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THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XLI. NO. 1. JANUARY 3, 1918. ** WEEKLY.

# Farm Loan Bank Unpatriotically Assailed

## *Private Interests Must Not Be Allowed to Wreck or Impair the Farm Loan System*

The alarming fear is expressed by the federal farm loan board that "the next move of those who are seeking to break down the system will be to institute a suit contesting the constitutionality of the farm loan act."

In other words, the enemies of the system, seeing the futility of their efforts to induce congress to repeal the law, may try a flank movement in the courts.

**It would be a national calamity if that threat were carried out and sustained by the supreme court of the United States.**

The system was needed in times of peace; it is doubly needed now. We must spur up the farms and maintain increased farm production to win the war, and the farm loan plan is a powerful aid to that end. It is particularly needed in the west, where the surplus wheat to feed our allies must be grown, if it is to be grown anywhere.

While private mortgage interests would be within their legal rights in attempting to wreck the farm loan banks, they have no moral or patriotic right now to assail the law. The nation is at war, and needs constructive, not destructive, policies.

Moreover, the government is under moral obligations to finance the farm loan bonds. Wartime necessities compel Uncle Sam to drain the investment world to float Liberty bond issues, and that fact makes it next to impossible for the federal farm loan board to find a sufficient market for its bonds.

In this emergency the government is asking congress to authorize the secretary of the treasury to purchase the coming year $100,000,000 of these farm loan bonds. Opposition must be expected from private interests, the same interests that the federal farm loan board finds framing up an attack in the courts.

**To meet these varied and insidious attacks, friends of the system must rally to its defense. The law was passed for the benefit of the farmers, and farmers must stand guard against its foes. Every farm loan association, every grange, every farmers' union and all other farmer organizations should immediately urge this matter upon the attention of their congressmen.**

The federal farm loan act built two competing systems in one—the government system and also a system of privately owned and operated "joint stock land banks" that are under government regulation.

Authority was given ten or more persons to organize such institutions "for carrying on the business of lending on farm mortgage security and issuing farm loan bonds." They must have not less than five directors, not less than $250,000 capital, can loan only on farm mortgages and can operate only in the state in which they are organized and in one contiguous state.

The wisdom of this coupling up of two competing systems under one act was seriously questioned when the bill was pending in congress, but the prevailing belief at the time was that this plan of chartering private land banks would cut away much of the opposition to the proposed law.

Evidently the results are not entirely satisfactory, for the federal farm loan board will ask congress for two amendments:

(1) To remove the present restriction permitting a joint stock land bank to do business only in the state where it is situated and in one contiguous state.

(2) To permit a bank to issue bonds to the amount of 20 times its capital stock instead of 15 times, as under the existing law, and to raise from six to six and one-half per cent the maximum interest rate that the joint stock land banks may charge on loans to farmers.

These amendments have been sought by the farm mortgage bankers' association, whose leaders predicted that a large proportion of the members would seek government charter and operate under supervision of the farm loan board is the modifications were made. Their plea to be allowed to use the name "National Land Bank" instead of "Joint Stock Land Bank" has not been received favorably by the board, owing to fear of confusion of private institutions with the government's 12 federal land banks.

Joint stock land banks would still be compelled to limit the interest rates on loans within one per cent more than the selling price of their bonds, even though the maximum were raised to six and one-half per cent. They also would have to compete with the federal land banks' new rate of five and one-half per cent.

# Grow Vegetables

## *State College Will Teach How*

The state college at Pullman is undertaking something a little out of the ordinary, but greatly to be commended—a garden school. Beginning next Monday, January 7, a garden "short course" of 12 weeks will be given by experienced and expert garden authorities at the college, with F. O. Kreager, head of the elementary science department, in general charge. The instruction is intended for the women and girls of the state, especially those of the farm. It is a part of the nation's great food production campaign and should result in a great stimulus to farm gardening. The instruction will include all manner of garden subjects, such as the making and use of hot beds and cold frames, the preparation of soils, the methods of planting and transplanting, and the methods of cultivation and care of the various garden crops. The school will include also a brief treatment of poultry production, with special reference to the hatching and care of chicks.

# Plan Crop System

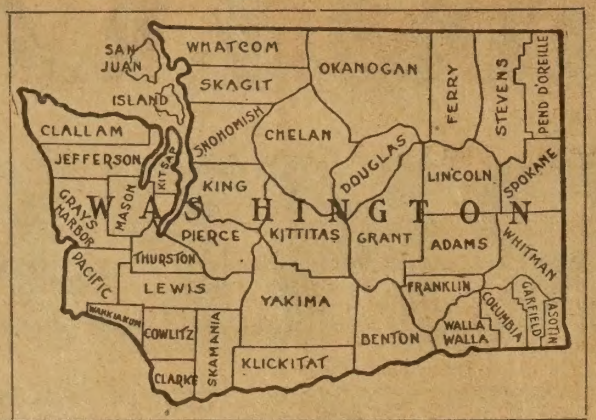
## *Maximum Efficiency Is Sought*

With a view to securing the maximum efficiency in production of food and feed crops for the coming season, and succeeding seasons, the state college, the state department of agriculture and the national food administration as represented by Charles Hebberd, administrator for this state, are collaborating in the preparation of a complete program of crop production for Washington. A conference was held last week in Spokane between President E. O. Holland of the college, Commissioner E. F. Benson of the state department of agriculture, and Mr. Hebberd of the food administration. The chief result of the conference was the expression of general ideas and purposes and the decision to have President Holland and agricultural department heads at the college draw up a definite plan for presentation at another meeting to be held the latter part of this month. The program, when announced, will include both grain and meat production.

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# Regulate Everything or Nothing

## Sentiment on Farms Seems to Favor the Regulation of Both What Is Sold and What Is Bought by the Farmers




COVILLE, Stevens County, Wash., Dec. 24.—So far the price regulation has not affected this locality to any great extent. Outside of a few commodities as wheat and sugar it is doubtful if any change has taken place in the prices asked or given for commodities used on the farm. There is a great divergence of opinion as to price regulation, but the great majority favor either entire or no regulation. The great majority of substitutes we are asked to use in place of wheat, meat, fats and sugar are still much higher than those products themselves. The mildness of the fall and early winter have helped the feed situation somewhat as many feeders have not been forced to feed hay as early as usual. It will enable some to carry stock over, who a few month ago could not see their way to do so. Hay at present is too high to expect any profit from feeding to either the common dairy or beef stock at the present prices of milk and beef. The dairymen are fortunate indeed if they are able to break even at the present prices, and in the case of the beef men they can not do so. In some cases farmers are cutting their hay and straw and mixing the two to secure better results, and at the present prices they will be paid for doing so. Even at the high prices of feeds, the sheep men will be able to show some profit. The draft has hit the farms here very heavily, and a great number of those not drafted have enlisted during the last month. There undoubtedly will be a great shortage of labor for the farms the coming season. A. H. HAHNER.

### Twenty-five go to War.

NEPPEL, Grant County, Wash., Dec. 14.—The effect of partial price regulation has a tendency to curtail buying and selling, as the farmers are in favor of a complete price regulation for their produce according to average cost of production. All products of the farm should be increased by this method, as it guarantees a certain margin of profit. The mild fall weather is a great help to the stock owner here, as most people are short of feed for their ever increasing herds, especially as wheat hay is bringing $25 to $30 per ton and alfalfa, loose, $20. This has caused owners of milk herds to sell some or all their milking stock. A farmer this season should receive at least $18 per ton for alfalfa to make a profit on his labor, and wheat headings, in some instances, have not been profitable at $30 per ton on account of the unfavorable season. Sheep men have paid on the average of $20 per ton for the wheat headings for sheep feed and $16 for alfalfa and they are fortunate to purchase at that figure as they can make a large profit. Sheep have more than doubled in value while feed has not advanced more than two-thirds of its old standard value. Several neighbors have tried out different methods of feed for stock over winter. Some have fed nothing but straw chaff with salt scattered over each feeding. Others have let the stock out and at large to straw piles with no further attention. This usually has caused the loss of an animal on account of mustard in the straw and no salt. Others have used carrots with their straw ration with fine success and as long as the carrot ration with free access to salt is given the stock has done remarkably well and are fit for work on short notice with but a few feeds of chopped grain or oats. Outside of using grain and hay, the first and third methods are the best in the long run. Some 25 farmers' sons have gone into the army. The effect has a tendency to throw a lot of land idle or for leasing, as there is a large acreage farmed by the average wheat farmer and high priced labor is an unknown factor. That does not tend to encourage the farmer to prepare a field and fall down on the work later on, when there is no labor available. MARTIN PENHALLICK.

### Has Been a Bad Season.

OAKESDALE, Whitman County, Wash., Dec. 14.—The last summer and fall was the driest on record for the Palouse country. Consequently the crops of all kinds were the lightest in the history of the country. The prospects for the wheat crop next season is not very bright. Very little fall seeding has been done and what was seeded has not come to amount to anything. There has been no fall plowing done, due to dry condition of the ground. The labor shortage threatens to become a serious menace next season, owing to the fact that hundreds of young men have enlisted or have been drafted into the army. A large per cent of these are young farmers and farmers' sons. The farmers would like to increase their acreage of wheat and other crops, but can not see their way clear to do so. As for price regulation the farmers are for it to a man if it is done right. That is, if the government will go far enough and include that which they have to buy as well as that which they have to sell. The farmers, as a whole, are not satisfied with the price regulation as it stands today. They feel that when the government controls the prices of what they have to sell and leaves them at the mercy of the profiteers for what they have to buy they are not getting a square deal by any means. Most of the potato growers of this section were hit hard the last season and they are feeling pretty blue over the way things have panned out. Owing to the high prices paid last year and the agitation last spring for greater production of the patriotic spuds, there was a very large acreage planted. Quite a number of the growers were laboring men of the towns who had never grown potatoes before. They rented land from the farmers at $5 and $6 per acre, while some planted them on shares. They planted $4 seed and hired them cultivated; the bugs were pretty bad here the last season, so they were forced to fight the bugs with paris green and arsenate of lead. Labor was scarce and high priced. It cost the growers from 20 to 35 cents per sack to dig them; second-hand sacks cost 5 cents each. It also cost 5 to 7 cents per sack to sort the spuds. The season was extremely unfavorable for the production of potatoes, therefore the yield was only half a crop and some places not that. Then at digging time quite a few were frozen. Now to cap the climax, the best prices offered at present is $1 per hundred pounds, with no cars to ship them in at that. Everything that went to produce these potatoes was paid for at war prices. Now when they are produced the best they are offered for them are peace prices. Unless something is done to relieve such conditions as these, I am afraid there will be a very short crop of potatoes next year. Last spring the production of seed peas promised to become a leading crop in this section. Dozens of farmers signed contracts with the seed pea companies and hundreds of acres were planted to peas. But unfortunately the season was unfavorable and the same thing has happened to the pea growers that happened to the potato growers, only the pea growers got it twice as hard. The growers lost from $45 to $500 in cash, not to speak of their time and labor. The larger the acreage the more the loss. Feed of all kinds is very scarce and the price is high. Farmers are selling off a large per cent of their live stock.

MASON BROWN.

### Regulate From Tractor to Hoe.

FAIRFIELD, Spokane County, Wash., Dec. 20.—The fixing of prices on farm produce has not caused any marked change in the generan running of things to any noticeable extent except that the wheat was disposed of much earlier in the season than is usually the case. Public opinion seems to favor the government reglation of prices of not only the more important farm produce but also the many things that the farmer has to buy to carry on his business. And farm implements should receive the price fixing at once. The prices should range from the farm tractor clear down to the humble hoe. The mild fall and winter weather has helped out the feed situation wonderfully. All stock is in fine shape for the winter and can be carried through on the minimum amount of feed. The farmer, this year, should get $18 to $20 per ton for fall wheat hay to make a fair profit. Oat and spring wheat hay, if sold at $20, would make very little profit, if any. If the cattle and sheep men can't pay that price and make a profit they can at least break even and stand a chance to make something the next year. Many farmers did not break even this year so it is a standoff between the two. Very few farmers' sons have been called from this section, although quite a lot of the farm help has either been called or enlisted in the service and as a result help may be scarce next year. ROY G. ADAMS.





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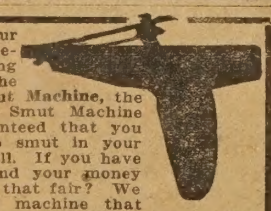






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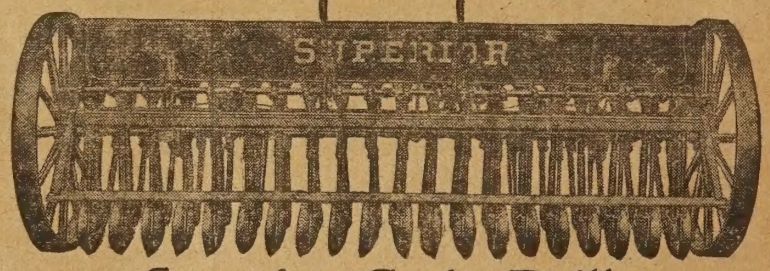
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# THE WASHINGTON FARMER

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## U. S. Helps Solve Seed Problem

### *Possibility of Federal Aid Illustrated in Montana*

The widely circulated report that the federal government has actually appropriated money with which to purchase seed for the farmers of various states that need assistance is not exactly true, though the government is lending practical aid in this regard. The report referred to is one which stated that the government had advanced half a million dollars for Montana farmers, and that the grain buying corporation of the food administration had advanced a like amount, making $1,000,000 all told for the purchase of seed for the farmers of that state. Montana farmers are receiving aid from the government, but not in exactly that easy fashion. Here is the truth of the situation in a nutshell:

(1) There was some time ago set aside by the government a limited amount of money which may be spent, with the approval of the United States department of agriculture, in assisting farmers in buying seed where such assistance is needed. This money is not to be loaned on easy terms, nor is the government authorized to use it to buy seed for the farmers' use. It is merely to be used in securing seed to be held until needed, and then sold to the farmers AT COST and FOR CASH. This is the case in Montana to the extent of about $500,000.

(2) The grain buying corporation of the national food administration is empowered by the food administration law to buy seed wheat and to sell it to farmers where needed AT COST and FOR CASH. This corporation has been requested by the authorities of Montana to so purchase and sell to the farmers of that state some 200,000 bushels of seed spring wheat.

There are two advantages that naturally result from this arrangement: (1) The assurance to farmers where either method is followed out that there will be sufficient seed for their plantings when seed time comes, and (2) the saving to farmers of whatever profits might be taken by private dealers on the seed that they would otherwise purchase through such private sources.

When the report reached The Farmer that the government had made advances of something like a million dollars to the farmers of Montana the exact facts of the case appeared doubtful and clouded. In order to clear the matter up a telegram was sent to Professor F. S. Cooley of the Montana Agricultural college, who was active in the movement in behalf of the farmers of Montana, asking for a statement. Immediately came his reply, corroborating the opinion of The Farmer, and setting forth plainly the manner in which the producers of his state were being aided. His telegraphic statement was as follows:

The chairman of the seed stock committee, with the approval of the secretary of agriculture at Washington, and in conference with representatives of Montana, North Dakota and Texas, has set aside a fund appropriated by congress to purchase seed and hold it for farmers at convenient points until the close of the spring seeding season.

This seed will be sold at cost for cash to those who require it. It will be seen that the government seed supply does not contemplate the financing of seed purchased by farmers. It will, however, save the profits charged by dealers and the freight out and back on seed kept within the state. Montana's allotment of the federal seed of the federal appropriation is about a half million dollars. It is expected that 60 per cent of this allotment will be used in purchasing seed oats, 20 per cent for barley and 20 per cent for flax. The United States grain buying corporation, under management of Mr. Julius Barnes of New York, has been requested, with the indorsement of the United States Department of Agriculture, to purchase and hold 200,000 bushels of seed spring wheat for Montana in addition to the oats, barley and flax previously mentioned. It should be distinctly understood that the seed provided by the United States government is to be sold only for cash and that purchasers will have to finance their seed buying without federal aid.

Last summer when Dr. Pearson of the United States department of agriculture was in the northwest consultation with him resulted in the later working out of a plan whereby each agricultural state was to have a committee whose duty it would be to study the seed situation in its own state and work out plans to assure plenty of seed available for crop planting. It is apparently this committee for Montana to which Professor Cooley refers in the opening sentence of his telegram.

Seed committees have been appointed in most or all of the western states, and have been working on the problems under their jurisdiction. Generally it is thought that the seed situation in the northwest is good, though the dry fall in many sections will necessitate much more spring wheat for seed than would otherwise have been the case. This will be especially true in Washington and to some extent in both Idaho and Oregon.

In many sections the banks are making special efforts to accommodate farmers by assisting them to purchase seed, and, as a rule, no distress seems to be felt because of inability either to secure seed or to secure funds with which to buy it.

Representative Baer of North Dakota has introduced a bill in congress which would, if passed, appropriate $50,000,000 to aid western farmers in the purchase of seed grain and feed for live stock.

The bill provides that the governor and two officials of the respective states shall be designated by the president to investigate into the necessity of federal aid to farmers and stockmen. Aid was said to be needed in several of the western states as follows: In North Dakota, $6,000,000; South Dakota, $3,000,000; Montana, $4,000,000; Kansas, $4,000,000, and Texas, $5,000,000. This will leave a balance of $25,000,000 to be used in any other states that may require aid.

## Marshall Is Coming

### Will Attend Live Stock Meeting

Duncan Marshall, minister of agriculture of Canada, with headquarters at Calgary, and perhaps the most prominent live stock authority in the dominion, will be one of the principal speakers at the second annual meeting of the Northwest Live Stock conference at Spokane February 21 and 22. Announcement of his acceptance of a place on the program has been made by W. L. Tennant, secretary of the association. Among the other speakers will be such men as T. W. Tomlinson, secretary of the American National Live Stock association; Dean E. J. Iddings of the agricultural college of the University of Idaho; William Hislop of the animal husbandry department of the State College of Washington, and probably E. L. Potter of Oregon Agricultural college. There will also be representatives of the federal government, packing companies and stock yards from various of the leading live stock centers.

Announcements of the conference have been sent to about 800 stock men throughout the west, and it is expected that a large attendance will be had. Special rates have been announced on all the railroads leading to Spokane.

On February 23, the day following the principal features of the conference, the annual sale of pure-bred Shorthorns will occur at the Spokane stock yards. Something like 100 head of animals consigned by a number of the well-known breeders will be offered at that time.

## Bulk Grain Sure

### Will Devise the Ways and Means

That it will be necessary for most of the wheat grown in the northwest to be handled in bulk this season is coming to be the consensus of opinion of those who are studying the situation. This is due to what appears to be an unusual sack shortage, which has not only made sacks practically unavailable, but so high in price as to be almost prohibitive. The shortage is due to two main causes, use of sacks for fortifications in the war and the lack of shipping to import the material from which they are manufactured.

There will be a bulk grain conference at Spokane January 25 and 26 for the purpose of threshing out the situation. One thousand letters have been set out by the Spokane Chamber of Commerce to parties interested in the questions involved, and it is believed that an unusually large attendance will be recorded. The speakers on the program are not yet definitely selected, but the committee in charge has taken the matter up with authorities in many lines. The committee expects to have representatives of, or messages from, the United States department of agriculture, bureau of farm markets, the food administration, the federal grain-buying corporation and many other departments and institutions.

Arrangements have been made for one and one-third fare on all railroads for the conference. Each person should see to it that he secures a certificate from his home depot agent at the time of the trip, so that he will be entitled to a rate of one-third fare back home.

The following is the tentative program of the conference, without the names of those who will lead the discussion of the subjects given:

Handling the 1918 grain crop of the Inland Empire. (a) Grain sack situation—necessity of bulk handling.

Present storage situation and probable storage at Coast terminals for 1918 crop.

Increased food production, a war necessity.

Grain dockage.

Grading and inspection.

Storing grain on the farm.

Loading and unloading devices.

Storage tank construction.

Elevator construction.

Elevators at shipping points.

Farm labor situation.

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## Feed Mixed Ration

### Demonstrations Prove Its Value

By E. L. Potter.

At the last Portland show the Oregon Agricultural college exhibited three experimental lots of hogs that illustrated forcibly the value of middlings, buttermilk and garbage for fattening hogs. All lots were fed a grain ration consisting of one-third middlings and two-thirds ground barley by weight. The first lot received only this grain mixture, while the second lot received buttermilk, and the third lot garbage in addition to the grain. The first lot on grain alone made a daily gain of 1.1 pounds, the second lot 1.5 pounds and the third lot 1.4 pounds. It took 470 pounds of grain to make 100 pounds of pork with the first lot; 367 pounds grain and 220 pounds of buttermilk for the second, and 355 pounds grain and 511 pounds of garbage for the third.

The first lot made very satisfactory and economical gain for grain alone, showing a mixture of middlings and ground barley to be a very good grain ration. This ration, however, was very much improved in lot two by the addition of a very small amount of buttermilk. It was intended to give a gallon of milk daily to each pig, but this amount was not available and, in fact, scarcely one-half gallon was actually fed. As it was, 200 pounds of buttermilk saved 100 pounds of grain as compared with lot one. This is, of course, a very high value for the buttermilk, but the college has been able to get results in other tests almost as good, but only where the milk was fed in very small quantities. The milk supplies elements lacking in the straight grain ration and thus enables the hog to properly utilize the nutrients in the grain as well as in the milk. Two pounds of buttermilk does not have anywhere nearly the nutrients that are contained in one pound of grain, in fact it takes about nine pounds of buttermilk to contain as much digestible nutrients as one pound of grain. Let one on grain alone gave about the usual results for grain alone, but it must be borne in mind that grain alone is never profitable in comparison with a properly balanced ration, and that to compare buttermilk with grain alone is hardly fair since we are comparing a supplementary feed with a basal feed. It would be better to compare buttermilk with another supplement, such as tankage or alfalfa pasture.

Lot three on garbage made gains almost as large as the lot with the buttermilk, thus showing that the garbage had considerable value as a supplement to a grain ration. In this case the use of 411 pounds of garbage saved 100 pounds of grain. The value of the garbage as a supplement was therefore about one-half that of the buttermilk. The garbage used was of good quality, free from soap, dishwater or coffee grounds. It was also quite dry. The garbage was fed in larger quantities than the buttermilk and it is very probable that if as much buttermilk as garbage had been fed the buttermilk would not have given so much better results than the garbage, at least that has been the results of other tests.

The general conclusions of this test may be stated as follows: Middlings may replace at least one-third of the ground barley in a fattening ration. Barley and middlings, however, are not a balanced ration and need a good supplement. This test shows a very marked increase in the rate of gain and in economy of gain by supplementing the grain ration with buttermilk or garbage. There arises, however, the question of whether more garbage and less grain could not have been fed to lot three. This must be answered by future tests.

**The Indian Pioneers.**

It will be found that the North American Indians rolled tobacco leaves into primitive cigars and "astounded the early explorers." This is all that can be obtained appertaining to the history of tobacco, but the Japanese are on record as having made tobacco for pipe consumption many years before the weed itself came into the hands of white men.

# More Boys for Farm Work

## *Plan to Release Them From School Early in Spring*

The problem of securing farm labor for 1918 is attracting much interest in Whitman county, where more than 1,000,000 acres are in cultivation and a large per cent of this is to be planted to spring crops. The commercial clubs and the school boards are discussing a plan to release from school early in the spring all of the boys capable of doing farm work, and it is estimated that from 1200 to 1500 can be released. The state school superintendent has been asked to permit this plan to be carried out, and to allow the boys thus released to have full credit for the time spent in farm work, upon presentation of evidence that they have been employed on farms.

So acute is the situation that the labor question is awakening interest in all parts of the state. A petition asking Governor Lister to call a special session of the legislature to pass a law forcing all men who are able to work to do some kind of labor that will assist in crop production, manufacture or in carring on the war, is being circulated. The Colfax Commercial club has been asked to assist in this call, but C. L. Chamberlain, committeeman to whom it was presented, says it would be useless. To The Washington Farmer correspondent Mr. Chamberlain, who was formerly a member of the legislature, said:

"I oppose calling a special session because of the expense and the fact that I do not believe the results desired can be obtained. If it is the object to conscript labor that is a national government function, and a law passed by Washington would simply drive the idlers into other states. We have a vagrancy law that permits men who refuse to work and have no visible means of support to be arrested and imprisoned for not to exceed six months and fined not to exceed $500. That will cover the case, and if there are idlers who ought to be put to work the vagrancy law will cover their case."

Thirty dollars per acre from summer fallow land was secured this year by C. L. Chamberlain on his farm, a few miles from Colfax, Wash. Mr. Chamberlain planted 10 acres of his summer fallow to beans. It was very late, the last week in June, when the beans were planted, and they never had a drop of rain until they were grown and harvested. The crop was very light, and the squirrels got fully an acre of the beans, yet he got $300 worth of beans from the 10 acres and the expense was light. They were not cultivated, and nothing was done to them except to plant and harvest them. Had the season been favorable and the crop cultivated Mr. Chamberlain believes he would have had several times that many beans, but he is well satisfied with the results.

### Squashes for Hogs.

Ninety dollars an acre for a single crop of squashes is the record made by E. H. Newton, whose farm lies three miles southeast of Colfax. Mr. Newton planted 30 acres of summer fallowed land to squashes and fed them to hogs. He turned the hogs into the field and let them eat the squashes from the vines. No harvesting expenses of any kind were incurred. The hogs ate the squashes greedily and fattened quickly. It required less than $50 worth of grain to finish the hogs for market, and they brought him the top price at Spokane.

Mr. Newton kept a close account of the weight of the hogs before turning them into the squash field and when they were sold, and estimates that he got $2700 from the 30 acres of squashes, which is $90 per acre for the crop, and the land is in better condition for fall wheat than it would have been had it been summer fallowed, the hogs cultivating and enriching it. It required very little work in planting and cultivating the squashes, and the returns have paid much better than a crop of wheat. Next year Mr. Newton will plant a larger acreage to squashes.

## BAD POTATOES
### Are Shipped in Violation of Law

Shipments of potatoes damaged by frost or decay have been reported to Charles Hebberd, federal food administrator for Washington. "Such shipments are in direct violation of federal licensing regulations," said Mr. Hebberd, when the matter was brought to his attention by Asher Hobson, head of the bureau of markets of Washington State college.

According to investigations conducted by the bureau of markets, producers have failed to grade their potatoes according to department of agriculture regulations, and shipments have gone forward to large distributing centers, such as Seattle, in damaged condition.

"Such violations come within the prohibition of rule two of the United States food administration regulations governing dealers in fresh vegetables and other perishable commodities," says Mr. Hebberd.

Rule two of the food administration licensing provisions is as follows:

"The licensee shall not ship or sell for food purposes from points of production potatoes which are not practically free from frost, injury and decay, and which are not free from serious damage caused by dirt or other foreign matter, sun burn, second growth, cuts, blight, dry rot or other disease, insect or mechanical means."

"Retail dealers or merchants who handle vegetable commodities, even when doing less than a $100,000 business per annum, are subject to this rule so far as they engage in the business of buying and shipping potatoes," says Mr. Hebberd.

At a conference of potato men at Toppenish this fall the department of agriculture grading and shipping regulations were adopted as the standard, and it is believed that those attending that meeting and most other shippers are adhering to such standards.

## Walla Walla Cow Testing.

At the annual meeting of the Walla Walla County Cow Testing association, officers for the year were named as follows: President, V. E. Brown; vice president, J. H. Compau; secretary, Charles Baker; treasurer, Henry Drum; directors, A. A. Bixby, F. J. Pingry and O. C. Plaquet.

# Nurses' Aids

## Requirements for Eligibility

To the Editor: Will you please give me some information in regard to the Red Cross work. I have made up my mind to help by being a nurse and would like to know how much training one must have before she can be accepted, and where she can get the training. Subscriber.
Sunset, Wash.

The following information is taken from a bulletin of the American Red Cross, northwestern division, with headquarters at Seattle, Wash.:

**Eligibility.**

To be eligible for assignments as a volunteer nurse's aid applicant must have had the course of instruction in elementary hygiene and home care of the sick, and preference will be given to those who have had the other Red Cross courses and the practical instruction in the hospital as a member of a base hospital unit, as this gives a familiarity with hospital procedure and some of the elementary principles of nursing. Under certain circumstances service in France or elsewhere, in connection with a hospital, as an auxiliary aid, under nursing supervision, might be considered as the equivalent of the practical course.

**Age.**

The desirable age for applicants for this service is between 25 and 40. Exceptions may be made to this in cases of women of unusual attainments and sound health.

**Civil Condition.**

Applicants desiring service as a nurse's aid under the Red Cross should be unmarried women or widows. Married women are not acceptable for this service in order to conform to the regulations of the state and war departments governing the sending to Europe of women whose husbands are or might be assigned to duty there.

**Endorsement.**

Applicants should, if possible, be known to some one connected with the nursing service of the Red Cross or will be expected to furnish satisfactory references before assignment to duty.

**Assignment to Duty.**

Assignment to duty will be under the bureau of nursing service, and aids will be under the direct supervision and authority of the chief nurse in charge of the department to which she is assigned.

**Physical Examination.**

The physical examination must be submitted to the bureau of nursing service and approved by the medical director. Nurse's aids must also take the immunity treatment for typhoid and paratyphoid and be vaccinated against smallpox, and these certificates must be on file in the bureau of nursing service before they can be assigned to duty.

**Uniform.**

The indoor uniform worn will be that selected for the aids in connection with base hospital units. No outdoor uniform will be required.

**Response to Call.**

Volunteer nurses' aids are expected to respond promptly to any call after they have definitely notified the bureau of nursing service that they are available.

**Compensation.**

Nurses' aids are expected to serve without remuneration and to maintain themselves and pay their traveling expenses to and from destination. In exceptional cases this latter requirement may be waived and provision allowed for transportation and maintenance from the Red Cross.

**Length of Service.**

Length of service is for one year, at the expiration of which time they may resign, and the resignation will be accepted and the release granted if the reasons for the request meet with the approval of the authorities of the Red Cross. They may, however, be relieved from duty at any time in case of misconduct or should their services prove unsatisfactory. Resignation from service should be presented to the chief nurse of the department under which they serve and will by her be forwarded to the proper authorities.

**Assignment in France.**

Nurses' aids assigned to duty in France will be required to speak French.

**Arrival in France.**

Aids report upon arrival in France to Miss Martha Russell, or the representative of the Red Cross nursing service at Red Cross headquarters in Paris, and will be assigned to duty under her direction and at her discretion.

# Perishable Food Policy

In order that there may be no misconception by the public of the attitude of the U. S. Food Administration toward the free consumption of perishable foods, the following statement is given out, reaffirming the position the Food Administration has always taken:

Foods of the "perishable products" group are essential to nutrition, and their continued production, distribution and consumption are vital, in view of national and international necessities.

The Food Administration desires to emphasize these facts, and to assure all producers and handlers of milk and dairy products, poultry and eggs, fish, fruits, potatoes and vegetables that no restrictions have been placed on such food materials, or are likely to be.

Not only are these foods of great use and value in supplying the ordinary bases of nutrition, but they vary the diet and promote palatability of the foods used with them; most of them are succulent or supply necessary bulk in the ration, which aids digestion; and some serve as efficient and necessary regulators of bodily functions, thus warding off ill health.

Since we must save for exportation wheat, meat, fats and sugar, we should utilize more than ever before the bulkier, more perishable products. Wholesalers, commission men, storage warehousemen and other intermediate handlers of most of these perishables must operate under license and report their transactions to the Food Administration.

## Apple Returns Good.

P. S. Darlington, district horticulturist for north central Washington, has estimated the apple output of that section this season at a little more than 5,260,000 boxes, an increase of more than 450,000 boxes over last season. The price is estimated to average $1.15 a box, giving the crop of that district a value of more than $6,000,000.

**Wages Up in New York.**

NEW YORK CITY.—The aggregate wages paid in manufacturing in New York state factories in September, 1917, showed an increase of 5 per cent over August.

# John J. Dillon Retires

## *Made It Possible for Farmers to Name Price for Milk*

When John J. Dillon retires to private life January 1 from the office of commissioner of foods and markets in New York the farmers of that state will suffer a distinct loss, for Mr. Dillon has been a fearless fighter for their interests and rights.

The biggest single achievement of his administration was his organization of the dairy farmers and the salvation of that industry from impending ruin. He made it possible, for the first time in 40 years, for the farmers to name the price for their milk—and get it, too.

Reviewing the work of his administration Mr. Dillon said:

"I have convinced the people of this state that there is such a thing as a food problem. I have made them realize that there is a necessity for an economical distribution of food. I have made them admit that gambling, speculation and the manipulation of food in the markets of this state is a discouragement to the producers of food and a tax on the consumers of food.

"We went out to the farms of this state and showed the farmers that the men who bought their apples were paying too little for them. We established market prices through public sales that brought the farmers an average of $1 more per barrel than they formerly received. By bringing food products to the city and making arrangements with retail stores we succeeded in selling many of these products at a much lower price to the consumer than he had previously paid. In other words, the farmer received more and the consumer paid less.

"For the first time in the history of this state the consumers of eggs knew when they were buying cold storage eggs. The custom had always been to sell these eggs at the same price paid for fresh eggs. The courts upheld this egg marketing order. We fought the express companies and railroads through the courts and the public service commission and were upheld in our demands that these organizations revise their orders and protect shipments of cases of eggs from being damaged or stolen in transit.

"We have done all these things with an insignificant appropriation of $24,000 annually, whereas the state food commission received $1,300,000 to do the same work."

"What recommendations would you make to your successor?" he was asked.

"I would not recommend anything to him, but if I had a little of that $1,300,000 myself I would assemble food at the farms, bring it here in carload lots, sell it to retail stores and consumers and save 25 to 30 per cent on the distribution of that food. If these commissions are ever going to do anything to reduce the cost of food they will do it by reducing the cost of distribution and they will do that in the way I have outlined. In my judgment, they may cut off a little here and there, but they will never completely cut out gambling and profiteering during this state administration, because they are tied up with the big interests."

"How do you think the food problem will eventually be solved?" he was asked.

"Indications are that there will be a food shortage prevalent in about a year and a half at which time the people will wake up and see to it that there is an efficient and fair distribution of food."

### All a Farmer Wants.

To The Washington Farmer: Enclosed please find $1 for your liberal offer of October 25. Your paper has all a farmer wants in regard to all kinds of farming for this state.

J. J. BARRY.
Tolt, Wash.

**Love Is Blind.**

"I don't know how many times he kissed me!"

"What! With the thing going on right under your nose!"—Harvard Lampoon.

# Crisis Demands Food Production Administrator

## *President Wilson Is Urged to Consider Creation of New Position to Insure Food Production*

A movement for the immediate creation of the office of "national wartime food production administrator" and the appointment of "the ablest available man in the country" to fill the position was launched in Spokane last week, when a representation of men who have been looking squarely at the gravity of the food production situation wired President Wilson urging the necessity for such action. The movement is actively participated in by The Washington Farmer, its managing editor being one of the signers of the telegram to the president. The other signers were E. F. Benson, commissioner of agriculture for Washington; Charles Hebberd, federal food administrator for Washington; R. Insinger, chairman of the agricultural committee of the Spokane Chamber of Commerce; Waldo G. Paine, vice president of the Spokane & Inland Empire railroad; David Brown, president of the Hazelwood company; J. L. Paine, president of the Spokane Chamber of Commerce; N. W. Durham, chairman of the Spokane County Council of Defense; David Munro, Holstein breeder and farmer of Spokane; D. W. Twohy, president of the Old National bank, and E. T. Coman, president of the Exchange National bank and regent of the Washington State college.

The matter will be called to the attention of senators, representatives and cabinet members in Washington also, and all the governors and council of defense chairmen of the 48 states are being asked to consider the idea as a practicable solution of the stupendous problem now confronting the nation.

The telegram to President Wilson sets forth the grave need and the recommendation for its solution, and is as follows:

"The President, Washington, D. C. Sir:—When the assistant secretary of agriculture, Dr. Pearson, left Spokane, after regional conference with large farmers, agricultural college representatives and bankers, strong hope was raised that the Pacific northwest would produce greatly increased crops. Dr. Pearson left here believing that the work could be followed up effectively. We regret to advise you, however, that, notwithstanding the State College of Washington and the state department of agriculture have done their utmost to carry on these plans, the present outlook here is exceedingly discouraging. Because of adverse weather conditions not more than 25 per cent of the average fall crop acreage has been planted. If wheat yield is to be even normal enormous spring planting is necessary and more labor will be required. The farms are being stripped of workers, and the remaining youths are eager to leave for the war. Unless something is done quickly there will be an alarming slump in the agricultural production of this region.

"The west is called on to produce the wheat surplus needed to feed our allies, but can not do it unless a way shall be found to hold our young men to the soil. Some system should be developed whereby loyal service in the production of foodstuffs shall be impressively recognized. Some way must be found to better labor conditions and hold young men on the farm with a patriotic consciousness of honor and dignity.

"The crisis demands the immediate appointment of the ablest available man in the country as national wartime food administrator, who will fire the imagination of all the people, consumer as well as producer, to the supreme necessity of increased food production, and who will establish farreaching cooperation with the agricultural department, agricultural colleges and farmers in all sections of the country in meeting their war-time food production difficulties, just as Hoover has brought home to every family the need of food conservation, and just as the Red Cross campaign has swept the entire nation under the leadership of Davison."

## Wheat Acreage

### Is Below Goal Set by Government

The United States department of agriculture estimates that the present winter wheat acreage in the state of Washington is 56 per cent of the acreage of last year, or 422,000 acres now seeded as against 754,000 acres a year ago.

The department's figures for other Pacific northwestern states are as follows:

| | 1917. | 1916. |
|---|---|---|
| Oregon | 562,000 | 450,000 |
| Idaho | 302,000 | 335,000 |
| Montana | 775,000 | 775,000 |

The department has evidently been misinformed by its Washington correspondents, for the best judgment of authorities here is that the present acreage of winter wheat is much less than 56 per cent of the acreage last year.

Adverse weather conditions account for the alarming falling off. A fall of almost unprecedented dryness left the ground in no condition for seeding, and another deterrent was the high price of seed wheat.

This condition will put over to next spring a tremendous amount of farm labor that otherwise would have been completed this fall, and intensifies the labor problem growing out of the draft. In other words, we ought to have an increased labor supply next spring instead of the decreased supply that is giving our farmers such grave concern.

The department's present estimates of winter wheat acreage are probably excessive in all four northwestern states. But accepting them as accurate, they yet disclose a shortage in the four states of nearly 1,000,000 acres below the department's suggested agricultural program of last August.

To spur up production, the department sent Assistant Secretary Pearson on a four of the country last summer. He conferred in Spokane with representative farmers, state college professors, county agents, bankers and editors of farm journals from half a dozen states. He urged then the following winter wheat acreage for the four northwestern states.

| | Recommended Acreage. | Present Estimates. |
|---|---|---|
| Idaho | 405,000 | 302,000 |
| Montana | 1,000,000 | 775,000 |
| Oregon | 708,000 | 562,000 |
| Washington | 850,000 | 422,000 |
| Totals | 2,963,000 | 2,061,00 |

For the whole United States the department last August urged a winter wheat acreage of 47,337,000 acres: Its present estimated total acreage is 42,170,000.

We hope these estimates are more accurate for the country in general than they are for the state of Washington.

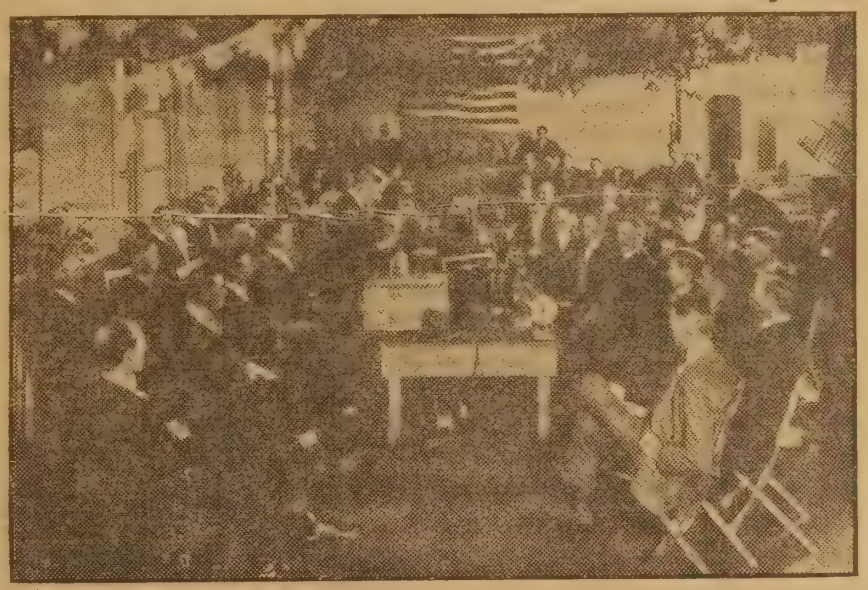
### War Bread at Penitentiary.

Patriotic service, by strict compliance with the Hoover program by conservation and nonwaste of food products, is the program at the state penitentiary at Walla Walla.

Having established a per capita cost varying from 15 to 16 cents a day per inmate, Warden Henry Drum has gone further and solved the bread problem "We observe the meatless Tuesday and two meatless meals a day and have solved the wheat flour problem," says Warden Drum. "When the inmates of the institution learned what Mr. Hoover is trying to do, the men, with hardly an exception, fell into line for the national food campaign.

"The steward has solved the bread problem by mixing 150 pounds of potatoes with 300 pounds of flour and the result is a war bread both excellent in flavor and nutritious in substance. The saving in wheat flour is not at the expense of the physical condition or the efficiency of the men. I believe that the same nutriment exists in the bread baked at the institution as that found in the bread of the bakeries."

## Learn How to Care for Farm Machinery



Farm implement manufacturers are more and more taking a long look ahead. They know that a farm machine which makes good for the farmer is the best advertising that they can get. In order that the farm machine shall make good, it must be suited to the best conditions of the individual farm and the farmer and his sons. They must learn the most efficient ways of using and conserving the life of a machine, so every now and then we see how these implement manufacturers are holding schools for their patrons.

Among others, the Avery company of Peoria, Ill., does not alone confine its efforts to the protection of machinery, but is going farther and is conducting service schools, attended on the average by a hundred farmers and dealers. In addition to these general schools, each salesman is conducting his own local school in his block, the general and local schools numbering 200 to 300 for a season.

Now that the demand for tractors is rapidly on the increase, the company is also sending out special information to its patrons as to how to handle their tractors in order to get the greatest possible use out of them. Besides offering the use of special service men who are experts with the tractor to help out tractor owners at a very reasonable compensation.

## Today the Red Cross Needs Your Aid

**Fill out the coupon below and mail it to the Editor of The Washington Farmer, Spokane, Wash. Upon receiving this coupon you will be enrolled as a member of the Patriotic League of The Washington Farmer.**

I am glad to express my patriotism at this time by pledging myself to render whatever special service I can to my country, and will you tell me especially about Red Cross work and the different ways in which I may be able to aid in that work?

Name .....

Postoffice .....

**Watch the Red Cross department of the Farmer each week for different ways in which you can help in this work.**

**The following have been enrolled as members of the Patriotic League of The Washington Farmer in addition to those previously reported:**

A. Lee McDonald, Winthrop, Wash.
Maud E. Heller, Barry, Wash.
Dee Case, Wheeler, Wash.
Mary Lewis, Johnson, Wash.
Wymona Tilla, Rockford, Wash.
Mrs. James Tilla, Rockford, Wash.
Mrs. J. D. Robertson, Rainier, Wash.

## Farm Labor

### Believes Situation Can Be Met

United States Secretary of Agriculture Houston has this to say of the farm situation:

"Attention has been given without cessation to problems in the field of (farm) labor. It was obvious that difficulties would be presented and that apprehension would run beyond the actual condition. An army could not be raised without taking men from every field of activity, and it would have been unfair to any class of workers in the community to have proposed its exemption. It was impossible in the haste of the first drill satisfactorily to work out in detail the principle of selective service; but, nevertheless, under the regulations, consideration was given throughout by exemption boards and by the officers of the war department to the needs of agriculture.

"With more time at its disposal, the war department has worked out a system of classification which gives due regard to the necessity of retaining skilled farmers and expert agricultural leaders on the farms and ranches and in the educational and administrative service. * * * I am confident that with the assistance of all the organized agencies and the alert and cooperative action of the farmers of the nation the situation can be met and that those remaining on the farms can produce as much or more than has heretofore been available.

"This struggle is one which calls not only for enormous resources, but also for invincible determination and endurance. It is a test even more of the spirit than of physical strength. That we have the physical resources in larger measure than any other nation in the world is a matter of common knowledge. We do not yet fully realize the enormous power of the nation.

"There must be no breakdown on the farm—no failure of foods, foodstuffs and clothing. The duty is pressing of furnishing abundant supplies for our own people and, in large measure, for the peoples with whom we are associating."

## Irrigate in Winter

**By C. A. WYCOFF, Toppenish, Wash.**

Those who have tried it are fully convinced that it is very profitable to water the land in the winter, especially the alfalfa. This should be done before the warm weather comes in the spring, allowing the moist ground to warm up with the weather. This makes it unnecessary to put cold water on the ground in the early spring. The early irrigation has a tendency to check the growth of grain and hay. Having the ground moist, also, enables the farmers to get a better germination of all kinds of seeds. Unfortunately there is no water available in the government's ditches during the winter. It is found necessary to have the ditches dry part of the winter for cleaning and for repairs, and the government not being familiar with the needs and conditions of the valley will not turn the water on till about April. The local men in charge of affairs fully realize this and have advised changes, but a rut is hard to get out of, especially when the affairs are directed by men three thousand miles away.

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We guarantee every subscriber against loss through dishonesty or swindle by any advertiser in this publication; we do not attempt, however, to adjust trifling differences between subscribers and honest, responsible advertisers, nor will we pay the debts of honest bankrupts. Complaints must be sent us within 30 days from the date of the transaction, and the subscriber must have mentioned The Washington Farmer when writing the advertiser. This guarantee applies to live stock, except that we will not be responsible for claims for damages on account of disease in stock sold through these columns.


## The Thrift Habit Invites You

There is an unusual opportunity to develop the thrift habit in this country right now. There is not only special incentive under the stress of the times, but the government needs the practice of that thrift by everybody, and has made it possible. The thrift and saving scheme that has been started is as simple as buying postage stamps. Go to any postoffice or bank with 25 cents. You can buy a thrift stamp with it. That thrift stamp is nothing more or less than a 25-cent government bond. If you want to "go heavy," take $4.12 and buy a war-savings stamp. It is also like a government bond, and will bear 4 per cent interest compounded quarterly, making the stamp worth an even $5 on January 1, 1923—five years hence. Either stamp can be cashed in at lesser amount at any time before 1923.

And the children! It is the chance of a lifetime. Systematic campaigns are under way for the schools to allow the children to buy small stamps—or large if they can and wish to—and add to them from week to week or month to month. Such investments are as safe as the United States treasury. They afford the finest way in the world to lay by small sums. They teach thrift, a moral duty, one of the greatest single necessities to be added to our educational system in this country. Encourage the boys and girls to take part in the system.

## The Red Cross Wins Gloriously

The patriotism and humanity of America are proved. The great Christmas Red Cross campaign overshot the mark just as the great Liberty loan campaigns overshot. The goal was set at 10,000,000 new members during the week preceding Christmas. As the Farmer goes to press reports indicate that this number was beaten by nearly 40 per cent. Each membership simply means that one American citizen has spent one dollar and aligned himself or herself openly in behalf of the relief of human suffering. War has been forced upon humanity by inhumanity. It trails with it terrible misery and desolation. It is the one aim of the American Red Cross to bring relief and hope where trouble does now so much more abound. What a different spirit from that which, for the sake of conquest, plunged so many millions of people into the hell of war! What a glorious message to send back to heaven in reply to the chorus of the heavenly host that sings at Christmas time, "Glory to God in the highest, and on earth peace, good will toward men"!

## Whitman Takes Step Forward

Whitman county is one of the leading agricultural counties of the state, but its crop has been so largely wheat alone that it has been slow to realize that a county agricultural agent would be worth while. But it has at last come to it, as was inevitable. The county commissioners have arranged to employ one under the government and state college provisions. It is one of the biggest things that ever happened for the farming interests of that wonderful, rich farming county.

## Use What Your State Produces

Our own state produces the best things on earth. Why go out of it to pay fancy prices and freight charges for what other states produce? Our own fruit, potatoes, butter, cheese, beef, mutton, pork, vegetables and the like can not be improved upon, yet we ship in thousands of tons of these things or of needless substitutes for them. Especially is this true of fruits, but it is true of many other products. Some fruits that we think are necessary can not, of course, be raised here, but why send our apples and prunes to New York and import oranges and bananas by the thousand tons from points a thousand or five thousand miles away? Why import butter and cheese when we make the finest butter and cheese on earth right at home?

It is not merely a matter of state patriotism to use home-grown and home-manufactured things. It is a matter of national patriotism. Shipping facilities are greatly needed for staple foods and munitions for war purposes, and when we eat or wear a home-grown or home-made article we are relieving just that much car space for the handling of shipping that is absolutely necessary to the winning of the war.

## What Is Your Utmost?

Will you please make a cross in the square given below according to your plans for the coming year's crops, clip the list, sign your name and address and mail to the Editor of The Washington Farmer, Spokane, Wash. Your name will be held in strict confidence if you so request.

I am planning for the season of 1918 to change my usual system of farming by raising more, or by raising less, of the following farm products:

| | MORE. | LESS. |
|---|---|---|
| Wheat | ☐ | ☐ |
| Oats | ☐ | ☐ |
| Barley | ☐ | ☐ |
| Rye | ☐ | ☐ |
| Corn | ☐ | ☐ |
| Potatoes | ☐ | ☐ |
| Peas | ☐ | ☐ |
| Beans | ☐ | ☐ |
| Sugar beets | ☐ | ☐ |
| Vegetables | ☐ | ☐ |
| Fruits | ☐ | ☐ |
| Hay | ☐ | ☐ |
| Horses | ☐ | ☐ |
| Beef cattle | ☐ | ☐ |
| Dairy stock | ☐ | ☐ |
| Sheep | ☐ | ☐ |
| Swine | ☐ | ☐ |
| Poultry | ☐ | ☐ |
| FOR FEED | | |
| Carrots | ☐ | ☐ |
| Mangels | ☐ | ☐ |
| Rutabagas | ☐ | ☐ |
| Turnips | ☐ | ☐ |
| Artichokes | ☐ | ☐ |
| Silage | ☐ | ☐ |

Name .....

Postoffice .....

J. C. Child of Wapato is an advocate of nitrate of soda as a fertilizer. He told delegates at the recent irrigation congress at Yakima that he has used a light application in his orchard and has found it highly satisfactory. But it must be remembered at all times that different conditions of soil and croppings require different forms of fertilization. What serves one purpose might not serve another. Study conditions before applying fertilizer.

A woman in Iowa made a pound of butter and donated it to the Red Cross, which had it sold at auction for $567. The purchaser sent it to President Wilson to be used on the White House table. The president has not reported on its quality yet, but we venture the guess that it was no better butter than any one of several thousand dairies of the northwest produces every day of the year. But congratulations to the Red Cross for receiving that $567.

## Washington Gleanings

The second week in January will mark the opening at Wenatchee of the largest poultry show ever held in Chelan county.

The weather has been so mild around Walla Walla that spinach, sowed for early spring use, has grown so rapidly that it is being cut and shipped to outside points.

Whitman county is to have an agricultural instructor, employed by the federal department of agriculture, which will pay his salary, the county to pay his expenses.

The annual crop report for the Sunnyside project places the total value of products grown on 65,858 acres at $8,006,233 or $121.67 an acre, a gain of 40 per cent over returns of last year.

County Agriculturist A. B. Nystrom has asked all county farmers' organizations, granges and all others, to name a representative to act as a member of the Lewis County Agricultural commission.

Demand for dried apples for jelly stock is so heavy in the east that all the efforts of the evaporating plant at the state prison at Walla Walla are being turned toward preparing apples for this purpose.

A three-day drive for sugar beet acreage on the success of which depended whether the Utah-Idaho company would build a factory at Toppenish, ended with 6900 acres signed. The required acreage was 6000.

The boys in the agriculture classes in the high school of Prescott have completed the agricultural survey of the school district that has been made at the request of Commissioner of Agriculture Benson.

By the building of four byproducts plants and the material improvement of two others during the year, Yakima valley fruit growers are able to find a home market for 16,000 tons of apples which would otherwise have been wasted, but which sold at an average of $7 a ton, return $112,000. Other fruit and vegetables sold to evaporators brought $117,820, making a total of $229,210.

## What Others Say

Kimball's Dairy Farmer: A community is made up of individuals, and each individual has a decided effect upon every other individual, either directly or indirectly.

Hoard's Dairyman: There are all sorts of foolish men and foolish notions wrapped up in this business of dairy farming. One of the most foolish is the notion that registration papers are of no particular value to the owner of a pure-bred animal.

Farmer's Review: Farming without figures has been the custom, but there is evidence that the modern farmer is using figures more than ever before. The more carefully we study the work in which we are engaged the more interesting it becomes and the greater is the satisfaction derived from it.

Wallace's Farmer: It is not difficult for the business man to understand that the cost of the raw material and the expense of operation must be considered to determine the cost of production in a packing or manufacturing enterprise; but it does not seem to occur to him that these same items must be considered in determining the cost of agricultural production.

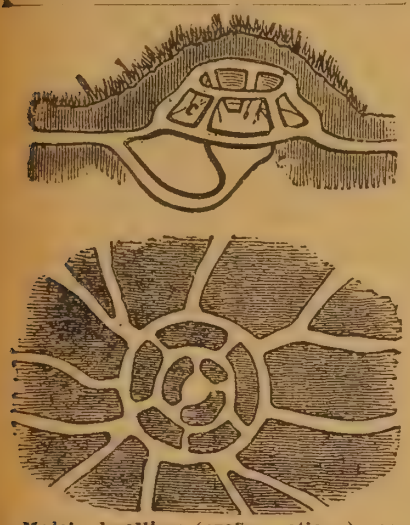
# Mole Trapping by Country Boys

By H. H. BUSHNELL.

War has been declared on the Cowlitz county moles and Theo. H. Shaeffer of Puyallup, mole expert, came down to tell the boys and girls how to do it. Meetings were held all the week, concluding at Kelso.

Mr. Shaeffer, who is connected with the U. S. biological survey, has an intimate acquaintance with moles of all sorts and kinds, and his talks were interesting and entertaining too.

There are possibilities in the moleskin industry which we have not realized as a nation. In 1916 New York furriers imported 6,000,000 moleskins from Europe. Apparently they do not know that we have moles of our own; at all events they have not developed



Mole's dwelling (cross sections), upper figure, side view; lower figure, top view.

the industry in this country. The fur of our moles is equal to if not superior to that of the European digger, and the moles are larger. The Townsend mole is quite a large creature and it does not take many of him to make a muff or neckpiece of the soft, lovely fur. There is also a smaller mole and the little shrew, which looks like a doll mole, and is not a mole at all.

The mole's forefeet are set on sideways. He is not designed by nature to do anything with them but dig and he is an efficiency expert at his job. He can even dig beneath a macadamized road with those powerful forefeet. He is not a true rodent and does not have the gnawing teeth. In fact, he is not much of a vegetarian and his chief diet is composed of earthworms. He devours insects and some vegetables when they come his way and appeal to his taste. But his tunnels furnish an avenue for other animals, particularly field mice which are very destructive to all root crops, and if we banish the



Common Mole.

mole the field mouse will have no chance to get at the roots, for he is not an excavator.

The mole is not a social creature, but many use the same big tunnels. A well chosen spot for trapping may yield a number of pelts before exhausted. The slight upheavals across a field are not permanent runways for moles, but where we find a mound of dirt freshly turned up we can be sure a tunnel is beneath it. The mounds are formed by plugs of earth dug out of the tunnels. Under the mounds you will find a hole running down to the tunnel at an angle so the dirt will not fall back into it.

The trapper clears away this earth, locates the hole and digs away enough dirt to lay bare a section of the tunnel. There he sets his trap and fills in the earth. The mole comes along and is not surprised at finding what he takes to be a cavein. He starts to digging and is caught. There are several types of traps.

While the temperature in moledom does not vary as much as above ground still there are seasons of the year when the fur appears to be shed and is not first class. This period begins late in September and extends for a few weeks. A moleskin secured at the wrong season is black when it is cured and as the new fur comes in the skin shows the change. Half shed, half the skin is darkened and the rest a tan color. A prize skin is yellow on the skin side.

The latter part of November, December, January and March are good mole trapping seasons. In April again there is a short period when the pelts are not prime. Then they are good through the summer, so there is a long trapping season and no closed season, either.

It is not difficult to skin moles. Mr. Scheffer skins them at the rate of one a minute. He uses a pair of scissors, cutting down the belly from mouth to tail. The skin is very loose; the mole is not in the least hidebound. The feet are cut off and the skin is taken off quickly. He advises against the use of salt, alum, pepper, mustard or vinegar. The skins should be cured in a moderately cool place. Do not dry them before a fire.

It is best to market a number of pelts at a time, and so the county agriculturists usually arrange for collecting and pooling them. Better prices are generally obtained in this way.

In seven Oregon counties there are bounties on moles. No bounties are provided in Washington, but they can be arranged if the moles are a pest, and it pays to provide this incentive.

The mole likes damp ground, but flooded land usually drives them out. The diking projects will be followed as a rule by more moles.

Country boys are generally the most interested in mole trapping. Some girls take to it, too, for the sake of the fur, which is used sometimes for trimming collars and cuffs. Mr. Scheffer had with him a muff made from 15 moleskins and a neckpiece made from 10.

Prime pelts bring from 15c to 25c, and if they are plentiful furnish quite




**The shaded portion of the accompanying map shows the home of the common large mole of western Washington and Oregon. They are larger and have better texture than those from Europe.**

a bit of extra money, besides ridding the earth of a pest. While the mole may not deserve all the hard reputation he has for destructiveness he associates with evil companions who do the mischief, and he furnishes the means.

Those who are interested in mole trapping are advised to write to the department of agriculture at Washington, D. C., for Farmers' Bulletin No. 832, and also to the Washington State College at Pullman for the monthly bulletin of December, 1916, both of which deal with this subject.

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The skins of plums can easily be removed by scalding, just as you would peaches.

# Community Cooperation

## *Why It Pays to Trade in Your Home Town*

Just about every big achievement recorded in history succeeded by reason of well directed cooperative effort.

This is true of towns and communities. Think of any live and prosperous town you are familiar with, analyze the reasons for its growth and advancement and you will find its character to reflect the amount and quality of united effort put forth by the residents in and around it.

Most thriving small towns owe their progress to the support that is given their retail stores by the surrounding community. In saying this we do not urge or expect our readers to patronize their local stores if they can do better elsewhere. We appreciate the fact that you want good goods and good service along with a fair price. If your local merchants do not deserve your trade on this basis it is only natural to expect you to trade outside your home town.

We believe, however, that our subscribers' best interests, both financial and social, are dependent on building up with their trade the communities in which they live. Trade kept at home means money kept at home—and money makes community progress possible—progress in which all may share.

Buy of your local merchants when you can do so to as good advantage as you can buy elsewhere. But don't make it hard for your local storekeeper to carry a fresh, up-to-date line of goods by withholding trade you can give him to your mutual advantage. If your home town merchants are well-meaning progressive men, you may be sure they want your trade and will do everything they can to please you and to give you good service and a square deal every time.


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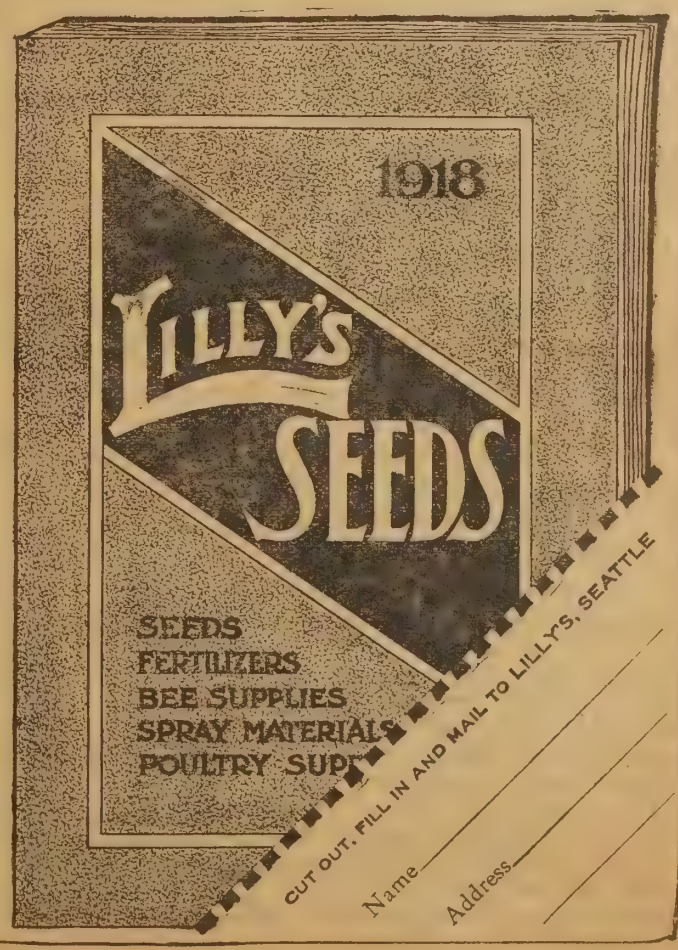
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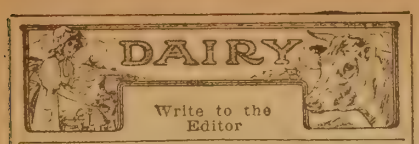
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A. B. NYSTROM, Editorial Contributor

# Feeding Cows

## A Few Common Sense Points

The dairy cow is one of the best food conservers we have today. She utilizes the waste hay and fodder that is found on many farms and makes the best food out of it. She produces remarkably well even on refuse, but she can not do her best on that sort of feed.

To get the best results from a cow a definite system of feeding must be followed. In the first place she must have fresh, clean water to drink. All animals need pure water to drink. The dairy cow is no exception. She must drink large quantities if she is a heavy milk producer. A cow producing from five to six gallons of milk daily should have from 18 to 25 gallons of water per day. Needless to say this should be given not less than twice a day.

Warming the water is not necessary if your cows have access to freshly drawn well water or spring water just out of the spring, but the practice of simply cutting a hole in the ice for watering dairy cows is not economical, to say nothing of the bad effect it has on the health of the animal. Drinking ice cold water affects the amount consumed and a lower milk production will result. The best temperature for water is between 50 and 60 degrees Fahrenheit.

Good hay is necessary to profitable dairying. Hay that is dusty, moldy or bleached does not make good cow feed. It may be used as a filler to furnish bulk, but ordinarily the best use it can be put to is for bedding. Green, well-leafed and properly cured alfalfa, clover or vetch hay makes the finest kind of hay for the dairy cow. She will consume large quantities of it, thus requiring less grain, and she will give economical returns from it. These legume hays of high protein content are, as a class, much superior to the grain or grass hays. A good rule to follow in feeding hay is to feed all the cow will clean up. Do not allow her to waste any. If the hay is coarse-stemmed and she leaves some of the stems these should be saved and fed to the horses.

It is also necessary to furnish succulence in the ration. A luxuriant pasture is best so far as the cow is concerned, but often more economical returns can be obtained from silage, soiling crops or the root crop. From 30 to 50 pounds of succulence should be the daily feed. Dairymen should never fail to provide succulence the year around.

The question of whether or not grain should be fed is not so easy to answer. Cows with a high producing capacity doubtless need grain. The point is simply this: If the cow has a large capacity for consuming feed with a low producing capacity no grain will be needed, but if the cow is rather small and has a high producing capacity concentrates should be fed. It is difficult to fix a minimum production under which no grain should be fed but it is safe to say that under normal conditions no grain should be fed to mature cows that do not produce more than 20 pounds of milk daily.

We like to have our cows respond well at the pail to proper feeding, and especially to the feeding of concentrates. In this connection it must be remembered that cows differ with regard to how they respond. In many cases the milk flow is increased immediately, but in just as many cases the lactation period is lengthened—the cow keeps up the heavy production for a longer time. A. B. N.

## Cost of Silos.

Figures have been compiled showing the cost of the three wooden hoop silos built in Grays Harbor county, Wash., this year. Those silos are of the following capacities: 36, 61 and 67 tons respectively. An investigation conducted by the office of the county agent last year shows that the silos of small size cost more per ton of capacity than the larger ones. Eleven silos of less than 80 tons capacity cost $3.06, while 13 silos of more than 80 tons capacity cost only $2.20. Comparing the former figure with the cost of the wooden hoop silos erected this year which cost $2.02 per ton we find that there was a saving of $1.04 for the wooden hoop type of construction. We should also consider that many of the silos that cost an average of $3.06 were built when all material was cheaper than it was this summer.

## Oleomargarine in Canada.

The greatly increased demand for butter and the desirability of making available substitutes therefor has led to the modification of the Canadian dairy and industry act, which prohibited the manufacture, importation, and sale of oleomargarine. The new regulations permitting such operations and transactions apply to oleomargarine, margarine, butterine, and any other substitutes for butter manufactured wholly or in part from any fat other than that from milk and cream, and containing no foreign coloring matter or more than 16 per cent of water. The use of any preservative other than salt is also prohibited except with the written consent of the food controller for Canada.

When lamp chimneys were universal to toughen them they were put in a vessel of cold water and put on the stove and allowed to slowly come to a boil. Undoubtedly other articles of glass might be toughened in the same way.

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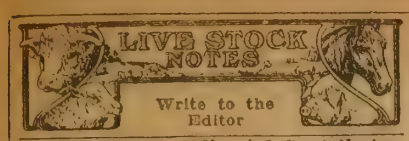
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E. J. IDDINGS, Editorial Contributor.

## More Pigs

With a shortage of brood sows throughout the country, gilts from the feed lots must be used to obtain the desired increase in the pig crop for 1918, specialists of the United States department of agriculture declare. Gilts will not produce as large litters as may be expected from mature sows, it is said, but their use in the emergency is advisable. Farmers using gilts should breed slightly above the prescribed number recommended in the state quotas in order to insure the requisite increase of pigs in the spring. The following per cent of increase is asked from the following states:

Missouri, 50; Alabama, 30; Kansas, 25; Iowa, 25; Illinois, 20; Indiana, 20; Nebraska, 20; Arkansas, 20; Mississippi, 20; Ohio, 15; Kentucky, 15; Tennessee, 15; South Carolina, 15; South Dakota, 10; Maryland, 10; North Carolina, 10; West Virginia, 5.

Farmers who do not breed as many as 20 sows can readily calculate the amount of increase which they should make in order to do their part. For example, if a farmer bred four sows in the fall of 1916 and breeds five this fall, he contributes at the rate of 25 per cent increase. If he bred 10 sows in 1916 and breeds 11 in 1917, he shares in a 10 per cent increase. If he bred only two sows in 1916 and breeds one more this year, he contributes exactly his quota if he lives in Missouri.

## Dr. John R. Mohler

The secretary of agriculture announces the appointment of Dr. John Robbins Mohler as chief of the bureau of animal industry of the United States department of agriculture. Dr. Mohler succeeds the late Dr. Alonzo D. Melvin, who died on December 7.

Dr. Mohler has been in the service of the bureau of animal industry since 1897 and has been assistant chief of the bureau since July 1, 1914. During the long illness of Dr. Melvin, Dr. Mohler performed the duties of acting chief, as well as those of chief pathologist.

The bureau of animal industry, in number of whole-time employes, is the largest division of the department of agriculture. Approximately 5000 employes are engaged in its work and are located in every state and nearly every county in the Union. The work of the bureau, generally stated, is to increase and conserve the live stock industry. The bureau also conducts the federal inspection of meat and meat products.

Dr. Mohler was born in Philadelphia May 9, 1875. After education in the Philadelphia Central high school, Temple college, University of Pennsylvania and medical department of Marquette university he engaged in private practice in Philadelphia in 1896. He entered the service of the bureau of animal industry in 1897 as a field inspector in the quarantine division. Later he was transferred to the meat inspection division, and in 1899 he was transferred to the pathological division, where he was advanced to the position of chief in 1902.

Dr. Mohler has translated a number of scientific works and is the author of numerous scientific articles.

## Veterinary

Dr. S. B. Nelson

**Feed Fewer Carrots**—I bought a cow three months ago, but she is too laxative so I can't feed her anything but dry hay and even that does not help much. Have tried to feed potatoes and carrots. She is in good condition and eats anything. She is to be fresh soon. —R. G. Olalla, Wash.

Try giving your cow one ounce of compound tincture of gentian and one teaspoonful of listerine in one quart of water morning and noon for some time. I would not feed her so very many carrots prior to her coming fresh. Do that a few days after she has had her calf. You may also continue the medical treatment soon after she has had her calf if necessary.

I have a cow about 8 years old. When fresh last March she gave birth to twin calves prematurely and both died. The mother took a heavy cold and she scarcely gave a cup of milk. The veterinarian in attendance suggested her being milked regularly as it would tend to bring up her flow of milk, but said she would not give her usual mess of milk until fresh again. She has given as much as four quarts at a milking by times and as low as two quarts since fresh. I am feeding her alfalfa hay and shorts in slop. She is in much better order than when I bought her and her milk is very rich, but in the last week she has dropped off in her milk almost two quarts a day in both milkings.—G. R. S., Olympia, Wash.

Try giving your cow one-fourth pound of Epsom salts in one quart of water daily. Also try feeding her a small quantity of carrots along with her other feed, say from two to three pounds to begin with and gradually increase it up to 10 or 12 pounds. If she is going dry, it might not be necessary to feed her more than six or eight pounds daily.

If an egg is cracked when putting it on to boil, salt shaken in the water will prevent the egg from running out.



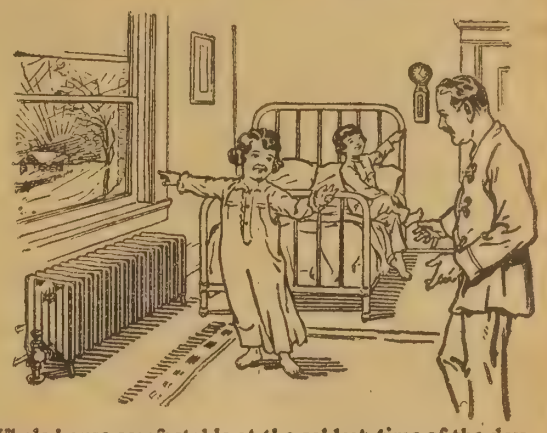

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JAMES DRYDEN
Editorial Contributor

# Feeds and Feeding

By JAMES DRYDEN.

The method of feeding, as pointed out in a previous article, is about as important as the feed. Unless the feed is dished up to the fowls in proper way we will not get the results in egg yield that we should get. We spoke of the necessity of two things; first, regularity in feeding, and second, the danger of making radical changes in the feed.

I wish to emphasize here some other points in feeding. First, the feeding should be done in such a way as to induce exercise. Activity is the life of the hen that is kept for the production of eggs. The laying hen is not a hog that eats and sleeps and eats some more until he is a fat hog and is killed that his fat may be used in the human dietary as fuel for the production of heat in the body. The lazy life of the hog does not produce fat, it conserves it. If the hog were compelled to work and scratch and run and fly and keep wide awake every hour of the day he would not get fat. The fat-producing foods would be used in the production of the energy to keep up the daily round of activities or gymnastics. Exercise burns up the fat and converts it into energy. Energy is what steam is to the engine; fuel is required to produce it and the food is the fuel.

Exercise is not essential in the production of fat or meat either in the hog or the fowl. The large meat fowls, like the Brahma, do not take to gymnastics or track meets. They are slow in moving and have little nervous energy, are not easily scared, do not scratch much or run much. Put a Brahma and a Leghorn in the same yard and the Leghorn will make the rounds of the yard four times when the Brahma makes it once. The Brahma conserves energy and makes fat and meat out of the food. Why does not the same process, why does not a life of ease, produce eggs as well as meat? Why does not feed give the same result when eaten by a Leghorn as by a Brahma, or by a Jersey and a Hereford? It is easier to ask that question than to answer it. But we know that activity and high nervous energy are associated with high egg production and not with meat production.

The point is that when we are feeding for egg production we must feed in such a way as to induce activity or exercise. It is a question of inducements. We can not compel the hens to exercise even though we furnish them with bloomers and Indian clubs and a gym. The hen takes her exercise when searching for her food, and so in modern poultry-keeping we take advantage of this trait of the hen and make the search so difficult that she will get the necessary amount of exercise.

How are we to induce them to exercise? Make them scratch. The hens will raise the mortgage if you will let them scratch. The best way to make them scratch is to cover their grain feeding floor 10 inche sdeep with straw and make them scratch their grain feed out of that. The straw while not a poultry feed is a valuable ally of the feeder. They won't scratch in the straw unless there is some grain in it, and they will not scratch if there is too much grain in it. It is here that skill in feeding comes in—to feed in such a way as to induce the proper amount of exercise.

We can not throw all the feed in the straw. All whole grain feeding is not the best way to feed. The fowls do better when part of their grain is fed in a ground state. It is not necessary that they should scratch all the time. There may be such a thing as too much exercise, but we know that we get better results when we feed a ground mash once a day than when we feed all whole grain. The proportion of ground grain to whole grain should be not less than one to two and may be two to three.

The following method will give good results. Feed a moist mash in the morning as soon as possible after the hens come from the roost. It will be an hour or two after eating the mash before they show much activity or desire to search for more feed. About 10 o'clock give them a light feed of grain in the straw, enough to keep them busy for an hour or more; then in the afternoon or evening give them a good feed of grain, all they will clean up in a couple of hours or before going to roost. This should be a liberal feed, so that they will go to roost with full crops.

This program, however, may be varied and give equally good results. The mash may be fed in the evening, giving them as much as they will eat before going to roost. In that case a light feed of grain should be fed first thing in the morning, and a heavy feed about noon. The amount given at this latter feed should be so gaged that they will eat of the mash at night about one-third as much ground grain as of whole grain. It is here where the difference between a skilful and an unskilful feeder come in. He must learn by experience and daily observation how much to give at a feed, first to induce exercise, and second to preserve a proper balance between whole and ground grain.

Straw is very essential in the business of egg production. It is not feed for the fowls, but its use brings us better returns from the feed fed. It is high in price at present, but at the same time it must be used in order to get results from the high priced feed. It is here where the grain farmer has the advantage in raising poultry, he has plenty of straw. The straw stack will produce eggs; make use of it.

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After first removing the cork of a bottle from glue do not use it again, but in its place insert the stump of an old candle. It will never exasperate you by sticking, and the glue can not possibly spill.


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may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.




GRANVILLE LOWTHER
Editorial Contributor

# Should Be Prompt

## Don't Hold Cars Unnecessarily

**By Granville Lowther.**

Last year I concluded to do a little marketing for ourselves instead of entrusting it to commission men or selling to buyers to be sold again at a profit. I came out without loss, and learned some things that I consider of value, and that I think should be passed along to the general public.

One thing that surprised me was that the jobbers seemed never in a hurry to unload their cars. To begin with, when a car of apples was received the jobbers had 48 hours in which to unload it without incurring any penalty. I had always supposed they unloaded as soon as possible, but I found they were never worried or hurried. At the expiration of the 48 hours there was a minimum demurrage charge of $1 on a car of apples. They never think of this demurrage as a penalty in the sense that that term is used in the courts, but they think of it as a charge for services rendered. At the end of the second day after demurrage charges begin $2 is charged, $4 for the third, etc.

I had sold a carload to a jobber and it was shipped in my name. I suggested to him that we unload as soon as possible. "No," said he, "in most cases I deliver them directly to the growers out of the car, and by that means save handling them twice." I said, "Won't you have to pay demurrage charges?" "Yes," said he, "but that is cheaper than handling them twice and paying the cost of storage at the warehouse." It dawned upon me that the railroad companies were not only furnishing cars for the transporation of our fruits, but that they were in a large degree furnishing warehouse accommodations as well. I saw that if these cars could be promptly released that it would be a big step in the right direction of relieving car shortage.

**Situation in Texas.**

Within the last five years I have made two trips to Texas, where I spent considerable time and always with a view of learning what I could in reference to fruits, shipments, etc. Texas formerly had the trouble to meet of which I have spoken, but they met it from a different angle. In that state the fruit growers from the Ozark mountains and some from Colorado would ship cars of fruit into the villages, towns and cities and leave the cars standing on the tracks until they peddled out the fruits among the citizens of the town or community. In this case the jobbers and growers appealed to the legislature of the state of Texas to pass a law prohibiting the sale of fruits directly from the cars, and requiring that they be unloaded from the cars into warehouses or some other receptacle. I do not know whether the bill as it appeared before the legislature finally became a law, but I do know that I heard several discussions on the subject.

I have recently been on Commission row in Seattle. The conditions there are best described by one of the city papers as follows:

"Consignees of foodstuffs in the past have taken from two to five and six days over the so-called 'free time' to unload their holdings, while other shippers were pleading for cars. Summary action taken by the railways and served on the commission men Saturday caused a wild search for cold and dry storage, as only one or two of the houses own such space, and none of the brokers, who are the principal intermediaries in handling carlot stuff, have space.

"Due to the zeal of brokers in earning their commissions on sales Western avenue has frequently been oversupplied with foodstuffs from California, Florida, Mexico and other distant points. This brought about price cutting by jobbers in order to get the stock out of the way, often at a loss.

"The effect of the car order is expected to gradually reduce the carload arrivals to the actual needs of this market and price cutting, it is said, will automatically cease, and, in the opinion of seasoned wholesalers, foodstuffs from outside the state will cost the consumer more money.

"The new order applies to all perishables, potatoes, onions and apples."

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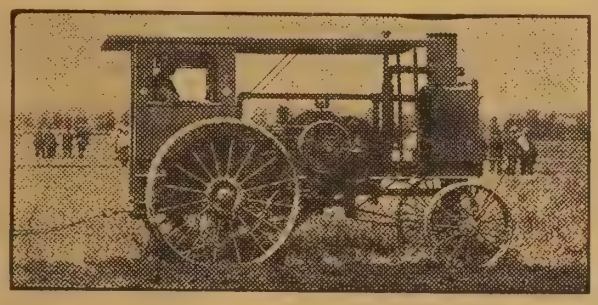
Tea is greatly improved by adding a slice of lemon; either for iced tea or for Russian tea on a cold day.

# Understanding the Tractor

## The Kinds of Tractors

Tractors are now commonly classified into two types—wheel tractors and crawlers. The wheel tractor delivers power from wider-surfaced wheels which are usually fitted with cleats or spikes for gripping the ground. The crawler type of tractor is one which works on the track-laying principle. Many of the crawler types of tractors have a supplemental front wheel or wheels which carry a portion of the weight and which are used to assist in steering.

There is now a wide variety of both wheel tractors and crawlers in use on farms throughout the country. The type to select for your particular farm depends on the size of the farm, the way it "lays"—whether level or rolling—and the nature of the soil. It is purely a matter of individual preference and requirements. Somebody has aptly said that one should use the same care in buying a tractor as in buying a horse—and that's as near a safe rule as we can suggest. If you intend to buy, it will be found a good idea to "read up" on tractor literature and to visit and talk to those who already have tractors in use on their farms.



Then select the size and kind of tractor suited to the needs of your farm. Questions regarding the tractor will receive prompt reply if addressed to the editor of this paper, Review Building, Spokane, Wash.


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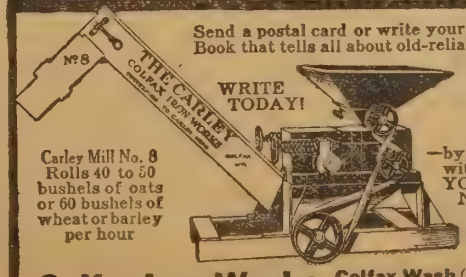
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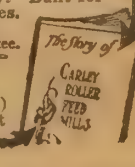



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# Will Unify Railroads

## *Government Assumes Full Control*

One of the most drastic war measures this country has ever known was taken last week when President Wilson, exercising the authority vested in him by congress, issued a formal proclamation taking over the railroads of the country for their complete control and operation by the government during the war. At the same time he announced that William G. McAdoo, secretary of the treasury, would be head of the operation system, having the title of director general of railroads. The appointment does not affect his position as secretary of the treasury. The absolute control of the railroads dates from January 1, though they were formally taken over on Friday, December 28.

Director General McAdoo announced immediately following the appointment that he would require the continuation of the present railroad officials and operatives in their present capacities until further notice, and that under their management the lines would continue to operate with as little disturbance from regular schedules and plans as possible. The railroad war board, composed of high railroad officials of a number of the most prominent lines, will continue in its present capacity. Walker D. Hines of New York, prominent in railroad business, was appointed assistant director to assist in the organization of the management under the government control regime.

Practically all the presidents of the railroads of the country have acknowledged the action of the government with pledges of personal support in all manners possible.

President Wilson announced in taking over the lines that the action was not taken because of dissatisfaction with the spirit or the efforts of the separate company managements, but because war traffic conditions demanded unification of all transportation, which could be accomplished only under one controlling management.

It is the plan of the government, as announced, to eliminate all lost motion possible, reduce passenger traffic as much as possible without interfering with necessary travel and route all freight over the most direct routes possible without regard to the lines on which the shipments originated or the ownership of the train equipment carrying them. Payment for service will be based on the earnings of the railroads during a considerable period just passed over.

### Italy Still Holds.

The Italian army still maintains control of the situation on its battle fronts. The combined attacks of the Germans and Austrians have been repulsed. All the territory lost in recent battles has been regained, and the Italians appear to be master of the situation again.

Comparatively little fighting has been in progress during the last week, owing to winter weather conditions.

Germany's peace offer at Christmas time fell on deaf ears everywhere except in Russia. There negotiations are still going on. The other allies have announced their intention to fight on relentlessly, regardless of what their former ally, Russia, does.

### Floods Menace Northwest.

The most serious floods for this time of year known in the northwest for decades have menaced property and life in various parts of the three states of Washington, Oregon and Idaho during the past two weeks. Especially is this true of western Washington, northern Idaho and parts of the Willamette valley in Oregon. Railroad traffic has been greatly handicapped.

### Gets Cold in the East.

While the northwest has been enjoying an open winter and almost springlike weather, the east has been in the grip of cold weather for several days. New York city reported temperature below zero; White River, Ontario, Canada, reported the remarkable low degree of 48 below zero, and Winnipeg, Canada, reported 32 degrees below. Sioux City, Ia., reported 28 degrees below zero.

### Still Probing Packers.

The federal trade commission continues its probe of the meat packing industry trying to discover the methods of control used by the large packers. Francis J. Heney of San Francisco is conducting the investigation. Volumes of testimony have been taken tending, it is claimed, to show that the large packing concerns have held such complete control of the situation as to squeeze the small packer or dealer out of business, control the price of meat and meat products and virtually establish the prices of hides and leather. The investigations probably will last for some time yet, following which definite action against the packers is a possibility.

# Farmers Must Pay in Loyalty to Get the Benefits of Cooperation

Among the persons who have done real work along the lines of better farming and helping to make better farmers and better farm conditions in the state of Washington must be included the name of W. J. Langdon of Sumner. His dairy experiences, as well as method of obtaining a market for other farm products when similar farm products raised by others farmers went a-begging are a real contribution to the market problem. Mr. Langdon was telling me the other day about an incident of his farm operations when it came to marketing potatoes. There was a big crop of potatoes that year, and the commission houses in Seattle were overloaded, and the price way down. The farmers generally were saying there was no money in potatoes, and they were going to quit raising them. For some years Mr. Langdon had been "standardizing" the potatoes he raised on his own individual basis. The trade in Seattle knew what Langdon potatoes were, and when Mr. Langdon visited the commission house with which he had traded and asked about the potato situation he received a reply that the market was overloaded. "But," said the commission man, "your potatoes are different, and I can use a carload and give you a fair price. I have an order right now that can only be supplied by such potatoes as you raise, and I will hold it until you can get your product in."

Mr. Langdon is prominently connected with grange work in this state, and is at work on a cooperative buying proposition by which individual granges can obtain goods from manufacturers and wholesalers direct. He is also at work with State Farm Market Director Hobson and with R. B. Coglon, at the head of county agriculturists in this state, the three working together to see if something can not be done in standardizing potatoes so as to create a market. As Mr. Hobson has continually pleaded with the growers that unless the buyer knows what he is getting he certainly will not buy with intelligence and will try to protect himself if he has to take a chance on getting the field run of potatoes.

Mr. Langdon doesn't despair of the growing success of cooperative enterprises. He believes that when farmers fully realize the importance of cooperative effect and are more willing to pay in loyalty to their organizations for the benefits conferred that the growth of the cooperative movement will be hastened.

**Newlands Laid to Rest.**

Senator Newlands of Nevada died recently after a career that gave him

## Time-Saving Ideas

With a tremendous amount of work to be done on the farm this coming year, and with the certainty that man power will be short, many wonder, no doubt, how they will get through.

One thought that will occur to many is to employ every good labor-saving device obtainable.

Thanks to the ingenuity of machinery manufacturers one can get many tools and machines that pay for themselves in the time they save and the increased amount of work they make possible.

Nearly every reader of a farm paper can trace the presence of some desirable piece of equipment on his place to having answered an ad and having secured a descriptive catalogue.

Take the present issue of this paper for example. Its advertising columns tell where to get scores of desirable things that will reduce work and save time.

The catalogues of manufacturers are easy to get and often prove the means of bringing to the farm valuable equipment.

You can learn a great deal by reading over advertisements—for there is where announcements are made of new and improved mechanical equipment that has been invented, perfected, found of practical value and offered for sale. Of course many things besides machinery are offered as well.

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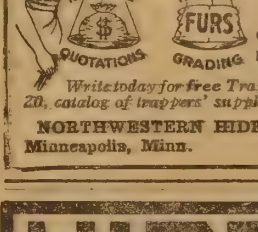
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**War Savings Stamps are a call to the thrift and patriotism of every American—a call that must be met by every man, woman and child who shares the blessings of this free country, if we are to carry on this war as a united people.**

## What They Are

War Savings Stamps are the most democratic form of government securities ever issued—a profitable, simple and secure investment backed by the entire resources of the government and people of the United States. They steadily increase in value from the date of purchase to the date of maturity—this increase is **guaranteed** by the government.

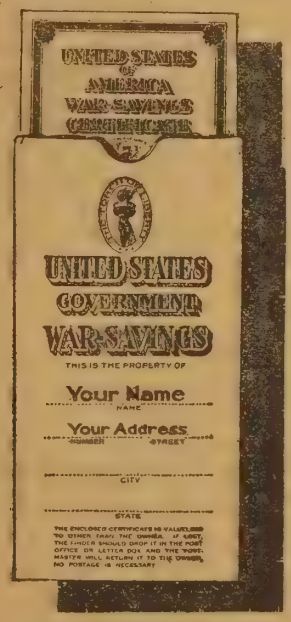
These stamps are issued in two denominations—the $5 stamp and the 25 cent Thrift Stamp.

## The $5 War Savings Stamp

The $5 War Savings Stamp is a stamp for which the government will pay you $5 on January 1, 1923. Its cost to you if bought this month is $4.12 (this cost increases one cent each month during 1918)—that is 4% interest compounded quarterly.

## How to Buy Them

Take $4.12 to the postoffice, a bank, your R. F. D. carrier or any other agent, buy a War Savings Stamp and ask for a War Savings Certificate.



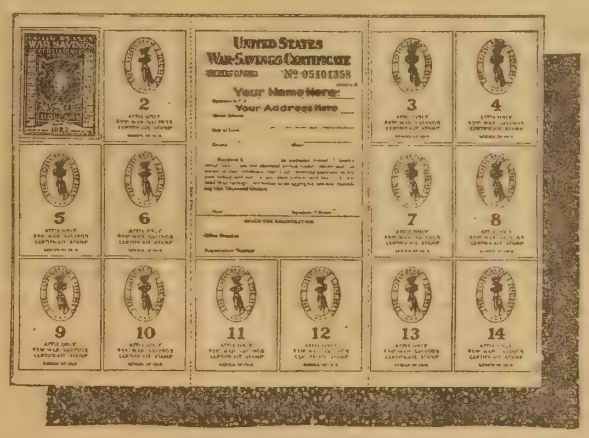

**U. S. Government War Savings Certificate and envelope. Envelope is 4x 8 inches.**

A War Savings Certificate is a pocket-sized folder containing 20 spaces upon which to affix War Savings Stamps. The agent from whom you purchase your first stamp will write your name and address on the certificate and will give you an envelope in which to keep it.

You are now a war saver—doing a personal part in winning the war by lending your savings to your government. Continue to buy War Savings Stamps every week or month and put them on your certificate until you have filled all of the 20 spaces. When this is done you can buy another War Savings Stamp and receive free of cost another Certificate, to which you can attach stamps as you buy them. For each certificate, filled with stamps, the government will pay you $100 on January 1, 1923—it is a $100 government bond, that if bought in January, has cost you $82.40.

## Simple, Secure

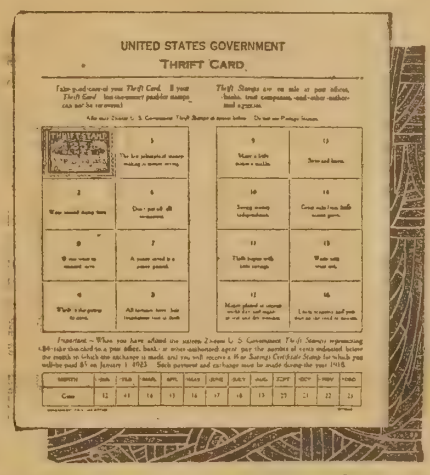
You don't have to figure interest, nor clip coupons, nor worry about the safety of your loan; the certificates are not transferable, and behind them are the wealth and taxing power of the richest country ever known. You can get your money back, on 10 days' notice, any time you need it.




**War savings certificate, with first stamp affixed. On this and the other side are 20 spaces for stamps. When filled it is a $100 government bond. Actual size of certificate 11½x8 inches.**

## Thrift Cards

The Thrift Card is furnished to all purchasers of the 25c Thrift Stamps. This card has spaces for 16 stamps. When all the spaces have been filled the thrift card may be exchanged for a $5 stamp by adding 12 cents in cash in January, or one cent additional each month thereafter.




**Thrift card with first stamp attached. When the 16 spaces are filled you have $4 toward the purchase of a war savings stamp.**

**Your Country needs your savings. War Savers are Life Savers. A Country worth fighting for is a Country worth saving for.**

**Start saving NOW. Get war savings Stamps from your R. F. D. carrier, postoffice, bank or any authorized agent.**

## War Savings Committee for Washington

**Daniel Kelleher,**
**State Director, Seattle.**

**D. W. Twohy,**
**Vice Chairman, Spokane.**

**This space contributed by Sears, Roebuck & Co.**

# Truly Reaps What He Has Not Sown

## *But Farming the Sea the Fisherman Does Not Lack Incentive to Industry*

By PAUL E. TRIEM

There is one point in which those who go down to the sea in ships have a great advantage over the farmer; the latter must sow and cultivate his own crop, while the fisherman has only to harvest that which lies ready to hand. And so, at a time when the free range of the past is vanishing from the memory of men, it is natural that America, with untold riches waiting to be garnered from her inland and adjacent waters, should turn to that primal source of all life, the ocean, to look for a substitute for the soaring beef steak.

The fisherman truly reaps what he has not sown, but his life does not lack incentive to industry, for all that. When the romance of the great infant fishing industry shall be written, there will be as thrilling chapters in it as



**Type of fishing boat in which salmon and halibut fishermen brave all sorts of weather. This boat came round the Horn from the eat coast.**

are to be found in the literature of war, mining or exploration. Men now in the prime of life, for instance, can look back to a time when the fish trap threatened to render possible the cornering and exploitation of the fish market. All that was necessary, apparently, was for some wealthy monopoly to buy up all the advantageous sites, by which simple process competition would be eliminated and the great salmon industry would be gathered neatly into a bag. Those were the days of open warfare between rival fish interests, when the guards in charge of an isolated trap might be picked off at dusk or daybreak by a stealthy rifleman. Fishing was no pink tea occupation in those days.

And then, when the dreams of the fish barons seemed on the point of fulfilment, suddenly out of nowhere came the seiners. They were like locusts or the grasshopper plague to the men who had hoped to control the fishing industry, for while there are but a limited number of really first-class sites for traps, the infinite ocean was a hunting ground for the men with nets. With enough capital to buy a sein and a fishing boat, the hardy Norwegian with hardly a dollar in his pocket became an independent producer. The dream of world-wide control of fish production turned into a nightmare, and then the "fish barons" awoke. That phase of the proceedings had become history.

The traps still do business as of old, but they are handicapped by the fact that they are chained to a location which may be avoided by the fish, while the seiners are mobile and can go where the salmon are to be found. Many of the fishing boats are owned by the men operating them. Hardy and adventurous men they are, too, for even with the elimination of the gun men of earlier days, fishing is no child's play. Much salmon fishing is done on various parts of Puget Sound and on the lower Columbia river. Cannery boats call at the various traps and also buy from the seiners—there is never any trouble in selling, although, of course, the price fluctuates according to market demand and the abundance of the "run." During these years of the world war, when food of all kinds is at a premium, there is little likelihood of any surplus of fish being produced.

With the coming of winter, many of the men who have seined for salmon in the sound during the milder weather change their occupation and become halibut fishermen. And if fishing in general is hard work, halibut fishing may be termed a job for men of steel. The fish are caught on hooks, baited usually with herring or smelt. The fishing banks lie off the Washington and Alaska shores, out where real ocean weather prevails throughout the winter. Most of the boats are but "pop bottles," but apparently these modern vikings who man them are unconscious of the wonderful courage they display in going out in such diminutive craft.

They are a strange type of mankind, altogether, these fisherfolk. They are not even paid like other men, for the crew receives a share of the profit of the trip, so that a man may make nothing a day or a hundred dollars or so per week, depending on the size of the catch and the price of halibut when the boat reaches port. And all the time they are at work, manning the dories or hauling in the long lines armed with an infinity of hooks, out beyond the cape, they can hardly be unconscious of the fact that death is as apt as not to be one of the crew. Never a dark night settles down over the heaving ocean but that this possibility—the chance that not a mother's son of them will be alive when day breaks—is so close at hand that the fishermen must at times look it unflinchingly in the eye. But the world must be fed, even as it must be purified from cruelty and the lust for dominion. And so these stolid faced men go down to the great sea in their tiny boats, and many of them never come back.



**A Puget Sound fishing boat in port.**

## Two Potato Problems

To the Editor of the Washington Farmer: I see in the December 14th issue of the Seattle Produce News, a statement by Lloyd Garretson, that if the potato growers of the Yakima valley send to Seattle a quality of potatoes that will pass United States government inspection, they will lose 75 per cent of their crop in the cull pile, and will be permitted to market but 25 per cent of their total crop in the city of Seattle. Mr. Garretson is secretary-treasurer of the Pacific Fruit and Produce company and is known throughout this valley as one of the best posted men in the produce trade, and as a man whose word is given due weight. I also notice in a Seattle paper of recent issue a wail from Western avenue in which the statement was made that the buyers in the city of Seattle were exceedingly glad to see the government compel the potato growers of the Yakima valley sort their product in the very strictest accordance with the rules laid down.

Now, if the potato growers of the Yakima valley raise an average crop of six tons to the acre and are only permitted to market one and one-half tons of this crop in the coast markets, and that one and one-half tons the most select stock, what shall he do with the balance and where shall he get the money to pay for the raising of these six tons, and how many acres do you suppose he can be induced to plant next season?

Granger, Wash. SAM DOUGLASS.

## Automobiles

### Aiding National Transportation

The recent reports from Washington show that our railroads have carried this year 15 per cent more than they did in 1916, which broke all records for freight deliveries. Admission is made at the same time that the railroads are now swamped by commercial activities, the transportation of farm products, the delivery of mail and parcel post and the business of the government in the transportation of troops and munitions.

The automobiles, therefore, should constitute a secondary line of national transportation. It is estimated that there are 4,200,000 automobiles in service in the United States, of which approximately 1,750,000 are in the hands of the farmer. It is safe to say that practically all of these automobiles on the farm are used the greater part of the time for utility purposes. In cities and towns it is safe to say that at least 70 per cent are used for transportation uses, conveying people from one place to another on business errands, etc. The automobile has enabled the doctor to extend considerably his practice and very materially increase his own efficiency as a human factor in city and country.

The automobile, through volume manufacture and widespread use in city and country, has become as big a utility as the telephone or electric light. This is not only a manufacturing country on automobiles in the sense of volume, but in gasoline we are the producing center for practically the entire world.

The automobile in the present war has proved its utility to a surprising degree. When Paris was threatened by the Germans in 1914 General Joffre commandeered all the automobiles, trucks and taxicabs in Paris, conveying several hundred thousand French soldiers to the Marne, where they turned back the Teutonic invasion.

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A special ring for engines that pump oil. Used in top groove only of pistons to control excess oil, with McQuay-Norris LEAK-PROOF Rings in lower grooves to insure maximum compression and fuel economy.

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If any of the young men you know are killed, injured, or taken prisoner on any of the battle fronts, you will be given the information in The Twice-a-Week Spokesman-Review as soon as it is issued by the military officials.

In times like these you surely need a complete and thoroughly reliable newspaper. The Twice-a-Week Spokesman-Review fills the bill.

Noteworthy events are taking place every week. Keep up with the march of events by sending in your dollar for the Twice-a-Week Spokesman-Review and your state farm paper.

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Jan. 4

THE WASHINGTON FARMER, Spokane, Washington.

Gentlemen:

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**IF YOUR NEIGHBORS DON'T KNOW ABOUT THIS OFFER PLEASE TELL THEM WHAT THEY CAN GET FOR $1.**

**The Washington Farmer**
**Spokane, Wash.**

# Shall He Quit Hog Business?

## *Palouse Farmer Says Some Wheat Is Necessary*

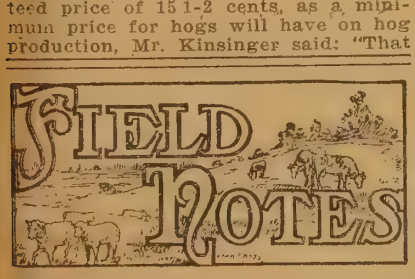
By J. E. NESSLY.

If the ruling of the food administrator that no wheat be fed to live stock is enforced it will cause Daniel Kinsinger, the "hog king of the Palouse," to dispose of his herd of 300 hogs and quit the business, which he has built up to the largest hog industry conducted by one man in the Palouse country. Mr. Kinsinger has been one of the most successful farmers of this county and has always combined hog raising with the production of wheat. He raises from 500 to 800 acres of wheat every year and has from 500 to 1000 hogs on hand most of the time. He has all his land enclosed with hog tight fences and runs the hogs on the wheat field in the fall and spring, on the summer fallow fields in the summer and after harvest in the stubble fields.

"I have sold $7000 worth of hogs this fall and they were only fed grain four days. I took them off of the stubble and kept them penned up and fed four days before driving them to the railroad station for shipment and they averaged 230 pounds each. I have 300 stock hogs and shotes left and am feeding them some wheat," said Mr. Kinsinger. "I do not know what I will do if the government stops me feeding wheat for I have no other feed and will simply have to stop raising hogs, sell off what I have and quit the business.

"I can not get corn. If we could buy it in the middle west we could not get cars to ship it. I hate to feed $2 wheat to hogs but must feed wheat or give up the hog business. The government is clamoring for more hogs and I understand we are forbidden to feed wheat to hogs. The government can not have the wheat and hogs, too, not from this country. I would like to know 'where I am at' and if I am not to be allowed to feed wheat to hogs I will sell off my hogs and quit the business, but the government must not ask farmers to raise hogs and then forbid them feeding the only feed they have."

Asked as to the effect the guaranteed price of 15 1-2 cents, as a minimum price for hogs will have on hog production, Mr. Kinsinger said: "That will be all right if we are permitted to feed what we can raise and the packers are not allowed to put the price down several cents in the fall when the bulk of the hog crop goes onto the market as has always been done, and after the hogs are practically all sold by the producers and the packing houses filled with cheap meat, raise the price of hogs several cents a pound and then sell the bacon and other products on the basis of the highest price paid during the year. If the government will guarantee a stable market for hogs we will raise them and supply the United States and our allies with pork, but we must be assured of a price that will allow a small profit and not let the packer get it all. The farmers ask only a square deal and they are entitled to it. They must feed the world and it is taxing their capacity to do so with the scarcity of labor and the exhorbitant prices demanded for everything they buy."




D. C. Bunn, son of the general counsel of the Northern Pacific Railway company, is farming 110 acres on the Yakima river, near Prosser, Wash. He has gone in for Bearkshires and has 120, including his young pigs and breeding stock. Mr. Bunn is making the pigs pay. He has developed a splendid type of big-boned Berkshires, noted for their excellent lines in back, shoulder and ham, as well as for their good feet.

"I believe we farmers would be far and away better off if the United States would continue the food administration even after the war," said Preston Royer, a well-known Prosser farmer the other day. "The system now in effect will go a long way toward eliminating the man who has secured the profits which the producer is entitled to. We have been confronted by a situation which has led many farmers to stock up heavily with dairy cows, hogs and poultry and to raise great quantities of produce, only to be faced later by a dead market. Those persons whom the farmer depended upon to take his output have filled their cellars and warehouses following the farmers' first enthusiastic over-production. They can hold their produce while they force the selling maket up. They can do this because they have all the stock they need and are buying no more from the producers. The producer, becoming discouraged, raises but little as compared to what he did. It follows, then, that the middle man, with the cornered stock, sells what he has at big profit to the consumer. In the meantime the farmer wonders what he is going to do with his expensive live stock and his investment in acreage. He had been promised a never-ending demand for what he could produce, but he finds himself stuck just as soon as the middle man has enough with which to begin his manipulations. Something surely can be done to curb this practice. Most farmers know it exists, but as a class we have been unable to check it." R. W. F.





In answering advertisements please mention this paper.

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For over 17 years we have never paid less than 6 per cent on savings.

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## Special Offer

**We will pay full six months earnings July 1, 1918, on all funds mailed us on or before January 15.**

**We accept any sum from $1.00 to $5000. You can send us money order, check or draft. We will return pass books, etc., by return mail.**

**YOU CAN DO** business with us
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**Third and Pike Street, Seattle, Wash.**
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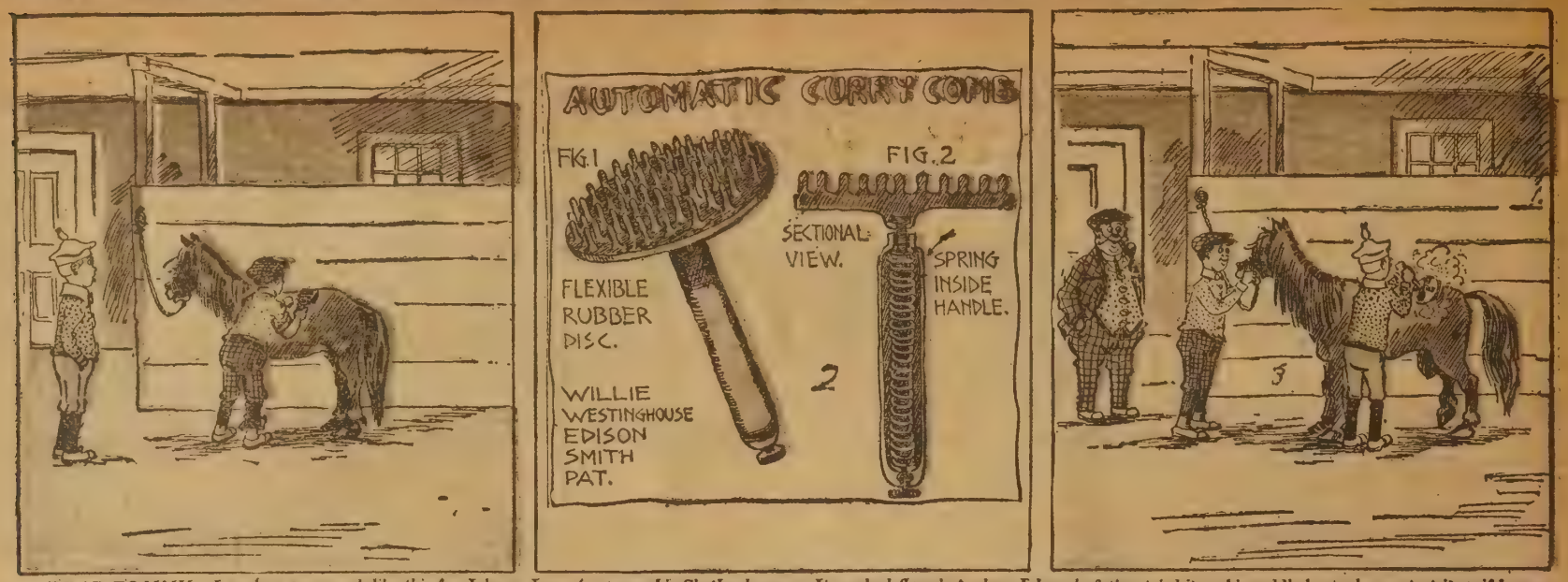
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Please send me copy of your booklet, "Safety and Security." Mailed free.

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# MR. JONES HAS HARD LUCK WITH WILLIE'S NEW CURRYCOMB




DEAR TOMMY: I made a currycomb like this for Johnny Jones to groom his Shetland pony. It worked fine; but when Johnny's father tried it on his saddle horse, he went at it as if he was trying to bore a hole through Dobbins. Of course, he wouldn't stand for that and nearly kicked the stable down!

Yours, etc.,
WILLIE.

# JERRY MACJUNK GETS WISE TO THE CONDIMENT THING



# COST OF READING MATTER CUT BY ELIMINATING THE MIDDLEMAN

*"Cooperation" has been a rallying cry with farmers and farmers' organizations for many years. How to eliminate the middlemen has been the question.*

*The Washington Farmer put the principle of cooperation to a test when announcement was printed that an effort would be made to dispense with the middleman, or agent, in subscription matters. We said to our friends: "Send your subscription order direct. Get your neighbors to do the same. We will give you and your neighbor the benefit of every penny which would ordinarily go to the agent handling the subscription. Moreover, many men will be released to serve in many lines where needed."*

*If you believe in cooperation---if you believe in eliminating the middleman---help us make our experiment a success. Send in your order if you haven't already done so, and let as many neighbors as possible know about our money-saving plan.*



## High Quality Is Maintained

The low price of your state farm paper does not mean lowered quality. We are endeavoring to give you a better and better publication.

One of the means adopted to improve the paper was finer facilities for printing it. This paper is now printed on a high-speed magazine press with every modern facility and appliance. This press has an hourly capacity for printing, folding and stapling 30,000 twenty-four page papers. Think how this cuts down the time between the occurrence of something important and the hour you hear about it in your state farm paper!

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The Washington Farmer,
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If you are already paid in advance your subscription will be set forward from the date to which you are paid.

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# Have You a Live Food Committee?

## *Every Community Should Have Organization*

Complete and thorough organization for food conservation purposes in each county and community in the state is urged by Charles Hebberd, food administrator for Washington, on chairman of county councils of defense. In a letter sent to chairman of county councils Mr. Hebberd makes this vigorous appeal:

"Some counties are very well organibed and others not so well. If you have not already done so, will you not undertake at once a complete organization in every community in your county to handle this work? You realize, I am sure, that the work comes closer home and entails more sustained effort than probably all the rest of the county council's work combined.

"Therefore, if you have not already done so, will you not kindly select the strongest man obtainable in your county to head your county committee on food supply and conservation and give him the support of a strong committee. Then have this chairman and his committee proceed to organize a food committee in every community in the county. The size of this committee will depend on the size of the community. It should be made up of active men and women who will undertake to do the things outlined by the food administration.

"It is my intention that the food committee of the county council, with its auxiliary committees in the several communities, shall be the representative of the federal food administration and the agent of the administration in food work in its locality. The county superintendent of schools and the county agricultural agent should be members of the county food committee. Also, if there is a merchant representative in the community appointed by A. J. Rhodes of Seattle, who is merchant representative of the food administration in this state, he should be made a member of the local committee. The function of the merchant representative is to encourage and secure all manner of store publicity for the food conservation program by way of window display, store posters, etc.

"Also if there is a representative in the county or community of the home economics department of this work appointed by Miss Craig, home economics director, Pullman, she should be made a member of the food committee. The function of the home economics department of the food conservatin work is to promote food conservation in the homes and in the schools of the state through teaching the right preparation, use and conservation of foods. The county food committee and food committees in the several cmmunities should consist of both men and women and should include the most active leaders in the locality.

"In each county there is a committee of minute women organized by Mrs. J. S. McKee of the state council of defense. This committee should also be represented on the local food committee.

"If your food committee has not been fully organized on the above lines will you not undertake to see that this organization is completed within the next two or three weeks? Mr. Hoover advises me that there is very important work coming out shortly which can be handled only through effective organization in every community."

# Progress in Marketing

The Eastern Lewis County Farmers' exchange whose headquarters are at Morton, Wash., is filling a long felt need in helping the farmers of that section market their produce. The manager, N. D. Tower, makes the following statement regarding the activities of the exchange:

"It is very hard to put on paper all we have accomplished through our association. To be sure we have made some mistakes, but not many, and experience is the best teacher, but I want to say that I think it is the only way for the farmer to buy or sell anything that he may be interested in.

"In starting our association we divided the territory into six districts. Each district elected its own director and these directors elected the director at large. The seventh director is not needed xcept to make an uneven number of directors. Each director is supposed to look after his own district.

"We have shipped seven cars of live stock and we have another to go this coming week. We have shipped about 40,000 pounds of dressed meat besides a good many veal. We have also handled a good many hides. Shipped one car of potatoes and have two in the warehouse. Also shipped one car of vegetables. We got out two tons of turkeys at Thanksgiving time. We have handled one car of flour and have another ordered. We tried hard to take orders ahead for the flour and had it nearly all spoken for, but when the car came it went very fast. We are also handling hay, which the farmers have never had a market for before.

"The stockholders, which comprise about 100 farmers, are all well satisfied and are doing all they can to keep this association the largest in the state."

# Flour Too High

## Do Price Regulations Regulate?

To the Editor: The government fixing of the price of wheat seemed to work swiftly and thoroughly—a very fine thing for the miller. Flour was lowered at the same time about $1.50 per barrel. The miller uses with normal wheat four and two-thirds bushels for a barrel of folur. He gets this on the Coast here at 17 cents less per bushel than does the Minneapolis miller. That puts him to the good 76 cents on every barrel. Like the Minneapolis miller, he uses enough of the cheaper grades of wheat to lower the cost of his milling mixture 8 cents on every bushel. Both claim that the cost of milling is about 80 cents per barrel. They claim the by-products—bran, shorts and middlings—resulting are worth $1.36. Both are ordered to take only 25 cents profit on a barrel of flour and 50 cents profit on a ton of feed. The following table will show how they are obeying these orders:

| | |
|---|---|
| 4 2-3 bushels wheat (280 pounds), $1.95 mixture | $ 9.10 |
| Claimed cost of milling (too high) per barrel | .80 |
| Profit on barrel miller is allowed to take under law | .25 |
| Gross cost per barrel of flour | $10.15 |
| Deduct value of by-products (too low) | 1.36 |
| Lawful price per barrel of flour | $ 8.79 |

They are charging from $10.25 to $12!

They are charging us ranchers $75 per ton for chicken-feed wheat—No. 5 and worse. This figures out $2.25 per bushel. Compare this with the cost to them of milling wheat—$1.95 per bushel.

Oh, yes, we like government regulations that regulate: that are not defied and evaded; but we have no use for regulations that regulate only one end of the deal. I sent in a protest the other day to Hoover, who solicits such from the people. He replied by referring me to Washington State Food Administrator Charles Hebberd of Spokane and to Theo. B. Wilcox, chairman of milling division here, and to M. H. Houver, government zone agent for grain corporation, at Portland. Those gentlemen have had three months to work in. When are they going to get into action? Hundreds of cows and thousands of laying hens have in this time gone to the block in order to enable the owners to buy feed for the remainder. Scores of small ranchers are giving up the hopeless fight and going out to work in lumber mills, lumber camps, shipyards—anywhere that they can get a few dollars that the patriotic miller can not get his claws on.

W. D. BOYNTON.
Gig Harbor, Pierce County, Wash.

**Deleted.**

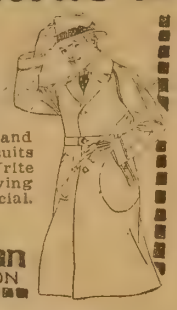
"This letter was deleted by the censor. So says the official stamp."

"Then I guess it's safe to read it. Them letters must pass through queer channels, I s'pose, and the censor ain't going to let us run the risk of ketching something or other."

On account of the great variation in local climatic conditions, moisture, soil, etc., it is up to the readers of The Washington Farmer always to remember that methods which prove successful in one locality may not work out in others. It is our aim to gather the experiences of farmers in every section of this state and pass these experiences on to our readers, that they may try out or adopt such as may be applicable to their locality and conditions.


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Three colors—Maroon, Oxford, Navy. Your money back if not satisfactory. Write for prices on underwear, blankets, hosiery, flannel shirts, etc.



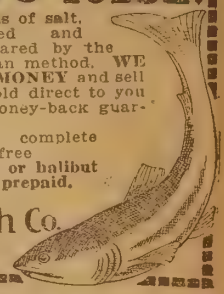
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# What Is the A. B. C.?

**Audit Bureau of Circulations.**

This is an association, nation-wide in its scope, not conducted for profit. Every publisher having membership in this organization pledges himself to sell circulation as a commodity, both as to quality and quantity. Advertisers using our columns are safguarded. They know that we give all the circulation we offer.

**A fountain pen or a pencil are good things to always have handy, together with postal cards. Then you can write friends or relatives or answer advertisements while you think about it and not run the risk of forgetting.**

# Saving Grain in Feeding

Saving grain in swine feeding is an exceedingly pertinent subject just at this time when there is a growing demand and a lessened supply for pork production, especially in connection with furnishing the necessary fats in an army ration.

In this connection the Farmer is glad to give added publicity to the efforts of the state college of Washington in publishiing the following article, prepared by William Hislop, professor of animal husbandry:

During the present winter, roots can be fed advantageously to brood sows, growing gilts and fattening shoats; however, as an exclusive diet, roots are not satisfactory, because they are too bulky and watery for the restricted capacity of swine. Their value lies in the fact that they reduce the amount of grain required per pound of gain, exert a tonic effect upon the digestive system thereby promoting better health and add variety to the ration.

During the next three or four months an excellent daily ration for pregnant brood sows would be seven to eight pounds of roots, six to seven pounds of red shorts, fed as a warm slop, and alfalfa hay (ad libitum) fed in a rack. As pregnancy advances, the roots should be produced and the red shorts increased. For growing gilts a ration similar in composition though less in bulk would promote efficient and economical development.

For fattening shoats now weighing 90 to 125 pounds a daily ration of four to six pounds of roots and three to five pounds of red shorts and ground barley, equal parts of weight would be a mixture well adapted to muscle and fat production; however, in the later stages of finishing, the daily allowance of roots should be cut down to two to three pounds and the concentrates increased to seven to eight pounds. The grain should be fed as a warm slop made by pouring warm water over it just before feeding.

At the Copenhagen experiment station, 204 pigs fed whole or sliced roots plus skim milk, whey and grain, demonstrated that 7.5 pounds of mangels or four pounds of sugar beets are as good as one pound of ground barley when all are combined with dairy by-products.

At the Utah experiment station pigs fed shorts in combination with sugar beets and also with beet pulp made daily gains of 1.2 pounds per head. In the above trial 396 pounds of sugar beets or 609 pounds of wet beet pulp proved equivalent to 100 pounds of wheat shorts.

At the Oregon experiment station cooked or steamed potatoes were fed with barley at the rate of three to six pounds of potatoes to one pound of barley. In this case, from 340 to 381 pounds of cooked potatoes replaced 100 pounds of grain while it required 552 pounds of raw potatoes to replace 100 pounds of barley.

Artichokes, pumpkins and squashes may also be used as grain savers. Artichokes have affected a saving of 150 to 200 pounds of grain for each 100 pounds of gain made, while 367 pounds of raw pumpkins plus 273 pounds of grain produced a 100 pounds of gain with fattening pigs.

In summarizing the experimental work reported it should be said that roots alone are never advisable, but as grain savers and health givers, they have a rightful place in hog feeding at all times, but more so today than ever before.

## Raising Hogs at a Profit.

A large amount of correspondence has followed the publication in The Spokesman-Review December 2 of a letter from G. H. Mottinger of Mottinger, Wash., who complained of the prices for poultry and hogs, and asked if he had not better trade his stock for a couple of whales.

Mr. Mottinger received a letter from L. R. McGee, secretary of the Portland Union Stockyards company regarding his complaint, and he replies in characteristic manner, a copy of which he sends The Spokesman-Review. The burden of Mr. Mottinger's letter to Mr. McGee is that just so soon as there are plenty of hogs or eggs the price goes down. The letter is worth noticing only for two points. First, it is a fact that price diminishes usually with supply, just as in any other line of trade. The second point—and the one stockmen and poultrymen should bear in mind—is that these lines of business can only be made a success by keeping at them. The stock business is not one that a man can win in by getting out and getting in. Given the established principle that hogs are high when scarce the successful stockman will see to it that he has them all the time, and will thus balance his profit and loss over a long period of years, just as the successful merchant does.

Mr. Mottinger makes the point that if the government would establish a guaranteed price for hogs for a period of six years, as England did with wheat, the farmers would go into the hog business. The laws of trade establish such a guarantee. All could take advantage of it. Six years ago hogs were high in price, and farmers began raising in large numbers. Three years ago the price went down and they quit. Now hogs have been high for a year again, thus proving the assertion that economic laws establish a price; not, however, at the same plane all the time, but spread over a period of years, the result would be the same. From the economic standpoint live stock is considered merely as a profitable way of marketing crops, and the farmer should not expect a large profit on both.

Mr. McGee inclosed a table giving the results of a recent feeding test to prove his assertion that hogs may be fattened at a profit, even on high-priced feed. In this barley and peas are charged at $40 a ton; tankage and oilmeal at $50 and shorts at $27. The shorts can not be bought for that now, but would cost $35. Four different lots of hogs were fed in the test, and the profit ranged from $3.72 to $5.71 per hog.

A letter also inclosed in the correspondence from an Oregon rancher makes the important point that no man should attempt to raise hogs unless he is properly equipped.

A. W.

# Discuss Live Stock

Among the many important subjects for consideration at the 21st annual convention of the American National Live Stock association, to be held at Salt Lake City, Utah, January 14-16, 1918, are the following:

Efforts of our government to stimulate the production of live stock, and what live stock producers should do; policy of the United States food administration toward the protection of producers; effect of the war on the live stock industry; better utilization of animal feeds, so as to produce meat animals at a lower cost; terms of the federal license of meat packers; investigation of the meat industry now being conducted by the federal trade commission; work of the bureau of markets in distribution of live stock and meat statistics; live stock conditions in foreign countries; necessity for an accurate federal census of live stock; effect of the drouth in Texas and the southwest; the cotton-seed meal combine, and what steps should be taken by the federal government to regulate the supply and price of cotton-seed cake and meal; land designations under the 640-acre stock raising homestead bill; reservation of driveways and water holes; classification and disposition or control of the remaining public land not designated as applicable to filing under the 640-acre law; some proposed changes in the grazing regulations on the national forests; extermination of predatory wild animals; poisonous plants; work of the bureau of animal industry in the eradication of ticks; inspection of meat, hides and wool from foreign countries; importation of live stock from countries where contagious diseases exist; protection of live stock owners and ranchmen in Mexico; meat inspection law; financing live stock loans; proposed advance in railroad rates; general investigation by the interstate commerce commission of all railroad rates, rules and practices involved in the transportation of live stock, known as docket 8436; service of railroads; shortage of cars; report of market committee; reports of other standing committees, etc.

These and other questions will be discussed by men prominent in the live stock world, government officials and others. An unusually attractive program is being arranged. Officers of the federal government connected with the food administration, bureau of animal industry, forest service and geological survey, as well as state live stock officials, will be present at our meeting.

The 54th annual convention of the National Wool Growers' association meets in Salt Lake City, Utah, January 17, 18 and 19, 1918, immediately following our convention.

# King County Corn



This photo shows some field corn grown by E. W. Trezise on the bottom land of Tolt, Wash. It is 13 1-2 feet high and the stalks are very large around. The ears are large and most of them are well developed. "This was sown about the 15th of June, 1917, and shows what this land can do with corn," says Mr. Trezise.

**Difficulties of Mining.**

Every time a ton of anthracite coal and rock is hoisted from a mine an average of 11 tons of water must be pumped from the mine.

It takes about the same amount of power to pump fresh air into a mine as it does to hoist coal out of it.

In some mines with long drifts the car hauls may be as much as 15 miles per round trip.—National Engineering.


APPLETON WOOD SAWS



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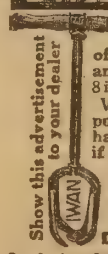
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has sharp blades of the best steel. Fastest of all augers. For post holes and wells. Sizes 3 to 16 inches; 8 inch $2.25, freight extra.

Write for booklet about Iwan post hole diggers, sickle edge hay knives ($1.75 prepaid P.P. if dealer will not sell you), ditching spades, drain cleaners, tile hooks, chimney tops, etc.

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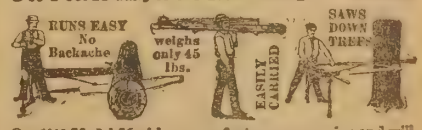
With Straight Edge

Genuine Iwan Augers and hay knives wholesaled by: Whiton Hdw. Co., Seattle; Morse Hdw. Co., Bellingham; Hunt & Mettet Co., Tacoma; Holley-Mason Hdw. Co., Spokane, Wash.

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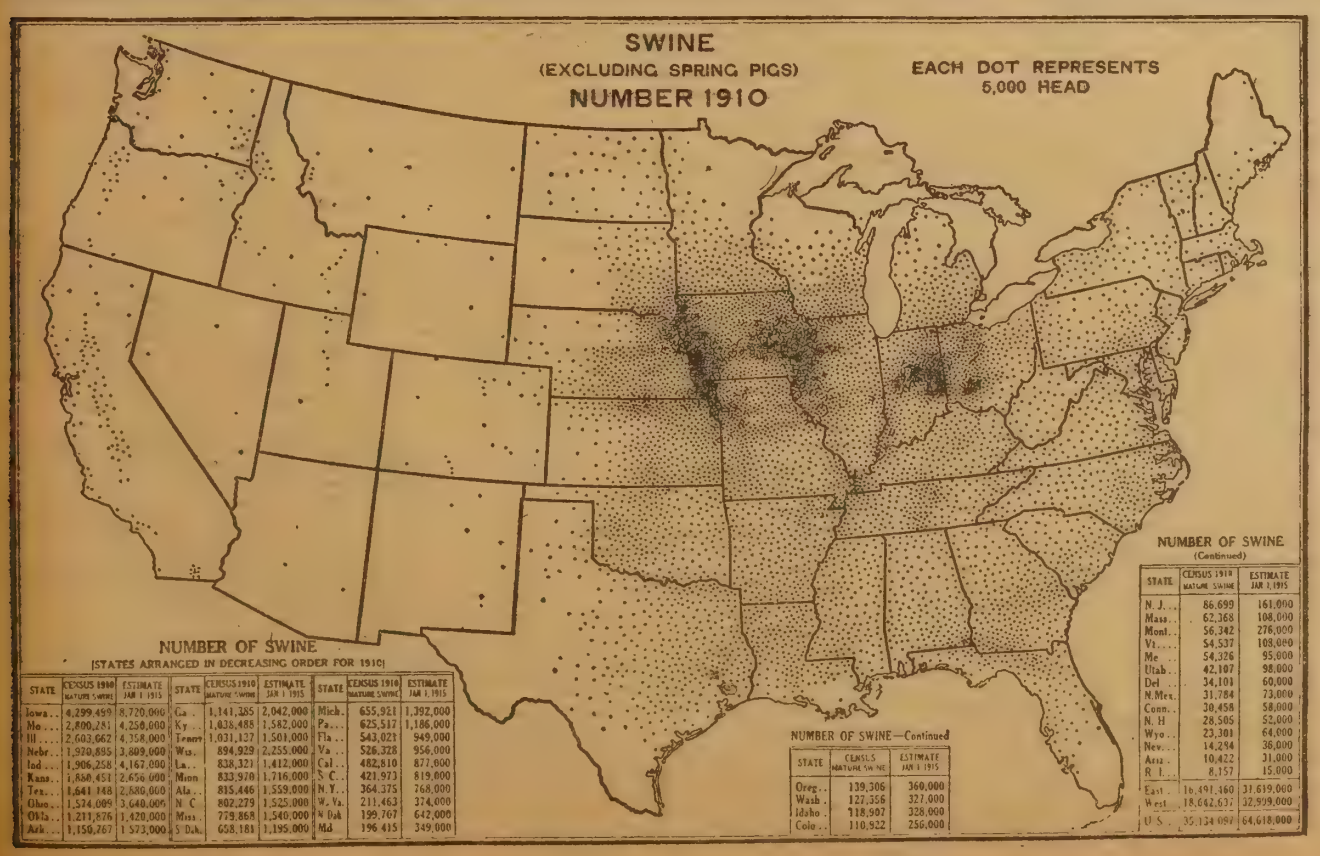
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WHAT IT WILL DO FOR YOU

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FERTILIZER Dept.

SPOKANE, WASH.


NUMBER OF SWINE
(STATES ARRANGED IN DECREASING ORDER FOR 1910)

| STATE | CENSUS 1910 MATURE SWINE | ESTIMATE JAN 1 1915 | STATE | CENSUS 1910 MATURE SWINE | ESTIMATE JAN 1 1915 | STATE | CENSUS 1910 MATURE SWINE | ESTIMATE JAN 1 1915 |
|---|---|---|---|---|---|---|---|---|
| Iowa | 4,299,459 | 8,720,000 | Ga. | 1,141,385 | 2,042,000 | Mich. | 655,921 | 1,392,000 |
| Mo. | 2,800,281 | 4,250,000 | Ky. | 1,038,488 | 1,582,000 | Pa. | 625,517 | 1,186,000 |
| Ill. | 2,603,662 | 4,358,000 | Tenn. | 1,031,127 | 1,501,000 | Fla. | 543,021 | 949,000 |
| Nebr. | 1,970,895 | 3,809,000 | Wis. | 894,929 | 2,255,000 | Va. | 526,328 | 956,000 |
| Ind. | 1,906,258 | 4,167,000 | La. | 838,321 | 1,412,000 | Cal. | 482,810 | 877,000 |
| Kans. | 1,880,451 | 2,656,000 | Miss. | 833,970 | 1,716,000 | S C. | 421,973 | 819,000 |
| Tex. | 1,641,148 | 2,580,000 | Ala. | 815,446 | 1,559,000 | N.Y. | 364,375 | 768,000 |
| Ohio | 1,574,009 | 3,640,000 | N C | 802,279 | 1,525,000 | W. Va. | 211,463 | 374,000 |
| Okla. | 1,211,876 | 1,420,000 | Miss. | 779,868 | 1,540,000 | N Dak | 199,767 | 642,000 |
| Ark. | 1,150,267 | 1,573,000 | S Dak. | 658,181 | 1,195,000 | Md | 196,415 | 349,000 |

NUMBER OF SWINE—Continued

| STATE | CENSUS MATURE SWINE | ESTIMATE JAN 1 1915 |
|---|---|---|
| Oreg. | 139,306 | 360,000 |
| Wash. | 127,356 | 327,000 |
| Idaho | 118,907 | 328,000 |
| Colo. | 110,922 | 256,000 |

NUMBER OF SWINE
(Continued)

| STATE | CENSUS 1910 MATURE SWINE | ESTIMATE JAN 1 1915 |
|---|---|---|
| N. J. | 86,699 | 161,000 |
| Mass. | 62,368 | 108,000 |
| Mont. | 56,342 | 276,000 |
| Vt. | 54,537 | 108,000 |
| Me. | 54,326 | 95,000 |
| Utah | 42,107 | 98,000 |
| Del. | 34,101 | 60,000 |
| N. Mex. | 31,784 | 73,000 |
| Conn. | 30,458 | 58,000 |
| N. H. | 28,505 | 52,000 |
| Wyo. | 23,301 | 64,000 |
| Nev. | 14,294 | 36,000 |
| Ariz. | 10,422 | 31,000 |
| R. I. | 8,157 | 15,000 |
| East | 16,491,160 | 31,619,000 |
| West | 18,642,637 | 32,999,000 |
| U. S. | 35,134,097 | 64,618,000 |

# Humanity as Safe in the Desert as in the Palace

By IDA C. YOUNG.

Another set of characters are reproduced by the Bunch Grass Boy, and his hand is not losing its skill. The last article seems to me better than ever.

Poor Mrs. Henry, there came a time in the history of Paradise Valley or Poverty Flat—it went by either name—when all our hearts went out to her in common sympathy. It was the time when we buried her first wee baby.

A hearse at that time was an unheard of thing. Usually a neighbor kindly tendered the use of a hack and team to convey the casket of any who died from home to the cemetery. But in this case the hack seemed dusty and large and empty with one tiny dead baby, so Florenec Coley and I sat in the back seat with the little white casket on our knees. The baby was buried in the dusty, wind swept city of the dead, where Russian thistles and Jim Hill mustard hung in heavy banks against the surrounding fence. This is not a specially beautiful picture of the graveyard, and yet it compares favorably with the grass covered cemeteries of the Coast, where cement linings or quick balings have to be resorted to before the casket can be lowered into the wet, wet grave. The subject of funerals brings we to what was probably the first event of this kind in Douglas county. The infant child of Frank Day gave up its little struggle for life in the spring of the second year. The few neighbors gathered about the little grave and armfuls of wild lupine, with its great spikes of blue and purple blossoms were piled in lovely confusion over the bottom. Onto this the casket was lowered, and more lupines heaped above. Then the dry, crumbly earth was returned to its place, and the funeral was over.

I had a vague feeling that the profusion of wild flowers was a very fitting part of the service, but not until I heard the murmured approval of Mrs. Bosworth did the feeling crystallize into definite thought. Then there bloomed in my childish heart a beautiful flower of admiration and friendship for the dear old lady who said such a lovely thing.

That same summer Mrs. Bosworth died suddenly, in the night, of heart failure. All the lumber used in the settlement came from Hawk Creek, north of where Davenport now stands. There was not a spare piece in the neighborhood, so father ripped off some boards from the side of our barn and with his simple tools planed them, making a clean, unpainted pine casket. This mother lined with some fine old linen sheets that had once belonged to her grandmother away back in Holstein.

The short funeral service was held outside the little frame house that could not hold the few neighbors who gathered there. Out under the blue skies my grandfather uttered the few fitting words that close the page of earthly life. I can see him yet with his black flowing gown, his fine old face and this thick gray hair gently stirred by the summer breeze.

After the service the little procession wound its way to the hillside, where, amidst the thick growing bunch grass, the dear old soul was laid way for her last long sleep. Then we went away and left the lonely old man and his son to return to their desolate home.

Sickness and death were things to be considered in this new country wthout the help of doctors. There was no such thing short of 90 or 100 miles. So we died or got well, which, after all, is the best we can do under any circumtsances. In our family we seemed to be among the fortunate ones who lived through sickness and danger. It was during that very first summer that I had my experience with illness. One Sunday we all, except grandmother and little sitser, took a tramp to the Grand coulee walls, a distance of not more than two miles. But I ate coyote berries all the way there and part way back. Then being terribly thirsty I drank and drank and drank at a little spring that we discovered about a mile from home.

Well, I was good and sick. After a few days, just before the turn for the better came, I sat up in my cot one evening and announced to mother, who happened to be alone with me, that I didn't think I'd live through the night. She didn't think so either, but didn't say so then. She made some matter-of-fact answer and I lay down again. Next morning I was better. To this day the very sight of a coyote berry gags me.

However, none of us were afraid of death, which perhaps is the reason we did not die. It's the things we fear that finally come upon us if we do not in some way master that fear.

There were other dangers besides sickness that gave us anxious moments that first summer. The prairie fires were an item that kept us busy and watchful. Every summer for years the bunch grass had grown up thick and tall, died down through the winter, or rather cured just as it stood. The next summer new grass grew up among this old carpet and so on, year after year until this summer, when in some unknown way it was set afire time after time and burned fiercely. The worst of it raged during the time that we were alone beside the spring. That is, before the rest of the camp came into the country. However, there were six men in our party. Grandfather, father and his four unmarried brothers, Adolph, Jake, Will and Louie. There was considerable time put in making fire breaks. Each man took a pail of water and an empty sack. Then a fire was lighted and the men followed it, beating it out with wet sacks along the side nearest the camp, in this way burning a broad strip that meant protection to those behind it. All this took time and sometimes it seemed that the prairie fires were on all sides of us. One night mother had to take a hand and we three children were left with grandmother. There was not much sleep that night. Mother came in toward morning tired out and we went to bed. I think the men stayed out all night. But the battle was won, either the fire breaks did their work, or the fire fiend passed away, for in a few weeks there were no more fires and the grass grew up greener than ever, so there was no harm anywhere.

The thing that gave mother the most uneasiness, however, was the danger from range cattle. For the first two or three years we had nothing to ride, brother Ed and I went on foot to hunt our few cows. They ranged anywhere within a radius of about five miles, and anywhere within this radius we were likely to come across range stock to whom a human being on foot creates stampede and no one ever knows in which direction, coming or going.

One thing had been effectually drilled into us, that never, never were we to run away from a herd of range cattle. There is only one way to run and that is toward the herd. We had many opportunities to try this out, but we never got so accustomed to the experience that we enjoyed it. If we saw the cattle far enough away we went around, slipped through some ravine or behind a hill and avoided them. Usually, however, it happened when we rounded a curve or came over the crest of a hill that we discovered we were in for it. The experience never varied, usually the cattle were peacefully grazing like ordinary cattle; many lying down, chewing their cuds. Then a few would sight us and up would go their heads, high up in the air, then more heads and more and more. Almost a simultaneous movement brought the cattle lying down to their feet and facing us. Then a crowding together, shoulder to shoulder, and a general movement of hoofs marching toward us, heads still high in the air with great white spreading horns.

I don't seem to remember any particular sensation of fear or panic. I think my mind was a sort of blank for a little space until we somehow felt that it was time to move, then we made a rush toward the cattle. This was the time I always felt little thrills and prickles running up my back and spreading over my body, or maybe it was just the instant before we started to run. The result was always the same whether there were three cows or 300. They faced about in a panic and fairly flew over the bunch grass to get away from us. Then we yelled and swung our bonnets or hats. Occasionally a straggler would halt, face about, to see if the terrible thing were really true, whereupon we became more vociferous and sprinted ahead just a little faster. Then the creature would whirl and fairly break his neck to catch up with the crowd that had gotten just a little ahead. We chased them in this way until we came to a convenient ravine or rock ledge or clump of brush, anything that could hide us for a little while as we stole away out of sight and proceeded to hunt our own cows. The sweetest music that came to our ears those days was the sound of our cowbell strapped to the neck of old Betsy, the first gentle milch cow that we bought a few weeks after setting up our tents beside the spring. She had to be milked in a chute tied securely fore and aft, but we always felt kindly toward her because she gave so much good, rich milk.

As I look over it all I see so clearly the evidence of a higher power that led and shielded us all through the dangers and distress that seemed so often to threaten. How else do we come through life so happy and unhurt? Safety and happiness are just as much the privilege of the pioneer as of the dweller in the opulent city. Humanity is as safe in the desert as in the palace.

The danger of hunting cows on foot changed when we finally rode horseback. We were safe from range cattle but I believe we fell off our horses more than any other set of youngsters in the country. Brother acquired a little bay Indian cayuse which we called Gipsy. He also had a nondescript saddle. Gipsy was never sure of her feet. I have seen them go crashing down together like a crate of old iron and both always came up unhurt. Sister and I rode much of the time without saddles. We fell off every conceivable way there is to fall off. Even the side saddle that we owned for a time didn't change matters much, something gave way or the saddle turned.

Another time I was doing a little stunt of cutting out some cattle that did not belong to us. Lady and I did all the circling and sharp turns very creditably till the old side saddle turned and flung me backward with my right shoulder hitting the ground first. I do not remember that I was even lamed.

The only disasters that really came quite close happened to sister Frances at home in our own barnyard when she was about six years old. Early in the spring just after the snow went off she was standing beside a barn door when brother Ed led out the horses to water. We had one mule, Queen, blind in one eye. As she came out, just to show her good spirit, she flung her heels in the air. Frances, being on the blind side of the creature, caught one hoof square in the cheek. Long after she grew up she had a deep dimple in that cheek.

That same summer she had a mixup with a cow. Ed had just brought the cow in with a young calf and mother took the pail and sat down to milk her. I tagged along, crossed the corral and climbed to the roof of the cattle shed. Then Frances started to follow me, crawling under the barb wire and

(Continued on page twenty-seven.)

## SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

## What the "Nervous" Person May Do for Her Own Relief



Dr. Hirshberg.

A "nervous" person is an abomination unto many, especially at this season of Christmas cheer. Quotation marks are used around such words as "nervous" because they are commonly employed in a faulty fashion. The "neurotic" or "nervous" individual is one generally dominated by his feelings, emotions and sentiments instead of by facts, figures, reason, common senes and the logic of events.

You who are victims of any one of the various maladies called "imaginary" or "nervous," which are none the less real because some doctors can not find an "organic" basis for them, should realize that one of the points at issue is your emotions.

If remedies are aimed at the restoration of a balance between the intellect and the feelings, of the subordination of the emotions to the mind, relief can perhaps be much more quickly attained than by calling the trouble "nerves," "nervous," "neurotic," "psychoesthenic," "neurasthenic" and similar verbal monstrosities.

To help treat the different emotional states, the sufferer must first study and practice a method of changing the target of his attention. One of the methods is to prepare the patient to take more interest in persons outside of the family.

War relief work, association with students, club members and constructive organizations, joining neighborhood associations, workers' guilds, lodges and various entertainments contribute toward the valuable end of making the patient meet new people, make new friends and acquire new interests.

### Work and Food.

With these novel, strange and stimulating oddities among the human tribe, there will arise a desire to converse. Conversation is often a sign of mental vigor and emotional health. Its absence over too long a time is, in the average person, a symbol of selfishness, self-exaggeration, sensitiveness and similar evidences of too much emphasis upon your own ego.

Thoughts and knowledge assist the practice of the neglected art of conversation. If the morose, moody person begins to take a wide interest in a variety of affairs and persons, new facts and information, as well as the suggestion of events, soon or late make conversation. This explains one of the causes as well as the treatment of "neurotics."

There are few superiors to this kind of counter-irritation to misplaced and long drawn out emotions, but certain foods, baths and exercises help considerably to drive away "blue devils."

Food and drink make some men unhappy and make others think. Tea, coffee, soups, water cress, meats, eggs, oysters, broths and salads are conducive to placid emotions. All of these sometimes arouse the feelings of many victims of "nerves" to states of unpleasantness. Taboo and anathema are to be levelled at such rations.

Soothsaying comfort can be had from cream, milk, oatmeal, rice, cabbage, cream cheese, custards, malt, spinach, celery, beans, fish, fats, oils and sweets. These are foods par excellence for the "neurasthenic."

Exercises in the open sunlight when possible, are preferable to home gymnastics, especially for the "nervous."

First clear the nostrils of all discharges by means of a weak salt water douche. Then drink a glass of cold water. Get rid of the kidney fluids, too, before beginning to exercise. Then heels together, toes turned out, chest well up and forward, with abdomen drawn in, and you are ready to start.

### Value of Warm Baths.

There are many books on home gymnastics which contain excellent and explicit details of exercises, such as stretching dumbbell aids, respiration, twisting, bending, shrugging, rolling shoulder, relaxation, body posture trunk-muscles and leg movements. All of these seem to improve the physical structures of those with "nervous prostration."

For the strong, alert, calm creature seldom disturbed in mind or fabric, the cold bath is a first-class whip. It arouses the sleepy, fagged and unstirred tissues and glands.

The warm bath is precisely the thing for the "neurotic." It causes a blush to pervade the flesh and profuse perspiration to break out. Then at its witching hour, namely, before bedtime, it is much more than a Job's comforter—it allays excitement, smooths the ruffled feelings and bestows the blanket of sleep over the restless. Physiologically, the warm—not hot—bath withdraws blood from the thyroid and other sometimes mischievous glands concerned in irritations of anxiety, grief, sorrow, moodiness, worry, anger and miserable feelings in general.

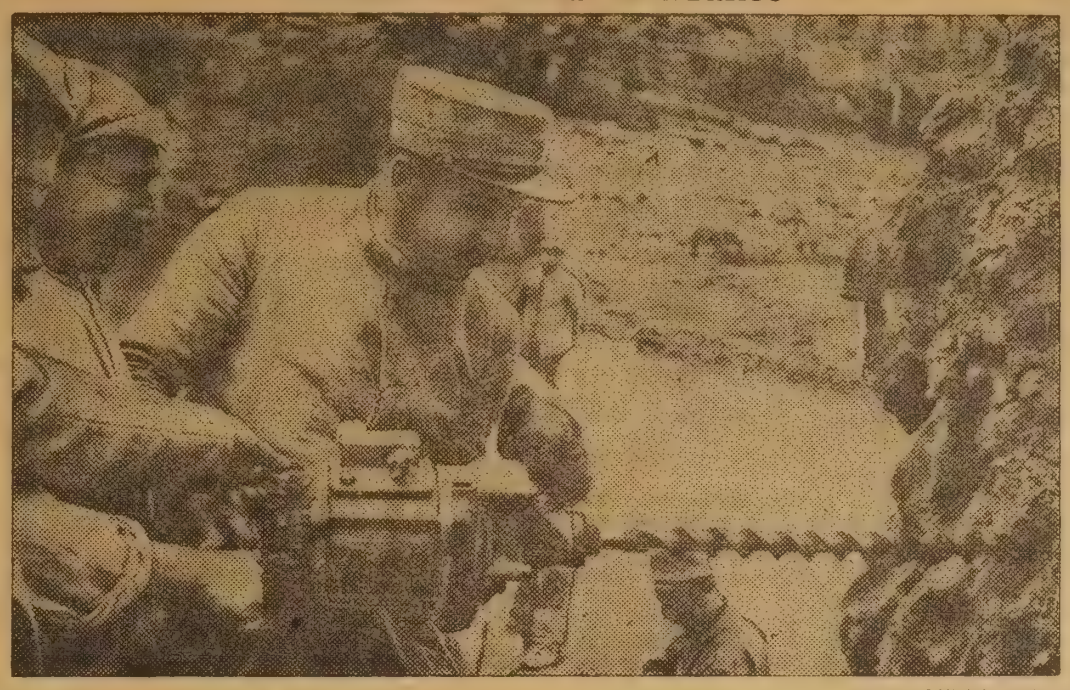
# All the World's a Stage, and All the Men and Women Merely Players

## Missing in Cambrai.



Captain Frank J. Upton, former member of the New York police force, was among those reported missing after the German attack on the British at Cambrai.

## Behind the Lines in France



French Official Photo.

It isn't all fighting with the French soldiers. This photograph shows them boring a hole with an electric drill, preparatory to blasting for road construction.

## Saw Wartime Germany.



Mrs. James W. Gerard, wife of the former ambassador from the United States to Germany. She recently underwent a successful operation for appendicitis.

## In the Home of Admiral Sims



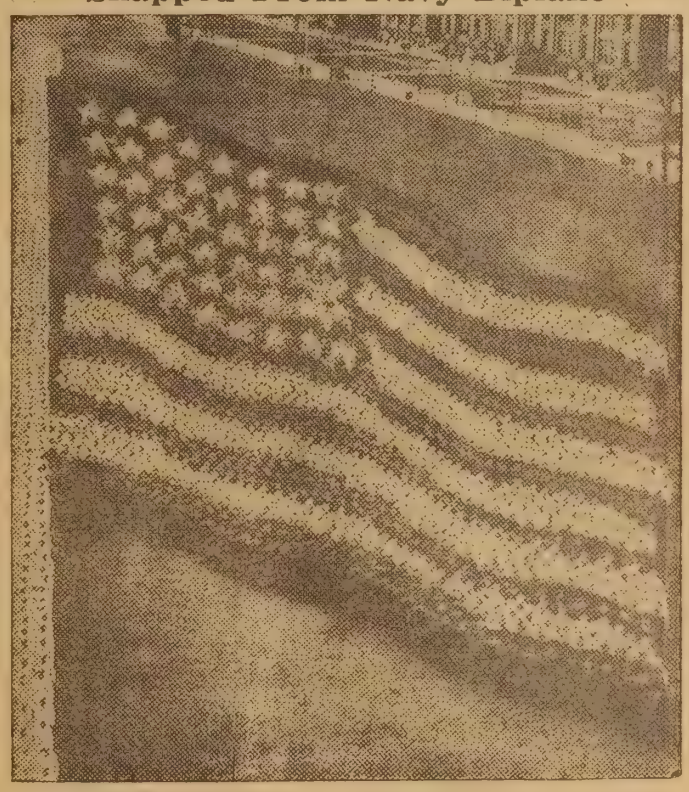
An interesting family group is this one, showing Mrs. William S. Sims, wife of Admiral Sims, and their children. From left to right they are: Adelaide, Mrs. William S. Sims, Ethan, Margaret, William and Anna Sims.

## Heir to Siam Throne.



Photograph shows Prince Praong Artit, 12-year-old crown prince and heir to the throne of Siam, arriving in San Francisco from Japan. The prince of the land of elephants and cocoanuts is here to study the customs of this country. His education will be under the supervision of the Siamese minister at Washington.

## Snapped From Navy Biplane



Snapped from a navy biplane, showing 10,000 bluejackets lined up representing the stars and bars of the flag.

## Judas



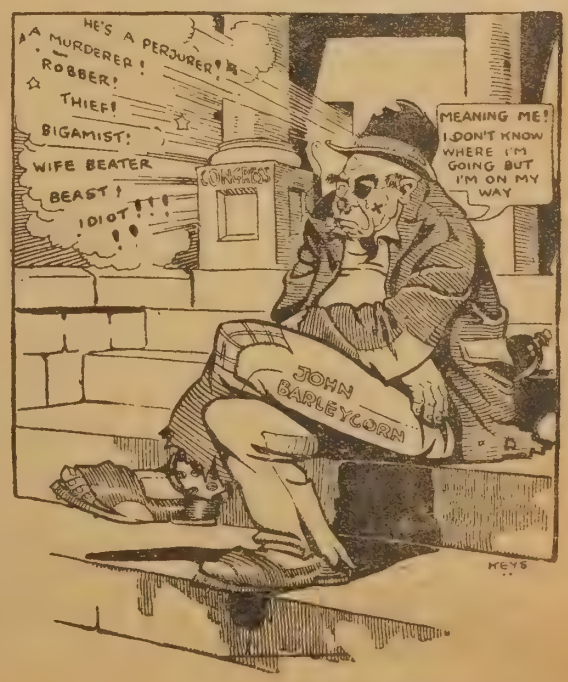

—New York Evening Telegram.

## If Only the Crusaders Could See It!




—Buffalo Evening News.

## Up Against It




—Fresno Herald.



# THE BARRIER



By REX BEACH

Author of "The Spoilers," "The Ne'er-Do-Well," "The Silver Horde," etc.

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### SYNOPSIS.

Gale, trader, of Flambeau, has a beautiful daughter, Necia, and two half-breed children. Alluna, a squaw, is their mother. Lieutenant Burrel is sent to Flambeau to establish a military post. He and Necia become close friends. "No Creek" Lee, an unsuccessful miner, strikes a vein of gold. Stark comes to Flambeau to grubstake the miners and start a saloon. Runnion, a desperado, is his assistant. Stark's presence in the camp causes Gale and his squaw great uneasiness. Lee, Stark, Runnion, Gale and Poleon, a Frenchman, leave for the claim secretly so as to prevent a stampede. Necia hears of it, and, longing for riches so she may be as others girls, persuades Burrell to accompany her on a shortcut to the claim. Burrell, who is unpopular in Flambeau, chooses this means of beating the men at their own game. That night by the campfire Necia, realizing her peril, cautiously awakens in the lieutenant his slumbering conscience. They reach camp before the others the next morning and Necia stakes three claims. While Stark, Runnion and Poleon are locating Runnion makes some insinuations about Necia and Burrell. Poleon, who loves Necia, swears that either Runnion or Burrell will pay for them with his life. That night as Star is telling Necia a story a shot rings out and Gale jumps across the room shouting "My God! I've killed him." But the bullet misses Stark by inches. When Alluna hears of the affair she tells Gale that Stark is bullet-proof and gives him a knife, begging him to kill Stark as soon as possible. Burrell knows that he loves Necia, but, thinking she is a half-breed, he is afraid to marry her on account of what it would mean to his family, his position and his honor. One day as Necia is alone in the store Runnion tells her that he is wiling to marry her, even if the lieutenant has thrown her over and the story is being told on the street. Later Necia acknowledges to Poleon that while Burrell has sworn his love for her he has never spoken of marriage. She declares that she has never been unmaidenly, but that since the men are talking she will be married by Sunday, and that it may as well be to Poleon as anybody. They send for Burrell and Necia hides so that she may hear his answer for herself.

When Burrell enters Poleon wastes no time but asks him if he means to marry Necia. Maddened by the lieutenant's hesitation, Necia rushes out declaring she has played with him long enough, and that she is to marry Poleon on Sunday. Locked in his room through long hours of struggle Burrell finally realizes that Necia's love means more to him than all else. He finds her dressed in the black ball gown, her bare arms and neck gleaming in their whiteness. Not until after he has asked her to marry him does the revelation come to Necia that love means sacrifice. She refuses to spoil his future.

Gale decides that for the sake of Necia's happiness, he will go to Burrell and tell him his story. Grief-stricken, Necia flees from the store, to spend her anguish alone in the darkness. Stark finds her sobbing and takes her to his cabin. There he learns that she is Merridy and uses the knowledge to further his plan for revenge on Gale and burrell. He persuades Necia to go to the mission and tells her that he will provide a man to take her there. When she has gone he takes out his six-shooter and, with his face set in exultant cruelty, leaves the cabin.

### CHAPTER XIV.

#### A Mystery Is Unravelled.

Lieutenant Burrell was considerably taken aback when, a quarter of an hour after the young lover's ecstatic return to his quarters, Gale knocked at his door, for the trader's visit, coupled with the late hour and his sombre countenance, forecast new complications.

"He's here to object, but it won't go," thought the lieutenant, as he made his visitor welcome.

It was the trader's first glimpse of the officer's quarters, and he cast a roving eye over the room, as if measuring the owner's character by his surroundings.

"I've got to have a long talk with you, Burrell," he began, with an effort. "It's liable to take me an hour or two."

"Then take this chair and be comfortable."

Meade swung his big reading-chair out beneath the hanging lamp, and, going to the sideboard, brought back a bottle, some glasses, and a pouch of tobacco. Noting the old man's sigh of fatigue as he sat himself down heavily, he remarked, sympathetically:

"Mr. Gale, you've made a long trip today, and you must be tired. If this talk is to be as lengthy as you say, why not have a drink with me now, and postpone it until tomorrow?"

"I've been tired for 18 years," the other replied, "tonight I hope to get rested." He lapsed into silence, watching his host pour out two glasses of liquor, fill his pipe, and then stretch himself out contentedly, his feet resting on another chair—a picture of youthful strength, vitality and determination. Beneath the lieutenant's flannel shirt the long, slim muscles showed free and full, and the firm set of jaw and lip denoted a mind at rest and confident of itself. Gale found himself for a moment jealously regarding the youth and his enviable state of contentment and decision.

"Well, let's get at it," the younger man finally said.

"I suppose you'll want to interrupt and question me a heap, but I'll ask you to let me tell this story the way it comes to me, till I get it out, then we can go back and take up the queer stuff. It runs back 18 or 20 years, and, being as it's part of a hidden life, it isn't easy to tell. You'll be the first one to hear it, and I reckon you're enough like other men to disbelieve—you're not old enough, and you haven't knocked around enough to learn that nothing is impossible, that nothing is strange enough to be unreasonable. Likewise, you'll want to know what all this has to do with you and Necia—yes, she told me about you and her, and that's why I'm here." He paused. "You really think you love her, do you?"

Burrell removed his pipe and gazed at its coal impersonally.

I love her so well, Mr. Gale, that nothing you can say will affect me. I—I hesitated at first about asking her to be my wife, because—you'll appreciate the unusual—well, her unusual history. You see, I come from a country where mixed blood is about the only thing that can't be lived down or overlooked, and I've been raised with notions of family honor and pride of race and birth, and so forth, that might seem preposterous and absurd to you. But a heap of conceits like that have been bred into me from generations back; they run in the blood of every old family in my country, and so, I'm ashamed to say, I hesitated and tried to reason myself into giving her up, but I've had my eyes opened, and I see how little those things amount to, after all. I'm going to marry Necia, Mr. Gale. I'd like to do it the day after tomorrow, Sunday, but she isn't of age yet, and if you object, we'll have to wait until November, when she turns 18. We'd both like your consent, of course; I'd be sorry to marry her without it; but if you refuse, we'll be forced to displease you." He looked up and met the father's gaze steadily. "Now, I'll be glad to listen as long as you care to talk, but I don't think it will do any good."

The other man's lips framed a faint smile.

"We'll see. I wish to God I'd had your decision when I was your age, this story would be different, and easier to tell." He waited a moment, then settled to his self-appointed task. "I was mining at the time up in the Mother Lode country of California, which was the frontier then, pretty much as this is now, only we had better things to eat. I came from the east, or my people did, but I was ranch-raised, and loved the hills and woods and places where you don't talk much, so I went to prospecting because it took me out where the sun was bright and I could see the wild things at play. I was one of the first men into a camp named Chandon—helped to build it, in fact, and got hold of some ground that looked real good. It was hard mining, however, and, being poor, I was still gripping my drill and hammer after the town had grown up.

"A woman came out from the east—Vermont, it was—and school-teaching was her line of business, only she hadn't been raised to it, and this was her first clatter at the game; but things had broke had for her people, and ended in her pulling stakes and coming west all alone. Her folks died and left her up against it, I gathered from what little she told me—sort of an old story, I guess, and usual too, only for her. She was plumb unusual."

He seemed to ponder this a moment, and then resumed:

"It don't make any difference to you how I first saw her, and how I beban to forget that anything else in the world was worth having but her. I'd lived in the woods all my life, as I said, and knew more about birds and bugs and bees than I did about women; I hadn't been broke proper, and didn't know how to act with them; but I laid out to get this girl, and I did fairly well. There's something wild in every woman that needs to be tamed, and it isn't like the wildness that runs in wood critters; you can win that over by gentleness, but you have to take it away from a woman. Every live thing that couldn't talk was my friend; but I made the mistake of courting my own kind the same way, not knowing that when two of any species mate the male must rule. I was too gentle. Even so, I reckon I'd have won out only for another man. Dan Bennett was his name—the kind that dumb animals hate, and—well, that takes his measure. His range adjoined mine, and, though I'd never seen him, I heard stories now and then—the sort of tales you can't tell to a good woman; so it worried me when I heard of his attentions to this girl. Still, I thought she'd surely find him out and recognize the kind of fellow he was, but, Lord! a woman can't tell a man from a dog, and there wasn't any one to warn her. There were plenty of women who knew him, but they were the ones who flew by night, while she lived in the sunshine; and women of that kind don't make complaint, anyhow.

"This Bennett came from the town below, where he ran a saloon and a brace game or two; but being as he



John Gale reveals his identity.

rode into our camp and out again in the night, and as I didn't drink nor listen to the music of the little rolling ball, why, we never met, even after he began coming to Chandon. Understand, I wasn't too good for those amusements; I just didn't happen to hanker after them, for I was living with the image of the little schoolma'am in my mind, and that destroyed what bad habits I'd formed.

"I was along in the early spring that she began to see I had notions about her, but my damned backwardness wouldn't let me speak, and, in addition, I was getting closer to ore every shot at the mine, and was holding off until I could lay both myself and my gold mine at her feet, and ask her to take the two of use, so if one didn't pan out the other might. But it seemed like I'd never get into pay. The closer I got the harder I worked, and, of course, the less I saw of her, likewise the oftener Bennett came. I reckon no man ever worked like I did—two shifts a day, eighteen hours, with six to sleep. The skin came off of my hands, and I staggered when I came out into the daylight, for the rock was hard, and I had no money to hire a helper; but I was young and strong, and the hope of her was like drink and food and sleep to me. At last I struck it, and still I waited awhile longer till I could be sure. Then I went down to my little shack and put on my other clothes. I remember I'd gone so thin that they hung loose, and my palms were so raw I had hard work handling the buttons, and got my shirt all bloody, for I'd been in the drift forty hours, without sleep and breathing powder smoke, till my knees buckled and wabbled under me. To this day the smell of stale powder smoke makes a woman of me; but that morning I sang, for I was going for my bride, and the world was brighter than it has ever been for eighteen years. The little school-house was closed, at which I remembered that the term was over. I'd been living underground for weeks and lost track of the days, so that I had to count them up on my fingers. It took me a long time, for I was pretty tired in my head; but when I'd figured it out I went on to where she was boarding.

"The woman of the place came to the door, a Scotchwoman. She had a mole on her chin, I remember, a brownish-black mole with three hairs in it. She wore an apron, too, that was kind of checkered, and three buttons were open at the neck of her dress. I recall a lot more of little things about her, though the rest of what happened is rather dreamy.

"I asked for Merridy, and she told me she'd gone away—gone with Bennett, the night before, while I was coughing blood from the powder smoke; that they were married in the front room, and that the bride looked beautiful. She had cried a bit on leaving Chandon, and—and—that was about all. I counted the buttons on the Scotchwoman's waist eight or ten times, and by-and-by she asked if I was sick. But I wasn't. She was a kind-hearted woman, and I'd been to her house a good deal, so she asked me to come in and rest. I wasn't tired, so I went away, and climbed back up to the little shack and the mine that I hated now."

The trader paused, and, reaching for the bottle, poured himself out a glass of brandy, which he spilled into his throat raw, then continued:

"I turned into a kind of hermit after that, and I wasn't good to associate with. Men got so they shunned me, and I knew they told strange stories, because I heard them whisper when I went to the stores for grub once a month. I changed all over, till even my squirrels and partridges and other friends quite me; once in a while I got out a ton or two of rock and sold it, but I never worked the mine or opened it up—I couldn't bear to go inside the drift. I tried it time and again, but the smell of its darkness drove me out; every foot of its ragged walls had left its mark on me, and my heart was torn and gouged and shivered worse than its seams and ledges. I could have sold it, but there was no place for me to go, and what did I want with money? I was shy of the world, like a crippled child that dreads the daylight, and I shrank from going out where people might see my scars; so I stayed there by myself, nursing the hurt that never got any better. You see, I'd been raised among the hills and rocks, and I was like them in a way; I couldn't grow and alter and heal up.

"From time to time I heard of her, but the news, instead of gladdening me, as it would have gladdened some men, wrung out what bits of suffering were left in me, and I farily ached for her. Nobody comes to see clearer than a woman deceived, so it didn't take her long to find out the kind of man Bennett was. He wasn't like her at all, and the reason he had courted her so hotly was just that he had had everything that rightly belonges to a man like him, and had sickened of it so he wanted her because she was clean and pure and different; and, realizing that he couldn't get her any other way, he had married her. But she was a treasure no bad man could appreciate, and so he tired quickly, even before the little one came.

"When I heard that she had borne him a daughter I wrote her a letter, which took me a month to compose, and which I tore up. One day a story came to me that made me saddle my horse to ride down and kill him—and, mind you, I was a man who made pets of little wild, trusting things. But I knew she would surely send for me when her pain became too great, so I uncinched my gear and hung it up and waited and waited and waited. Three long, endless years I waited, almost without a glimpse of her, and every hour of that time went by as slowly as if I had held my breath. Then she called to me, and I went.

"I tell you, I was thankful that day for the fortune that made me take good care of my horse, for I rode like Death on a windstorm. It grew moonlight as I raced down the valley and the foam from the animal's muzzle lodged on my clothes and made me laugh and swear that the morning sun would show Dan Bennett's blood in its place. I rode

(Continued on the following page.)




ALICE W. BARLAND
Editorial Contributor

# War Makes Changes

## Democracy Among Individuals

Dear Young Folks of the Family Circle: We hear much these days about this being a war for world-wide democracy. What is democracy anyway? Boiled down it means equality of rights or giving the other fellow a chance.

Our country, as a country, has lived up to this idea after a fashion. All who set foot on our shore have been free to climb the ladder of fame and prosperity as high as they might choose to go. But still we are not truly democratic as individuals. We are most of us looking about for the best end of the bargains we make, and we are not worrying much about the rights of the other fellow.

We can be democratic or otherwise in the common everyday lives we live, but many are not, though perhaps they don't know that they are not. In schools we see the best dressed girls forming into clubs and cliques. There are frequently in the same classes poor girls of equal or more mental ability than others who would enjoy the social good times planned and carried out by the various clubs and "frats," but who are frequently left out because they are compelled to dress plainly and for that reason alone. There is no democracy about that kind of thing. In cases where girls or boys are left out because of plain clothes they need the social life more than those with money, because plain clothes commonly go with plain homes, where there is usually much work and little play. What a treat it would have been to me when a schoolgirl to have been invited into the homes of the rich girls, and how delighted I would have been if I had been taken to ride in a nice carriage with prancing horses. One such ride would have been a delightful memory for many weeks. But things do not work out that way. Our rich young Americans are not very much given to sharing their blessings with those who have nothing to give in return. I have noticed that the older people who own the big autos don't go about often taking out the folks who have none. I have many times stood by and seen big cars go by with two or more vacant seats, and have wondered if I should ever own a car, and, if so, would I be democratic enough to give the less fortunate folks a chance to ride.

It is so easy to look on and see the faults of others, and say if we were in their places we should do so and so, but at best we are all selfish. Selfish love of power has thrown the whole world into war. There is no hint of democracy or equality of rights or a fair show for the other fellow in the attitude of our adversaries.

But out of all the blackness and horror, we, as a nation, are being drawn more closely together. When traveling about the country last summer I saw women every where knitting. There were women who carried their knitting work in fancy knitting bags with pearl and gold mountings and whose diamond rings flashed in and out among their needles. Sitting close by in parks or pavilions were women in plain cotton dresses, with hands made hard by toil, who were just as industriously making garments with the same kind of yarn, after the very same set of rules and for the very same purpose. This common interest forms a bond of union, a point of contact never before brought about in my lifetime.

Uncle Sam takes his men as he requires them from all classes, the rich and poor alike, and it is not unlikely that the women knitting side by side in park or pavilion, the one with diamond rings and the one with cotton gown and work-hardened hands, each has a son in camp or "somewhere in France." What a common meeting point of interest for them is this!

Mother hearts, anxious, sore and sad, have much in common to draw them together. Beside the great calamity of our broken family circles the question of worldly possessions sinks into insignificance, where it belongs, and the fatherhood of God and the brotherhood of man stands out in greater importance as the anxious days go by.

We trust that out of this great black horror, which hangs over our land, will come not only world-wide democracy for nations but a kindlier, more democratic spirit in the hearts of all Americans. Already we are drawn closer together just because we are fellow countrymen and because we love the same flag and all it stands for. We do not know from day to day what new horror will confront us. The old adage so often quoted, "coming events cast their shadow before" does not hold good these days, for great calamities just swoop down upon us without any warning shadow. These are times when it is wise and comforting, it seems to me, to cling fast to God and his wisdom. A divinity great enough to create the sun and moon, to make the planets and set them whirling around the sun each in its own orbit and to create mankind is surely equal to the task of straightening out the great calamity into which our world is engulfed. "God moves in a mysterious way his wonders to perform," and perhaps when the last toll is taken and the song of the angels on the first Christmas day, 'Peace on earth good will toward men," is sung from the heart by all nations, then will come the time when we shall "beat our swords into plowshares and our spears into pruning hooks and nations shall learn war no more."

If we do not trust God to bring this about to whom shall we turn?

Let me make for you instead the wish that you hold fast your faith in God's wisdom.

A. W. B.

# THE BARRIER

(Continued from the preceding page.)

through the streets of Mesa, where they lived, and past the lights of his big saloon, where I heard the sound of devil's revelry and a shrill-voiced woman singing—a woman the like of which he had tried to make my Merridy. I never skulked or sneaked in those days, and no man ever made me take back roads, so I came up to his house from the front and tied my horse to his gatepost. She heard me on the steps and opened the door.

"'You sent for me,' said I. 'Where is he?' But he had gone away to a neighboring camp, and wouldn't be back until morning, at which I felt the way a thief must feel, for I'd hoped to meet him in his own house, and I wasn't the kind to go calling when the husband was out. I couldn't think very clearly, however, because of the change in her. She was so thin and worn and sad, sadder than any woman I'd ever seen, and she wasn't the girl I'd known three years before. I guess I'd changed a heap myself; anyhow, that was the first thing she spoke about, and the tears came into her eyes as she breathed:

"'Poor boy! poor boy! You took it very hard, didn't you?'

"'You sent for me,' said I. 'Which road did he take?'

"'There's nothing you can do to him,' she answered back. 'I sent for you to make sure that you still love me.'

"'Did you ever doubt it?' said I, at which she began to cry, sobbing like a woman who has worn out all emotion.

"'Can you feel the same after what I've made you suffer?' she said, and I reckon she must have read the answer in my eyes; for I never was much good at talking, and the sight of her, so changed, had taken the speech out of me, leaving nothing but aches and pains and ashes in its place. When she saw what she wished to know, she told me the story, the whole miserable story, that I'd heard enough of to suspect. Why she'd married the other man she couldn't explain herself, except that it was a woman's whim—I had stayed away and he had come the oftener—part pique and part the man's dare-devil fascination, I reckon; but a month had shown her how she really stood, and had shown him, too. Likewise, she saw the sort of man he was and the kind of life he lived. At last he got rough and cruel to her, trying every way to break her spirit; and even the baby didn't stop him—it made him worse, if anything—till he swore he'd make them both the kind he was, for his goodness seemed to rile and goad him; and, having lived with the kind of woman you have to beat, he tried it on her. Then she knew her fight was hopeless, and she sent for me.

"'He's a fiend,' she told me. 'I've stood all I can. He'll make a bad woman of me as sure as he will of the little one, if I stay on here, so I have decided to go and take her with me.'

"'Where?' said I.

"'Wherever you say,' she answered; and yet I did not understand, not till I saw the look in her eyes. Then, as it downed on me, she broke down, for it was a terrible thing for a good woman to offer.

"'It's all for the little girl!' she cried. 'More than her life depends upon it. We must get her away from him.'

"She saw it was her only course, and went where her heart was calling."

The lieutenant met the look of appeal in the trader's eyes, and nodded to imply his complete understanding and approval.

"We love some women for their goodness, others we love for their frailness, but there never was one who combined the two like her, and, now that I knew she loved me, I began to believe again there was a God somewhere. I'd never seen the youngster, so she led me in where it was sleeping, and I remember my boots made such a devil of a thumping on the floor that she laid her slim white finger on her lips and smiled at me. All the fingers in the world began to choke at my throat, and all the blood in me commenced to pound at my heart, when I looked on that little sleeping kiddie. The tears began to roll out of my eyes, they scalded like melted metal. That was the only time I ever wept—the sight of her baby did it.

"I love her already," I whispered, 'and I'll spend my life making her happy and making a lady of her,' which clinched what wavering doubt the mother had, and she began to plan quickly, the fear coming on her of a sudden that our scheme might fail. I was for riding away with both of them that night, back through the streets of Mesa and up into the hills, where I'd have held tehm single-handed against man or God or devil, but she wouldn't hear of it.

"'We must go away,' she said, 'a long way from here, where the world won't find us and the little one can grow to womanhood without knowing. She must never learn who her father was or what her mother did. We will start all over, you and I and the baby, and forget. Do you love me well enough to do it?'

"I uttered a cry and took her in my arms, the arms that had ached for her all those years. Then I kissed her for the first time."

The old man tried to light his pipe, which had gone out, but his fingers shook so that he dropped the match; whereupon, without speaking, Burrell struck another and held it for him. The trader drew a noisy puff or two in silence and shot his host a grateful glance.

"Her plan was for me to take the youngster away that night, and for her to join us later, because pursuit was certain, and three could be traced where one might disappear; she would follow when the opportunity offered. I saw that he had instilled a terror into her, and that she feared him like death; but, as I thought it over, her scheme seemed feasible, so I agreed. I was to ride west that hour with the sleeping babe, and conceal myself at a place we selected, while she would say that the little one had wandered away and been lost in the canyon, or anything else to throw Bennett off. After a time she would join us. Well—the little girl never waked when I took her in my arms, nor when the mother broke down again and talked to me like a crazy woman. Her collapse showed the terrible strain she had been living under, and the ragged edge where her reason stood. She had been brave enough to plan coolly till the hour for giving up her baby, but when that came she was seized with a thousand dreads, and made me swear by my love for her, which was and is the holiest thing in all my life, that if anything happened I would live for the other Merridy. I begged her again to come with me, but her fears held her back. She vowed, however, that Bennett should never touch her again, and I made her swear by her love for the babe that she would die before he ever laid hands on her. It woke a savage joy in me to think I had bested him, after all.

"I never thought of what I was giving up, of the clean name I was soiling, of the mine back there that meant a fortune any time I cared to take it, for things like that don't count when a man's blood is hot, so I rode away in the yellow moonlight with a sleeping baby on my breast, where no child or woman had ever lain except for that minute before I left. She stood out from beneath the porch shadow and smiled her good-bye—the last I ever saw of her.

"I traveled hard that night and swapped horses at daylight; then, leaving the wild country behind, I came into a region I didn't know, and found a Mexican woman who tended the child for me, for I was close by the place where Merridy was to come. Every night I went into the village in hopes that some word had arrived, and I waited patiently for a week. Then I got the blow. I heard it from the loafers around the little postoffice first, but it dazed me so I wouldn't believe it till I borrowed the paper and read the whole story, with the type dancing and leaping before me. It took some hours for it to seep in, even after that, and for years I recalled every word of the damned lie as if it had been branded on me with hot irons. They called it a shocking crime, the most brutal murder California had ever known, and in the headlines was my name in letters that struck me between the eyes like a hammer. Mrs. Dan Bennett had been foully murdered by me in a fit of sudden jealousy, and I had disappeared with the baby! The husband had returned unexpectedly to find her dying, so he said, but too far gone to call for help, and with barely sufficient strength to tell him who did it and how! Then the paper went on with the tale of my courting her, and her turning me down for Bennett. It told how I had gone off alone up into the hills, turning into a bear that nobody, man or child, could approach. It said I had brooded there all this time till the mania got uppermost, and so came down to wreak my vengeance. They never even did me the credit of calling me crazy; I was a fiend incarnate, a beast without soul, and a lot of things like that; and, remember, I had never harmed a living thing in all my life. However, that wasn't what hurt. What turned me into a dull, dead, suffering thing was the knowledge that she was gone. For hours I couldn't get beyond that fact. Then came the realization that Bennett had done it, for I reasoned that he had dragged a hint of the truth from her by very force of the fear he held her in—and slain her. God!—the awful rage that came over me! But there was nothing to do; I had sworn to guard the little one, so I couldn't take vengeance on him. I couldn't go back and prove my innocence, for that would give the child to him. What a night I spent! The next day I saw I had been indicted by the grand jury, and was a wanted man. From a distance I watched myself become an outlaw; watched the county put a price upon my head, which Bennett doubled; watched public opinion rise to such a heat that posses began to scour the mountains. What I noted in particular was a statement in the paper that 'The sorrowing husband takes his bereavement with the quiet courage which marks a brave man'! That roused me more than the knowledge that he had made me a wolf and set my friends on my track, which I hadn't covered very well, having ridden boldly. It happened that the Mexican woman couldn't read and talked little; still I knew they'd find me soon—it couldn't be otherwise—so I made another run for it, swearing an oath, however, before I left that I'd come back and have that gambler's heart.

"It was lucky I went, for they uncovered my sign the next day, and the country where I'd hidden blazed like a field of dry grass. They were close on my heels, and they closed in from every quarter, but, pshaw! I knew the woods like an Indian, and the wild things were my friends again, which would have made it play if I'd been alone, but a girl child of 3 was harder to manage. So I cowered and skulked day after day like a thief or the murderer they thought me, working always farther into the hidden places, traveling by night with the little one asleep on my bosom, by day playing with her in some leafy glen, with my pursuers so close behind that for weeks I never slept; and my love for the child increased daily till it became almost insanity.

"She was the only woman thing I had ever possessed, and it seemed like my love for the mother came back and settled on her. And she loved me, too, and trusted me. Every little smile, every clasp of her tiny, dimpled fingers showed it, and tied her to me with another knot till the fear of losing her became greater than I could bear, till it kept the chill of death in my bones and filled my veins with glacier water. I became an animal, a cowardly, quailing coyote, all through the love of a child.

"We had close squeezes many times, but I finally won, in spite of the fact that they tracked us clear to the edge of the desert, for I had hit for the state line, knowing that Nevada was a wilderness, and feeling that I'd surely lose them there. And I did. But in doing it I nearly lost Merridy. You see, the constant travel and hardship was too much for a prattling baby, and she fell sick from the heat and the dust and the thirst. I'd been going and going till I was a riding skeleton, till my arms were crooked and dead from holding her, but this new thing frightened me like those men and dogs had never done. Here was a thing I couldn't hide from nor outride, so I doubled back and came boldly into the watered country again, expecting they would take me, of course, for a runaway man with a babe in his arms isn't hard to identify, but I didn't care. I was bound for the nearest ranch or mining camp where a woman could

(Continued on page thirty-one.)

# Patterns

1823—Girls' dress. Cut in four sizes: 1, 2, 4 and 5 years. It requires 2 3-8 yards of 44-inch material for a 4-year size. Price, 10 cents.

2009—Ladies' lounging robe. Cut in four sizes: 34, 38, 42 and 46 inches bust measure. It requires 6 5-8 yards of 44-inch material for a 34-inch size. Price, 10 cents.

2082—Dress for misses and small women. Cut in three sizes: 16, 18 and 20 years. It requires 5 3-4 yards of 44-inch material for an 18-year size. The skirt measures about 2 7-8 yards at the foot. Price, 10 cents.

2103—A practical work dress. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 6 1-4 yards of 36-inch material for a 36-inch size. Price, 10 cents.

2204—Girls' dress. Cut in five sizes: 4, 6, 8, 10 and 12 years. Size 8 will require 3 1-2 yards of 44-inch material. Price, 10 cents.

2291—Ladies' skirt. Cut in seven sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. Size 24 requires 3 yards of 44-inch material. The skirt measures about 2 1-2 yards at the foot. Price, 10 cents.

2295—Boys' suit. Cut in four sizes: 6 8, 10 and 12 years. Size 10 requires 3 1-8 yards of 44-inch material. Price, 10 cents.

2296—Ladies' dress. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 38 requires 6 1-4 yards of 36-inch material for the dress and 1 1-2 yards for the jumper. The skirt measures a little over 2 yards at the foot. Price, 10 cents.

2302—Girls' dress. Cut in four sizes: 6, 8, 10 and 12 years. Size 10 requires 4 3-4 yards of 36-inch material. Price, 10 cents.

2307—A set of new collars: The pattern includes all styles illustrated. It is cut in 3 sizes: Small, medium and large. Size medium requires, for No. 1, 1 yard of 27-inch material; for No. 2, 1 yard of 36-inch material, and for No. 3, 1 1-4 yards of 36-inch material. Price 10 cents.

2317-2313—Ladies' costume. Waist 2317 cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 2313 cut in seven sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. A medium size will require for the skirt and waist 5 5-8 yards of 44-inch material. The skirt measures 2 1-4 yards at the foot, with plaits drawn out. Two separate patterns, 10 cents for each pattern.

2322—Girls' dress. Cut in four sizes: 8, 10, 12 and 14 years. Size 12 requires 3 1-2 yards of 44-inch material. Price, 10 cents.

### As Br'er William Sees It.

You never know when you is happy till you is cl'ar out er happy lan,' an' den you ain't got time nuff lef' ter kick yo'se'f fer not knowin' it at de right time.—Atlanta Constitution.




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Postoffice .....

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**BE SURE TO GIVE NUMBER AND SIZE.**

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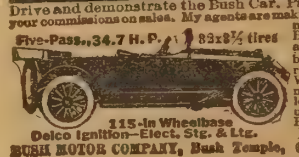
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**Go to Town By Boat.**

Dear Aunt Nellie: This is my first time to write to you. I am 11 years old. My birthday is the 22d of December. Have I any twin? If I have will they please write to me? I would be glad to join the Children's Corner. I live on a farm. We have to go to town by a bot. Sometimes I wish I could walk or ride horseback to town. I go to school every day. I have gone three years and haven't been tardy or absent. There is another family here. They work for papa. There are eight children in the family. They are just six in our school. I am in a grade all by myself. I am in the fifth grade. I have history, geography, hygiene, arithmetic, spelling, grammar and writing. We have four dogs. Their names are Bess, Bub, Bollie and Cap. We have lots of chickens, cows, four pigs, three horses and some little calves. I have a little brother one year old. His birthday is the 30th of November. It surely has been stormy weather this week. When the snow comes I go coasting. Papa made me a sled. Isn't this war awful. I wish it would stop.—Alice Carrie Case, Tokeland, Wash.

**Edith Likes to Play With Kittens.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I hope it won't be the last. I am 9 years old. My birthday is the 13th of January. Have I a twin? I go to school. I am in the second grade. We have 26 pupils in our school. We gave a Thanksgiving entertainment and gave the money we made to the Red Cross. My little cousin is living with us. She is 6 years old. We have lots of fun playing together. We have three kittens. Their names are Snowball, Tommy and Lucky. I like to play with kittens. We have three horses, one colt. One is a riding pony. I like to ride horseback. Our horses' names are Mabel, Buster, Bab and Dicky. We have five cows and one dog. His name is Sport. I have one sister. Her name is Florence. My four brothers' names are Lowell, Henry, Grant and Max. I would like to hear from any little girl.—Edith Redmon, Riffe, Wash.

**Books for the School Library.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I hope to see my letter in print. We have 64 head of cattle. We are milking 20 cows. We have 37 head of hogs, one cat and 150 chickens and four horses. The horses' names are Chee, Johnnie, Daisy and Nellie. Sister Mary, Gladys and I wash the dishes and sweep the floor while mamma helps papa milk the cows. There are six of us children in the family, one boy and five girls. We girls are not going to school on account of having the whooping cough. Our school gave a program and a basket social. We are going to get some books for the library at school. My next birthday is June the 16th. I am eight years old and in the third grade. Have I a twin?—Frances Huot, Geer, Wash.

**Sold Red Cross Stamps.**

Dear Aunt Nellie: As I have only written once before I will write again. Our school is selling stamps for the Red Cross. I have already sold 10 and when we get 10 sold at one cent apiece we get a pin. Do you think they will kill all our kittens in 1920? I do hope not for I love them so. I have four cats, one cow, three chickens and two bantams. It has rained for two weeks. I think it will never stop raining now since it has started. There is a real nice story about a little child and her mother. She asked her mother, "May I have a small Christmas tree?" Her mother said, "No, none this year for papa is too sick." Then she began to cry.—Gladys B. Jacobsen, Olympia, Wash.

**The First One to Read the Paper.**

Dear Aunt Nellie: I am always the first one to read the Farmer. I am glad that father is going to subscribe for it another year. We have 17 little pigs and we are going to get a little pup from our neighbors. I would be very glad to see my letter in print. Then I will write you another letter. I am 12 years old, but I will be 13 February 17. I am in the seventh grade at school. My hair is dark brown. My eyes are hazel. Have I a twin? I would be very glad to correspond with some one.—Marie Hazel Bultman, Box 31, Oak Harbor, Wash.

**Had a Christmas Tree.**

Dear Aunt Nellie: I am 9 years old and in the fourth grade. I go to the Cunningham school. We have 27 scholars and nine in my class. We had a Christmas tree and a program Christmas. We live on a farm. We have 15 horses, four colts and three cows. We go to school in our new car. I have two brothers and two sisters. We haxe a nice time coasting at school.—Lowell Eden, Cunningham, Wash.

**In a Drill on Christmas.**

Dear Aunt Nellie: I am in the fifth grade at school. I am 10 years old. My teacher's name is Miss Mason. We had a Christmas tree at church and I was in the drill.—Blanche Bell, Davenport, Wash.

**Desks Open in a Funny Way.**

Dear Aunt Nellie: I have written to you before. I enjoy reading the letters very much. I should think more of the children would write to the Corner to make it larger. I am 10 years old. There is a girl who writes to the Corner who said she was 10 years old, but she didn't say when her birthday was. I would like to know and maybe I will write to her. Her name is Verna L. Huffman. She lives at Elk, Wash. My birthday is August 20. I have told you my sisters' names and my brother's, so I won't this time. I used to live at Wawawai, Wash., but I do not now. I live at Bishop, Wash. I live about 20 biles down the river farther than Lewiston, Idaho. My teacher's name is Miss Hazel Howell. She is a nice teacher. I like her and everybody around Bishop likes her. She came from Seattle. Our school just got new desks about a week ago. They open funny. They open at the top and I like them. Today is my smallest sister's birthday. I think I will write again.——, Bishop, Wash.

(This little cousin forgot to give her name when she wrote her letter. Be sure you tell us what it is the next time you write, won't you? Aunt Nellie.)

**Lives on Wild Rose Prairie.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner and do not think it is the last. I am 12 years old and will be 13 the 19th of July. We live on Wild Rose Prairie about six or seven miles south of Deer Park. We live about two miles from school. There are about 24 pupils in our school this year. The name of our school is Edgewood. Our teacher's name is Miss Fornfiest. There are three of us from this place attending school. We have a church and a Sunday school about two miles from here. We go there nearly every Sunday. Sometimes we drive and sometimes we walk. We all like to read the letters in the Children's Corner and wish the papers would come and visit us a little oftener and would like to see my letter in the Corner.—Helga Peterson, R. F. D. 1, Box 62, Deer Park, Wash.

**Anna Is Going to Learn to Knit.**

Dear Aunt Nellie: This is the fourth time I have written to the Children's Corner. This time I will tell you how we save. We do not use much sugar or we do not eat much pastry now. I guess everybody ought to help in winning this war. If everybody would save it would help to save food for the allies. I am going to learn to knit, so I can knit something for the Red Cross for the soldiers. We had Thanksgiving program and I had lots of fun. We all spoke a recitation and we sang some songs. There were not many people at our program. I wish some of the cousins would write to me. I hope I will see this letter in print.—Anna Straube, B. 327, LaCross, Wash.

**Fun Sliding Down Hill.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. My father takes the Farmer and I always read the letters. My birthday is October 3. I am 12 years old and am in the sixth grade. My teacher's name is Miss Fornfiest. I like her very well. I have on sister and her name is Dortha. She is in the fifth grade. We go two miles and a half to school. The name of our school is Edgewood. We have lots of fun sliding down hill.—Eva McKenzie, Route 1, Box 55, Deer Park, Wash.

**Dortha's First Corner Letter.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. We take the Farmer and I read the letters. I am 11 years old. My birthday is the 29th of March. I have four cats and one dog. We have four horses and four cows and two calves. I have one sister and her name is Eva. Our teacher's name is Miss Fornfiest. There are 27 pupils in our school. We children have lots of fun sliding down hill. We have to go two miles and a half to school.—Dortha McKenzie, Route 1, Box 55, Deer Park, Wash.

**Nigger and Pudge Are Her Cats.**

Dear Aunt Nellie: I am eight years old and I am in the third grade. I live on a farm. My teacher's name is Mr. Berry. My complexion is dark. I have blue eyes and brown hair. We have a horse, a cow, a sow and chickens. The horse's name is Queen and the cow's name is Beauty. I have a dog and her name is Fluffy. I have two cats and their names are Nigger and Pudge. I hope my letter will be in print.—Katherine Cady, Olalla, Wash.

**Lester Goes to a Country School.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 10 years old and in the fifth grade. I go to a country school. There are only 11 pupils in our school. My teacher's name is Mrs. Backlund. I have three brothers and three sisters. The girls' names are Eunice, Pauline and Beulah. My brothers' names are Herbert, John Henry and Harold. Herbert, Eunice and I go to school.—Lester Hoech, Wilson Creek, Wash.

**Frances Answers Her Riddles.**

Dear Aunt Nellie: Here are the answers to the riddles I sent for the cousins to guess last week. One—a splinter. Two—a watermelon. Three—noise. Four—a negro with a black cat on his head riding a brown mule. Five—a churn. Six—because she is something to adore.—Frances McCauley, Route 1, Box 35, Dayton, Wash.

# Handicraft For Girls

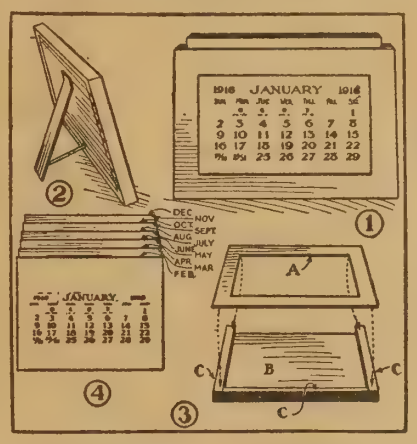
By Dorothy Perkins.

## Homemade Calendars.

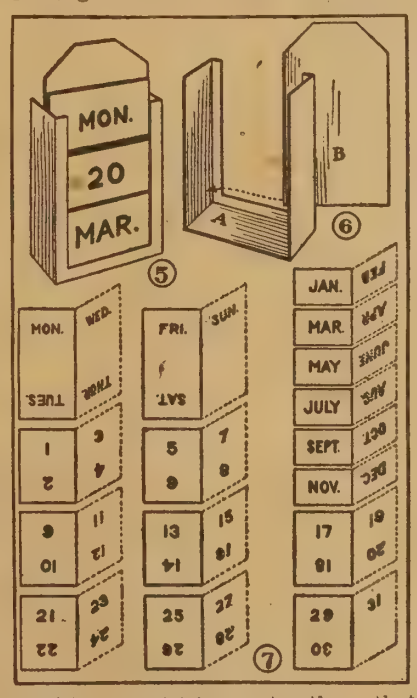
The illustrations show three calendars which I know you will enjoy making. You will need several calendar pads from which to cut the names of the months, days of the week, and the dates, and these can be obtained from advertising calendars.

## Desk Calendar.

The little desk calendar in Figs. 1 and 2 has a cardboard case (Fig. 3), and six calendar cards (Fig. 4). First make the cards, then the case. The size of your calendar pad will determine the size of the cards. Fig. 4 will




give you an idea of the relative size. The card tops must extend above the case as shown. Use a light-weight cardboard or heavy letter paper for the cards. You will see by Fig. 4 that one month of the calendar is pasted upon each side of each card. Be careful to get the margins equal so the printing will center upon the opening in the front of the case. Cut the front of the case from cardboard, with the opening of the right size so there will be a margin of about one-quarter inch around the opening about one-half inch wide. Use a very sharp knife so the edge will cut straight and smooth. Mark out back B with front A as a marker, and blue enough of the strips C along the side and bottom to make




a thickness a trifle greater than that of the six calendar cards.

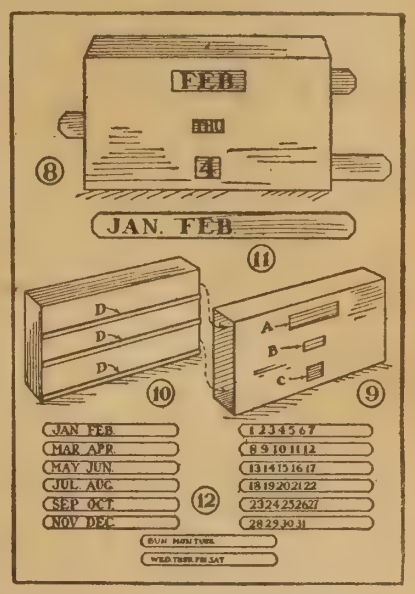
To assemble the case, bind together A and B with paper lapped over and blued to their edges. Paste a piece of tinted paper on the front to conceal the binding strip. Fig. 2 shows how to fasten a cardboard strip to the back of the case to support the calendar. With the case finished, a new set of cards each year will keep the calendar up to date.

## Perpetual Calendar.

Perhaps you would prefer a perpetual calendar to the kind just described. The calendar in Fig. 5 requires a small cardboard box for a case (A, Fig. 6). Remove one end of the box, then cut away the bottom, with the exception of a margin of one-quarter inch along the sides and remaining end. Back B (Fig. 6) fits between the box sides, and extends an inch above them. Glue its edges to the sides of the box.

There are 16 calendar cards (Fig. 2), two for the "days," eight for the "dates," and six for the "months." Cut the "date" cards two-thirds of the length of the "day" cards, and the "month" cards one-half of the length of the "date" cards. The calendar pad from which you cut the "days," "dates" and "months" should be in heavy clear type. Arrange and paste the printing in the manner shown in Fig. 7. The dotted portions of the diagram indicate the reverse side of the cards.

The perpetual calendar in Fig. 8 is made of a cardboard box of the kind that slides into a sleeve cover




(Figs. 9 and 10). Cut the openings A, B and C (Fig. 9) through the sleeve cover, and paste the three strips D (Fig. 10) upon the box bottom for the "month," "day" and "date" strips to slide upon. Fig. 11 shows the relative length and width of the slide strips, and Fig. 12 the arrangement of the calendar letters and numbers. Fourteen strips are shown in the diagram, but by using both sides only seven will be necessary.

(Copyright, 1915, by A. Neely Hall.)

# Humanity as Safe in Desert as in Palace

(Continued from page twenty-two.)

crossing almost in my footsteps. I suppose she was just small enough to class in the intelligence of the cow along with the dog. For, like a flash, she was clear across the big corral and had knocked Frances down with her horns; before she could get up mother was there and threw the milk bucket half full of milk into the cow's face. That gave Frances time to scramble up and start off in a new direction, the cow after her. Mother slipped and sat down. The cow caught Frances in the back and then slipped and they both went down, the cow square on top. Then Ed appeared around the corner of the shed with a big stick and by the time the cow got to her feet he was upon her and she gave way, giving Frances a chance to scramble through a crack in the side of the cowshed. We all gathered round her while she, cobbing violently, dug into her mouth and took out one little tooth. "It was loose anyway," she gulped. That was the only injury that she suffered in the experience. To complete the cycle of three, toward fall Frances fell through the straw and brush roof of the barn, striking her temple against the manger. How long she lay in the barn we never knew, she was out of the house so much, scouting around with the dog and the calves, that we seldom knew where she was, except at mealtime. That day she came in early in the afternoon with her eye swelled shut and a general look of dilapidation.

That made three times and we all began to be easy, especially as winter was coming on and we all had to stay closer to the house. Life went on from that time without more trouble of that kind.

In this way we rode and raced and chased our way through childhood in the bunch grass days of the golden west, just grazing by a hair's breadth disaster and distress and enjoying to the full all the good things of time or earth or senso which come to all who know how to look for them.

**Education Delivered.**

"In the old days an ambitious boy used to walk 20 miles to borrow a book."

"Well?"

"But now the public libraries dump 'em at your door."—Louisville Courier-Journal.

# News for Breeders

J. E. Finnicum, the Amity, Ore., Duroc Jersey swine breeder, some little time ago purchased a very fine spring boar from the Waltermeier herd of Iowa. Tme pig is by Great Wonder, that was grand champion at the Iowa State fair in 1916, and that goes back three times to Ohio Chief, and is a great grandson of Crimson Wonder Again and H. A.s Queen, considered the greatest of Duroc mating. The young boar's dam is by Grand Model, grand champion of the Iowa, South Dakota and Minnesota state fairs in 1915. Grand Wonder is by Golden Model 2d, the boar that made the Waltermeier herd famous. At a sale of the same line of breeding a year ago Mr. Waltermeier had the higrest average price ever received for boars. A boar now in Nebraska by the same sire is said to be the largest Duroc alive. Mr. Finnicum's boar is a fine individual with strong back, good legs and feet, is smooth and has a good head. Mated with the Finnicum sows he ought to produce very high class stock. H. A.

## Denver Shorthorn Sale.

It is announced that a sale of 40 high class Shorthorns, 30 bulls and 10 females, will be conducted at Denver, Col., Friday, January 25, the week of the Western Live Stock show, conducted by the American Shorthorn Breeders' association, "not with a view to scoring high prices, but for the purpose of enabling western Shorthorn breeders and farmers to obtain breeding Shorthorns at their door with a minimum cost of freight and traveling expenses."

## Champion Duroc Jersey.



The above photograph shows the grand champion Duroc Jersey shown at the Spokane Interstate fair last fall, owned by George Swales of Johnson, Wash., where she is a decided addition to his very high class herd. H. A.

## Live Stock Men Elect.

At the annual meeting of the National Society of Record associations, just held, Secretary Wayne Dinsmore reported that the societies had taken up regulations promulgated by the American and National express companies this fall under which they had refused to accept breeding animals or exhibition animals weighing over 500 pounds for shipment. The matter had been brought to the attention of the public utilities commission by W. S. Corsa, and a hearing had been held on the same November 16, 1917, in Chicago. Following the hearing, the express companies had plead for a suspension of any order by the public utilities commission, and had promised to promulgate satisfactory regulations. This has been done, and all agents of all express companies have been notified that their previous orders debarring them from accepting shipments weighing over 500 pounds do not apply to animals intended for breeding or exhibition purposes. It was the opinion of the directors present that this was sufficient and it is not likely that any further complaint will be found with the action of the express companies in this respect.

The following officers were elected: Jess C. Andrew, of the American Shropshire Registry association, was elected president; J. R. Pfander, of the National Duroc-Jersey Record association, was elected vice president; Wayne Dinsmore was reelected secretary-treasurer.

Members of the executive committee were elected as follows:

C. F. Curtiss of the American Berkshire association, F. Lothrop Ames of the American Clydesdale association, L. D. Tomson of the American Shorthorn association, W. M. McFadden of the American Poland-China Record association, J. G. Truman of the American Shire Horse Breeders' association, H. G. Van Pelt of the American Jersey Cattle club, Comfort Tyler of the American Hampshire association, and A. J. Knollin of the American Rambouillet Sheep Breeders' association.


CUTTER'S
BLACKLEG PILLS
"California's Favorite" for nearly 20 years
For the Prevention of Blackleg in calves and young cattle

Their superiority is due to nearly 20 years of specializing in "Vaccines and Serums only."

Year in and Year Out they give better satisfaction than any other vaccine made, and the cost of a few cents per dose is cheap insurance against a disease that always takes the fattest and best.

Single Pills may be used for ordinary and range stock.

Double Pills should be used for pure bred and high grade stock.

Use any Injector, but Cutter's simplest and strongest.

Prices:
10 dose pkge, Single pills $1.00
50 dose pkge. Single pills 4.00
10 dose pkge. Double Pills 1.50
50 dose pkge. Double Pills 6.00
Cutter's Pill Injector.... 1.50

Insist on Cutter's. If unobtainable, order direct.

Write for new booklet, "The Control of Blackleg." It tells about Anti-Blackleg Serum which cures Blackleg and may be used simultaneously with vaccine to combat outbreaks and safely protect valuable stock.

The Cutter Laboratory, Berkeley, Calif.

The Cutter Laboratory of Illinois, Chicago
Eastern Agent

BERKSHIRE SWINE

BERKSHIRE HOGS

Gilts of any age, bred or open; can also furnish young boars, from the best of strains and prize winning parentage.

EARL WOOD, Silverton, Ore.

RIVERBY ORCHARD BERKSHIRES won 12 out of 15 first prizes at the Washington State Fair, 1916. A few outstanding boars for sale at reasonable prices.
D. C. BUNN. Prosser, Wash.

HORSES

Hunter Ranch Percherons

The Grand Champion KROUMIR at head of herd. Young stallions for sale at all times at breeders' prices.

A. R. HUNTER. Island City, Ore.

Jerseys for Net Profits



You're in the dairy business for profit—the *net* profit that your herd has made you at the end of the year will determine the size of your bank account. Jerseys yield the largest returns from every ounce of feed—proved by tests at two great expositions. Jersey milk averages 5.3% butter fat, 9.1% solids not fat—highest of all breeds. Buy a Jersey bull. Write the breeders advertised below for prices, pedigrees, etc.



The American Jersey Cattle Club, 314 West 23rd Street, New York City

Jersey Isle Stock Ranch

Herd headed by Bright Light's Knight 103741, a line-bred Gamboge Knight-Combination. Castilian Lady 26628 made 603.3 lbs. fat (713.3 lbs. butter) and 11,530 lbs. milk in 11½ mos., and my herd has highest average test of 399.8 lbs. fat in Buhl Cow Testing association. Young stock for sale.
C. E. LONG, Buhl, Idaho.

724 Pounds Butter

and 11,076 pounds milk is the record the dam of a bull calf dropped Sept. 1, 1917. The sire, Dominus, is out of an 817-lb. cow and sired by a bull out of an 853-lb. cow. PRICE $125 for quick sale.
J. B. STUMP & SON, Monmouth, Ore.

Every Cow a Record

Fifty per cent of our cows that have dropped more than one calf have records above 700 lbs. butter, 85 per cent fat. Golden Glow's Chief and Adelaide of Beechlands blood predominates. Special prices on bull calves under 9 months old.
LADD FARM, Oswego, Ore.

Green Meadows Farm Jerseys

Young bull out of dam on official test making good record. Sire a grandson of Golden Glow's Chief, out of dam with official test of over 700 lbs. butter in a year. Other bull calves from register of merit dams. Also cows and heifers.
HENRY STEWART, Prop., Albany, Ore.

Ashwood Farm Jerseys

FOR SALE—BULL CALVES sired by ST. MAWES OF ASHWOOD and out of daughters of HOLGER now making creditable Register of Merit records.
McARTHUR & STAUFF, Rickreall, Ore.

914 Pounds of Butter

This is the official record for a year of the dam of a choice bull calf by Rosaire Olga Lad, sire of 29 tested daughters. He and others priced according to quality.
ED CARY, P. O., Carlton, Ore.
Station, LaFayette, Ore.

Waikiki Farm

Register of Merit Jerseys. Largest Jersey herd in the northwest. Young stock for sale.
IRA P. WHITNEY, Manager.
ROUTE 7, SPOKANE, WASH.

Mellow Lawn Jerseys

are promising to make a year's herd average of 700 lbs. butter, including every head from two to sixteen years old. Since June, 1916, none went under 612 lbs. butter. Junior champion bull calf at Oregon state fair, 1917, is our oldest male left for sale. Sired by our herd bull, Gertie's Poppy's St. Mawes.
F. A. DOERFLER, Silverton, Ore

Who Wants This Bull?

18 months old, out of Kadia F., with world's 4-year-old milk record and 797 lbs. butter. By Engineer's Bluster, whose first daughter, Pride of Cedar Hill, made, on test, a record of 600 lbs. of butter as a senior yearling.
N. H. SMITH, R. F. D. 2,
Oregon City, Ore.

ASHBURN FARM
Register of Merit Jerseys

In nearly 13 years we have yet to get our first poor heifer or dissatisfied customer. We have the best of the Golden Glow's Chief and St. Mawes strains, with the cross of our great Kentucky bull, Valentine's Ashburn Baronet.
J. M. DICKSON & SON, Shedd, Ore.

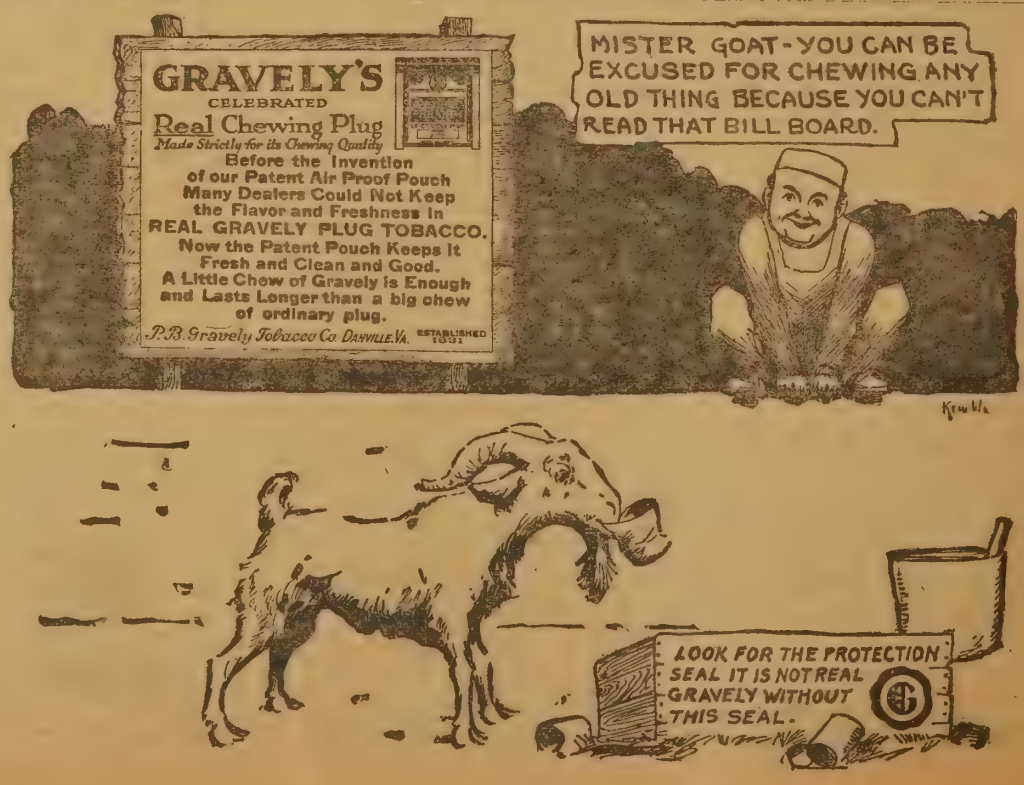
Oak Ridge Jersey Farm
Register of Merit Cattle

Twenty-nine years breeding Jersey cattle. Write us for prices and pedigrees. For information address
RILEY E. HULBURT, Albany, Ore.

A Bit of Courtesy

When writing to any of the Jersey breeders advertising in these columns, you will confer a favor to the breeder and to the American Jersey Cattle club by mentioning this paper, as they want to be able to trace the exact source of their inquiries. Will you do this, please?

When you write to advertisers be sure to say that you saw their advertisement in this paper.



## DUROC-JERSEY SWINE

# DUROC JERSEY

## Gilts and Boars

I am booking orders for fall weanling pigs for October and November delivery. Can furnish them singly or in unrelated pairs or trios. Special prices to members of boys' and girls' pig clubs. An exceptional strain of Durocs, carrying the best blood lines found in the northwest. Have been prize winners wherever shown.

Chas. G. Sprong, Grandview, Wn.

## Young Boars and Gilts

Sired by Elizabeth's Perfection, grand champion Oregon State fair, 1917, and Orion's Top Col.

E. C. NAFTZGER, GERVAIS, ORE.

DUROCS.

Boars and open or bred gilts of excellent breeding.

E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE, YAKIMA, WASH.

## POLAND CHINA SWINE

## Locust Lawn Herd

Big Type Poland Chinas.

W. F. HOWARD & SONS, Parma, Idaho.

## Pure-Bred Poland China Fall Gilts

will be shipped c. o. d., subject to your approval. Write to

HERBERT WILLARD, Dayton, Ore.

QUALITY HERD.

If you want to improve your herd, try stock from my winners at the Oregon state fair.

RAY J. FOX, Lyons, Ore.

## POULTRY

## Rhode Island Reds and Whites

Rose comb and S. C. blue ribbon winners. Utility and show stock. 100 cockerels at $3 up. Bronze turkeys and Toulouse geese. Now is the time to buy for next year's breeding, from blue ribbon stock. Sale of pedigreed Rufus Red Belgian hares. Bucks at $3 each. Registered Airedale bitch at a bargain if taken at once.

HIGHLAND FRUIT AND POULTRY RANCH.
J. NONNENMACHER.
R. F. D. 3. NORTH YAKIMA, WASH.

# White Leghorns

Baby chicks or hatching eggs from hens hatched from stock whose trap-nested records average 259 eggs per year. Special rates on lots of 100 and over.

MOUNTAIN BROOK POULTRY FARM.
Mr. and Mrs. W. A. Newton,
Myrtle Creek, Ore.

## S. C. Rhode Island Reds

Cockerels, hens and pullets. Heavy-laying strain. Eggs after Jan. 15. Satisfaction guaranteed.

J. F. BENSON. Cottage Grove, Ore.

## Blooded Bronze Turkey

20 years' Blue Ribbon Winner, mated last year with a Golden Back tom from the Panama Fair Winners. Geese, Ducks, Guineas, Chickens and Poland China Hogs.

E. A. KRUSE. Roseburg, Ore.

## Barred Rock Cockerels

Have some good birds at $3 and $5 each, from good laying stock. Send me your list of wants; will try and please you.

STARK. Box 242, Sutherlin, Ore.

## White Holland Turkeys

Choice young toms, $10.00; hens, $7.00.

ALICE E. CARY, Carlton, Ore.

# Breeders' Department

## HOLSTEIN CATTLE



## A Rare Opportunity

To secure some thoroughbred Holstein male calves, described as follows:

No. 1—Born Feb. 19, 1917. Sire, Segis Walker Hartog, No. 162423; dam, Buckeye Grace Morley, No. 99452.

No. 2—Born Jan. 23, '17. Sire, Segis Walker Hartog, dam Naiad Jewel Netherland, No. 124102.

No. 3—Born April 14, '17, Sire, Segis Walker Hartog, dam, Buckeye Grace Morley. No. 248417.

No. 4—Born Jan. 11, '17. Sire, Segis Walker Hertog, dam, Susie De Kol Pauline 2d, No. 245999.

No. 5—Born Feb. 19, '17, Sire, Segis Walker Hartog, dam, Mary De Kol Stony Brook, No. 248416.

No. 6—Born March 26, '17. Sire, Hazelwood Sir Ormsby, No. 148496, dam, Queen Gerben Josephine Michtilda, No. 146519.

Application for registry for all the calves have been sent in. For further particulars, prices, etc., address The Intermountain Institute, or

E. A. PADDOCK, Pres., Weiser, Idaho.
R. F. D. 1.

## World's Record Holsteins

Herd headed by Ononis Cornucopia Johanna Newman, the best bred son of the world's record cow, Margie Newman, with more 100-lb. records in his pedigree than any other bull in the world.

Home of the world's champion junior 2-year-old and junior 3-year-old producers. Write for records and prices on young bulls.

CHAS. ELDRIDGE, Chimacum, Wash.

## LaConnor Flats Stock Farm

Pure bred registered Holstein cattle. Herd sire Segis Pontiac Acme; average of three of nearest dams; butter, 1 year, 1080.82 lbs.; milk, 24,380.3.

J. H. HULBERT, Mt. Vernon, Wash.

## Record-Holsteins

Young bulls, some of them ready for service, by a sire whose 5 nearest dams average 26.17 pounds butter, or another with 29.67-pound dam, and out of high-record A. R. O. dams. Priced to sell.

ERNEST WERNER, AURORA, ORE.

## Holsteins and O. I. C. Hogs

For sale—Bulls and cows, good breeding, from tested dams. May gilts and boars ready for service, from show ancestors. Priced to sell.

E. C. SCHUMACHER, R. 1, Granger, Wash.

## HOLSTEINS

Well bred young bulls for sale.

THOS. CARMICHAEL. Gaston, Ore.

## YORKSHIRE SWINE

## Spring Boars and Gilts

Gilts, bred or open, boars ready for service. Also weanling pigs. Best of breeding.

WM. NEUENSCHWANDER, Gaston, Ore.

## CHESTER WHITE SWINE

BLUE RIBBON STOCK FARM

Prize winning Chester White hogs and Jersey cattle. Young stock for sale.

ED SCHOEL, Suver, Ore.

## RABBITS

BARBER RABBITRY.

Pedigreed and registered Flemish and Checkered Giants. Bucks at stud. Stock for sale. Correspondence solicited.

MRS. R. W. BARBER, R. 4, Boise, Idaho.

## Registered Holsteins

Young calves, born last July and later; also 1 30-lb. bull, ready for service, whose sire, dam and sire's dam have all been grand champions at one or more state fairs, and full brother to his sire and full sister junior champions at a state fair. Here is production and type we hear so much about. Could also spare a few cows.

H. R. BOOMER, New Plymouth, Idaho.

Established 1887—100 in Herd.

REGISTERED HOLSTEIN CATTLE.

As I wish to reduce my herd I am offering the blood of such bulls as King Segis Pontiac, 13th, 30.39 lbs. breeding, 4.25 per cent fat; Iowana Rochdale Korndyke, 26 lb. breeding, and Prince Segis Korndyke De Kol, 31.41 lbs. breeding.

LAKE SIDE STOCK FARM.
P. A. FRAKES, Scappoose, Ore.

## 365-Day Holsteins

24,667 lbs. milk—1026 lbs. butter—is the s. o. advanced registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.

THE HERD WITH YEARLY RECORDS.
WESTERNWOLD RANCH.
Prineville, Ore.

## ABERDEEN ANGUS

## Yakima Herd of Aberdeen Angus

In the famous valley of the Yakima is one of America's greatest collections of the breed.

At the recent Chicago International our breed won 1st on aged herd, 2d on young herd, 1st on calf herd and 2d on get of sire. All stock exhibited, except 2, were of our own breeding. We have an exceptionally good lot of yearling bulls for sale. To introduce our stock in this section we are pricing them within reach of small breeders and range men.

Congdon & Battles
Otto V. Battles, Mgr.
North Yakima, Wash.

## BROWN SWISS CATTLE

## Brown Swiss Stock Farm

Breeders of Brown Swiss Cattle, the Farmer's Dairy Cow. Young stock for sale.

THEO. BRUGGER, Route 3, Gresham, Ore.

## SHORTHORN CATTLE

# SHORTHORNS

A few young stock for sale by such noted sires as Precious Goods, a son of the great Golden Goods, and Scottish Sunrise 2d.

R. E. BOYCE, Baker, Ore.

## Hercules Shorthorns

For particulars write

DAY & ROTHROCK
Exchange Bank Bldg.
Spokane, Washington.

## CEDARHURST FARM

SHORTHORNS.

Am offering a number of richly bred young bulls, fit for service, also a few females. For particulars write

JOE TURNER, Meyers Falls, Wash.

## H. H. Schildman

breeder of registered Shorthorn cattle, Hampshire sheep and big-type Poland China hogs.

Filer, Idaho.

## For Sale

25 registered red, white and roan Shorthorn bull calves and yearlings.

WM. MULHALL. Fenn, Idaho.

## JERSEY CATTLE

## Jersey Home Dairy

Young bulls, winners at Washington State Fair, make good herd sires. Attractive prices for quick sale.

Erickson Bros. Prop.
North Yakima, Wash.

TWO YOUNG BULLS

Ready for service. Sire, a Ladd bull of Brown Bessie strain and out of good working cows.

RALPH BILLINGS, Ashland, Ore.

JERSEY BULL FOR SALE.

Year old, good individual, priced reasonable. Dam gave 45 to 50 lbs. of milk a day, test 4.8. Sire, Island bred.

MRS. J. F. PEFFER, Dayton, Ore.

## GUERNSEY CATTLE

MIDDLEDALE FARMS GUERNSEYS.

Herd founded in 1904. May Rose breeding. Most all granddaughters of Jethro Bass (11366), son of Imp. King of the May. Have a few heifers, calves for sale. Goshen, Ore.

## Orchard Hill Farm

"Home of High-Class Guernseys."

Dr. Park Weed Willis, Owner.

Redmond, Wash.

## FAIRVIEW FARM

Breeders of high class registered and grade Guernseys.

A. J. SINNES.
Route 5. Mt. Vernon, Wash.

## HEREFORD CATTLE

## BULL RANCH

Registered Hereford cattle.

CHAS. BULL, Prop. Mabton, Wn.

In answering advertisements don't fail to mention this paper.

# Valley Junction Shorthorns

The grand champion bull, General Hampton 390583, at the head of the herd. Young bulls fit to head the best pure bred herds and others that will make impressive improvements on range herds. Priced according to quality.

W. W. GREEN & SONS, Union, Ore.

# BATTEN'S S. C. REDS

I have 50 of the best cockerels that I have ever seen in one yard that I am offering at low prices, quality considered, in order to move them quickly to make room for younger stock. Prices range from $5 to $15 and can give you good selection if you will write me your wants. Can spare a few good pullets at $2.50 each. Let me hear from you.

E. F. BATTEN, HOOD RIVER, ORE.

# TRAP NESTED WHITE LEGHORNS

The kind that lays and pays. A few fine range-bred cockerels for sale. Bred from high layers. Mothers laid from 180 to 266 eggs in pullet year. Entire flock averaged 191 eggs last year. All hens trap-nested continuously and only best layers used as breeders. Hatching eggs in season. Write for catalogue.

WM. HANDS & SON, Cottage Grove, Ore.



## *Imported and American Bred*

## Percheron, Shire and Belgian Stallions

They are of the very best breeding obtainable and are guaranteed to be breeders. They will be sold at very reasonable prices.

If in need of a good stallion weighing from 1800 to 2200 pounds, come direct to my stables and see them or write for description and terms to

WM. T. TRACY, Kennewick, Wash.

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, Dec. 31.—Peace talk and the disappearance of the cold wave tended to ease down the corn market. Largely as a result prices, although steady at the finish, were ¼c to ⅝c net lower, with January at $1.26⅜ and May $1.24¾. Oats fell 1⅛c to 3⅝c and provisions 5c to 42c.

Weakness in corn values developed chiefly in the last half of the day. During the earlier trading scantiness of receipts, together with continued reports of difficulty in getting cars for shipments from country elevators, had a temporary bullish effect. Backwardness of husking was also of some influence toward a transient hardening of prices. After slight gains had been scored, however, attention focused to a considerable extent on gossip of proposed answers to Germany's latest peace offer. Additional selling was also brought about by the fact that milder temperatures promised help in facilitating railway traffic and thus bring about more liberal arrivals.

Sharp breaks took place in the oats market, but not until new high price records for the season had been touched. Export business caused the upturn, whereas peace talk and the subsesquent withdrawal of export bids made prices tumble.

Forecasts of plentiful supplies of hogs toward the end of the week pulled down provisions.

**Cash Quotations.**

CHICAGO, Dec. 31.—Corn—No. 2 yellow, nominal; No. 3 yellow, $1.90; No. 4 yellow, $1.75@1.78.

Oats—No. 3 white, 80¾@81c; standard, 81@82c.

Rye—No. 2, $1.83. Barley, $1.40@1.60. Timothy, $5@7.50; clover, $20@26.

**Chicago Futures.**

| | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| Corn— | | | | |
| Jan. | 1.26⅝ | 1.26⅞ | 1.26¼ | 1.26⅜ |
| May | 1.25¼ | 1.25½ | 1.24⅝ | 1.24¾ |
| Oats— | | | | |
| Dec. | .80¼ | .81¾ | .77 | .77 |
| May | .77¼ | .77⅝ | .75¾ | .75¾ |
| Pork— | | | | |
| Jan. | 45.75 | 45.75 | 45.20 | 45.45 |
| May | 45.60 | 45.60 | 45.00 | 45.30 |
| Lard— | | | | |
| Jan. | 24.00 | 24.00 | 23.50 | 23.65 |
| May | 24.37 | 24.37 | 24.05 | 24.20 |
| Ribs— | | | | |
| Jan. | | 24.00 | 23.45 | 23.70 |
| May | 24.55 | 24.60 | 24.20 | 24.32 |

**Pacific Northwest Grain.**

PORTLAND, Ore., Dec. 29.—Grain futures: January oats, $58.25; feed barley, $55.50; brewing barley, $57.50.

Eastern oats and corn in bulk: Oats, No. 3 white December, $55; 38-pound clipped white, $55.50; corn, No. 3 yellow January, $62.50; No. 3 mixed, $62.50; January oats, No. 3, $55.50; oats, clipped, $56; corn, February yellow, $59; mixed, $58.

Sales: One hundred tons January oats (white) at $58.50; 200 tons January clipped oats at $56.

**San Francisco Grain.**

SAN FRANCISCO, Dec. 29.—Barley—May, $1.80@1.87½.

**Minneapolis Grain.**

MINNEAPOLIS, Dec. 31.—Flour—Unchanged. Standard flour in carload lots quoted at $9.75 a barrel, in 98-pound cotton sacks. Shipments, 54,096 barrels.

Barley, $1.31@1.59.

Rye, $1.86½@1.87½.

Bran, $32.50.

Wheat—Receipts, 372 cars, compared with 431 a year ago.

Corn—No. 3 yellow $1.70@1.75.

Oats—No. 3 white, 78@79c.

Flax, $3.53@3.55.

## Live Stock Quotations.

**At Omaha.**

OMAHA, Neb., Dec. 31.—Hogs—Receipts 4000; market 5c to 10c higher. Heavy, $16.40@16.70; mixed, $16.50@16.70; light, $16.40@16.75; pigs, $10@17; bulk of sales, $16.50@16.70.

Cattle—Receipts 6300; market steady to stronger. Native steers, $9@13.50; cows and heifers, $6.50@10.50; western steers, $7.50@11.75; Texas steers, $7@10.50; cows and heifers, $6@9; canners, $5@6; stockers and feeders, $6.50@10.50; calves, $9.75@12.75; bulls, stags, etc., $6@9.

Sheep — Receipts 17,500; steady. Yearlings, $11.50@13.25; wethers, $11@12.50; ewes, $9.75@11.50; lambs, $15@16.50.

**At Chicago.**

CHICAGO, Dec. 31.—Hogs—Receipts 29,000; market strong, 15c to 20c above Saturday's average. Bulk, $16.60@16.90; light, $15.80@16.75; mixed, $16.30@17; heavy, $16.25@17; rough, $16.25@16.45; pigs, $11.75@15.35.

Cattle — Receipts 11,000; market strong. Native steers, $7.60@14.25; stockers and feeders, $6.70@10.40; cows and heifers, $5.35@11.35; calves, $8.50@16.

Sheep—Receipts 9000; market firm. Wethers, $9.25@13.50; lambs, $12.90@16.80.

**At Portland.**

PORTLAND, Ore., Dec. 31.—Cattle steady; receipts 1112. Medium to choice steers, $9.75@10.50; good to medium steers, $8.75@9.65; common to good steers, $7.25@8.40; choice cows and heifers, $7@7.85; common to good cows and heifers, $5.75@7.35; canners, $3@5.50; bulls, $4.50@7; calves, $7@10; stocker and feeder steers, $6@8.

Hogs steady; receipts 1734. Prime light, $15.35@16.50; prime heavy, $15.45@15.60; pigs, $13.50@14.50; bulk, $15.35@15.50.

Sheep steady; receipts 565. Western lambs, $13@13.50; valley lambs, $12.50@13; yearlings, $12@12.50; wethers, $11.75@12.25; ewes, $8@10.

**Spokane Stockyards, Monday.**

Hogs—Receipts 31; market steady. Prime light, $15.40@15.60; prime heavy, $15.50@15.60; pigs, $13.75@14.75; stockers and feeders, $11.50@13.

Cattle—Receipts 53; market steady. Best beef steers, $9.50@10.25; good steers, $8.50@9.25; common to good steers, $7@8.25; best beef cows, $7.50@8.25; good cows, $6.50@7.25; ordinary to good cows, $5.50@6.50; canners, $3@5.50; best heifers, $7.75@8.50; bulls, $5@6.75; calves, $6.50@8.75; stocker and feeder steers, $5@7.75.

Sheep—Receipts none; market steady. Prime lambs, $13.25@14; good lambs, $12@12.75; prime yearlings, $11.50@12.25; prime wethers, $11.25@12; best mutton ewes, $8@10.

## Seattle Market.

SEATTLE, Dec. 29.—Shrinkage of Yakima and Puget sound potatoes held in common storage in Seattle is causing much alarm among jobbers. The mild weather, with temperatures around 55 degrees in early morning and warm winds have cut heavily into the visible supply. Well informed dealers estimate that the loss in this way has already reached 25 to 35 per cent.

Sacks of spuds taken out of common storage show water-soaked exteriors and pulpy and ruined contents, originally well selected and graded before storing. Cold storage at this time of the year has never been considered, but it would have been impossible owing to the fact that all cold storage space in this city is already full. Fearful of a declining market, wholesalers bought and stored but little spud stock, and growers who own the bulk will be compelled to stand the loss.

Today jobbers took a tighter grip on their good keeping fancy and extra fancy pack apples when the orange market jumped to $5.25 and $6 for navels. This competitive fruit, while broadening the differential that is continually favoring apples, firmed up quotations and added stiffly to the value of the native product. It is not believed that it will be difficult for the remainder of the winter to get $3 per box for fancy Delicious and Winesaps.

Jobbers are shying away from accumulations of fresh ranch eggs. Storage stocks are cleaning up, and it was stated today that before January 10 all holdings will have been sold. Little in the present weather conditions make for bullish sentiment.

Japanese eggs are being offered at 43c, with pullets at 36c to jobbers, but the movement is light.

**BUYING PRICES.**

Unless otherwise stated, the following prices are fixed on a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle;

Eggs—Local, 47@48c per dozen; putlets, 38@40c.

Butterfat—54c lb.

Poultry—Live hens, fat, over 4 lbs., 22c per lb.; 4 lbs. and under, 20c; old roosters, 15c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 15c per lb.; springs, live, fat, 20c per lb.; hens and young tom turkeys, dressed, 30c per lb.

Beef—Buying prices: Prime beef steers, 7@8c per lb.; cows, fat, 7@8c per lb.; heifers, 6@8c per lb.

Hogs—Light, 16@18c per lb.; heavy, 12@15c per lb.

Veal—Fancy, light, 14@16c per lb.; heavy, 9@13c per lb.

Hides—Salted, 16c per lb.; flint-dry hides, 30@31c per lb.; salt kip, 16c per lb.; green hides, 13c per lb.; green calf, 25c per lb.; dry calf (under 6 lbs.), 31c per lb.; bulls and dry salts, 4c per lb. less; green bulls, 10c per lb.; dry full wool sheep pelts, 42@46c per lb.; salt bulls, 13c per lb.

**SELLING PRICES.**

Feed—Scratch feed, $76 per ton; all grain chops, $67 ton; oats, $63 per ton; rolled oats, $64.50 per ton; wheat, $74 per ton; bran, $35 per ton; shorts, $38 per ton; soy bean meal, $65 per ton whole carn, $78 per ton; cracked corn, $79 per ton; alfalfa meal, $35; chick feed, $80 per ton; barley, $63.50 a ton; all grain chop, $67 per ton.

Hay—Eastern Washington timothy, $36@37 per ton; alfalfa, $28@29 per ton; double compressed, $40@41 per ton; wheat hay, $28 per ton; Puget sound, $30@31 per ton; straw, $14@15.

Butter—Washington creamery extras, cubes, 52c per lb.; do bricks, 53c per lb.

Eggs—Rresh ranch, 54c per doz.

Onions—Yakima, $2.25@2.50 per cwt.; Oregon, $2.75@3 per cwt.

Potatoes — Puget sound, $1.25@1.35 per cwt.; eastern Washington, $1.50@1.60 per cwt.

## Seattle Wheat.

SEATTLE, Dec. 29.—Stocks of wheat shipped to terminals here before the order which transferred government purchases from tidewater to country warehouses are cleaning up rapidly. The orders of M. H. Houser, following the Baltimore dock fire, were to the effect that before any mills could buy wheat in the country all storage holdings on Puget Sound should also be cleaned up.

Notwithstanding this order, a total of 3179 cars have reached Seattle since July 1, as against 3464 cars for the same period a year ago. Grain buyers explain this apparent discrepancy in the fact that before the embargo against further shipments to Puget sound was placed the most phnomenal rush of wheat to tidewater in the history of the state had already been well started. It is expected that the effect of the order will become more visible from now on.

Mill prices of $29 for bran and $32 for shorts, sacked, will be the new cost of millfeed, according to rough estimates of costs of production and margins of profits allowed by the government in the new orders from Washington ordering a reduction in quotations on this commodity.

There has been practically as much confusion as to what the government meant by millfeed prices on the basis of 38 per cent of the bulk wheat cost as followed the announcement last fall of Coast terminal wheat prices as related to country prices.

How much farther millers can go in order to meet the urgent demand from the government backed by the dairy interests of Washington and Oregon and still keep off flour is not known.

## The Wool Market.

BOSTON, Dec. 28.—The Commercial Bulletin will say tomorrow:

"The last week of the year, true to form, has been a quiet one. Prices, except on fine short clothing wools, have been very firm on all grades and with the developments of the last week there has been no disposition on the part of holders to sell wool for any less money.

"The situation at the mills is a very strong one and bids fair to keep so, with the machinery engaged on government orders being increased more or less steadily."

Scoured basis: Texas fine, 12 months, $1.68@1.72; fine 8 months, $1.55@1.60. California northern, $1.70@1.75; middle county, $1.55@1.60.

Oregon eastern, No. 1 staple, $1.80@1.82; eastern clothing, $1.50@1.60; valley No. 1, $1.65@1.70. Territory: Fine staple, $1.80@1.85; half-blood combing, $1.75@1.80; ¾ blood combing, $1.45@1.50; fine clothing, $1.60@1.65; fine medium clothing, $1.55@1.60; pulled: Extra, $1.80@1.85; AA, $1.70@1.80; A supers, $1.60@1.65.

## Portland Wheat.

PORTLAND, Ore., Dec. 29.—At a meeting of millers of the northwest, held at the office of T. B. Wilcox, chairman for this district of the milling division of the food administration, it was decided that, with mill feed prices reduced, no further cut in flour prices was possible. There was a revision of feed prices as recently given out, bran now being listed at $30 and shorts at $32, in car lots, with 50 cents added for less than car lots. It was also decided that the manufacture of 95 per cent flour, the so-called "war flour," called for by the government, will begin as soon as present stocks of patent flour are exhausted.

The coarse grain markets were strong at the close of the week. At the exchange 100 tons of January local oats were sold at $58.50 and 200 tons of eastern clipped oats at $56.

## Butter and Eggs.

PORTLAND, Ore., Dec. 29.—Butter—Prints, extras, 50@52c; cubes, extras, 49 1-2c; prime firsts, 49c; dairy, 34c.

Butter fat, Portland delivery, No. 1 sour cream, 56@57c.

Potatoes: Buying price, locals, $1@1.25; selling price, $1.25@1.50.

SAN FRANCISCO, Dec. 29.—Butter—Prime extra, 50 1-2c.

Cheese—Young Americas, 24c.

CHICAGO, Dec. 29.—Butter higher; creamery, 33@49c.

Eggs higher; receipts, 2919 cases; firsts, 56@57c; ordinary firsts, 52@54; at mark, cases included, 50@55c; refrigerator firsts, 40@41c.

## Portland Market.

PORTLAND, Ore., Dec. 29.—Poultry sold at record prices in the latter part of the week as the demand was keen and but little was available. Dressed turkeys for the New Year holiday brought 36 to 38 cents, dressed chickens of all kinds 23 to 25 cents and dressed geese 27 1-2 cents. Live poultry sold for almost as much; hens, large and small, and springs going at 22 to 24 cents.

The dressed meat market is also on a stronger basis as receipts have been small.

Butter continues scarce and firm. No early change in cheese prices is expected by dealers.

Eggs are accumulating and the market is weak. The general quotation is 45 cents, case count, and unless the weather turns colder, a further drop is expected. The market is likely to decline to a point where the Spokane and Montana trade will buy here instead of in the east.

There has been no improvement yet in the potato market. A set of state grades is being considered by the public service commission, and it is proposed to locate inspectors at all shipping points.

A fair volume of wool business has been done locally in the last week. The prices are said to have been equal to those recently current. The purchases were for eastern manufacturers.

In the following list of quotations the grain, hay, mill feed, hops, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 1, $58.50 per ton.

Millstuffs — Carloads: Bran, $30; shorts, $32; middlings, $39; less than carloads and mixed cars, 50c more.

Barley—No. 1 feed, $54.50; brewing, $57.50; rolled, $61@62.

Hay—Buying prices: Timothy, eastern Oregon, $27; alfalfa, $24; grain $24.

Eggs—Oregon ranch, case counts, 45c per dozen; candled, 47@51c.

Poultry—Hens, 22@24c; ducks, 24c; turkeys, live, 25c; geese, 20c.

Butter—City creamery, prints, 52@53c per pound; cubes, extras, 49 1-2c.

Cheese — Tillamook triplets, 23c; Young Americas, 24c.

Dressed meats—Veal, 16 1-2@17c; pork, 18 1-2@19c.

Hops—1916, 13@15c; 1917 crop, 16@20c.

Potatoes—Oregon, buying price, $1@1.25 per hundred.

Wool—Eastern Oregon, 50@60c; valley, 55@60c.

Beans—Buying prices: Oregon white, 9@9 1-2c; colored, 8@9c.

## Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

**Potatoes**—New local potatoes, $1@1.50 cwt; sweet potatoes, $4.75.

**Apples**—Large eating apples, $1.25@1.50; cooking apples, $1 box; Delicious, $1.85@$2.25; Winter Bananas, $1.50 box; Jonathans, $1.10@1.40 box; Wageners, $1.10 box; Rome Beauties, $1.25@1.60 box; Spitzenburgs, $2 box; King Davids, $1.10 box; Grimes Golden, $1.35@1.65 box; Staymen Winesaps, $1.75 box.

**Butter**—Blanchard cartons, 53c lb; Medo-Maid, 53c lb; Cascade, 45c lb; Gold Leaf, 53c lb; Better Butter, 53c lb; Attalia, 53c lb; Diadem, 53c lb; Hazelwood, 53c lb; Solid Pack, 52@53c lb; Jersey Belle, 51c lb; Peerless, 47@48c lb; Snowcap, 38c lb; cooking butter, 38c lb.

**Cheese**—Wisconsin full cream, twins, 27c; triplets, 25c; Hazelwood full cream, triplets, 26c lb; Hazelwood Young America, 27c lb; Wisconsin limburger, 32@33c lb; brick cheese, 33@35c lb; domestic Swiss 38c lb; Young Americas, 27c lb.

**Eggs**—White filler, guaranteed, $13 case; selected storage, $12.

**Live Poultry**—Hens, 13@16c lb; broilers 18c lb; old roosters, 9c lb; ducks, 15c lb; geese, 12c lb; turkeys, 22@25c lb; local turkeys to retailer, 32c lb.

**Dressed Poultry**—Hens, 21@22c lb; broilers, 24@25c lb; old roosters, 11c lb; ducks, 20@23c lb; geese, 20@23c lb; turkeys, 20@28@32c lb.

**Hide Quotations.**

**Green Cows and Steers**—25 lbs and up, 15c; salted cured, 17c; green bulls and stags, 12c; salted cured, 15c; kip, 15 lbs. to 25 lbs., 20c; calf skins up to 15 lbs, 28c; dry flint hides, 30c; dry salted, 26c; dry calf skins, under 1 lbs, 30c; dry sheep pelts, 35@40c; dry shearlings, 10c@$1 each; green horse hides, $2.50@4 each; dry horse hides, $1@2 each.

**LINSEED.**

DULUTH, Dec. 29.—Linseed on track, $3.49@3.57; December, $3.59 bid; January, $3.49 bid; May, $3.47; July, $3.41 asked.

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# "The Barrier" By REX BEACH

(Continued from page twenty-five.)

be found; but, as luck would have it, I went through without trying. I had gone farther from men and things, however, than I thought, and this return pursuit was a million times worse than the other, for I couldn't go fast enough to shake Death, who ran with his hand on my cantle or rode on my horse's rump. It was then I found Alluna. She was with a hunting party of Pah-Utes, who knew nothing of me nor of the white man's affairs, and cared less; and when I saw the little squaw I rode my horse up beside her, laid the sick child in her arms, then tumbled out of the saddle. They had a harder job to pull me through than they did to save Merridy, for I'd given the baby all the water and hadn't slept or rested for many years, so it seemed.

"The little one was playing around several days before I got back my reason. Meanwhile the party had moved north, taking us with them, and, as it happened, just missing a posse who were returning from the desert.

"When I was able to get about I told Alluna that I must be going, but as I told her I watched her face, and saw the sign I wanted—the white girl had clutched at her like she had at me, and she couldn't give her up, so I made a dicker with her old man. It took all the money I had to buy that squaw, but I knew the kiddie must have a woman's care; and the three of us started out soon after, alone, and broke, and aimless—and we've been going ever since.

"That's the heart of the story, Lieutenant, and that's how I started to drift. Since then we three have never rested. I left them once in Idaho and went back to Mesa, riding all the way, mostly by night, but Bennett was gone. He'd run down mighty fast after Merridy died, so I heard, growing sullen and uglier day by day—and I reckon I was the only one who knew why—till he had a killing in his place. It was unprovoked, and instead of stopping to face it out the yellow in him rose to the surface and he left before sunup, as I had left, making a clean getaway, too, for there was no such hullabaloo raised about killing a man as there was about—the other. So my trip was all for nothing.

"I was used to disappointment by now, so I took it quiet and went back to Alluna and the little one, knowing that some day we two men would meet. You see, I figured that God had framed a cold hand for me, but he would surely give me a pair before the game closed. Of course, never having seen Bennett, I was handicapped, and, added to that, he changed his name, so the search was mighty slow and blind, but I knew the day would come. And it would have come only for—this.

"There isn't much more to tell. I did what most men would have done, I reckon, because I was just average in every way. I took Alluna, and together we drifted north, along the frontier, until we landed here. Every year the little girl got more beautiful and more like her mother, and every year we two loved her more. We changed her name, of course, for I've always had the dread of the law back of me, and then the other two kiddies came along; but we were living pretty easy, the woman contented and me waiting for Bennett, till you stepped in and Necia fell in love. That's another thing I never counted on. It seems like I've always overlooked the plainest kind of facts. I've held off telling you the last few weeks, hoping you two wouldn't make it necessary, for I reckon I'm sort of a coward; but she informed me tonight that she couldn't marry you, being what she things she is, and knowing the blood she has in her I knew she wouldn't. I figured it wouldn't be right to either of you to let you go it blind, and so I came in to tell you this whole thing and to give myself up."

Gale stopped, then poured himself another drink.

"To give yourself up?" echoed Burrell, vaguely. "How do you mean?" He had sat like one in a trance during the long recital, only his eyes alive.

"I'm under indictment for murder," said the trader. "I have been for 15 years, and there's no chance in the world for me to prove my innocence."

"Have you told Necia?" the young man inquired.

"No, you'll have to do that—I never could—she might—disbelieve. What's more, you mustn't tell her yet. Wait till I give the word. It won't be long, perhaps a day. I want to go free a little while yet, for I've got some work to do."

Burrell rose to his feet and stamped the cramps from his muscles. He was deeply agitated, and his mind was groping darkly for light to lay hold of this new thing that confronted him.

"Why, yes, yes—of course—don't come until you're ready," he muttered, mechanically, as if unaware of the meaning of his words. "To be sure, I'm a policeman, am I not? I had forgotten I was a jailer, and—and all that." He said it sneeringly, and with a measure of contempt for his office; then he turned suddenly to the trader, and his voice was rich and deep-pitched with feeling.

"John Gale," he said, "you're the bravest man I ever knew, and the best." He choked a bit. "You sacrificed all that life meant when this girl was a baby, and now when she has come into womanhood you give up your blood for her. By God! You are a man! I want your hand!"

In spite of himself he could not restrain the moisture that dimmed his eyes as he gripped the toil-worn palm of this great, gray hulk of a man, so aged and bent beneath the burden of his life-long, fadeless love, who, in turn, was powerfully affected by the young man's impulsive outburst of feeling and his unexpected words of praise. The old man looked up a trifle shyly.

"Then you don't doubt no part of it?"

"Certainly not."

"Somehow, I always figured nobody would believe me if ever I told the whole thing."

The soldier gazed unseeingly into the flame of his lamp, and said:

"I wonder if my love for the daughter is as great and as holy as your love for the mother. I wonder if I could give what you have given, if I had nothing but a memory to live with me." Then he inquired, irrelevantly; "But what about Bennett, Mr. Gale? You say you never found him?"

The trader answered, after moment's hesitation, "He's still at large." At which his companion exclaimed, "I'd love to meet him in your stead!"

Gale seemed seized with a desire to speak, but, even while he hesitated, out of the silent night there came the sound of quick footsteps approaching briskly, as if the owner were in haste and knew whither he was bound. Up the steps they came lightly; then the room and the whole silence round echoed with a peremptory signal. Evidently this man rapped on the board door to awaken and alarm, for instead of his knuckles he used some hard and heavy thing like a gun-butt.

"Lieutenant Burrell! Lieutenant Burrell!" a gruff voice cried.

"Who's there?" called the young man.

"Let me in! Quick! I've got work for you to do! Open up, I say! This is Ben Stark!"

(To be continued.)

## CONSERVE BUG POISON.

### Food Administration Takes Hand.

With the idea of further conserving the nation's food supply by protecting it from insect ravages, President Wilson, in a proclamation dated November 15, has placed the arsenic industry of the United States under direction of the food administration. The president's action comes in answer to a threatened shortage in the supply of arsenical insecticides, which are the farmer's chief protection for his crops against the onslaught of "biting insects."

The arsenicals are used in nearly all the preparations for combating fruit farm pests. Arsenate of lead, paris green, arsenate of zinc and others of the common poisons are included. Potato bugs, grasshoppers and all biting insects are most successfully combated by the use of these poisons.

The food administration points out that the cessation of imports of arsenic has made it necessary to conserve the stock in this country for essential purposes, including several other government enterprises in addition to its use for insecticides. It is also thought that the arsenic industry, which has hitherto been subject to widely fluctuating demands and price, will be stabilized when under the control of the food administrator.

**Find Canoe 1000 Years Old.**

Workmen engaged in the dry river bed of the Namazue-gawa Osaka prefecture in Tokyo have unearthed a huge canoe made of camphor wood. The part so far dug out measures 40 feet in length, 6 feet in width and 26 inches in depth. According to archeologists the canoe is about 1000 years old.

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$5 A DAY GATHERING EVERGREENS, roots and herbs. 10c brings book and war prices. Particulars free. Botanical, 14, New Haven, Conn.

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SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

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### POULTRY 174

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### LIVE STOCK 177

ONE SHIRE REGISTERED STALLION, coming 4 years old, color dark brown, weight 1850, for sale or trade for horses or good property. James R. Barnes, Route 3, Pullman, Wash.

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### LIVE STOCK 177 Continued.

RED CLOVER BIG TYPE POLANDS—Mouw, Fesenmeyer, Miller and Herring strains—spring pigs, both sexes, with quality, for sale. Never before could you raise or buy grain and make as much money feeding good hogs as now. Write your wants. Inspection solicited. H. J. Howser, Stites, Idaho.

### HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

### RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

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### MONUMENTS 510

GET MY PRICES ON MONUMENTS BEfore placing your order. I can save you money. Geo. H. Moody, Moscow, Idaho.

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PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

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WE SPECIALIZE IN TIMOTHY, ALFALfa, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Ida.

FOR SALE—16,500 LBS. PEA SEED, AT 6c, f. o. b. cars Fairbanks, S. & I. E. R. R. T. H. Howard, Oakesdale, Wash.

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314 New York Blk., Seattle, Wash.

GOING — IRRIGATED ALFALFA AND stock ranch of 111 acres; gross income $6000; situated on the bank of the Yakima river; ideal for all kinds of stock; properly cultivated, will raise 100 bu. corn and 10 tons of potatoes to the acre. Horses, cows, registered $1000 Holstein bull, Berkshire hogs, chickens, farm implements, etc.; eight-room house, barn, silo, hog and chicken houses. This ranch is second to none in the Yakima valley. Reason for selling, old age. Price for all $28,000; one-half cash. Address B 7, care Washington Farmer, Spokane.

BIG CUT IN PRICE OF FARM LAND. In the best agricultural part of Snohomish county. $25 to $35 per acre; 10 yearly payments; railways, mills, factories, plenty of labor. The best proposition on the market for the man who wants a farm. Send for illustrated literature. Brownell Land Co., 904 Third ave., Seattle, Wash.

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IT MAY MEAN MUCH—or nothing. Depending on whether the reader knows all the factors that enter in.

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AND IT MAY SURPRISE YOU to know that—not in the "ads," but on the scales—this Reo Six is as light as many, and actually lighter than some, whose claims to lightness are their chief recommendation.

WE REO FOLK have never talked much about lightness—because that quality in itself is proof of nothing, and yet, as we've said, we make Reos just as light as may be, by the use of the best materials known to the art—as light as may be compatible with the safety factor we desire.

WE LAY MORE STRESS in our advertisements on the staying qualities of the Reo product and the consequent low upkeep.

BECAUSE THAT REALLY COUNTS—those are the qualities the buyer most desires and seeks in the car he buys.

WE DO NOT SACRIFICE endurance for an immediate effect—either in our sales talk or in our designing.

REO ENGINEERING is admittedly sound—it is the standard by which other engineering is compared by those who know.

AND SO WE DESIGN each part of a Reo with an eye single to long time service. Doing that, we automatically obtain low upkeep.

SO, AS WE'VE SAID, this Reo Six is light, using the term relatively—but more important, it is sturdily built.

PUT IT ON THE SCALES—then weigh other cars of similar power and wheel base and size, and you'll agree this is indeed a Light Six.

AND WHILE YOU'RE at it, examine carefully the size of the various parts, especially bearings and the shafts that carry the load and take the driving strains—and you will find other arguments why, at the same price, you should select a Reo Six for yours.

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STRANGELY ENOUGH, the real proof of "lightness" is not to be found on the scales alone—but in the tire mileage.

SOME CARS are so flimsily made and some others so poorly designed that they are practically dead weight on the tires. Result, excessive tire wear and expense.

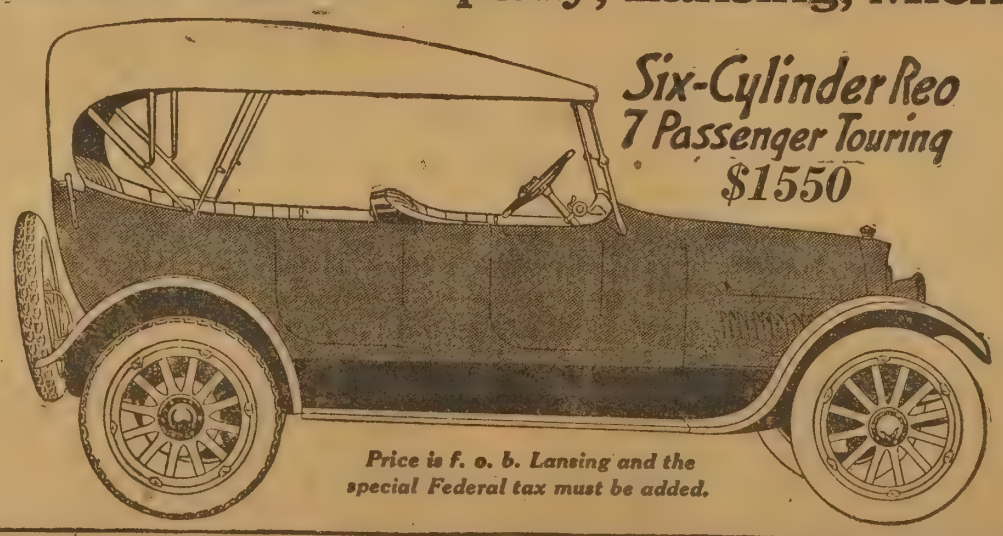
ASK ANY REO OWNER of any Reo model about his tire mileage, and his reply will convince you that the Reo is the "Lightest" Six made.

SUPPLY IS LIMITED—we cannot hope to supply all who will want this Reo Six.

SO ONLY WAY is to see your Reo dealer at once, place your order and secure an early delivery date before his limited quota is disposed of.

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*Price is f. o. b. Lansing and the special Federal tax must be added.*

# THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XLI. NO. 2. JANUARY 10, 1918. ** WEEKLY.


# Farm Labor Is a Military Necessity

## *Wheat Convention Urges the Postponement of All Public Improvement During War*

The following resolution introduced by Honorable R. C. McCroskey "father of the wheat convention," and one of the leading farmers of the Inland Empire, was adopted unanimously and is regarded as the most important action taken by the wheat convention at Pullman, Wash., last week.

"Whereas, we are in a state of war and our military efforts demand a very large per cent of our able-bodied men; and,

"Whereas, there is a vital military necessity that the United States, 'The bread basket of the world,' shall furnish meat and bread for the American and allied soldiers of said war; and,

"Whereas, the withdrawal of millions of American citizens from productive industry to serve in the army will create a serious shortage of labor in this country and an ample supply of labor is needed to plant, protect and harvest the crops; therefore, be it

"Resolved: That this 12th annual convention of the Washington State Grain Growers, Shippers and Millers, respectively, urge all state, county and municipal governments and all other political divisions to desist as far as possible from all improvements which will require labor that can otherwise be used in planting, protecting and harvesting of crops, the saving of which is a military necessity.

"Resolved, further: That every paper in the state of Washington be earnestly requested to publish these resolutions.

"J. S. KLEMGARD,
"FRANK ATKINSON,
"H. E. GOLDSWORTHY,
"Committee."

Another resolution, also regarded as of vast importance, will be sent to our representatives in congress and to President Wilson. It provides that:

"The United States and British governments be asked to allow the use of sufficient ships to bring to the United States sufficient grain bags to handle the grain crop of the Pacific coast, and that the charter rates of these ships be reduced to a reasonable price, in order that the cost of grain bags may not be prohibitive."

### Spring Seed Wheat

#### Government to Hold Supply

**That the federal grain corporation will take care of the demands of the farmer for spring seed wheat of all varieties was the quieting news brought to the wheat convention at Pullman by M. H. Houser, head of the food administration and grain corporation of the northwest, who stated that sufficient wheat would be held to supply all the farmers who find themselves short of seed under the unusual conditions which will require an exceptionally heavy spring seeding. He estimated that between one-half a million and a full million bushels would be required for this purpose. He advised that the farmers pool their orders for this wheat as much as possible to relieve the shipping requirements, and stated that the wheat would be sold at a price that would be eminently fair to the farmer.**

**"Unfortunately," said Mr. Houser, "conditions were such that this year the farmer with the good wheat was forced to carry, to a certain extent, the farmer with the poor wheat. Under the new standards, however, this condition will be remedied, and the farmer who raises better wheat than his neighbor will come into his own."**

It was brought out by R. T. Lord, of the Seattle Grain company, Spokane, that there are plenty of sacks in India and there will be no scarcity of sacks if these can be brought to the Pacific coast. Mr. Lord had a letter from the Bemis Bag company stating that they will be able to supply all the sacks needed. But Mr. Lord said the price would be about 20 cents unless a reduction in ocean freights could be secured. This government and the English government are to be shown the need of sacks and reduced freight on them and asked to assist this coast in securing enough to supply the local demand. Other speakers said they believe this can be done. M. H. Houser of the national grain commission gave much valuable information on the wheat and the bag questions. Citing the grain bag situation as the most vital problem confronting farmers of the northwest. Mr. Houser, head of the corporation, urged a united and strenuous effort to induce the shipping administration to release a few ships to transport bags for the 1918 crop from Calcutta. The only possible remedies for the bag situation, according to the federal grain man, are the bulking of practically the entire crop or the release of ships to carry the bags. He called attention to the fact that it will be impossible for all the farmers to adopt the bulk system at once, and stressed the point that every farmer must consider it his duty to assist in placing the matter in its true light before the shipping heads, at the same time bulking as much of the northwest crop as possible, especially wheat going to Minneapolis.

Continued on page three.

# Ask Extensions and Developments of Irrigation Projects

The Washington State Horticultural association held its fourteenth annual meeting at Kennewick last week. The following officers were elected:

President, F. E. Williams, Opportunity.

First vice president, J. F. Sugrue, Cashmere.

Second vice president, F. A. Wiggins, Toppenish.

Directors for one year—J. Howard Wright, Yakima, and Luke Powell, Prosser.

Directors for two years—M. L. Dean, Olympia, and A. G. Craig, Deer Park.

Directors for three years—Professor O. M. Morris, Pullman, and J. L. Dumas, Dayton.

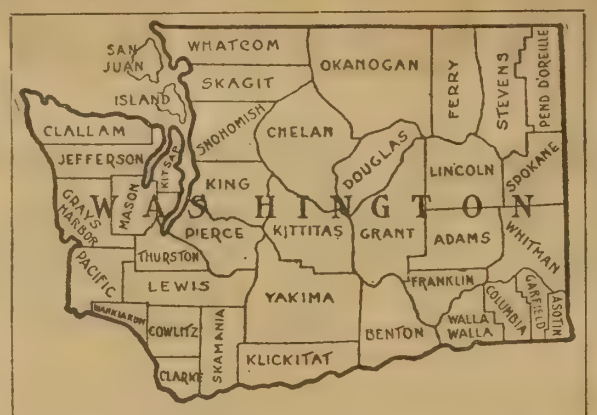
The new secretary and treasurer and the location of next year's convention will be chosen by the board of directors.

A resolution was directed to the secretary of the interior, the secretary of agriculture and the food administration, asking that they at once investigate irrigation projects and other lands in the state where extensions and developments can be speedily made, and to take such steps as will insure a good crop.

A full report of this meeting, together with important addresses made and other fruit growing features, will be given in the next issue of The Washington Farmer.

# Calf Problem Is a Serious One

## Condenseries Pay Good Milk Price, Resulting in Shortage of Milk With Which to Raise Calves on the Farm




CHEHALIS, Lewis County, Wash., Dec. 29.—The labor problem is a serious one, but this is quite general. Perhaps the most important local problem is that of raising calves. The condenseries are paying such high prices for milk that very few farmers are saving any at home for feeding calves. This does not seem so serious on the face of it, but after this practice has been allowed to go on for four or five years it is easy to see that the herds will be inferior to what they are today. Then when the price of milk drops again their low producing cows can not make a profit. When a dairyman is forced to buy cows to replenish his herd nine times out of ten he gets culls.

Without any question the problem of quickly winning this war is the question of world-wide interest that is of most importance at the present. This community can play and is playing a very important part by increasing production, minimizing waste and practicing conservation at all points.

The crop prospects for 1918 look very good. The fall grains are in splendid condition and the mild winter has kept them, as well as all the winter pastures, growing steadily. There has been growing weather with a temperature around 55 to 60 degrees for over a month. This weather condition makes the feed situation much easier to handle. Most farmers will have hay enough to do them through the winter. Only a few will be forced to buy hay from over the mountains. Live stock is in fine condition.

Very few farmers will attend the college short courses this year, due to the shortage of help.

A. B. NYSTROM.

### Conditions Brighten.

LA CROSSE, Whitman County, Wash., Jan. 1.—As midwinter approaches crop prospects are much brighter. Excessive warm rains with very mild temperatures never before equaled as far as records go, caused winter wheat to germinate nicely. Pastures are green and stock is wintering the best in a number of years, and feed, which had the promise of becoming very scarce, is plentful. The rainfall for December was 3.42 inches, the greatest since 1886, when it was 3.57 inches. The month's mean temperature was 43 degrees, the normal for this station being 32 degrees. The rainfall for 1917 was 15.40 inches, about normal. The wettest month was December, and July, August and October had no precipitation at all. Lack of rain until the end of November stopped all fall work and present ideal condition is causing many farmers to plow for spring crops and farmers will put in every acre possible. The greatest drawback or obstacle to contend with is help for harvesting. The fact is every farmer is putting all the crops in he can possibly handle. Scores of our best help have gone and more will leave before harvest, so every nerve will be strained to harvest the 1918 crop.

M. E. SCHRECK.

### "Silver Thaw" in Whatcom.

FERNDALE, Whatcom County, Wash., Dec. 29.—A curious thing has happened in this part of the county. It rained and froze at the same time. The ground was covered with a sheet of ice. Rural mail deliveries were suspended. One day milk haulers failed to gather the milk. Telephone poles and lines broke down under the heavy weight. In some orchards almost every tree has lost half of its branches. Some trees will have to be entirely removed, while others that are not in such a bad condition will have to be cut back and a new head started.

CARL J. MENZE.

### Cut Up Big Tracts.

PORT ANGELES, Clallam County, Wash., Dec. 31.—For Clallam county I consider the most important local question to be solved in clearing off logged-off lands and to further this movement would be a state appropriation for cheap, or free powder to small farmers. Of a national character would be: cutting up big land holdings into smaller farm tracts. The 1918 crop prospects for this section of the country have never been better, due to the mild temperature and so with the condition of live stock and feed for it.

J. P. CHRISTENSEN.

### Will Trust Government.

PORT ORCHARD, Kitsap County, Wash., Dec. 26.—The partial price regulation put on by the government has, in some instances, saved the farmers in this county considerable. It no doubt has helped very materially to keep up the present standard of the poultry and dairy ends of agriculture. Prior to the fixing of the price on wheat the poultry flocks were being most severely culled and many poultrymen expressed themselves as going out of the business. Public opinion as to the government regulation of prices is very favorable here and the people are willing to abide by whatever the government sees fit, if there is necessity for it, but in the fixing of prices on all products sold from the farm care must be taken to keep a market open for such produce to keep the production up to a steady and high standard. The mildness of the fore part of the winter has undoubtedly saved the farmers a great deal in the manner of buying feeds. Young stock up to within the last two weeks has been taking very little, if any, feed. I think the supply of home grown feed ample to carry through the winter. The present price of alfalfa, as shipped in here ($26 to $28 per ton delivered on the wharf), is almost prohibitive to the making of any returns from the common run of cows such as the majority in this county are at the present time. Herds containing good cows, owned and managed by careful men, who make dairying their business and who study and plan to that end, are making a fair labor income. The cattle and sheep men can not well afford to pay the present price for hay and receive any returns for their work.

The only avenue left for them to make a labor income in the business is for them to raise more of their feeds at home and to build silos to put it in. More cattle and sheep should be raised in this county. Climate is favorable and the green, succulent feeds can be very easily and cheaply raised. A great many farmers' sons have gone into the army service. Fifteen have gone from one small neighborhood. In most of the farm homes where a member has left for the front a determination is found to do that member's share of the work.

C. B. SPRAGUE.

### "Our Band Is Broken Up."

STEVENSON, Skamiania County, Wash., Dec. 7.—Our long looked for fall rains have set in and since November 26 has been a pretty general rain and the grass has made quite a growth and no frosts to kill, so far. It will make quite a difference in the amount of feed needed for stock, as pastures are green and grazing is good yet. The price regulation has had quite a beneficial effect on things bought and sold and from what I can learn the consensus of opinion is it would work a benefit if the regulation applied to all principal articles of food, feed and clothing required. The situation as to feed and the supply is about the same, also the price; if any change has occurred the price is higher for hay and straw and last week shorts advanced 15 cents per sack of 80 pounds. About 37 or 40 young men have left this community for the army and navy and the effect is plainly visible in lack of help and influence on the community. Our band is broken up and while the loss in labor is not so badly missed at this season of the year next spring will see a real shortage of labor.

W. T. JACKSON.

### Hay Must Bring $15.

METHOW, Okanogan County, Wash., Dec. 27.—As to what effect the partial price regulation by the government has had on things bought and sold, will say that wheat is the only thing that it has affected, so far, and will say that it has had the effect of steadying the growing of wheat, and if the government would cut out some of the red tape and be more prompt about paying for the wheat it would be all right. Public opinion at present, owing to the embargo on wheat, is against more government regulation. It would be all right to fix the price on products of the farm providing the prices are fixed on all the farmer has to buy. The effect of the mild winter, until the last few days, has been a great saving on hay, as when the thermometer drops to zero it is necessary to feed 50 per cent more hay than when it is at 20 or 30 above. To make a reasonable profit on hay a

(Continued on page twenty-five.)




**Clean Your Seed** and grade it by weight.

**Clipper Cleaners**

will do it as well as though you weighed each individual kernel.

Let us show you. Nine-tenths of the seed houses use Clipper Cleaners. Why?

**Spokane Seed Co.**
Spokane.



# Ten Million Dollars

Congress, to increase next year's crops, has made this appropriation to bring Nitrate of Soda, at cost, from Chile. "What Nitrate Has Done in the Farmer's Own Hands" will be sent to you free if you send your address on a post card.

**DR. WILLIAM S. MYERS**
*Director Chilean Nitrate Committee*
**P. O. Box 248, Berkeley, Cal.**


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Formaldehyde has been rightly dubbed "The Farmer's Friend" because it serves the scientific farmer in a thousand ways.

**FORMALDEHYDE**
*The Farmer's Friend*

is the best and cheapest disinfectant—officially endorsed as *the* standard treatment for seed grains. It rids seed grains of smuts and fungus growth, also flax wilt and scab and black-leg diseases of potatoes, insuring healthy grain, clean potatoes, onions, cucumbers, etc. One pint bottle costing 35 cents treats 40 bushels of seed. Big book free. Write to-day.

**Perth Amboy Chemical Works**
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**Livingston's SEEDS**
"TRUE BLUE"



Make better gardens. All are tested for purity and vitality. Have been giving satisfaction for over 50 years. Be sure and try our

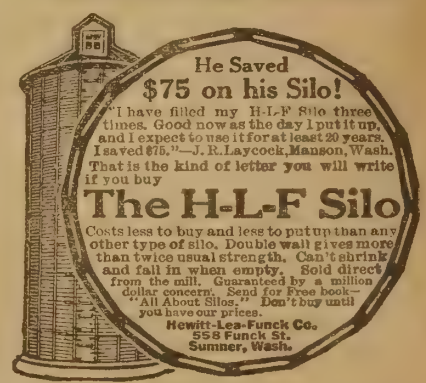
**5 FINE VEGETABLES 10c**

One large packet each of Bean, Beet, Lettuce, Radish and Tomato—postpaid. All are heavy yielding and exceptionally fine in quality. Try them.

**Large CATALOG FREE**
Gives helpful cultural directions and offers strictly high-grade seeds at fair prices. Write for it.

**Livingston Seed Co.**
Box 259 Columbus, Ohio





He Saved **$75 on his Silo!**

"I have filled my H-L-F Silo three times. Good now as the day I put it up, and I expect to use it for at least 20 years. I saved $75."—J. R. Laycock, Manson, Wash.

That is the kind of letter you will write if you buy

**The H-L-F Silo**

Costs less to buy and less to put up than any other type of silo. Double wall gives more than twice usual strength. Can't shrink and fall in when empty. Sold direct from the mill. Guaranteed by a million dollar concern. Send for Free book—"All About Silos." Don't buy until you have our prices.

**Hewitt-Lea-Funck Co.**
558 Funck St.
Sumner, Wash.


In answering advertisements don't fail to mention this paper.




**Will's "PIONEER BRAND" Seed Corn**

Raised in the Northwest. Will's new Gehu (flint), Dakota (flint), Northwestern, Square Deal and Minnesota 13 (dents) are just the right sorts for this section.

**Will's Seed Annual**

Eighty pages of information that will help you to get bigger crops, and tell you about the seeds and plants for the great Northwest. Send today for a free copy.

**OSCAR H. WILL & CO.**
Box M, BISMARCK, NO. DAK.






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Catalogue Free Write For It—

# The Man-Saver

The Martin Ditcher is a man-saver, and a time-saver—therefore a money-saver. Two men, four horses and a Martin will make or clean more ditch *in one day* than they could plow and shovel out in *three weeks*—time and man saving are big items *now*.

**Fine for Terracing, Dykes and Roadwork**

Made in 2, 4 and 6 horse sizes; can be used with tractor. Works equally well on side hill or level, or in wet or dry soil. Handles rocks and cuts alfalfa roots without plowing. Cuts or cleans ditches down to 4 feet deep. *All Steel, Reversible and Adjustable. Investigate the Martin NOW.*

**OWENSBORO DITCHER & GRADER CO., INC.**
1576 Waree Street Denver, Colorado

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 2 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF January 10, 1918

## Somebody Is Plundering Public Funds

### *Scandalous Revelations Are Made by Committees Now Investigating*

Astounding revelations regarding army supplies and government shipbuilding were made in public hearings before two investigating committees of the senate at Washington last week. Scandalous disclosures were made of gigantic rake-offs in government contracts and stupendous extravagance. The nation seems on the eve of the most sensational disclosures since the Spanish war.

The senate committee on commerce was probing the record of the United States shipping board, the organization that has been letting gigantic contracts for the building of government ships, and here are some of the facts brought out.

Contracts were let to the Sloan Ship Yards corporation of Seattle for the building of 16 wooden ships for $7,840,000. In his work of investigating the Sloan corporation Admiral Bowles interviewed Mr. Sloan about the item of $400,000 paid to the Clinchfield Navigation company. Mr. Sloan frankly told the admiral, the admiral testified, that he regarded the payment as brokerage or commission for obtaining the $7,840,000 contract.

In other words, some one got $400,000 rakeoff for getting contracts that should have been awarded without one dollar of commission.

But that is not all of it. When the shipping board started its investigation in August John Purse, the district auditor of the emergency fleet corporation at Seattle, was set to work on the books of the Sloan company. In his report as to the Clinchfield Navigation company's connection (which report did not take account of all payments), he says:

"It is further stated that the Clinchfield Navigation corporation was instrumental in securing for Sloan Shipyards corporation the contract for 12 additional Ferris type vessels, for which service they are to receive a commission of 5½ per cent of the contract price, or $323,400. This, together with the profit above mentioned, makes a total of $743,400, which is payable out of the funds received from the emergency fleet corporation."

But these disclosures were overshadowed later in the revelations of the contract entered into by the government with the American International, a company in which the firm of Stone & Webster of Seattle is the chief figure, for the erection of a steel ship fabrication plant at Hog island in the Delaware river, eight or nine miles below Philadelphia. The government advances some $21,000,000 or more to build this plant; in other words, puts up almost the entire capital and running expenses, promising the company as fees a total of $6,000,000, fees on 120 ships, all the costs of building which are to be paid by the government.

While these exposure were being made before the commerce committee, another sensational hearing was being conducted in another room at the capitol by the senate committee on military affairs that is ivestigating the letting of army contracts.

To better understand the government method of letting contracts a brief analysis is needed of the gigantic organization that has been built up under the council of national defense. This national coucil, created by act of congress, is composed of the following members of the cabinet:

Secretary of war, Newton D. Baker.

Secreary of the navy, Josephus Daniels.

Secretary of the interior, Franklin K. Lane.

Secretary of agriculture, David E. Houston.

Secretary of commerce, William C. Redfield.

Secretary of labor, William B. Wilson.

The council of national defense organized a large number of subordinate committees, composed mainly of able and patriotic citizens who volunteered their services without pay as a war-time duty.

It is evident, though from the revelations, that some selfish and designing men worked their way into this splendid volunteer service and used their vantage points to get fat contracts for friends and relatives.

Charles Eisenman, vice chairman of the supplies committee and a retired clothing manufacturer of Cleveland, and Samuel M. Kaplan of New York, one of the dollar-a-year volunteer members, were the principal witnesses. The latter's testimony was confined almost entirely to a contract with the Base Sorting plant, Inc., of New York, of which his brother, Ira A. Kaplan, has a third interest, for sorting army clothing scraps, which was said to promise profits of $400,000 annually. The contract recently was canceled.

Both Eisenman and Kaplan had lively clashes with committee members. Senator McKellar admonished the latter, who resented having his motives impugned, to speak respectfully, and Senator Weeks heatedly declared he was "about as impudent a man" as he had ever seen.

Senator McKellar said the circumstances indicated that Kaplan Brothers were dealing with the government through the witness.

"You were careful to evade the law," the senator suggested.

Senator McKellar turned temporarily to examine Frederick Edington of the supply committee. He said he is a foreign wool buyer for the American Woolen company, still receives a salary from it and is now devoting all his time to the government's interests at $1 a year.

"And your firm gets large contracts from the committee?" asked Senator McKellar.

"Yes," said Mr. Edington, "but the amount has diminished since I came here. I don't think my connection has had any effect on the contracts of the American Woolen company."

In further investigation of clothing and other army supply contracts negotiated by the civilian supplies committee of the council of national defense the senate committee received from Charles Eisenman, vice chairman of the contracting committee, a statement of merchandise bought from firms whose members or employes are or were connected with the committee.

Of supplies worth about $800,000,000 bought during the last eight months Mr. Eisenman's statement discloses that $128,830,000 worth came from such concerns, but that all except $14,830,064 worth was contracted for before the contractors' representatives became connected with the committee.

It is evident, from these revelations, that the whole government system of letting contracts needs overhauling, and to that end Senator Chamberlain of Oregon, chairman of the senate committee on military affairs, has introduced a bill to create a new cabinet member, known as the secretary of munitions, to have complete charge of all war material purchasing. This bill is promised virtually unanimous committee support.

The Farmer does not doubt that President Wilson and his cabinet members are innocent of all complicity in or approval of these monstrous evils. They should have been more vigilant, of course, but even on that ground much can be said in way of excuse, for the work of preparing against the enemy has thrown the government agencies into blinding confusion.

But now that the evils are revealed, it is the president's duty to cast out the rascals regardless of their standing or influence. Plenty of high-minded, honest and patriotic men stand ready to serve the government, and justice to the many splendid men who are now serving demands the casting out of the tricksters and profiteers who falsely garbed themselves in the cloak of patriotism that they might plunder the government and enrich themselves out of its wartime necessities.

## Farm Labor Is Military Necessity

### *Grain Men Urge the Postponement of all Public Work*

(Continued from page one.)

Under the demoralized commercial shipping conditions, Mr. Houser called attention to the increase in freight rates on grain bags from Calcutta from $7 and $8 a ton to $98 to $100, making the bags impossible under these conditions. If only enough shipping could be released to take care of a part of this tonnage, he said, the partial receipts might induce lower rates by commercial companies and solve the situation.

In touching on the subject of screenings and the clamor from the farmers for monetary return on the screenings, Mr. Houser advanced the opinion that all this foreign matter should be eliminated before the wheat is marketed, calling attention to the fact that it costs practically as much to clean the wheat at the terminals as the screenings are worth. "The farmers may be able to get some return from the screenings," he said, "but they should, especially under the bulk system, be able to take care of the thing for themselves."

Mr. Houser touched briefly upon the basic prices offered, declaring that, with government rail control and the added shipping facilities to result from the wholesale construction of ships, these problems would probably take care of themselves.

Mr. Houser urged the farmers who feel that abuses exist in the method of handling their grain to feel perfectly at liberty to register their objections or complaints with his office, stating that full consideration will be given every complaint filed.

"When the grain corporation was started," he said, "it was a good deal like sailing a boat on a sea that had never been charted, and errors were, of course, made." One correspondent, related the speaker, accused him of being friendly with the farmers. To this he replied that the farmer does not need friends in the premises; that he is asking only what he can get and taking what he gets uncomplainingly.

In answer to a statement made by J. C. Lawrence at a recent meeting in Spokane to the effect that committees operating under direction of Houser in Portland and Seattle were costing the farmers thousands of dollars, President R. J. Stephens of the convention stated that his investigations had disproved this. He has found, he said, that instead of costing the farmer money, these committees, which act as a buffer between the shipper and receiver, were actually saving the farmer from 4 to 10 cents on every bushel of such wheat inspected.

Mr. Houser's speech will be printed in full in the pamphlet containing the proceedings of the convention.

**Twelfth Convention.**

Although the attendance was disappointing the twelfth annual convention of the Grain Growers, Shippers and Millers' association of Washington held at Washington State college January 3 to 5, inclusive, was one of the best in the history of the association. The papers read, the addresses made and the discussions were all of importance and of interest to men engaged in producing and handling wheat. In order that the proceedings might get before the people and the farmer, in particular, the press of the state has been especially requested to give all the publicity possible to the work of the convention. No previous convention developed deeper thought or more intelligent cooperation between the various interests and a determination to do all within the power of the producer, the shipper and the miller of wheat, the great staff upon which the armies of the allied powers are depending to win the war, was shown throughout the convention.

Every phase of the important industry was discussed. Every obstacle to maximum production and minimum cost of handling and rapidity of delivery to the points where most needed, were given attention. The fear of labor shortage preventing a full crop being produced this year was expressed by all and steps taken to prevent it or to reduce its effects to the minimum.

**Officers Elected.**

Huston McCroskey of Garfield was elected president; Dr. E. Maguire,

(Continued on page seventeen.)

## Agricultural Council Plans.

During the last month all of the committees of the Cowlitz county agricultural council have met and made up their report for the February 2 meeting of the council, to be held at Kelso. The work of the committees has been to outline the farm problems coming under their division of farm operations in the county. With this outline as a basis they have recommended the one or two most important problems to be used as the nucleus of the council and county agent work for the coming year.

When the council meets on February 2 it will consider the reports of the committees and if such are satisfactory plans will be outlined for carrying out of the projects, says Lyman S. Keyes, county agriculturist. Thus it is that the farmers of Cowlitz county are becoming a large factor in the development of more productive farming practice in the county.

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## DON'T HOARD WOOL.

### Wool Bureau Appeals to Growers.

Because the country needs wool, the National Sheep and Wool bureau is urging owners of wool clips not to hoard their wool. A resolution recently adopted reads in part:

"Knowing that there are individuals throughout the country who are at the present time hoarding wool and holding back as much as two or three years' clip, with the apparent purpose of getting still higher prices for their wool, and realizing the need of the country for wool and, in harmony with the feeling in general that any sort of hoarding is unpatriotic, be it

"Resolved, by the board of governors of the National Sheep and Wool bureau that this bureau goes on record as disfavoring any such practice and that a copy of this resolution be forwarded to the United States Council of Defense and to the various state councils of defense, with the request that such councils do everything within their power to stop this practice."

# Swat the Dog? Put a Tax on Him? Yes! No!

## *Mr. Martin Started Something When He Suggested the Elimination of "Useless" Canines*

Two stupendous problems have been brought to the attention of the public through the publication recently in The Farmer of an interview with J. M. Martin, a farmer of Colfax, Wash., in which he advocated ruthless warfare on useless dogs. Problem No. 1, What is a "useless" dog? Problem No. 2, Should he be eliminated?



St. Bernard.

Mr. Martin recommends a law placing a high tax—$10 to $50 annually—on all dogs, so that the dog that had no real value would soon have no master, either. Judging from letters received by The Farmer, there are those who agree with him and there are those who do not. Here are sample letters:

**Dogs Must Perform Labor.**

To the Editor: I fully indorse Mr. Martin's proposition; but, first, what is a useless dog? This will bring out a diversity of opinion, but in my opinion all dogs that are not actively employed in productive labor should be brought under this head. Of course, I know I am treading on dangerous ground, and something is going to pop, especially in the neighborhood of the dog fancier and the sportsman—two of the most useless classes of dogs on the face of the earth, and, as a rule, the best fed. If I had my say about the only dog that would find himself exempt from facing the firing squad would be the sheepman's faithful animal.

**To My Dog, Blanco.**

I look into your great brown eyes
Where love and loyal homage shine,
And wonder where the difference lies
Between your soul and mine.

I do not approve of the license system. That only gives the wealthy an opportunity to protect the worthless while it works a hardship on the sheepman, who must of necessity keep a number of dogs, and the poor boy in the large city, who uses the dog as a beast of burden.

It is surprising the distance the dog will sometimes travel at night to effect his work of destruction on sheep, pigs and oftentimes attacking cattle and other domestic stock. A recent experience of my own is as follows: The first of this month the wire netting in front of my pen of Belgian hares was out, and 10 fine young does I was keeping for feeding were killed. Realizing that Mr. Dog would be back again to wreak havoc in some other of my pens, I set traps for him. The next morning I had a fine specimen of the shepherd type in one of my traps. The poor fellow ran his head against an uncompromising obstacle, and he died. A few days later I was notified that a man living about seven miles away was offering $50 reward for the person who had stolen or killed his dog. I at once wrote to him, telling him where he could find all that was mortal of his dog. But as yet he has not come through with his dough.

Prosser, Wash. JOHN DUNHAM.

**Protect the Good Dog.**

To the Editor: In answer to Mr. J. M. Martin's "Dog Tax," good men should not be condemned because some men are bad; ditto dogs. I have a four-pound dog, 13 years old, that has never been 160 rods from the house in 13 years. The food she consumes would not help a dying Belgian catch his last breath, and here a man wants me to pay a $50 tax on that dog. My six children have had hours of comfort playing with little "Twig." Kill the dogs that need killing and allow a man's true friend his liberty. Always in behalf of the good dog.



Bulldog.

J. H. ALLEN JR.
Richester, Wash.



Boston Terrier.

**Raise Pigs Instead.**

Open letter to J. M. ("Roe") Martin and J. E. Nessley, Colfax, Wash.

I notice your communication in regard to useless dogs. I am with you on this subject and I will tell you my reasons for being so, from the standpoint of a farmer.

It is a fact that a dog or dogs on the farm worry milch cows and calves more than their owners realize. A cow is a mother and has that mother nature that is always looking out for their young; and a calf is an infant, fearful of all the canine kind. Where a farmer has a dog or dogs, if he would keep a strict account he would find at the end of the year a substantial loss in butterfat and beef to be charged up against the dogs.

The dog roams at night and eats on the carcasses (and rolls in them) of dead animals; he comes home and plays with the children and blows his foul breath in their faces. A charge must here be made on account of doctor bills.

The dog roams over the country at night and about other farms and attracts other dogs from ill-kept places and carries any contagion or disorder to his master's herd.

The dog has foul habits in and about the garden and is likely to render the lettuce and cabbage unfit for use. Almost any physician will tell you that the dog is very subject to taenia, and the avum of the taenia is abated only with the most strenuous washing.



Collie.

A prospective buyer for my herd sire seemed pleased with the animal and has not yet shown dissatisfaction with the price, when he asked if he was clear of disorders. My answer was, "I don't know, sir." He looked at me quick and sharp. I then told him that I had used the greatest care and went to extra expense in the way of preventives, antiseptics, etc., and so far he had shown no sign of any disease, but I could not guarantee him free, as no man can do that as long as the country is overrun by stray dogs. His countenance assumed a serious aspect;

**It makes no difference if he is a houn',**
**You've got to quit kickin' my dog aroun'.**

his teeth closed tight together; his visit was short, and I have not seen or heard of him since. He had just bought a bunch of $350 to $500 heifers and was looking for a sire to mate them.

The magnitude of the indiscretion manifest by the people of our nation by feeding dogs instead of a like number of pigs, and at a time when the country is so sorely in need of the bacon and hams for its army and navy, to say nothing of home supply, is remarkable. It would be interesting to estimate how much money we have invested in dogs in the United States. Let us figure a little: Say 100,000,000 people equals 20,000,000 families; one dog to a family is 20,000,000 dogs. Those families that do not keep a dog will be offset by those that keep two or more; so we have 20,000,000 dogs instead of 20,000,000 pigs of, say, 100 pounds each, at a value of $15 per pig. This equals $300,000,000 invested in dogs. A. J. WILLIAMSON.

Cocolalla, Idaho.

## From Time Out of All Memory the World Has Delighted in the Horse

From time out of all memory and history the world has delighted in the horse. What man is there who does not recall the childish thrill of that never-to-be-forgotten adventure when elder hands lifted him astride a friendly steed and a shiver of exquisite joy ran the length of his little spine when he felt the heaving sides of his first mount beneath his tiny legs?

Here was his first lesson in mastery, in courage. For the few brief moments of that delectable ride from the roadway gate to the barn he felt himself a boyish knight, eager to fare forth and conquer the vast, mysterious world.

Or that later event, when grown amazingly in worldly knowledge and boyish strength, he was allowed to call one horse upon the farm his very own?

More than any other single factor the horse has glorified country life and made endurable the isolation of the farm. But now, alas, old times are changed, old manners gone, old sentiments going into the discard. Scientific gentlemen are telling us the horse must go because he is a meaace to our health.

Dr. Charles F. Bolduan of the health department of the city of New York, has declared a crusade for the abolition of the remaining 10,584 stables in that wicked town.

> "We have recently completed a census of the city on the horse question," said Dr. Bolduan, "and have found that there are 108,036 horses in New York, with more than 55,000 of them in Manhattan and 35,000 in Brooklyn. There is no question but that the public health would be benefited if the present owners of horse drawn vehicles would make the change to motor trucks. The motor truck will do all and more than any horse can do.
>
> "Aside from the fly breeding possibilities of all stables and the odors which accompany most of them, especially in the poorer parts of the city, there is an ever present danger from a glanders epidemic, a disease which works havoc among the horses and is sometimes communicated to man, with fatal results in most cases."
>
> Dr. Bolduan added that the decrease in the horse population of all the larger cities had been noticed by the health authorities everywhere and had been welcomed as a most encouraging sign. The time has come, however, for his banishment. He said that the decrease in many diseases is believed to be due to the fact that the public is becoming educated in combatting the fly menace and that as the old style stable disappears the fly will, in a large degree, disappear with it.

But isn't there such a thing as paying too great a price for the new life that is to be all machinery driven and science ruled? We take note that the heads of the great insurance companies are more concerned just now over the increasing risks of automobile accidents than over this possible danger of association with Friend Horse.

Life will lose much of its ecstacy when the scientific monitors are given their full sway. The horse, the dog, the family cat will be banished then. The mother may not kiss her child nor the lover embrace his girl. We shall all be wearing gloves and breathing through screens, and taking a hundred other precautions that will be a constant reminder that disease and death are lurking everywhere. In a word, life will be so closely guarded that living will hardly be worth while.

Command us to place our stables right and keep them wholesome and clean, for that is sensible and in reason. But don't demand the utter extinction of the horse. Leave us a little sentimet and gratitude in this dazed and upset world.

N. W. Durham.

## For Animal Relief

### Special American Society Formed

For the purpose of contributing to the welfare and comfort of animals in this trying period an organization has recently been formed, known as the American Red Star Animal Relief society. It was organized at the request of the secretary of war and will be conducted under the auspices of the American Humane association.

There is at present in Europe, though working largely with European problems, a well organized dumb animal hospital system following in the wake of the armies much as the Red Cross hospital system serves the soldiers themselves.

The American Red Star Animal Relief would act in a similar capacity to the American forces, maintaining supplies and stores behind the lines, providing ambulances and hospitals as required and generally rendering service by meeting the exigencies of the campaign. To the American forces this service would be more valuable than even to the British, because the Amer-

(Continued on page twenty-eight.)

**Beans on Virgin Soil.**

To the Editor of The Washington Farmer: I found in 1917 we could produce one ton or more beans per acre from virgin soil, the sagebrush being removed and ground put in shape and beans planted. Of course this is an irrigated section and beans will stand considerable water. We had better success with a pink bean, called The Yakima Pink, and they are a much better bean than the navy beans. When cooked they turn brown. These beans we sold this fall for 10 cents per pound, bringing the returns for one acre of $200.

Beans do better on the heavier soils, they do not seem to produce as well on sandy land. There are thousands of acres in this valley that could be cleared and put into beans this next season of 1918. I will be glad to answer any other questions relative to the bean proposition with stamp enclosure.

L. N. FRY.

Allard, Wash.

# Washington Food Production, 1918

## *What the Farmers of the State Are Planning to Raise Coming Season*

Answers to the question, "What Is Your Utmost?" are beginning to come in from all over the state. The Washington Farmer is confident that this survey will be read with great interest. This instalment is only the beginning. If you have not already sent in your answers, fill out the coupon given on this page and mail it at once.

**Spring Wheat on Stubble.**

To the Editor of The Washington Farmer: I am very seriously considering the disking of some 1200 or 1500 acres of stubble and sowing it into spring wheat. I have consulted with some of my friends who are experienced farmers and who have resided in this district for 25 or 30 years and they say that considering the very unusual open winter and the excess amount of precipitation that there is a very fair chance of getting a crop of spring wheat by this method of farming. I have something like 400 acres of summerfallow that I am putting in, but if I can be reasonably assured that I can get a return on my money invested (in view of the very urgent demand for increased production), I am planning to take a chance and put in an additional 1200 or 1500 acres by the method which I have mentioned. Some of my friends tell me that they have in times past obtained very good results, and I think under the circumstances that I am justified in taking the chance.

I think it might be well for a great many of the farmers, especially those in the lighter land districts, to give this matter serious consideration. It might be the means of adding a million or a million and a half bushels, or possibly twice as much, to the 1918 crops of the Inland Empire.

J. C. CUNNINGHAM.

Spokane.

**Women and Girls Helped.**

To the Editor of The Washington Farmer: When Cherry Lane orchard was started practically the entire area was set to fruit trees, this of course, fixes it so that our principal crop must be fruit. We have almost all of the orchard seeded to alfalfa, which gives us enough hay so that we can now feel able to plow up our alfalfa field and grow potatoes and corn. As for the orchard it is kept up in the very best of shape in every respect.

A large number of men have been called to the colors and millions more must soon be called, the proportionately small number that has already gone are easily missed by farms who require hired labor in gathering their crops, in fact from observation, I am inclined to think that women harvested more than half of the fruit crop in the Yakima valley this year. We marketed 27,000 boxes of big fruit this year besides cherries and grapes, we were unable to get men to do the work, and if it had not been for the large number of women and girls who helped in this sort of work as a patriotic duty it is doubtful if half of the crop could have been saved.

Labor another year is bound to be scarcer and if the crops are to be gathered a very substantial amount of help must be given by women and young folks, I think the press especially should be mindful of this situation and make every possible appeal to the women, to do whatever they can in the matter of growing or gathering food crops.

H. C. BENSON, Manager.

Prosser.

**Little Children Help Out.**

To the Editor of The Washington Farmer: One more day's work then I can say that the biggest year's work ever accomplished by one family of three little children, five, nine and eleven years old, has been produced here in Chimacum valley. Not one day has been lost in the year. Our farm consists of about 70 acres mostly bottom land that requires a great deal of ditching and rooting every spring or fall when the crops are prepared for. Knowing help would be hard to get and feed very high, I ordered a 75-ton silo, a seven-horsepower gas engine and a silage cutter and blower. The next thing to make sure of was the crop to fill my silo and barn with feed for my stock. By the month of June four men had left me for higher pay and shorter hours. I talked the matter over with my wife that we would have to do our best without men, and she decided to do the milking. With a determination to win, the whole family went to work. Morning and evening two little girls turned out and tied up 22 head of cows, while the boy hitched and drove the horses, harrowed and took a man's place to help with the crops. It was fun for the children and they have learned a great lesson, to love the stock and farm. I succeeded in getting a man and neighbor to put in the hay, then there was the silo to build, and was able to get a man for one day. So myself and son, completed the job with a 20-foot foundation. My wife painted the lower half. My little girl of five would climb to the top, drive in bolts and tighten them without any fear of danger. We have succeeded in raising the following crops for the silo, oats, peas, vetch, barley, wheat. September 15 we commenced to fill the silo and after waiting about 20 days for the machinery, several neighbors were very kind in helping me with the work. I expect to open the silo now in a few days. We are all true Americans and have the same determination to win the war.

P. M. WRIGHT.

Chimacum.

**Will Work Early and Late.**

To the Editor of The Washington Farmer: We who have the interest of humanity at heart can readily see "American's big business is war," but only a few seem to realize it as yet. Some of the boys who succeeded in obtaining exemptions rejoiced at their good luck, as they called it, and now they are to be brought up again for another trial and some of them will go. Every man, woman and child should be a member of the Red Cross, and we are glad of the number, but too many are indifferent. We believe each able-bodied man, within the age limit, should be called regardless of his occupation. These farms will be tilled by someone. Many men who have not handled a team for years, can and will get into the field rather than leave their land idle. We can not win against such a foe unless we have men and they must be the best of our boys, and the sooner they are trained the less number it will take. I am too old to go, but I can work early and late to help care for the boys who fight for me and mine.

A. O. LEE.

Othello.

**Summary of Coupons.**

Here is a summary of the coupons so far received:

A. O. Lee, Othello, Wash.: MORE wheat, rye, potatoes, hay and swine.

L. J. Goodenough, Hatton, Wash.: MORE wheat, rye, potatoes, hay, beef cattle, swine and poultry; LESS dairy cattle.

J. L. Ankrom, Cheney, Wash.: MORE wheat, oats and corn.

C. E. Cox, Kennewick, Wash.: MORE corn, vegetables, hay, dairy cattle and silage; LESS horses.

Martin Penhallick, Neppel, Wash.: MORE vegetables, fruits, alfalfa, beef cattle, swine, carrots; LESS potatoes.

S. W. Batty, Wauna, Wash.: MORE wheat, corn, potatoes, peas, beans, vegetables, hay, beef cattle and swine; LESS fruits.

John Klingele, North Yakima, Wash.: MORE corn, peas, fruits, hay, dairy stock, swine, carrots and mangels; LESS potatoes.

D. W. Wallace, Mica, Wash.: MORE wheat, oats, barley, rye, corn, vegetables, fruits, dairy stock, poultry, carrots, mangels, artichokes and silage; LESS potatoes, hay, horses and swine.

Chriss Krogness, Quincy, Wash.: MORE wheat, corn, potatoes, vegetables, horses, poultry and carrots.

Eureka Ranch company, Cusick, Wash.: MORE wheat, oats, potatoes, hay, horses, beef cattle, swine and poultry.

L. N. Fry, Allard, Wash.: MORE wheat, oats, rye, corn, peas, beans, vegetables, hay, beef and dairy cattle, sheep, swine, poultry, carrots, mangels, turnips and silage; LESS potatoes.

S. J. Gross, Kelso, Wash.: MORE wheat, corn, potatoes, peas, vegetables, hay, horses, beef cattle, sheep, swine, poultry and artichokes; LESS oats, barley, beans.

Cherry Lane Orchard, Prosser, Wash.: MORE corn, potatoes, beans, hay, sheep and poultry; LESS horses, beef cattle and swine.

John Hopp Jr., Odessa, Wash.: MORE wheat, oats, potatoes, beans, fruits, beef and dairy cattle, swine, carrots.

J. C. Jantz, Ruff, Wash.: MORE wheat, potatoes, dairy cattle, swine.

C. A. Lester, Centerville, Wash.: LESS oats and barley, and usual amount of other things.

G. W. Wilgus, Prosser, Wash.: MORE potatoes, corn, peas, beans, vegetables, fruits horses, sheep, swine, poultry, carrots, mangels, turnips; LESS sugar beets, horses, beef cattle, dairy cattle and rutabagas.

W. A. Meister, Pullman, Wash.: MORE wheat, corn, potatoes, peas, beans, vegetables, fruits, hay, horses, dairy stock, swine, poultry, carrots and turnips.

J. S. Klemgard, Pullman, Wash.: MORE wheat, oats, barley, swine.

John E. Nicherson, St. John, Wash.: MORE wheat, barley, potatoes, beans, vegetables, horses, swine, poultry, carrots, mangels and rutabagas.

E. B. Capell, Mead, Wash.: MORE wheat, barley, corn, potatoes, peas, beans, fruits, hay, beef and dairy cattle, swine, poultry, carrots, rutabagas, and silage; LESS oats, rye, sugar beets, vegetables, horses, sheep.

E. J. Schnase, Colton, Wash: MORE wheat, barley, corn, potatoes, peas, vegetables, fruits, hay, horses, beef and dairy cattle, swine, poultry, carrots, mangels and turnips; LESS rye.

W. J. McDonald, Cheney, Wash.: MORE wheat, oats, corn, potatoes, peas, beans, vegetables, fruit, hay, dairy stock, swine, poultry, carrots, and rutabagas.

R. L. O'Hare, Boundary, Wash.: MORE wheat, oats, barley, peas, dairy cattle, swine, poultry and silage; LESS beef cattle, carrots, mangels, rutabagas, turnips and artichokes.

Harvey Herndon, Silcott, Wash.: MORE wheat, barley, rye, potatoes, peas, eans, horses, poultry; LESS hay, beef cattle and swine.

Leslie D. Herndon, Silcott, Wash.: MORE wheat, barley, rye, potatoes, beans, horses and poultry; LESS hay, beef cattle and swine.

Joe Turner, Meyers Falls, Wash.: MORE oats, hay, beef cattle, sheep and silage.

G. B. Sharinger, Snohomish, Wash.: MORE hay, sheep, silage; LESS dairy cattle.

R. V. Peringer, Belmont, Wash.: MORE oats, barley, potatoes, peas, poultry; LESS swine.

Edward Thomas, Cheney, Wash.: MORE oats, potatoes, vegetables, hay, dairy stock, poultry, carrots, mangels.

Kreps Brothers, Laurel, Wash.: MORE wheat, oats, rye, potatoes, vegetables, fruits, hay, beef cattle and poultry.

John Everett, Alderdale, Wash.: MORE wheat, rye, potatoes, vegetables, hay, horses, dairy and beef cattle, sheep, poultry.

W. T. Jackson, Stevenson, Wash.: MORE oats, peas, beans, hay, dairy cattle, poultry, carrots; LESS potatoes, vegetables, turnips.

P. M. Wright, Chimacum, Wash.: MORE wheat, oats, barley, potatoes, peas, beans, vegetables, fruits, hay, dairy cattle, sheep, swine, poultry, carrots, mangels, rutabagas, turnips and silage.

Mary Kimer, Sequim, Wash.: MORE wheat, oats, potatoes, peas, hay, dairy cattle, sheep, swine, mangels and silage.

James C. Cunningham, Spokane, Wash.: MORE wheat, peas.

Andrew J. Colhoun, Spring Valley, Wash.: MORE wheat; LESS horses, dairy cattle.

George McCroskey, Pullman, Wash.: MORE turnips; LESS wheat, oats, beef cattle, dairy cattle.

N. D. Johnson, Quincy, Wash.: MORE wheat.

Eli B. Robinson, Shelton, Wash.: MORE wheat, vegetables, swine, carrots, mangels, rutabagas; LESS dairy cattle.

Julius M. Fisk, Spring Valley, Wash.: MORE carrots, mangels; LESS swine.

William Bishop, Chimacum, Wash.: MORE wheat, oats, barley, rye, potatoes, peas, vegetables, hay, beef and dairy cattle, swine, carrots, mangels, rutabagas, silage.

J. E. Gibson and Son, Quincy, Wash.: MORE wheat, potatoes, hay, dairy cattle, swine.

S. A. Weipert, Waukon, Wash.: MORE wheat, oats, barley, corn, potatoes, vegetables, fruits, hay, horses, cattle, swine, poultry, carrots, mangels.

C. S. English, Camas, Wash.: MORE wheat, corn, peas, beans, beef and dairy cattle, swine, poultry, silage; LESS potatoes.

J. E. Reynolds, Guler, Wash.: MORE wheat, oats, corn, potatoes, vegetables, hay, beef and dairy cattle, swine, poultry, rutabagas, turnips.

George Bertrand, Castlerock, Wash.: MORE wheat, oats, barley, peas, fruits, hay, Shorthorn cattle; swine, poultry, silage; LESS horses.

A. E. Randall, Meyers Falls, Wash.: MORE wheat, oats, barley, corn, beans, vegetables, beef cattle, swine, poultry, carrots, mangels.

W. C. Halsey, Jerry, Wash: MORE wheat, barley, potatoes, horses, beef cattle, sheep, swine.

A. C. Borchen, Pateros, Wash.: MORE wheat, oats, corn, potatoes, peas, beans, vegetables, hay, horses, dairy cattle, swine, poultry, carrots, turnips.

H. P. Denis, Addy, Wash.: MORE wheat, oats, barley, potatoes, sugar beets, vegetables, hay, beef and dairy cattle, swine, poultry, mangels, rutabagas; LESS horses.

Peterson Bros., Espanola, Wash.: MORE wheat, oats, barley, beans, hay, dairy cattle, silage.

Charles Rumbolz, Malott, Wash.: MORE wheat, oats, potatoes, vegetables, fruits, hay, poultry, carrots; LESS sugar beets, cattle, swine.

August Larsen, Wapato, Wash.: MORE wheat, corn, potatoes, beans, vegetables, fruits, horses, dairy cattle, sheep, swine, poultry, mangels, silage; LESS oats, barley, hay.

B. L. Lyons, Odessa, Wash.: MORE vegetables, hay, dairy cattle, poultry, sheep.

### WHAT IS YOUR UTMOST?

Are you planning to raise more or to raise less of wheat, oats, barley, rye, corn, potatoes, peas, beans, sugar beets, vegetables, fruits, hay, horses, beef cattle, dairy stock, sheep, swine, poultry, or for feed carrots, mangels, rutabagas, turnips, artichokes, silage?

Please fill out this coupon, sign your name and postoffice address and mail to the Editor of The Washington Farmer, Spokane, Wash. Your name will be held in strict confidence if you so request.

I am planning to raise this coming season:

More of .....

.....

Less of .....

.....

# Federal Farm Loan System Sound

## *Secretary M'Adoo Is Positive All Attacks Will Fail*

Secretary of the Treasury McAdoo is positive that the efforts of enemies of the federal farm loan system to break down that institution will fail. In a public statement he says:

"We are advised that the next move of those who are seeking to break the system down will be to institute a suit contesting the constiutionality of the farm loan act. The purpose of this suit will be to alarm investors who have already bought bonds and to dissuade others from buying them. There is not the slightest reason to fear it, however. The constitutionality of the act has already been passed upon by the attorney general of the United States and by former Supreme Court Justice Hughes, who examined it critically for a group of banking houses who were not willing to recommend the bonds to their clients without disinterested opinion from eminent counsel of their own selection. The system is so strong and its administration is of such paramount importance to the agricultural development of the country that attacks upon it are bound to fail. It is only proper, however, that this warning should be given, in order that the farmers and all friends of the system should grasp the sinister purpose that is behind these attacks."

Mr. McAdoo says that while bankers and farm mortgage companies generally are not hostile to the system, there is "a small minority of farm loan men and country bankers bitterly opposed to it, and these interests have been waiting for an opportunity to attack it. Knowing perfectly the conditions under which the business is done, they now think they have found their coveted opportunity to attack the system. Their first step has been to in-

(Continued on page twenty-eight.)

THE WASHINGTON FARMER

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## Make All Energy Effective

There is one resolution that every man and woman in America should be starting out this new year of 1918 with: That every ounce of energy be expended in a way that will serve some real purpose in the world's great crisis.

Much is heard these days about American wastefulness. Foods and soils and fertility and money are wasted recklessly. But by far the greatest of America's waste is her lack of use or her misapplication of energy.

Where is the man or the woman who expends his or her energy with the degree of judgment that should be exercised? How many times is it the case that one's weariness at night fall is due to activity of one kind or another that was not productive of beneficial results?

There are thousands of men and women who overwork, who actually expend more energy than they should. But of this number there are few who accomplish results commensurate to their exhaustion. Well defined plans of work would enable such workers to secure better results with less bodily and mental weariness. The exercise of physical and mental control at all times would avoid much useless expenditure of energy.

There are many people who are too lazy and shiftless to expend their energy even wisely. To such no appeal can be made except to come out of their lethargy and be workers instead of drones. But to the thoughtful, ambitious man and woman, the appeal to systematize in the use of their powers should not fall on deaf ears. To them the call is not to more work, but to more efficiently directed work. To misapply energy is to lose it almost as certainly as not to apply it at all, and the world can not afford to lose energies in these trying times.

## Automobile a Utility Machine

In these days of congested freight traffic on the railroads, it is well to remember that automobiles constitute a secondary line of national transportation. It is estimated that there are 4,200,000 automobiles in service in the United States, of which approximately 1,750,000 are in the hands of the farmer. It is safe to say that practically all these automobiles on the farm are used the greater part of the time for utility purposes. Even in cities probably 70 per cent or more are used for transportation uses, conveying people from one place to another on business or professional errands.

In view of these facts it is unfortunate that the automobile has been referred to as a pleasure car as though that was its chief use and that therefore its further manufacture during the period of the war should be seriously curtailed. Facts indicate on the other hand that in this country the automobile has become as big a utility as the telephone or electric light; that in place of its being manufactured largely for the use of the rich, 90 per cent of the output of the country has been represented in motor cars selling at less than $900.

Moreover, in these days when high wages for industries are making an appeal to the young man left on the farms and when food production itself has become the biggest war necessity, it is well to remember that the automobile has had much to do with the reconciling the young man to farm life and keeping the family together on the farm. In this sense even its occasional use as a pleasure car contributes materially to the farming industry.

## Are You Using Your College?

In your state there is an agricultural college, experiment station, demonstration farm and the like that you, as a farmer and citizen of the state, are helping to pay for. Whether you realize it or not, that institution is helping you in your farming problems, but is it helping you as much as it might? Are you accepting all that it offers you? If not, don't criticise it or the taxing authorities for taxing you to help support it. Don't criticise it for not doing more for you until you have accepted and put to use all the information that it offers you. Not only is it offering practical and full education to you or your sons and daughters, but it is making special effort to serve you with as little loss of time from your business as possible. It is offering winter schools of several weeks when your farm work is least confining; it is running demonstration trains to as many communities as possible; it is offering "farmers' week" for both men and women. In some instances, actual correspondence education is obtainable, and the heads of the various departments are always ready to answer your questions. It is likely that your own state college costs you only a few cents a year, yet it offers service worth hundreds of dollars to you. Are you accepting this service?

## Plan Your Gardens Now

There are always larger crops grown in the winter than at any other season of the year, and furthermore they are grown on paper by lamp light. But those grown on the soil are frequently the result in considerable part of the "paper" crop produced around the family table on winter evenings. This is especially true of farm gardens. The garden can not be grown successfully without a plan. One can not go out into the garden lot and plant a couple of dozen packages of seed, go away and forget it and have a garden. One must know the habits of vegetables—their planting times, their length of seasons, their soil and cultivation requirements. Now is the time to learn these things about the cabbage and turnips and beans and peas and many other things that should be grown in every farm garden. Now is the time to draw a sketch of the garden plot and lay it off in pencil rows. There never before was greater need for production of garden stuff than this year. A good garden means good meals and good health for the home family, and more wheat and meat for the soldiers of America and her allies.

Another "day" is to be added to the calendar, namely, Potato Day, if the food administration's plans are carried out. It is the aim of the administration to have potatoes served in every home in America every day. "An apple a day keeps the doctor away," says the old adage. Without depreciating the apple, let's quote the revised version: "Potatoes each day keep the kaiser away."

Announcement has been made that Argentina has contracted to the allies two and a half million tons of wheat and that this wheat will be made into feed and flour in the United States. This should have one advantage—the leaving of a considerable quantity of mill feed in this country.

## Washington Gleanings

An experiment recently undertaken by the poultry division of the state college at Pullman is to work out poultry-feeding rations dispensing entirely with meat.

Dr. Isa Tanimura, commissioner of live stock for the Japanese government, is in Seattle laying plans for the purchase of 10,000,000 head of sheep for his government.

A blue ribbon cheese donated by Manager Harry Doherty of the Hardwood cheese factory was put up at auction at the Red Cross rally at Harwood and brought in $61.70.

Byproducts factories in North Yakima, Kennewick and Selah have in 1917 paid farmers for fruit and vegetables over $300,000, and the value of the finished product will exceed $1,000,000.

J. H. Cronkite of Trinidad, who has six acres of bearing orchard, one-fourth Jonathans and three-fourths Winesaps, got a gross return of $3650, having sold his crop of 2300 boxes at $1.60.

The Northwest Livestock Conference and the Spokane Chamber of Commerce are joining in an effort to secure a reasonably full report on the livestock holdings of the Pacific Northwest before the second annual Northwest Livestock conference, to be held in Spokane on February 21, 22 and 23 of 1918.

The general welfare committee to work in conjunction with the government in solving farmers' problems has been appointed by President B. F. Brewer of the farmers' union at Walla Walla, with W. H. Kirkman chairman and A. C. Moore secretary. The first problem will be that of the bulk handling of grain.

The Utah-Idaho Sugar company has handled in the manufacturing season about to close approximately 65,000 tons of sugar beets, which represent the first crop grown in the Yakima valley. According to statements made by the company officials this is the largest crop ever handled by them in any territory.

The Methow valley has shipped 80 carloads of beef cattle this fall, valued at $160,000. It is stated that between 40 and 50 carloads are yet to be shipped between now and spring. Twenty-five cars of hogs, valued at $25,000, and 295 cars of sheep, valued at $737,000, have left the valley. The total output of the valley for 1917 is about $1,000,000.

Farmers have voted that they would do their utmost to insure the planting of 300 acres of sugar beets near Kittitas and 300 acres tributary to Ellensburg if the Idaho-Utah Beet Sugar company now operating at Yakima would agree to put in an automatic dump at each place and the Milwaukee and Northern Pacific railroads would agree to make a special connection between their lines near Kittitas.

## What Others Say

Farm and Fireside: This one fact we might as well realize, once and for all: The prices of farm produce—whether meat, corn, poultry, milk, or potatoes—can not consistently be lowered to any considerable extent until there is a gradual lowering of all prices, including shoes, machinery, and other manufactured products.

Rural New Yorker: Those who say that bread and meat will be cheap are either childishly ignorant or else demagogues trying to fool the people. Food will continue to be high, and there is just one hope for a fair and needed adjustment of society. That is to see that more of the consumer's price goes to the actual producer.

Kimball's Dairy Farmer: It is time for every one of us who has been permitted to remain at home to take a thorough inventory of his obligations, which are his opportunities, and resolve that he will begin today and with all the strength and knowledge he possesses increase his efforts and improve his methods in the one or two, yes, in the dozen or score, of instances where he finds a possibility exists for doing so.

Ohio Farmer: The efficient farmer is the one who seeks the reason as well as the best method of applying work to bring the result. He asks both how and why, but he makes sure of the how and exerts every effort to get the work done so as to have a crop to sell or to feed. He is the really practical, scientific farmer. He has the advantage of knowing what to do in case of emergency—when he is confronted with a new set of conditions—because he has studied why things should be handled in a certain way, as well as the method itself—the "how" of it.

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Nightingale Song
The Rosary

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Long, Long Ago

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Just a Wee Deoch and Doris
Roamin' in the Gloamin'
She's My Daisy

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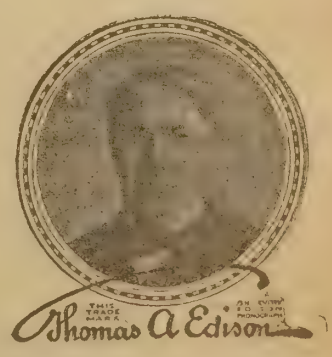
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# West's Greatest Undeveloped Resource

## *Vast Area of Grazing Lands Now Known by the Name of "Public Range"*

By E. L. POTTER

The west has many undeveloped resources, but of all of these the one that by development would give the greatest returns at the minimum expense is the vast area of grazing lands now known by the name of "public range."

Approximately 2 1-2 per cent of the area of the west is now in crop. If the dream of our most optimistic boosters comes true this area will be doubled, making a total of 5 per cent in crop. In the meanwhile 85 to 90 per cent is used exclusively for grazing purposes and approximately one-third is free or public range. That is, it is land that still belongs to Uncle Sam, but which is used by whoever gets there first. Our government will not rent or sell it or otherwise dispose of it except upon homestead conditions. Our government does not use this land itself, but it does not prohibit any one else from using it. People can do as they please with this land so long as they do not attempt to fence it and thereby prevent others from using it.

**Such a state of economic anarchy exists nowhere else in the civilized world.**

The productive capacity of this land is constantly decreasing, and the system of live stock farming followed belongs in the barbaric age. These millions of acres have been in use for 40 years, yet they have no fences, wells, corrals, buildings or improvements of any kind. Nothing whatever has been done to improve the grass and nearly everything done to ruin it.

England is the world's greatest breeding ground for fine live stock, yet all of this improvement has come about in the last two or three hundred years, or since that great transformation known in history as "Enclosure." For centuries English grazing lands were held in common ownership, or, perhaps we had better say, lack of ownership. Each farmer turned his stock out on the "common" and all others did the same. Then gradually this common land passed into private ownership and was fenced, or, as the English say, "enclosed." Then, and not until then, began the live stock development that has astonished the world.

We are not advocating any one certain remedy for this serious condition in western America. There are a lot of remedies that will help. The chief drawback to all, however, lies in the fact that this land belongs to the United States government, and is, therefore, in the hands of congress, which in turn represents the mass of the American people, the very large majority of which live in the central and eastern states and know absolutely nothing about the conditions we have been describing. This lack of information on their part is entirely excusable, even though it may be of very great material detriment. Never before in the history of the world has there been any high degree of civilization established in a region of such low productive capacity as the range districts of the west. In fact, before the days of the railroad and the telephone civilization was impossible where the land would only support one inhabitant to the square mile. Now, however, these inventions, coupled with the automobile, have robbed range life of its dreaded isolation and has made living conditions equal, if not superior to, those of the average rural communities. There still remains, however, the economic anarchy which can not be ended until the American people are brought to realize that there are millions of acres in the west where from 2000 to 5000 acres are required to support a family, but where, given this amount of land, a family can be supported in decency.

**The average American can realize some of the causes which may make one acre worth $50 and another $200, but he has no comprehension of land worth from 50 cents to $5 an acre.**

He feels that land must either be entirely worthless of must have a farm land value, when the actual facts are that the productive capacity of range land is much more easily determined than that of farm land. We hope, therefore, to do our part in making people realize that a stock ranch in the range country must comprise a considerable acreage in order to support a family and that "cattle barons" do not grow on ranches of a few thousand acres, but only on ranches of hundreds of thousands of acres. The ranchman who owns or control the grazing on 3000 acres of range land is in the same class financially and otherwise with the 160-acre farmer in the humid farming districts. It should furthermore be remembered that the few great fortunes that have been built on the range cattle business have largely been based on the fact that these anarchic conditions have given the rich a great advantage over the poor.

## New Agricultural Agent



Not because he was a great football player, but because he was believed to be a practical demonstrator of up-to-date agricultural knowledge, Benton Bangs has been chosen as a county agricultural agent, soon to be placed in charge of the work in some county of the state.

Mr. Bangs, whose photograph is shown herewith in his football uniform, is a graduate of the state college at Pullman, where he specialized in agricultural subjects. He graduated from the regular course last June, but during the last half year has been taking post-graduate work at Pullman. During his college course he was a wonder on the football field, being recognized as one of the greatest players ever produced in the northwest. He is expected to put some of the same vim into his agricultural work that he put into his athletic sport.

## Farm Problems

### Walla Walla Man Wants Light

The Stubblefield Home, Walla Walla, Wash. To the Editor of The Washington Farmer: While our farm work is not very brisk just now it is a good time to consider a few of the farm problems that are going unchallenged.

The writer was raised in a corn country, and in his endeavor to raise the crop in this valley the greatest trouble that has confronted the grower here is the corn worm. Never had it entered our minds that the little pest could be such a nuisance.

Two years ago, after a winter in which we had 20 days of freezing weather with no snow, the pest was not at all troublesome. In fact, it was hardly noticeable. But this last season it has done the work for the kaiser. From an acre of fine corn that made 90 bushels the best that we could do was not more than half a dozen ears that were not damaged with the worm.

So far as we know one has offered a remedy for the trouble. Some have suggested spraying. But on a little reflection it is quite evident that spraying will not do. One would have to spray the entire stalk as they frequently go into the stalk and are found in the tassel.

We have noticed that the lady bug preys on the worm and will seek them out. But who will provide the lady bugs? Now it may be that some of your readers will know what to do and if they will let go of the information it will be very much appreciated.

Last season we planted some corn that came from Iowa. It was very prolific. Every stalk had at least two ears and many of them three. One had 10. Of course they did not amount to much. But there is the other problem. How can we make the stalk mature more ears? If we have a stalk with 10 nubbins how can we make the 10 nubbins 10 good ears? If some of your people know the answer to this question I will be glad to pay for that.

Maybe we should not ask too many questions in one paper, but it would be mighty pleasing to know why our mangels go to seed so badly. This last season we raised 50 tons per acre. It would be hard to say how many more there would have been had they not gone to seed so badly. It will be worth a lot to know the answer to this question. Any information that you can give me on these subjects will be appreciated. L. J. CAMPBELL.

## BULK GRAIN MEETING

### Session Will Be Held at Spokane

Plans are completed for the bulk grain conference at Spokane January 25 and 26, and experts along various lines will be present to assist in working out a system to meet the need of bulk handling methods in the northwest this season. Representatives of the government will be present, as will representatives of the farmers' organizations, warehouse companies, elevator companies and shippers and dealers.

The question to be debated is not: Shall the grain be handled in bulk? The question is: How can the northwest best prepare at once to get along without sacks. Sacks are declared to be, absolutely unobtainable, except at excessive prices, and then in insufficient quantities.

It is expected that a large delegation from all the wheat growing districts of eastern Washington and northern Idaho, and also some from Oregon, will be present.

### Favors Standard Grade.

S. C. La Riviere of the Moxee valley, Washington, is in favor of a standard potato grade. "If I produce a better spud than my neighbor I am entitled to better pay for it and the grade is the only way I know of that will bring that condition about," said Mr. La Riviere. "That, in my mind, is the long and short of the potato grading controversy."

**Strikes in Japan.**

The most notable social phenomenon in Japan is the prevalence of strikes. During the last year 180 strikes, involving 30,000 workmen, have taken place, which compare with 80 strikes involving 9000 workmen last year.




# We Must "Follow-Up"

The story of the Gallipoli withdrawal is a tale of inadequate support. Like Salamanders clinging to the red-hot bars of a fiery furnace, the boys of Australia and New Zealand clung to the slopes of Anzac. Desperately, heroically they clung. No troops under any circumstances ever displayed greater soldierly qualities or upheld more sacredly the best traditions of England's Army. But they had to withdraw because the "follow-up" was not there.

To some of us it has been given to march with the columns of troops that go to France. And to others it is given to wave God-speed. But he who marches and he who stays is equally a citizen of the world's mightiest republic and equally responsible for its success in this greatest of undertakings.

Then let us at home turn from our flag waving and consider how necessary we are, how useful we must be. Those who go to fight cannot hope to win by naked bravery and we cannot hope to win unless every individual at home does *all* he can. We must have no Gallipoli.

The Bell System is only one of the myriad great and small industries which are co-operating that nothing be left undone to keep a constant, efficient stream of men, guns, ammunition, food, clothing and comforts flowing to the front.

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# Are Trying to Reduce Amount of Wheat Fed



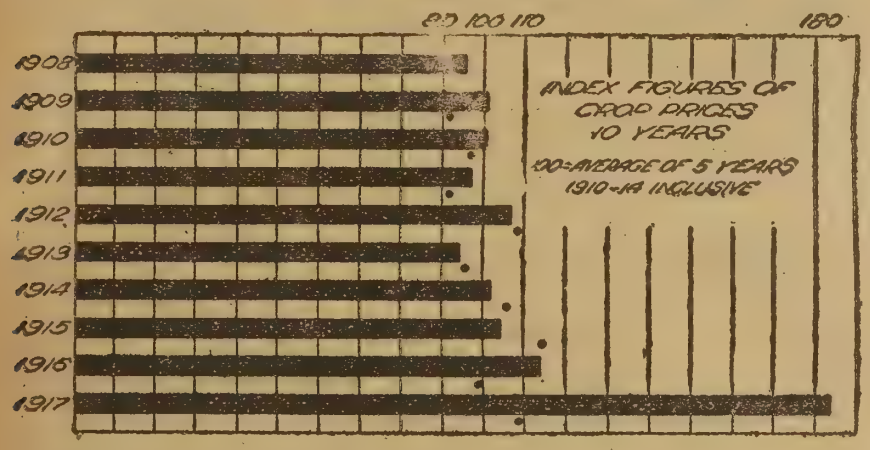
Here are a few of the 1700 White Leghorns on the Tisher-Allen place.

One of the most up-to-the-minute poultry plants in the northwest is that owned by Charles and John Tisher and John Allen of Silverdale, Wash. The houses are of the most modern type, and are electrically lighted. As is commonly the case in the Silverdale district, no attempt has been made to breed show stock. Thrifty growth and productiveness are the standards applied to the flock of 1700 Leghorns.

In the matter of feeding, every effort is being made to spare the world's deficient wheat crop. Not more than 10 per cent as much wheat is being fed this year as formerly, oats, kale and roots being utilized as far as possible. Under these conditions production has been lessened somewhat, one of the partners estimating that the egg yield is about 50 per cent now, while last year at this time the birds were laying 80 per cent.

# Crop Prices and Production

In the accompanying chart the bars indicate by their length the yearly relative price to producers of the United States of 10 important crops. These crops are wheat, corn, oats, barley, rye, buckwheat, potatoes, hay, cotton and flax. Their combined acreage is nearly 90 per cent of the entire crop acreage of the United States, therefore their combined average price may be taken as representing the trend of all prices. The yearly average price of each product was reduced to its percentage of its average during the five years 1910-14, inclusive, and the percentages of all the crops were combined into a general average, due weight being given to the relative importance of the different crops.




It will be observed by an examination of the chart government monthly crop report that during the first eight of the 10 years the composite price ranged between 90 and 110 per cent of the 5-year average. In 1916 the price advanced to 114 and in 1917 to date the average has been above 180.

It is instructive to study the relation of crop prices with crop production. The dots in the chart indicate the relative size of the 10 crops combined (combined by the same method as the prices), 100 representing the average of the five years 1910-14. Under normal conditions increased production tends to decrease price, and vice versa, decreased crops to increase price. In the chart it may be noticed that until 1915 the composite of crop production of any year could be used to forecast approximately the average of prices during the following year. Thus it will be seen by the chart that the crop production in 1910 was larger than in 1909; therefore, prices in 1911 were lower than in 1910. Production in 1911 was smaller than in 1910; hence prices in 1912 were higher than in 1911. Production in 1912 was materially larger than in 1911; hence in 1913 prices were materially lower than in 1912. Production in 1913 was smaller than in 1912; hence prices in 1914 were higher than in 1913. Production in 1914 was larger than in 1913; therefore, prices in 1915 would normally be expected to be lower than in 1914, but they were slightly higher, a new factor—the war—counteracting the normal influence. Production in 1915 was larger than in 1914, therefore, prices in 1916 would normally be less than in 1915; but again the war had a greater counteracting influence. Production in 1916 was less than in 1915; therefore, prices in 1917 would normally be expected to be higher than in 1916; the long bar indicating prices in 1917 shows how truly they have been so. Here both factors, war and production, have been driving in the same direction.

Preliminary estimates indicate that production in 1917 will be larger than in 1916; therefore, under normal conditions prices in 1918 might be expected to be lower than in 1917; but in 1916 and 1917 the new factor affecting prices seems to have been stronger than the production factor. It remains to be seen which will be the stronger in 1918.

## Hope On.

Hope on! although the weary days seem dragging.
That lie between you and heart's desire,
Whose heavy hours with leaden-footed lagging
At times 'gainst faith and hope and love conspire.

Hope on and if at times your soul should falter
'Neath breaking heart and memory-maddened brain
In brave endurance read your daily psalter
Of resignation in the book of pain.

Hope on! Above the clouds your star is gleaming,
A beacon light to guide you on your way,
Look up and watch lest you should miss its beaming,
There's comfort for you in its cheering ray.

Hope on! The longest night is not unending,
The darkest hour is just before the dawn.
The giver of all good his strength is sending;
Keep up your courage bravely and hope on!

—Louise M. Berry in Atlanta Good Words.


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A. B. NYSTROM, Editorial Contributor

## MILK REGULARLY.

### Punctuality Will Add Revenues.

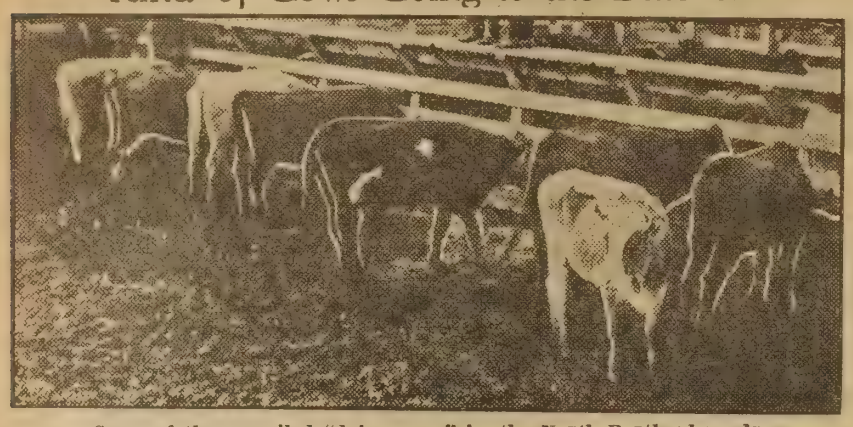
Successful dairymen agree that the more perfect the system employed in the work of feeding and milking the cows the more profit will result. Haphazard methods seldom pay in any business, and never pay in dairying.

This system should apply as effectively to the time and manner of milking as to the time and manner of feeding. It might be difficult to explain exactly why it is true, but it is proved without doubt that more milk is obtained when milking and feeding are done on exact schedule than when no schedule is followed. If milking is done at 6 o'clock in the morning, it should be done at 6 o'clock every morning, rain or shine, Monday or Sunday. Similarly in the evening. It never pays to be late, and being early loses its usual virtue when applied to milking the cows.

The dairy cow is a sensitive animal, and should always be treated as such. She has a personality as truly as her caretaker has and the latter should study the former in order to conform to her temperamental requirements. The dairyman is cutting off his nose to spite his face when he tries to make the cow conform to his own temperament and convenience.

It naturally follows, that it is best for the same person to care for the same animals day after day, for much more of the success of the dairy depends on the personal touch than is often supposed.

## Kind of Cows Going to the Butcher



Some of the so-called "dairy cows" in the North Portland yards.

By PAUL E. TRIEM.

From time to time vague reports filter in to the effect that the present selling movement of dairy cattle is far more extensive than the public realizes, and that the country is in fact, facing a veritable depletion of the herds upon which it must depend for butter and milk. It is a little difficult to get at the actual facts of a nation-wide situation, but a little investigation into what is occurring here in the northwest leaves the investigator reassured, rather than otherwise. Undoubtedly some profitable dairy herds have been sold because of labor shortage and the high cost of feed; but in the main, the cows going to the butcher should have gone there long ago. This was the belief expressed by Colonel George Gue at one of the recent sales, when he declared:

"The North Portland yards are full of dairy cattle, but among them you will not find any high producers. They are scrubs, and won't even make good sausage."

Superintendent McGee, of the North Portland yards, confirms this opinion.

"There are not many more cows going through here than is usual at this time of year," he commented. "And as to the ones that are being sold—go out and see for yourself; when a good dairy cow does come in here, she is resold for dairy purposes."

A dairyman who was sitting in the superintendent's office at the time this remark was made, nodded.

"Ninety-five per cent of these cows have been boarded at a loss by the farmer who owned them," he said.

An inspection of the stockyards confirmed these verdicts. There were plenty of so-called "dairy cows" in the pens, but practically all of them were obviously scrubs, constitutionally unthrifty and unproductive. Viewed from this angle, the severe competition for labor and the fruits of labor which the present world situation entails is bringing about much good.

## DEHORN THE COWS?

### Sometimes, but Not in All Cases.

The problem of dehorning cattle is one on which all authorities are not agreed, but if properly done the dehorning process in many cases will result in improvement. It is probably better to dehorn the calves than to wait until maturity, but if a cow is particularly troublesome in the herd, as they are occasionally found to be, they probably will suffer less from having their horns removed than the other members of the herd will suffer from allowing them to remain.

Dehorning should never be done hastily or without due care. It is dangerous for one to remove horns of a mature animal unless he knows how to do it, and under no circumstances should the operation be performed in very cold or in excessivly hot weather. Veterinary authorities should be consulted if dehorning is contemplated.


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In these days of high prices for dairy products, the "poor milker" is more than ever a liability.

But before you sell the cow that is not producing well, try to improve her condition. Her milk value is much greater than her meat value.

Most poor milkers are non-productive because of some defect of health, which can be quickly remedied by intelligent treatment.

Kow-Kure is a medicine that acts quickly on the organs of digestion and milk production. Its widely known tonic and curative qualities have made it the standard cow medicine for the prevention of disease and the treatment of Abortion, Barrenness, Retained Afterbirth, Scouring, Lost Appetite and Bunches.

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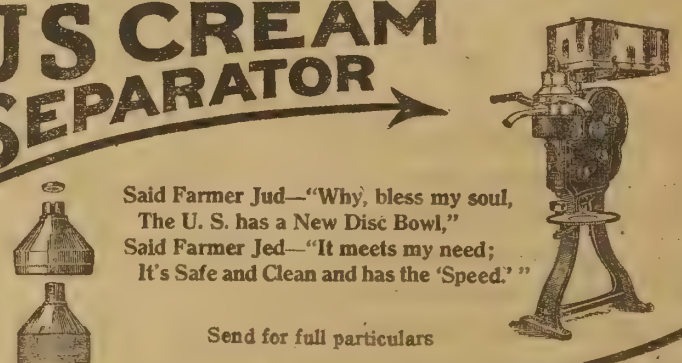
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LIVE STOCK NOTES

Write to the Editor

E. J. IDDINGS, Editorial Contributor.

# Feed to Make Pork

"Why fatten hogs with corn and wheat when each of the following combinations will produce 100 pounds of pork?" is the pertinent question when reading over the following feeding summary made by Professor Fjeldsted of the Oregon Agricultural college:

1. 470 pounds barley, ground.
2. 400 pounds barley, ground, plus 20 pounds digester tankage.
3. 332 pounds barley, ground, plus 350 pounds skim milk or butter milk.
4. 246 pounds barley, ground, plus 123 pounds middlings, plus 220 pounds butter milk or skim milk.
5. 236 pounds barley, ground, plus 118 pounds middlings, plus 511 pounds garbage.
6. 320 pounds barley, ground, plus 160 pounds middlings.
7. 252 pounds barley, ground, plus 126 pounds middlings, plus 30 pounds digester tankage.
8. 209 pounds barley, ground, plus 209 pounds middlings, plus 20 pounds digester tankage.

The following combination should be kept before the hogs at all times:

One hundred pounds slacked coal or wood ashes, four pounds air slacked lime, two pounds common salt, one pound epsom salts.

Mix thoroughly and sprinkle over the combination the following solution:

Two pounds copperas dissolved in one quart boiling water.

# Percheron Society

At the annual meeting of the Percheron Society of America recently, President White in his opening address said that it is time for optimism, not pessimism, in the horse business; that the breeding of horses has been curtailed materially in the last few years, while the demands on our horse stocks have been greater than ever. Demands for food and for meat animals have reached unprecedented heights. These grain foods, and forage and grain, with which to feed meat animals, must necessarily be produced from the soil; and in tilling the soil efficiently no power unit has yet been developed which would equal the draft horse.

He urged all breeders to hold fast to their good stock, and exert themselves to produce more good Percherons, which will be urgently needed in the future as seed stock from which to build up our ordinary farm horses.

Secretary Wayne Dinsmore, in his annual report, directed attention to the great growth of the society in the last seven years. Seven years ago the society had about 2850 members and reserve funds around $34,000. In seven years the membership has increased to approximately 9000 breeders, and the reserve funds, in securities, are now in excess of $106,000. More animals have been recorded in the last seven years than in the entire 34 years preceding, eloquet evidence of the steadily increasing popularity of Percherons. He reported that in spite of the pessimism prevalent in some quarters, the society has enjoyed the banner year of its history, having handled more registrations and transfers than in any past year. Ten thousand five hundred and eight registrations were made during the fiscal year ended October 31, 1917; 10,314 of these were American bred, an increase of 1410 registrations in American bred animals—or a 15 per cent gain.

In the election of directors, E. B. White or Virginia, W. H. Butler of Ohio, and H. J. McLaughlin of Nebraska were elected for the ensuing three years.

In the election of officers by the board of directors immediately following the stockholders' meeting, E. B. White was reelected president; W. S. Dunham, now serving as a captain in the United States army, was elected vice president. The election of a treasurer was postponed for 24 hours. Wayne Dinsmore continues as secretary. W. S. Corsa was elected to represent the Percheron society on the National Society of Record associations.

# Veterinary

Dr. S. B. Nelson

**Cow Pox**—I bought a cow that has what seemed to be sore teats caused from the calf sucking, but have been unable to heal them. There seems to be lumps just beneath the skin on her udder just at the base of the teats and a scab forms over these. The cow that stands next to her in the barn seems to be getting the same thing on her udder. When I first noticed it I thought she had been stung, but the swelling has gone down now, leaving it just like the other cow.

H. B., Hillsboro, Ore.

Your cows are affected with cow pox. Milk your two affected cows after you have milked all the well ones. Wash the udders of all the cows with a one per cent solution of lysol both before and after milking. This is a valuable preventive against the spread of the disease. After milking the diseased cows, apply a little of a benzoated zinc oxide ointment to the ulcers on the teats and udders. It takes from two to three weeks for the disease to run its course.

**Proud Flesh**—I have a horse that has a large growth on the hock joint caused from a wire cut over a year ago. He is not very lame. Is this proud flesh.

A. H.

Cle Elum, Wash.

It is quite possible that the large growth on the hock joint is composed of proud flesh. It may be that it is a special tumor of some kind. You might try the application of either dried alum to the part or sprinkle the part with arsenic. The latter is not the preferable treatment, as it is very painful. It would be much better, however, if you could have your local veterinarian see it and make a definite diagnosis from personal examination and then give you advice.

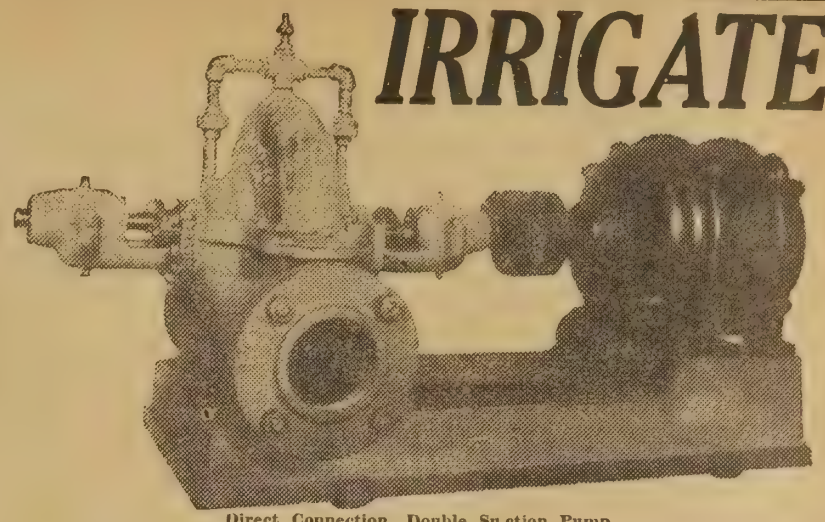
**Testing for Tuberculosis**—What is the state law for testing cows for tuberculosis? Does it hurt them for beef if they have had tuberculosis?

S. D. R., Ocosta, Wash.

The state of Washington through its commissioner of agriculture at Olympia will test cattle for tuberculosis at the expense of the state under certain conditions. Write to the commissioner for detail information regarding their regulations.

Generalized tuberculosis or where two organs are affected or where one organ is badly affected would cause the condemnation of the carcass for food. A carcass affected very slightly or with a small local leison of an organ may be passed for food under careful inspection. The passing of carcasses for food is based upon certain definite regulations issued by the bureau of animal husbandry of the U. S. department of agriculture for the guidance of their inspectors.


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Among the consignors are the Allen Cattle Co., Colorado Springs, Col.; David Warnock & Sons, Loveland, Colo.; Rapp Bros., St. Edward, Neb.; Carpenter & Ross, Mansfield, O., and others of similar reputation.

The cattle are of strong ages, best of scale, bone, quality and colors and drawn from established herds throughout various middle western states. They will be ready for inspection during the entire show week.

The sale will occur in the Livestock Show Pavilion at 9:30 A. M.

Catalogs ready for distribution early during the show.

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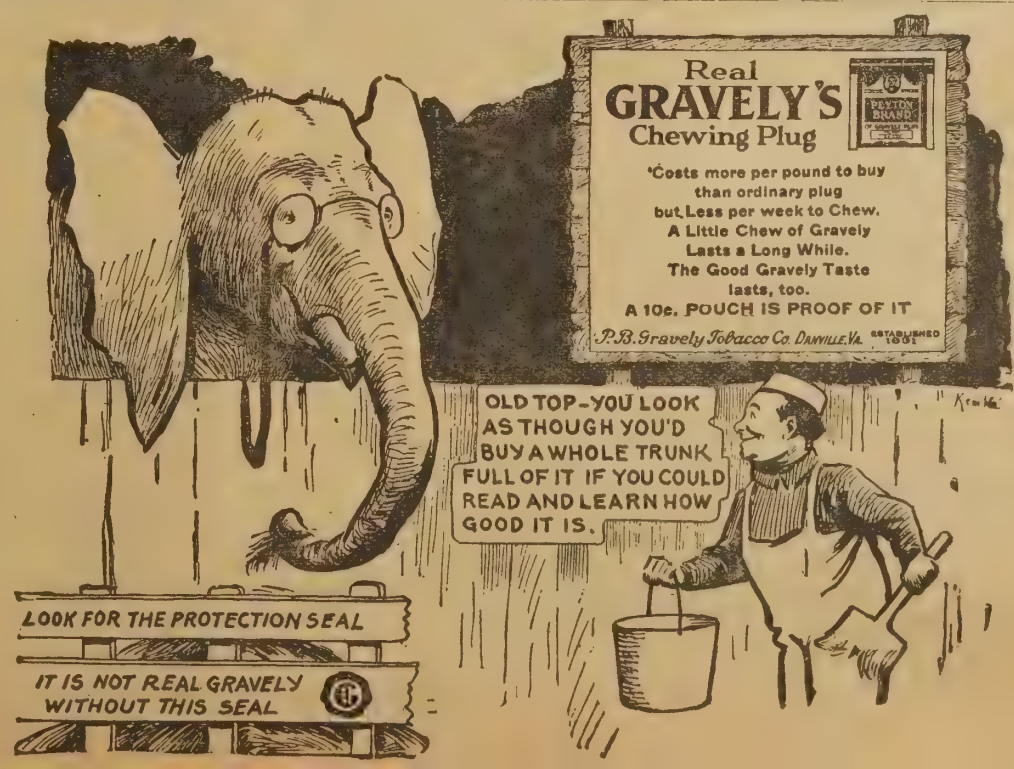
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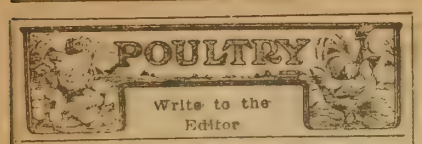
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JAMES DRYDEN
Editorial Contributor

# Tried Cheaper Feed

To the Editor: As I am one of your patrons and much interested in your valuable paper, I will write a few lines on the poultry industry which perhaps you will consider worth printing.

I have been raising chickens in a small way for several years and experimented to some extent. I had 36 hens this summer; I kept them shut up in park from May 15 to November 15. Now, I hear many complaints about chickens not laying. I didn't try to raise many chicks this season on account of the high price of feed, only hatching 38, giving me 16 pullets. My 36 hens have laid since December 1, 1916, to December 1, 1917, 4841 eggs, and have received $154.48. Now, the eggs used in the family have not been charged up nor any account made of them, that is, in a financial way, using the eggs as we needed them.

The high price of wheat staggered me some and I commenced to think that I would have to dispose of them. I finally concluded to try a cheaper feed for a month and feed rolled oats and shorts in equal parts mixed into a stiff mash, feeding three times daily. I have fed no wheat since May 28 until November 1. Since that I have fed both corn and wheat in order to have them in good condition for the winter. Expenses for the year ended December 1, 1917, are $91.93, leaving me a profit of $62.85. I consider that pretty fair for 36 hens. Of this expense $2.25 was for repairs on house. My flock are White Leghorns and Minorcas.

J. H. D.

Hillsdale, Ore.

# A Boy's War Ration

To the Editor: I am a 12-year-old boy, a reader of the Farmer, and the poultry department absorbs my interest. Would your please tell me how to feed old chickens for profit when I have the following to give them. Shorts, bone, potatoes, beef scraps, corn, oyster shell and good straw in which to feed it? The chickens sing all the time. I just cured them of the roup, but lost two Rhode Island Reds. If possible I would like to feed them about 8 a. m. and 5 p. m. How much would I have to feed to get eggs and lots of them. They don't like to scratch if they can get out of it.

F. V. D.

Leavenworth, Wash.

If fed in a right way the feeds mentioned will make the hens lay fairly well. I would suggest the following method: Boil the potatoes and mix them with shorts, leaving a little of the water the potatoes were boiled with and mix as much shorts in as the moisture will take up and make a fairly crumbly mass. Salt it at the rate of about an ounce a day for 100 hens. Feed this about 7 o'clock in the morning. Eight is a little late. Give them all they will eat up in half an hour. If you are going to school and can not feed it later than 8, throw a little corn in the straw and cover it up so they will have to scratch for it. They should eat of this mash about an ounce per hen a day, weighed before the water is added to it. The morning feed of corn should be fed at the rate of about a pound for 20 hens. Just enough to keep them exercising in the straw for an hour or two. Five o'clock is too late to feed them corn or whole grain during the winter. It is getting dark about that time. They could not see to eat and they will not get the exercise they need. In midsummer 5 o'clock would be all right. If it is not possible to feed them about 3 o'clock feed them between 12 and 1 o'clock. Cover the corn deep in the straw. The straw should be about 10 inches deep and should be renewed often enough to keep it clean and dry. Plenty of good, dry straw is a fine help in the egg-making business. If no feeding can be done between 8 and 5 o'clock better feed the mash at 5 and the corn at 7 or 8. Give about a pound to seven or eight hens. Then give them all the mash they will eat up at night. Go back in half an hour and take away any that is left. Be sure they get all they will eat. Keep a hopper of meat scrap before them all the time, also a box of the bone. Never let the hopper get empty. There should also be oyster shell where they can help themselves at will, also grit. Charcoal is also a help. Green stuff should also be fed, unless they have range where they can get it in the fields. Keep them busy and give them all they will eat of the above, and they will lay eggs—providing always they are of the laying kind. Don't forget the water. Then another thing, feed regularly.

J. D.

# Tuberculosis; Soft Liver

To the Editor: Will you please tell how one is to know when fowls have tuberculosis? What is the matter with a fowl that has a soft liver?

MRS. M. P. Linnton, Ore.

Tuberculosis fowls are usually thin in flesh. After the first symptoms of droopiness appear they may live two or three weeks, during which time there is a gradual loss of flesh; sometimes a diarrhoea and sometimes lameness. However, these symptoms are not a certain indication of tuberculosis because fowls lose flesh, go lame and have diarrhoea from other causes. If these symptoms are observed a postmortem examination should be made, for it is only in this way that one can be certain of the disease. The liver is usually affected, and there will be yellowish spots, more or less numerous. The intestines are also frequently affected, showing many small tubercular growths. When a characteristic case is once seen there will be no difficulty afterward in identifying the disease. In some cases, however, the symptoms will not be very plain and only a bacteriological examination will determine whether or not the germs of the disease are present. The liver is often enlarged, due to the growth of the tuberculosis spots.

A soft liver may be caused by congestion and inflammation. It may also be due to wrong methods of feeding and care. Fowls that are heavily fed and have little exercise frequently develop this condition of the liver.


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**20 Years Successful Experience**

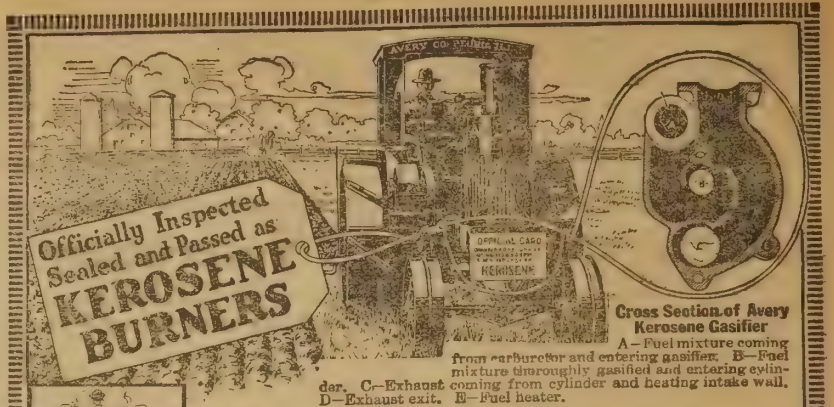
SURE HATCH has made thousands of people large, steady, sure profits in the last 20 years. **Sure Hatch** owners never buy any other make. Why experiment? Learn now how others have profited with the dependable Sure Hatch.

**SURE HATCH**

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**SURE HATCH INCUBATOR CO.**
Box 60 Fremont, Neb.




# A Wonderful Invention

## Avery Gasifier—Turns Kerosene Into Gas

WE have discovered the way to burn kerosene more successfully than it has ever been done before in a tractor. Avery Tractors burn *all* of the kerosene instead of wasting part of it on account of it not being fully vaporized. Avery Tractors burn kerosene so successfully that we are able to use the lubricating oil over and over again instead of using it only once and then wasting it. Avery Tractors don't just run on kerosene—they burn *all* of the kerosene.

Avery Tractors are equipped with double carburetors. The motor is started on gasoline and when it warms up you pull the lever and switch over to kerosene without having to make a single adjustment of any kind.

But while a carburetor will mix gasoline with air and form a gas, no carburetor has as yet been designed which will successfully handle kerosene. We accordingly place on each cylinder head of an Avery Tractor our Duplex Gasifier, which takes the mixture of kerosene and air as it comes from the carburetor and so reduces the particles of kerosene and mixes them with the air as to form a gas that burns more successfully than kerosene has ever been burned before. Avery Tractors are the only tractors with double carburetor and duplex gasifier fuel system.

**The 1917 National Tractor Demonstration proved Avery Tractors to be real kerosene burners.**

The rules of the demonstration were that a tractor which burned kerosene was allowed only 5% as much gasoline as kerosene for starting. Avery Tractors did more.

—They burned kerosene without calling for any more gasoline for starting during the entire week than the 5% allowed for the first day's filling of kerosene.

—They burned kerosene without a lot of black smoke coming out of the exhaust.

—Without kerosene passing the pistons and cutting the lubrication—the oil in the crank-case did not have to be changed.

—A couple of sizes Avery Tractors even burned distillate.

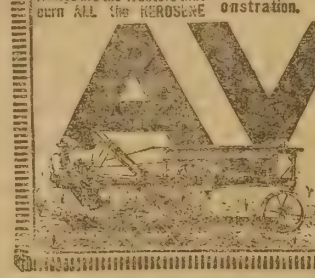
**Get all the Facts** There is a size Avery Kerosene Tractor to fit every size farm—six sizes, from 5-10 to 40-80 H. P. There is also a size Avery Tractor Plow and a size Avery Thresher to fit every size tractor. Write for a free copy of the new 1918 Avery Catalog and get *all* the facts. Address

The official cards used at the 1917 National Tractor Demonstration.

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# VEGETABLES




## Grow More During 1918

## Seed Annual

off the press soon.

**Send for It Now**

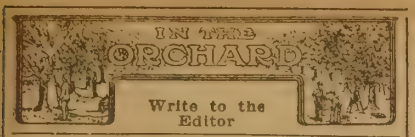
Ask for No. 77.

**Spokane Seed Co.**

"Diamond Quality Seeds."
Spokane.

**HIDES**
WOOL · PELTS
FURS · TALLOW

SHIP TO US
NO CARTAGE NO COMMISSION
HIGHEST CASH PRICES PAID
PROMPT RETURNS HONEST WEIGHT
WRITE FOR PRICE LIST AND SHIPPING TAGS
HIBBARD, STEWART CO. INC.
SEATTLE
BE SURE AND MENTION THIS PAPER




GRANVILLE LOWTHER
Editorial Contributor

## Selecting Varieties

In the planting of an orchard, or in top-grafting an orchard, it is of great importance to select varieties that will bring high prices in the market, that will bear heavily, bear every year, and therefore yield good profits above the cost of production.

Suppose the land on which the orchard grows is valued, when the orchard comes into good bearing, at $1000 per acre. Interest on this amount at 7 per cent is $70 per acre; on 10 acres, $700. We will suppose the average cost of irrigating water to be $1.50 per acre on 10 acres, $15. We will place the taxes at $7 per acre, on 10 acres, $70; we will estimate the cost of food for team, depreciation of the value of team, wear and tear of machinery, harness, etc., at $25 per acre, or for 10 acres, $250. This makes a total of $103 per acre, or $1030 on 10 acres. Now, suppose that the orchard yields 650 boxes of apples per acre, or 6500 for 10 acres. This will place the cost per box at 16 cents; then suppose we add the cost of spraying, labor and irrigating, picking, assorting, packing box materials, boxing and hauling to market. We have, according to general estimates, in these items of expense, about 47 cents per box. This, added to the 16 cents per box, which includes interest on land, water, taxes, etc., makes the cost of producing a box of apples 63 cents. The government estimates place it at an average cost of 79 cents per box. Generally the interest on land, taxes, etc., are not counted, because it is estimated that it furnishes the grower a home, a profitable place to work, etc.; but we estimate it because our purpose is to show the value of the selecting of good varieties instead of poor.

Suppose, then, an orchardist grows varieties of apples that sell for $1 per box. He has had interest on the money invested, has had pay for his labor, a place to live and work and 37 cents per box net profit, or $2405 on 6500 boxes.

Suppose he produced apples that yielded $1.50 a box; he has an additional net profit of $3250 with perhaps less than $250 additional expense.

Suppose he gets $2 per box; he has an additional net profit of $6500, or a total profit of $8900. Now, the difference between $2405 net profit and $8900 net profit is intensive farming, and the selection of good varieties.

Again, suppose he grows the varieties that bring the highest prices, but grows them in such a manner that one-third of them are not marketable on account of lack of cultivation, lack of proper irrigation in countries where they irrigate, lack of proper spraying so that he has a great amount of scale, codling moth and other insect pests, or lack of thinning and pruning.

Suppose there comes a reactionary period, bad marketing conditions, or other unforseen events that depress prices as during the last year. In such a case the man with poor varieties has no profit and will probably have a loss.

G. L.

## Understanding the Tractor

### Strains Should Be Avoided.

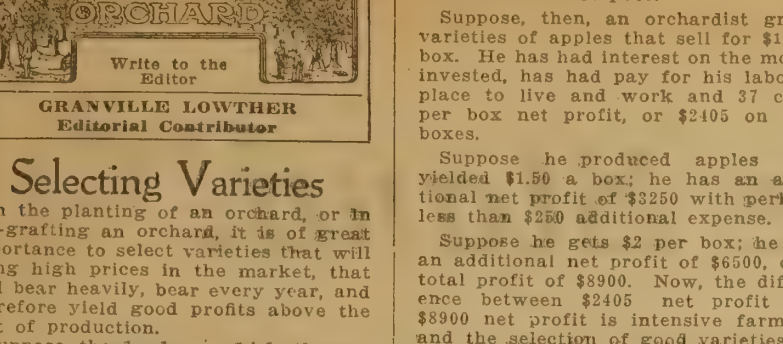
No form of machinery on the farm is subjected to more severe strains than the tractor. Besides the heavy draft work it must do on the drawbar, it must also propel its own weight over uneven ground and in constantly changing positions. To bear up under this strain the tractor must be made exceptionally strong in all its working parts.

Most of the good tractors now in the market are equipped with the four-cylinder, four-cycle type of engine, with the oiling system incorporated in the crank case. The space for water for the cooling system should be ample, or even generous in size. Crank shaft and bearings should be studied carefully—this being of much greater importance than in the case of engines designed for lighter work. Don't get a tractor with an engine that is too powerful for it. Sufficient power for the work you wish the tractor to-do—with a reasonable reserve—is a vital thing to look for in a tractor engine.

A too powerful engine means strain and weakness, and in its way is worse than an engine that isn't powerful enough. Study well the engine of the tractor before you buy, just as you would examine a horse's teeth and joints.

Study the clutch, too, because this regulates the application of the power to the work. The life of a tractor depends very largely upon the clutch and its operation. To turn the full power of the engines, operating at top speed, suddenly loose against the transmission of a tractor will either strip the gear wheels of their teeth or prove a tremendous strain upon both engine and tractor connections. It takes a good deal of power to bring a few thousand pounds of metal into action and it is the mission of the clutch, properly handled, to effect this work without undue suddenness. Most clutches and the pinions they carry to engage the transmission gear are not fixed upon the main shaft of the engine, where they usually run, but only revolve with it when the toggles force the clutch blocks out firmly against the inside of the belt wheel's outer rim.

In next week's issue we will go briefly into the subject of the transmission system of the tractor.



## Can the Stranger Learn?

It is often a question whether the "newcomer" can learn the business of fruitgrowing successfully. He says, "there is so much to learn that I hesitate to undertake it." The man who feels that way will learn. The man who will not learn is he who knows nothing of what is to be learned, or the "old-timer" who, because he has "been in this country a long time," knows all about it.

As a rule, the poorest orchardists are the "old-timers." There are a few, very few, honorable exceptions. The best orchardists are the men from the east—from the cities, from the professions, or young men from the colleges. The men from the east know they have it all to learn, and study it. The men from the professions and colleges put brains as well as muscles into it, yet some of the saddest failures I have seen have been men from the east, educated, refined, cultured and industrious. These men do not easily adapt themselves to new environments. Some men who ought to have succeeded have been young men who did most of their spraying with beer and their smudge pots were pipes. They farmed around the hotel bars and pool rooms, expecting to pick gold nuggets off the trees and sell them for enough to enable them to live lives of indulgence while irresponsible hired men did the work.

G. L.




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Twelve Million Feet of Lumber for every purpose at prices that defy competition! Every lot an exceptional value. Don't buy a stick of lumber until you get our prices. Just imagine! Genuine Red Cedar Bevel Siding at $7.95 per 100 0feet. Cedar Drop Siding at $13.60 per 1000 feet. Shiplap at $14.00 per 1000 feet. 2 x 4 Studding at $12.95 per 1000 feet. Vertical Grain Flooring at $22.00 per 1000 feet. Everything subject to prior sale—first come, first served. Don't wait for prices to go higher.

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Cream-Saving Machines



IF you are still setting your milk and skimming by hand, you are losing anywhere from one-fourth to one-third of your cream. If you are using a separator, and it is not one of the best, you are still losing an amount of cream that would surprise you if you knew it. Every farm loss or leak that can be stopped this year should be stopped. Buy a **Lily** or **Primrose** cream separator and stop the cream loss.

Don't imagine that cream left in the skim milk will fatten pigs and calves faster. It has been proved scores of times that stock thrives as fast on warm separator skim milk, when a little meal or flax replaces the fat. Cream in the skim milk is dead-loss cream!

**Lily** and **Primrose** separators get that cream. We can prove to you that they get it all, except about one drop in each gallon.

Besides that, they are well-known as simple, easy-running, easily-cleaned machines that last and do the same good work year after year. Buy a **Lily** or **Primrose**—it will pay back its cost in cream you may now be losing. See the local dealers who handle these separators, or, write us for catalogues.

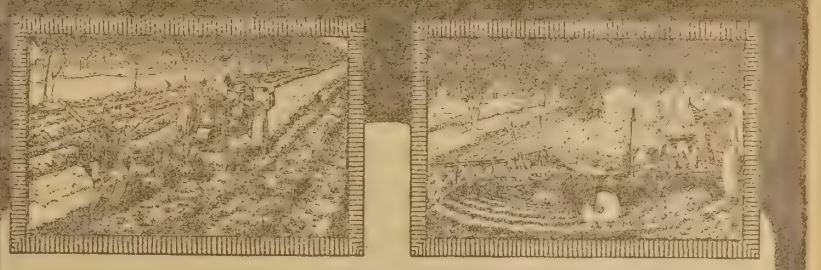
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Send For Our Tractor Book

THE Bean TrackPULL Tractor—6 h.p. at drawbar—cultivates from ten to fifteen acres or plows from four to seven acres in ten hours, *without getting tired* like a team. It plows and harrows as *close up in the corners and as close to vines and trees as a team.*

In orchards it passes under branches only four feet off the ground. It pulls instead of pushes itself along. It "gees" and "haws" out of holes and soft places just as a team will do. Than it turns clear around in a ten-foot circle (5-foot radius) and pulls with its full power on the turns.

When it isn't at work in the field it runs stationery machinery up to 10 horse power.

The Bean TrackPULL weighs less and costs less to run than wheel-type tractors of same power. And it does things no other tractor can do like turning clear around in a 5-foot radius and pulling with full power on the turns, because of invaluable patents. Don't make a mistake. Don't be sorry, too late, that you didn't get a Bean.

Write now for the *free book* that tells all about it. Why spend 2½ hours a day in simply *caring* for horses when a *tractor will save* that time. You don't need more *land* to increase your earnings if you get the right kind of tractor. Send the coupon now. Learn what you can do with a Bean TrackPULL on your place.

BEAN TrackPULL Tractor



Bean Spray Pump Co.
754 W. Julian St.
San Jose, California

Please send Tractor Book with full information about the Bean TrackPULL Tractor.

Name.....
Street.....
City.....
County..... State.....
No. of acres..... kind of crops grown.....

# "United We Stand!"

THE main reason for the purchase of War Savings Stamps is because your country is at war.

Your country needs every penny which every man, woman and child can save and lend, in order to feed, clothe, arm and equip the soldiers and sailors of America and to win this righteous war in defense of American honor.

We today have an opportunity for service such as never before has been given to the rank and file of Americans. It is a service that must be shared by all who share the blessings of this great free land and who owe allegiance to its flag. America has taken up the greatest burdens that can come to the richest, strongest nation on earth. All of us, farmers, business men, professional men, women, boys and girls—all who are, first and last, Americans, must carry America's burdens and perform America's tasks. In us is America's strength and wealth. In us lies America's hope of victory.

If we are to win this war we must win it as a **United** People. The savings of all are necessary to hasten victory. **War savers are life savers.**

"The three things needed to enable the United States successfully to terminate this war are **money,** men and transportation," says the Secretary of War.

A dollar from each of a million men is far mightier than a million dollars from one man.

War Savings Stamps provide the means of enlisting the savings of the many in the service of our country.

Starting with a $4.12 War Savings Stamp, or even a 25c Thrift Stamp, every one of us can help to accumulate money for our country and at the same time teach ourselves and our children a lesson in thrift that will influence America for generations to come.

For War Savings Stamps GROW in value. The stamp you buy this month for $4.12 will be worth $5 on January 1st, 1923. The government guarantees its value.

With the first stamp you buy you will get a War Savings Certificate which has 20 spaces for stamps. When filled it is a $100 Government Bond, payable on January 1st, 1923. If you buy the stamps in January that Bond will cost you just $82.40. That is interest at 4 per cent compounded quarterly. No red tape, no worry, the certificate is yours. Safer to keep than money, because it is not transferable.

Buy all the stamps you can during 1918. As soon as you have filled one certificate, put it away and start another. You couldn't make a better investment, and should you need the money before maturity you can get it back at any time through your postoffice.

Thrift Stamps are 25-cent stamps for those who find it easier to begin saving with that amount. With your first Thrift Stamp you will be given a Thrift Card which has 16 spaces for stamps. When filled, this card is worth $4 in the purchase of a War Savings Stamp. Thrift Cards bear no interest; turn them into Savings Stamps as quickly as you get them filled.

**Help the government and help yourself at the same time. This is a service in which all may share.**

**W.S.S.**
**WAR SAVINGS STAMPS**
**ISSUED BY THE**
**UNITED STATES GOVERNMENT**

You can get War Savings Stamps and Thrift Stamps from any bank or other authorized agent, from the Postoffice, or right at home from your R. F. D. carrier.

## Today Is the Day to Begin

## WAR SAVINGS COMMITTEE OF WASHINGTON

**Daniel Kelleher,**
**State Director, Seattle.**

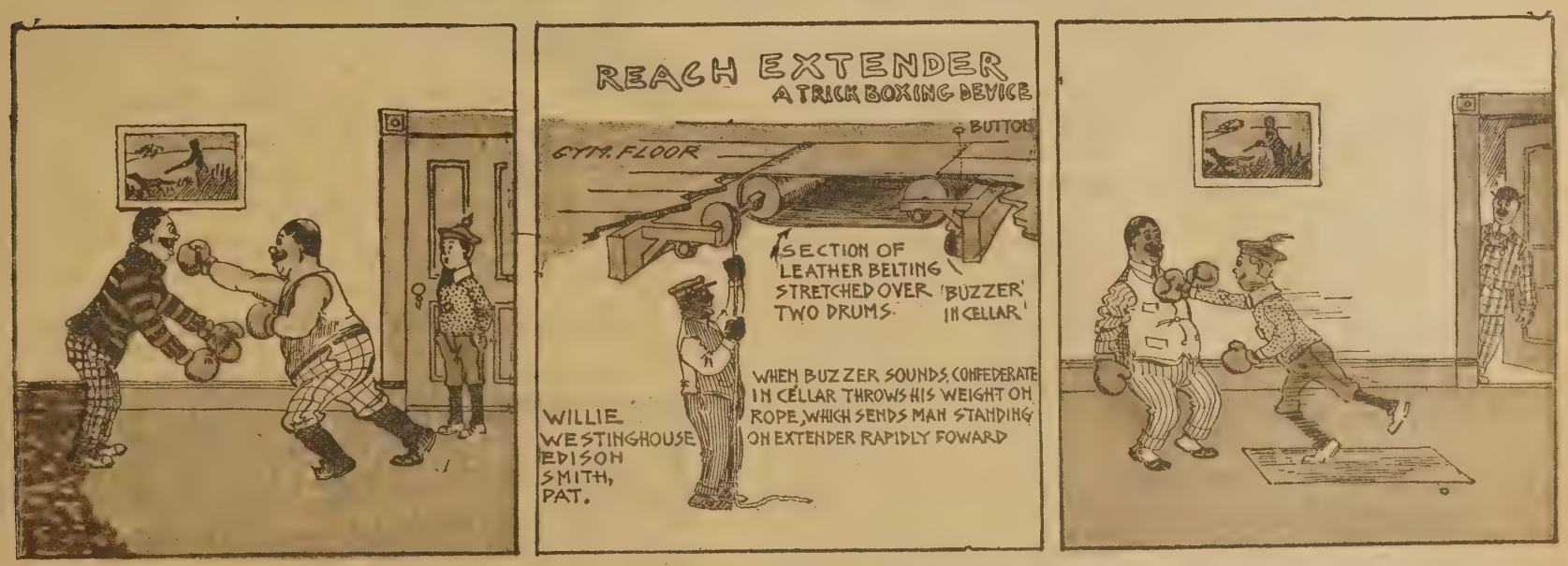
**D. W. Twohy,**
**Vice Chairman, Spokane.**

(This space contributed by O. B. Williams Company, Sash and Doors, Seattle.)

# KATE AND KARL MEET A BEAR IN THE WOODS




# THE BOXING INSTRUCTOR WAS TOO QUICK




DEAR TOMMY: The boxing instructor is always making fun of Reggie's short reach, so I fixed up a scheme like this. We expected to fool Professod Slug, but he caught us trying it out. He pretended not to know about it, and when Reggie started for him he just ducked. It was lucky there was a big chair in the room! Yours, etc., WILLIE.



# Peace Move Balked

## *German Terms Do Not Suit Russia*

There is apparently little prospect of peace between Germany and Russia. When Germany made her offer of peace in definte form last week the Russian delegates to the conference balked, declaring that the terms offered were grossly inacceptable. The terms showed beyond a doubt that Germany still plans to make this a war of conquest, and that she proposes to retain possession permanently of a considerable portion of the Russian territory. What the ultimate result of the failure of the conference will be is problematical, but it is reported to have caused grave concern in Germany, where it was believed that the bolsheviki of Russia would jump at anything in the form of peace and accept almost any terms that Germany would make. The unhesitating refusal of the Russians to consider the terms startled German authorities. The Russians went so far as to threaten a resumption of hostilities unless more reasonable terms were offered. Further conferences are scheduled and the peace negotiations are expectd to continu indefinitely before resumption of fighting between the Germans and the Russians actually takes place.

### German Soldiers Revolt.

Reports from the Russian battle front are to the effect that about 25,000 German soldiers have revolted against their own army and have actually been making war on their fellows. It is claimed by them that the terms of the armistice between Germany and Russia prohibit the transfer of soldiers from the Russian front to the western front, and that they were ordered to the western front. They refused to go, according to the report, and entrenched themselves for warfare if force was brought to bear.

### Allied Terms of Peace.

One of the most powerful and open statements of the allied governments relative to the terms upon which peace would be considered was made in an address by Premier Lloyd George last week. He declared that there was no desire on the part of England and her allies to disrupt the German nation, but that Germany had to be conquered and made evacuate all occupied territory. The complete restoration of Belgium, Serbia and Montenegro, he said, would be required. Germany must withdraw from all French, Italian and Rumanian territory now occupied, and in all cases must repair the damages done in so far as such damages could be repaired. It was not a definite statement that indemnity would be required, though it apparently meant a reparation closely allied to indemnity. Perhaps the most significant portion of the premier's statement was that England was determined to stand squarely beside France until the latter country regained the provinces of Alsace-Loraine, which were taken by Germany at the close of the war of 1871.

### Government Controls Railroads.

The government is rapidly assuming full control of the railroads under the proclamation of the president of 10 days ago. The lines will continue to be operated in the main by the same officials and crews as at the present time, and the high officials are cooperating heartily with the government in making the movement a success. It is now announced that, in order to give more freight service for the handling of foodstuffs and war materials, passenger service will be greatly curtailed. On the eastern lines already a reduction of 20 per cent of the service heretofore given has been announced, and Director General McAdoo has issued an appeal to the people to travel as little as possible consistent with the judicious conduct of their business.

President Wilson addressed a joint session of congress shortly after its reassembling after the holiday recess last week. One of the significant parts of his address dealing solely with the railroads was the suggestion that government control would continue after the close of the war until such time as congress deemed wise to return the roads to private management. There is much talk that the roads probably never will return to private operation again, but will be taken over permanently by the government under complete government ownership. This could be done by payment to the present owners of their value.

### Vanderlip for Cabinet?

Reports are being circulated that Frank A. Vanderlip of New York, prominent in financial circles, is slated by President Wilson for the position of secretary of the treasury to succeed Secretary McAdoo. This is only rumor, and probably results from the recent appointment of McAdoo to be head of the railroads under government control plan as now under way. It is urged that McAdoo will have to give his entire time to the operation of the railroads. Mr. Vanderlip has taken an active part in the floating of the Liberty loan bonds, and is now head of the thrift and war savings stamp campaign of the government.

### Would Help Buy Seed.

Secretary Houston of the United States department of agriculture has called to the attention of congress what he deems a vital need of the farmers in the matter of seed for the coming season's crops. He recommends that an appropriation of $6,000,000 be made at once for the purchase and sale to farmers of seed at cost. Speaking of the matter the secretary said:

"There is urgent and immediate need for at least $6,000,000, and it is probable that an additional sum will be required in the near future," said the secretary. "The seed situation presents many difficulties. Two general areas have suffered severely from drought during the last season—the southwest, including a large part of Texas and a part of Oklahoma, and a considerable portion of the northwest, including large sections of North Dakota and Eastern Montana. These regions represent a large part of the grain producing area of the United States. The seed-corn situation in the north half of the corn belt is more serious than it has been for many years."

### To Buy Farm Loan Bonds.

Recently the federal farm loan board at Washington, D. C., urged congress to appropriate $100,000,000 to be used in the purchase of federal farm loan bank bonds if need be to stabilize the finances of that institution. The lower house of congress has already passed the bill which now goes to the senate for consideration. The land bank board requested the appropriation on the grounds that there are so many demands for money at this time in financing the war that private money may become tied up to such an extent as to jeopardize the bank bond market, which in turn would jeopardize the lending of money to the farmers. The money to be appropriated by the government will not be used except to take the bonds if private capital fail to do so. It is considered specially important that the farm loan bank be maintained at this particular time in full operation as a means of aiding in the production of foodstuffs through farm financing.

### Community Drainage District.

To the Editor of The Washington Farmer: I wish to report the formation of a community drainage district near Marysville in which 10 property owners have all signed an agreement through which they will construct a community main ditch for the drainage and improvement of 530 acres of valuable land for agricultural purposes.

The following men were elected as a board of supervisors for the improvement work. Jeffrey Hilton, E. M. Tompkins and J. E. DeuPree.

The contract for digging of the ditch was let to A. Amundson, who is one of the members of the district.

The Swans Trail district have decided not to vote for a district at this time, but instead all have agreed to put up $5 an acre to improve the old dike, which is in bad repair.

Drainage and diking are very important problems in Snohomish county and practically every farm in the county could be improved by some drainage. Many are putting in their closed drains with the use of cedar slabs. There is more activity in getting poorly drained land into proper shape for next year's crop than ever before. CHESTER C. FARR,
County agricultural agent.
Everett, Wash.

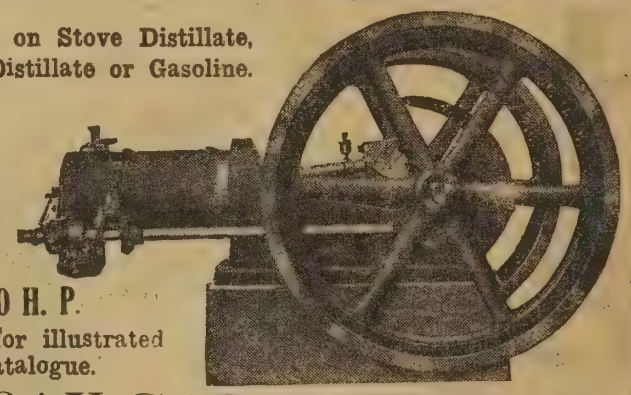
### Can't Sell His Beans.

To the Editor of The Washington Farmer: I raised a few beans last year and I can not sell them. I take them to the stores and I am offered 5 and 6 cents. At the same time I can't buy a pound of beans unless I pay from 12½ to 17 cents per pound. The merchants and dealers say they are waiting for Hoover, but will take long chances at 5 and 6 cents.

Washington has an ideal climate to raise beans, but we can not raise them for 5 and 6 cents per pound at the rate of wages. P. TOWES.
Wapato, Wash.


**DOAK ENGINES Simple, Reliable, Efficient**

Operate on Stove Distillate, No. 1 Distillate or Gasoline.



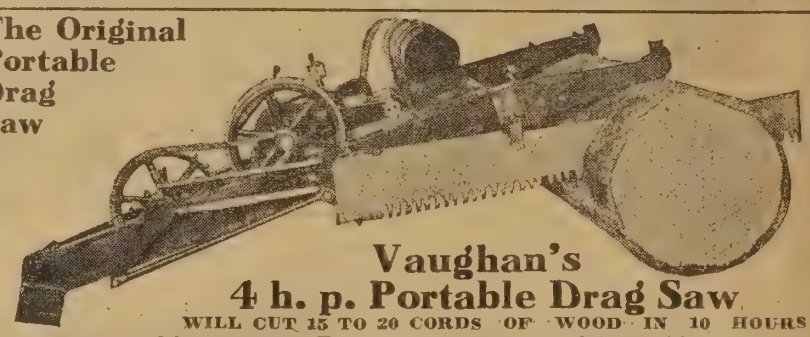
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**The Original Portable Drag Saw**



**Vaughan's 4 h. p. Portable Drag Saw**

WILL CUT 15 TO 20 CORDS OF WOOD IN 10 HOURS

Can be operated by one man. Two men can carry complete machine. 4 H. P. gasoline motor mounted on frame. One gallon gasoline required to cut 8 to 12 cords of wood. Engine can be used for other work without removing from frame. No gears, cogs, belts or pulleys. Friction clutch prevents breakage if saw pinches. Saw makes about 125 strokes per minute. Will cut any size log up to 6 feet. Sprockets and cranks, etc., made of cast steel. All working parts guaranteed against defects in material and workmanship.

Net cash price for complete machine as shown in cut, $150 f. o. b. Spokane and common points. FOR SALE BY

**Washington Machinery & Supply Company**

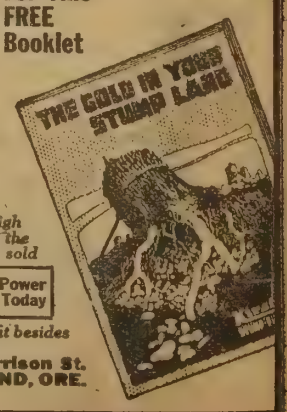
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*Put that slacker land to work. Prices on farm products are high and going higher—get ALL your land working and share in the increased profits. Mr. Jarish, of Oswego, Oregon, just sold the cabbage that he grew on a single acre of land cleared with a Kirstin and he got $150 COLD CASH for it. Your increased production will help win the war and net you a handsome profit besides*

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# Farm Labor Is Military Necessity

(Continued from page three.)

Pullman, vice president; and E. G. Shafer, Pullman, secretary and treasurer, of the 1919 convention which will meet at Pullman at the call of the president.

The board of directors is composed of W. H. Yenney of Walla Walla; S. A. Weipert, Reardan J. H. Roberts, Spokane; George Kunz, Creston; D. S. Wallace, Lewiston, and R. J. Stephens, Spokane.

Guy Wolfe of Moscow, R. J. Stephens of Spokane, and S. A. Weipert of Reardan, were appointed to cooperate with the grain commission in trying to secure elevators, warehouses and bins at interior points to handle bulk grain and to assist the grain commission in handling the grain crop.

Huston McCroskey, the new president, a son of R. C. McCroskey of Garfield, is a practical and extensive farmer and a graduate of Washington State college.

**Dr. Holland's Welcome.**

The convention opened at 1:30 Thursday afternoon with the singing of "America," with all standing and taking part in the song. Dr. E. O. Holland, president of Washington State college, delivered the address of welcome, which was full of power and instruction. He told of the great work the college and the experiment station and the farm extension departments are doing. He assured the convention that its annual visit to the college is looked forward to with pleasure and that "you get no more benefit from the college than the college gets from your presence here and your deliberations." He told of the vast sums spent by the state and the nation for the support of the college and the carrying on of its work, but made the statement that he believes that this state has received, in direct benefits, $20 for every dollar expended on the college and its allied work. He said that 90 per cent of the agricultural problems are solved by the farmers themselves, but that the other 10 per cent solved by the agricultural college is equally as important to the total net results as the 90 per cent that the farmers solve.

**President's Annual Address.**

R. J. Stephens of the Stephens-Smith Grain company, Spokane, president of the association, delivered his annual address, which was chuck full of food for thought and splendid encouragement to the men interested in the growing and handling of grain. He cited the fact that everything must give way to the winning of the war, but pointed out that the raising of a grain crop is equally important with the raising of a great army.

He asked every one to lay aside individual interests and do his utmost to help the United States and its allies in winning the war. He condemned the feeding of wheat to hogs in the Palouse country, but said there is some excuse for this in the Big Bend country where there was much 48 and 50 pound test wheat and wheat that had been frosted and was unfit for milling. He urged that farmers who have hogs to sell their wheat and buy barley to feed them. He stated that hog raising is as important as wheat raising but pleaded for the saving of wheat this year.

**Value of Different Wheats.**

One of the most interesting papers read was that of R. T. Lord, of Spokane, who used a blackboard to illustrate the difference in value of different wheats. He showed that wheat testing but 50 pounds per bushel yielded but 63.8 per cent of flour while wheat testing 60 pounds yields 77.4 per cent, and based on $1 per bushel for 57 pound test wheat, the 50 pound wheat yields but $0.899, while the 60 pound test wheat yields $1.0228. On a basis of $2 per bushel for wheat the difference would be twice as great. In other words with wheat at $1 per bushel wheat testing only 50 pounds would be worth a little more than 12 cents a bushel less than wheat testing 60 pounds and at $2 per bushel the difference in value would be 24 1-2 cents. This table had been worked out by millers and chemists in laboratory and milling tests and is accepted as standard wherever wheat is grown. This shows that the government grades, making 24 cents difference in price between 50 and 60 pound test wheat at a $2 per bushel price, is not far from right.

Mr. Lord showed that when wheat was worth $1 per bushel mill feed (bran and shorts) sold for $20 per ton while now, with wheat at $2 per bushel mill feed sells for only $30 to $32 per ton, showing that mill feed has not kept pace in price advance with wheat.

**Spring Wheat Discussion.**

President Stephens advised using an hour in discussing the best plans for increasing the yield of spring wheat, and this began, but soon developed into a discussion of higher prices and a number of speakers waxed warm in protesting against getting only $2 per bushel for wheat during the war. J. M. Reid of Pullman stated that if "the farmers were only organized as the labor unions are organized they would not stand, for a single minute, to get 66 per cent as much for their wheat (which means their labor) as the farmers of the middle west are getting." This brought R. J. Lord to his feet with the counter thrust that "if the 10,000,000 young men, the flower of American manhood, including my son and the sons of many others here, had organized they might have refused to obey the call of their country to go to the front and sacrifice their lives, if need be, to save democracy and freedom, and we might have had to fight the kaiser's troops on our own shores later or submit to his dictation." Mr. Lord was loudly cheered and the clamor for higher prices ceased.

**Wheat Farm Rotation.**

R. C. McCroskey told of his experience in alternating alfalfa and clover with wheat. He got 43 bushels of wheat from land that had been in alfalfa for several years, and last year (1917), one of the worst crop years this state has known, got 67 bushels of oats from the same land without summer fallowing it. Tillage of summer fallow was discussed interestingly by A. M. Richardson of Pullman. A concert by the college department of music closed the second evening's program, the attendance being large and the music appreciated.

Potato flour as a substitute for wheat flour and a mixture of corn meal with wheat flour was advocated by William T. Harshman, chemist for the Spokane Bakery company, who told how other grains or potatoes may be used in reducing the percentage of wheat flour and still give wholesome bread.

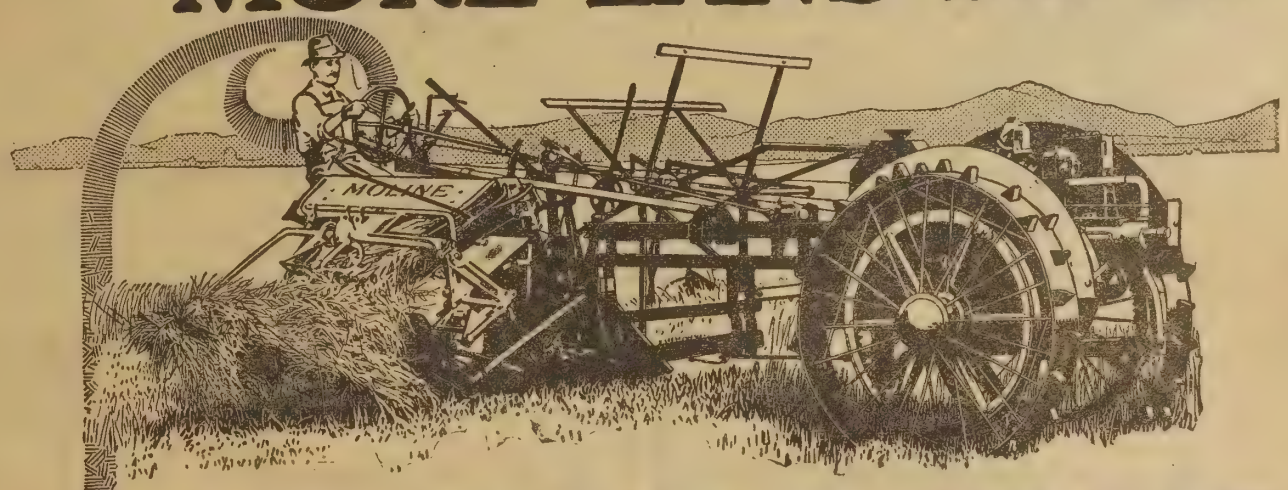
R. J. Stephens, retiring president of the wheat convention, wants it understood that he is not opposing hog-raising, but on the contrary regards pork production as almost equaling in importance increased production of wheat, but he believes that if farmers will use due diligence and care they can have barley for hog feed and save money and produce as much pork at less cost than by feeding wheat. He told of prices at which barley can be secured and urged that farmers raise more hogs, but that no milling wheat be fed to them.

It was brought out in the grain discussion that the college has propagated a new variety of wheat called "Triplet," and that it is a great yielder and a strong smut resister. Professor Gaines will be pleased to give the farmers information about this wheat and small quantities can be secured from the college for seed.

Professor M. K. Snyder of the engineering department of Washington State college, read an interesting and highly instructive paper on the building of grain bins for farmers. His plan calls for a crib bin, made of 2x8 dressed fir or pine spiked with 30 penny spikes, which go through three of the planks, and he gave detailed instructions on the building of such crib bins, their cost and saving to the farmer. He had made a study of the subject and in giving the cost had quoted the maximum in every case, quoting prices on No. 1, fir lumber at $27 per 1000 feet, and adding $3 for hauling. He stated that No. 2 lumber which can be bought for $20 will be almost equally as good.

Professor Snyder's paper will be given in next week's issue of the Farmer.


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One woman or boy operates the Moline-Universal as easily as a man. Miss Ruth Harding of Albion, N. Y., a proud owner of a Moline-Universal, writes: "I have never called a man from his work to assist me with the tractor in any way."

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# UNLUCKY LOOIE IS STILL UNLUCKY




# BOOT GETS AWAY WITH THE PUP—ALMOST



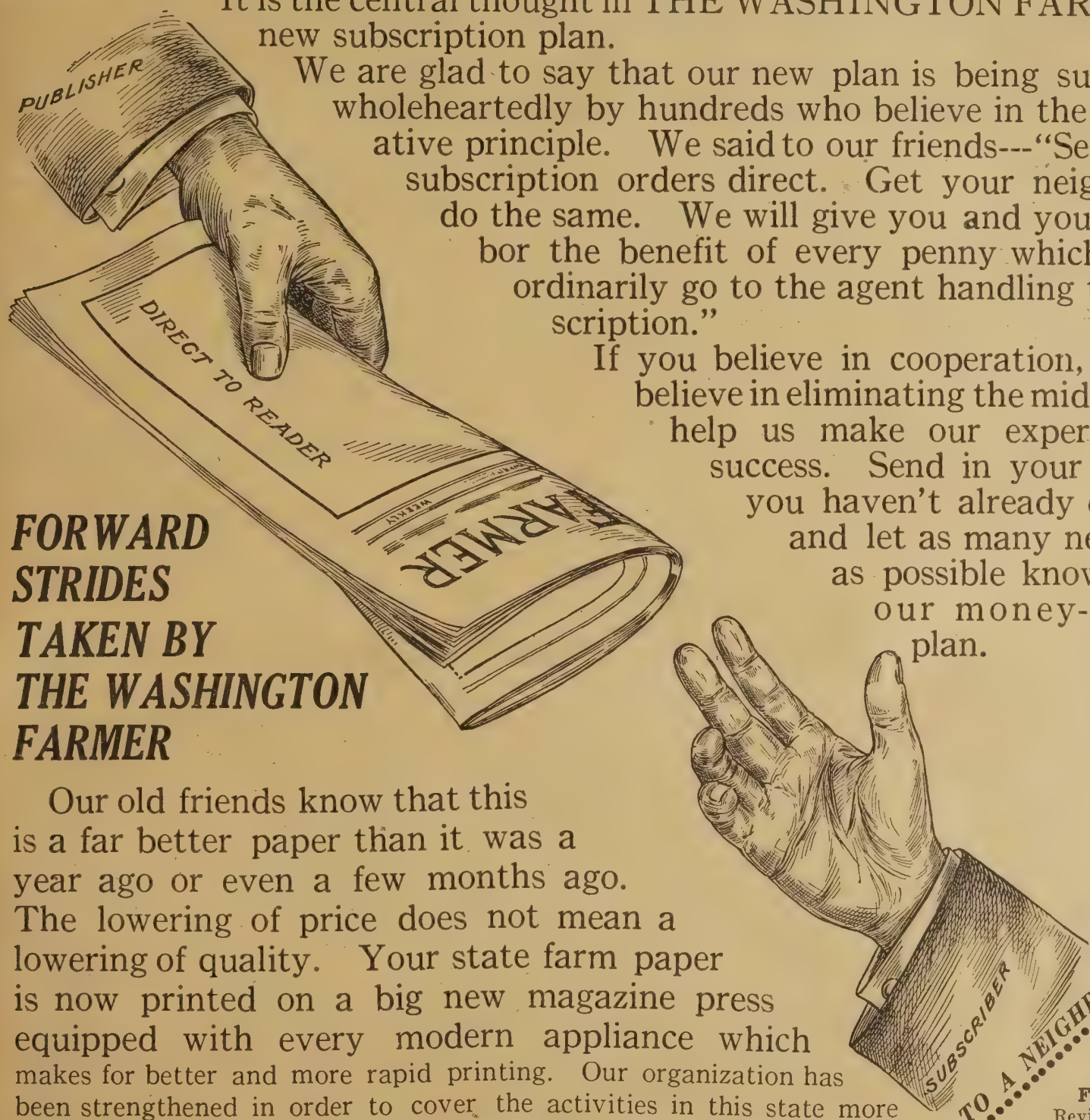
# CUT OUT THE MIDDLEMEN!

That has been a slogan and rallying cry with farmers and farmers' organizations for many years.

It is the central thought in THE WASHINGTON FARMER'S new subscription plan.

We are glad to say that our new plan is being supported wholeheartedly by hundreds who believe in the cooperative principle. We said to our friends---"Send your subscription orders direct. Get your neighbor to do the same. We will give you and your neighbor the benefit of every penny which would ordinarily go to the agent handling the subscription."

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# Magazine Department of The Washington Farmer

## What Is the Law of Mendellism?

### *Great Development Has Resulted From Monk's Discovery*

It is not often that a priest or a monk, dedicated to "Holy orders," and consecrated to the work of the church, has time or even the natural tastes for physical studies and to become so well acquainted with nature as to discover one of her laws and to make his name famous among scientists all round the world. But in the city of Brunn, the capital of Moravia, an Austrian province, Gregor Johann Meandell, experimented in his cloister with garden peas, chickens, rabbits and guinea pigs until he discovered what has passed into history as "Mendell's Law." At the state fair, I met a man who is trying it out on fruits of different kinds, and while he has not gone far enough to announce any definite results, his experiments brought again to mind what seemed to me, when I first read of Mendell's experiments, one of the laws by which all farm crops, fruits, animals and all forms of life may be improved. However, we are treading on ground that may cause us some disappointment if we depend too much upon it. The reason for this I will announce later.

**What Mendell Discovered.**

Mendell discovered that certain characters of one parent would appear in the hybrids of the first generation to the exclusion of the contrasting characters of the other parent. The former he called the dominant, the other the recessive. In successive generations, of the self-fertilized hybrids, the recessive characters appeared, in the ratio of one recessive to three dominants. The recessive continued pure, that is, like its recessive parent. The dominants continued pure dominants on the ratio of one pure dominant to two mixed offspring. In general wherever there appears a pair of differentiating characters, of which one is dominant to the other, three possibilities exist: there are recessives which always breed true to recessive character; there are dominants that always breed true to dominant character, and are therefore pure; and thirdly there are dominants which may be called impure and which on self-fertilization (or inbreeding where the sexes are separate) give both dominant and recessive characteristics. These dominant and recessive forms, products of the third class, give their impure characteristics in the proporation of three dominant to one recessive.

**The Law Illustrated.**

We will illustrate by varieties of strawberries as follows: Clarke's Seedling has a fruit well adapted to our northwest conditions. It is medium in size, roundish to slightly conical, blunt, very attractive, crimson color, flesh red to the core, very firm, well flavored and of good quality.

Parson's Beauty: Are lighter in color than Clarkes' Seedling, flesh varies in color from scarlet to pink salmon, or salmon pink, has prominent greenish seeds extending out on the surface marring its beauty and selling qualities.

Now suppose these two varieties were crossed. According to Mendell's law, in the first generation of offspring if Clarke's seedling were dominant and Parson's Beauty recessive, the proportion would be as one recessive to three dominants.

In the second generation, allowing the strawberries to fertilize themselves the recessives, that is the Parson's Beauty would produce Parson's Beauty strawberries. The products of this generation would never produce Clarke's Seedlings; would never produce dominants.

When the dominants were examined, they were not all alike. There were pure dominants, Clarke's Seedlings, and mixed offspring, partly recessive and partly dominant. That is, they partook of the characters of both Parson's Beauty and Clarke's Seedling. The number of pure dominants would be as one dominant to three mixed. In other words 25 per cent would be Clarke's Seedling, and 75 per cent mixed. Through all the succeeding generations, the pure dominants will produce dominants, and the new variety, if any is produced, must come from the class of impure stock.

In the next or third generation of offspring, the cross breds partaking of the characters of both dominant and recessive, will follow the law of proportions namely, three dominant to one recessive.

In the fourth generation there will be two dominants and one recessive. The process of breaking up into the parent forms is thus continued in each succeeding generation and the same numerical law followed.

Why is it so?

The explanation is supposed to be in the purity of the germ cells—which are the units of heredity and which in the process of fertilization lose their individuality. In the result of cross mating, the young may show but one contrasting pair of parental characteristics. That is it may show the traits of one parent, but not the other. However the traits of the other are latent and may reappear in a succeeding generation. Those appearing are called prepoteat, those not appearing are latent.

If this be true, nothing that has ever appeared as a form of life can be annihilated until the species becomes extinct, for it may be latent and reappear in most unexpected environments.

I was very well acquainted with a man of light complexion, curly hair almost as red as that of the school boy whom his comrades will call "brick top," and who married a woman of dark complexion, black hair, but of pure Caucasian blood. The children were decidedly African in characteristics. When the first child was born, the father was about to obtain a divorce from his wife on the supposition that she had cohabited with their coachman. His father came to the rescue of the innocent life, and told him that the negro blood was in his veins and not in his wife. The husband was the son of a woman one-fourth negro. The father of the child, seeing the child was fair in complexion with light hair, adopted him and he and his wife brought him up as their own. In fact he was the child of the man who adopted him, but not of the woman. In other words the law of latent characters reappearing in succeeding generations runs through all the forms of animal and vegetable life.

**Reasons for Cure.**

There seems to be conflict of authority and perhaps it is true as it often is, that where two or more intelligent persons disagree about anything concerning which they are both familiar, there is truth on both sides because there is a larger truth that includes them both. Or as Herbert Spencer expressed it, they are both right in what they affirm, and wrong in what they deny.

Sir Francis Galton, regarded as one of the best authorities on heredity, claimed that offspring derive one-fourth of their ancestral inheritance from each parent, one-sixteenth from each grandparent, and one thirty-second from each great grandparent.

Charles Darwin in his "Origin of Species" claims that there are certain factors affecting hereditary tendencies and causing variation from the original type. Among these factors are quantity of food, quality of food, soil, climate, action of insects and other causes.

About 25 years ago, certain students of sociology and criminology in studying the laws of heredity in relation to environment, in order to ascertain the effects upon society of the saloon, brothel, bad housing, tenement conditions in the cities, etc., reached the conclusion that there are seven laws of hereditary descent.

The first is direct in which the offspring is like one or the other of the parents.

The second is reversional in which it is like one of the grand-parents, great-grand-parents, or great-great-grand-parents.

The third is co-equal, which maintains the equality of the sexes.

The fourth is collateral, in which it is like one of the uncles or aunts.

The fifth is prenatal in which it is affected by some circumstances after conception and before birth.

The sixth is pre-martial in which it is like the husband of a previous marriage in human heredity, but like the sire of a previous copulation in animals. This is evidently a psychic influence, or is supposed to be. Darwin relates the case of a young filly that was first bred to a buckskin colored horse with a dark stripe across his shoulders. The offspring had the characteristic marking of the dark stripe across its shoulders. The next year she was bred to a horse of a different color, without the dark stripe. However, her colt of that copulation had the dark stripe. Darwin thought it might have resulted from the fact that the first and second experiences affected the mind of the animal so as to cause the marking of the second colt.

The seventh law is initial and is illustrated in certain changes of habit in one or both of the parents. For instance, a man was brought up on a little farm in western New York state, married and had two children, strong, vigorous and that grew up to become good citizens. But after the birth of the two children he removed to New York city, engaged as a worker in one of the manufactories there, became dissipated, drank and indulged the habits common to that kind of life. Two other children were born, neither of which had the strength, physical, intellectual or moral, of the other two.

These sociologists give cases where men have been dissipated early in life, but seeing the bad effects upon their children have reformed and after a certain period of right living the hereditary traits have been improved. This is especially true where there are syphilitic tendencies and alcoholism. This is supported by Darwin's "Variation on Account of the Kinds of Food." This has furnished the opposers of the use of tobacco with their strongest arguments.

It is known to fruitgrowers that iron in the soil will give the apples a deeper color than soil without iron or some other coloring quality. Alkali colors fruits if it is not too strong. These are laws that must be studied if we would make the most out of life.

## SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University)

## How Some Persons "Fake" Illness Without Meaning To



Dr. Hirshberg.

Just where truth ends and "faking" begins in these persons who think they are very sick and are not or who pretend they have a chronic illness which is not present, is not easy to define.

Acute seeming illness is often called "hysteria." It is probably due to some disorders of the glands, because it is associated with an emotional cause. Some kinds of epilepsy are of this emotional sort.

Another example of temporary malingering is "aphonia" or loss of voice due to an emotional "paralysis" of the vocal cords. This is generally called erroneously "nervousness." Certain kinds of suppressed feelings cause this.

These conditions are not "faking." The victim actually undergoes a temporary physical change of some kind, traceable, perhaps, to the thyroid, pituitary or other glands.

It is not a "will to do," but a lack of the will to do what is needed to counteract the symptoms and overcome the loss of physical stability. The patient is not "crooked," hypocritical or insincere, but is merely powerless to correct the twisted quirk into a real equilibrium or agreement between personality and the world.

**How to Distinguish.**

Discipline, education, training, knowledge and public opinion cause a lot of natural appetites, tendencies, inclinations, wishes, desires and motives to be concealed and suppressed. Their natural outlets are jammed with a consequent pressure of these torrents and Niagaras of feeling being turned aside to force their way out in some other direction. This discharge then occurs when there is some form of discipline or habit which prevents the emotions seeking ordinary expression. The potential energy which is not used up accumulates until it compels some kind of unreal, foolish or abnormal manifestation.

Malingering, therefore, is not to be blamed upon the patient whose wishes are clearly beyond control for the time being. Rather public opinion with its crocodile tears and the customs, laws and codes of society which cause hypocrites and concealment, suppression and repression of feelings—civilization socalled, is justly to be blamed.

Sympathy should go out to the "malingerer" and "hysteric," and some sort of resentment should be asserted against the machinery-made public opinion with its lack of human charity.

A workman employed by a public service corporation, which pays half-wages to those injured, suffered some damage to a leg. He became spineless and depressed, and lost interest in most things. He was a member of several sick benefit societies, and came in for something under the workmen's compensation acts.

There were no outward signs or any others to show that he was injured, although he had many "subjective" symptoms—symptoms are the things told of by the patient, signs are what the doctors and the experimental psychologists can find.

**Bring Out Hidden Cause.**

Upon adding up his society benefits, his half-pay and his compensation rights it was found that this man's income was actually greater when sick than when he was at regular work.

Yet the man did not consciously feign. He was unconsciously guided or forced by the obvious rewards into the staet of a malingerer. The overpowering motive of a better reward suspected his ordinary, normal activities for altered ones, just as the hypnotist uses similar suggestive motives to urge the mesmerized subject to carry out the former's will. Of course, the instant the motive is either removed or made to appear openly unworthy the malingerer usually begins to mend. Thereafter he is amenable to ordinary treatment.

## A Handy List

Figures giving the food supplies of the world tell us that in 1918 America will more and more be called on to share with a hungry world what she can spare from her own board. This can be done by substituting other foods not needed for shipping. Sometimes it is hard to think of that substitute. Why not prepare a list to hang on the kitchen cabinet to be used for ready reference when in doubt. Let the list below grow with your experiments.

| Meat Substitutes. | |
|---|---|
| Poultry | Bean loaf |
| Rabbit | Nut loaf |
| Fish | Bean soup |
| Eggs | Milk soup |
| Cheese dishes | Chowders |
| Baked beans | Milk |

| Wheat Bread Substitutes. | |
|---|---|
| Corn bread | Potato biscuit |
| Brown bread | Rye bread |
| Oatcakes | Potatoes |
| Buckwheat cakes | Rice |
| Hominy | |

**DARN THE OLD KAISER.**

My Tuesdays are meatless,
My Wednesdays are wheatless;
I am getting more eatless each day,
My house it is heatless,
My bed it is sheetless,
They're all sent to the Y. M. C. A.
The barrooms are treatless,
My coffee is sweetless,
Each day I get poorer and wiser,
My stockings are feetless,
My trousers are seatless;
My—but I do hate the kaiser!

**Inexpensive Fruit Cake.**

This southern recipe for cake is made without eggs, which is a decided advantage at the present price. Mix together one cupful of light brown sugar, molasses and butter, a pinch of salt, heaping teaspoonful each of cinamon, cloves and ginger, half a nutmeg grated, one teaspoonful of lemon juice and a teaspoonful of soda dissolved in a little hot water. Add two cupfuls of floured raisins, a cupful of currants, quarter cupful of citron cut in small pieces and the same quantity of chopped almonds. Mix all together thoroughly and add one cupful of boiling water and then add flour enough to make it so stiff that it will hold the mixing spoon upright and bake in a moderate oven for one hour.

# All the World's a Stage, and All the Men and Women Merely Players

## America's New Fliers Studying



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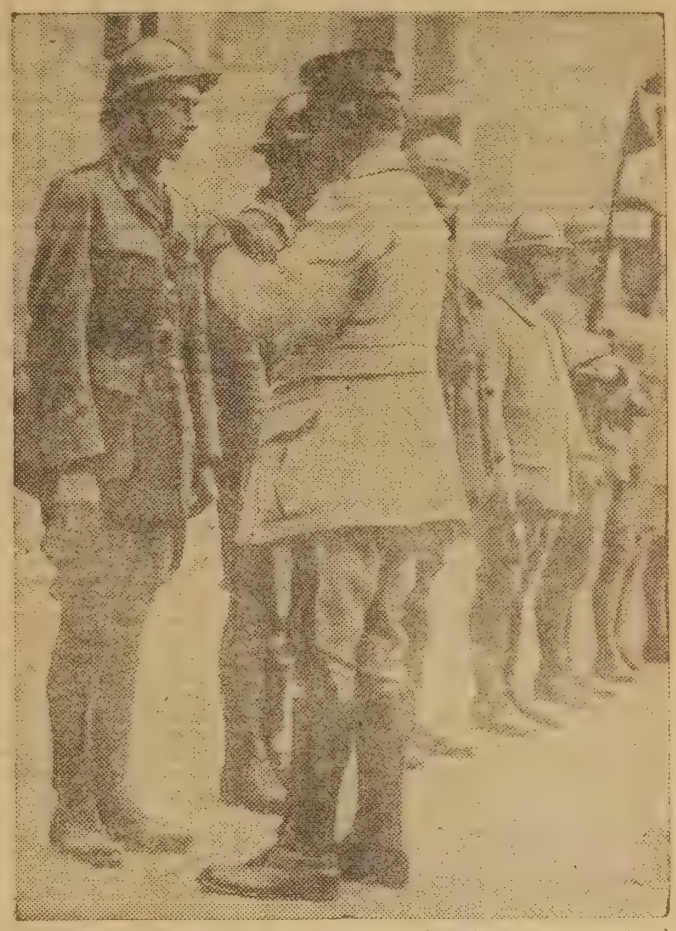
America's new airmen must know their machines, inside and out, with that intuitive knowledge which assures complete mastery. A group of cadets at one of the engineering colleges where government courses have been established, is shown working over the assembling of a plane.

## On War Mission.



Above is the photograph of Mrs. J. Borden Harriman of New York and Washington, who has arrived in London to investigate women's part in ambulance, hospital and other war work. Her object is to ascertain how the services of American women best may be utilized. Mrs. Harriman also will go to Paris for the same purpose. She is the only woman member of the federal industrial relations commission.

## French Decorate American



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Norman Lee of New York and a member of the American field service has won the French Croix de Guerre. The photograph shows him being decorated by General Darwin.

## Serbian Fighter Here.



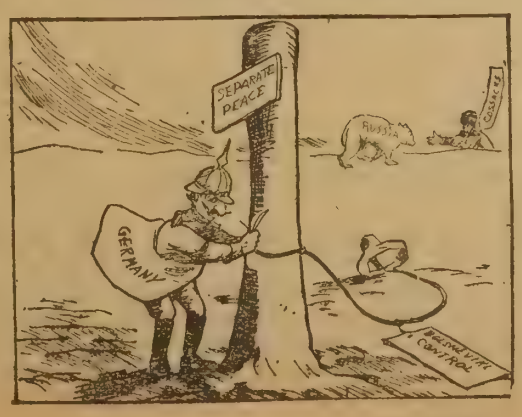
This is the photograph of Lieutenant Colonel Nenadovitch of the Serbian mission which is visiting the United States to express gratitude for the extensive relief work carried on in stricken Serbia. Lieutenant Colonel Nenadovitch, who is a cousin of King Peter, was aide de camp to the Serbian crown prince at the commencement of the war, but left his post to engage in active service at the front. He was severely wounded in battle.

## Supplies Waiting Ships for Overseas



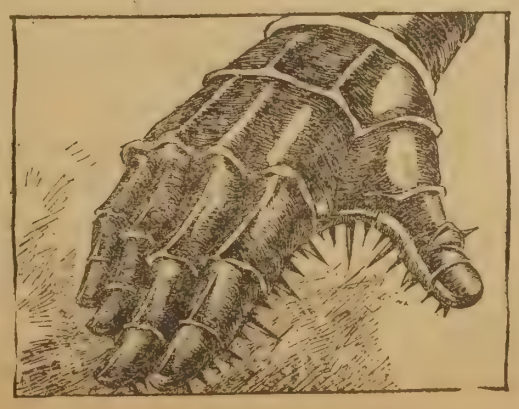
A general view of 60,000 barrels of rosin ready for shipment to the allies for use in the manufacture of munitions, lying on the wharfs at Savannah, Ga.

## Tying an Empty Halter.




Wichita Eagle.

## The Kaiser's Glad Hand.



—Chicago Herald.

## Devery's Plans Good.



The war department has accepted for consideration from former Chief of Police Will S. Devery of New York suggestions to help organize the force recently authorized by President Wilson to administer the alien enemy laws. Devery's photograph appears above.

Mr. Devery suggests the new force be called the national military police. This, with other recommendations, was transmitted to the war department in a letter written by the veteran police authority to the New York American.

Brigadier General J. McCarter, designated by Secretary of War Baker to devise means for raising the new force, said:

"Mr. Devery's suggestions will be very helpful. They represent precisely the character of advice we desire and must have. Undoubtedly many of the recommendations which can be made to conform with the existing laws will be adopted."



# THE BARRIER



By REX BEACH

Author of "The Spoilers," "The Ne'er-Do-Well," "The Silver Horde," etc.

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## SYNOPSIS.

Gale, trader, of Flambeau, has a beautiful daughter, Necia, and two half-breed children. Alluna, a squaw, is their mother. Lieutenant Burrell is sent to Flambeau to establish a military post. He and Necia become close friends. "No Creek" Lee, an unsuccessful miner, strikes a vein of gold. Stark comes to Flambeau to grubstake the miners and start a saloon. Runnion, a desperado, is his assistant. Stark's presence in the camp causes Gale and his squaw great uneasiness. Lee, Stark, Runnion, Gale and Poleon, a Frenchman, leave for the claim secretly so as to prevent a stampede. Necia hears of it, and, longing for riches so she may be as others girls, persuades Burrell to accompany her on a shortcut to the claim. Burrell, who is unpopular in Flambeau, chooses this means of beating the men at their own game. That night by the campfire Necia, realizing her peril, cautiously awakens in the lieutenant his slumbering conscience. They reach camp before the others the next morning and Necia stakes three claims. While Stark, Runnion and Poleon are locating Runnion makes some insinuations about Necia and Burrell. Poleon, who loves Necia, swears that either Runnion or Burrell will pay for them with his life. That night as Star is telling Necia a story a shot rings out and Gale jumps across the room shouting "My God! I've killed him." But the bullet misses Stark by inches. When Alluna hears of the affair she tells Gale that Stark is bullet-proof and gives him a knife, begging him to kill Stark as soon as possible. Burrell knows that he loves Necia, but, thinking she is a half-breed, he is afraid to marry her on account of what it would mean to his family, his position and his honor. One day as Necia is alone in the store Runnion tells her that he is willing to marry her, even if the lieutenant has thrown her over and the story is being told on the street. Later Necia acknowledges to Poleon that while Burrell has sworn his love for her he has never spoken of marriage. She declares that she has never been unmaidenly, but that since the men are talking she will be married by Sunday, and that it may as well be to Poleon as anybody. They send for Burrell and Necia hides so that she may hear his answer for herself

When Burrell enters Poleon wastes no time but asks him if he means to marry Necia. Maddened by the lieutenant's hesitation, Necia rushes out declaring she has played with him long enough, and that she is to marry Poleon on Sunday. Locked in his room through long hours of struggle Burrell finally realizes that Necia's love means more to him than all else. He finds her dressed in the black ball gown, her bare arms and neck gleaming in their whiteness. Not until after he has asked her to marry him does the revelation come to Necia that love means sacrifice. She refuses to spoil his future.

Gale decides that for the sake of Necia's happiness, he will go to Burrell and tell him his story. Grief-stricken, Necia flees from the store, to spend her anguish alone in the darkness. Stark finds her sobbing and takes her to his cabin. There he learns that she is Merridy and uses the knowledge to further his plan for revenge on Gale and burrell. He persuades Necia to go to the mission and tells her that he will provide a man to take her there. When she has gone he takes out his six-shooter and, with his face set in exultant cruelty, leaves the cabin.

## CHAPTER XV.

### And a Knot Tightened.

A day of shattered hopes is a desolate thing, but the night of such a day is desolate indeed. In all his life Poleon Doret had never sunk to such depths of despondency, for his optimistic philosophy and his buoyant faith in the goodness of life forbade it. Therefore, when darkness came it blotted out what little brightness and light and hope were left to him after Necia's stormy interview with the lieutenant. The arrival of the freight steamer afforded him some distraction, but there was only a small consignment for the store, and that was quickly disposed of, so, leaving the other citizens of Flambeau to wrangle over their private merchandise, he went back to his solitary vigil, which finally became so unbearale that he sought to escape his thoughts, or at least to drown them for a while, amid the lights and life and laughter of Stark's saloon. Being but a child by nature, his means of distraction were primal and elementary, and he began to gamble, as usual with hard luck, for the cards had ever been unkind to him. He did not think of winnings or losings, however—he merely craved the occupation; and it was this that induced him to sit at a game in which Runnion played, although ordinarily he would not have tolerated even tacitly such a truce to his dislikes. As it was, he crouched in a corner, his hat pulled down over his brow, his swarthy face a darker hue beneath the shadow, losing steadily, only now and then showing a flash of white teeth as he saw his money go. What mattered loss to him? He had no more need of money now than Necia had of his love. He would spend the dollars he had eked and scraped and saved for her as she had spent the treasures of his heart, and now that the one had brought him no return he wished to be rid of the other, for he was shortly to go again in search of his "New Country," where no man needs gold half so much as a clean heart. It would be a long journey, far to the west and north—a journey that none of his kind had ever fared back from, and he wished to go light, as all good adventurers go.

Runnion annoyed him with his volubility, for the news of his good fortune had fired the man with a reckless disregard for money, and he turned to gaming as the one natural recourse of his ilk. As the irony of fate would have it, he won what the Canadian lost, together with the stakes of various others who played for a time with him and then gave up, wagging their heads or swearing softly at the cards.

It was shortly after midnight that Stark came into the place. Poleon was not too absorbed in his own fortunes to fail to notice the extraordinary ferocity and exhilaration of the saloon keeper, nor that his face was keener, his nostrils thinner, his walk more nervous, and his voice more cutting than usual when he spoke to Runnion.

"Come here."

"I'll be with you when I finish this hand," said the player, over his shoulder.

"Come here!" Stark snapped his command, and Runnion threw down his cards.

"I'm right in the middle of a winning streak. You'll break my luck, Ben."

But the other only frowned impatiently, and, drawing the reluctant gambler aside, began to talk rapidly to him, almost within earshot of Poleon, who watched them, idly wondering what Stark had to say that could make Runnion start and act so queerly. Well, it was their affair. They made a bad pair to draw to. He knew that Runnion was the saloon keeper's lieutenant and obeyed implicitly his senior's commands. He could distinguish nothing they said, nor was he at all curious until a knot of noisy men crowded up to the bar, and, forcing the two back nearer to the table where he sat, his sharp ears caught these words from Runnion's lips:

"Not with me! She'd never go with me!" and Stark's reply:

"She'll go where I send her, and with anybody I tell her to."

The Frenchman lost what followed, for a newly dealt hand required study. He scanned his cards, and tossed them face up before the dealer; then he overheard Runnion say:

"It's the only one in camp. He might sell it if you offered him enough." At this Stark called one of the men at the bar aside, and the three began to dicker.

"Not a cent less," the third man announced, loudly. "There ain't another Peterborough in town."

It was Poleon's deal now, and when he had finished both Stark and Runnion had disappeared, also the man they had accosted, which pleased the Canadian, for now Runnion was eliminated from the game he might win a little. A steady, unvarying run of bad hands is uninteresting, and does not occupy one's mind as well as an occasional change of luck.

Outside Runnion was saying again to Stark:

"She won't go with me, Ben: she don't like me. You see, I made love to her, and she got mad and wanted me killed."

"She'll never know who you are until it's too late to turn back," said the other, "and you are the only man I can trust to take her through. I can trust you—you owe me too much to be crooked."

"Oh, I'll act square with you! But look here, what's all this about, anyhow? Why do you want that girl? You said you didn't care for her that way; you told me so yourself. Been having a change of heart, or is it your second childhood?" He laughed disagreeably.

"It's none of your business," said the gambler. "I want her, and that's enough. All you have to do is to take her to St. Michael's and keep her there till you hear from me. She thinks she is going to the Mission, and you needn't tell her otherwise until you get her aboard a steamer; then take her, no matter what kind of a fight she puts up. You've got a light-rowing skiff, and you'd better keep going till you're overtaken by a downriver boat. I want her as far away from here as possible. Thert's going to be some hell in this camp. Now, hike, and get yourself ready."

"All right! But I ain't the safest kind of a chaperon for a good-looking girl."

Stark laid a cold hand on Runnion's shoulder, close up to his neck.

"Get that out of your mind. She belongs to me."

"You said just now——"

"Never mind what I said. She's mine, and you've got to promise to be straight with her. I've trusted you before, and if you're not on the level now, say so. It will save you a lot of trouble."

"Oh! All right;" exclaimed Runnion, testily. "Only it looks mighty queer."

He melted into the darkness and Stark returned to his cabin, where he paced back and forth impatiently, smiling evilly now and then, consulting his watch at frequent intervals. A black look had begun to settle on his face, but it vanished when Necia came, and he met her with a smile.

"I was afraid you had weakened," he said. "Everything is ready and waiting. I've got the only canoe in the place, a Peterborough, and hired a good oarsman to put you through, instructing him to make as fast time as he can, and to board the first steamer that overtakes you. Too bad this freighter that just got in isn't going the other way. However, there's liable to be another any hour, and if one doesn't come along you'll find enough blankets and flood in the skiff, so you needn't go ashore. You'll be there before you know it."

"You are very kind," said the girl. "I can't thank you enough." She was clothed in her simple everyday dress, and looked again the sun-colored half-breed girl with the wide, dark eyes and the twin braids of crow-black hair.

"You didn't run into anybody, eh?"

She shook her head. Then he led her out into the darkness, and they stumbled down to the river's bank, descending to the gravelly water's edge, where rows of clumsy hand-sawed boats and poling-skiffs were chafing at their painters. The up-river steamer was just clearing.

Stark's low whistle was answered a hundred yards below, and they searched out a darker blot that proved to be a man's figure.

"Is everything ready?" he inquired, at which the shadow grunted unintelligibly. So, holding Necia by the arm, Stark helped her back to a seat in the stern.

"This man will take you through," he said. "You can trust him, all right."

The oarsman clambered in and adjusted his sweeps, then Stark laid a hand on the prow and shoved the light boat out into the current, calling softly:

"Good-bye, and good luck."

"Good-bye, Mr. Stark. Thank you ever so much," the girl replied, too numb and worn out to say much, or to notice or care whither she was bound or who was her boatman. She had been swept along too swiftly to reason or fear for herself any more.

Half an hour later the scattered lights of the little camp winked and twinkled for the last time. Turning, she set her face forward, and, adjusting the cushions to her comfort, strained her tired eyes toward the rising and falling shadow of her boatman. She seemed borne along on a mystic river of gloom that hissed and gurgled about her, invisible but all-pervading, irresistible, monstrous, only the ceaseless, monotonous creak of the rowlocks breaking the silence.

Stark did not return to his cabin, but went back instead to his saloon, where he saw Poleon Doret still sprawling with elbows on the table, his hat pulled low above his sullen face. The owner of the place passed behind the bar and poured himself a full glass of whisky, which he tossed off, then, without a look to right or left, went out and down toward the barracks. A light behind the drawn curtains of the officer's house told that his man was not abed, but he waited a long moment after his summons before the door was opened, during which he heard the occupant moving about and another door close in the rear. When he was allowed entrance at last he found the young man alone in a smoke-filled room with a bottle and two empty glasses on the table.

For at the sound of his voice Gale had whispered to Burrell, "Keep him out!" and the lieutenant had decided to refuse his late visitor admittance when he lighted on the expedient of concealing the trader in the bedroom at the rear. It was only natural, he reasoned, that Gale should dislike to face a man like Stark before he had regained his composure.

"Go in there and wait till I see what he wants," he had said, and, shutting the old man in, he had gone forth to admit Stark, resenting his ill-timed intrusion and inquiring brusquely the cause of it.

Before answering, Stark entered and closed the door behind him.

"I've got some work for you, lieutenant."

"I guess it can wait till morning," said Meade.

"No, it can't; it's got to be done tonight, right now! You represent the law, or at least you've taken every occasion to so declare yourself, and to mix in with little things that don't cut much figure; so now I've come to you with something big. It's a serious affair, and, being as I'm a peaceful man, I want to go by the law." His eyes mocked the words he uttered. "You're mighty prompt and determined when it comes to regulating such affairs. You seem to carry the weight of this whole community on your shoulders, so I'm here to give you some information."

Burrell ignored the taunt, and said, quietly: "It's a little late for polite conversation. Come to the point."

"I've got a criminal for you."

"What kind?"

"Murderer."

"You've had a killing in your place, eh?"

"No, I've just made a discovery. I found it all out by accident, too—pure accident. By Heaven! You can't tell me there isn't a beneficient Providence overlooking our affairs. Why, this felon has lived here among us all this time, and only for the merest chance I never would have recognized him."

"Well, well! Go on!" snapped Burrell, impatiently.

"He's a friend of yours, and a highly respected party. He's a glorious example to this whole river."

The officer started. Could it be? He wondered. Could knowledge of this affair have reached this man. He was uncomfortably aware of that presence in the back room, but he had to know the truth.

"Who is the man?"

"He's your friend. He's——" Stark paused, gloating over his enemy's suspense.

"Go on."

"He's everybody's friend. He's the shining mark of this whole country. He's the benevolent renegade, Squaw-man Gale."

"John Gale?"

"Gaylord is his name, and I was a fool not to know it sooner."

"How did you discover this?" inquired Burrell, lamely. "What proof have you?"

The disclosure had not affected the

(Continued on page twenty-eight.)

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FAMILY CIRCLE

Write to the Editor

ALICE W. BARLAND
Editorial Contributor

# Using Skimmed Milk

Skimmed milk is usually so abundant on the farm that its value in the diet is overlooked, says a bulletin of the U. S food administration. Quart for quart it contains a little more protein and a little more milk sugar than whole milk, but much less fat. Because of the lack of fat it can not be used in place of whole milk for children. It is, however, a most valuable adjunct to the diet of meatless days, and the cheapest protein food for the farmer's table.

Aside from its food value skimmed milk adds much to the quality and flavor in cooking, and is a first aid in converting leftovers into palatable dishes. Milk used in bread in place of water adds as much protein to a pound loaf of bread as there is in one egg. It gives a softness of texture to bread that adds particularly to the palatability of graham or bran bread.

Cereals cooked in milk instead of water gain in flavor and food value. A particularly nourishing dish is prepared by cooking down 10 to 12 parts of skimmed milk to one of rice, oatmeal or other cereal. Where this is to be served for a dessert use one-fourth cup of rice and one-fourth cup of sugar to three cups of milk. Cook until thick. This can be used in place of cream with stewed fruit.

Milk soups or purees are made with skimmed milk and the pulp of beans, peas, onions, potatoes or celery. Fish chowder made with milk is a most substantial meat substitute. A few oysters or a little meat stock will suffice to lend flavor to a milk soup.

Skimmed milk thickened with flour and served hot on hard stale bread or toasted biscuit makes a comforting cold weather dish for breakfast or supper.

White sauce or cream dressing can be used with bits of meat to make attractive dishes, or with warmed over vegetables. Cheese added to the sauce gives another variation. This can be served on rice, macaroni, hominy or cauliflower.

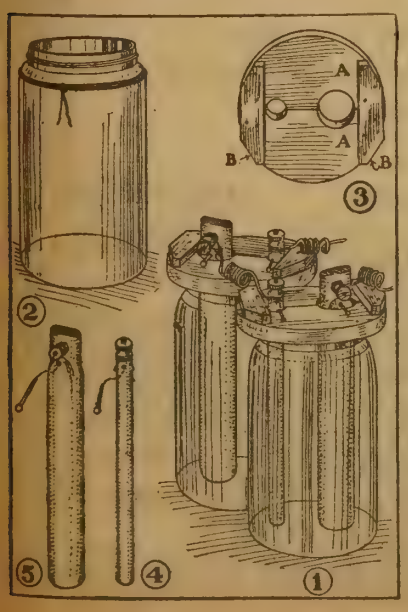
# Handicraft For Boys

By A. Neely Hall.

## Electric Battery Cells.

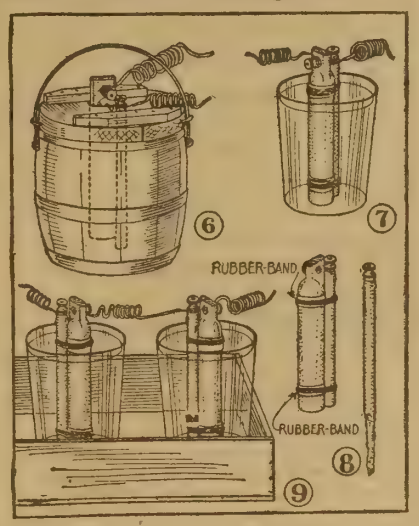
Every boy can make his experimental electric batteries. In this article I show several simple home-made cells. There are two general classes—those used for "open circuit," work, where the current is used for short intervals, and those made for "closed circuit" work, where there is a steady drain upon the current.

The simplest of the open-circuit type is the salammoniac battery. Mason fruit jars make good receptacles. Fig 1 shows a pair used for cells. If you want a wider mouth to the jars, wind cotton wrapping twine around them, just below the neck, saturate the twine with alcohol, light the cord, and when the alcohol has burned out, quickly dip the jars into cold water. if properly done the glass will crack along the line of the twine.




## Cover for Cell.

Fig. 3 shows the cover for the fruit-jar cell. To save boring holes for the battery "elements" to stick through, the top can be made in two pieces (A, Fig. 3) with one-half of each hole cut in their edges, and the pieces joined with a pair of cross strips B). The "elements" of a salammoniac battery are zinc and carbon. A zinc pencil (Fig. 4) can be obtained from an electrical dealer, and the carbon (Fig. 5) can be taken from a worn-out dry battery. To support the zinc and carbon, drill a small hole through each near




the top, and run a nail through each hole (Fig. 1).

Salammoniac can be purchased from an electrical dealer. Mix it in the proportion of eight ounces to one quart of water.

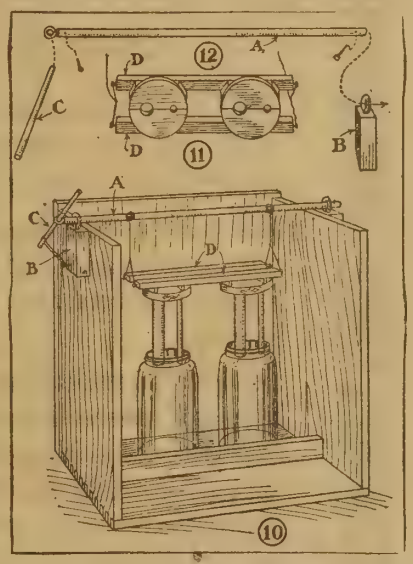
Two cells will give double the "voltage" of one, when connected in "series"—that is, with the carbon of one cell connected with the zinc of the other (Fig. 1).

Fig. 6 shows a cell with a small paint keg for the receptacle.

A glass tumbler may be used for a small cell (Fig. 7), but it will be necessary to connect several in series to obtain the voltage of the fruit-jar cell, because of its small size. Fig. 8 shows how to bind together the carbon and zinc for the glass tumbler cell. Place a wad of cardboard between them to keep them separated.

## Bichromate Solution.

A "bichromate" battery solution is more powerful than the salammoniac, and is the kind to use for small motors




and other "closed circuit" work. This solution is made up of the following:

Four ounces of bichromate of potash, four ounces of sulphuric acid, one quart of water.

In mixing, be sure to add the acid to the water—not the water to the acid—and pour the acid slowly, because the combination creates a great deal of heat, and if the heat forms too quickly the glass bottle will split.

When the solution has cooled, add the bochromate of potash. Label the solution bottle "Poison."

The bichromate solution attacks the zinc even when the cell is at "rest," so this element should be removed after use. The plunge battery (Fig. 10) provides a simple arrangement for raising and lowering the elements of a bichromate battery. A soap box with one end removed forms the case. The raising device consists of drum A, which turns in screw eyes in the blocks B nailed to the ends of the box; handle, C, which fits snugly in a screw eye in one end of drum A, and a pair of sticks D, which connect the tops of the cells and are suspended from the winding-drum.

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# Just One Thing After Another

By E. A. BRYAN.

The loyal citizens may expect just one thing after another. You have had the food conservation pledge drive, the Liberty loan drive and the Y. M. C. A. drive. The Red Cross membership drive is at hand. By and by there will be the third Liberty loan. And so it goes, and so it will go all winter and next summer and as long as the war lasts. And the loyal citizen will not be annoyed or grow weary of this. On the other hand, he will be awakened. He will enter on each new week's work with new enthusiasm—new consecration. He will cease to growl or criticize. He will help to organize and direct public opinion in the service of the nation. We are beyond the point of argument as to the proper policy for the nation to pursue. We are in the war up to the neck, and the only way through is to fight it through. The Christ said: "He that is not with me is against me." So might the nation say. If you are loyal, work every day and all the time.





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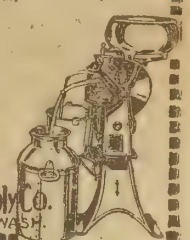
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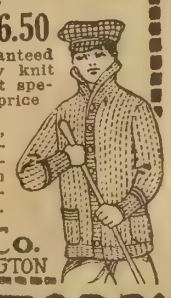
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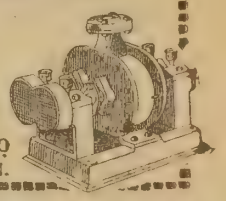
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2315—Boys' coat. Cut in five sizes: 4, 6, 8, 10 and 12 years. Size 10 requires 2 3-8 yards of 54-inch material. Price, 10 cents.

2316—Juniors' dress. Cut in three sizes: 12, 14 and 16 years. Size 14 requires 5 5-8 yards of 44-inch material. Price, 10 cents.

2318—Ladies' dress: Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 5 3-8 yards of 44-inch material. The skirt measures about 2 1-2 yards at the foot. Price, 10 cents.

**Fill in this coupon and mail to Pattern Dept.**

**THE PACIFIC NORTHWEST FARM TRIO**

**36 Review Bldg., Spokane, Wash.**

Enclosed find .....

cents, for which send me the following patterns:

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**BE SURE TO GIVE NUMBER AND SIZE.**




# Today the Red Cross Needs Your Aid

**Fill out the coupon below and mail it to the Editor of The Washington Farmer, Spokane, Wash. Upon receiving this coupon you will be enrolled as a member of the Patriotic League of The Washington Farmer.**

**Watch the Red Cross department of the Farmer each week for different ways in which you can help in this work.**

A limited number of the complete instructions for Red Cross knitters, together with illustrations of the sleeveless sweater, the sock, the knitted helmet, the muffler and the wristlets, published in The Washington Farmer, have been reprinted on a single sheet, and will be furnished to any reader as long as they last, upon receipt of a self-addressed stamped envelope.

I am glad to express my patriotism at this time by pledging myself to render whatever special service I can to my country, and will you tell me especially about Red Cross work and the different ways in which I may be able to aid in that work?

Name ..... ..... ..... .....

Postoffice ..... ..... ..... .....

# Help Red Cross

## Each Week New Ideas Are Born

Every week gives birth to new ideas for helping to fill the coffers of the Red Cross, according to a bulletin issued by the American Red Cross.

In Seattle, the Union Savings and Trust company has originated the idea of a Red Cross account, in which depositors are urged to open a savings account, allowing the principal to stand, but donating the accruing interest each May and November to the Red Cross.

In another part of Seattle Professor X. Koucherence is giving instruction in the Russian language twice weekly, and turning the tuition fees over to the Red Cross for the period of the war.

At Vancouver, Wash., the blind children of the state school gave an entertainment on December 19, at which an admission of 25 cents was charged, and the proceeds turned over for Red Cross work. In the same city an auction sale was scheduled as a Red Cross benefit.


# After a Hard Day's Work—

WITH the chores done, the stock 'tended to, everything ship-shape and air-tight for the night—

It's pretty nice to settle down to supper with a steaming cup of Ghirardelli's at your elbow. Pretty nice and warm and comforting!

And in the morning—up early (what with help so scarce!) and a hundred and one things to do—it's right comforting to know that Ghirardelli's will be there at the breakfast table to greet you.

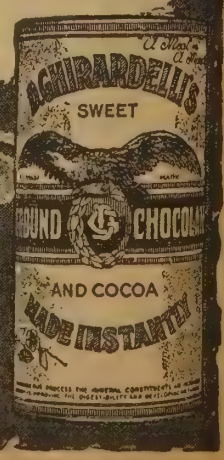
A delicious, sustaining food-beverage—drink it every day for health and economy.

*In ½ lb., 1 lb. and 3 lb. cans; a tablespoonful—one cent's worth—makes a cup.*

D. GHIRARDELLI CO.

Since 1852 San Francisco

Ghirardelli's Ground Chocolate



# Calf Problem Is a Serious One

(Continued from page two.)

farmer ought to have at least $15 per ton for his hay in the stack. The profit on feeding it would be small, as follows One and one-half tons for feeding cow with calf, one ton feeding calf first winter, one and one-half tons second winter, $60 for raising steer until he is 2 years old, sold in August the second year, weighing 1100 pounds, meat worth 7 cents per pound, totals $77. This leaves $17 for taxes and pasture on reserve and feeding. I have not tried out any new methods of feeding, but for feeding stock cattle it is hard to beat good, clean hay in a sheltered place, stringing it out from a sled, where they all get a chance at it. Ten farmers' sons have gone from here into the army and navy service. The effect on the home is that the father has to get in and work double, and it is absolutely necessary to slight a great deal of the work. Where the son has had a farm it is all but abandoned. CHARLES GRANT.

### Beets, $12; Carrots, $8.

NEPPEL, Grant County, Wash., Dec. 14.—There was but little seeding done here, as there was not sufficient rain to guarantee a good starting of fall wheat. Most of the seeding done was rye. So far there has been no losses from cold or other causes. Farmers here are not Hooverizing as they should on account of the difference of opinion and nationalities, but some are certainly doing their part in production and economizing. Small potatoes, sugar beets and carrots, with a little bran and shorts, are the substitutes for wheat for hog feeding, and it is a good one. There are plenty of hogs now, although small in this territory. A double-deck car was shipped to the middle east today and the local price paid for stockers was 13 cents. The sugar beets planted here this season were a fair yield according to the season and are proving a valuable feed and are retailing to wheat ranchers in ton lots at $12 and carrots at $8. These are used as rations with straw as horse feed through the winter, thus effecting a good saving of wheat headings that is usually fed. Alfalfa baling is all finished. The Moses lake country here produced 500 tons for export and alfalfa is going to be the main crop in this locality in the future.

MARTIN PENHALLICK.

### Labor Problem Important.

CHIMACUM, Jefferson County, Wash., Dec. 28.—The most important problem in our community to solve at present is to get help enough to get the land in shape for next year's crops. People here are taking a great interest in the Red Cross and army Y. M. C. A. and have subscribed liberally, in most instances whole families have taken out Red Cross memberships for next year. So far we have had one of the mildest winters on record. Young stock are out on pastures yet and the milch cows have eaten very little hay and it looks now as if the live stock will winter well with very little cost.

JOHN VAN TROJEN.

### Need Stable Markets.

NEWPORT, Pend Oreille County, Wash., Dec. 27.—Price regulation should be carried to the point that some assurance could be given the farmer that he would not be obliged to grow his products at a loss. I believe the farmer generally is just as patriotic as the manufacturer and is willing to accept a price under which he can operate on the same profit basis as the miller or packer. Stabilization of market conditions for staples will bring forth all the farm products desired by the government if reasonable assurance of protection is given. The small farmer feels that he has been the prey of the packer and manufacturer until he has lost faith in any statement or promise not backed by the government. The small farmer, rather than the large one, is the factor to be reckoned with in the production of foodstuffs other than cereals. The mildness of the winter has enabled farmers to carry their stock thus far on a great deal less forage than they had figured on, and indications are now that many who were well stocked with feed will have hay to carry over or sell. As to price of hay: Under present labor conditions clover or alfalfa hay should bring $10 to $12 and timothy $15 to $18 in the stack if it is to yield any profit at all to the producer. The present hay market is higher, I think, than is justified by conditions. I sold baled hay recently for $30 per ton. Stock can not be fed on this valuation without loss.

The drafting of farmers' sons will naturally reduce production of all farm products. Many small herds of stock are being disposed of where farmers' sons are being called to the front, as the fathers do not care to trust its care to strange or incompetent help.

CHARLES M. TALMADGE.

### Surplus of Potatoes.

Declaring that there was a surplus of at least 40,000,000 bushels of potatoes in this country, A. D. Wilson, state food administrator for Minnesota, urges everybody to eat more potatoes and thereby not only save them from loss, but at the same time save foodstuffs for exportation to the allied armies.

### Cuban Sugar Is Coming.

The first of the sugar crop of the present season is beginning to arrive from Cuba, and is expected to relieve the reported sugar shortage.

Don't throw away that old stiff harness. Eureka Harness Oil will give it new life - takes the place of the natural oils that have dried out. Your harness is then ready for months, perhaps years more of faithful service. Eureka keeps harness jet black.

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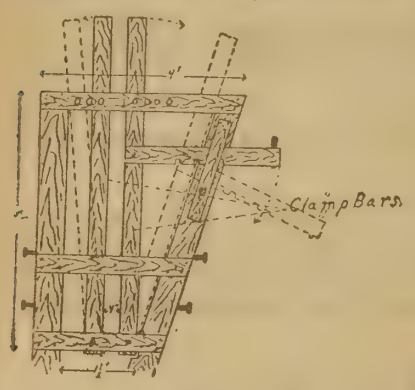
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# Dehorn the Cattle for Feed Lots

## *Will Give Each Animal More Nearly Equal Chance at the Feed Trough*

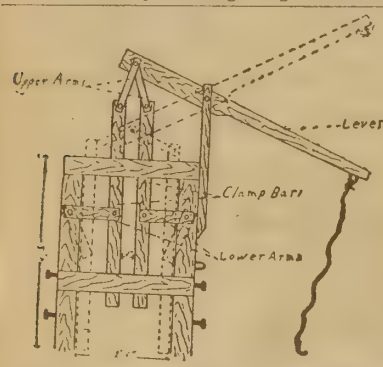
All horned cattle intended for the feed lots next winter should be dehorned as soon as the weather will permit so that the wounds will heal before the cattle are put on full feed.

There are advantages in dehorning cattle that the cattle feeder can not well afford to overlook. It makes the




**Front view of dehorning chute with sloping side, showing clamps closed. Dotted lines show open position.**

cattle more easily and safely handled in the feed lot, and each animal is assured of a more nearly equal chance at the feed trough. Also it avoids the bruised condition of the flesh and torn hides caused by cattle goring each other




**Front view of dehorning chute with clamps closed. Dotted lines show open position.**

in the feed lots and in transit to market, as well as excessive shrinkage in transit.

### Best Tools to Use.

The most common method of dehorning cattle is to saw the horns off, and for this purpose an ordinary meat saw can be used, though there are saws on the market that are specially designed for the operation. By this method a good, clean job can be done on any type of horn, and the wound is left in a condition to heal readily.

The use of dehorning clippers is becoming more common, especially where be used for vaccinating, branding and castrating, as well as for dehorning.

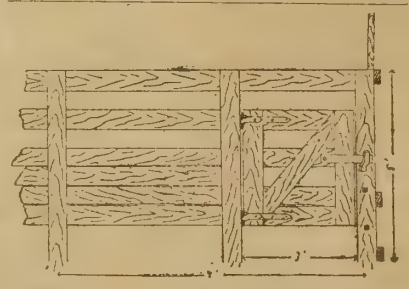
### Care of Wounds.

Cattle should never be dehorned during warm weather, when there is danger of the wound becoming infested with screw worms. The best time to dehorn is in late fall and early winter or during the cool weather of spring. If the weather is sufficiently cool there is very little danger of the wound be a large number of cattle are to be dehorned before the horn becomes hard and brittle. The chief objection to dehorning with the clippers is that thin or hard horns are sometimes crushed or splintered, resulting in a wound that heals slowly. This objection is partly overcome by using clippers that are constructed with two V-shaped blades, which, when pressed together bring four cutting edges against the horn, lessening the tendency to crush or splinter the horn.

### Dehorning Pens.

A number of methods of restraining animals during the dehorning operation have been practiced. Where only a few head are to be dehorned the quickest way is to throw the animal to the ground and hold it or tie it securely until the horn is taken off.

When a considerable number of cattle are to be dehorned it will pay to construct a dehorning chute. Plans of a chute that has proved very satisfactory for this purpose are given herewith. This chute is made narrow enough so that the animal will not have room to struggle a great deal, and with a stanchion-shaped head clamp at one end for holding the animal's head. After an animal is in the chute and the

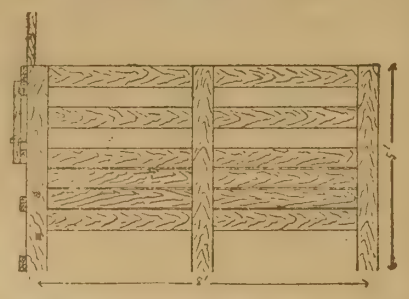


**Side view of dehorning chute showing gate.**

head clamp closed a noose should be placed around the neck with a loop over the nose. The head can then be snubbed down to the peg indicated on the side post. This forces one horn forward, so as to make it easily removed. After one horn is removed the head should be snubbed to the other side for the removal of the other horn. A chute of this kind can be constructed at very low cost by using scrap material about the farm. However, material of sufficient strength to hold the animal should be used. This chute can coming infested with screw worms. However, it is best to apply some fly repellent, such as pine tar or one of the coal-tar products to the wound, especially where the cattle are to be turned out on the range and where close attention can not be given to them. If the wound becomes infested with screw worms they should be removed. The worms can be killed by inserting into the wound a piece of cotton that has been saturated with chloroform or by pouring gasoline into the horn cavities. This will kill the screw worms, after which they may be removed with the forceps or a probe or by forcing the animal's head to one side and allowing them to drop out.

Some animals bleed profusely following the dehorning operation, but ordinarily this need cause no alarm, as a clot soon forms and no great amount of blood is lost.

The accompanying plans show the construction of two types of simple and satisfactory dehorning chutes. The dotted lines in both types of chute show the head clamps when open, and the lever in both cases is used for closing the head clamps after the animal's head is in position. The sides that are



**Side view of dehorning chute without gate.**

shown in the plans can be used for either type. The gate is convenient for letting the animal out of the chute and also for branding and vaccinating.

# Trapping

## Must Study Nature of Fur Bearers

**By George La Rue.**

Trapping as well as other pursuits and occupations has undergone many changes, and whereas there were a few trappers in years gone by and very few of them shipped the furs they caught, now there is an army of trappers and nearly every trapper is a shipper. A great many farmers and their boys devote part of their time during the winter to trapping, both for pleasure and profit. In order for us to make a success of any line of business it is necessary for us to first become interested in that particular line.

If we win out at trapping we must study the nature of the fur-bearers and acquaint ourselves with their habits, and veteran trappers will continue to learn new stunts and methods as long as they are able to run a trap line. Some trappers use scent to lure the animals and some animals are easily taken that way. I will give a recipe for making the best scent that I have tried for lynx, fisher or marten. Use equal parts oil of anise, oil of rhodium and beaver castoreum, and put in enough alcohol to cut the oils so they will combine. The scent is very attractive to a great many fur-bearers. In a great many instances a good set for a lynx is a good one for marten or fisher. If either of the above-mentioned animals is hungry and finds a trail with fresh blood scattered along they will follow the trail sometimes for miles. We have known them to come across a trail made by dragging a deer down the mountain side and follow to one end of the trail. So one of our best methods of trapping them is to drag some kind of fresh meat behind us when the snow is on, and when we find a leaning tree or log that will protect the trap from the deep snow we will cut off a chunk of the meat and leave it for bait and make a set. When a fisher or marten finds a chunk of meat or carcass they will usually stick around until they have consumed the meat or got caught or have been frightened away. They are easily outwitted and it is great sport as well as considerable profit to catch them.

Twisp, Wash.

On account of the great variation in local climatic conditions, moisture, soil, etc., it is up to the readers of The Washington Farmer always to remember that methods which prove successful in one locality may not work out in others. It is our aim to gather the experiences of farmers in every section of this state and pass these experiences on to our readers, that they may try out or adopt such as may be applicable to their locality and conditions.


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Ship Your Raw Furs

to us for quickest returns. We pay spot cash and the highest market prices.

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for our new winter price list, which covers raw furs of every description — complete with shipping directions.

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Send hides to us for highest cash market price. Check by return mail.

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Make more Money
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Showing easy lever operation

Clear your stump land cheaply—no digging, no expense for teams and powder. One man with a K can rip out any stump that can be pulled with the best inch steel cable.

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I pay what I quote for the average run of prime furs. I pay more than I quote for extra fine skins. Send your name and address on a postal card to

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FURS IN STRONG DEMAND

Moles, Lynx, Cats, Rats, Foxes and Martens bringing good prices. Price list ready Nov. 15.

Oscar Gard 75 Marion St., Seattle, Wash.


In answering advertisements don't fail to mention this paper.

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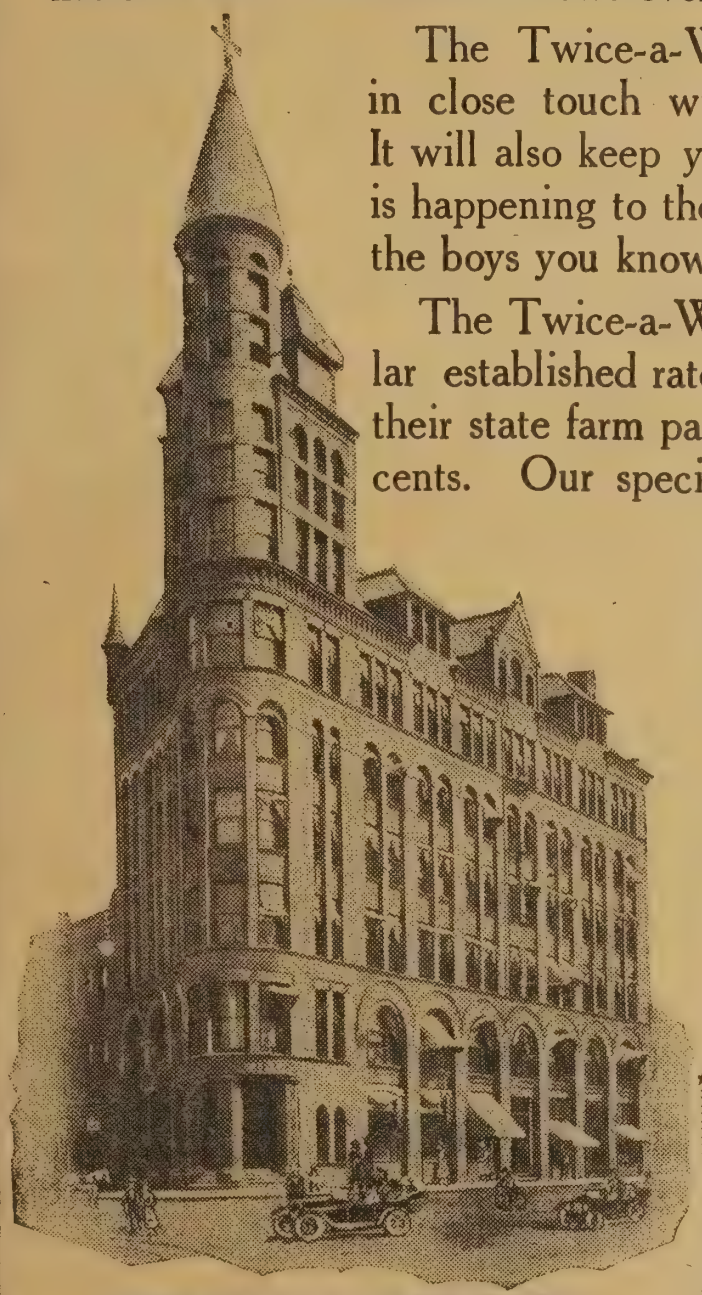
## Twice-a-Week Spokesman-Review, 1 Year The Washington Farmer 3 Years--Both for $1

THIS clubbing offer is meeting with a big response. Most of our readers need no introduction to The Twice-a-Week Spokesman-Review. It is an old established semi-weekly newspaper which brings a complete, condensed and thoroughly reliable review of local, state, national and international news every Tuesday and Friday.

The Twice-a-Week Spokesman-Review will keep you in close touch with neighborhood and Northwest news. It will also keep you posted regarding the great war; what is happening to the boys "over there"; what is happening to the boys you know.

The Twice-a-Week Spokesman-Review is sold at a regular established rate of $1 per year. As our readers know, their state farm paper can be secured for three years for 50 cents. Our special clubbing rate of $1 for both publications is therefore seen to be extremely liberal. With everything else going up in cost we are glad to offer you such a material saving on your reading matter.

It is also worth your while to note that clubbing offers of this kind are rare; and with the steady increase in publishing costs bargains of this kind are being generally withdrawn. It is to your interest to act at once.



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**Above is a picture of the Review Building, Spokane, Wash., built, owned and occupied by the Spokesman-Review. It is the home of a great news gathering organization; the center of world-wide activities in securing reports of important events for Spokesman-Review readers.**

## ORDER BLANK

Jan. 11.

**THE WASHINGTON FARMER, Spokane, Washington.**

Gentlemen:

I desire to take advantage of your special clubbing offer. Enclosed is $1 in full payment for one year's subscription to The Twice-a-Week Spokesman-Review and three years' subscription to THE WASHINGTON FARMER.

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Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I will be 12 years old in August. I am in the fifth grade. My teacher's name is Lillian Bloomer. I like her very much. I have one brother and his name is Bernhard. I like to read the letters very much and I hope my letter will be in print, too. Now I will tell you about school. There are two rooms. In the room that I am in there are four grades.—Dora Anderson, R. 3, Box 57, Mt. Vernon, Wash.

**Eveline's Third Corner Letter.**

Dear Aunt Nellie: I have written to the Children's Corner now three times. I am a little girl 11 years old. I would like to correspond with Verda Muffat, Hunters, Wash. I would also like to correspond with Gladys Slusser, Waterville, Wash., if they will write to me. We had a Christmas program at our schoolhouse. I had to speak a piece. Aunt Nellie, I think all of the cousins will try and help win the war. I'm sure I will. I have to milk the cow Saturday and Sunday mornings. I have two sisters whose names are Violet and Delma and five brothers whose names are Anton, Fred, Carl, Melvin and Richard. I will write more next time.—Eveline Vida Dahl, Grangeville, Idaho.

**Rides Horseback to School.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 10 years old and I am in the fourth grade. I am living on a farm. We have 160 acres and we have 45 head of cattle and 13 horses. I have a cow and a calf and a horse. I have lots of fun riding horseback to school. I have three brothers and three sisters. Two of my sisters are married. My brothers' names are Harold and Orin and Mervil and my sisters' are Grace and Zelva and Faye. I can't think of anything more to say. —Wilma Little, Miles, Wash.

**Likes History and Reading.**

Dear Aunt Nellie: This is the first time I have written to the Corner. I am 10 years old and in the fifth grade. There are 12 children in our school. I have one brother and three sisters. Their names are Velma, Dorothy, Bessie and Lawrence. Our teacher's name is Miss Ford. We like her fine. I like to go to school and have two miles to go. I like history, spelling and reading. I like on an 80-acre farm. We milk four cows and have three little calves. I have one yearling of my own.—Mary Healy, Box 134, Quincy, Wash.

**Soon Ready for High School.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I enjoy reading the letters. I am 14 years old. I will be 15 the 20th of March. We have two cows and three calves. I have a pony and her name is Lady. I live on a 200-acre farm. I am in the eighth grade in school. I want to pass the eighth grade in January then I am going to high school. I hope to see my letter in print. I have a light complexion and dark hair. I weigh 108 pounds. If I have a twin I wish they would please write to me.—Pearl Burnett, R. R. 6, Box 76, Spokane, Wash.

**Jack Is Their Riding Pony.**

Dear Aunt Nellie: This is the first time I have written to the Corner. I am 10 years old and in the fourth grade. I have a sister and one little brother. Their names are Lena and George. We have three horses. Their names are Bill, Queen and Jack. Jack is our riding pony. He is a bay. We have 30 head of cattle. We have 18 head of sheep.—Edna McKune, Box 22, Winlock, Wash.

**Eight Pupils in Vern's School.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. We have 17 horses and five cows and a lot of chickens. I have to walk two and one-half miles to school. I am in the sixth grade. I am 11 years old. My birthday is the 25th of October. Have I a twin? If I have I would like to have her write to me. We take the Farmer and I enjoy reading the Children's Corner very much. —Vern Forrey, Soap Lake, Wash.

**Live Near the Ocean.**

Dear Aunt Nellie: This is the first time I have written to the Corner. I enjoy reading the letters and would like to see mine in print. I am 14 years old and in the eighth grade. Have I a twin? If so please write. My birthday is November 28. We have a farm of 160 acres. There are ducks, turkeys and chickens on the farm. We live near the beach. During summer we take the rowboat and go out rowboat riding.—Grace Buttman, Box 31, Oak Harbor, Wash.

**Clara Belongs to the Junior Red Cross.**

Dear Aunt Nellie: I haven't written to the Children's Corner for a long time. I thought I would write again. I am 12 years old and will soon be in the seventh grade. I go to Central school and I ride on a bus. I live on a berry ranch. It is two miles from Puyallup and seven miles from Tacoma. We have three cows and one calf, three kittens, about 50 chickens and one horse. I have joined the Junior Red Cross up at school. I am going to learn how to knit. Then I will knit for the soldiers. I have two brothers and one sister. One of my brothers is in the draft age. He has not been drafted yet—Clara Haida, R. F. D. 3, Box 164, Puyallup, Wash.

**Ella Lives On a Ranch.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. We have two cats and one dog. My name is Ella and my brother's name is Frank. My birthday is the seventh of April. Frank's birthday is the sixth of April. My father has one cow and one horse. We live on a ranch. My cats' names are Muff and Toots. Our dog's name is Boots. I go to Sunday school. I go to the public school, too. My teacher's name is Miss Hurst.—Ella Napier, Sprague, Wash.

**Candy for the Soldier Boys.**

Dear Aunt Nellie: This is my second letter to the Children's Corner. I was very pleased to see my letter in print. We have all been out of school with the whooping cough, but we are better now. I am going to school in January. I helped mother get ready for Christmas. One day we made 10 pounds of candy for the soldiers. I think we all ought to do something for the soldier boys. I will have to close now with love to Aunt Nellie.—Ida Jones, R. 2, Box 17, Tumwater, Wash.

**Hopes the Corner Will Grow.**

Dear Aunt Nellie: I have been reading the Children's Corner for some time and I thought I would write also. I am in the seventh grade at school. My teacher's name is Miss Anna Fornifiest. I live about one mile from school. I am 12 years old. I will be 13 December 29. Have I a twin? If I have I would like to hear from them. I have four brothers and two sisters. Three of them go to school. I hope the Corner will grow larger each time.—Viola Marguerite Tarbert, Ruote 1, Box 56, Deer Park, Wash.

**Soldiers Are Fighting Our Battles.**

Dear Aunt Nellie: I received the book and I am reading it. It is very interesting, and I thank you very much for it. My subject is about the Red Cross. Some people say that the soldiers are fighting the Germans for their own good. We must not look at it this way, but say, "They are fighting our battles, and we should save." I hope all the cousins will live up to all the things that are asked of us. You will be helping win the war and keep our own government. Don't you think so?—Dorothy Jones, Route 1, Florence, Col.

**Seems Almost Like Summer.**

Dear Aunt Nellie: I have written to the Corner before. I like to read the Aunt Nellie stories. I read them every night. It seems just like summer all except snow on the ground and now that even is thawing off. I am 7 years old and I am taking music lessons. I have three sisters. I have three little kittens, one is Big Tiger, one is Baby Tiger and the other is Cutie. I wish you and all the cousins a happy New Year.—Florence June St. John, 1245 Miller street, Worthington, Minn

# THE BARRIER

(Continued from page twenty-two.)

soldier as Stark expected, and his anger began to lift itself.

"That's neither here nor there; the man's a murderer; he's wanted in California, where I came from; he's been indicted and there's a price on his head. He's hidden for 15 years, but he'll hang as sure as I stand here."

Disclosures of a complex nature had so crowded on Burrell in the last few hours that he saw himself the center of a most unfortunate and amazing tangle. Things were difficult enough as it was, but to have this man appear and cry for justice—this man above all others!—it was a complication quite unlooked for—a hideous mockery. He must gain time for thought. One false step might ruin all. He could not face this on the spur of the moment, so, shrugging his shoulders with an air of polite scepticism, he assumed a tone of good-natured raillery.

"Fifteen years? Murder? John Gale a murderer? Why, that's almost—pardon me if I smile—I'm getting sleepy. What proof have you?"

"Proof!" blazed the gambler. "Proof! Ask Gaylord! Proof! Why, the woman he murdered was my wife!"

It was Burrell's turn now to fall incoherent, and not only did his speech forsake him, but his thoughts went madly veering off into a wilderness where there was no trail, no light, no hope. What kind of a coil was this? What frightful bones were these he bared? This man was Bennett! This was Necia's father! This man he hated, this man who was bad, whose name was a curse throughout the length and breadth of the west, was the father of the girl he loved! His head began to whirl, then the story of the trader came back to him, and he remembered who and what the bearer of these later tidings was. He raised a pair of eyes that had become furious and bloodshot, and suddenly realized that the man before him, who persisted in saddling upon Gale this heinous crime, was the slayer of Necia's mother; for he did not doubt Gale's story for an instant. He found his fingers writhing to feel the creature's throat.

"Proof!" Stark was growling. "How muck proof do you need? I've followed him for 15 years. I've tracked him with men and dogs through woods and deserts and mining-camps. I've slept on his trail for 5000 miles, and now do you think I'm mistaken? He killed my wife, I say, and robbed me of my little girl! That's her in his house. That's her girl, do you understand?—and I'll have his life."

It was hate that animated him, and nothing more. He had no joy in the finding of his offspring, no uplifted thought of justice. The thirst for revenge, personal, violent, utter, was all that prompted this man; but Burrell had no inkling yet of the father's well-shaped plans, nor how far-reaching they were, and could barely stammer:

"So! You—you know?"

"Yes! She wears the evidence around her neck, and if that isn't enough I can furnish more—evidence enough to smother you. My name isn't Stark at all; I changed it years ago for certain reasons. I've changed it more than once, but that's my privilege and my own affair. Her name is Merridy Bennett."

"I don't suppose you know I'm going to marry her," said the Kentuckian, irrelevantly.

"No," replied the other, "I wasn't aware of the fact."

"Well, I am. I'll be your son-in-law." He said this as if it was the statement of an astonishing truth, whereat Stark grinned, a mirthless, disquieting sort of grimace, and said:

"There's a lot of things for you and me to settle up first. For one think, I want those mines of hers."

"Why?"

"Well, I'm her father, and she's not of age."

"I'll think it over."

"I'll take them, anyway as her next of kin."

Burrell did not follow up this statement, for its truth was incontrovertible, and showed that the father's ill-will was too tangible a thing to be concealed; so he continued:

"We'll adjust that after Gale is attended to; but, meanwhile, what do you want me to do?"

"I want you to arrest the man who killed my wife. If you don't take him the miners will. I've got a following in this camp, and I'll raise a crowd in fifteen minutes—enough to hang this squaw-man, or batter down your barracks to get him. But I don't want to do that; I want to go by the law you've talked so much about; I want you to do the trick."

At last Burrell saw the gambler's deviltry. He knew Stark's reputation too well to think that he feared a meeting with Gale, for the man had lived in hope of that these 15 years, and had shaped his life around such a meeting; but this indirect method—the Kentuckian felt a flash of reluctant admiration for a man who could mould a vengeance with such cruel hands, and, even though he came from a land of feuds, where hate is a precious thing, the cunning strength of this man's enmity dwarfed any he had ever known. Stark had planned his settlement coldly and with deliberate

(Continued on page thirty-one.)

# For Animal Relief

(Continued from page four.)

ican army would be 4000 miles from Washington, while the British army was only 200 miles from London.

This war calls for continuous supply of nearly 5,000,000 horses and mules. An infantry regiment requires one horse for every four men, and every horse that is killed must be replaced by one from America. Veterinary surgery and care for animals has never in the history of world warfare reached such a high state of efficiency as in the present war. Although the number of horses killed in France is sometimes as high as 5000 a day, the number of sick and wounded animals cured and returned to service is one of the wonders of the campaign.

The Royal Society for the Prevention of Cruelty to Animals, working with the British forces in France, has built hospitals for 12,000 horses, hospitals which would compare with those created for the wounded soldiers. The British people have voluntarily subscribed $700,000 to pay for this work, and its efficiency is such that close to 80 per cent of the animals treated in hospitals are cured and sent back to the front.

# Federal Farm Loan System Is Sound

(Continued from page five.)

stigate a call for a report of the condition of the 12 federal land banks."

The secretary declares that this demand is palpably unreasonable and unfair. The system, he explains, is in process of building, and its initial expenses are necessarily high. The various land banks had to buy office furniture, stationery, etc., to organize their office forces and to employ and pay appraisers to appraise the farms of the applicants for loans. They were also required to create a legal department to examine the titles of applicants. For at least six months they were paying out money continually, with scarcely a dollar of receipts.

"On November 1 they had to pay six months' interest on the bonds they had sold. They are now just beginning to receive the first payments on the loans they have made. Under these conditions each bank necessarily shows what is technically called 'an impairment of capital. The average impairment,' so-called is 6 per cent, but this does not actually impair the strength or the solvency of the banks, particularly as they have received from farm loan associations subscriptions to additional stock in excess of $1,500,000, so that their actual capital is about $1,000,000 greater than it was when they started. Everybody knew that this would be so.

"On the other side, it should be remembered that they have assets which do not appear on their books, made up principally of two items. The first of these is the large amount of interest accrued, but not yet due upon the loans they have made. The second is the charges for appraisement and determination of title, payable by borrowers when their loans are closed. They have made appraisements and examinations of title on loans to the amount of over $100,000,000, of which only a little over $30,000,000 have been closed to date. They are therefore entitled to reimbursement of these charges on the $70,000,000 of business which has been examined and approved, but not yet closed."

Mr. McAdoo illustrates the unreasonableness of the people who are demanding that the system shall show a profit-earning capacity at this time by asking what would be thought of the fair-mindedness of a person who criticized a farmer who had bought a farm in October because he could not show profits from the operation of that farm in the following May.

Commissioner Norris of the farm loan board also makes a strong point when he reminds the country that this system is needed now more than it was ever needed before. Mr. Norris says:

"In addition there is the fact that lenders of money on farm mortgages are now either withdrawing from the farm loan field or greatly curtailing their operations, and the sale of farm mortgages to those who have been in the habit of investing in them has to a great extent ceased. It may therefore confidently be anticipated that the demands upon the farm loan system will be vastly greater than has been foreseen. These conditions are almost altogether owing to the fact that we are at war and to the effects upon the investment market of the financial operations of the government of the United States. It is a war emergency."

Mistakes may have been made in the management of some of the farm loan banks. Possibly some of them have not been managed as economically as could be desired. On these phases the Farmer is not now prepared to express an opinion. There should be, of course, a vigilant auditing of their accounts, and friends of the system will welcome any honest and well-meant demand for congressional oversight. But that movement should be of constructive, not destructive, spirit.

The principle on which the system is built is sound, and the war is testing its credit just as the war is severely testing the credit of the strongest railroads in the United States and making difficult the sale of their securities. The government is coming to the support of the railroads, and it must, in justice, reason and protection of its own institution, help to tide over the farm loan banks in the sale of their bonds.

## Another Liberty Loan Coming.

Unofficial announcement has been made that the third Liberty loan will be made shortly after February 1. The amount and the rate of interest have not yet been announced.

**Raise Minimum Wage.**

Owing to the increase of living cost, it is the expectation of the Washington state minimum wage commission that an increase of wages to women workers will be necessary. The average minimum is now about $10, and it is expected that the increase will bring it to about $12.

# News for Breeders

## Bull Sells at $31,000.

The auction sales of both Herefords and Shorthorns at the Chicago International developed sensational prices. With two millionaires and other wealthy men bidding, the Hereford bull Ardmore went to W. R. and W. A. Pickering of Kansas City for the record price of $31,000, while Walter L. Yost of the same city, who sold the bull, paid $10,000 for Maples Lad 61st, to replace him. Top price for cow was $3150, paid for the yearling heifer Paragon Dore. Fifty-eight animals were sold for an average of $1774.

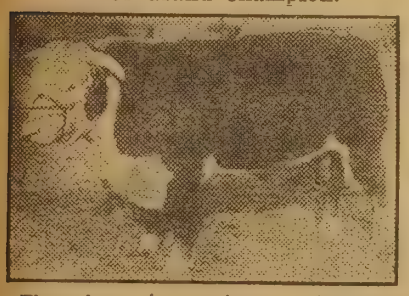
The Shorthorn sale had not quite such a sensational single price, though top for bull was $9000, Mount Victoria Stamp, 2 years old, going at that figure to Walter J. Hill of Great Bear Lake, Wis. Verbena of Oakdale, one of the great cows of the breed, with heifer calf at foot, went to W. B. Aylor, Grandin, N. D., for $4800. The average for 53 head was $1090.

The Aberdeen Angus top was $3050 and the Galloways $1200. H. A.

## A Community Proposition.

The Rogue River Valley Berkshire Breeding association has about 20 farmers in Josephine county breeding registered Berkshires. It is a community or cooperative proposition, and all the foundation stock is from F. R. Steele's Winona farm. Mr. Steele does the advertising and selling. He began breeding Berkshires in 1913 and began advertising heavily in 1914. Mr. Steele has in the short time since then made himself famous, has shipped Berkshires practically to every part of the United States and has been the means of making nearly all the hogs in his home county of Josephine, Berkshires. By his plan of community breeding he is spreading breeding farms all over southern Oregon. H. A.

## Junior Grand Champion.



The above is a picture of Prince Rupert 80th, that was junior and grand champion Hereford bull at both the Northwest Live Stock show at Lewiston, Idaho, and the Pacific International at North Portland at this winter's show. He won similar honors as a senior calf last year and promises to do as well again next year. H. A.

## Richly Bred Jerseys.

Emery T. Smith of Myrtle Creek, Ore., has a richly bred herd of 16 Jerseys, some of Island some of American breeding. Stockwell's Unknown Girl, an imported-in-dam daughter of J. B. Stump's grand champion cow, Stockwell's Dahlia, is considered the best cow in the herd. She is a real show cow and while she has no official record is a good producer. For the month of May, 1916, she produced 50 86 pounds of fat or 59.83 pounds of butter. Her feed bill, including a charge of $1 for roadside pasture, was $793. Raleigh's Jolly Nobelman, the senior herd sire, traces 21 times to Golden Lad and 54 times to Sultane, the two greatest foundation animals of the breed. Fairy Boy of M. L. P., the junior herd sire, is a great grandson on the top line and a grandson on the lower line of Raleigh's Fairy Boy. Both are showy individuals. H. A.

## Washington Steer Good.

The pure-bred Shorthorn steer Hercules, owned by Day & Rothrock, Sprague, Wash., that was shown at the Chicago International, won second in his class of senior calf in a class of 16 of the best individuals the exhibitors of the middle west were able to bring together. He was beaten only by an entry of Purdue university, Ind. Hercules won grand championship at the Lewiston show, but was beaten for the purple ribbon at Portland by the California university entry, Roan Marvel. While the Washington steer did not carry off a championship at Chicago, Day & Rothrock and the state of Washington have reason to be proud of the place he won. H. A.

# Breeders' Department

## HOLSTEIN CATTLE



### A Rare Opportunity

To secure some thoroughbred Holstein male calves, described as follows:

No. 1—Born Feb. 19, 1917. Sire, Segis Walker Hartog, No. 162423; dam, Buckeye Grace Morley, No. 99452.

No. 2—Born Jan. 23, '17. Sire, Segis Walker Hartog, dam Naiad Jewel Netherland, No. 124102.

No. 3—Born April 14, '17, Sire, Segis Walker Hartog, dam, Buckeye Grace Morley. No. 248417.

No. 4—Born Jan. 11, '17. Sire, Segis Walker Hertog, dam, Susie De Kol Pauline 2d, No. 245999.

No. 5—Born Feb. 19, '17, Sire, Segis Walker Hartog, dam, Mary De Kol Stony Brook, No. 248416.

No. 6—Born March 26, '17. Sire, Hazelwood Sir Ormsby, No. 148496, dam, Queen Gerben Josephine Michtilda, No. 146519.

Application for registry for all the calves have been sent in. For further particulars, prices, etc., address The Intermountain Institute, or

**E. A. PADDOCK, Pres., Welser, Idaho.**
R. F. D. 1.

### Registered Holsteins

Young calves, born last July and later; also 1 30-lb. bull, ready for service, whose sire, dam and sire's dam have all been grand champions at one or more state fairs, and full brother to his sire and full sister junior champions at a state fair. Here is production and type we hear so much about. Could also spare a few cows.

**H. R. BOOMER, New Plymouth, Idaho.**

## POULTRY

### Trap Nested Barred Rocks

All hen-hatched and hen-raised. Every hen on the place trap nested. My first pen has, I believe, for the past two years, the highest Barred Rock average egg record in the world. All other pens are practically the same blood lines. A few last fall cock birds and cockerels, from $5 up, according to pedigree and quality.

Eggs from first and second pen, $5 per 15. Others, $3.75 and $2.50. No day-old chicks.

**Irvine P. Gardner**
**Riddle, Ore.**

### S. C. White Leghorns

Head your pens with cocks and cockerels from selected, trap-nested stock, with known records. We are also booking orders for day-old chicks and hatching eggs. Write for price list.

**HORN'S EGG FARM, Maple Valley, Wash.**

### Rhode Island Reds and Whites

Rose comb and S. C. blue ribbon winners. Utility and show stock. 100 cockerels at $3 up. Bronze turkeys and Toulouse geese. Blue ribbon stock. Registered Airedale bitch at a bargain if taken at once.

**Highland Fruit and Poultry Ranch.**
J. NONNENMACHER,
R. F. D. 3. NORTH YAKIMA, WASH.

### Heavy Laying Strain

S. C. White Leghorns, hatching eggs, baby chicks and stock.

**MT. ANGEL COLLEGE POULTRY RANCH.**
St. Benedict, Ore.

### Blooded Bronze Turkey

20 years' Blue Ribbon Winner, mated last year with a Golden Back tom from the Panama Fair Winners. Geese, Ducks, Guineas, Chickens and Poland China Hogs.

**E. A. KRUSE. Roseburg, Ore.**

### 365-Day Holsteins

24,667 lbs. milk—1026 lbs. butter—is the s. o. advanced registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.

THE HERD WITH YEARLY RECORDS.
**WESTERNWOLD RANCH.**
Prineville, Ore.

**REGISTERED HOLSTEINS**

Bull calves for sale with good A. R. O. backing.

**BEEBE BROS., R. F. D. 2, Rupert, Idaho.**

## SHORTHORN CATTLE

### Hercules Shorthorns

For particulars write
**DAY & ROTHROCK**
Exchange Bank Bldg.
Spokane, Washington.

### CEDARHURST FARM

SHORTHORNS.

Am offering a number of richly bred young bulls, fit for service, also a few females. For particulars write

**JOE TURNER, Meyers Falls, Wash.**

### For Sale

25 registered red, white and roan Shorthorn bull calves and yearlings.

**WM. MULHALL. Fenn, Idaho.**

### Shorthorn Bull for Sale

Inquire

**FRANK SCHUSSMAN, Clarks Fork, Idaho.**

## JERSEY CATTLE

### Registered Jerseys

One senior 2-year-old bull. One bull calf, 4 months old; one junior yearling heifer, bred; two senior yearling heifers nearly ready to freshen; two cows, one four, one five years old; one senior 2-year-old ready to freshen, second calf; one 10 months calf; all in splendid condition.

**F. A. NORTON, Breeder, Grandview, Wash.,**
R. D. 2.

### Waikiki Farm Jerseys

We offer several young bulls and heifers of exceptional breeding. Send for descriptions and breeding.

**WAIKIKI FARM, R. 7, Spokane, Wash.**

**JERSEY BULL FOR SALE.**

Year old, good individual, priced reasonable. Dam gave 45 to 50 lbs. of milk a day, test 4.8. Sire, Island bred.

**MRS. J. F. PEFFER. Dayton, Ore.**

### BATTEN'S S. C. REDS

I have 50 of the best cockerels that I have ever seen in one yard that I am offering at low prices, quality considered, in order to move them quickly to make room for younger stock. Prices range from $5 to $15 and can give you good selection if you will write me your wants. Can spare a few good pullets at $2.50 each. Let me hear from you.

**E. F. BATTEN, HOOD RIVER, ORE.**

In answering advertisements please mention this paper.

## DUROC-JERSEY SWINE

### Ioka Farm Durocs

The big type, with quality. The kind that wins in the show ring. Offspring of the great sire Golden Rod and other best Duroc strains.

**DOERFLER BROS., Silverton, Ore.**
A. N. DOERFLER, Manager.

### DUROCS

Bred and open gilts of the best breeding and individuality.

**G. O. SWALES. Johnson, Wash.**

**DUROCS.**

Boars and open or bred gilts of excellent breeding.

E. E. PRICE, CABINET, IDAHO, OR
**JAMES N. PRICE. YAKIMA, WASH.**

**OTTO'S DUROC JERSEYS.**

Founded on the basis of making Duroc history in Idaho. Won 4 championships and two grand championships at Southern Idaho State Fair.

**L. S. OTTO. Filer, Idaho.**

**IDAHO CHAMPION DUROCS**—At state fair of Idaho our Durocs won more prizes than all other exhibitors combined. Stock of all ages for sale.

**Richards Live Stock Co., Virginia, Idaho.**

**AVONDALE STOCK FARM.**

Registered Duroc-Jersey hogs. Inspection invited. Corespondence solicited.

**H. C. POLLY. Route 3, Burley, Idaho.**

## POLAND CHINA SWINE

**GREENLEAF STOCK RANCH.**
Big type Poland Chinas, either sex, for sale at all times.
**Wilson Bros., A. L. Wilson, Mgr.**
Greenleaf, Idaho.

**BIG TYPE POLAND CHINAS.**
Herd headed by Sammy (79,833), Correspondence Solicited.
**Fruitland Stock Farm, C. Royston, Mgr.**
Payette or Fruitland, Idaho.

## BERKSHIRE SWINE

### BERKSHIRE HOGS

Gilts of any age, bred or open; can also furnish young boars, from the best of strains and prize winning parentage.

**EARL WOOD, Silverton, Ore.**

## TAMWORTH SWINE

**ROUND KNOLL RANCH NO. 3.**

Herd headed by Knoll Slope Colonel, assisted by Jolly Lad IV. Correspondence solicited.

**Bliss, Idaho.**

## YORKSHIRE SWINE

### FALL PIGS

Both boars and gilts of best breeding. Now booking orders for spring pigs. Can furnish pairs or trios.

**WM. NEUENSCHWANDER, Gaston, Ore.**

## HAMPSHIRE SWINE

### Registered Hampshire Swine

A famous forage hog, great rustlers, fine mothers, quick growers.

**TUTTLE BROS., Asotin, Wash.**

## ABERDEEN ANGUS

### Aberdeen Angus Cattle

**A. H. EAGLESON & SONS.**
Boise, Idaho.

## HORSES

### Registered Clydesdale Stallion

3 years old in spring. Excellent breeding and conformation and will make horse weighing 1900 to 2000 pounds.

**O. I. TRICE, Grandview, Wash.**

Breeder of Registered Clydesdales.

**REGISTERED PERCHERON HORSES.**
E. O. WALTER, AUCTIONEER.
**Walter Bros.**
Buhl and Filer, Idaho.

### WHAT IS THE A. B. C.?

**Audit Bureau of Circulations.**

This is an association, nation-wide in its scope, not conducted for profit. Every publisher having membership in this organization pledges himself to sell circulation as a commodity, both as to quality and quantity. Advertisers using our columns are safguarded. They know that we give all the circulation we offer.

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, Jan. 7.—Storm conditions affecting the railroads tended today to uphold the corn market. Prices closed steady at the same as Saturday's finish to 1-8c off, with January at $1.27 1-2 and May $1.25 5-8. Oats gained 1-4c to 1-2c and provisions 15c to 42c.

Corn prices hardened a little at times as a result of the fact that owing to train blockades the arrivals of corn here showed a much smaller total than had been looked for. It was the general belief, however, that a material quickening of the crop movement would not be long delayed and there were numerous reports that empty cars were being furnished freely to rural shippers. A further handicap to bulls was the knowledge that to comply with the views of the food administration the board of trade directors had refused to disturb the present maximum price limit on future deliveries.

Provisions advanced because the supply of hogs was less numerous than had been expected.

**Chicago Futures.**

| | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| Corn— | | | | |
| Jan. | 1.27½ | 1.27½ | 1.27¼ | 1.27¼ |
| May | 1.25⅝ | 1.25½ | 1.25½ | 1.25⅝ |
| Oats— | | | | |
| Jan. | .79⅝ | .80⅛ | .79⅛ | .80⅛ |
| May | .77⅜ | .77¾ | .76⅞ | .77⅝ |
| Pork— | | | | |
| Jan. | | 45.80 | 45 50 | 45 80 |
| May | | 45.37 | 44.90 | 45.30 |
| Lard— | | | | |
| Jan. | | 24.00 | 23.95 | 24.00 |
| May | 24.30 | 24.40 | 24.25 | 24.37 |
| Ribs— | | | | |
| Jan. | 23.57 | 23.77 | 23.57 | 23.77 |
| May | 24.10 | 24.20 | 24.02 | 24.17 |

**Cash Quotations.**

CHICAGO, Jan. 7.—Corn—No. 2 and 3 yellow nominal; No. 4 yellow, $1.70.

Oats—No. 3 white, 81@82c; standard, 81½@82¾c.

Rye, $1.83½@1.84½.

Barley, $1.38@1.58.

Timothy, $5@7.50.

Clover, $20@26.

**Pacific Northwest Grain.**

PORTLAND, Ore., Jan. 7.—Grain 30-day options: Oats, No. 2, $59 bid; barley, feed, $54; brewing, $57.50. Eastern oats and corn in bulk: Oats, No. 3 white, $55 bid; 38-pound clipped, $55.50; corn, No. 3 yellow, $64; No. 3 mixed, $64; oats, No. 3, $55; clipped, $55.50; corn, yellow, $64; mixed, $64.

**San Francisco Grain.**

SAN FRANCISCO, Jan. 7.—Barley—May, $2.80 bid, $2.87½ asked.

**Minneapolis Grain.**

MINNEAPOLIS, Jan. 7.—Flour unchanged; shipments, 60,782 barrels.

Barley, $1.29@1.57.

Rye, $1.82½@1.84½.

Bran, $32.50.

Wheat—Receipts 450 cars, compared with 461 a year ago.

Corn—No. 3 yellow, $1.68@1.73.

Oats—No. 3 white, 79¾ @80¾c.

Flax, $3.57½@3.61½.

**San Francisco Produce Market.**

SAN FRANCISCO, Jan. 5.—Butter—Extras, solid packed cubes, 51@53c; prime firsts, 50@51c; one-pound square, wrapped, 53½c; one-pound square cartons, 55@56c; two-pound square, wrapped, 54c; two-pound square cartons, 54½@55½c; prime firsts, two-pound squares, wrapped, 51c; one-pound square, wrapped, 51½c.

Eggs—Fresh extras, 62c; fresh extra pullets, 55c.

Cheese—New firsts not quoted. Young Americas, California, 27½c.

Poultry—Hens, 25@26c; roosters, 16@17c; fryers, 27@29c; broilers, 30@35c; squabs, $2.50@3.50; pigeons, $1.60@1.75; geese, 18@20c; turkeys, hens, 32@34c.

Hay—Wheat and wheat and oat, $26@28; tame oat, $26@27.50; barley $24@26, alfalfa, $24@27; barley straw, 60@90c bale.

## Live Stock Quotations.

**At Omaha.**

OMAHA, Jan. 7.—Hogs—Receipts, 10,800; market 5c to 15c higher. Heavy, $16.10@16.55; mixed, $16.25@16.40; light, $16.10@16.50; pigs, $10@16. Bulk of sales, $16.20@16.40.

Cattle—Receipts, 10,300; market 10c to 15c lower. Native steers, $9@13; cows and heifers, $7@11.25; western steers, $7.50@12; Texas steers, $7@10; cows and heifers, $6.50@9.25; canners, $5.50@6.50; stockers and feeders, $6.50@12; calves, $9@13; bulls, stags, etc., $7@10.

Sheep—Receipts, 13,000; market slow, 10c to 15c lower. Yearlings, $11.50@13.50; wethers, $11@12.50; ewes, $10@11.50; lambs, $15.75@16.75.

**At Chicago.**

CHICAGO, Jan. 7.—Hogs—Receipts, 30,000; strong, 25c to 35c above Saturday's average. Bulk, $16.40@16.70; light, $15.75@16.65; mixed, $16.10@16.80; heavy, $16.05@16.80; rough, $16.05@16.25; pigs, $12.25@15.30.

Cattle—Receipts, 14,000; strong. Native steers, $7.85@13.50; stockers and feeders, $6.70@10.50; cows and heifers, $5.50@11.60; calves, $8.50@15.75.

Sheep—Receipts, 10,000; strong. Wethers, $9.50@13.25; lambs, $13.50@17.30.

**At Portland.**

PORTLAND, Ore., Jan. 7.—Cattle 15c to 30c lower; receipts, 1461. Medium to choice steers, $9.65@10.25; good to medium steers, $8.60@9.50; common to good steers, $7@8.40; choice cows and heifers $7@7.60; common to good cows and heifers, $5.75@7; canners, $3@5.25; bulls, $4.50@6.75; calves, $7@10; stocker and feeder steers, $6@8.

Hogs—Steady; receipts, 2880. Prime light, $15.45@15.60; prime heavy, $15.50@15.65; pigs, $13.50@14; bulk, $15.45@15.60.

Sheep—Dull; receipts, none. Western lambs, $13@13.50; valley lambs, $12.50@13; yearlings, $12@12.50; wethers, $11.75@12.25; ewes, $8@10.

**Spokane Stockyards, Monday.**

Hogs—Receipts, 76; market steady to strong. Prime light, $15.35@15.50; prime heavy, $15.35@15.50; pigs, $13.75@14.50. Bulk of sales at $15.40.

Cattle—Receipts, none; market steady. Best beef steers, $9.50@10.25; good steers, $8.50@9.25; common to good steers, $7@8.25; best beef cows, $7.50@8.25; good cows, $6.50@7.25; ordinary to good cows, $5.50@6.50; canners, $3@5.50; best heifers, $7.75@8.50; bulls, $5@7.50; calves, $6.50@9.50; stocker and feeder steers, $5@7.75.

Sheep—Receipts, none; market steady. Prime lambs, $13.25@14; good lambs, $12@12.75; prime yearlings, $11.50@12.25; prime wethers, $11.25@12; best mutton ewes, $8@10.

## The Wool Market.

BOSTON, Jan. 4.—The annual canvas of the unsold stocks of wool throughout the country made by the Commercial Bulletin as of January 1 shows total stocks in dealers' hands of 89,510,827 pounds, compared with 78,805,484 pounds of January 1, 1917. The Boston stocks in dealers' hands were 34,960,130 pounds, in addition to 1,234,596 pounds of tops and 2,544,101 pounds of noils this year, compared with total stocks last year of 44,099,484 pounds.

BOSTON, Jan. 4.—The Commercial Bulletin will say tomorrow:

"Business in wool has been very dull during the last week, every one waiting for the wool auctions, which occurred on Thursday. Except for the auction sales little has been done in private trading. What has been sold has been at unchanged prices and manufacturers report no change worthy of note."

Ohio and Pennsylvania fleeces: Delaine washed, 83@85c; Delaine unwashed, 75@76c; half-blood combing, 77@78c; three-eighths- blood combing, 77.

Michigan and New York fleeces: Fine unwashed, 63@64c; Delaine unwashed, 73c; half-blood unwashed, 75@76; three-eighths unwashed, 76@77c.

Wisconsin, Missouri and average New England; half-blood, 70@72; three-eighths blood, 75@76; quarter-blood, 74@75c.

Virginia, Kentucky and similar: Half-blood unwashed, 77@78c; three-eighths-blood unwashed, 78@79c.

Scoured basis:

Texas fine, 12 months, $1.68@1.72; fine eight months, $1.55@1.60.

California: Northern, $1.70@1.75; middle county, $1.55@1.60; southern, $1.45@1.50.

Oregon: Eastern No. 1 staple, $1.80@1.82; eastern clothing, $1.50@1.60; valley No. 1, $1.65@1.70.

Territory: Fine staple, $1.80@1.85; half-blood combing, $1 75@1.80; three-eighths-blood combing, $1.45@1.50; fine clothing, $1.60@1.65; fine medium clothing, $1.55@1.60.

Pulled: Extra, $1.80@1.85; AA, $1 70@1.80; A supers, $1.60@1.65.

## Seattle Market.

SEATTLE, Jan. 4.—Jobbers today lopped 10 cents off the selling price of Yakima Gems, quotations being $1.50 per sack, against $1.25@1.35 for Puget sound stock.

Culling out of apples in storage, particularly with regard to orchard run and all jumble packs has been started. It is admitted that cheap fruit must be moved before vitality can be put into the market for fancy and extra fancy fruit, and holdings of cheap fruit are heavy.

Butter is firm. Jobbers are of the opinion that as long as the weather remains mild an advance in prices would not be tenable.

**Purchasing Prices.**

Eggs—Local ranch, 47@48c per dozen; pullets, 37@38c per dozen.

Butter—Fresh dairy, 36c per lb; butter fat, 58c per lb.

Poultry—Live hens, fat, 4 lbs. and over, 23c per lb; under 4 lbs, 23c per lb.

**LINSEED.**

DULUTH, Minn., Jan. 5.—Linseed, $3.52 1-2@3.64 1-2; January, $3.52 1-2; May, $3.45 1-2 bid; July, $3.37 1-2 bid; October, $3.30 nominal.

**HOPS.**

NEW YORK, Jan. 5.—Hops easy; state medium to choice 1917, 48@55c; 1916, nominal; Pacific coast, 1917, 22@25; 1916, 15@18c.

**METALS.**

NEW YORK, Jan. 5.—Bar silver, 90 1-8.

## Portland Market.

PORTLAND, Ore., June 7.—The demand for mill feed continues in excess of the output of the mills, though the latter are running practically full time. It was thought that when prices were fixed on a definite basis the demand would slow down, but such has not been the case. Further advances in coarse grains are the probable cause of the heavy buying of bran and shorts.

Very little oats or barley are being offered by holders here or in the country.

A moderate wool turnover is reported by warehouse men here. The prices are not made public, but it is believed the prices are on a level with previous sales. Wool men do not believe that the Boston auction of Australian wools has changed the domestic situation in any way. According to wires received here, the best fine combing fleeces at Boston sold at $1@1.05 in the grease. These are wools that will shrink only about 45 or 50 per cent.

The potato market is still balanced and shippers are not offering over $1 at country points. Several cars of onions have gone south, the first to be shipped in about six weeks. The association price is now established at $1.75.

City creameries have advanced print butter prices another cent and this has strengthened the cube market. The buying price of butterfat has not been changed.

Eggs are coming in more freely, but the supply is not excessive and as storage stocks are nearly exhausted the market for fresh ranch is quoted steady.

The high prices to which the poultry market climbed in holiday week have been maintained. Country dressed meats are also high.

In the following list of quotations the grain, hay, mill feed, hops, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 1, $59 per ton.

Millstuffs—Bran, $30 per ton; shorts, $32.

Barley—No. 1 feed, $54; brewing, $57; rolled, $58@60.

Hay—Buying prices: Timothy, eastern Oregon, $27; alfalfa, $23.50; grain, $24.

Eggs — Oregon ranch, case count, 45c per dozen; candled, 46@50c.

Poultry—Hens, 23@24c; ducks, 20@25c; turkeys, live, 25@27c; geese, 15@18c.

Butter — City creamery, prints, 52@54c per pound; cubes, extras, 49 1-2c.

Cheese — Tillamook triplets, 23c; Young Americas, 24c.

Dressed meats — Veal, 17 1-2@18c; pork, 19@19 1-2c.

Hops—1916, nominal; 1917 crops, 14@16c.

Potatoes—Oregon, buying price, $1 per hundred.

Wool—Eastern Oregon, 50@60c; valley, 55@60c.

Beans—Buying prices: Oregon white, 9@9 1-2c; colored, 8@9c.

## Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

**Potatoes**—New local potatoes, $1.25 cwt; sweet potatoes, $4.75.

**Apples**—Large eating apples, $1.25@1.50; cooking apples, $1 box; Delicious, $1.85@2.25; Winter Bananas, $1.50 box; Jonathans, $1.10@1.40 box; Wageners, $1.25 box; Rome Beauties, $1.75 box; Spitzenburgs, $2 box; King Davids, $1.10 box; Grimes Golden, $1.35@1.60 box; Stayman Winesaps, $1.75 box.

**Butter**—Blanchard cartons, 53c lb; Medo-Maid, 53c lb; Cascade, 49c lb; Gold Leaf, 53c lb; Better Butter, 53c lb; Attalia, 53c lb; Diadem, 53c lb; Hazelwood, 53c lb; Solid Pack, 52@53c lb; Jersey Belle, 51c lb; Peerless, 47@48c lb; Snowcap, 38c lb; cooking butter, 38c lb.

**Cheese**—Wisconsin full cream, twins, 27c; triplets, 25c; Hazelwood full cream, triplets, 26c lb; Hazelwood Young America, 27c lb; Wisconsin limburger, 32@33c lb; brick cheese, 33@35c lb; domestic Swiss, 38c lb; Young Americas, 27c lb.

**Eggs**—White filler, guaranteed, $13 case; selected storage, $12.

**Live Poultry**—Hens, 13@16c lb; broilers, 18c lb; old roosters, 9c lb; ducks, 15c lb; geese, 20@23c lb; turkeys, 28@32c lb.

**Dressed Poultry**—Hens, 21@22c lb; broilers, 24@25c lb; old roosters, 11c lb; ducks, 20@23c lb; geese, 20@23c lb; turkeys, 28@32c lb.

**Hide Quotations.**

**Green Cows and Steers**—25 lbs and up, 15c; salted cured, 17c; green bulls and stags, 12c; salted cured, 15c; kip, 15 lbs. to 25 lbs, 20c; calf skins up to 15 lbs, 28c; dry flint hides, 30c; dry salted, 26c; dry calf skins, under 10 lbs, 30c; dry sheep pelts, 35@40c; dry shearlings, 10c@$1 each; green horse hides, $2.50@4 each; dry horse hides, $1@2 each.

## Butter and Eggs.

PORTLAND, Jan. 5.—Butter—Prints extras, 52@54c; cubes, extras, 49 1-2c; prime firsts, 49c; daily, 34c.

Butter fat, Portland delivery No. 1 sour cream, 56@57c.

CHICAGO, Jan. 5.—Butter unchanged. Eggs higher; receipts, 1702 cases; firsts, 55@56 1-2; ordinary firsts, 52@54c; at mark cases included, 50@55c; refrigerator firsts, 41c.

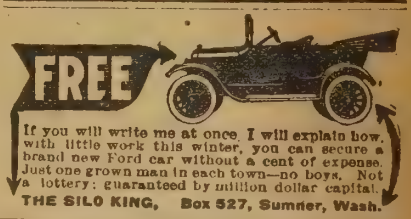
SAN FRANCISCO, Jan. 5.—Butter—Extras, 51@53c; prime firsts, 50@51c.

Eggs—Fresh extras, 62c; fresh extra pullets, 55c.

**TURPENTINE AND ROSIN.**

SAVANNAH, Ga., Jan. 5.—Turpentine firm, 43 1-4c; sales 182; receipts 10; shipments 109; stock 26,900.

Rosin firm; sales 1,086; receipts 792; shipments 300; stock 87,282. Quote B, D, E, F, G, H, I, 6.10; K, 6.80; M, 7.00; N, 7.20@7.25; WG, 7.40@7.45; WW, 7.50@7.65.




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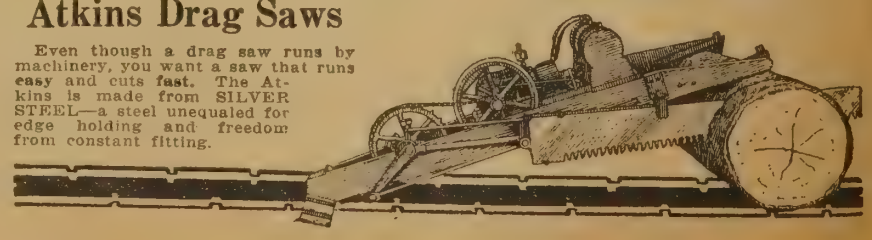
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# THE BARRIER

(Continued from page twenty-eight.)

malice; moreover, he was strong enough to stand aside and let another take his place, and thus deny to Gale the final recourse of a hunted beast, the desperate satisfaction that the trader craved. He tied his enemy's hands and delivered him up with his thirst unsatisfied—to whom? He thrust a weapon into the hand of his other enemy, and bade this other enemy use it; worse than that, forced it into to strike the man he honored—the man he loved. Burrell never doubted that Stark had carefully weighed the effect of this upon Necia, and had reasoned that a girl like her could not understand a soldier's duty if it meant the blood of a parent. If he refused to act, the gambler could break him, while every effort he made to protect Gale would but increase the other satisfaction. There was no chance of the trader's escape. Stark held him in his hand. His followers would do his bidding. It was a desperate affair. Was it impossible, the lieutenant wondered, to move this man from his purpose?

"Have you thought of Necia? She loves Gale. What effect will this have on her?"

"Damn her! She's more his brat than mine. I want John Gaylord!"

At this a vicious frenzy overtook Burrell, and he thought of the man behind yonder door, whom he had forgotten until these words woke something savage in him. Well! Why not? These two men had stalked each other clear into the farthest places, driven by forces that were older than the hills. Who was he to stand between these passions? This was ordained, it was the course of nature, the clash of elements, and this was a fair battleground, so why should he undertake to stop a thing decreed?

The gambler's words rang in his ears—"I want John Gaylord"—and before he knew what he was doing he had answered: "Very well. I'll give him to you," and crossed quickly to the door of his bedroom and flung it open. On the threshhold he paused stock-still. The place was empty; a draught sucked through the open window, flirting with the curtain and telling the story of the trader's exit.

"If you're looking for your coat, it's here," he heard Stark say. "Get into it, and we'll go for him."

The lieutenant's mind was working fast enough now, in all conscience, and he saw with clear and fateful eyes whither he was being led, at which a sudden reckless disregard for consequences seized him. He felt a blind fury at being pulled and hauled and driven by this creature, and also an unreasoning anger at Gale's defection. But it was the thought of Necia and the horrible net of evil in which this man had ensnared them both that galled him most. It was all a terrible tangle, in which the truth was hopelessly hidden, and nothing but harm could come from attempting to unravel it. There was but one solution, and that, though fundamental and effective, was not to be expected from an officer of the law. Nevertheless, he chose it, for Ben Stark was too potent a force for evil to be at large, and needed extermination as truly as if he were some dangerous beast. He determined to finish this thing here and now.

Meade went to his bureau, took his revolver from the belt where he had hung it, and came out into the other room. Stark, seeing the weapon, exclaimed:

"You don't need that; he won't resist you."

"I've decided not to take him?" said Burrell.

"Decided not to take him?" shouted the other. "Have you weakened? Don't you intend to arrest that man?"

"No!" cried the soldier. "I've listened to your lies long enough; now I'm going to stop them, once for all. You're to dangerous to have around."

They faced each other silently a moment; then Stark spoke in a very quiet voice, though his eyes were glittering:

"What's the meaning of this? Are you crazy?"

"Gale was here just before you came, and told me who killed your wife. I know."

"You do?"

"I do."

"Well?"

"It's pretty late. This place is lonely. This is the simplest way."

The gambler fell to studying his antagonist, and when he did not speak Burrell continued:

"Come, brace up! I'm giving you a chance."

But Stark shook his head.

"Don't be afraid," insisted the lieutenant. "There are no witnesses. If you get me, nobody will know, and your word is good. If not it's much simpler than the other." Then, when the gambler still made no move, he insisted, "You wouldn't have me kill you like a rattlesnake?"

"You couldn't," said the older man. "You're not that kind—and I'm not the kind to be cheated, either. Listen! I've lived over 40 years, and I never took less than was coming to me. I won't begin tonight."

"You'll get your share——"

"Bah! You don't know what I mean. I don't want you; it's him I'm after, and when I'm done with him I'll take care of you; but I won't run any risk right now. I won't take a chance on losing what I've risked so much to gain, what I've lived these 15 years to get. You might put me away—there's the possibility—and I won't let you or any other man—or woman either, not even my girl—cheat me out of Gale. Put up your gun."

The soldier hesitated, then did as he was bidden, for this man knew him better than he knew himself.

"I ought to treat you like a mad dog, but I can't do it while your hands are up. I'm going to fight for John Gale, however, and you can't take him."

"I'll have his carcass hung to my ridge-pole before daylight."

"No."

"I say yes!" Stark turned to go, but paused at the door. "And you think you'll marry Necia, do you?"

"I know it."

"Like h—— you will! Suppose you find her first."

"What do you mean? Wait—"

But his visitor was gone, leaving behind him a lover already sorely vexed, and now harassed by a new and sudden apprehension. What venom the man distilled! Could it be that he had sent Necia away? Burrell scouted the idea. She wasn't the kind to go at Stark's mere behest; and as for his forcing her, why, this was not an age of abductions! He might aim to take her, but it would require some time to establish his rights, and even then there were Gale and himself to be reckoned with. Still, this was no time for idling, and he might as well make certain, so the young man put on his coat hurriedly, knowing there was work to do. There was no telling what this night would bring forth, but first he must warn his friend, after which they would fight this thing together, not as soldier and civilian, but as man and man, not for the law, but against it. He smiled as he realized the situation. Well, he was through with the army, anyhow; his path was strange and new from this time henceforth, and led him away from all he had known, taking him among other peoples; but he did not flinch, for it led to her. Behind him was that former life; tonight he began anew.

Stark traced his way back to his cabin in a 10 times fiercer mood than he had come, reviling, cursing, hating; back past the dark trading post he went, pausing to shake his clenched fist and grind out an oath between his teeth; past the door of his own saloon, which was alight, and whence came the sound of revelry, through the scattered houses, where he went more by feel than by sight, up to the door of his own shack. He fitted his key in the lock, but the door swung open without his aid, at which he remembered that he had only pulled it after him when he came away with Necia. He closed it behind him now, and locked it, for he had some thinking to do; then felt through his pockets for a match, and, striking it, bent over his lamp to adjust the wick. It flared up steady and strong at last, flooding the narrow place with its illumination; then he straightened up and turned toward the bed to throw off his coat, when suddenly every muscle of his body leaped with an uncontrollable spasm, as if he had uncovered a deadly serpent coiled and ready to spring. In spite of himself his lungs contracted as if with the grip of giant hands, and his breath came forth in a startled cry.

John Gale was sitting at his table, barely an arm's length away, his gray-blue eyes fixed upon him, and the deep seams of his heavy face set as if graven in stone. His huge, knotted hands were upon the table, and between them lay a naked knife.

(To be continued.)


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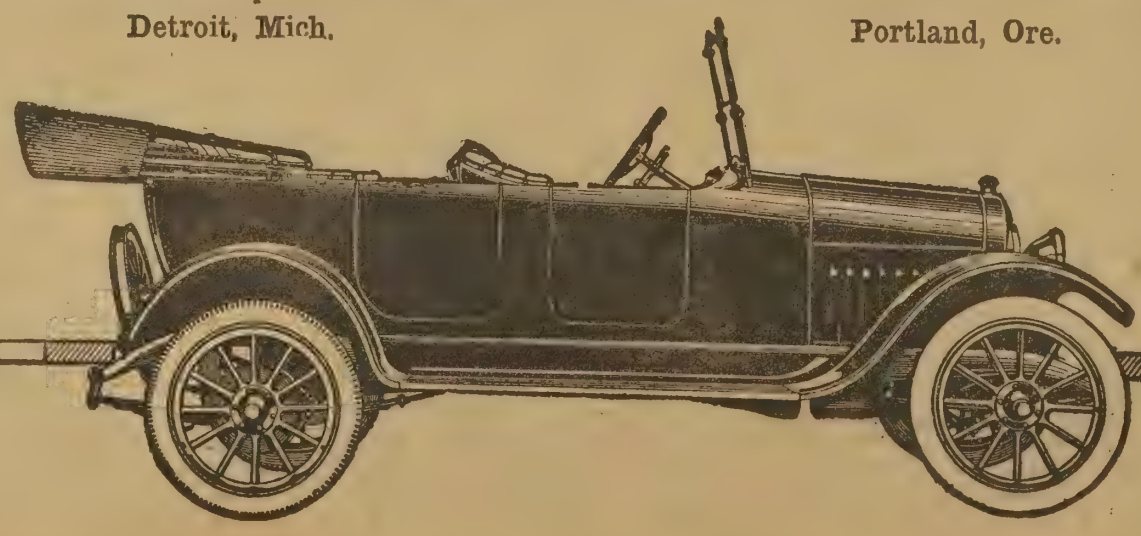
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VOL. XLI. NO. 3. JANUARY 17, 1918. ** WEEKLY.

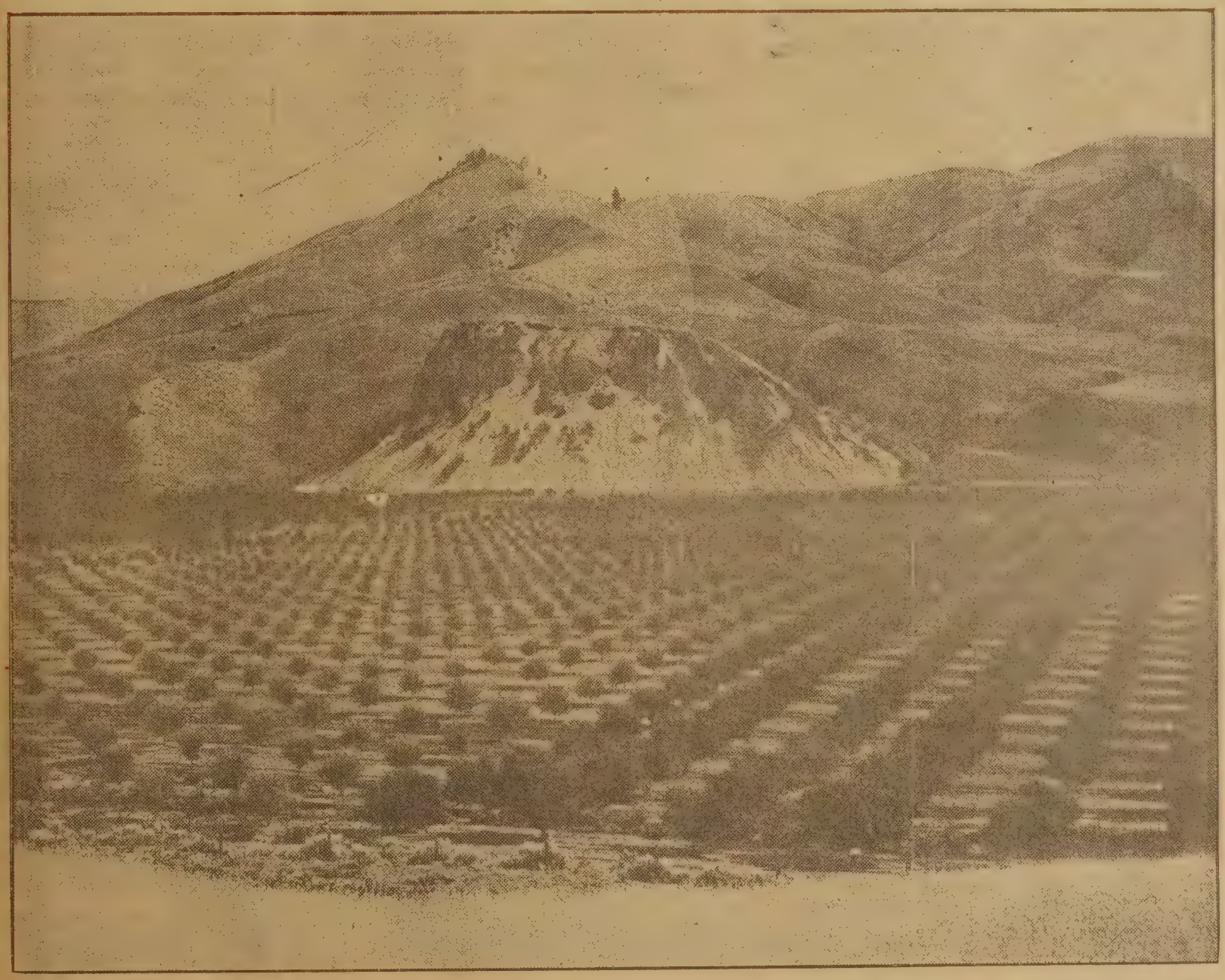



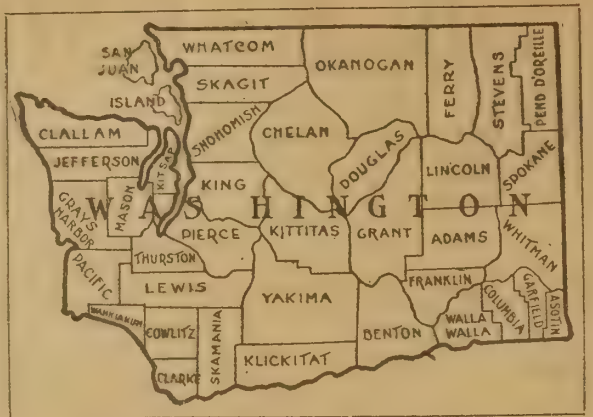
Photo by Frank Palmer.

**This Issue Contains Many Bits of Orchard Information, Among Them Being:**


Summary of the Horticultural Convention
Cull Apples Are No Longer Mere Hog Feed
Fruit Men Must Have Storage Facilities
Facts and Figures on Apple Production
The Cost of Arsenate of Lead for Spray
The Labor Situation Will be Coped With
Machinery Can Replace Much Man Power
Transportation Is a Big Fruit Problem

# Cut Out Useless Business

## Men Occupied in Unproductive Business in the Cities Should Be Put to Work Farming, Declares a Writer From the West Side




CHEHALIS, Lewis County, Wash., Jan. 3.—From a farmer's point of view, the most important problem in Lewis county for solution at the present time is the labor problem. The big shipbuilding industry of Portland and the Sound cities constantly draws workingmen from this community, and the lumbering industry of western Washington is using every obtainable man. The army and navy have taken their full share of men from the farms, and yet the farmers are asked to speed up and produce more food. Just how they will do it is more than I can tell. One firm has sold this winter 18 milking machines, and several small tractors have been placed in Lewis county, but machinery alone can not do the work. It takes men at seasonable times of the year. There are dozens of men running needless jitney lines. If the government could cut the number of these lines, as it has the number of railway trains, it would help. If the government could take the time and go still deeper and reduce the number of useless businesses in the towns and require every able-bodied person not regularly employed in a useful line to perform some manual labor on the farms during the year at the seasons when help is needed, and if the farmers knew they could depend on securing help when needed, they might succeed in speeding up, but under present conditions not much can be expected in the way of producing a surplus of food. There can be only one great problem which the communities of the United States can help to solve until the war is finished. The sooner we begin to use our every energy and every resource to help finish the war, the better it will be for us. The winter has been favorable for live stock. We have had no cold weather and no snow. During the last two weeks it has rained a great deal, but now it is past the turn of the year, and there is little chance for any protracted spell of cold weather. Farmers were so busy this winter that the local agricultural schools put on by the college authorities did not attract the usual attention. Neither are the special winter courses at Pullman or Puyallup going to draw much attendance from this community. J. C. BUSH.

### Keep Tab on Public Money.

STEVENSON, Skamania County, Wash., Jan. 2.—The rainfall has been incessant for the last month and the weather very mild with no frost. Grain is still growing beautifully and buds are swelling on some trees and vines. Should this condition continue I fear bad results when cold weather comes. As mid-winter approaches crop prospects for 1919 are, in my estimation, very favorable. Feed conditions are better than expected earlier in the season, as the grass is very good and stock is doing well and in better condition than last year, but there is not quite the same amount of stock on hand as last year. I know of no one in our community who is interested in the winter courses or demonstrations at the state college or university as no farmers are attending the same from here. I consider the clearing of stump land and the settlement of same, one of the most important problems confronting this section, so as to produce more hay and grain. Our principal resource has so far been timber products and as the years go by the timber of necessity is becoming less and land should be made productive. A more vigilant watch kept on the expenditure of public money in all departments would prove a big benefit to this locality as well as all others.

W. T. JACKSON.

### Some Are Impatient.

TWISP, Okanogan County, Wash., Dec. 31.—In some respects the price regulation by the government on wheat is satisfactory. Farmers are confident they will get the price promised by Uncle Sam by holding their grain until the government gets ready to handle it. Some of the farmers are getting impationt and are beginning to complain, but they are not pressed hard enough to offer their wheat below the standard price. I have heard no complaint about the fixed price on flour. I see no reason why we wouldn't be greatly benefited and considerably encouraged by a fixed price on corn, cotton, beef and the necessary articles we have to buy. It is my opinion that the time should be limited to the duration of the war or one year after, for the present fixed prices. The mildness of the early part of the winter has been very favorable to the farmer that was short on hay and some farmers will pull their stock through with very little hay. Speculation on hay has ceased for the present and the surplus hay is held at $15 per ton. Considering the price of labor and machinery and the present rate of taxes, the farmer should have $12 for hay to make a fair profit on it. While the dairyman is getting 50 cents and up, per pound, for butter fat, beef steers bringing 10 cents per pound, and button and wool high, with good fortune and proper management, good profits should come to the feeders of $12 hay. I know of no special methods of feeding or preparation of feeds practiced here. I can think of about 12 farmers' sons of this neighborhood that have gone into the navy or army.

GEORGE LA RUE.

### Should Regulate Everything.

COLVILLE, Stevens County, Wash., Dec. 28.—In this community it can hardly be said that any appreciable effect can be noted due to the interference of the government with the ordinary course of the markets. Government regulation does not appear to reach remote corners distant from central markets. Trading is almost entirely local, farm products being consumed at home. Public opinion is undoubtedly behind any attempt at regulation, and the only complaint is the delay and dilatoriousness of the administration in taking hold of some of the flagrant abuses which it is believed can only be controlled by government action. The action of the state food controller and the price-fixing commission is being closely watched, with some degree of criticism. It is difficult to understand why there should be such extremes between the prices charged the consumer and those quoted as being paid by the retail as well as the wholesale merchants. In other words, the difference between the prices received by the producer and those paid by the consumer is entirely too great. The farmer would be willing to stand for complete price fixing, even on all articles of food produced by him, provided he was protected in the things he had to buy. In this region early snows have complicated the feed situation. Every care is being taken to conserve the supply. Owing to the large number of teams required for hauling for the mines and lumber mills, as well as the pole and post industry, the local consumption of hay is very great. The prices of hay and feed have not increased with the progress of the season, but have remained stationary. Most of the farmers seem to have been careful to estimate the amount needed to carry their stock through the winter, and the prices secured at public sales would indicate that feeders felt safe in view of the available supply. Farmers are not inclined to experiment with the feeding problem, but are avidently eliminating waste in every direction.

The labor problem has not yet become acute. There is not the same clogging of work at certain times that prevails in many parts of the country, as farm work is better distributed throughout the year. Doubtless the pinch will come after the next draft call. No need, so far as noted, has compelled girls or women to don the overalls and go to the fields. A shortening of the school year by cutting out holidays and holding sessions on Saturdays is to be undertaken and thus let the children home to help out with the labor problem. At least one extra month will be gained by this speeding up and the operation of the school will be carried on more economically. E. E. ELLIOTT.

### Can't Do the Impossible.

MEAD, Spokane County, Wash., Jan. 3.—There is no fault found by the farmers here in regard to price fixing by the government, except that they think the fixing of prices on things they buy such as hardware, farm machinery, clothing, etc., should keep pace with the fixing of prices on the produce they have to sell. I should say public opinion rather favors more price fixing if it can be done more quickly on a more uniform level. The mildness of the season, so far, has resulted in a great saving of feed as stock of all kinds are still rustling much of their feed in the fields. If warm weather continues prices of hay and straw will probably go lower. The average grower has made no money selling hay this year at $25. Dairy men can not pay that much and come out whole. Some are going back to the old plan of cutting all fodder and mixing with ground feeds. Nearly half of the farm boys have gone to war. Unless some measures are taken to replace many of those where there was only one or two on the farm, the places must be short cropped and the production will not equal that desired by the government. Much is being said about help from the cities, but 90 per cent of those available know but little about farming and many nothing at all. They are absolutely ignorant when it comes to hitching up a four, six or eight horse team, or the use of modern machinery on the farm. The farmer will do his best, but he can not do the impossible.

GEORGE HINGSTON.

### Not Increasing Hogs.

GREAT FALLS, Cascade county, Mont., Nov. 15.—No losses due to cold or other causes since harvest set in. Our losses were all before harvest on account of drouth. I do not think there is much Hooverizing because there is little room for it among farmers generally, who are now and have been for years Hooverizing. Potatoes and turnips are being fed to hogs no more than heretofore. Farmers are not increasing their hog herds to any great extent. ALLEN PIERSE.




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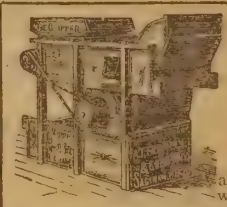
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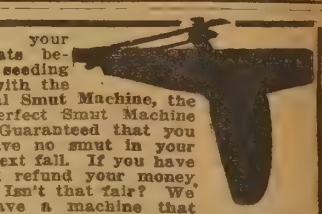
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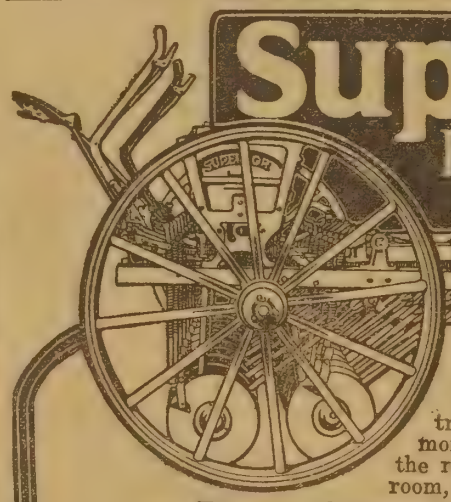
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# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 3 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF January 17, 1918

# Labor Is Big Orchard Problem

## *Subject Engrosses Growers at Agricultural Convention at Kennewick*

By RAY W. FELTON

Labor problems confronting northwest fruit growers in 1918 occupied a place of prominence at the 14th annual convention of the Washington State Horticultural association, which was held at Kennewick, Wash., January 3, 4 and 5. While this subject had been discussed more or less by groups of growers in hotel lobbies and during recesses, it was not until J. Curtis Robinson, traffic manager of the Northwest Fruit exchange, read a paper by Dr. Henry Suzzallo, chairman of the state council of defense, that the topic became one of absorbing interest.

Dr. Suzzallo pointed out the urgent need of making early preparation to meet the situation and made various suggestions along the line of cooperation and coordination. The convention voted to refer the matter to the executive committee, which will meet with the state council of defense and look after labor matters affecting the fruit industry of the state.

**Make Conditions Attractive.**

C. F. Stephens of Nampa, Idaho, who operates orchards approximating 400 acres, told of the way in which he kept things moving during fruit harvest. The Idaho man seems to have done just what other employers of labor are gradually coming to. He made living conditions attractive. He invested $1200 in tents which the pickers were privileged to use. He provided free fuel, and for those who came out from town each morning he arranged for state passage. He also served hot coffee at noon.

J. L. Dumas of Dayton declared it is certainly necessary to consider the personal comforts of the pickers and packers. Warm lunches, stage passage and other comforts were provided the workers at the Dumas orchards this year, and Mr. Dumas declared the amount of money required to provide these things proved an investment worth while.

Flood interference with railroad schedules severely curtailed the attendance at the convention. It was stated that 60 persons at Yakima turned back at the station Friday morning when they learned just what the situation was with respect to high water. A similar fear prevailed among Wenatchee growers.

But in spite of the comparatively small attendance the convention was one of great benefit. The program was replete with topics of a timely nature, both as to culture and marketing problems.

Secretary Luke Powell was given credit for much of the success of the meeting. Mr. Powell is horticultural inspector for Benton county and he is an untiring worker. Mr. Dumas paid glowing tribute to Mr. Powell and his most excellent work.

Lee E. Lampson, agriculturist for Benton county, with headquarters at Kennewick, is another person who gave much time and energy to preparing plans for the meeting and looking out for details after the delegates arrived.

The Kennewick Commercial club, whose members have always proved themselves alive and alert, saw to it that the visitors were well cared for. A pelasant automobile trip about the valley on a warm, sunshiny afternoon was one of the commercial club's hospitable acts.

Every delegate had an opportunity to partake of the juice of the grape when the Church Manufacturing company took the visitors to its plant and presented each with a bottle of grape juice.

A. R. Gardner of Kennewick delivered the address of welcome Thursday morning. President J. F. Sugrue of Cashmere held the attention of his audience with his most interesting address. Mr. Sugrue, who is manager of the Skookum Packing association, is an old-time Alaska "sourdough." He mushed over some of the worst passes known in the Klondike and finally left the Dawson country and came down to the States, later locating at Cashmere, where he is an extensive grower and shipper. As an executive officer he is difficult to excel. His good nature, ready wit and his skill as a parliamentarian kept things right side up and in smooth running order. As a collector of annual membership fees he and Commissioner E. F. Benson are neck and neck.

Following President Sugrue's address came the report of the treasurer, after which Professor George A. Olson of Pullman read a paper on "Economical Cereals in the Home." Commissioner Benson's paper, "Magnitude and Importance of the Horticultural Interests of the State," was decidedly interesting, but many missed it because of late trains.

A. H. Harrison, field representative and entomologist for the Kentucky Tobacco Products company of Louisville, Ky., manufacturers of "Blackleaf 40," gave the convention a most instructive paper on "Control of Aphis on Apple and Truck Crops."

C. Joseph DeVise, directing manager

(Continued on page seven.)

## Club Workers Meet

### Session in Conference at Pullman

Three district boys and girls' club leaders of the state of Washington, two specialists, the state club leader and her assistant, four county superintendents of schols and others who are interested in club work are holding a two-weeks' conference at the state college at Pullman.

George E. Farrell, deputy in charge of boys and girls' club work from Washington, D. C., is presiding and taking charge of the conference. His plan is, first for the proper organization of the county for developing and instituting club work, followed by the discussion of the relations between the different divisions of extension work as conducted by the state college, their relation financially and socially with the community factors such as the county, the state, the school and the home, and with that of the church and other organizations.

The conference had under consideration the construction of the state law as applied to the operation of club work and the salary of county club leaders for the purpose of carrying on the work. They plan to finish the outlining of the requirements for membership in the different club projects, such as the corn clubs, the pig clubs, the potato clubs, the sewing clubs, canning clubs and all the rest of the 14 different kinds of clubs in the state.

Some time was spent in the arrangement for contest work in communities, counties and state fairs, the celebration of a festival day and the making of a county program for each individual county for the entire year.

This week is being devoted mainly to the discussion along the lines that the clubs play in the county agricultural campaigns of the different counties in the state, and their relation to the proposed farm work as enlarged by the United States department of agriculture.

Among those in attendance are:

Miss Mazie Wilson, district club leader of the eastern division of the state; Lucien N. Jones of the central division and F. L. Audrain of the west side division; B. E. Smead, pig club specialist; W. K. Whitaker, poultry club specialist; Mrs. Elizabeth Jones, state club leader; Miss Josephine Arnquist, assistant state club leader; H. A. Horn, Spokane county club leader; W. E. Dudley, Clarke county school superintendent; H. R. Cox, Pierce county school superintendent; W. E. Delplain, Pierce county club leader; J. R. Shinn, Spokane county agricultural agent; Miss Jeanette Donaldson, Spokane county school superintendent; O. S. Fletcher, assistant county agricultural agent of Spokane county; Mrs. Nagel, assistant state school superintendent; Mrs. Henrietta Lycette, Spokane; Miss Margaret Boyle, Butte, Mont., and Miss Jessie Koontz, Spokane.

## HOLDS POULTRY SHOW.

### Good Birds Seen at Walla Walla.

Walla Walla staged a mighty good poultry show during the week of January 7-12. The number of entries was equal to the 1917 show and the quality ranked higher. There was a good representation of nearly all breeds, the Leghorn varieties looming large as usual with an exceptionally fine showing of Buff Orpingtons. Barred Rocks were very much in evidence, as were other types of meat-producers, showing a tendency to some extent to breed for war meat demands.

W. F. Sheets of Walla Walla took first on a S. C. White Leghorn cock, which Judge Keeney pronounced a bird of very unusual qualities. Sheets also displayed a Buff Cornish Indian Game cock and hen, which attracted much attention.

From the state game farm at the penitentiary was sent a splendid collection of game birds.

"Casey's Side Show" was an interesting feature. Casey and Sons, well-known breeders of S. C. White Leghorns at Waitsburg, were on hand Monday morning with a brood of day-old chicks. They were fine specimens, and they seemed perfectly at home in their quarters made warm and cozy by a coal-burner hover.

There were 18 varieties entered in the sales class and a large number of purchases were made.

The show was held in large, commodious quarters at Main and Fifth streets. It had the loyal support of Walla Walla business men. The energetic work of Superintendent I. D. Casey and Secretary J. A. Levy kept things moving in good shape. Judge Keeney added to the interest of the occasion by his willingness to give generously of his knowledge and experience. This proved especially true when Superintendent W. M. Davis of the College Place public schools took 10 of his boys, who are studying agriculture, to the exhibit that they might learn some of the fine points of practical poultry judging. The boys who made the trip were: Ray Tomlinson, Myron Harmon, Sumpter Thorington, Raymond Kilberg, Frank Nelson, Ralph Nelson, Angelo Criseuoli, Earl Hauck, Harry Beischoff, Douglas Arnold.

The agricultural class of the Walla Walla high school also spent part of a day at the show, studying the birds and observing the judging.

## Talk Bulk Grain

### Session Will Be Held Next Week

Beginning at 10:30 Friday morning, January 25, the bulk grain conference announced some time ago will open its two-day session in Spokane. The session will be an important one, and will probably result in the solution of some of the vital problems of grain handling by the bulk method.

The first main question at the afternoon session will be under the head of "Handling the 1918 Grain Crop of the Inland Empire." The first division will be "Price and destination—Shall the surplus go east by rail, or shall it go west and through the Panama canal?" This subject has been assigned to M. H. Houser of Portland, agent in the northwest for the federal food administration, and who has handled the grain situation. The next division is "The grain sack situation—Available supply and prices." This will be discussed by representatives of Ames, Harris & Neville and of the Bemis Bag company, which two concerns do a large business in the handling of grain bags. The last division of the main subject is "Necessity of bulk handling," to be discussed by a number of men.

"The Present Storage Situation, and the Available Storage at Coast Terminals for 1918" will be discussed by G. B. Hegardt, engineer and secretary of the commission of public docks at Portland.

The next general subject is "Increased Food Production a War Necessity."

(a) "Need for Increase of Meat Production," Charles Hebberd, federal food administrator for Washington.

(b) "Retaining Dockage on the Farm for Feed," M. W. Harris.

(c) "Appeal for More Meat Production," E. E. Flood.

Other subjects to be discussed are: "Rules and Regulations Governing Grain Grading." "The Farm Labor Situation." "Handling and Storing Bulk Grain on the Farm" and "Elevator Construction."

Friday evening a dinner will be held, following which a part of the program will be carried out.

Persons attending should ask their ticket agents for certificates upon which they may secure a reduced fare if sufficient numbers attend the convention.

## Hillyard Poultry Show.

Hillyard, the railway town near Spokane, has created for itself an enviable place in the poultry world. A year ago the Interstate Poultry club of that town pulled off a good show. This year it has jumped into a prominent poultry position. There were entries this year of more than 600 birds from outside points, Reardan, Wenatchee, St. Maries, Ritzville and Walla Walla and elsewhere. Oscar Nelson judged the birds.

**Rim Rusting.**

When a rim has had some of its paint knocked off take the precaution of applying some graphite paint at once, not only for the looks sake but to prevent the formation of rust.

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# Fruit Men Must Have Storage

## *Adequate Equipment Would Prevent Rush to Market*

Leaving out of consideration altogether the frostproof warehouses of the ranches (and these warehouses are numerous), there is in the Northern Pacific and O.-W. R. & N. shipping district from Selah to Kennewick, in the Yakima valley, common storage for 5840 cars of apples and cold storage for 2075 cars. These figures are not hard and fast, since storage warehouses are constantly under construction and refrigeration is now considered an essential in all progressive districts. The development of this phase of the fruit industry is not generally remarked but is one of the most essential and important tendencies.

Unfortunately the Walla Walla, Wenatchee, Chelan and other districts are not as well provided with storage as is Yakima and are not indeed yet adequately provided. This situation, however, rectifies itself in each community with the passage of years, particularly since each district with storage recognizes that the best protection it can have is storage elsewhere in competing districts to counteract the tendency to sacrifice fruit by rushing it to market.

Railways themselves are among the most active agencies in urging this storage. Railroad officials recognize that it is an utter impossibility now, and the difficulty is increasing, to furnish all the rolling stock and motive power needed to transport in a few weeks the entire crop of any district. Transportation and marketing must be spread out, both as a physical problem and as a matter of good business.

**Storage Is an Investment.**

Frostproof storage on the ranch is keeping pace with the development of the silo. Ranchers generally recognize the argument and the merit of the investment. The farmer is preserving his crops just as his wife for years has preserved in cans, jars and bottles that portion needed for home consumption until another year's supply was available. The cheapest and most effective system is the home storage, supplementing the cold and community warehouse storage. In this respect one important part of the state has become almost independent. Other sections particularly as they diversify their crops, will do likewise.

It is an old saying that price makes the tonnage. It is impossible, almost, to tell what crops are stored in a district that has developed its facilities for carrying its yield where it will be reasonably safe from frost and decay. It is a fact, however, that the Yakima valley, when the price advances, is always able to bring out from its storage apples, potatoes, meats, eggs onions and other money bringers, until one is compelled to wonder where these supplies were produced.

Statistics of the Yakima valley for the last season show shipments of 480 cars of mixed fruit, which, at an average value of $775 per car, is a total of $372,000. This business is in its infancy. It has been made possible by the storage, especially the cold storage which, at the same time, has made possible the shipments of straight cars of fruit such as apricots, grapes, cherries, melons, etc., that at one time could not be held.

**The Mixed Car Business.**

Authorities differ as to just how much the mixed car business is a development of the storage and how much is natural because of the development of the country. The fact remains, however, that the cold storage has been the means of conserving to the individual rancher an immense aggregate of fruit that was formerly wasted. In these days of the household automobile, the odd lots of peaches, berries, apricots, unusual varieties of pears, etc., of which every home had a few, became a commercial article. It is not necessary to hire a team to haul the little lots to town, and it is not necessary for the shipper to sacrifice them before they have a chance to spoil. They can be held for an accumulation and shipped under insulation. In this way the single tree of early apples becomes an asset instead of a liability. In this way the back lot and the orchard corners become remunerative.

This small item is touched on merely to illustrate one of the by-products of the storage development. The mixed car business will grow, however, into a very important phase of the fruit business. The storage plant will be the handmaiden of the grower, the shipper and the processing plant. This last, where waste is eliminated, is where the "velvet" is to be found in the fruit business for the grower, and it is the only place, if at all.

There were in the Yakima valley, when the figures above and herewith given were compiled, 23 shipping points that had commercial common storage and 13 that had commercial cold storage. The grower had his choice of 79 common and 13 cold storage plants. The figures are changing constantly and by another season the proportions will be greatly changed and the aggregate much increased. It is easy to figure, however, what these facilities mean, especially for the smaller districts which before were compelled to eat up a large proportion of the profits of the crop in hauling to a more or less distant shipping or storing point.

The fruit business of the territory in question is figured for the year 1917 to be $12,268,850, not to mention another million dollars of processed by-product. It is, perhaps, unnecessary to point out that the benefit of this storage reacts on other crops, so that the value is not to be measured by the fruit business alone. Potatoes, vegetables, eggs, butter, cream, cheese, can be and are handled and held until the time to realize on them has arrived.

This little story is given for just what it is worth. It is significant that an agricultural section of the state that is undergoing the most rapid development and that this year produces a commercial crop of a value almost twice that of the total fisheries of the state, has storage out of all proportion to other agricultural sections of the state and, excepting, of course, the cities. Construction of this storage, in the orchard and on the ranch, as community warehouses and as a commercial undertaking on railroad tracks, is based on experience and is paying handsomely, every citizen participating in the benefits.

## Chehalis Cow Testing.

B. C. Wright, official tester of the Chehalis District Cow Testing association, declares in his December report that dairymen should market their own culls or surplus stock. "If there is not a carload," he says, "ship cooperatively—even a mixed load. Every time you sell to a cattle buyer who comes to your farm you deliver a blow at the open market as found at the stockyards where buyers congregate and bid for what they get. A traveling buyer is either a representative of one of the big packing establishments who seeks to buy at a lower figure than that found on an open market where competition prevails, or he is buying on his own hook and will make his profit on the margin he will obtain at the yards over what he paid at the farm."

Mr. Wright backs up his statement by declaring that early in December Bouchard Bros. shipped a carload of "border" cows for which they received $180 more than the price the buyer laughed at on the farm. Three cows in the association during December produced over 60 pounds of butterfat, each of them a Holstein. The highest cow was owned by G. Salzer, which produced 1626 pounds of milk, making 76.422 pounds of butterfat.

**Eat Fatless Meats.**

The food administration is working out a plan to have nearly all the fat removed from meat at the bucher's or packing plant before it is offered for sale in the markets. This is for the purpose of conserving the fats that are so much needed in the armies.

# Cost of Arsenate of Lead Spraying Is Shown

The cost of spraying an orchard with arsenate of lead, measured in terms of acres or boxes of apples, was one of the interesting subjects at the horticultural convention at Kennewick last week. Especially interesting was the discussion of the subject by S. W. Foster of the General Chemical company, supplemented by a detailed table illustrating the facts given. The table is given herewith.

Almost equally interesting was a smaller table showing the loss in boxes per acre when worms destroy varying percentages of the fruit. In discussing the tables Mr. Foster said in part:

"Take for example an orchard sprayed four times, using 300 gallons per acre at each application and using five pounds of paste lead to each 100 gallons of water, or 60 pounds per acre. Suppose the acre produces 500 boxes of apples. Two per cent of the crop at $1 a box will more than pay for all the arsenate of lead used. If the orchard produces only 300 boxes per acre, about 3 per cent of the crop will be required to pay for the lead used in 1918.

"Then consider the large trees requiring 600 gallons of dilute spray per acre, or 2400 gallons for four applications. Less than 4 per cent of the crop will pay for the lead used if the orchard produces 500 boxes per acre. If the orchard produces 700 boxes per acre, less than 3 per cent of the crop will pay for all the lead used.

"The man who thinks that he may omit one or more of the late applications to save money should carefully compare the cost of the application with loss of apples, if, by omitting the application any of the apples become wormy. When we remember that 1 per cent of the crop will pay for the arsenate of lead used for one application it is dangerous business to try to save expenses when the loss at the other end may be many times the amount supposedly saved. The difference between three and four applications is only about $1.80 per acre for lead costs."

### LOSS FROM WORMS.

This table was presented by Mr. Foster to show the loss from worms in boxes of apples per acre. The three columns of figures are for orchards producing 700 boxes, 500 boxes and 300 boxes per acre, respectively.

| Wormy. | Boxes lost per acre. | | |
|---|---|---|---|
| 1 per cent | 7 | 5 | 3 |
| 2 per cent | 14 | 10 | 6 |
| 3 per cent | 21 | 15 | 9 |
| 4 per cent | 28 | 20 | 12 |
| 5 per cent | 35 | 25 | 15 |
| 10 per cent | 70 | 50 | 30 |
| 15 per cent | 105 | 75 | 45 |
| 20 per cent | 140 | 100 | 60 |

### ARSENATE OF LEAD COSTS FOR SPRAYING APPLE ORCHARDS.

Comparison of costs in paste and powder forms at average price in 1917 and at anticipated prices for 1918. Showing cost per acre and cost per box according to production for three and four applications each season.

| | Gals. of spray per acre each application | No. of applications | Total gals. spray per acre | Amount of lead: Per 100 gals. | Amount of lead: Per acre | Form | Price per lb. | Cost per acre | Boxes per acre and cost per box: 700. | 500. | 300. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | a 300 | 3 | 900 | 4 | 36 | Paste | .09 | 3.24 | .0046 | .0064 | .0108 |
| | a 300 | 3 | 900 | 3 | 18 | Powder | .21 | 3.78 | .0054 | .0075 | .0126 |
| | b 300 | 4 | 1200 | 4 | 48 | Paste | .09 | 4.32 | .0061 | .0085 | .0144 |
| | b 300 | 4 | 1200 | 2 | 24 | Powder | .21 | 5.04 | .0072 | .0100 | .0168 |
| | c 300 | 4 | 1200 | 5 | 60 | Paste | .09 | 5.40 | .0077 | .0108 | .0180 |
| 1917 | c 300 | 4 | 1200 | 2½ | 30 | Powder | .21 | 6.30 | .0090 | .0126 | .0210 |
| | d 600 | 4 | 2400 | 4 | 96 | Paste | .09 | 8.64 | .0123 | .0173 | .0288 |
| | d 600 | 4 | 2400 | 2 | 48 | Powder | .21 | 10.08 | .0144 | .0201 | .0336 |
| | e 600 | 4 | 2400 | 5 | 120 | Paste | .09 | 10.80 | .0154 | .0216 | .0360 |
| | e 600 | 4 | 2400 | 2½ | 60 | Powder | .21 | 12.60 | .0180 | .0252 | .0420 |
| | a 300 | 3 | 900 | 4 | 36 | Paste | .15 | 5.40 | .0077 | .0108 | .0180 |
| | a 300 | 3 | 900 | 2 | 18 | Powder | .33 | 5.94 | .0085 | .0118 | .0198 |
| | b 300 | 4 | 1200 | 4 | 48 | Paste | .15 | 7.20 | .0103 | .0144 | .0240 |
| | b 300 | 4 | 1200 | 2 | 24 | Powder | .33 | 7.92 | .0111 | .0168 | .0264 |
| | c 300 | 4 | 1200 | 5 | 60 | Paste | .15 | 9.00 | .0128 | .0180 | .0300 |
| 1918 | c 300 | 4 | 1200 | 2½ | 30 | Powder | .33 | 9.90 | .0141 | .0198 | .0333 |
| | d 600 | 4 | 2400 | 4 | 96 | Paste | .15 | 14.40 | .0206 | .0288 | .0480 |
| | d 600 | 4 | 2400 | 2 | 48 | Powder | .33 | 15.84 | .0226 | .0313 | .0528 |
| | e 600 | 4 | 2400 | 5 | 120 | Paste | .15 | 18.00 | .0257 | .0360 | .0600 |
| | e 600 | 4 | 2400 | 2½ | 60 | Powder | .33 | 19.80 | .0282 | .0396 | .0660 |

# Field Notes

Harry Van Horn of Richland, Wash., is one of the first settlers of that section, now noted for its early berries and fruits, besides being a district where diversified farming is profitably practiced. Mr. Van Horn lived for years in the Richland district before the town was established and his was one of the few ranches bordering upon a great desert of sand and sagebrush. But even in that state the country appealed to "Van," as he is popularly known, and he has lived to see the country developed into its present high state of cultivation. Both Mr. and Mrs. Van Horn have been active in educational work in their district.

R. D. Inman of Grandview, Wash., wished to breed a bird with the laying qualities of the White Leghorn and the meat of the White Rock type, and says his experiment has proved successful. In breeding, he selected the U. R. Fisher strain of White Rocks for the hen. The cock used was a Rose Comb White Leghorn of the Snowball strain. Mr. Inman says the cross makes a desirable market bird, but still possessing the laying qualities of the Leghorn breed. The hybrid will run four to six pounds. In 1915 Mr. Inman's flock netted $1.52 per hen. In 1916, due to "too many irons in the fire," as he puts it, his flock fell down to a fraction over $1.40. He has not made an accounting for this year. "My bids have kept me going," said M. Inman. "They have paid me when my cows fell down. But, as all poultymen know, no flock will poduce desied esults unless given the most caeful attention possible."

# To Prepare Rice Powder

To the Editor of The Washington Farmer: As rice contains more nourishment than wheat it should be used far more than it is at present. Rice flour is so easily prepared and bread made from it is so delicate that everyone likes it.

To prepare rice flour use any cheap grade of rice. Wash and soak in cold water two or three hours. Drain and run through the food chopper, using the nut butter grinder. The rice must be drained fairly dry to grind well.

The flour is rather coarse and damp so whatever is not used at once must be spread on a cloth and laid on the warming shelf of the kitchen range to dry. Stir occasionally to prevent its drying lumpy. Do not sift it as small lumps will disappear in baking.

To make bread use one pound of rice flour to three of wheat flour. Mix and treat the same as wheat bread. Use the bread dough for all kinds of rolls as you would wheat bread dough. To make doughnuts, take a lump of the bread dough twice the size of your fist, one cup sugar or honey, one cup warm milk and a little shortening, wheat flour to mix stiff as bread dough. When light, roll out and cut into doughnuts. Put them on a floured cloth to raise. When light fry like any other doughnuts.

These do not take as long to fry as other doughnuts and absorb very little grease. They are good hot or cold.

By adding one cup sugar or honey and a pound or more of raisins to an ordinary family baking of rice flour bread, a delicious sweet bread is obtained.

Use one-third rice flour in your baking powder or soda biscuits and in muffins and save half your shortening. Use it in custards and puddings as you would corn starch cookies.

Use one pound of oatmeal or cornmeal to three pounds of wheat flour. One-third of either rye or graham to two-thirds wheat flour and equal parts of barley, graham and wheat flour for war bread.

Pour boiling water on the cornmeal to make a thick mush. Let stand in a warm place over night closely covered. In the morning add your sponge or yeast and proceed as for wheat bread, using any method you are accustomed to in making all wheat bread. Use no shortening. Oatmeal should be cooked five minutes and treated the same as corn meal. Makes fine toast. This bread dough can be used for all kinds of rolls, also doughnuts, by treating like the rice flour bread dough.

Make barley flour by running pearl barley through the food chopper dry, using the nut butter grinder. Sift and use the coarse particles for soup or breakfast food.

MRS. W. F. STECHER.

Pullman, Wash.

# Food Production Problem

## *What Farmers of the State Are Planning to Raise During 1918*

Here is another instalment of answers from Washington farmers as to their utmost in food production for the year 1918. Reading over the products of which they propose to raise more, as well as those of which they plan to raise less, will give one an encouraging glimpse of the patriotic attitude of the farmers of the state.

**To Increase Poultry Flocks.**

To the Editor of The Washington Farmer: I am filling out your "What Is Your Utmost" blank and returning same herewith. Might say in explanation that I specialice in fruit and poultry and have heretofore made no effort to raise any other crop—not even feeds. However, feed is high and land and labor, so far, are comparatively cheap; so I have purchased a small tract near me and will raise a little corn, wheat and mangels. I have always felt a little guilty in feeding so much wheat to my poultry and believe my conscience will rest a little easier if I raise part of what I feed. Concerning poultry, I consider it not only our patriotic duty, but also mighty good business to increase our flocks to the extent of our ability to take care of them. Consequently I will practically double the number of my layers by the first of next October. As I am carrying 1000 layers now this increase will be quite a substantial one. I know feed is considered high, but the price is practically set, and we know just what our hens will cost us for maintenance—there is no gamble on that end of the business. Eggs are high, also, and will surely remain so for a long time. A heavy producing flock will make more money net now than it did two years ago. It is only the man with the scrubs, mongrels and poor layers that is losing money at the present time. The poultry man that will care for his flocks properly, cull them severely and when adding new stock be very careful to secure it from a pure-bred, heavy laying strain—that man is safe. He will not only make money for himself, but will also be doing his duty to his country and to humanity. A few years ago the man that dared admit that his flocks were utility fowl; that his main object as a poultryman was to produce eggs and meat—that man was openly ridiculed and belittled by the so-called "fanciers" and the public in general. But the times have changed since then, and also public opinion. Now the man that can show that his flocks have made money from market eggs and meat is considered a good citizen and a good business man. The fancier that can show only "pretty feathers" is the one that is crying "hard times" and bewailing the "high cost of feed." I honestly believe that the poultry business is a safe insituation, and I am also just as firmly convinced that the level-headed, patriotic "business hen" poultry men and women will do their "utmost" this spring and geratly increase the country's wealth of poultry products. Truly "now is the time for all good men and true to come to the aid of their country." E. R. WELLS.

Prosser, Wash.

**Bigger Machinery.**

To the Editor of The Washington Farmer: In regard to farm labor, men are scarce. I am going to run bigger machinery and drive eight and 10 horses myself and do all I can and won't figure on any hired help. In harvest we are planning to help one another and exchange work. The women could raise poultry and help milk and help with the chores.

ED TIEDT.

Soap Lake, Wash.

**To Help the War Out.**

To the Editor of The Washington Farmer: I am trying to raise everything to help the war out. We have more wheat and everything else.

E. J. EDWARDS.

Eureka, Wash.

**Extra Cultivation.**

To the Editor of The Washington Farmer: I am not increasing normal acreage. Intend to raise more by extra cultivation. If labor is so high that I can not afford a man I will therefore produce less, as I have farmed for 12 years now and while I have increased improvements, stock, etc., and kept up my interest, my original debt remains the same. F. F. WOLLENBERG.

Hartline, Wash.

**Neighbors Exchange Work.**

To the Editor of The Washington Farmer: Farm labor was scarce and very expensive last summer, men asking from $2.50 to $3.00 per day, and it looks like conditions would be worse in that respect the coming summer. Neighbors exchange work to quite an extent, thereby lessening the expense of hiring a good deal.

A. E. RANDALL.

Meyers Falls.

The tendency of crop production is shown by the following summary of the coupons received during the week:

W. H. Barney, Chesaw: MORE wheat, oats, barley, corn, potatoes, peas, beans, vegetables, fruits, hay, beef and

(Continued on page sixteen.)

### THE RAINIER APPLE.

**Said to Be World's Best Keeper.**

While the Yakima valley of Washington has long claimed credit for growing as fine flavored, as highly colored and as profitable apples as are produced in the nation, it has remained for the United States department of agriculture to officially declare that an apple, not only grown, but originated in the valley, is the world's best apple when keeping qualities are considered.

W. W. Scott, a well-known orchardist of the Fruitvale section, near North Yakima, is the originator of the "best keeper," the Rainier apple. For several years it was known as the Scott apple, and was by many persons confused with the Hubbardston Nonesuch, which it somewhat resembles. Mr. Scott, who insisted that his apple had distinct points of difference from the Hubbardston, finally submitted the fruit to the United States department of agriculture.

Appropriately enough, since the Scott ranch where the apple originated looks on two snow-capped peaks, the apple was given the name of the larger of the two, and became the Rainier apple. A number of orchardists, attractd by the apple's splendid flavor, color and firmness, have set out orchards, now coming into full bearing, of the new fruit. The Rainier apple bids fair to become as much of a commercial favorite as the Delicious, Winter Banana or other standard variety.

The official report regarding the keeping qualities of the different apples, says: "The experiments showed the Rainier apple to be the best keeping variety. It remained in prime condition for market until May or later."

According to the report sent out by the department of agriculture the other leading keeping varieties among the apples grown in the northwest are: Arkansas Black, May; Winesap and Yellow Newton, last of April; Rome Beauty, middle of April; Delicious, last of March; Ben Davis, Winter Banana and White Permain, first of March; Spitzenberg, last of February; Stayman Winesap, middle of February; Jonathan, first of January, and Grimes, middle to last of December.

# Use Strongest Men to Push Food Production Campaign

Copies of the recent telegram to President Wilson, urging the immediate appointment of the strongest available man in the country as national war time food production administrator, were sent to persons in different parts of the country asking them to push the movement if it met their approval.

(From the telegram to President Wilson.)

"Some way must be found to better labor conditions and hold young men on the farm with a patriotic consciousness of honor and dignity. The crisis demands the immediate appointment of the ablest available man in the country as national war-time food production administrator, who will fire the imagination of all the people, consumer as well as producer, to the supreme necessity of increased food production, and who will establish far-reaching cooperation with the agricultural department, agricultural colleges and farmers in all sections of the country in meeting their war-time food production difficulties, just as Hoover has brought home to every family the need of food conservation, and just as the Red Cross campaign has swept the entire nation under the leadership of Davidson."

**Labor Problem Most Vital.**

With regard to this C. P. Norgord, state commissioner of agriculture in Wisconsin, writes:

To the Editor: Replying to you letter of December 29th with regard to the farm labor situation, permit me to state that I have considered all the time, since the beginning of the war, that the labor proposition is the most vital one with which we have to deal, more vital, indeed, than the seed situation.

Your appeal to President Wilson, I believe, is seconded by all of those who know the food situation, and the present prospects for the coming crop. I believe that we must use the very strongest men, and those in the most effective official positions, to start the increased food production campaign for the next year. We must get all of the governors behind the movement as well as the national and state councils of defense, and they must all speak in positive proclamations regarding the great need of the most effective stimulus possible to the production of the needed acreage of crops for the coming year.

The bad weather of last fall has prevented many states in the Union, including Wisconsin, from getting in the acreage of winter grains that would have been put in had the weather been more favorable.

I believe that the farmers throughout this state, and other states, are ready to work to the limit to produce the needed crops, if the matter is properly brought to their attention.

C. P. NORGORD.

Madison, Wis.

**Suggestion Appeals Strongly.**

Wallace B. Douglas of St. Paul has been attorney general of the state of Minnesota as well as associate justice of the supreme court. At present he is a member of the Minnesota state forestry department and is practicing his profession in St. Paul as the head of the firm of Douglas, Kennedy & Kennedy. Mr. Douglas wrties:

To the Editor: I am today in receipt of your favor in the matter of the appointment of a "National War-Time Food Production Administrator."

Your suggestion appeals to me strongly and I have just taken up the subject with Judge McGee, a member of the commission of public safety, and requested that he invite consideration and action by the board.

W. B. DOUGLAS.

St. Paul, Minn.

**Close Unnecessary Business.**

J. N. Hagan, commissioner of the department of agriculture and labor in North Dakota, writes further:

To the Editor: Your letter of December 29, with enclosure of copy of telegram to President Wilson, received, and I agree with you that it is very necessary that everything be done to maintain the young men on the farms as far as it is possible, as the available supply of persons competent for agricultural work is becoming very limited, owing to the great demand for military service and also the factories in the east have taken a great many competent young men from the farms.

As food is of prime importance during this emergency, it occurs to me that pressure should be brought to bear to enforce the closing out of all unnecessary business during the period of the war. I notice that in many of the cities and towns that there are many men engaged in running pool halls, bowling alleys, soda fountains, candy kitchens, etc., that, to my mind, might be eliminated as unnecessary during this military emergency.

Men engaged in unnecessary occupations should be compelled to either enter agricultural pursuits or be automatically placed into the army; we would then be conserving a great deal of human energy that would contribute something toward the accomplishment of winning the war. J. N. HAGAN.

Bismarck, N. D.

**Idea New to Him.**

One of the big agricultural associations of Iowa is the Corn Belt Meat Producers' association, of which A. Sykes is president and organizer, as well as chairman of the executive committee. Mr. Sykes writes:

To the Editor: I am just in receipt of your letter containing copy of telegram sent to President Wilson urging the immediate appointment of a national war-time food production administrator, and beg to say in reply that the suggestion is entirely new to me and I confess that I had not given the subject any thought whatever from the standpoint of having a special administrator appointed to supervise the production of foodstuffs during the period of the war, but I am free to admit that the plan looks feasible and appeals to me as one that might work out, providing the right party was secured, for a great benefit to our own people and our allies as well. However, before I take any definite action in regard to this matter I am submitting your letter and telegram to H. C. Wallace of Des Moines, who is secretary of the Corn Belt Meat Producers' association and editor of Wallace's Farmer, for him to pass upon the matter and see what his idea is as to whether we should get behind such a movement as this or not. Mr. Wallace is also a member of the animal industry board and is quite closely in touch with Mr. Hoover and Mr. Cotton of the food administration department, and I feel that he is in a much better position to pass upon this matter than I would be myself. If Mr. Wallace is favorably inclined toward the proposition I will be only too glad to lend any support that I can. A. SYKES.

Ida Grove, Iowa.

**Millions Voted for This.**

Dr. Van Hise, president of the University of Wisconsin, writes:

To the Editor: You letter of January 3, relating to a national war-time food production administrator, is received.

As you are doubtless aware, an appropriation was made to the United States department of agriculture, amounting to several million dollars, for this very purpose. The matter is therefore in the charge of Secretary Houston. I know that Secretary Houston is thoroughly alive to the situation and will do everything in his power to further food production; indeed, the department of agriculture is devoting a large part of its energy to this, and already a definite program has been worked out.

However, I am sending your communication to the chairman of the Wisconsin State Council of Defense, in order that he may take such action as he thinks wise.

CHARLES R. VAN HISE.

Madison, Wis.

**Worried Over Labor Situation.**

Charles W. Paine, secretary of the California State Agricultural society, writes:

To the Editor: In answer to your letter will state we in California are very much worried over the labor situation. Our crops have been abundant and everybody is doing what he can to increase the production. The only drawback seems to be a scarcity of labor.

I do not care to suggest a remedy, as I think the matter is being taken up by the several councils of defense and I am quite sure they will find some method to recommend to the proper authorities. CHARLES W. PAINE.

Sacramento, Cal.

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## *Cattle Feed vs. Human Food*

Recent statements of certain eastern publicists have led people to inquire whether our beef cattle might not be competitors of the human race for food material, and in that manner depriving the human race of more food than they were furnishing. It has even been suggested that the number of beef cattle might be profitably curtailed and the feed used for human consumption. It has been stated that a steer requires 1000 pounds of grain to produce 100 pounds of growth, and that only 50 to 60 pounds of this 100 is suitable for food.

Now these statements are in a general way true, but they are of little application since there is very little grain fed to steers in proportion to the total amount of beef produced. In the western states there is practically no grain fed whatever. Any discussion of how much grain it takes to make 100 pounds of beef is very much beside the question. The question may be enlarged to ask whether there is any food material used by beef cattle that may be more profitably used directly for human food. The very large proportion of the beef of the entire world is made from grass grown on land unsuitable for tillage. This feed is, of course, unsuitable for human consumption, and the land which grows it is unsuited for the production of cereals, vegetables, fruits, or other human foods. In winter, however, these cattle must have hay, usually at the rate of about one ton per head each winter. While this hay, of course, has no value as a human food, in some cases the land upon which it is grown could be used for other purposes, but this is not usually the case since a very great deal of hay land is poorly, if at all, suited to the growth of other crops. Furthermore, this small amount of hay makes it possible to utilize the vast acreage of grass land which would otherwise be not used on account of lack of winter feed.

A great increase in the number of beef cattle in the west would doubtless be at least partially at the expense of land and produce that could be used more directly for the support of the human race. A decrease, however, would not have the contrary effect since our cattle are not now using to any appreciable amount, cereals that might be made directly into human food, or even land that might be devoted to growing products suitable for direct manufature into human foods.

The production of the amount of beef which we are now raising, and perhaps even more, is not at the expense of other food material. Eighty-five per cent or more of the area of the west can be made to produce human food only by using it for the raising of sheep and cattle.

## *Kicking Up a Dust*

A New York daily newspaper quotes "a prominent food packer and distributor" to this ranting effect:

> "In 1913 the farmer sold his wheat at 77½c per bushel and made a profit. In 1914 he sold his wheat at 84c and made a profit. In 1915 he sold his wheat at $1.02½ and made such a profit that he could hardly stand it. His wife and children stood at the crossroads, not knowing which way to turn to go to the big city to spend his money. He bought short skirts for the ladies, collars for the boys and a limousine for himself. Those who were afraid of the electric lights consulted their mail order catalogues daily and blocked the railroads with immense orders, not wanting to be outdone by their brave neighbors. In 1916 and 1917 they dictated to the public what they must pay them for their products. What will they do with $2 wheat, $8 beans, etc.? Of every dollar you spend in the bakery nowadays, the "poor" farmer receives 40c. Is this fair?"

If farming is such profitable business, and packing and distributing are carrying the men in those lines down to poverty and ruin, why do they keep out of the rich agricultural pastures? Why don't they quit packing and go in for producing? The packing business takes big capital and farmers generally are unable to get into it; but no such obstacle interferes with the packer's desire to go into farming. The field is as big as all out-doors. Why don't they go to it?

The packer's statement is stuffed with misstatements and fallacies. If soil exhaustion, equipment depreciation and fair wage allowance are considered, it is doubtful if the American wheat growers extracted real profits from 77 cent wheat in 1913.

But 1913 is not 1918. Bewildering changes have come in these momentous five years. Labor has gone up and become more independent and less productive. Prices of all commodities that enter into farming have gone sky-rocketing. The farmer's cost of living has advanced.

Another point that is generally overlooked: The farmer's visible profit at present prices is largely fictitious. Suppose that his books show a seeming profit of $1000 in 1917, as against $500 in 1913. It looks double, but is not double, because money is inflated and the purchasing power of the dollar is impaired. That is the chief reason why the prices of farm lands seem to have gone upward in recent years. But the hard economic fact remains that the proceeds of a farm sold in 1913 at $40 an acre would buy substantially as much then as the proceeds would now bring if the same farm were sold at $60 or $70 an acre.

So much for the misstatements in the packer's communication. Now for the downright falsehood that in 1916 and 1917 the farmers "dictated to the public what they must pay them for their products."

The shoe was exactly on the other foot. The public, by act of congress, dictated to the farmer what he should be paid for his 1917 wheat crop. It put the price arbitrarily at $2.20 for No. 1 northern delivered at Chicago, which works out at an average of about $1.85 in the Inland Empire.

That is, the government stepped in and made a price arbitrarily below that which surely would have ruled if the market had been left open to the law of supply and demand. In all probability the farmer would have received $3 or better for his wheat if this action had not been taken.

In patriotic spirit the growers accepted that reduction, although it meant reduced profits in every instance and actual losses in thousands of cases.

These are the facts, and farmers are justly indignant when men like this New York packer, on the inside of big business and standing in with special interests that right now are under governmental investigation for profiteering practices, kick up a dust to divert public attention and expect the farmer to swallow that dust without protest.

Secretary McAdoo of the United States treasury, has expressed the belief that the federal farm loan bank system is sound in every detail, and that its enemies will fail in their threatened attempt to wreck it. The system is one long needed in this country, and its operation for the first ten or so months has seemed to justify its existence many times over. Technicalities, if such exist, must not be allowed to interfere with the valuable and just service this institution is rendering.

As a means of speeding up agricultural production in France that country is importing from America 1500 tractors in time for spring plowing. This is made necessary not only by the demand for speed in cultivating large acreage, but by the actual shortage of horses as a result of their having been commandeered for war service. It is said that the war demands a constant supply of some 5,000,000 horses in military service of one kind or another.

## *Washington Gleanings*

If 1000 acres of potatoes can be guaranteed in Clarke county the Beaverton (Ore.) Starch company will build a factory in Vancouver.

The Dayton mill of the Portland Flouring Mills company is experimenting in the making of barley flour. The first day's run netted 27 sacks.

W. B. Martin and son, E. L. Martin, have bought the W. F. Seagraves farm east of Tekoa on the Benewah road. The farm is well improved and the consideration was $3000.

A Walla Walla Farmers' union committee will take before the food administration a petition to have the price paid for wheat apply at the place of production rather than at some other point.

Forty stockmen will lease 20,000 acres of grazing land from the reclamation service in the Yakima region. The leases are for periods extending from 18 to 24 years. Prices range from seven cents an acre to 75 cents an acre.

A committee of Yakima wool growers probably will appear before the district exemption board of Kennewick and ask that wool growers, sheep raisers and herders be put in a lower classification, to insure their continuing in business.

To encourage the immediate purchase of brood sows, now going on the market, with a view to stimulating hog production in the Inland Empire, the Exchange National bank will lend the farmers near Spokane money to buy a sow without security and on easy terms.

E. T. Marchetti, field agent for the U. S. department of agriculture, has issued his last report for 1917, in which he estimates the acreage of fall-sown wheat in eastern Washington at 422,000 acres, which is 46.1 per cent of the normal fall sown acreage of 914,725 acres.

That the Sunset highway through Snoqualmie pass may be open to travel from six weeks to two months earlier next spring as a result of the warm Chinook winds and rains melting the snows in the pass is the prediction made by George F. Cotterill, chief engineer for the state highway board.

The report of Dr. Willis Wilson, Yakima meat inspector, shows 80,120 pounds of meat by-products put up in that city in December. This includes 34,210 pounds of meat, 12,000 pounds of smoked meat, 8000 pounds of lard, 12,000 pounds of compound, 6000 pounds of tallow and 10,000 pounds of sausage.

## *What Others Say*

Farmers' Mail and Breeze: The world can never be safe with the Hohenzollerns in power.

The Rural New Yorker: The latest figures show that it costs $34 per year to feed the average dog.

Kimball's Dairy Farmer: Now is a good time to begin building up the farm flock by securing eggs that will hatch chickens of the most approved breeding for meat and egg production.

Successful Farming: There must be no class of favorites in this country. The financiers and captains of industry are very important in a time like this; and so are the farmers and laboring men in the factories.

Wallace's Farmer: One of the best results of the work of the county agent is cooperative action by the farmers of the county. Through the county agent they learn how to buy and sell cooperatively, and after a while learn how to do other things cooperatively.

# Sheepmen and Dairy Workers

## *Gov. Lister Calls Attention to Labor Shortage*

In a circular letter sent out the first of the month Governor Ernest Lister desires to invite the very earnest consideration of district boards to the food production situation in the state of Washington and to particularly emphasize the fact that in the consideration of claims for different classes based on the grounds of agricultural occupation the definition of the word "necessary" as given in the classification of rules and principles has a special and pertinent application to the state of Washington. Since the new regulation became effective the various agencies in the state which are charged with the responsibility for maintained and increased food production including the federal food administrator, the state council of defense, the county councils of defense and the state commissioner of agriculture have made a survey of what was accomplished during 1917 and have found indisputable proof that voluntary enlistments and the first draft by taking men from agricultural pursuits actually did reduce food production by crippling and in some instances causing the discontinuance of agricultural enterprises which had been producing an appreciable amount of agricultural products over and above what was necessary for the maintenance of the persons residing on such farms.

Governor Lister appreciates that in passing on agricultural claims during the first draft district boards were sorely handicapped by the lack of any standards of measurement or by previous experience, but these handicaps have now been largely removed. Reversals of some of their decisions, made by the president have demonstrated to the district boards that in the stress of the hour and the urgent need for the first national army they gave the army the benefit of the doubt and sought to hold men for military service who in some instances should have been left on farms. The governor wishes it pointed out here that no reflection whatever is intended on the judgment of the district boards, for their work during the first draft was a splendid tribute to their patriotism and intelligence. The scanty population of many agricultural sections of the state, even in normal times, produces a very special condition of affairs viewed in the light of the sustained and increased food production demanded by federal and state agencies charged with responsibility for such matters and which production will, without argument, be conceded a fundamental necessity

The survey of the situation, made by the agencies herein referred to, shows that in connection with food production in the state sheepmen and dairy workers, especially milkers, are the two classes of agricultural labor that have been hardest hit by voluntary enlistments and the first draft. Attention of district boards is particularly directed to these two classes of agricultural labor, particularly in the light of the definition of essential principles governing classification in respect of engagement in agriculture.

The two particular classes of farm labor herein referred to are not, of course, the only classes to which special consideration and attention should be devoted by district boards. They happen to be the two classes, however, in which there is and has the last year been the most pronounced shortage, and there is no indication at present of an improvement in the supply.

In his letter to the editor of The Washington Farmer enclosing the above circular Governor Lister says: "I beg to acknowledge receipt of yours of December 31 enclosing a copy of the telegram sent to President Wilson after the conference recently held in Spokane, also a copy of your article published in the Washington Farmer of December 27. I may say that I have gone over this matter carefully with Mr. Benson, the commissioner of agriculture, since his return to Olympia and will do everything I can to assist in the handling of the problems which face us. I am herewith enclosing a circular that I had prepared and sent to the district boards of review in the state in relation to agricultural exemptions. Copies of this circular were also sent to all of the local boards. This circular was prepared and sent out for the purpose of calling to the attention of the boards the great need of care by them in the handling of the agricultural cases that may be presented. I hope this circular will be of some assistance."

# Apples in Baskets

Eastern apple consumers bought Yakima valley apples in bushel baskets this year for the first time in the history of the apple industry in this state. The experiment was tried by a few shippers in North Yakima, among them the Thompson Fruit company and J. M. Perry & Co. Speaking of the innovation Mr. Perry said:

"Of course most of us know that apples have been shipped and sold in bushel baskets in the east for many years. This sort of receptable is new here, however, and we are very well pleased with the experiment in so far as we conducted it. The saving comes in the pack. No wrapping is required and very little pains is required in the packing, as long as the weight is up to standard."

Each basket is covered and the baskets are so filled that the familiar "swell," giving the brimful appearance, is in evidence. R. W. F.

# Why Raise Sheep?

## Expert Gives a Score of Reasons

In discussing "Sheep on the Oregon Farm" Professor O. M. Nelson of Oregon Agricultural college, says that 20 sheep are needed for each soldier sent abroad. One million men require an army of 20,000,000 sheep to clothe them. Referring to the immense amount of wool needed and the impossibility of increasing the number of sheep on the range to any extent, he showed an increase of a few sheep on every farm would go far toward meeting the ned. He submitted the following 29 reasons for keeping sheep in the farm:

The initial investment in foundation stock is small.

Expensive buildings are not necessary.

Expensive machinery is not required.

Less productive land can be utilized.

Sheep will eat and relish almost every class of weed.

For cleaning out the fence rows sheep destroy the winter protection of many injurious insects.

Due to the fineness of the mastication of their food very few weed seeds are found in the sheep's droppings.

Sheep are of great value in clearing brush land.

Sheep are dual purpose animals.

Crop yields are increased by the constant and uniform distribution of rich manure.

The excreta of sheep is rich in nitrogen and potassium.

Less plant food is removed from the soil by sheep than by grain crops.

The cost of maintenance is small.

Sheep make profitable use of the stubble left in fields after the crop is harvested.

Sheep can be made marketable without grain.

Wool and lambs are more easily transported than grain crops.

Rapid and frequent monetary returns.

Reasonably large percentage of profit under normal conditions.

Wool and mutton advanced in price before the war, and a sudden drop in value is not to be expected.

Less labor is required on a sheep farm than on a grain farm.

Labor on the farm is more evenly distributed throughout the year.

Sheep require little care except during the usual slack period.

Children as a rule like sheep, and this is a good time to develop future shepherds.

A flock of sheep on the farm furnishes a fresh supply of meat at any time of the year.

Because of the comparatively low cost per animal sheep are more easily improved than most other kinds of live stock.

Sheep are more prolific than horses and cattle.

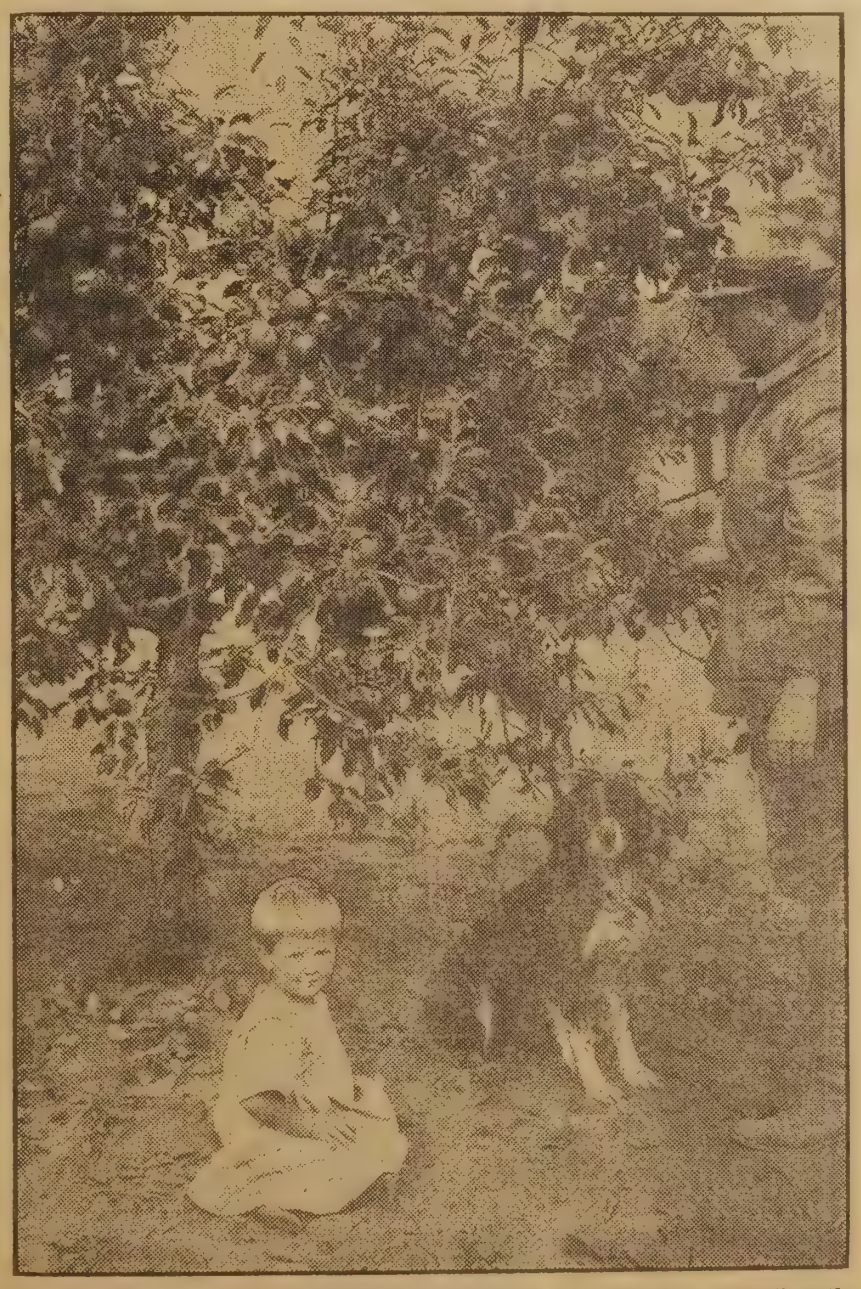
The western sheep ranches are rapidly disappearing, and it is up to the small farmers to make up the deficiencies.

The population of the United States is increasing, while the number of sheep is steadily decreasing.

As a patriotic duty in the present world crisis we must produce more wool and mutton.

### Farmers Holding Potatoes?

It is reported that farmers of many middle west sections are holding their potatoes for higher prices. They claim that they can not get anything like the price that the dealer is charging the consumer and that they will not sell until a more equitable price is paid.



A scene quite common in the orchards of Washington. The man inspecting the fruit is C. J. Webb of the Spokane Fruit Growers' agency.

# Labor Is the Big Orchard Problem

(Continued from page three.)

of the Northwest Rex Spray companies, read a carefully prepared paper on lime and sulphur solution.

### The Byproducts Question.

"What a Community Can Do to Bring in a Byproducts Plant" was a subject ably handled by Robert C. Paulus of Salem, Ore. Mr. Paulus' paper caused no small amount of comment in view of the dosastrous results of some byproducts plants established in the northwest. Mr. Paulus emphasized the fact that it is a comparatively simple matter to put up the byproducts pack, but it is another job to sell it at a profit.

Transportation problems affecting the fruit industry were discussed in a most interesting and helpful manner by J. Curtis Robinson, traffic manager of the Northwestern Fruit Exchange, Seattle.

S. W. Foster, entomologist for the General Chemical company, San Francisco, submitted a comprehensive table showing costs and efficiency of arsenate of lead spraying.

Professor O. M. Morris of Washington State college read a paper on pruning stone fruit. Another splendid paper and chart talk on the pruning subject was given by Professor V. R. Gardner of Corvallis, Ore.

P. S. Darlington, Wenatchee, gave the convention some of his experiences and observations on some phases of alfalfa as a cover crop.

M. L. Dean, chief of the division of horticulture, state department of agriculture, told what efforts are being made to put the horticultural inspection work on a business basis.

### Favor Land Settlement.

F. A. Wiggins of the Washington Nursery company, Toppenish, Wash., read Dr. Elwood Mead's paper on "Colonization—Australia Versus America." Dr. Mead gave this address in person at the last meeting of the Washington Irrigation institute at Yakima. Mr. Wiggins presented it in an able manner, and one of the resolutions adopted by the horticultural convention asks that steps be taken to provide a land settlement board for Washington similar to that established in California. The California plan is similar to that in effect in Australia.

Professor Gardner of Corvallis gave a lecture on pollenation of sweet cherries and Tragedy prunes.

"Ten Years' Experience With San Jose Scale" was the subject of a paper, illustrated by charts, which Dr. A. L. Melander, entomologist at Washington State college, read.

W. C. Quick, U. S. department of markets, with headquarters at Yakima, read a paper on "Essentials of Air-Cooled Storage Houses." Storage facilities have been greatly added to in late years and many more warehouses are in prospect, in consequence of which Mr. Quick's address, illustrated with samples of wall construction, proved decidedly profitable.

F. E. Allen, also of the department of markets, spoke on "Picking the Apples for Flavor and Keeping Qualities." Other numbers on the program included a paper on "Handicap to Successful Marketing," P. R. Parks, manager Spokane Fruit Growers' company; "Banking the Fruit Crop," J. J. Rouse, cashier Fidelity National bank, Spokane; "Abuses of Water on Fruit and Trees," D. T. Fisher, U. S. bureau plant industry, Wenatchee; "Some of the Most Difficult Fruit Problems to Solve," M. S. Middleton, provincial horticulturist, Victoria, B. C., and an illustrated lecture on potato diseases by Dr. F. D. Heald, Pullman.

Officers were elected as follows: President, F. E. Williams, Opportunity; first vice president, J. F. Sugrue, Cashmere; second vice president, F. A. Wiggins, Toppenish. Directors were elected as follows: For the one-year term, Luke Powell, Prosser, and J. Howard Wright, Yakima; for the two-year term, H. G. Craig, Deer Park, and M. L. Dean, Olympia; for the three-year term, O. M. Morris, Pullman, and J. L. Dumas, Dayton.

The directors elect their own secretary and treasurer. The place for the next meeting has not been decided upon.

# Congress Backs Federal Land Bank

## *Big Appropriation Is Made to Insure the Sale of Farm Loan Bonds*

Congress has passed the appropriation bill setting aside $200,000,000 as a reservoir fund for the purchase when necessary of federal farm loan bank bonds. Half of this amount is to be available for 1918 and the remaining half for 1919.

This is one of the most important acts of congress in recent months from the viewpoint of the farming industry, as it guarantees the stability of the farm loan bank unless the whole system is overthrown, which seems wholly improbable. It is known that financial interests opposed to the farm loan system have considered attacking it in the United States supreme court on the ground that the act creating it was unconstitutional. This vigorous action on the part of congress and President Wilson in the making of the large appropriation in the face of these threats probably will do much to deter the opponents of the system from making the attack.

Owing to the unprecedented demand upon financial interests during the present war period the sale of farm loan bonds became for a time uncertain. The central board of the bank at Washington, D. C., asked congress for the appropriation to be used to stabilize the sale of the bonds. Without delay the appropriation has been made.

Under the provisions of the law borrowers give the farm loan bank first mortgages on their property. These mortgages in turn are used by the bank as security for the issuance of bonds. The sale of these bonds brings in more money to be loaned to the farmers, who in turn give other mortgages to be used as security for more bonds. Thus the more money is loaned the more the system will ultimately have to loan.

When the federal farm loan act was passed The Farmer said that time and experience would probably show the need of some amendments, as it would be almost miraculous if congress should launch a vast new system of this complicated character without making some errors of judgment.

The law has now been upon the statute books for 18 months, and the system has been in operation for nearly a year, but only minor changes are recommended in the first annual report of the federal farm loan board.

This report, which is signed by Secretary of the Treasury William G. McAdoo, ex officio chairman; George W. Norris, farm loan commissioner; Herbert Quick, W. S. A. Smith and Charles E. Lobdell, members, urged upon congress the importance of authorizing the secretary of the treasury to purchase farm loan bonds during the coming year to the extent of $100,000,00 if necessary, these bonds to be resold to investors as the demand for them develops. The board urged this step as a means of providing the basic industry of the United States with the capital needed to increase food production during the war; to stabilize interest rates and to encourage the purchase of the bonds by relieving purchasers of the fear that the bonds may be pushed for sale at unpropitious times.

Briefly, the other recommendations contained in this annual report are:

That the cooperative farm loan association or borowing group provided under the federal loan act be given another year on trial before any consideration be given to amending the act to make the method of borrowing more direct.

That the maximum loan limit permitted to the individual borrower be increased from $10,000 to $25,000.

That the denominations of farm loan bonds be changed from $25 to $20 and from $50 to $40 to eliminate the fractional cent in the computation of semi-annual interest.

That the provision enabling a borrower to pay all or any part of his indebtedness after it has run in five years, in multiples of $25, be amended to enable him to pay all or any number of annual amortization payments on any interest-paying date. These mortgages are retired by fixed annual payments and limiting advance payments in indebtedness to the size of these fixed annual amortization instalments would eliminate bookkeeping.

That the provisions governing joint stock land banks be amended to allow such banks to operate in more than two states; to increase their limit of bond issues to 20 times their capital stock instead of 15, and to raise the authorized rate of interest from 6 to 6 1-2 per cent. This is not to be confused with the authorized maximum rate of 6 per cent allowed the federal land banks.

An interesting feature of the annual report is the discussion of the cooperative national farm loan associations and the acceptance of the principles of cooperative borrowing by the American farmer. It is pointed out that up to December 1, 1917, 1839 of these cooperative associations had been chartered by the federal farm loan board; applications had been filed for $219,750,740 of loans; the 12 federal land banks had approved loans amounting to $105,136,529, and loans had been actually paid out to farmers amounting to $29,824,655. In addition to the 1839 associations actually chartered 1985 such associations were in process of organization, getting ready to be chartereed.

Another important phase of the annual report is the discussion of land titles and their investigation. It is pointed out that the federal land banks, in line with all conservative farm mortgage operators, have required each borrower to furnish an abstract of title. The cost per loan for abstracts averages not less than $10 each, which, on a basis of 50,000 loans to be closed during the first year, aggregates at least $500,000. The examination of these abstracts by the federal land banks costs $3 each, or another $150,000, making a grand total of $650,000 expended to eliminate hopelessly defective titles. One federal land bank found only two incurably bad titles in 1056 examinations. The board cites this as an economic waste, which should be eliminated if it can be done with entire safety, and promises to make further investigation and submit recommendations at a later date.

# Phillip W. Cox

## Death Removes Pioneer Stockman

By J. E. NESSLY.

Phillip Walter Cox, one of the most widely known and influential pioneers in the northwest, died at Long Beach, Cal., January 11, age 76 years.

In the death of Mr. Cox the live stock industry of the northwest lost one of its most active supporters and successful operators. Mr. Cox was a pioneer in every sense of the word. Crossing the plains with his father with an ox team in 1845, his entire life was spent in the west, which he did so much to develop. His father was one of the very earliest settlers of Albany, Ore., where Phillip Walter Cox grew to manhood. He left Albany and came to what is now Waitsburg, Wash., in 1861 and remained there a few years, dividing his time between his stock ranch there and mining interests in the Florence, Idaho, district, where he worked in the winter time. A hard winter wiped out all of his live stock excepting one cow and left him stranded. The Waitsburg country became too thickly settled for this pioneer and in 1869 he went north into what is now Whitman, but was then Stevens county, and laid the foundations for the fortune which was built up with hard work and careful attention to his business.

At one time Mr. Cox owned 60,000 head of sheep, but sheep were worth but little then and wool was scarcely worth shearing, sacking and hauling the long distances to market. But he never lost faith in sheep. He later engaged in farming on an extensive scale, in raising purebred and high grade horses, in hog raising and cattle raising, but he said to the writer, after having given all a fair trial covering a period of years:

"I have raised cattle, horses, sheep and hogs and I have made money with all of them, but taking one year with another, or taking any 10-year period that I have known Mr. Sheep will bring more clear profit to the man who takes care of him and stays with him than any other animal that can be raised in the northwest."

Mr. Cox believed in action. He was a strong advocate of many socialistic ideas, but he never let these beliefs interfere with his business. He wanted to "know" and tried experiments. He and his two oldest sons, Anderson and Arthur, owned 7800 acres of land in southwestern Whitman county. His purebred, registered black Percheron horses took first and sweepstakes prizes throughout the northwest for many years. He raised corn on his summer fallow land and one year had 450 acres of corn and made big money by "hogging it off" and selling several carloads of hogs. When the ranges in Washington were converted into farms he took his sheep to Montana and ran them on the ranges there.

Mr. Cox was one of a line of rugged pioneers who blazed the trails and laid the foundation for the great Inland Empire of which he was so proud. A few days before he left for California on what proved to be his last journey, he spent several hours with the writer and gave a complete history of his life, the struggles and privations of the pioneer days, but through all of which he never lost faith that this was destined to become one of the greatest agricultural districts of the northwest. The writer had been working at odd times on this history, the notes for which cover 40 pages, when word came of Mr. Cox's death. He had not lived to see it published.

### Feed More Barley.

There is a distinct tendency for farmers to feed more barley to hogs than in the past, owing to the great need for wheat conservation. The movement may result in the development of barley as a great hog feed like corn is in the middle west.

## ORGANIZING GRANGES

### Master Bouck Works Abont State.

William Bouck, who is serving out the unexpired term of the late C. B. Kegley as master of the state grange, is active in the work of the order throughout the state. He has recently visited both the northwest and the southwest portions of the state and also the central portion. The latter part of the month he will visit in the north central portion of the state. Master Bouck is not only working for the stimulus of locals already organized, but is cooperating in unorganized localities for the formation of granges.

While in Spokane last week Master Bouck, discussing the nonpartizan league movement, expressed the opinion that the members of the state grange were favorable to the league. "Personally I am in sympathy with the league's principles," said Master Bouck. "The members of the grange are in sympathy with it, though it has not formally indorsed it. The grange is not a political organization."

That there is division of sentiment in the grange on the subject was indicated, however, when members of the Spokane county branch took exception to Master Bouck's statement. C. H. Weeks, an active member, said: "There is no place for any politics with us now or at any other time. There are questions of more vital importance before the farmers than the nonpartizan league." George Hingston, another member, said: "There will be speakers at the local meetings in this county who will explain this movement to the farmers in such a way that they will not want to have anything to do with it."

The Spokane county grange at its recent quarterly convention adopted a number of important resolutions, among them being the following:

"That the federal government, for the purpose of grading wheat, fix a market point somewhere in the Inland Empire and in each other wheat-growing center of the country.

"That a primary terminal market be established at some point on the Pacific coast.

"That all food produce be graded under a national market law, such as has been outlined by the agricultural department of the Washington State college, placing each produce in a class with a fixed market.

"That congress be commended for its action in passing the national woman suffrage and national prohibition measures."

# Will Teach Tractor Engineering

At this time of needed increased crop production and the serious shortage of labor much attention is being directed to the possibilities of power farming equipment.

It is now generally realized that one of the greatest factors in influencing the success of farming with the aid of a tractor is the ability of the farmer to correctly operate the machine. The very general use of the automobile and the farm gas engine has helped materially in familiarizing the public in general with the fundamentals of motor operation. It is generally felt, however, that a thorough study of the practical care of engines and tractors is needed by many of the men who are to use this modern farm machinery.

Throughout the United tates various tractor companies are holding courses of instruction for the owners and operators of their machines. This work will be of much value to the country in that the tractors will be much more effectively operated and many more farmers will be convinced by this successful work that they themselves can use tractors to advantage.

The agricultural engineering division of the state college of Washington, at Pullman, has announced that the annual gas engineering short course will be held this year from February 18 to March 9. Last year this course was given for the first time, and with few announcements the attendance was over ninety. This year a much larger enrolment is indicated. This is in keeping with the marked interest in tractors now being shown. Some of last year's students have signified their intentions of returning this year for a review and to become familiar with the new tractors which will be there. The course will be held three weeks this year instead of two, as last year. Half of each day will be spent in the classroom, attending lectures and demonstrations on the principles of gas engine operation, carburetion, ignition, lubrication, care and types of construction. Special lectures will be given by factory representatives and engineers on various phases of the tractor, gas engine and motor truck. The remaining half of each day will be spent in practical work in the repair shop, on the farm gas engines, in the ignition department and on the tractors and motor trucks. The tractors will be studied in detail and run in the belt in the large enclosed building. If the weather conditions permit, the machines will be operated on the road to some extent.

The tuition will be $5, the college announces, for the purpose of covering the incidental expenses incurred by the college. Eight differest makes of tractors for use during the course have already been guaranteed by tractor firms, and several more are expected.

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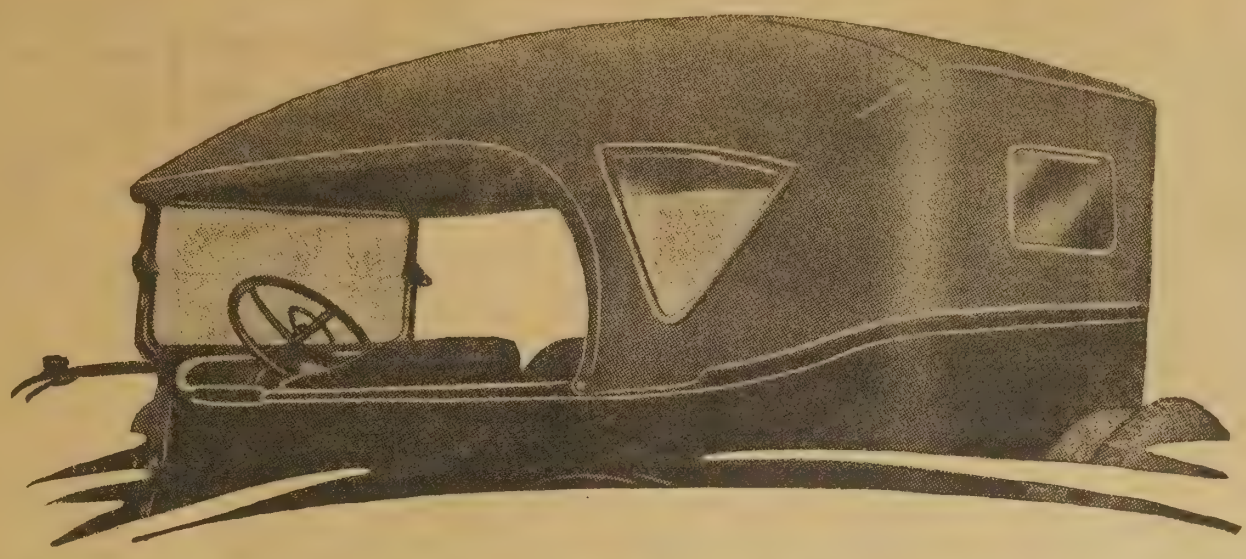
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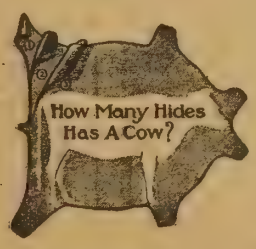
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# U. S. Terms of Peace

## *President Wilson States War Aims*

Following closely upon the heels of Premier Lloyd George's declaration of the purposes and aims of Great Britain in the present war, President Wilson last week addressed congress in a formal statement of the purposes and aims of the United States. His purpose as in the case of Lloyd George's statement, was to leave no possible doubt as to the objects of the allies in the further prosecution of the war against Germany and Austria. The president's message was a great declaration of the principle of world-wide democracy. In 14 divisions that must be effected before peace can be agreed upon. The following are the conditions in the exact words of the president:

"1—Open covenants of peace, openly arrived at, after which there shall be no private international understandings of any kind, but diplomacy shall proceed always frankly and in the public view.

"2—Absolute freedom of navigation upon the seas, outside territorial waters, alike in peace and in war, except as the seas may be closed in whole and in part by international action for the enforcement of international covenats.

"3—The removal, so far as possible, of all economic barriers and the establishment of an equality of trade conditions among all the nations consenting to the peace and associating themselves for its maintenance.

"4—Adequate guarantees given and taken that national armaments will be reduced to the lowest point consistent with domestic safety.

"5—A free, open minded and absolutely impartial adjustment of all colonial claims, based upon a strict observance of the principle that in determining all such questions of sovereignty the interests of the populations concerned must have equal weight with the equitable claims of the government whose title is to be determined.

"6—The evacuation of all Russian territory and such a settlement of all questions affecting Russia as will secure the best and freest cooperation of other nations of the world in obtaining for her an unhampered and unembarrassed opportunity for the independent determination of her own political development and national policy and assure her of a sincere welcome into the society of free nations under institutions of her own choosing; and, more than a welcome, assistance also of every kind that she may need and may herself desire. The treatment accorded Russia by her sister nations in the months to come will be the acid test of their good will, of their comprehension of her needs as distinguished from their own interests and of their intelligent and unselfish sympathy.

"7—Belgium, the whole world will agree, must be evacuated and restored without any attempt to limit the sovereignty which she enjoys in common with all other free nations. No other single act will serve as this will serve to restore confidence among the nations in the laws which they have themselves set and determined for the government of their relations with one another. Without this healing act, the whole structure and validity of international law is forever impaired.

"8—All French territory shall be freed and the invaded portions restored and the wrong done to France by Prussia in 1871 in the matter of Alsace-Lorraine, which has unsettled the peace of the world for nearly 50 years, should be righted in order that peace may once more be made secure in the interest of all.

"9—A readjustment of the frontiers of Italy should be effected along clearly recognizable lines of nationality.

"10—The peoples of Austria-Hungary, whose place among the nations we wish to see safeguarded and assured, should be accorded the freest opportunity of autonomous development.

"1—Rumania, Serbia and Montenegro should be evacuated; occupied territories restored; Serbia accorded free and secure access to the sea, and the relations of the several Balkan states to one another determined by friendly counsel along historically established lines of allegiance and nationality; and international guarantees of the political and economic independence and territorial integrity of the several Balkan states should be entered into.

"12—The Turkish portions of the present Ottoman empire should be assured a secure sovereignty, but the other nationalities which are now under Turkish rule should be assured an undoubted security of life and an absolutely unmolested opportunity of autonomous development, and the Dardanelles should be permanently opened as a free passage to the ships and commerce of all nations, under international guarantees.

"13—An independent Polish state should be erected, which should include the territories inhabited by indisputably Polish populations, which should be assured a free and secure access to the sea, and whose political and economic independence and territorial integrity should be guaranteed by international covenant.

"14—A general association of nations must be formed under specific covenants for the purpose of affording mutual guarantees of political independence and territorial integrity to great and small states alike.

### Bolsheviki Still Talks Peace.

Though for a time it looked as if all negotiations between Germany and Russia were broken off because of the unreasonable terms offered by Germany, negotiations have been taken up again. Germany has withdrawn her terms so far as the other allies are concerned and is negotiating for a separate peace with Russia.

### Plenty of Labor.

United States Secretary of Labor William B. Wilson says that there is plenty of labor in the United States and that the problem is solely one of distribution. He says that the war will not take more than three per cent of the country's labor the first year.

### Woman Suffrage Gains.

The house of representatives of congress has passed the Susan B. Anthony amendment to the Constitution granting to the women of all states of the Union the privilege of voting. The vote was exactly the two-thirds of the members necessary to carry the amendment. The measure will next be voted upon by the senate. If the senate passes it it will then go before the legislatures of the states for ratification. If 36 of them (three-fourths) ratify the amendment, it becomes a part of the Constitution and women will be entitled to vote in all the states. If this amendment passes the senate it will mean two big constitutional amendments before the legislatures of the states, the other being the national prohibition amendment.

### Storm Grips Middle West.

What is claimed to be the worst storm in the last 50 years in the middle west has held that section in its grip for the last week or 10 days. The storm has covered the distance from Hudson bay, in the northeastern part of Canada, to the Gulf of Mexico. Heavy snows have fallen. Temperatures in many places have gone as low as 25 to 35 degrees below zero. Chicago has been buried under two to three feet of snow, badly drifted.

### Submarines Play Havoc.

One of the most disastrous weeks of submarine warfare has been reported, showing the loss of 21 British ships, of which 18 were over 1600 tons carrying capacity. Reports are not made officially of the losses to other countries.

### Military Payroll Large.

It takes $100,000,000 to pay the salaries and wages of the soldiers and sailors of this country monthly. Secretary of War Baker, who has been undergoing a cross-examination before the investigating committee of congress, says that this country now has approximately 1,500,000 men in training or in actual service in the army.

### Mississippi Votes Dry.

The legislature of Mississippi has already ratified the national prohibition amendment to the Constitution. This is the first state to vote on the subject.

# Takes Education to You

## *College Spends $600 Daily in Rural Districts*

By ANNA BUCHANAN

Some idea of the growth of the extension work of the State College of Washington during the last two years was shown by Professor W. S. Thornber, who is at the head of the department, at the housekeepers' week at Pullman, January 7 to 12. Professor Thorber said two years ago there were five workers reporting to the extension office. Today there are 81, and during the summer there were 101, so it is seen that almost half the faculty is out in the country, with the country people. Over 2400 meetings have been held in the state this year, with an attendance of 177,000, whereas two years ago there were held 70 meetings. Two years ago $40 a day was expended in carrying on work in rural communities; now there is an average of $600 a day, and the increase in correspondence has grown accordingly.

One of the new features of extension work is that of the eight emergency home demonstration agents. The state is divided into eight districts, with an agent in each district. They are: Miss Mary E. Sutherland, state leader; Mrs. Grace Coulter Scott of Pullman; Miss Della Delvin, Wenatchee; Miss Elizabeth Jacobson, Mount Vernon; Miss Myrtle Boone, Olympia; Miss Elmina White, Puyallup; Miss Olga Grizzle, Everett, and Miss Inez J. Arnquist, Spokane. These women were all active workers at Pullman during housekeepers' week.

The attendance at housekeepers' week was large, the interest keen, the speakers well chosen and the program especially arranged to fill the wartime needs.

Many, however, from the west side of the state, who intended to be at Pullman for the week, were prevented by the washouts on the railroads. Some were delayed and arrived a day or two late, and telegrams were received in large numbers asking to have places reserved in the classes in which they were especially interested. Others wired to ask if the series of meetings could not be postponed, but, as this could not be done, Professor W. S. Thornber, director of extension service of the state college, promised that, if the demand is great enough, which he thinks more than probable, the same program will be repeated on the west side of the state some time before the end of the year.

Miss Mary E. Sutherland, state leader of emergency home demonstration agents of the Washington State college, who arranged the program and who has the management of the week in charge, is greatly pleased with the results.

One of the noticeable features of the week was the presence of a large number of women, who came not merely for the purpose of getting all they could for their own use, but with the idea of going back to their home towns and telling and teaching others what they had learned.

Professor Thornber, in his talk Tuesday afternoon, said that one of the good things about farmers' and housekeepers' week was the getting together of all the extension workers (the only time during the whole year that they all assembled at the college) when they exchanged ideas and experiences, as well as help those women who attend the meetings and classes.

Some idea of the growth of the extension work of the state college during the last two years was shown by Professor Thornber. Two years ago there were five workers reporting to the extension office.

During the week there were laboratory periods each day, from 8:30 to 10:20, at which were taught the different subjects of interest to women in the home. In one room Mrs. Lottie B. Smith and Miss Della Delvin held a millinery class, where women were invited to bring either new or old material, and they were shown how to make a hat—frame, covering, trimming and all, at a small cost. This class was so popular that evening sessions had to be held, some of the women taking advantage of it to fit themselves out with hats for spring. Others made over their winter hats, of which they had grown tired, and still others made hats for children.

There was the room where Miss Edna Walker taught how to remodel garments to make them look like new. Here also the women brought their own material, old dresses, old suits, goods which they had perhaps had in the house for years and were unable to make use of, and they were shown how to combine the materials and make them into attractive garments.

Miss Elizabeth Jacobson held a class each day in simple house-dress making. This also proved a popular class.

Perhaps, though, the class which drew the greatest number of women was that in which was taught "Food Substitutes in Time of War," under the direction of Miss Myrtle Boone and Miss Inez J. Arnquist. In these classes the general principles of cookery were taught, rather than the giving of recipes, and the idea was brought out of the great necessity of thinking when cooking.

Another department of no small importance was the nursery, in charge of Mrs. H. G. Winans, which enabled the mothers of small children to attend the meetings.

The war bread contest was another interesting feature, entries coming from all parts of the state.

In this contest the home breadmakers of Washington were invited to contribute their skill and experience in devising the best loaf of bread, in point of palatability, wheat saving, and nutrition closed with the final day of housekeeper's week, and resulted in the award of the first prize to Mrs. Grace Guernsey of Pullman, second to Miss Georgia Stamp of Reynolds Hall, Walla Walla; third to Mrs. C. Nommensen of Olympia.

The judges were George A. Olsen, chemist of the state experiment station; H. M. Beck, proprietor of the Model bakery of Pullman; and Miss Leila W. Hunt of the home economics department of the state college.

The judges stated that on any other than a war basis of judgment, in which wheat economy was a prime consideration, the third prize loaf, baked by Mrs. C. Nommensen of Olympia would have been first. Mrs. Guernsey's loaf won for the wheat it saved without sacrifice of palatability, digestibility or nutrition.

Important speakers, outside of the college faculty, were: George E. Farrell, assistant national club leader, Washington, D. C.; Miss Anna Barrows, professor of home economics, Columbia university, who is also well known as a Chautauqua and government lecturer and demonstrator. Her talks and demonstrations were mainly on the use of the perishable and neglected foods. Mrs. J. G. Gawler, national chairman of home economics department of the federation of women's clubs of Yakima, told of the big work being done by the women's clubs throughout the country and the advantages such a membership is and how these clubs cultivate the community spirit and makes women realize their individual responsibility. E. T. Coman, president of the Exchange National bank of Spokane, and regent of the State college, spoke on "Household Finances." Mrs. E. W. Thorpe of Pullman told of the work of the Pullman auxiliary of the Red Cross. Miss Helen Louise Burr, dean of women, Whitman college, spoke on "The Economic Function of Women." Mrs. Lou Diven, state traveling librarian, spoke on "Making Use of the Traveling Library." Dr. E. H. Lindley, president of the University of Idaho, gave an address Friday afternoon.

Interesting and helpful talks were given by the following members of the state college faculty: Miss Leila W. Hunt, Miss Saide Swenson, Dr. E. O. Holland, Miss Doris Schumaker, Miss Agnes Craig, Miss Rhoda M. White, Mrs. Elizabeth Deitz Jones, Miss Doris A. Daniels and Professor F. O. Kreager.

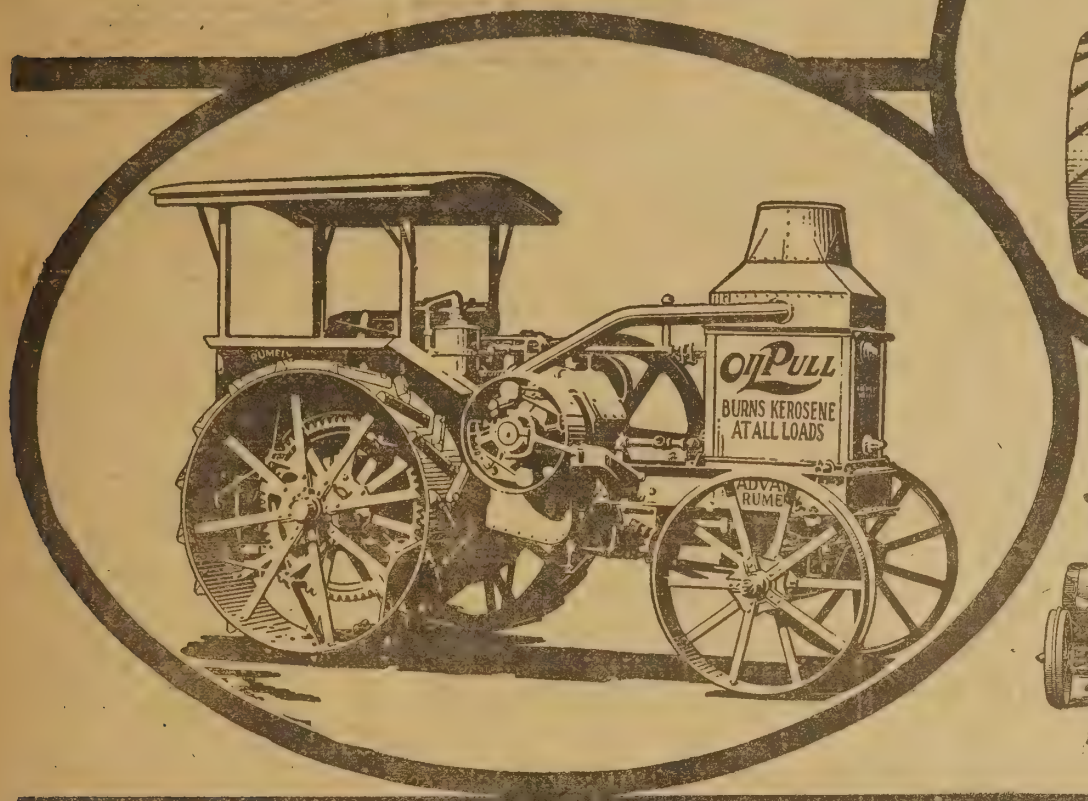
A few of those attending from outside of Pullman were: Mrs. Anna Morell, Acme; Miss Jessie Koontz, Spokane; Miss Elsie K. Dickson, Seattle; Mrs. A. B. Nystrom, Chehalis; Mrs. Edmond Reed, Nine Mile Falls; Mrs. Ellen Sebring, Spokane; Miss Alleta Callahan, Mount Vernon; Miss Claire Fiske, Granger; Miss Chloe Buffington, Colfax; Mrs. C. J. Hutchinson, Everett; Mrs. Carol Jensen, Waterville; Mrs. F. S. Shinkle, Colfax; Mrs. George Dills, Colfax; Miss Mary Gilliam, Walla Walla; Mrs. D. F. Harney, Pasco; Miss Bixton of the Queen Anne high school, Seattle.

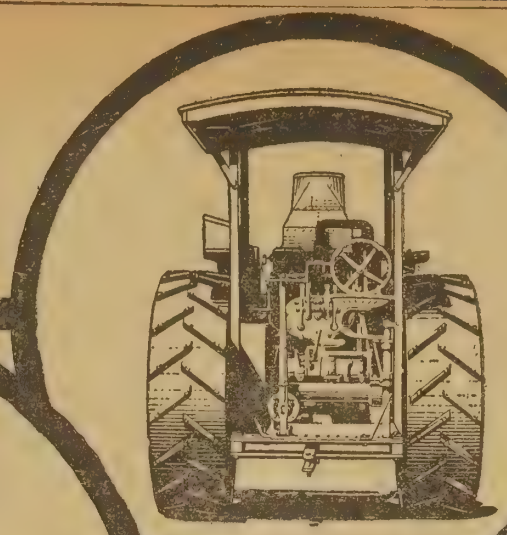
## Much Orchard Information Coming

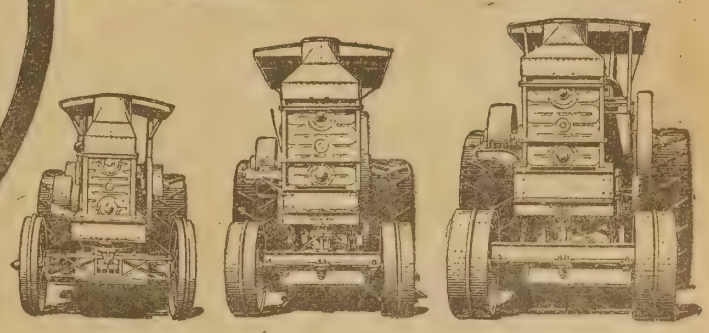
While the present issue of the Farmer is devoting much space to matters of orchard interest, especially that growing out of the state horticultural convention at Kennewick recently, there is much valuable matter withheld for lack of space. This will be given in subsequent issues, as will also other horticultural articles. From time to time during the next few weeks vital extracts from addresses and discussions at the fruit growers' conference at Spokane during the recent apple show will be published. One of the ever-present problems of the orchardist, especially the learner, is that of sprays and spraying. This subject will receive comprehensive treatment in early issues of this paper.

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We guarantee the 14-28 to pull up to and including 5 fourteen inch plows—on the belt it will handle a 24 to 28 inch cylinder separator, fully equipped. It is made equally efficient on draw-bar or belt by a patented shifting device—*the greatest basic improvement made in tractor construction.* Read about it on page 28 of the 14-28 catalog. Then there is the low platform, full control from the driver's seat, air starter and short turning radius—a real *one-man* outfit.

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# ADVANCE-RUMELY




A. B. NYSTROM, Editorial Contributor

# Keep Calf Comfortable

I have often said that the capacity to produce milk that any cow possesses is one thing that comes with her from birth. I mean by this that the highest point of production is fixed at the time of birth. Yet it is doubtful that any cow ever reached this production when she finally came to be a producer.

We can charge a considerable amount of this inability to get results to our methods of feeding and management of the producing cow, but many of us fail to see that no small amount can and should be charged to our method of handling the animal when she was a calf.

It has been said that every time a child has a disease or is sick in any way and then recovers, that child's life is shortened by a few days, weeks, or even years. So it is with calves. Every time a calf gets "off feed" or is exposed to severe weather and gets sick, it shortens the life of usefulness of the animal and to no small degree decreases her efficiency as a milk producer. The calf must be kept growing all the time. Just the slightest check in growth will result in a decreased production later in life.

Many times have I seen dairymen who take good care of their producing herds leave the calves exposed to cold rains and sleet. Others have compelled the little ones to stay in dark, damp and even wet quarters, little realizing the effect it will have on the full grown animal.

A well lighted, airy, clean and well bedded box stall or shed where the caves can be under cover when it rains and be out in the open air when the weather permits is an absolute essential to successful calf raising. And now when it is so important that we raise high producing cows these points must be considered.

I have always been a firm believer in the advantage of a large cow over a small one; not comparing breed, but within a breed. One thing that will help to get big cows is to keep the calves growing all the time. This can be done only when they are comfortable all the time. A. B. N.

# Understanding the Tractor

## Heavy Transmission for Plowing

There is room for considerable difference of opinion with reference to the tractor. The main difference is frequently as much a personal matter as it is mechanical. One tractor operator will work along nicely week in, week out, with gearing that another would strip in a day.

The tractor that is to be used for plowing needs much heavier transmission gearing than an engine that is to do stationary work only. It is estimated that the relative strain placed upon an engine used for threshing and one used for plowing is about 30 to 70. If this is correct then the plow engine should be equipped with a main gear approximately twice the strength of the main gear of the stationary engine.

No test to which the tractor is subjected is as hard as the plow test. Practically all of the reliable tractors now manufactured are built expressly for plowing, with heavy duty engine and transmission gearing that may be expected to take care of any reasonable conditions.

It is not safe to assume to say, just because there are dozens of good, substantially built, reliable tractors nowadays, that all tractors are good for all farms. It is safe to say, however, that if you wish to adopt machine power farming, you should be able to find a tractor to "fit your farm" from among the various types and sizes of well constructed tractors now on the market.

Questions regarding the tractor will have prompt reply if addressed to the editor of this paper, Review Building, Spokane, Wash.



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# Cow Makes Money

By W. S. Trimble.

S. O. Pool of Wenatchee, Wash., has a purebred Jersey cow that is yielding him a net income of $1 a day. Mr. Pool has kept accurate tab on the cost of the cow's keep and the receipts from the sale of her milk. He finds that since October 1 the cow has given 3800 pounds of milk, which sold for slightly less than 4 cents a pound, making the total receipts about $125. He spent 32 cents a day for mill feed for the animal, amounting in the 90 days to $28.80. In addition to the grain feed the cow consumed about 20 pounds of hay a day, or approximately a ton in the 30 days. Calling it a ton and allowing $30 as its cost, the total bill for the upkeep of the cow was $58.80, for the 90 days, leaving a net profit of $93.20 in three months. During October and November the cow cleared $52 a month for its owner. Mr. Pool considers this convincing proof that high grade stock is profitable. He has three other cows that are doing almost as well, all of them purebred stock. The animals cost more than the common stock, but they yield far better returns in the long run he is convinced.

## Refuse $5000 for Cow.

On December 27, Pickard Brothers refused an option of $5000 for Viva La France and $10,000 for the three cows, Viva La France, Old Man's Darling II., and Lady Silken Glow. The offer was made by O. M. Plummer, who for years was secretary of the Portland Union Stock Yards and general manager of the Pacific International Live Stock show, until this season. Mr. Plummer will make no statement further than to confirm the fact of his asking for the option, but it is generally believed it was for a wealthy breeder in the east.

It will be remembered that Viva La France recently made a new world record of butter production for the Junior 3-year-old Jerseys of 1050.15 pounds butter in a year; Old Man's Darling II., came close to a world's record as a junior 2-year-old, and Lady Silken Glow has an almost equally creditable record. Mr. Plummer admits that the Messrs. Pickard were wise in refusing the offer and that the cows will yield many times that amount through their offspring, in the next few years.

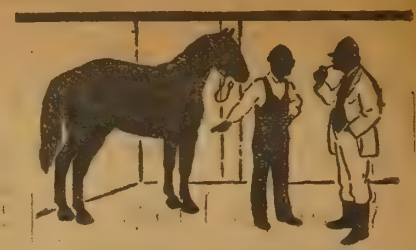
It is another instance of the value of Oregon Jerseys beginning to be realized. And as long as Oregon breeders have the wisdom to refuse such offers for their best animals, we may expect Oregon cows to continue to make world records.

# More Silos in Clallam

Within the last year the number of silos in Clallam county, Wash., have been increased by nearly one-half, according to the report of O. T. McWhorter, county agent. The high prices commanded by eastern Washington hay making it almost mandatory that dairy feeds be produced at home, and the desire on the part of the dairyman to provide suitable feed for winter use, accounts largely for an increased use of the silo in Clallam county. The silo also furnishes crop insurance by providing a means of caring for hay during seasons of heavy rainfull for many of the dairymen.

In one locality of the county a few farmers have discontinued using the silo. At that place the soil is very fertile and produces enormous root crops, 50 tons per acre being a common yield, while a much larger yield has been often reported. There is in this instance some argument for root crops in place of silage.

Farmers in other parts of the county are not so fortunate in producing large yields of roots and are therefore supporters of the silo, because it assists in providing suitable and economical feed.



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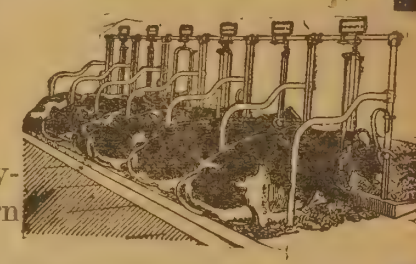
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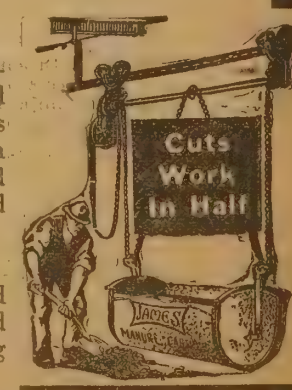
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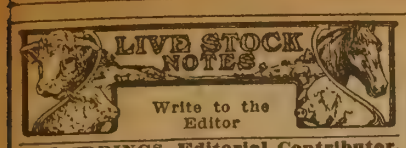

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E. J. IDDINGS, Editorial Contributor.

# Barley for Hogs

## Thinks It Best Feed for Northwest

To the Editor: I would like to say a few words in regard to the feeding of hogs, that may be of interest to some of your readers in the northwest. Too much emphasis has been placed on the feeding of corn and selling the wheat, as if these are the only two grains suitable for hog feed. I have read two or three letters in one of our daily papers, to the effect that farmers have gone to town to sell their wheat and buy corn for their hogs, and on finding corn considerably higher than wheat, took the wheat back home and fed it. The government should put a price on corn, oats, barley, potatoes and farm machinery, etc., so that we shouldn't have the anomalous condition of the biggest crops of these things and prices for them away out of reason in relation to the value put on wheat. Corn is the hog feed of the middle west, and barley is the hog feed of the northwest, and where we have the price of pork left to the speculators, the same as the price of coarse grains has been left to them by the government, it is up to us pork producers to use every kind of cheap food available. With that in mind, as I buy tons of feed every month, I study feed prices and their analysis and buy what figures the cheapest.

At present I am making my main feed as follows: I have a large cooker into which I put six sacks of cull spuds and boil until mealy; all 20 pounds tankage, 10 pounds oil meal, about two pounds salt, 60 pounds shorts and 50 pounds ground barley. Mix thoroughly, put down the lid and fed the next day. The pigs all relish this feed and my whole herd is in beautiful condition.

I am starting a bunch to fatten on this and will know more about it as a fattening feed later, but it certainly is a cheap growing and maintenance ration.

Figuring about $12 a ton, the cull spuds cost me $4 a ton, the barley 3 cents a pound, shorts 2 cents, tankage 5½ cents, oil meal 4¾ cents and salt 1½ cents per pound.

Another thing to consider is the use of old heavy boars now. They are consuming feed and will continue to do so until the next breeding season, without any increase in size. By altering now and fattening, they will make 600 to 800 pounds of pork and lard, and bring the owner $75 to over $100, and he can buy a purebred fall weaned boar for $25 that will gain for every pound of feed given him and be ready for service in the spring, thereby increasing the pork production and improving the quality of the herd.

This month I sold a big type Poland China stag that weighed 840 pounds for 14 cents a pound, bringing me $117.60, which is some money when you look back to the time when you could hardly give them away. I don't doubt other farmers have good feed mixtures, and I would certainly like to hear of some, in fact they must have or there would not have been the enormous demand we have had for breeding stock the past year. My entire crop of February, March and April pigs were gobbled up by July so I had no bred gilts for sale this winter, and I am now shipping fall weaned pigs and had to turn down over $1200 in orders this summer that I couldn't supply, so the past year has been a good one for the hog breeder.

GEORGE W. BUCK.
Arroyo de Puerro Ranch,
Oregon City, Ore.

# Veterinary

Dr. S. B. Nelson

**May Work the Horse**—I have a 4-year-old gelding whose sheath is swollen the size of my fist. He has been running in the pasture lately and is kept in the barn at night. Would he do to work in this condition? I have been using some liniment, but it does not seem to do any good.

H. I. M., Tuscor, Mont.

While your statement in regard to the swelling is not very definite, if it is just a common swelling of the sheath, I would advise you not to use any liniment on it, but to wash out the sheath by making half a bucketful of bran mash, scalding it and letting it partly cool. Then wash out the sheath with handful after handful of this mash, afterward rinsing the sheath with pure white water. Do not use anything in it at all. I think that work would be good for the horse. If the swelling is of the character of a growth, then it may be that you need the personal service of a veterinarian to see what kind of a tumor it is, and whether or not it should be removed surgically. Until such time you might apply to the growth tincture of iodine once daily, or every two days.

**Butter Tastes Bitter.**—What is the trouble with my cows? We let the cream rise in pans and by the time it is churned the butter tastes bitter and smells old. We have been troubled this way for three or four years, but only in the winter. We are milking young cows with their first calf, fresh in October, and they are all in good condition. I feed oat hay and 12 to 15 pounds of carrots once a day. My barn is not modern, but is warm and has an opening two inches wide at the top of the wall for ventilation. I have concrete floor and I curry my cows, so they are clean, and I am careful not to get any dirt in the milk when milking. I use plenty of bedding and pile the litter well back of the cows, hauling it out about every three or four days. Is there such a thing as their udders getting infected with some disease that would cause this trouble? We scald all vessels the milk is kept in. S. M. P., Rathdrum, Idaho.

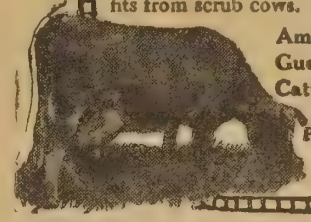
The condition you mention is generally caused either by a bacterial cause or by a disturbance caused by the feed. In this case, judging from the history you give, I am of the opinion that it is due to bacterial invasion. For temporary relief heat the milk, which is said to remove the odor from the milk. Then I would advise you to disinfect your stable at regular intervals, say of two weeks, with a 2 per cent creolin or any of the coal tar disinfectants, or a 1 to 1000 solution of bichloride of mercury solution. Do this very thoroughly. Wash the udder of each cow before and after milking with a 1 per cent solution of lysol. It would also be advisable if you do it to divide your herd into groups and keep the milk and cream separate and gradually separate the cows not affected from those affected so that you can give the latter closer attention.


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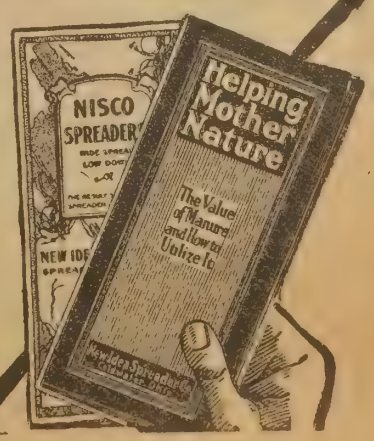
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JAMES DRYDEN
Editorial Contributor

# Combat Chicken Lice

To the Editor: I want to know how to combat chicken lice. I have 35 chickens and have done nothing during the summer to kill them, excepting to keep the chicken house fairly clean. I have a rooster apparently sick and in a drooping condition. I looked him over and found a great many lice on him. Do you know of any way I can kill the lice on the rooster without killing him. There are a great many lice in the cracks of the roosts, but I think the coming cold weather will kill them. How should I treat the hens to kill the lice on them. I desire to use some remedy which is being used by some practical poultryman and which is known to give good results. J. D. N.

Hagerman, Idaho.

To kill the body lice use an insect powder. These powders may be purchased at the poultry supply stores, also at drug stores, and other places. The powder should be rubbed well into the root of the feathers, especially around the vent and under the wings. These dust powders are all more or less effective. Probably the most effective dust treatment is the sodium fluorid, described in The Farmer of the issue of September 27.

Another treatment which is effective is to apply blue ointment or mercurial ointment. The method is described in a bulletin of the Connecticut experiment station. "The cheapest method is to buy mercurial ointment and mix it with vaseline at home, using one part of the ointment to one or two of vaseline. Place these ingredients on a pane of glass and work them together with a case knife. Be sure that the mixing is thoroughly done so that a smooth ointment is obtained. Place in a receptacle and be sure to label. An ounce is sufficient to treat about 75 fowls.

The method of application recommended is to take an amount of this ointment about the size of a pea and rub it on the flesh just below the vent. In the case of badly infested fowls it may be better to apply the ointment also under the wings.

A good home-made powder for lice may be made as follows: "Two and a half pounds plaster of paris is spread in a shallow pan or tray, one-fourth pint of crude carbolic acid is poured into a receptacle, and into this is poured three-fourths of a pint of gasoline. The mixture of gasoline and acid is poured over the plaster of paris and thoroughly mixed. It is then rubbed through a wire screen on a piece of paper and allowed to stand for from one and one-half to two hours or until thoroughly dry. It must not be placed near a flame or any heat. The powder should be kept in a closed can or jar where it will retain its strength for a long time. If it should happen that the powder should not be perfectly dry, more plaster of paris should be added. When dusting, the fowl should be held over a tray or a bucket, so as to prevent waste of the powder. It may be necessary to repeat the treatment in 10 days or two weeks

The lice spoken of in the cracks of the roosts is a different insect. It is the mite. The mites do not stay on the fowls, only at night when they suck the blood from the fowls and return to their hiding and breeding places in the cracks. Spray the roosts with coal oil and repeat in 10 days. A paint brush may be used instead of a sprayer. All sides of the roost must be treated. A better treatment is some coal tar preparation, such as zenoleum, creosote. Crude petroleum is very effective. Crude carbolic acid also makes a good paint for mites. J. D.

## Turkeys Have Colds.

To the Editor: A few weeks before Thanksgiving I penned up all my turkeys to fatten them. Since then the ones I kept have been roosting in trees. The last few days some of them have come down with the roup or something similar. Their eyes and heads are swollen and whenever they sneeze or cough, as you might term it, water comes from their mouths. I would be very glad to receive any information or suggestions for the cure of their condition. W. A. Y.

Hubbard, Ore.

The turkeys are probably suffering from simple catarrh or colds. Try rubbing the swollen parts of the face with kerosene and inject a little up the nostrils. Also swab the throat out with a feather dipped in the oil. Another remedy is to take a 2 per cent solution of permanganate of potash and dip the head of the fowl in it, holding it there a few moments, or as long as the fowl can stand it without strangling. Changing the turkeys from the outdoors to the closed pens probably accounted for the colds. P. D.

## Successfully Raises Capons.

Dr. C. H. Bailey of Roseburg, Ore., elected president of the Oregon State Horticultural society at its late meeting at Salem, is not only an orchardist, but for the last five years has been successfully growing capons. Dr. Bailey, who is a breeder of Barred Rocks, has used them for his capons, but this year is trying out some R. I. Reds and Buff Orpingtons to see which will take on the most flesh.

The advantage of a capon is that it not only grows heavier but its flesh is higher flavored than that of a rooster. Capons should be marketed under a year old. Dr. Bailey has them at eight and a half months that weigh six and a half pounds. The profit in growing capons depends in finding a market that appreciates them and Dr. Bailey sends all his to a public market in San Francisco, where they retail at 40 cents a pound. There is practically no loss in caponizing if carefully done. H. A.

### May Make Bigger Loans.

A movement is on foot to allow the federal farm loan bank to make loans of $25,000 to one borrower, instead of the maximum of $10,000 as under the law as it now stands.

# All-Northwest Contest

The second egg laying contest at Pullman has started out well. The report for the first month, November, shows high egg records. The 20 best pens and the number of eggs of each were as follows:

Hollywood farm, Hollywood, Wash., White Leghorns, 126; D. Tancred, Kent, Wash., White Leghorns, 119; N. Otto, Greenacres, Wash., White Leghorns, 117; G. H. Numsen, Centralia, Wash., White Leghorns, 114; F. W. Frederick, Phoenix, B. C., R. I. Whites, 113; Paul B. Towne, Tekoa, Wash., White Leghorns, 111; E. R. Wells, Prosser, Wash., White Leghorns, 110; Ill-a-Hee Co., Grants Pass, Ore., Barred Rocks, 110; Oscar A. Velz, Snohomish, Wash. White Leghorns, 109; C. F. Williams, Salem, Ore., White Leghorns, 109; J. A. Hanson, Corvallis, Ore., White Leghorns, 107, B. O. Longsdorf, Lebanon, Ore., White Minorcas, 104; C. G. Coolidge, La Grande, Ore., White Leghorns, 102; Mrs. Monona Van Cise, St. Maries, Idaho, White Leghorns, 102, Mt. Angel College, St. Benedict, Ore., White Leghorns, 101; K. Hammerbacher, Grants Pass, Ore., White Leghorns, 101; L. E. Harris & Co., Missoula, Mont., White Leghorns, 101; F. C. Park, Hermiston, Ore., White Leghorns, 97; C. K. Olsen, Houlton, Ore., White Leghorns, 97; H. J. Kingsbury, Twin Falls, Idaho, R. I. Whites, 97.

In individual records, first place was won by a hen entered by C. F. Williams of Salem, Ore., with 29 eggs; second by D. Tancred of Kent, Wash.; H. Otto, Greenacres, Wash.; Mrs. Monona Van Cise, St. Maries, Idaho; J. R. McRate, Milwaukee, Ore., and F. W. Frederich, Phoenix, B. C., with 27 eggs each.

## The Storrs Contest.

At the Storrs, Connecticut, contest, a pen of Oregons from the Oregon Agricultural college won first place in the fourth and fifth weeks, their record being 48 eggs for each week. In the full period of five weeks they were second among all entries, a Massachusetts pen being first. J. D.


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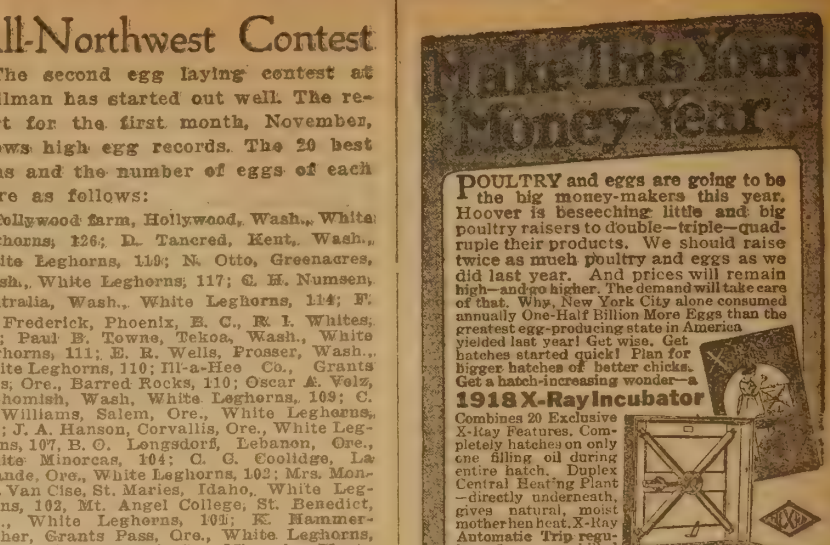
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GRANVILLE LOWTHER
Editorial Contributor

# Pecans in Northwest

I have received an inquiry with reference to the growing of pecans in the northwest, and the inquirer asks, "Can they be successfully grown for commercial purposes?"

Personally I have not sufficient information to answer that question. In Texas and other southern states where I have traveled the pecan is a very profitable crop when properly grown and when proper varieties are planted. Even the native pecan, if cared for, will produce a more profitable crop than almost any other crop which they grow in the southern states, but the improved varieties are exceedingly profitable. At the present time I would say that they yield greater profit in proportion to the money and labor expended in their production than do oranges in California or apples in Washington, Oregon and Idaho.

Besides the pecan orchard is a long-lived orchard. I saw pecan trees in the south which were said to be 500 or 600 years old and were bearing good crops of nuts. That means an investment for the future generations as well as the present. Also they require less care for pruning and spraying.

However, as I approached the north in the states of Pennsylvania and New York and inquired of the forestry departments in the universities there I found that New York was supposed to be the northern limit where the pecan could be grown successfully and that there it was not grown for commercial purposes. It grows in the Mississippi valley as far north as Iowa, but I have no knowledge that it is grown either in Iowa or Illinois for commercial purposes.

I have made inquiry of persons I supposed knew something about the matter in the state of Washington. I inquired of the forestry department of the state university and I found that they had pecan trees growing in the nursery, but had none that had been brought into bearing. I found a pint or quart of nuts at the state fair in North Yakima, but they were not very well developed. I am not prepared to say under what conditions they were grown because I have not been able to see the producer. I have planted a few in my own orchard, but they have had only one season's growth. I am of the opinion that the trees will grow successfully, but are not sure that the nuts can be grown successfully for commercial purposes. G. L.

# Orchard Motors

I am in receipt of an inquiry in reference to the utility of orchard motors to take the place of horsepower and of the fully adapted machinery that is sometimes used in the orchard. There is no question as to the necessity of something that can be used instead of horses among the heavily loaded fruit trees, because it is impossible to cultivate, spray and do other orchard work with teams without more or less injury to the tree and loss of fruit. I have not had experience personally in the use of motors, therefore, can not say with certainty.

I am acquainted with one man who had a 35-horsepower gasoline engine which he had used with a hay baler but who fixed is so he could attach plows to it and now he plows 12 acres per day of alfalfa land, 16 acres per day of sagebrush or fallow land. For plowing the alfalfa land he charges $4 per acre, making an income of $48. The cost per day is $4 for gasoline, $4 for help and $2 for the wear and tear of his machine, making $10 per day, entire costs, leaving $38 per day net profit. He charges a little less per acre for plowing sagebrush, but plows enough more acres so that he makes about the same net profit.

I am satisfied that we are on the eve of changes that will be greater to the advantage of the orchard industry in adapting mechanical power to orchard work rather than horsepower. Thousands of people are now using machinery of different kinds, such as bicycles, motorcycles and automobiles for travel. In this way they have greatly increased their capacity for traveling long distances in a given time. It is probably costing them for automobile travel more on the average than horses would cost. Nevertheless, where time is an important factor it is claimed that they can be used at a profit as compared with horses. I am persuaded that we are approaching a period when the same will be true of mechanical power in orchards. It will be more difficult to adapt it to orchard work than it will be to open field work, but it is being done and will continue to be done in a greater degree and each succeeding year will improve the machinery for that purpose. Here is an open field for the inventor and whoever can take an ordinary traction gasoline engine and adapt it to orchard work will be doing a good thing for that business. G. L.


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185 E. 87th St., N., Portland, Ore.


## Profits in Dried Prunes.

The territory about Riddle, Myrtle Creek and Canyonville, Ore., for the year 1917, produced two and a quarter to two and a half million pounds of dried prunes. They returned in cash to the growers $125,000 to $150,000, after packing and freight charges were paid. Labor of picking and drying is generally estimated to cost one-third of the selling price. As there are but 50 to 70 prune growers, large and small, new orchards and old, it is readily seen that the growers are making a nice profit. These towns also have heavy shipments of eggs, poultry and other farm produce.

### Will Register All Germans.

During the week of February 4-9 the federal department of justice will conduct a registration throughout the entire nation of all unnaturalized Germans. This registration will probably include women.


## THE PRICE FRUIT SORTING AND SIZING MACHINES

### Operated on the Tossing Principle

which has proved to be the only method of accurately sizing fruit, so the packers do not have to do the sizing. Our machines are used for sorting and sizing apples, peaches and pears. Unlike other sizers, the fruit weighs itself and makes its own proper distribution without the use of belt carriers. Fruit can not be sized accurately by measurement, owing to its irregular shape it must be weighed. Our machines have passed the experimental stage. They were given highest award at the Panama exposition and they are used by representative fruit growers throughout the northwest. If you would save yourself time, expense and trouble give our machines an investigation. If you will fill in the enclosed coupon and send it to us today, we will send you illustrated descriptive matter and the names of fruit growers who have proved to their own satisfaction the merits of the Price Sorter and Sizer.

Fill This In—NOW
PRICE FRUIT SIZER CO.
Yakima, Wash.
Gentlemen: Please send me descriptive matter pertaining to your Sorter and Sizer.
Name .....
P. O. .....
R. D..... State.....

PRICE FRUIT SIZER CO.
YAKIMA, WASH.

## YOU SAW IT AT THE APPLE SHOW

If you didn't, perhaps your neighbor did. Anyhow, fruit growers who were there remember the

## Cutler Fruit Grader

operated in the Government Model Packing House. Growers were impressed with the practicability of the machine.

Why not prepare now to handle this year's crop more efficiently? Labor will be scarce and every labor saving device will have to be used. A postal card, bearing your name and address, will bring full particulars and prices. Mention the Washington Farmer when writing.

CUTLER FRUIT GRADER CO.
NEW ADDRESS, 351 East 10th Street, Portland, Oregon.


**When you write to advertisers, be sure to say that you saw their advertisement in this paper.**


# Every Page is of Interest To Northwest Farmers

If you can't put a gun on your shoulder, sow a seed or raise a hog —never has the need been so great for crops and food.

LILLY'S seeds are *Best for the West* and you'll find our catalog a complete compendium and real guide to seed buying and planting. Contains Field, Farm and Flower Seeds, Fertilizers, Poultry Supplies, Stock Foods, Bee Supplies, etc. *Buy early*—write for your copy today.



# Food Production Problem

(Continued from page five.)

dairy cattle, swine, poultry, carrots, mangels, ruitabagas.

E. C. Halterman, Pateros: MORE wheat, oats, corn, potatoes, beans, vegetables, hay, horses, dairy stock, swine, poultry, carrots, mangels.

J. F. McCurdy, Wapato: MORE wheat, corn, beans, vegetables, fruit, hay, beef cattle, swine, poultry, carrots, turnips.

W. H. Stonecipher, Waitsburg, Wash.: MORE wheat, hay, mules, beef cattle, swine, poultry.

Paul R. Schaffran, Castlerock: MORE wheat, oats, barley, corn, peas, vegetables, hay, horses, beef cattle, poultry, carrots, mangels, rutabagas, turnips; LESS potatoes.

C. R. McKinley, Castlerock: MORE beans, vegetables, hay, swine, carrots, mangels; LESS corn, potatoes, beef and dairy cattle, poultry, turnips.

Arthur Brown, Castlerock: MORE wheat, barley, beans, dairy cattle, swine, poultry, carrots, mangels, turnips, artichokes; LESS oats, rye, potatoes, vegetables, fruits, rutabagas, silage.

E. J. Edwards, Eureka: MORE wheat, oats, barley, corn, potatoes, peas, beans, vegetables, hay, horses, beef and dairy cattle, swine, poultry, carrots, rutabagas, turnips, artichokes.

R. H. Goddard, Rochester: MORE wheat, corn, peas, beans, sugar beets, vegetables, fruits, hay, horses, dairy cattle, swine, poultry, carrots, mangels, rutabagas, turnips, artichokes.

Cal P. Saeger, Shelton: MORE wheat, corn, potatoes, hay, beef cattle, swine, silage; LESS oats, dairy cattle.

P. H. Thomsen, Centralia, Wash.: MORE wheat, oats, rye, corn, hay, dairy cattle, swine, mangels, silage; LESS poultry.

George N. Baker, Soap Lake, Wash.: MORE wheat, oats, potatoes, beans, hay, horses, beef cattle, swine, poultry, carrots, mangels; LESS barley, rye, corn, vegetables, dairy cattle.

Jacob Homberg, Irby, Wash.: MORE barley, potatoes, beef and dairy cattle, swine, poultry.

Ed Horn, Snohomish, Wash.: MORE oats, barley, corn, peas, beans, vegetables, fruits, hay, dairy cattle, sheep, swine, poultry, mangels, silage; LESS potatoes, horses.

O. E. Wheaton, Toroda, Wash.: MORE wheat, rye, vegetables, hay, beef cattle, swine, poultry, silage.

Orva E. Rungan, Ariel, Wash.: MORE wheat, oats, corn, potatoes, peas, vegetables, beans, fruits, hay, beef and dairy cattle, swine, poultry, carrots, rutabagas, turnips, artichokes, silage.

Donald Urquhart, Wilson Creek: MORE rye, corn, potatoes, vegetables, hay, dairy cattle, sheep, swine, carrots, silage; LESS wheat, oats, barley, fruits, beef cattle, poultry.

W. B. Meyers, Toppenish: MORE wheat, oats, barley, hay, swine, poultry; LESS corn, sugar beets.

P. J. Arkenson, Quilcene: MORE oats, corn, peas, sugar beets, hay, sheep, carrots, mangels, rutabagas; LESS potatoes.

John Goff, Castlerock: MORE wheat, rye, peas, beans, horses, carrots, silage; LESS oats, potatoes, vegetables, dairy cattle, artichokes.

A. Rost, Castlerock: MORE oats, potatoes, beef cattle, silage; LESS wheat, barley, peas, hay, dairy cattle.

E. M. Gillette, Malaga: MORE wheat, barley, corn, hay, beef cattle, swine; LESS potatoes, horses.

H. Starkey, Yakima: MORE sugar beets, fruits, hay, beef cattle.

A. P. Romine, Neppel: MORE wheat, potatoes, vegetables, fruits, hay, poultry, horses, swine, carrots, mangels, rutabagas, turnips; LESS corn, beans, beef and dairy cattle.

F. F. Wollenberg, Hartline: MORE wheat, barley, corn, potatoes, vegetables, swine, carrots; LESS oats, beef and dairy cattle.

H. E. DeBolt, Adrian: MORE barley, rye, corn, potatoes, vegetables, beef and dairy cattle, sheep, swine, poultry, silage; LESS wheat, hay.

A. O. Page, Rainier: MORE wheat, rye, potatoes, hay, beef cattle, swine, carrots, turnips; LESS oats.

Roy W. Hays, Waverly: MORE wheat, potatoes, peas, horses, swine.

William Bayers Jr., Spangle: MORE wheat, oats, hay, horses, swine.

George C. Pratt, Rockford: MORE potatoes, peas, beans, hay, horses, dairy cattle, swine, poultry, silage; LESS wheat, fruits.

Daniel Michel, Latah: MORE wheat, barley, peas, fruits, hay, beef and dairy cattle, sheep, swine; LESS oats, vegetables.

Orin Pilkinton, Twisp: MORE oats, wheat, corn, potatoes, beans, hay, beef, horses and dairy cattle, swine, poultry.

Ed C. Wieber, Uniontown: MORE wheat, oats, potatoes, peas, vegetables, hay, horses, beef and dairy cattle, swine, poultry, carrots.

Carl H. Wieber, Uniontown: MORE wheat, corn, potatoes, beans, vegetables, fruits, hay, horses, beef and dairy cattle, swine, poultry, carrots.

Henry Hoefer, Uniontown: MORE wheat, oats, barley, potatoes, beans, vegetables, fruits, hay, horses, beef and dairy cattle, sheep, swine, poultry, carrots, mangels, turnips.

R. Wills, Prosser: More wheat, corn, poultry, mangels.

Smalley Bros., Sprague: MORE oats, potatoes, hay, beef cattle, swine; LESS horses, poultry.

Ed Tiedt, Soap Lake: MORE wheat, oats, hay, horses, beef cattle, dairy cattle, swine; LESS corn, potatoes, beans, vegetables, fruits, poultry.

S. Portwood, Beverly: MORE wheat, rye.

V. Schromm, Beverly: MORE wheat.

John Olson, Beverly: More wheat; LESS rye.

J. B. Glunk, Pullman: MORE wheat, corn, fruits, hay, dairy cattle, sheep; LESS oats, barley, potatoes, horses, beef cattle, swine, carrots, rutabagas, turnips, artichokes, silage.

James C. Farrn, Albion: MORE wheat, oats, corn, vegetables, sheep, poultry, carrots, silage; LESS beef and dairy cattle, swine.

G. P. Stuart, Monroe: MORE rye, potatoes, fruits, swine; LESS oats, vegetables, poultry.

C. Ackerman, Spokane: MORE wheat, oats, potatoes, peas, beans, vegetables, hay, dairy cattle, swine, carrots; LESS poultry.

Walter Gietzen, Dayton: MORE wheat, potatoes, beef cattle, swine.

Lon Mobray, Montesano: MORE oats, rye, peas, hay, swine, carrots, mangels, rutabagas; LESS wheat, potatoes, dairy cattle.

H. E. Robinson, White Bluff: MORE corn, fruits, hay, horses, sheep; LESS potatoes, beans, beef and dairy cattle.

## FUTURE IS BRIGHT.

### Orchardists Express Optimism.

Rosy prospects for the fruitgrower were painted by various persons engaged in th industry during informal lobby discussions at Kennewick, when members of the Washington Horticultural association met in annual convention, January 7 to 12.

Consensus of opinion among growers is that more general and more thorough distribution is one of the chief factors contributing to the improved outlook. Such a condition as this was predicted years ago by Dan Lesh, well known farmer and business man of the Yakima valley.

"Of course," Mr. Lesh remarked at that time, "there is always danger of overproduction in almost any line. But when better distribution is made possible the apple will take its place among staple food products and will be found in the homes of people in all parts of the world, because it will have a food value which few other products of its nature do, when prices are taken into consideration."

We seem to be approaching such a condition. Apples are to be found in the homes of thousands who, in years gone by, considered it more of a fancy food than a staple.

"To me the fruit outlook looks mighty promising," said J. F. Sugrue, retiring president of the state association and manager of the Skookum Packing association of Cashmere. "Better distributing agencies have been established, transportation is being made easier and storage facilities have been provided in such number and of such a character that growers are more able to get their product on the market at times most advantageous to them.

"In the case of the growers represented by the Skookum Packing association they have found ready market for their apples by means of a well organized and systematic publicity campaign. During the year just closed we spent approximately $45,000 for advertising space in papers and magazines with national circulations, and we are planning a similar if not more extensive campaign this year. The results we secured were most gratifying. We established an advertising agency in New York, and the consequent demand for the 'Skookum' apple was remarkable.

"There is no reason why the apple should not be given the same amount of publicity as is given the orange or the raisin, or any other food product of this nature.

"Educational campaigns of this nature will open the way for an increased output hardly dreamed of before."

### Government to Buy Flour.

The federal food administration has announced that it will buy from every flour mill in the country not to exceed 30 per cent of such mill's output. This flour is for the use of the American and allied armies, but a reserve will be held, so that any emergency need in the United States might be met at once.

### Loomis Stockmen Elect.

The Loomis Stock association at its annual meeting elected the following officers:

R. G. Bernard, president.
Will J. Ford, secretary-treasurer.
C. W. Adair, vice president.

### One Killed Each Day.

The industrial insurance commission of Washington reports that there is an average of one person killed or fatally injured daily in the hazardous industries of the state.

### Will Mill Corn.

A corn-products mill will be built in the immediate future at Spokane, Wash., according to announcement made by incorporators of a $100,000 plant.




**Fortify Your Feet With "U. S. Protection"**

Make sure of warm, dry, comfortable feet wherever wet, cold and rough going must be met and conquered. Wear sturdy, heavy service, reinforced for double duty

**U. S. Rubber Footwear**

and know genuine comfort and economy that "U. S. Protection" brings. There's a special "U. S." style for every outdoor worker. Every pair carries the U. S. Seal—the trade mark of the largest rubber manufacturer in the world. Look for the seal. It is your protection.

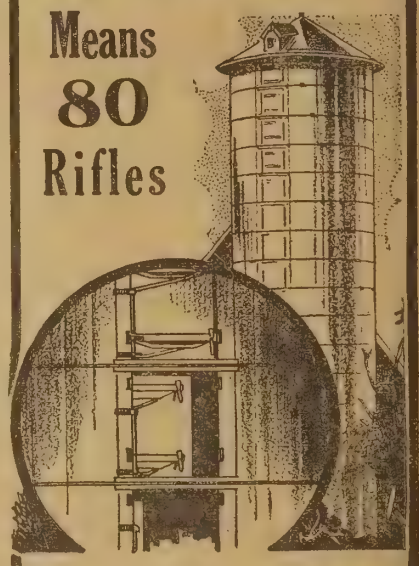
For sale everywhere. Your dealer has just what you want in "U. S.," or can get it for you.

United States Rubber Company
New York

U. S. Rubber Footwear



**One Silo Means 80 Rifles**



1. Every SILO increases the food supply enough to feed 80 soldiers a month.
2. If you can't put a gun on your shoulder, put a silo on your farm.
3. It is an unquestioned fact that we must all strain every nerve to GET THE FOOD that will win the war. Be up-to-date, EFFICIENT, is the patriotic need of the hour!

**Weyerhaeuser Silos**

are eminently efficient. The fodder put in comes out ALL SILAGE, none spoiled. Our facilities mean the best of lumber, the most skilled workmanship. And remember the AIRTIGHT DOOR.

**Order early.** The situation all around makes it most advisable to get orders in without delay.

Literature Free.

**Weyerhaeuser Timber Company**

Everett, Wash.

# Your Help Will Mean Much to the Man "Over There"




Do you know that every dollar you put into War Savings Stamps is a help to our men "over there"?

They look to us to help, not only with money but with **united support.** Of far more importance than the sum to be raised by the War Savings Plan is the stimulus to cooperation among our people. That our men at the front may know that we are **all** behind them in the fight for free government.

**We have pledged the honor of our country and our people to fight this war to our last dollar and our last man if necessary. America does not break her word.**

It is the privilege and duty of every American to do his part to redeem that pledge, whether he has sprung from the free soil of America or has been transplanted from other soil to flourish here. Every man, woman and child in America should realize that every cent they put into War Savings Stamps is actually doing a personal part to shorten the war and to **save the lives of our soldiers and sailors.**

Remember that each War Savings Stamp you buy is the promise of the strongest treasury on earth to pay you $5 five years hence (January 1st, 1923). You can buy that this month for $4.12 or in February for $4.13, and your money will begin at once to earn 4 per cent, and the interest is reckoned every three months. Each month for five years your money grows and you can always get it back in full if you need it.

See that each of your children has a Thrift Card. It has 16 spaces for 25c Thrift Stamps and, when filled, is worth $4 in exchange for a War Savings Stamp.

War Savings Stamps are simply little government bonds, safe to keep because the Certificate is not transferable, a badge of patriotism as well as a gilt-edge investment.

**W.S.S.**
**WAR SAVINGS STAMPS**
**ISSUED BY THE**
**UNITED STATES**
**GOVERNMENT**

## Become a War Saver and Help Your Country to Victory

You can get War Savings Stamps and Thrift Stamps from any bank or other authorized agent, from the Postoffice, or right at home from your R. F. D. carrier.

## WAR SAVINGS COMMITTEE FOR WASHINGTON

**Daniel Kelleher,**
**State Director, Seattle.**

**D. W. Twohy,**
**Vice Chairman, Spokane.**

**This Space Contributed by Albers Bros. Milling Co. (Manufacturers of Dairy and Poultry Feeds.)**
**Seattle, Portland, Tacoma, Spokane, Bellingham.**

# Build Grain Bins for the Future

## *Saving One Dollar to Spend Two Later Is Poor Policy*

The Farmer is glad to publish the address of Prof. Snyder on the building of bulk grain storage facilities, delivered at the grain convention at Pullman, Wash., Jan. 4. It is given in full herewith.

**By M. K. SNYDER.**

The bulk grain storage plan is a new one in this country so far as its practice is concerned, and we are apt to think that all those things that replace the hands in the handling of grain are a dead loss or waste, forgetting that you have lost the money paid for your sacks twice over; that you had their weight docked from your wheat weights, sent your sacks to the mill where the grain was emptied out of them and cleaned and the miller kept the sacks and the cleanings.

Suppose that you were raising 160 acres of grain with an average yield of 25 bushels per acre—4000 bushels—requiring 2000 sacks at 10 cents, with dockage of one pound on a sack that weighs seven-tenths of a pound, and how much did you get back?

Leaving the wages paid to the sack sewer and the usual warehouse charge to cover the cost of hauling from the machine to your own storage bins, we still have something like $200 per year to pay interest on the money invested in the bin and to ultimately pay for the bin.

**Cost of a Bin.**

One square crib bin made from 16-foot material and 25 feet high, or two adjacent crib bins built of 14-foot material 16 feet high, will hold slightly over 4000 bushels. The two cribs could be built as a rectangle 14x28 feet, outside measurement, with a single partition wall, forming two cribs with interior dimensions very closely 13x13x16 feet each. Building these under the same requirements as for elevators at shipping points, setting them up on posts so that loading for market would consist of opening a gate at the bottom and letting the grain run until the wagon box was full, providing a wagon dump of concrete of sufficient capacity to hold 100 bushels, constructing a bucket elevator, taking the grain from the bottom of the wagon dump and discharging it into bins at the top, I find that material at the prices prevailing at Pullman can be delivered for about $900. Four men working eight hours a day ought to build the structure easily in 10 days, and, allowing them $6 per day (skilled carpenters' wages), the total cost is about $1200. At $200 per year saved in sacks, the whole is paid for, including interest at 8 per cent, in 10 years, and there is a margin of $10 per year for repairs. There is a very slight margin in favor of the single bin 16 feet square and 25 feet high. The life of such a bin should be 15 to 20 years.

A single circular steel bin 17 feet in diameter and 25 feet high would have the same capacity. This would require, so far as lateral strength is concerned, only No. 19 gage United States standard steel plates. But, since the vertical lead, due to the friction of the grain against the side of the bin, amounts to about 2600 pounds to the square foot of circumference, it is evident that a bin built of this material would crumple up like paper unless stiffened vertically with angle irons or Z bars at frequent intervals. Also, when empty, such a bin would collapse even under a moderate wind, so that it would require stiffeners at frequent intervals horizontally. The floor system and underpinning would be identical with that of a wooden bin. The steel tank would require expert labor in its construction, while the wooden bin could be built by ordinary unskilled labor assisted by possibly one skilled carpenter.

For the man with a small quantity of grain, 40 to 100 acres, the problem is more difficult. The cost of elevator system and some other items change very little in passing from a 1000-bushel to a 10,000-bushel storage, so that the relative cost of the storehouse for the small amount of grain is much greater than for the larger. In the problem given the cost of the warehouse is between 30 and 40 cents per bushel capacity. For the smaller quantity of grain stored with the same conveniences for handling, the cost would be between 40 and 50 cents per bushel capacity.

**Deep Bins Are Cheaper.**

Since the cost of roof, elevator system and floor system will be very small, it is plain that it is more economical to construct deep bins than shallow ones.

Coming back to the small grain raiser, I have seen several bins built on side hills with the upper side deep in excavation in the side hill and an embankment thrown up so that it was possible to dump directly from a wagon into the top of a bin from 10 to 12 feet deep, thus the filling of the bin was done rapidly and easily, and at the time of filling speed is usually essential. In removing the grain from the bin, the grain was taken from an opening near the bottom of the bin and elevated into the wagon box by hand with baskets or boxes. I am not so sure but that a piece of leather or canvas belting with sheet iron buckets riveted to it would form an improvised elevator that would have given better service than the baskets.

To avoid raising the grain bin up on high posts, as suggested, it would be comparatively easy to arrange the outlet so that it would discharge into the wagon dump and then use the same elevator or a portion of it, if of link construction, as a loading elevator. There would be a slight saving in cost in favor of the loading elevator, say about $75.

**Possibility of Concrete.**

Probably the best material for the construction of storage bins is concrete. It is fireproof, is not subject to rust or rot, is sightly and of extremely long life. The cost will be slightly in excess of wood. At the present time it seems that steel is almost out of the question. A rough calculation tends to show that a concrete bin of the capacity given above will cost about 10 to 12 per cent more than the wooden bin. If only one were built in a neighborhood the difference in cost would be slightly more than this, as the forms for a concrete bin cost about $100. The concrete bin, if set on the ground, would not be very different from a concrete silo, except that a little more care should be taken to make it damp proof.

If you are looking for something cheap (and cheap things usually are cheap indeed), a wood stave grain bin may fill the bill. I have not been able to secure figures on these bins, but so far as strength is concerned, the usual 1 5-8 to 1 7-8 staves with 3-8 rods 7 inches or 1-2-inch rods spaced 12 inches will give sufficient strength even at the bottom, where the stresses are highest. If the rods are fitted with shoes as in the making of stave pipe and are kept tight, the staves painted thoroughly on the edges before being assembled and the structure painted and kept painted, it ought to have a life as great or greater than the stave silo. But you know what happens to the stave silo with the summer shrinking.

I believe that the thing to do is to keep in mind that the cost of sacks has not been less than 5 cents per bushel per year, or, counting the dockage in weight, about 7 cents per bushel per year. Then, with your eyes wide open, don't be afraid to put 30 to 50 cents per bushel of storage capacity into a structure that is good, not for one year, but for you and your children and your grandchildren. Remember that 5 cents per bushel per year pays 30 cents a bushel in 10 years, including 8 per cent interest, and 7 cents per bushel will do the same thing for over 40 cents per bushel of storage capacity. Dollars are dollars all right, but to hang onto one dollar now to spend $10 under compulsion is not good sense.

## Office of Farm Markets.

Producers, dealers and consumers—and that includes nearly everybody—are interested in the question of marketing. Every one is concerned with the price of foodstuffs, and so, indirectly, in methods of marketing. Marketing has become a public function rather than a private one. Realizing this, the last legislature created the office of farm markets with power to investigate and promote economical and efficient distribution of farm products. The office is cooperating with the state college, the state department of agriculture, and the United States bureau of markets, thereby unifying all state and national marketing efforts for the state of Washington.

One of the projects of the office is to furnish the people with information on marketing matters. "Where can I find a market for peas? Where can I buy alfalfa in carload lots? How shall I pack my products in order to get the highest price?" These are some of the questions asked of the office. Whenever the information is not at hand, by writing to the United States bureau of markets, other state marketing agencies, or people in the trade, the office will attempt to get first hand information or put the person making the inquiry in touch with the proper party.

Fuller information may be had concerning the above work by writing to the office of farm markets, Pullman, Washington.

**Many Marry at Vancouver.**

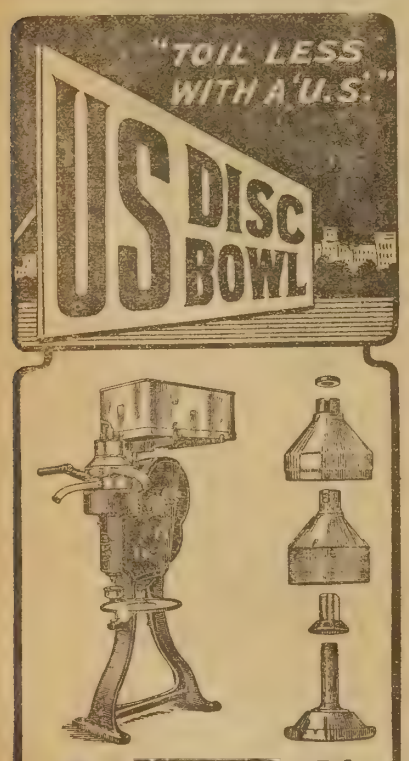
The little town of Vancouver, Wash., just across the Columbia river from Portland, is in the limelight as a marrying center. Couples by the score cross the river to secure their licenses. Last year 2116 couples secured licenses in the little town.

**Cut Off His Own Fingers.**

In order to escape military duty, a logger in a western Washington camp placed his fingers before a buzzsaw and cut three of them off, according to reports from the camp. The injured man has since been sent to an insane asylum.

**Large Number of Automobiles.**

During the year just closed the secretary of state of Washington issued more than 100,000 motor vehicle licenses, including autos and trucks and motorcycles.


UNITED STATES

Excels in CLOSE SKIMMING
Excels in BIG CAPACITY
Excels in EASY CLEANING
Excels in EASY RUNNING

Try, then buy the great 'U. S.'
And dairy troubles will grow less

US LIGHTING PLANTS

"U. S. Light,
Bright—white—
Just Right!"

Daylight all time in home. Will wash, churn, fan, toast, supply electric flat iron, save hundreds of steps, provide water all over the house. Operating cost low. A comfort and a joy.

*Greatest thing out for the farm*
*Ask for full particulars*

VERMONT FARM MACHINE Co.
40 First St., Portland, Ore.
Factory at Bellows Falls, Vt.
Branch offices: Salt Lake City, Oakland, Cal., Chicago, Ill.

In answering advertisements don't fail to mention this paper.



MOLINE Tillage Tools

No matter what your tillage requirements may be there is a Moline Harrow just suited for your work. For orchard or field, with horses or with tractors, Moline Harrows do thorough work, give long, lasting service, are easily operated and light in draft.



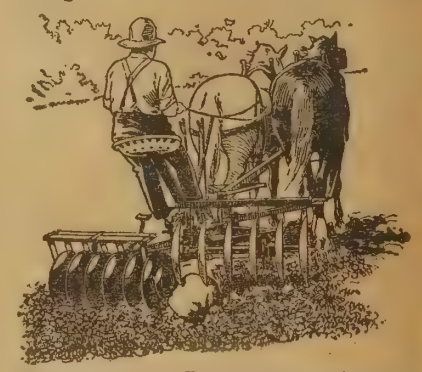
Moline Spring Tooth Harrow

Built for hard usage. Two-inch channel bars, heavy tubular steel tooth bars and teeth of finest spring steel, hardened in oil, give exceptionally strong construction. Furnished either with runners or wheels in 1, 2 or 3 sections.



Moline Reversible Low Down Disc Harrow

Just the harrow for orchard work. Wide or narrow frame extensions can be provided for harrowing under overhanging branches. Disc gangs can be easily reversed or tilted. Can be equipped with guards to prevent injury to overhanging branches. Well constructed with dust proof bearings.



Moline Three-Lever Disc Harrow

An extremely flexible, deep penetrating, light draft disc harrow. Frames so constructed that the gangs do not bump or ride. Pressure of the disc gangs is regulated by a lever. Difference in pressure between gangs is perfectly equalized. A tandem attachment can be furnished to make a double cut harrow. A great variety of sizes with round or cut-out discs can be provided.



Moline Engine Disc Harrow

A heavy, powerful disc harrow built especially for use with heavy tractors. Pull is direct from three large, dust proof bearings on each gang—the only correct method. Heavy springs take up end thrust of the gangs. Extreme flexibility between disc gangs.

You cannot go wrong in selecting from the Moline Line of tillage tools; they are correctly designed and built in the best possible manner.

*See your nearest Moline dealer, or write us for illustrated folders. Address Dept. 60*

Moline Plow Co.
Moline, Illinois



9 CORDS IN 10 HOURS




BY ONE MAN. It's KING OF THE WOODS. Saves money and backache. Send for FREE catalog No. B 64 showing low price and latest improvements. First order gets agency.
Folding Sawing Machine Co., 161 West Harrison St., Chicago, Ill.

# FLORA FLIRT MEETS AN ATHLETE



Flora Flirt on a sunny day
To the country took her way.



Down a pretty lane she turned,
When her eyes a man discerned.



Athletic he, and tall and brave
Flora's eyes will not behave.



He smiles and says, "How do you do?"
Flo's heart flutters, she smiles, too.




Just then they heard an awful row.
Down the lane there rushed a cow.



O'er the fence, see the coward fly.
Flora faints as the cow runs by.
*The Moral:* Now, dear girls, to flirt with sense
Get on the right side of the fence.

# Washington Leads in Apples

## *Produced 54 Per Cent of Boxed Crop in 1917*

Summarizing the apple crop for the state of Washington Leon M. Estabrook, chief of the bureau of crop estimates of the United States department of agriculture, says: "Washington has harvested its apple crop and in the 1917 production is the leading apple state in the United States by a wide margin. This year Washington produced 19 per cent of the commercial crop of the United States and 54 per cent of the boxed apple crop." Washington apples, however, were reported under normal size and worm injury is reported worse than usual, which is another point that, with all its advantages as an apple growing state, Washington growers can not afford to show any lapses in the matter of thorough infection of his fruit from insect or fungus diseases.

According to the revised apple estimates of the United States department of agriculture for the season of 1917 the apple crop of the country reached a total of 174,608,000 bushels, as against a total production in 1916 of 204,582,000 bushels.

The commercial crop of apples in the United States, or apples sold for consumption as fresh fruit, reached a total of 20,595,000 barrels in 1917, as against 25,069,000 barrels in 1916. A barrel of apples contains three bushels.

The apple crop of the state of Washington in 1917 reached a total of 17,897,000 bushels, as against 14,858,000 bushels in 1916.

Thus it will be seen that while the apple crop of the United States fell 30,000,000 bushels, as compared with the crop of 1916, the apple crop of Washington shows an increase of over 3,000,000 bushels, as compared with the crop of 1916.

Another interesting fact is that 70 per cent of the apple crop of Washington is boxed, or commercial apples, only two other states surpassing Washington in the percentage of boxed apple production, Utah with 80 per cent and Idaho with 85 per cent. It is to be remembered, however, that the combined boxed production of Utah and Idaho only reached 741,000 barrels, as compared with a total of 4,176,000 barrels produced by Washington.

The total apple production of Washington was also larger than that of any other state in 1917, nearly 4,000,000 bushels larger than New York, over 5,500,000 bushels more than Missouri and nearly 6,000,000 bushels more than Pennsylvania, the three largest producing states in 1917. In 1917 Virginia produced 10,000,000 bushels of apples; Kentucky, a little over 9,000,000; Illinois, 7,500,000; Ohio, 6,636,000; North Carolina, 6,156,000, and West Virginia nearly 5,994,000 bushels and other states in lesser amounts.

The only states not producing apples in sufficient quantities to be reported in the government summary are Florida, Louisiana and Wyoming.

As has already been stated, Washington produced in 1917 by far the largest amount of commercial apples of any state in the Union, 4,176,000 barrels or 12,528,000 boxes. Of the other big apple producing states 50 per cent of New York's crop, or 2,380,000 barrels, is included in its commercial outlook. Only 28 per cent, or 1,555,000 barrels, of Missouri's crop was sold as commercial fruit and only 22 per cent, or 911,000 barrels, of Pennsylvania's apples were sold as commercial fruit.

Oregon's apple crop in 1917 reached a total of 3,500,000 bushels, of which 76 per cent, or 650,000 barrels, were commercial fruit. Idaho's apple crop for 1917 was 1,995,000 bushels, of which 85 per cent, or 567,000 barrels, was commercial fruit. Montana's apple crop for 1917 was 911,000 barrels, of which 24 per cent, or 74,000 barrels, was classed as commercial fruit.

Another interesting feature of the report is the percentage of late varieties raised in the different states. Of the Washington apple crop 85 per cent is of the late varieties; 74 per cent of New York's crop, 72 per cent of Missouri's crop, 70 per cent of Pennsylvania's crop, 58 per cent of West Virginia's crop and 48 per cent of North Carolina's crop.

In 1917 Washington's crop sold for an average of $1.25, Oregon's crop for $1.05, Idaho's crop for 95 cents, Montana's crop for $1, New York's crop for $1.32, Pennsylvania's crop for $1.26, West Virginia's crop for $1.22, Ohio's crop for $1.50 and Missouri's crop for $1.06.

## Caught on the Run in Yakima Valley

W. P. Sawyer is more than a Yakima county legislator. He is also an authority on pear growing and marketing. The Sawyer pears are as well known on the New York auction markets as they are in their home valley and this year, as for several years previously, topped the market on different occasions. Mr. Sawyer explains his success by saying that he never packs his fruit till it has cooled off after being picked and that he is careful not to ship fruit which is so ripe it will not hold up.

Edwin Ballard of the Fruitvale section of the Yakima valley holds the valley record for the lowest cost in handling peaches. He harvested his 9722 boxes at a cost of $1697.25 for taking the peaches from tree to box, or 17.3 cents per box. This price includes the picking, hauling, shed work, boxes, paper, nailing and packing.

W. L. Wright, who is the owner of one of the older orchards of the Yakima district, has long been inclined to cut out the few odd trees which surround the house on his home orchard. They are soft fruit trees, peaches, plums and prunes. After his experience this season he is inclined to forego his talk of grubbing them out, as from the six trees in question he sold, direct and with no cost of handling, $205 worth of fruit.

G. W. Vaughn is the owner of five acres of fruit land near Yakima, the land serving as his home site as well as orchard property. This year he cleared, net, $3000 from it, due, he says, to the fact that he made an effort to produce quality fruit, free from pests and of good color and size.

Henry Lombard is one of the many Yakima commuters. He lives on a four-acre tract which adjoins a street-car leading from Nob hill into the city, to which he comes every day to attend to his business interests. From the plat he this year picked 6500 boxes of Elberta peaches, an average of 1625 boxes to the acre.

Joseph Feser, one of the old-timers in the Yakima valley, has 20 acres of prime apple trees from which he this year harvested 15,000 boxes of fancy apples. He sold the crop at a price of approximately $25,000. From the two remaining acres of his place he took 1500 boxes of fancy Elberta peaches.

M. A. Chandler, one of the retired business men of Yakima, who is now a "little lander," has two acres of Winter Nellis pears on his home grounds. From these trees he picked 1100 boxes, all of which sold at good prices.

## Thrifty Hamsters

The hamster belongs to the rat family and is a native of temperate Europe and Asia. It has a body a little larger than that of the ordinary rat short legs and a tail one and a half inches long covered with hair. The head is thick, the ears oval and round and the mouth is supplied with internal cheek-pouches in which grain and seeds are carried to its underground abode. The fore feet are four toed and the hind feet are five toed, all furnished with strong claws fitted for digging. The fur, which is fine and long, is usually reddish-gray above and black below. It is sometimes entirely black. The feet are generally white. The hamster digs burrows three to six feet deep with a large living chamber at the end and with one or more store rooms to hold grain for winter use. The entrance tunnel is always perpendicular and so straight sometimes that one can thrust a cane into it, but it turns below before leading to the sleeping chamber. The latter, which is built with soft grass, is connected with the storeroom



The Hamster.

by a sloping tunnel. Old hampsters sometimes construct four or five storerooms, each one capable of holding a peck of grain. In the summer the hamster's food consists largely of small birds, mice, lizards, worms, snakes and insects, but in winter, when it is partly dormant, it lives chiefly on vegetable food. As soon as the crops are ripe it begins to gather and lay up its winter supplies, working usually in the first half of the night and in the early morning before sunrise. It gathers peas, beans and various grains. It does much harm to grain fields and causes the farmer to wage relentless war against it. In some parts of Europe hamsters are hunted for the grain they lay up which is washed, dried and ground like other grain. The skins, too, are valuable for fur and in some countries the flesh is eaten.


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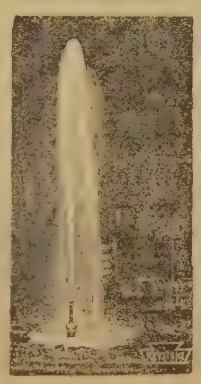
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# In These Days of High Prices

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***With prices for almost everything mounting steadily, the advantages to be gained through the elimination of the middleman are more apparent than ever.***

The plan of this paper to cut out its force of agents so far as possible came at just the right time. It offered a means for putting the principle of cooperation into actual practice.

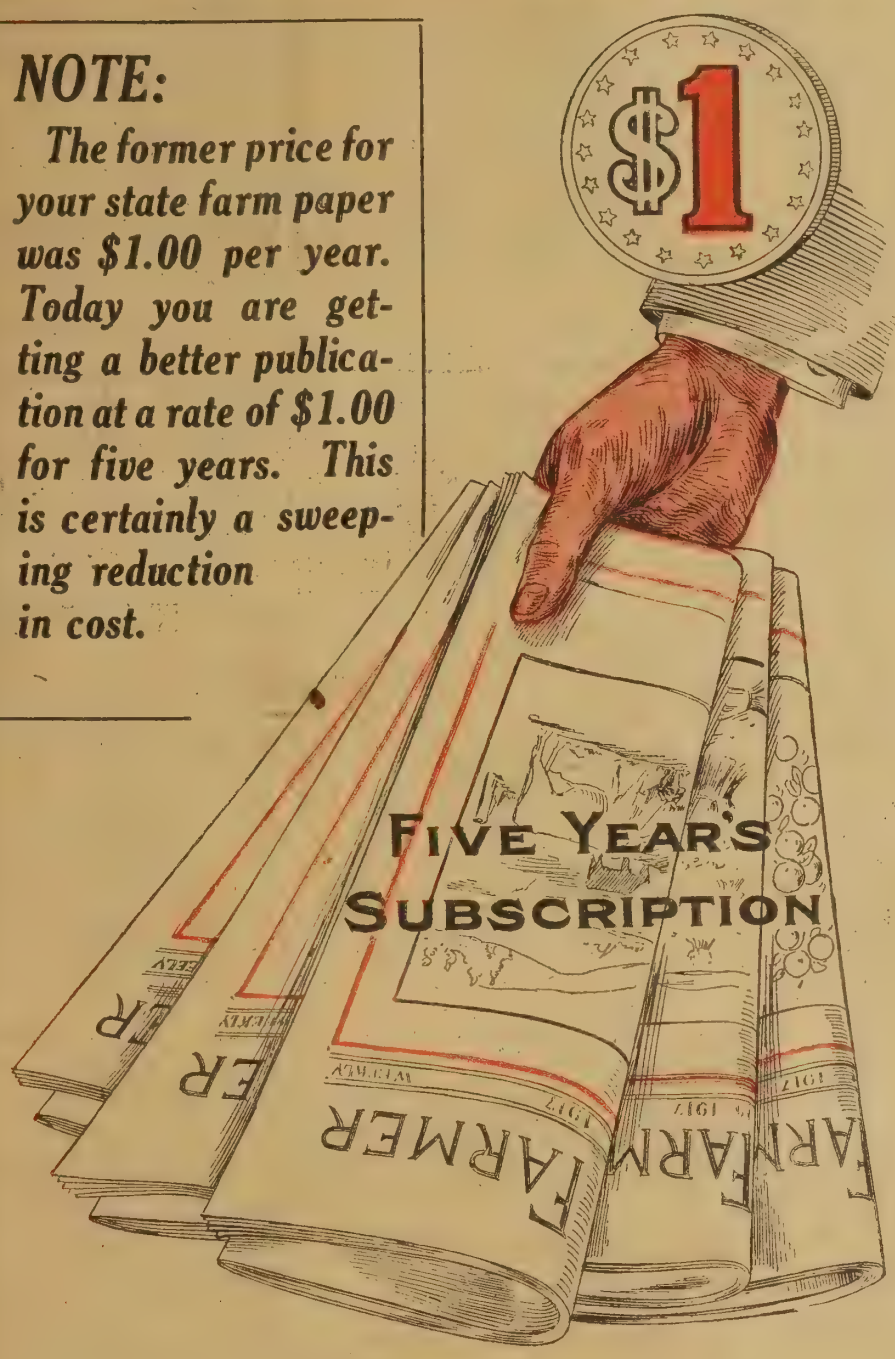
We said to our friends: "Send your subscription order direct. Get your neighbors to do the same. We will give you and your neighbor the benefit of every penny which would ordinarily go to the agent handling the subscription. Moreover, many men will be released to serve in lines where help is badly needed."

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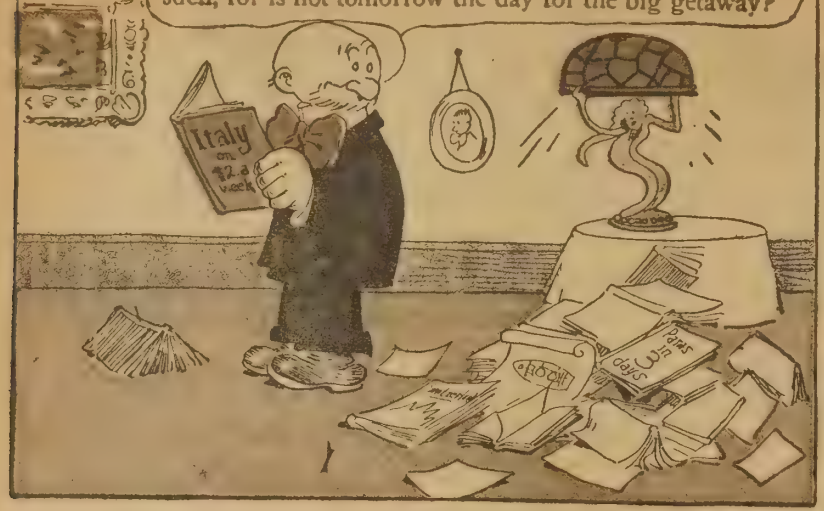
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# JERRY MACJUNK STARTS FOR EUROPE AND GETS ADVICE

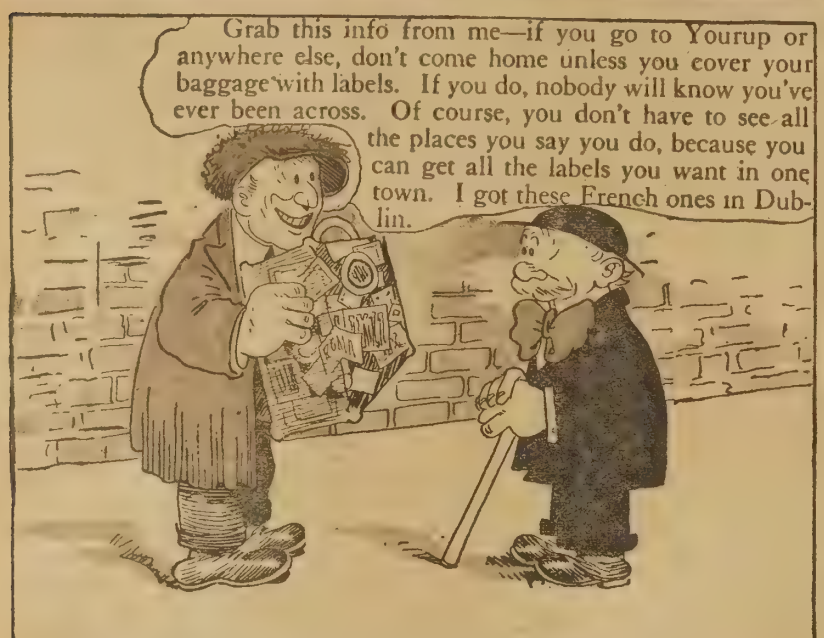
Gosh—I've read so much dope about Europe that I know more about it than the guy who invented the place. Now I'll scoot over to the gentlemanly agent's joint and drop a bunch of dough for transportation and such, for is not tomorrow the day for the big getaway?



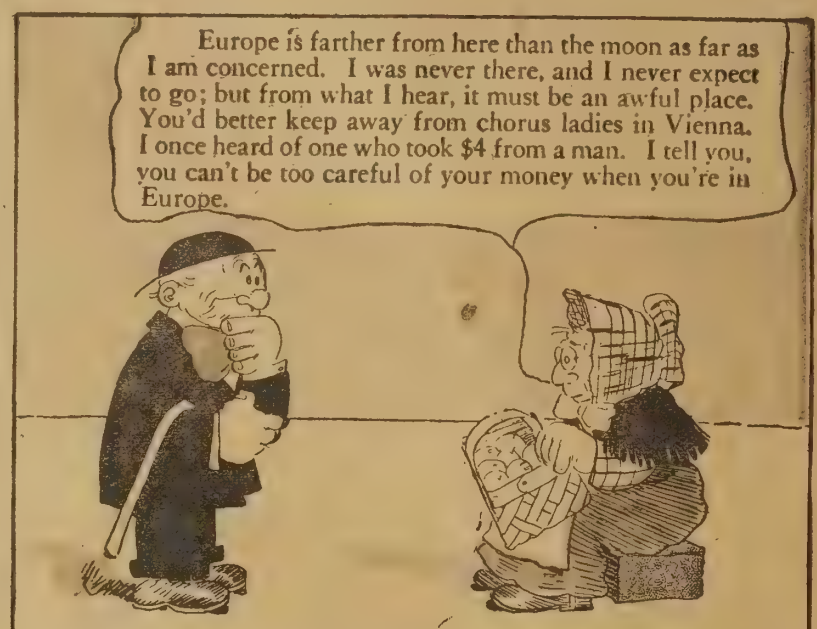

The night bartender around at Cholly's tells me you're leaving our fair country for foreign shores. Well, let me slip it to you straight—I've been over a few times myself and I never got the old mal de mer. Why? Simply because I drank 30 cocktails before every meal and took a quart or two of Burgundy with my meals.



Grab this info from me—if you go to Yourup or anywhere else, don't come home unless you cover your baggage with labels. If you do, nobody will know you've ever been across. Of course, you don't have to see all the places you say you do, because you can get all the labels you want in one town. I got these French ones in Dublin.



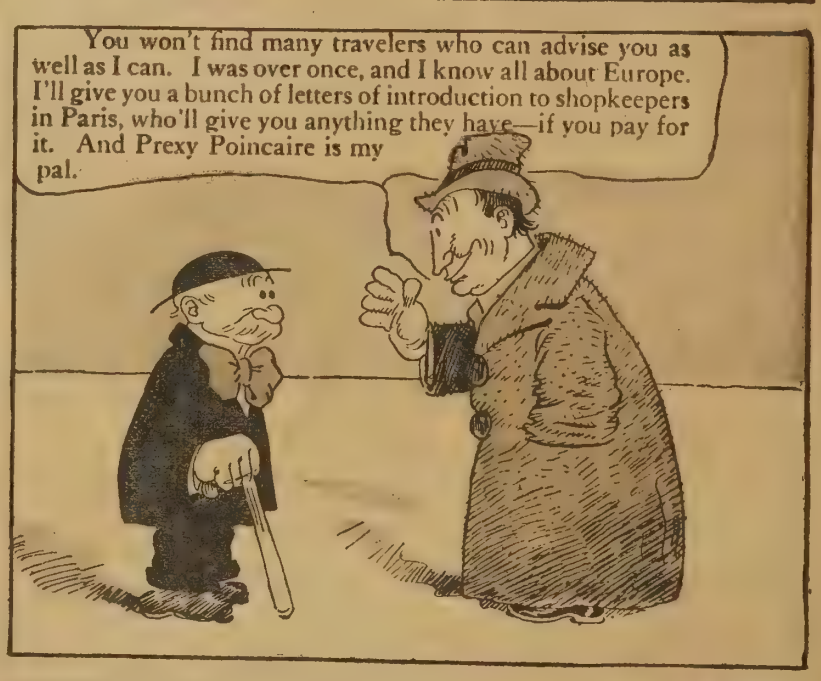
Europe is farther from here than the moon as far as I am concerned. I was never there, and I never expect to go; but from what I hear, it must be an awful place. You'd better keep away from chorus ladies in Vienna. I once heard of one who took $4 from a man. I tell you, you can't be too careful of your money when you're in Europe.



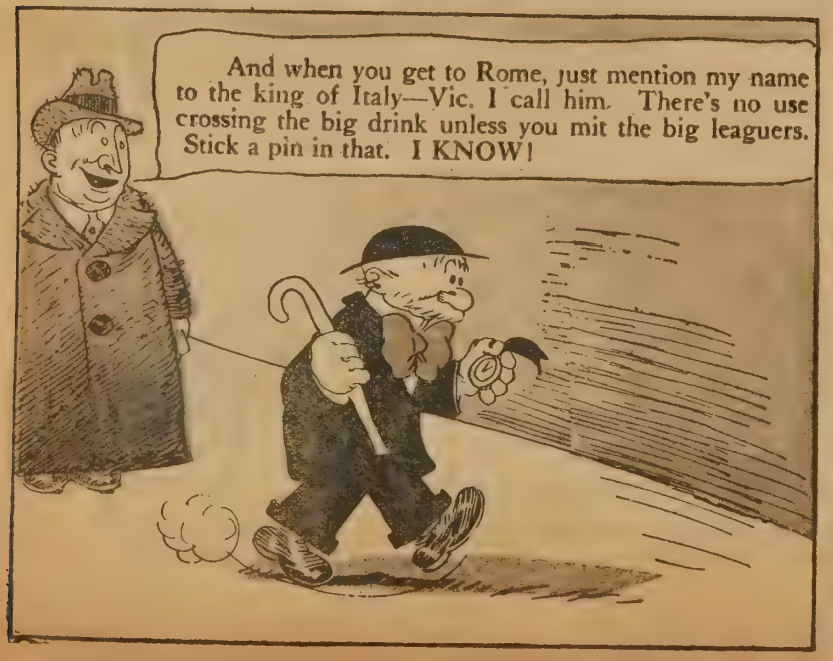
Ooh! I was told you are going abroad—and I must tell you about the pastry shops in Paris. Don't miss Rumpelmeyer's place on the Boulevard des Italiennes. They have the most delicious fishcakes in the world. As soon as you strike Paree, go to Rumpelmeyer's.



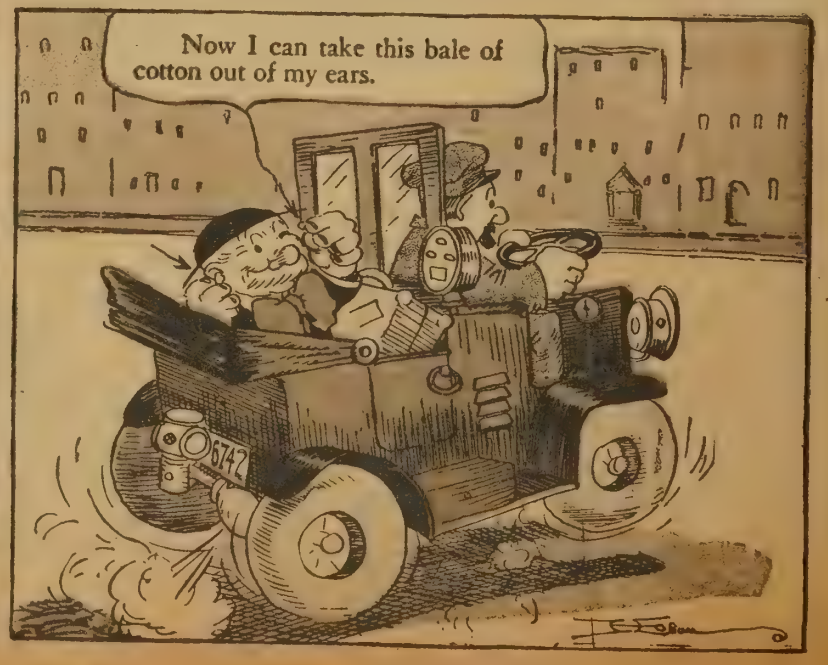
You won't find many travelers who can advise you as well as I can. I was over once, and I know all about Europe. I'll give you a bunch of letters of introduction to shopkeepers in Paris, who'll give you anything they have—if you pay for it. And Prexy Poincaire is my pal.



And when you get to Rome, just mention my name to the king of Italy—Vic, I call him. There's no use crossing the big drink unless you mit the big leaguers. Stick a pin in that. I KNOW!



Now I can take this bale of cotton out of my ears.



# Facts and Figures on Apple Growing

It is difficult to get people to read much now except war news and related subjects. Statistics are always considered dry except when a man is figuring up his bank account with a good balance to his credit. Government reports are dryer still, for there is no effort on the part of the average government employe to popularize his writing. Notwithstanding all these, I have found something published by S. M. Thompson, scientific assistant, and G. H. Miller, assistant agriculturist, on the cost of producing apples in the Wenatchee valley, Washington, Hood River, Oregon, and western Colorado, that every apple grower should read, reread, study and digest, until by the process of assimilation it becomes part of himself.

This is related to the war in the fact that as a war measure there is a tendency on the part of many to make exorbitant profits, and on the part of the government to so control prices as to give a fair profit to producer, manufacturer, distributor and common carrier, but to stop speculative piracy. Farmers and wage workers have been clamoring for this for a generation, but it is only since the government becomes a large purchaser that the real question has begun to filter through, into the minds of the majority of our political representatives. However, perhaps we too are to blame, for if a majority of the farmers and wage workers had seen it and organized to bring about the desired reforms, we would have had them long ago.

This subject is also related in a most practical way to the fixing of the prices of apples, provided the government concludes to determine the prices that shall be paid for food products.

Will apples be classed as food in the same catalogue with wheat, corn, potatoes, beans, etc.? If so, what shall be paid for them? In other words, "What is a fair profit?" That, of course, depends on what it costs to grow them, and Messrs. Thompson and Miller, in Bulletin No. 500, have given the most complete and exhaustive answer to this question I have ever seen. For years I tried to get reliable statistics, but there was nothing available that gave such reliable information as this report.

I am now wondering if I can so condense and summarize it as to make it readable, and at the same time arrange my figures so as to make just comparisons.

The first item is the cost of land, with interest on the investment. Then there is cost of equipment, taxes, insurance, water, manuring, cultivation, pruning, brush handling, irrigation, thinning, propping, spraying, boxes, hauling box shooks, making boxes, picking, hauling to packing house, sorting, packing, paper, nailing packed boxes, stamping, waiter for packers, foreman in orchard and packing house, hauling to town, or storage and miscellaneous expenses. Remember the comparisons are between Wenatchee, Hood River and western Colorado.

**Cost of Land.**

In the Wenatchee valley the cost of land per acre was $1925.

In the Hood River valley the cost of land per acre was $990.74.

In Colorado the cost of land was $751.56.

In Colorado, estimates were made in three counties, Mesa, Delta and Montrose. Mesa is the county in which Grand Junction is situated, Delta is further east up the Gunnison river, Monrose is south of Mesa and Delta.

It should be borne in mind that these estimates are based on averages; not on the most successful, nor the least successful, but the average man producing the average crop and these averages obtained by adding a considerable number of crops together, and dividing by the number of orchards. In Wenatchee, the number of orchards estimated, was 87; in Hood River, the number was 54, in western Colorado, 125.

The sizes of the orchards in the different districts are: Wenatchee, 11.4 acres; Hood River, 12.4; Colorado, the average size is not given, but of the orchards tabulated, there were 35 over 10 acres, 47, 6 to 10 acres, and 22, 1 to 5 acres inclusive.

The average yields of the orchards are: Wenatchee, 593 boxes per acre, or 7.3 boxes per tree. Hood River the average yield is 222 packed boxes per acre, or 3.08 boxes per tree. It is noted that in 30 orchards given clean cultivation, the average yield is 218 boxes per acre, while those with mulch crops of clover, alfalfa, etc., the average is 228 boxes per acre. Further, in the orchards with mulch crops, the fruit was of better quality. The labor cost of caring for an orchard with a mulch crop is slightly higher than by the clean cultivation method, but when the value of the hay is considered, the difference per acre in favor of the mulch crop is $6.21 for clover and $10.89 for alfalfa. The average yields in the Colorado districts are 284 boxes per acre, or 3.8 boxes per tree.

The average ages of the trees estimated are: Wenatchee, 11 years; Hood River, 12 years, and Colorado, 17 years. The time of the survey covered a period of six years.

**Prices Received.**

Wenatchee not given; Hood River the average returns f. o. b. Hood River, for the years 1910 to 1914 inclusive, $1.11 per box. The averages by years are $1.52 for 1910, $1.41 for 1911, $0.77 for 1912, $1.23 for 1913, and $0.63 for 1914.

In western Colorado "the grower must get $0.844 per box in order to pay all costs and make 8 per cent interest on his investment. When all grades are considered it is seldom of late years that the grower receives $1 per box f. o. b. on his apples and the average is usually considerable less."

**The Costs by Items.**

Interest on the investment is figured at 8 per cent. This investment is for land and equipment. By equipment is meant machinery and other articles necessary to the orchard business, but does not include horses, harness, packing houses, etc.

In Wenatchee the cost of equipment was $444 per orchard, or $47 per acre. In Hood River equipment was $491.87 per orchard, or $39.587 per acre. Colorado the equipment was $653.47 per orchard, but since the average size of the orchards is not given, we have no means of knowing the cost per acre.

**Labor Costs.**

In Wenatchee labor is paid from $35 to $50 per month, depending on the privileges given. In Hood River, the range is from $25 to $60 per month. In Colorado, $30 to $60 per month is paid for labor.

**Cost of Pruning.**

Wenatchee, $3 to $3.50 per day, is paid to expert pruners. The average cost per acre, $10.08. In Hood River the average cost for pruning is $5.48. In Colorado the cost for pruning is $18.78.

Hauling brush—Wenatchee, $4.927; Hood River, $2.36; Colorado, $3.77 per acre.

**Cost of Spraying.**

This includes the cost of labor and material, and when the spraying outfit is hired, it is charged at the rate of $1.50 per hour for man with team and sprayer, the orchardist furnishing the spray material. In Wenatchee the cost for the lime-sulphur spray is $8.89 per acre. First arsenate of lead spray, $2.15; second arsenate of lead, $2.02; third arsenate of lead, $1.91; fourth arsenate of lead, $2.24. Total spraying, $17.21.

Hood River—The labor cost for spraying is $8.83; cost for materials, $8.69 per acre. Total spraying, $17.52.

Colorado—The cost of lime-sulphur spray is $9.91 per acre, and all the arsenate of lead sprays, $4.37. Total per acre, $14.18.

These estimates do not include the cost of special sprays for certain pests and diseases, such as the Bordeaux for powdery mildew, and tobacco for aphis and other pests.

**Cost of Cultivating.**

In Wenatchee the cost of cultivation is reckoned at $14.75 per acre. In Hood River the cost of cultivation is $8.49, in Colorado $8.70. The costs of the va-

(Continued on page thirty.)




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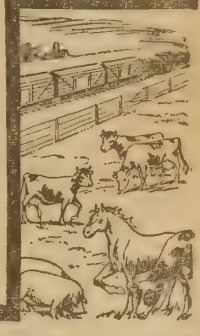
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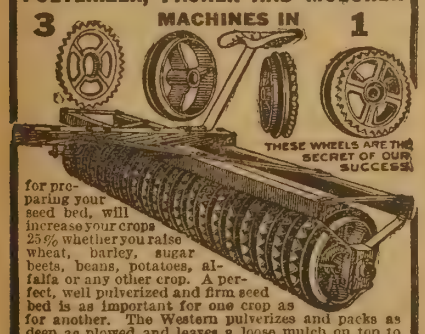
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# Fruit Problems Will Be Solved

## *Labor and Transportation Seem Able to 'Swing Themselves'*

By JOHN V. ELLIS, North Yakima, Wash.

Washington has been able, to this time, to handle the labor problems arising from its fruit industry without any serious inconvenience. There have been times when the labor question has been a source of worry, but there has never been lost in the harvest a material proportion of the crop, though individuals annually suffer in this, that or the other district. This, however, is the problem of the human equation.

Heretofore the bulk of the fruit has been produced in territory contiguous to numerous small towns and along trails where labor has been accustomed to seek employment. Also, along with the increased production has come from the south the efficient army of those who "follow the crop" just as the wheat harvesters have followed the ripening grain northward to the last fields. Annually this group, or these groups, dependent upon the fruit harvest for their income, is growing. The business is building up its special labor field and supply. There are those workers who year after year return to the same orchards and employers. This is a growth from the circumference and has at times shown signs of being very rapid in its development.

**Can't Book Labor Ahead.**

Some fruit producing sections where the acreage is large, the permanent population small and the difficulties of travel and housing not yet overcome, will probably suffer before the adjustment. Extra orchard labor can not be booked ahead. Labor will not wait for the weather and the ripening of the crop. This fact has led to some changes in the method of handling the apples, which are the largest of the fruit crops of the state. Time was when the apples were sorted and packed as they were picked. That day is passing or has passed.

The wise apple grower today picks his crop and gets it under cover. The sorting, grading and packing are not fraught with the haste that must attend on the harvest in a state where the crop is large, the labor inadequate and the demands on that labor varied sufficiently to draw away at all times, for steady if not pressing development, hands that otherwise could be utilized to tide over the vital three or four weeks of the fall.

Necessity for housing the crop speedily to protect it from the advancing winter has led to the development in the more progressive sections of storage warehouses of a community character supplemented in large part by home ranch storage sufficient to take care of that portion of the crop that can not reasonably be hauled to warehouse during the harvest.

Incidentally it may be said that there is here a pretty illustration of the matter of interdependence in the fact that those fruit districts where there is the greatest diversity of farm crops have the best and most adequate storage. The humble potato and the lowly alfalfa, in other words, have assisted in building proper receiving places for their more lordly brother, the apple. Also, it must be remarked that the development of the auto truck has done much to speed up the task of getting the fruit "under cover."

**Skilled Labor Gone to War.**

Skilled labor has gone to war. This is a fact. The organized craftsman of the city, ready as has been his response to the call to arms, has been no whit ahead of his skilled brother of the farm. It is equally true that four untrained hands are as inadequate on the farm to replace the two that have taken up arms as they are in the city. In Washington the taking from the agricultural sections of thousands of swift and true apple handlers has worked a hardship. The competition of the shipyards, and of the spruce harvest for the airships, the more general adoption of women into industrial lines and similar tendencies have worked a still further hardship. There are some saving features. Much fruit handling is by the piece and energetic young men and women, seeking an education and anxious to earn in a short time money to carry them the balance of the year at school, turn their attention to it. More and more, also, fruitgrowers find themselves able to use families and give employment to several wage earners in a single family. More and more, also, mechanical means are devised for handling by power some of the routine that formerly was done by men and women.

It may be that before the cities of this state reach that degree of development when they will be able to furnish thousands of short-term workers for the harvest it will become necessary to dignify the apple harvest by making it an annual festival, as has been done in some of the European countries with their harvests. In this event the clergyman and the banker, the editor and the craftsman will close their respective places of business, take their families and go into the orchard to work, for a week, or two, or three. In this event there will be no labor problem. It may for a time come to this. Already an approach has been made. In some sections of the state the schools have been made to wait upon the apple crop, business has recognized that it depends upon the success of the rancher and all have gone out to help, permitting other needs to lie in abeyance. This, however, has been done as a grim necessity, not as a joyous opportunity. It may be that gladness and not dull determination will accompany and escort the lay brethren and sisters into the harvest fields when Washington's apples are ready for the picker and the packer.

Federal attempts to assist in the labor problem have met with great success. As much can not be said, so far as apples are concerned, of the state harvesters' league of recent memory. A positive forward step, on the other hand, is the more general adoption of the county agent idea and an increasing recognition of the merits of those officials. The federal department of labor is doing the most effective kind of work. It is filling out the crews; it is making possible the success of the harvest where otherwise it would be but a partial crop that would be brought to the commercial stage. Federal labor agents have taken up the task of making effective the work, in a labor way, of the county agents, and have kept the stream of labor flowing in one channel and prevented cross currents and backwaters.

**Statistics Tell the Story.**

Statistics tell their own story to those who can read them. From the 1917 records of Federal Labor Agent Wilson at North Yakima are taken the following figures of fruit handlers sent out to ranchers the last season:

| | Men. | Women. |
|---|---|---|
| July | 124 | 33 |
| August | 168 | 9 |
| September | 740 | 75 |
| October | 730 | 131 |
| November | 35 | 6 |
| Total | 1797 | 253 |

"These were "fruit workers" only. During the same period he supplied to ranchers scores of drivers, farm laborers, cooks, berry pickers and various other kinds of workers who either assisted directly in the harvest or released others for that task.

Pear picking began in 1917 early in August. It was followed by the peaches and these in turn were followed by the apples. Many families which by experience had learned of this progession of crops were on hand, with camping outfits, in anticipation of the season. These came from various parts of the northwest. Then there was the before mentioned army of "swifts" from the south who were following the harvest and the labor north and to these must be added the ever growing number of people in each farming district who devote a portion of each season to the higher wages that a swift worker can get by following the piece system of the apple harvest and handling.

The wage base of the last season was $2 to $2.25 per day and board or $3 a day without board where the work was not by the piece. Pickers, sorters and graders were paid $3 per day, warehouse packers received four to four and a half cents a box and orchard packers six cents. Truckers and warehousemen received $3 per day. This, as stated, was the basis of the wages. What was actually paid varied with every part of the state and every subsection of each district. In many sections there was a strong demand for camping parties that could board and lodge themselves. Some wanted straight crews of men, some were willing to take mixed crews. The harvest was the first consideration.

**Workers From the Cities.**

One of the weaknesses of the State Harvesters' league was that those who, through patriotism, volunteered to assist in the work were in large part not only unskilled but "soft." The average rancher is willing to take any kind of laborer provided he is seasoned to toil. Those who are without either skill or the ability to carry the speed for the distance, as the runners say, are a handicap rather than a help, especially if the balance of the crew is dependent upon them for supplies "coming up." Then, too, fairly or unfairly, the volunteers of the State Harvesters' league were considered to be a superior lot of citizens who were looking for a vacation with wages. Easy going, as he generally is, the average farmer shrunk from biting into that pudding.

District agents, organized by the county agents, did good work in many sections, the value of this feature depending largely upon the efficiency of the district representative of the county agent. These men unified the needs of their territories, so far as the federal labor agent was concerned. They kept in touch with the employers in their respective territories and succeeded in large part in keeping labor within the district by shifting it from one employer to another as each task was finished, and prevented it from drifting away to jobs elsewhere. The effect of this in favored districts was that the labor on hand was retained, there were constant accessions and the supply grew steadily until there was neither worry nor need for worry as to the harvest.

A steadily increasing number of the resident population capable of handling fruit from planting to shipping and a growing army of expert workers following the crop from lower latitudes northwards will make a base on which can be superimposed the drifting and seasonal laborers who more and more, as the years pass, the federal bureau of labor will be able to divert to the apple producing sections.

**Processing Plants Help.**

Development also of the processing plants will have a tendency along this line. It is figured that this year in the Yakima valley, where the processing industry has had its greatest development in Washington, that the commercial value of the product is of a value of $1,055,000. Canned and evaporated fruit, cider, vinegar, grape juice used in 1917, 20,160 tons of apples and 2805 tons of other fruits. In addition they used up 835 tons of vegetables. These plants are holding permanently some families that expected to be but seasonal laborers and they are enlarging and solidifying the base on which the fruit industry may be reared. When it is considered that the state is shipping annually some 16,000 carloads of commercial apples and 8000 carloads of other fruits, not to speak of berries, it will be seen that the by-product industry is but touched.

**Car Situation Handled.**

It was not in the labor department alone that assistance was rendered the fruitgrowers and shippers by the federal government. Its handling of the car situation the last season was another item of activity, allied to labor, that was a life raft to the state. It was not always possible to maintain the supply of refrigerator cars, but so much was accomplished in this direction that the refigerator car shipments were, throughout the season, ahead of shipments of a like kind to corresponding dates in preceding years. But while keeping up to its highest possible point the refrigerator car supply the government saw to it that the shippers were offered boxcars for a proportion of the crop.

Boxcars made a further call upon the labor supply, but it was not altogether a rush call in its character. Boxcars needed a false flooring, to be insulated by paper protection against variations in temperature and to be accompanied on their trip by tenders who would keep up the individual heating plants in case of extreme cold weather. This gave further occupation to those laborers who know fruit and are sympathetic in its handling.

In some respects the government assisted in the box and paper difficulties, but its work in this field is more in prospect than in fact. Present indications are that paper for insulation, for box linings and for wraps will be cheaper the coming season than in that which has passed. The box problem, the government says, will be in part solved if users will now anticipate their needs and order at once instead of delaying until the final moment and then asking the manufacturers to meet their needs in a short time. In any event, it seems that government intervention will stabilize the situation.

Yakima shippers, by organization of a traffic association, have taken the most vital step to the industry that has been recorded in recent years. This association is a voluntary organization of shippers, which has as its manager an experienced railroad man, L. F. Sainsbury. The association undertakes to render a wide service to its members by attending to the entire car situation and including a messenger service accompanying cars, not only to protect them en route, but to determine the character of the contents upon arrival at destination in case of rejections, etc. In this field, however, the shippers are receiving great assistance from the federal food administration, which is standing between the shipper and the purchaser who has a tendency to refuse shipments simply because he has changed his mind as to the deal.

**"Buyers" Sometimes Caught.**

Shippers tell of the rejection of a car of prunes which the buyer had never seen. Instead of arriving, they were in "the ditch" because of a railroad wreck. They tell, also, of rejections of two carloads of apples within recent date that did not arrive at their destination until after the shipper, hearing of the rejection, had taken train east and himself arrived to ascertain the difficulty. His cars were not in the yard and did not come for several days. When he explained the situation to the federal authorities they had the fruit inspected by the federal inspectors, now located at all important points, and he received ample redress when the government said to the buyer, "You take these two cars or lose your license."

The messenger service, especially in these days of an increased tendency to use ordinary instead of insulated cars, is a vital feature. It is the first application to the northwest apple business of a practice that in tropical and semi-tropical fruits has proven to be an essential business development and a splendid insurance. The traffic association manager works hand in hand with the federal officials in his field as the shippers in theirs work with the federal bureau of markets. The industry has already felt the benefit of the advantages obtained.

Problems of labor and of shipping remain up to the grower and the handler of the fruit crop. The government aims merely to assist and to rectify. The person vitally interested must anticipate and plan. If is easy to see that under present international difficulties the fruit industry might readily find itself in a serious way in the harvest as it is now in the matter of export. So far, however, the labor and transportation problems have been able to swing themselves. It would seem that they will continue to do so.

ACKNOWLEDGMENT

The Farmer wishes to acknowledge the courtesy of the Spokane Chamber of Commerce in lending to it the photograph reproduced on the first page of this issue. It is one of scores of scenic photos taken by Frank Palmer of Spokane, and was selected for this issue as typical of the transformation of once barren land into beautiful and productive orchard farms.

## Where Your Dollar Goes.

What becomes of the dollar which is invested in government bonds? Here is the course it takes as visualized by Secretary of the Treasury McAdoo in his annual report to congress.

"First, it goes to the government as a loan for the war.

"Second, it is expended by the government for food, clothing and ammunition, which go directly to a gallant soldier or sailor whose fighting strength is kept warm by the clothing, and whose enemy is hit by the ammunition.

"It has not been expended in the purchase of needless food and clothing for the man at home, and is therefore released for the use of the soldier; it is saved wealth to the man at home and can be loaned to his government at interest with resulting benefit to himself and to his government."

## New Dairy Leader.

Announcement has been made from Pullman that Professor E. G. Woodward of the University of Nebraska has been appointed head of the dairy division of the state college. Professor Woodward succeeds Professor A. B. Nystrom, who resigned some time ago to accept the position of county agriculturist of Lewis county.

## Do You Know That

Many insect pests may be destroyed by late fall plowing?

# Culls No Longer Merely Food for Swine

## *Women "Corner" Market and Manufacture Delicacies of Farmer Waste*

By S. I. Anthon

When poets sing of the dearth of new things under the sun they show themselves entirely unacquainted with the 1917 developments of the apple industry of the state of Washington. At least two new things have come to the front in it. One is the presence of women as an active factor in the apple game, whether from the buying or the by-products end of the business, and the other is the amazing variety of apple products which are being turned out from the once-scorned apple cull. Indeed, so great was the demand for cull apples, once commonly relegated to be feed for such hogs as did not turn up their snouts in disdain at them, that cull apples were the center of the prettiest little buying contest which the state saw.

At least two women entered the apple game in sober earnestness and, inexperienced as they were, beat their masculine competitors at it. One slender slip of a woman, Mrs. Peter V. Davis of Seattle, with true feminine willingness to try a new thing and go the limit in the trying, entered the cull market and, before the close of the season, purchased some 300 cars of cull fruit in the hottest buying competition the Yakima valley has ever known. Her partner, Mrs. William E. Meyers, who is likewise from Seattle, did some small share of the buying, but devoted her energies more to the operation of the Yakima Evaporated Fruit company's plant, where she "bossed" a crew of 45 men and women, did her full share at the manual labor, which must be done in even the most up-to-date by-products plant, and learned for the first time in her life, all the ins and outs of the different apple varieties.

### Gave Tips to Competitors.

When Mrs. Davis first became interested in fruit she did so by way of a five-acre peach orchard, which her husband purchased and turned over to her. During the last three years she has taken full charge of the harvesting and selling of the peach crop and, however low the market sagged, always managed to dispose of her fruit at the psychological moment when there was a demand and a good price. "Davis' luck" became a byword on Produce Row, where experienced peach jobbers were not unwilling to accept tips from their feminine competitor.

Cull apples first interested Mrs. Davis during the last season. Till this year a cull apple was a cull to her, and nothing more: Now a cull apple stands for slices of evaporated apple, for dabs of apple butter, for canned apples, for jelly stock and for pectin, the gelatinous matter which is used to stiffen the juices of fruit which frequently fail to "jell" properly. Seeing the cull apple in its new possibilities, what more natural than that she should trust to her feminine intuition and establish a near-corner in it?

Bold speculators on the larger exchanges have at different times tried to corner various foodstuffs. It has remained for Mrs. Davis to corner the cull apple supply of an entire valley. She began early. In her trusty little Ford, which she drives herself on occasions and otherwise turns over to a small boy, she covered the Yakima valley from Prosser to Ellensburg for culls. Growers with several carloads of culls received as much attention as the farmer with but a few wagonloads—and no more. Culls were culls. Mrs. Davis wanted them all. By the time her masculine competitors awoke to what was happening, the woman buyer had secured contracts for over 200 carloads of the stock. She had also gotten so wide an acquaintance with the growers that she had but to say "Got any culls to sell?" to be met with "Oh, you're Mrs. Davis. Sure, you can have all I've got."

### Price of Culls Goes Up.

At the opening of the season, first-class cull apples could be readily purchased at $5 the ton, delivered at any desired plant. By the time the other buyers awoke to the new game of "Culls, culls, who's got any culls?" they found themselves unable to purchase them at the former figure. Later in the season, while Mrs. Davis was smilingly thinking of the steady stream of cull apples which were coming into the plant in which she is interested, the establishment of the Yakima Fruit Evaporation company, other buyers were scouring the valley to offer as high as $10 a ton for culls. Some few sales were made at $12 a ton for products which last year were used as so much farm waste in nine cases out of 10.



Mrs. Peter V. Davis, who taught the Yakima valley the "cull apple" business.

Many and weird experiences fell to the lot of the first woman buyer to enter the commercial field in this state. There were farmers who plainly doubted her ability to pay on delivery—but it did not take long for her reputation of living up to her promises to spread far. Other orchardists tried a bit of camouflage regarding the variety and quality of their culls only to find that the little woman, properly attired in a tailor-made suit of great becomingness, knew a trifle more about apples than they could tell her. Many growers were willing enough to sell their cull fruit, but unwilling or unable—in the rush for labor and rapid harvesting—to gather it and bring it to the plant. In such cases Mrs. Davis bought the stuff "on the ground" and, quite as a matter of course, hired crews, usually men, to gather and sort her purchases. Harvesters who plumed themselves on being engaged to work under a "woman boss" quickly found that their hopes of extra-soft berths were premature. Mrs. Davis knew what she wanted and when and how she wanted it. By the use of her magic smile, at times backed by an iron determination, she got it.

On one occasion the plant needed a truckload of apples. There were no men to drive the truck, standing loaded in an orchard. Mrs. Davis, in the early dusk, started the truck. While on the road she struck a piece of soft road, the machine settled on one side and lurched over. Her first remarks on regaining consciousness after the bump were about the fruit and the possibility of getting it in that night. It was safely delivered.

### Drafts Tramps Into Service.

Car shortages did their share to educate the feminine buyer into the true inwardness of the apple game, but it must be granted that she ordinarily got her desired cars. At one time she received peremptory orders from the railroad higher-ups to unload a car of fruit which was standing on a siding and to see that it was done "instantier." Unable to spare any of her regular crew she hired some tramps who were trying the tie route to the Sound, and, by setting the example of working herself, got the car emptied in record time.

Mrs. Meyers' work, though it began considerably later in the season, is no less remarkable. She purchased an interest in the Yakima Evaporated Fruit company, in which Mr. and Mrs. Davis own much of the stock, and at once, inspired by the example of her fellow-owner, determined to get into the game. She made some trips to purchase culls, but decided she could be of greater service at the plant itself.

Books? Certainly Mrs. Meyers could audit and keep books—and did. Direct the peelers, who place the apples on spindles to start them on their journey from the bins to the drying kilns? Assuredly; what if they were 15 women with as many opinions as to the manner in which they should be handled. Tact is not a possession of diplomats alone. Speed up the men engaged in the task of keeping the plant heated and packing the evaporated fruit? Why not? Skirts are no handicap if one can deliver the goods, as Mrs. Meyers could. "Boss" the yard crew, engaged in unloading the fruit brought to the plant or in loading the boxes of evaporated apples to start off to market? Quite as easily as leading the conversation in the proper channels at a tea party. Dicker with salesmen, buyers, important railway officials of fractious purchasers? Never did ball bearings work more smoothly than the woman director. The "Women's plant" has been the envy of men who operate similar establishments because it has speeded production so much and has avoided the labor troubles which for a time threatened to close down several plants. The hand that rocks the cradle may rule the world, as the axiom says, but it is equally sure that it is highly efficient when it comes to ruling a by-products plant.

### Save 20,000 Tons of Apples.

This year, according to the best and most conservative estimates obtainable, 20,160 tons of cull apples from the Yakima valley alone were transformed into apple by-products valued at $1,055,000 or approximately $520 worth of products from each ton of culls. These by-products include evaporated apples, canned apples, apple butter, apple jelly stock, vinegar, cider and pecten. So great was the competition for cull stock that the apple peelings and cores, formerly regarded as waste by the evaporator plants, were this year sold to the vinegar plant for further processing. And by-products made from the Yakima valley apples will not only be found on the shelves of practically all the grocers in the United States, but will follow Uncle Sam's armies into the trenches.

During the last 12 months there has been a great growth in by-products plants in the Yakima valley, and particularly in the region vicinal to Yakika. Libby, McNeill & Libby were first in the field and erected an $80,000 cannery, in which canned apples, apple butter, jelly stock and pectin were made this year. Several hundred tons of apples were canned and almost as many transformed into apple butter, which is truly reminiscent of the kind turned out during one's childhood days on the old New England farm. The jelly stock and pectin were treated largely as an experiment, but the trial proved so successful that a large quantity of fruit will be so handled during the coming season.

Four evaporator plants were erected. The Washington Evaporated Foods Products company, backed by local capital, put up the first large evaporator, but went largely into the business of handling evaporated vegetables instead of apple evaporation. The California Packing corporation, with headquarters at Sebastopol, Cal., and the largest evaporation interest in the country, started a modest plant with which its backers were so pleased they enlarged it three times during the season. The plant handles 35 tons of fruit daily, which means a return of about one-eighth of the tonnage in the form of evaporated fruit. The Selah Evaporation company, an organization formed mainly to handle the cull apples of the Yakima Fruit Growers' association, handles almost as much fruit daily, and the Yakima Evaporation company's plant, the "Women's plant," does a little better.

Not content with the regulation apple products, there is also a great increase in the amount of cider and vinegar being manufactured. The Hecox Processing company this season doubled its plant and is making superior cider and vinegar. The new Jones Bros.' plant, a branch of the Jones Bros.' California establishments, makes 40,000 gallons of apple juice into either cider or vinegar daily. The plant was put up late and its manager found considerable difficulty in securing enough cull fruit to run it at full capacity, but expects to enlarge the plant next season and have a six-months' run.



Everybody picks fruit when necessary in Washington.

## USE MACHINERY.

### Labor Shortage Is Demanding It.

Labor shortage brought on by the war has caused unusual distress among northwest horticulturists. In a paper read before the recent convention of the Washington Horticultural association Chairman Henry Suzzallo of the state council of defense urged the use of every practical labor-saving device in order that this contingency may be met. Unusual conditions prevailed last picking time and it is predicted that next year's harvest may be even more difficult to accomplish.

Anticipating this, manufacturers of equipment are preparing to meet the demanad. The capacity of the Price Fruit Sizer company's plant at Yakima will be greatly enlarged. This company has a large plant in its present shape, but when the improvements now planned are completed it will be able to turn out a great many more machines than is now possible.

It is a most interesting sight to watch the sizer in operation. Apples are automatically graded and by means of a device which computes the actual weight of each apple the fruit is picked up and tossed into a conveyance so delicately arranged that the fruit is not damaged, even though tossed several feet.

The Cutler Fruit Grader company has moved its plant and place of business from Hood River, Ore., to Portland and has greatly enlarged its plant. Both the Cutler company and the Price company have established means of distribution so that they are extending their trade territory not only to various sections of the northwest but to fruitgrowing districts in the extreme east.

Fruit-handling equipment was a subject which was much discussed by growers at the recent horticultural meeting at Kennewick.

### War Payroll Is High.

The monthly war payroll of the United States army and navy is now about $100,000,000 a month.

# Reminiscences of Pioneer Days in Bunchgrass Land

By Ida C. Young.

A few years after we had settled in Douglas county, Washington, a new family moved in and camped about half a mile from us. To be neighborly mother called upon them as soon as was suitable. On her return home all of us, as was natural, asked questions about them. For quite a while mother was silent or noncommittal. But we felt some way that there was something which did not meet with her approval.

At the supper table it came out. The new neighbor woman was most emphatically sick of the country. She had been used to better things. "Why, I can't even give my children pie!" mimicked mother in disgust. That settled it; any one who could not live without pie had small chance for popularity at our house. The term "pie face" would have been in high favor with us at that particular time. Happily it was unknown and the people moved away shortly after. I don't know where, but I hope they found pie.

There was really very little loneliness or homesickness among those early settlers. John Henry Smith had a period of discouragement during the second summer. It was strong upon him early in the spring at planting time. He rode by our place while father was plowing and planting potatoes. Coming from Missouri, of course the light volcanic ash looked like poor soil to him, and his comments on wasting perfectly good potatoes in that bed of ashes were not encouraging. However, father went on planting and that fall we had a good crop of potatoes and other vegetables. The next spring Mr. Smith plowed and planted with the rest of us, and as the years went by he became one of the well-to-do farmers of that community. He often referred to those early days and dwelt upon the fact that it was a lucky thing he had no money to take him out of the country or he surely would have gone back to Missouri.

Of course, the grownups were all so very busy with the absolute necessity of keeping alive that there was little time for pining or regret. Even the winter days brought their share of activity for the men at least. Firewood had to be hauled for the year's supply and we lived on the road that led to the canyons which opened into the Grand coulee. Here there was plenty of fuel, but the pine trees had to be cut and sawed up into shape to drag them out and made ready to haul three, six, 10 or 15 miles as the case might be. Our grindstone drew its share of this particular activity and we made the acquaintance of people coming and going whom we would not have known any other way.

There were long winter evenings that might have meant loneliness to some, but to us they meant a chance to read and we read a great deal. About once a month some one of the neighbors made a trip on skees to Brentz postoffice over in Lincoln county about 30 miles away. Nearly always there was a big roll of story papers and magazines for us sent by relatives in the east. Neither Ed nor I ever went through the process of learning to read, we just read. I also read my first book that winter. It was an old-fashioned Sunday school novel "Fanny Grant Among the Indians." It certainly did lay down the lesson of the sin of stealing and the virtue of honesty. I read it several times; in fact it was a standby for several years; whenever we ran low on reading I dug up Fanny Grant and was happy for several days.

When F. H. Bosworth was elected one of the first commissioners of Douglas county that second autumn he moved to Okanogan, the temporary county seat. This happened in the spring after his election. Then Lincoln postoffice, which had been established at his place just before or after the election, I'm not sure which, was turned over to us and we had more reading.

I can not vouch for the quality of all our reading, but the quantity was all sufficient as there were continually sample copies coming to the postmaster. Mother provided an antidote in the shape of the Youth's Companion and a little religious paper and let us alone. We read everything from the Chicago Police Gazette to the Heart and Hand. The Police Gazette was printed on very pink paper and was profusely and furiously illustrated. The Heart and Hand was a mongrel-looking little matrimonial publication, but we got more thrills out of it than out of the other. We grew quite proficient in picking out the winners among the great collection of lonely hearts and loving dispositions. We were also quite frank and unfeeling in our criticism of them all.

I can not see that we were in any way harmed by this indiscriminate reading. Perhaps the very fact that we were not watched and fretted over gave kind providence a chance to turn away from us any reading that might have been really harmful. Any way, we all turned out fairly well.

During those first few years sister Frances sort of lost out in the reading. She was always so busy and interested with the dogs, cats, calves and colts or some out-door stunt that she really couldn't get started as the rest of us did. Ed and I criticized her quite freely on this subject, but she went serenely on struggling through three months of school work in a year, until she was eight or nine years old. Then one day she suddenly announced to all of us that she was going to read. No one disputed or interfered with her and she gathered up an armful of Youth's Companions, laboriously crawled up the outside corner of the house on the projecting logs, to the roof of the little porch that ran along the south side of the house. Here she proceeded with considerable noise to make herself comfortable, calling down emphatically at intervals that she was not to be disturbed. She was going to read.

Finally quiet reigned and we forgot all about her. I didn't think of the incident again until after I grew up when she confessed that she went sound asleep up there in the warm spring sunshine. When she awoke she was hungry and came down to find something to eat and she never read a word. I might add here when she finally did learn to read she became the worst bookworm of the lot.

Before I take leave of this subject of the postoffice in its share of furnishing entertainment I must make mention of an occasion which furnished a high tension of interest for the whole family and one outsider.

Our log house, 14 by 22, was left undivided inside so that we had one big living room whose one half held the kitchen and dining room conveniences and the other end contained the postoffice desk and little square of pigeon holes, the organ, a little walnut bureau, a home made lounge and big home made bedstead.

I was 12 or 13 when it all happened and quite tall. We had just finished supper and I had crawled under the bed after a penknife which had fallen behind the bed. Just as my hand closed over the knife I heard footsteps crunching outside and immediately a knock. The door was open so I had not time to back out. I decided to stay where I was and drew my feet up a little hoping they would not show. Father invited the man in, they exchanged the usual greetings and commonplace remarks, the man asked for the mail and it was given to him. Then just as I was beginning to relax, thinking now he would go, father invited him to sit down. He sat and the two men fell to talking.

It transpired later that none of the family knew where I was. Frances had been the only one to see me crawl under and had forgotten that I had not come out, so there I was and there he sat—maybe, after all, he saw my feet—there was work waiting for me, too. I had my choice between washing the milk pans and supper dishes and helping milk the 12 cows out in the corral. The men talked and talked. Mother began clearing off the table and piling up the dishes and then it began to grow dusk and all at once it came to her that I should be putting in an appearance. The milk pails still stood waiting and after a little time I heard mother asking where I was. No one could tell her and the man still sat on. If he did see my feet he must have had some queer thoughts. Pretty soon mother went out and called. I was silent. She called again. More silence. Then she called one of the calls that we sometimes heard a mile away when the wind was right and she feared for our safety in the fog or among range cattle. I was still dumb, I simply couldn't think of anything to say at this stage that could justify my hiding away like that. I'm still hoping that he did not see my feet; no human mind could have endured that strain and kept silent, but he certainly was interested. They had stopped talking now and every one was more or less concerned about my nonappearance. Frances and Ed ran out to the corral and came back to report no results; mother went out to the smokehouse; father was silent. He was not given to worrying and was not yet really alive to the situation. It was, however, entirely unlike me to remain away like that when I knew I was needed, and where could I possibly be? Mother went out and called some more, but I had a leaden hope that maybe his horse would break away or that there might be an earthquake so that I would not have to crawl out right there under his nose.

It was getting dark now and every one was getting worried. The situation was getting on the nerves of us all. The stranger was probably getting worried, too; I know I was, but wild horses couldn't have dragged him away. He was there to the finish.

Then I crawled out, slowly, deliberately. There were no words in any language to explain myself with, so I was dumb with the exception of the three words, "Here I am," which I realized immediately were entirely superfluous. Mother insists to this day that I was perfectly calm and collected as if it were a daily occurrence with me to spend part of my time under the bed, company or no company.

Anyway, the entertainment closed there for that day. The man suddenly remembered that it was finished, got up and went home. The only fly in the ointment is the fact that I can not remember who he was, some transient, likely, who came into the country, stayed a while, then grew discouraged and left.

## Girls' Honor Guard Do Their "Bit"



The Girls' Honor Guard of Cottage Grove, Ore., have "done their bit" this year by cooperative garden work. The photo herewith shows them at work. Ground was donated by Mrs. Clara Burkholder, Mrs. O. L. Nichols and Sam Newcombe. The Cottage Grove Commercial club paid for the plowing, all the balance of the work, including hoeing, weeding and watering, having been done by the girls, except the digging of a part of the potatoes. Miss Belle Burkholder is leader of the guard.

# Swift and Mighty War Will Save Men and Money for the United States

President William T. Foster of Reed college was one of the men who sincerely and most earnestly hoped that the United States would not be drawn into the great world war. His recent visit to Europe as an inspector for the American Red Cross so opened his eyes not only to the duty and necessity of the United States to enter the war, but to the world-wide duty of the United States now to shoulder the burden of the war and end it as speedily as possible.

President Foster has been in great demand as a lecturer on what he saw and what he believes with regard to the great world war. He is about beginning another lecture trip in the east. During December his itinerary called him from central California north through Oregon to the Inland Empire, where hundreds and thousands flocked to hear him.

Just after his return from his European trip President Foster made the following statement, which embodies his convictions on the part which the United States must play in the great war:

One night last week, "somewhere on the Atlantic," in the light of a wild storm, a group of men of varied life experiences were thrown together by the fortunes of war. A captain of the British navy was there, an admiral of the American navy, our minister to Switzerland and our minister to Colombia, our consul at Jerusalem, Ian Hay and Harry Lauder, John Golden and James Lord, not to mention a graduate of Oxford, who has just brought several thousand Chinese coolies to France; a refugee from Belgium, a Young Men's Christian Association war secretary, returning from India, a merchant from Brazil, a lawyer from South Africa, an American Red Cross organizer from the French front, a newspaper correspondent from Italy and a college professor from Bulgarian prison camps.

It may seem surprising that such a motley collection of men could agree on anything of importance. The fact is they agreed perfectly on everything of immediate importance to the world. On the basis of their recent experience the world over they agreed that the way to save the money and men of all the nations now at war is to bring the total available resources of the United States to bear against the enemy of mankind as speedily as possible. I do not mean to imply that these men, or any others I have met on the continent or in England, are disappointed with what the United States has achieved during the last six months. On the contrary, all the people I have met, except German prisoners, are jubilant, and many are amazed. Indeed, the confidence and dash and progress of the French and British armies during the last two months is in part due to their knowledge that we are already with them spiritually, and soon to be with them physically. How much fighting strength this prospect has given them I do not venture to estimate, but one can not travel along the entire French front, as I have done during the last two months, and talk with hundreds of French soldiers, American ambulance boys, Red Cross nurses, German prisoners, canteen workers and doctors, without having grave doubts whether there would have been any French offensive this fall if the United States had not sent troops to France.

The German government has been assuring its people that the United States has no army worth mentioning, no troops at all in France, no chance of getting them past the submarine blockade—in short, that the only American offensive would be the usual American "bluff." Undesigned testimony to that effect is seen in the amazement of German prisoners on first seeing American soldiers.

The point I wish to emphasize is that France and Great Britain are looking eagerly and expectantly toward us. They frankly say so. Germany is not yet conquered. An end of the war without victory, a peace that would be no peace, a truce with an undefeated autocracy, they know they could have at any time. But a peace guaranteeing our children against another attempt of Germany to dominate the world is not yet in sight. To be sure, another peace offensive by Germany is soon to be expected. America will be the main objective. The counter-attack must be prepared here, and at once, for we have seen enough of such camouflage to know what an ugly thing lies under the pretty paint. America can achieve a durable peace and freedom by making supreme efforts at once, or another kind of peace by dallying and being conquered. The sooner we realize that the better for us.

# All the World's a Stage, and All the Men and Women Merely Players

## Earth Shocks Raze Property



The above photograph shows the American consulate at Guatemala which was destroyed in the great earthquake which razed the city of Guatemala and killed hundreds of people. Hospitals, asylums and prisons, as well as homes and stores were swallowed in the great fissures that appeared in the streets, burying the occupants in the ruins.

## Dangerous Job in the Trenches



The above illustration shows a radio station and the operator standing outside of his dugout. His post is probably the most dangerous of the second line trenches, for the Germans take pains to locate these stations and keep them constantly under fire.

## Fuel Given the Needy in New York



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Over 13 tons of coal, as well as blankets and provisions, were distributed to 400 of New York's neediest families in every section of New York by a New York daily on December 30, the coldest day in the history of the city. The trucks started out late on the night of December 29 and continued to deal out the coal in 50-pound lots throughout the night. The trucks were besieged by hundreds.

## Store Supplies Abroad for U. S. Troops



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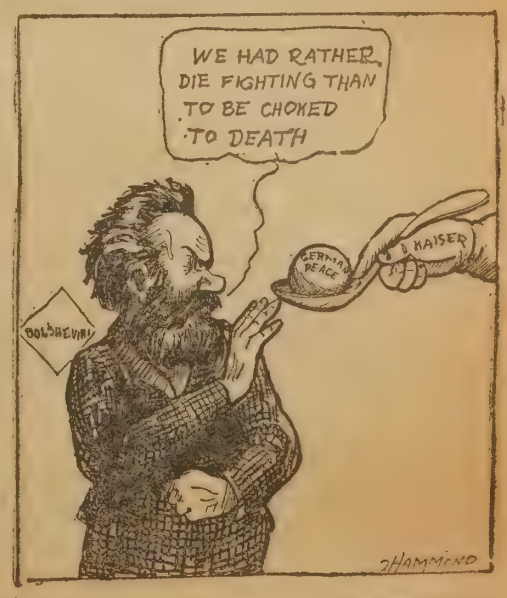
The above photograph shows a railway station nestled in the hills of France. Uncle Sam is now sending more supplies to this district than have ever been there before. As fast as one train is unloaded another plows its way up and the work of unloading food and munitions begins all over again. The United States is doing all in its power to solve the problem of distribution to the men at the front.

## Collecting His New Year Gift




—New York Evening Mail.

## Too Much to Swallow




—Wichita Eagle.



# THE BARRIER



By REX BEACH

Author of "The Spoilers," "The Ne'er-Do-Well," "The Silver Horde," etc.

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## CHAPTER XVI.

### John Gale's Hour.

It was a heathenish time of night to arouse the girl, thought Burrell as he left the barracks, but he must allay these fears that were besetting him—he must see Necia at once. The low, drifting clouds obscured what starglow there was in the heavens, and he stepped back to light a lantern. By its light he looked at his watch and exclaimed, then held it to his ear. Five hours had passed since he left Gale's house. Well, the call was urgent and Necia would understand his anxiety.

A few moments later he stood above the squaw, who crouched on the trader's doorstep, wailing her death song into the night. He could not check her; she paid no heed to him, but only rocked and moaned and chanted that strange, weird song which somehow gave strength to his fears.

"What's wrong? Where is Necia—where is she?" he demanded, and at last seized her roughly, facing her to the light. But Alluna only blinked owlishly at his lantern and shook her head.

"Gone away," she finally informed him, and began to move again in her despair; but he held her fiercely.

"Where has she gone? When did she go? He shook her to quicken her reply.

"I don't know—I don't know. Long time she's gone now." She trailed off into Indian words he could not comprehend, so he pushed past her into the house to see for himself, and without knocking flung Necia's door open and stepped into her chamber. Before he had swept the unfamiliar room with his eyes he knew that she had indeed gone, and gone hurriedly, for the signs of disorder betrayed a reckless haste. Hanging across the back of a chair was what had once been the wondrous dress, Poleon's gift, now a damp and draggled ruin, and on the floor were two sodden satin slippers and a pair of wet silk stockings. He picked up the lace gown and saw that it was torn from shoulder to waist. What insanity had possessed the girl to rip her garment thus?

"She take her 'nother dress; the one I make las' summer," said Alluna, who had followed him in and stood staring as he stared.

"When did she go, Alluna? For God's sake, what does this mean?"

"I don't know! She come and she go, and I don' see her; mebbe three, four hour ago."

"Where's Gale? He'll know. He's gone after her, eh?"

The upward glow of the lantern heightened the young man's pallor, and again the squaw broke into her sad lament.

"John Gale—he's gone away with the knife of my father. I am afraid—I am afraid."

Burrell forced himself to speak calmly. This was no time to let his wits stampede.

"How long ago?"

"Long time."

"Did he come back here just now?"

"No; he went to the jail house, and he would not let me follow. He don' come back no more."

This was confusing, and Meade cried, angrily:

"Why didn't you give the alarm? Why didn't you come to me instead of yelling your lungs out around the house?"

"He told me to wait," she said, simply.

"Go find Poleon, quick."

"He told me to wait," she repeated, stoically, and Burrell knew he was powerless to move her. He saw the image of a great terror in the woman's face. The night suddenly became heavy with the hint of unspeakable things, and he grew fearful, suspecting now that Gale had told him but a part of his story, that all the time he knew Stark's identity, and that his quarry was at hand, ready for the kill; or, if not, he had learned enough while standing behind that partititon. Where was he now? Where was Necia? What part did she play in this? Starks parting words struck Burrell again like a blow. This life-long feud was drawing swiftly to some tragic culmination, and somewhere out in the darkness those two strong, hate-filled men were settling their scores. All at once a fear for the trader's life came upon the young man, and he realized that a great bond held them together. He could not think clearly because of the dread thing that gripped him at thought of Necia. Was he to lose her after all? He gave up trying to think, and fled for Stark's saloon, reasoning that where one was the other must be near, and there would surely be some word of Necia. He burst through the door; a quick glance over the place showed it empty of those he sought, but, spying Poleon Doret, he dragged him outside, inquiring breathlessly:

"Have you seen Gale?"

"No."

"Have you seen Stark? Has he been about?"

"Yes, wan hour, mebbe two hour ago. W'y? What for you ask?"

"There's the devil to pay Those two have come together and Necia is gone."

"Necia gone?" the Canadian jerked



**The combatants were dragged apart . . . "I got you, Bennett!" cried the trader, hoarsely, "your magic is no good."**

out. "W'at you mean by dat? W'ere she's gone to?"

"I don't know. Nobody knows. God! I'm shaking like a leaf."

"Bah! She's feel purty bad! She's go out by herse'f. Dat's all right."

"I tell you something has happened to her; there's hell to pay. I found her clothes at the house torn to ribbons and all muddy and wet."

Poleon cried out at this.

"We've got to find her and Gale, and we haven't a minute to lose. I'm afraid we're too late as it is. I wish it was daylight. Damn the darkness, anyhow! It makes it 10 times harder."

His incoherence alarmed his listener more than his words.

"W'ere have you look?"

"I've been to the house, but Alluna is crazy, and says Gale has gone to kill Stark, as near as I can make out. Both of them were at my quarters tonight, and I'm afraid the squaw is right."

"But w'ere is Necia?"

"We don't know. Maybe Stark has got her."

The Frenchman cursed horribly. "Have you try hees cabane?"

"No."

Without answer the Frenchman darted away, and the lieutenant sped after him through the deserted rows of log houses.

"Ha! Dere's light," snarled Doret, over his shoulder, as they neared their goal.

"Be careful," panted Burrell. "Wait! Don't knock." He forced Poleon to pause. "Let's find out who's inside. Remember, we're working blind."

He gripped his companion's arm with fingers of steel, and together they crept up to the door, but even before they had gained it they heard a voice within. It was Stark's. The walls of the house were of moss-chinked logs that deadened every sound, but the door itself was thin, whip-sawed pine boards with ample cracks at top and bottom, and, the room being of small dimensions, they heard plainly. The lieutenant leaned forward, then with difficulty smothered an exclamation, for he heard another voice now—the voice of John Gale. The words came to him muffled but distinct, and he raised his hand to knock, when, suddenly arrested, he seized Poleon and forced him to his knees, hissing into his ear:

"Listen! Listen! For God's sake, listen!"

For the first time in his tempestuous life Ben Stark lost the iron composure that had made his name a byword in the west, and at sight of his bitterest enemy seated in the dark of his own house waiting for him he became an ordinary, nervous, frightened man faced by a great peril. It was the utter unexpectedness of the thing that shook him, and before he could regain his balance Gale spoke:

"I've come to settle, Bennett."

"What are you doing here?" the gambler stammered.

"I was up at the soldier's place just now and heard you. I didn't want any interruptions, so I came here where we can be alone." He paused, and, when Stark made no answer, continued, "Well, let's get at it." But still the other made no move. "You've had all the best of it for 20 years," Gale went on, in his level voice, "but tonight I get even. By God! I've lived for this."

"That shot in Lee's cabin?" recalled Stark, with the light of a new understanding. "You knew me then?"

"Yes."

Stark took a deep breath. 'What a damned fool I've been!"

"Your devil's magic saved you that time, but it won't stop this." The trader rose slowly with the knife in his hand.

"You'll hang for this!" said the gambler, unsteadily, at which Gale's face blazed.

"Ha!" exclaimed the trader, exultingly, "you can feel it in your guts already, eh?"

With an effort Stark began to assemble his wits as the trader continued:

"You saddled your dirty work on me, Ben Stark, and I've carried it for 15 years; but tonight I put you out the way you put her out. An eye for an eye!"

"I didn't kill her," said the man.

"Don't lie. This isn't a grand jury. We're all alone."

"I didn't kill her."

"So? The yellow is showing up at last. I knew you were a coward, but I didn't think you'd be afraid to own it to yourself. That thing must have lived with you."

"Look here," said Stark, curiously, "do you really think I killed Merridy?"

"I know it. A man who would strike a woman would kill her—if he had the nerve."

Stark had now mastered himself, and smiled.

"My hate worked better than I thought. Well, well, that made it hard for you, didn't it?" he chuckled. "I supposed, of course, you knew——"

"Knew?" Gale's face showed emotion for the first time. "Knew what—?" His hands were quivering slightly.

"She killed herself."

"So help you God?"

"So help me God."

There was a long pause.

"Why?"

"Say, it's kind of funny our standing here talking about that thing, isn't it? Well, if you want to know, I came home early that night—I guess you hadn't been gone two hours—and the surprise did it, more than anything else, I suppose—she hadn't prepared a story. I got suspicious, named you at random, and hit the nail on the head. She broke down, thought I knew more than I did, and—and then there was hell to pay."

"Go on."

"I suppose I talked bad and made threats—I was crazy over you—till she must have thought I meant to kill her, but I didn't. No. I never was quite that bad. Anyhow, she did it herself."

Gale's face was like chalk, and his voice sounded thin and dry as he said:

"You beat her, that's why she did it."

Stark made no answer.

"The papers said the room showed a struggle."

When the other still kept silent Gale insisted:

"Didn't you?"

At this Stark flamed up defiantly.

"Well, I guess I had cause enough. No woman except her was ever untrue to me—wife or sweetheart."

"You didn't really think——?"

"Think hell! I thought so then, and I think so now. She denied it, but—"

"And you knew her so well, too. I guess you've had some bad nights yourself, Bennett, with that always on your mind."

"I swore I'd have you——"

"—and so you put her blood on my head, and made me an outlaw." After an instant: "Why did you tell me this, anyhow?"

"It's our last talk, and I wanted you to know how well my hate worked."

"Well, I guess that's all," said Gale. So far they had watched each other with unwavering, unblinking eyes, straining at the leash and taut in every nerve. Now, however, the trader's fingers tightened on the knife handle and his knuckles whitened with the grip, at which Stark's right hand swept to his waist, and simultaneously Gale lunged across the table. His blade flickered in the light, and the gun spoke, once—twice—again and again. A cry arose outside the cabin, then some heavy thing crashed in through the door, bringing light with it, for with his first leap Gale had carried the lamp and table with him, and the two had clenched in the dark.

Burrell had waited an instant too long, for the men's voices had held so steady, their words had been so vital, that the finish found him unprepared, but, thrusting the lantern into Poleon's hand, he had backed off a pace and hurled himself at the door. He had learned the knack of bunching his weight in football days, and the barrier burst and splintered before him. He fell to his knees inside, and an instant later found himself wrestling for his life between two raging beasts. The Lieutenant knew Doret must have entered, too, though he could not see him, for the lantern shed a sickly gloom over the chaos. He was locked desperately with John Gale, who flung him about and handled him like a child, fighting like an old gray wolf, hoary with years and terrible in his rage. Burrell had never been so battered and harried and torn; only for the lantern's light Gale would doubtless have sheathed his weapon in his new assailant, but the more fiercely the trader struggled, the more tenaciously the soldier clung. As it was, Gale carried the Lieutenant with him and struck over his head at Stark.

Poleon had leaped into the room at Burrell's heels, to receive the impact of a heavy body hurled backward into his arms as if by some irresistible force. He seized it and bore it away from the thing that pressed after and bore down upon it with the ferocity of a wild beast. He saw Gale reach over the Lieutenant's head and swing his arm, saw the knife blade bury itself in what he held, then saw it rip away, and felt a hot stream spurt into his face. So closely was the Canadian entangled with Stark that he fancied for an instant the weapon had wounded both of them, for the trader has aimed at his enemy's neck where it joined the shoulder, but, hampered by the soldier, his blow went astray about four inches. Doret glimpsed Burrell rising from his knees, his arms about the trader's waist, and the next instant the combatants were dragged apart.

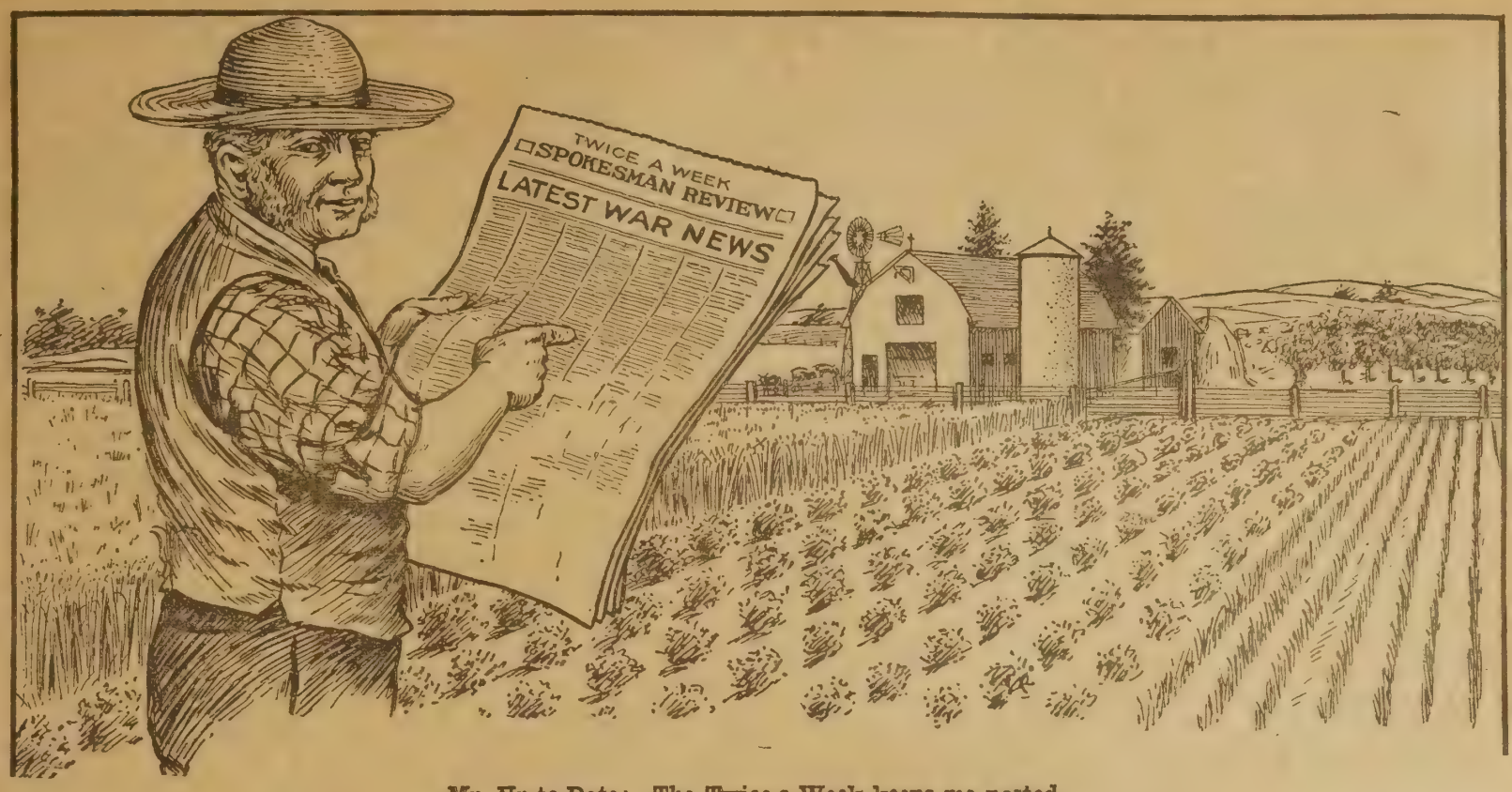
The Lieutenant wrenched the dripping blade from Gale's hand; it no longer gleamed, but was warm and slippery in his fingers. Poleon held Stark's gun, which was empty and smoking.

The fight had not lasted a minute, and yet what terrible havoc had been wrought! The gambler was drenched with his own blood, which gushed from him, black in the yellow flicker, and so plentifully that the Frenchman was befouled with it, while Gale, too, was horribly stained, but whether from his own or his enemy's veins it was hard to tell. The trader paid no heed to himself nor to the intruders, allowing Burrell to push him back against the wall, the breath wheezing in and out of his lungs, his eyes fastened on Stark.

"I got you, Bennett!" he cried, hoarsely. "Your magic is no good." His teeth showed through his grizzled muzzle like the fangs of some wild animal.

Bennett, or Stark, as the others knew him, lunged about with his captor, trying to get at his enemy, and crying curses on them all, but he was like a child in Poleon's arms. Gradually he weakened, and suddenly resistance died out of him.

(Continued on page thirty-five.)




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# Searching Survey of Milk Problem

## *New York Mayor's Committee Finds No Easy Royal Road to Solution*

After a searching survey of the milk problem the mayor's committee of New York has made its report. It finds that milk prices there have increased 55 per cent since June, 1914, and there has been a corresponding increase in other cities throughout the country. As a result of high prices thousands of poor families have had to cut down their supply and the city's consumption has fallen off 30 per cent within a year.

We turn now to the suggested remedies, and as the Farmer has often said, there is no easy royal road to a solution of the problem.

**For the farmers the committee recommends: Elimination of slacker cows whose milk production is small; breeding from heavy milkers; collective hauling to shipping stations, and collective buying of grain.**

**For cheapter distribution, these recommendations are made: Daylight delivery between 7 a. m. and 2 p. m., which would increase sales, insure better collections, decrease thefts, eliminate waste of lost bottles; increased retail business through grocery stores, which, it is said, will decrease the cost of sale on each quart 1 or 2 cents; reduction of milk wagon routes through centralization.**

Investigations by the federal committee are leading to the same gate. At Boston the other day the United States commission was told by witnesses that lack of cooperation among farmers, the keeping of unprofitable cows and extravagant methods of distribution by middlemen were causes of the high cost of milk.

One witness quoted statistics showing that the milk production of the country averaged five quarts a day per cow, while experience shows, according to his figures, that it is to obtain cattle that will produce an average of at least 8 1-2 cents a day.

Expensive methods of distribution were pointed out by Mrs. William A. Lowell Putnam. She said it was no unusual thing for 15 milk dealers to deliver milk in one large apartment house, some of the distributors climbing four flights of stairs to leave one quart.

Producers are slow to cut out their low-production cows, and in one way it is well that this remedy is not carried to quick excess, for the sudden elimination of all the poor milkers in the country would mean a ruinous falling off in the milk supply. Yet it is a remedy not to be ignored, and there is no probability that it will be carried to excess.

Some betterment may be expected from the application of the foregoing reforms, but it is futile for consumers to expect a return to the low prices of three or four years ago. Prices were fundamentally too low even on the old basis of feed prices and wages. The industry was really maintained on a losing foundation, and was only kept going by the dairy farmer and his family working long hours for outrageously low pay.

Now the high prices of feed and all kinds of supplies and the higher wages that farmers must pay for help, are factors that can not be brushed aside, and factors that seem with us for many years to come. So far as expectations of the old time low prices are concerned, there is no solution to the milk "problem."

At its hearing in New York the federal commission refused to go into the question of past profits of the distributors. Its counsel contended that it was necessary for the commision to make an early report, and that it would be futile to extend the investigation to any such field, as the purpose of the inquiry was to deal with present prices and costs of producing and distributing milk, and not with profits of the past.

This argument prevailed with the commission, but we think it was fallicious and that the commission would have gained new light by taking up that line.

The request came from Edward K. Baird, counsel for the consumers' organization, who said he was prepared to substantiate the following figures:

"The Borden Condensed Milk company was incorporated in New Jersey April 24, 1899. It took over the business of the New York Condensed Milk company. It was capitalized at $20,000,000. Of this amount of stock, $15,428,408 was issued for good will, patents and trademarks. In addition, the amount of $4,070,751 was paid for the assets of the New York Condensed Milk company. Stock of the company of a par value of $100 per share was sold for $25 per share.

"The common stock has paid from 1902 to 1917, a period of 15 years, over 130 per cent in dividends. In a period of 17 years the preferred stock has paid over 100 per cent in dividends. In other words, the company has distributed to its stockholders a sum in excess of $32,000,000.

"The Sheffield Farms, Slawson-Decke & company was incorporated in 1902. It was a consolidation of four existing companies. We claim and are prepared to prove by competent evidence that for one period of which we know the net earnings of this company, after deducting all charges and expenses of every kind and nature, were over 120 per cent on the amount originally invested in the company."

From facts that have come into the possession of the Farmer it is obvious that if Mr. Hoover could unlock the storage vaults and force a distribution of the overstocked cheese supply of the country a big benefit would be conferred on the American people and our allies.

The government report as of December 1 gave the total holdings in 466 storages as 80,081,360 pounds. In 414 storages that reported on December 1 both this year and last the total holdings were 71,173,170 pounds, as compared with 37,079,632 pounds last year, or an increase of 91.9 per cent. It is pointed out, however, that it would be perfectly proper to compare the total of the 414 storages last year with the 466 storages this year, as there was so much more cheese to be stored that it required additional storage room; hence, it is safe to say that the total amount of cheese in storage is more than double the supply of last year.

Against this double storage there is known to be a sharp falling off in cheese consumption, due to the high prices that the public must pay. Yet the high prices continue. As a Boston dealer put it:

"The present cheese situation gives a practical illustration of the fallacy that supply and demand form the only panacea in arriving at values during this awful war. Unfettered supply and demand can and do this generally, but the advent of cold storage and colossal combinations of capital make it chimerical in the present situation. Here is a case of the demand being perfectly free and unfettered, while that of supply is made artificial in consequence of this combination.

"However, be this as it may, I think we will have to admit that, if the present enormous stocks of cheese were more equally held by the different interests of the trade throughout the country there would be sufficient holders who would realize that to contend with such excessive quantities at this advanced stage of the season would show bad judgment, so that some of the wise ones would be pressing for a cleanance, and it is quite easy to imagine what would be the result to cheese costing practically 25 cents.

"Work it out as you like, but I still cling to the opinion that the position is strained, yes, badly strained, and nothing but an export demand for at least 500,000 to 750,000 boxes can prevent the lowest prices recorded for the 1917 output."

Authorities in the cheese trade say the meat packers are to blame for these conditions, as they have dipped freely into this line and are said to own the bulk of the present large stocks.

## BEET AND APPLE PULP.

### Feeds Like These Save Wheat.

**By JAMES N. PRICE, Yakima, Wash.**

In the feeding of hogs in the Yakima valley we use less wheat perhaps than almost any other county in the state. This is due to the fact that our hogs are fed largely on alfalfa pasture, with considerable alfalfa hay used in winter. This food is supplemented by the use of cull apples, cull potatoes and other waste fruits and farm by-products. This year a number of farmers are using sugar beets and some had planned to use some beet pulp and molasses.

We have farmers this year who are using apple pulp from the cider factory and cores and peelings from the evaporator for hog feeding and are getting very satisfactory results. We also have a number of silos being filled with apple pomace which will be fed to dairy cattle. We also have a larger production of corn this year than in any previous year since the development of Yakima county. This is coming to be our chief grain for hog feeding and in future years will no doubt furnish the basis of rations for all classes of live stock.

## Trap Nest White Leghorns.

William Hand & Son of Cottage Grove, Ore., trap-nested 116 White Leghorn hens in 1916. They began in June, and, running a full year from the time of starting, the entire number averaged over 191 eggs. For 1917 they have 500 White Leghorns, every one trap-nested. During last August one pen of 130 pullets laid 2155 eggs. One hen last spring laid 35 days without intermission.

They have a good, light poultry house with drop roof and sliding windows in the roof, which allows the hot air in warm weather to escape and thus sets up a cooling draft. The floor is covered with three inches of sand and the hens are kept in at all times.

One of their breeding pens is of hens that laid 170 eggs to 214 eggs in a year, with two cock birds. One special pen of seven hens have records of 240 to 266.

### Will Control Oil.

The government is preparing to take complete control of the oil supply of the United States under the fuel control power of the food administration law.

### Will Control Hemp.

The government is taking over complete control of the purchase and distribution of Manila hemp.

# School Club

## Wide Awake Bossburg Youngsters

Reporting the organization of two industrial clubs at the Bossburg school in the spring of last year, Principal V. I. Tucker said: "We thing the club should be not merely a pastime for the children, but a medium through which they will acquire the habits of industry and thrift and learn to do things in a business-like manner." Now the Farmer is glad to receive from Mr. Tucker the following report which shows that the clubs have indeed been something more than pastimes for children, no matter how much the pupils have enjoyed their work:

To the Editor of The Washington Farmer: Last year we organized a poultry and vegetable club with an enrolment of 14. Four of them moved away for the summer and one withdrew.

The remaining nine stayed with the work and made their annual reports showing the following record:

Profit of nine by club work, $76.30; earned at home, $50; earned away from home, $345; total earnings, $471.30.

This profit is net. Each member figured his time at 10 cents per hour.

We are enthusiastic about the work and expect to organize soon for next year. We estimate that we shall have about 20 members in our new club.

Your paper is doing a good work in showing the people the value of club work and thereby helping to keep the boys and girls on the farm. I think there is too much of the attitude of "the boy's colt and dad's horse." Let the boy have something for his very own and he will have no desire to leave the farm.

V. I. TUCKER.

Bossburg, Wash.

# Facts and Figures on Apple Growing

(Continued from page twenty-three.)

rious methods of cultivation are carefully tabulated, such as clean culture, mulch crop, cultivation with various instruments such as the plow, the cultivator, the harrow, the drag, etc., but I have given the final estimate of all averages.

### Cost of Irrigation.

In Wenatchee for orchards under clean cultivation the cost was $8.59; for orchards in mulch crops $8.92; average $8.75. This does not include the cost of water, which the writers did not give, and varies greatly under the different systems, in some cases ranging as low as 25 cents per acre under the old ditches, and as high as $8 under certain pumping plants in the state of Washington. In Hood River the duty of water is given as $1.25 to $2.50 per acre, while the labor cost is $3.25. In Colorado the duty of water ranges from a mere nominal cost under some of the old ditches near the river to a very high price, not given, under a pumping plant. The labor cost is figured at $3.44 per acre.

### Thinning.

In Wenatchee the cost of thinning was estimated at $13.32 per acre, in Hood River $5.54, in Colorado $4.43. This difference is largely on account of the difference in varieties grown in the different sections. For instance, in Wenatchee they grow a good many of the heavier bearing varieties, which require more thinning than the Spitzenburg, for which Hood River is noted.

### ProPping.

The cost of propping the trees at Wenatchee is given as $6.36 per acre. This does not include the cost of props, but the hauling out, setting up, and hauling back from the orchard. In Hood River this work is reckoned at $5.65 per acre, while in Colorado it is estimated at practically nothing. The writers say "so few growers of western Colorado practice propping that this operation need not be discussed here as an orchard operation."

### Picking.

In Wenatchee the picking cost is reckoned as $0.0503 per packed box, or $29.727 per acre. In the Hood River valley the cost is $0.0569 per packed box, or $18.49 per acre. Picking is generally paid for by the day and the average picker will pick from 50 to 80 loose boxes, owing to conditions, and when the conditions are averaged it will amount to 74.6 loose boxes, or 49.73 packed boxes.

### Summary of Other Costs.

To carry out the costs in detail as I have been doing would make this article too long; I will therefore summarize as follows:

Cost of hauling boxes to the orchard and back from the orchard to packing house, one cent per box.

Cost of hauling box shooks, .83 per acre or .0037 per box.

Making boxes, one cent each.

Sorting for those who use a sizer, is .032 per packed box, while for those who do not use sizer it is .046 per packed box. Often four sorters are necessary to keep three packers going. This is especially true where sizers are not used.

Packing costs from .04 to .05, depending upon whether graders are used and upon the condition of the fruit. The average packer will put up 77 boxes in 10 hours.

Nailing and stamping will cost one cent a box.

Paper will cost two to four cents per box.

Box shooks have ordinarily been bought for 10 cents per box, and this is the price given in the report, but this year it looks as if they would cost one-third more.

The foreman in the orchard will cost $2.50 per acre, and the foreman in the packing house will cost $3 to $3.50 per day.

Hauling to town will cost from one to three cents per box, depending on the distance, and in a few cases more than three cents.

There are other items that vary with circumstances, such as hauling of manure, cost of nails, labels, gasoline, etc., but the money received for culls, above the cost of handling them should pay for these items.

### Conclusions.

From a study of these reports I conclude that unless circumstances change to make it easier to grow good commercial fruit, and to give better average prices, that the average man and the man below average, will go out of the orchard business and leave the work of producing the best commercial varieties for the best markets to the men who are above the average. This means that the orchardist of the future will be more than an average man, unless the I. W. W. succed with their philosophy, and then the level of efficiency will be brought down to the standard of the men who will not spray, who will not study to succeed, who are careless, indolent, lazy, indiffered and dontcarative. If we could make conditions so that this class could succeed, then the best class would, of course, coin money. But in that case society would be evolving backward. The aim should be not to bring society in general down to the level of the failures, but to bring it up to the standard of the most successful.

I still believe that for the man who is an efficient orchardist and who intends to stay with the business, that this is the time to buy orchards. Am I right?

GRANVILLE LOWTHER.

# Alfalfa as a Fertilizer for Wheat Land

The value of alfalfa and clover to wheat growers of the Pacific northwest was Senator R. C. McCroskey's theme at the recent meeting of the Washington wheat convention at the State College of Washington. Senator McCroskey, whose devotion and success in the production of this "most valued of all war crops" for the last quarter of a century has earned him the title "The Wheat King of the Palouse," gave point to his discussion by calling for testimonials from other wheat kings who, in recent years, have caught the drift of wheat farming and availed themselves of inter-wheat crops of alfalfa and clover. This testimony was introduced before the wheat convention in the form of letters, which are here quoted.

Max Hinrichs of Pullman, better known for his production of high-quality alfalfa and grass seed, gave the following letter on his experience on producing wheat following his crops of alfalfa

**Alfalfa Soil.**

"Six years ago this fall I plowed about 60 acres of alfalfa soil (part of which had been pastured for a number of years, while the remainder had been cut for hay or seed for five seasons), and planted 15 acres to bluestem wheat and the remainder to oats. This grain grew exceptionally well. The wheat yielded 30 bushels and the oats 72 bushels per acre. This same land was cropped with oats the next two years, yielding around 75 bushels to an acre. The fourth year 25 acres were put to bluestem wheat. It yielded 40 bushels per acre. Another six-acre piece that was broke out one year later, but seeded to wheat the same time as the 25-acre field, yielded about 360 bushels of extra fine bluesteam. The remainder of the 60 acres was again in oats, and gave a very good yield, but showed a lot of wild oats. The renter claimed it made above 60 bushels per acre.

"This year (1917) all of the land was again plowed and seesed to bluestem, and gave around 22 bushels per acre. This makes five consecutive crops on most of the land and four on part of it. This year (1917) the grain grew quite rank, more so than any in the neighborhood, and compared very favorably with wheat seeded on summer fallowed land. The wild oats did not show much, but the last season was not very favorable for them.

"As far as available plant food is concerned, I believe there is still plenty in this field to produce another good crop; but it needs a good summer fallowing to get rid of the wild oats.

"Three years ago we plowed up 120 acres of 4-year-old alfalfa sod, mostly in the spring, and seeded the ground to oats. Around July 1 this was the richest large field of oats that I have ever seen, but the very hot weather in July burned it badly, and it yielded only 45 bushels of oats per acre.

"That fall we plowed this 120-acre field again, and seeded it to wheat. This was a mistake, as the wheat did not come up very well, and winter killed in spots besides. It yields 24 bushells to the acre. This year (1917) we spring plowed the 120-acre field, and planted it to barley, which yielded 1780 bags, or, close to 15 bags to the acre. This field is still very rich and will produce at least two more good crops.

"These two fields represent about the average of my experience in raising grain on alfalfa land. Both show that there is abundance of available plant food for a good many crops, but the biggest difficulty is the wild oats and other weeds that will bother after three crops. To obviate this difficulty we cut a 30-acre piece of Bluestem for hay (the third crop), and in the next two years grew a 40-bushel crop of Red Russian and a 15-sack crop of barley.

"All the clover sod that I have plowed up I have either planted to potatoes or corn. Both have done finely. So did the oats I grew after the potatoes and corn. With the oats I seeded some grass seed, and grew some very large crops of grass seed for two and three years. I credit the preceding crop of clover with a good deal of the success I had with the grass seed."

**Three to Five Bushels More.**

Senator McCroskey introduced as evidence in behalf of alfalfa between wheat, the following letter from Lester Daily, of Palouse, Wash.:

"In 1905 I seeded eight acres to alfalfa and used this eight-acre field for pasture and hay with good results. In the spring of 1910 I plowed it up and removed the fence, and this eight-acre field became a part of an 80-acre field.

"In 1910 the crop on this 80-acre field was very light because it was caught by the hot weather. In 1911 it was fine. I did not thresh the eight-acre alfalfa land separately, but I think that it yielded at least 10 bushels per acre more than the balance of the 80 of which it was a part.

"I have summer-fallowed this eight-acre piece only once since plowing it up in 1910, and have had it in peas one year.

"Last year I cut it for wheat hay, and you could see that the old alfalfa land produced a much better growth of hay than did the rest of the field.

"One year I let the 80 mature and threshed it. I think that the alfalfa soil yielded from three to five bushels more than the rest of the field.

"In 1915 I plowed up a 33-acre field of alfalfa sod that I seeded in 1909, and seeded it to California Glory wheat in the spring of 1916, receiving a yield of 35 bushels per acre. That being a very wet year, the field was struck with the rust, so I think the yield was cut down several bushels.

"The spring of 1917 I re-seeded to Marquis wheat, and received a yield of 20 bushels per acre, which was as much as some of my neighbors from their summerfallowed land. I am a firm believer in alfalfa as a fertilizer for wheat land, and if it had not been for the war prices of wheat, would have seeded half my land to alfalfa.

LESTER DAILY.

"Palouse, Wash."

**Continuous Cropping.**

Another letter introduced by Senator McCroskey, was from George Severance, head of the agricultural department of the state college, and covered the experience on the state farm, with alfalfa, clover, wheat and soil productivity in general, since 1894:

"Probably the best example of the improvement brought about by the growing of clover is shown in our field 2, which is the 15-acre tract that I have often spoken of as having been cropped continuously since 1894, yet producing greater yields during late years than during the nineties.

"Clover was grown on this tract during the seasons of 1907 and 1908, and was plowed up during the fall of 1909. We used the field for corn in 1910. In 1911, the wheat on this tract yielded 41.7 bushels per acre; in 1912 peas yielded 40 bushels per acre; in 1913, wheat yielded 46.1 bushels per acre; and in 1914, oats yielded 76.3 bushels per acre. In 1915 the whole tract was manured, so that the later records would be unfair as showing the fertilizing effect of the clover.

"In 1909 a tract of wheat on the comparatively high elevation on the northwest corner of the farm yielded 44 bushels per acre. This wheat was seeded early in November on corn stubble, the corn having been grown on clover sod plowed under. The wheat barely came up in the fall, and looked very thin and unpromising in the early spring. As soon as the warm weather came on, and the wheat became fairly well rooted, it began to show the effects of the clover by the rank growth and rich, dark green color of the foliage. It stooled tremendously and proved a great surprise to those who saw it early in the spring.

"In 1914, 14 acres of winter barley seeded on corn stubble after clover, yielded 85 bushels per acre. The growth of barley showed plainly the invigorating effect of the clover.

"In the small field between the cattle barn and the horse barn, a number of plots have been used to test the value of various rotations in maintaining yields without summer-fallow. Practically all these rotations, of course, include wheat.

"On another plot where a six-year rotation is practiced clover is followed by corn with wheat seeded in the corn stubble. In this plot, wheat yielded in 1907, 50.85 bushels per acre, and in 1914 4.12 tons of hay per acre, all the wheat produced in this field being cut for hay that season on account of smut.

"In another series, wheat following corn in a four-year rotation, yielded in 1906, 33.55 bushels per acre; in 1910, 40.7 bushels per acre, and in 1915, 45.92 bushels per acre."

# Stockmen Survey Situation

## *Let Not Any Fail to Do More Than His Share*

The address of President I. T. Pryor of the American National Live Stock association at Salt Lake City, Utah, Monday of this week, closed with this paragraph:

"Never was our industry confronted with more perplexing propositions. Never was there greater need for wise counsel and united action. We are in the midst of the greatest war in all history. We must maintain inviolate our sacred ideals of civilization. To do this, we must make many bitter sacrifices. Let it not be said of any stockman that he failed to do more than his share."

Reviewing the fact that soon after the war was declared, President Wilson made a strong appeal to farmers and stockmen to increase the production of food supplies and the passing of the two bills by congress—one broadening the duties and responsibilities of the national department of agriculture and the other known as the food administration bill—and the appointment of Herbert C. Hoover as food administrator, President Pryor says in his address:

Food administration is an experiment in this country. The task is gigantic, the interests involved are exceedingly complex, and it would indeed be a miracle if mistakes were not made. However, if all the different interests concerned will patiently and consistently assist, and if the food administration will promptly rectify any mistakes, I feel confident that the food problem can be solved with a minimum of injustice to any one interest, and a maximum of benefit to our nation and to our cause. We should be glad to dedicate our best intelligence and energy to that end, for we know that an unfailing supply of food is the one great essential in winning the war. A widespread discussion of the food question will surely result in a better understanding, by the public and our government, of some of our many difficult problems, and the fundamental economic factors involved. It is only through a thorough knowledge and recognition of these difficulties, coupled with intelligent action, that food administration can be successful.

For more than 60 years the United States has ranked as the largest surplus nation in meat and other food products. Our unrivaled agricultural resources have permitted us to supply the rest of the world with a large share of its needed food. Thus we repaid the debtor balance contracted in the earlier periods of our national life. In the years immediately preceding the present war our exports of meat products were relatively less, but we still retained the leading position.

**Our ability to increase our production need not be doubted, for we have not reached the maximum utilization of our agricultural and live stock possibilities.**

The greatest need of our allies and their civilian population is hog products. For the purpose of increasing our production of hogs, the food administration established, until further notice, a minimum price on hogs. For next season's crop it announced a ratio based on the price of corn. That action was both timely and wise. It should secure the necessary increase in production, and at the same time protect the producer from unforeseen hazards. Although not a money guarantee, producers generally have construed it as such, and any failure of the food administration to make it good would be most unfortunate. The purchase of meat supplies for the allies, our army, our navy, the Red Cross, and the Belgian relief has been centralized into one agency, which is operating directly through the meat division of the food administration. With the leverage of these large purchases, there is no reasonable doubt about the ability of our government to maintain its guarantee as to hog prices. The maintenance of reasonable prices on cattle and sheep will be much more difficult.

Another splendid act of the meat division of the food administration was to place all the meat packers under license, fixing their profits and exercising a supervision over their operations. They are now a regulated monopoly.

**This, I believe, will prove a long step in the right direction, provided our government will also see that fair and reasonable prices for live stock are paid by the monopoly which it is regulating. Unless this is done the producer will be worse off than before.**

Farmers and stockmen are not lacking in patriotism; they loyally responded to the call for increased production. All that they ask is that the strong arm of our government protect them from the disasters which may flow from abnormal production, or other causes over which they have no control.

**The food administration can readily ascertain the average reasonable cost of producing the different kinds of live stock, and its plain duty is to exercise all the powers it possesses to see that such prices are paid as will cover that cost, with a reasonable profit.**

A special representative of the Farmer is in attendance at this twenty-first annual convention of the American National Live Stock association at Salt Lake City and his report, which will be given later, will include phases of the live stock industry taken up at the convention of special interest to our own readers.

# County Agents Meet

## Vital Problems Are Discussed

For the purpose of unifying agricultural institutional work in the state and to make plans for the year's work, the county agricultural agents of the state of Washington are holding daily conferences at the state college at Pullman. The convention, which is really a training school for the agents, began Tuesday, January 8, and will continue till Saturday, January 19.

The time is mostly devoted to discussions of different phases of the agents' work and the heads of the different agricultural departments of the state college meet with them at different times and explain their various lines of work and how the county agents may work with them to the best advantage.

The labor and crop survey proposed by the United States department of agriculture is one of the most important subjects under discussion. It is the plan to make a complete survey of the state, in cooperation with the department of agriculture, for the purpose of knowing the actual conditions as they exist. The government is preparing blanks to be filled by every farmer in the country and the county agents will have the assistance of their county organizations, such as the schools, clubs, and it is hoped by the county councils of defense in getting them filled.

It is hoped that the newly appointed emergency home demonstration agents will begin their work within the next two months, and it is planned to have a woman demonstrator in Seattle, Spokane and Tacoma, who will work among the city women and children in an effort to increase production in the city by encouraging them to raise city gardens, keeping poultry, as well as to demonstrate ways of conserving foods, clothing, fuel, time, etc.

"Live Stock on Every Farm" was one of the subjects extensively discussed. It is thought best to have enough to eat up the roughage, but not in such a way as to make it necessary to buy a lot of feed.

George E. Farrell, assistant national club leader, and S. R. Simons, United States department of agriculture specialist in county organization work, were present, the former talking with the county agents, emphasizing club organizations and their relation between club and county agent work, and Mr. Simons discussed the ways and means to organize counties.

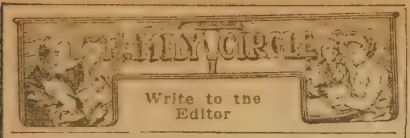
Asher Hobson, state director of farm markets, urged the necessity of farmers getting together in groups for marketing their fruits and vegetables and preparing them for market in a uniform way.

E. E. Faville talked on the training of boys to write agricultural stories and agricultural news.

The following are new assistant county agents, having been appointed during the last few weeks: A. J. Seltzer, Thurston county; Albert K. Millay, Okanogan county; A. W. Holland, Yakima county, and W. D. Love, King county. Benton M. Bangs has been appointed agent for Skagit county.

The county agents present at the conference follow, the county being given in each case:

L. M. Lampson, Benton; M. R. Alleman, Clallam; M. J. Newhouse, Clarke; L. S. Keyes, Cowlitz; Henry M. Skidmore, Franklin; William Meikle, assistant, Franklin and Benton; Theodore S. Brown, assistant, Garfield and Columbia; H. W. Reaugh, Grant; C. F. Monroe, Grays Harbor; O. T. McWhorter, Jefferson; Russell M. Turner, Island; F. W. Rader, King; C. B. Sprague, Kitsap; B. W. Cooney, Klickitat; W. A. Holt, Okanogan; G. A. Nelson, Pacific; Robert Cowan, Pend Oreille; C. A. Cole, Pierce; Benton M. Bangs, Skagit; C. C. Farr, Snohomish; J. R. Shinn, Spokane; A. R. Hahner, Stevens; C. H. Bergstrom, Thurston; A. J. Seltzer, assistant, Thurston; A. T. Flagg, Wahkiakum; H. H. Boone, Walla Walla; H. B. Carroll Jr., Whatcom; J. N. Price, Yakima; A. B. Nystrom, Lewis; Roy Larsen, Mason; Albert K. Millay, assistant, Okanogan; O. S. Fletcher, assistant, Spokane; A. W. Holland, assistant, Yakima; W. D. Love, assistant, King.




ALICE W. BARLAND
Editorial Contributor

# Ways to Make Slippers

By Mrs. Sam Hayes.

The old-fashioned beaver cloth jacket is usually considered worthless, owing to its many gores and heavy weight, but if ripped up and cleaned and cut out, will make house slippers for the whole family, an old slipper, sandal or moccasin being used for a pattern, and with shirred ribbon or strips of fur to bind the top, will make very nice ones, and outlast any felt slipper, and soles cut out from the beaver cloth and closely stitched are excellent to use with knitted slipper uppers.

Leggings are also easily made, and are very warm, besides the goods are heavy enough that they will not wrinkle down over the shoes. Stretched brim hats for boys with ear-flaps, look nice if made from the dyed jacket gores, and cuffs added to home-made gloves or mittens prevent snow entering at the wrist. Circles cut from the darker scraps and sewed to gunny sacking makes serviceable rugs.

Discarded leather sofa pillow top or stand covers also make nobby den moccasins, etc. Ladies' old felt hats, dyed or stained, can be made into comfortable sandals, too, and the soft kid from ladies' hightop shoe uppers make excellent baby every-day bootees.

## Dry Apples and Potatoes.

To the Editor: I would strongly advise drying apples that we can spare to send to all places where people are suffering for the want of fruit.

I would still further advise the drying of potatoes at this time. Many people have a surplus of potatoes grown on land that produces good potatoes for fall and early winter, that will not keep longer. Such potaotes could be dried now. Potatoes are plentiful and cheap now, but may not be next year.

I have found this method of drying good. Wash and scrub with a small vegetable brush. Do not peel. Place in steamer and steam until the skins break. Place in oven until dry and thoroughly done. Peel and run through ricer. Place on plates and let dry around the stove. Do not have too thick a layer. Turn and stir when necessary. They will dry in a short time. When dry place in glass fruit jars or similar receptacles. Keep in a dry place.

These can be soaked up in a short time and can be used for the table. They are also especially handy to have for yeast making, particularly at that time when new potatoes are too new and old potatoes too old to make good yeast. MRS. E. MENDENHALL.
Whitney, Wash., Bayview P. O.

### Chicken a la King.

Stew large chicken until tender. Dice the nice parts, add half pound mushrooms and one red and one green pepper, one cup stock and cream together; serve on crisp toast. This will serve six people nicely, and is fine to serve for club refreshments, etc.

### Cultivation of Pea Long Known.

The discovery in Sweden of a loaf of bread made from pea flour in the time of the Vikings has disclosed the fact that peas were cultivated in Europe more than 1000 years ago.

### Cheese Pudding.

Take grated dry cheese or finely cut cheese and use it in alternate layers with crackers or bread, slightly buttered; fill the dish with milk and bake until the milk is absorbed.

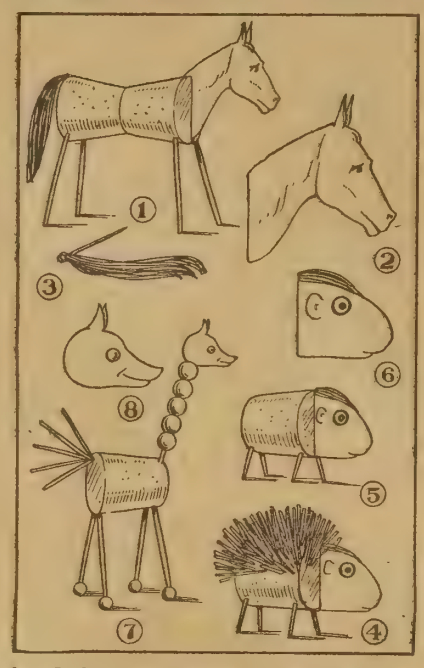
Cheaper cuts of meat, well cooked with a fine sauce, are quite as appetzing as the more expensive ones.

# Handicraft For Girls

By Dorothy Perkins.

## Cork Toys.

If you will save the cork from every empty bottle before it is thrown out or disposed of to the ragman, you will soon have enough shapes and sizes to provide an afternoon's fun of toymaking. If you do not want to wait until enough corks have accumulated by this means, you can get what you will need at a drug store.




In addition to corks, you must have some cardboard, some worsted, beads, toothpicks, burnt matches, pins and glue. For cutting the corks use a very sharp knife.

The horse (figure 1) has a body made of two tapered corks, with the small ends glued together. Use the pattern in figure 2 for the head, and glue this in a slot cut across the end of the body. The legs may be toothpicks or matches; glue them into holes in the cork body. The tail is made of several strands of worsted tied to a pin (figure 3), which is stuck into the body.

The funny little porcupine (figure 4), has a tapered cork body (figure 5), toothpick legs, a cardboard head (figure 6), and toothpick quills.

Because cork birds and animals are funny creatures at best, it is proper to devise varieties other than those found in zoos. Figure 7 shows a peculiar specimen. Isn't he a dandy with his ornamental neck? Five glass beads strung upon a toothpick form the neck, the cardboard head (figure 8) sticks upon the end of the toothpick neck, and the toothpick legs have beads glued upon their ends.

The duck (figure 9) is one of the many floating toys which can be made. Figure 10 shows the head and neck, figure 11 the tail, and figure 12 the keel fastened to the under side of the body to prevent upsetting. The keel should be of cardboard coated with paraffin.

Figure 13 shows a teeter for your cork animal circus. The strip of cardboard used for the teeter is bent down




at the edges and pinned to the ends of a straight cork (figure 14).

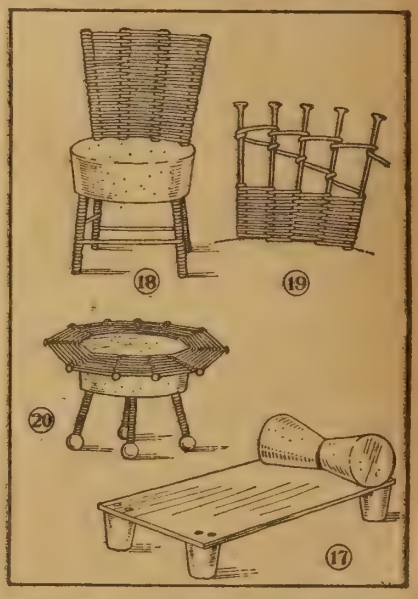
Tapering corks make splendid pots for toy plants for a doll house (figure 15), and plants can be made of paper or pieces of artificial ferns.

If you have never made a cork javelin to toss at a target, you have missed lots of fun. Figure 16 shows how to make one by inserting a needle in the bottom of a tapered cork, and a feather in the top.

Enough cork furniture can be devised to furnish a doll's house completely. Figure 17 shows a bed. This has a cardboard mattress, cork feet, and a pillow of two tapering corks.

You will not deny that the chair in figure 18 has pretty good style. The seat is a pickle-bottle cork; the legs and back are made of long pins wrapped with worsted. Figure 19 shows how to weave the worsted around the pins of the back.

The table in figure 20 was a pickle bottle cork top with pins stuck in its edge all around and interwoven with worsted, and the legs are pins wrapped with worsted, with glass beads glued to the ends.

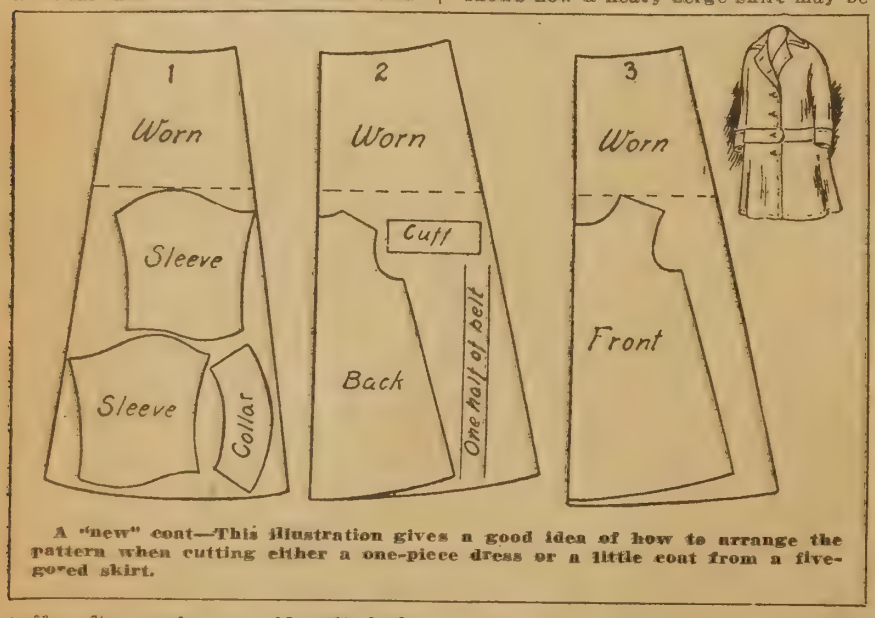



(Copyright, 1916, by A. Neely Hall.)

# The Fine Art of "Making Over"

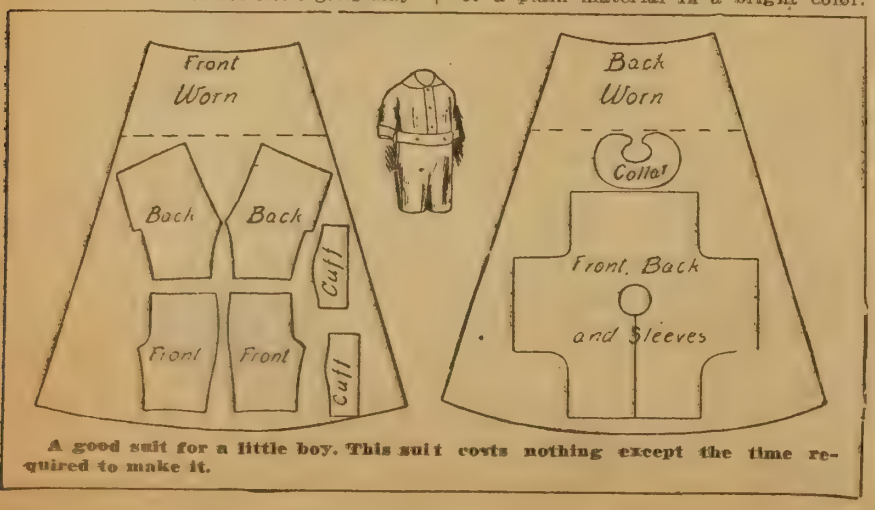
Women's garments are frequently cut down and used for children's clothes. A woolen suit may be altered to fit a girl of 15 to 18 years without much change save a fresh facing for a collar and cuffs. New collar and cuffs often make an old suit look new; there are always leftovers which may be used for this purpose, says Hazel Manning, in a bulletin of the extension service of the college of agriculture, University of Wisconsin.

Coats and dresses for little girls may be made from partly worn skirts. The accompanying illustration gives an idea of how a child's coat or one-piece dress may be cut from a partly-worn five-gored skirt. Another illustration shows how a heavy serge skirt may be made into a whole suit for a little boy.




**A "new" coat—This illustration gives a good idea of how to arrange the pattern when cutting either a one-piece dress or a little coat from a five-gored skirt.**

Just a word here about the dull colors of a woman's suit for a little girl's dress. Be sure and brighten up sister's frock with a touch of gay plaid or a plain material in a bright color.




**A good suit for a little boy. This suit costs nothing except the time required to make it.**

# Community Cooperation

## *Hunting "Bargains" at Home Is Good Policy*

In these days when all of us are asked to be thrifty and saving, one of the first things we think of is to buy less and to save as much as possible on each purchase when we do buy. As a matter of fact, this is a good plan to follow at all times; but there may be a tendency on the part of some of us to carry on our search for "bargains" too far from home.

We don't want to forget that the trade we take away from our own community helps to build up some other community or city from the growth and prosperity of which we do not ourselves get any benefit. If your home town merchants ask you a higher price than you are asked to pay by outside merchants for the same line of goods, it isn't any more than fair to discuss the situation with your home storekeepers, giving them a chance to explain why their prices are higher than those you can buy for elsewhere. There may be some reason that will be worth while learning about,—some difficulty which you can help straightenu out to your advantage as well as their's, if the matter is brought up for frank discussion.

You and your family and your neighbors like to trade at an up-to-date store. If such a store can be made possible by cooperation between you and your neighbors and your local merchants—if a strong, pull-together feeling can be established in your community—then that community will be progressive, will forge ahead towards better streets, better roads, better schools, better places of amusement, better and more influential churches, better social and business advantages for yourself and your young folks. It is this spirit of community cooperation that almost invariably results in good for all concerned if it is kept alive and actively participated in by one and all.

# Patterns

2042—Ladies' apron. Cut in four sizes: Small, medium, large and extra large. It requires 5 1-2 yards of 36-inch material for a medium size. Price 10 cents.

2101—Ladies' waist. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 3 yards of 36-inch material for a 36-inch size. Price 10 cents.

2121—Girls' dress. Cut in three sizes: 12, 14 and 16 years. Size 14 will require 5 1-8 yards of 32-inch material. Price 10 cents.

2154—A pretty summer dress. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 6 yards of 44-inch material for a 38-inch size. The skirt measures about 3 1-8 yards with plaits drawn out. Price 10 cents.

2190—Ladies' one-piece corset cover. Cut in six sizes: 32, 34, 36, 38, 40 and 42 inches bust measure. It requires 1 3-8 yards of 36-inch material for a medium size. Price 10 cents.

2331—Ladies' house dress. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 7 yards of 36-inch material. The dress measures about 2 1-2 yards at the foot. Price 10 cents.

2336—Girls' dress with guimpe. Cut in four sizes: 2, 4, 6 and 8 years. Size 6 requires 3 yards of 27-inch material for the dress and 2 1-4 yards for the guimpe. Price 10 cents.

2341—Dress for misses and small women—Cut in three sizes, 16, 18 and 20 years. Size 18 requires four and seven-eighths yards of 44-inch material. The skirt measures about two yards at the foot. Price 10 cents.

**Fill in this coupon and mail to Pattern Dept.**

**THE PACIFIC NORTHWEST FARM TRIO**

**36 Review Bldg., Spokane, Wash.**

Enclosed find .....

cents, for which send me the following patterns:

Patterns No. ..... Size .....

Patterns No. ..... Size .....

Patterns No. ..... Size .....

Name .....

.....

Postoffice .....

State .....

R. F. D. or St. No. .....

**BE SURE TO GIVE NUMBER AND SIZE.**




2344-2343—Ladies' costume. Waist 2344 cut in seven sizes, 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires three and three-quarters yards of 36-inch material. Skirt 2343 is cut in seven sizes, 22, 24, 26, 28, 30, 32 and 34 inches waist measure. The skirt, with tunic portions, requires four and five-eighths yards of 44-inch material for a 24-inch size. It measures about one and seven-eighths yards at the foot. TWO separate patterns, 10 cents FOR EACH pattern.

2346—A simple set of coat and cap. Cut in four sizes, 6 months, 1, 2 and 4 years. Size 2 will require three and three-quarters yards of 27-inch material for the coat and three-quarters of a yard for the cap. Price 10 cents.

2348—Girls' dress. Cut in four sizes, 8, 10, 12 and 14 years. Size 12 requires four yards of 44-inch material. Price 10 cents.

2352—Ladies' sleeping garment. Cut in four sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. Size 38, or medium, requires six and a half yards of 27-inch material. Price 10 cents.

# Today the Red Cross Needs Your Aid

**Fill out the coupon below and mail it to the Editor of The Washington Farmer, Spokane, Wash. Upon receiving this coupon you will be enrolled as a member of the Patriotic League of The Washington Farmer.**

A limited number of the complete instructions for Red Cross knitters, together with illustrations of the sleeveless sweater, the sock, the knitted helmet, the muffler and the wristlets, published in The Washington Farmer, have been reprinted on a single sheet, and will be furnished to any reader as long as they last, upon receipt of a self-addressed stamped envelope.

I am glad to express my patriotism at this time by pledging myself to render whatever special service I can to my country, and will you tell me especially about Red Cross work and the different ways in which I may be able to aid in that work?

Name ..... ..... ..... .....

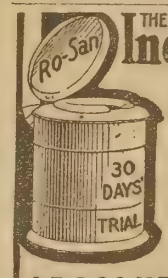
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## Ferndale Cow Testing.

The December report of the Ferndale Cow Testing association received from H. B. Carroll Jr., Whatcom county agricultural agent, shows a list of eight cows which produced more than 50 pounds of butterfat. George Steiner has a Holstein cow that gave 2112 pounds of milk, 63.4 pounds of butterfat testing 3 per cent. The second cow in the list was a Guernsey owned by Nels Jacobsen which gave 1083 pounds of milk, produced 57.4 pounds of butter-fat, the milk testing 5.3 per cent. The 11 grade Holstein cows of George Steiner averaged 36.3 pounds of butterfat and was at the head of the herds.

The averages for December show a still further decrease in production as compared to previous months. The change from part pasture onto a straight barn ration, and in some cases a winter ration with no succulence, is mainly responsible for the decrease. Mill feeds have recently declined in price, and no doubt many dairymen who have not been feeding concentrates heretofore will now commence to do so. With a few exceptions, all of the members have sufficient roughage for the remainder of the winter. This, coupled with cheaper mill feeds makes the prospects considerable brighter for carrying the herds through the rest of the winter without diminished production.


THE ORIGINAL CHEMICAL
**Indoor Closet**
30,000 SOLD—FIFTH YEAR
**More Comfortable, Healthful, Convenient**




Eliminates the out-house, open vault and cess-pool, which are breeding places for germs. Have a warm, sanitary, odorless toilet right in your house. No going out in cold weather. A boon to invalids. Endorsed by State Boards of Health.

**ABSOLUTELY ODORLESS**
**Put It Anywhere In The House**

The germs are killed by a chemical process in water in the container. Empty once a month. No more trouble to empty than ashes. Closet absolutely guaranteed. Guarantee on file in the office of this publication. Ask for catalog and price
ROWE SANITARY MFG. CO. 11301 6th ST., DETROIT, MICH.
Ask about the Ro-San Washstand—Hot and Cold Running Water Without Plumbing

**Eat Corn Bread Save Syrup Cost**
By making your own syrup at home with
**CRESCENT MAPLEINE**




Half teaspoonful added to two cups of granulated sugar dissolved in one cup of hot water makes one pint of delicious sylup. Total cost 12½ cents. Less than half the cost of comparable ready-made syrup. (M-121)
Write Dept. S.
Crescent Mfg. Co.,
Seattle, Wash.

Grocers Sell Mapleine, 2-oz. Bottle, 35c, (in Canada, 50c.)

**STRAWBERRIES**
**Best of Small Fruits**
EARLY PLANTING ADVISABLE.
our
**1918 SEED ANNUAL**
and Planter's Guide, No. 77,
gives list of best varieties. Ask for copy of "Strawberry Culture." A booklet on planting, fertilizing and picking.




**SPOKANE SEED CO.**
First Ave., Cor. Lincoln St.

# Fruit Transportation Is Problem

## *Perishable Nature Increases Necessity of the Solution*

"The fruit industry of the northwest occupies fourth position in the way of tonnage to be shipped over the various transportation lines which serve our different valleys. Lumber is first in the state of Washington, fish second, grain and grain products third, and fruit fourth. As lumber, grain and canned fish products are not of a perishable nature, in my judgment, here a transposition takes place in traffic matters; for, though fruit is fourth in volume of tonnage, it ranks, or should rank, first in importance on account of its extremely perishable nature."

These are significant statements made by J. Curtis Robinson, traffic manager of the Northwestern Fruit Exchange, Seattle, Wash., before the Washington state horticultural convention at Wenatchee recently. Mr. Robinson's address was one of the most searching delivered on any subject at the convention. Relative to the car shortage problem he said:

"Circumstances entirely without the control of growers or shippers have caused serious car shortages during the last two years. This threatens paralysis of the industry unless in some way it can be overcome. This year the carriers, supported by the government's council of defense, insisted on each and every car being heavily loaded in order to overcome the car shortage as far as possible.

"During the last year the carriers threatened to increase the minimum from 30,000 to 35,000 pounds. After several conferences the carriers finally consented not to increase the minimum to 35,000 pounds if shippers would load heavier than 30,000. This action was in the interest of the industry, and should be appreciated by us.

"I think the shippers showed their patriotism in the way they responded to the request of the government for heavier loading.

"If shippers are entitled to a rate of $1 cwt. on a 30,000-pound minimum, then if the same car which previously hauled 30,000 now hauls 850 boxes, or 42,075 pounds, a little more than one and one-third tonnage has been moved by the carrier. The shipper has saved the carrier one car in every three shipped; the shipper saves the carrier the empty westbound haul on that empty car for every third car which is loaded heavier. The shipper saves the carrier the haul eastbound on the tare weight of one car in every three when he loads as heavy as 850 boxes to the car. The carrier charges the shipper $1 per cwt. for hauling 30,000 pounds, or 40,000 pounds to Chicago. On the same basis the shipper saves the carrier the haul on 40,000 pounds westbound and 40,000 pounds east every time the shipper loads heavy.

"I know it costs the carrier more to pull a heavier load, but his overhead and terminal charges, which are a big factor in the rate, are not increased by heavier loading."

The following are seven specific conclusions which Mr. Robinson urged upon the consideration of the orchardists of the northwest:

"First—While I am not yet an advocate of government ownership of railroads, I do think it would be highly desirable if a plan could be worked out something like the pooling of cars which is being done now, so that refrigerator cars might be distributed to the lines that have the perishable product to move at the time they need them most; or,

"Second—Each carrier with fruit traffic tributary to its rails that it knows it will be expected to move should be compelled as a common carrier to be responsible for having sufficient refrigerator cars to move the crops raised annually and not be compelled to resort to the use of box cars. This responsibility is one belonging to the carriers and delegated to them under the law and does not belong to the shipper in any way. Connecting carriers should be compelled by law to return refrigerator cars to owning lines promptly, providing there was not general pooling arrangement. Carriers now claim cars make but one trip annually. They should make two or more.

"Third—Each district should provide sufficient cold and common storage for at least one-half of their output. It should be remembered, however, that storage alone will never save the industry. Fruit must be moved not only when physically fit and ready, but when the dealer who buys it wants it and will pay for it, and not in February or March, if he wants it in November or December.

"Fourth—Carriers should voluntarily adjust their rates in keeping with the increased loading of the shipper in the interests of improving the transportation position of the fruit industry and measuring out justice to the struggling fruit grower.

"Fifth—Instead of carriers undertaking to increase the present rate on fruit, as in the 15 per cent increase case, I think some of their most able men should be assigned to coordinate the carriers' efforts with those of the growers, shipper and agricultural department in working out the problem of safe and speedy transportation. If the carriers are then entitled to a higher freight rate and the industry can stand it they should have it. If the industry does not succeed under such a coordination of effort, then the carrier can not collect either a high or low rate upon it, because it will have perished.

"Sixth—If there is one route to the east which is warmer and just as fast, and with less chance of frost damage than another route, why not concentrate on the use of that route to the exclusion of all others? Why knowingly take the risk and cause the excessive economic waste which could be avoided? Let nonperishables be routed via the lines from which the traffic in perishables has been diverted until tonnage and earnings are equalized.

"Seventh—I believe that a market train service should be established after very careful thought and preparation of details in connection with that kind of service. A fast market train service could be organized which could also take over the present option 2 service which is so unsatisfactory to both carrier and shipper. One of the difficulties to be experienced would be to secure trained messengers with a knowledge of fruit and a knowledge also of transportation. Careful planning could undoubtedly devise a book of instructions to cover most conditions which would be met. Those instructions could be supplemented from time to time as necessity and experience required. There are special banana trains from Mobile, Ala., for the north; live stock trains into live stock centers; orange trains from California; cantaloupe trains from Imperial Valley—why not special apple trains, or market trains from the northwest to the large eastern centers like Chicago and New York? Plans could be worked out by the carriers to take care of cars for markets north or south of the main line of travel so they could be protected better than they are today.

"Last—I plead for a keener interest in transportation problems on the part of growers and owners of these vast orchards in the northwest."

### City and Country Equal.

Statistics from the army camps seem to indicate that the city and country young men are about equal in soldierly qualities.


## *Wonderful Egg Producer*

Any poultry raiser can easily double his profits by doubling the egg production of his hens. A scientific tonic has been discovered that revitalizes the flock and makes hens work all the time. The tonic is called "More Eggs." Give your hens a few cents' worth of "More Eggs" and you will be amazed and delighted with results. A dollar's worth of "More Eggs" will double this year's production of eggs, so if you wish to try this great profit-maker, write E. J. Reefer, poultry expert, 4661 Reefer bldg., Kansas City, Mo., who will send you a season's supply of "More Eggs" Tonic for $1.00 (prepaid). So confident is Mr. Reefer of the results that a million-dollar bank guarantees if you are not absolutely satisfied your dollar will be returned on request and the "More Eggs" cost you nothing. Send a dollar today or ask Mr. Reefer for his Free Poultry book that tells the experience of a man who has made a fortune out of poultry.—Adv.



# BIGGER FARM FLOCKS *for* 1918

UNCLE SAM is appealing to producers for a great increase in poultry and egg production. There should be a patriotic response from the whole country, with a consequent demand for good breeding fowls and eggs for hatching—also baby chicks.

If you have good breeding birds, baby chicks or hatching eggs to offer, advertise them in this paper. We predict an unusually active season of buying.

Or if you want to buy breeding stock, chicks or eggs, watch the poultry ads in this paper for offerings of *good* breeds and *good* strains.



Write us for sample ads, rates and free advertising service blanks if you have poultry to sell and want to get in touch cheaply with thousands of possible buyers.

THE WASHINGTON FARMER

Room 37 Review Bldg. Spokane, Wash.




Dear Corner Children: In a recent issue it was suggested that we have a crochet contest, but at this time I think it better to devote all the time we have to the Red Cross and personal work for our soldier and sailor boys. At this time of war we must all have a share in the fight for freedom, not only for ourselves but for the whole world.

Some of our girls have written about what they are doing, and what they say is all very good. There are gun wipers to be made, bandages to be wrapped, those who can knit can help a great deal—make helmets, sleeveless sweaters, mitts, socks, mufflers and such things. If you can not knit, it is very easy to learn; grandmother will show you how.

Some have brothers in the army or navy; some have brothers too young to go to war, and some haven't any brothers. If we haven't a real brother in the service, we might adopt one, work for him, send him comforts and cheer him with letters. There are thousands of young men in the army and navy who have no little brothers and sisters at home to work and wait for them. They should not have to go without the things they need, should they?

A few nights ago I went to a moving picture house and saw the pictures taken "at the front" in France. I could not begin to tell you all about them, for it would take too much space, but there is one thing I want to tell you. I saw soldiers marching forward toward the enemy and close behind came the Red Cross ambulance. The Red Cross is doing a wonderful work; it rescues the wounded, brings them to hospitals, bandages their wounds, gives them doctors and nurses. What could be finer and nobler than that?

The pictures made the war seem very near and real to Aunt Nellie, and she is thinking always of the thousands of Cousins of the Corner, some of whom have fine, manly brothers helping bring peace and safety back to the world, and all of whom are loyal and eager to do what they can.

AUNT NELLIE.

**A Letter From Cheery Cousin Sallie.**

Dear Aunt Nellie: Hello my dear Corner cousins and loving Aunt Nellie. Here's another letter from a squaw girl. It has been a long time since I have written to the Children's Corner as I have been gone since last July 23. I am staying at Fort Spokane hospital. I have the T. B.—tuberculosis. How many of you think T. B. sounds funny? T. B. sounds like tall bone. Well I had eight calves this year. Now I have 24 head of cattle and four saddle horses. One time I sold three steers and it brought me $103. I can hemstitch, embroider, crochet and do all kinds of bead work and sew dresses. I can make light bread, cake and pies and do all kinds of work, but one thing that I can't do is tat, but I am going to learn how. I can play the organ very well. I played the organ for the people at the church. I made some presents for Christmas. If some of the cousins write to me I'll send her or him one. I can make nice candy, too. I used to have six cats and their names were Frenchman, Englishman, Dutchman, America, German and Blackeye. I had better shut up and comb my bushy head. I wish you all a Happy New Year.—Sallie Salina Garry, Fort Spokane hospital, Miles, Wash.

**Marie Writes to Us Again.**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I am 10 years old and my birthday is the 19th of May. I am in the fifth grade. Have I a twin? If so I wish she would write to me. I have a dog, a little kitten and a big cat. My kitten is black and my cat is white. I go to school a mile and a half from home. We have Sunday school in our schoolhouse. There are 27 children in our school. We have eight acres of land and about 80 chickens. I like to read the letters in The Farmer. I have three sisters and one brother. I got a book for Christmas named "Rusty Wren" I hope you had a Merry Christmas and a Happy New Year.—Marie Fountain, Fragaria, Wash.

**Sunset's the Most Beautiful Time.**

Dear Aunt Nellie: It seems like ages since I wrote to you. My subject will be "Sunset." When the sinking sun is setting and its glorious streaks of crimson and yellow are flashing o'er the earth that is the most beautiful part of the day. I like to watch the setting sun over the tree tops, but better still by the rippling water. I love to read books. When you feel tired or angry at something if you sit down and read a good book it all disappears. Some books I have read are "The Trail of the Lonesome Pine," which is very good; "The Shuttle," "The Shepherd of the Hills," "Freckles," "The Crisis," "Angel," "His Evil Eye," "Late Miss Hollingsford," "Grey Knight," "Saint Elmo" and also many others. I would like to correspond with any of the Corner cousins.—Clara Olson, Box 108, Bothell, Wash.

**Writes About Life on the Farm.**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. My subject is "On the Farm." I live on a 320-acre farm. It is close to the beach and is very pretty here in the summer. There were over 500 fishing boats in the bay. We have a tractor and a car, five horses, 10 cows and some young stock. We have 14 pigs, 100 turkeys and about 50 chickens. I have two brothers and one sister. My oldest brother is 14 and the other is 12. I am 9 years old and my sister is 7. My birthday is the 27th of May. Have I a twin? If I have I wish she would write to me. We all go to school. Papa takes us in the car when the weather is bad. My teacher's name is Miss Nero. I like her very well. We have three pet kittens. Their names are Muff, Polly and Snookums. We have one dog. I almost forgot to tell you about our sheep. We have about 75 of them. I help mama when I am home. I can wash and wipe dishes, dust, sweep the floor and make the beds. I am in the fifth grade. My Christmas presents were two dolls, a lavalliere, ring, hair ribbon and some handkerchiefs. I wish you and all the cousins a happy New Year.—Alice Elizabeth Govan, R. F. D. 1, Box 30, Friday Harbor, Wash.

**Why Stella Thinks We'll Win.**

Dear Aunt Nellie: This is the first time I ever wrote to the Children's Corner and I like to read the letters very much. They interest me. I am in the fifth grade in school and I will be 12 years old January 20. I weigh 109 pounds. I have one sister and two brothers. My sister's name is Oma. She is three years old. My brothers' names are Leslie and Clyde. Leslie is 10 years old and Clyde is 7 years old. We had a nice program Christmas. My little sister sang that night and she was in some more things. I had a piece to say and a song to sing and was in a scene. We have one dog and his name is Friend and we have two cats. One is black and the other one is gray. We used to have three black cats. Their names were Uncle Sam and Queen and Kaiser. Kaiser and Queen died and that is the reason why I think the United States will beat, for Uncle Sam is still alive. We have one horse that we ride to school. His name is Stogons. He is a fine horse. Have I a twin? If I have I wish they would write to me.—Stella Davis, Fruitland, Wash.

**Gertrude's Cat Doesn't Like the Pup.**

Dear Aunt Nellie: This is the first time I have written to you and I hope it won't be the last. I live on a 120-acre farm. I have a cow and two heifers. The cow's name is Pansy. We have two horses, two pigs and about 35 chickens. I have a little pup and a cat. The cat doesn't like the pup. The cat took his paw once and scratched her eye. Have I a twin? If I have I wish she would write to me. I have to go a mile to school. My teacher's name is Mrs. Waybright. I am 10 years old, but will be 11 the 23d of January. There are 14 scholars in our school. I am in the fourth grade. I am learning how to play the piano. I haven't any brother or sister. I had a fine time Christmas. We had candy and nuts, presents and a big Christmas tree. I hope my letter will be in print.—Gertrude Hough, R. F. D. 1, Greenacres, Wash.

**Winnie Is 11 Years Old Now.**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I am 11 years old. I was 10 the other time I wrote. I am going to school now. I like my teacher fine. Her name is Miss Vivian Horndson. She is going to leave, so we have another teacher. Her name is Miss Margaret McConnell. Ada and Jimmie are the oldest. Ada is 15 and Jimmie 13. Billy, Clara, Elsie and Ruby are the little ones. There are four of us going to school, Ada, Jimmie, Billy and I. We walk three miles to school. We have 15 scholars. I like East Fork fine. I will hope to see my letter in print.—Winnie Papworth, Clayton, Idaho.

**Helen Tells About Vacation.**

Dear Aunt Nellie: This is the third time I have written to the Children's Corner. I hope this will not be the last. My subject is my Christmas vacation. The first day of my vacation I went to Walla Walla with my brother and sister. I stayed a week with my aunts. Santa Claus remembered me well. There was a Christmas tree at my Aunt Nellie's. I had a very nice time in a week's vacation. We did not go to school Monday, but started Wednesday. I was glad to go to school again to see my playmates. I am going to send you my picture sometime.—Helen Schoenberg, Prosser, Wash.

**Ejnoys School This Year.**

Dear Aunt Nellie: I will write again as it is raining and I haven't much to do only the housework, crocheting, embroidery or tatting. I enjoyed Christmas very much. I received a pretty present from one of the cousins. Her name is Mildred Wilhour. I received lots of presents from my friends near where I live. I enjoy school this year. Arthur, my brother, and I do the janitor work in school and go to high school, too. There are two families where I lived with twins. My aunt has one boy and one girl. They are growing fast now, but we didn't think they would live. The other twins are well, but small. They are both boys. I had six pet chicks, but they all died but one.—Dora Dunaway, Glenoma, Wash.

**Millie Has Joined the Corner.**

Dear Aunt Nellie: This is the first time I have written to the Corner. I hope every member enjoys reading the letters as I do. May I join the Corner? If so, please let me know. I would like to see my letter in print. I have dark brown hair and light blue eyes. I am 9 years old. I am in the fourth grade. I have a little sister 6 years old. Her name is Madeline. She is in the first grade. I have two weeks' vacation. My papa has a Chevrolet car. My mama drives it also.—Millie Rucker, R. F. D. 2, Box 18A, Elma, Wash.

# THE BARRIER

(Continued from page twenty-eight.)

"Come away from here," the Lieutenant ordered Gale.

But the old man did not hear, and gathered himself as if to resume the battle with his bare hands, whereupon the soldier, finding himself shaking like a frightened child, and growing physically weak at what he saw, doubted his ability to prevent the encounter, and repeated his command.

"Come away!" he shouted, but the words sounded foolishly flat and inane.

Then Stark spoke intelligibly for the first time.

"Arrest him! You've got to believe what I told you now, Burrell." He poured forth a stream of unspeakable profanity, smitten by the bitter knowledge of his first and only defeat. "You'll hang, Gaylord! I'll see your neck stretched, damn your heart!" To Poleon he panted, excitedly: "I followed him for fifteen years, Doret. He killed my wife."

"Dat's damn lie!" said the Frenchman.

"No, it isn't. He's under indictment for it back in California. He shot her down in cold blood, then ran off with



John Gale and Stark settle an old score.

my kid. That's her he calls Necia. She's mine. Ain't I right, Lieutenant?"

At this final desperate effort to fix the crime upon his rival, Burrell turned on him with loathing.

"It's no use, Stark. We heard you say she killed herself. We were standing outside the door, both of us, and got it from her own lips."

Until this moment the man had stood on his own feet, but now he began to sag, seeing which, Poleon supported him to the bed, where he sank weakly, collapsing in every joint and muscle.

"It's a job," he snarled. "You put this up, you three, and came here to gang me." An unnatural shudder convulsed him as his wounds bit at him, and then heflared up viciously. "But I'll beat you all. I've got the girl! I've got her!"

"Necia!" cried Burrell, suddenly remembering, for this affray had driven all else from his mind.

Stark crouched on the edge of his bunk—a ghastly, gray, grinning thing! One weapon still remained to him, and he used it.

"Yes, I've got my daughter!"

"Where is she?" demanded the trader, hoarsely. "Where's my girl?"

The gambler chuckled; an agony seized him till he hiccoughed and strangled; then, as the spell passed, he laughed again.

"She's got you in her head, like the mother had, but I'll drive it out; I'll treat her like I did her—"

Gale uttered a terrible cry and moved upon him, but Burrell shouldered the trader aside, himself possessed by a cold fury that intensified his strength tenfold.

"Stop it, Gale! Let me attend to this. I'll make him tell!"

"Oh, will you?" mocked the girl's father.

"Where is she?"

"None of your damned business." Again he was seized with a paroxysm that left him shivering and his lips colorless. The blankets were soaked and soggy with blood, and his feet rested in a red pool.

"Ben Stark," said the tortured lover, "you're a sick man, and you'll be gone in half an hour at this rate. Won't you do one decent thing before you die?"

"Bah! I'm all right."

"I'll get a doctor if you'll tell us where she is. If you don't—I'll—let you die. For God's sake, man, speak up!"

The wounded man strove to rise, but could not, then considered for a moment before he said:

"I sent her away."

"Where?"

"Up-river, on that freighter that left last night. She'll go out by Skagway, and I'll join her later, where I can have her to myself. She's forty miles up-river now, and getting farther every minute—oh, you can't catch her!"

The three men stared at one another blankly.

"Why did she go?" said Gale, dully.

"Because I told her who she was, and who you are, because she thinks you killed her mother; because she was glad to get away." Now that he was grown too weak to inflict violent pain, the man lied malevolently, gloating over what he saw in the trader's face.

"Never mind, old man, I'll bring her back," said Burrell, and laid a comforting hand on Gale's shoulder, for the fact that she was safe, the fact of knowing something relieved him immensely; but Stark's next words plunged him into even blacker horror than the trader felt.

"You won't want her if you catch her. Runnion will see to that."

"Runnion!"

"Yes, I sent him with her."

The lover cried out in anguish, and hid his face in his hands.

"He's wanted her for a long time, so I told him to go ahead—"

None of them noticed Poleon Doret, who, upon this unnatural confession, alone seemed to retain sufficient control to doubt and to reason. He was thinking hard, straightening out certain facts, and trying to square this horrible statement with things he had seen and heard tonight. All of a sudden he uttered a great cry, and bolted out into the darkness unheeded by Gale and Burrell, who stood dazed and distraught with a fear greater than that which was growing in Stark at sight of his wounds.

The gambler looked down at his injuries, opened and closed the fingers of his hand as if to see whether he still maintained control of them, then cried out at the two helpless men:

"Well, are you going to let me bleed to death?"

It brought the soldier out of his trance.

"Why—no, no! We'll get a doctor."

But Gale touched him on the shoulder and said:

"He's too weak to get out. Lock him in and let him die in the dark."

Stark cursed affrightedly, for it is a terrible thing to bleed to death in the dark, and in spite of himself the Lieutenant wavered.

"I can't do that. I promised."

"He told that lie to my girl. He gave her to that hound," said the trader, but Burrell shoved him through the door.

"No! I can't do that." And then to the wounded man he said, "I'll get a doctor, but God have mercy on your soul." He could not trust himself to talk further with this creature, nor be near him any longer, for though he had a slight knowledge of surgery, he would sooner have touched a loathsome serpent than the flesh of this monstrous man.

He pushed Gale ahead of him and the old man went like a driven beast, for his violence had wasted itself, and he was like a person under the spell of a strong drug. At the doctor's door Burrell stopped.

"I never thought to ask you," he said, wearily; "but you must be hurt? He must have wounded you?"

"I reckon he did—I don't know." Then the man's listless voice throbbed out achingly, as he cried in despair: "She believed him, boy! She believed his lies! That's what hurts." Something like a sob caught in his throat, and he staggered, away under the weight of his great bereavement.

(To be continued.)

# News for Breeders

## Oregon Boar Wins at Chicago.

The Pacific northwest has reason to feel proud of the fact that a boar pig bred at Winona ranch, Grants Pass, Ore., was shown in the under 6 months class at the Chicago International and won first place, in the strong competion that show always affords. The pig is by the great boar Laurel Champion and out of Escalon Polly, that was junior champion at the Oregon state fair in 1916. Escalon Polly is a daughter of Grand Leader 2d, that was grand champion at the Panama-Pacific International exposition. The young boar was shown by Mr. Steele, proprietor of Winona ranch, at the Oregon state fair and then shipped to Hamilton farms, Gladstone, N. J. But J. W. Clapp, manager of Hamilton farms, was at Winona when the pig was 3 weeks old and selected him at that time, thus showing rare judgment of Berkshire quality.

Laurel Champion was purchased by Mr. Steele from Silberfa farm four years ago for $750. At that time his best friends thought him foolish to pay so much, but Mr. Steele knew his breeding, his show record and his potency as a sire. The boar has been the prime factor in making Mr. Steele's herd great. A daughter of his was grand champion at the California state fair and the Western Berkshire congress at the Oregon state fair the past fall. The first prize aged boar, that was made grand champion at the Nevada state fair, is his son. The first and second aged sows at that fair were also by Laurel Champion. His son won grand championship at the Northwest Live Stock show at Lewiston, Idaho, and another of his under six months pig won first in class and grand championship at the Pacific International at North Portland. A son of his was grand champion at Spokane.

So that for the season of 1917 Laurel Champion's offspring have won more awards than those of any other Berkshire boar, with the possible exception of Matchless Lee 8th, a noted Kentucky boar, and Mr. Steele feels sure when final returns are checked up that Laurel Champion will be ahead.

H. A.

## Noted Breeder Sells Holdings.

W. F. Howard of Roswell, Idaho, has recently sold his fine farm at that place and has advertised an auction sale of purebred stock, grades and agricultural implements. Mr. Howard has for years been a successful farmer and breeder of purebred stock and has won many prizes in strong competition. He has purchased an attractive acreage property in Caldwell and will occupy the same early in February.

## Three Sow Pigs in Three Litters.

Three registered Poland China gilts farrowed 20 pigs for Frank Needham of Eugene, Ore., with just one sow pig in each litter. Mr. Needham is well satisfied with the number of pigs, but would have liked a few more sows.

H. A.

# A Grand Champion Herd of Poland Chinas



The accompanying photograph shows the grand champion Poland China herd of the Pacific northwest, owned by Howard & Royston, Parma and Payette, Idaho. The big boar, Sammy, still under 2 years old and weighing over 800 pounds, has never failed of championship wherever shown; one or another of the sows has each time won grand championship and, shown as herd, the four have invariably won first place. They were shown at Filer, Boise, Lewiston and North Portland. Each of these gentlemen already had an enviable reputation as a Poland China breeder and, in joining forces the last fall, they were able to put up one of the greatest shows of Poland Chinas ever exhibited in the northwest.

H. A.


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## Live Stock Movement on Increase.

In a recent trip concluded by R. A. Blanchard, agriculturist, Live Stock State bank, North Portland, Ore., through the Willamette valley and southern Oregon, he reported very interesting activity among the farmers at every place. Especially is this apparent in the live stock movement, which seems to be slightly on the increase. Two years ago when hogs were in such disrepute among ranchers there was a wholesale going out of the hog business, but now Mr. Blanchard reports that farmers are gradually stocking up on swine, especially the small farmer, who is attempting to keep just enough to take care of the waste on the farm.

The efforts of the food administration and the department of agriculture seem to have taken firm hold in a great many instances. The bankers generally in this country are encouraging the raising of sheep. Oregon now stands seventh rating in sheep production and while it is impossible to increase the number of sheep in the eastern sections in the range country, western Oregon can easily support one-half again as many sheep, which would bring the state rapidly to the fore in wool production. "Many bankers are encouraging the 'sheep on every farm,' said Mr. Blanchard, and point to the example of Ohio."

## Money In Sheep.

Denby & Stark of Sutherlin, Ore., in August of 1915, purchased 50 ewes and six wethers for $224. They then bought a registered Shropshire ram for $25, or a total of $249. They clipped the sheep in October of 1915 and again in April, 1916. They sold 20 ram lambs and increased the flock by 10 ewe lambs. They paid $100 for pasture rent of 194 acres, and fed about 500 pounds of grain during the winter of 1915. The first of August, 1916, they had the 60 ewes, five wethers and one buck all clear, the wool and lambs sold having paid the entire bill. Is it any wonder that Mr. Stark thinks there is money in a farm flock of sheep?


Jerseys for Net Profits



You're in the dairy business for profit—the *net* profit that your herd has made you at the end of the year will determine the size of your bank account. Jerseys yield the largest returns from every ounce of feed—proved by tests at two great expositions. Jersey milk averages 5.3% butter fat, 9.1% solids not fat—highest of all breeds. Buy a Jersey bull. Write the breeders advertised below for prices, pedigrees, etc.



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C. E. LONG, Buhl, Idaho.

724 Pounds Butter

and 11,076 pounds milk is the record the dam of a bull calf dropped Sept. 1, 1917. The sire, Dominus, is out of an 817-lb. cow and sired by a bull out of an 853-lb. cow. PRICE $125 for quick sale.

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WM. NEUENSCHWANDER, Gaston, Ore.

### What Is the A. B. C.?

Audit Bureau of Circulations.

This is an association, nation-wide in its scope, not conducted for profit. Every publisher having membership in this organization pledges himself to sell circulation as a commodity, both as to quality and quantity. Advertisers using our columns are safguarded. They know that we give all the circulation we offer.

## HORSES

### Hunter Ranch Percherons

The Grand Champion KROUMIR at head of herd. Young stallions for sale at all times at breeders' prices.

A. R. HUNTER, Island City, Ore.

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, Jan. 14.—Although milder weather somewhat eased the corn market today, forecasts pointing to more snow prevented any substantial decline. Prices closed unsettled, at the same as Saturday's finish to ⅛@¼c lower, with January $1.27½ and May $1.25⅛. Oats underwent a setback of ⅝ to ⅞c net. Provisions finished unchanged to 15c down.

Total absence of inquiry from the seaboard intensified the weakness of oats.

Provisions sagged mainly because upturns in the hog market were not of a lasting sort.

**Cash Quotations.**

CHICAGO, Jan. 14.—Corn No. 2 and 3 yellow, nominal; No. 4 yellow, $1.65.

Oats—No. 3 white, 81@32c; standard, 82c.

Rye—No. 2, nominal. Barley, $1.40@1.59.

Timothy, $5@7.50. Clover, $21@27.

**Chicago Futures.**

| | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| Corn— | | | | |
| Jan. ..... | 1.27½ | 1.27½ | 1.27½ | 1.27½ |
| May ..... | 1.25 | 1.25⅛ | 1.24⅝ | 1.25⅛ |
| Oats— | | | | |
| Jan. ..... | .80⅛ | .80⅛ | .79⅛ | .79¼ |
| May ..... | .77⅛ | .77¼ | .76 | .76⅜ |
| Pork— | | | | |
| Jan. ..... | ..... | ..... | ..... | 46.40 |
| May ..... | ..... | 45.82 | 45.60 | 45.60 |
| Lard— | | | | |
| Jan. ..... | 24.40 | 24.40 | 24.30 | 24.32 |
| May ..... | 24.92 | 24.92 | 24.75 | 24.77 |
| Ribs— | | | | |
| Jan. ..... | ..... | 24.07 | 23.90 | 23.93 |
| May ..... | 24.50 | 24.52 | 24.35 | 24.37 |

**Pacific Northwest Grain.**

PORTLAND, Ore., Jan. 14.—Grain, 30-day options: Oats, No. 2, $59.50 bid; barley, feed, $55; brewing, $57.50. Eastern oats and corn in bulk: Oats, No. 3 white, $55 bid; 38-pound clipped, $56; corn, No. 3 yellow, $65; No. 3 mixed, $64; oats, No. 3, $55; do clipped, $56; corn, yellow, $64; do mixed, $63.50.

**San Francisco Grain.**

SAN FRANCISCO, Jan. 14.—Barley, May, $2.84 bid.

**Minneapolis Grain.**

MINNEAPOLIS, Jan. 14.—Flour unchanged; in carload lots, standard flour quoted at $9.75 a barrel in 98-pound cotton sacks. Shipments, 68,340 barrels.

Barley, $1.32@1.57.

Rye, $1.87@1.88.

Bran, $32.50.

Wheat—Receipts, 343 cars, compared with 400 a year ago.

Corn—No. 3 yellow, $1.65@1.68.

Oats—No. 3 white, 78 3-4@79 3-4c.

Flax, $3.58@3.61.

## Live Stock Quotations.

**At Omaha.**

OMAHA, Neb., Jan. 14.—Hogs—Receipts, 5600; market steady. Heavy, $16.20@16.45; mixed, $16.25@16.35; light, $16.15@16.40; pigs, $10@15.50. Bulk of sales at $16.25@16.35.

Cattle—Receipts, 2900; market active, steady to stronger. Native steers, $9.50@12.60; cows and heifers, $7@11; western steers, $8@11.75; Texas steers, $7.50@10.50; cows and heifers, $6.50@9.25; canners, $6@7; stockers and feeders, $6.50@11; calves, $9@13; bulls, stags, etc., $7@10.50.

Sheep—Receipts, 11,700; market strong. Yearlings, $11.50@13.50; wethers, $11@12.50; ewes, $10.75@12.25; lambs, $16.25@17.25.

**At Chicago.**

CHICAGO, Jan. 14.—Hogs—Receipts, 14,000; market 5c above Saturday's average. Bulk, $16.15@16.50; light, $15.75@16.45; mixed, $15.90@16.60; heavy, $15.90@16.60; rough, $15.90@16.10; pigs, $12.50@15.25.

Cattle—Receipts, 2000; firm. Native steers, $8.20@13.60; stockers and feeders, $6.80@10.75; cows and heifers, $5.80@11.75; calves, $8.75@16.

Sheep—Receipts, 2000; strong. Wethers, $9.60@13.25; lambs, $14@17.40.

**At Portland.**

PORTLAND, Ore., Jan. 14.—Cattle—Steady; receipts, 616. Medium to choice steers, $10@10.75; good to medium steers, $8.75@10; common to good steers, $7.25@8.75; choice cows and heifers, $7.25@8; common to good cows and heifers, $6@6.35; canners, $3@5.10; bulls, $4.50@7; calves, $7@10.25; stocker and feeder steers, $6@8.50.

Hogs—Steady; receipts, 2198. Prime light, $15.45@15.60; prime heavy, $15.50@15.65; pigs, $13.50@14; bulk, $15.45@15.60.

Sheep—Steady; receipts, 290. Western lambs, $14.50@15; valley lambs, $14@14.25; yearlings, $12.50@13; wethers, $12@12.50; ewes, $9.50@11.

**Spokane Stockyards, Monday.**

Hogs—Receipts, 52; market steady to strong. Prime light, $15.40@15.50; prime heavy, $15.40@15.50; pigs, $14@14.75; stockers and feeders, $11.50@13. Bulk of sales, $15.40.

Cattle—Receipts, 12; market steady to strong. Best beef steers, $9.50@10.25; good steers, $8.50@9.25; common to good steers, $7@8.25; best beef cows, $7.50@8.25; good cows, $6.50@7.25; ordinary to good cows, $5.50@6.50; canners, $3@5.50; best heifers, $7.75@8.50; bulls, $5@7.50; calves, $6.50@9.50; stocker and feeder steers, $5.50@7.75.

Sheep—Receipts, none; market, steady. Prime lambs, $14@14.75; good lambs, $12.50@13.25; prime yearlings, $12@12.75; prime wethers, $11.50@12.25; best mutton ewes, $8.50@10.50.

## The Hide Market.

The price of hides has declined several cents per pound during the last two weeks. This is due to the fact that the cattle killed in this country has been about 3,000,000 head more than last year. The number of hides imported this year is the largest in the history of the country. Stocks of hides are large and tanners are not interested, except at very low figures. The decline amounts to 3c to 5c on hides and 8c to 10c per pound on calf skins.

The following prices were quoted officially as covering all the chief marketing points of the northwest on January 8:

Green hides, cows and steers, 12c; salted cured, 15c; green bulls and stags, 10c; salted cured, 12c; Kip, 15 to 25 pounds, 16c; calf skins up to 15 pounds, 23c; dry flint hides, 28c; dry flint calf skins under 7 pounds, 30c; dry salted hides, 25c; dry sheep pelt, 30@35c; shearlings, dry, 10c@$1 each; dry horse hides, $1@2 each; green horse hides, $2.50@4 each.

## Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

**Potatoes**—New local potatoes, $1.25 cwt; sweet potatoes, $4.75.

**Apples**—Large eating apples, $1.25@1.50; cooking apples, $1 box; Delicious, $1.85@2.25; Winter Bananas, $1.50 box; Jonathans, $1.10@1.40 box; Wageners, $1@1.50 box; Rome Beauties, $1.75 box; Spitzenburgs, $2 box; King Davids, $1.10 box; Grimes Golden, $1.35@1.60 box; Stayman Winesaps, $1.75 box.

**Butter**—Blanchard cartons, 53c lb; Medo-Maid, 53c lb; Cascade, 49c lb; Gold Leaf, 53c lb; Better Butter, 53c lb; Attalia, 53c lb; Diadem, 53c lb; Hazelwood, 53c lb; Solid Pack, 52@53c lb; Jersey Belle, 51c lb; Peerless, 47@48c lb; Snoweap, 38c lb; cooking butter, 38c lb.

**Cheese**—Wisconsin full cream, twins, 27c; triplets, 25c; Hazelwood full cream, triplets, 26c lb; Hazelwood Young America, 27c lb; Winconsin limburger, 32@33c lb; brick cheese, 33@35c lb; domestic Swiss, 38c lb; Young Americas, 27c lb.

**Eggs**—White filler, guaranteed, $13 case; selected storage, $12.

**Live Poultry**—Hens, 13@16c lb; broilers, 18c lb; old roosters, 9c lb; ducks, 15c lb; geese, 20@23c lb; turkeys, 28@32c lb.

**Dressed Poultry**—Hens, 21@22c lb; broilers, 24@25c lb; old roosters, 11c lb; ducks, 20@23c lb; geese, 20@23c lb; turkeys, 28@32c lb.

**Hide Quotations.**

**Green Cows and Steers**—25 lbs and up, 15c; salted cured, 17c; green bulls and stags, 12c; salted cured, 15c; kip, 15 lbs. to 25 lbs, 20c; calf skins up to 15 lbs, 28c; dry flint hides, 30c; dry salted, 26c; dry calf skins, under 10 lbs, 30c; dry sheep pelts, 35@40c; dry shearlings, 10c@$1 each; green horse hides, $2.50@4 each; dry horse hides, $1@2 each.

## Seattle Market.

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle:

Eggs—Local, 46@48c per dozen; pullets, 38@40c dozen.

Poultry—Live hens, fat, over 4 lbs., 23c lb.; 4 lbs. and under, 23c; old roosters, 15c lb.; squabs, large, $3.50 dozen; geese, fat, alive, 18c lb.; springs, alive, 28c lb.

Butterfat—54c lb.; dairy butter, 36c.

Beef—Buying prices: Prime beef steers, 11@12c lb.; cows, fat, 9@11c lb.; heifers, 10@11c lb.

Hogs—Light, 18@20c lb.; heavy, 17@18c lb.

Veal—Fancy light, 14@17c lb.; heavy, 12@14c lb.

Hides—Salted, 15c lb.; flint-dry hides, 29c lb.; salt kip, 16c lb.; green hides, 12c lb.; green calf, 23c lb.; dry calf (under 6 lbs.), 29c lb.; bulls and dry salts, 4c lb. less; green bulls, 10c lb.; dry full wool sheep pelts, 35@39c lb.; salt bulls, 12c lb.

**SELLING PRICES.**

Feed—Scratch, $75 per ton; all grain chop, $67 per ton; oats, $64 per ton; rolled oats, $65.50 per ton; bran, $32.50@35 per ton; shorts, $34@38 per ton; soy bean meal, $68 per ton; whole corn, $77 per ton; cracked corn, $78 per ton; alfalfa meal, $35.

Hay—Eastern Washington timothy, $36@37 per ton; alfalfa, $28@29 per ton; double compressed, $40@41 per ton; wheat hay, $28 per ton; Puget sound, $30@31 per ton; straw, $15.

Butter—Washington creamery extras, cubes, 52c lb.; do bricks, 53c lb.

Eggs—Fresh ranch, 52@53c dozen.

Potatoes—Puget sound, $1.25@1.35 per cwt.; eastern Washington, $1.50 per cwt.

## Seattle Wheat.

SEATTLE, Jan. 12.—Millers were advised this week that a cargo of Australian wheat had been landed at Tacoma, and this was taken to mean that more is on the way and that this grain, heaped up and going to waste for lack of shipping space, is to be released for grinding flour on Puget sound for the allied armies of Europe.

Seattle millers have announced that the reduction in the quality of established grades of flour to the uniform 95 per cent will not mean lower, but if anything higher prices, due to demands of the government for a cut in millfeed. To equalize the reduction of $2 and $3 in millfeed millers are quoting the new flour at the old price of patents. They claim that the 5 per cent residue is an unknown quantity, and until some basis for this is created they will be compelled to maintain flour prices where they are.

## The Wool Market.

BOSTON, Jan. 11.—The Commercial Bulletin will say tomorrow:

"While the week in the wool market has been generally quiet, there is no disposition on the part of dealers to let prices down; indeed, the tendency on all spot wools, if anything, is to ask a little more, especially on those grades known to be scarce.

"The situation at the mills shows no noteworthy change. The next colonial wool auctions at Boston are scheduled for January 24 and 25."

Scoured basis:

Texas, fine 12 months, $1.68@1.72; fine eight months, $1.55@1.60.

California, northern, $1.70@1.75; middle county, $1.55@1.60; southern, $1.45@1.50.

Oregon, eastern No. 1 staple, $1.80@1.82; eastern clothing, $1.50@1.60; valley No. 1, $1.65@1.70.

Territory, fine staple, $1.80@1.85; halfblood combing, $1.75@1.80; three-eighths blood combing, $1.45@1.50; fine clothing, $1.60@1.65; fine medium clothing, $1.55@1.60.

Pulled, extra, $1.80@1.85; AA, $1.70@1.80; supers, $1.60@1.65.

## Portland Market.

PORTLAND, Ore., Jan. 12.—The potato demand continues light and prices are steady, $1@1.15 offered by shippers and $1.25@1.35 quoted by jobbers. Yakimas are selling here at $1.50@1.75.

The egg market has climbed because of the strength of the San Francisco market. Fresh ranch are selling up to 47 1-2 cents, case count. Storage stocks are practically exhausted.

Butter is barely steady at 50 cents for country creamery extras. Talk of an early advance in cheese prices is again heard.

The inquiry for onions is better than at any time this season. The last week 13 cars were sold by the association, all for shipment to western points. The price holds at $1.75 at loading stations.

Demand from the Sound keeps poultry prices at the highest level ever known here in the face of very good receipts. Country dressed meats are also firm, but not as high as a week ago.

A few sales in the wool market are reported at around 55@58 cents.

In the following list of quotations the grain, hay, mill feed, hops, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 1, $60.25 per ton.

Millstuffs—Bran, $30 per ton; shorts, $32.

Barley—No. 1 feed, $55; brewing, $58; rolled, $59@60.

Hay—Buying prices: Timothy, eastern Oregon, $27; alfalfa, $23.50; grain, $24.

Eggs — Oregon ranch, case count, 47@47 1-2c per dozen; candled, 48@51c.

Poultry—Hens, 16@19c; ducks, 20@25c; turkeys, live, 25c; geese, 16@19c.

Butter — City creamery, prints, 52@54c per pound; cubes, extras, 50c.

Cheese — Tillamook triplets, 23c; Young Americas, 24c.

Dressed meats — Veal, 17 1-2@18c; pork, 18@18 1-2c.

Hops—1916, nominal; 1917 crops, 15@18c.

Potatoes—Oregon, buying price; $1@1.15 per hundred.

Wool—Eastern Oregon, 50@60c; valley, 55@60c.

Beans—Buying prices: Oregon whites, 9@9 1-2c; colored, 8@9c.

## Portland Wheat.

PORTLAND, Ore., Jan. 12.—Barley reached the highest price of the season at the close of the week when 200 tons of brewing grade were sold at the Merchants' exchange at $58. Oats also touched a new record for this market with $60.25 bid for both January and 30-day delivery.

Hay prices are still maintained, but dealers look for some weakening, as there have been numerous offers of surplus hay by feeders.

## Butter and Eggs.

PORTLAND, Ore., Jan. 12.—Butter prints, extras, 52c to 54c; cubes, extras, 50c; prime first, 49 1-2c; dairy, 32 1-2c.

Butter fat—Portland delivery, No. 1 sour cream, 56@57c.

SAN FRANCISCO, Jan. 12.—Butter, prime firsts, 51@52c.

Eggs—Fresh extras, 67c; fresh extra pullets, 63c.

**TURPENTINE AND ROSIN.**

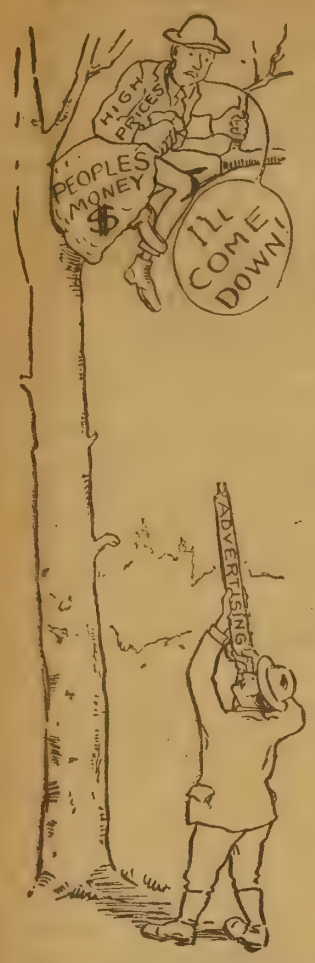
SAVANNAH, Ga., Jan. 12.—Turpentine firm, 45 1-2c; sales, 95; receipts, 30; shipments, 10; stock, 26,274.

Rosin firm; sales, 666; receipts, 1002; stock, 89,493.

Quote B, D, E, $6.35; F, $6.40; G, H, I, $6.45; K, $6.70; M, $6.80; N, $7.25; WG, $7.45; WW, $7.60.



## ADVERTISING LOWERS COST OF GOODS.




"Advertising," writes John Lee Mahin, a man who has spent his life studying the subject, "is an organized form of salesmanship that tends, in the long run, to make the cost of living more reasonable for the average human being.

"Advertising enables the manufacturer to give a better quality of goods at a lower price than he could if his advertising had not lifted him out of the rut of ruinous competition and standardized his articles of merchandise.

"Further, advertising reduces interest charges by giving manufacturers power to make quicker collections; it lowers the cost of production of standard articles, benefits skilled labor and improves all kinds of labor conditions.

"Modern advertising methods reduce the cost of everything that requires personal salesmanship in its distribution. Thus they reduce the ultimate cost of living."

The above truths are well illustrated by the advertising columns of this paper.

A great many money-saving opportunities are to be found constantly in them.

Are you reading and investigating our advertisements?

# Food Survey

## Ask Aid of 6,000,000 Farmers

The farmers of the United States will be asked to cooperate with Uncle Sam in making the first nation-wide war emergency food survey, which will be conducted by the bureau of markets. The bureau of crop estimates will work in conjunction with the bureau of markets in this branch of the survey, and will distribute through their voluntary crop reporters one-half million questionnaires to representative farmers asking for the amounts of the important crops and numbers of live stock on their farms on December 31, 1917, and December 31, 1916. From the data secured in this way a fair estimate can be made of the crops and live stock in the hands of the 6,000,000 farmers of the nation as compared to a year ago.

The questionnaire which the farmer will fill includes 56 items asking for estimates on all important crops and kinds of live stock. The schedule also asks for the amounts of a number of crops produced during 1917, the size of the farm, number of acres in cultivation, and whether or not it is operated by owner or tenant.

### Allied Armies Need Food.

Reports from official sources in Europe indicate that there is ever-increasing need for food in the armies and civilian populations of the allied countries.

A little powdered sage sprinkled on slices of cold pork is very agreeable.

On account of the great variation in local climatic conditions, moisture, soil, etc., it is up to the readers of The Washington Farmer always to remember that methods which prove successful in one locality may not work out in others. It is our aim to gather the experiences of farmers in every section of this state and pass these experiences on to our readers, that they may try out or adopt such as may be applicable to their locality and conditions.

## Want Ads

### EDUCATIONAL 45

BEHNKE-WALKER, PORTLAND, NORTHwest's largest, finest business college, can not supply half the calls for trained young men, women. Enroll now. Free success catalog. Positions secured.

### MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

Kitchen cupboards, 4 ft. 6 in. wide, 7 ft. high; two glass doors and three long adjustable shelves in the upper part; three drawers, one flour bin, one sugar bin, mixing board, and a cupboard for pots and pans, with panel door in lower part; price $35 set up, or $25 knock down.

| | |
|---|---|
| 5 cross panel doors | $1.92 |
| Cottage front doors | 3.50 |
| Two light windows | 1.24 |
| Spruce flour bins | 1.75 |
| Prepared roofing | 1.35 |

Our large illustrated catalog No. 37, sent, postpaid, without charge, on request. Sell any one, ship anywhere, and guarantee safe delivery.

The largest factory in the west selling direct to consumer.

O. B. WILLIAMS CO.,
1943 FIRST AVE., SO. SEATTLE, WASH.

TRAP COYOTES — IF YOU WANT TO learn of a sure system for trapping coyotes write me for information. I have it. C. L. Willis, Dillard, Ore.

HIDES
WOOL · PELTS
FURS · TALLOW
SHIP TO US
NO CARTAGE · NO COMMISSION
HIGHEST CASH PRICES PAID
PROMPT RETURNS · HONEST WEIGHT
WRITE FOR PRICE LIST AND SHIPPING TAGS
HIBBARD-STEWART CO. INC
SEATTLE
BE SURE AND MENTION THIS PAPER

HIDES
WOOL, PELTS, MOHAIR, CASCARA BARK
We do the largest consignment business in the northwest. Equally fair treatment on all shipments, large or small. Returns at full market value mailed same day goods are received. Trial shipments wanted and appreciated, but are handled as regular shipments and not at inflated values.
THE H. F. NORTON CO.
53-55 No. Front St., PORTLAND, ORE.
206 3d Ave. So., SEATTLE, WASH.

## Want Ads

**Want Ad Rates 30c Per Line**

Want ads are run at this rate in The Washington Farmer and i t s associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

**How to Figure Cost of Ads**

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

Send for card giving lower rates for ads running one month or longer.

### MISCELLANEOUS—FOR SALE 60 Continued.

SALT FISH.

We sell it by the carload or in a pail. Fish is about the cheapest and best food you can get. Buy it now. Write for price list.

SUPERIOR FISH CO.,
SEATTLE, WASH.

BUILDING MATERIALS AT WHOLESALE prices — Doors, windows, roofing paper, porch columns, plaster boards. All building materials shipped promptly. Send for our complete illustrated catalogue; gives you lowest net prices. P. A. ROVIG CO., 2229 First ave., So., Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

10-LB. PAIL SALTED BLACK COD BELLies, the best part of the fish. Within 300 miles of Seattle, $1.50 by parcel post.
SUPERIOR FISH CO.,
SEATTLE, WASH.

### MISCELLANEOUS WANTED 63

POULTRY WANTED.

We want live poultry, dressed meats, hides and potatoes. We solicit your cream shipments. Write for prices. Commercial Creamery Company, Spokane, Wash.

### FARM LIGHT PLANTS. 73

WARNERLITE ELEC. LIGHT PLANTS absolutely guaranteed. Thousands used by satisfied farmers. Live agents wanted. Warnerlite Co., Temple Court bldg., Spokane.

### AUCTIONEERS 75

N. R. SHEPHERD, FARM AND LIVE stock auctioneer, Troy, Idaho.

### MACHINERY FOR SALE. 93

FOR FARM LUMBERING USE
"AMERICAN" PORTABLE SAWMILLS.
Carried in Stock by
HIGGINS MACHINERY COMPANY,
312 1st ave. So., Seattle. Write for Catalog.

### STOVE REPAIRING 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

### POULTRY 174

125,000 BABY CHICKS FOR 1918—WHITE Leghorns, Feb. $15; March, $14; April, $14; May, $12. Reds, Rocks and Minorcas, March, $18; April, $18; May, $17. Agents Queen incubators and brooder stoves. A few second-hand incubators and brooders very cheap. Queen Hatchery, 89 Pike st., Seattle, Wash.

YOUNG PERCHERON STALLIONS AND mares for sale. Among them Unietta, champion of three 1917 stock shows. H. E. Evans & Co., Rickreall, Ore.

FOR SALE—MAMMOTH BRONZE TURkeys. Won five prizes at Wash. State Fair. Toms, $7 and $10; hens, $5. H. T. Cutler, Parker, Wash.

BIG, DARK ROSE COMB R. I. REDS; also pure bred Airedale puppies; 6-tray, successful oat sprouter, $8. Mrs. Melvin H. Shirley, Firth, Idaho.

FOR SOMETHING GOOD IN SILVER Wyandottes, S. S. Hamburgs or Golden Campines, write G. G. Wherry, Payette, Ida.

S. C. R. I. RED AND WHITE LEGHORN cockerels, hens and pullets. Hatching eggs. Mrs. Rominger, Underwood, Wash.

BEST S. C. R. I. RED COCKERELS FOR sale. N. S. Felthouse, New Plymouth, Idaho.

WILD AND BRONZE TURKEYS. CHOICE breeders. E. Y. Sanders, Roy, Wash.

TOULOUSE GANDERS, $3.50. C. O. JOHNson, R. 1, Medical Lake, Wash.

### LIVE STOCK 177

FOR SALE, LIVE STOCK.

Big two days' sale, Friday, Saturday, Feb. 15-16. California Ranch, Buena, Wash. O. W. R. R., 15 miles from Yakima. Feb. 15, 30 head farm horses, 3 to 5 years; all farm raised, by reg. stallion; all broken, 20 head steers, heifers and grade cows. Feb. 16, 60 head reg. Holsteins, mostly cows and bred heifers. These offerings are the best in the west. Chas. S. Mead Jr., owner. George A. Gue, auctioneer.

RED CLOVER BIG TYPE POLANDS. Mouw, Fessenmeyer, Miller and Herring strains. All sold out of servicable breeding stock. Booking orders for spring delivery. Stock of best breeding and quality. Visitors welcome. H. J. Howser, Stites, Idaho.

ONE SHIRE REGISTERED STALLION, coming 4 years old, color dark brown, weight 1850, for sale or trade for horses or good property. James R. Barnes, Route 3, Pullman, Wash.

REGISTERED SHORTHORN COWS, YOUNG bulls and heifers, sired by Scotch bulls; liberal terms. Caldwell Cattle Co., by H. W. Dorman, Pres., Caldwell, Idaho.

FOR SALE—PURE BRED CHESTER White pigs. Either sex, $10 each. Bellingham Bay Improvement Company, P. O. Box 155, Bellingham, Wash.

FOR SALE—25 REGISTERED RED, white and roan Shorthorn bull calves and yearlings. Wm. Mulhall, Fenn, Idaho.

TWO BELGIAN STALLIONS FOR SALE. Colts to show. Address Willow Creek Stock Farm, Latah, Wash.

O. I. C. BOAR PIGS, SERVICEABLE AGE. Pearl Guineas, $5.00 per trio. C. I. Ballard, Rickreall, Ore.

### HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

### RUBBER STAMPS and SEALS 384

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THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XLI. NO. 4. JANUARY 24, 1918. ** WEEKLY.

# Minimum Hog Price for West Is Fixed

## *Good and Evil Seen in Agreement Between Food Administration and Western Packers*

The bottom can't fall out of the hog market in the west and northwest this year, but an agreement just entered into between the meat division of the national food administration and the packers that the minimum price in the west shall be one cent below the Chicago market price may prove a severe blow to the swine production industry of Washington, Oregon, Idaho, California and other western states. The one certain virtue of the agreement is that a producer may know that his hogs will not go down to six or eight cents after he has produced them on two dollar wheat or other feed correspondingly high.

Here is what has happened: Joseph P. Cotton, chief of the meat division of the national food administration, called a meeting of western packers in San Francisco. As the food administration's representative, with authority under the food control act of congress, he entered into agreement with them that they should pay the producers of the west a price not less than the Chicago market price less one cent per pound. The federal live stock commission of California and the food administrator of that state participated in the conference.

This means that the minimum price for western hogs is now about $14.50 a hundred pounds. Under previous ruling of the food administration the Chicago price is $15.50, this figure having been arrived at on the basis of the present price of corn, the recognized hog feed staple of the middle west. It was calculated that between 13 and 14 bushels of corn are required to produce 100 pounds of pork, and that therefore the price of 100 pounds of pork should be fixed at the same figure as the market value of 13 to 14 bushels of corn.

Here is the wording of the agreement signed by Mr. Cotton for the food administration, and representatives of the principal packing companies doing business in the west:

"The food administration deems it imperative that steps be taken to increase hog production on the Pacific coast. In order that producers have confidence that hogs bred this spring may be marketed at a fair price, the administration hereby adopts the following minimum policy for the period during which similar minimums are in force in the middle west. The average price of packing hogs bought by packers at the terminal points of San Francisco, Los Angeles, Portland, Oakland, San Diego, Seattle, South San Francisco, Spokane and Sacramento will not be less than one cent under the food administration minimum effective on the Chicago market (such Chicago minimum now $15.50 per hundred). Any packer may make it a condition for the maintenance of the minimum that he shall charge any loss through condemnation by federal or municipal inspectors to the raiser or shipper."

Among the leading signers are the following packers or packing company representatives:

F. L. Washburn, Western Meat company; R. Scott, Cudahy Packing company, Los Angeles; H. L.

Continued on page three.

### WHAT A STOCK YARDS MAN SAYS

W. D. Roberts, president of the Spokane Union Stock yards, is not optimistic over the hog price agreement. Here is what he says:

"I do not think a worse thing could happen to this section, because the people of the east are in better shape to raise hogs at $15.50 a hundred than we are here at the same price, for much wheat is fed here. The top prices here are about $15.50 and down to $14.50 now. I hope that the packers here will see fit to keep up the present price, which is above the amount the agreement would permit."

### WHAT A PACKER SAYS

T. N. Conway, manager of the Carstens Packing company of Spokane, expresses various sentiments, as follows:

"This price puts Spokane on a market basis where we can get out to Chicago and the east with our product, in case there should be an overproduction, for the permission to purchase a cent a pound under the Chicago minimum, or $14.50 a hundred at present, would aid in paying the freight to the eastern markets. The packers will have to get together and agree whether they will absorb the loss of inspection or whether all will agree to charge it to the farmer or raiser.

"It appears to me that it is up to the food administration to say what the Chicago minimum shall be, as it will undoubtedly be based according to the price of corn, on which there is no limit. It takes 13 to 14 bushels of corn to produce 100 pounds of good pork. The price of corn has been left free by the government to be up or down so as to increase the production of hogs and cattle.

"If these 'cent-less-than-Chicago-minimum' prices should be carried out here it would retard the increase in the production of hogs in this section at the present time unless wheat prices should be lowered, which is not probable."

**Thrift and Patriotism** — **Two great lessons will be learned by the people of this country as a result of the war: Thrift and saving! Patriotism! The need and opportunity are both in our hands. Read on pages 14 and 15 of this issue how you can serve both yourself and your country—be both thrifty and patriotic.**

# Rule Should Work Both Ways

## The Prices on Farm Machinery Should Be in Same Ratio as Prices on the Products Raised by the Farmers




BICKLETON, Klickitat County, Wash., Jan. 8.—We have been having real spring weather for the last three weeks. Pioneers say they never saw anything like it. Grain, weeds and grass have grown luxuriantly; all fall sown grain is excellent. Pasture is fine, practically no feed has been given outside stock yet. There will be plenty of feed unless we have winter all next spring. Hay is about $20 per ton, when it can be bought. I believe a farmer can make a profit at that price, but would have to hold it over until spring and most of us need the money in the fall. I doubt if a cattleman could make a profit at that price unless he raised it himself; a sheepman could, if he did not have to feed too long. The farmers of this part are not satisfied with the price fixing at all; in fact, they are very indignant about it. They say when the government fixed the price on what was raised, they should have fixed the price on what we buy. I am in favor of fixing prices if it is on all principal articles, but is it justice to fix the price on farmers' grain and let the manufacturer of agricultural implements have full swing to raise the price on machinery, which they have done this year? It is a poor rule which does not work both ways. The price of combines is 20 per cent higher than last year and the farmer is almost compelled to buy them on account of shortage of labor. Fix the price on the articles that a farmer has to have on the same ratio as his wheat price and then he will be able to pay his debts and raise grain for the government. BERT F. FAULKNER.

### Crop Prospects Good.

WATERVILLE, Douglas County, Wash., Jan. 11.—The greatest problem that confronts the people of this county at present is how to handle the wheat next season with the prospects of no bags. The farmers are fully awake to the situation and I believe that they will meet the need of building elevators and small granaries. The most important world-wide problem in which this county is interested is the raising of enough wheat to supply their share toward feeding the allies next year. And, under that heading is the distribution of labor. The prospects for the crop at the present time is very enccuraging. There has been considerable precipitation and the soil is wet down over two feet. The winter has been very open so far, but there is so little winter wheat that the damage to it will be very small, comparatively. Feed conditions have been excellent so far; that is, as regards weather conditions. Feed is scarce all through the county and I fear will be more so before spring. Very few farmers are attending the special winter courses at the state college. Help is scarce and many can not leave the farm. H. E. LOTTIG.

### Labor Is Scarce.

DARRINGTON, Snohomish County, Wash., Jan. 16.—Public opinion as to the partial price regulations by the government is very favorable. This year hogs had to be fattened somewhat different than formerly. Shorts, small boiled potatoes and carrots, was the hog's bill-of-fare in this section with only a few exceptions where farmers are able to raise their own corn. The retailing price on cracked corn is five cents per pound at our local loading places. Wheat is $5.25 per 120-pound sack. This will make feeding corn or wheat prohibitive for feeding purposes. There has been growing weather for the last month with a temperature of from 54 to 56 degrees. This will help the feed situation considerable and not much hay will have to be shipped from east of the mountain. Floods did considerable damage in this section, not only to bridges and roads, but it washed considerably on improved farms. Practically all of the logging companies lost their bridges across the streams and are busy rebuilding and repairing. Labor is scarce for this time of the year.

C. B. NEIDERPRUN.

### Whatcom County Suffers.

FERNDALE, Whatcom County, Wash., Jan. 8.—This has been rather a bad winter for inhabitants here, though there has as yet been scarcely any cold weather. We have had a light fall of snow and rain followed by a "silver thaw," which broke off many tree branches and uprooted other trees. The damage to orchards was great, cherry trees being the most brittle, were injured to the greatest extent. The silver thaw was followed by a heavy rain for nearly 36 hours. The Nooksack river overflowed in many places. The condensary at Everson had to suspend operations for many days. The river broke through its banks about a quarter of a mile below Ferndale and flooded the entire Fertile Meadows district. No loss of live stock is reported though many people were compelled to leave their homes. Considerable damage was done to hay and oats, and the roads leading to Ferndale were washed out for nearly a mile in one place and cut into very badly in many others. It will be necessary for some farmers to move all their buildings back from the bank. Work on the roads and bridges is being rushed and the water is receding very rapidly.

MRS. JACK PLASTER.

### Sack Question Vital.

FAIRFIELD, Spokane County, Wash., Jan. 12.—A very important problem of local interest that should keep every grain farmer thinking pretty hard is the sack question for the coming harvest. A shortage of sacks is absolutely certain and other provision must be provided to care for the grain. So far this community hasn't done anything in providing means of storing the loose grain on the farms or at the shipping points. The very warm weather in December and the first week of January gave the fall sown wheat a fair start and with the present covering of snow it seems to be in a good way of making a crop. The chances are very good. Stock has done exceptionally well and it has taken very little feed to keep it in condition. Stock hogs have made the winter, up to the present snow, without being fed. The pea fields have furnished all their living and they are in fine condition. There are no farmers attending the courses or demonstrations at the state college from this locality.

ROY G. ADAMS.

### Frogs Are Croaking.

SOUTH BEND, Pacific County, Wash., Jan. 4.—The winter is continuing very mild. During December 31.13 inches of rain fell and the temperature averaged 45 degrees. Cattle are in excellent condition, the weather being very favorable to farmers and cattle growers. The frogs have begun to croak and it seems that we are to have an early spring. Many bushes and trees are showing green leaf buds and it is to be hoped that we get no severe killing frosts to injure the fruit. Dairy products are high, butter sells at 60 cents a pound in the local markets and eggs were 70 cents, but are dropping. Meat brings a good price. The most important problem of local interest here as elsewhere is the problem of food, although we seem to have an abundance. In this county we can get fish, clams, oysters, crabs and wild berries in quantities. Conditions are good for dairying and a great variety of fruits and vegetables can be raised here. The problem is to further stimulate the growing interest in raising home products and then using them. Already one of our three local trains have been taken off and shipping in foodstuffs will be more difficult in the future. An interest was taken in the series of agricultural lectures held last fall and a number of farmers visited Puyallup in the summer, but few if any have been able to avail themselves of the opportunity of attending the winter sessions.

MRS. WINNIFRED BUCKINGHAM.

### Would Unite Water Users.

NEPPEL, Grant County, Wash., Jan. 12.—The chief problem in the Moses lake district is the settling of the water rights to the satisfaction of the local land owner. There are several old established water rights on Moses lake. Personally, I was the first party to start appropriating the water according to the Pierce and Ballinger code. I am now endeavoring to draw all the parties, locally interested, into a Water Users' association, for the mutual benefit of all land owners on the banks of the Moses lake. This association, if maintained by the parties interested would assure the rapid development of the thousands of acres of alfalfa land now lying idle, caused by costly and useless litigation by two parties, one of them owning two-fifths of the land around Moses lake; the other litigant owns no land, but claims right to appropriate all the water of the lake with the exception of myself and a few others that have established rights of long record. The three-fifths balance of land is partly developed by homesteaders and actual farmers. The prospects for the 1918 crop is very favorable as weather here is open and mild and rains have saturated the ground, making a good reservoir of water for crops this coming season. Mild weather has been a large help in the carrying of stock over as but little feeding has been done to date. At this season most people are putting up their supply of ice, but the lake is still open and large flocks of geese are seen daily as they fly back and forth to the wheat fields east of the lake.

MARTIN PENHALLICK.

### At the Editor's Desk.

The Washington Farmer has received a copy of an unusual publication. It is entitled, "A Patriotic Bulletin," and is compiled and sent out by the state department of education. Mrs. Josephine Preston, state superintendent, for use in the public schools. The editor has seldom if ever seen a booklet containing so many up-to-date and rugged illustrations of patriotic documents and utterances. It is especially interesting in that it contains several of the most momentous documents and addresses of the present war, among them President Wilson's message to congress recommending that a state of war be recognized as existing between this country and Germany.


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# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 4 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF January 24, 1918

## Stockmen Appeal to Washington

### *Association Raises $20,000 to Finance Its Interests*

The delegates attending the twenty-first annual meeting of the American Live Stock association at Salt Lake City last week contributed a total of $20,000 to be used in furthering the work of the market committee, and in sending a delegation to Washington to take up with the higher officials of the government problems of vital interest to the live stock industry.

A significant incident of the raising of this fund was the refusal of the association to accept the subscription of $1000 by Louis F. Swift of Swift & Co., packers, to assist in the movement. The committee declined to accept the subscription to avoid embarrassment that might result through the acceptance of assistance from the packing industry, with which the stock producing industry has had more or less controversy.

**Packers Make Big Profit.**

Mr. Swift, in an address before the convention, stated that the company which he represented had made a profit of $34,000,000 during the past fiscal year. What purports to be a verbatim extract from his address follows:

"This profit has been stated to be $34,000,000, or 34 per cent on a capital of $100,000,000. This is hardly a fair way to put it, as all profits should be figured on capital and surplus combined, as both are being used in the business. Our surplus is $60,000,000, a total of $160,000,000. Figuring the profits on this comes to only a trifle over 20 per cent instead of 34 per cent.

"To earn $34,000,000 we had to do a business of $875,000,000. The increase in our volume of business has been due almost entirely to higher prices rather than to increase in tonnage. Swift & Co. paid $455,000,000 to live stock raisers during 1917. This was an increase of $141,000,000 over 1916.

"This profit figures include all profits from hides and manufactured byproducts.

"On the turnover the profit is less than 4 per cent or about ¼ cents a pound on beef and this is equal to about $1.50 a head in cattle. Of this profit of $34,000,000 you might say one-half is caused by unexpected advances in the market on product in the cellars. Such prices as 25 cents a pound for lard and short ribs have never been heard of before and sometimes there will come a decline in the inventory and we will need a part of this $34,000,000 to make up losses sustained by prices paid for live stock, otherwise we may be bankrupt. Consequently part of these profits are only paper profits. Our profits, if reduced to those of a business of small scale, would be equivalent to only $3400 on a business of $87,000. You do not call this too much. If the packers made no profit whatever it would not make any appreciable difference on the prices paid to producers for live stock or prices paid by the consumers for meats."

Edward C. Lasaler of the association's marketing committee made a vigorous appeal to the delegates to send a delegation direct to President Wilson with the troubles of the live stock industry, declaring that the food administration was failing to take action absolutely necessary for the maintenance of the industry.

**Administration Man Replies.**

Joseph P. Cotton of the meat division of the food administration replied to this suggestion.

"The food administration is trying to treat everybody fairly," said Mr. Cotton. "I am not here as your friend, because a food administrator can't be a friend to anybody. We have not gone blindly into our work, but we're trying to do a big job fairly. I admit we don't understand the stock grower, but we're trying to, and that's all any one can do. We have regulated the packer, and that's more than anybody else in the world ever accomplished before the food administration came into existence."

**What Is Stock Situation?**

The report of the market committee contained a comprehensive digest of the meat situation at the present time. The nine features of this part of the report follow:

"First—A tremendous shortage of hogs, a moderate shortage of sheep and liberal supplies of cattle in the United States.

"Second—The impossibility, owing to the lack of shipping facilities, of either Argentina's or Australia's supplies affecting for some time our markets for live stock.

"Third—Unusually large numbers of cattle and sheep in feed lots, and liberal receipts of fat cattle and lambs at congested markets, which are selling at heavy losses to producers.

"Fourth—A large crop of corn and, in some sections, of forage crops, which are selling at the highest prices ever known at this time of year, making cost of production of meat correspondingly high.

"Fifth—General disposition of producers last fall to accept without question the general representations of the government regarding the needs of increased production of all kinds of meat, and its assurance of a fair profit. This is shown by the unusually large amount of stock which was put on feed.

"Sixth—The probability of relatively better prices for live stock than for grain after the war, owing to the depletion of the herds of Europe and the conversion of grazing into grain raising lands.

"Seventh—Curtailment in domestic consumption of meat on both patriotic and economic grounds, the limited exports of beef, owing to lack of shipping facilities, and the growing danger that producers of beef and mutton will become discouraged on account of heavy losses, lose faith in the representations of the food administration and curtail production for next season.

"Eighth—The need of prompt action on the part of the food administration to avert this very thing.

"Ninth—The importance of a better understanding of producers' problems and of a more sympathetic attitude on the part of the public toward them."

All the old officers were reelected as follows:

I. T. Pryor, president, San Antonio, Texas; J. B. Kendrick, first vice president, Sheridan, Wyo.

Second vice presidents—C. M. O'Donel, Bell Ranch, New Mexico; M. K. Parsons, Salt Lake City, Utah; Wallis Huidekoper, Wallis, Mont.; Isaac Baer, Meeker, Col.; W. J. Tod, Maple Hill, Kan.; E. L. Burke, Omaha, Neb.; John W. Springer, treasurer, Denver, Col.; Samuel H. Cowan, attorney, Fort Worth, Texas; T. W. Tomlinson, secretary, Denver, Col.

The 1919 convention will be held in Denver, with the probability that the 1920 meet will be in some northwestern city, probably Spokane.

The meeting was a joint affair between the live stock association and the National Wool Growers' association. The latter transacted business, took part in the general joint convention and reelected last year's officers, as follows:

President, Frank J. Hagenbarth of Salt Lake City; A. J. Knolin of Kansas City, vice president; M. L. Powers of Flagstaff, Ariz., assistant vice president; F. D. Miracle of Helena, Mont., treasurer, and Dr. S. W. McClure, Salt Lake City, secretary.

The wool men raised $6000 for the Red Cross through the sale of a ram donated by the Wyoming Wool Growers' association.

## HORTICULTURAL MEET

### In Western Washington Feb. 14-15

The eighth annual meeting of the Western Washington Horticultural association will be held in the Arctic building, Seattle, February 14-15. Among topics to be discussed are the following: "Magnitude and Importance of the Horticultural Interests of the State," E. F. Benson, commissioner of agriculture; "Four Years' Berry Production Costs," L. M. Hatch, Alderton; "Mistakes in Potato Growing," C. B. Sprague, agricultural agent, Kitsap county, Port Orchard; "Relation of the Experiment Station to Western Washington Horticulture," W. A. Linklater, superintendent western Washington experiment station, Puyallup; "Putting the Horticultural Inspection Work on a Business Basis," M. L. Dean, commissioner of Horticulture, Olympia; "Drainage Problems," Floyd W. Rader, agricultural agent, King county; "Relation of Bees to Fruit Growing," Professor Trevor Kincaid, University of Washington, Seattle; "A Message From Nature's Woods," Stephen J. Harmeling, Vashon; "How Agricultural Fairs Can Benefit Our State," C. E. Flint, Blaine; "Nut Growing in Western Washington," A. A. Quaenberg, Vancouver; "Increasing Spraying Efficiency," Arthur Frank, plant pathologist, western Washington experiment station; "Growing and Marketing Grapes," Robert T. Reid, Bellevue; "The Value of Fruits and Vegetables in the Diet," Miss Elmina White, district home demonstration agent, Puyallup; "Between Producer and Consumer," J. B. Powles, Seattle; "Grading and Marketing Fruits and Vegetables in Seattle," E. S. Gill, secretary produce association, Seattle; "Relation of the Farm Markets Department to the Horticulturist," Asher Hobson, director of farm markets, Pullman.

**Bumper Potato Crop.**

Potato crops of England and Wales are turning out much better than was expected, the estimated production being 33 per cent greater than in 1916, and the heaviest crop since 1885. Over 3,300,000 tons are estimated for the season.

## No Minors Allowed

Three forceful articles dealing with primitive pioneer days in the Big Bend country, written by the "Bunchgrass Boy," will begin in the Farmer next week.

These articles need only to be mentioned to arouse an expectant interest, and every reader may be assured that that expectant interest will be more than satisfied.

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## Minimum Hog Price Is Fixed for Northwest

(Continued from page one.)

Kelley, for Wilson & Co., Los Angeles; I. L. Blum, Roth-Blum Packing company, San Francisco; C. Swanson & Son, Sacramento; W. O. Forsyth, Armour & Co., Spokane; C. C. Colt, Union Meat company, Portland; J. H. Talbot, Universal Packing company, Fresno; Charles S. Hardy Packing company, San Diego, and the Hauser Packing company, Los Angeles.

What will be the effect of this agreement on the hog producing industry of the west? The food administration says it is for the purpose of increasing production. Can the western grower produce pork with $2 wheat as his principal grain feed (or with barley or peas as a substitute) a cent a pound cheaper than the middle western grower can with $1.25 corn as his principal grain feed? Probably not, but this is not the most vital question. The most vital question is: Can the western grower make a reasonable profit on hogs under present western feed conditions if guaranteed $14.50 a hundred pounds?

Many answers are already being given to this question. There is wide difference of opinion. The food administration may get its increased production of pork, as it is to be hoped it shall. On the other hand, pork production may not be stimulated as desired. The possibilities are grave.

## Lewis County Pure Breeders.

The Lewis County Pure Breeders' club will meet January 26 in Chehalis.

The meeting will be in the nature of both a banquet and a business meeting.

The object of this association is that of promoting and encouraging the breeding of purebred live stock and all other animals and fowls, such as are and can be admitted to official registration. Membership is open to any resident of Lewis county who is the owner of one or more pureblood animals.

The association is unique in that there are no fees, dues or other such conditions of membership. Its work is carried on through voluntary contributions. The president is N. B. Coffman; vice president, F. M. Svinth, and secretary-treasurer, G. R. Walker. Mr. Walker is also connected with the Centralia-Chehalis fair in the capacity of secretary. Around 50 residents of Lewis county are members of this association.

## Yakima Farmers' Institute

Yakima is a scene of much agricultural activity this week. It is staging a mighty interesting farmers' institute, with a section for farm women and a corn show. J. N. Price, county agriculturist, is being assisted in the management of details by Lee M. Lampson, agriculturist for Benton county, and Roy P. Bean, agriculturist for the government, with supervision over the Tieton reclamation project.

W. S. Thornber, director of extension work at the State college of Washington; Professor Leonard Hegnauer, crop specialist for the college; Professor Heald, Miss Mary E. Sutherland, director of the college home economics department, and her assistant, Miss Edna Walker, besides H. E. Waterbery, Duncan Dunn, H. Stanley Coffin, Asher Hobson, director of farm markets for Washington, and others, are on the program for the five-day institute.

R. W. F.

## Crop Prospects Improve.

With the heavy rains and the open winter of the last few weeks the wheat farmers of eastern Washington are expressing greater optimism over the 1918 crop. Large acreage will be sown to spring grain, according to present indications. The fall acreage, owing to the unusually dry fall, is unprecedentedly low.

# Grant County Farmers Tell Their Needs

## *Find Inspiration in Newly Formed Agricultural Council Under County Agent Leadership*

At the organization of the Grant County Agricultural council recently a number of valuable farm pointers were given by men representing the different sections of the county. County Agricultural Agent H. W. Reaugh explained the benefits of such an organization and also stated that in many of the eastern states is was necessary to form a county council before a county agent could be secured. V. O. Patton, assistant county agent leader, was also present, mentioning the value of such an organization to help the farmers in selling and in buying and possibly in uiformity of breeding, thus helping them in the exchange of sires.

### Pump Irrigation Water 70 Feet From the Columbia

Representing the fruitgrowers of Trinidad, Steve McDonald said: "Our problems are possibly a little different from any of the localities, inasmuch as we have the irrigation proposition and fruitgrowing. We pump water 70 feet from the Columbia river to irrigate our orchards and have just put in new pumping machinery and oil engines this year. The problem of obtaining fuel oil for the coming season is the greatest important problem and we request that the fuel administration make an effort to see what can be done along this line. We have some woolly aphis and a few other diseases not very bad, but might be worse if we do not take care of them. We tried to get an inspector there and as long as we had a fruitgrowers' league it was all right, but when that fell through it practically ceased. We asked for an inspector this year, but none has been appointed. We need an inspector in order to have uniform fruit so that the reputation of the district may be maintained. I believe the council will be a great deal of benefit to the county if properly directed."

### Lost Money But Gained Some Paying Experience

Norman Johnson, representing the cooperative creamery at Quincy told of the difficulties which had to be overcome. The first was not being posted on creamery matters and allowing a promoter to come in and sell them a plant at twice its value and furnish them with a buttermaker who did not understand the business and who would run them into debt. "But," he continued, "this last year we have been successful in operating the creamery and have made back about half of what was lost the first year and have made good interest on the money we invested in the creamery. It is on a paying basis now and I believe they are a good thing for a community if people are interested in the dairy business. We are in the stock business more than in the dairy business. The people usually milk just during the summer while the grass is green and when it gets dry they discontinue milking. I believe it would be a good plan to have the cows fresh in the fall and then feed them during the winter months on such feeds as would increase milk production. I think it takes a little time to change the methods of handling stock, but do believe that people will change to dairying. In some localities they are keeping dairy herds on high priced grain and making a success of it and it is usually noticed that a community engaged in dairying is usually financially well fixed. If they feed cattle in other counties and make it pay I believe they can do the same in this county where the land is so much cheaper and there are many advantages that they do not have in other places. Expensive stables are not required as in some of the colder sections. As soon as silos come into general use the dairy business will be put on a much more substantial basis by producing cheaper feed. It will only be a matter of time until all will be using silos. What is needed now, is a few people to use silos in the county and then others will start to using them when they see their neighbors are making a success."

### Stick to Business Or Business Will Slip By

John Urquhart, representative in the legislature from Grant county, said it was the first time he had been away from home since last March, adding: "I find if you do not stick to your business your business will not stick to you very long." He gave his unqualified support to the agricultural council movement, and added: "We have to get down and grow more wheat and, in addition to that, we have to cooperate with one another. The purpose of organization is cooperation. I can not express my approval of such an organization as is contemplated here today, for I believe it will untimately be of untold value to this county. We must copy economic Germany, leaving out her political aspect altogether, copy economy in every particular, if we are going to succeed."

### Farm With About Half After You Are Posted

Martin Johnson, who represented the Neppel Producers' association, alluded to the benefits which had already resulted from the appointment of a county agriculturist, and said: "There are many problems confronting us that may be solved a little later on by such an organization. The main trouble is with buying and selling. When a person buys, as a rule, he buys at retail prices and very high ones at that, and when he sells, he sells at wholesale prices, and very low ones at that. This is the problem we must solve—that is, buying and selling. We have been organized for some time. This is a new country and productive under irrigation. We started to raise vegetables and general trucking and there was no market for anything of that kind in that locality, and ours was new to them and we had to go out and look up a sale for our produce, and we found it very difficult. It is the same as this creamery man spoke about. You can do it with about half after you are posted on the subject, but you have to study it over and go after it gradually. One thing just comes to my mind. Some time ago there were quite a number of farmers raising hogs. I had comething like 20 or 30. Fall came, we commenced to fatten them. They are fat and ready for the market and the market for hogs is high, but how can we get them to the market? No one comes around to buy them and we have not a carload to sell. This organization could probably help by getting the people together who wish to ship, and thus save considerable in transportation. Not only that, but they would then get the full value of the hogs at the market. We are not supposed to feed wheat to hogs and that is all we can get. We can not possibly feed anything else, as we can not get it. For the last three or four weeks we have been unable to get anything except wheat. We find that it is necessary to feed wheat against our will, because we can not starve them when we are starting to fatten them. We also need assistance in being able to purchase our feed in carload lots."

### Raise More Chickens Without Costing More

Ed Dunham, representing the Wheeler Cooperative Union, said he was from a wheat-growing section, adding: "Johnson is from Neppel and from where I live we could work together very nicely and work to advantage. I am satisfied we could raise more stock and wheat. We could exchange with our neighbors on the lake. We could exchange dry feed for alfalfa and be mutually benefited. We are short of meats and fats and our government is asking us to conserve these. There is not a farmer in the county that has as many chickens as he could raise without costing a cent more than to raise what few we do. I told my wife every chicken she hatched off this spring would be worth at least $1 by Christmas. They are worth more than that now.

"Our serious trouble is going to be hired help. We depended on our local boys helping us and they have enlisted or been drafted. Such an organization can help out a great deal in helping solve the labor situation. The people I represented told me to put the labor situation before this organization strong."

### How to Raise Live Stock Having No Pasture

A. T. Hampte, who represented the Steamboat Rock Community Organization, said: "The place where I represent does not amount to very much—a little three-cornered piece of ground 1400 feet high, representing 3000 to 4000 acres. The main problem with us is to know just how to cultivate the soil to produce what we want and what time to do it. As far as a market is concerned, we have a market for most everything we have raised, such as hogs, cattle, etc. The main trouble in raising live stock is that we have no pasture. It is costly to raise hogs, but we do it to a great extent."

### Bring Pressure on Those Who Are Not Spraying

H. E. Windebank, who represented the fruitgrowers at Grant Orchards, declared that the biggest problem for them was to get sufficient water for irrigation and the next of importance was to keep the orchards clean by means of spraying.

"The most of the orchardists," he said, "have thoroughly sprayed their orchards and at the proper time but a few have not. By means of an organization we could bring pressure to bear on those who are not spraying and make them spray. Transportation is a serious factor in orcharding. Possibly this organization could assist in the local distribution of produce and fruit. I am very much pleased to see something like this started and I am glad at any time to do anything I can to forward its development. I am sure it would be a benefit to us."

### Swap Work Profitably Under Right Organization

James Hill of Hartline said the main proposition in his locality was the labor situation. He said: "While I do not think it is as serious as we take it to be, for in our county we could exchange work. North of the Hartline country it is possibly a week or two weeks later than on the flats and we could exchange after our work is done and help them out. That would work all the way down to the south line of the county. We could help them out and they could return it. In other words swap work. Another proposition is wireworms. That cuts down our yield more or less each year, and another proposition is conservation of moisture.

"If we could conserve moisture so we could sow fall wheat and get it up, we could produce from five to 15 bushels more per acre each year than we do under the present system. If we can not get moisture enough in the fall and do not get it up until spring we do not have as long a season to harvest in. If it is all spring wheat, it practically all comes at the same time, but if we could sow half in the fall and the other half in the spring we could carry it on in a more extensive way. I believe the varieties of wheat are quite an important factor in this wheat-raising game. We have mostly, in our neighborhood, bluestem and early baart. I think this association could get localities to get the same class of live stock so sires could be exchanged. In part of the county we have three or four farmers' organizations, and each one seems to have a different breed. Three organizations bought three different stallions the same year, at an approximate cost of $2200 each. This year I found it necessary to change, which cost me about $1350. All this expense could have been eliminated if we could have made an exchange."

### Have Big Turnout at Low Gap Community Center

H. M. Perry, who represented the Low Gap Community organization, said: "I am to represent Low Gap, away out in the middle of the sage brush, and there are a very few people. We are organized out there and are known as the Low Gap Community Center. We did it in the first place for the social benefit. We lived so far apart very few of us were acquainted with each other, although many of us had lived there for 10 years. We have derived more benefit from this association than you could imagine. We meet every month and there are as many as 150 there every time. It is pretty hard for the agriculturist to see us or to get acquainted. He meets us there at the meetings and we get information from him and get different ideas exchanged. Practically all are interested in the same thing—live stock, creameries and a small amount of grain raising. All kinds of cattle are raised there. Some have Holsteins, and others Herefords and Shorthorns. The general problem with us is weeds, wind and dry weather. Woolly sheep will do the work with the Russian thistle. I kept 160 acres clean with 100 head last year and did not have to work the ground. It has blown but very little either. Heretofore I have had to cultivate my summer fallow regularly to keep the weeds down. This continued cultivation causes the land to blow, which is a serious problem to control. Sheep do this work and have also been a good paying proposition. The wool of the sheep fenced the ground. I move the fence from one quarter to another every year, so the sheep will keep the summer fallow clean as I summer fallow 160 acres each year."

> To The Washington Farmer: Enclosed please find $1.75 for four new subscribers, also four cooperative certificates filled out. Please send the paper as soon as you can. I am very much pleased with The Washington Farmer.
>
> A. C. MOE.
>
> Vashon, Wash.

### Finds Russian Thistle Makes Good Cow Feed

J. H. Smith, who represented the Green Valley Farmers' union, said: "I was very much interested in what Mr. Perry said concerning the use of sheep in keeping the weeds down on summer fallow. His interests and mine seem to be along the same lines. I would not say that weeds bother us to any great extent in wheat raising. Of course, we would be bothered if they were not taken care of. Cattle will keep them off, but sheep will keep them off much better as they will eat mustard when cattle won't. I think we have profited by the Russian thistle. It makes good cow feed and good fertilizer if plowed down at the right time. I notice we are getting better crops as we are working the ground better and do it at the right time. I have a few sheep now, but am going to get some more. The cattle and sheep together have worked so hard in keeping the weeds down that I do not consider the weed problem a serious one.

### Other Speakers Commend the New Organization

Nathan A. Lewis, who represented the Franchman Hill community organization, said that a number of settlers are making a success of their farming in that dry section of thec ounty. He continued: "We believe in plowing our land and cultivating it with a weeder one or two times, and then cut the remainder of the weeds off with a hoe. An organization of this kind will undoubtedly be of much assistance to the farmers in our district."

Mr. Huffman, who represented the Quincy Farmers' union, spoke of the value of the proposed organization and referred to the war and the necessity of raising more wheat to win the war.

Wendell Phillips of Quincy told of the benefits which he had obtained from the farmers' union elevator, which is a cooperative organization, and added that there were many things the county council could do "if the farmers would stay together, but there is the problem, will they stay together?"

Rev. H. M. Course of Neppel said he was proud of being a farmer as well as being a preacher, that nothing can be accomplished without organization.

Mrs. H. W. Mangold pleaded for quality, that more money could be obtained and more satisfaction derived from quality produced.

Mrs. J. Q. Smith and Mrs. Daniel T. Cross also spoke of the need of organization in promoting women's work on the farm.

### Institute at Quincy.

Notwithstanding the delay in trains there was a good attendance at the institute arranged by County Agriculturist Reaugh at Quincy, Wash., the first week in January. The institute was thoroughly advertised and the three speakers made a good team. Dr. S. B. Nelson took up the diseases of live stock, W. K. Whittaker, poultry, and Professor William Hislop, head of the live stock department at Pullman, also spoke.

**Ask the State College.**

When problems arise concerning live stock, poultry, field crops, farm buildings, machinery—anything pertaining to the farm, in fact, remember that the state college is conducted to help solve your problems.

# Farmers Ready to Do Their Part

## *Will Not Hesitate to Work From 14 to 16 Hours Daily if Necessary*

**What are the plans of the farmers of the state of Washington as to food production during the coming season? In answer to this question replies continue to be received. This is the third instalment of letters and of a summary of the coupons returned on this most important question:**

To the Editor of The Washington Farmer: During the busy season it may be necessary for us to use our daughters and wives to assist in caring for our crops. As for ourselves and boys, we will not hesitate to work from 14 to 16 hours daily when necessary, to help win the war. COATE BROS.
Trout Lake, Wash.

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To the Editor of The Washington Farmer: Almost all the farmers of this section are running short-handed. I fear we will be very short this coming summer. As to exchange work, it is being done in some sections of the country. The women and young folks have not made much of a showing around here, but we may have to call on them later. EUGENE LARSEN,
Chehalis, Wash.

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Here is a summary of the coupons received during the week.

George J. Cannon, Buckeye: MORE wheat, oats, corn, seed potatoes, peas, beans, vegetables, hay, beef cattle, Berkshire swine, carrots, rutabagas, silage. LESS barley, rye, sugar beets, fruits, horses, dairy cattle, poultry, mangels, turnips, artichokes.

Chris Anderson, Danville: MORE wheat, barley, corn, potatoes, peas, beans, vegetables, hay, horses, beef and dairy cattle, swine, carrots, rutabagas. LESS oats, poultry.

J. M. Pulliam, Clayton: MORE potatoes, peas, vegetables, hay, dairy stock, swine, poultry, carrots, turnips.

C. Ham, Coulee City: MORE wheat, potatoes, beans, fruits, hay.

T. M. Anderson, Northport: MORE wheat, oats, barley, rye, corn, potatoes, peas, beans, sugar beets, vegetables, hay, dairy stock, poultry, carrots, mangels, rutabagas, turnips, artichokes.

Henry Metzger, Carson: MORE wheat, corn, hay, dairy cattle, swine, carrots.

J. W. Shipley, Underwood: MORE fruits. LESS hay.

J. L. Sparling, Kelso: MORE wheat, peas, hay, beef cattle, poultry, carrots, mangels. LESS oats, barley, potatoes, vegetables, fruits, dairy cattle.

E. D. Paul, Trout Lake: MORE wheat, oats, vegetables, hay, swine, poultry, carrots. LESS potatoes, dairy cattle.

L. G. Shelton, Shelton: MORE wheat, corn, peas, beans, dairy cattle, swine, carrots, mangels, rutabagas, silage.

T. D. Adams, Centerville: MORE wheat, rye, beef.

Roy Adams, Fairfield: MORE potatoes, beans, horses, swine, poultry; LESS wheat, oats.

John T. Sinclair, Rochester: MORE wheat, oats, corn, potatoes, peas, beans, sugar beets, vegetables, dairy cattle, swine, poultry, silage; LESS hay, horses, beef cattle, sheep, mangels, rutabagas, turnips, artichokes.

Henry Vanderscheid, Addy: MORE corn, potatoes, vegetables, hay, dairy stock, sheep, swine, poultry, mangels, rutabagas, turnips.

J. C. Cook, Spring Valley: MORE wheat, barley, beans, horses, carrots; LESS oats, potatoes, fruits, hay, beef cattle, swine.

J. A. Wilson, Rosalia: MORE wheat, corn, potatoes, hay, beef cattle; LESS oats, fruit, horses, dairy cattle.

N. W. Akers, Rosalia: MORE oats, peas, hay, beef cattle; LESS wheat, potatoes, dairy cattle.

David Camp, Rosalia: MORE wheat, oats, hay, horses, beef cattle, swine.

J. R. Beutel, Outlook: MORE wheat, corn, potatoes, fruits, hay, beef cattle, sheep, swine, poultry; LESS dairy cattle.

F. W. Massie, Curlew: MORE wheat, barley, corn, vegetables, hay, horses, beef cattle, sheep, swine; LESS oats, potatoes, poultry.

S. L. Busby, Outlook: MORE wheat, potatoes, peas, vegetables, fruits, hay, beef cattle, sheep, swine, poultry; LESS corn, beans.

D. C. Mathews, Sunnyside: MORE wheat, oats, barley, horses, swine, poultry; LESS potatoes, vegetables, fruits, hay.

V. L. Bevington, Chehalis: MORE wheat, rye, hay, dairy cattle, silage; LESS oats, corn, potatoes, beans.

George Myers, Espanola: MORE wheat, oats, barley, potatoes, horses, beef cattle, swine, poultry.

H. S. Findley, Cheney: MORE wheat, oats, potatoes, peas, hay, horses, beef and dairy cattle, poultry, carrots, mangels, turnips, silage; LESS swine.

A. G. Barger, North Bend: MORE wheat, oats, rye, corn, potatoes, peas, beans, vegetables, fruits, hay, dairy stock, swine, poultry, carrots, mangels, turnips, artichokes; LESS barley, sugar beets, horses, beef cattle, sheep, rutabages, silage.

Otto Jacobs, Rosalia: MORE wheat, oats, potatoes, poultry; LESS beef cattle, swine.

Coate Bros., Trout Lake: MORE wheat, beef and dairy cattle, oats.

Fred Stutler, Leland: MORE potatoes, peas, beans, hay, dairy cattle, swine, silage; LESS poultry.

Matt Crocker, Centerville: MORE potatoes, wheat, barley, peas, fruits, hay, horses, beef cattle, swine, poultry, rutabagas, turnips.

P. J. Arkenson, Quilcene: MORE oats, corn, peas, sugar beets, hay, carrots, mangels, rutabagas; LESS potatoes.

George Hendricks, Dabob: MORE wheat, oats, barley, potatoes, peas, hay, beans, vegetables, fruits, dairy cattle, swine, poultry, rutabagas, silage; LESS corn, carrots, mangels.

C. J. Nailor, Chimacum: MORE oats, dairy cattle.

Enoch A. Dorf, Ferndale: MORE oats, potatoes, peas, hay, dairy cattle, swine, poultry, mangels.

T. B. DeShazer, Lowgap: MORE hay, wheat, peas, beans, beef and dairy cattle; LESS rye, potatoes, horses.

W. F. Darby, Montesano: MORE wheat, oats, peas, beans, hay, dairy cattle, poultry, rutabagas, silage; LESS potatoes.

J. W. Clise, Redmond: MORE wheat, oats, corn, potatoes, vegetables, fruits, dairy cattle, poultry, carrots, mangels, rutabagas; LESS hay, swine.

Reade M. Young, Pullman: MORE oats, barley, corn, potatoes, peas, beef cattle, sheep, swine, silage; LESS wheat.

Henry Bouchard, Tono: MORE oats, barley, corn, potatoes, peas, beans, vegetables, hay, poultry, carrots, mangels, silage.

M. O. Dayton, Goldendale: MORE wheat, barley, potatoes, peas, vegetables, sheep, swine, carrots; LESS oats.

William Wuchman, Centerville: MORE wheat, oats, barley, corn, potatoes, vegetables, hay, horses, beef and dairy cattle, swine, poultry, carrots, rutabagas, turnips.

William J. Leonard, Pomeroy: MORE wheat, corn, potatoes, hay, beef cattle, sheep, swine, poultry.

G. A. Marshall, Twisp: MORE hay, horses, dairy stock.

Ernest Pries, Bridgeport: MORE potatoes, vegetables, poultry, carrots, mangels, rutabagas; LESS swine.

G. D. Banks, Quincy: MORE barley, potatoes, beans, vegetables, hay, swine, poultry; LESS wheat.

James Strouf, Stratford: MORE wheat, fruits, hay, horses, dairy cattle; LESS corn, potatoes, vegetables, swine, poultry, carrots, mangels, rutabagas, turnips.

L. Wilmer, Hartline: MORE wheat, potatoes, fruits, hay, horses, beef and dairy cattle, sheep, swine, poultry.

P. N. Campbell, Wapato: MORE wheat, barley, corn, potatoes, hay; LESS alfalfa.

C. M. Lelt, Huntsville: MORE wheat, peas, beans, hay, beef and dairy cattle, swine, poultry, carrots, mangels, silage; LESS oats, barley, rye, corn, potatoes, sugar beets, vegetables, fruits, horses, sheep, rutabagas, turnips, artichokes.

H. O. Mides, Fairfield: MORE wheat, potatoes, beans, horses, swine, poultry, turnips; LESS peas.

J. T. Heizelmann, Krupp: MORE wheat, potatoes, peas, vegetables, horses, beef cattle, swine, poultry.

Eugene Larson, Chehalis: MORE wheat, potatoes, vegetables, dairy cattle, sheep, swine, poultry, kale.

J. K. B. Anderson, Ferndale: MORE oats, peas, beans, vegetables, hay, dairy cattle, swine, poultry, carrots, mangels, silage; LESS potatoes, fruits, horses, beef cattle.

Barbo Brothers, Bellingham: MORE wheat, oats, potatoes, beans, beef cattle, sheep, poultry, turnips; LESS horses, carrots, rutabagas.

L. Beebe, Bellingham: MORE oats, corn, potatoes, vegetables, hay, swine, carrots, mangels; LESS beef and dairy cattle, poultry.

George Nolt, Bellingham: MORE oats, rye, corn, peas, hay, poultry, carrots, mangels, silage; LESS potatoes, vegetables, fruits, swine.

Warsing Brothers, Goshen: MORE wheat, peas, dairy cattle, sheep; LESS barley, potatoes, hay, swine, poultry.

C. E. Barnes, Bellingham: MORE oats, peas, hay, dairy cattle, swine, mangels; LESS fruits, poultry.

William Wolfrum, Davenport: MORE wheat, oats, barley, swine, cattle, beans, potatoes.

Charles Schell, Cheney: MORE wheat, potatoes, beans, vegetables, hay, horses, dairy cattle, swine, carrots; LESS poultry.

# High Privates to the Front

## *Volunteer Patriotic Campaigns Now Are Government Essentials*

The war has brought high privates to the front. The Red Cross and the Y. M. C. A. are war department essentials. The bugle call has gone forth from every department of the government for whole-hearted moral support from all the people. This moral support is manifesting itself in volunteer patriotic organizations, under the ablest leadership, and is resulting in active volunteer participation in war preparation and war prosecution.

The food conservation campaign, the Liberty bond campaign, the war thrift campaign—these volunteer organizations, led by the corporals, the captains, the generals and the commanders-in-chief, are as necessary as are the government departments themselves.

The secretary of agriculture has his double in food conservation, who thinks and plans and acts in terms of food conservation, and must he not at once have his double in stimulating to the utmost food production?

Constrained by this necessity of increased food supplies the telegram was sent to President Wilson, urging the immediate appointment of a national wartime food production administrator. A copy of this telegram was sent by the Farmer also to persons of prominence in different parts of the country.

Governor Arthur Capper of Kansas, than whom there is no more earnest evangelist of greater food production under better farm conditions, writes:

**Governor Capper's Letter.**

To the Editor: Your letter of December 31 was duly received and I have read with much interest the clippings enclosed with reference to your campaign for increased food production. I am in full accord with the movement and for several months I have been doing everything in my power to arouse our people to the necessity of raising every possible pound of foodstuffs. I have also laid before the authorities at Washington the difficulty we will encounter in harvesting these crops, once they are planted and matured, if the farms are stripped of their experienced farm labor. To that end I have urged the liberal application of the exemption law with respect to experienced and trained farmers. The farm labor problem is one of the most serious we shall have to solve in the next year or two. ARTHUR CAPPER.

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Hon. Wesley L. Jones, U. S. senator from Washington, takes a broad view of the situation, and looks forward to possible conscription of every man in the country to be put where he will do the most good. Senator Jones writes:

**Senator Jones' Letter.**

To the Editor: Your favor of December 31 with reference to more effective work along agricultural lines at hand.

The problem is a very serious one, but it is not the only serious problem in connection with the prosecution of this war. I am on the committee investigating the activities of the shipping board and I have been impressed with the supreme importance of shipbuilding and the difficulties in securing labor and carrying it on properly. While it is true that we must raise an abundance of food for our soldiers and for the allies it is also true that this food must be transported to them three or four thousand miles. We may raise an abundance of food, but if we do not get it to them they are as bad off as if we didn't raise it at all.

The production of food, of course, is supremely important and it is also supremely important to get the food we raise where it is needed. The more we study the dependence of one industry and one product upon another industry or line of action, the more we are forced to the conclusion that no one thing is really supreme, but that several lines of activity are absolutely essential to success in this war and that the failure of any one will nullify or make ineffective all the others.

I want to do everything that I can to encourage and promote agricultural development and also make certain that all other essentials are properly promoted.

I sometimes think that the best way to carry on this war would be to conscript every man in the country, old and young, and then authorize some authority to place them wherever their services will do the most good. It looks as if this may be about the only way that will bring victory to our arms.

W. L. JONES.

---

Lynn J. Frazier, known as the farmer governor of North Dakota, and put into office by the uprising of the farmers of the state through the nonpartizan movement, writes:

**Governor Frazier's Letter.**

To the Editor: Your message sent to the president provides the means which I believe would be a great assistance in the increase of food production for next year. I have called a special session of our state legislature for the special purpose of providing seed-grains to the farmers who are unable to procure seed on account of failures of crop.

LYNN J. FRAZIER.

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J. Ross Carpenter, secretary of the state board of farm commissioners of Wyoming, writes:

**J. Ross Carpenter's Letter.**

To the Editor: Your letter of the 29th addressed to the commissioner of agriculture, has been referred to this office since there is no agricultural commission.

We have read very carefully your enclosures and thoroughly agree that the situation you set forth is typical of the conditions here in our own state. For us the labor question promises to be a serious one the coming season.

We heartily indorse the action you are taking with reference to getting some big man to assume the duties of food production administrator, and shall be glad to do anything possible to assist with the work. We are referring your communication to the state council of national defense.

J. ROSS CARPENTER,
Secretary.

---

**Hooverize on Entertaining.**

The White House has cut out official receptions and banquets for this winter, and cabinet families have followed suit.

### WHAT IS YOUR UTMOST?

Are you planning to raise more or to raise less of wheat, oats, barley, rye, corn, potatoes, peas, beans, sugar beets, vegetables, fruits, hay, horses, beef cattle, dairy stock, sheep, swine, poultry, or for feed carrots, mangels, rutabagas, turnips, artichokes, silage?

Please fill out this coupon, sign your name and postoffice address and mail to the Editor of The Washington Farmer, Spokane, Wash. Your name will be held in strict confidence if you so request.

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## Prepare to Store Your Grain

Producers of wheat, oats and barley face a necessity this year that is somewhat new in the northwest, that of grain storage. There are no sacks, if present indications are to be relied upon. Calcutta still produces jute for their manufacture, but the ships that would transport this material, either raw or manufactured, are carrying war materials instead. Available sacks are requisitioned by various governments to put dirt in for fortification purposes, or other war uses. The grain farmer must, therefore, figure on handling his 1918 crop without sacks, and that means handling and storage facilities for grain in bulk.

The first problem, and perhaps the most vital from the standpoint of the individual farmer, is that of handling and storage facilities on the farm. Instead of sacks to be sewed and piled on the ground, bins or granaries or wagon tanks must be ready this year. The character of these containers is something that can not be specified for all farmers. Some will find it advisable to build of one kind of material and of one style and capacity; others will have other needs and other means of filling them. For some, temporary structures will be adequate and satisfactory. For others, permanent equipment will be required. For some, lumber may be readily available and the best and cheapest thing to build of. For others, concrete may be best suited to the needs. For some, the equipment may properly be a small storage bin at each setting in the field, with one or two tank wagons for hauling at leisure. For others, it may be wisest to have one central storage warehouse on the farm with tanks to haul direct from the machine to this central storage. For others it may be wise to have enough tanks available to haul direct to the warehouse at the shipping point.

Every man must decide these things for himself; but unless he wants to pay ten or more cents a bushel for sacks, and then run a risk of not having a supply when the harvest season comes, he must prepare in some way for bulk handling.

The warehouse and elevator situation at the shipping points and large terminals presents a grave problem. It is something for the farmers to watch constantly. Farmers should exert their influence at all times to insure such facilities in their own sections and to induce the preparation of adequate elevators at the terminals, but the farmer's first problem is at home. And now is the time to be solving that problem. It will not do to wait until grain is ripening or harvest nearly on.

## Land Bank System Sound

As we reported last week, congress has passed the bill authorizing Secretary of the Treasury McAdoo to purchase $100,000,000 of farm loan bonds during the current fiscal year and a like amount if need be next year.

This wise action lifts a cloud off the farm loan system and insures continued growth.

As the Wall Street Journal points out in a friendly article, government war borrowings and increased rates of interest on all classes of loans now being put out had made it impossible to sell farm loan bonds to the general public in sufficient quantity to meet the demands of farmers' loans from the 12 land banks.

The difficulty was a general lack of demand for all kinds of securities, however inviting in ordinary times. As these bonds are free from all forms of government taxation, including federal income tax, and also are legal for investment by life insurance companies and savings banks in most states, in normal times it would be an easy matter to sell them in unlimited amounts.

Enemies of the system tried to undermine public confidence by questioning the constitutionality of the farm loan law, but that flank movement failed when the attorney general of the United States, acting for the government, and Hon. Charles E. Hughes, the republican candidate for president in 1916, acting for buying bankers, approved the constitutionality of the act and the validity of the provision exempting the bonds from taxation.

Up to November 1, 1917, the open bond market had bought $21,500,000 worth of these farm loan bonds, and undoubtedly there will still be a considerable demand for them in spite of war-time conditions.

## Many-Sided Problem

A New York statistician has figured it out that the 108,000 horses in that city eat enough grain to feed 500,000 people, and he argues from that calculation that New York ought to dispose of its horses and use auto trucks in their places.

He says that statistics compiled by the United States department of agriculture have shown that it requires four acres of cultivated farm land to produce enough grain to feed a horse for one year. This estimate pre-supposes a fertile grade of land in a good farming locality; in poorer sections more land would be needed.

On the minimum estimate it is figured that 432,000 acres of land must be cultivated yearly just to feed the horses owned in that city. On the basis of 100 acres to the farm it will be seen that 4320 farms or their equivalent are entirely devoted to producing feed for horses. Taking an average of five persons to the average farm household, 21,600 people, or enough to make a fair sized city, devote all their attention to the production of grain for this purpose.

The New York man who did all this figuring showed his calculation to the federal food controller at New York, who promptly agreed with him that the horses should be discarded.

It all seems a very clear case until we remember that other government officials are giving conflicting counsel.

The director of the U. S. bureau of mines says there is danger of a gasoline famine, and we are bidden to conserve the country's supply of that power. But auto trucks require gasoline.

And the gentlemen in charge of the sale of Liberty bonds and thrift stamps tell us that we ought not to buy anything we can possibly get along without buying. They say it takes war materials to make automobiles and auto trucks, and the labor engaged in that way would better be working in shipyards, munitions factories, coal mines, etc., and the money spent by the buyers ought to be invested in Liberty bonds and war certificates.

There is further the humane consideration. What is to become of the 108,000 horses that New York is urged to cast out of its city limits? The city might sell them, but that transfer would not stop their eating grain. New York has an active and vigilant Society for the Prevention of Cruelty to Animals, and that organization would surely be heard from if the city government contemplated the wholesale slaughter of its cast-off animals.

So we see this is a many-sided problem, and it is dangerous to jump at conclusions.

The flouring mill at Dayton, is experimenting in a new industry—the making of barley flour. The output is small and the product is being tested as to its baking qualities and food value. It may prove a palatable and nutritious substitute for wheat.

The loyalty of the granges of the state was illustrated recently when a conference of all the Spokane county locals went strongly on record as determined to do everything in the power of the order to increase the production of all things that tend to aid in winning the war.

If Chicago is to be a "primary, interior market" for the determination of the price of northwest wheat, why not make Portland a "primary interior market" for the determination of the price of Iowa corn to the farmers of the northwest, a correspondent writes to inquire. We do not know.

## Washington Gleanings

Mr. and Mrs. Robert Fredlund of Chehalis have sold out their interest in the Avon dairy to Carl Johnson for $10,500.

Merrill, the 14-year-old son of Mr. and Mrs. C. E. DeBow of Prosser, last season raised 1050 pounds of beans on .47 of an acre of ground.

The Farmers' union of Albion has elected the following officers: Charles Bryan, president; James Christopher, vice president, and Edward Moyes, secretary.

The recent warm weather, which has been succeeded by a cold snap and snow, hurried along the spinach and onions and heavy shipments of these vegetables were made from Walla Walla.

A resolution has been adopted by the Whitman county farmers' union in which it is urged that the farmers, in so far as is possible, bulk their grain. An effort will also be made to bring the price of sacks down to a more reasonable figure.

Vernon Robinson and Harry McGrunn, having entered into a partnership, have bought 2860 acres of land situated between Linn and Ritzville. About 2500 acres are in cultivation to wheat. Live stock and machinery with 1300 acres of summerfallow were included in the deal, the total consideration being $120,000.

Six cars of apples billed to cross the continent under a test by government agents as to the best means for shipping fruit in winter left Yakima recently. Each car was equipped with different methods of heating and insulation and had 10 thermometers, from which readings will be made every few hours by the men in charge.

D. A. L. Melander, professor of entomology and head of the department of zoology of the state college, has been designated by the United States bureau of entomology as project leader in entomology in this state, the work outlined to be undertaken cooperatively between the federal bureau and the state college extension service as a war measure.

## What Others Say

Dakota Farmer: Sunshine in the hog house means healthier and more profitable pigs.

Kimball's Dairy Farmer: What the milk producer must learn is that there are other markets for milk except the one which he has been accustomed to supply.

Hoard's Dairyman: It seems to us at times that there is only a small percentage of men who consider the character of cows they are keeping and the importance of raising the kind of roughage which requires the purchase of but little mill feed.

Wallace's Farmer: The problem of feeding almost half the world is up to the farmers of the United States. If we are to solve it satisfactorily, and avoid a world famine, there must be a very real and thorough mobilization of our agricultural forces, and it must be handled in a practical, and not in a theoretical way.

# Tractor Is Outstanding War Factor

## *To Speed Up Food Production on Farms as Well as to Speed Up the Fighting at the Front*

The tractor has become a great outstanding factor in the war, both on the firing line and in the way of hauling supplies to the firing line. Likewise the tractor is becoming more and more an outstanding factor in the farming industry. On thousands of farms and in many orchards the tractor is solving the problem of greater acreage and bigger crops with less help. Adapted to the farm and properly handled, the tractor means greatly increased production, simplifies the help problem, lowers the cost of plowing, seeding, harvesting and hauling.

With machinery, the factory does in hours what handwork would require days and perhaps weeks to do. The farm is a factory. The profits of a factory depend largely upon lessening the cost of production. This is just as true of the farm as of the factory. If proper machinery enables the factory to save time and human labor, has not machinery a similar mission on the farm?

Every farmer who has one or more boys ready to answer any future call to arms, has the deepest and most profound interest in the winning of the war. The sooner this great conflict is won, the less is the probability that these sons of the farmers will be sacrificed. A prolonged war means untold sacrifice. As week by week the war is brought home to the farms of the country, farmers become more and more concerned regarding all the means of carrying on that war. Guns and cannon, ships and aeroplanes become a part of their daily thoughts and yet the success of all these warlike instrumentalities depends upon the men behind the guns. Due efficiency of the men behind the guns depends upon energy-producing food and the supply of food more and more depends upon increased food production.

It is becoming more and more evident every day that nothing is more vital to the speedy winning of this war than big farm crops. It is up to farmers of the great west to raise the surplus of food for European as well as for American fighting forces. To speed up production it is up to every farmer to employ machinery to the greatest practicable extent and machinery of the right kind will make it possible for him to plow faster, seed faster, harvest faster—doing a dozen and one of the activities of the farm more quickly and with less hired help.

The first consideration of keeping the farms of the country up to their highest level of production is the manpower available. This question is becoming more serious with every recurring draft. A marked farm labor shortage existed for the 1916 harvests before the first draft was made. Last summer this shortage had become even more acute. Next spring's work can not be done even up to the level of former years with the manpower now in sight if farming methods remain unchanged. Not only is the usually vast army of floating labor of pre-war days absorbed, but many thousands of farmer boys have been enlisted in one or another of the industries of war. How shall the great grain states prepare for the harvest of 1918? What is the answer to this shortage of farm labor? This is a hard question to answer because so much depends on the viewpoint of the man who is face to face with it.

One thing is reasonably sure, that is that every man who farms together with what help he will have can with improved methods of machinery, double or treble or quadruple what he has heretofore done. Lost time is a tremendously important factor and this should be made to cover not only the idle time of men, horses and machinery, but also of idle land capable of raising profitable crops. Some of the old methods of farming will have to be discarded in the pressure that is brought to bear upon every worker through the exigencies of preparing for and carrying on America's part in the great war. The horse has his place on the farm, but the time is at hand when he is dividing honors with the machine. It takes more men to handle the same amount of horsepower in horses than it does to handle horse power in farm machinery. Even if horses were plenty and one man could work 10, 20 or 30 horses in farm work, this matter would be different, but on the average it takes one man to handle from two to six horses. Hence it is that every farmer should aim to get out of the two-horsepower class into the 10 or more horsepower class, so far as his conditions warrant.

As labor shortage has increased, the demand for the one-man tractor especially has grown. Such an outfit enables the farmer himself to multiply many times the results of his own labor with the aid of the machine. Estimates received from tractor owners show that the one-man tractor is taking the place of from 2 to 16 or more horses, depending on the size and power on the drawbar of the machine operated.

When buying a tractor it is well to be sure that the machine selected is large enough for your needs. It is better to have one that will develop more power than you feel you will actually need than to invest in one that may not develop enough. Aim to have an abundance of power.

It is the experience of those who have farmed one or more seasons with a tractor that it pays to have the machinery that is made to work with it. The tractor plow, for example, may be operated from the seat, has the correct draft and is adjusted to work with the tractor. The double disc pulverizer is also especially desirable, one set of discs throwing the dirt one way and the other set the other, thus making a seed bed at one operation. Horse-drawn machinery may often be made over for use with the tractor with very little cost.

When the work of plowing, discing, harrowing, seeding, mowing and threshing that a tractor can do has been finished there still remains much winter farm work to which it can be put. Aside from the hauling of heavy loads, there is silo filling, feed grinding, stump pulling, wood-sawing and other work calling for engine power that it will perform.

It is better, if you can spare the time, to take a week or so in which to select your tractor than to buy it after only a casual inspection of one or two sizes and types of machines. And after you have decided on a certain make of tractor, look into the reputation of the firm that is back of it, assure yourself that parts that may need replacing can be obtained in a reasonably short time.

And after you purchase a tractor, study it until you understand it thoroughly. Keep it well lubricated and never neglect to stop when the time comes to grease up. A tractor that runs along doing work to the limit of its capacity is a time and money saver. It isn't difficult to keep a good tractor in running order; but, like any other piece of machinery, understanding and care should be exercised in handling it.

A tractor should be properly housed and protected from the weather. Whenever it becomes necessary to leave it stand out it is advisable to see that all openings to the fuel tanks as well as all priming cups are turned down to prevent any water from getting into them. Just a little water in the wrong place can make a great deal of trouble, especially when starting.

Let it be repeated that the tractor is an outstanding factor in helping win the war. It is ushering in a day of more extensive and more efficient farmer. To do your utmost this year, next year and in the years to come, don't try to skimp, unless you have to, or do things the old way when you can accomplish much more, do it more cheaply and thus put yourself in position to realize more profit from your farming operations. It is up to every one here in America to help win the war. It is no more up to farmers than to other men except that farmers can help more than other men because they are in position to supply food—the greatest war need.

The tractor is a power unit merely. Alone it will not plow a foot of ground, sow a pound of seed nor harvest a bushel of grain. But hooked up to plows, to cultivators, to binders, to threshing machines and properly driven, it can be made to help towards greater accomplishment, greater production, while at the same time conserving grain and that scarce and very valuable commodity—skilled farm labor. It can be so handled as to permit a large amount of work being done that might otherwise go undone at one of the most critical times in our history. In a word it offers in many cases a means of doing things on a larger, more efficient and hence more profitable scale. Properly handled in these cases it is a force which can be made to lower the production cost of farm crops and to make it possible for the farm factory to increase its output when bigger crops stand as one of the mightiest bulwarks of national safety and defense.

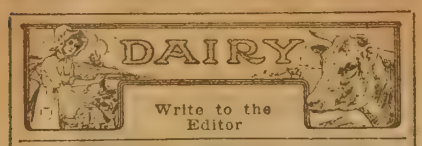
Because of this, and because it is the patriotic duty and desire of every one, in whatever measure possible, to increase the supply of those things for which the nation, its army and its allies are in dire need of, this machine is referred to for supplying power to the farm as "an outstanding factor" in helping bring victory and as speedy an ending of the war as it is possible, by united efforts, to bring about.



Plowing with one type of tractor.



Discing with another type of the tractor.




A. B. NYSTROM, Editorial Contributor

# Silage This Year?

## Corn Can Be Successfully Grown

By Paul E. Triem.

If you have decided to put in some silage corn this season, here are a few important points brought out by the experience of many farmers during the last few years. To begin with, use nothing but acclimated seed of a variety which is adapted to your local conditions. On this all-important matter of variety, consult the experiment station of your state college and those of your neighbors who have been successful with corn.

Corn in the northwest does best on light, warm land. Do not plant this sun and heat loving crop in cold bottom land and expect it to do well. It may, in exceptional years, but you are not giving it a fair chance when you handicap it in this way. Remember at the same time that corn is a gross feeder—it must be, when you consider that yields of from 20 to 75 tons of silage per acre are reported—and that as this warm soil is often deficient in plant food and humus, you must supply plenty of available fertilizer.

Promptness is the keynote of success in raising corn in the northwest. The seed must not be put into the ground until the latter is fairly warm and all danger of frost is past. It must be planted just as soon as these conditions are assured, for the growing season is short. And putting the crop into the silo must be attended to without a day's delay, when the proper stage of development is reached—many of those whose corn crop was a partial or complete loss last fall would have avoided this loss had they heeded this rule of promptness.

The gospel of corn for the northwest may be summed up in the statement that this is not a real "corn country," but that with proper precautions tremendous crops of corn, particularly of corn silage, can be secured. The game is decidedly worth the candle.

# Milking Shorthorns

At a time when we in America are beginning to look with anxious eyes after the soaring pot roast and beef steak, it may be well to consider some of the advantages claimed for the dual-purpose Shorthorn. Here is the way the American Milking Shorthorn Breeders' association sums up a discussion of the milking Shorthorn.

"A good milking Shorthorn cow will give a return in milk of not less than 6000 pounds for the year, and it will test about 3.7 per cent. The cream from this milk, at present values, will be worth about $75. Her calf, reared on her skim milk and adjuncts, will be worth approximately $50 for meat when 1 year old. The return, then, from this cow is $75 plus $50, or $125."

American dairymen often ask why it is that the herds of this country must be constantly recruited by individuals imported from England.

"Is the English climate more favorable than ours for the breeding of milking Shorthorns?" the northwest dairyman is apt to inquire, before becoming too enthusiastic about the dual purpose cow.

This important question was put to W. S. Dunn, a New York importer and breeder of milking Shorthorns and Brown Swiss.

"The climate of America has nothing to do with the matter," Mr. Dunn replied. "It isn't a matter of climate, but of breeding, and until our farmers settle down into the routine of the English herdsmen we will have to import our finest breeding stock. The reason is not difficult to find: in England a dairy farmer has inherited his herd from his father, and in turn passes it on to his son, with the blood lines unbroken. He has done his share in building up the herd, and this selective breeding continues for generations. In this country we are less settled. The work that one farmer does in starting a herd is apt to be undone at his death or retirement, when, as likely as not, the herd will be dispersed."

# Better Milk Price

As previously reported in these columns, a federal commission has been investigating milk production and prices for the United States food administration. Its report is now in the hands of the government, and it approves higher prices for the producers.

Commenting on this report, Mr. Hoover says the only hope for cheaper milk for the consumer lies in the organization of transportation facilities for the freer movement of feeds. He has issued the following statement:

"I consider the committee has done the best that can be done with a difficult situation. There can be no question from the investigation of the committee that if we are to preserve our milk supplies the milk producers around New York must have relief by an increased price for their product. On the other hand, the arrangement set up of not increasing the price of cash-and-carry milk protects the most necessitous of the population to the utmost degree possible in the situation.

"If the new railway control is able to untangle the railway blockade so as to allow sufficient grain cars to return to the corn belt, the price of corn to the consumer should fall rapidly. Nor does the corn raiser benefit from a high market which he can not reach. Therefore, our feed and our milk situations are inextricably entangled with our railway situation. If we can secure a free movement of grain, there is hope of cheaper milk."

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Lily Primrose

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Then ask for skimming demonstrations to determine how little cream is left in the skim milk. This is important, because the wrong machine can waste more cream than it is worth, while the right one will put money in your pocket every time you use it.

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LIVE STOCK NOTES

Write to the Editor

E. J. IDDINGS, Editorial Contributor

# Finance Live Stock

## Banks Take Interest in Problem

"One of the most hopeful signs of the times has been the active interest taken by the local bankers in the agricultural development and welfare of their patrons. There are 11 banks in the United States who regularly employ agricultural experts. In no sense is this work considered philanthropic or an effort to dictate. The banker realizes that in proportion as the farmer and stockman prosper so will the city and its institutions."

This is the statement of R. A. Blanchard, agriculturist for the North Portland and Live Stock bank, who was formerly actively engaged in county agriculturist work in Oregon.

Two of the most prominent banking organizations in the northwest now taking special interest in the financing of live stock problems are the bank with which Mr. Blanchard is connected and the Spokane Cattle Loan company, which has connections with the Old National bank, the Exchange National bank, the Spokane & Eastern Trust company and Armour & Co. of Spokane.

While neither of these institutions make loans on live stock at lower rates of interest than on other staple security, both are working with a view to stimulating the live stock industry as much as possible.

# Veterinary

Dr. S. B. Nelson

**Change Their Feed**—I have some goats running in an oak, willow and ash pasture that get the scours and live only a few days, then die. I am feeding oat hay. E. H., Barton, Ore.

Gradually change the feed. Decrease the feed to about one-half for a short time. Remove them from the pasture containing the oak into another pasture if possible. Give them once daily on a little grain feed five grains of sulfo-carbolate of zinc. Give them morning and evening a douche of one teaspoonful of Listerine in eight ounces of water for a few days.

**Trouble by Change in Feed**—I have been feeding gold coin wheat straw and a little oats to my horses. I gave them pea straw three times and one got sick. Is pea straw good for horses and cattle or did this cause it. All straw was put in the barn soon after threshing and it was dry. J. L. Mica, Wash.

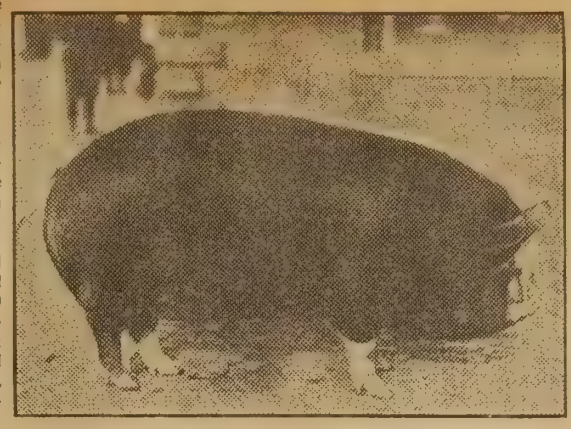
The cause of your horse getting so very sick was the sudden changing of her feeding from one feed to another of a different kind. When it becomes necessary or desirable to change an animal's feed it should be done gradually. Change only one-fourth of the feed at one feeding, one-half at the next, and so forth until the system of feeding is entirely changed, taking from one to two days to change. I have seen horses and cattle taken violently ill by simply changing from oats to one feed of barley and then back to oats again and yet barley in certain sections of the country is the only grain for feeding stock. Pea straw is a fine feed for farm animals provided they are gradually accustomed to eating it and it is fed in moderation with some other feeds and especially some roots.

**Milk Leaks**—I have a splendid cow that got her teat cut over a year ago. It healed up all but a hole about the size of a timothy straw, and now the milk leaks through this opening in the side of her teat.

J. E. A., Waldron, Wash.

Take your cow and cast her with a triple hitch if necessary. Then scarify the small opening with a fine-bladed knife, turning the point of the knife round and round until the scar tissue has been removed and new, fresh tissue has been produced. Now put through above and below, going around the opening, what is known as a harness maker's stitch. Take large thread and put through the side of the teat and then fasten quite securely. This will make the lips of the wound pucker out a little, open up. Now bathe that with a 5 per cent solution of lysol in water and dry carefully with cotton dipped in the lysol solution and squeezed dry. Sew the outside of the wound together with two or three small, fine sutures, dust on some boracic acid and then cover with collodion. Place the cow in a clean place, where she will not get herself dirty, and allow the wound to heal. In five or six days the collodion may be picked off and the stitches removed.

# "Berkshire Year" in the Barrow Contest



The American Berkshire association finds good reason for calling the International Live Stock exposition at Chicago this year, in the barrow contests, a "Berkshire year."

The grand champion barrow and the grand champion pen of barrows were pure bred Berkshires shown by Hood Farm, Lowell, Mass They were senior yearlings and two of them weighed 625 pounds each. The grand champion weighed 600 pounds. The grand champion carload also was a load of Berkshires bred, fed and shown by T. E. Bruner, Augusta, Ill., in class 250-and-under-300-pounds.


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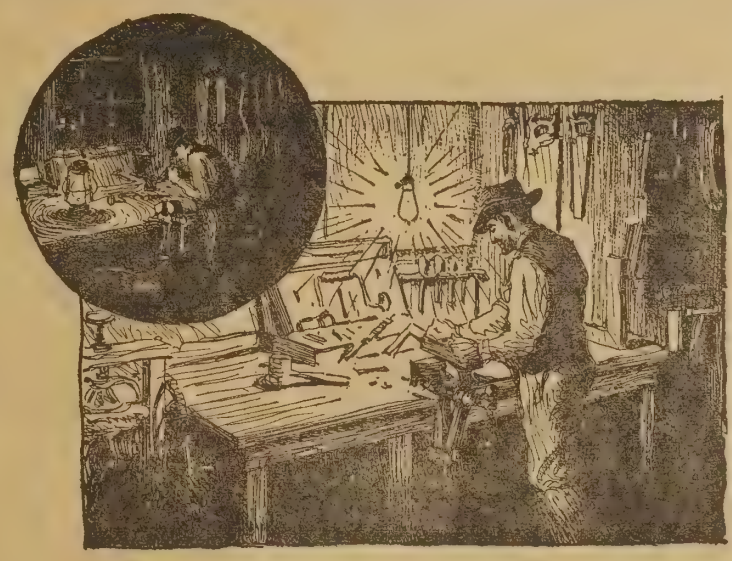
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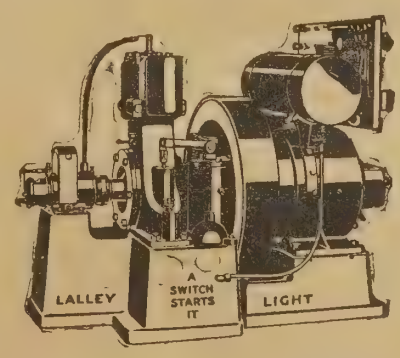
Where the ordinary electric-light plant engine has sixteen moving parts—often more—our engine has only three. In fact, there is no other light plant that we know of which compares with the Lalley on that score.

Think what such simplicity adds to the life of Lalley-Light—what it saves in wear and tear, adjustment and repairs.

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It has big ball bearings at every point where split babbitt or roller bearings are commonly used. It has sure-fire magneto ignition. It is water-cooled. It runs with steam-engine steadiness. That is why light direct from the generator is as unflickering as from the battery.

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Generating plant is 27 inches long, 14 inches wide, 21 inches high. Storage battery is included in complete outfit.

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Lalley-Light brings electricity to the farm—unlimited light and power in their safest, surest and simplest form.

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## POULTRY

Write to the Editor

JAMES DRYDEN,
Editorial Contributor.

# Selecting the Layer

In the issue of the Farmer of December 13 there were photographs of two Barred Plymouth Rock hens, one of them with a record of 220 eggs in a year and the other seven eggs, but it was not stated which was which. The question was asked: "Can any one pick out the best and give a satisfactory reason for the selection?"

A reader in Lakeview, Oregon, has made a selection and gives his reasons very lucidly as follows:

"I am a dairy farmer, if you please, and as is usual with me, have just been perusing the Farmer upon its receipt here. Now on page four of your issue of December 13, under the caption 'You Can Not Judge Layers by Their Appearance,' two hens are shown, and as I keep from four to six dozen matured Barred Rocks as a farm flock, am interested in learning which of the two is the better layer. My guess is that the hen to the left of the picture is the more desirable for laying. She appears more neat, trim and alert, more sensitive and doubtless more active and energetic than the other of the heavier and coarse-featured type, of a dense and sluggish disposition. I am not appealing for the answer out of mere curiosity, but for edification and future guidance."

The only trouble with the answer is the wrong hen was selected. He picked the seven-egg hen as the 220-egg hen. The gentleman has evidently hade a study of the characteristics of the heavy layer, and he enumerates the characteristics of the good layer possibly as well as any one can enumerate them. There was not a great deal of difference in the type of the two hens. Two hens were selected of as nearly identical shape as possible with the purpose of showing that even though the hens look alike they do not lay alike. They are about the same size. The length of body is about the same, and both have the characteristic Plymouth Rock shape. But in spite of the uniformity of shape or type there is no uniformity in production. I think, however, that Mr. Reynolds' designation of a good layer—"more neat, trim and alert and more active and energetic," is good. His description of the poor layer is also very good—"heavier and coarse featured, dense and sluggish disposition." This will hold good on the average. The alert, active, busy hen is the good layer, the heavy, sluggish, masculine hen is usually a poor layer. But one is easily fooled in selecting the best layer. The actual record of the ancestors is the best indication of the egg laying capacity of the pullet. Judge her from her ancestry rather than her looks. Heredity is greater than type of hens. J. D.


## *Wonderful Egg Producer*

Any poultry raiser can easily double his profits by doubling the egg production of his hens. A scientific tonic has been discovered that revitalizes the flock and makes hens work all the time. The tonic is called "More Eggs." Give your hens a few cents' worth of "More Eggs" and you will be amazed and delighted with results. A dollar's worth of "More Eggs" will double this year's production of eggs, so if you wish to try this great profit-maker, write E. J. Reefer, poultry expert, 4661 Reefer bldg., Kansas City, Mo., who will send you a season's supply of "More Eggs" Tonic for $1.00 (prepaid). So confident is Mr. Reefer of the results that a million-dollar bank guarantees if you are not absolutely satisfied your dollar will be returned on request and the "More Eggs" cost you nothing. Send a dollar today or ask Mr. Reefer for his Free Poultry book that tells the experience of a man who has made a fortune out of poultry.—Adv.

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## Treatment for Lice

To the Editor: I have a flock of chickens and although they seem to be healthy most of them seem to be lazy and do not get around as they should. I examined some and find that they have lice, but I do not find any lice in the chicken house, as I clean it out twice a week and always paint roosts with lice killer, but the lice seem to stay on the chickens. Can you recommend ways and means of getting rid of the lice?

G. B. BRAUN.

Mayview, Wash.

The question of lice has been discussed several times in these columns and treatment given, but it is an ever-recurring question, a sort of come-back proposition, that is always open for discussion.

Poultry keepers should always remember that there are two kinds of insects that prey upon the hen and a method of controlling one will not control the other. One of them we call the louse and the other the mite.

The louse stays on the hen all the time. That is, it lives and breeds and propagates on the hen. The mite lives on the hen or on the blood that it sucks from the hen, but when it gets its fill it leaves the hen and crawls back to its breeding place which are little hiding places or cracks on the roost, mostly under the roost, and in the bottom of the nest boxes. It is a sort of nocturnal actor; it does its feeding at night and sleeps during the day. It is not found on the hen during the day.

The other insect, the louse, stays with the hen all the time. It lives around the root of the feathers and subsists on the productions of the skin and feathers. The lice do not suck blood from the hen like the mites. There are different kinds of lice. One kind is found on the head, usually of small chicks. Another kind is found on different parts of the hen, a sort of wandering pest. Another is found between the barbs of the wing and tail feathers. There are various other kinds, but these are the main ones. The hen has her full share of pests, probably more than her share. Unsanitary, dark, dirty, ill-ventilated poultry houses are favorable conditions for the pests.

Treatment. First, make the poultry house sanitary. Let the light and the fresh air into it and the control will be easier. Keep the hen in good health and vigor and she herself will help to win the war. The poor, thin, droopy, lazy hens are the ones that suffer most.

The wild fowl fights her own battles with insect pests, but the domesticated hen must have assistance, otherwise the barbarians will soon put her out of business. She will need less assistance, however, if she is kept under sanitary conditions and gets the care and feeding necessary to keep her in good health and vigor. The wild fowl lives the free, open air life, and is not compelled to live in pest-ridden, germ-infected houses, and she can take her daily bath of clean dust. The dust is nature's remedy. It is one of the best things ever invented for the hen.

If the hens are kept under proper housing conditions and have opportunity to use nature's remedy, the dust bath, there should be no necessity for any other treatment for lice. At any rate it has not been thought practicable on most of the large poultry farms to

(Continued on page twenty-three.)


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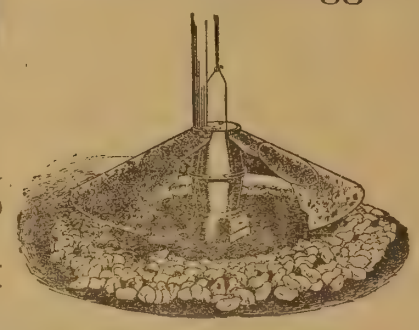
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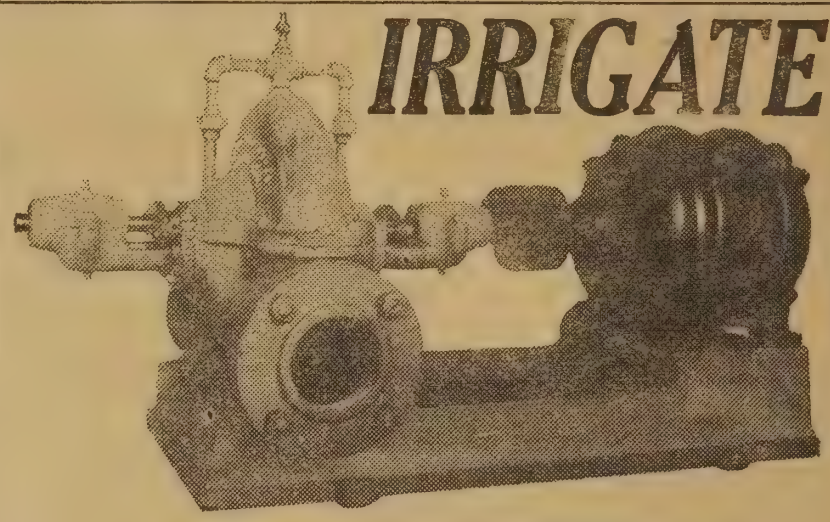
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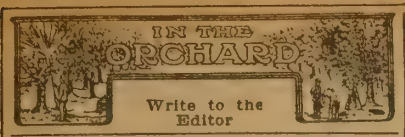
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GRANVILLE LOWTHER,
Editorial Contributor.

# Depends on the Man

## Success Does Not Follow Formula

By GRANVILLE LOWTHER.

I have received a letter, not for publication but for private information. However, the information is such as many others might wish to know, so I will publish answers to the inquiries, withholding the name of the writer.

The inquirer is a professional man, an educator. Like many others, he looks forward to a time when he will be crowded back in his profession by younger teachers who, if they have not more knowledge and skill in school management, have at least more vim and energy to bear the long sustained, nerve-taxing strain of school life. In other words, he wants a place to which he can go, a home in the later years of life on earth, a quiet, restful place that will bring him an income sufficient to keep him and his wife. He thinks he wants an orchard, and wants to know what are the chances of success?

I hesitate to advise, because there are so many factors entering into it. Some men succeed where others fail. Some of the most pronounced successes in the orchard business have been by men who for years followed some of the professions. Then, too, others have signally failed. No one can tell; not even the man himself until there has been a trial.

**Progress Strewn With Wrecks.**

The pathway of human progress is strewn with the wrecks of fortunes, hopes, ambitions, nations and races; but when the sum total of influence is computed, each generation is ahead of the one that preceded it. I have a simple illustration in which I am now engaged. I have seen the necessity for some method of utilizing, at a profit, the wastes of the orchards. I have made a study of various fruit products, and a number of experiments not generally adopted. I have a record of notes and observations in reference to 32 experiments that are failures. Now if I make 100 experiments and one succeeds I will feel repaid, and the future will reap the benefit. Sometimes when I feel like it I write poetry, or verse, or rhyme, or jingle, or whatever folks please to call it. I do it generally for my own pleasure and not for publication. Much of it is like my experiments, mostly failures. But some time since I wrote something that fits in here and illustrates my meaning.

Do we look at the faults of our fathers and say
"How simple their notions were?"
Or do we observe our own errors and see
"How foolish we mortals are?"

Be not too severe; for the men who succeed
Who have mounted the heights and prevailed,
Owe more than they know to the heroic deeds
Of men who have struggled and failed.

These bold pioneers in the unknown wilds,
Whose mistakes teach us what not to do,
Help us to succeed by the knowledge we gain
By keeping their errors in view.

In the fruit business we are past the pioneer stage. Its success as an industry is established. The growing of commercial fruits in a large way for the world's markets, is yet in its infancy, but enough has been done to know that it will be one of the valuable industries of the Pacific northwest. Then, too, we have passed the boom period which always comes from the settlement of a new country. We are coming to realize that values are estimated mostly upon the basis of three factors. First, whether land will pay a good interest on the investment. Second, whether the development of the country will increase the values, as to whether the land is located in a good neighborhood of desirable people, or in a group to whom we are not congenial, nor they congenial to us. The esthetic value may be illustrated by its location on an elevation overlooking the country, or in a hole where there is nothing desirable to see.

**The Man.**

Mostly, success or failure depends on the man, because his physical strength is an asset. It makes a difference whether he is able or unable to work long hours, or whether most of the work must be entrusted to hired men.

If it is done by hired labor, much depends on the wisdom with which he can choose his help, and direct the labor of others. Much depends on how he adapts the fruits and vegetables grown, to the conditions of soil and climate. Further, it depends on the demand in the markets for the varieties of crops grown. A man may grow splendid celery, but if he can not sell it, he is bound to lose. He may grow good Ben Davis apples, but if people persist in buying other varieties, he will grow them at a loss.

There are many other things to consider, and the "man on the job," is the only one who can tell what to do.

## A NATIONAL PROBLEM.

### Individual Can't Solve Marketing.

"Marketing is not an individual problem, or even a community problem," declares Professor T. J. Newbill, formerly club leader for the state of Washington. "It may once have been so, but in that case the day has long passed. Our marketing problems must now be settled nationally—a view which is being brought to the front in the national capital during the present turbulent times as never before."

"National considerations," continued Professor Newbill, "decree that the one crop system must give place to diversified farming, under which each community will be able to feed itself. The old way of shipping fruits and grains across the country from a community which was producing them to one which was engaged solely in the production of another specialized product can no longer continue, for our overburdened transportation systems are not equal to the demand. The railroads must be used nationally."

In the matter of marketing by-products, we must learn to think straight before we can act straight, says Professor Newbill.

"We must think by-products and talk by-products for a long time before we will begin to get results," he insists. "There is a tremendous need here—50 per cent of our farm products are wasted; and the only cure for this is for us to learn to make our by-products—to standardize production and marketing, so that the 50 per cent of our people who are now going without sufficient food may be fed."


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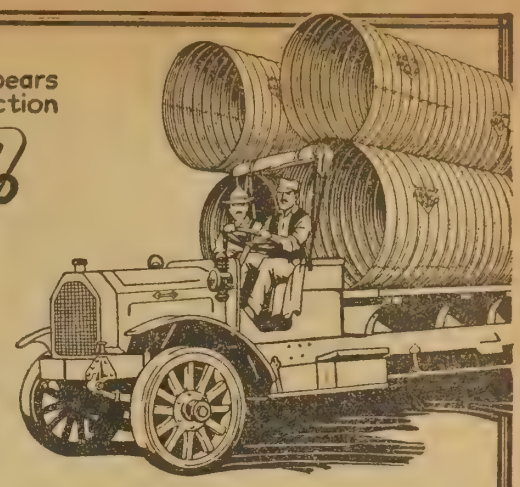
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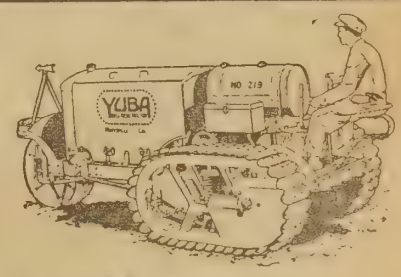
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# Industry Is Checked

## *Fuel Administration Takes Action*

The vicissitudes of war were brought home to the American people with a jolt last week when National Fuel Administrator Garfield issued an order shutting down the greater part of the industrial plants of the east for five days, and requiring suspension of work every Monday for a period of 10 weeks. The action was taken with a view to relieving the congestion of railroad equipment at terminals and Atlantic ports, giving them a chance to catch up and get an even start with business again. The action was specially ordered because of the fact that many ships were tied up at docks unable to sail for lack of coal. Administrator Garfield announced immediately after the taking of effect of the order that the congestion was already becoming relieved, and that ships were being furnished coal to make their voyage with war supplies for the American soldiers and their allies.

President Wilson approved the action of Mr. Garfield, but many members of congress and representatives of industries made vigorous effort to have the order revoked before it could go into effect last Friday, declaring that it meant ruin to the industry affected. The order exempted all plants manufacturing or actively distributing food and also most of those engaged in war activities. Others of various kinds were exempted, but the order put hundreds of thousands of employes out of work during the five days.

This is the first time that business in America has felt keenly the effect of the war, and is believed to be only the first of a great many sacrifices that will have to be made. As the country takes a greater and greater part in the struggle, all the energies of the nation will have to be centered on war operation, and industries that do not contribute directly toward a victory over Germany and her allies will have to suffer, many even to the extent of temporary elimination.

### Peace Parley Is Failure.

Indications are to the effect that the peace negotiations between Germany and the Russians are to be a total failure. Germany holds fast to her annexation demands, to which the Russians will not yield. Indications are that the bolsheviki element is growing less popular in Russia than it has been, possibly forecasting another change of control in that ill-fated country.

### War-Proof Ship Invented?

Hudson Maxim, the inventor of fame, is reported to have given to the war department the plans of an invention which he believes will protect ships from torpedoes. The details of the invention are not made public, but it is understood to involve some of the laws of physics and chemistry.

### May Ration America.

It is not impossible that before many months the people of America will be regulated in their eating by law, though the food administration is not ready to take this action yet. Congress is considering measures that would, if passed, make certain wheatless and meatless days compulsory, and make the eaters of meat or wheat breads on those days liable to punishment.

### Teuton Mutinies Reported.

Reports indicate trouble in both the German and Austrian navies. Submarine crews are reported to have mutinied in a number of cases.

### Skilled Workers Must Go.

It appears that the allies in Europe are so pressed for men in the armies that England is compelled to recruit her forces from the ranks of skilled labor, heretofore engaged in what was ruled to be necessary war work. The move is taken to fill the ranks temporarily while America is getting her army into Europe and ready to participate in the war.

### Italy Remains Firm.

The Italian armies are still maintaining their positions in the struggle with the Austrians and Germans.

# Farming Has Always Been a Gamble

## *Should Not Prices Be Fixed for a Year in Advance?*

In a letter to the Farmer, James N. Price, county agriculturist for Yakima county, says that he believes "it would be the best thing that ever happened to agriculture if something could be done to establish a price on farm products for at least a year in advance." And the ground he gives is that "the farming business has always been a gamble."

"The farmer plants his crops in the fall or spring, as the case may be, depends upon 'Providence' in most cases to furnish sufficient rainfall, does all of the labor of cultivating and harvesting and marketing of his crops and does not know until the crops are sold and the money in the bank how much he can expect in return for his labor," says Mr. Price. "This has not only made the farming business uncertain, but has held back a proper development of our farms, has retarded proper crop rotation and development of the live stock industry and has, in general, made the farming business a losing game. I realize the question of fixing prices on farm products is a very difficult matter since the cost of production varies widely in different districts, but I am sure that this is a matter that must be worked out sooner or later and should be taken seriously in hand at once.

"As to the regulation of prices on food, feed and clothing required by the farmer and his family I do not like to make a distinction between the farmer and other consumers, neither do I think the farmer wishes this distinction to be made. We are too prone to think the farmer in a class by himself. The farmer of today, while he may not have had the opportunity of so wide an experience or opportunity for observation as some other classes, is, nevertheless, a reader and if wide awake to the situation and to his needs; and the sooner the general public realizes this the better it will be for all concerned. But I do believe that under present conditions, at least, the government should regulate the prices of articles of food, feed and clothing. There is nothing that would please the general public better.

"I find that the people generally are extremely patriotic and desire to follow out the suggestions of the food administration and other government authorities, but when people go to market to purchase articles of food or clothing or feed for live stock and find that the very articles which we are urged to use are from 50 per cent to 200 per cent higher than they were 12 to 18 months ago it makes us wonder who is getting the profit. Some seem to think that the farmers, as a class, are complaining about the way the food administration has handled the price regulation. From the attitude of the farmers I have come in contact with during the last few months I am convinced that the farmer is as patriotic as any other class of people in the United States, and his criticism is not a criticism of the food administration or the government so much as it is the criticism of business methods of the various industries."


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# Farmers Are Meeting

A meeting that promises widespread influence on the farming industry of the northwest is in session this week at Lewiston, where the second annual meeting of the Idaho State Federation of Agriculture is in session. The federation is made up of representations from various farmers' organizations, including the grange, farmers' union, society of equity and the like. Speakers of national fame are on the program, and the keynote of the meeting is the need of more complete organization of the farming interests.

Owing to inability to adequately report the convention this week a comprehensive report will be given in next week's issue, that of January 31. The Farmer has a special representative on the ground. No important action of the convention will be overlooked, and care should be taken by all subscribers to read the report of the meeting.

### Household Problems.

Don't forget that the state college at Pullman has a force of workers dealing strictly with household problems. These workers are anxious to help you if you will send them your questions.

### Great Accomplishment.

The government has accomplished more in the way of efficiency regulation and war preparation in the last eight months than in all its previous history.

To The Washington Farmer: Please send me The Twice-a-Week Spokesman-Review for one year and the Washington Farmer for three years. I like your paper better than any paper I have ever taken, and I get a daily paper, too. My time has not run out yet, but will send one in so as to get the Farmer.

JOHN O'BRIEN.
Brewster, Wash.


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**Ship Your Raw Furs**

to us for quickest returns. We pay spot cash and the highest market prices.

SEND TODAY

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I am in the market to buy large quantities of mole, muskrat, coyote and rabbit skins.

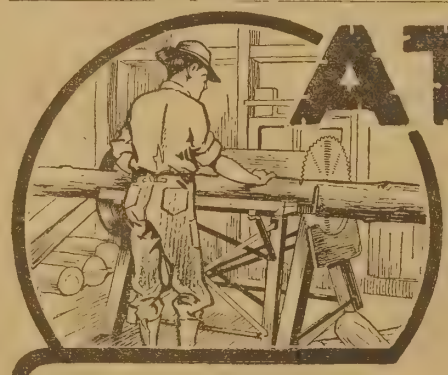
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OSCAR GARD, 75 Marion Street, Seattle, Wash.

In answering advertisements don't fail to mention this paper.

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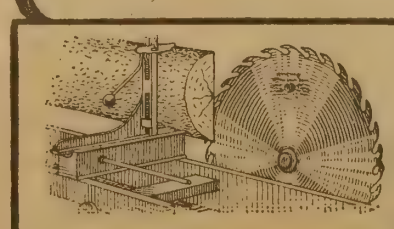
**Turn Your Wood Lot Into a Source of Real Profit**

Every farmer or landowner can make additional profits right now, by installing a circular saw, and cutting wood for fuel. Never before was coal so scarce, never before was there such a chance to make a big profit from the wood lot.

To derive the greatest profit from this work you must have a good saw.

The Atkins Circular Saw is the best saw you can buy, and is designed for fast work. It is made of SILVER STEEL. This steel was formulated by us and is unequalled for edge holding and freedom from constant fitting.

The Atkins saw is the choice of all woodsmen—because it is a time saver, labor saver and a money maker.



Any dealer will take pleasure in explaining the merits of Atkins Silver Steel Circular Saws. They will save you time, labor and money, and do everything we claim for them. The genuine Atkins Saw always has our name on the blade.

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Makers of Silver Steel Saws.
Indianapolis, Indiana.

# MACJUNK GETS THE RIGHT ADVICE ABOUT ENDING ALL




# BOOT FINDS THAT PUP LACKS IN STRENUOSITY



# Washington Farmer Is Agent for War Stamps

## *Undertakes to Sell $50,000 Worth of United States Government War Savings Securities*

The United States government is offering "War Savings Stamps" to the public as a means for raising money for war purposes.

Realizing that many readers of this paper who are remote from financial centers will want to buy these stamps, the Farmer has made arrangements whereby it will be easy for them to do so by mail.

This paper is now an agency authorized by the United States government to handle the war stamps, and is ready to distribute among its readers a total of $50,000 worth of these desirable securities.

This form of security permits you to invest as little as 25 cents at a time, thus enabling the child and the person with small means to strike a blow for his country.

All details of the plan are fully explained on this and the following pages.

As you will note by reading this over, two kinds of stamps are issued: a 25-cent stamp and a $5 stamp. The first is known as a Thrift Stamp and the second as a War Savings Stamp.

With the first purchase of one or more 25-cent stamps we will send you the thrift card issued by the government. This has spaces for 16 stamps. It makes it convenient to keep track of the 25-cent stamps which you buy from time to time.

With the first purchase of one or more $5 stamps we will send you an engraved folder known as a "war savings certificate." This contains spaces for 20 stamps, which must be attached to it as they are purchased.

**These $5 stamps, it should be noted, cost you but $4.12 if your remittance is mailed in time to reach us in January; increasing one cent per month thereafter. If you buy two of these in January send us $8.24. If you buy three, send us $12.36. If you buy four send $16.48 and so on.**

These war savings stamps have been called "little baby bonds."

Like Liberty bonds these infant bonds have solidly behind them the entire resources of the government and people of the United States.

They are absolutely safe; a sterling form of investment. On January 1, 1923, you will get back all you put in and in addition you will get 4% interest compounded **every three months.**

**If necessity compels you, you can withdraw every cent you have invested in these certificates at any time, not only without loss, but actually with 3% interest in addition.**

What other form of investment combines all of these advantages of absolute safety, interest compounded quarterly at 4%, and opportunity for withdrawal?

These war stamps are indeed a splendid form of investment, but more important, their purchase is a patriotic act.

The government sums up this phase of the matter in these words:

"The main reason for the purchase of War Savings Stamps is because your country is at war. Your country needs every penny which every man, woman and child can save and lend, in order to feed, clothe, arm and equip the soldiers and sailors of America and to win this righteous war in defense of American honor and the cause of democracy throughout the world.

"If we are to win the war, we must win it as a united people. The savings of every man, woman and child are necessary if we are to hasten the victorious ending of the war. War Savers are Life Savers.

"A single strand in the cables which uphold the great Brooklyn suspension bridge is not very strong, but thousands of these strands bound together uphold one of the great thoroughfares of the world.

"When our fathers and sons and brothers were called by our country to take up arms in her defense, you did not hear an individual soldier refuse to serve because his service alone would not win the war. Each man was ready to do his part. The great army thus formed is going forward to face the fire of battle and to risk everything for the safety and security of our homes and our families, and for the very existence of our country.

"These are the men for whom you are asked to save and lend your dollars.

"A country worth fighting for is a country worth saving for.

"To save money is to save life."

Big and little, old and young, should "rally round the flag," and start investing in war stamps without delay.

The following is a statement and catechism by the government, explaining in detail the reasons for the war stamps, what they are and how they may be obtained:

In offering "war-savings stamps" to the public the United States government has made immediately available for every man, woman and child in the country a profitable, simple and secure investment.

What They Are—War-savings stamps are the answer of a great democracy to the demand for a democratic form of government security. They are "little baby bonds." Like Liberty bonds, they have behind them the entire resources of the government and people of the United States. They have the additional advantage that they steadily increase in value from the date of purchase until the date of maturity, and this increase is guaranteed by the government. These stamps are issued in two denominations, the 25-cent stamp and the $5 stamp.

For the convenience of investors a "thrift card" is furnished to all purchasers of 25-cent stamps. This card has spaces for 16 stamps. When all the spaces have been filled the thrift card may be exchanged for a $5 stamp at postoffices, banks or other authorized agencies by adding 12 cents in cash prior to February 1, 1918, and 1 cent additional each month thereafter.

Those who prefer may buy a $5 stamp outright. These will be on sale from December 3, 1917, until January 31, 1918, for $4.12. They automatically increase in value a cent a month every month thereafter until January 1, 1923, when the United States will pay $5 at any postoffice or at the treasury in Washington for each stamp affixed to a war-savings certificate.

When you purchase a $5 stamp, you must attach it to an engraved folder known as a "war-savings certificate" which bears the name of the purchaser and can be cashed only by the person whose name appears upon the certificate, except in case of death or disability. This certificate contains 20 spaces. If these are all filled with war-savings stamps between December 3, 1917, and January 31, 1918, the cost to the purchaser will be $82.40, and on January 1, 1923, the government will pay the owner of the certificate $100—a net profit to the holder of $17.60. This is based on an interest rate of 4 per cent compounded quarterly from January 2, 1918. The amount of war-savings stamps sold to any one person at any one time shall not exceed $100 (maturity value), and no person may hold such stamps or war-savings certificates to an aggregate amount exceeding $1000 (maturity value).

If the holder of a war-savings certificate finds it necessary to realize cash on it before maturity, he may at any time after January 2, 1918, upon giving 10 days' written notice to any money order postoffice, receive for each stamp affixed to his certificate the amount paid therefor plus 1 cent for each calendar month after the month of purchase of each stamp. A registered certificate may be redeemed, however, only at the postoffice where registered.

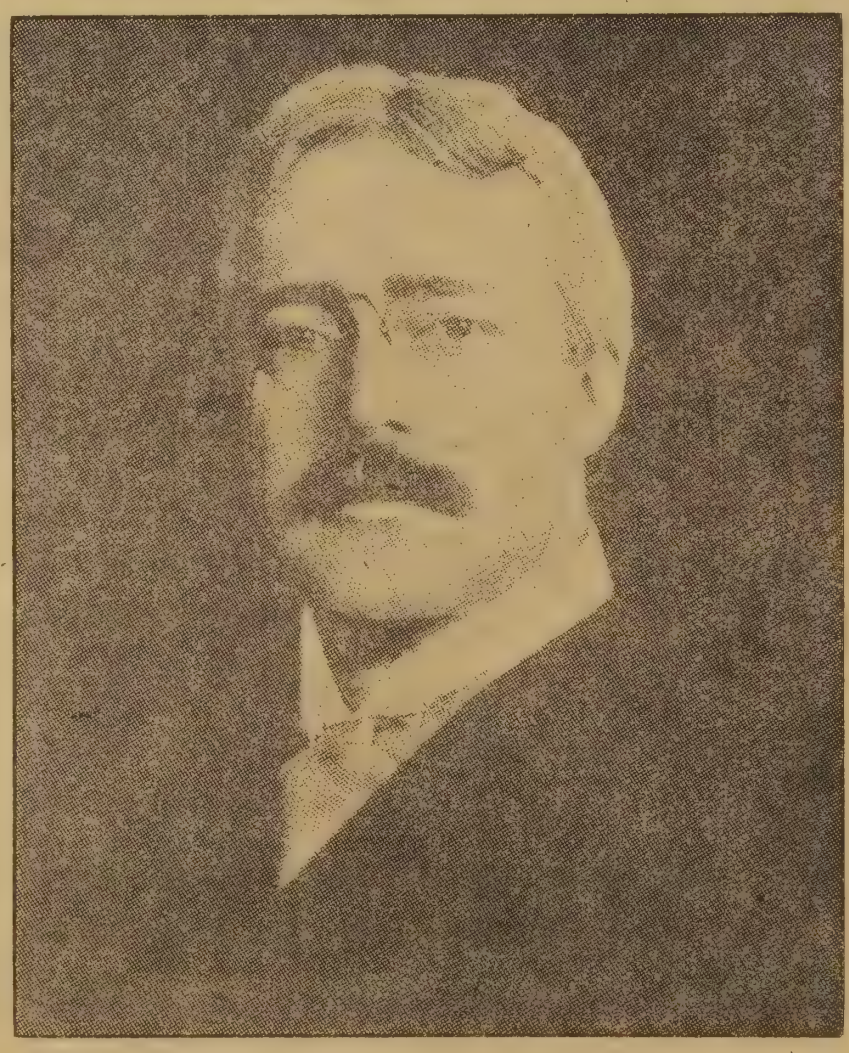
In other words, the plan is simple, straightforward, and certain. The holder of the certificates can not lose and is certain to gain. He is buying the safest security in the world in the most convenient form in which the security of a great government has ever been offered to its people.

### The General Plan.

Q. What is the war-savings plan?
A. It is a plan by which you can lend small savings to your government at 4 per cent interest, compounded quarterly.
Q. How may this be done?
A. By purchasing war-savings stamps and thrift stamps.
Q. What is a war-savings stamp?
A. It is a stamp for which the government will pay you $5 on January 1, 1923.
Q. What does it cost?
A. Between $4.12 and $4.23 during 1918, depending upon the month in which purchased.
Q. What is a thrift stamp?
A. It is a stamp costing 25 cents, to be applied in payment for a war-savings stamp. It does not earn interest. The purpose of its issue is to enable people to accumulate in small sums the amount necessary to pay for a war-savings stamp.
Q. Where can I buy them?
A. At postoffices, banks and authorized agencies.
Q. Why should I buy them?
A. Every dollar loaned to the government helps to save the lives of our men at the front and to win the war.

### The War Savings Stamps.

Q. I want to begin to save on the war-savings plan. What is the first thing to do?
A. Take $4.12 to the postoffice or a bank or any other agent, buy a war-



FRANK A. VANDERLIP, Chairman of the National War Savings Committee.

## What You Must Do to Get a Thrift or Savings Stamp Through the Washington Farmer

1. Send 25 cents for each thrift stamp desired.

2. Send $4.12 for each war savings stamp desired, with one cent additional for each stamp if your order reaches us in February, two cents additional if it reaches us in March, and so on.

### What the Washington Farmer Will Do.

1. Will send you a thrift stamp for each 25 cent remittance, together with thrift stamp card if you are just starting to save.

2. Will send you a $5 war savings stamp for each $4.12 that reaches us in January, for each $4.13 that reaches us in February, and so on. Also will send a war savings certificate if you are just starting to save.

savings stamp, and ask for a war-savings certificate.

Q. What is a war-savings certificate?

A. It is a pocket-sized folder containing 20 spaces upon which to affix war-savings stamps.

Q. Is the war-savings certificate a government obligation?

A. It becomes an obligation as soon as one or more war-savings stamps are affixed to it.

Q. Can I get a war-savings certificate without buying a stamp?

A. No.

Q. Does the war-savings certificate cost anything?

A. No. The Agent from whom you purchase the stamps will write your name and address on the certificate and will furnish you an envelope in which to keep it.

Q. What do I do after that?

A. Affix the war-savings stamp on your certificate in space No. 1 and take good care of it.

Q. What do I do next?

A. You have now become a war saver. Continue to buy war-savings stamps every week or month and put them on your certificate until you have filled all of the 20 spaces. When this is done you can buy another war-savings stamp, and you will receive free of cost another certificate to which you can attach new stamps as you buy them.

Q. When I have filled the 20 spaces on my certificate what do I do with it?

A. Keep the certificate until January 1, 1923, and the government will pay you $100 for it.

Q. How many war-savings certificates can I fill?

A. Ten. The law allows each person to own $1000 worth of war-savings certificates.

Q. What is the largest quantity that I can purchase at any one time?

A. $100 worth, or 20 stamps.

**Price of War-Savings Stamps.**

Q. Does the price of war-savings stamp always remain the same?

A. No. The price for each month appears on the face of each stamp. Never pay either more or less than the amount shown for the month in which you make the purchase. The price is $4.12 in December, 1917, and January, 1918, and increases 1 cent each month after January, 1918, until in December, 1918, when the price is $4.23.

Q. What is the price of war-savings stamps for each month of 1918?

A. January, $4.12; February, $4.13; March, $4.14; April, $4.15; May, $4.16; June, $4.17; July, $4.18; August, $4.19; September, $4.20; October, $4.21; November, $4.22; December, $4.23.

Q. Why is the price higher each month?

A. Because the stamps are earning interest.

## The Thrift Stamps.

Q. If I do not have enough money saved up to buy a war-savings stamp and can only save in small amounts, what should I do?

A. Buy a 25-cent thrift stamp at a postoffice, bank or other authorized agency and ask for a thrift card, to which you can attach your thrift stamp.

Q. Is there any charge for a thrift card?

A. No. It is given you to hold thrift stamps and contains a place for your name and address.

**KEEP THESE TWO PAGES FOR FUTURE REFERENCE**

*Complete details regarding the thrift and war savings stamps are given on this and the preceding page. Be sure and keep these two pages, as all of this information can not be printed again.*

## There is But One Way! Save!

No nation in history has been called upon to provide funds equal to those America must provide for the task which has just begun. The serious, vital task before the nation is to supply the needed funds without injuring commerce and industry, without decreasing that very production which must be vastly increased that our armies may be supplied. There is but one way. The nation must save. Every individual must learn and practice the lesson of economy, of self-denial, of saving to the point of sacrifice. Thrift will mean triumph.

*F. A. Vanderlip*

Q. How many thrift stamps will this card hold?

A. Sixteen stamps, which represents a value of $4.

Q. When I have filled the thrift card what do I do?

A. Take it to a postoffice, bank or other authorized agency, surrender the card and pay in cash the few cents difference between the $4 worth of thrift stamps and the price of a war-savings stamp for the month in which the exchange is made.

Q. What do I do next?

A. You take the war-savings stamp given you in exchange for your thrift card, ask for a war-savings certificate, if you haven't one already, and attach the stamp to the certificate.

Q. Should I continue to buy thrift stamps?

A. Yes. Ask for a new thrift card and begin again.

Q. Do thrift stamps bear interest?

A. No.

Q. Then why are they issued?

A. To make it convenient for you to save in small amounts so that you can purchase a war-savings stamp, which does bear interest.

Q. May I exchange thrift stamps for war-savings stamps at any time?

A. No; only on or before December 31, 1918.

**Money to the Government.**

Q. What security is behind the war-savings stamp?

A. The United States government promises to pay $5 for each stamp on January 1, 1923. This promise is backed by the faith and honor of the United States and by the taxing power of this country, which is the richest nation in the world.

Q. Why does the United States borrow this money?

A. To pay the expenses of the war.

Q. When I lend my money to the government, would it be safer to buy a government bond rather than these war-savings stamps?

A. When a war-savings stamp is attached to a war-savings certificate it becomes a government obligation with the same security as the Liberty bond, now held by more than 10,000,000 Americans.

Q. Is the 4 per cent interest, compounded quarterly, on war-savings certificates paid in the same way as the interest on Liberty bonds?

A. No. The Liberty bond interest is paid every six months, but the interest on the war-savings certificates accumulates and is paid to you in one sum, on January 1, 1923.

Q. Why isn't the interest paid in the same manner on both war-savings certificates and Liberty bonds?

A. It would be very complicated and expensive to pay interest every six months on $5 stamps and for that reason the United States government retains the interest until January 1, 1923, at which time it pays you the compound interest and the principal, amounting to $5, the face value of the war-savings stamp.

Q. Shall I sell Liberty bonds to buy war-stamps?

A. No. The security behind Liberty bonds and war-savings certificates is the same. Keep your Liberty bonds, but buy war-savings stamps also.

Q. Is the money received from war-savings stamps and thrift stamps used for the same purpose as the money received from Liberty bonds?

A. Yes.

Q. Should I take money out of the savings bank to buy war-savings stamps?

A. No. You should save as much as you can every day and buy thrift stamps and war-savings stamps with these savings.

Q. How did congress authorize these war-savings certificates?

A. By act approved September 24, 1917.

Q. How large an amount of war-savings certificates can be issued under the present law?

A. $2,000,000,000.

Q. Can I sell or transfer my war-savings certificate to any one?

A. No. The certificate is not transferable and is of value to the owner only, except in case of death or disability.

Q. Should I sell my thrift card to any one?

A. No. Your thrift card has your name on it and should be filled with 16 25-cent thrift stamps and exchanged at a postoffice, bank, or other authorized agency for a war-savings stamp.

**Registration.**

Q. Should I register a war-savings certificate?

A. Yes, if you wish to secure payment in case the certificate is lost.

Q. Am I required to register it?

A. No.

Q. Where can I register it?

A. At any postoffice of the first, second, or third class, subject to such regulations as the postmaster general may prescribe.

Q. When can I register?

A. At the time of purchase or any later time.

Q. Is there any charge for registration?

A. No.

Q. Can I register thrift stamps or my thrift card?

A. No.

Q. Can I register a war-savings stamp that is not attached to a war-savings certificate?

A. No.

Q. Can I register a war-savings certificate for any one else?

A. No.

Q. Should a married woman use her own or her husband's name when registering?

A. Her own—Mrs. Mary Brown, not Mrs. John Brown.

Q. Suppose a married woman wishes to surrender her war-savings certificate which is registered in her maiden name?

A. She should sign herself Mary Jones, now by marriage Mary Brown.

Q. If I have five war-savings stamps on my war-savings certificate and have it registered and I put one more stamp on, must I have it registered again to have protection on my sixth stamp?

A. Yes. Each stamp must be registered.

**If a Stamp Is Lost.**

Q. If I lose some detached thrift stamps, can I get my money back?

A. No. These stamps are of value to the bearer, just as postage stamps are.

A. Be sure to put your name and address on the thrift card; so that if the finder drops it in any postoffice box without postage it may be returned to you.

Q. Is an unattached war-savings stamp of value to any one who finds it?

A. Yes. For this reason you should attach it to your war-savings certificate at the time of purchase. You should write across the face of the stamp your name and the number of your certificate.

Q. If a registered war-savings certificate is lost or destroyed, what should I do?

A. If it is not returned to you within a reasonable time, report it to your postmaster where you had the certificate registered.

Q. How do I get my money back if my registered war-savings certificate is lost.

A. By applying at the postoffice where you registered it.

**The Payment Plan.**

Q. Where does the United States government pay the $5 on January 1, 1923, for each war-savings stamp attached to a war-savings certificate?

A. At either the treasury department in Washington or at any money-order postoffice after ten (10) days' notice.

Q. Where is payment made if the certificate is registered?

A. At the postoffice where the certificate is registered.

**Payment Before Maturity.**

Q. If it is necessary before January 1, 1923, to have money for my war-savings certificate, how can I get it?

A. If it is not registered, take it to any money-order postoffice and it will be redeemed, after 10 days' written demand, as prescribed by the rules of the postoffice department. If registered, take it to the postoffice where registered.

Q. What do I get in cash for each war-savings stamp attached to my war-savings certificate if I surrender it?

A. The amount is indicated on the table, which is printed on the back of each war-saving certificate.

Q. Can I surrender my thrift card for cash?

A. No.

Q. If I must have money on my thrift card and thrift stamps, how can I obtain it?

A. By filling the thrift card and exchanging it for a war-savings stamp, which has a redeemable value.

Q. Is the postoffice the only place where I can surrender my war-savings certificate before its maturity and get my money back?

A. Yes.

Q. How much notice must I give the postoffice?

A. Ten days' notice.

Q. If I should find it necessary to surrender my war-savings certificate for cash, what rate of interest would I receive on my investment?

A. A little less than 3 per cent. The value of a stamp for each month is shown in the following table:

| Month | 1918 | 1919 | 1920 | 1921 | 1922 |
|---|---|---|---|---|---|
| January | $4.12 | $4.24 | $4.36 | $4.48 | $4.60 |
| February | 4.13 | 4.25 | 4.37 | 4.49 | 4.61 |
| March | 4.14 | 4.26 | 4.38 | 4.50 | 4.62 |
| April | 4.15 | 4.27 | 4.39 | 4.51 | 4.63 |
| May | 4.16 | 4.28 | 4.40 | 4.52 | 4.64 |
| June | 4.17 | 4.29 | 4.41 | 4.53 | 4.65 |
| July | 4.18 | 4.30 | 4.42 | 4.55 | 4.66 |
| August | 4.19 | 4.31 | 4.43 | 4.55 | 4.67 |
| September | 4.20 | 4.32 | 4.44 | 4.56 | 4.68 |
| October | 4.21 | 4.33 | 4.45 | 4.57 | 4.69 |
| November | 4.22 | 4.34 | 4.46 | 4.58 | 4.70 |
| December | 4.23 | 4.35 | 4.47 | 4.59 | 4.71 |
| Jan. 1, 1923 | | | | | $5.00 |

Q. If I have registered a war-savings certificate in one city and I move to another, do I have to go back to the city where registered to get my money?

A. No. You may, by applying to the postmaster where your certificate was registered, have your registration card transferred to any postoffice you may designate.

Q. Can I write my name on a stamp to identify it?

A. Yes.

Q. How large is a thrift stamp?

A. It is slightly larger than a two-cent postage stamp and green in color.

Q. What size is a thrift card?

A. Contains spaces for 16 thrift stamps and, when folded, fits the pocket. It is 4 by 8 inches in size.

Q. How large is a war-savings stamp?

A. It is about the size of four postage stamps and green in color.

Q. How large is a war-savings certificate?

A. It is a folder, size 4 by 8 inches, containing 20 spaces for war-savings stamps.

Q. Where can information be obtained regarding war-savings certificates and thrift stamps?

A. At postoffices, banks, or other agencies, or by addressing the national war-savings committee, Washington, D. C.

## Clip This Convenient Order Blank

Address all communications concerning thrift or war savings stamps to The Washington Farmer, War Savings Department, Room 26, Review Building, Spokane, Wash.

Remittances may be in any form desired, including personal check.

---

The Washington Farmer, War Savings Department, Room 26, Review Building, Spokane, Wash.

Gentlemen: I wish to invest in ..... (number desired.) U. S. government thrift stamps at 25 cents each.

I wish to invest in ..... (number desired.) U. S. war savings stamps at $4.12 each. (January figure.)

Amount enclosed $.....

Full Name .....

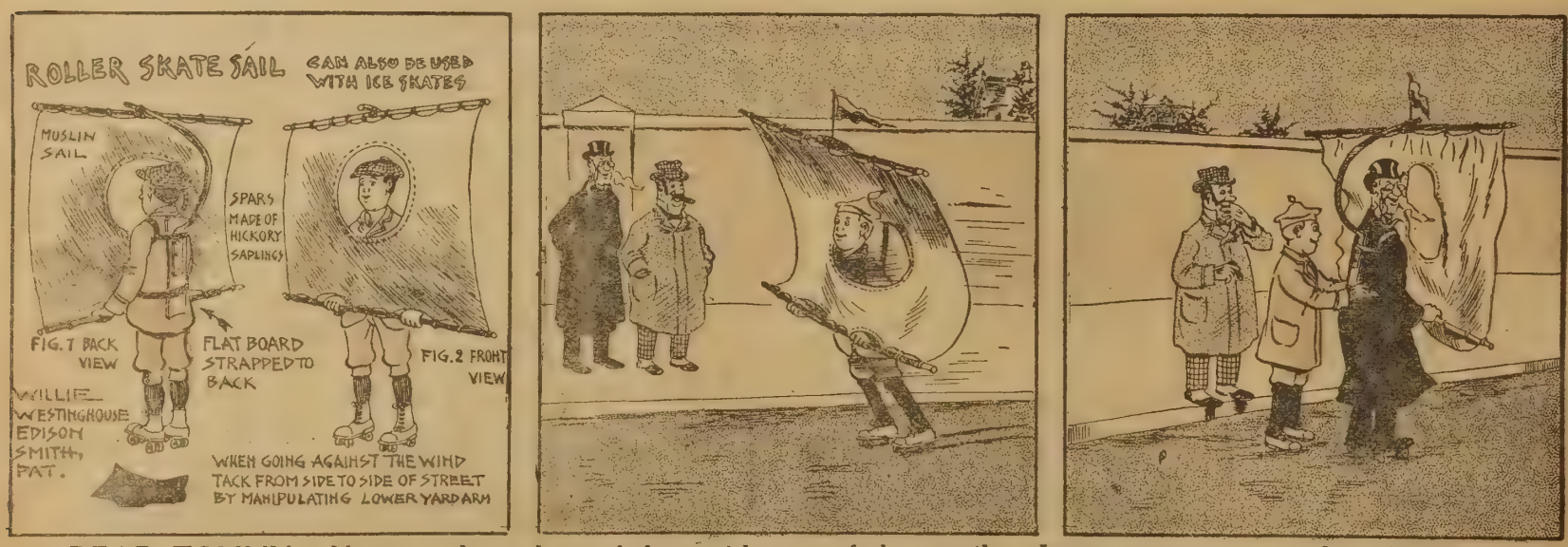
Town ..... State .....

R. F. D. No. .....

# UNLUCKY LOOIE WANTS THE DAY FIXED




# PAPA AND THE MINISTER GET INTO TROUBLE WITH WILLIE'S LATEST




DEAR TOMMY: You can have lots of fun with one of these sails. I was trying mine, when Papa and the Minister came along, and the Minister wanted to try it. He can skate pretty good, but doesn't understand managing a sail, and got started backward. Papa was so full of laughter that he couldn't move, and the Minister bumped into him!

Yours. etc..

WILLIE.

# U. S. Would Control Water Power

## *Compromise Between the Shields and Ferris Bills Is Up*

The national administration has introduced a bill at Washington of vast future interest to American farmers. It is a measure for the development of water powers upon navigable streams, public lands and national forests.

This problem has been deadlocked for several years. The house has passed what is known as the Ferris bill, approved by the friends of conservation. The senate has repeatedly passed the Shields bill, a measure unsatisfactory to conservation, as in their judgment, while it is nominally a leasing proposition, it practically surrendered forever these great water powers to private interests.

The new administration bill is in the nature of a compromise. It creates a commission composed of the secretaries of war, interior and agriculture.

It proposes to lease the water power privilege to private capital for a period not exceeding 50 years. At the end of that time the project may be (a) taken over by the United States; upon payment of "the fair value, not to exceed actual cost of the property taken," (b) re-leased to the original lessees; (c) leased to a new lessee.

Rates and service to the public are to be regulated by the individual states where the state has a public service commission, and in case a state has no such regulative commission, then by the federal power commission.

The bill proposes that the lessee must pay the United States reasonable annual charges for the use of government lands or waters, in no case to be les sthan 10 cents per horsepower per annum.

The bill is more than electric power development. It aims at the improvement of navigable streams. For example, a company leasing a power project on the Snake river could be required by the commission to build locks for steamboats.

This problem is of special concern to the coming generation, for the use of electric current is bound to inrease amazingly, and it is of vital importance that the rates shall be reasonable and that the government shall keep a string on these water powers so that the boys and girls of this generation shall have the right, if they deem it wise to exercise it, to take them back under government ownership and operation.

The bill has vast importance in another way. The day is coming when the fertile lands of the Pacific northwest will wear out and require fertilizing. When that time comes, the farmers will need cheap phosphates and nitrates. With water power the nitrates may be taken from the atmosphere, and phosphates can be electrically produced from the vast deposits of phosphate rock that are known to underlie large areas of eastrn Oregon and southern Idaho.

We see, then, the importance of Uncle Sam keeping title to these phosphate lands, and holding a string on the big water powers, so that if private interests should charge excessive prices for fertilizers, the government can step in, take back the power projects and manufacture fertilizers to sell to the people at cost.

# Bulk Grain Meeting

Farmers from all parts of the Inland Empire will be in attendance at the bulk grain conference in Spokane beginning in Spokane tomorrow, January 25. An excellent program has been arranged, including talks and demonstrations by a number of experts in various lines affecting the handling of the grain crop of the northwest. The big question, however, is how to handle this season's crop in bulk, as the indications are that there will not be enough sacks available and that those that can be obtained will be prohibitively high. The conference closes Saturday evening. A Hoover dinner will be served Friday evening, following which discussion of the subjects at hand will be continued.

# Naval Station Active

The way Commander Miller Freeman is interesting the public in the naval station at Seattle is illustrated by the following incident:

Commander Freeman has not only succeeded in having the government do numerous things for the success of the station, but has also by example inspired the public to do likewise. For instance, one day Hazen J. Titus, a very patriotic citizen and head of the dining car service of the Northern Pacific, visited the station and expressed a desire to do something for the boys. The commander told him that they were organizing a band and needed some instruments. "Just give me a list of what you need," said Titus. The leader of the band soon compiled the list and Mr. Titus left for the city.

In the afternoon the telephone rang and the agitated voice of Titus came to the ear of the commander, saying, "Do you know that list you gave me amounted to $700?"

"I should worry," replied Commander Freeman.

"How in the world do you think I am going to get the money?" said Titus.

"That is a matter which does not concern me in the least," replied the commander.

Titus knew that he was in for it, and the next afternoon the instruments were received, together with a receipted bill for the $700.

Another patriotic citizen tendered to the station a 125-foot yacht, a sailing vessel with auxiliary power, which has proved of splendid service in the training of the boys. Of course this man did not turn over his $50,000 boat to the government for nothing. It is leased from him at the very generous rental of $1 per month during the period of the war, and for a reasonable time thereafter.


# FIVE FUNCTIONS OF ADVERTISING

The New York American describes the function of advertising as "five fold."

1. To enlighten or educate.
2. To create new wants or to satisfy old ones.
3. To protect and foster legitimate enterprises.
4. To establish a medium of understanding between buyer and seller as a basis for mutual profit and advantage.
5. To fix an economical price and the maintenance of a standard of quality.




"To Enlighten."

These five uses of advertising are illustrated again and again by the advertisements printed in every issue of this paper.

They give you facts about new products and improved machinery.

They show you how you can add conveniences and comforts to your farm or home life.

They bring you into touch with strong, reliable, legitimate enterprises built up by means of advertising.

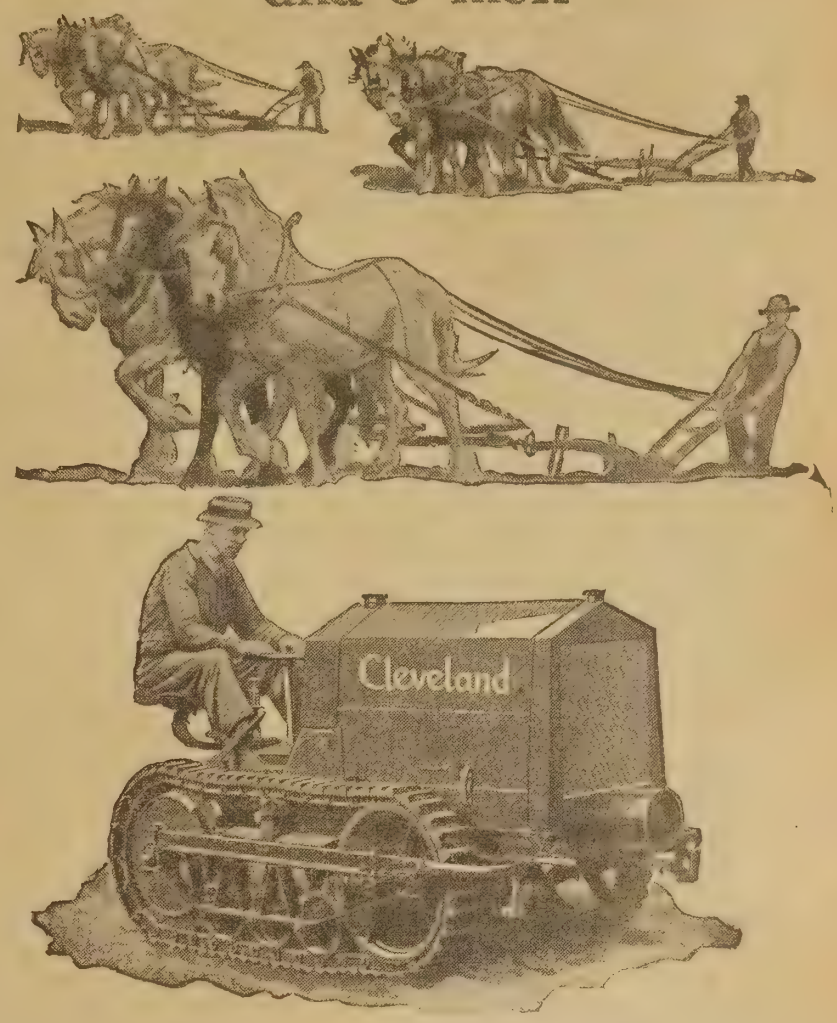
They introduce you to those with whom you can deal profitably.

They acquaint you with high standard goods economically priced.



# Cleveland Tractor

## Does the work of 9 horses and 3 men




Even if horses and men were plentiful, the Cleveland Tractor would do your work faster and at much less cost.

With the Cleveland pulling two 14-inch bottoms, it can plow up to 3½ miles an hour—*8 to 10 acres a day.* That is more than you can do with 3 good three-horse teams and their drivers.

But labor is scarce. Horses are scarce. The urgency of the situation demands farm tractors. The government urges their use.

The Cleveland Tractor not only works faster and cheaper than horses and men —*but far better.* With its aid, you can increase your production and reduce the cost.

That means more grain for Uncle Sam —*and more money for you.*

Because the Cleveland *crawls on its own tracks,* it can go almost anywhere. It weighs less than 3200 pounds and has more than 600 square inches of continuous traction surface—a bearing pressure of about 5 pounds per square inch.

Because of the small size of the Cleveland Tractor it can be turned in a twelve foot circle and housed in less space than it takes for a horse.

Its small size enables it to pass through narrow spaces between buildings, through wooded grounds, through doors and other places where larger machines cannot go.

The work in which The Cleveland Tractor can be used to accomplish more, and with greater economy, is almost endless—plowing, harrowing, discing, seeding, pulling a mower or binder, hay loader or manure spreader.

It is *the* tractor par-excellence for hauling of any nature, in excavating, road grading, pulling a snow-plow or stone-boat, in fact almost anywhere that motive power can be utilized.

Delivering 20 horse-power at the pulley, it supplements its hauling capacity by almost innumerable uses for stationary work, such as wood sawing, pumping and irrigation work, feed grinding, hay baling, corn shredding, corn shelling, ensilage cutting, silo filling, threshing, and many other uses where power is needed.

Rollin H. White, the famous motor truck engineer, is the designer of the Cleveland. He uses only the finest motor truck gears and materials. Gears are enclosed in dirt proof, dust proof cases.

*Get ready now for spring work.* Prepare for the bigger, better crops America expects of you and must have. Write us today for a complete description of the Cleveland Tractor and the name of the nearest Cleveland dealer. Address Dept. BK, or use the coupon.

Cleveland Tractor Co.
Dept. BK,
Cleveland, Ohio

Please send me full information about the Cleveland Tractor.

Name_____
City_____
County_____ State_____

**The Cleveland Tractor Company, Cleveland, Ohio**



# McNeff Motor Co.

## Northwest Distributors

Cleveland Tractor
Geared to the Ground

## 223 Pittock Block

## PORTLAND, ORE.



# THE BARRIER



By REX BEACH

Author of "The Spoilers," "The Ne'er-Do-Well," "The Silver Horde," etc.

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### CHAPTER XVII.

#### The Love of Poleon Doret.

To the girl crouching at the stern of Runnion's boat it seemed as if this day and night would never end. It seemed as if the procession of natural events must have ceased, that there was no longer any time, for she had been suffering steadily for hours and hours withotu end, and began to wonder dreamily whether she had not skipped a day in her reckoning between the time when she first heard of the strike on her claim and this present moment. It occurred to her that she was a rich girl now in her own right, and she smiled her crooked smile, as she reflected that the thing she had longed for without hope of attainment had come with confusing swiftness, and had left her unhappier than ever.

Would the day never come She pulled the rugs up closer about her as the morning chill made her shiver. She found herself keeping mechanical count with the sound of the sweeps—they must be making good speed, she thought, and the camp must be miles behind now. Had it been earlier in the season, when the river ran full of drift, they never could have gone thus in the dark, but the water was low and the chances of collision so remote as to render blind travel safe. Even yet she could not distinguish her oarsman, except as a black bulk, for it had been a lowering night and the approaching dawn failed to break through the blanket of cloud that hung above the great valley. He was a good boatman, however, as she gathered from the tireless regularity of his strokes. He was a silent man, too, and she was grateful for that. She snuggled down into her blanket and tried to sleep, but she only dozed for a minute, it seemed, to find her eyes fly wide open again. So, restless and tired of her lonely vigil, she gave a premonitory cough, and said to her companion:

"You must be tired rowing so steadily?"

"Oh, I don't mind it," he replied.

At the sound of his voice she sat bolt upright. It couldn't be—if this were Runnion he would have spoken before! She ventured again, tremulously:

"Have you any idea what time it is?"

"About 3 o'clock, I fancy."

"Who are you?" The question came like a shot.

"Don't you know?"

"What are you doing here, Mr. Runnion?"

"I'm rowing," he answered, carelessly.

"Why didn't you speak?" A vague feeling of uneasiness came over her, a suspicion that all was not right, so she waited for him to explain, and when he did not, she repeated her question. "What made you keep still so long? You knew who I was?"

"Well, it's the first time I ever took you on a midnight row, and I wanted to enjoy it."

The mockery in his voice quickened her apprehension. Of a sudden the fear of being misjudged impelled her to end this flight that had become so distasteful in a moment, preferring to face the people at the post rather than continue her journey with this man.

"I've changed my mind, Mr. Runnion," she said. "I don't want to go down to the Mission. I want you to take me back."

"Can't do it," he said; "the current is too swift."

"Then set me ashore and I'll walk back. It cant be far to town."

"Twenty-five miles. We've been out about three hours." He kept on rowing steadily, and although the distance they had gone frightened her, she summoned her courage to say:

"We can make that easily enough. Come, run in to the bank."

He ceased rowing and let the boat drift with dragging sweeps, filled his pipe and lighted it, then took up his oars again and resumed his labors.

"Please do as I ask you, Mr. Runnion. I've decided I don't want to go any farther." He laughed, and the sound aroused her. "Put me ashore this minute" she cried, indignantly. "What do you mean?"

"You've got a fierce temper, haven't you?

"Will you do it or not?"

When he made no answer, except to continue the maddening monotony of his movements, she was seized with a rash resolve to wrench the oars out of his hands, and made a quick motion towards him, at which he shouted:

"Sit down! Do you want to upset us?"

The unstable craft lurched and dipped dangerously, and, realizing the futility of her mad impulse, she sank back on her knees.

"Put me ashore!"

"No," he said, "not till I'm ready. Now, keep your seat or we'll both drown; this aint a ferry-boat." After a few strokes, he added, "We'll never get along together unless you tame that temper."

"We're not going to get along together, Mr. Runnion—only as far as the Mission. I dare say you can tolerate me until then, can you not?" She said this bitingly.

"Stark told me to board the first boat for St. Michael's," he said, disregarding her sarcasm, "but I've made a few plans of my own the last hour or so."

"St. Michael's! Mr. Stark told you—why, that's impossible! You misunderstood him. He told you to row me to the Mission. I'm going to Father Barnum's house."

"No, you're not, and I didn't misunderstand him. He wants to get you outside, all right, but I reckon you'd rather go as Mrs. Runnion than as the sweetheart of Ben Stark."

"Are you crazy?" the girl cried. "Mr. Stark kindly offered to help me reach the Father at his Mission. I'm nothing to him, and I'm certainly not going to be anything to you. If I'd known you were going to row the boat I should have stayed at home, because I detest you."

"You'll get over that."

"I'm not in the humor for jokes."

He rested again on his oars, and said, with deliberation:

"Stark 'kindly offered did he? Well, whenever Ben Stark 'kindly' offers anything, I'm in on the play. He's had his eye on you for the last three months, and he wants you, but he slipped a cog when he gave me the oars. You needn't be afraid, though, I'm going to do the square thing by you. We'll stop in at the Mission and be married, and then we'll see whether we want to go to St. Michael's or not, though personally I'm for going back to Flambeau."

During the hours while he had waited for Necia to discsover his identity, the man's mind had not been idle; he had determined to take what fortune tossed into his lap. Had she been the unknown, unnoticed halfbreed of a month or two before, he would not have wasted thought upon priests or vows, but now that a strange fate had worked a change in her before the world, he accepted it.

The girl's beauty, her indiference, the mistaken attitude of Stark urged him, and, strongest of all, he was drawn by his cupidity, for she would be very rich, so the knowing ones said. Doubtless that was why Stark wanted her, and, being a man who acknowledged no fidelity to his kind or his creator, Runnion determined to outwit his principal, Doret, Burrell, and all the rest. It was a chance to win much at the risk of nothing, and he was too good a gambler to let it pass.

With his brusque declaration Necia realized her position—that she was a weak, lonely girl, just come into womanhood, so cursed by good looks that men wanted her, so stained by birth that they would not take her honestly; realized that she was alone with a dissolute creature and beyond help, and for the first time in her life she felt the meaning of fear.

She saw what a frail and helpless thing she was; nothing about her was great save her soul, and that was immeasurably vexed and worried. She had just lived through a grief that had made her generous, and now she gained her first knowledge of the man-animal's gross selfishness.

"You are absolutely daft," she said. "You can't force me to marry you."

"I ain't going to force you; you'll do it willingly."

"I'll die first. I'll call the first man we see—I'll tell Father Barnum, and he'll have you run out of the country—it would only take a word from me.

"If you haven't changed your mind when we get to his place, I'll run through without stopping; but there isn't another priest between there and St. Mike's, and by the time we get to the mouth of the river, I guess you'll say yes to most anything. However, I'd rather marry you at Holy Cross if you'll consent, and I'm pretty sure you will—when you think it over."

"We won't discuss it."

"You don't understand yet," he continued, slowly. "What will people say when they know you ran away with me?"

"I'll tell them the truth."

"Huh! I'm too well known. No man on the river would ever have you after that."

"You—you—" Her voice was a-quiver with indignation and loathing, but her lips could not fram an epithet fit for him. He continued rowing for some time, then said:

"Will you marry me?"

"No! If this thing is ever known, Poleon will kill you—or father."

For a third time he rested on his oars.

"Now that we've come to threats, let me talk. I offered to marry you and do the square thing, but if you don't want to, I'll pass up the formality and take you for my squaw, the same as your father took Alluna. I guess you're no better than your mother, so your old man can't say much under the circumstances, and if he don't object, Poleon can't. Just remember, you're alone with me in the heart of the wilderness, and you've got to make a choice quick, because I'm going ashore and make some breakfast as soon as it's light enough to choose a landing place. If you agree to come quietly and go through with this thing like a sensible girl, I'll do what's right, but if you don't—then I'll do what's wrong, and maybe you won't be so damned anxious to tell your friends about this trip, or spread your story up and down the river. Make up your mind before I land."

The water gurgled at the bow again, and the rowlocks squeaked. Another hour and then another passed in silence before the girl noted that she no longer seemed to float through abysmal darkness, but that the river showed in muddy grayness just over the gunwale. She saw Runion more clearly, too, and made out his hateful outlines, though for all else she

(Continued on page twenty.)

## SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

## What You Should Know and Do About Breathing Properly



Dr. Hirshberg

You may well be thankful to sights which "fairly take your breath away." If the annual round of the year, which brings Christmas and New Year back again, could be duplicated or imitated by "surprises" of one kind and another every week, instead of only in the winter time, your lungs would be all the stronger and the air in them that much purer.

After you breathe in air and expell it fully from your lungs, there is a noticeable puffing out or protrusion of the abdomen. This is accompanied by a contraction of the diaphragm, the shallow, domelike partition between the chest and the abdomen. This corresponds to the initial act of inspiration or inhaling. Next follows the orderly elevation of the muscles underneath the diaphragm and a backward expansion of the chest over the neighborhood which corresponds to the lower lobes of the lungs.

The chest expands more to the sides in health than forward. The inflation then spreads from the lower parts of the chest upward to the collarbone area. As this expansion is completed the spine bows itself backward. At the end of all these movements of full breathing the chest will be found to have expanded to its fullest extent in all three diameters.

#### A Fine Exercise.

At best in the usual types of respiration there is always a certain amount of residual air left. This supplemental air can be driven out by powerful contraction of the abdominal muscles. Unluckily, the average person fails to exert these muscles sufficiently to expel this stale leftover air from each breath you take.

There is no real reason why the entire left lung and right lung should not both be in use at one time. That is why gymnastics, games, athletics, dancing and hard labor are recommended as incentives to perfect and complete respiration.

Since "it is better to wear out than to rust out," moderate exercise is labor with its head in heaven, and the person whose occupation and habits forbid him the activity his lungs demand ought to take the proper breathing exercises.

You should stand erect, with the heels together and the rest of your anatomy balanced upon the whole of your feet. The hands should rest upon the hips, thus relieving the shoulders of the weight of the arms.

Now lean the head very slightly back; open the nostrils—which should be previously cleared of obstructions by a nose surgeon—as widely as possible, and stretch the whole upper part of the trunk upward.

The lower ribs are then simultaneously moved outward, chiefly sideways, but also somewhat forward. The breastbone is lifted upward in the same motion. At once the air enters and fills each nook and cranny of the lungs in a steady, full flow.

#### Some Valuable Don'ts.

Among the "don'ts" connected with this breathing exercise, keep these especially in mind:

Never force the elbows and shoulders backward in order to bring the upper part of the chest into a cramped and highly arched position. Such a strain is too much of a tax, according to the results obtained. The upper lobes of the lungs are more easily and gently filled by the exercise of lifting the shoulders, collarbones and shoulder blades.

Never make too conscious an effort to secure the abdominal and diaphragmatic part of this full breathing by mere puffing up or distension of the abdomen. This will come unconsciously, because the diaphragm must sink when the ribs are widened, if only it is not hindered by forcibly drawing the abdomen inward. The abdominal wall should be kept in a relaxed and natural position.

It is an easy thing for animals and healthy children to pay attention to the movements of the chest. But grown-ups have usually forgotten how to exercise the chest. They hate to distress themselves or suffer the little discomfort necessary to learn how to breathe once again as "a romping, rollicking child."

# All the World's a Stage, and All the Men and Women Merely Players

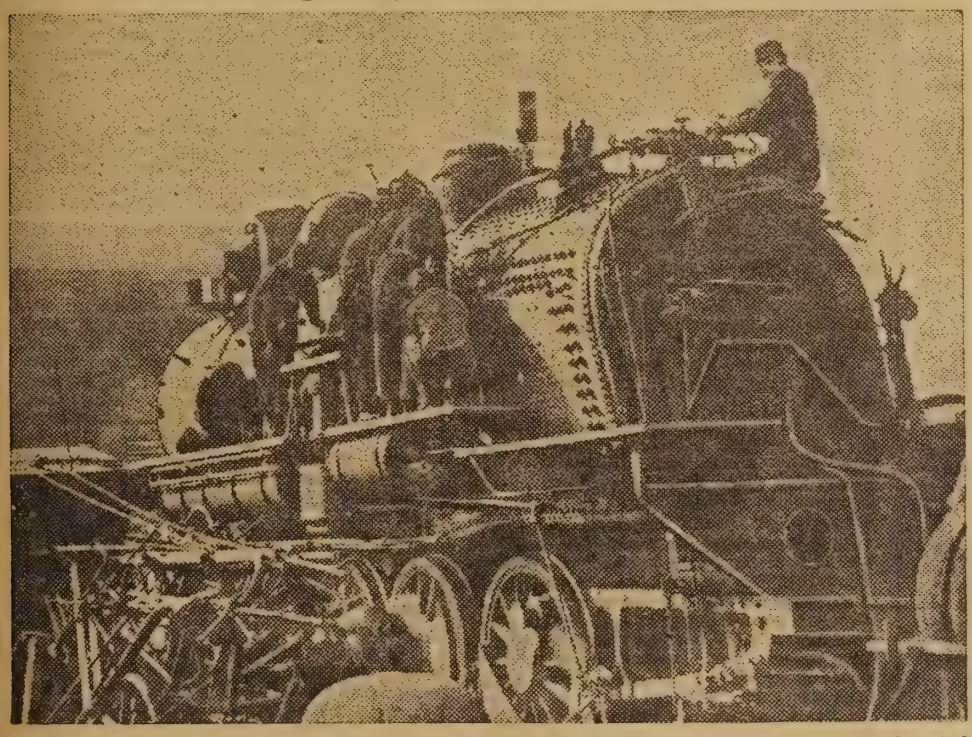
## Army and Navy Mascots Get Acquainted Before Game



—Copyrighted by International Film Service.

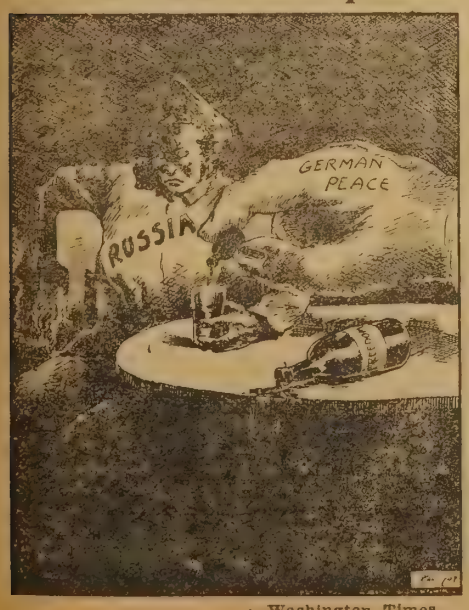
Army and navy mascots getting acquainted before the game. In the picture above are shown navy pet dog, "Sammy," goat "Eli," and army mule "Mike." The game at Travers island was played by the Fort Slocum eleven and the team from the Pelham bay naval training station. A bill has been introduced in the United States senate providing for the training of a thousand dogs for war service in France.

## Reclaiming Engines From the Scrap Heap



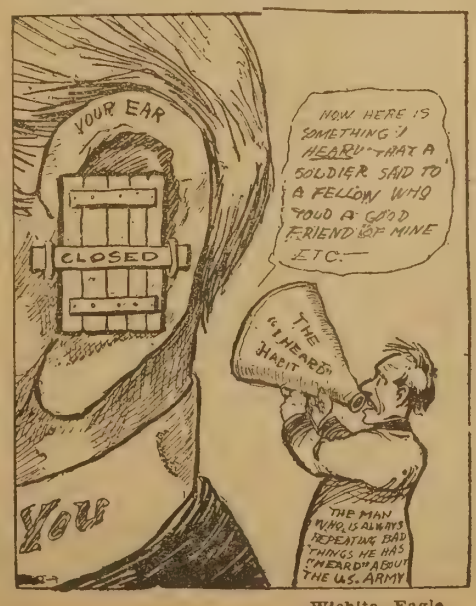
The locomotive shown in the accompanying photograph is one that had been relegated to the scrap heap a long time ago, but on account of the shortage of locomotives, it has just been rushed through Uncle Sam's repair shop at Los Angeles, Cal., and made fit for use once more. The railroad situation is so very grave at the present time that thousands of experts are employed day and night in making over old locomotives.

## Knockout Drops




—Washington Times.

## Refuse to Listen to It




—Wichita Eagle.

## Three Men Who Will Help Rush War




Secretary of War Baker recently announced that Colonel McRoberts, formerly executive manager of the National City Bank of New York, will have charge of the newly created procurement division of the ordnance bureau. This division will have charge of procuring all supplies for the armies of the United States. Major General Bullard, will, it is understood go to France. Major General James Parker also may be selected for duty in France soon.

## Camouflage as It Is Practiced



—Committee on Public Information.

This photograph gives an instance of the art of camouflage as it is practiced in France. It is a military observer prepared for an ascent into a tree which is within the observation of the enemy and which is within enemy artillery range. When the circus-appearing gentleman gets into the tree not the keenest sighted of the enemy will ever be able to tell that there is a man there. His queer looking costume will blend perfectly with the branches and leaves of the tree.

# "The Barrier" By REX BEACH

(Continued from page eighteen.)

beheld they might have been miles out upon a placid sea, and so imperceptible was the laggard day's approach that she could not measure the growing light. It was a desolate dawn, and showed no glorious gleams of color. There was no rose-pink glow, no merging of a thousand tints, no final burst of gleaming gold; the night merely faded away, changing to a sickly pallor that grew to ashen gray, and then dissolved the low-hung, distorted shadows a quarter of a mile inland on either hand into a forbidding row of unbroken forest backed by plain, morass and distant hills, untipped by slanting rays. Overhead a bleak ruin of clouds drifted; underneath the river ran, a bilious yellow. The whole country so far as the eye could range was unmarred by the hand of man, untracked save by the feet of the crafty forest people.

She saw Runion gazing over his shoulder in search of a shelving beach or bar, his profile showing more debased and mean than she has ever noticed it before. They rounded a bend where the left bank crumbled before the untiring teeth of the river, forming a bristling chevaux-de-frise of leaning, fallen firs awash in the current. The short side of the curve, the one nearest them, protected a gravel bar that made down-stream to a daggerlike point, and toward this Runion propelled the skiff. The girl's heart sank and she felt her limbs grow cold.

The mind of Poleon Doret worked in straight lines. Moreover, his memory was good. Stark's statement, which so upset Gale and the lieutenant, had a somewhat different effect upon the Frenchman, for certain facts had been impressed upon his subconsciousness which did not entirely gibe with the gambler's remarks, and yet they were too dimly engraved to afford foundation for a theory. What he did know was this, that he doubted. Why? Because certain scraps of a disjointed conversation recurred to him, a few words which he had overheard in Stark's saloon, something about a Peterborough canoe and a woman. He knew every skiff that lay along the water front, and of a sudden he decided to see if this one was where it had been at dusk, for there were but two modes of egress from Flambeau, and there was but one canoe of this type. If Necia had gone upriver on the freighter, pursuit was hopeless, for no boatman could make headway against the current; but if, on the other hand, that cedar craft was gone——. He ran out of Starks house and down to the river bank, then leaped to the shingle beneath. It was just one chance, and if he was wrong, no matter; the others would leave on the next upriver steamer; whereas, if his suspicion proved a certainty, if Stark had lied to throw them off the track, and Runion had taken her down stream—well, Poleon wished no one to hinder him, for he would travel light.

The boat was gone! He searched the line backward, but it was not there, and his excitement grew now, likewise his haste. Still on the run, he stumbled up to the trading post and around to the rear, where, bottom up, lay his own craft, the one he guarded jealously, a birch canoe, frail and treacherous for any but a man schooled in the ways of swift water and Indian tricks. He was very glad now that he had not told the others of his suspicions; they might have claimed the right to go, and of that he would not be cheated. He swung the shell over his shoulders, then hurried to the bank and down the steep trail like some great, misshapen turtle. He laid it carefully in the whispering current, then stripped himself with feverish haste, for the driving call of a hot pursuit was on him, and although it was the cold, raw hours of late night, he whipped off his garments until he was bare to the middle. He seized his paddle, stepped in, then knelt amidships and pushed away. The birch bark answered him like a living thing, leaping and dancing beneath the strokes which sprung the spruce blade and boiled the water to a foam, while rippling, rising ridges stood out upon his back and arms as they rose and fell, stretched and bent and straigtened.

A half-luminous, opaque glow was over the waters, but the banks quickly dropped away until there was nothing to guide him but the suck of the current and the sight of the dim-set stars. His haste now became something crying that lashed him fiercely, for he seemed to be standing still, and so began to mutter at the crawling stream and to complain of his thews, which did not drive him fast enough, only the sound he made was more like the whine of a hound in leash or a wolf that runs with hot nostrils close to the earth.

Runnion drove his Peterborough toward the shore with powerful strokes and ran its nose up on the gravel, rose, stretched himself and dragged it farther out, then looked down at Necia.

"Well, what is it, yes or no? Do you want me for a husband or for a master?" She cowered in the stern, a pale, fearful creature, finally murmuring:

"You—you must give me time."

"Not another hour. Here's where you declare yourself; and remember, I don't care which you choose, only you'd better be sensible."

She cast her despairing eyes up and down the river, then at the wilderness on either shore; but it was as silent and unpeopled as if it had been created that morning. She must have time; she would temporize, pretending to yield, and then betray him to the first comer; a promise exacted under duress would not be binding.

"I'll go quietly," she said, in a faint voice.

"I knew you'd see that I'm acting square. Come! Get the cramp out of yourself while I make a pot of coffee." He held out his hand to assist her and she accepted it, but stumbled as she rose, for she had been crouched in one position for several hours and her limbs were stiff. He caught her and swung her ashore; then, instead of putting her feet to the ground, he pressed her to himself roughly and kissed her. She gave a stifled cry and fought him off, but he laughed and held her the closer.

"Ain't I good for one kiss? Say this is the deuce of an engagement. Come now—"

"No, no, no!" she gasped, writhing like a wild thing; but he crushed his lips to hers again and then let her go, whereupon she drew away from him panting, disshevelled, her eyes wide and filled with horror. She scrubbed her lips with the back of her hand, as if to erase his mark, while he reached into the canoe and brought forth an ax, a bundle of food and a coffee pot. Then, still chuckling, he gathered a few sticks of driftwood and built a fire. She had a blind instinct to flee, and sought for a means of escape, but they were well upon the bar that stretched a distance of 300 feet to the wooded bank; one one side of the narrow spit was the scarcely moving, half stagnant water of a tiny bay or eddy; on the other the swift, gliding current tugging at the beached canoe, while the outer end of the gravelled ridge dwindled down to nothing and disappeared into the river. At sight of the canoe a thought struck her, but her face must have shown some sign of it, for the man chanced to look at the moment; and, seeing her expression, straightened himself, then gazed about searchingly. Without a word he stepped to the boat, and, seizing it, dragged it entirely out upon the bar, where her strength would not be equal to shoving it off quickly; and, not content with this, he made the painter fast, then went back to his fire. The eagerness died out of her face, but an instant later, when he turned to the clearer water of the eddy to fill the coffee pot, she seized her chance and sped up the bar towards the bank. The shingle under foot and her noisy skirts betrayed her, and with an oath he followed. It was an unequal race, and he handled her with rough, strong hands when he overtook her.

"So! You lied to me! Well, I'm through with this foolishness. If you'll go back on your word like this you'll 'bawl me out' before the priest; so I'll forget my promise, too, and you'll be glad of the chance to marry me."

"Let me go!" she panted. "I'll marry you. Yes, yes, I'll do it, only don't touch me now!"

He led her back to the fire, which had begun to crackle. She was so weak now that she sank upon the stones shivering.

"That's right! Sit down and behave while I make you something hot to drink. You're all in." After a time he continued, as he busied himself about his task: "Say, you ought to be glad to get me; I've got a lot of money, or I will have, and once you're Mrs. Runnion nobody'll ever know about this or think of you as a squaw." He talked to her while he waited for the water to boil, his assurance robbing her of hope; for she saw he was stubborn and reckless, determined to override her will as well as to conquer her body, while under his creed, the creed of his kind, a woman was made from the rib of man and for his service. He conveyed it to her plainly. He ruled horses with a hard hand, he drove his dog teams with a biting lash, and he mastered women with a similar lack of feeling or consideration.

He was still talking when the girl sprang to her feet and sent a shrill cry out over the river; but instantly he was up and upon her, his hand over her mouth, while she tore at it, screaming the name of Poleon Doret. He silenced her to a smothered, sobbing, mumble, and turned to see, far out on the bosom of the great soiled river, a man in a bark canoe. The craft had just swung past the bend above and was still a long way off—so far away, in fact, that Necia's signal had not reached it, for its occupant held unwaveringly to the swiftest channel, his body rising and falling in the smooth, unending rhythm of a master boatman under great haste, his arms up-flung now and then, as the paddle glinted and flashed across to the opposite.

Runnion glanced about hurriedly, then cursed as he saw no place of concealment. The Peterborough stood out upon the bar conspicuously, as did he and the girl; but the chance remained that this man, whoever he was, would pass by, for his speed was great, the river a mile in width and the bend sharp. Necia had cried Poleon's name, but her companion saw no resemblance to the Frenchman in this strange-looking voyager; in fact, he could not quite make out what was peculiar about the man—perhaps his eyes were not as sharp as hers—and then he saw that the boatman was naked to the waist. By now he was drawing opposite them with the speed of a hound. The girl, gagged and held by her captor's hands, struggled and moaned despairingly, and, crouching back of the boat, they might have escaped discovery in the gray morning ligh had it not been for the telltale fire—a tiny, crackling blaze no larger than a man's hat. It betrayed them. The dancing craft upon which their eyes were fixed whipped about, almost leaping from the water at one stroke, then came toward them, now nothing but a narrow thing, half again the width of a man's body. The current carried it down abreast of them, then past, and Runnion rose, releasing the girl, who cried out with all her might to the boatman. He made no sound in reply, but drove his canoe shoreward with quicker strokes. It was evident he would effect his landing near the lower end of the spit, for now he was within hearing distance, and driving closer every instant.

Necia heard the gambler call:

"Sheer off, Doret! You can't land here!"

She saw a gun in Runnion's hand, and a terrible, sickening fear swept over her, for he was slowly walking down the spit, keeping abreast of the canoe as it drifted. She could see exactly what would happen; no man could disembark against the will of an armed marksman, and if Poleon slackened his stroke, or stopped it to exchange his paddle for a weapon, the current would carry him past; in addition he would have to fire from a rocking paper shell harried by a boiling current, whereas the other man stood flat upon his feet.

"Keep away or I'll fire!" threatened Runnion again; and she screamed, "Don't try it, Poleon, he'll kill you!"

At her words Runnion raised his weapon and fired. She heard the woods behind reverberate with the echoes like a sounding board, saw the white spurt of smoke and the skitter of the bullet as it went wide. It was a long shot, and had been fired as a final warning; but Doret made no outcry, nor did he cease coming; instead, his paddle clove the water with the same steady strokes that took every ounce of effort in his body. Runnion threw open his gun and replaced the spent shell. On came the careening, crazy craft in a sidewise drift, and with it the girl saw coming a terrible tragedy. She started to run down the graveled ridge behind her enemy, not realizing the value or moment of her action, not knowing clearly what she would do; but as she drew near she saw Runnion raise his gun again, and, without thought of her own safety, threw herself upon him. Again his shot went wide as he strove to hurl her off, but his former taste of her strength was nothing to this, now that she fought for Poleon's life. Runnion snarled angrily and thrust her away, for he had waited till the canoe was close.

"Let me go, you devil" he cried, and aimed again; but again she ran at him. This time, however, she did not pit her strength against his, but paused, and as he undertook to fire she thrust at his elbow, then dodged out of his way. Her blow was crafty and well-timed, and his shot went wild. Again he took aim, and again she destroyed it with a touch and danced out of his reach. She was nimble and light, and quickened now by a cold calculation of all that depended upon her.

Three times in all she thwarted Runnion, while the canoe drove closer every instant. On the fourth, as she dashed at him, he struck to be rid of her, cursing wickedly—struck as he would have struck at a man. Silently she crumpled up and fell, a pitiful, draggled awkward little figure sprawled upon the rocks; but the delay proved fatal to him, for, though the canoe was close against the bank, and the huge man in it seemed to offer a mark too plain to be missed, he was too close to permit careful aim. Runnion heard him giving utterance to a strange, feral, whining sound, as if he were crying like a fighting boy; then, as the gambler raised his arm, the Canadian lifted himself up on the bottom of the canoe until he stood stretched to his full height, and leaped. As Runnion fired he sprang out and was into the water to his knees, his backward kick whirling the craft from underneath him out into the current, where the river seized it. He had risen and jumped all in one moment, launching himself at the shore like a panther. The gun roared again, but Poleon came up and on with the rush of the great, brown grizzly that no missile can stop. Runnion's weapon blazed in his face, but he neither felt nor heeded it, for his bare hands were upon his quarry, the impact of his body hurling the other from his feet, and neither of them knew whether any or all of the last bullets had taken effect. Poleon had come like an arrow, straight for his mark the instant he glimpsed it, an insensate, unreasoning, raging thing that no weight of lead nor length of blade could stop. In his haste he had left Flambeau without weapon of any kind, for in his mind such things were superfluous, and he had never fought with any but those God gave him, nor found any living thing that his hands could not master. Therefore, he had rushed headlong against this armed and waiting man, reaching for him ever closer and closer till the burning powder stung his eyes. They grappled and fought, alone and unseen, and yet it was no fight, for Runnion, though a vigorous, heavy-muscled man, was beaten down, smothered, and crushed beneath the onslaught of this great naked fellow, who all the time sobbed and whined and mewed in a panting fury.

They swung half across the spit to the farther side, where they fell in a fantastic convulsion, slipping and sliding and rolling among the rocks that smote and gouged and bruised them. The gambler fought for his life against the distorted face that snapped and bit like the muzzle of a wolf, while all the time he heard that fearful, inarticulate note of blood-hunger at his ear. The Canadian's clenched hands crushed whatever they fell upon as if mailed with metal; the fingers were like tearing tongs that could not be loosed. It was a frightful combat, hideous from its inequality, like the battle of a man against a maddened beast whose teeth tore and whose claws ripped, whose every move was irresistible. And so it was over shortly.

Poleon rose and ran to the fallen girl, leaving behind him a huddled and twisted likeness of a man. He picked her up tenderly, moaning and crooning; but as her limp head lolled back, throwing her pale, blind features up to the heavens, he began to cry, this time like a woman. Tears fell from his eyes, burning tears, the agony of which seared his soul. He laid her carefully beside the water's edge, and, holding her head and shoulders in the crook of his left arm, he wet his right hand and bathed her face, crouching over her, half nude, bathed in the sweat of his great labors, a tender, palpitating figure of bronzed muscle and sinew, with all his fury and hate replaced by apprehension and pity. The short moments that he worked with her were ages to him, but she revived beneath his ministrations, and her first frightened look of consciousness was changed to a melting smile.

"W-what happened, Poleon?" she said. "I was afraid!"

He stood up to his full height, shaking, and weak as the water that dripped from him, the very bones in him dissolved. For the first time he uttered words.

"T'ank God, ba gosh!" and ran his hand over his wet face.

"Where is he?" She started to her knees affrighted; then, seeing the twisted sprawling figure beyond, began to shudder. "He—he's dead?"

"I don' know," said Poleon, carelessly. "You feel it purty good, now, eh, w'at?"

"Yes—I—he struck me!" the remembrance of what had occurred surged over her, and she buried her face in

(Continued on page twenty-four.)

W.S.S.
WAR SAVINGS STAMPS
ISSUED BY THE
UNITED STATES
GOVERNMENT

# INSURANCE
## AGAINST THE HUN

**By J. F. MARTIN, Pres.**
**Northwestern Mutual Fire Association**

YOU buy Life Insurance to guard your family against Death.

You buy Fire insurance to protect your property against the Fire Fiend.

You should now buy War Savings Stamps to protect yourself against the greater Fiend—the War-mad Hun!

How would you like to see a victorious Germany with iron heel trample down from ocean to ocean the America we all know and love—the homes we have builded, the great nation of which you and I are a part; our men slain, our women dragged into worse than slavery?

Such is no idle picture if we let Germany win this war!

Our sons will be wasted in battle unless protected by the sinews of war, which we must furnish.

Only one person in ten bought Liberty Bonds.

Every man, woman and child can buy War Savings Stamps, and thus have a part in the insurance of America against the Hun.

The Northwestern Mutual Fire Association has been preaching economy and thrift for years, and it has saved its policy holders more than $2,500,000 in dividends and savings.

We are paying the policy holders of the Northwestern Mutual over $20,000 a month in cash dividends.

Take some of the money that you have saved on your Northwestern Mutual fire insurance policy and buy Thrift Stamps at 25c, or $5 War Savings Stamps at $4.13. You'll get your money back with interest from the strongest government on earth!

That isn't much of a sacrifice.

Do it now. Get started! Buy Thrift or Savings Stamps from the postoffice or mail carrier, your bank or other authorized agent.

"I mean to!" won't help you when the Hun is at the gate!

## Northwestern Mutual Fire Association

**Main Offices, Central Building, Seattle.**

**Inland Empire Offices, Old National Bank Bldg., Spokane.**

**This Advertisement Approved by the War Savings Committee for Washington. Daniel Kelleher, State Director.**

FAMILY CIRCLE

Write to the Editor

ALICE W. BARLAND,
Editorial Contributor.

# Dad's Old Sock Again

By Elizabeth Quaker.

In a recent issue of this paper we were told how to convert the top of men's heavy winter socks into chest protectors, leggings and many other practical articles of clothing, after the foot was worn out.

Besides those already mentioned, good underskirts for little ones may be fashioned from the legs of men's worn-out socks by cutting down one side of the leg so it will lie flat. Then sew the legs together, narrowing at the waist so they will fit. Three legs will be needed for each petticoat. I have seen very good little garments made by attaching a little knit skirt of dark gray stocking tops to an underwaist and a shell edge of bright scarlet crocheted at the bottom.

The worn foot may be cut off and the better parts of the leg and top undone. A good supply of heavy darning yarn is obtained. This wool when dyed some suitable color may be used for tying comfortables, knitting mittens and mufflers for the younger children's everyday use or for the shell edge for the little underskirts.

The unraveling is good busy work for the children on stormy days.

# Just Plain Cornbread

Get the best unbolted white cornmeal and learn to make plain cornbread. Eggs and milk are needed for muffins and spoon bread, and these are good, but so is plain cornbread. It is even better than "egg bread" for dinner. To the southerner eating cabbage, snap beans, turnip salad and spinach without cornbread is like eating food without salt. To him meat for dinner may be a luxury, but crisp little corn pones a necessity. Serve these with a vegetable dinner and you will not miss the meat.

**Corn Dodgers.**

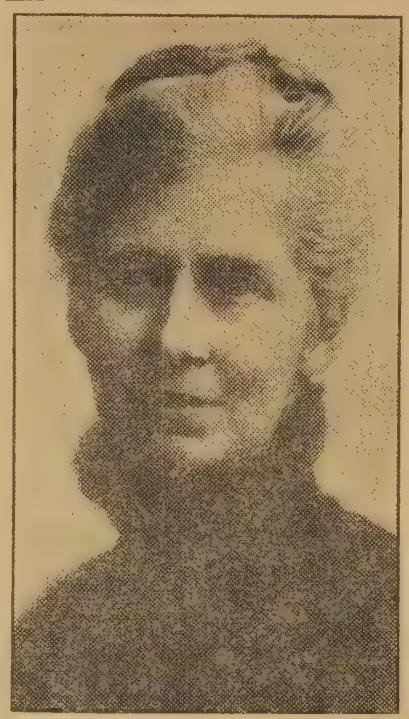
Pour over two cups of cornmeal, one teaspoon of salt and one teaspoon of fat, enough boiling water to make a stiff dough. Set aside to cool and rise. When cold shape into small oblong pones and bake in a moderate oven 35 minutes. The crust of these pones should be thick, crisp and golden brown.

**Crackling Bread.**

Make this bread according to the recipe for corn dodgers. Omit the shortening, and when dough is cold mix in one cup of very dry cracklings. This bread is very rich, and can be served without butter or meat. Hot stewed fruit, apricots or tart apples, is the right accompaniment for this rich bread. The combination makes a good breakfast.

**Cornmeal Dumplings.**

Greens, cornmeal dumplings and jowl—food experts will tell you is a perfect combination of food values. The dumplings are made as follows: Pour a cup of boiling water over two cups of cornmeal and one teaspoon of salt, add a little more water if it swells too dry. Mold into dumplings, while hot, dipping the hands in cold water every minute to prevent burning. Drop dumplings in the liquor in which greens were cooked and cook 15 minutes closely covered. Lift from pot with skimmer and serve on dish with greens.



Miss Anna Barrows.

# Handicraft For Boys

By A. Neely Hall.

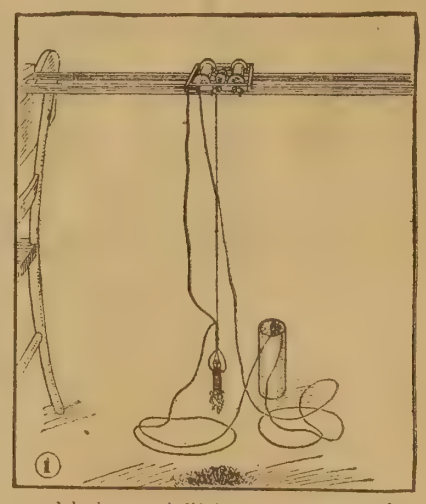
## Electro-Magnet Crane.

An electro-magnet is one of the most interesting of the simpler and easily constructed pieces of electrical apparatus which a boy can construct. Figure 1 shows one of the forms of conveying toys in which the electro-magnet can be used.

## Crane Carriage.

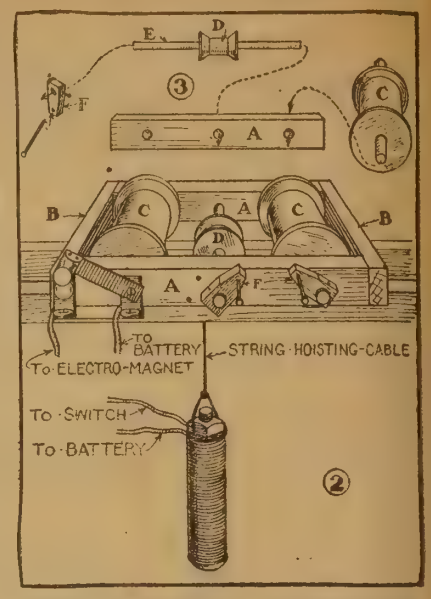
The crane carriage (Fig. 2) is a simple frame built up of two pairs of wooden strips (A and B), mounted upon a pair of ribbon spool wheels (C), with a third spool (D) mounted between for the cable winding drum.

Bore three quarter-inch holes into strips A (Fig. 3) for the spool axles. Cut the axles to fit snugly in the




spool holes, and fit loosely in the holes in strips A. The crank F (Fig. 3) fastens to shaft E. A similar crank must be fastened to the end of one of the spool shafts, also. A long brad forms the crank handle. The one for the winding-drum crank should fit loosely, and several small holes should be drilled in stick A in the correct positions so the crank handle can be ing drum at any point desired. The crank on the wheel shaft moves the carriage along its tracks.

Make the tracks of sticks heavy pushed into them to lock the wind-

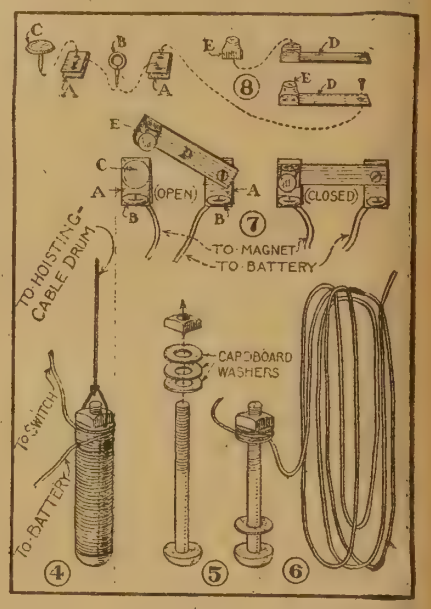



enough to support the carriage without bending. Nail strips across the ends to hold them at the proper distance apart (Fig. 1).

## Electro-Magnet.

Now for the magnet. An electro-magnet has a core of soft iron incased in a coil of wire. When an electric current passes through this coil, the core becomes a magnet, but it retains its magnetism only as long as the current passes through the wire. In using an electro-magnet, therefore, we pass a current through the coil when we want to lift a load, and shut off the current when we wish to drop the load. Your magnet should lift 250 or more small brads or tacks at one time.

A carriage bolt about two and one-half inches long and one-quarter inch in diameter is needed for the magnet




core, insulated electric bell wire for the coil, cardboard, paper, and a dry battery. Cut three cardboard washers of the diameter of the bolthead (Rig. 5), slip them over the bolt, and screw on the nut (Fig. 6). Then slip the end of the wire between the upper two washers, and starting at that end wind the wire around the bolt, pushing each turn close to the preceding turn. When the head of the bolt is reached, wind back to the starting point; then wind back to the head again, and so on until four or six layers have been wound on. Slip the second end of the wire between the cardboard washers, and screw the nut tight to hold the coil in position. Figs. 1 and 2 show how one end of the coil is connected by wire to a dry battery, how the other end is connected to a switch on the crane carriage, and how a third wire connects the battery with the switch.

Fig. 7 shows the switch. Make the contact plates A out of tin or brass (Fig 8), and punch holes through them for screweye binding posts B, brass tack C, and the lever screw. Make the lever D of tin or brass, with turned up tips on one end to tack to the wooden knob E.

Attach the hoisting cable string to the top of the magnet, run it up and over the winding-drum spool, and glue it to the spool.

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# Learn to Eat Things We Can Get Easily

By ANNA BUCHANAN

"I would rather not be on a committee or have to work with people who are so particular about their food, who can only eat this and that and the other thing," said Miss Anna Barrows at the Washington State college during Housekeepers' week. "They are not broad-minded people. We must learn to eat the things we can get easily. Half the trouble of food transportation today is in not using things we can get near by. We reach clear across the country for different types of food. Our devotion to wheat, I think, is due to advertising of wheat over and above the advertising of the neglected foods. We must learn to overcome this tendency to want things that are hard to obtain. Why do we insist upon having bread made of bleached flour and insist upon having our butter so yellow that it is often necessary to put coloring in it?"

Miss Barrows was the principal speaker during Housekeeping week at Pullman, Wash. She is head of the home economic department at Columbia university and is well known throughout the country as a Chautauqua lecturer and demonstrator. Just now she is demonstrating and lecturing for the national food administration.

Every one who has heard her, I think, likes Miss Barrows, not only for her quaint and pleasing manner on the platform, but because every idea she presents is so practical that it can be applied in any kind of a home.

Greater use of neglected and perishable foods was the main thought throughout all Miss Barrows' lectures and demonstrations. She spent a good deal of time discussing war breads, or as she was pleased to call it, "liberty" breads, containing the coarser flours such as corn, rye, barley and oats.

"The best way to place new bread before the family," she said, "is to do it quietly, and not say, 'Here is a new kind of bread we have to eat, I wonder if you will like it.'"

In order to accustom the family to the use of these coarser breads, Miss Barrows advises taking a small proportion of the new flour at first, so the change will not be so apparent, and gradually increase the amount of the darker flours. She uses white flour for sponge because it blends better with the yeast and gives the bread a good start.

Miss Barrows thinks it a good plan to divide the baking into three parts, using corn in one part, barley in another and having the third of white flour. If we have only a little of a kind, the family is more apt to like it and want more, she says.

**War Bread Contest.**

The war bread contest in which the home breadmakers of Washington were invited to contribute their skill and experience, attracted much attention. The judging of this bread was based on four points—nutritive value, 25 per cent; skill and texture, 25 per cent; palatability, 25 per cent, and use of flour other than wheat, 25 per cent.

Mrs. Grace Guernsey's loaf, which won first prize, received the following points; nutritive value, 24 per cent; palatibility, 23 per cent; skill and texture, 15 per cent; use of other flours than wheat, 25 per cent. Her recipe follows:

One cup soft yeast (the old-fashioned "starter"), one cup cornmeal (yellow preferred), one cup oatmeal, well cooked; one cup of mashed and sifted potatoes, two cups flour add a little more if bread sticks to the hand after kneading, two teaspoons salt.

Mix all ingredients in a solid loaf; knead till the bubbles show in the bread dough; set where it will keep very warm, but not hot; when doubled in bulk, knead it down again; when again doubled in bulk, bake the same as wheat bread.

**Won Second Prize.**

Miss Georgia Stamp of Walla Walla won second prize with bread made from the following recipe:

One and one-half cup potato yeast; half tablespoonful fat, half tablespoonful sugar, two and one-half cups wheat flour, two and one-half cups rye flour.

(Can use compressed yeast dissolved in one and one-half cups of lukewarm water, and add one-half tablespoonful of salt. Mix ingredients in order given, and knead thoroughly. Let it rise to double in bulk, shape in loaf, let rise as before, bake in moderately hot oven 45 minutes.)

Miss Stamp was given the following points: Nutritive value 22 per cent, palatability, 22 per cent; skill and texture, 18 per cent; flour other than wheat, 24 per cent.

**Third Prize Loaf.**

The third prize loaf was made by Mrs. C. Nommensen, which, on other than a war basis of judgment would have been given first by the judges. She received for nutritive value, 25 per cent; skill and texture, 20 per cent; palatability, 20 per cent; flour other than wheat, 15 per cent. Mrs. Nommensen's recipe follows:

One and one-half sifts of wheat flour, one-half sift graham flour, one-half sift rye flour, one cup any kind of fruit—jelly, pear butter or jam; four cups warm water, one tablespoonful lard, 1 tablespoonful salt.

(Boil the potatoes until done; then pour off the water and mash the potatoes. Put the water back on the potatoes, dissolve the yeast cake, add a little flour, and let it rise very light; then add flour, water, lard, fruit and salt; let it rise three times; then bake for an hour and a quarter.)

In announcing the awards, the judges gave the following points to remember when making bread for contest or show purposes:

Never enter a round loaf of bread in a contest, because if the outside is baked just right, the middle is not done, and if the middle is done the outside will have too hard a crust. The crust should be about an inch thick and the same all over the loaf.

See that the crumbs spring back to original shape after being pressed between the fingers.

Avoid large gas bubbles in the loaf.

Must be sweet and nutty in flavor, not sweet with sugar, but the fermentation must be carried on just right.

# Patterns

1149—Child's night drawers. Cut in five sizes: 2, 4, 6, 8 and 10 years. It requires three and a half yards of 36-inch material for an 8-year size. Price 10c.

2011—Child's dress. Cut in four sizes: 2, 3, 4 and 5 years. It requires two and one-fourth yards of 35-inch material for a 3-year size. Price, 10 cents.

2029—Ladies' night dress. Cut in four sizes: Small, medium, large and extra large. A medium size will require six yards of 36-inch material. Price, 10 cents.

2070—Ladies' house dress. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires six and a half yards of 36-inch material for a 36-inch size. The skirt measures about three yards at the lower edge. Price, 10 cents.

2216—Dress for misses and small women. Cut in four sizes: 14, 16, 18 and 20 years. Size 16 requires six and three-eighth yards of 44-inch material. The dress measures about three yards at the lower edge. Price, 10 cents.

2324—Ladies' work dress. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires six and one-fourth yards of 44-inch material. The dress measures about two and a half yards at the foot. Price, 10 cents.

2325-2326—Ladies' costume. Waist 2325 cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 38 will require three and one-fourth yards of 36-inch material. The skirt 2326 cut in six sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. Size 24 will require three and one-half yards of 36-inch material. The skirt measures about two yards at the foot. Two separate patterns, 10 cents for each pattern.

2327—Ladies' dress. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 38 requires six yards of 36-inch material. The skirt portion measures a little over 2 yards at the foot. Price, 10 cents.

2328—Boys' mackinaw. Cut in five sizes: 8, 10, 12, 14 and 16 years. Size 14 requires three and a half yards of 44-inch material. Price, 10 cents.

2332—Girls' dress. Cut in four sizes: 6, 8, 10 and 12 years. Size 10 requires four and a quarter yards of 44-inch material. Price, 10 cents.

2340—Juniors' dress. Cut in three sizes: 12, 14 and 16 years. Size 14 will require five and three-eighths yards of 44-inch material. Price, 10 cents.

2349—Girls' dress. Cut in four sizes: 4, 6, 8 and 10 years. Size 8 will require three and a half yards of 36-inch material. Price, 10 cents.




# Treatment for Lice

(Continued from page ten.)

resort to individual treatment. It is doubtful whether it is practicable to keep any large flock entirely free from lice, nor will a few scattering body lice do any particular harm.

With farm fowls that have the liberty of the fields they will find dusting places in the cultivated field, in the garden, under the berry bushes, on the roads, but where they are confined in houses and small yards, or in winter time when the fields and dusting places may be covered with snow, the dust bath should be furnished. It should consist of finely pulverized earth or fine dust taken from the roads in dry weather and stored for winter use. Coal ashes also make a very effective dust bath. The dust should be kept in boxes large enough to accommodate the flock. It should be kept under cover, and preferably where the sunshine will strike it.

As to individual treatment, various methods are more or less effective. Satisfactory commercial powders are on the market. Recent experiments made by the United States department of agriculture showed that sodium fluorid was the most satisfactory of any material tried. This chemical can be purchased in a powdered form and the commercial grade should contain 90 to 98 per cent sodium fluorid. It should be obtained from druggists at a price 30 to 60 cents a pound retail. It is not now found in the ordinary country drug stores, but may be purchased from the larger city stores.

It may be applied either as a dry powder or as a liquid and used as a dip. In the latter case about one ounce of commercial sodium fluorid is dissolved in a gallon of water. Dipping, however, should not be tried in northern or cold sections at this season of the year. For treating with the powder, it is recommended that the fowl be held on a large pan or tray by one hand and with the other the dust is applied by the "pinch" method, as follows: One pinch on the head, one on the neck, two on the back, one on the breast, one below the vent, one on the tail, one on either thigh and one scattered on the under side of each wing. The powder should be spread a little among the feathers when released by the thumb and fingers. This is called the pinch method, and is more economical and probably more effective than to use a can or shaker with holes in the lid and dust the powder into the feathers. By using a pan under the fowl when applying the powder the waste material that falls from the hen may be gathered up and used again. One pound of the powder will treat about 100 fowls, applied with the fingers as above.

If it is not possible to secure sodium fluorid, other commercial powders, which may always be purchased in the local stores, may be used with satisfactory results.

The "barrel" treatment is not effective and may be dangerous. Sulphur is often used for lice, but is not as satisfactory as some other powders.

Lice killer applied to the perches will not kill the body lice. That is the treatment for mites, but the mite is another story. J. D.

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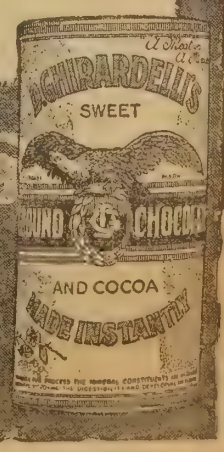
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**Lots of Rain Instead of Snow.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 11 years old and my birthday is February 21. I have been going to school, but I am sick now and can not go for a few days. I had a fine time Christmas morning. There is no snow here now, but quite a bit of rain. We live about 10 miles from Colfax and we have horses, cattle, pigs and other stock. I hope I will see my letter in print.—Dwight McNeilly, Colfax, Wash.

**Marie Has Found Her Twin.**

Dear Aunt Nellie: This is my third Corner letter. I have found a twin. She lives in Pasco. Her name is Ida McCotter. She wrote me a very interesting letter. The other evening about 8 o'clock I went outside and the moon was very bright and the stars were shining. The searchlight at Fort Casey was shining on our house and our house was all lighted up by the searchlight. I hope all the cousins and you have a happy New Year.—Marie Hazel Bultman, Box 31, Oak Harbor, Wash.

**Of Course Elsie May Be a Cousin.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 12 years old and I am in the seventh grade at school. I am five feet one and one-half inches tall and I have light hair and blue eyes. I wish Aunt Nellie would write more stories. I enjoy them very much, as I read quite a lot. May I be a cousin? Our school is having a vacation. I think it would be nice if we could have more contests. I live on a 240-acre farm. I lived in a city for seven years. My birthday is March 16. I will write again—Elsie Margaret Phillips, R. F. D. 1, Box 66, Colbert, Wash.

**Grace Lives on an Island.**

Dear Aunt Nellie: This is the second letter I have written to the Corner. We live on an island. I like to live here very much. The beach is about a mile from my home. We go down there in the summer and go out boat riding. We take the boat way out in the water. Some times we go up to the fishtrap and watch the men lift. At twilight the sun sets out in the west. When it sets there are many beautiful colors. The colors reflect upon the water. This is all for this time. I am hoping to hear from my twin soon.—Grace Mildred Bultman, Oak Harbor, Wash.

**Learning How to Embroider.**

Dear Aunt Nellie: This is the first time that I have written to the Children's Corner. I have read all the letters that were printed in the Farmer. I am 12 years old. I was born January 24, 1905. Have I a twin? If so I would like for them to write to me. I like to go to school. I am taking embroidering lessons from my teacher, Miss Campbell. I like her very much. I am going to embroider a centerpiece first. We had a Christmas tree at our school house. We did not have a program. I would like to see my letter in print.—Grace Helen Smelcer, Mayview, Wash.

**First Teacher Went to War.**

Dear Aunt Nellie: This is the third time I have written to the Children's Corner. I have found my twin. Her name is Bertha Jennings. She wrote me two letters and I answered them, but she hasn't answered my last one yet. No one has written from here so I thought I would write. I have a little brother 4 months old. We have had one week's vacation. I like my teacher fine. Her name is Helen Argyle. My sister's teacher's name is Miss Lillian Haupt. She is the primary teacher. Our first teacher went to war. I will write again some other time.—Marie Ganguin, box 37, Goldendale, Wash.

**Edna Takes Domestic Science.**

Dear Aunt Nellie: I will write to the Farmer for the first time. I am 13 years old. I am in the seventh grade. My teacher's name is Mr. McCabe. I take domestic science. I will take the state examinations this January in both geography and physiology. I took music lessons on the piano and organ. I can crochet, embroider and tat. I have a pet calf. Her name is Star. We all love her dearly. I have been reading the letters in the Farmer so I thought I would like to write. I loved to read them. I would like to get acquainted with some of the cousins. We have a week of vacation. I surely had a merry Christmas. I wish all a Happy New Year.—Edna Dunaway, Glenoma, Wash.

**Writes About Her Christmas.**

Dear Aunt Nellie: It has been a long time since I wrote to the Children's Corner. I am going to write about my Christmas. For Christmas I got a dolly, a handkerchief, a game of India, three ribbons and a lot of candy and nuts and oranges. We have a phone in our house now. We are going to move pretty soon. Our teacher is very nice. The river has been high. Three times it went over a neighbor's field. There is my uncle and a man working on it. We have all been sick. Papa is sick now. Have I a twin? I am 8 years old and in the third grade. If I have a twin please write to me.—Irene Rogers, R. F. D. 2, Box 12, Arlington, Wash.

**Albert Is 11 Years Old.**

Dear Aunt Nellie: We have taken the Farmer for some time and I enjoy the letters of the other children. This time I am going to write about my Christmas vacation. For Christmas I got a book and some dominoes. We had lots of fun Christmas. We did not have to go back to school until the second of January. I am 11 years old. My birthday is September the 18th.—Albert Mitchell Needham, Wilcox, Wash.

**Call Baby Calf "Christmas Carol."**

Dear Aunt Nellie: I will write to the Children's Corner. I got a doll for Christmas, three ribbons and three games and nuts and candy. I like Christmas. We had a nice program at our schoolhouse. We have a baby calf. We call him Christmas Carol. I have one brother and one sister. My brother's name is Homer and my sister's name is Gladys. One of our neighbors came over and ate Christmas dinner with us. My birthday is January 14. I will be 9 years old. Homer joined the 23d engineers. I am in the third grade at school. I hope I will see my letter in print.—Ruth Bentley, R. F. D. 1, Elk, Wash.

**Go Boat Riding in Vacation.**

Dear Aunt Nellie: This is the first time that I have written to the Children's Corner. I am 11 years old. My birthday is the 12th of October. I have light hair and blue eyes. We live on a farm about four miles from Oak Harbor and only a little ways from the west beach. I like to go to the beach in the summer time. We go nearly every day in vacation and go boat riding. I know a couple of the riddles that Frances McCauley wrote. One is a watermelon and the other is the churn. Do I have a twin? If so I would like to correspond with her.—Sarah Mellenoar, R. F. D. 2, Box 29, Oak Harbor, Wash.

**Elzina Is a True American.**

Dear Aunt Nellie: It has been ever so long since I wrote to you. My sister in Stanwood has a little baby boy. He was born on Christmas. For Christmas I got two red ribbons and one black ribbon, a handkerchief, a game of battles and a lot of candy, oranges and nuts, besides my dolls and other things. My brother is in the army in England now. We haven't had a letter from him lately. I hope the Corner is growing. I hope our side will beat in this war. I am an American and I hope all the children in the Corner are. We had some little chickens and one night some big thing came and ate the mother hen. We think it is a coyote. I hope you will have a happy New Year.—Elzina Rogers, R. F. D. 2, Box 12, Arlington, Wash.

**Velvet Paws and Lilly Are Kittens.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I enjoy reading the letters, so I thought I would write. I am 10 years old and my birthday was the 27th of April. I have one sister and four brothers. My sister's name is Laura and my brothers' names are Robert, Ben, Walter and Ted. My sister is 15 years old, Robert is 26, Ben is 23, Walter is 19 and Ted is 17. Robert had to go to war this summer. I have two kittens named Velvet Paws and Lilly. Velvet Paws is black and white and Lilly is gray and white. We have one cow and two calves. We have some horses, but I don't know how many. We drive to school. Have I a twin? If I have I wish she would write to me.—Hattie Hayden, Benge, Wash.

**Brother Is a Soldier.**

Dear Aunt Nellie: This is the first time I have written to the Corner. I enjoy myself reading the letters. My birthday is the first of September. I was 10 years old. Have I a twin? I am in the fifth grade. I like to go to school. I live on the Colville Indian reservation. We have four colts and six grown horses. We have one cow and a calf. Their names are Boss and Flower. I have four brothers and three sisters. Their names are Huston, Lloyd, Roy and Charlie. My sisters' names are Velma, Emma and Mary. We have one dog and two cats. My oldest brother has gone to war. I would like to see my letter in print.—Thomas Everett Henson, Okanogan, Wash.

## THE BARRIER

(Continued from page twenty.)

her hands. "Oh, Poleon! Poleon! He was a dreadful man."

"He don' trouble you no more."

"He tried—he— Ugh! I—I'm glad you did it!" She broke down, trembling at her escape, until her selfishness smote her, and she was up and beside him on the instant. "Are you hurt? Oh, I never thought of that. You must be wounded!"

The Frenchman felt himself over, and looked down at his limbs for the first time. "No! I guess not," he said, at which Necia noticed his meager attire, and simultaneously he became conscious of it. He fell away a pace, casting his eyes over the river for his canoe, which was now a speck in the distance.

"Ba gosh! I'm a hell of a t'ing for lookin' at," he said. "I'm paddle hard —dat's wy. Sacre! how I sweat!" He hitched nervously at the band of his overalls, while Necia answered:

"Thats all right, Poleon." Then, without warning, her face froze with mingled repulsion and wonder. "Look! Look!" she whispered, pointing past him.

Runnion was moving slowly, crawling painfully into a sitting posture, uplifting a terribly mutilated face, dazed and half conscious, groping for possession of his wits. He saw them, and grimaced frightfully, cowering and cringing.

Poleon felt the girl's hand upon his arm and heard her crying in a hard, sharp voice:

"He needs killing! Put him away!"

He stared down at his gentle Necia, and saw the loathing in her face and the look of strange ferocity as she met his eyes boldly.

'You don't know what he—what he did," she said, through her shut teeth. "He—" But the man waited to hear no more.

Runnion saw him coming and scrambled frantically to all fours, then got on his feet and staggered down the bar. As Poleon overtook him, he cried out piteously, a shrill scream of terror, and, falling to his knees, groveled and debased himself like a foul cripple at fear of the lash. His agony dispelled the savage taint of Alluna's aboriginal training in Necia, and the pure white blood of her ancestors cried out:

"Poleon, Poleon! Not that!" She hurried after him to where he paused above the wretch waiting for her. "You mustn't!" she said. "That would be murder, and—and—it's all over now."

The Frenchman looked at her wonderingly, not comprehending this sudden leniency.

"Let him alone; you've nearly killed him; that's enough." Whereat Runnion, broken in body and spirit, began to beg for his life.

"W'at's dat you say jus' now?" Doret asked the girl. "Was dat de truth for sure w'at you speak?"

"Yes, but you've done your work. Don't touch him again."

He hesitated, and Runnion, quick to observe it, added his entreaty to hers.

"I'm beaten, Doret. You broke me to pieces. I need help—I—I'm hurt."

"W'at you 'spec' I do wit' 'im?" the Canadian asked, and she answered:

"I suppose we'll have to take him where he can get assistance."

"Dat skiff ain' carry all t'ree of us."

"I'll stay here," groaned the frightened man. "I'll wait for a steamer to pick me up, but for God's sake don't touch me again!"

Poleon looked him over carefully, and made up his mind that the man was more injured in spirit than in body, for, outside of his battered muscles, he showed no fatal symptoms. Although the voyageur was slower to anger than a child, a grudge never died in him, and his simple, self-taught creed knew no forgiveness for such men as Runnion, cherished no mercy for preying men or beasts. He glanced towards the wooded shores a stone's-throw above, then back at the coward he had beaten and whose life was forfeit under the code. There was a queer light in his eyes.

"Leave him here, Poleon. We'll go away, you and I, in the canoe, and the first boat will pick him up. Come." Necia tugged at his wrist for fear she might not prevail; but he was bent on brushing away a handful of hungry mosquitoes which, warmed by the growing day, had ventured out on the river. His face became wrinkled and set.

"Bien!" he grunted. "We lef' 'im here, bicouse dere ain't 'nough room in de batteau, eh? All right! Dat's good t'ing; but he's seeck man, so mebbe I feex it him nice place for stop till dem boats come."

"Yes, yes! Leave me here. I'll

(Continued on page twenty-seven.)


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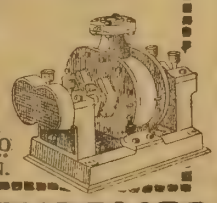
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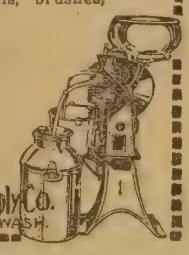
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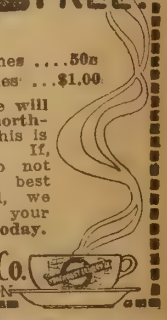



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## News for Breeders

The American Shorthorn association has, through the recommendation of Frank Brown, western representative, appropriated $500 for premiums for the Union Live Stock show at Union, Ore. It is a most commendable appropriation and the Union stock show, already one of the important shows of its kind in the northwest, is thus assisted on its way to greatness.

Cal Young, who is breeding Shorthorns and grade beef cattle near Eugene, Ore., is inclined to believe that sweet clover is the coming feed for cattle. He is trying some out and finds that when cattle get used to it they prefer it to timothy and velvet grass hay. Mr. Young has grown alfalfa and found it does well a year or two, but "runs out.' He is, however, going to give it another trial. Mr. Young pastures his cattle through the spring and summer, but feeds in winter—silage and clover hay with some alfalfa. Mr. Young now has 15 registered Shorthorn females. He used for awhile a high-class bull from the W. O. Minor herd, and is at present using a bull from the J. B. Cornett herd that is siring very satisfactory calves. H. A.

### An Oregon Product.



The picture above shown is Sir Nida Yamhill Wayne, senior and grand champion Holstein bull at the recent Pacific International Stock show at North Portland, Ore. This handsome young bull was bred and raised by C. S. Magee of McMinnville, Ore., who exhibited him at the show, and Mr. Magee is justly proud of his winning. H. A.

### Buys Jersey Bull.

J. N. Price, Yakima county (Wash.) agent, reports: "D. A. Hoag of Sunnyside purchased a pure bred Jersey bull from Waikiki ranch at spokane. This is one of three bulls I had recommended to Mr. Hoag. I prepared rations for feeding fall pigs on Mr. Cornue's ranch at Selah. He will use equal parts of corn and shorts with about 10 per cent tankage and a liberal supply of cull apples. We secured a price of $2 per hundred for tankage from the Yakima Meat company. Mr. Cornue has some spring shotes which he planned on feeding for two or three months longer, and selling his fall pigs at about $8 per head. I advised that he finish the spring pigs within a month or six weeks and put his feed into the fall pigs and finish them for market in March or April. The spring pigs weigh now about 180 pounds and their cost of gains will increase rapidly from now on."

### Harry Jenkins.

Harry Jenkins, who judged Jerseys at the Oregon State fair, and who had the misfortune to break a leg in an automobile accident during fair week, found on his return to his Indiana home that his bad luck was not entirely over. His leg had not knit from the setting at Salem, Ore., and he went to an Indianapolis hospital, where he underwent another operation. At last accounts Mr. Jenkins was reported to be rapidly recovering.

### Purchase of Shorthorns.

A. L. Wilson of Greenleaf, Idaho, has recently purchased of the Caldwell Live Stock association 24 head of purebred Shorthorns that represent some of the best blood of the country. The purchase includes a $1250 sire, with 14 females and seven male calves. Mr. Wilson is noted as a breeder of quality Poland China hogs, and his recent addition to his live stock holdings will land him pretty much in the line of animal hunsbandry.

### Pure Scotch Shorthorn.

Robert McGuire of Dixie, Idaho, a well-known Shorthorn breeder, has purchased of H. W. Dorman "Sassy Sultan," a pure Scotch and a snow-white 3-year-old, for $1000. Sassy Sultan is a grandson of Whitehall Sultan, another bull of fame in America.

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Herd founded in 1904, May Rose breeding. Most all granddaughters of Jethro Bass (11366), son of Imp. King of the May. Have a few heifers, calves for sale. Goshen, Ore.

## ABERDEEN ANGUS

### Aberdeen Angus Cattle

A. H. EAGLESON & SONS.
Boise, Idaho.

**The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.**

## POLAND CHINA SWINE

GREENLEAF STOCK RANCH.
Big type Poland Chinas, either sex, for sale at all times.
Wilson Bros., A. L. Wilson, Mgr.
Greenleaf, Idaho.

BIG TYPE POLAND CHINAS.
Herd headed by Sammy (79,833), Correspondence Solicited.
Fruitland Stock Farm, C. Royston, Mgr.
Payette or Fruitland, Idaho.

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### BERKSHIRE HOGS

Gilts of any age, bred or open; can also furnish young boars, from the best of strains and prize winning parentage.

EARL WOOD, Silverton, Ore.

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### Registered Hampshire Swine

A famous forage hog, great rustlers, fine mothers, quick growers.

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### Registered Clydesdale Stallion

3 years old in spring. Excellent breeding and conformation and will make horse weighing 1900 to 2000 pounds.

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Breeder of Registered Clydesdales.

REGISTERED PERCHERON HORSES.
E. O. WALTER, AUCTIONEER.
Walter Bros.
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### Mr. Livestock Man

Your ad, if placed on this page, will reach the eyes of more than 50,000 subscribers living in Washington, Oregon and Idaho. If you have surplus stock for sale, write today for our live stock and poultry advertising rates.

**The Pacific Northwest Farm Trio**

36 Review Bldg., Spokane, Wash.

## ANNUAL SALE OF REGISTERED SHORTHORNS

*Spokane, Wash., Feb. 23*
*Portland, Ore., Feb. 25*

Consignors announced later. For particulars and catalogs write now to

**F. M. ROTHROCK *or* FRANK BROWN**

Spokane, Wash. Carlton, Ore.

Spokane sale will be held during Northwest Live Stock Conference, Spokane, Feb. 21, 22 and 23.

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### White, Buff and Blue Orpingtons

(Capt. De Bathe Strain.)
Speckled Sussex and Anconas. All Single Comb

Aldrich strain Orpingtons, Sheppard Anconas. My birds took first prizes at all leading shows of Pacific Coast. Prices for stock, eggs and chicks reasonable. All from best laying birds. Finest lot of cockerels I've ever raised. A few choice Rhode Island Red cockerels.

A few White Holland and bronze turkey toms for sale.

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### S. C. White Leghorns

Head your pens with cocks and cockerels from selected, trap-nested stock, with known records. We are also booking orders for day-old chicks and hatching eggs. Write for price list.

HORN'S EGG FARM, Maple Valley, Wash.

### Rhode Island Reds and Whites

Rose comb and S. C. blue ribbon winners. Utility and show stock. 100 cockerels at $3 up. Bronze turkeys and Toulouse geese. Blue ribbon stock. Registered Airedale bitch at a bargain if taken at once.

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S. C. White Leghorns, hatching eggs, baby chicks and stock.

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### Famous Carnation White Leghorn Chicks

from healthy, vigorous, early maturing stock that have had free range and are heavy winter layers. Chix only $15 per 100. Also breeding stock.

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HEAVY-LAYING STRAIN S. C. R. I. REDS. Hatching eggs from top-notch laying strain of Pacific Northwest. If you want the best layers, weighers and payers that money can buy, write me.
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from first prize winners at the recent Portland poultry show.
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PARKS BRED TO LAY
Barred Rocks; line-bred. Cockerels, $3; singly; $2.50 each, in lots. Also 25 yearling hens at $1.50 each.
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### Ioka Farm Durocs

The big type, with quality. The kind that wins in the show ring. Offspring of the great sire Golden Rod and other best Duroc strains.
DOERFLER BROS., Silverton, Ore.
A. N. DOERFLER, Manager.

### DUROCS

Bred and open gilts of the best breeding and individuality.
G. O. SWALES. Johnson, Wash.

DUROCS.
Boars and open or bred gilts of excellent breeding.
E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE. YAKIMA, WASH.

OTTO'S DUROC JERSEYS.
Founded on the basis of making Duroc history in Idaho. Won 4 championships and two grand championships at Southern Idaho State Fair.
L. S. OTTO. Filer, Idaho.

IDAHO CHAMPION DUROCS—At state fair of Idaho our Durocs won more prizes than all other exhibitors combined. Stock of all ages for sale.
Richards Live Stock Co., Virginia, Idaho.

AVONDALE STOCK FARM.
Registered Duroc-Jersey hogs. Inspection invited. Corespondence solicited.
H. C. POLLY. Route 3, Burley, Idaho.

## TAMWORTH SWINE

ROUND KNOLL RANCH NO. 3.
Herd headed by Knoll Slope Colonel, assisted by Jolly Lad IV. Correspondence solicited.
Bliss, Idaho.

**In answering advertisements don't fail to mention this paper.**

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, Jan. 21.—With primary receipts the largest yet this season, the corn market today showed a noticeable downward slant. Prices closed steady, at the same as Saturday's finish to 5-8 cent lower, with January 127 5-8 and May 125 1-8@125 1-4. The outcome for oats ranged from 1-8 decline to a like advance, and for provisions from 7 cents down to a rise of 10 cents.

Although the increase in the arrivals of corn was principally at other centers than Chicago, the progress implied in diminishing traffic congestions gave an immediate advantage to the bears. Peace developments also counted in favor of lower prices, but selling was not at any time of an aggressive character, being checked by prospects of a renewal of lower temperature.

Oats sagged with corn, but reacted on account of assertions that seaboard exporters were in the market again for supplies.

More plentiful receipts of hogs than were expected made provisions average lower. Cash demand was slow and exports much reduced.

**Chicago Futures.**

| Corn— | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| Jan. ..... | 1.27½ | 1.27⅝ | 1.27½ | 1.27⅝ |
| May ..... | 1.24¼ | 1.24¼ | 1.23⅞ | 1.24¼ |
| Oats— | | | | |
| March .... | .77¾ | .78⅛ | .77¾ | .78 |
| May ..... | .75⅞ | .76¼ | .75⅝ | .76¼ |
| Pork— | | | | |
| Jan. ..... | ..... | ..... | ..... | 47.20 |
| May .....45.90 | | 45.90 | 45.75 | 45.87 |
| Lard— | | | | |
| Jan. ..... | | 24.77 | 24.75 | 24.75 |
| May .....25.00 | | 25.02 | 24.97 | 25.00 |
| Ribs— | | | | |
| Jan. ..... | .... | 24.02 | 24.00 | 24.02 |
| May ..... | .... | 24.45 | 24.40 | 24.42 |

**Cash Quotations.**

CHICAGO, Jan. 21.—Corn—No. 2, 3 and 4 yellow, nominal.

Oats—No. 3 white, 80½@81½c; standard, 81¼@82c.

Rye—No. 2, nominal.

Barley, $1.40@1.59.

Timothy, $5@8.

Clover, $20@28.

**Pacific Northwest Grain.**

PORTLAND, Ore., Jan. 19.—Grain, 30-day option, bids:

Oats—No. 2, $59; barley feed, $57.50; barley brewing, $59.

Eastern oats and corn in bulk bids: Oats, No. 3 white, $55.50; oats, 38-pound clipped, $56; corn, No. 3 yellow, $63; corn, No. 3 mixed, $62; oats, No. 3, $55.50; oats, clipped, $56; corn, yellow, $63; corn, mixed, $62.

**San Francisco Grain.**

SAN FRANCISCO, Jan. 21.—Barley, May, $2.91¼ bid, $3 asked.

**Minneapolis Grain.**

MINNEAPOLIS, Jan. 21.—Flour unchanged. In carload lots standard flour quoted at $9.75 a barrel in 98-pound cotton sacks. Shipments, 69,664 barrels.

Barley, $1.36@1.59.

Rye, $1.92@1.93.

Bran, $32.50.

Wheat—Receipts, 285 cars, compared with 311 a year ago.

Corn—No. 3 yellow, $1.53@1.58.

Oats—No. 3 white, 78½@79½c.

Flax, $3.51½@3.54½.

## Live Stock Quotations.

**At Omaha.**

OMAHA, Neb., Jan. 19.—Hogs—Receipts, 10,000; steady. Heavy, $15.85@16.20; mixed, $15.90@16.10; light, $15.75@16.15; pigs, $10@15; bulk of sales, $15.90@16.15.

Cattle—Receipts, 300; market steady. Native steers, $9.50@13; cows and heifers, $7@10.50; western steers, $8.50@11.50; Texas steers, $8@10; cows and heifers, $7@9; canners, $6@7.25; stockers and feeders, $6@11.25; calves, $9.25@13.25; bulls, stags, etc., $6.75@10.25.

Sheep—Receipts, 1000; market steady. Yearlings, $12@15; wethers, $11@13; ewes, $10.50@12.50; lambs, $16.50@17.10.

**At Chicago.**

CHICAGO, Jan. 21.—Hogs—Receipts, 43,000; tomorrow, 28,000; steady at Saturday's average. Bulk, $16.40@16.80; light, $15.90@16.70; mixed, $16.15@16.85; heavy, $16.15@16.20; rough, $16.15@16.30; pigs, $12.75@15.35.

Cattle—Receipts, 20,000; tomorrow, 8000; unsettled. Native steers, $8.40@14; stockers and feeders, $7@10.80; cows and heifers, $6@11.80; calves, $9@16.25.

Sheep—Receipts, 22,000; tomorrow, 12,000; weak. Wethers, $9.75@13.35; ewes, $9.40@12.75; lambs, $14.50@17.85.

**At Portland.**

PORTLAND, Ore., Jan. 21.—Cattle, 25 to 50c higher; receipts, 1059. Medium to choice steers, $10.35@11; good to medium steers, $9.35@10.35; common to good steers, $7.75@9.25; choice cows and heifers, $7.75@8.50; common to good cows and heifers, $6.50@7.75; canners, $3@6; bulls, $5@7.50; calves, $7.50@11; stockers and feeder steers, $6@9.

Hogs, 25 to 35c higher; receipts, 447. Prime light, $15.75@16; prime heavy, $15.75@16.10; pigs, $13.75@14.50; bulk, $15.75@16.

Sheep—Steady; receipts, 75. Western lambs, $14.50@15; valley lambs, $14@14.50; yearlings, $12.50@13; wethers, $12@12.50; ewes, $9.50@10.50.

**Spokane Stockyards, Monday.**

Hogs—Receipts, 74; market, strong to 25c higher. Prime light, $15.75@16; prime heavy, $15.75@16; pigs, $14@15; stockers and feeders, $11.50@13.25.

Cattle—Receipts, 115; market, strong to higher. Best beef steers, $10@10.75; good steers, $9@9.75; common to good steers, $7.75@8.75; best beef cows, $7.75@8.50; good cows, $6.75@7.50; ordinary to good cows, $6@6.75; canners, $3.50@5.75; best heifers, $8@8.75 bulls, $5@7.50; calves, $6.50@10; stocker and feeder steers, $6@8.

Sheep—Receipts, 62; market, strong to 25c higher. Prime lambs, $14@14.75; good lambs, $12.75@13.50; prime yearlings, $12.25@13; prime wethers, $11.75@12.50; ewes, $8.50@10.50.

## The Wool Market.

BOSTON, Jan. 18.—The Commercial Bulletin will say tomorrow:

"With confidence in the wool situation somewhat restored through the modification of the trade board's import regulations came the order of the fuel administrator curtailing manufacturing in the textile mills and consequently curtailing business in the wool merchants' offices, to the great annoyance of the trade, which has had nearly enough problems to meet in the last three years and more of war. Business in the trade in the earlier part of the week was of fair volume and fairly well distributed, with prices firm throughout the list. At the mills the only news is with reference to fuel and the action of the fuel administrator."

Scoured basis:

California—Northern, $1.70@1.75; middle county, $1.55@1.60; southern, $1.45@1.50.

Oregon—Eastern No. 1 staple, $1.80@1.82; eastern clothing, $1.50@1.60; valley No. 1, $1.65@1.70.

Territory—Fine staple, $1.85@1.90; halfblood combing, $1.75@1.80; three-eighths blood combing, $1.45@1.50; fine clothing, $1.60@1.63; fine medium clothing, $1.55@1.60.

Pulled—Extra, $1.80@1.85; AA, $1.70@1.80; A suppers, $1.60@1.65.

## Seattle Wheat.

SEATTLE, Wash., Jan. 19.—While Minneapolis and southeastern millers are actively operating in Washington, Oregon and Idaho to get hold of the theoretical surplus of 15,000,000 bushels of wheat accredited by the government report, their efforts have unavailing since Puget sound millers wired protests to the national capital. Whether combined action here will prevail, and whether the food department can be convinced that the estimate of millers, grain dealers, state and federal inspectors and supervisors are right and the department of agriculture wrong is the problem. Grain dealers this week reiterate their statement that there is now only 41,000,000 bushels of a visible supply in the three states against the government's 56,000,000 bushels. Some hope has been taken from the fact that eastern millers are experiencing much difficulty in buying wheat in this territory. A little has moved, but the sum total is trifling by comparison.

A ship cargo of 2200 long tons of Australian wheat arrived in port Wednesday. It is reported that the wheat will be ground here on contracts for flour to the allies.

## Portland Market.

PORTLAND, Ore., Jan. 21.—The strong demand for barley is now the feature of the grain trade. The order from the food administration, putting an embargo on shipments of barley out of California, strengthened the position of this cereal in all the other Coast states. At the local exchange at the close of the week bids for feed barley were advanced $3 a ton, while offers for brewing barley were $1.75 over those of Friday. There is not much barley now left in the northwest except the stock in the hands of the larger dealers, and this is said not to be extensive.

In the following list of quotations the grain, hay, mill feed, hops, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 1, $59 per ton.

Millstuffs—Bran, $30 per ton; shorts, $32.

Barley—No. 1 feed, $57.50; brewing, $59; rolled, $61@63.

Hay—Buying prices: Timothy, eastern Oregon, $27; alfalfa, $23.50; grain, $24.

Eggs — Oregon ranch, case count, 50c per dozen; candled, 52@55c.

Poultry—Hens, 22@24c; ducks, 20@25c; turkeys, live, 25c; geese, 16@18c.

Butter — City creamery, prints, 52@54c per pound; cubes, extras, 49 1-2c.

Cheese — Tillamook triplets, 23c; Young Americas, 24c.

Dressed meats — Veal, 17 1-2@18c; pork, 18 1-2@19c.

Hops—1916, nominal; 1917 crops, 16@18 1-2c.

Potatoes—Oregon, buying price, $1@1.15 per hundred.

Wool—Eastern Oregon, 50@60c; valley, 55@60c.

Beans—Buying prices: Oregon white, 9@10c; colored, 8@9c.

## Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

**Potatoes**—New local potatoes, $1.25 cwt; sweet potatoes, $4.75.

**Apples**—Large eating apples, $1.25@1.50; cooking apples, $1 box; Delicious, 2.25; Winter Bananas, $1.50 box; Jonathans, $1.10@1.40 box; Wageners, $1@1.50 box; Rome Beauties, $1.75 box; Spitzenburgs, $2 box; King Davids, $1.10 box; Grimes Golden, $1.35@1.60 box; Stayman Winesaps, $1.75 box.

**Butter**—Blanchard cartons, 53c lb; Medo-Maid, 53c lb; Cascade, 49c lb; Gold Leaf, 53c lb; Better Butter, 53c lb; Attalia, 53c lb; Diadem, 53c lb; Hazelwood, 53c lb; Solid Pack, 52@53c lb; Jersey Belle, 51c lb; Peerless, 47@48c lb; Snowcap, 38c lb; cooking butter, 38c lb.

**Cheese**—Wisconsin full cream, twins, 27c; triplets, 25c; Hazelwood full cream, triplets, 26c lb; Hazelwood Young America, 27c lb; Winconsin limburger, 32@33c lb; brick cheese, 33@35c lb; domestic Swiss, 38c lb; Young Americas, 27c lb.

**Eggs**—White filler, guaranteed, $13 case; selected storage, $12.

**Live Poultry**—Hens, 13@16c lb; broilers, 18c lb; old roosters, 9c lb; ducks, 15c lb; geese, 20@23c lb; turkeys, 28@32c lb.

**Dressed Poultry**—Hens, 30c lb; broilers, 32c lb; old roosters, 11c lb; ducks, 20@23c lb; geese, 20@23c lb; turkeys, 28@32c lb.

**Hide Quotations.**

**Green Cows and Steers**—25 lbs and up, 15c; salted cured, 17c; green bulls and stags, 12c; salted cured, 15c; kip, 15 lbs. to 25 lbs, 20c; calf skins up to 15 lbs, 28c; dry flint hides, 30c; dry salted, 26c; dry calf skins, under 10 lbs, 30c; dry sheep pelts, 35@40c; dry shearlings, 10c@$1 each; green horse hides, $2.50@4 each; dry horse hides, $1@2 each.

**METALS.**

NEW YORK, Jan. 19.—Bar silver, 89 5-8.

## Seattle Market.

SEATTLE, Jan. 19.—The potato market for the week-end shows a steadily weakening tendency, with heavy shrinkage and increasing costs of bags affecting quotations but little. Decay to spuds in storage has been so marked that it is possible to use only a small percentage of the bags for the second or third time. Sacks have reached a cost of about $5 to each ton of spuds. Shrinkage is 25 to 50 per cent. Jobbers predict that in all probability a third of the crop of western Washington will be lost through shrinkage.

The sensational ranch egg market, that jumped to 58c for two days, collapsed this morning when jobbers began seeking cover. Fortunately for them country bid prices were limited at the high lever, and only a few cases were in transit when the market broke. Dealers uniformly pronounced the flyer unwarranted.

The best reason that could be given for the fancy price was that brokers and others were getting hold of the surplus and shipping to New York on fat profits. The obvious effect, however, was to compel Seattle consumers to buy their eggs at 5c per dozen more than they were worth. The market is still weak at this level, and it is predicted that it may decline to a half dollar selling next week. Storage eggs are now history, but production is heavy and the big coops are turning some heavy shipments into this market daily. Jobbers have ceased to urge weather conditions as a bull factor, as the industry on Puget Sound is scientifically predicated to a very large exteint on heated and lighted coops.

Butter is uniformly firm. It seems impossible for brokers, jobbers and creamery men to increase the visible supply, but quotations have evidently gone as high as the traffic will stand and no attempt is being made to elevate them.

**BUYING PRICES.**

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle.

Eggs—Local, 50c per dozen.

Poultry—Live hens, fat, over 4 lbs., 25c lb.; 4 lbs. and under, 25c; old roosters, 16c lb.; squabs, large, $3.50 dozen; geese, fat, live, 18c lb; springs, live, 25c lb.

Butterfat—58c lb.; dairy butter, 56c.

Beef—Buying prices: Prime beef steers, 11@12c lb.; cows, fat, 9@11c lb.; heifers, 10@11c lb.

Hogs—Light, 18@20c lb.; heavy, 17@18c lb.

Veal—Fancy light, 14@17c lb.; heavy, 12@14c lb.

Hides — Salted, 15c lb.; flint-dry hides, 29c lb.; salt kip, 16c lb.; green hides, 12c lb.; green calf, 23c lb.; dry calf (under 6 lbs.), 29c lb.; bulls and dry salts, 4c lb. less; green bulls, 10c lb.; dry full wool sheep pelts, 35@39c lb.; salt bulls, 12c lb.

**SELLING PRICES.**

Feed—Scratch, $75 per ton; all grain chop, $67 per ton; oats, $64 per ton; rolled oats, $65.50 per ton; bran, $32.50@35 per ton; shorts, $34@38 per ton; soy bean meal, $68 per ton; whole corn, $77 per ton; cracked corn, $78 per ton; alfalfa meal, $35.

Hay—Eastern Washington timothy, $36@37 per ton; alfalfa, $28@29 per ton; double compressed, $40@41 per ton; wheat hay, $28 per ton; Puget sound, $30@31 per ton; straw, $15.

Butter—Washington creamery extras, cubes, 52c lb.; do bricks, 53c lb.

Eggs—Fresh ranch, 53@54c dozen.

Potatoes—Puget sound, $1.25@1.35 per cwt.; eastern Washington, $1.50@1.60 per cwt.



# THE BARRIER

(Continued from page twenty-four.)

make it through all right," begged Runnion.

"Better you camp yonder on de point, w'ere you can see does steamboat w'en she comes 'roun' de ben'. Dis is bad place." He indicated the thicket, a quarter of a mile above which ran out almost to the cut bank. "Come! I help you get feex."

Runnion shrank from his proffered assistance half fearfully, but, reassured, allowed the Frenchman to help him towards the shore.

"We tell it de first boat 'bout you, an' dey pick you up. You wait here, Necia."

The girl watched her rescuer guide Runnion up to the level of the woods, then disappear with him in the firs, and was relieved to see the two emerge upon the river bank again frather on, for she had feared for an instant that Poleon might forget. There seemed to be no danger, however, for he was crashing through the brush in advance of the other, who followed laboriously. Once Runnion gained the high point he would be able to command a view of both reaches of the river and could make signals to attract the first steamboat that chanced to come along. Without doubt a craft of some sort would pass from one direction or the other by tomorrow at latest, or, if not, she and Poleon could send back succor to him from the first habitation they encountered. The two men disappeared again, and her fears had begun to prey on her a second time when she beheld the big Canadian returning. He was hurrying a bit, apparently to be rid of the mosquitoes that swarmed about him, and she marked that, in addition to whipping himself with a handful of blueberry bushes, he wore Runnion's coat to protect his shoulders.

"Woof! Dose skeeter bug is hongry," he cried. "Let's we pass on de river queeck."

"You didn't touch him again?"

"No, no. I'm t'rough wit' 'im."

She was only too eager to be away from the spot, and an instant later they were afloat in the Peterborough.

"Dis nice batteau," Poleon remarked, critically. "I mak' it go fas,'" and began to row swiftly, seeking the breeze of the open river in which to shake off the horde of stinging pests that had risen with the sun. "I come 'way queeck wit'out t'inkin' 'bout gun or skeeter net or not'in'. Runnion she's len' me dis coat, so mebbe I don' look so worse lak' I do jus' now, eh?"

"How did you leave him? Is he badly injured?"

"No, I bus' it up on de face an' de rib, but she's feelin' good now. Yes. I'm leave 'im nice place for stop an' wait on de steamboat—plaintee spruce bough for set on."

She began to shudder again, and, sensitive to her every motion, he asked, solicitously, if she were sick, but she shook her head.

"I—I—was thinking what—supposing you hadn't come? Oh, Poleon! you don't know what you saved me from." She leaned forward and laid a tiny, grateful hand on the huge brown paw that rested on his oar. "I wonder if I can ever forget?"

She noted that they were running with the current and inquired:

"Where are we going?"

"Wal, I can't pull dis boat 'gainst dat current, so I guess we pass on till fin' my shirt, den bimebye we pick it up some steamboat an' go home."

Five miles below his quick eye detected his half-submerged "bark" lodged beneath some overhanging firs which, from the water's action, had fallen forward into the stream, and by rare good fortune it was still upright, although awash. He towed it to the next sandbar, where he wrung out and donned his shirt, then tipped the water from the smaller craft, and, making it fast astern of the Peterborough, set out again. Toward noon they came in sight of a little stern-wheeled craft that puffed and pattered manfully against the sweeping current, hiding behind the points and bars and following the slackest water.

"It's the Mission boat!" cried Necia. "It's the Mission boat! Father Barnum will be aboard."

She waved her arms madly and mingled her voice with Poleon's until a black-robed figure appeared beside the pilot house.

"Father Barnum!" she screamed, and, recognizing her, he signalled back.

Soon they were alongside, and a pair of Siwash deckhands lifted Necia aboard. Doret following after, the painter of the Peterborough in his teeth. He dragged both canoes out of the boiling tide and laid them bottom up on the forward deck, then climbed the narrow little stairs to find Necia in the arms of a benignant, white-haired priest, the best-beloved man on the Yukon, who broke away from the girl to greet the Frenchman, his kind face alight with astonishment.

"What is all this I hear? Slowly, Doret, slowly! My little girl is talking too furiously for these poor old wits to follow. I can't understand; I am amazed. What is this tale?"

Together they told him, while his blue eyes now opened with wonder, now grew soft with pity, then blazed with indignation. When they had finished he laid his hand upon Doret's shoulder.

"My son, I thank God for your good body and your clean heart. You saved our Necia, and you will be rewarded. As to this—this—man Runnion, we must find him, and he must be sent out of the country; this new, clean land of ours is no place for such as he. You will be our pilot, Poleon, and guide us to the spot."

"He's try for walk it back to camp," said Doret. "Mebbe he ain' hurt so much, after all."

"You must be right," said Father Barnum. "We will keep the steamer close to this shore, so that he can hail us when we overtake him."

And so they resumed their toilsome trip. But mile after mile fell behind them, and still no voice came from the woods, no figure hailed them. Doret, inscrutable and silent, lounged against the pilot house smoking innumerable cigarettes, which he rolled from squares of newspaper, his keen eyes apparently scanning every foot of their slow way; but when night fell at last and the bank faded from sight he tossed his last butt overboard, smiled grimly into the darkness and went below.

(To be continued in the next issue.)

# Want Ads

## HELP WANTED—MALE 3

WANTED—ACTIVE MEN WITH FARMER acquaintances, to sell Pipeless Furnaces; splendid line; good proposition to offer. Richardson & Boynton Co., 171 W. Lake st., Chicago, Ill.

## EDUCATIONAL 45

BEHNKE-WALKER, PORTLAND, NORTHwest's largest, finest business college, can not supply half the calls for trained young men, women. Enroll now. Free success catalog. Positions secured.

## MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

Send us postcard asking for our new, illustrated catalog No. 27, of sash, doors, finish, paints, builders' hardware, plaster board, roofing, etc., sent free on request.

Cottage front doors .....$2.75
6x panel doors .....$1.80
2 light windows .....$1.24
Prepared roofing, ....$1.35, $1.70 and $2.10
Clear cedar lap siding, per 1000 ft. ....$8.00
Short flooring and ceiling .....$20.00

The largest factory in the west selling direct to the consumer. We sell any one, ship anywhere, and guarantee safe delivery.

O. B. WILLIAMS CO.
1943 FIRST AVE SO. SEATTLE, WASH.

SALT FISH.

We sell it by the carload or in a pail. Fish is about the cheapest and best food you can get. Buy it now. Write for price list.

SUPERIOR FISH CO.,
SEATTLE, WASH.

BUILDING MATERIALS AT WHOLESALE prices — Doors, windows, roofing paper, porch columns, plaster boards. All building materials shipped promptly. Send for our complete illustrated catalogue; gives you lowest net prices. P. A. ROVIG CO., 2229 First ave., So., Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

10-LB. PAIL SALTED BLACK COD BELlies, the best part of the fish. Within 300 miles of Seattle, $1.50 by parcel post.

SUPERIOR FISH CO.,
SEATTLE, WASH.

TRAP COYOTES — IF YOU WANT TO learn of a sure system for trapping coyotes write me for information. I have it. C. L. Willis, Dillard, Ore.

## MISCELLANEOUS WANTED 63

POULTRY WANTED.

We want live poultry, dressed meats, hides and potatoes. We solicit your cream shipments. Write for prices. Commercial Creamery Company, Spokane, Wash.

## FARM LIGHT PLANTS. 73

WARNERLITE ELEC. LIGHT PLANTS absolutely guaranteed. Thousands used by satisfied farmers. Live agents wanted. Warnerlite Co., Temple Court bldg., Spokane.

## MACHINERY FOR SALE. 93

FOR SALE—NEW, BIG BULL TRACTOR; has never been used; must leave country, and will sacrifice for cash; act quick if you want a real bargain. Don't answer unless you mean business. Address Frank Van Patten, 617 Central bldg., Seattle, Wash.

"WITTE" GASOLINE ENGINES
save labor, and are carried in stock by
HIGGINS MACHINERY COMPANY,
312 FIRST AVE., S., SEATTLE.
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Want ads are run at this rate in The Washington Farmer and its associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

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Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

**Send for card giving lower rates for ads running one month or longer.**

## STOVE REPAIRING 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

## PATENTS 150

WRITE FOR HOW TO OBTAIN A PATent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

## POULTRY 174



125,000 BABY CHICKS FOR 1918—WHITE Leghorns, Feb. $15; March, $14; April, $14; May, $12. Reds, Rocks and Minorcas, March, $18; April, $18; May, $17. Agents Queen incubators and brooder stoves. A few second-hand incubators and brooders very cheap. Queen Hatchery, 89 Pike st., Seattle, Wash.

PEDIGREED POULTRY.

Tom Barron strain of English Leghorns; every bird pedigreed; 257-egg hens, cock's dam 275 eggs. These are real egg producers. A limited amount of choice stock for sale. Satisfaction guaranteed or no sales. Prices very reasonable. Asael H. Dixon, Oakley, Idaho.

FOR SALE—MAMMOTH BRONZE TURkeys. Won five prizes at Wash. State Fair. Toms, $7 and $10; hens, $5. H. T. Cutler, Parker, Wash.

BIG, DARK ROSE COMB R. I. REDS; also pure bred Airedale puppies; 6-tray, successful oat sprouter, $8. Mrs. Melvin H. Shirley, Firth, Idaho.

S. C. BLUE ANDALUSIANS; GREAT LAYers. Eggs, $2 per setting; fine ckls., $2 to $5. Mrs. C. W. Armstrong, Freewater, Ore.

FOR SOMETHING GOOD IN SILVER Wyandottes, S. S. Hamburgs or Golden Campines, write G. G. Wherry, Payette, Ida.

S. C. R. I. RED AND WHITE LEGHORN cockerels, hens and pullets. Hatching eggs. Mrs. Rominger, Underwood, Wash.

FOR SALE—BARRED PLYMOUTH ROCK chickens; best in the country. Mrs. C. H. Harris, Nampa, Idaho, R. D. 1.

BEST S. C. R. I. RED COCKERELS FOR sale. N. S. Felthouse, New Plymouth, Idaho.

WILD AND BRONZE TURKEYS. CHOICE breeders. E. Y. Sanders, Roy, Wash.

CHOICE BARRED ROCK COCKERELS, $3. B. Livingston, Glenwood, Wn.

## LIVE STOCK 177

FOR SALE, LIVE STOCK.

Big two days' sale, Friday, Saturday, Feb. 15-16. California Ranch, Buena, Wash. O. W. R. R., 15 miles from Yakima. Feb. 15, 30 head farm horses, 3 to 5 years; all farm raised, by reg. stallion; all broken, 20 head steers, heifers and grade cows. Feb. 16, 60 head reg. Holsteins, mostly cows and bred heifers. These offerings are the best in the west. Chas. S. Mead Jr., owner. George A. Gue, auctioneer.

HOLSTEIN HERD FOR SALE.

As I will sell or rent my ranch this spring, my entire herd of registered and high-grade Holstein cattle is for sale. For particulars as to breeding and prices, write W. Fred Harper, New Plymouth, Idaho.

ONE SHIRE REGISTERED STALLION, coming 4 years old, color dark brown, weight 1850, for sale or trade for horses or good property. James R. Barnes, Route 3, Pullman, Wash.

REGISTERED SHORTHORN COWS, YOUNG bulls and heifers, sired by Scotch bulls; liberal terms. Caldwell Cattle Co., by H. W. Dorman, Pres., Caldwell, Idaho.

YOUNG PERCHERON STALLIONS AND mares for sale. Among them Unietta, champion of three 1917 stock shows. H. E. Evans & Co., Rickreall, Ore.

FOR SALE—25 REGISTERED RED, white and roan Shorthorn bull calves and yearlings. Wm. Mulhall, Fenn, Idaho.

O. I. C. BOAR PIGS, SERVICEABLE AGE. Pearl Guineas, $5.00 per trio. C. I. Ballard, Rickerall, Ore.

FOR SALE — PIGS OF ALL AGES AND sizes. Can ship by express. Geo. W. Stevens, Maltby, Wash.

## HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

## BUSINESS OPPORTUNITIES 516

$6000 BUYS A WELL-EQUIPPED DAIRY plant and business in a beautiful college town in So. Calif. Brings in about $400 per mo. For full particulars and terms write R. F. D. 1, Bx. 86, Yelm, Wash.

## RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

## TAXIDERMISTS 426

WE MOUNT ANYTHING. FURS TANNED and made into furs and robes. Raw furs bought. Mohr, 82 Bernard, Spokane.

## PLUMBING and HEATING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

## SEEDS 620

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.
Portland, Oregon.

WE SPECIALIZE IN TIMOTHY, ALFALfa, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Ida.

## NURSERY STOCK 621

EVERBEARING STRAWBERRIES ARE mortgage lifters. We have plants, strong and thrifty. Send for price list. F. H. Moffett, Ellensburg, Wash.

CLARK'S SEEDLING STRAWBERRY plants. Fine, strong plants; terms reasonable. A. M. Sawyer, Hood River, Ore.

FOR SALE—STRAWBERRY PLANTS, standard varieties and best Everbearing kinds. Chas. Leigh, R. 3, Kent, Wash.

## HOMEST'DS, RELINQ'M'TS 642

OREGON-CALIFORNIA GOV'T LAND, booklet free. Joseph Clark, Sacramento, Cal.

## FARM LANDS—FOR SALE 651

BUY WHERE THEY RAISE THE PRIZE CROPS
IN SNOHOMISH COUNTY.

40-acre farms, $25 per acre. Ten yearly payments, 6 per cent interest. Visit our office and see the great exhibit of PRIZE-WINNING vegetables, fruits, grains, alfalfa and other grasses raised on the adjoining farms. They prove our claims that this is the best land in WESTERN WASHINGTON.

Paved roads. Four passenger trains a day. Graded school, cannery, creamery, cheese factory, plenty of work for the laboring man in the mills and camps, where 75 settlers are all boosters. DON'T LOSE A DAY in asking for our illustrated literature.

BROWNELL LAND CO.
904 THIRD AVE., SEATTLE, WASH.

YOUR CHANCE IS IN CANADA—RICH lands and business opportunities offer you independence: Farm lands, $11 to $30 acre; irrigated lands, $35 to $50; twenty years to pay; $2000 loan in improvements, or ready made farms. Loan of live stock; taxes average under twenty cents an acre; no taxes on improvements, personal property, or live stock. Good markets, churches, schools, roads, telephones; excellent climate—crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Allan Cameron, general superintendent land branch, Canadian Pacific Ry., 30 Ninth ave., Calgary, Alberta.

GOING — IRRIGATED ALFALFA AND stock ranch of 111 acres; gross income $6000; situated on the bank of the Yakima river; ideal for all kinds of stock; properly cultivated, will raise 100 bu. corn and 10 tons of potatoes to the acre. Horses, cows, registered $1000 Holstein bull, Berkshire hogs, chickens, farm implements, etc.; eight-room house, barn, silo, hog and chicken houses. This ranch is second to none in the Yakima valley. Reason for selling, old age. Price for all $28,000; one-half cash. Address B 7, care Washington Farmer, Spokane.

JORDAN VALLEY PROJECT—WHY NOT investigate this new project? It is just in the making, and opportunities of this character are becoming more scarce each year. We will explain it and send literature on request. There is plenty of development work and an opportunity for those who want to make payments in this manner. Our autos will take you from Boise to look the project over. HARLEY J. HOOKER, Shaw Bldg., Boise, Idaho.

PHYSICALLY DISABLED; OFFER 200 acres; 100 good alfalfa and grain land, with 14 head stock, chickens, implements and Ford, all for $4300; $2000 cash. Adjoins good range; in fine valley; eastern Oregon. 3-room house, barn and garage. Address Owner, care of Oregon Farmer, Spokane, Wn.

HEAD FOR THE HEADWATERS OF the old Missouri; splendid grain and stock ranches. For information about climate and soil write Chamber of Commerce, Three Forks, Montana.

187 ACRES FOR SALE—90 IN CULTIVAtion; 41 cattle, 9 horses, 10 hogs; all machinery, grain and hay; good grass and stock region. Price $16,000. C. E. Long, Fraser, Idaho.

GOOD 80-A. FARM OFFERED CHEAP; low interest, easy terms. For detailed information write (aged owner), August Storme, R 1, Marysville, Wash.

65 ACRES; ½ MILE FROM
station. Stock and tools.
SQUARE DEAL RANCH, Oceosta, Wash.

ALFALFA, PLOW LANDS, HOP YARDS, orchards, business investments. Lund Land Co., North Yakima, Wash.

40 A. LOGGED-OFF LAND; MUST SELL at once. Geo. Misener, Bothell, Wn.

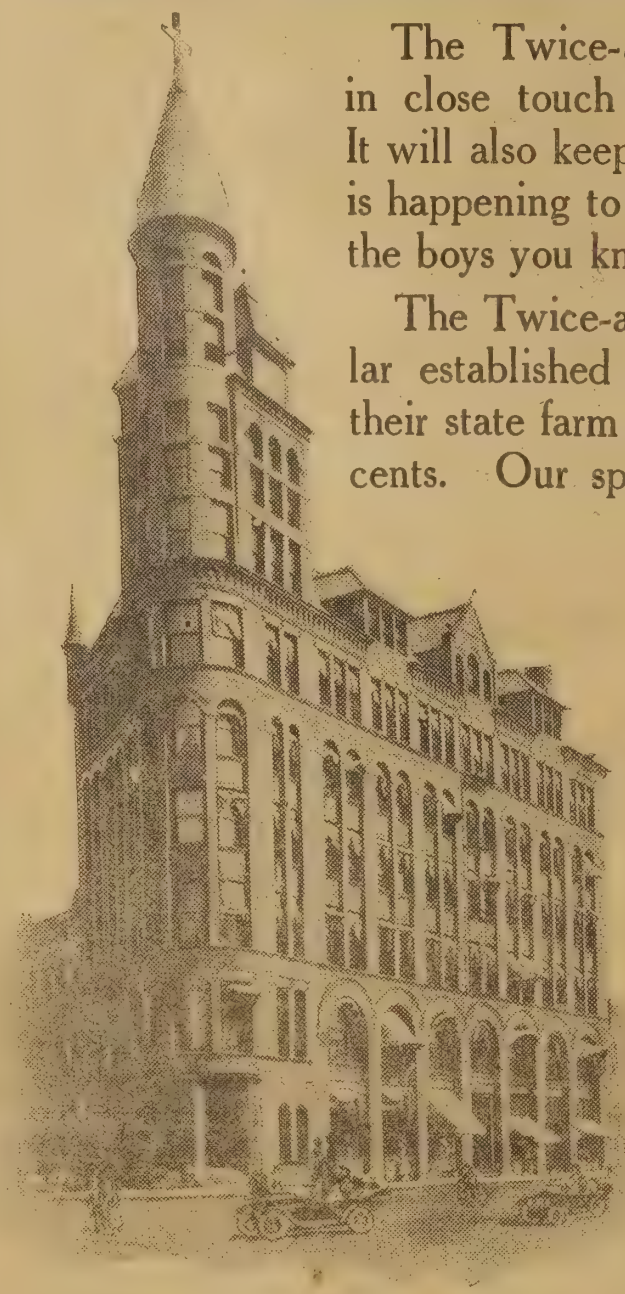
## FOR SALE OR EXCHANGE 702

160-ACRE RANCH; RICH SOIL; 40 ACRES broke; 100 tillable; plenty range; stream through place; some buildings; well; good grain ranch; 3½ miles from Cambridge, Idaho. $5000. Would trade for cattle. Owner, H. T. Cutler, Parker, Wash.

# A BIG SAVING

## *Twice-a-Week Spokesman-Review, 1 Year The Washington Farmer, 3 Years---Both for $1*

THIS clubbing offer is meeting with a big response. Most of our readers need no introduction to The Twice-a-Week Spokesman-Review. It is an old established semi-weekly newspaper which brings a complete, condensed and thoroughly reliable review of local, state, national and international news every Tuesday and Friday.



HOME OF TWICE-A-WEEK SPOKESMAN-REVIEW.

Above is a picture of the Review Building, Spokane, Wash., built, owned and occupied by the Spokesman-Review. It is the home of a great news gathering organization; the center of world-wide activities in securing reports of important events for Spokesman-Review readers.

The Twice-a-Week Spokesman-Review will keep you in close touch with neighborhood and Northwest news. It will also keep you posted regarding the great war; what is happening to the boys "over there"; what is happening to the boys you know.

The Twice-a-Week Spokesman-Review is sold at a regular established rate of $1 per year. As our readers know, their state farm paper can be secured for three years for 50 cents. Our special clubbing rate of $1 for both publications is therefore seen to be extremely liberal. With everything else going up in cost we are glad to offer you such a material saving on your reading matter.

It is also worth your while to note that clubbing offers of this kind are rare; and with the steady increase in publishing costs bargains of this kind are being generally withdrawn. It is to your interest to act at once.

## ORDER BLANK

Jan. 24.

THE WASHINGTON FARMER, Spokane, Washington.
Gentlemen:

I desire to take advantage of your special clubbing offer. Enclosed is $1 in full payment for one year's subscription to The Twice-a-Week Spokesman-Review and three years' subscription to THE WASHINGTON FARMER.

Name .....

Town .....

R. F. D. ..... State .....

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THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XLI. NO. 5. JANUARY 31, 1918. ** WEEKLY.

# Crisis Demands Food Production Administrator

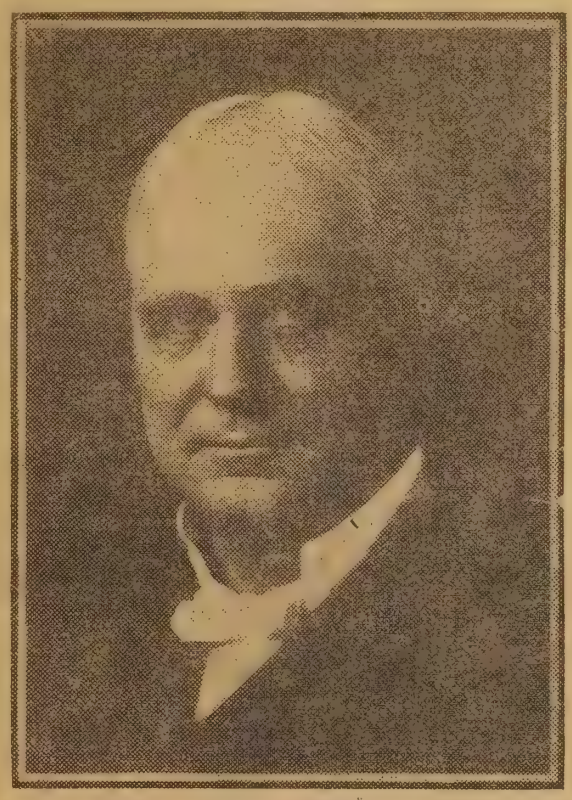
**Senator William E. Borah**



**With reference to the national war-time food production administrator, The Washington Farmer has received the following letter from Senator Borah of Idaho:**

**"I have your letter of the 31st. I think your idea a good one and I shall be glad to cooperate in any way I can."**

**Speaker Champ Clark**



Hon. Champ Clark of Missouri, speaker of the house of representatives, has this to say in his letter to The Washington Farmer:

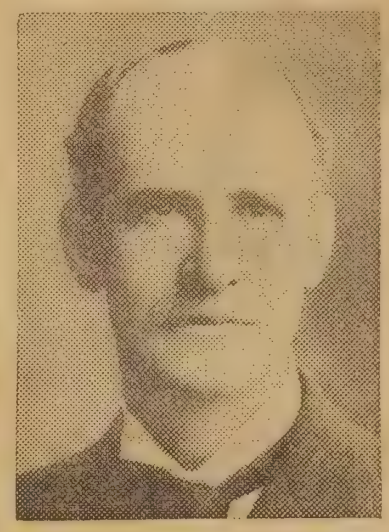
My dear Mr. Editor:

I have your note with the enclosures. Your general idea is one I have been preaching for a good while. I have tried to persuade the Powers that Be to that effect, apparently, without success.

Your friend,

Champ Clark

**Senator Miles Poindexter**



**In his letter to The Washington Farmer, Senator Poindexter of Washington, says:**

**"Am immediately recommending to the president favorable action upon the suggestions contained in your joint telegram, which I think is highly meritorious."**

## Governor Arthur Capper



**In his letter to The Washington Farmer, Governor Capper of Kansas says:**

**"I am in full accord with the movement and for several months I have been doing everything in my power to arouse our people to the necessity of raising every possible pound of foodstuffs."**

THE FARMER believes that the time is at hand for the immediate appointment of a National War-time Food Production Administrator. This view is now supported by Speaker Clark and other most eminent public men in America.

The Farmer has pushed the campaign for the appointment of such a man. A copy of a telegram to President Wilson placing before him the urgent necessity of a food production administrator has been sent by the Farmer to leading men in many parts of the country.

Many replies endorsing the plan have been received. Some recognized the importance of increased food pro-

Continued on page seven.

## Governor Lynn J. Frazier



**From the letter of Governor Frazier of North Dakota to The Washington Farmer, the following sentence is taken:**

**"Your message sent to the president provides the means which I believe would be a great assistance in the increase of food production for next year."**

# Grow Crops on Summerfallow

## Fertility Is Being Taken From the Soil and Producing Time Is Lost Through Method of Alternate Year Farming.




COLFAX, Whitman County, Wash., Jan. 13.—I consider the most important problem in this locality to be the utilization of summer fallow for crop production together with a realizing sense of the necessity of maintaining the fertility of the soil and a method of cultivation that will minimize the washing away of the soil of the hills in winter time. If there is any crop that can be profitably grown on summer fallow, some legumes for instance, the farmers here should have a demonstration of it. Land is being robbed of its fertility as ruthlessly and systematically as the Germans sacked Belgium. I have seen acres and acres of humus in the form of stubble, burned for no other reason that that it "plowed prettier" without it. This stubble plowed under will aid in softening the soil and save washing of the hills. The most important national problem is the elimination of the middle man. This class of citizen has established himself between the two great wealth producing classes, the agricultural and manufacturing industries and because of the relatively small volume of their individual business and the staggering number engaged in the distribution of commodities together with the overhead expenses and duplication of effort, the agriculturist suffers from low prices and the consumer of his products is mulcted. There are altogether too many people engaged in distribution and too few in production. Some system of distribution must be devised that will operate democratically and cooperatively. These surplus middlemen should be recruited into the army of production which would automatically shorten the hours of necessary labor and lighten the burden of production. Crop prospects for 1918 are rosy. Winter wheat came up nicely following the warm December rains and is now covered with a mantle of six inches of snow. There is an abundance of moisture in the soil. Live stock are in much better condition than usual at this time of the year, the winter being such that feed conditions are easy. Not much interest is shown in courses by the state college at Pullman.

E. C. HUNTON.

### Farmers Must Be Independent.

GIG HARBOR, Pierce County, Wash., Jan. 15.—The most important local problem to be solved in the near future by our farmers here is to learn to be self-sustaining and independent of outside sources of income on their own little ranches. Careful management and strict economy will do this. Very soon now 30,000,000 of fighting men are to be turned loose on a somewhat disorganized world. When that time comes the high prices of farm produce, as well as of labor, will be lowered tremendously. We farmers should be the most independent and self-sustaining of all workers when that time comes. As to the national and worldwide problems which now confront us I feel sure that the most important and all-absorbing one is to coordinate with each other, with our local, state and national governments in the schedules of action laid down for us to follow, that we may thereby hasten the closing of the great conflict which now disorganizes the world. This calls for unselfish, unswerving loyalty to the principles of liberty and justice through which the nations of the earth, both large and small, are to be reestablished on a peaceful and enduring basis. Safety, prosperity and happiness may then be possible for us all.

W. D. BOYNTON.

### Apples and Hay Wasted.

MALAGA, Chelan County, Wash., Jan. 3.—The price of pork has gone down to the normal price again. The price regulation has not been in effect here long enough to tell yet just what good it will do the farmer. But I think public opinion is in favor of price regulation on things bought by the farmer as well as things sold by him. Some of the farmers here are feeding straw and alfalfa together to young stock and they say it keeps the stock in good shape. They baled straw and sold it for $18 per ton and some was too fine to bale, so that is being fed to young stock. A farmer here can make a good profit on alfalfa hay if he can sell it at $20 per ton on the place and wheat hay at $25 per ton. Nearly all the farmers' sons have gone away to the army or navy and the effect will be seen in the spring on the farms for lack of help. Lots of apples and hay went to waste in this community for lack of farm help this year.

MRS. O. ALLENBAUGH.

### Should Extend Regulation.

BOSSBURG, Stevens County, Wash., June 14.—Partial price regulation by our government has proven very satisfactory to all classes in this part of the country, and we believe in government regulation of prices for all our nonperishable products, as that would give the producer a chance to figure on the cost of production, what could be made from a certain crop and on meat animals raised on the farm. We believe the government should fix a price on cotton and wool and their products. But we are no agitators, and we are willing to let our government regulate all these matters as they come to them. We have had a very mild and warm winter here so far, and stock of all kinds are doing fine. Some farmers have fed but little hay so far, and feed is holding out well. Prices have not advanced since early in the winter. There was less hay for sale here this year than for many years, for two reasons: one on account of more cattle than usual in the country, and on account of the dry summer. Hay has sold for $25 to $30 per ton, baled, f. o. b., and that gives the farmers a large profit even at the high cost of labor on the farms. We believe the farmer can make a good profit on hay at $20 per ton, and when the cattle and sheep men have to pay $20 for hay there is not much profit in feeding their stock. If the feeding is not done in the most scientific manner there will be no profit to the stockman. Our farmers are having better success with the silo for the preparation of feed than any other way, where they can grow corn or barley, and one of the farmers said that he has tried artichoke tops in the silo and finds that the stock like it. We had a small patch last year for hog feed and the tops of the artichokes were very large. They were in a field where the horses got at them and they ate them to the ground. If a farmer has no silo he should cut his hay with straw and mix with bran and shorts which makes a good feed for cattle, and is found much cheaper than feeding the hay loose and letting the stock run to the strawstacks. Labor on the farms is going to be pretty scarce this year, as there is more work in the timber than for several years, and the mines and smelters are taking all the men they can get. Many of our young men have gone into the army and navy and will be missed this year, as most all our farmers were planning on larger acreage this year than usual. No one is complaining of conditions, and say they will do the best they can. We are going to try organizing into groups and exchange work in order to plant and harvest our crops with as little expense as possible and save everything. Every one must pull together to feed our nation and allies and win the war.

W. W. PALMER.

### Feed Problem Is Solved.

RITZVILLE, Adams County, Wash., Jan. 17.—The most important problem of local interest is the labor question and it is a hard one to solve. The most important national problem will present itself after the war and it will be harder still to solve. The duty of any community will be to preach economy and nothing but economy and plenty of industry, and we will heal the wounds which are made by this terrible catastrophe which has befallen this world. The winter, so far, has been excellent and nobody need fear a hard spell, as all indications speak for a fine winter. Stock of all descriptions are looking very fine and the feed problem, as a whole, is solved. We are hoping for an early spring, which always is a main factor in growing good crops. Our community is very sparsely inhabited and have not attended any demonstration week offered by the state college or university. JACOB HARDER.

### Multiplicity of Movements.

COLVILLE, Stevens County, Wash., Jan. 23.—It is difficult to state a single and definite local problem of particular interest to farmers which might be said to stand out above all others as the most important. Judging from discussions recently listened to by the writer and conversations with farmers at organization meetings, there is evidence that war topics are increasing in interest, and the relation of the farming class to the conduct of the war is taking first place over any merely local problems. There is an evident desire to do the full part in the matter of production, and at the same time there is a feeling of uncertainty and lack of guidance on the part of those undertaking to direct these campaigns for the government. The multiplicity of movements of a public and official character, the stream of literature issued in support of these, the succession of calls for service, especially on those holding local positions of various kinds, is beginning to bewilder the average citizen. The tours of workers, many of them making special appeals to the farmers, but all acting independently and each endeavoring to monopolize the public eye, appear to be losing force. This can not be said to be due to any lessening of interest in the great cause on the part of farmers or others, but rather to the fact that people are unaccustomed to being directed by propaganda methods. Coupled to this is the frequent weak presentation of some of these moral suasion movements by the persons representing them, who are often lacking in experience or training for such important work and leave an unfortunate impression behind them. Cooperation and enthusiasm in support of the government's plan will always be readily forthcoming if the right sort of missionaries are sent out to make the pil-

(Continued on page twenty-six.)

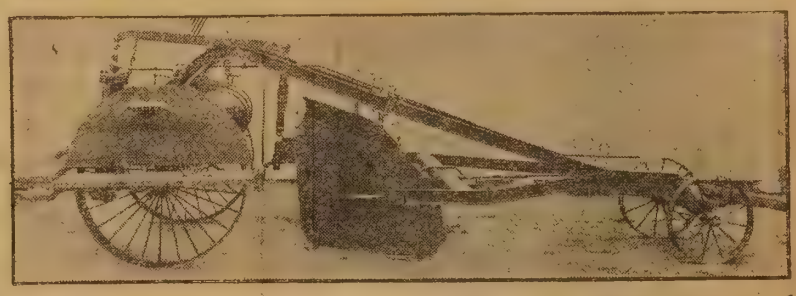
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The Perfect Grain Bin, manufactured and sold by
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Ask your dealer or write direct
DO IT NOW.
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Vol. 41. No. 5 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF January 31, 1918

# Best Sack Offer Is Twenty-five Cents

## *Big Conference of Grain Growers at Spokane Faces Vital Problems; Bulk Handling Looms*

"Said sacks to be 25 cents f. o. b. distributing point."

These are substantially the concluding words of the only offer made to the grain growers' convention at Spokane last week by any sack company to supply sacks to the growers this season. The Bemis Bag company offered to contract 1,000,000 bags at this figure for July delivery, subject to a number of conditions.

When this offer was presented in a letter the convention broke into an uproar of laughter, but Chairman R. Insinger rapped for order and declared that it was no laughing matter. "This company is serious; this offer is made in good faith; there are abnormal conditions surrounding the sack question this year," he said.

While the condition existing this year reflected itself in a strong sentiment favoring bulk handling of grain the consensus of opinion in the convention was that a large part of the 1918 crop would have to be handled in sacks regardless of the price.



**Charles L. McKenzie, banker and farmer, of Colfax, one of the delegates to the grain conference at Spokane, where he made a strong appeal for loyalty to the interests of the country during its present crisis.**

Lack of shipping facilities and correspondingly high freight rates on bags and bag material from Calcutta are cited as the reasons for the excessive price on bags. M. H. Houser, northwestern representative of the grain corporation of the food administration told the convention that the administration was working out as best it could means of alleviating the condition, and would do its best to secure sacks for the growers of grain at as nearly a reasonable price as possible. The convention adopted a resolution by R. C. McCroskey calling upon the government to take immediate action in the matter. A delegation may be sent to Washington to push the appeal with officials.

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The grain conference was originated by the Spokane Chamber of Commerce three years ago, when the agricultural committee of that body saw the growing need of more handling in bulk. A meeting was called at that time, a considerable number of farmers attending. Last year a larger number attended, and this year the assemblage was so large that one of the most spacious churches in Spokane had to be borrowed for the meetings, the assembly room of the chamber of commerce being inadequate.

Not only did it outgrow its quarters, but it outgrew its original scope. Then but a conference to discuss bulk grain possibilities, it this year broadened out to a discussion of agriculture in general, though the method of handling wheat remained the central theme. This was natural, for the people of the United States—even this far northwestern corner—are gradually beginning to realize the stupendous seriousness of the present day, the world condition that demands the utmost of every man and woman in every occupation. Wheat handling, wheat prices, saving wheat wastes, live stock feeding, food conservation, the war and a score of other topics, all centering about the great world crisis, were discussed during the two days of the conference.

The convention organized by the selection of a large general executive committee, representing the various counties as follows:

**Washington.**

Lincoln county—Almer McCurtain, Davenport; Edgar Williams, Mohler.
Adams county—J. F. Lauer, Odessa; Frank Hurst, Washtucna.
Walla Walla county—N. B. Atkinson, Waitsburg; B. F. Brewer, Walla Walla.
Okanogan county—Marion Warren, Chesaw.
Grant county—Frank Hinkhouse, Ruff; H. W. Carolus, Hartline.
Garfield county—J. L. Horrell, Mayview; James Oliver, Pomeroy.
Columbia county—E. L. Van Patten, Dayton; William Woodward, Dayton.
Franklin county—G. C. Foster, Eltopia; William Gibson, Snake.
Douglas county—Bernard Burke, Mansfield; Harry Clark, Waterville.
Kittitas county—Claude Catlin, Ellensburg; Ralph Lynch, Ellensburg.
Benton county—C. O. Williams, Kennewick; W. C. Travis, Kiona.
Whitman county—A. C. Whisler, Garfield; R. J. Neergaard, Oakesdale.
Spokane county—J. P. Hill, Spokane; W. J. Sutton, Cheney.

**Idaho.**

Idaho county—Riley Rice, Cottonwood.
Lewis county—C. W. Booth, Nez Perce.
Kootenai county—E. Korsboren, Worley.
Nez Perce county—John Thain, Melrose.
Clearwater county—Joseph Michaels, Orofino.

**Montana.**

Flathead county—W. M. McCutcheon, Kalispell.

A sub-committee of this committee was later selected for the purpose of conducting the affairs of the conference until the next meeting is called. This subcommittee follows:

Almer McCurtain, Davenport; B. F. Brewer, Walla Walla; Edgar Williams, Mohler; A. C. Whisler, Garfield, and C. W. Booth Nez Perce, Idaho.

The following is the wording of the resolution as introduced by Senator R. C. McCroskey of Oakesdale and incorporated into the report of the executive committee and adopted as part of that report:

"Whereas, there will unquestionably be a shortage of grain bags and bulking facilities for taking care of the wheat crop for this year in the three northwest states which have in the past been handling their grain in bags, and

"Whereas, the price of grain bags has risen to 25 cents each—the average price for the last five years, including three years of war, having been 8 cents each, and

"Whereas, we are confident that this high price is not warranted by any existing conditions, and

"Whereas, it will be impossible for the farmers who have been handling their grain in bags to prepare for bulk handling, owing to the limited time at their disposal, and

"Whereas, the cost of material and labor for constructing elevators, bins and tanks has materially increased, and

"Whereas, the loss of grain in consequence of the shortage of facilities for handling it will materially reduce the amount we will be able to furnish the allied armies of Europe, now, therefore,

"Be it resolved, that we, the farmers of Washington, Oregon and Idaho in convention assembled, do most earnestly, but courteously, ask the congressmen from these states, and the food administrations of the government of the United States and those of Great Britain and France to put on foot such measures as will result in furnishing the farmers of the northwest such number of bags at a reasonable price as will enable them to take care, without loss, of the crop of 1918."

The following is the report of the executive committee, which, after the incorporation of the McCroskey resolution, was adopted:

"A discussion was had relative to the question of the price on sacks and possible assistance from the government in the matter of furnishing sacks or fixing the price thereof.

"Your committee gave consideration to the question of the number of sacks necessary to care for that portion of the 1918 crop that could not be handled in bulk and from reports from counties represented it was believed that 10,000,000 sacks will be necessary to care for that portion of the 1918 crop which can not be handled in bulk. There being no information of a definite character presented to your committee as to the matter of sacks available for this crop your committee could make no finding as to a possible shortage of sacks at this time.

"Your committee was of the opinion that the major portion of the sacks sold to farmers up to the present time have been carried over from last year's stock, from which stock they were furnished sacks last year at 14 cents, and that the price placed thereon now at 25 cents carries an excessive profit. We, therefore, request your convention to authorize us to make such representations to our senators and congressmen asking them to take up with the administration at Washington at the earliest date possible the question of cooperating in the matter of securing sacks at a lesser price. That they suggest that American shipping now available at or near Calcutta be chartered for bringing sacks to Portland or Seattle for the purpose of bringing the price of sacks to a reasonable figure.

"On motion duly carried Charles Hebberd, food administrator for Washington, was requested to join in such representations as may be made to the department at Washington and to the food administrator and to join in a telegram to Mr. Hoover, and that the findings of this committee of five be presented to Mr. Houser of Portland, representative of the United States grain corporation.

"On motion duly carried your convention was asked to request the assistance of the federal government in furthering the handling of grain by the bulk method."

Two big problems were confronted

(Continued on the following page.)



**Almer McCurtain of Davenport, chairman of the executive committee of the grain growers' conference. Mr. McCurtain was chairman during the last year, also. He is an ardent advocate of bulk grain handling.**

## WILL HELP NORTHWEST.
### Letter Received From Poindexter

A letter was read to the grain convention from Senator Miles Poindexter, who said that he would do all in his power to have the food administration establish a "primary interior market" for 1918 wheat in the northwest, so that the growers would receive the same price as the growers tributary to Chicago. He said that all the northwestern senators were in favor of such market, and would work for it in congress and before the food administration.

## MUST GO AFTER IT.
### Delegation Can Bring Results.

Chairman Insinger told the grain convention at Spokane that it was not enough to present conditions to the government at Washington in the form of resolutions or memorials, but that such resolutions or memorials should be followed up by a delegation to present the case in person.

He was referring to the two-fold question of securing sacks for this year's grain crop and of securing a "primary interior market" for the northwest so northwestern farmers could get $2 for their wheat the same as middle western farmers.

Mr. Insinger, who was a member of the delegation that went to Washington last summer when the food administration ruled that this section must pay 30 cents freight on its grain before it could get its $2.20 a bushel for its 1917 crop, said that the work of that delegation saved the farmers of the northwest more than $2,000,000. The farmers got several cents a bushel more for their grain than they would have, he thinks, if appeal had merely been made by mail or telegraph.

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# How to Feed Hogs and Get Profit

## *Break Even on Wheat; Vary the Feed, Use Pasture, and Profit Comes*

By B. E. SMEAD, Representative of U. S. Government in Pig Club Work.

A minimum price of $14.50 a hundred pounds for hogs at northwest centers, as provided in the recent agreement between the food administration and the packers of the west at a San Francisco meeting, will allow a feeder a fair profit.

Let's presume that we start with a good March pig. With careful feeding with grain costing 3 cents a pound from weaning time to maturity we can just about break even at 14 1-2 cents a pound. Supplementing with kitchen waste, roots or milk would mean a small profit.

If red shorts can be had, the price of which is now $34 to $38 a ton, the feeding cost can be cut in half.

If alfalfa pasture is available the cost can again be materially reduced.

If hog-fenced stubble is to be had in the fall, $7.50 or more can be added to the profit side of the ledger, for each pig.

These figures are not guesswork, nor taken from experiments with freak hogs, under unnatural conditions, nor are they the dream of some enthusiastic scientist.

**Experiments Are Made.**

Some experiments conducted at the Washington State college experimental farm in December with thrifty but ordinary hogs, under conditions such as are found on the average farm, gave results as follows:

Small pigs averaging 30 pounds made a pound gain with 4 pounds of grain and tankage, costing approximately 12 cents per pound gain.

Shoats weighing about 110 pounds, fed barley alone, made a pound gain on 4.73 pounds of grain. Figuring barley at $60 a ton the cost per pound gain would be 14.19 cents.

A similar group of shoats fed red shorts alone made one pound gain for each 3.72 pounds of shorts, which, figured at $40 per ton, would give the cost, per pound of gain, of 7.54 cents.

These figures check approximately with experiments made at different times at experiment stations in various states of the Union. There is no reason why any farmer, if he cared to take the time, could not do as well, or better.

**An Acre of Alfalfa.**

Returning to the question of the additional profit to a farmer with an acre of good alfalfa available for pasture, he could verify, if he cared to take the time, the following figures for a group of pigs averaging 18.7 pounds the first of May:

| Month | Average Daily Gain, lbs. | Daily Ration Grain, lbs. | Meat Meal Lbs. | Cost Daily Ration in Cents | Value of Gain in Cents at 16c per lb. |
|---|---|---|---|---|---|
| May | .33 | .79 | .05 | 2.52 | 5 |
| June | .40 | 1.19 | .073 | 3.79 | 6 |
| July | .98 | 1.84 | .116 | 5.87 | 15 |
| August | 1.66 | 4.11 | .251 | 13.08 | 25 |
| September | 1.53 | 6.33 | .385 | 20.14 | 23 |
| October | 1.38 | 6.34 | .385 | 20.14 | 20 |

From this table it can readily be seen what a very nice additional profit could be secured if the hogs ran on stubble September and October.

**Should Study the Question.**

From the foregoing it can be seen that during these war times each farmer should take it upon himself, as a patriotic duty, to study this question of economical feeding of swine, so as to make the smallest amount of grain produce the largest amount of pork.

The table above also shows what a large saving of grain can be effected by the use of alfalfa pasture.

It might be well to mention that alfalfa pasture alone will not produce most economical pork.

The boys' and girls' pig club members of various counties of the state will demonstrate this year 1918 that, with proper feeding methods, a price of $14.50 or better will leave them a satisfactory profit, after deducting all charges for feed and labor.

Why should not hundreds of farmers in the state secure at least one brood sow, that will farrow this spring, make a fair profit and aid his country by increasing swine production?

Arrangements have been made whereby piggy sows arriving at Spokane this spring will be held and placed with farmers who can handle them.

The Exchange National bank of Spokane has agreed to finance farmers who wish to take one or more of these sows.

(Details of the plan can be had by writing to R. E. Smead, state pig club leader, Pullman, Wash. Those who desire to take advantage of the plan, thereby aiding in food production and also adding to the farm income, would do well to write to him early so as to facilitate the work.—Editor.)

# Makes It Easy to Save and Earn

## *The Farmer Becomes War Stamp Agent*

As announced in last week's issue, this paper has been appointed agent of the United States government for the sale of thrift and war savings stamps. With a view of making it easy for its readers to make investments in these "little baby bonds," the Farmer made arrangements with the U. S. treasury department whereby it can offer $50,000 worth of the stamps, and a special department has been created to care for the work which the agency entails.

Last week's issue contained a lengthy and detailed statement of the plan, explaining also in detail the nature and purpose of the two kinds of war stamps offered for sale by the government. Here is a summary of that explanation:

**The Purpose**—The government needs money to finance the many phases of the war, and is selling these stamps with a view, first, of raising part of the needed money, and second, of giving the people of the country an incentive to thrift, saving and safe investment.

**The Stamps**—There are two kinds of stamps: (1) The Thrift Stamp, which sells for 25 cents and bears no interest until five dollars worth have been bought and transferred for a five dollar war savings stamp. (2) The War Saving Stamp, which sells for $4.13 cents during the month of February and an additional cent for every month thereafter, and which bears interest at the rate of 4 per cent compounded every three months. This makes the War Saving Stamp which is bought during this month (February) for $4.13 worth $5 in five years, when it matures.

**Money Back Any Time**—Here is a specially fine thing about the war stamps: If you need your money you can take your savings stamp to the postoffice and cash it almost the same as you would a money order. The postoffice may require you to wait 10 days, but no longer than that. The 25-cent thrift stamp can not be cashed this way, but you can buy enough thrift stamps to make one $5 war savings stamp and then cash that, and you have your money.

**As Safe as Gold**—You can't lose by investing in thrift and war savings stamps unless you lose the stamp, and you are just as likely to lose your silver or gold as to lose your stamp. Each stamp is in reality a government bond, with the whole resources of the United States back of it. Furthermore, you can take your war savings stamps to the postoffice and have them registered. Then you can collect your money even though you should lose the stamp.

**How to Order**—You can buy any number of stamps up to $100 of the Farmer at one time. No one person is allowed by the government to own more than $1000 worth of them. If you want to buy stamps, use the coupon printed on this page. Send 25 cents for every Thrift Stamp wanted. Send $4.13 for every War Savings Stamp wanted if your order is sent so as to reach the Farmer's office during February. Add one cent if it is to reach the Farmer in March. If you have already bought stamps of either kind, be sure to say in your order that you have the war savings certificate or the thrift card, as the case may be, so we will not send you one that you do not need.

## Clip This Convenient Order Blank

Address all communications concerning thrift or war savings stamps to The Washington Farmer, War Savings Department, Room 26, Review Building, Spokane, Wash.

Remittances may be in any form desired, including personal check.

The Washington Farmer, War Savings Department, Room 26, Review Building, Spokane, Wash.

Gentlemen: I wish to invest in ..... U. S. government thrift stamps at 25 cents each.
(number desired.)

I wish to invest in ..... U. S. war savings stamps at $4.13 each.
(number desired.) (February figure.)

Amount enclosed $.....

Full Name .....

Town ..... State .....

R. F. D. No. .....

I have already bought.....Stamps and have a.....
(kind of stamp) (card or certificate)

## Grange Opposes Shields Bill.

The Pomona grange of Yakima county has gone on record vigorously against the Shields water power bill. The organization has urged upon congress the advisability of enacting legislation as contemplated in the Kelly bill, which vests the control of water in the national administration.

**Many County Agents.**

Thirty-two of the 39 counties of the state now have county agricultural agents.

# Best Sack Offer

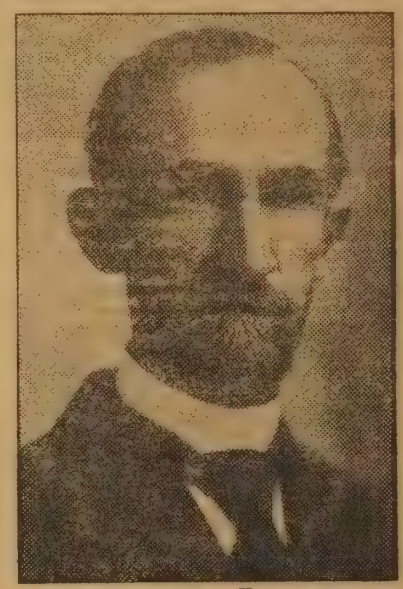
## Is Twenty-Five Cents Apiece

(Continued from the preceding page.)

by the convention: (1) That of the 1918 grain price, and (2) that of how to handle the crop, bulk or sacks. While numerous matters only indirectly connected with either problem was treated, the matter of how to handle this season's crop received the greater share of the consideration.

The following is a digest of some of the addresses and discussions most vitally affecting the conference.

**G. B. Hegardt of the public docks commission of Portland**—Mr. Hegardt said bulk handling of a large part of the crop was an "absolute necessity." He told of the building at Portland of the first unit of the elevator for which the people of that city voted $3,000,000 in bonds last summer. This unit has a million bushel capacity, and has 79 bins for the storage and handling of different kinds and grades of grain. There is railroad trackage for the handling of 80 loaded cars at one time. The elevator site comprises 158 acres. Mr. Hegardt said that there was storage at terminals in the northwest for 6,000,000 bushels of bulk wheat, or about one-ninth of the normal crop. This includes mill storage. He said



**R. C. McCroskey of Oakesdale, one of the most widely known men of the state. Though more than three score and ten years old, he is active and alert on all problems affecting the agricultural industry. He was one of the prominent figures at the grain convention last week.**

the interior storage facilities could handle some 4,500,000 bushels, or about one-twelfth of the normal crop. He estimated that it would be necessary this year, regardless of the price of sacks, for four-fifths of the grain crop to be handled in some other manner than in bulk because of lack of storage and handling facilities and inability to equip adequately in the short time yet remaining. He said that the Portland elevator would be able to handle three to five times its single capacity, or three to five million bushels, during the season, depending upon the normal or abnormal movement of grain during the season.

**B. F. Stone of the port of Astoria**—Mr. Stone covered in general the same matter as did Mr. Hegardt, covering also the facilities at Astoria. That terminal has bulk storage facilities for about 1,000,000 bushels in bulk. He estimated that the total bulk storage capacity in the three states was something over 13,000,000 bushels, which corresponded closely with Mr. Hegardt's figures.

**M. H. Houser, federal grain corporation representative**—Mr. Houser's addrsess before the convention is covered under a separate heading in this issue.

**Orris Dorman, farmer**—Mr. Dorman's subject was the advisability of handling in bulk. He said that the Bemis Bag company's offer of sacks at 25 cents each proved bulk handling to be advisable, and that he, therefore, had little to say. He declared that his experience had convinced him that farmers were unduly wary of bulk handling; that it was really a simple proposition. He said that where he had to haul his grain four miles it cost him one-half cent per bushel per mile to deliver in

(Continued on the following page.)

# Great Task of Food Production

## *Present Conditions Must Be Radically Changed if Country Is to Harvest Increased Crops*

We find ourselves in hearty general accord with the policies set forth in a powerful memorial by farming interests urging President Wilson to speed up governmental machinery in aid of production so as to relieve the anxiety of farmers as to labor supply, credit facilities and seed shortage in some sections.

This memorial was laid before the president last week and comes from the federated board of farm organizations, which is said to represent more than 2,000,000 organized farmers.

The board asked for a reply February 6, when representatives of the seven national farm organizations comprising the board, together with a number of state masters of the grange and heads of the Society of Equity and other bodies, will seek an audience with the president.

The fear has been growing in many thoughtful minds that present conditions must be radically changed if the country is to harvest increased crops this year. The Farmer is convinced that satisfactory progress requires the speedy appointment of a national food production administrator — the ablest man that can be found in the nation, who will key up action and inspire enthusiasm in the great task of food production as Hoover has fired the country's imagination with regard to food conservation.

While some of our readers may think the memorial given herewith draws too gloomy a picture, and exaggerates agricultural distress in some regions, it may be that a little exaggeration will do no harm. We have felt for some time that the agricultural department at Washington is taking too easy-going a view of the problem.

The declaration in the memorial that representative farmers are practically barred from "any position of authority in the food administration, the advisory council of national defense, or any of the other special boards charged with the conduct of the war" is unpleasantly near the truth.

While the secretary of agriculture is a member of the council of national defense and is working in close cooperation with agricultural colleges, there is a notable absence of men who are distinctively farmers. Many millers and grain buyers are represented, and some of them undoubtedly have farm interests, as also have some of the college presidents and professors connected with the national food administration.

Charles J. Barrett, national president of the Farmers' union, and L. J. Tabor, master of the Ohio state grange, were members of Dr. Garfield's committee that fixed wheat prices, but that service is over, and they seem to have no active connection now with the food administration.

It is earnestly hoped that these facts will be given thoughtful consideration by President Wilson. Agriculture plays too tremendously an important role in this stupendous war to be denied full representation in the government.

## Farming Interests Lay Powerful Memorial Before President Wilson

The memorial laid before President Wilson by the Federated Board of Farm Organizations says:

1. If food is to win the war, as we are assured on every side, the farmers of America must produce more food in 1918 than they did in 1917. But unless present conditions are radically changed increased crops next year are impossible. Under existing conditions we can not equal the production of 1917, much less surpass it, and this for reasons over which the farmers have no control.

**Causes of Smaller Crop.**

2. The chief causes which will inevitably bring about a smaller crop next year, unless promptly removed by national action, are six in number:

3. The shortage of farm labor; the shortage of seed; prices often below the cost of production; lack of reasonable credit; exclusion of the farmer from his right and necessary share in the conduct of the war; and deep-seated doubt whether he can raise the increased crops demanded of him and still support his family and pay his debts.

4. Many thousands of acres were left unharvested last fall because the necessary hands had left the farms. Already great numbers of farms near excellent markets lie idle for lack of a living return. Millions of acres will be wholly or partly idle next summer because the money to buy seed and subsistence will be lacking. Many of the farmers thus affected are tenants whom misfortune will compel to abandon the farm.

**No Farmers in Authority.**

5. So far as we have learned there is not a single genuine farmer, representative of the organized farmers of America, in any position of authority in the food administration, the advisory council of national defense or any of the other special boards charged with the conduct of the war.

6. Comparing their own small earnings with the huge war profits they see on every hand, the farmers have lost confidence that the government understands the needs and difficulties of the farmer. Unless that confidence can be restored it is useless to hope that we can maintain the food production of last year and meaningless to talk of increasing it.

# Best Sack Offer Is Twenty-five Cents

(Continued from the preceding page.)

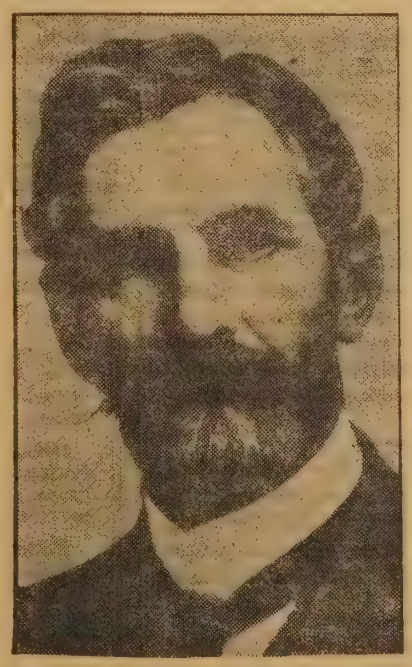
bulk. He considered it better to haul direct from the machine to the warehouse at the station if the haul were short, but better to store on the farm if the haul were long. He said that farm storage bins should be built out of lumber that could later me used for something else if another system of handling or storing were decided upon. He said most farmers could build their own storage bins and tanks. He said he had bulked economically two crops in Montana when sacks cost only seven or eight cents, and that there was no argument for use of sacks when they cost 20 cents or more.

**Charles Hebberd, national food administrator for Washington**—Mr. Hebberd said the four great war industries, each of which "must be built up to the same acme of perfection," are munitions manufacture, shipbuilding, airplane making and food production. He said that there could be found no hope that the war would end in less than two years. He said that this country had saved between 25,000,000 and 50,000,000 bushels through food conservation, but that this was far inadequate to make up for the shortage in Europe. The allies normally import 380,000,000 bushels of wheat; last year their production was decreased because of the war some 200,000,000 bushels, thus necessitating the importation of 580,000,000 bushels to secure a normal supply of food. This importation was impossible, an actual shortage of more than 350,000,000 bushels being experienced. He urged maximum production this year, both of wheat and meat animals.

**M. W. Harris, Minneapolis, Minn.**—Mr. Harris told of the necessity of keeping cleanings on the farm. He declared that cleanings had an actual medical value for feeding hogs, relating his experience of one year when all his neighbors had hog diseases and he had none, due, he believed, to the feeding of cleanings with all manner of weed seeds and the like. He showed the great loss to the farmers in feed, sacks and freight when the cleaning was made at the terminals. He also urged using summer fallow for a crop of peas, either for feed or for a market crop.

**E. E. Flood, banker and farmer, Spokane**—Mr. Flood said the hog industry was at the lowest ebb he ever saw it; urged the conservation of breeding stock and congratulated the Inland Empire on the coming to Spokane of Armour & Co., which, he said, "brought the markets of the world to our own door."

**C. L. MacKENZIE, banker and farmer, Colfax**—Mr. MacKenzie urged that they should produce their maximum because 200,000,000 people in Europe were living on a half ration of bread now because of the withdrawal of so many men from productive to destructive industry in the war. He denounced the habit of rushing to the government with all our troubles, declaring that the United States officials were "burdened now as men never before were burdened." He designated the I. W. W. as the "most dastardly organization on earth," and recommended stringent measures to suppress its members. He urged farmers not to rush into new organizations at the present time, but to concentrate all their efforts on production along tried and true lines. He said he had recently contracted for a large number of sacks for this year's crop at 21½ cents, but that he still favored the use of sacks at even that high price.



**R. Insinger, chairman of the agricultural committee of the Spokane Chamber of Commerce, one of the active workers in behalf of the grain growers' convention. Mr. Insinger was chairman of most of the meetings of the recent convention.**

**ERNEST LISTER, governor of Washington**—"I certainly am surprised to see such a large attendance at this convention," said Governor Lister, echoing the statement of Senator R. C. McCroskey of Oakesdale, who said that it was the greatest convention of the kind he had ever known in Washington. The governor delivered a patriotic appeal to the farmers to leave no effort unexpended toward aiding in the conquering of German militarism. "I would 10,000 times rather live under the government of the United States, with all its faults, than if its control were in the hands of German autocracy," he declared.

He said that very soon agriculture was going to take first place among the industries of the state and that he would be proud of the day when that became true.

**COL. CLARENCE OUSLEY, assistant secretary U. S. department of agriculture**—The most patriotic address of the convention was that by Colonel Ousley. He pleaded with the farmers to put in the greatest acreage possible, and promised them that the government would not allow crops to go to waste because of lack of harvest labor.

Here are a few pointed statements from his address:

"The utmost we can do will not be sufficient at the present rate of living."

"Let no man deceive you with the statement that we are fighting the battles of England and France. England and France have been and are fighting our battles."

"Fifty million people have been taken from productive industry and placed in destructive industry."

"It has been said that we must farm without regard to profits. If we must farm without regard to profits let me tell you that bankers and merchants and other business men must likewise operate without regard to profits."

"If we allow England or France to lose courage the same thing that happened to Russia will happen to them."

"Eat the crust and say, 'That's for poor, suffering Belgium, who fought my fight.'"

"The man who stops to quibble about profits is gambling in the blood of America's sons."

**M. K. SNYDER, Engineering Department, State College, Pullman**—"If there's a man in this room that can't lay out a square crib, he has my sincere sympathy," said Professor Snyder in urging the farmers to build simple storage bins and do the work themselves. He favored the building of more or less temporary structures about the fields when they were necessary until the farmers of the northwest become more familiar with bulk handling and determine the kind of permanent structures best adapted to their conditions.

The following is a bill of materials which he figures are required for the construction of a crib elevator 14 feet by 28 feet by 16 feet high, with a single partition in the center:

Lumber: Sidewalls, 12,544 feet (board measure); floor (2x6), 868 feet; joists, 1386 feet ;sills, 934 feet; posts (eight feet high), 1494 feet; braces, 992 feet; rafters, 288 feet; roof board, 540 feet; floor (No. 3 flooring), 460 feet; elevator, 350 feet, making a total of 19,856 board feet of lumber.

Miscellaneous materials: Concrete for piers and wagon dump, 14 cubic yards; shingles, 4000; nails, 430 pounds; chain for elevator, 74 feet; buckets for elevator, 74.

Professor Snyder figures that four men can build this elevator in 10 days.

**DR. E. O. HOLLAND, president state college of Washington**—Dr. Holland announced that the state college was working on a comprehensive food production program that would be ready for publication at an early date, when it was hoped that the effort of this state could be coordinated and made more efficient than at present. He pleaded for the greatest production possible and the utmost loyalty in every way toward the winning of the war.

"What does Germany say about us?" he asked. "She says that we love money; we love ease: we won't fight any battle that England and France will fight for us; we can't apply science to our operations. But our reply will be the application of greater science to our problems than Germany ever knew."

He predicted that this country would yet have time to play a great part in the war, indicating the gravity of his vision in the question, "What will be our compnsation for a million and a half dead men in Europe?"

# THE WASHINGTON FARMER

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## Make Safe Investments

All over this land there are offices where all manner of stocks are on sale, and where all manner of smooth inducement is made to the possible purchaser. Some of these stocks are good investments. Thousands of them are not. It is undoubtedly true that nine out of ten of the investments made in these offices whose windows are gaudy with pictures of oil wells, big red caluculations of millions made from small investment, colored charts showing exactly where a bonanza mine is located and so on are bad investments—just so much money gone to jingle in a promoter's pocket. The ordinary investor has difficulty in selecting the one out of the ten "buys" that is safe and sound.

But all over this land there are offices today where certain securities are on sale that are both safe and sound. Uncle Sam, with all his resources and all the resources of his family of 100,000,000 loyal Americans is behind these securities. They are sometimes called "baby bonds," but more commonly called thrift stamps and war savings stamps. They are the finest thing ever invented for the man or woman or boy or girl who wishes to save a little and invest a little—anything from 25 cents to $1000. No bank in the world is a safer place to put money. It is as easy to buy these stamps as it is to put money in the bank, and it is almost as easy to get one's money back as if it were on deposit. And furthermore, they bear interest, a good rate of interest, 4 per cent compounded every three months. No person will make a mistake if he buys a thrift stamp or a war savings stamp or a hundred of each. It is the finest little investment in the world, and it will help this country win the war.

## Is More Power Needed?

A conviction is growing in many authoritative minds that the food control law should be amended to give the national food administration power to fix prices on all foodstuffs and to put the people on rations where necessary.

At a recent conference in Washington between Mr. Hoover and state food administrators from all parts of the Union this view was urged by several as an essential attribute of the United States food administration if it is to cope successfully with the problems to be met the coming year.

This recommendation, although not supported by all of those in attendance at the two-day conference of state administrators, was easily the most important feature. The testimony of Mr. Hoover before the senate committee on manufactures recently indicates that it is in line with his views on the subject. He claimed then that so far as his efforts had failed, this had been due to the curb on his power provided in the food control act rather than to his usurping powers not given him by the law. He maintained further that mere fixing of prices would prove ineffective, but that, supported by control of distribution or of the commodity concerned, such action would bring far-reaching and beneficial results.

Special emphasis was placed on the fact that in Great Britain the food controller has the power to fix prices and to inaugurate a rationing system. In the United States, even though the necessity for exercising such power might not arise, the food administration would be able to handle the situation much more effectively if supported by it, both in enforcing conservation measures and in action designed to control distribution and prices.

## The War Everybody's Business

The war is everybody's business. The war is too big a job for any one set of people. The war department, the navy department, the agricultural department—all the organized forces of the government can not of themselves carry on this war successfully without the loyal cooperation of our biggest financiers and captains of industry. These ablest financiers and captains of industry are again entirely dependent upon the loyal cooperation of the girl knitters, the boy scouts, the thrift stamp buyers and the Y. M. C. A. contributors. Army surgeons are complemented by a host of medical men from civil life. Every industry and every profession and every home becomes for the time being an integral part of the war forces. The great department of agriculture, with its staff of tens of thousands, reaching through the state colleges and extension department almost to every hamlet of the nation, receives the cooperation of the people in general through the food conservation department headed by Herbert Hoover.

In normal days food conservation may be as important as food production. In war days food conservation is no less important, but food production is more important. There must be adequate supplies of food to be saved for the allies and for our own fighting boys. As Governor Graham of Vermont says in his telegram to President Wilson: "We have a national food conservation administrator. I feel very strongly that we should also have a national food production administrator of equal ability."

Every back yard's garden, every suburban poultry house, every dairyman and stockman, every grain raiser and crop producer throughout the length and breadth of the United States needs the stimulus of public opinion which alone can be given by the ablest available man in the country as National War-Time Food Production Administrator.

It was from the viewpoint of this "far-reaching cooperation with the agricultural department, agricultural colleges and farmers in all sections of the country in meeting their war-time food production difficulties" that the telegram reprinted elsewhere was sent to President Wilson.

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It is hard for the average human mind to conceive the utter fiendishness of a man or class of men who will deliberately destroy foodstuffs and other property when millions of men and women and children are starving for lack of nourishment.

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While there is not a doubt but that the federal government can help relieve rail congestion by operating our railways under one head and not from a competitive standpoint, every shipper can help very greatly by cooperating. One way is to unload cars speedily, and load them as rapidly as possible. Do not delay in dealing with the railways. There is a crisis in the affairs of the nation and it behooves every patriot to do his share.

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It is not too late nor is it too early to speak of the seed problem. This is the time to conserve seed. Without question there will be a shortage of many seeds needed, and those who are forwarned are forearmed.

Those who have enough seed will do well to safeguard it carefully. Those who have not should look around for available supplies.

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One of the valuable adjuncts to the farm at any time is the silo. Right now it has been classed as a part of the war equipment. Why? It makes use of material which otherwise would be largely wasted; it increases the live stock capacity of the farm and thereby increases the supply of fertilizer and adds to growing crops; it provides summer feed when pastures are short; it is a succulent winter feed.

## Washington Gleanings

County Agriculturist R. M. Turner in connection with his work as county agent, will organize pig clubs among the boys of Island county.

W. H. Paulhamus and business associates have organized to take over the cooperative holdings of the Puyallup & Sumner Fruitgrowers' association. The capital stock is listed at $600,000.

The Farmers' Union Mill and Grain company of Tekoa has decided to construct a large bulk grain elevator. It will have a capacity of 75,000 bushels and the approximate cost will be $20,000.

Bellingham's popular Chuckanut drive, the most scenic part of the Pacific highway in the northwest, will not be entirely open for travel before next spring, as the result of damage done by recent storms.

That the Sunnyside factory is an assured thing for next year is now a proved fact, with the filing of the deed to 93 acres of land at Sunnyside for the Utah-Idaho Beet Sugar company closing the matter. The consideration named in the transaction is $18,300.

Aroused by the devastation wrought by the recent freshet, owners of farm lands just outside of West Kelso have petitioned for the organization of diking district No. 6 of Cowlitz county, to include about 1500 acres of land lying between Fowler's lake and the foothills.

An invention based on the principle of internal charpit combustion, which, if generally applied, will revolutionize methods of land clearing in the northwest, has been conceived by Arthur Watts, land agent for the Bellingham Bay Improvement company and manager of half a dozen farms in Whatcom county.

Unless the Nooksack river is diked just west of Ferndale it will cut through the high bank at that point and flood the lands below, comprising 2500 acres of fine agricultural soil, is the belief of Captain A. Butt of Ferndale, who has asked the chamber of commerce to lead a movement to have the river diked by the government.

The Island County Fair association has elected the following officers for the ensuing year: P. P. Custer, president; George M. Izett, vice president; H. V. Hills, secretary; Leonard Lang, treasurer. Jerome Ely of Oak Harbor, Fred Funk of Langley and John Kineth of Coupeville were chosen as the board of trustees.

Capitalized at $100,000, the Puget Sound Wholesale Cooperative society, with headquarters in Everett, will start buying and marketing for the various cooperatives throughout the district. It consists of 15 directors elected by the affiliated bodies, composed of consumers' societies, creameries, canneries, shingle mills, farmers' associations, and the recently organized food products association of Seattle.

## What Others Say

Farm and Fireside: There is no getting away from the fact that normal prices can be restored only with the return of normal conditions.

Dakota Farmer: A silo in the north is equally important as a silo farther south—perhaps more so, for the silo is the great saver of immature corn.

National Stockman and Farmer: A calf is like a boy, a colt, or any other young animal. Fresh air, sufficient feed and plenty of exercise are the foundation of a good constitution so necessary to well-doing at hard work in the future.

Nebraska Farmer: If children are taught to think logically they will see that the country with its glorious surroundings affords the greatest of all opportunities for home building and they will strive with the correct goal in mind.

# Crisis Demands Food Production Administrator

(Continued from page one.)

duction, but think the agricultural department is sufficient unto the work. That the offices of food conservation and food production should be united under one chief is another view. The writers of the replies indicate an earnest endeavor to do all they can to help out the food production campaign in one way or another.

The letters of Governor Capper of Kansas, of Senator Jones of Washington, of Governor Frazier of North Dakota, of Secretary Carpenter of the state department of agriculture of Wyoming and that of R. H. Stockton, president of the Majestic Manufacturing company of St. Louis, were published in last week's issue of the Farmer.

Letters also have been received from Secretary Houston of the United States department of agriculture, from Governor W. L. Harding of Iowa, Governor Sidney J. Catts of Florida, Governor Horace F. Graham of Vermont, Governor Frank O. Lowden of Illinois, Governor James M. Cox of Ohio; from Congressmen Eugene Black of Texas, Ernest Lundeen of Minnesota, Albert Johnson of Washington, Sydney Anderson of Minnesota, Stuart F. Reed of West Virginia, John W. Langley of Kentucky; from state departments of agriculture, Charles Adkins of Illinois, J. C. Mohler of Kansas, N. E. Shaw of Ohio, Wesley Webb of Delaware, James H. Page of Arkansas, Alva Agee of New Jersey, Mat S. Cohen of Kenturcky, Charles C. Cannady of Indiana, Wilfrid Wheeler of Massachusetts, Fred W. Davis of Texas, and from Charles S. Knight, dean of the college of agriculture of Nevada; H. C. McCartney, treasurer of the Bull Tractor company, and from P. G. Holden of the American Harvester company.

**Food Production Administrator.**

Here is the telegram sent to President Wilson:

"When the assistant secretary of agriculture, Dr. Pearson, left Spokane after a regional conference with large farmers, agricultural college representatives and bankers strong hope was raised that the Pacific northwest would produce greatly increased crops. Dr. Pearson left here believing that the work could be followed up effectively. We regret to advise you, however, that notwithstanding the state college of Washington and the state department of agriculture have done their utmost to carry on these plans, the present outlook here is exceedingly discouraging. Because of adverse weather conditions not more than 25 per cent of the average fall crop acreage has been planted.

**Must Keep Youth on Farms.**

"If wheat yield is to be even normal enormous spring planting is necessary and more labor will be required. The farms are being stripped of workers and the remaining youths are eager to leave for the war. Unless something is done quickly there will be an alarming slump in the agricultural production of this region.

"The west is called on to produce the wheat surplus needed to feed our allies, but it can not do it unless a way shall be found to hold our young men to the soil. Some system should be developed whereby loyal service in the production of foodstuffs shall be impressively recognized. Some way must be found to better labor conditions and hold young men on the farm with a patriotic consciousness of honor and dignity.

**Need National Leader.**

"The crisis demands the immediate appointment of the ablest available man in the country as national wartime food production administrator, who will fire the imagination of all the people, consumer as well as producer, to the supreme necessity of increased food production, and who will establish far-reaching cooperation with the agricultural department, agricultural colleges and farmers in all sections of the country in meeting their wartime food production difficulties, just as Hoover has brought home to every family the need of food conservation, and just as the Red Cross campaign has swept the entire nation under the leadership of Davison."

A leading part in the framing of this telegram was taken by the Farmer, its managing editor being one of the signers. The other signers were as follows: E. F. Benson, Washington state commissioner of agriculture; Charles Hebberd, federal food administrator for Washington; R. Insinger, chairman agricultural committee Spokane Chamber of Commerce; Waldo G. Paine, vice president Spokane & Inland Empire Railroad company; David Brown, president Hazelwood Creamery company; J. L. Paine, president Spokane Chamber of Commerce; N. W. Durham, chairman Spokane county council of defense; David Munroe, farmer and Holstein breeder; D. W. Twohy, president Old National bank; E. T. Coman, president Exchange National bank and regent State College of Washington.

The letters given as follows are but a few of those received. Many are crowded out this week. but will be given next week and succeeding weeks:

**Heartily Concurs.**

Congressman John W. Langley from Kentucky writes:

"To the Editor: I beg to acknowledge the receipt of your letter of January 1st, enclosing copy of a telegram which was sent by yourself and others to President Wilson and which was reproduced in The Spokesman-Review of December 29 last. I have read this telegram and I heartily concur in the views therein expressed. In the haste to raise a large national army I fear that the agricultural situation and its necessities have been neglected and more or less overlooked. Those in authority are laying abundant stress upon the action of the president regarding increased production in order to win the war, but apparently they are not taking sufficient action to secure the necessary man power for that production. This is not intended as a criticism of any one, but rather as a frank statement of the situation, as I view it, which could be greatly improved, I think, by a wider circulation of arguments along the lines embodied in your telegram. I thank you for bringing it to my attention.

"JOHN W. LANGLEY."

**Hearty Support.**

STATE BOARD OF AGRICULTURE, DOVER, Del.—To the Editor: Your telegram to President Wilson on food production strikes the matter squarely and solidly, and it has the hearty and unqualified support of the department of agriculture of Delaware.

WESLEY WEBB,
Secretary.

**Sure It Does.**

EXECUTIVE CHAMBER, TALLAHASSEE, Florida.—To the Editor: I have your letter of recent date in which you tell me that the biggest war problem of today is war supplies and asking me if your telegram to the president does not help. I am sure it does.

SIDNEY J. CATTS,
Governor.

**Deserves Serious Thought.**

J. C. Mohler, secretary of the Kansas state board of agriculture, writes:

"To the Editor: The idea of a national war-time food production administrator, as suggested in the telegram to President Wilson, is deserving of serious thought. At first blush I would say it was excellent, although it occurs to me that the U. S. department, with its organization and machinery, with Secretary Houston at the head, ought to be in position to do just what you would ask of the special food production administrator, and do it most efficiently. Our board meets this week in its annual state agricultural convention, and I shall be glad to bring the matter before it. Certainly, the suggestion merits thorough consideration.

"I shall also have your communications brought before the state council of defense, which meets here next week.

"Thanking you for your thoughtfulness in forwarding the interesting documents and assuring you of our desire to cooperate in promoting all movements calculated to increase production, I am J. C. MOHLER."

**Demands Action.**

The Farmer has received from Governor Horace F. Graham of Vermont a copy of the following telegram sent by him to President Wilson:

"We have a national food conservation administrator. I feel very strongly that we should also have a national food production administrator of equal ability, through whom the food production committees of the several states can coordinate their work. The time to plan increased food production is upon us."

Governor Graham also addressed the following letter to the chairman of the Vermont committee of public safety:

"We have reached the time when renewed effort and a campaign for another season command our serious consideration. It demands action. Last spring much was accomplished in the limited time left to us. This year we have the time, and we must map out in advance the courses of action to be carried out during the year. Particular attention must be given to agricultural production. If the suggestions and assistance of the committee of public safety are to be of value to the people of the state the committee should indicate promptly to the public what efforts will be undertaken."

**As a War Measure.**

"We are still handicapped with the old plan of making all kinds of promises concerning agriculture with little serious intention of carrying them out," is the pardonable statement made by Commissioner Fred W. Davis of the state department of agriculture of Texas. Mr. Davis' letter follows:

"To the Editor: Your letter, together with enclosures on the food production question, was received many days ago. I have delayed in replying to same, thinking I might have something concrete to offer as a suggestion; but so far I have not been able to get things in shape. Everybody seems anxious to do something here in Texas, and we have all kinds of offices and commissions, with the result that a maximum of concrete work is not being done. I am working with all my migth to get things in better shape, in order that we might do a great deal more.

"In general terms, I agree with the plans outlined in the copy of the telegram to President Wilson. Stress must be laid upon the question of agriculture as a war measure. General assertions of general facts are not going to meet the situation. We are still handicapped with the old plan of making all kinds of promises concerning agriculture with little serious intention of carrying them out. Of course, the people are much more in earnest now, but this state and the nation, it seems to me, have not yet realized the full import of the great machinery and means that are necessary to carry on this great industry as it must be carried on.

"Texas has about three-fifths of her agricultural area almost barren, having

(Continued on page nine.)

# Secretary Houston Tells of Vast Work of Agricultural Department

Department of Agriculture, Washington.—To the Editor: I appreciate your letter of December 30. The telegram to which you refer has been called to my attention. I felt sure that the parties sending the telegram did so largely in ignorance of the vast emergency as well as normal work being done by this department for food production in cooperation with the land-grant colleges of the nation and, where the commissioners of agriculture have the requisite power and justification, with them and with other state agencies, as well as with the federal food administration and farmers' organizations throughout the Union. We are dealing with food production through thousands of approaches and have engaged in this work a very large and experienced force. You may know that the staff of the department of agriculture numbers over 18,000, and that of the 48 land-grant colleges numbers as many more, and that the relation between the members of these two staffs is intimate not only under the law, but under informal agreement and activity. Through the extension service alone we are jointly carrying on demonstration work with a force of extension workers numbering over 5500, including the specialists performing extention work employed through both state and federal regular and emergency funds.

This department, of course, is working in close harmony with the food administration and is giving its attention for war purposes to the problems of production, the conservation of farm and animal products up to the time they reach the market, to marketing, and to assisting farmers in safeguarding and securing seed. You doubtless know something of the greatly expedited work in combating plant and animal diseases, especially in controlling cattle tick, hog cholera, tuberculosis, dourine and the like.

I am enclosing herewith a statement issued by the president some time ago; which indicates in general the functions of the department of agriculture and the food administration. I am enclosing also a statement which sets forth the agreement between the food administrator and this department, as well as a copy of my annual report. This report only hints at many of the war-time activities of the department of agriculture. I am also sending you a copy of a statement regarding the farm labor problem, which shows the directions our activities in this field are taking.

D. F. HOUSTON,
Secretary.

# Bring Into War Industry the Best Brains and Enthusiasm of Country

Reading the following letter from Sydney Anderson of Minnesota, who is a member of the house committee on agriculture, one is reminded of the scriptural injunction: "Neither do men put new wine into old bottles; else the bottles break, and the wine runneth out, and the bottles perish; but they put new wine into new bottles and both are preserved."

Here is Mr. Anderson's letter:

To the Editor: Your favor of the first instant, enclosing a copy of a telegram to President Wilson relative to food production next year, is at hand and contents noted.

I am in entire accord with the suggestion contained in the telegram. It attempts to deal with a situation which exists not only in connection with the government's activities in increasing food production, but almost in every other activity. The trouble seems to me to be that the government has been accustomed to run everything according to a particular groove, and that instead of undertaking to operate war activities upon the basis of war and its immediate necessities, they are undertaking to apply the same old methods, the same old organization, to this new activity. Most of us, I think, who come in contact with the practical aspects of these problems as they have to be worked out on the farms and in the factories appreciate the fact that this war can not be run on that basis. Some time official Washington will come to realize it, too. Congress, I think, is alive to the situation, but we all know that laws can't win this war and that laws are utterly ineffective unless they are backed up by efficient and energetic administration. I only hope administrative Washington will wake up to the necessity of bringing into this great war industry of destruction the best brains and enthusiasm of the country before it is too late.

SYDNEY ANDERSON.

# Poisoned by Diabolical Teachings

## *Instilled Into the Thoughts of the German People by Their Government, Their Press, Their Churches and Their Schools*

The committee on public information, consisting of the secretary of state, the secretary of war, the secretary of the navy and George Creel, sends the Farmer a remarkable book of 171 pages. Its title is "Conquest and Kultur; Aims of the Germans in Their Own Words."

The committee on public information asks the Farmer to lay before its readers the essential facts revealed in this astounding expose.

**1. That the German government began more than a generation ago to work out its plans for world conquest.**

**2. That the German people were taught from infancy to hate all the other peoples of the globe; that they were a superior people, favored of God and by Him chosen to conquer all other nations; that the kaiser was the chosen agent of God, and disobedience to one was disobedience to the other.**

**3. That the war should be carried on with pitiless fury and ferocity.**

**4. That German arms should carry the German flag to all the continents of earth, including Africa and South America.**

**5 That the American Monroe doctrine should be overthrown in order that German settlers in South America and Mexico might set up German colonies there under the German flag.**

In proof of these premises the book quotes the exact words of hundreds of German leaders in all walks of life—the kaiser, his ministers, members of the bundesrath and the reichstag, professors in the universities, teachers in the public schools, pastors of great German churches, merchants, manufacturers, lecturers and writers in newspapers and magazines.

In the United States our views and policies have been molded by such men as Washington, Franklin, Jefferson and Lincoln.

In Germany the public mind has been educated by Fichte, Nietsche, Treitschke, Bismarck, Von Moltke, General Von Bernhardi and the kaiser.

The essence of Fichte's teachings is expressed in this extract from one of his books: "In case of need one single man has the right and duty to compel the whole of mankind. * * * He is the master armed with compulsion and appointed by God."

The gist of Nietsche's false teachings is contained in this extract from his works: "Ye shall love peace as a means to new wars, and the short peace better than the long. I do not advise you to work but to fight. I do not advise you to compromise and make peace, but to conquer. Let your labor be fighting and your peace victory. You say that a good cause hallows even war. I tell you that a good war hallows every cause."

The spirit of Treitschke's teachings speaks in this extract: "We have already seen that war is both justifiable and moral. * * * We may depend upon the re-Germanizing of Alsace, but not of Livonia and Kurland (two great Russian provinces now invaded by German armies). There no other course is open to us but to keep the subject race in as uncivilized a condition as possible, and thus prevent them from becoming a danger to the handful of their conquerers."

For two generations or more the kaiser's government has been planting these doctrines in the German mind, beginning with the children in school. "What is Germany?" is a question asked in a German text book, and this the answer. "My fatherland, a country entirely surrounded by enemies."

A magazine published for young readers, and widely circulated in Germany, is called Jung-Deutschland. It is the official organ of young Germany, and its spirit is expressed in this article, published in October, 1913, only nine months before the kaiser's forces were hurled on helpless Belgium and inoffending and peace-loving France:

**"War is the noblest and holiest expression of human activity. For us, too, the glad, great hour of battle will strike. Still and deep in the German heart must live the joy of battle and the longing for it. Let us ridicule to the utmost the old women in breeches who fear war and deplore it as cruel and revolting. No, war is beautiful. Its august sublimity elevates the human heart beyond the earthly and the common. In the cloud palace above sit the heroes, Frederick the Great, and Blucher, and all the men of action—the great emperor, Moltke, Bismarck are there as well, but not the old women who would take away our joy in war. When here on earth a battle is won by German arms and the faithful dead ascent to heaven a Potsdam lance corporal will call the guard to the door, and Old Fritz, springing from his golden throne, will give the command to present arms. That is the heaven of young Germany."**

Such are the diabolical doctrines taught to young German boys of about the same age as our Boy Scouts.

These atrocious doctrines are also disseminated through the churches. We have space for only a few of the many extracts from sermons of German pastors.

"We feel ourselves to be the bearer of a superior kultur," declared Dr. Paul Conrad, pastor of the Kaiser Wilhelm Memorial church in Berlin, in his book published in 1915. "We execute God Almighty's will and the edicts of his justice we will fulfill, imbued with holy rage, in vengeance upon the ungodly. God calls us to murderous battles, even if worlds should thereby fall to ruins."

And this from the writings of Pastor J. Rump, in 1914: "Take heed that ye be counted among the blessed, who show declining England, corrupt Belgium, licentious France, uncouth Russia, the unconquerable youthful power and manhood of the German people in a manner never to be forgotten. * * * Brethren, make an end of this generation of vipers with German blows and German thrusts."

After the sinking of the Lusitania Pastor B. Baumgartner wrote a pamphlet that contained this fiendish thought:

"Whoever can not prevail upon himself to approve from the bottom of his heart the sinking of the Lusitania, whoever can not conquer his sense of the gigantic cruelty to unnumbered perfectly innocent victims * * * and give himself up to honest delight at this victorious exploit of German defensive power—him we judge to be no true German.

"We are compelled to carry on this war with a cruelty, a ruthlessness, an employment of every imaginable device unknown in any previous war."

**When we realize that this is the kind of teaching that the German people have been receiving from their government, their press, their churches and their schools, we come to a clear understanding of what lies back of the submarine, the Zeppelin raids on villages and towns, and the awful cruelties perpetrated by the German armies in Belgium, France, Serbia, Rumania and Russit. These horrors are a part of the kaiserõs system—planned, plotted and executed in cold blood.**

The German people are naturally as kind and generous as any people. But their hearts and minds have been poisoned by diabolical teachings. They have been fed on monstrous lies; told that the rest of the world hated them and wanted to destroy them, and that in self-defense they must fight like fiends and devils.

It is the gigantic tragedy of the ages—this vicious building up of national hatred and fear. It has plunged the world into an inferno of shot and shell, of liquid fire and poison gas, of wasted lands and millions perishing of starvation and disease.

We are raising armies to fight that frightful menace to civilization and humanity. We are sending our farmer lads across the sea, to bear their heroic part in this heroic strife. They are going to strike gallant blows for a noble and exalted cause, the cause of world freedom, safety and enduring peace. Once again, as their fathers before them, under Lincoln, they will bear a "fiery gospel writ in burnished rows of steel," and an applauding world again will see the hero born of woman crush the serpent with his heel."

# Must Keep Seed

## Can Find Substitutes for Food

Heavy shipments of wheat to the allies have brought the American people pretty close to the bottom of the flour barrel. A New York grain authority says the visible supply of wheat in the United States showed a decrease for the week of 1,365,000 bushels, bringing the total down to 17,581,000 bushels. A year ago it was 78,781,000.

Yet the calls of France, Italy and Great Britain become more and more insistent for bread, and our government is justly going to let them have it, even if the American consumers have to go to short rations. We have abundant substitutes for wheat, such as corn, oats, rye and barley, and no real suffering would result even if the American people had to stop eating wheat bread altogether for a few weeks or months.

One grave danger, however, needs to be guarded against—the possibility of cutting down home stocks until not enough wheat would remain for seed requirements.

The seed wheat problem is particularly acute in Montana, North Dakota and Texas, and to meet requirements there the government will purchase, through money appropriated by congress, approximately $1,000,000 worth of seed wheat to be held until spring, when it will be sold for cash to farmers.

Professor F. S. Cooley of the Montana State college, who has returned to Bozeman from a conference at Washington, makes the following statement:

"The seed will be sold at cost, for cash, to those who require it. It will be seen that the government seed supply does not contemplate the financing of seed purchased by farmers. It will, however, save the profits charged by dealers, and the freight out and back on seed kept within the state. It should be understood that this seed is to be sold for cash and that purchasers will have to finance their seed buying without federal aid."

# Teach Farming by Doing

## *Farm Needs Boy Now and Boy Needs Farm*

**By D. R. Hubbard.**

Some years ago numerous magazine writers gave lengthy articles, lavishly illustrated, of a great farmer with thousands of broad acres, who had, by organization of men, animals and mechanical efficiency, solved the problem of wheat production, could produce it, together with large dividends himself, at 50 cents bushel.

Men, animals, mechanics, dividends, human factor nil. Commercialized farms—the writer traversed the area of this enterprise in 1916—men, mules, mechanics, efficiency! Yes. Migratory men who come onto the farm in spring, put in crop, summer fallow, harvest crop, do fall plowing, move on to lumber camps or city. Churches? Schools? Homes? Children? Social life? All very rare.

The American home is basic to the American nation. The rural home is the ideal. Sufficient isolation to properly emphasize the home-life, surroundings to develop the mental, moral and physical. Home ties grow stronger with the years. Such homes furnish the real reasons for a nation. The daily tasks are woven into the lives of the youth day by day. The mental, the physical or manual, and proper emotions, all come as a natural process as the days go by.

Shall we ask for coolie labor on the American farms to speed up production to carry on the war? In many portions of the Pacific northwest this may be feasible. The large wheat fields may require it. Yet when we see the few men, the large horsepower used in culture and seeding, the great mechanical engines and small amount of man-power used in harvesting, we ask what part in this work can a Chinese coolie do? Farm labor is skilled labor. Farm management calls for high business qualifications.

Just where will the coolie work in on the lesser farms. One, two or three men may be needed for a few days or weeks. There will be haying, cultivating, harvesting, animal care and management, milking. Here again we are confronted with skilled labor. On the best farms this is not only skilled labor, but labor that is best done by members of the family.

The beet fields and the orchards may have a place for the coolie, but he could have only a small part in American agriculture. There is no vocation which requires and usually has a longer training than that employed upon the farm. There is no line of industry that will suffer greater waste for want of proper training than the farm. Then why discuss the lowest grade of physical and mental labor, as a substitute for the highest skill, which comes only from long contact and close application in the service?

The American farm uses self-employed labor. The head and the hand do the work coordinately. The coolie labor can not be substituted for the boys who are at the front.

We are proud to think of the paid teacher as the only educator and that hours in the school room are the only proper mental credits to the child. Vocational education, manual training, are now generally looked upon as exclusive creations of the school rooms. And the sweet little miss is dealing out agricultural empirics to the boy in the country schools who sits admiring her clever manners and comeliness during the spring, summer and autumn months of his years from 14 to 17 while his overworked father and mother at home could teach him more real agriculture in one season that he could get in the present primitive academics in five years.

It's a fact! Let your academics and actualities go hand in hand. So adjust the teaching that the boy and the girl may do the actual thing, at home, with simply enough time in the schoolroom to classify and work into a system the fruit of actual experience.

The farm needs the boy now and the boy needs the farm.

Mental and physical training, with added interest in the doing, will accomplis vastly more. Let the city agricultural boy go to the country at 14 to 17. They need the drill. The country needs their service. Do they teach the soldier in the schoolroom? If so, why do they ask him to dig trenches, practice the art of personal offense and defense in the ranks? Does not the farm require skilled physical experience as well as the battle field?

Let us get sane!

The agricultural army in our schools will solve our farm labor problem. This has always been their proper work, vastly more so now. The coolie? No! Let the best there is in America be mustered into this honorable service.

### The New National Party.

A convention for the purpose of making the new national party a permanent organization in the political life of the nation has been called for March 6 in New York, at which time delegates will be present from many, if not all states of the Union. The so-called national party is designed to be composed of certain elements of the prohibition party, socialist party, progressive party and others not willing to fight their battles out alone or in either of the two major political parties of the nation.

# Crisis Demands Food Production Director

(Continued from page seven.)

been stricken by the worst drouth in her history, and, speaking in general terms, the drouth still exists. We have reached that point where in many communities the farmers are gone or are leaving, and those that have stayed or who could be persuaded to return have not the means to make a crop nor the collateral to secure the means. The banks can not furnish money except on good security. The nation can take a chance, as a war measure; but so far we have not been able to put it by, having met with opposition from the national department of agriculture. This is one of the reasons why I included the nation in my statement that we were not yet sufficiently aroused to the needs of agriculture.

"FRED W. DAVIS."

### Truth and Logic.

Congressman Stuart F. Reed of West Virginia writes:

"To the Editor: Your letter of January 1st has been received and it and the enclosure have been read with a great deal of interest. Your telegram to the president appeals to me as containing a great deal of truth and logic. The government should be slow in taking from the farms for military service the men upon whom the farmer must depend for his labor. I shall be glad to hear from you again when you have other suggestions to offer.

"STUART F. REED."

### A Grave Situation.

Governor Cox of Ohio recognizes the fact that a practical solution of the problem of increased food production is beset with vexatious difficulties.

"EXECUTIVE CHAMBER, COLUMBUS, Ohio.—To the Editor: Your communication of December 31 is at hand. Your recommendation is unquestionably conceived in the best of motives and with a view to the practical solution of a problem that promises vexatious difficulties. The military authorities appreciate the necessity that the agricultural production of the nation must not be disturbed too seriously by the selective service system, and recent rulings accredited to Provost Marshal General Crowder indicate that the authorities propose to avoid making any further inroads upon farm labor than are absolutely necessary. The federal authorities are unquestionably alive to the gravity of the situation, and the general tone of your memorial to the president may be calculated to have a salutary effect.

"JAMES M. COX, Governor."

### Least Possible Delay.

Professor P. G. Holden, whose remarkable work in increasing the corn production of Iowa by waking up the farmers to better methods of seed selection and who is one of the very best agricultural evangelists in all the country, now director of the agricultural extension department of the International Harvester company, writes:

"To the Editor: Your letter of January 3 is just at hand, and will say that I am in hearty sympathy with the suggestion which you make, and I also want to add that I think that it should be done with the least possible delay, as it will soon be too late to take advantage of our opportunities. Will certainly do what I can to aid the movement.

P. G. HOLDEN."

### Glad to Cooperate.

Congressman Walter Kehoe of Florida writes:

"To the Editor: Your letter of the 1st inst., enclosing copy of telegram sent to President Wilson, duly received. The same has been read with a great deal of interest and pleasure, and I assure you that I will be glad to cooperate with the congressmen representing the states of Washington, Oregon and Idaho in this connection.

"WALTER KEHOE."

### Committee of Eleven.

Here is a new proposition with regard to speeding up food production made by Secretary Alva Agee of the state department of agriculture of New Jersey:

"To the Editor: I am pleased to have a copy of your telegram to President Wilson. A group of us are urging the president to appoint a committee of 11, of which a majority of the members shall be practical farmers and of which the secretary of agriculture and a representative of the national food administration shall be members, to control the national government's policy in respect to food production, and that the chairman of this committee shall be a member of the war council.

ALVA AGEE."

### Hearty Indorsement.

The following is from Congressman Louis W. Fairfield of Indiana:

"To the Editor: Your letter, with enclosed appeal to the president, has been carefully read. Permit me to say that I heartily indorse what it contains and trust that there may be prompt action in this matter.

"LOUIS W. FAIRFIELD."

### In Winning the War.

Commissioner Mat S. Cohen of the state department of agriculture of Kentucky writes:

"To the Editor: Replying to your valued communication of December 29, attaching thereto telegram signed by your people to President Wilson, also circular entitled "America's One Big Business Is War," beg to congratulate you and your people upon the method and manner of expressing yourself and sincerely hope that your earnest and most consequential appeal will aid materially toward increasing your share of the necessary products so essential in maintaining the war and extremely imperative in the winning of the war.

"MAT S. COHEN."








# What would the oil in your engine show?



FOR years, both motorists and engineers were in the dark as to the amount of friction and consequent wear due to the sediment formed in the average motor oil.

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The Sediment Test, illustrated at the right, is as simple as it is convincing.

The bottle to the left contains a sample of ordinary oil taken from the crankcase of an engine after 500 miles of running.

In the right-hand bottle is a sample of Veedol after being used for 500 miles under identical conditions.

Notice that ordinary oil contains over five times as much sediment as Veedol.

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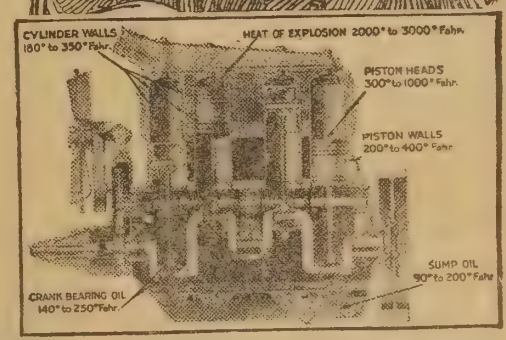
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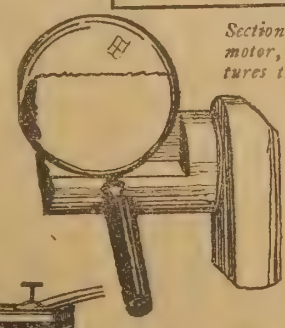
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A. B. NYSTROM, Editorial Contributor

# Beet Pulp for Silage

To the Editor: Is it well to plant potatoes on land that produced sugar beets the preceding year? Is it well to feed milk cows beet pulp or potatoes? Also is it injurious to horses to eat pea straw?—L. J. E., Burley, Idaho.

The above questions were referred to Professor George Severance, vice dean, college of agriculture, Washingtotn state college, who gives the following answer:

Potatoes will do well after sugar beets on good land. Beet pulp gives very satisfactory results when fed to dairy cows, making a very satisfactory substitute for silage. It is not as good as corn silage, but furnishes succulence, which is one of the most important reasons for feeding silage. Horses do not, as a rule, eat dry pea straw readily, though it is not injurious if they are not confined to it as a sole diet—even in that case it would be better than a stack of wheat straw.

## Cow Making a Record.

Zamolia Nutwood, one of the Jersey cows in the Meadow Lawn herd of F. A. Doerfler, Silverton, Ore., is making a remarkable record for her age. Her official test begun at 15½ years old and she is badly stifled, yet in her ninth month she produced 50 pounds of fat and it looks as if she would finish her year with over 700 pounds of 85 per cent butter.

A number of other very creditable records have been and are still being made, among them one by Spozza Foxhall of F. O., that will probably win a gold medal by producing over 800 pounds of butter.

Since June, 1916, none of the records completed have been less than 619 pounds of butter. This was made by a junior 2-year-old. The highest record completed so far was 765 pounds of butter made by Gwendola's Rosaire. She was fresh when Mr. Doerfler purchased her and moving gave her quite a set back. She dropped a heifer calf two months before her test was finished and was dry nine days before calving, for which she gets no credit. So it can be seen she is capable of doing much better and Mr. Doerfler has strong hopes of yet getting a 1000-pound record from her.

H. A.

## Colored Oleomargarine.

The Farmer has received the following from William T. Creasy, secretary of the National Dairy Union:

"You are no doubt aware of the fact that the butter interests are confronted by the most serious situation for years. At present there is a propaganda being carried on to take off the 10-cent tax on colored oleomargarine.

A large oleo manufacturer a few years ago, when appearing before a committee of congress stated: "That the natural color of oleomargarine was white; that the white oleomargarine was of a higher quality, because it contained a higher grade of refined oils," but he added: "Of course, there is more money in the yellow."

Comparing the price of butter with the cost of producing milk, butter is the cheapest dairy product at the present time. Notwithstanding this fact, the beef trust is trying to add new burdens to the creamery interests by recommending to the joint committee on definitions and standards of food 'that the fat standard for butter be increased from 80 per cent to 82 1-2 per cent."

## Stillaquamish Cow Tests.

There were 470 cows tested during the month of December in the Stillaquamish (Wash.) Cow Testing association, according to report of Will W. Henry, official tester.

The average pounds of milk per cow was 550.7, the average pounds of butterfat per cow, 26.73 and the average cost of feed, $7.79.

In 30 days during this month 48 cows produced over 40 pounds of butterfat, 11 produced over 50 pounds, and three produced over 60 pounds. The highest record cow for the month is owned by Zenas Farrington. She made 67.5 pounds butterfat. The other two 60-pound cows are owned by M. F. Borseth, and J. E. Wrage. The 50-pound cows were owned by the following members: Farrington, 1; Wrage, 5; Grimm, 2; Sneve, 1; Estby, 1, and Olsen, 1.

This month finishes a year's work for the association. There were 448 cows finishing the year's record. The average butterfat production for these cows was 300 pounds and a fraction of the 26 herds tested 15 were under this average. The lowest herd average was 239.84 pounds, and the highest average 400.13 pounds.

Twelve cows were sold for beef last month.

It is quite noticeable during the year's work that herds do much better where regularity is observed in regard to the time of feeding, milking, etc., and where the herds are not made to stand in the rain when they might just as well be in the barn. The more one observes in the dairy field, the more he will be convinced that it is the small, seemingly unimportant things that count.

## Buhl Testing Association.

The Buhl (Idaho) Pioneer Cow Testing association began its third year's work December 1, 1917, of promoting the dairy industry in the state. It has at the present time 32 members owning approximately 550 cows entered in the association, according to the report of R. W. Sharp, test supervisor. The present territory now consists of portions of four different counties, namely: Twin Falls, Gooding, Minidoka and Cassia.

It is found by comparing the net returns from the different herds that in the majority of cases the herds returning the greatest average profit are the small ones where only select cows are kept. This difference is very noticeable, showing the cost of producing one pound of butterfat three times as great in some herds as in others. In other words; some of the herds with one-half the number of cows are producing as much butter as other herds with only about one-half the cost of feed, labor and money invested. When it is possible to have a large herd and of just as good quality as the smaller ones, it is often wondered why dairymen persis in milking and feeding twice as many to get the same returns or do not make twice the money in order that they may offset the greater amount due for taxes and interest on the investment.

This is partly explained by the absence of a sufficient number of real high class cows in Idaho, but the time is not far distane when more of these mortgage-lifters will be shipped from the east into this natural dairy country.

## A Promising Cow.

Nashville Susie, the Jersey cow that was grand champion at the Panama Pacific live stock show at San Francisco, and that is owned by F. E. Lynn, Perrydale, Ore., is on official test, with good promise of becoming a gold medal cow. Susie already has a very creditable record, made as a two-year-old, with two milkings a day. She freshened in November, has milked up to 52.5 pounds and is still milking close to 50 with about a five per cent test. She is milked three times a day and, if everything goes right, will be given a chance to show what she can do. Right now it looks as if her production might be nearer 900 than 800 pounds of butter. She has a fine bull calf by St. Mawes Golden Poppy, son of St. Mawes Poppy (1120 lbs.), a very handsome calf, and he is not for sale.

H. A.




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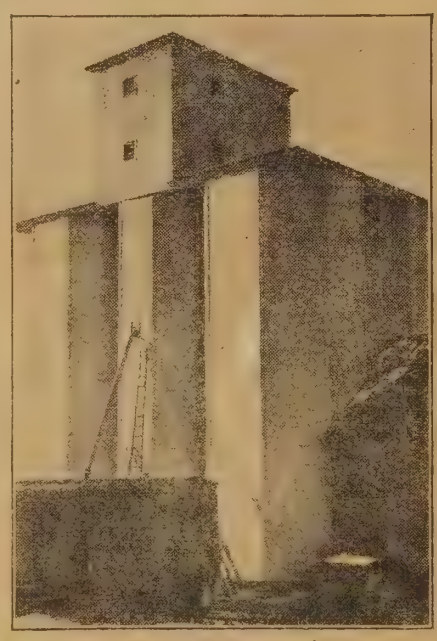
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LIVE STOCK NOTES

Write to the Editor

E. J. IDDINGS, Editorial Contributor

# Potatoes for Feed

## Have Real Value for Live Stock

By E. L. POTTER.

Potatoes are made almost entirely of starch and water. The starch has a very high feeding value, while the water has the same value as the water in the trough. One pound of potatoes contains about 23 per cent as much digestible nutrients as a pound of wheat, barley, or corn, and about 12 per cent as much protein. Potatoes may be fed to almost any kind of live stock, but give the best results when steamed and fed to hogs. They may be fed to cattle or sheep in place of silage or roots, but are not very palatable and can not be fed in very large amounts, especially when raw. Potatoes are very seldom fed to cattle or sheep, not because they can not be so fed successfully, but because they will give greater returns when fed to hogs. Experiments show 100 pounds of cooked or steamed potatoes equal in value to from 23 to 29 pounds of grain with an average of about 25 pounds. Experiments with raw potatoes show 100 pounds of raw potatoes worth about 18 pounds of grain. As a rule, therefore, we do not recommend raw potatoes, but instead recommend feeding them steamed or boiled and consider them worth, when so used, about one-fourth as much, pound for pound, as grain.

Potatoes can not be successfully fed alone to fattening hogs for two reasons. First, they contain so much water that the pig can not eat enough to fatten him. A 150-pound pig can eat conveniently about 12 pounds of potatoes a day. This will be equivalent to about three pounds of grain when he really needs six to seven pounds of grain, or its equivalent. It is therefore the usual custom to feed to fattening pigs one pound of grain with each three or four pounds of potatoes. The second objection to potatoes alone lies in the fact they contain a very small amount of protein, so little, in fact that proper gains will not be made unless this protein is supplied from some other source. This may be furnished through the medium of good alfalfa or clover pasture, or when pasture is not available, by skim milk, buttermilk, or tankage. A gallon of milk or one-half pound of tankage per day will be enough. This, of course, applies with equal force when grain is fed. The average farmer figures that it takes four pounds of grain to make one pound of pork when a little supplement will reduce the amount of grain to around four pounds.

For growing pigs or sows suckling litters, the potatoes are fed the same as with fattening pigs, that with grain and some little suplement as pasture, milk, or tankage. Dry sows, however, will get along nicely without the grain although they will not produce strong, healthy litters without the supplemental feed.

Steaming is generally considered the best method of cooking, but it has not been proven that steamed potatoes are any more valuable than boiled potatoes. The pigs like the potatoes, better, however, if the water in which they have been boiled is poured off. Grain should not be cooked with the potatoes since cooking lowers the digestibility of the grain instead of improving it as it does with the potatoes. After cooking the potatoes may be mixed with the grain or they may be fed separately, as the feeder may prefer. Salt is sometimes added, but it is generally safer to mix a small amount of salt with wood ashes or slack coal and let the pigs help themselves to it.

# Veterinary

Dr. S. B. Nelson

**Udder Swells**—I have a cow that freshened two months ago. In the evening her udder is swollen and sometimes there is fever. In the morning the swelling seems to be all out. She is stabled at night, is fed alfalfa hay twice a day, apple pulp twice a day and at noon is given a small bunch of corn fodder. S. E. E.

Medford, Ore.

Try giving your cow one and one-half pounds of Epsom salts in three quarts of water. Cut down the feed about one-third, then give morning, noon and night one ounce of fluid extract of pokeroot in a little water as a drench.

**Trouble With Ankle**—I have an 8-year-old horse that for the last year has been in the habit of getting his ankle joint out of shape if he steps into soft ground. The joint slips back and forth when he walks as if the muscles were too weak to hold it tightly together. He goes considerably lame after working. There is no inflammation.—H. L. O., Lane, Idaho.

The condition that you mention in your inquiry is that which is known as cocked ankle, and is due to a soreness in the posterior tendon. There are not very many horses that get over the trouble. It can, however, be alleviated by cutting down the toe, that is, by raising the heel and thus resting the tendon, also by taking him off from hard work of all kinds, giving him a rest for some time, spraying the ankle with cold water for five or six minutes and then rubbing dry is also of benefit. Liniments do not seem to be of any special benefit in these cases. Firing by the actual hot cautery has in a few instances given results, but, of course, this is a pretty severe treatment and one where you need the services of a veterinarian.

### Surpasses Krupp Output.

It was recently stated by Charles M. Schwab that the capacity of the shipyards controlled by the Bethlehem Steel corporation is a 10,000-ton vessel about every five days. This organization expects soon to have in its employ between 120,000 and 130,000 workmen. Its output of war material greatly surpasses even that of the great Krupp works.

### Requisition Timber for War.

To empower the president to requisition timber and timber products for war purposes Senator Chamberlain has introduced a bill to permit taking standing or fallen timber for the use of the army, navy or shipping board.


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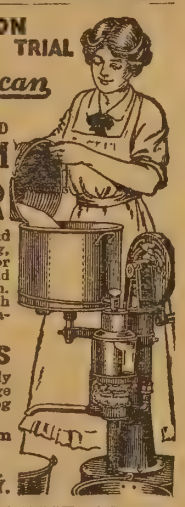

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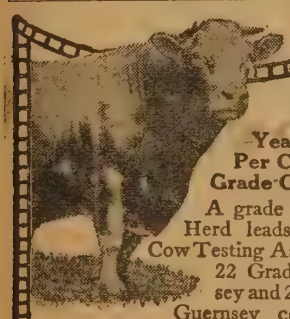
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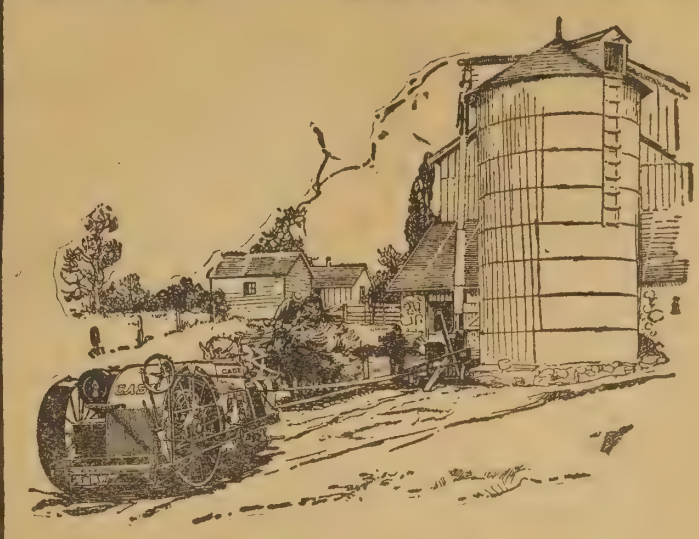
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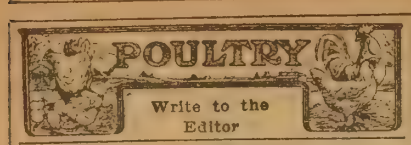
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JAMES DRYDEN,
Editorial Contributor.

# Petaluma's Egg Output

The hens are not all killed off. A report published in the Petaluma Poultry Journal shows that there was an actual increase of about two and a half million dozens of eggs in 1917 over 1916 shipped from Petaluma. The total product for the year was 15,552,376 dozens. The shipments by months were as follows:

| | |
|---|---|
| January | 1,080,432 |
| February | 1,351,498 |
| March | 1,924,602 |
| April | 1,947,720 |
| May | 2,134,943 |
| June | 1,583,346 |
| July | 1,188,380 |
| August | 1,076,368 |
| September | 898,234 |
| October | 844,810 |
| November | 705,265 |
| December | 812,768 |
| Total | 15,552,376 |

The shipments, as will be seen, were largest in May and smallest in November. On the average April is the best month for shipments at Petaluma.

For the last eight years the shipments have been as follows:

| | |
|---|---|
| 1910 | 7,388,215 |
| 1911 | 8,134,127 |
| 1912 | 15,252,131 |
| 1913 | 10,164,714 |
| 1914 | 9,432,333 |
| 1915 | 11,681,154 |
| 1916 | 13,101,512 |
| 1917 | 15,552,376 |

This shows an increase of 19 per cent in shipments in 1917 over 1916. It does not look as though the hens have been killed off at Petaluma. This is encouraging. We have been told by many that the hens were being marketed in great numbers due to the high price of feeds, but the situation is not as pessimistic as has been made out. They have been telling us that the poultry industry was doomed. In this one county alone there was an increase of two and a half million dozens of eggs last year over the previous year, and 50 per cent over the shipments in 1913, the year before the war.

Poultry-keepers are not going out of business in Petaluma. That is a good piece of news. They are not going out of business in Oregon, Washington or Idaho, in spite of assertions to the contrary. From the best information available, there is an actual increase in poultry in Oregon and there is doubtless an increase in Washington and other western states. J. D.

# How She Sprouts Oats

To the Editor: I had no idea you were going to print my former letter. If I had known I surely should have sent the directions for sprouting oats. I had a message over the phone this morning asking how to do it, and I will try to tell in print how it is done for the benefit of others.

Some five years ago I sent for my sprouter in some eastern state (I have forgotten the address). The inside dimensions for each of the six trays are 18x18x4 inches. They are perforated in the bottoms and sides, but so arranged that the oats can not fall from one tray to the one below and still give drainage as well as admit air. The bottoms are of zinc. The bottom is a frame about 18x18x12 inches to hold a lamp, with a pan to catch the water.

I do not use the lamp, as I keep the sprouter in the kitchen in winter and in the brooder house in the summer. So I put the water tray clear under the bottom to catch the draining water.

I take half a gallon of recleaned white oats and cover with lukewarm water and let it stand overnight in summer and longer in winter. Then I drain off into a holey bucket and let it stand there another day, then I pour off into a bucket that has a good bottom. I set one on top of the other and take the older each day to put in the first tray of the sprouter. It takes nine days from the time the oats are put in water till ready to feed out. I have all the six trays going.

I feed out the first thing in the morning and clean and dry the tray and fill in from the older bucket, whose oats should have begun to sprout. Whenever necessary, I sprinkle the oats in the trays. The trays having loose oats should be stirred and smoothed out, but as soon as they begin to mat they should not be stirred any more, only sprinkled morning and night. I leave them open in the daytime and cover them with a tight lid at night, and it is really surprising how they will grow. I have it warm in the kitchen all day long, otherwise it might take one or two days longer.

This ration is plenty for 200 chickens. I don't feed their mash until from 10 to 11 o'clock, and finish feeding with whole gray oats at 3 o'clock and give a small wheat feed as soon as the oats are eaten up. If it were not for the sprouted oats I would not think of keeping up the flock at the present prices of feed.

MRS. MARIE FULHAM.
Dayton, Ore.

## High-Class White Leghorn.



The above is one of the high class White Leghorn cockerels at the Mount Angel College Poultry farm in Marion county, Oregon. This farm combines in a remarkable manner the heavy laying and show type. At the Portland show in December their White Leghorns won 15 prizes. They trapnest enough of their birds at all times to mate up their breeding pens and to tell which hatchings are producing the most eggs. Other breeds are kept in smaller numbers and at the Portland show their Black Sumatra cock attracted more attention than any other bird in the show. He is 18 years old and struts around with all the airs and is as ready for a fight as any year-old bird. Father Boniface, who is in charge of the farm, and who is as careful a breeder and almost as much of an experimenter as Mendel, informs me the old bird is not only being used on birds of his own breed, but that he is experimenting with him in cross-breeding, with very interesting results.

A new poultry house for the White Leghorns had lately been completed when I was there. A movable fence is so arranged that the runways can be changed from one side of the house to the other. Each unit of the fence is 10 feet long and each run 30 by 120 feet. When the runways are changed the old ones are plowed up and put in grain, while for spring run stubble turnips, rye and vetch, early spring wheat or spring peas are sown.

H. A.


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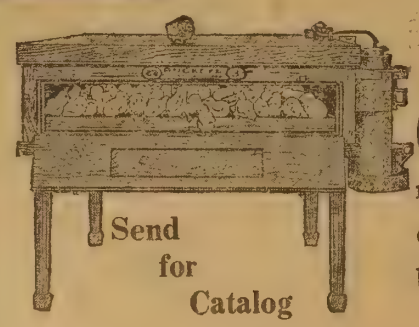
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GRANVILLE LOWTHER,
Editorial Contributor.

# New Zealand

## Will Hold National Apple Show

The directors of the National Federtion of Fruitgrowers of New Zealand have decided to hold the next national apple show at Auckland, beginning on Wednesday, May 1, and continuing until Saturday, May 4, 1918. It is proposed to make this the greatest show of the kind ever given in New Zealand, since the fruit crop for the coming season is very promising; and a special effort is being made to organize the fruit industry so as to better distribute the crop throughout the country in order to increase the consumption of fruit, especially apples.

It is proposed to standardize the packing of the different kinds of fruit in New Zealand, and after inspection to affix mark or sign to the packages setting forth the class of goods, and those who are not prepared to pack up to standard will be denied the advantages gained by this system.

# Fruit Grower and Buyer

By GRANVILLE LOWTHER.

The marketing season of 1916 opened with only moderate prospects of good prices. Henry Wilson had delivered to the association what he had contracted to them, had sold a small amount to the cash buyers, had consigned to a stock company, in which he held shares, a certain amount, and had about half his crop stored in his packing shed and other places about the orchard. He had made a tour along Commission row to see what were the prospects, but the prices did not suit him.

He had just opened a few boxes to see how the apples were keeping, when a very pleasant looking man appeared and said, "This is Mr. Wilson, I presume." "Yes," said Mr. Wilson, "that is what they call me." "My name is Bland," said the man. "I represent the well-known firm of Roseburg and Bloomfield, of whom you have doubtless heard, because they are known all over the United States, but until recently we have not operated largely in this part of the country. We have concluded, however, that we want to get started here and handle our share of the boxed apples grown in the northwest. I have been referred to you as one of the prominent fruitgrowers and one of the reliable men of this community, so I have come to see you, and to talk matters over."

Mr. Wilson felt somewhat flattered at these compliments, but tried to conceal his emotions as he replied: "Well, I suppose the more buyers there are, the better chances we have of making sales." "Just so," said Mr. Bland, "and the fact is, we are all the time opening up new territory and while our competitors, sooner or later, find it profitable to enter our fields, some of the best sales we make are in sections where the sales agencies of the other companies have not entered. However, if they do enter our territory, we have nevertheless enlarged the markets, so our being in the field is an advantage for all the marketing agencies, but is more especially of advantage to the grower."

Mr. Wilson was favorably impressed with this plan and really felt that the firm of Roseburg and Bloomfield was a good agency, a kind of benefactor to the whole country, and deserved the patronage of the growers. He showed Mr. Bland specimens of fruit in some of the boxes he had just opened. The fruit was in fine condition and Mr. Bland said, "What have you been offered for these extra fancy Winesaps?" "Well, I suppose I should ask you how much you will give, but to be frank with you, I will say I was offered by the cash buyers $1.25 a box, while the association thinks it can get $1.50, net to me. Now I have told you my secret, tell me what you can give."

"That depends," said Mr. Bland, "on the conditions of sale. If we buy for cash, we will be under the necessity of doing what the other cash buyers do, that is, to get as much fruit as possible for as little money as possible, and then sell for as big a profit as possible. If we take it on consignment, we will do as the other commission companies do; that is, we will ship your fruit to the markets, let you furnish the fruit, bear all the expenses, run all the risks, and then we will return to you what we get, less the commission, less the railroad expenses, etc. But, I have a general method, which is much better for the grower than the plan of the cash buyer, or the commission man. We will pay you when the fruit is delivered on board the cars what it cost to grow it, pick, pack, and haul to town, which I believe is about 50 cents a box, but whatever it is, you are sure of enough to pay expenses, then we will use our large marketing agency to get you the best prices possible and you are to have what we get, less our commission and railroad expenses. I believe, Mr. Wilson, that I can make these apples net you $2 a box, and while I could not guarantee that amount, I am sure market conditions justify more than the buyers are offering. In fact, they are doing just what anybody in their circumstances would be likely to do, but what they are doing is not to the best interest of the growers. Now, Mr. Wilson, since your apples are above the average, I will pay you 55 cents a box when they are delivered on board the cars and when they are sold in the eastern markets I will do as I agreed in reference to the returns. That is practically what the other commission houses are doing, except that I pay you 55 cents in advance and except that we have better marketing facilities than they have, so you see our proposition is much better than theirs." "Well," said Wilson, "I will sell you a carload of Winesaps on the terms that you suggest, and will deliver them to you on board the cars within two days." "That is entirely satisfactory," said Bland, "and I will pay 55 cents a box as a first payment when the car is loaded." "All right," said Wilson, and they shook hands and Mr. Bland departed.

The next morning Wilson began loading a car. He had not told his wife about it. Whether he felt at this time that the bargain had in it risks that she would not approve, is not certain. At any rate, the car was loaded and a check given for $346.50, which Wilson had in his pocket when his wife said to him, "Henry, I see you have been hauling some fruit to town. Have you made a sale?" "Yes, I have sold a car of Winesaps." "What did you get for them?" "Well, I do not know, yet. I got an advance payment of 55 cents a box and the man who bought them thinks he can get enough to net me $2 a box." "That would be splendid, if we could get it, but to whom did you sell?" "I sold to Mr. Bland, who represents Roseburg & Bloomfield, said to be one of the largest marketing agencies in the United States." "Do you know Mr. Bland?" "No, I never met him before," and he drawled a little as if he felt that his wife questioned the wisdom of his transaction. In fact, he had himself begun to feel that he had not been careful enough in making inquiry about the firm with which he was trading.

After a suspense of at least five minutes, during which time neither one spoke, Mrs. Wilson said, "Henry, do

(Continued on page twenty-one.)

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H. G. Hunzicker, of Foster, Wash., pulling a 24-inch fir stump with deep tap roots out of hard ground.

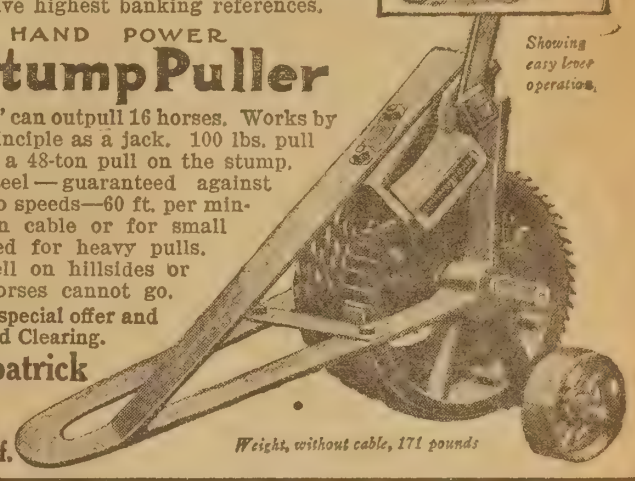
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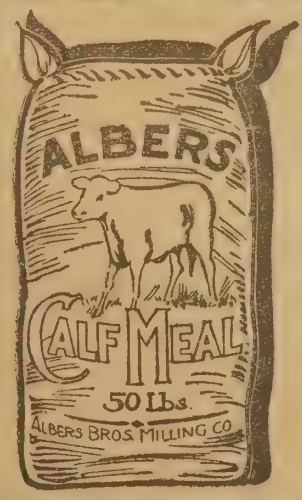
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# Trapping the Fox and the Coon

By GEORGE LA RUE.

Among the valuable fur bearers are the fox, the otter and the coon. Many a trapper has been disappointed by not finding one of those animals anchored to what his trap was made fast to, when he would have a trap set in such a favorable place that he would have wagered half of his future that he would catch one that night. I learned to catch the coon and fox while a school boy and old trappers were after me for pointers on fox trapping when I was about 16 years old. I never claimed to be a professional trapper but I have always liked the sport since I was about six or seven years of age. I have studied the nature of the fur bearers and got acquainted with their habits and when a small boy I used to trap in the summer just for the sport, in fact I didn't know the value of fur. It was very seldom that I could get a fox to take bait, but they would come up within 10 or 12 yards, sometimes closer to the bait which was a rabbit or chicken, and would leave without touching the bait or springing a trap. I decided to try a new scheme and if I remember correctly I got a big red fox at the first set I made after that. I caught or killed a rabbit and hunted a dense thicket of brush and found a dim trail leading through and decided that would be a good place to make a set. I hung the rabbit so his head didn't quite touch the ground and set one trap near the bait and the other one about 12 yards from the trap and in that dim trail and scattered a little fur on each side of the trail and to my surprise I found a fine big red fox in the trap that was set in the trail in a few mornings afterward while on my way to school. I caught several after that by the same method, but I learned that by finding a crosstrail and making the set in the crossing that my chances were better for a catch. The coon isn't very difficult to trap, but won't walk into an open set like some animals.

They are easily trapped along the water's edge but if the trap is set in a favorable place in the water the trap should be covered with leaves or mud. They can often be caught by placing a bright object on the pan of the trap if the set is in the water. If a person can get a minnow or two or crawfish or frog and fasten on the pan and cover the trap, except the bait, the first coon along will get his front foot in the trap. I never had much experience with the otter so won't attempt to tell how to catch them. I shot one and my brother and I caught one in a trap and that is the limit of my experience with them.

## Walla Walla Poultry Winners.

The following awards were made at the recent Walla Walla Valley Poultry show:

Barred Rocks—L. B. Losey, College Place; B. D. Riser, Walla Walla; A. E. Oliver, Zillah; W. J. Earnest, Walla Walla; D. D. Wright, Walla Walla.

Buff Rocks—P. H. Tomlinson, College Place.

Silver Wyandottes—Sterling Wyandotte ranch, Kennewick; William Shepherd, Walla Walla.

Single Comb Rhode Island Reds—Matt Ennis, Walla Walla; Losey & Stratton, College Place.

White Wyandottes—P. H. Tomlinson, College Place; J. A. Griffin, Eugene, Ore.; A. Brooks Summers, Walla Walla; H. Brown, Walla Walla.

Single Comb Brown Leghorns—E. H. Rosenkranz, Colfax; J. W. Stateville, Walla Walla.

Single Comb White Leghorns—Mrs. Robert Seiberman, Walla Walla; F. W. Sheets.

Single Comb Anconas—Mrs. G. M. McKenzie, Walla Walla; C. A. Burman, College Place.

Single Comb White Minorcas—John Goodhew, College Place.

Single Comb Buff Orpingtons—C. H. Thompson, College Place; Jerry Farrell, Walla Walla; J. B. Thomas, Walla Walla; D. G. Thomas, Walla Walla.

Black Orpingtons—C. H. Thompson, College Place; L. E. Biggs, College Place.

Games—Austin Williams, Walla Walla; George Rogers, Walla Walla; J. E. Johnson, Walla Walla; H. Huber, Waitsburg; W. F. Sheets, Walla Walla.

Buff Cochin Bantams—Paul Rypyzinski, Walla Walla.

Peking ducks—D. B. Riser.

Rouen ducks—P. H. Tomlinson.

Bronze turkeys—Miss Mary Villa; C. M. Bowers, Whitman Station.

The exhibit of State Game farm and penitentiary was excellent. The poultry was of exceptional quality and pheasants were beautiful. The pelican was a great attraction, says J. A. Levy, assistant secretary of the show.







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# Houser Talks on Grain Marketing Situation

In his address before the grain growers' convention held in Spokane last Friday and Saturday M. H. Houser of the U. S. food administration grain corporation, warned the farmers that it was high time to decide what they proposed to do in the matter of handling their grain this year, whether to continue the sack system or change to the bulk system; that the food administration met with difficulties when it undertook to handle the 1917 crop because of the newness of the work considered and the lateness of the season when it was committed to them.

Mr. Houser pointed out that the 1917 crop was one of the smallest in years, but believes that the 1918 crop will be double that of 1917. It is true that the fall acreage is not as great as it was last year, but he thinks what is seeded will do much better than last year, according to the present prospects. The manner in which the 1918 crop will be moved depends upon the size of the crop and the competition of the tonnage on the Pacific coast. Last year when the delegation went back to Washington contending for a basis market on the Pacific coast they made representations as to prospective tonnage and as to terminal facilities. Those representations have held good with the exception of the completion of the tonnage, but the strike in the shipping industry continued and held back the new ships.

Considering the limited fall acreage Mr. Houser does not anticipate a record breaking crop this year. He thinks the maximum of Washington and northern Idaho will be from 55,000,000 to 58,000,000 bushels; deducting 25,000,000 bushels as the minimum for home consumption and California, this would leave only 33,000,000 bushels, and this can be easily reduced from 5,000,000 to 7,000,000 bushels. Mr. Houser believes there should be put afloat at least 1,000,000 tons of new tonnage this year, and that most of this tonnage should be available to the movement of crops.

It is high time for the grain growers to decide whether they will change from the sack system to the bulk system of handling the wheat, or to what extent they will make the change. He has taken up the price of bags with the various business firms interested, and finds that conditions are such that these firms are practically helpless. Only three or four years ago the most that was paid on grain bags from Calcutta was $5 and $6 per ton, today they are asking $105 and $106 a ton. Practically the only tonnage that is loose and available today for bringing bags here is the Japanese tonnage, and naturally the Japanese are making the most of the situation. If bags must be had, Mr. Houser says, the food administration will do all in their power to obtain them at as reasonable price as possible. The average price for the last 10 years has been 7 1-2 cents, the average price for the three war years has been 8 1-2 cents, under existing conditions from 15 to 16 and possibly 17 cents is the cheapest could be gotten. Even if that could be accomplished "you need not expect even with the government taking a hand that they would be gotten cheaper, but even that is cheaper than 24 or 25 or 26 cents, and no telling where they may be in 30 days, even if they can be had at all."

Mr. Houser reviewed the history of price fixing by congress, how the act of October 14, 1917, gave the president power to fix prices on wheat as he sees fit under existing conditions, and then providing distinctly that under no conditions shall the price for the crop year 1918 be less than $2 per bushel at the principal primary interior markets.

I am wondering if the senators and the representatives who framed this bill—just what they had in mind when they made that statement, principal primary market. I was not in congress. I was not a representative or a senator, and therefore I think some of our representatives should say what was the purpose of it, what they had in mind and what they meant in that language in that bill. As you know conditions in the east are such that the wheat fields are a long ways from the Atlantic seaboard. Many times when a car of wheat would be started in former years before establishment of primary markets, Minneapolis, Duluth, Milwaukee, Chicago, Omaha, Kansas City, St. Louis, Buffalo, etc., they found from experience it was better to confine that car of wheat to one of these primary markets. If they shipped a car of wheat to the Atlantic, while it was in transit, some miller or somebody would pay 3 to 5 cents more for the wheat than they could pay when it got to the seaboard. Therefore they found it more practical to move this wheat to the primary market and then segregate it and parcel it out for the direction and purpose for which the grade of the wheat best destined it. That has created the market.

With us on the Pacific coast, on account of the close proximity of the wheat fields to the tidewater, there has never been any need for those markets. It has been a short haul, from 300 to 350 or 400 miles, and consequently we haven't any of those primary markets that they had in mind when they framed that bill, as I see it, and that is the interpretation of it in the east. Therefore it is either one of two things, as we do not have to make any shipments to primary markets the primary market must be elsewhere or else our primary and terminal markets are one and the same thing. That is not a question that either I or any one else has a right to say any more than the people who framed the bill, and I think it is up to them to say. I think it is up to them to declare to the wheat growers what they had in mind when that bill was framed.

Mr. Houser said that he had received some letters recently that would lead him to believe that there was some feeling and apprehension throughout the northwest that the general food administration was not particularly friendly to this section of the country. He declared himself at a loss to understand why such feeling should exist; that Mr. Insinger and the other gentlemen of the committee who went and interviewed Mr. Hoover felt that the treatment and consideration that they received was all that they could ask and "so far as I know and from conversations that I have had with Mr. Hoover he has a kindly and interesting feeling toward us and he was very much taken with the delegation and the fair and square manner in which they presented their case."

Returning to the question of the price of the 1918 crop of wheat, Mr. Hoover said that while the price was not to be less than $2 per bushel, that does not mean it should be only $2. Continuing, he said:

"Just what should be the final price that is fixed will, no doubt, be along the line of what has been done during the last year. Possibly there will be a commission appointed and we must prepare. This is the only wheat grown that has a surplus to ship to the other parts of the country in a year when it was badly needed, and undoubtedly the people this year will know more about the possibilities of the northwest, that we are raising wheat here and have a surplus. I think it is up to the northwest to see that we have a representation there when the price fixing is being done and whenever that time comes I presume it will be fairly and squarely dealt with. As far as I can and the food administration can, I will do the best I can.

"Last fall, when this question first came up on the basic price, the work was new. I was not quite sure what the position was, and I was unacquainted with the people I was working with. I know them better today and I can go to them and I can ask for more than I did last year, and whatever is done in that matter I think will be properly done.

"In regard to the bag situation, seeing the shipments of grain going east today I noticed almost a third of it is moving in the sack. I think this is a serious mistake. I know, and we all know, there is little if anything to be said in the general run of the second-hand wheat sack, but it is a whole lot better if it is patched up than no bag at all.

"In regard to the handling of the crop this year, there was some complaint, and I notice the old reliable Spokesman-Review here—the paper I read when I was a boy and used to turn to when the free silver argument was before the country and any question that came up it always used to be left to the Review—they got a wrong idea of the embargo put on the shipments to the terminals. You all know when the delegation went back



M. H. Houser.

last year to establish the facts, they made certain representations that we had so many ships, so many mills and we had so much terminal elevators and so much terminal facilities, and on that representation we were given a terminal basic price. Well, what happened? The wheat started to move and it was only a short time until it became very apparent that the terminal facilities were going to be deficient and quickly filled up. Now then, if we should let the shipments continue to come until those warehouses had been filled all we could have said is, 'Here, our terminals are are we going to do?' They could say, 'We gave you the basic price on the representations the ships in the terminals would take care of themselves.' There was a condition arising that made it imperative shipments should stop coming down there. As long as there was an embargo issued it made it both practical and possible to arrange some way of payment for the rest of the wheat that was left in the country and could not get to tidewater, and I thought it was much better to put on the embargo and keep the supply from increasing there, and thereby make it possible for the payment of the carrying of the wheat. The price which this commission fixed for this year was at the terminal basic points, and I could not pay under the price, I could not pay for wheat in the country; it was impossible; I would be breaking the law to pay for it in the country. The rule was not framed properly, and therefore we had to do the best we could under the circumstances, and by putting on an embargo from making any further shipments necessitated meeting the situation in some way, and we have tried to meet that the best way that was possible by allowing your interior dealer the carrying charges of so much per month, which just about pays it, and he in turn could settle with you, and if he couldn't settle in full he could very nearly do so.

"This leads up to the proposition that there has been more or less criticism this year on account of the delay in final settlement. You know our quality was poorer this year than it has ever been that I can remember almost. When they started to buy this wheat and pay for it in full the complaints were coming in 50, 100 and 200 a day that we were being robbed. I immediately put the matter up to the grain people and asked them what the trouble was and I found out it was a lack of understanding. As you know, this year we are buying wheat on the basis of the federal grades while heretofore we had been buying wheat on the average, and we would try to average it up one man with another's. This year every lot of wheat is going on its merits, and we have had the poorest quality in years, and the farmers claimed they didn't have the separators, the people in the country didn't know how to determine the grade and in order to have them play safe they were taking a grade or two under what the wheat would grade. Then I put it up to them this way: If you can't buy wheat as you should why not act as a commission man and ship the wheat down there and pay what the wheat brought and charge him for service and have it all open and above board. The mills took 30 or 40 days before they would give the returns and the bookkeeping where you have every car and sometimes one car has three or four different grades of wheat, it took a lot of trouble. I know every grain firm in Portland and Seattle worked into the night until 11 o'clock or all night doing the best they could, and I think when you realize the difference in the grades and the method of handling and the other details, the delay was almost impossible to avoid with this commission basis. If they had bought your wheat outright, they would have had to discount that enough to pay for the delay until they could get their money and what is the difference whether it is figured one way or the other? The thing to do is to try to eliminate as much of the delay as possible, but when it is all said and done I think we will get all or practically all of the wheat shipped out between now and the first of March.

Mr. Insinger—I will ask Mr. Houser to state what allowance will be made for sacked wheat on this crop?

Mr. Houser—That is rather hard to answer at this time, but there will be a great deal of consideration given to the price of the bag. It is true I do not think it is going to be possible to anywhere near recompense for the outlay, but nevertheless even today I had in mind that the price should be increased by having in mind to conserve the bags. I thought it was much better for the ultimate good not to make any change at this time, but by having a wide difference in the price that could be gotten for the bag less the difference between the bulk and the sack, hoping the people would hold back the bags and make the shipments of the wheat as much as possible in bulk. With bags at 24 and 25 cents now, I do not know what it will be later on, it stands to reason it is not going to be possible to make all that difference in the sacked wheat, because we do not know what the second-hand sack value will be on the coming year's crop. This year we may get 4½ cents. Some of the millers objected, they wanted to make it five and the farmers and millers four, so we split the difference and made it 4½ where the bag costs on an average 10 or 11 cents. We are going to try, if possible, to follow along that line as much as possible, but when you get up to those extremely high prices the danger of the decline or possible decline of the next year would preclude following it altogether.

Senator McCroskie—I believe I understood Mr. Houser to say the food administration was figuring out a method by which they transport to this coast the necessary bags or necessary material from which bags were to be made, to make up the deficit between the method of handling in bulk and the bags we now have on hand to handle the crop of 1918. Am I correct?

Mr. Houser—Partly so. We are trying to determine how much is needed that the regular handlers of bags will be in a position to get the material with which to make the bags, which are necessary, so that the shortage on the bag material may not raise the price materially. It seems to me there should be some way of putting the requirements of this convention before the food administration.

Senator McCroskie—I infer from that that it is contemplated that the governments of England and the United States are concerned with some means, devising ways of bringing materials to this coast to make up the deficit?

Mr. Houser—Providing tonnage to bring it to this country, whether to this coast or not I would not be able to say.

**Promise Grain Sack Relief.**

Mr. Houser announced the receipt of the following message from the grain corporation:

"Control of grain bag situation is now under consideration by the war trade board, and we hope that something definite and beneficial will be accomplished soon. We are giving the matter of burlap sacks our attention and hope to be able to give you definite information in the near future."

After the meeting, and after having had further communication with the food administration at Washington, Mr. Houser said:

"The grain corporation, acting jointly with the federal food administrator for Washington, Charles Hebberd, desires to urge the farmers to bulk their grain. We realize the situation as it exists at this time, and we wish to assure the farmers that everything will be done to see that the demand for sacks will be met if possible, and at fair prices. This assurance, however, should not cause any letup in the movement to provide bulk facilities wherever possible."

## NOBODY SEEMS TO KNOW

### Meaning of Wheat Law Is Mystery

What congress meant when it put the words "primary interior market" into the law fixing $2 as the wheat price for 1918 is something for a Sherlock Holmes to discover. Other folks can't. Mr. Houser, northwestern representative of the federal grain buying corporation, admits that he doesn't know, and he told the grain convention at Spokane that it seemed impossible to find out from those who passed the measure in congress. His way of looking at it is indicated in his address to the convention, printed in part elsewhere in this issue.

In the meantime the farmers of this section do not believe that the framers of the law meant that the nearest point at which wheat would be worth $2 a bushel was meant to be Minneapolis, which is the case under the grain corporation's ruling of some time ago.

R. C. McCroskey of Oakesdale, still one of the most alert men in the interest of the northwest though past the three-score-and-ten mark and handicapped by the loss of sight, took a prominent part in the convention, and presented an interesting bit of evidence on the matter, Mr. McCroskey said that he had what appeared to be reliable information that Senator Hitchcock, who was active in the interests of the grain price law before it was passed, stated definitely on the floor of congress what the law meant. When asked what was meant by "principal primary interior markets," Senator Hitchcock is reported to have answered that it meant that "every farmer shall receive $2 for his wheat at the point to which he delivers it with his wagon."

Mr. McCroskey told the convention that he was convinced that if the matter were taken into the courts the courts would accept that record as convincing evidence that the markets had not been properly established by the grain corporation.

Mr. Houser is a strong advocate of moderation in this section's appeal on the matter. He thinks it would be unwise to press the claim for a $2 market at every interior shipping station, but that it would be wiser to try to have northwest coast terminals made the "primary interior market" for the northwest.

# Heavy Increase in Beef Supply

## *Exports Amount to Only About Five Per Cent With No Increase in Sight*

By E. L. POTTER

The annual meeting of the American National Live Stock association at Salt Lake January 14 to 16 was one of the largest and best attended in the history of the association. The chief points discussed in the course of the convention were "meatless days" and the marketing situation. The serious feature of the present beef situation lies in the heavy increase in the supply of beef without a corresponding increase in the outlet. The secretary of agriculture estimates that on January 1, 1918, the total number of cattle in the United Sates showed an increase of 3,500,000 head, the number of hogs a decrease of 4,700,000 head, and sheep a decrease of 2,400,000 as compared with the number in the country one year ago. Not only is the number on the farms increasing, but the number being marketed is following a similar course. The department of agriculture has just recently announced that the receipts of cattle at 52 leading markets showed for the first 11 months of 1917 an increase of 4,400,000 head as compared with the receipts of the same period of 1916, or an increase of 26 1-2 per cent, an increase certainly worthy of serious consideration. On December 1 the amount of frozen beef in storage in 297 leading storage plants was 57 per cent greater than on December 1, 1916. The month of November alone showed an increase of 27 per cent.

We hear a great deal about the needs of our allies for beef, even in face of this great increase in supply our exports only amount to about 5 per cent of our supply and according to the food administration is not apt to increase soon. The general attitude of the stockmen is that they are more than willing to do all in their power to increase production in accordance with the demands of the food administration, but they feel that it is up to the food administration to find some adequate outlet for this increase.

Joseph C. Cotton, the federal food administrator for meat products, addressed the convention and announced that a holiday from the meatless day would be granted in the western states for two months as has already been announced in the press. He further promised aid in the way of publicity to encourage the use of lamb and mutton rather than pork. The announcement made early in the war that lamb was not to be used has caused great harm and while the attitude of the food administration was at once changed on this point and the liberal use of lamb and mutton both is now encouraged since these products can not be exported the general public is not very well aware of the change and there are hundreds of conscientious housewives that still regard it as almost a crime to use lamb. Mr. Cotton would not, however, promise any permanent relief from the meatless days as he felt that while there was a surplus accumulating just now there was a shortage only a few months away.

Louis F. Swift of Swift & Co., was also at the convention and finally consented to break his rule of silence. His very willingness to come before the producers in person was hailed with a good deal of pleasure. He said that the published statements of the profits of Swift & Co. as being 34 per cent was not entirely correct since this was on a capital stock of $100,000,000, when it should have been based on a combined capital and surplus amounting to $160,000,000. Even this modification, however, only brought the profits down to a little more than 20 per cent, a figure so large as to make the producers green with envy. In regard to the surplus of beef piling up in the freezers he would make no definite statements except that he felt that it would all be needed soon. As to prices he felt that they would not very soon be lower but he did not say they might be higher so the producers got cold comfort out of that, since prices are already in many places below the cost of production. Hay, labor and other expenses have more than doubled while cattle prices have not doubled by a long ways.

The marketing committee, which was established at the El Paso meeting two years ago, gave a long report of its activities. This committe was formed with the purpose of "fighting the packers," although it has really a broader view of the situation than any mere antagonism toward the packing house interests and is trying to do everything in its power to correct the two great abuses of live stock marketing, i. e., the too great difference in the price the producer receives, and the one the consumer pays; and, even more important, the excessive, and often apparently unwarranted fluctuations in live stock prices which make it impossible for the producer to know within 20 per cent of what his stock will be worth a month hence. This latter is especially hard on the feeder who never knows whether he will double his money or whether he will lose every dollar he has invested. The marketing committee during the past year has secured an investigation of the packers by the federal trade commission, assisted by the United States department of agriculture and backed with an appropriation from congress of $250,000 to cover expenses of such investigation. (2) It assisted Mr. Wattles, food administrator of Nebraska, in securing a withdrawal of advance charges by the commission merchants of South Omaha whereby commissions would have been increased 25 per cent to 50 per cent, which would have cost the producers over $450,000 per annum at the Omaha market and what is more important the case was being watched by other markets which would have doubtless have increased their rates had the Omaha people been successful.

In spite of the avowed purpose of the association to do all in its power to help the live stock producer the sentiment everywhere was to the effect that the chief business of the country was to win the war and that if it should become necessary for the live stock producers to undergo severe losses they would do so willingly and cheerfully and with the feeling that they had sacrificed nothing as compared with the boys who are doing the actual fighting.

The next place of meeting is to be in Denver, although both Spokane and Portland wanted it. Spokane withdrew in favor of Portland, but the sentiment was too strong in favor of some more central point such as Kansas City or Denver.

# Three Hundred Sheep on 700-Acre Wheat Farm

"If it had not been for my sheep I would have had no income tax to pay this year and would no more than have made expenses," said R. G. Lyle, the pioneer "sheep farmer" of Whitman county, who has been raising sheep on his farm on Union flat, not far from Pullman, for 12 years. There has been much said and written about keeping sheep on the farms and much of this has been conjecture or theory. But there is no theory with Mr. Lyle's expereince. He has been in the business long enough to know and he is preparing to keep more sheep than ever in future years. Agassiz once said: "If you want to know how many legs the grasshopper has, ask the grasshopper." In other works go to headquarters, and The Farmer correspondent went to Mr. Lyle, who is the pioneer farmer-sheep raiser of the wheat belt to ascertain just what are the facts in regard to keeping sheep. His talk is interesting and instructive.

"I have kept sheep on my farm for 12 years and find they pay more clear profit than any other portion of my farming industry," said Mr. Lyle. "Owing to the hard winter last year and fear of a repetition of it and a shortage of feed due to the driest season we have ever known, I cut down my flock to about 180 head. I sold off all the lambs, including the ewes. Last year, as every farmer and stockman knows, was a bad year for sheep. The lamb crop was very light. The long, cold, wet spring made it difficult to save the lambs and I only raised a little more than 100 head. I sold 116 head for an average of $13 per head, which made a nice income. I could have had more if I had sold them at auction for people are beginning to realize that there is money in raisng sheep in connection with farming. Sheep no better than mine have brought $18 and $20 per head at auction sales recently.

"My sheep sheared an average of 10 pounds last year and I got 53 cents a pound, or an average of $5.30 per head. I had been breeding for January and February lambs, but, owing to the unfavorable sprnig last year will have my lambs come this year in April."

Mr. Lyle was originally a wheat farmer, but he fenced a large portion of his land with woven wire fencing and engaged, many years ago, in hog raising on an extensive scale and he made money on his hogs, but he tried sheep 12 years ago and they proved so much more profitable that he practically went out of the hog business and raised sheep. Primarily he is a wheat farmer still, but his sheep have been bringing more profit than his wheat, amount of work, capital and expense considered. He has 700 acres of land near Pullman and generally keeps from 150 to 300 head. In the future he plans to keep more, as he finds he can raise more sheep at a profit. He has Shropshires, which he thinks are the best for farm purposes. He has bred them up by the use of purebred bucks of large size and has a fine herd that are practically purebred, although not registered. He sells the ram lambs, or many of the best ones, to owners of large flocks and every fall has a lot of wethers to turn off for mutton, and he gets a fancy price for them.

"It requires study and patience to learn the sheep business,' said Mr. Lyle. "I have learned much since I started in. I believe that many sheep can be kept on 160 acres if it is farmed as I farm my land. I do not summer-fallow as others do, but I raise some pasture on my summer-fallow land. I sow wheat in the fall on summer-fallow. The next year I sow oats or barley in the spring and sow five or six pounds of sweet clover with the grain. When the grain is cut the sweet clover makes the finest kind of pasture. I do not plow that up for summer-fallow, but let the sheep pasture on it until fall and then plow it late and sow it to fall wheat. Perhaps I do not get quite as much wheat as I would if the land were plowed earlier in the summer, but I get the pasture and the sheep running on it fertilize it and I think that even if I lose a very few bushels of wheat the next year I get more than its value in pasture. I only summer-fallow one-third of my land each year and farm two-thirds of it, raising two crops, one of fall wheat and one of spring barley or oats, with the sweet clover. The sweet clover benefits the land and the sheep running on it also fertilize it. Some people think there is danger of the sweet clover spreading and taking the ranch, but I have found no trouble with it in that respect.

"I raise alfalfa for hay, but do not let the sheep pasture on it. That is unsafe. I have lost a great many sheep from bloat while pasturing on alfalfa and it is very dangerous. They do well on alfalfa hay, but it is not the right pasture for sheep."

Asked how many sheep 160 acres of ordinary wheat land ought to keep in connection with wheat farming, Mr. Lyle said: "That is a hard question to answer. But I can handle 300 head very easily on my 700 acres and I believe I could handle more and still raise good crops of wheat. If every farmer tried my plan of raising pasture and farming two-thirds of his land every year as I do, I believe that about that number of sheep can be raised profitable on that amount of land."

Mr. Lyle's experience has shown that about one sheep for two acres of grain land is a safe number and will yield a good profit. Taking that as a basis and using his experience and his plan for a guide, the ordinary grain farmer with 160 acres could keep from 75 to 80 ewes that would bring him from 80 to 100 lambs a year and make a good profit from them without interfering with his wheat crop. With lambs selling for from $10 to $15 per head in the fall, and wool bringing from 50 cents to $1 per pound (the price sheepmen expect this year), and an average of from eight to 10 pounds can be expected each year, it is easy to see how a man can add to his profits if he adds sheepraising to his wheat farming in the Inland Empire.

Mr. Lyle had come to meet the income tax collector when seen by The Farmer correspondent. Like every other wheat farmer in the northwest his grain crop last year was light, but his sheep saved him from loss and made a nice profit on his year's work.

Mr. Lyle is a pioneer of the Palouse country and one of its most successful farmers and a real patriot. He is doing all he can to increase production of food products and wool for clothing. He has been spending his winters in town, but will go back on the farm in the spring for his oldest son, Floyd A. Lyle, is now in France, fighting with the American army, and Mr. Lyle will have to take his son's place on the farm this year.

Even before sheep reached the present high prices Mr. Lyle was making good profits on his sheep. He not infrequently made 100 per cent each year on each of his ewes, selling the lamb and the wool for more than the value of the ewe and the cost of her keep for a year. He has done this many seasons since he began raising sheep more than a decade ago.

## SEEK MORE MEMBERS

### Farmers' Union Starts Campaign

President A. A. Elmore of the farmers' union of Washington and northern Idaho, has announced the opening of a broad campaign for increased membership. It is the plan of the committee in charge to visit every farmer in the district and invite him to become a member. If he has reasons for not so doing it is intended to make a record of such reasons with a view on the part of the union to meet such objections if they appear to have validity.

## African Ant-Eater

Among the curious African animals is the aard-vark, from the Dutch word "Aarde," earth, and "Varken," pig. As the picture indicates, this is an ungainly animal resembling a short-legged pig with a thick, heavy body, nearly naked or sparsely clad, bristly reddish-brown hairs, and a long, narrow head with a pig-like snout. The ears are long and erect, the eyes are small, and the mouth is small and tubular, with a long, slender tongue capable of extension. A full-grown aard-vark is about three and a half feet long, or, with the tail, more than six feet. It is a timid, inoffensive animal, nocturnal in its habits, and lives



Aard-Vark.

in burrows in the ground, where it sleeps usually all day long. Its limbs are armed with powerful claws, four on the front feet and five behind. This gives it great facility in digging and it will burrow so rapidly, if pursued, throwing out great clods of earth between its hind legs, as to get out of sight in a few minutes. The burrows of the aard-vark are generally near the mounds of white ants, on which they feed almost exclusively, hence the animal is named the ant-bear by the English colonists in Southern Africa. The flesh of the aard-vark is wholesome and its hams, salted and cured like pork harms, are good eating. Their skins, too, are valuable for leather. A similar animal is found in northeastern Africa, having less hair than the Cape aard-vark and a longer head and ears.

## Store Ice and Save Ammonia.

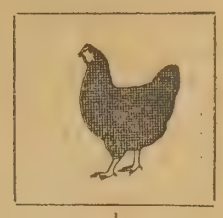
Such importance is now attached to ammonia as a war commodity that the food administration is planning to effect a reduction, if possible, in its use for making artificial ice. Ammonia is widely used for making ammunition, for cold storage and for the manufacture of artificial ice.

### Cares for 1200 Children.

Lady Beatty, wife of Sir David Beatty, commander of the British fleet, cares for over 1200 children, all of whom belong to sailors who lost their lives in the Jutland naval battle.

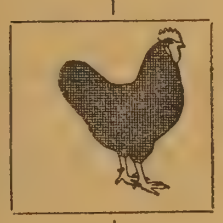
# WANTED





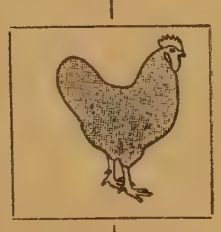
## Good Breeding Fowls, Hatching Eggs, Baby Chicks

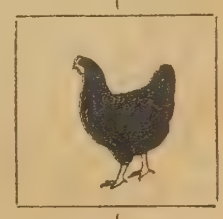
Just as the high cost of poultry feed is forcing many small flock owners in town out of the poultry business, the attractive profits that farm flocks can be made to yield is developing widespread attention among ranchers.





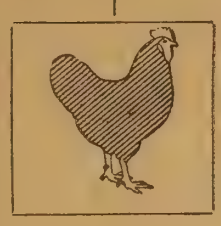
If you have good breeding birds, hatching eggs or baby chicks to offer, by all means advertise the fact in farm papers this season. We predict that such advertising will bring you mighty pleasing results.

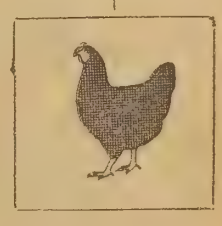




### More Than 50,000

farm homes receive The Idaho Farmer, The Washington Farmer and The Oregon Farmer regularly each week. Each of these papers carries a corking good page of breeders' ads. For good returns your own birds and hatching eggs ought to be offered there during the mating and hatching season.





Send the coupon today for Poultry Breeders' Advertising Rates for this combination of three big state farm weeklies.

## The Washington Farmer

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Spokane, Wash.

The Washington Farmer, Poultry Adv. Dept.
36 Review Bldg., Spokane, Wash.

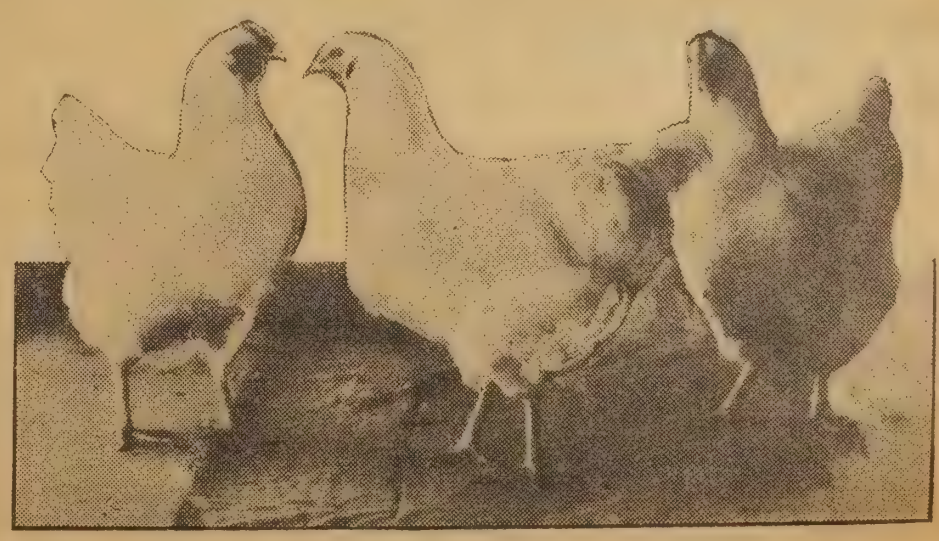
Gentlemen: Send me your advertising rates to Poultry Breeders and oblige.

Name .....

Town .....

State .....

R. F. D. .....



# How To Do More Farm Work With Less Hired Help Is Problem

The farm labor problem in these days of war does not depend wholly upon being able to hire one or more farm hands. It is possible to find ways and means of increasing farm labor efficiency from 25 to 50 per cent on the farms of Washington. This is the opinion of J. C. Scott of the State college at Pullman, who is also labor specialist of the United States Department of Agriculture.

"In the first place," said Mr. Scott to the Farmer, "the best way to get the largest possible amount of farm work done with the smallest manpower is by use of farm machinery. In order to realize this one should go back to the time of the cradle and flail. The average amount of work that could be done in those days was three-fifths of an acre of cradling, binding and threshing. By the new method of the combine you can average six and a quarter acres a day or 143 bushels. By the old method it would take 10 days to do the work done in one day by the two-man combine. Two-man combines are no longer an experiment. Last year in the Walla Walla and Big Bend countries they were used and I have yet to hear a report against them. Moreover, one man can run a 34-horsepower tractor which will pull a six-bottom plow. Tractors can be used more generally in the Palouse country. One man whom I know is farming over 3000 acres of land in the Palouse country told me the other day that the labor problem would not trouble him if he could get one good man that could run the tractor. He said he could run a tractor himself and they could get the work done between them; if necessary he could get some 16-year-old boy to tend to the plows behind the tractor. Plowing with a big tractor needs another man, but a good 16-year-old boy can and will do the extra work. Huston McCroskey of Garfield figures on getting a 45-horsepower tractor driven by one man and pulling a six-bottom plow.

"The four points worth considering in favor of the tractor are: (1) Labor saver. (2) Big saver of horse feed. (3) Since the farmer is in such keen competition with other industries in hiring men, the hired man will prefer to work in town where he will not have to get up at 4 o'clock in the morning, feed and curry and harness a bunch of horses. (4) If there are two or three boys in the family they can keep the tractor running 24 hours or easily put in two shifts.

"Among other farm machines the automatic beet topper and lifter is of great value. The Utah and Idaho Sugar company, I am informed, will have these machines to rent to farmers in the Yakima valley.

"The milking machine is another important labor saver, wherever there are 20 head of cows or more.

"One young man in the Palouse country and his brother say they are going to get their work done this year whether they can get any men or not. They are going to get out and work. Labor efficiency can be inercased if every farmer in the Palouse country will get out himself and take a team every day. As a rule, many Palouse farm owners have not heretofore found it necessary to drive a team or themselves work as hired men in harvest time. On a farm of 300 or 400 acres two men can do the work. In one instance in the Big Bend country a man and his wife harvested his crop with a combine, the wife driving and the man doing the rest.

"Of course one advantage of the binder in the Palouse country is that they can begin harvesting a little earlier and the grain will dry out somewhat quicker in the shock than it will on the ground. On the other hand it usually takes one man to drive and two men to shock on the combine, while a header crew requires at one time a header puncher, loader, four box drivers, spike pitcher and stacker.

### Exchange of Labor.

"Another method in increasing the efficiency of farm labor is that the farmers could exchange work, make up a harvesting crew among themselves, without hiring any new men.

"Then again exchanging between communities according to climatic conditions. Farmers around Oakesdale go to the Sunset country 12 or 15 miles, and by the time the work in the Sunset country is done the season will be beginning in the Oakesdale country. In one instance 36 days were spent in threshing in the Oakesdale country, and then back to the Palouse country at the beginning of the threshing season. This exchange of work is especially applicable to early spring work when there is not much of anything to do before spring work opens. This labor can be transferred to sections where spring work begins earlier.

"The farmer should realize now as he has never realized before that he is in keen competition with other industries; better food, more wages, shorter working hours and better sleeping conditions will be required more now than ever before to keep farm labor on the farm.

"The postponement of public and private improvement not of absolute and immediate necessity will release much labor for farm use. The postponement of the planting of orchards or other crops requiring much labor, and where there is no immediate return of food is also a method of saving farm labor.

"Another thing, the farmer should stick to stable crops. Don't let somebody get you started on some new kind of crop and don't experiment on these new ideas. You can not now afford to waste time and money in this way. By sticking to the old reliable crop you know exactly what to do and when to do it, thus saving a lot of time. Don't do unnecessary things.

"The best source of labor comes from the farmer himself and then from his family. In order to get more work from the family six days of school in time of war will add a month to summer vacations. In time of great harvest stress it is a good thing to close the school and business houses and let everybody get out and help in the apple harvest, potato harvest or beet harvest.

"In the United States there are estimated to be 700,000 retired farmers. These should get out and work. One retired farmer about 50 years of age, was telling me he wished he could get into the army. I replied that it would take at least one year's training to make him fit for service; in the meantime he would have to be fed and clothed and men hired to train him to get ready, while he was trained and all ready to render immediate service on the farm, and where could he render more needed and patriotic service.

"In cities and towns many business men who come from the farms can take their vacations in time of harvest and go out and help.

"As to conscription of labor there are many difficulties. Men should not be allowed to be idle and on the other hand if you have a ranch and have six or eight horses, are you willing to trust these animals to conscripted men? Maryland has a law that every man between the ages of 18 and 50 must register, any man loafing can be put to some useful work. If we had a law like that in Washington then it would be up to us to see that we had work all the year round for these men.

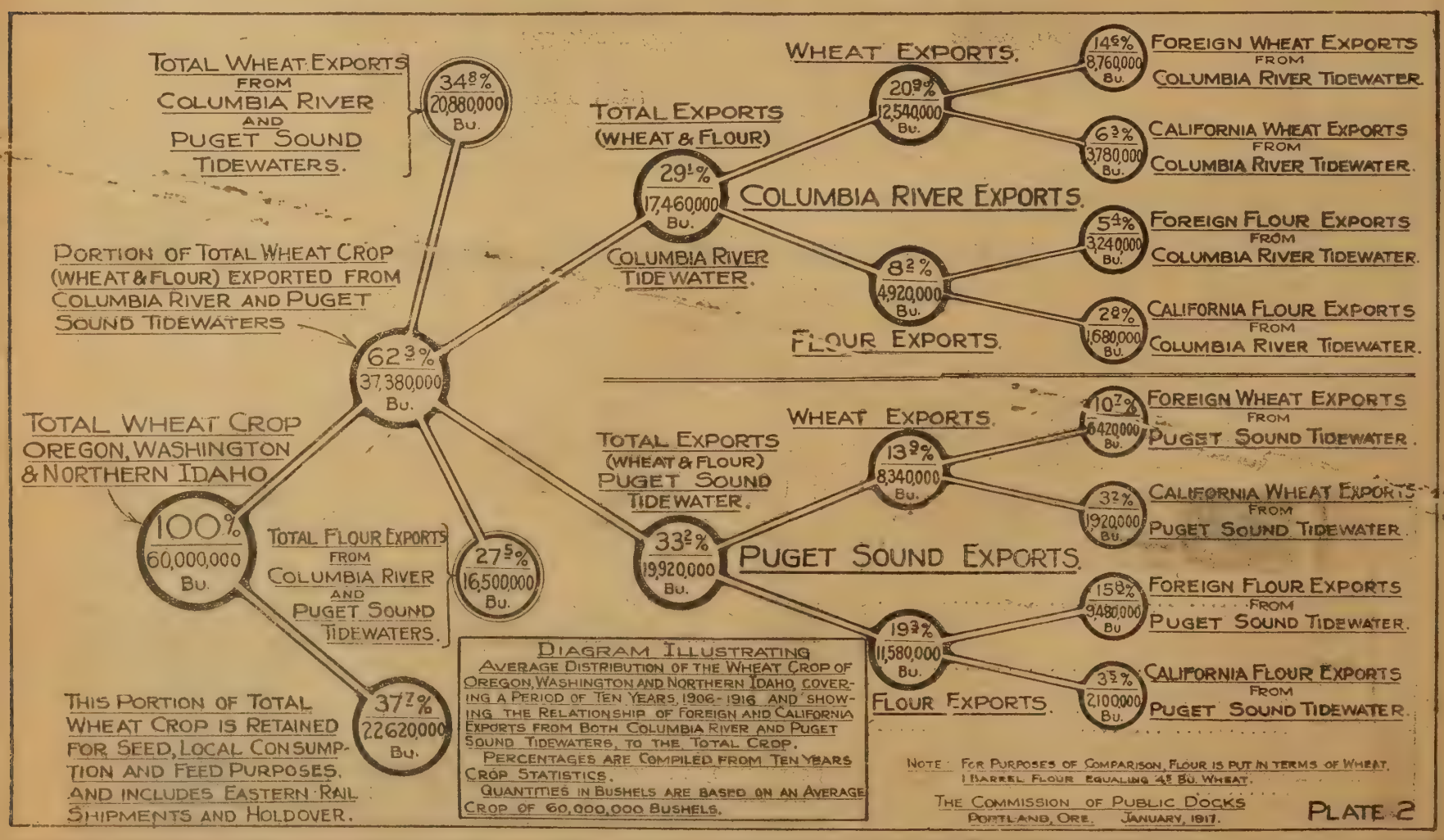
"I am given to understand that the vagrancy law in this state can be extended to loafers, either work or move on.

"Most farmers expect the government to do something, but why can not each community take up this labor problem and carry it on?

"The U. S. department of labor, county agents, farm help specialists, state council of defense, the labor department of the Spokane Chamber of Commerce, have agreed to help in the question of better distribution of labor. Heretofore employers from Ritzville would call Spokane for men. When the work is completed these men would return to Spokane, not being put in touch with other employers in the vicinity of Ritzville, thus causing loss of time and money in finding another employer almost in the vicinity where they last worked.

"The thing is to get the farmers in every town in the country, even in a hamlet where there is only a store, to organize, appoint a committee and give that committee power to establish a farm labor bureau. This plan has been worked out in Spokane county and Yakima county with great success. Men were found who were willing to donate part of their time to take charge of this labor bureau, especially men with offices where the farmers could phone for help, and where a blackboard will inform the farmer with regard to the supply of men. The U. S. department of labor has promised to do all it can to make this a success and to furnish these sub-agencies created by the farmers in any community with franked envelopes, report blanks, etc., to report to the nearest U. S. labor agency. Lawrence Wood has been placed at the head of the government employment bureau of the state of Washington. B. A. Hunter is the head of the employment service in Spokane. All the year round government agencies have been established at Walla Walla, North Yakima, Seattle, Tacoma, Aberdeen, Everett, Bellingham, Seasonable labor employment offices at Kennewick, Puyallup, Sumner, Colfax and Wenatchee. All these government offices will keep in touch with one another and know what is being done as to the proper distribution of labor throughout the state."

# Where Does the Wheat Produced in the Northwest Go, and How Does It Go?




One of the interesting addresses at the grain convention in Spokane was that by Engineer Hegardt of the Portland Dock commission. The above is a chart prepared by Mr. Hegardt showing what becomes of the wheat raised in the three states of the northwest. The calculation assumes that the production is 60,000,000 bushels a year, which is probably a few million bushels more than the usual crop, though there will be a strenuous effort made this year to produce that much. The yield, however, makes no difference with the percentages that are shipped as indicated in the above chart.

# FLORA FLIRTS IN A BIG SNOW STORM



Flora Flirt, dressed nice and warm,
Takes a walk in a big snowstorm



Daintily her dress she lifts
As she trudges through the drifts.



A handsome man, all dressed in fur,
Says "Hello, kid!" and winks at her.



Flo winks, too. Joy wreathes her face
As she leads him to a sheltered place.



She snuggles close to the young man bold;
His arms 'round her keep off the cold.



A big snowslide their romance wrecks—
And buries them up to their necks.
**The Moral**—Now, girls, in flirting make no blunder,
Or you may find you've been snowed under

# War Machine Ready

## *Secretary Baker Tells of Good Results*

Secretary of War Newton Baker told the military committee of congress Monday and, incidentally, the whole world, that this country had half a million men ready to take up the brunt of war in Europe early this year, with a million more ready to go as rapidly as transportation across the Atlantic can be had. And he said that this army was completely equipped with food, clothing and guns.

This announcement, which occupied nearly all day in the making, resulted from attacks made upon the war department by Senator Chamberlain of Oregon and others, who declared in public addresses and statements that the department had failed miserably in its preparations.

It was charged by Senator Chamberlain that the war department had not equipped the army properly; that the great army camps had not been properly constructed; that thousands of American soldiers in camps had died because of lack of protection from weather and insanitary conditions; that there are not enough guns for the soldiers; that the American soldiers in France have borrowed French guns with which to train.

The movement on the part of Senator Chamberlain and his associates is part of a greater movement for the creation of a munitions director to coordinate all the preparations for war in the way of equipment. President Wilson has gone on record as vigorously opposed to the creation of such authority, arguing that it would take out of the hands of those who are now in a position to profit from experience the control of their activities.

It was admitted by Senator Chamberlain, who is chairman of the military committee of the senate, that the reply of Secretary Baker made a profound impression.

At this writing, the secretary is still to appear before the committee for further statement concerning further war preparations, at which time those desiring so to do will likely question him at length.

Secretary Baker said that this country was getting its big guns from French and English factories, because those countries had them and the equipment to make them and preferred that they be furnished by them rather than that ships be taken from food and troops transportation to carry them to Europe. He said that this country now had in process the manufacture of 60,000,000 shells, and that they would be ready for use as rapidly as the American army could use them. He said that every man who was ready to use a rifle had one of approved type, and that rifles and ammunition would be supplied as rapidly as men could be trained and put into the field. He answered the charges of unsanitary and unhealthful conditions about camps, declaring that there had been instances of failures along this line, but that they were only instances and that the general condition was admirable.

### Politics Get Stimulus.

Politics took the center of the stage in congress the other day when Senator Stone of Missouri, democrat, made a speech in which he charged certain republican senators, among them Senator Penrose of Pennsylvania, with playing politics. He charged that the investigations of governmental departments which have been under way were started for the purpose of handicapping the administration. Senator Penrose and other senators replied in kind. This is the first open break between republicans and democrats in congress since the war began, and it is likely that the break will grow wider rather than heal over until the next presidential election.

### More Food Conservation.

President Wilson has issued a formal proclamation calling upon the people of the United States to save 30 per cent, or nearly one-third, of the wheat and meat normally consumed. He points out the great and increasing need of the allies if they are to survive against the attacks of the Germans. The proclamation calls upon dealers to restrict their customers to 70 per cent of normal purchases.

Food Administrator Hoover has issued another conservation program in conformity with the president's proclamation. Here are the salient points embodied in it:

1. A baker's bread of mixed flours, beginning Monday with a 5 per cent substitution of other cereals for wheat, increasing until a 20 per cent substitute is reached February 24.

2. Sale by retailers to householders of an equal amount of substitutes for every pound of wheat flour purchased at the time the wheat flour is bought.

3. Sales by millers to wholesalers and wholesalers to retailers of only 70 per cent of the amount of wheat flour sold last year.

4. Two wheatless days a week—Monday and Wednesday—and one wheatless meal a day.

One meatless day a week—Tuesday—and one meatless meal a day.

Two porkless days a week—Tuesday and Saturday.

### Revolt in Austria.

Reports of discontent manifesting itself in the form of revolts in Austria, and also to some extent in Germany, continue to come from those countries. It is becoming apparent that the element of people growing dissatisfied with the war in those countries is increasing. It is reported that one of the German newspapers says Von Hindenberg is considering withdrawing from his present leadership because of the growing disfavor in which he finds himself and the militaristic faction with the German people in general.

### Break Diplomatic Relations.

Russia and Rumania, up to recent times members of the entente allies, have broken off diplomatic relations, owing to disagreement between the bolsheviki, now controlling affairs in Russia, and the Rumanian government. Rumania appears in general to consider the bolsheviki as of pro-German character, and has undertaken to check some of their activities as they have affected Rumania.

### White River Valley Cows.

The cows appearing on the honor roll of the White River Valley Cow Testing association in western Washington had been fresh one month or over when the test was made, according to Frank W. Logan, official tester.

Twenty-three cows gave over 55 pounds of butterfat and 99 gave over 1000 pounds of milk. Average milk production for December was 687 pounds per cow; average butterfat, 27.19 pounds; average test, 3.95 per cent, and the average feed cost, $12.56.

High cow for the month was a 5-year-old grade Holstein. She gave 68.3 pounds of milk daily and tested 3.9 per cent, making 83.17 pounds of butterfat for the month. This cow holds up well the entire lactation period. She belongs to Cochrane Bros., and is machine milked.

## Some Yakima Breeders

For uniformity in conformation, size and type Charles G. Sprong's bunch of September Durocs ranks high. The Sprong ranch, at Grandview, Wash., has purchased a number of prize-winning Durocs and this new lot of gilts and boars are well up to standard. They have been well and carefully fed and are in the pink of condition.

A. D. Dunn of Wapato will enter 15 head of Shorthorns at the Spokane Shorthorn sale February 23. The offerings will include cows with calves at foot, bred heifers and young bulls. The Dunn herd has long stood for all that is good in the Shorthorn breed and breeders who heretofore have not had opportunity to inspect its members will welcome this opportunity.

Among other live stock there will be sold 60 head of registered Holsteins at the California ranch, Buena, Wash., February 15 and 16. The California ranch is owned by Charles Mead Jr., and George A. Gue will have charge of the sale.

R. W. F.


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Safety and Service

Buy a wood saw strong enough to be *safe* under any strain and durable enough to last you for years. The Appleton has tremendously strong, rigid frame of angle steel; or hardwood, bolted, braced and mortised—doesn't get out of line. Lathe turned steel shaft. Dust proof, non-heating, self-adjusting bearings, keep saw true and steady even after years of wear.

10 sizes; tilting and sliding table types and drag circular log saws. Write for

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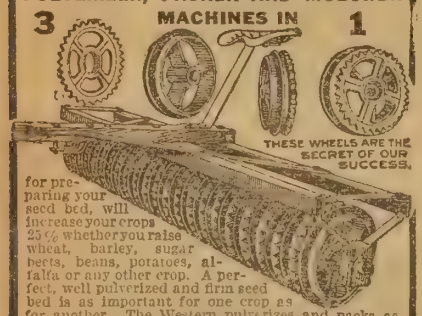
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Pacific Northwest Distributors for Keystone Driller Co. of Beaver Falls, Pa.

J. H. HARRIS, Spokane, Wash. Phone Maxwell 280.

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3 MACHINES IN 1




for preparing your seed bed, will increase your crops 25% whether you raise wheat, barley, sugar beets, beans, potatoes, alfalfa or any other crop. A perfect, well pulverized and firm seed bed is as important for one crop as for another. The Western pulverizes and packs as deep as plowed and leaves a loose mulch on top to protect the moisture; saves 1-3 of expensive seed and time, labor and horse power in preparing a seed bed. It is especially adapted for breaking crust and cultivating winter wheat in the spring, or for breaking crust on sugar beets or beans either before or after they are up without injury to the plants.

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1918 crop will bring war prices; make it a record breaker in size by using the Western. Send for our free illustrated catalog, giving full description of the machine and its work, also dealer's name and much other valuable information.

Western Land Roller Co., Box 300 Hastings, Neb.



**WHEN PRICES ARE HIGH *and* LABOR IS SHORT**

the farmer MUST save time and effort, not only in producing, but in hauling. The larger the load and the faster the trip to market, the greater the profit.

Good roads have always helped the farmer. Now they are indispensable. Farm labor is scarce. Wages are high. Every hour wasted on the highway cuts down output and eats a hole in profits.

What the farmer needs is not a patch of hard road here and there, but a connected system of hard roads putting him in easy reach of his markets. And to get the best prices he needs **roads that stay good 365 days a year.**

There is no reason why farming communities should not have perfect systems of permanent highways. It is entirely up to them. The roads can be built in two or three seasons. When the cost is spread over fifteen or twenty years the annual tax for both interest and principal is only a few cents per acre. In Vermilion County, Illinois, for example, a magnificent concrete system is being built and the annual tax is only about 8c per acre per year, for 20 years, which covers the interest and gradually pays off the debt.

The farmer should act now in getting road plans under way to further his own interests. Systems of permanent highways benefit everyone, but to the farmer they are *indispensable*.

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**CONCRETE FOR PERMANENCE**

# Dirt Pit Silo Cured Beet Tops

## *Sugar Man Tells of Success of His Experiment*

By A. E. GIPSON.

An experiment important to all who use beet tops for feeding purposes was conducted last season by Mark Austin of the Idaho-Utah Beet Sugar company.

Mr. Austin conceived the idea of siloing the green beet tops in a cheap ground silo, and he did it in the following manner. Taking his teams and scraper, a pit was excavated 100 feet long, 4½ feet deep and 14 feet wide. He then filled it by a layer of straw in the bottom of the pit, followed by a layer of beet tops, alternating in this way until the pit was filled. In filling the team was driven into the pit in unloading the beets, thus packing the tops and helping to settle the contents of the silo.

After the pit was filled about six inches of straw was placed over it and this was followed by six inches of manure. In this way the air was excluded and the beet tops were perfectly cured and kept from freezing. One hundred and twenty tons of the tops were put in, at a cost of 60 cents per ton. The cost was figured on the basis of $3.50 a day for men. The beet tops, he said, were not rotted, but perfectly cured, thus increasing their feeding value. Twelve tons of the beets give six tons of the tops. About 80 per cent of feeding value was secured on what was put in. An important thing to observe is to put the tops in shortly after they are cut, or before they have had a chance to dry. Mr. Austin fed something like 500 head of ewes and lambs on this silage, giving them three pounds per head per day in connection with alfalfa hay. The sheep not only relished it, but did exceptionally well, and consumed probably a half, or nearly so, less hay than they otherwise would.

### Help to Buy Stock.

Mr. Austin is so well pleased with this experiment that it will be conducted on a larger scale in the future. Recognizing the value of live stock on the farm, Mr. Austin's company has established a live stock department for the purpose of encouraging farmers to keep good feeding stock. This will enable them both to get a revenue from the stock and to keep up the fertility of their lands. His company will buy the animals and sell to any responsible farmer on long time at the low rate of 5 per cent per annum. The aim is not so much to encourage the breeding of young stock but to buy for feeding purposes and to turn the animals as soon as they are ready for the market.

Speaking about the prospect for sugar beet growing, Mr. Austin said it was yet too early to tell with certainty what the acreage the coming year would be. With the price of $7.25 per hundred fixed by the government it would certainly be impossible for the sugar companies to pay about $8.50 per ton. With an advance of 50 cents a hundred on the selling price of sugar they could advance the price for beets to $10 per ton.

### Cost of Raising Beets.

Regarding the cost of the planting, care and harvesting of an acre of beets, Mr. Austin says it can be done and done well for $58.50. This is figuring every item at a reasonable price. Estimating the yield at 12 tons per acre, which is conservative, and the yield often considerably exceeds this, with the selling price at $8.50 gives a net return of $43.50 per acre, with the beet tops left for feeding purposes. Twelve tons of beets will make about six tons of tops.

If the yield were 15 or more tons the net returns would be increased in proportion. Mr. Austin says they are perfectly willing to increase the price per ton if the government will allow them to increase the price of sugar to protect them from loss. He, however, strongly urges farmers to combine beet growing with stock raising as a means both of adding to their annual revenue and of maintaining soil fertility.

## RAISE MILK STANDARD

### Associations Announce Proposal

At the meeting in Spokane last week of the Northwest Milk Dealers' association and the Pacific Northwest Milk Inspectors' association, a resolution was adopted declaring it to be the policy of the associations to raise the standard of milk for the coming year in every way possible. The former association selected Butte, Mont., as its next year's meeting place, and the latter association selected Portland. Officers elected are as follows:

Dealers—F. B. Flood, Spokane, president; A. F. Bird, Seattle, secretary-treasurer; F. C. Streff, Butte, vice president; directors, F. N. Martin, Spokane; Bert Walker, Tacoma; T. M. Carlyle, Calgary, Can.; August Christoferson, Seattle; E. F. Gentry, Wallace, and A. M. Embrey, Great Falls.

Inspectors—E. C. Calloway, Portland, president; George Henderson, Seattle, secretary-treasurer, and L. Davies, Everett, vice president.

## Hislop Resigns College Position.

Announcement of the resignation of Professor William Hislop as head of the animal husbandry department of the state college of Washington at Pullman has been made. It is stated that Professor Hislop will enter private business in the northwest. He has been active in the live stock industry of the northwest for several years, and is widely known among stock men for his judging at many live stock shows throughout the west.

## Fruit Grower and Buyer

(Continued from page thirteen.)

you know anything about Roseburg & Bloomfield? "Nothing, except what Bland told me." Mrs. Wilson's countenance fell and while out of respect for her husband, whom she really loved, she said nothing, yet she went into the bedroom and took a good cry, for she felt that at least part of their profits were gone. Wilson saw that he had not been cautious. He had sold to a man he never met and that man consigned the fruit to a firm of which he had never heard, and about which he had not taken the trouble to inquire. He knew, too, that by instinct, or intuition, or something else, his wife often reached conclusions that were more accurate than his own, which he believed to be founded upon reason.

He resolved to keep track of that car, so early the next morning he went to the freight office to get the number of the car into which he had loaded his fruit, but had not thought, while loading, to take the number. He also wanted to see to whom it had been consigned. He found that it was billed to Blank of Minneapolis, but he reasoned that they were probably agents of Roseburg & Bloomfield. He found Bland, who was so busy getting other cars started to market that he could not talk, except to assure Wilson that everything was all right.

Days went by. Bland was sending carload after carload out of the country. Wilson tried to reassure himself that he had acted wisely, but was ill at ease. In about two weeks a telegram came from Blank of Minneapolis. The message was directed to Bland, saying: "Fruit received in bad condition. Await your order."

Wilson knew the telegram was false, but what could he do? Again, he found Bland, who assured him that everything would turn out to be all right and ordered the car sent to Chicago. Here it was refused and after a week or two another telegram came, saying: "Fruit received in bad condition. Await your orders." Bland then sent the car rolling for New York. Weeks went by and finally a telegram was received from New York, saying: "Fruit received in bad condition." Bland was receiving dozens of cars at his station in the northwest. Other agents like himself were at other stations in the same country and dozens, perhaps hundreds of cars through these agencies had been sent to the eastern markets.

It was evident now to Wilson that he had been swindled and that his neighbors had been swindled in the same way. He went to his banker to get him to consult Bradstreet and Dun's financial review, in order to find the rating of Roseburg & Bloomfield. Their names could not be found in the directory. Why did I not have sense enough, he mused, as if talking to himself, to make inquiry before I let those thieves have my fruit? Whether there was any such firm or not, as Roseburg & Bloomfield, and, if so, whether or not they were reliable.

Weeks went by before returns came in, reporting the prices for which they said the apples had been sold, less the freight, less demurrage, less the commission at New York, less the commission at Chicago, less the commission at Minneapolis, less Bland's commission.

Bland had left his business in the hands of another man and could not be found. Doubtless the men who employed him took care of his commissions. The returns showed that Wilson was in debt 2 cents a box. He felt chagrined on account of the loss of his fruit and the loss of his own self-confidence, but most of all, he disliked to tell his wife. However, he met it like a man and on returning from town said: "Well, wife, I have had returns from my car of Winesaps." "Have you; what did they bring?" "Nothing," said Wilson; "I am in debt 2 cents a box. Still, I have made a valuable discovery. I have discovered that I am the biggest fool in this community." "No, you are not," said his wife, "for at the Woman's club yesterday I heard of a dozen others who were swindled in the same way. I am sorry, for we needed the money, but I said nothing about it, because I saw you were worried and we can get along somehow. You are the dearest man in the world." "No," said Wilson, "I acted without ordinary business sense, but you are the best woman in the world, for if you had been critical and cross about it we would probably have quarreled and instead of being in closer sympathy with each other, as we are now, we would have been embittered. It is worth a car of fruit to know each other better, but I still insist that I am a fool and that I have paid $600 at least to find it out."


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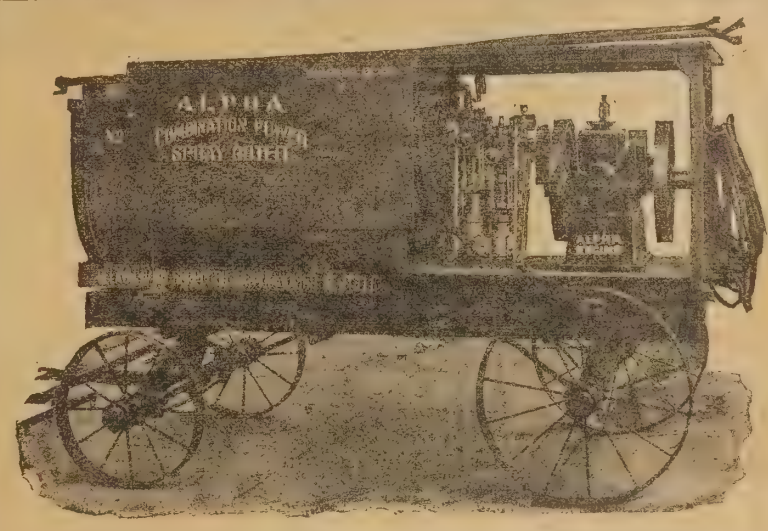
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# MUGGSY MAKES HIMSELF SOLID WITH THE COMMISSIONER















# Farm Meetings at Yakima

## *Wool Growers, Bee Keepers and Forest Users in Session*

By RAY W. FELTON

Representatives of five branches of agricultural activity met at Yakima recently. Three of these meetings, the annual conventions of the Washington State Wool Growers' association, the Washington Forest Users' association and the Washington Beekeepers' association, were representative of the state at large. The other two gatherings were the Yakima County Farmers' institute and a meeting for Yakima county women, conducted by extension workers from the home economics department of Washington State college. All meetings were well attended, and served as evidence of Yakima's growing importance as a center of diversified farming.

In view of the government's appeal for a greater production of mutton and wool the sheepmen, who met Thursday, Friday and Saturday, adopted a resolution embodying a memorial to Secretary of the Interior Franklin K. Lane, urging that steps be taken to open sections of Rainier National park for summer grazing purposes. The resolution points out that there are many sections of the park wholly unused, and never seen by tourists, which can be used most advantageously by masters of flocks in the summer time who use the Columbia river basin ranges during the winter. These districts in the national park afford valuable range, but are not accessible to tourists, it is asserted. They can be reached by sheepmen without going near those sections which are now frequented by tourists making trips to Mount Rainier, or camping in any of the adjacent valleys.

Yakima will have the meeting of the wool growers again next year. This was decided by a ballot taken at the end of the first day's sessions. Some desire had been expressed to hold the meetings in different centers rather than cling to Yakima as the permanent meeting place. Spokane had invited the sheepmen, as had Walla Walla. F. M. Rothrock, well-known stockman, and J. H. Roberts of the Spokane Union Stock yards, conveyed Spokane's invitation, but added Spokane had no desire to take the meeting away from Yakima if it was the sense of the meeting that Yakima should be the permanent home of the association. Walla Walla then got into the ring and a vote was taken by ballot to decide where the meeting was to be held in 1919. This split it three ways, with the result that Yakima was decided upon, with Spokane second.

J. W. Bradley of the Old National bank, Spokane, was present and told of Spokane's desire to cooperate with live stock interests and to give every possible assistance to forwarding the industry in the northwest.

Officers elected for the ensuing year are: President, Tom Drumheller of Walla Walla; vice president, W. A. McGuffey of Yakima, and secretary, F. A. Sears of Prosser.

The resolutions committee was composed of H. Stanley Coffin of Yakima, F. M. Rothrock of Spokane and C. A. Hales of Pasco. The executive committee's personnel is George Jackson of Yakima, Charles Anderson of Ellensburg and Everett Butler of Prosser.

Professor William Hislop of the state college, who managed the ram sale at the Washington state fair last year, gave a brief report of the sale and told of plans for this year's sale, which will be held on even a more pretentious scale than the first attempt, which was successful beyond even the hopes of the most sanguine. This year's standard has been raised so that none but thoroughbred and standard bred rams will be entered in the ring.

Income tax, exemption of herdsmen from military duty, the necessity of amending the present herd law so as to keep cattlemen off unfenced ranges owned by sheepmen and the forestry department's rule requiring sheepmen to prove they grow hay before they are given range permits were among topics discussed at the first day's session.

Commissioner E. F. Benson of the state department of agriculture, who is an enthusiastic woolgrower and seldom fails to attend the annual meeting, wired his regret over his enforced absence this time.

### Farmers' Institute.

The farmers' institute extended from Monday morning until Friday night. It was very largely attended. The program was arranged by J. N. Price, agriculturist for Yakima county, and Roy P. Bean, agriculturist for the government's Tieton project. The instructors were Professor J. C. Caldwell, H. L. Waterbury, Professor Hegnaur, Professor Thornber, Mr. Price, Mr. Bean, L. M. Lampson, county agent for Benton; A. D. Dunn of Wapato, H. Stanley Coffin of Yakima. It is doubtful if the state of Washington has this winter experienced a more interesting or profitable meeting than the institute at Yakima.

Farm women turned out in large numbers to hear Miss Edna Walker and Miss Elizabeth Jacobson of the Washington State college home economics department. They did work similar to that accomplished at Pullman. Matters pertaining to home management during war time, elimination of waste, strength conservation, feeding of children, fuel economy, saving sugar and making a new shirt out of dad's old one, were subjects which received most earnest consideration.

### Beekeepers' Meet.

Washington State Beekeepers' association held an interesting two days' session. J. B. Ramage of Yakima was elected president; J. P. Hostetler of Puyallup, vice president; W. H. Tucker of Prosser, secretary and statistician, and H. L. Hart of Yakima, treasurer. A committee was appointed to purchase supplies for all members of the association. W. H. Foster, a government expert, who is working under the supervision of Professor Thornber of the state college extension service, attended the meeting and gave the beekeepers valuable ideas on the treatment of colonies infected with foul brood. Mr. Foster will spend several days in the Yakima valley inspecting various colonies.

### Corn Show.

In days gone by they used to say Yakima was not a corn country. Showings at the corn show held in connection with the institute told a different story last week. Corn growers experienced in the corn belts of the middle west and south, who saw the exhibits at the Yakima show, pronounced them first class and stories of big yields were in keeping with the high quality specimens exhibited. B. D. Sloop of Outlook, was awarded the blue ribbon for the most perfect ear of corn shown. Professor Leonard Hegnaur acted as judge. Other winners are:

Yellow corn—J. L. Willett, first and third prizes; C. Olson, second prize; J. L. Willett, F. A. Hall, A. J. Johnson, B. D. Sloop, J. A. Starcher, highly recomended.

White corn—C. Starcher, first; John Klingle, second; A. Boggess, third; E. N. Roady and A. J. Plessey, highly recommended.

Calico corn—C. E. Newell, all prizes.

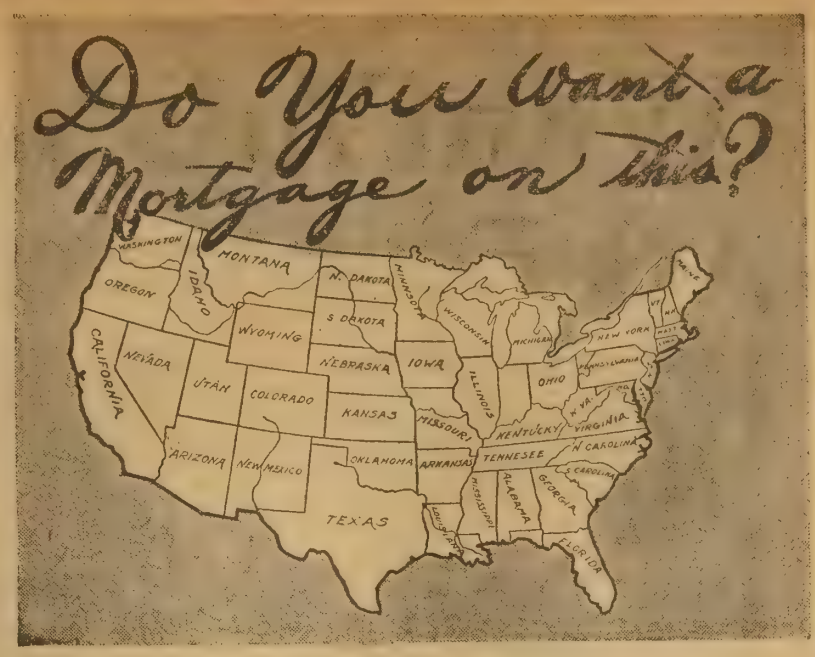
Popcorn—R. C. Woodruff, first; J. H. Morrison, second; R. C. Woodruff, third; best single ear, C. Starcher.

The best 10 ears for all exhibits belonged to J. L. Willett, and he was awarded a prize of $10 therefor. First prize in other exhibits was $5; second, $3; third, $2, while a prize of $1 was given each of those persons whose corn was highly recommended.

## Beans on Summer Fallow.

Arthur Carter, a farmer near Colfax, Wash., raised 10 acres of beans on his summer fallow last year and was so well pleased with the results that he is planning to plant 40 acres this year. Mr. Carter is a fervant advocate of diversified farming and raises a number of hogs, as well as grain. He plants peas on summer-fallow for hog pasture and fall feed, and this year he plans to raise a great many hogs and a large quantity of beans. "The government wants pork and beans for the army and I am going to 'do my bit' to provide these staples for the fighting men," said he. Bean raising has become quite popular in the Colfax neighborhood despite the fact that the crop last year was far below normal, due to the prolonged drouth.

To The Washington Farmer: I want to subscribe again for your valuable paper. Have been taking it for several years before my husband, H. Watson Smith, died.
MRS. RACHEL A. SMITH.
Lynden, Wash.


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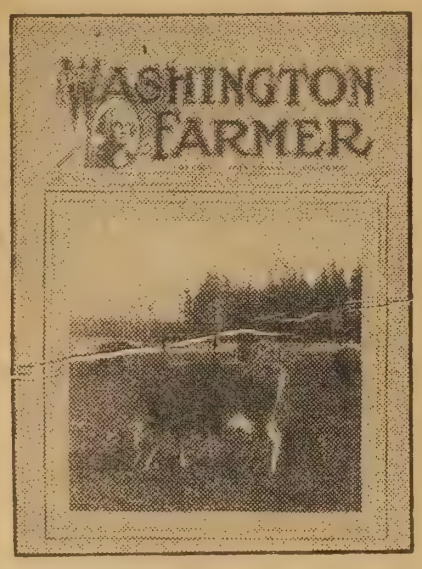
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Have you farm products to sell, such as live stock, poultry, seeds or dried fruits? Once more, the "want" ad in the three state farm papers offers a solution for the difficulty. It reaches the very class of homes where there is a constant demand for these things.

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To sum up, our "want" ads enable you to reach the people who have what you want or who want what you have. They are easy to insert. They are low in cost. Even if there is nothing you care to advertise at this time, you will always find interesting, profitable reading in our "want" ad columns.

Rates are printed at the top of these columns in every issue. Don't miss the "want" ad page today!

**Send Orders and Inquiries Regarding "Want" Ads to The Washington Farmer, 617 Central Bldg., Seattle, Wash.**

# Horses in the Army

## *Rules Adopted for Their Care and Feeding*

Few persons realize how many horses are required by the army. Besides the artillery, ammunition and supply horses there is an immense number used by mounted officers and orderlies and by the ambulance and signal corps. Since the battle of Cambrai the formation of a cavalry division has been ordered.

There are hundreds of men in the artillery camps of the country, especially those drawn from the eastern cities, who are now engaged in the care of horses although they have never touched a horse before in their lives. Even in the western and southern camps there are doubtless thousands of men who are ignorant of the rudiments of horsemanship, or the care and feeding of the animals. Taking these facts into account the Boston Work Horse Relief association has issued 14 rules especially for beginners in the care and feeding of horses. They were submitted to and approved by Colonel Frank Tompkins, a widely known cavalry officer, and they have been adopted by Brigadier General John A. Johnston for use in the northeastern department which he commands. Here they are:

1. Remember that the horse is an extremely timid animal, and must be handled very gently, though firmly. Always speak to the horse when approaching him; take hold of his headstall carefully, pat him on the neck, and draw his head slowly toward you. In tying him be sure that the rope is not so long that he can get his leg or foot over it, as painful wounds are often caused in that way.

2. In entering a stall do not put your hand on the animal, as that might cause a vicious or stupid horse to kick, especially if you are a stranger to him; but tell him to "get over," and then step in quickly on the left of the horse.

3. In leading a horse take a firm grip of his headstall or bridle with your right hand, hold the end of the halter rope in your left hand and keep beside him not in front of him. If he rears or pulls back you can let go of the headstall and hold him by the rope—not trying to struggle with him, keeping your face turned from the animal, but stepping toward him as he goes backward. He must move slowly in going backward and will soon tire of it.

4. Do not mount a horse equipped only with a halter; and do not attempt to ride a strange horse unless he is bridled, and there is some one with you to hold him, and lead him about at first. You may be willing to take a chance yourself; but a horse never forgets anything and if he bolts or throws his rider once he may do the same thing again at a critical moment. The Prince Imperial lost his life because his horse would not stand to be mounted.

5. The stomach of the horse is extremely small and therefore he should be watered at least three or four times a day and if possible should receive both hay and grain three times a day. The less work he does the more important it is to give him hay often, because a hungry, idle horse is apt to take up some bad habit such as biting, kicking, cribbing or weaving.

6. If the horse gnaws his manger or stall it is certain that he needs salt unless he is very hungry. Keep a lump of salt always before him if possible.

7. Horses should be watered first and fed afterward, and if possible watered again an hour or two after eating their grain.

8. Never water or grain a horse that is much heated; to do that is likely to "founder" and so ruin him.

9. Never give grain to a tired horse; let him rest for an hour or two first. Otherwise, he is very likely to have indigestion and colic. More horses die from colic than from anything else.

10. Bring your horse into the stable or camp cool and breathing easily, if possible. Nothing is worse for a horse than a chill after being heated. But if for any reason it is necessary to halt or encamp when your horse is sweating—then blanket him and walk him about, or put him in a sheltered spot and rub him—according to circumstances. A horse is cold when his ears are cold. Get in the habit of feeling his ears.

11. Use the currycomb very lightly, if at all. It is apt to hurt the skin of the horse. A stiff brush is better—and much more efficacious if the horse's coat is long. The head and legs should never be touched with the currycomb. You can clean your horse with a wisp of hay or straw vigorously use—or even with your bare hands. At least an hour a day of hard work should be devoted to cleaning a horse. This helps the circulation, removes dead skin and dirt, and makes the horse feel right and look right. Look out for frosted bits in winter.

12. Avoid sore backs and shoulders by keeping the inside of your saddle or harness perfectly clean, and by sponging or cleaning off the saddle or harness marks. The dandruff in the horse's hair is very salt, and when this dandruff dries on the horse or on his equipment it irritates the skin.

13. On reaching camp or stable, do not remove the saddle, unless you can at once clean and dry the hair underneath. If that can not be done immediately, loosen the girth and leave the saddle and blanket on until the hair is dry underneath.

14. In order to avoid scratches, rub your horse's legs dry when he comes in wet or muddy. This is hard work, but it can be done. In winter, when the roads are muddy, or there is snow on the ground, put a little vaseline or grease on his pasterns and heels to shed the moisture.

# Farmers Meet

## A. C. Townley Talks at Lewiston

One of the most important farmers' meetings ever held in northern Idaho was that of the State Federation of agriculture, held at Lewiston Tuesday, Wednesday and Thursday, January 22-4. It was attended by delegates from all of the farmers' organizations of the state, including the grange, the Farmers' union, the Society of Equity, the Fruitgrowers' association and the Potato Growers' union of southern Idaho. In addition to these delegates there were organizers and members of the National Nonpartizan league, including the national president and national secretary and their talks on what the league has done, is doing and will do were well received.

President Tronaas reviewed briefly the history of the organization in Idaho, stating that when W. G. Scholtz was state market director he came in contact with the farmers and found three separate organizations all working to the same end, but not together. The grange, the farmers' union and the society of equity were working to help the farmers and remedy existing conditions, but were working along different lines, he said. Mr. Scholtz conceived the idea of getting them all into one organization and formed the State Federation of Agriculture for his purpose. The first meeting was held in Boise in February, 1916. The second meeting was held a year later at the same place, when it was agreed that annual conventions should be held alternately in northern and southern Idaho, and the Lewiston convention was arranged. President Tronaas said there should be "no north and no south" in Idaho, and he said that one of the first things the federation planned to do when it secured power is to connect the two sections of the state by railroad.

He deprecated the fact that there are so few farmers in the legislatures and in congress and said that a young lawyer once told him that farmers and business men can not afford to go to the legislature; that only lawyers can go there and live without accepting a bribe, for lawyers can take a retainer, and they will never go against the interests that retain them. He said that unless there are more farmers and more representatives of the producing classes sent to the legislatures and to congress to make our laws "government of the people, by the people and for the people will perish from the earth." President Tronaas then introduced President Townley of the national association, who was given an ovation as he slowly stepped forward and faced the big audience. Mr. Townley spoke slowly and distinctly until he warmed up to his subject, his eloquence and force increasing as he developed his theme:

President Townley declared that this above any other day in the world's history is the day of organization. Almost every club of industrial workers are organized not only for protection, but to keep other organizations from destroying them as well as to make for efficiency in their own business, he said. Here are extracts from Mr. Townley's speech:

Now the farmers are organized in some little measure, but not in a very large measure. The farming industry is the very basis of civilization; it is the foundation upon which all of our civilization structure rests. Without the farming industry there could be no civilization. Now as organizations of all other industries contributed to the efficiency of the industry and of the general welfare of the state, so likewise, in a very much greater measure will organization of the farmers, organization of the basic industry, organization of the industry which is the foundation of all civilization—I say so, in a great measure, in a measure proportionate with the importance of that industry, will organization of the farmers benefit not only the farmers, but the whole community, the state, the nation and the world. Organization of the farming industry is as essential as organization of the army that defends this nation against the foreign foe. While the sons of the farmers by the million will be organized into a military machine that is to defend the honor of this nation and liberty and democracy, not only of ourselves, but of all the world—I say, while the sons of farmers are being organized for that service—the biggest thing that can be done to benefit those sons of farmers is to organize the old men at home, for without organization of the basic industry, farming, we can not so well support the organized military machine made up of our sons as we can by organizing farming, the basic industry.

And as in this time of prices the work of the farmer is more important than it ever has been before because the winning of the war—victory, depends upon food. As at this time we look to the foundation upon which we stand for success, so at this time organization of the farming industry, organization of the farmers for more efficiency in the business of farming, is more patriotic than organizing anything else in this United States, for it is the foundation upon which everything else rests.

F. P. Waters, a "war horse" in farmers' movements, who has been organizer for the grange in many states, is now a national organizer for the nonpartizan league and deputy state master for the grange in Washington, was the principal speaker in the afternoon session Wednesday. Mr. Waters is a forceful speaker and held the closest attention of the audience. He went after the "middlemen" who take enormous profits from the producer and the consumer and told of many instances that had come to his observation. He told of being in North Dakota, where he organized the state for the grange movement, and said C grade apples that had been bought at North Yakima for 75 cents per box and shipped to North Dakota at an expense of 37 cents a box sold there for $2.50 per box. As a result the producers in Washington were making little or no profit and the consumer in North Dakota could hardly afford to eat these lower grade apples because of the high cost, but the "middlemen" were making more profit off a box of apples than the producer and the railroad got for producing, packing and hauling the apples 1000 to 1500 miles. He told of buying Bing cherries that had been grown in Idaho and sold for 4 cents a pound, in North Dakota for 35 cents a pound and the retailer made very little profit off them at that. They had been handled through St. Paul and Minneapolis commission houses. He pleaded for closer relation between the producer and the consumer to the end that the former might get a profit and the latter could afford to use them. He said that tens of thousands of men, women and children are doing without fruit because they can not afford to buy it, while tens of thousands of boxes of fruit have rotted in the west because the producer could not afford to gather, pack and ship it for the price allowed by the "middlemen."

The federation of agriculture is an organization in which any farmers' organization may take part. It is an outgrowth of the farm marketing plan of the state of Idaho of which William G. Scholtz was director until removed by Governor Alexander. In his travels over the state and his dealings with the farmers Mr. Scholtz found that while there were many farm organizations, such as the grange, farmers' union, society of equity, fruitgrowers and other associations, they were local and did not work together. He conceived the idea of having them work under one management; to work together for better marketing conditions and better conditions generally on the farms, in the orchards and on the stock ranges. As a result this organization was perfected and the first meeting held in Boise in January, 1916. Two other annual meetings have been held since, the last closing at Lewiston Thursday evening. Each of the old organizations keeps up its organization, operates as before, but it can, if it wishes, become a member of the federation and receive all the benefits accruing from it. Those attending the convention claim that already they have secured great benefits from their association with the federation.

Next comes the question, "What is the nonpartizan league?" The answer is that this league is, as its name indicates, a nonpartizan, but by no means a nonpolitical league. In fact, it is wholly political. It is organized exclusively for political purposes. None but farmers can be members of it, but the league is supported by merchants, labor organizations and others. The secretary is Ray McKaig, who is also secretary of the state republican central committee of North Dakota, and master of the North Dakota state grange. The league elected most of the officers in Dakota by indorsing and voting for them, regardless of party. Mr. McKaig told of a strong democrat being placed on the republican ticket and elected by a big majority in North Dakota. While only farmers can be members of the league, it is a tower of strength in North Dakota, which is largely a farming country, and in Idaho, where it is being organized and has the support of the labor organizations, the promoters insist they will have a clean majority in the next election. Among the prominent organizers for the league who attended the Lewiston convention are: L. C. Crow, for many years president of the Washington-Idaho Farmers' union; F. P. Waters, state organizer and deputy master of the grange in Washington; H. L. Fest of Emmett, Idaho, a prominent breeder of Duroc Jersey hogs, who reduced his herd to the minimum and is spending the greater part of his time organizing the league in Idaho; and there are scores of others. They are republicans, democrats, former populists and socialists. Riley Rice, prominent stockman of Cottonwood, Idaho, who has been a life-long democrat, is an enthusiastic booster for the league, while Miles Cannon of Payette was, for many years, a republican "war-horse" in Washington, where he was classed as a "standpatter."

To The Washington Farmer: I like The Washington Farmer just fine, and am in good standing until 1919. Find enclosed 50 cents for which please send a new subscription to The Washington Farmer for three years.

EDWARD EICHHORN.
Tacoma, Wash.

# Will Do His Part

To the Editor: As to the minimum, also maximum, 14 cents for hogs, it surely decreased the hog population of the Big Bend country by 50 per cent. It will hardly pay for fattening, to say nothing of raising them to the first 150 pounds and wintering the brood sows. If the government will put a stop to the packers' little "up and down" game, up when we are raising and down when we are selling, and be sure to buy the bonds for the farm loan bank, so we can have 5 per cent money to buy hog wire, instead of the 10 and 12 we now have to pay, it will help more than a set price. The set price is so easy to juggle with, especially when they know a farmer is out of feed. A buyer offered me 12 cents for good, fat hogs and 4 1-2 cents for cattle just the other day because he thought I was bound to sell.

But personally I am going to stay in, for I think every farmer ought to do not "his bit" but "his all" for the increasing of food, both meat and bread. The farmer will find $1.75 for wheat and 14 cents for hogs a big thing if peace should come this spring, for peace will mean plenty of help and that means cheaper machinery, clothing and everything we have to buy. But the set price for wheat will remain for two years.

Every farmer should keep enough hogs and cattle to clean up all waste of the farm. It will mean work and stay at home more, but we have not finished this big war yet and if we do not do our every bit and win, our little home will not be fit for a Yankee to live in. This means the conditions in the Big Bend country, and my experience for 20 years.

LESTER C. HAYDEN.
Mold, Wash.

## Milk Yields in Scotland.

At the annual sale of Ayrshire pure-bred bull calves held at Netherton, Newton Mearns, 21 bull calves were offered, and all were out of cows whose yearly yield of milk was over 1100 gallons, which, allowing 60 days off for the dry period, gives a daily flow of 3 2-3 gallons. One 9-months-old calf brought $2150, and another, 1 year old, sold for $1500. Its dam had a record of 1156 gallons of milk in 48 weeks, yielding 3.67 per cent of butter fat. Mention is also made of an Ayrshire cow whose flow of milk constitutes a world record. In nine seasons she gave 9500 gallons of milk, and calved each year on an average within 12 months.

# More Rather Than Less

## *Food Production Plans of the Farmers of Washington*

Notwithstanding the fact that many of the farm boys are called to war and labor shortage generally faces the farmer, there is a decided determination on the part of the farmers of the state to raise more food crops this year. Here is another instalment of letters in response to the "More or Less" circulars sent out by The Washington Farmer:

**Do More Than Last Year.**

To the Editor of The Washington Farmer: I take pleasure in informing you that I am going to do a little more for my country this year than I did last. We raise lots to eat and have some on hand now, such as potatoes and beans. It is not the top price that we look at, but we like to Hooverize some and if we sold a carload to our merchants they would want us to take it all out of the store in trade. We would like to see a government buyer do all of this buying.

J. A. BUMGARDNER.

Wenatchee.

**Sons Leave the Farm.**

To the Editor of The Washington Farmer: Owing to one son being at the training camp, and one expecting to go in February, I don't know exactly what I will do in regard to raising more. The camps and sawmills are paying more wages than the farmers around here can afford to pay.

E. M. MOSES.

Chehalis.

**Farm Help Question.**

To the Editor of The Washington Farmer: I have been planning on putting in more of everything that I have been raising, wheat, oats, corn, hay and beans. I will have 90 acres of wheat and oats to sow in the spring and would like to put in about 20 acres of potatoes, two acres of corn and two of beans, and half an acre of carrots. The question is will we be able to get any help. Have been paying $40 a month for a man and I don't feel like I can afford to pay much more than that. If I have to pay from $60 to $70 for a man I think it would be better to put in just what I can take care of myself.

OSCAR PETERSON.

Spokane.

**Summary of Coupons.**

The following is an additional summary of coupons received:

Theodore Johnson, McIntosh—**More** potatoes, peas, beans, hay, beef and dairy cattle, swine, carrots, mangels.

Robert Winters, Port Angeles—**More** wheat, potatoes, peas, hay, swine, cattle; **less** poultry, horses.

Mrs. E. M. Kashernickor, Cle Elum—**More** wheat, potatoes, alfalfa, Holsteins, Duroc Jersey swine, carrots, mangels.

E. M. Moses, Chehalis—**More** wheat, oats, barley, corn, fruits, hay, dairy cattle, sheep, swine, mangels, silage; **less** potatoes, peas, horses, beef cattle.

Thomas Berg, Allyn—**More** wheat, barley, rye, corn, potatoes, beans, vegetables, hay, swine, poultry, carrots, mangels, turnips, artichokes, silage; **less** oats, peas.

G. J. Camp, Trout Lake—**More** wheat, oats, peas, beans, vegetables, beef and dairy cattle, swine, carrots, rutabagas; **less** hay, poultry, turnips.

Bellwood Farm, Valleyford—**More** wheat, oats, rye, corn, potatoes, peas, vegetables, hay, horses, dairy cattle, swine, poultry, carrots, mangels, silage; **less** beans, sugar beets, fruits.

Mrs. J. W. Henley, Roy—**More** swine, poultry, potatoes, carrots; **less** berries.

G. O. Roundtree, Boistfort—**More** wheat, rye, corn, potatoes, sugar beets, fruits, beef cattle, sheep, swine, poultry, carrots, rutabagas, silage; **less** oats.

William Weimerskirch, Mold—**More** wheat, potatoes, vegetables, horses, swine, poultry, carrots, mangels, rutabagas, turnips.

J. T. McLean, Bridgeport—**More** wheat, barley, rye, vegetables, horses, sheep; **less** swine.

D. W. Tomlinson, Mansfield—**More** corn, beans, beef cattle, silage; **less** barley, swine, poultry.

Oscar Peterson, Spokane — **More** wheat, oats, corn, potatoes, beans, hay, horses, swine, poultry, carrots.

Martin Penhallick, Neppel—**More** vegetables, fruits, alfalfa, beef cattle, swine, carrots; **less** potatoes.

Albert Bertschi, Glenwood—**More** wheat, oats, barley, rye, hay, dairy cattle, swine.

Charles M. Keinfmon, Middleport—**More** wheat, oats, potatoes, peas, sugar beets, vegetables, hay, poultry, carrots, mangels, rutabagas, turnips.

C. W. Fitzsimmons, Pomeroy—**More** corn, potatoes, beans, poultry.

J. A. Bumgardner, Wenatchee—**More** wheat, barley, potatoes, beans, vegetables, hay, horses, beef cattle, sheep, swine, poultry.

L. K. Cogswell, Chehalis—**More** wheat, oats, corn, potatoes, peas, beans, vegetables, hay, carrots, mangels, rutabagas; **less** dairy cattle.

Thomas E. Woodward, Fairfield—**More** wheat, oats, barley, potatoes, vegetables, poultry; **less** peas, beef cattle, swine.

Joe Gizler, La Center—**More** potatoes, vegetables, hay, beef cattle, dairy cattle, rutabagas, turnips; **less** beans.

Peter E. Boyce, Snohomish—**More** wheat, oats, peas, vegetables, hay, dairy cattle, poultry, carrots, silage; **less** corn, potatoes, rutabagas.

Hunter Land company, Hunters—**More** wheat, vegetables, fruits, hay, beef cattle, swine.

Oscar McNeill, Hanson Ferry—**More** wheat, oats, barley, corn, potatoes, beans, beef cattle, swin; **less** hay, horses.

W. H. Ritzschke, Centerville—**More** wheat, oats, potatoes, beans, vegetables, hay, beef cattle, swine, poultry.

George Harlan, Goldendale—**More** wheat, potatoes, hay, horses, beef cattle, sheep, swine, poultry, turnips, artichokes, silage; **less** oats, barley, rye, corn, beans, sugar beets, vegetables, dairy cattle, carrots, mangels, rutabagas.

# Favor Bulk System

## Colfax Farmers Find It Cheaper

**By J. E. NESSLY.**

Cutting, threshing and delivering on board the cars at the railroad station 4000 bushels of wheat at a total cash outlay of $210 is the record made by B. R. Pratt, of near Colfax, who is an enthusiastic advocate of bulk handling of grain. Mr. Pratt has an elevator and used no sacks. Had this grain been handled in sacks the sack bill alone would have been $280.

Mr. Pratt is farming rented land. He has the farm of Dr. W. B. Palamountain of Colfax, rented. The land lies on the Spokane & Inland Empire electric railway between Colfax and Steptoe and the station of Blackwell is on the land. Mr. Pratt built a wooden elevator on the land at the edge of the right of way and loads the grain directly into the cars by a long spout that runs from the elevator to the cars. His elevator cost him $1200.

"While I do not own the land I found it cheaper to build the elevator than to buy sacks," says Mr. Pratt. "I have a long lease and the sacks required to handle this grain during the period for which I have the land leased would cost more than the elevator cost me, to say nothing of the saving in cost of handling the grain. I used an Idaho combined harvester last year and had 11 head of my own horses on the machine My total cash outlay for harvesting the 160 acres of my own grain, which yielded 4000 bushels, was $185 and it cost me $25 to load the grain on the cars. I have an elevator run by gasoline engine and we clean the grain before it is loaded, consequently we save the screenings for feed. I got 200 bushels of good hog feed from the wheat and saved the freight on this. If I had had the grain sacked I would have had to pay freight on the screenings and lost that 200 bushels of feed, which is another big item in favor of handling grain in bulk."

Mr. Pratt came from Minnesota, where all grain is handled in bulk and he could not accustom himself to using sacks.

Harry Roberts is another very successful farmer who is an enthusiast in favor of bulk handling. Mr. Roberts is a pioneer. His land lies between Elberton and Steptoe, in Whitman county, Wash., and he has raised wheat for more than a quarter of a century. He has changed from the sack to bulk grain and says he saved big money. Mr. Roberts said:

"I handled my grain in bulk last year. There were no facilities for handling bulk grain at the railroad, but I had tanks at home and had to sack my grain out of the tanks and haul it to the railroad and load it in cars in bulk, but saved money at that. I saved three men on the thresher, which is a big item in itself. At Steptoe there is an elevator built two years ago that has already paid for itself and the men who own it say they will never again handle grain in sacks: I find that one man can handle as much grain through an elevator as 10 men can handle in sacks, and there is a great saving in the loading of grain on cars. I am in favor of the bulk system and believe it will be the best thing for this country when adopted generally."

Many matters of interest to the grain farmers of the northwest were discussed at a recent meeting of the Patriotic League of Colfax, which is endeavoring to help the farmers in every way possible to produce a record crop of grain this year. This meeting was devoted exclusively to the grain question and Dr. W. B. Palamountain, the president, who owns a valuable farm, had invited farm owners who farm their own land, land owners who rent their land, and renters who farm other men's land, to attend the meeting and take part in the discussion and tell what the league can do to help the farmers. There was a good attendance and matters of vital interest to the farmers were discussed. The sack and bulk question was given prominence.

It was brought out that rich land owners who have grown wealthy and retired and have their lands rented, refuse to build granaries for the renter, whose contract generally requires him to "delicer one-third (or two-fifths, in many instances,) of the grain in sacks," either at the nearest warehouse or on the land. The renter can ill afford to build a granary unless he has a long lease on the land. Some farmers contend that it will be utterly impossible for them to handle grain in bulk this year and that unless they are assured of having sacks they will plant oats or barley and feed it at home. It was made plain that the wheat production of the Inland Empire will be cut short unless sufficient sacks are provided to hold a large part of the grain. It was estimated that not more than 50 per cent of the 1918 crop can be handled in bulk under the most favorable circumstances, which will mean that Whitman county alone will have close to 3,000,000 bags this year. Many elevators will be built this year if material and carpenters can be secured, but this is doubtful.

The labor question is one that is interesting the farmers and those at the meeting of the Patriotic league asked that high school boys and those in the upper grades of the lower schools be released from school not later than April 1, to work on farms. One farmer said that every boy so released who can handle a six-horse team can put in 80 acres of wheat that will not be planted unless some such arrangement is made. He estimated this at the low average of 20 bushels, which would mean 1600 bushels of wheat additional to the total crop for every boy who can go on a farm during the spring seeding season.

# Grow Crops on Summerfallow

(Continued from page two.)

grimages on its behalf. I believe this community could do nothing in a local way that would have a closer relation to world-wide needs than to push the dairy interests. The country is admirably adapted to this business if concerted action on the part of the farmers could be secured. As an aid to such a movement a campaign for the erection of a large number of silos would have a powerful influence, and with the remembrance of the late disastrous season of drouth still fresh in mind it ought not to be a difficult matter to stir up a boom in silo construction and the growing of suitable crops with which to fill them. It has so far been an admirable winter, and live stock are faring well in spite of the shortage of feed. Farmers are busy with the sleighs, and until the last snow were still able to keep the plows running. The ground is frozen only a few inches, and the snowfall is light.

E. E. ELLIOTT.

### Hog Feed Not Abundant.

HUNTERS, Stevens County, Wash., Jan. 18.—This community is wide awake as regards the assistance it can give Red Cross work, conservation of food and purchase of Liberty bonds. We have a very active Red Cross auxiliary. The purchase here of Liberty bonds has been very considerable. A campaign to further the sale of war savings stamps is being initiated and substantial progress in their sale has been made. Nearly every one is falling in line with the administration's food campaign. It is a little early to make any forecast as to the 1918 crop. The soil was extremely dry when winter set in; in spots dry soil was turned up in January plowing. There is time yet for a considerable addition to the moisture content of the soil before planting time. A satisfactory yield of grain crop in this locality depends upon a normal rainfall in May and June. The winter has been very mild and much hay has been saved. Stock is in good condition and there is plenty of feed for cattle and horses, but hog feed is not so abundant.

ELIAS NELSON.

### Will Do Their Bits.

RAINIER, Thurston County, Wash., Jan. 18.—We have had a mild winter so far, no snow and mud all the time. A very few days since November 25 that we have not had rain. Winter grain growing all the time and some had to feed it to cows to keep it down. The mild winter has helped a lot in feed and pasture, although milch cows have to be fed heavy to keep up the milk flow. Farmers are not hiring any more help than necessary. This is a dairy community and the problem is how to produce the most and best feeds on the farms, to produce more milk and keep more cows. The problem of national interest in which this community can play and is playing a part is that the women are helping in the Red Cross work, economizing in the kitchens and helping in the farm chores. The farmer will put into crop every acre he possibly can to help out on food production.

L. F. DAVIS.

### Labor Problem Puzzles.

METHOW, Okanogan County, Wash., Jan. 21.—The most important problem of local interest that this community will have to solve in a short time is the problem of labor on the farms and orchards. The young men have gone to the Sound to work. The most important national problem in which we must play a part is to help win the war by working harder, practicing economy and buying bonds. The prospect for the 1918 crop is promising, as everything looks like an early spring, with no snow to speak of. The mild winter has saved the feed, range horses still feeding on the range and doing better than they did in the fall. The cattle are in better condition than usual, too. No farmers or families are attending the winter courses at the state college, owing to the fact that there is an average of only one man to the ranch where formerly there were two or three.

CHARLES GRANT.

### Live Stock Stimulus Needed.

NEWPORT, Pend Oreille County, Wash., Jan. 22.—The most important problem of purely local interest in this community is naturally the stimulation of the live stock industry, to which the country is best adapted, but as it is a timbered country the marketing of timber products is engaging the attention just now of most farmers whose land is not entirely cleared. Through the efforts of the county agent many farmers are improving their present stock and others are taking on new stock as their means will permit, but the district generally is far below its carrying capacity, due largely to the fact that the lumber industry furnishes a market for crops at a much greater profit than could be secured by feeding these crops to live stock. The most important problem of national interest that this community could assist in is the stimulation of crop production. There is very little snow at present, no frost in the ground and fall wheat so far is in splendid condition. The heavy run-off of snow early in the month will probably preclude the possibility of overflow in the river bottoms the coming summer. Live stock is wintering well and economically; in better condition generally, I believe, than on the average at this season of the year. I know of no farmers attending the short courses this winter.

CHARLES M. TALMADGE.

### Bond District for $375,000.

Water users in the Naches-Selah irrigation district indorsed a proposal to bond the district for $375,000 at a largely attended meeting at Selah January 15. There are about 10,500 acres in this district, which is recognized as one of the most prominent of the fruit growing sections of Yakima valley. The contemplated work includes a large amount of tunnel construction, making possible the elimination of uncertain trestle work besides straightening out many of the troublesome kinks of the canal. E. M. Chandler, president of the Washington Irrigation institute, attended the meeting and gave the water users advice and information on the work proposed and what results may be expected therefrom. It was decided to appoint an advisory committee to work in conjunction with the directors of the district in an effort to assist them in the supervision and management of the proposed work.

**Eat More Potatoes.**

The United States food administration wishes to place the Irish potato every day in the year on every table in America. Potatoes furnish nourishment, bulk, mineral salts and a corrective alkalinity in the diet. They are plentiful this year and reasonably cheap.

# BIG SAVING OFFERED

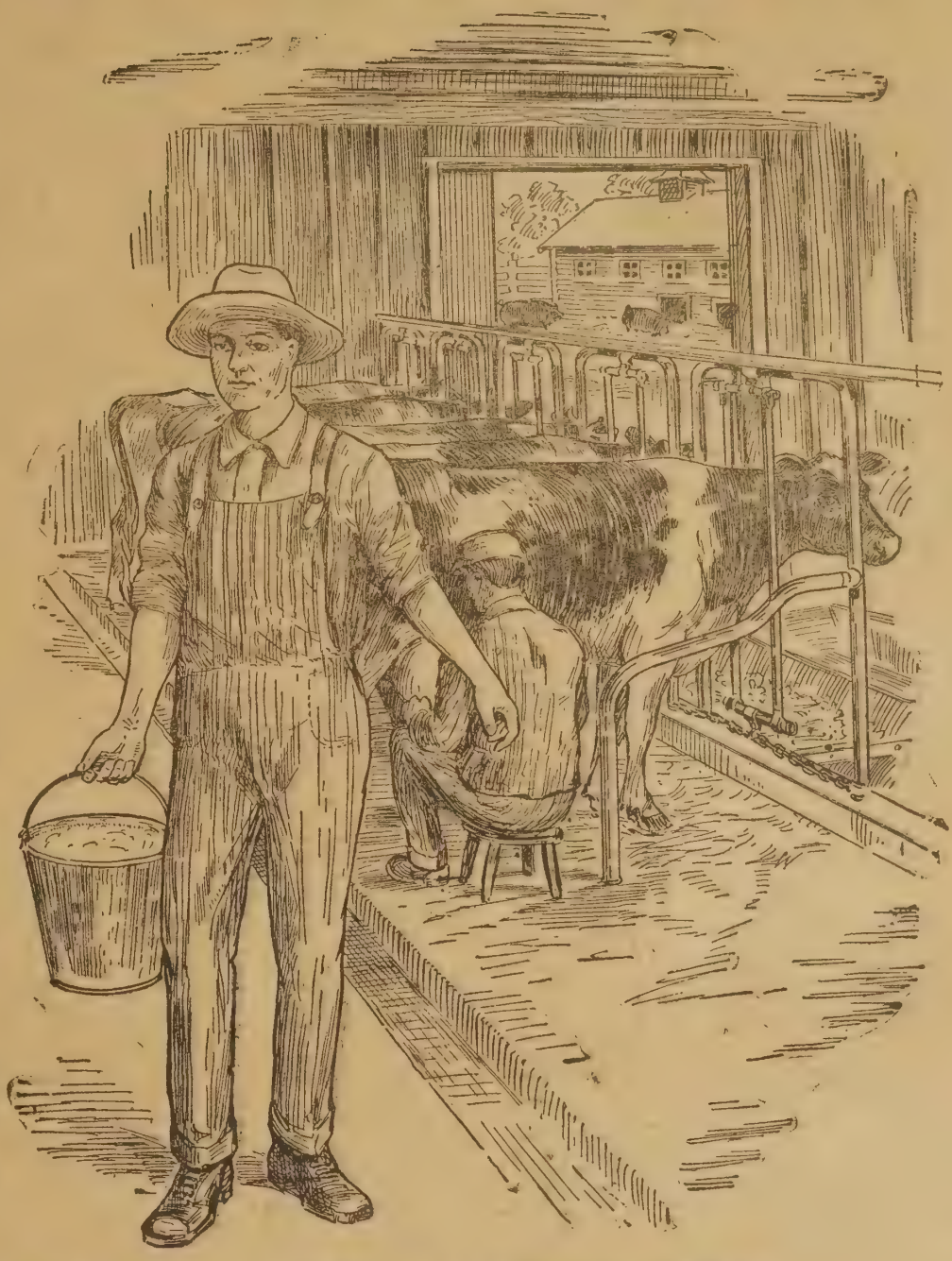
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## If You Believe in the Principle of Cooperation Help Us Make This Plan a Success

Granges and farmers' unions everywhere have said, "The middleman must go!" They have debated ways and means for accomplishing this result.

As an experiment and war measure THE WASHINGTON FARMER asked its readers to help dispense with the middleman in subscription matters. We said to our friends—"Send your subscription order direct. Get your neighbor to do the same. We will give you and your neighbor the benefit of every penny which would ordinarily go to the agent handling the subscription."

If you believe in cooperation, if you believe in eliminating the middleman, help us make our experiment a success: Send in your order if you haven't already done so, and let as many neighbors as possible know about our money-saving plan.

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Jan. 31.

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# No Minors Allowed

By J. L. ASHLOCK

PART I.

The games we boys used to play in the streets of Coulee City in the days when that town was "wide open" to the dissipation, joys, sorrows, social immoralities, and pioneer thrift of a pine-board city in the bunchgrass would give the modern city in playground people a touch of heart failure.

A row in a saloon broke up our game of "hi barbaree" one night. Shooting started, which caused us to huddle together on the lee side of the Star livery barn till it was over.

A little while afterward, when the town was quiet, Charlie Blank and I were racing down the street in front of the saloon, yelling "hi barbaree" to our pursuers. Charley's flying feet struck something lying on the ground in the dark that sent him headlong to the ground. I stopped to see how he fared in his fall, and in a second we were "caught."

"One of you stiffs was lyin' on the ground there and tripped me," vowed Charley. "It ain't fair. We've got a right to run it over."

The boys vowed that no one had tripped him. Charley was stubborn.

"My feet hit somebody," he vowed. "I stepped right on his stomach, or something. We've got to run it over."

We argued pro and con with rising heat. Finally some one proposed that we go back and look at the place where Charley fell. We did so, lighting matches—and found a dead man!

A man had been walking down the middle of the dark street. A bullet had come his way when the shooting started, and hit him in a tender spot.

Frightened now, we held a whispered conference. Charley was the first to get his wits together.

"Fellows, if we say anything about this, we'll be pulled in as witnesses," he declared—in a whisper. "Everybody promise not to tell anybody—not even his folks."

It is unlikely, I think, that any of us small boys would have been called in as witnesses. But Charley thought we would; so we all promised and vowed utter silence on the subject, for all time to come.

The killer, drunk when he did the shooting, and having no intent to kill the man walking out in the dark street, got 20 years for his frolicsome shooting. He finished his term five years ago, I think; and so far as I know, the vow the boys made within 10 feet of the dead man in the street has been kept to this day, by every one of us, and is here broken for the first time.

There were many saloons in old Coulee City of the bunchgrass days. My memory fails as to number. But I recall that they were noisy places and hilarious. Barred from their mysterious interiors by the sign "No Minors Allowed" we youngsters had to content ourselves with second-hand accounts of what went on inside, which to us was most entertaining.

A lot of us organized a "play saloon" out in the sagebrush adjacent to the town, once. We picked up bottles of many sizes, shapes, and colors, and made use of some beer and whisky signs which an adventurous member of our set pulled from a saloon front one dark night. We filled our bottles with water of a bitter, alkali kind, which was taken from the small, undrained lake near the railway water-tank. In this lake many cattle stood during the warm days, and several times the town hobo had bathed there. The last time the cowboys bathed him they cut off his whiskers with sheep shears, and we boys waded out in the lake, rescued as many of the whiskers as we could find in the water, and tried to turn them into water snakes by soaking them a long time in bottles of water kept in the sun. Charley Blank said you could turn the hairs of a horse's tail into snakes by soaking them that way, and we wanted to find out what kind of a snake would grow from the whiskers of a hobo.

Well, our play saloon was stocked with liquor taken from this lake, and in the management of our "house" we carried on the experiment with the hairs from the town hobo's whiskers as a side line. We sold our wares for poker chips—red, white, and blue. The chips that were cut out inside so that they could be worn on a necktie were more desirable than the others.

We had one of our big boys for the policeman. One day the policeman and some other big boys got super-hilarious on our bottled goods, which they actually drank, including one bottle which contained a soaking whisker, and wrecked the shop. They smashed our bar, broke our bottles, and shot up the place generally. That ended our saloon game. We understood well enough that inebriated patrons had a right to wreck our joint, and that this was only part of the game. But we smaller youngsters didn't care for that part of the game, so our play saloon and the experiment with the whiskers of the hobo ended in the sagebrush flat south of Coulee City, where it began.

"Hi barbaree" was the classic game of bunchgrass days. It was played at night, when it was dark—the darker the better; in fact, in the full of the moon we could not play it. The game went thus:

A crowd of us boys met in the main, unlighted street, and arbitrarily designated one of our number as "it." At a signal, we scattered in all directions, yelling "hi barbaree." The "it" had to follow, and lay hands on whoever he could, and he upon whom "it" laid a hand, became "it" No. 2. And so on, till a dozen to 20 "its" might be scouring the town in every street and alley for one lone fugitive, who must keep moving and at intervals not too far apart, yell "hi barbaree." In thrills, lion hunting in darkest Africa can not compare with the game of hi barbaree that we boys used to play in the dark streets and alleys of old Coulee City.

In the first part of the game we had to keep in the streets or alleys and be on the move. When there were five "its" to one fugitive, the latter could then hide in empty whisky barrels which were thick all over the town, particularly in alleys and saloon rears. Hiding in the empty barrels, we had to answer "hi barbaree" whenever a pursuer called to us. However, "hi barbaree" from a whisky barrel was not a safe guide to pursuers. The voice calling from the barrel was muffled and unnatural; also, worse still, the barrel seemed to "throw" your voice the wrong way, so far as your pursuers were concerned. It often happened, therefore, that a dozen or 20 of the "its" scoured the town for hours for the last one or two fugitives who kept dodging from one barrel to another and cunningly eluding the "its"—who, along about midnight would get discouraged and go home to bed.

One night Charley Blank and I played a mean trick on the "its," who had vainly pursued us two for an hour or so. We dodged from barrel to barrel, doubled back, criss-crossed the streets and alleys, cunning as foxes. A dozen times we raced at breakneck speed down the dark alley in the rear of the old Owl saloon—and our pursuers likewise plunged down the alley at top speed.

Sprinting to get ahead of the "its" we darted into the alley the last time, and working in mad haste, rolled whisky barrels across the alley and jammed them end to end. Then we shrilled "hi barbaree" and slipped off to one side and listened in the dark.

Down the alley came the "its" panting and racing at top speed. Over the barrel barricade they went, to a boy. With many exclamations they regained their feet—and did not fail to examine the inside of every barrel to see if we were lurking therein. We made off stealthily and yelled "hi barbaree" from the rear of the Elk saloon, and down this alley the "its" came, in a panting, discouraged, badly bruised crowd. A little while afterward they gave up the hunt and each boy made for his home and bed. Charley and I were left at large.

That night Charley and I had an adventure which put into my mind new understanding of that great, shadowy, underworld encompassed in the word "saloon."

We had evaded all our pursuers. Our piercing "hi barbaree" failed to evoke a single challenge. So, two gloating conquerors, we emerged from a dark alley, and walked boldly down the dark street. As we passed in front of the Owl saloon, in whose rear we had a short time before wrecked our pursuers; we heard a piercing yell. We stopped to listen.

The yell was repeated. Then there were several yells which rose to the attitude of shrieks. Going with the loud yelling and shrieking was an undercurrent of excited talking, and we perceived that the sounds were coming from the Owl.

The saloon porch was unlighted save for the dim rays from the flickering, yellow illumination in the barroom. The glass front of the building was smoke-stained as well as frosted or "whited," and the smudgy lamplight from within left the board walk under the dimly glowing, whited glass in complete darkness. Into this darkened space close to the building crept Charley and I, bent on discovering what the rumpus was about.

Charley said there was a place in the glass where the whiting had been rubbed away. We proposed to look inside.

Charley took the first look. While he looked, he whispered to me what he saw.

"Billy (the bartender) is scared stiff," he whispered. "He's scared so stiff that his mustache is turned yellow—no, his face is so white—that's what it is." His eye fairly glued to the hole in the whiting, and his lithe bady stiffened with excitement. From inside came a sudden, fierce, animal-like screaming, and the sounds of a struggle. Suddenly Charley ducked low and flattened to the sidewalk. I did likewise.

"Billy is tryin' to get the Swede's gun," he whispered. "There's goin' to be some shootin'."

Inside we could hear the scuffle that was going on—the overturning of chairs and tables, the crash of falling glasses and bottles, and the howling of the drunk Swede whom Billy, to save his own life, was trying to disarm. He apparently was successful. There was a final smash and whoop, and then comparative silence.

"Now will you be good?—get out of here," we heard Billy say.

Charley again had his eye glued to the hole in the whiting, which let him see behind the bar.

"Billy's put the Swede's gun up there behind him in the bottles," he whispered. "He's got his own gun down there—I see the handle sticking out from under a towel. The Swede had commenced to yell, howl, shriek and curse. Billy kept calling him a damned fool and ordering him out of the saloon.

"You look now," said Charley.

I looked. The Swede, crazed with drink, was leaning over the bar clutching Billy's sleeve with one hand. The other hand was clinched and waved aloft as he yelled:

"You got my money—you steal my money—I sleep with $50, and you steal it—I owe you a dollar—I pay, I pay, when you give my money back!" Thus he raved. Over and over again he shouted this at Billy, who kept shoving him away, calling him a liar and other things worse, and telling him to clear out. But the Swede didn't clear out worth a cent.

Wildly accusing Billy of having robbed him, he would suddenly break off in a wild, cursing chanting which rose to piercing yells and shrieks. At times he would break out in a strange, crazy sort of singing in a tongue unknown to us. Suddenly, with ominous abruptness, he ceased raving.

"You steal my money while I sleep," he said quietly. "For that I kill you—now or some day."

I could see Billy's mustage go a shade yellower—which merely meant that his face had gone a trifle writer.

The Swede's frenzy broke out again, as suddenly as it had subsided. Moving like a flash, he caught Billy's hand and wrist, and nearly dragged him over the bar before he could break lose. Billy cursed roundly, though in chattering tones. He was scared clear to the marrow of his bones.

Up and down the barroom the Swede raved and stormed like a maniac.

"My money—I work for my money—you steal my money—I owe you money, I pay it when you give back what you steal," and so on. He charged suddenly at the bar and flung his hands, with fingers curved like claws, at Billy's throat. Billy leaped backward in time to save himself.

With this outburst the Swede sagged wearily on the bar. He was all in; but without a doubt, gathering steam for a new start.

Billy made use of this lull in the storm by taking a new tack. Confidentially and in comforting tones, he assured the Swede that maybe "they" had stolen his money; but that he, Billy, was onto the "bunch" and that if they had grabbed his coin he sure would make 'em come through.

"You're tired and worn out, old fellow," he told the drunken fellow, kindly, as if he were talking to a brother. "Go on to bed now—I'll fix you a bunk in the back room. Sleep there, and when you come around in the morning I'll have your money, somehow.

"If the gang stole it, I'll get it, and if you lost it, I'll find it," he vowed. "Go to bed now, and come and get your money in the morning."

(Continued on page thirty-four.)

## SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

## How Your Muscles Help to Keep Your Mind in Condition



Dr. Hirshberg

"Mind" and "brain" are far from the same, for it is now definitely known that the brain is not the exclusive seat of memory, perception, judgment, reasoning and the intellect. Ovid wrote that "it is the mind that makes the man, and our vigor is in our immortal soul." Here you have the truth reversed in the first phase and corrected in the second. It is the world outside of a man and his inherited physical parts which make his mind. The immortal soul then manifests itself through the material perfections.

The most antiquated physiologist will agree that the switchboard or "motor centers of the brain" develop only after exercise and training of the muscles. The sensation capacity and motive power of the muscles appear first. Unless these are formed, the corresponding "centers" in the brain will not have their proper development, growth and efficiency.

The brain is biologically and anatomically a bridge across the Danube of muscle with muscle, memory, perception or comparison with comparison. It is not the seat of the soul, the intellect, the nonmaterial store houses in the different tissues any more than are those tissues themselves, but is a mere pathway for the coordination of one kind of physiological activity with another, whether muscular, conscious or unconscious.

**Important for Brain Growth.**

Muscular and sense association and adjustment are more important for brain maturity and growth than is brain development for them. The greater the sensitiveness, skill, variability, ingenuity and complexity of sensation or of muscular movement, the fuller the development of the gray matter of the brain. But not vice versa.

It follows, then, that play, labor and creative work freed from habit and instinct, full of change and new situations train the mind. The development of the brain is a secondary accomplishment as is proved by many highly trained and educated plants and animals.

Professor William James was one of the first to emphasize that the will and the feelings are intimately related to muscular activity and development. Sensations and ideas direct muscular action, and the muscles in their turn guide the emotions. You are afraid—an emotion—because you see a savage beast which make your legs tremble or seek to run away.

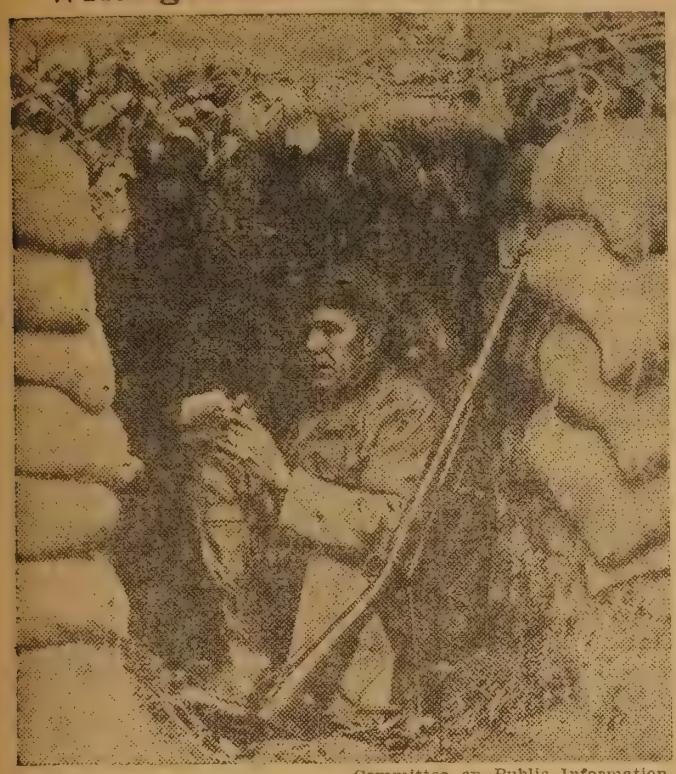
**Source of Delicate Feelings.**

Many of the muscle movements and delineations in the face are the source of delicate feelings. Darwin seems to have been right in the observations that the muscles give the expression of and to the emotions.

Flabby muscles are a sign of a weak will. A life of inactivity, indoors or out, spells a gradual sap of will power.

# All the World's a Stage, and All the Men and Women Merely Players

## Writing His Letter Under Cover



—Committee on Public Information.

The soldier's letter to his home folks may be composed under these difficult conditions and in a concealed "cranny" of this sort.

## Machine Digs Battle Trench



—Copyrighted by International Film Service.

Things are being rushed at top speed at the mobilization camps these days for the training of the nation's national army. One of the great time savers in use is the mechanical trench digger, which is put to all sorts of tasks and accomplishes them equally well. The machine can in a day do the work of 1000 men.

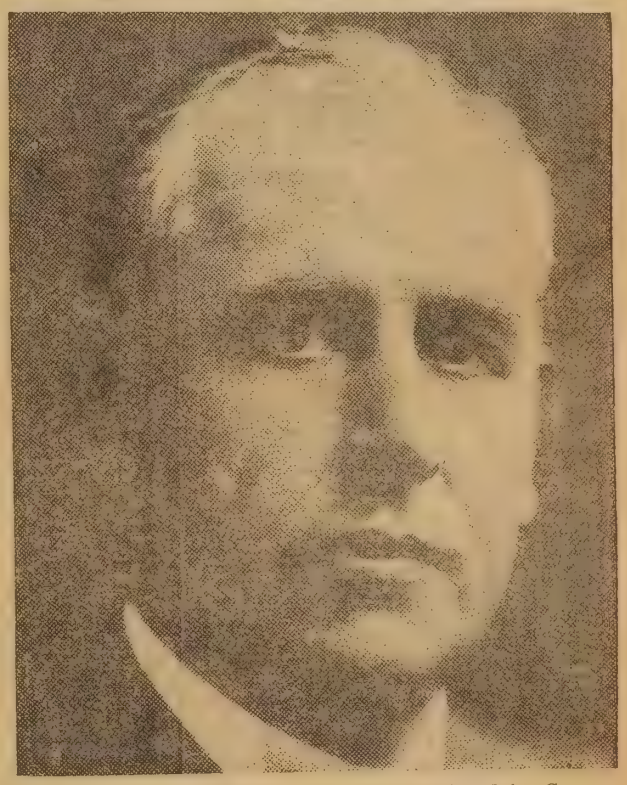
## Getting Down to Business at Camp



—Copyrighted by International Film Service.

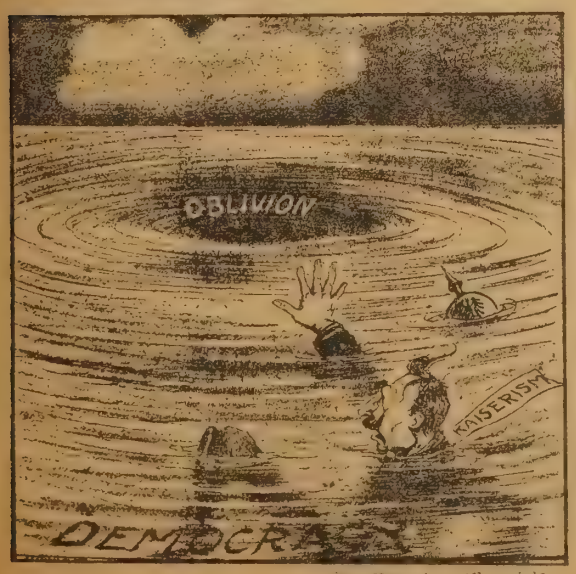
The above picture shows men at bayonet practice with dummies at the officers' training camp at Presidio, California, where is located the largest western training camp of its kind.

## Appointed Idaho Senator



John F. Nugent of Boise, who was appointed by Governor Moses Alexander to succeed the late Senator Brady. Nugent has been a prominent democratic leader in the state for years.

## Nearing the Vortex



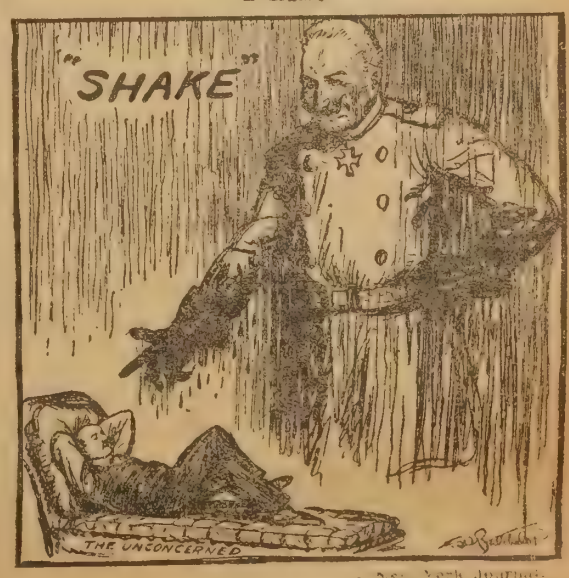

—San Francisco Chronicle.

## Kick in the Right Direction




—Duluth Herald.

## Pals!




—New York Journal.



# THE BARRIER



By REX BEACH

Author of "The Spoilers," "The Ne'er-Do-Well," "The Silver Horde," etc.

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## CHAPTER XVIII.

### Runnion Finds the Singing People.

"No Creek" Lee came into the trading post on the following morning, and found Gale attending store as if nothing unusual had occurred.

"Say! What's this about you and Stark? I hear you had a horrible run-in, and that you split him up the back like a quail."

"We had a row," admitted the trader. "It's been a long time working out, and last night it came to a head."

"Lord—ee! And to think of Ben Stark's being licked Why, the whole camp's talkin' about it. They say he emptied two six-shooters at you, but you kept a-comin', and when you did get to him you just carved your initials on him like he was a bass-wood tree. Say, John, he's a goner, sure."

"Do you mean he's—passing out?"

"Oh no! I reckon he'll get well, from what I hear, though he won't let nobody come near him except old Doc; but he's lost a battle, and that ends him. Don't you savvy? Whenever a killer quits second best, it breaks his hoodoo. Why, there's been men laying for him these twenty years, from here to the Rio Grande, and every feller he ever bested will hear of this and begin to grease his holster; then the first shave-tail desperado that meets him will spit in his eye, just to make a name for himself. No, sir! He's a spent shell. He's got to fight all his battles over again, and this time the other feller will open the ball. Oh, I've seen it happen before. You killed him last night, just as sure as if you'd hung up his hide to dry, and he knows it."

"I'm a peaceable man," said Gale, on the defensive. "I had to do it."

"I know! I know! There was witnesses—this dressmaker at the fort seen it, so I hear."

The other acquiesced silently.

"Well! Well! Ben Stark licked! I can't get over that. It must 'a' been somethin' powerful strong to make you do it, John." It was as close to a question as the miner dared come, although he was avid with curiosity, and, like the entire town, was in a fret to know what lay back of this midnight encounter, concerning which the most exaggerated rumors were rife. These stories grew the more grotesque and ridiculous the longer the truth remained hidden, for Stark could not be seen, and neither Gale nor Burrell would speak. All that the people knew was that one lay wounded to death behind the dumb walls of his cabin, and that the other had brought him down. When the old man vouchsafed no more than a nod to his question, the prospector inquired:

"Where's Poleon? I've got news for him from the creek."

"I don't know; he's gone."

"Back soon?"

"I don't know. Why?"

"His laymen have give up. They've cross-cut his ground and the pay ain't there, so they've quit work for good."

"He drew a blank, eh?"

"Worse'n that—three of them. The creek is spottedder than a leopard. Runnion's men, for instance, are into it bigger than a house, while Poleon's people can't raise a color. I call it tough luck—yes, worse'n tough; it's hard-biled and pickled. To them as has shall it be given, and to them as hasn't shall be took even what they ain't got, as the poet says. Look at Necia! She'll be richer than a cream puff. Guess I'll step around and see her."

"She's gone," said the trader, wearily, turning his haggard face from the prospector.

"Gone! Where?"

"Up-river with Runnion. They got her away from me last night."

"Sufferin' snakes!" ejaculated Lee. "So that's why!" Then he added, simply, "Lets go and git her, John."

The trader looked at him queerly.

"Maybe I won't—on the first boat! I'm eating my heart out hour by hour waiting — waiting — waiting for some kind of a craft to come, and so is Burrell."

"What's he got to do with it?" said the one-eyed miner jealousy. "Can't you and me bring her back?"

"He'll marry her! God, won't there never be a boat!"

For the hundredth time that morning he went to the door of the post and strained his eyes down-stream.

"Well, well! Them two goin' to be married," said Lee. "Stark licked, and Necia goin' to be married—all at once. I hate to see it, John; he ain't good enough; she could 'a' done a heap better. There's a lot of reg'lar men around here, and she could 'a' had her pick. Of course, always bein' broke like a dog myself, I 'ain't kept up my personal appearance like I'd ought, but I've got some new clothes now, and you wouldn't know me. I bought 'em off a tenderfoot with fold feet, but they're the goods, and you'd see a big improvement in me."

"He's a good man," said Gale. "Better than you or me, and he's all torn up over this. I never saw a man act so. When he learned about it I thought he'd go mad—he's haunted the river-bank ever since, raging about for some means of following her, and if I hadn't fairly held him he'd have set out single-handed."

"I'm still strong in the belief that Necia could have bettered her hand by stayin' out awhile longer," declared Lee, stubbornly; "but if she wants a soldier why, we'll get one for her, only I'd rather have got her somethin' real good and pronounced in the military line—like an agitant-gen'ral or a walkin' delegate."

While they were talking Burrell came in, and "No Creek" saw that the night had affected the youth even more than it had Gale, or at least he showed the marks more plainly, for his face was drawn, his eyes were sunken as if from hunger, and his whole body seemed to have fallen away till his uniform hung upon him loose, unkempt, and careless. It was as if hope had been a thing of avoirdupois, and when taken away had caused a shrinkage. He had interrogated Stark again after getting the doctor, but the man had only cursed at him, declaring that his daughter was out of reach, where he would take care to keep her, and torturing the lover anew by linking Runnion's name with the girl's till the young man fled from the sound of the monster's voice back to his own quarters. He strove to keep the image of Runnion out of his mind, for his reason could not endure it. At such times he cried aloud, cursing in a way that was utterly strange to a God-fearing man, only to break off and rush to the other extreme, praying blindly, beseechingly, for the girl's safe-keeping. At intervals an unholy impulse almost drove him to Stark's cabin to finish the work Gale had begun, to do it coldly as a matter of justice, for was not he the one who had put Necia into the hands of that ruffian? Greeting Lee mechanically, he said to Gale:

"I can't wait much longer," and sank wearily into a seat. Almost the next instant he was on his feet again, saying to the trader, as he had said it a score of times already: "Runnion comes to me, Gale! You understand he's mine, don't you?"

The old man nodded. "Yes! You can take him."

"Well, who do I git?" asked Lee.

"You can't come along," the trader said. "We may have to follow the hound clean to the states. Think of your mine——"

"To hell with the mine!" exploded the shaggy prospector. "I reckon I'm kind of a daddy to your gal, and I'm goin' to be in at the finish."

Back and forth paced the lieutenant restlessly, pausing every now and then to peer down the river. Suddenly he uttered a cry, and with a bound Gale was beside him, Lee at his shoulder.

"Look! Over the point! Down yonder! I saw smoke!"

The three stared at the distant forest fringe that masked the bend of the river until their eyes ached, and the dark green grew black and wavered indistinctly.

"You're tired, my boy," said Gale.

"Wait!"

They obeyed, and finally over the treetops saw a faint steamer of black.

"It is! It is!" cried the soldier. "I'm going for my war bag." And before the steamboat hove into sight he was back with his scanty bundle of baggage, behaving like one daft, talking and laughing and running here and there. Lee watched him closely, then went behind the bar and poured out a stiff glass of whisky, which he made Burrell drink. To Gale he whispered, a moment later:

"Keep your eye on him, John—he'll go mad at this rate."

They waited, it seemed interminably, until at last a white hull slowly rounded the point, then shaped a course across the current toward the other bank, where the water was less swift. As it came fully into sight, Gale swore aloud in despair:

"It's the Mission boat!"

"Well, what of that?" said Burrell. "We'll hire it—buy it—take it!"

"It's no use; she ain't got but three dog-power to her engines," Lee explained. "She's a down-river boat—has to run with the current to move."

"We can't use her," Gale gave in, reluctantly. "She'd only lose time for us. We've got to wait for one of the A. C. boats."

"Wait!" cried Burrell. "Good God, we've done nothing but wait, wait, wait! Let's do something!"

"You go back yonder and set down," commanded Lee. "We'll have a boat before long."

The arrival of the tiny Mission steamer was never of sufficient importance to draw a crowd to the river bank, so the impatient men at the post relaxed interest in her as she came creeping up abreast of the town. It was little Johnny Gale who first saw Necia and Poleon on board, for he had recognized Father Barnum's craft at a distance, and stationed himself at the bank hand-in-hand with Molly to bid the good, kind old man welcome.

The men inside the house did not hear the boy crying Necia's name, for his voice was small, and they had gone to the rear of the store.

"Understand! You leave Runnion to me," Burrell was saying. "No man shall lay hands on him except me—" His voice trailed away; he rose slowly to his feet, a strange light on his face. The others turned to see what sight had drawn his eyes. In the opening, all splendid with the golden sunlight, stood Necia and Poleon Doret, who had her by the hand—and she was smiling!

Gale uttered a great cry and went to meet them, but the soldier could move nothing save his lips and stood dazed and disbelieving. He saw them dimly coming toward him and heard Poleon's voice as if at a great distance, saw that the Frenchman's eyes were upon him, and that his words were directed to him.

"I bring her back to you, M'sieu'!"

Doret laid Necia's hand in that of her lover, and Burrell saw her smiling shyly up at him. Something gripped him chokingly, and he could utter no sound. There was nothing to say—she was here, safe, smiling, that was all. And the girl, beholding the glory in his eyes, understood.

Gale caught her away from him then, and buried her in his arms.

A woman came running into the store, and, seeing the group, paused at the door—a shapeless, silent, shawled figure in silhouette against the day. The trader brought the girl to her foster mother, who began to talk in her own tongue with a rapidity none of them had ever heard before, her voice as tender as some wild bird's song; then the two women went away together around the store into the house. Poleon had told Necia all the amazing story that had come to him that direful night, all that he had overheard, all that he knew and much that he guessed.

The priest came into the store shortly and the men fell upon him for information for nothing was to be gained from Poleon, who seemed strangely fagged and weary and who had said but little.

"Yes, yes, yes!" laughed Father Barnum. "I'll tell you all I know, of course, but first I must meet Lieutenant Burrell and take him by the hand."

The story did not lose in his telling, particularly when he came to describe the fight on the gravel bar which no man had seen and of which Poleon had told him little; but the good priest was of a militant turn, and his blue eyes glittered and flashed like an old crusader's.

"It was a wondrous combat," he declared, with all the spirit of a spectator, "for Poleon advanced bare-handed and beat him down even as the man fired into his face. It is due to the goodness and mercy of God that he was spared a single wound from this desperado—a miracle vouchsafed because of his clean heart and his righteous cause."

"But where is Runnion?" broke in Burrell.

"Nursing his injuries at some wood cutter's camp, no doubt; but God be praised for that double spirit of generosity and forgiveness which prompted our Poleon to spare the wretch. No finer thing have I known in all my life, Doret, even though you have ever been an ungodly fellow."

The Frenchman moved uneasily.

"Wal, I don' know; he ain't 'fight so dam' hard."

"You couldn't find no trace of him?" said Lee.

"No trace whatever," Father Barnum replied; "but he will surely reach some place of refuge where we can pick him up, for the days are still mild and the woods full of berries, and, as you know, the streams overflow with salmon, which he can kill with a stick. Why, a man might live a fortnight without inconvenience!"

"I'll be on the lookout for him," said the Lieutenant, grimly. "Tonight I'll send Thomas and a couple of men down the river."

When the voluble old priest had at last exhausted his narrative he requested of Burnell the privilege of a few words, and drew him apart from the others. His face was shrewdly wrinkled and warm with understanding.

"I had a long conversation with my little girl, for she is like a daughter to me, and I discovered the depth of her love for you. Do you think you are worthy of her?"

"No."

"Do you love her as much as you should?"

"As much as I can. They don't make words or numbers big enough to tell you how dear she is to me."

"Then why delay? Tomorrow I leave again, and one never knows what a day may bring forth."

"But Stark?" the young man cried. "He's her father, you know; he's like a madman, and she's still under age."

"I know very little of law outside of the Church," the Father observed, "but as I understand it, if she marries before he forbids her, the law will hold him powerless. Now, he has never made himself known to her, he has never forbidden her anything; and although my conclusion may not be correct, I believe it is, and you have a chance if you make haste. At your age my boy, I never needed a spur."

"A spur? Good Lord! I'm from Kentucky."

"Once she is yours before God, your hold will be stronger in the eyes of men. If I am wrong, and he takes her from you—well, may some other priest rewed you two—I sha'n't!"

"Don't worry," laughed Burrel, ablaze at the thought. "You're the only preacher who'll kiss my bride, for I'm a jealous man, and all the Starks and all the fathers in the world won't get her away from me. Do you think she'll do it?"

"A woman in love will do anything."

Burrell seized the little man by the hand. "If I had known more law you needn't have given me this hint."

"I must go now to this Stark," said Father, "he may need me. But first I shall talk with Necia. Poor child, she is in a difficult position, standing between the love of John Gale and the loyalty she owes her father. I—I fear I can not counsel her as well as I ought, for I am very weak and human. You had better come with me! perhaps the plea of a lover may have more weight than the voice of reason." As they started toward the house, he continued, energetically: "Young man, I'm beginning to live once more. Do you know, sometimes I think I was not designed for this vocation, and just between you and me, there was a day when—" He paused and coughed a trifle, then said sharply, "Well, what are you waiting for?"

Together they went into the trader's house.

Back in the store there was silence after the priest and the soldier went out, which Gale broke at last:

"This forgiveness talk is all right, I suppose—but I want Runnion!"

"We'll git him, too," growled Lee, at which Poleon uttered a curt exclamation:

"No!"

"Why not" said the miner.

"Wal," the Canadian drawled, slowly, then paused to light the cigarette he had rolled in a bit of wrapping paper, inhaled the smoke deeply to the bottom of his lungs, held it there a moment, and blew it out through mouth and

(Continued on page thirty-four.)




"Yes, Sir, The Twice-a-Week Gives Me All the War News."

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FAMILY CIRCLE
Write to the Editor

ALICE W. BARLAND,
Editorial Contributor.

# Teach Child to Love

By Elizabeth Quaker.

The most beautiful sentiment we have; "the greatest thing in the world;" the one virtue which the law leaves to the discretion of the parents—love.

The law will take care of the thief or the murderer, but the sour, crabbed old crank is just left alone with his unhappiness.

How very important, then, that we mix plenty of love in the foundation of our children's characters.

I entered a room one day where two little boys were engaged in a childish squabble over toys. "Oh," I said kindly, "I see what is the matter with these little ones. They don't love one another enough." It was very apparent they were not very loving at that moment.

The boys looked wonderingly at me for a minute, then, with a shamed little glance at each other, went quietly on with their play. How pleased I was a few days later to have one of these little boys,—during a heated argument between two of the older children,—come quietly to my side and say: "Auntie, they don't love enough, do they?" You see the little idea had "stayed with him."

Of course, you can not expect much if you simply tell the children to love. But there are so many little opportunities, presenting themselves, daily, by which they can be led in the right direction. Sometimes a fitting quotation or rhyme will be all that is needed. Here is one my grandmother taught me:

"Little children, love each other;
Never give another pain.
If your brother speaks in anger
Answer not in wrath again."

Don't worry; you will not make a "mollycoddle" out of that boy; more danger that his natural ability to "stand up for his rights" will crowd out the loving tenderness and kindness you are trying to instill.

It seems to me if brotherly love was given a larger place in the children's discipline there would be less of greed and selfishness and more happiness for all.

# Learn How to Live

By RAY W. FELTON.

"Sometimes it seems we must live a life before we learn how to get the very best from it."

So remarked Walker Moren, well known Yakima valley (Wash.) fruit grower.

We were talking of country life, its joys and its sorrows. Morren hasn't always been a fruit grower. He came to Yakima 11 years ago from Kentucky and built up a good law practice. Always a genial, likeable fellow he soon became to be regarded as one of the fixtures of the town. His friends were legion.

"I thought I was having a pretty good time," continued Moren, "and yet there was something that wasn't just right and I couldn't figure out what it was. One day a friend of mine said to me:

"'I envy Tom Jones. Why? Go and talk to Tom. He'll tell you he's got the finest farm in the finest state and in the best country outdoors. His wife is the most efficient woman in the neighborhood and his daughter the most lovely and accomplished. Tom not only appreciates every blessing he has but he can see just a little bit more than there actually is among the fortunes of his life.'

"You know that set me thinking. I began to envy Tom Jones, too. Then it dawned on me that I didn't have to envy him a bit. I found Tom didn't have much more than the ordinary man of thrift and industry is able to acquire here in Washington. Well, soon after that I married the finest girl in Yakima and bought the best fruit farm in the Naches valley. I know I'm right about the former, although some will question what I say about the fruit farm. Eight days ago the finest baby girl in the land arrived at our house. I haven't any desire to accumulate great riches and I'm having the finest time of my life. I believe I've found myself. I've been here on earth a long time, yet, I'm just beginning to live."

Moren has the right idea. Too few of us have taken the time to figure out just how much we have. We haven't found that the real joy of living comes from the simple pleasures we can get from every-day existence, provided we "find ourselves" and get the right slant at life in general.


## *Wonderful Egg Producer*

Any poultry raiser can easily double his profits by doubling the egg production of his hens. A scientific tonic has been discovered that revitalizes the flock and makes hens work all the time. The tonic is called "More Eggs." Give your hens a few cents' worth of "More Eggs" and you will be amazed and delighted with results. A dollar's worth of "More Eggs" will double this year's production of eggs, so if you wish to try this great profit-maker, write E. J. Reefer, poultry expert, 4661 Reefer bldg., Kansas City, Mo., who will send you a season's supply of "More Eggs" Tonic for $1.00 (prepaid). So confident is Mr. Reefer of the results that a million-dollar bank guarantees if you are not absolutely satisfied your dollar will be returned on request and the "More Eggs" cost you nothing. Send a dollar today or ask Mr. Reefer for his Free Poultry book that tells the experience of a man who has made a fortune out of poultry.—Adv.


## Pretty and Inexpensive.



Just to prove that it doesn't require a lot of money to dress a small girl stylishly, note this cunning little school frock of striped blue and white and plain Copenhagen. The skirt, collar and cuffs are of the stripe.

# Ways to Economize

By MRS. SAM HAYES.

When a khaki or denim riding skirt wears out, usually in the crotch and down the inside of leg gores, it can be made into a useful garden or outside work skirt by trimming out worn gores and closing seam down front and back, or it can be made into serviceable overalls for the small boy.

If the collar and cuffs are worn out on a good blouse, a couple of bright-bordered handkerchiefs will make a lovely new set. Any handkerchiefs laid away by the men folks with borders considered too loud for pocket use make smart cuff and collar sets. Three of them will make a nobby dust cap and apron. Watch your magazines for patterns or look through the old numbers.

Flour sacks which have been used as bags and are too worn for that purpose make good dish towels. Rip them open and hem the raw edges. Boil them in a vessel separate from other clothes, with a little soap. Lemon rind keeps them bleached.

When hat and dress trimming ribbons which have faded and have accumulated in the house are washed and dyed, they make good hair ribbons for little daughter.

Men's good percale shirts, discarded owing to light figures or stripes fading, can be made into boys' blouses, girls' aprons, babies' caps or slips, etc., by bleaching out the faded figures and using plain white, or dying them.

Dining room table pads made of worn cotton blankets quilted together are soft and can be washed and boiled to the heart's content.

Hunt up the beaded jet (or other color) jackets, etc., on the out-of-date clothing and use beads instead of French knots on the new blouses, or make medallions of them on the front of belts for serge dresses or velvet hat trimming, and be up to date.

Cut out the best parts of the worn Jap silk blouse and shape and hem into a supply of boys' bow-ties.

A big full-sleeved short-waisted jacket of brilliantine or other good material makes good knitting bags, the sleeves for the main part of the bag and gores of body of jacket for handles, ruffles, side pockets, etc.

Cut a hole to fit the neck or head in a silk chiffon scarf and wear over an unusually plain party dress, holding scarf in at the waist with ribbon to match. This will make a new frock of it entirely.

The tight velvet corduroy jacket, if faded, should be dyed and made into one or more tam-o-shanters. A large tassel or fur puff is the only additional purchase for trimming. A corduroy "hobble" skirt to match will make a large muff and scarf or cape collar. They may be fur trimmed.

The out-of-date Turkish toweling hat cut into a bag to fit the hand, with elastic run in the wrist, makes good bath mitts. The best parts of worn Turkish towels or bathrobes can be put to the same use and are much more satisfactory than the wash cloths.

Make the back or best parts of a galatea or worsted skirt into blouses or kilts for the small boy. Unravel woolen stocking legs, caps, sweater, etc., and when there is no other use for them use the yarn for knotting comforters, etc.

When baby has outgrown his crib blanket, make a morning jacket of it by cutting a diamond-shape hole near the center to slip over head and catching the edges under each arm with hook and eye, bows of ribbon over hooks and eyes and on shoulder at neck as trimming improves the appearance. It also can be opened down the front or a ribbon sash added—any way to suit the individual.

When a shoe string has "played out," and the supply of new ones is gone, get a length of binding tape, corset lace or narrow soutache braid, blacken it with shoe polish, dip the ends in melting sealing wax, paraffin or candle, and roll them, and you have a good substitute.

Boil until bleached the discarded or faded print or cretonne curtains and sew the lengths together and use to dry your vegetables and fruit on next summer, by so doing saving the sheets.

### A Cheap Rice Pudding.

One-quarter cup uncooked rice, one pint milk, one-fourth cup New Orleans molasses, one-third teaspoon salt, one-fourth teaspoon cinnamon and one tablespoon butter.

Wash rice well. Mix ingredients and pour into greased baking dish. Bake about two hours in slow oven (under the broiler of the gas range when using the baking oven), stirring two or three times during the first hour to prevent rice settling to bottom of dish, at last adding butter (or other shortening). Serve hot.

## The following are just a few of the points gleaned from the talks of Miss Anna Barrows during Housekeepers' Week at the State College of Washington:

When buying cooking utensils choose those with round corners, instead of square, wherever possible. They are easier to keep clean.

Light granite round pans are better than crockery bowls to use for mixing. They are easier to handle.

When you put things away on shelves see that they are in deep utensils, rather than large shallow ones. They take less room on the shelf, and there is less danger of spilling.

Use spices for flavoring instead of so much vanilla. Vanilla is much more expensive and contains no nourishment.

When you cut up an onion and use part for seasoning, cut up the balance and dry it, and it will be ready when needed the next time.

After parsley has been used for garnishing dip it in boiling water to set the coor, then dry and sift it and have it ready for soup, dressing, etc.

Best way to wash rice is to put it in a strainer and hold under a running faucet.

When ricing potatoes, warm the ricer in hot water instead of with the hot potatoes and serving the potatoes cold.

Keep a brush especially for washing vegetables.

When using cheese with mashed potatoes it is better to cut the cheese in small pieces and mix in than to grate it over the potatoes. The flavor is then mixed all through.

Warm potato salad is good because it absorbs the flavors better than the cold, and doesn't have that "cold potato" taste.

Baked or boiled leftover potatoes will keep better if the skins are left on.

If cabbage is dry or old cut the tough stem off and set in water over night or until it freshens.

Aprons made of crossbar pattern can be easily mended without the patch showing.

Half-bleached cotton crepe napkins are good for everyday use. They save lots of ironing, and yet the children may be taught proper use of the napkin at the table.




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# Make Savory Stews

Make a little meat go a long way; Use savory stews. It needs only a small piece of meat to give flavor to a hearty dish. In the following dishes part of your building material comes from the more expensive meat and part from the cheaper peas, beans, hominy and barley. The recipes are taken from a leaflet issued by the United States department of agriculture:

**English stew**—One pound mutton, one-half cup pearled barley, one tablespoon salt, four potatoes, three onions, celery tops or other seasoning herbs. Cut the mutton in small pieces and brown with the onion in fat cut from meat. This will help make the meat tender and improves the flavor. Pour this into a covered saucepan. Add two quarts water and the barley. Simmer for one and one-half hours. Then add the potatoes cut in quarters, seasoning herbs, and seasoning and cook one-half hour longer.

**Beef stew**—One pound beef, four potatoes cut in quarters, one-fourth peck peas or one can, one cup carrots cut up small, one teaspoon salt. Cut the meat in small pieces and brown in the fat from the meat. Simmer in two quarts of water for one hour. Add the peas and carrots and cook for one-half hour, then add the potatoes. If canned peas are used, add them 10 minutes before serving. Serve when potatoes are done.

Here is the way you can change the stews to make them different and to suit the season:

1—The meat.—This may be any kind and more or less than a pound may be used. Use the cheap cuts, the flank, rump, neck or brisket. The long, slow cooking makes them tender. Game and poultry are good.

2—Potatoes and barley may be used or barley alone, or rice, hominy or macaroni.

3—Vegetables.—Carrots, turnips, onions, peas, beans, cabbage, tomato are good, canned or fresh. Use one or more of these as you wish.

4.—Parsley, celery tops, onion tops, seasoning herbs, or chopped sweet peppers add to the flavor.

5—Many left-overs may be used—not only meat and vegetables, but rice of hominy.

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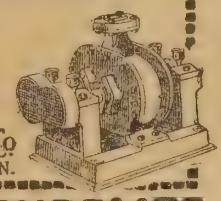
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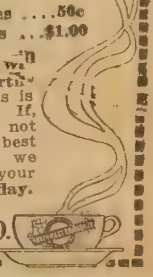



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# Handicraft For Girls

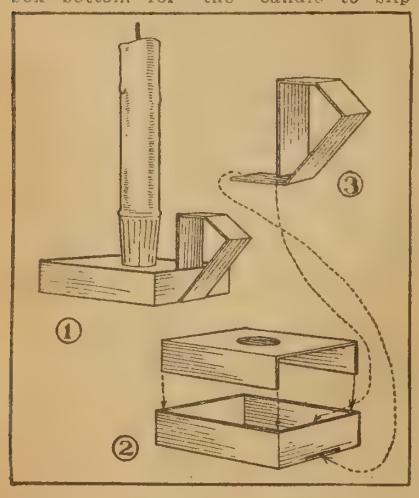
By Dorothy Perkins.

## Home Made Candlesticks.

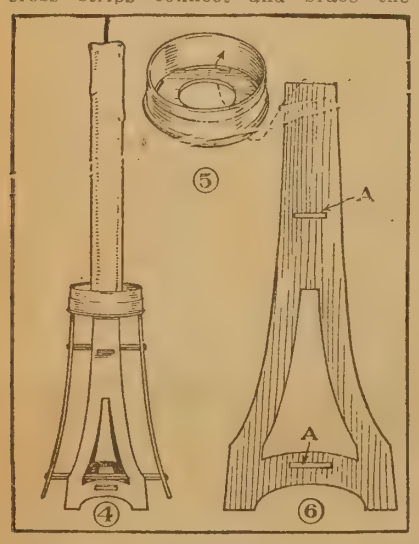
Candlesticks are coming more and more into use as ornaments, and a pair on the mantel shelf, and one on the library table or desk top is quite the thing. The three candlesticks in the illustration are of unique form, and you girls will find them interesting things to make. As they are made of cardboard, it is best not to light the candles. Burn each candle just enough to give it a used appearance, then keep it in the candle stick unlit.

The candlestick in Fig. 1 has a base made of a small cardboard box (Fig. 2). In this box is fitted a piece of cardboard having its edges turned down and a hole cut through the center to receive a candle (Fig. 2); glue the turned down edges to the sides of the box. Fig. 3 shows how to fold a cardboard strip for the handle. One end of this is stuck through a slot in one side of the box and glued to the box bottom; the other end is slipped into the box and glued to the side.

The candlestick in Fig. 4 is of a more ornamental design. A pill box forms the top. Fig. 5 shows how a hole is cut through the center of the box bottom for the candle to slip



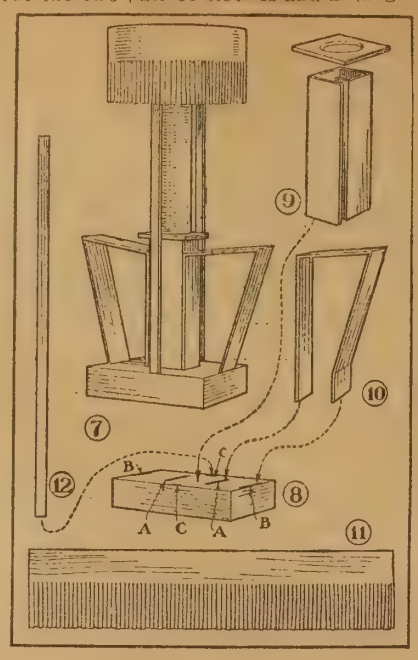

through, also how slots are cut through the bottom to receive the ends of the four supports. A pattern for the supports is shown in Fig. 6. Fig. 4 shows the relative proportions of the box top and the supports. After making and cutting out one support, use it as a pattern for marking out the other three. The two slots A (Fig. 6) are provided for the cross strips to stick through. Fig. 4 shows how these cross strips connect and brace the




supports. The upper pair of braces support the candle. Glue the ends of the crosspieces in slots A, and glue one crosspiece to the other at their intersection.

## Candlestick Shade.

In Fig. 7 we have a candle stick with a simple shade. The base is a small cardboard box, turned bottom side up (Fig. 8). The center post mounted upon the base is in reality a sleeve that fits over the lower part of the candle (Fig. 9). This post is folded out of one piece of cardboard, and a flap is provided on one edge to lap and glue to the other edge. The top cap projects over the sides of the support all around, and has a hole cut through its center large enough for the candle to slip through. This post is glued to the center of the base, and is braced with the candlestick handles (Fig. 10). After preparing the handles, cut the two pair of slots A and B (Fig.




8) through the base, for the handle ends to stick through. Glue the inner upright of each handle to the candle post, glue the end of the outer upright to the ends of the box, and glue the end of the inner upright to the box bottom.

The candle shade is made of a band of cardboard bent into a ring and covered with a strip of paper that has been slashed along its edges (Fig. 11) to form fringe. Red paper will look best for the covering. The supports for the shade are a pair of cardboard strips (Fig. 12). Glue the upper end of these to the inside of the shade; stick the lower end through a pair of slots in the base (C, Fig. 8) and glue to the box sides.

When you have completed the candlesticks, you may try your hand at decorating the cardboard with different tints of water color.

(Copyrighted, 1916, by A. Neely Hall.)

# No Minors Allowed

(Continued from page [illegible].)

"You promise me—you promise me—you not break your promise," implored the Swede. He was fairly praying to his newly found friend, Billy.

"Yes, damit, I promise," vowed Billy. "I won't break my promise—you know I never do, Gus. All I'll break is some necks for them guys that stole your money, if they don't come through. When one of my best customers is robbed in my house, I'm sure one little rattlesnake—ain't I, old man?"

The "old man" agreed. Also, he was comforted and agreed to go to bed.

"Say, when am I goin' to get a peek at that hole?" complained Charley. That was my cue to retire, and Charley took the eye-hole.

"Billy's puttin' the Swede to bed," he whispered presently. "The crazy gink wants to throw his arms around Billy and love him; gee, but they're a lovin' pair!"

He watched for both of us, informing me of developments in a low whisper.

"Billy's goin' to blow out the lights—time for us to beat it," he announced aloud! He had made the fatal slip.

Billy heard him. He uttered a startled curse, and there was the swift rush of his feet as he made for the door.

Charley and I left the saloon porch like a pair of flying squirrels, and flattened in the street where it was dark as pitch just as Billy jerked open the door, and in a harsh voice shouted:

"Wutinell you doin' there?"

We didn't answer, of course. So Billy hurled at us, in the dark, the vilest curses and names imaginable. Charley's quick temper overcame his caution.

"I'll fix you for that," he whispered; and to me: "Find me a rock, won't you—never mind, here's a dandy."

Softly as a cat he got on his feet. Standing on the saloon porch with the lamplit glass of the saloon front back of him, Billy was a good target, though he could not see us. Charley's lithe arm lashed out with the snap of a whip as he let the stone fly. I have a notion that the stone missed Billy's head by an inch or less. It went through the glass front of the saloon with a mighty bang.

"Beat it!" whispered Charley. We "beat it" for a little way. Suddenly Charley stoped and whirled about.

"Catch us, you damned thief—catch us! Thief, thief, thief!" he taunted.

We heard Billy's feet strike the ground as he sprang from the porch and started in pursuit; and away we went, running on our toetips with the soft, springy tread that we had learned in our games of "hi barbaree." Billy could not hear our footfalls, nor could he see us; we could not see him, but he was running flatfooted with the sound of a galloping horse. It was play to evade him—mere play. Very clumsy at our game of hi barbaree was Billy, the bartender. We yelled "thief" at him some more; then desiring to give him the slip, we darted into a black alley. Billy followed; and almost immediately banged into a huge box of tin cans in the rear of the Grand hotel. Billy couldn't have crept down that alley on hands and knees without making as much noise as a runaway milk wagon.

We had darted down it dozens of times, and knew by instinct the location of every pile of bottles, barrel of cans and pile of boxes. So a hundred feet or so away from Billy we stopped and laughed at him while he crawled from among the cans, swearing like a pirate. Charley found another stone somehow, and, guessing his "range" by the sound of the bartender's swearing and the rattle of the cans, he let drive with all his might.

He made a fairly close shot, I think. He rattled the cans with the stone, and couldn't have missed Billy more than a yard.

We slipped between two buildings, crept quickly under one of them and shot out into the dark street through a place where a board hung on one nail and could be shoved aside if you knew the trick; darted across the street, sped down another alley, doubled back between two buildings and slipped into a couple of barrels in pitchy darkness, to rest and listen. I suppose that while we were doing all that Billy was tiptoeing around in the dark alley, thinking every minutes that he would collar us. But at our hi barbaree game he was thick-headed and clod-footed.

"You called Billy a thief," I remarked as we made warily for home a little while later. "What do you suppose he thought?"

"He thought somebody had the goods on him, I reckon," answered Charley.

"The goods?"

"Yep, the goods. When he come out of the back room from putting the Swede to bed, he stopped at the far end of the bar right by the lamp and looked around sly like. Then he fetched from his inside pocket a bunch of bills. He looked around sly like again, and listened; and then he stooped in front of the bar where I couldn't see him. I'll bet he hid the bills down by the foot rail under a spitoon or something; and in the morning he'll have the Swede clean out bright and early before anybody is around, or maybe he'll get him out of bed tonight somehow; and he'll fix it so that the poor fathead'll find the money there himself."

Such was Charley's diagnosis. It was about 100 per cent correct. The next day it was noised about the town that Gus Larsen had done the funniest thing! He had been on a tear the night before, and somehow, dropped a roll of bills into a cuspidor close to the footrail of the bar.

Billy had found them there when he was cleaning out that morning; and he just picked up the spitoon and took it into the back-room, where Gus was sleeping off a drunk, and woke Gus up and made him fish the bills out himself so that he'd know how it was that he'd lost his money.

Gus felt mighty sheepish about it, it was said. Others remarked that if all bartenders were as honest as Billy, saloons wouldn't have such a bad name. Gus felt so sneaking about it, having accused Billy of stealing his money, that the next day he treated everybody that came in the saloon as long as his money lasted.

# "The Barrier" By REX BEACH

(Continued from page [illegible].)

nostrils before adding, "you'll jus' be wastin' tam'!"

Gale looked up from beneath his thatch of brow, and asked, quietly:

"Why?"

"You 'member—story I tol' you wan day, two, t'ree mont' ago," Poleon remarked, with apparent evasion, "'bout Johnny Platt w'at I ketch on de Porcupine all et up by skeeter-bugs?"

"I do," answered Gale.

"Wal,"—he met their eyes squarely, then drew another long breath from his cigarette—"I'm jus' hopin' nobody don' pick up dis Runnion feller de same way. Mebbe dey fin' hees han's tie' behin' 'im wit' pieces of hees shirt—"

"Good God!" cried the trader, starting to his feet. "You—you—"

"—of course, I'm jus' s'posin'. He was feel purty good w'en I lef'. He was feel so good I tak' hees coat for keepin' off dem bugs from me, because I lef' it my own shirt on de canoe. He's nice feller dat way; he give up easy. Ba gosh! I never see worse place for skeeters!"

Gale fell silent, and "No Creek" Lee began to swear in little, useless, ineffective oaths, which were but two ways of showing similar emotions. Then the former stepped up and laid a big hand upon Poleon's shoulder.

"That saves us quite a trip," he said, but "No Creek" Lee continued to swear softly.

It seemed that Poleon's wish was to be gratified for no news of the missing man came through in the days that followed. Only a fishing village far down the river, where a few native families had staked their nets and weirs for salmon, a hunter told a strange tale to his brothers— a tale of the white man's idiosyncrasies. In sooth, they were a strange people, he observed, surpassing wise in many things, yet ignorant and childish in all others, else why should a half-naked man go wandering idly through the thickets holding a knotted rag behind his back, and that when the glades were dense and the moss-chinks filled with the singing people who lived for blood? The elders of the village nodded their heads sagely, and commended the hunter for holding aloof from the inert body, for the foolishness of this man was past belief, and—well, his people were swift and cruel in their vengeance, and sometimes doubted an Indian's word, wherefore it were best to pay no heed to their ways and say nothing. But they continued to wonder why.

Father Barnum found the three still talking in the store when he had finished an hour's counsel with Necia, so came straight to the point. It was work that delighted his soul, for he loved the girl, and had formed a strong admiration for Burrell. Two of them took his announcement quietly, the other cried out strenuous objections. It was the one-eyed miner.

"Right away! Not on your life! It's too onexpected. You've got to hold 'em apart for an hour, anyhow, till I get dressed." He slid down from his seat upon the counter. "What do you reckon I got all them clothes for?"

"Come as you are," urged the father, but Lee fought his point desperately.

"I'll bust it up if you don't gimme time. What's an hour or two when they've got a life sentence comin' to 'em? Dammit, you jest ought to see them clothes!" And by very force of his vociferations he succeeded in exacting the promise of a brief stay in the proceedings before he bolted out, the rags of his yellow mackinaw flapping excitedly.

The priest returned to Necia, leaving the trader and Poleon alone.

"I s'pose it's best," said the former.

"Yes!"

"Beats the deuce, though, how things work out, don't it?"

"I'm glad for see dis day," said the Frenchman. "He's good man, an' he ain' never goin' to hurt her none." He paused. "Dere's jus' wan t'ing I want for ask it of you, John—you 'member dat day we stop on de birch grove, an' you spik 'bout her an' tol' me dose story 'bout her moder? Wal, I was dreamin' dat tam', so I'm goin' ask it you now don' never tell her w'at I said."

"Doesn't she know, my boy?"

"No; I ain 'never spoke 'bout love. She t'inks I'm broder wit' her, an'—dat's w'at I am, ba Gar!" He could not hold his voice even—it broke with him; but he avoided the old man's gaze. Gale took him by the shoulders.

"There ain't nothing so cruel in the world as a gentle woman," said he; "but she wouldn't hurt you for all the world, Poleon; only the blaze of this other thing has blinded her. She can't see nothing for the light of this new love of hers."

"I know! Dat's w'y—nobody onderstan's but you an' me—"

Gale looked out through the open door, past the sunlit river which came from a land of mystery and vanished

(Continued on the following page.)




**Lily Creek and Lily Hill.**

Dear Aunt Nellie: We get the Farmer every week and as soon as we get it I look for the letters. I write to a girl at Friday Harbor. Her name is Nettie Johnson. We have lived on this place for seven years. It will be eight years in April. It is a cattle ranch. We have lived here for nearly five years without any neighbors. When we first came here there was alder trees growing right against the porch. All the level land there is around here is tideland. There are five fields that we raise hay in. In the summer time when we are putting in the hay I have a lot of work to do. I drive the hay fork and hay rake, milk the cows, drive the cows in, water and feed the horse, I work and sometimes unharness her. I will have more to do next summer. I will have my work in the house, feed seven rabbits, feed chickens besides the other things I have told you. I hope to see this letter in print. When the lilies are blooming Nora Jones and Edith Jones and I go way back over a hill in the woods after lilies. There is a little creek that runs through between two hills. We call one of the hills Lily hill and the creek, Lily creek. One time my father sent me to find a cow. She had a little calf. I hunted for a long time before I could find her. She was standing under a spruce tree with her little black and white calf along her side. It was just the color of her. I had a hard time getting her home. The calf fell in the mud once. She was a fine milk cow. Afterward she was going across a bridge and she slipped and broke her leg. Her foot went under the end of the bridge so she couldn't get out. She smothered in the mud. Papa moved the bridge as soon as he could. I have five little rabbits and two old ones. The little ones just opened their eyes. Johnnie is running all over. He is my brother. Well I am about out of news. Is there any girls about 12 years old? If there are I would like to hear from them. I just passed into the sixth grade.—Alice Case, Tokeland, Wash.

**Goldie Has Joined Our Corner.**

Dear Aunt Nellie: May I join your happy Corner? If I may please write to me and tell me. I live on a farm of 240 acres. My father owns about 3000 acres of land, but we do not live on it. We haven't any cows, but have about 105 horses. The ranch we live on now we are trying to sell. I am 11 years old. I will be 12 years old January 13. Have I a twin? If I have one I wish they would write to me whether it is a boy or girl I don't care. I enjoy reading the letters very much. I belong to the Red Cross and I have got a war saving stamp. I have two brothers, but no sisters. My brothers' names are Alfred, age 17, and Noble, age 19. My brother will have to go to the war if they take them from 19 to 45. I like to think that our soldiers will give up their lives to make the German people free from their government. I will send a few riddles to you. A long house, a small door. Pull its tail and it will roar. What is it? Upon the hill there is a green house, in this green house there is a pink house, in this pink house there is a red house, in this red house there is a lake, in this lake there is a boat, in this boat there is a beautiful lady, with golden hair. On this lady's shoulders there is a pair of blue birds. What is her name? Aunt Nellie, if you only would just put your address in the Farmer I do believe more children would join and the Corner would grow larger. I hope to see my letter in print. I am in the sixth grade.—Goldie Yohnka, Box 685, Ritzville, Wash.

**Water All Around the House.**

Dear Aunt Nellie: This is my first letter to the Children's Corner. I am 11 years old and in the seventh grade. My birthday is the 22d of June. Have I a twin? If so, I would wish to correspond with her or with any one else. I have four sisters, Helga, Bertha, Elver and Teckla. I have three brothers, Edward, Leo and Verner. The dreadfullest thing happened here lately. The Skagit river has flooded over because of the snow from the mountains. The flood came December 30. It was Sunday. I guess every one had a happy New Year, but I did not have a happy one. When I awoke I looked out through the window and all that I saw was water. We have three feet of water here now. It did not come here very fast because the Great Northern railroad was between our farm and the river. In Riverside it was 15 feet of water. The water came with such a current that it made a great big slough in a man's farm. Lots of houses and barns were wrecked. We do not know how many people or cattle were killed. When you look outside it looks like an ocean. I am just getting tired of it, and it gets more and more hateful because I know I ought to be in school and not sitting inside reading, sewing or doing something else. The only relief is a boat ride. We have moved all our cattle and horses away. Every evening and morning my brother Edward goes to milk on a raft about two miles away. I guess my letter is getting too long. I hope I see it in print. Also I wish to be a cousin.—Agnes Sunnell, R. 5, Box 58, Mount Vernon, Wash.

**Brothers Are in Honolulu.**

Dear Aunt Nellie: This is the fourth time I have written to the Children's Corner. I have not written for a long time, so thought I would write. I have a twin. Her name is Mable Margret. She is just one day older than I am. I was 12 years old December 19, 1917. There are more girls write than boys. I have three brothers and one sister. Her name is Beulah. My brothers' names are Almon, Frank and Walter. Almon and Frank have joined the army. They are both in Honolulu. It is pretty warm over there. My brother and I joined the Red Cross at school. In Elma most all of the children are joining the Red Cross to help the soldiers. I know how to tat and knit. My teacher's name is Miss McDonnell. I like her fine. Our Corner is getting pretty little. I wish more of the children would write so our Corner will get larger. The water is up quite high. The water is back of our house. I had a good time Christmas. My aunt and uncle, Mr. and Mrs. Gale, were up from Montesano for Christmas. My father could not come home for Christmas for he had a hurt leg. He is in the hospital now. We only had seven school days for Christmas vacation. I hope all of the children got lots of presents for Christmas. I wish some of the children would write to me.—Ruby Warren, R. F. D. Route 1, Box 2B, Elma, Wash.

**Likes to Coast Downhill.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I enjoy reading the cousins' letters very much and would like to be a member of the Corner. I am 10 years old and am in the fifth grade at school. My birthday is June 21. Have I a twin? I go to the Jones school, district No. 146. The schoolhouse has one large room and one teacher. Her name is Miss Alpharetta Kellie. She is a very good teacher. I have brown eyes, medium brown hair and my complexion is fair. It is snowing very fast today. I am glad for I enjoy snowballing and coasting down hills. I have two brothers, both younger than I. Their names are Raymond and Elmer. Raymond goes to school and is in the second grade at school. Elmer doesn't go this year, but will go next year. I hope all the cousins had such a happy Christmas as I did and I got the most beautiful present. It was a piano. I would like very much if some of the cousins would write to me.—Lucille Genevieve Gerlitz, Route 1, Box 40, Penawawa, Wash.

**Likes to Read Books.**

Dear Aunt Nellie: It has been a long time since I wrote a letter to the Corner. I think it is about time I wrote. The cousins do not seem to want to write to me. I don't know why. I surely would answer their letters and would be very glad to hear from them. I am 15 years old. It is snowing hard outside. I suppose there will be lots on the ground in the morning. We are only milking three cows now. Did you cousins get many Christmas presents? I got 15 and they were all nice. I am writing to one girl and she sent me a nice silk handkerchief. I haven't heard from her for quite a while. But I guess the letter is delayed somewhere. If any of the cousins want to read a good book get "The Rover Boys in the Mountains" or "The Rover Boys in Southern Waters." They are very good books. Every book I read I like awfully well. "Jack, the Runaway," is another good book. I hope the cousins get to read them. I will try and write again if I get time, Aunt Nellie.—Iris Chevalier, Prevost, Wash.

**Knitted Washrag for Uncle in France.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 8 years old and in the second grade. Our teacher's name is Verna Wheeler. I have one brother. His name is John. He is 12 years old and in the eighth grade. We all knit at school. I knitted a washrag and sent it to my Uncle Al, now in France. Mama, John and I are members of the Red Cross. My papa died eight years ago. We live on my uncle's farm of 340 acres. I have one cow. Her name is Tommy. I have two kittens, Toby and Puss. I can milk my cow, too. My Uncle Jake is at Bremerton in the navy. There is a spruce camp across the Wynooche river. We have had no winter at all. Our roses are still in bloom. I like to be one of the cousins and would be glad to hear from some little girl. My birthday is September 17.—Anna Larson, Route A, Montesano, Wash.

**A Dog and a Cat for Pets.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I hope it will not be the last. I am 13 years old and in the fifth grade. I live on a farm and have a dog and a cat for pets. We have about 50 cows and calves all together and about 30 horses and 29 pigs and about 50 chickens. My complexion is light. I have light blue eyes and light yellow hair. I have one brother and one sister. My brother is 16 years old and my sister is 5 years old. We are having two weeks' vacation at our school. We have a nice teacher. His name is Mr. Harry Smith. There are 10 going to our school. Their names are as follows: Harold Harris, Erick Shultz, Frank Reinbold, Lena Reinbold, Bertha Reinbold, Susie Thuringer, Mary Brodin, Ruth Cenard and myself. I like to go to school. I would like to see my letter in print. If I have a twin I would like to hear from her.—Selma Schillinger, Miles, Wash.

**Three Teachers This Term.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 12 years old and in the sixth grade in school. I have only one sister. Her name is Esther and she is 10 years old and in the fifth grade in school. We have had three different teachers this year. The first one was Miss Schragg, the second Miss Prewett, and the third one was one of our neighbor girls that taught when our other teacher was sick. I have two miles to go to school and walk most of the time, for we haven't had much snow yet. There are just 10 scholars in our school and just two in my grade. I live on a 320-acre farm. We have three cows and four calves. We have one dog and two cats, 11 horses and two colts. The dog's name is Tige. We had some vacation for Christmas and New Year's. I go to Sunday school. We get the Farmer and I enjoy reading the letters in it very much. I would like to correspond with somebody if they would write to me. I will be 13 October 18. If this does not reach the wastebasket I hope to see my letter in print.—May Nightingale, Box 28, Schragg, Wash.

**Helen Adds a Letter to the Corner.**

Dear Aunt Nellie: This is the first letter I have ever written to you, but it will not be the last. I am 13 years old. My birthday is April 4. Have I a twin? I surely do enjoy reading the letters in the Children's Corner and I wanted to add one to them. We only live a little ways from town. We have three cows, Maggie, Daisy and Rose. We have six calves, two pigs, one horse and 35 chickens. We also have a pretty cat that looks like a tiger, so we call it Tiger. I go to school every day. I am in the sixth grade. My teacher's name is Miss Thurber and I have a sewing teacher by the name of Miss Morris and a music teacher, Miss Katherine Duran. I also have two sisters, Rachel and Lydia. Rachel is 8 and Lydie is 6.—Helen Inez Dowk, Medical Lake Wash.

**Cousin Lois Raises Chickens.**

Dear Aunt Nellie: I like to read the letters in the Corner. I am 10 years old and in the fourth grade. I go to school a half a mile. Our teacher's name is Miss Barkley and we all like her. I have a cold and haven't gone to school for a week but expect to go Monday. I have some Black Minorca chickens. I am going to raise enough to buy another war saving stamp. I like chickens and my papa likes hogs. He raises Poland China hogs. We live on a high hill three miles north of Oakesdale and we can see all over the Palouse country. I have four younger brothers, Stanton, Wayne, Del and Donald. I wish to see this in print. This isn't the last time I am going to write.—Lois Walker, R. F. D. 2, Oakesdale, Wash.

**Mail Box Is Five Miles Away.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 14 years old. I am in the seventh grade at school. Our teacher's name is Miss Johnson. I love to go to school. We live on a 40-acre farm. We have three horses. Their names are Jim, Fannie and Katie. I ride horseback to our mailbox. It is five miles away. I have four brothers and three sisters. My brother's names are Nick, Steve, Egnoce and Pete. Nick and Steve are in the navy at Seattle. My sisters' names are Emma, Jennie and Mary. Have I a twin I hope this letter will not find the wastebasket. I would like to have it printed. I shall write again.—Elsie Gronka, Route 2, Box 31, Sequim, Wash.

**Goes to Glenwood School.**

Dear Aunt Nellie: I am 10 years old. My birthday is the 26th of January. Have I a twin? If so write to me. I go to school. The name of the school is Glenwood school. I am in the fifth grade. I have two miles to walk to school every day. This is the second letter I have written to the Corner. I have four brothers and no sisters. My brothers' names are Rex, Max, Wilbur and Francis. The baby's name is Francis. He will be 3 in July. Max is in the navy. Rex might be drafted. I can't think of any more, so will close for now.—Dorothy Cain, Box 200, R. R. 6, Vancouver, Wash.

**Edna Has a Pony.**

Dear Aunt Nellie: This is the third time I have written to the Children's Corner. I wrote twice, a year ago this winter. I am nine years old and in the fourth grade. We have two cows and two calves. I have a pony. I live on a 160-acre farm. We have 36 chickens and 12 turkeys and six hogs. We have 12 horses. We had a Christmas program at school. Everybody said it was fine. My teacher's name is Hazel Hamilton.—Edna Smith, Riverside, Wash.

**Ella's First Corner Letter.**

Dear Aunt Nellie: I have never written to the Children's Corner. I am 11 years old and in the fifth grade. I have two brothers and one sister. My brothers' names are John and George. My sister's name is Annie. Annie began to go to school this year. She was seven years old in October. We have 17 cows and five calves, eight horses and one colt. We have 50 chickens, two cats and one dog.—Ella Wasko, Prosser, Wash.

# THE BARRIER

(Continued from the preceding page.)

into a valley of forgetfulness, past the forest and the hills, in his deep-set eyes the light of a wondrous love that had lived with him these many weary years, and said:

"Nobody else can understand but me—I know how it is. I had even a harder thing to bear, for you'll know she's happy at least, while I—" His voice trembled, but, after a pause, he continued: "They neither of them understand what you've done for them, for it was you that brought her back; but some time they'll learn how great their debt is and thank you. It 'll take them years and years, however, and when they do they'll tell their babes of you, Poleon, so that your name will never die. I loved her mother, but I don't think I could have done what you did."

"She's purty hard t'ing, for sure, but I ain't t'ink 'bout Poleon Doret none w'en I'm doin' it. No, I'm t'ink 'bout her all de tam'. She's li'l' gal, an' I'm beeg, strong feller w'at don' matter much an' w'at ain' know much—'cept singin', an' lovin' her. I'm see for sure now dat I ain' fit for her—I'm beeg, rough, fightin' feller w'at can't read, an' she's de beam of sunlight w'at blin' my eyes."

"If I was a fool I'd say you'd forget in time, but I've lived my life in the open, and I know you won't. I didn't."

"I don't want to forget," the brown man cried, hurriedly. "Le bon Dieu would not let me forget—it's all I've got to keep wit' me w'en I'm lookin' for my 'New Countree.'"

"You're not goin' to look for that 'New Country' any more," Gale replied.

"Today," said the other, quietly.

"No."

"Today! Dis affernoon! De blood in me is callin' for travel, John. I'm livin' here on dis place five year dis fall, an' dat's long tam' for voyageur. I'm hongry for hear de ax in de woods an' de moose blow at sundown. I want for see the campfire t'rough de brush w'en I come from trap de fox an' dem little wild fellers. I want to smell smoke in de dusk. My work she's finish here, so I'm paddle away today, an' I'll fin' dat place dis tam', for sure—she's over dere." He raised his long arm and pointed to the dim mountains that hid the valley of the Koyukuk, the valley that called good men and strong, year after year, and took them to itself, while in his face the trader saw the hunger of his race, the unslaked longing for the wilderness, the driving desire that led them ever north and west, and, seeing it, he knew the man would go.

"Have you heard the news from the creeks?"

"No."

"Your claims are blanks; your men have quit."

The Frenchman shook his head sadly, then smiled—a wistful little smile.

"Wal, it's better I lose dan you—or Necia; I ain' de lucky kin', dat's all; an', after all, w'at good to me is riche gol'-mine? I ain' got no use for money—any more."

They stood in the doorway together, two rugged, stalwart figures, different in blood and birth and every other thing, yet brothers withal, whom the ebb and flow of the far places had thrown together and now drew apart again. And they were sad, these two, for their love was deeper than comes to other people, and they knew this was farewell; so they remained thus side by side, two dumb, sorrowful men, until they were addressed by a person who hurried from the town.

He came as an apparition bearing the voice of "No Creek" Lee, the mining king, but in no other way showing sign or symbol of their old friend. Its style of face and curious outfit were utterly foreign to the miner, for he had been bearded with the robust, unkempt growth of many years, tanned to a leathery hue, and garbed perennially in the habit of a scarecrow, while this creature was shaved and clipped and curried, and the clothes it stood up in were of many startling hues. Its face was scraped so clean of whiskers as to be a pallid white, but lack of adornment ended at this point and the rest was overladen wondrously, while from the center of the half-brown, half-white face the long, red nose of Lee ran out. Beside it rolled his lonesome eye, alive with excitement.

He came up with a strut, illumining the landscape, and inquired:

"Well, how do I look?"

"I'm darned if I know," said Gale, "But it's plumb unusual."

"These here shoes leak," said the spectacle, pulling up his baggy trous-

(Continued on page thirty-nine.)

# NEWS FOR BREEDERS

Professor Potter head of the animal husbandry department of the O. A. C., placed the stock for the students' judging contest at the Denver stock show, the week of January 21. The previous week Professor Potter delivered an address at the meeting of the National Live Stock association at Salt Lake and attended the meeting of the National Wool Growers' association in the same city.

That there will be the best lamb crop in many years in the Willamette valley and in the entire northwest, for that matter, is the prediction of Professor Oran M. Nelson, assistant professor of animal husbandry at the O. A. C. The ewes have been pastured all winter on good growing wheat, the best feed in the world for breeding ewes. They are strong and in good condition to produce good strong lambs. But bad weather is apt to be on hand just at lambing time, Professor Nelson points out, and the good condition of the ewes is no reason for relaxing vigilance and care. At this time when the need of food conservation is so great and when every lamb means so much money, every flock master should try to make this a record year in the number of lambs born and saved. H. A.

## Goldie's Nehalem Beauty.

After making the junior 3-year-old world's record, Goldie's Nehalem Beauty, owned by Clifford Reid, Portland, Ore., is living proof that a cow can make a big record without impairing her health and come back the next year with a much larger record.

Goldie finished her junior 3-year-old world's record September 9, 1916, freshened again in two months and one day, started her test at 4 years 6 months and 6 days, and on November 17, 1917, finished with 904.91 pounds of fat, 1131.137 pounds of butter, 80 per cent fat. This makes a record for her in two years two months and one week of 27,691.2 pounds milk and 2068.15 pounds butter.

Mr. Reid writes: "As far as we know this record made at 4 years 6 months is unsurpassed by any other Jersey cow at the same age, and we think the record made for the two years is also unsurpassed by any cow of the same age."

## National Shorthorn Congress.

The Farmer is in receipt of a communication from Frank D. Tomson with regard to the National Shorthorn congress, show and sale, from which it is glad to take the following extracts:

An impression of the responsive attitude of the American Shorthorn breeders toward the announcement of the forthcoming National Shorthorn congress, show and sale February 18-23 at Chicago, is gained in the scope of territory represented by those who have made entries for this event. From the Atlantic coast to the Rocky mountains and from Canada to the gulf and the states between there have come requests for entries such as have never before responded to the call of any event of a kindred nature. In all 81 breeding establishments from 20 different states have made entries and applications from many others have come too late for acceptance.

The prize list is an alluring one, with from 15 to 20 prizes in each class and with a maximum of $50 and a minimum of $20 to any prize winner, not including trophies offered as special awards. It is the intention to arrange the various divisions so that practically the same number of contestants will be included in each section—a plan most equitable to the exhibitors—and the awards will be placed by judges of international reputation.

## Red Polled Calf.

F. H. Porter, one of the Oregon delegation who attended the Chicago International stock show, while there, purchased a 6-day-old Red Polled bull calf, from Gene Duluth farm, for a future herd header. The little fellow is a son of Teddy's Charmer and out of Susie II., that were grand champion Red Polled bull and cow at the last two Internationals. It was bred by J. W. Larabee of Illinois, who showed both animals last year and sold the dam after she was bred.

## Davis Holstein Sale.

The dispersal sale of the H. C. Davis Holstein herd will be held at Granger, Wash., February 5. The Davis herd of 60 head is one of the most prominent of any of the registered herds of the northwest. Its dispersal is due directly to conditions brought about by the war. When Mr. Davis became president of the Central Bank and Trust company of Yakima he leased his ranch and the herd to Butchard Bros., two promising young stockmen, who are of military age. The fact that both boys may have to serve in the army, and the further fact that labor conditions add to the uncertainty of continuing the existence of the herd during a time like this, make the dispersal necessary. Mr. Davis is not complaining. He gladly releases the boys for the nation's service, but a change in his system must be made to meet the situation.

## To Sell His Shorthorns.

Alex. Morrison, a well-known Shorthorn breeder of Valley, Wash., on account of ill health, has decided to retire from the stock business and will hold a dispersion sale of his entire herd of beef and milking Shorthorns at the Union stock yards, Spokane, on February 20th, with Harry C. Cranke as auctioneer. Mr. Morrison will rent his frams at Valley.

## Advertising Has Done Wonders

Advertising has been defined as the force which "has transformed the parlor melodeon into a pianola, the cracker barrel into a hermetically sealed package, the crane over the hearth into a fireless cooker, and everything else in like degree."




This is not over-stating the value of advertising.

If each of us consults his own experience he will think of dozens of articles which he would never have known about had it not been for advertising. The silo, the cream separator, the telephone, the phonograph, the reaper and countless other articles have been advertised and advertised until they are now universally known, universally used.

What new things and new improvements are being offered in the year 1918? For an answer consult the advertisements.


## SHEEP

## SHEEP

Full blood Lincolns, Romneys, Corridales and Hampshires. Ewes and rams, small or large lots. For sale by

H. STANLEY COFFIN,

Breeder and Importer, Yakima, Wash.

## AYRSHIRE CATTLE

### Edgewater Farm

Government accredited herd, headed by Peter Pan, 63d. Bull calves available.

E. M. CHANDLER, Burbank, Wash.



# WANTED

## Breeding Fowls Hatching Eggs Baby Chicks

On hundreds of farms the attractive profits from poultry and egg production are claiming attention. As a consequence a brisk demand for good birds, eggs and chicks is in promise for the poultry breeder who has good stock to offer.

## MORE THAN 50,000

farm homes receive The Washington Farmer, The Oregon Farmer and The Idaho Farmer regularly each week. Write today for Poultry Breeders' Advertising Rates for this combination of three big State Farm Weeklies.

**The Washington Farmer**

POULTRY DEPARTMENT
The Washington Farmer.
36 Review Bldg., Spokane, Wash.
Gentlemen:
Send me your advertising rates for Poultry Breeders, and oblige.
Name .....
Town .....
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# Breeders' Department

## SHORTHORN CATTLE

### Herd Bulls

Imported Doune Radiance No. 609412
and
Gainford Perfection No. 442173.

### Hercules Shorthorns

We can supply you with choice, well grown bulls and females of breeding age. Your inspection of our herd is invited. Visitors always welcome.

**Day & Rothrock Company**
205 Exchange Bank Bldg. Spokane, Wash.

### FOR SALE

A choice lot of pure bred Shire stallions, coming two years old; also pure bred yearling Shorthorn bulls. Address

WILSON RANCH, Rocklyn, Wash.

## HOLSTEIN CATTLE

### 365-Day Holsteins

24,667 lbs. milk—1026 lbs. butter—is the a. o. advanced registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.

THE HERD WITH YEARLY RECORDS.
WESTERNWOLD RANCH.
Prineville, Ore.

### Registered Holsteins

Young calves, born last July and later; also 1 30-lb. bull, ready for service, whose sire, dam and sire's dam have all been grand champions at one or more state fairs, and full brother to his sire and full sister junior champions at a state fair. Here is production and type we hear so much about. Could also spare a few cows.

H. R. BOOMER, New Plymouth, Idaho.

MOOREHEAD RANCH.
Registered Holsteins.

Herd sire, Model Annie De Kol Segis, grandson of the famous King Segis. We have no bulls of service age, all having been sold, but we have some splendid young stuff, from 6 to 8 months old, coming on. If you are looking for real foundation stock, write us for particulars and pedigrees.

MOOREHEAD & HOBSON.
Breeders of Purebred Holsteins.
Outlook, Wash.

## DUROC-JERSEY SWINE

### DUROCS

Bred and open gilts of the best breeding and individuality.

G. O. SWALES. Johnson, Wash.

DUROCS.

Boars and open or bred gilts of excellent breeding.

E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE, YAKIMA, WASH.

## BERKSHIRE SWINE

### BERKSHIRE HOGS

Gilts of any age, bred or open; can also furnish young boars, from the best of strains and prize winning parentage.

EARL WOOD, Silverton, Ore.

## HAMPSHIRE SWINE

### Registered Hampshire Swine

A famous forage hog, great rustlers, fine mothers, quick growers.

TUTTLE BROS., Asotin, Wash.

## JERSEY CATTLE

### Waikiki Farm Jerseys

We offer several young bulls and heifers of exceptional breeding. Send for descriptions and breeding.

WAIKIKI FARM, R. 7, Spokane, Wash.

## POULTRY

### TRAP-NESTED Barred Rocks

Breeding hens with trap nest records of 160 to 264 eggs in 12 months. Average value for meat in Seattle market now over $1.50. Males from dams, granddams and great granddams with trap nest record of 207 to 264.

EGGS SEND FOR FOLDER. CHICKS

Get some February chicks and market the males while prices are high.

ALBERT KASTNER
R. R. 1, Box 164, South Tacoma, Wash.

### S. C. White Leghorns

Head your pens with cocks and cockerels from selected, trap-nested stock, with known records. We are also booking orders for day-old chicks and hatching eggs. Write for price list.

HORN'S EGG FARM, Maple Valley, Wash.

### Rhode Island Reds and Whites

Rose comb and S. C. blue ribbon winners. Utility and show stock. 100 cockerels at $3 up. Bronze turkeys and Toulouse geese. Blue ribbon stock. Registered Airedale bitch at a bargain if taken at once.

Highland Fruit and Poultry Ranch.
J. NONNENMACHER,
R. F. D. 3. NORTH YAKIMA, WASH.

### BABY CHICKS

Rhode Island Reds, White Leghorns. Don't wait until March or April to order and then be disappointed because you can't get them. But order now from our heavy-laying strain. Send card for price list.

MAPLEBROOK POULTRY FARM.
Box 3, Southworth, Wash.

### Heavy Laying S. C. R. I. Reds

Hatching eggs from top-notch laying strain of Pacific Northwest. If you want the best layers, weighers and payers that money can buy, write me.

MRS. ROMINGER, Underwood, Wash.

MAMMOTH BRONZE TOMS.

Strong vitality, $6 to $8 each; no charge for crates. Barred Rock eggs for hatching. Pullets (some laying) $1.25 each.

S. M. WILSON, Carley, Wash.

### White, Buff and Blue Orpingtons

(Capt. De Bathe Strain.)
Speckled Sussex and Anconas. All Single Comb

Aldrich strain Orpingtons, Sheppard Anconas. My birds took first prizes at all leading shows of Pacific Coast. Prices for stock, eggs and chicks reasonable. All from best laying birds. Finest lot of cockerels I've ever raised. A few choice Rhode Island Red cockerels.

A few White Holland and bronze turkey toms for sale.

IRA N. DeLINE, Olympia, Wash.

### State Winners of the Blue

Barred Rocks, White Leghorns and Black Minorcas. Prize winners, with the laying habit. Choice cockerels at $5 each. Eggs, $3 and $5.

WILBER CLAYTON, Payette, Ida., R. 1.

### Famous Carnation White Leghorn Chicks

from healthy, vigorous, early maturing stock that have had free range and are heavy winter layers. Chix only $15 per 100. Also breeding stock.

CARNATION POULTRY FARM.
E. W. Raush, Kent, Wash.

PATRIDGE WYANDOTTES.

Eggs from best of hens, mated with Pompadour Jim, 2d prize cockerel P. P. I. E., $2.50 per 15.

A few speckled Sussex, $3.00 per 15.

W. A. DUNLAP, Springfield, Ore.

### Mammoth White Holland Turkeys

from first prize winners at the recent Portland poultry show.

MRS. E. D. SITTON, Carlton, Ore.

PARK'S BRED TO LAY

Barred Rocks; line bred. Eggs, $1.50 setting. $8 per 100. 25 yearling hens at $1.50 each.

F. J. WIRTNER, Mica, Wash.

## RABBITS

BARBER RABBITRY.

Pedigreed and registered Flemish and Checkered Giants. Bucks at stud. Stock for sale. Correspondence solicited.

MRS. R. W. BARBER, R. 4, Boise, Idaho.

In writing advertisers, be sure to say that you saw their advertisement in this paper.

# ANNUAL SHORTHORN SHOW AND SALE

*Spokane, Wash. . Feb. 23*
*Portland, Ore. . . Feb. 25*

## 100 Registered Shorthorn Bulls and Heifers at Each Sale

Among consignors to Spokane sale are such well-known breeders as Jos. Turner, A. D. Dunn, J. H. McCroskey, Gibson Estate, Day & Rothrock Co., and others.

All entries to Spokane sale judged Friday, Feb. 22—one day preceding sale.

**Consignors to Portland sale announced next week.**

For particulars and catalogue write now to

F. M. ROTHROCK, Exchange Bank Bldg., Spokane, Wash.,
or
FRANK BROWN, Carlton, Oregon.

## TRAP NESTED BARRED ROCKS

All hen-hatched and hen-raised. Every hen on the place trap nested. My first pen has, I believe, for the past two years, the highest Barred Rock average egg record in the world. All other pens are practically the same blood lines. A few last fall cock birds and cockerels from $5 up, according to pedigree and quality.

Eggs from first and second pen, $5 per 15. Others, $3.75 and $2.50. No day-old chicks.

IRVINE P. GARDNER, Riddle, Ore.

# Fifty Bulls for Sale at Auction

GEORGE D. HARRAH OF NEWTON, IOWA, will bring to Caldwell two car loads of two-year-old Registered Shorthorns and Hereford Bulls that will be sold at Public Auction on

## FEBRUARY 20, 1918

AT CALDWELL SALES & COMMISSION COMPANY'S YARDS

Mr. Harrah informs us that these bulls are especially selected for this sale, having plenty of quality and lots of bone; not fat, but in good breeding condition.

Positively none of these bulls sold before this sale.

Mr. Harrah is one of the best known breeders in the Central West, having succeeded his father as owner of the Harrah Stock Farms at Newton, Iowa, which have been noted for their purebred cattle for over sixty years.

For catalogue, terms and further information address

CALDWELL CATTLE CO.
H. W. Dorman, President. Caldwell, Idaho

We have for sale at private treaty on our farm, on liberal terms, Fifty Registered Shorthorn Cows, many with calves at foot.

In answering advertisements please mention this paper.

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, Jan. 28.—Shrinkage of industrial and shipping demand here as a result of traffic congestion counteracted an upward tendency today in corn prices. The market closed steady at the same as Saturday's finish with March 126¾ and May 125¼@125⅝. Oats gained ⅝c to 1½c. The outcome in provisions ranged from 10 cents decline to an advance of 5 cents.

Unfavorable weather for the crop movement from the country made corn prices harden a little at the outset, but the fact speedily became apparent that the adverse conditions prevailing had materially diminished. A further reason given for the evident cautiousness of buyers was the prospect of enlarged government control of grain prices other than wheat.

Urgent export demand for shipment by the way of the gulf did much to hoist the value of oats, and so, too, did the meagerness of arrivals. New high price records for the season were reached by all deliveries, with the market showing its greatest strength just at the close.

Provisions averaged slightly higher owing to the fact that hog receipts were less plentiful than had been expected. Aggressive support, however, was lacking.

### Pacific Northwest Grain.

PORTLAND, Ore., Jan. 28.—Grain, 30-day option bids. Oats—No. 2, $61.50; barley feed, $57; barley brewing, $61.

Eastern oats and corn in bulk bids: Oats—No. 3 white, $57.50; 38-pound clipped white, $58.50; corn, No. 3 yellow, $62; No. 3 mixed, $61; oats, No. 3, $57; clipped, $58; corn yellow, $61.50; corn mixed, $61.

### San Francisco Grain.

SAN FRANCISCO, Jan. 28.—Barley, $2.97.

### Cash Quotations.

CHICAGO, Jan. 28.—Corn—No. 2 and 3 yellow nominal; No. 4 yellow, $1.55@1.60.

Corn—No. 3 white, 85 3-4@87c; standard, 86 1-2@87 1-4c.

Rye—No. 2, $2.05. Barley, $1.40@1.65.

Timothy, $5@8.25; clover, $21@30.

Pork nominal. Lard, $24.85. Ribs, $23.27—24.02.

### Minneapolis Grain.

MINNEAPOLIS, Jan. 28.—Flour unchanged. In carload lots standard flour quoted at $9.75 a barrel in 98-pound cotton sacks. Shipments, 62,880 barrels.

Barley, $1.40@1.54.
Rye, $2.05@2.07.
Bran, $32.50.
Wheat—Receipts, 201 cars, compared with 591 a year ago.
Corn—No. 3 yellow, $1.65@1.70.
Oats—No. 3 white, 84¼@85¼c.
Flax, $3.59@3.63.

## Live Stock Quotations.

### At Omaha.

OMAHA, Neb., Jan. 28.—Hogs—Receipts 7800; market steady. Heavy, $15.65@16; mixed, $15.70@15.90; light, $15.60@15.95; pigs, $10@15; bulk of sales, $15.70@15.90.

Cattle—Receipts 5000; market strong, 10@15c higher. Native steers, $9@13; cows and heifers, $7.50@11; western steers, $8@11.50; Texas steers, $7.50@11; cows and heifers, $7@9; canners, $6.50@17.25; stockers and feeders, $6.50@11.25; calves, $9@13; bulls, stags, etc., $6.75@9.75.

Sheep — Receipts 12,000; market steady and stronger. Yearlings, $11.50@14.50; wethers, $11@13; ewes, $10.75@12.25; lambs, $16.25@17.25.

### At Chicago.

CHICAGO, Jan. 28.—Hogs—Receipts 24,000; market slow, 15c above Saturday's average. Bulk, $15.50@15.80; light, $15@15.70; mixed, $15.20@15.90; heavy, $15.20@15.90; rough, $15.20@15.35; pigs, $11.75@14.

Cattle—Receipts 5000; market strong. Native steers, $8.40@13.75; stockers and feeders, $7.25@10.40; cows and heifers, $6.25@11.75; calves, $9@15.50.

Sheep—Receipts 3000; market firm. Wethers, $9.90@13.40; lambs, $14.75@17.75.

### At Portland.

PORTLAND, Ore., Jan. 28.—Cattle active; receipts 985. Medium to choice steers, $10.35@11; good to medium steers, $9.35@10.35; common to good steers, $7.75@9.25, choice cows and heifers, $7.75@9; common to good cows and heifers, $6.50@7.75; canners, $3@6; bulls, $5@7.50; calves, $7.50@11; stocker and feeder steers, $6@9.

Hogs 25c to 35c higher; receipts 1160. Prime light, $16.10@16.25; prime heavy, $16.20@16.35; pigs, $13.75@15; bulk of sales, $16@16.15.

Sheep steady; receipts 21. Western lambs, $15@15.50; valley lambs, $14.50@15; yearlings, $13@13.50; wethers, $12.50@13; ewes, $10@11.

### Spokane Stockyards, Monday.

Hogs—Receipts none; market strong. Prime light, $15.75@16; prime heavy, $15.85@16.10; pigs, $14.25@15.25; stockers and feeders, $12@13.50.

Cattle—Receipts 90; market steady to strong. Best beef steers, $10@10.75; good steers, $9@9.75; common to good steers, $7.75@8.75; best beef cows, $8.50@9.25; good cows, $7.50@8.25; ordinary to good cows, $6.25@7.25; best heifers, $8.50@9.25; bulls, $5@7.50; calves, $6.50@10; stocker and feeder steers, $6@8.

Sheep — Receipts none; market steady. Prime lambs, $14.50@15.25; good lambs, $13.25@14; prime yearlings, $12.50@13.25; prime wethers, $12@12.75; best mutton ewes, $9@10.75.

## Portland Market.

PORTLAND, Ore., Jan. 26.—After reaching record marks, oats and barley prices eased off at the close of the week because of a lighter local demand. Advices from the valley are that farmers are still holding fair stocks or oats, and as feeding is light, because of the open winter, they are more inclined to dispose of their surplus. Hay prices are also weakening because of the reduction of stock feeding.

Notice has been issued by the food administration to feed dealers calling attention to the fact that only a reasonable profit can be charged on resales of millfeed. The administrator in this state has fixed the maximum profit at $2 a ton.

After shipping a dozen cars of Oregon eggs to eastern markets, most of them to New York city, the movement was brought to an abrupt halt by the milder weather that struck the middle western and southwestern egg producing sections. From 52 cents, the top price that prevailed here the market dropped to 46 cents at the close of the week. Local buying also slowed down when prices began to tumble. Shippers think the eastern demand may revive with colder weather again prevailing east of the Rocky mountains.

Butter prices have turned weaker as there has been some increase in arrivals of country creamery cubes. Cheese is moving slow at the recent advance.

Poultry and dressed meats continue high in price and scarce.

Because of the car shortage only two cars of onions were sent out of the state last week. The shipping demand was good at $1.75 at country points. Potato shippers also complain of scarcity of cars.

A few hop sales were made in the last week at 17 to 18 cents. The eastern brewery demand is still poor.

In the following list of quotations the grain, hay, mill feed, hops, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 1, $61.50 per ton.

Millstuffs—Bran, $30 per ton; shorts, $32.

Barley—No. 1 feed, $58; brewing, $61.25; rolled, $66@68.

Hay—Buying prices: Timothy, eastern Oregon, $27; alfalfa, $22.50; grain, $22.

Eggs — Oregon ranch, case count, 46c per dozen; candled, 48@51c.

Poultry—Hens, 22@24c; ducks, 20@25c; turkeys, live, 25c; geese, 16@18c.

Butter — City creamery, prints, 52@54c per pound; cubes, extras, 49c.

Cheese — Tilamook triplets, 25c; Young Americas, 26c.

Dressed meats — Veal, 18@18 1-2c; pork, 19 1-2@20c.

Hops—1916, nominal; 1917 crops, 17@18c.

Potatoes—Oregon, buying price, $1@1.15 per hundred.

Wool—Eastern Oregon, 50@60c; valley, 50@55c.

Beans—Buying prices: Oregon white, 9@10c; colored, 8c.

## The Wool Market.

BOSTON, Jan. 25.—The Commercial Bulletin will say tomorrow:

"Business in the wool market this week was slow, with a disposition on the part of buyers to await the colonial wool auctions Thursday and Friday. Possibly a million pounds of various classes and grades of wool were sold through the week privately. At the auctions prices on merino wools were off about 5 per cent, according to the general consensus of opinion. The opening of staple worsteds for next fall by the leading factor was at an advance of 50 to 75 per cent over last year, due to the increased cost of labor and raw materials."

Scoured basis:

Texas fine 12 months, $1.68@1.72; fine 8 months, $1.55@1.60.

California northern, $1.70@1.75; middle county, $1.55@1.60; southern, $1.46@1.50.

Oregon, eastern No. 1 staple, $1.80@1.82; eastern clothing, $1.50@1.60; valley No. 1, $1.65@1.70.

Territory: Fine staple, $1.35@1.90; 1-2 blood combing, $1.70@1.75; 3-8 blood combing, $1.45@1.50; fine clothing, $1.60@1.65; fine medium clothing, $1.55@1.60; pulled extra, $1.80@1.85; AA, $1.70@1.80; A supers, $1.60@1.65.

### LINSEED.

DULUTH, Jan. 26.—Linseed, $3.53@3.68; January, $3.53 bid; May, $3.50 1-2 asked; July, $3.45; October, $3.15 bid.

## Seattle Market.

SEATTLE, Jan. 26.—While the visible supply of potatoes is running to a surplus and market conditions generally make for still lower levels, the Yakima government-graded gem is stronger.

It is noticeable that potatoes that were held at Yakima are in good condition, while the product of the same part of the state that has been held in common storage here shows decay almost equally with the native stock, due to the climatic conditions which, while easy on the coal pile have been severe on potatoes which require other than temperatures of 50 to 60 degrees to keep them through the winter. Jobbers have been increasing their orders for gems, owing to a brisk demand. The request of the government for 1,250,000 pounds of potatoes for the cantonment at Camp Lewis is expected to stiffen prices, although no unusual effects are looked for. A similar order was placed early in the winter.

### BUYING PRICES.

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle.

Eggs—Local, 45@50c per dozen.

Poultry—Live hens, fat, over 4 lbs., 25c lb.; 4 lbs. and under, 25c; old roosters, 16c lb.; squabs, large, $3.50 dozen; geese, fat, live, 18c lb.; springs, live, 25c lb.

Butterfat—58c lb.; dairy butter, 35@36c.

Beef—Buying prices: Prime beef steers, 11@12c lb.; cows, fat, 9@11c lb.; heifers, 10@11c lb.

Hogs—Light, 18x20c lb.; heavy, 17@18c lb.

Veal—Fancy light, 14@17c lb.; heavy, 12@14c lb.

Hides — Salted, 14c lb.; flint-dry hides, 29c lb.; salt kip, 16c lb.; green hides, 11c lb.; green calf, 23c lb.; dry calf (under 6 lbs.), 29c lb.; bulls and dry salts, 4c lb. less; green bulls, 10c lb.; dry full wool sheep pelts, 36@39c lb.; salt bulls, 12c lb.

### SELLING PRICES.

Feed—Scratch, $74 per ton; all grain chop, $68 per ton; oats, $64 per ton; rolled oats, $65.50 per ton; bran, $33@34 per ton; shorts, $35@36 per ton, soy bean meal, $68 per ton; whole corn, $73 per ton; cracked corn, $74 per ton; alfalfa meal, $35; rolled barley, $63@$65.50.

Hay—Eastern Washington timothy, $36@37 per ton; alfalfa, $28@29 per ton; double compressed, $40@41 per ton; wheat hay, $28 per ton; Puget sound, $30@31 per ton; straw, $15.

Butter—Washington creamery extras, cubes, 52c lb.; do bricks, 53c lb.

Eggs—Fresh ranch, 54c dozen.

Potatoes—Puget sound, $1.25@1.35 per cwt.; eastern Washington, $1.50@1.60 per cwt.

## Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

**Potatoes**—New local potatoes, $1.25@1.50 cwt; sweet potatoes, $4.75.

**Apples**—Large eating apples, $1.25@1.50; cooking apples, $1 box; Delicious, 2.25; Winter Bananas, $1.50 box; Jonathans, $1.10@1.25 box; Wageners, $1@1.50 box Rome Beauties, $1.75 box; Spitzenburgs, $2 box; King Davids, $1.10 box; Grimes Golden, $1.35@1.65 box; Stayman Winesaps, $1.75 box.

**Butter**—Blanchard cartons, 53c lb; Medo-Maid, 53c lb; Cascade, 49c lb; Gold Leaf, 53c lb; Better Butter, 53c lb; Attalia, 53c lb; Diadem, 53c lb; Hazelwood, 53c lb; Solid Pack, 52@53c lb; Jersey Belle, 51c lb; Peerless, 47@48c lb; Snowcap, 38c lb; cooking butter, 38c lb.

**Cheese**—Wisconsin full cream, twins, 27c; triplets, 25c; Hazelwood full cream, triplets, 26c lb; Hazelwood Young America, 27c lb; Winconsin limburger, 32@33c lb; brick cheese, 33@35c lb; domestic Swiss, 38c lb; Young Americas, 27c lb.

**Eggs**—White filler, guaranteed, $13 case; selected storage, $12.

**Live Poultry**—Hens, 13@16c lb; broilers, 18c lb; old roosters, 9c lb; ducks, 15c lb; geese, 20@23c lb; turkeys, 28@32c lb.

**Dressed Poultry**—Hens, 30c lb; broilers, 32c lb; old roosters, 11c lb; ducks, 20@23c lb; geese, 20@23c lb.

### Hide Quotations.

**Green Cows and Steers**—25 lbs and up, 11c; salted cured, 14c; green bulls and stags, 10c; salted cured, 12c; kip, 15 lbs. to 25 lbs., 16c; calf skins up to 15 lbs. 23c; dry flint hides, 30c; dry, salted, 25c; dry calf skins, under 10 lbs. 28c; dry sheep pelts, 30@35c; dry shearlings, 10c@$1 each; green horse hides, $2.50@4 each; dry horse hides, $1@2 each.

## Seattle Wheat.

SEATTLE, Wash., Jan. 26.—More or less wheat has been going out of the country to eastern millers from Oregon, Washington and Idaho this week, according to reports from field agents of Seattle millers now in the territory. No means are at hand of ascertaining how much wheat has been sold in this way, but it is sufficient to cause considerable anxiety among millers as to what is to become of the visible that must suffice them into the new crop year in September.

Bid and asked prices on 'change for the week-end were as follows:

Barley, No. 2 feed, prompt, $60.50@64.50; February, $61@64.50. Oats, No. 2 white feed, prompt, $60@64; February, $61@64. Forty-pound barley, prompt, $59@62; February, $59.50@62.

Timothy, prompt, $30@34. Alfalfa, prompt, $23@24.50. Straw, prompt, $11@12.50.

Canadian oats, extra No. 1 feed, prompt, $58@60; February shipment, $58.50@62.

Oats, 38-pound bulk, white clipped, eastern weights and grades, prompt, $58@61.50; February shipment, $59@62.


# CREAM WANTED

**We Are Paying 53c Per Pound for Butter Fat, f. o. b. Spokane**

Write us for our 1918 System's Calendars, both practical and useful for the cream shipper and for keeping all kinds of farm records. Mailed free by us.

**Hazelwood Co., Ltd., Spokane, Wash.**
Organized, 1890.

# SUGAR BEETS

*The Country Needs Sugar*

Why not **"do your bit"** by increasing your yield—at the same time adding to your profits.

**NITRATE OF SODA**

with its 15% nitrogen—equivalent to 18% ammonia—immediately available, will solve both problems for you, as it has for the Hawaiian and Cuban sugar planter.

Send for free booklet on "Nitrate of Soda for Sugar Beets."

**Nitrate Agencies Co.**
210 Leary Building
SEATTLE

# THE BARRIER

(Continued from page thirty-five.)

ers to display his tan footgear, 'because they was made for dry goin'—that's why they left the tops off; but they've got a nice, healthy color, ain't they? As a whole, it seems to me I'm sort of nifty." He revolved slowly before their admiring gaze, and while to one versed in the manners of the far east it would have been evident that the original owner of these clothes had come from somewhere beyond the Susquehanna, and had either been a football player or had traveled with a glee club, to these three northmen it seemed merely that here was the modish echo of a distant civilization.

"W'at's de matter on your face?" said Poleon. "You been fightin'?"

"I ain't shaved in a long time and this here excitement has kind of shattered my nerves. I didn't have no lookin' glass, neither, in my shack, so I had to use a lard can cover. Does it look bad?"

"Not to my way of thinking'," said Gale, allaying "No Creek's" anxiety. "It's more desp'rate than bad, but it sort of adds expression." At which the miner's pride burst bounds.

"I'll kindly ask you to note the shirt—$10 a copy, that's all! I got it from the little Jew down yonder. See them red spear heads on the boosum? 'Flower dee Lizzies,' which means 'calla lilies' in French. Every one of 'em cost me four bits. On the level—how am I?"

"I never see no harness jus' lak it mese'f!" exclaimed Doret. "You look good 'nough for tin horn gambler. Say, don't you wear no necktie wit' dem kin' of clothes?"

"No, sir! Not me. I'm a rude, rough miner, and I dress the part. Low cut, blushin' shoes and straw hats I can stand for, likewise collars—they go hand-in-hand with pay streaks; but a necktie ain't neither wore for warmth nor protection; it's a pomp and a vanity, and I'm a plain man without conceit. Now, let's proceed with the obsequies."

It was a very simple, unpretentious ceremony that took place inside the long low house of logs, and yet it was a wonderful thing to the dark, shy maid who hearkened so breathlessly beside the man she had singled out—the clean-cut man in uniform, who stood so straight and tall, making response in a voice that had neither fear nor weakness in it. When they had done he turned and took her reverently in his arms and kissed her before them all; then she went and stood beside Gale and the red wife who was no wife, and said, simply:

"I am very happy."

The old man stooped, and for the first time in her memory pressed his lips to hers, then went out into the sunlight, where he might be alone with himself and the memory of that other Merridy, the woman who, to him, was more than all the women of the world; the woman who, each day and night, came to him, and with whom he had kept faith. The burden she had laid upon him had been heavy, but he had borne it long and uncomplainingly; and now he was very glad, for he had kept his covenant.

The first word of the wedding was borne by Father Barnum, who went alone to the cabin where the girl's father lay, entering with trepidation; for, in spite of the pleas of justice and humanity, this stony hearted, amply hated man had certain rights which he might choose to enforce; hence, the good priest feared for the peace of his little charge, and approached the stricken man with apprehension. He was there a long time alone with Stark and when he returned to Gale's house he would answer no questions.

"He is a strange man—a wonderfully strange man; unrepentant and wicked; but I can't tell you what he said. Have a little patience and you will soon know."

(To Be Continued.)

# Want Ads

## HELP WANTED—MALE 3

BOY WANTED TO CARE FOR BLOODED Jersey cattle; 14 to 18 yrs. old; able to milk 5 or 6 cows well; must have a sincere desire to learn about Jersey cattle, methods of handling and feeding of calves and test cows; a noncigarette smoker; splendid chance to work up in a rapidly growing herd; chance to work with agricultural college graduate and experienced herdsman. Write at once to Ladd Iron Mine Farm, Oswego, Ore.

# Want Ads

**Want Ad Rates 30c Per Line**

Want ads are run at this rate in The Washington Farmer and i t s associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

**Send for card giving lower rates for ads running one month or longer.**

**How to Figure Cost of Ads**

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

## HELP WANTED—MALE 3
Continued.

WANTED—ACTIVE MEN WITH FARMER acquaintances, to sell Pipeless Furnaces; splendid line; good proposition to offer. Richardson & Boynton Co., 171 W. Lake st., Chicago, Ill.

## SITUATION WANTED—Female 18

CAPABLE WOMAN WANTS POSITION AS housekeeper. Mrs. Blanche Trask, Gardiner, Maine.

## EDUCATIONAL 45

BEHNKE-WALKER, PORTLAND, NORTHwest's largest, finest business college, can not supply half the calls for trained young men, women. Enroll now. Free success catalog. Positions secured.

## MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

Send us postcard asking for our new, illustrated catalog No. 27, of sash, doors, finish, paints, builders' hardware, plaster board, roofing, etc., sent free on request.
Cottage front doors ..... $2.75
5x panel doors ..... $1.80
2 light windows ..... $1.24
Prepared roofing, ....$1.35, $1.70 and $2.10
Clear cedar lap siding, per 1000 ft. ....$8.00
Short flooring and ceiling ..... $20.00
The largest factory in the west selling direct to the consumer. We sell any one, ship anywhere, and guarantee safe delivery.
O. B. WILLIAMS CO.
1943 FIRST AVE SO. SEATTLE, WASH.

SALT FISH.

We sell it by the carload or in a pail. Fish is about the cheapest and best food you can get. Buy it now. Write for price list.
SUPERIOR FISH CO.,
SEATTLE, WASH.

BUILDING MATERIALS AT WHOLESALE prices — Doors, windows, roofing paper, porch columns, plaster boards. All building materials shipped promptly. Send for our complete illustrated catalogue; gives you lowest net prices. P. A. ROVIG CO., 2229 First ave., So., Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

10-LB. PAIL SALTED BLACK COD BELLies, the best part of the fish. Within 300 miles of Seattle, $1.50 by parcel post.
SUPERIOR FISH CO.,
SEATTLE, WASH.

TRAP COYOTES — IF YOU WANT TO learn of a sure system for trapping coyotes write me for information. I have it. C. L. Willis, Dillard, Ore.

MY PACK-TRAINED FOX HOUNDS FOR sale. Write W. Gingery, Plains, Mont.

## MISCELLANEOUS WANTED 63

POULTRY WANTED.

We want live poultry, dressed meats, hides and potatoes. We solicit your cream shipments. Write for prices. Commercial Creamery Company, Spokane, Wash.

## FARM LIGHT PLANTS. 73

WARNERLITE ELEC. LIGHT PLANTS absolutely guaranteed. Thousands used by satisfied farmers. Live agents wanted. Warnerlite Co., Temple Court bldg., Spokane.

## MACHINERY FOR SALE. 93

FOR FARM LUMBERING USE
"AMERICAN" PORTABLE SAWMILLS.
Carried in Stock by
HIGGINS MACHINERY COMPANY,
312 1st Ave. So., Seattle. Write for Catalog.

## STOVE REPAIRING 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

## PATENTS 150

WRITE FOR HOW TO OBTAIN A PATent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

## POULTRY 174



WHY MY CHICKS LIVE AND GROW IN the hands of my customers. They are all hatched from fully matured stock, on free range; bred right, mated right, fed right. I have the most up-to-date hatchery building in the country—five thousand feet of floor space—built of brick, with dead-air space in wall, giving a uniform heat that means strong, healthy chicks. No spoiled chicks from overheating. We use eggs from Hoganized stock only. We guarantee safe delivery and full count. Write for prices. Lasher's Hatchery, Petaluma, Calif.

## POULTRY 174
Continued.

BABY CHICKS.

We will have 125,000 baby chicks for sale this season. White Leghorns, $15 in Feb.; $14 in March and Apr. R. I. Reds and Barred Rocks, $18 in March and Apr. Our job lot of Essex Model incubators more than ½ sold; 70-egg size, $5; 120-egg size, $7.50; 175-egg size, $15; 275-egg size, $20; 410-egg size, $32. Send for free catalog of famous Queen incubators and brooder stoves. Queen Hatchery, 89 Pike st., Seattle, Wn.

PETALUMA HATCHERY—CAN SHIP DAYold chicks to points reached in 3 days. Why not have the best? We challenge the hen. Free circular. L. W. Clark, Petaluma, Cal.

FOR SALE—POULTRY PLANT; EVERYthing new; 18 a.; good location; 1½a. big sale; house 1200 hens; no lice. Good reasons. Write Levi Balmer, Salem, Ore.

FOR SALE—MAMMOTH BRONZE TURkeys. Won five prizes at Wash. State Fair. Toms, $7 and $10; hens, $5. H. T. Cutler, Parker, Wash.

BIG, DARK ROSE COMB R. I. REDS; also pure bred Airedale puppies; 6-tray, successful oat sprouter, $8. Mrs. Melvin H. Shirley, Firth, Idaho.

S. C. BLUE ANDALUSIANS; GREAT LAYers. Eggs, $2 per setting; fine ckls., $2 to $5. Mrs. C. W. Armstrong, Freewater, Ore.

FOR SOMETHING GOOD IN SILVER Wyandottes, S. S. Hamburgs or Golden Campines, write G. G. Wherry, Payette, Ida.

S. C. R. I. RED AND WHITE LEGHORN cockerels, hens and pullets. Hatching eggs. Mrs. Rominger, Underwood, Wash.

FOR SALE—BARRED PLYMOUTH ROCK chickens; best in the country. Mrs. C. H. Harris, Nampa, Idaho, R. D. 1.

WILD AND BRONZE TURKEYS. CHOICE breeders. E. Y. Sanders, Roy, Wash.

CHOICE BARRED ROCK COCKERELS, $3. B. Livingston, Glenwood, Wn.

## LIVE STOCK 177

CALVES—CALVES—CALVES—CALVES

I am in a position to supply you with all the young calves that you can use, and this season I am able to offer you some very fine stock, especially in the dairy line, I will have calves for sale from cows that produce as high as 70 lbs. of milk daily. Send for my price list at once as these calves are ready for delivery from this date on.

SMITH, "THE CALF MAN,"
Tillamook, Oregon.

FOR SALE, LIVE STOCK.

Big two days' sale, Friday, Saturday, Feb. 15-16. California Ranch, Buena, Wash. O. W. R. R., 15 miles from Yakima. Feb. 15, 30 head farm horses, 3 to 5 years; all farm raised, by reg. stallion; all broken, 20 head steers, heifers and grade cows. Feb. 16, 60 head reg. Holsteins, mostly cows and bred heifers. These offerings are the best in the west. Chas. S. Mead Jr., owner. George A. Gue, auctioneer.

HOLSTEIN HERD FOR SALE.

As I will sell or rent my ranch this spring, my entire herd of registered and high-grade Holstein cattle is for sale. For particulars as to breeding and prices, write W. Fred Harper, New Plymouth, Idaho.

BERKSHIRE BRED SOWS AND GILTS, March, April and May farrow. Write for special price list today. SILVER BIRCH FARMS, Newport, Wash.

JERSEY CATTLE—BULLS, COWS AND calves are included in private sale list now ready. SILVER BIRCH FARMS, Newport, Wash.

FOR SALE—25 REGISTERED RED, white and roan Shorthorn bull calves and yearlings. Wm. Mulhall, Fenn, Idaho.

O. I. C. BOAR PIGS, SERVICEABLE AGE. Pearl Guineas, $5.00 per trio. C. I. Ballard, Rickerall, Ore.

## HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

## BUSINESS OPPORTUNITIES 516

$6000 BUYS A WELL-EQUIPPED DAIRY plant and business in a beautiful college town in So. Calif. Brings in about $400 per mo. For full particulars and terms write R. F. D. 1, Bx. 86, Yelm, Wash.

## RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

## TAXIDERMISTS 426

WE MOUNT ANYTHING. FURS TANNED and made into furs and robes. Raw furs bought. Mohr, 82 Bernard, Spokane.

## PLUMBING and HEATING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

## SEEDS 620

PEAS—KAUFMAN'S PEDIGREED BLUE Bells. Best seed on the Coast. Send for circulars. Hill-selected seed potatoes, Earliest of All, Early Rose, American Wonder. Duroc hogs. 60 a. dairy land for sale. $75 month and home for farm hand. W. H. Kaufman, Bellingham, Wn.

VETCH, CLOVER, TIMOTHY.

Choice recleaned seeds at direct to you prices. RHOTEN FARM, Salem, Oregon.

## SEEDS 620
Continued.

SEEDS—THE KIND THAT GROW. You can't keep them in the ground. Send for catalogue.
BUTZER'S SEED STORE,
188-190 Front St.
Portland, Oregon.

RED AND ALSIKE CLOVER

from the heart of the Willamette valley; also field corn and all kinds field and garden seeds. Drop us a postal for samples and prices.
MURPHY'S SEED STORE, ALBANY, ORE.

WE SPECIALIZE IN TIMOTHY, ALFALfa, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Ida.

## NURSERY STOCK 621

CLARK SEEDLING STRAWBERRY PLANTS, the kind that made Hood River famous. No other commercial variety grown here. An absolutely pure strain of strong, well-grown plants. You can not buy better plants than we are offering. Mt. View Orchards, W. R. Gibson & Son, Proprs., Route 2, Hood River, Ore.

EVERBEARING STRAWBERRIES ARE mortgage lifters. We have plants, strong and thrifty. Send for price list. F. I. Moffett, Ellensburg, Wash.

CLARK'S SEEDLING STRAWBERRY plants. Fine, strong plants; terms reasonable. A. M. Sawyer, Hood River, Ore.

FOR SALE—STRAWBERRY PLANTS, standard varieties and best Everbearing kinds. Chas. Leigh, R. 3, Kent, Wash.

## HOMEST'DS, RELINQ'M'TS 642

OREGON-CALIFORNIA GOV'T LAND, booklet free. Joseph Clark, Sacramento, Cal.

## FARM LANDS—FOR SALE 651

BUY WHERE THEY RAISE THE PRIZE CROPS
IN SNOHOMISH COUNTY.

40-acre farms, $25 per acre. Ten yearly payments, 6 per cent interest. Visit our office and see the great exhibit of PRIZE-WINNING vegetables, fruits, grains, alfalfa and other grasses raised on the adjoining farms. They prove our claims that this is the best land in WESTERN WASHINGTON.

Paved roads. Four passenger trains a day. Graded school, cannery, creamery, cheese factory, plenty of work for the laboring man in the mills and camps, where 75 settlers are all boosters. DON'T LOSE A DAY in asking for our illustrated literature.

BROWNELL LAND CO.
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YOUR CHANCE IS IN CANADA—RICH lands and business opportunities offer you independence: Farm lands, $11 to $30 acre; irrigated lands, $35 to $50; twenty years to pay; $2000 loan in improvements, or ready made farms. Loan of live stock; taxes average under twenty cents an acre; no taxes on improvements, personal property, or live stock. Good markets, churches, schools, roads, telephones; excellent climate—crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Allan Cameron, general superintendent land branch, Canadian Pacific Ry., 39 Ninth ave., Calgary, Alberta.

GOING — IRRIGATED ALFALFA AND stock ranch of 111 acres; gross income $6000; situated on the bank of the Yakima river; ideal for all kinds of stock; properly cultivated, will raise 100 bu. corn and 10 tons of potatoes to the acre. Horses, cows, registered $1000 Holstein bull, Berkshire hogs, chickens, farm implements, etc.; eight-room house, barn, silo, hog and chicken houses. This ranch is second to none in the Yakima valley. Reason for selling, old age. Price for all $28,000; one-half cash. Address B 7, care Washington Farmer, Spokane.

JORDAN VALLEY PROJECT—WHY NOT investigate this new project? It is just in the making, and opportunities of this character are becoming more scarce each year. We will explain it and send literature on request. There is plenty of development work and an opportunity for those who want to make payments in this manner. Our autos will take you from Boise to look the project over. HARLEY J. HOOKER, Shaw Bldg., Boise, Idaho.

PHYSICALLY DISABLED; OFFER 200 acres; 100 good alfalfa and grain land, with 14 head stock, chickens, implements and Ford, all for $4300; $2000 cash. Adjoins good range; in fine valley; eastern Oregon. 3-room house, barn and garage. Address Owner, care of Oregon Farmer, Spokane, Wn.

1200 ACRES CHOICE MONTANA FARM land for sale by owner. Agents, don't apply. 500 acres broken; 250 of this ready for seeding; 75 acres alfalfa; 9-room house, large barn, granaries, running water, telephone. Liberal terms. Box R, Cascade, Mont.

FOR SALE BY OWNER—GOOD DAIRY dairy ranch in Lincoln county, Ore. Dyked, improved, with or without stock and equipment; close to town; about 150 acres. For full information address Owner, B 1, Oregon Farmer, Portland, Ore.

FOR SALE—2700 ACRES OF FINE FARM land in one body; several large springs of good water make it fine for stock farm; two miles from R. R. sta. Will sell for best offer. Mrs. W. W. Green, Georgetown, Ga.

WILL PAY CASH FOR GOOD FARM, 50 to 400 acres, not over 50 miles from Spokane. Give lowest price and location in your letter. B 9, Pacific Northwest Farm Trio, Spokane, Wash.

HEAD FOR THE HEADWATERS OF the old Missouri; splendid grain and stock ranches. For information about climate and soil write Chamber of Commerce, Three Forks, Montana.

GOOD 80-A. FARM OFFERED CHEAP; low interest, easy terms. For detailed information write (aged owner), August Storme, R 1, Marysville, Wash.

ALFALFA, PLOW LANDS, HOP YARDS, orchards, business investments. Lum Land Co., North Yakima, Wash.

40 A. LOGGED-OFF LAND; MUST SELL at once. Geo. Misener, Bothell, Wn.

## FARM LANDS—FOR RENT 657

FOR LEASE—160-A. STOCK RANCH, 40 mi. S. E. Portland, to reputable party, for term yrs.; 3 milch cows, 4 range cows, bull, team horses, 3 sows, boar, 4 weaned pigs, 40 laying hens, farm impl. Rent exch. for farm work. Write owner, B 3, Oregon Farmer, Portland.

## A 350 to 900-Pound Separator

# For Only $2.00 DOWN




**Beats Them All**

I am certainly satisfied with my separator. It runs very easy, is a close skimmer and is handy. In competition with 208 separators in our district, our separator outskimmed all others and left the least amount of cream in the skim milk.

(Signed) J. W. MEYERS, West Salem, Ill.

For this small payment down you can have a Brookfield cream separator. It is a close skimming, high-class machine, fully guaranteed, equal to the hardest service, tested by years of actual use. Our liberal offer makes it pay for itself as it goes along. You have a year to pay in small monthly payments. We back this offer with our 37 years of square dealing with hundreds of thousands of men and women everywhere in America. Write for free catalog and full details of our offer.

## The Brookfield

Thirty days' free trial on your own farm is your guarantee that the Brookfield Separator will meet any test. You run it yourself. You are the judge. We take all the risk. We could not make this exceptional offer if we did not know the Brookfield has come with flying colors through the severest trials. It is capable of standing up to the hardest work day in and day out. Now is your opportunity to get this separator for only $2.00 down. Don't miss writing for this offer. Cut off coupon and send it for free illustrated catalog and full details of our terms and low prices.

## Free Trial

There will be no expense whatever to you for your chance to prove the superiority of the Brookfield by giving it thirty days' free trial on your own farm. If you are not perfectly satisfied, you may return it and we will refund your $2.00 and all freight charges. No offer could possibly be fairer. We are confident enough in the Brookfield separator to send it to you and let you judge for yourself if it does all that we claim for it. So don't delay. Now, remember, should you ask for a free trial, you are to be the sole judge

## Easy Payments

We have made the time payments especially low so that you have a full year in which to pay—while you are learning of the marvelous qualities of the Brookfield—how it gives you greater cream poundage and thus saves the money you pay for it. We charge you nothing for extending you credit. No interest is added. The Brookfield is sold in the exact way we carry on the other departments of our big business. There is no discount for cash. There is only one price for the Brookfield Separator—that is the *very* lowest.

## Mail Coupon for Free Catalog

**Straus & Schram (Inc.)**
Dept. 2281—**W. 35th Street, Chicago, Ill.**

Gentlemen:—Without any obligation on my part please send me your Free Catalog on the Brookfield Cream Separator, also full details on your 30-days free trial offer.

*Name* .....

*Address* .....

*P. O.* ..... *State* .....

Don't take a chance of missing this opportunity. Mail coupon and get the catalog describing the Brookfield Separator and what it will do. Remember, the Brookfield has to do its work in your dairy for thirty days and prove it is a perfectly made piece of dairy machinery and a money-maker for you.

You cannot afford not to send for the catalog and learn all about this separator and this offer. Our guarantee is back of this machine and back of every statement we make. Mail coupon today.

**Straus & Schram (Inc)**
Dept. 2281—**W. 35th St., Chicago, Ill,**

## Superior Points of the Brookfield

SKIMS ALL BUT 14-1000 OF 1 PER CENT OF THE BUTTERFAT.

This is the average work of the Brookfield as proved by certified test at Dairy Department of Purdue University, Indiana.

*BUILT LOW*—Top of milk tank only 35¾ inches from floor—easy to fill. Crank shaft 33 inches from floor and in right position for easiest turning, no back-breaking work.

*SPEED INDICATOR*—Brookfield Speedometer, patented, cannot be used by any other separator, insures correct speed at all times to get the maximum cream. Brookfield close skimming Sanitary Disc Bowl guaranteed to skim as close or closer than any other.

*LIGHT RUNNING*—Self oiling ball bearings and patented, self oiling, neck bearing, used exclusively by Brookfield Separators, make easiest possible running machine. Full guarantee covers this point.

*DURABLE*—All gears made of finest steel and in best workmanship, and enclosed and protected from dust. The Brookfield Separator will run for many years with no care except oiling.

*EASY TO CLEAN*—Every part of bowl and disc easy to see and clean. No corners or crevices. All parts heavily double tinned and smoothly polished.

Order Thrift Stamp or War Savings Stamp Today. See Page 3

THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XLI. NO. 6. FEBRUARY 7, 1918. ** WEEKLY.

# Farmers of Washington Pledge More Food

## *Figures Compiled by This Paper Indicate Stupendous Efforts Toward Increased Production*

In response to their country's call the farmers of Washington are sending their full proportion of sons to war. Farm help is harder to get and costs more than ever before. All farm supplies, including food, feed and machinery, have jumped to unprecedented prices.

In the face of these facts, what is the attitude of the farmers of the state toward the urgent appeal that they increase their production of wheat and hogs and other staple products?

In order to learn this attitude from the only source that knew it, the farmers themselves, this paper sent out blanks a few weeks ago asking them for their plans for increasing or diminishing their productions of various foodstuffs. The inquiry was scattered broadcast to insure representative replies. Scores of replies have been received, representing the farmers of 34 counties. The attitude shown is unmistakable.

In the same manner that the sons of the farm have answered the call to army or navy service, the fathers and mothers and brothers and sisters are answering the call for increased production. Figures don't lie. At the bottom of this page are figures in detail covering the reports on more than a score of the principal farm products of the state. To those who have feared that the farmers were not awake to the importance of their industry during the war these figures should be encouraging.

For example, they indicate reliably that nine out of ten wheat growers are going to try to produce more wheat this year than heretofore; that eight out of ten corn growers are going to try to grow more corn; that nine out of ten growers are going to try to grow more vegetables to take the place of meat and wheat that the allies and the American soldiers need; that nine out of ten hay raisers are going to increase their output of feed for livestock if nature does her share; that hundreds of farmers are going to increase meat animal production, including poultry and hogs.

Of special interest is the report concerning hog production. It has been feared and actually believed by many, that hog production was due to slump tremendously this year, but 83 per cent of the growers who

Continued on page five.

## Here Is Positive Proof of Patriotism of Farmers of Washington

**Wheat**
156 plan to produce more wheat.
17 plan to produce less wheat.
90 per cent plan to produce more.

**Oats**
95 more oats, 34 less.
73 per cent plan to produce more.

**Barley**
61 more barley, 17 less.
78 per cent plan to produce more.

**Rye**
33 more rye, 13 less.
71 per cent plan to produce more.

**Corn**
77 more corn, 15 less.
83 per cent plan to produce more.

**Potatoes**
125 more potatoes, 32 less.
79 per cent plan to produce more.

**Peas**
78 more peas, 8 less.
90 per cent plan to produce more.

**Beans**
77 more beans, 12 less.
86 per cent plan to produce more.

**Sugar Beets**
10 more sugar beets, 14 less.
41 per cent plan to produce more.

**Vegetables**
92 more vegetables, 15 less.
86 per cent plan to produce more.

**Fruits**
49 more fruits, 17 less.
74 per cent plan to produce more.

**Hay**
136 more hay, 15 less.
90 per cent plan to produce more.

**Horses**
58 more horses, 30 less.
66 per cent plan to produce more.

**Beef Cattle**
82 more beef cattle, 23 less.
78 per cent plan to produce more.

**Dairy Cattle**
93 more dairy cattle, 29 less.
76 per cent plan to produce more.

**Sheep**
39 more sheep, 7 less.
84 per cent plan to produce more.

**Swine**
128 more swine, 26 less.
83 per cent plan to produce more.

**Poultry**
120 more poultry, 24 less.
83 per cent plan to produce more.

**Carrots**
87 more carrots, 6 less.
93 per cent plan to produce more.

**Mangels**
60 more mangels, 10 less.
85 per cent plan to produce more.

**Rutabagas**
40 more rutabagas, 13 less.
75 per cent plan to produce more.

**Turnips**
36 more turnips, 10 less.
78 per cent plan to produce more.

**Artichokes**
11 more artichokes, 7 less.
61 per cent plan to produce more.

**Silage**
51 more silage, 5 less.
91 per cent plan to produce more.

# Roads and War Are Big Issue

## Farmers Are Becoming Conscious of a Large Responsibility in the Conduct of the War; All Must Do




local interest in this community at this time is roads. The most important problem of national or worldwide importance is the war and what we can best do to assist in bringing it to a successful issue for the allies. The farmers are becoming more and more conscious of the fact that their part is to be of great importance in settling the matter in controversy and settling them right. Prospects for the 1918 crop grow better from week to week. The mild winter has made feed conditions very easy and live stock is in better condition than usual at this time of the year, notwithstanding the feed costs being less. There is not a very pronounced interest here in the special winter courses or demonstration weeks at the state college or university and no one attending from here, as far as I know. Possibly one reason for this is that few farmers are satisfied that they and their families are here to stay or are in their life work. GEORGE HINGSTON.

### Bulk Grain Is Problem.

COLVILLE, Stevens County, Wash., Jan. 23.—A very important problem facing this community at present is the question of handling grain without the prospect of obtaining sacks for the coming season. The storage of loose grains on the farm and at shipping points while offering a hard problem that must be met, has brought up another question. What effect will the loose handling of grain have on the minimum price of wheat? If the wheat is handled loose, must the farmer absorb the price of sacks? It is impossible at present to state what effect the shortage of labor will have on farming operations the coming season. The winter has been mild, with a light covering of snow during the time of frosts and as a result the late seeded fall wheat will likely come through in good shape. There was an unusually large amount of fall plowing done, which speaks well for the spring crop. The late fall rains and the melting snow at various times has soaked in well. This has, so far, been an unusually good winter for live stock, many requiring but little additional feed outside of what they were able to rustle. In most localities they are in good shape at this time. But very few farmers are able at this time to attend the short coures at the state college, owing to the shortage of farm help. A. R. HAHNER.

### Mild Winter Helps.

CHIMACUM, Jefferson County, Wash., Jan. 26.—At present the market conditions are good in this part of the state. There has been a large demand for fresh milch cows or springers and many buyers have to leave this part of the county as most of the cows for sale have been disposed of and the farmers who have them, on account of the mild winter, are going to hold them as they will have hay enough to last throughout the winter. The farmers are receiving about 55 cents per pound for butterfat, eggs 45 cents per dozen, cow beef 11 to 12 cents dressed, pork 19 cents dressed. I think pork raised by the farmers who have skimmed milk and finishes them with grain can be produced at about $12 to $15 per 100 pounds dressed. Most of the markets are local and what is shipped out goes to Seattle. As most of the winter has gone by the farmers have taken advantage of the fine weather, and have most of the plowing done, and when spring opens up they will be in shape to plant as soon as the weather permits.

JOHN VAN TROJEN JR.

### "Earnest Desire to Help."

CENTERVILLE, Klickitat County, Wash., Jan. 25.—The problem for us here is an earnest desire to help in all things pertaining to the government. As far as the crops are concerned every effort will be put forth here to utilize as much ground for grain or for the crops most needed. The stock is doing fine, having consumed very little of the feed saved up for winter. The prospect now is for a considerable amount of feed carried over on account of the mild winter and which will also mean a lower price. There are three parties attending special winter courses from here. The 1918 prospects for winter wheat is better. We have had a very heavy rain, consequently, some will be drowned out; also some complaint that the late wheat is not rooting any as we have not had frost to pull it much so far, so we are not looking for damage from that source unless it comes later oon. C. A. LESTER.

### Not Trying New Crops.

KENNEWICK, Benton County, Wash., Dec. 31.—The government regulation has evidently not changed the prices of the material to any great extent from what it was previous to regulation, however, the general feeling is that it has materially stabelized prices. Public opinion generally favors more such regulation rather than less, although there is often criticism in particular cases. Farmers generally feel that where prices are fixed on farm products, they should also be fixed on the material that the farmer has to buy. The mild weather has materially lessened the amount of hay fed, although the extreme dry fall made the grass start late, consequently the sheep and range cattle have had poor grazing. A number of farmers are making use of corn stover and straw, which previously went to waste. One method of using stover is to chop it and soak it before feedings, on farms where there are no silos. Each locality has materially noticed the decrease of boys and young men on the farms. From the Richland locality alone I am informed that 35 have gone to the army or navy. These, I think, in every instance were farmers' sons. On many farms in the county where farmers' sons have left, two facts are noticeable, one is, more intense patriotism and more of a national view of life; the other is materially less undertaking in the way of new development and preparation for new crops.

LEE M. LAMPSON.

### Churches Display Flag.

Bishop Henderson of Detroit, Mich., has issued an order that every Methodist church in his diocese shall display the Stars and Stripes for the duration of the war.




GOOD SEEDS

GOOD AS CAN BE GROWN
Prices Below All Others

I will give a lot of new sorts free with every order I fill. Buy and test. Return if not O. K.—money refunded.

Big Catalog FREE

Over 700 illustrations of vegetables and flowers. Send yours and your neighbors' addresses.

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The Perfect Grain Bin, manufactured and sold by

Stay Round Silo Co.,

Easy to set up.
Easy to take down.
Ask your dealer or write direct
DO IT NOW.

STAY ROUND SILO CO.

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Portland, Ore.

Uncle Sam Says Raise Garden Truck

Farmers and "towners" must have gardens this year. Raise your own lettuce, carrots, onions, beans, beets, corn and potatoes.



Use "Pioneer Brand" Seeds

Everything you need can be had from this "Pioneer Seed House and Nursery," which furnishes stocks that are Best for the West by actual Test.

Will's "Pioneer Seed Annual"

—a handy helper for every planter—tells about vegetables for the table, flowers for the family, seeds for the farm. Write today—now—for a copy—*free.*

Oscar H. Will & Co.
Box M
BISMARCK
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The Right Start

A crop well-started is half-grown. A moist, smooth, firm seed bed is essential to a right start. For bigger yields use the

"Acme" Pulverizing Harrow

"The Coulters Do the Work." They cut the soil easily, crushing, pulverizing and leveling it. Leading Experiment Stations use and endorse the "Acme." Sizes, 1 horse to 4-horse. Get our free book, "The Acme Way to Crops That Pay." Send today.

Duane H. Nash Inc.

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No. 23 61-2 ft. Wide




Eureka Potato Planter

*Pays for Itself in Labor and Time Saved*

**One man** and team with an Eureka Potato Planter needs no hired help to plant the whole crop. Whether you plant 4 acres or 400, the Eureka Planter will pay for itself many times over. Better than hand planting. Increases yield. Does 5 operations at once, automatically—accurately.

Opens furrow, drops seed any distance and depth, drops fertilizer (if desired), covers up and marks next row. **Furrow opens and seed drops in plain sight**—an equal distance apart, at uniform depth, with **absolutely no injury to seed.** Easy to operate in any soil, made of steel and malleable iron—assuring long life, light weight and few or no repairs.

Write for **free** catalog on this great line of potato planters—the largest line made. 3 sizes, 1 or 2 rows, with or without fertilizer attachment **In Stock Near You.** A success for over 19 years. Whether you are a large or small grower—**write today.**



*Send for Catalog*

EUREKA MOWER CO. Box 972 UTICA, N.Y.

IMPORTANT

You may think you are doing your full duty when you garden or farm in an intensified way. Of first importance is the selection of your seeds.

We are a home concern, producing seeds suitable for northwest planters. These will give much better results in this section than seeds that have been grown especially for the eastern and southern sections. Our seeds are dependable, pedigreed seeds.

Ask for Catalogue No. 40.

Inland Seed Co. Spokane, Wash.

SEEDS

*This Year* carefully plan your plantings — choose varieties for food value and productiveness.

Plant GOOD SEED
—Strive for big returns.

Our standing of over a quarter century as the SEED HEADQUARTERS of the Northwest Guarantees that




*We can Serve You to Your Profit and Satisfaction*

"BUCKEYE" Incubators.
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LEE'S Foods & Remedies.

Special Catalogs—
NURSERY STOCK
POULTRY SUPPLIES
BEE SUPPLIES
FERTILIZERS
"BUCKEYE" and LEE BOOKLETS
Mailed on Request.

*Ask for Catalog No. 180*

PORTLAND SEED CO.
PORTLAND, OREGON
PORTLAND Diamond SEED Quality COMPANY

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 6 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF February 7, 1918

# Washington Live Stock Situation Is Encouraging

The bureau of crop estimates, United States department of agriculture, office at Spokane, has just issued an interesting compilation of figures covering the live stock situation in this state. E. T. Marchetti, field agent, located at Spokane, who issued the statement, says that the tendency is toward an increase in live stock, regardless of the conditions that might seem to lead otherwise. Here is the statement in full:

**Horses and Mules.**

The number of horses in the state, which has had a tendency to decrease in the past two years on account of war demand, has increased over a year ago. There have been slight decreases west of the Cascades, in Ferry and Stevens counties, and the Yakima valley from the number a year ago. However, with few exceptions the number of horses in the wheat producing areas of the state has increased, which is especially evident in the Big Bend counties. The average prices of horses are slightly higher than a year ago, as better stock is being retained, but some localities report considerably less demand and a slightly lower price than last year.

The number of mules in the state is the same as a year ago. There have been occasional decreases on farms where gasoline engines are being substituted, and in some areas west of the Cascades, but the increases on the occasional farms in the wheat areas of the state have practically counterbalanced the decreases, and, taking the state as a whole, the number of mules remains the same as last year. The prices of mules have increased over the prices a year ago, due to the demand in the wheat producing portions of the state.

**Milch Cows.**

In spite of the general opinion that milch cows have decreased considerably in number in this state, the tabulation of hundreds of typical farms indicates a slight increase over a year ago. Although a large number of milch cows have been sold off the past year, these represent the inferior grade cow and indicate a tendency to substitute better bred cattle in all areas of the state. In some of the larger herds west of the Cascades and in portions of the southeast counties there have been decreases on account of high feed prices, but many smaller herds in all portions of eastern Washington and even west of the Cascades have increased the number of milch cows by the retention of better grade heifers the past two years which have now matured and caused increases in the total number of milch cows in the state as a whole. The largest increases of milch cows have been in Chelan, Okanogan and the Big Bend counties. Due to the sloughing off of inferior grade milch cows the past few years and the retention of the better grade milch cows, the average price per head has increased slightly over the last year in the state.

**Other Cattle.**

There has been an increase in the number of other cattle over that of a year ago. Although there have been fairly noticeable decreases in some areas west of the Cascades, in Spokane, Whitman, Ferry, Stevens, portions of Benton and the southeast counties on account of high feed prices and partial crop failures, the number has materially increased in portions of Okanogan, the Big Bend, Klickitat counties and the Yakima valley. There have unquestionably been decreases in the number of farms which reported "no cattle" a year ago, especially in the Big Bend counties, and the general tendency to increase the smaller herds in practically all portions of the state have increased the number of other cattle over last year. Prices of other cattle have advanced since January 1 last year, due to the unusual demand.

**Sheep.**

The number of sheep has increased materially in all portions of the state excepting in the northwest and southwest counties, where dogs and cougars have materially interfered with sheep increases. Large increases are noted in Okanogan and Klickitat counties and in the Yakima valley. Many farmers are retaining a few head at present who never before raised sheep in this state. The prices of all classes of sheep have increased over a year ago.

**Swine.**

The number of swine over six months old has decreased materially from that of a year ago, excepting in the northwest portions of the state, where there have been increases in the number of swine of this age. However, there has been an abnormal increase in the number of swine under six months old and the total number of swine of all ages is the same as that of a year ago. Practically every part of the state indicates unusually large increases in the number of young swine and there has been a tendency throughout the state to retain brood sows considerably in excess of the number retained the last two years. The prices of swine were higher on January 1 this year than on the same date a year ago.

The general tendency is toward an increase of all classes of live stock in this state in the succeeding year, and the patriotic response of growers, especially the small farmer, to increase numbers on account of the great food requirements of the world has been very commendable. The shortage of labor throughout the state, lack of feed in areas of Spokane and Whitman counties on account of abnormally small crops, have hampered the growth of the live stock industry somewhat. The winter, however, has been unusually favorable for all classes of live stock. Had the winter been as severe as the two preceding years, undoubtedly unusually large decreases of stock would have probably occurred instead of increases on account of the high hay and feed prices prevailing. It is extremely encouraging to note the large increases in the number of calves, heifers, young swine and steers on small farms that are being retained in practically all portions of the state.

The following is an interesting table showing the comparative number and price of the various animals a year ago and now. The figures are for January 1 of each year:

**Washington.**

| | Number | | Value per head | |
|---|---|---|---|---|
| | 1917. | 1918. | 1917. | 1918. |
| Horses | 300,000 | 309,000 | $ 98.00 | $108.00 |
| Mules | 19,000 | 19,000 | 111.00 | 117.00 |
| Milch cows. | 263,000 | 266,000 | 59.50 | 70.00 |
| Other cattle. | 280,000 | 294,000 | 30.40 | 36.00 |
| Sheep | 571,000 | 661,000 | 7.10 | 11.40 |
| Swine | 283,000 | 283,000 | 11.10 | 20.00 |

**United States.**

| | Number | | Value per head | |
|---|---|---|---|---|
| | 1917. | 1918. | 1917. | 1918. |
| Horses | 21,210,000 | 21,563,000 | $102.89 | $104.28 |
| Mules | 4,723,000 | 4,824,000 | 118.15 | 128.74 |
| M. cows. | 22,894,000 | 23,824,000 | 59.63 | 70.59 |
| Other cattle | 41,689,000 | 43,546,000 | 35.92 | 40.88 |
| Sheep | 47,616,000 | 48,900,000 | 7.13 | 11.82 |
| Swine | 67,503,000 | 71,374,000 | 11.75 | 19.51 |

An interesting comparison is the difference between the value per head and number of live stock in the state on January 1, 1906, and January 1, 1918, which is as follows:

| | Number | | Value per head | |
|---|---|---|---|---|
| | 1906. | 1918. | 1906. | 1918. |
| Horses | 237,000 | 309,000 | $ 70.51 | $108.00 |
| Mules | 3,000 | 19,000 | 75.37 | 117.00 |
| Milch cows. | 167,000 | 266,000 | 32.50 | 70.00 |
| Other cattle. | 309,000 | 294,000 | 15.03 | 36.00 |
| Sheep | 850,000 | 661,000 | 3.03 | 11.40 |
| Swine | 179,000 | 283,000 | 7.40 | 20.00 |

This does not mean that the incomes of the producers have increased proportionately to the value, as the free range has been greatly decreased since 1906; feed prices have greatly increased; labor wages have advanced; and breeding stock has also materially increased in value; so that the actual income to the producer on some classes of live stock is even probably no more on January 1, 1917, than on the same date in 1906.

## Let Your Money Earn Something

Real efficiency, the kind that makes for success in any line of business, is the kind that has everything at work. The successful farmer doesn't keep "boarder" cows, nonlaying hens or work horses that do not work. Neither does he keep money lying idle. He invests it in something that will earn for him or puts it directly to work earning interest.

This paper recently offered to the government to become agent for war stamps issued by the treasury department as one means of raising funds to carry on the war. The offer was accepted, and a special department has been established to handle the great mass of business detail connnected with the selling of $50,000 worth of thrift and war savings stamps. But the Farmer is glad to be able to serve both its readers and Uncle Sam. The excellence of the war stamp plan can not be too often or to strongly stated. Here it is in a nutshell:

**The Plan in Brief.**

The government issues two kinds of stamps, both of which are backed by every resource of the country. The first is a thrift stamp costing 25 cents, designed for the man or woman or boy or girl who has an occasional or a frequent quarter that ought to be saved. The second is a war savings stamp, costing $4.13 during February, and a cent a month more for each month thereafter. This stamp is designed not only as a savings opportunity, but as an investment opportunity. It draws interest at the rate of 4 per cent compounded every three months. That makes it worth $5 on January 1, 1923. A book of 20 of these stamps would cost now $82.60 and would be worth $100 on January 1, 1923.

And here is another remarkable feature: You don't have to keep a war savings stamp that long. You can cash it any time you want to and if you have had it three months or more you get not only your money back, but interest for the time you have had it at the rate of 3 per cent. It is almost like having a checking account in your bank drawing interest.

The Farmer has no interest in the matter except to help you and Uncle Sam get together and help each other. The coupon presented herewith is self-explanatory. If you have some money that isn't at work, however small the amount may be, you can "kill two birds with one stone" by buying stamps of one kind or the other. You can make yourself a safe investment and at the same time help win the war. Count your change and look up the idle bank account today and see if you don't want to put a part of it—anything from 25 cents to $82.60—to work right now. For more details refer back to this paper of January 24.

## Clip This Convenient Order Blank

Address all communications concerning thrift or war savings stamps to The Washington Farmer, War Savings Department, Room 26, Review Building, Spokane, Wash.

Remittances may be in any form desired, including personal check.

The Washington Farmer, War Savings Department, Room 26, Review Building, Spokane, Wash.

Gentlemen: I wish to invest in ..... U. S. government thrift stamps at 25 cents each.
(number desired.)

I wish to invest in ..... U. S. war savings stamps at $4.13 each.
(number desired.) (February figure.)

Amount enclosed $.....

Full Name .....

Town ..... State .....

R. F. D. No. .....

I have already bought.....Stamps and have a.....
(kind of stamp) (card or certificate)

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## "No Swearing Allowed."

An item of interest to the visitor at the Carnation Stock Farm, Carnation, Washington, is the placards bearing the notice, "No Swearing Allowed. These Are Contented Cows." These and other placards bearing similar legends were of great interest to spectators at the various eastern and western shows in which the Carnation herd was entered last fall.

**Japan Railroad Wages.**

Japan has 110,000 railroad employes receiving an average wage of 31 cents a day. The average wage of an American engineer is $5.40 a day.

# Farm Labor Outlook

## *Is Community Problem Pure and Simple*

### By A. L. ROGERS, Waterville, Wash.

The farm labor department of the state council of defense will do all in its power to adjust local matters and see that all crops are planted and harvested and all foods conserved, but the initiative in this work must come from the farmers themselves. The responsibilities of their individual adjustments are up to them. These are community problems, pure and simple.

In cases of local emergency I have maintained, and still maintain, that any agricultural and horticultural community can increase its labor efficiency 100 per cent, and more if needed, by patriotic service, self-denial and everybody pulling together. They can produce and save all crops for 1918-1919 and several more years should the war continue. Of course this would mean good community organization and much personal sacrifice, but it can be done.

Furthermore I want to state that it is impossible to sacrifice or waste the general opportunities of food production in any state of the union at the present time. Of course, the acts of God and weather conditions are excepted.

The present federal administration and the world at large are so well aware of its vital importance in winning this war, and the present machinery that is now organized to do this great work could be immediately adjusted to meet any emergency demands that may confront it. To illustrate, the governors and their state councils of defense, with the sanction of the federal department and the commander of any cantonment, can immeditately look over the questionnaire of every soldier in their command, and those suits can be ordered into the fields who are skilled in agricultural pursuits can be ordered into the fields and continue there until all crops have been planted, and later harvested and all emergencies met. This will apply to any other industry that is vital to the winning of this war.

Suggestions on farm labor problems for 1918. I think we should carry on our work on much the same plan as last season. That is, a close coordination of the different labor departments, federal and state schools, harvester leagues and county councils of defense. We must do teamwork and all pull together.

It would be almost a crime and national sin for any council or commission to step in and try to shield and protect any class of citizens from getting the benefits in the way of the many personal sacrifices that will have to be made in fighting and winning this great war and the principles that are involved.

Whenever the American people, as a whole, become awakened to these facts and get down to thinking in war terms and on a war basis, they will discover with the most of us that 50 per cent of all we eat, all we drink, all we wear and all we do, are absolutely nonessential, and a sharp modification of these conditions will not detract one jota from the stability and intrinsic value of the nation's great resources, and God knows our coming generations need this discipline.

It is a very simple thing for the old pioneers that came to this northwest 30 and 40 years ago, and started in on the basis of a sack of flour and a side of bacon, to put a fair valuation on our present day standard of living.

America's great prosperity is making our people fat and flabby and they are in danger of losing their vital powers of resistance. Whenever they start to swap fundamental principles for personal comforts the nation is doomed.

The other day when that modern sphinx, Colonel House, and his commission returned from Europe he leaked just enough to prove to some people that he is a philosopher of the highest type. He said of England, France and Italy: "Their determination to win without thought of cost is admirable."

That must be America's attitude of mind if our people expect any benefits in this great world's struggle for human rights.

It is worth the price, Let's pay it.

To The Washington Farmer: Please find enclosed $1 for which send me the Washington Farmer for three years and The Twice-a-Week Spokesman-Review for one year, as stated by your big combination bargain offer. We have taken The Washington Farmer for three years, and could not get along without it. There is so much valuable reading in it, both for the farm and house.

C. R. TALBOTT.
Elma, Wash.

# Carroll Freeland

## Twelve-Year-Old Newspaper Man

By RAY W. FELTON.

Carroll Freeland, 12-year-old son of Mr. and Mrs. Ray Freeland of White Swan, Yakima county, is perhaps the youngest newspaper publisher in Washington. Carroll is a farmer boy. His father owns and operates 80 acres near the little village of White Swan, on the Yakima Indian reservation. There are perhaps 25 families in White Swan and until Carroll started his paper three weeks ago there was no medium through which the local news could be disseminated. Carroll has been selling subscriptions for a magazine and recently he approached his father with a proposition to buy a small printing press and some type. He agreed to put up half the money if his father would loan the other half. The plan was agreed upon and the printing outfit was installed. Then appeared the first issue of the White Swan Record, a weekly paper, giving local news, war news and other interesting information.

Carroll has a real subscription list. He charges 35 cents for a nine-months' subscription and his parents have impressed upon him the necessity of issuing his paper regularly and making good the obligation he assumes when he accepts money for a subscription. The three stores in White Swan use the Record as an advertising medium.

# Sow Alfalfa With Barley

To the Editor: I wish to seed 30 acres to alfalfa the coming season. The land is wheat and oat stubble. Can I seed it with wheat or barley Which would be the better crop or would you advise either? The reason of this is under the conditions I hate to lose the use of the land this season. The country is calling upon us to produce and I would like to have the land in alfalfa. I have 14 acres now and could use 100 acres. I am controlling and own 100 acres and I need alfalfa. The land is clear of all foul vegetation. Information will be highly appreciated. This land here is natural alfalfa land on the hills as well as lowlands.—W. B. R., Bossburg, Wash.

Professor George Severance, vice dean, college of agriculture, Washington State college, answers the above questions as follows:

I believe it feasible to seed alfalfa with wheat or barley, preferably barley, this spring, provided you get the crop in early so that the alfalfa may become well established before the dry season comes on and so that the grain may mature and be removed at as early a date as possible. If the land has never grown alfalfa it would be safer to inoculate the seed. If the dry weather comes on unusually early this season it might be wise to cut the wheat or barley for hay, to give the alfalfa a better opportunity to endure the drouth. If hay is scarce you may possibly do your country as great a service by producing the hay as by producing grain.

### Southern Mills Busy.

Entrance of the United States into the European conflict with its consequent demand for materials for ships has set every southern pine mill in the timber belt working overtime in an effort to supply the need of the nation. Nearly 300 wooden ships are now under construction in this country. Hurry is the watchword everywhere and within a few weeks the goal of a million feet a day is expected to be reached.

# To Seize Nation's Water Power

## *Aims of the Shields Bill Now Pending in Congress*

Not only farmers, but the public in general should cordially approve the spirit of these clearcut resolutions adopted by the Idaho State Federation of Agriculture at Lewiston:

Whereas, Owing to the needs of this world war, there are increasing demand for the use and development of hydro-electric power to take the place of oil and coal; and,

Whereas, Much of this cry is made by corporations greedy for monopoly of the coveted heritages of the people, the hydro-electric power of this nation; therefore be it

Resolved, that this federation of agriculture demand that the federal and state governments shall retain ownership of all water power not already owned by the power trust and ownership of water rights already seized; and, be it further

Resolved, That the ownership and development of water power by municipalities and states be encouraged as the only means of preventing monopoly and trust prices, and that we go on record as opposed to the infamous power trust steal known as the Shields bill, now pending in congress.

As our leaders will recall, we have vigorously condemned the Shields bill so emphatically denounced by the foregoing resolutions. That measure aims at the practical seizure of and perpetual ownership by private interests of vast undeveloped water powers now owned by the people.

This issue has been before congress for more than a decade. When Roosevelt was president his administration took a firm and courageous stand against further looting of the country's natural resources, and Gifford Pinchot, Mr. Roosevelt's able and courageous head of the forest bureau, made a splendid fight for the preservation of our forests, our water power, our vast deposits of coal, oil, gas and the phosphates that some day will be vitally needed for fertilizing the exhausted soils of the nation.

Few men in public life have been attacked as Mr. Pinchot has been assailed by the special interests wanting to get control of these resources. But he has never faltered in his good work, and at last victory seems at hand with regard to water power.

As a substitute for the vicious Shields bill, President Wilson's administration has brought forward in congress a water power measure that meets with Mr. Pinchot's cordial approval. We know of no one whose judgment we would rather follow on this subject, and are glad to give space hereith to his commendation of the administration measure. Mr. Pinchot writes:

The 12-year fight to keep the nation's water power from capture by the power monopolists is at last on the verge of being won. The administration water power bill, now before congress, opens the way to save for the people of the United States their most valuable natural asset. Some 50,000,000 water horsepower is at stake.

The bill in question was formulated under the direction of the secretary of agriculture, the secretary of war and the secretary of the interior, was submitted to the president for his approval, and recently put forward as an administration measure. It deals with water power in national forests, public lands, Indian lands and navigable streams. A special committee of the house has been created to consider it.

It is an admirable measure, drawn with thorough knowledge and unusual skill. The principles essential for the wise use and development of our public water powers in the public interest are all embodied in it.

The administration water power bill will first come before the house of representatives, where an effort will certainly be made to amend it in the interest of the power interests. If that fails, the water power lobbyists will endeavor to have the indefensible provisions of the Shields bill substituted in the senate for the administration bill. Beaten in that, they will fall back upon the formula of obstruction and delay they have used so successfully for the last 10 years.

This measure is practical, fair and wise. The friends of conservation should insist that their friends in congress shall give their prompt and full support to the administration water power bill and shall see to it that it is passed without emasculation, substitution or posiponement. It is of vital interest to our country while the war is on and will be equally important after the war is over.

The passage of this law will secure to the American people for ever vast resources whose use for the good of all will make this land a safer and a better place to live in. All the forces of conservation are behind it. Sincerely your, GIFFORD PINCHOT.

# Ewe Brings $3500

## Red Cross Benefits From the Sale

By Ray W. Felton.

A 3-year-old half-blooded ewe brought $3501 at the close of a banquet held recently at Yakima in connection with the joint convention of the Washington Wool Growers' and Washington Forest Users' associations. This probably is a record price paid for a ewe. The proceeds go to the Red Cross. Under the hammer of Auctioneer George Gue the sheep was sold between 50 and 60 times, several purchasers buying the animal three or four times, and each time turning it back to be sold again.

Bidding for the Washington Wool Growers' association, President T. J. Drumheller of Walla Walla reached the top price when he paid $480 for the ewe. He immediately relinquished all claim to it and bidding went on, stopping only when Frank M. Rothrock of Spokane paid $75 for it, with the understanding that the animal is to remain in the custody of A. Duncan Dunn until H. Stanley Coffin takes it to the national sale at Salt Lake City, where the Washington sheepmen plan to buy it back and keep it going from one sale ring to another for the benefit of the Red Cross.

The sale was sprung as a surprise on the assembled merrymakers, who had partaken heartily of a bounteous spread in the banquet room of the Commercial hotel. True to old-time custom, the sheepmen had made the most of an evening of fun. Tom Drumheller and Stanley Coffin had just completed a highland fling on the stage occupied by the orchestra when the door opened and in came the much-bewildered ewe, led by an employe of the Yakima Meat company, who donated the animal for the sale. Auctioneer Gue was immediately pressed into service after a brief announcement as to the purpose of the sale. Gue rolled up his sleeves and entered into the spirit of the affair with his usual "pep," and the bidding started. It never lagged a moment, and it is hardly possible to estimate what the animal might have brought had the bidding not been stopped when it was learned that the $3500 mark had been reached.

With Duncan Dunn presiding as toastmaster the banquet lived up to old-time traditions. There were speeches, songs and dances and a more whole-souled type of good fellowship is rarely found than that which prevailed.

Following is a list of the bidders on the Red Cross ewe. In several cases the amounts following the names represent two and three bids on the part of the individual:

George Pryor, Yakima, $60; Tom Smith, Yakima, $60; T. J. Drumheller, Walla Walla, $60; Butler & Knox, Prosser, $60; F. M. Rothrock, Spokane, $135; Anderson Brothers, Ellensburg, $50; R. A. O'Brien, Yakima, $65; Bob Jackson, Dayton, $100; John Rennie, Yakima, $50; Fred Farmer, Yakima, $300; Yakima Sheep company, $50; P. Ager, Yakima, $60; A. Pryor, Yakima, $50; Sam Stewart, Yakima, $50; George Jackson, Yakima, $50; W. P. Prater, Ellensburg, $10; Robert Hopkins, Yakima, $10; Yakima Meat company, $45; A. Roberts & Son, Tampico, $25; Kenneth McColl, Yakima, $15; A. D. Dunn, Wapato, $65; Kennedy Forsman, Yakima, $15; A. A. McPherson, Ellensburg, $30; Congdon Orchards company, Yakima, $10; Dave McColl, Ephrata, $10; United States forest service officials, $56; Columbia Basin Wool Warehouse company, Portland, $50; Raymond Escure, Quincy, $60; John Smithson, Ellensburg, $25; Robert Herron, Yakima, $50; Nagle Brothers, Ringold, $50; Tom Smith, Yakima, $150; Prosser Sheep company, Prosser, $50; Mercer & Hill, Prosser, $50; H. Stanley Coffin, Yakima, $250; Washington State Forest Users' association, $110; Washington State Wool Growers' association, $480; George Hendrix, Kahlotus, $50; Alex. Taylor, Yakima, $45; Commercial hotel, Yakima, $50; Benson & Nyre, Prosser, $75; C. M. Longmire, Selah, $25; G. W. Hopkins, $50; K. O. Kohler, Ellensburg, $50; L. Lauzier, Ephrata, $50; Spokane Union Stock Yards company, $50; George Chambers, Yakima, $50; Louis Schneider, Yakima, $50; William Wilson, Yakima, $50; A. Trieber, Yakima, $50; C. A. Hales, Pasco, $50.

### Wilbur Union Elects.

The following officers have been elected for the Farmers' union at Wilbur: President, J. C. Mearns; vice president, Dan Hudkins; secretary-treasurer, Joseph Kunz; chaplain, T. W. McCord; conductor, Veggo Jurgensen; doorkeeper, J. R. Wibomey; executive committee, Chris Lyse, H. Krause and William Lauritzen.

# Produce More Food Now

## *Food Production Administrator Is Great Need*

Is there any agency that would so forcibly awaken all the American people to the great and supremely important work being done by the United States department of agriculture as the immediate appointment of the ablest available man for a national War-Time Food Production Administrator?

The opportunity is now here, not only for stimulating production of food supplies now to the utmost but of placing the agricultural industry itself upon a more attractive plane for young men than ever before.

Here is another instalment of letters received on this subject:

**Agricultural Workers.**

Congressman Ernest Lundeen of Minnesota writes:

"To the Editor: Receipt is acknowledges of your letter of January 1st, enclosing articles on the necessity for agricultural workers. I agree as to the need of a great production of food and will support well-considered and wise legislation to that end.

"ERNEST LUNDEEN."

**Reorganization Imperative.**

Dean Charles S. Knight of the Nevada College of Agriculture writes:

"To the Editor: I have your letter of December 31, with accompanying leaflets on the farm labor situation in this country. Nevada is very much interested in a nation-wide method for speeding up food production. During the past year considerable loss has been caused by labor shortage in crop and live stock production. The labor situation, however, for the present year will undoubtedly introduce more serious problems. In coping with this momentous and most important food propaganda a reorganization of our present methods of farming operations is imperative. However, there will be a limit to the extent of this readjustment on account of labor shortage if we are to maintain or increase our present production. We feel this matter can not be given too serious consideration. CHAS. S. KNIGHT."

**Too Many Heads.**

Secretary Charles F. Kennedy of the Indiana state board of agriculture is determined to keep an open mind, while at the same time expressing his opinion with regard to food production:

"To the Editor: I have your letter, with enclosures, and have read them over in a casual way, and the work suggested in your letter requires no argument at my hands or anybody else's to establish the fact that it is of an important nature. I happen to know that when the food commissioner was appointed a great many people seemed to have no understanding of the importance of this move, and I can see a good many reasons why it might have failed; but it did not fail, because the president found the very best man that could have been provided for the place. Now, then, to create a third department in Washington—and that is what this proposition means—would seem to be covering the territory with too many heads of departments. What there is which applies to agricultural work should emanate from the secretary of agriculture, as I see it. I am not so obtuse but that I can be convinced that I am mistaken, but it is ideas that you are asking for, and these are mine. CHAS. F. KENNEDY."

**Has Merit.**

Congressman John R. Ramsey of New Jersey writes:

"To the Editor: This is to acknowledge receipt of your letter dated January 1st, with clippings attached. I think that your communication to the president has merit and is worthy of consideration. If matters along this line are presented for the consideration of congress they will certainly have my careful attention.

"JOHN R. RAMSEY."

**Not Essential Industries.**

While agreeing with the general proposition that nonessential industries of the country should certainly be curtailed during these war days, yet there are those that will question Congressman Eugene Black of Texas in his quoted sentiments that not more than 25 per cent of the automobiles of the country are essential to industries.

"To the Editor: I am just in receipt of your letter of the 1st inst., in which you enclose me a copy of a telegram which you have recently sent to President Wilson relating to the subject of the scarcity of farm labor. To be sure, I am deeply interested in this important subject, and think that it should receive the most earnest and careful attention. I fear that the matter of adequate food production is going to be neglected until the point of danger

(Continued on page eleven.)

# Farmers of Washington Pledge More Food

(Continued from page one.)

answered the question as to swine production said they were planning to produce more pork this year than previously.

The survey just made was also made to cover both Idaho and Oregon, and the same general results were obtained. In addition to the detailed statement covering the state of Washington at the bottom of page 1 there follows a detailed statement by counties and also a statement covering the three states of the northwest.

**WASHINGTON, COUNTY BY COUNTY**

Here are details of the production plans for Washington, county by county:

ADAMS COUNTY: **More**—Wheat 2, rye 2, potatoes 2, hay 2, beef cattle 1, swine 2, poultry 1. **Less**—Dairy cattle 1.

ASOTIN COUNTY: **More**—Wheat 4, oats 1, barley 4, rye 2, corn 1, potatoes 4, peas 1, beans 3, horses 3, beef cattle 2, sheep 2, swine 1, poultry 2. **Less**—Hay 3, horses 1, beef cattle 2, swine 2.

BENTON COUNTY: **More**—Wheat 2, oats 1, rye 1, corn 6, potatoes 2, peas 2, beans 3, vegetables 3, fruits 2, hay 5, horses 1, beef cattle 1, dairy cattle 2; sheep 4, swine 2, poultry 4, carrots 2, mangels 3, turnips 2, silage 2. **Less**—Potatoes 2, beans 1, sugar beets 1, horses 3, beef cattle 3, dairy cattle 2, swine 1, rutabagas 1.

CHELAN COUNTY: **More**—Wheat 2, barley 2, corn 1, potatoes 1, beans 1, vegetables 1, hay 2, horses 1, beef cattle 2, sheep 1, swine 2, poultry 1. **Less**—Potatoes 1, horses 1.

CLALLAM COUNTY: **More**—Wheat 2, oats 1, barley 1, corn 2, potatoes 3, peas 2, vegetables 1, fruits 2, hay 4, beef cattle 1, dairy cattle 2, sheep 2, swine 3, poultry 2, carrots 1, mangels 2, rutabagas 2, silage 1. **Less**—Wheat 1, oats 1, barley 1, potatoes 1, horses 1, dairy cattle 1, swine 1, poultry 1.

CLARKE COUNTY: **More**—Wheat 1, corn 1, potatoes 1, peas 1, beans 1, vegetables 1, hay 1, beef cattle 2, dairy cattle 2, swine 1, poultry 1, rutabagas 1, turnips 1, silage 1. **Less**—Corn 1, beans 1.

COLUMBIA COUNTY: **More**—Wheat 1, oats 1, potatoes 1, peas 1, beans 1, hay 1, beef cattle 2, dairy cattle 1, swine 2, poultry 1, carrots 1, mangels 1, silage 1. **Less**—Oats 1, barley 1, rye 1, corn 1, potatoes 1, sugar beets 1, vegetables 1, fruits 1, horses 1, sheep 1, rutabagas 1, turnips 1, artichokes 1.

COWLITZ COUNTY: **More**—Wheat 7, oats 4, barley 3, rye 1, corn 3, potatoes 3, peas 6, beans 4, vegetables 4, fruits 2, hay 6, horses 3, beef cattle 6, dairy cattle 2, sheep 1, swine 5, poultry 6, carrots 6, mangels 4, rutabagas 2, turnips 3, artichokes 3, silage 4. **Less**—Wheat 1, oats 4, barley 3, rye 1, corn 1, potatoes 4, peas 1, beans 1, vegetables 3, fruits 2, hay 1, horses 1, beef cattle 1, dairy cattle 4, poultry 1, rutabagas 1, turnips 1, artichokes 1, silage 1.

DOUGLAS COUNTY: **More**—Wheat 2, barley 1, rye 1, corn 1, potatoes 2, beans 2, vegetables 3, horses 2, beef cattle 1, sheep 1, swine 1, poultry 2, carrots 2, mangels 2, rutabagas 2, turnips 1, silage 1. **Less**—Oats 1, barley 1, swine 3, poultry 1.

FERRY COUNTY: **More**—Wheat 3, barley 2, rye 1, corn 2, potatoes 1, peas 1, beans 1, vegetables 3, hay 3, horses 2, beef cattle 3, dairy cattle 1, sheep 1, swine 3, poultry 1, carrots 1, rutabagas 1, silage 1. **Less**—Oats, 2, potatoes 1, poultry 2.

GARFIELD COUNTY: **More**—Wheat 1, corn 2, potatoes 2, beans 1, hay 1, beef cattle 1, sheep 1, swine 1, poultry 2, carrots 1.

GRANT COUNTY: **More**—Wheat 17, oats 3, barley 3, rye 4, corn 4, potatoes 13, peas 3, beans 6, vegetables 8, fruits 5, hay 11, horses 8, beef cattle 7, dairy cattle 8, sheep 3, swine 12, poultry 7, carrots 6, mangels 2, rutabagas 1, turnips 1, silage 2. **Less**—Wheat 5, oats 2, rye 2, barley 3, corn 4, potatoes 3, beans 2, vegetables 3, fruits 2, hay 1, horses 2, beef cattle 3, dairy cattle 2, swine 2, poultry 5, carrots 1, mangels 2, rutabagas 2, turnips 2, artichokes 1.

GRAYS HARBOR COUNTY: **More**—Wheat 2, oats 3, barley 1, rye 1, potatoes 1, peas 3, beans 1, hay 3, dairy cattle 2, swine, 2, poultry 1, carrots 1, mangels 1, rutabagas 3, silage 2. **Less**—Wheat 1, potatoes 2, dairy cattle 1.

ISLAND COUNTY: **More**— Wheat 1, oats 1, rye 1, potatoes 1, peas 1, fruits 1, hay 1, dairy cattle 1, swine 1, poultry 1, carrots 1, rutabagas 1. **Less**—Barley 1, rye 1, beans 1, sugar beets 1, beef cattle 1, dairy cattle 1, mangels 1.

JEFFERSON COUNTY: **More**—Wheat 3, oats 6, barley 3, rye 1, corn 2, potatoes 4, peas 6, beans 3, sugar beets 2, vegetables 3, fruits 2, hay 6, beef cattle 1, dairy cattle 6, sheep 1, swine 5, poultry 2, carrots 4, mangels 4, rutabagas 5, turnips 1, silage 4. **Less**—Corn 1, potatoes 1, poultry 1, carrots 1, mangels 1.

KING COUNTY: **More**—Wheat 2, oats 2, rye 1, corn 2, potatoes 2, peas 1, beans 1, vegetables 2, fruits 2, hay 1, dairy cattle 2, swine 1, poultry 2, carrots 2, mangels 2, rutabages 1, turnips 2, artichokes 1, silage 1. **Less**—Barley 1, sugar beets 1, hay 1, horses 1, beef cattle 1, sheep 1, swine 1, rutabagas 1, silage 1.

KITTITAS COUNTY: **More**—Wheat 1, potatoes 1, hay 1, dairy cattle 1, swine 1, carrots 1, mangels 1.

KLICKITAT COUNTY: **More**—Wheat 15, oats 10, barley 7, rye 6, corn 2, potatoes 8, peas 4, beans 4, vegetables 15, fruits 1, hay 12, horses 4, beef cattle 11, dairy cattle 7, sheep 3, swine 8, poultry 11, carrots 4, rutabagas 3, turnips 4, artichokes 2, silage 1. **Less**—Wheat 1, oats 4, barley 2, rye 1, corn 1, potatoes 2, beans 1, sugar beets 1, vegetables 1, hay 3, horses 1, dairy cattle 3, swine 1, poultry 1, carrots 1, mangels 1, rutabagas 1, turnips 1.

LEWIS COUNTY: **More**—Wheat 6, oats 3, barley 1, rye 3, corn 4, potatoes 3, peas 1, beans 1, sugar beets 1, vegetables 2, fruits 2, hay 4, beef cattle 2, dairy cattle 4, sheep 3, swine 4, poultry 2, carrots 2, mangels 3, rutabagas 2, silage 5. **Less**—Wheat 2, corn 1, potatoes 2, peas 1, beans 1, horses 1, beef cattle 1, dairy cattle 1, poultry 1.

LINCOLN COUNTY: **More**—Wheat 9, oats 6, barley 4, corn 1, potatoes 6, beans 3, vegetables 2, fruits 2, hay 2, horses 2, beef cattle 7, dairy cattle 5, sheep 1, swine 5, poultry 5, carrots 3. **Less**—Wheat 1, oats 1, barley 1, vegetables 1, horses 1, sheep 1, swine 1.

MASON COUNTY: **More**—Wheat 4, barley 1, rye 1, corn 4, potatoes 3, peas 1, beans 3, vegetables 2, hay 2, beef cattle 1, dairy cattle 1, swine 5, poultry 1, carrots 3, mangels 4, rutabagas 2, turnips 1, artichokes 1, silage 4. **Less**—Oats 2, hay 1, dairy cattle 2, poultry 1.

OKANOGAN COUNTY: **More**—Wheat 5, oats 6, barley 2, rye 1, corn 6, potatoes 7, peas 2, beans 6, vegetables 5, fruits 4, hay 8, horses 6, beef cattle 3, dairy cattle 6, swine 6, poultry 7, carrots 5, mangels 4, rutabagas 1, turnips 2, silage 1. **Less**—Wheat 1, sugar beets 1, beef cattle 1, dairy cattle 1, swine 1.

PACIFIC COUNTY: **More**—Wheat 2, barley 1, rye 1, potatoes 1, peas 1, fruits 1, hay 1, horses 1, beef cattle 2, swine 1, poultry 1 rutabagas 1, turnips 1.

PEND OREILLE COUNTY: **More**—Wheat 1, oats 1, potatoes 1, hay 1, horses 1, beef cattle 1, swine 1, poultry 1.

PIERCE COUNTY: **More**—Potatoes 1, fruits 1, swine 1, poultry 1, carrots 1.

SKAMANIA COUNTY: **More**—Wheat 1, oats 1, corn 1, peas 1, beans 1, fruits 1, hay 2, dairy cattle 2, swine 1, poultry 1, carrots 1. **Less**—Potatoes 1, vegetables 1, hay 1, turnips 1,

SNOHOMISH COUNTY: **More**—Wheat 1, oats 2, barley 1, rye 1, corn 1, potatoes 1, peas 1, beans 1, vegetables 2, fruits 2, hay 3, dairy cattle 2, sheep 1, swine 3, poultry 2, carrots 1, mangels 1, silage 3. **Less**—Oats 1, corn 1, potatoes 2, vegetables 1, horses 1, poultry 1, rutabagas 1.

SPOKANE COUNTY: **More**—Wheat 22, oats 16, barley 8, rye 2, corn 7, potatoes 18, peas 12, beans 13, vegetables 10, fruits 5, hay 16, horses 11, beef cattle 6, dairy cattle 11, sheep 1, swine 16, poultry 13, carrots 14, mangels 7, rutabagas 4, turnips 3, artichokes 1, silage 8. **Less**—Wheat 2, oats 4, barley 1, rye 2, potatoes 2, peas 4, beans 1, sugar beets 3, vegetables 2, fruits 4, beef cattle 1, hay 2, horses 4, dairy cattle 2, sheep 1, swine 6, poultry 4, mangels 1, turnips 1, artichokes 1.

STEVENS COUNTY: **More**—Wheat 6, oats 6, barley 4, rye 1, corn 3, potatoes 5, peas 4, beans 2, sugar beets 3, vegetables 7, fruits 1, hay 7, beef cattle 5, dairy cattle 5, sheep 3, swine 6, poultry 7, carrots 5, mangels 6, rutabagas 4, turnips 4, artichokes 1, silage 2. **Less**—Rye 1, peas 1, sugar beets 1, fruits 1, hay 1, horses 2, beef cattle 1, dairy cattle 1, sheep 1, carrots 1, mangels 1, rutabagas 2, turnips 2, chokes 2 silage 1.

THURSTON COUNTY: **More**—Wheat 3, oats 2, barley 1, rye 1, corn 3, potatoes 4, peas 4, beans 4, sugar beets 2, vegetables 3, fruits 1, hay 4, horses 1, beef cattle 2, dairy cattle 4, swine 4, poultry 3, carrots 4, mangels 3, rutabagas 1, turnips 2, artichokes 1, silage 2. **Less**—Oats 1, hay 1, horses 1, beef cattle 1, sheep 1, mangels 1, rutabagas 1, turnips 1, artichokes 1.

WALLA WALLA COUNTY: **More**—Wheat 2, oats 1, barley 1, corn 1, potatoes 2, peas 1, beans 1, vegetables 1, hay 1, horses 1, beef cattle 1, dairy cattle, swine 2, poultry 2, carrots 1, rutabagas 1, turnips 1, artichokes 1.

WHATCOM COUNTY: **More**—Wheat 2, oats 6, barley 1, rye 1, corn 2, potatoes 3, peas 6, beans 2, vegetables 2, hay 5, beef cattle 1, dairy cattle 5, sheep 2, swine 5, poultry 4, carrots 3,

(Continued on page twenty-eight.)

## PRIZES FOR WAR GARDEN PLANS

The Washington Farmer will give $10 in prizes for plans and directions for growing the best war-garden on the farm. This includes:

1. As to size and length of rows and where and when to plant the various garden vegetables.

2. The best methods of cultivating the garden throughout the season and the best methods of fighting garden pests.

3. The best methods of harvesting, preserving and storing winter supplies of garden vegetables

4. In short, how to produce in variety and quality the largest amount of food for the farmer's family table with the least interference with other necessary farm production.

First prize, $5; second prize, $3; third prize, $2.

All entries in this contest must be received on or before February 28. Any entry received on or before February 21, and that article takes a prize, one dollar will be added to the prize.

Mail to the Editor of The Washington Farmer, Spokane, Wash.

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GUARANTEE OF ADVERTISEMENTS.

We guarantee every subscriber against loss through dishonesty or swindle by any advertiser in this publication; we do not attempt, however, to adjust trifling differences between subscribers and honest, responsible advertisers, nor will we pay the debts of honest bankrupts. Complaints must be sent us within 30 days from the date of the transaction, and the subscriber must have mentioned The Washington Farmer when writing the advertiser. This guarantee applies to live stock, except that we will not be responsible for claims for damages on account of disease in stock sold through these columns.

## *Awake to Labor Situation*

Forty-one farmers of one Washington county (Douglas) recently signed a petition asking the government to make some plans for providing adequate labor for the farms. The government has its hands decidedly full at the present time, but if there is anything that warrants petition to federal officials it is labor shortage in this time of food stringency. The government should see to it that there is plenty of labor if a thorough survey of the situation shows an actual shortage. And the government is taking steps in that direction. J. C. Scott, federal labor specialist, told the grain convention at Spokane recently that the authorities were making plans for the utilization of labor and labor saving devices this season in the most efficient manner possible. His own efforts, and those of other specialists in the northwest, are proof of the government's interest. Colonel Clarence Ousley, assistant secretary of agriculture, from Washington, D. C., told the farmers attending the convention at Spokane to put in the maximum acreage possible, declaring that the government would take whatever means were later found necessary to guarantee the harvesting of any crops produced.

## *Beware of Solicitors*

The council of national defense is doing a good work in taking up the matter of solicitors of miscellaneous funds for various purposes. This is a peculiarly easy time for two classes of solicitation to operate unwarrantedly—the professional bunco steerer and the well-meaning, but unwise beneficent organization. Here are some of the recommendations made by the council of national defense to the state councils all over the union:

That the council of national defense requests each of the state councils of defense so to organize that it may assure itself of the worthiness of the objects in support of which appeals for assistance are made and of the integrity and financial responsibility of those making such appeals;

That the council of national defense requests that all campaigns for private aid be conducted in entire cooperation with the state councils of defense;

That the council of national defense urges the people of the country to contribute assistance, financial and otherwise, only to those persons and objects that are accredited and approved by the council of defense in each state;

That the council of national defense suggests that the state councils of defense approve appeals for financial aid only where it shall be understood that an accounting of the moneys received and spent shall be made public.

## *"Awake or We Perish"*

Samuel Fraser, a Geneseo, New York, farmer, whose clearcut and emphatic utterances on agricultural problems are attracting national attention, told the Wholesale Grocers' association of New York city last week that "the food production of the United States in 1918 will not equal that of 1917 unless we have three exceptional conditions."

Favorable weather.

Additional capital.

More labor at the disposal of the farmers.

Mr. Fraser and a delegation of New York farmers recently told Secretary Houston, of the United States department of agriculture, that a famine threatens the land in 1918.

"They were told," remarked Mr. Fraser in his talk before the wholesale grocers, "that they should be hopeful and talk patriotic. But neither," the speaker added, "will grow food. The growing of food for 1918 is one of the most serious problems confronting the world today. Awake or we perish! We have basked in fancied security long enough."

Mr. Fraser is right. There is too much basking in fancied security at Washington. The Farmer has realized that fact for some time, and it was just that conviction which led it to launch a movement for the appointment by the president of a national food production administrator, who would impart to that work the same fine spirit of tremendous earnestness that Mr. Hoover has put into the work of food conservation.

"The present federal food administration," added Mr. Fraser, "does not regard crop production as within its scope, and the lack of recognition that they are so closely interrelated as to be inseparable parts of a whole is bound to cause waste and bring disaster to the work of both organizations."

Are these warnings unduly gloomy? If you think so, listen to the words of the American minister to Denmark, Dr. Maurice Francis Egan, recently home from Europe to arouse the American people to a more vivid realization of actual conditions.

Mr. Egan says that European food experts are agreed that the entire world will be brought to the verge of starvation if the war continues two years more.

It daily becomes more apparent that Mr. Hoover's original conviction, that food supplies, or the lack of them, will win or lose the war, was well founded. Yet a fear is growing that neither the president nor his secretary of agriculture has fully grasped the significance of these warnings.

## *The Dirt Silo Question*

In a recent issue of this paper there appeared an article telling the results of an experiment with a dirt silo. The story was reliable. There is no ground to doubt the truth of the report, and it was to the effect that 120 tons of sugar beet tops were placed in a dirt pit 100 feet long, 4 1-2 feet deep and 14 feet wide, a layer of straw and a layer of beet tops alternating. The entire mass was tramped down by the teams as the tops were unloaded, and when the pit was full it was covered by a six-inch layer of straw and a six-inch layer of manure to exclude the air. The report says that the beet tops were perfectly preserved and made excellent feed.

There is no reason to discourage experiments of this kind, and the use of the lessons thereby learned. But the pit silo without a lining thoroughly impervious to water is questionable in most localities. There are many localities where water seeps through the soil during the very period of the year when it is desired to have the silo full.

But the report of this experiment is valuable. This silage was made at a cost of 60 cents a ton. It is another illustration of what can be done by a thorough and scientific study of conditions.

## *A Lamb on Every Lawn*

A sheep on every lawn! Eliminate the lawn mower, fertilize the lawn, grow wool, grow mutton! This is the idea expressed by E. F. Benson, head of the agricultural department of the state of Washington. And Commissioner Benson has offered to prove that the idea is a good one. He is himself a sheep man, and he has offered the Red Cross two ewes with twin lambs each if that organization will furnish him a couple of portable pens and the state board of control allow him to graze the sheep on the lawn of the statehouse. There is evidence that his offer will be accepted. If it is he proposes to calculate to a nicety the money saved through the elimination of the lawn mower and the money made through the production of wool and mutton from feed ordinarily thrown away. If he makes good, a large number of families may be producing sheep on their lawns next year.

## *Washington Gleanings*

Ten students of the college of veterinary science, Washington state college, have enlisted in the medical reserve corps of the army.

Pack train service into the Rimrock region has been installed pending the opening of the canyon road and mail and provisions are being sent in that way.

A loan of $77,687 by the Spokane Cattle Loan company has been made to H. V. Wexler of Pasco, Wash., on the latter's band of sheep numbering 12,064.

Skagit county oats are being used entirely in the manufacture of "Mount Vernon Oatmeal," the new product put out by the Mount Vernon Milling company.

Charles E. Hill, with the Whitman Implement company at Pullman, has accepted a position as manager of Dr. E. A. Bryan's extensive "Riviera" tracts on the Snake river.

Stockholders of the Selah-Moxee Canal company will make another attempt to vote a $500,000 bond issue to secure money for improvements, according to E. M. Chandler, director and consulting engineer.

The Richland Farm Loan association stockholders report that 51 applications for loans have been furnished to the federal land bank, of which 29 have been closed and the money paid, amounting to $46,450.

Five trustees have been elected at the annual meeting of stockholders of the Old Union Ditch company. O. L. Gardner, H. J. Madill, Clarence Starcher, F. A. Huntley and W. C. Ferguson were chosen. The company expended $3100 during the last year in improvements.

A plan of mobilization for farmers exempted from the selective draft, advanced by J. R. Shinn, county agriculturist of Spokane county, has been accepted by W. A. Lloyd, national director of county agent work for the government, as a model for a campaign throughout the west and northwest.

Developments of a new hybrid wheat by the state experiment station at W. S. C. has been announced. The wheat, known as Triplet, is believed to be a maximum yielder, hardy, a good grader and remarkable smut resister. It was developed from fife, little club and turkey red after four years of experimentation.

R. K. Tiffany, president of the commercial club of Yakima, has appointed A. H. Huebner chairman of the permanent live stock committee and also chairman of the special committee to cooperate with G. E. Frevert of Salt Lake and R. P. Bean of Yakima in making necessary arrangements for the dairy products show scheduled for Yakima, February 28-March 2.

Resolutions adopted by the Forest Users' association at its recent session in Yakima indorse the hearty cooperation given stockmen by officials of the forestry department; ask regulations allowing more stock in grazing permits; prompt reseeding of burned areas; permission to graze sheep in portions of Rainier National park, and for a change in the regulations concerning ownership of hay lands for winter feeding.

## *What Others Say*

Farmer and Stockman: The farmer needs special training just as much as do the doctor and the lawyer.

Field and Farm: Patriotism isn't just dying for your country. It is trying to live for it—honestly and uprightly.

Hoard's Dairyman: The farmer has come to the point that if he continues to work his farm he must expend a certain amount of capital to house his help.

Rural New Yorker: The garbage can is the true test of housekeeping, and in like manner the idle hours are the true test of character. What does man or woman throw away? Find that and you know your friends for what they are.

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Will Be YOUR SAVING if YOU PURCHASE This "Four-Ninety" Light Delivery BEFORE MARCH 1ST

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The Chevrolet Model "Four-Ninety," for those who desire completeness in equipment with the minimum in price and economy and utmost in performance.

New features for 1918: Improved type motor, water pump, geared oil pump, oil pressure gauge, Harrison honeycombed radiator, wheels with demountable rims, tire carrier with extra rim, ventilating tilted windshield, self lubricating clutch, new adjustable steering assembly, three-quarter floating rear-axle, cantilever springs, one-man mohair top, side curtains that fold into top, pockets in each door, foot rail, robe rail, front and rear fender skirts, etc.

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| Model "490" Chassis only | Now | $ 650 |
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| Model "490" Five-Passenger Touring Car | Now | 715 |
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In California, Idaho, Washington, Oregon




The "Four-Ninety" Light Delivery is not a makeshift, built by an alien corporation. It is a Chevrolet product.

No. 5 Light Delivery; without top; No. 6, with top, as illustrated. Express body with panels 10 in. deep, 5-inch flare boards. Loading space 43 in. wide, 63 in. long. No. 6 is 52 in. high; has top, complete with rolled side and back curtains, celluloid lights both sides of seat.

No. 5 Light Delivery Now $675 No. 6 Light Delivery Now $695

No. 7 Light Delivery—Full panel top, double doors with glass panels in rear end. Glass in side panels beside driver's seat. Solid slatted roof. Back and cushion. Loading space. 44 in. wide, 56 in. long, 54 in. high.

No. 7 Light Delivery ..... Now $740

CHEVROLET one-ton trucks are sanely designed, properly constructed and built of known material. The result of long and careful study of motor truck transportation problems. Appreciating the responsibility attached to the manufacture of a commercial unit, we have subjected these trucks to the most gruelling tests. They have been driven the distance across the continent and back again; put to road tests and load tests. And from these tests we know just what the trucks will do under the most trying conditions.

Sturdiness of each vital unit making up the running gear is a striking feature of the truck. Each one is meant for plain, hard work. Axles, front and rear; motor, clutch, transmission, frame, springs—all have been designed with the idea of giving steady, uninterrupted service.



THE NEW CHEVROLET ONE-TON WORM-DRIVE TRUCK.

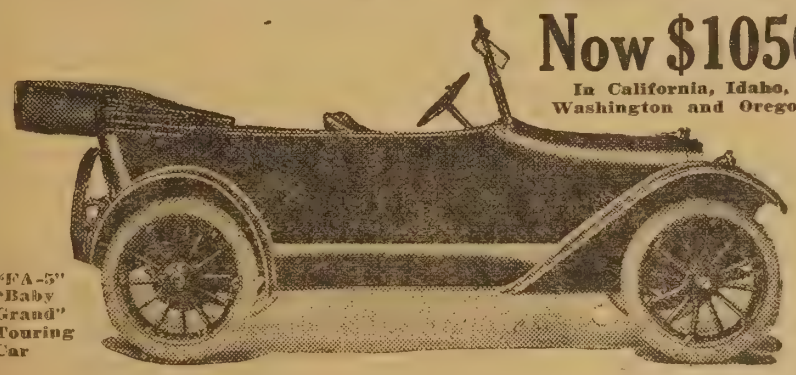
SPECIFICATIONS.

Capacity, tons ..... 1
Wheelbase, inches ..... 125
Tires, front, inches, 31x4, pneumatic.
Tires, rear, inches, 32x4 solid.
Bore, inches, 3 11-16.
Stroke, inches, 5¼.
Speed, miles per hour, ..... 25
Gear-ratio in high gear, 7 to 1.
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Chassis only ..... $1225
Add for open delivery body ..... $120
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"FA-5" "Baby Grand" Touring Car

Conservative refinement of motor radiator and oil pump, together with tilted windshield, emergency brake lever, demountable rims, robe-rail, foot rail, etc., makes this model "FA" Chevrolet a most desirable motor car.

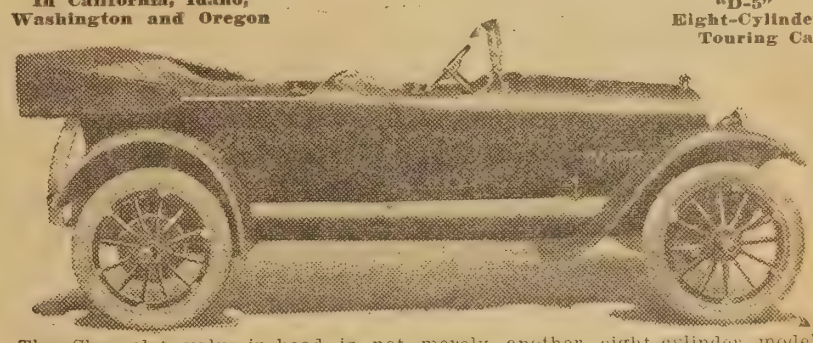
Baby Grand five-passenger Sedan. The fine coach builder has done his best in designing and building the body. Both a Winter and Summer car. The windows can be lowered and the posts removed, giving all of the features of an open car.

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| Model "FA-2" (Royal Mail) Two Passenger Roadster | Now | $1050 |
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The new eight is as outstanding in comparison with other eights on the market as are the four-cylinder Chevrolet models.

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| Model "D-4" Eight Cylinder, Four Passenger, Clover Leaf Body, Roadster | Now | $1510 |
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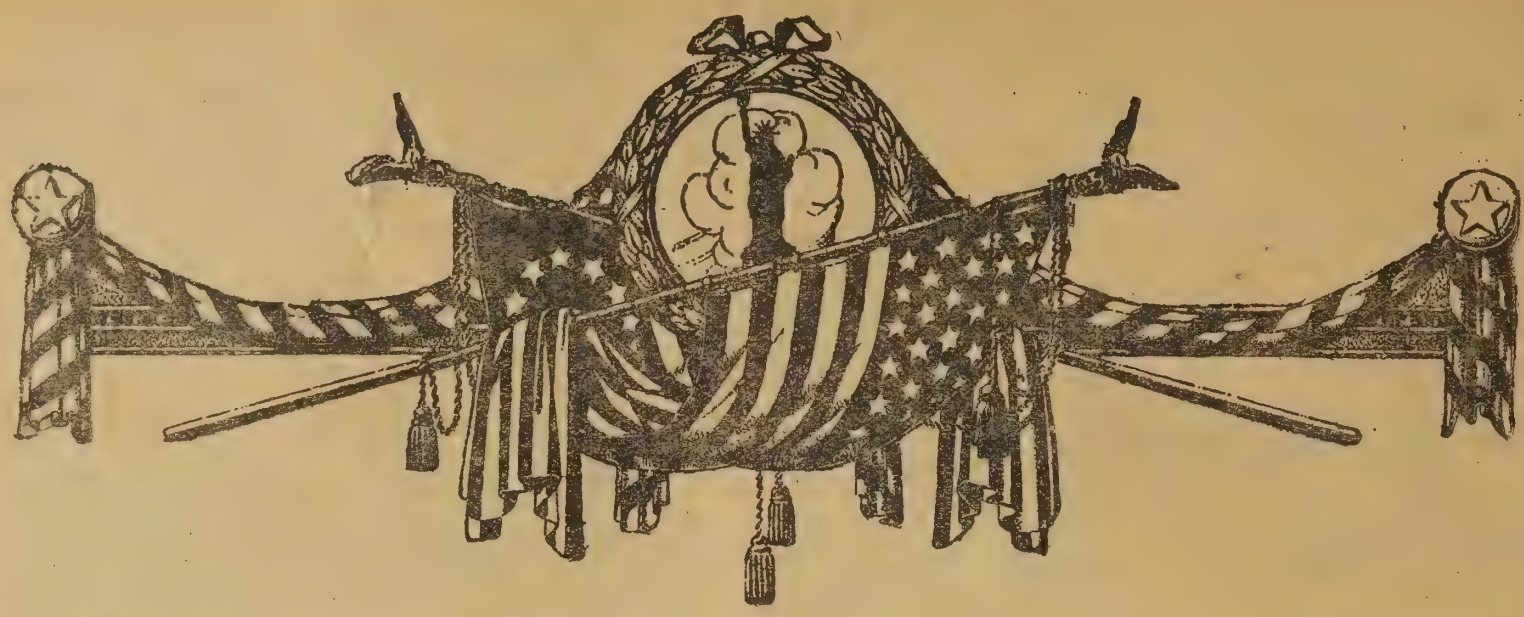
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# Let Your Dollars Be Patriots!

This war is a test of democratic government. It is also a trial of democracy as to its fitness to survive. A small group of autocrats within whose hands are the resources of Central Europe are attacking the principle of the right of people to govern themselves. Should the United States and its allies fail in this war, there will not remain on earth a people absolutely independent of the dictation of the Teutonic empires, organized for military efficiency and bent on using the efficiency for the purpose of forcing their will upon the world. Let the Teutons triumph and the world will not be a safe place for democracy, and to make it such a safe place is not only the expressed purpose of the United States in taking up the challenge of the Huns, but also the purpose of the other powers who took up the challenge when Germany sent it forth three years and a half ago, and who for three years and a half have borne the burden of the conflict.

For this reason **the present business of the United States is war**—war to exterminate organized unrighteousness and to establish peace among the nations of the world.

The government has perfected a plan which will enable all of our people, without exception, to take a definite part in winning the war.

One of the first great steps called for by the government is ***saving.*** The American people must cease to require all of the pleasant and comfortable luxuries which they consumed before the war, the production of which calls for the energy of millions of men and women. These men and women must devote themselves to the production of the things which are needed to win the war. This is the key to the present situation; it rests in the hands of the average man, woman and child in every state in the Union, by refraining from everything not absolutely necessary to health and efficiency, to release strong arms for the production of materials of war to support our army and navy.

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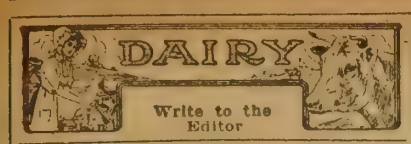
## Stamp Out Autocracy

**War Savings Committee for Washington**

DANIEL KELLEHER,
State Director, Seattle.

D. W. TWOHY,
Vice Chairman, Spokane.

(This Space Contributed by Standard Oil Co., Seattle)




A. B. NYSTROM, Editorial Contributor

# Dairy Efficiency

## System Must Be Used for Results

This is an age of efficiency everywhere. Never did the fittest survive and the less fit, in whatever line of life or industry, fall by the wayside any more certainly than today. This is just as true in the dairy business as elsewhere. Under the stress of present circumstances, none but the efficient dairy can pay wages and interest on investment. Therefore, increase your efficiency as a dairyman if you are in the business.

Study the feed problem. Don't feed merely what you have or what you can get most easily. Don't feed miscellaneous amounts of feed of miscellaneous characters.

Test your cows. You can not always tell from the appearance of the cow or the quantity or the appearance of her milk whether she is a real producer or not. If there is a testing association in reach of you, join it. If not, take a means of your own to determine exactly which cow is producing the butter fat and which is boarding at your expense.

Breed for better stock. Whether you intend to keep and raise the calf of your cow or not, select a sire exactly the same as if you did intend to raise the calf to maturity and add her to your herd. Some one will, and every drop of scrub dairy blood that is perpetuated in the community or county is just that much dead weight that the dairy industry must get rid of before its real efficiency can be attained.

Develop yourself. Remember that dairy cows are sensitive in many ways. They respond quickly to good or bad treatment, as readily to the one as to the other. Poor quarters, unwholesome or unpalatable feed, harsh treatment and the like reduce the production of those things for which the dairy is conducted. Work out these finer points and discover the difference between a dairyman and a keeper of cows.

# Dairy Questions

## Are Answered by A. B. Nystrom

Which do you consider the best feed for milch cows—potatoes or dried beet pulp, according to market values? I am feeding oat and vetch hay.

M. W. M., Chehalis.

I presume you refer to cull potatoes which would have a value of about $8 per ton. These could be used in small quantities from 15 to 20 pounds daily for feeding dairy cows when no other succulent is available. But potatoes are rather laxative to some cows and in all cases the butter is affected so that it is hard to churn and does not have the quality of grass butter. Dried beet pulp does not affect the cow in the same way, with reference to the butter, but it also is slightly laxative. I do not know the price of dried beet pulp at present, but I believe it is around $40 per ton. In that case a succulent feed made by soaking the dried beet pulp in about four times its weight of water would cost about $10 per ton. If you could dispose of your potatoes at $10 per ton I think it would be better to feed the beet pulp, rather than the potatoes. If the potatoes will bring a price very much under this it would be best to feed them. Cows do better on cooked potatoes, but the cost is usually prohibitive. Potatoes should always be cooked for hogs.

### Ration Needs Succulence.

Will you please tell me what it is most economical to feed from the following feeds at the prices quoted:

| | Per Ton. |
|---|---|
| Alfalfa | $24.00 |
| Bran | 30.00 |
| Shorts | 33.00 |
| Oat middlings | 33.50 |
| Ground barley | 58.00 |
| Alber's Carnation stock feed | 33.00 |
| Wheat straw | 14.00 |

Those are the feeds available at the present time, but I am in hopes to be able to get dried beet pulp a little later, but don't know at what prices. I will be glad to have the information.

E. L., Snohomish.

Using the feeds you have mentioned I would suggest that you give the cow almost as much alfalfa hay as she will clean up and from five to seven pounds of straw per day. As a grain ration mix equal parts by weight, of oat middlings and wheat bran, feeding this to the proportion of one pound of grain for each four pounds of milk produced. This ration is by no means perfect in that it does not contain succulence. If you get dried beet pulp at a reasonable price I would suggest that you soak some in four or five times its weight of water, and feed it to the cow as succulence. If it is not convenient for you to soak it you can get nearly as good results by feeding it dry with the grain ration. I do not know anything about the Albers Carnation stock food.

### Snoqualmie Cow Records.

The following are the 10 high butterfat cows of the Snoqualmie Valley Cow Testing association for the month of November, as reported by L. F. Champlin, official cow tester: Baldy, Guernsey, owned by F. Krouse, produced 1218 pounds of milk and 54.8 pounds of butterfat; 33, Jersey-Guernsey, owned by L. J. Clark, 1176 pounds milk, 54 pounds butterfat; 5, Holstein, owned by G. Barr, 1338 pounds milk, 52.1 pounds butterfat; Nellie, Holstein, owned by F. Krouse, 1473 pounds milk, 50 pounds butterfat; Queen, Durham-Jersey, owned by T. B. Lodean, 1185 pounds milk, 47.4 pounds butterfat; Toots, Jersey, owned by A. Chisholm, 1137 pounds milk, 46.6 pounds butterfat; Topsy, Jersey, owned by V. Hanson, 885 pounds milk, 45.1 pounds butterfat; Baxter, Ayrshire, owned by F. Krouse, 897 pounds milk, 44.8 pounds butterfat; Jane, Jersey-Holstein, owned by E. Boulch, 783 pounds milk, 44.6 pounds butterfat.

Four cows gave over 50 pounds butterfat, four cows gave over 45 pounds butterfat, and 14 cows gave over 40 pounds of butterfat.





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SPOKANE, WASH.



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Your cows will give 25% more milk on a silage ration than on dry feed with grain, and you can feed them much more cheaply on silage.

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Your dairy can be healthy and profitable with but little care and expense on your part—if you just exercise the same "first aid" principles as you would use in your own family. Do not wait until a cow is nonproductive; the intelligent use of Kow-Kure will prevent the diseases that sap her life and vigor.

Cows frequently need medical attention, and in most cases you can supply the need yourself with the aid of KOW-KURE—just as thousands of the best dairymen have been doing for over twenty-five years.

Kow-Kure has made many a poor milker profitable. Do you have a cow that is worth the expense of a package of Kow-Kure to prove for yourself what it will do? This well-known cow medicine has a positive action on the digestive and genital organs—a preventive of disease and a sure, quick remedy for such common cow ills as Abortion, Barrenness, Scouring, Lost Appetite and bunches. Used before and after calving, Kow-Kure is a sure preventive of milk fever and Retained Afterbirth.

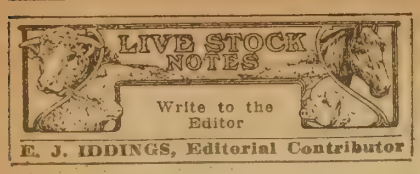
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E. J. IDDINGS, Editorial Contributor

# Good Winter for Sheep

By RAY W. FELTON.

"This mild winter weather is saving me a thousand dollars a day" says H. Stanley Coffin well-known Washington sheepman. "Our bands are scattered over a good many sections of Washington and up to this time we haven't fed a spear of hay to our range sheep. The grass is excellent and the sheep are wintering in fine shape. It has been years since we have experienced as favorable weather conditions as have prevailed this year."

While there are many ups and downs in the sheep business the years 1917 and 1918 promise to go down in history as record breakers for the woolgrowers of the northwest. Added to fancy wool prices and the consequent demand for stock even for the old "gummies," comes this grass-producing winter.

"I have just returned from our range in the Rattlesnake hills," remarked Fred Cleman, who, with his father, John Cleman, is engaged extensively in the sheep business in the Yakima valley. "What I saw there made me feel good. Green grass a-plenty and old ewes in as fine a condition as one could ever wish for. The green stuff has forced its way up so suddenly that it is well mixed with the tall dead grass, thereby making a green food and roughage combination that is hard to beat."

Sheep and cattle men laid in heavy supplies of hay last fall and not a few have experienced losses as a result of heavy rains and high water. Few of them worry over that, however, as they regard an ample supply of hay for winter feeding much as any business man would his insurance policy.

The plentiful supply of grass has weakened the hay market to a considerable extent.




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**Cutter's Blackleg Filtrate positively protects** against Blackleg.

**Cutter's Blackleg Aggressin,** made directly from animal tissues, **affords even greater protection.**

**Neither the Filtrate nor the Aggressin can possibly produce Blackleg** in even the most susceptible animals.

These products will probably never supplant Blackleg Vaccine. Still, under some conditions, they have advantages that should be known to every stockraiser.

**Write us for full information regarding them.**

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## Hog Feeding Problem.

To the Editor. The writer has been feeding a bunch of hogs for spring shipment and in order to save wheat, as we all should do, we have been feeding principally shorts, but some weeks ago one of them seemed to get stiff in all of its legs, and when helped up would squeal as in pain, and now there are others affected. Two of the best ones have died. They are all thrifty and look well and have made a good growth. A few days ago an old Iowa hog raiser told me it was feeding too much flour or wheat. I bought a ton of corn and ground it and am feeding this to the exclusion of wheat or shorts and after one week I can see an improvement in those hogs. I have been feeding stock food continuously. Other men who are feeding wheat only are having the same trouble. I am confident that a change of feed will bring relief. Feed liberally with salt in the slop and watch them grow and make pork to win the war. A. O. LEE.

Othello, Wash.

## Veterinary

Dr. S. B. Nelson

**Staggers**—Please give me the best remedy you know for staggers.

J. G. K

There are many different treatments advised for staggers. The word "staggers" as a disease means one thing to some people and another to others. As a general rule, however, it includes a disturbance of the circulation to the brain. One of the remedies advised for this trouble is to give the animal a thorough purge, either of one ounce of aloes and two drams of ginger made into a ball or a quart of raw linseed oil. Then follow this treatment for a week or 10 days with one dram of powdered potassium iodine given on the feed morning and evening.

**Warts**—I have a heifer that recently freshened which has seemed to grow warts on her teats almost over night. Have used every known treatment, but they return. They dry up and fall off about once a week after acquiring a growth of one-fourth to three-eights inch in length.

R. D. L., Yakima, Wash.

Supposing you try an internal treatment of giving to the heifer one-half ounce of Fowler's solution of arsenic, either on her feed or in a drink morning and evening for a while. If you use this treatment, which has proved very efficacious in a number of cases, you will have to cease using the milk for human consumption for a number of days during the treatment and a few days afterward.

We have a calf that has had fits for two months, and when it gets one of these it goes through anything. It has been cut several times in barb wire. Sometimes it has two or three fits a day. L. H., Viewpoint, Ore.

Fits, as you describe them as occurring in cows, are generally caused by overfeeding of the animals. Once in a while it is due to a brain trouble, but not so often as due to indigestion. I would, therefore, recommend that you take the calf off feed for a day or so, giving it plenty of water in the meantime. Give it about two to four ounces of castor oil, depending upon the size of it. Later, if you are feeding milk, add a little lime water to it, say about two to three ounces of lime water twice a day, if you feed it that often. Give it 10 grains of potassium iodine in about four ounces of water once daily for a few days.


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Every cow in the herd on test. Our herd is getting too large to give proper care, with present labor scarcity, so am forced to sell a few. Some of the best in the herd, now milking around 50 lbs., are for sale. Write for pedigree and prices. Ranch 7 miles south of Silverton, 12 miles east of Salem.

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under U. S. government control for health. No. T. B. or abortion ever in herd. A breeder for 15 years; high-class stock, for high production.

We offer you a bull that is O. K., guaranteed; sired by Oxford You'll Do Jr.; daughters producing ever 2 pounds b. f. per day. His dam, Morrow's Select 828 lbs., is the first tested daughter of Golden Glow's Chief. She was 5 weeks on fair circuit while on test and only dairyman's care when at home, otherwise she would have produced close to 1100 lbs. This bull is 2½ years old and solid color. We have a bull calf from this cow, otherwise would not sell. Priced right.

W. O. MORROW, Independence, Ore.

**Jersey Isle Stock Ranch**

Herd headed by Bright Light's Knight 103741, a line-bred Gamboge Knight-Combination. Castilian Lady 26628 made 603.3 lbs. fat (713.3 lbs. butter) and 11,530 lbs. milk in 11½ mos., and my herd has highest average test of 399.8 lbs. fat in Buhl Cow Testing association. Young stock for sale.

C. E. LONG, Buhl, Idaho.

**Every Cow a Record**

Fifty per cent of our cows that have dropped more than one calf have records above 700 lbs. butter, 85 per cent fat. Golden Glow's Chief and Adelaide of Beechlands blood predominates. Special prices on bull calves under 9 months old.

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**914 Pounds of Butter**

This is the official record for a year of the dam of a choice bull calf by Rosaire Olga Lad, sire of 29 tested daughters. He and others priced according to quality.

ED CARY, P. O., Carlton, Ore.
Station, LaFayette, Ore.

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FOR SALE—BULL CALVES sired by ST. MAWES OF ASHWOOD and out of daughters of HOLGER now making creditable Register of Merit records.

McARTHUR & STAUFF, Rickreall, Ore.

GOLDEN GLOW HERD
Winner of 1st and 2d prize in butter test, Oregon State Fair, 1917, (all breeds, 20 entries); breeder and owner of grand champion cow in show ring, 1916; breeder of grand champion cow, 1917. Breeder and owner of world's champion 3-year-old, with 1115 lbs. butter, 80 per cent fat. Every female a daughter, granddaughter or great granddaughter of Golden Glow's Chief, sire of 34; 14 over 700 lbs.; 32 over 600 lbs.
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**724 Pounds Butter**

and 11,076 pounds milk is the record the dam of a bull calf dropped Sept. 1, 1917. The sire, Dominus, is out of an 817-lb. cow and sired by a bull out of an 853-lb. cow. PRICE $125 for quick sale.

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In nearly 13 years we have yet to get our first poor heifer or dissatisfied customer. We have the best of the Golden Glow's Chief and St. Mawes strains, with the cross of our great Kentucky bull, Valentine's Ashburn Baronet.

J. M. DICKSON & SON, Shedd, Ore.

**Waikiki Farm**

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IRA P. WHITNEY, Manager.
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# Produce More Food Now Is Urgent Need

(Continued from page five.)

is reached. To my mind some of the nonessential industries of the country must certainly be dispensed with during the period of the war or else we are going to encounter disaster before it ends. For instance, I read an article in Collier's Weekly of recent date in which it was stated that 1,000,000 workers are now engaged in the production of automobiles and that 5,000,000 people were depending upon this industry for a living and support. I dare say that not more than 25 per cent of this effort is put forth in manufacturing vehicles that are essential to carrying on the industries of the country, and that it is a conservative statement to say that at least 75 per cent of this effort goes into the manufacture of vehicles which will be used for pleasure purposes only. A condition of this kind can not continue indefinitely without surely bringing disaster on the country, and it is certainly a foolish policy to take men who are engaged in essential production of foodstuffs and leave men in automobile factories manufacturing pleasure cars. To my mind nothing can be more absurd. The above illustration, of course, offers only one phase of the matter, and there are many more similar ones which might be cited. EUGENE BLACK."

**Situation Very Acute.**

Secretary Wilfrid Wheeler of the Massachusetts state board of agriculture indicates by his letter that the extreme northwest and the extreme northeast portions of the country are facing the same serious problem of increased food production:

"To the Editor: The telegram, copy of which you sent us under date of December 29, has been received, for which I thank you. I fully agree with the sentiments expressed therein. Our problem here is very similar to yours, and the conditions are even worse, owing to the fact that we are so near the manufacturing centers that practically all our labor has gone into the factories and munition plants. We are conducting at the present time a system to utilize the boy and young women labor on our farms, and hope in this way to supplement the farmers' already depleted labor stock so that we will get a fair production this year. But the situation is very acute, and you have not expressed it any too seriously, and I hope that your telegram will bring good results.

"WILFRID WHEELER."

**Serious Labor Situation.**

In his letter Andrew L. Felker, commissioner of the state department of agriculture of New Hampshire, writes:

"The market condition for labor is the most serious that he is confronting, and farming in this section or any other section of the country will not take its place among the industries which it is entitled to fill until the farmer can go into the market and buy his labor in competition with other industries on at least somewhere near an equal basis. Our farmers are finding it exceedingly hard to pay $60 to $80 per month for the labor which they are able to secure, and this in most cases is plus the keep of the man, which under present conditions is an added cost of $20 to $30 per month. By the increased use of modern machines, including tractors for motive power, and with a favorable season New Hampshire will do much better than she did one year ago, even while we face the labor shortage. We are assured of better seed, at fairly normal prices, than we used last year. There is a great conserving of farm manures for fertilizer and the better planning of the farm business. All these conditions seem to warrant us in saying that the New Hampshire farmer will be a winner in 1918."

Congressman Albert Johnson of Washington writes:

"To the Editor: On my return from the west I have had pleasure in reading your letter of January 1, with enclosures. I am heartily in favor of the best possible steps to promote increased farm production and shall be pleased to cooperate in the splendid effort along that line which you are making. ALBERT JOHNSON."


BEST IN THE LONG RUN

FAIR TREATMENT

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In the purchase of any product, experience dictates you put your buying faith in a standard brand. It safeguards you from deceiving appearances. Nowhere are appearances more deceiving than in tires; and your best protection is Goodrich, the name which for a half century has stood for the best in rubber.

Whether you need an automobile tire, large or small, a tire for your truck, motorcycle or bicycle, trust the trustworthy brand of Goodrich. You are sure of the service because it is a service proved the nation over by Goodrich Test Car Fleets. The teeth of the roads of the nation have gnawed at Goodrich Tires and the tires, fighting back, conquered with phenomenal mileage.

Get Goodrich pneumatic tires for automobiles, motorcycles, or bicycles, and get the greatest tire strength and mileage for your money.

Get Goodrich Truck Tires and you get truck tires that in actual test have outworn steel. Trust in the Goodrich brand, and you will save time and money, and gain comfort by it.

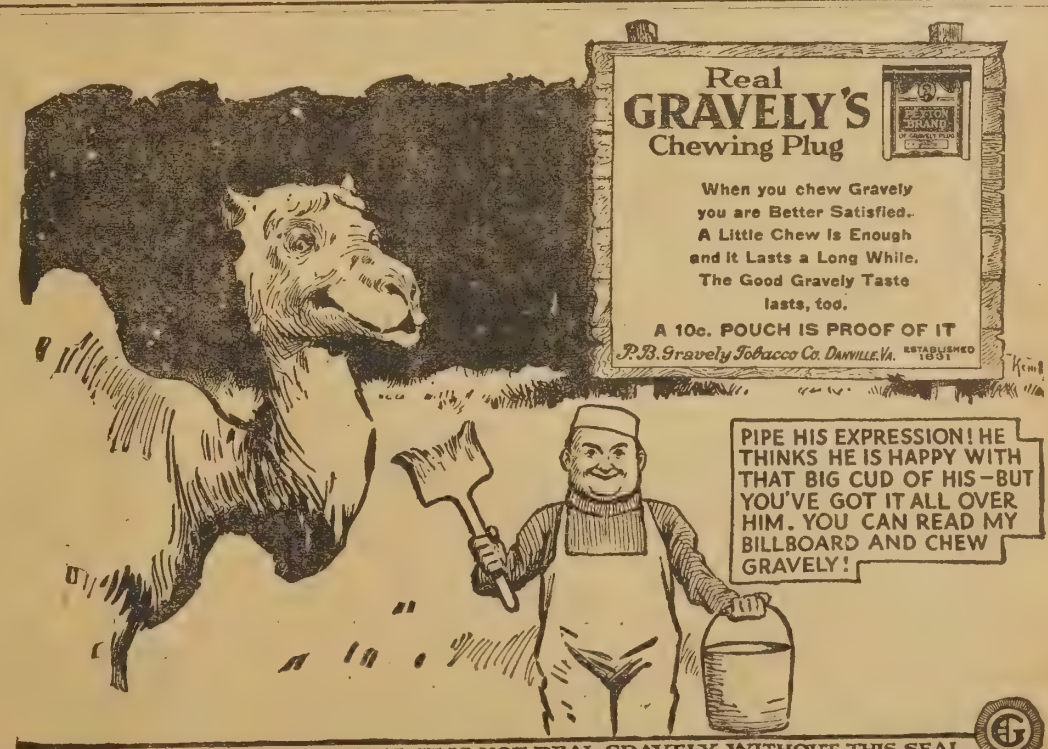
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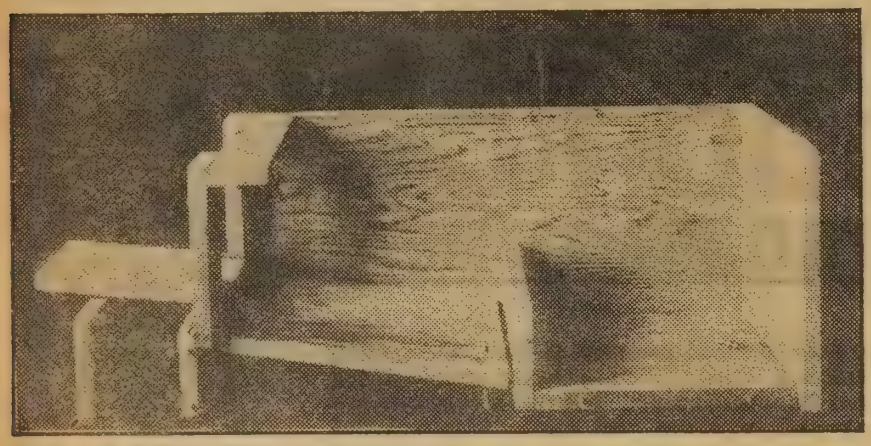
Write to the Editor

JAMES DRYDEN,
Editorial Contributor.

## Interest in Trapnests

To the Editor: Please give me directions for making trapnests. I have about three dozen hens and only get seven to 10 eggs a day. J. E. L.
St. Maries, Idaho.

Many requests are coming in for a description of a trapnest. These is an increased interest in trapnesting, and this is encouraging. The trapnest is the weapon to fight the Hun hen with. Poultrymen who are making a success of commercial poultry-keeping owe it very largely to the trapnest.



Oregon station trapnest with side removed to show construction.

The trapnest is not producing good layers, but it is identifying the good layers and spotting the bad layers. It gives the breeder the opportunity to make an intelligent selection of breeding stock and to take advantage of that powerful factor for improvement—heredity. The progressive poultry-keeper is letting heredity work for him. The trapnest picks out the best; the poultryman mates the best to the best, and heredity does the rest.

There are various kinds of trapnests. The one described herewith which is in use at the Oregon station, has given good results. It is accurate and simple in construction, requires no adjustment after the hen is relieved, and is in two compartments so that the hen after laying goes to the outer compartment to be released and is not so likely to stand on the eggs and break them. These are all good points in a good trapnest. But there may be others as good if not better that I am not informed of.

Inventers have not yet designed a trapnest that will obviate the necessity of an attendant releasing the hens after they lay and get their number. This is the only objection to the use of the trapnests. They require considerable labor and attention. Those who have the time to attend to them will find it pays as it is the best method, if not he only method of surely weeding out the poor layers and enabling the poultryman to increase the production of his flock by breeding from the best.

For a flock of 50 hens 10 to 12 nests will be sufficient. The nests have to be opened several times a day to release the hens. If not attended to often enough the nests may be all occupied at times and other hens will lay on the floor if they can not get into the nests.

The Oregon station trapnest can all be cut out of a board 10 feet long and 12 inches wide. The main point in making it is to adjust the door so that the weight of the hen when she walks into the nest will close the door behind her. Dimensions given are for a medium sized or small hen. For a large hen an inch or two should be added to the size.

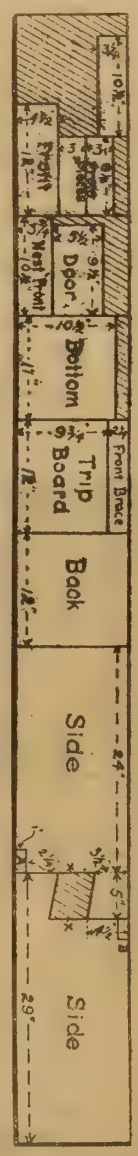
The material consists of:

One board 1 inch by 12 inches by 10 feet.

Six screw eyes, No. 210 Bright.

Two pieces of iron rod 3-16 inch by 12 inches.

Two pieces of rawhide 9 inches by one-half inch.




The diagram shows how the nest may be cut out of the board. The shaded portions are the waste pieces of the board. The solid black lines show where the board is to be cut. When cutting the sides apart it will be necessary to cut only as far as "X," then split the boards apart, after which cut out the required angle.

After nailing together, turn the nest on its side and bore the holes in the sides for the three sixteen-inch iron rod. The holes are one inch from the bottom and one and a quarter inch from the nest front.

On the bottom of the trip-board, put a screw eye seven-eighth inches from the end and one inch from each side. At the other end of the trip-board, bore three-eighth-inch holes, one inch from one end and three inches from each side.

On the bottom and at each side of the door put in a screw eye one and one-half inches from the end and three-fourths inch from the sides. On the upper side tack two rawhide strips, using a small staple or nail for each. The end of the strap will be two inches from the end and one-half inch from the side of the door.

Place the door in front of the trip-board, the screw eyes down; push the rawhide strips through the holes in the trip-board; turn the boards over and draw the strips up tight, then bend the door back over the trip-board until there is full three-fourths inch between the boards when laid flat; the strap should then be tacked to the lower side of the trip-board.

The door and trip-board are put in place by pushing the iron rods through the sides and the screw eyes.

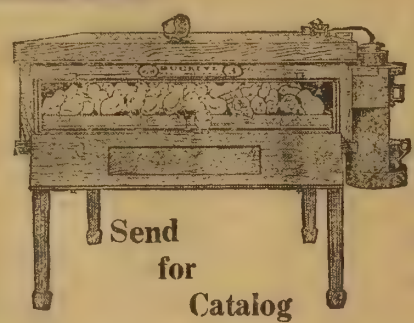
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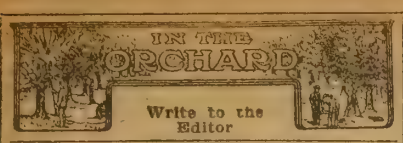
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**GRANVILLE LOWTHER,**
**Editorial Contributor.**

# No New Orchards

## Produce Food Quickest Way Now

There is a strong sentiment going around now to do no work this year where returns in the form of food are slow in coming. The idea is to conserve labor as much as possible for the immediate and urgent needs of war-time food production.

One specific recommendation that has been made by labor specialists is that no new orchards be planted this year, the argument being that it will be a number of years before food will result from the work done. This seems like a blow to the orchard industry, and arguments can be found both for and against the idea. But these are terrible times; more terrible than most of us realize, though we are beginning to wake up to the truth.

But one thing is certain: Orchards already planted must not be neglected. Whether they are in bearing or not yet old enough, they should be cared for thoroughly. If they are in bearing their crops should be increased as much as possible, both as to quantity and quality. Fruit is a valuable food.

### Survivor of Revolution.

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*Chilean Nitrate Committee*
**P. O. Box 248, Berkeley, Cal.**

## TRANSPLANT WITH CARE.

### Damage Often Occurs to the Tree.

Whether you are putting out a berry patch, a half dozen apple trees or a large commercial orchard, it is vital that the transplanting be done well and scientifically. The injury is twofold if a tree or shrub dies—the original cost and cost of labor is lost and the season passes with no tree or shrub growing.

Director W. S. Thornber of the extension department of the state college of Washington recommends that trees or shrubs be heeled in immediately after they are received if they are in good condition. If they are not in first-class condition he says that they should be covered all over, roots and tops, with moist earth for a few days before being set out. This is for the purpose of softening up all the tissue and bark of both roots and trunks so that they may be in shape to begin at once to perform their functions when transplanted.

Trees should never be cramped when set into the ground. Plenty of root space should be allowed. The roots should be allowed to rest firmly on the bottom of the hole and the earth well settled and packed about them as the hole is filled up.

## NO MORE WASTE.

### Byproducts Plants Life-Savers.

The last year has been the year of the byproducts plant. As never before in the history of the northwest, inferior grades of fruit have been converted into something very much worth while. The cull apple, not so very long ago considered hardly worth saving for feed except as the hogs could harvest them from the ground, has this year brought thousands of dollars to the producers, the products plant operator and the worker, and, what is even more important, has added greatly to the supply of foodstuffs at a time when foodstuffs are unusually in demand.

If the war does nothing else for this country it will have resulted in some good in the stimulation of the spirit of saving on the part of a shamefully wasteful people.

The coming season will, without doubt, see the conversion of more inferior fruits and vegetables into valuable food, and the salvage of more waste products in all forms, than any other season in the history of the United States.

## WOULD IMPORT RUSSIANS

### Beet Growers Want Enough Help

A largely attended meeting of formers at Sunnyside, Wash., recently went on record in favor of importing large numbers of Russian families for the purpose of relieving the labor shortage in that section, especially with regard to the beet crop. It is stated that 6000 acres of beets will be grown about Sunnyside the coming season, and definite plans are under way for the importation of labor of some kind.

### At the Editor's Desk.

"Soil Physics and Management," by J. G. Mosier and A. F. Gustafson and published by J. B. Lippincott company, Philadelphia, Pa., This is really a text book for students, and is most thorough and exhaustive in its treatment, from the origin of soils and the various agencies which have their part in making and affecting them, down to actual crop production. For those who wish to understand the theory of soil formation and the action of natural forces on soils, the book will be well adapted, but it is not intended for popular reading nor for those who are interested only in results and care nothing for causes. The book is founded on careful, accurate observation and study, and is well illustrated.

Howard Evarts Weed has recently issued a revised issue of Spraying for Profit, a booklet on this subject which puts in succinct form this chief method of fighting injurious insects and fungous diseases. It is clear and conveniently arranged. It is put out by the Horticultural Publishing Co., Caxton bldg., Cleveland, Ohio.

### Beans From Burma.

There was an increase in the exportation of beans, particularly to Great Britain, during 1916. In general, other agricultural products declined because of high freight rates or lack of tonnage. Great Britain took about $1,1000,000 worth of cotton—an increase of nearly 50 per cent; India took less than $300,000—a decrease of about 33 1-3 per cent; and Japan about $90,000—a decrease of about 40 per cent.




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There's an Avery Two-Row Motor Cultivator for doing your cultivating and other light traction and belt work.

Then you can get an Avery Plow and an Avery Thresher to fit any size tractor, and you have an equipment of Tractor Farming Machinery that will enable you to raise a larger crop at less expense and save it after you raise it.

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An easy foot-lift plow made in 1 or 2-bottom sizes. Extremely light in draft because the wheel control is correct. The rear wheel is not affected by any motion of the tongue, and the tongue is not crowded against the horses by the rear wheel. Does splendid work under all conditions. Equipped with either Moline chilled bases or Moline steel bottoms.



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A popular plow for hillside plowing or plowing irrigated land. To raise the bottom simply press a foot lever. Wheels run in the corner of the furrow and do not climb the furrow wall. The tongue always remains parallel with the furrow and does not crowd the horses. Hitch automatically shifts at the ends of the rows.



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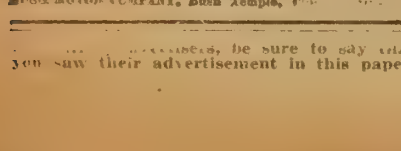
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# The Use of Lime

## Problem Should Be Well Studied

C. C. Farr, agriculturist for Snohomish county, delivered a most interesting address on the subject of lime and its scientific use at a meeting of fruit growers some time ago.

The generally admitted acidity of western Washington soils, Mr. Farr explained, to be due to the presence of much organic matter, or humus, whose gradual reduction produced humic acid, and also the leaching out of the soils of the various bases normally present. In the arid sections the salts liberated in various ways are less likely to be leached out, so that in eastern Washington, for instance, sodium, calcium and potassium are found in liberal quantities. Sometimes they are even too abundant, as the result of the gradual accumulation at lower levels of salts in solution, carried down in seepage water and deposited by evaporation. This is the origin of alkali soils and deposits, perhaps the most famous example of which is "Death valley," with its borax deposits.

"The three elements of soil fertility upon which most emphasis is placed," continued Mr. Farr, "are phosphorous, potassium and nitrogen. There are 10 elements altogether, upon which vegetable and animal life are dependent. All of these of course are found in the soil, but the three named are the ones most apt to be deficient in quantity. Calcium, the basic element in lime, you will notice is not mentioned among these three critical elements, because what may be called 'normal soil' contains sufficient lime. It is only where local conditions have caused the disappearance of lime from the soil that this trouble is encountered."

Lime, the speaker continued, might be called an "indirect fertilizer," because its action is largely locked up with that matter of the availability of other mineral elements. Available elements are those which, because of their solubility can be made use of in the plant economy. Sometimes availability is a disadvantage, as when it leaves quantities of easily leached plant food in the soil at the beginning of winter. This trouble is successfully dealt with by the use of catch crops, which seize the available plant food and build it into their tissues.

The matter of excessive alkalinity or acidity of soils was treated by Mr. Farr in connection with two points. First, the effect of these changes from normal on osmosis, or the drawing in of a thin solution by a thicker or heavier one. This is the method by which the juices in plants draw in their nourishment—their greater concentration enables them to draw in the soil water, bearing dissolved plant food. An excess of acid or alkali, by raising the weight or solid content of this soil water, makes it impossible for this process of absorption to proceed.

Acidity, in addition to this possible effect on osmosis, brings to bear upon the growing plant an actual toxic or poisonous effect. The relative tolerance of different plants to alkalinity and acidity must of course be taken into consideration, so that the mistake of heavily liming ground for potatoes, which can stand considerable acidity, will not be made.

"Whenever the presence of acidity in the soil has been determined," Mr. Farr told his audience, "the first step to take is to find the cause, and as far as possible to remedy it. This means drainage, for the bacteria whose by-products in the soil give rise to acidity, belong to those which must work in an air-free medium, and the air permeation which follows successful drainage, discourages their activity. In this connection, the practical question is often asked whether we can determine in advance just how much lime is needed to correct the acidity of the soil. I may say that at present there are several fairly accurate methods of doing this, two tests in particular worked out by investigators having done much to make liming less of a hit or miss operation than it used to be.

Touching briefly upon the effect of lime in counteracting the tendency of colloidal bodies to bind clay soils too firmly together, the agriculturist concluded by calling attention to the difference in calcium content in the various forms of lime on the market. Quick lime, he stated to contain about 40 pounds of calcium to 56 of other elements; hydrated lime, 40 of calcium to 60; and lime stone, 40 of calcium to 100. As calcium is the thing the farmer is really buying when he buys "lime" in any form, Mr. Farr advised those present always to figure out comparative prices on this basis. It is not how much "lime" you buy, but how much calcium you get for your money which really counts.

P. E. J


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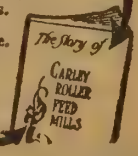



Carley Mill No. 8 Rolls 40 to 50 bushels of oats or 60 bushels of wheat or barley per hour

**Use 25 Per Cent Less Feed**

—by rolling your oats, corn, barley and wheat with a new improved Carley. Built for YOUR needs—7 different sizes. Nothing to get out of order. Sold under our Ironclad guarantee.

**Write today for Free Book**




**Colfax Iron Works,** Colfax, Wash. (Successors to Carley Bros.) Oldest-Largest Mfrs. of Feed Mills in West
703 S. Main St.


In answering advertisements please mention this paper.

# A MISHAP FOLLOWS FLO'S COQUETTISH INDULGENCE



Flora Flirt is feeling great,
So she's going out to skate.



Slowly gliding o'er the ice
Comes a youth who thinks she's nice.



Flo's roguish eyes and girlish laughter
Cause that young man to follow after.



Flora skates fast as she can,
Followed by that handsome man.




He pleads with her, "Oh, please be mine."
They never heed the danger sign.




With cries of terror, in a trice
They both have broken through the ice.
**The Moral**—Now, flirting girls, take this advice:
Don't go "skating on thin ice."

# Death to Strikers

## *This Is Way Germany Rules Labor*

The iron hand of the military authorities in Germany has come down with a death grip on the element in that country who, sick and tired of the war, have sought to bring it to an end by striking in the factories. A wholesale policy of death to those who refuse to work has been announced by the head of the military authority in Berlin.

It has been believed that a general strike in Berlin and other manufacturing cities, both in Germany and Austria, has been threatening, if it has not actually taken place. It was reported with some semblence of reliability that 700,000 workers, including some women, had gone on strike in the munitions factories of Berlin. A summary order was given that they return to work by Monday of this week, and the promise of death was made to those who defied the military authorities.

### Americans in the Fight.

Reports from Europe indicate that the American soldiers are getting into the actual battles more and more. It is estimated that nearly half a million troops from this country are now in Europe or on the way, preparing to enter vigorously into the war as soon as spring opens.

### Fight to Finish.

The allied war council has had a formal meeting to consider the peace terms recently outlined in the German parliament by Chancellor Hertling, and has reached a definite agreement to give the terms no further thought. They are held to be wholly unacceptable as a basis on which to discuss peace. The council is determined to carry the war on to a finish satisfactory to the allies' ideals of peace.

### Railroad Control.

Congress is likely to pass a measure soon requiring that the railroads return to private control within a specified time after the conclusion of the war. There has been a movement on the part of some to make the government control, now being exercised, permanent.

### Want War Council.

Though the heat of the controversy over United States war preparations has somewhat subsided, the fight for a central war council to oversee all the various phases of the conduct of the war on the part of the United States continues. President Wilson is opposed to such central council. Many senators and congressmen agree with him; many are anxious to have a council established.

# Stockmen to Meet

## Conference Planned for Spokane

February 21, 22 and 23 will be big days for the live stock producers of the northwest. On the first two days the annual northwest live stock conference will be held in Spokane and on the last day the annual purebred Shorthorn sale at the Spokane Union stockyards.

The conference will be for the purpose of threshing out the big problems of the industry and the program will contain addresses and discussions by some of the most noted men of America. Heading the program as announced is Duncan Marshall, minister of agriculture, Calgary, Alberta. Professor C. H. Eckles of the University of Missouri, recognized as one of the leading authorities on dairy cattle, will speak also. Other national and international figures will be present.

The following is the program just announced:

**Thursday.**

Address of welcome—Mayor Fassett of Spokane, Wash.

T. S. Lane, prseident chamber of commerce.

T. S. Griffith, president Spokane Interstate fair.

"How the Stockman Can Best Help to Win the War," by Charles Hebberd, food administrator for Washington.

"The County Agent's Work"—Professor O. D. Center, Oregon Agricultural college.

"The Bank and the Agriculturist"—R. A. Blanchard, Live Stock State bank, North Portland, Ore.

"Crop Production for the Livestock Farmer"—Professor George Severence, Washington State college.

Demonstration by packing house and address by E. R. Gentry, Chicago.

"Cooperative Shipping of Live Stock"—C. M. McAllister, Portland, Ore.

"The Future of Live Stock in the Northwest"—A. D. Dunn.

"The Conservation of Dairy Live Stock"—E. R. Brady, Satsop, Wash.

"Prospects for Live Stock Production"—Dean E. J. Iddings, University of Idaho.

"War-Time Feeding of Live Stock"—Professor W. T. McDonald, commissioner of live stock, British Columbia.

"Combating Some Common Diseases of Live Stock"—Dr. Otto Menig, Spokane.

Address—E. F. Benson, commissioner of agriculture, state of Washington.

**Friday.**

Shorthorn show at Spokane Union stockyards. All stockmen invited.

"The Dairy Cow"—Professor C. H. Eckles, University of Missouri, Columbia, Mo.

Address—T. W. Tomlinson, secretary American National Live Stock association, Denver, Col.

Address—Duncan Marshall, minsiter of agriculture, Calgary, Alta.

"Sheep"—William Hislop.

Demonstration by packing house.

Annual stockmen's dinner in the evening.

The committee in charge urges all those attending to ask their ticket agents for receipts for their fare so that the benefit of a reduced return fare can be had. All railroads are making the reduction.

### Just Plain Dog.

Sam was reading the paper, when suddenly he snorted and addressed Mrs. Sam:

"What tomfoolery, Maria! It says here that some idiot has actually paid a thousand guineas for a dog!"

"Well, my dear, those well-bred dogs are worth a lot of money, you know," answered his wife.

"Yes, of course, I know that. But a thousand guineas! Why, it's a good deal more than I'm worth myself."

"Ah, yes, Sam, but then some dogs are worth more than others, you see."


TELEGRAPHY SCHOOL

JENKINS INSTITUTE

Spokane Y. M. C. A.

For Young Men and Women

ENTER ANY TIME

Eddress Educational Secy Y. M. C. A. Spokane, Wash.

Study Power Farming at the Gas Engineering Short Course

given by the state college of Washington, Feb. 18 to March 9. Three weeks of practical instruction and work on gas tractors, motor trucks and farm gas engines. Tuition $5. For further information address

THE REGISTRAR.

State College of Washington

Pullman, Wash.




Men Mechanically Inclined, Your Services Are Needed.

NEVER before has the demand for Automobile, Tractor, Truck and Aeroplane motor Mechanics been so great. Your service is needed in the Army, driving and repairing Trucks and Ambulances; in the Aeroplane section repairing motors; on our farms using Tractors; besides, remember that this country has 4,000,000 Automobiles. Thousands of mechanics who formerly took care of them are in the Government service. Somebody must take their places. It is up to you to take the places in the garage, etc., of the men that must go. Realizing these conditions I have made preparation to train men to fill these important positions. The demand for men is here. I am ready to train them. If you are in the draft come here and be trained so that you can give a special service to your Country.

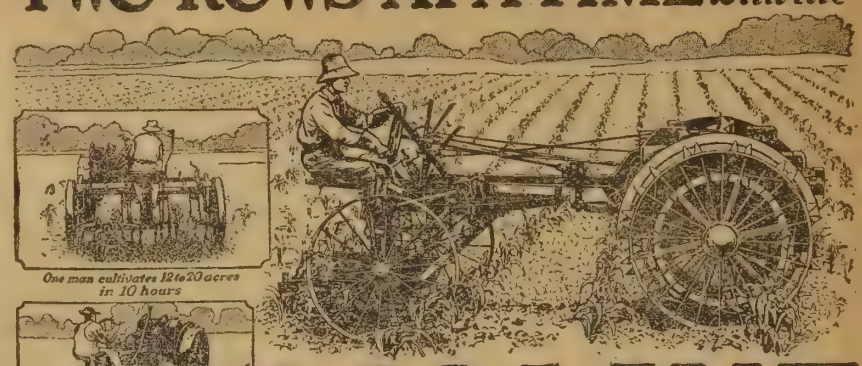
WRITE FOR FREE CATALOGUE.

I have written a catalogue that shows pictures of all departments and describes my school. I want you to have it. It will tell you how I teach the Automobile, Tractor business; open your eyes to the opportunities for splendid positions at good money. This Country must have trained Mechanics. Take advantage of present conditions, write for my free catalogue; it's a trip through the greatest school in the world. Today is the day of oppportunities, grasp them.



E. J. SWEENEY, Pres.,
Sweeney Automobile & Tractor School,
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ONE MAN CULTIVATES TWO ROWS AT A TIME with the



One man cultivates 12 to 20 acres in 10 hours

One man plows 5 to 8 acres in 10 hours

One man lists 12 to 20 acres in 10 hours

One man harvests 15 to 25 acres of grain in 10 hours

One man harvests 8 to 10 acres of corn in 10 hours

Equipped with rear carrying truck for odd jobs

MOLINE UNIVERSAL TRACTOR

"It Solves the Farm Help Problem"

More time is spent in cultivating than any other single operation. Sixty per cent of the crops grown on most farms are planted in rows which require cultivation.

If one man is to farm more land than ever before, he must also cultivate more. With the Moline-Universal Tractor one man cultivates two rows at a time and does it better, quicker and cheaper than with horses.

The Moline-Universal Tractor has ample clearance to straddle the corn row at all stages of growth. The operator sits on the cultivator in line with the right drive wheel of the tractor—not directly behind the tractor. This gives a clear view of the rows ahead. By keeping the right wheel of the Moline-Universal a certain distance from the outside row the whole outfit will go properly. For dodging individual hills the cultivator gangs are easily shifted by the operator's feet.

But cultivation is only one of all the farm operations which the Moline-Universal can do. It is light, but has more than enough power to pull two 14-in. plow bottoms, because all its weight is available for traction.

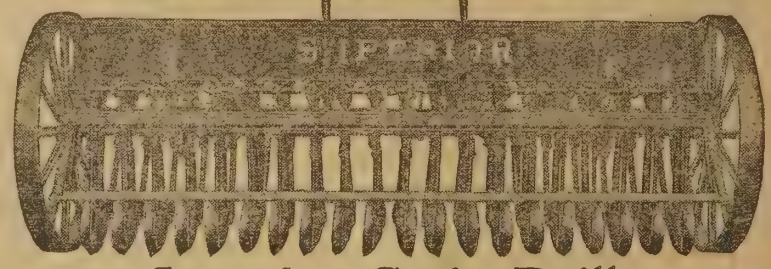
The Moline-Universal isn't the kind of a tractor that will do your plowing and seed bed preparation and then rest while your horses do the planting, cultivating and harvesting. It works to full capacity throughout the entire year with the greatest speed and economy.

Your Moline-Universal is ready now. Write today for further information and name of your nearest Moline dealer.

*Address Department 50*

MOLINE PLOW COMPANY, MOLINE, ILL.

PLANT for PROFIT




Superior Grain Drills

plant for profit, because every feed sows a measured quantity of seed; because the Superior does not skip, choke or bunch; because every furrow opener makes a perfect, roomy seed trench; because an equal amount of seed is sown in every furrow; because the seed is planted at an even depth. "Even Sowing Means Even Growing"—an evenly ripened crop.

The purchaser of a Superior Drill runs no risk whatever, because the warranty covers every vital point.

Superior Drills meet every seeding condition that confronts the northwest farmer. They are easy on both man and team. Light draft, great strength. Light running Disc Bearings that are guaranteed never to wear out. Positive Force Feeds, Hard-work Change Speed Disk Gear Drive, Furrow Openers that will work in any soil no matter how wet, sticky or dry. The Superior will stand right up to the work year in and year out, and satisfy the most particular farmers.

Send for The Superior Catalog. Read it. Note the warranty. Then go to your Implement Dealer and insist on seeing the SUPERIOR.

"The Name Tells a True Story."

The American Seeding-Machine Co., Springfield O.
INCORPORATED

HIDES
WOOL · PELTS
FURS · TALLOW

SHIP TO US
NO CARTAGE · NO COMMISSION
HIGHEST CASH PRICES PAID
PROMPT RETURNS · HONEST WEIGHT
WRITE FOR PRICE LIST AND SHIPPING TAGS
HIBBARD-STEWART CO. INC.
SEATTLE
BE SURE AND MENTION THIS PAPER

In answering advertisements please mention this paper.

# Farmers Must Win

## President Makes Vigorous Appeal

President Wilson told the farmers of America last week that the result of the war depended upon them. This declaration was made in a formal message to an agricultural conference meeting at Urbana, Illinois.

After outlining the diabolical conduct of Germany in her warfare against humanity, the president says:

"We are fighting, therefore, as truly for the liberty and self-government of the United States as if the war of our own revolution had to be fought over again, and every man in every business in the United States must know by this time that his whole future fortune lies in the balance. Our national life and our whole economic development will pass under the sinister influences of foreign control if we do not win. We must win, therefore, and we shall win. I need not ask you to pledge your lives and fortunes with those of the rest of the nation to the accomplishment of that great end.

"And let me say that the stimulation of the agencies I have enumerated has been responded to by the farmers in splendid fashion. I dare say that you are aware that the farmers of this country are as efficient as any other farmers in the world. They do not produce more per acre than the farmers in Europe. It is not necessary that they should do so. It would perhaps be bad economy for them to attempt it. But they do produce by two to three or four times more per man, per unit of labor and capital, than the farmers of any European country.

"They are more alert and use more labor saving devices than any other farmers in the world. And their response to the demands of the present emergency has been in every way remarkable.

"Last spring their planting exceeded by 12,000,000 acres the largest planting of any previous year, and the yields from the crops were record-breaking yields. In the fall of 1917 a wheat acreage of 42,170,000 was planted, which was 1,000,000 larger than for any preceding year, 3,000,000 greater than the next largest, and 7,000,000 greater than the preceding five years' average.

"But I ought to say to you that it is not only necessary that these achievements should be repeated, but that they should be exceeded. I know what this advice involves. It involves not only labor, but sacrifice, the painstaking application of every bit of scientific knowledge and every tested practice that is available. It means the utmost economy, even to the point where the pinch comes. It means the kind of concentration and self-sacrifice which is involved in the field of battle itself, where the object always looms greater than the individual. And yet the government will help and help in every way that it is possible.

"I will not appeal to you to continue and renew and increase your efforts. I do not believe that it is necessary to do so. I believe that you will do it without any word or appeal from me, because you understand as well as I do the needs and opportunities of this great hour when the fortunes of mankind everywhere seem about to be determined and when America has the greatest opportunity she has ever had to make good her own freedom and in making it good to lend a helping hand to men struggling for their freedom everywhere.

"You remember that it was farmers from whom came the first shots at Lexington, that set aflame the revolution that made America free. I hope and believe that the farmers of America will willingly and conspicuously stand by to win this war also.

"The toil, the intelligence, the energy, the foresight, the self-sacrifice and devotion of the farmers of America will, I believe, bring to a triumphant conclusion this great last war for the emancipation of men from the control of arbitrary government and the selfishness of class legislation and control and then, when the end has come, we may look each other in the face and be glad that we are Americans and have had the privilege to play such a part."

# May Furlough Labor

## Administration Considers Problem

In reply to a letter from Governor Capper of Kansas urging upon the administration the necessity of providing adequate labor for the farms this season, President Wilson says that congress now has before it a measure that would empower the war department to furlough drafted or enlisted men during the rush seasons of farm work. Here is the president's letter to Governor Capper:

"Under the new selective service regulations, under which the present classification of registrants is now proceeding in very specific terms in those regulations, it is provided that skilled farm laborers essential to the continued and undiminished operations of farms shall be deferred in class two. It is our present hope and belief that we shall be able to raise all the forces in immediate prospect without invading any deferred classification and therefore we can assume, I think, that future drafts will not interfere with the supply of skilled farmers.

**Would Furlough Selected Men.**

"I also had very prominently in mind the advisability of furloughing selected men during planting and harvesting time and to this end the war department has asked of congress authority to grant such furloughs without pay, whenever, in the opinion of the secretary of war the military situation justifies such a step. Of course, it is impossible to say in advance what the changing conditions of warfare may impose upon us, but I can assure you that, if this authority is granted by congress, we shall permit these furloughs whenever it is possible to do so.

"I take it that what I have said is precisely responsive to what you have in mind and I hope and believe that the various selection boards composed of men of your choice will exercise the authority to defer skilled farm labor in such a way as to meet the situation you present in the fullest way it could be met under our present circumstances."


THE GENUINE SMITH STUMP PULLERS
W. SMITH GRUBBER CO.
CATALOG FREE—DEPT. 23 LA CRESCENT, MINN.

IWAN POST HOLE AUGER
has sharp blades of the best steel. Fastest of all augers. For post holes and wells. Sizes 3 to 16 inches; 8 inch $2.25, freight extra.
Write for booklet about Iwan post hole diggers, sickle edge hay knives ($1.75 prepaid P.P. if dealer will not sell you), ditching spades, drain cleaners, tile hooks, chimney tops, etc.
IWAN BROS.
Dept. G, South Bend, Ind.
Show this advertisement to your dealer
With Straight Edge
Genuine Iwan Augers and hay knives wholesaled by: Whiton Hdw. Co., Seattle; Morse Hdw. Co., Bellingham; Hunt & Mottet Co., Tacoma; Holley-Mason Hdw. Co., Spokane, Wash.

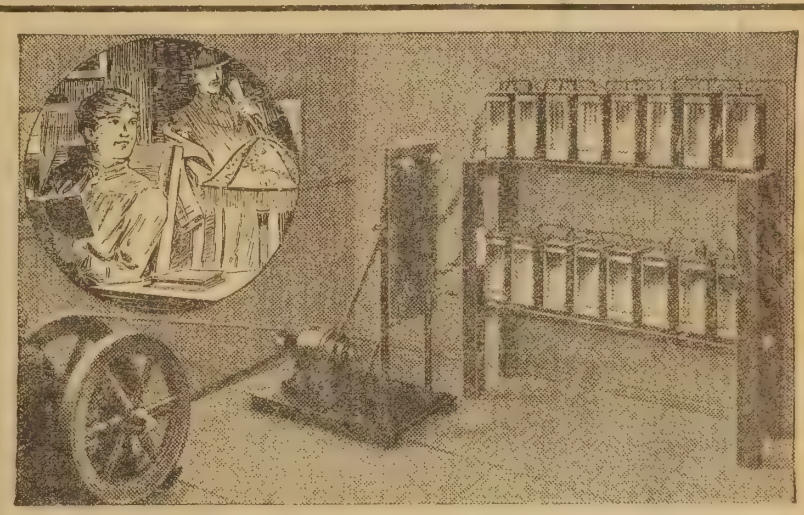
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has become so popular in its first three years that thousands have been called for to replace, on their old towers, other makes of mills, and to replace, at small cost, the gearing of the earlier Aermotors, making them self-oiling. Its enclosed motor keeps in the oil and keeps out dust and rain. The Splash Oiling System constantly floods every bearing with oil preventing wear and enabling the mill to pump in the lightest breeze. The oil supply is renewed once a year. Double Gears are used, each carrying half the load.
We make Gasoline Engines, Pumps, Tanks, Water Supply Goods and Steel Frame Saws.
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"Pumps for Every Service" is the title of our very latest book on farm pumps. Describes pumps for farm and water supply, irrigation, mechanical milking system and many other uses—one for every purpose and for every kind of power. Send for it. And ask our Service Dept. —free—to help you select the pump for your needs from the 300 styles and sizes of
GOULDS PUMPS
FOR EVERY SERVICE
Guaranteed. Backed by 69 years' pump-making experience. Write today to Department 45
The Goulds Mfg. Co.
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New York, Boston, Philadelphia, Chicago, Pittsburgh, Houston, Atlanta
Goulds Fig. 853
Goulds Fig. 1604 New Alert
Spokane Seed Co.
Distributors of Spray Pump Line
SPOKANE, WASH.

The Original Portable Drag Saw

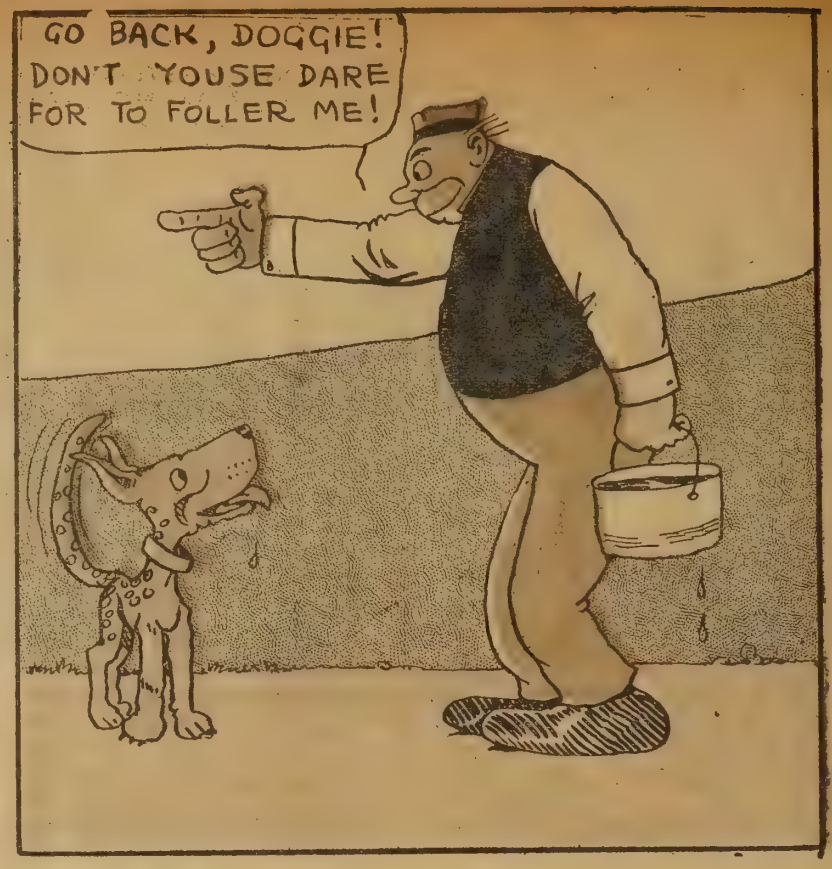
Vaughan's
4 h. p. Portable Drag Saw
WILL CUT 15 TO 20 CORDS OF WOOD IN 10 HOURS
Can be operated by one man. Two men can carry complete machine. 4 H. P. gasoline motor mounted on frame. One gallon gasoline required to cut 8 to 12 cords of wood. Engine can be used for other work without removing from frame. No gears, cogs, belts or pulleys. Friction clutch prevents breakage if saw pinches. Saw makes about 125 strokes per minute. Will cut any size log up to 6 feet. Sprockets and cranks, etc., made of cast steel. All working parts guaranteed against defects in material and workmanship.
Net cash price for complete machine as shown in cut, $150 f. o. b. Spokane and common points. FOR SALE BY
Washington Machinery & Supply Company
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CREAM WANTED
We Are Paying 53c Per Pound for Butter Fat, f. o. b. Spokane
Write us for our 1918 System's Calendars, both practical and useful for the cream shipper and for keeping all kinds of farm records. Mailed free by us.
Hazelwood Co., Ltd., Spokane, Wash.
Organized, 1890.


Read what this farmer says about his
Western Electric
Farm Light and Power Plant
"By all means buy a Western Electric plant. They are the largest electrical goods dealers in the country and their reputation is for very square, honest dealing, giving you good value for your money.
"I have a total of 35 lamps in my new home, barn and chicken house, and besides supply my old home 75 feet away with about 15 lamps.
"I have a pump in basement which draws water from a spring about 250 feet distant, and forces it into a tank in attic on third floor, a height of 35 feet. I pump, charge batteries and light lamps at the same time.
"The directions are simple and if read carefully a few times, can be easily understood. I knew nothing about running a plant when I put my plant in. I have not spent a cent for repairs to the battery, switchboard, wiring, generator, or any part of the plant the Western Electric Company furnished."
(Name of writer on request)
*There is a Western Electric Light Plant that will give you just the same kind of service. Find out about it now, and get electricity on your farm before winter is over. Mail the coupon to our nearest house.*
WESTERN ELECTRIC COMPANY
INCORPORATED
84 Marion Street, Seattle, Wash.
Portland, Oregon
41 & 43 Broadway, Salt Lake City
WESTERN ELECTRIC COMPANY:
Please send me illustrated booklet, No. WNF-2, "Brightening Up the Farm."
Name
P. O. Address
State

# UNLUCKY LOOIE ATTRACTS A LOST DOG



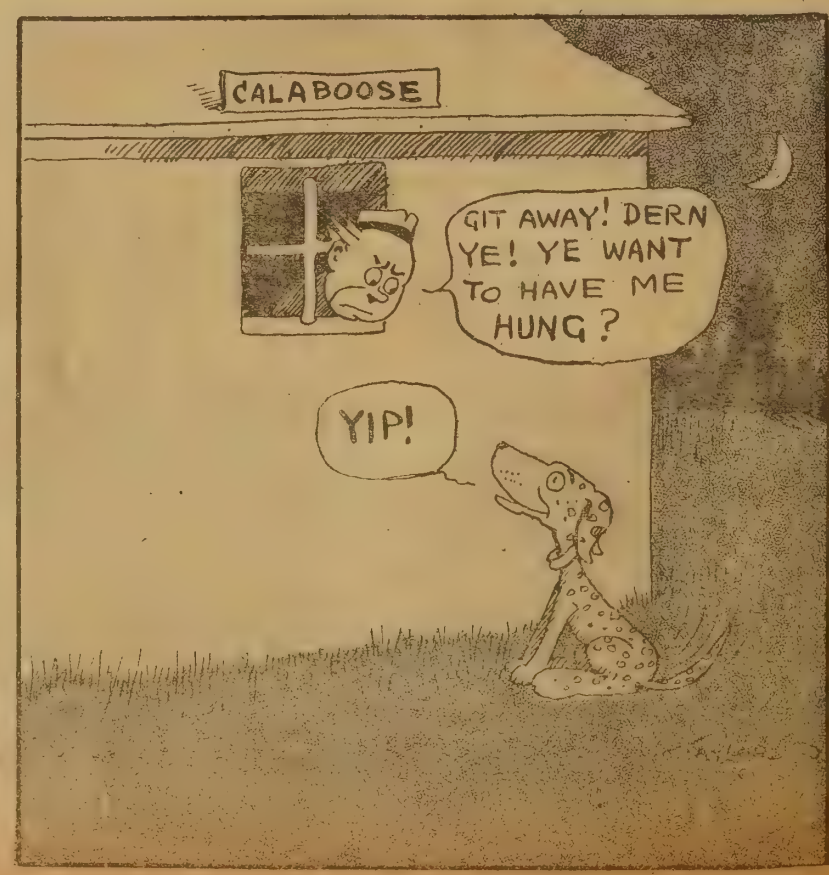












# Keep Posted About the War

The days we are living through now are among the most momentous in the history of the world. Our country is making preparations for war on such a gigantic scale that the effects are felt in every home throughout the land. Our sons, brothers and neighbors are marching in the military encampments. In a few months a million of our boys will be at the front. You and your family will want to keep in touch with the movements of the American armies. You will want to know where the boys from your home town are sent. You will want to know every detail of this great drama. You can not do better than subscribe for

## The Twice-a-Week Spokesman-Review

This is a splendid semi-weekly home newspaper which brings you every Tuesday and Friday a complete, accurate, condensed review of local, national and world events. It gives you a reliable narrative of history in the making. Being a member of the Associated Press, the important happenings are flashed to it instantly from every capital and village, and from every far-flung battle line.

We are very glad to be in a position to offer THE TWICE-A-WEEK SPOKESMAN-REVIEW at a big saving when taken in combination with THE WASHINGTON FARMER. It is a paper especially appropriate for our subscribers because it is a paper primarily designed for busy readers.

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**The Washington Farmer 3 Years, Both for $1.00**

These are days of high and rapidly rising costs in the publishing business. Clubbing offers are rare. This fact makes the clubbing proposition of The Twice-a-Week Spokesman-Review with your state farm paper especially noteworthy. Our advice is not to delay but to accept this liberal offer at once.

**Address orders to**

**The Washington Farmer**

**Review Bldg., Spokane, Wash.**

Feb. 7.

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**THE WASHINGTON FARMER, Spokane, Washington.**

Gentlemen:

I desire to take advantage of your special clubbing offer. Enclosed is $1 in full payment for one year's subscription to The Twice-a-Week Spokesman-Review and three year's subscription to THE WASHINGTON FARMER.

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# No Minors Allowed

By JOE L. ASHLOCK

PART II.

Some boys I knew many years ago when eastern Washington was in bunchgrass, homes far apart, and amusements few, got a bad start in life. For their bad start a certain "medicine" known as "bull bitters" was chiefly responsible.

We boys that went to town in those days went in quest of "excitement"; and we needed excitement worse than food.

There were no theaters, no city parks with bands playing, no picture shows—what a lot of us would have gone to town and come home sober if only there had been a "movie" to go to instead of a saloon! And there were no religious services till the Salvation Army came to town. When it did come the saloon crowd backslid in a bunch and went in for salvation, even Hop Lee, the town Chinaman, who cursed the bartender's yellow-eyed cat so luridly and in such wrath that the cat, lacking any one of its nine lives, would surely have been singed, scorched and incinerated!

But when the Salvation Army left town the saloon crowd, Hop Lee included, backslid again, hellward, this time, and all the kegs in town were dry at the spigot the next morning.

My mother had decided views on the liquor question. I told her one morning how Charley Blank went to a dance with me, and toward morning got so drunk on bull bitters that we had to take him out to the barn and put him to sleep in a horse blanket. Charley didn't want to let his mother know about his drinking. While we were bedding him down in the hay he wept drunkenly and swore that he would kill any one of us that ever let his mother know.

A little while after this Charley got drunk at another dance and tried to get to bed toward morning without awakening his mother. He stole into the house, took off his shoes at the foot of the stairs, and threw them to the landing at the top, where they banged against the door of his mother's bedroom. Aroused by the racket, she came out and by the light of the candle she had lighted beheld Charley trying to creep up the stairs in his stocking feet.

Hearing of these matters from me, mother told me that it was her desire that I should never touch liquor in any form; but that if I chose to do so against her will she would ask me not to play the sneak about it. She told me to buy my booze, bring it home, drink it at home, and sleep off my drunk behind the stove.

Her placing the proposition before me in that sportsmanlike way made me see the drinking bouts of my companions with new eyes. Booze, sellers of booze and consumers of booze stood before me in the same new light. The idea of deliberately buying a bottle of whisky, bringing it to my home, sitting down by the stove and drinking it all, then sleeping off my drunk behind the stove while mother poked wood into the stove to keep me warm was both ludicrous and repulsive. The very thought of such a thing eventually became to me actually nauseating.

The mental picture of myself in the performance of so disgusting a thing got into my mind in such a way that thereafter, whenever I saw a flat flask of whisky, or a tall, round quart—and I saw many—I immediately looked through the evil liquid and saw myself curled up behind the stove sleeping off the drunk I had acquired by consuming the contents of the bottle—with mother poking wood into the stove to keep me warm!

The mental picture of myself in this condition was so angering and so disgusting that I felt like smashing the bottle at once. This did not mean, however, that I had any "anti-saloon" predilections. Far from it! In fact, I had not grasped the meaning of the word "temperance" as applied to liquor reforms, and would not have been interested if I had.

I was simply in the position of one who, finding that a fly has been cooked in his favorite pudding, thereby loses his appetite for the pudding, though has no desire to keep others from eating their fill of it. The fly in the pudding was the picture of myself sleeping off a drunk with mother poking wood in the stove. Ugh! It makes me shudder yet to think of it.

Mother is dead now. She was sure before she died that I would not be a "drinking man." But she never knew how, by the picture she put in my mind, she shut off the possibility of my ever falling into the habit of drink, which I can see, as I look back, has laid a number of my boyhood companions in drunkard's graves; or, worse still, let them stagger on, pitied by some, loathed by others, and useless to all, including themselves.

Charley Hill started a candy store in our bunchgrass town in the early days. He kept his chocolates in fruit jars with the lids screwed fast on the rubbers. He had various other knicknacks and kickshaws, including a nickel-in-the-slot machine and variously colored and flavored pop—strawberry, lemon, vanilla, raspberry and ginger ale.

I bucked his slot machine for a royal flush one day, which nearly sent him into bankruptcy. I didn't care for his chocolates and cigars, but took kindly to the pop. My royal flush gave me 50 bottles of this at 10 cents a bottle. I didn't care to drink it all at once; nor did I care to call in a crowd to help drink it all at once, for he had less than 50 bottles on hand. So we agreed that I should use up two or three, maybe four bottles every time I came to town for the next couple of months.

My first taste of Charley's pop was a shock. I mistook its "bite" for the sting of whisky on an untanned palate. I asked Charley when he had gotten a license to sell booze. Charley, an extremist among the town "dries," who scarcely doffed his white ribbon long enough to go to bed, was offended at my question; but cooled off when he saw that I was merely ignorant of the right and harmless nature of pop.

It was my pop habit, I think, that ultimately got me tangled up with bull bitters—I failing to recognize in bull bitters the counterpart of the other enemy that came in small, flat flasks and tall quarts and conjured in my vision the picture of myself sleeping behind the stove with mother poking in wood while I slept off a drunk.

It was Charley Blank who discovered bull bitters to us. He bought it in black bottles holding a quart. It had a "bitey" taste, and was seasoned with herbs or roots of some sort. I know now, but did not then know that to all intents and purposes bull bitters was whisky in disguise; and it was not very good whisky, nor was it very well disguised.

Five or six of us used to gather in the shade of the town store on not Sunday afternoons, some from the harvest fields north, others from the stock ranges south. Bull bitters and pop went the rounds. Charley drank the bitters and made fun of the pop. Under the sting of his ridicule we of softer palates began to sip the bitters and took more as our mouths and palates got toughened to the sting of the fiery liquid.

Charley was a handsome young fellow with wavy, black hair, clean cut features, hard muscles, and quick wit when himself. Drunk or sober, he was the best horseman I have ever seen. He was gifted socially, and all the girls liked him. For a time he had "kept company" with the prettiest girl in all the bunch grass countryside, but a little while before the forming of our bull bitters club that met Sundays on the shady side of the town store, she had quite sensibly "given him the mitten" on account of his drinking.

On a Sunday afternoon I have in mind Charley consumed the better part of a quart of bull bitters, and was quarrelsome. His face was flushed, his eyes were unnaturally bright, and he used a wide range of bad language. Another of the boys, who was somewhat less freighted with bull bitters, took occasion to joke Charley about the throw-down the girl had given him. Charley, in a drunken way, began to abuse the girl and the joker, and his words stirred some bad temper amongst us.

I cut in presently with a remark which Charley resented. To tell the plain truth, my own share of the bull bitters had gotten pretty well to my head and temper—though I did not realize it. I was not thoroughly drunk. In the venacular of the bunchgrass, I was "three sheets to the wind and another a-floppin'."

One who drinks loses command of his head and temper before he loses command of his legs, usually. Just before his pins begin to wobble he imagines himself a regular Goliath, and usually can exert more than the normal of his strength for a couple of punches. Then he wilts. I was at about this point when I began to quarrel with Charley. He had reached and passed the wilting point.

I know now that I was considerably out of my normal self when Charley lurched up to me and called me a name which in our country was instantly followed by blows. Had I been in my right mind I likely would have waited till he was sober and then demanded a settlement. As it was, in a flash of temper I struck him.

I remember yet my feeling of dull astonishment at seeing Charley reel backward and crumple up under the blow. He fell in a sodden way, prone in the dirty street. Cursing thickly he rolled over on his side and tried to get up. He got on all fours like a dog, but his head sagged limply, and his efforts to rise ended in a spasmodic attempt which sent him sprawling with face sunk deeply in the dust. He rolled over on his side to get air, coughing and spitting the dust from his mouth. He tried to wipe his flushed, dust-streaked face with his hand, but the effort amounted to only a feeble waving of his hand near his face.

"You've hit a drunk man," sounded in my ears from a long way off, and then, "You're drunk yourself."

I told whoever spoke that he was a liar. Somebody laughed.

The bitters had taken possession of me, muscles and mind, all in a flash, following my scuffle with Charley. I knew that he who I had called a liar had spoken the truth. I was insanely angry at some one or something—just what I did not know. Some one laughed in an unpleasant way and said:

"Too much bull bitters!"

I wanted to get out of town at once, and asked where my pony was. A couple of fellows, one on each side, partly led and partly carried me to my horse, I suppose. Anyway, my next sensation was that of trying to keep a saddle under me, which wasn't easy. I rolled this way and that, like a ship at sea, and tried till sweat rolled from my face to regain control of my lost faculties.

There presently arose in my fog-stricken mind the conviction that some one had robbed me. With this came the great fear that the thief would escape. I vowed that I had been robbed, and told what all I would do to the thief, which was plenty.

There was more laughing, and the laughing made me surer than ever that some one had robbed me. The sinister words, "too much bull bitters," hammered in my mind with anvil blows, and each crash on the anvil was a shout that I had been robbed.

Wildly I felt in my pockets for the things which the thief had taken. Something was missing. Alternately I cowered in fear, and waxed mighty in wrath in the presence of imagined thieves. I knew I had been robbed of something.

Some one asked me what it was. I didn't know, but searched my pockets for the missing thing, thinking to find the stolen articles, and then exhibit them in proof of the fact that I had been robbed! There was more laughing; again the phrase "too much bull bitters," which in my ears was hell-sent proof that I had been robbed.

Now I understand it. I merely missed certain mental powers, and the control of my thinking and speech. My muscles were not pulling in their usual well-oiled grooves. Blighting as the breath of hell, the fiery alcoholic mist had risen to my brain and paralyzed it. The thief was bull bitters. The thing which had been taken away was myself.

My pony knew the way to the harvesting crew with which I was working that summer, and it was by his wits rather than by my own that I finally reached the outfit. Leaving the horse saddled in the barn lot I steered a rather devious course for a haystack about which were the beds of my harvest field companions, mine included. I walked, or staggered right over somebody's bed, and trod on the foot,

(Continued on page twenty-three.)

## SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

### How to Get Up and Dress the Physical Culture Way

Radiant eyes, a clear complexion, symmetry and grace and a cheerful disposition are possible of attainment by practically every person. A little attention to the muscles and the discreet use of odd moments considered of small importance alone often accomplish the results desired.



Dr. Hirshberg

If, with reluctance and a prayer unuttered, you arise in the morning with the wish that you had no need of daily bread or payment of war tax to recall you from a relapse into the land of nod, you should stretch yourself firmly on your back with hands above your head and your feet pressed upon the footboard. Then you will have taken a first step in physical training.

Thus outstretched, inhale deeply and deliberately 12 times. Without belts, straps, stays or corsets, you thus give vent to the bad air of the anatomy.

**Make Movements Count.**

The muscles of your back and those of the chest are thus given a morning tone, which may overcome much of the slovenly attitude of which part of the world speaks and you fail to notice in yourself.

Dr. Leonhard Fald of the committee of education in New York city maintains correctly that you should not turn over on your side and roll out of bed without regard to gymnastics. Not at all. Get some benefit out of every little ordinary movement.

Hold your hips with your hands; catch your toes at the bottom of the bed; sit up without the slightest aid from your hands. That's the way to train your physical self. Difficult, doubtless, at first, but it soon gives a glow of pleasure and purpose to the day's beginning.

So many muscles in the grown-up human have become flabby, fat-ridden and almost useless that it requires just such simple exercise as these to train them into symmetry.

**Getting Most Benefit.**

As you lie prone on your bed, force yourself day by day to rise to a sitting posture by the strength of the abdominal muscles. Elevate the legs with the knees bent until the legs are at right angles to the body.

Straighten the legs now and point the toes toward the ceiling and then allow the legs to sink unbent to the bed. This is extremely difficult at first, and there may be a tremor from the strain, but after some practice this will disappear and then the manoeuvre can be carried out with success.

Do not hunch your back when you put on your stockings. Hold firm, lie on your back, rise your knee to your chest and pull on the stocking.

To put on your shoes, stand in an upright position in your stocking feet. Raise the foot and balance on the other one as you slip on the shoe. This is no easy method. It calls for purpose, persistence and practice—three important P's.

The way to lace your shoes, yet help your muscles and cords, is to kneel on one knee as you lace the shoe on the other foot. Bend the knee until your body almost touches your foot, but do not bend the spine. Move the leg backward, kneel on the other knee and then lace the other shoe.

These movements are done slovenly, carelessly and with no purpose by most people. Yet they can be converted into helpful physical culture exercises if daily carried out as here suggested.

# All the World's a Stage, and All the Men and Women Merely Players

## Getting Milk to Babies



—Copyrighted by International Film Service.

Due to the terrific snowstorms that have hit Chicago, the streets became impassable for wheeled vehicles and milkmen could not make the daily rounds. Frank Clements, owner of a team of reindeer, succeeded in delivering milk to many kiddies who would otherwise have had to go without.

## Bundles of Sisal Leaves



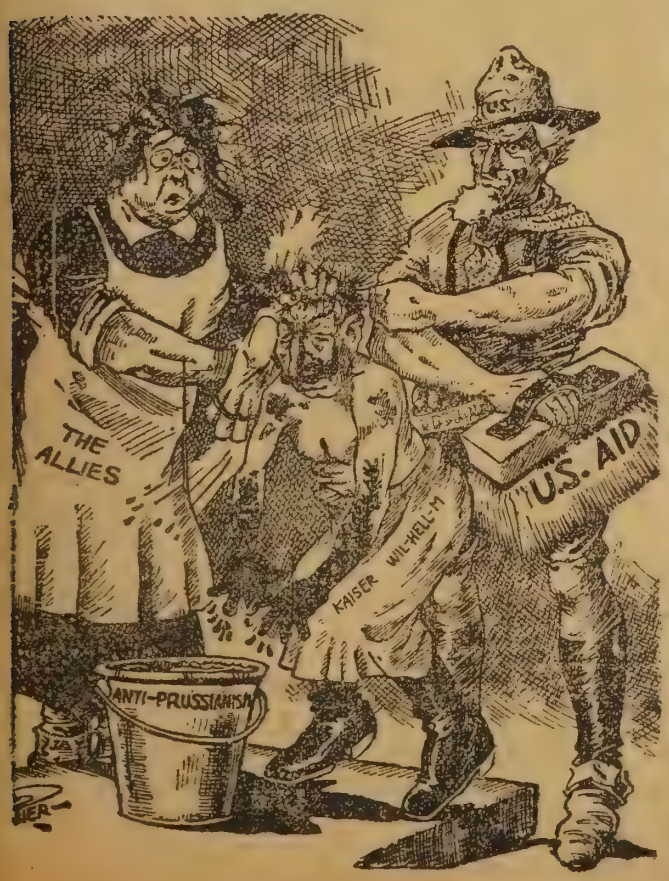
Mexico is the home of the sisal fiber industry. In Yucatan the sisal plant is grown on large plantations embracing thousands of acres and supplying nearly all the fiber used in harvesting the crops of the world. Manila fiber is procured from the Philippine islands, which supply about 15 per cent of the fiber used in the manufacture of binder twine. This photograph is taken from "Harvest Scenes of the World," issued by the service bureau of the International Harvester company.

## Filming World's Greatest Drama



Sergeant Leon H. Caverly, United States marine corps, a "movie" camera man of Uncle Sam's fighting forces in France, is shown photographing our participation in the great war, for the nation's archives. These men daily risk their lives recording the world's greatest drama for future generations. Enemy soldiers spot him with powerful glasses and because they fear his records, train their guns on him. The moving pictures have been used in a new way as a result of the European war in the production of actual fighting scenes. While they are not half so thrilling and spectacular as the pictured sham battles of previous years, they have had a tremendous grip on the imagination and are expected to be of ultimate use to the various movements organized throughout the world to prevent wars in the years to come.

## "The Worst Is Yet to Come!"




—Los Angeles Times.

## Soldiers Near Front Attend Divine Services



—Copyrighted by International Film Service.

Even in the midst of ruin the minds of French soldiers turn to religion and spiritual thoughts that were once commonplaces of a peaceful civilization. This photograph, taken near the western front, shows the gallant poilus leaving the cathedral of Rombercourt after service.



# THE BARRIER



By REX BEACH

Author of "The Spoilers," "The Ne'er-Do-Well," "The Silver Horde," etc.

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## CHAPTER XIX.

### The Call of the Oreads.

There was mingled rejoicing and lamentation in the household of John Gale this afternoon. Molly and Johnny were in the throes of an overwhelming sorrow, the noise of which might be heard from the barracks to the Indian village. They were sparing of tears as a rule, but when they did give way to woe they published it abroad, yelling with utter abandon, their black eyes puckered up, their mouths distended into squares, from which came such a measure of sound as to rack the ears and burden the air heavily with sadness. Poleon was going away. Their own particular Poleon. Something was badly asked in the general scheme of affairs to permit of such a thing, and they manifested their grief so loudly that Burrell, who knew nothing of Doret's intention, sought them out and tried to ascertain the cause of it. They had found the French-Canadian at the river with their father, loading his canoe; and they had asked him whither he fared. When the meaning of his words struck home they looked at each other in dismay, then, bred as they were to mask emotion, they joined hands and trudged silently back up the bank with filling eyes and chins a-quiver until they gained the rear of the house. Here they sat down all forlorn, and began to weep bitterly and in an ascending crescendo.

"What's the matter with you tikes, anyhow?" inquired the lieutenant. He had always filled them with a speechless awe, and at his unexpected appearance they began the slow and painful process of swallowing their grief. He was a nice man, they had both agreed long ago, and very splendid to the eye, but he was nothing like Poleon, who was one of them, only somewhat bigger.

"Come, now! Tell me all about it," the soldier insisted. "Has something happened to the three-legged puppy?"

Molly denied the occurrence of any such catastrophe.

"Then you've lost the little shiny rifle that shoots with air?" But Johnny dispelled this horrible suspicion by drawing the formidable weapon out of the grass behind him.

"Well, there isn't anything else bad enough to cause all this outlay of anguish. Can't I help you out?"

"Poleon!" they wailed, in unison.

"Exactly! What about him?"

"He's goin' away!" said Johnny.

"He's goin' away!" echoed Molly.

"Now, that's too bad, of course," the young man assented; "but think what nice things he'll bring you when he comes back."

"He ain't comin' back!" announced the pair, with the tone that conveys a sorrow unspeakable.

"He ain't comin' back!" wailed the little girl, and, being a woman, yielded again to her weakness, unashamed.

Burrell tried to extract a more detailed explanation, but this was as far as their knowledge ran. So he sought out the Canadian, and found him with Gale in the store, a scanty pile of food and ammunition on the counter between them.

"Poleon," said he, "you're not going away?"

"Yes," said Doret. "I'm takin' li'l' trip."

"But when are young coming back?"

The man shrugged his shoulders.

"Dat's hard t'ing for telling'. I'm res'less in my heart, so I'm goin' travel some. I ain' never pass on de back trail yet, so I 'spect I keep goin'."

"Oh, but you can't!" cried Burrell. "I—I—" He paused awkwardly, while down the breeze came the lament of the two little Gales. "Well, I feel just as they do." He motioned in the direction of the sound. "I wanted you for a friend, Doret; I hate to lose you."

"I ain' never got my satisfy yet, so I'm pass on—all de tam' pass on. Mebbe dis trip I fin' de place."

"I'm sorry—because—well, I'm a selfish sort of cuss—and—" Burrell pulled up blushingly, with a strong man's display of shame at his own emotion. "I owe all my happiness to you, old man. I can't thank you—neither of us can—e shall never live long enough for that, but you mustn't go without knowing that I feel more than I'll ever have words to say."

He was making it very hard for the Frenchman, whose eart was aching already with a dull, unending pain. Poleon had hoped to get away quietly; his heart was too heavy to let him face Necia or this man, and run the risk of their reading his secret, so a plaintive wrinkle gathered between his eyes that grew into a smile. And then, as if he were not tried sufficiently, the girl herself came flying in.

"What's this I hear?" she cried. "Alluna tells me—' She saw the telltale pile on the counter, and her face grew white. "Then it's true! Oh, Poleon?"

He smiled, and spoke cheerily. "Yes, I been t'inkin' 'bout dis trip long tam'."

"When are you coming back?"

"Wal, if I fin' dat new place w'at I'm lookin' for I don' never come back. You people was good frien' to me, but I'm kin' of shif'less feller, you know. Mebbe I forget all 'bout Flambeau, an' stop on my 'New Countree'—you never can tol' w'at dose Franchemans goin' do."

"It's the wander-lust," murmured Burrell to himself; "he'll never rest."

"What a child you are!" cried Necia, half angrily. "Can't you conquer that roving spirit and settle down like a man?" She laid her hand on his arm appealingly. "Haven't I told you there isn't any 'far country'? Haven't I told you that this path leads only to hardshi pand suffering and danger? The land you are looking for is there"—she touched his breast—"so why don't you stay in Flambeau and let us help you to find it?"

He was deeply grateful for her blindness, and yet it hurt him so that his great heart was nigh to bursting. Why couldn't she see the endless, hopeless yearning that consumed him, and know that if he stayed in sight and touch of her it would be like a living death? Perhaps, then, she would have given over urging him to do what he longed to do, and let him go on that search he knew was hopeless, and in which he had no joy. But she did not see; she would never see. He laughed aloud, for all the world as if the sun were bright and the fret for adventure were still keen in him, then, picking up his bundle, said:

"Dere's no use argue wit' Canayen man. Mebbe some day I come paddle back roun' de ben' down yonder, an' you hear me singin' dose chanson; but now de day she's too fine, de river she's laugh too loud, an' de birds she's sing too purty for Francheman to stop on shore. Ba gosh, I'm glad!" He began to hum, and they heard him singing all the way down to the river bank, as if the spirit of Youth and Hope and Gladness were not dead within him.

"Chante, rossignol, chante!
Toi qui a de coeur gai;
Tu as le coeur a rire
Mai j' l' ai-ta pleurer,
Il y a longtemps que j' t'aime
Jamais je ne t'outblierai."

A moment later they heard him expostulating with some one at the water's edge, and then a child's treble rose on high.

"No, no! I'm goin', too; I'm goin', too-o-o-o—"

"Hey! John Gale!" called Poleon. "Come 'ere! Ba gosh! You better horry, too! I can't hol' dis feller long."

When they appeared on the bank above him, he continued, "Look 'ere w'at I fin' on my batteau," and held up the wriggling form of Johnny Gale. "He's stow hisse'f away onder dem blanket. Sacre! He's bad feller, dis man—don' pay for hees ticket at all; he reg'lar toff mug."

"Sing, little bird, oh, sing away!
You with the voice so light and gay!
Yours is a heart that laughter cheers,
Mine is a heart that's full of tears.

Long have I loved, I love her yet!
Leave her I can, but not forget."

"I want to go 'long!" yelled the incorrigible stowaway. He had brought his gun with him, and this weapon, peeping forth from under Poleon's blanket, had betrayed him. "I want to go 'long!" shrieked the little man. "I like you best of all!" At which Doret took him in his arms and hugged him fiercely.

"Wal, I guess you don't t'ink 'bout dem beeg black bear at night, eh?" But this only awoke a keener distress in the junior Gale.

"Oh, maybe de bear will get you, Poleon! Let me go 'long, and I'll keep dem off. Two men is better dan one—please, Poleon!"

It took the efforts of Necia and the trader combined to tear the lad from the Frenchman, and even then the foul deed was accomplished only at the cost of such wild acclaim and evidence of undying sorrow that little Molly came hurrying from the house, her round face stained and tearful, her mouth an inverted crescent. She had gone to the lame puppy for comfort, and now strangled him absent-mindedly in her arms, clutching him to her breast so tightly that his tongue lolled out and his three legs protruded stiffly, pawing an aimless pantomime. When Johnny found that no hope remained he quelled his demonstrations of emotion and, as befitted a stout-hearted gentleman of the woods, bore a final present to his friend. He took the little air-gun and gave it into Poleon's hands against that black night when the bears would come, and no man ever made a greater sacrifice. Doret picked him up by the elbows and kissed him again and again, then set him down gently, at which Molly scrambled forward, and without word or presentation speech gave him her heart's first treasure. She held out the three-legged puppy, for a gun and a dog should ever go together; then, being of the womankind aforesaid, she began to cry as she kissed her pet goodby on its cold, wet nose.

"W'at's dis?" said Poleon, and his voice quavered, for these childish fingers tore at his heart-strings terribly.

"He's a very brave doggie," said the little girl. "He will scare de bears away!" And then she became dissolved in tears at the anguish her offering cost her.

Doret caressed her as he had her brother, then placed the puppy carefully upon the blankets in the canoe, where it wagged a grateful and amiable stump at him and regained its breath. It was the highest proof of Molly's affection for her Poleon that she kept her tear-stained eyes fixed upon the dog as long as it was visible.

The time had come for the last goodby—that awkward moment when human hearts are full and spoken words are empty. Burrell gripped the Frenchman's hand. He was grateful, but he did not know.

"Good luck and better hunting!" he said. "A heavy purse and a light heart for you always, Poleon. I have learned to love you."

"I want you to be good husban', M'sieu'. Dat's de bes' t'ing I can wish for you."

Gale spoke to him in patois, and all he said was: "May you not forget, my son."

They did not look into each other's eyes; there was no need. The old man stooped, and, taking both his children by the hand, walked slowly toward the house.

"Dis tam I'll fin' it for sure," smiled Poleon to Necia.

Her eyes were shining through the tears, and she whispered, fervently:

"I hope so, brother. God love you—always."

It was grief at losing a playmate, a dear and well-beloved companion. He knew it well, and he was glad now that he had never said a word of love to her. It added to his pain, but it lightened hers, and that had ever been his wish. He gazed on her for a long moment, taking in that blessed image which would ever live with him—in his eyes was the light of a love as pure and clean as ever any maid had seen, and in his heart a sorrow that would never cease.

"Good-bye, li'l gal," he said, then dropped her hand and entered his canoe. With one great stroke he drove it out and into the flood, then headed away towards the mists and colors of the distant hills, where the Oreads

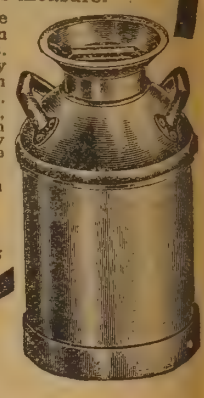

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were calling to him. He turned for one last look, and flung his paddle high; then, fearing lest they might see the tears that came at last unhindered, he began to sing:

"Chante, rossignol, chante!
Toi qui a le coeur gai;
Tu as le couer a rire
Mai j' l' ai-t-a pleurer.

He sang long and lustily, keeping time to the dip of his flashing paddle and defying his bursting heart. After all, was he not a voyageur, and life but a song and a tear, and then a dream or two?

"I wish I might have known him better," sighed Meade Burrell, as he watched the receding form of the boatman.

"You would have loved him as we do," said Necia, "and you would have missed him as we will."

"I hope some time he will be happy."

"As happy as you, my soldier?"

"Yes; but that he can never be," said her husband, "for no man could love as I love you."

"Yours is a heart that laughter cheers,
Mine is a heart that's full of tears.
Long have I loved, I love here yet;
Leave her I can, but not forget—"

came the voice of the singer far down the stream.

And thus Poleon of the Great Heart went away.

The End.

## No Minors Allowed

(Continued from page twenty.)

stomach or head of the sleeping occupant who awoke with a yell and wanted to know where the devil I was walking.

From somebody else's disturbed bed came the sleepy ejaculation, "He's all lit up!"

Being "lit up" in a harvest crew late Sunday night explained away a multitude of sins. So the fellow on whose foot, stomach or head I had walked did not follow me to execute vengeance.

By a sort of animal instinct I knew where my bed was, and headed for it, rounding, or trying to round the corner of the haystack in my course. At the turn I lost my balance and nearly pitched into the dust. Right in my path stood a tall, heavily stooled wheat plant which somehow the harvesters had missed.

Clutching the air to regain my balance, my hand found the wheat straws, and there I stood, reeling slightly from side to side, clutching a straw to make up the deficiency in my legs.

A cool breath of night air fanned my feverish, sweating face as I stood there. It revived me somewhat—seemed to blow back into my head certain mental powers that had strayed away. I found myself standing there, clutching the wheat straw, with the cool wind in my face—and the humor of it all struck me. I laughed. Up there in the pale sky was the round harvest moon and I looked up at it, laughed, and called it a fool for shining that way. Then I bethought myself of bed, and let go of my straw.

## Sidelights

**Wrong and Right.**

Teacher—Tommy, spell "wrong."
Tommy—"R-o-n-g."
Teacher—That's wrong."
Tommy—That's what you asked me to spell."

**His Viewpoint.**

"They have four bathrooms in their new house and——"

"Why—gol-ram it!—there ain't no four Saturday nights in one week!" astoundedly exclaimed Jason Greenhaw.—Wroe's Writings.

**Hurry Up, Please.**

Young Hopeful (to his sister): "I say Nell, pass me the butter."

Nell (in a tone of sisterly reproach): "If what, Johnny?"

Johnny (goaded to desperation by the delay): "If you can reach it."

**Eunice Knew How.**

Little Eunice was attending her first class in domestic science, and was asked to tell briefly the surest way to keep milk from souring. And Eunice, who was an exceedingly practical child, gave this recipe: "Leave it in the cow."

**The Stake Holder.**

Jack (pushing into papa's room): "Papa, the coffee pot and the kettle are singing."

Papa: "Nothing strange about that, my boy."

Jack: "But they are singing for a wager."

Papa: "Nonsense!"

Jack: "But I can prove it."

Papa: "How?"

Jack: "Because the frying pan is in the middle holding the steaks!"



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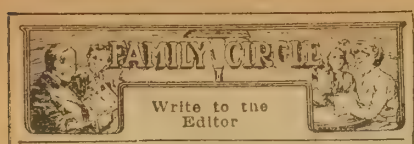
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ALICE W. BARLAND,
Editorial Contributor.

# Making Over Clothes

Both muslin and knitted underwear may be cut over if it has not been too much worn. There is not much wear on the ruffle of a woman's cotton petticoat and this will often make the whole skirt for a child. A good quality of lace or embroidery nearly always wears longer than the garment and may be used on another.

Knitted underwear may be cut down for both boys and girls. Seams should be made as flat as possible and the



**"Footing" stockings. This method doubles the lifetime of a pair of hose.**

neck, bottom, wrists and arms' eyes may be finished first by stitching on the machine, back-stitching or binding. A shell crochet or a blanket

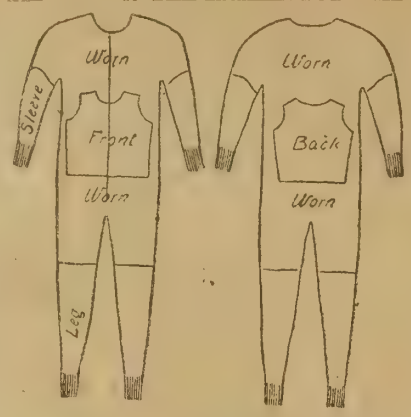


**Baby overalls. By sewing the tops of stockings together, overalls to draw over the baby's underclothes may be made.**

stitch may then be used as a final finish. This is easier than making a hem.

**Save the Stockings.**

Hose should never be thrown away, because the feet are worn out. New feet may be cut from old uppers. Tops of old stockings may be used to reenforce tops of new ones. One ingenious mother sews the tops of two stockings together and draws them on her creeping baby. In this way the underclothing is kept clean much longer. The closely woven tops of father's or big brother's socks make




**Union suit for the children. Father's and mother's may often be made over for the little people.**

splendid wristlets for the small folk when skating is good. The folded leg of a long stocking makes a first rate holder for use in the kitchen. Fold in to the desired size and shape, overcast about the edge or even buttonhole it and then quilt a few times and you will have a useful article.

# Oatmeal Dishes

Oatmeal makes delicious puddings and other good things and is even better fixed up for dinner or supper than as a breakfast food, according to a leaflet issued by the United States food administration.

To cook oatmeal stir slowly two and one-half cups of rolled oats into five cups of boiling water which has in it two and one-half teaspoons of salt. Cook for one hour or over night in a double boiler or fireless cooker. This will serve five people. If you want it for two meals, cook twice the amount to save time and fuel.

Try this oatmeal pudding when you have a light dinner or supper: Two cups cooked oatmeal, four apples cut up small, one-half cup raisins, one-half cup sugar, one-fourth teaspoon cinnamon. Mix and bake for one-half hour. Serve hot or cold. Any dried or fresh fruits, dates, or ground peanuts may be used instead of apples.

Scotch soup with bread and dessert is enough for lunch or supper. Two and one-half quarts water, one and one-fourth cups rolled oats, five potatoes cut in small pieces, two onions, sliced, two tablespoons flour, two tablespoons fat. Boil the water and add the oatmeal, potato and onion, one-half tablespoon of salt and one-half teaspoon pepper. Cook for one-half hour. Brown the flour with the fat and add to the soup. Cook until thick. One cup of tomato adds to the flavor. Serves five people.

Oatmeal bread is delicious with all meals: One cup milk or water, one teaspoon salt, two and one-half cups wheat flour, one-third yeast cake, one cup rolled oats. Scald the liquid, add salt and pour over the oats, cool, half an hour, add the yeast mixed with one-fourth cup lukewarm water, and the flour. Knead and let rise until double the size. Knead again and let rise in the pan until the size is doubled. Bake in a moderate oven for 50 minutes. Makes one loaf, weighing one and one-fourth pounds.

The whole family will like spiced oatmeal cakes and they are easily made: One and one-half cups flour, one-half cup cooked oatmeal, one-fourth cup sugar, one-fourth cup raisins, one-fourth teaspoon soda, one-half teaspoon baking powder, one-half teaspoon cinnamon, three tablespoons fat, one-fourth cup molasses. Heat the molasses and fat to boiling. Mix with all the other materials. Bake in muffin pans for 30 minutes. This makes 12 cakes.

Especially crisp and good as well as cheap are Scotch oat crackers: Two cups rolled oats, one-fourth cup milk, one-fourth cup molasses, one and one-half tablespoons fat, one-fourth teaspoon soda, one teaspoon salt. Grind or crush the oats and mix with the other materials. Roll out in a thin sheet and cut in squares. Bake for 20 minutes in a moderate oven. Makes three dozen crackers.

Instead of meat, cook baked oatmeal and nuts for your family: Two cups cooked oatmeal, one cup crushed peanuts, one-half cup milk, one teaspoon vinegar, one-fourth teaspoon pepper, two and one-half teaspoons salt. Mix together and bake in a greased pan 15 minutes. This is enough for five people.

# To Dry Cure Beef

To the Editor: I would like to know how to cure beef so it will keep. Some years ago when the government boats were working on the Columbia river, they had some beef that was very fine. It was salted, but was not in any brine. It seemed to be dry cured. Could you tell me how to do this?

G. S. M.

William Hislop, professor of animal husbandry, Washington State college, to whom the above question was referred, answers as follows:

It would appear to me that the meat in question was dried to keep.

The process of securing dried beef is as follows:

To each 100 pounds of meat weigh out five pounds of salt, three pounds of granulated sugar and two ounces of saltpeter. Mix these materials thoroughly together. Rub the meat an all surfaces with a third of the mixture and pack it in a tight jar, allow it to remain there three days, then remove it and rub it again with another third of the mixture. In replacing the meat put on the bottom the pieces that were on top the first time. Let it stand for three days, then remove again and rub with the remaining third of the mixture and allow it to remain for three days more. The meat is then ready to be removed from the pickle. The liquid forming in the jar should not be removed, but the meat should be repacked in the liquid each time. After being removed from the pickle the meat should be smoked and hung in a dry attic where the water will evaporate from it. It may be used any time after smoking, although the longer it hangs in the dry attic the drier it will get.

**Prefer Irregular Lines.**

The straight line is an abomination to the Chinese. They endeavor to avoid it in their streets and buildings, and have banished it completely where country field paths are concerned. They will always substitute a curve wherever possible or they will torture it with a zigzag. To the Chinese mind the straight line is suggestive of death and demons.





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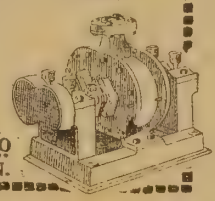
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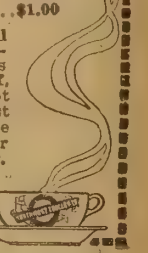



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# Patterns

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2038—Girls' dress. Cut in four sizes: 2, 4, 6 and 8 years. It requires 2 5-8 yards of 36-inch material for a 2-year size. Price, 10 cents.

2041—Girls' underwaist and drawers. Cut in six sizes: 2, 4, 6, 8, 10 and 12 years. It requires 1 yard of 36-inch material for the waist and 1 1-4 yards for the drawers, for an 8-year size. Ruffles on drawers will require about 2 1-2 yards of edging 3 1-2 inches wide. Price, 10 cents.

2083—Ladies' brassiere and drawers. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 3 1-2 yards of 36-inch material for a 36-inch size. Price, 10 cents.

2191—Dress for elderly ladies. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 6 1-8 yards of 36-inch material for a 36-inch size. Price, 10 cents.

2329—Ladies' negligee. Cut in four sizes: Small, 32-34; medium, 36-38; inches bust measure. Size medium requires 6 3-4 yards of 36-inch material. Price, 10 cents.

2330—Boys' suit. Cut in four sizes: 2, 3, 4 and 5 years. Size 4 requires 1 1-4 yards of 44-inch material for the waist and 2 1-8 yards for the trousers. Price, 10 cents.

2333—Ladies' apron. Cut in four sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. Size medium requires 3 1-4 yards of 36-inch material. Price, 10 cents.

2337—Girls' dress. Cut in four sizes: 8, 10, 12 and 14 years. Size 12 requires 4 1-2 yards of 36-inch material, with 2 strips 36 inches long and 5 inches wide, for the sash ends. Price, 10 cents.

2345—Dress for misses and small women. Cut in three sizes: 16, 18 and 20 years. Size 18 requires 7 1-4 yards of 36-inch material. The skirt measures about 2 1-4 yards at the foot. Price, 10 cents.

2347—Girls' dress. Cut in four sizes: 8, 10, 12 and 14 years. Size 12 requires 5 yards of 36-inch material. Price, 10 cents.

2334-2335—A very attractive gown. large, 40-42, and extra large, 44-46 Waist, 2334, cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Skirt, 2335, cut in 6 sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. For a medium size the entire dress will require about 8 yards of 44-inch material, with 3 3-8 yards of silk or ribbon, 6 1-2 inches wide, for the sash ends of the waist. The skirt measures about 2 1-2 yards at the foot. Two separate patterns, 10 cents for each pattern.




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**Conservation Fruit Cake.**

No wheat flour nor sugar is used in this cake. The recipe follows:

One cup molasses, two and one-fourth cups rye flour, one cup sour milk, two teaspoons cinnamon; one and two-thirds teaspoons soda, one-eighth teaspoon clove, one-half teaspoon salt, one-fourth teaspoon nutmeg, four tablespoons shortening (melted), one cup seeded raisins. Mix in order given, beat well and bake as cup cakes, or as a loaf cake, in a moderate oven.

**Cook Cereals in Skim Milk.**

Cereals cooked in milk instead of water gain in flavor and food value. A particularly nourishing dish is prepared by cooking down 10 to 12 parts of skimmed milk to one of rice, oatmeal or other cereal. Where this is to be served for a dessert, use one-fourth cup of rice and one-fourth cup of sugar to three cups of milk. Cook until thick. This can be used in place of cream with stewed fruit.

**Supper Dish of Rice.**

Steam a cupful of rice with one sweet red pepper, chopped. When the rice is thoroughly cooked, stir in one can of condensed tomato soup. Season to taste.


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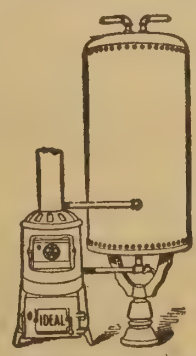


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# Handicraft For Boys

By A. Neely Hall.

## An Armored Pushmobile.

The next time you boys build a fort for a snowfight, suppose those of you who are to attack it provide yourselves with armored pushmobiles like the one in Fig 1. You will find that this new idea provides the means for making a snow battle double exciting, because the attacking party has as much protection as the defenders of the fort have, and with their pushmobiles can push up within as close range as they



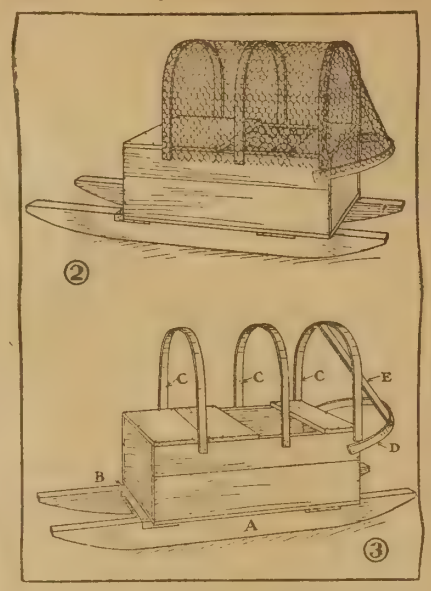

want, before firing upon the fort. Besides the protection which the pushmobile affords the boys who are attacking, it provides a protected magazine large enough for 100 or more snowballs. You will acknowledge that this is dandy, because you will not have to prepare snowballs while under fire. The wire-mesh armor makes it possible for the boy within to see where he is advancing to, and when he has pushed up into a position for firing he is enabled to watch for the opportunity to jump out of cover and throw snowballs at the defenses of the fort when they are least prepared. Having thrown as many snowballs as he could carry in his hands, he can seek the protection of the pushmobile again.

### Sled for Runners.

If you own a sled you can use it for the runners of a pushmobile, but as it is so simple a matter to prepare a pair of runners, probably you will want to build the entire pushmobile, Fig. 2 shows a side view of the completed pushmobile, and Fig. 3 shows a detail of the completed framework.

You can use whatever proportions you wish, but I would suggest that you make the runners (A, Fig. 4) about four feet long, and that you cut them out of 2x4s. Fig. 5 shows how to notch each runners one foot from each end for the connecting crosspieces B (Fig. 4) to fit in. These crosspieces may be pieces of board one inch thick and four inches wide. Cut along each end of the notches with a saw, and split out the wood between with a chisel. Nail the crosspieces securely in the notches.

Fig. 6 shows the box which is fastened to the runner crosspieces, on which the boy rests his chest and

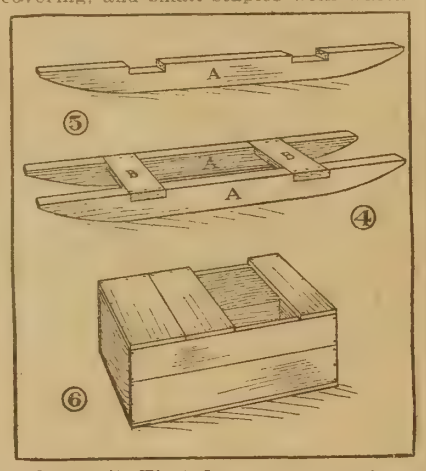



stomach in pushing the pushmobile. Nail the cover boards on crosswise of the box, with an opening left between them large enough to allow access to the inside of snowball magazine.

### Framework for Armor.

Procure four barrel hoops for the supporting framework for the wire-mesh armor. Remove the nails which fasten together the ends of these, and open out and fasten three of the hoops to the sides of the box to form the vertical ribs C. Fasten the fourth hoop to the front of the box D and connect it to the front hoop C by means of the diagonal stick E.

Get a small sized wire mesh for the covering, and small staples with which




to fasten it. First fasten on one piece to extend from end rib to end rib, and from one side of the box over the rib tops and down to the opposite ends; then cut another piece to fit over the box framework.

(Copyright by A. Neely Hall.)

## Trade in Home Town

Not long ago we received a letter from one of our subscribers saying that if he wished to buy a certain commodity (which by the way was handled by one of his home town dealers) he would send to a mail order house for it. This, of course is his privilege. But supposing a majority of his neighbors in that community were to do the same thing continually. Would it not mean discouragement to all local storekeepers in that community? Would it not mean slow starvation to all merchants already located there and stand as an effectual barrier against the business advancement and enterprise of the neighborhood?

We do not mean to express or imply that there should be no trading done with mail order houses, for it happens frequently that such houses offer certain lines of goods not obtainable from local stores. But we believe that the home town storekeeper should be given all the trade encouragement possible where he is doing the best he can to deserve it. Even though his prices on some lines may be a trifle higher, due to the fact that his volume of trade will not permit his buying in big lots, it must not be forgotten that he is (or can be made) an important factor in the development of the community in which you are, or should be interested.

Bear in mind that the storekeeper, whether he keeps a little store or a big one, is a giver of service. He invests his money and his time in supplying you and your neighbors with commodities that you might otherwise be at considerable inconvenience to obtain. As a rule the storekeeper in your community is what your community makes him. If you withhold your trade from him he is held back in his efforts to keep a fresh and varied line for you to select from. He is entitled to a reasonable profit on what he sells you just the same as you are entitled to a profit on whatever you produce for sale. The storekeeper is not a drone in the community hive. He is a very necessary factor in making the community a better place for you and your family to live in. Public spirited cooperation with your home town merchants is like bread upon the waters. It comes back to you in the form of a more prosperous, more progressive community center

## The Silo Is Popular

The popularity of the silo for storing dairy cow feed is indicated in a letter from M. R. Alleman, county agent for Clallam county, when he says that every member of the Clallam County Cow Testing association, with one exception, has at least one silo, and that that member is planning to have one for this season

"A considerable number of silos were put up in the county this year," says Mr. Alleman, "and in several instances by those who already had a silo and had been using it successfully for several years. There will be a great many more put up the coming season."

Owing to the unusually fine weather for hay-making last summer, a number of farmers put up their feed in the form of hay in Clallam county, says Mr. Alleman, but some of them have already expressed regret, finding that they need the succulent silage for the best dairy production. A report from the county that the silo was growing in disfavor apparently was founded on the cutting of some of the crops as hay. Mr. Alleman's statements make it clear, however, that the farmer of his county are strongly in favor of the silo.


## *Wonderful Egg Producer*

Any poultry raiser can easily double his profits by doubling the egg production of his hens. A scientific tonic has been discovered that revitalizes the flock and makes hens work all the time. The tonic is called "More Eggs." Give your hens a few cents' worth of "More Eggs" and you will be amazed and delighted with results. A dollar's worth of "More Eggs" will double this year's production of eggs, so if you wish to try this great profit-maker, write E. J. Reefer, poultry expert, 4662 Reefer bldg., Kansas City, Mo., who will send you a season's supply of "More Eggs" Tonic for $1.00 (prepaid). So confident is Mr. Reefer of the results that a million-dollar bank guarantees if you are not absolutely satisfied your dollar will be returned on request and the "More Eggs" cost you nothing. Send a dollar today or ask Mr. Reefer for his Free Poultry book that tells the experience of a man who has made a fortune out of poultry.—Adv.

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COMMONSENSE WALKING SHOE



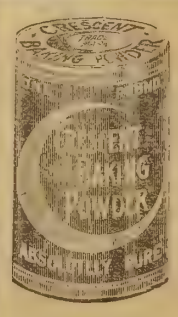

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Spokane, Wash.




Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I enjoy reading the letters very much. I hope this will not be the last. I go to school and am in the sixth grade. I am 13 years old and my birthday is July 25. Have I a twin? I would like if some one would correspond with me. I have two sisters. Their names are Alice and Eileen. I have four rabbits. Their names are Bonny, White Tail, Brownie, White Nose and Little Bonny. Little Bonny is cute. I have one turkey and she is laying eggs now. She has laid 91 eggs already and she is still laying. She is my dearest pet. I have some fish in my spring. They are little fish.—Johnnie Hanley, R. F. D. Route 1, Twisp, Wash.

**Skate and Slide on the Pond.**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. The first time I wrote about my calf. Her name was Beauty. One evening I was at the barn. Beauty was afraid of me. Always before when I went over to her she did not make a move. I petted her, but she did not even move her head. I told papa she was sick. He said: "She just wants to be friendly with you." I went to the house and told mama my calf was sick. Mama and papa went to see what was the matter with her. She really was sick. That evening mama and papa gave her medicine and tried to make her stand up. Beauty acted like she had been poisoned. In the night some time she died. Papa gave me another calf. I called her Jean. Our farm is just across the road from the schoolhouse. In the winter the school children come down to a small pond on our place. They skate and slide on my sled. In our school are 11 children. There are four girls and seven boys. I have two big brothers, George and Leslie. George is 20 years old and Leslie is 18 next month. I was 10 years old last September 7. Have I a twin? We have a Ford car. One Sunday last summer papa and mama, George and I went to Spokane and spent the day with my aunt. We have 24 head of cattle, two horses, one pig and 43 chickens. I have a cat and dog. I am left-handed.—Ruth Ada Jones, R. F. D. 1, Box 49, Newport, Wash.

**Rained Enought to Last Five Years.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner, but I hope it won't be the last. My name is Esther. I was 12 years old last October 17 and am in the seventh grade. I have blue eyes and light hair. If I have any twins will they please write to me? I have four sisters. Mary is 18 years old and is a teacher; Elsie is 8 years old; Minnie is 3 years old and my brother's name is Hugo and he is 14 years old. We have three cows, Jersey, Nancy and Daisy. We have two calves, Spotty is the name of one. Our dog's name is Tige and our pony is named Dolly. I go to the Fernwood school which is half a mile from our place. It has two rooms, one for the primary grades and the other for the upper grades. My teacher's name is Miss Johnson and I like her very much. We have had only a little bit of snow this year, but it has rained enough to last five years, I think. My letter is getting a little long, and as it is about 9 o'clock, I think I'll retire to Bedlam.—Esther Hoglund, R. F. D., Box 222, Port Orchard, Wash.

**Has Lunches at School Every Day.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 13 years old and in the sixth grade. I have three sisters and one brother. My sisters' names are Mary, Evelyn and Wilma. Mary is 15 years old and is in the seventh grade. Evelyn is seven years old and is in the third grade. Wilma is the baby. She is three months old. Clay is in the fourth grade and is 11 years old. We live on a 168-acre farm. We have two horses and four cows. We have 16 chickens and 15 of them are mine. I have six tame rabbits. Two are the old ones and four are little ones. We haven't had very much snow this winter. I forgot to tell my teacher's name; it is Miss Rose Gute. She lives at Cloverland, five miles from our place. We have 20 scholars at school. We have hot lunches at school every day. I like it fine.—Vierbie Miller, Cloverland, Wash.

**Brother Is in the Navy.**

Dear Aunt Nellie: We have six cows and about 30 chickens, five geese, three pigs and a few calves. We have a puppy. The puppy's name is Daisy. We have no name for the cat. I live on a 62-acre farm. I have five sisters and five brothers and two nephews. I live in a 14-roomed house. I am 10 years old and will be 11 June 17. If I have a twin I hope she will write. I'm in the fourth grade. My teacher's name is Mrs. Brooks. Seven of our family are going to school. I just about forgot to tell you how many horses we have. We have two horses and a wagon. I have a brother in the navy. There are 12 children in my school. One of my sisters goes to Ilwaco school. There are about 400 in that school. There are only three girls home. My oldest sister is married.—M. E. Sargant, Nahoota, Wash.

**Likes to Live on a Farm.**

Dear Aunt Nellie: I like to live in the country on a farm better than in the city. I have one brother and one sister. My brother joined the twenty-third engineers. My birthday is the 25th of March. I will be 13 years old. Papa is plowing on the first of January. We have one cow, one yearling calf, and one little calf, two horses, one dog and one cat. The cow's name is Bossie, the calf's name is Pansy and the little calf is Carol. The horses' names are Nellie and Prince. The dog's name is Woodrow and the cat's name is Tom. I made one crotcheted yoke for a Christmas present. I can crotchet and knit. If I have a twin I hope he or she will write to me. I go to Elk school. I am in the sixth grade. My best studies are grammar and spelling. I wish any one of my age would write to me.—Gladys Bentley, R. F. D. 1, Elk, Wash.

**Cousin Iris Loves All the Birds.**

Dear Aunt Nellie: This is the first time I have written to the Corner. I would like to be a cousin. May I? I am a little girl 11 years old. My birthday is the 6th of December. If I have a twin I would like to hear from her. I have one sister, Lois, and two brothers, Robert and Arthur. They are younger than I. My sister and I have a butterfly collection that we captured this summer. We love birds and do all we can to protect them and hope you all will do the same. I won the first prize on a bird composition at the last Washington state fair and got $3. I live on a 40-acre farm. We have four cows, Daisy, Bessie, Pansie and Blossom. We have two work horses, Dick and Prince. Maud, our mare, has a colt. Ribbon is our driving horse. We have three calves, lots and lots of chickens, ducks and turkeys.—Iris White, Wapato, Wash.

**Knitting Belgian Squares.**

Dear Aunt Nellie: I am a little girl 9 years old. I am in the third grade at school. My teacher's name is Miss Corbett. I am taking music lessons on the piano. My music teacher's name is Mr. Blankenship. I enjoy the letters very much. I have one brother. His name is Glenn. He is 20 years old. I have one kitty. Her name is Snowball. I also have a canary bird. His name is Ned. Have I a tin? If I have I wish she would write to me. My birthday is August 20. I take Little Folks' magazine. I like it real well. It has letters in it also. How many other little girls take it? We third graders at school are knitting Belgian squares. Some of us are knitting wash rags. I am making a Belgian square.—Vesta Kelly, Box 126, Dixie, Wash.

**Saddle Pony Is Called June.**

Dear Aunt Nellie: This is the first letter I have written to the Children's Corner. I enjoy reading the letters very much. My papa takes the Farmer. We live on a 320-acre farm in Okanogan county. I am 12 years old and will be 13 the 5th of August. Have I a twin? If I have I would like to hear from her. I am in the seventh grade. Our teacher's name is Miss Anderson. I have three sisters and one brother. Their names are Violet, Elsie, Melvia and Karl. We have eight cows and seven horses. One is a saddle pony. Her name is June. I hope to see my letter in print. If I do I will write again.—Pearl Thomason, Wauconda, Wash.

**A Good Time at the Children's Party.**

Dear Aunt Nellie: I have been reading the letters in the Children's Corner and I would like to join. I am 12 years old and I am in the sixth grade. I go to No. 12 school and I like my teacher very much. Her name is Miss Rowe. There are five in my class and 20 pupils in the school. We had a Christmas tree at our schoolhouse. We did not have an entertainment, just a party for the school children. Each one of us got a present for one another and each brought sandwiches or a cake. We had a real good time. Miss Rowe said we would have an entertainment some time.—Verna Jennings, Friday Harbor, Wash.

**Leslie Burns Stumps in the Spring.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. We live on a farm of 100 acres cleared and 60 acres not cleared. We have 160 altogether. In the spring my brother and I have to burn stumps. I have two sisters and one brother. My brother's name is Clyde and my sisters' names are Oma and Stella. I like to live on a farm. We have 26 head of cattle and 10 horses. We also have 42 hogs. I am 10 years old and will be 11 the 5th of October. Have I a twin? If I have I would like for them to write to me.—Leslie Davis, Fruitland, Wash.

**Goldie Is in the Third Grade.**

Dear Aunt Nellie: I'm eight years old and in the third grade and my teacher's name is Miss Dunngan. We had a Christmas tree and I got a little bell off of the tree and a doll and basket. Buster got a little car.—Goldie Miller, Box 63, Mayview, Wash.

**Has Emma Twin Anywhere?**

Dear Aunt Nellie: This is the first time I have written to the Corner. I have two sisters and five brothers. Their names are Irene, Myrtle, Bernard, Dan, Frankie, Karl and Glen. We have two cows; their names are Lucky and Kate. We have about 100 chickens and one cat. Her name is Slivers. I am in the fourth grade. My teacher's name is Miss Snider. I was 10 years old the 12th of September. Have I a twin? If so, I hope he or she will write to me. I hope some of the other cousins write me, too. I must close now and go to bed.—Emma LaPen, Yelm, Wash.

**Helen's Friend, Leona.**

Dear Aunt Nellie: This is the fourth time I have written to the Children's Corner. My subject is my friend, Leona. My friend's name is Leona Chamberlain. We have lots of fun playing. She got a little baby doll for Christmas. Christmas when she went to bed her mother dressed it in a little gown. She put a chair beside her and put the doll on it. The next morning when Leona awoke and saw it she was so surprised. She and I have all sorts of fun playing with it. I made a little dress for it Christmas. She has lots of clothes for it. Every night she puts its little gown on it and puts it to bed. It is just about the size of a real baby. Its name is Ervin Lloyd Chamberlain. She named it after her brother. She washes and irons its clothes on Saturday and has them clean for Sunday. She takes as much care of it as a woman takes of a baby. She washes it and puts in much of her time taking care of it. I hope to see my letter in print again. I will soon be 11 years old. My birthday is the 20th of January. My friend's birthday is the 11th of February and she will be 10 year old. Have we any twins? If we have we would like to hear from them. —Helen Schoenberg, Prosser, Wash.

**Have a Big Clam Beach.**

Dear Aunt Nellie: It has been a long time since I have written to you. This makes the third time I have written. I will tell you about the islands I can see around here. We live about a half a block from the beach. We live on a farm. We have two cows, a horse and a pig, and 17 sheep and a dozen chickens. We have four cats and two dogs. I have three brothers and one sister. I wrote to a girl. Her name is Verna Huffman. She did not answer my letter. I hope she will soon. I am looking for a letter from her every day. I am 10 years old. My birthday is the 13th of June. I am not going to school now. I have three miles to go to school. I will tell you about our boats. We have three little row boats and two gas boats. Their names are Mermaid and Pawnee. We have a big clam beach not far from our house.—Pearl Droullard, Prevost, Wash.

**Tip and Rags Are the Dogs.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 9 years old. I am in the third grade. We live on a three-acre ranch in Wallace addition. We have two cows, one calf. Our cows' names are Cherrie and Flossie. Our horse's name is King. We have two dogs, Tip and Rags. I have been reading the Children's Corner. Have I a twin? We take the Farmer. There are 10 pupils in our school. I will tell you about our family next time.—Alonzo Murray, Kelso, Wash.

**Raise Wheat, Oats and Alfalfa.**

Dear Aunt Nellie: This is my first letter to the Children's Corner. I am eight years old and in the second grade. I live on a farm of 80 acres. We have five horses and two colts, one cow and two calves, also about 45 chickens and five geese. We raise wheat, oats and alfalfa and hogs. I have a brother four years old. His name is Vern. We have a new Ford car. I have two sheep and two cats. Their names are Bess and Yank. I hope to see my letter in print.—Virgil Glen McGee, Oakesdale, Wash.

**Alice's Second Corner Letter.**

Dear Aunt Nellie: This is the second time I have written to the Childrens' Corner and it will not be the last. I have three brothers and one sister. Their names are Alfred, Vastor, Robert and Amy. Alfred is 14 years old, Vestor is seven years old, Robert is 17 months old and Amy is 10 years old the last August 23. Have I a twin? If so, I wish she would write to me and I would answer. I hope Santa Claus was kind to all the cousins this year.—Alice E. Ritchey, Chesaw, Wash.

**Going to Join the Red Cross.**

Dear Aunt Nellie: My papa works in a logging camp, but he takes the Farmer. I am going to join the Red Cross after a while. My mother is going to teach me to knit. Last summer we lived near the Nooksack falls. They are beautiful. I have two sisters. Their names are Fay and Vivian. I have two brothers. Their names are Burton and Beecher. I am nine years old. My birthday is March 23. I am in the fourth grade.—Leona Adkinson, Maple Falls, Wash.

**Zenia's Dogs Are Bob and Jack.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner and I hope it won't be the last time. I am nine years old. My birthday is the 12th of May. I live on a farm 10 miles north of Davenport. I have three brothers and two sisters. I have two dogs and their names are Bob and Jack. We have lots of cats.—Zenia Light, Davenport, Wash.

**Big Gray Cat Is 14 Years Old.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. It has rained here for several days and it is very muddy out. I do wish it would snow as we have had very little snow and sleigh rides this year. I have a great big gray cat for a pet about 14 years old and his name is Tabby. I go to the Davenport graded school and I was 12 years old November 16. Have I a twin? I have only one brother, 9 years old, and his name is James. I am so glad he does not have to go to war, but he said "He would like to go."—Josephine Holland, Box 77, Davenport, Wash.

**Lillian Tells Us a Good Joke.**

Dear Aunt Nellie: I did not write to the Children's Corner yet, but I liked the letters so well that I thought I could not help writing to you. We are having nice warm weather, but I wish I could go sleighriding soon. It doesn't seem like winter the way the weather is now. My sisters, Elizabeth, Edna and I have two miles to go to school and I am in the fifth grade. We had a basket social in October and an entertainment with it. We also had an entertainment on Christmas eve. I think it is great fun to be in the little plays. Here is a little joke I think some of the cousins would like to read: A young farmer applied for a position on the farm. As he walked into the barn he addresesd the farmer: "Hey, Mister, will you job me?" "Will I what?" asked the farmer. "Will you job me? Make me work yet?" "Oh, I see; you want a job," said the farmer. "Well, how much do you want a month?" "I tell you. If you eat me on der farm I come for $30, but for $45 I eat myself at Schmidt's." If the Corner cousins like the funny jokes I will write again and tell you some more.—Lillian Lehman, Paha, Wash.

**Letter From Daddy's Right-hand Man.**

Dear Aunt Nellie: This is the second time I have written to the Corner. We had a nice Christmas tree and I got a lot of nice things. Daddy gave me a watch. We had two weeks' vacation and the weather has been fine and daddy is plowing. I have to do all the chores and I clean out the barn and get the horses up for daddy. I help him harness the horses and sometimes I help hook on the plow. I went after the mail on horseback and the mailbox is five miles from home. My saddle horse is Jessie. We have two towns, one is Wilbur and one is Almira and we have a car. It is a Dodge. I help daddy pump water for the cows and our pump is hard to pump. Sometimes when daddy is gone all night I get the cows up and water them and then put them in the barn. Then I feed them and mother milks the cow. We have three milch cows, but we are just milking one. I feed the pigs and we have two of them. One is brown and we call it Brownie and one is white and we call it Snowwhite. My teacher's name is Miss Fitzell.—Jerome Gottwals, Govan, Wash.

**Mamie Writes About Summer.**

Dear Aunt Nellie: My subject is summer. When summer comes you can go in the lake and swim. You can pick wild flowers and play ball. Now I will tell you what I got for Christmas. I got a doll, a puzzle, two books, a work box, some paper dolls, some candy, some nuts and an embroidery set. I got a doll buggy for my birthday and a calendar for my New Year present—Mamie Lien, Coulee City, Wash.

**Uncle and Cousin Were Drafted.**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. My birthday is the 14th of August. I am 10 years old. My father and mother belong to the Red Cross. My uncle and my cousin were drafted. My uncle is in Camp Funston, Kansas. My cousin is in Florida. I would like to see my letter in print.—Lester Hoech, Wilson Creek, Wash.

**Tracy Is 11 Years Old.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I live on a 20-acre farm. I am 11 years old. I hope my letter will be in print. My teacher's name is Mrs. E. Waybright. I am in the fifth grade. —Tracy Germont, Greenacres, Wash.

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IT HAS NO EQUAL
For the Human Body —It is penetrating, soothing and healing, and for all Old Sores, Bruises, or Wounds, Felons, Exterior Cancers, Boils Corns and Bunions, CAUSTIC BALSAM has no equal as a Liniment.
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# News for Breeders

## A Promising Holstein Herd.

Moorehead & Hobson of Outlook, Wash., have a promising herd of Holsteins on their 85-acre ranch. It was established in 1913 with six heifers, granddaughters of the noted bull, King Segis. It now numbers 56 purebreds, most of which are direct descendants of King Segis. Moorehead & Hobson's herd sire, Annie Dekol Segis, is a grandson of the celebrated Segis. A brother of Model Annie was purchased by Professor Wing for the college of agriculture of the University of New York. The herd now has five granddaughters of Segis, which averaged for seven days 26.59 pounds of butter. One of these cows holds the highest records for seven days and also for the year of any cow in the Yakima valley of her age. She produced 29.56 pounds of butter in seven days. Three of her calves are from Model Annie Dekol Segis and Vera Dutchess, and their four nearest dams averaged for seven consecutive days 30.35 pounds of butter.

R. W. F.

## Talmadge's Boar Goes East.

Violet's Champion 219191, bred by Charles M. Talmadge of Newport, Wash., has been sold to A. J. Lovejoy & Son of Roscoe, Ill., to head their great herd in the east. Violet's Champion was sired by the well-known Laurel Champion, he by Rival's Champion Best, the famous boar owned by Dean C. F. Curtis of Ames, Iowa.

Violet's Champion was farrowed on May 17, 1914. He was grown out and developed by Mr. Talmadge and was sold to the Fontana Land company, Fontana, Cal., in December, 1915, together with a carload of gilts which he sold to the same people. The dam of Violet's Champion was Royal Violet II., bred by A. D. Hudson, Tangent, Ore., and was the grand champion sow of the Oregon and Washington state fairs in 1912, having been purchased by Mr. Talmadge the following year.

## Breaks Seven-Day Record.

A pure-bred Holstein cow again breaks a record for butter fat production. Lady Netherland Pontiac, with 43 1-2 pounds of butter to show for a week's work, has displaced Wandermeere Belle Hengerveld as junior 4-year-old in the seven-day division. Lady Netherland Pontiac produced in seven consecutive days 577.8 pounds of milk containing 34.817 pounds of fat, equivalent to 43.52 pounds of butter. Her sire is King Pontiac Konigen and her dam is Dretka Netherland II. Lass. She was bred by Julius V. Fredericks of Canajoharie, New York, and is now owned by Oliver Cabana Jr., of Elma Center, N. Y.

# Farmers of Washington Pledge More Food

(Continued from page five.)

mangels 5, turnips 1, silage 2. **Less**—Oats 1, barley 1, potatoes 2, vegetables 1, fruit 4, hay 1, horses 2, beef cattle 2, dairy cattle 1, swine 2, poultry 3, carrots 1, rutabagas 1.

WHITMAN COUNTY: **More**—Wheat 15, oats 9, barley 7, corn 9, potatoes 14, peas 9, beans 6, sugar beets 1, vegetables 10, fruits 5, hay 11, horses 8, beef cattle 10, dairy cattle 8, sheep 4, swine 11, poultry 10, carrots 8, mangels 3, rutabagas 1, turnips 4, silage 2. **Less**—Wheat 4, oats 6, barley 1, rye 3, corn 2, potatoes 3, peas 1, beans 2, sugar beets 1, fruits 2, horses 5, beef cattle 5, dairy cattle 5, swine 6, poultry 2, carrots 1, mangels 2, rutabagas 3, turnips 2, artichokes 2, silage 2.

YAKIMA COUNTY: **More**—Wheat 8, oats 3, barley 2, corn 5, potatoes 5, peas 3, beans 3, sugar beets 1, vegetables 3, fruits 7, hay 8, horses 2, beef cattle 4, dairy cattle 3, sheep 4, swine 9, poultry 8, carrots 3, mangels 2, rutabagas 1, turnips 2, silage 1. **Less**—Oats 1, barley 1, corn 2, potatoes 2, beans 1, sugar beets 1, vegetables 1, fruits 1, hay 1, beef cattle 1, dairy cattle 1.

### THE THREE STATES

Here are the figures for the three states, showing that the determination to increase production is general:

**Wheat.**
415 plan to produce more wheat.
41 plan to produce less wheat.
91 per cent plan to produce more.

**Oats.**
267 more oats, 96 less.
77 per cent plan to produce more.

**Barley.**
166 more barley, 67 less.
80 per cent plan to produce more.

**Rye.**
82 more rye, 33 less.
71 per cent plan to produce more.

**Corn.**
214 more corn, 37 less.
85 per cent plan to produce more.

**Potatoes.**
343 more potatoes, 85 less.
80 per cent plan to produce more.

**Peas.**
164 more peas, 33 less.
83 per cent plan to produce more.

**Beans.**
179 more beans, 37 less.
83 per cent plan to produce more.

**Sugar Beets.**
33 more sugar beets, 34 less.
49 per cent plan to produce more.

**Vegetables.**
240 more vegetables, 25 less.
91 per cent plan to produce more.

**Fruits.**
115 more fruits, 40 less.
74 per cent plan to produce more.

**Hay.**
380 more hay, 52 less.
88 per cent plan to produce more.

**Horses.**
166 more horses, 69 less.
79 per cent plan to produce more.

**Beef Cattle.**
218 more beef cattle, 49 less.
81 per cent plan to produce more.

**Dairy Cattle.**
227 more dairy cattle, 66 less.
78 per cent plan to produce more.

**Sheep.**
137 more sheep, 21 less.
87 per cent plan to produce more.

**Swine.**
342 more swine, 65 less.
84 per cent plan to produce more.

**Poultry.**
308 more poultry, 48 less.
86 per cent plan to produce more.

**Carrots.**
197 more carrots, 16 less.
92 per cent plan to produce more.

**Mangels.**
115 more mangels, 24 less.
83 per cent plan to produce more.

**Rutabagas.**
79 more rutabagas, 26 less.
75 per cent plan to produce more.

**Turnips.**
86 more turnips, 25 less.
77 per cent plan to produce more.

**Artichokes.**
25 more artichokes, 21 less.
55 per cent plan to produce more.

**Silage.**
126 more silage, 12 less.
91 per cent plan to produce more.


## HORSES

### Registered Clydesdale Stallion

3 years old in spring. Excellent breeding and conformation and will make horse weighing 1900 to 2000 pounds.

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y are of the very best breeding obtainable and are anteed to be breeders. They will be sold at very reable prices.

If in need of a good stallion weighing from 1800 to 2200 pounds, come direct to my stables and see them or write for description and terms to

**WM. T. TRACY, Kennewick, Wash.**

ANNUAL

# SHORTHORN SHOW & SALE

**Spokane, Wash., Feb. 23d**
**Portland, Oregon, Feb. 25th.**

## 96 Registered Shorthorns

**At Spokane Sale**

## 70 Registered Shorthorns

**At Portland Sale**

## BULLS AND HEIFERS AT EACH SALE

**Prominent consignors to Spokane Sale: Jos, Turner, A. D. Dunn, J. H. McCroskey, Gibson Estate, Day & Rothrock, and University of Idaho.**

**The Shorthorns offered at the Portland sale will be from the herds of such breeders as W. O. Minor, Frank Brown, A. D. Dunn, Day & Rothrock and Oregon Agricultural College.**

**RANGEMEN** Splendid opportunity to get a class of bulls that will improve your herds and produce the kind that top the market for prime beef.

**DAIRYMEN** Come to these sales for choicely bred bulls from heavy milking strain.

**BREEDERS** Will find excellent individuals with which to lay the foundation for a Shorthorn herd or enlarge and improve a herd already established.

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# Fifty Bulls for Sale at Auction

**GEORGE D. HARRAH OF NEWTON, IOWA, will bring to Caldwell two car loads of two-year-old Registered Shorthorns and Hereford Bulls that will be sold at Public Auction on**

## FEBRUARY 20, 1918

**AT CALDWELL SALES & COMMISSION COMPANY'S YARDS**

**Mr. Harrah informs us that these bulls are especially selected for this sale, having plenty of quality and lots of bone; not fat, but in good breeding condition.**

**Positively none of these bulls sold before this sale.**

**Mr. Harrah is one of the best known breeders in the Central West, having succeeded his father as owner of the Harrah Stock Farms at Newton, Iowa, which have been noted for their purebred cattle for over sixty years.**

**For catalogue, terms and further information address**

**CALDWELL CATTLE CO.**
**H. W. Dorman, President. Caldwell, Idaho**

**We have for sale at private treaty on our farm, on liberal terms, Fifty Registered Shorthorn Cows, many with calves at foot.**

## GUERNSEY CATTLE

### Orchard Hill Farm

"Home of High-Class Guernseys."
Dr. Park Weed Willis, Owner.
Redmond, Wash.

### FAIRVIEW FARM

Breeders of high class registered and grade Guernseys.
A. J. SINNES.
Route 5. Mt. Vernon, Wash.

**MIDDLEDALE FARMS GUERNSEYS.**
Herd founded in 1904, May Rose breeding. Most all granddaughters of Jethro Bass (11366), son of Imp. King of the May. Have a few heifers, calves for sale. Goshen, Ore.

## JERSEY CATTLE

### Jersey Home Dairy

Young bulls, winners at Washington State Fair, make good herd sires. Attractive prices for quick sale.

**Erickson Bros. Prop.**
North Yakima, Wash.

## AYRSHIRE CATTLE

### Edgewater Farm

Government accredited herd, headed by Peter Pan, 63d. Bull calves available.
E. M. CHANDLER, Burbank, Wash.

# Breeders' Department

## DUROC-JERSEY SWINE

### September Durocs

I have a bunch of September gilts and boars in fine condition and ready for service soon. They are true to type and conformation and altogether one of the finest layouts ever produced on my ranch. They weigh from 100 to 160 pounds. Sired by Sprong's Prince and Yakima Willeta's Wonder. Dams largely Advance Wonder blood. Ancestry prize-winners wherever shown.

**CHARLES G. SPRONG.**
Grandview, Wash.

**IOKA FARM DUROCS.**
Big type, with quality. Offspring of the great sire GOLDEN ROD. and other best Duroc strains.
**DOERFLER BROS., Silverton, Ore.**
A. N. DOERFLER, Manager.

### DUROCS

Bred and open gilts of the best breeding and individuality.

**G. O. SWALES. Johnson, Wash.**

**DUROCS.**
Boars and open or bred gilts of excellent breeding.
E. E. PRICE, CABINET, IDAHO, OR
**JAMES N. PRICE. YAKIMA, WASH.**

**OTTO'S DUROC JERSEYS.**
Founded on the basis of making Duroc history in Idaho. Won 4 championships and two grand championships at Southern Idaho State Fair.
**L. S. OTTO. Filer, Idaho.**

**IDAHO CHAMPION DUROCS**—At state fair of Idaho our Durocs won more prizes than all other exhibitors combined. Stock of all ages for sale.
**Richards Live Stock Co., Virginia, Idaho.**

**AVONDALE STOCK FARM.**
Registered Duroc-Jersey hogs. Inspection invited. Corespondence solicited.
**H. C. POLLY. Route 3. Burley, Idaho.**

**PATHFINDER BOARS**—Choice Duroc Jersey boars for sale. Sired by Richard Pathfinder, 1st prize and junior champion Utah state fair. Priced to sell and guaranteed.
**ERICK W. OLSON, Virginia, Idaho.**

## POLAND CHINA SWINE

### Locust Lawn Herd

Big Type Poland Chinas.
**W. F. HOWARD & SONS, Parma, Idaho.**

**SPECIAL PRICES ON BOAR PIGS.**
Fall farrow, best breeding, good individuals. Also a few choice gilts. Quality and utility our hobby. Poland Chinas our breed.
**FRANK NEEDHAM, Eugene, Ore.**

**GREENLEAF STOCK RANCH.**
Big type Poland Chinas, either sex, for sale at all times.
**Wilson Bros., A. L. Wilson, Mgr.**
Greenleaf, Idaho.

**BIG TYPE POLAND CHINAS**
Herd headed by Sammy (79,833).
Correspondence Solicited.
**Fruitland Stock Farm, C. Royston, Mgr.**
Payette or Fruitland, Idaho.

**QUALITY HERD.**
If you want to improve your herd, try stock from my winners at the Oregon state fair.
**RAY J. FOX, Lyons, Ore.**

**PURE BRED POLAND CHINAS**
Some choice Sept. and Aug. pigs, $25 to $35 each, either sex; also a good herd boar. Will ship C. O. D., subject to approval
**HERBERT WILLARD, Dayton, Oregon.**

## BERKSHIRE SWINE

### BERKSHIRE HOGS

Gilts of any age, bred or open; can also furnish young boars, from the best of strains and prize winning parentage.

**EARL WOOD, Silverton, Ore.**

**RIVERBY ORCHARD BERKSHIRES**
won 12 out of 15 first prizes at the Washington State Fair, 1916. A few outstanding boars for sale at reasonable prices.
**D. C. BUNN. Prosser, Wash.**

## CHESTER WHITE SWINE

**BLUE RIBBON STOCK FARM**
Prize winning Chester White hogs and Jersey cattle. Young stock for sale.
**ED SCHOEL, Suver, Ore.**

## YORKSHIRE SWINE

### FALL PIGS

Both boars and gilts of best breeding. Now booking orders for spring pigs. Can furnish pairs or trios.
**WM. NEUENSCHWANDER, Gaston, Ore.**

**When you write to advertisers be sure to state that you saw their advertisement in this paper.**

## HOLSTEIN CATTLE

### PRODUCING HOLSTEINS

In purchasing foundation stock secure those from proven ancestry. They are the kind that bring large returns from the sale of their offspring as well as from the sale of milk and cream.

We offer for sale twenty of the kind that are seldom offered at public sale. Most of them are granddaughters of King of the Pontiacs and from dams with semi-official yearly records up to 598 lbs. for junior two years, 670 lbs. for junior three years and 813 lbs. for mature cows. These records made under practical dairying conditions. The heifers range in age from six to thirty months. Those of proper age have been bred to a 33-lb. bull. The pedigrees of many of them are without a blank for two, three and four generations. If you are in the market for unusual animals, grasp this opportunity.

Prices range from $350.00 to $600.00 each, with proper discount on sales of more than one animal. A liberal discount will be made on a sale of all to one customer. Copies of pedigrees will be sent to interested persons.

**The Greenbank Farm** 800 Leary Bldg. SEATTLE, WASH.

### Registered Holsteins

Young calves, born last July and later; also 1 30-lb. bull, ready for service, whose sire, dam and sire's dam have all been grand champions at one or more state fairs, and full brother to his sire and full sister junior champions at a state fair. Here is production and type we hear so much about. Could also spare a few cows.

**H. R. BOOMER, New Plymouth, Idaho.**

**MOOREHEAD RANCH.**
Registered Holsteins.
Herd sire, Model Annie De Kol Segis, grandson of the famous King Segis. We have no bulls of service age, all having been sold, but we have some splendid young stuff, from 6 to 8 months old, coming on. If you are looking for real foundation stock, write us for particulars and pedigrees.
**MOOREHEAD & HOBSON.**
Breeders of Purebred Holsteins.
Outlook, Wash.

### 365-Day Holsteins

24,667 lbs. milk—1026 lbs. butter—is the s. o. advanced registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.
**THE HERD WITH YEARLY RECORDS.**
**WESTERNWOLD RANCH.**
**Prineville, Ore.**

### Registered Holsteins

Glenwood herd offers for sale a few A. R. O. cows with records up to 24.32 lbs. Also a few bred heifers.

**A. H. BUCK & ED HOLM.**
Snohomish, Wash.

### LaConnor Flats Stock Farm

Pure bred registered Holstein cattle. Herd sire Segis Pontiac Acme; average of three of nearest dams; butter, 1 year, 1080.82 lbs.; milk, 24,380.3.

**J. H. HULBERT, Mt. Vernon, Wash.**

### Record Holsteins

Young bulls, some of them ready for service, by a sire whose 5 nearest dams average 26.17 pounds butter, or another with 29.67-pound dam, and out of high-record A. R. O. dams. Priced to sell.

**ERNEST WERNER, AURORA, ORE.**

### HOLSTEIN HERD FOR SALE

As I will sell or rent my ranch this spring, my entire herd of registered and high-grade Holstein cattle is for sale. For particulars as to breeding and prices, write
**W. FRED HARPER.**
New Plymouth, Idaho.

### Bargains in Bull Calves

Sired by Segis Riverside Pontiac, that sold in Pacific international sale, 1914, for $1025, and whose dam has A. R. O. record of 31.47 lbs. butter in 7 days; 118.89 in 30 days, and big records all through his pedigree.
**ERNEST JOHNSON. Scappoose, Ore.**

### HOLSTEINS

Well bred young bulls for sale.
**THOS. CARMICHAEL. Gaston, Ore.**

**REGISTERED HOLSTEINS**
Bull calves for sale with good A. R. O. backing.
**BEEBE BROS., R. F. D. 2, Rupert, Idaho.**

## ABERDEEN ANGUS

### Yakima Herd of Aberdeen Angus

In the famous valley of the Yakima is one of America's greatest collections of the breed.

At the recent Chicago International our breed won 1st on aged herd, 2d on young herd, 1st on calf herd and 2d on get of sire. All stock exhibited, except 2, were of our own breeding. We have an exceptionally good lot of yearling bulls for sale. To introduce our stock in this section we are pricing them within reach of small breeders and range men.

**Congdon & Battles**
Otto V. Battles, Mgr.
North Yakima, Wash.

### Aberdeen Angus Cattle

**A. H. EAGLESON & SONS.**
Boise, Idaho.

## BROWN SWISS CATTLE

### Brown Swiss Stock Farm

Breeders of Brown Swiss Cattle, the Farmer's Dairy Cow. Young stock for sale.
**THEO. BRUGGER, Route 3, Gresham, Ore.**

## SHORTHORN CATTLE

### SHORTHORNS

A few young stock for sale by such noted sires as Precious Goods, a son of the great Golden Goods, and Scottish Sunrise 2d.

**R. E. BOYCE, Baker, Ore.**

### FOR SALE

A choice lot of pure bred Shire stallions, coming two years old; also pure bred yearling Shorthorn bulls. Address

**WILSON RANCH, Rocklyn, Wash.**

**WEST SIDE AUGUSTUS (514271).**
heads my herd of registered Shorthorns and D. S. Poll Durhams. West Side Augustus by Count Augustus was first prize winner at Intermountain Stock show, Salt Lake, 1917. Stock for sale. Correspondence solicited.
**R. A. PARSONS. Blackfoot, Idaho.**

### LELAND BROTHERS

Breeders of top registered Shorthorn cattle. Correspondence solicited.
**WENDELL, Idaho.**

### H. H. Schildman

breeder of registered Shorthorn cattle, Hampshire sheep and big-type Poland China hogs.

**Filer, Idaho.**

**REGISTERED SHORTHORN COWS,**
Young bulls and heifers, sired by Scotch bulls: liberal terms.
**CALDWELL CATTLE CO., Caldwell, Idaho.**

**In answering advertisements don't fail to mention this paper.**

### Herd Bulls

Imported Doune Radiance No. 609412
and
Gainford Perfection No. 442173.

### Hercules Shorthorns

We can supply you with choice, well grown bulls and females of breeding age. Your inspection of our herd is invited. Visitors always welcome.

**Day & Rothrock Company**
205 Exchange Bank Bldg. Spokane, Wash.

## POULTRY

### White, Buff and Blue Orpingtons

**(Capt. De Bathe Strain.)**
**Speckled Sussex and Anconas. All Single Comb**

Aldrich strain Orpingtons, Sheppard Anconas. My birds took first prizes at all leading shows of Pacific Coast. Prices for stock, eggs and chicks reasonable. All from best laying birds. Finest lot of cockerels I've ever raised. A few choice Rhode Island Red cockerels.
A few White Holland and bronze turkey toms for sale.

**IRA N. DeLINE, Olympia, Wash.**

### State Winners of the Blue

Barred Rocks, White Leghorns and Black Minorcas. Prize winners, with the laying habit. Choice cockerels at $5 each. Eggs, $3 and $5.

**WILBER CLAYTON, Payette, Ida., R. 1.**

### White Leghorns

Baby chicks or hatching eggs from hens hatched from stock whose trap-nested records average 259 eggs per year. Special rates on lots of 100 and over.

**MOUNTAIN BROOK POULTRY FARM.**
Mr. and Mrs. W. A. Newton,
Myrtle Creek, Ore.

### Rhode Island Reds & Whites

Rose comb and S. C. blue ribbon winners. Utility and show stock. Limited number of cockerels, $5 each. Bronze turkeys and Toulouse geese. Blue ribbon stock. Egg orders booked. Write for mating list. No baby chicks.
**HIGHLAND FRUIT & POULTRY RANCH.**
J. Nonnenmacher, R. 3, North Yakima, Wn.

### BABY CHICKS

Rhode Island Reds, White Leghorns. Don't wait until March or April to order and then be disappointed because you can't get them. But order now from our heavy laying strain. Send card for price list.

**MAPLEBROOK POULTRY FARM.**
Box 3, Southworth, Wash.

### S. C. R. I. REDS

Buy your breeding stock and hatching eggs from a strictly commercial flock of heavy layers, that produce profits even with feed at war-time prices. Drop me a card today.

**MRS. ROMINGER, Underwood, Wash.**

**PATRIDGE WYANDOTTES.**
Eggs from best of hens, mated with Pompadour Jim, 2d prize cockerel P. P. I. E., $2.50 per 15.
A few speckled Sussex, $3.00 per 15.
**W. A. DUNLAP, Springfield, Ore.**

### Mammoth White Holland Turkeys

from first prize winners at the recent Portland poultry show.

**MRS. E. D. SITTON. Carlton, Ore.**

### Barred Rock Cockerels

Have some good birds at $3 and $5 each, from good laying stock. Send me your list of wants; will try and please you.
**C. A. STARK, Box 242, Sutherlin, Ore.**

**MAMMOTH BRONZE TOMS.**
Strong vitality, $6 to $8 each; no charge for crates. Barred Rock eggs for hatching. Pullets (some laying) $1.25 each.
**S. M. WILSON, Carley, Wash.**

### BABY CHICKS

S. C. White Leghorns. Eggs for hatching and day-old chicks from heavy laying strains.
**G. W. BURT, Roseburg, Ore.**

**PARK'S BRED TO LAY**
Barred Rocks; line bred. Eggs, $1.50 setting. $8 per 100. 25 yearling hens at $1.50 each
**F. J. WIRTNER, Mica, Wash.**

## SHEEP

### SHEEP

Full blood Lincolns, Romneys, Corridales and Hampshires. Ewes and rams, small or large lots. For sale by

**H. STANLEY COFFIN,**
Breeder and Importer. Yakima, Wash.

## TAMWORTH SWINE

**ROUND KNOLL RANCH NO. 3.**
Herd headed by Knoll Slope Colonel, assisted by Jolly Lad IV. Correspondence solicited.
**Bliss, Idaho.**

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, Feb. 4.—Enlarged receipts at the leading Missouri markets did a good deal to ease corn prices today after some gains had been scored as a result of severe low temperatures and owing to a dearth of peace news. The market closed steady at the same as Saturday's finish to a shade lower, with March $1.27 and May $1.24 7-8. The outcome in oats was also virtually unchanged, but for provisions varied from 5c decline to a rise of 7c.

Although arctic conditions in Illinois and eastward greatly hindered delivery of corn, conditions elsewhere, especially in Missouri and Iowa, were fairly good. As a consequence, primary receipts taken as a whole exceeded to a material extent the corresponding total of a year ago. Before this fact was known, however, bulls had an advantage, as receipts here were disappointing.

Railway congestion in the east acted as a weight on the oats market.

In provisions increases of western stocks largely offset the effect of higher quotations on hogs.

**Chicago Futures.**

| | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| Corn— | | | | |
| March .... | 1.27 | 1.27⅛ | 1.26⅞ | 1.27 |
| May ..... | 1.25 | 1.25⅛ | 1.24⅞ | 1.24⅞ |
| Oats— | | | | |
| March .... | .82¾ | .83⅜ | .82½ | .82½ |
| May ..... | .79¾ | .80⅝ | .79½ | .79½ |
| Pork— | | | | |
| May .....47.25 | | 47.25 | 47.00 | 47.10 |
| Lard— | | | | |
| May .....25.80 | | 25.92 | 25.80 | 25.85 |
| Ribs— | | | | |
| May .....24.80 | | 24.85 | 24.72 | 24.80 |

**Cash Quotations.**

CHICAGO, Feb. 4.—Corn—Nos. 2 and 3 yellow, nominal; No. 4 yellow, $1.75.

Oats—No. 3 white, 88½@89c; standard, 89@90c.

Rye—No. 2, nominal.

Barley, $1.53@1.76.

Timothy, $5@8.25.

Clover, $21@30.

Pork, nominal.

Lard, $25.85.

Ribs, $23.80@24.30.

**Pacific Northwest Grain.**

PORTLAND, Ore., Feb. 4.—Grain, 30-day options, bid: Oats, No. 2, $62; barley, feed, $58; barley, feed, $58; barley, brewing, $60.

Oats—No. 3 white, $56.50; 38-pound clipped white, $58.50; corn, No. 3 yellow, $68; No. 3 mixed, $66; oats, No. 3, $56.50; oats, clipped, $58.50; corn, yellow, $68; corn, mixed, $66.

Sales, 100 tons yellow corn, 30 days at $66.

**San Francisco Grain.**

SAN FRANCISCO, Feb. 4.—Barley—May, $3 bid.

**Minneapolis Grain.**

MINNEAPOLIS, Feb. 4.—Flour unchanged; shipments, 46,936 barrels.

Barley, $1.50@1.76.

Rye, $2.12@2.13.

Bran, $32.50.

Wheat—Receipts 233 cars, compared with 57 a year ago.

Corn—No. 3 yellow, $1.75@1.77.

Oats—No. 3 white, 81½@81½c.

Flax, $3.61½@3.65½.

## Live Stock Quotations.

**At Omaha.**

OMAHA, Feb. 4.—Hogs—Receipts 14,500; market strong to 5c higher. Heavy, $15.85@16.20; mixed, $15.90@16.10; light, $15.75@16.15; pigs, $10@15; bulk of sales, $15.90@16.10.

Cattle — Receipts 12,000; market steady to 10c lower. Native steers, $9@13.25; cows and heifers, $7.50@11; western steers, $8.50@11.75; Texas steers, $7.50@10.25; cows and heifers, $7@9.25; canners, $6.50@7.10; stockers and feeders, $6.50@10.15; calves, $9@13.25; bulls, stags, etc., $7@10.

Sheep—Receipts 7500; market slow, steady. Yearlings, $12@15; wethers, $11@13; ewes, $10.75@12.50; lambs, $16.25@17.25.

**At Chicago.**

CHICAGO, Feb. 4.—Hogs—Receipts 41,000; market strong, 10c above Saturday's average. Bulk, $16.35@16.65; light, $15.80@16.55; mixed, $16.05@16.70; heavy, $16@16.70; rough, $16@16.20; pigs, $13.25@15.50.

Cattle—Receipts 16,000; market firm. Native steers, $8.65@14.25; stockers and feeders, $7.50@10.60; cows and heifers, $6.50@12; calves, $9.50@16.

Sheep—Receipts 12,000; market firm. Wethers, $10@13.50; lambs, $14.75@17.85.

**At Portland.**

PORTLAND, Ore., Feb. 4.—Cattle strong; receipts 1236. Medium to choice steers, $10.55@11; good to medium steers, $9.35@10.35; common to good steers, $7.75@9.25; choice cows and heifers, $8@10; common to good cows and heifers, $6.50@8; canners, $4@6; bulls, $5@7.50; calves, $7.50@11; stocker and feeder steers, $6@9.50.

Hogs higher; receipts 1817. Prime light, $16.20@16.35; prime heavy, $16.35@16.50; pigs, $13.75@15; bulk of sales, $16@16.35.

Sheep firm; receipts 558. Western lambs, $15@15.50; valley lambs, $14.50@15; yearlings, $13@13.50; wethers, $12.50@13; ewes, $9@11.

**Spokane Stockyards, Monday.**

Hogs—Receipts 40; market strong. Prime light, $15.75@16; prime heavy, $15.85@16.10; pigs, $14.50@15.50; stockers and feeders, $12@14; bulk of sales, $16.

Cattle—Receipts 77; market steady to strong. Best beef steers, $10.25@11; good steers, $9.25@10.25; common to good steers, $8@9; best beef cows and heifers, $8.50@9.25; good cows and heifers, $7.50@8.25; common to good cows and heifers, $6.35@7.25; canners, $3.50@6; bulls, $5.50@7.75; calves, $6.50@10.50; stocker and feeder steers, $6@8.

Sheep—Receipts none; market strong. Prime lambs, $14.50@15; good lambs, $13.25@14; prime yearlings, $12.50@13.25; prime wethers, $12@12.75; best mutton ewes, $9@10.75.

## Portland Market.

PORTLAND, Ore., Feb. 4.—An all-around weakening of the butter market is noted. Print and cube prices have dropped a cent and the buying price of butterfat has been reduced 2 cents. A steady decline from now on is expected. Lower San Francisco prices were mainly responsible for the drop here, and also the condition of the condensed milk business. An overproduction of canned milk is reported and some of the condenseries in this state have closed down while others are preparing to do so.

Eggs advanced when the snow came. The eastern demand continues and at the same time shippers in the country are apparently holding back supplies.

Dressed meats, which are very scarce, have climbed to record prices and poultry is also selling high.

The improvement in the hide market east encourages local dealers, but prices here have not yet been raised.

Hops are selling in a small way at 18 cents for the best grades.

In the following list of quotations the grain, hay, mill feed, hops, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 1, $61.50 per ton.

Millstuffs—Bran, $30 per ton; shorts, $32.

Barley—No. 1 feed, $57; brewing, $61.25; rolled, $66@68.

Hay—Buying prices: Timothy, eastern Oregon, $27; alfalfa, $22.50; grain, $22.

Eggs — Oregon ranch, case count, 51c per dozen; candled, 52@53c.

Poultry—Hens, 23 1-2@25c; ducks, 30c; turkeys, live, 25c; geese, 16@18c.

Butter—City creamery, prints, 52@53c per pound; cubes, extras, 48c.

Cheese —Tillamook triplets, 25c; Young Americas, 26c.

Dressed meats—Veal, 19 1-2@20c; pork, 20@20 1-2c.

Hops—1916, nominal; 1917 crops, 17@18c.

Potatoes—Oregon, buying price, $1@1.15 per hundred.

Wool—Eastern Oregon, 50@60c; valley, 50@55c.

Beans—Buying prices: Oregon white, 9@10c; colored, 8c.

## The Wool Market.

BOSTON, Feb. 1.—The Commercial Bulletin tomorrow will say:

"The last week has been a quiet one in the wool market, although not altogether uninteresting. Some business is being done more or less steadily, so that prices keep fairly firm. Manufacturers report fair business on newly opened civilian fabrics."

Scoured basis:

Texas—Fine 12 months, $1.68@1.72; fine eight months, $1.55@1.60.

California—Northern, $1.70@1.75; middle county, $1.55@1.60; southern, $1.45@1.50.

Oregon—Eastern No. 1 staple, $1.80@1.82; eastern clothing, $1.50@1.60; valley No. 1, $1.65@1.70.

Territory—Fine staple, $1.85@1.90; halfblood combing, $1.70@1.75; three-eighths blood combing, $1.45@1.50; fine clothing, $1.60@1.65; fine medium clothing, $1.55@1.60.

Pulled—Extra, $1.80@1.85; AA, $1.70@1.80; A supers, $1.60@1.60.

## Portland Wheat.

PORTLAND, Ore., Feb. 4.—Chief interest in the grain market just now centers in barley, owing to the urgent export demand. Buyers are bidding as much in the country as here, but there is little left to buy from farmers. The export orders, it is said, are more than enough to take care of all the barley left in all hands in the northwest. There is also some demand from millers, but those now making barley flour are understood to have enough of the cereal on hand.

Oats are firm and though $61 is still being quoted on the board here there have been bids in the open market several dollars higher, with farmers very firm holders.

Hay is ruling steady at current prices.

## Sheep Clubs Added.

Sheep clubs will be added to the industrial club projects in Klamath county, Oregon, for the new year.

## Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

**Potatoes**—New local potatoes, $1.25@1.50 cwt; sweet potatoes, $4.75.

**Apples**—Large eating apples, $1.25@1.50; cooking apples, $1 box; Delicious, 2.25; Winter Bananas, $1.50 box; Jonathans, $1.10@1.25 box; Wageners, $1@1.50 box Rome Beauties, $1.75 box; Spitzenburgs, $2 box; King Davids, $1.10 box; Grimes Golden, $1.35@1.65 box; Stayman Winesaps, $1.75 box.

**Butter**—Blanchard cartons, 53c lb; Medo-Maid, 53c lb; Cascade, 49c lb; Gold Leaf, 53c lb; Better Butter, 53c lb; Attalia, 53c lb; Diadem, 53c lb; Hazelwood, 53c lb; Solid Pack, 52@53c lb; Jersey Belle, 51c lb; Peerless, 47@48c lb; Snowcap, 38c lb; cooking butter, 38c lb.

**Cheese**—Wisconsin full cream, twins, 27c; triplets, 25c; Hazelwood full cream, triplets, 26c lb; Hazelwood Young America, 27c lb; Winconsin limburger, 32@33c lb; brick cheese, 33@35c lb; domestic Swiss, 38c lb; Young Americas, 27c lb.

**Eggs**—White filler, guaranteed, $13 case; selected storage, $12.

**Live Poultry**—Hens, 13@16c lb; broilers, 18c lb; old roosters, 9c lb; ducks, 15c lb; geese, 20@23c lb; turkeys, 28@32c lb.

**Dressed Poultry**—Hens, 30c lb; broilers, 32c lb; old roosters, 14@17c lb; ducks, 20@23c lb; geese, 20@23c lb.

**Hide Quotations.**

**Green Cows and Steers**—25 lbs and up, 11c; salted cured, 14c; green bulls and stags, 10c; salted cured, 12c; kip, 15 lbs. to 25 lbs., 16c; calf skins up to 15 lbs. 23c; dry flint hides, 30c; dry, salted, 25c; dry calf skins, under 10 lbs. 28c; dry sheep pelts, 30@35c; dry shearlings, 10c@$1 each; green horse hides, $2.50@4 each; dry horse hides, $1@2 each.

**Top Price for Oats, Barley.**

PULLMAN, Wash., Feb. 2.—The highest prices for oats and barley ever offered in this vicinity are available to farmers. D. F. Staley this week disposed of 65 tons of barley and oats to the Interior Warehouse company, receiving $60 a ton, or $3 a hundredweight.

## Seattle Market.

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots f. o. b. Seattle.

Eggs—Local, 47@48c per dozen.

Poultry—Live hens, fat, over 4 lbs., 25c lb.; 4 lbs. and under, 25c; old roosters, 16c lb.; squabs, large, $3.50 dozen; geese, fat, live, 18c lb.; springs, live, 25c lb.

Butterfat—58c lb.; dairy butter, 35@36c.

Beef—Buying prices: Prime beef steers, 11@12c lb.; cows, fat, 9@11c lb.; heifers, 10@11c lb.

Hogs—Light, 18x20c lb.; heavy, 17@18c lb.

Veal—Fancy light, 14@17c lb.; heavy, 12@14c lb.

Hides — Salted, 14c lb.; flint-dry hides, 29c lb.; salt kip, 16c lb.; green hides, 11c lb.; green calf, 23c lb.; dry calf (under 6 lbs.), 29c lb.; bulls and dry salts, 4c lb. less; green bulls, 10c lb.; dry full wool sheep pelts, 36@39c lb.; salt bulls, 12c lb.

**SELLING PRICES.**

Feed—Scratch, $74 per ton; all grain chop, $69 per ton; oats, $66 per ton; rolled oats, $65.50 per ton; bran, $33@34 per ton; shorts, $36@37 per ton; soy bean meal, $67 per ton; whole corn, $67.50 per ton; cracked corn, $74 per ton; alfalfa meal, $35; rolled barley, $66.50; sprouting oats, $68 per ton; Milo maize, $70 per ton; white gyp, $75 per ton.

Hay—Eastern Washington timothy, $36@37 per ton; alfalfa, $28@29 per ton; double compressed, $40@41 per ton; wheat hay, $28 per ton; Puget sound, $30@31 per ton; straw, $15.

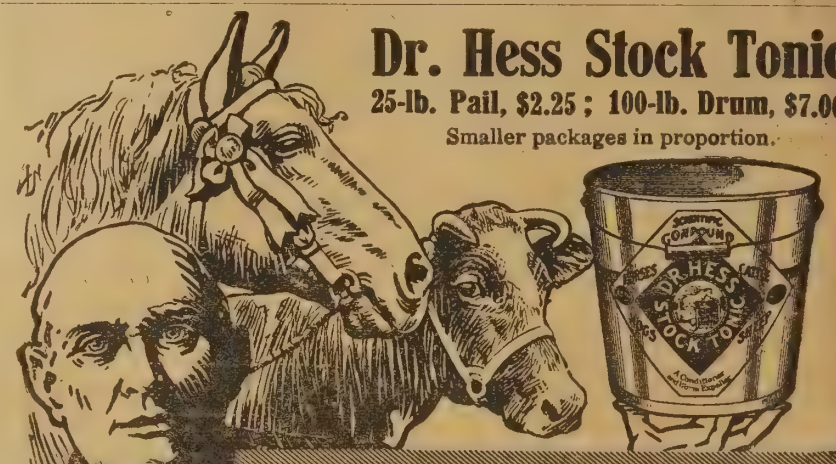
Butter—Washington creamery extras, cubes, 52c lb.; do bricks, 53c lb.

Eggs—Fresh ranch, 52@53c dozen.

Potatoes—Puget sound, $1.25@1.35 per cwt.; eastern Washington, $1.50@1.60 per cwt.

**LINSEED.**

DULUTH, Feb. 2.—Linseed, $3.53½@3.65½; May, $3.53½ asked; July, $3.48; October, $3.14 bid.

**Dr. Hess Stock Tonic**

**25-lb. Pail, $2.25; 100-lb. Drum, $7.00**

Smaller packages in proportion.

**You buy my Stock Tonic from a dealer in your town at rock-bottom prices.**

## Condition Your Stock Drive Out the Worms

**Spring is here**—your animals have long been on dry feed and as grain, hay and fodder do not contain the laxatives so abundantly supplied by grass, they are apt to be out of fix.

Now's the time to feed Dr. Hess Stock Tonic to **your horses,** to condition them for spring work, so that when the sun shines they will be rid of their old coat, full of stamina and ready for business.

And don't overlook the spring **pig crop**—the money-makers. Start them off free from disease—free from worms, by a course of Dr. Hess Stock Tonic.

**Your cows** will be benefited by Dr. Hess Stock Tonic, and it will keep your **feeding cattle** right up on their appetites during the finishing period.

Excellent for **ewes** at lambing time.

Dr. Hess Stock Tonic contains laxatives to regulate the bowels, diuretics to remove dropsical swellings, tonics to improve the appetite and increase digestion, and vermifuges to expel worms.

There's a dealer in your town that will supply you with Dr. Hess Stock Tonic and guarantee it to do these things.

**Dr. Hess & Clark, Ashland, Ohio**

**Dr. Hess Poultry PAN-A-CE-A will help make your hens lay now**

**Dr. Hess Instant Louse Killer Kills Lice**

## Western Canada.

Western Canada is declaring that the cereal crop for 1917 was the most valuable one ever harvested; the returns from all classes of live stock being satisfactory. The wool clip was not only greater than in any previous year, but the price obtained was double that of 1916, which in turn was almost double that of the year before.

**Earning Value of Ship.**

The earning value of a ship is now from $400 to $500 a day.

# Want Ads

### HELP WANTED—MALE 3

WANTED—ACTIVE MEN WITH FARMER acquaintances, to sell Pipeless Furnaces; splendid line; good proposition to offer. Richardson & Boynton Co., 171 W. Lake st., Chicago, Ill.

### EDUCATIONAL 45

BEHNKE-WALKER, PORTLAND, NORTHwest's largest, finest business college, can not supply half the calls for trained young men, women. Enroll now. Free success catalog. Positions secured.

### MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

Send us postcard asking for our new, illustrated catalog No. 27, of sash, doors, finish, paints, builders' hardware, plaster board, roofing, etc., sent free on request.

Cottage front doors .....$2.75
5x panel doors .....$1.80
2 light windows .....$1.24
Prepared roofing, ....$1.35, $1.70 and $2.10
Clear cedar lap siding, per 1000 ft. ....$8.00
Short flooring and ceiling .....$20.00

The largest factory in the west selling direct to the consumer. We sell any one, ship anywhere, and guarantee safe delivery.

O. B. WILLIAMS CO.
1943 FIRST AVE SO. SEATTLE, WASH.

BUILDING MATERIALS AT WHOLESALE prices — Doors, windows, roofing paper, porch columns, plaster boards. All building materials shipped promptly. Send for our complete illustrated catalogue; gives you lowest net prices. P. A. ROVIG CO., 2229 First ave., So., Seattle, Wash.

FOR SALE—GENERAL MDSE. STORE, dock, 7 acres land, 800 ft. water frontage, warehouses, 2 barns. Located on Puget Sound between Seattle and Tacoma. This business netted me over $2000 in 1917. $9000 will handle this. Address A-10 Washington Farmer, Seattle, Wash.

**SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.**

FARMERS——WRITE FOR ELEVATOR plans and prices at once. Save 20 per cent of construction cost. Capacities, 6000 bushels and up. Gem Elevator Co., Bonners Ferry, Idaho.

TRAP COYOTES — IF YOU WANT TO learn of a sure system for trapping coyotes write me for information. I have it. C. L. Willis, Dillard, Ore.

READY-CUT HOUSES AND BARNS, wholesale, mill prices. Plan book free. Keystone Lumber Company, Tacoma, Wash.

BARGAINS: GOOD VIOLIN, $5; UKELELE, $4; vest pocket kodak, soft leather case, $6; postpaid. Ralph Bruihl, Benge, Wash.

FOR SALE—THREE OAK CASKS, 300 gallons capacity. Inland Products Co., Spokane, Wash.

MY PACK-TRAINED FOX HOUNDS FOR sale. Write W. Gingery, Plains, Mont.

### MISCELLANEOUS WANTED 63

WANTED—ALIVE BELGIAN HARES; also poultry, eggs and dressed meat. Commercial Creamery Company. Spokane, Wash.

### FARM LIGHT PLANTS. 73

WARNERLITE ELEC. LIGHT PLANTS absolutely guaranteed. Thousands used by satisfied farmers. Live agents wanted. Warnerlite Co., Temple Court bldg., Spokane.

### MACHINERY FOR SALE. 93

"WITTE" GASOLINE ENGINES
save labor, and are carried in stock by
HIGGINS MACHINERY COMPANY,
312 FIRST AVE., S., SEATTLE.

Write for Catalogue.

MOTORS, GEARS, BEARINGS, WHEELS, axles; we wreck all makes of cars and sell their parts at half price. Auto Wrecking Co., 89,91-93 North Broadway, Portland, Ore.

### STOVE REPAIRING 126

**WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.**

### PATENTS 150

WRITE FOR HOW TO OBTAIN A PATent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

### POULTRY 174

BABY CHICKS.

We will have 125,000 baby chicks for sale this season. White Leghorns, $15 in Feb.; $14 in March and Apr. R. I. Reds and Barred Rocks, $18 in March and Apr. Our job lot of Essex Model incubators more than ½ sold; 70-egg size, $5; 120-egg size, $7.50; 175-egg size, $15; 275-egg size, $20; 410-egg size, $30. Send for free catalog of famous Queen incubators and brooder stoves. Queen Hatchery, 89 Pike st., Seattle, Wn.

FOR SOMETHING GOOD IN SILVER Wyandottes, S. S. Hamburgs or Golden Campines, write G. G. Wherry, Payette, Ida.

## Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and 1 t s associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

# Want Ads

**Send for card giving lower rates for ads running one month or longer.**

## How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

### POULTRY 174
Continued.



WHY MY CHICKS LIVE AND GROW IN the hands of my customers. They are all hatched from fully matured stock, on free range; bred right, mated right, fed right. I have the most up-to-date hatchery building in the country—five thousand feet of floor space—built of brick, with dead-air space in wall, giving a uniform heat that means strong, healthy chicks. No spoiled chicks from overheating. We use eggs from Hoganized stock only. We guarantee safe delivery and full count. Write for prices. Lasher's Hatchery, Petaluma, Calif.

PEDIGREED POULTRY.

Tom Barron strain of English Leghorns; every bird pedigreed; 257-egg hens, cock's dam 275 eggs. These are real egg producers. A limited amount of choice stock for sale. Satisfaction guaranteed or no sales. Prices very reasonable. Asael H. Dixon, Oakley, Idaho.

BABY CHICKS.

Famous Carnation White Leghorn; vigorous, early maturing, heavy winter layers; also breeding stock. E. W. Raush, Carnation Poultry Ranch, Kent, Wash.

PETALUMA HATCHERY—CAN SHIP DAYold chicks to points reached in 3 days. Why not have the best? We challenge the hen. Free circular. L. W. Clark, Petaluma, Cal.

FOR SALE—POULTRY PLANT; EVERYthing new; 18 a.; good location; 1 a. big sale; house 1200 hens; no lice. Good reasons. Write Levi Balmer, Salem, Ore.

FOR SALE—MAMMOTH BRONZE TURkeys. Won five prizes at Wash. State Fair. Toms, $7 and $10; hens, $5. H. T. Cutler, Parker, Wash.

BIG, DARK ROSE COMB R. I. REDS; also pure bred Airedale puppies; 6-tray, successful oat sprouter, $8. Mrs. Melvin H. Shirley, Firth, Idaho.

S. C. BLUE ANDALUSIANS; GREAT LAYers. Eggs, $2 per setting; fine ckls., $2 to $5. Mrs. C. W. Armstrong, Freewater, Ore.

TRAP-NESTED S. C. W. LEGHORNS—Hens, pullets and hatching eggs for sale. H. C. Deitz, Box 337, Hood River, Ore.

TRAPNESTED WHITE LEGHORNS AND Barred Rocks. Eggs, $1.50 per 15; $8 per 100. Mrs. W. M. Roberts, Elmira, Ore.

RANCH RAISED WHITE WYANDOTTES. Good vigorous birds, eggs and stock for sale. Jas. A. Hills, Jonathan, Wash.

FOR SALE—BARRED PLYMOUTH ROCK chickens; best in the country. Mrs. C. H. Harris, Nampa, Idaho, R. D. 1.

WILD AND BRONZE TURKEYS. CHOICE breeders. E. Y. Sanders, Roy, Wash.

### LIVE STOCK 177

CALVES—CALVES—CALVES—CALVES

I am in a position to supply you with all the young calves that you can use, and this season I am able to offer you some very fine stock, especially in the dairy line, I will have calves for sale from cows that produce as high as 70 lbs. of milk daily. Send for my price list at once as these calves are ready for delivery from this date on.

SMITH, "THE CALF MAN,"
Tillamook, Oregon.

FOR SALE, LIVE STOCK.

Big two days' sale, Friday, Saturday, Feb. 15-16. California Ranch, Buena, Wash. O. W. R. R., 15 miles from Yakima. Feb. 15, 30 head farm horses, 3 to 5 years; all farm raised, by reg. stallion; all broken, 20 head steers, heifers and grade cows. Feb. 16, 60 head reg. Holsteins, mostly cows and bred heifers. These offerings are the best in the west. Chas. S. Mead Jr., owner. George A. Gue, auctioneer.

WORKING STALLION.

We have for sale a registered Clydesdale stallion that is gentle and is used daily as part of one of the regular work teams on the farm. We have discontinued raising colts and will sell him at the very low price of $350. For further information address

THE GREENBACK FARM,
800 LEARY BLDG., SEATTLE, WASH.

YOUNG PERCHERON STALLIONS AND mares for sale. Among them Unietta, champion of three 1917 stock shows. H. E. Evans & Co., Rickreall, Ore.

BERKSHIRE BRED SOWS AND GILTS, March, April and May farrow. Write for special price list today. SILVER BIRCH FARMS, Newport, Wash.

JERSEY CATTLE—BULLS, COWS AND calves are included in private sale list now ready. SILVER BIRCH FARMS, Newport, Wash.

POLAND-CHINAS; BIG TYPE; SPRING pigs by Young Chief N. 79349, from good, rangy sows. James A. Hills, Jonathan, Wn.

FOR SALE—25 REGISTERED RED, white and roan Shorthorn bull calves and yearlings. Wm. Mulhall, Fenn, Idaho.

O. I. C. BOAR PIGS, SERVICEABLE AGE. Pearl Guineas, $5.00 per trio. C. I. Ballard, Rickerall, Ore.

### HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

### BUSINESS OPPORTUNITIES 516

$6500 BUYS A WELL-EQUIPPED DAIRY plant and business in a beautiful college town in So. Calif. Brings in about $400 per mo. For full particulars and terms write R. F. D. 1, Bx. 86, Yelm, Wash.

### RUBBER STAMPS and SEALS 334

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

### TAXIDERMISTS 426

WE MOUNT ANYTHING. FURS TANNED and made into furs and robes. Raw furs bought. Mohr, 82 Bernard, Spokane.

### PLUMBING and HEATING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

### SEEDS 620



IF YOU HAVE ACCLIMATED SEED TO sell, it will pay you to advertise it in this classification. If you want to buy seed adapted to western soil and climate watch what is offered in this department.

PEAS — KAUFMAN'S PEDIGREED BLUE Bells. Best seed on the Coast. Send for circulars. Hill-selected seed potatoes, Earliest of All, Early Rose, American Wonder. Duroc hogs. 60 a. dairy land for sale. $75 month and home for farm hand. W. H. Kaufman, Bellingham, Wn.

VETCH, CLOVER AND FIELD SEEDS. We carry a complete line of grasses, wheat, oats and other seeds too numerous to mention. Our prices are right. Will be glad to send samples and quote prices.

CORVALLIS FLOURING MILLS.
CORVALLIS, ORE.

SEEDS—THE KIND THAT GROW. You can't keep them in the ground. Send for catalogue.

BUTZER'S SEED STORE.
188-190 Front St.
Portland, Oregon.

RED AND ALSIKE CLOVER from the heart of the Willamette valley; also field corn and all kinds field and garden seeds. Drop us a postal for samples and prices.

MURPHY'S SEED STORE, ALBANY, ORE.

WE SPECIALIZE IN TIMOTHY, ALFALfa, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Ida.

VETCH, CLOVER, TIMOTHY.

Choice recleaned seeds at direct to you prices. RHOTEN FARM, Salem, Oregon.

HIGHEST QUALITY RED AND ALSIKE clover, also vetch seed. Prices right. M. Senders & Co., Albany, Ore.

### NURSERY STOCK 621

CLARK SEEDLING STRAWBERRY PLANTS, the kind that made Hood River famous. No other commercial variety grown here. An absolutely pure strain of strong, well-grown plants. You can not buy better plants than we are offering. Mt. View Orchards, W. R. Gibson & Son, Proprs., Route 2, Hood River, Ore.

EVERBEARING STRAWBERRIES ARE mortgage lifters. We have plants, strong and thrifty. Send for price list. F. I. Moffett, Ellensburg, Wash.

CLARK'S SEEDLING STRAWBERRY plants. Fine, strong plants; terms reasonable. A. M. Sawyer, Hood River, Ore.

FOR SALE—STRAWBERRY PLANTS, standard varieties and best Everbearing kinds. Chas. Leigh, R. 3, Kent, Wash.

### HOMEST'DS, RELINQ'M'TS 642

OREGON-CALIFORNIA GOV'T LAND, booklet free. Joseph Clark, Sacramento, Cal.

### FARM LANDS—FOR SALE 651

FOR SALE—2700 ACRES OF FINE FARM land in one body; several large springs of good water make it fine for stock farm; two miles from R. R. sta. Will sell for best offer. Mrs. W. W. Green, Georgetown, Ga.

HEAD FOR THE HEADWATERS OF the old Missouri; splendid grain and stock ranches. For information about climate and soil write Chamber of Commerce, Three Forks, Montana.

### FARM LANDS—FOR SALE 651
Continued.

BUY WHERE THEY RAISE THE PRIZE CROPS
IN SNOHOMISH COUNTY.

40-acre farms, $25 per acre. Ten yearly payments, 6 per cent interest. Visit our office and see the great exhibit of PRIZE-WINNING vegetables, fruits, grains, alfalfa and other grasses raised on the adjoining farms. They prove our claims that this is the best land in WESTERN WASHINGTON.

Paved roads. Four passenger trains a day. Graded school, cannery, creamery, cheese factory, plenty of work for the laboring man in the mills and camps, where 75 settlers are all boosters. DON'T LOSE A DAY in asking for our illustrated literature.

BROWNELL LAND CO.
904 THIRD AVE., SEATTLE, WASH.

YOUR CHANCE IS IN CANADA—RICH lands and business opportunities offer you independence: Farm lands, $11 to $30 acre; irrigated lands, $35 to $50; twenty years to pay; $2000 loan in improvements, or ready made farms. Loan of live stock; taxes average under twenty cents an acre; no taxes on improvements, personal property, or live stock. Good markets, churches, schools, roads, telephones; excellent climate—crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Allan Cameron, general superintendent land branch, Canadian Pacific Ry., 30 Ninth ave., Calgary, Alberta.

GOING — IRRIGATED ALFALFA AND stock ranch of 111 acres; gross income $6000; situated on the bank of the Yakima river; ideal for all kinds of stock; properly cultivated, will raise 100 bu. corn and 10 tons of potatoes to the acre. Horses, cows, registered $1000 Holstein bull, Berkshire hogs, chickens, farm implements, etc.; eight-room house, barn, silo, hog and chicken houses. This ranch is second to none in the Yakima valley. Reason for selling, old age. Price for all $28,000; one-half cash. Address B 7, care Washington Farmer, Spokane.

FOR SALE BY OWNER—40 ACRES; IN the beautiful San Juan archipelago, where there are no floods and the crops are sure; 20 a. cleared, bal. pasture, with enough timber to pay for the place; horses, cattle, hogs, sheep and chickens; all implements; house, barn, shed, chicken houses; all kinds of feed for the stock. Price, as stands, $37.50. Will take $1750 down, bal. easy, to suit purchaser; 8 per cent int. Address J. M. Jorgensen, R. F. D. Box 48, Port Stanley, Wash.

JORDAN VALLEY PROJECT—WHY NOT investigate this new project? It is just in the making, and opportunities of this character are becoming more scarce each year. We will explain it and send literature on request. There is plenty of development work and an opportunity for those who want to make payments in this manner. Our autos will take you from Boise to look the project over. HARLEY J. HOOKER, Shaw Bldg., Boise, Idaho.

FOR SALE BY OWNER—½ SECTION OF choice improved stock, hay and grain farm, almost level; one modern dairy barn and one horse barn; two houses; 2 wells, granary, implement shed and several small buildings; stream running through for stock water; good markets for everything; county seat and railroad station; high school 1¼ miles; grade school ¼ mile. $65 per acre; one-third cash, easy terms for balance. R. D. Thomas, Cascade, Idaho.

PHYSICALLY DISABLED; OFFER 200 acres; 100 good alfalfa and grain land, with 14 head stock, chickens, implements and Ford, all for $4300; $2000 cash. Adjoins good range; in fine valley; eastern Oregon. 3-room house, barn and garage. Address Owner, care of Oregon Farmer, Spokane, Wn.

FOR SALE BY OWNER—GOOD DAIRY dairy ranch in Lincoln county, Ore. Dyked, improved, with or without stock and equipment; close to town; about 150 acres. For full information address Owner, B 1, Oregon Farmer, Portland, Ore.

FOR SALE—2700 ACRES OF FINE FARM land in one body; several large springs of good water make it fine for stock farm; two miles from R. R. sta. Will sell for best offer. Mrs. W. W. Green, Georgetown, Ga.

ALFALFA, PLOW LANDS, HOP YARDS, orchards, business investments. Lum Land Co., North Yakima, Wash.

### FARM LANDS—WANTED 654

WILL PAY CASH FOR GOOD FARM, 50 to 400 acres, not over 50 miles from Spokane. Give lowest price and location in your letter. B 9, Pacific Northwest Farm Trio, Spokane, Wash.

### FARM LANDS—FOR RENT 657

FARM FOR RENT.

The Greenbank company will consider leasing its modern, complete dairy and breeding farm at Greenbank, Washington, on the shores of Puget sound, about forty miles north of Seattle.

There are about 250 acres in a high state of cultivation; fenced and cross-fenced, and much of it tile drained. There is an additional 100 acres, or thereabouts, fenced for stump pasturage. There is a milking barn for 60 cows, a large separate sleeping shed with a capacity for about 100 head and numerous other buildings sufficient to care for the usual number of young stock. There is also a large piggery. Water is piped by gravity to all of the buildings and corrals. There are separate five-room cottages with modern conveniences for all permanent help. The land is exceptionally fertile, two fields of oats last year yielded 96½ and 110 bushels respectively to the acre. The land is high and not subject to overflow. Most of it is dry throughout the entire winter and suitable for pasturing. The climate permits plowing during all of the winter months and spring seeding during February and March. A considerable acreage is seeded to winter grain and most of the plowing for spring seeding has been completed. The mows are nearly filled with hay and straw and about 100 tons of corn silage is in the silo.

A lease of the property will be given to responsible persons for a number of years, to be operated as a dairy farm. For further particulars address us.

THE GREENBANK FARM.
800 LEARY BLDG., SEATTLE, WASH.

### FARM LANDS—Wanted to Rent 660

WANTED—TO HEAR FROM OWNER OF partly improved or cut-over land for lease or sale. Give description, location and lowest cash terms. Address G. N. Johnson, Gen. Del., Seattle, Wash.

REO
"THE GOLD STANDARD OF VALUES"

# This New Reo Light Four Is a Handsome Motor Car

AT THE NEW YORK SHOW, in January, the Reo exhibit was, to an even greater extent than ordinarily, the mecca of the crowds.

YOU'D THINK, PERHAPS, that at the National automobile show, and especially in the world's greatest metropolis, where dealers and buyers go to see what is latest in construction and design, that the ponderous multi-cylinder machines would attract the most attention.

ON THE CONTRARY, there was vastly more interest shown in the types of cars that are designed to supply that great American need for a practical, economical, five-passenger touring car or three-passenger roadster.

THIS YEAR, more than ever before, buyers are paying less attention to fads and more to practical things. More to cost of upkeep than to first cost.

AND THIS REO—this new Light Four—stood out above all the rest.

IT IS SUCCESSOR to the greatest four-cylinder automobile ever built—that wonderfully efficient, wonderfully sturdy Reo the Fifth, that for eight years maintained its supremacy.

THIS IS A REFINEMENT of that great car. All fundamentals have been retained and every detail has been refined to the last degree.

IN A WORD, this latest Reo represents all that has gone before and just that much more of Reo experience.

THIS IS A REAL CAR—a full five-passenger Light four. Not a skimpy—not a little four.

IT DOES SEAT FIVE full grown adults—you don't have to use a shoe horn to get them in.

BODY DESIGN IS BEAUTIFUL—it is up to the minute in every line and curve and in every detail of upholstery and finish and appointments.

IT IS JUST THE CAR you would specify if having one made to your own order.

FOR HERE ARE COMBINED roominess with economy of operation; beauty in appearance with sterling mechanical quality;

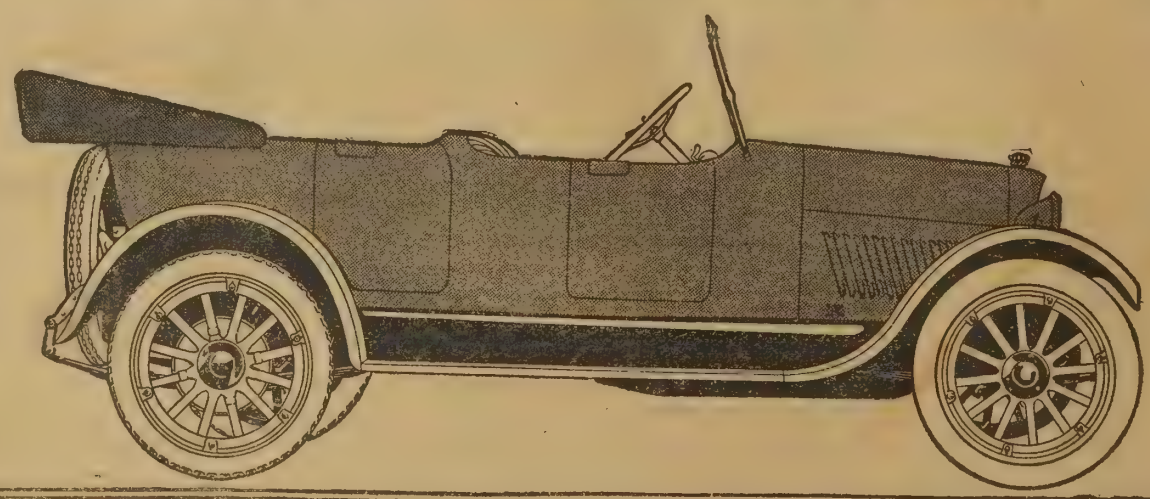
AND LOW UPKEEP—that quality for which Reos have always been famous.

OUTPUT IS LIMITED—must be this year, for we also are doing our part to assist Uncle Sam.

SO YOU'LL HAVE TO HURRY. Make your decision—see your Reo dealer, and place your order well in advance of the time you will want delivery, else you will surely be disappointed.

TODAY—won't be a minute to soon.

**Reo Motor Car Company, Lansing, Michigan**



THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XLI. NO. 7. FEBRUARY 14, 1918. ** WEEKLY.

# Can't Run Western Farm on Eastern Training



The above is a picture of Mrs. D. W. Brown of Battle Ground, Clarke county, Wash., with her pet calf and horse. Mrs. Brown writes: "I was raised on a Michigan farm and find that my early training in Michigan does not do me much good in Washington. I lived for some time in that splendid city of Spokane and then came out here on the farm. My husband is a veterinary surgeon and therefore I am more interested in live stock, but we raise enough to feed our stock. Our cows feed our hogs, and I have fine success with getting eggs the year around when my neighbors on either side get none. I attribute it to making my chickens work. I never feed them more than once a day and then just an hour before roosting time."

World's Lowest Priced Electrically Equipped Automobiles

# CHEVROLET

The Product Of Experience

"'Tis a Mark of Distinction to Be a 'Shev-Ro-Lay' Owner."

**$51.30**

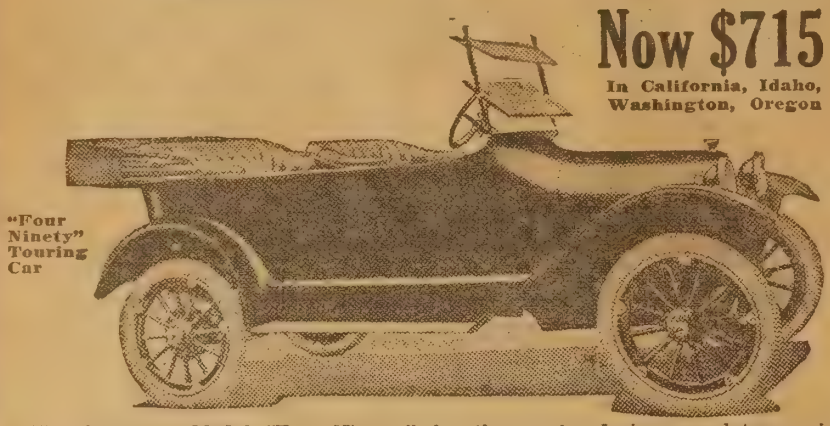
Will Be YOUR SAVING if YOU PURCHASE This "Four-Ninety" Touring Car BEFORE MARCH 1ST.

*All Prices Quoted Herein Are F. O. B. Pacific Coast States*

**$41.00**

Will Be YOUR SAVING if YOU PURCHASE This "Four-Ninety" Light Delivery BEFORE MARCH 1ST

**Now $715**
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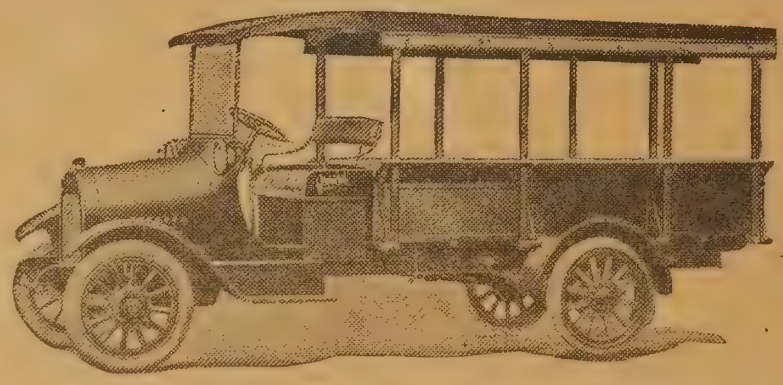
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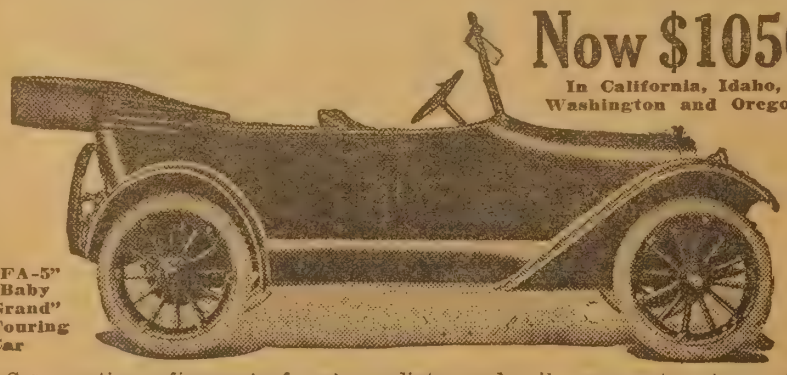
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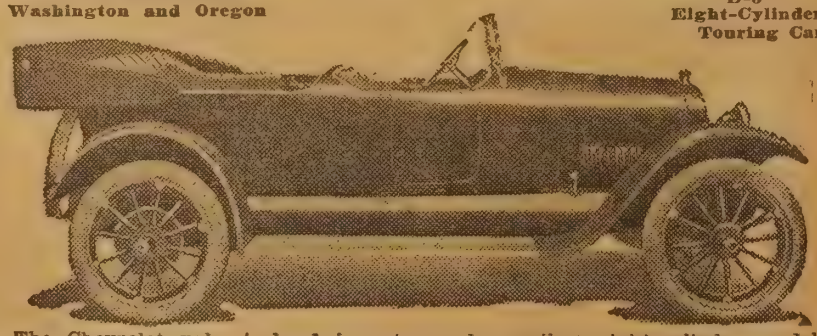
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# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 7 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF February 14, 1918

# Would Destroy Farm Loan Bank

## *Mortgage Bankers Attack It; O'Shea Replies to Their Criticisms*

Ever since the federal farm loan bank began operations nearly a year ago private financial interests of certain classes, primarily those that have been doing a farm mortgage business, have shown desires to undermine and overthrow it. One shot in attack on the farm loan system was heard last week when the Washington State Bankers' association met in Spokane. The association took no action of any kind in the matter, but speakers on the program, especially George L. Ramsey, president of the Montana Banking corporation of Helena, Mont., criticized it vigorously. Mr. Ramsey charged that the farm loan bank was built upon an unsound principle, and that the experience of the year had shown that it could not pay its operating expenses.

For the benefit of the thousands of farmers of the four states of the northwest interested in the farm loan bank President D. G. O'Shea of the northwestern branch issued a formal statement in reply to the Ramsey attack, which occurred at the last meeting of the bankers at such time that no opportunity was given him to reply. In his statement President O'Shea declares that the farm loan bank will actually pay a dividend at the end of the current year. Here are vital parts of the statement:

"The federal land bank received a capital of $750,000 provided in accordance with the farm loan act, which capital will be returned to the government, but none is to be returned under the law until the stock paid in by national farm loan associations amounts to an equal sum. In April or May of this year this bank will have acquired the capital necessary to enable it thereafter to refund the government's stock subscription in accordance with the law, and it will do so.

**Keeps Down Expenses.**

"It seems necessary to say again that the land bank receives no appropriation; that it has to pay for everything it gets and needs, including postage, as does any other person or business; and that it is required to and will earn its operating expenses, which can be legitimately obtained only from the small margin of interest it charges the borrower over and above the interest it pays on its bonds.

"In waiving the collection of such charges the land bank has no income save interest which it collects semi-annually; hence it will show on its books no material revenue collected until after six months from the date of the first loan is completed, while during that six months and for a prior period during which forms were being devised and organizations being perfected expenses naturally were being legitimately incurred and accumulated before earnings were collected.

"There is appended herewith a statement of our operations to January 31, 1918. The statement of expenses incurred and accrued in excess of earnings collected and accrued was worked out in detail during January, and is correct, and the record and accomplishment can be considered on its merits.

"In connection therewith it can be readily determined that even under the small margin earned on loans made at 5 per cent, and the added margin to come on loans made at 5½ per cent, the land bank of Spokane will unquestionably show, even if it does not have actually collected, earnings that will make for a substantial dividend at the close of the current year. We collected in actual cash earnings in January $23,586.67, and earnings are coming in in a constantly increasing volume each succeeding day and for all time to come.

Here is the statement of the bank's business:

"Loan applications numbering 15,757 were filed aggregating $38,491,718.

"Farms to the number of 9971 were examined and appraised, of which 8487 applications were approved in the sum of $18,673,170, and 1484 applications were rejected and withdrawn aggregating $3,279,505. Many applications were approved in less sums than applied for, it appearing that the average of the loans applied for is $2443, and the average of the loans approved $2200.

"We have organized and recommended charters for 313 national farm loan associations, and have furnished supplies and labor toward assisting hundreds of other associations to organize.

"We have examined titles and approved the same and drew mortgage papers for 5015 applications, of which there was finally closed and paid 3905 loans aggregating $8,930,075; 1110 mortgages are in transit awaiting execution and return and the completion of the things necessary to protect title, satisfy former liens, etc. On such pending mortgages, aggregating $2,400,000, all work has been done but the final payment.

"The capital stock of the bank has been increased from $750,000 to $1,196,650. Farm loan bonds have been authorized by the farm loan board for this bank in the sum of $7,750,000. Loans in December were closed in the sum of $1,333,696 and in January $1,724,765.

"No charge has been made to applicants who completed their loans for appraising farms, for examining abstracts or for drawing mortgages, nor have we charged associations for blanks, forms, or postage thereon.

"The cost of service aforesaid and of the business accumulated, which will have an earning value for many years, is:

"For furniture and fixtures (equipment on hand), $7177.47.

"Gross expenses to date plus accrued interest on farm loan bonds less earnings collected and accrued, $13,319.54.

"The national government will be under no expense for the operation of the federal land banks; such bonds as the treasury department has been authorized to buy will earn for the government 4½ per cent interest, payable semi-annually. The government does pay the cost of maintaining the farm loan bureau as it pays the cost of the department under the comptroller of the currency or of the interstate commerce commission or any other bureau or department charged with the administration or supervision of business, public or private.

"Not the least virtue of the farm loan system is that none of its operations are secret; there will be no confidential loans or confidential deals. It loans money only on first mortgages on farms duly appraised by three representative farmers of the community, thereafter approved by the directors of a farm loan association that will indorse the loan; then examined by a federal appraiser sworn to do his duty and sent in from the outside to make an independent report. Men of equal talents may and do differ as to the value of lands, but where the margin is never less than two to one on the lands and five to one on the insurable improvements supplemented by a stock subscription of 5 per cent of the full loan, further supplemented by the indorsement of the Farm Loan association as a corporation, the security ever will be absolute and assured.

"The land bank makes loans not for profit, not to loan money, but to aid agricultural development and for specific, designated improvements. It does not afford an easy means to get into debt, but an easy way to get out of it. It affords honest men facilities on easy terms to acquire and improve a farm home, with assurance that they themselves will reap the crop they sow; it will enable the farmer to add needed comforts to his farm home; inspire him with hope to added endeavor; make country life more pleasant and more profitable, and thereby bring to all other classes and persons some of the benefits which naturally overflow from a contented and prosperous producing class.

"That the land bank has begun to fulfil its mission is evident, for if it were negligible it would not merit attack. It has not reached all who desire its service, as it wished to operate economically and not incur the expenses of a large organization which would have been required to serve all its applicants before earnings would be flowing in."

## Want Representation

### Farmers Appeal to the President

With a view to securing representation for the agricultural industry of the country in the carrying out of the national war program representatives of 16 farm organizations of national scope have formally appealed to President Wilson for the creation of a standing committee of farmers to be in constant touch with the administration at Washington.

After listening to the memorial President Wilson made this reply:

"I can not, of course, answer offhand so important a memorial as this, and I need not tell you that it will receive my most careful and respectful attention.

"This plan would be in harmony with the procedure already adopted by the government in other essential industries. The creation of such a commission would convince all farmers that our viewpoint was fully represented in Washington, and always accessible to the president, and would inspire and encourage them as nothing else would."

## Save the Hens!

### Government Prohibits Slaughter

In order to save the hens and pullets for egg production and chicken hatching, the national food administration has issued an order prohibiting the sale for market purposes of either live or freshly killed hens or pullets during the present spring hatching season. Until the last of April the prohibitory order will be in effect. The ruling does not interfere with the disposal of poultry that had been killed and place in storage prior to February 11, nor does it interfere with the sale and shipment of hens and pullets for breeding or laying or hatching purposes.

This is one of the first notable steps in the nation-wide movement for the increase of poultry and poultry products this year to help tide the world over the great food crisis.

## Sweet Clover

### Finds It Valuable Forage Crop

Sweet clover as a forage crop for the Pacific northwest has a strong advocate in F. R. Steele, the well-known Berkshire breeder of Grants Pass, Ore., who figures its value as pasture, in his case, at $147.50 per acre, with a cost charge of $11 per acre, including the slashing of new land. It is on slashings that Mr. Steele especially urges that sweet clover be sown, basing his views on his own experience, which is most interesting.

In the winter and spring of 1914-15 Mr. Steele had four acres of young fir and pine, four to 12 inches in diameter, slashed at odd times. This was burned in November, 1915, and the first of February, 1916, scarified white sweet clover was sown at the rate of five pounds per acre. Mr. Steele finds the white to be better than the yellow variety.

The first year there was a fair amount of pasture and about 13 head of cattle were pastured, but they had considerable feed in addition. It is the second year, or 1917, however, of which this story is a record. Five cows in milk, seven head of young stock, a bull and one horse were pastured to some extent during the winter and were pastured steadily after April first. About June first, County Agent Thompson was out at Winona ranch and advised Mr. Steele to put on more stock, as the clover was getting too high and coarse. So two more horses, two mules and one neighbor's cow were added to the herd using the pasture. The cow was taken off about the first of October and the two mules about the first of November. The balance of the stock were still on when I was there the middle of December. A few acres more sweet clover sown in 1917 furnishes a little feed, but many of the big stalks were still standing a foot to 18 inches above the ground, and there were some green leaves and quite a bit of fair pasture. Where the "burn" was the thickest, leaving the most ash, the clover showed the best stand and was the strongest.

Summing up the profit Mr. Steele puts it this way: From April 1 to October (six months pacture), five cows, average per month, per pow, $20. This includes butter sold and skim milk fed to hogs, worth 90 cents per hundred. This is an unusual price for skim milk, but Mr. Steele has proven it worth that much to him, in the grain it replaces. The heifers were grown with absolutely no other feed, and none for the bull nor mules. But horses are fed grain, but not hay. The neighbor's cow paid $2 per month; the mules, $3 each, so $16 is credited for eight head of cattle and $15 for five head of mules and horses. The only other feed the milch cows got was $3.50 worth of shorts per month and each cow is charged $3.70 per month for labor, so Mr. Steele allows the pasture $12.80 per month, as the profit on each cow, or $95 per month, as the value of four acres of sweet clover pasture for six months, which gives a total of $590, or $147.50 per acre net. The cost of slashing was $8 per acre, seed and sowing $1 per acre and irrigating $3 per acre for the season.

Of course every one would not credit the profit to the pasture, but would allow rental or pasture charges, but the result is the same. If Mr. Steele had not had the sweet clover pasture he could not have made the profit on the cows, without expensive feed, and the value of sweet clover on slashings in the Rogue River valley seems proven.

H. A.

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# What Kind of Silo Is It Advisable to Build?

## *Must Be Air-Tight as First Essential; Cost, Durability and Convenience Are Considerations*

By A. B. NYSTROM

The time has long since passed when the silo was considered an experiment. All progressive dairymen realize the need of a silo as a means of furnishing succulence for the cow. Hundreds of thousands of dairymen have shown their faith in them by building one or more of them. Perhaps nearly as many would build this year if they were convinced regarding the kind to build. In this article a few of the common types of silos will be compared with the hope that it will aid some one who is contemplating putting up one this year.

### Requisites of a Silo.

Let us see what are the requisites of a good silo:

First—It must be air-tight, so as to exclude the air from the silage.

Second—It must be round and have smooth walls, so as to allow perfect settling.

Third—It must be well built and properly reinforced to sustain the outward pressure due to the weight of the silage.

Fourth—It must be deep enough so that the weight of the silage itself will exclude the air from the mass.

Fifth—It must be on a solid foundation and properly braced, so that it will not get out of plumb.

### The First Silo.

Silage is nothing more nor less than pickled green feed. The secret of its making lies in the ability to keep the air away from it. Green feed may be packed in huge piles in the open and the extreme pressure due to the weight of the mass will exclude the air from the bottom of the pile where good silage will be formed—the edges and top of the pile will mould, due to the presence of air.

The first practical silos were pit silos, or "holes in the ground." Green feed was packed in the hole and the dirt thrown back on the pile to press it down firmly. By such a silo excellent silage was made, though it entailed considerable work to move and replace the dirt covering when the silage was needed.

### Underground Silos.

An underground or pit silo can only be considered as a temporary improvement. When properly built in a well drained and rather heavy soil this type of silo will make excellent silage, quite as good as the above-ground silos. Where the soil conditions are right and where money is not available for a more permanent structure, this type should by all means be built. About the only cost is that of excavation with a small amount of cement plastering near the top. The costs run from 50 cents to $1.25 per ton capacity.

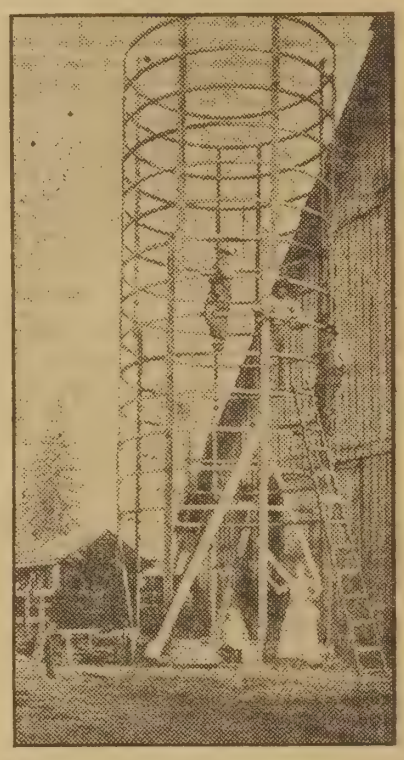
But there are two drawbacks to the pit silo. In the first place it takes a lot of labor to hoist the feed each day from the pit to the feeding floor, and secondly there is danger of the formation of deadly gas due to the fermentation of the fodder when it is first put in. In a silo above ground the circulation of air through the door openings drives out the gas.

A half-and-half pit and above ground silo is a great deal worse than a real pit silo. No satisfactory arrangement can be made for removing the silage with such a silo unless that part below the ground is only six feet or less below the feeding door.

### The Wood Stave Silo.

Of the silos above ground the common wooden stave is the most numerous, probably because it can be constructed in its entirety and shipped "knocked down" to the farmer who wants it, with directions for setting it up. It costs less than the more permanent types, yet it must be admitted that when a stave silo is made out of first-grade material, properly put up on a good foundation, and kept painted, it is as much a permanent structure as most of our dwellings and stables that are built of wood, and we know that many of these have withstood the effects of weathering for 50 to 75 years.

The various kinds and grades of stave silos differ in but a few particulars. (1) They have different kinds of doors and door fasteners; (2) they vary in the kind of tongue and groove used to keep the stave in place, and (3) they differ in the quality of material. The matter of a proper door has been a valuable talking point for many makes of stave silos because of the fact that if the doors or openings are not tightly closed, air will get in and cause mouldy silage. However, the writer is of the opinion that in many cases too much emphasis (at least so far as price is concerned) has been placed on this point by the sellers of some of the patent door silos. Let the silo builder or owner keep this in mind: The pressure on any door due to the weight of the silage is sure to be sufficient to close the opening perfectly, provided the door jam and the edges of the door are smooth and fit evenly. If the doors are made strong and to fit the openings it matters little what kind of a hinge or catch is used, or what kind of material it is made of so long as it is air-tight.



**Here is the skeleton of a wooden stave silo under construction on the P. H. Thomsen place near Centralia, Wash. No scaffold is required.**

Where the weather is likely to get extremely hot and dry at the time the silo is empty, the stave silo is not the best because the shrinkage causes cracks between the staves and consequently a loss of silage due to mould. This may be overcome however by tightening the hoops as the silage is put in and then loosening them again as the staves take up moisture and swell. Patent stave silos are of many grades. The prices usually vary from $2.75 to $4 per ton capacity outside of the foundation.

### Wooden Hoop Silos.

The wooden hoop silo can not be considered as permanent a structure as the better types of patent stave silos, but it is coming to be a popular type just now because of its low cost. It requires somewhat less material than either the stave or the Wisconsin type (described later). The sides may be built of either 1x4 matched flooring or 1x6 common, either of which can be bought at the local lumber yards. In many places in Washington the prospective builder is located near a sawmill where the material can be obtained at a still lower figure.

If the sides are made of 1x6 common it is necessary to have a double wall, built so as to break joints. The hoop material is usually made from straight grained fir three to four inches wide planed to 3-8 inches thick. The cost of erecting this type varies from $1 to $22 per ton capacity. It is a very popular type in western Washington.

### The Wiconsin Silo.

The Wisconsin type of silo is another home-made type that has proven satisfactory in all parts of the country. In this type 2x4s or 2x6s are erected as studding about 14 inches apart in a circle on the silo foundation. Two layers of boards 1-2x4 inches are then nailed horizontally on the inside of the studding, the first layer breaking joints with the second. Tar paper is usually used between the layers. To improve the appearance of this silo, ordinary siding is nailed on the outside. This also adds materially to the strength. The cost of this type varies from $2 to $2.50 per ton capacity.

### The Gurler Silo.

The Gurler silo is an improvement over the Wisconsin in that a cement plaster about 1-2 to 3-4 inch thick on metal lath is used in place of the two layers of 1-2-inch boards. This makes a more durable structure, one that is not affected by dry weather and still it is just as good as far as the preservation of the silage is concerned. It takes a little more skill in constructing this type and therefore it is slightly more expensive than the Wisconsin.

The cribbed type of silo, sometimes called the "Common Sense," has not proven entirely satisfactory. It is more expensive than almost any type of home-made wooden silos, and frequently it is difficult to lay the plank so as to exclude air. When tar is used between the planks an air-tight structure is assured, but the cost is considerably increased. The cost of this silo varies from $2.25 to $2.75 per ton capacity.

### The Concrete Silo.

The concrete silos are of four kinds, the monolithic, or solid concrete; the cement plastered, the concrete block, and the concrete stave.

The monolithic is the best and usually the most expensive. The first ones built were not properly reinforced and consequentiy cracked when filled with the silage. But now there is available information and specifications on building concrete silos, which, if followed, will insure a perfect structure that will last hundreds of years. A good point to keep in mind when constructing concrete silos is that the same amount of hoop material or other reinforcing is necessary for this type as for the wooden stave silos and that this reinforcing must be imbedded in the concrete.

Concrete silos of all kinds have many advantages over the wooden silos. The former are more durable, fireproof and do not shrink nor swell due to changes in weather. There has been some complaint from concrete silo owners from mouldy silage along the sides. This is likely to happen if care is not taken to fill up the pores in the wall. A few coatings of cement wash well brushed in will fill the pores and prevent the silage from moulding. The cost of the monolithic type is from $3.50 to $6 per ton capacity.

The cement plastered silo is not popular because it takes an expert cement man and plasterer to construct it. This silo is made by first erecting a false set of studding on a solid foundation. To this studding a metal lath is tacked in such a way as to make it possible to remove the studding later. Cement plaster is then put on the metal lath on one side, until it is about two inches thick at the top and three at the bottom. The studding is then removed and the cement plaster of the same thickness is put on the other side of the metal lath. When finished, the wall is about four inches thick at the top and six inches at the bottom. This makes a durable and very satisfactory silo when properly put up. The cost varies from $3 to $4.50 per ton capacity.

Where a machine for making concrete blocks can be obtained near the place where the silo is to be built, this type of silo is very desirable. The blocks can be made when there is no rush of other work, and they may also be laid a few at a time. In cold climates these blocks may be made hollow and thus serve as an insulation against freezing. The best of reinforcing is required for concrete block silos, and this should be imbedded in the grooves made for the purpose. A plaster of cement about one-half inch thick, with the usual coatings of cement wash, are required to finish the inside wall. This silo costs from $4.50 to $6.50 per ton capacity.

### Stone, Brick, Tile Silos.

Many of the best silos in the country are made of either stone, brick or tile. The cost of these is usually greater than of any of the concrete types. It takes an expert mason to lay the material for best results. The hollow tile silo is a good type to use where the weather is extremely cold, the cost of these types vary from $4 to $7.50 per ton capacity.

### Summarizing.

The success or failure in making silage does not depend upon the choice of silo, so long as the silo can be kept air-tight. Durability, cost of construction, ease of taking out silage, fireproofness, are points to consider in selecting the type of silo. No matter what kind is built, ample returns will come from the money invested if the silage is judiciously fed to dairy or beef cattle.

## PRIZES FOR WAR GARDEN PLANS

The Washington Farmer will give $10 in prizes for plans and directions for growing the best war garden on the farm. This includes:

1. As to size and length of rows and where and when to plant the various garden vegetables.

2. The best methods of cultivating the garden throughout the season and the best methods of fighting garden pests.

3. The best methods of harvesting, preserving and storing winter supplies of garden vegetables

4. In short, how to produce in variety and quality the largest amount of food for the farmer's family table with the least interference with other necessary farm production.

First prize, $5; second prize, $3; third prize, $2.

All entries in this contest must be received on or before February 28. Any entry received on or before February 21, and that article takes a prize, one dollar will be added to the prize.

Mail to the Editor of The Washington Farmer, Spokane, Wash.

# Evidence Against I. W. W. Is Uncovered

## *Government Agents Gather Information for Use in Trial of Leaders*

An investigation of great importance to the farmers of the northwest is now being conducted by the secret service of the United States government, whose agents are in Washington and Idaho gathering evidence in connection with the destruction of threshing machines, grain fields and other farm property by the Industrial Workers of the World. An investigation recently held at Colfax by Secret Service Agent Gibson of Washington, D. C., brought out much evidence that fits in with evidence secured when the I. W. W. headquarters were raided in Chicago several months ago. This investigation is proving that the numerous "smut" explosions which destroyed threshing machines and grain in the wheat belt of the northwest were not caused by smut in the grain but by an organized gang of I. W. W. members working in the harvest fields and reporting regularly to headquarters of the organization at various centers in the east and middle west.

Telegrams and letters have been found from the workers in the field to the headquarters telling of destruction of property and of human life. Mr. Gibson read one telegram from an I. W. W. member in California, who is now under arrest, to headquarters in Bismarck, N. D., telling of the poisoning of a sheriff in California. Long day and night letters were sent by telegraph to the I. W. W. headquarters telling of the burning of threshing machines, grain fields and other farm property by the I. W. W. "field men" who were working as laborers with threshing machines or doing other farm work for the purpose of getting opportunities to destroy property.

Orchards were reported as being destroyed by driving copper nails into the trunks of trees. Fruit was destroyed or injured in packing so that it would decay while in storage or shipment. The method of destroying fruit was unique, but simple. Men would be employed in packing houses, and when wrapping peaches or pears would squeeze the fruit, when wrapping the paper around it, so hard that the imprints of the fingers and thumb would make indentions in the fruit and it would decay where thus bruised.

Telegrams and letters were found at headquarters from workers in Whitman, Latah, Lincoln and other counties of Washington and Idaho telling of the destruction of threshing machines and grain fields in 1914 and 1915. These reports were kept on file at the headquarters of the I. W. W., and were among the tons of reports, literature and documents found when government agents raided these headquarters. Minute directions on how to destroy fruit trees, injure fruit so it would decay and burn grain in the fields and stacks and while being threshed were given.

Phosphorus wrapped in a damp cloth and inserted in grain shocks or stacks was referred to as "tooth brush and paste," and instructions on how to prepare this and how long it would take for it to burn were given in detail. The whole thing seems to have been planned by a "master mind" and carried out as systematically as any of the German methods of espionage, and reports were made regularly by all of the field agents.

Several months ago the government raided I. W. W. headquarters at all the important centers from Chicago to Seattle, and arrested more than 200 leaders of the organization, who are soon to be tried in Chicago. Among those arrested were the leaders at Spokane who had called a general strike throughout Washington, Idaho and Oregon for August 20, with instructions to all workers to "let the fruit rot in the orchards and the grain rot in the fields and let all property be destroyed." Prompt arrests of a number of I. W. W. members in Washington and Idaho a few days before the strike was to have begun killed the effort to strike, and the crops were saved, but from reports dug up in the raids of the I. W. W. headquarters it appears that the destruction of property continued "on the sly."

At Colfax Saturday Mr. Gibson and an assistant took the evidence of more than 30 farmers and threshing machine owners who had suffered fire losses in the last few years. Each witness was closely questioned, and his testimony taken down in long hand and signed by the witness. "Did you ever have any trouble with the 'wobblies'? (the name by which the I. W. W. is called) was a question Mr. Gibson asked of each witness. Men told of mysterious fires occurring in their threshing machines and grain fields and the heavy losses that were suffered in 1914 and 1915, when insurance companies refused to issue insurance policies on threshing machines because few escaped destruction. Several witnesses told of losing two and three machines in the season of 1914. The dates and places where the fires occurred were given, and these will be checked with the reports on file at I. W. W. headquarters. It is the government's plan to show, at the trial of the I. W. W. leaders, that there was a systematized plan for the destruction of property throughout the United States. Several farmers from Washington and Idaho will probably be called as witnesses before the court at the trials, which are to be held soon.

In 1914 more than 100 threshing machines were destroyed by what was believed to be "smut" explosions in Whitman county, Washington, alone. Other counties suffered heavily, but none so much as Whitman. In 1915 the loss was also extremely heavy, more than 50 threshing machines being burned in Whitman county in that season. Suspicious circumstances aroused the people to the belief that machines were being destroyed by an organized gang, and in 1916 and 1917 vigilance committees were formed and threats made that any man caught putting combustible material in grain or setting fire to machines or grain fields would be lynched, and there were only three fires in Whitman county in 1917, and these were purely accidental, the cause in each case being known.

It is believed that the government is on the right track and that the investigation now being conducted by the government agents will result in completely wiping out the gang which has destroyed hundreds of thousands of dollars worth of property on the farms, in the orchards and in the lumber camps of Washington, Oregon and Idaho in the last few years.

Mr. Gibson refused to tell exactly what evidence had been obtained, and said: "We are trying a lawsuit in the courts, not in the newspapers, but we have the right men, are on the right track, and are not going to stop until we get every one of them." He read to witnesses whose testimony was taken a number of the telegrams and letters taken in the I. W. W. headquarters shewing conclusively that the destruction of property in the west was being carried on under the direction of the leaders of the I. W. W. in Chicago and North Dakota.

To each witness, after he had given his testimony, Mr. Gibson said: "Go home and raise more wheat than you ever raised before. We need it. Europe needs it. I was in Europe when this war broke out, and my assistant here has made several trips to Europe since the war began, and I tell you that we need every bushel of grain you farmers can produce, and the government will protect your grain fields from these men who have been destroying them."

**Fabrics to Cling.**

Serge is good if it is soft; otherwise it should be barred. The fundamental thing is to get the fabric that clings to the figure. All others must be put on the opposite side of the scale. Nothing must have any chance to flare.

# Silage for Sheep

## Three Pounds a Day About Right

C. L. Smith, the veteran agriculturist of the O.-W. R. & N. company, tells me that over 400 silos were built last year on the lines of his company. These silos average about 80 tons each, the largest having a capacity of 380 tons. About two-thirds of the silos were built to furnish feed for dairy cattle.

"During the last year," says Farmer Smith, "more silage has been fed to sheep than ever before. Experience has taught that three pounds a day of silage is about right for sheep. A well-established dairy ration is 30 pounds of silage of any sort and all the say a cow will eat, together with one pound of mixed grain for every five pounds of milk the cow gives. The grain ration for heifers may be increased so long as she will respond in the milk pail. At first the heifer may not at once respond to the increased grain ration, but the problem is to stimulate her capacity for utilizing the largest amount of feed possible."

Farmer Smith met a dairyman who was feeding four pounds of barley with his hay, and was just breaking even—getting just milk enough to pay for the feed for his cows After a talk the dairyman added four pounds more of barley, costing 7 cents more for feed, and the additional milk which the cows gave amounted to 25 cents a day inside of 10 days.

Farmer Smith met a dairyman who ing the farmers' week at the university. He is never disturbed by the apparent apathy of farmers toward new methods, and he will tell you why. Among his chief reasons is the success of the campaign for corn growing which he has waged so vigorously throughout the last five or six years From saying that the Pacific northwest is not a corn country and then saying that only certain limited localities here can grow corn, farmers are confronted with corn shows with as fine corn as is grown on the continent, and the territory where corn will grow is enlarged year by year.

# Be Ready for National Farm Survey

## *Important Facts Sought by Government About Farms*

The farmers of America can do a great service to their country and themselves by cooperating willingly in the nation-wide farm survey being undertaken by the government. It will be a great aid to the department of agriculture in assembling facts upon which to work out such problems as the labor problem and increased food production if every farmer is ready to give unreserved information when the government's agent reaches him. The survey is the most gigantic of its kind ever undertaken in this country.

"The survey includes labor needed for 1918, both seasonal and year-around; the amount of live stock on hand a year ago, on hand at present, the amount to be bought and the amount to be sold," said J. C. Scott, federal labor specialist for Washington. "The farm animals mentioned in the survey are meat, dairy and work animals, and horses and mules.

"Another division of the survey pertains to farm crops planted last year, and the bushels, tons, and so on, harvested last year. It includes the amount of fruit produced last year, and estimated crop acreage for 1918. It includes the amount of pasturage available—stubble, woodland, and so on, and the amount of seed on hand and to be bought and sold.

"One of the advantages of this survey will be in the help that it will be to the seed situation throughout the country. An illustration of how knowledge of this kind will help is seen in the situation that arose in Walla Walla and Franklin counties last year. Farmers in Walla Walla county wanted to buy Early Baart wheat for next year's seeding. It happened that farmers in Franklin county had Early Baart for sale. It happened that the county agricultural agents learned of this situation; otherwise the people of Franklin would have sold their wheat and shipped it out of the country before the Walla Walla county wheatmen knew about it.

"The same is true of live stock. One community has certain live stock to sell and another wants to buy. Neither knows of the other, unless there is an intermediary or connecting agency. The United States government, through the national department of agriculture, acting in cooperation with the Washington State college, the county agricultural agents and agencies of a voluntary nature provided by the citizens in their different communities, is now seeking to provide this connecting link between different communities, so that they may help each other."

# Going After Income Tax

## *Will Enforce Payment With Greater Vigor Than Ever*

The government is going after income taxes this year with greater vigor than ever before, and people who try to evade payment are pretty certain to get into trouble.

As the Farmer has previously explained, every married individual whose net income is more than $2000, and every single person with a net income of more than $1000, is subject to this tax, and must make a report to the collector of internal revenue.

The penalties, so far as individuals are concerned, for failing to make a report at the proper time is a fine not in excess of $1000, and an increase of the tax by 50 per cent; for making a false report, a fine not in excess of $2000 or imprisonment for one year, or both, and an increase of tax of 100 per cent. Where a corporation fails to file a report at the proper time the fine is not in excess of $10,000 and a 50 per cent increase in tax is assessed; for making a false return, a fine not in excess of $10,000 and an increase of 100 per cent in tax and imprisonment of not more than one year, or both, will be the punishment imposed.

The law makes it the duty of citizens with incomes of $2000 and $1000 (single and married persons respectively) to apply to the collector of internal revenue for the necessary blanks, which they are to fill out and return. The fact that the collector may not send one a blank does not release such person from his obligation.

Government officials say that two things will make their work easier this year than in past years:

The fact that the country is at war will lead many persons who have been careless before to recognize their patriotic duty.

And citizens who know of cases where the law is being evaded are keener to report the "slackers" to the government officials. Discussing this spirit, a government official says:

"The number of anonymous communications that the office of the collector receives daily, commonly called 'squeals,' would astonish the average citizen. Some people who have thought they have succeeded in evading tax, do not hesitate to boast of it to some friend, and the result is a letter to the collector, calling his attention to that fact.

"These letters will receive prompt attention this year, and no attempt will be made to discover the source of the communication, nor will the taxpayer who is found delinquent be given any inkling as to the manner in which his delinquency was discovered."

# Stockmen Gather in Spokane Next Week

Next week, Thursday and Friday, February 21 and 22, occurs in Spokane the second annual Northwest Live Stock conference. On the following day occurs the second annual sale of the Northwest Shorthorn Breeders' association, at which approximately 100 purebred Shorthorn breeding animals will be offered at auction by some of the most prominent breeders of the northwest. Frank M. Rothrock of Sprague, Wash., is in charge of the sale arrangements, assisted by D. I. Raymond of Spokane and Frank Brown of Carleton, Ore.

W. L. Tennant of Spokane is in general charge of the conference arrangements, and has announced a program of addresses and discussions by some of the most widely known live stock authorities in America, including Duncan Marshall, minister of agriculture for Canada.

All persons attending the conference should secure railroad fare receipts, so that reduction of fare for the return trip can be secured.

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## Strikes Are Unpatriotic

Officials of the United States department of labor say that since the declaration of war against Germany strikes have been more numerous throughout the country than at any time in the past.

Here is conclusive proof that the proper patriotic spirit is lacking somewhere. The Farmer is not prepared to decide whether the fault lies with the employer or the employes, but it rests somewhere between them. Probably both classes are at fault—the employers in some cases, the workers in others; but whatever view one may take of it the situation is not cheering.

After months of more or less futile efforts at conciliation and arbitration the secretary of labor now confesses the need of a thorough reorganization of the department and the formulation of a broad national labor policy for the duration of the war. Accordingly Secretary Wilson will call on both sides immediately to form a joint board to meet in Washington to agree on general principles to govern their relations during the war. Each side will be asked to name a commission of five representatives, which in turn will elect one person each representing the general public, making a board of twelve members.

But why only two members to represent the general public? The public's representation should not be less than five; ten would be better, for the public has interests not secondary to those of the employer and his employes.

Labor is entitled to full consideration, but analysis of the elaborate organization of the council of national defense shows that it has had recognition out of all proportion to that given agriculture. The farmers have almost no direct representation; but nearly four pages of the government pamphlet listing the various sub-committees of the council are taken just to list the "committees of and cooperating with Mr. Gompers," president of the American Federation of Labor.

There is a sub-committee on mediation and conciliation, with 67 members; another large committee on wages and hours; another on women in industry, and numerous others of smaller membership.

There are no such committees of and cooperating with the heads of the great farmer organizations.

The farmers are expected to do their patriotic part without special pleading, and are generally living up to that expectation. They are not striking anywhere for higher prices or shorter hours. They are just simply on the job of speeding up production to provide the food that will make it possible for the United States and its allies to win the war.

## Useless to Deceive Ourselves

The British food controller has cabled Mr. Hoover that England must have from the United States 75,000,000 bushels of wheat in addition to the wheat that has been sent from this country prior to January 1. "Unless we have it I shall not be able to announce to the British people that their bread supply will hold out," added the food controller.

Mr. Hoover is exerting every possible influence to comply with the request, but in the final analysis it is up to the American people to make delivery possible. Unless they save more wheat than they have been saving in the past our allies will be short of bread.

Or, as David Lubin, American member of the International Institute of Agriculture, cables from Rome, Italy, "food is most important for the allies now. It is useless to deceive ourselves." Mr. Lubin further says:

> "I am reporting to the state department, and also to congress, that Europe's crops may be worse than last year's, and that the mobilization of women of the United States for farm work may be necessary. We should also consider plans for devoting land in the 11 arid states to grazing purposes, so that the United States will be able to supply cattle for replenishment of the diminishing stocks.
>
> "Our allies are depending upon the United States. Without its help they would reach a condition similar to that in Germany and Austria, in which there is merely food enough for the armies, with the civil populations dying off."

Just read the British food controller's cable to Mr. Hoover over again. "Unless we have it we will be unable to announce to the British people that their food supply will hold out."

That "it" means the saving of 75,000,000 bushels of wheat by the American people before the next wheat harvest.

## Moving Farm Products

In many parts of the country farmers have been alarmed by rumors that the railroads, under government direction, might refuse them transportation facilities for some of their products.

Officials of the department of agriculture conferred with Mr. McAdoo, director general of railroads, and a Washington dispatch says they were informed that the director general has not promulgated a list of nonessential farm products which would be denied transportation "and does not contemplate issuing any such order." Request was made that the department of agriculture disseminate this information as widely as possible to the farmers of the country.

The director general of railways believes that under the plan now being formulated it will be possible to provide adequate transportation for farm products this year.

This statement will be of particular interest to fruit growers of the Pacific northwest. While it is highly encouraging, the fact should still be noted that the director general has not pledged himself to provide cars. He says he has not issued an embargo on any farm products and does not contemplate any such order. But that falls a little short of saying that he will not.

## Labor Problem Will Be Solved

In a recent leter to Governor Capper of Kansas, President Wilson says that the war department has asked congress for authority to furlough soldiers for service on the farms when deemed necessary.

This is good news, not only for the farming industry, but for the country as a whole. It should prove a great stimulus to food production. It indicates clearly that the government is not unmindful of the need of the farm, and that it is planning definitely to guarantee the farmer against possible loss of crops due to labor shortage.

The government can not afford to let any food product be wasted, and it will not do so. In war times it possesses powers that it does not have in normal times. Under conditions of military necessity the administration can requisition men for industrial service at any time or anywhere. It would be inconceivable folly for it to fail to exercise any degree of power necessary to save the crops when food is the first essential of success against Germany and her barbarism.

Labor specialists are now studying the labor situation in every state in the union, with a view to insuring proper use and distribution of the labor that is available, and with the additional view to learning exactly what will be required that is not locally available. Undoubtedly there will be some pinching in some quarters, but the evidences are that the labor problem will be solved and solved in a manner generally satisfactory.

Therefore, no farmer should hesitate about planting for fear of inability to harvest. Every acre that can be put to food crop should be seeded. The government will not permit it to go unharvested.

## Washington Gleanings

The output of jute bags at the state prison this year will be a little under a million, about 25 per cent less than the output last year.

Negotiations have been completed at Sequim for the construction of the first condensed milk plant on the Olympic peninsula to cost $100,000.

State Fish Commissioner L. H. Darwin has been notified that the city of Everett has provided $6000 for the construction of a new state fish hatchery.

George Gang has sold 130 acres two miles west of Toppenish to G. Brandt for $235 an acre. Gang bought this property about a year ago for approximately $100 per acre.

The report of the manager of the Fairfield Cooperative Creamery company shows a gross business for 1917 of $32,000, which was a considerable increase over 1916.

A number of prune growers of the Blalock district have organized a union to sell their own fruit and vegetables through the Northwestern Fruit Exchange of Seattle.

The secretary's report of the Southwest Washington fair board shows the expenses for 1917 to be approximately $16,000 and a balance on hand in the fair fund of $1500.

Washington farmers are responding to the call to supply more foodstuffs for this and the allied nations by planting a larger wheat crop than ever before, according to P. J. Sweeney of Tacoma, chief grain inspector for the state.

One ton of silkworm eggs, enough to fill half a carload and capable of making enough silk after they have developed in the mulberry bushes of Japan to clothe a city, arrived in Seattle recently from the east and was shipped to the orient.

The Farmers' union of Spokane is sending a representative to Washington to urge upon the grain corporation of the United States food administration the necessity of establishing primary wheat markets on the Pacific coast for handling the 1918 crops.

Realizing the fact that the present housing facilities are entirely inadequate to handle the number of workmen they expect to have for the running of the Sunnyside and Toppenish sugar factories next year, the Utah-Idaho Sugar company has announced that it will erect whatever houses it may need to carry the men.

## What Others Say

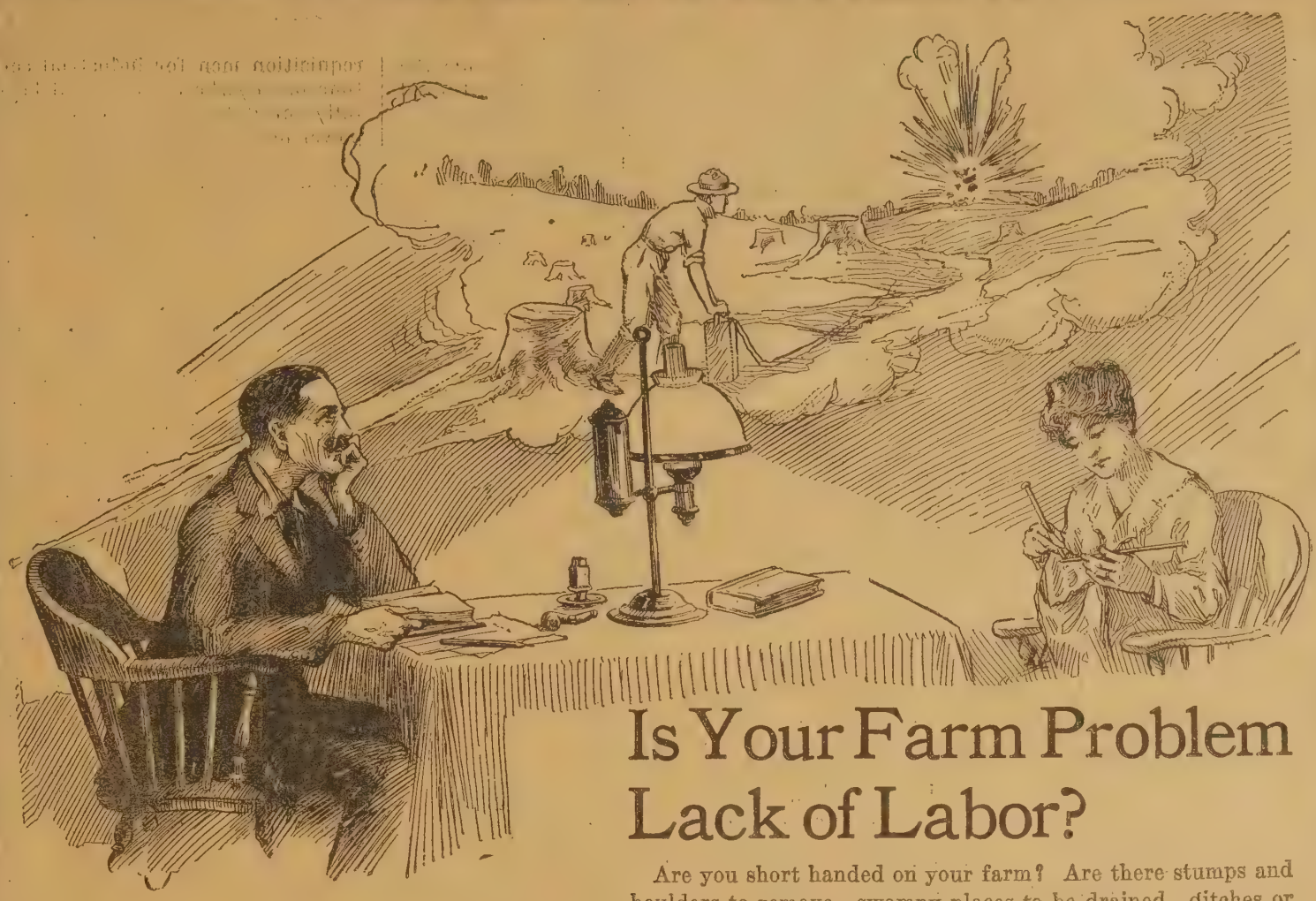
California Cultivator: It is a wise farmer who can look ahead and be sure of getting a profit from any particular crop.

Ohio Farmer: Farmers may well put their equipment in the most attractive working order, put tenant houses in good repair and make terms as definite and fair as conditions demand.

Denver Field and Farm: What has become of the old pioneer who didn't grumble at a wheatless day when he could forage enough corn meal from an incoming bull train to make a hoecake?

Breeders Gazette: A pedigree has no value whatsoever in itself. Its utility lies in the fact that it affords the information from which a study can be made that will determine the question of whether a given animal has a good pedigree or otherwise.

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# Value of Crops Increases Greatly

## *Increases Faster Than Production Due to High Price*

According to the revised estimates of the department of agriculture, farm products of the United States reached the unprecedented value of $19,443,849,381 in 1917, an increase of more than $6,000,000,000 over 1916, and almost $9,000,000,000 more than in 1915.

It is well to point out, however, that these figures, if taken without explanation, would be misleading. They are the combined value of all farm crops and also of animals and animal products. The department has counted in the grain, hay, etc., fed to live stock, and in that way the value of such products has been figured twice, though the farmer is paid but once.

For illustration, suppose that a dairy farmer grows 1000 tons of hay and feeds it to his dairy herd. It is counted twice—first for its hay value and again in the value of the produced butter, cheese, cream and milk.

But, deducting the total value of all animal and animal products, the figures on farm crops alone make an impressive record, a total for the United States of $13,610,462,782, or 70 per cent of the value of all farm products. Animals and animal products were valued at $5,833,336,599 in 1917, an increase of almost $1,500,000,000 over 1916.

The figures might be misleading in another way. They measure market values, not bushels, pounds or tons. Higher prices have played a large part in swelling the totals. And while the producers have been paid increased prices, the gain has been largely, in many cases entirely, offset by the increased cost of production.

In a measure, therefore, this stupendous showing of farm wealth is largely "paper" increase.

But even so, it is evident that the American farmers responded right loyally to the government's appeal for increased production of food.

**Northwest Production.**

A study of the figures on farm crop production (aside from live stock and other animal products) shows that the four Pacific northwestern states produced last year crops to the value of $451,789,000, divided as follows:

| | Value. | Rank. |
|---|---|---|
| Washington | $144,422,000 | 29 |
| Oregon | 108,632,000 | 32 |
| Idaho | 94,890,000 | 36 |
| Montana | 103,845,000 | 35 |
| Total | $451,789,000 | |

The term "rank" in the foregoing table means that Washington was 29th state in the Union in point of crop production.

Illinois topped all the other states and Texas came second. It will surprise many readers to be told that Kansas ranked down to 14th place. The "big ten" states were:

| | Value. | Rank. |
|---|---|---|
| Illinois | $842,042,000 | 1 |
| Texas | 788,983,000 | 2 |
| Iowa | 783,488,000 | 3 |
| Ohio | 546,058,000 | 4 |
| Missouri | 546,036,000 | 5 |
| Georgia | 542,733,000 | 6 |
| Nebraska | 522,186,000 | 7 |
| Indiana | 503,154,000 | 8 |
| Minnesota | 480,230,000 | 9 |
| California | 432,285,000 | 10 |

**Comparative Records.**

Last year's national production compares with former years as follows:

| | Crops. | Animals and Products. | Total. |
|---|---|---|---|
| 1917 | $13,610,462,782 | $5,833,386,599 | $19,433,849,381 |
| 1916 | 9,054,458,922 | 4,351,905,089 | 13,406,364,011 |
| 1915 | 6,907,186,742 | 3,868,303,670 | 10,775,490,412 |
| 1914 | 6,111,684,020 | 3,783,276,511 | 9,894,960,531 |
| 1913 | 6,132,758,962 | 3,716,753,549 | 9,849,512,511 |
| 1912 | 5,842,220,449 | 3,500,569,700 | 9,342,790,149 |
| 1911 | 5,562,058,150 | 3,257,116,809 | 8,819,174,959 |
| 1910 | 5,486,373,550 | 3,551,017,194 | 9,037,390,744 |

These figures represent the actual value on the farm unmixed with any additions for freight. They are, therefore, basic figures of the industry, which is the foundation of industrial and financial life.

# Busy on Farm Labor Problems

## *Government Assigns Specialists to Groups of States*

The farm help specialists through preliminary labor surveys will endeavor to ascertain in advance the prospectivve needs for extra labor in each community. They will work with state and local agencies to supply labor deficiencies from local supplies if possible or from the nearest point where labor can be secured outside the community in need of assistance. All local sources of labor first will be drawn upon and only when the fullest possible utilization of local labor proves inadequate will labor be brought in from outside. In cases of necessity, however, through the department of agriculture and the department of labor, arrangements will be made for interstate movement of help, in which the department of labor will cooperate in obtaining extra labor for farm purposes from the populous communities.

To cooperate effectively in the farm labor problem with the United States department of labor state councils of defense, state commissioners of agriculture and labor, and other official state and local agencies concerned with supplying needed farm labor, the department of agriculture has divided the country into four farm labor divisions:

(1) New England and northeastern states.
(2) Southern states.
(3) North Central states, and
(4) Western states.

Each of these divisions is in charge of a representative of the department of agriculture, known as a supervising farm help specialist, who supervises the work of the department's farm help specialist assigned to the farm labor work in single states or two or more adjoining states. These farm help specialists will cooperate directly with state agencies, central and local employment agencies of the United States department of labor and with the county agents and community farm help committees which will be charged directly with meeting labor needs in their specific localities.

It is pointed out that the farmer in need of labor should proceed as follows: He should report his need to his county agent or to a member of the community farm help committee. If possible, his need will be supplied from lists of men available in the county. If local labor is inadequate, the county agent or committee will report to the state farm labor specialist, who, in cooperation with the state officials, will draw on the nearest available labor within the state.

A farmer who does not know the name of his county agent or those on the community committee, should make known his need to his state farm help specialist, who will direct his request into the proper channels and answer questions on farm help problems.

The supervising and state farm help specialists of the department of agriculture for the western states are given below. The grouping of the large states is temporary, as the plan contemplates appointing a state farm help specialist for each of the large agricultural states.

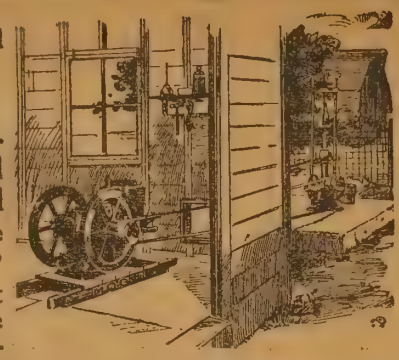
M. O. Evans, supervising farm help specialist, 1931 Home street, Berkeley, Cal.

Arizona and New Mexico: J. O. Miller, Las Cruces, N. M.
California: R. L. Adams, Berkeley.
Montana: T. L. Currier, Agricultural college, Bozeman.
Oregon: J. H. Brewer, Portland.
Washington: J. C. Scott, Pullman.
Colorado: D. W. Thomas, Chamber of Commerce building, Denver.
Utah: J. W. Watson, Logan.
Idaho: Specialist to be appointed.
Wyoming: Specialist to be appointed.
Nevada: Specialist to be appointed.

To The Washington Farmer: I enclose my check for $1 for The Twice-a-Week Spokesman-Review and The Washington Farmer. I feel that I can not afford to overlook this unusual bargain.

A. J. McLAUGHLIN.
Waitsburg, Wash.


**Makes Farm Work Easy**



IS there an **International Harvester Mogul Kerosene Engine** on your farm? This is an important question because few factors contribute more to farm life, in the way of economy, time saving, comfort, and lasting satisfaction, than the right size and type of **Mogul** engine.

You don't mind the lack of hired help nearly so much when you have a **Mogul** engine to do the chores. Morning and night it takes care of the jobs that used to be so tedious and tiresome. It does not get tired or quit just when you need it most. When you find how useful it is and how cheaply it works, you buy more labor-saving machines for it to run until it is doing all the power jobs on the place.

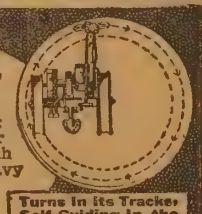
**Mogul** engines are the standard steady reliable power. They are designed, made, backed and guaranteed by a manufacturing experience that grew out of three-quarters of a century of good farm machine building. They work economically on the cheapest engine fuel you can buy—kerosene or distillate. They start easily. They run steadily. They serve you well for years.

Buy Mogul power and run your farm more profitably and with less labor. See the dealer and write us for catalogues describing **Moguls** ranging in size from 1 to 50-h. p., in all styles, for all purposes, all using kerosene for fuel.

**International Harvester Company of America**
(Incorporated)
Billings, Mont. Crawford, Neb. Denver, Colo. Helena, Mont.
Los Angeles, Cal. Portland, Ore. Salt Lake City, Utah
San Francisco, Cal. Spokane, Wash.

**Turn More Acres With Kerosene**

The difference between the **Happy Farmer** and other tractors makes the difference in the extra work you can do with it. The Happy Farmer works on kerosene without waste—has plenty of power to do all your plowing and is built to stay right on the job all through your busy season. Weight only 3800 pounds with 12-24 H. P.—a wonderful combination of heavy power with light weight. **Write for descriptive circular.**

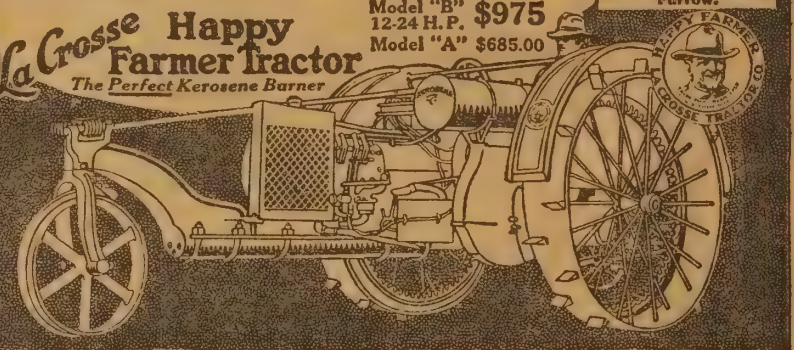


**LA CROSSE TRACTOR CO., Dept. 18 La Crosse, Wis.**

Turns in its Tracks. Self-Guiding in the Furrow.

Model "B" 12-24 H.P. $975
Model "A" $685.00

**La Crosse Happy Farmer Tractor**
*The Perfect Kerosene Burner*



**FREE**



If you will write me at once, I will explain how, with little work this winter, you can secure a brand new Ford car without a cent of expense. Just one grown man in each town—no boys. Not a lottery; guaranteed by million dollar capital.
**THE SILO KING, Box 627, Sumner, Wash.**

**Just What You Want**

may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.

**Easy to figure the Profits**




Where in **Western Canada** you can buy at from **$15. to $30. per acre good farm land** that will raise **20 to 45 bushels to the acre of $2. wheat**—it's easy to figure the profits. Many Western Canadian farmers (scores of them from the U. S.) have paid for their land from a single crop. Such an opportunity for **100% profit** on labor and investment is worth investigation.

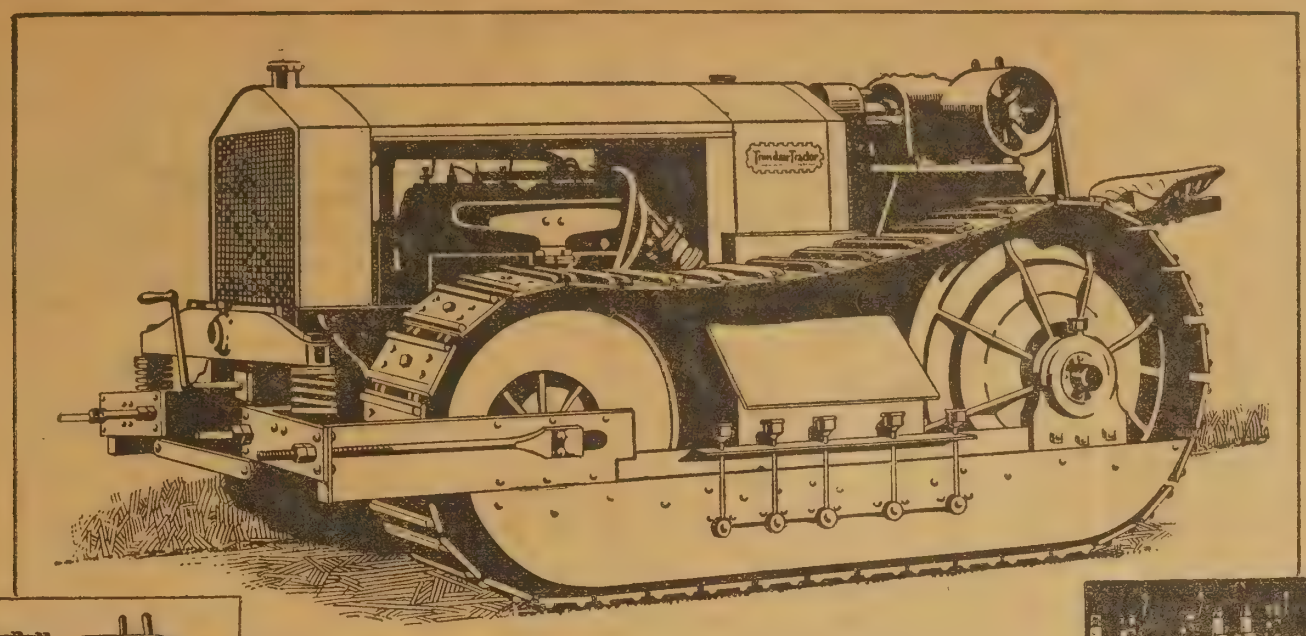
Canada extends to you a hearty invitation to settle on her

**FREE Homestead Lands of 160 Acres Each**

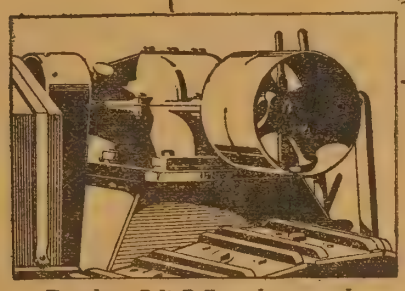
or secure some of the low priced lands in **Manitoba, Saskatchewan or Alberta.** Think **what you can make** with wheat at **$2. a bushel** and land so easy to get. Wonderful yields also of **Oats, Barley and Flax. Mixed Farming** and cattle raising. The climate is healthful and agreeable, railway facilities excellent, good schools and churches convenient. Write for literature and particulars as to reduced railway rates to Supt. Immigration, Ottawa, Canada, or to

J. N. GRIEVE,
Cor. 1st & Post Sts., Spokane, Wash.
Canadian Government Agent.

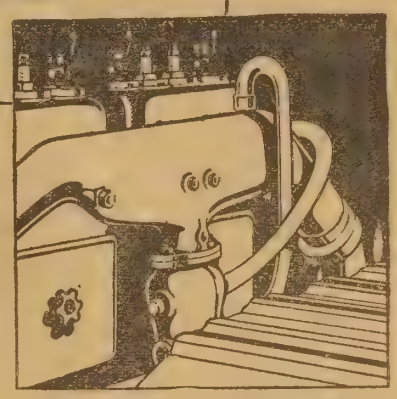
160 ACRE FARMS IN WESTERN CANADA FREE



*The Trundaar Tractor meets every requirement of your farm work and has many distinctive features*



*Trundaar Belt Pulley—always ready for work*



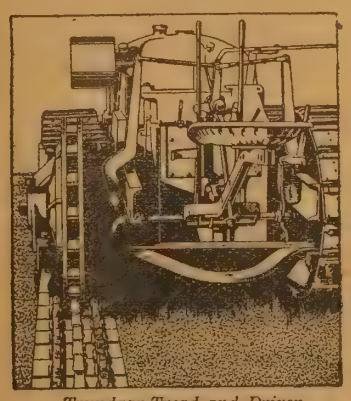
*Mounting of the Buckeye-Deppé Integrator on the Trundaar Tractor*

# What will you look for when *you* choose a tractor?

***Experienced business farmers and tractor engineers agree on main requirements for the successful tractor. How the Trundaar Tractor exceeds these requirements***

When you choose a tractor for your farm you will want a tractor that is a practical success. You will set up your own standards of tractor performance and make your own requirements to suit working conditions on your farm. So the tractor you buy must measure up to your particular requirements.

Experienced business farmers and tractor engineers have definitely outlined the features that have proved essential to success in a tractor. We believe that these will coincide with your own views on the



*Trundaar Tread and Driver*

subject. Just look them over and see:

*Positive traction without packing the soil under all sorts of conditions.*

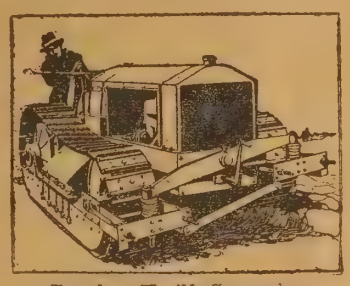
*Perfect protection of all vital parts from dust.*

*Reliability. Ample power.*

*Economy of operation.*

*Flexibility and ease of control.*

*Belt pulley that may be quickly connected and adjusted.*



*Trundaar Flexible Suspension*

All the accumulated knowledge and experience of 23 years in the tractor industry has been built into the Trundaar Tractor.

Glance over a few of the many exclusive features that characterize this scientifically-built tractor and note how thoroughly every detail has been worked out in tests on actual farm work in every section of the United States.

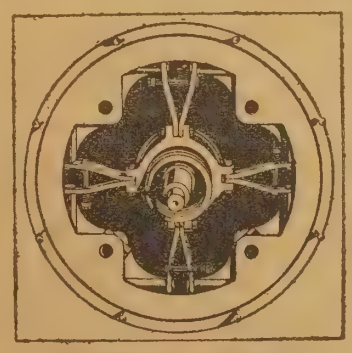
**Practical engineering principles develop ideal tractor**

The patented Trundaar Tread, built on the log-chain principle, is of the endless belt type and provides positive traction at all times, under any conditions. The Trundaar Tread requires no lubrication and every link and grouser plate is instantly detachable. Its large area on the ground—2160 square inches—entirely obviates the soil-packing problem.

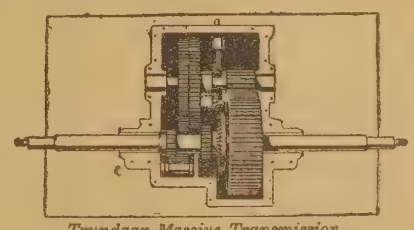
Every vital part of the Trundaar Tractor runs in oil and is absolutely impervious to dust.

The double three-point suspension insures maximum traction on any ground. It absorbs all shocks and strains, thus protecting the power plant.

The Trundaar Tractor is rated at 20 horsepower on the drawbar and 35 horsepower on the belt. The Buckeye-Waukesha special tractor engine is standard equipment in all Trundaar Tractors. Another feature is the Buckeye-Deppé Integrator, which makes low-grade fuel operate like high-grade gasoline.



*Trundaar Drive Clutch*



*Trundaar Massive Transmission*

The massive Trundaar transmission delivers maximum drive power to the treads and is practically wear-proof. It requires no differential.

Powerful multiple disc drive clutches control the treads—a new principle in tractor engineering that produces wonderful flexibility.

A big, strong belt pulley that may be instantly connected is fitted to the Trundaar Tractor.

We believe you will want to know more about the Trundaar. Write today to our nearest distributor for illustrated advance catalog which describes it in detail.

*Manufacturers*

**The Buckeye Manufacturing Company**

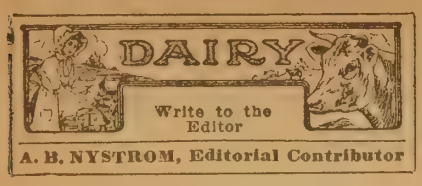
**Anderson Indiana**

**Trundaar Tractor**

SPEEDS UP THE BUSINESS OF FARMING

***Distributors for Washington***

**Larson Brothers, Inc.,**
**Spokane, Washington.**




A. B. NYSTROM, Editorial Contributor

## Dairy Questions

### Are Answered by A. B. Nystrom

I want to know what I can do and feed to make my cows give more milk. I am now feeding good alfalfa hay with a feed of shorts at each milking. I also feed a few pumpkins and rutabagas at noon. Three weeks ago I began feeding bean straw, which they seemed to relish. But shortly after I stopped they went down in milk. What can I do to bring them back to normal flow?

E. S., Mabton.

Apparently you do not give the cows enough to eat and I would suggest that you feed them more succulence, such as rutabagas and pumpkins, up to 30 or 40 pounds a day. Cows can not do their best, unless they have a liberal allowance of such feed. In addition give them all the alfalfa hay they will clean up and one pound of bran for every three pounds of milk produced. I do not believe the bean straw produced any ill effects. If you still have some to feed I would use it in supplementing the alfalfa.

**Apples for Succulence.**

Are apples injurious to the milch cows? Have just been told so; but have been feeding a little right along with the rest of the feed. If they are good how much should be given to each cow, also how much each of mangles, rutabages, shorts and bran with good clover hay to make a good ration? Have intended the mangles for the fore part of winter and rutabagas for the latter part of the winter. A. N., Rochester.

Apples are not injurious when fed to cows. When cull apples are available it is good economy to use them for succulence, especially when other succulence is scarce. They will not cause the cow to dry up as is often supposed, unless she is given nothing to eat but apples, in which case it is the lack of food material rather than any injurious effects that cause the cows to dry up.

Apples have about 40 per cent of the feeding value of corn silage. When used with the other feeds you have mentioned feed all the clover hay the cow will eat and from 35 to 45 pounds of apples, mangles or rutabagas. For a grain ration feed one pound of apples for each 3 1-2 to 4 pounds of milk produced. I would advise you to eliminate the shorts as it does not add anything to your ration except a price.

### FIGURES PROVE FACTS

#### Purebred Sires Improve Herd

The Carnation Milk Products company of Seattle is sending to its patrons a little pamphlet bearing on its cover these words:

"Subject—Pure Bred Sires. If you have never gone into the subject of pure bred stock we earnestly request your attention to the official statement on pages 2 and 3 of this folder. It is true this test was made in Iowa, but it will hold good in this dairy section."

The inner reading matter of the folder contains the tabulated results of an experiment carried out upon a scrub herd by the Iowa experiment station.

Pure bred bulls were mated with scrub cows and the resulting heifers were bred back to approved bulls of the same breed as were their sires.

Here is what happened: The first generation of heifers all showed a remarkable increase over the herds of grade cows from which they were descended. In the case of heifers out of pure bred Holstein bulls mated with scrubs, this increase was 94 per cent in milk and 62 per cent in butter fat. The daughters of pure bred Guernsey bulls, mated with scrubs, increased their dams' average 11 per cent in milk and 17 per cent in butter fat. Heifers sired by pure bred Jerseys when mated with scrubs increased their milk production 39 per cent and their butter fat production 54 per cent over their dams.

In the second generation of daughters out of pure bred sires, the increase in productivity was enormous, the daughters of Holstein sires again heading the list with an increase of 245 per cent in milk and 168 per cent in butter fat. The increase of the other two breeds, while less than that of the Holsteins, was very large.

To complete the work begun by the publication of these figures the folder closes with the announcement that the Carnation company will furnish information to inquirers who desire to purchase pure bred sires, either Holstein, Guernsey or Jersey.

### Finishes Remarkable Record.

Star of Ashburn, one of the good Jersey cows in the J. M. Dickson & Son herd at Shedd, Ore., on December 13, last, finished a really remarkable record. She began at 4 years and 2 months of age, was only on test 347 days and produced 727 pounds of fat, or 855 pounds of butter. This puts Star of Ashburn in the gold medal class, but that tells only a part of the story. She was only milked twice a day, had ordinary herd care and her maximum feed of concentrates was only 12 pounds a day. On her 347th ay she stepped on her teat and cut the milk duct open. She was then giving two and one-tenth pounds of



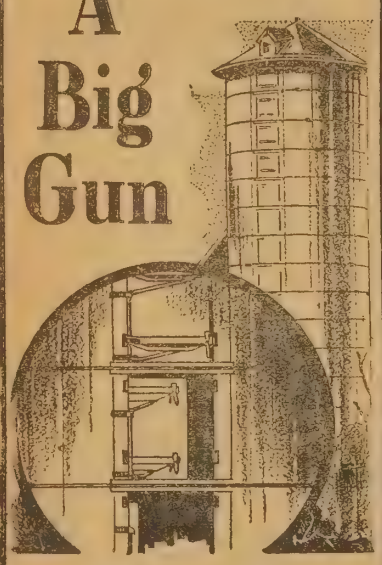
fat a day. There is no reasonable doubt that had she continued 365 days she would have produced 900 pounds of 85 per cent butter.

H. A.

**Smallest Known Bird.**

The smallest known bird is a Central American humming bird that is about the size of a bluebottle fly.


# Every Silo's A Big Gun



Americanism stands for action; for deeds, not words. The SILO on your farm means that you are doing things—doing your best to win the war.

## A WEYERHAEUSER SILO

on your farm you can point to as one more proof of American food efficiency—every Silo is just one more big gun pointed against the enemy.

Remember the Air-tight door of the Weyerhaeuser Silo—it is important!

Don't Order Too Late.

**Weyerhaeuser Timber Co.**

Everett, Wash.



# Three Important Reasons For Buying a NEW DE LAVAL CREAM SEPARATOR At Once

THERE are three very strong reasons for the immediate purchase of an up-to-date De Laval Cream Separator.

In the first place, a new De Laval machine will now save its cost in a few months—in more and better cream and butter and in time saving—at the present very high butter prices and great need of every minute of time.

In the second place, the patriotic duty rests upon every producer of butter-fat to save every ounce of it, and nothing is of greater food value to a nation at war. All European countries are encouraging the sale of the best cream separators in every way possible.

In the third place, railway delays are such that you can't depend upon quick delivery, and if you don't order your De Laval now there is no telling when you can get it. Moreover, the supply of labor and material is uncertain and all last year De Laval deliveries were nearly two months behind.

Again, De Laval prices have advanced very little thus far but must go higher if present industrial conditions continue, let alone become more difficult. Present prices hold good until March 1 only.

There was never a time when the immediate purchase of a latest improved De Laval Cream Separator was more important to every one separating cream, or when it could less wisely be delayed.



See the nearest De Laval agent at once. Arrange to try a new De Laval machine for your own satisfaction. See for yourself just what it will do for you. If you don't know the nearest agent simply address the nearest general office.

**De Laval Dairy Supply Co.**

LARGEST DAIRY SUPPLY HOUSE ON THE PACIFIC COAST. Alpha Gasoline and Distillate Engines, Ideal Green Feed Silos, Acme Ensilage Cutters and Blowers, Irrigation Equipment, Centrifugal and Deep Well Pumps and Alpha Spraying Outfits. Send for special catalog.
61 BEALE STREET, SAN FRANCISCO.



A Load of Culverts that went to One of Our Allies



# When War Makes Time Precious and Labor Scarce

Governments turn to culverts that can be bought ready-made, shipped promptly, and installed quickly by unskilled labor.

## "ARMCO" IRON CORRUGATED CULVERTS

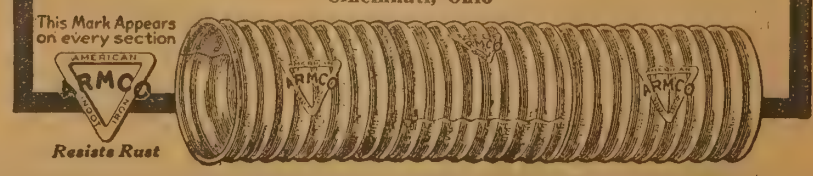
not only meet all requirements as to speed of delivery and ease of installation but they fulfill every demand for endurance and strength. The iron used in "Armco" Culverts is remarkable for its purity and evenness. If you have ever pulled an old hand-wrought nail out of a building that has stood for years, you will know that pure iron endures.

"Armco" Iron Culverts last for years and years without a cent for cost of maintenance. Not affected by frost. Stand up under heavy loads. Withstand spring freshets. Measured in terms of service they are an investment—not an expense.

*For full information as to rust-resisting "Armco" Iron Culverts, Flumes, Sheets, Roofing, and Formed Products, write to*

ARMCO IRON CULVERT & FLUME MFRS. ASSOCIATION
Cincinnati, Ohio

This Mark Appears on every section




*Resists Rust*


When you write to advertisers be sure to say that you saw their advertisement in this paper.

# National Commander-in-Chief Is Needed for Food Production

There is perhaps greater agitation in the public mind over other problems today than there is over that of food production. Coal transportation, the work of the war department in handling and equipping and transporting troops and food conservation are those most strongly urged before the public. But the problem of food production is the one most vital problem before the world today if this war continues even as much as one more year. These other things are important, desperately important, but if food production should fail, it would make no difference whether troops were armed or transported to Europe or not.

Here are further letters received by the Farmer in its campaign for the appointment of a national food production administrator for the period of the war, to do for food production what Herbert C. Hoover is doing for food saving:

**A Monster Problem.**

AGRICULTURAL COLLEGE OF UTAH, LOGAN.—To the Editor: I am very much in sympathy with your telegram to President Wilson. Certainly, if we are to maintain our production, something must be done to retain boys on the farm. The nation is confronted with a monster problem, this great war, but if "Food Will Win the War," its production must be increased and the experienced men on the farm will, no doubt, be more valuable on the farm than in the trenches, provided they can be made to realize the significance of their work and inspired by a knowledge that they are actually engaged in the war, produce to the utmost the vital necessities of the nation.

I have pleasure in quoting the words of a resolution adopted at a very representative assembly of the citizens, largely tillers of the soil, in attendance at the Farmers' Round-up and Housekeepers' conference of the Utah Agricultural college, as follows:

"Resolved: That we, the farmers and housekeepers of Utah, assembled at the Utah Agricultural college, Logan, Utah, pledge to the national and state food administration our unqualified support of every measure adopted, and every measure necessary to adopt in the future, in meeting the serious and critical issues which are now ahead of the nation, and we pledge to suffering humanity the maximum production from our fields and the maximum conservation in our homes.

"Unanimously adopted."

Every effort is being made to keep men on the farms to urge increased production during the coming year.

E. G. PETERSON, President.

**Is Much Interested.**

HOUSE OF REPRESENTATIVES, Washington.—To the Editor: I have been very much interested in reading and considering the articles enclosed with your letter of January 1, concerning food production during the war.

BURTON L. FRENCH.

**Will Push It Along.**

H. C. McCartney, treasurer of the Bull Tractor company of Minneapolis, Minn., writes:

"To the Editor: I have your letter of January 2d, enclosing copy of telegram sent to President Wilson asking for the immediate appointment of a national war-time food production administrator. This certainly appeals to me, and I will be pleased to push this along in any way possible and will write the chairman of our state council of defense.

"In April of last year I took this

(Continued on page thirty-four.)

## Coordination in Food Production

Colonel Clarence Ousley, assistant secretary of the United States department of agriculture, told the farmers gathered at the state university at Moscow, Idaho, the other day, that the tens of millions of people in England and France had not had a full meal for two years, having used up their surplus of food during the first year and a half of the war. This tremendous fact is sinking more and more deeply into the minds of the American people every day. The grave need of greater food production in the United States this year already has aroused the nation as a whole. Chambers of commerce, great railroad companies, banking and other great business enterprises, are making it a part of their business to help devise ways and means for increasing food supplies. The public school systems of these 48 states are doing more to put a punch into home gardening and other ways of increasing food production than ever before. The national department of agriculture itself, with its thousands upon thousands of employes, with the county agents, with food production evangelists traveling into every nook of the country, and backed by millions of emergency funds, is arousing the people to this great need. The farmers are awakening up on this matter. As was shown in our columns last week most of the farmers are planning to raise more wheat, more barley, more rye, more beef and dairy cattle, more sheep and hogs. All of these developments demand coordination, else there will be a tremendous waste in duplicated and inefficient work. Never was there a greater need for a national war-time food production administrator than at this very moment. This is indicated clearly by the following communication to the Farmer by Governor Lister of Washington:

To the Editor: Regarding the campaign you are making for the appointment of a National War-Time Food Production Administrator, I would say that the appointment of a person to cover that matter would in my opinion assist materially in coordinating the energies of those who are now engaged in this most important line of activity. There is no question regarding the need of great food production. The plan you suggest ought to be of material assistance in bringing it about.

*Ernest Lister*
Governor.





*Raise Your Calves on*
**Blatchford's Calf Meal**
***and Sell the Milk***

More calves have been raised on Blatchford's Calf Meal than on all other milk substitutes combined.

100 lbs. makes 100 gallons of milk substitute, costing only one-third as much as milk.

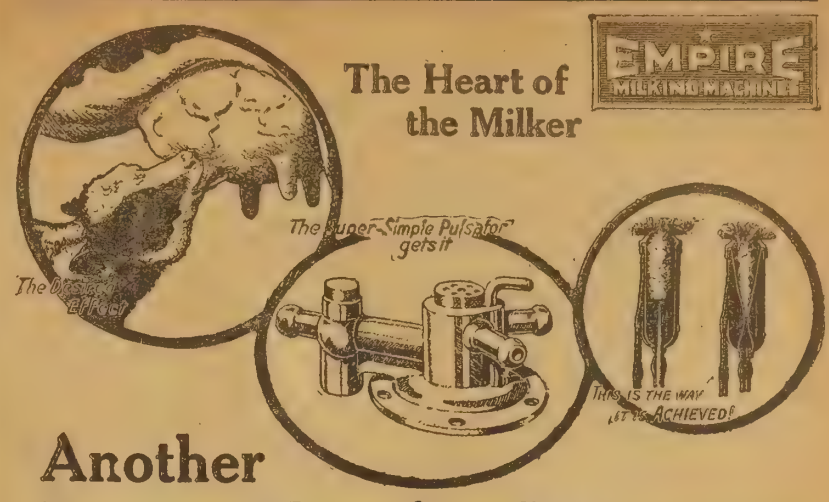
Prevents scouring and insures the early maturity of sleek, handsome calves.

It is steam-cooked and no trouble to prepare or use.

**Write for Pamphlet** "How to Raise Calves Cheaply and Successfully with Little or No Milk." At dealers, or Blatchford Calf Meal Co., Dept. 58 Waukegan, Ill.

**SPOKANE SEED CO.**
Distributors,
SPOKANE, WASH.



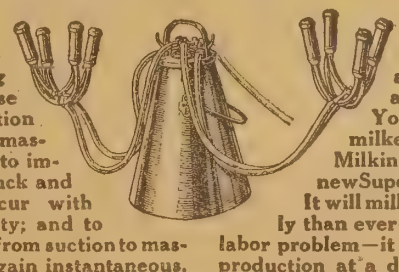



**Another Battle Won for Dairymen**

**FOR months we have been experimenting—investigating—testing—fighting, to find a way to make the Empire Milking Machine, already the unquestioned leader, still more efficient for the dairy farmer.**

**The battle is won.**

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*Also Manufacturers of Empire Cream Separators Gasoline Engines and Farm Electric Plants*





LIVE STOCK NOTES

Write to the Editor

E. J. IDDINGS, Editorial Contributor

# Digestive Tankage

Replying to an inquiry about digestive tankage, Professor E. J. Fjelsted, assistant professor of animal husbandry at the O. A. C., writes:

"Digestive tankage is a feed very high in protein. The highest grade of this material analyzes about 60 per cent protein. It is a product of the packing industry, being made in the following manner: They take the scraps, blood and certain parts of the animal, place them in a steam chest and subject them to a very high temperature. After this they are thoroughly cooked in order to increase digestibility and remove any danger of disease. The mass is then dried and ground.

"The feed is very concentrated and rather expensive, so it must and should be fed in comparatively small amounts in proportion to other feeds. For best results it should be fed as follows:

"For fattening hogs, feed about 5 per cent of your grain ration digestive tankage; for growing pigs, from 7 to 9 per cent. Maintaining sows over winter can stand from 10 to 12 per cent economically. One pound of digestive tankage in a combination of this kind will replace about three pounds of grain. Digestive tankage at from $90 to $100 per ton would (fed properly) equal either barley, wheat or corn at $30 per ton.

"We have been able to get the best results with our hogs by feeding about two-thirds barley and one-third shorts with from three to five pounds of digestive tankage for every 100 pounds of the combination in feeding fattening hogs."

## Hogs on Mt. Angel Farm.

Mt. Angel College farm, St. Benedict, Ore., that turns off a good many fat hogs, usually at a profit, has this winter been feeding ground barley, middlings, and about 7 per cent tankage or fish meal, with excellent results. Cull potatoes, raised on the farm, are also used.

Father Boniface, who manages the hogs and poultry, is a Duroc-Jersey fancier. Pacific Golden Rod, purchased from Doerfler Brothers, is being used as a herd sire. Will Advance III., another of the Harvey line of breeding, is one of the foundation sows and she was bred to Orion Top Col. of Charles Hoover breeding. Both purebred and grade Durocs are kept and when I was last there 11 registered breeding sows, all good ones, were in the hog lots, besides a lot of grades nearly ready for the butcher. H. A.

# Veterinary

Dr. S. B. Nelson

**Diarrhea**—I have a 14-year-old mare that is troubled with diarrhea a great deal. I had a veterinarian extract two loose molar teeth about 18 months ago and float her teeth. About a month ago he extracted another loose tooth, but this time it did not do any good.—J. M. Burley, Idaho.

Try giving your horse one teaspoonful of listerine in a little water morning, noon and night. It may not be possible to do very much for a permanent cure for an animal of this age.

I have a mare that foaled a colt last April. Both of them have highly colored water and they strain and pass small quantities of water at short intervals. F. C. S.
Monkland, Ore.

Give your mare one teaspoonful of tincture of iodine in her drinking water once daily. Also give the mare on her feed morning and evening a half a teaspoonful of salt with a teaspoonful of sodium bicarbonate. Give this for three, four or five days as necessary.

**Teat Is Injured**—I have a cow that has a hole half way up one teat. When she is milked the milk comes out of this place. W. C.
Fangollano, Ore.

The treatment for your cow is to put a harnessmakers's stitch through the side of the teat at the middle between the outside and inside opening. That will close the middle of the hole. Then make the outside wound sore, scraping it with a fine knife, washing it thoroughly with hot water and a 1 per cent solution of lysol. Then put in two fine stitches on this outside opening. Cover the stitches with boracic acid and pour collodion on it so as to keep it airtight until it heals. This is the only way that these types of injuries to the teats can be in most instances successfully treated.

**Horses Have Worms**—I have several horses which have been troubled with worms. Can you give me some reliable remedy? What are the symptoms? How does a horse act which has been foundered at some time or other? L. C. H.
Hingham, Mont.

The treatment for worms runs along two lines. One to kill the worms and then flush them out of the system, the other one to stupefy the worms and then flush them out.

The first treatment necessitates that one should know the specific parasite and use certain drugs that are nearly specifics. As you have not made this clear I can not give the treatment.

The second treatment will cover many of the cases although not all, and is therefore the best all around treatment, and although some people seem to not know the value of it, yet my records show that it has been a very valuable one and is as follows:

Give the horse two drachms of powdered iron sulphate on his grain night and morning for a week. Then miss one meal and before the next one give him from one to two ounces of turpentine well shaken up in one full quart of linseed oil, given as a drench.

**Work Horse Sick**—I have a work horse 12 years old that has been sick for a week. He does not eat, but stands with his head down and once in a while he throws his head up. When I turn him loose he goes and lies down, but does not kick, paw or thrash around any. The pain seems to be located in his bowels or stomach, for he sometimes looks around at his side. He seems to pass water as usual and his bowels move. Some horses around have mountain fever. F. W.
Greer, Idaho.

Give your horse all the water that he wants to drink. Do not feed him anything to speak of at the present time. Give him each morning one pint of raw linseed oil and at night three-fourths of one pound of Epsom salts in two quarts of water. At noon give him one ounce of compound tincture of gentian in one pint of water. I do not think that your horse has what is known as mountain fever among horses.

**May Be Lice**—I have a few horses that bite themselves and rub against anything and blemish themselves, appearing as if they have lice. P. P.
Opportunity, Wash.

Your horses may be affected with some one of the external parasites which sometimes attack horses, such as mites, lice or the manger mite. The use of a tobacco solution bath or a bath of a 2 per cent solution of any of the coal-tar disinfectants might be of value. For the tobacco solution get a quantity of tobacco stems and boil them until the solution is a light brown and use on a warm, sunny day. Use the coal-tar product wash the same. The solutions had better be used warm since it sometimes makes a difference in treatment as to which parasite is to be destroyed. I would suggest that you consult your local veterinarian and let him determine the exact cause of the trouble for you.

## Save Orphan Lambs.

To the Editor: Spring is or will be coming soon, and then comes lambing time. I noticed in the papers that the government is calling attention to the shortage of meat and advocates meatless days. Now, as stated above, lambing time will soon be here and it is time right now for us to wake up and stop this useless killing of orphan lambs. I am sure that at least 10,000 little orphan lambs died last spring for want of care which would have been taken care of if the sheepmen would sell them to the farmers. At least half of this amount could have been saved, but the sheepmen would not sell them for love or money. They would rather kill them than see the farmers raise them. I think it high time to call the attention of the food administrator to this and stop this willful slaughter of lambs. I for one would be willing to buy some or take them and raise them on shares.
ERNEST A. MESSNER.
Wendell, Idaho.

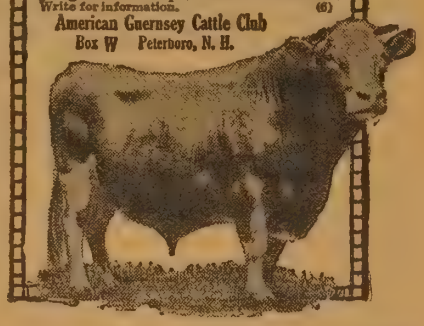

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Don't sell your scrub cows for beef. Breed them to a pure bred Guernsey bull. The resulting heifers will produce from 25 per cent to 100 per cent more than their dams. Guernseys give greatest return per dollar invested in feed. Write for information. (6)

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The Lawrence-Williams Co.,

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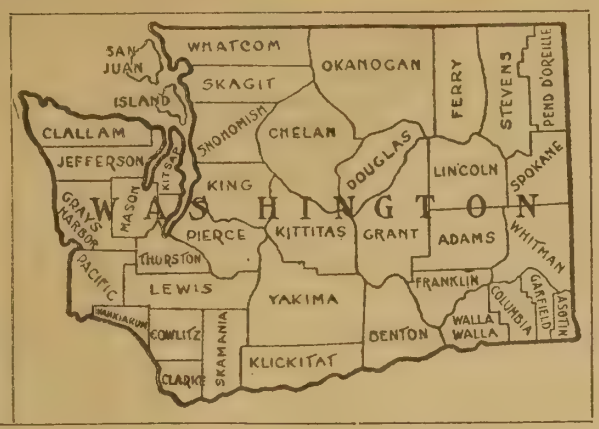
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# What Does It Cost to Make Pork?

## The Cost Per Hundred Is Estimated at from Ten to Twenty Dollars; Ration Feed Appears To Be Determining Factor.




SOUTH BEND, Pacific county, Wash., Feb. 1.—Dairymen are receiving 56 cents for butter fat and $3 per hundred for milk. Bran is $38 a ton and shorts $40, beef from 15 cents to 20 cents per pound. Poultry raisers pay $4.50 a sack for scratch feed and are receiving 50 cents for eggs on the local market. The dealer gets 55 cents. Potatoes are one and a half cents, wholesale, and the dealer is receiving two cents for them; cabbage, carrots, rutabagas and turnips average the same. Home grown apples sell at $1.25 and $1.50 a box. Butter is shipped in; almost the entire amount consumed is shipped in from other counties. Lots of cheese is made here and a great deal of condensed milk is used and meat also, which is shipped in from outside. Poultrymen are able to supply the local markets. Vegetables are nearly all home grown, with the exception of early varieties. Every year the dealers buy a couple of carloads of Eastern Washington apples to supply the demand. Butterfat, milk, and often meat are shipped to distant points. One farmer who raises more pigs than any one else around here estimates that it costs $18 to raise a pig until it weighs 100 pounds. He uses the by-product of his cheese factory to feed them on. January was a mild month for midwinter, but toward the end, the weather grew colder and on January 31 the thermometer registered 22 degrees above zero, the coldest this winter. The grass grew a couple of inches during the month. The ground is quite wet and soggy for spring plowing. Hay is scarce and the farmers look forward to an early spring.

MRS. WINNIFRED BUCKINGHAM.

### Costs 15 Cents to Raise Pork.

LA CROSSE, Whitman County, Feb. 2.—Market conditions are quite steady and uniform. The farmers have very little produce to sell, as a rule, although nearly all have some eggs and butter to market when they are not in market for it themselves. Eggs remain steady at 50 cents per dozen, potatoes retail at $1.75 to $2 per hundredweight, hogs, live weight, are 15 cents per pound, steers seven to eight cents and cows five and one-half to six cents per pound. I would estimate from personal experience that it would take, ordinarily, from four to five pounds of dry grain feed to produce one pound of pork. If one figures high cost value of wheat and barley, adding cost of equipment and labor, a pound of pork will cost 15 cents. The exceptionally warm open winter came to a sudden end January 30, when a strong north wind caused the temperature to drop to five above zero. The ground was blown bare and winter wheat had its first siege, but I believe it is still unhurt.

M. E. SCHRECK.

### Feed Potatoes for Cheap Pork.

MARIETTA, Whatcom County, Wash., Jan. 28.—Farmers about this time receive $20 per ton for potatoes, $60 to $65 per ton for wheat, $43 to $45 for oats and $51 to $55 per ton for barley. The retailer generally gets $30 per ton for potatoes, $80 for wheat, $55 for oats and $70 for barley. Most of the farm produce here is marketed locally. By feeding small potatoes and mangels and waste from the farm, farmers should be able to raise 100 pounds of pork for $10. Some farmers are waiting for a few days of nice weather the ground being soft and ideal for plowing. It begins to look in some sections as if winter were over, as many buds are coming on the bushes. Right in this section, however, there has been very heavy damage done by the recent high water, and it will take months of hard work to put some of the farms back in a good condition.

S. B. HAYHEW.

### Twelve Cents to Make Pork.

GIG HARBOR, Pierce County, Wash., Feb. 1.—With the exception of some of the small fruits grown quite freely about here, our market may be termed a purely local one—mainly in the city of Tacoma. Prices for such of our products as are to be marketed at this season of the year, are undeniably good, with the exception of the potato, for which there can hardly be said to be a market. Eggs for some days back have brought upwards of 50 cents per dozen, dairy butter 50 cents, butter fat about 53 cents, dressed pigs 18 to 20 cents, live hens 24 cents. We are paying $1.70 for quarters of flour, oatmeal, cornmeal, graham and other like flours about 20 per cent advance on this price; shorts $37 per ton, bran $33 to $34 per ton, scratch feed $74 per ton, oats $65 per ton, barley about the same when it is to be had; alfalfa hay $29 per ton, timothy hay $38 per ton.

Farmers about here who have to buy the bulk of their concentrated feeds but have potatoes and roots to boil and use with them, consider that it costs about 12 cents per pound to make pork. Up to yesterday's severe freeze the weather has been unprecedentally mild, with grasses and grains making quite a steady growth. Just what effect this freeze will have on such winter grain as is grown here can not yet be determined. There has been heavy rainfall, and there should be a good store of water with which to make next season's crop.

W. D. BOYNTON.

### No Demand for Potatoes.

RAINIER, Thurston County, Wash., Jan. 29.—Weather is mild with plenty of rain. Winter grain is growing right along. Some plowing is being done. No demand for potatoes, but many farmers have not sold 500 pounds of potatoes since last fall. Eggs sold locally at 45 cents a dozen. Most of the products are shipped out to distant points. Milk is shipped to the condenser at $3 per hundred pounds, and a number of farmers are shipping milk to Camp Lewis through the Thurston County Dairy association. The farmer pays, retail, $1.15 for a 60-pound sack of bran, $1.65 for 80-pound sack of shorts and $1.85 for a 90-pound sack of shorts. Scratch feed is $4.50 per hundred pounds, flour is $2.80 for a 49-pound sack, creamery butter is 60 cents a pound. The dealer will sell 45-cent eggs at 50 cents a dozen. Potatoes are from 1-4 to 1 cent per pound over what he pays, according to the season. There are a good many porkless days for the people now. Very few hogs here, and young 6-weeks-old pigs are worth $5 to $7 each. I do not think there are as many calves vealed as there used to be. The dairy farmer is raising what he needs of heifer calves and there is a good demand for the rest of his calves at fair prices to stock raisers. The calves are sold when from three to five days old.

L. F. DAVIS.

### Want Coast Wheat Price.

EPHRATA, Grant County, Wash., Jan. 30.—This is especially a wheat country and the problem that interests the farmer as much as any one thing at the present is whether labor will be available for the planting and harvesting of next year's crop. The farmers are much interested in having a primary wheat terminal established on the Coast. They consider this one of the most important things at the present time to be done to increase wheat production. The big percentage of the wheat in this county is already handled in bulk and the problem of sacks does not interest so much as getting a price for their wheat based on the Coast, instead of some eastern market. There is about as much moisture in the ground at the present as is usual at this season of the year. However, there is no snow on the ground and if a heavy snow fall comes there is apt to be considerable run off because the ground is frozen and will not take moisture when the snow melts. Live stock is in much better condition than it has been at this season of the year for two years. Very little feed has been given them, as the range has been open all winter and cattle have been able to make a very good living without feed.

H. W. REAUGH.

### Get Together.

WALLA WALLA, Walla Walla County, Wash., Jan. 26.—I consider the most important problem for our or any community is the getting together of the people in thought and action supporting the national government in word and deed. The crop prospects are fine for this section. Live stock is looking fine and prices of hay have decreased. We believe that the state college is doing a fine work and is being well patronized from this district.

W. A. RITZ.

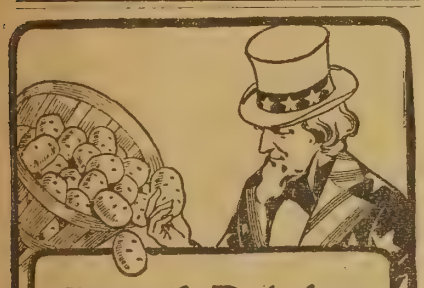
### Stock Wintering Well.

GRANDVIEW, Yakima County, Wash., Jan. 27.—The mild and rainy winter will be splendid for wheat and also for summer fallow. Not as much hay has been fed this winter as usual and live stock is looking good. There has been but little interest in the winter course. I hope there will be more interest when the demonstration farm is started near Prosser.

E. H. FAULKNER.



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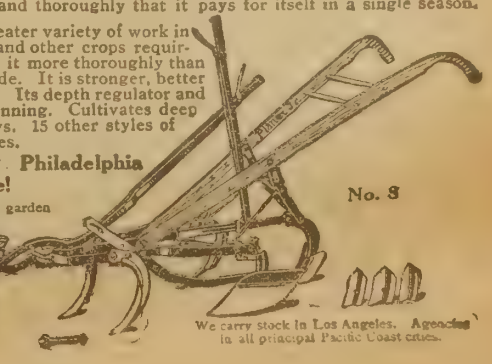

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POULTRY

Write to the Editor

JAMES DRYDEN,
Editorial Contributor.

# The Feed Question

The placing of a maximum price on bran and shorts has created an unusual demand for them among poultrymen and dairymen. Farmers are feeding more bran and shorts and less oats and barley. The action of the food administration in reducing the price of these mill feeds has been a distinct advantage to poultry raisers. The price of bran and shorts would probably be $10 a ton higher than it is now but for this action. Oats and barley are now about double the price of the wheat by-products and as a consequence farmers are selling oats and barley that they otherwise feed to stock and buying bran and shorts.

But bran and shorts are not in sufficient quantity to meet the demand. The food control price therefore has not been of as much advantage as it would have been had there been a sufficient supply. One mill in the northwest is turning out 200 tons of bran a day, but if all the mills could double their output there would be ready sale for it. If farmers can not get what they want since the price was reduced, it is because there is not enough to go around.

What the poultrymen need now and need badly is a supply of cheaper corn. It would seem that the corn farmers should be regulated just as the wheat farmers are. At any rate a reasonable maximum price on corn, a price that would permit it to be laid down in this state at $60 a ton or less, would be a fine thing for the poultry raisers.

Large quantities of bran and shorts may be fed to advantage, but the more bran that is fed the more corn is needed to balance it. With cheaper bran and cheap corn the increase of eggs and poultry which the government is calling for would be assured. The best way to secure an increased production is to lessen its cost.

Meantime poultrymen will lessen their feed bills by feeding more bran and shorts if they can be obtained. About as much bran and shorts by weight as of whole grain may be fed. Bran and shorts may profitably replace whole grain up to 50 per cent of the ration.

The price of corn at this writing, January 28, is about $76 a ton at Portland, kiln dried. That is more than the price of wheat. It requires patriotism for the farmer to sell his wheat and buy corn at a higher price.

J. D.

# Soft Shelled Eggs

To the Editor: Should like to know cause and remedy of chickens dropping soft shell eggs at night. They have a large area of ground to run over. I would appreciate any information you can give me on the way to get best results from chickens.

S. V. D.

Friday Harbor, Wash.

Eggs that are laid with a thin shell or soft shell or without any shell, according to some recent investigations, are not due to a lack of calcium, lime, in the feed. It was found at the Wisconsin station that a lack of calcium did not cause soft-shelled eggs, the hen apparently drawing upon her skeleton for the lime. The number of eggs laid, however, seemed to decrease. If she doesn't get lime enough she will not lay the eggs. The trouble is probably due to some deranged condition of the egg organs or to a lack of vigor. A heavy laying hen uses a large amount of lime to cover the eggs with the shells and the ordinary foods do not furnish lime enough for the purpose of heavy production. It has been found that oyster shells furnish the lime in most available form, and all good poultrymen feed oyster shells. The best plan is to keep a box or hopper of broken or ground oyster shells before the fowls all the time. Clam shells may also be used, but are not as valuable as oyster shells, but will serve the purpose.

In other respects a good ration should be fed. That means a variety. Barley and oats, or corn and oats and barley, for whole grain, fed in such a way as to keep the fowls as busy as possible. Feed the grain in a deep litter of straw twice a day so as to keep them exercising, and that means keeping them in good health and vigor and with less trouble from thin or soft shells. A mash should also be fed, either dry or moist. If fed dry it should be kept in a hopper all the time so the fowls can help themselves at will. It may be composed of about the following materials: Wheat bran, 3 parts by weight; middlings or shorts, 1 part; ground corn, 1 part, oil meal (either linseed or cocoanut oil meal) 1 part, and meat scrap or fish scrap, 1 part. If the mash is fed moist use buttermilk, preferably, for moistening it or water if milk is not available. Use about as much milk by weight or a little more as of mash, and mix to a crumbly consistency. Feed it either first thing in the morning, all they will clean up in half an hour, or feed it as the last feed of the day, all they will eat. If fed moist do not put the meat scrap in it, but feed this in a separate hopper where the fowls can help themselves at will. Give all the green food they will eat and keep charcoal, grit and shell before them all the time in separate hoppers. Feed in such a way as to keep the fowls as busy as possible, at the same time giving them all the food they need, and there will be little trouble from soft shell eggs.

J. D.

## Catarrhal Roup.

To the Editor: I have kept hens for more than 40 years, but now I have something I do not understand. Have had trouble about one year. Some of them always shake their heads exhaling air through the nasal passage and one of them when doing that utters a short chip sound. They are out of sorts when so troubled. However, some of them recover without treatment. Others finally act as with roup. None have died. A SUBSCRIBER.

Hillyard, Wash.

The fowls are no doubt suffering from a form of catarrhal coup. Try dipping the head of the fowl in a 2 per cent solution of permanganate of potash. Hold the head in the solution for quarter of a minute or long enough so as not to strangle the bird. Repeat this two or three times, or twice a day for two days.

J. D.

## Turkey Raising Information.

To the Editor: Will you kindly inform me where I may obtain instruction in the way of a book or literature on "Turkey Raising?"

R. E. M.

Coeur d'Alene, Idaho.

For a treatise on turkey reasing write to the United States department of agriculture, Washington, D. C., for a farmers' bulletin on that subject. This is a recent bulletin and covers the subject very thoroughly. Copies could no doubt be secured also by addressing a request to your congressman.

J. D.

## Longer Hours for the Hen.

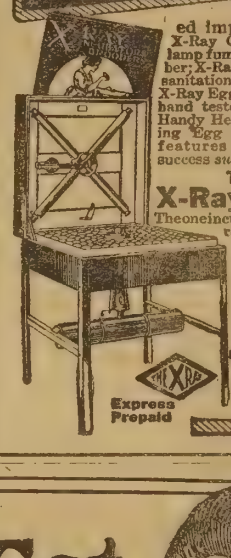
W. C. Tuhrlow, residing on a small tract in the Montavilla district near Portland, has a flock of bred-to-lay White Leghorns that have been laying 60 to 70 per cent a day during December and January. That is excellent laying. He uses artificial lights in the poultry houses in the morning and evening and he believes that the lighting is responsible in part at least for this good egg yield. A number of northwest poultrymen are using lights this winter and the reports seem to be favorable. The purpose of the lights is to give the fowls a longer working day in winter. On the Baker & Mart farm at Beaverton, Oregon, artificial light is used for a flock of 1000 hens.

J. D.

### Mineral Wool.

An American firm operating in Australia has started works near Melbourne for turning the local basalt into "mineral wool" for use as an insulator in packing machinery and ice chests and as a substitute for asbestos.


1918 Features that Assure Good Hatches



Twenty patented improvements in all. X-Ray Gas Arrestor prevents lamp fumes entering egg chamber; X-Ray Nursery Tray assures sanitation, protects little chicks; X-Ray Egg-Tester, most perfect hand tester ever conceived; Handy Height; 1918 Quick-Cooling Egg Tray — *all* exclusive features that make poultry success *sure*.

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Tells why chicks die

E. J. Reefer, the poultry expert, 466 Reefer Bldg., Kansas City, Mo., is giving away free a valuable book entitled, "White Diarrhoea and How to Cure it." This book contains scientific facts on white diarrhoea and tells how to prepare a simple home solution that cures this terrible disease over night and actually raises 98 per cent of every hatch. All poultry raisers should certainly write Mr. Reefer for one of these valuable FREE books.



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There is economy as well as safety in the Non-Skid lettered tread. Out of that added rubber, piled high in the center, you get good-measure wear. Fuel-saving will interest you at this time especially. Unusually long runs per gallon is the rule on Firestone Tires.

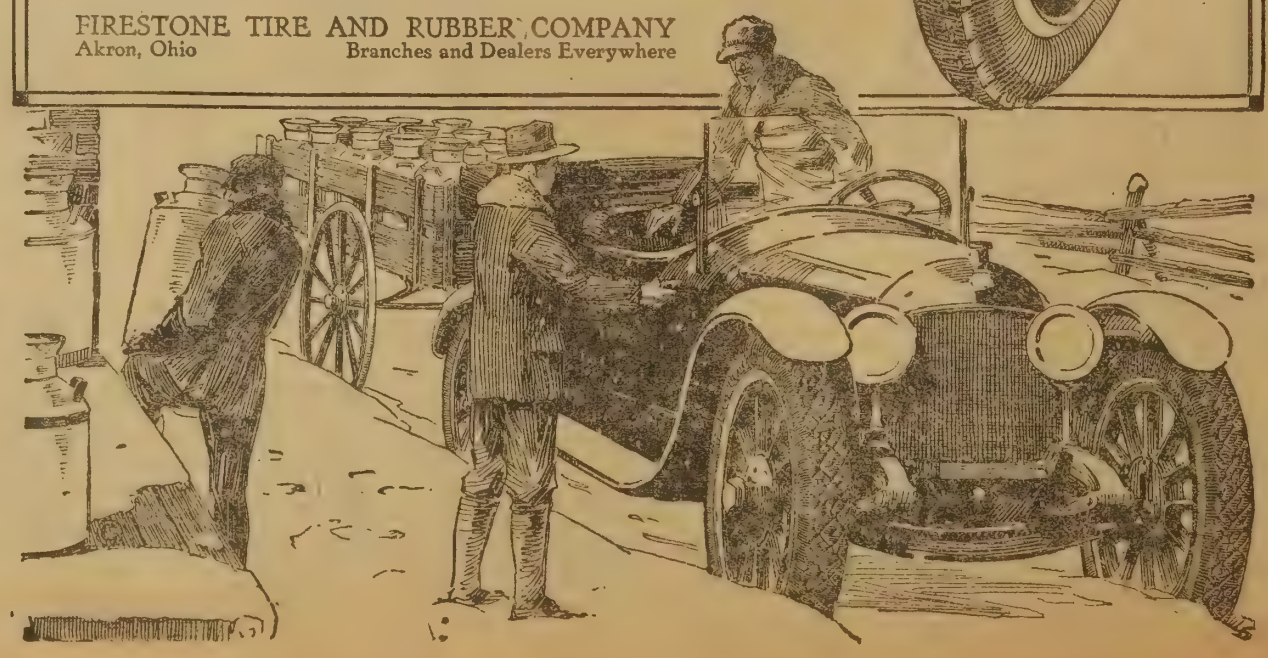
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GRANVILLE LOWTHER,
Editorial Contributor.

## Uses Cover Crops

### Irrigates Trees With "Clover Tea"

In an address before the Idaho State Horticultural association recently E. F. Stephens, prominent orchardist of that state, cited some interesting figures and gave some interesting opinions concerning orcharding. Here are some things he says:

"R. H. Woods of Wood Spur, in the Payette valley, in 1912 packed 1295 boxes of fancy and extra fancy Ben Davis apples from apple trees making their tenth season's growth. Placing these apples in storage, he sold the crop the succeeding spring at $1.03, $1313.55 per acre, and after paying storage charges he had remaining $1056 per acre.

"In 1917 in the Stephens orchards, near Nampa, 26 orchard run boxes of Rome Beauty were picked from single trees, 1178 boxes from single acres.

"How could this be done? First, by 24 cultivations a year during the period of development. In five years the trees were grown to a size large enough to carry many boxes of apples. Next the fertility of the soil was increased by seeding to and growing clover. In the year 1916 no crop of apples on the trees, hay and clover seed to the value of $3000 was marketed.

"In 1917 the abundant crop on the trees was supported and developed by repeated cuttings of clover, which was allowed to fall on the ground, act as a mulch and also decay. Clover lying on the ground impeded the rapid passing away of irrigation water. The water was checked and compelled to soak deeply into the soil. I called this watering with clover tea. The apples now on display on the platform illustrate the superior quality of fruit grown with clover tea.

"In connection with fertile soil and suitable culture we must not overlook the important work of pruning followed by spraying with suitable insecticides. For some years I have given careful study to the question of what to spray with. My trip to the Washington state meeting this winter still further confirmed my reliance on the use of the liquid solution of lime sulphur 32 or 33 degrees Baume, and to control the codling moth the paste form of arsenate of lead, averaging in available markets 15 to 18 per cent cheaper than the powdered form of arsenate of lead."

## Make a Garden

### Make It a Part of Farm Work

Making a plea for farm gardens, E. R. Bennett, field horticulturist of the University of Idaho, declared that the people of the United States used 50 per cent more of wheat and meats in their diet than do the people of Europe. Later in the day the same point was brought out by Professor O. M. Morris of the state college of Washington, when he mentioned the fact that the per capita consumption of potatoes in Europe was twice as large as in this country. A. C. Burrell, field entomologist of the Idaho State university; W. S. Shearer, practical gardener of Lewiston, Idaho, and C. L. Smith of the O.-W. R. & N., also urged the raising of more vegetables for home use on the farm. War conditions gave a certain punch to the words of the speakers and a certain earnestness to the audience which was in striking contrast to many of the farm meetings I have hitherto attended. Here are a few scattered points from the garden day session of the farmers' week at the Idaho State university.

Do not think that you must have some sort of peculiar soil or peculiar fertilizers to grow "vegetables. Any of the common vegetables will thrive on well-prepared, well-fertilized and well-cultivated soils. Plenty of well-rotted manure thoroughly worked into the soils of the Pacific northwest is all that is needed in the way of fertilizers.

Take a sheet of paper and plan out your garden before spring work begins.

A half acre of garden should furnish half the living for a farm family the year round. It is better to have this half-acre twice as long as it is wide so as to make longer rows for cultivating with the horse. Plant early vegetables like lettuce, radishes, spinach and peas on one side of the garden, part of a row at a time so as to furnish these fresh, early vegetables right along, and later use this same part of the garden for late cabbage and other late vegetables.

It is a good plan to move the garden every two or three years to other parts of the farm, as this is one of the surest ways of keeping down garden pests.

Cleanliness, also, is one of the most effective methods of controlling garden pests. Clean off all the trash or leaves and weeds and burn them up especially in the fall.

Cultivate often, keeping a dust mulch of two or three inches over the garden.

There is hardly a day throughout the season, but the garden needs some attention. You can not have a good garden without paying the price, but the garden is well worth the price.

As a rule, your home garden on the farm will give fresh vegetables, will give you a greater variety of vegetables and vegetables of a better quality than you can buy from others. Those who make a business of producing vegetables for the market will, just as far as they can, raise varieties which will produce the largest crops even at some expense of quality.

Cultivate your vegetable garden on the farm as early as is practicable in the spring so as to warm up the land as well as to conserve the moisture. Wet soil is cold soil. By cultivating as early as the soil will permit you dry out the top of the soil and warm it up.

Latest garden experiences seem to favor a combination of sprays on general principles. Tobacco, Bordeaux and the arsenical sprays can be combined.

Write to your state experiment station or advise with your most successful neighbors if you have not found out yourself what are the best varieties of vegetables to grow. Write to the department of agriculture, Washington, D. C., for farmers' bulletin, No. 856, which has just been published, giving directions for raising the common vegetables. EAS


## Trees

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### MUST BELIEVE IN IT

### Orchardist Must Have Side Line

By E. F. Stephens.

Commercial orcharding under present conditions should be in the hands of people who enjoy and believe in the business. Commercial orcharding also should be conducted on lands suited to the production of fruit of superior quality. Those who have planted orchards on unsuitable soil or unfortunate locations should change to other lines of work. They are likely to succeed better with grain, hay or some form of live stock.

The orchardist should grow his own forage and feed and he should keep a cow, pigs and poultry. He should be able to survive an occasional blank year.

### Northwest and California Fruits.

I have been out over some of the citrus groves' sections of California, and am trying to make comparisons on the methods of irrigation, pruning, spraying, cultivating, cost of land, harvesting, marketing and the net profits. I want to know as nearly as possible what are the profits from these orchards as compared with apples, pears and peaches in the Pacific northwest. I am not ready to report, but I have some information that to me is interesting and I think maybe so to the fruitgrowers of Washington, Oregon and Idaho. Of course, the conditions are so different in the two sections that it is, in some cases, difficult to make comparisons, but the citrus fruitgrowers have passed through some experiences similar to our own and have solved the problems satisfactorily to themselves. We have not been so long in the business and our organizations are not so complete as those of California. I presume we will bring them to a higher stage of perfection in time, but it will take pressure and the elimination of some of the smaller organizatitons to do it. I may be mistaken, but it seems to me now that a government marketing agency is destined to be the final solution of the question. However, I would not be dogmatic about it, but wait and see the result of experiments already being tested by the government as a result of this war.

G. L.


# Sugar Beet Growers
# ATTENTION!

**NITRATE OF SODA** can make money for **YOU** and help **UNCLE SAM** by materially increasing yield and quality.

Read our booklet, **"NITRATE OF SODA FOR SUGAR BEETS,"** and be convinced. Actual tests prove that an increase of 2500 to 4500 pounds per acre can be obtained from the application of 100 pounds of this **IMMEDIATELY AVAILABLE** fertilizer. **REMEMBER**—it contains 15 per cent Nitrogen, equal to 18% ammonia.

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# IMPORTANT

You may think you are doing your full duty when you garden or farm in an intensified way. Of first importance is the selection of your seeds.

We are a home concern, producing seeds suitable for northwest planters. These will give much better results in this section than seeds that have been grown especially for the eastern and southern sections. Our seeds are dependable, pedigreed seeds.

Ask for Catalogue No. 40.

**Inland Seed Co.** Spokane, Wash.



Right Back in the Same Row and Right Up to the Trees Under the Low Branches!

# Patented "Turning Feature"

### Immensely Important in Orchard Tractor

Will the tractor you buy turn in a 10-foot circle (5-foot radius) *pulling as strong on the short turns* as on the *straight away*—and will it do that without *straining one side or one wheel?* That's of vital importance! Many tractors work well when pulling *straight*—it's on the *turns* that you will get *good* or *poor* service from your tractor.

The Bean TrackPULL Tractor is the *only small orchard-and-vineyard tractor made* that delivers *full power* on 10-foot turns and it turns without straining one side, pivoting, or doing anything else that a tractor shouldn't do.

This remarkable machine is built on *patented FRONT-DRIVE principle*—you *steer* with *the single track* which does all the *pulling* whichever way you go. You can turn it back down the same row (see illustration above) without lifting out the tools making as *short* a turn as with a team!

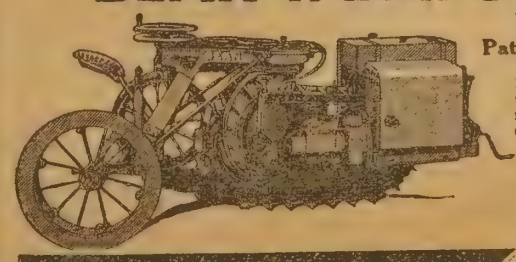
Absolutely no other tractor acts so like a team while doing three times as much, is so handy, so efficient, so staunch, and so *protected against over-strains!*

You'll want the TrackPULL eventually—go see it now. Send coupon at once for catalog, complete description, and name of nearest demonstrating-agent.

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# Transport Torpedoed

## *American Soldiers Are Jeopardized*

The one outstanding news event of the past week in the eyes of all America was the sinking by a submarine Wednesday of the British transport Tuscania, carrying more than 2100 American soldiers bound for the European front. At this writing complete check on the lost and rescued has not been announced, but it is practically certain that the loss will not exceed 200 men, a considerable portion of whom are members of the vessel's crew. The Tuscania at the time of the sinking was under British convoy just off the Irish coast and it is reported to have remained afloat for some two hours. Much of the rescue work was done by the convoying vessels. Up to this time the names of those lost have not been learned owing to the fact that it is necessary for the names of the survivors to be cabled to the war department at Washington before identification of the lost can be had. The bodies of a considerable number have been washed ashore on the rocky coast of Ireland, but it is officially stated that recognition was impossible owing to injuries and mutilations resulting either from the torpedoing of the boat or the dashing of the bodies upon the rocks. While most of the soldiers aboard the Tuscania were from the states of Michigan and Wisconsin there were a few on board from many sections of the country, including the northwest. Probably as many as 100 men from the three states of Oregon, Washington and Idaho were on board. The sinking has served better than any other single event up to this time to arouse the American people to a realization of the gravity of the American position. Although the loss of some 200 men is a vital and regrettable matter, from the standpoint of American participation in the war the loss of the vessel will be more keenly felt. It was one of the largest vessels in the war carrying service.

### Unsinkable Vessels?

An interesting announcement was made late last week by William L. Saunders, vice president of the naval consulting board, to the effect that marked progress had been made in an attempt to make vessels unsinkable by torpedoes. He declared to a New York audience that one ship now at an Atlantic port is so protected that she can not be sunk by a submarine. He said the ship might have a hole 30 or 40 feet in diameter torn in her side and yet remain afloat. What was true of this ship, he said, could be made true of other ships, although it would take considerable time to equip a large number of vessels with this device. The scheme in the main consists of a honeycombing form of construction and Mr. Saunders said that an injury such as he described would permit the flooding of not more than one-tenth of the vessel's displacement.

### Peace Terms Again.

In a message to congress Monday President Wilson again made clear this country's terms of peace. He summarized them as follows:

"1. Each part of the final settlement must be based upon essential justice to bring a permanent peace.

"2. Peoples and provinces are not to be bartered about like chattels to establish a balance of power.

3. Territorial settlements must be for the benefit of people concerned and not merely adjustment of rival states' claims.

"4. Well defined national aspirations must be accorded all possible satisfaction.

"A general peace upon such foundations can be discussed," said the president. "Until such a peace can be secured we have no choice but to go on."

### Americans Taken Prisoner.

A report seemingly authentic from European sources announces the capture of American soldiers by a German reconnoitering party. It is not stated how many soldiers have been captured. Reports from the front indicate the morale of the American soldiers under General Pershing is excellent and that their preparations for participating in the war are satisfactory.

### Roosevelt Is Ill.

Considerable interest has been manifested during the week in the illness of Theodore Roosevelt, who has recently undergone two operations for abscesses in the region of his ears. For a time the colonel's condition was thought to be very serious, but at this writing he is reported to be well out of danger. His physicians have ordered him to remain in bed for two or three weeks.

### Russia Quits War.

The Russian government, as nearly as there is a Russian government at the present chaotic time in that country, has formally quit the war, declaring that the state of war between that country and Germany and her allies is at an end. This virtually turns over to Germany all the supplies available in Russia, and relieves hundreds of thousands of German prisoners held by Russia, for participation in the war against the allies.

### Prefer Irregular Lines.

The straight line is an abomination to the Chinese. They endeavor to avoid it in their streets and buildings, and have banished it completely where country field paths are concerned. They will always substitute a curve wherever possible or they will torture it with a zigzag. To the Chinese mind the straight line is suggestive of reath and demans.

# Auto Boosts Land Value

"Statistics prove that the total cost of all the automobiles purchased up to this time does not equal the difference between the value of land 10 years ago, when automobile transportation was introduced to any degree and the present value of the land," says W. C. Hendricks of Spokane. He attributes the increase in land value to the automobile in considerable measure.

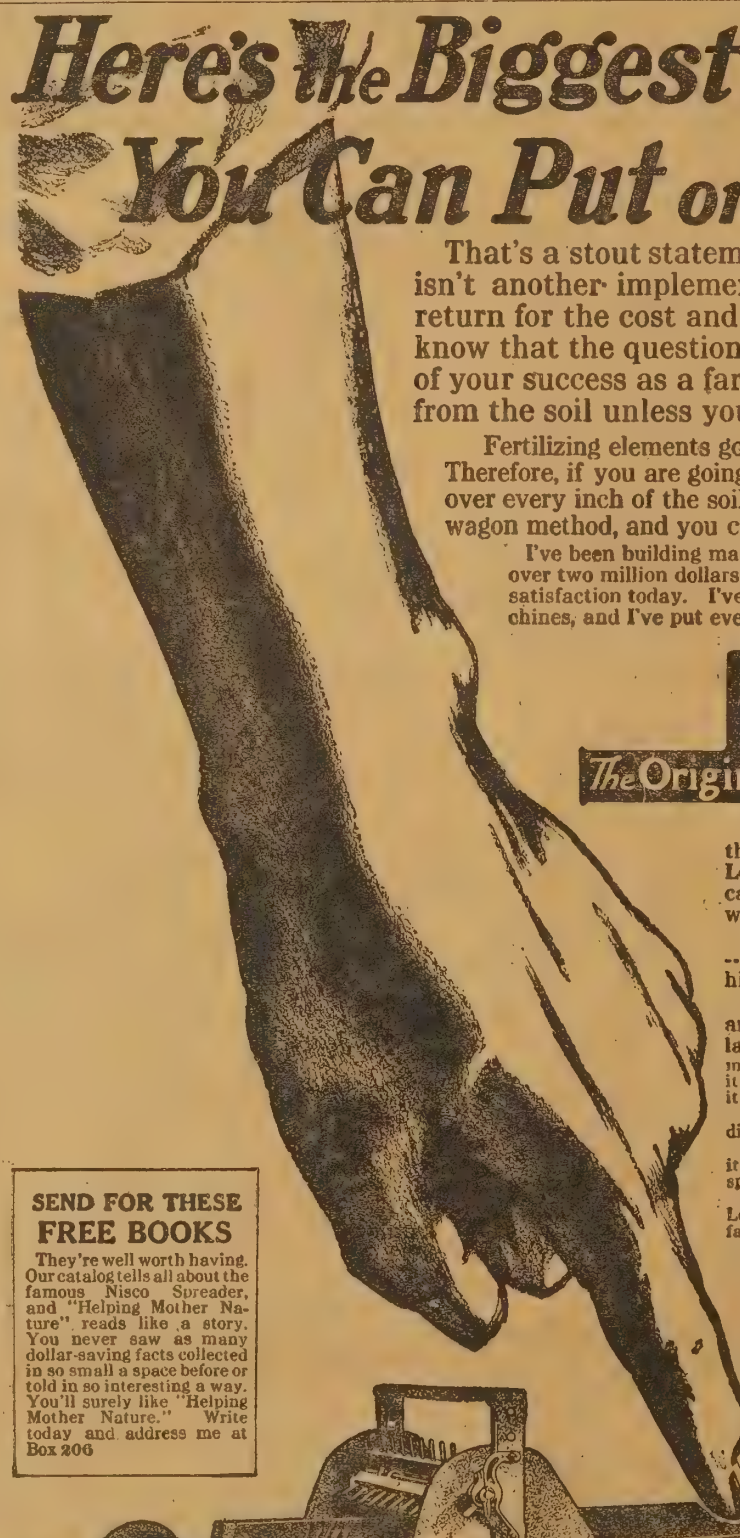
"Take the value 10 years ago of a farm 10 miles from a railroad station, and it will be found that a 25 per cent to a 50 per cent increase in value has doubled. The automobile has boosted land values because it has brought city advantages to the country. It has to a 50 per cent increase in value is a fair average," he continues. "In a majority of cases the value has brought church and school opportunities to the farm in almost the same degree that they are enjoyed by the city resident.

"The good roads movement did not get any material start until the automobile became popular. And more progress has been made in this direction during the last 10 years than in all the time that came before. Good roads will be general for the reason that so many have interested themselves in the movement. And this is because of the vast number of farmers who own automobiles and who have a desire to see the country in which they live.

"The automobile has served another purpose, in a business way. It has aided the real estate men in marketing farm lands which heretofore have been lying idle or inefficiently worked. It has created the townsman's interest in country life and as a result he has invested in country property.

"Strange as it may seem when it comes to purchasing a car, the country buyer is better posted than the average city purchaser. This indicates the great interest manifested by those who are in a position to know and realize the value of machinery in general and its uses."


# Here's the Biggest Money Maker You Can Put on Your Farm!



That's a stout statement, but the facts bear it out. There isn't another implement made that will bring you as great return for the cost and the work as a good spreader will. You know that the question of fertility of your land is at the bottom of your success as a farmer. You cannot keep on taking crops from the soil unless you restore the fertilizing elements.

Fertilizing elements go straight down. They will not spread themselves. Therefore, if you are going to get bumper crops, you have to put manure over every inch of the soil. You can't do that by the old pitchfork and wagon method, and you can't do it with many of the spreaders offered.

I've been building manure spreaders ever since I was fifteen years old. I sold over two million dollars worth of them last year, and every one of them is giving satisfaction today. I've learned something in all these years about these machines, and I've put everything I know into building the

## NISCO
### The Original Wide Spreading Spreader

Look at its wide distribution--seven feet at least. It was the first wide spreader, and it has always held the lead. Look at the way it pulverizes the manure—so fine that you can safely scatter it over growing corn. Can you do that with any other?

Then it's light draft—easy for the team. It's low down --easy for the men. You can load the bed thirty inches high, and scatter 8, 6, 9, 12 or 15 loads to the acre.

Let me tell you that without a Nisco Spreader you are wasting your most valuable asset--the fertility of your land. With a Nisco standing where you can throw the manure from the stalls right into it, hauling it on your fields as soon as it is full, you are getting every dollar's worth of crop food right where it is needed, at the least labor, just when it is needed.

Ask any county agent, any experiment station man, what right distribution of manure will do for you.

I haven't exaggerated a bit. Thousands of good farmers have proved it themselves. Thousands know it pays to use the right kind of spreader, and that the Nisco is right in every particular.

Stop wasting your fertilizer! Feed your land and get more out of it! Let me send you my book, "Helping Mother Nature," which tells the facts about manure, and full description of the peerless Nisco, a money maker for *your* farm.

See the machine at the Nisco dealer's. If you don't know him, we will send you his name.

*B. C. OPPENHEIM, Mgr.*

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# Cost and Worry of Distributing Milk

(From The Idaho Farmer.)

By R. C. KUHMANN

Some time ago I discussed the milk problem from the producer's point of view, in the Idaho Farmer; now I want to say something from the distributor's position.

Some people seem to think that the milk distributors have a gold mine that needs only to be scratched a little with a pick in order that the gold dollars can hop out at a great rate. The reason they think so is because they know nothing at all of the work, the difficulties and often the discouragements that are a large share of the lot of the milk distributor. While the consumer may have a very vivid imagination, he is more than likely to imagine the wrong thing about milk distribution than the true course of affairs. It all looks easy just to see a quart bottle of milk placed on the back or front porch each day, but let me tell you there are a great many moves connected therewith, and some of them are very expensive ones, too.

In the first place, after the cost of milk itself, there is the labor required to wash the bottles and other milk-house utensils. This takes considerable time if it is all done properly. Then there is the filling of the bottles, capping, etc. After that comes the most expensive and trying part of the distributor's work, that of delivering to the consumers list of customers. As I ran a milk wagon for several years, I can give first-hand experience in this line. It is one of the most trying kinds of work that can be imagined; very tiresome, and wearing, too. It isn't any boy's play—it's a man's job, to keep all the accounts and deliveries straight, and the customers satisfied; also to prevent a heavy loss of bottles. Of all the miserable, irritating, little, measly troubles in life, commend me to the milkman!

He must jump off and on his wagon several hundred times a day, and do it every day in the week, including Sundays. He may climb a flight of stairs and then be told by the lady, "We don't want any milk today." Or, he may stand and rap for several minutes, and when the lady finally arrives at the door she says, "Oh, I forgot to put my bottle out, didn't I?"

Again, after doing his best to please a lady in supplying special milk for her baby, she says one day, "I can get 12 quarts for $1 from a neighbor who has a cow—that's four quarts more than you are giving me!" Just thing of "turning down" fine milk that has kept her baby in health, and use the usually filthy stuff produced in an unsanitary barn and other surroundings, by a neighbor who is not equipped to produce sanitary milk! The business dairy and distributor's places and methods are all inspected, and must meet the rules and requirements of the law; but a neighbor, with one cow, can produce milk in any kind of filthy place and manner, and the law permits such unfair competition. Is that right? What encouragement is there for one who wants to produce clean milk, and deliver it in a sanitary way all along the line, when the unsanitary neighbor is allowed to produce and sell without any inspection at all?

I have nothing to say about the cow kept for private family use—if they want to drink dirty milk, that's their own affair; but I do protest most emphatically when such a product is allowed to be put on the market in competition with clean milk that has been produced in accordance with the strict requirements of the law.

Another thing that must be taken into consideration: The expense not only of the drivers of the milk wagons, but the tremendous upkeep of horses and wagons. With oats at $65 a ton, and hay at $35; and with horse-shoeing at $5 a team, and wagon repairs all the way from broken axles and broken double-trees to broken springs and other breakdowns—well, there is a continual expense that only those in the business know anything about.

Then, consumers should not forget that no matter what the weather is, nor how hard the condition of the roads, their little pint of milk must be there on time ever day, Sundays not excepted! Beginning with the care and milking of the cows, all the way through to the end of the delivering the bottled milk, is there any such a dog's life connected with any other business? Nay, verily. And consumers are not willing to pay a price for the milk and its cost of delivery that will only meet expenses, to say nothing of a fair profit and return on the large amount invested, from the value of the cows to the equipment used by dairymen and distributors.

Unless there is a radical change on the part of many consumers in regard to milk, some of these fine days they will be whistling for their milk, and no milk will be forthcoming. Both producers and distributors will simply quit the exasperating and discouraging business of milk production and delivery, and go on day's wages in some other line of work. By so doing they will make more clear money, have shorter hours of labor, and live like white folks instead of worse than African slavery.

Yes, I know I have painted a somewhat sombre picture of the milk business, but some one needs to paint it in its true colors, and so impress it upon the public that they will stop and think—stop and realize the quality and quantity of service they are getting when they get a pint or quart of clean, pure milk every day in the year, and be willing to pay what it is worth, or at least what it costs. Almost every other article of food is bought without a murmur of protest as to its high price, but when it comes to milk, why, the poor consumer is "being robbed" if he is asked to pay a fair price for it! I dare say that there is not another article of food in the whole list that requires so much actual labor—so many hours of toil—from start to finish, as it does to produce and deliver clean milk. It is high time that the consuming public begins to appreciate this, and cease their everlasting howl against paying a legitimate price for so valuable a food article as pure and sanitary milk.





# Enlist Your Ford
# Your Country Needs It

Increased food production is the crying need of the country. More corn, wheat, oats, rye barley—more land under cultivation—more productive labor from horses, machinery and the men on the farms. Efficiency and greater output are not only patriotic duties, but they insure increased profits. And the

## STAUDE Mak-a-Tractor

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Price $225 F. O. B. St. Paul

stands today as the farmers first and strongest ally in the battle for food supremacy. *Put that Ford to work.* Remember you have two-thirds of a tractor already in your car. A Staude completes the job and does double the work. It releases 20 acres for food for men that otherwise go to feed that four-horse team.

## Making Good With 7,000 Farmers

The triumph of the Staude Mak-a-Tractor has been so tremendous that any possible doubts of its efficiency have been swept away by the tidal wave of popular approval. The enthusiastic praise from users everywhere is the most convincing evidence that it has more than justified every prediction made for it. Thousands of farmers can testify that the Staude has stood up well under the most grueling test in all kinds of farm work and heavy hauling.

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It does continuously—24 hours a day if necessary—the work of four horses at the cost of feeding one. It plows an acre with less than two gallons of gasoline—is easy to attach and operate—can be used on Fords, Overlands, Chevrolets and other cars—is detached in 20 minutes, permitting the use of your car on the road—nothing to get out of order or require adjustment.

## Master of All the Farm Work

Attached in a few minutes to your automobile, the Staude Make-a-Tractor will do your plowing, seeding, reaping, binding and hauling. Equipped with the Belt Power Attachment, it does your sawing, grinding, shelling, feed chopping, pumping and any other work that an 8-10 H. P. farm engine could do.

**We are co-operating with the U. S. Government in the increased food production through greater acreage and increased yield per acre. The Staude Mak-a-Tractor will help you solve these problems.**

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Get ready to meet the shortage in farm help and horses. Put your farm on an increased production and efficiency basis. Fill out the coupon and get our two free books by return mail. Read the statements of some of the thousands of Mak-a-Tractor owners. Find out how YOU can increase output and profits and decrease cost of production.

*Sign and mail the coupon today—NOW—while it's before you.*

## The E. G. Staude Mfg. Company

2596 W. University Ave., ST. PAUL, MINN.



I have got my Staude Mak-a-Tractor belt power attachment at work and it sure is great for sawing wood and grinding feed. Sawed our 40 cords in one day, some as large as 14 inches in diameter and all three men could lift. I say it is great.
Glenn O. Wood, Limaville, Ohio.



I plowed 190 acres with my Staude at a cost of less than 50 cents an acre. My car is just as good as ever and the engine don't heat. I used about one quart of water a day. I plowed 5 acres a day, where I could only plow 5 acres with 5 horses on the gang. It does the work of six horses and not four.
J. S. Welter, Grafton, N. D.



I cut all my wheat, 450 acres, with a Staude Mak-a-Tractor and am plowing 10 acres a day at the present time with a 14 inch gang, and don't have any trouble with it heating and it doesn't damage the car as much as running on the road.
A. Christophorson, Flaxville, Mont.



My Staude Mak-a-Tractor pulled a 14-disc grain drill over 200 acres of newly broken prairie sod, pulled a 8-section harrow over 200 acres and the same drill over 450 acres more land—all newly broken sod. I averaged 2 1/2 acres per hour with the drill. It has proven absolutely satisfactory.
Carl F. Errebo, Garden City, Kan.



I have pulled two 16-inch plows in sod for five hours and 4 tons on the road for eight miles with my Staude Mak-a-Tractor and the engine never boiled. I don't see that it hurts the car and it will do all the company claims.
C. F. HARRIS,
Orange Lake, N. Y.

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E. G. Staude Mfg. Co.,
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Please send me your two books and prove to me that I can profitably use a Staude Mak-a-Tractor with my car.

Name.....

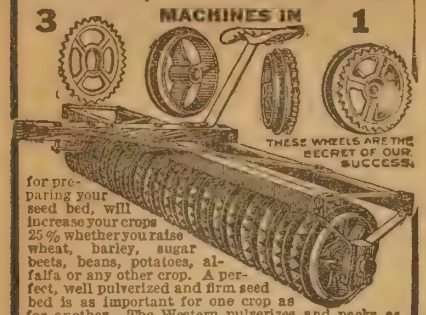
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3 MACHINES IN 1




for preparing your seed bed, will increase your crops 25% whether you raise wheat, barley, sugar beets, beans, potatoes, alfalfa or any other crop. A perfect, well pulverized and firm seed bed is as important for one crop as for another. The Western pulverizes and packs as deep as plowed and leaves a loose mulch on top to protect the moisture; saves 1-3 of expensive seed and time, labor and horse power in preparing a seed bed. It is especially adapted for breaking crust and cultivating winter wheat in the spring, or for breaking crust on sugar beets or beans either before or after they are up without injury to the plants.
**MADE IN 12 SIZES, FOR HORSES OR TRACTOR USE, IN 1 AND 3 SECTIONS**
1918 crop will bring war prices; make it a record breaker in size by using the Western. Send for our free illustrated catalog, giving full description of the machine and its work, also dealer's name and much other valuable information.
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**Tools & Cordage**
for well drilling
Also the famous
**'5 in 1' Keystone**
traction excavator, ditcher, cellar digger, etc.
*Downie Deep Well Pumps*
Pacific Northwest Distributors for Keystone Driller Co. of Beaver Falls, Pa.
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*Clean Your Seed*
and grade it by weight.
**Clipper Cleaners**
will do it as well as though you weighed each individual kernel.
Let us show you. Nine-tenths of the seed houses use Clipper Cleaners. Why.
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3 miles of sod-grown ditch—3 feet deep—in one day—an **easy** job for
*The Martin*
**Farm Ditcher, Grader and Terracer**
Made of steel and built to last. Reversible and adjustable. Horse and tractor sizes. Works in any kind of soil—wet or dry, hillside or level. No plowing required either for new ditch or for cleaning. A big time saver.
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Write for complete catalog and list of users near you. Postal will do.
**OWENSBORO DITCHER & GRADER CO., Inc.**
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**ON SILO FILLERS**
Now ready to mail. Learn how "Silverized Silage" increases yield of farm stock. This 52 page catalog covers all styles hand or power cutters. Send for it.
**The Silver Mfg. Co.**
503 Broadway, Salem, O.


In answering advertisements don't fail to mention this paper.

# Wool Men Meet

## Thresh Out Important Problems

By RAY W. FELTON.

The government's rule requiring sheep men to be growers of hay before they are given permits on the national forests for grazing purposes was the subject of much discussion during the recent joint convention of the Washington State Wool Growers' association and the Washington State Forest Users' association. A resolution was adopted asking that sheep men owning their grazing lands or leasing sufficient fall, winter and spring lambing range be placed as class A applicants for grazing and that those not in a position to raise their own hay be not handicapped by reason thereof.

The resolution points out that it is more beneficial to the industry and to the government in the production of more sheep and wool to permit the sheep men to buy such hay as they need from the small irrigation ranchers living on projects tributary to the ranges which have been developed largely by government reclamation service. Such a practice would foster two industries where it now works as a handicap to both. The hay man can sell profitably to the sheep man at a price less than the sheep men can produce it himself, the resolution declares. Another resolution asks for state legislation making closed herd districts of unfenced ranges leased or owned by sheep men. It was pointed out that these ranges, used for winter grazing, are used by some cattlemen while the herdsmen and their flocks are away on the summer ranges in the national forests or elsewhere and that as a result there is little or no grazing for the sheep when they return in the fall.

The convention indorsed the annual state fair sheep sale which last year was successful under the direction of Professor William Hislop of Washington State college and asked that congress appropriate $500,000 to aid the destruction of predatory animals.

A. F. Averill of the federal biological survey, in charge of the destruction of predatory animals, addressed the convention, telling of the work he and his men are doing to aid the live stock industry, and he spoke at some length regarding rabies, which he said is spread largely in this state and from which, he said, a man died two weeks age at Pasco. He urged sheep men not to kill dogs believed to have rabies until 10 days after the first symptoms develop. He advised them to chain the animal up and leave it 10 days. If at the end of that time the dog is not dead it will be proof that it did not have rabies. The $15,000 appropriated by the last legislature is being used in this work for the hiring of trappers and hunters and Mr. Averill promised to send a man to any section where coyotes or bears are causing trouble. From the sale of hides and furs taken from animals trapped and killed the survey will secure sufficient to return to the state about 25 per cent of the amount appropriated for this work. Particular efforts are directed at this time to protecting the lambing ranges and sheep men displayed much interest in the activity of the survey and are deeply appreciative of the personal interest and energy evidenced by Mr. Averill.

An interesting talk was that delivered by F. A. Clarke of the Columbia Basin Wool Warehouse company of Portland. While last year at this time practically 12,000,000 pounds of wool had been contracted on the sheeps' backs, this year there has not been a pound contracted, so far as is known, Mr. Clarke said. Mr. Clarke expressed the opinion that producers could contract at 55 cents if they made the effort. He expressed the opinion that sooner or later the government will fix a minimum price on wool and he urged western producers to have a representative on hand when that time comes instead of staying home and letting some man wholly unfamiliar with the situation say what growers are to receive for their efforts and the money they have invested in the business.

Mr. Clarke said he did not think there was a surplus of wool. The use of shoddy in the manufacture of clothing and bedding for the boys at the front is positively criminal, he declared, and has resulted in the death of many men not properly clothed. This substitution has made an oversupply apparent but not real, he declared. It is criminal to say wool men have been profiteering, Mr. Clarke asserted.

## Mill Feeds Scarce.

Mill feeds are very scarce and expensive in Spokane county, says O. S. Fletcher, assistant county agent. Farmers are hard put to find a way to get stock through the winter. At present there is a large supply of barley in local warehouses and we are advising people to buy rolled barley for feed.




# In The Nation's Service

America is sending its best men to fight for freedom and in their honor the whole land is dotted with service flags carrying the stars of sacrifice

It is a far cry from the crowded city streets above which floats our service flag to the telephone exchange hidden in the front-line trenches. But the actuating spirit of service here and abroad remains unchanged.

The Stars and Stripes is the emblem which unites us in war for human liberty and national honor. The service flag is the emblem which unites us in mutual sympathy for the men who give themselves and for those who give their men.

These flags should inspire all citizens to greater endeavor and greater sacrifice. As one of the agencies of preparation and military support, the Bell System is honored by the opportunity to do its share.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY
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The hen has the right idea—she pays for her keep. Does the gopher?—not on your life! Follow the hen's advice—cut it out—quit feeding the gophers—kill em!




Increase Your Crop 1 to 5 Bushels Per Acre. Kill-Em Quick Will Do It.

Gophers are greedy, but wise and hard to fool. It's extra hard to fool them on poison. Unless it is flavored entirely to their taste, they won't eat enough to make them sick, let alone kill them. Kill-Em-Quick is concentrated, exceedingly strong, intensely sweet and palatable to gophers. They always eat it and the tiniest particle taken into the mouth invariably kills.

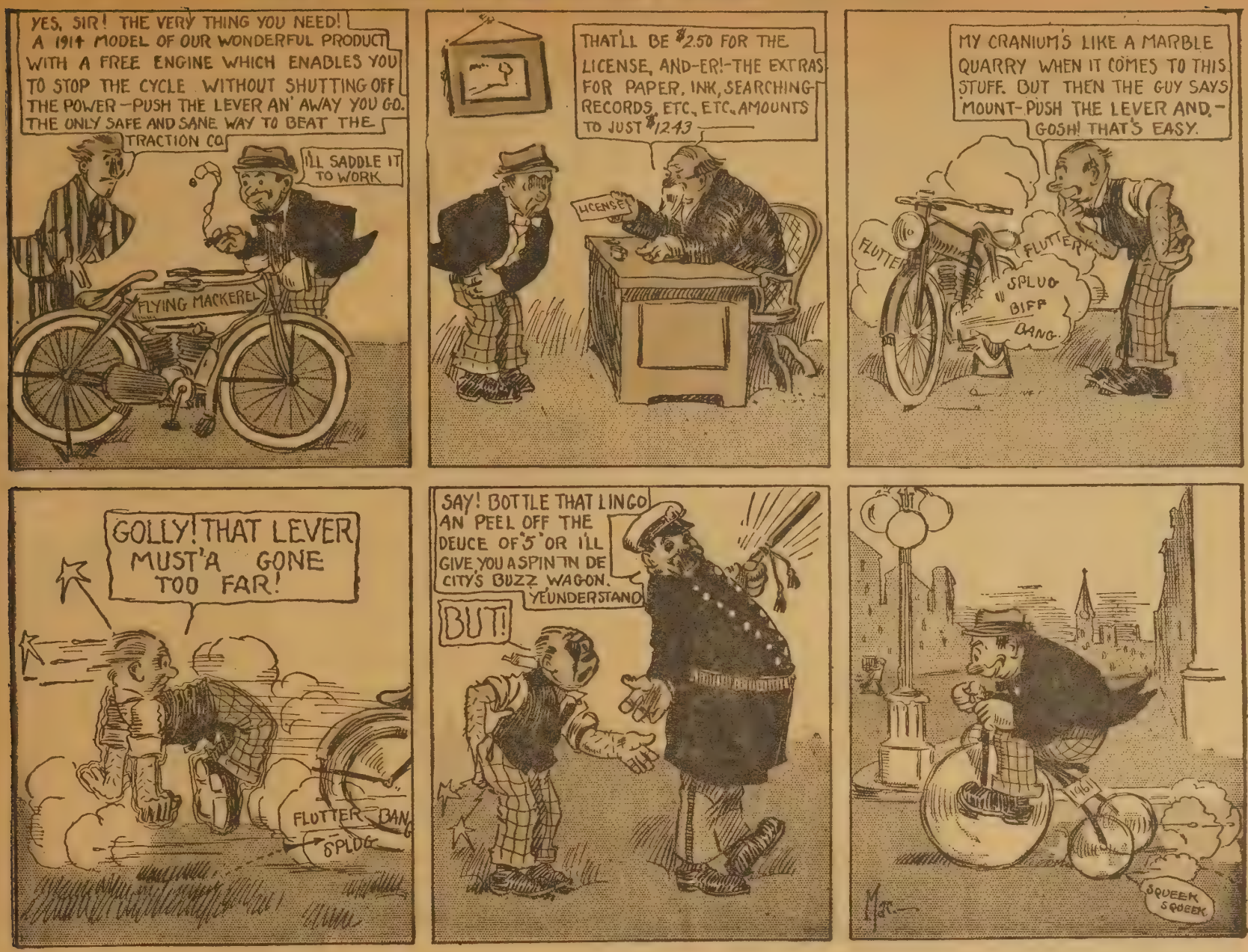
You can not afford to experiment. Gophers do their worst damage just after seeding time, while the grain is young. If you want to save your crop, get

**Kill-Em-Quick**
TRADE MARK REG. U.S. PAT. OFF
**GOPHER POISON**
*The Time-Tested Guaranteed Gopher Killer*

Better be safe than sorry: Get Kill-Em-Quick from your dealer, or by express, prepaid, from us on the receipt of the price, if he can not supply you. 40-acre size, 50c; 100-acre size, $1.00.

**LEO SHAPIRO CO. Minneapolis, Minn.**
**SPOKANE SEED CO., Distributors, Spokane**

# HAS THIS EVER HAPPENED TO YOU?




# MUGGSY RUINS A GENT'S TOPCOAT AND SAVES HIS LIFE



# World Faces Meat Hunger

## *Right Care and Feed Will Do Much to Increase Supply*

By DR. S. B. NELSON

At the present time when there is a shortage of live stock throughout the world, stock men can help by taking better care of their animals. It is well known to all who have handled animals that a little extra attention at the right time may prevent sickness, even death. There never has been any excuse for letting farm animals die for want of the right care or feed; but at this time in world's history, such negligence is unpatriotic, as well as unprofitable.

There is a good example of what care will do for animals in an experiment conducted in the Sixth field artillery corps involving 937 horses that averaged 1165 pounds in weight, and ranged in age from five years up, eleven years being the average.

These horses were put on a scientifically planned method of feeding for 140 days. In that time, only 14 of the horses were ill from digestive troubles. Twelve of these cases were very slight. Only two horses died. If this record had been carried out for a year there would have been less than forty horses sick, and less than six died—out of nearly a thousand.

In a herd of one hundred horses, at this rate, and with this kind of care, there should be about four horses sick in a year, and one dying every year and a half or so. This means that a farmer with five, ten or twenty horses ought to have sickness among them, between the ages mentioned, of course, so seldom as to be hardly a factor in his work at any time of the year—yet what harvest crew gets through with one week's work without being troubled with sick horses? Many have a colicky horse every day or two—so often that it is understood to be the right and proper thing. But it is not.

Herbert Hoover says that it is the multiplication of spoonfuls, slices and scraps, by 100,000,000 and then by 360 days in the year that will save the world from going hungry in the present war crisis and food emergency. If live stock men will apply this same thought in their business, watching daily for the small bit of care and attention here and there that may make an animal more comfortable and help prevent disease, they can, in the United States alone, relieve much of the meat hunger that now is threatening the nations of the earth.

Any one who has seen the immense numbers of letters that have in past years come to the college of veterinary science at W. S. C. from farmers asking about every conceivable animal disease, could not doubt the largeness of this problem, and the actual possibilities for the saving of meat-producing animals merely by taking better care of them. If it is not scours in calves due to navel infection at the time of birth, it is scours due to dry feeding, or to overfeeding; this and other maladies and ailments levy a heavy toll on the meat of the world every year, and now the world can ill afford to stand that loss.

It is a mistake to assume that all animal disease is allowed to run rampant. The once costly plague of calves, blackleg, is an example. Since the 27th of last November the college of veterinary science has distributed over 10,000 doses of blackleg vaccine. Without doubt this was used to overcome a definite loss in calves, and much veal was saved.

There are other sources of animal loss, however, which are not so well controlled as blackleg. This is especially true in the wheat growing sections, where straw is now stacked out of doors. In such localities there occure during certain periods of the year a poisoning of horses known as "forage poison," which is entirely preventable. Merely keep the horses away from the strawstacks when they are wet and covered with the blue mold that forms either after a period of frost or severe rain followed by warm, sunshiny weather. But when horses get this disease it is practically 100 per cent fatal. Therefore, prevention is its cure.

Many breeders are now growing pigs on cheap roughage with the grain ration minimized on account of its expense. Our correspondence shows that many are having trouble in feeding pigs from 3 to 5 months of age when they ought to be able to thrive on a large percentage of roughage with only a small portion of concentrates, or grain. The animals become infected with an irritation of the bowels, which presently appears in a protrusion of the rectum, or "piles."

This trouble can be prevented by seeing that the little pigs get plenty of exercise. A very simple way of providing such exercise is practiced by Charles M. Talmadge of Newport, Wash., and other breeders of the northwest. Mr. Talmadge wads up a newspaper and throws it among the young pigs three or four times daily, and they play with it, thus getting the exercise they need.

A sudden change in feeding is one thing that animals can not stand. I remember that a few years ago a friend of mine was feeding a hundred or more 2 and 3 year old steers. He ran out of rolled barley, and thought he would carry them over on whole barley for a short time, till he could get some of the rolled. Just two full feeds of the whole barley succeeded in putting over 50 per cent of these big, fine, fat steers on the sick list, and he lost more than 10 per cent of the entire band. Many of the steers that were quite ill did not recover quickly enough to make the required gain and were not ready for the market. His loss from these

(Continued on page thirty-four.)


Mr. Edison's




Eilers MUSIC HOUSE

Sprague at Post, Spokane, Wn.

MR. EDISON'S NEW DIAMOND AMBEROLA

**Including 12 new Amberola records, all for $42.20, at Eilers Music House, Spokane, Wn.**

This very latest 1918 model Amberola, with genuine Diamond Stylus Reproducer, which means no needles to change, and the 12 records included, can be selected from our new 1918 catalog, in which are embodied thousands of different selections.

SPECIAL FREE TRIAL

**Shipped All Charges Prepaid**

Cut out coupon below and mail it to us today, and we will send you our Free Trial Order Blank, which will permit you to **keep one of these outfits in your home for ten days** and play it to your heart's content. **All charges will be prepaid,** so there will not be a single penny of expense to you.

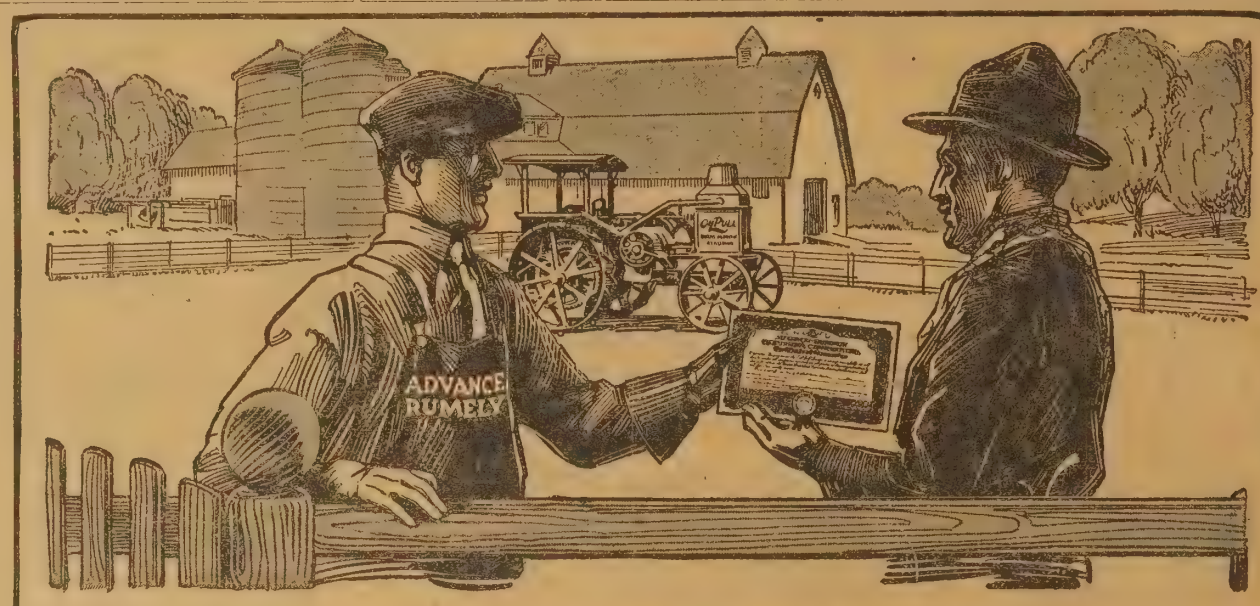
If you desire to keep it, then we will arrange so that you can pay for it in **small weekly or monthly payments.** If you do not want to keep it, return it to us at our expense. Other special offers for $65.20 and $89.70. **Send for our new, big, free catalog.** Act quickly, before this offer expires.

**WRITE US TODAY.**

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Without any obligation whatsoever, please send me full particulars and free catalog of your special Edison offer in Washington Farmer for $42.20.






"One more thing before I go—
the guarantee that goes with your OilPull"

YOU know the kind of service that goes with the Rumely OilPull Tractor—or ask any owner. He'll tell you that Advance-Rumely doesn't lose sight of the customer's best interests after the sale is made. At each of our 22 branch offices we maintain an organization of skilled tractor experts, for the benefit of Advance-Rumely tractor owners.

When you need him, there's an Advance-Rumely expert to not only help unload and deliver your tractor but to show you how to operate and take care of it.

But we go still further in guarding our customer's interests. In addition to that personal service, with your OilPull you get an iron-clad *written guarantee.* The OilPull would give just the same satisfactory performance *without* this guarantee, but we feel that the OilPull owner is entitled to protection against "near" kerosene tractors, and the word of mouth promises and "near" guarantees that go with them. It is just the difference between "delivering the goods" and "putting it over."




The guarantee speaks for itself—*read it carefully.* Notice that it says—*under all conditions—at all loads*—and with *all grades* of fuel oils. It protects the new owner as well as the experienced operator, and it holds good for the life of the tractor.

There's no half way in this burning of kerosene, distillates, etc. Either a tractor does it *successfully* or it doesn't. And if it does, why should it not carry a clean, fair and square, *written guarantee* as goes with every OilPull? Think it over.

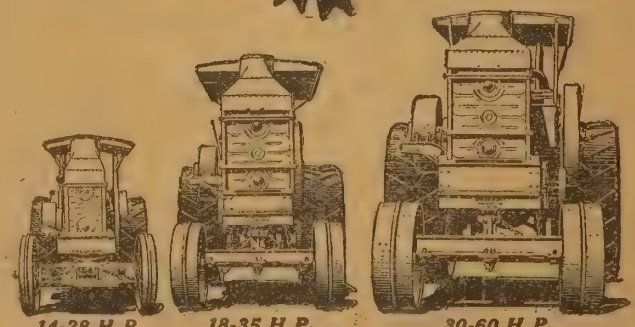
The OilPull in a New Size—14-28

You can now get the famous OilPull in a small size, the 14-28. A light weight, *big power* outfit. The 14-28 is every inch an OilPull—the same *guaranteed* performance on low grade oil fuels—the sure, dependable service—long life—and ability to handle all jobs, drawbar or belt.

The new 14-28, with the 18-35 and 30-60, give three sizes of OilPulls—a small, medium and large. Ask our nearest branch for a copy of the special OilPull catalog.

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# AMBEROLA

## MADE IN THE "WIZARD'S" LABORATORY
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*Model 50, Edison Diamond Amberola*

SEE the coupon at the bottom of the page? That little slip of paper sent to an Edison dealer, with your name and address on it, will bring to your home Edison's latest model Diamond Amberola, the wonderful phonograph with the GENUINE DIAMOND reproducer point, no loose needles or any thing like that to bother with.

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Just as much as if he knew you personally, Edison wants you to have one of his marvelous New Diamond Amberolas in your home. In this way you may know that it is all that is claimed for it. This will be done on an

## ABSOLUTELY FREE TRIAL

No strings to this offer. No red-tape. First you will want to get full particulars about the free trial and especially a copy of

### "A MASTER PRODUCT OF A MASTER MIND"
***The Beautiful Amberola Booklet, Illustrated in Natural Colors***

When you receive this booklet, select from it the model Amberola you prefer, also any twelve records from the Blue Amberol Record Catalog. Blue Amberol Records are almost unwearable and unbreakable. As soon as he can pack and ship them, the dealer will send the Amberola and records. When they arrive make believe they are yours, then you will realize what wonderful times you could have for years to come if they actually belonged to you. No need for either young folks or old folks to go out for entertainment, no more dull evenings.

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### SOME AMBEROLA MUSIC

The records listed below will give you a good idea of the kind of music you can have with the Amberola. Look over the list. We are sure you will find many of your favorites.

**SACRED**
Flee as a Bird
Hark! Hark! My Soul
Is My Name Written There
I Surrender All
I Will Sing of My Redeemer
Looking This Way
Lord, I'm Coming Home
O Come, All Ye Faithful
The Palms
Softly and Tenderly

**NEGRO MELODIES**
Dinah
Kentucky Babe
My Little Cotton Dolly
Ma Pickaninny Babe
Old Folks at Home

**VOCAL QUARTETS**
Call to Arms
Lorena
Old Black Joe
Owl in the Old Oak Tree
Perfect Day
Quartet from Rigoletto
When the Corn is Waving

**ORCHESTRA**
Blue Danube Waltz
Somewhere a Voice is Calling
Teddy Bears' Picnic
Whispering Flowers

**RECITATIONS**
An Old Sweetheart of Mine
Finch's The Blue and the Gray
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Out to Old Aunt Mary's
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**BANDS**
Gladiator March
Laughing Love
Night of Gladness Waltz
Old Comrades' March
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Spirit of Independence March
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Sympathy—The Firefly
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Miserere—Il Trovatore
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Whispering Hope

**VICTOR HERBERT ORCHESTRA**
Dream Melody—Intermezzo—Naughty Marietta
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Mocking Bird, Fantasia (Xylophone)
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The Rosary (Cornet)

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Love and Devotion
Love's Old Sweet Song
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**VOCAL MEDLEYS**
Favorite Airs from The Beggar Student
Famous Songs in Irish Plays
Favorite Airs from Patience
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**BELLS**
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First Heart Throbs
Light as a Feather
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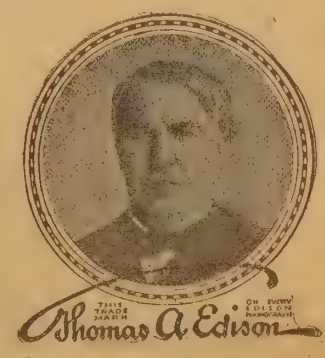
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# UNLUCKY LOOIE LOSES HIS LAWSUIT




# BOOT FINDS PUP IS SOME GOOD AFTER ALL

# Wheat for Allies

## Hungry for Every Ounce Saved

In regard to the wheat situation the United States food administration has issued the following statement:

"It is true that the allies need from 75,000,000 to 90,000,000 bushels more American wheat. It is also true we have already exported the theoretical surplus of last harvest over our normal consumption. The American people have saved a considerable amount, estimated from 25,000,000 to 50,000,000 bushels, during the last five months, and we are exporting this saving.

"We can not and will not export more than our savings, for our own people must also be fed. The allies have reduced the bread ration to their people sharply the last few days, and if the lowered ration is to be maintained we must save more than hitherto.

"Every grain of wheat and every ounce of flour and bread saved now is exactly that amount supplied to some man, woman and child among the allies.

"We are asking the American people to further reduce their consumption of wheat products and use other foodstuffs instead, for the allies must also have some wheat as well as ourselves. It is one of the vital issues in winning the war that we must maintain the health and strength and morale of their men, women and children over this winter."




H. A. Akin of Parker is turning sheep on waste land on his farm this year. Sub-irrigation has killed out a lot of his alfalfa and he will pasture it for the time being. Mr. Akin will plant about five acres of corn this year.

A. C. Mitchell of Naches has found sugar beets excellent cow feed. "I cut out all grain and fed about 15 pounds of beets a day to a cow," said Mr. Mitchell. "The test held up and my herd is in excellent condition. I am well pleased with the beets."

H. Stanley Coffin at this writing is dipping his purebred sheep in the lower Yakima valley. Dipping operations are carried on in an extensive manner at this season of the year. Equipment of a modern nature is provided and the sheep respond readily to the treatment, which is given to keep them free from ticks.

Joseph Tyson of the Moxee valley, Washington, will plant 25 acres of corn this season. "I am planning to check my field and thereby make my rows run both ways so it can be cultivated with horses," said Mr. Tyson to the Farmer field man. "I believe this will save me a good deal of labor and on account of the labor shortage, which bids fair to be even more crucial than in 1917, I realize the necessity of making every possible arrangement to conserve as much man-power as possible."

"Speaking of hog feeds," said S. D. Saunders of Selah, Wash., "reminds me that artichokes and their value seem to have been overlooked by a large number of stockmen. I raise artichokes on my place and as feed for hogs they net me $200 an acre, besides providing a convenient method of feeding. I feed just a little grain at the same time I am feeding the artichokes and my hogs thrive on the ration. I much prefer artichokes to alfalfa. I also am a great believer in sugar beets as a food for hogs. I can feed them to my swine and make double what the beet sugar company will pay me for them."

Mrs. Art Adams of Yakima, Wash., is one of the many farm women of the northwest who did farm labor this summer to help out the shortage of help which prevailed quite generally. When it was time to stack the alfalfa Mr. Adams found he was unable to get necessary help. "Don't worry, we'll get the hay stacked," said his plucky little wife. Then she proposed that she do it and her husband, who at first demurred, finally consented to let her try. A representative of The Farmer saw the stacks she put up the other day and he is here to say she did a first-class job. "We took things easy," said Mrs. Adams, "and it was fun to think I was doing something that was a really, truly help. I didn't get very tired because I am accustomed to lots of outdoor life."

## Western Washington Floods.

Some indication of the damage done in western Washington by the recent floods is afforded by the fact that on the Carnation Stock Farms, Carnation, Wash., a roadway constructed of three-inch planking, laid on heavy timbers and anchored every 20 feet to a log sunk three feet in the ground, was lifted by the flood and set down in an entirely new location. By the same arbitrary force a peninsula has been changed into an island, with a branch of the river whose depredations caused all the damage running like a mill stream where formerly was dry land. Mr. Stuart reports all stock and buildings in good shape, however, thanks to the fact of the latter being located on higher ground than the bottom lands chosen by the flood waters.

P. E. T.

## Silos in Klickitat County.

B. W. Cooney, county agent in Klickitat county, reports that he has visited every farm where there was a silo built last fall.

With the exception of no one, he says, every farmer is pleased with what he has done. The Coates brothers, who are large dairymen in the valley, say that they will more than pay for their silos by this season's operations. Their only regret is that some one did not inudce them to build one 10 years ago.

## GRAIN AND HOGS

### Pay for Hogs in Terms of Barley

To the Editor: There seems at present a particular need for a price of hogs bearing a certain ratio to the price of grain on the same market. The Hoover commission has recommended that the government fix the price of 100 pounds of live hogs at either 13.3 bushels of corn or 14.3 bushels of corn, according to whether a return of the pork supply of normal or a 15 per cent increase is desired. In the west the price of live hogs would be based upon the price of barley instead of corn. According to this the price of 100 pounds of live hogs, average of the run, would be the same as the price of 800 pounds of barley, average of the run. Such a ratio price on hogs should undoubtedly be established by the government at once.

F. R. STEEL.

Grants Pass, Ore

# Believes in Silage

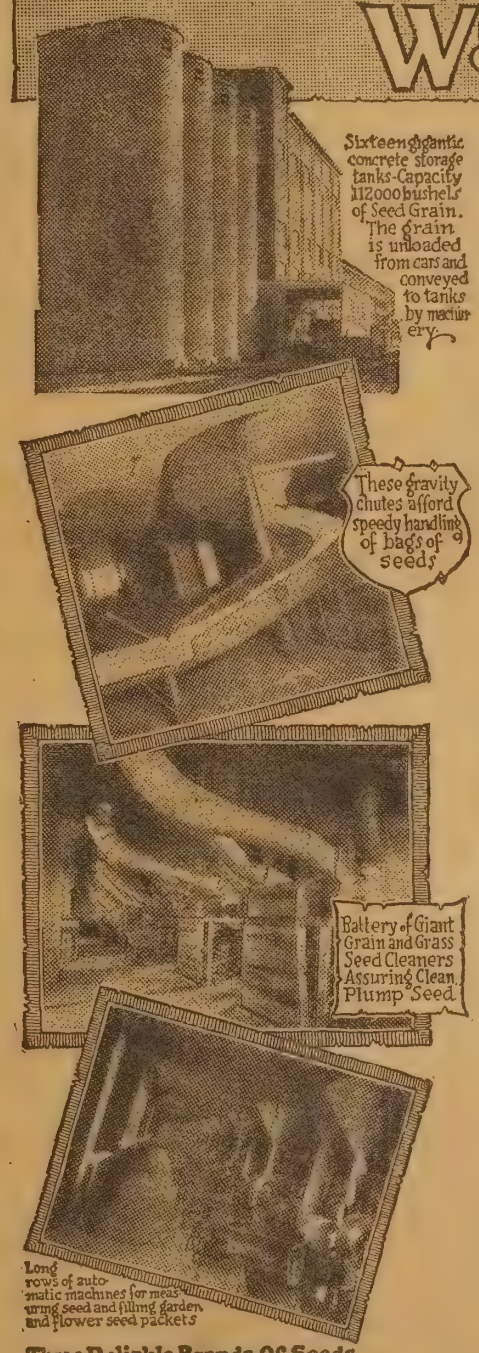
John L. Smith, the Holstein man of Spokane, believes unequivocally in silage. During several seasons Mr. Smith's concrete silo was unusable because of leakage of the walls, and during this time feeding had to be carried on without silage. Last fall Mr. Smith bought enough cement to make a thin wash or paint, with which the interior of the silo was sprayed. The corn crop subsequently ensiled has been absolutely satisfactory and Mr. Smith declares that he will never again be without silage. He admits that roots are a fine supplementary feed, however, and in the matter of production to the acre it is unlikely that the best crop of corn silage will go much beyond a yield of 30 tons of carrots to the acre, which he secured on his Spokane farm. Mr. Smith reports several satisfactory seven-day butterfat tests recently made on his farm, the three highest of which were 34.5, 28 and 23.

P. E. T.

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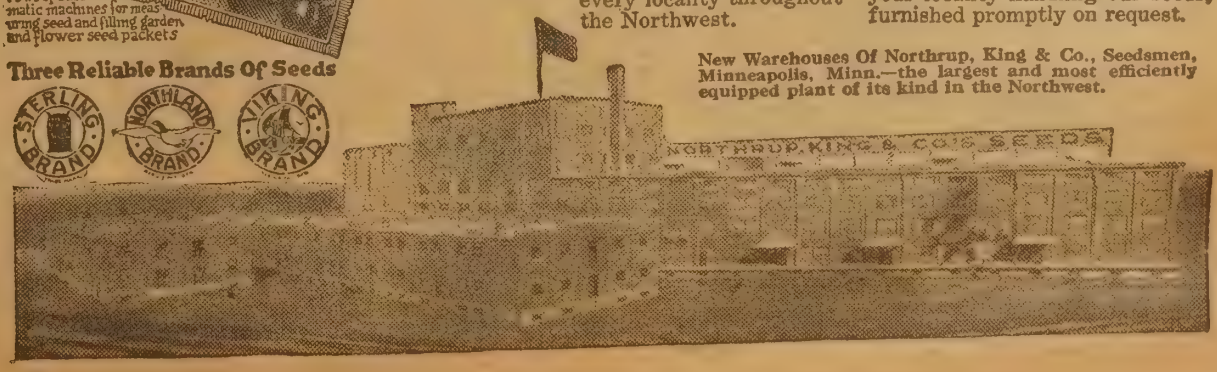
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may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.


# Grow Wrong Beans

## Markets Demand Certain Varieties

Numerous reports from various districts have indicated a dissatisfaction on the part of growers of beans with market conditions. It has been charged that dealers were demanding as high as 15 cents a pound for beans when they would pay the producer something like half that price. Where this condition exists it may be due to the production of the wrong varieties of beans, thinks Charles Uhden, wholesale dealer, of Spokane.

Mr. Uhden believes that the trouble is that the growers have beans of an unpopular variety or one comparatively unknown to the consumers. He recommends the production of the White Navy or Martha Washington varieties, because these beans are staple, known to all consumers and generally popular.

"We would advise every grower to raise white beans only," says Mr. Uhden. "Many growers make one mistake, not only in raising beans but in raising other products. Too often they raise what appears to them to be good, regardless of the fact that the public does not take to it at all. They should pay attention to public taste or opinion and govern themselves accordingly. This refers especially to potatoes. They raise perhaps 50 varieties in the northwest, while perhaps six varieties would be sufficient."

### Understanding the Tractor.

Does the tractor possess any marked advantages over the horse? If it does have such advantages, what are they?

With thousands of tractors drawing plows and harrows and seeders and binders over American farms today it looks as if there is a real need for power that is greater and more economical than has been supplied by horses. With tractor schools throughout the country, many of which give free courses of systematic instruction to tractor owners, it is evident that tractor farming is growing in favor very rapidly.

One of the first considerations that comes up in comparing the tractor with the horse is the difference in operating and maintenance cost between machine power and horse power; for it is obvious that production cost is one of the big determining factors in measuring profits from farming operations, the crops must be marketed at the very best price you can get and the cost of producing the crops reduced to the lowest point possible.

In order to show just what the general opinion of the tractor is among those who have adopted tractor farming in the Pacific northwest we shall pass along to our readers from week to week the opinions and experiences of some of these men. Here is one of them:

"The tractor question is a very large one," says Mr. William Potter of Grangeville, Idaho. "I have been using a small tractor for two years on my place of about 1000 acres in a very heavy adobe soil that had practically been given up by horse farmers. I was a stranger here in this country when I started and people generally expected me to make a failure. But instead I have done so well with my tractor that a large per cent of my neighbors are now buying tractors. My tractor is a small one. It takes the place of about 20 horses and will plow the same number of acres as 15 horses in a day. It does not tire out and requires no attention when not in use." Mr. Potter says that his repair bill the first year was heavy owing to his having used a make of lubricating oil not suited to his machine. "I found that my trouble was altogether the oil," he adds, "and have not been out one cent for repairs this year." Another point Mr. Potter brings out is that in his estimation a tractor should be powerful enough to pull a sufficient number of plows to plow out its own track.

**Expansion of Concrete.**

Concrete roads expand most in winter and contract most in summer, according to the United States bureau of standards, because of increases or decreases in the moisture they contain.


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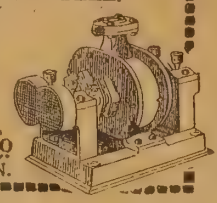


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# Two Shorthorn Sales Coming Soon

## *Hundred and Seventy-Five Purebreds Will Be Offered*

**By. D. I. RAYMOND, Assistant Sales Manager, Northwest Shorthorn Breeders' Association.**

Approximately 175 head of purebred Shorthorn cattle will be offered for sale at Spokane and North Portland on February 23 and 25, respectively, under the auspices of the Northwest Shorthorn Breeders' association. About 100 head will be offered at Spokane, at the Union stockyards, while about 75 will go on sale at the stock yards at North Portland.

I hope that the farmers and stock men of the northwest will look upon these sales as excellent mediums through which to purchase their purebred stock, for such is the aim of the breeders in congregating their offerings and selling them together at a given place. It has been my interesting experience, in discussing these forthcoming events with prospective purchasers, to hear them express their ideas that the breeders hold these periodical sales, with the sole idea in view of acquiring large, unreasonable prices, through arousing competition among the buyers. Such is not the case. The object of such sales is along more cooperative lines. Of course, the breeders have their own welfare at heart in conducting them. It serves to create a market for their surplus, a marget to which they can consign their stock and sell it entirely upon its merits. But the paramount idea the breeders have in mind, is to conveniently serve the needs of the farmer, enabling him to get what he needs with little expense and trouble. He has the advantage of inspecting and comparing the stock offered by all the breeders, of discussing the merits of the different individuals which interest him and in meeting the breeder of the stock, and he usually finds that the breeder is anything but one obsessed with the idea of filching him, but merely a man similar to himself, occupied with the same ideas and problems and particularly with a desire to cooperate, and proud of the opportunity to distribute a class of live stock that will result in profit to the farmer and at the same time improve materially, the quality of the stock in his community. With such ideas in mind, the Northwest Shorthorn Breeders' association initiated the Spokane show and sale in 1917. For the first venture of this kind, the patronage was encouraging. Such a sale was more or less of a novelty to the people in this territory and the attendance was not as great as the offerings warrante', although the breeders felt that the interest shown and appreciation expressed, justified them in again consigning their young bulls and heifers to Spokane and offering them again to the farmer and stockman. Their belief that the sale will receive the patronage which it will justify, is indicated through the fact that they have increased the number of their offerings of last year, 35 head, there being offered this year 60 bulls and 37 heifers.

These cattle will come from the herds of many of the new as well as of the old and well-known breeders and I believe that the facts will bear out my statement that the farmer, stockman, dairyman or breeder can procure through either of these sales the type of breeding animal he desires. There will be strong, rugged, bigboned young bulls that can be put on the range and help produce the kind of stock that top the market for prime beef; bulls and heifers from good milking foundations with facts and figures to back them which will prove a valuable addition to any dairy herd, and stock of the same families that have proved themselves winners in the east as well as in the west, with which the breeder can build up a creditable herd or improve one already established.

All the cattle offered through the sales will be exhibited and judged and prizes will be awarded. Nothing but those that are to be sold will be allowed to compete for these prizes. These exhibitions should afford the prospective purchaser an excellent opportunity for comparison of the offerings and to choose among the many, the one he would like to buy. Each animal will be tested, showing it free from tuberculosis and the breeding qualities of each will be guaranteed, and a certified copy of registry will be furnished with each lot sold.

The second annual northwest live stock conference will be in session from February 21 to 23 and will enable those coming to the Spokane sale to attend and participate in this conference which will, through the prominent authorities who will be present, take up the many things with which the farmer and stockman have to contend with. Among the men who are qualified to talk on these matters, based upon their own experiences, are Duncan Marshall, minister of agriculture of Calgary; W. T. McDonald, commissioner of live stock of British Columbia; C. H. Eckles, University of Missouri of Columbia, Mo.; T. W. Tomlinson of the American National Live Stock association, and many others. Representatives of packing houses, stockyards and educational institutions will be in attendance and the meeting will be interspersed with visits to the local packing houses and stockyards, followed by a dinner on Friday evening at which the business men of Spokane hope all out-of-town visitors to the conference will be their guests. A very entertaining and instructive three days will be the lot of all those who can come to Spokane at that time. Railway companies have authorized the usual fare and a third on a certificate plan for those attending the convention.

### The Busy Gaza.

In almost every particular the modern Gaza is an Egyptian rather than a Syrian town. It is full of rich vegetation, and its many glistening minarets show up against the dull green of innumerable olive trees. Gaza is still as of old, a place of trade, of camels and caravans, and its bazaars are loud with traffic and filled with merchandise.

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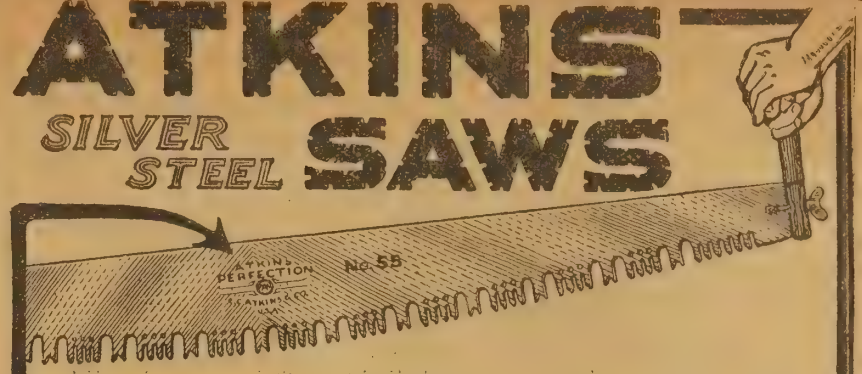
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# The Nannie Goat--Why Not?

## *In Italy, Belgium, the Balkans, Goat Is Stand-by for Milk*

By E. E. ELLIOTT

There was an interesting story in the Spokane papers lately about a man out on the North Side of the city who was attracting a lot of attention because he kept a nannie goat to supply his famly with milk. The story was mighty interesting to the reading public for several reasons. In the first place, it was a story "touching and appertaining," as the lawyers say, to milk and the milk question in the city of Spokane, as well as in every other metropolis, might be called a burning issue, only it isn't the milk that burns, but the money that is spent for it. In the second place, the story attracted attention because it held out the alluring dream of 5 cents a quart, or was it 2½ cents? Anyway the owner of this animal claimed that it cost him only 5 cents a quart to produce the milk, and, of course, he would be willing to sell it at cost, as all the other dairymen are doing. In the third and last place, this article made some slight mention of a certain nannie goat as being the fountain and source of supply of a very desirable and necessary article of food and spoke in a complimentary way of the public service being rendered by this lady-like appendage to the family circle of this estimable citizen

As a matter of fact the reporter who wrote up this story knew his audience and wrote it in the manner that would easiest catch the eye, consequently the goat as a possible rival to old brindle was not the outstanding feature as might have been a reasonable conclusion. The point that was featured was 5-cent milk, or the possibility of it. Cheap milk, good, wholesome milk at old-time, befo'-de-war prices. Some one had pioneered and shown the way. Everybody and anybody with a backyard could adopt it. The plan was simple and within the reach of the poor as well as the rich. It was an excellent corrolary of the war garden on the vacant lot and the unoccupied parking strip.

Simply told it was this: Keep a goat. If necessary keep two goats. Purchase a tether rope, flank the chicken yard with a goat corral, sell the lawn mower to the second-hand man and put the lady goat to work on the front yard. Compel her to minister to the ultimate city beautiful by helping to clean up the surplus weeds and grass on idle real estate and unused public property. Give her a place of honor beside the hen and the spud and let her do her bit or best toward helping to win the war.

This story appeared only a few weeks ago and after a day's mild interest, has passed and is probably forgotten. How many can recall reading it? It proposed a perfectly reasonable scheme based on an actual experience for augmenting the milk supply of the city and holding down the soaring price of this product. Did it create a furore of excitement? Did the goat market suffer any remarkable inflation? Was there a rush to the stockyards or a flood of inquiries in the advertising columns for stock of this character? There was not. None of these things took place. The goat population of the city is yet normal and will probably remain so subject only to natural increase. The people will still continue to pay any price demanded for milk; 14, 16, 18 and even 20 cents. The milk wagons will still chase each other around and duplicate their routes, the health officer will lend his office to the maintainance of the existing order and everything will go on as before.

And yet, why not? The suggestion was a perfectly reasonable one! We are doing and expect to do many unusual things these war days in order to win the world-wide victory for humanity.

We are changing our whole system of living, giving up preferences and likes, accepting discards and dislikes. We are curbing our prejudices in every direction and especially in the matter of food, all in the interest of the public good.

The arbitrary demands of the situation are cutting across all our eating and living habits and will affect them more and more as time goes on. These are the hardest prejudices of all to overcome. We are trying to create an appetite for corn and rye bread, to substitute rabbit for veal, whale steak for mutton chops and horse meat for pork sausage. It goes against the grain, but why not? They are all perfectly wholesome and nutritious. By what compulsion in science or economics are we compelled to limit ourselves to cow's milk? It is not so in other parts of the world, among people and nations with, as well as against whom we are fighting. Before the war it was estimated that 75 per cent of the households in Germany depended on goat's milk. In Italy, Belgium, the Balkans, the goat is the standby. There are more goats in Switzerland than cows. In many countries along the Mediterranean there are no cows at all. The explorers of the United States department of agriculture in foreign lands have found types and breeds of milch goats almost without number. In a late bulletin not less than 33 types and breeds were described in detail, all of them being classified as having been bred for distinctive dairy purposes in various countries. Switzerland alone has no less than 16 breeds which are well defined in character.

And yet, when the goat is suggested as a substitute in America it is always met with ridicule. A few years ago a public spirited citizen in a town in New Jersey gathered a considerable flock of selected milking animals and undertook to popularize their use among the consumers. His experiment met with attack from that irresistable source the ridicule of the sensational reporter, and was a failure. The goat, to the average American, seems capable of serving best as a foundation for the jokesmith and cartoonist.

Here and there breeders are trying to build up flocks of superior quality and an association has been established to found a breed to be known as the "American goat." The United States government has given all possible encouragement to this movement, but while the future of the Angora breed, because of its production of mohair, appears well established, efforts to exploit the really more valuable milking breeds seem to languish. The argument for the goat against the cow is unanswerable and may be given in detail.

1. The original purchase cost compared with possible production profits is much less.

2. A cow rarely comes into service until past two years of age, the goat at one year.

3. The goat can utilize foods that the cow can not, and may be kept more economically.

4. The goat is immune to many of the diseases affecting the cow, particularly tuberculosis.

5. The amount of milk in proportion to weight of animal compares favorably.

6. The quality is superior, as is the percent of butterfat.

7. The milk approaches more nearly to that of the human family and is recognized as the best adapted to infants and sick people.

8. The goat will reproduce twice as rapidly as the cow, twin kids being the rule.

The goat can be said to be the poor man's cow, but by the same token it may be said to belong in the aristocratic class. The efforts of well-meaning wealthy citizens to popularize the use of the milk are certainly to be commended. It has already passed the experimental stage, even for peace times, and now when the demand is emphasized by war conditions it should receive serious consideration from stock men as well as other people of influence. A campaign in behalf of the nannie goat is certainly as feasible as well as reasonable a suggestion as the backyard garden idea, the potato propaganda, the "can all you can" game, or the "hurry up with the hen" scheme. Mr. Editor, I have convinced myself. Do you know where I can get a goat?

### Test Germination of Seed Corn.

Even when seed corn has been carefully gathered and stored it should be thoroughly tested in the spring before planting. The best way to do this, says the United States department of agriculture, is to make a seed-corn testing box and test 100 ears separately.

Each kernel that is tested must be perfect and not injured at the tip when it was removed from the ear. Hand-shelling will give much fewer injured tips than machine shelling, and should be used with all seed corn. If three or more kernels out of ten from any one ear fail to grow it will be wise to test every ear in the entire supply of seed. If the 100 tested ears show no poor ones further testing of the supply is unnecessary.

### Salt Found Under Cleveland.

Salt has been found under Cleveland and prepared for market for many years, but the city has only recently awakened to the fact that sufficient salt underlies it and the immediate vicinity to supply the world.


## Win the War by Preparing the Land, Sowing the Seed and Producing Bigger Crops

**Work in Joint Effort the Soil of the U. S. and Canada—Cooperative Farming in Man Power Necessary to Win the Battle for Liberty.**

The Food Controllers of United States and Canada are asking for greater food production. Scarcely 100,000,000 bushels of wheat can be sent to the allies overseas before the crop harvest. Upon the efforts of the United States and Canada rest the burden of supply.

**Every Available Tillable Acre Must Contribute; Every Available Farmer and Farm Hand Must Assist.**

Western Canada has an enormous acreage to be seeded, but man power is short, and an appeal to the United States allies is for more men for seeding operations.

**Canada's Wheat Production Last Year Was 225,000,000 Bushels; the Demand From Canada Alone, for 1918, is 400,000,000 Bushels.**

To secure this she must have assistance. She has the land, but needs the men. The Government of the United States wants every man who can effectively help to do farm work this year. It wants the land in the United States developed first, of course; but it also wants to help Canada. Whenever we find a man we can spare to Canada's fields after ours are supplied, we want to direct him there. Apply to our Employment service, and we will tell where you can best serve the combined interests.

**Western Canada's help will be required not later than April 5. Wages to competent help, $50 a month and up, board and lodging.**

Those who respond to this appeal will get a warm welcome, good wages, good board, and find comfortable homes. They will get a rate of one cent a mile from Canadian boundary points to destination and return.

For particulars as to routes and places where employment may be had, apply to

**U. S. Employment Service, Dept. of Labor**

## VEGETABLES




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As a war measure, we introduced the "direct-to-the-consumer" idea in our subscription business. Our plan was ultimately to do away with the subscription agent and to secure new and renewal subscriptions by dealing with our readers direct.

It is not too early to say that the new system is working splendidly. Already, thousands of our friends have taken advantage of the big saving which our offer makes possible. Readers get the benefit of every dollar which would ordinarily go for agents' salary and expense account.

If you are a supporter of the cooperative principle, we hope you will help us make the new subscription plan a complete success. When convenient drop a word regarding it in your neighbor's hearing, or better still, pass along some of our many interesting issues when you are through reading them. We will appreciate this assistance very much and we feel sure that if your neighbor does not know about his state farm paper he will be glad to make its acquaintance.

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Feb. 14.

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# No Minors Allowed

By JOE L. ASHLOCK

PART III.

The sun was hot in my face the next morning when I began to awake. First, there was a hazy, dreamy notion about the day before—too much bull bitters, an eerie ride home, a round, yellow moon that laughed like a fool while I stood by the haystack pulling at a wheat straw to regain the balance of my legs—or was it I who had laughed? I pondered in my waking dream.

As consciousness became clearer other impressions crowded into my feverish brain. Some one had rested a crowbar on my head and was trying to pry up the corner of the haystack. I yelled at him to quit. He dropped the crowbar and let the whole haystack fall on me!

I struggled madly and was smothered almost into unconsciousness; fought on, determined to die game; suddenly was wide awake, my own thirsty, suffering self!

The sun's light smote my eyes in white sheets which focused in pricking, burning, stabbing points of pain in the back of my head. I was hot and dry as a smelter, inside and out.

With hands that trembled I put on my clothes, which, oddly enough, I had removed the night before. How I got them off I can not imagine.

My whole being, body and soul, was assailed with a parching desert of thirst; which presently was relieved by a stream of clear, cold water that flowed in the horsetrough. After drinking I soused my aching head in the water and felt a little bit better.

The rest of the crew were up ahead of me and had fed and harnessed their horses and gone in to breakfast. Some good Samaritan had fed my horses, but had left me the harnessing to do, which I did and was hitched up and ready to go to the field with the crew. I had missed breakfast, of course, but could not have eaten anyway. No one in the crew paid any attention to me. There was reason for this. A fellow who the night before has been "lit up" does not take amiably to joking the next morning. In our wheat country it was an unwritten law that a fellow should be let alone by his fellow harvesters while he was "sobering up." Once sobered up and himself again then he was the legitimate prey of whatever jokes or remarks might be made at his expense.

We were "heading" heavy wheat that day and the torments I endured in the hot, yellow wheatfield are not good to think of. I was helped in my battle with the adeptness of a rather wiry, muscle-toughened, farm-reared boy; and I called into play every trick of the harvest trade I knew.

Trained and disciplined to the tasks as I was I believe the strain would have worn me down except for the fact that twice during the day, once forenoon and one afternoon, the "header" broke down, giving me in all about an hour of rest when otherwise I should have been driving and unloading at top speed.

During the afternoon rest, which the breakdown of the header gave me, I slept 15 or 20 minutes and had queer, ghoulish dreams.

I dreamed that a lot of small, active, monkey-like black devils or imps were making sport of me. They raced one after the other at regular intervals along the high side of my grain bed, then hopped and skipped down the sloping end to the low side, from which they leaped into the yellow wheat stubble. Over the grain stack and through the tall, stiff stubble raced the imps; and then swarmed over the low side of the grain bed, leered at me from beady, black eyes that were surrounded by reddish disks like the spokes of small, red wheels set closely together. I awoke with such a jerk that I seemed nearly to spring out of my own skin.

Almost immediately I dozed again. Another dream! This time many hideous insects as long as clothespins, bent in a half circle, possessing scratchy feet and a forked tail with a stinger on each fork, were stinging me. The crescent-shaped bugs were colored bright red and shiny black in diamond-shaped spots not unlike the markings of a rattlesnake, except for color, and with their scratchy feet they hung to your nose, cheek or hand while they humped their clothespin tails and stung you twice with one punch!

This devil-bug had a small, leering, half-human face about the size of the head of a wooden clothespin. Its impish face was decorated with sharply-pointed mustache and an equally pointed beard. It flew in the air, but had no wings! Surely enough my spiritual guardian whose mission was to punish me for wrongdoing was not sleeping on the job, though I was!

The rattle and clip of the header sickle awakened me from this pleasant vision and I snached the lines just as my team started.

It was several days before I rid myself of the effects of those drinks of bull bitters—and out of the experience was born in me the most intense hatred of bull bitters and the whole bitter and booze tribe.

When I was a little fellow the phrenologist that came to our town and felt the heads of many felt of mine. He told the audience that I must surely have some Indian blood in my veins. He said it would be strange for one to have an Indian trait so strongly developed as did I and not have ancestral lines reaching back to a redskin somewhere.

I was much disturbed by this pronouncement and for days pestered my mother for information about my alleged redskin forebears. She finally lost patience and told me to clear out and be still on that subject ever after.

Failing to get from my mother any information about the supposed Indian king, chief or warrior from whom I had inherited an unforgiving disposition, I pored over the "family record" in our big Bible, which was an heirloom in our family, having passed from father to son and mother to daughter through several generations.

My quest was discouraging. There were announcements of marriages, births and deaths galore. There was the announcement of my own birth, with space reserved for my marriage, the birth of my children, and my final death! I acquired a creepy feeling, and for the time forgot about the mysterious Indian chief I was trailing through the maze of my ancestral record.

Finally I found it!—so I thought. On a page of Deuteronomy was a queer looking bird done in pencil of four or five colors. The bird had a blue and a red wing, one purple feather in its tail, the rest being black; a huge yellow eye with green eyebrows; and monstrous claws! The coat of arms of him from whom I had inherited an unforgiving disposition without a doubt! In excitement I confronted mother with this evidence.

Nonsense! When my Uncle Sam was little, Grandfather Stigall one Christmas gave him a box of differently colored pencils. Sammy proceeded to decorate the family Bible, beginning with Genesis and ending with Deuteronomy, where he was discovered. For this bit of art a hickory switch had been the lot of Sammy. Such would be my lot if I wasted any more time about that Indian who had never existed! So I gave up the search.

So, in tracing my vindictive disposition to a redskin ancestor the phrenologist marked a limb of my family tree which, on all evidence, never existed. But in his diagnosis of disposition, the examiner of heads was partly right, as was evidenced by the intense and sweeping hatred which, on the occasion of my bull bitter experience I developed toward bull bitters, any and all kinds of bitters, any and all kinds of booze—indeed, my animosity reached almost to the innocent bottles containing these outlaw liquids!

My feeling was Indian-like, I suppose, barring the essential fact that no Indian of my acquaintance ever felt peeved at the presence of any of the booze tribe. But the Indian's ethics, by which he is led to hate his enemy and his enemy's kinfolks and friends as one, were mine in the matter of bull bitters. My animosity extended from the drink itself to its consumers and sellers—everything in connection with it. All this time I had not at all espoused the cause of temperance, of which I had never heard. I was merely hating a personal enemy and all his kin, and my affair was a personal one rather than the burning public question which has developed from the liquor evil.

My hatred of the booze tribe and its camp followers ultimately led to an exchange of blows and a break of friendship with Charley Blank, who for years had been my loved companion. Charley told me one day how a few days before he had been "tanked" at the Wilbur Fourth of July celebration. While thus "tanked" he had met Miss So and So on the street and held conversation with her for 10 minutes before he could tell who she was—so drunk he couldn't see, yet was walking straight! Charley was proud of the achievement, and bragged about it.

The memory of my bottle of bull bitters came to me like a flame and set my head ablaze. What I said to Charley drew from him a heated retort. Our exchange of compliments, neither of which is printable, was instantly followed by blows at short range.

Bystanders took possession of us then—pulled us apart like two raging collies. We went our way, each vowing vengeance, I with a bleeding nose, he with an eye that was closed. But in a little while we cooled off and by unspoken understanding let our affair pass, though never were friends again.

The following winter at a big dance in McDonald's wheat warehouse I slipped from Charley's pocket a flat pint of whisky. I do not know exactly why I did this, for by this time my regard for him was so slight that his ejection from the dance for drunkenness would have caused me no grief. Half drunk at least, Charley did not observe my act; and saying nothing about it, I took the flat bottle and its evil contents home.

Dawn was brightening the east when I reached home, weary and numb with the cold. I had forgotten about the whisky, but found it when undressing. I took the flat bottle from my pocket and set it on a small table near the door. Then I turned in, and a moment later was sound asleep with no dreams of either Charley or his whisky.

In mid-forenoon I was awakened by the rattle of the door lock. With eyes half open I saw that the door stood half ajar, and could also see that some one was holding the knob on the other side. In a flash I realized what was happening. Whoever was holding the doorknob on the other side was standing there looking at the flat flask of whisky on my washstand. My mother, of course!

It was she. While I watched her hand reached in and took away the flat pint. The door closed swiftly and she was gone.

Oddly enough, I never offered mother any explanation. Nor had I ever told her of my experience with bull bitters. She knew a little about my hatred of the whole booze tribe, and may have wondered why I brought the whisky home. But she asked no questions, and so far as I know was not particularly disturbed at finding a flat pint of whisky in my possession. She was a shrewd mother.

But I can never forget the hesitant, wondering movement of her hand as it reached through the half open door for the bottle.

A good many years later I visited mother's grave in the Greenwood cemetery near Spokane. The place was quiet and beautiful in all its richness of shading trees, green grass and blossoming flowers, and set among all this beauty and quiet with silence unbroken save for the twittering and flutter of nesting birds were stately groups and rows of monuments.

My mother's monument was of pure white marble, with an open gate carved in the foreground of its decoration. You looked through the open gate at "Morning" cut in pure white. Reaching down from the morning clouds was the likeness of a human hand.

Why I had never noticed that hand before I can not imagine, for I had been at my mother's grave many times before the occasion of which I speak. There the hand was—my mother's hand, cut as true as if the sculptor had had the living model before him!

The hand held a white rose, and back of the rose was the dawn.

I stood there for a long time, marveled, and suddenly remembered when last I had seen my mother's living hand in a posture similar to that cut in the pure white stone. It was when she reached through the partly open door and took away a flat flask half full of an evil looking liquid.

## SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B. , M. A., M. D. (Johns Hopkins University.)

## The Sort of Pillow Science Suggests to Sleep On



Dr. Hirshberg

Whenever you undertake such a task as an inventory of your bed clothes, you will be apt to discover that some of the soft, downy pillows which were a part of the family inheritance may have to find a place among the many household goods which have been scheduled for the refuse heap.

Feather pillows of the old-fashioned type are unhygienic, because they are neither germ-free nor clean. That part of the human machinery which is supposed to lie on the pillows does not rest upon them so as to be in a position parallel with the rest of the anatomy. The softness of the down is frequently the source of the stiff neck which accompanies your waking, and this feeling of soreness and pain may perhaps be traced back to the restless movements which pushed the feathers so much to one side as to render stiff and hard that spot upon which your head rested. The neck, in its twisted position, is apt, at times, to become afflicted with knots and lumps during your sleep so that interference with a large vein or artery may even result in some permanent damage.

**Germs Often Present.**

When you realize that feather pillows are, in many instances, handed down in families from time immemorial, you will probably not be surprised to know that examination under the microscope of the down or feathers in them may reveal the presence of millions of germs, which are ready to do some mischief when the rundown vitality of the human machine gives the opportunity. As soon as the life motor becomes impaired by "colds" or coughs or ailments of certain kinds bacteria in the feathers of your pillows begin to "do their bit" to provoke and to complicate the malady.

There is some ground, perhaps, for the suspicion that infantile paralysis is transferred by the use of the old-time feather pillows for babies. Myriads of bacteria are prone to become a menace to baby's health. The heat which feather pillows produce about a child's head, a most delicate part of his entire mechanism, is not liberated because feathers are a non-conductor, and therefore, an excellent heat retainer. Since a child's flesh and blood are very sensitive, the head becomes overheated, interference with the heart action may possibly take place and indirectly aid the virus of some disease to make greater headway in the progress of that ailment.

**A Better Pillow.**

Just as the tired, worn-out plant must ever give way to the young and vigorous offshoot, so the old-fashioned, worn-out, too thoroughly exploited feather pillow is soon to make way for the modern, sanitary pillow. This new head rest is small—as long as the space between the back of the neck and the top of the head, and as wide as the line from shoulder to shoulder, and about five inches in height. It is easily filled through a slit in its ticking with new stuffings of curled hair, and so is kept clean and wholesome. It does not give opportunity for a brood of facteria to grow old within it.

This physiological pillow is adapted to the individual's head. The rest plane of the anatomy and that of the head are parallel to each other when the weary human machine reposes peacefully in bed. No opportunity is given to crumple the pillow into a hard knot under the head or neck or to give hindrance to the free flow of the blood. It remains straight and comfortable during the night, uniformly smooth, and is an aid in body building. The pillow itself tends not to break up the resistance of the flesh-covered bony framework of the human form.

# All the World's a Stage, and All the Men and Women Merely Players

## Digging Wire From Battlefield



An old peasant digging out barbed wire entanglements which the enemy has sown in his field. Even under fire the French peasants have often continued to till their fields, and as the Germans are slowly but surely driven back by the allied armies the peasants move forward and restore the liberated soil to cultivation.

## Archduke Eugene.



In the above photograph is shown Archduke Eugene, commander of Austro-Hungarian troops on the entire front against Italy. According to cable reports, Archduke Eugene has been replaced by General Szetozar Boroevic, who commanded the front along the Piave.

## Drilled in Leaving Trenches



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Soldiers at one of the national army cantonments getting a line on how to go over the top.

## Escapes from Germany.



Lieutenant P. O'Brien of the Royal Canadian flying corps, who hails from Momence, Ill., has arrived in America after a remarkable escape from a German prison.

## Welcome Summons to Marines' Dinner



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The United States marines shown in the photograph above have stopped their arduous training at the welcome sound of the dinner-bell. The boys come with a rush at the sound of the gong and do not leave their appetites behind them.

## To Train Airmen.



Walter Camp, the Yale athletic director, whose scheme of installing in the aviation training camps throughout the country a system of physical exercises, by which it is hoped to cure overnervous men, has been approved by Secretary Daniels and the aviation board.

## The New Coal Scuttle




——St. Louis Republic.

## The Squealers




—Rochester Herald.

## The Only Way




—New York Herald.

# Use and Patriotism of Foreign Languages

Not long since I went into a dining car to get dinner, when among the first things on the bill of fare was something I could not understand. It was printed "du jure," and I supposed it was French, but had not the slightest idea what it meant. It was in the same class with consomme, so I reasoned it might be a variety of soup.

I used to be too proud to ask when I did not know for fear I would advertise my ignorance, but I learned later that if I did not know there were enough others in a similar state of ignorance, so that I would not seem lonesome.

When the waiter came around I pointed with my finger to the place where the word was printed, and said: "How do you pronounce that word?"

He bowed politicly and said: "Well, suh, I don' no's I kin tell yuh."

"Can you tell me," I said, "what it means?"

"Sorry, suh, but I doin' no's I kin. I think, suh, it means some kind of soup."

"Well, will you bring the head waiter, the cook, the chef, or some one else who can tell me what it means?"

"Sure, suh," and he hurried away with that politeness characteristic of his race.

A gentleman sitting nearby took a French book from his pocket and said: "Pardon me, sir, I have been studying French a little, and I think that word means soup of the day."

"Thank you," I said. "I care very little about it, but I want to get some fun from this outfit, for printing the bill-of-fare in a language not one person in 100 hunderstands.

By this time the head waiter came, and I said to him: "We are all mixed up here about the meaning of a word, perhaps you can straighten us out a little."

"That," said the head waiter, 'means vegetable soup."

"The French student said, My book gives soup of the day, and I supposed it was a kind of composite of everything thrown into the pot."

"Well, here if you order it," said the head waiter, "you would get vegetable soup."

"All right," I said, "then bring me vegetable soup." "But," I said, "I see at the bottom of this program Demi Tasse. What does that mean?"

"It means a small cup of coffee."

"Well," I said, "I used to know that Demi John was a small John, at any rate, a half John, and if I had known what Tasse meant, I would have known what to order. Bring me Demi Tasse."

I have not written this for mere amusement, nor for magazine filling. I have given it for two purposes.

One is that I think we are spending millions of dollars in the United States teaching foreign language in our schools when the money could better be spent teaching the laws of business, of commerce, of science, industrial training, chemistry and the laws of health. Not half the college graduates can draw up a contract according to legal form, make a deed to land, or do the simple things in business life, which most people must do in order to succeed. Every one should study shorthand and be able to write approximately as fast as he could talk. Every one should be able to use a typewriter and be able to keep books, so that he would know at a glance his balance of profits or losses.

Then, every one should know the chemical composition of the ordinary foods and their actions and reactions on the particular individuals using them. Because some people like milk and it agrees with them is no evidence that it will react favorably on every other one. No two persons are exactly alike, chemically or otherwise. If corn bread is 4.7 per cent fat, whole wheat bread 0.9 per cent fat, and white wheat bread 1.3 per cent fit, it might be interesting to know which of the three kinds of bread would require the most butter or bacon to make a balanced ration. If fat is a heat producer, it would also be interesting to know which of the three kinds of bread is best for cold weather and which for hot weather. Why do the boys in the trenches and the people in extremely cold climates require so much fat and sugar? To know the chemical qualities of root crops and their effects on health, energy and life is more important than to know Greek roots and Latin endings. This line of study is a large field exceedingly practical and can be used to advantage in every-day life.

My observation has been that the average student of a foreign language will seldom make practical use of the language which he has spent months, or perhaps years, in studying and that in a short time will not be able to read or translate correctly a single page of the book from which he studied. I do not claim that this study is of no value, but that it is not of the greatest value and if any one desires to specialize in that field, let him choose for himself and pay for it out of his own pocket.

In the second place I am convinced, after carefully studying the question, that the principal reasons for the disloyalty of so many German-Americans is that the "Society for the Organization of Germanism in Foreign Lands," a movement hatched in Berlin, and propagated in every country in the world, is fed, fostered and strengthened by German language papers and German teachers in the schools. This society publishes a quarterly magazine in which the declared purpose of its publication is "The promotion of Germanism among 30,000,000 people of German birth dwelling outside of the German empire." This is Pan-Germanism. The "Pan-German league" was founded in the United States in 1893, and its declared purpose is "To foster German civilization, to use the German language, to assist in spreading Germanism, to live the German manner and create German world nationality."

In 1910 statistics showed that there were in the United States 715 German-American newspapers. Wisconsin had 94, Illinois 82, New York 80, Ohio 76, Pennsylvania 57, Missouri 50, Iowa 40. Total in the seven states named, 579. All the other states had 136. It should be noted that Wisconsin had 94 and Illinois 82, therefore, Senator La Follette of Wisconsin and Mayor Thompson of Chicago are not accidents, but are effects of causes. Neither are the incendiary fires, dynamiting outrages, blowing up of our ships, labor strikes, numberless spies, and the various methods for the destruction of life and property of American citizens accidents. They are the effects of causes that we have only recently felt, but which were seen years ago in Germany, as a means by which the war lords of that country hoped to conquer the world. These German-Americans, many of them take out naturalization papers and are taught from Berlin to do so, in order that they may use the ballot, to promote the interests of Germany, as in the case of La Follette, who represents Berlin in the United States senate and does the United States more damage than if he were a member of the German reichstag. Just now, we are allies of France, and many of our boys will be almost compelled to learn the French language, while many others will find pleasure in doing so, but I do not believe the public moneys should be used to teach and our children be compelled to learn a foreign language.

In her conquered territory Germany prohibits the use of any language except the German. A family, who are our neighbors, and who had lived in Alsace-Lorraine, told me that the children in the schools of that country were questioned by their teachers as to whether, when they prayed, they thought in French or in German. If they prayed or thought in French, they were punished. If the world is not to be ruled by Germany, Germany's own methods must in some degree be made to react upon herself. Cut out the German language from every school in America and stop the German language newspapers.

Granville Lowthers


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Are War Savings Stamps the safest investment on earth?

Is their value *fixed*, so that they *can not* depreciate?

Have they a greater value with each day that passes?

Will they keep my dollars from competing with the government?

Will they help the nation in fighting this war?

Can I by buying them show my spirit and earnestness in backing up our soldiers?

Can I buy them cheaper this month than next?

Can I get my money back any time if I *need* it?

Are they as easy to buy as postage stamps?

***Get War Savings Stamps---$5 Stamps are $4.13 in February---from your carrier, postoffices, banks and many other authorized agents***

**THRIFT STAMPS**

Help your children by teaching them the lesson of thrift—have them buy Thrift Stamps REGULARLY. It will teach the value and rewards of saving. U. S. Thrift Stamps sell for 25 cents each. With the first one you get, free, a Thrift Card with spaces for 16 stamps. When filled, this may be exchanged, with a few added cents, for a $5 war savings stamp.

W.S.S.
WAR SAVINGS STAMPS
ISSUED BY THE
UNITED STATES
GOVERNMENT

WAR SAVINGS COMMITTEE FOR WASHINGTON

Daniel Kelleher, State Director, Seattle
D. W. Twohy, Vice Chairman, Spokane

This space contributed by Carnation Milk Products Co.




The Veteran: "Yes, by all means, learn about our past wars in your school books; but don't fail to read the history of the present world war in The Twice-a-Week Spokesman-Review."

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## WAR NEWS

The present war is the greatest, most far reaching and stupendous conflict in the history of the world. You and your family will want to keep in touch with every move in this tremendous drama of the nations. You can do so at low cost by accepting our clubbing offer. The Twice-a-Week Spokesman-Review presents a reliable, condensed review of all current events.

Being a member of the Associated Press, the important happenings are flashed to it without delay from every capital and village, and from every far flung battle line, where the history of our day is being recorded. It pays particular attention to the war news of special interest to the people of the Pacific Northwest. It reports the progress of the draft; and from its pages you will learn who among your friends and neighbors have joined the colors.

If any of the young men you know are killed, injured, or taken prisoner on any of the battle fronts, you will be given the information in The Twice-a-Week Spokesman-Review as soon as it is issued by the military officials.

In addition to this intensely interesting and important war news, the Twice-a-Week brings you an accurate summary of local, state, national and international events. It is published every Tuesday and Friday. Purchased in any other way it costs $1 per year. Certainly an offer so liberal should appeal to every one of our readers. Every issue contains important news. If you have not acted already send in your dollar now.

*In case you are already a subscriber, your subscription will be extended if payment is sent now*

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**The Washington Farmer**
SPOKANE, WASH.

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THE WASHINGTON FARMER, Spokane, Washington. Feb. 14.

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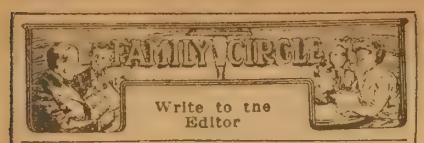
I desire to take advantage of your special clubbing offer. Enclosed is $1 in full payment for one year's subscription to The Twice-a-Week Spokesman-Review and three years' subscription to THE WASHINGTON FARMER.

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ALICE W. BARLAND,
Editorial Contributor.

# Friendly Advice

## Out of Her Own Experiences

Dear Young People of the Family Circle: When I open the paper and see the little picture at the head of the page, with father, mother and the children gathered around the reading table, it brings before my imagination the scores of dear young folk in the farm homes where the Farmer is a weekly visitor. Young people are very dear to me. One way and another I have been closely associated with them all my life. Looking back over the years to my owa girlhood I can not recall that any one, outside my father and an older brother, gave any particular attention to guiding my inexperienced feet into ways that were safe and secure. And neither did any one take the trouble to give me heart-to-heart talks about the seriousness of making mistakes about my associates or of wasting my time in school or the value of forming good habits.

I would have given respectful attention I am sure and I have no doubt that I should have been saved much heartache and avoided many mistakes had I been given the benefit of the experience of those who had traveled the road of life before me.

There are some things I just long to say to you young people while you are growing up and before it is too late. You will scatter out into the world soon and I want to tell you a few things that will aid you in making your way in the world.

First, be truthful, be frank and open in all your dealings. If you have made a mistake, and we all do, frankly acknowledge it. Excuse yourself, apologize if you know you should and then start in again.

Be friendly. Don't just seem to be but cultivate a friendly feeling toward every one. There is good in every one if we will but look for it and most of us have sufficient number of faults so we can, quite profitably, spend some time counting up and correcting our own, which will leave us less time to take account of the faults and mistakes of others. Don't be critical. Remember how easy it is to misjudge when we do not know all the circumstances. Jesus said: "Judge not that ye be not judged." Let that little "judge not" come quickly into your mind before your tongue gets in its work of criticizing the actions, manners or motives of people.

Perhaps they may be in the wrong. You may be convinced of it, but what good will it do to talk about it to any one save the people themselves? Learn early to be a good listener. When a person is talking to you give perfect attention. Most of us, even if what we have to say is not so very profound, enjoy the courtesy of attention from the person to whom we are speaking. In this connection let me say that it pays to be alert to learn something from people with whom you are talking. If one is so full of his own ideas and so eager to express them that he can not wait to hear what the other party to the conversation has to say he will have small chance to profit by the other's ideas.

Many years ago my father gave me a little bit of advice which has always stayed by me. I was about to leave for church one Sunday morning and was bewailing my lot that I had to sit and listen to a certain preacher. My father quietly said: "If you pay attention to the man I am very certain he will say something good, and the more careful attention all of you give him the more good things he will say." Tuck that sentiment away in the back of your heads and bring it forward whenever you listen to a public speaker. We get back, in this world, about in the same proportion as we give out. You may doubt this, but I believe it to be true, with some exceptions. There are many more bits of advice I have in store for my young people, but I will only mention one more this time.

Be neat and clean, both about your person and your rooms and personal belongings. Habits good and bad stick closer to us than our friends.

To the boys I would say that there is no matter of greater importance for them to consider than their personal appearance when they set about getting a position. No firm worth working for will want a fellow who looks untidy. It is the fellow with the neatly pressed clothes, clean linen, well kept teeth and hands who will gain easy access to the up-to-date business ofice. I don't mean these things alone will gain him a position, but if he secures an interview he can then present his case, and it is the clean, erect, honest-eyed fellows who command attention.

The girls I will gather about me another time and tell them some things I know.

A. W. B.

# Helmeted Basilisk

One of the curious animals of Central America is the helmeted basilisk. It is about 31 inches long, three-fourths of which is tail. The general color of its body, which is covered with small,



Helmeted Basilisk.

overlapping scales is a greenish or olive-brown above and whitish below. The head has an elevated ridge of skin inclined backward and the back and tail are like the dorsal fin of the fish. The limbs are long, especially the hinder ones and armed with short nails.

# Corn and Oaten Breads

Americans have almost forgotten some of the best things we knew, says a circular issued by the U. S. food administration. Corn bread is one of them; oaten bread is another. How many times you have said, "That's good; why don't we have it oftener?"

Well we are going to have corn and oat bread more often, very often, every day, in fact. We would do it whether we liked or not, because our government needs more wheat to send abroad—wheat that can be had only as we let it go.

Well made, there is no bread more wholesome, more nourishing or better flavored than the mixed loaf of corn or oats. There are a number of good rules in every old recipe book. Here are three that have been tried; When in doubt, use these. Every time you eat bread with corn and oats you do well by yourself—and more, you help to win the war.

**Corn Meal Quick Bread.**

One and one-half cups corn meal, 4 teaspoons baking powder, 1 teaspoon salt, 1 tablespoon flour, 2 cups milk, 1 egg (omitted if desired), 1 tablespoon melted fat.

Mix and sift the dry ingredients. Combine the milk beaten egg and melted fat, and add to the dry ingredients. Mix well, pour into greased muffin tins and bake in a hot oven about 20 minutes. This bread should be served hot.

If a softer bread is desired the cornmeal, salt and milk may be brought to a boil and cooked for 10 minutes in a double boiler or over hot water. Cool, add the beaten egg, melted fat and baking powder. The flour is not necessary. Beat well and bake in a hot oven. This same mixture may be baked as griddle cakes.

**Oatmeal Bread.**

One cup liquid, 1 1-2 teaspoons salt, 1 cup rolled oats, 1-8 to 1-4 yeast cake softened in 1-4 cup lukewarm water, 2 1-2 cups flour.

Long process—Scald the liquid, add salt and pour it over the rolled oats in a bread-mixing bowl. Cool, add the yeast and one cup flour. Cover and allow the sponge to rise. When light add the remainder of the flour, knead, cover and let rise until double in bulk. Shape into a loaf, cover, let rise again until it doubles in bulk, and bake.

Short process—Follow the directions as given above, but add the flour at one time.

**Corn Meal Gingerbread.**

One cup corn meal, 1 cup wheat flour, 1 teaspoon soda, 3-4 teaspoon salt, 2 teaspoons ginger, 1 teaspoon cinnamon, 1-2 teaspoon cloves, 1 cup sour milk, 1 cup molasses, 2 tablespoons shortening.

Sift together the dry ingredients. Combine the milk, molasses, melted shortening and beaten egg. Add the liquid ingredients to the dry. Stir well. Bake in moderate oven.

Two cups of buckwheat flour may be substituted for the cornmeal and flour in this recipe. This will have the characteristic flavor of buckwheat. If it is too strong, use only one cup of buckwheat and one and a half cups of white flour. Two and a half cups of rye and white flour may also be substituted.

# Plenty of Potatoes

Leaflets are being sent out by the United States department of agriculture and United States food administration and contain many valuable recipes. One just received tells about the value of potatoes and says:

They are a splendid food, excellent for your body and are delicious when well cooked. They are good fuel; they furnish starch which burns in your muscles to make you work, much as the gasoline burns in an automobile engine to make the car go.

To boil them so they will be "fit for a king," drop the unpeeled potatoes into boiling salted water and cook 20 to 30 minutes. Drain the water off at once. If they are cooked too long or allowed to stand in the water they get soggy.

For best mashed potatoes, peel the boiled potato, mash and beat until very light, adding salt, butter or oleomargarine and hot milk. If dinner is not ready to serve, pile lightly in a pan and set in the oven to brown.

Potatoes are good in bread. Try the following recipe and see if you do not like it.

**Potato Cornmeal Muffins.**

Two teaspoons fat, 1 tablespoon sugar, 1 egg well beaten, 1 cup milk, 1 cup mashed potatoes, 1 cup cornmeal, 4 teaspoons baking powder and 1 teaspoon salt. Mix in order given and bake in a hot oven for 40 minutes. This makes 12 muffins, and they are delicious.

Potatoes can be used with nut meats and make the main dish of the meal.

**Potato Sausage.**

One cup mashed potatoes, 1 cup ground nuts, fish or meat, 1 egg well beaten, 1½ teaspoons salt, a pinch of pepper, and either salt pork, bacon or other fat. Mix the mashed potatoes and seasonings with the ground nuts, fish or meat. Add beaten egg and form into little cakes or sausages, roll in flour and place in a greased pan with a small piece of fat or salt pork on each sausage. Bake in a fairly hot oven until brown.

The above recipes have been tried by the writer and all are delicious.

G. P. F.

We prepay parcel post on all wearing apparel.

COMMONSENSE WALKING SHOE




No. 500

This is one of the most popular utility shoes; in black glazed kidskin, with black whipcord top, hand welt sole and 1½-inch walking heel; sizes from 4 to 10, widths AAA to E; sent postpaid for ... .....$5.50

SILK STOCKINGS—In black or white, with top, heel, sole and toe of lisle. Sent postpaid, $1 pair. Silk thread stockings in white, black and colors, postpaid, pair .. ....$1.50

You are invited to take advantage of our personal shopping plan—just write us your needs.

Frederick & Nelson SEATTLE-WN.

In answering advertisements don't fail to mention this paper.

"Refreshments will be served"

IT makes little difference whether it's a dance, a school or church social, a Red Cross Chapter meeting, a "get-together" meeting of the Farm Bureau or a big rally—

Chances are Ghirardelli's will be "among those present." And—for very good reason:

It promotes sociability. It provides added cheer and comfort. It is a delicious, refreshing food-beverage that is always in order at *any* social function.

*In ½ lb., 1 lb. and 3 lb. cans; a tablespoonful—one cent's worth—makes a cup.*

D. GHIRARDELLI CO.

Since 1852 San Francisco

Ghirardelli's Ground Chocolate

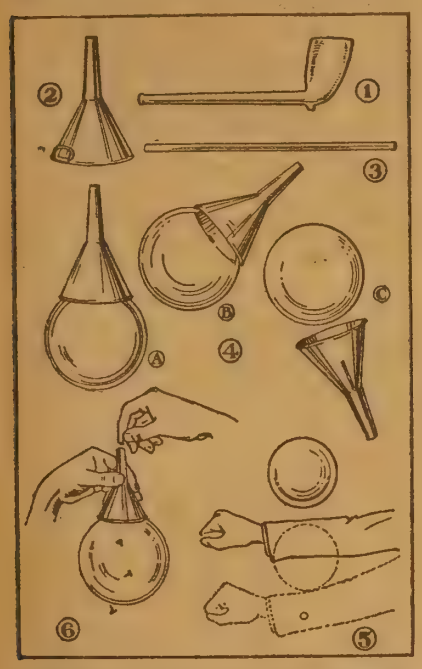


# Handicraft For Girls

By Dorothy Perkins.

## Soap Bubble Fun.

It is not necessary to have special soap or a patent blower to blow bubbles successfully. There is nothing better than castile or ivory soap for



a solution, and a clay pipe like that in Fig. 1, which can be bought at a drug store, is as good as any blower on the market. But for large bubbles, the finest sort of a blower is a tin funnel about 2 1-2 inches in diameter (Fig. 2). Probably your mother has



one in her pantry. Another blower which you will find handy is a short lemonade straw (Fig. 3).

To make up the solution, shave the soap into a pan of warm water, putting in as much soap as the water will dissolve.

To make a bubble with the tin funnel, place the end into the solution, then lift it out gently, and if it is covered with a film blow upon the small end and a bubble will appear. Steps A, B and C (Fig. 4) indicate how to release the bubble by inverting the funnel and tossing the bubble out.

If the solution has the proper amount of soap in it, the bubble should be tough enough to land upon the floor without bursting. A carpet or rug is better to drop bubbles on than a bare floor.

## Bouncing Bubbles.

Fig. 5 shows how to bounce a bubble upon your arm. By dropping your arm slightly as the bubble descends, as indicated by the dotted lines, the bubble will land with less shock.

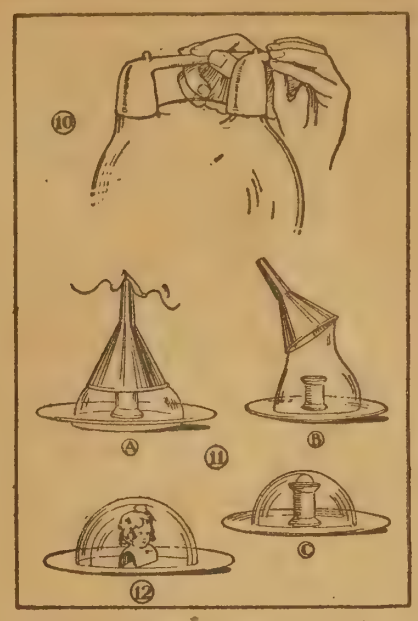
Fig. 6 shows how you can drop tacks into the funnel spout without bursting the bubble.

Place several glass tumblers upon a table, and blow a bubble upon each (Fig. 7), then add other tumblers and see how many bubbles you can place before the first ones burst.

## One Bubble Within Another.

Fig. 8 shows how to blow one bubble within another. First blow a large bubble on a pie tin having a depth of one-quarter inch of solution in it. Blow the bubble as you raise the funnel, then turn the funnel sidewise and slide it off of the bubble. The inner bubble is blown with a lemonade straw. Wet the straw in the solution, stick it through the bubble into the solution, and blow the inner bubble. The large bubble will not burst if the straw is wet, and is pushed through quickly. In the same way a series of small bubbles may be blown (Fig. 9).

If you have two clay pipes, you can blow two bubbles, and then by bring-



ing them together cause them to unite in one large bubble (Fig. 10).

Fig. 11 shows the steps required to blow a bubble over a spool. After blowing this bubble you can place a smaller one inside on top of the spool (C, Fig. 11). A small doll's head can be enclosed in a bubble, as shown in Fig. 12, and there are many other tricks which can be carried out.

(Copyright, 1916, by A. Neely Hall.)

## Meat Pies.

Here are some recipes for making meat pies taken from a leaflet issued by the U. S. food administration:

Cornmeal mush, hominy or rice are used for crust to save wheat. Take 4 cups cooked corn meal, rice or hominy, 1 onion, 2 cups tomato, 1-8 teaspoon pepper, 1 tablespoon fat, 1 pound raw meat or left-over meat cut up small, 1-2 teaspoon salt. Melt the fat, add the sliced onion, and if raw meat is used, add it and stir until the red color disappears. Add the tomato and seasoning. If cooked meat is used, add it with the tomato and seasoning, after the onion is browned and heat through. Grease a baking dish, put in a layer of the cereal, add the meat and gravy and cover with the cereal dotted with fat. Bake for half an hour.

Shepherd's pie is the name of a meat pie with a mashed-potato crust browned in the oven.

### Insect Language.

Insects, like birds and animals, have their calls, naturalists say. But the sounds they produce include the rubbing together of their limbs or wing covers and the vibration of their wings, so they can not always be spoken of as voices. Flies and bees undoubtedly mean something when they hum louder and louder.


## *Wonderful Egg Producer*

Any poultry raiser can easily double his profits by doubling the egg production of his hens. A scientific tonic has been discovered that revitalizes the flock and makes hens work all the time. The tonic is called "More Eggs." Give your hens a few cents' worth of "More Eggs" and you will be amazed and delighted with results. A dollar's worth of "More Eggs" will double this year's production of eggs, so if you wish to try this great profit-maker, write E. J. Reefer, poultry expert, 4662 Reefer bldg., Kansas City, Mo., who will send you a season's supply of "More Eggs" Tonic for $1.00 (prepaid). So confident is Mr. Reefer of the results that a million-dollar bank guarantees if you are not absolutely satisfied your dollar will be returned on request and the "More Eggs" cost you nothing. Send a dollar today or ask Mr. Reefer for his Free Poultry book that tells the experience of a man who has made a fortune out of poultry.—**Adv.**

# Silent, Steady, Sure In Its Work



***Lalley-Light Brings New Cheer to the Old Home***

LALLEY-LIGHT, in operation, is practically as silent as light itself. With it in the basement you can barely hear, on the first floor, the low hum of its running.

It is quiet because its engine is designed and built expressly to run a direct-connected electric generator. That means, in addition, increased economy and efficiency.

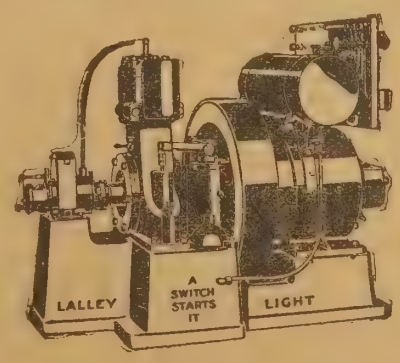
Because it has big ball bearings to prevent wear—and noise—at every point where split babbitt or roller bearings are ordinarily used.

Because it has but three moving parts—no valves, no springs, no cams, to clatter and chatter.

Because the engine's patented construction permits it to run as smoothly and steadily as a perfectly governed steam engine.

Lalley-Light—with a record of seven successful years—brings electric light and power to the farm, and with them every convenience and comfort and cheer which electricity has conferred on mankind.

It gives you safe light—and eliminates fire risk in that direction. It is so simple that a woman, a boy or even a girl can run and care for it as well as a man.




**Generating plant is 27 inches long, 14 inches wide, 21 inches high. Storage battery is included in complete outfit.**

It is practically two plants at the cost of one—for either the generator or the battery supplies current, independently of the other.

Lalley-Light is a complete plant—direct-connected engine and generator, and storage battery. No extras to buy, aside from the wiring, fixtures and bulbs you must supply for any plant.

Consider the comfort of Lalley-Light on the farm. Unlimited light always and instantly at your command, in house and barn; power for pump, churn, separator, and so on. Greater convenience and labor-saving than you have ever had—all for a few cents' worth of gasoline per day.

Do not put this paper aside until you send us a postal card with your name and address. In return, we will send you, free, our book completely describing and illustrating Lalley-Light; and tell you what the plant complete will cost delivered at home.

We will also tell you the nearest place where you can see Lalley-Light in actual operation. Be sure to write today.

**Lalley Electro-Lighting Corporation, 1856 Mt. Elliott Ave., Detroit, Michigan.**

**LALLEY-LIGHT**

ELECTRIC LIGHT AND POWER FOR EVERY FARM

# Make Uncle Sam Your Banker

## *Uncle Sam Never Goes Broke; Buy War Stamps, Bonds*

A man may be bright and a woman brilliant, but unless intellect and wit are linked with the solid virtues they are unstable foundations.

What are the solid virtues? Industry, honesty, reliability, truthfulness, morality and thrift. Given these virtues the comparatively dull boy or girl will succeed where the bright and witty youth without them will fail.

Thrift is an almost indispensable essential to real and lasting success. Every one should save money and acquire the habit of thrift. This counsel is good for the country and good for the city. A New York daily, published near Wall street, finds no better advice for its readers, chiefly men of the great metropolitan business world, than the tried maxims of the Bible and the homely teachings of Ben Franklin.

"Nobody," it says, "can make money in the sense of accumulating a competence for old age without saving it. Even speculation must be based on money in hand. The young man who dreams of making a fortune will do no more than dream until he learns self-restraint and saves something."

There was never a time in American history when the government made it as easy as now for young people in the farming regions to form the saving habit. It has made an easy and safe beginning possible for every boy and girl in the United States.

Buy war savings stamps. They are the best investment in the world. The following explanation of these war savings stamps should convince persons of small means that this is the chance of a life time:

Beginning January, 1918, a war savings stamp costs only $4.12, with 1 cent additional every month this year, making the cost this month, February, $4.13. The United States government will pay back $5 on January 1, 1923 and the owner of this stamp may—prior to January 1, 1923—if he wants his money back, get it with interest at 3 per cent by giving 10 days' notice to any postoffice. This is the safest investment in the world bearing 4 per cent interest, which is compounded quarterly; these stamps may be registered at any postoffice as an insurance against loss. This, of course, applies only to the $5 stamp, as the thrift stamp, which costs only 25 cents, is simply a building plan toward the purchase of war savings stamps. The price of the stamp itself and its maturity value is the great thing to emphasize throughout the campaign. We want to visualize for each individual the figures $4.13 now and $5 in 1923.

Parents should buy war savings stamps and encourage their boys and girls to buy them. In that way they will support their country and help themselves.

If you have not already done so, get into partnership with Uncle Sam. Make him your banker. He will never go broke, but if he did go bankrupt all the banks in the country would go bankrupt with him.

This paper is in partnership with the government in helping you invest in these stamps. Any order received at this office will be filled at once. The Farmer has undertaken to sell $50,000 worth of them for Uncle Sam. Already many readers have ordered and have received their stamps. One man purchased a hundred dollar book of the stamps for each of the seven members of his family. Another has taken 10 books of them. At first the government did not allow any one to buy more than $100 worth of the stamps at ony one time, but now one person can buy $1000 worth if he wants to. That is the opportunity—a safe, businesslike investment of everything from 25 cents to $1000. In ordering, clip the coupon printed herewith and mail it to The Farmer properly filled out. That is all you have to do.

## Clip This Convenient Order Blank

Address all communications concerning thrift or war savings stamps to The Washington Farmer, War Savings Department, Room 26, Review Building, Spokane, Wash.

Remittances may be in any form desired, including personal check.

---

The Washington Farmer, War Savings Department, Room 26, Review Building, Spokane, Wash.

Gentlemen: I wish to invest in ..... U. S. government thrift (number desired.) stamps at 25 cents each.

I wish to invest in ..... U. S. war savings stamps at $4.13 each. (number desired.) (February figure.)

Amount enclosed $.....

Full Name .....

Town ..... State .....

R. F. D. No. .....

I have already bought.....Stamps and have a..... (kind of stamp) (card or certificate)

# Commander-in-Chief Needed for Food Production

(Continued from page eleven.)

matter of food production up with Hon. John Skelton Williams, comptroller, which is embodied in copy of letter which I enclose herewith. I also took it up with senators and congressmen from North Dakota, but nothing came of it. In fact, I presume the trouble with the scheme is that there is not enough red tape to it. In other words, it would be too simple a proposition. H. C. M'CARTNEY."

Mr. CcCartney's proposition to Comptroller Williams is indicated by the following paragraphs:

"It occurs to me that we have a vast organization already mobilized which could be put to work immediately. This organization would be the most efficient of any that could be gotten together. I have reference to the national and state banks of the United States. The officers of every bank in the United States located in agricultural districts, we feel confident, would be only too glad to take up this work if they were requested to do so, and we believe they could organize the agricultural districts quicker and better than it could be done in any other way. Every manager of a bank in the agricultural districts is thoroughly conversant with the crop, soil conditions, circumstances of the farmers and their needs, and is better fitted for this work than any other class of men in the United States.

"This organization could be brought into service for immediate action—give every banker a certain territory in his vicinity to organize. We believe all that is necessary is to outline a plan for the bankers, assure them of assistance through the federal reserve for the financing of farmers who need seed and machiney or other financial assistance in their immediate district, and they will get results and get them quick."

### Army of Small Farmers.

In his letter the state commissioner of agriculture of Arkansas, John H. Page, brings out one of the most important phases of the problem of increased food production and one that has been very largely neglected. It is the problem of getting into closer touch with the great army of small farmers who must be depended upon to produce the results so desired. Here is his letter:

"BUREAU OF MINES, MANUFACTURES AND AGRICULTURE, LITTLE ROCK, Ark.—To the Editor: I have yours of recent date in regard to telegram sent to President Wilson.

"For some time past I have been conscious of a very distinct weakness in the general movements made to stimulate greater production and to produce cooperation and intelligent action among the farmers. I refer to the conspicuous absence of the farmers in the recent and other meetings that have been held and the preponderance of college professors, college presidents, agricultural workers and professional agriculturists, bankers, big business men, et cetera. It is doubtless much easier to reach definite conclusions as to what should be done about production to meet war conditions, to make pledges for increased production and to pass high-sounding resolutions in favor of meeting the war needs when the meetings are composed of presidents and members of the faculties of universities and agricultural colleges, the professional agriculturists and the bankers; but the results following their conferences clearly indicate that a meeting composed of this class of people—almost to the exclusion of the actual producer—is not qualified to speak for the great army of farmers throughout the country, nor is such a meeting authorized to pledge their efforts. In truth, the great bulk of our farm products is produced by the small farmers, who constitute the greatest factor to be reckoned with in production at any time. These people have never been brought into a meeting, and possibly never invited to attend. They have not been consulted about their own condition or their ability to respond to the demands that might be made upon them by the country at large. They have been campaigned to death by people with good intentions, who have in a measure assumed an attitude of guardianship or administrative interest in their affairs, and unfortunately but few, if any, of the class that compose the average meeting or conference have ever stooped to lend a helping hand or take an inquiring interest in the affairs of the small farmer.

"Viewing it from this situation, I am not astonished that the small farmers throughout the country do not exercise any greater degree of interest in fulfilling the pledges made for them by those who only seem to have a supervisory interest in their affairs.

"I do not believe that we will ever produce any very substantial results until some plan is devised of bringing the nation's needs into closer, if not direct, contact with the great army of small farmers who must be depended upon to produce the results so desired.

"I have attended several of these meetings in person, and consequently I have caught this viewpoint. I may be in error about the matter, but I do not believe that I am.

JNO. H. PAGE, Commissioner."

### Labor That Sticks.

Secretary N. E. Shaw of the Ohio state department of agriculture had this to say:

"To the Editor: I have read carefully your telegram to President Wilson. I heartily endorse any movement that will assist in promoting conditions with reference to farm labor. Our farmers are willing to do their utmost to increase production and some plan must be devised to supply them with the necessary labor and see that it sticks. When this is done we can expect greatly increased production in this state.

"N. E. SHAW."

## Storms Delay Dress Patterns

Severe storms have greatly handicapped mail service throughout the east, and the Farmer and its readers have to suffer for it. The regular weekly dress pattern material failed to reach us in time for this week's issue, probably tied up in a snow bank "back east." For the hundreds of readers who weekly turn to this department for information and opportunity to place orders for patterns, this is unfortunate, but the pattern department will be resumed next week and in the long run nothing will be lost. We will not omit the instalment missed this week, but will continue the patterns in regular order after it reaches us.

### Adequate Food Supply.

UNITED STATES SENATE, Washington.—To the Editor: I am in sympathy with any movement looking to securing adequate food supplies, and hope it will be possible to aid the farmers along some such line as that which you suggest. MORRIS SHEPPARD.

# World Faces Threatening Meat Hunger

(Continued from page twenty.)

two feeds of whole barley was very great.

If stockmen will commence a change in feed with a fourth or a third of the feed to which the animals are accustomed and make the complete change gradually they will be much less likely to suffer losses of this character.

Losses can be prevented and much done to increase our meat supply merely by housing animals well. Pay strict attention to feeding, of course, and neither over-feed nor under-feed; but also see that the animals are not subjected to cold, chilling draughts during the next few months.

I can illustrate the importance of housing for animals.

Some years ago a friend of mine who was operating a farm in cooperation with a tenant went out to the farm to see how things were getting on. They had several nice brood sows—four or five, I suppose. He found that they were due to litter in a short time. The next time he went out he found that the night before one of the sows had given birth to nine pigs. The night had been cold and stormy and the sow, being in an unprotected place, lost all of her pigs but one. They died from exposure almost as soon as born.

A few days after that he went out and found that two more of the sows had given birth to their pigs under similar circumstances, most of their offspring having chilled to death. Naturally, his anger rose. He informed the man on his place that there was really no excuse for the first mishap, but that that could be overlooked; but that when two more sows were permitted to lose their pigs it amounted merely to gross negligence, for which utterly no excuse could be offered.

How many young pigs have been lost in the Pacific northwest in the last 10 years? One man's guess is about as good as another's. I think, however, that most men who have observed would agree that if we had all this pork in the Pacific northwest now, for our own use, we would not feel the world's pork shortage for several years to come. It would be agreed, also, I am sure, that if we now had all the pork that has been lost by this and similar causes in the United States in the last 10 years we need not fear a pork shortage in the American army overseas, or in the allied armies. When we add to this the pork losses from other sources—cholera, improper feeding, bad housing, lack of sanitation, our imagination shrinks; we can not comprehend it at all. The tragedy of it is that much of this loss is preventable.

Looking back into human history we find certain periods known as the stone age, the copper age, the bronze and the iron age. When, by the passage of time, we of this present day have been swept far into the past, I believe that historians will look back at us and call our present time the age of waste. If the great war does nothing else than to usher us out of our age of waste it will have contributed something of value to us and our descendants.




**Pomppaso Has a Star.**

Dear Aunt Nellie: Today as I was sitting in the library I accidentally picked up the Farmer and as I noticed the Children's Corner I decided to write. I have just returned from a drive in my Pierce Arrow car, which I received from my grandfather for my last birthday. I am the only child in the family. We have 95 head of cattle, 20 hogs and 200 chickens. We have six horses of which I have a pony of my own. He is very black with a star on his forehead. His name is Pomppaso. He is very gentle. I am in the eighth grade at school and am 11 years of age. My birthday is February 22. I have long black hair, which is very curly and large brown eyes.—Violet Vivian Vase.

**Freedom for All Forever.**

Dear Aunt Nellie: As my friend, Violet is writing to you I thought I would add a little. The great conflict raging among the nations at the present time we must all strive to end. To the Red Cross you can give your services and also donate to the other various funds. Adopt this slogan, "Freedom for all forever." I am in the eighth grade and go to the Wakins schools. I am 12 years of age and my birthday is the 24th of December. I will have to close with the hopes of seeing my letter in print.—June Jeneva Gorden.

**Good Times Camping in Summer.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner, but I have been reading the letters. I am 10 years old. My birthday is September 17. I have a brother and a sister. My brother's name is Fred and my sister's name is Alice. I have a pet dog, a pet chicken and a pet kitten. My dog's name is Fannie. I have not named my kitten and chicken yet. I always call my chicken Chickie. We go to school every day. I am in the fourth grade. We have a mile and a quarter to go. We drive every day with a horse. In the summer when there is no school we go camping. Then we have a good time. I am always glad when we get through with harvest, for then I know it is not very long till we will go. One morning when we were going camping mama called us and told us to get up, because she wanted to start early. We slept in a tent that time. It was quite dark when mama called us. When we got outside the moon and the stars were still up. It took a long time before we could get all the quilts and dishes and whatever we were going to have with us.—Edith Christensen, Cottonwood Farm, Box 143, R. 3, Ellensburg, Wash.

**Sleigh Rides on Saturday.**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I love to read the girls' letters. I am going to learn to knit for the soldier boys. My brother is going to enlist pretty soon. We go three miles to school. We go horseback to school. Our teacher's name is Miss Clara Nelson. We have 27 pupils. I am in the fourth grade. My father has a sawmill. He is just getting in logs to saw up. We have three inches of snow. It is melting fast. It is like summer all but the snow. We have lots of fun riding. My brother has a sleigh. My brother and I go sleigh riding on Saturday when there is no school. Our first techer went to war. His name was Mr. Magary. I am 10 years old. I will be 11 years old July 16.—Wilma Little, Fruitland, Wash.

**A Good Letter From Georgie.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I enjoy reading the Farmer. I am 12 years old and I am in the fifth and sixth grades. I hope I see my letter in print. My complexion is fair and my hair is a dark brown. Have I a twin? My birthday comes the 3d of September. My sisters and I go to school. I like to go to school. Our teacher's name is Miss Juanita Tigges. I have three sisters. Their names are Lola, Iva and Virgie. We have four horses. The horses' names are Maud, Bessie, Ted and Bird. We live at a logging camp. Father logs in the winter and spring. We children have fun in the summer. We go in swimming. We have to go just one mile to school. —Georgie Fraser, Ford, Wash.

**Fun at School With Lucille.**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I am going to tell about our school. We have all eight grades. There are 22 pupils in school. My teacher's name is Alpharetta Kellie. The name of the school I go to is Jones school, district No. 146. We had a program at our school, but we did not have a Christmas tree. Teacher and the older pupils cleaned the floor, black boards and seats and also decorated our schoolroom with Santa Claus and fur and pine branches. All our parents and other people came. In our program were the following: "Three Bad Little Boys," "Poor Christmas Dolly," "Santa and His Reindeer," "His Letter and Others." The name of the dialogue was "Mrs. Ruggles Getting Ready for a Christmas Party." When we had finished our program the people all said it was the best one that they had heard for a long time. One of my school chums is writing to the Children's Corner. Her name is Lucille Gerlitz. I have lots of fun with her at school. I hope all the cousins had a good time Christmas vacation. I had a grand time. Twelve days after Christmas came my 10th birthday. I wish some of the cousins would write to me and I will surely answer their letters.—Esther Herger, Box 48, Penawawa, Wash.

**Shorty, the Dog, Has No Tail.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 11 years old, and my birthday is the 27th of March. I am in the fourth grade. I have one dog and cat. The dog's name is Shorty. I call him Shorty because he hasn't any tail. The cat hasn't any name. We ride horseback to school. Four of us go to school. Lucile is 6 years old and in the first grade. Leo is 9 years old and in the second grade. My oldest brother's name is Chester. He is 13 years old. He is in the fifth grade. I like to go to school. My hair is brown. My eyes are gray. My complexion is medium fair. Have I a twin?...We have two guineas, five geese, four horses, two cows, a lot of pigs and chickens. I had lots of fun Christmas. We had candy and nuts.—Vera Isabelle Mcord, Box 30, Fruitland, Wash.

**Sister Is Margaret's Teacher.**

Dear Aunt Nellie: This is the second time I have written to the Corner. I have noticed that the Children's Corner is a lot smaller than when I wrote last. I live on a 10-acre farm. This may seem small, but the largest farm around is only about 40 acres. I have three cats. I did have three guinea pigs, but two died. We have five cows, Beauty, Brownie, Sunshine, Fussy and Maidie. We have one horse named Dick, I am 10 years old. My birthday is the 12th of January. Have I a twin? If so I wish they would write to me or I would like to have any of the other cousins write. I am in the fifth grade at school. There are 26 pupils in my room and there are four rooms. I have my sister for a teacher. I like school fine.—Margaret Binnings, R. F. D. 4, Box 298, Tacoma, Wash.

**Play Hop-Scotch at Recess.**

Dear Aunt Nellie: I am going to write to the Corner and I hope to write again. I am 13 years old and my birthday is May 1. Have I a twin? If so please write. I would like to correspond with Viola Marguerite Tarbert, Route 1, Box 56, Deer Park, Wash. I go to school every day. I am in the seventh grade. The schoolhouse is very old and painted white. There are 12 pupils and my teacher's name is Mr. Brown. The schoolhouse is a mile and a half from my home. I ride my pony, but in good weather I walk. My pony's name is Puss. We only have half an hour noon and we get out at half past 3. At noon and recess we play baseball and hop-scotch. I am going to take the state examination in geography and physiology.—Irene Alma Clark, Grand Dalles, Wash.

**Always Cool in the Mountains.**

Dear Aunt Nellie: We live on Twin mountain. I am 13 years old. We have five miles to go to school and 12 miles to go to town. We have five nice milch cows and sell butter. I have two brothers. They are Morden and Dale. I have three sisters. They are Ramona, Pearl and Dorothy. I have a little canary. I like to live in the mountains, where the timber grows, because it is always cool. They are having literaries at the schoolhouse. I have dark brown hair and blue eyes. I am about four and one-half feet tall. My birthday is the 8th of August. Can you find me a twin? I will write another letter some other time.—Gladys Phillips, R. F. D. 2, Deer Park, Wash.

**Mildred Hasn't Written Before.**

Dear Aunt Nellie: I have not written to the Corner before so I thought I would write. I like to read the Children's Corner very much. I am 11 years old and in the fifth grade. My birthday is August 26. I have one brother. His name is Robert. He is 5 years old and will be six February 15. He goes to school and is in the first grade. We have one cat and two dogs. The cat's name is Blackey. The dogs are Doc and Prince. We have a horse and cow. The cow's name is Blackey and the horse's name is Dolly. My teacher's name is Miss Sandall. I like her very much. I would like to correspond with one of the cousins.—Mildred Buxton, Route 7, Spokane, Wash.

**Lowlands Are Flooded.**

Dear Aunt Nellie: This is my third letter to the Corner, but anyway it won't be the last. I am 9 years old and in the sixth grade. My birthday is March 10. I have blue eyes and weigh 72 pounds. My teacher's name is Mr. Sloane. I go to the Conway school. There are about 60 pupils that go to it. I spent a very happy Christmas and I hope all the cousins and Aunt Nellie did the same. We had a program at the schoolhouse. We are going to start a junior Red Cross at school. I have five sisters and four brothers. I am very glad we live on the highland, because all the people that live on the lowlands have moved their cattle to the highland and some families have moved, too. A few days ago I had a boat ride in the flood. All the trains are stopped because the railroad bridges are washed out, so the mail is carried on boats. I wish that we had a bigger Corner, so I am going to ask some children that go to school to write. I certainly will help Mary can the kaiser.—Walborg Brandt, R. 5, Mount Vernon, Wash.

**Glad That Dorothy Is a Cousin.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner and I hope it won't be the last time. I have been reading the Children's Corner. I am 9 years old. My birthday is the 10th of December. I go to school and am in the third grade. We have four horses and one cow. The horses' names are Dolly, Polly, Bonnie Bell and Princess. The cow's name is Daisy. We have one dog and his name is Fido. We have a cat and her name is Pussy. I have a twin. I will write to her. I would like to join very much. May I be one of the cousins of the Corner? My sister's name is Zelma. I have no brothers and only one sister.—Dorothy Helen Hotchkiss, R. F. 1, Oroville, Wash.

**Good Luck to All Cousins.**

Dear Aunt Nellie: I am a little girl 8 years old and in the second grade at school. I like my teacher very much. I go one mile to school. I have three brothers, Richard, Irwin and Gerald. My sister's name is Mildred. Mamma reads the letters in the Corner to me every week. I like them very much. We have two horses, three colts, two cows and 60 chickens. We have a fine dog. His name is Tip. This is the first time I have written to the Corner. I hope I shall see my letter in print. I hope we will win the war. I wish everybody in the Corner good luck.—Isabel Sullivan, Uniontown, Wash.

**Lydia Got Eight Red Cross Members.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. We are glad that the water didn't get in our houses. Papa and about 50 more men were working on the dyke. They put over 3000 sacks on the dyke. I ride a bicycle to school. We have a lot of chickens and I think we have 500 altogether. I have 25 and I get $4 per month to put in the bank. Papa and mama are putting up window curtains. I got eight Red Cross members. We have typhoid fever germs. All the water is turned off. Papa got me a bottle to carry water to school.—Lydia L. Young, Mount Vernon, Wash.

**Doris Goes to a Country School.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. May I join? I am 10 years old and in the fifth grade. I go to a country school. Our teacher's name is Mrs. Stine. I like her fine. The name of our school is Ainslie. I have about a half mile to walk to school. I have two brothers and four sisters. Their names are Emery, Lawrence, Lillie, Nellie, Maxine and Irene. Lillie is the oldest. We have 120 acres of land, three big pigs, two horses, 21 chickens and 17 head of cattle. I will write again.—Doris Roe, Route 2, Box 129, Winlock, Wash.

**A Jolly Good Time Together.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 9 years old and am in the second grade at school. I have one dog. His name is Kaiser Bill. That is a very funny name, don't you think? Of course, Brother Frank had to name him, but I don't like that name. I have three cousins who live in the city of Seattle. Their names are Margaret, Lillian and George. My cousin, Margaret, came up here to visit me, and we had a jolly good time together.—Gunda Bailey, Box 15, Marysville, Wash.

**Burton Lives in Maple Falls.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. Beecher and I just got through piling for papa. Beecher is the only brother I have. He is 6 years old and I am 8 years old. I have three sisters; one is 2, one is 3 and one is 9. My sister write to you yesterday. I like the story of the New Year Bells. I live in Maple Falls. I am in the third grade. My brother is in the first. My birthday is the 5th of March. —Burton Adkinson, Maple Falls, Wash.

**Brother Is Soldier in France.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I like the letters very much. I am 9 years old. I am in the fourth grade. I have blue eyes and light brown hair. I have two kittens. Their names are Tim and Maud. We have two horses and two cows and a calf. We have lots of chickens. I have three sisters and two brothers. One brother is a soldier in France.—Marion McPherson, Colby, Wash.

**George Has a Dog Named Nifty.**

Dear Aunt Nellie: This is the first time I have ever written to the Children's Corner. I am 10 years old and in the third grade and like it fine. I have two brothers and two sisters. My big brother is a mechanic and my little brother is a freshman. My little sister is in the fifth grade. I have a dog named Nifty. I have two cats. —George Bolender, R. F. D. No. 2, Box 57, Olympia, Wash.

**Knitting Will Help.**

Dear Aunt Nellie: This is the fourth time I have written to the Children's Corner. I enjoy reading the letters of the Corner. My subject is the Red Cross. I hope the cousins can learn to knit. I am going to learn as soon as I can. I think all the cousins ought to learn how to knit if they can. That is the one way we can help. I have been thinking of starting a junior Red Cross in my school, but I don't think I can. I am 8 years old. My birthday is the 11th of July. I am in the fifth grade. Have I a twin? I have three cats. Their names are Julia, Tommy and Freckles. We have eight head of cattle. Their names are Prilly, Rosabell, Beauty, Cherry, June, Maybell, Annabell, Bess and King Bonnie. We have five horses. Their names are Babe, Prince, Mascot, Fred and Sam. We have one dog. His name is Tip. I would like it if the cousins would write to me.—Mildred Elizabeth Marks, Wapato, Wash.

**Building a Good, Warm House.**

Dear Aunt Nellie: I live on a farm and we have lots of chickens. We have an old rooster and when you are running by he will fight you. I am in the fifth grade and my studies are easy. We are building a log house and it is a warm one. This is my first letter to the Corner. I am pleased with the Corner. We have been taking the Farmer for five years. I am 10 years old and I am four feet three inches tall. I weigh 78 pounds. I wish we could have jokes and riddles in the Corner.—Roland W. Gerth, Tumwater, Wash.

**Tracy Writes to Us Again.**

Dear Aunt Nellie: This is the second time that I have written to the Children's Corner and I hope it won't be the last. I have two cats and a dog. The dog's name is Prince and the cats' names are Tom and Pussy. We have two cows and one horse. The horse's name is Molly and the cows' names are Nellie and Pansy. We have about 25 chickens. I am 11 years old. My birthday is the 17th of December.—Tracy Germont, R. F. D. 1, Greenacres, Wash.

**Seven Miles From Town.**

Dear Aunt Nellie: This is my first letter to the Corner. I am in the fifth grade. I was 12 years old the 27th of January. I have two sisters and one baby brother. My papa takes the Farmer. I like to read the letters in the Children's Corner. I have one lamb and a pony. I like to ride horse back. We live on a farm. We are seven miles from town. We live close to school and church. I go to Sunday school.—Myrtle Bailey, Fruitland, Wash.

**Has Alice a Twin Anywhere?**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner and I enjoy reading the letters. I am 11 years old and my birthday is August 3. Have I a twin? I go to school. I am in the fourth grade. I have one brother and one sister. My sister's name is Eileen and my brother's name is Johnnie. We have two cats and one dog and one cow and one calf.—Alice Henley, R. F. D. Route 1, Twisp, Wash.

**Little Brother Rocks the Baby.**

Dear Aunt Nellie: How are you and all the cousins? I am going to tell you about my little brother. He can dry dishes and rock the baby. He is 4 years old, and his name is Raymond. I have four brothers. Their names are Wynne, George, Raymond and Gilbert. My sister's name is Maxine. She is 3 months old. I like her very much. I am 9 years old. I am in the third grade at school. I like school fine.—Fern Stallcop, Pomeroy, Wash.

**Goes to School Every Day.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. My name is Willie Plano. I am in the third grade. I am 8 years old. My teacher's name is Miss Emma L. Bucklin. I go to school every day. We have eight acres of land. We have a cow, a heifer, six rabbits, 23 chickens, one dog and a cat. The dog's name is Jack and the cat's name is Tommy.—Willie Plano, R. F. D. Route 2, Box 5, Renton, Wash.

**Gets 100 in Spelling.**

Dear Aunt Nellie: I haven't written to you for a long time so I thought I would write. I have had 100 in spelling for the last two months and a half. My sister Martha spelled the whole school of Mud Creek down in a spelling match. I will be 13 years of age the 24th of February. Have I a twin? I would like to have a crochet contest. Would you cousins like one, too —Emma Short, R. F. D. 1, Lowden, Wash.

**Make Bandages and Bed Socks.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 12 years old. My birthday is the 22d of October. I am in the seventh grade. Have I a twin? We girls are making bandages and bed socks for the Red Cross. We are learning to knit, too. I think all the girls should learn to knit.—Eunice Pool, Box 134, Wenatchee, Wash.

**Seventeen Scholars in Eileen's School.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner and I enjoy reading the letters very much. I am 9 years old. My birthday is June 17. I am in the second grade at school. Teacher's name is Miss Lenore Roach. We all like her very much. She is from Seattle. We have 17 scholars in our school.—Eileen Hanley, R. F. D. Route 1, Twisp, Wash.

**Hazel Goes to School Every Day.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 12 years old. I go to school every day. I live on an 80-acre farm. My father has two horses and five cows and five pigs and many other animals.—Hazel Jane Webster, R. F. D. 1, Box 6 D, Burley, Wash.

# NEWS FOR BREEDERS

Ed Schoel, well-known O. I. C. breeder, reports that he has had one litter of six pigs farrowed since the first of the year, and has sold four of them inside of three weeks of their birth. He is delighted with the winter, which has so far been fine for hogs as well as other live stock. He finds a strong demand for O. I. Cs., and thinks swine breeders generally will have no trouble in disposing of their stock.

C. L. Falk Jr. of Halsey, Ore., has recently purchased the young Percheron stallion, Diligent, from B. F. Burge of Albany, Ore. Diligent is a very handsome black, coming 3. He was first price and reserve junior champion at the P. P. I. E. Mr. Burge purchased the colt the winter he won at San Francisco and considers him one of the best Percheron horses in Oregon. His blood lines run strong into Brilliant through Besique. The Falk brothers and their father have six registered Percheron mares and have kept a horse in service at Halsey for years.

Doerfler Brothers, the Duroc Jersey breeders of Silverton, Ore., report that they have had fair sales and many inquiries, but that a great many seem to want breeding stock at pork prices. This is something that many swine breeders find to be the case. Yet any one wanting a breeding boar or sow should remember that the breeder can, at pork prices, realize almost as much as former breeding prices; that not only is feed higher, but the breeder must have something for the extra care given a breeding animal. If a breeder can not get a fair margin over what a hog will bring for pork, it will pay him better to sell to the butcher.

Martin & Looney of Junction City, Ore., who now have about 40 registered Holsteins, including 20 cows in milk, have, for a herd bull, Lundy Pontiac Ormsby. This bull is a son of King of the Pontiacs, on the sire's side, while on the dam's side he goes back to the famous Frakes bull, Lundy Oregon DeKol.

One of their good cows, North Star Helena Burke, bred by W. S. Moscrip of Minnesota, is related to Bonnie Ormsby Lass, William Bishop's cow that has won so many grand champion honors, including the P. P. I. E., and has a number of high-record relatives close up. It was the intention to give this cow an official test at her last freshening, but she went off feed before they were ready to begin. She is a heavy milker and high tester.

These gentlemen also have a granddaughter of Colantha Johanna Lad, and they should make some fine records when they get started on official test. H. A.

## Steer for Annual Banquet.

Those who attended the fat stock sale at the Pacific International Stock show in December no doubt remember that the Oregon Cattle and Horse Raisers' association was the purchaser of one of the steers offered. The steer was a purebred Shorthorn exhibited and sold by Child & Anceny of Helena, Mont., and weighed 1160 pounds at the date of sale. It was, in fact, purchased by William Pollman of Baker, Ore., and presented by him to the association, of which he is president, to be used at the banquet held at the annual meeting in Ontario, Ore., April 24. The well-known Shorthorn breeder, Duncan Dunn of Yakima, Wash., offered to feed the steer free of charge until time to kill him for the meeting, which offer, it is needless to say, was accepted. Rumors that the steer is "coming on" in fine shape reach The Farmer. More than rumors are also already in circulation that at their next meeting the stockmen and citizens of Ontario are going not only make welcome and comfortable the largest crowd that has yet attended an annual meeting, but that the "stunts" pulled off will eclipse anything yet attempted at the meeting of their organization, at which business of serious import to stockmen and uproarious and enjoyable fun are well mingled. H. A.

## Building Up a Herd.

A. E. Smith, the Holstein breeder of Seattle, is planning to consign to the spring sale of the Western Washington Holstein Breeders' association approximately 20 head of stock from his farm at Sumas. Many of these animals either have A. R. O. records themselves or are heifers out of A. R. O. dams.

From 40 to 60 cows are milked on the Smith farm, and an unusual percentage of these are advanced registry animals. Mr. Smith is a firm believer in the official test, especially as to its value to the occasional buyer who is not well posted on blood lines. In regard to this latter class of buyers, which includes the farmer who purchases a few good heifers or a pure bred bull occasionally, Mr. Smith has something to say.

"It isn't reasonable to expect that any breeder is going to sell his best breeding animals," he says. "Sometimes you hear the complaint that a man has bought some pure breds, and that the latter are not producing any better than the grades he has been milking. Perhaps the claim is true. But if he will look upon these purebreds simply as the foundations of his herd, and will buy the best bull he can afford to go with them, it will not be many years before he will realize that he has made a good investment. There are only a few 30-pound cows on the Coast today, and the farmer who wants to get into the purebred business can not expect to buy any of these. But he can buy good, healthy purebred heifers and a purebred bull out of high producing ancestors. This is the way a herd is built up."

All of which is based on Mr. Smith's own experience in building up a herd containing many individuals producing 20,000 pounds of milk annually.

"I can remember when it was harder for me to produce an 8000-pound cow that it now is to breed one that will produce 16,000 pounds," he says. "You've got to look to your bull to do most of the building up. There aren't enough good cows to go around, while in the nature of things there will always be plenty of bulls out of high producing ancestors." P. E. T.

## A Spring Valley Lamb.



**One of the good Oxford lambs, shown by Fisk Farm, Spring Valley, Wash., at the Northwest Livestock show at Lewiston, Idaho, in 1917.**

## Chalcraft Buys Jersey Bull.

J. J. Chalcraft of Richland, Wash., recently purchased from F. A. Doefler, proprietor of Mellow Lawn farm, one of his best bred young Jersey bulls, paying $250 for him. The bull's dam has an official record, begun as a senior yearling, of 480 pounds of butter, made in 10½ months, and promises to make over 700 pounds as a senior 2-year-old. The grand dam on the dam's side seems sure of producing over 700 pounds of butter, starting at 15½ years old and badly stifled. The calf's sire carries 50 per cent of the blood of Rosaire Olga Lad, 25 per cent of St. Mawes Poppy (with 1120 pounds of butter in a year), and 25 per cent of Gertie's Fern Princess that Mr. Doerfler paid $820 for. Mr. Chalcraft has no registered Jerseys yet, but has used only registered sires since he has been in the dairy business and he certainly showed wisdom and deserves great credit for paying the price and getting so good a bull to improve his grade herd. H. A.

## A Correction.

In the isslue of the Farmer of January 24, it was stated that the Shorthorn dispersal sale of Alex Morrison of Valley, Wash., would be held at the stock yards, Spokane, February 20. The correct date is March 20.

## Scientific Grafting.

Lane county, Oregon, fruitgrowers are resorting to scientific grafting to make up for the shortage of bees as pollenizing agents for cherries and pears. The late, wet springs delay the bees to such an extent that pollenization has not been perfect when other conditions were favorable.

**Important Point.**

Concentration is a great distinguishing faculty.—Greenville Kleiser.




# Don't Go Through Another Winter Without a Good Silo

**GOOD SILOS will produce 20% to 25% more milk and keep your cows in fine condition during the periods when fresh, green pasture can not be had.**

**MAKE YOUR SILO INVESTMENT PERMANENT AND PROFITABLE**

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# IDEAL Green Feed SILO

There is a difference between the Ideal Green Feed Silo and other silos. You will discover it if you take a few minutes to compare the details of construction; the quality of material and workmanship; the contact of the doors with the door frame; the kind and size of hoops and lugs used; the quality of the paint for the inside.

**THE DOORS**

The doors of the Ideal Green Feed Silo are of the REFRIGERATOR TYPE, having three distinct bearings on the door frame on all four sides. They make an air and water tight joint. The inner side of the doors comes flush with the inside of the silo walls, making a smooth surface throughout the inside of the silo. No projections to prevent perfect packing of the silage and no chances for air pockets and spoiled silage.

Send for complete description, telling us how many cows you want to feed and ask for our Dairy Hand Book with Rations for Dairy Cows.

## DE LAVAL DAIRY SUPPLY COMPANY

**61 BEALE ST., SAN FRANCISCO, CAL.**

**Prompt Shipment From Seattle and Portland Storage Stocks.**


## POULTRY


### TRAP-NESTED BARRED ROCKS



All hen-hatched and hen-raised. Every hen trap-nested. First pen has, I believe, for past two years highest Barred Rock av. egg record in the world. All other pens practically same blood lines.

Pen 1, 12 hens, av. over 240 eggs, crossed to yearling cock, parents av. 260 eggs, $5 setting of 15. Pen 2, 25 yearling hens, av. over 200, crossed to 2 sons of No. 44, 708 eggs in 3 yrs., $5 setting of 15. Pen 3, about 20 hens and pullets, with reserve cocks and cockerels, same breeding $3.50 per 15. A few cocks and cockerels from $5 up. **IRVINE P. GARDNER.** **Riddle, Ore.**



### Heavy Laying S. C. R. I. Reds

Hatching eggs from top-notch laying strain of Pacific Northwest. If you want the best layers, weighers and payers that money can buy, write me.

**MRS. ROMINGER, Underwood, Wash.**

### Heavy Laying Strain

S. C. White Leghorns, hatching eggs, baby chicks and stock.

**MT. ANGEL COLLEGE POULTRY RANCH.**
**St. Benedict, Ore.**

### BABY CHICKS

Rhode Island Reds, White Leghorns. Don't wait until March or April to order and then be disappointed because you can't get them. But order now from our heavy-laying strain. Send card for price list.

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Box 3, Southworth, Wash.

### State Winners of the Blue

Barred Rocks, White Leghorns and Black Minorcas. Prize winners, with the laying habit. Choice cockerels at $5 each. Eggs, $3 and $5.

**WILBER CLAYTON, Payette, Ida., R. 1.**

### S. C. Rhode Island Reds

Golden Sebright and Black Bantams.
**CHAS. E. LUCAS, R. F. D. 3, Missoula, Mont.**

**MAMMOTH BRONZE TOMS.**

Strong vitality, $6 to $8 each; no charge for crates. Barred Rock eggs for hatching. Pullets (some laying) $1.25 each.

**S. M. WILSON, Carley, Wash.**

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Rose comb and S. C. Blue ribbon winners. Utility and show stock. 100 cockerels at $3 up. Bronze turkeys and Toulouse geese. Blue ribbon stock. Registered Airedale bitch at a bargain if taken at once.

**Highland Fruit and Poultry Ranch.**
J. NONNENMACHER,
R. F. D. 3. NORTH YAKIMA, WASH.

### Mammoth White Holland Turkeys

from first prize winners at the recent Portland poultry show.

**MRS. E. D. SITTON. Carlton, Ore.**

**PARK'S BRED TO LAY**

Barred Rocks; line bred. Eggs, $1.50 setting. $8 per 100. 25 yearling hens at $1.50 each

**F. J. WIRTNER, Mica, Wash.**

**In writing advertisers, be sure to say that you saw their advertisement in this paper.**

**S. C. AND R. C. RHODE ISLAND REDS.**

Cockerels, $2.50 to $3.50; eggs from S. C. R. I. Reds, heavy winter layers, $1.50 per 15; $7 per 100. Flemish Giant does, $1.50.

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### White, Buff and Blue Orpingtons

**(Capt. De Bathe Strain.)**

Speckled Sussex and Anconas. All single comb. Aldrich strain Orpingtons, Sheppard Anconas. My birds took first prizes at all leading shows of Pacific Coast. Prices for stock, eggs and chicks reasonable. All from best laying birds. Finest lot of cockerels I've ever raised. A few choice Rhode Island Red cockerels. A few White Holland and bronze turkey toms for sale.

**IRA N. DELINE,**
**Olympia, Wash.**

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Are reached every week by The Washington Farmer, The Oregon Farmer and the Idaho Farmer, composing the Pacific Northwest Farm Trio. Among the thousands who read our papers every week are many who are in the market to buy live stock, poultry, hatching eggs and, in fact, anything and everything needed on the farm.

Use our papers to advertise whatever you have to sell. We help you write your ads.

**Pacific Northwest Farm Trio** 36 Review Building Spokane, Wash.

# Breeders' Department

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### Herd Bulls

Imported Doune Radiance No. 609412
and
Gainford Perfection No. 442173.

### Hercules Shorthorns

We can supply you with choice, well grown bulls and females of breeding age. Your inspection of our herd is invited. Visitors always welcome.

**Day & Rothrock Company**
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Breeders of top registered Shorthorn cattle.
Correspondence solicited.
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REGISTERED SHORTHORN COWS.
Young bulls and heifers, sired by Scotch bulls: liberal terms.
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### Waikiki Farm Jerseys

We offer several young bulls and heifers of exceptional breeding. Send for descriptions and breeding.
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### A FEW COWS AND HEIFERS

MELLOW LAWN FARM HIGH PRODUCING JERSEY HERD.
HERD AVERAGE, APPROXIMATELY 700 POUNDS BUTTER.

Every cow in the herd on test. Our herd is getting too large to give proper care, with present labor scarcity, so am forced to sell a few. Some of the best in the herd, now milking around 50 lbs., are for sale. Write for pedigree and prices. Ranch 7 miles south of Silverton, 12 miles east of Salem.

*F. A. DOERFLER, Silverton, Ore.*

## RABBITS

BARBER RABBITRY.
Pedigreed and registered Flemish and Checkered Giants. Bucks at stud. Stock for sale. Correspondence solicited.
MRS. R. W. BARBER, R. 4, Boise, Idaho.

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### Edgewater Farm

Government accredited herd, headed by Peter Pan, 63d. Bull calves available.
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## HOLSTEIN CATTLE

### Registered Holsteins

Young calves, born last July and later; also 1 30-lb. bull, ready for service, whose sire, dam and sire's dam have all been grand champions at one or more state fairs, and full brother to his sire and full sister junior champions at a state fair. Here is production and type we hear so much about. Could also spare a few cows.
H. R. BOOMER, New Plymouth, Idaho.

MOOREHEAD RANCH.
Registered Holsteins.
Herd sire, Model Annie De Kol Segis, grandson of the famous King Segis. We have no bulls of service age, all having been sold, but we have some splendid young stuff, from 6 to 8 months old, coming on. If you are looking for real foundation stock, write us for particulars and pedigrees.
MOOREHEAD & HOBSON.
Breeders of Purebred Holsteins.
Outlook, Wash.

### 365-DAY HOLSTEINS

24,667 lbs. milk—1026 lbs. butter—is the 8. o. advanced registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.
THE HERD WITH YEARLY RECORDS.
WESTERNWOLD RANCH, Prineville, Ore.

### Registered Holsteins

Glenwood herd offers for sale a few A. R. O. cows with records up to 24.32 lbs. Also a few bred heifers.
A. H. BUCK & ED HOLM.
Snohomish, Wash.

### HOLSTEIN HERD FOR SALE

As I will sell or rent my ranch this spring, my entire herd of registered and high-grade Holstein cattle is for sale. For particulars as to breeding and prices, write
W. FRED HARPER.
New Plymouth, Idaho.

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### Ioka Farm Durocs

The big type, with quality. The kind that wins in the show ring. Offspring of the great sire Golden Rod and other best Duroc strains.
DOERFLER BROS., Silverton, Ore.
A. N. DOERFLER, Manager.

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Bred and open gilts of the best breeding and individuality.
G. O. SWALES. Johnson, Wash.

DUROCS.
Boars and open or bred gilts of excellent breeding.
E. E. PRICE, CABINET, IDAHO, OR
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### BERKSHIRE HOGS

Gilts of any age, bred or open; can also furnish young boars, from the best of strains and prize winning parentage.
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### SHEEP

Full blood Lincolns, Romneys, Corridales and Hampshires. Ewes and rams, small or large lots. For sale by
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## This Is the Last Announcement of the Big

# Annual Shorthorn Shows and Sales

*At Spokane*
*February 22, 23*
*59 BULLS*
*37 HEIFERS*

All Choice, Well Grown, Pure Bred Registered Shorthorn Stock

*At Portland*
*February 25*
*40 BULLS*
*30 HEIFERS*

## Leading Breeders of the Pacific Northwest Are Consignors to Both Sales

**FARMERS** You get in this sale the kind of stock that will build up your farms to profitable production.

**BREEDERS** Will find excellent individuals with which to lay the foundation for a Shorthorn herd or enlarge and improve a herd already established.

**DAIRYMEN** Come to these sales for choicely bred bulls and heifers from heavy milking strain.

**RANGEMEN** Splendid opportunity to get a class of stock that will improve your herds and produce the kind that tops the market for prime beef.

## Spokane Show and Sale Held During Session of Northwest Livestock Conference February 21, 22, 23

Speakers of national prominence in U. S. and Canada will discuss timely matters of vital importance to the farmer and stockman.

Sales will be held at Union Stock Yards, in both cities.

Write immediately for catalogue and particulars to

**F. M. ROTHROCK** or **FRANK BROWN**
Exchange Bank Bldg., Spokane, Wash. Carlton, Oregon.

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, Feb. 11.—Prospects of a renewal of eastbound shipments of grain from Chicago strengthened the corn market today after prices had sagged owing to a decided enlargement of receipts. The close was firm at a shade to 1-8@1-4 net advance, with March $1.27 1-4@3-8 and May $1.25 1-8. Oats gained 1-8 to 1-8@1-4c. Provisions lost 7 to 25 cents.

Peace gossip, which early in the day had received some attention, was apparently not a factor in the late trading after the general tenor of the president's speech became known.

Oats were governed by the same conditions which affected the corn market. Receipts showed a material increase, but demand was good both from elevator interests and shippers.

Big receipts of hogs and a falling off in exports weakened provisions.

**Chicago Futures—Close.**

Corn—March, $1.27¼; May, $1,25⅛.
Oats—March, 82⅞c; May, 79⅞c.
Pork—May, $46.70.
Lard—May, $25.40; July, $25.50.
Ribs—May, $24.65.

**Cash Quotations.**

CHICAGO, Feb. 11.—Corn—No. 2 and 3 yellow, nominal; No. 4 yellow, $1.35@1.80.

Oats—No. 3 white, 83½@85c; standard, 84@86c.

Rye—No. 2, $2.18.
Barley, $1.70@1.90.
Timothy, $5@8.25.
Clover, $21@30.
Pork, nominal $24.32; ribs, $23.50@24.02.

**Pacific Northwest Grain.**

PORTLAND, Ore., Feb. 11.—Grain futures 30 days: Oats, No. 2, $63 bid; barley, feed, $63; brewing, $66. Eastern oats and corn in bulk: Oats, No. 3 white, $59 bid; 38 pounds clipped, $39.50; corn, No. 3 yellow, $65; No. 3 mixed, $63.50; oats, No. 3, $59; clipped, $60; corn, yellow, $65; mixed, $62.50.

**Minneapolis Grain.**

MINNEAPOLIS, Feb. 11.—Flour unchanged; shipments, 32,030 barrels.
Barley, $1.55@1.88.
Rye, $2.16@2.17.
Bran, $32.50.
Wheat—Receipts, 200; holiday a year ago.
Corn—No. 3 yellow, $1.68@1.73.
Oats—No. 3 white, 83½@84½c.
Flax, $3.64@3.68.

**San Francisco Grain.**

SAN FRANCISCO, Feb. 11.—Barley—May, $3 bid.

## Live Stock Quotations.

**At Omaha.**

OMAHA, Neb., Feb. 9.—Hogs—Receipts, 19,200; steady. Heavy, $15.10@16.10, mixed, $15.75@15.05, light, $15.65@16.05; pigs, $10@15; bulk of sales, $15.75@15.95.

Cattle—Receipts, 500; steady. Native steers, $8@12; cows and heifers, $7@10; western steers, $7.50@11.50; Texas steers, $7@10; cows and heifers, $6.50@9; canners, $6.25@7.25; stockers and feeders, $6.50@10.75; calves, $9@13; bulls, stags, $7@10.

Sheep—Receipts, 100; market steady. Yearlings, $12@15; wethers, $11@13; ewes, $10.50@12.50; lambs, $16@17.

**At Chicago.**

CHICAGO, Feb. 11.—Hogs—Receipts 60,000; slow, 10 to 15c under Saturday's average. Bulk, $16.20@16.40; light, $16.70@16.45; mixed, $15.85@16.40; heavy, $15.65@16.40; rough, $15.65@15.85; pigs, $12.50@15.

Cattle—Receipts 15,000; steady. Native steers, $8.40@13.90; stockers and feeders, $7.20@10.40; cows and heifers, $6.25@11.65; calves, $9.50@15.25.

Sheep—Receipts 25,000; weak. Wethers, $10@13.30; lambs, $14.25@17.50.

**At Portland.**

PORTLAND, Ore., Feb. 11.—Cattle—Steady to 25c higher; receipts 743. Medium to choice steers, $10.55@11; good to medium steers, $9.35@10.35; common to good steers, $8@9.40; choice cows and heifers, $8@10; common to good cows and heifers, $6.75@8.15; canners, $4.25@6.25; bulls, $5@8; calves, $7.50@11; stockers and feeder steers, $6@9.50.

Hogs—Market 30 to 45c higher; receipts 1371. Prime light, $16.85@17.25; prime heavy, $16.60@16.90; pigs, $14.50@15.50; bulk of sales, $16.80@17.

Sheep—Steady; receipts 305. Western lambs, $15@15.50; valley lambs, $14.50@15; yearlings, $13@13.50; wethers, $12.50@13; ewes, $9@11.

**Spokane Stockyards, Saturday.**

Hogs—Receipts, 76; market steady. Prime light, $16@16.25; prime heavy, $16@16.25; pigs, $14.75@15.50; stockers and feeders, 12@14; bulk of sales, $16.05.

Cattle—Receipts, 12; market steady. Best beef steers, $10.25@11; good steers, $9.25@10.25; common to good steers, $8@9; best beef cows and heifers, $8.50@9.25; good cows and heifers, $7.50@8.25; common to good cows and heifers, $6.25@7.25; canners, $3.50@6.25; bulls, $5.50@7.75; calves, $6.50@10.50; stocker and feeder steers, $6@8.

Sheep — Receipts, none; market steady. Prime lambs, $14.50@15.25; good lambs, $13.25@14; prime yearlings, $12.50@13.25; prime wethers, $12@12.75; best mutton ewes, $9@10.25.

**At Salt Lake.**

SALT LAKE CITY, Utah, Feb. 8.—Cattle receipts fair, market steady. Choice steers, $9.50@10.50; good steers, $8.50@9.50; fair steers, $7.50@8.25; choice cows and heavy heifers, $7.25@7.75; fair to good cows and heifers, $6.25@7; cutters, $4.75@5.50; canners, $4.50@5.50; bologna bulls, $5.50@6; fat bulls, $6.25@7.50.

Hog receipts have been light, although the market has jumped 50 cents the last week. Choice hogs, $15.75@16; mixed hogs, $15.50@15.75.

Sheep receipts good. Sheep, steady. Receipts 1195. Choice grain-fed lambs, $14.50@15; choice yearling wethers, $11@11.50; fat wethers, $10.50@11; fat ewes, $9.50@10.

## Portland Market.

PORTLAND, Ore., Feb. 9.—With the withdrawal of eastern buyers from the egg market, local prices have declined fast. At the close of the week the extreme quotation on the street was 40 cents and large lots could not be moved at 38 cents. Local consumption is increasing as the price declines—eggs now retailing at 45 cents, but the buying is not heavy enough to take up the enlarged receipts.

The butter market is not active and prices are barely holding steady.

So small is the poultry supply that prices have climbed to an unheard of level. Heavy hens were sold at 26 1-2@27 cents, light hens at 25 1-2 cents, heavy springs at 26@27 cents and broilers at 35 cents. Geese easily bring 20 cents and any kind of ducks will sell for 30 cents.

Country dressed meats have also advanced, fancy pork going to 21 cents and veal to 20 1-2 cents. Only a small quantity of meat is reaching the street each day.

Farmers are offering potatoes more freely and prices have eased off. Shippers are buying at 90c@$1 and have more potatoes offered them than they can use. Burbanks are jobbing at $1.10@1.25 and a few Washington Netted Gems are bringing $1.50. The onion market is also weaker at $1.50 at country points for No. 1 stock.

In the following list of quotations the grain, hay, mill feed, hops, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 1, $62.50 per ton.

Millstuffs—Bran, $30 per ton; shorts, $32.

Barley—No. 1 feed, $61; brewing, $65@70; rolled, $67@69.

Hay—Buying prices: Timothy, eastern Oregon, $27; alfalfa, $22.50; grain, $22.

Eggs—Oregon ranch, case count, 38@40c per dozen; candled, 42@44c.

Poultry—Hens, 25 1-2@27c; ducks, 30c; turkeys, live, 25c; geese, 20c.

Butter—City creamery, prints, 52@53c per pound; cubes, extras, 48c.

Cheese — Tillamook triplets, 25c; Young Americas, 26c.

Dressed meats—Veal, 20@20 1-2c; pork, 21c.

Hops—1916, nominal; 1917 crop, 16@17c.

Potatoes—Oregon, buying price, 90c@$1 per hundred.

Wool—Eastern Oregon, 50@60c; valley, 50@55c.

Beans—Buying prices: Oregon white, 9@10c; colored, 8c.

## The Wool Market.

BOSTON, Mass., Feb. 8.—The Commercial Bulletin will say tomorrow: "The wool market has passed through another dull week, although there was heavy trading.

"Prices were firm on all good wools, but short scoured capes were easier.

"The manufacturers are finding a very good call for civilian cloth, although the government is not exhibiting any great keenness to place new orders as yet."

Scoured basis: Texas, fine 12 months, $1.68@1.72; fine 8 months, $1.55@1.60.

California northern, $1.70@1.75; middle county, $1.55@1.60; southern, $1.45@1.50.

Oregon, eastern No. 1 staple, $1.80@1.82; eastern clothing, $1.50@1.60; valley No. 1, $1.65@1.70.

Territory fine staple, $1.85@1.90; half-blood combing, $1.70@1.75; 3-8 blood combing, $1.45@1.50; fine clothing, $1.60@1.65; fine medium clothing, $1.55@1.60.

Pulled extra, $1.80@1.85; AA, $1.70@1.80; A supers, $1.60@1.65.

## Portland Wheat.

PORTLAND, Ore., Feb. 9.—Barley sales were made in the latter part of the week as high as $70 and $72 for shipment east, but available stocks in this territory are so nearly exhausted that prices are nominal. Competition between Minneapolis and local millers for what remained was responsible for the high prices.

There is an urgent demand here from bakers for barley flour, but little of it is to be had. Millers' list prices are $10.50@11 a barrel. Corn meal, also required as a substitute, is scarce and strong at $5.65 a bale. Only a limited amount of rice flour is on the market and it is now quoted at 8 1-2 cents a pound.

Oats are holding steady with a light movement. The hay market continues easy.

## Seattle Market.

SEATTLE, Feb. 9.—Seattle jobbing interests have been bucking the tide in selling fancy and extra fancy Washington apples against California orange competition at $6.50 per box. The choice of practically any good keeping apples in the proportion of three to one, is offered against oranges, but buyers are insisting upon having the orange while protesting against the excessive price. Wholesalers say this is a phase of human nature often manifested, but never satisfactorily explained.

The same peculiar situation exists as to potatoes. At this time last year spuds were selling at more than twice the present level and the market tendency was upward. There was a heavy demand, coupled with loud protests at the price. Today the market is downward and jobbers are unable to elicit the slightest interest in the commodity.

There has been a slight inquiry from the east for Washington spuds for the week-end, but prices are weak in both gems and locals. Jobbers say it will require more pressure than a mere request from the food committee to put stiffening into the Washington potato market in view of its demoralized condition.

**BUYING PRICES.**

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots, f. o. b. Seattle:

Eggs—Local, 44c per dozen.

Poultry—Live hens, fat, over 4 lbs., 25c lb.; 4 lbs. and under, 25c; old roosters, 16c lb.; squabs, large, $3.50 dozen; geese, fat, live, 18c lb.; springs, live, 25c lb.

Butterfat—58c lb.; dairy butter, 35@36c.

Beef—Buying prices: Prime beef, steers, 11@12c lb.; cows, fat, 9@11c lb.; heifers, 10@11c lb.

Hogs—Light, 18@20c lb.; heavy, 17@18c lb.

Veal—Fancy light, 17@18c lb.; heavy, 9@16c lb.

Hides—Salted, 14c lb.; flint-dry hides, 29c lb.; salt kip, 16c lb.; green hides, 11c lb.; green calf, 23c lb.; dry calf (under 6 lbs.), 29c lb.; bulls and dry salts, 4c lb. less; green bulls, 10c lb.; dry full wool sheep pelts, 36@39c lb.; salt bulls, 12c lb.

**SELLING PRICES.**

Feed—Scratch, $74 per ton; all grain chop, $70 per ton; oats, $68 per ton; rolled oats, $69.50 per ton; bran, $33@34 per ton; shorts, $36@37 per ton; soy bean meal, $67 per ton; whole corn, $67.50 per ton; cracked corn, $74 per ton; alfalfa meal, $35; rolled barley, $68.50; sprouting oats, $68 per ton; Milo maize, $70 per ton; white gyp, $75 per ton.

Hay—Eastern Washington timothy, $36@37 per ton; alfalfa, $28@29 per ton; double compressed, $40@41 per ton; wheat hay, $28 per ton; Puget sound, $30@31 per ton; straw, $15.

Butter—Washington creamery extras, cubes, 52c lb.; do bricks, 53c lb.

Eggs—Fresh ranch, 48c dozen.

Potatoes—Puget sound, $1.25@1.35 per cwt.; eastern Washington, $1.50@1.60 per cwt.

## Seattle Wheat.

SEATTLE, Wash., Feb. 9.—Convinced that they will have ground all the available wheat in the three states by April 1, Seattle millers are preparing to withdraw their salesmen from the road. Flour can sell itself at a sufficient speed to clean up all that will be left before the new soft wheat harvest in September and it is regarded as prudent at this time to Hooverize the payroll to that extent.

Millers have some hope that the government will give them another allotment of wheat before the present apportionment gives out. The movement into the east, however, has been so heavy that prospects of keeping the mills running through that source are not overbright. Barley that at one time was a drug on the Washington market has been sold out. Millers here claim that Washington barley has been moving out of this market for the last 60 days. Other substitutes in this territory are equally scarce. The Centennial Mill company announces that it will keep grinding oat products at its Spokane mill, but until forced to do so will install no machinery for grinding barley, rice and potato flour.

Experiments with barley, soy bean meal and soy beans from Japan are being made here by several of the smaller mills, but with uncertain results. Seattle grain and feed dealers have been trying to contract in the east for a supply of corn flour. One car was tentatively booked for March delivery, but the shippers later refused to confirm.

Food regulations regarding wheat in poultry food are causing the greatest hardship in this territory. The 10 per cent allowed is insufficient and dealers assert that unless it is raised there will be a material reduction in the number of young chcicks next season. There are no corn substitutes and others are not conducive to poultry development. Wheat grown on Whidby island, shipped across one of the docks and hauled into the Sumner district by wagon and truck contained, it is claimed, an excess of the 10 per cent and the wheat was fit for human consumption, contrary to the regulations. While feed dealers were prohibited from handling this wheat, farmers of Puget sound had ignored the regulations. B. C. Beck, assistant federal food administrator, stopped the practice summarily.

## Butter and Eggs.

PORTLAND, Ore., Feb. 9.—Butter—Prints extras, 52@53c; cubes extras, 48c; prime firsts, 47c; dairy, 32½c.

Butterfat—Portland delivery, No. 1 sour cream, 55c.

Eggs higher; receipts, 1809 cases; firsts, 51c; ordinary firsts, 48@49c; at mark, cases included, 48@50c; refrigerator firsts, 44¾c.

SAN FRANCISCO, Feb. 9.—Eggs—Fresh extras, 45c; firsts, 44c; fresh extra pullets, 42½c.





**Easy Milking and a Full Pail**

are the natural result of a healthy udder. When a cow freshens, her udder should be given careful attention. Caked Bag, so likely to occur then, is quickly removed by applying Bag Balm, the great healing ointment. Sores, cuts, chaps, bruises, cracks, bunches and inflammation quickly respond to its healing, penetrating effect. Try Bag Balm and you will never be without it.

Sold by feed dealers and druggists, in large 50c packages. Send for booklet, "Dairy Wrinkles."

DAIRY ASSOCIATION CO., Lyndonville, Vt.

**SPOKANE SEED CO.**

Distributors.
SPOKANE, WASH.

**HIDES**

Send hides to us for highest cash market price. Check by return mail. References, any bank in Seattle.

**NORTH COAST TANNING CO.**

Ballard Station, Seattle.

**RAW FURS**

I am in the market to buy large quantities of mole, muskrat, coyote and rabbit skins. Send for price list and tags. OSCAR GARD, 75 Marion Street, Seattle, Wash.

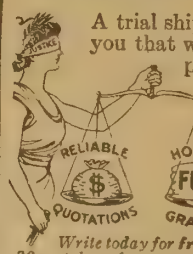
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I pay what I quote for the average run of prime furs. I pay more than I quote for extra fine skins. Send your name and address on a postal card to

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P. O. Box F-2, East Liberty, Ohio.

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A trial shipment will convince you that we pay the highest prices for Furs, Hides, Pelts, etc. We remit you the day your shipment is received and charge no commission.

*Write today for free Trapper's Guide No. 20, catalog of trappers' supplies and price list*

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**Highest Market Prices Paid**

for hides and prompt returns made same day shipment arrives. Write for price list and shipping tags. Address

PACIFIC HIDE & FUR DEPOT.
Joseph Thiebes and C. T. Symmes,
1101-9 Railroad Ave., Spokane, Wash.

# Farmers to Blame?

To the Editor: Instead of the shortage of labor so much complained of by the farmers, is it not a matter of distribution of labor? Our state labor commissioner, also the United States secretary of labor, say there is no shortage of labor. The federal employment bureau at Portland says the shipyards are turning men away every day. It seems to me the farmers are somewhat to blame for this faulty distribution of labor.

I left my homestead and went into the Willamette valley to work during seeding time last fall. I worked 10 hours in the field, one hour at chores in the morning and one-half hour in the evening, a total of 11 1-2 hours, for $1.50 per day, or about 13 cents per hour. After coming in from a fair day's labor you would naturally be sweaty and rusty, and with no facilities for a bath you are only fit to sleep in the barn and fight fleas and be disturbed by the noise of the stock. Now, take the factory hand who works 8 or 10 hours per day, at from 25 cents to 75 cents per hour and up, and lives in a home with modern conveniences, with access to the public library, lectures, music and entertainments. Which would you prefer, Mr. Farmer, if you had to work for wages? You would rather buy a Ford than install a bath tub. You would rather build a silo than build a sleeping room for your hired hand. You do not try to make his work convenient or his leisure time pleasant and inviting.

Would say in fairness to the party referred to above that, while I have but one hand, the work I was doing was as much as a team could stand. Also, he paid the going wage, which is not sufficient for even my small family of two. I would like to stay in the country to help sow and reap enough to feed the starving world, but I, too, prefer more natural and ideal conditoins under which to labor.

C. C. MURPHY.

Goldson, Ore.

# Want Ads

## HELP WANTED—MALE 3

STRIKE STILL ON IN PAPER MILLS AT Camas, Washington, but running smoothly and without trouble; all inside positions now filled and over 700 men on payroll; can use 25 men on outside work on construction and in yard; $3.10 for 9 hours; permanent work; married men with families preferred; good opportunity since vacancies on inside work are filled from outside crews; rubber shoes and raincoats supplied to pulp handlers in wet weather. Camas on main line of S., P. & S. railroad, about 24 miles from Portland and about 15 miles from Vancouver, Washington. Jitney service to Vancouver; half hour car service Vancouver to Portland. Two boat lines Camas to Portland; fare on one 25 cents; other 50 cents. Cut out this "ad" and apply in person at Camas office or Room 509 Oregon bldg., Portland.

WANTED—ACTIVE MEN WITH FARMER acquaintances, to sell Pipeless Furnaces; splendid line; good proposition to offer. Richardson & Boynton Co., 171 W. Lake st., Chicago, Ill.

## SITUATION WANTED—Male 21

GOOD, EXPERIENCED FARM HAND; NOT afraid of hard work; not subject to draft; no bad habits; well recommended. Address Wm. Schwab, Owyhee, Nevada.

HAVE SMALL FARM I CAN RENT; DESIRE work; farm hand, clerk or mechanic. Too old to be drafted. George E. Bass, Worley, Idaho.

## EDUCATIONAL 45

BEHNKE-WALKER, PORTLAND, NORTHwest's largest, finest business college, can not supply half the calls for trained young men, women. Enroll now. Free success catalog. Positions secured.

## MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

Send us postcard asking for our new, illustrated catalog No. 27, of sash, doors, finish, paints, builders' hardware, plaster board, roofing, etc., sent free on request.

Cottage front doors .....$2.75
5x panel doors ... ... .....$1.80
2 light windows ... .....$1.24
Prepared roofing, ....$1.35, $1.70 and $2.10
Clear cedar lap siding, per 1000 ft. ....$8.00
Short flooring and ceiling .....$20.00

The largest factory in the west selling direct to the consumer. We sell any one, ship anywhere, and guarantee safe delivery.

O. B. WILLIAMS CO.
1943 FIRST AVE SO. SEATTLE, WASH.

BUILDING MATERIALS AT WHOLESALE prices — Doors, windows, roofing paper, porch columns, plaster boards. All building materials shipped promptly. Send for our complete illustrated catalogue; gives you lowest net prices. P. A. ROVIG CO., 2229 First ave., So., Seattle, Wash.

FOR SALE—GENERAL MDSE. STORE, dock, 7 acres land, 800 ft. water frontage, warehouses, 2 barns. Located on Puget Sound between Seattle and Tacoma. This business netted me over $2000 in 1917. $9000 will handle this. Address A-10 Washington Farmer, Seattle, Wash.

FARMERS——WRITE FOR ELEVATOR plans and prices at once. Save 20 per cent of construction cost. Capacities, 6000 bushels and up. Gem Elevator Co., Bonners Ferry, Idaho.

**Want Ad Rates 30c Per Line**

Want ads are run at this rate in The Washington Farmer and i t s associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

# Want Ads

**Send for card giving lower rates for ads running one month or longer.**

**How to Figure Cost of Ads**

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

## MISCELLANEOUS—FOR SALE 60 Continued.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

TRAP COYOTES — IF YOU WANT TO learn of a sure system for trapping coyotes write me for information. I have it. C. L. Willis, Dillard, Ore.

## MISCELLANEOUS WANTED 63

WANTED—ALIVE BELGIAN HARES; also poultry, eggs and dressed meat. Commercial Creamery Company, Spokane, Wash.

## FARM LIGHT PLANTS. 73

WARNERLITE ELEC. LIGHT PLANTS absolutely guaranteed. Thousands used by satisfied farmers. Live agents wanted. Warnerlite Co., Temple Court bldg., Spokane.

## MACHINERY FOR SALE. 93

FOR FARM LUMBERING USE "AMERICAN" PORTABLE SAWMILLS. Carried in Stock by HIGGINS MACHINERY COMPANY, 312 1st ave. So., Seattle. Write for Catalog.

MOTORS, GEARS, BEARINGS, WHEELS, axles; we wreck all makes of cars and sell their parts at half price. Auto Wrecking Co., 89-91-93 N. Broadway, Portland, Ore

## STOVE REPAIRING 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

## PATENTS 150

WRITE FOR HOW TO OBTAIN A PATent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

## POULTRY 174



BABY CHICKS.

White Leghorn chicks, $14 per 100.
Barred Rock and Rhode Island Red chicks, $18 per 100.

HATCHING EGGS.

$1.50 per setting of 15 guaranteed.

INCUBATORS AND BROODER STOVES.

We are agents for the famous Queen incubators and brooder stoves. Also have a line of hot air, hard wood, first-class hatchers at ½ their real value. Also cheaper machines; 70 eggs, $5, and 120 eggs, $7.50

CUSTOM HATCHING.

We do custom hatching, 3c per egg. Catalog free.
QUEEN HATCHERY, 89 Pike, Seattle, Wn.

BABY CHICKS—LEADING VARIETIES. We guarantee safe arrival and full count; strong, vigorous chicks from the finest flocks of free range stock in this country. 1918 price list and care of baby chicks if you mention this paper. Lashner's Hatchery, Petaluma, Calif.

BABY CHICKS.

Famous Carnation White Leghorn; vigorous, early maturing, heavy winter layers; also breeding stock. E. W. Raush, Carnation Poultry Ranch, Kent, Wash.

PETALUMA HATCHERY—CAN SHIP DAYold chicks to points reached in 3 days. Why not have the best? We challenge the hen. Free circular. L. W. Clark, Petaluma, Cal.

FOR SALE—POULTRY PLANT; EVERYthing new; 18 a.; good location; 1 a. big sale; house 1200 hens; no lice. Good reasons. Write Levi Balmer, Salem, Ore.

WHITE WYANDOTTES, BRED FROM Martin's famous bred-to-lay Dorcas line fowls. Eggs, $2.25 and $3.50 per 15. Thos. Thorson, Cashmere, Wash.

FOR SALE—MAMMOTH BRONZE TURkeys. Won five prizes at Wash. State Fair. Toms, $7 and $10; hens, $5. H. T. Cutler, Parker, Wash.

S. C. BLUE ANDALUSIANS; GREAT LAYers. Eggs, $2 per setting; fine ckls., $2 to $5. Mrs. C. W. Armstrong, Freewater, Ore.

FOR SALE—PUREBRED BARRED ROCK cockerels, Barronett strain; choicest birds, $5. August Anderson, R. No. 1, Pullman, Wn.

TRAP-NESTED S. C. W. LEGHORNS—Hens, pullets and hatching eggs for sale. H. C. Deitz, Box 337, Hood River, Ore.

TRAPNESTED WHITE LEGHORNS AND Barred Rocks. Eggs, $1.50 per 15; $8 per 100. Mrs. W. M. Roberts, Elmira, Ore.

RANCH RAISED WHITE WYANDOTTES. Good vigorous birds, eggs and stock for sale. Jas. A. Hills, Jonathan, Wash.

FOR SALE—BARRED PLYMOUTH ROCK chickens; best in the country. Mrs. C. H. Harris, Nampa, Idaho, R. D. 1.

WANTED—MAMMOTH PEKIN DRAKE. Leonard Ziniker, Creswell, Oregon.

## LIVE STOCK 177

CALVES—CALVES—CALVES—CALVES

I am in a position to supply you with all the young calves that you can use, and this season I am able to offer you some very fine stock, especially in the dairy line. I will have calves for sale from cows that produce as high as 70 lbs. of milk daily. Send for my price list at once as these calves are ready for delivery from this date on.

SMITH, "THE CALF MAN,"
Tillamook, Oregon.

GET A SON OF STADACONA TRIUMPH, second prize boar Spokane, 1916, and sire of first prize and junior champion, 1917. We are offering a son, farrowed March 15, weighing now, in breeding condition, 250 pounds. A splendid specimen of the Duroc breed. Registered and crated, $50, or 20c a pound. Can you use him? Garfield Stock Farm, Registered Holsteins, Duroc Swine, Garfield, Wash.

S. C. RHODE ISLAND RED AND WHITE Leghorns; best western prize winning stock, crossed with my own trap-nested birds; cocks and cockerels, $2.50 to $5; a few hens and pullets, $1.25 and up; eggs, $1.50 for 15; $7 100; no chicks. F. H. Volland, Kennewick, Wash.

WE OFFER IN SPOKANE SHORTHORN sale, Feb. 23, a milking Shorthorn bull calf—with high milk records—also 5 Shorthorn heifers, bred to our dairy Shorthorn bull. Write for pedigrees and description. A. V. Bradrick & Son, Palouse, Wash.

FOR SALE.

A choice lot of pure bred Shire stallions, coming two years old; also pure bred yearling Shorthorn bulls. Address
WILSON RANCH, ROCKLYN, WASH.

BERKSHIRE BRED SOWS AND GILTS, March, April and May farrow. Write for special price list today. SILVER BIRCH FARMS, Newport, Wash.

PUREBRED GUERNSEY BULL, "Moses of Chicona," No. 18739. Near 7 years old; weight about 1700 lbs. H. D. Phillips, Kelso, Wash.

JERSEY CATTLE—BULLS, COWS AND calves are included in private sale list now ready. SILVER BIRCH FARMS, Newport, Wash.

POLAND-CHINAS; BIG TYPE; SPRING pigs by Young Chief N. 79349, from good, rangy sows. James A. Hills, Jonathan, Wn.

WANTED—15 TO 20 HEAD REAL SHETland ponies, mostly mares; none over 5 years old. Chas. Kemsley, Lublett, Idaho.

FOR SALE—25 REGISTERED RED, white and roan Shorthorn bull calves and yearlings. Wm. Mulhall, Fenn, Idaho.

ANGORA BUCK FOR SALE.
H. O. Hansen, R. F. D. No. 1, Box 135, Colville, Wash.

## HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

## BUSINESS OPPORTUNITIES 516

$6500 BUYS A WELL-EQUIPPED DAIRY plant and business in a beautiful college town in So. Calif. Brings in about $400 per mo. For full particulars and terms write R. F. D. 1, Bx. 86, Yelm, Wash.

## RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

## TAXIDERMISTS 426

WE MOUNT ANYTHING. FURS TANNED and made into furs and robes. Raw furs bought. Mohr, 82 Bernard, Spokane.

## PLUMBING and HEATING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

## SEEDS 620



IF YOU HAVE ACCLIMATED SEED TO sell, it will pay you to advertise it in this classification. If you want to buy seed adapted to western soil and climate watch what is offered in this department.

## SEEDS 620 Continued.

PEAS — KAUFMAN'S PEDIGREED BLUE Bells. Best seed on the Coast. Send for circulars. Hill-selected seed potatoes, Earliest of All, Early Rose, American Wonder. Duroc hogs. 60 a. dairy land for sale. $75 month and home for farm hand. W. H. Kaufman, Bellingham, Wn.

VETCH, CLOVER AND FIELD SEEDS. We carry a complete line of grasses, wheat, oats and other seeds too numerous to mention. Our prices are right. Will be glad to send samples and quote prices.
CORVALLIS FLOURING MILLS.
CORVALLIS, ORE.

SEEDS—THE KIND THAT GROW. You can't keep them in the ground. Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.
Portland, Oregon.

RED AND ALSIKE CLOVER from the heart of the Willamette valley; also field corn and all kinds field and garden seeds. Drop us a postal for samples and prices.
MURPHY'S SEED STORE, ALBANY, ORE.

WE SPECIALIZE IN TIMOTHY, ALFALfa, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Ida.

VETCH, CLOVER, TIMOTHY. Choice recleaned seeds at direct to you prices. RHOTEN FARM, Salem, Oregon.

HIGHEST QUALITY RED AND ALSIKE clover, also vetch seed. Prices right. M. Senders & Co., Albany, Ore.

## NURSERY STOCK 621

EVERBEARING STRAWBERRIES ARE mortgage lifters. We have plants, strong and thrifty. Send for price list. F. I. Moffett, Ellensburg, Wash.

PROGRESSIVE STRAWBERRY PLANTS, bear first year set, from July to November. $2 per hundred; $1.50 for more. G. F. Thayer, Payette, Idaho.

## FARM LANDS—FOR SALE 651

BUY WHERE THEY RAISE THE PRIZE CROPS
IN SNOHOMISH COUNTY.

40-acre farms, $25 per acre. Ten yearly payments, 6 per cent interest. Visit our office and see the great exhibit of PRIZEWINNING vegetables, fruits, grains, alfalfa and other grasses raised on the adjoining farms. They prove our claims that this is the best land in WESTERN WASHINGTON.

Paved roads. Four passenger trains a day. Graded school, cannery, creamery, cheese factory, plenty of work for the laboring man in the mills and camps, where 75 settlers are all boosters. DON'T LOSE A DAY in asking for our illustrated literature.

BROWNELL LAND CO.
904 THIRD AVE., SEATTLE, WASH.

YOUR CHANCE IS IN CANADA—RICH lands and business opportunities offer you independence: Farm lands, $11 to $30 acre; irrigated lands, $35 to $50; twenty years to pay; $2000 loan in improvements, or ready made farms. Loan of live stock; taxes average under twenty cents an acre; no taxes on improvements, personal property, or live stock. Good markets, churches, schools, roads, telephones; excellent climate—crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Allan Cameron, general superintendent land branch, Canadian Pacific Ry., 30 Ninth ave., Calgary, Alberta.

GOING — IRRIGATED ALFALFA AND stock ranch of 111 acres; gross income $6000; situated on the bank of the Yakima river; ideal for all kinds of stock; properly cultivated, will raise 100 bu. corn and 10 tons of potatoes to the acre. Horses, cows, registered $1000 Holstein bull, Berkshire hogs, chickens, farm implements, etc.; eight-room house, barn, silo, hog and chicken houses. This ranch is second to none in the Yakima valley. Reason for selling, old age. Price for all $28,000; one-half cash. Address B 7, care Washington Farmer, Spokane.

JORDAN VALLEY PROJECT—WHY NOT investigate this new project? It is just in the making, and opportunities of this character are becoming more scarce each year. We will explain it and send literature on request. There is plenty of development work and an opportunity for those who want to make payments in this manner. Our autos will take you from Boise to look the project over. HARLEY J. HOOKER, Shaw Bldg., Boise, Idaho.

FOR SALE BY OWNER—½ SECTION OF choice improved stock, hay and grain farm, almost level; one modern dairy barn and one horse barn; two houses; 2 wells, granary, implement shed and several small buildings; stream running through for stock water; good markets for everything; county seat and railroad station; high school 1¼ miles; grade school ¼ mile. $65 per acre; one-third cash, easy terms for balance. R. D. Thomas, Cascade, Idaho.

ONE HUNDRED-ACRE ALFALFA RANCH; irrigated from artesian well; earliest place in state; on Columbia river; fair buildings; 2000 feet galvanized flume; good terms to right man. If you have not ability, money and lots of ambition don't bother me. Apply D. M. Adams, R. F. D. No. 1, Spokane, Wash. Tel. Main 828J2.

FOR SALE BY OWNER—GOOD DAIRY dairy ranch in Lincoln county, Ore. Dyked, improved, with or without stock and equipment; close to town; about 150 acres. For full information address Owner, B 1, Oregon Farmer, Portland, Ore.

IN THE FAMOUS OKANOGAN VALLEY; an ideal sheep ranch; a big hay ranch; three bargains under irrigation project; severeal good grain ranches; dairy, fruit and alfalfa lands; excellent water, timber, range and climate. J. W. Graham, Tonasket, Wash.

FOR SALE—2700 ACRES OF FINE FARM land in one body; several large springs of good water make it fine for stock farm; two miles from R. R. sta. Will sell for best offer. Mrs. W. W. Green, Georgetown, Ga.

FOR SALE—2700 ACRES OF FINE FARM land in one body; several large springs of good water make it fine for stock farm; two miles from R. R. sta. Will sell for best offer. Mrs. W. W. Green, Georgetown, Ga.

HEAD FOR THE HEADWATERS OF the old Missouri; splendid grain and stock ranches. For information about climate and soil write Chamber of Commerce, Three Forks, Montana.

ALFALFA, PLOW LANDS, HOP YARDS, orchards, business investments. Lusk Land Co., North Yakima, Wash.

# MAXWELL

## Most Miles per Gallon Most Miles on Tires

## Horse-Pace Family!—You Have Come to the Turning Point

**Business-Farmer—to be longer without a motor car may affect the whole of your success, and the whole of your family's future.**

Have you noticed lately that somehow the good chances that are missed by you are seized by others—others who have automobiles?

Have you noticed that, though some men you know of turn every hour and minute into profit, *your* work goes slow, *your* time is spent in fretting against delays—and that you are getting into the habit of letting many a good chance pass because you "wouldn't be able to get there in time?"

* * *

Have you noticed that your family—your girls, your boys, your wife—are steadily, steadily getting out of touch with those they ought to know? Have you realized that the families which surround you—automobile families—have a circle of friends and interests, and a radius of easy visits, far larger than your family? Open your eyes.

Have you noticed how many times you and your family have been placed under obligation by neighbors who have cars? Aren't you tired of asking favors?

* * *

Your environment is moving at automobile pace. You and your family are limited to horse-pace and horse-radius. And in the next few months the paths of automobile families and horse-pace families will separate still more sharply. Only motor-pace will do for the conditions in which this nation is now doing its work.

You stand at the turning point.

* * *

Motor-car service now costs less than horse service for all the work that a motor car can do.

And of all motor cars of equal service the one that costs least to run and least to own is the Maxwell.

Investigate this while these cars of greatest efficiency are still procurable. Write us a letter today.

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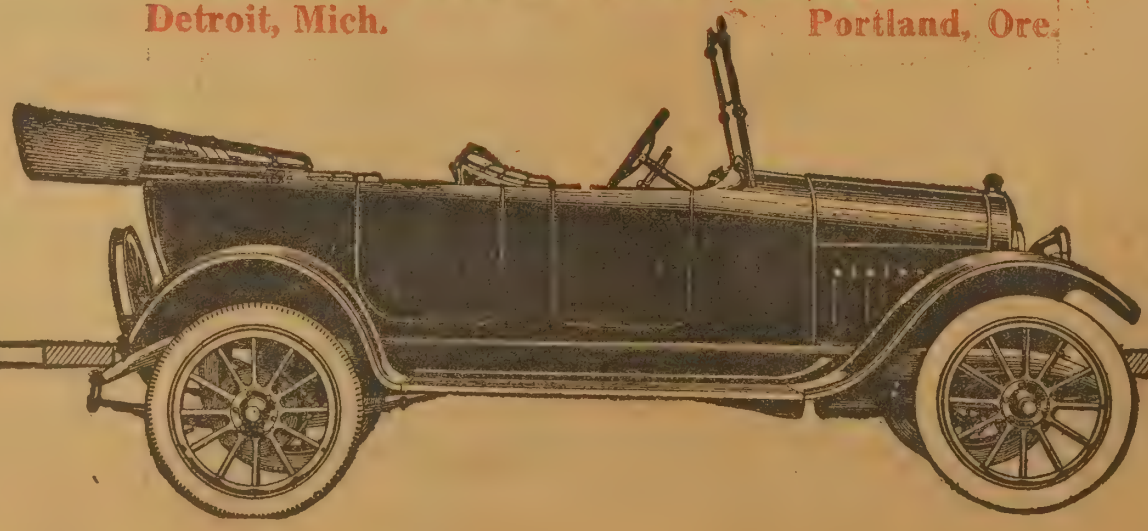
*Touring Car $745; Roadster $745; Touring Car with Winter Top $855*
*Roadster with Winter Top $830; Berline $1095; Sedan with Wire Wheels $1195. F.O.B. Detroit*

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***Write Today for Catalog N. W.***

**Maxwell Motor Sales Corporation**

**Detroit, Mich.** **Portland, Ore.**



# THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XLI. NO. 8. FEBRUARY 21, 1918. ** WEEKLY.


# School Ma'ams and College Girls Farm It

## *They Hoe Beans, Harvest Beans, Dig Potatoes and Buy Liberty Bonds in the Fall!*

FOUR young schoolma'ams gazed on a sun-baked stubble field near Waitsburg, Washington, one day last spring, and pondered. It was nearing vacation time.

"Perfectly grand spot if one were a writer in search of local color," remarked one.

"Yes, one likely would take on a thick coat of it," agreed another.

"The question before the house is: Are we willing to try the bean business?" put in a third.

"To a man!" was the response.

And thereupon the "Ho-Bean-Hoe" syndicate was organized. Its membership was limited to those present—Miss Gladys Persels, Miss Pauline Anderson, Miss Anne Goff and Miss Evadna Kuntzell, all teachers in the Waitsburg high school. The primary object of the syndicate was to provide profitable employment for its members during the vacation period and bean growing had been suggested.

Beans as a desirable crop on summerfallow wheat lands had been discussed by farmers in the neighborhood. Some regarded it with favor; others were doubtful. Mac Taylor had 15 acres four miles from town which he offered to let the four teachers use free of charge, as a bean experimental farm. The young women accepted the offer. Other fields were planted, but interest naturally centered on the Ho-Bean-Hoe outfit.

Plowing and planting time came before school was out for the summer. Mr. Taylor was willing to do the plowing, or have his man do it, but the planting had to be taken care of some way. The girls realized it would be expensive business to hire a man for this work, so they made a deal with

Continued on page fifteen.









## *Woman and the Labor Crisis*

**The participation of women in the work of the farm, the actual toil with teams and farm implements is not a laughing matter. There has never arisen a crisis in which women did not come forth loyally and capably to play their just part. It is well to smile at the stories of the women and girls in these photographs, but back of them is a positive assurance that, come what may, the women of America will do their full share, whatever that share may be, toward the winning of the war. Above are photographs of the "Ho-Bean-Hoe" girls who grew beans at Waitsburg. At the left is a group of state college girls who arose to the occasion and harvested a crop of potatoes when "man power" was not available.**

**But it must not be forgotten that the woman on the farm has already a full share of hard labor to do. To expect her to venture into the field to take the place of the young man who has gone to the front is, in most cases, injudicious. In the house and poultry yard and dairy she renders service as real as that which she might perform in the field. And not only that, but there she finds, and always has found, all the work that one individual can perform. The farm woman is not an idler, waiting to be put into the field. She is already doing a share equal to the man's share, and in all too many cases is doing more than her fair proportion.**

# SOMETHING GOOD IN STORE FOR OUR SUBSCRIBERS!

In our next week's issue (Feb. 28th) will begin a serial story of gripping interest to every one of our readers.



A strong, clean story of outdoor adventure, full of exciting and out-of-the-ordinary incidents.

## THE TRAPPERS OF THE OZARKS

HERE'S a corking good tale--one which will certainly furnish a lot of keen enjoyment to red blooded men, women, boys and girls--any and all, in fact--who like a tale of real, up-and-doing outdoor adventure.

Chapter by chapter, it beguiles you farther and farther away from the last white settlement and deeper into the uncharted wilderness, west of the Mississippi as it was a hundred years ago.

The two young trappers reach the Ozarks, but hardly are they settled in camp when they are discovered by hostile Indians. From that time on hair-raising things begin to happen--and keep happening.

Just let this story get hold of you and we predict you will not miss a chapter of it if you can help it.

**THE OPENING CHAPTERS WILL APPEAR IN THIS PAPER NEXT WEEK. YOU'LL MISS A REAL TREAT IF YOU MISS THIS STORY**

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 8 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF February 21, 1918

# Why Deny Market Price to Farmers Alone?

## *President Schurman of Cornell University Declares That "We Are Confronted With Danger of Starvation in the Next Twelve Months."*

Warning that the nation "is confronted with the danger of starvation in the next 12 months," and that "the energies of our farmers are paralyzed by price fixing and the fear of price fixing," President Jacob Gould Schurman of Cornell university spoke at the farmers' week program at Cornell university last week, on "The Food Crisis and the Farmer."

President Schurman deplored attempts to regulate the prices of farm products, but urged legislation to end profiteering in the sale of foodstuffs. He warned that the nation is using up its grain reserves and said he believed the stage had been reached where compulsion should supersede appeals to save food. He appealed to President Wilson and congress to give farmers a fair chance to stimulate agricultural production.

President Schurman's address, in part, follows:

"Of all the great problems of this colossal world war the food problem is now the most important. Man power can be raised by conscription up to the point of exhaustion. The allied lines from the North sea to Switzerland are piled high with munitions which the output of French, British and American factories is constantly augmenting. But everywhere the supply of food is limited, and beyond a very narrow margin you see the edge of an inferno of starving nations. Yet no problem of the war is so much misunderstood. The simple question is this: Can we keep our own and our allied soldiers and civil population from starvation? It is not all a question of price. It is solely a question of supply.

"Legislation can surely put a stop to profiteering in the sale of foodstuffs. If milk goes up a cent a quart and children die in New York city in consequence, ought there not to be a law to stop it?

"But why should the food producer be singled out for the role of a public benevolent institution? Why not also the producers of unessential commodities, of amenities and luxuries? Why deny the farmer alone the market price of his labor and skill? Why select him first to support the poor of our great cities? He certainly can not afford it. One-third of our farmers are tenants and own little or nothing in the world. And of those who own the farms they operate only 28 per cent have them free of mortgage.

Why attempt to regulate the prices of farm products? Like other commodities, they will not be produced at all unless the producer gets a price sufficient to cover the cost of production and a fair profit. The people who demand the regulation of food prices really want low prices. But low prices for anything whatever in war time are utterly impossible. And foodstuffs have not gone up more than other commodities.

"I repeat and reiterate that our food problem is one of enlarged production and augmented supply. Price fixing leads to the opposite results. We have tried that experiment with coal producers, and the result is heatless Mondays. We have tried that experiment with the railway companies, and the result is a paralysis of transportation. We have tried that experiment with wheat and we have sent the price of corn above wheat, compelling the farmer to feed wheat to his poultry and animals and discouraging him in the planting of winter wheat.

"I believe it no exaggeration to say that we are confronted with the danger of starvation in the next 12 months. The energies of our farmers are paralyzed by price fixing and the fear of price fixing. Does the government want to stimulate agricultural production? Then strike the shackles off the farmer and leave him as free as other producers. In the name of common sense, of justice and of patriotism I make this appeal to the president and congress. Food will win the war. Give the farmers a fair chance to win it."

Jacob Gould Schurman.



**President Schurman comes of a New York Dutch family; was born on Prince Edward island in 1854; graduated from the University of London in 1877, continued his studies in Paris and University of Edinburgh, as well as the Universities of Germany and Italy. He became a professor in Cornell university in 1886 and has been president of that institution since 1892. He was United States minister to Greece and Montenegro in 1913. He was a member of the Philippine commission and joint author of an extended report of conditions in those islands.**

Even those who do not agree with the remarkable statement made by President Schurman of Cornell university as to the danger of starvation in this country within the next twelve months, will admit the increasing seriousness of the food production problem.

All this makes it plainer than ever that the ablest man in the country should be at the head of the food production campaign, a National War-Time Food Production Administrator.

The country is in great need of wise counsel, of a master executive, of one who shall lift this whole perplexing problem out of the routine of bureaucratic administration and who shall call to his aid men of like caliber in every state, and in every county of every state, in putting the food production campaign on its feet.

The survey made by the Farmer demonstrates the patriotic willingness of producers in the Pacific northwest to do their part, but they stand in need of the most efficient war-time cooperation, especially in the matter of marketing their products when raised.

# Wheat Men Will Be Represented

**The delegation of men interested in wheat production and marketing in the northwest, who went to Washington recently to take the matter of the 1918 price up with the federal authorities, are about to "bring home the bacon." At this writing they have apparently secured the cooperation of Herbert C. Hoover, national food administrator, and have secured his promise that the wheat growers shall be represented on the board that fixes the price of the wheat crop. Further conferences are booked for this week when details will be worked out.**

Mr. Hoover has made it plain to the northwestern delegation that the establishment of a primary market in the northwest depends upon the shipping facilities for transportation by water. Because of this the conferences at Washington are not only with Mr. Hoover, but with the head of the shipping board. One of the big things to be discovered, therefore, is: What boat tonnage can be made available for handling the 1918 crop? This is what the conferences are working out this week.

It is clear that Commissioner Hoover is anxious to do all he can to influence large wheat production and to facilitate the shipment of the crop when it is raised.

The two big questions involved, and which the farmers are deeply concerned in are: (1) What price shall the government guarantee for the 1918 wheat crop, and (2) at what markets shall that price be paid?

A clearer understanding of the problem can be had from reading the law. Section 14 of the food control act provides:

> Whenever the president shall find that an emergency exists requiring stimulation of the production of wheat and that it is essential that producers of wheat produced within the United States shall have the benefits of the guaranty provided for in this section, he is authorized from time to time, seasonably and as far in advance of seeding time as practicable, to determine and fix and to give public notice of what, under specified conditions is a reasonable guaranteed price for wheat, in order to assure such producers a reasonable profit.
>
> The president shall thereupon fix such guaranteed price for each of the official grain standards for wheat as established under the United States grain standards.
>
> The president shall from time to time establish and promulgate such regulations as he shall deem wise in connection with such guaran-

(Continued on page thirty.)

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## STOCK CONFERENCE ON

### Great Session Booked This Week

This morning (February 21) there begins in Spokane the annual convention of the Northwest Live Stock association and it promises to be one of the notable gatherings of the year. Indications are for a large attendance, and an excellent program is ready. Many noted speakers will appear. The convention will continue for two days, with a dinner Friday evening. On Saturday, February 23, the annual sale of purebred Shorthorns will be held at the Spokane Union stockyards under the auspices of the Northwest Shorthorn Breeders' association. About 100 head of animals will be offered. A similar sale, with about 75 head, occurs at the Portland Union stockyards on Monday, February 25.

# Self-Feeder for Fattening Hogs

The use of self-feeders for fattening hogs is gaining in popularity, says Farmers' Bulletin 906 of the United States department of agriculture. A self-feeder is simply a device by means of which a supply of grain or other feed is kept constantly available to the hogs, in order that they may always satisfy the craving of their appetites with respect to the kind and the amount of feed.

Hogs in the wild state were self-fed animals, living upon such feeds as would satisfy their appetites, and under domestication they seem to thrive best when fed by the same principle. The marked success of the self-feeding system of hog raising is largely due to the fact that they may eat an abundance of those feeds which will nourish them to the best advantage.

**Requirements of Self-Feeder.**

The self-feeder should be designed primarily to keep an available supply of grain constantly before the hogs and at the same time protect the contents against waste due to wind and rain.

A self-feeder consists of a hopper to hold the feed and a trough below it into which the grain flows as the pigs eat it. The hopper is made of such size that it will contain several days' supply of feed, and the inside walls are made as smooth as possible in order not to obstruct the flow of grain to the trough. At the bottom of the hopper, leading into the feed trough, an adjustable slide should be placed to control the rapidity of the grain flow. This slide usually takes the form of a board running lengthwise of the feeder and fastened to the hopper by wing bolts. A certain amount of flexibility in this slide will aid materially in preventing clogging, for the constant rooting of the pigs against such a board will cause the contents to flow down more freely.

Best results are obtained when the self-feeder can be placed under cover, but as this is nearly always impossible the feeder must be constructed to protect the contents from the weather. This is best accomplished by covering the end of the trough to keep out the wind and by projecting the roof to drain off the rain. Many variations are possible. The Ohio self-feeder is made with a hinged cover which fits over the feed trough and may be closed when the feeder is not in use.

The self-feeder should be built upon a pair of skids or runners to prevent rotting of the floor and to facilitate moving. If strongly constructed this method of transportation will be much easier and quicker than loading upon a wagon or sled. When it is desirable to feed two or more concentrates separately in the same self-feeder a partition may easily be placed in the hopper at any distance from one end. By using the best grade of lumber and applying yearly a coat of paint a well-constructed self-feeder will give service through a number of years.

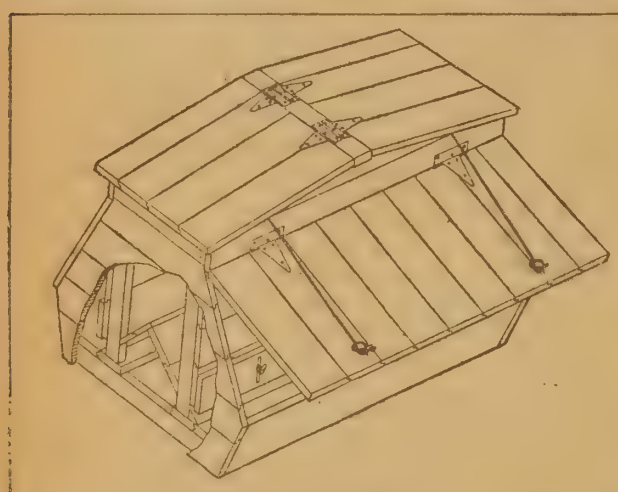
**Materials Necessary for Ohio Double Self-Feeder.**

| | | Board feet. |
|---|---|---|
| 24 pieces | ⅞ inch by 8-inch shiplap, 6 feet long | 96 |
| 20 pieces | ⅞ inch by 8-inch shiplap, 2 feet 10 inches long | 38 |
| 10 pieces | ⅞ inch by 8-inch shiplap, 3 feet long | 20 |
| 10 pieces | ⅞ inch by 8-inch shiplap, 4 feet 6 inches long | 30 |
| 12 pieces | ⅞ inch by 8-inch shiplap, 2 feet long | 16 |
| 8 pieces | 2 inch by 4-inch framing material, 3 feet 6 inches long | 19 |
| 2 pieces | 2 inch by 4-inch framing material, 4 feet long | 6 |
| 2 pieces | 2 inch by 2-inch framing material, 4 feet long | 3 |
| 6 pieces | 2 inch by 2 inch framing material, 1 foot 6 inches long | 6 |
| 2 pieces | 2 inch by 8 inch for trough, 6 feet long | 16 |
| 4 pieces | 1½ inch or 2 inch by 8-inch for trough, 6 feet long | 32 |
| Total | | 286 |

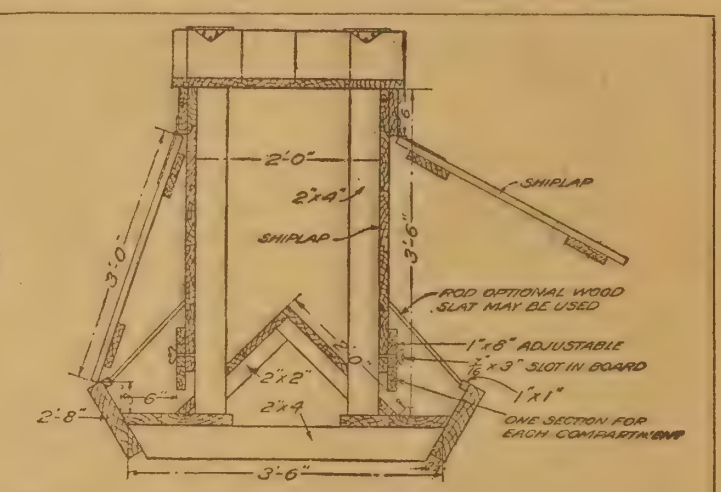
8 pieces 8 inch T hinges.
4 pieces 6 inch T hinges.
12 pieces ⅜ inch by 2½-inch bolt, with thumbscrew.
6 pounds 8d nails.
3 pounds 20d nails.
20 square feet prepared roofing.

**Capacity of the Various Sized Feeders of the Ohio Type.**

| | Hogs accommodated. |
|---|---|
| 6 feet long, 15 bushels shelled corn, 400 pounds middlings, 315 pounds tankage | 50 |
| 8 feet long, 20 bushels shelled corn, 540 pounds middlings, 420 pounds tankage | 75 |
| 10 feet long, 25 bushels shelled corn, 670 pounds middlings, 525 pounds tankage | 100 |



The Ohio self-feeder.




The Ohio self-feeder, end view with end sliding boards removed.

# Chemistry Work

## One Department of State College

The Washington Farmer is glad to publish a statement from C. C. Todd, head of the department of chemistry, state college, Pullman, Wash., regarding the service which they are glad to render to the people of the state. Professor Todd writes that the department of chemistry of the state college of Washingtn maintains a special analyst to serve the taxpayers of the state, adding:

"We are at all times willing to make chemical analyses free of charge on samples of material sent in by citizens of the state for examination. We discourage the sending in of samples from mere curiosity, and attempt to make this work a real service by analyzing such materials as would tend to the discovery and development of new resources of the state of Washington. We are glad also to take such cases as tend toward the guarding and conservation of the health of the people. To this end, also, we examine a very large number of samples of water to determine what water is safe for domestic use. We have analyzed a number of samples for municipalities, as well as for private citizens.

"We receive a great many samples of water sent in small containers—many of them with ordinary cork stoppers. It is impossible for us to make a sanitary chemical analysis on such samples, and where analyses are desired it is always best for the patron to make inquiry of the department of chemistry as to the best means of shipping the water. We have especially prepared glass stoppered containers for collection of such samples, and with them we send out complete directions for collecting the samples, and a certificate for making the return.

"We do not wish in any way to seem to compete with commercial analyists of the state and decline to receive samples from business firms where the analyses would be solely for pecuniary advantage to the firm."




Potatoes, as this is written, are beginning to move from the Yakima valley. The price is about $20 a ton.

L. G. Terry of Sunnyside has purchased a fine young registered Holstein bull from the H. C. Davis herd of Granger. This will make a splendid addition to Mr. Terry's growing herd of Holsteins. He has four heifers from Snell brothers' herd at Puyallup. In addition to Holstein cattle Mr. Terry is breeding Duroc Jersey hogs. Recently he took four to market that weighed 1330 pounds, one of them tipping the beam at 590.

In line with many other farmers of the Northwest, William Todd & Sons, Yakima Holstein breeders, have reached the conclusion that machinery must take the place of man power during the next few years. As a result they are installing a milking machine in their dairy barn and hope to have it in operation shortly. Alex. Todd says the purchase of the machine is due directly to uncertainty of securing needed help during the coming season and the consequent necessity of meeting changing conditions.

"The wire worm pest is going to destroy the corn industry of this state unless some remedy is found to check their ravages," said G. W. Eastman of Yakima recently. "My losses from wire worms have been so great that I have been forced out of the corn business." Mr. Eastman recommends the use of a home-made drag for corn which is just poking its sprouts through the soil. "The regulation drag is too heavy and the teeth too large," he said. "I made a drag out of two by fours and used 60 penny spikes. This seemed to be just right. It killed the weeds, but did not injure the corn plants."

Alfalfa meal mills of Washington are experiencing keen demand for their product. The alfalfa meal business has been rather an uncertain undertaking in this state, and there are several skeletons of one-time thriving institutions scattered throughout the alfalfa-growing districts. The trouble, the millers say, comes as a result of the difficulty experienced in manufacturing. Hay when wet is exceedingly difficult to grind, and in spite of the most constant vigilance, numerous breakdowns are experienced from time to time during the day's run. This winter the mills have been swamped with orders, especially from western Washington. They are doing their utmost to fill them.

The bean situation seems to be looking up. While there is no pronounced movement there are inquiries which are somewhat encouraging. J. N. Price, agriculturist for Yakima county, received notice January 1 from the state office of farm markets notifying him that the Charles H. Lilly company of Seattle would handle white beans at 10 cents, on board cars in Yakima valley or at warehouses where carlots could be assembled. Up to this time the bean situation has been most depressing. This has been true not only of the Yakima valley, but of other sections of the northwest as well. In Yakima county approximately 2400 acres were grown, producing a crop estimated at 600 tons. In years gone by Yakima produced but few beans. The quality is well up to standard, and it is believed that they will yet command a ready market at a profitable price. Dealers say the act designed to prohibit hoarding of foodstuffs has prevented their buying any great quantity at a time. R. W. F.

# Raised Beans

## And Made $1500 During Vacation

**By D. C. SANDERSON.**

What professional men can accomplish in adding to food production is well illustrated in Milton, Ore. A committee for encouraging food production, consisting of Tassie Stewart, chairman; Professor John Washburn, superintendent of the Milton-Freewater high school; Professor E. R. Naylor of Columbia college, and Frank Cockburn, a prominent rancher of the district, met to consider how more food could be produced in this vicinity. After much consideration beans were selected as the crop, and Frank Cockburn suggested the highlands near Weston as most suitable for the purpose.

One Saturday, no school being in session, Professors Naylor and Washburn spent the day in looking for suitable land and finally selected a quarter section on the George Winn place on Dry Creek which seemed good, according to the bulletins they had read, for the purpose of raising beans. The land was in summer fallow and no crop would be raised on it that year. If they could raise beans they would enlarge the food production and make two crops grow where only one had grown before and at the same time improve the land for the next year's wheat crop. They agreed to pay one-fourth crop rent and later took into the partnership Hinkle Cox, who had some experience in raising beans in Idaho.

They planted the beans early in June in check rows 32 and 36 inches apart, putting five and six beans to a hill. The amount of seed used was about 15 pounds to the acre. Before the crop was planted Professor Naylor went to Kentucky, leaving the entire work and experiment to Professor Washburn and Cox. The last of June they started cultivating and had some trouble in getting two-horse cultivators and had to depend entirely on the one-horse cultivator at the start. In about a week they succeeded in getting the two-horse cultivator and used these most of the time. They had quite a time in breaking the horses to walk between the rows, and since they had no riding cultivator they had to walk 15 and 16 miles a day through soft dirt, which was quite a trial and hardship to the pedagogic legs. The beans were cultivated twice, once in each direction, the work being completed early in August.

The harvesting of the beans began about the 10th of September, employing a regular bean cutter, which cut the roots of two rows at the same time and threw the two rows of bean stalks together. Four horses were employed to pull the bean cutter, four or five men following with pitch forks to throw the stalks in still larger windrows. This part of the work was slow and occupied four or five weeks.

A small bean huller was procured, a $200 machine, which would thrash from 5000 to 7000 pounds a day. It took 15 days to thresh the crop. The yield was about 440 pounds to the acre, giving over 300 tons as the yield on the quarter section.

The beans were sold to a dealer in Idaho for 7½ cents in the dirt, and the plucky school teacher and his partner, after figuring out their expenses and labor, netted a clear profit on the entire crop at somewhere in the neighborhood of $1500. Not only that, but the field, which was sown to wheat has one of the best stands in the country, and with favoring conditions will yield a bumper crop this year.

## Tractors Have Come to Stay.

A prominent Scottish farmer, in an article on the agricultural situation contributed to a Dundee paper, states: "Tractors have come to stay. In the future they are to play an important part on the farm from an economic point of view. The report of the observers at the recent trial of tractors at Edinburgh, Glasgow and Perth should prove of value to the agricultural community. Their recommendations are on sound lines. Farmers and others should be more concerned about the thoroughness of the plow. After all, it is the work of the plow that counts most in helping to produce good or bad crops."

**Time the Only Cure.**

Nothing but time will get the hero of 16 out of the notion of marrying the heroine of 14. It may take a month.

# Income Tax Made Plain

## *On What You Pay and What Is Exempted*

To carry on the war Uncle Sam is drafting men into his armies.

To raise funds to back his soldiers he is drafting wealth.

People who try to dodge payment of income tax will be regarded as worse slackers than people who try to evade the draft, because there is less excuse for the man who runs away from his financial obligation to his country than for the timid man who runs away from the army.

Perhaps you have been negligent and have not yet filed your income tax return. If so you should perform that duty without further delay.

First, because it is your plain duty.

Second, because the penalties are severe. For failing to make a return on time the penalty is a fine of not less than $20 nor more than $1000, and in addition 50 per cent of the amount due. For making a false or fraudulent return the penalty is a fine not exceeding $2000 or one year's imprisonment, or both, in the discretion of the court and 100 per cent of the tax due. For failing to pay on time the penalty is an assessment of 5 per cent of the amount of tax due plus 1 per cent interest for each full month during which it remains unpaid.

To whom should you make your return? To the collector of internal revenue in the district in which you reside. The task of collecting income taxes devolves upon the bureau of internal revenue. The bureau is sending into every county in the United States revenue officers to assist taxpayers in making out their returns. The location of their offices may be ascertained by inquiring of the office of the collector of internal revenue, your bank or the postmaster. They will furnish you with blanks, answer any and all questions as to your returns, each of which must be accompanied by an affidavit.

The man who thinks to evade the income tax is making a serious error. A checking system will inform the government of delinquents.

The original requirement was that returns must be filed by March 1, 1918. Associated Press dispatches say the time has been extended to April 1, but collectors say they have not yet received official notification of any change. To be on the safe side, you should make your return by March 1.

The next thing to be considered is that the income tax applies only to your income for the calendar year 1917. Your income for prior years and your estimated income for 1918 are not to be considered.

This article, which has been prepared with the approval of the United States revenue experts, tells you how to make out your return. By studying it carefully and getting in touch with your banker or postmaster, you can do this without employing a lawyer:

The war revenue act of October 3, 1917, provides for a normal rate of tax of 2 per cent on net incomes of unmarried persons in excess of $1000 and upon incomes of married persons or heads of families in excess of $2000. If you are unmarried and your income for 1917 was $1000 or more you must get a tax blank, fill it out and file it with the collector of internal revenue in the district in which you live. If married and your net income was $2000 or more you must file a return with the collector.

The old income tax under the act of September 8, 1916, still is in effect, so that the total of your tax will be the sum of these taxes added together. Under the act of 1916 the normal rate of tax is 2 per cent on incomes of married persons in excess of $4000 and on incomes of single persons in excess of $3000.

For example, if you are married and your net income for 1917 was $4500, you will pay a tax of $60. This is 2 per cent on the amount above your exemption of $2000 under the act of 1917 and 2 per cent on the amount above your exemption of $4000 under act of 1916. An additional exemption of $200 is allowed a married person or head of a family for each dependent child if under 18 years of age or incapable of self-support.

A taxpayer is considered to be the head of a family and entitled to all the exemptions allowed a married person if he is actually supporting one or more persons closely connected with him by blood relationship, relationship by marriage, or by adoption.

Women as well as men must pay an income tax. The combined net income of a married couple in excess of $2000 is assessed. They may file a joint return or each file a separate return, if desired. If a joint return is filed either one may claim the exemption or it may be divided between them. A widow, a woman living apart from her husband or a maid is assessed on her net income above $1000.

"Net income" means gross income less certain deductions provided for by the act.

Expenses actually incurred in carrying on any business may be deducted, but not family or living expenses.

In making out your return you may deduct the following from gross income:

Interest paid on mortgages and notes and other indebtedness, except indebtedness for the purchase of tax exempt securities.

Rent paid for offices or business places.

Taxes paid, except for local improvements, such as sewer and water, income taxes and excess profit taxes.

Losses sustained in business or trade arising from fires, storm or other casualty or by theft, if not compensated for by insurance or otherwise. If property was purchased prior to March 1, 1913, the fair market price or value on March 1, 1913, is the basis for figuring the loss.

Losses sustained in speculations and side lines not connected with your regular business, but these deductions must not exceed the profits from similar transactions.

Debts ascertained to be worthless and charged off within the year.

Reasonable depreciation for business structures, but not for your residence.

Depreciation for oil, gas wells, mines, etc.

You must include under gross income the following items:

Salaries, wages and commissions or compensation of whatever kind for personal services.

All profits derived from business, trade or commerce.

Profits from the sale of property, real or personal.

Rents.

Interest on notes, bonds and bank deposits, including savings banks.

Incomes received from fiduciaries; that is, amounts received from incomes of estates, trusts, etc., through trustees, administrators or executors.

Dividends on stock, whether received as cash or stock. Only dividends paid out of earnings or profits accrued since March 13, 1913, are taxable.

Net partnership profits, whether divided and distributed or not.

Royalties from mines, oil and gas wells, patents, copyrights and franchises.

The following items are not taxable and need not be reported in your return:

Value of property acquired through will or by inheritance. It must be understood, however, that the income received from such property is taxable.

Proceeds of life insurance policies.

Returns of premiums on life endowment and annuity policies.

Interest on bonds and other obligations of the United States government or its possessions and of any state or political subdivision of a state, such as a city, town, county or village.

Interest on the Second Liberty Bond issue of September 24, 1917, to an amount not exceeding $5000 of such bonds. If you own more more than that amount the interest on the additional bonds is exempt from the normal tax, but not from the surtax.

Interest on securities issued under the provisions of the Federal Farm Loan Act of July 17, 1916.

Salaries of officers and employes of a state or political subdivision of a state, including schoolteachers.

In addition to the normal rate of 2 per cent the act of 1917 imposes an extra levy or surtax ranging from 1 per cent on incomes between $5000 and $7500 to 50 per cent on incomes in excess of $1,000,000. The act of 1916 in addition to the normal tax imposes a surtax ranging from 1 per cent on incomes between $20,000 and $40,000 to 13 per cent on incomes of more than $2,000,000. The total tax on incomes of more than $2,000,000, therefore, is 67 per cent.

# Was Sandy Waste; Now a Profitable Farm

By RAY W. FELTON

A farm that will pay 7 per cent on the investment and a labor income of $1712.68 is always interesting and when it is added that such a showing was made the first year the place was in full crop one's curiosity is aroused.

Three years ago Edgewater farm, a mile from Burbank, Wash., looked like one of those sandy waste places that make the easterner sick at heart when he reaches Pasco. In 1917 it was made to represent a paying investment and an example of what purpose and thoughtful planning will do towards approaching the model farm home. Books showing careful farm accounting tell the financial side of the story.

E. M. Chandler, its owner, does not call Edgewater farm a model farm. There are many things yet to be accomplished—improvements and additions that only time can bring about and changing conditions make practicable. But there is one thing that seems certain—neither time nor changing conditions will make it necessary to tear down very much of that which has been accomplished, because the future has been reckoned with in everything that has been done.

Edgewater farm gets its name because it lies along the south side of the Snake river not far from a point where the Northern Pacific bridge crosses the stream on the Walla Walla branch. The S. P. & S. parallels the place for some distance on the north side of the river. Emerging from a plain of sagebrush on either line one's attention is attracted and held by the broad acres of alfalfa, well laid out barn lots, red and white buildings and groups of purebred live stock.

The river forms a boundary line of the Burbank project, comprising 14,000 acres, and of which Edgewater farm is a part. Mr. Chandler, who recently was elected president of the Washington Irrigation institute, acquired this place after he was sent to Burbank to serve as project engineer and resident manager for the land company. He laid out the big project, installed the pump-buildings in the little town and drove away the gloom clouds that hovered over the little settlement during the first days of desert reclamation. He demonstrated his faith in the country when he purchased 60 acres which he has now improved and 90 acres more, which he is holding for another purpose. The 60-acre farm produced 350 tons of alfalfa last season.

With the mechanical mind of an engineer Mr. Chandler has the vision of an empire builder, a combination most unusual. The care he exercised in his work on the irrigation project has made it one of the notable ones of the west in spite of many adversities. When at last he found it possible to turn some attention to his own place it was natural that he should begin laying it out with the same thoroughness that had marked his other work.

"My first thought was that everything I put on the place should be first class," said Mr. Chandler, as we walked over the alfalfa fields the other day. "I was determined that the purebred strains should be carried out in all the live stock I shouldl acquire and I made up my mind that everything else, including buildings and equipment should be in keeping with that idea."

A visit to the farm will prove just how steadfastly this purpose has been followed.

One of the first things which will attract your attention is the dairy barn, 36 by 160 in dimensions. The arrangement is such that it answers the purpose of an ordinary structure several times its size. The barn has an all-steel stanchion and manger equipment. It is lighted by day by eight large windows on each side and two on each end and by night by four 60-watt electric lights. The interior is ceiled and there isn't a post in sight. The walls and ceiling are painted with white lead and oil. In the center of the concrete floor is a turn table on which feed and litter carriers can be turned to connect with spur tracks running from the main tracks leading from the barn to the manure pit and to the feed room. A sewage system connects the barn and the manure pit, thus keeping everything thoroughly drained and providing a means of saving the liquid manure.

There are 20 stanchions, pens for young stock, three bull pens and two hospital stalls.

An overhead track with patent milk-can carrier runs from the barn to a milk house, a concrete-frame structure 14x14, which has a hip roof and is ventilated by a ventilator cupalo. The milk house is equipped with a motor-driven separator and houses a water system with motor-driven pump which supplies water for all domestic purposes, including the barns and stock yards.

The horse barn is 36x64 and contains eight box stalls 13x16, and a 10-foot alley. It has a hay capacity of 75 tons. The roof is the Mansard type. There are no interior posts in the haymow. Like all the buildings on Edgewater farm the horse barn is lighted by electricity and equipped with a switch system so that any stall or any compartment may be lighted by turning a switch at the main door.

A silo with capacity of 60 tons and with dimensions of 12x28, stands halfway between the horse barn and the dairy barn.

A machinery shed 20x60 feet houses wagons and modern field equipment, including a tractor.

On an elevation commanding a good view of the river and the farm are two modern bungalows. Eventually both of these houses will be used for the help, Mr. Chandler having picked out another site for the residence he expects to build for his family later on.

Ayrshire cattle and Percheron horses are the breeds selected by Mr. Chandler for foundation stock. His herd sire is Peter Pan 63d, a double grandson of Beuchan Peter Pan, undefeated grand champion of Great Britain and America. Peter Pan 63d was bred by J. W. Clise of Redmond, Wash. He is a splendid individual and the Edgewater herd in its entirety is a credit to the Ayrshire family.

The same care in selection and breeding has been exercised in the horse barn. Fine specimens of Percherons are in evidence and they as well as the cattle, show the effects of intelligent handling, good housing and systematic feeding.



**Alloka, one of the Ayrshires on Edgewater Farm. She was sired by Chief of Sunnyside, 10522. Her dam was Miss Fox, 19794. Alloka was a prize winner at the Panama-Pacific exposition in 1915, although shown dry.**

# WASHINGTON FARMER

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## The Test of Patriotism

It seems to be in order to remark that shouldering the musket is not the only test of patriotism. It may not be even the best test of loyalty to the country and to the flag. This much may be said without disparagement to those who may be found on the tented field, or in the naval service of the government. Not all are fitted for such a test, and Uncle Sam is wisely recognizing the fact.

It should, therefore, be no reflection on the loyalty of any person that he is not found tendering his services to the military branch of the government, either for service at home or abroad.

Fortunately, there are other ways of showing patriotism. Good citizenship means service to the country, and that can be rendered by the faithful discharge of whatever duty or duties may be required. The level-headed crop producer is a patriot, and he must be reckoned with in the adjustment of things. There may not be much bluster about him, but he gets there just the same, and that is what counts in the long run. Let us not belittle the mission of the soil tiller, nor, for that matter, of any other person, who engages in wholesome, useful work for the common good. There is no patent on patriotism, although there may be different types of patriots. They are all needed just now.

## Wheatless Days

What is this moan we hear about the "deprivation of wheatless days?" Ho, ye men and women from Pennsylvania, Ohio, Indiana, Illinois and Iowa! How about it, ye citizens from Kansas, Nebraska and Missouri? What do you think about it, folk from the sunny south?

You are descended from the men and women who bridged the streams, climbed the mountains, and conquered the wilderness—men with axe and rifle—women with distaff and spindle. They rode not in automobiles nor Pullman palace cars, but in canvas-covered wagons or on horseback or plodded along laboriously on foot. What served as a staple for the patriots from the rocky shores of Maine, the deep indentations of Massachusetts? What filled and strengthened the sturdy inconquerables, the pioneers whom peril by field and flood could not daunt?

They won gloriously on a diet of corn—corn meal, mush, corn pone, hoe cake, Johnny cake, hominy and other dishes which bear homely names.

Corn is the most versatile plant that grows. It adapts itself to every climate. It is a native of the tropics, and wins prizes for excellence in Minnesota and the Dakotas. It flaunts its green streamers on the dry winds of the plains, and bows its tassels to the rains of the coast country. The pilgrims leaned on it as on a staff. The history of corn is interwoven with that of our country.

It is not a hardship, but a pleasure to eat it. From it comes the rugged strength and rugged virtues we most covet and admire.

We should laugh at wheatless days. Why call them wheatless? Why not lament that we have so many cornless days? Instead of making a dismal face over a foolish custom which has deprived us of one of our most wholesome foods, we should be sad only because our allies and our own soldier boys are deprived of this great grain.

## Produce What Public Wants

While the public wants many things that it doesn't need, or that are actually inferior to other varieties of the same thing, it is doubtful policy for the farmer to attempt to educate the public to different desires. For instance, if consumers want a certain kind of bean, it is likely that the individual farmer will lose money if he produces some other variety and tries to sell it to such consumer. Nothing short of united and persistent effort along well planned lines of education would change the public taste, and until that taste is changed the producer would be wise to feed it what it wants. It therefore becomes one of the first problems of the grower of anything to sell to know his market. The successful merchant studies to find out what his patrons want and then supplies it if he can. In like manner the farmer must study to find out what the consumers of his products want, and then produce to satisfy that appetite.

## Thrift Stamps

The Washington Farmer has become accredited agent for the United States for selling thrift stamps. This does not mean that we merely buy the stamps from some of the regular agencies and sell them again; the government has named us as one of its recognized sources of distribution. We have accepted this position for two reasons: We wish to make it convenient for our readers to invest in a safe and profitable proposition with small amounts; we stand ready to do an important and patriotic service.

The war, terrible and destructive as it is, still brings out some virtues. Among them are generosity and thrift. Ease and comfort are nice things, but they do not strengthen backbones, and we have had some suspicion that we need a cold bath to brace our moral nerves again.

Today the world is crying for our help. The Belgians are still in the depths of need; the Armenians are starving. Poland has been devastated. The armies of the allies, as well as our own, are not producing and must be fed and clothed and cared for, whether wounded or not. These are calls upon our hearts, and to give as we should we must learn not only to give from our bounty, but must save that we may give more. The Liberty bonds furnished a means of saving and helping the government at the same time, and we have taken a goodly share. There are some who can not buy Liberty bonds, but who can invest an occasional five. The government has done a wise and sensible thing in enabling people to invest as low as twenty-five cents at a time.

Everybody should have a part in the campaigns and the thrift stamps and war savings stamps make it possible.

These are just what the names imply—they enable us to save small amounts steadily, and we doubt if there is any other way to make a good rate of interest on so small a sum.

## Washington Gleanings

Cashup, a grain station on the Spokane & Inland Empire railroad between Steptoe and Thornton, is to have a $50,000 grain elevator, with a capacity of about 90,000 bushels.

County Farm Agent C. F. Monroe of Chehalis county is urging farmers to save select roots such as rutabagas and mangels and other forage plants and leave them in the ground for 1919 seed.

The Unity Orchards company of Gordon has announced that it has purchased a mill site and a large body of land in Okanogan county and that it will hereafter operate its own box factory.

A. L. Aabling, president of the Aabling's Seed farms, reports that they will have about 1200 acres in cabbage, spinach, beets, rutabagas, kale and cauliflower for seed in the Skagit valley for 1918 crop.

The Lincoln county commissioners, as an inducement to trappers and ranchers to rid the county of coyotes, have offered $1.50 for each pelt as a bounty, in addition to the $1 offered by the state.

There are 83,692 bushels of potatoes in Snohomosh county still in the hands of farmers, according to the estimates submitted through the school teachers of the county to County Superintendent W. F. Martin.

The election of directors of the Western Washington Fair association for 1918 resulted in naming W. A. Miller and J. M. Jones to succeed John Mills and George Schofield. W. H. Paulhamus and H. A. Huff were reelected.

Ten million gallons of water daily, six times Aberdeen's present consumption and enough to easily supply a city of 100,000 inhabitants, are pouring through the new Wishkah water project, recently completed at a cost of about $400,000.

The sale of the Fred Lauer ranch northwest of Pomeroy, containing 480 acres, to W. L. Hoppe, a successful young farmer, owner of a valuable tract of grain land on the Pataha flat, is reported. The purchase price is reported ot be $48,800.

To encourage culture of sugar beets in the Yakima valley the Utah-Idaho company will contract with farmers on a basis of $9 a ton. An active compaign will be made all over the valley, as the company hopes to secure 15,000 acres for the 1918 crop.

The names of 142 Lewis county boys and girls who have been awarded achievement pins by the state department of education for their work in industrial clubs the last year have been announced. Herbert G. Heath has been appointed county leader for this year.

Farmers of Grays Harbor county have adopted the community labor agent plan—that is, some public-spirited man in each community center or town will be selected to work with the government employment agents in the big city centers to supply the help needed by the farmers of his community.

The Lynden Cooperative Creamery company reports that the resources of the company increased $1000 during the past year, while the gross sales fell off about $30,000. During the year 649,702 pounds of butter were churned. The creamery handled 2,203,025 pounds of cream.

The farmers' union of Pomeroy has elected the following officers: James Oliver, president; D. B. Williams, vice president; J. A. Strain, secretary-treasurer; J. W. Armstrong, conductor; Henry Hiller, doorkeeper; J. W. Ball, chaplain; W. A. DeBow, Peter McClung and D. B. Williams, executive committee.

The girls of Pullman high school are enrolling in the courses in agriculture, which were abandoned at the opening of the first semester because of lack of interest in the subject. The girls expect to place themselves in a position to help with the farm work at home in a scientific way while the young men are away bearing arms in defense of their country.

## What Others Say

Western Farm Life: The first cost of everything is the price of food. The duration and expense of the war will be determined largely by the support given the farmers to secure the greatest possible production.

Wallace's Farmer: Until we can grow another crop, we must cut down our rations just as much as is necessary to make this crop go around, and give our allies plenty of food to enable them to carry on the war vigorously.

Farmers' Review: The busy farmer can't go around with a spray pump on his back all the time and nobody expects him to, but nevertheless, sensible, sanitary precautions should be exercised and are necessary if farm animals are to be kept in good health year after year.

Ohio Farmer: There seems no good reason why every farm should not go into poultry production conservatively. Most farms can maintain a fair-sized flock without adding greatly to the work, and if properly managed it will yield a fair return, in money and maintenance for the family table.

# Special Free Information Bureau

## *Opened in Washington, D. C., for the Benefit of the Readers of The Washington Farmer*

**The Washington Farmer proposes to act as a clearing house of information between the government and the people of this state. It proposes to assemble, compile and distribute the practical results of the great federal work of research and investigation. It proposes to make this information available to every one of its readers. For this purpose it has opened its new bureau in Washington, D. C.**

Our government is the greatest organization devoted to a single purpose the world has ever known. The keenest minds, the broadest learning, the most expert technical skill are turned day in and day out on every problem that confronts the American people. Problems of the farm and household, questions of health and hygiene, questions of opportunity, of self-help and help for others—all these and many more are studied in federal laboratories and in the field by men at the head of their professions with the resources of the richest nation on the earth behind them.

The work is being done for you. Your government is doing it. You are entitled to the benefit of its results. Examine the accompanying chart and learn how the government divides its work. Cut this chart out and preserve it in your scrapbook. It will be a valuable source of information as well for your boy and girl in school.

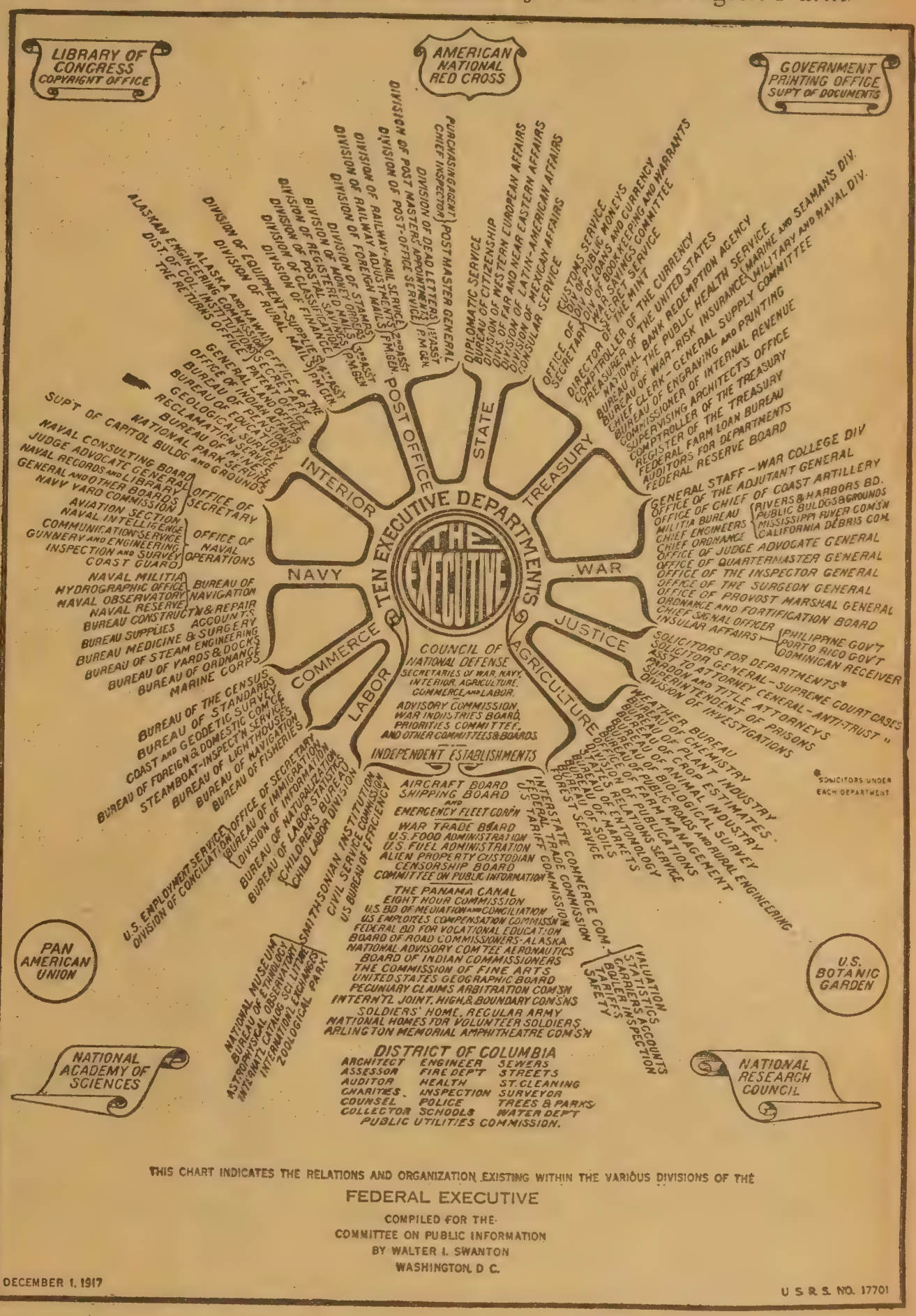
In beginning its new service The Washington Farmer Bureau offers **"The War Cook Book,"** a pamphlet of special interest to the home. This pamphlet contains the results of government researches, made at great pains and expense for the benefit of the household. The investigations deal with simple, practical things that every housewife ought to know.

The purpose of this cook book, which has just been published, is to put the war in terms of the kitchen and pantry. It sohws how every home can help; how every woman can save enough food to assure some American boy in France of three square meals a day.

One side of the food saving campaign, according to the authorities in Washington, is not sufficiently understood. Too many people think that food conservation means making a sacrifice. The opposite is more nearly true. When you save food, as the term goes today, you help your country, you live as well as ever, and you save money.

The government has spent your money to teach you how to do these things. The Washington Farmer Information Bureau is ready to tell you what the government has found out.

The keynote of the times is efficient service, and by supplying this bureau for the free use of its readers the Farmer is living up to this principle in deed and fact. Every housewife can help herself and her family by keeping posted on the latest knowledge relating to home management.




**This service is absolutely free to every reader of The Washington Farmer. You have only to send a 2-cent stamp for postage to The Washington Farmer Information Bureau at Washington, D. C., and "The War Cook Book" will be forwarded promptly.**

**Use the blank printed herewith, fill in your name and address plainly. Write today.**

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Please find enclosed a two-cent stamp, for which you will send me, entirely free, "The War Cook Book."

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# Farmers Must Pull Together

## Team Work Is the Great Need in Solving Any Problem That Comes Up on the Farm or in Any Other Industry of the Country




BICKLETON, Klickitat County, Wash., Feb. 4.—In the last few days the temperature has been as low as seven above zero, but has moderated again. The prospects for a fall crop of wheat are fine and the general opinion is that hot winds like last year are the only thing which can prevent a bumper crop. Live stock is doing well; grass is fine, with no snow to cover it up. Stock is in better condition than usual for this time of year. I consider the most important problem this community has to solve at present is the sack problem. This country could handle grain in bulk if they only would, but they still cling to the old sack proposition. There are two sawmills handy here and all of the big farmers have empty houses and barns that could be converted into granaries. If we could be assured of enough sacks to transport the grain from the threshing machines and combines to the granaries we could haul it after that to the stations in bulk and the same number of sacks would last us several seasons and eventually we could equip our machines to elevate the grain loose directly into the wagons and do without sacks altogether. The most important national problem at present is the raising of foodstuffs, and to do this we should adopt every means to eliminate unnecessary expense and use the money thus saved to install improved machinery to meet the labor shortage which is sure to be severe. Also better cooperation, pulling together. A dozen men can pull a reaper if they keep in the same direction, but all the men in the township could not cut a bundle of hay if they pulled it in all directions.

BERT H. FAULKNER.

### Two Reasons for Big Crop.

TWISP, Okanogan County, Wash., Jan. 30.—What methods we should employ to handle the amount of farm work we want to do this year seems to be the question that is causing the most worry among the local farmers at present. We can see two great attractive objects to lure the farmer to do his utmost to raise a bumper crop this year, patriotism and profit. The shortage and high price of farm labor seems to be bothering the farmers more than any other question. We consider a termination of the world's strife that is now being waged as the greatest problem of national interest. The winter has been favorable for the man that was short on roughage for his stock. Stock is in a normal condition. It seems that no one has been able to spare the time to attend the short course offered by the state institutions, as the call for the farm boys has left many farmers with shortage of help. GEORGE LA RUE.

### Yakima Valley Busy.

TOPPENISH, Yakima County, Wash., Jan. 26.—The winter so far is one of the mildest that has been experienced in many years. The only winter of recent years, approaching it in mildness was the winter of 1904-5. That was a very dry winter; this winter was much wetter than usual. Twice during December the Yakima river was at flood stage, the last time staying over the bottoms for more than a week. The last rise was the highest since November, 1906. Considerable damage was done to farms in the low lands immediately north of Toppenish between Toppenish and Buena, much of the soil being washed away and the fields badly rutted and cut. Hay stacked in the low lands was badly damaged by being wet from the bottom; the fact that the water stayed up so long caused much more damage than would have occurred otherwise. On the other hand the water staying on the land in a running state did much to wash away the alkali and land that was not washed was enriched by a deposit of silt.

The ground has been in fine condition for plowing all winter and farmers are very busy now preparing for spring crops. The acreage of hay will not be

(Continued on page fifteen.)


**Eureka Potato Planter**

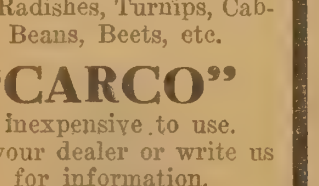
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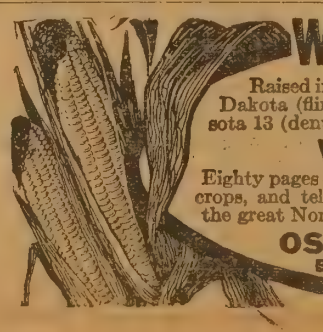
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# Buys Good Feed and Pays the Price

## *Hog Knows Better Than Men What He Wants and Needs*

It doesn't pay to try to produce pork without first-class feed; it doesn't pay to feed hogs good feed and let the vermin sap their strength; it doesn't pay to be careless in feeding methods.

These are some of the declarations of Charles Eagleson of Boise, Idaho, one of the successful swine breeders of the northwest, in an address before the recent meeting of the Idaho Swine Breeders of the northwest, in an address before the recent meeting of the Idaho Swine Breeders' association.

"In speaking of fitting hogs for market one naturally brings to mind the picture of a nicely built shoat, weighing from 100 to 140 pounds, with which to begin the fattening process," said Mr. Eagleson. "To my mind that would be ideal, if they were all uniform; but to get them alike in conformation, I believe you will find it necessary to go back to the time of selection of the sire and dam of the hogs you expect to feed. Proper attention should be given to the right type in order to get an animal that will top the market in the shortest time with the least feed.

"The problem of the northwestern feeder is to produce pork on a basis of 14 to 15 cents per pound, which is the guaranteed price, less freight, to the larger markets. We must come in competition with the feeders of the corn belt who can use less expensive feed, and who have much less freight to pay than we of the west. We have an advantage in that we have more sunshine and better pastures, and although our feed is costing around 3 cents, with the proper proportioning of good pasture and cut alfalfa hay being mixed with it, I believe a modest profit can be made, and under the present circumstances, with our country engaged in a world war, upholding and defending our right and the right of other and smaller countries to a free and happy existence, we can not in justice to our government ask more than a small profit.

"I believe it right and proper for the authorities to fix the prices of foodstuffs during such times as now obtain, and further believe it within their power, and their bounden duty, to go farther and fix prices on what the farmer is compelled to buy in order to produce the foodstuffs needed.

**Raise Pork for Humanity.**

"Our country is asking us through its agents to increase our pork output 15 per cent this year, and we should make every effort to meet the demands, for in that manner we who are not permitted to go to the front ourselves, can raise more food and help support those who do go.

"Our experience in feeding hogs only dates back some five years, and in that time we have found the hog to have a good many human traits; for instance, he enjoys a clean, warm bed, a respectable place to go for his meals; good, clean water; lots of sunshine and pure air, and feels disgraced and loses interest in the higher purposes of life when his owner allows his body to become infested with lice. A little crude oil, warmed enough to run through a garden sprinkler, is very effective in making the louse disgusted with his surroundings, and a second application usually sees him on the way to the happy hunting grounds.

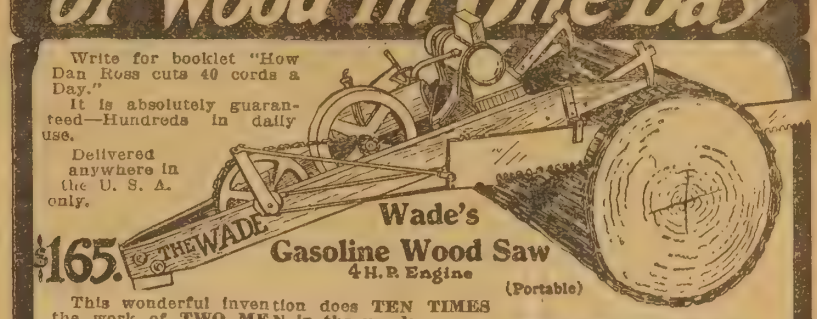
"We try to have our pigs come in March and October, and provide pens as warm and dry as possible, with plenty of light. Two to three weeks before farrowing, the feed is gradualy increased, so that by the time the pigs arrive the mother is on full feed. The pigs are allowed out as soon as they will eat, and given the run of the driveway, or in nice weather an outdoor pen. In the spring when the pigs are old enough to follow, the mother is turned on pasture. Plenty of salt and coal is kept in the pasture and grain enough fed to keep the mother and pigs in good condition. When the pigs are from 8 to 10 weeks old they are weaned and placed in a separate pasture with a ration of grain which is increased as they grow, until they are getting about four pounds per day, when they should weigh around 100 pounds. Just before or soon after they attain this weight they are weighed into the feed lot and from that day on an account is kept of feed, labor and weights until they are sold. Each day's feed is weighed and the hogs weighed once each week.

"If you have no scales, sell a good fat hog, and buy a set. There is no machine or implement on your farm that will pay for itself quicker than a set of scales.

"Interest is charged on the value of the hogs and on the feed they consume during the fattening period, and a charge is also made for all labor. We are satisfied to put on a pound a day to begin with, gradually increasing to two pounds or better. We prefer to feed corn, wheat, oats, barley and

(Continued on page fourteen.)


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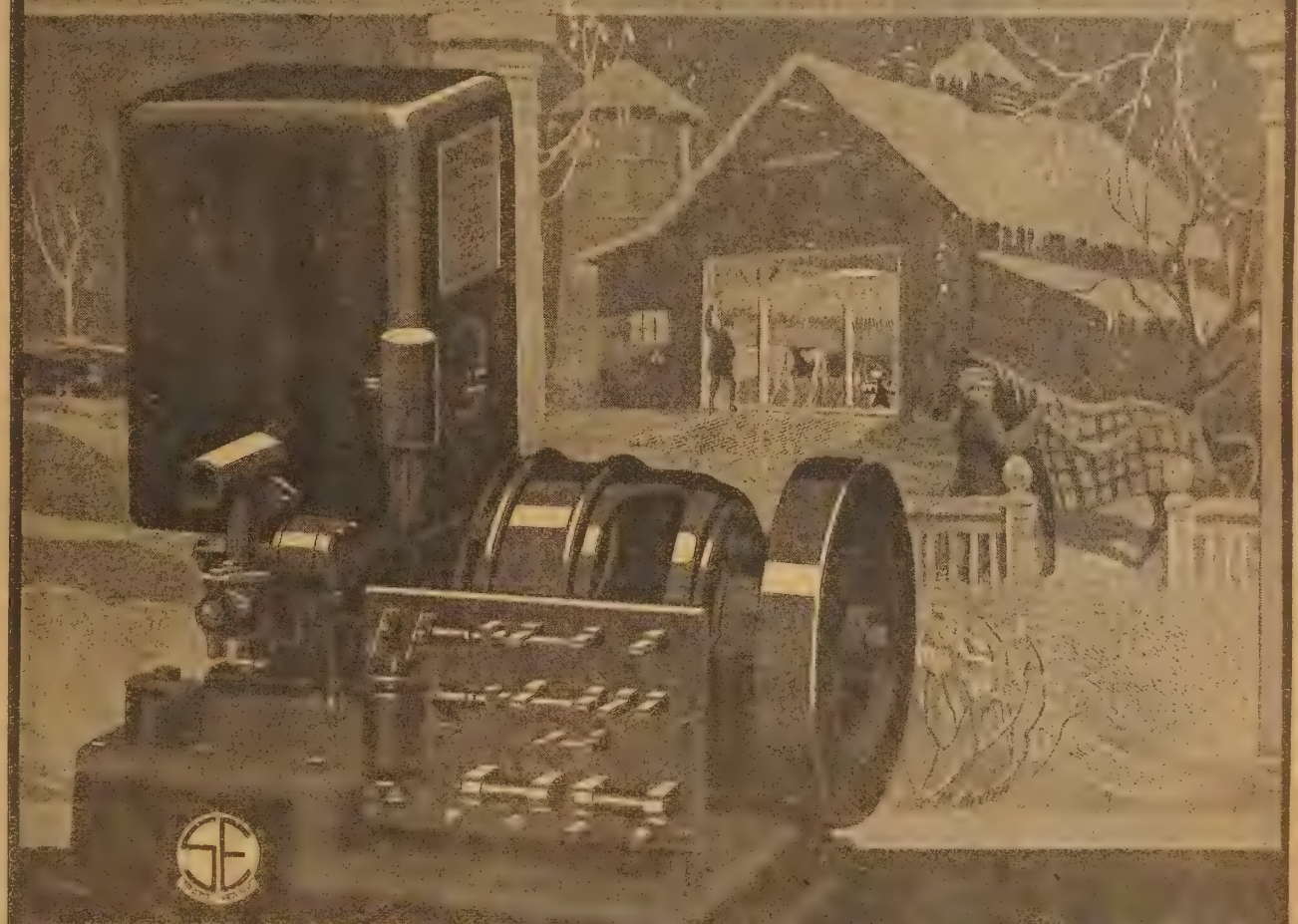
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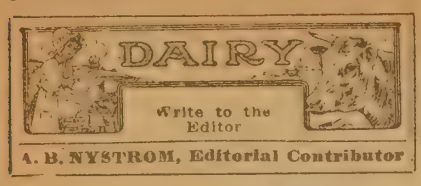
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A. B. NYSTROM, Editorial Contributor

# Farm Butter Making

Here is a summary of steps in making butter on the farm as given in Farmers' Bulletin 876:

1. Produce clean milk and cream. Cool the cream immediately after it comes from the separator. Clean and sterilize all utensils.

2. Ripen the cream at from 65 to 75 degrees F. until mildly sour. Always use a thermometer in order to know that the right temperature is reached.

3. Cool the cream to churning temperature or below, and hold at that temperature for at least two hours before churning.

4. Use a churning temperature—usually between 52 and 66 F.—that will require 30 or 40 minutes to obtain butter.

5. Clean and scald the churn, then half fill it with cold water and revolve until churn is thoroughly cooled, after which empty the water.

6. Pour the cream into the churn through a strainer.

7. Add butter color—from 20 to 35 drops to a gallon of cream—except late in the spring and early in the summer.

8. Put the cover on tight; revolve the churn several times; stop with bottom up and remove stopper to permit escape of gas; repeat until no more gas forms.

9. Continue churning until butter granules are formed the size of grains of wheat.

10. Draw off the buttermilk through the hole at the bottom of the churn using a strainer to catch particles of butter. When the buttermilk has drained out, replace the cork.

11. Prepare twice as much wash water as there is buttermilk, and at about the same temperature. Use the thermometer; do not guess at temperatures. Put one-half the water into the churn with the butter.

12. Replace the cover and revolve the churn rapidly a few times, then draw off the water. Repeat the washing with the remainder of the water.

13. The butter should still be in granular form when the washing is completed.

14. Weigh the butter.

15. Place the butter on the worker and add salt at the rate of three-quarters of an ounce to a pound of butter.

16. Work the butter until the salt is dissolved and evenly distributed. Do not overwork.

17. Pack in any convenient form for home use, or make into one-pound prints for market, wrapping the butter in white parchment paper and enclosing in a paraffined carton.

18. Clean the churn and all butter-making utensils.

## Western Dairy Instructors.

The Western Dairy Instructors' association holds its annual convention at Yakima, Wash., February 28 and March 1 and 2. This association includes the states of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington and Wyoming. Men of national reputation along dairy lines will be present at the convention and subjects of live and vital interest taken up for consideration. A general invitation to attend this convention is to be sent out and it is hoped that a large attendance may be secured.

A Dairy Products show is to be held in connection with the convention which includes butter, cheese, milk and cream. Premium lists covering these exhibits are enclosed herewith. A students' judging contest is to be held in connection with the convention covering dairy cattle and dairy products. It is expected that teams from the agricultural colleges in the various states will be present and participate.

## Makes New Butter Record.

A purebred Holstein cows again breaks a record for butterfat production, says a letter from the Holstein-Friesian Association of America. Lady Netherland Pontiac, with 43 1-2 pounds of butter to show for a week's work, has displaced Wandermeere Belle Hengerveld as junior 4-year-old in the seven-day division.

Lady Netherland Pontiac produced in seven consecutive days 577.8 pounds of milk containing 34.817 pounds of fat, equivalent to 43.52 pounds of butter.

Her sire is King Pontiac Konigen, and her dam is Dretka Netherland 2d Lass. She was bred by Julius V. Fredericks of Canajoharie, New York, and is now owned by Oliver Cabana Jr. of Elma Center, New York.

## Linn County Cow Testing.

The Linn County Cow Testing association elected officers for its second year at Albany, Ore., January 21. There was a large attendance and a harmonious meeting. More dairymen make applications for testing than there are week days in the month, but the tester will work overtime and accommodate some of the new ones.

H. J. McInnis of Albany was elected president; Henry Stewart, vice president, and J. M. Dickson, secretary. Five of the herds have pure-bred Jerseys on official test. H. A.

### Steel Glasses for Soldiers.

Steel spectacles are the latest addition to the equipment of the Netherlands army for modern warfare. The commander in chief has ordered that they shall be supplied to all the machine-gun sections of both infantry, hussars and fortress artillery, as a protection against sprinters of projectiles, flying chips of stone and the like. Stocks of the glasses will be kept in readiness to serve out to infantry in case of war.







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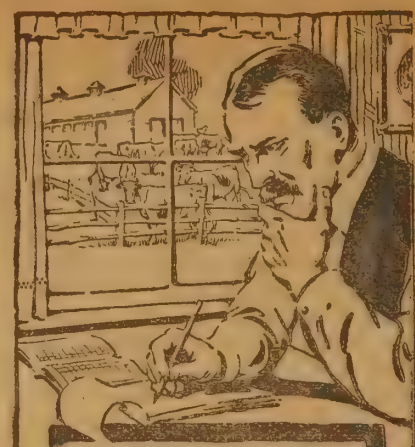
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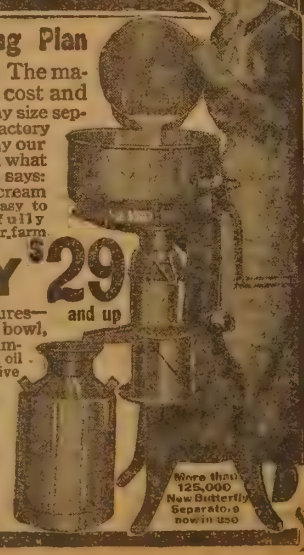
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LIVE STOCK NOTES

Write to the Editor

E. J. IDDINGS, Editorial Contributor

## Aberdeen Angus Field Force.

Following the decision of the American Aberdeen-Angus Breeders' association to employ more men to carry on the growing business in "Doddies" and meet the demands of enlarged fields for beef growing, two additional field men and an assistant secretary have been added. The field has been divided into eastern, southern and western territories and a field man definitely assigned to take care of business and advance Angus activities in each territory.

M. A. Judy, regular field representative, has been assigned to the eastern territory, which includes all states east of the Mississippi river and north of the Ohio river and the southern boundary of Pennsylvania, Delaware excepted, and the remainder of Minnesota. Dr. C. D. Lowe, in charge of live stock work in the extension division, University of Tennessee, has been assigned to the southern territory with headquarters at Knoxville, Tenn. East of the Mississippi river, all territory south of that in charge of Mr. Judy comes under his jurisdiction, as well as all west and south of the Missouri river in Missouri and the state of Arkansas, Louisiana, Texas, Oklahoma, New Mexico and Arizona. The western territory, assigned to E. T. Davis of Iowa City, Iowa, includes all the other states and that part of Missouri north of the Missouri river.

## Live Stock After the War.

While war conditions with guaranteed wheat prices make that form of farming increasingly attractive as an immediate operation, with the end of the war the high reserves of Australia, India and Argentina will be thrown on the world's markets to swell the pent-up flood of wheat that will pour out of Russia and into Europe through the back door, says Charles Gray, secretary of the American Aberdeen Angus Breeders' association at the annual meeting of the Minnesota beef breeders last month.

All the cheap lands of the world will be raising grain as the most direct route to the hungry mouths of Europe, and only government guarantees can hold up our grain markets. Our live stock, however, will have the inside track for the meat and fat needs of the world, for it will take years to rebuild the foreign herds and flocks that have been depleted and swept away. Furthermore, these herds and flocks will be largely rebuilt from seed brought from our herds, and already many purebred associations are laying plans for this export business for the rebuilding of a new Europe.

## Veterinary

Dr. S. B. Nelson

**Cow Has Warts**—I have a cow that has warts on her teats. How can I remove them? W. B. MARIAL, Ore.

I would suggest the use of the following treatment, applied night and morning after milking: Chloral hydrate, 1 1-2 drachms; acetic acid, absolute, 1 1-2 drachms; salicylic acid, 1 drachm; spirit of ether, 1 drachm; sollodion, 4 drachms; mix well before using.

I have a young hog whose skin on his sides and shoulders is very hard. It is creased and this is what is hard. He walks as if he is stiff and sore. He seems to be in good health and eats hearty.—A. K., Medford, Ore.

Try applying some of the following ointments to the sides of the pig: Pine tar, one part; lard, three parts; beeswax, one part; rub into the sides once daily or every other day for some time. See that he has plenty of roots or silage or green stuff in his feed.

I have a colt about 18 months old that I think scratched himself over the eyebrow on a nail and it did not heal, but puffed out as though it might be proud flesh. It is still an open sore, but looks like a wart.—H. C., Jared, Wash.

The chances are that there is some offending foreign substance in the injury which the colt received. Wash the part thoroughly with a 2 per cent solution of lysol until it is clean. Put a twitch on the horse's nose so that you can hold him, then gather up the sore portion and after disinfecting your knife make an incision into the part which is wounded and give it a draining. Then apply to the outside of the wound a dusting powder composed of one part of boracic acid and one part of tannic acid, dressing the wound once daily with this powder.

I have a cow that freshened January 4 this year and her udder has been swollen ever since. The hind quarters of her udder are very hard and there seems to be lumps in it, and the milk from these quarters is stringy. She is stabled at night, fed on timothy, clover and some alfalfa hay, and potatoes and brain.—S. O., Conway, Wash.

Your cow is without question affected with mammitis or caked bag. Give the cow a pound and a half of epsom salts in three quarts of water. Cut down on her feed. Try milking her three times daily even if you do not get very much milk from her. Then paint the affected parts of the udder with the following liniment once daily: Soap liniment, one part; tincture of iodine, one part. That may start resolution so as to cause the diseased tissue to break up and either absorb or be discharged. After three or four days it might be wise to give the cow one drachm and a half of potassium iodide in a pint of water night and morning.

**Hip Sweeny**—I have a mare that had a bad sprain in the left hind leg which has now developed a hip sweeny with a very rapid wasting of the muscle. She is very lame and favors the leg at all times.

W. J. W., Bellevue, Idaho.

Hip sweeny is generally the result of an injury in some part of the legs which prevents the use of the legs normally. Therefore, it does not always indicate that a shrinking away of the croup muscles means that the injury is in that region. However, it seems that the best thing that could be done for the mare would be to determine where the injury was and then have her fired by a veterinary with the actual covering. The use of the actual cautery does two things. It rests the limb and the injured part and secondly it causes an increased blood supply into the part. Of course, I can not tell you where to use the cautery because you do not say which part of the leg the injury was to.

### Control of Leather.

The American consul general at London cables that the British war office has extended control of horsehides in raw state to leather produced therefrom, and now takes possession of such leather from domestic or imported horsehides.


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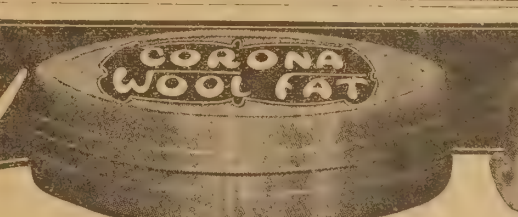
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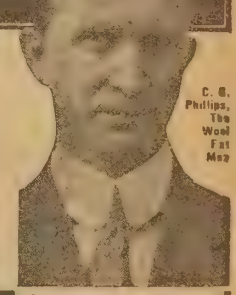


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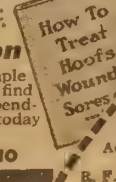
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# POULTRY

Write to the Editor

JAMES DRYDEN,
Editorial Contributor.

## Turkeys Fed Too Much

To the Editor: Can you please tell me what is wrong with my young turkeys? I have four hatched in September and each morning when they fly from the roost they can't support their bodies. It seems as though their bodies are too heavy for their legs to support. They walk stiff-legged all the time. At first only one of them was that way, but now they all are. I feed the same as for my laying hens, wheat bran, shorts, beef scraps and oil meal for a dry mash. In the morning I feed wheat and this dry mash, at noon I feed a crumbly mash of the same ingredients and in the evening corn if I have it, and if not wheat. They eat heartily and I can see nothing else wrong with them. They were all right until about two weeks ago.
MRS. A. L.
Benge, Wash.

From the information given I should judge the turkeys were fed too much, or too often. The turkey is a wild bird by nature and can not stand too much domestication. If possible give them free range in the fields and feed not more than twice a day, and one of these a light feed. Give them a light feed of moist or crumbly mash in the morning, early, then let them range till evening, when a feed of whole grain should be given, about as much as they will clean up. They need the exercise as much as the feed. If the purpose is to fatten the turkeys they will stand a ration such as is described in the letter about two weeks, and after that they will lose appetite and finally go to pieces. But for breeding fowls and for raising the young stock light feeding and abundant range or exercise are the essentials. J. D.

## Chickens Have Roup

hens of roup. The sparrows brought
To the Editor: I. I saw recently in The Farmer that a boy cured his it to my chickens last year. Some of the young chicks get over it, but my hens die. Please explain how to cure it. I have tried several cures, but all have failed.

2. I am planning to build a henhouse. Which is the better of the following plans? A room for roosts and a room for nests with a scratching shed between, or all in one room with a dropping board about four or five feet from the floor, with perches above, the front boarded up solid three feet to protect from the southeast winds and nests placed on this, using the entire floor space for scratching, the rest of the front being covered with netting? Please give dimensions of house to accommodate 100 hens, not more.
Meridian, Idaho. E. M. G.

1. For ordinary cases of roup, use a 2 per cent solution of permanganate of potash and dip the head of the fowl into this. Hold it there 20 or 30 seconds, or just long enough so as not to strangle the fowl. If there is canker in the mouth or throat apply a strong solution with a feather. Isolate the sick fowls from the rest of the flock. Keep them in an open-front house. Fresh air is a better preventive and cure for colds and roup than medicines.

2. The second plan is the better. Fowls require a certain amount of floor space and air space in their roosting quarters. A room that gives the required amount of air space for roosting will contain floor space enough for scratching or exercise. It is therefore a more economical plan to have the roosting and scratching room in one. A dropping board three feet from the floor will be high enough. A house 12 feet by 25 is large enough for 100 hens. A plan of this house was published in The Farmer September 28, 1916. J. D.

## Scaly Leg Contagious

To the Editor: What would you do for scaly legged chickens? My last year's pullets have been so for about six weeks, a little swollen and now a little watery and, getting sore up in the feathers to the body. Five days ago I dipped them in lamp oil to the feathers, and in two days greased them with a mixture of lard and sulphur and lamp oil. They are in good condition. J. R. L.
Reardan, Wash.

Scaly leg is caused by a mite under the scales. Coal oil will kill the mite. The leg should be held in the oil about half a minute. The oil works up under the scales and destroys the mites. Sulphur ointment or vaseline should then be applied. When it can be done without causing bleeding the scales should be taken off and vaseline or other ointment applied. It may be necessary to repeat the treatment. If coal oil is used at the first appearance of the disease it is easily checked or cured. It is contagious and it is a good plan to coal oil the roosts and nest boxes when any of the fowls show the infection. J. D.

### Case of Tuberculosis.

To the Editor: Can you tell me what is the matter with my chickens and give me a cure for them? The symptoms are as follows, as near as we can describe:

"First, become lame in one or both legs, generally both; sometimes eat heartily till very last, but lose flesh steadily and waste away and die. Other times, soon lose appetite after becoming lame and die soon. Have diarrhoea—yellow and watery. Never dissected but one; that was yesterday. Found the liver about three times normal size; granulated, that is, resembled a cake of very fine sand, and brittle. Lungs did not seem to be diseased, but were somewhat wasted—shrunken."

Have disinfected house and runways frequently; fed nothing but clean, wholesome grain and mash. Occasionally give saltpeter in water, also limewater. House is not entirely dry, and they wade around in mud after cattle. Have very fine stock, laying strain, but they have laid hardly an egg all fall and winter. L. E. C.
Applegate, Ore.

The symptoms of tuberculosis in fowls are very completely given here. There is no doubt but this is a case of tuberculosis. There is no known cure for this disease. The safe thing to do is to kill off the fowls and start with a new flock. The houses should be thoroughly disinfected and the yard plowed or spaded up and covered with air-slacked lime. It will be better to start the new flock on fresh ground. The new stock should be from a flock that is known to be free from this disease.

By using the VanEs test, recently described in The Farmer, it is possible to determine fairly accurately which hens are infected. If the test can be applied and all the fowls showing the reaction killed off and the houses and yards disinfected the disease may be stamped out without having to kill off all the flock. J. D.

### Catarrh or Roup.

To the Editor: Will you please tell me what was the matter with one of my hens. She could not breathe through her nose and she just stood around and gasped for breath. Her head was awfully hot and feverish. Her gills were very red. I cut her open, but could not find anything wrong. E. A. T.
Ellensburg, Wash.

This was no doubt a case of catarrh or roup. Try dipping the head of the fowl in a 2 per cent solution of permanganate of potash, holding it there 20 or 30 seconds. If any white patches or canker are found in the mouth or throat treat them with a strong solution of permanganate. J. D.


**Tells why chicks die**

E. J. Reefer, the poultry expert, 466 Reefer Bldg., Kansas City, Mo., is giving away free a valuable book entitled, "White Diarrhoea and How to Cure it." This book contains scientific facts on white diarrhoea and tells how to prepare a simple home solution that cures this terrible disease over night and actually raises 98 per cent of every hatch. All poultry raisers should certainly write Mr. Reefer for one of these valuable FREE books.

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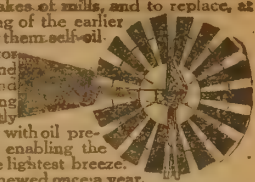
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Works right under the branches. The sharp-ground coulters work the soil easily, cutting out weeds and leaving a loose dust mulch at the top. Extension and regular styles—1 horse to 4 horse sizes—3 ft. to 17½ ft. wide.
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has become so popular in its first three years that thousands have been called for to replace, on their old towers, other makes of mills, and to replace, at small cost, the gearing of the earlier Aermotors, making them self-oiling. Its enclosed motor keeps in the oil and keeps out dust and rain. The Splash Oiling System constantly floods every bearing with oil preventing wear and enabling the mill to pump in the lightest breeze. The oil supply is renewed once a year. Double Gears are used, each carrying half the load.



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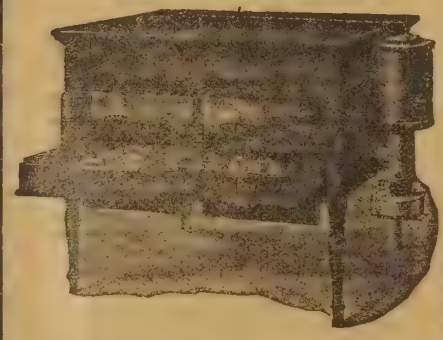
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*Strawberry PLANTS* FREE To introduce our *Pedigreed Everbearing* strawberries we will send 25 fine plants free. CONSOLIDATED NURSERY CO., ST. LOUIS, MO.

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Our catalogue No. 40 gives prices, description and capacity.

**Inland Seed Co., Spokane, Wash.**

**Run a PAPEC CUTTER With Your Own Gas Engine**



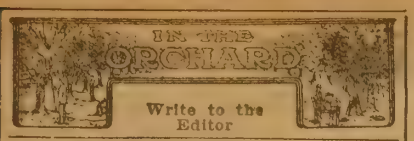
You don't need a big power-eating engine for the Papec. It takes 25% *less power*, size for size, than any other blower cutter. Many 10 to 13-inch Papec Cutters are satisfactorily operated by small gasoline engines, varying in size from 3 to 6 h. p.

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With a Papec Cutter of your own, you are prepared to fill your silo right—at the *right time.* Cut your corn and fodder when you get the *most nutriment.* Fill your silo slowly and let it pack.

Papec has met the demands of the Northwest for a reliable cutter. Use it for silo-filling, for cutting and shredding your dry feed. Let us send you copies of letters from Papec owners—also the free Papec catalog.
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**Monroe & Crissell, 91 Front St., Portland**
or
**Dairy Machinery Co., 907 Western Av. Seattle**

A REMINDER
To write my name and address on the margin below, and mail for the Papec catalog and owners' letters. No obligation on my part.




GRANVILLE LOWTHER,
Editorial Contributor.

## Moths in Bee Hives

To the Editor: What way do moths damage hives of bees? Do they feed on the young? Can they be driven from the hive in any way? W. S. W.
Woodburn, Ore.

A. L. Melander, professor of entomology and head of the department of zoology, Washington States college, answers the question above in the following way:

The bee moth is notoriously fond of attacking hives which are not thrifty. Where the bees are in good, vigorous condition they take care of their own hives, which is especially true wherever the ready-made hives are made use of. Some farmers may have a loose-fitting hive which would permit the bee moth to enter, but in well-kept apiaries the bee moth is a very negligible factor. Hives which have become depleted for some reason or other, as for example, if the queen is lacking, or the brood is diseased, or the bees have become poisoned, and thus the hive allowed to become run down—such are the places where the bee moth does its harm. The caterpillars of the moth work through every part of the hive spinning up with silk as they go and utterly demoralizing the bee household. The bee moth and its caterpillars do not feed on the brood but eat the wax and more or less of the castings and excrement of the colony. If they are present the hive should be opened and freed of the pests. Old hives should be fumigated before being used, which may be done by the use of carbon bisulphide at the rate of two pounds to every 100 cubic feet of hive space to be fumigated. This, of course, can not be used when the hives are occupied by the bees. If occupied hives are infected it would be well to open them frequently and destroy whatever traces of the bee moth may be found.

## Community Drying Plant.

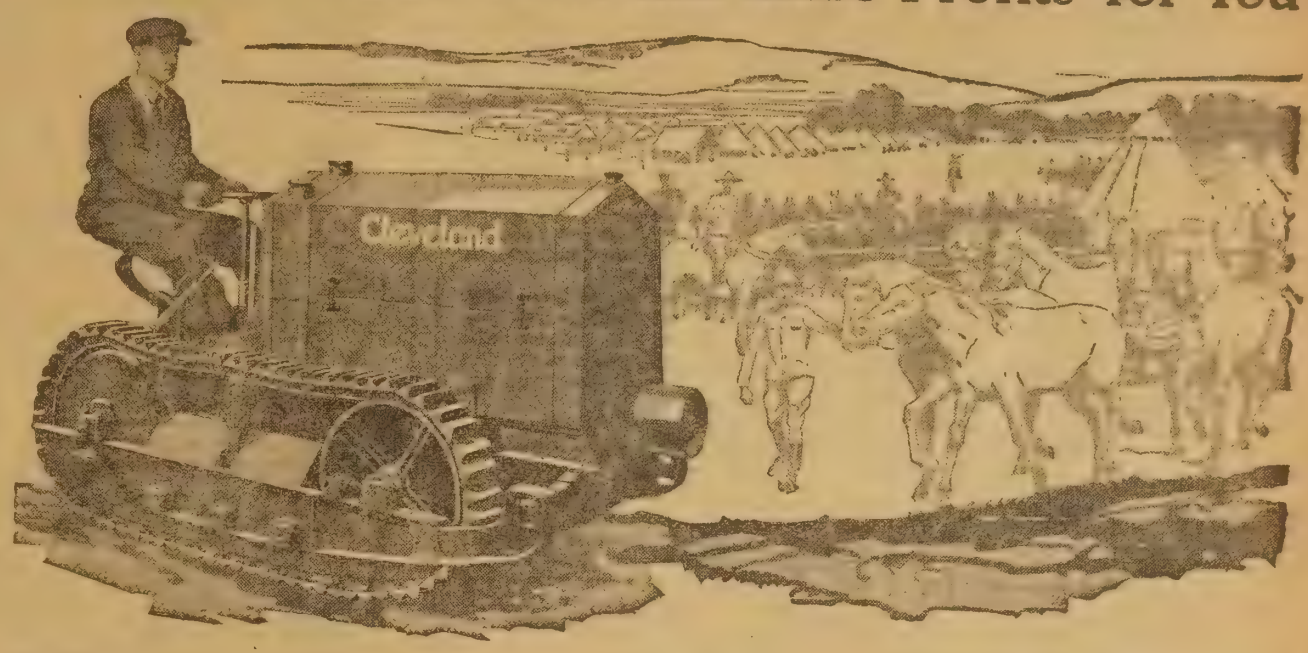
Municipal or government-owned drying plants have been in successful operation in European countries for years. Such plants provide village communities with a convenient and simple method of drying all sorts of produce of the home garden and orchard, as well as the vegetables and fruits shipped to the community, which might be allowed to go to waste at the stores and market places. The advantage to the busy farmer's wife in the country community can not be overestimated. Her work is heaviest in the summer, when vegetables and fruits must be saved for winter use. The establishment of a community drying plant at a consolidated school, country church, or centrally located farm home, would offer a great relief from her heavy kitchen duties. The housewife could clean and slice at least a portion of the fruits and vegetables she desires to conserve, and either take these or have one of the children take them to the community drying plant, where they could be left until it was convenient to call for the dried product.

A successful community drying plant located at Lincoln, Neb., is described in Farmers' Bulletin 916, which may be obtained free upon application to the division of publications, United States department of agriculture. Practically the same plan was followed in 11 other communities—nine of them in Nebraska—during the summer and fall of 1917, and the experience is related at this time in answer to a demand for information of this character for consideration at farmers' meetings during the winter.

## Fix Nitrate Price.

Announcement has been made by the United States department of agriculture that a price of $75.50 a ton f. o. b. seaboard, has been fixed for the nitrate for fertilizer which the department of agriculture has purchased in Chile for sale to American farmers at cost. The farmers must pay the freight charges from ports and the state tag fees and payments must be made in cash. In the farming districts county agents assisted by local business men chosen by them will handle the shipments and in counties where there are no agents, a committee of three or more local business men will be appointed. Farmers are required to file their applications with the agents or committees not later than February 4.


# Quick Plowing and Deep Cultivation Mean Bigger Crops for Uncle Sam and More Profits for You




NOW—more than ever before—you must work quickly and well. Farm and firing line must fight together.

America's acres must yield more than ever before. But the task of stimulating production is hedged about by difficulty.

Munition plants and factories have steadily drained labor from the fields. The new regulations place unskilled farm hands in the first draft class. Over a million horses already have been shipped abroad and the needs of our own army are yet to be filled.

*You must replace muscle with machine.*

The Cleveland Tractor will plow 3½ miles an hour—8 to 10 acres a day. *That equals the work of three good 3-horse teams and 3 men.*

This same time-saving speed, so profitable in plowing, is of equal advantage in harvesting, mowing, discing, spreading manure and other hauling work.

The Cleveland not only conserves time and labor but it does better, cheaper work.

*Traveling on its own tracks,* this sturdy little machine will go practically anywhere—even through ditches or gumbo, sand and gravel.

It will not pack the soil, nor mire, slip or flounder. It weighs less than 3200 pounds and has 600 square inches of continuous traction surface.

Although small enough for work in orchards and among small fruit trees, the Cleveland develops full 12 h. p. at the drawbar for hauling.

At the pulley belt it gives 20 h. p.—plenty for stationary work such as shelling corn, cutting ensilage, filling silos, pumping, and many other uses on the farm where power is needed.

## Cleveland Tractor

Rollin H. White, the famous motor truck engineer, designed the Cleveland Tractor. He uses only the best materials. Gears are the same quality as those of the finest trucks and are protected by dirt proof, dust proof cases.

Mr. White has so constructed the Cleveland that *it steers by the power of its engine.*

It will turn in a 12-foot circle. And can be housed in less space than it takes for a horse.

Put yourself in a position to produce the record crops called for by Uncle Sam—and incidentally to make more money for yourself.

Write to us today for complete information on the Cleveland Tractor and the name of the nearest Cleveland dealer. Address Dept. BK or use the coupon.

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Please send me full information about the Cleveland Tractor.
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# Growing Peas

## Disk Land as Early as Possible

**By Joseph Brunna, Moran Prairie, Wash.**

For nearly twenty years I have been growing peas with more or less success, and during this experience I have found that the best method of preparing for the crop has been to disk the land as early as possible in the spring, after which I go over it with a harrow. Then it is plowed from seven to nine inches deep. By such deep plowing I enable the peas to have a fine surface in which to feed. The roots can penetrate to good depth through this mellow soil that is thus formed by deep plowing. After the plowing has been done I immediately go over the ground twice with a harrow, setting the teeth as straight as possible and frequently, by placing a board across the harrow, ride it to better facilitate the working down of the soil. If the ground is very loose at this time I roll it, so as to compact the surface and get rid of all clods. After this rolling the ground is ready for seeding, and it is my plan to put the seed in as deep as possible. Deep seeding, I have learned by practice, is very essential for the best results in growing the smooth varieties of peas. By deep seeding I mean put the seed in from four to six inches below the surface. Many drills will not accomplish this purpose, because the seed does not drop to the bottom of the furrow opened by the disks. One should have the drills so that the seed will drop to the bottom of the disk furrow and thereby insure them getting into the ground.

After drilling in the seed the best plan to follow is to roll directly. If a rain should come before the crop is up the harrow should be used to prevent the formation of a crust.

**Variety Used.**

I have used the Blue Prussian variety, and it has always given good results. In 1915 this variety made me 38 bushels to the acre. In 1916 I secured 40 bushels to the acre, and in 1917, during the very severe year, this variety made 13 bushels per acre. In 1916 the crop was sold for 6 cents per pound, thereby making me $144 an acre from the crop.

Early planting is essential for good results. Just as early as you can get the ground prepared in the spring the peas should be planted, as they must get their growth before the hot weather comes. I have found the pea straw from the Blue Prussian as good as wheat hay when fed to stock in the proper manner. I always feed my horses pea straw, but at first I feed them very little, mixing it well with wheat hay. Gradually the pea straw is increased, and when my horses are working practically the only roughage that they secure will be this pea straw during the winter months. I have also found it to be one of the very finest cattle feeds. My Jersey calves feed upon this, making excellent growth, and come through the winter in splendid condition.

I trust that this experience may be helpful to others who are going to grow peas, and especially those who have to prepare their land this spring for the crop.

# Buys Good Feed

(Continued from page nine.)

rye, with preference given in the order named. All grain is ground and soaked from 10 to 12 hours, and the cut alfalfa is soaked with the grain.

"We find that as the grain ration is increased they eat very little hay. Our experience has shown us that a hog will not eat over about three-fourths of a pound of alfalfa per day, when given a reasonable grain ration, but this keeps them in splendid condition so that they are ready for their food at feeding time.

**Platforms to Prevent Waste.**

"The feed is put in troughs on a platform so that any waste may be picked up and refed to the stockers. The feed is increased slowly and we are guided in this by their gains each week, and sometimes by the market quotations. We watch them closely, and if one does not come up to his feed, he is at once looked after. If there seems to be anything seriously wrong, he is taken out of the pen and placed in quarantine.

"Coal, salt and sulphur are kept in the feed lot, and by spraying for the vermin, we have been able to keep them healthy and ready for their feed. Any price is too much to pay for grain to feed to hogs that have to feed an army of lice, for the lice do not weigh enough at market time to show a profit, even though on full feed all their lives.

"Our hogs are usually marketed when weighing around 200 pounds, although if the market promises to go higher we have fed longer.

"We have tried mill feed and beet pulp, and there may be times when these products can be fed at a profit, but we have found it cheaper to buy good feed and pay the price rather than try to put lard on a hog with a bluff.

"We hope this year to give the cafeteria plan of feeding a thorough trial. The least feed required for one pound gain for any car we have yet fed was 4.1 pounds, and ran from that amount up to about 5.5 pounds.

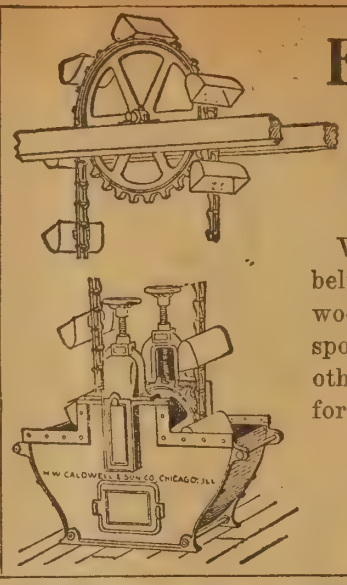
"The hog knows what he wants and needs to make him healthy and you wealthy, and if given the chance will show better judgment about his eating than the majority of feeders who try to regulate him."

## To Work Swiss Peat Beds.

According to the Geneva Tribune, a syndicate proposes at an early date to ask the federal council for a $1,000,000 loan for the development of the peat industry in Switzerland. The extraction of peat will be undertaken on a large scale, it being planned to work 24 peat fields in the coming spring.

## Catalogues Received.

Old's 1918 catalogue of seeds for the farm and garden, seed potatoes, bulbs, plants, tools and poultry supplies. Madison, Wis.

**Elevating Machinery**
for handling
**Bulk Grain**

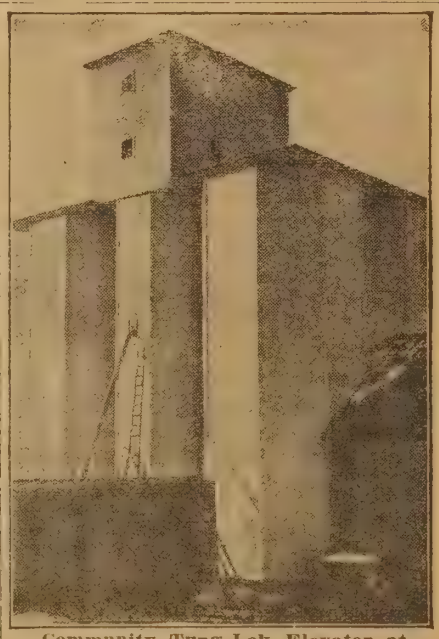
We carry in stock belting, buckets, chain belts, sprockets, pulleys, take up boxes for wood boots. We can furnish distributing spouts, steel boots, spiral conveyors and other equipment on special orders. Write for prices.

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S120 Monroe St., Spokane.

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SHIP TO US
NO CARTAGE - NO COMMISSION
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SEATTLE
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Community Tung-Lok Elevator at Hanson Station, Wash.

**Handle Your Wheat in Bulk !**

Wheat sack prices are prohibitive, even if you could get the sacks. Surely you will not pile your wheat on the ground, to suffer heavy damage and loss above and below. Patriotic duty and business judgment alike demand that you save ALL your crop.

Here is the answer to your problem—build a

**Tung-Lok Elevator**

(Home-Built, Singly or in Series.)

A Tung-Lok Elevator can be built for so little money that it will pay for itself in one year, while it provides **permanent** storage. Easily and quickly erected—storm-proof for a lifetime. The most economical and convenient way of building is by community cooperation, each farmer erecting one of a group of Tung-Loks, as shown in the cut herewith.

Just notify us, and one of our agents will call on you and explain the Tung-Lok method to you and your neighbors. That costs you nothing. Now is the time to act—WRITE US TODAY.

You realize, of course, that labor conditions have been extremely unsettled in all industries in the past year, and the future is uncertain. While conditions with us now are such that we can take care of all orders promptly, we ask that you act at once if you are planning to erect a Tung-Lok Elevator this year. Don't wait for the summer rush!

**UNION LUMBER COMPANY**

Dept. B. Union Mills. Makers of the Famous Tung-Lok Silo. Washington.

# School Ma'ams and College Girls Farm

(Continued from page one.)

the school janitor. They would do his work if he would plant their beans. A bargain was made and four determined school teachers kept things spick and span about the school building and attended regularly to their classes.

Finally came commencement and the end of the semester. With hardly a day's delay the girls began making preparation to live near the scene of the "Beanery." Each purchased a supply of the popular koveralls and contributed to a fund that bought a camp outfit. The neighbors were much interested and disposed to help. They loaned the syndicate a cook wagon, a tent, a cultivator, and most precious of all—Tom, an old black mule, who experienced a bewildered career during the weeks that followed.

A delightful place to camp was found not far from the bean field. A big pile of fence rails, to which the girls had free access, provided plenty of dry wood, but they were mightly hard to carry to camp and tough as blazes to saw.

With camp established and preliminary work attended to, attention was turned to the cultivation of the beans, which, by the way, were of the Mexican Red variety.

Jupe Pluvius, the rain god, was anything but generous last summer, and the land the syndicate used, was in poor condition—baked hard and foul with weeds. Cultivation, and lots of it, therefore was imperative. First the field was dragged, then gone over with old Tom and the small cultivator, and then twice with a two-horse, wheel cultivator (also borrowed). This was followed by a thorough hoeing.

And here it was that grit and determination were brought into play. It wasn't half bad for one girl to ride old Tom while another manipulated the drag, or for one girl to drive the horses while another operated the two-wheeled cultivator. Hoeing was a different proposition. A lot of the joy of living seemed to fade before the end of a row was reached. The clods were hard, the hoes got dull, the dust was choking, Jupe Pluvius was stingy, Old Sol was merciless.

"Are you down-hearted?"

"No, but darned hungry."

And so the summer passed. Each day brought its joys and its sorrows, its blisters and sunburn. Often the girls were in the field as early as 4 o'clock in the morning to avoid the necessity of working through the heat of the day.

Not one had had farm experience of any kind before. They got into all sorts of difficulties. More than once their horses found themselves trying to untangle themselves from hard knots, brought about by crossed lines. There were distressing mixups when collars and hames were put on upside down and when Old Tom's traces were so tight the single-tree cracked him in the heels.

The continued dry weather was disheartening. Not a drop of rain fell from the time the beans were planted until they were pulled.

The fall term of school started with the beans in the field. The Ho-Bean-Hoes were trying to decide on some way of getting them pulled when the high school instructor in agriculture came to their rescue and went with his class to the field where the beans were pulled and shocked.

Then a neighbor with a home-made bean thresher was employed to finish the job.

In spite of the dry summer and the poor condition of the soil, the harvest yielded 4500 pounds. The crop was sold, ungraded, to Waitsburg stores at eight cents a pound. The girls had paid 12 cents a pound for the seed. When they finished their accounting they found the had realized enough to pay all their summer's expenses, including clothes, their rooms in town, which they had kept and visited once a week, and had some money left. Each put her surplus into a Liberty bond.

"We realized many benefits which are hard to compute in dollars and cents," said Miss Persels the other day. "We learned a great deal about farming, which we can put into practical use again. If we raise beans again, we will take the utmost care in preparing the seed bed. That's the big thing. We would check the rows when planting so we could cultivate both ways.

"We returned to our work in splendid health and much refreshed from the outdoor life and strenuous exercise. We are satisfied our bean crop, and the attention we gave it, left Mr. Taylor's land in better condition than it was when we found it. We made a little money, had a lot of fun and not a single quarrel all summer."

## Mere Man Not Needed.

What women can do in the absence of men is being demonstrated by Mrs. R. Goodman of Albion, Wash., who is known as the "Potato Queen," and is making a success of raising potatoes for the markets. Mrs. Goodman has been raising potatoes for several years and has been quite successful. She rents land that usually would be summer fallowed and she gets it for a reasonable rental and leaves it in better condition for fall seeding than if no crop had been grown upon it.

Last year Mrs. Goodman rented 30 acres of the M. L. Davis farm near Pullman and raised a good crop of potatoes, despite unfavorable weather conditions. She sold one carload for $1600, or more than $50 per acres for the entire field, and she had the bulk of her crop left on hand.

The unique and interesting part of her venture is the fact that the work of caring for and harvesting the potatoes was done without the help of "mere man." When harvest time came men could not be obtained for the work, but Mrs. Goodman was not disheartened, nor even worried. She went to Washington State college at Pullman and secured the aid of the "fair co-eds" and her potato crop was dug and saved. The accompanying photograph shows her "crew" of college girls posed with the patent potato digger. All are dressed in overalls, and they 'made good" at the work. The girls are:

Valley Bigle, Tacoma, Wash.; Mary Martz, Colville, Wash., Marjorie Heaton, Spokane, Wash.; Frances Donnellaw, Tacoma, Wash.; Eva Bradley, Spokane, and Evalyn Bradbury, North Yakima, and Evalyn Bradbury, Yakima, Wash. Mrs. Goodman is driving the team.

## Do You Know That

A little extra care for the comfort of the live stock will make your own bed more comfortable?

# Must Pull Together

(Continued from page eight.)

increased any this year and the acreage of potatoes will be less. The acreage of beets and corn will be larger, while the grain sown on irrigated land will be much the same. The acreage of dry land sown to wheat will be larger than last year. The Utah-Idaho Sugar company has announced that they will raise the price of beets on this year's crop to $9; many thousand acres were contracted at $8, but the company will give the raise to those who have contracted at the lower price.

The market on local grown beans has not been very satisfactory and the acreage will be decreased this year.

Potatoes are a little higher in price the last few days and are moving as fast as cars can be obtained. Many people are blaming farmers for not selling last fall on the high market yet the most of the offers were f. o. b. cars and cars could not be had on which to load them. Many who did sell could not deliver because they could not get cars. Leases are still in demand, but are not commanding such prices as earlier in the season. Milch cows are not bringing as good prices as in the fall, the reason for the lack of demand is not apparent. Hay is holding up pretty well yet many predict a sharp fall in the near future as the weather is staying extremely mild and the pastures are the best ever seen here in the winter. Many sheep men bought heavily of hay and have not fed a pound of hay and say that they do not expect to feed any hay. Hogs have done well this winter and are still in good demand for breeding purposes as well as for slaughtering. Eggs are down to 45 cents and are plentiful, butter is very strong and some is being shipped into the valley. Building is better than last winter, but is being held back by the high price of material. There is not an empty house in Toppenish or in the surrounding community, nor has there been one this winter. The sugar factory being unable to get houses for their employes are building 15 cottages and a hotel on their grounds near the factory. Roads were badly damaged by the recent high waters, all the small bridges washed away and the road beds washed badly in many places; dirt roads are still in very bad shape but are improving.

C. A. WYCKOFF.

### Couldn't Find It.

The Kid—This map is not correct.

The Teacher—Why not?

The Kid—You told me the general was going to Reconnoiter, but I can't find the place on the map.

### Coal Miners Patriotic.

In the Shenandoah district of the Reading mines the coal miners, on Thanksgiving day, made a record of 116 per cent of normal output, largely as a patriotic duty.

# Get the Habit of Thrift and Saving

This is a terrible war we are becoming involved in, but good can come out of even war. One of the benefits that will result to the American people is the renewal of the spirit of thrift and saving—a spirit almost lost. We have become a wasteful people. We have relegated the old proverb, "Save the pennies and the dollars will take care of themselves," to the discards. But war is arousing us. We are beginning to realize our mistakes. We are beginning to get the habit of economy and thrift. We need—how much we need!—to make that habit so much a part of our nature that it will remain with us long after the war is over.

There never before in the history of this country was so ideal an opportunity for saving and earning as that afforded by the thrift and war savings stamps offered by the government. As stated many times heretofore, the government has issued stamps called thrift stamps, that sell for 25 cents each, and has issued stamps called war savings stamps, that sell at $4.13 each (they will cost $4.14 in March). When one has enough of the thrift stamps he can exchange them for a war savings stamp. This is the thing to do for the war savings stamp draws interest. It draws interest at the rate of 4 per cent compounded quarterly (every three months).

The Farmer has become duly authorized agent for the government in the sale of these stamps, having undertaken to sell for Uncle Sam $50,000 worth of them. They are going. Several thousands of dollars' worth of them have been bought by readers and orders are still coming. This paper will be glad to furnish any reader the stamps of either kind without any charge to anybody. If you want to join in the thrift and savings habit merely fill out the coupon herewith, enclose the amount of money you want to save and invest, mail it to this paper and you will receive your stamps as quickly as the mail can take them to you.

## Clip This Convenient Order Blank

Address all communications concerning thrift or war savings stamps to The Washington Farmer, War Savings Department, Room 26, Review Building, Spokane, Wash.

Remittances may be in any form desired, including personal check.

The Washington Farmer, War Savings Department, Room 26, Review Building, Spokane, Wash.

Gentlemen: I wish to invest in ..... U. S. government thrift stamps at 25 cents each.
(number desired.)

I wish to invest in ..... U. S. war savings stamps at $4.13 each.
(number desired.) (February figure.)

Amount enclosed $.....

Full Name .....

Town ..... State .....

R. F. D. No. .....

I have already bought.....Stamps and have a.....
(kind of stamp) (card or certificate)

# Win the War by Preparing the Land, Sowing the Seed and Producing Bigger Crops

**Work in Joint Effort the Soil of the U. S. and Canada—Cooperative Farming in Man Power Necessary to Win the Battle for Liberty.**

The Food Controllers of United States and Canada are asking for greater food production. Scarcely 100,000,000 bushels of wheat can be sent to the allies overseas before the crop harvest. Upon the efforts of the United States and Canada rest the burden of supply.

**Every Available Tillable Acre Must Contribute; Every Available Farmer and Farm Hand Must Assist.**

Western Canada has an enormous acreage to be seeded, but man power is short, and an appeal to the United States allies is for more men for seeding operations.

**Canada's Wheat Production Last Year Was 225,000,000 Bushels; the Demand From Canada Alone, for 1918, is 400,000,000 Bushels.**

To secure this she must have assistance. She has the land, but needs the men. The Government of the United States wants every man who can effectively help to do farm work this year. It wants the land in the United States developed first, of course; but it also wants to help Canada. Whenever we find a man we can spare to Canada's fields after ours are supplied, we want to direct him there. Apply to our Employment service, and we will tell where you can best serve the combined interests.

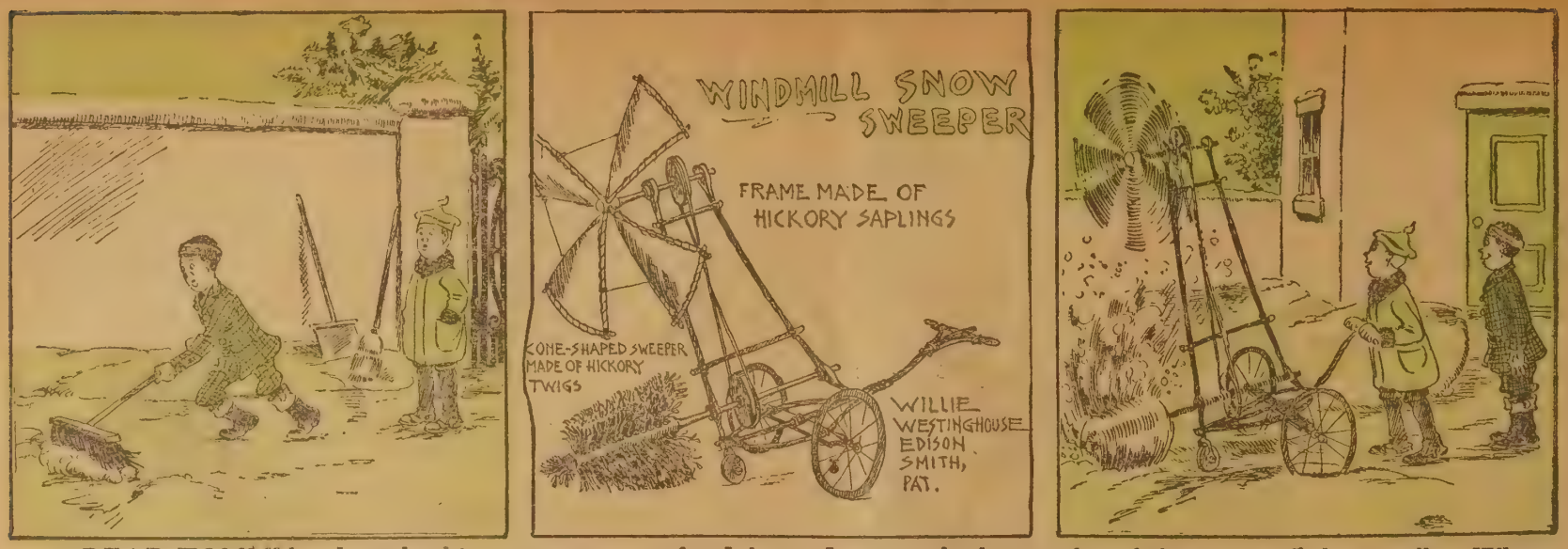
**Western Canada's help will be required not later than April 5. Wages to competent help, $50 a month and up, board and lodging.**

Those who respond to this appeal will get a warm welcome, good wages, good board, and find comfortable homes. They will get a rate of one cent a mile from Canadian boundary points to destination and return.

**For particulars as to routes and places where employment may be had, apply to**

**U. S. Employment Service, Dept. of Labor**

# HOW WILLIE MAKES THE WIND CLEAN THE SIDEWALK




DEAR TOMMY: I made this snow-sweeper for Johnny Jones, as he has to shovel the snow off their walk. When we were trying it old Mr. Jones came out and started to laugh because the wind wasn't strong enough to turn it. But a breeze sprang up suddenly and nearly buried him! Yours, etc., WILLIE.

# BOOT RESORTS TO FIREARMS TO FREE HIMSELF OF PUP



# MACJUNK LEARNS HOW TO CONQUER THE MICE




# MUGGSY ASSISTS AN ABSENT-MINDED JURIST



# Poland May Fight

## *Germany Arouses Country's Anger*

Complications that may greatly affect the progress of the war in Europe have been noted during the last week in Russia, Germany and a number of provinces. The latest possibility is that the Polish nation will rise up against Germany and prove a thorn in her side. The reason that appears behind the Polish anger is the taking of a strip of her territory and giving it to the province of Ukraine as a peace offering to the latter.

The whole situation in that section of Europe is mystifying. The bolsheviki of Russia, apparently in something like an unconditional surrender, a little more than a week ago announced that the state of war with Germany was ended. They did not, however, agree to sign a treaty of peace. The province of Ukraine, however, did make separate peace, thus winning the enmity of the bolsheviki. The latter were taking steps of warfare against Ukraine when Germany stepped in and said no, and began sending soldiers to protect Ukraine. About the same time came seemingly authentic reports that Germany had formulated definite plans for further warfare against northern Russia; that it was the definite German intention to proceed to the Russian capital of Petrograd.

What all this means is problematical, but it does not seem unreasonable to think that it is the purpose of Germany to take advantage of the helplessness of Russia and dominate that territory. Whether or not Russia will remain helpless if Germany proves false to the bolsheviki is a matter of doubt, at least. If German armies go to overrunning the territory will the various factions that have been conflicting with each other unite in defense of their common country?

If Germany is allowed to take virtual control of Russia and devolop her industries as German genius can develop them, how many years will it add to the war? So long able to maintain herself in powerful fighting trim in her present restricted territory, how long could she maintain herself if the rich possibilities of the Russian empire were under her control?

Without question the breaking down of the Russian power was the great victory of the war for Germany, but it seems not improbable that she will make another colossal mistake. The unrest in the country to the east of Germany is great enough yet to remain a grave menace to the Teutons, and to prevent the full concentration of power on the western front.

### Is Germany Ready to Strike?

For several months the world has been developing an expectation that with the coming of spring the German and Austrian armies would launch the most gigantic offensive of the war on the western front. It has been freely predicted by some who believed themselves in a position to know probabilities that this offensive would be so great as to penetrate the allied lines, and it has even been suggested that Paris may again be in danger as she was at the opening of the war till the gallant French checked the invaders at the Marne in the greatest battle of the war. To what extent the central powers are ready to strike this blow, and to what extent the allies are ready to withstand it are questions that hold the world a-quiver. The next few weeks may see the decisive battles of the war fought out—before the American army is ready to lend the aid that the spirit of America is becoming so anxious to lend.

### New Examination Rules.

New regulations have been made by the war department of the United States covering physical examinations for drafted men, and it is stated that the percentage of rejected men is much less under the new rules. The rules modify some of the former grounds for rejection, so that a man need not be a perfect physical specimen to be accepted.

# Would Arrest Townley

Simultaneously with the statement of the conviction and sentencing of Joseph Gilbert, manager of the National Nonpartizan league, on a charge of holding an unlawful meeting in Lakefield, Minn., came the statement last week that a warrant was out for the arrest of President A. C. Towley of the Nonpartizan league on a charge of conspiracy to discourage enlistment. No report of the arrest of Townley has been made up to this writing. The following are the dispatches telling of the matters:

LAKEFIELD, Minn., Feb. 12.—Joseph Gilbert, manager of the Nonpartizan league, charged with holding an unlawful assemblage, was found guilty by a jury in the district court today and sentenced to three months in the county jail.

A warrant has been issued for the arrest of A. C. Townley, president of the Nonpartizan league, charging him with conspiracy to discourage enlistments. Townley now is at Thief River Falls, and authorities here say he will be arrested when he returns to St. Paul.

ST. PAUL, Minn., Feb. 13.—A. C. Townley, president of the National Nonpartizan league, for whose arrest a warrant was issued at Lakefield, Minn., Monday, charging him with conspiracy to discourage enlistments, did not arrive here tonight as had been expected. At the league headquarters it was said that Townley was scheduled to address a meeting of farmers at Perham, Minn., this afternoon and that he would return to St. Paul tomorrow morning. Sheriff O. G. Lee of Jackson county left today for St. Paul with a warrant for Townley.

Indicating that the plan to arrest President Townley had not materialized, and that he was still at liberty was indicated by publication Monday of this week of a statement by him urging the farmers of the country to increase wheat production to the greatest point possible. The following are extracts from his statement in this regard:

"The spring seeding season is close at hand," said Mr. Townley, "and at present prices corn, rye and barley all will pay the farmer much better than wheat.

"But the government and our allies need wheat above all else. Its increased production is of paramount importance. We must have more wheat to win the war. Many farmers, burdened by pressing financial obligations and possibly unaware of the vital necessity for more wheat, may decide to plant corn, barley or rye instead of wheat. This is a very natural thing for the individual farmer to do, but if it is done generally it would be a national calamity.

"Therefore, I urge in the strongest possible manner that all farmers prepare to plant more wheat, to the exclusion of less needed crops, purely as a matter of patriotism."

### Tractor Demonstration.

On April 17, 18 and 19 of this year a mammoth tractor demonstration that promises to draw visitors from every part of the Pacific coast will be held at Davis, Cal., on the Universtiy of California farm.

The demonstration will be under the auspices of the California Tractor and Implement association, an organization composed of the manufacturers, and California representatives of manufacturers of tractors and tractor implements.

The University of California, recognizing the broad educational value of such a demonstration, has offered to serve as host to the tractor men and the demonstration will therefore be held on the university farm, at a point less than two miles from the center of the town of Davis, on the main line of the Southern Pacific railroad.

Several features will mark this demonstration that are entirely novel and that will greatly increase its interest for the farmer. In the first place, at the suggestion of Professor J. B. Davidson, head of the department of farm engineering of the University of California, a special effort will be made to show the broad scope of modern power farming and to demonstrate the extreme versatility of the present-day tractor. With this purpose in mind, there will be a more complete showing of tractor tools than is usual at these demonstrations, including plows, disc and drag harrows, special types of cultivators, land levelers, sub-soilers, scrapers, checkers and so on.

### Sticking to the Point.

"Have you amused your baby brother, Willie, and kept him quiet while I was gone?"

"Yes, ma, and he hasn't opened his mouth since you went away."

"What did you do to amuse him, Willie?"

"I gave him the mucilage bottle to suck."

### Women Are Rulers.

Women are the rulers of the Island of Tiburon in the gulf of California, and the men are made to do all the work and act as servants to their wives.


**HIDES**

Send hides to us for highest cash market price. Check by return mail. References, any bank in Seattle

**NORTH COAST TANNING CO.**

Ballard Station, Seattle.

**RAW FURS**

I am in the market to buy large quantities of mole, muskrat, coyote and rabbit skins. Send for price list and tags. OSCAR GARD. 75 Marion Street, Seattle, Wash.

Get Your Name on My Mailing List—I can always quote you Top Market Prices for

**RAW FURS**

I pay what I quote for the average run of prime furs. I pay more than I quote for extra fine skins. Send your name and address on a postal card to

**O. L. SLENKER**

P. O. Box F-2, East Liberty, Ohio.


## PRIZES FOR WAR GARDEN PLANS

The Washington Farmer will give $10 in prizes for plans and directions for growing the best war garden on the farm. This includes:

1. As to size and length of rows and where and when to plant the various garden vegetables.

2. The best methods of cultivating the garden throughout the season and the best methods of fighting garden pests.

3. The best methods of harvesting, preserving and storing winter supplies of garden vegetables

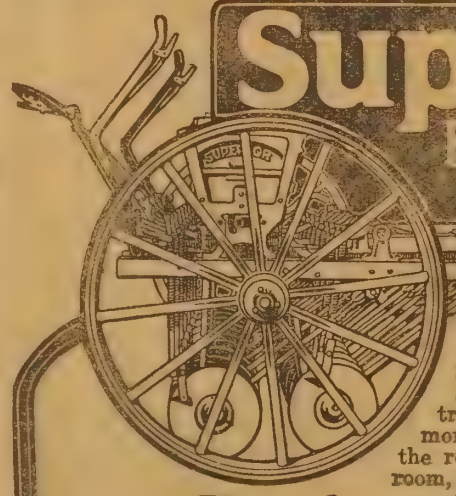
4. In short, how to produce in variety and quality the largest amount of food for the farmer's family table with the least interference with other necessary farm production.

First prize, $5; second prize, $3; third prize, $2.

All entries in this contest must be received on or before February 28.

Mail to the Editor of The Washington Farmer, Spokane, Wash.


**Superior Four Inch Grain Drills**



Are made for the farmer who wants to Sow his grain closer together. Superior 4 Inch Drills distribute the seed more evenly, with more rows per acre and less seed in the row, giving each plant more root room, and a chance for sturdier growth.

**Bigger Crops—Fewer Weeds**

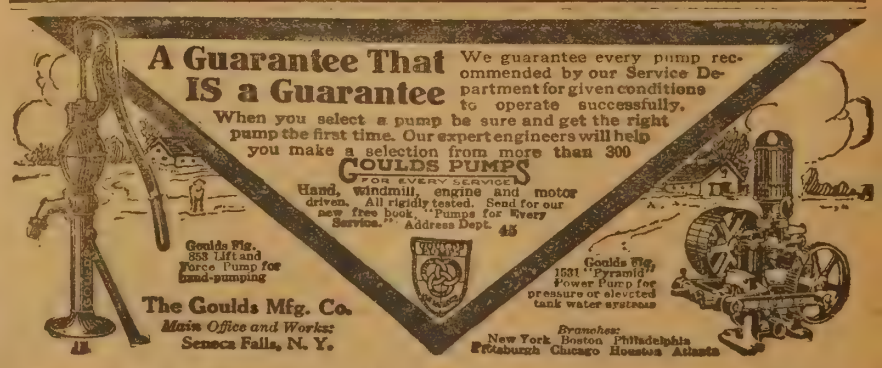
It has been proven that a greatly increased yield is obtained, some claiming as much as one-third more than by the old method of seeding. The discs are so closely spaced that a highly cultivated seed bed is obtained with an almost total elimination of weeds.

Superior 4 Inch Grain Drills are made in two sizes, plain and fertilizer styles. Operate perfectly under the most severe conditions. The heavy angle steel frame will stand up to all strains encountered in field work. The famous Superior Disc Bearings are guaranteed against wear. Positive force feed for both grain and fertilizer.

Ask your Dealer for further information, or write us for descriptive pamphlet.

**The American Seeding-Machine Co., Inc.**

Springfield, Ohio




**SPOKANE SEED CO.**

Distributors of Spray Pump Line.

SPOKANE, WASH.

# WASHINGTON FARMER GIVES MORE FOR $1 AT A TIME WHEN DOLLAR'S BUYING POWER HAS BEEN MUCH REDUCED

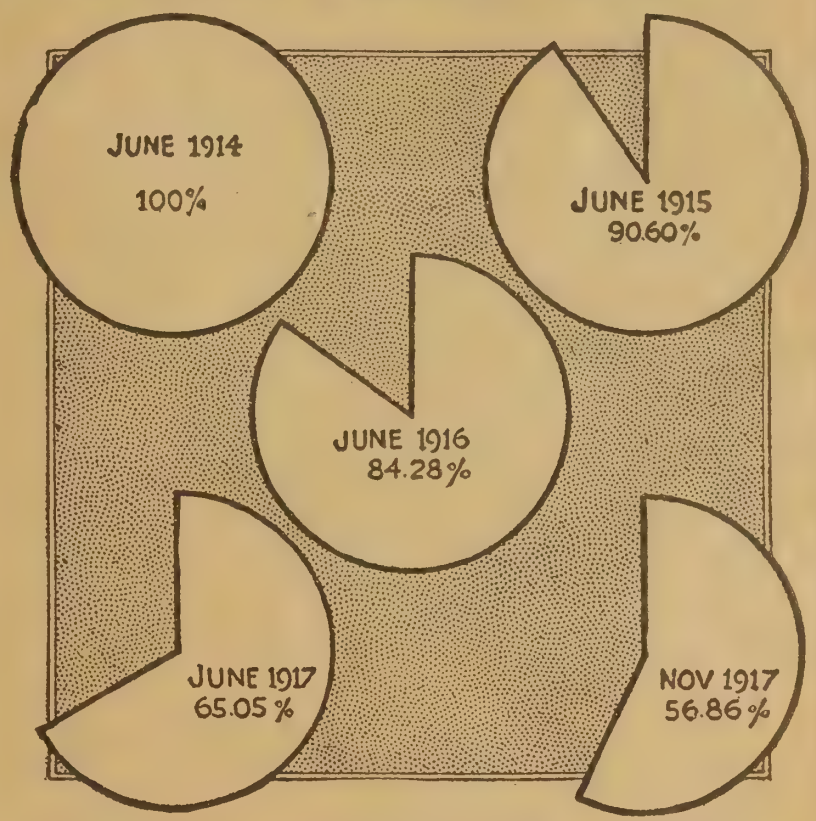
## Former Rate Was $1.00 for One Year Present Rate $1.00 for 5 Years

***With prices for almost everything mounting steadily, the advantages to be gained through the elimination of the middleman are more apparent than ever.***

The plan of this paper to cut out its force of agents so far as possible came at just the right time. It offered a means for putting the principle of cooperation into actual practice.

We said to our friends: "Send your subscription order direct. Get your neighbors to do the same. We will give you and your neighbor the benefit of every penny which would ordinarily go to the agent handling the subscription. Moreover, many men will be released to serve in lines where help is badly needed."

If you believe in cooperation—if you believe in eliminating the middleman—help us make our experiment a success. Send in your order if you haven't already done so, and let as many neighbors as possible know about our money-saving plan.




**This Chart Shows How the Dollar Has Dwindled in Purchasing Power Since the War Began. Compare With Our Offer**

## PLEASE TELL YOUR NEIGHBORS ABOUT THIS OFFER

Your state farm paper aims to have every issue of interest to each and every member of the family. There are departments devoted to live stock, dairy, poultry and orchard. Perplexing questions are answered. A splendid pattern service is maintained. Clean, fascinating fiction by popular authors is secured. Articles of timely interest are prepared. Today you are getting a better paper than ever before for less money than ever before.

**25c** PAYS FOR THE WASHINGTON FARMER FOR ONE YEAR

**50c** PAYS FOR THE WASHINGTON FARMER FOR THREE YEARS

**$1** PAYS FOR THE WASHINGTON FARMER FOR FIVE YEARS

Very likely one or more of your neighbors is unfamiliar with this unusual offer. If so, please tell them about it. We will appreciate this cooperation on your part, and we feel sure that they will, too.



YOUR REMITTANCE MAY BE IN ANY FORM MOST CONVENIENT—SILVER, STAMPS, PERSONAL CHECK, POSTAL MONEY ORDER, EXPRESS MONEY ORDER OR BANK DRAFT.

Feb. 21.

The Washington Farmer,
Review Bldg.,
Spokane, Wash.

I desire to take advantage of your plan to deal direct with your readers in securing and renewing subscriptions, thus saving the middleman's cost and releasing men for productive labor.

Enclosed is $..... for ..... years subscription. In Canada add 1 cent per copy for extra postage.

If you are already paid in advance your subscription will be set forward from the date to which you are paid.

NAME .....

.....

TOWN .....R. F. D.....

STATE .....

# Small, Inexpensive, Up-to-Date Farm House

Here are plans and sketches of a farmhouse made as small and as inexpensive as could well be done for the convenience of a farm family of four persons, says Professor William A. Etherton, of the Kansas State agricultural college. This plan, together with the plans of another farmhouse, by the same author, is published by the National Lumber Manufacturers' association of Chicago. The author well says that it is easier to increase than to decrease the dimensions of a plan, and many builders of this house have made it larger than shown.

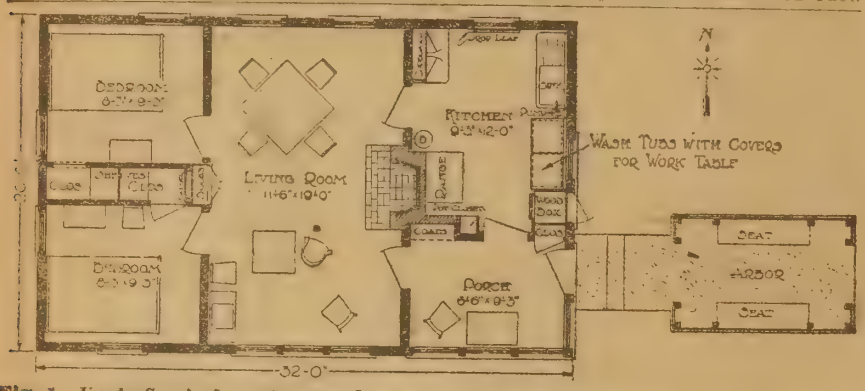



**Fig. 1—Uncle Sam's farm tenant house. An exemplary plan for a very small and inexpensive house.**

This plan was made by the author for the United States department of agriculture. It has been published extensively and many houses have been built from it. It is the prototype of a series of plans—three of which follow here in consecutive order—and of other published plans, also, which were not designed by the author. It serves better than larger houses to exemplify some of the important principles of planning, and it is used here for that purpose. It will be referred to in succeeding chapters more often than the other plans.

It is necessary to increase the size of this house if another outside door is required, and this is a change that many demand. When, however, it is considered that, in most farmhouses, the outside kitchen door is the entrance most used and, in many cases, the only one used in winter; and when it is considered that it is not needful to go out of this house for water and fuel, the one entrance is less objectionable.

A house has been built from this plan, near Kansas City, Mo., without change in dimensions, but stripped of all built-in conveniences, for less than $700 ($679.28). It can be built as it should be for a cost of about $1.50 per square foot of floor area, or $960.

The little house has many structural advantages for strength and durability. Some of these features will hereafter be explained. It has advantages, also, for convenience and comfort, some of which are not equalled or excelled in the larger plans.

It is one of the first principles of planning to make a logical grouping of rooms into public, semi-public, private and service rooms. This principle has been regarded in this little plan, notwithstanding that the reception room for strangers had to be provided out of doors. The arbor inclosure, with its seats, serves this purpose very well in summer. When too cold there, a warmer reception can be given in the living room, which is the semi-public division of this house and intervenes between the private (bedrooms) and the service (kitchen) divisions.

The living room corresponds to the wide hall in southern houses and it serves here a similar purpose. It serves, also, as a dining room and a sitting room, and the better because of well placed doors and the use of a fireplace instead of a stove. Should there be a need during harvest for a long dining table, there is room for it here and two routes, also, between dining room and kitchen. The room is easy to heat, because of being little exposed; it is well lighted and ventilated; and it can be made very attractive at little cost. See Fig. 3.

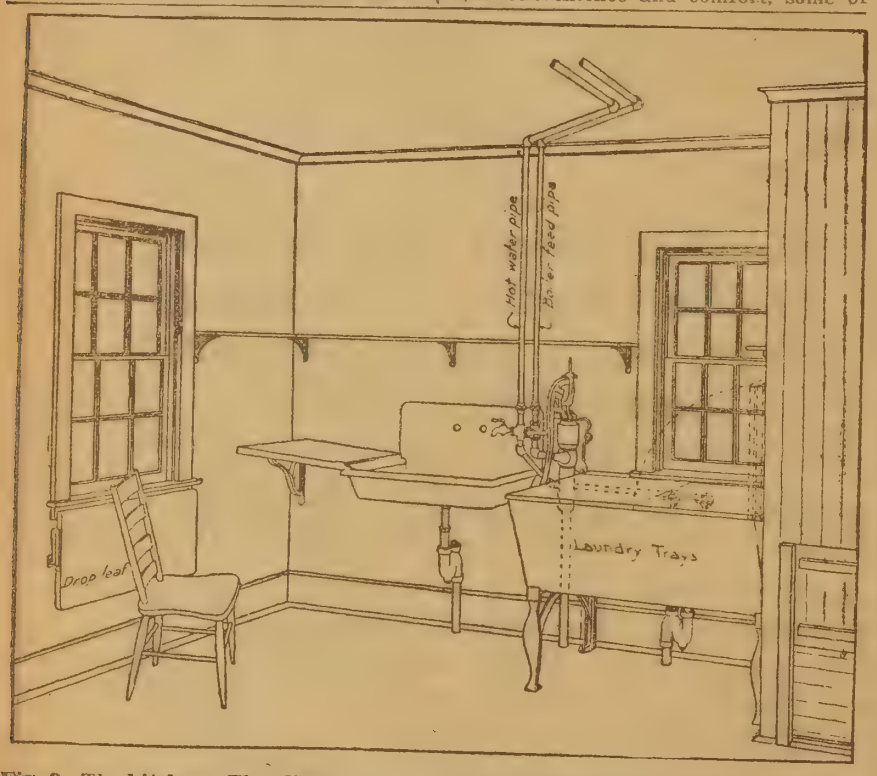



**Fig. 2—The kitchen. The slide to fuel box on the right drops to the floor to open.**

The partition between living room and kitchen can be omitted, so as to have in this little house what so many families contend for and have in large farmhouses; namely, a big kitchen for all purposes except sleeping. And this combination room would be better than the large, square kitchens, because the fireplace, if retained, would partly separate the cooking and dishwashing from the sitting portion of the room. But, whatever advantage there may be in such an arrangement, there are greater advantages in the kitchen that can be closed from other rooms.

As here shown, the dining table is quite as near to the kitchen fire as it should be and but little farther away from the work table, sink and cupboard. Certainly, it is more comfortably and pleasantly placed than would be possible in a kitchen.

This kitchen is not a thoroughfare to other rooms. It is not too large, yet large enough. It is self-contained. It has ample cupboards, a pot closet, work tables, fuel box, water supply, sink and stationary tubs. These are all within three steps of the center of the room.

The fuel box is filled from the outside of the house. The water—hot and cold—is supplied to the sink and to the laundry tubs.

It is necessary that rooms in small houses be used for more purposes than in larger ones, and the kitchen in this house serves also as a laundry and as a bathroom. As a laundry it has the stationary tubs with sewer connections, and hot and cold water supply. It has, also, the kitchen range for use as a laundry stove, and convenient fuel. A window at the tubs affords good light. When the two windows and the south door are open, the heat and the odors of the room will blow away from the house and not into other rooms.

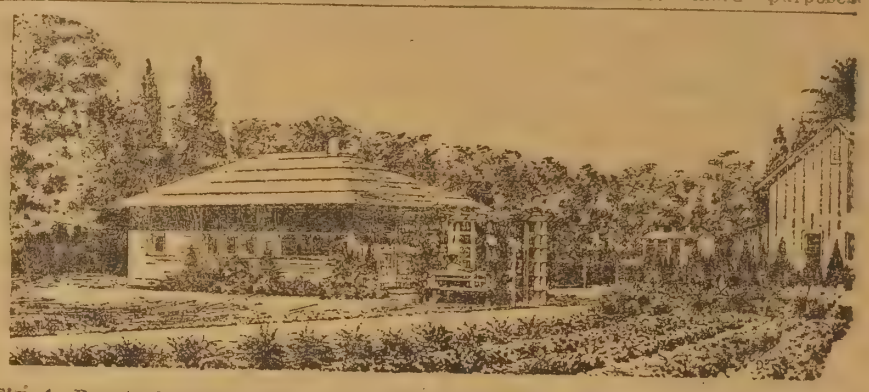


**Fig. 4—Beauty is not a luxury. The cheapest and simplest of farm tenant houses can have pleasing lines and beautiful surroundings.**



**Fig. 3—The living room. A very plain interior that has architectural design.**

Note:—Abnormal lumber prices make the figures in this story only suggestive of the cost.

## SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

## Why the "Careless Sneezer" Is a Big Menace to Business



Dr. Hirshberg

If the breakfast is tasteless, the wife "wearisome," the children "a nuisance" and the car service an abomination, the chances are you are getting "it." Then if the typist is intolerably stupid, the business meeting an irritating wrangle, participated in mainly by "fools," and golf a thing of pain and sorrow, you've "got it."

Of course, being a man of courage and obligations, you will report at the office the following morning as usual. Your eyes will be red and watery, your voice raspy and your nerves frazzled. You will sneeze and cough, and your associates will look upon you coldly and avoid you, because you're in a fair way of infecting the office help, their families, the town, perhaps county and state, with wheezes, snivelings and gloom.

You have one of the 57 varieties of common colds—it doesn't matter particularly which one. There was a time when victims like you were mere objects of amusement—the butts of good-natured jibes. Today you're a pariah. This is the penalty you pay for your sanitary sins.

What aroused the public to this frame of mind, aside from the discomfort and the latent danger is the staggering economic loss annually suffered because of common colds. In these times of high prices and uncertainty the people can not afford to submit to an epidemic of colds with the resultant lowering of efficiency and often the total suspension of work.

The larger manufacturers, particularly those upon which the United States government depends for products essential to the prosecution of the war, were the first to appreciate the seriousness of this disease and its paralyzing effect on output. In many of these plants there is now a well-organized propaganda along this line. Close, dusty and over-heated workrooms are rarely found in the modern factory or mill. In this the employer is willingly aided by the employe who has a lively appreciation of the dangers of stuffy air. Some employers have gone to the length of establishing a separate department of hygiene and in every instance have paid dividens in increased output. The more simple rules laid down for workers are:

Avoid sudden changes in temperature.

Exercise regularly and eat intelligently.

Body cleanliness and lots of sleep are essential if the system is to be held to the highest point of resistance to disease.

**Muffle Your Sneezes.**

The careless sneezer in the shop has become of a right a person execrated. One careless sneeze may infect a dozen associates. Each sneeze releases thousands of cold germs in a fine spray and the one who breathes nearby must be very robust to escape infection. A handkerchief held to the mouth prevents this. It has the added virtue of muffling the noise and concealing a face which is for the moment most unattractive.

# All the World's a Stage, and All the Men and Women Merely Players

## Traveling "Somewhere in France"



Copyright—Committee on Public Information, Supplied by I. N. S.

American soldiers just arrived in France are here shown on the last leg of their journey to the training camps behind the trenches.

## Learn European Style of Warfare



Copyright—International.

In the above photograph are shown some of the members of the Harvard university officers' training corps who are learning the European style of warfare. They are digging trenches for practice at Fresh Pond, Mass.

## Wood Precious in France



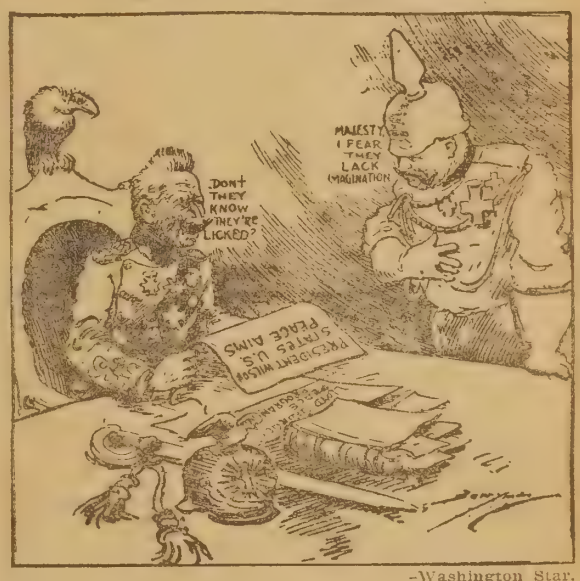
They are selling wood by the ounce in Paris now. The fuel shortage here is nothing in comparison with that of France. This photo shows a street merchant disposing of his precious stock of wood to the shivering citizens by weight.

## To "Feed Up" the Navy.



The time-honored sailors' menu of "beans, hardtack and more beans" is threatened. Miss Helen C. Hoerle, a suffragette, and pretty, recently won the distinction of being the first of her sex to be enrolled in the United States naval reserve as a cook. Miss Hoerle will act as cooking instructor in the naval reserve and is to start a campaign to recruit 500 men as coworkers in her plan to oust the bean from the sailors' menu.

## Lack of Imagination



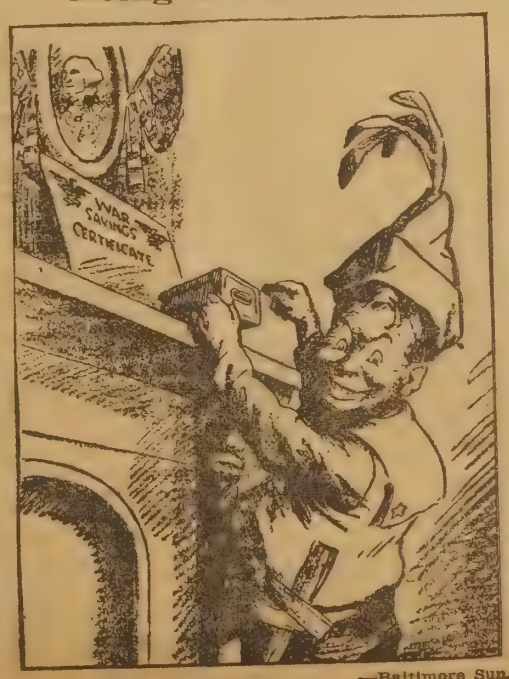

—Washington Star.

## The Service of Sacrifice



—Memphis Commercial Appeal.

## Doing His Two Bits




—Baltimore Sun.

## Prussian Sands Running Low




—El Paso Times.

# Pioneer Memories of the Big Bend

By IDA C. YOUNG

Those who have followed the experiences of the Bunch Grass Boy in the Big Bend country of central Washington will find a treat in these further pictures of pioneer days related by a bunch grass girl—Editor.

For a considerable time Lincoln and Okanogan postoffices were the only ones that existed in Douglas county. The mail route extended clear on to Davenport, which, in those early days, was known as Cottonwood. For a long time Mr. Tibbets carried the mail riding one horse and leading another, upon which was packed the single leather mail pouch shaped like a mammoth double-jointed oyster. On Tuesdays he came from the west with a little handful of letters and a paper or two in the saddle bag. On Fridays he returned from the east with a fairly well filled sack that held the mail for all Douglas county.

In time the growing population outgrew the capacity of the pack horse system, and a hack and team were installed. About this time J. E. Hetley had the contract for mail service. During his time I think it was at its best. Travel increased and there were more postoffices. The route was shortened so that Grand Coulee postoffice, nine miles east in Lincoln county, became the end of the division. We had four stages a week now: two from the east and two from the west.

During the winter of '88 and '89, carrying the mail became a difficult proposition. It was a hard winter, a cattle killer. The snow was deep and badly crusted, making it impossible for horses to paw through and reach the bunch grass as they did during the milder winters. Neither were there any bare spots, and range cattle starved that hitherto had made a good living drifting from place to place where southern exposure and scab lands held the abundant, well-cured bunch grass for winter forage.

**Traveling on Skees Carrying Only Letters**

Travel was next to impossible. The poor stage horses had leather boot-tops laced around their front legs, and still they staggered in spent and bleeding from the deep drifts and the cruel crust. Finally the drivers had to give it up, and for a long time it seemed to me there was no mail. Then one day toward evening two of Hetley's drivers, Alex Field and Corrington Gilbert, came down over the hill from the west. They were traveling on skees and carried only letters. They were tired, but in high spirits, and stopped over night to rest.

Young Gilbert had his harmonica along. I remember him as the most efficient producer of music on the mouth organ that I knew at that time: that is saying a great deal, for every one who could whistle a tune played the mouth organ. There are old tunes now that I hear occasionally that don't sound right because they are not given in this way.

We all certainly enjoyed those evenings. The next morning the boys were off again, and in a day or so they came back with letters from the east. Young Gilbert stopped at his home across the coulee, leaving Field to go on to Waterville with 80 pounds of mail on his back.

That was a long remembered winter. Feed among the settlers ran short long before the snow was gone. When bare spots finally did appear cattle and horses were taken out and herded and nursed along from one day to another. Chopped feed was hauled from Almira, where railroad operations had halted for the winter. This feed helped save man of the settlers' stock. Range stock, of course, having to shift for themselves, died off by thousands that spring.

**When Pink Crabtree Spent Night in Big Snowdrift**

I think it was in the earlier part of this same winter that a neighbor boy was lost in a snowstorm, and lay out all night. Pink we called him—it was really Pinkerton, but Pink was so much easier, and if went so well with his last name, which was Crabtree. Pink had started out with a sack partly full of ground feed for some horses, which he was to feed. He found the horses; scattered the feed in little piles for them to eat. Then, as I remember, he turned his mount loose and started for home with the empty grain sack.

It was snowing hard by this time, and before he had gone any distance he was completely lost. It seems, however, that he did not become alarmed or excited, nor did he spend much time traveling. He walked until he became warm. Then, coming to a big snowdrift, he pawed out a big hollow, made himself as comfortable as possible, without any overcoat and only the empty sack to wrap around his feet.

In the morning the storm was over and he came home. His people were considerably worried, and yet they had hoped some way that he had drifted in to one of the scattering neighbors. Pink never took the experience as seriously as did the rest of the boys and girls of the neighborhood, who regarded him with more or less respect after that.

**Getting Lost Was an Easy Matter Those Days**

Getting lost was an easy matter those days, especially in the fall when the rains began and the fog came down. Hillsides, rock ledges and sage brush get to have a terrifying monotony in a trackless region, that is trackless so far as human feet go, for cattle trails are little help, except that they might lead to a watering place, if one happened to be headed right.

Ed and I got lost just once, that is I was lost. Ed, however, had a sense of location that was almost uncanny when it came to finding home. We were out on foot and hadn't yet found our cows when all at once the fog shut down on us. We decided immediately to go home and turned around. I wisely let Ed engineer the expedition though I kept thinking that he was bearing pretty far to one side to find the road we were looking for. At last, after long walking, we came upon it and Ed started off down the slope at a quickened pace. It was then my doubts culminated in wild protest. I was sure he was going straight away from home. He was just as sure he going right. I begged and even wept a little, finally starting off on my own hook up the road. Ed only shut his jaws, turned and went the other way. Then after we had been out of sight of each other a few moments I began to feel that if we must part we might just as well do it together. So I turned and hurried after him. He was still going at a good pace when I overtook him, and paid no attention to my sniffing and grumbling, for I was sure to a dead certainty that we were going straight off toward the coulee walls. In a short time, to my complete amazement, we came upon our backyard fence looming strangely through the mist.

But fog and darkness and storm were not the only means of confusing sense of direction; children sometimes wandered off in the sunshine and were lost. Little three-year-old Sally Higgenbotham did this. One warm, sunny spring afternoon she, with some older brothers and sisters, wandered together in search of flowers. The children left the house, went over a little rising ground out of sight. Then in their interest going from flower to flower, became separated and later on straggled home one by one without Sally. Her absence was unnoticed for some time, but it finally became apparent that she was missing and when a hasty search and much calling failed to bring her by the time it grew dark the neighborhood was aroused and turned out man and boy for a systematic search.

**Three-Year-Old Finds Shelter in Badger Hole**

It turned cold in the night, clouded over and began to rain. All the searchers had on overcoats and mittens and somewhere out in the wilderness was that three-year-old child with no protection but a gingham dress. About daylight they found her huddled down in the open mouth of a deserted badger hole. She was stupid with cold and fright, but recovered very quickly after getting home and so far as I know suffered no ill effects from her experience.

But I've wandered away from my subject almost as far as Sally did from her home. When I began I meant to tell how much a part Lincoln postoffice had in our entertainment. So far I've only touched upon the regular or irregular arrival of the stages.

People come long distances for their mail in those early years. Phillip McEntee, Dan Paul, the Leaheys from the south end of Grand coulee, the Osbornes, Long and William Fleet from the north end. The Stubblefields and William Nail from way over across the coulee. From the south near and beyond where Hartline now stands, from distances away of 10 and 15 miles, came William Bundschue, the Ames, Mrs. Alice Jones and D. M. Stevens.

There were others, of course, but I seem to remember best those who came often, or those who traveled so far that they could not return the same day, so stayed the night with us. There were wonderful stories and songs on these occasions. One story that father still loves to tell concerned Jack Hardin, one time partner of William Fleet in the cattle business. Hardin had secured a new cook for his outfit, and the story concerned the unfeeling joking tendency of one of the outfit in slipping a handful of brown beans into the kettle in which simmered a toothsome mess of dried apples.

Every one who could sing was also expected to contribute a song with or without music. I have still to hear anything sweeter than "Kathleen Mavourneen," as sung by Phillip McEntee in genuine Irish dialect as he sat among the others in the light of our one little kerosene lamp. Dan Paul could not sing, but he voiced his appreciation of those who could in that unforgettable little hesitating way of

(Continued on page twenty-five.)

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I will send one dollar to every secretary of a farm loan association of the 12th district located east of the Cascade range who will send me his name and address.

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W. H. WINFREE, President.

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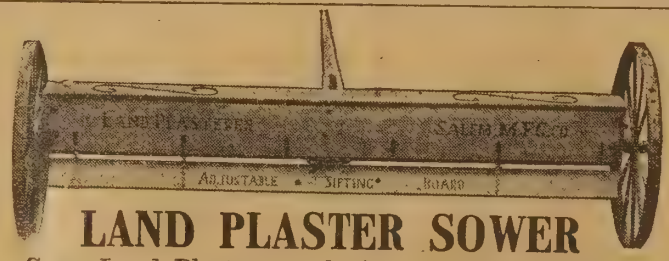
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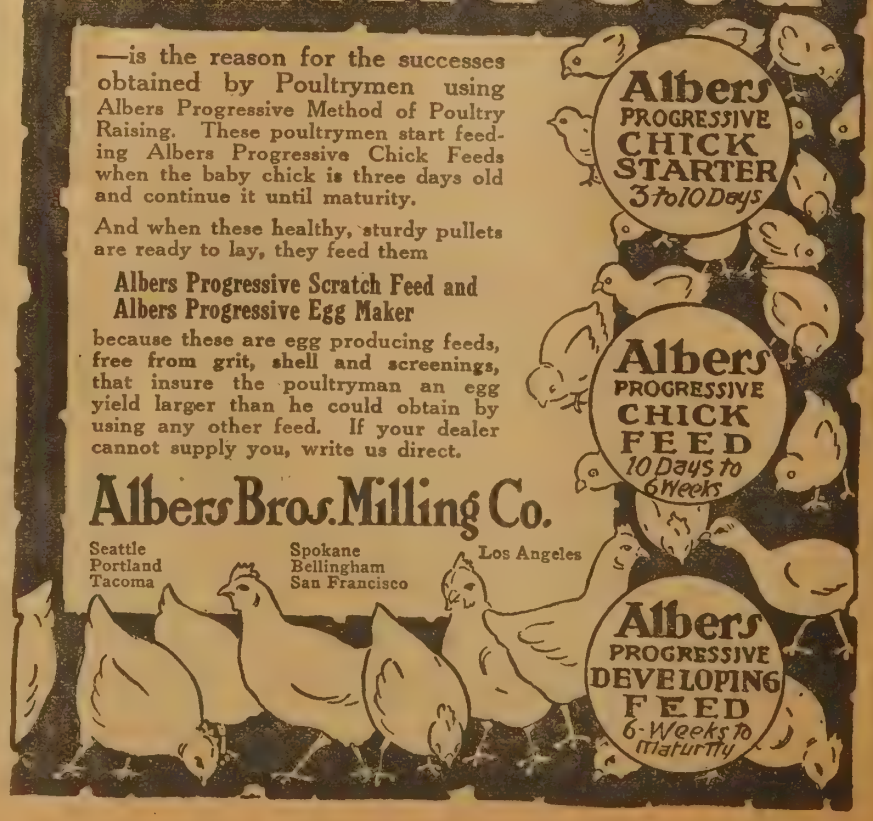
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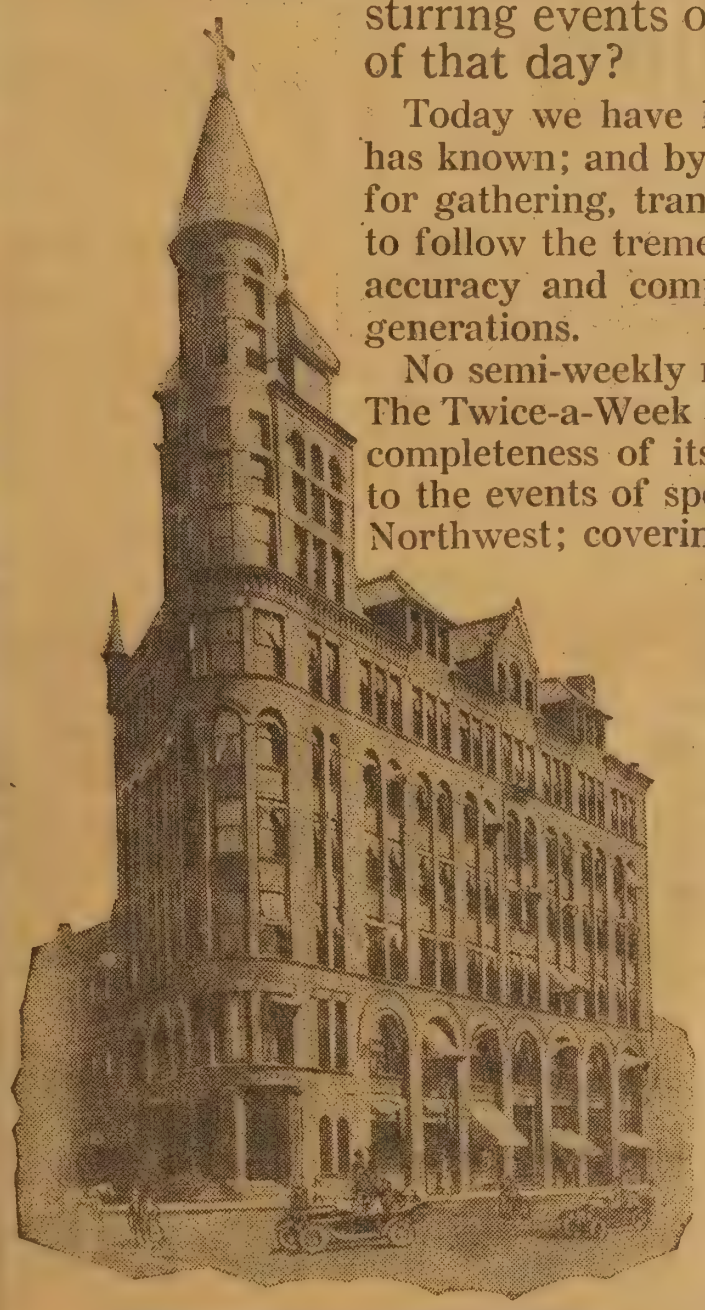
IF you were living in the days of the American Revolution you would want to know every step in the campaigns of Washington and Cornwallis.

And what would you think of any one who lived in the '60s of the last century and was not enough interested in the stirring events of the civil war to secure the papers of that day?

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ALICE W. BARLAND,
Editorial Contributor.

# Good Things to Eat

By MISS RUTH WOODS, Caldwell, Ida.

Here are a few good things to eat, as demonstrated in the Caldwell (Idaho) public schools:

**Custar Souffle.**

Two tablespoons butter, two tablespoons flour, two tablespoons sugar, one can milk, four eggs, fresh or preserved fruit, (peaches or apricots are best).

Method—Scald the milk in a double boiler. stir the flour and the butter together, add the scalded milk gradually and cook five mintues, stirring constantly. Beat the egg yolks and add the sugar; then add to the milk. Set the mixture away to cool. When cool add the stiffly beaten whites of eggs, pour into a buttered baking dish and bake 30 minutes. Serve at once.

**Bread Pudding With Prunes.**

Ten prunes, one-eighth cup sugar, nutmeg, one egg, four slices buttered bread, one cup milk, salt.

Wash and soak the prunes for several hours—cook until the friut is soft so that the stones may be easily removed. Drain the water from the prunes, remove the stones and add sugar and nutmeg. Break the buttered bread into pieces. Put a layer of the bread in a buttered dish, add half of the prunes and then another layer of bread, the remainder of the prunes and finally a layer of bread with buttered side up. Beat the egg, add the milk and salt to it and pour the mixture over the bread and prunes. Bake slowly until the milk is thickened—cover for the first 15 mintues. Serve with hard or lemon sauce. Use juice from prunes for lemon sauce.

**Orange Marmalade.**

Four oranges, one grapefruit, four lemons, water, sugar.

Process I.—Reserve half peel of orange, grapefruit and lemon to use for candied peel. Slice fruit through pulp and rind to paper thickness, discarding all seeds—weight the prepared fruit and to each pound add three pints cold water. Set aside 24 hours.

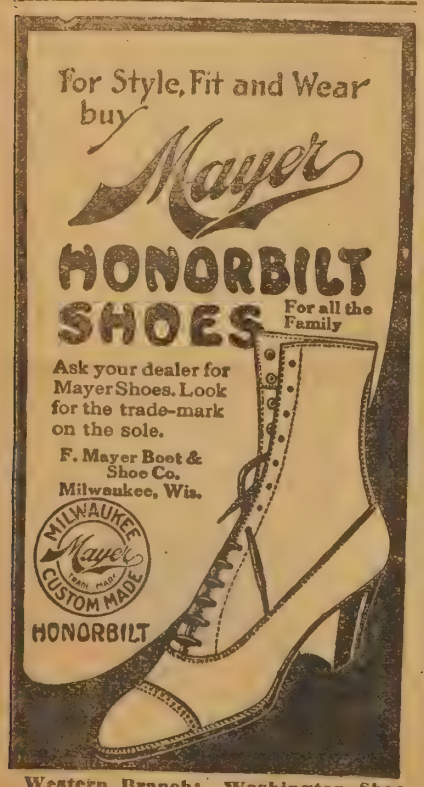
Process II.—Let boil quickly until rind is perfectly tender, about one hour. Set aside until next day.

Process III.—Weight material and to each pound add one pound of sugar. Cook (stirring occasionally to avoid burning) to a temperature of 220-224 degrees F. Store in sterilized glasses or jars.

**Apricot Conserve.**

One pound dried apricots, one and one-half quarts water, two pineapples, sugar.

Wash the apricots and soak them in water—cook apricots until tender in the water in which they were soaked. Press through a strainer. Shred the pineapple and cook in as little water as possible. Combine the cooked fruits and measure. Add half as much sugar. Cook until thick—pour into sterilized glasses.




Western Branch: Washington Shoe Mfg. Co., Seattle, Wash.

## One-Dish Dinners.

These one-dish dinners planned by the U. S. food administration of the department of agriculture, supply all five kinds of food. Each is enough for the whole dinner for a family of five. Eat them with bread and with fruit or jam for dessert. Then you will have all the five kinds of food your body needs.

**Fish Chowder**—Rabbit, fowl, or any meat may be used instead of the fish, or tomatoes instead of milk. Carrots may be omitted. One and one-half pounds fish (fresh, salt or canned), 9 potatoes, peeled and cut in small pieces, 1 onion, sliced, 2 cups carrots cut in pieces, 1-4 pound salt pork, 3 cups milk, pepper, 3 tablespoons flour. Cut pork in small pieces and fry with the chopped onion for five minutes. Put pork, onions, carrots and potatoes in kettle and cover with boiling water. Cook until vegetables are tender. Mix three tablespoons of flour with one-half cup of the cold milk and stir in the liquid in the pot to thicken. Add the rest of the milk and the fish which has been removed from the bone and cut in small pieces. Cook until the fish is tender, about 10 minutes. Serve hot. You can omit salt pork and use a tablespoon of other fat.

**Dried Peas with Rice and Tomatoes**—One and one-half cups rice, 2 cups dried peas, 6 onions, 1 tablespoon salt, 1-4 teaspoon pepper, 2 cups tomato (fresh or canned.) Soak peas over night in two quarts of water. Cook until tender in water in which they soaked. Add rice, onions, tomato and seasonings and cook 20 minutes.

**Potted Hominy and Beef**—Hominy is excellent to use as part of a one-dish dinner, if you have a fire in your stove so that you can cook it for a long time, or use a fireless cooker. Heat one and one-half quarts of water to boiling; add 1 teaspoon of salt and 2 cups of hominy which has been soaked over night. Cook in a double boiler for four hours or in the fireless cooker over night. This makes 5 cups. This recipe may be increased and enough cooked in different ways for several meals. Hominy is excellent combined with dried, canned, or fresh fish, or meat and vegetable left-overs may be used. Here is one combination. Five cups cooked hominy, 4 potatoes, 2 cups carrots, 1 teaspoon salt, 1-4 pound dried beef, 2 cups milk, 2 tablespoons fat, 2 tablespoons flour. Melt the fat, stir in the flour, add the cold milk and mix well. Cook until it thickens. Cut the potatoes and carrots in dice, mix all the materials in a baking dish, and bake for one hour.

## Using Worn Out Garments.

To the Editor: My experience in making over garments and utilizing the least worn parts of discarded ones has caused me to say often that I am an expert in the art.

A much worn sweater will yield enough good material to make a child a petticoat; also good ones can be made from the bottoms of knit shirts. Sew onto a waist or yoke and crochet scallops on the bottom.

Underwear, when worn out for adults, still has enough good material to make garments for little folks. The gauze will even make nice stockings and can be dyed if colored ones are desired. Buy or make new feet for the children's stockings. Turn the worn knees to the back when you sew them on.

Flour sacks, dyed black, make nice bloomers for the little folks.

Did you ever have a dainty white waist made from sugar bags? If you prefer a tint put some tissue paper of the desired shade in the rinse water. This will wash out and you can have another color the next time.

MRS. A. O. LEE.

Othello, Wash.

**Habits of Crayfish.**

The crayfish may be described as a fresh water lobster, and usually lives a purely aquatic life, keeping to the river-bed. Some of the crayfish found in Australia, however, have forsaken the water and excavate burrows in damp soil. The tunnel leading to the heart of the burrow is free from water, but water is always present in the chambers at the end where the crayfish lives. They do much damage to artificial watercourses in the mining districts by riddling the banks and dams.

**Creamed Turnips.**

Wash and pare the turnip and cut into cubes. Cook in boiling, salted water until tender. Evaporate the water by leaving the kettle uncovred on the fire. Add three cups of thin white sauce made separately, or stir three tablespoons of flour into one-half cup water and add this with two and one-half cups of milk and water to the vegetables and boil. Add salt and pepper to taste.

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# Trouble With His Well

To the Editor: I have a well on my dry farm 10 feet deep. Have dug it in a hollow. The formation is a blue clay and the water does not taste good. It seems slick, soapy. What is the cause of water tasting slick? Will a drive sand point be satisfactory to drive the well deeper? I have only about five inches of water. Would the screen get clogged up with the clay? G. E. B.
Preston, Idaho.

J. P. Fairbanks, instructor in agricultural engineering, Washington State college, gives the following partial answer to the above question:

In case the clay is not unusually hard it would be possible to drive your well deeper with a sand point, and the point should work satisfactorily in case it is driven through the clay into sand or gravel. If, however, the point remains in the clay after driving deeper it would be very apt to clog up, and you will be unable to get any quantity of water. This will be caused not only by the screen becoming clogged, but the circulation through the clay will be very slow. For this reason you should have a larger hole so that the water can collect during the intervals between pumping.

# Pioneer Memories

(Continued from page twenty-two.)

his speech and laughed his soft little chuckle at the stories that were told.

**"Oh, Bury Me Not on The Lone Prai-ree"**

Our choice of music was probably as indiscriminate as our reading. We had our hymn books, of course, that mother brought along with the organ, also some simple instrumental music. Ed used to play and sing "Come Thou Fount," and mother drilled us so that he and I could make a soprano and alto duet of "Jesus Lover of My Soul." I think those songs were a great help to mother. She seemed to prefer them to the more popular airs that took the fancy of us children.

We reveled in songs of pathos and emotion. There was "The Charge of Fredericksburg" that Frank Alexander used to play and sing with such feeling on the little organ. Also "The Drunkard's Lone Child." There was a cowboy song that I guess was known all over the west. I remember only the chorus:

"Oh, bury me not on the lone prai-ree
Where the yellow coyote will howl o'er me.
In a narrow grave just six by three
Oh, bury me not on the lone prai-ree."

Then there was "The Cowboy's Lament," which was charged with muffled drums, mournful music and dead marches. There were also the old plantation songs and many others. We sung them all, and I hope were influenced only by the best.

The postoffice, however, was not the only means of furnishing interest and entertainment. We had a flourishing Sunday school under the leadership of Mrs. A. L. Davis. There was preaching, too, every Sunday. A Mr. Gibson and grandfather alternating regularly in the frame schoolhouse that was now in district No. 1. Voorhees district, with the first log schoolhouse, having been cut off.

There were also school entertainments and Christmas trees. I think about the last entertainment that took place before we sold out and moved to Hartline, on the Central Washington railroad, was staged by Mrs. Davis. Julius Johnson was the hero; Davy Hughes second man. Julius did a slashing bachelor's part, baking sour dough biscuits and making a spectacular hit over the washboard. I was involved in the play somehow, but was inexpressibly bored over my part and didn't

(Continued on the following page.)


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# Patterns

2175. Dress for Misses and Small Women. Cut in 3 sizes: 16, 18 and 20 years. Size 18 requires 6 3-8 yards of 44-inch material.

1982. Middy Blouse for Small Women and Misses. Cut in 3 sizes: 16, 18 and 20 years. It requires 3 1-4 yards of 36-inch material for an 18-year size.

2159. Dress for Misses and Small Women. Cut in 4 sizes: 14, 16, 18 and 20 years. It requires 5 1-8 yards of 44-inch material for a 16-year size.

1909. A New Coat Dress for Misses and Small Women. Cut in 4 sizes: 14, 16, 18 and 20 years. Size 16 requires 6 yards of 44-inch material.

1998. Dress for Misses and Small Women. Cut in 3 sizes: 16, 18 and 20 years. It requires 6 1-2 yards of 36-inch material for an 18-year size.

2271. Dress for Misses and Small Women. Cut in 3 sizes: 16, 18 and 20 years. Size 18 will require 4 7-8 yards of 44-inch material.

2304. Dress for Misses and Small Women. Cut in 3 sizes: 16, 18 and 20 years. Size 16 requires 4 3-4 yards of 44-inch material for the dress and 1 3-4 yard for jumper.

2345. Dress for Misses and Small Women. Cut in 3 sizes: 16, 18 and 20 years. Size 18 requires 7 1-4 yards of 36-inch material.

1758. Ladies' Apron. Cut in 3 sizes: Small, Medium and Large. It requires 6 1-4 yards of 36-inch material for a Medium size.

1502. Ladies' "Over All" Apron. Cut in 3 sizes: Small, Medium and Large. It requires 4 3-8 yards of 36-inch material for a Medium size.




Please fill in this order and mail with remittance to:
PATTERN DEPT., PACIFIC NORTHWEST FARM TRIO, Spokane, Wash.

Enclosed find.....cents for which send me the following:

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Pattern No.....Size..... Pattern No..... Size.....

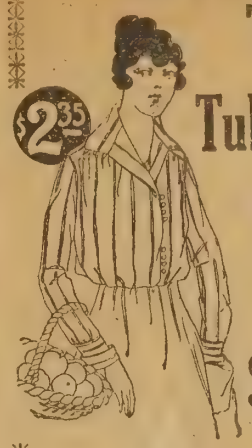
Name.....

Postoffice..... State.....

R. F. D. No.....Box No.....Street No.....

Be sure to give the pattern number and the correct size.


We Prepay Parcel Post on All Wearing Apparel.




## This Tub-Silk Waist

Sent Post Paid for

**$2.35**

The plain shirtwaist model shown in the illustration is made of an excellent quality of Tub-Silk—and may be had in stripes of

Red,
Lavender,
Purple,
Green,
Blue, or
Yellow.

Designed with two-in-one collar and yoke effect, and fastens with loops or silk cord.

Sizes 38 to 46.
Price, postpaid, **$2.35**

*Send for a copy of our Mail Order News—Mailed free.*

Our Personal Shopping Service will be found very convenient.

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Seattle, Washington.

## The MILLION DOLLAR AUTOMOBILE AND TRACTOR SCHOOL



**Men Mechanically Inclined, Your Services Are Needed.**

NEVER before has the demand for Automobile, Tractor, Truck and Aeroplane motor Mechanics been so great. Your service is needed in the Army, driving and repairing Trucks and Ambulances; in the Aeroplane section repairing motors; on our farms using Tractors; besides, remember that this country has 4,000,000 Automobiles. Thousands of mechanics who formerly took care of them are in the Government service. Somebody must take their places. It is up to you to take the places in the garage, etc., of the men that must go. Realizing these conditions I have made preparation to train men to fill these important positions. The demand for men is here. I am ready to train them. If you are in the draft come here and be trained so that you can give a special service to your Country.

WRITE FOR FREE CATALOGUE.

I have written a catalogue that shows pictures of all departments and describes my school. I want you to have it. It will tell you how I teach the Automobile, Tractor business; open your eyes to the opportunities for splendid positions at good money. This Country must have trained Mechanics. Take advantage of present conditions, write for my free catalogue; it's a trip through the greatest school in the world. Today is the day of oppportunities, grasp them.



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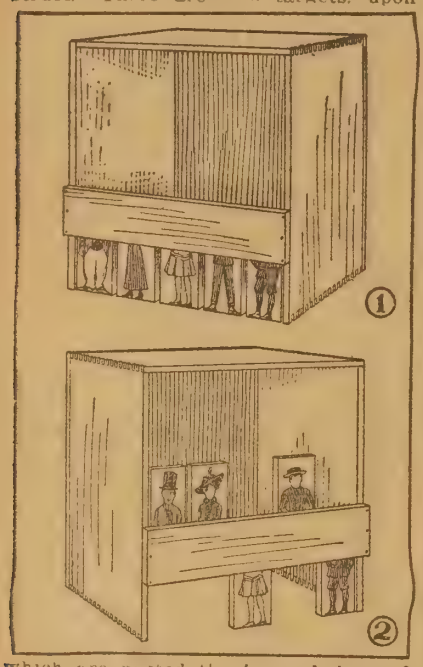
When you write to advertisers be sure to state that you saw their advertisement in this paper.

# Handicraft For Boys

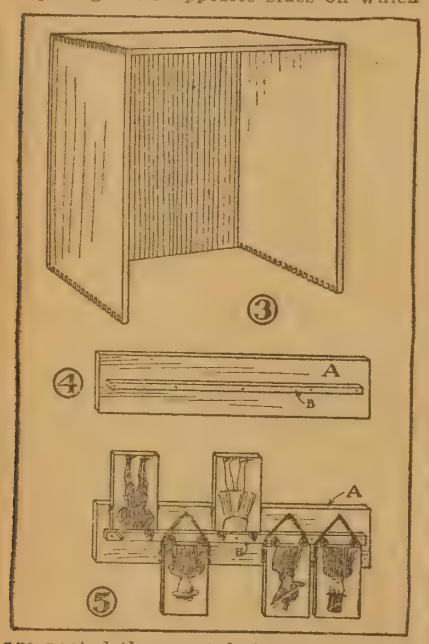
By A. Neely Hall.

## A Johnnie-Jump-Up Target.

This is one of the funniest home-made games which you boys can construct. There are five targets, upon

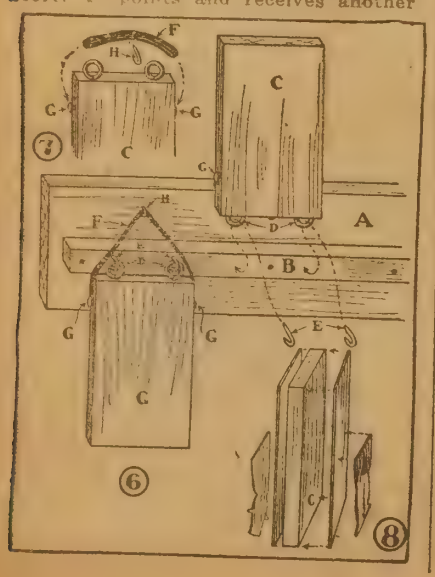



which are pasted the lower halves of pictures of men, women, boys and girls, and these are bowled at with large marbles or small balls. When the targets are struck they swing back and up to the positions shown in Fig. 2, exposing their opposite sides on which




are pasted the upper halves of the pictures. The effect produced is that of the figures jumping up to see who has struck their feet.

By rolling the marbles or balls exactly right, all five targets can be sprung by three bowls. Each player has three bowls to a turn. He scores five points for each target he springs, and if he springs all five targets he scores 25 points and receives another




turn of three bowls. The first player to score 150 points is winner.

### Target Case.

A soap box or any other box of about this size can be used for the target case. Fig. 3 shows how one end must be removed; it also shows the position in which the box must stand.

Cut board A. (Fig 4) three inches wide and long enough to reach from one side of the box to the other, and nail the narrow strip B along its center to support the targets (Fig. 5). Board A must be nailed across the box front three inches above the open end, but not until after the targets have been mounted.

Fig. 6 shows a large detail of the target blocks. Cut these two and one-half inches wide and four inches long. Buy small screweyes and double-pointed tacks for mounting the blocks, then screw a couple of the screweyes into an end of each block (D, Fig. 6), and drive a double-pointed tack (E) over each screweye into strip B.

When all five targets have been pivoted in place, you must make provision for springing them above strip B, because the marbles or balls will not strike them hard enough to throw them into this position. The best arrangement is a rubber-band (F, Figs. 6 and 7) looped over a pair of large tacks G, driven into the side edges of the target block, and fastened to board A at its center by means of the double-pointed tack H. With this arrangement when the target is pulled down to the lower position it remains there because the rubber band pulls straight up (Fig. 6), but the instant that the marble throws the target out of this vertical position the rubber band pulls at an oblique angle and springs the target into the vertical position above stick B.

### Target Pictures.

Target pictures may be cut from magazines and newspapers. If you can find funny pictures of the right size they will make funnier targets than fashion pictures and other kinds would. Cut the pictures in half, lengthwise, paste them upon pieces of white cardboard, and glue the cardboard to the target blocks (Fig. 8).

Make the Johnnie-jump-up target after school some day, then invite several boys to come in and play, and you will have the jolliest time imaginable.

(Copyright, 1916, by A. Neely Hall.)

# Pioneer Memories

(Continued from the preceding page.)

make an impression on the audience as a sterling success.

Then there was a Christmas tree entertainment at which Sister Frances, then just 6 years old, was induced to play and sing a simple little song that mother had taught her. It was her first appearance in public and the vociferous applause rather startled her. She confided to the rest of us on the way home that she never would sing again for a Christmas tree if people were going to act like that.

**Our First Christmas Tree in the Big Bend**

Our first Christmas tree in the Big Bend was a little home affair, the crowning event of our second winter in Douglas county. We began thinking about it quite early in the fall when father had returned from his semi-annual trip to the railroad nearly a hundred miles away. The trip usually took a week, and along toward the sixth day of his absence we children began watching and listening for his return. Usually he could be heard before he was seen, for as long as I can remember father always came home singing, and always got up in the morning the same way. No matter how cold the weather we were awakened by the rattle of stove lids and the sound of song.

So when we heard him singing away in the distance of the still October evening that second fall we ran to meet him, climbed into the wagon and came home together in high spirits. As yet we had not thought of Christmas, but we knew we had new shoes. Each of us got a pair every fall. They had to last until the next fall. They were heavy and clumsy, as I remember them now, but we rejoiced in the squeaky, shiny newness as though they had been sandals of gold.

It was not until after supper that father sprung his great surprise on us. We three had on our new shoes, and Ed and I were examining with great interest our new Robinson's arithmetic that was to be taken to school next day. For we were part way through our first three months' term of school. Suddenly father announced that he had seen Santa Claus in Spokane. Ed and I were wise as to Santa Claus, nevertheless the statement meant something to us all.

Yes, sir, he went on in a matter of fact tone, he had met Santa Claus and Santa Claus was coming out to see us Christmas. Frances was all eyes. She dropped the cat, came over and climbed upon father's lap, asking all sorts of questions, but there was not much more to say. We knew we were to have a Christmas tree and that satisfied us, but I could hardly sleep that night.

**Mother Was Dipping Little Tallow Candles**

The days went by until Christmas eve finally arrived. We went upstairs to bed and Ed and I lay awake a long time from excited anticipation. There were all sorts of strange subdued noises below, muffled sawing and hammering, and the spicy fragrance of fir. That was the Christmas tree being set up. A sound of frying and spluttering, that was mother dipping little tallow candles; soft rustling of paper and the unmistakable perfume of apples, that was heavenly incense to us, for as yet we had had no apples in Washington. All this with a running accompaniment of whispering and soft laughter.

I suppose we finally went to sleep, for the rattling of stove lids and father's singing wakened us as usual next morning, and we called first from one bed then from the other, asking if we could come down now. Finally the room below was considered warm enough and we were given the word to come. We hopped out, grabbed our clothes and clattered down.




Mapleine can be used in more ways and with greater satisfaction than lemon or vanilla, and a smaller amount is required to produce the result.

Use CRESCENT MAPLEINE

As a savor for soups and meats as well as a flavor for desserts and for syrup.

Your grocer sells it—35c 2-oz. bottle (in Canada 50c)

Send 4c, stamps, and carton top for Mapleine Cook Book. Dept. PN. CRESCENT MFG. CO., Seattle, Wash.

M-145

The powdered mica in Mica Axle Grease keeps the spindles smooth, resists wear and pressure, and makes the grease last twice as long. Mica Axle Grease would still be good axle grease without the mica. But the mica makes it better. Get a can from your dealer today.

STANDARD OIL COMPANY (California)

MICA AXLE GREASE




ALL SOLD AT SATISFACTORY PRICES



Gentlemen:—

My little ad that ran during December cleaned me out entirely of boars and gilts at satisfactory prices. Could have sold three times as many if I had had them. Enclosed is a picture of some of the beauties I sold. It certainly pays to advertise in the Trio. I will be with you in spring with a good ad.

F. E. KINGSBURY.

Malaga, Wash., Jan. 16, 1918.




Dear Boys and Girls: A little baby was born in Virginia 186 years ago. I suppose he was very much like other little babies, though it hardly seems respectful to think of George Washington as a little crying, dimpled baby, does it? He wasn't any better off than most of the other babies all around him. He grew into boyhood in the same way, and had no more advantages than the others. He worked very hard as a surveyor. Yet, out of all the thousands of young men of that time, George Washington was the oine who became greatest.

Why do you think that was? I think it was because his mother began from the first to teach him certain things. He learned not only to read and write and do sums and other studies, but first of all, he learned to have courage, to want to be good, to stand by what he thought was right, no matter what happened.

As a little boy he was afraid of only one thing—to do wrong. As a young man he was the same. He wasn't great as a boy nor great as a young man. Few people knew anything about him. But pretty soon the time came when all our colonies needed just a certain kind of a man—a man who could not be bribed or bought or deceived of frightened, and there was one man of that kind—George Washington.

Now, this we must remember, especially when we think of George Washington. He didn't become great suddenly. It took him all his life. All the time he was a little boy and a young man he was making himself the kind of a man to be great when the right time came.

I think every one of you, girls and boys both, if you develop yourselves as George Washington did, all the time, when young, will find when you grow up that there is some great work waiting for just such a person as you, and you will be able and fit to do it.

### A Kitty Named Calico.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner and I hope it won't be the last We have a kitty named Calico. I live on a 37-acre farm. I go to school and I am in the second grade. I am 7 years old. We have one cow.—Katherine Gillette.

### Leslie Writes Another Good Letter.

Dear Aunt Nellie: I am 9 years old. I guess I will tell you about the farm. We are milking five cows. I have two brothers. Their names are Carrol and Vernon. Vernon's cow's name is June. I have to walk to school about a quarter of a mile. Vernon likes to ride on Bob. I like to read the cousins' letters. I will tell you about the winter. We have had an easy winter. It is cold tonight. I am writing by lamp light. It is Sunday. I will be 10 November 10. Have I a twin? If so, I would like to hear from him. It has been a long time since I wrote to you. My father takes the Farmer. We have a good house and barn. We lost a good many chickens this winter. They froze. I like to go to school. I guess I will quit for the night.—Leslie Peck, R. F. D. Box 42, Republic, Wash.

### Hasn't Missed a Day This Year.

Dear Aunt Nellie: This is my fourth letter to the Children's Corner. This time my subject is about school. I am in the third grade at school. I am 9 years old. I will be 10 October 22, 1918. My birthday will be on Tuesday this year. I think I'll write about measles now. A girl that I go with got the measles when we were in the schoolroom. The girl's name is Helen, too. She told me to tell the teacher and I went and told the teacher and she said, "Why, Helen." She got redder and redder and the teacher sent her home. There are four who have the measles in our room. I have had the real measles, but not this kind. This kind of measles are German measles. I have not missed a day this year.—Helen Anderson, R. R. 3, Box 19, Olympia, Wash.

### Twenty Children in Helen's Room.

Dear Aunt Nellie: I am 8 years old and I am in the third grade at school. My teacher's name is Miss May Moore. We have 20 children in our room and 13 in the other. I live on a 40-acre farm and have four brothers and four sisters. Two of my sisters have graduated from high school. I have two brothers and one sister who go to the Ridgeway school. We had a Christmas tree at the schoolhouse and one at home. I got lots of presents Christmas.—Helen Elde, Mount Vernon, Wash.

### Vera Tells About Examinations.

Dear Aunt Nellie: We have three pictures enlarged. I took examination in reading and got 94. Leslie took examination in reading and got 92. I got 100 in my arithmetic and Leslie did, too. Leslie got 98 in spelling. There are seven pupils in our school. The names of the children are Jack, Lee, Bessie, Bonnie, Vera and Leslie. This is the second time I have written to the Children' Corner.—Vera Peck, R. 2, Box 42, Republic, Wash.

### Beautiful View in Clear Weather.

Dear Aunt Nellie: Now for my first time I will also write to the Corner. I have not written before. First of all I will describe our country and home. We live four miles from a town called Mount Vernon. It is not a very large town. It is advancing little by little. We live in Western Washington. Our home is not far from a small hill and there is a railroad up there. It is a logging train. The name of the camp is the English logging camp. We have a beautiful view of Mount Baker and the Olympic mountains. We can see them when the weather is clear and cold. We live on a 20-acre farm south of Mount Vernon. We have three horses, seven cows, two sheep and about 50 chickens. I go to the Lincoln school and my teacher's name is Mrs. Berenice Anderson. There are two rooms in our school and about 40 children in our school. There was some water on the school ground. When it got real cold weather it froze. We had a lot of fun skating on the ice. It did not last very long. I am 12 years old. My birthday is the 18th of October. I am in the seventh grade at school. Oh! I wish I had a twin. If I have I wish they would please write to me.—Myrtle Gladys Lee, R. F. D. No. 5, Box 40, Mount Vernon, Wash.

### Lalla Has Four Bantams.

Dear Aunt Nellie: We live on a 40-acre farm. We have two horses and one little colt. The little colt's name is Maud. We have about 25 chickens, four bantams. I got them for my last birthday. My birthday is June 22. I would like to correspond with Agnes Sunnell. Have I a twin? If so, I would like her to write to me. My teacher's name is Mr. Huffman. I am in the fifth grade at school. I have one sister and one brother in the eighth grade at school. I have two sisters and one brother. I can crochet, tat and knit. I will send you a few riddles. Higher than a tree, higher than a house; what is it? Patch upon patch and no seams? It can go up a stovepipe when it is down and down a stovepipe when it is down; it can't go up a stovepipe when it is up and it can't go down a stovepipe when it is up. We have had a little snow here. We have eight cows and three cats and one dog. The dog's name is Jeff. The cats' names are Lizzie, Mary and Pussy. I hope all the cousins are well.—Lalla Haquist, Independence, Wash.

### Lorna Doone and Bonny Bell Are Pets.

Dear Aunt Nellie: I have never written to the Corner before. I live on a 160-acre farm. For pets I have a pony and a dog. My pony is white and chestnut. Her name is Lorna Doone. My dog is straw colored. Her name is Bonny Bell. Lorna, as I call her, is a Shetland pony and Bonny is a Chesapeake Bay dog. We also have three big horses that I like real well. We also have one cow and calf and an immense lot of pigs. We have two cats. I have made two wash cloths for the Red Cross. I knit a sock and a scarf for myself and now I am making a scarf for the Belgians. I hope our Corner will grow.—Virginia Gibson, East Sound, Wash.

### Elizabeth Knits Afghan Squares.

Dear Aunt Nellie: I enjoy reading the cousins' letters. I love to go to school and I am in the second grade. I have one sister and two brothers. Sister's name is Harriet. My oldest brother's name is Leonard. The other one is a baby and we haven't named him yet. We have two kitties. They are named Tiger and Ted. We have one cow and a calf. The cow's name is Brownie. The calf is Tilda. We have six horses, two mules and two colts. I have joined the Junior Red Cross and I am knitting. I knitted one afghan square yesterday afternoon.—Elizabeth Cook, Route 2, Box 46, Mansfield, Wash.

### Not Far to Go to School.

Dear Aunt Nellie: I am 12 years old. My birthday is October 5. Have I a twin. I am in the seventh grade. I live on a 480-acre farm. We have 18 horses and six cows I have two pet dogs. Their names are Curly and Bob. We have seven sheep. I have a brother and no sisters. My brother is 16 years old. His name is Clarence. My teacher's name is Ruth Finnel. I like her very much. I have only one quarter of a mile to go to school. I would like to have my letter printed. I shall write again.—Esther Olestreich, Box 575, Ritzville, Wash.

### Marguerite Lives on a Big Farm.

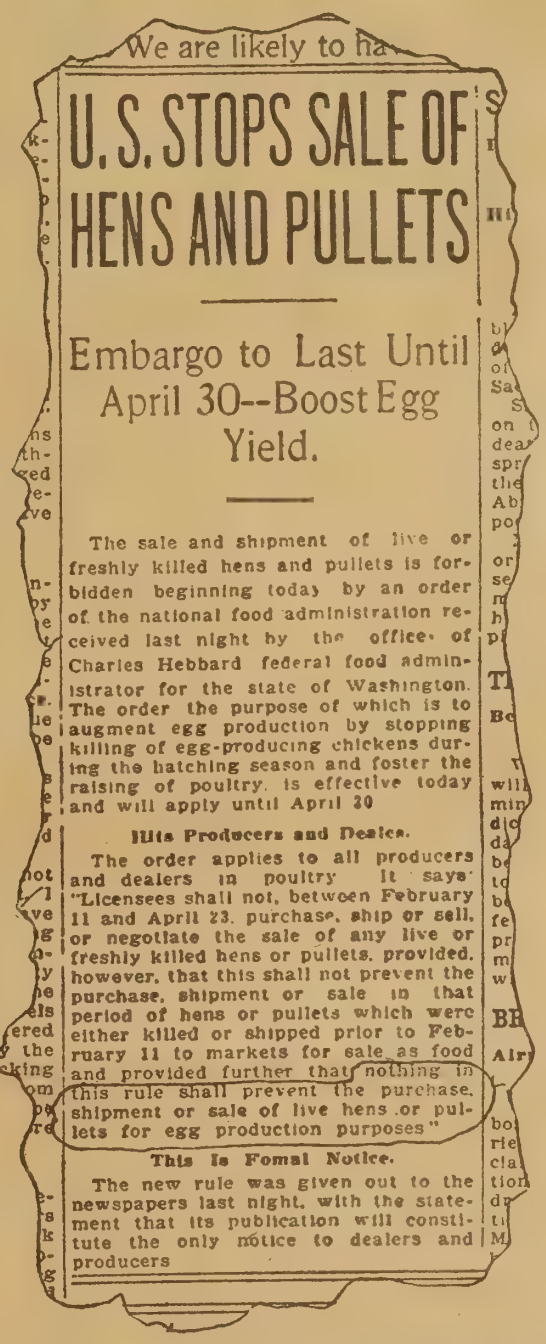
Dear Aunt Nellie: I was 9 years old the last November. I have six brothers and no sisters. My brothers are Thomas, William, Howard, John, Bertie and Theodore. I live on a big farm. Last year my teacher was Miss Ford and I liked her fine. This year our teacher is Miss Lightheart. We like her very much. I am in the third grade. I have a mile and a half to go to school.—Marguerite Lawson, R. F. D. 2, Box 45, Friday Harbor, Wash.

### Muriel Stays With Grandma.

Dear Aunt Nellie: I live on a 10-acre ranch. We have cows, horses, chickens and a pig. I am 7 years old and am in the third grade. I have three sisters, Marjorie, Marie and baby Wilma. I stay with my grandma. I got some nice presents Christmas.—Muriel L. Dunn, R. D. 1, Box 60, Bellingham, Wash.


# *On Every Farm Chickens Should Be Raised in Increasing Numbers*

***Because Much of That Which They Eat Would Otherwise Be Wasted. Right Now Is a Good Time to Begin Building Up the Farm Flock by Securing Eggs That Will Hatch Chickens of the Most Approved Breeding for Meat and Egg Production.***



We are likely to ha

## U. S. STOPS SALE OF HENS AND PULLETS

### Embargo to Last Until April 30--Boost Egg Yield.

The sale and shipment of live or freshly killed hens and pullets is forbidden beginning today by an order of the national food administration received last night by the office of Charles Hebbard federal food administrator for the state of Washington. The order the purpose of which is to augment egg production by stopping killing of egg-producing chickens during the hatching season and foster the raising of poultry, is effective today and will apply until April 30

**Illis Producers and Dealers.**

The order applies to all producers and dealers in poultry It says: "Licensees shall not, between February 11 and April 23, purchase, ship or sell, or negotiate the sale of any live or freshly killed hens or pullets, provided, however, that this shall not prevent the purchase, shipment or sale in that period of hens or pullets which were either killed or shipped prior to February 11 to markets for sale as food and provided further that nothing in this rule shall prevent the purchase, shipment or sale of live hens or pullets for egg production purposes"

**This Is Fomal Notice.**

The new rule was given out to the newspapers last night, with the statement that its publication will constitute the only notice to dealers and producers

# *BREEDERS OF GOOD FOWLS*

grasp this excellent opportunity to sell surplus breeding fowls and hatching eggs. An ad with us, offering your birds, hatching eggs or baby chicks, will carry straight into more than 50,000 farm homes, where the patriotic wish to build up egg and meat producing flocks is growing daily stronger. Send in your ad today or write for our rates. Don't miss the best of the selling season by waiting. Write today.

**THE WASHINGTON FARMER**

Room 26, Review Bldg.

Spokane, Wash.

# News for Breeders

## Fruit Buys Champion Boar.

J. W. Fruit of Brooks, Ore., has purchased from E. C. Naftzger of Gervais Ore., the Duroc Jersey boar, Elizabeth's Perfection, that was grand champion a' the Oregon State fair last fall. This boar's full brother was grand champion at the California State fair last fall, and his dam was grand champion at the P. P. I. E. at San Francisco. He comes from a prize-winning strain, and it was his extreme smoothness and general character that won last fall, as he was not extremely highly fitted. He was bred by Charles Hoover of Gervais, Ore., and both breeder and seller are neighbors of the buyer. Mr. Fruit has a great show ring record himself, having shown both junior champions last year and the year before and grand champion boar once and grand champion sow twice at the Oregon State fair. Mr. Naftzger has used the boar considerably for breeding purposes, and already has some very promising offspring from him, so it would not be surprising to see Elizabeth's Perfection and some of his get strong contenders at this coming fall's state fair. H. A.

## Wintering Beef Cattle.

One of the finest herds of young beef cattle in central Oregon is being wintered on the old Almeter ranch, three and one-half miles northwest of Terrebonne. This is a mixed herd of Shorthorns and Herefords. They are being cared for by F. E. Pellett, who has the 320-acre Almeter ranch under rental. The herd is the property of Logan brothers and will be sent back to the range about March 1 if the weather at that time permits.

Mr. Pellett had 100 acres in hay last year, and produced 200 tons. This is the hay now being fed to the cattle. Mr. Pellett expects to have the 320 acres all practically under cultivation this year. He has been in the past instrumental in securing for this section a farmers' phone line, and aided in the establishment of better roads. He is also taking up the raising of blooded Duroc hogs and pure bred chickens this coming reason in connection with his other work. Besides working this rented ranch, Mr. Pellett is the owner of another ranch in the same vicinity. W. S. C.

## Nineteen-Year-Old Ayrshire.

Lenetta, an Ayrshire cow born August 16, 1898, the property of Dr. John A. Ness, Auburn, Me., has just completer her fourth entry in the advanced registry, producing 11,450 pounds milk, 411.14 pounds butterfat, according to the Ayrshire Quarterly. From September 21, 1911, to November 23, 1917, Lenetta has produced 46,226 pounds milk, 1712.07 pounds fat, an average for four periods of 11,556 pounds milk, 428.01 pounds fat.

## Average Return Which Counts.

Dr. Park Weed Willis, well known Guernsey breeder and owner of Orchard Hill farm, Redmond, Wash., has little use for short period testing.

"All of our cows are tested for a year's production," he comments. "We have cows which will start out at a 50-pound clip, but which at the end of the year have not produced as much as some of our 40-pound cows which are steady producers. With cows, as with human beings, it is the average return which counts, not the exceptional and short-lived performance."

P. E. T.

### Larget Hens' Eggs.

The largest hens' eggs are produced in Manchuria, those weighing one-sixth of a pound being common.


Warranted to Give Satisfaction.

**Gombault's**

**Caustic Balsam**



**Has Imitators But No Competitors.**

A Safe, Speedy and Positive Cure for Curb, Splint, Sweeny, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunches from Horses or Cattle.

As a Human Remedy for Rheumatism, Sprains, Sore Throat, etc., it is invaluable. Every bottle of Caustic Balsam sold is Warranted to give satisfaction. Price $1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address

The Lawrence-Williams Co., Cleveland, O.





FEED COSTS ARE UP; DAIRY PRODUCTS PRICES ARE NOT.

The only way to beat this combination is to get large-yield cows.

Pure Bred **HOLSTEINS ARE PAYING THEIR OWNERS**

Their enormous yields of milk and butter fat make them extremely profitable despite high feed costs. They hold all records for production. Write for free information.

THE HOLSTEIN-FRIESIAN ASSN. OF AMERICA, Box 205, Brattleboro, Vt.



**HAMPSHIRE SWINE**

**Unrelated Fall Pigs**

Both sexes, good individuals of best breeding. My herd has shown the winners at all the leading fairs in the northwest for the past seven years, and a barrow of my breeding was first at Chicago International last December.

J. M. FRUITTS, Enterprise, Ore.



# Dispersion Sale

On account of my ill health I will sell at public auction on

**WEDNESDAY, MARCH 20, 1918, AT THE UNION STOCK YARDS, SPOKANE, WASH.,**

my entire herd of Registered Shorthorns—beef and milk strains—without reserve, including my show herd. My herd bull, Western Star, by Scottish Star, and all his get, which will be seen on day of sale. Princess Louise, my show cow, is a heavy milker and has never been defeated in the show ring.

50 head bulls, cows and heifers, Spokane fair and Pacific International winners, 1917. All tuberculin tested. Heifers from this herd are giving 53 pounds of milk a day. For particulars and catalogues write either

**A. Morrison**
VALLEY, WASH.,
Owner.

Or

**Harry C. Cranke**
NEZPERCE, IDAHO,
Auctioneer and Sales Mgr.



# Jerseys Win Economy Test



In a recent test at the Ohio State University, 157 Jerseys and 131 members of another dairy breed were entered. The Jerseys required only 75.3 per cent as much digestible nutrients per lb. of fat produced as did the other breed. Further, they produced 1.2 per cent more milk, 25.6 per cent more solids and 59.3 per cent more fat per 1000 lbs. live weight. Jerseys produce the largest *net profits* from every pound of feed. Build a Jersey herd. Write to breeders for prices.



*Send today for free book, "The Jersey Cow in America."*

**The American Jersey Cattle Club, 314 West 23rd Street, New York City**



# A FEW COWS AND HEIFERS

**MELLOW LAWN FARM HIGH PRODUCING JERSEY HERD.**

**HERD AVERAGE, APPROXIMATELY 700 POUNDS BUTTER.**

Every cow in the herd on test. Our herd is getting too large to give proper care, with present labor scarcity, so am forced to sell a few. Some of the best in the herd, now milking around 50 lbs., are for sale. Write for pedigree and prices. Ranch 7 miles south of Silverton, 12 miles east of Salem.

***F. A. DOERFLER, Silverton, Ore.***



# La Creole Farm Register of Merit A. J. C. C. Jerseys

under U. S. government control for health. No. T. B. or abortion ever in herd. A breeder for 15 years; high-class stock, for high production.

We offer you a bull that is O. K., guaranteed; sired by Oxford You'll Do Jr.; daughters producing over 2 pounds b. f. per day. His dam, Morrow's Select 828 lbs., is the first tested daughter of Golden Glow's Chief. She was 5 weeks on fair circuit while on test and only dairyman's care when at home, otherwise she would have produced close to 1100 lbs. This bull is 2½ years old and solid color. We have a bull calf from this cow, otherwise would not sell. Priced right.

**W. O. MORROW, Independence, Ore.**



**Jersey Isle Stock Ranch**

Herd headed by Bright Light's Knight 103741, a line-bred Gamboge Knight-Combination. Castillian Lady 26628 made 603.3 lbs. fat (713.3 lbs. butter) and 11,530 lbs. milk in 11½ mos., and my herd has highest average test of 399.8 lbs. fat in Buhl Cow Testing association. Young stock for sale.

C. E. LONG, Buhl, Idaho.

**BREEDER OF GOLDEN GLOW'S CHIEF 61460.**

35 daughters average 533.9 lbs. fat. Sire of world record Junior three-year-old. Two of his sons heading our herd. Some choice bull calves out of cows with records up to 856 pounds for sale. Sold out of bulls over six months old.

LADD FARM, Oswego, Ore.

**914 Pounds of Butter**

This is the official record for a year of the dam of a choice bull calf by Rosaire Olga Lad, sire of 29 tested daughters. He and others priced according to quality.

ED CARY, P. O., Carlton, Ore.
Station, LaFayette, Ore.

**Ashwood Farm Jerseys**

FOR SALE—BULL CALVES sired by ST. MAWES OF ASHWOOD and out of daughters of HOLGER now making creditable Register of Merit records.

McARTHUR & STAUFF, Rickreall, Ore.

**Bull Calf For Sale**

Dropped June 19, '17; dam is Noble's Jewel of Fair Acres in R. of M., with record of 457 lbs., 4 oz. butter at 2 yrs., 3 mos. Sire is Holger; also in R. of M. Price $75 for quick sale. For particulars address,

WOODLAWN FARM, Vega, Wash.

**OAK RIDGE JERSEY FARM.**

Thirty years breeding Jersey cattle. Young bulls from Register of Merit dams. Also a few choice females.

RILEY E. HULBURT, Albany, Ore.

**763 Pounds Butter**

and 11,501 lbs. milk is the average of the Register of Merit records of the three nearest dams of this handsome bull dropped Aug. 28, 1917. Dam Stockwells Dahlia, 619 lbs. butter and grand champion Oregon State Fair twice. Sire Dominus, who is out of an 817-lb. cow and a son of an 853 lb. cow. Price $150.

J. B. STUMP & SON, Monmouth, Ore.

**ASHBURN FARM**
**Register of Merit Jerseys**

In nearly 13 years we have yet to get our first poor heifer or dissatisfied customer. We have the best of the Golden Glow's Chief and St. Mawes strains, with the cross of our great Kentucky bull, Valentine's Ashburn Baronet.

J. M. DICKSON & SON, Shedd, Ore.

**Waikiki Farm**

Register of Merit Jerseys. Largest Jersey herd in the northwest. Young stock for sale.

IRA P. WHITNEY, Manager.

ROUTE 7, SPOKANE, WASH.

**Jersey Bull for Sale**

dropped Oct. 14, 1917. Sired by Prosser Pogis 136850, a son of Hood Farms' great bull, Pogis, 99th of Hood Farm 94502, and full brother of Sophie's Agnes—record, 14149.7 lbs. milk, 982.3 lbs. butter.

E. O. RICE, Prosser, Wash.

**GOLDEN GLOW HERD**

Winner of 1st and 2d prize in butter test, Oregon State Fair, 1917, (all breeds, 20 entries); breeder and owner of grand champion cow in show ring, 1916; breeder of grand champion cow, 1917. Breeder and owner of world's champion 3-year-old, with 1115 lbs. butter, 80 per cent fat. Every female a daughter, granddaughter or great granddaughter of Golden Glow's Chief, sire of 34; 14 over 700 lbs.; 32 over 600 lbs.

PICKARD BROS., Marion, Ore.



**JERSEY CATTLE**

**Jersey Home Dairy**

Young bulls, winners at Washington State Fair, make good herd sires. Attractive prices for quick sale.

**Erickson Bros. Prop.**

North Yakima, Wash.



**SHEEP**

**SHEEP**

Full blood Lincolns, Rommeys, Corridales and Hampshires. Ewes and rams, small or large lots. For sale by

H. STANLEY COFFIN,
Breeder and Importer. Yakima, Wash.


**When you write to advertisers, be sure to say that you saw their advertisement in this paper.**

# Breeders' Department

## DUROC-JERSEY SWINE

### September Durocs

I have a bunch of September gilts and boars in fine condition and ready for service soon. They are true to type and conformation and altogether one of the finest layouts ever produced on my ranch. They weigh from 100 to 160 pounds. Sired by Sprong's Prince and Yakima Willeta's Wonder. Dams largely Advance Wonder blood. Ancestry prize-winners wherever shown.

CHARLES G. SPRONG.
Grandview, Wash.

### DUROCS

Bred and open gilts of the best breeding and individuality.
G. O. SWALES. Johnson, Wash.

OTTO'S DUROC JERSEYS.
Founded on the basis of making Duroc history in Idaho. Won 4 championships and two grand championships at Southern Idaho State Fair.
L. S. OTTO. Filer, Idaho.

IDAHO CHAMPION DUROCS—At state fair of Idaho our Durocs won more prizes than all other exhibitors combined. Stock of all ages for sale.
Richards Live Stock Co., Virginia, Idaho.

AVONDALE STOCK FARM.
Registered Duroc-Jersey hogs. Inspection invited. Corespondence solicited.
H. C. POLLY. Route 3, Burley, Idaho.

PATHFINDER BOARS—Choice Duroc Jersey boars for sale. Sired by Richard Pathfinder, 1st prize and junior champion Utah state fair. Priced to sell and guaranteed.
ERICK W. OLSON. Virginia, Idaho.

## POLAND CHINA SWINE

### Locust Lawn Herd

Big Type Poland Chinas.
W. F. HOWARD & SONS, Parma, Idaho.

SPECIAL PRICES ON BOAR PIGS.
Fall farrow, best breeding, good individuals. Also a few choice gilts. Quality and utility our hobby. Poland Chinas our breed.
FRANK NEEDHAM, Eugene, Ore.

GREENLEAF STOCK RANCH.
Big type Poland Chinas, either sex, for sale at all times.
Wilson Bros., A. L. Wilson, Mgr.
Greenleaf, Idaho.

BIG TYPE POLAND CHINAS
Herd headed by Sammy (79,833).
Correspondence Solicited.
Fruitland Stock Farm, C. Royston, Mgr.
Payette or Fruitland, Idaho.

QUALITY HERD.
If you want to improve your herd, try stock from my winners at the Oregon state fair.
RAY J. FOX, Lyons, Ore.

PURE BRED POLAND CHINAS
Some choice Sept. and Aug. pigs, $25 to $35 each, either sex; also a good herd boar. Will ship C. O. D., subject to approval
HERBERT WILLARD, Dayton, Oregon.

## BERKSHIRE SWINE

### BERKSHIRE HOGS

Gilts of any age, bred or open; can also furnish young boars, from the best of strains and prize winning parentage.
EARL WOOD. Silverton, Ore.

### Kintrye Farm Berkshires

A few good gilts bred for spring farrow.
CLARK BROS., Prosser, Wash.

### COVE STOCK FARM

Unrelated fall and spring Chester White pigs from prize winning stock.
ARCHIE CONLEY, Cove, Ore.

RIVERBY ORCHARD BERKSHIRES won 12 out of 15 first prizes at the Washington State Fair, 1916. A few outstanding boars for sale at reasonable prices.
D. C. BUNN, Prosser, Wash.

## CHESTER WHITE SWINE

BLUE RIBBON STOCK FARM
Prize winning Chester White hogs and Jersey cattle. Young stock for sale.
ED SCHOEL, Suver, Ore.

## TAMWORTH SWINE

ROUND KNOLL RANCH NO. 3.
Herd headed by Knoll Slope Colonel, assisted by Jolly Lad IV. Correspondence solicited.
Bliss, Idaho.

**The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.**

## SHORTHORN CATTLE

### Herd Bulls

Imported Doune Radiance No. 609412
and
Gainford Perfection No. 442173.

### Hercules Shorthorns

We can supply you with choice, well grown bulls and females of breeding age. Your inspection of our herd is invited. Visitors always welcome.

### Day & Rothrock Company

205 Exchange Bank Bldg. Spokane, Wash.

### SHORTHORNS

A few young stock for sale by such noted sires as Precious Goods, a son of the great Golden Goods, and Scottish Sunrise 2d.

R. E. BOYCE, Baker, Ore.

WEST SIDE AUGUSTUS (514271).
heads my herd of registered Shorthorns and D. S. Poll Durhams. West Side Augustus by Count Augustus was first prize winner at Intermountain Stock show, Salt Lake, 1917. Stock for sale. Correspondence solicited.
R. A. PARSONS. Blackfoot, Idaho.

### LELAND BROTHERS

Breeders of top registered Shorthorn cattle. Correspondence solicited.
WENDELL, Idaho.

### H. H. Schildman

breeder of registered Shorthorn cattle, Hampshire sheep and big-type Poland China hogs.
Filer, Idaho.

REGISTERED SHORTHORN COWS,
Young bulls and heifers, sired by Scotch bulls; liberal terms.
CALDWELL CATTLE CO., Caldwell, Idaho.

## ABERDEEN ANGUS

### ANGUS CATTLE

In the famous valley of the Yakima there is located one of the best herds of Aberdeen Angus in America. Proof of this is evident by the many prizes won by this herd at all of the greatest shows of the northwest and central states, including the Chicago International.

Fifty extra good range bulls are now offered for sale. Also fancy herd headers and show cattle of both male and female. All prices very reasonable.

CONGDON & BATTLES.
OTTO V. BATTLES, Manager.
Yakima, Washington.

### Aberdeen Angus Cattle

A. H. EAGLESON & SONS.
Boise, Idaho.

## BROWN SWISS CATTLE

### Brown Swiss Stock Farm

Breeders of Brown Swiss Cattle, the Farmer's Dairy Cow. Young stock for sale.
THEO. BRUGGER, Route 3, Gresham, Ore.

## HORSES

### Registered Clydesdale Stallion

3 years old in spring. Excellent breeding and conformation and will make horse weighing 1900 to 2000 pounds.

O. I. TRICE, Grandview, Wash.
Breeder of Registered Clydesdales.

### Hunter Ranch Percherons

The Grand Champion KROUMIR at head of herd. Young stallions for sale at all times at breeders' prices.
A. R. HUNTER, Island City, Ore.

REGISTERED PERCHERON HORSES.
E. O. WALTER, AUCTIONEER.
WALTER BROS.
Buhl and Filer, Idaho.

## HOLSTEIN CATTLE

MOOREHEAD RANCH.
Registered Holsteins.
Herd sire, Model Annie De Kol Segis, grandson of the famous King Segis. We have no bulls of service age, all having been sold, but we have some splendid young stuff, from 6 to 8 months old, coming on. If you are looking for real foundation stock, write us for particulars and pedigrees.
MOOREHEAD & HOBSON.
Breeders of Purebred Holsteins.
Outlook, Wash.

### 365-DAY HOLSTEINS

24,667 lbs. milk—1026 lbs. butter—is the s. o. advanced registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.
THE HERD WITH YEARLY RECORDS.
WESTERNWOLD RANCH, Prineville, Ore.

### Registered Holsteins

Glenwood herd offers for sale a few A. R. O. cows with records up to 24.32 lbs. Also a few bred heifers.
A. H. BUCK & ED HOEM.
Snohomish, Wash.

### LaConnor Flats Stock Farm

Pure bred registered Holstein cattle. Herd sire Segis Pontiac Acme; average of three of nearest dams; butter, 1 year, 1080.82 lbs.; milk, 24,380.3.
J. H. HULBERT, Mt. Vernon, Wash.

### Record Holsteins

Young bulls, some of them ready for service, by a sire whose 5 nearest dams average 26.17 pounds butter, or another with 29.67-pound dam, and out of high-record A. R. O. dams. Priced to sell.
ERNEST WERNER, AURORA, ORE.

### HOLSTEIN HERD FOR SALE

As I will sell or rent my ranch this spring, my entire herd of registered and high-grade Holstein cattle is for sale. For particulars as to breeding and prices, write
W. FRED HARPER.
New Plymouth, Idaho.

### Bargains in Bull Calves

Sired by Segis Riverside Pontiac, that sold in Pacific International sale, 1914, for $1025, and whose dam has A. R. O. record of 31.47 lbs. butter in 7 days; 118.89 in 30 days, and big records all through his pedigree.
ERNEST JOHNSON. Scappoose, Ore.

REGISTERED HOLSTEINS.
One 30-lb. bull with grand champion sire and dam; also young bull calves. Here is production and type we hear so much about.
H. R. BOOMER, New Plymouth, Idaho.

### HOLSTEINS

Well bred young bulls for sale.
THOS. CARMICHAEL. Gaston, Ore.

REGISTERED HOLSTEINS.
Bull calves for sale with good A. R. O. backing.
BEEBE BROS., R. F. D. 2, Rupert, Idaho.

## YORKSHIRE SWINE

### FALL PIGS

Both boars and gilts of best breeding. Now booking orders for spring pigs. Can furnish pairs or trios.
WM. NEUENSCHWANDER, Gaston, Ore.



### *Imported and American Bred*
### Percheron, Shire and Belgian Stallions

They are of the very best breeding obtainable and are guaranteed to be breeders. They will be sold at very reasonable prices.

If in need of a good stallion weighing from 1800 to 2200 pounds, come direct to my stables and see them or write for description and terms to

WM. T. TRACY, Kennewick, Wash.

## POULTRY

### State Winners of the Blue

Barred Rocks, S. C. White Leghorns and S. C. Black Minorcas. Prize winners, with the laying habit. Choice cockerels at $5 each. Eggs $3 and $5.
WILBER CLAYTON, Payette, Ida., R. 1.

VIBERT STRAIN S. C. REDS.
Cockerels, $2.50 to $25; eggs, $8 per hundred; $1.50 to $15 per sitting. Three special pens headed by cockerels from a 289-egg trapnested hen. One pen headed by magnificent cock bird that has kept his wonderful color through the moult and well into his second season. He is one great bird. If you need new **Red Blood**, you need **Vibert** blood from the largest pure Vibert flock on the Pacific coast.
MRS. ROMINGER. Underwood, Wash.

### White Leghorns

Baby chicks or hatching eggs from hens hatched from stock whose trap-nested records average 259 eggs per year. Special rates on lots of 100 and over.
MOUNTAIN BROOK POULTRY FARM.
Mr. and Mrs. W. A. Newton,
Myrtle Creek, Ore.

### Rhode Island Reds and Whites

Rose comb and S. C. Blue ribbon winners. Utility and show stock. 100 cockerels at $3 up. Bronze turkeys and Toulouse geese. Blue ribbon stock. Registered Airedale bitch at a bargain if taken at once.
Highland Fruit and Poultry Ranch.
J. NONNENMACHER,
R. F. D. 3. NORTH YAKIMA, WASH.

### BABY CHICKS

Rhode Island Reds, White Leghorns. Don't wait until March or April to order and then be disappointed because you can't get them. But order now from our heavy-laying strain. Send card for price list.
MAPLEBROOK POULTRY FARM.
Box 3, Southworth, Wash.

### Mammoth White Holland Turkeys

from first prize winners at the recent Portland poultry show.
MRS. E. D. SITTON. Carlton, Ore.

### Barred Rock Cockerels

Have some good birds at $3 and $5 each, from good laying stock. Send me your list of wants; will try and please you.
C. A. STARK, Box 242, Sutherlin, Ore.

MAMMOTH BRONZE TOMS.
Strong vitality, $6 to $8 each; no charge for crates. Barred Rock eggs for hatching. Pullets (some laying) $1.25 each.
S. M. WILSON, Carley, Wash.

### BABY CHICKS

S. C. White Leghorns. Eggs for hatching and day-old chicks from heavy laying strains.
G. W. BURT, Roseburg, Ore.

### S. C. White Leghorns

Heavy laying strain. Hatching eggs from hens averaging 245 eggs per year, $2 per 15.
E. C. FISK, Olalla, Wash.

### S. C. Rhode Island Reds

Golden Sebright and Black Bantams.
CHAS. E. LUCAS, R. F. D. 3, Missoula, Mont.

PARK'S BRED TO LAY
Barred Rocks; line bred. Eggs, $1.50 setting. $8 per 100. 25 yearling hens at $1.50 each
F. J. WIRTNER, Mica, Wash.

S. C. AND R. C. RHODE ISLAND REDS.
Cockerels, $2.50 to $3.50; eggs from S. C. R. I. Reds, heavy winter layers, $1.50 per 15; $7 per 100. Flemish Giant does, $1.50.
W. T. WILSON, R. 3, Weiser, Idaho.

## GUERNSEY CATTLE

### Orchard Hill Farm

"Home of High-Class Guernseys."
Dr. Park Weed Willis, Owner.
Redmond, Wash.

### FAIRVIEW FARM

Breeders of high class registered and grade Guernseys.
A. J. SINNES.
Route 5. Mt. Vernon, Wash.

MIDDLEDALE FARMS GUERNSEYS.
Herd founded in 1904, May Rose breeding. Most all granddaughters of Jethro Bass (11366), son of Imp. King of the May. Have a few heifers, calves for sale. Goshen, Ore.

## AYRSHIRE CATTLE

### Edgewater Farm

Government accredited herd, headed by Peter Pan, 63d. Bull calves available.
E. M. CHANDLER, Burbank, Wash.

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, Feb. 18.—Corn averaged higher today owing more or less to efforts to accumulate reserve stocks here before farmers become busy with field work. The close, however, was unsettled, March, $1.27 5-8, and May to a like advance compared with Saturday's $1.26 3-8, with the final range 1-8c off day's latest figures. Oats gained 3-8c to 5-8@3-4c net. The outcome in provisions varied from 17 1-2c decline to a raise of 7 1-2c.

Despite a big increase of arrivals, the corn market pointed upward throughout nearly the entire session. It was realized that but a short time remains until spring work might sharply restrict the crop movement. Predictions of stormy weather within the next 36 hours emphasied bullish sentiment ,and so, too, did the reports millers are absorbing choice grades. Reports were current that as high as $2 a bushel had been paid for extra good white corn suitable for milling. Near the end of the day, though, prices tended somewhat to relax owing to assertions that 100,000 cars had been concentrated in the middle west, and that a daily movement of 4,000,000 to 6,000,000 bushels was on.

Oats ascended to new top records of the season. Urgent bidding from the east was chiefly responsible.

A bulge in hog prices gave strength to provisions. Subsequently realizing sales brought about a setback.

**Chicago Futures.**

| Corn— | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| March .... | ..... | ..... | ..... | 1.27⅝ |
| May ..... | 1.26¾ | 1.26½ | 1.26⅛ | 1.26⅜ |
| Oats— | | | | |
| March .... | .85¼ | .86⅜ | .85¼ | .86⅛ |
| May ..... | .83⅛ | .84⅝ | .83⅛ | .84⅛ |
| Pork— | | | | |
| May ..... .... | | 48.20 | 48.05 | 48.05 |
| Lard— | | | | |
| May .....26.25 | | 26.30 | 26.02 | 26.05 |
| July .....26.47 | | 26.47 | 26.22 | 26.25 |
| Ribs— | | | | |
| May .....25.45 | | 25.60 | 25.30 | 25.30 |
| July .....25.70 | | 25.70 | 25.57 | 25.60 |

**Cash Quotations.**

Chicago, Feb. 18.—Corn—No. 2 yellow, nominal; No. 3 yellow, $1.70@1.80; No. 4 yellow, $1.60@1.75.

Oats—No. 3 white, 88 1-2@89 1-4c; standard, 88 3-4@89 3-4c.

Rye—No. 2, $2.23@2.23 1-2.

Barley—$1.60@1.92.

Timothy—$5@8.25.

Clover—$22@33.

Pork—Nominal. Lard, $26.08. Ribs, $24.20@24.70.

**Pacific Northwest Grain.**

PORTLAND, Ore., Feb. 18.—Grain—30-day options: Barley, feed, $65 bid; brewing, $66.

Eastern oats and corn in bulk: Oats, No. 3 white, $62.50 bid; No. 38, clipped, white, $63.50; corn, No. 3 yellow, $68.50; No. 3 mixed, $67.50; oats, No. 3, $62.50; clipped, $64; corn, yellow, $68.50; mixed, $67.50.

**Minneapolis Grain.**

MINNEAPOLIS, Feb. 18.—Flour unchanged; in carload lots standard flour quoted at $9.75 a barrel in 98-pound cotton sacks. Shipments, 43,398 barrels.

Barley—$1.54@1.99.

Rye—$2.19@2.20.

Bran—$32.50.

Wheat—Receipts, 246 cars, compared with 423 a year ago.

Corn—No. 3 yellow, $1.75@1.80.

Oats—No. 3 white, 88 1-2@89 1-2c.

Flax—$3.78 1-4@3.83 1-4.

## Live Stock Quotations.

**At Chicago.**

CHICAGO, Feb. 18.—Hogs—Receipts, 4600; strong, 25c above Saturday's average. Bulk, $16.70@17; light, $16.45@17.05; mixed, $16.40@17.05; heavy, $16.30@17; rough, $16.30@16.45; pigs, $15.25@16.25.

Cattle—Receipts, 15,000; firm. Native steers, $8.50@13.80; stockers and feeders, $7.35@10.60; cows and heifers, $6.40@11.65; calves, $8.50@13.75.

Sheep—Receipts, 20,000; weak. Sheep, $9.75@13.20; lambs, $13.75@16.65.

**At Portland.**

PORTLAND, Ore., Feb. 18.—Cattle—Steady; receipts, 893. Medium to choice steers, $10.55@11.50; good to medium steers, $9.35@10.35; common to good steers, $6@9.40; choice cows and heifers, $8@10; common to good cows and heifers, $6.75@8.15; canners, $4.25@6.25; bulls, $5@8; calves, $7.50@12; stocker and feeder steers, $6@9.50.

Hogs—Lower; receipts, 2686. Prime light, $16.45@16.60; prime heavy, $16.40 16.55; pigs, $14.50@15; bulk of sales, $16.25@16.50.

Sheep—Steady; receipts, 86. Western lambs, $15@15.50; valley lambs, $14.50@15; yearings, $13@13.50; wethers, $12.50@13; ewes, $9@11.

Note—Portland market on shorn sheep, 2 1-2c to 3c under quotation.

**Spokane Stockyards, Monday.**

Hogs—Receipts, 358; market weak, 40 cents lower. Prime light, $16.50@16.60; prime heavy, $16.50@16.60; pigs, $15@15.75; stockers and feeders, $12@14; bulk of sales, $16.60.

Cattle—Receipts, 191; market steady. Best beef steers $10.25@11; good steers, $9.25@10.25; common to good steers, $8@9; best beef cows and heifers, $8.50@9.25; good cows and heifers, $7.50@8.25; ordinary to good cows and heifers, $6.26@7.25; canners, $3.50@6.25; calves, $6.50@10.50; stocker and feeder steers, $6@8.25.

Sheep — Receipts, none; market steady. Prime lambs, $14.50@15.25; good lambs, $13.25@14; prime yearlings, $12.50@13.25; prime wethers, $12@12.75; best mutton ewes, $9@10.75.

## Portland Market.

PORTLAND, Ore., Feb. 18.—The potato market continues very weak. On the street the best Burbanks and American Wonders are quoted at $1.15@1.25 and Yakima Netted Gems generally at $1.35@1.45. There is a little buying around a cent for ordinary stock, with $1.05@1.10 available in a small way for fancy. Onions are weak and dragging.

In the following list of quotations the grain, hay, mill feed, hops, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 1, $64.50 per ton.

Millstuffs—Bran, $30 per ton; shorts, $32.

Barley—No. 1 feed, $64.50; brewing, $69.50@72; rolled, $67@69.

Hay—Buying prices: Timothy, eastern Oregon, $27; alfalfa, $22.50; grain, $22.

Eggs—Oregon ranch, case count, 42@44c per dozen; candled, 45@46c.

Poultry—Ducks, 30@35c; turkeys, live, 25c; geese, 20@22c.

Butter—City creamery, prints, 52@53c per pound; cubes, extras, 47c.

Cheese — Tillamook triplets, 25c; Young Americas, 26c.

Dressed meats—Veal, 20@20 1-2c; pork, 21@21 1-2c.

Hops—1916, nominal; 1917 crop, 16@17c.

Potatoes—Oregon, buying price, 90c@$1.10 per hundred.

Wool—Eastern Oregon, 50@60c; valley, 50@55c.

Beans—Buying prices: Oregon white, 9 1-2@10c; colored, 8 1-2c.

## Seattle Market.

SEATTLE, Wash., Feb. 16.—It was quite apparent today that there is little hope for stronger potato prices.

Growers have expressed a strong feeling of disappointment over the season's results. Statements that the acreage planted will be greatly reduced this year are frequent. Producers who held their potatoes off the fall markets when selling was good point out that the government at that time advised them to be in no hurry to sell and that they did not keep their spuds off the market entirely of their own volition.

Inquiry for seed potatoes has started. One car of selected Yakima Gem seed potatoes sold this week at $23. White or Puget sound seed is being quoted at $18@20.

There has been an improvement in the apple demand. Buyers who a week ago were looking only for cheap fruit are paying $1.15@1.75 for healed-over stings. Fruit that can scarcely be called fancy is selling at $1@1.50.

**BUYING PRICES.**

Unless otherwise state, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots, f. o. b. Seattle:

Eggs—Local, 40c per dozen.

Poultry—Springs, 25c lb; 4 lbs. and under, 25c; old roosters, 16c lb; squabs, large, $3.50 dozen; geese, fat, live, 18c lb.

Butterfat, 53c lb; dairy butter, 35@36c.

Beef—Buying prices: Prime beef, steers, 11@12c lb; cows, fat, 9@11c lb; heifers, 10@11c lb.

Hogs—Light, 18@20c lb; heavy, 17@18c lb.

Veal—Fancy light, 17@18c lb; heavy, 9@16c lb.

Hides—Salted, 14c lb; flint-dry hides, 29c lb; salt kip, 16c lb; green hides, 11c lb; green calf, 23c lb; dry calf (under six pounds), 29c lb; bulls and dry salts, 4c lb. less; green bulls, 9c lb; dry full wool sheep pelts, 36@39c lb; salt bulls, 11c lb.

**SELLING PRICES.**

Feed—Scratch, $76 per ton; all grain chop, $72 per ton; oats, $70 per ton; rolled oats, $71.50 per ton; bran, $34.50 per ton; shorts, $36.50 per ton; soy bean meal, $67 per ton; whole corn, $74 per ton; cracked corn, $75 per ton; alfalfa meal, $35; rolled barley, $70.50; sprouting oats, $70 per ton; Milo maize, $75 per ton; white gyp, $75 per ton.

Hay—Eastern Washington timothy, $36@37 per ton; alfalfa, $28@29 per ton; double compressed, $40@41 per ton; wheat hay, $28 per ton; Puget sound, $29@30 per ton; straw, $15.

Butter—Washington creamery extras, cubes, 52c lb; do bricks, 53c lb.

Eggs—Fresh ranch, 42@44c dozen.

Potatoes—Puget sound, $1.25@1.35 per cwt; eastern Washington, $1.40@1.50 per cwt.

## Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

**Potatoes**—New local potatoes, $1.25@1.50 cwt; sweet potatoes, $4.75.

**Apples**—Large eating apples, $1.25@1.50; cooking apples, $1 box; Delicious, 2.25; Winter Bananas, $1.50 box; Jonathans, $1.10@1.25 box; Wageners, $1@1.50 box Rome Beauties, $1.75 box; Spitzenburgs, $2 box; King Davids, $1.10 box; Grimes Golden, $1.35@1.65 box; Stayman Winesaps, $1.75 box.

**Butter**—Blanchard cartons, 53c lb; Medo-Maid, 53c lb; Cascade, 49c lb; Gold Leaf, 53c lb; Better Butter, 53c lb; Attalia, 53c lb; Diadem, 53c lb; Hazelwood, 53c lb; Solid Pack, 52@53c lb; Jersey Belle, 51c lb; Peerless, 47@48c lb; Snowcap, 38c lb; cooking butter, 38c lb.

**Cheese**—Wisconsin full cream, twins, 27c; triplets, 25c; Hazelwood full cream, triplets, 26c lb; Hazelwood Young America, 27c lb; Winconsin limburger, 32@33c lb; brick cheese, 33@35c lb; domestic Swiss, 38c lb; Young Americas, 27c lb.

**Eggs**—White filler, guaranteed, $13 case; selected storage, $12.

**Live Poultry**—Hens, 13@16c lb; broilers, 18c lb; old roosters, 9c lb; ducks, 15c lb; geese, 20@23c lb; turkeys, 28@32c lb.

**Dressed Poultry**—Hens, 28c lb; broilers, 32c lb; old roosters, 14@17c lb; ducks, 20@23c lb; geese, 20@23c lb.

**Hide Quotations.**

**Green Cows and Steers**—25 lbs and up, 11c; salted cured, 14c; green bulls and stags, 10c; salted cured, 12c; kip, 15 lbs. to 25 lbs., 16c; calf skins up to 15 lbs. 23c; dry flint hides, 30c; dry, salted, 25c; dry calf skins, under 10 lbs. 28c; dry sheep pelts, 30@35c; dry shearlings, 10c@$1 each; green horse hides, $2.50@4 each; dry horse hides, $1@2 each.

## Portland Wheat.

PORTLAND, Ore., Feb. 18.—Coarse grain prices continue to climb. At the merchants exchange at the close of the week $69.50 was bid for brewing barley and in the open market sales at $72 and better were reported. Oats are following the eastern advances closely, and there are very few offerings of either cereal. One hundred tons of bulk yellow corn, February delivery, were sold at $69, which shows the upward tendency of that article. Because of the high price of the raw materials, millers today announced an advance of $1 a barrel on barley flour, rye flour, oatmeal and cornmeal.

Hay dealers report a strong demand from California for alfalfa, with sales of good sized lots at Idaho points for shipment south.

**METALS.**

NEW YORK, Feb. 16.—Bar silver, 85⅝c.

LONDON, Feb. 16.—Bar silver, 42⅝d.

## Will Be Represented

(Continued from page three.)

teed prices, and in particular governing conditions of delivery and payment, and differences in price for the several standard grades IN THE PRINCIPAL PRIMARY MARKETS of the United States, adopting No. 1 northern spring or its equivalent at the principal primary markets as the basis.

Wheat growers in Ohio and other eastern states are asking that the government set a basic price of $2.50. They are pointing out that if a lower price is set there will not be sufficient stimulus to insure the increased spring seeding that seems necessary to meet the emergency, and argue further that unless a reasonably high price is fixed a great deal of wheat will be fed to stock.

The law provides that the government price on the 1918 crop shall not be less than $2 a bushel, and it is contended that congress had in mind the probability that a higher price would be guaranteed and therefore gave the president a free hand to go above the $2 minimum.

Farmers of the Pacific northwest feel that a great injustice will be done them if the government should fail to establish a primary market in this region. They feel that Washington, Oregon, Idaho and Montana are a part of the United States and are entitled to at least one primary market where the farmer can deliver his wheat and receive the government guaranteed price.

They reason that a broad and liberal interpretation of the language of the law would recognize local points where the growers actually deliver their grain by team as the true primary markets, and that it is stretching the law to make them pay freight rates to a single primary market like Portland. They seem willing, however, that that be done, but do object to a further straining of the law that would deprive them of a northwestern market, make Chicago the only basic point, and require them to sell their wheat at the government price less the cost of freighting it to that distant point.

The manifest purpose of the law is to deal liberally with the wheat growers of the United States and so far as practicable to put the growers of the different sections of the Union on a plane of equality of treatment. But such equality would vanish if the broad Pacific northwest were treated as a region outside the pale of the Union.


43½ Bu Wheat Per Acre

**Mr. W. Loat Writes:** "I had 203 acres of wheat that averaged 43.5 bushels an acre, 13 acres of oats that averaged 65 bushels, 25 acres of barley that averaged 50.5 bushels per acre."

Such remarkable reports are coming in every day from Western Canada. Farm crops in Manitoba, Alberta and Saskatchewan are making records never before equaled.

| Bushels | |
|---|---|
| Wheat | 30 |
| Oats | 53½ |
| Potatoes | 148 |
| Barley | 37 |
| Rye | 27¾ |
| Flax | 13½ |

This is the 1915 average per acre from Government statistics.

**FREE!**

**128,000 Farms**

In this most fertile farming section you can get one of these 128,000 newly surveyed homesteads of 160 acres near the Canadian Northern—"The Road to Opportunity." You can get results as successful in grain growing, mixed farming or stock raising as did Mr. Loat.

**Best Farm Lands $15 to $25 Per Acre**

Rich, centrally located farms adjacent to the Canadian Northern can be purchased at from $15 to $25 per acre—easy cash payments, or part cash and part crop payments. Crops produced equal to crops on farms costing $150 to $200 per acre in more densely settled communities.

**Special Low Fares**

The Canadian Northern Railway, which takes you to all parts of this territory, provides special low fares to home-seekers and settlers.

**Send for FREE Book**

"Home-Seekers' and Settlers' Guide" contains valuable and interesting information based on government returns, and it tells you exactly how to make a home in Western Canada. Here is a home and wealth for you.

CANADIAN NORTHERN

**Canadian Northern Railway**
A. R. BROSTEDT, D. F. & P. A.,
605 Hastings St., Vancouver B. C.



**MUD!**

—It gets in your ditches—then grass grows and refuse piles up—and then your ditch is hard to clean with plow and shovel. The job is easy with

Cut shows Model 20, made in 2, 4, 6 horse and tractor sizes. Makes new ditches, cleans old ones, to 4 ft. deep.

The Martin

**DITCHER AND GRADER**

**FINE FOR GRADING, TERRACING AND DYKING**

Does the work of 50 men and does a better job. Is simple, practical and efficient. No wheels or gears. No repair bills. Fully illustrated catalog with prices and list of users near you free. Write for it today.

**OWENSBORO DITCHER & GRADER CO.**
1576 Wazee Street Denver, Colorado

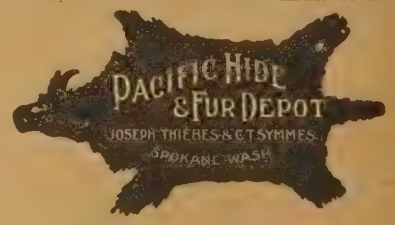



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**50-Carloads-50 For Every Purpose**

At prices that defy competition, but you must act quickly. We are selling Genuine Red Cedar Bevel Siding at $3.95 per 1000 feet. 2x4 Dimension at $15.75 per 1000 feet. 1x4 Fir Boards at $11.50 per 1000 feet. 1x6 Fir Shiplap at $14.75 per 1000 feet. Vertical Grain Flooring at $22.00 per 1000 feet, and 45 other items in our Free Bargain Bulletin. Send us your Lumber Bill for Estimate. Write for Free Bargain Bulletin, also Millwork Catalog, Plan Book, Post Price List.

Address HEWITT-LEA-FUNCK CO.,
458 Funck Street Sumner, Wash.




**Highest Market Prices Paid**

for hides and prompt returns made same day shipment arrives. Write for price list and shipping tags. Address

**PACIFIC HIDE & FUR DEPOT.**

Joseph Thiebes and C. T. Symmes,
1101-9 Railroad Ave., Spokane, Wash.


**The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.**

## SITUATION WANTED—Male 21

GOOD, EXPERIENCED FARM HAND; NOT afraid of hard work; not subject to draft; no bad habits; well recommended. Address Wm. Schwab, Owyhee, Nevada.

## EDUCATIONAL 45

BEHNKE-WALKER, PORTLAND, NORTHwest's largest, finest business college, can not supply half the calls for trained young men, women. Enroll now. Free success catalog. Positions secured.

## MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

Send us postcard asking for our new, illustrated catalog No. 27, of sash, doors, finish, paints, builders' hardware, plaster board, roofing, etc., sent free on request.

Cottage front doors .....$2.75
5x panel doors ... ... .....$1.80
2 light windows ... .....$1.24
Prepared roofing, ....$1.35, $1.70 and $2.10
Clear cedar lap siding, per 1000 ft. ....$8.00
Short flooring and ceiling .....$20.00

The largest factory in the west selling direct to the consumer. We sell any one, ship anywhere, and guarantee safe delivery.

O. B. WILLIAMS CO.
1943 FIRST AVE SO. SEATTLE, WASH.

BUILDING MATERIALS AT WHOLESALE prices — Doors, windows, roofing paper, porch columns, plaster boards. All building materials shipped promptly. Send for our complete illustrated catalogue; gives you lowest net prices. P. A. ROVIG CO., 2229 First ave., So., Seattle, Wash.

FOR SALE—GENERAL MDSE. STORE, dock, 4 acres land, 800 ft. water frontage, warehouses, 2 barns. Located on Puget Sound between Seattle and Tacoma. This business netted me over $2000 in 1917. $8000 will handle this. Address A-10 Washington Farmer, Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

READY-CUT HOUSES AND BARNS, wholesale, mill prices. Plan book free. Keystone Lumber Company, Tacoma, Wash.

## MISCELLANEOUS WANTED 63

WANTED—ALIVE BELGIAN HARES; also poultry, eggs and dressed meat. Commercial Creamery Company. Spokane, Wash.

## FARM LIGHT PLANTS. 73

WARNERLITE ELEC. LIGHT PLANTS absolutely guaranteed. Thousands used by satisfied farmers. Live agents wanted. Warnerlite Co., Temple Court bldg., Spokane.

## JUNK SHOPS 90

CENTRAL HIDE AND JUNK CO.
BUYERS HIDES, WOOL, METAL, RUBBER, SACKS, ETC. WRITE FOR PRICE LIST IF INTERESTED. QUICK RETURNS.
W200 MAIN AVE., SPOKANE, WASH.

## MACHINERY FOR SALE. 93

"WITTE" GASOLINE ENGINES
save labor, and are carried in stock by
HIGGINS MACHINERY COMPANY,
312 FIRST AVE., S., SEATTLE.
Write for Catalogue.

HARMON WEDGES CAN BE OBTAINED from your hardware company or dealer. If unable to procure them, we will be glad to fill your order. Wm. Walters, inventor, Glendale. Wash.

MOTORS, GEARS, BEARINGS, WHEELS, axles; we wreck all makes of cars and sell their parts at half price. Auto Wrecking Co., 89-91-93 N. Broadway, Portland, Ore

## AUTOMOBILES 114

FORDS START EASY IN COLD WEATHER if you use our 1918 carburetor. 34 miles per gallon guaranteed. One-third more power. Use cheapest gasoline or one-half kerosene. Quickly starts cold motor even at zero and moves right off with full power. No spitting or popping. Slow speed on high. Fits exactly. Attach it yourself. 30 off list where no agent. Big profits selling our goods. We fit all motors. Write for 30-day trial offer and money back guarantee. The Air-Friction Carburetor Company, 321 Madison St., Dayton, Ohio.

## STOVE REPAIRING 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

## PATENTS 150

WRITE FOR HOW TO OBTAIN A PATent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

## POULTRY 174

BABY CHICKS.

White Leghorn chicks, $14 per 100.
Barred Rock and Rhode Island Red chicks, $18 per 100.

HATCHING EGGS.

$1.50 per setting of 15 guaranteed.

INCUBATORS AND BROODER STOVES.

We are agents for the famous Queen incubators and brooder stoves. Also have a line of hot air, hard wood, first-class hatchers at ½ their real value. Also cheaper machines; 70 eggs, $5, and 120 eggs, $7.50

CUSTOM HATCHING.

We do custom hatching, 3c per egg. Catalog free.
QUEEN HATCHERY, 89 Pike, Seattle, Wn.

SEVERAL VARIETIES.

Turkey eggs, White Holland, Bourbon Red, 50c each, $5 dozen; Bronze, 35c; White Muscovy Ducks, $1.50 dozen; Houdan, White Guinea, R. I. Red, 15 for $2. From 1st prize stock. Breeders for sale. Parcel post prepaid. Turkeys in separate, wire-covered yards. Mrs. B. Hocking, Guasti, Calif.

PETALUMA HATCHERY—CAN SHIP DAYold chicks to points reached in 3 days. Why not have the best? We challenge the hen. Free circular. L. W. Clark, Petaluma, Cal.

# Want Ads

**Want Ad Rates 30c Per Line**

Want ads are run at this rate in The Washington Farmer and i t s associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

**Send for card giving lower rates for ads running one month or longer.**

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Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

## POULTRY 174 Continued.

PEDIGREED POULTRY.

Tom Barren strain of English Leghorns; every bird pedigreed; 257-egg hens, cock's dam, 275 eggs. These are real egg producers. A limited amount of choice stock for sale. Satisfaction guaranteed or no sales. Prices very reasonable. Asael H. Dixon, Oakley, Idaho.

HOGANIZED S. C. W. LEGHORNS—THEY have no fear of the high food prices, but just keep on laying high-priced eggs. Our pullets have cleared 50 per cent above their feed cost all winter. Eggs for hatching, $3 and $5 per setting, and $10 and $15 per 100. Golden Rule Poultry Farm, Cheney, Wash.

S. C. RHODE ISLAND RED AND WHITE Leghorns; best western prize winning stock, crossed with my own trap-nested birds; cocks and cockerels, $2.50 to $5; a few hens and pullets, $1.25 and up; eggs, $1.50 for 15; $7 100; no chicks. F. H. Volland, Kennewick, Wash.

BABY CHICKS—LEADING VARIETIES. We guarantee safe arrival and full count; strong, vigorous chicks from the finest flocks of free range stock in this country. 1918 price list and care of baby chicks if you mention this paper. Lashner's Hatchery, Petaluma, Calif.

BABY CHICKS.

Famous Carnation White Leghorn; vigorous, early maturing, heavy winter layers; also breeding stock. E. W. Raush, Carnation Poultry Ranch, Kent, Wash.

BABY CHICKS—S. C. WHITE LEGHORNS; real mertgage lifters; the kind that lay while mere kiddies; 21 years on the job. Catalogue. I. D. Casey & Sons, R. 6, Waitsburg, Wash.

MAMMOTH BRONZE TURKEYS.

18-month-old tom, weight 30 lbs., $10. Young toms, $7. Hens, $5. Mrs. J. R. Mulkey, St. John, Whitman Co., Wash.

S. C. WHITE LEGHORNS — PRESENT breeders averaged 15 doz. each last season. Mated to high-record males. Hatching eggs. Mary Jessup, Cooks, Wash.

WHITE WYANDOTTES, BRED FROM Martin's famous bred-to-lay Dorcas line fowls. Eggs, $2.25 and $3.50 per 15. Thos. Thorson, Cashmere, Wash.

FOR SALE—MAMMOTH BRONZE TURkeys. Won five prizes at Wash. State Fair. Toms, $7 and $10; hens, $5. H. T. Cutler, Parker, Wash.

S. C. REDS; EGGS $1.50 TO $5 SETTING. A card will bring mating list. Sure to please. J. S. Benson, Cottage Grove, Oregon.

FOR SALE—PUREBRED BARRED ROCK cockerels, Barronett strain; choicest birds, $5. August Anderson, R. No. 1, Pullman, Wn.

PARKS BRED-TO-LAY BARRED ROCKS, winter layers. Eggs, $1.50 for 15; $8 per 100. W. G. Neyland, Spokane Bridge, Wn.

TRAPNESTED WHITE LEGHORNS AND Barred Rocks. Eggs, $1.50 per 15; $8 per 100. Mrs. W. M. Roberts, Elmira, Ore.

TRAP-NESTED S. C. W. LEGHORNS—Hens, pullets and hatching eggs for sale. H. C. Deitz, Box 337, Hood River, Ore.

RANCH RAISED WHITE WYANDOTTES. Good vigorous birds, eggs and stock for sale. Jas. A. Hills, Jonathan, Wash.

FOR SALE—BARRED PLYMOUTH ROCK chickens; best in the country. Mrs. C. H. Harris, Nampa, Idaho, R. D. 1.

WANTED—FIVE TO FORTY LARGE, healthy turkey hens. No disease in flock. Mrs. Costello, Malden, Wash.

S. C. BUFF ORPINGTON CKLS., $3 TO $5 ea. Mrs. J. A. Lockhart, St. John, Wash.

## LIVE STOCK 177

CALVES—CALVES—CALVES—CALVES

I am in a position to supply you with all the young calves that you can use, and this season I am able to offer you some very fine stock, especially in the dairy line, I will have calves for sale from cows that produce as high as 70 lbs. of milk daily. Send for my price list at once as these calves are ready for delivery from this date on.

SMITH, "THE CALF MAN,"
Tillamook, Oregon.

FOR SALE.

A choice lot of pure bred Shire stallions, coming two years old; also pure bred yearling Shorthorn bulls. Address
WILSON RANCH, ROCKLYN, WASH.

ABORTION IN COWS CURED AFTER seven days' treatment. Write me in regard to the matter. The best references in Linn county, Ore., on application. Wm. Schneider, R. 1, Box 43, Albany, Ore.

BERKSHIRE BRED SOWS AND GILTS, March, April and May farrow. Write for special price list today. SILVER BIRCH FARMS, Newport, Wash.

PUREBRED GUERNSEY BULL.

"Moses of Chicona," No. 18739. Near 7 years old; weight about 1700 lbs. H. D. Phillips, Kelso, Wash.

FOR SALE—WILLOWMOOR PETER PAN 19th, registered Ayrshire bull; 5 yrs. old; gentle, sure breeder. Randolph Brown, R. 3, Junction City, Ore.

JERSEY CATTLE—BULLS, COWS AND calves are included in private sale list now ready. SILVER BIRCH FARMS, Newport, Wash.

POLAND-CHINAS; BIG TYPE; SPRING pigs by Young Chief N. 79349, from good, rangy sows. James A. Hills, Jonathan, Wn.

WANTED—15 TO 20 HEAD REAL SHETland ponies, mostly mares; none over 5 years old. Chas. Kemsley, Sublett, Idaho.

FOR SALE—25 REGISTERED RED, white and roan Shorthorn bull calves and yearlings. Wm. Mulhall, Fenn, Idaho.

WANT TO BUY GUERNSEY BULL, 1 OR 1½ yrs. P. Nelson, R. D., Eatonville, Wn.

## HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

## RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

## TAXIDERMISTS 426

WE MOUNT ANYTHING. FURS TANNED and made into furs and robes. Raw furs bought. Mohr, 82 Bernard, Spokane.

## BUSINESS OPPORTUNITIES 516

$6500 BUYS A WELL-EQUIPPED DAIRY plant and business in a beautiful college town in So. Calif. Brings in about $400 per mo. For full particulars and terms write R. F. D. 1, Bx. 86, Yelm, Wash.

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PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

## SEEDS 620



IF YOU HAVE ACCLIMATED SEED TO sell, it will pay you to advertise it in this classification. If you want to buy seed adapted to western soil and climate watch what is offered in this department.

VOGELER'S PURITY SEEDS.

Alfalfa and clover seeds—full of life—carefully cleaned and tested. Also the finest seed grains. Write for catalog and prices.

VOGELER SEED CO.

Salt Lake City, Utah.

FULLY EQUIPPED STOCK RANCH
$2000 BELOW VALUE.

160 acres beaver dam land; all tillable except 2 acres; 80 acres in meadow; 5 head of horses, 8 head of cattle; all farm machinery; good 2-story house, barn, wagon shed, garage, blacksmith shop and other outbuildings; good well and creek.

Price $5500; $4000 cash, bal. long time.
JAMES W. BOOTHE & CO.
510 FIRST AVE. SPOKANE, WASH.

PEAS — KAUFMAN'S PEDIGREED BLUE Bells. Best seed on the Coast. Send for circulars. Hill-selected seed potatoes, Earliest of All, Early Rose, American Wonder. Duroc hogs. 60 a. dairy land for sale. $75 month and home for farm hand. W. H. Kaufman, Bellingham, Wn.

VETCH, CLOVER AND FIELD SEEDS. We carry a complete line of grasses, wheat, oats and other seeds too numerous to mention. Our prices are right. Will be glad to send samples and quote prices.
CORVALLIS FLOURING MILLS.
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SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
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BUTZER'S SEED STORE.
188-190 Front St.,
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NEW SEED CATALOG—COMPLETE LIST of Tested Seeds for Western planting. Write for your copy today—MAILED FREE. An experience of 25 years in the Northwest. Aabling-Boyce Seed Co., 89 Pike St., Seattle, Wash.

WE SPECIALIZE IN TIMOTHY, ALFALfa, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Ida.

VETCH, CLOVER, TIMOTHY.
Choice recleaned seeds at direct to you prices. RHOTEN FARM, Salem, Oregon.

HIGHEST QUALITY RED AND ALSIKE clover, also vetch seed. Prices right. M. Senders & Co., Albany, Ore.

## NURSERY STOCK 621

EVERBEARING STRAWBERRIES ARE mortgage lifters. We have plants, strong and thrifty. Send for price list. F. I. Moffett, Ellensburg, Wash.

PROGRESSIVE STRAWBERRY PLANTS, bear first year set, from July to November. $2 per hundred; $1.50 for more. G. F. Thayer, Payette, Idaho.

## FARM LANDS—FOR SALE 651

SMALL FARMS FOR SALE.

We have for sale at lower than prevailing market prices—and on terms to suit purchaser—8 small farms, ranging from 10 to 80 acres each—Some improved with house, barn, well, etc., at $80 to $120 an acre, just half former prices. Finest black Palouse soil—just the kind that insures "sure" crops of grain, fruit or garden; located 14 miles from Spokane, on electric line, and paved highway. Surrounding growing suburban community—active trading center.

These are among best bargains offered today. You buy from us as owners. Call at office, or write for full particulars, with plat, before you buy anywhere. One of these tracts will surely suit your needs.

HANAUER-GRAVES COMPANY.
601 Old National Bank Bldg.
Spokane, Wash.

BUY WHERE THEY RAISE THE PRIZE CROPS
IN SNOHOMISH COUNTY.

40-acre farms, $25 per acre. Ten yearly payments, 6 per cent interest. Visit our office and see the great exhibit of PRIZE-WINNING vegetables, fruits, grains, alfalfa and other grasses raised on the adjoining farms. They prove our claims that this is the best land in WESTERN WASHINGTON.

Paved roads. Four passenger trains a day. Graded school, cannery, creamery, cheese factory, plenty of work for the laboring man in the mills and camps, where 75 settlers are all boosters. DON'T LOSE A DAY in asking for our illustrated literature.

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YOUR CHANCE IS IN CANADA—RICH lands and business opportunities offer you independence: Farm lands, $11 to $30 acre; irrigated lands, $35 to $50; twenty years to pay; $2000 loan in improvements, or ready made farms. Loan of live stock; taxes average under twenty cents an acre; no taxes on improvements, personal property, or live stock. Good markets, churches, schools, roads, telephones; excellent climate—crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Allan Cameron, general superintendent land branch, Canadian Pacific Ry., 30 Ninth ave., Calgary, Alberta.

GOING — IRRIGATED ALFALFA AND stock ranch of 111 acres; gross income $6000; situated on the bank of the Yakima river; ideal for all kinds of stock; properly cultivated, will raise 100 bu. corn and 10 tons of potatoes to the acre. Horses, cows, registered $1000 Holstein bull, Berkshire hogs, chickens, farm implements, etc.; eight-room house, barn, silo, hog and chicken houses. This ranch is second to none in the Yakima valley. Reason for selling, old age. Price for all $28,000; one-half cash. Address B 7, care Washington Farmer, Spokane.

FOR SALE BY OWNER—40 ACRES; IN the beautiful San Juan archipelago, where there are no floods and the crops are sure; 20 a. cleared, bal. pasture, with enough timber to pay for the place; horses, cattle, hogs, sheep and chickens; all implements; house, barn, shed, chicken houses; all kinds of feed for the stock. Price, as stands, $37.50. Will take $1750 down, bal. easy, to suit purchaser; 8 per cent int. Address J. M. Jorgensen, R. F. D. Box 48, Port Stanley, Wash.

AN IDEAL FRUIT AND POULTRY RANCH —5 acres; abundantly watered; modern 6-room house; large sunroom, 12x24; hot and cold water, bath, etc.; overlooking the bay; 400 ft. from dock; on account of old age and poor health will sacrifice. For particulars address S. S. Stults, Langley, Wash.

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HEAD FOR THE HEADWATERS OF the old Missouri; splendid grain and stock ranches. For information about climate and soil write Chamber of Commerce, Three Forks, Montana.

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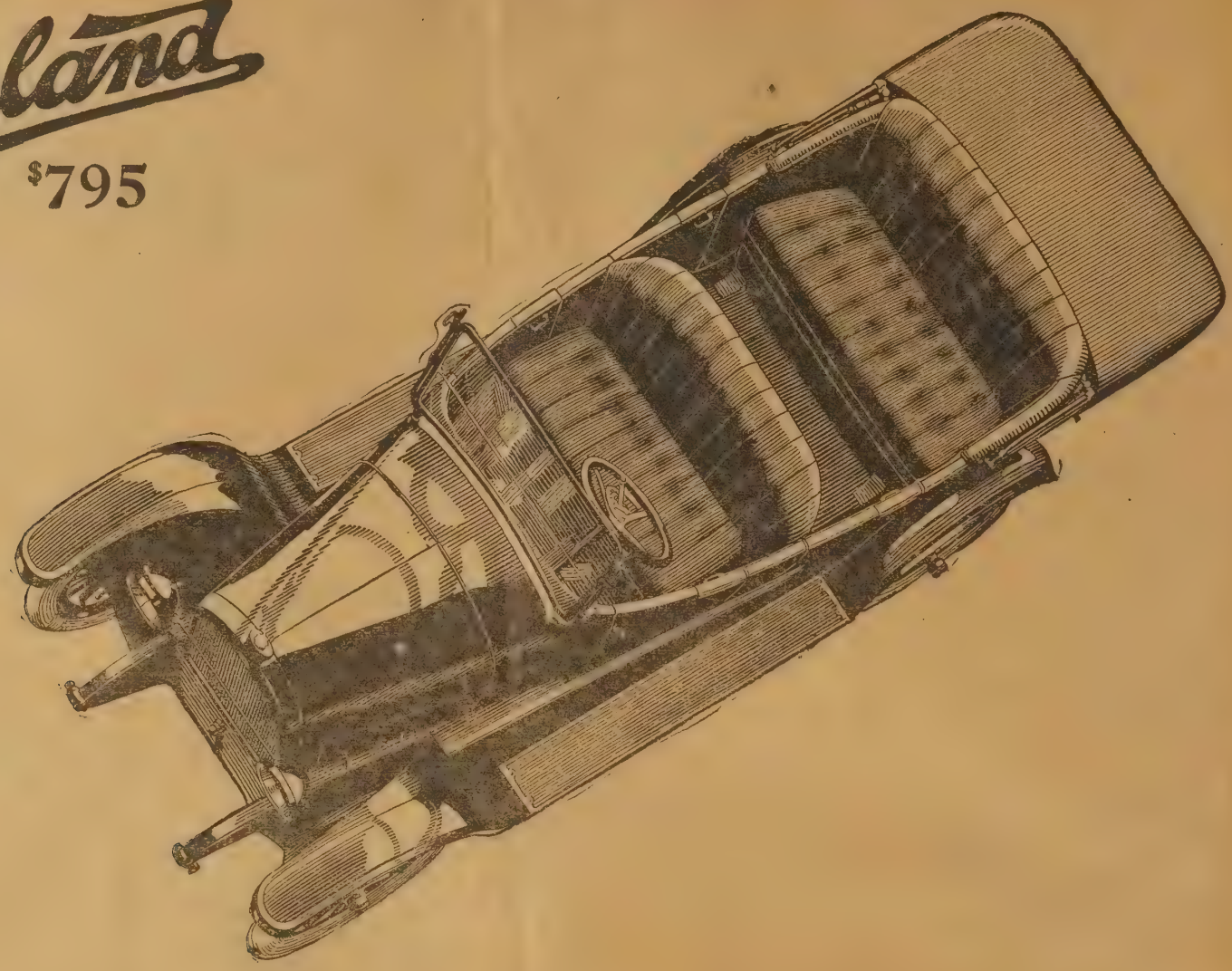
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THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XLI. NO. 9. FEBRUARY 28, 1918. ** WEEKLY.

# President Fixes Price for 1918 Wheat

## *Remains Practically Same as Last Season; Hoover's Pledge to Farmers Is Overruled*

Wheat producers, northwestern senators and representatives, and it seems Food Administrator Herbert Hoover himself, were given something of a shock Saturday when President Wilson issued a proclamation fixing the price of wheat for 1918 at approximately what it has been for 1917. The price is identical except for a few changes due to the addition of a few points as primary markets. It makes the price at Chicago $2.20, and at northwest coast terminals $2.05 a bushel for No. 1 northern. This is the same as last year. It specifies a price of $2 flat at Spokane, which would seem to be a small gain for the Spokane territory, as the freight to the coast is about 9 cents.



Woodrow Wilson.

### Cause of Surprise.

The surprise felt by growers and others at the president's proclamation is not due so much to the fixing of a price, but due to the fact that it is fixed 12 or 13 cents lower for northwestern points than Food Administrator Hoover promised the northwestern delegation to Washington last week that it would be.

But encouragement is given by a dispatch from Washington saying that Mr. Hoover promises to make good his pledge, though it is evident that to do so he must cause the president to rescind at least part of his regulation.

Mr. Hoover promised the growers that they would be allowed a price based on the Atlantic coast price, with an ocean freight rate to the Atlantic coast of $3.50 a ton, which would make wheat at Pacific northwest terminals $2.17 to $2.18 a bushel. This would be from 12 to 13 cents more than the price announced by President Wilson. It would make the price at such interior points as Spokane, Ritzville, Moscow, Pendleton and the like the coast price less freight, or $2.08 to $2.09 a bushel, or a gain of 8 or 9 cents over the president's specification for Spokane.

### Committee Obtained Pledge.

On the face of the Washington reports it would seem that unless Mr. Hoover is able to influence the president to alter his schedule of prices, the work of the northwest committee that has been in Washington for two weeks has been largely in vain, notwithstanding their complete success in negotiating with the food administration and the federal shipping board.

Here is the statement issued by President Wilson in explanation of his price-fixing proclamation:

"Under the food control act of August 10, 1917, it is my duty to announce a guaranteed price for wheat of the 1918 harvest. I am, therefore, issuing a proclamation setting forth the price at the principal interior primary markets. It makes no essential alteration in the present guarantee. It is a continuation of the present price, with some adjustments arising from the designation of a number of additional terminal marketing points.



Herbert Hoover.

"This guaranteed price assures the farmer of a reasonable profit, even if the war should end within the year and the large stores of grain in those sections of the world that are now cut off from transportation should again come into competition with his products. To increase the price of wheat above the present figure, or to agitate any increase of price, would have the effect of seriously hampering the large operations of the nation and of the allies by causing the wheat of last year's crop to be withheld from the market. It would, moreover, dislocate all the present wage levels that have been established after much anxious discussion and would, therefore, create an industrial unrest which would be harmful to every industry in the country.

"I know the spirit of our farmers and have not the least doubt as to the loyalty with which they will accept the present decision. The fall wheat planting, which furnishes two-thirds of our wheat production, took place with no other assurance than this, and the

Continued on page sixteen.

"Trappers of the Ozarks"---See Page 7

# Must Consider Many Things

## Feed Is Not Only Consideration That Is To Be Counted in Production of Pork, Says Whitman County Man




COLFAX, Whitman County, Wash., Feb. 20.—Market conditions are splendid for all kinds of farm products. Farmers only need to make offerings to have their products readily absorbed. The average price farmers received for wheat was close to $1.80 per bushel; oats about $2.25 per hundredweight, hogs have averaged about 15 cents per pound on the hoof and cattle about 6 cents per pound. Hay brings about $25 per ton on the farm and baled straw about $6. Potatoes are a drag on the market at $1 per hundred pounds. Many farmers are thoroughly disgusted with potato growing. They say they got "stung" last year to the tune of thousands of dollars when they mistook the potato bee that was buzzing in their heads for a golden winged fairy. I would suggest that families in cities and town plant potatoes again this spring as few farmers are going to plant many. Butter and eggs are sold at the same price the dealer pays as they are always taken in trade. A profit is added to other farm products before it is sold. The market is mostly at outside places as farmers save enough of their products to carry them from year to year. I raised hogs for 10 years, up to 1914, and fed wheat, corn, peas, alfalfa and potatoes. I found the potatoes worthless, either cooked or raw. In the hog raising business one should consider a great many factors to correctly compute the cost of pork, such as original investment, interest on it, loss of pigs at farrowing time, the potential profit from land used for pasture if devoted to other purposes, destruction of crops and garden from breechy hogs, loss of poultry devoured by hogs, loss of fat hogs in marketing, loss through market manipulation by packing houses, dockage on "sows," "stags," "piggy sows," "lame hogs," etc. I can not say what it will cost to produce pork under present conditions, but I can say the inducement of $15.50 per 100 pounds has no effect upon me. Crop conditions appear encouraging. E. C. HUNTON.

### Markets Too Distant.

NEPPEL, Grant County, Wash., Feb. 17.—Regarding marketing conditions here, everything is at a standstill. There are plenty of cattle, hogs and potatoes for sale. One farmer shipped several dressed hogs two weeks ago, and has not received a notice of receipt of shipment yet. He had to dispose of them because he could no longer feed them. Many farmers are in the same position and are losing many hogs at $16 live weight, f. o. b Spokane, as there is nothing but wheat or its products to fatten them now. There is no good market for beef, so we are not fattening any. This condition will throw a lot of grass-fattened stock on the market in June and July, when hard to handle. The market price of coal here is $11.25 per ton in bulk lump, and flour is $2.80 per 48-pound sack, sugar 10 cents per pound, bacon 45 to 50 cents per pound, corn meal $2 per 25-pound sack, cattle hides 8 cents, dry; eggs 40 cents a dozen. One of our drawbacks is a poor local market and a too-distant market for small-lot shipments. The cost of producing 100 pounds of pork under our method at present could not be produced for less than 16 cents per pound, with no one anxious to go into it at that with the exception of the alfalfa grower, as young hogs turned on green alfalfa will grow a good frame and bone for fall fattening with grain, and this is our best and cheapest method of producing pork at a reasonably safe profit. The Jerusalem artichoke is easily grown here, and has been found a great help in finishing in the fall for hog harvest and also reseed by leaving enough small artichokes in the ground to make a good stand the next year. Crop conditions have never been better, so far, and most of the farmers have started seeding and are doing their best to get in a large crop and are working every hour available, as help is scarce, and some wheat farmers are paying as high as $100 per month and board for spring seeding help. No one wants less than $75 and board, and expects the farmer's wife to pack the five-gallon cans of slop to the stock in the bargain when the farmer is absent. But the good wife has provided against this also by helping to pay taxes to build and maintain efficient insane asylums where often many of them have to go when their minds break down under the heavy strain, in a great many cases, but they are faithful to the last. Uncle Sam need not look for the slackers among the farmers' wives, for they are backing this war to a finish for the benefit of their offspring and liberty.

MARTIN PENHALLICK.

### Must Figure All Costs.

MEAD, Spokane County, Wash., Feb. 16.—The following prices are paid by the farmer for some of the things he has to sell in this section. Wheat, $1.85 per bushel, oats $58 per ton, potatoes $1.25 per hundred, dressed hogs 19 cents. We have to pay $6 per hundred pounds for cracked corn, oatmeal $7 per hundred, rice 12 cents per pound, beans 15 cents a pound; apples bought for $1 per box are retailed at $1.35. Poultry, eggs, meats and butter are usually sold on the local or Spokane market. Apples and potatoes are usually shipped east and south. Allowing interest on investment in land required, fences, houses and hogs, and wages for time attending to the raising and killing or shipment of animals, hogs can not be raised in this section for less than 19 cents per pound, live weight. I notice in the figures given by the hog men from our state college feed costs are all that are given, nothing being allowed for interest on investment, wages of attendance, etc. These figures might have had some influence on the farmer years ago, but they will not avail now. Statements such as given out within the last month are doing more harm than good, judging from remarks of our best posted men of this section. All indications are for a good yield of general crops the coming season. Winter wheat continues to improve and there is more moisture in the ground than for several years at this season. GEORGE HINGSTON.

### Stock Do Well.

MALAGA, Chelan County, Wash., Feb. 20.—We have had a very open winter so far and the ranchers have been able to run their stock on the alfalfa in the orchards, which has saved feed so most ranchers have plenty of hay to carry them through the rest of the winter, and stock in general are looking fine. There has been some sickness and a few losses among horses, which the veterinary claims is due to eating moldy feed in orchards. Ranchers are working long hours in pruning to overcome the shortage of help caused by so many of our young men being called to the front. The light snowfall in the mountains is causing some worry among the ranchers, who depend on the creeks for their supply of water for irrigation. The unusually rainy season we have had this winter will help a great deal, the ground being soaked to a depth of three to four feet. However, there is some snow now and the water will mostly soak in the ground, as there is very little frost. Owing to the mild winter there will be very little, if any, ice harvested, as ice is only five inches thick now.

MRS. F. E. KINGSBURY.

### Produce Artificial Silk.

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NEW WORLD LIFE

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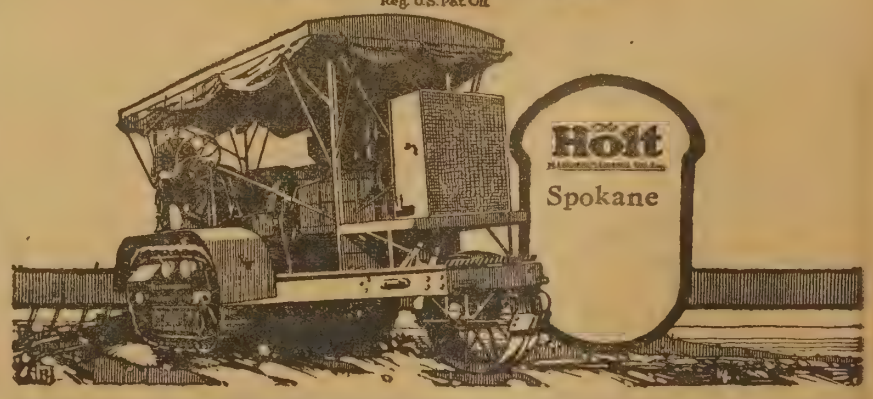
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# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 9 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF February 28, 1918

# Stockmen Want Stable Market

## *Conference Seeks Same Treatment for Meat Industry as for Wheat*

The live stock men of the northwest feel that the live stock industry is entitled to the same consideration at the hands of the food administration that the wheat industry is, and they see an inequality as at present. To illustrate: The recent delegation of grainmen to Washington secured the same rate on wheat for a Pacific coast terminal as Chicago gets, but the minimum price of $14.50 a hundred for hogs in the northwest still stands, notwithstanding the fact that the Chicago minimum is $15.50.

The second annual convention of the Northwest Live Stock association at Spokane last week went on record in the following resolution as opposed to this regulation:

"Whereas, The United States food administration has conceded that the Pacific northwest is entitled to the same price on wheat as the Chicago market, therefore,

"Be it resolved, That we express our belief that the same principle should apply in fixing a minimum price for hogs in the Pacific northwest, and that it is the sense of this conference that the minimum price of $15.50 instead of $14.50 should be fixed in all live stock markets of the Pacific northwest.

"Be it further resolved. That a copy of these resolutions be sent to the senators and congressmen from the four northwestern states, to the agricultural press, Herbert Hoover and Joseph P. Cotton."

Other resolutions adopted by the conference were: Endorsement of the county agent movement, with a request to the authorities for the appointment of an agent for every county in the northwest during the war to speed up production; endorsement of the movement for the creation of courses of instruction in animal husbandry and especially in animal feeding in agricultural high schools and other institutions of learning where practicable; urging the stabilization of the live stock market so that producers may know what they may depend upon, no matter what line of production they are engaged in; urging the appointment by the government of more farmers and stockmen on the various commissions and subcommissions of the food administration, with a view to giving the agricultural industry a greater voice in carrying on the war production work; recommending that city authorities be lenient with those who desire to produce a pig or pigs inside the city limits; recommending the abolition of the mongrel and useless dog by the placing of a liberal tax on dogs; indorsing the work of the United States biological department as conducted in the northwest by E. F. Averill at Pendleton, Ore., in the destruction of predatory animals that carry rabies; approving the legislation now on some of the law books prohibiting the running at large of scrub sires, and urging the enactment of more and more rigid legislation of this kind; indorsing the work of the Pacific Northwest Fair association, and that of the live stock shows; pledging loyal and unstinted support of the stockmen to the government for the prosecution of the war to a successful end.

The conference was one of the most successful and largely attended of any like conference in the history of the northwest. Though there was criticism of a number of conditions, this criticism was directed with a view to improvement, and throughout the entire meeting a spirit of patriotism was manifest. This spirit was especially in evidence at the banquet on the closing evening, when more than 300 stockmen and their wives and guests ate a Hoover meal together and listened to an excellent program of music and addresses. The evening began with the singing of "The Star Spangled Banner" by all those present. The day was that of Washington's birthday, and the speakers, under the leadership of President E. H. Lindley of the University of Idaho, who acted as toastmaster, thrilled their listeners with patriotism. Among the speakers were: President E. O. Holland of Washington State college: Dr. E. A. Bryan, commissioner of education for Idaho; Charles Hebberd, Washington state food administrator; A. D. Dunn, Shorthorn breeder of Wapato; E. F. Benson, Washington state commissioner of agriculture; Frank Brown, breeder of Carlton, Ore.; F. E. Faville, publisher of Portland; James E. Poole, editor Shorthorn World.

Probably the strongest note of patriotism at the convention was that sounded by Dr. Bryan at the Friday afternoon session when he put to shame those who are wont to speak of the sacrifices America is making for the war. He declared that no American is yet doing anything worthy the word sacrifice except those young men who have offered themselves upon the altar of their country and have gone or are going to the battle front.

It is no sacrifice to do without pork chops and beef steak when there are plenty of wholesome and palatable foods to substitute for them, even though the latter may mean a little more expense, he said. Neither is it a sacrifice to buy Liberty bonds or war savings stamps, the most perfect investment securities in the world. Neither should we call it a sacrifice to give to the Red Cross or the Y. M. C. A. to aid those organizations in their great humanitarian work.

We mustn't let these little disputes of market prices and feed prices trouble us too much, said Dr. Bryan, when civilization is facing such a struggle. It isn't a question of whether we are going to get just what we think we ought to, for we are in an "irrepressible conflict" that must be won at whatever cost.

"Whatever the sacrifice may yet be, we must make it ,we must make it! We are all drafted in the service of civilization. You stockmen are drafted to perform your particular line of work, and you must stay in it to the end. Stay in it, win or lose. You are drafted for that business and you mustn't refuse the draft."

**Not Afraid of Minimum.**

That the hog raisers need not be afraid of the minimum price that has recently been established was the declaration of C. M. McAllister of Portland, who predicted that hogs would not get as low as the $14.50 minimum in the northwest during the war. Mr. McAllister argued in favor of community shipments of live stock where individual farmers could not make up full carloads. He said that in communities that had shipped cooperatively the number of live stock had not declined as it had in communities distant from markets where this method of shipment was not used. He said that America was going to have to furnish the foundation herds of Europe after the war, citing the enormous losses of live stock during the war. The text on which he preaches throughout the stock producing sections is: "Cooperation and Organization Mean Efficiency, and Efficiency Means Success."

A. D. Dunn of Wapato, Wash., told the stockmen that they could not succeed in the stock business if they did not like animals. "You must like live stock; you must love the outside; you must love nature," he said. He said the three essentials to successful live stock production were feed, breeding and care. He laid special emphasis on the care, declaring that there were not enough real husbandmen feeding the stock of the country; that feeding was a science and an art worthy of being made the leading feature of a branch of agricultural education in the high schools and colleges of the country

Of special interest to stockmen of the large district tributary to Spokane was the statement of J. B. Campbell of Spokane that the railroads had made marked reduction in the freight on carload lots of stock shipped to the yards in that city. He said that the Northern Pacific had made reductions of from $1 to $47 a car, or an average of $23 a car. The Milwaukee had made reductions of from $2 to $47 a car, or an average of $25 a car. The question was taken up with the Union Pacific and they promised to look into it. He said that this really extended the Spokane territory several hundreds of miles, reaching Montana and southern Idaho producing sections. These reductions, said Mr. Campbell, were not a discrimination against other points, but were the correction of discriminations that have existed against Spokane.

There were numerous other speakers with messages to the stockmen.

Charles Hebberd, food administrator for Washington, told of the urgent needs for efficient food production and conservation. H. W. Hochbaum, county agent leader for Idaho, told of the work of that department, laying special stress upon the value of the farm bureau that is now organized in the state of Idaho. He said there were 28 county bureaus in 40 counties and he is now working on the organization of others. R. A. Blanchard of Portland talked on the subject of live stock finance. E. R. Gentry, representing Armour & Co., packers, told of the work of the packers and the development of the packing and meat producing industries. W. T. McDonald of British Columbia, live stock commissioner for the province, told of the industry in Canada. Animal disease as a result of malnutrition was the subject of Dr. Otto Menig of Spokane. E. F. Benson, Washington state commissioner of agriculture, spoke of various matters during the conference. He called attention to the need of California stockmen for range or pasture and urged upon the farmers the possibility of aiding that state in saving its stock and at the same time receiving benefit from the transaction. He said thousands of cattle in California were in dire straits because of feed shortage caused by drouth. Dean E. J. Iddings of the college of agriculture of the University of Idaho discussed the prospects for the live stock man. His address is reported on another page of this issue of the Farmer. James E. Poole, editor of the Shorthorn World, spoke of general market conditions and prospects. He said present conditions were distinctly unsatisfactory and expressed regret that the food administration had taken the action in many regards that it did on the conservation of meat. He urged the need of effective live stock organizations and argued in favor of more farmers and stockmen and fewer lawyers at the national capital. He cited numerous instances of absurd ignorance of high government officials of the commonest facts affecting the production and marketing of live stock. William Hislop, for a number of years head of the animal husbandry department of the state college of Washington, spoke on sheep production in war time, giving many valuable suggestions for improvement in this branch of the industry. Professor C. L. Roadhouse of the University of California spoke on the live stock policy that should be followed in the future. He showed the enormous losses to Europe due to the war, indicating that America must step in and replenish the depleted herds. Professor George Severance of the department of agriculture of the state college of Washington spoke on the crops that should be produced by the live stock farmer. His address and those of others at the conference will be treated by the Farmer in other places from time to time. The convention was filled with information that every farmer should possess and as space permits this information will be given publicity.

## TO RELIEVE HORSES

### Stockmen Give to the Red Star

At the stockmen's dinner during the conference in Spokane last week E. E. Faville of Portland appealed to those present in behalf of the Red Star association, a nation-wide organization for the relief of horses that are called into the service of their country at the battle front. C. M. McAllister of Portland and George M. Wilson of Wilbur, Wash., passed the hat and the stockmen and their friends present dropped $208 into the fund. The Red Star is to the horse what the Red Cross is to the soldier, and, with hundreds of thousands of horses already in battle and hundreds of thousands more ready or being prepared for service, the need of the relief work is readily understood. Horse hospitals must be prepared behind the lines and equipment for rescue work provided and manned.

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## Delay Combine Case

### Will Try Creamery Men in Fall

Formal hearing on the charges of illegal combination on the part of the large creamery companies of the northwest has been continued in United States circuit court at Boise, Idaho, until the September term of court.

Indictment in this case was returned by the federal grand jury on February 24, 1917. Under the indictment nearly a score of the large creamery concerns doing business in the west and northwest are charged with illegal combination for restraint of trade on the part of the small concern. Special Agent Leon Bone of the U. S. department of justice has charge of the case for the government, but wartime duties have prevented his preparation of the government's argument.

A few days ago Ex-Governor James H. Hawley, representing the Jensen Creamery company, one of the defendants in the case, requested postponement owing to his various duties in connection with the war savings stamp campaign for Idaho, and the United States attorney was willing because the government still wishes additional information.

President Jensen of one of the principal defendant companies, residing in Salt Lake City, is largely engaged in war service in that city in connection with the larger movements, and this was also given as one reason by Ex-Governor Hawley, attorney for the Jensen interests, for further postponement of the cases.

In the event of final hearing or trial the cases must come before United States Judge Dietrich at Boise.

**Early Day Buttons.**

The ancients lacked buttons—one wonders, indeed, how they got along without them—but evidently they possessed studs of modern pattern, such as those with which we fasten our cuffs and collors. And, in truth, they did even have a kind of button (though not sewn on), which fastened garments with a pin and hook exactly in the way our brooches and clasp pins operate.—Exchange.

# Camp Life Easy

## So Thinks Duroc Jersey Breeder

Robert Nelson, "the boy Duroc Jersey breeder," of North Yakima, Wash., is now one of Uncle Sam's soldiers. Robert began showing Durocs when a mere boy and in the few years he has been breeding had advanced to the front rank of red hog breeders, winning a large share of the ribbons at his home and other stock shows, in the strongest competition. With it all he has been modest and a good fellow with every one, making him one of the most popular breeders on the circuit. In a letter to J. M. Fruitts of Enterprise, Ore., he tells interestingly of his life in camp and exhibits the same sterling qualities that made him popular on the show circuit.

Robert says he enlisted about the first of the year and was first sent to Fort Lawton, Wash., then to the Presidio at San Francisco. He says, "I write to let you know my next show circuit will be in France." He is in battery C, second field artillery, and says: "This is certainly a lazy life compared with what I am used to, but a fellow has to make the best of it. I sometimes feel that it would be a real honor to get stuck in the guardhouse, so that one would be sure of 10 hours of hard labor." He adds that since he sold his hogs he has had hundreds of inquiries and realizes that he quit the business at the wrong time, "but there was no choice and, besides, a man owes something to the country that offers him all the opportunities that this great nation does."

Robert concludes: "If the war lasts until fall, as it undoubtedly will, you can bet there will be one soldier whose heart is with the stockmen on the circuit. If I am one of the lucky ones I will probably be showing again, but it is hard to tell when."

The letter was written from the army Y. M. C. A. rooms. Robert expressed an earnest desire to hear from his friends and I hope he (and all the soldier boys) may receive many and frequent letters. His address is Charles R. Nelson, battery C, second field artillery, San Francisco, Cal. H. A.

# Work With Soldiers

Fortified with the approval of President Wilson, the unqualified indorsement of Secretary of War Baker and the commendation of the national and state councils of defense the Salvation army is making an appeal for funds to finance its war work in France.

On the authority of Samuel Insull, chairman of the state council of defense of Illinois, it can be said that not a dollar of the found to be collected will be devoted to any other purpose than war work with the soldiers.

The Salvation Army has been in the war from the beginning. Its men are fighting in the trenches, manning ambulances, working in the hospitals, preaching in the hutments, attending the sick and dying and doing everything that is required of a soldier or a civilian in these perilous times. Military authorities tell us that the huts are well managed and that those who manage them do much to preserve the morale of the soldiers.

The Salvation Army women are as near the firing line as the military authorities will permit. These devoted women are big sisters to the men in the trenches. They cook, sew, knit, write letters to their friends in America and in many other American ways serve the boys at the front.

## Argentine Seed Distribution.

According to the review of the river Plate the central committee appointed by the national government to distribute seed to agriculturists in the form of advances for the forthcoming harvest, has recently presented its report to the ministry of agriculture. It appears that 10,500 applications were received, representing 1,902,700 acres and 88,309,000 pounds of seed in the following proportions: Buenos Aires, San Luis, Santiago del Estero and Pampa territory, 1,388,624 acres, granted 67,652,119 pounds of wheat and 1,812,402 pounds of linseed; Entre Rios, 420,076 acres, granted 12,332,532 pounds of wheat and 6,511,947 pounds of linseed. The average cost price to the committee of the seed advanced after taking into account railway freight, administration expenses, etc., and making reservation for contingencies and for interest at 8 per cent per annum up to March 31, 1918, works out at $4.47 per 220 pounds of wheat and $11.83 per 220 pounds of linseed, for Entre Rios. For Buenos Aires and the other districts above mentioned, the wheat works out at $7.73 and the linseed at $12.62 per 220 pounds.

# What The Washington Farmer Free Information Bureau Means to You

*It Can Assist You in Your Farming, Help You in Your Home, Tell You How Best to Serve Your Country, Post You on New Laws and Government Orders, Answer the Questions Every One Is Asking About.*

Summed up in a phrase, the object of The Washington Farmer Information Bureau at Washington, D. C., is to tell you, without charge, "Whatever You Want to Know."

The Information Bureau endeavors to answer questions in such a way that the answers are of the greatest practical value. It replies to your inquiry by personal letter. In addition, it sends you any books, pamphlets or documents published by the United States government bearing on the subject in which you are interested.

### FOR FARMERS.

Progressive farmers will appreciate without the need for discussion the value of an expert and comprehensive Washington information service at this time.

The great mass of new legislation, executive orders, licensing systems, and similar instances of government activity affecting farm products raise problems almost daily. Where these problems affect your business you will want, not a generalized idea of the nature of the laws and rulings, but specific and definite information, and perhaps printed copies of bills and executive orders. The Information Bureau stands ready to supply you with these things upon request whenevr they are avilable.

### FOR WOMEN.

The Information Bureau is in a position to give service of great value to women. Every household problem has been studied for years by the government. There are literally hundreds of publications available along this line, showing how to save time and labor and money in the home.

The next time some household problem comes up in your own home—some task that you think might be done better or more easily if you knew how—some annoyance that you think might be done away with—sit down and write to the Information Bureau about it. It will surprise you to find how many questions of this sort, from ants in the ice-box and moths in the clothes closet to the proper food for young children, the federal government has thoroughly worked out and solved.

### HEALTH PROBLEMS

There is much valuable information on health problems to be had in such great Washington offices as the United States Public Health Service. For example, the care of babies is a question which has been made the subject of a great amount of expert study, and facts and advice of great value to mothers have been published in simple form.

Every woman should write to the Information Bureau for government publications telling what the United States asks her to do in helping to win the war. The length of the struggle and the success of the American armies are largely dependent on the part played by American women.

And in general—we urge our women readers to make free use of this information service, asking it any question that they like. The increasingly important part played by women in business and politics makes a service such as this of greater value to them every day.

### NO CHARGE

There is no limit to the number of times you may call on the Information Bureau for service. It will always be willingly rendered, as promptly as possible.

There is no charge of any kind for this service. You need not be a subscriber to this paper to make use of it. The sole requirement is that you enclose a three-cent stamp with your query for postage on reply. All inquiries are held strictly confidential.

Certain classes of medical and legal questions can not in their nature be answered by the bureau. Any question along this line which is of such a nature that it can safely and usefully be answered by mail will be willingly attended to, but the bureau is careful not to supply data necessarily incomplete in cases which demand the personal services of a physician or a lawyer.

Enclose a three-cent stamp with each inquiry for return postage. Special pamphlets, bulletins, etc., announced for free distribution require only a two-cent stamp.

Address all inquiries to:

*The Washington Information Bureau*
*WASHINGTON, D. C.*

# Sugar Beet Prizes

## Company Would Inspire Grower

With a view to giving the production of beets for sugar making purposes added stimulus, the Utah-Idaho Sugar company has announced a series of prizes to be given those who grow beets under contract this season. For the purposes of the contest the entire territory is to be divided into three districts, No. 1 comprising the state of Utah, No. 2 the state of Idaho and No. 3 the states of Washington, Oregon and Nevada. Those entering the contest can compete for one prize only, and each contestant must go into the class in which he belongs, according to his contracted and planted acreage:

To the growers in each district contracting, planting, growing and delivering beets from an area between one-half acre and .99 acre, inclusive, prizes in money amounting to $100 will be offered for the largest tonnage grown on a half acre, divided as follows: Largest tonnage, $50; second, $30; third, $20.

To the growers in each district contracting, planting, growing and delivering beets from an area between one acre and 1.99 acres, inclusive, prizes in money amounting to $150 will be offered for the largest tonnage grown on one acre, divided as follows: Largest tonnage, $75; second, $45; third, $30.

To the growers in each district contracting, planting, growing and delivering beets from an area between two acres and 2.99 acres, inclusive, prizes in money amounting to $200 will be offered for the largest tonnage grown on two acres, divided as follows: Largest tonnage, $100; second, $60; third, $40.

To the growers in each district contracting, planting, growing and delivering beets from an area between three acres and 3.99 acres, inclusive, prizes in money amounting to $250 will be offered for the largest tonnage grown on three acres, divided as follows: Largest tonnage, $125; second, $75; third, $50.

To the growers in each district contracting, planting, growing and delivering beets from an area between four acres and 4.99 acres, inclusive, prizes in money amounting to $300 will be offered for the largest tonnage grown on four acres, divided as follows: Largest tonnage, $150; second, $100; third, $50.

To the growers in each district contracting, planting, growing and delivering beets from an area between five acres and 9.99 acres, inclusive, prizes in money amounting to $350 will be offered for the largest tonnage grown on five acres, divided as follows: Largest tonnage, $175, second, $115; third, $60.

To the growers in each district contracting, planting, growing and delivering beets from an area between 10 acres and 19.99 acres, inclusive, prizes in money amounting to $400 will be offered for the largest tonnage grown on 10 acres, divided as follows: Largest tonnage, $250; second, $125, third, $75.

To the growers in each district contracting, planting, growing and delivering beets from an area between 20 acres and 29.99 acres, inclusive, prizes in money amounting to $500 will be offered for the largest tonnage grown on 20 acres, divided as follows: Largest tonnage, $250; second, $150; third, $100.

To the grower in each of the three districts delivering the largest tonnage of sugar beets, regardless of acreage, $500.

To the grower in each of the three districts harvesting the largest acreage, $500.

# To Handle Grain in Bulk

Palouse country farmers are preparing to handle a large part of the 1918 grain crop in bulk. Elevators are to be built at many places on the railroads of that county and grain bins and tanks will be built on the farms. Cashup, on the Spokane & Inland Empire railway, between Steptoe and Thornton, is to have an elevator with capacity for 100,000 bushels of grain. A corporation with $50,000 capital has been formed by Charles Hart, Frank Davis, W. J. Stillson, N. M. Crider and C. T. Lathen to build and operate this elevator.

The Farmers' Warehouse company of Mockonema, six miles west of Colfax, on the O.-W. R. & N. railroad, organized recently to build an elevator with a capacity for 100,000 bushels in addition to their sacked grain warehouse, which has capacity for 200,000 bushels. Mockonema handles an average of from 400,000 to 500,000 bushels of wheat annually.

Tekoa is to have a big grain elevator to be built and operated by the farmers' union and Palouse, Garfield, Pullman and Oakesdale are also considering the proposition of building bulk grain elevators. The high price of grain bags, which are now quoted at 24 cents, and the uncertainty of getting them is driving farmers into handling their grain in bulk.

J. E. N.

# Food Shortage Serious in the East

## *Hoover Declares Problem Goes Far Deeper Than Supplies to Allies*

Food Administrator Hoover declares in a statement just made that the situation is the most critical in this country's history and that in many of the large consuming areas reserve food stores are at the point of exhaustion.

Mr. Hoover's statement follows:

"In response to many inquiries I beg to say it is true that since the first of December we have fallen far behind our agreed food program with the allies. By the end of February we will be short 45,000,000 bushels in cereal products which we undertook as our share of their supplies. We will also be short of the amount of meat and pork products that we were to deliver. This deficiency is due solely to the railway congestion since that date. The railway directorate, since coming into control on January 1, has made efforts to find a remedy, but during January the weather was insuperable, and although progress has been made since February 5 the situation is the accumulation of three months' delay.

**Problem Has Deep Meaning.**

"The next 60 days will be the most critical period in our food history. The simple fact is that the problem goes far deeper than supplies to the allies. During the last three months we have fallen behind in movement of foodstuffs from the farms to the consuming and storage centers. Up to February 1 less than 50 per cent of the normal ratio of corn had been moved, less than 80 per cent of the oats, and less than 60 per cent of the potatoes. From November 1 to January 1 we were short in the usual movement of grains and grain products into the terminals alone by over 120,000 carloads—over 120,000,000 bushels—and this was further aggravated by similar shortage outside the terminals.

"Furthermore, this year we have the largest percentage of soft corn in many years, and though we have a record crop of corn, a considerable portion of the soft corn will be lost by spoiling unless it can be moved in the next 60 days to the drying terminals. The least amount of grain that must be loaded for the next 60 days is 8,000,000 bushels per day, and we have not yet attained that. Less than this will solve neither the allied nor our domestic situation.

**Potatoes Are Spoiling.**

"We had about 130,000 carloads of potatoes on November 1 which should have been moved from the principal producing centers, and up to February 1 we had moved about 28,000 carloads, while we should have moved over 50,000 in this period. The result is that potatoes are piled up spoiling in the producers' hands and the consuming centers have only been supplied by virtue of the summer gardens and other stores carried over from last year. There is a great deal of live stock which has been ready for the market for some time, but is still held in the farmers' hands through inability to secure transportation. These cattle are eating their heads off without increasing their meat value and are only adding to the costs of the farmer and consuming the grain.

**Many Unfortunate Effects.**

"The effect of this delayed movement has been many-fold:

"First—To jeopardize the safety of a great deal of the soft corn and perishables, such as potatoes.

"Second—The stricture in flow of distribution has entirely disturbed the price conditions in the country by virtually suspending the law of supply and demand. The margins between the farmer and the consumer in many commodities were never wider than they are today, because the cosuming trades are under-supplied and the farmers compete for transportation. Prices of the coarse grains have reached unheard of levels, while the limited transportation has diminished the farmers' returns.

"Third—The cost of grains for feeding live stock has so increased to the feeders of finished cattle that they face serious losses. The costs of the dairying industries have necessorily greatly increased.

**Living Off Reserves.**

"Fourth—Through the large consuming areas we have been living off reserves through the period of scant supplies. These reserves are in many sections approaching exhaustion.

"Fifth—We have been unable to transport to seaboard the necessary foodstuffs for the allies. This has not been due so much to the actual inability of the railways giving priority to foodstuffs for allied shipping as it has been to bringing products from the farms to the terminal markets, where it can be aggregated, prepared and purchased by the allies.

"The economic ramifications of this whole delay in the movement of the national harvest are almost countless and they present the most critical of situations, of which no solution exists but a continued expansion of the efforts of the railway administration in the movement of foodstuffs in every direction to the exclusion of much other commerce of the country. Considerable progress has been made in the last 10 days, but continued rises in the price of cereal commodities and the failure to secure sufficient surplus over immediate domestic consumption to feed the allies are evidence that there is still a deficiency in food cars and that they need be still further increased.

"Comparisons of the movement from day to day during the last few days, with movements of similar periods last year reflect the efforts being made by the railway directorate. We have, however, a long accumulation to be got over and to be got over within the next 60 days. The situation calls for every cooperation of the public—through the quick loading of cars, loading them to capacity and discharging them quickly—and in every way reducing the tax on the railways. Cooperation can be given by reduction in consumption of foodstuffs, by the consumption of home and local stores to the exclusion, so far as may be, of transported articles. If every interest cooperates we shall supply the allies and remedy the distribution of our abundant domestic supplies, for our farms are full of foodstuffs.

"No effort is being spared to move allied food as fast as it can be accumulated in the interior and today the railway directorate is arranging special trains to carry meat and packing house products from Chicago to load the waiting ships."

# Shorthorns Sell

## Good Breeding Stock Distributed

Eighty-eight head of purebred Shorthorn cattle were sold at the Spokane Union stockyards February 23 under the auspices of the Northwest Shorthorn Breeders' association. They brought a total of about $23,000, or an average of $262 a head. The highest price was paid for a bull that brought $750. The following were the consignors:

Consignors to the sale were: A. D. Dunn, Wapato; J. H. McCroskey & Son, Sprague; T. B. Gibson estate, Woodland, Cal.; Joe Turner, Meyers Falls; Day & Rothrock, company, Sprague; F. W. Downen, Pullman; University of Idaho; D. E. Pearson, Boyds; William Mulhall, Fenn, Idaho; W. H. Leonard, Pomeroy; M. S. Little, Fruitland; J. B. Campbell, Spokane; J. Houston McCroskey, Garfield; A. V. Bradrick, Palouse; W. D. Barkhuff, Colton; J. E. Nordby, Genesee, Idaho.

Some of the higher figure sales were:

Bull, Onward Lad, Day & Rothrock company, to J. W. Fox, Cedonia, Wash., $405.

Bull, Snow King, Gibson estate, to R. W. Rader, Walla Walla, $475.

Bull, Hercules Goods, Day & Rothrock company, to S. A. Whiteman, Reardan, $550.

Bull, Charity King, A. D. Dunn to M. S. Little, Fruitland, $500.

Bull, Scottish Secret, J. H. McCroskey & Son, to G. A. Hutchinson, Chesaw, $325.

Bull, Copperfield, William Mulhall, to B. F. Hurley, Davenport, $300.

Bull, Ringleader's Goods, Gibson estate to Theodore Bajou, Inchelium, Wash., $550.

Bull, Roan Gem, University of Idaho, to E J. Frantz, Thornton, $385.

Cow, Flora II., Day & Rothrock company, to Carl Grief, Uniontown, $380.

Cow, Ford, Day & Rothrock company, to O. L. Worthley, Hunters, $325.

Cow, May of Roselawn, Gibson estate, to Ike Dunn, Molson, $440.

Cow, Victor's Maid, Gibson estate, to Ira Sanger, Molson, $410.

Cow, College Goldie, Joe Turner, to J. W. Ford, Cedonia, $300.

Cow, May Elberg, Gibson estate, to Ira Sanger, Molson, $410.

A complete list of the sales will be given in next week's issue of the Farmer.

# What Are the Points of a Good Hog?

## *Idaho Man Describes Ideal Animals as He Sees Them*

The qualifications of a good sow and a good boar, as A. L. Wilson of Greenleaf, Idaho, one of the prominent breeders of the northwest, sees them, were outlined by Mr. Wilson before the recent swine breeders' convention in Idaho. After declaring that the first essential of success was to like the hog business, he outlined the characteristics of the first-class animal as his experience had taught them to him. Here are extracts from his address:

"Three of the most essential considerations in the order of their importance are one's own personal inclination, the money there is in the business and the effect on the community. No matter which breed or family in a breed is the best and most profitable, a man will be at a disadvantage in his work unless he is personally interested in it and goes into it with his whole heart and soul. Certainly the man who goes in a business expecting to make a profit and possibly a living from it is going to give it every possible attention.

"The beginner should bear in mind that no one breed or family of one breed has all of the good hogs. The best one in most any breed is better than the common ones in any other breed.

"The most profitable sows in my herd are two years old or over. That is, the matured sows that have raised pigs. No one could reasonably expect the gilt to produce as many and as good pigs as the matured sow for three important reasons. She must take care of her own maintenance, put on growth herself and furnish nourishment for the development of the unborn litter. The older sow has the decided advantage. This does not mean, nowever, that the tried sow will produce better than all gilts.

**The Characteristics.**

"The sow should be an outstanding individual with a neat, clean head of medium size, carrying ears that are not too large and thick, but in proportion to the size of the body, a short to medium nose and a docile, matronly expression. A big, heavy ear denotes poor feeding qualities. Her back should be evenly arched from the top line of her head to the root of her tail, but not too short and steep over the rump There should be plenty of spring of ribs and long, deep, even side lines. The legs should be straight and symmetrical, set well under the four corners of her body and of sufficient length to carry the udder well up off the ground. A large bone with lots of quality is one of the essentials. The coat of hair should be short, thick and as fine as possible. The feet, one of the most important considerations of the body, should be short and the toes close together instead of being spread

# French Farm Lands

## A Call for Men and for Capital

The 325,000 acres of wheat land retaken from Germany this year in northern France may be made to produce enough wheat next year for 1,000,000 men, according to the estimate of a mission appointed by the agricultural department of France, which has been examining the liberated territory. Both men and money are required and the mission asks for 1000 volunteer American farm hands and a loan from American capital

# Dairy Show Is On

The Western Dairy Products show is opening at Yakima today, February 28, with a promise of an excellent show. It is reported that nearly 200 exhibits are in place, and that numerous problems of the dairy industry from the production of feed to the disposition of the milk and butter will be discussed and illustrated. G. E. Frevert of Salt Lake City, manager of the show, has general supervision.

## Interested in Tractor School.

Interest in the tractor as a war necessity was never more marked than at the tractor school conducted in Spokane February 20 to 23 by the J. I. Case company. An average daily attendance of 200 was registered. Farmers and farmer boys from all parts of the Inland Empire were interested students. Some came distances as great as 300 miles and all went away feeling they had spent the four days in a highly profitable manner.

Tuition was free and all who desired were given careful instruction as to the operation of the tractor and coached as to the manner of obtaining the best results therefrom under various soil conditions. Among the instructors were E. S. Echlin of Chicago, who later went to Pullman to assist in tractor instruction there; G. H. McCray of Racine and W. S. Selbe of the Kokomo Electric company.

# Real Danger That Half of the World May Face Starvation Within Two Years

A statement by Charles Hebberd, United States food administrator for Washington state, before the second annual northwest live stock conference in Spokane last week, should be a stirring incentive to every farmer to put his very best thought and unflagging industry to the work of increased food production.

Mr. Hebberd is in almost daily communication with Mr. Hoover, and has made numerous trips to the national capital this winter. He speaks advisedly when he declares that there is real danger that half the world may face starvation in two years.

And his further grave statement, that the condition of the allies was worse than it ever had been on food and was relatively worse than that of the enemy, is borne out by information from other sources. Mr. Hoover says that for lack of transportation we are disappointing the allies, and Lord Northcliffe of Great Britain says the food situation in Germany and Austria is distinctly better than it was a year ago, owing to the capture of supplies in Rumania and the extension of cultivable areas throughout the lands of the central powers.

Since that utterance by Lord Northcliffe Germany seems to have further bettered her condition through the collapse of Russia and the negotiation of a treaty with the new Ukraine republic that has split off from old Russia.

The cry is for non-perishable foods—for wheat and other cereals, for meats (particularly pork products), for larger production of beet sugar, and for butter and other dairy products.

No farmer should hold back from fear of lack of transportation. The first duty is to grow the things we want to ship. The government must and will work out the railroad and ship problems.

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## *Hard Luck? Be Ashamed to Complain, Whatever Your Lot!*

"If any one thinks he is getting the worst of it he should stop and think of the boys in the trenches." So says a reader in a letter to the editor.

Isn't that a good sentiment to carry around with us every waking hour! Hard luck? Why, man, you have food and shelter and freedom from danger. You have your friends and your family. You have peace! Across the ocean—think of millions of men actually killed and as many more maimed for life. Think of hundreds of thousands of widows and millions of orphans. Think of whole nations starving, whole nations with scarcely a child left. Think of days and weeks and months in the trenches, with cold, muddy clothing, wet feet, shells bursting everywhere. There are men in the trenches today who have not seen their families, or even heard from them, for three years. There are thousands of men in the trenches who know that back home, or in the exile of slavery, their wives or mothers or sisters or sweethearts are suffering their lives away. Hard luck in America? Let the blood of shame rush to the face of every man in America who complains.

## *Crop Adaptation to Environment*

Ecology is the science that treats of the homes of plants; why they grow under certain conditions and will not grow under others.

Why do the cacti grow in the deserts and kelp in the ocean?

Why is corn so well adapted to Illinois and Iowa, and wheat to Kansas, Nebraska and the Dakotas?

Why are apples profitable in some sections of Washington, Oregon and Idaho and not profitable in other sections of the same states?

These contrasts illustrate interesting points in regard to the one crop methods of many farmers and while, in general, they have been condemned, nevertheless, there are some reasons in their favor. We have thousands of fruit farmers who buy their hay, vegetables and meats. We have wheat farmers who buy their fruits, and stock growers who not only buy their meats, principally, but almost entirely live out of tin cans.

One of the reasons for this is in the fact that when a man devotes himself to one crop and specializes, by giving it his undivided attention, he can produce enough more, by that means, to buy the other things that he needs. If a land is specially adapted to that one crop he will probably be able to produce enough more to buy what he needs and have a profit, besides.

The German government recently issued a circular, urging a decrease in the raising of animals, because more than half the food value is lost in that way. Cattle raising is said to be the most wasteful form of feeding human beings. Grain comes next. Here is the population, per sqaure mile, which, under the extremes of economy, various crops will support:

Wheat, 1860; corn, 3025; legumes and peanuts, 2397; potatoes, 6000; peaches, 3500; apples, 8727; walnuts, 11,636; bananas, 41,890.

Cattle on a range, only 53 persons to the square mile.

It should be borne in mind that a family can not live on one article of food, such as wheat, corn, potatoes and fruits, but the question to be decided is whether the one-crop man can produce enough to pay the transportation charges and still have a balance to his credit.

## *Ask for Information You Want*

There is no other one place in the United States, if in the whole world, where so much information is obtainable as in Washington, D. C., our national capital. With this thought in mind, The Washington Farmer has established in that city a national information bureau, and throws it open for the use of its readers. The bureau will answer any inquiry that a reader makes if it is answerable—and all reasonable inquiries are answerable. In our issue of last week, February 21, on page 7, is a diagram showing the almost limitless branches of government at Washington to which the Farmer's information bureau has access. It will pay you to turn back to that issue and read the announcement over again, and then clip it out and lay it away for future reference.

Many bulletins and official and semi-official publications will be sent out by the bureau to those who ask for them from time to time, as they will be announced. Right now we want to call special attention to the cook book that is available. It is prepared specially with a view to the conservation of foods, and will prove a great help to the housewife who wants to do her bit by substituting healthful and palatable foods for the things that are so greatly needed abroad for the winning of the war. Use the coupon found on another page in this issue and get this book.

Remember, it costs you nothing to get information from the Washington Farmer's bureau at Washington, except postage in cases where it is so stated in coupons or special announcements. Feel free to use the bureau at any time. We are glad to be able to serve our readers in this way. And always bear this in mind:

Do not address your inquiry to the home office of the Farmer, but address it directly to The Washington Farmer Information Bureau, Washington, D. C.

Somebody has said that it does not come natural to most people to work. Possibly so, but the man to whom work is onerous is indeed to be pitied. Work with the hands, real physical toil for the production of something worth while, is the most noble thing this world possesses. To be able to work is one of the greatest blessings in human life.

## *What Others Say*

Nebraska Farmer: From many quarters the suggestion is coming that retired farmers must prepare to do what they can to help relieve the farm labor shortage.

Farmers' Review: A sensible and safe war program for farmers everywhere is to produce better than ever what they can produce best, because "We have a victory to win."

Hoard's Dairyman: The higher the producing capacity of the cow, the less does her milk cost. The intelligence with which she is fed also lowers the cost of milk production.

National Stockman and Farmer: On most farms the "women folks" have charge of the poultry, and this is the time to see that they have the means of doing their work easily and well.

## *Why Not Carry Out the Idea?*

An effort is being made to enlist young men in food production as well as in the army which will fight with guns for our liberties. Why not carry the army idea farther in this work?

A young man said to the writer not so long ago: "I suppose I ought to stay and farm, but it is hard. All my friends have gone." He was really patriotic in resisting his natural desire to go where the band played.

If we are to have an organized army of producers, why not establish ranks, promote the successful ones, give those deserving command over others as yet less skilful, reward hard work, give insignia of some sort.

Let all know that this sort of work is just as honorable and regarded as highly as that of the man with the gun. Carry it out and make it more apparent. We believe the result will be good.

This has been a great season for educational gatherings. Probably never before in the history of the northwest have there been so many gatherings of farmers for educational purposes. Not only at the state colleges, but all over—groups of stockmen, wheat growers, dairymen, orchardists and so on. The sentiment of the entire country is being fired for greater efficiency in line of production, and out of it all is coming, and coming rapidly, a new agriculture.

## *Washington Gleanings*

County Agriculturist H. E. Lattig of Douglas county has resigned. He will manage a large wheat ranch in Canada.

Thomas Drumheller, a stockman, has completed, near Ephrata, a sheep barn capable of housing about 10,000 animals.

Federal authorities will begin the improvement of the road over Blewett pass in the spring just as soon as weather conditions permit.

James A. Alexander of Chehalis is feeding his hogs cull potatoes as a means of crowding them for the market during the next few weeks.

J. C. Wilson, manager of the federal labor bureau at Yakima says with spring labor opening up he is assured of an ample supply to meet immediate needs.

During the 12 months ended January 31, the Horticultural Union in Yakima did a fruit business aggregating $1,001,080, according to the report of Chief Accountant John P. Evans.

Farm laborers in the region of Walla Walla, who used to get $30 to $35 a month and and board are being paid $2 a day, or $50 a month and the government employment service reports a shortage.

Organization of Grays Harbor county for food conservation has been completed by County Food Chairman Mrs. L. G. Humbarger and grocers, bakers, wholesalers and all other food dealers have been warned.

Apple growers and shippers in the Yakima valley face a shortage of box material for next season, and shoulld begin now to take serious concern about it, according to Fred Eberle, manager of the Horticultural Union.

B. F. Dickinson of Dayton was elected president of the Wenaha Wool Growers' association at the annual convention with S. V. Dain of Walla Walla, vice president; Elmer D. Bryson of Slater, secretary, and T. A. Van Hollebecke of Eureka, treasurer.

The Yakima Commercial club has been asked to support a request to Charles Hebberd, state food administrator, to have potatoes accepted as an official substitute for flour. Yakima has a surplus of about 1200 cars of potatoes.

The Conconully Cattle and Horse Raisers' association shipped in a carload of young bulls recently from Prineville, Ore. Six Durham Shorthorns and 12 Herefords were in the bunch, which were bought by farmers of Conconully and vicinity.

With a total capitalization of $120,000, the Royal Dairy Products company of Bellingham nas taken over the property of the Royal Dairy company, and has purchased the building known as the Bellingham Bay brewery, preparatory to the establishment of a milk condensery.

Director Thornber of the extension service of the Washington State college at Pullman has received notice from Washington to the effect that in purchasing the supply of nitrate being brought to this countr for sale at cost to the farmers by the government the county agents are to act as intermediaries.

# Trappers of the Ozarks



## The Adventures of Two Young Pioneers in the Wilds of Upper Louisiana, Now the State of Missouri.

By LEWIS B. MILLER

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### CHAPTER I.

### Away to the Wild Country.



ONE September afternoon, in the year 1811, three persons were standing at the shady end of a big log-barn, and not far from a big, two-story farmhouse. The farm that the house and the barn belonged to lay 15 or 20 miles west of a little fur-trading post, perched on the right bank of the Mississippi, and known as St. Louis.

Of the three people in the shade of the barn, two were young men, very different in appearance, but both smooth-faced, and both bronzed to an honest brown by the sun. The third of the trio was a girl of 18 or 19 years, dressed in home-spun, but far from unpleasant to look at. So, at any rate, thought the older of the young men, who had deserted his work to talk to her.

In addition to these three human occupants of the barn-yard, there were three others, not human. One was a big dog, tawny and shaggy in appearance, and of dignified mien. Another was a little black-and-white-spotted dog, with a short tail. Just now the little dog was frisking and capering about the big one, which took no part in the playful antics, but tolerated them in a good-natured way. The remaining occupant, a little black mule, was at one side of the barn, trying hard to work an elusive ear of corn out between two logs.

While the older of the young men was giving all his attention to the girl, the other stood by a work-bench, busy with several pieces of wood. After vainly trying to get the pieces together without assistance, the worker turned to the girl, his sister, and said:

"Rachel I do wish you'd go back to the house! You had no business to come out here to talk to Ben. You know how busy we are. And you know Ben won't earn his salt—don't do a hand's turn—as long as you're here to bother 'im."

The girl's fair face flushed indignantly. "I didn't come out there to talk to you, did I, Benoni?"

"No, you didn't," promptly agreed the young man addressed. "You came out here to—"

"To bring the pigs some buttermilk"—she shook the empty bucket on her arm—"and—"

"And I stopped you and made you talk to me. But never mind Jodo. He doesn't mean any harm by what he says."

"No, I don't mean any harm. But I mean that Rachel ought to go back to her spinning, and let you come here and help me bolt this packsaddle together."

"All right Jodo. I'm going back to my spinning. But you know well enough that if Betsy was here you'd take time to talk to her."

Jodo's fair face flushed slightly. Like his sister, he had light hair and blue eyes. He would be 21 years old on his next birthday.

"Maybe I would. And it's well that she's not here. How are Ben and I ever to get started on our trapping trip into the Ozarks if we spend all our time talking to you girls? We haven't a minute to lose, it seems to me. We've got a long, hard tramp ahead of us, through a rough, wild country. And cold weather is likely to set in before we can reach our destination and get housed in our winter quarters."

"Oh, we'll arrive there in ample time, and have our cabin up in ample time—don't you fret, Jodo," remarked Ben.

"And you ought to be glad to talk to us girls while you can. Think how long—how dreadfully long it will be before you see us again—a whole half year and more. And so many things may happen to you while you're away out there in that wild region." A wistful look came into the girl's face, her voice trembled, and her lips seemed on the point of quivering.

Hastily Ben spoke up: "Oh, we'll come back all safe and sound! Don't you go to worrying about what will happen to us, little girl." He reached out and patted her arm reassuringly. "This is not my first trip into the wilderness—not the first by several, you must recollect."

"Yes, I know. But it will be your last, won't it, Benoni?" The girl raised her blue eyes appealingly to the dark ones of her stalwart admirer.

"If Jodo and I can make this trip pay as well as we have a right to hope for this will be my last trapping trip. From that time on my occupation will be farming, or some other civilized employment. You know I've already promised you that, Rachel. If I hadn't fully decided to swap my steel traps for a hoe and my rifle for a plow, after this coming winter, I'd now be on the headwaters of the Missouri with Manuel Lisa and his crew. And I'd have spent next winter in the Rocky mountains."

"I'm glad you didn't go with that wild, rollicking gang. I wouldn't want anybody that was anything to me to be out with such a crowd as those fellows have the reputation of being." The girl paused and half shuddered. "And your mother didn't want you to go, either."

For an hour or two Ben Armstrong and Jodo Henderson applied themselves to the packsaddle. While working they glanced often toward the little mule; so often, in fact, that one could easily have guessed that this particular packsaddle was being made for that particular mule.

The frame of the saddle completed, they fastened on two girts and then various straps and strings. That done, Ben went and caught the mule and led him around to the shady end of the barn. Now a saddle blanket was folded up and placed on the mule's back, the packsaddle placed on the blanket and the two girts fastened, one just behind the animal's fore legs and the other just in front of his hind legs. Two straps were also buckled, one around the mule's breast to keep the pack from slipping back and the other around his hams, to keep the pack from slipping forward.

One thing might have been noticed—the care with which Ben, the mule's owner, and Jodo kept away from the mule's heels.

"Spunky is safe enough as long as you stay close to his head," Ben remarked. "But his heels are like a gun—always loaded, and always in danger of going off. And they're worse than a gun in one respect—they're sure to go off sooner or later, whether you pull the trigger or not."

The prudence of giving the mule's heels plenty of room was soon demonstrated. The fastening of the flank girt had seemed to irritate him; and scarcely had the ham strap been buckled when his great ears dropped suddenly till they lay along his neck.

"Look out! Here she goes!" yelled Ben. Jodo ran backward.

Now Spunky's head went down and his heels began to fly. And for the next minute or two they kept flying out so fast that the eye could scarcely follow them. The only thing struck was a half-bushel basket, with a handle, which happened to be sitting on the ground close by. It went rolling till stopped by the rail fence, 30 yards away.

At length the flying heels stopped flying, and Spunky drew a long breath, snorted a satisfied snort, and stood quietly. Ben slapped him on the neck. "Feel better now, don't you, old fellow?"

When the packsaddle and all its straps and fastenings had been made satisfactory the saddle was taken off and hung up. Now Ben went to the farmhouse for another word with Rachel. He and the girl had much to talk over; for they made no secret of the fact that if the coming trip into the wilds proved even fairly profitable they would be married not later than the following fall. Jodo busied himself with other preparations for the journey.

Just before sunset Ben went home, leading the mule and taking the packsaddle. But after supper all the Henderson family walked over to the Armstrong house, barely a quarter of a mile away, and the two families remained together till bedtime.

The Armstrongs and the Hendersons had been neighbors in Kentucky. Also, they had migrated to this new country together in the fall of 1804—only a few months after President Jefferson had completed the Louisiana purchase.

Since his home had been near St. Louis, Ben had spent two winters as a student in a Kentucky college. And Jodo Henderson was starting on his trapping trip for the express purpose of earning money enough to enable him to spend at least a year in the same institution.

At this time the name Missouri had not yet been given to any division of country. The present state of Louisiana was known as the Territory of Orleans. And all the rest of the Louisiana purchase, extending to the British possessions on the north and to Mexico and the Pacific ocean on the west, was named in law the District of Louisiana. But it was commonly spoken of as upper Louisiana. Not even a territory as yet—it had not white people enough for that—it was attached to Indiana Territory, and had the same governor.

The hour was rather late when the Hendersons started home. Ben walked with them as far as their yard gate, where he and the girl stopped. The others went on to the house, but Jodo called back:

"Now, Rachel, don't you go to keeping Ben up late. He and I want to get an early start tomorrow morning. And we want to make a good day's travel, too. If I'd had my way, we'd have been on the road a week ago. Soon be time for wet, cold weather."

Ben said that he would be out of bed as early as his friend next morning, and both were up at the first breaking of day. Before sunrise the packsaddle had been girted on Spunky—not without a kicking spell—and bags of flour and meal, together with such other things the young trappers would take with them, were being packed on the saddle and strapped fast. The last things to be put on were two medium-sized washpots, joined by a piece of rawhide, which hung bottoms up.

Now came the leave-taking at their homes, and a little later Ben and Jodo were on the way. Rachel and Betsey, Ben's 17-

(Continued on the following page.)

**The Indians Discover the Hunters.**



**Ben and Jodo have discovered signs of Indians in the wild region, but are unaware that the savages are spying upon them seeking a good chance to capture them. One day while out visiting their traps they learn that the red men know of their presence and are after them. A cruel faced Osage stealthily creeps upon them, peering cautiously through the underbrush as they work over a trap. He signals his fellows and, without warning, they part the brush and rush upon the frightened boys. Thus begins their warfare agnist the cunning reds, a warfare of wits and physical prowess that does not end until the lads finish their hunting trip and are well out of the Osage country on their homeward journey. The incidents of this warfare fill chapter after chapter of this story.**

**Troubles Never Come One at a Time.**



**If Indians had been the only menace to the young hunters, it would have been less of a problem for the lads to protect themselves. But troubles never come singly. Merciless Indians, terrible cold and hungry wolf packs combine against them. It was during one of their hard races with pursuing savages that Ben and Jodo outwitted and outfought a horde of ravenous wolves. The story of the blood-chilling adventure is told in chapter 15 of "Trappers of the Ozarks."**

**With snow on the ground and in the air, an icy wind blowing, a band of warriors in pursuit but left well behind, the boys discover that they are being trailed by a pack of howling, famished wolves. For dear life they race until they suddenly burst out of the timber into a little clearing where a settler's home had been destroyed by the Indians. Nothing but a huge log fence about the clearing and the old stone fireplace and chimney remain. The fireplace is the salvation of the hunter lads. Quickly they start a roaring fire, and turn to meet the wolves with fire brands as their weapons. All that night and all next day and night the battle is waged, broken into by the arrival of the Indians, who have discovered the boys through the sight of the smoke from their fire. It is no longer merely a problem of fighting wolves and zero weather. The old menace of Chief Snapping Turtle and his horde of Osage savages must be met again, too.**

# Trappers of the Ozarks

.....BY.....
LEWIS B. MILLER

(Continued from the preceding page.)

year-old sister, were with them—were going to walk with them as far as the end of the lane.

Ben and Rachel were in front, the young man leading the pack mule. Behind Spunky came Jodo and Betsy, good friends of life-long standing. Jodo was armed with a far-reaching switch—farther reaching than the range of those vicious heels. And close behind the latter couple followed Bose, Ben's big dog, and Tinker, Jodo's little dog. The dogs would accompany the trappers.

At the end of the lane the forest began, and there the whole party halted.

"Now you boys do be careful of yourselves, away out there in that wild country," pleaded Rachel. "You'll be in the hunting grounds of the Osages, you know, and they resent that. No telling what they'd do to you if they catch you there."

"And beware of all Indians," urged Betsy. "Any of them would be likely to murder you and rob you, out there where nobody ever would know. You recollect what that man said—the man who told us of the Pottawatomies' raid on the Boone's Lick settlement, when several white men were killed. He mentioned that the Pottawatomies had been down in the Osages' country, hunting, and fighting the Osages. And they're worse than the Osages, the Pottawatomies are. The Osages do pretend to be friendly to the whites, but the Pottawatomies don't. They'd as soon kill you as look at you."

"Risk us to keep a sharp lookout for all redskins and all kinds of redskins," Ben answered lightly. "This is not the first time I've hunted and trapped in the Ozarks, you must remember."

Rachel replied: "We know that Benoni. But we're afraid you'll grow careless. Please take good care of yourself and of Jodo too. This is the first time Jodo has been far from home. We're all depending on you to see that that no harm comes to him."

"You know I'll do my best, Rachel."

Betsy's dark eyes had a twinkle of mischief in them as she said:

"And, Jodo, please take good care of Benoni, won't you? This is his first venture into the wild country without a Frenchman or some experienced woodsman to look after him. We're all depending on you to see that no harm happens to him."

Jodo glanced at Ben's stalwart figure and then grinned. "Betsy, I'll guard 'im. I'll watch over 'im like a hen watches over her little chicken."

At this everybody laughed. But there were soon tearful good-bys; for all knew how long it might be, and how many things might befall them, ere they met again. To Ben, Rachel held out a little vial, tightly corked, and wrapped around many times with a buckskin string.

"Here's what I promised you, to put your message in. There's some paper in it to write on, and a piece of pencil to write with. Be sure to tie the string hard and fast, to keep brush from raking it off. And be sure to cork the vial tightly, so that water won't get into it if Spunky has to swim any rivers."

Ben received the vial, examined it carefully, and dropped it into his ammunition bag. "All right, little girl! You shall have a message from us if we send any messenger back. In fact, if we can find anything to feed him through the winter I almost know that we'll keep him out there till spring. So you mustn't be disappointed if he doesn't come."

"Anyhow, he'll start before you do, and he's likely to get home before you do. So you'll send a message by him when he does come, won't you, Benoni?"

"You shall certainly have your message if there's any way to send it."

For a few minutes longer the four stood talking together, saying the last words they would be able to speak for many a day. Then the two parties separated, the young trappers moving on into the forest, and their sisters turning their faces homeward. But at the mouth of the lane the girls stopped and stood gazing. When the trapping party was about to disappear, Rachel waved her handkerchief and cried:

"Goodby, Benoni—and Jodo! You won't forget the message?"

Ben took off his cap and waved it. "Goodby, Rachel—and Betsey! We won't forget the message—we couldn't forget the message!"

The two parties kept waving to each other till the winding of the woods road hid each from the other's view. Then the girls went slowly back through the lane, while their brothers tramped briskly on into the forest.

In front, and still leading the pack-mule, strode Ben, slightly more than six feet tall, dark-haired and olive-skinned, 24 years old, and very strong-looking. Behind the mule followed Jodo, with his cautiously-long switch. For Spunky greatly preferred a civilized farm to the uncivilized wilderness. Though a well-seasoned farm boy, toughened by plenty of hard work, Jodo was not so tall, and he looked a mere stripling compared with his stalwart friend in the lead.

In dress and accoutrements they were much alike. For Jodo had fitted himself out in imitation of his older and more experienced companion. Each wore a 'coonskin cap, with the ringed tail hanging down behind, and coarse, homemade boots. And each wore buckskin pantaloons and a buckskin hunting shirt, so-called—coat would describe it better—confined at the waist by a belt.

On his shoulder each of them carried a long, flintlock rifle, with much brass on the stock. Ben's rifle had been used, but Jodo's had the polish and brightness of newness. On one side of each hung an ammunition bag, and on the other a thin-scraped powder horn. In his belt each carried a flintlock pistol, a hunting knife, in a sheath, and a light hatchet, or tomahawk. Both the knife and the hatchet, while useful for many purposes in the woods, could be employed as weapons in a hand-to-hand fight with either beast of prey or man.

Till noon the two young travelers tramped ahead steadily, one at each end of the mule. Sometimes the road led by a log house, set at one corner of a little, rail-fenced field, thickly studded over with girdled, deadened trees. The two dogs either trotted along by their masters, or busied themselves with hunting through the woods by the road. Bose had been on two trapping trips before, but Tinker was going for the first time. The further the travelers tramped, the fewer became the houses, and the dimmer grew the woods road they were following.

Noontime came and they stopped for dinner by a spring at the foot of a hill, in sight of a settler's cabin. After removing Spunky's pack, watering him, and turning him loose, with a rope on, to graze, they themselves sat down by the spring to eat. While the two were at dinner, a man came from the cabin for a bucket of water, and stopped to chat.

"And so you're bound for the Ozarks, or Black mountains as some still call 'em, for a winter's trappin', eh?" the settler remarked, after hearing how Ben and Jodo came to be there. "And what use do you expect to make of this pair of pots? Cook your meat in 'em? or turn 'em bottom up and set 'em for traps?"

Ben laughed. "Neither. On my last trip I discovered a little salt spring up in that country. While hunting and trapping we expect to be boiling down some salt water. We hope to bring back at least 20 bushels of good salt to sell."

"Salt's in bully good demand just now. Wouldn't mind to have a bushel or two myself. But how are you figurin' on gettin' it home?" he glanced toward the mule. "Expect little long-ears to pack it?"

Ben laughed again. "Hardly. Not any more than he can lick up. We're going out by land, but we expect to come home by water. And we hope to load one good-sized canoe with salt."

"Oh, I see. But what will you do with your mule? Leave 'im out there to rustle for 'imself?"

"Not Spunky. We couldn't leave the little rascal if we tried. He makes a bee-line for home as soon as he's turned loose. The danger is that he'll get loose and come home before we're ready for him to come.

"We expect to spend the coming winter along the Big Niangua river."

"So I see. That would be a fine trip, some ways. I'm fond of huntin' and trappin'; but that's a long ways from home, and there's ruther too many redskins roamin' that neck of the woods to suit this chap. My scalp's worth more to me than all the coonskins and otter skins and beaver skins in Upper Loozanny. Everybody that's been among 'em says the Indians is gettin' sulky at the way the white settlers keep movin' in. They're liable to start to killin' and scalpin' any day, the reds air."

"Such a thing is possible, of course, but we'll hope it won't come to pass. I've heard my father and old Mr. Boone—Daniel Boone—tell too much about the Indian wars back in Kentucky. I hope this country may be spared such experiences."

For a good while longer the settler talked. Then he dipped up a bucket of water from the spring and returned to his cabin. Having rested long enough, the two travelers caught Spunky, lifted his pack on and fastened it, and were soon on the march again.

On they went, tramping, tramping, the pack-mule between them. Their backs were to civilization, and their faces were set steadfastly toward the wilderness.



**A Thrilling Incident From Chapter Fourteen.**

**For once in their score of hair-raising experiences with the savages of the Ozark region, the hunter lads have the advantage and make use of it. Driven to a cave high up in a cliff and pursued to the retreat by the blood-thirsty red men they baffle all attempts at their capture. Discovering the hunters' hiding place, the Indians assemble at the base of the cliff and prepare to ascend by means of a buffalo rope. Members of the marauding party climb to the top of the cliff and let the rope down past the mouth of the cave and begin drawing one of their members up.**

**"I can stop that," whispered Ben, as he jerked out his hunting knife and stood waiting. The moment he caught sight of the Indian's black head, he leaned forward and drew his knife across the tightly stretched rope.**

**Discovering the knife, the Osage uttered a fierce war whoop. The Indians above and those below began to yell. But it was to no purpose. The buffalo hide parted under the keen-edged knife and the warrior dropped straight down, clutching at the rocky edge as he fell.**

## CHAPTER II.

### Threading a Wilderness Trail.

At the time when Benoni Armstrong and Jodo Henderson started out on their trapping trip, the region called Upper Louisiana was settled mainly along and near the west bank of the Mississippi river. With the exception of these settlements, and of a few very scattering settlements strung for a good distance up the Missouri, the whole half of a continent, from the Mississippi to the Pacific ocean, was one mighty wilderness, roamed over by savages. Twice only had explorers penetrated it, and its geography was little known. But the trapper and the Indian trader had ventured into it often. The region toward which Ben and Jodo had started, though only 200 or 250 miles distant, was one of the wildest and least known parts of that great wilderness.

Hour after hour the two young travelers tramped away from the settlements and on into the wilds. Ben led the way, followed by Spunky with his pack, and Spunky by Jodo with his switch. Not a little pulling and prodding were necessary to get the reluctant brute away from home.

Toward the southwest they were traveling. Sometimes they were in thick woods and sometimes in scattering woods; and now and then they crossed little patches of prairie. But there were always hills and vales, and deep ravines with spring-fed streams, and a never-ending, ever-changing variety of striking scenery. They had to choose every step of their way; but Ben—this was his fourth trapping trip—pushed ahead with all the skill and certainty of an old-time woodsman.

When the sun was low, Jodo took the rope and led the mule, while his companion went ahead in quest of game for their supper and breakfast. There was not a bite of meat among their supplies in the pack. Their rifles would have to furnish that.

Scarcely was the hunter out of sight among the scattering woods when the report of his gun startled the silence. The noisy flapping of big wings could be heard, and through an opening between trees Jodo saw a flock of wild turkeys running and taking to flight. A few minutes later he came upon Ben, who was standing near a little spring at the foot of a hill, reloading his rifle. A fat turkey gobbler lay less than a yard from the spring.

"Ehot 'im while he was drinking, didn't you?"

Ben nodded. "Nice little spring, too, this is. We might as well camp here as anywhere, I guess."

Jodo glanced around. "Yes, this is all right for a camping-place. Plenty of water and grass for Spunky, and plenty of wood and water for us."

The pack-saddle was soon ungirted and lifted from the mule's back. Then Spunky's fore feet were hobbled with a piece of rawhide, a not very large bell from the pack was buckled on his neck, the leading-rope was taken off, and he was turned loose to eat and drink to his heart's content.

While Ben was looking after the mule, Jodo gathered wood for their camp-fire. Then, taking a tinder-box from his ammunition-bag, with flint and steel he struck sparks into some tinder, and soon had a fire burning not many yards from the spring. In a little while the two travelers were sitting by their fire, each with a stick in his hand, broiling a piece of the turkey. Their long day of tramping had given them sharp appetites.

Soon darkness had settled down upon camp-fire and campers.

The two were soon lying in their blankets. The woods were noisy with the hooting and screeching of owls, with the howling of wolves, and with the cries of other night-flying birds and of other night-prowling animals. The dogs sometimes sprang up and

(Continued on page twenty-six.)

# Prospects for the Live Stock Man

## *Present Situation Points to Successful Business in Line of Work That Is of Real Service*

By E. J. IDDINGS

This survey of live stock prospects by Dean Iddings covers his presentation of the subject before the Northwest Live Stock conference at Spokane last week.

In discussing this question with you, one of very great importance to the live stock industry of the northwest, I shall present views which I have had for some time, modified in some respects and reenforced in many others after attendance for two days at the recent notable gathering at Salt Lake, the annual meeting of the American National Live Stock association.

There are two important things to attain at the most serious stage of the world's history in connection with the live stock man's business. In the first place, there can be no question as to his patriotism and his desire to meet the needs of the nation in the way of food production. The great need, therefore, is to bend and divert every effort in such directions as will enable every community to yield the greatest possible amount of animal products.

> The farmers and stockmen expect only the same rule as is applied in the shipbuilding industry, to the munition factory and to any other American manufacturing enterprise directly allied with our efforts in the war.

This is clearly our first duty, but, in addition to this we must, as it were, "keep the home fires burning." After the war the flocks and herds of continental Europe and the British isles will need to be reorganized and largely replenished. We need protect, therefore, not only the future of our own industry here in America, but in addition to prepare to meet the foreign after-war demand. We must keep the nucleus of our flocks and herds in such shape that we can present the right front when once peace comes.

It is estimated, for instance, that 54,000,000 head of sheep, 38,000,000 head of cattle and 32,000,000 head of hogs have been lost in the old world as a result of devastation of the war.

To replenish this loss would take practically all the sheep, nearly all the beef cattle and almost one half of all the hogs of America.

The information that comes to us through the food administration is that the bread line and meat famine may come to England and France almost any day. It is, therefore, clear that the situation is serious and that the live stock man's assistance is one of the vital needs of the present day.

> With the labor problem becoming more serious there is a disposition to use horses even more largely than in times of peace.

It is only right at this particular time to make clear one point in regard to the live stock industry: A point where there has been considerable confusion. The federal government should not expect the live stock men to turn over their products for national use at a loss any more than the same thing is expected of the many different lines of manufacturing industries. The farmers and stockmen expect, therefore, only the same rule as is applied in the shipbuilding industry, to the munition factory and to any other American manufacturing enterprise directly allied with our effort in the war. He expects and should have a reasonable profit as the result of his skill and effort, and also has the right to expect as stable a market as is possible to obtain by the direct action and direct intervention of the food administration.

So far the food administration has accomplished several things, some of them of direct benefit to the stockmen.

First, the large packing plants have been put under federal license and federal control.

> It is estimated, for instance, that 54,000,000 head of sheep, 38,000,000 head of cattle and 32,000,000 head of hogs have been lost in the old world as a result of devastation of the war. To replenish this loss would take practically all the sheep, nearly all the beef cattle and about two-thirds of all the hogs of America.

Second, there has been a minimum price set at Chicago for hogs.

Third, there has been adopted and put into operation a system of zones from which live stock are to be shipped, thus stabilizing the market and making more equal each day the numbers of live stock that appear upon the market.

Fourth, the first effort in the way of control of certain feed prices has been taken, in setting prices for millstuffs.

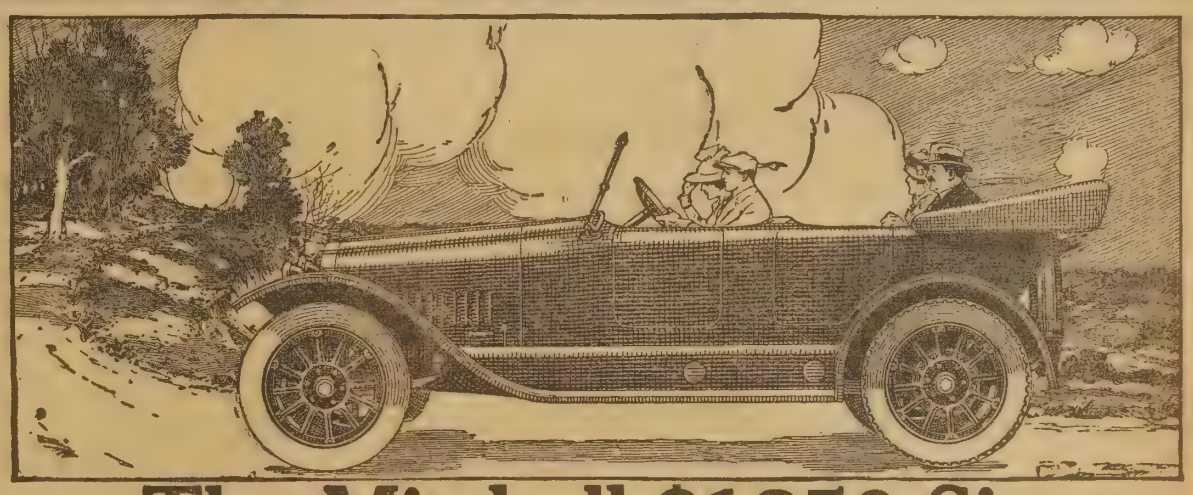
These actions are real accomplishments, and have been of encouragement and of direct and substantial benefit to the live stock industry.

In view of the needs of the nation and of such action as has already been taken in connection with the live stock industry, I will therefore discuss in a rather brief way the situation as I see it in respect to the production of horses, dairy cattle, beef cattle, sheep and swine.

Horses—There are two needs for horses. First, for the army, and second, for the farm. The federal government now is buying horses freely for artillery purposes, requiring a medium weight, strongly built and active type of horse, such as is produced on many of the farms of the west. This demand takes a considerable number of horses, and is acting as a direct stimulus in connection with the market situation.

The need for horses on the farm is one that will not decrease during the period of the war. The demand last spring was, in many sections, far greater than the supply, and horses of some age and of inferior conformation frequently sold during the early spring last year for prices such as are ordinarily paid for perfectly sound horses. With the labor problem becoming more serious, there is a disposition to use horses even more largely than in times of peace, and this fact, in connection with the need for making every acre produce the maximum, is certain to maintain during the period of the war a strong demand for good farm horses. After the war is once ended the horse supplies of Europe, now in many sections almost entirely exhausted, will

(Continued on page twenty-four.)

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A. B. NYSTROM, Editorial Contributor

# Dairy Questions

## Are Answered by A. B. Nystrom

To the Editor: Please let me know through your valuable paper: First—Is block salt mixed with sulphur good for milch cows? Second—What root crop is the best for milch cows? H. P. Libby, Mont.

Ans.: Sulphur is mixed with the salt so that the latter will not dissolve so fast when exposed to rain. The cow gets all the sulphur she needs in the usual ration, but what she gets with the salt in the way you mention does no harm whatever.

There is no best root crop for all conditions. One root crop will be best in the one case and one in another. It depends largely upon the conditions under which the crop is grown and fed. Since all root crops are from 80 to 90 per cent water it is plain to be seen that these feeds are used more for the succulent properties than for the nutritive value. Root crops have a beneficial effect upon digestion. The best rule to follow is to grow that crop that will give you the largest yield of palatable roots at the lowest cost. When feeding roots, feed a good quality of hay and the proper grain mixture and good results will be obtained from any kind of roots that are palatable.

To the Editor: As I am planning on putting up a silo this season, I would like to have a little advice from people who have had experience with silos. Will a round, wooden hoop silo, with the hoops three feet apart and an iron hoop between each of the wooden hoops and two courses of six-inch shiplap with weather proof building paper between the shiplap, be air tight enough to keep the silage from spoiling? After the silage is put in the silo, how long will it have to be there before it can be fed, and how long will it keep in the silo? Will green wheat that has a lot of Jim Hill mustard in it make good silage when cut green? Which is the best way to use green rye for silage? How many tons of ready-made silage will a silo hold which is about 10 feet in diameter and 18 feet high?

R. L. B.

Odessa, Wash.

Ans: It depends upon the strength of the hoops and the quality of the wall material. If iron hoops are used, you would need for a 10-foot silo, a 5-8-inch hoop. Place the first one six inches from the bottom of the staves. The next one two feet above and then increase the distance between each successive hoop until you reach the top. If wooden hoops are used make them of straight grained fir or white pine. Plane them down to about three inches wide and 3-8 inch thick. It takes at least four-ply and preferably five-ply of this material to make a strong hoop and these should be placed two feet apart on the silo. Two layers of 1x6 shiplap or even 1x6 common, free from knot holes will do very well for the sides. Building paper is desirable, but not necessary between the layers. Silos built according to this plan will last 20 to 25 years, and preserve excellent silage every year.

Silage may be fed just as soon as the filling is finished. Many dairymen prevent the usual loss from moldy silage on top by beginning feeding while the fodder is still green—before any fermentation has taken place. While fermentation is going on the cows do not relish the feed as well as later, but no injurious effects will result from using the feed at this stage, and there will be no waste. If the air is kept away from the silage it will remain in good condition for many years. The writer has seen silage seven years old that gave as good results as fresh silage.

Silage can be made out of almost any green plant that a cow will eat in its natural state, and sometimes from crops that cows do not relish unless it is made into silage. A mixture of wheat and mustard is not as good as wheat alone; still you will get considerably more feeding value from the silage made from this mixture than from the same mixture fed green or as hay.

Rye should be cut for silage when the grain is in the soft dough stage. Be sure to run it through a cutter, pack it well in the silo and add plenty of water. Rye mixed with a legume such as vetch makes a better silage than rye alone.

A silo 10 feet in diameter and 18 feet high will hold approximately 28 tons. I would advise you to make your silo at least 20 feet and preferably 24 feet high.

# Cream Separator

## What It Does for the Dairyman

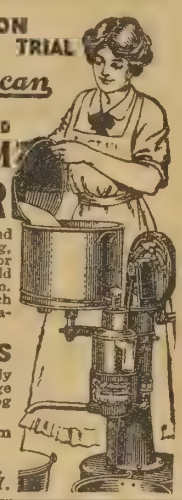
**By R. A. Lamson, Dairy Department, Purdue University.**

No progressive farmer who sells or churns cream can afford to be without a centrifugal cream separator. But a short time ago it was impractical for the farmer with only three or four cows to operate a separator. Now, however, most separator companies make machines of all sizes, some as low in capacity as 100 pounds of milk per hour, so that even the small dairyman can now find a separator of proper size for his herd.

The advantages of a separator to the dairyman are many. In the first place, more of the valuable butterfat can be extracted from milk by this means than by the so-called gravity method of creaming. A table taken from Indiana bulletin No. 116 shows the loss from these methods as compared with the hand separator with from one to 20 cows.

The table, which assumes that an average cow will give 6000 pounds of milk per year, and that the butterfat is worth 37 1-2 cents per pound (the average of Elgin prices from August 25, 1916, to August 26, 1917) shows that the hand separator effects a saving of from $5.46 to $9.87 per cow per year. These facts, based on accurate experi-


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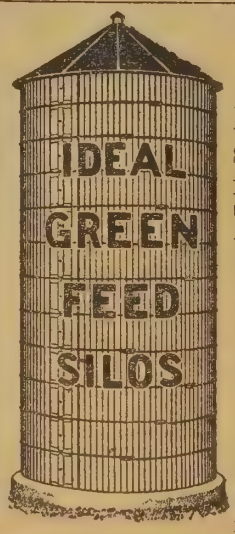


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ments under practical conditions, should convince the dairyman of the necessity of a cream separator on his farm.

The second great advantage of the hand separator is in the quality of the cream and skimmilk. Cream cooled at once after separation and marketed three times a week can be sold at a premium. The creamery industry is realizing that quality of cream is fundamental to quality of the resulting butter. Therefore clean, sweet cream will sell at a higher price than cream of poor quality. It pays the dairyman to work for this extra price. The hand separator finishes its work within a half hour, while the water dilution system requires 12 hours, the deep setting system 24 hours and the shallow pan system 36 hours to obtain the cream, and then much of it is lost. Because of this long time, gravity cream for marketing or churning and gravity skimmilk for feeding to calves or pigs is in very poor condition. When fresh milk is run through a hand separator the skimmilk is in the best possible condition to feed, and good results can be obtained by feeding it to chickens, calves and pigs, as will be seen from a later article on this subject.

A third advantage lies in the fact that the richness of the cream can be controlled. All separators have a cream regulating screw by which the percentage of fat in the cream can be raised or lowered. The creamery man wants a 35 to 45 per cent cream, as it makes better butter, and the dairyman will get more for his cream, usually, if it tests within these limits; in fact, some creameries cut the price per pound of fat when the test is too low.

A fourth advantage is in the clarifying action of the separator which cleans most of the dirt and slime from the milk during the skimming process. This is of great importance from the sanitary viewpoint, but it has a meaning in dollars and cents in the improved quality of the cream and the butter made from it. Furthermore, the centrifugal separator does not expose the milk and cream to the air, dirt and bacteria, as do the open-top, gravity pans and cans.

## Veterinary

Dr. S. B. Nelson

**Stifle Hurt**—I have a cow that has had her stifle hurt for the past two months. What is a good liniment?
W. P.
Stevensville, Mont.

A very good liniment which is frequently used is composed of soap liniment, six ounces; tincture of iodine, six ounces and tincture of cantharides, four ounces. Apply morning and evening.

**Cow Loses Hair**—I have a cow that is losing hair around the hips and neck. I thought it might be mange, but there seems to be a few short hairs growing again. H. J. S.
Oroville, Wash.

Apply the following salve or mixture very lightly to the part where the hair is off, going into the part covered with the hair slightly. Take a pound of flower of sulphur. Then add kerosene or coal oil to it until it is a semi-liquid soup. Now take a small paint brush and paint this without any great friction on the affected parts. I think that one treatment or two or three, four or five days apart will be of value.

**Growth on Teats**—I have a heifer that calved last June and two months later small white lumps began to appear on the teats and gradually increase in size to a small filbert nut, only long shaped, then the end begins to die and it finally drops off.
S. S.
Yelm, Wash.

Buy one pound of Squibb's chemically pure magnesium sulphate. Make a saturated solution of it. Give the cow one tablespoonful in her drinking water morning and evening; also bathe the teat in this solution after milking. You will, of course, have to divide the solution so that you will have one part for use on the teat and the other to be given internally.

**Milk Fever**—Kindly tell me how to take care of a fresh cow with milk fever.—W. L., Nahcotta, Wash.

The treatment for a cow with milk fever if she has lost consciousness is to give her no medicine by the mouth, but inject the udder with air. To do this use a force pump of any kind, and after disinfecting the udder and teat carefully with a 2 per cent solution of lysol, dip the teat into tincture of iodine and then inject the end of the nozzle. The best kind of a nozzle to use is the glass end of a 5-cent eye dropper into the teat and then pump the udder full of air. In order that the air may not escape tie a piece of cloth about as wide as your finger around the end of the teat, not too tightly, but just so the air can not escape. It may be necessary to inject the udder with air in four or five hours again. It is also wise to give the animal enemas of hot water every two or three hours until she can get on her feet so that she can be drenched with one pound of epsom salts in three quarts of water. Do not try to drench the animal unless you are sure that she can swallow, for you may choke her.

**Symptoms of Rheumatism**—I have a litter of pigs about four weeks old. About two weeks ago one got sick and died, and now three more are acting the same way. They seem to show symptoms of lameness, and are unable to stand up or walk around. One of them is making a grinding noise with its teeth. There seems to be something the matter with the mother pig, too, as she keeps tramping around from one foot to the other.
L. H., Blossburg, Wash.

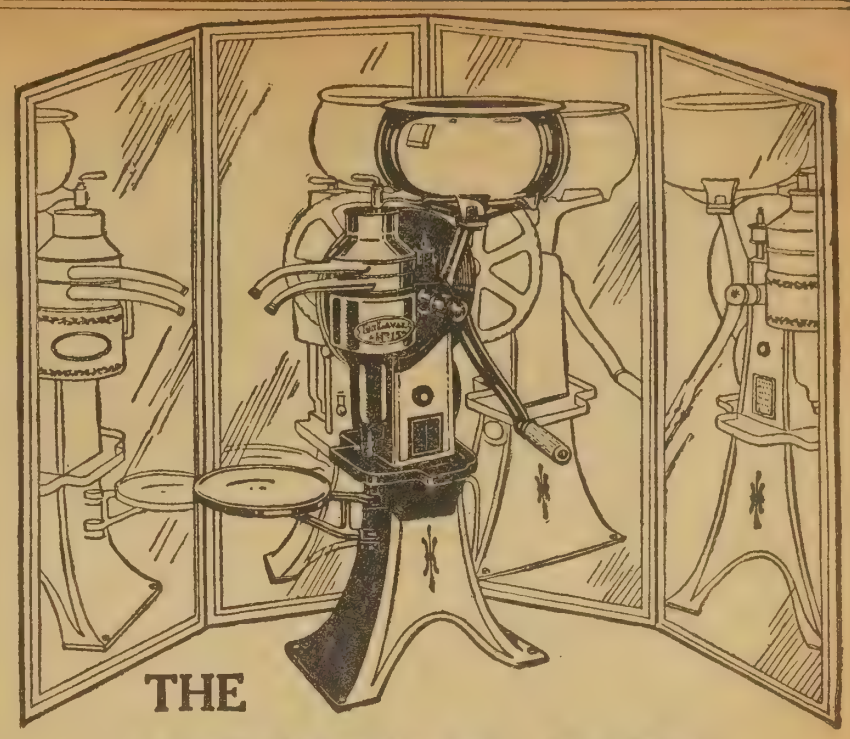
It seems to me that your pigs and sow all show symptoms of rheumatism. I am going to advise you to give the sow from two to four ounces of castor oil in her feed, depending upon her size. Then follow this treatment with 15 grains of potassium iodine in her feed once daily for three or four days. Do not give anything to the little pigs. Be sure and provide dry, comfortable, clean quarters for them where they are out of the draft. Be sure that they are out of the draft.

## Test 380 Cows During Month.

According to the report of Victor Morgan, tester of the Ferndale (Wash.) Cow Testing association, there were 380 cows tested during the month of January. The average pounds of fat per cow was 26.22 pounds; the average pounds of milk per cow, 631.8; the average feed cost per cow was $12.89. Thirty-six cows produced 1000 pounds of milk or more, and 33 cows produced 40 pounds of fat or more. The highest herd, owned by George Steiner, produced an average of 44.15 pounds of butterfat.

Mr. Hillier's herd at Laurel has been from month to month one of the most consistent in the association up to the present time. So far this winter he has fed his cows a ration made up mainly as follows: 40 pounds of oats and vetch silage and 7 pounds of clover hay, per cow per day, and a grain mixture consisting of equal parts of bran and shorts, fed at the rate of approximately one pound of grain for every three and a half pounds of fat produced in a month. Mr Hillier is a strong booster for silos, and says that silage is one of the most indispensable parts of a ration.

George Steiner's cow "Queen," with 106 pounds of butterfat in 30 days, will come very near being the highest producing cow in any testing association in the United States for the month of January. At the time of the association test she had just completed an official test, wherein she made slightly better than 30 pounds of butter in seven days.

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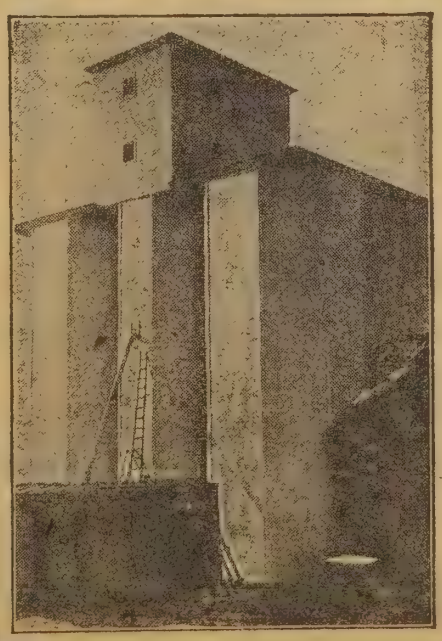
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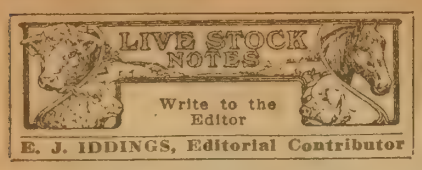
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You realize, of course, that labor conditions have been extremely unsettled in all industries in the last year, and the future is uncertain. While conditions with us now are such that we can take care of all orders promptly, we ask that you act at once if you are planning to erect a Tung-Lok Elevator this year. Don't wait for the summer rush!

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## Grain for Feed

### Is Better When Not Cooked

To the Editor: I was reading the item on "Potatoes for Feed," by E. L. Potter. He says not to cook grain with potatoes, as the grain becomes less digestible when cooked. I have some discolored oats that I have been cooking and feeding to the hogs, thinking that I would get better results from cooking and feeding than if I ground the oats or fed them whole without cooking. The oats when cooked swell up two to three times normal size, making it easier for the hogs to chew the grain. The grain being larger, the hog is less apt to swallow the oats whole, while feeding hogs whole oats without cooking, a large percentage of the oats passes through the hog; that is mainly my reason for cooking the oats, also cooking requires less labor than grinding.

The hogs that I have fed are in butchering condition now and I would like to know if it would have been more profitable for me if I had fed the grain without cooking it.

I have some potatoes and I was thinking of cooking them with the oats that I have. I would be glad if you would inform me of a better way of feeding oats with potatoes either through the Farmer or directly.

Sequim, Wash. L. S.

The cooking of grain has been demonstrated very thoroughly to be detrimental rather than beneficial. In a series of trials covering nine years at the Maine Agricultural college as reported in their report of 1878, every test showed that the grain was damaged rather than benefited by cooking. The Kansas experiment station, as shown in their report of 1885 found the same thing. The Ontario report of 1876 showed the same results. At Wisconsin the experimenters starting in with the firm belief that the cooking must increase the value of common foods, found after 15 trials that the cooking was not beneficial. These experiments have been duplicated in a lesser way at many other experiment stations since this time, all with the same results except as stated in the article that potatoes give some advantage for cooking.

Later experiments have shown that the starch of the feed is slightly benefited by cooking whereas the protein and mineral matter is damaged by the formation of insoluble combination of the protein with the minerals. In feeds such as oats, barley or corn containing fairly high proportions of protein and mineral matter and but a limited amount of starch, the damage offsets the benefit and more besides, whereas potatoes are almost entirely starch and contain very little protein or mineral matter. In this case the benefit from cooking the starch much more than offsets the very slight damage which would come from the limited amount of mineral matter and protein present.

You speak of the oats apparently being more digestible when cooked. In this connection, will say that you can get the same results from soaking the feed without cooking. In any case, however, the increased digestibility from soaking or grinding is not as great as appears to be since the whole dry grain will oftentimes pass through the animal entirely whole and can be seen in the manure whereas if the feed has been ground, soaked or cooked, particles will pass through undigested, but can not be seen in the manure, hence the feeder assumed that the feed has been entirely digested which is not necessarily the case. E. L. P.

## The Milch Goat

**By A. E. Gipson.**

Referring to the discussion of the "Nannie Goat" and the question "Why Not?" by E. E. Elliott in the Farmer of February 14, the writer is inclined to the view that Mr. Elliott has made out a pretty good case for her ladyship, Mrs. Nannie.

The failure of the people of this country to appreciate and popularize the goat would seem to be largely a matter of prejudice and of failure to understand the value of the goat for the dairy. Still, in some parts of our country, particularly in California, goats for family use are becoming quite the thing, and are said to be giving entire satisfaction. In fact, there are several good sized commercial goat dairies in that state.

The writer has been investigating the milch goat for several years, and has come to the conclusion that the animal should be thoroughly tested in Idaho and the Pacific northwest. Not that she should supersede the dairy cow, but that she may fill a place, possibly, that the dairy cow does not and can not fill satisfactorily, in the nature of things.

The wholesomeness of goat's milk, and its value, particularly as a food for children and sick people, has been known for a long time. The freedom from many of the diseases to which the cow and other domestic animals are subject is pretty generally conceded. The small cost of keeping a goat, as compared to that of keeping the family cow, and other things that might be suggested, and to which Mr. Elliott refers, all combine to make a showing for the goat that should entitle her to a trial, at least.

While the milch goat seems to keep more in the milder climates, as a rule, there does not appear to be any good reason why the climate of Idaho and other portions of the Pacific northwest would not be adapted to her needs. She should be given a fair trial and a square deal.

### A Domestic Tragedy.

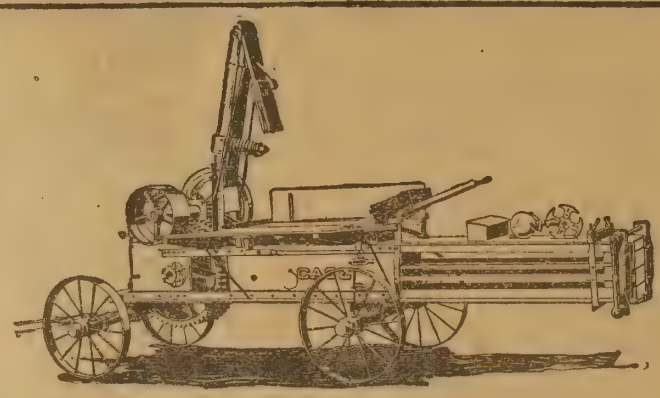
Janet and grandpa had a disagreement during the morning, and at luncheon she did not take her usual seat beside him. "Grandpa and I are unspeakable," she explained briefly.

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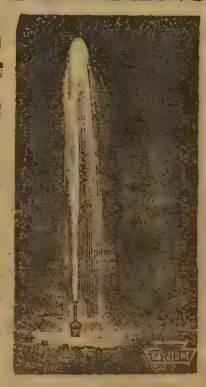
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When you write to advertisers, be sure to say that you saw their advertisement in this paper.

On account of the great variation in local climatic conditions, moisture, soil, etc., it is up to the readers of The Washington Farmer always to remember that methods which prove successful in one locality may not work out in others. It is our aim to gather the experiences of farmers in every section of this state and pass these experiences on to our readers, that they may try out or adopt such as may be applicable to their locality and conditions.

## Wants No Weed Silage

Hugh Wilson, of Joseph, Ore., has proven to his own satisfaction that the oft-repated assertion that "it pays to put just anything you can cut into your silo" is false. His silo was filled last fall mainly with peas and barley. He had one patch of barley, grown on an old feed lot to assist in producing all the crops possblie, for the government, that was practically taken by pig weed, or lambs' quarters, as it is sometimes called. Still, there was some barley in the field and it was all cut and put in the silo. When it was reached at feeding time it looked different from the other silage and did not smell good. Most of the cows did not like it and some would not eat it at all, but he did not discover any bad effects on the cows except that some went down a little in their milk. The work horses did not like it and as Mr. Wilson was feeding them silage he put grain on it, thus inducing them to eat it. Some outside horses were fed the "leavings" from the cows' managers. They ate it, but not readily. The horses began to die and he lost seven before he quit feeding the bad silage. As the first symptom of trouble the horse would walk shaky, then stagger, then lie down, and never get up. Some died quickly and some lingered two weeks.

Mr. Wilson called County Veterinarian Flack, County Agriculturist Hoke, and finally State Veterinarian Lytle. With all the facts before them and after examining the animals the opinion was unanimous that the silage did it. And no more died or sickened after the feeding of the bad silage was stopped. So Mr. Wilson has resolved that there will be no more weed silage for him and no silage of any kind for his horses. H. A.

## New Railroad Map

The state public service commission, Olympia, Wash., will be glad to furnish the latest railway map of the state, issued in 1917, giving all the railroads of the state in operation, as well as dotted lines indicating railroads projected or under consideration. The map also indicates the counties' boundaries and an alphabetical list of towns of the state, indicating those having a railway station, a telegraph station or a telephone station or all three, and so arranged as to be easily found on the map.

The public service commission will be glad to send this map to any reader of The Washington Farmer, if postage is sent, as follows: Mounted wall map, 15 cents; unmounted map, 2 cents; folded map, 2 cents.

## Has Bought a Gangplow.

C. T. Bracken, manager of Dr. Park Weed Willis' "Orchard Hill Farm," has just purchased a gangplow with which to expedite the spring work. Mr. Bracken explains that with the present shortage of farm labor he finds it necessary to make full use of labor-saving machinery.


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Special 36-page chapter from famous 264-page book "Modern Silage Methods." Write for copy. Get up-to-the-minute helpful suggestions free. Also get our free catalog on Silver's "Ohio" Silo Fillers. 1917 revised edition of "Modern Silage Methods" 25c, covers entire silage subject—every type of silo—how to build, 41 crops used, feeding, 8-page index. 55 illustrations. Write now.



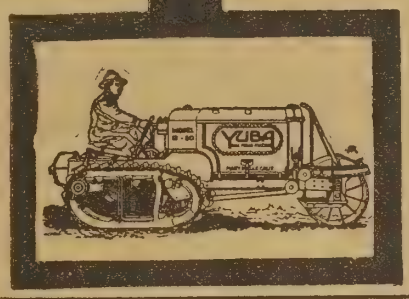

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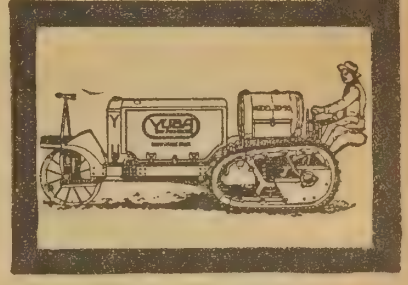
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# Please Mention This Paper When You Answer Ads

## POULTRY

Write to the Editor

JAMES DRYDEN,
Editorial Contributor.

# Blackhead in Turkeys

To the Editor: Will you please tell me what is the matter with my turkeys and what is the cause of their sickness? I have lost old turkeys every year with the same disease. They have a yellow discharge. Their heads turn blue and they seem to have a rattling in their throats and won't eat. They stand around drowsily and when they are dead I have opened them and their livers are hard yellow sores. The first thing I notice is a yellow discharge. MRS. M. F.
Scio, Ore.

From the description given the turkeys probably have blackhead. This disease has already been described in The Farmer. It is the result usually of close confinement and heavy feeding. The turkeys should be encouraged to range as much as possible. Put them on limited feeding for a while and this will induce ranging or exercise and do not confine them in close houses. Fresh air, fresh feeding ground and plenty of exercise are the preventives for blackhead. J. D.


WILL SAVE YOUR CHICKS

Any reader of this paper who writes P. J. Kelly, the Poultryman, at 69 N. 2d st., Minneapolis, Minn., will receive a free copy of his new booklet, "White Diarrhoea in Baby Chicks." It tells how to prevent, remedy and save the whole hatch. Write for this valuable free book at once.—Adv.

**Tells why chicks die**

E. J. Reefer, the poultry expert, 466 Reefer Bldg., Kansas City, Mo., is giving away free a valuable book entitled, "White Diarrhoea and How to Cure it." This book contains scientific facts on white diarrhoea and tells how to prepare a simple home solution that cures this terrible disease every night and actually raises 95 per cent of every hatch. All poultry raisers should certainly write Mr. Reefer for one of these valuable FREE books.

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Sold from factory direct to you. Used by 48 western hatcheries. Send today for big free illustrated catalogue.

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## Another Large Egg.

To the Editor: I note in the Idaho Farmer issue of January 24, 1918, an item regarding an Egg owned by G. S. Brooks, of Tillamook, who believes it to be the largest hen's egg in existence. While I do not care to take the record away from Oregon in general or Tillamook in particular, I wish to say that in 1911, while living at Armour, S. D., I had a double-shelled hen's egg in my zoological collection that was larger than the one mentioned in the Idaho Farmer.

This egg measured exactly nine inches in circumference the long way and seven and five-eighths the round way. With my instruments for preparing birds' eggs for museum specimens, I drilled a hole in the outer shell, through which I blew the contents and then with a smaller drill, reached the inner egg through the outer sell, and blew it also. This left the smaller egg which was of normal size inside the outer shall, and as both were properly prepared, it may be considered a perfect specimen. This specimen is now in the oological collection of A. M. Barnes, editor of "The Oologist' of Lacon, Ill., and was recorded in volume XVIII of that magazine.
ALEX WALKER.

Tillamook, Ore.

## Catarrhal Roup.

To the Editor: I have kept hens for more than 40 years, but now I have something I do not understand. Have had trouble about one year. Some of them always shake their heads exhaling air through the nasal passage and one of them when doing that utters a short chip sound. They are out of sorts when so troubled. However, some of them recover without treatment. Others finally act as with roup. None have died. A SUBSCRIBER.
Hillyard, Wash.

The fowls are no doubt suffering from a form of catarrhal coup. Try dipping the head of the fowl in a 2 per cent solution of permanganate of potash. Hold the head in the solution for quarter of a minute or long enough so as not to strangle the bird. Repeat this two or three times, or twice a day for two days. J. D.

## Raise More Turkeys.

In the present campaign of the United States department of agriculture to increase the production of poultry upon the farm, the turkey raiser is particularly well able to respond. The turkey is a farm bird, first and last, and is especially suited to the grain and stock farms where there is ample ranging ground abounding in such turkey food as grasshoppers and other insects, weed seeds, waste grain, such as is left in the fields after harvest. Farmers' bulletin 791, "Turkey Raising," describes the most successful methods of breeding, feeding and management. This bulletin may be obtained free upon application to the United States department of agriculture, Washington, D. C.

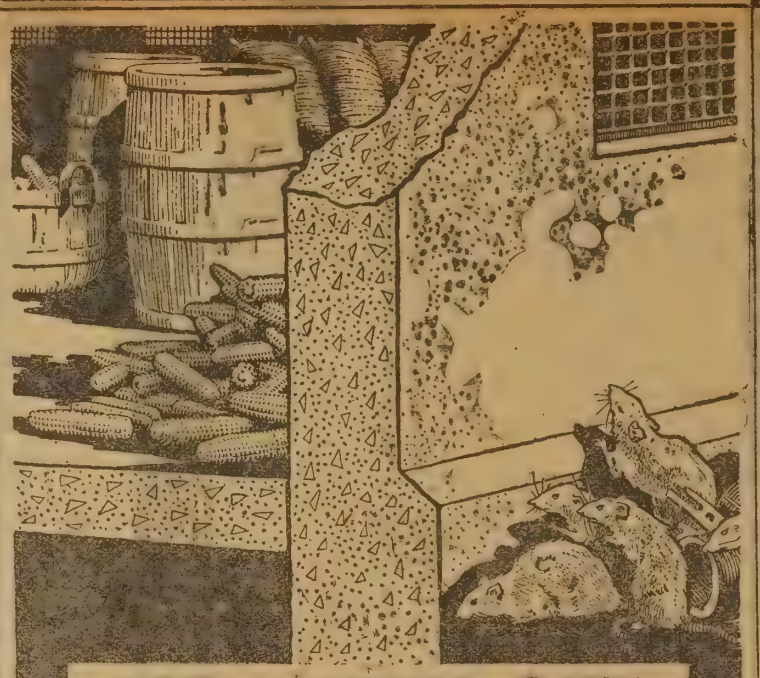
## Finds Profit in Poultry.

Harry Miller of Newburg, Ore., is a poultry breeder who made a good profit on White Leghorns during 1916. He had 435 hens and made a net profit of $1930. Mr. Miller bought grain in October, so he got through on an expense charge of $1.50 per hen, but says it costs considerably more now. It costs 20 cents per month per hen or a little more.

Mr. Miller used electric lights to lengthen the days last year, and says the lights are nice to get them up in good time in the morning, but he is not impressed with the idea and is not using them this year. H. A.

## Office Methods on Farms.

Progressive farming more and more implies something in addition to the implements with which to till the soil or harvest the crop. Some one has figured up that farmers are buying $5,000,000 worth of typewriters a year. This means office methods of efficiency on the farm; that increasing numbers of farmers are taking annual inventories, keeping careful book accounts throughout the year, and at the end of the year striking a balance to discover what their incomes have been and the sources from which they have come; also what the outgo has been and where it has gone. In this connection it is interesting to read that more than 200 Minnesota country banks have purthased through the Minnesota Bankers' association 30,000 farm account books for distribution as complimentary copies among such farmer customers as may be interested in adopting a simple and useful system of farm records.

**BUILD THEM OUT**

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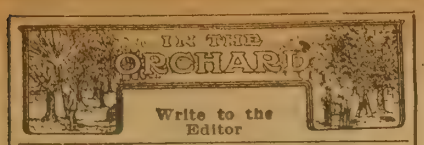
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GRANVILLE LOWTHER,
Editorial Contributor.

# The Bemis Garden

## Successful Method Is Described

The Bemis farm garden near Ralston, Adams county, Wash., has a good reputation. It is in the dry farming district, and is an answer to the often asked question, Can a successful garden be grown on a dry farm. Some time ago the Farmer wrote to Mrs. Bemis and asked her for a description of her method, and we are now glad to publish the following letter from her:

To the Editor: Our garden occupies a spot sloping to the west and slightly north and is about 50 feet by 130 feet in size. Each spring the ground is deeply plowed and well pulverized. Then a furrow about 10 inches deep is turned every four feet across the short way for laterals and one long furrow at the side for a main ditch.

The main ditch is left open and the short ones filled with fresh, strawy manure from the horse barn and the soil between trenches worked down with a garden rake into good shape for planting.

The varieties requiring the maximum of warmth and moisture and the longest period of growth, such as melons, tomatoes, peppers, egg plant, etc., are planted as close as possible to the edge of the trench, while the quick growing varieties and those requiring rather less of moisture, like cabbage, peas, carrots, etc., are planted nearer the middle of the bed.

A windmill furnishes most of the water for irrigating the garden and a gasoline engine comes to the rescue when the wind fails.

This system of gardening furnishes us each year an abundance of lettuce, radishes, rhubarb, peas, beets, turnips, spinach, beans, cabbage, carrots, melons, cantaloupes, cucumbers, tomatoes, peppers, egg plant, lima beans, parsnips and salsify, through their respective seasons, while many varieties are prolonged till frost by means of successive plantings.

I always can enough of the "cannable" varieties to last till the next growing season and store a generous amount of beets, carrots, cabbage, etc., for our own use and to furnish green feed for the chickens through the winter.

In addition to this, I sold last summer, $50 worth of surplus vegetables. Having had no thought of my garden breaking into print, I kept no separate account of the amount of each variety sold, but the sales consisted largely of cabbage, green beans, cucumbers and tomatoes.

From my 32 tomato plants, I canned 104 quarts, made four gallons of catsup and sold seven boxes of ripe and 15 boxes of green tomatoes.

These plants were started in a sunny window in February, transplanted to a cold frame in April, and were blooming freely at the time they were put into the garden in late May.

The plants were pruned at the last transplanting and stalked up, and fruits set from almost the first blossom clusters, giving us our first ripe tomatoes July 20. We had an unusually long ripening season last year, having no killing frosts till past the middle of October.

In a letter from L. J. Campbell of Walla Walla to the Farmer, he writes of having trouble getting good ears of corn from seed from Iowa.

We had the same trouble with sweet corn seed from the east, but by saving for seed the best of what we raised each year. In a few years it became acclimated and we now get very satisfactory sweet corn without irrigation.

MRS. O. BEMIS.

Ralston, Wash.

### Nation's 1917 Tomato Pack.

Complete reports for 1917, secured by the United States food administration, give the total pack of canned tomatoes as 15,076,074 cases of two dozen cans each. This is the largest amount packed since 1914 and is equivalent to more than three cans of No. 3 size for every person in the United States.


## Trees

We offer a few choice prune, pear and cherry trees, select Vrooman Franquette walnut trees, and other first-class nursery stock at special low prices. Order today.

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# Crops for the Orchard

By C. I. LEWIS, O. A. C.,
Corvallis, Ore.

Orchardists are asking themselves at this time what they can grow in their orchards to help the food situation. In young orchards from one to five years of age, under normal conditions, the best crops to grow are such crops as strawberries and hoed crops such as tomatoes, melons, squash, peas and beans. To a certain extent, even under war conditions, such crops should still be produced, but the acreage is somewhat limited—at least the market for the acreage of some of these hoed crops is somewhat limited—and orchardists should see to what extent they can grow crops requiring the minimum of labor and yet give large returns of the world's food.

Navy beans should be considered. Seed potatoes, corn for ensilage or for hog feed, strips of vetch such as purple vetch to be raised for seed purposes, or vetch and oats for hay, such grains as wheat, barley, oats and buckwheat may also be planted.

In these young orchards, however, good wide strips should be left close to the trees so that the grain will not take away food and moisture which the trees need. If you are not careful, you will be robbing the trees in order to grow a temporary crop and will injure the orchard more than the money you will obtain for the crop.

Where hogs are to be kept on the farm a rotation of crops could be grown to good advantage. In the early spring Canada field peas should be planted and this will give some very good feed to help in turning off the hogs. For summer planting about th middle of July drill in such crops as Aberdeen and Cow Horn turnips, vetch

(Continued on page twenty-six.)


# POOR CROPS

Are Inexcusable at This Time When

**The Country Needs Food** and the farmer needs money, especially as quantity and quality crops are so easily obtainable through the use of

# NITRATE OF SODA

Use it on your sugar beets, fruit trees, truck garden, alfalfa, wheat and oat land, and be recompensed with a

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Free literature showing the excellent results obtained in connection with any or all of the above crops gladly sent upon request.

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# How to double the life of your engine

THE life of your engine—whether in motor car, truck or tractor—depends on the lubrication it receives.

Any well-built engine can run, after a fashion, for weeks, sometimes for months, on inferior oil—but with rapidly decreasing efficiency. And then come troubles, in endless succession; worn and broken parts, requiring costly replacements, and, finally, the scrap heap.

Do you want this to happen to your engine?



Ordinary oil after use — Veedol after use

*Note that the ordinary oil contains five times as much sediment as Veedol*

### Sediment in ordinary oil means wear

Ordinary oil causes rapid wear because it breaks down under the terrific heat of the engine—200° to 1000°F.—forms large quantities of black sediment and evaporates rapidly through the oil filler pipe.

Sediment is the greatest cause of friction and consequent shortened life of automobile, tractor and stationary engines. It crowds out the good oil that should form a protecting film between moving metal surfaces. As sediment has no lubricating value, these metal parts grind together, producing friction and wear.

### How the sediment problem was solved

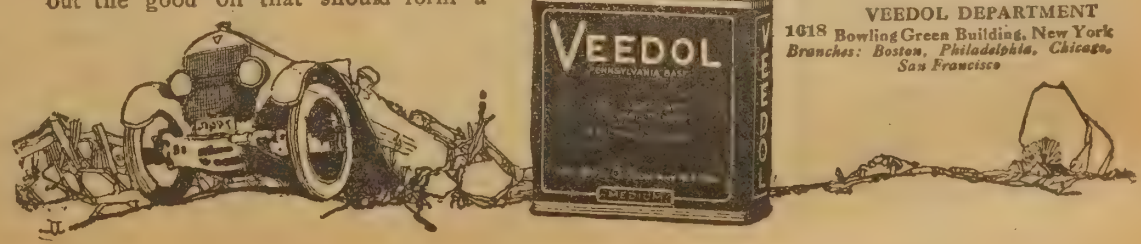
For years prominent engineers and chemists sought a new method of refining which would produce a lubricating oil that would not break down and form sediment under the heat of the engine, and that would give greater mileage due to minimum evaporation.

The result of their research was the discovery of the Faulkner Process. By this process—exclusively used by this company—was produced Veedol, the lubricant that resists heat.

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1618 Bowling Green Building, New York
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# President Fixes 1918 Wheat Price

(Continued from page one.)

farmer's confidence was demonstrated by the fact that they planted an acreage larger than the record of any preceding year, larger by 2,000,000 acres than the second largest record year, and 7,000,000 acres more than the average for the five years before the outbreak of the European war.

"It seems not to be generally understood why wheat is picked out for price determination and only wheat, among the cereals. The answer is that while normal distribution of all our farm products has been subject to great disturbances during the last three years because of war conditions only two commodities, namely, wheat and sugar, have been so seriously affected as to require governmental intervention.

**Meet Government Obligation.**

"The disturbances which affect these products (and others in less degree) arise from the fact that all of the overseas shipping in the world is now under government control and that the government is obliged to assign tonnage to each commodity that enters into commercial overseas traffic. It has consequently been necessary to establish single agencies for the purchase of the food supplies which must go abroad. The purchase of wheat in the United States for foreign use is of so great volume in comparison with the available domestic supply that the price of wheat has been materially disturbed and it became necessary, in order to protect both the producer and the consumer, to prevent speculation. It was necessary, therefore, for the government to exercise direct supervision as far as possible to control purchases of wheat and the processes of its exportation. This supervision necessarily amounted to price fixing and I, therefore, thought it fair and wise that there should be a price stated that should be at once liberal and equitable.

"These peculiar circumstances governing the handling and consumption of wheat put the farmer at the very center of war service. Next to the soldier himself, he is serving the country and the world and serving it in a way which is absolutely fundamental to his own future safety and prosperity. He sees this and can be relied upon as the soldier can.

"The farmer is also contributing to the army, and I am keenly alive to the sacrifices involved. Out of 13,800,000 men engaged in farm industries, 205,000 have been drafted, or about 1.48 per cent of the whole number. In addition to these, there have been volunteers, and the farmers have lost a considerable number of laborers because wages paid in industrial pursuits drew them away. In order to relieve the farming industry as far as possible from further drains of labor, the new draft regulations have been drawn with a view to taking from the farms an even smaller proportion of men, and it is my hope that the local exemption boards will make the new classifications with a view of lightening the load upon the farmers to the utmost extent.

"The secretary of war has asked for authority to furlough soldiers of the national army if conditions permit it so that they may return to their farms when assistance is necessary in the planting and harvesting of the crops. National and local agencies are actively at work, besides, in organizing community help for the more efficient distribution of labor and the drawing upon of new sources of available labor. While there will be difficulties, and very serious ones, they will be difficulties which are among the stern necessities of war.

"The federal railway administration is cooperating in the most active, intelligent and efficient way with the food administration to remove the difficulties of transportation and of the active movement of the crops. Their marketing is to be facilitated and the farmers given the opportunity to realize promptly upon their stocks.

"The department of agriculture and the food administration will continue to cooperate as heretofore to assist the farmers in every way possible. All questions of production, of the marketing of farm products, of conservation in the course of production and of agricultural labor and farm problems generally will be handled by the department of agriculture; while all questions of distribution of food supplies to the allies and of conservation in consumption will be handled by the food administration; but the chief reliance is upon the farmer himself and I am sure that that reliance will be justified by the results.

"The chief thing to be kept clearly in mind is that regulations of this sort are only a part of the great general plan of mobilization into which every element in the nation enters in this war as in no other. The business of war touches everybody. It is a stern business, a cooperative business, a business of energy and sacrifice, a business in the largest and best and most stirring sense of that great word."

The schedule as announced is as follows:

| | | | |
|---|---|---|---|
| Spokane | $2.00 | Philadelphia | 2.27 |
| Seattle | 2.05 | Baltimore | 2.27 |
| Portland | 2.05 | Newport News | 2.27 |
| Great Falls | 2.00 | Charleston | 2.27 |
| Pocatello | 2.00 | Savannah | 2.27 |
| Salt Lake | 2.00 | San Francisco | 2.10 |
| Chicago | 2.20 | Los Angeles | 2.10 |
| Omaha | 2.15 | Galveston | 2.20 |
| Kansas City | 2.16 | New Orleans | 2.20 |
| St. Louis | 2.18 | Fort Worth | 2.09 |
| Minneapolis | 2.17 | Oklahoma City | 2.05 |
| Duluth | 2.17 | Wichita | 2.08 |
| New York | 2.28 | | |

## Hoover Makes Good.

**As the Washington Farmer goes to press advices are being received from Washington indicating that Herbert C. Hoover, national food administrator, is making good his pledge to the farmers of the northwest that they would be given a wheat price "approximately the Chicago price." It is evident from telegrams received, one of them from Mr. Hoover himself, that the eastern price will be paid in the northwest, less a freight rate to Atlantic coast terminals of $3.50 a ton. This seems to assure the northwest a price of something like $2.17 at Coast points and about $2.08 at interior points for No. 1 Northern spring wheat. Here is Mr. Hoover's telegram to Charles Hebberd, food administrator for Washington:**

"The shipping board has undertaken to transport the excess production of 1918 wheat or flour from the Pacific coast in government vessels and has made a rate of $6 (a ton) for flour and $3.50 for wheat. In consequence the food administration will be able to raise the basis for 1918 harvest at Pacific coast points to approximately the Chicago basis. Give this publicity."

Here is a message received by E. T. Coman of Spokane, who was chairman of the delegation that went from the northwest to Washington to negotiate with the authorities relative to an **equitable price for the 1918 crop.** The telegram is from Senator Charles McNary of Oregon:

"Food administration promised Saturday night to stand by the original agreement which will give Chicago base."

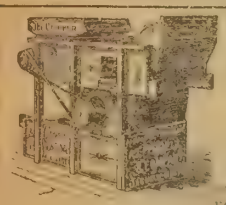
**Satisfies Wheat Growers.**

"The situation could not be more satisfactory to the northwestern wheat growers," said Mr. Coman. "Under the price plan announced, the New York price is $2.28. The freight rate from Portland to New York has been fixed by the shipping board on the basis of $3.50 a ton or 10 cents a bushel. The Spokane rate to Portland is 10 cents a bushel, which is also the rate from the average interior point to Portland. The average interior price then, including Spokane, will be the New York price of $2.28, less 10 cents freight to Portland, less 10 cents freight Portland to New York, or $2.08.

"This will yield the northwestern wheat grower 10 to 15 cents a bushel more than he received for his wheat in 1917. The average 1917 price in the interior was $1.95. Because of abnormal crop conditions, many farmers got as low as $1.75 and the average probably was around $1.80 a bushel.







*Clean Your Seed*

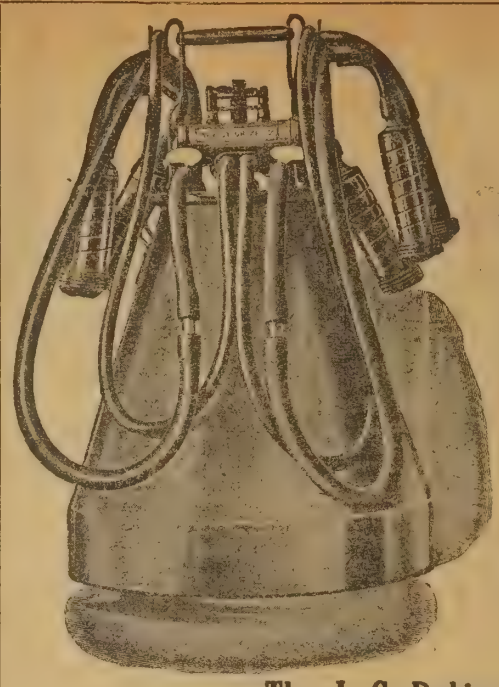
... grade it by weight.

**Clipper Cleaners**

will do it as well as though you weighed each individual kernel.

Let us show you. Nine-tenths of the seed houses use Clipper Cleaners. Why.

**Spokane Seed Co.**
Spokane.



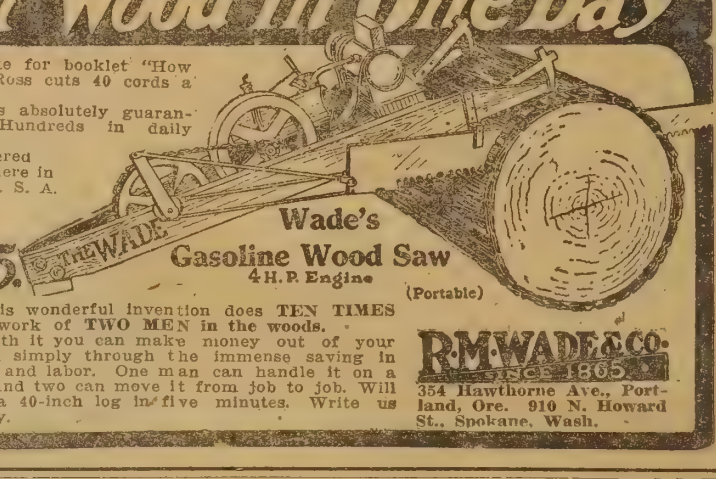
**The Perfection Milker**

There is nothing better for the milker to do than imitate the calf. *The Perfection Milker* does this. It gives a *mild suction,* a squeeze from the udder downward, then a release, and that is what the calf does. The *action massages* the *teat* and *stimulates circulation,* which keeps the *teat* and *udder* in *good condition,* therefore *will not injure the cow.*

Let us mail you a catalog telling all about it.

**The J. C. Robinson Co.**
46 FIRST STREET, PORTLAND, ORE.

**This Saw Cuts 25 Cords of Wood in One Day**




Write for booklet "How Dan Ross cuts 40 cords a Day."

It is absolutely guaranteed—Hundreds in daily use.

Delivered anywhere in the U. S. A. only.

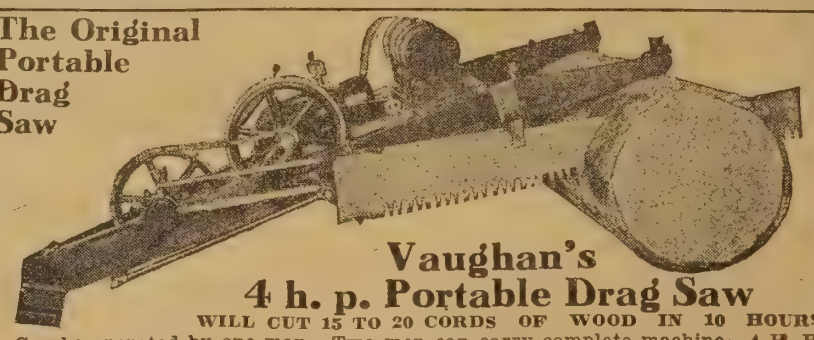
$165.

**Wade's Gasoline Wood Saw**
4 H. P. Engine (Portable)

This wonderful invention does TEN TIMES the work of TWO MEN in the woods. With it you can make money out of your wood simply through the immense saving in time and labor. One man can handle it on a log and two can move it from job to job. Will cut a 40-inch log in five minutes. Write us today.

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SINCE 1865
354 Hawthorne Ave., Portland, Ore. 910 N. Howard St., Spokane, Wash.

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**Vaughan's 4 h. p. Portable Drag Saw**

WILL CUT 15 TO 20 CORDS OF WOOD IN 10 HOURS

Can be operated by one man. Two men can carry complete machine. 4 H. P. gasoline motor mounted on frame. One gallon gasoline required to cut 8 to 12 cords of wood. Engine can be used for other work without removing from frame. No gears, cogs, belts or pulleys. Friction clutch prevents breakage if saw pinches. Saw makes about 125 strokes per minute. Will cut any size log up to 6 feet. Sprockets and cranks, etc., made of cast steel. All working parts guaranteed against defects in material and workmanship.

Net cash price for complete machine as shown in cut, $160 f. o. b. Spokane and common points. FOR SALE BY

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$122 Monroe. SPOKANE, WASHINGTON

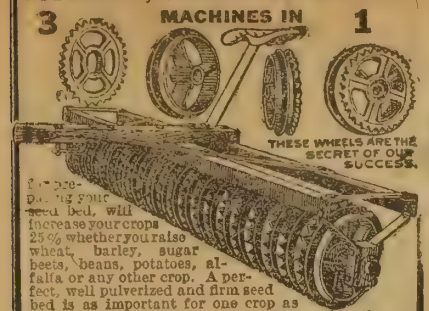
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**WATER PLANTS**

THE DIFFERENT KIND. NO STORED WATER. ALWAYS FRESH AND COOL. DIRECT FROM THE SOURCE. MODERATE COST. GET FREE BOOK WHICH GIVES FULL DETAILS. POST YOURSELF.

**FARM UTILITIES COMPANY**
104 FIFTH ST. NORTH PORTLAND, OREGON

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**USE THE WESTERN**
**PULVERIZER, PACKER AND MULCHER**
**3 MACHINES IN 1**




for pre-paring your seed bed, will increase your crops 25% whether you raise wheat, barley, sugar beets, beans, potatoes, alfalfa or any other crop. A perfect, well pulverized and firm seed bed is as important for one crop as for another. The Western pulverizes and packs as deep as plowed and leaves a loose mulch on top to protect the moisture; saves 1-3 of expensive seed and time, labor and horse power in preparing a seed bed. It is especially adapted for breaking crust and cultivating winter wheat in the spring; or for breaking crust on sugar beets or beans either before or after they are up without injury to the plants.

**MADE IN 12 SIZES, FOR HORSES OR TRACTOR USE; IN 1 AND 3 SECTIONS**

1918 crop will bring war prices; make it a record breaker in size by using the Western. Send for our free illustrated catalog, giving full description of the machine and its work, also dealer's name and much other valuable information.

**Western Land Roller Co., Box 300 Hastings, Neb.**



**J. A. Freeman & Son**
**General Agents.**
***For Western Pulveriser Packer and Mulcher***
(See Advertisement Above.)
**Write for Folder.**
**313 Belmont St., Portland, Ore.**



**Get Your Name on My Mailing List**—I can always quote you Top Market Prices for

# RAW FURS

I pay what I quote for the average run of prime furs. I pay more than I quote for extra fine skins. Send your name and address on a postal card to

**O. L. SLENKER**
**P. O. Box F-2, East Liberty, Ohio.**



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A trial shipment will convince you that we pay the highest prices for Furs, Hides, Pelts, etc. We remit you the day your shipment is received and charge no commission.

*Write today for* **free** *Trapper's Guide No. 20, catalog of trappers' supplies and price list*

**NORTHWESTERN HIDE & FUR CO.**
**Minneapolis, Minn. Est. 1890.**





**PRICES PAID BY US FOR RAW FURS ARE EXTREMELY HIGH**

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**RAW FURS**

I am in the market to buy large quantities of mole, muskrat, coyote and rabbit skins. Send for price list and tags. **OSCAR GARD, 75 Marion Street, Seattle, Wash.**



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Send hides to us for highest cash market price. Check by return mail. References, any bank in Seattle.

**NORTH COAST TANNING CO.**
**Ballard Station, Seattle.**


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# The Wheat Problem

To the Editor: I wish to offer a few suggestions in regard to the situation that is confronting the wheat farmer. By reason of the extremely dry falls of the past two years practically no winter wheat was sown. Last year the spring wheat made a fair crop and with the price prevailing at that time the grower made some money. The season just ended was very dry and a short crop was harvested, some fields are making only three bushels per acre, the general average being about seven bushels. Increased wages, in fact, increased cost of everything, that entered into the production of the crop, made it by far the most expensive crop ever raised in this country. The price of wheat prevailing before and at harvest time, together with the unprecedented demand, led the farmers to expect at least $2.25 per bushel for his wheat, some being sold here at $2.40 per bushel. Then came the price fixing commission and a price of $2.20 per bushel at Chicago was fixed, with a discrimination of 30 cents per bushel freight against northwestern wheat, and the farmers were bitterly disappointed. Our food commission placed a liberal construction on the freight question and a price of about $1.90 was offered at interior points.

A meeting was then called at Portland to protest against what was considered by both grower and business men an unjust discrimination against the northwest and a committee was sent to Washington to take the matter up the authorities there. They agreed upon an advance of 15 cents per bushel over price formerly fixed and the farmer felt better for a few days, thinking he would get at least $2 per bushel for his wheat, but another construction was placed on the freight proposition and again he was disappointed. And the change of grades from those of former years by which wheat that had formerly passed as No. 1 was docked 3 cents per bushel was another cause of complaint. As an illustration of this point I will give you a little of my own experience. I shipped a car of wheat to Portland. The test was 57. Under the rule of former years it would have been docked 1 cent per bushel. Under the present system it was docked 6 cents. These things have worked to cause the wheat grower to look upon the present managers of the wheat game as being decidedly antagonistic to their interest and if, the same unfriendly attitude is to continue they see a still lower price for next year's crop.

We are compelled again to depend on a spring crop and at present are deficient in moisture, therefore the outlook is not promising. The consequence is that men are afraid in the face of vastly increased expenses to take the chance of increasing their farming operations and some outfits that run three or four teams last year are cutting down to two. While the acreage sown the coming year will be about the same as last year, there will be a decided falling off in the next year's acreage, unless something is done to change the morals of the wheat farmer. I know the man in town does not and can not look at this proposition as I have outlined it to you, but if he had in a wheat crop last year, worked hard the entire season and found that instead of getting anything for his work he failed to make expenses by several hundred dollars he would look at it differently and do what a great many wheat growers are doing—quit the game and go to work for the high wages now prevailing and let the other fellow take the chances.

Personally I think the fixing of the price of wheat at the present figure was a grave mistake and wish to submit the following reasons for so thinking: The present bread allowance at the Spokane restaurants is two ounces, but assuming that three and a half ounces are used each meal that would require practically two ounces of flour which at the present retail price of $11.20 per barrel in Othello, Wash., would amount to five-sevenths of a cent. This leads me to believe that the high cost of living is not due to the price of wheat. On the other hand, if I feed an eight-horse team four and a half pounds of wheat each I feed flour enough to supply 192 men for a meal. Therefore, placing a price on wheat that put it into the class with feed grains was a mistake. Not one bushel of wheat should be fed to stock under present conditions, but it is the cheapest feed on the ranch today and more wheat is being fed to stock in Adams county at the present time than is being consumed by its people.

(For obvious reasons the writer of this article wishes his name withheld.)


# Win the War by Preparing the Land, Sowing the Seed and Producing Bigger Crops

**Work in Joint Effort the Soil of the U. S. and Canada—Cooperative Farming in Man Power Necessary to Win the Battle for Liberty.**

The Food Controllers of United States and Canada are asking for greater food production. Scarcely 100,000,000 bushels of wheat can be sent to the allies overseas before the crop harvest. Upon the efforts of the United States and Canada rest the burden of supply.

**Every Available Tillable Acre Must Contribute; Every Available Farmer and Farm Hand Must Assist.**

Western Canada has an enormous acreage to be seeded, but man power is short, and an appeal to the United States allies is for more men for seeding operations.

**Canada's Wheat Production Last Year Was 225,000,000 Bushels; the Demand From Canada Alone, for 1918, is 400,000,000 Bushels.**

To secure this she must have assistance. She has the land, but needs the men. The Government of the United States wants every man who can effectively help to do farm work this year. It wants the land in the United States developed first, of course; but it also wants to help Canada. Whenever we find a man we can spare to Canada's fields after ours are supplied, we want to direct him there. Apply to our Employment service, and we will tell where you can best serve the combined interests.

**Western Canada's help will be required not later than April 5. Wages to competent help, $50 a month and up, board and lodging.**

Those who respond to this appeal will get a warm welcome, good wages, good board, and find comfortable homes. They will get a rate of one cent a mile from Canadian boundary points to destination and return.

For particulars as to routes and places where employment may be had, apply to

**U. S. Employment Service, Dept. of Labor**



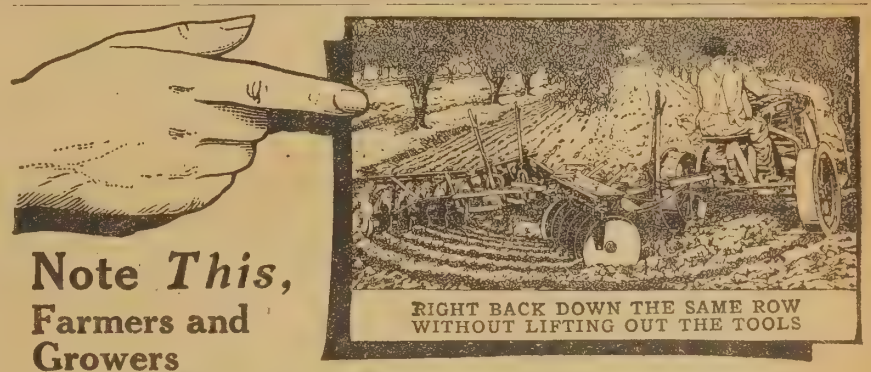
**HIDES** **WOOL, PELTS, MOHAIR, CASCARA BARK**

We do the largest consignment business in the northwest. Equally fair treatment on all shipments, large or small. Returns at full market value mailed same day as goods are received. Trial shipments wanted and appreciated, but are handled as regular shipments and not at inflated values.

**THE H. F. NORTON CO.**

53-55 No. Front St., PORTLAND, ORE. 206 3d Ave. So., SEATTLE, WASH.






**Note *This*, Farmers and Growers**

# "Right-About Face" with FULL POWER!

**Remarkable Performance with Small Tractor**

BEFORE you write out your check for any tractor, note how the Bean TrackPULL turns right around into the same row with *tools down deep all the way, without pivoting, or overloading one side* of the tractor, or doing *anything else* that is injurious, or difficult, or that a tractor shouldn't do. Note how this tractor takes its turn with its *full load*, just as easily at it takes the same load down the *straight-away*. Note the reason for this in this tractor's *single track* with which *it pulls* and *you steer*. See how *easy* it is to steer, and how that great PATENTED SINGLE TRACK FEATURE also makes the TrackPULL Tractor as *flexible as the best team you ever had.*

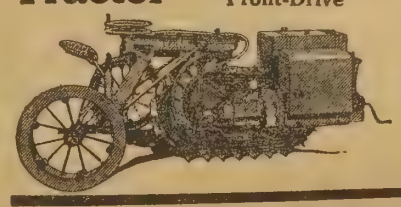
**"Almost Like Animal Intelligence"**

"Mine acts like it understood—almost animal intelligence," is the way one man puts it—and you'll want that, too, in a tractor. For ease of handling, as well as the ability to make right-about-face turns with full power, has *got to be* in the tractor you use in an orchard or vineyard or in the field, where there's a lot more than just straight-away work to do.

Be careful about "acrobat" tractors—for tractors that will spin around at a fair aren't necessarily tractors that will *turn short with a full load in the field.* Make them demonstrate to you with their tools hitched on.

Send right now for the Bean TrackPULL catalog, learn the price of this great machine, and get the name of the nearest factory-agent who will demonstrate how the Bean TrackPULL Tractor does the kind of work that's waiting for it *on your place.* Mail us this coupon, now before you forget it. Find out the truth about tractors right now!

**Bean *TrackPULL* Tractor** With Patented Front-Drive



**Bean Spray Pump Co.,**
1054 W. Julian St., San Jose, Cal.

Please send Tractor Book with full information about the Bean TrackPULL Tractor.

Name .....
Street .....
City .....
County ..... State .....
No. of acres ..... Kind of crops grown .....


**When you write to advertisers be sure to say that you saw their advertisement in this paper.**

# The Master Crime

## *Germany Ravages Helpless Russia*

With a view to appropriating land and supplies and probably slaves to till the soil under despotic control, German is overrunning helpless Russia after the bolsheviki, surely but probably unintentionally, betrayed that land into the hands of the vandals. With the bolsheviki on their knees, arms laid down, armies disbanded or disbanding, German hordes have been ordered to march forward and appropriate all that is before them.

They talk peace, but Germany's terms of peace are little short of a quit-claim deed to Russia and her resources. Here they are in part:

> One hundred and sixty thousand square miles of territory, with a population of 18,000,000 people, and more than $1,500,000,000 indemnity.

In addition to these terms Germany would require the Russian government to cease all war activities and all propaganda of every kind in Germany.

Owing to the complete helplessness of the Russian people, the Germans are marching forward comparatively unretarded, with Petrograd as their objective point.

Reports of the capture of large stores of foodstuffs and munitions have been made, but the greatest advantage to be gained by the invasion of the country is the capture of large areas of agricultural land and men to work them for the production of crops this season. The release of large numbers of Germans held prisoner by the Russians is another advantage, though it is doubtful whether any considerable number could thus be released for work on the French front.

The advantage of large territorial gains and man power would seem to make the end of the war more and more remote. Once Germany has been allowed to retrench herself well into the Russian empire, if she follows out that policy, and her powers of self-maintenance will be practically illimitable until her soldier force is actually wiped out by shot and shell.

What the attitude of the Russians will be as the German invasion gains greater headway is problematical, but it is generally conceded that the most vigorous resistance possible will be made before Petrograd is given up. The resistance likely will be in the nature of guerrilla warfare.

### The Western Front.

What of the western front? Who knows? Who that does know will tell? That the most stupendous battle of the war is pending on the western front is the consensus of opinion. It has been proclaimed far and wide that the German and Austrian forces were planning a gigantic offensive for this spring and that the allies were merely preparing to resist. Some authorities in position to predict have even predicted that the Germans would be victorious in the spring campaign and make again great inroads into France. But there is another sentiment that finds some expression, namely, that the British and French and American armies on the French frontier are not only ready to withstand attack, but are possibly contemplating an allied offensive to surprise the central powers. This sentiment finds some encouragement in the prospect of a portion of the German arms being utilized in the invasion of Russia.

### Pass Railroad Bill.

The United States senate has passed the administration's railroad bill appropriating a revolving fund of half a billion dollars for the federal operation of the roads during the war and providing that the government shall retain control of the roads for 18 months following the conclusion of the war. The measure now has to be acted upon by the lower house of congress. Much debate is being made on the matter of government control after the war. Some congressmen favor the continuation of control by the government indefinitely after peace is concluded.

### Making Rifles.

The ordnance branch of the war department announces that since the United States became involved in the war this country has manufactured over 700,000 modern rifles of the Springfield and Enfield types. It is likewise stated that the manufacture of ammunition has kept pace.

### Build Sub Destroyers.

Henry Ford, automobile manufacturer, is soon to have built a plant for the manufacture of submarine destroyers. The plant will be located at Detroit and will employ no fewer than 10,000 men. The boats will reach the ocean through the Detroit river and the Great Lakes.

### Women Work on Farms.

There are reported to be 1,800,000 women working in agricultural industries in the United States. Of this number about 1,000,000 are colored. The majority of the women workers of both races are in the south.

### Make Smokeless Powder.

The war department announces the letting of contracts for the construction of two smokeless powder plants that will have a capacity of 500,000 pounds of powder each per day. They will have started operations by August, it is stated.

### Jericho Is Captured.

Jericho, that old Bible land city, has been captured by the British army from the Turks after centuries of occupation by the Mohammedan people.

# Growing Demand for Baby Beef



Three Good Types of Baby Beef Animals.

By RICHARD HAMILTON BYRD.

Live stock markets during recent years have experienced a constantly growing demand for well-fattened beef animals weighing from 900 to 1200 pounds. This has been due to the increasing demand by beef consumers for light-weight, high-grade cuts. Such a demand must necessarily be supplied by well-finished animals from 14 to 20 months old, carrying a large percentage of the blood of one of the early maturing beef breeds, usually, that of the Hereford, Aberdeen-Angus or Shorthorn. To distinguish them from animals of other beef classes these yearlings have come to be designated as baby beeves. The preparation for market of this class of beef requires more skill than is necessary in the production of animals marketed at more mature ages, since the growth in the latter is made largely on the cheaper roughages of the farm.

With the growing scarcity of feeder cattle and the advance in value of farm lands the baby-beef industry is of increasing importance and is receiving the attention of farmers in all live stock sections of the country.

Feeders at the present time show an increasing tendency toward finishing off their beef cattle at younger ages. In general this tendency is created by two causes: First, consumers are demanding small, high-quality cuts of meat; second, the cost of producing beef, due to advance in land values, feeds, labor and taxes, has increased to such an extent that feeders and breeders can seldom hold their cattle to advanced ages at a profit. General conditions in the last few years have indicated that no class of beef yet produced more nearly fulfils the requirements of both producer and consumer than baby beef, and the feeding of baby beeves has been increasing in popularity.

In a generally way the following are the advantages in favor of finishing cattle at younger ages rather than waiting an additional year or two before they are placed upon the market, according to S. H. Ray of the bureau of animal industry, department of agriculture.

Young cattle make better gains than older cattle on the same quantity of feed. Yearlings can make 25 to 40 per cent more gain than mature cattle on the same feed. The quantity of feed necessary to make 100 pounds of gain increases with the age of the animal. The herd of cattle on hand at any one time is smaller, since the breeder selling catte as yearlings no longer has steers 2 or 3 years old on his farm. The surplus feed and pasture which become available when the cattle are sold before 2 years of age may be used for maintaining a larger breeding herd, and this provides for the production of a large number of calves. By feeding calves as baby beef the money invested can be turned over in 18 months or less.

Open heifers when finished as baby beef at 900 to 950 pounds sell as well as steers. As a general rule it is better to dispose of them at such weights, although frequently well-finished heifers weighing up to 1050 pounds are not discriminated against. When they are over 2 years of age, however, they seldom sell as well as steers, because heifers and cows carry a great deal of bunched internal fat, which makes them less desirable on the market.

Well-finished beeves when fattened for market under 2 years of age offer greater choice in the matter of selecting the date of marketing. The average consumer prefers the size and quality of the cuts which are obtained from the carcass of a well-bred, highly finished yearling. In addition to high quality, thickness in steaks and other cuts of beef is desired by the consumer, and these can be produced more economically in the well-matured yearling than in any other class of beef animal.

Markets are paying a premium for this type of beef, and the market for baby beef in recent years has been more stable than for any other class of cattle. During the last few years this class of beef has practically had a market of its own, and until packing centers can command a larger supply relatively greater stability in prices for fat yearling beef may prevail. Prime baby beef usually commands a price equal to that of the highest grade of mature fat cattle.

# Buy That "Baby Bond" by Mail Today

"They are the biggest little blow to the kaiser that I know of."

This is the way one man described the war savings and thrift stamps, and he was exactly right. Through them every man, woman, boy or girl in America can actually add a blow to that monster monarch that is covering all Europe with blood and misery. Every time we buy a 25-cent thrift stamp or a $5 war saving stamp we are putting powder in the guns of the boys over there with which to drive Prussianism back across the ravaged lands of Belgium and France. Herewith is printed a coupon by which you can order stamps of either variety direct from this paper without a penny's cost except that of the stamp. The thrift stamp is always 25 cents; the war savings stamp costs $4.14 if bought during the month of March. Fill out the coupon and mail it to The Farmer and The Farmer will send you your stamp or stamps by return mail.

## Clip This Convenient Order Blank

Address all communications concerning thrift or war savings stamps to The Washington Farmer, War Savings Department, Room 26, Review Building, Spokane, Wash.

Remittances may be in any form desired, including personal check.

The Washington Farmer, War Savings Department, Room 26, Review Building, Spokane, Wash.

Gentlemen: I wish to invest in ..... U. S. government thrift stamps at 25 cents each.
(number desired.)

I wish to invest in ..... U. S. war savings stamps at $4.14 each.
(number desired.) March figure.

Amount enclosed $.....

Full Name ..... ..... .....

Town ..... State ..... .....

R. F. D. No. .....

I have already bought.....Stamps and have a.....
(kind of stamp) (card or certificate)

# Put Families on Farms

To the Editor of The Washington Farmer: Many are writing just now of different ways to increase food production. I notice many farmers writing in your valuable farm paper are fearful of shortage in farm help next season and well they should be, owing to the draft and calls for helpers in connection with war needs. Right here I wish to suggest something which would help materially if gone after properly. It is this: Here is a family that could be of more service on the farm than where we are, three boys and myself. My oldest boy is able to do an able-bodied man's work. The other two are able to do very much on the farm. I am a practical farmer and the boys have some experience at farm work. The oldest boy and myself have to support the family of 10 by our days' work. We do not have steady employment in this locality. The two younger boys are not employed at all because they must be able-bodied men to get wages. The idea is to get just such families and the farm together in some way. We would take a farm to rent, everything furnished, or move onto a farm where we could all be employed and some garden ground for raising vegetables for family use. No doubt there are many other families similarly situated. I. P. HOWES.
Grays, Wash.

To The Washington Farmer: Enclosed you will find twenty-five cents for which send me your most helpful magazine, The Washington Farmer. Your paper is very interesting and helpful, and I know it will be of much value to me in my school work.

AGNES ERICKSON.
State College, Pullman, Wn.

# FLORA FLIRT SEEKS TO WIN THE TENOR



Flora Flirt feels very gay—
To the opera she's on her way.



A box close to the stage she gets,
And wears a bunch of violets.



She thinks the music most entrancing,
Likewise the ballet gaily dancing.



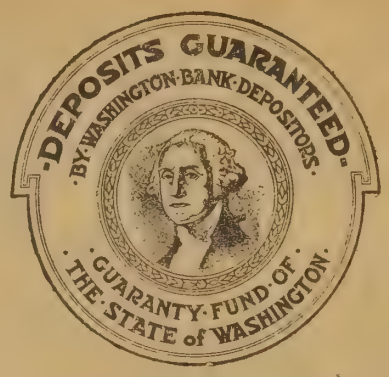
A tenor sings with wondrous art,
And soon has won poor Flora's heart.



She grabs that bunch of violets sweet
To throw them at her hero's feet.



She aims too high, and down his throat
They fly and spoil his highest note!
**The Moral**—Now, girls, to flirt is quite a lark—
**If you don't "overshoot the mark."**




SYMBOL OF SAFETY

# MONEY INSURANCE

To save enough from one's earnings to start a bank account is one thing; to feel secure that one's hard earned money is in safe hands—to know that you can walk into the particular bank that holds your all and draw every cent that belongs to you, together with accrued interest, is another.

This uncertainty is exactly what the Legislature of Washington had in mind when it framed and enacted into law at the 1917 session the Washington Bank Depositors' Bank Guaranty Fund, acknowledged to be the best law in existence for the protection of bank depositors.

The sponsors of the act took as their guide the best features of similar laws in force for many years in the states of North and South Dakota, Nebraska, Kansas, Oklahoma and Texas, resulting in a measure that absolutely insures and protects such depositors as intrust their moneys to banks that are members of the Guaranty Fund.

In fact the Guaranty Fund might truly be termed Money Insurance, for it is just that, differing only from Fire and Life Insurance in that it costs those benefiting absolutely nothing for the protection.

John Skelton Williams, Comptroller of the Currency, in his annual report to congress recommends the enactment of a law to provide for a guarantee of all deposits in National banks where the amount to the credit of each individual is less than five thousand dollars. The State of Washington places no limit under its Guaranty Fund act, every depositor, large and small, being absolutely protected. Mr. Williams evidently realizes that at the present time there is no guaranteed protection of any kind for depositors in National banks.

It is a matter of official record that never has a depositor lost a single cent in Guaranteed banks in any of the states where bank guarantee laws are in force.

Sixty-six state banks of Washington scattered throughout the commonwealth; banks that have proved strong enough to withstand the rigid examination required under the new law; banks that not only must pass the highest test as to their financial standing, but also a close inquiry into moral and ethical standards of banking as well—these have already become members of the Washington Guaranty Fund. Many others have filed their applications to become members and, just as quickly as they can qualify, will be mustered into the ranks of Guaranteed banks.

The Symbol of Safety at the top of this page is adopted for the purpose of distinguishing Guaranty banks. It is YOUR guide to a strong, conservatively managed banking institution.

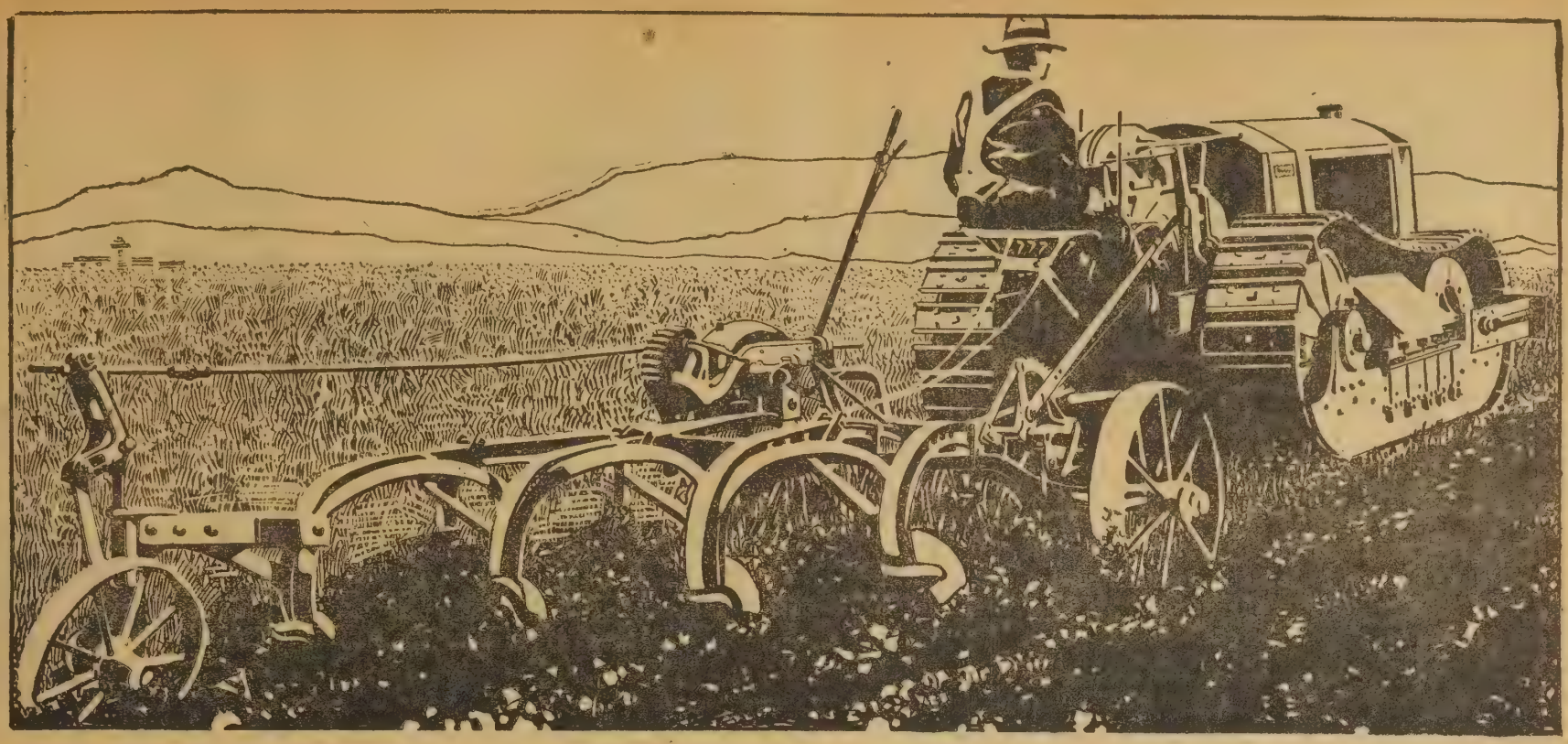
The Guaranty Bank list of Washington includes the following representative banks.

Almira State Bank.
Bank of Stevenson.
Bank of Clallam County, Port Angeles.
Bremerton Trust & Savings Bank.
Ballard Branch, Scandinavian-American Bank, Seattle.
Commercial Bank & Trust Co., Wenatchee.
Commercial Bank, Chesaw.
Chesaw Branch, Bank of Conconully.
Citizens' State Bank, Auburn.
Commercial Bank of Conconully.
Citizens' Bank & Trust Co., Everett.
Citizens' Bank of Bremerton.
Clarke County Bank, Washougal.
Duvall State Bank.
Eltopia State Bank.
Farmers' State Bank, Almira.
Farmers' Bank of Ellensburg.
Farmers' Bank of Krupp.
Farmers' State Bank, St. John.
Farmers' State Bank of Reardan.
Farmers & Merchants' Bank of Centralia.
Farmers' State Bank of Centerville.
Field & Lease, Bankers, Centralia.
First State Bank, Yacolt.
German-American State Bank, Ritzville.
Grant County Bank, Ephrata.
Guardian Trust & Savings Bank, Seattle.
Harrington State Bank.
Hillyard State Bank.
Hunters Exchange Office, Branch Lincoln County State Bank.
Kalama State Bank.
Kittitas State Bank, Kittitas.
Kitsap County Bank, Port Orchard.
Kirkland State Bank.
La Center State Bank.
Lincoln County State Bank, Davenport.
Miners & Merchants Bank, Chelan.
Molson State Bank.
Moxee State Bank, Moxee City.
Naches State Bank.
Napavine State Bank.
Okanogan Branch, Commercial Bank of Conconully.
People's State Bank, Enumclaw.
Pullman State Bank.
Ruff State Bank.
Scandinavian American Bank, Seattle.
Security State Bank, Palouse.
Scandinavian American Bank, Spokane.
Security State Bank, Spokane.
San Juan County Bank, Friday Harbor.
Spokane & Eastern Trust Company, Spokane.
State Bank of Enumclaw.
State Bank of Spangle.
State Bank of Conway.
State Bank of Kent.
State Bank of East Stanwood.
Skagit County Savings Bank & Trust Co., Mount Vernon.
State Bank of Goldendale.
Union Park Bank, Spokane.
Vashon State Bank of Vashon.
Washington Exchange Bank, Vancouver.
Woodland State Bank.
Warden State Bank.
Wheeler State Bank.
Yakima Trust Company, Yakima.
Yakima Valley Bank, Yakima.

## IS YOUR MONEY DEPOSITED IN A GUARANTEED BANK?

LOOK FOR THE "SYMBOL OF SAFETY"

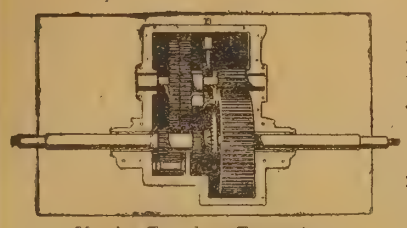
Note: An Official Copy of the Bank Depositors' Guaranty Law May Be Had Free by Addressing L. H. MOORE, State Bank Examiner, Olympia, Wash.



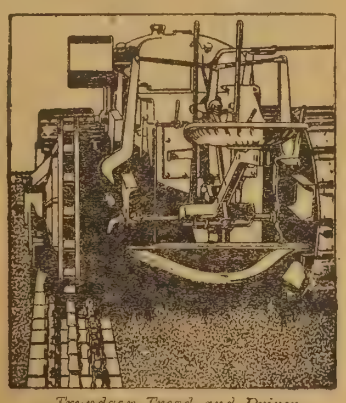
*The Trundaar Tractor is a one-man outfit. Buy this tractor for service, and get what you pay for*

# When every day is worth $1000

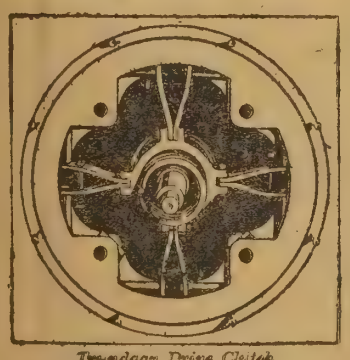
***Many days are worth more than that in busy seasons on the farm. How a Trundaar Tractor will save you many days a year***



*Massive Trundaar Transmission*



*Trundaar Tread and Driver*



*Trundaar Drive Clutch*

Can you remember how many times in your business career you would have cheerfully given $1000 or more just to save a day?

Such occasions are only too frequent in the rush and drive of modern farm work, especially when labor is scarce and weather conditions are uncertain.

A Trundaar Tractor will save you many days in a year, besides enabling you to feel that, whatever the work may be, it is being done quickly and well.

You can work a Trundaar any day in the year, no matter what the weather may be like.

All the accumulated knowledge and experience of 23 years in the tractor industry has been built into the Trundaar Tractor.

### Practical engineering principles develop ideal tractor

Its patented Trundaar Tread grips the ground so that the traction is positive, yet its area of 2160 square inches on the ground prevents soil-packing. If the ground is rough and uneven, traction is not impaired on the Trundaar, owing to the flexible nature and elastic operation of the double three-point suspension—another exclusive Trundaar idea. This suspension also absorbs all shocks and strains so that the power plant and other parts of the tractor remain unaffected.

The Buckeye-Waukesha special tractor engine develops more than enough power for any possible requirement in farm work.

Trundaar owners have cut their fuel bills down to a minimum, due to the Buckeye-Deppé Integrator—exclusive equipment on the Trundaar. This system makes low-grade fuel operate like high-grade gasoline.

Dust cannot possibly affect the Trundaar as every vital part of this scientifically built tractor runs in oil.

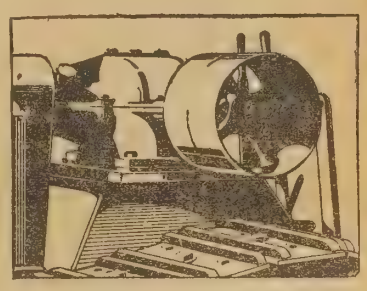
A big, strong belt pulley is conveniently located for stationary work. It is always ready and is quickly connected.

Powerful multiple disc drive clutches control each tread—a new principle in tractor engineering.

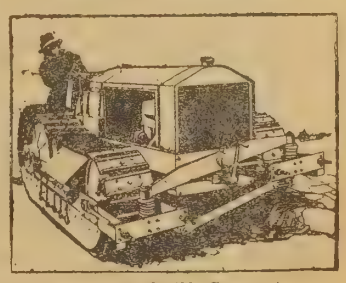
The massive Trundaar transmission is built with a 20 per cent margin of safety so that it is practically wear-proof. This transmission requires no differential and delivers maximum power to the drawbar.

Business farmers are writing us daily for our illustrated advance catalog, which describes the Trundaar in detail. Write today to our nearest distributor for your copy.

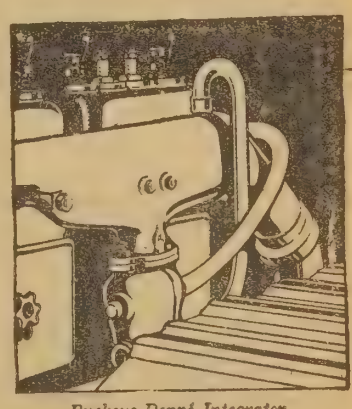
**The Buckeye Manufacturing Co.**
**Anderson, Indiana**



*Trundaar Practical Belt Pulley*



*Trundaar Flexible Suspension*



*Buckeye-Deppé Integrator*

## Distributors for Washington
## LARSON BROTHERS, Inc., Spokane

***You can work a Trundaar Tractor any day in the year***

**Trundaar Tractor**
SPEEDS UP THE BUSINESS OF FARMING

***Provides positive traction without packing the soil***

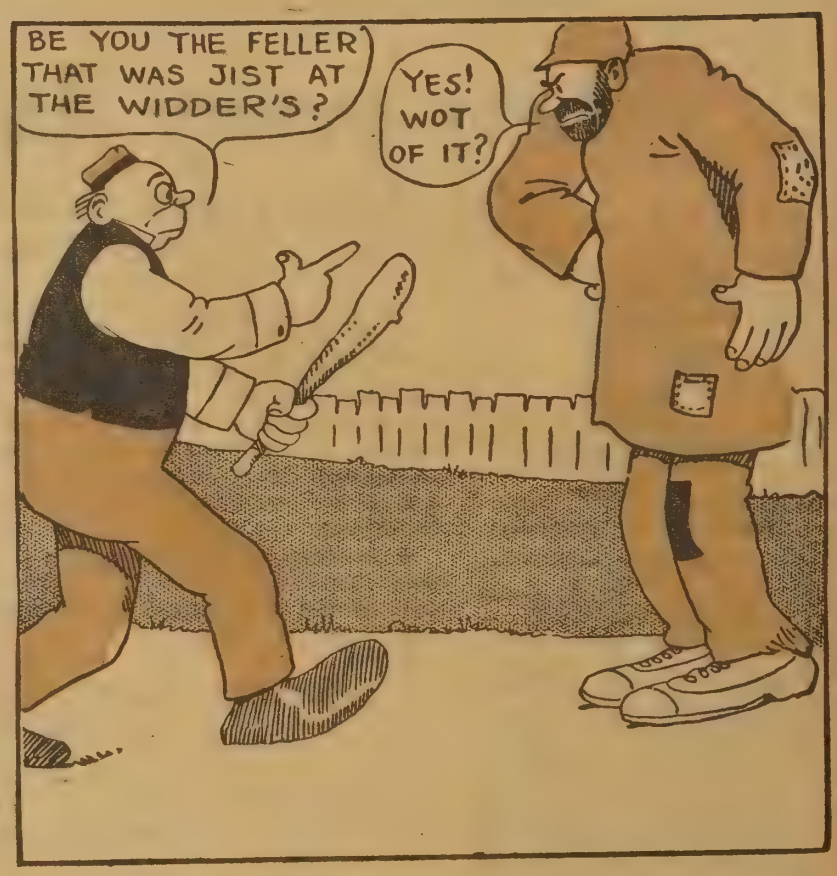
# UNLUCKY LOOIE AVENGES AN INSULT















# To Purchase Seed and Feed

## *Bill in Congress to Appropriate $50,000,000*

The following letter has been received from J. M. Baer, the nonpartizan league congressman from North Dakota, in reply to the campaign which The Farmer has been waging for a food production administrator:

Your letter of January 31, received and will say that I am very much interested in the campaign you are making for national war-time food production administrator.

I did not receive the copy of the issue of The Farmer, but I know that you have a good argument for such an executive.

I have introduced a bill for $50,000,000 to aid the needy farmers who require seed and feed. There are vast stretches in the northwest where there is plenty of land and man-power but the farmers have not sufficient credit to buy seed. This land ought to be utilized or we shall face a world famine. Similar conditions prevail in the southwest where the young stock is being slaughtered and dying off on account of lack of feed. Briefly, the cradle of the cattle industry is being robbed.

My bill is for seed and feed and I think it will be a lifesaver to our armies and the allied armies if the government will take action on it. Mr Hoover appeared before the agricultural committee and showed the need of such legislation. Mr. Herbert Quick, David Lubin, Lord Rhonnda and many others have showed the necessity. I am enclosing a copy of the bill, which, of course will be amended and revised to suit the wisdom of the committee. In fact, I believe that the money should be handled through the federal reserve system.

J. M. BAER.

The following is the text of the bill introduced by Mr. Baer:

**A BILL.**

To appropriate $50,000,000 for the purchase of seed grain and feed for live stock, to be supplied to farmers and stockmen, and to create boards in the respective states to assist in carrying out the provisions of this act.

Be it enacted by the senate and house of representatives of the United States of America in congress assembled, That the governor and two other state officials of the respective states be designated by the president as a state board to investigate into the necessity for federal aid to farmers and stockmen who are unable to cultivate and crop their farms, or maintain their live stock and herds during the year 1918 because of drought or failure of crops during the year 1917. The board so created, and particularly the boards of the states of North Dakota, South Dakota, Montana, Nebraska, Kansas and Texas shall forthwith organize, make provisions and report their findings to the secretary of the department of agriculture and shall do all such other acts and things as may be necessary for the purpose of carrying out the provisions of this act.

Sec. 2. That it shall be the duty of the boards of the respective states and particularly the boards of the states of North Dakota, South Dakota, Montana, Nebraska, Kansas and Texas, where the farmers and stockmen are already severely suffering as a result of drought and crop failure in 1917, to gather data showing the amount of seed grain and feed needed by the farmers and stockmen of their respective states who must have aid and credit in order to cultivate and crop their lands and to maintain their live stock and herds during the year 1918.

Sec. 3. That there is hereby appropriated, out of the funds of the treasury of the United States not otherwise appropriated, the sum of $50,000,000, for the relief of the farmers and stockmen, or so much thereof as may be necesary, $6,000,000 for North Dakota, $4,000,000 for Montana, $3,000,000 for Nebraska, $3,000,000 for South Dakota, $4,000,000 for Kansas, $5,000,000 for Texas, and so much of the remainder for the other states as the secretary of agriculture may deem necessary.

Sec. 4. That the moneys hereby appropriated shall be expended by the secretary of agriculture in the purchase of seed grain and feed and in the necessary expense incurred in carrying out the provisions of this act. The seed grain and feed so purchased shall be sold on credit and distributed to the farmers and stockmen heretofore mentioned at a price not to exceed the cost to the government, the purchaser to give promissory note therefor, payable in one year from date, to the treasurer of the United States, and bearing interest at the rate of 4 per cent per annum.

## Information Bureau

The Farmer will be glad to answer questions of general interest, as well as those of a practical nature, relating to the farm or farm home. There will be no charge for this service. Questions must be signed with your name and postoffice address and will be answered either by personal letter or by publication when of general interest.

Address Farmers' Information Bureau, Room 35 Review building, Spokane, Wash.

How are photographs produced in natural colors? D. P.
Loon Lake, Wash.

A. L. Melander, professor of entomology and head of the department of zoology, Washington State college, gives the following answer to the above question:

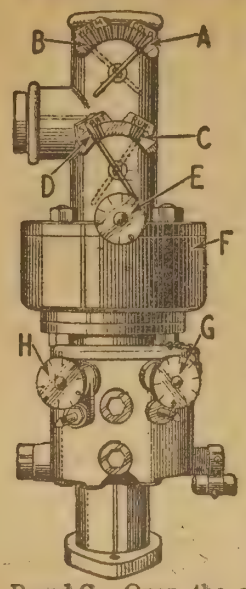
There is no practical way of making photographs in color on paper. There are a number of ways, however, by which they can be easily produced upon glass and then used as transparancies. The most familiar of the color photographs on glass are made by the Lumiere autochrome process. You can purchase Lumiere plates through any dealer in photographic supplies, and these can be used in any plate camera, but will take pictures in color only when the special ray filter is used. The plates are clamped in the plate holder with the glass side facing the lens. The ray filter is put on the lens and exposure made as with an ordinary dry plate. Development is easily done in a very dark room and is usually accompanied by the time method. Following the development the plates are brought out into the open daylight and are placed in the reducing solution which dissolves out the metallic silver first deposited by the first development. When all the silver has been dissolved the plates are then put in the first developer again which brings about the reverasl from negative to positive, and permits the color in the individual starch grains which coat the plate underneath the emulsion to show out and the picture then appears in natural color.


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describing BURTON'S QUALITY SEEDS
FREE on request. Write TODAY—you will find it the most instructive and best illustrated SEED BOOK issued in the WEST.
EXTENSIVE AND INTENSIVE FARMING IS A WAR TIME DUTY
Our SEED BOOK will give you the best and latest information available on WAR GARDENS, and bigger and better emergency crops.
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The MAIL ORDER SEED HOUSE of the WEST
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Over a quarter century as the recognized SEED HEADQUARTERS of the Northwest is our Guarantee of Satisfactory Service to You.
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Borrowers From the
FARM LOAN BANK
can close their loans quickly by having their titles examined and insured by us.
The Land Bank accepts our Title Insurance Policies without examination of the abstract.
It will pay you or the secretary of your association to write us at once for particulars and terms.
Spokane Title Company
(Under State Supervision.)
SPOKANE, WASHINGTON.

Turn Kerosene into Power




MOGUL kerosene engines will be bought for many thousands of farms this year because so many farm power users finally realize that lasting engine satisfaction comes only with perfect kerosene engine design, best materials, long manufacturing experience, and prompt, dependable repair service.

Take a few profitable minutes to glance over this diagram of the patented mixer which enables Mogul engines to operate successfully on kerosene, and *which can be found on no other engine.* To start engine, place the dampers as indicated by A and D. Open the gasoline valve, E, which will supply gasoline from the small bowl, F, used only for starting. After the engine is started, place the dampers in the positions indicated by B and C. Open the valve, G, and the engine will run on kerosene. When the engine is warmed up, supply a little water by opening valve, H, which is needed for the successful using of kerosene by large engines. (No water is used on the smaller size engines.)

The simplicity and effectiveness of this Mogul mixer are of tremendous importance because kerosene is the great economy engine fuel nowadays, cutting power cost in half. Kerosene economy, coupled with the known value of International Harvester machine construction, makes the Mogul the right power for all-around use on any farm. Send for our catalogue and study Mogul details, then see the Mogul engine dealer. Mogul engines are of all styles, ranging in size from 1 to 50-h. p. Write the address below for catalogue.



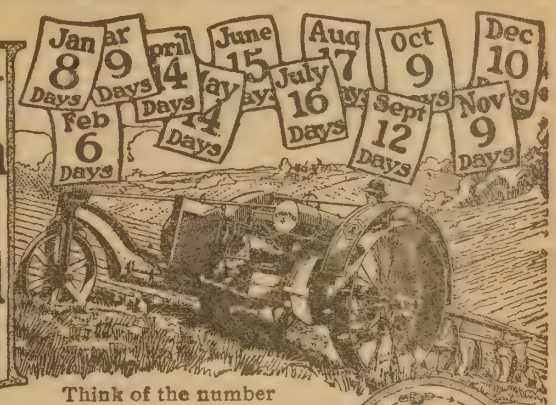
International Harvester Company of America
(Incorporated)
Billings, Mont. Crawford, Neb. Denver, Colo. Helena, Mont.
Los Angeles, Cal. Portland, Ore. Salt Lake City, Utah
San Francisco, Cal. Spokane, Wash.



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Tents $4.25 up | New Uniforms $1.50 up
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SQUASH AND PUMPKIN SEEDS.
We pay the highest market prices for first quality seeds—write us for blank contract and full particulars.
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How many days of man and horse labor could you Save




Think of the number of days you could save out of each month with a La Crosse Happy Farmer Tractor on your farm. Roll two or three days' work into one in plowing and preparing the seed bed, in harvesting and plowing again in the heat of the summer. Save time doing your own silo filling—supply your own power for threshing. You will find many uses every day for a




Turns In Its Tracks
Self-Guiding in the Furrows

La Crosse Happy Farmer Tractor
The Perfect Kerosene Burner




The Happy Farmer is any farmer's tractor. Because it fits any farmer's needs. Powerful enough to pull three 14 inch plows under ordinary conditions, light enough to handle drills, harrows, manure spreader, hay loader, etc., and so economical in first cost and in upkeep that any farmer can afford it.

Burns Kerosene Without Waste

Patented short intake with hot exhaust passing through it completely vaporizes the fuel charge. Twin cylinder motor—each cylinder completely water jacketed means cylinders always round—steady power hour after hour. One-piece unbreakable cast steel annealed frame, 3-point suspension; perfect alignment of bearings.





SEND FOR FOLDER telling all about this modern farm work saver. We have a dealer or distributor near you for prompt service. Address Department 18

LA CROSSE TRACTOR COMPANY
La Crosse, Wisconsin

Model B, 12-24 h.p. $975
Model A, 8-16 h.p. $685

# Prospects for the Live Stock Man

(Continued from page nine.)

need to be replenished from some well-organized source of supply, and of all the horse-producing sections of the world America is one equipped to do a large share in the way of supplying the European need.

Only a few months ago the consumer did not have a clear understanding of the real cost of producing dairy products, and was bitterly opposed, on the whole, to every effort made to get adequate prices for the dairyman. It is very fortunate that this feeling has been overcome, largely due to educational efforts and the dissemination of accurate information concerning production costs. The consumers of dairy products now understand that it is either a question of paying such prices as will enable the dairyman to continue at the business at a reasonable profit or the dairy business will be so checked that milk, butter and cheese can no longer be had in adequate quantities. The response of the market to this necessity of better prices has resulted in butter fat prices today ranging from 48 cents to 75 cents per pound. Seventy-two to 75 cents per pound is certainly satisfactory to the dairyman, and is a price paid by condenseries both in the intermountain and the Coast sections.

The consumers of dairy products now understand that it is either a question of paying such prices as will enable the dairymen to continue at the business at a reasonable profit or the dairy business will be so checked that milk, butter and cheese can no longer be had in adequate quantities.

It is true that there was a time when a considerable number of dairy cattle were being sent to slaughter. Fortunately, the first cattle that were eliminated were those that were unfit and were probably being kept at a loss. On the whole, only a small number of really profitable dairy cows have been sacrificed, and the average of the herds has been raised rather than lowered by the sale movement that prevailed a few weeks ago. The whole dairy industry is in quite stable condition, with fair prices prevailing and with future prospects bright. In this connection let me say that the word that went forth soon after the declaration of war for the saving of all heifer calves was a distinct mistake. The dairy heifer calves that promise well in production should be saved if possible, but dairy steer calves or inferior heifer calves had better be sold for veal than kept one or two years with heavy consumption of feed and with no great prospect of profit to the owner.

The beef cattle situation is now in a state of uncertainty, particularly in regard to the feeder situation. The latest available figures indicate an increase in beef cattle in America during the last year of 1,900,000 head. It is possible that this increase is apparent rather than real, since we have had, in all probability for the first time, a real, adequate live stock census. It is a fact, however, that there have been marketed during the last year at 52 of the leading markets of America 4,400,000 head more of beef cattle than in the preceeding year. There has been taken to the feed lots 782,000 more feeder cattle than in 1916. This might be regarded as a healthy wartime situation were it not for the fact, due to lack of transportant facilities across the Atlantic, that beef supplies are accumulating in storage. Records show 57 per cent more beef in storage than one year ago, and as a result the prices to the producer are far from satisfactory.

The sheep situation has been a wonderfully satisfactory one up to within recent days. The census figures show a gain of 1,300,000 head during the last year. Prices had been quite satisfactory up to within the last month or six weeks, when there was a distinct falling off in the demand for sheep for mutton purposes. Some of the feeders who bought at from 15 cents to as high as 18 cents a pound do not stand much chance of coming out well on the enterprise unless the present situation is much improved. There are probably two reasons for the comparatively little demand for sheep for meat purposes. Meatless day has unquestionably had its influence, but a factor that has been probably much more potent is the mistaken notes that were sounded early in the war. The movement opposing the use of lamb for human food was a mistaken policy. On the other hand, those of us who know and understand the sheep business realize that when the lamb has reached 75 to 90 pounds and is in condition fit for slaughter that lamb has produced the greatest possible amount of human food, taking into consideration the consumption of grass and other feeding stuffs in attaining that result. The keeping of a lamb over to a yearling results in the displacement of a ewe which would bring the same fleece and also is capable of producing one or two lambs the succeeding year to replace lambs that have gone to slaughter. The use of lamb for carcass purposes fits in directly and it is entirely consistent with the program of food conservation.

After the cattle now in feed lots are finally disposed of, which will be completed by middle or late May, the demand will be more active for beef cattle and the price situation in all probability satisfactory.

One movement that has been particularly noticeable during the last year has been the very great increase in the number of small flocks on the farm. This is a healthy movement; one that will increase our wool supplies for army purposes and mutton for feeding our own people, and will also prove a profitable enterprise for the farmer. The men who have invested in these flocks are entitled to every encouragement, and those who give these flocks adequate care and attention are practically certain to find their efforts successful. Outside of the temporary unsatisfactory feature in regard to the demand for and prices paid for lambs from the feed lot the sheep situation is, therefore, satisfactory and the business deserving of extension and development rather than a policy of retrenchment.

There was a time in Idaho history, and quite recently, when central and southern Idaho alone shipped 3200 cars of hogs in a single year. One county had the proud year's record of shipping 500 cars. This situation is entirely different today, as most of you know. One irrigation district has 52 per cent of the hogs of one year ago; another well-known district has 47 per cent of its supply of one year ago and only 23 per cent of the number of two years ago. In some sections of the state there is scarcely one hog where there were 10 two years ago.

The food administration has adopted

# This Cook Book Will Help You Hooverize

It is no sacrifice to Hooverize. It is no sacrifice to eat corn muffins and oat meal mush and fish and rice and fruit and chicken and vegetables. But it is a sacrifice to leave home and friends and mother and sister. It is a sacrifice to cross the ocean where submarines are stealing about seeking to send you to the cold, slimy bottom. It is a sacrifice to go into the wet, muddy trenches by day and roll up at night in a blanket on the cold ground. It is a sacrifice to face, day and night, hour after hour, the bursting shell and the whistling rifle ball. It is a sacrifice to lay down your life.

Read the coupon herewith. Write now, today, for the Hoover cookbook. It will help you save food for the fellow—somebody's son, maybe your own—who is making the supreme sacrifice.

**When writing for this book do not address the state office of the Farmer, but write directly to The Washington Farmer Information Bureau, Washington, D. C. This will prevent a delay of several days in receiving the book, which you ought to have at the earliest date possible.**

The Washington Farmer Information Bureau, Washington, D. C.:

Please find enclosed a two-cent stamp, for which you will send me, entirely free, "The War Cook Book."

Name .....

Postoffice ..... State .....

R. F. D. No. .....Box No. .....


## Sugar! Save It!

Americus Everbearing strawberries are the sweetest known. Just right to eat fresh. Take very little sugar for canning. Plants, $1.50 per 100. $3.00 per 250.

CANYON HOME NURSERY.
Ellensburg, Washington.

## Get the most out of your Cover Crops Plant Now!

Right now is the time to plant your cover crops in your orchards, your groves or vineyards. Get them at once so as to benefit by the winter rains. *We recommend Bitter Clover, Vetch, Burr Clover.*

The heavier your cover crop, the more nitrogen you will put into your soil—the more you will increase its fertility—the larger will be the yield from your trees and vines.

Cover Crops conserve moisture. Plant yours now and be prepared against a dry winter.

Our long experience has taught us what cover crops will succeed best in your locality. Just tell us on a postal what kind of trees or vines you have. We'll give our recommendations and quote prices gladly.

*Our 1918 Garden Guide is ready.* It tells all about Morse Seeds for your fields and garden. To your wife it has a special message about flowers. Write for your copy today—it's free.

C. C. MORSE & CO.
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Be "U. S. Protected" From Dawn to Dark

and know that your feet will be warm, dry and comfortable, however wet and cold the weather, or rough the path. Greater comfort would alone be sufficient inducement to the outdoor worker to buy

## U. S. Rubber Footwear

Longer service which this heavy service, double duty rubber footwear assures you makes the wearing a money-saving proposition.

Comfort and economy go hand in hand in "U. S. Protection" and every pair of the many "U. S." styles bears the U. S. Seal—the trade mark of the largest rubber manufacturer in the world—placed there for your protection. Look for it. For sale everywhere. Your dealer has the style you need, or can get it for you.

United States Rubber Company
New York

U. S. Rubber Footwear

a definite and vigorous policy, and expects the American farmer to lend his efforts for a campaign for increasing swine production. The reason for this is quite apparent. The hog population of America has increased 4,000,000 head during the last year. The meat of the hog can be cured easily, transported long distances in comparatively small space and kept in good condition for a considerable length of time. There are three and one-half times as much hog products used in the American army and for allied army needs as compared

One movement that has been particularly noticeable during the past year has been the very great increase in the number of small flocks on the farm.

with beef. Furthermore, the fat produced by the hog is greatly needed to meet the demands for fats and oils in the British isles and continental Europe. It is, therefore, quite natural to turn to the hog as the readiest and cheapest way of supplying our army and the allied army with meat and other animal products. If one cared to adopt a slogan which would stand for the fundamentals from the food side in the winning of the war the whole needs of the case can be expressed in "wheat and hogs."

There arises immediately in connection with the efforts of any community not only to increase its supply of hogs but to even maintain the present rate of production, the question of proper feeds for hogs. Wheat is being fed in some sections, and we all realize that wheat should not be fed except in a case of absolute necessity. Alfalfa hay and alfalfa pasture, shorts, skimmed milk, buttermilk and possibly imported corn are feeds suggested in the way of offering substitutes for wheat. If the food administration can go so far as to place a definite price on corn it is possible that we will be able to lay corn down here at such a price as will

If one cares to adopt a slogan which would stand for the fundamentals from the food side in the winning of the war the whole needs of the case can be expressed in "Wheat and Hogs."

enable us to finish our hogs in a proper manner for market.

The feeds above mentioned can be used to supplement pasture during the early growing period, and we can grow our hogs to 100 to 150 pounds in a comparatively cheap way. Some such concentrates as field peas, barley, wheat or corn are necessary, however, in order to get the final finish. In this connection I would like to suggest the feasibility of maintaining a heavy wheat acreage and yet take the proper care in planting the crops of the year that we do not lack a reasonable amount of feed for live stock. One of the possibilities in the way of producing splendid hog feed and at the same time help solve the labor problem is the seeding of field peas and possibly other crops for hogging-off purposes. In tests, where the hogs were carefully weighed, from 800 to 900 pounds of pork per acre have been secured in hogging off field peas on the Minidoka tract. With hogs at the present price there are few crops that can be grown on the farm that will yield as much net profit as will field peas used in this way.

In conclusion, I will say that the live stock man must not falter, even though his prospects of heavy or even reasonable profit do not seem assuring. The needs of the nation are clear, and we will all have a distinct duty to do in our particular field and a certain portion of most important national service to perform. The stockman must, therefore, go forward with courage and with confidence and a purpose in his business. It is a distinct satisfaction to see considerable promise of obtaining from the live stock industry a reasonable profit, such as has been laid down as the general rule in handling other lines of business necessary to the government at this time. At the same time we are performing a really patriotic duty of American citizenship.

In horses, dairy cattle, beef cattle, sheep and swine a premium will of course be placed upon good management, efficiency and real skill in live stock breeding, feeding and management. With the exercise of care in this direction the situation at present strongly points to a successful business in a line of work that is of real service and to reasonable profit in the next few years to come.

**Poor Baby!**

Little man, aged 5, talking to baby brother in the cradle said: "You poor little thing, you hasn't got no mudder, only mama, and she works so hard."

To The Washington Farmer: I thank you for writing me your combination offer. I will renew my subscription for The Twice-a-Week Spokesman-Review for one year once more and the new offer for The Washington Farmer for three years.

E. J. SCHIMKE.
Newport, Wash.





# Keep Up the Acreage



AMERICA needs a big 1918 corn crop. Corn is our most important farm product. Added to its many daily uses, it forms a necessary substitute for grains that can be more safely shipped to Europe to feed our army and reduce the food shortage of our allies.

Lack of seed now places the corn crop of the entire Northwest in danger. Careful investigation has failed to locate one-half of the seed that will be needed. By actual tests, a small percentage only has been found fit to plant.

Patriotic farmers can do their part to keep up the needed acreage. They should see that every kernel of seed corn is used to advantage. Wherever there is an extra ear, it should be supplied to those who need it most. The best way to accomplish this is to report all surplus to the nearest bank or state experiment station.

Test your seed corn now. Use the best you can obtain. Much corn of low germination must be planted, but in such cases, sow thickly enough to obtain normal stand. Do not use corn grown too far south to ripen in your locality, unless you want fodder only.

At best there will not be enough seed corn to plant a normal acreage. Substitutes next in value should be selected. For increasing the food supply, sow small grains such as wheat, barley, oats and rye. For increasing the meat supply, sow legumes, grasses, forage, and soiling crops; such as alfalfa, clover, timothy, millets, vetch, fodder corn, and rape.

Plant every available piece of land. Reduce labor and prevent loss by sowing the best seed you can get. Use improved farm machinery to supply labor at lowest cost. Make your farm do its best to help win the war.

NORTHRUP, KING & CO., Seedsmen
United States Food Administration License No. G-32453
MINNEAPOLIS MINNESOTA

# Trappers of the Ozarks

(Continued from page eight.)

ran off a few yards to bark, but the men paid little attention to the noises.

While Ben was broiling some turkey and eating his breakfast, Jodo girted the pack saddle on Spunky. There was a brief kicking spell, and then the various things were packed on the saddle and strapped fast. By this time Ben had finished eating and the little party were soon pushing on into the wilderness again. All the rest of the day, with only a brief halt at noon, they kept tramping.

Late in the day the sky became overcast with clouds. And when the travelers camped for the night there were strong indications of rain. After they had stopped, Jodo, who wanted to try his new rifle, went in quest of meat for supper. While he was absent Ben, with an ax from their pack, cut two forks, drove them into the ground, laid a pole on them and stretched their tent over the pole. After that he ditched around the tent and made preparations for a possible rainstorm. For already the clouds were growing black in the northwest and sometimes the booming of thunder shook the air.

At dusk Jodo returned to camp with a half-grown deer on his shoulder. While skinning the game the two decided that, as a change from broiled meat, they would like a stew. So some of the venison was soon in their little camp kettle and on the fire to cook. Spunky, after being watered at a near-by creek, was tethered to a bush with a small but very strong hair lariat, 50 feet long. As a matter of precaution, the bell was fastened on his neck.

An hour or longer was required to stew the venison properly. And by the time it was done rain was beginning to patter down. After feeding the dogs all they could eat, and more, Ben had tossed a rope over a limb and drawn the deer up out of reach. The pack was already in the tent, and Jodo carried the kettle of venison back into the same shelter. Bose and Tinker sat by the fire till the rain grew hard, then retreated into the tent.

"What's in that package?" Jodo inquired, while they were eating. He was pointing toward their things.

Ben glanced at the package. "That's three pounds of sulphur I bought."

"Sulphur! What in the world do we want with three pounds of sulphur? Do you expect to eat it?"

"No. But I thought if we found time we might try a little experiment."

"How—what?"

"To see if we could make some gunpowder."

"Oh, all right. Yes, I'd like to try that."

It was well that the travelers had shelter. Harder and harder grew the rain, till it became a downpour; and the wind blew till it threatened to tear up the tent pegs.

Having finished their supper, Ben and Jodo spread down their blankets, and after assuring themselves that their powder was double-wrapped, and that everything was keeping dry, they lay down.

The rain was still pattering on the tent when they awoke, and daylight had come. The first thing that Ben noticed, on looking out, was their campfire, still smoldering, and the next thing was Spunky, cropping the grass with an undiminished appetite. The creek was still roaring, though not so loudly, and the whole earth was drenched and every leaf dripping.

The drizzle soon ceased, and not long after that the sky began to clear in the northwest. The travelers rekindled their campfire, and then broiled some venison.

Not very much later, Spunky was saddled, the pack and the pots were on, and the travelers were on the march.

Late in the day the party arrived at a small river.

"Now what?" demanded Jodo, when they had halted on the river bank.

"That's a question. There are indications of more rain. But even if not another drop falls, this stream won't be fordable till some time tomorrow, and maybe not till the morning after. So, if we are to ford it, the only thing is to sit down and wait patiently for the water to run by."

"We can't well swim it with our things. Spunky couldn't swim and carry his pack. And even if he could, he'd get our flour and meal and things wet."

"He certainly would. He can swim all right without his pack, though. And there are other ways of getting our things across."

"What ways, Ben?"

"Well, we could make a raft and raft them across, for one way. And this stream's deep, but not very wide. I believe we could bridge it and carry everything across on the bridge—on a foot-log."

"A foot-log will be best and safest, if we can find a tree that's tall enough, and that will fall in the right direction."

They followed up the river bank half a mile or more, and at length came to a big, straight sycamore that promised well for their purpose. After deciding that it could be made to fall across the stream, they unsaddled Spunky and let him graze, then got the axe out of their pack and fell to chopping. They took turns with the axe, and soon the great tree began to totter on its stump, then to crack and pop, and then to fall.

As the tree went down, Ben and Jodo watched anxiously, first to make sure that it would fall across the stream, and after that to see whether it was long enough to reach the far bank. There was also danger that the long trunk, if it had a weak spot, would be snapped in two by the fall.

But the outcome proved to be exactly what the axmen had hoped for. The huge top crashed down on the far bank, and the trunk stretched a straight bridge between the two banks.

Scarcely was the tree at rest when Bose sprang upon it and went trotting across, with Tinker at his heels.

"Our bridge stands ready! Now to carry our things across," remarked Ben. "But to make sure that she lies solid and immovable, maybe I'd better stroll across first."

He stepped upon the stump, and from that sprang upon the log. Cautiously he started, not knowing at what moment the big log might begin to roll under him. But he crossed safely, and finding the top in a stable position, he turned and came back.

Jodo crossed without mishap, deposited his things on the far bank, and was soon coming back.

Other trips the two made, going and returning safely, till nothing remained to be carried over but the pack saddle itself, and the pots. Ben took up the pots by the rawhide that connected them, and laid them across his shoulder.

"Better be cautious with those sinkers, Ben!"

"Hadn't I, though! If I happened to step off, you could hear me bump the bottom!"

"What a pity Spunky can't walk a log!" Ben exclaimed, when they had the little mule at the water's edge. "There's going to be one trouble with him. This river is swift. By the time he can swim across it, it'll have him 50 yards down stream."



**Shortly after Ben and Jodo had reached the wilds of the Ozarks the latter had one of the stirring experiences of his young life, and it is doubtful if ever a pack donkey had a more exciting chase than that which Spunky, Jodo's mount, had in getting away from the enraged buffalo bull. In fact, he would never have escaped if Ben had not come to the rescue with his flintlock rifle. This incident is told in an early chapter of the story.**

"Then we shall have to turn 'im loose and drive 'im across."

"We could try that. But 10 chances to one he'd drift down a good distance, and then make back for the bank he'd started from. He'd rather go home than travel on, anyhow."

"Could we hold 'im with the lead-rope?"

Ben shook his head. "There'd be danger of pulling his nose under water. But if you can lead him across, I believe I can fasten the lariat around his body and hold him against the current."

"Won't the stream drag you off the log?"

"Not if I keep myself braced. But if it proves too strong for me, I shall just have to let the rope go—that's all."

So the hair-lariat was tied around the mule, just back of his fore legs. Then both men climbed up and started along the log, Jodo holding the leading-rope and Ben the lariat. The water and the bank were almost on a level, but the mule had decided objections to plunging in. After much urging, he laid his ears down angrily, doubled himself up, and jumped as far out into the stream as he could. He disappeared altogether, but soon bobbed up. Then he went swimming by lungés, as if doing some kicking under the water.

The swift current boiled noisily against him, and tried hard to drag the little fellow down stream. But Ben threw himself back on the hair rope and held him in spite of the current. And thus, Jodo leading and Ben holding, they gradually towed little Longears across the river. At the far bank they had to work nearly a hundred yards down stream before he could find a sloping place to climb out.

Not a great while later Spunky had been saddled and packed and the travelers were pushing on. A few miles beyond the river they came to a well-beaten trail which looked much like a cattle path.

"At last!" exclaimed Ben, and turned into it.

"What's this?"

"An Indian trail—a hunting trail."

A mile or two farther on they came to a low place, where a pond of muddy rainwater covered the path. While the party were passing around the pond, the mule's small, sharp-hoofed feet cut through a thin turf, and he sank knee-deep into a treacherous bog. Furiously he struggled, but, weighted by his pack, only made his condition worse. Before any assistance could be given him, his short legs had disappeared and his body was resting on the mud. Now he was past struggling.

(To be continued)



**It is told in chapter 11 of this story how the two young hunters became captives in the hands of the Osage Indians, and how they were kept for days in a wigwam with red-skinned guards preventing even so much as a look out at their surroundings. Under these circumstances, imagine their feeling when a big hand suddenly appeared before their faces, thrust through the buffalo flap of the wigwam. What did it mean, this mysterious intrusion of the hand of an unknown Indian? Was it a friendly or a hostile sign? It was natural that they should consider it the latter, but it did not prove so. It was the hand of an Osage squaw, and day after day during their captivity it came and supplied them with buffalo meat, venison and parched corn. And the old squaw later did something that the boys had occasion to remember to their dying days.**

# Crops for the Orchard

(Continued from page fifteen.)

and rape. This will make most excellent hog feed in the fall and winter. In orchards six or eight years of age, which are not bearing heavily but which are very vigorous, grain is the ideal crop. Such grains as barley and oats can be sown for hog feed and the hogs can harvest such grains to very good advantage.

Another crop which should receive more consideration from the orchardist is buckwheat. This crop allows for late seeding. It should be put in an orchard where climatic conditions have ruined the crop for the coming year. It will grow with a relatively small amount of moisture and can be handled fairly easily among the trees and is a good cash crop and a good substitute for wheat in our food ration. A much larger amount of buckwheat should be raised among the orchardists than has ever been raised before. The buckwheat, in addition, has a tendency on the heavier soils to make them lighter and less compact and improve their physical condition.

Orchardists should not neglect the possibilities of sheep feeding. Right now in many orchards in western and southern Oregon there is most excellent sheep feed. Sheep could be turned into these orchards and could be allowed to run until about the time of the spring plowing. Of course if the ground is poorly drained and too heavy this practice might be questioned, but in the majority of orchards this is not true and mild winter has given a wonderful amount of feed which could be turned into mutton and wool. Orchards which have very good cover crops will support sheep at this time to very good advantage and the manure from the sheep will compensate to a large extent for the loss of organic matter. If sheep injure trees they must be removed, but this seems to be the exception where there is plenty of feed.

Where orchards are mature and in bearing and are unirrigated there is practically nothing that can be grown to advantage unless one could pasture off some of the cover crops this spring. In irrigated districts where alfalfa and clover can be grown abundantly, sheep can be used to good advantage.

In all these practices, however, one should watch the trees carefully to see that there is no injury by the animals or by having all the moisture and food taken away from them.

## Reservoir Dams in Tunis.

Already the French are looking forward to the rapid development of the province of Tunis in Africa. According to a civil engineer who has been investigating the matter there are about 35 localities in that country where dams could be constructed, with reservoir capacities ranging from 3,000,000 to 400,000,000 cubic meters, and water power ranging from 30 to 6000 horsepower of continuous energy. The engineering difficulties are stated to be small in comparison with those of dams already built in Europe and the United States, and the utilization of the water for irrigation, electrical power, and in one case canal navigation is estimated to furnish a good margin of profit. The numerous ruins of Roman dams found in Tunis show by what methods the country became "the granary of Rome" under the empire, and the ruins of large cities, with coliseums, baths and temples of great size standing in what are now bared plains, are evidence of the success of the organized methods of irrigation of those ancient times.

## Do You Know That

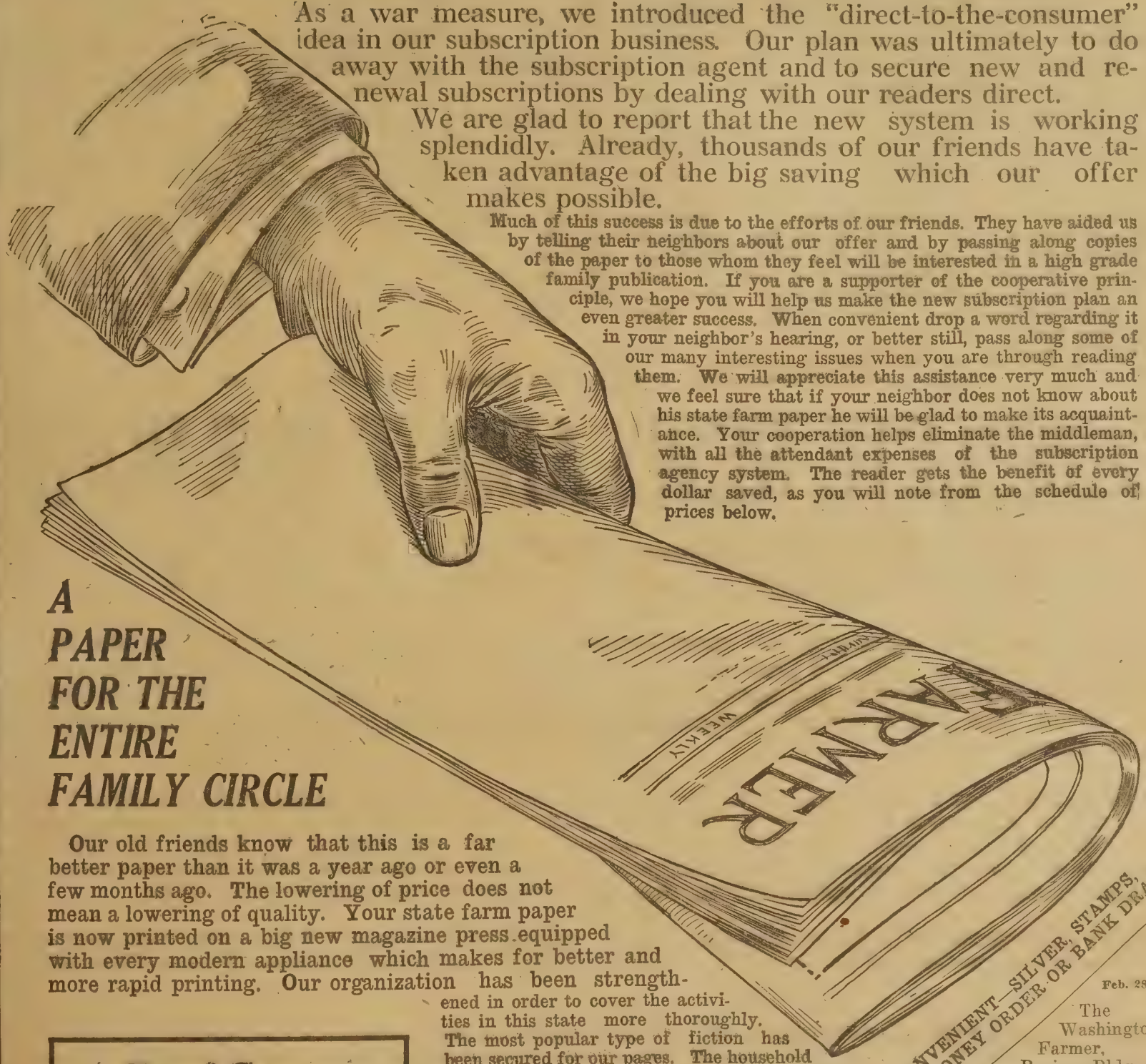
The United States is appropriating $20,000,000,000 for uses in carrying on the war against Germany?

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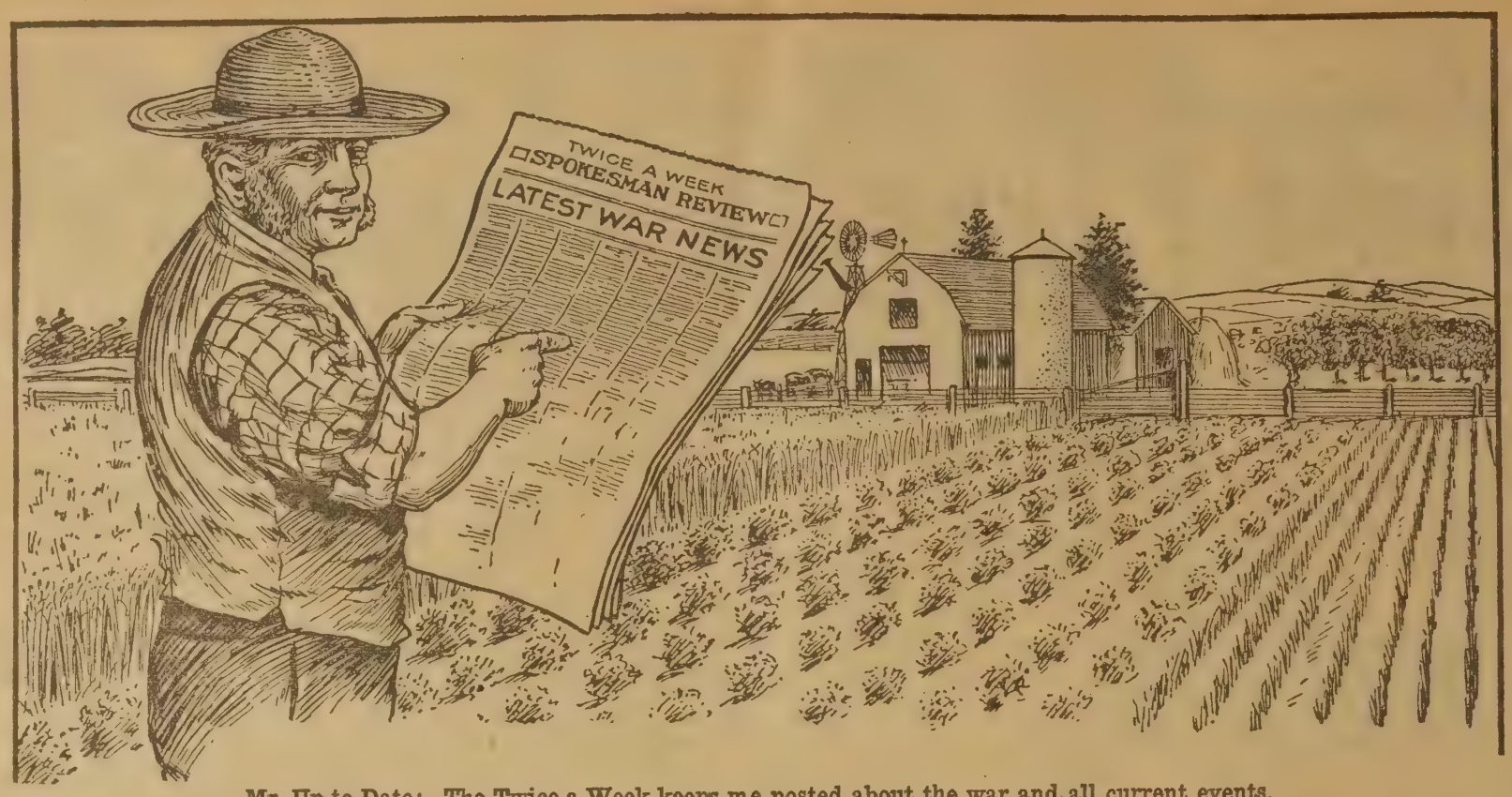
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If any of the young men you know are killed, injured, or taken prisoner on any of the battle fronts, you will be given the information in The Twice-a-Week Spokesman-Review as soon as it is issued by the military officals.

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# All the World's a Stage, and All the Men and Women Merely Players

## German Crown Prince.



The German crown prince has telegraphed his congratulations to the different airdromes in Germany on the occasion of the 100th air raid on London. These raids have resulted in the killing of hundreds of men, women and children.

## Guns Roar, but School Goes On



(Copyright—Com. on Public Information, Supplied by I. N. S.)

The old teacher of a little school for peasant children in Belgium is shown in the above photograph gathering wood to keep her pupils in comfort while they are in her care. The little school has been damaged by gunfire, but it keeps, although the roar of the big guns can always be heard.

## Scotch Nurse in U. S.



Miss Kathleen Burke of the Scottish women's hospital has arrived in this country on her second visit to raise funds for the Scottish hospitals.

## New Winter Outfit of Sailors



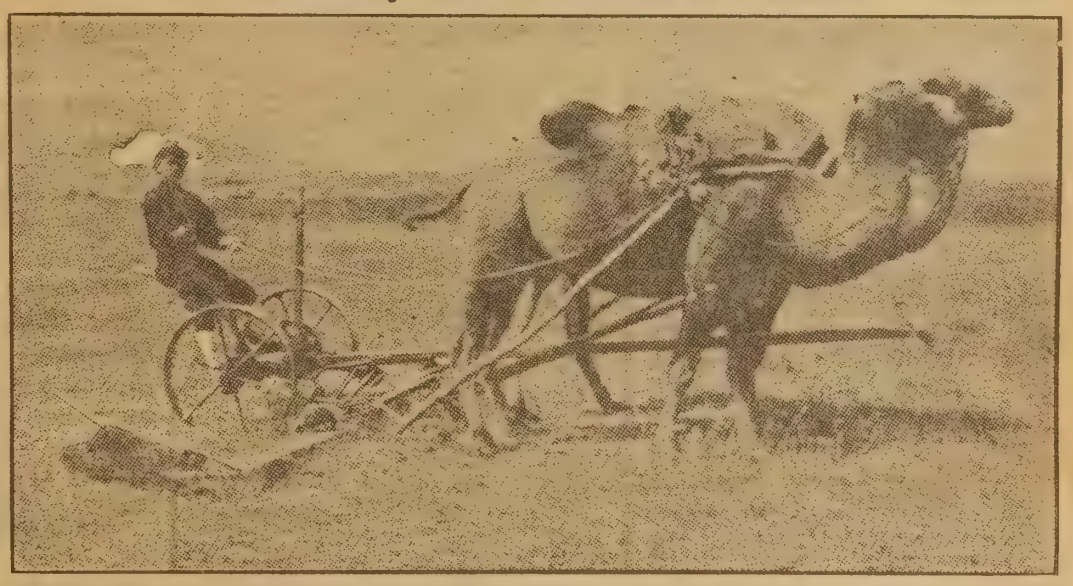
Here is a photograph of one of Uncle Sam's fighting Jackies on lookout duty while at sea. Notice the new winter outfit, which includes a life belt, in case that the Jackie is washed overboard by the high seas that roll continuously over the ship.

## Trying to Scare Everybody to Death




—Wichita Eagle.

## Dromedary Used as Draft Animal



Modern methods and machinery have not been introduced to any measurable extent in Siberia. The picture shows dromedaries being used as draft animals. The picture is taken from Harvest Scenes of the World issued by the International Harvest company's service bureau.

## Plowing in Ancient Days in Egypt



The picture shows the way plowing was done in Egypt long ago. The early Colonial farmer plowed in much the same primitive manner with a wooden plow, sowed his grain broadcast by hand, harvested his crop with a scythe, and threshed the grain on the barn floor with a flail. The picture is taken from Harvest Scenes of the World.

# Magazine Department of The Washington Farmer

## What a Farmer Thinks of Things

It is up to the Farmer to keep its readers informed of the trend of thought among farmers in all parts of the country, as well as in our own state. In a letter written to the editor of the Pittsburg Dispatch a Pennsylvania farmer speaks out his convictions freely:

After a careful review of the facts published since we went into the war, to my mind, the big outstanding features are the efficiency shown by the naval department and farmers, and the comparative lack of efficiency every other part of our national machinery has shown. Didn't the farmers, with the greatest shortage of labor ever known, respond to President Wilson's call with record crops of everything but wheat? And it was in the ground and could not be increased until another crop year. We gave the country the greatest supply of foodstuffs on record. How were they handled, and who was responsible? For instance, the mill where I sold my wheat paid $2 for mixed and $2.10 for red wheat, charged me $12.75 a barrel for flour, and I hauled it from the mill, while they sold a barrel to a storekeeper and delivered it a mile from the mill for $12. I have a dairy and have to have protein feed for the cows. I raised corn; oats and wheat. Corn is 7 per cent protein, oats 9 per cent and wheat 14 per cent. I could sell corn at home for $2.50 per bushel. To get $2 for the wheat I had to haul it 12 miles. Then I would have to come home and go 10 miles in the opposite direction to get oil meal or cottonseed meal at $62 per ton to supply the protein I had sold in the wheat. It amounted to this: I could stay at home, sell the corn and grind the wheat for the cows, make 50 cents per bushel on the wheat and save the long haul of heavy loads. What would any business man you know have done under the circumstances? Do you think it was patriotism or lack of business intelligence that caused me to haul the wheat to the mill when I knew the exorbitant price I paid for the cottonseed meal was due to a willingness to allow profiteering, or incompetence on the part of the food controller. I leave it to you to guess what the foreign element on farms and the pacifist and pro-German farmers have done under these circumstances.

How many wheatless days will it take for you, and your staff, to save enough wheat to make up the hundred bushels some Polish farmer ground for feed because the price of cottonseed meal was not controlled. After the farmers overworked themselves early and late to raise larger crops, doesn't it take a lot of brass to ask them to make sacrifices to prevent their efforts from being nullified by official incompetency.

I am going to confess for myself and a lot of other farmers I have talked with, to a lack of confidence in the administration. President Wilson was elected by the pacifist vote, because "He kept us out of war," and the labor vote obtained through the medium of the Adamson law. I don't believe you will dispute the statement that the people who are strong supporters of the war—I mean from conviction not policy—are not the people who voted for President Wilson.

Many of us think the delay in adopting and contracting for armament and supplies was due to auto-intoxication caused by pacifist germs still hidden in the administrative body.

I believe the farmers generally consider the attitude of the administration toward organized labor as the greatest weakness of the United States in prosecuting the war. If the war continues two or three years farmers expect to see labor making demands for more pay from time to time, getting it; and eventually demanding a six-hour day with eight-hour pay, and a continued effort to make a lower cost of living by government regulation of prices. We thank heaven for a congressional election next fall. Now, don's get me wrong. I'm not a political sorehead, but an independent nonpartizan voter. As witness, I am a reader of The Dispatch. If the government makes the price of the farmers' produce it is fixing the price of his labor, and therefore should fix the wages of industrial labor.

The farmers are the only laborers that are a vital force in the prosecution of the war that have stuck to their post and made good without threat of strike for more pay or shorter hours. I would like to say to those in control of the government: The farms are the foundation of our national power; don't discriminate against us. If shipbuilding, transportation and the war department had been as faithfully and efficiently handled as the farms, not only Uncle Sam, but our allies as well, would have cause for rejoicing.

There will probably be a national federation of farmers some day and, as the precedent is now established, maybe some administration seeking reelection will push a law through congress to enable farmers to get as much pay for an hour of labor as is paid in other lines of industry. Or, in other words, give us a square deal.

I am for winning the war, not by diplomacy or parleying, but by walking all over Germany until she yells so the whole world will know she is whipped. I have been gradually getting that feeling ever since they tried, or showed an inclination to try to interfere with Dewey at Manila.

My grandfather was born at Wittenberg, Prussia, and believe I know what they need.

I would like to say to the administration—Quit playing to the grandstand and play to win the game.

To congress—Quit playing politics and attend to business.

To the food and fuel administrators—Shut up and get busy.

To the newspapers—When any 22-caliber officials want to get some personal advertising into your columns camouflaged as news, tell them to conduct their offices so ably that the public will notice them.

To the workers on shipbuilding—Forget you are putting in time at so much per hour, and remember every extra effort is saving lives.

To the railroad man—Don't be throwing monkey wrenches in the gears; buck up and haul freight.

To the coal miner—Don't be afraid you are not appreciated; you are moving the world.

To the farmer—Don't be yellow; stick it out. What if help is scarce; there's a good fight left in you.

For myself—I am going to try just as hard or harder than last year. I raised big crops, and didn't make enough over expenses to buy a few records for the Victrola at Christmas, while the industrial workers around me could buy anything they wanted, from barrels of beer to automobiles. But I'm not going to quit till the kaiser does.

I wrote this to you personally, but you may publish it if you wish, as I have the courage of my convictions, even when it takes money out of my pocket, or skin off my nose. Your for winning the war. L. W. SHOUP.

McKees Rocks, Feb. 7, 1918.

### Cattle in North Dakota.

Any one who believes that the day of the cattle king has passed in North Dakota is invited to take note of the fact that C. P. Burnstad, owner of the largest individual ranch in North Dakota, is to be found within 80 miles of the state capitol, in almost the center of the state, and that he is absolute lord of 33,820 acres of land; stands at the head of a clan of 35 of the doughtiest riders the cow country has ever produced, and has on hoof 5000 head of cattle, 300 horses and 1200 sheep, not to mention a general store, an automobile agency and sundry other little enterprises included in the town which bears his name.

## Community Farms

Canada expects a stream of immigrants at the close of the European war, and the government of New Brunswick already is preparing to provide suitable settlement areas for those who may elect to make their homes in this province. A provincial advisory board has been created.

The New Brunswick government proposes that when a block of land is finally accepted, it shall be surveyed and laid out according to a special pan. The railroad will pass through it diagonally, and two main roads will cross it at right angles to each other. The railroad will serve as a base line for lots, with a corresponding line for the base on the other side of the block. Every farm will commence at the main road and run back to one of the base lines. No farm will have land on both sides of the track. Each block or community is to have at its central point a model farm, managed by a practical farmer placed there by the government. This farm will produce the seeds required by the surrounding farmers.

The land in each community will be divided into sections ranging from 10 to 100 acres each. The government proposes to sell these farms at actual cost, on easy terms. Each purchaser will be required to pay 10 per cent down and will be given 20 years to clear the remainder. The government will erect a house and a barn and dig a well on each farm. The purchaser will furnish his own implements, with the exception of certain special appliances to be shared by the whole community and loaned by the central model farm.

## It Depends on the Man

### *If You Want a Good Time Take It With You*

**By Granville Lowther.**

In every field of industry, in every profession, in every department of life, success depends on the man. In every sphere there have been successes and failures with averages in between. There are enough uncertainties in life, enough obstacles in nature, enough difficult problems to solve, and so much that can only be learned by careful study and observation, that the man who will not think will fail, while the man who will not put his energy and soul into it will only become an average man in his business. It is estimated that ninety per cent of all the business men fail some time during their business career. It is estimated that of the number who fail and who are above fifty years of age, not one in four thousand ever recover from their failures, in so far as to be considered successful in the future.

In traveling over a country, or viewing a landscape, the pleasure derived from it depends on what the man is. In reading a book or visiting a library, the good we get out of it depends on what we take with us. In visiting an art gallery or listening to music, the pleasure depends on what we are. If we are going out for a picnic or a pleasure drive, the way to have a good time is to take it with us.

I have traveled over a good many sections of country, talking with farmers, fruit growers and others, and have invariably found in every community I have visited persons who are cheerful and happy and others who were gloomy and despondent. Two men may be living side by side with exactly the same environment, tilling the same kind of land, growing the same kind of fruit, and marketing at the same prices, the one will be happy and the other miserable. If you want a good time take it with you.

## SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

## How to Care for Your Feet---Exercises Strengthen Them



Dr. Hirshberg

To have a perfect enunciation and a speech free from defects, there must be perfect harmony between the speech and voice apparatus, perfect mind control and deep breathing from the diaphragm. When these conditions are not present there is chaos which causes lisping, stammering, stuttering, agitophasia—that is, excessive rapidity of speech which causes omission of syllables, slurring and otherwise mutilating the sounds.

Foremost among these are stuttering and stammering. They do not come from malformation of the organs of speech and voice, but from the incorrect use of these organs, and the interference of the action of certain muscles as well as from imperfect harmony.

Just as a little child learns to pronounce its first short words, so must he who suffers from speech defect be taught. He must—after training by such a method as that suggested by Professor Cadwallader of Cleveland—articulate without conscious effort. Just as a person swallows food with an involuntary action, so the words must flow smoothly forth.

Some excellent rules for treatment to correct impeded speech are:

Training the muscles of speech through the sense of touch at the points at which they meet when speaking.

Eliminating monotone.

Breath control from the diaphragm.

Exercises in short phrases to eliminate rapid, continuous speech and to prevent talking when the breath is exhausted.

Retaining new perfection in speech by reading aloud and conversation.

**Training Speech Muscles.**

In the training of speech muscles letters are first pronounced, then words and phrases. Each letter of the alphabet is carefully spoken. B should be made with a light meeting of the lips and the contact broken as quickly as possible. This invokes the entire power of the jaw, lips, tongue and throat. M, P, B, W, with the lips, slightly touching each other, and the jaw, tongue and throat at rest. The gutturals, K, Q, G and the hard C are made in the throat, with lips, jaw and tongue in nonactivity.

In the correction of speech deep breathing plays a major role. This must be practised to relieve the vocal cords of the duty of controlling the breath and the inevitable throat clutch. These deep-breathing exercises are taken in this manner:

Stand erect in the ordinary position of "attention," chest high and active while taking in breath, expand at the waist with diaphragmic muscles. Hold the breath while counting 20. Then slowly increase by gradual degrees to 40. The sensation of tightness and fulness in the throat experienced when first taking these exercises will pass away after you have become accustomed to them.

The monotone—a common disturbance of speech—is corrected, according to Professor Cadwallader's method, by conversation and reading aloud. The passages to be read are marked with the proper signs to tell whether the voice is to be raised or lowered.

In the treatment of small children picture books and cards are used. The mother or guardian should come with the child and thoroughly understand the treatment so it can be carried on at home all the time. Rules and tasks are repulsive to a child, therefore the treatment must be carried on by games, so that the child is unconsciously taught.

**Careful Work Necessary.**

"How long will it take to cure me?" can be answered only by telling the patient that this depends upon the responsiveness of the abnormal speech-conditions, the pupil's industry, his patience and perseverance. The cure does not lie in the knowledge of the treatment, but in the diligent perseverance of the afflicted person to practise the methods.

To eliminate all imperfections of the speech and voice, the instructor must be a voice specialist as well as a speech specialist. It is impossible to eliminate such imperfections without preserving and training the singing voice as well as speaking voice. Those who fail to do this acquire and develop weak and husky voices.

Class work in schools for stammering doesn't correct the defect, it is through the study and application of the methods taught that the individual obtains perfection in speech.

# Food Shortage in Sight

## *Every Day Adds to Gravity of the Situation*

Every succeeding day for the last two months has added to the gravity of the food production situation for 1918. Every day it has become more and more important that a national war-time food production administrator should be putting in his 16 or 18 hours of war-time activity.

A movement for the immediate creation of the office of a national war-time food production administrator was launched in Spokane December 29, 1917, when a telegram was sent to President Wilson declaring:

The crisis demands the immediate appointment of the ablest available man in the country as national war-time food production administrator, who will fire the imagination of all the people, consumer as well as producer, to the supreme necessity of increased food production, and who will establish far-reaching cooperation with the agricultural department, agricultural colleges and farmers in all sections of the country in meeting their war-time food production difficulties, just as Hoover has brought home to every family the need of food conservation, and just as the Red Cross campaign has swept the entire nation under the leadership of Davison.

Many men of eminence in the nation, as readers of the Farmer well know, have indorsed this movement.

Only recently Samuel Fraser, a Genesee (N. Y.) farmer, the spokesman for a delegation of farmers, told Secretary Houston of the United States department of agriculture that famine threatens the land in 1918. As a result of their appeal to the secretary Mr. Fraser says they were told "that they should be hopeful and talk patriotic." "The growing of food for 1918," says Mr. Fraser, "is one of the most serious problems controlling the world today. Awake or we perish! We have basked in fancied security long enough."

Only a few days ago President Jacob Gould Schurman of Cornell university declared before a gathering of farmers that "of all the great problems of this colossal war, the food problem is now the most important," emphasizing this fact with the warning that "the nation is confronted with a danger of starvation in the next 12 months," and that "the energies of our farmers are paralyzed by price fixing and the fear of price fixing."

And here is an editorial from the Country Gentleman of February 16:

### Still Planning.

We don't know!
We can't tell!
We are planning!

The department of agriculture has not as yet taken out patent rights on the above phrases, but apparently it has standardized them as pat replies to all pilgrims seeking general or specific information wherewith to render service in the 1918 food drive.

Nine months ago the department of agriculture announced that it was planning in a big constructive way—

To help solve the farm labor problem.
To help solve the seed problem.
To help solve the fertilizer problem.
To help solve the farm machinery problem.

To make an intensive food survey that would show us this spring just where we stood on food reserve and food production needs.

To work out a definite plan for war-time food production.

To reshape and improve the department's public information service.

A large order, yes; but with a fund of $40,000,000 to draw on and a staff of 20,000 trained workers to serve, we are amply justified in expecting both big plans and big accomplishments. We have been expectant; likewise patient. And as plowing time approaches and we hear, growing increasingly urgent, the call for more crops and still more crops, we are inclined to ask for a showdown.

We are bit fed up on plans, plans, plans; optimistic conjectures; cavalier evasions; that venerable and tottering subterfuge: "It's too early to announce results, but presently we'll do a bulletin on it." Really, it would cheer us infinitely to hear of something done and doing.

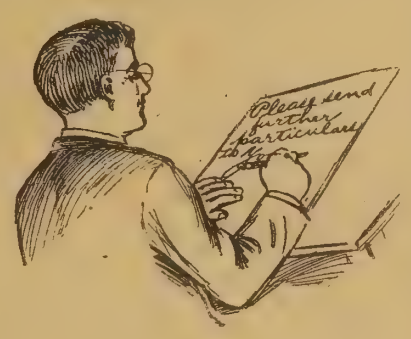
It would be mighty stimulating these days to see something big and upstanding, with hairy chest, smashing big arms, unafraid of sweat and dust, emerge vigorously from the department of agriculture and shout in a he-man's voice: "Come on, boys, I've got the tools and the seed and the how-to-do-it dope; let's swing at it and get it done. I'll help you find a market for every peck you can raise at a price a little better than worth while." There'd be a wholesome humanness about such a sensation.

But, alas! Nothing of the sort seems to be on the cards. The department of agriculture remains a hidebound bureaucracy, muffled to the eyebrows in academic seclusiveness and scientific secretiveness. Invade not its high-browed portals and disturb not its dignified and heavy-thinking functionaries and factotums, for about all the satisfaction likely to accrue from your efforts will be as stated above:

We don't know!
We can't tell!
We are planning!


## Advertising Food Product Doubled Size of Package and Lowered Cost

"We believe that advertising actually reduces cost to the consumer, and our experience proves it," says the advertising manager of a widely-advertised breakfast food. "When our produce was first put on the market the package was only about two-thirds its present size and sold for 15 cents. Advertising so stimulated demand as to justify larger and more systematic production and more economical manufacturing and selling methods, directly resulting in almost doubling the size of the package, and at the same time justifying us in reducing the price to 10 cents."




Yes, advertising has a strong tendency to lower the cost of manufactured articles of all kinds. Even more important, it gives the buyer the assurance of quality. If a manufacturer or dealer advertises a claim, there is no backing down; he must stand by his printed statement.

In addition, the reliability of every advertisement appearing in this paper is guaranteed, making your assurance of fair dealing doubly sure. Note the iron-clad nature of this guarantee on our editorial page. Then, why not write our advertisers to tell you more about the articles they have for sale.


# Triplet Wheat

## It Is a True Winter Variety

To the Editor of The Washington Farmer: I would appreciate it if you would make a statement in your next issue to the reader somewhat as follows: "The new variety of wheat called Triplet, which was discussed at the meeting of the Washington Grain Growers', Shippers and Millers' association, is a true winter variety and will not mature grain if planted in the spring. While it has shown a remarkable yield in both field and nursery trials at Pullman, little is known concerning its adaptability to other sections of the state. It should be grown only in an experimental way for at least two or three years before being recommended anywhere outside of the Palouse country. The college has about 20 acres of this variety for the coming harvest. The seed will probably be handled through the county agents of the various wheat producing countries for experimental tests in 1918 and 1919." E. F. GAINES.

Instructor in Farm Crops.

Washington State College, Pullman, Wash.


# DIRECT from the PRODUCER to the CONSUMER

## AN UNEQUALED BUILDING SERVICE IS OFFERED TO THE PUBLIC AT THE TOWNS SHOWN ON THIS MAP

BLUE PRINTED WORKING PLANS covering any type of wood constructed buildings, together with an itemized list of all the necessary material GUARANTEED to complete the building, prepared under the personal supervision of one of the most efficient Architectural Engineers in the West, are offered ABSOLUTELY FREE to purchasers of **Potlatch Quality Lumber.**

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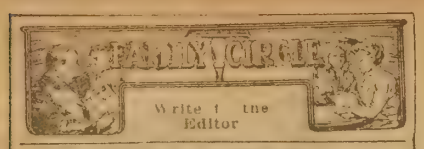
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ALICE W. BARLAND,
Editorial Contributor.

# Women Organize

## Every Locality to Be Represented

The organization of a council of women in every county of every state of the nation, to work in every district and community of each respective county is part of a gigantic plan of the federal department of agriculture to bring to the women of the United States a direct working understanding of the needs of war-time conservation. The plan is yet in its infancy, but the various government agents in each county are rapidly completing the details.

Each county is to be divided into small districts; each district to elect a representative who will have charge of the work in her section. The general supervision of the district leaders will be carried on through a county organization of the leaders by the federal county agents, who will direct the work and instruct the district leaders.

Although food conservation, because of the present urgent necessity for the saving of foods by the housewives of the nation, will be one of the first problems dealt with, other lines of household management will also be taken up. The shortage of wool, linen and cotton materials is presenting a new problem to the women of these times, and the study of textiles and clothing will be carried on in all probability very soon through this women's national organization.

Other subjects which may be taken up are sanitation, the most economical management of the home, various labor-saving devices and other problems may present themselves.

The organization is not to be entirely a war measure, but probably will be continued in times of peace.

# Meats and Soups

Dear Family Circle: It has been such a long time since I wrote to you about things to eat that it may seem as though I am not interested in "eats" any more. This is not true, for I have given more thought to foods and how to cook them during the last few months than ever before.

In these times of meatless and wheatless days it behooves us to give our best thoughts to providing substitutes and to preparing those substitutes so that they will give the most nourishment possible.

We are asked that the country shall save meat, so along this line we should prepare the meat we do use that it may reach as far as possible.

I have learned a new way to make a meat loaf, and it is delicious. Take a leg of beef, the last three cuts called shins which is sold for soup meat. Boil till it falls from the bones. Before it is done, or during the last hour, add to the meat and stock about six good sized potatoes cut into inch cubes, four onions and three or four carrots also cut into pieces about an inch square. When the vegetables are thoroughly cooked strain the stock off, remove all bones, let the meat cool, then put it through the meat grinder. If you have not salted it sufficiently while it is cooking add more, and pepper and some sage if you like it. Mix the vegetables, which should be thoroughly cooked, all through the ground meat; add enough stock to the mixture to hold it together but no more; pack firmly into an oblong bread pan or anything convenient, and place on it a weight of some kind like a flat iron and cool thoroughly.

It slices very nicely and is surprisingly good. It is fine for sandwiches for school lunches, and goes twice as far as if served any other way. We never consider the soup meat very choice, but made into a meat loaf it is fine.

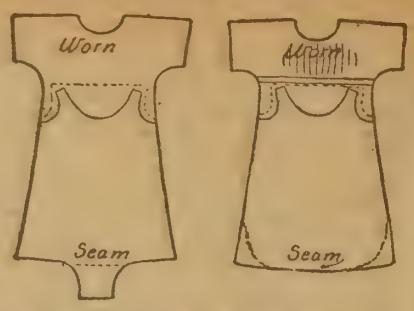
Then you have the stock in which you have cooked the meat left for soup. I have written the Family Circle before about soups, but since that time I have seen so many people in so many different places serve such poor, sloppy stuff for soup that I want to urge you to cook your vegetables long and slowly so that the flavor will be brought out into the stock. I am talking now of vegetable soup, which I think is the very best of any when it is made right. I put every kind of vegetable that I have in the soup, but only a little of each, then I add a little rice, only a little, or it will be too thick, also I add a few pieces of macaroni and some canned tomatoes, only a very little of each. The days I make soup I always look around in my ice box to see if there are not some odds and ends left over and any sort of thing at all suitable goes in. For instance, there might be a small portion too little for a meal; if baked beans, they go in. There might be one dish of cold breakfast cereal, like oat meal or graham mush. I slide that into my soup kettle. You will understand that one way and another I am producing a dish of real nourishing food, and on a cold day it surely is good. Be careful not to make a stew of it instead of a soup. There must be only a very little of each vegetable, remember. Sometimes I take a notion to strain the broth through a coarse sieve, but in that case I never use the rice or macaroni. All the other things will press through the sieve and the soup will be smooth. Another time I will tell you of ways I have learned to make bread for the wheatless days.

A. W. B.


## *Wonderful Egg Producer*

Any poultry raiser can easily double his profits by doubling the egg production of his hens. A scientific tonic has been discovered that revitalizes the flock and makes hens work all the time. The tonic is called "More Eggs." Give your hens a few cents' worth of "More Eggs" and you will be amazed and delighted with results. A dollar's worth of "More Eggs" will double this year's production of eggs, so if you wish to try this great profit-maker, write E. J. Reefer, poultry expert, 4662 Reefer bldg. Kansas City, Mo., who will send you a season's supply of "More Eggs" Tonic for $1.00 (prepaid). So confident is Mr. Reefer of the results that a million-dollar bank guarantees if you are not absolutely satisfied your dollar will be returned on request and the "More Eggs" cost you nothing. Send a dollar today or ask Mr. Reefer for his Free Poultry book that tells the experience of a man who has made a fortune out of poultry.—Adv.


## Teddy Bears for Children.




Either a kimono nightgown or a nighty with set-in sleeves may be made into a teddy bear. As a rule, the upper part of a nightgown is split or worn thin, but the lower part is usable.

# Household Hints

In making oat meal bread it improves the flavor to let the oats scald a half hour in the liquid, although the rolled oats may be used dry if preferred.

It is a good idea in making the first few trials of war bread to measure the ingredients. The "own judgment" method of many very good cooks has been known to fail in the case of wheat substitute breads.

The government suggests that if you find you can not make a success of your bread with over one-fourth wheat substitution, rather than spoil all your bread make the substitution in other ways, as not using wheat cereals for breakfast, and using more of the quick baking powder breads, such as corn meal, which can easily be made with a 50 per cent substitution.

## Make Waists Into Corset Covers.



Thin white waists make dainty corset covers for summer wear and the heavier waists may be made into corset covers to be worn under woolen dresses in the winter.


# When You Buy a Piano it Pays to Buy a Good One

When you buy a Piano it is usually intended to last a life time. Therefore special care should be used in its selection.

You should not be guided by cheap prices or special inducements. Pianos, like everything else, are priced according to their intrinsic worth. If you do not possess expert knowledge of piano making you must rely greatly on the Piano Dealer. Therefore it is certainly to your interest to go to a dealer who has the reputation of carrying only pianos of merit and true musical worth, who is known to price his pianos consistently, and who has only one price for everybody.

We carry a number of well known makes, each the very best in their grade. Prices of new pianos range from $300 upward; good "used" pianos from $125 upward. If desired, we arrange convenient terms of payment.

**We invite you to call at any of our stores—or write us asking for illustrated catalogues and prices.**

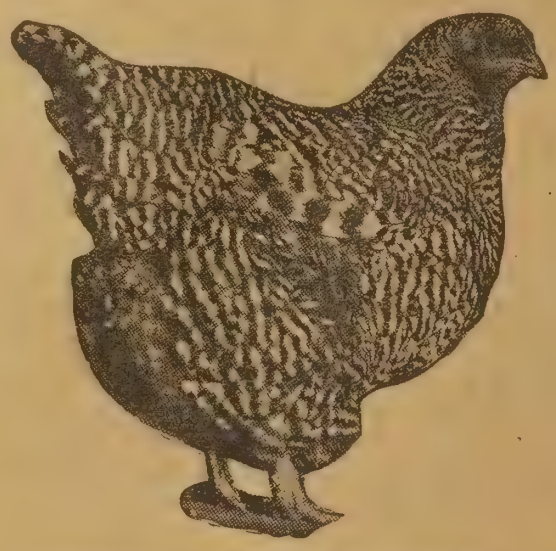
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**Sixth and Morrison Streets, Portland**
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# POULTRY FOR PROFIT

**Every rancher who can raise poultry during the period of the war is not only assured a good profit, but is giving another proof of patriotic interest in building up one of the world's most vitally needed food supplies.**



## GET STARTED RIGHT

**Have heavy egg producers of some breed and strain that has been bred up to a high standard. You will find on the "Want Ad" page and the breeders' page of this paper hatching eggs, baby chicks and breeding fowls from some of the best stocks in the Pacific northwest.**

## POULTRY BREEDERS

**The demand for foundation stock-hatching eggs, chicks and birds for breeding among ranchers, can not be supplied by present advertisers. Advertise your surplus in the classified or poultry breeders' department of our papers and help to supply this demand, at the same time adding to your own profits.**

## THE WASHINGTON FARMER

**Room 26, Review Bldg. Spokane, Wash.**

# Patterns

2378—Dress for misses and small women. Cut in three sizes: 16, 18 and 20 years. Size 16 requires 4 1-4 yards of 44-inch material. The dress measures about 2 1-8 yards at the foot. Price, 10 cents.

2375—A new spring coat. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 36 requires 4 3-4 yards of 36-inch material. Price, 10c.

2384-2381—Ladies' costume. Waist, 2384, cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Skirt, 2381, cut in six sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. A dress for a medium size, as illustrated, will require 5 7-8 yards of 36-inch material. The skirt measures about 2 1-8 yards at the foot. Two separate patterns, 10 cents for each pattern.

2362—Girls' dress. Cut in four sizes: 4, 6, 8 and 10 years. Size 8 will require 3 1-4 yards of 36-inch material. Price, 10 cents.

1947—Ladies' house dress. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 6 7-8 yards of 36-inch material for a 36-inch size. The skirt measures about 3 1-4 yards at the foot. Price, 10 cents.

2206—Child's set of short clothes. Cut in four sizes: 1, 2, 3 and 4 years. The dress requires 2 1-2 yards of 36-inch material, the slip requires 1 1-2 yards, and the drawers require 1 1-8 yards, for a 3-year size. Price, 10 cents.

2168—A practical apron model. Cut in four sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. Size medium requires 6 1-8 yards of 36-inch material. Price, 10 cents.

2208-2211—Ladies' costume. Waist, 2208, cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Skirt, 2211, cut in six sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. It will require 6 yards of 36-inch material for a 36-inch size, for the dress as illustrated. The skirt measures 2 3-8 yards at the foot. Two separate patterns, 10 cents for each pattern.

1987—Ladies' house gown or negligee. Cut in four sizes: 34, 38, 42 and 46 inches bust measure. It requires 7 yards of 44-inch material for a 38-inch size. Price, 10 cents.

1993—Girls' one-piece dress. Cut in five sizes: 4, 6, 8, 10 and 12 years. It requires 3 1-4 yards of 44-inch material for an 8-year size. Price, 10 cents.

2379—Girls' dress. Cut in five sizes: 6, 8, 10, 12 and 14 years. Size 10 requires 4 3-8 yards of 36-inch material. Price, 10 cents.

2356—Ladies' night robe. Cut in four sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. Size medium requires 4 3-4 yards of 36-inch material. Price, 10 cents.




Please fill in this order and mail with remittance to:
PATTERN DEPT., PACIFIC NORTHWEST FARM TRIO, Spokane, Wash.

Enclosed find.....cents for which send me the following:

Pattern No.....Size..... Pattern No.....Size.....

Pattern No.....Size..... Pattern No.....Size.....

Name .....

Postoffice ..... State .....

R. F. D. No.....Box No.....Street No.....

Be sure to give the pattern number and the correct size.

**New Machine for Fish Canneries.**

A new machine has been introduced into the salmon canneries of the northwest which does the work of 50 men. All the processes of cleaning, splitting, and removing the fins of the fish are performed by the machine automatically, and it can handle 60 fish a minute.

**Labor Disputes in China.**

Labor disputes are often settled in China by a chamber of commerce, and after the award has been made all the parties take part in a feast paid for by the side which won the decision.




Dreadnaught School Suits

(Registered.)

$7.50

2 Pair Pants

Especially designed and tailored from wear-resisting fabrics, to withstand the hard knocks of school and play days.

New spring line ready, featuring the slash pockets, buckled belts and other military touches which appeal to the modern boy.

Tailored in gray and brown mixed suitings, with taped seams and buttons that will not come off.

Sizes 6 to 18 years. Each suit has an extra pair of full-lined knickerbockers. State whether gray or brown mixture is preferred.

With an extra pair of full-lined knickerbockers ..... $7.50

PROMPT ATTENTION will be given all inquiries regarding spring merchandise. Take advantage of our mail order shopping service.

We prepay parcel post on all wearing apparel.

Address Dept. F.

Frederick & Nelson

The Department Store,
Seattle, Washington.


The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.


First Aide to Hostesses Who Know

PERHAPS it's only a couple of friends who drop in for a little chat. Or—it may be a knitting party, an Aid Society meeting or what not. Or—who knows?—perhaps it's a big "party"—music and dancing and Japanese lanterns and all that.

In any event, don't overlook the help Ghirardelli's can give you. Whether it's two cups for yourself—or two gallons for your "big affair"—you can make it just as easily.

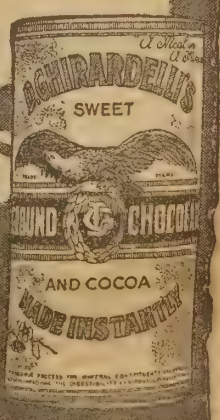
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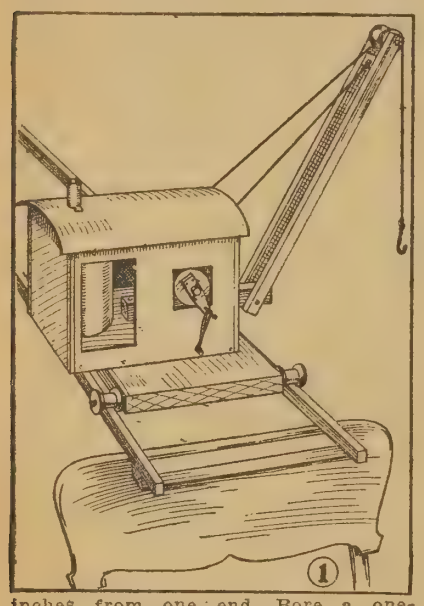
By A. Neely Hall

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## A Toy Crane.

This little crane travels along an elevated track supported at its ends upon the tops of chair backs (Fig. 1). It is more fun to have the track at an elevation than on the floor, because it provides a greater distance for hoisting things.

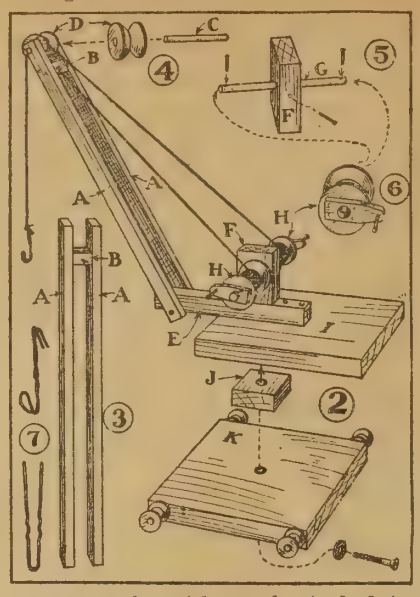
Fig. 2 shows details of the crane, windlasses and turntable, and Fig. 3 the cabin walls and roof. The crane boom is made of two strips (A, Fig 3) 14 inches long with a short block (B) fastened between, one and one-half



inches from one end. Bore a one-fourth-inch hole through each strip near the upper end for the axle C (Fig. 4) to fit in, and a one-eighth-inch hole near the lower end through which to pivot the boom. Make the pulley of two spool ends nailed together (Fig. 4).

## To Make the Windlass.

After completing the boom, cut beam E (Fig. 2) about eight inches long, to fit between strips A of the boom. Cut the windlass block F (Figs. 2 and 5), and bore a hole through it for a one-fourth-inch stick shaft (G) to run through. Make the windlass drums



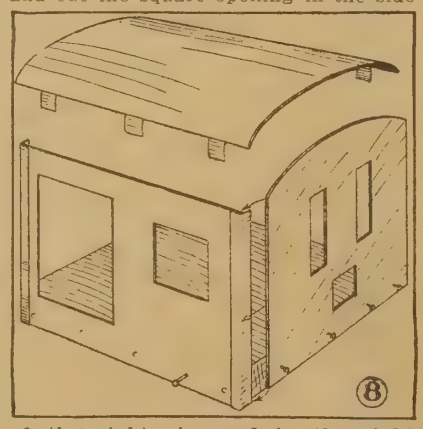

out of spools, with cranks tacked to their ends as shown in Fig. 6, and after slipping them upon the shaft drive brads through the shaft ends to hold them on. Nail beam E to the lower edge of block F, then nail it to the turntable (1), a block five by eight inches in size. Center the beam in the width of the turntable, and allow three or four inches to project over the end, as shown in Fig. 2.

The turntable I is pivoted upon the base K, a block eight inches square, with a small block (J) inserted between them. Bore a one-fourth-inch hole through the center of base K and block J, so the screw pivot will turn freely, and slip an iron washer over the screw to keep its head from pulling through the holes. Drive the screw into the under side of turntable I, three inches in back of its forward end. Fasten four spools to the side edges of the base with nails, for wheels.

Screw the lower ends of the boom sticks A to the end of beam E. Drive a nail into block B, attach one end of a three-foot piece of cord to it, and tie the other end to one windlass. This is the cable by which the boom is raised and lowered. Use a cord five or six feet long for the hoisting cable, tie one end to the second windlass spool, run the cord over pulley D, and tie the other end to a hook bent out of a hairpin (Figure 7). Figure 1 shows how the windlasses are laced by loops of string.

## Cardboard Cabin.

Build the cabin of cardboard. Figure 8 shows the front and one side. Cut the two long openings in the front for the cables to run through, and the square opening for beam E to fit in; and cut the square opening in the side



of the right size and in the right place for the windlass spools to pass through (Figure 1). There need be but one doorway. Tack the walls to the edge of the turntable, then bind together the corners with paper strips. Fasten on the roof with strips of paper, as shown.

The tin can in the rear portion of the cabin (Figure 1) serves the double purpose of make-believe boiler, and counterweight for offsetting the effect of loads hoisted by the boom. Fill the can with earth or sand.

Make the tracks of strips just wide enough for the spool wheels to run upon, and connect them with cross-pieces.

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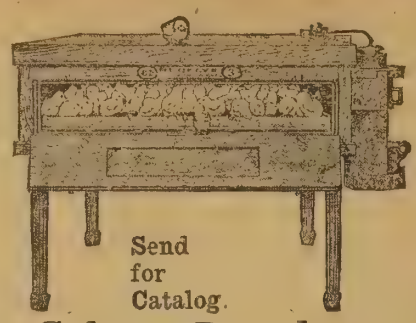
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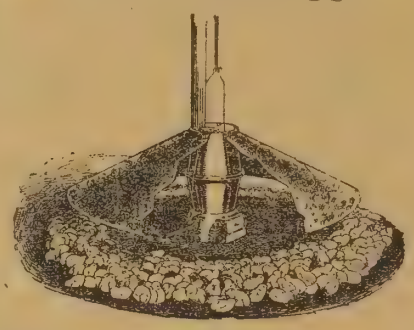
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**Fun in the Auto Bus.**

Dear Aunt Nellie: I am 10 years old. I have dark brown hair and gray eyes. My birthday is on the 21st of April. Have I a twin? If I have will they please write to me. I do not care if it is a boy or a girl. I have three brothers and one sister. My sister's name is Helen. She is 17 years old. She will graduate this year. My brother's names are Robert, William and Clark. Robert is 3 and William is 8. Clark is 19. He is a soldier. I have a cousin who is a soldier, too. We had two horses, but one died. We have one cat and one dog. We call the dog Booze. We have two cows. Their names are Daisy and Spot. The snow is just melting. I thought it was lots of fun while it lasted. Yesterday I rolled up some real large snowballs. Some of them were two feet through and I carried them. This morning when I woke up my back hurt me so that I could hardly move, but it is better now. I am just learning how to knit. I already know how to tat, embroider and cross-stitch. I like school very much. I have to go two miles to school in an auto bus. We had lots of fun Friday. There was no top on the bus and it was snowing. In our school there are 1000 pupils, I believe. There are 43 in my grade. I am in the fifth grade. We have five teachers. My teachers are Miss Cannahan, Miss Holgerson, Miss Saunderson, Miss Ehle and Miss McRae. I live on a poultry ranch.—Margaret Coleman, R. F. D. 2, Box 32, Auburn, Wash.

**"Nigger Tom" Is Leona's Pony.**

Dear Aunt Nellie: May I join the Children's Corner? This is the first time I have written to the Corner. I am 11 years old and in the third grade at school. My birthday is on the 17th of February. I go to school every day and have three playmates. Their names are Thelma, Gertrude and Louise. We have lots of fun at school. I have two sisters and three brothers. My brothers' names are Leo, Teddy and Tom. My sisters' names are Della and Wilma. Della goes to school and all three brothers go to school. Wilma is 3 years old and Della is 7 years old and is in the first grade. I go to the White Swan public school, district No. 88. There are three rooms and also a basement and a bookroom in the school. There are about 120 children in our school. I have a pet lamb, and also two dogs. The dogs' names are Nick and Jack. I have a pony and his name is Nigger Tom. Have I a twin? It has been snowing here. There were four inches of snow, but there are about three inches of now.—Leona Frances Ohms, White Swan, Wash.

**Likes Their New House Fine.**

Dear Aunt Nellie: I am going to write another letter to the Corner. I am very interested in reading the letters in the Farmer, so I suppose other children are, too. I am 12 years old and will be 13 August 7. I have two sisters and no brothers. Their names are Myrtle and Mary. We call Mary Betty. Myrtle is 9 years old and Mary is 2. I had three sisters, but one died. We just moved into our new house last May. I like our new house fine. We live on an 80-acre farm. We have horses and five cows and some pigs. We have one dog and three cats, two big ones and one little one. The cats' names are Bob, Spot and Beauty. We have a pet calf. Her name is Dolly. We like her very much. The other morning when we woke up the ground was covered with snow. We were surprised. My papa said I didn't have to go to school that day. But I said I didn't want to miss any day, so he said I could go.—Hazel Jean Webster, Box 62, Route 1, R. F. D., Olalla, Wash.

**Isola Likes to Knit for the Soldiers.**

Dear Aunt Nellie: This is my first attempt to write to the Children's Corner. I was 12 years old January 14. I like to read the Children's Corner. For pets I have four kittens and one pup called Don. I have one brother and one big sister. Her name is Effie and she teaches at district No. 46, near Cunningham. I live three miles from school and my brother and I go to school horseback. My brother and I have been knitting washrags for the soldiers. We both like to knit. Have I a twin? If so I hope to hear from her.—Isola Starks, Washtucna, Wash.

**A Nice Little Letter From Evelyn.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. We have two horses, one cat and one dog. I have a little baby sister. She was 3 months old the 10th of January. Her name is Wilma Audrey. I have two sisters and two brothers. Their names are Vierbie and Clay. My sister's name is Mary. My name is Evelyn. I hope you will enjoy my letter.—Evelyn Miller, Cloverland, Wash.

**Iris Is Getting Fat.**

Dear Aunt Nellie: I thought I would write again. There isn't much to say, but I guess I can think of something. I hope the cousins are all fine. We have two little calves. One is a week old and the other isn't a day old. One is named Virgel and the other one Jingel. I found both of them. I like to milk cows. I can do anything outside on the farm and like to work outside. I can work inside. We have nice times at school playing games. The games we play are running games, so when it is blowing it is fine to play, because it keeps us warm. The sixth grade here is getting awful poor at school. It seems like they can't get their lessons. The teacher said the fifth grade is beating them. I would be very glad to hear from Elsie Gronka, route 2, box 31, Sequim, Wash. I surely would answer her letter. We had our picture taken at school today. I got a letter from my cousin today. They do not get the Farmer. I haven't any brothers in the war, but have a cousin in the navy. I set a hen this morning. Put 13 eggs under her. I like little chickens. I think they are awful cute. Aunt Nellie, I am getting fat! The last time I weighed 89 pounds and now I weigh 103 pounds. We killed one of our pigs and now we only have two. My little sister is getting awful big. She can climb in chairs, go upstairs and get into mischief, too. She surely is a pretty little girl. Well, I guess I will go and get some apples and finish this when I come back. Well, I got them. Our Corner was pretty large this last time. I will be glad when it is nice weather so I can go boat riding and fishing. Day after tomorrow we have a test at school. The teacher is reading a book. It is a pretty good story. It is about animals and a man. I'll bet Lucile Gerlitz sure was glad to get that piano for Christmas. We have an organ. I play on it once in a while. I hope to hear from some of the cousins. It doesn't matter how old they are. Be good to yourself, Aunt Nellie.—Iris J. Chevalier, Provost, Wash.

**Snow Did Not Last Long.**

Dear Aunt Nellie: It seems so long since I wrote last. My first letter was in print. My sister and I are taking music lessons. Our teacher has a little boy. He is two years old. We like him very much. His name is Carl. We had our first snow last Friday. We had lots of fun at school, but the snow only lasted two days and now is raining again. I just love to read the Farmer. I can hardly wait till the Farmer comes. We get it on Saturday. We had a program at school, Lincoln's birthday. I saw Bertha Jennings' letter in the Corner. I wonder if she is the same little Bertha that used to live on Grays River.—Onida Wilson, Box 102, Grays River, Wash.

**Just Discovered the Corner.**

Dear Aunt Nellie: I am a little girl 9 years old. I have just discovered the Children's corner in the Farmer. I was very much interested. I thought I would write a letter for the first time. I live in a new settlement on a 40-acre farm which my papa has cleared since we came here six years ago. I have one little sister. She is 6 years old. We live four miles south of Mount Spokane. I am only one-eighth of a mile from our log schoolhouse. My teachers' name is Miss Wilma Fuher. There are five pupils in our school. There are four girls and one boy.—Ruth Wilma Peterson, R. F. D. 2, Mead, Wash.

**Glad to Hear From Lila Smith.**

Dear Aunt Nellie: This is my first time to write to you. I hope it won't be the last. I am 11 years old. I will be 12 years old the 7th of May. I have one mile and a half from school. I go to Sunday school every Sunday. I have one brother and one sister. My brother's name is Wesley and my sister's name is Viola. We have 10 horses and 48 head of cattle and 20 milk cows. I have two dogs. Their names are Jack and Ted.—Lila Smith, Mold, Wash.

**Verona Tells About Her School.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I live on a 480-acre farm. I will tell you about our school. I am in the second grade. We have 10 pupils. I am seven years old. We have 12 horses. My teacher's name is Miss Larsen. We have one pig. I have a riding pony. Its name is Pinky. We have 13 head of cattle. We have two dogs, Shep and Billy. I enjoy reading the letters. My papa takes the Farmer. —Verona Faulkner, Bickleton, Wash.

## The Famous Mastiff.



The mastiff is a very large dog with a broad head and strong neck and limbs. This kind of dog lived in England before Caesar invaded the island in 55 B. C. It was much prized by the Romans on account of its great courage and was used by them in the sports of the circus being matched to fight with different wild animals, sometimes even with a lion. Alexander the Great brought mastiffs to Greece with him when he came back from India. These are supposed to be the great mastiffs of Thibet, which are the fastest of their kind.

**Jean Is Buying Thrift Stamps.**

Dear Aunt Nellie: I have never written to you before, but I hope that this letter will be printed and never see Mr. Waste Basket. I have a little sister nine months old. She has two teeth. Her name is Virginia Holletta, but we call her Virginia. I have 11 Thrift Stamps. A boy at school has 12, and the teacher owes him two, so that when the teacher gets some more his card will be filled. It isn't hard to earn 25 cents when you try. I wish I could fill one of the War Saving cards this year and I hope each cousin gets several of the $5 stamps before the year is up.—Jean Salisbury, Friday Harbor, Wash.

**Clay Tells bout His School.**

Dear Aunt Nellie: This is the first time I ever wrote to the Children's Corner. I hope that you will enjoy my letter. I will tell about my school. There are 20 children in our school. I am in the fourth grade. I am 11 years old. We live on a farm of 16 acres. I have three sisters. Their names are Mary, Evelyn and Wilma. Wilma is a baby. We have two horses and 16 pigs. We have nine little pigs. I live a third of a mile from school.—Clay Miller, Cloverland, Wash.

**Fern Is a Cousin Now.**

Dear Aunt Nellie: This is the first time I have ever written to the Children's Corner. I go to school and like it fine. My teacher's name is Miss Foxwell. We live on a 20-acre farm and have a pig, one cow and 14 chickens. I hope to see my letter in print. May I join the Children's Corner?—Fern Bolender, Box 57, Route 2, Olympia, Wash.

**Cousin Melvin Lives on a Farm.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 8 years old. My birthday is March 21. We have been taking the Farmer for some time. We live on a farm. We live nine miles from Colfax. We have cows and horses.—Melvin Kammerzell, Colfax, Wash.

**A New Cousin From Mansfield.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I have two cats. Their names are Tom and Pussy. I am 10 years old. I have two brothers. We have four horses and one colt. I go to school. It is half a mile to school. We have two cows.—Villa May Gahuey, Mansfield, Wash.

**A Letter From Cousin Wynne.**

Dear Aunt Nellie: How are you and all the cousins? I have three brothers and two sisters. Their names are Fern, Maxine, George, Raymond and Gilbert. My little sister, Maxine, is 2 months old.—Wynne Stallcop, Pomeroy, Wash.

**How Many Cousins Can Knit?**

Dear Aunt Nellie: My father takes The Farmer and we like it very much. I am 9 years old now and will be 10 the 25th of May. I have two brothers and one sister and their names are Ilma, Kermit and Russell. We are milking 25 cows now and have lots of sheep. I have a little lamb and it is awful cute. How many of the cousins can knit? I don't know how, but I am going to learn. I got lots of things for Christmas and hope Aunt Nellie had a merry Christmas.—Ethel Halsey, Joseph, Ore. (Aunt Nellie and all the cousins are glad to have you with us again, Ethel, and hope that you will write more often in the future. I hope that you will learn to knit and help make articles for the soldiers. Thanks for your kind words, Ethel. I hope you, too, had a nice time.—Aunt Nellie.)

**Started to Take Music Lessons.**

Dear Aunt Nellie: This is my first time of writing to the Corner. My father takes the Farmer and I read the letters. I am 11 years old and my birthday is the 18th of December. Have I a twin? If I have, I would like to have them write to me. We live in Joseph, Ore. I have two brothers and one sister. We have a pet cat and are going to have a dog. I take music lessons and I have taken my third lesson. Mrs. Green is my music teacher and Miss Shot, who lives in Condon, Ore., is my school teacher. I am in the fifth grade. If I see my letter in print I shall write again.—Winfred Beith, Joseph, Ore. (Aunt Nellie and all the cousins welcome you to our Corner and we hope you will write often. I am sure you will find a twin. Aunt Nellie.)

**Expect Floods Again This Year.**

Dear Aunt Nellie: I have got a new Corner girl. Her name is Minnie Harris. I am going to send some riddles and answer some of Freda's, too. As I was going across London Bridge I met my sister and I cut off her head and left her body standing. Answer—a beer bottle. Answer to the third is, one was going to St. Ives. I am going to send some now: Twelve pears hanging high. Twelve men riding by. Each man took a pair and left 11 hanging there. 2. It's black and white and red all over. 3. It goes all over the field by day and sits in the cupboard at night. 4. Round as a biscuit and busy as a bee. It snowed about a foot last week, but last night it rained and all day today the snow has been melting very fast. Tonight when we were coming home from school there was a big ditch to cross and we had one big pole to walk across on. The water was over the top of it. I expect we will have another flood this year like we did last year. Last year when the flood first started my schoolmate and I were out playing and the first thing we knew the ditch was clear full of ice and water. The ditch was very deep and when the water broke loose it splashed over our high fence.—Blanche Weaver, Box 202, Wallowa, Ore.

**Two New Mills Near Them.**

Dear Aunt Nellie: I have been reading the letters in the Children's Corner and like them very much. I will be 10 years old the 19th of next November. I have one sister and two brothers. My sister's name is Etta and my brother's names are Harry and William. They are all older than I am, so I am the baby. Papa has one pig, one cow, two mules and some horses. I am going to school and am in the fourth grade. Our teacher's name is Miss Winnie Bayley. I live half way between the schoolhouse and the postoffice. I have only about 50 yards to walk to school. We have Sunday school and Christian Endeavor every Sunday. Mama plays the organ. My sister is knitting for the Red Cross. There are two new mills near here. Papa is sawing wood with a gasoline saw. I can't think of much to write, but like to read the other children's letters. Papa told me that if I would write maybe I would get my letter put in the Corner.—Magdaline Fletcher, Pine Grove, Ore. (Write to us often, Magdaline; your letters will all be printed. We are glad to welcome a new cousin to our Corner. Aunt Nellie and all the cousins are glad that you like our letters. —Aunt Nellie.)

**Raise Teasel Where Anna Lives.**

Dear Aunt Nellie: I am a little girl of 12 years. I am in the sixth grade. We have many playthings at our school. We have a play shed and a game of basket ball. I like to play fine. There are 52 scholars at our school and one teacher. There are some boys and girls sitting together at our school. Our teacher's name is Mr. Woodworth. He has taught for five years so you see that speaks well for him. We like him fine. We go to Teasel Creek school. They raise some teasel here. I will tell you more about it if you wish to know in my next letter. We live in the country on a farm. I have one sister of 13. She writes stories at our school. Our mother died when we were small. We live on a farm with our grandma and grandpa. My father is in Alaska. My sister and I can do all kinds of housework. I have three uncles. Their names are Uncles Will, Roy and Don. They are all married.—Anna Drummond, Molalla, Ore. (I am sure, Anna, that every one of the cousins and Aunt Nellie, too, would be very glad to learn more about teasel. Tell us what it looks like, how it is raised, and what the plant is used for. We are glad that you are one of our cousins. Aunt Nellie.)

**Knitting a Scarf for Brother.**

Dear Aunt Nellie: I saw my letter in print so thought I would write again. I do the dusting for mama and help her do the dishes every morning and evening and it is my job to gather the eggs, and every Sunday I get lunch for mama. I like knitting very much; I started it by making a scarf for my doll and now I am making a scorf for my brother. I am going to school and am in the fourth grade. I walk two miles to school; my teacher's name is Miss Loura Hurnidge, and I like her fine. I will close as my letter is getting long. If I see this in print, I may write again.—Mary Louise Hillgen, R. 2, Dufur, Ore. (Aunt Nellie is glad that you help your mother, Mary Louise, and I am sure that she appreciates it very much. You did not tell us how old you were, but I am so pleased that you know how to knit. Write us often. —Aunt Nellie.)

**Plays Right Guard on Ball Team.**

Dear Aunt Nellie: This is my first letter to the Children's Corner. My father subscribes for The Farmer every year. I wish the Corner was larger, because the letters are so interesting. I have a twin sister. We are the only children. Her name is Linda. She is in the eighth grade. I am in high school and enjoy it very much. I take algebra, ancient history, literature and Latin. I am 15 years old, weigh 163 pounds and am 5 feet 11 inches tall. I play right guard on our basket ball team. We live about two and a half miles from town on a farm of 80 acres. We have 12 head of cattle, about 80 horses, seven sheep and one dog. He is a bird dog and his name is Kazan. My letter is getting long so I will close. I would like to hear from some of the cousins.—Grey U. Munjar, Dayville, Ore.

**The Books That Mildred Has Read.**

Dear Aunt Nellie: This is my first letter to the Corner and I hope it won't be the last. Can I join the Corner? My papa takes the Farmer. I read the letters and I want to know what it means when a boy or girl writes and asks if they have a twin. My papa owns a store. We have two horses, Tony and Molly; two cats, Tom and Martha Washington; about 20 chickens, two rabbits and about 80 pigeons. I go to school and I am in the fifth grade. My mother died when I was 2 years old. She had tuberculosis. She died in Phoenix, Ariz. I like to read. I have read "A Golden Heart."

(Continued on the following page.)

# Children's Corner

(Continued from the preceding page.)

"A Wilful Maid," "Only an Irish Boy," "The Shepherd of the Hills," "The Trail of the Lonesome Pine," Michael O'Halloran," "The Crisis,' "Hidden Hand," "Rebecca of Sunnybrook Farm." I saw the last played by Mary Pickford. Some of the books are the same as the ones Clara Olson read. At school today we built a kaiser out of snow and threw snowballs at him. I can knit and crochet a little bit. I wish Cousin Sally Garry would write to me or some other girl of my age. I think I would like Sally very much. I will write soon.—Mildred Tormey, Spokane Star Route, Wash. (Of course, you may join the Corner, Mildred. When a cousin asks if he has a twin, he wants to know if there is some other Corner cousin, who is the same age and whose birthday comes on the same day of the year, as his does.—Aunt Nellie.)

**Schoolmates Belong to the Corner.**

Dear Aunt Nellie: This is the first time I have ever written to the Corner. I am 13 years old and will be 14 next January. My teacher's name is Della Barclay. I like her very much. We live on an 80-acre farm. I like the stories in the Farmer and like to read the cousins' letters. Some of my schoolmates belong to the Corner. There are six children in our family, four girls and two boys. I have a baby brother 6 months' old. His name is Lavern. I have one uncle and a cousin fighting for Uncle Sammy and I hope they will win. My mother and father belong to the Red Cross and I am going to join. Have I a twin? If I have I wish she would write to me.—Thelma Hazel Owens, R. F. D. 2, Oakesdale, Wash.

**Mama Calls Loretta Her Tomboy.**

Dear Aunt Nellie: I hope my letter will be in print. I am 11 years old. My birthday is December 11. I like to ride horseback and go after the cows for papa. I live on an 80-acre farm and we have 520 acres altogether that we farm. We raise wheat, peas, and oats. I haul water for the men in the summer. Mama calls me her Tomboy. Have I a twin? I wish if I have that she would write to me. I like to read the Farmer. I feed the pigs and do some of the chores for papa.—Loretta Owens, R. R. 2, Oaksdale, Wash.

**Not Much Winter Yet.**

Dear Aunt Nellie: I have not written to the Corner for a long time. We have not much winter yet. I have two new, dandy twins now. Their names are Sallie Salina Garry anad Vera Allen. Sallies is 3 months older than I. I hope all the cousins had a Merry Christmas and a Happy New Year. I wish the Corner would grow. For Christmas I got a nice box of stationery, hair ribbon, handkerchief box, candy, nuts, oranges and a few other things. I am in the sixth grade, but I don't take geography and history with the sixth. I like my teacher better than any teacher I ever had. Her name is Irene Geoway. I hope I shall see this letter in print. I am 14 years old and will be 15 in July. If any of the cousins are my age I hope they will write to me. I surely will be glad to answer her. I wish I could win a prize some time.—Anna Straube, Lacrosse, Wash.




The Cowlitz county agricultural council voted recently to urge potato growers to place their names on every sack of potatoes marketed, hoping thereby to raise the standard of the product and create, as a result, a greater demand therefor. The council has not decided just what method of grading it will recommend, but some system will be adopted.

"While we are disposed to cooperate in every way possible with the government's war program it is hard to comply with the appeal to clear more land as an emergency war measure on account of the labor shortage and the increased cost of stumping powder," said F. C. Hamilton of Woodland, Wash., the other day. "There is a good deal of work that can be done, however, especially in picking up and clearing brush out between the stumps."

"It is quite impossible for us farmers to realize the great responsibility that rests upon us during this war," said Leander Martin to a representative of The Farmer, recently. Mr. Martin is chairman of the Cowlitz county agricultural council. He has a farm at Castle Rock. "When this war is over," he continued, "a great number of people in all parts of the world will be foodless. Germany itself will need help and we want to be in position ot help its people. Even though we may conquer Germany we want to conquer her again by our example of humanity. I feel that every farmer should ally himself with some organization working to aid the food production campaign. We should all be soldiers."

Before this reaches print the Yakima plant of the Utah-Idaho Sugar company will have closed down for the season. It will remain idle until the early part of October, at which time the 1918 crop of beets will be ready. Resident Manager T. R. Horne is rushing work on the company's two new plants at Sunnyside and Toppenish. At each of these places the company is sending aproximately $2,000,000. This includes the cost of the site and the construction of a modern plant. This huge expenditure is being made in addition to the big plant which operated at Yakima this season for the first time. Farmers are beginning to realize that the beet business means a solid, permanent industry in this section, and that it is doing much to stabalize land values. Sixty thousand tons or beets were produced in the valley this season and a campaign for increased tonnage around Yakima is now under way. All beets used at the Yakima plant this year will be grown north of Union Gap, and all those produced south of Union Gap will go to the Toppenish and Sunnyside plants.

A. W. Crane of Castle Rock expresses the same opinion voiced by large numbers of other farmers regarding the standardization of farm products. "I feel that as communities we should standardize," said Mr. Crane to The Farmer recently. "In Cowlitz county, for instance, it would be good business for us to decide on some variety of potatoes which we can produce profitably and all grow that paritcular variety. We would soon create a demand for the Cowlitz potato because, working on a cooperative basis, we would learn how to produce a better potato. As it is now we go hit and miss, raise all varieties and not enough of any one variety to make our product particularly sought after."

Among active county agricultural councils of Washington the Cowlitz county council should have a place well to the fore. Projects upon which active work is being done include crop rotation, seed selection and growing of adapted varieties and standardization of products. Members of the council are: Leander Martin, Castle Rock, chairman; D. A. Hooper, Castle Rock; J. K. Conger, Castle Rock; A. W. Crane, Castle Rock; E. A. Johnson, Castle Rock; George Smith, Castle Rock; Charles Marsh, Kelso; William Mayelin, Carrolls; B. F. Blair, Mount Solo; Ernest Doble, Carrolls; E. W. Robinson, Woodland; H. E. Dort, Arill; Victor Seeborg, Kelso; C. E. Libby, Kelso; F. G. Hamilton, Woodland; J. A. Pennington, Yale; F. L. Jenkins, Pigeon Springs; Fred Schroeder, Yale; F. M. Lane, Kalama; Earl Barnes, Silver Lake; J. H. Rogers, Kelso; Avariel Thiel, Woodland. R. W. F.

## Who Will Tell?

To the Editor: Can you tell me of any method for breaking a cow of fence jumping. I have bought a young cow that I would like to keep if I can break her of this habit.

L. G. M'CORMICK.

Kennydale, Wash.


CUTTER'S

BLACKLEG PILLS

"California's Favorite" for nearly 20 years

For the Prevention of Blackleg in calves and young cattle

Their superiority is due to nearly 20 years of specializing in "Vaccines and Serums only."

Year in and Year Out they give better satisfaction than any other vaccine made, and the cost of a few cents per dose is cheap insurance against a disease that always takes the fattest and best.

Single Pills may be used for ordinary and range stock.

Double Pills should be used for pure bred and high grade stock.

Use any Injector, but Cutter's simplest and strongest.

Prices:

| | |
|---|---|
| 10 dose pkge. Single pills | $1.00 |
| 50 dose pkge. Single pills | 4.00 |
| 10 dose pkge. Double Pills | 1.50 |
| 50 dose pkge. Double Pills | 6.00 |
| Cutter's Pill Injector.... | 1.50 |

Insist on Cutter's. If unobtainable, order direct.

Write for new booklet, "The Control of Blackleg." It tells about Anti-Blackleg Serum which cures Blackleg and may be used simultaneously with vaccine to combat outbreaks and safely protect valuable stock.

The Cutter Laboratory, Berkeley, Calif.

The Cutter Laboratory of Illinois, Chicago
Eastern Agent



# The Greatest Sale of Percherons and Belgians

*95 Head of Stallions and Mares*

*From the Celebrated Heart's Delight Farm Stud*

*To Be Sold at Sale Pavilion, Union Stock Yards, Chicago*

*Friday and Saturday, March 8 and 9, 1918*

The famous stallions, ILDEFONSE and RICHELIEU, the noted Percheron and Belgian stallions that have been in service at Heart's Delight ever since their importation to this country. Sons, daughters and mares bred to them in this sale.

SELDOM HAVE ADMIRERS OF EITHER BREED HAD AN OPPORTUNITY TO PLACE BIDS ON A PAIR OF STALLIONS OF SUCH MERIT.

YOUNG STALLIONS OF RARE MERIT OF BOTH BREEDS.

IMPORTED and NATIVE BRED MARES and THEIR PRODUCE. IF YOU WANT TRIED MARES THAT ARE PRODUCERS AND WORKERS, YOUNG MARES OF SPECIAL MERIT, YOU CAN NOT AFFORD TO OVERLOOK THIS GREAT SALE.

The Catalogue will interest and it will be mailed to all who write for it to

## Heart's Delight Farm, Chazy, Clinton County, New York

Reppert and Jones, Auctioneers

# News for Breeders

Luther Benson, who farms on quite a large scale, besides breeding draft horses at Heppner, Ore., recently purchased from S. Metz & Sons of Pendleton, Ore., the Percheron stallion, Livarison. Livarison is a horse of good size, of Percheron type and excellent quality. Metz & Son intended to show him at the Lewiston and Portland winter shows, but he went off feed and they held him over. They consider him one of the very best horses ever brought west.

W. W. Green has a roan heifer calf out of his great cow, Scottish Flower 3d, and by his equally great sire General Hampton. It has substance and quality, together with the finest of Shorthorn type. When Mr. Green paid Alex Chalmers $805 for Scottish Flower 3d with a fine bull calf at foot, some of his friends called him foolish. But he has refused $600 for the bull calf, because he wants it for his own use and now the little heifer seems even more valuable, while the cow is just in her prime and likely to produce several more high-class offspring. Mr. Green still considers it good policy to pay good prices for Shorthorns. H. A.

## Recent Guernsey Sales.

Among recent Guernsey sales reported by C. T. Bracken, farm manager for Dr. Park Weed Willis of Seattle, are the following: Glenwood Bob White of Orchard Hill, No. 43532, to Robert Anderson, Snohomish, Wash.; Glenwood's Main Stay of Orchard Hill, No. 36326, to the Pilchuck Ranch company, Pilchuck, Wash.; Chief Seattle of Orchard Hill to Eric Nelson, Everett, Wash., and Royal Governor Glen of Orchard Hill to Ellen H. Reynolds, Walla Walla, Wash. This latter animal is out of Sammamish Topsy, No. 46992, holder of the best Guernsey record for a 2-year-old west of the Missouri river (629.66 pounds of butter fat in one year).

At the present time Mr. Bracken adds that there is not an animal on the farm for sale.

"As a matter of fact," he says, "it's difficult to find Guernsey heifers for sale anywhere. The demand is far in advance of the supply."

## Prize Winning Shropshires.

To the Editor: The following registered Shropshires, fed and bred by A. J. Knollin, Soda Springs, Idaho, were prize winners at the National Western Live Stock show, Denver, Col., January 20-26:

Fat class—Grand champion yearling wether, grand champion carload lot of lambs, champion fat lamb, reserve champion fat lamb, first on yearling wether, first on pen of five fat lambs, first, second and third on three lambs. He also won the American Shropshire special.

Breeding class—First and champion on 2-year-old ram, second and third on yearling rams, first, second and third on ram lambs, first and champion on yearling ewe, second on yearling ewe, first, second and reserve champion on ewe lambs.

A. Nicholson and E. W. Cook, sheep herders.

The grand champion carload lot of lambs averaged 114 pounds and sold to the Brown Palace hotel of Denver, Col., for 35 cents per pound.

The grand champion yearling wether weighed 210 pounds, sold to the Coffy Packing company, Denver, Col., at 50 cents per pound. E. W. COOK.

Soda Springs, Idaho.

## Purebred Shorthorns.

Officers elected for the present year by the Canyon County (Idaho) Purebred Shorthorn Cattle Breeders' association at its annual meeting at Caldwell are as follows: President, Thomas Tarr, Caldwell; vice president, H. W. Dorman, Caldwell; secretary and treasurer, Charles Howard of the Pleasant Ridge community; directors, L. M. Beal of Kuna, S. G. Tucker of Notus, W. A. Hall of Hall's Station and George Halton of Nampa.

Though the new organization is to be known as "The Canyon County Purebred Shorthorn Cattle Breeders' association," the breeders of Ada, Payette, Gem and Owyhee counties are eligible to membership in it. The association represents an ownership of 379 purebred Shorthorn cattle.

Caldwell was named as the headquarters of the new organization and the first Wednesday of September of each year was designated as the date of its annual meeting. A county-wide propaganda is to be initiated by the newly formed organization for the elimination of "scrub cattle" and the substitution in their place of the best of purebred cattle.

## New English Breeder.

Among the newer breeders of Shorthorns in England is Hildebrand Harmsworth of newspaper fame, and the owner of the Freshwater herd of dairy Shorthorns, situated at Freshwater Grove, Shipley, Sussex. Mr. Harmsworth has been buying female stock with rare good judgment, according to the London Live Stock Journal, and his most recent purchases include such cows as Veracity, Ash Muriel 6th, Hadnock Charming Lass 3d, Lady Clara, Turner 19th, Morecambe Lily, Lady Isabel and Primrose Day, a catholic taste in back breeding, all will agree, but a selection made on sound and right lines. To head his herd, some day, he has just secured at the figure of 750 gs. a 10-months-old bull calf, Kelmscott Conjuror 8th, bred by Messrs. R. W. Hobbs and Sons of Lechlade.

## Jean Armour Dead.

The Ayrshire Breeders' association, with deep regret, announces the passing of Jean Armour, one of the greatest dairy cows in history. Jean Armour 25487 was bred by H. & J. McKee, Ontario, but was developed by Mrs. F. D. Erhardt, Vermont. She was the first Ayrshire cow to produce over 20,000 pounds of milk; her official record, which also made her breed champion, being 20,174 pounds milk, containing 774.73 pounds butterfat. In her fourteenth year she produced 18,382 pounds milk, containing 716.36 pounds fat.

## Purebred Horse Sale.

At a sale to be held at the Union Stockyards, Chicago, March 8 and 9, Heart's Delight Farm of Chazy, N. Y., will offer 95 head of purebred Percherons and Belgians.


## HOLSTEIN CATTLE

MOOREHEAD RANCH.
Registered Holsteins.
Herd sire, Model Annie De Kol Segis, grandson of the famous King Segis. We have no bulls of service age, all having been sold, but we have some splendid young stuff, from 6 to 8 months old, coming on. If you are looking for real foundation stock, write us for particulars and pedigrees.
MOOREHEAD & HOBSON.
Breeders of Purebred Holsteins.
Outlook, Wash.

## 365-DAY HOLSTEINS

24,667 lbs. milk—1026 lbs. butter—is the a. o. advanced registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.
THE HERD WITH YEARLY RECORDS.
WESTERNWOLD RANCH, Prineville, Ore.

## Registered Holsteins

Glenwood herd offers for sale a few A. R. O. cows with records up to 24.32 lbs. Also a few bred heifers.
A. H. BUCK & ED HOEM.
Snohomish, Wash.

REGISTERED HOLSTEINS.
One 30-lb. bull with grand champion sire and dam; also young bull calves. Here is production and type we hear so much about.
H. R. BOOMER, New Plymouth, Idaho.

## AYRSHIRE CATTLE

## Edgewater Farm

Government accredited herd, headed by Peter Pan, 83d. Bull calves available.
E. M. CHANDLER, Burbank, Wash.

## SHEEP

## SHEEP

Full blood Lincolns, Romneys, Corridales and Hampshires. Ewes and rams, small or large lots. For sale by
H. STANLEY COFFIN,
Breeder and Importer. Yakima, Wash.

## BERKSHIRE SWINE

## Riverby Orchard Berkshires

Riverby Orchard Berkshires won 12 out of 15 first prizes at the Washington state fair, 1916, also many prizes, including grand champion sow at the Panama-Pacific world's fair. We offer for sale a few good boars and young sows.
D. C. BUNN, Prosser, Wash.


# Breeders' Department


## SHORTHORN CATTLE

## Herd Bulls

Imported Doune Radiance No. 609412
and
Gainford Perfection No. 442173.

## Hercules Shorthorns

We can supply you with choice, well grown bulls and females of breeding age. Your inspection of our herd is invited. Visitors always welcome.

## Day & Rothrock Company

205 Exchange Bank Bldg. Spokane, Wash.

## LELAND BROTHERS

Breeders of top registered Shorthorn cattle.
Correspondence solicited.
WENDELL, Idaho.

REGISTERED SHORTHORN COWS,
Young bulls and heifers, sired by Scotch bulls; liberal terms.
CALDWELL CATTLE CO., Caldwell, Idaho.

## JERSEY CATTLE

## Waikiki Farm Jerseys

We offer several young bulls and heifers of exceptional breeding. Send for descriptions and breeding.
WAIKIKI FARM, R. 7, Spokane, Wash.

## A FEW COWS AND HEIFERS

MELLOW LAWN FARM HIGH PRODUCING JERSEY HERD.
HERD AVERAGE, APPROXIMATELY 700 POUNDS BUTTER.

Every cow in the herd on test. Our herd is getting too large to give proper care, with present labor scarcity, so am forced to sell a few. Some of the best in the herd, now milking around 50 lbs., are for sale. Write for pedigree and prices. Ranch 7 miles south of Silverton, 12 miles east of Salem.

*F. A. DOERFLER, Silverton, Ore.*

## POULTRY



## White, Buff and Blue Orpingtons

(Capt. De Bathe Strain.)

Speckled Sussex and Anconas. All single comb. Aldrich strain Orpingtons, Sheppard Anconas. My birds took first prizes at all leading shows of Pacific Coast. Prices for stock, eggs and chicks reasonable. All from best laying birds. Finest lot of cockerels I've ever raised. A few White Holland and bronze turkey toms for sale.
IRA N. DELINE, Olympia, Wash.

HATCHING EGGS.
BARRED PLYMOUTH ROCK — Thompson's Ringlet strain and Morningside trapnested, bred-for-eggs strain.
S. C. RHODE ISLAND RED — Tompkins' strain.
S. C. WHITE LEGHORN — Trap-nested English strain. Also a few Tompkins' Rhode Island Red breeding cockerels left for sale. Write for prices. Morningside Poultry Farm.
FEHNEL & KIRCHNER, PROPS.
Box 146. Blackfoot, Idaho.

PRIZE WINNING W. ORPINGTONS.
Kellerstrass strain, S. C. eggs, $10 per 100; $3 per 15. 1 hen scored best fowl at 1916 Wash. state fair; several others over 280 eggs. 1st prize cock, 1st hen, 1st pullet, 1st pen, cock and hens; 1st pen, ckl. and pullets, state fair, 1915.
MRS. E. B. WADE, R. 4, Yakima, Wash.

PARKS BRED-TO-LAY BARRED ROCKS.
My pen, 5 Barred Rocks, at Pullman laying contest laid in Nov. 88, Dec. 100, Jan. 104 eggs. Eggs from this winter-laying strain, $1.50 15, $8 per 100.
F. J. WIRTNER. Mica, Wn., R. 1.

## S. C. Rhode Island Reds

Golden Sebright and Black Bantams.
CHAS. E. LUCAS, R. F. D. 3, Missoula, Mont.

## S. C. White Leghorns

Heavy laying strain. Hatching eggs from hens averaging 245 eggs per year, $2 per 15.
E. C. FISK, Olalla, Wash.

S. C. AND R. C. RHODE ISLAND REDS.
Cockerels, $2.50 to $3.50; eggs from S. C. R. I. Reds, heavy winter layers, $1.50 per 15; $7 per 100. Flemish Giant does, $1.50.
W. T. WILSON, R. 3, Weiser, Idaho.

## Heavy Laying Strain

S. C. White Leghorns, hatching eggs, baby chicks and stock.
MT. ANGEL COLLEGE POULTRY RANCH,
St. Benedict, Ore.

VIBERT STRAIN S. C. REDS.
Cockerels, $2.50 to $25; eggs, $8 per hundred; $1.50 to $15 per sitting. Three special pens headed by cockerels from a 289-egg trapnested hen. One pen headed by magnificent cock bird that has kept his wonderful color through the moult and well into his second season. He is one great bird. If you need new Red Blood, you need Vibert blood from the largest pure Vibert flock on the Pacific coast.
MRS. ROMINGER. Underwood, Wash.

RHODE ISLAND REDS AND WHITES
both combs. Mammoth Bronze turkeys and Mammoth Touluse geese. My birds are true blue—winners and qualities. Have a few S. C. Red and R. C. White cockerels at $3 and $5 each. Have a limited number of Mammoth Bronze gobblers at $8 and $10 each. We are booking orders for eggs. Write for mating list. No baby chicks.
HIGHLAND FRUIT AND POULTRY RANCH.
J. Nonnenmacher, R. F. D. 3, North Yakima, Wash.

## BABY CHICKS

Rhode Island Reds, White Leghorns. Don't wait until March or April to order and then be disappointed because you can't get them. But order now from our heavy-laying strain. Send card for price list.
MAPLEBROOK POULTRY FARM.
Box 3, Southworth, Wash.

## TRAP-NESTED BARRED ROCKS



All hen-hatched and hen-raised. Every hen trap-nested. First pen has, I believe, for past two years highest Barred Rock av. egg record in the world. All other pens practically same blood lines.

Pen 1, 12 hens, av. over 240 eggs, crossed to yearling cock, parents av. 260 eggs, $5 setting of 15. Pen 2, 25 yearling hens, av. over 200, crossed to 2 sons of No. 44, 708 eggs in 3 yrs., $5 setting of 15. Pen 3, about 20 hens and pullets, with reserve cocks and cockerels, same breeding. $3.50 per 15. A few cocks and cockerels from $5 up. IRVINE P. GARDNER. Riddle, Ore.



## DUROC-JERSEY SWINE

DUROCS.
Boars and open or bred gilts of excellent breeding.
E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE, Yakima, Wash.

## RABBITS

BARBER RABBITRY.
Pedigreed and registered Flemish and Checkered Giants. Bucks at stud. Stock for sale. Correspondence solicited.
MRS. R. W. BARBER, R. 4, Boise, Idaho.

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, Feb. 25.—Notwithstanding that big receipts pulled down grain values today, the effect was subsequently more than overcome by adverse weather conditions and by the lifting of embargoes on various railway lines from here to Atlantic seaboard. Corn closed firm, $1.27½ March and $1.26⅞ May, the same as Saturday's finish to ¼c higher. Oats gained ½c to ⅝c. In provisions there was a setback ranging from 12½c to $1.

Receipts of grain were the heaviest yet this season, and in corn arrivals at primary centers were more than double last year's figures. A further bearish factor was President Wilson's proclamation disapproving a higher guaranteed price on wheat. About the middle of the session, however, sentiment changed, and thereafter the market tended upward.

Oats paralleled the action of corn. There was much short covering as a result of a ruling at Minneapolis that settlement of defaults would be based somewhat on the value of cash oats in all markets.

General commission house selling weakened provisions.

**Chicago Futures.**

| | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| Corn— | | | | |
| March .... | 1.27½ | 1.27⅝ | 1.27½ | 1.27½ |
| May ..... | 1.26½ | 1.26⅞ | 1.26⅝ | 1.26⅞ |
| Oats— | | | | |
| March .... | .88¼ | .89¾ | .87⅝ | .89⅝ |
| May ..... | .86½ | .88⅛ | .86⅛ | .88 |
| Pork— | | | | |
| May ..... | 48.55 | 48.70 | 48.55 | 48.55 |
| Lard— | | | | |
| May ..... | 25.97 | 26.20 | 25.97 | 26.02 |
| July ..... | 26.25 | 26.40 | 26.25 | 26.25 |
| Ribs— | | | | |
| May ..... | 25.20 | 25.55 | 25.20 | 25.27 |
| July ..... | 25.70 | 25.95 | 25.70 | 25.70 |

**Cash Quotations.**

CHICAGO, Feb. 25.—Corn—No. 2 yellow, nominal; No. 3 yellow, $1.70@1.75; No. 4 yellow, $1.52@1.70.

Oats—No. 3 white, 89¾@91c; standard, 90¼@91½c.

Rye—No. 2, $2.47.

Barley, $1.65@2.03.

Timothy, $8@8.25.

Clover, $22@33.

Pork—Nominal.

Lard, $25.50.

Ribs, $24.25@24.75.

**Pacific Northwest Grain.**

PORTLAND, Ore., Feb. 25.—Grain, 30 days' options: Oats—No. 2, $69 bid. Barley, feed, $69; brewing, $72. Eastern oats and corn in bulk: Oats—No. 3, white, $64.50; 38-pound clipped, white, $65.50; corn—No. 3 yellow, $68; No. 3 mixed, $67. Oats—No. 3, $64.50; clipped, $65.50. Corn—Yellow, $68; mixed, $67.

**Minneapolis Grain.**

MINNEAPOLIS, Feb. 25.—Flour—Unchanged; shipments, 77,247 barrels.

Barley—$1.70@2.02.

Rye—$2.42@2.43.

Bran—$32.50.

Wheat receipts, 254 cars, compared with 455 a year ago.

Corn—No. 3 yellow, $1.55@1.80.

Oats—No. 3 white, 90 3-4@91 3-4c.

Flax—$3.79 1-2@3.81 1-2.

## Live Stock Quotations.

**At Omaha.**

OMAHA, Feb. 25.—Hogs—Receipts 18,600 head; market 5 to 10c lower. Heavy, $16.90@17.30; mixed, $17@17.15; light, $16.90@17.30; pigs, $10@15; bulk of sales, $17@17.15.

Cattle—Receipts 9000 head; market steady. Native steers, $9@13.25; cows and heifers, $7.50@11; western steers, $8.50@12; Texas steers, $7.50@10.50; cows and heifers, $7@9.50; canners, $6.75@7.50; stockers and feeders, $7@11.50; calves, $9@13; bulls, stags, etc., $7.50@10.50.

Sheep—Receipts, 7500 head; market 25 to 30c higher. Yearlings, $12@15; wethers, $11@13; ewes, $10.50@12.25; lambs, $15@16.60.

**At Chicago.**

CHICAGO, Feb. 25.—Hogs—Receipts, 53,000 head; market strong, 15c above Saturday's average. Bulk of sales, $17.40@17.60; light, $17.15@17.65; mixed, $17.15@17.65; heavy, $16.85@17.60; rough, $16.85@17, pigs, $12.75@16.25.

Cattle—Receipts, 15,000 head; market firm. Native steers, $8.85@14.15; stockers and feeders, $7.60@11; cows and heifers, $6.75@12; calves, $8.75@14.25.

Sheep—Receipts, 14,000 head; market strong. Sheep, $10.25@13.30; lambs, $13.75@16.85.

**At Portland.**

PORTLAND, Ore., Feb. 25.—Cattle—Steady; receipts 1086. Medium to choice steers, $10.35@11; good to medium steers, $9.35@10.35; common to good steers, $8@9.40; choice cows and heifers, $8@10; common to good cows and heifers, $6.75@8.15 canners, $4.25@6.25; bulls, $5@8; calves, $7.50@12; stocker and feeder steers, $6@9.50.

Hogs—Higher; receipts, 1873. Prime light, $16.85@17; prime heavy, $16.60@16.85; pigs, $14@15; bulk of sales, $16.50.

Sheep—Steady; receipts, 440. Western lambs, $15@15.50; valley lambs, $14.50@15; yearlings, $13@13.50; wethers, $12.50@13; ewes, $9@11. Shorn sheep 2½ to 3 cents under quotation.

**Spokane Stockyards, Monday.**

Hogs—Receipts, 26; market steady. Prime light, $16.10@16.35; prime heavy, $16.10@16.35; pigs, $14.50@15.25; stockers and feeders, $12@14; bulk of sales, $16.10.

Cattle—Receipts, 40; market steady. Best beef steers, $10.25@11; good steers, $9.25@10.25; common to good steers, $8@9; best beef cows and heifers, $8.75@9.50; good cows and heifers, $7.50@8.50; ordinary to good cows and heifers, $6.25@7.50; canners, $3.50@6.25; bulls, $5.75@7.85; calves, $6.50@10.50; stocker and feeder steers, $6@8.25.

Sheep—Receipts, 565; market steady. Prime lambs, $14.50@15.25; good lambs, $13.25@14; prime yearlings, $12.50@13.25; prime wethers, $12@12.75; best mutton ewes, $9@10.75.

## Portland Market.

PORTLAND, Ore., Feb. 25.—The fixing of oats prices in the east put a stop to the advance in the local market and at the close of the week prices were a dollar lower than on the preceding day. Barley suffered in sympathy with a similar decline.

There is reported to be a strong demand from California for alfalfa. Stockmen in that state need 50,000 to 60,000 tons before the new crop comes on. The government's buying of hay is also becoming heavier. As a consequence it is believed all stocks in the northwest will clean up closely before the season is over. Alfalfa has advanced here to $24.50 and other kinds of hay are also stronger.

There has been a free movement of wool during the last week. One of the local warehouses sold 350,000 pounds at prices ranging from 44 to 65 cents. Wool men are advised that shearing will begin in Yakima on March 5.

The potato market is working lower each week. Buyers are offering 85c @$1 at country points and selling for shipment is on a larger scalce. Jobbing trade is slack. Onions continue weak and inactive.

Canadian orders for eggs are on the market and the larger receipts clean up readily.

Butter is very firm with a general demand for extra cubes. No change in the cheese market is expected in the near future.

Country dressed meat receipts have been light all week and prices are quoted strong. Very little poultry is arriving.

In the following list of quotations the grain, hay, mill feed, hops, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 2 white, $69 per ton.

Millstuffs—Bran, $30 per ton; shorts, $32.

Barley—No. 1 feed, $69; brewing, $72 rolled, $67@69.

Hay—Buying prices: Timothy, eastern Oregon, $27; alfalfa, $24.50; grain, $22.

Eggs—Oregon ranch, case count, 43c per dozen; candled, 45@46c.

Poultry—Ducks, 30@35c; turkeys, live, 25c; geese, 20@22c.

Butter—City creamery, prints, 52@53c per pound; cubes, extras, 48 1-2@49c.

Cheese — Tillamook triplets, 25c; Young Americas, 26c.

Dressed meats—Veal, 20@20 1-2c; pork, 21@21 1-2c.

Hops—1916, nominal; 1917 crop, 16@17c.

Potatoes—Oregon, buying price, 85c @$1 per hundred.

Wool—Eastern Oregon, 44@65c; valley, 50@55c.

Beans—Buying prices: Oregon white, 9 1-2@10c; colored, 8 1-2c.

## Fat for Margarine.

On account of the shortage of other materials for the margarin industry experiments have been made for some time with hardened whale fat. In Denmark whale fat has been in use ever since 1914, but in Norway it has not been necessary until recently to use this substitute for other fat. In 1914 Denmark used 20,000 barrels of hardened whale fat in the margarin industry. It is also stated that this product has been proved to be well suited for making a margarin that keeps well and tastes well and to be even better suited for making lard. For the latter purpose it is only necessary to add a smaller part of the vegetable oil, such as cottonseed oil or sova oil.

## Butter and Eggs.

PORTLAND, Feb. 23.—Butter, prints extras, 52@53c; cubes extras, 48½@49c; prime firsts, 48c; dairy, 32@34c.

Butterfat, Portland delivery, No. 1 sour cream, 55c.

CHICAGO, Feb. 23.—Eggs, lower; receipts, 2394 cases; firsts, 46c; ordinary firsts, 44@45c; at mark, cases included, 44@45c.

SAN FRANCISCO, Feb. 23.—Butter—Extra, 52@54c.

Eggs—Fresh extras, 45½c; firsts, 44c; fresh extra pullets, 42c.

## Seattle Market.

SEATTLE, Feb. 23.—Difficulty of securing cars for shipping apples and potatoes from the Yakima valley is strengthening the market, although it must be admitted such pressure is insufficient to hold spud quotations.

Actual sales of graded Yakima gems have been made today at $1.25 per sack, or 15 and 25 cents under levels of a week ago for the same quality. Local whites are bringing $1 per bag, and while there have been occasional sales at the former price jobbers report that it is almost impossible to get any better money.

Apples have come to be the best sellers on Western avenue today. Jobbers generally report that cheap fruit has been cleaned up. Upward of 2500 boxes of jumble packs, stored by individual houses early in the winter, have been moved, and quotations withdrawn by a majority of the holders. The inquiry has swung over to the fancy and extra fancy, although buyers are slow to take on stock that sells at $2.25 and $2.50. Levels of $1.75 and $2.25 are most popular.

Storage butter at 47 and 50 cents per pound and such country creamery offerings of merit as brokers are able to bring in are preventing this market from going higher. City creameries are unable to supply the demand, notwithstanding that they have been reaching out into more distant territory to make up the supply for which they are steadily outbidden by the condenseries.

The cleanup of fresh ranch eggs for the week was generally at 45 cents, although a few sales at 46 cents were reported. For the last 10 days in the face of extremely light receipts, the market has been declining.

Cheese is unsteady owing to price cutting by packers. Triplets are 25 cents.

**BUYING PRICES.**

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots, f. o. b. Seattle:

Eggs—Local, 40c per dozen.

Poultry—Springs, 25c lb; 4 lbs and under, 25c; old roosters, 16c lb; squabs, large, $3.50 dozen; geese, fat, live, 18c lb.

Butterfat, 58c lb; dairy butter, 35@36c.

Beef—Buying prices: Prime beef, steers, 11@12c lb; cows, fat, 9@11c lb; heifers, 10@11c lb.

Hogs—Light, 18@20c lb; heavy, 17@18c lb.

Veal—Fancy light, 17@18c lb; heavy, 9@16c lb.

Hides—Salted, 14c lb; flint-dry hides, 29c lb; salt kip, 16c lb; green hides, 11c lb; green calf, 23c lb; dry calf (under six pounds), 29c lb; bulls and dry salts, 4c lb less; green bulls, 9c lb; dry full wool sheep pelts, 36@39c lb; salt bulls, 11c lb.

**SELLING PRICES.**

Feed—Scratch, $76 per ton; all grain chop, $74 per ton; oats, $75 per ton; rolled oats, $76.50 per ton; bran, $33.50 per ton; shorts, $35.50 per ton; soy bean meal, $67 per ton; whole corn, $78 per ton; cracked corn, $77 per ton; alfalfa meal, $35; rolled barley, $76.50; sprouting oats, $81 per ton; Milo maize, $75 per ton; white gyp, $75 per ton.

Hay—Eastern Washington timothy, $36@37 per ton; alfalfa, $28@29 per ton; double compressed, $40@41 per ton; wheat hay, $28 per ton; Puget sound, $29@30 per ton; straw, $15.

Butter—Washington creamery extras, cubes, 52c lb; do bricks, 53c lb.

Eggs—Fresh ranch, 45c dozen.

Potatoes—Puget sound, $1@1.35 per cwt; eastern Washington, $1.25 per cwt.

## Spokane Market.

The wholesale prices quoted in the list below are not the prices paid to producers or shippers; they are those charged by the Spokane commission houses to the retail trade for standard produce. The prices quoted for live stock, however, are the prices given to the producer.

**Potatoes**—New local potatoes, $1.25@1.50 cwt; sweet potatoes, $4.75.

**Apples**—Large eating apples, $1.25@1.50; cooking apples, $1 box; Delicious, 2.25; Winter Bananas, $1.50 box; Jonathans, $1.10@1.25 box; Wageners; $1@1.50 box Rome Beauties, $1.75 box; Spitzenburgs, $2 box; King Davids, $1.10 box; Grimes Golden, $1.35@1.65 box; Stayman Winesaps, $1.75 box.

**Butter**—Blanchard cartons, 53c lb; Medo-Maid, 53c lb; Cascade, 49c lb; Gold Leaf, 53c lb; Better Butter, 53c lb; Attalia, 53c lb; Diadem, 53c lb; Hazelwood, 53c lb; Solid Pack, 52@53c lb; Jersey Belle, 51c lb; Peerless, 47@48c lb; Snowcap, 38c lb; cooking butter, 38c lb.

**Cheese**—Wisconsin full cream, twins, 27c; triplets, 25c; Hazelwood full cream, triplets, 26c lb; Hazelwood Young America, 27c lb; Winconsin limburger, 32@33c lb; brick cheese, 33@35c lb; domestic Swiss, 38c lb; Young Americas, 27c lb.

**Eggs**—White filler, guaranteed, $13 case; selected storage, $12.

**Live Poultry**—Hens, 13@16c lb; broilers, 18c lb; old roosters, 9c lb; ducks, 15c lb; geese, 20@23c lb; turkeys, 28@32c lb.

**Dressed Poultry**—Hens, 28c lb; broilers, 32c lb; old roosters, 14@17c lb; ducks, 20@23c lb; geese, 20@23c lb.

**Hide Quotations.**

**Green Cows and Steers**—25 lbs and up, 11c; salted cured, 14c; green bulls and stags, 10c; salted cured, 12c; kip, 15 lbs. to 25 lbs., 16c; calf skins up to 15 lbs. 23c; dry flint hides, 30c; dry, salted, 25c; dry calf skins, under 10 lbs. 28c; dry sheep pelts, 30@35c; dry shearlings, 10c@$1 each; green horse hides, $2.50@4 each; dry horse hides, $1@2 each.

## Seattle Wheat.

SEATTLE, Wash., Feb. 23.—The committee appointed to work with M. H. Houser, agent of the federal grain corporation, of which L. P. Baumann, assistant general manager of the Centennial Mills is secretary, to take a census of wheat holdings in this state, has made poor progress. Only meager facts have been forthcoming. Mr. Houser has shipping orders for 23,000,000 bushels, but does not know where he is going to get the wheat. The Oregon-Washington railway yesterday embargoed loading of all boxcars east of Huntington as part of a plan, it is revealed, for assembling 4000 boxcars for shipping wheat out of the Oregon territory, destination not disclosed.

Seattle feed dealers have written Mr. Willcox at Portland, agent of the food committee in administration of flour distribution, that millers here are selling flour, mill and poultry feed direct to country dealers and have failed to segregate the jobbers' part of the handling in flour as distinct from the costs of production allowed by the government. They ask that these items be kept and shown separately to the government, after which they will have no objection. They also claim that in order to get poultry feed country dealers must buy flour and millfeed and that the production of millfeed at this time is heavier than ever before, as the mills are running full shift and with day and night crews. These jobbers ask Mr. Willcox for a hearing.

The grain and feed committee of the merchants' exchange yesterday telegraphed President Wilson, Herbert Hoover and the Washington delegation in congress urging that barley, corn and oats prices be placed under federal regulation, stating that as substitutes for wheat these foods have risen so high in price that poultry growers of western Washington can not pay it and remain in the business.

**TURPENTINE AND ROSIN.**

SAVANNAH, Ga., Feb. 23.—Turpentine firm, 42; sales, 50c; receipts, 113; shipments, 324; stock, 25,091.

Rosin, firm; sales, 423; receipts, 725; shipments, 908; stock, 88,963.

Quote: B, D, E, F, G, 600; H, 595@620; I, 595@620; K, 605; M, 615; N. 635; WG, 645; WW, 670.

**Serves Double Purpose.**

Basic slag, otherwise known as Thomas' phosphate, is the only known phosphate material that serves the double purpose of phosphating and liming crops.





**Highest Market Prices Paid**

for hides and prompt returns made same day shipment arrives. Write for price list and shipping tags. Address

**PACIFIC HIDE & FUR DEPOT.**

**Joseph Thiebes and C. T. Symmes.**
**1101-9 Railroad Ave., Spokane, Wash.**



## Peeling Saves Posts.

All fence posts should be peeled. Peeling keeps boring insects out of the posts, says J. H. Allison of the Minnesota college of agriculture. Since peeling is desirable it is best to cut posts in the spring. If the posts are not to be given preservative treatment they need not be seasoned. Records show that unseasoned peeled posts last just as long as peeled ones.

# Want Ads

### HELP WANTED—MALE 3

IRRIGATION MEN—DITCH RIDERS wanted for season of 1918. U. S. Reclamation service, St. Ignatius, Mont.

WANTED—ACTIVE MEN WITH FARMER acquaintances, to sell Pipeless Furnaces; splendid line; good proposition to offer. Richardson & Boynton Co., 171 W. Lake st., Chicago, Ill.

### EDUCATIONAL 45

BEHNKE-WALKER, PORTLAND, NORTHwest's largest, finest business college, can not supply half the calls for trained young men, women. Enroll now. Free success catalog. Positions secured.

### MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.
Send us postcard asking for our new, illustrated catalog No. 27, of sash, doors, finish, paints, builders' hardware, plaster board, roofing, etc., sent free on request.
Cottage front doors .....$2.75
5x panel doors ... ... .....$1.80
2 light windows ... .....$1.24
Prepared roofing, ....$1.35, $1.70 and $2.10
Clear cedar lap siding, per 1000 ft. ....$8.00
Short flooring and ceiling .....$20.00
The largest factory in the west selling direct to the consumer. We sell any one, ship anywhere, and guarantee safe delivery.
O. B. WILLIAMS CO.
1943 FIRST AVE SO. SEATTLE, WASH.

BUILDING MATERIALS AT WHOLESALE prices — Doors, windows, roofing paper, porch columns, plaster boards. All building materials shipped promptly. Send for our complete illustrated catalogue; gives you lowest net prices. P. A. ROVIG CO., 2229 First ave., So., Seattle, Wash.

FOR SALE—GENERAL MDSE. STORE, dock, 7 acres land, 800 ft. water frontage, warehouses, 2 barns. Located on Puget Sound between Seattle and Tacoma. This business netted me over $2000 in 1917. $9000 will handle this. Address A-10 Washington Farmer, Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

FLAX FOR SALE, $3 PER BU. DON F. Kugler, Soda Springs, Idaho.

### MISCELLANEOUS—WANTED 63

WANTED—BELGIAN HARES. WE ARE paying 15c per pound, alive, f. o. b. Spokane. Commercial Creamery company, Spokane, Wash.

### FARM LIGHT PLANTS. 73

WARNERLITE ELEC. LIGHT PLANTS absolutely guaranteed. Thousands used by satisfied farmers. Live agents wanted. Warnerlite Co., Temple Court bldg., Spokane.

### JUNK SHOPS 90

CENTRAL HIDE AND JUNK CO.
BUYERS HIDES, WOOL, METAL, RUBBER, SACKS, ETC. WRITE FOR PRICE LIST IF INTERESTED. QUICK RETURNS. W200 MAIN AVE., SPOKANE, WASH.

### MACHINERY FOR SALE. 93

FOR FARM LUMBERING USE
"AMERICAN" PORTABLE SAWMILLS
Carried in Stock by
HIGGINS MACHINERY COMPANY,
312 1st ave. So., Seattle. Write for Catalog.

MOTORS, GEARS, BEARINGS, WHEELS, axles; we wreck all makes of cars and sell their parts at half price. Auto Wrecking Co., 89-91-93 N. Broadway, Portland, Ore

### STOVE REPAIRING 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

### PATENTS 150

WRITE FOR HOW TO OBTAIN A PATent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

### POULTRY 174



BABY CHICKS—LEADING VARIETIES.
We guarantee safe arrival and full count; strong, vigorous chicks from the finest flocks of free range stock in this country. 1918 price list and care of baby chicks if you mention this paper. Lasher's Hatchery, Petaluma, Calif.

## Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and i t s associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

# Want Ads

Send for card giving lower rates for ads running one month or longer.

## How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

### POULTRY 174 Continued.

BABY CHICKS.
White Leghorn chicks, $14 per 100. Barred Rock and Rhode Island Red chicks, $18 per 100.
HATCHING EGGS.
$1.50 per setting of 15 guaranteed.
INCUBATORS AND BROODER STOVES.
We are agents for the famous Queen incubators and brooder stoves. Also have a line of hot air, hard wood, first-class hatchers at ⅓ their real value. Also cheaper machines; 70 eggs, $5, and 120 eggs, $7.50
CUSTOM HATCHING.
We do custom hatching, 3c per egg. Catalog free.
QUEEN HATCHERY, 89 Pike, Seattle, Wn.

HOGANIZED S. C. W. LEGHORNS—THEY have no fear of the high food prices, but just keep on laying high-priced eggs. Our pullets have cleared 50 per cent above their feed cost all winter. Eggs for hatching, $3 and $5 per setting, and $10 and $15 per 100. Golden Rule Poultry Farm, Cheney, Wash.

S. C. RHODE ISLAND RED AND WHITE Leghorns; best western prize winning stock, crossed with my own trap-nested birds; cocks and cockerels, $2.50 to $5; a few hens and pullets, $1.25 and up; eggs, $1.50 for 15; $7 100; no chicks. F. H. Volland, Kennewick, Wash.

BABY CHICKS.
Famous Carnation White Leghorn; vigorous, early maturing, heavy winter layers; also breeding stock. E. W. Raush, Carnation Poultry Ranch, Kent, Wash.

WHITE ROCKS—EGGS FOR HATCHING from trap-nested stock at $2 per 15. Winners in the leading shows of the coast for nine years; heavy egg production. L. R. Kerns, Eugene, Ore.

BABY CHICKS—S. C. WHITE LEGHORNS; real mortgage lifters; the kind that lay while mere kiddies; 21 years on the job. Catalogue. I. D. Casey & Sons, R. 6, Waitsburg, Wash.

PETALUMA HATCHERY—CAN SHIP DAYold chicks to points reached in 3 days. Why not have the best? We challenge the hen. Free circular. L. W. Clark, Petaluma, Cal.

MAMMOTH BRONZE TURKEYS.
18-month-old tom, weight 30 lbs., $10. Young toms, $7. Hens, $5. Mrs. J. R. Mulkey, St. John, Whitman Co., Wash.

S. C. WHITE LEGHORNS — PRESENT breeders averaged 15 doz. each last season. Mated to high-record males. Hatching eggs. Mary Jessup, Cooks, Wash.

WHITE WYANDOTTES, BRED FROM Martin's famous bred-to-lay Dorcas line fowls. Eggs, $2.25 and $3.50 per 15. Thos. Thorson, Cashmere, Wash.

PURE BRED S. C. BROWN LEGHORNS; best winter layers; hardy, free range stock; eggs, $1.50 to $3 for 15. Vail's Poultry Ranch, Loomis, Wash.

S. C. REDS; EGGS $1.50 TO $5 SETTING. A card will bring mating list. Sure to please. J. S. Benson, Cottage Grove, Oregon.

FOR SALE—PUREBRED BARRED ROCK cockerels, Barronett strain; choicest birds, $5. August Anderson, R. No. 1, Pullman, Wn.

FOR SOMETHING GOOD IN SILVER Wyandottes, S. S. Hamburgs or Golden Campines, write G. G. Wherry, Payette, Ida.

PARKS BRED-TO-LAY BARRED ROCKS, winter layers. Eggs, $1.50 for 15; $8 per 100. W. G. Neyland, Spokane Bridge, Wn.

TRAPNESTED WHITE LEGHORNS AND Barred Rocks. Eggs, $1.50 per 15; $8 per 100. Mrs. W. M. Roberts, Elmira, Ore.

TRAP-NESTED S. C. W. LEGHORNS— Hens, pullets and hatching eggs for sale. H. C. Deitz, Box 337, Hood River, Ore.

RANCH RAISED WHITE WYANDOTTES. Good vigorous birds, eggs and stock for sale. Jas. A. Hills, Jonathan, Wash.

WANTED—FIVE TO FORTY LARGE, healthy turkey hens. No disease in flock. Mrs. Costello, Malden, Wash.

S. C. BUFF ORPINGTON CKLS., $3 TO $5 ea. Mrs. J. A. Lockhart, St. John, Wash.

WANTED—4 PEKIN DUCK HENS. B 10, Washington Farmer, Spokane, Wash.

BARRED ROCK EGGS, $2 PER 15. W. D. Good, Mt. Vernon, Wash.

### LIVE STOCK 177

FOR SALE.
A choice lot of pure bred Shire stallions, coming two years old; also pure bred yearling Shorthorn bulls. Address
WILSON RANCH, ROCKLYN, WASH.

ABORTION IN COWS CURED AFTER seven days' treatment. Write me in regard to the matter. The best references in Linn county, Ore., on application. Wm. Schneider, R. 1, Box 43, Albany, Ore.

BERKSHIRE BRED SOWS AND GILTS, March, April and May farrow. Write for special price list today. SILVER BIRCH FARMS, Newport, Wash.

FOR SALE—WILLOWMOOR PETER PAN 19th, registered Ayrshire bull; 5 yrs. old; gentle, sure breeder. Randolph Brown, R. 3, Junction City, Ore.

JERSEY CATTLE—BULLS, COWS AND calves are included in private sale list now ready. SILVER BIRCH FARMS, Newport, Wash.

POLAND-CHINAS; BIG TYPE; SPRING pigs by Young Chief N. 79349, from good, rangy sows. James A. Hills, Jonathan, Wn.

FOR SALE—25 REGISTERED RED, white and roan Shorthorn bull calves and yearlings. Wm. Mulhall, Fenn, Idaho.

### HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

### RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

### TAXIDERMISTS 426

WE MOUNT ANYTHING. FURS TANNED and made into furs and robes. Raw furs bought. Mohr, 82 Bernard, Spokane.

### BUSINESS OPPORTUNITIES 516

$6500 BUYS A WELL-EQUIPPED DAIRY plant and business in a beautiful college town in So. Calif. Brings in about $400 per mo. For full particulars and terms write R. F. D. 1, Bx. 86, Yelm, Wash.

### PLUMBING, STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

### SEEDS 620



IF YOU HAVE ACCLIMATED SEED TO sell, it will pay you to advertise it in this classification. If you want to buy seed adapted to western soil and climate watch what is offered in this department.

VETCH, CLOVER AND FIELD SEEDS.
We carry a complete line of grasses, wheat, oats and other seeds too numerous to mention. Our prices are right. Will be glad to send samples and quote prices.
CORVALLIS FLOURING MILLS.
CORVALLIS, ORE.

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.,
Portland, Oregon.

NEW SEED CATALOG—COMPLETE LIST of Tested Seeds for Western planting. Write for your copy today—MAILED FREE. An experience of 25 years in the Northwest. Aabling-Boyce Seed Co., 89 Pike St., Seattle, Wash.

VOGELER'S PURITY SEEDS.
Alfalfa and clover seeds—full of life—carefully cleaned and tested. Also the finest seed grains. Write for catalog and price.
VOGELER SEED CO., Salt Lake City, Utah.

CLOVER SEED, FANCY RED, STRICTLY pure; buy from the growers and save. Sample and price. Write Shadeland Farms, Amity, Ore.

WE SPECIALIZE IN TIMOTHY, ALFALfa, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Ida.

HIGHEST QUALITY RED AND ALSIKE clover, also vetch seed. Prices right. M. Senders & Co., Albany, Ore.

### NURSERY STOCK 621

NURSERY STOCK — ITALIAN PRUNE trees, grafted walnuts, pure strain of Vrooman Franquette walnuts, and all other kinds of nursery stock; small fruits of all kinds. Buy direct and save 50 per cent. Brooks Nursery, Lafayette, Oregon.

FAY'S PROLIFIC RED, BLACK NAPLES currant and Oregon champion gooseberry cuttings, $3 per thousand f. o. b. here. J. E. Newton, R 3, Bx. 198, Puyallup, Wash.

EVERBEARING STRAWBERRIES ARE mortgage lifters. We have plants, strong and thrifty. Send for price list. F. I. Moffett, Ellensburg, Wash.

PROGRESSIVE STRAWBERRY PLANTS, bear first year set, from July to November. $2 per hundred; $1.50 for more. G. F. Thayer, Payette, Idaho.

### FARM LANDS—FOR SALE 651

FULLY EQUIPPED STOCK RANCH
$2000 BELOW VALUE.
160 acres beaver dam land; all tillable except 2 acres; 80 acres in meadow; 5 head of horses, 8 head of cattle; all farm machinery; good 2-story house, barn, wagon shed, garage, blacksmith shop and other outbuildings; good well and creek. Price $5500; $4000 cash, bal. long time.
This is one of our many.
JAMES W. BOOTHE & CO.
510 FIRST AVE. SPOKANE, WASH.

HEAD FOR THE HEADWATERS OF the old Missouri; splendid grain and stock ranches. For information about climate and soil write Chamber of Commerce, Three Forks, Montana.

### FARM LANDS—FOR SALE 651 Continued.

SMALL FARMS FOR SALE.

We have for sale at lower than prevailing market prices—and on terms to suit purchaser—3 small farms, ranging from 10 to 80 acres each—Some improved with house, barn, well, etc., at $80 to $120 an acre, just half former prices. Finest black Palouse soil—just the kind that insures "sure" crops of grain, fruit or garden; located 14 miles from Spokane, on electric line, and paved highway. Surrounding growing suburban community—active trading center.

These are among best bargains offered today. You buy from us as owners. Call at office, or write for full particulars, with plat, before you buy anywhere. One of these tracts will surely suit your needs.

HANAUER-GRAVES COMPANY.
601 Old National Bank Bldg.
Spokane, Wash.

BUY WHERE THEY RAISE THE PRIZE CROPS
IN SNOHOMISH COUNTY.
40-acre farms, $25 per acre. Ten yearly payments, 6 per cent interest. Visit our office and see the great exhibit of PRIZE-WINNING vegetables, fruits, grains, alfalfa and other grasses raised on the adjoining farms. They prove our claims that this is the best land in WESTERN WASHINGTON.
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GOING — IRRIGATED ALFALFA AND stock ranch of 111 acres; gross income $6000; situated on the bank of the Yakima river; ideal for all kinds of stock; properly cultivated, will raise 100 bu. corn and 10 tons of potatoes to the acre. Horses, cows, registered $1000 Holstein bull, Berkshire hogs, chickens, farm implements, etc.; eight-room house, barn, silo, hog and chicken houses. This ranch is second to none in the Yakima valley. Reason for selling, old age. Price for all $28,000; one-half cash. Address B 7, care Washington Farmer, Spokane.

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# We must fill that basket!

*The Spirit of 1918*



THIS is the most vital of all win-the-war messages. It is addressed to you and to us—so that you will put forth every available effort and resource to plant big crops, and to us that we may strain every effort to supply the highest quality seeds for fruitful production.

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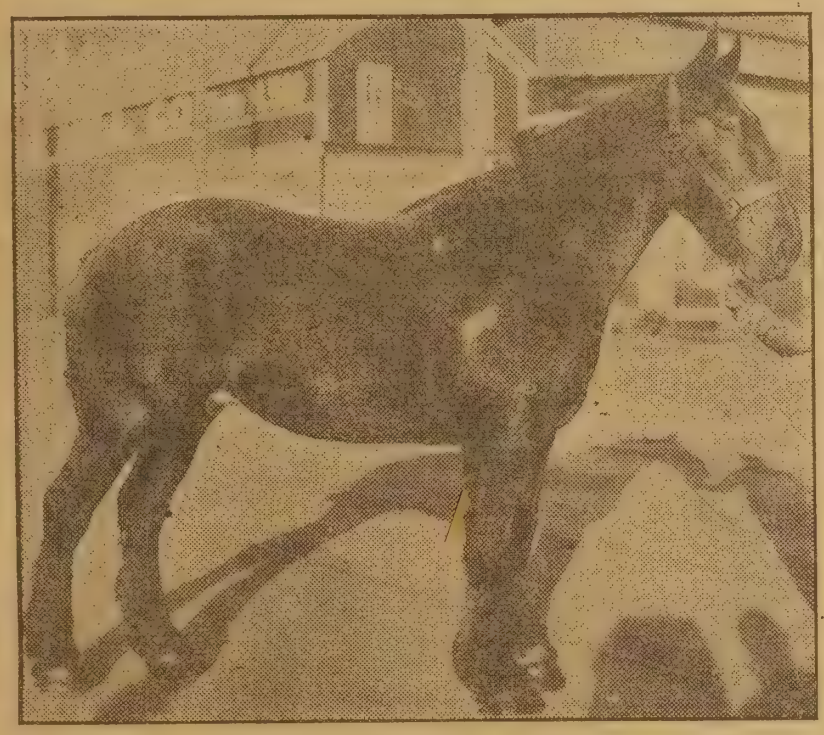
*Seattle, Wash.* LILLY'S *Portland, Ore*

# THE WASHINGTON FARMER

SUCCESSOR TO

THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XLI. NO. 10. MARCH 7, 1918. WEEKLY.






# CHEVROLET

THE PRODUCT OF EXPERIENCE

# ASK YOUR BANKER!

You are contemplating the purchase of an automobile—because you realize the lack of a good motor car puts you at a great disadvantage in a business way as well as keeping you out of your proper environment socially. But you must have a reliable car. How are you going to get it?

ASK YOUR BANKER what is the best guarantee of the reliability of a product and he will tell you it is the responsibility of its maker.

Back of every Chevrolet car is an $80,000,000 corporation operating factories in the principal districts of the United States and Canada. At the head of this company is W. C. Durant, "the master mind of the motor industry," and the head of the General Motors Company, controlling Buick, Olds, Cadillac, Oakland, G. M. C. Truck Co., and others. At Oakland, California, the Chevrolet Motor Company has invested nearly two million dollars in a factory to give service to Pacific Coast Chevrolet owners. This factory operates branches at Spokane, Wash., and at Portland, Oregon, to carry Chevrolet service closer to you people of the Pacific Northwest.

In every Chevrolet car is bred a quality that can only come of years of experience in the building of motor cars; a quality that reflects the ideals of its makers to produce a really high grade car at a popular price. The purchase of such a car is an INVESTMENT, not alone because of its small first cost, but because of the little it costs after purchase.

Economy, though the most important consideration, is not the only requisite of the modern motor car. You want a good-looking car, and the Chevrolet has it in full measure. Vanadium steel, used wherever unusual stress occurs, insures its strength. Your comfort wishes are satisfied to the fullest degree by proper spring suspension, roominess and comfortable upholstering. The wonderful valve-in-head motor, with which every Chevrolet is equipped, provides power far in excess of ordinary requirement or emergency, and the direct-application-of-power principle insures the maximum of power on the minimum of fuel. Last of all, you must have balance if you are to get the full benefit of the use of your car, and in the Chevrolet you will find a car so evenly balanced that the driving of it will be a source of the keenest pleasure, second only to the pride of ownership.

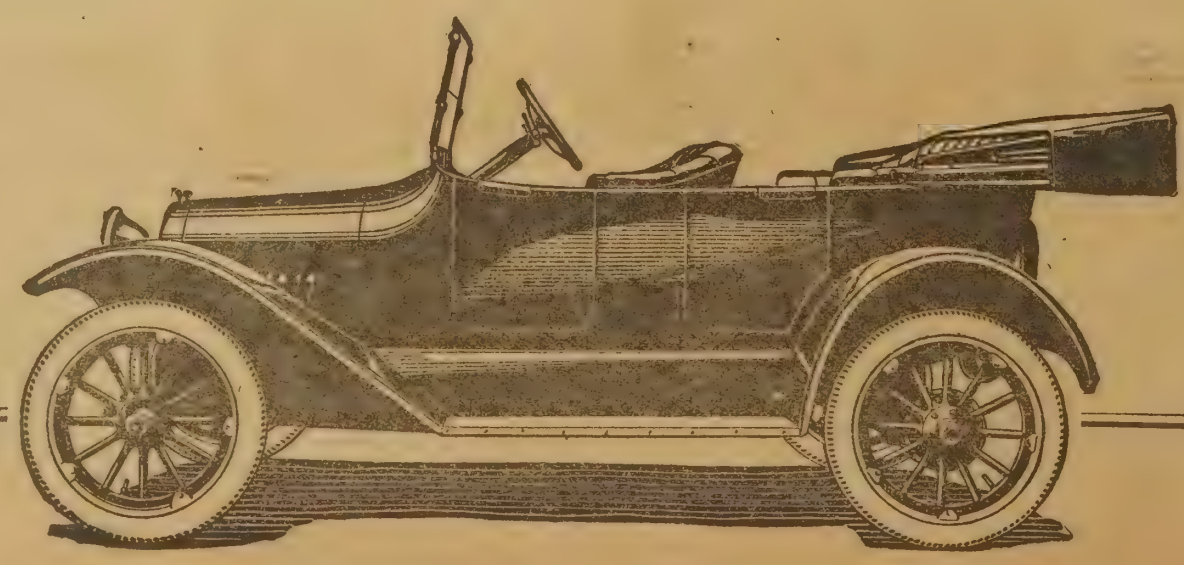
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**CHEVROLET MOTOR CO. of CAL.**
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FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 10 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF March 7, 1918

## Will Pay Dividend

### Land Bank Becomes Well Grounded

The federal farm loan bank for the northwest is progressing so satisfactorily that it will declare a dividend to its stockholders during the present year. This is the confident prediction of President D. G. O'Shea.

During the first several months of the existence of the farm loan bank there were no sources of income, but the expenses were very heavy, due to the work of organization and the setting in motion of the institution's machinery for business. Now, however, the bank has a source of income, namely, the payment of interest and a small percentage of principal by the farmers who took out the first loans through the bank. The provisions of the law require that twice a year payments be made by borrowers on an amortization plan, which means that each payment shall be such as to cover the interest due on the whole loan and also a small portion of the principal, thus reducing the principal with every semi-annual payment. President O'Shea states that since January 1 these payments have been coming in to Spokane at an average rate of more than a thousand dollars a day.

The actual work accomplished by the farm loan bank is nothing short of remarkable. In considerably less than a year it has actually placed in the hands of its farmer borrowers $10,734,925. There are yet pending before the bank applications for approximately $30,000,000 more in loans, the total applications up to March 1 being $40,619,921. The board of directors has approved loans totaling approximately $20,000,000, of which, as shown above, more than half has actually been distributed to applicants. Indicating that the board is exercising due care in the making of its loans, its books show that applications have been rejected for loans totaling nearly $4,000,000. It is the policy of the Spokane district board to require perfect security for the loans which it makes. They argue that if the security is ever found to be the least bit faulty, financial interests will not wish to purchase the bank's bonds, which are issued on a basis of the mortgages given by the borrowers.

## Food Production Day

With a view to stimulating the production of food throughout the state of Washington, Charles Hebberd, state food administrator, has sent word to all county food administrators designating Saturday, March 9, as state food production day. The following telegram indicates the object of the movement and the method of carrying it out:

"Farm production, marketing of farm crops, farm labor and farm problems generally come particularly under direction of national and state departments of agriculture. The agencies of the national department of agriculture, including the agricultural department of the Washington State college, its agricultural extension department, county agricultural agents and club leaders are primarily charged with responsibility for increased food production.

"Hoover feels, however, that the food administration has a prime duty to fire the imagination of the producer to the national necessity, and to enlist all agencies in the state in food production he desires that the federal food administration use every possible method to consolidate public sentiment and the national service back of the responsible agencies of the national and state agricultural departments in a campaign for greater food production in 1918.

"I am, therefore, wiring all county food administrators, asking them to call together in their respective communities on Saturday, March 9, all food committees, farmers' organizatons, county defense councils, school superintendents and principals, commercial, labor and women's organizations and all other agencies in a mass food production convention within the county, with county agricultural agents and other agencies of national and state agricultural departments, in a statewide campaign for the largest possible food production in 1918.

"The problem of increased food production varies in each section of the state. Therefore each county should work out its own plan of campaign. Will you not undertake to put your county in the van, both in farm production and in home and school war production for 1918?"

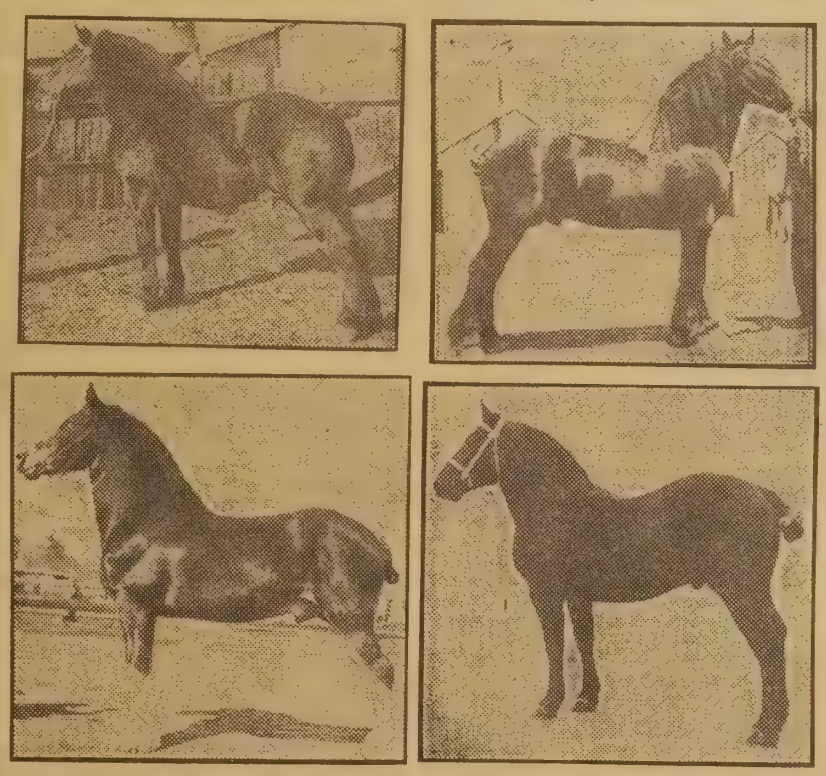
### A Big Little Help.

County Agricultural Agent H. W. Hockbaum of Idaho refers to the war savings stamps now being offered for sale as "the biggest little help we can give the boys over there."

### For the Kitchen Sink.

A paper box that fits a kitchen sink strainer has been patented to receive garbage and facilitate its removal.

## Typical of the Four Big Draft Breeds



**Here are shown four good horses, typical of the four big breeds of draft animals, the Percheron, Shire, Belgian and Clydesdale. At the top are: Left, Bismark, a Belgian owned by W. T. Tracy of Kennewick, Wash., and right, Wilson Idol, a Shire owned by W. R. Ledbetter of Alicel, Ore. At the bottom are: Left, Decoration, a Clydesdale owned by R. E. Reynolds, La Grande, Ore., and right, Diligent, a Percheron, as owned at 2 years old by B. F. Burge of Albany, Ore.**

## Trappers of the Ozarks

You will become intensely interested in the adventures of these two young pioneers in the wilds of Upper Louisiana, now the state of Missouri, by beginning to read this new serial, the second instalment of which begins on page 34 of this issue. The buffalo hunt related in chapter six is first class reading of itself, but with the summary of the preceding chapters you can enjoy every bit of the following instalments. Here is the summary:

In September, 1811, two young men who lived near St. Louis—Ben Armstrong and Jodo Henderson—taking with them their two dogs and donkey, Spunky, started on an all winter's hunt in what was at that time an unsettled region, where Indians held full sway, in the wilds of upper Louisiana, now the state of Missouri. After a perilous trip over old Indian trails and dangerous streams, they reached their destination—a salt spring, close to the River Big Niangua, which Ben had visited before and from which they expected to secure salt for sale with their furs when they returned to civilization the following spring. Here they erected a rough cabin for their winter quarters close to the mouth of a large cave that was full of water and bats, and started their salt making and hunting.

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### The Front Cover.

The photographs on the cover of this paper are the work of W. O. Reed, photographer, of Spokane, and were submitted by Roberts Bros. of the Spokane Union stock yards. The lower picture shows a four-horse team of heavy draft horses moving a giant piece of machinery that weighs 18 tons, approximately five times the weigh of the horse flesh that hauled it. The photographs at the top show a pair of heavy geldings, the kind that it is supremely worth while to raise. They weigh around the 1750 mark each, and are representative of what can be accomplished by the use of good high grade mares and purebred sires.

## Want Dairy Council

### Show at Yakima Is Great Success

A resolution was adopted at the Western Dairy Products show last week at Yakima, Wash., favoring the creation of a western dairy council for the purpose of concentrating the efforts of those interested in the solution of dairy problems. Another resolution was adopted urging the appropriation by each of the 11 states represented at the meeting of a fund for use in animal husbandry work, with special reference to the dairy industry.

The show and the conferences held under the leadership of experts from all over the west, together with instructors' sessions with dairymen from many states, proved one of the organization's greatest successes.

There were 76 exhibits of milk and cream from seven of the western states, 36 being from Oregon, and the producers of Portland carried away the highest honors in the contest for rank. In class 7, board of health averages for five highest scoring dairies, Portland was first, with an average score of 97.76.

Three college teams competed in the judging contests on butter, cheese, milk and dairy cattle. The team from Washington State college took first place in the final summary with a score of 2353.95. Idaho university took second rank with a score of 2325.1. On butter, milk, cream and cheese Idaho was first with a total of 1149.8, Oregon 1142.85, Washington 1133.3, but in stock judging the Washington team was first by 80 points, scoring 1889 out of a possible 2400 points.

### LIMIT TWINE PRICE.

### Food Administration Acts.

Under an agreement with manufacturers of binder twine with sisal importers the food administration has announced the maximum advance over cost of sisal which may be charged by the manufacturers, the scale being on the present price of 19 cents a pound for sisal fiber.

Standard and sisal binder twine containing 500 feet to the pound should be sold in carload lots of 20,000 pounds or more at a maximum advance of 4 cents per pound above the cost of sisal. Lots of 10,000 pounds or more, but less than 20,000 pounds, are to be sold at an advance of not more than 4 1-2 cents a pound.

Twine that contains 550 feet to the pounds should be sold at a maximum advance of 1 3-4 cents above the price for standard twine; 600 feet to the pound at an increase of 3 cents, and 650 feet to the pound at 4 cents to the pound. Pure manila twine containing 650 feet to the pound should be sold at an advance of not more than 6 cents per pound above the price of standard twine. All prices are f. o. b. factory.

### Engineer's Periscope.

An Englishman has invented a periscope to be mounted in a locomotive cab to enable an engineer to see the track ahead or the whole of his train.

# Horse Ailments Are Genuine Scourge

## *Great Effort Should Be Made to Conserve Every Ounce of Horse Flesh*

By W. H. LYTLE, State Veterinarian of Oregon

Unfortunately we have regarded many of the ailments and diseases of horses more in the light of a necessity than a scourge. We have today many examples of diseases and maladies that could be practically eradicated or at least easily avoided by a proper effort along the line of precautionary vaccination or judicious handling.

The necessity for an elaborate effort at conservation of horseflesh is, this year, more apparent than ever. The season just opening should be one in which unusual returns should be realized from the horse and mule industry. Indeed, those who champion the horse against motor power competition can best further the interests of this noble beast by making him return such a profit that to do away with him will be the most obvious of follies. Horses are rendered inefficient because of disease, improper care and handling and an abnormal loss of the young at foaling time. To more successfully avoid some of these pitfalls will be the attempt of this article.

**"The Heaves."**

In the Pacific northwest there are two separate and distinct divisions of the horse raising district. The arid portion of this region is, properly speaking, what might be called a vast sanatorium for many of the horse ills that are to be found in the coast region of these states; here what is commonly spoken of as "heaves" is unknown. Conversely, many of the ills that the horse is heir to in the arid sections of the Pacific northwest are unknown to horses inhabiting the coast regions.

Perhaps no one disease has been of so much concern to horse raisers in the Pacific northwest as has what has been designated as the walking disease. This malady has been prevalent only in the arid sections of this district. For some six or more years, particularly during the summer months, unusual losses have been recorded in horses, particularly those that are harbored on wheat farms. A number of different theories have been evolved and likewise a number of experiments have been conducted, all of which have not, so far, tended to prove or disprove any one theory. During the summer months a report was had from certain French veterinarians who brought forth the theory that the bot was responsible for the disease known as infectious anemia. Such experiments as have been made would not tend to link the disease, infectious anemia, with the so-called walking disease.

**Treatments Mixed.**

At one time we had carried out a treatment on walking disease patients with an idea in mind of freeing the animal from bots. Unfortunately other treatments were carried out at the same time and it could not be definitely proven what particular line of treatment was responsible for the good results that were had. Some 180 or more horses were treated in three different bands with a loss of only three horses subsequent thereto. The following year a different theory was produced and consequently a different treatment was carried out obtaining the former satisfactory results, hence we are now showing a tendency to assign the bot as a cause of the disease, termed by the layman walking disease.

A particularly interesting coincidence has been noticed in connection with walking disease patients. Mules that have always been allowed to associate with horses never have been reported to show this infection. Practically all of the different books on animal parasites do not mention the mule as being susceptible to bot infestation. For that reason it is thought that the mule has escaped this highly fatal malady. Horses in the valley districts are thought not to become infested with the particular species of bot that probably either carries an infecting oganism or elaborates a particularly deadly virus; or, it is possible, the rains of this section wash away the bot eggs before they are taken into the system and the larvae hatch out.

Those owners who have experienced repeated losses from walking disease should consult their veterinarian and have him administer a treatment that will assist in the expulsion of bots. No drug seems to have been so successful as carbon bisulphide. This treatment is of such a nature it must be given carefully and by an expert in the administering of drugs of this nature. Those breeders who are located in remote sections of districts where the services of a veterinarian are not procurable should place their animals on a treatment of flowers of sulphur, about a tablespoonful twice daily in the feed. Good results have been reported from the administration of carbolic acid and salt, one ounce of pure carbolic acid to the pound of salt, animals allowed to eat at will. Horse owners who have experienced losses from this malady should be careful to curry off the bot eggs from their horses' legs. It might even be better to spray the regions of their body that are covered with eggs with a 2 per cent crude carbolic acid and water spray. This will have a tendency to kill the larvae at the time they hatch.

A disease frequently termed mountain fever, occasionally swamp fever, and sometimes plain paralysis, has doubtless occasionally been confused with the so-called walking disease of the northwest. It is apparently a form of hemorrhagic septicemia. At least numerous bands of horses that have plainly showed characteristic symptoms have been protected from this ailment by the administration of hemorrhagic septicemia vaccine. The chief symptoms of this disease are that animals will show an intermittent fever, frequently pneumonia complications will result and if such animals do not die early in the attack they follow out a chronic course, grow very thin and sometimes present a wobbling-like appearance much the same as is seen in hogs suffering from hog cholera.

The treatment of this ailment is not as a rule satisfactory and only through precautionary measures can good results be had. The manner in which infection spreads is not thoroughly understood. It is quite possible that infected surface water is the means of spreading the malady. It would seem that the same precautions should be used as are used in treating hogs infected with cholera. Doubtless, the urine contains an infecting virus or is the means of carrying the organism that is responsible for this ailment.

**Glanders Troublesome.**

Probably glanders is more frequently seen on the range than any other one horse disease. This ailment is one of the oldest of known horse diseases. It has been existent in the Pacific northwest since the early immigrant days and was probably introduced into this district by immigrants coming to the Pacific northwest over the old Oregon trail The very chronic course that this disease follows in high, dry altitudes proves one of the obstacles to its successful eradication. Horses frequently show this malady only during the winter months of the year. When the dry season of the year comes the nasal discharge seems to dry up and frequently the glands under and between the lower jaw, which in the winter time and in advanced cases are seen as hard, swollen bodies, are absorbed and reach their normal size and consistency during the dry summer months.

Generally speaking, glandered animals show a discharge from one nostril. Frequently this is said to be the left nostril, but apparently the right nostril is quite as frequently the seat of involvement. Frequently both nostrils will be seen to be discharging a thick, viscid pus, which is unusually sticky and agglutinous. The large hairs which protrude from the nose and nostrils will frequently be found thickly coated from this puslike discharge and will occasionally present the size of a small shingle nail. It is thought by many that the discharge from glandered animals is of such a consistency that it will sink in water. Generally speaking, this is true, but one would not be warranted in basing his diagnosis on this particular characteristic of the discharge. Frequently small ulcers can be seen high up in the nostril. The inner lining membrane will present a ragged, starlike ulcer, which in many respects resembles the starlike cracks in thin ice, only, of course, small in comparison. The edge of these ulcers are very ragged and overhanging and occasionally they converge one into the other and present a considerable size.

**Have Veterinary Test.**

Bands in which glandered horses have been discovered should be treated to an ophthalmic mallein test by a reliable veterinarian. Those animals

Continued on page forty-two.)

# Will Handle Grain

With a view to carrying out the principles of cooperative unionism, the farmers' unions of Oregon, Washington and Idaho have organized what will be known as the Tri-State Union company. Its purpose will be the handling of grain. It is announced that the company will have a capitalization of $1,000,000.

For a long time there has been a marked sentiment among the three state organizations for a closer union in the conduct of the warehouse and grain-handling business. Heretofore the farmers' union warehouses have been more or less local in character, but under the system as now being worked out for the new company the management of this line of the organization work will be centralized. It is understood that there are approximately 200 of the local farmers' union warehouse companies in the three states, and the capital stock of the larger company will be made up, in part at least, of part of the capital stock of these individual companies.

While the organization will have a definite effect upon the handling of grain during the coming season it will not be fully organized and operative before the first of next year. Speaking of the new venture, President A. A. Elmore of the Washington and Northern Idaho Farmers' Union says:

"Under the organization now in progress we shall be able to bring the entire three states into one comprehensive working organization. We have been in the grain handling business 10 years, and the plan we are now working on is the result of our experience. We have made mistakes, and intend to profit by them. We believe we are now on the way to a better plan of handling our grain. The scope of the new organization will include providing bags and such other things as are necessary to the grain business."

## It Is Horses Like These That Make the Hearts of Their Owners Thrill With Genuine Pride



This is a scene at the Spokane Interstate fair when a few of the good horses were lined up before the camera. These and their like of all the draft breeds are the kind of stock that is needed on the farm and in every line of work where horse power in its original form is required.

# Substitute Potatoes for Wheat

## *Will Farmers Increase Plantings Without Guarantee Against Loss?*

By ROBERT S. DOUBLEDAY

Among all the close-at-home problems confronting the farmer of Washington state at this time, no other is more important than the closing out of the 1917 potato crop at reasonable prices.

E. F. Benson, commissioner of agriculture, pointed out some months ago the likelihood of the development of the conditions which now exist, but little or no heed was given to his statements and prophecy. Whether this lack of appreciation of Mr. Benson's intelligent presentation of the matter was due to mere public indifference, or what is more likely, due to lack of proper publicity for his department because of the lop-sided niggardliness of a legislature, would be an interesting subject in itself for investigation and discussion. But in any event Mr. Benson's warning went practically for nought—and now comes the whirlwind—and it is not so small at that.

Just by way of indicating what the present situation is, let me refer to a recent issue of the Daily Produce News in which it may be found that the leading article is headed, "Immediate action is essential if potato crop is to clean up." And up to this moment there has not been any immediate action worth while that has tended to move the balance of the crop at all. On the contrary the growers of potatoes who promptly and properly and patriotically responded to the call for growing more potatoes find themselves well loaded up still with a large part of last year's crop. Spring is close at hand, potatoes are spoiling where not properly stored or storage costs are absorbing the profit where they are stored, and yet the necessary and proper distribution and the encouragement to consumption is still lacking.

We are in dire need of a few competent potato colonels and rutabaga majors and the like. Probably the material for such officials is abundant enough, but the state has no proper machinery for employing them. Some of us have insisted for a long, long time that these matters of distribution and market direction are properly enough matters of state concern. The evidence of the correctness of this contention is abundant enough at all times. When war, with its unusual demands and abnormal conditions, comfronts us, the truth is brought home to us in a way that will not be denied, that is all. With needs unsupplied in some directions and wasting surplus in others, we are found fiddling around with finely drawn "standardization" details and academic statistics embracing juicy information concerning averages of this, that and the other under conditions which once no doubt existed, but which do not now obtain.

What the farmer needs at present, so far as potatoes are concerned, and therefore and to that extent what the state needs, and what has right along been needed, is to most advantageously dispose of the big crop of potatoes that the farmer raised, the big crop that he raised under special urging and patriotic impulse.

Certain of the information issued by Commissioner Benson in the spring of last year, and certain information afterward sent out, all of it too largely ignored by the press that loves the farmer ever so dearly, reads now like the prophecies of a man who is unusually gifted with foresight. Unfortunately, after having made either a right good guess or an "a number one" prophecy, Commissioner Benson quit. I doubt if he wanted to, but he had reached the limits of his jurisdiction, in any event, and that is another matter.

Let me quote you from one of Commissioner Benson's circulars of last year, referring to probable conditions at this time:

"Next spring, if we have a slump in prices, many farmers may be glad to sell for less than $20 a ton, besides sustaining a loss of 25 per cent to 75 cent between digging time and opening the pits several months afterward." Commissioner Benson saw also in this connection the sins of certain farmers who were disposed to be speculators first and farmers afterward. Said he: "There will be little sympathy next spring for the farmers who refused $25 to $30 a ton at digging time." And, also he added: "One reason for the farmer's speculative notions this year is that last year the speculators made huge profits on the farmers' prices."

Incidentally, is it not curious how many farmers there are who will howl themselves positively purple about the grievous sin of speculation—by somebody else—in foodstuffs, but who can see no remedy for the evil, but to speculate themselves? Verily, there are farmers and farmers and once again farmers. No one should be allowed to speculate in foodstuffs, and the rule has no class application. Speculation in foodstuffs at any time is evil enough. In time of war it loses no whit of its ordinary sinfulness, but takes on that of being traitorous as well. Incidentally, also, it may be worth while to remark at this juncture that farmers have no longer the former right to complain of being wholly at the mercy of middlemen and bankers. At Seattle, the largest market in the state, there are public storage facilities under the Seattle port commission; storage of very great capacity and conducted on a basis of cost only; and the national administration, under the new banking laws, has made warehouse receipts for potatoes, under certain proper conditions, acceptable for commercial loans at any national bank, on low rates of interest.

One effect of the present potato situation is likely to be a lesser planting of potatoes than would otherwise have been made this year. If this shall prove to be the case it will be as unfortunate as it is unnecessary. All that was said a year ago to urge farmers to plant potatoes might well be repeated at this time with added emphasis and considerable amplification. The nation needs potatoes. It is going to need them more than it does now. Not that I mean to prophesy any particularly direful status, for I do not. But even normally we do not use potatoes as generously as we should.

Under the existing war conditions there is greatly increased need of the use of potatoes. Are we not already under the stern and absolute necessity of foregoing wheat to a considerable extent? Apart from properly trained and equipped soldiers, is there any other one thing we can provide and which is more obviously essential to the allies than wheat? There is not. And if we send away a considerable part of our wheat supply, what shall we substitute for wheat in our own domestic economy? Corn is, of course, the first suggestion. But, necessarily there are limitations in the possible use of corn. Besides, corn is greatly needed for live stock food, and furthermore, the use of corn for human food at the present time is not economical because of its high market value. Potatoes must more largely be substituted for wheat. But of what avail is it to urge the greater use of potatoes in other than the ordinary ways unless the potatoes are to be had under reasonable conditions and when required? What is the use of urging the substitution of potato flour for wheat flour, for instance, if potato flour is not to be had? And last, but by no means least, why expect farmers to increase potato plantings if there is no guaranty to them against loss and no intelligent control and direction of the distribution and marketing of the potato crop after it has been raised? This last is no such vast problem as some interests would like to make it appear. Intelligent officials with a grasp of the fundamental economic principles of marketing, with proper legalized authority, with sufficient funds provided, with the purely selfish influences disregarded, could properly balance so far as possible the supply and demand and at any rate guarantee fair market conditions for producer and consumer and serve a very great patriotic purpose at this time.

# Achievement Pins

## Lewis County Students' Awards

County Superintendent A. C. Canterbury of Lewis county has just received the list of boys and girls who have been awarded achievement pins for their work in the boys' and girls' industrial clubs for the last year.

In order to earn one of these pins a boy or girl must keep an account, make a final report to the state club leader, write a story of their project and show a profit.

There were 142 boys and girls to get these pins this year, showing a net profit of $1776.07. Those receiving pins were as follows: Rosa Cheatham, Beth Dodge, Billy Derington, Frieda Billen, Martha Black, Marjorie Burrows, Daisy Canterbury, Elsie Canterbury, Olive Canterbury, Albert Closner, John Deggeller, Betha Dodge, Bertha Faas, Leland Foister, Horace Fuller, William Fuller, Harry Giren, Lloyd Macomber, Clyde Madsen, Earl Miller, Charles Mulford, Lafie Phillips, Cleo Pier, Ewald Richardt, Norris Saindon, Alfred Scherer, Vern Scherer, Earl Simmons, Vernie Simmons, Bruce Stockand, Elenora Stout, Dorothy Lang, George Van deBoe, Weaver Vandegrift, Manna Whitcomb, Myrtle Zachman, Jens Svinth, Stewart Bassett, Edward Maurin and Oscar Nordwall of Chehalis; Rosa Addington and Julius Schoemouer of Ajlune; Zella Collins, Lloyd Carson, Laurence Carson, Bessie Morris, Clarence Landes, Robert Martin, Willie Graham, Hannabel Blankenship, Glen Moore and Ruth Walsh of Mossyrock; Hazel Johnston, Myrtle Kibbey, Rose Robison, Dorothy Stewart, Eva Cannse, Jack Kohtala, Lillie Kohtala, Leonard Niemi, Arne Niemi and Francis Osborne of Centralia; Emma Jordan and Lenore Perkins of Swofford; Bernice Sweany of Curtis; Marse Belanger, Claude Burleson, Edna Burleson, Lynn Burleson, John Burns, Grace Chaufty, Thelma Cunningham, C. R. Leathers, Doris Roe, Emery and Lillie Roe and Lyle Varney of Winlock; William Balch, Moree Cook, Ellen Jackson, Nellie Klub, Vivian Kowalsky, Otto Maurer, Frieda Serierinsen, Paul Smith and Edward Boyer of Pe Ell; Mansford Brabec, Catherine Connell, Albert Harmon, Edna Hoover, Kenneth Hoover, Buford Hopper, Melvin Howell, Edith and Ray Johnson, Mary Painter, John Pilz, Charles Ratkie, Roman Ratkie, Inez Schmidt, John Taylor and Leota Tucker of Dryad; Alma Bumann, Ella Bumann and Bennie Roundtree of Boistfort; Julia and Lucien Christian, Marcel Christian, J. E. Holcomb, Effie Thorp, Ida Milburn and William Wilburn of Neskill; John Delamater of McCormick; Adrian Duncan, Anna Jackson and Eddie Roundtree of Klaber; May Foister and Nora Rainero of Rifle; Bennie Geiszler, George Geiszler, Willie Keto, John Leonard, Frank Walter, Ida Walter, Mamie Walter and V. E. Waltar of Eagleton; Lottie Gessell of Forest; Ethel Gibson and Jack Herttua of Vader; Elsie Lahti of Castle Rock; Alex. McDaughlin and Florence Valentine of Littell; Russell Towner of Kopiah; John Sears of Mayfield, and Marion Stelloh of Nesika.

Deputy County Superintendent Heath has been appointed county club leader for this year.

# Spraying Program for Western Washington

Spraying in the orchard is one of the most important operations of the season's work, and if clean, first-class fruit is desired it should not be neglected. Plan the spraying in advance to secure maximum value. Know what pests are present, secure all materials early and follow a regular program. Use the right material in the right strength at the right time, says Arthur Frank, plant pathologist of the Western Washington experiment station at Puyallup.

**When the Buds are Bursting,** or just as they are swelling. This is the best time to apply the so-called "dormant" spray. Apply to all fruit trees. Use lime tsulfur solution, 1 gallon to 8 or 10 gallons of water. This controls **Oyster-Shell Scale, San Jose Scale, Blister Mite** (on apples and pears), **Red Spider, Anthracnose** (black-spot canker), and will keep down **Moss** and **Lichens.**

To control **Aphis,** use a **Combination Spray;** that is, combine black leaf 40 with the lime sulfur, using 1-3-pint to 50 gallons of the lime sulfur spray, which give a strength of 1-1200. For **Bud Moth,** add 1 pound of powdered lead arsenate to 50 gallons of lime sulfur spray.

**When the Blossom Buds Show Pink,** but before they burst. This is for apples and pears for **Scab.** Use Bordeaux mixture 4-4-50, or lime sulfur 1-30. For **Apple Mildew** add 2 pounds of iron sulfate (dissolved) to 50 gallons of lime sulfur spray. If not used in previous application for **Aphis,** add black leaf 40 (1-3 pint to 50 gallons of spray), and for **Bud Moth** add lead arsenate.

**When the Petals Fall,** on apples and pears for **Scab.** Use lime sulfur 1-30. If **Mildew** is present, add 2 pounds of iron sulfate (dissolved) to 50 gallons of lime sulfur. Add lead arsenate (1 pound to 50 gallons of spray), for **Bud Moth** or **Codling Moth.**

**Two Weeks to Three Weeks Later,** spray apples and pears again for **Scab,** with lime sulfur 1-30. The application depends upon weather conditions: If the weather is wet after the preceding spray, spray again in about two weeks; if the weather is clear and dry, delay this application, or it may not be needed at all.

**Peach Leaf Curl.** Use Bordeaux mixture 4-4-50, or lime sulfur solution 1-15 before the buds start to swell.

**Cherry Gummosis.** Although winter injury and other causes may produce gumming in sweet cherries, most of this trouble is due to a bark and fruit spur disease caused by bacteria. Carefully inspect all sweet cherry trees during the winter and spring for discolored patches on the bark or for gumming. Cut into such bark and remove all that is discolored, and then disinfect the wound with lime sulfur or other disinfectant and paint it with pruning paint or grafting wax. It is thought that the disease is carried by insects, so wrapping the trunks and main limbs with burlap is suggested for trial. The use of resistant varieties on which to graft sweet varieties is another way of avoiding the disease. The trouble is prevalent upon young trees of sweet varieties.

**Brown Rot of Plums and Prunes.** When the disease is serious, spray as follows:

(1) Just before the petals open.
(2) When the petals have fallen.
(3) When the husks are off.
(4) One month before the fruit is ripe.

Use Bordeaux mixture 4-4-50, or self-boiled lime sulfur. In addition to spraying keep the trees pruned. Pick up and burn all old decayed fruits from the ground beneath the tree, and also pick the old dried fruit off the tree. Plow the ground under the trees before blossoming time and keep the ground cultivated.

**Gooseberry Mildew.** Use lime sulfur solution, 1 gallon to 10 gallons of water, just as the buds are starting. Apply lime sulfur solution again, but at a strength of 1-30, just after the fruit has set, and again at 1-30 strength when the fruit is one-half to two-thirds grown. Add lead arsenate (1 pound to 50 gallons) for leaf-chewing insects, or black leaf 40 (1 pint to 50 gallons) for aphis.

**Bordeaux Mixture** is made by dissolving 4 pounds of copper sulfate in 25 gallons of water and slaking 4 pounds of lime in another 25 gallons of water, and then pouring the two solutions together.

**Lime Sulfur Solution** is the most reliable form in which to use this product, although there are several solution of nicotine sulfate. It is the most efficient spray for all types of aphis. The use of soap, or if used alone the addition of a little lime, adds greatly to its efficiency.

**Lead Arsenate** is the best poison to use against all chewing insects. Although it is apt to be rather higher in price this season, it is still the best material and under conditions the cheapest that could be used.

Mr. Frank adds that he is glad to answer any inquiries sent him in care of the Experiment Station, Puyallup, Wash., regarding the making of sprays, the use of materials, or any other spraying problems, and will be interested to hear from growers as to their results with spraying. Growers are invited to send in specimens of any plant diseases or of insects that are doing damage. Any information of these pests will be greatly appreciated.

### Cavite Flashes Time Over Pacific.

Since October 1 the radio station at Cavite, cooperating with the Philippine bureau of posts and the Manila observatory, has been sending the time signals of the 120th meridian east of Greenwich at 11 a. m. and 10 p. m. every day, says Science.

For the purpose of sending time signals, the transmitting clock of the Manila observatory is connected with the Cavite wireless station through the bureau of posts. Manila observatory time signals begin at 10:55 a. m. and 9:55 p. m., standard time of the 120th meridian east of Greenwich, and continue for five minutes. During this interval every tick of the clock is transmitted, except the 28th, 29th, 54th, 55th, 56th, 57th, 58th and 59th of each minute.

The situation of Manila in the Pacific makes this service of the greatest importance to the mercantile and naval fleets that ply upon that ocean.

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## *Take No Chances With Crop!*

Secretary Houston appeared before the house committee on agriculture Monday with an optimistic view of the food situation. He said there was no need for any "hysteria" over a danger of shortage of any commodity.

Apparently the secretary of agriculture spoke against the proposed legislation to extend government loans to farmers to buy seed, for Chairman Lever of the committee said after the hearing that he did not think information given to the committee would warrant extending financial aid to farmers for purchasing seed.

Notwithstanding this attitude, congressmen from a number of western states insist that it is essential and will fight for the desired legislation.

**Danger of Over-Confidence.**

We fear that Secretary Houston is overconfident and that his over-confidence may injure the allied cause. It is not improbable that his optimistic statements to President Wilson explain the president's decision not to fix 1918 wheat prices higher than last year's guarantee.

We are at a loss to understand the reasons for Mr. Houston's easy-going cheerfulness. He seems, Micawber-like, to be trusting to "something to turn up." He is strong on appeals to the farmers to increase production, but weak on substantial support like stimulating prices and government loans to farmers needing seed in dry regions who have been having a pretty hard time for the past two seasons.

The overwhelming weight of opinion of such authorities as Mr. Hoover in this country and the food controllers in Great Britain and France is that the danger is exceedingly grave that America will not produce enough wheat this year to save the allied forces from short rations and possible hunger.

**Evidence Is Contradictory.**

Mr Houston's own department recently gave out a statement that contradicts his confident assertions Monday before the house committee. In that statement, issued February 18, the department said:

"While the area of winter wheat sown in 1917 was the largest on record, the condition of the crop as reported on December 1 was the lowest ever recorded, indicating a probable production of only 540,000,000 bushels."

Mr. Houston hopes that this probable shortage will be overcome by heavy spring sowing, but admits that "the total acreage will be greatly influenced by what is done in Minnesota, North Dakota, Montana and Idaho, wehe the conditions have not been the most favorable and where, in some sections, they have been decidedly unfavorable during the past two years. North Dakota's lowest acreage in the last five years was that of 1917." And the same is true, according to the department's statement of February 18, of Minnesota.

These are significant facts. Although wheat prices were high in the spring of 1917, North Dakota farmers seeded 657,000 less acreage than the five-year average, 1912-1916, and the Minnesota acreage of 1917 fell off 765,000 acres below that state's five-year average.

Although the department says much will depend on what is done this year in Minnesota, North Dakota, Montana and Idaho, it says further:

"What these states can do this spring it is difficult to determine. Because of the difficulties they have experienced, particularly during the last two years, a definite suggestion of acreage for these four states is not given in the accompanying table."

On this showing of facts—the department's own statement—it would seem that prudence would demand that no action be omitted that would stimulate increased production in these states. Mr. Houston admits that the growers have had "decidedly unfavorable" conditions for two years. It is known that many of them, particularly in Dakota and Montana, are pleading for financial aid to buy seed. But he dismisses their pleas with roseate guesses that all will turn out well at the next harvest.

**Take No Chances Now.**

We hope it will, but with the country at war we don't believe in taking any unnecessary chances. Why not provide the necessary funds for seed? It is not asked as a gift, only as a loan. If Mr. Houston is right, and the aid is not needed, no harm will be done. The fund would not be invaded. But if aid is needed, and for lack of that aid land is allowed to lie idle that could have been seeded, the loss will not be alone upon the affected farmers. It will be a national and allied misfortune.

## *The Horse Is Here to Stay*

The remarkable development of the gas-driven vehicles within the last few years has led to a widespread belief that the day of the horse is drawing to a close. A great many people have mourned over the passing of man's best friend. It seems logical that when a machine is made which does a horse's work its advantages will crowd the animal out of the place he has held so long. The increase in motor machines of all sorts made it seem probable, and yet investigation of the horse industry indicates that it is not true at all.

The day of the scrub horse is nearly gone, and the sooner darkness settles on him the better. But the day of the specialized horse—the horse bred for a definite place in the world as it is—is still in its first dawn.

The demands of the greatest war in history have been for more and more machinery. Cavalry we hear little of. The cavalrymen of today rides the air, and the rest of the army appears to have burrowed into the earth. And still the demands for horses for the war have been enormous. In spite of automobiles and tractors of all types the cry is for horses, more horses of the right type.

On the farm, while the tractor grows in usefulness, there is no denying the fact that the right kind of a horse is more in demand than ever. The machine does a certain amount of work; the horse is flesh and blood and can respond to an emergency. If the machine breaks down, it is done for until it is repaired. If one of a team of horses is crippled, the other horse can serve in a pinch and do more than his full share. While he has some disadvantages, he has just as many advantages. He has a place in economy from which he can not be ousted. The tractor has not destroyed the horse industry;; as a matter of fact, it has helped it, for they have made breeders scratch their heads and get to work producing an animal even better fitted to meet the new competition or to fit into a new corner of real economy.

When will we do away with the horse? Why, about the time we succeed in making a mechanical cow; when we grow wool by pulling a lever, or raise pork by pressing a button.

## *Washington Gleanings*

It is planned to build a $35,000 dock near the head of Port Townsend bay.

An active campaign for members is to be started by the Farmers' union of Walla Walla.

The Whitman county commissioners have purchased a caterpillar for road work in the LaCrosse district.

The Northwest Egg association has been organized at Walla Walla by poultrymen who hope to equalize prices.

F. E. Johnson has sold his ranch south of Chewelah to Mr. Nebrey of Idaho for $32,000, of which a large part was cash.

M. F. Elmore recently sold 1120 acres of land near Lind, which he had settled on 17 years ago, to Kiehn and Koch of Ritzville, for $50,000.

Fifty head of steers were recently shipped from Reardan by L. E. Ensor, which netted him over $6000, or more than an average of $120 each.

The sale of 800 acres near Keystone by I. N. Womach, a pioneer of Adams county, to David Greenwalt of Ritzville for $39,000 has been reported.

The difference in the price of wheat and in barley and oats has caused many farmers near Toppenish to change their wheat acreage to oats and barley.

A. B. Dorsey has sold his ranch of 1278 acres, located six miles northwest of Waterville, to Frank Malfa Jr. for $55,000. There are 575 acres of farm land on the place and the balance in pasture land.

At a recent meeting of the Whitman-Spokane County Cow Testing association the following officers were elected: Ira P. Whitney, Spokane, president; H. S. Curtis, Palouse, vice president; C. M. Bach, Pullman, secretary-treasurer.

In order to increase meat production, the trustees of the Sunnyside Waterusers' association have petitioned Secretary of the Interior Franklin K. Lane, to modify a recent ruling of his to permit sheep to graze in Rainier National park during the war.

Following a personal tour of grain-growing sections in eastern Washington, P. J. Sweeney, state grain inspector, reports excellent prospects that winter wheat this year will yield an average of 90 per cent of grain sown where 60 per cent was winter killed last year.

N. F. Thompson, plant disease specialist with the state college, and the United States department of agriculture, conducted a series of demonstrations and lectures on plant diseases and treatment of seed in Cowlitz county, in cooperation with County Agent L. S. Keyes, recently.

## *What Others Say*

Kimball's Dairy Farmer: Cooperative bull associations promise to accomplish as great a purpose as have the cooperative cow testing associations. They should become even more popular and more numerous.

Hoard's Dairyman: It should ever be remembered that the man who does hard work is entitled to good food and clean, cheerful quarters; he should have hours for recreation and study; for the demand for right living in this country has become so urgent that farmers in the future who do not furnish the right conditions for hired men will have serious difficulty in securing competent farm labor.

Wallace's Farmer: When we once begin to economize, we are likely to carry it altogether too far, and refuse to make expenditures which are really good investments. The man who "gets along somehow" with a practically worn-out implement, for example, will spend, in keeping it in repair and in time wasted, far more than the interest on the money invested in a new implement. There is such a thing as unwise economy.

The Farmer: The problem of persuading farmers to maintain their acreage will undoubtedly receive a very great deal of discussion during the next few weeks, and we would suggest that our readers take particular pains to post themselves very carefully both as to their duty in this matter and as to the possibility of adjusting their farming plans so that they will receive the greatest returns and at the same time be fair to their country.

REO

"THE GOLD STANDARD OF VALUES"

# A Seven Passenger Six That You Can Afford

THE GOLD STANDARD OF VALUES

**Salient Features of the Reo Six**

50 HORSE POWER, Six-cylinder motor cast in threes.

REO DESIGNED, Reo made—throughout.

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CANTILEVER rear springs—Semi-elliptic front springs.

FULL FLOATING rear axle.

TIMKEN BEARINGS throughout.

NOISELESS spiral-bevel driving gears.

REO ONE-ROD centre control.

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BOTH BRAKES operated by foot levers and provided with ratchet locks. Extra large and both operating on rear hubs. No hand brake.

CLUTCH AND SERVICE brake are interconnected.

TWO UNIVERSAL Joints in drive shaft.

TORQUE SHAFT relieves driving mechanism of road stresses.

SUB FRAME carries motor and transmission.

EXTRA LARGE—and round—spokes in wheels.

OVER-SIZE TIRES—34 in. x 4½ in.

PERFECT LUBRICATION at every moving point.

REO RADIATOR—Reo designed, Reo made.

REO-REMY Electric Starting, Lighting and Ignition system.

REO STEERING GEAR—exclusively Reo. No back-lash—self-adjusting for wear. Positive.

50 PER CENT OVERSIZE in all vital parts—crank-shaft, axles, driving shafts, gears, frame, wheels, tires.

NET RESULT—Reo upkeep equalled by no other 7-passenger car.

PRICE IS F. O. B. LANSING AND SUBJECT TO INCREASE WITHOUT NOTICE

WE ARE NOT THINKING of the price—for that isn't the primary consideration in the selection of a car.

YOU KNOW YOUR OWN NEEDS—whether a five passenger car is sufficient; or if you really need, at times, room for more.

AND YOU KNOW better than anyone else can tell you, what your price limit is.

AND SURELY AT ITS PRICE this Reo Six is the greatest value obtainable in a car of established reputation.

AND REO REPUTATION is second to none.

WHEN WE SAY "Here is a seven-passenger Six that you can afford," we are thinking of the same item that you, an experienced motorist, are considering—

NAMELY—UPKEEP. That is the first thing to consider in the selection of an automobile.

CERTAINLY YOU CAN afford to own a seven-passenger car—and you can treat yourself to the luxury of a sweet-running, silent Six—if you can feel that not only in first cost but also in cost of upkeep it will be well within your means and accord with your ideas.

ASK ANY REO SIX OWNER to tell you of the upkeep cost of his Six—and the longer he has owned and the farther he has driven his Reo, the better will his answer sound.

HE WILL TELL YOU that, having compared notes with friends who own and drive other makes of cars—fours as well as sixes—of the same passenger capacity, he has never found one that compared with his Reo Six in low cost of upkeep.

AND HE'LL TELL YOU, too, that he has yet to find even a five-passenger car—four or six—the operation, repairs, replacements and general upkeep cost of which proved as low as his Reo Six—except one the five-passenger Reo.

NATURALLY a five passenger car ought to be cheaper to maintain than one of seven-passenger capacity—but most are not, when you look up the figures.

REO DEALERS TELL US that their records for the past three years show that Reo Six owners on the average have paid less than eight dollars per car per year for replacement parts.

JUST READ THAT AGAIN—with thousands of Reo Sixes running in all parts of the country, over all kinds of roads and handled by all kinds of skilled and unskilled drivers; most of them owner driven and owner cared for (or neglected)—

THE AVERAGE COST per car, per year; for replacement parts was less than eight dollars!

FRANKLY WE DON'T believe that record can be equalled by any other seven-passenger car on earth.

AND WE MAY ADD that the records on the five-passenger Reo show less than seven dollars per car.

THE SAME QUALITY—the same sound engineering; the same ripe experience; the same attention to little details and the same construction, inspection and testing of every car enter into the making of all Reo models.

COST OF UPKEEP is always uppermost in the minds of Reo engineers, when designing and when specifying materials. And since the same desire is uppermost in the minds of the most experienced buyers—we meet on a common ground.

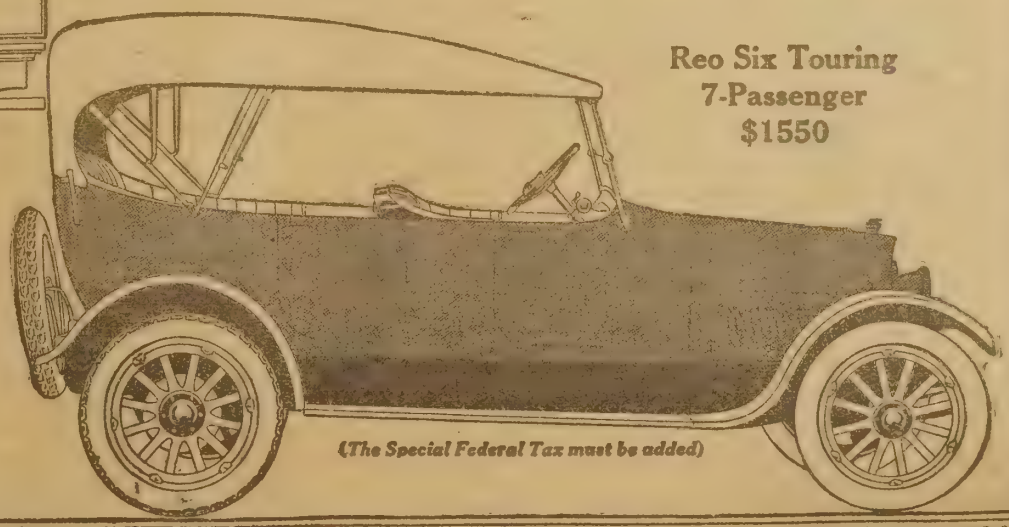
WE ARE FRANK TO ADMIT that to a large extent the phenomenally low cost of upkeep of Reos is due to the fact that Reo buyers are, as a class, better informed and more careful in their selection than the average.

REOS DO NOT APPEAL to those who look only to superficials—Reos are built for connoisseurs and Reo owners are mostly men of ripe experience in motoring. They, therefore, combine prudence with intelligence in their choosing of an automobile.

IF YOU ARE ONE of that kind, we say to you, here is a magnificent, luxurious, seven-passenger six that, both in first cost and cost of upkeep, you can well afford to own.

REO EFFICIENCY sets the price lower—Reo quality guarantees low upkeep.

## Reo Motor Car Company, Lansing, Mich.



Reo Six Touring
7-Passenger
$1550

*(The Special Federal Tax must be added)*

# Red Star Will Save the Horse

## *Will Be to Him What Red Cross Is to Soldier*

There is probably not a man or woman in America or in Europe who does not know the Red Cross and the work that it is doing in behalf of humanity, but as yet those who know the Red Star are in the minority.

The Red Star is to the horse what the Red Cross is to man, and while the latter is doing its noble work behind the battle lines in France the Red Star, if the people of America rally to its support as they should, will be performing the same kind of work in behalf of the army horse.

Already the allied governments of Europe have purchased from America more than 1,000,000 horses for army service in one capacity or another, and if America ever places 2,000,000 soldiers on European soil those soldiers must be accompanied by at least 750,000 horses. All nations participating in the war recognize the fact that the horse is indispensable, notwithstanding the great service which the automobile truck and "tank" are performing.

During the last three years, though there has been little said about it in the casualty lists, there have been thousands and thousands of horses left dead or mortally wounded on the fields of battle. Thousands of them have died unnecessarily because there had been inadequate organization for the purpose of their rescue.

From one end of this land to the other there is now being waged a campaign to raise funds to rescue these injured animals and restore them to service. Though live stock associations, especially horse breeders' associations, are taking the leading part in the movement, the campaign is one in which every person should become vitally interested. Like the Red Cross appeal the appeal of the Red Star is universal in character. Like the Red Cross its one purpose is the relief of suffering and the restoration of powers to serve.

If the people in this country contribute as they should to this movement there will be built hundreds of veterinary hospitals back of the battle lines in France and hundreds of pieces of equipment will be purchased and put into operation to bring back from the battle fields the injured animals. In these hospitals they will be treated by experienced horsemen and veterinarians in the same manner that the wounded soldiers are treated by the Red Cross nurses, surgeons and doctors.

America has responded to the Red Cross loyally, giving its millions for the sake of humanity. It must respond to the Red Star with similar loyalty and give at least its hundreds of thousands in behalf of humanity's best friend.

## Automobile Hints

Following are suggestions that are likely to be helpful to drivers of motor cars. It sometimes happens that emergencies come up where these practical pointers come in handy. If information along any specific line is desired write us.

For cleaning battery plates that have become encrusted with sulphate here is a good recipe: Half pound of ammonium acetate in a quart of water. Heat the solution while removing plates from battery, insert plates in hot solution and let stand for half an hour. If badly encrusted, leave in solution for longer time. Wash well in clear water after removing from bath and dry before returning to battery.

If there is some carbon in cylinders pour half an ounce to an ounce of kerosene into each cylinder at night while engine is still heated, let stand until morning and when carbon deposits are not too hard the results will be gratifying. This can be practices to advantage every few weeks if the car is much used.

Where an acid-proof coating for terminals, connecting bars or other battery fittings is desired melt small pieces of sealing wax in alcohol and let stand for a day. Use enough alcohol so that the solution will be of the consistensy of varnish. It can be applied the same as paint, dries quickly and is not affected by acid. This may be made to take the place of shellac varnish. The latter is made by dissolving flake shellac in alcohol If the mixture is kept in a bottle the cork should be waxed to prevent its sticking.

If you wish to test your fuel pour a few drops on a sheet of clean white paper. Note how long it takes to dry off and whether it leaves a greasy stain or discoloration. If the paper is stained or discolored the fuel contains nonvolatile impurities. If it is a considerable time drying the fuel very likely contains water.

To remove from the radiator the scale which forms in it fill the water system with a strong solution of washing soda and hot water. Run (but do not race) the engine for about 15 minutes and drain the solution from the system. The scale will come with it.

If a valve cap sticks run the engine until it is warm and then pour cold water into each cap. This causes a sufficient contraction in most cases to permit the ready removel of the cap from the cylinder casing.

A good temporary repair for a leaking water pipe may be made by bending around the leak several layers of string soaked in thick oil.

### A Result of Sugar Shortage.

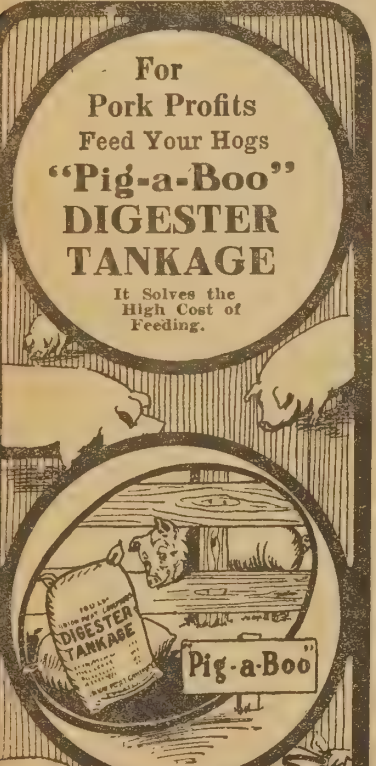
The sugar shortage has encouraged Louisiana planters to broaden the use of pure cane syrup, which is made from cane juice, without taking out any of its sugar. This juice is boiled to a point just below that required to crystallize it into sugar, and can be used not only for griddle cakes and candy making, but it is recommended by the planters as a sweetening for coffee and tea. It is practically sugar in a liquid form, and on a basis of 8 cents a pound retail for granulated sugar will yield economies of 40 to 50 per cent, at a price of 4 1-2 to 5 cents a pound for syrup.

### Dentists' Instruments.

For the use of physicians and dentists a tongue depressing instrument has been invented that switches on an electric light to illuminate a patient's mouth when it is used.


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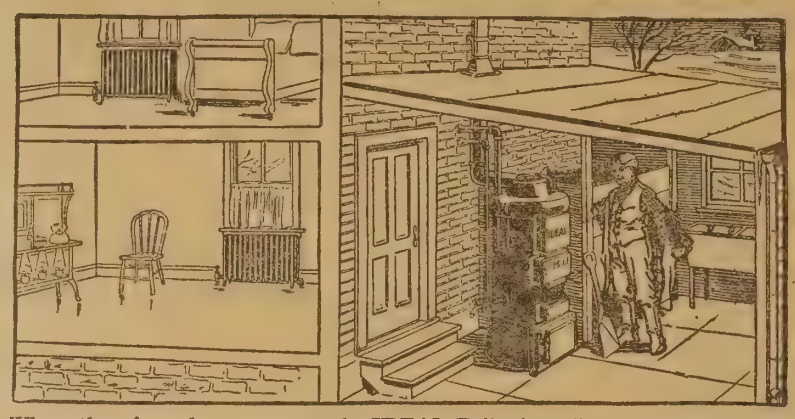



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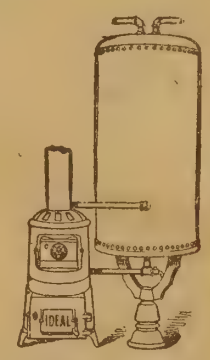
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## Greatest fuel savers known

Radiator heating is the IDEAL heating for the farm—it is cleanly—labor-saving—gives heat for any kind of weather. A small fire will furnish plenty for chilly days and the house is as balmy as June even in blizzard weather.

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Improve your house with IDEAL heating—give your family its comforts—pays back its first cost in fuel savings. IDEAL heating is safe, clean and durable—never needing repairs or over-hauling and lasts as long as the building stands.




Our IDEAL Hot Water Supply Boilers will supply plenty of warm water for home and stock at small cost of few dollars for fuel for season.

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**Don't put it off another day—read up and get all information about IDEAL Boilers and AMERICAN Radiators. This book tells all—puts you under no obligation to buy.**

Sold by all dealers. No exclusive agents.

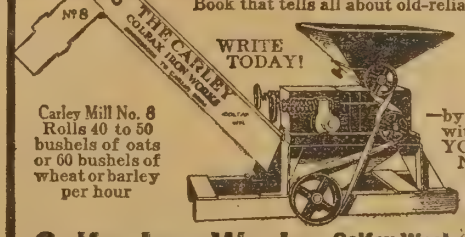
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# Heavier Draft Horses Are Needed

## *Farm Work Demands the Horse With Greatest Power Possibility*

By WAYNE DINSMORE

Horse breeders throughout the United States have been somewhat discouraged over the outlook for the next two years. Hay, grain, cattle, sheep and hogs have doubled or trebled in price. Horses, with the exception of the very best draft animals, have not advanced. Motor trucks and tractors have increased in numbers. Automobiles and light trucks have virtually eliminated driving, carriage and delivery horses. These factors have disturbed men who have been raising heavy horses and have caused a decided slowing up in our horse breeding operations. Investigations made by the Percheron society this past fall indicated that not more than 40 per cent of the mares of breeding age have been bred within the last two years.

The situation has changed. The large surplus of horses weighing from 1100 to 1500 pounds which we had when the war began has now been practically exhausted. Horse buyers who were formerly able to purchase two carloads per week now report that they can not buy over eight or ten in a week's time. Buyers of artillery horses are competing directly with farmers who need and must have teams to put in their crops this coming spring. Thousands of farmers sold themselves short this last fall to save feed. The acreage to be put in grain in the spring of 1918 will be greater than at any time in the history of the United States. This is particularly true of small grains. Pastures are being broken up. More land is necessarily coming into tillage to meet the great demand for foodstuffs in the present war emergency. More work horses will be needed on the farm than at any time in the last fifteen years. The surplus of horses weighing over 1300 pounds is shorter than it has been at any time in the last fifteen years. Auctioneers who have been making sales steadily all winter in Illinois and Iowa report that good grade draft mares weighing from 1400 pounds up are in very strong demand and that prices on these have risen at least $50 per head in the last thirty days. We must have these heavy draft teams.

**Raise Draft Horses.**

Since the war began we have sold to the allies more than 1,000,000 head of horses and over 300,000 head of mules. During this time small stuff not large enough for artillery needs and unsound horses which will not pass inspection have been steadily accumulating. They are today a drug on the market at prices ranging from $30 to $125 per head. Many have gone to the southern trade, but this is not large enough to take any considerable proportion of such horses and the result is that there are 3,000,000 or 4,000,000 horses in the United States alone that are of no special commercial value and which serve only to retard horse breeding operations. Fortunately, the breeding of these small horses has practically ceased and they will eventually be eliminated from consideration.

Men who formerly plowed three acres per day have bought more heavy mares and will use gang plows next spring, plowing 5 1-2 to 8 acres per man per day, instead of three. They have traded their old disk harrows in on new ones of larger size and will disk from 20 to 40 acres per day, instead of 10 to 12. They have sold their old 12-hole seeders and put in 20-hole disk drills, with which they can seed daily from 20 to 25 acres. They are selling mowers of five-foot cut and putting in machines with eight-foot sickles instead. They are buying side-delivery rakes and hay loaders to reduce hand labor to a minimum. They are buying corn harvesters with loading elevators so that the heavy bundles of corn can be loaded directly on the wagon from the corn harvester in silo filling, thus eliminating two laborers formerly required to hoist the bundles of corn to the wagon. All these changes reduce labor requirements and make the work that must be done much lighter, and all this is made possible through the use of much more powerful horses and more of them.

Aside from all this the yield per acre is being increased. Men with insufficient horse power prepare the land in a superficial manner. They do not realize their loss till it is driven home to them by the greater success of their neighbors.

Draft horses are essential to this more effective work. Any competent teamster can handle five to 10 horses weighing from 1600 to 1800 pounds; but not one teamster in a hundred can handle the number of smaller horses which would be required to deliver the same power units. Aside from this draft mares can be used, and the colts produced constitute an important source of revenue because they are readily sold at profitable prices; while there is no outlet for surplus small horses if any should be produced.

**Tractor Is a Factor.**

The one remaining question is the tractor. What effect will it have on the need for heavy horses on our farms? Will it eliminate or materially reduce the number of horses in farm use? Time alone can answer this question exactly. Developments to date, however, indicate that the tractor may supplement, but not displace heavy draft horses. In fall plowing, when horses are needed in the harvest field, the tractor can be used to advantage; and where there is enough need for belt power to make the tractor pay interest and depreciation charges for the balance of the year it may be well to buy one. The fact remains, however, that the horse is a self-repairing, self-reproducing motive power, and the tractor is not. The horse utilizes roughage, such as corn fodder, straw and pasturage, produced on the farm, as a considerable share of his fuel, and all fuel for the tractor must be bought.

The breeding of small horses must end. They have no place on our modern farms. The best of the small mares will, if bred to heavy draft stallions of extremely prepotent character, produce good farm chunks weighing 1400 pounds or over, providing the progeny is liberally fed and grown out, but the production of horses that will weigh under 1300 pounds should be discouraged. Small cayuses may well be converted into meat or fertilizer and their hides turned over to shoe factories which are in need of greater supplies of raw material for leather. No one need hesitate to produce all of the good heavy, well proportioned draft horses that he can possibly breed and raise. Prices are already rising, and will unquestionably continue to do so for the next few years, for there is a shortage of heavy horses suitable for work on the farm and in the city, and farmers generally are just beginning to awake to the true situation. I hope they go so high that farmers will have to pay $800 per pair for good grade draft mares. It will be a just penalty on those who have neglected to breed good horses in the last few years.

# Raise Your Own Colts

## *Brood Mares Are Profit Makers of Farm*

By A. R. HUNTER, Island City, Ore.

At the present time, with one of the worst wars in the history of the world, all foodstuffs and products of food animals are being regulated by the nations at war.

To a certain extent tractors are furnishing a part of the power to produce foodstuffs on the farm, but the draft horse is the largest factor in the production of farm power.

It is then time for all farmers and breeders to look forward to the conservation of the draft horse, to produce more grain and farm products.



**Here is a team of pure-bred Percheron mares on the farm of A. R. Hunter, near Island City, Ore. They are hauling 80 sacks of wheat to market. It is mares like this that Mr. Hunter refers to when he says every farmer should keep good brood mares and raise his own colts.**

This leads me up to my subject of the brood mare on the farm.

In some sections of the country where there are large areas of land farmed by one man or company it might be more profitable to use geldings or mules. But with the average farmer where there are but a limited number of men employed the brood mare will furnish all the farm power and raise a foal every year. And every farmer should keep a few good mares of good draft type with which to do the farm work. Under-sized, mongrel type animals—neither draft nor driving stock—of course, will not pay to keep. But good, big, sound draft mares do now and always will prove profitable.

Now, it has been my observation that the brood mares that do the regular farm work are the mares that raise the best colts, which grow into the best horses at maturity.

Tme mare is worked up to within two or three weeks of foaling time and after the colt is 10 days or two weeks old the mare is put back into the harness. The colt being in constant company with the teamster or groom becomes quite gentle and learns to eat from its mother's feed trough early in life, as the mare is fed the colt will get its share. The proper way to care for a colt is never to let the colt follow the mare, but leave it at the barn in a box stall or tie it up; that is, if the mare is being worked near the barn, where she will be in at the noon hour. If she is being worked at a distance from the barn, where she will not be in at the noon hour, put a small halter on the colt, tie him to the trace near the hame and he will soon be broken to lead and you can then tie him to the fence or wagon near the work. The brood mare on the farm, where she does her part of the farm work, can be detected in season, and in most cases the mares that do their part of the farm work produce a larger per cent of the colts than do mares that run in the pasture or on the range.

As the harvest season approaches and grain hauling time comes on, the colt is now about 4 or 5 months old and he has his own feed trough, and if fed crushed oats or oats and bran three or four times a day he does not miss his mother much at the noon hour and the mare will do her part in the harvest field or on the wagon delivering grain to the elevator. Later on, when the colt is 5 or 6 months old, you can gradually wean the colt away from its mother.

The colt is now well broken to lead and will not make much fuss when being weaned and the mare will not make much fuss over the colt being taken away from her.

You put the colt raised in this way in the lot with your pasture or range raised colts and you will find that this colt will be larger and more thrifty and will not lose flesh like the pasture or range raised colts.

# The Saddle Horse

## He Is a Product of This Country

By D. E. Richards.

With the exception of the American trotting horse, the American saddle horse is the only breed of horses which was developed in the United States. The very first use that was made of the horse was for riding purposes. In every locality horses are used for riding, more in some places than in others, but there are always some used as riding horses. The first horses used were small, lacked style and symmetry, and were too often "rough riding." With the continual use for riding purposes came a demand for horses with more size, style, and horses that were easier gaited.

Virginia, Kentucky, Tennessee and Missouri are the states that were most active in developing the saddle breed. Thoroughbred horses with quality and endurance were crossed on the best native saddle mares of these states, and the offspring selected depending upon their merits as riding horses, and this developed the foundation stock for the American saddle horse.

Kentucky and Missouri were heavy breeders and have always raised comparitively more of these horses than have the other states, and the name "Kentucky saddle horse" or "Missouri saddle horse" is often but wrongly applied to this breed.

The American Saddle Horse Breeders' association, incorporated at Louisville, Ky., is the recognized society for recording this breed.

There are two classes of saddle horses, the three-gaited and the five-gaited. The three-gaited or natural-gaited horses have the walk, trot and canter. The five-gaited horses, in addition to the walk, trot and canter, must have the rack and the running walk or the slow pace or fox trot.

The rack, commonly called a "single foot," is where only one foot strikes the ground at a time, differing from the two-beat gait of the trot and pace. This is a very easy riding gait for the man, but is tiring for the horse when he is kept at this gait for any length of time. A good racking horse develops considerable speed and makes a very flashy and showy appearance.

The "running walk" is a properly named gait, as the legs move in the same manner as in the walk. The running walk is termed a slow gait. The horse moves faster than in a flat-footed walk, but the feet strike the ground in the same rythm. It is an easy riding gait both for the horse and rider.

The slow pace is a two-beat gait, the right fore and right hind feet move ahead at one step, and the left fore and left hind moving at the next. When the horse is not urged out of a slow pace this is an easy riding gait and if the horse shows some knee action it is also a very attractive gait.

The fox trot is generally used on horses that can not develop a good running walk or a slow pace. It is used as a slow gait, being nothing more than a restrained trot or jog trot. It is little used except on rough ground, or to rest a horse from some of the other gaits.

The superior gaited horse should have the walk, trot, canter, rack and running walk. When the horse can not develop a good running walk the slow pace or fox trot may be used as a substitute.

The conformation in a addle horse is similar to that of the roadster of superior type. The saddler should have a short, strong back, be short coupled, with a good body. The shoulder and pastern must be sloping, strong and long to give a springy gait as well as a conformation that will last. The saddler must show style and quality, with a high carriage of head, arched neck, with a proud, rather high carriage of tail. The height ranges from 15 hands 1 inch to 16 hands 2 1-2 inches, the weight depending on condition, ranging from 950 to 1100 pounds. When the saddle horse shows quality, style, intelligence and good life, together with a good education and will go any gait at the will of the rider, he commands a very high respect in the horse world.

**President Gets $260,000.**

Somebody is always wanting to know how much salary the president gets. The total amount the government provides him for clerk hire and White House expenses, including his salary, is $260,000 annually. Of this $75,000 is straight salary, $25,000 for traveling expenses and $160,000 for the rest.

**Why Mary Was Late.**

A Topeka (Kan.) school teacher received the following note during the recent cold spell:

"Please excuse Mary for being late. We were out of coal and she had to sit on the wood while I chopped it."

# These Horses Are "On the Water Wagon"



**This is a picture taken at the Union Live Stock show at Union, Ore., where this handsome team of six kept the parade grounds well sprinkled during the show.**

# The Tomato

## Queen of the Vegetable World

The tomato is the Cinderella of the vegetable kingdom. Like Cinderella, its virtues were long unknown; its proud sisters of the garden looked on it with contempt. Then a prince came along one day and sought it out for favor and esteem, and now it is the queen of the vegetable world.

Elderly people can recall a time when the tomato was grown for ornamental display, and many of us remember our grandmothers saying that when they were little girls the tomato was called the "love apple" and people thought it poisonous.

People got over that notion long ago. More tomatoes were canned in 1917 than all other vegetables combined. A tabulation just compiled by the national food administration and the National Canners' association shows that more than 15,000,000 cases of tomatoes were packed last year—360,000,000 cans.

Maryland led, with a pack of 5,993,239 cases, enough to supply every person in the United States and France with a can. California came second, with 2,603,019 cases. Delaware was third, with 1,380,805, and the two Virginias fourth, with 1,170,504.

It is interesting to note that from the Andes mountains in South America the world received the two vegetables, hitherto unknown to Europe and Asia, that now surpass in popularity all others—the potato and the tomato.

In canned fruits the peach easily leads, with a total pack last year of nearly 4,000,000 cases. The pineapple was second choice and the apple third.

The complete statistics of vegetables and fruits as published by the national food administration, follow:

**Vegetable Pack for 1917.**

| Commodity. | Cases. | Can size No. |
|---|---|---|
| Hominy | 504,873 | 3 |
| Succotash | 134,002 | 2 |
| Spaghetti | 60,786 | 3 |
| Tomato pulp | 1,023,474 | 10 |
| Beans, green or wax | 1,892,407 | 2 |
| Red kidney | 413,135 | 2 |
| Lima, green dried | 450,807 | 2 |
| Pork and beans | 1,729,721 | 2 |
| Kraut | 1,379,169 | 3 |
| Cabbage | 113,963 | 3 |
| Spinach | 332,705 | 3 |
| Asparagus | 1,648,706 | 2 |
| Sweet potatoes | 238,250 | 3 |
| Beets | 739,565 | 3 |
| Pumpkin and squash | 1,065,483 | 3 |
| Other vegetables | 1,664,661 | 3 |

**Fruit Pack for 1917.**

| Commodity. | Cases. | Can size No. |
|---|---|---|
| Apples | 1,280,637 | 3 |
| Apricots | 925,034 | 3 |
| Cherries | 591,991 | 2 |
| Grapes | 43,106 | 3 |
| Peaches | 3,861,969 | 3 |
| Pears | 717,918 | 3 |
| Pineapple | 2,652,315 | 3 |
| Berries | 781,420 | 2 |
| Plums and prunes | 423,242 | 2 |
| Other fruits | 8,017 | 2 |

### Whale Packing House.

A company at Moss Landing, Cal., has established a packing house for whale meat and will soon supply consumers on the Pacific coast. The whales are caught with trollers and harpoon guns. The flesh is sold in steaks and roasts, free from bone and gristle, at 8 to 10 cents a pound, and resembles good beef in flavor, texture and appearance.

### Sell Linseed Cake.

Fifty thousand tons of linseed cake originally consigned to Holland will be sold at request of the consignees for consumption in New York, Pennsylvania and New England, according to an announcement authorized by the United States food administration. This amount of linseed cake, it is hoped, will supply a large portion of the concentrated feed needed this winter and spring in those states.

### U. S. Export of Gold.

Since the United States entered the war net exports of gold have been $78,000,000, or at a weekly rate of $2,168,000. Recently the outward movement has been curtailed, however, to a weekly average of $856,000. Imports now come mainly from Merico, Canada and South America, while exports are to Chile and Mexico.

### Good Morning, Bonnie Lass.



Meet Bonnie Lass, daughter of Princess Louise, a blue ribbon winner for nine consecutive years in the show ring. Bonnie Lass is a 4-year-old Shorthorn, bred and owned by Alex. Morrison of Valley, Wash.


# Draft Stallions and Mares

**The best of the breeds at all times.**

## Note Our Winnings at the Principal Shows in the West



81 FIRST PREMIUMS.
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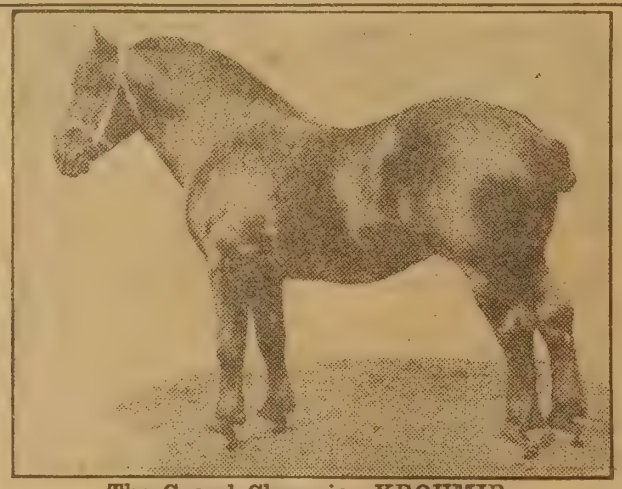
Moscow, Idaho. Phone 70.

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**Largest Herd of Pure-Bred Percherons in the Pacific Northwest**
**The Many Times Grand Champion 97397 at Head of the Herd**

## Kroumir

imparts to his offspring the large size, great bone and rare quality that have made him winner of many championships.



The Grand Champion KROUMIR

## Kroumir's Colts

have been consistent winners in the northwest in competition with the best home-bred and imported stock.

## Seventy-Three Prizes Won in 1917

At the fairs and stock shows of the Northwest, for the season of 1917, the Hunter Percherons won; 47 firsts, 15 seconds, 5 thirds, 6 champions.

## Young Stallions for Sale at Breeders' Prices

Write for pedigrees, photos, prices and full descriptions.

**A. R. HUNTER, Proprietor** **Island City, Oregon**

# Germany on Two City Lots

## *Had War Garden Long Before Present World Struggle*

**By Andrew E. Murneek.**

Germany is starving! There is enough to eat in Germany! Again and again you have heard these contradictory statements expounded through our press, while Germany goes on, a little hungry, no doubt, but still defying the world, still opposing a united front of democracies. How is Germany managing to feed her eighty some millions of people from a tillable area not bigger than that of an ordinary state of this country?

Please come with me to 305 Orchard street, Corvallis, Ore., and you may find a pretty good answer to this puzling question. Here lives W. Gruening and wife and his family of five robust children. They occupy a comfortable five-room house on a lot of 75x150. The adjoining lot, showing a very weather beaten sign, "this lot for sale," is also theirs. Little by little, they have been paying for this property. It is "clear" and theirs now. The father of the household is working as a night watchman at the local state institution. Though of German descent, he is as staunch and patriotic American as one could desire to be.

But here is what we want you to see. The Gruenings have had a "war garden" long long before the present world struggle. Due to necessity of feeding seven hungry mouths it came into existence many many years before the fatal shot of a thoughtless student at Sarajevo set the spark to a fuse that resulted in the present conflagration.

"I have not paid a cent for vegetables, flowers or fruits for a number of years," said Mr. Gruening, while a broad, congenial smile rippled over his browned cheeks. "I believe you, I believe anything you may say about this matter, for I have seen your garden," is all I could manage out to stop a further discussion.

To begin with, Mr. Gruening is an orchardist, a vegetable grower, a florist, a family father and a good citizen, all tightly wrapped and knit together.

On the very line of the rear end of his property stand two large trees—an apple and a prune tree. They were loaded with enough fruit to supply a little grocery for the whole winter season with enough dried apples and prunes, apple sauce and jams and jellies. But the Gruening family have a little grocery of their own in the basement under their house, where there are many shelves stacked with labeled jars. Let us, however, return to the garden. The still unsold lot has been turned into a peach and plum orchard. If my memory does not play tricks with me there are three varieties of peaches and four varieties of plums in bearing. In the rear of the house luxurious rows of raspberries, gooseberries and currants are to be found. The back fence is bending over on account of large bushes of blackberries finding support on it. Two Bartlett pears of shining and smooth growth find shelter at the side of the house. They are still small, but exhibit each a dozen or so of large pendulous fruit.

The spreading apple tree to the rear of the yard is sheltering a cozy corner for a couple of pigs, a score of rabbits, living in a skyscraper fashion, and a little kingdom of a dozen Leghorns. What waste there comes from the house or the garden goes to this animal husbandry department.

Then the vegetable growing business of the Gruenings is conducted on such an intensive scale as to be most terrifying to the ordinary city dweller. All the "57 varieties" have been corraled and domesticated on the two lots. There are long rows of potatoes and beans under the peaches. These again are intercropped with such faster growing vegetables like lettuce, radishes, etc. Then there is sweet corn grown in New England fashion, with pumpkin carpeting the ground below. Indeed, you could not find as much ground as to put your palm on that does not support some sort of useful vegetation. Here you see little rows of carrots, onions, peas, beets; there cabbages, kohlrabi, cucumbers, tomatoes. But nowhere you could find a weed that had dared to show more than its head above the little trenches.

German efficiency in rotation of crops, manuring, watering, but above all in preserving and storing the crops is exhibited on every hand.

The Gruenings' basement is a regular byproducts plant and a storehouse for vegetables and fruits of every description. I have sampled in their house the finest of cider from their mill in the basement. I have tested their salads with vinegar of their own production—in fact, I have eaten whole square meals consisting of products from their own land, save pepper and salt.

One would be gravely mistaken thinking that it is all a "kitchen affairs." The head of this little Germany on two city lots is a great lover of flowers, so much so that all his landscape gardening effect around the house is distorted, due to the large number of varieties of ornamental plants grown. I counted no less than 40 varieties of flowers around the premises. How well the old man knows the name, characteristics, peculiarities in habit of growth, season and market value of his flowers was a great surprise to me. Still, in spite of all this profusion of cultivated plants, room has been found for a clean, well-kept lawn to face the street.

There is no question but that this family has been driven to this mode of exploiting a few square rods of land by mere necessity. But ever since my visits to Mr. Gruening and his remarkable garden, I have been keenly reminded of what one man alone can do in order to produce and save food. Now supposing every family in Germany adheres to such rules at present; supposing even half of Germany accepts such a regime of living, any, even ten millions or even five million families live like the Gruenings, what then? It makes me feel a peculiar warm itching, under my cap every time I think of this and then of the end of the war.

### Outbid Each Other.

One of the greatest difficulties met yet in trying to solve the labor problem on the farms is the tendency of farmers to bid against each other in the matter of wages. In many districts they are now agreeing upon fixed wage scales with a view to eliminating this competition. It appears that a definite and unbending wage scale is an absolute necessity for contentment among laborers.

### Everybody Should Save.

The federal government is asking at least 30,000,000 people to take an active part in saving through the thrift stamp and war savings stamp campaign. The need of this is clear when it is remembered that the cost of conducting the war is already about $24,000,000 a day for this country alone.

### Ahead of Times.

One of the draft questions is, in effect, "State all the occupations you have followed in the last 10 years, and how many years you followed each." A Fort Scott (Kan.) young man replied with so many occupations with such long periods at each that his terms of service added up to 38 years. The young man is 23 years old.

### New York Women Naturalized.

The naturalization of about 43,000 women of voting age who belong to the socialist party will be one of the first results of the suffrage victory in New York.


## Farmers, Teamsters and Horsemen, Look to Your Interests

The horse collar is one of the most important factors in spring work. Always ask for the

## Sharkey Collar

The one that always fits, wears well and does not cause sore necks.

If your dealer does not carry the Sharkey collar write direct to

**P. Sharkey & Son**

Portland, Oregon.



## Tracy Barns and Breeding Ranch

Imported and American Bred.

**PERCHERON, SHIRE AND BELGIAN STALLIONS AND MARES**



"Francis B," No. 116,927, Weighs 1900 Lbs.

First Prize 2 Year Old and Grand Champion Percheron Stallion at Yakima Valley Horse Breeders' Assn., Toppenish, 1917

We have as fine a lot of breeding animals as have ever been gathered together in one barn in the northwest. Many of the stallions are fit to place at the head of a registered herd of mares. Others, cheaper, are of good individuality and will sire big, dratf colts from any kind of work mares.

Write for description and prices or come direct to my stables and see them.

**William T. Tracy**

KENNEWICK. WASHINGTON.







## 40 Stallions, 12 Jacks

We can show you more big TON imported and native bred

**Percheron, Belgian and Shire Stallions, and Mammoth Kentucky Jacks**

Than any other two firms in the Northwest.

The stallion shown above was our champion Belgian at the Northwest Live Stock show at Lewiston. Many of the stallions in our barns are winners at the Chicago International, as well as the leading western shows. Come and make your choice. Our prices, terms and guarantee will suit you.

**S. Metz & Sons.**

Commercial Barns, PENDLETON, ORE.

# Must Provide Farm Labor

## *Many Express Fear That Houston Is Mistaken*

We hope that time will justify Secretary Houston's assertion before the house committee on agriculture, that there is no need for fear over a danger of a shortage of any food commodity. We are at a loss, however, to understand the basis for his optimistic view of things. Farmers in all parts of the United States are frankly concerned, and Governor Whitman of New York has sent telegrams to the various draft boards in that state urging conservation of farm labor.

"I am alarmed," said the governor, "at the tendency of some district boards to classify in class 1 such a large percentage of farm laborers as 'unskilled.' Unless men are left on farms, the grain and food shortage will continue and famine may result."

There is reason to fear that the conditions found to exist in New York state are more or less general throughout the country. The New York board of trade and transportation recently sent out questionnaires to a large number of organizations representing farmers in all sections of the Union. It has received 100 replies, and says its inquiry shows "the present actual distress of American farmers—our farms denuded of labor," and it adds:

**"This means short crops—soaring food prices. The situation requires immediate concrete relief measures."**

The statement of the board summarizing the facts gleaned by it is:

**"The labor organizations insist there is no cause for complaint, while our information—from the farmers themselves—is gravely to the contrary. The actual present prospect is that acreage planted this year must be greatly reduced, with consequent short crops, meaning still higher food prices than have already afflicted consumers."**

The patriotic spirit runs through the scores of letters received, and while pointing out almost universally that the war's draft has taken the younger farmers away, the writers left at home are devoted in their expressions of readiness to make all necessary personal sacrifices—but are confronted by the physical impossibility of planting and reaping on the sufficient scale that the ordinary quota of help assures.

**Some of the Reports.**

John A. Roberts, agricultural commissioner of Maine, wrote to the board: "There is a great shortage of farm labor, and well-informed opinion is that acreage will be one-fourth to one-third smaller than last year."

Fred W. Davis, Texas agricultural commissioner, wrote: "We need more labor in Texas this year than ever before, but the supply is not up to normal nor anything like it." And out at another geographical extreme, T. M. Williams, master of the North Dakota State grange, said: "Labor shortage conditions exist here to an alarming degree. Our farmers are not only discouraged, but are absolutely prohibited from putting in normal crops on account of the absence of farm labor. Our people are just as loyal as you will find anywhere and are anxious to do their bit in furthering the cause of world democracy, but it is impossible to do what we could do if only cultivating help were available."

Elbert S. Brigham, Vermont commissioner, wrote: "The limiting factor in farm production this year is labor shortage, meaning a serious cut, which we can not afford in the country's crisis." Leslie R. Smith, master of the Massachusetts State grange, said: "The agricultural people of New England are going to do their utmost, but the amount of food they produce will be measured exactly by the amount of labor they have to do with. Reports from all over the country show to an alarming degree crops of last year unharvested, and I have noticed in a trip from New York to Washington all along the road acres and acres of corn shocked and unshocked, but yet to be taken care of. West Virginia people reported to me areas of corn and potatoes unharvested, and cotton planters told the same story."

From New Jersey, Wilmer Collins of Merchantville, treasurer of the state grange, wrote: "I have a farm of 276 acres that last year produced over $22,000 in gross sales, but I can not do it again without help." Alva Agee, secretary of the New Jersey department of agriculture, said: "The labor shortage is believed by farmers to be so great that the planting of even usual acreage will be very hazardous."

William T. Creasy, of the Pennsylvania grange: "Reports from all sections show shortage of labor." Robert W. Meyer, Pennsylvania agricultural department: "There is a tremendous shortage of skilled farm labor." F. P. Willits, president of the Interstate Milk Producers' association, Ward, Pa.: "Labor shortage will affect the whole agricultural situation." John A. McSparran, master of the Pennsylvania grange: "Agricultural conditions present the most serious situation we have to face in this country today. The farm exodus has been continuous. There are not enough farmers on the farms today to grow the crop we have to have. I have just been in a conference of all the farm organizations of the country in Washington, and they all say the same thing."

Leslie Gilbert, Alabama agricultural department: "We are wofully handicapped by lack of labor." William A. McRae, Florida agricultural commissioner, pointed out that the exodus of negroes, attracted by northern industrial wages, is chiefly responsible for bad southern conditions, and W. A. Dobson, of that state's farm extension department, hopes the government will bring Porto Ricans to Florida for relief.

From Ohio L. J. Taber, master of the state grange, wrote: "The situation is more acute than you can make the public believe."

The Indiana situation is indicated by Charles F. Kennedy, secretary of the Indiana state board of agriculture, who wrote: "During the seeding time of 1917 farmers did not sow the normal acreage because labor was so scarce. This difficulty has increased since last fall. There is less trouble, possibly, in getting the crop planted and cultivated than there will be in getting it harvested, and farmers will have this in mind when attempting to plant for 1918."

A. F. Pickard, master of the state grange of Illinois, wrote to the board of trade and transportation: "During 1917 there were more idle acres in this section of the country than ever known before, and I am afraid it will be worse this year." This terse presentation was supplemented by the following from Chicago by Edward F. Keefer, secretary of the National Live Stock Shippers' league: "There has hardly been a meeting of any agricultural or live stock organization of any importance in the last six months that has not either passed resolutions or sent memorials to President Wilson or Food Administrator Hoover in regard to the farm labor situation."

## Red Cross in Serbia.

A great constructive work of the American Red Cross, to make 40,000 Serbians in the neighborhood of Monastir self-supporting, and at the same time to reduce shipping of food by making the country productive, is the object of an appropriation of $244,438 by the Red Cross war council. The money is to be used for the reclamation of 21,000 acres of land in that region. This acreage is to be cultivated with modern machinery, under the direction of American farm experts.

Monastir is in the extreme south of Serbia, on the Grecian border; 40,000 villages in that region are now depending on charity. The enemy has stripped the country of all tools, machinery, foodstuffs, horses, and most of the oxen.

**Contribute Spy Glasses.**

The navy's appeal for "eyes" for the watch officers has brought more than 20,000 binoculars, spy glasses, telescopes, sextants and chronometers. Assistant Secretary Roosevelt states. One day's receipts amounted to 3000. However, more will be needed.


**ABSORBINE**
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will reduce inflamed, swollen Joints, Sprains, Bruises, Soft Bunches; Heals Boils, Poll Evil, Quittor, Fistula and infected sores quickly as it is a positive antiseptic and germicide. Pleasant to use; does not blister or remove the hair, and you can work the horse. $2.50 per bottle, delivered. Book 7 R free.

**ABSORBINE, JR.**, the antiseptic liniment for mankind, reduces Painful, Swollen Veins, Wens, Strains, Bruises; stops pain and inflammation. Price $1.25 per bottle at dealers or delivered. Will tell you more if you write. Liberal Trial Bottle for 10c in stamps.
**W. F. YOUNG, P. D. F., 371 Temple St., Springfield, Mass.**

**Registered Percheron Stallion**

2 years old in June. Breeding and conformation to make a ton horse.
Also two registered mares. Prices reasonable.
**H. N. PAUL.** **Mabton, Wash.**
Breeder of Registered Percherons.

**PERCHERONS**
**Young Stallions and Mares**
Of good breeding and good individuality always on hand at prices you can afford to pay, because they are worth the money.
**TWO FILLIES**
coming 4; bred to Kallou, grand champion of Umatilla county.
**J. W. SPARKS,** **Pendleton, Ore.**

**C. L. FALK & SONS**
**Halsey, Ore.**
Breeders of **PERCHERON HORSES,** now offer Jack Tar 61058, coming 5, black, weighs 1900 in condition, blocky, heavy bone, good disposition, sure breeder and his colts in this neighborhood show their quality.
**JACK STEWART,** 135632, coming 2, black, good size, good bone, fine style, very promising.
Each of these horses will be sold at a bargain. Will also sell a few fillies. Write for particulars.

**TO EXCHANGE**
**THE PERCHERON STALLION HUCHOIR**
He was junior champion at the A.-Y.-P. stock show and twice grand champion at Oregon State fair. Is coming 11; is absolutely sound, as vigorous as when 4 years old and is guaranteed a sure breeder.
I wish to exchange him for another Percheron stallion only because he has stood eight seasons here. Must be a high-class horse, sound and a guaranteed breeder.
**J. M. NICHOLS,** **Junction City, Ore.**

**Oregon Bred Percherons**
**Young Stallions and Mares**
Including
**Uniętta,** junior champion at three big shows last fall, and a great young stallion, three this spring. Both sired by the grand champion stallion UNIVERSE and out of the imported mare HENRIETTA,
Two 2-year-old fillies. All good individuals and all will be sold at very reasonable prices.
**MRS. H. E. EVANS & CO.** **Rickreall, Ore.**
**Farm close to Dallas, Ore. Phone.**

**Imported Percheron Stallion**
**FOR SALE**
Dapple gray; weight, 1850 pounds; foaled in 1910. He is of a fine disposition and works well with other horses or single driving. Is a good, sure breeder. Will be sold at a price you can afford to pay.
**ADOLPH WAELTY, Elgin, Ore.**

**FOR SALE**
Registered Black Percheron stallion; age 8 years; weight about 1900 pounds. In his ancestry are some of the best sires of the Percheron breed. Will sell at a very reasonable price if sold at once.
**GEO. W. CORK. Box 64, Monument, Ore.**

**ATHLETE**
Percheron Stallion, coming 10; strong and vigorous as a 4-year-old. Last year bred 130 mares and appears now to over 100 in foal. Has stood in this locality several years and will be sold at a very reasonable price.
Also two Percheron fillies, coming 2 and 3; one of them sired by the three-times Grand Champion HUCHOIR.
**FRED SPIRES,** **LEBANON, OREGON.**

**EDGEWATER FARM**
can not use any longer on my pure bred mares and will sell reasonable imported Percheron stallion "Licinius," six, dark gray, with star, white mane and tail, weight 2000 in show shape. Can show colts from grade and pure bred mares and place $1000 insurance.
**E. M. CHANDLER,** **Burbank, Wash.**

**A Great Percheron Stallion**
ROYAL PONTONE.
Dapple gray, coming seven, weight 1940, good bone, fine action. Was first prize and grand champion at Union, Ore., stock show, 1916. Priced right. Also one young Percheron mare and stud colt.
**DUNCAN M'DONALD,** **La Grande, Ore.**

**Jacks and Jennets for Sale**
40 yrs.' breeding in jack stock. Every jack in this time has made good. Mules from these native-bred jacks have won every premium, with one exception, for 28 yrs., throughout Ore. and Wash.
**20 head now for sale,** from 3 to 6 yrs. old; prices made to sell. Mules to show from them. Have one mule that $800 failed to find its equal in U. S.
**No importer can sell as cheap as the breeder.**
**Eastern Oregon Jack Farm**
**B. F. SWAGGART, Prop., Lexington, Ore.**

# Feed No Hay at Morning or Noon

## *Veterinary Authority Urges Science for the Work Horse*

Do not feed the working horse any hay except at night.

This is the advice of Dr. S. B. Nelson, dean of the college of veterinary science of the State College of Washington, who is a member of a party of extension workers holding farmers' institutes throughout Spokane county under the leadership of County Agricultural Agent J. R. Shinn.

Dr. Nelson says he has found it common practice among farmers to feed their work horses during the working days about as follows:

Morning—First, grain; then hay, then water (after breakfast).

Noon—First water; then grain, then hay, then probably water as they start to the field.

Night—First, water; then grain, then hay.

This method he declares to be wasteful of feed and productive of less horse power than could be obtained by another system. Here is the system he recommends:

Morning—First, water, then grain. No hay.

Noon—First, water; then grain. No hay.

Night—First, water, then hay, then grain after supper, perhaps), then more hay.

During his lectures Dr. Nelson draws a picture of a horse's stomach, showing its shape, size and general character. He shows that the stomach of the ordinary 1200 or 1300 pound workhorse has a capacity of only from three and one-half to four and one-half gallons, and that the food goes into the stomach in layers and tends to remain that way during the digestive process. This is very unlike the case of other animals, and is the basis for Dr. Nelson's argument against the common method of feeding.

For instance, if grain is fed first it takes its position in the stomach nearest the outlet into the small intestines, and when the stomach is then filled with hay and water, part of this grain is forced or washed out before the digestive processes have taken place. Grain that reaches the large intestines before being digested is lost, says Dr. Nelson.

The doctor says that a horse in an hour will eat from four to six pounds of hay. If fed hay at night when he returns from the fields, he will eat this much by time to feed grain, and will then eat his grain more slowly. After eating the grain, he will probably stand or lie down and sleep for two or three hours. He will then arouse and eat hay for a while, go to sleep again for two or three hours, probably eat some more hay and be asleep when the farmer comes out in the morning. Thus the horse will not need a hay feed in the morning, but will be ready for grain and water only.

Dr. Nelson tells his audiences that a seemingly absurd fact is true of horse feeding: The lighter the horse and the faster the work being done, the greater proportion of grain will he consume, and the heavier the horse and the slower the work the greater the proportion of hay. That is, a horse doing light work wants more grain in proportion to the hay fed than if he were doing heavy work, and the horse doing heavy work wants more hay in proportion to the grain fed than if he were doing lighter work.

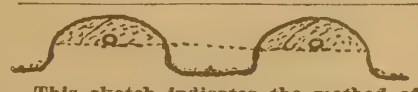
He says that experiments show another peculiar fact: The hay and grain rations should be reversed when feeding light and heavy horses. The light horse will require about one and one-quarter to one and one-half pounds of grain (the figures being for oats) for each 100 pounds of weight of the animal. The heavy horse will require about one to one and one-quarter pounds of grain to each 100 pounds of weight. The light horse will require about one to one and one-quarter pounds of hay to each 100 pounds of weight. The heavy horse will require about one to one and one-half pounds of hay to each 100 pounds of weight.

# Plants Potatoes on Top of the Ground

Here is a method of planting potatoes on irrigated land where the soil is heavy that W. J. Tapper of Richfield, Idaho, recommends. He says that he discovered it by accident, that some of his neighbors laughed at him first and then imitated him, and that he and they now produce first class crops in the accident way.

### The Method.

Plow the land in the fall. Plow it deep. Let it lie over winter unharrowed, rough so that all the rain and melting snow will be absorbed before running off. In the spring harrow it. If rough and uneven, level it by a floating process. Then drop a row of potatoes on top of the surface. Take an ordinary mouldboard plow and turn a furrow so that the outside edge of the upturned earth falls over the potatoes. Then go down the other side, turning a like furrow and covering the potatoes a little deeper. That finishes one row. Then drop another row of potatoes on the surface just far enough from the open furrow so that when you run your plow as close to the first furrow as possible it will cover the potatoes in the same manner that the first row was covered. Then plow down the other side, covering them a little deeper as was done in case of the first row.



**This sketch indicates the method of planting as practiced by Mr. Tapper. The dotted line indicates what was the surface of the ground. The sketch is a cross section of the ends of two rows of potatoes, with the irrigation ditch two furrows wide between them and the potatoes lying under the overturned earth on what was the surface of the ground.**

### The Result.

There you have it. The potatoes are on top of a fairly soft, yet fairly compact seed bed, and are covered by a loose mass of earth to whatever depth is desired.

**The two open furrows that are left between the rows serve as the irrigation ditch, which provides a sub-irrigation rather than a surface irrigation.**

Whatever harrowing is done after planting can be done in such way as to not uncover the potatoes nor fill the ditch too much with loose dirt.

Mr. Tapper said that he discovered this method several years ago on his irrigated farm near Richfield when he was in a hurry and had run out of selected seed. In order to hasten the patch he planted a few rows of cull potatoes on the surface after the manner described above. When digging time came he found the yield and the quality much better than that of his selected seed planted in the "good old-fashioned way." He says that it was not just luck that year, but that the new method has proved superior from season to season, not only on his own farm, but upon the farms of neighbors who irrigate. He emphasizes the point, however, that the method is not practicable except on heavy soils. On a light, sandy soil, he thinks it would not succeed.




**Don't Get Caught Like This!**

You'll need horse badly from now on. Why take risk or lay up because of lameness? Send for

**SAVE-THE-HORSE**

THE humane remedy for lame and blemished horses. It's sold with signed Contract-Bond to refund money if it fails to cure SPAVIN, Ringbone, Thoropin and ALL Shoulder, Knee, Ankle, Hoof and Tendon Diseases, and while horse works.

Our 96-page FREE BOOK is the last word in the treatment of 58 kinds of lameness. It's our 22 years' experience. Expert veterinary advice, Sample Contract and BOOK—ALL FREE.

TROY CHEMICAL CO., 18 State Street, Binghamton, N.Y.
Druggists everywhere sell Save-The-Horse with CONTRACT, or we send by Parcel Post or Express Paid.

**Imported Shire Stallion**

BLAIDSON STANDARD 8623.

Foaled, 1904, bay, white stripe in face, weight about 2000 lbs. Sound and in good condition. Have used him three years and 40 of his colts can be seen on my place. Is a sure foal getter, but I need to change.

JAMES H. SCOTT, Howard, Crook Co., Ore.

**For Sale----Pureblood Clydesdale Stallion**

Won **first premium** at Ore. State Fair, 1917; will be **3 yrs. old** June 1, 1918. Bright bay, well marked, splendid disposition and well broke. Sired by Massasoit, also a **pure blood Clydesdale stallion, 9 mos. old.** Took second premium at 1917 Ore. State Fair. Color black, well marked. Sired by The Preacher.

BOTH STALLIONS PRICED TO SELL.

**Wm. H. Egan and Sons, Gervais, Ore.**

Route 2. Phone Salem 3F11

**Richly Bred Clydesdales**

**AT BARGAIN PRICES**

**Dunure Edward 15420,** one of the best bred, imported Clydesdales in America, going back through both sire and dam to Baron's Pride, sire of Baron O'Buchlyvie, that sold at auction for $47,500, and four times to Prince of Wales, sire of Baron's Pride.

**DANMORE 19547, foaled** August, 1915, and BEAU 19837 and RASTUS 19838, both foaled in July, 1916, all sons of Dunure Edward.

These high class Clydesdales are all offered at bargain prices.

N. K. WEST, La Grande, Oregon.

**Clydesdale Stallion Bargain**

**LYDE STAMP 11636**

Foaled May, 1904, weight about 1800; splendid conformation, with plenty of bone, good back, strong loin, typical Clydesdale head and good disposition. He stood second at the Oregon State Fair last fall, in a class of four. He is a proven breeder of high class colts and will be sold under guarantee.

Because I do not need him, will sell at a strictly bargain price. For any further particulars address owner.

A. T. JONES, McMinnville, Ore.

I also have another younger high class Clydesdale stallion and will sell either one at a bargain price.

**FAIRVIEW STOCK FARM**

**Shire and Clydesdale Horses**

CHIEF BENDER, grand champion Oregon State fair 1916, as yearling; is now coming 3 and it is safe to say he is the greatest individual Clyde in the northwest.

One horse-colt, coming yearling, very typy and well grown.

Write for prices and full pedigrees.

A few choice Shropshire Ewe Lambs now for sale.

W. R. LEDBETTER, Alicel, Ore.

**Hillside Stock Farm**

Breeder of

**Clydesdale Horses Holstein Cattle**

Ten head high class registered ewes now for sale.

RAY NORVALL. Summerville, Ore.

**CLYDESDALE HORSES**

Two bred fillies, coming 4, and one stallion, coming 3, all sired by imported Hiawatha's Pride, son of the Champion Hiawatha and out of a mare by the breed's greatest sire, Baron's Pride. The fillies out of imported mares. Attractive prices.

John Farmer. Route 1, McMinnville, Ore.

JOHN PAINTER, SALEM, OREGON.

**Clydesdale Headquarters**

For sale—STALLIONS and MARES, from yearlings up; sired by great horse MASSASOIT, 13530; grandson of BARON'S PRIDE, 9122, which sold in Scotland for $47,500, making them the BEST BRED HORSES in OREGON. The number of prizes won have been equaled by no firm in this country for the last ten years. WRITE FOR WHAT YOU WANT.

**CLYDESDALE HORSES**

The Grand Champion Stallion Decoration at head of the stud, Lady Jane, Grand Champion at Lewis & Clark and other stock shows, chief foundation mare. Blood of the great sire Baron's Pride, strong in the herd.

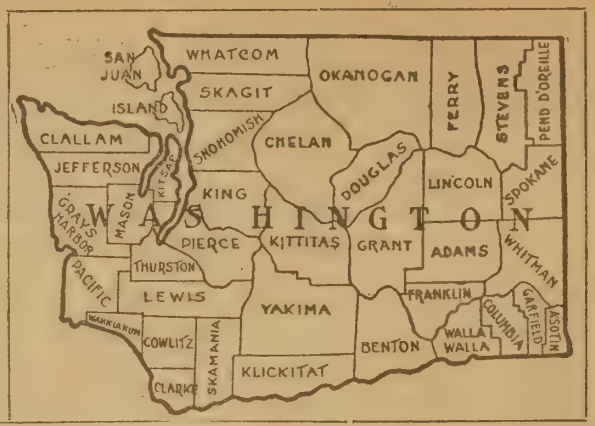
Breeding stock for sale.

J. E. REYNOLDS. La Grande, Ore.

In answering advertisements please mention this paper.

# Should Ship Hogs Cooperatively

## Farmers Get Less for Hogs Than if They Raised More of Them and Shipped Them Out Cooperatively, Thinks County Agent




EPHRATA, Grant County, Wash., Feb. 21.—Grant county is almost specifically a wheat producing county. The rainfall is so limited that in many cases it harly pays the farmer to grow his own potatoes as many times he will not get his seed returned. However, most of the farmers pick out an especially good place and plant some garden that will mature early, as lettuce, radishes, and peas. This gives them some early garden truck which they can use in the house. The potatoes are also grown in the draws or where there has been an excessive amount of moisture. Owing to the continued dry weather many years it has been rather discouraging for the growing of potatoes and in some of the dryer sections of the county many of the farmers do not attempt to grow even their own potatoes. In some of the better sections of the county, however, they grow all kinds of garden truck, which are used for home consumption. There is very little shipped out of the county except in the irrigated parts or where people have water that they can irrigate some with during the hot weather; so, as a matter of fact, very little of the produce grown in this county finds an outside market excepting in irrigated districts. Many farmers are somewhat discouraged on the price and cost of producing pork. The farmers have only a small number of hogs and are not in this business to any great extent, as most farmers find that they have to take from one to two cents per pound less than they should for their pork. This is because there are so few hogs raised. If a few more were raised, they should ship cooperatively and get a very good price for them. Some of the best farmers find they are able to make money on hogs at the present prices, at 15 to 16 cents per pound. H. W. REAUGH.

### Conditions Are Favorable.

ALPHA, Lane County, Ore., Feb. 27.—The principal products for the market in this locality are cream and beef. For cream, or rather butter fat we receive now 54 cents per pound. The beef market is not so good, no sales having been made in this immediate vicinity for some time, but prices range around 4 cents on foot. There is not much produce sold to local dealers, nearly everything being shipped to Eugene or Portland. The cost of producing 100 pounds of pork from the by-products of the dairy farm is hard to estimate, depending on how much other feed is put in the hog. Feed seems to be starting early as spring approaches, and conditions look favorable for good crops.
L. H. BROOKS.

### Gouged on Machinery.

FAIRFIELD, Spokane County, Wash., Feb. 21.—This community is very largely a one-grain crop farming section so the local markets do not effect the farmers to any great extent. The main things they sell the price is fixed by the government so the local merchants simply act as weighers and get very little rakeoff from what they take in. However, when the farmer buys farm machinery then he is gouged properly. The local men say they don't make the prices, but it is very evident some one is getting a very good profit at the farmers' expense. No more hogs are produced on the average farm here than can be raised on the waste of the farm. My own hogs will not cost me, on actual money value of feed, $5 per hundred pounds, but if I had to buy feed at the prevailing prices, the cost would be at best three times that price. My stock hogs are wintering on cracked peas, wild oats and whatever they can find. They are fat and thrifty, and doing very well. We are hoping for an early spring, but can't predict crop conditions until warmer weather comes. ROY G. ADAMS.

## Agricultural Council

By MRS. WINNIFRED BUCKINGHAM.

On February 19 representative farmers from all over Pacific county met in South Bend with the county agriculturist, George A. Nelson, and organized an agricultural council. E. L. Swartz was elected president; Eli Rockey and E. W. Lilly, vice presidents; J. E. Buckingham, secretary and treasurer. An executive committee composed of leading men in their respective communities will hold councils there. The object will be to promote animal industry, cranberry culture, home economics, club work among the boys and girls, forage and potato crops, marketing and organization.

The following organizations were represented: Lebarn grange by Frank Griffin; Bay Center grange, Eli Rockey; Nasel grange, A. L. Mosher and W. W. Moffitt; Willapa Federal Farm Loan association, E. W. Lilly and Emil Scholtz; Mendo grange, E. L. Swartz and Victor Monohon; unorganized farmers were represented by W. S. Corruthers and J. E. Buckingham.

### Sell Wheat and Buy Flour, Bran and Shorts

To the Editor of The Washington Farmer: I am writing you today in the interest of the many farmers living in the Inland Empire, where they raise millions of bushels of wheat, and where not over 5 per cent can take their wheat to the mill and have it exchanged for flour, bran and shorts, but they have to sell their wheat and buy flour, bran and shorts from the feed or grocery store, thereby paying two profits on their wheat, after it has left their hands. I have often wondered if those things will be corrected when the nonpartizan league comes into power? A. M. NEWSOM.
R. D. No. 2, Spokane, Wash.

On account of the great variation in local climatic conditions, moisture, soil, etc., it is up to the readers of The Washington Farmer always to remember that methods which prove successful in one locality may not work out in others. It is our aim to gather the experiences of farmers in every section of this state and pass these experiences on to our readers, that they may try out or adopt such as may be applicable to their locality and conditions.




**Spreader Profit for You**

THIS year—if you own no spreader, you are not only losing out on the bigger yields and profits that should be yours, but you are contributing to a billion-dollar manure waste, and stopping your ears to the world-call for food.

We have facts and figures to show that in scores of cases the use of an International Harvester spreader has added to crops more than enough to pay for a spreader in one year.

When you know the situation, you will probably decide to buy a wide-spread **Low Cloverleaf, Corn King,** or **20th Century Manure Spreader.** These machines break the manure up into very fine bits and spread it evenly. They spread beyond the tracks of the rear wheels. The width of the spread is adjustable. Manure goes further and does the soil more good when spread with a **Low Cloverleaf, Corn King,** or **20th Century** machine.

Sold in all the best-liked sizes—disk wide-spread is regular, spiral wide-spread on special order. Buy a **Low Cloverleaf, Corn King,** or **20th Century.** If you will drop us a line, we will send you full information and tell you where you can see these machines.

**International Harvester Company of America**
(Incorporated)
Billings, Mont. Crawford, Neb. Denver, Colo. Helena, Mont.
Los Angeles, Cal. Portland, Ore. Salt Lake City, Utah
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**PLANT for PROFIT**



**Superior Grain Drills**

plant for profit, because every feed sows a measured quantity of seed; because the Superior does not skip, choke or bunch; because every furrow opener makes a perfect, roomy seed trench; because an equal amount of seed is sown in every furrow; because the seed is planted at an even depth. "Even Sowing Means Even Growing"—an evenly ripened crop.

**The purchaser of a Superior Drill runs no risk whatever, because the warranty covers every vital point.**

Superior Drills meet every seeding condition that confronts the northwest farmer. They are easy on both man and team. Light draft, great strength. Light running Disc Bearings that are guaranteed never to wear out. Positive Force Feeds, Hard-work Change Speed Disk Gear Drive, Furrow Openers that will work in any soil no matter how wet, sticky or dry. The Superior will stand right up to the work year in and year out, and satisfy the most particular farmers.

Send for The Superior Catalog. Read it. **Note the warranty.** Then go to your Implement Dealer and insist on seeing the SUPERIOR.

"The Name Tells a True Story."

**The American Seeding-Machine Co., Springfield O.**
INCORPORATED

**SEEDS**

Over a quarter century as the recognized SEED HEADQUARTERS of the Northwest is our Guarantee of Satisfactory Service to You.

"Buckeye" Incubators and Brooder Stoves
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**PORTLAND SEED CO.**
PORTLAND, OREGON



**"PIONEER BRAND" FARM SEEDS**
**Best for the West—By Actual Test**
Will's "Pioneer Brand" seeds grow better and yield better than seeds not selected for the section. Since 1881 hundreds of customers have been satisfied with the field, garden, and flower seeds bought from this Pioneer Seed House and Nursery.

**Will's Seed Annual**
tells about the best seeds for the Northwest. Send today for a copy—free to all readers of this paper.

**OSCAR H. WILL & CO.**
Box M, BISMARCK, NO. DAK.



## Healthy Grain

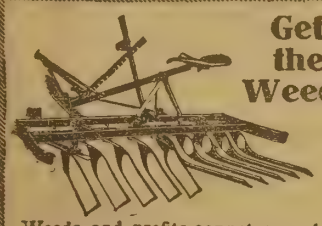
Seeds grow faster and mature into good healthy grain when first freed from smuts by using

**FORMALDEHYDE**
*The Farmer's Friend*

This powerful disinfectant destroys grain smuts and fungus growth. Every up-to-date farmer should use Formaldehyde. It has the supreme endorsement of the U. S. Dept. of Agriculture. Our Formaldehyde in one pint bottles costs 35 cents and treats 40 bushels of grain. Big illustrated hand book sent free on request.

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**Get the Weeds**

Weeds and profits cannot grow in the same orchard. Weeds sap moisture and steal plant food. Destroy them with the fast-working, light-running

**"Acme" Foot-Lift Weeder**

The sharp-ground knife edges cut all weeds—till deep or shallow as desired. Foot-lift lever clears trash and makes transportation easy. Guards at end protect trees. Sizes, 1-horse to 3-horse.

Write today for our free book
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**Duane H. Nash Inc.**
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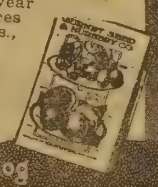




**GURNEY'S BUGLESS POTATOES**

For the last four years thousands of successful farmers have been getting wonderful results from my Bugless Potatoes. These potatoes are practically free from bugs and I have letters from thousands of farmers, as well as the International Harvester Co., claiming that bugs will not eat the vines. The potatoes themselves yield up to 300 bushels per acre and are firm and solid clear through, although they are exceptionally large in size. Try some for yourself this year and be convinced. Prices 15 lbs., $1.50; 60 lbs., $3.50; 300 lbs. $15.

D. B. GURNEY, Pres.
GURNEY SEED & NURSERY CO.
140 Gurney Square
Yankton, S. D.



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Grow New Varieties of

# POTATOES

from the True Seed Ball Seed: There's money in it, and fun galore. No product so interesting—none may be of such value. The result will be amazingly diversified—potatoes of all conceivable colors, shapes and sizes—50 or more new varieties. One may make your fortune. This may be your last chance to obtain this rapidly vanishing seed. Please tell your friends.

Packet with full directions for growing, 15 cents, 4 for 50 cents, 10 for $1.

FOSTER'S FLOWER SEED FARM.
1468 Locust Street, Pasadena, California.


**In answering advertisements don't fail to mention this paper.**

## Tractor Farming

Changes are taking place in the business of farming these days the world over. What was considered good enough a few years ago is obsolete now. The expression that we are living in a "motor age" has gone trite from overuse; yet it is nevertheless true.

First came the automobile—at first a plaything for the idle rich—next a luxury for the moderately well-to-do; now a universally accepted necessity which more than pays its way. Hauling and transportation look nowadays to the motor truck. And almost coincident with the advent of more speedy hauling by motor power came the tractor to cut down the time and the cost of plowing, harrowing, seeding, reaping, threshing and doing other jobs about the farm.

The question is still asked by some: "Is the farm tractor thoroughly practical and a sound, dividend-paying investment?" Broadly speaking, the answer is affirmative. The surest way to measure the practical utility of the tractor is to find out what encouragement tractor manufacturers are being given by tractor users. The very fact that thousands of tractors are now in use on farms throughout our own country and in other countries and that manufacturers of most types of tractors are finding it next to impossible to supply the present demand is proof that the tractor, generally speaking, has "made good."

This does not mean that every individual make of tractor is good, nor that the purchase of a tractor should be made without carefully weighing all the conditions that obtain on your own farm and apply to your methods of farming. Where conditions are favorable to the profitable use of a tractor—where it can cut down crop production costs by doing farm work at a material saving over the cost of doing the work with horses—then it is advisable to adopt power farming. So it is in every instance an individual problem.

Here is one farmer's experience:

A. J. Cole of Creston, Wash., uses a 20-35 tractor on his farm of 600 acres. He used his tractor during the unusually dry season of 1917 for plowing, harrowing, seeding, etc. He uses distillate for fuel and his machine pulls six plows. His tractor has taken the place of from 12 to 16 head of horses and with it he plows from 10 to 15 acres a day. "My tractor means a reduction of at least one-half of the hired help I would require if farming with horses," Mr. Cole goes on to say, "and in addition to harrowing and seeding at the same time with one man I can also run a threshing machine, haul grain to market, etc. With my tractor one man can put in 320 acres of fall wheat in eight days." In common with many tractor owners, Mr. Cole believes that the tractor buyer should be able to operate his own machine and he adds that "with a little practice they are easy to operate."

### Send Smileage Coupons.

The several hundred employes of Wilson & Co. of Chicago, who are serving their country in the United States army were remembered this week by the company, which sent each man a book of smileage coupons. As soon as the first book is used up another will go forward to the boys. These men are under military training in various cantonments in this country, and if any of them have been sent overseas their smileage will follow them. "The boys write us that they are enjoying army life," said Thomas E. Wilson, "and not one of them has even hinted in his letters to our soldiers' aid association that he would like to have the coupons. But we don't want any of them to feel that he is missing any of the fun he might be having if he were at home, so the smileage coupons have been sent to all of them."

### Tractors for Cultivation of Rice.

The French government of Cochin China has become interested in the employment of caterpillar tractors for the cultivation of rice. On September 29, 1917, a 45-horsepower track machine valued at more than $5000 United States currency, was purchased telegraphically. If the experiment is successful, larger orders will follow. Everything depends upon whether the tractor can operate in the soft rice-paddy fields of Cochin China.

### Letters.

It is estimated that about two-thirds of all the letters carried by the postal service of the world are written, sent to and read by English-speaking people.


*The Spirit of 1918*

# We must fill that basket!



**The farmer's duty is as important as the soldier's—one cannot win without the other. The cry of today is "Food and more food" with Europe devastated and every available man taken from the fields and factories to fight for his country in the trenches—what is the answer? The answer MUST be Plant—Plant—PLANT!**

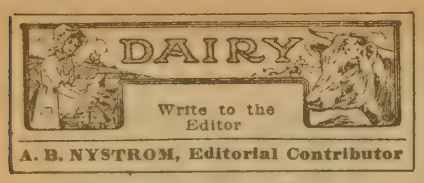
**This is the thirty-third year of—**

# LILLY'S SEEDS

**in the Pacific Northwest. In other words, for a third of a century the House of LILLY'S has been growing, selecting and producing seeds that are BEST FOR THE WEST.**

Avail yourselves of this organization and of the standard pedigreed tested seeds that have made LILLY'S famous throughout the country. Such an organization as this can meet promptly the tremendous demand upon its resources. Dealers sell LILLY'S seeds. Write today for the latest catalog.

SEATTLE **LILLY'S** PORTLAND




A. B. NYSTROM, Editorial Contributor

# Not a "Boarder"

## Rather "Deadbeat" or Parasite"

"Three hundred pounds of butterfat must be produced by an individual cow if she is to show a profit," said A. B. Nystrom at a farmers' institute meeting in Clarke county, Wash. He was leading a discussion as to the possibility of staying in the dairy business during a time like the present when feed prices threaten to paralyze the industry.

"We've got to look this thing right square in the face," he continued. "If I own a herd I am going to charge every member of it with everything she needs at full market price, whether I raised her feed or bought it at retail. If a cow can't make good on a system of this kind I am going to take her to the butcher.

"Too many dairymen have kept cows thinking they were all right, when as a matter of fact, they were poor producers. They have hung on to them believing them to be profitable because other farm products have paid. They knew they had a little money coming, but often failed to ascertain definitely just where the money came from..

"Now is a good time to go slow. Let's be content this year and possibly next with small margins, but let us start to build up our herds in such a manner that five years from now we will be realizing what we ought to from this business.

"Some complain of the long hours necessary in the dairy business. What of it? If we have good cows and are making money and being paid for our overtime, we're willing to put forth a little extra effort, aren't we? No one, I think, will object even to getting up at 12 o'clock at night to milk a bunch of cows if he is going to get a couple of hundred pounds more milk thereby.

"The word 'boarder' is too good for a scrub cow. The average boarder pays for his board or is denied admission to the dining room. The scrub cow often pays nothing but keeps right on eating her head off. This kind of an animal should be called a 'deadbeat' or a 'parasite' and treated accordingly.

"The bull is more than half the herd. No sane dairyman will put a grade bull at the head of his herd." R. W. F.

# MakesGoodButterNow

To the Editor: In The Farmer of January 17 S. M. P. of Rathdrum, Idaho, writes in regard to his having trouble making good butter in the winter time. As for two winters we had some of the same kind of experience of which he writes I thought I would tell you how we overcame the trouble.

We first had bad tasting, bad smelling butter when the weather got quite cold, and frequently the cream would foam in the churn and take long to churn. The room in which we set the milk had no means of being heated, so, although the cream or milk did not freeze, it became very cold. Then I tried keeping the milk in the pantry, where it was not so cold, and the quality improved very much. We then got a separator, and in cold weather kept the cream in the kitchen after it was cooled, never at any time letting the temperature get below 55 degrees F., and when souring it raising the temperature to 60 to 63 degrees. We had no more bad cream or butter except once or twice when I forgot and left the cream sitting in the window overnight and it got too cold. On very cold nights I wrap a blanket around the can, always keeping a thin cloth over the top after cream is cooled. We get nearly creamery price for the butter, and our customers say it is far superior to creamery butter.

I consider our trouble several years ago was due to the fact that the good souring bacteria are retarded in their development when much below 60 degrees, and that there are other bad bacteria which thrive at that low temperature in milk, thereby enabling the bad ones to get ahead of the good ones and to keep ahead when the cream is warmed. On the other hand, when the cream is kept near 60 degrees or above the souring bacteria work rapidly and kill or retard the bad ones.

I may be wrong in my theory, but our experience seems to bear it out. The experiment would be easy for S. M. P. of Idaho to try, and in case it does not help he could feel more certain the trouble is with the cows.

MRS CARRIE PETERSON.
Montborne, Wash.

# New University of Idaho Dairy Record



The Holstein cow, Idaho Violet Posch Ormsby, No. 337275, out of Hazelwood Posch Ormsby, No. 64222, and Cascade Violet Cornecopia, No. 108317, has established a new seven-days record for the University of Idaho in the production of milk and butter fat. As a 6-year-old this cow produced 593 pounds of milk and 22.05 pounds of butter fat, or 27.56 pounds of butter. This cow freshened Nov. 8 and her milk production for the month of December was 2432 pounds and for January 2162 pounds, and at present she continues to add from 75 to 78 pounds a day to her total for the period. It is to be regretted that it was not possible to run this cow on a semi-official test at this time.

The ration fed during the test period consisted of corn silage, alfalfa hay, cut beets and a grain mixture composed of ground barley, bran, ground oats and oil meal.

The best previous record at the university was made by Alaska Yukon Colantha, No. 126465, who as a 6-year-old produced 564.4 pounds of milk and 19.37 pounds of butter fat in seven consecutive days.

## Produces 2480 Pounds of Milk.

The report of the first Central Oregon Cow Testing association just received by County Agent Ward shows that for the second time a central Oregon cow heads the list of highest butterfat producers in the state and perhaps in the northwest. The report of Ray K. Potter, official tester, shows that the registered Holstein, Pearl, owned by Henry McCall of Prineville, during the period of 30 days ended January 16 produced 2480 pounds of milk, which yielded 96.7 pounds of butterfat.

## High Producing Cows.

The following members of the Skagit Valley (Wash.) Cow Testing association have cows that produced more than 60 pounds of butterfat during the month of January: W. W. Acheson, whose Holstein produced 62 pounds of butterfat; J. A. Folsom, whose grade Holstein produced 69.1 pounds of butterfat; F. J. Gallacher, whose grade Holstein produced 62.7 pounds of butterfat.

According to the report of R. L. Lauderdale and R. W. Ropes, official testers, there were 752 cows tested during the month. Seventy-one cows produced between 40 and 50 pounds of butterfat, and 15 cows averaged between 50 and 60 pounds. The average pounds of milk per cow was 644 pounds, the average pounds of butterfat, 26.1, and the average cost of feed per cow, $10.85.

The highest average milk herd, owned by J. A. Folsom, produced 1076 pounds of milk and 39.3 pounds of butterfat. There are 22 cows in the herd. The highest average butterfat herd was owned by F. J. Gallacher, 41.2 pounds of butterfat and 965 pounds of milk. There were 11 cows in his herd.






**The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.**


HIDES
WOOL · PELTS
FURS · TALLOW
SHIP TO US
NO CARTAGE - NO COMMISSION
HIGHEST CASH PRICES PAID
PROMPT RETURNS - HONEST WEIGHT
WRITE FOR PRICE LIST AND SHIPPING TAGS
HIBBARD-STEWART CO. INC.
SEATTLE
BE SURE AND MENTION THIS PAPER

JUST CONSIDER THESE PRIZE-WINNING, REGISTERED PERCHERONS

Yearling stallion, will be 2 years old in May. This fellow is bound to make a splendid sire.

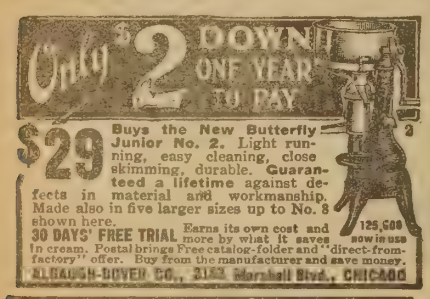
One older stallion, weighing 2000 pounds. A handsome horse, with dozens of fine colts to his credit and still in the pink of breeding condition.

Three mares—one weighing 2000 pounds; one 4-year-old, 1700 pound mare with foal; one dandy young mare coming two years old.

ALL REGISTERED, ALL PRIZE WINNERS

If you want something especially good at the right price write me, as I am sure I can please you.

W. J. KNUTZEN, Route 2, Mt. Vernon, Wash.







*Raise Your Calves on*
**Blatchford's Calf Meal**
*and Sell the Milk*

More calves have been raised on Blatchford's Calf Meal than on all other milk substitutes combined.

100 lbs. makes 100 gallons of milk substitute, costing only one-third as much as milk.

Prevents scouring and insures the early maturity of sleek, handsome calves.

It is steam-cooked and no trouble to prepare or use.

Write for Pamphlet "How to Raise Calves Cheaply and Successfully with Little or No Milk." At dealers, or Blatchford Calf Meal Co., Dept. 58 Waukegan, Ill.

SPOKANE SEED CO.
Distributors.
SPOKANE, WASH.

BUHL SANITARY DAIRY SUPPLIES

"Buhl Quality" stands the racket! Buhl Milk Cans, Sanitary Milking Pails, Strainers, are standard with Northwest dairymen.

*A postal brings the FREE circular on Buhl Sanitary Dairy Supplies or anything else in dairy, buttermaking or cheese-making needs.*

Address Desk B nearest house,
Monroe & Crisell Dairy Machinery Co.
91 Front St., Portland 907 Western Ave., Seattle



# A Well-Bred Young Jersey



"Peggy" is not a prize-winning, blue-ribbon animal, but she is a well-bred American Jersey, 3 years old, the property of Mrs. Chris Cohrs, Prineville, Ore. This young animal is an exceptionally good butter animal, and is just the kind of well-bred animal that is supplying many a family in this region with cream and butter, without the owners spending too much time looking into "bossy's" family tree. Mrs. Cohrs sells a quart of Peggy's milk each day to a lady. This lady, being economical, each day took the cream off this quart of milk and placed it in a jar for a week. This cream was then churned in a little jar into butter, and for that length of time yielded three-fourths of a pound. In this instance Peggy proves her butterfat value by returning to the lady patron who bought the milk almost the price of the milk in actual butter, besides leaving her the fairly rich skimmed milk for family use.

**Birds of Nebraska.**

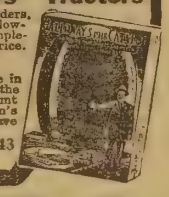
Although 400 different species of birds have their home in Nebraska, it is said that no more than 200 are to be found in any one locality.


$17.95 Upward ON TRIAL
American
FULLY GUARANTEED CREAM SEPARATOR



A Solid Proposition to send new, well made, easy running, perfect skimming separator for $17.95. Skims warm or cold milk; heavy or light cream. Different from picture, which shows larger capacity machines. See our plan of
MONTHLY PAYMENTS
Bowl a sanitary marvel easily cleaned. Whether dairy is large or small, write for free catalog and monthly payment plan. Western orders filled from western points.
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WAIT! Hold up your Separator Order!
Get Galloway's Low Direct Price
Do this first. Don't think of investing in a separator until you learn what a big separator value you can get direct from Galloway.
Sanitary Separator New 1918 Models
It's the sensation of all separators. Sensational in construction, clean skimming, sanitation, easy cleaning and durability. The features of the Galloway Sanitary Separator combine the new and best advantages of all high grade separators. Buy a Galloway and you get the best of all embodied in one perfect machine. Four big sizes at four low prices. Every size guaranteed to skim to rated capacity. Sold on 180 milking test in your own dairy before you decide to keep it.
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Galloway also makes Engines, Spreaders, Tractors and sells them direct, too, at lowest factory prices. Don't order any implement until you get Galloway's factory price.
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WE build Sturges Cans to be more than just good milk containers. Each Sturges Can is built to be true to rated capacity. This is a big advantage in daily service. Saves work and time. forestalls disputes with city sealers—insures pleasing your trade more. Only highest grade steel plate is used. Carefully tinned, seams soldered smooth—easy to keep clean. Write for Catalog No. 133. Estd. 1865.
Sturges & Burn Mfg. Co., Chicago
Sturges Milk Cans


# Profit in Corn

## Grows It on Wheat Stubble

**By Horace Addis.**

The profit in growing corn on wheat stubble is shown in a striking manner by the experience of Charles Playle of La Grande, Ore. Mr. Playle is one of the big farmers of the Grande Ronde valley. He farms 1480 acres, and his 1917 wheat crop averaged 46 bushels per acre. All his farming operations are exclusively with horses, as he considers them cheaper and more satisfactory than gas-propelled machinery, hence he has a good many horses to feed.

Last year 50 acres of Mr. Playle's summer fallow was planted to corn. Being a believer in both conserving moisture and killing weeds on summer fallow, Mr. Playle cultivates it nine times. His corn he cultivates three times, so even when planting is considered, the amount of work does not favor the summer fallow. The corn was cut with a binder and the amount is indicated by the stock it fed. Mr. Playle commenced feeding the corn December 26. He has ever since been feeding 60 horses and 75 head of cattle on corn fodder and wheat straw. The cattle are in good condition and the horses fat and ready to go to work. Mr. Playle estimates that the amount of hay necessary to keep the stock in the same condition would be 100 tons. As hay was $20 a ton most of the winter, it will be seen that a corn crop that took very little more work than would have been done anyway, was a paying investment. And the story is not all told yet. Thirty-four head of hogs followed the cattle, had no other feed, and while I did not see them, I was assured that they were fat enough for the butcher when I was in La Grande, the middle of February.

Mr. Playle keeps some brood mares and raises his own work horses.

## Urges Keeping of Records.

To the Editor of The Washington Farmer: In these trying times when every loyal citizen of the United States is studying how he can do the most to help his country win the war in the quickest way possible there will be a great temptation to drop the keeping of the record of each dairy cow. This should not be, as I have proved that it is the only way to tell a good cow from a poor one and enables one to sort out the poor cows, keeping the best.

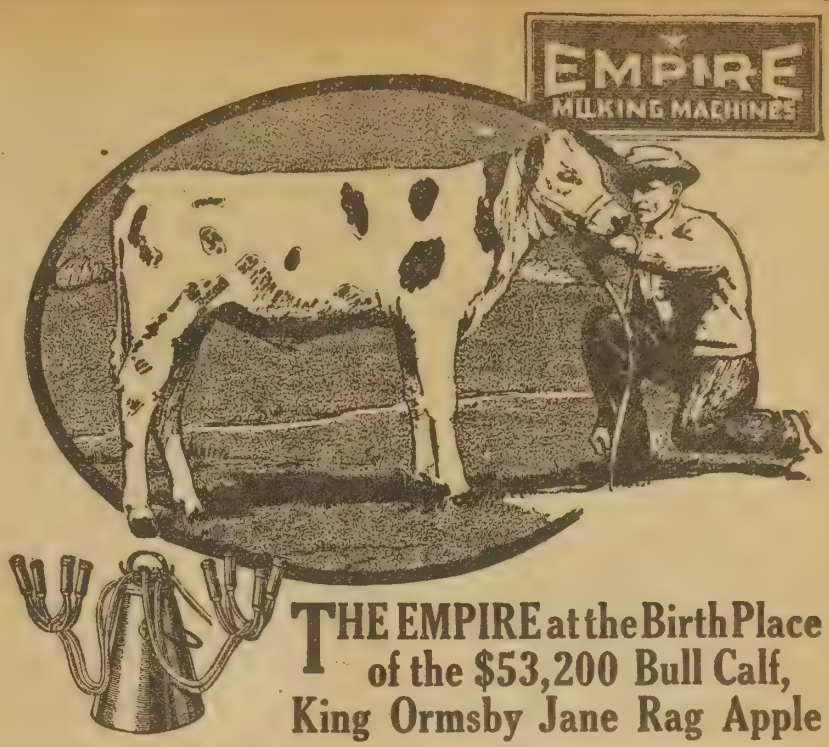
I know there are many who think it does not pay for the bother, and to such I suggest that they try weighing the milk one day in seven. While this is not the best way it will give a comparatively correct record, and by counting up the account at the end of each month, and multiply by seven, you can determine the average amount each cow gives. This takes but little time and yet enables one to find the amount of butterfat contained in the milk.

A. D. ESTABROOK.

Pateros, Wash.

## No Fixed Wool Price.

The federal government will not fix the price of wool, according to information received from S. W. McClure, secretary of the National Woolgrowers' association, who has been in Washington. A number of reports had reached the woolmen of the west to the effect that the government, in all probability, would undertake to establish a price for the wool clip of 1918, and Secretary McClure went to Washington to investigate.


THE EMPIRE at the Birth Place of the $53,200 Bull Calf, King Ormsby Jane Rag Apple

Milk producers throughout America have watched the records made by Oliver Cabana Jr.'s herd of Holsteins at Pine Grove Farms—a herd famous for the bull-calf which brought the record price at Worcester; for the great herd bull, Rag Apple Korndyke 8th; for Segis Fayne Johanna, the champion milk cow, with her record of 50.68 lbs. of butter in 7 days. Many of you, too, know how carefully Charley Cole conditioned the latter for her test.

It is time for the *world* to know that this high-bred herd is milked with the Empire Milker. Here is a test of responsibility. Empire Milkers get the milk; they keep up the flow for the *full period of lactation* and usually they *increase the yield.* They milk more *gently* and *uniformly* than even the calf—or the most reliable of hand milkers.

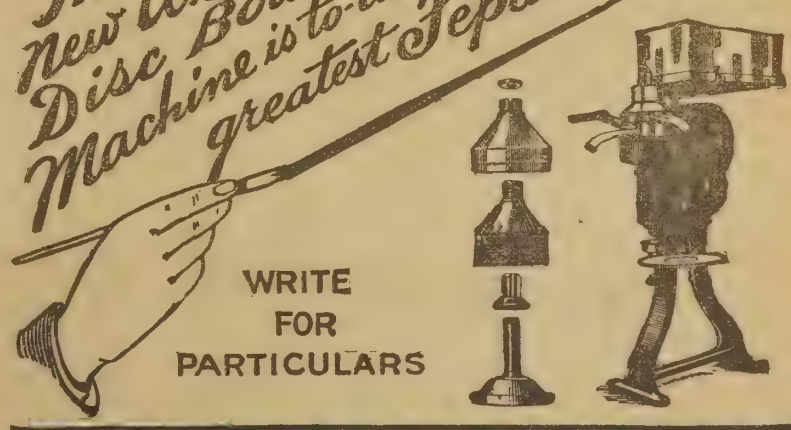
Scores of prize milk herds of *all breeds* are today milked by the Empire. It is so simple that at many of these dairies a 10-year-old boy or girl with an Empire Outfit is doing *all* the milking, putting an end to the labor problem.

Every owner of eight or more milk cows will save wages by installing Empire Milkers—and usually he will increase the size of his milk check. Get in touch with the Empire dealer at once so that he can supply you.

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Branch offices: Salt Lake City; Oakland, Cal.; Chicago, Ill.

LIVE STOCK NOTES

Write to the Editor

E. J. IDDINGS, Editorial Contributor

# Colic Treatment

## Always Have Raw Oil on the Farm

When your horse shows signs of colic stop feeding him at once. Drench him with a quart of raw linseed oil into which from one to one and one-half ounces of turpentine has been mixed. If he wants water let him have it, all he wants, except do not let him gorge himself at one drinking.

This is the advice of Dr. S. B. Nelson, dean of the college of veterinary science of the state college of Washington.

Among the things that every farmer and stockman should have on hand at all times are raw linseed oil and turpentine, he says. The former is one of the best purges known, and is in no way harmful whether it serves the purpose for which it is wanted or not. In case of a colicky horse, if the animal's stomach is impacted, the oil will be utilized by him as a food and will be of benefit in that way.

**How to Drench.**

Dr. Nelson urges great care that none of the drenching liquid get into the lungs, as it may start an irritation resulting in pneumonia. Therefore it is extremely desirable that choking or strangling be avoided.

Strangling is often due to forcing the horse's head too high while drenching. It is often the case that the halter rope will be drawn up over a beam above the horse's head, and the more he struggles the higher his head is held. This tends to close the throat and make swallowing difficult if not impossible.

One man can drench a horse better than two, except that one can be of assistance in holding the bottle and other necessities. Dr. Nelson's method of drenching is about as follows:

Use a bridle with two reins and a large, straight bit. Pass the reins over a beam or through a ring somewhat higher than the horse's head. Hold the reins a few inches from the animal's nose, holding the ends and main reins in one hand. This allows the one administering the drench to watch carefully the animal's action and expression and judge the exact moment to release the hold to avoid strangling.

The drench should be given in a bottle and if the animal shows stubbornness or fear of swallowing a little tickling with the fingers just behind the front teeth will invariably cause him to move his tongue forward and swallow, says Dr. Nelson.

# Veterinary

Dr. S. B. Nelson

**Bacterial Infection**—I have an eight-months-old pig that is not doing well. About a month ago the hide all came off his back and the ends of his ears came off. It does not heal and there is matter under the scabs. He eats well, but does not grow.—E. M. R., Fernwood, Idaho.

The trouble with your pig is probably a bacterial infection. Try applying a one-half of one per cent solution of picric acid in water to the affected parts once daily.

**Too Laxative**—I have a cow fresh last October that gives three gallons of milk a day. She is fed first cutting clover hay and about 10 pounds of carrots once a day. She has plenty of clean well water and salt at hand, yet she seems entirely too laxative.—G. F. P., Twin Falls, Idaho.

Try giving your cow one tablespoonful of listerine in one quart of water morning and night for a few days.

**Lost Use of Hind Leg.**—I have a 10-weeks-old pig which was doing fine, when it began to choke while eating, would fall over, shake, squeal, recover and eat again. This went on for about two weeks when it commenced to lose the use of its hind quarters and now does not try to use them. A. M. S.

Hood River, Ore.

There may be one of two troubles affecting your pig, the first being internal parasites, and the second rheumatism. First, in either case, take the pig off feed for a day or such a matter Then give it from one to three tablespoonfuls of castor oil, depending on its size. I notice that you say it is a 10-weeks-old pig, and about two tablespoonfuls in a little feed may be all right. Then try giving it about three grains of santonin in its next feed. If it is worms, it will do very nicely on this treatment, I think. After a few days if you do not see results from this, begin giving the pig five grains of potassium iodin on its feed night and morning.

**Wants to Scratch**—I have a horse eight years old that seems to want to scratch his skin and tail and when he lies down to roll he bites his legs. I am sure it is not lice or mange. He has been doing this for about a year. F. A. W., Loma, Mont.

The trouble with your horse is one of two things. Either it is a straight case of malnutrition; or it may possibly be a case of intestinal parasites. In the first place I believe that I would give him a quart of raw linseed oil with one ounce of turpentine in it and then I would follow up with the following powder given once daily:

Artificial Carlsbad salts, one ounce.
Sulphate of Iron, one dram.
Powdered gentian, two drams.
Powdered Fenugreek seed, four drams.

I would recommend that you have about 20 to 30 of these powders made at the local drug store and give the horse one daily. When warm weather comes it might not be out of the way to give the horse a good tobacco solution wash or give him a wash of a two per cent solution of any of the coal tar disinfectants, such as cresol, creosote, or any of that type.

**Sore, Running Eye**—I have a cow that has been affected with a sore and running eye for two years. There is not much swelling, but it is raw and runs blood. It seems to get worse during cold weather. It is apparently painful. The eyeball is rough in appearance. J. R. R.

Cambridge, Idaho.

Judging from your expression in your inquiry that the eyeball is rough in appearance there may be some scum on the eyeball, and yet you do not seem to give a definite expression if that is the case. I am going to suggest to you that you drop into the cow's eye a few drops of the following solution: Three per cent solution of argyrol in water morning, noon and night for some time.

I have a cow that has been dry since November. I took her from the range a few days ago, as I expect her to calve in a few weeks. On examining her udder I find that blood comes from the teats. We have been feeding her all the alfalfa hay she will eat since taking her in. Would this be the cause?—G. E. S., Central Point, Ore.

I do not believe the feeding of the alfalfa hay had anything to do with the trouble you mention. I would suggest that you give her one teaspoonful of hyposulfite of soda in a pint of water once daily. Also that you give her one teaspoonful of fluid extract of Phytolacca in a small quantity of water once daily.


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The Secret of Making Money Out of Hogs is in growing them fast. Ryde's Pig Meal is the ideal food for this. Ask for catalog No. 40.

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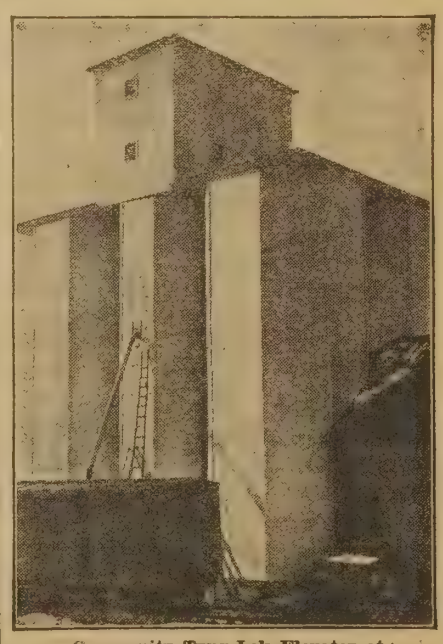
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Dr. DAVID ROBERTS VETERINARY CO., Waukesha, Wis.

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Handle Your Wheat in Bulk!

Wheat sack prices are prohibitive, even if you could get the sacks. Surely you will not pile your wheat on the ground, to suffer heavy damage and loss above and below. Patriotic duty and business judgment alike demand that you save ALL your crop.

Here is the answer to your problem—build a

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A Tung-Lok Elevator can be built for so little money that it will pay for itself in one year, while it provides permanent storage. Easily and quickly erected—storm-proof for a lifetime. The most economical and convenient way of building is by community cooperation, each farmer erecting one of a group of Tung-Loks, as shown in the cut herewith.

Just notify us, and one of our agents will call on you and explain the Tung-Lok method to you and your neighbors. That costs you nothing. Now is the time to act—WRITE US TODAY.

You realize, of course, that labor conditions have been extremely unsettled in all industries in the past year, and the future is uncertain. While conditions with us now are such that we can take care of all orders promptly, we ask that you act at once if you are planning to erect a Tung-Lok Elevator this year. Don't wait for the summer rush!

UNION LUMBER COMPANY

Dept. B. Union Mills. Makers of the Famous Tung-Lok Silo. Washington.

# War Aids Horseman

## Great Number Do Tasks of Battle

By E. L. POTTER.

That the war has had a very great influence upon the horse industry goes without saying. That the thousands and thousands of horses that were shipped to the allies before the entry of our own country into the war did not affect the horse would be an absurdity. Likewise that the purchase of some 800,000 horses for our own army has had its effect can not be denied. We hear so much of motors in connection with the war that we forget the enormous number of horses used. We also forget that there are not enough horses and horse feed in the world to supplant the motors now in use by the various armies. We also forget that in our news service a story of a caterpillar tank plowing across no man's land is sensational news, but no reporter is going to waste good cablegrams telling about six American farm horses dragging a French 75 through a foot and a half of mud. We have heard much of the famous 75s, but we hear nothing of their motive power. Why? Because their motive power is merely some common United States plow horses that a few months ago were pulling mowing machines, "somewhere in the U. S. A." There is very little motor transportation used with light artillery, because the horses are more reliable and are more easily replaced in case of injury. A well-placed shot puts a motor gun entirely out of commission, while a horse shot down is almost instantly replaced from the officers' mounts. Even if the entire team is destroyed, the gun remains intact, to be pulled by another team, or, if the gun is destroyed, the team remains to pull another gun. These are not horsemen's statements, but are common talk of artillerymen.

### Relatively Low Price.

The price of horses is, however, relatively low in spite of army demand. The facts are that along about 1914 there was an oversupply of horses in the United States. It was generally known that the demand was dull and there were plenty of horses for sale, but the real extent of the available supply was hardly dreamed of. It was assumed that the purchase of a half million horses for war purposes would put up the prices to almost prohibitive figures. No one at that time would have believed a statement to the effect that twice that many horses could be purchased without materially changing the scale of prices. We now know that the war was the only salvation of the horse market, and that horses would be unsalable today if it had not been for the war demand. What the demand will be after the war is largely a matter of speculation, but no one can question that the clearing up of this surplus will help the situation.

The buying of war horses both for the allies and for our own government has had a great educational influence upon the horse industry. Hundreds and even thousands of farmers have learned to locate the common unsoundnesses and have acquired a considerable judgment as to the value of a horse, whereas, heretofore, only here and there was there a man who was really a judge of a horse. The great majority of the horses of the country have been raised by men who know but little as to the value of the animals they produce. This change will doubtless be of great value to the industry. We could hardly expect breeders to use only good mares and to patronize good stallions when they had not yet had experience enough to know good horses from bad ones. This widespread improvement in judgment on the part of our horse producers can not help but have a marked influence on the business.

On the whole, we do not expect that the war is going to produce any boom in the horse business, but we do feel that it has already prevented a serious depression and that it is going to have a far-reaching and lasting influence on the quality of our horses.

### Seven Ages of Man.

The seven ages of man, if we may be permitted to tamper with Shakespeare's stuff, are as follows:

First—The age when he doesn't know anything and doesn't know it.

Second—When he doesn't know much more and yet doesn't know it.

Third—When he knows a little bit and doesn't know how little.

Fourth—When he knows he knows something and hopes to know more.

Fifth—When he knows a little and thinks he knows everything.

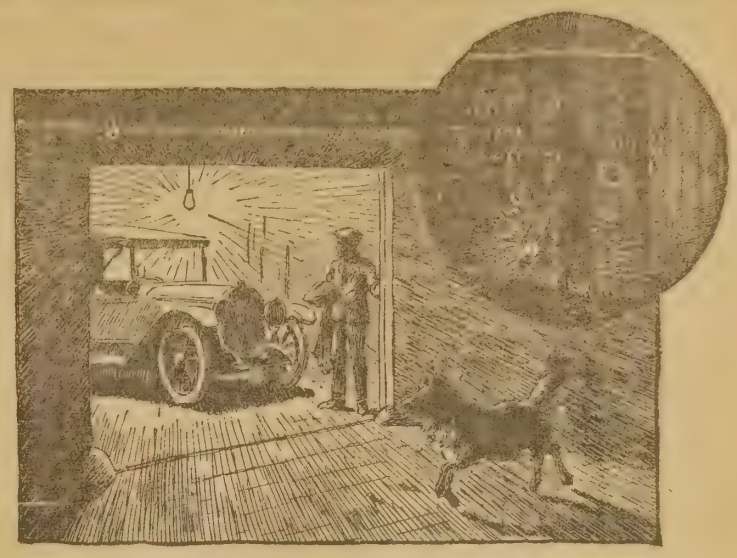
Sixth—When he begins to realize how little he knows.

Seventh—When he knows that he doesn't know anyting worth knowing and doesn't care a continental whether he does or not.


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ELECTRIC LIGHT AND POWER FOR EVERY FARM

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# Two Plants in One At the Cost of One

Lalley-Light, in effect, is two electric light plants for the price of one. For it provides two sources of light and power, both reliable and efficient. One of these is the storage battery. The other is the electric generator.

Current used direct from the generator—giving bright, steady light, without a flicker—does not pass through the battery. That is an economy, for the life of the battery is prolonged.

When only a few lights are required it is more economical to draw current from the battery, with the generator idle.

Few, if any, other plants afford this optional use of generator and battery.

Lalley-Light brings to your farm electricity in its simplest, safest, surest form. Its reliability is established by nearly eight years of successful, every-day farm use.

It is so simple that even your boy or girl can run it and give it all the care it needs.

The engine, direct-connected to the generator, starts when a button is pressed. If run to replenish the battery, it automatically stops when the battery is fully charged. If the battery needs charging, a bell rings to warn you.

These are distinct Lalley-Light advantages, over and above the great comfort and convenience—the perfect safety and the proved economy—of electric light and power.

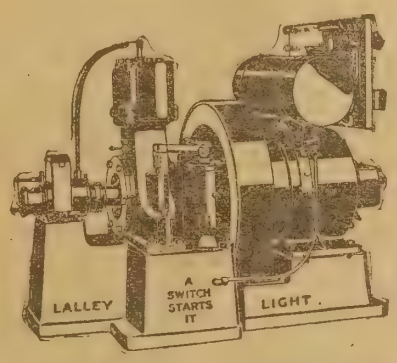
On thousands of farms Lalley-Light keeps the young folks contented; it is a boon of comfort to the old folks.

Its light is always ready—waiting, in a flood, for the turn of a switch—in house, barn and outbuildings.

Its power is ample to pump water and to run much of the smaller farm machinery — decreasing labor inside and outside the house. All at a daily cost the average farmer can well afford.

Write us at once for the illustrated free booklet which tells, in detail, what Lalley-Light is and does. We will tell you where you can see Lalley-Light in operation, and give you the cost of the complete plant, delivered to you.

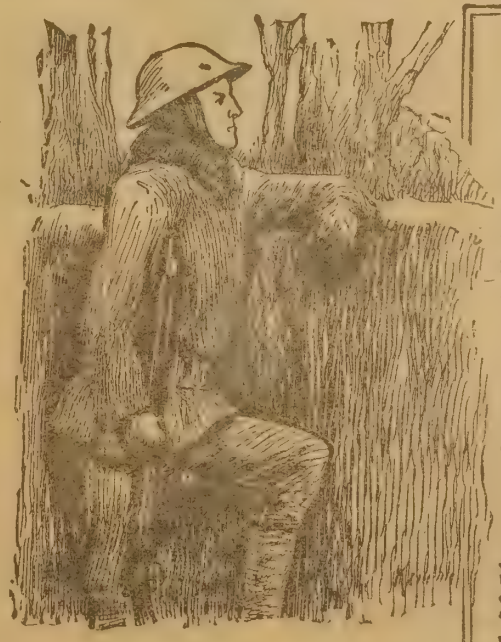
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## Send Him a pouch of Real GRAVELY Chewing Plug

**Real Gravely Chewing Plug—there's the soldier's tobacco, that he can use anywhere, anytime. Just a small chew of Real Gravely is enough—*all good tobacco*, rich, sappy leaf made the Gravely way, not loaded up with heavy sweetening like ordinary plug.**

Give any man a chew of Real Gravely Plug, and he will tell you *that's* the kind to send. Send the best!

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If you smoke a pipe, slice Gravely with your knife and add a little to your smoking tobacco. It will give flavor—improve your smoke.

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Dealers all around here carry it in 10c. pouches. A 3c. stamp will put it into his hands in any Training Camp or Seaport of the U. S. A. Even "over there" a 3c. stamp will take it to him. Your dealer will supply envelope and give you official directions how to address it.

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**Established 1831**

# POULTRY

Write to the Editor.

**JAMES DRYDEN,**
**Editorial Contributor.**

## Disinfection

### Keep Chicks Off Infected Ground

To the Editor: I am a subscriber to your paper and would be glad to know how to proceed to disinfect buildings and premises on which fowls suspected of being tubercular have been kept in order to have it safe to put healthy fowls in the same place. How long should the buildings remain empty?

Would also like to know what is the best feed for hens for winter eggs?

H. A. K.

Nez Perce, Idaho.

Tuberculosis is believed to spread largely through the medium of the feed. It is the digestive organs of the fowl that are usually affected. The germs of the disease pass through the infected fowl in the excreta or droppings. The droppings come in contact with the feed by the grain being thrown on the ground and falling on the droppings. It is picked up by the fowl, which may become infected by eating it. A knowledge of this fact will make plain the nature of the disinfection that will be necessary. The germs may live in the ground for several months; just how long I do not know, but in about six months the ground will probably be free from the disease if the chickens are kept away.

This is probably the safest thing to do: Keep the chickens off the infected ground for about a year. After that it would be safe to start with a new flock. The sunshine is a germ destroyer; therefore the more direct sunshine that strikes the ground the better. Cultivating and cropping the ground is also a germ destroyer.

The ground may be disinfected by covering it white with fresh air-slacked lime that has been broken into a floury powder. The house may be disinfected by a good whitewash, to which a little carbolic acid has been added, about 5 per cent. The house should first be cleaned out and all sweepings and droppings burned or destroyed. A good spray may be made by using one pint formaldehyde in 20 gallons of water. All feed troughs and drinking vessels should also be thoroughly disinfected. Cultivation and cropping of the yards with plenty of sunshine thrown in will go a long way toward preventing the disease or spread of it.

J. D.

## Egg-Laying Contest

Some wonderful egg records were made in the All-Northwest Egg Laying contest in January, as reported by Professor Helen Dow Whitaker, the director. The average production for the month was 14.77 eggs a hen. The highest record for the month was made by a pen of Barred Plymouth Rocks owned by the Oregon Agricultural college. This pen laid 124 eggs, an average of 24.8 per hen, or 80 per cent egg yield. The next highest record was 120 eggs made by a pen of Leghorns owned by the Hollywood farm, Wash., and by a pen of Rhode Island Whites, owned by H. E. Caldwell, Texas. The highest individual record for three months was made by a hen owned by C. F. Williams, Salem, Ore., which laid 84 eggs. The Williams pen has the highest record for the three months, or 345 eggs. The report in detail for the 20 best pens is as follows:

The following are the pens laying the highest number of eggs from November 1, 1917, to January 31, 1918:

White Leghorns, C. F. Williams, Salem, Ore., 345 eggs; White Leghorns, H. Otto, Greenacres, Wash., 341 eggs; Rhode Island Whites, F. W. Frederick, Phoenix, B. C., 328 eggs; Rhode Island Whites, H. J. Kingsbury, Twin Falls, Idaho, 313 eggs; White Leghorns, D. Tancred, Kent, Wash., 307 eggs; Barred Rocks, Oregon Agricultural college, Corvallis, 303 eggs; White Leghorns, Hollywood farm, Hollywood, Wash., 301 eggs; White Leghorns, Mrs. Mono Van Cise, St. Maries, Idaho, 298 eggs; White Leghorns, Paul B. Towne, Tekoa, Wash., 297 eggs; White Leghorns, C. C. Coolidge, La Grande, Ore., 293 eggs; White Leghorns, F. C. Park, Hermiston, Ore., 292 eggs; Barred Rocks, F. J. Wirtner, Mica, Wash., 292 eggs; Rhode Island Reds, Mrs. H. V. Rominger, Underwood, Wash., 283 eggs; White Minorcas, B. O. Longsdorf, Lebanan, Ore., 283 eggs; White Leghorns, L. E. Harris & Co., Missoula, Mont., 283 eggs; White Leghorns, K. Kammerbacher, Grants Pass, Ore., 280 eggs; White Rocks, F. E. Kneedler, St. Libory, Ill., 280 eggs; Barred Rocks, Bliss & Bliss, Southworth, Wash., 280 eggs; White Leghorns, Waikiki farm, Spokane, Wash., 278 eggs; White Leghorns, J. R. McRae, Milwaukie, Ore. 275 eggs.

The following are the pens (five birds) laying the highest number of eggs in January, 1918:

Barred Rocks, Oregon Agricultural college, Corvallis, 124 eggs; White Leghorns, Hollywood farm, Hollywood, Wash., 120 eggs; Rhode Island Whites, H. E. Caldwell, Canutillo, Texas, 120 eggs; White Leghorns, C. F. Williams, Salem, Ore., 119 eggs; White Rocks, University of Idaho, Moscow, 117 eggs; White Leghorns, Oregon Agricultural college, 115 eggs; Rhode Island Reds, Mrs. H. V. Rominger, Underwood, Wash., 113 eggs; White Leghorns, Mrs. Monona Van Cise, St. Maries, Ida., 112 eggs; White Leghorns, F. C. Park, Hermiston, Ore., 110 eggs; Barred Rocks, Bliss & Bliss, Southworth, Wash., 108 eggs; Rhode Island Whites, H. J. Kingsbury, Twin Falls, Idaho, 107 eggs; White Rocks, F. S. Kneedler, St. Libory, Ill., 107 eggs; White Leghorns, A. Unsworth, Sardis, B. C., 107 eggs; White Leghorns, Paul B. Towne, Tekoa, Wash., 106 eggs; White Rocks, Dr. Louis Heely, St. Libory, Ill., 106 eggs; White Leghorns, H. Otto, Greenacres, Wash., 105 eggs; White Leghorns, D. Tancred, Kent, Wash., 105 eggs; Barred Rocks, F. J. Wirtner, Mica, Wash., 104 eggs; White Leghorns, Benn Olitt, Linnton, Ore., 104 eggs; Rhode Island Reds, Bliss & Bliss, Southworth, Wash., 102 eggs.

### Rice With Creamed Halibut.

An easy and attractive way of serving left-over halibut is to cream the fish and use it for stuffing a mound of rice. The rice should be steamed with salt and water for 45 minutes in a double boiler.


**Tells why chicks die**

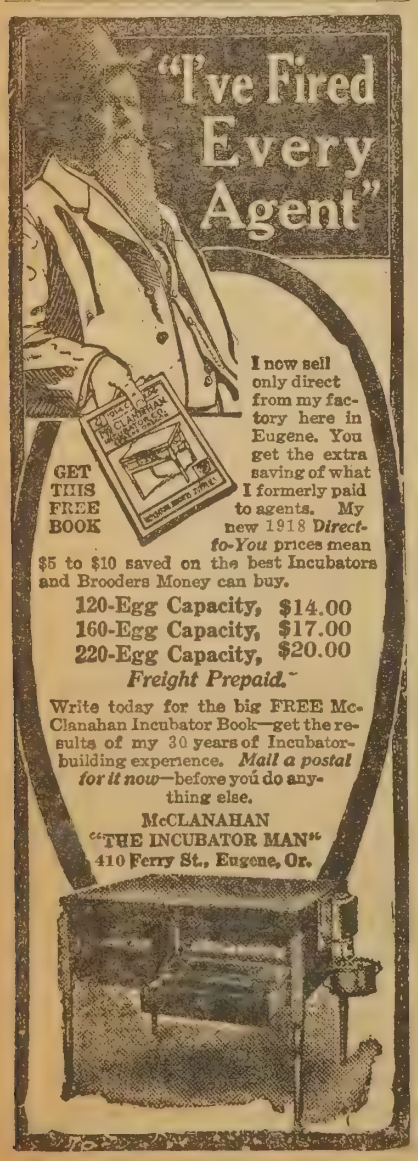
E. J. Reefer, the poultry expert, 466 Reefer Bldg., Kansas City, Mo., is giving away free a valuable book entitled, "White Diarrhoea and How to Cure it." This book contains scientific facts on white diarrhoea and tells how to prepare a simple home solution that cures this terrible disease over night and actually raises 98 per cent of every batch. All poultry raisers should certainly write Mr. Reefer for one of these valuable FREE books.

**Pioneer Incubators**

Sold from factory direct to you. Used by 48 western hatcheries Send today for big free illustrated catalogue.



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320 South Spring St.,
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**Mating Time Is Here**

Now's the time to put your hens and roosters in the pink of condition with Poultry Pan-a-ce-a.

If you want chicks that will live and develop rapidly—if you want early broilers—if you want pullets that will develop into early winter layers, then feed the parent stock—

**DR. HESS POULTRY PAN-A-CE-A**

**Makes Poultry Healthy—Makes Hens Lay**

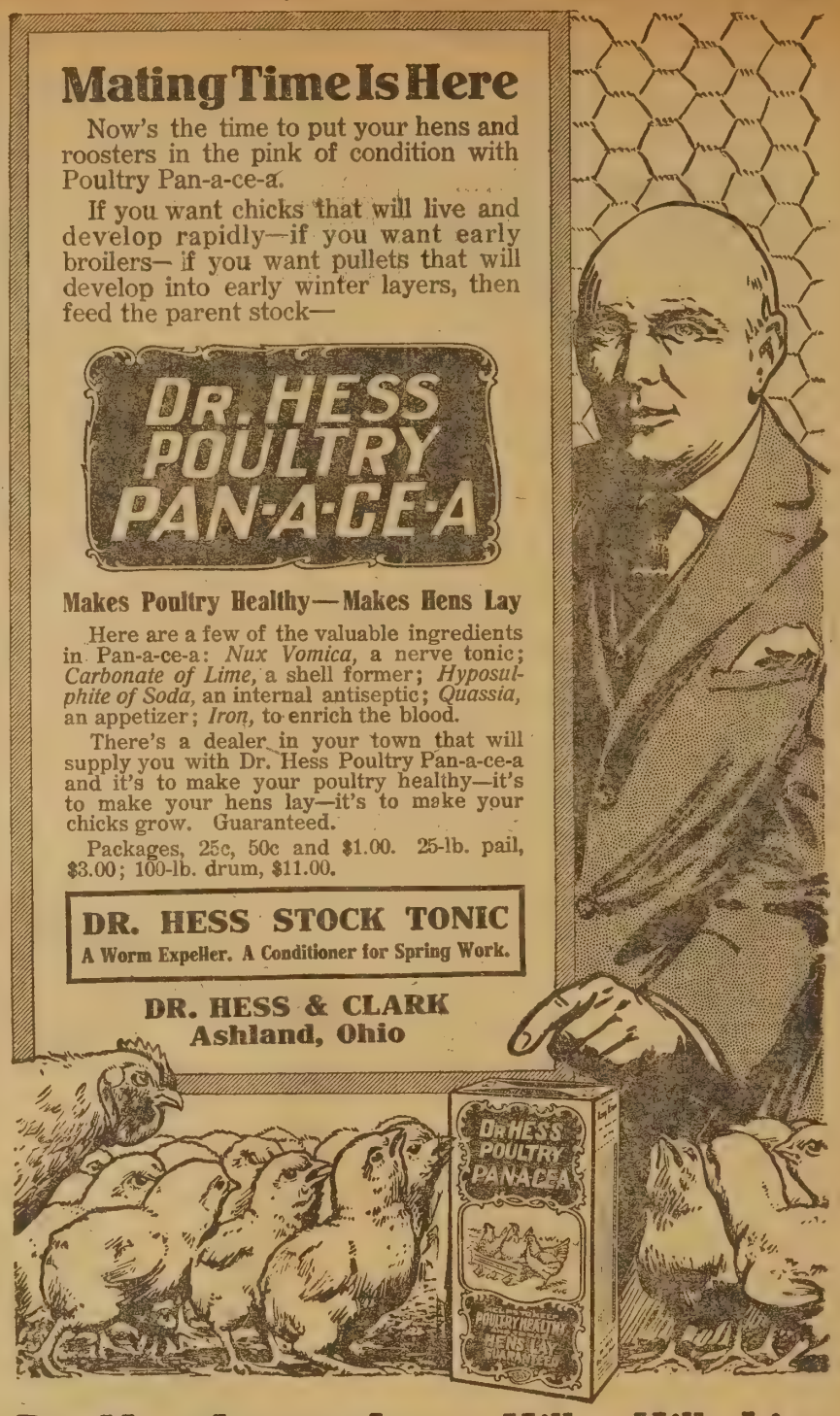
Here are a few of the valuable ingredients in Pan-a-ce-a: *Nux Vomica,* a nerve tonic; *Carbonate of Lime,* a shell former; *Hyposulphite of Soda,* an internal antiseptic; *Quassia,* an appetizer; *Iron,* to enrich the blood.

There's a dealer in your town that will supply you with Dr. Hess Poultry Pan-a-ce-a and it's to make your poultry healthy—it's to make your hens lay—it's to make your chicks grow. Guaranteed.

Packages, 25c, 50c and $1.00. 25-lb. pail, $3.00; 100-lb. drum, $11.00.

**DR. HESS STOCK TONIC**
**A Worm Expeller. A Conditioner for Spring Work.**

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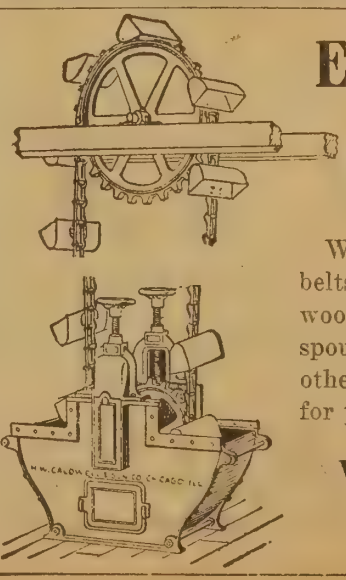

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**What Is the A. B. C.?**

**Audit Bureau of Circulations.**

This is an association, nation-wide in its scope, not conducted for profit. Every publisher having membership in this organization pledges himself to sell circulation as a commodity, both as to quality and quantity. Advertisers using our columns are safeguarded. They know that we give all the circulation we offer.



**Elevating Machinery**
for handling
**Bulk Grain**

We carry in stock belting, buckets, chain belts, sprockets, pulleys, take up boxes for wood boots. We can furnish distributing spouts, steel boots, spiral conveyors and other equipment on special orders. Write for prices.

**Washington Machinery and Supply Co.**
S120 Monroe St., Spokane.




GRANVILLE LOWTHER,
Editorial Contributor.

# Food Values of Fruits

Since the war began so much has been written upon food conservation that it seems the whole subject has been pretty thoroughly canvassed. However, the tables as generally published contain so many things, such as the chemical compostions, the water, protein, nitrogen, fiber, ash, refuse, and so on, that it is difficult to hold in mind the comparative values. In presenting these figures I confine myself to the calories of energy which certain foods will produce, and while I know that this comparsion is not satisfactory from the scientific viewpoint I believe that the results will be more easily remembered than if published in the ordinary way.

It should be borne in mind that the principal value of most fruits is not so much in the amount of energy they will produce as in the fact that they furnsih a balanced ration, thus making the ordinary foods more digestible and healthful. For instance, the acids add to the food value of fats and starches. It is the experience of every one who has lived mostly on fat and starch foods that they have inordinate appetites for acids. It is not on account of these facts that I have given this estimate, but to show the food value of certain fruit when taken alone. As before stated, these values are given in calories.

Apples 290, apricots 270, avocado 512, bananas 460, blackberries 270, cactus fruit 375, cherries 365, cranberries 215, currants 265, figs 380, gooseberries 255, grapes 450, guava 315, huckleberries 345, lemons 205, loquats 395, mulberries 280, muskmelons 185, nectarines 305, olives 407, oranges 240, peaches 190, pears 163, persimmons 630, pineapples 200, plums 395, pomegranites 460, prunes 370, raspberreis (red) 255, raspberries (black) 310, rhubarb stalks 105, strawberries 180, water melons 140.

**Dried Fruits.**

Apples 1350, apricots 1290, bananas 1240, banana flour 1610, citrons 1520, dates 1615, figs 1475, pears 1635, prunes 1400, raisins 1605, raspberries 1705.

Most fruits, like other classes of food, contain more or less material such as pits, skin, etc., which is inedible. When such portions are removed a larger or smaller part of the edible material is almost always of necessity removed also, and is spoken of as "waste." Thus, of pears it constitutes on an average 10 per cent of the total fruit, peaces, 18 per cent, apples and grapes, 25 per cent, and bananas, 35 per cent, while in the case of raspberries and blackberries there is no refuse and the whole fruit can be eaten.

The analytical data quoted above show that fresh fruits are in general dilute foods—that is, the proportion of water which they contain is large, compared with the total amount of nutritive material. It has been suggested that fruits containing 80 per cent or more of water be classed as flavor fruits and those with less than 80 per cent as food fruits. Such fruits as strawberries, blackberries and raspberries would be included in the first class and fresh figs, banana, grapes, etc., in the second. In dried fruits which have been concentrated by evaporation the percentage of nutrients is very much higher than in fresh fruits. Some preserved fruits also possess a comparatively high nutritive value, owing to the evaporation of water by the heat of cooking or to the addition of sugar, or to both factors. Candied fruits, such as cherries and apricots, may be looked upon as typical examples of this class of fruit products. As regards composition, the water content is low and the carbohydrates and consequently the energy value is very high, owing to the added sugar.

Olives and the avocado are remarkable for the large percentage of fat which they contain, but in general it may be said that this constitutent is present in very small proportion in fresh fruits. In the case of the apple, pear, etc., it seems probable that the small amount of fat obtained in chemical analysis consists of the coloring matter contained in the fruit or of wax found in the skin. That the amount of wax may be considerable is evident when we recall the fact that fruit wax is collected from bay berries and other fruits in quantities sufficient for candle making and other purposes. That common fruits actually contain fat, though it is not generally associated with them, is shown by a recently published study of the fat of woods strawberries. The dried berries when extracted yielded a small amount of oil, cloudy at ordinary temperatures, but clear when heated, and much like linseed oil in its properties.

In the majority of fruits and fruit products the carbohydrates are the food constituents most abundantly represented. The proportion of nitrogen free extract varies greatly, being lowest in the fresh and highest in the dried and preserved fruits. In seeds

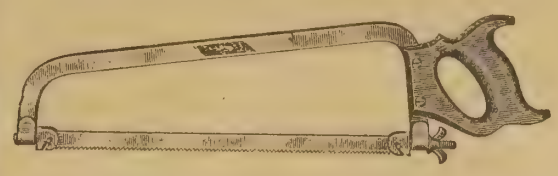
(Continued on page twenty-eight.)


# PRUNING TOOLS

THE BEST IS THE CHEAPEST.

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16-inch straight single edge..... 80¢
16-inch straight double edge ..... $1.10
12-inch crescent single edge ..... 80¢
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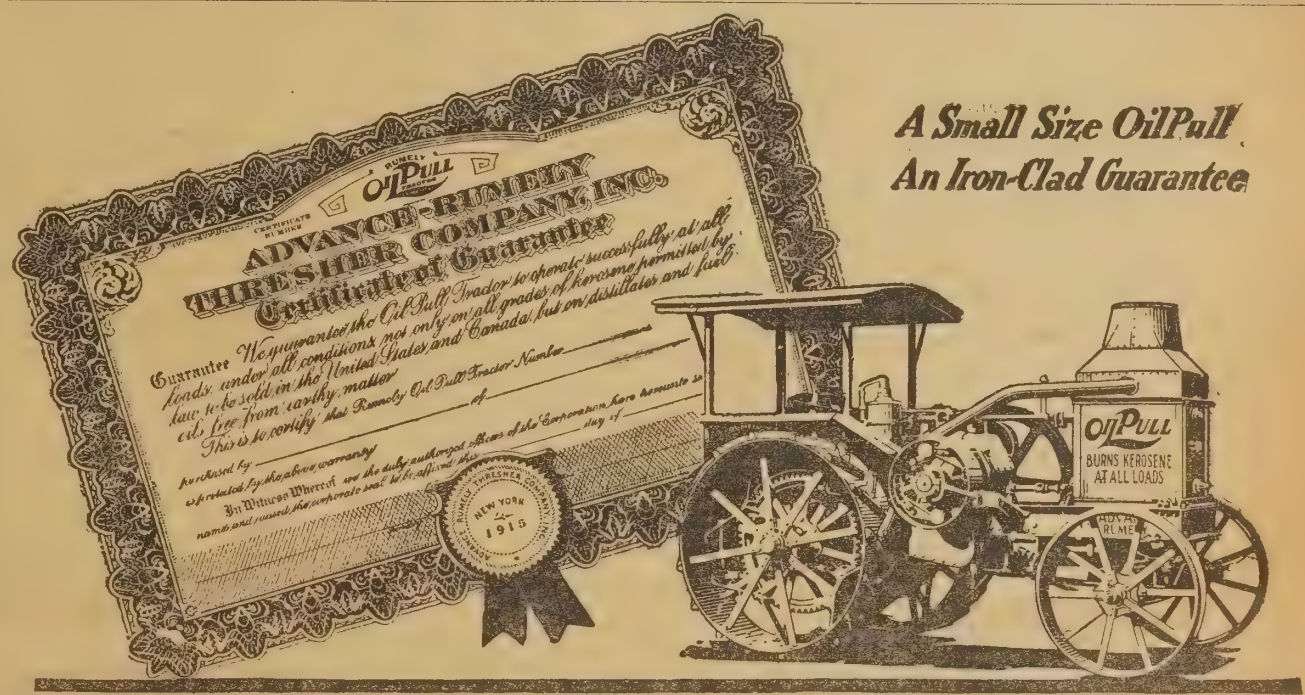
A Good Hand Pruning Shear 7-Inch 90c

Cronk 26-inch branch shears, just the thing for heavy work $2.25
8-foot long handle pruners ..... $1.35
Full line of budding and pruning knives.
Send for complete list.

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In answering advertisements please mention this paper.




*A Small Size OilPull*
*An Iron-Clad Guarantee*

# "The new 14-28 sure is a *real* OilPull"

THAT'S the way a Kansas farmer who bought one the other day, put it. And he hit the nail right on the head. Just consider this—in the 14-28 you're getting more than just a small, light weight, easily handled tractor. You're getting all that *plus* the well known Rumely OilPull dependability and long life—*guaranteed* ability to burn low grade fuel oils *at all loads, under all conditions*—*automatic* speed control—oil cooling. You're getting a *real* OilPull.

Nor have strength or power been sacrificed in making the 14-28 a light weight tractor. It's a *big power* outfit—capable of handling up to 5 bottoms in plowing, and to run a 24 to 28 inch thresher with all attachments.

And you'll find the 14-28 extremely easy to handle. The platform is just a step from the ground—all operating levers are within easy reach and all working parts easy of access. It has an automobile steering device. It is short turning. An air starter is part of the regular equipment.

Then there's the patented shifting device that makes the 14-28 equally efficient on drawbar or belt, with no sacrifice in construction. The 14-28 catalog explains it fully—we'll just say here that it is *one of the greatest improvements that has been made in tractor construction.*

## For your protection—a *written guarantee*

A tractor's ability to burn kerosene or other oil fuels *can't* be established by claims or "near" guarantees. You are entitled to *know* what kind of an oil burning outfit you are buying, and the only way to protect yourself is to demand a *written guarantee* such as goes with every OilPull.

Remember this. A tractor either burns oil *economically—at all loads—under all conditions* that a tractor must run up against—*or it doesn't.*

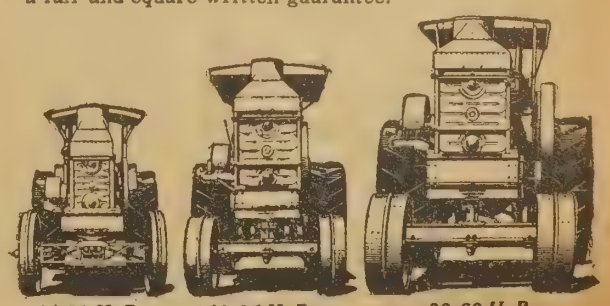
Don't be misled by word of mouth claims or guarantees that "talk but say nothing." Demand what you are entitled to *—a fair and square written guarantee.*

## Get These Special Catalogs

A new OilPull catalog is just out. Besides covering every detail of the new 14-28, it describes the medium and large size OilPulls, the 18-35 and 30-60 h. p. Also you'll want the catalog of the new small Ideal thresher—the 20x36 Junior—made especially to be run by a small size tractor. Just ask our nearest branch.

ADVANCE-RUMELY THRESHER CO.
(*Incorporated*)
LaPorte Indiana

Spokane, Wash.



*14-28 H. P.* *18-35 H. P.* *30-60 H. P.*

# ADVANCE-RUMELY

*Strawberry* PLANTS **FREE** To introduce our *Pedigreed Everbearing* strawberries we will send 25 fine plants free. CONSOLIDATED NURSERY CO., ST. LOUIS, MO.

# WAR GARDENS

My interesting catalog of everbearing and standard varieties of

## Strawberries and Vegetable Plants

30 years of cultural advice free. Send postal today.
KELLY GARDENS, Sta. B, Spokane.

## Trees

We offer a few choice prune, pear and cherry trees, select Vrooman Franquette walnut trees, and other first-class nursery stock at special low prices.—Order today.
BENEDICT NURSERY CO.
135 E. 87th St., N., Portland, Ore.

# Farmers' Conference

## Benton Agricultural Council Meets

By E. H. DUNNING.

The regular annual session of the Benton County Agricultural council met in the commercial club rooms at Kennewick, Wash., on February 18 for the purpose of devising ways and means to stimulate greater crop production, unity of effort within and between all farmers' organizations, to hear the reports from the different members of the council as to what agricultural progress is being made or contemplated in their respective districts and, incidentally, to elect officers.

N. C. Bowles of Finley was elected president, R. H. Bone of Prosser vice president and W. H. Allison of Kennewick secretary.

Probably the most important of all subjects commanding attention was the now widely discussed "Farm Labor Problem."

That there will be a shortage of labor this year is apparent to all, and in view of this fact the council advises all localities where help is hired to maintain an employment agency to list the names of farmers wanting help and also of farmers who are using help for a short period, such farmers to notify the agency as to when this help will be released, so that it can be immediately shifted to another farm and avoid the waste of time spent by laborers in job hunting. It also advised that if farmers were to secure and retain competent laborers they must provide clean and comfortable sleeping quarters, because of the fact that workers will not stay where they are poorly fed or quartered when there is such an abundance of work and scarcity of help as there is now. Some members of the council rightly argued that, aside from the fact that hired help justly deserved good accommodations, it is imperative under the present national crisis to get the maximum amount of work from the hired man consistent with his ability, but that this can not be obtained from a man who has to sleep in a manger or spread his blankets under a tree.

Resolutions were adopted by the council strongly urging all farmers' organizations to install bulletin boards at their meeting places with "For Sale" and "Wanted" columns thereon, the different organizations to exchange lists wherever possible. By this method farmers who sometimes travel a great distance or send to some distant point for a cow, horse or some farm commodity could have perhaps obtained what he wanted from a near neighbor and saved time, useless transportation and probably money.

The meeting was in session practically all day, adjourning late in the afternoon with much accomplished. Much credit for the success of the meeting is due Lee M. Lampson, county agent, at whose instigation the council was organized.




C. R. Campbell of Bellevue, Wash., thinks home canned beef is not only superior to the commercial pack, but that it is actually better than the fresh cooked article usually served on the home table.

"I never knew what beef ought to taste like till I had eaten some of our own canned product," he comments. "And as to economy—well, the Bellevue school canned 125 pounds of beef some time ago, and I doubt if there was an ounce of waste when they had finished. Even the bones were cracked and steamed, the resulting liquor being poured into the cans with the meat. This use of the soluble part of the bones, together with the perfect cooking, probably accounts for the added flavor of the canned article."

When it comes to raising navy beans many a farmer in the northwest will have to take off his hat to two Bellevue, Wash., boys. Last year Charles Hamley, aged 14, and his brother, one year younger, put approximately two-thirds of an acre of upland into small navy beans (California Wonder). Western Washington isn't considered much of a navy bean country, but the boys did the square thing by their garden all summer and in the fall they pulled their vines and flailed out nearly six hundred pounds of seed. Most of the crop has been sold, much of it bringing 15 cents a pound for seed purposes. If you think any such dubious thing as "luck" entered into this achievement, just consider this sample of the careful reasoning done by the juvenile bean culturists:

"We planted our beans 18 inches apart between rows, and three or four inches apart in the rows," the older boy explains. "This made it just right for cultivation with a wheel hoe. No, we didn't want to use a horse cultivator; beans are shallow rooters, and we didn't think it would do them any good to have a horse trampling on them."

W. V. Goelzer of Puyallup is an enthusiastic convert to the canning doctrine advocated by the government. It has enabled him to solve, for instance, that annually recurring problem faced by all poultrymen—the disposal of superfluous cockerels. With the lighter breeds this is apt to be even a more serious question than with the heavier Americans and Asiastics, for the lightweight rooster is a drug on the market at those seasons of the year when poultrymen are sorting out their flocks.

Mr. Goelzer faced such a condition last year, and he solved it by canning the superfluous birds—115 of them. He and his wife followed implicitly directions given them by a member of the western Washington experiment station staff, with the result that not one can of the entire lot spoiled.

One of the most important points in connection with this matter of spoilage, according to the Puyallup man, is the use of rubbers. Here he and his wife are in perfect agreement with the teachings of the agricultural department that the use of last year's rubbers is one of the most short-sighted "economies" possible. On the Goelzer place a rubber is used once and then discarded.

To The Washington Farmer: I enclose fifty cents for renewed subscription for three years from date of expiration of last subscription. I find many valuable suggestions in your paper. We are using syrup made from sugar beets, according to your directions, which helps to win the war.

MRS. JOHN B. DeLACY.
Seattle, Wash., R. F. D. 5.


**Our Country Needs Livestock and Poultry**



**Kreso Dip No. 1**

for

**FARM SANITATION**

will keep Livestock and Poultry healthy.

**KRESO DIP No. 1**

EASY TO USE.
EFFICIENT. ECONOMICAL.

Kills Sheep Ticks, Lice and Mites; Helps Heal Cuts, Scratches, and Common Skin Diseases.

**PREVENTS HOG CHOLERA.**

WRITE FOR FREE BOOKLETS ON POULTRY AND LIVESTOCK.

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# HEREFORD BULLS

## At Auction Sale

**Twin Falls Registered Livestock Association**

Sells at the McMaster Sale Barn, Twin Falls, Idaho,

## Tuesday, March 12, 1918

# 50 Hereford Bulls 50

AGES 12 TO 24 MONTHS, OLD ENOUGH FOR IMMEDIATE SERVICE, WEIGHING FROM 800 TO 1200 POUNDS

By an arrangement with some of the best breeders of Hereford cattle of Iowa, Missouri and Illinois, we are enabled to bring to you this great offering of high class bulls of the choicest breeding and of such individuality and quality as will please the most discriminating buyer. They are the big boned, productive, beefy type, that give satisfaction.

Don't miss this great opportunity of attending this sale of the best lot of herd heading Herefords ever offered at auction west of the Rockies. Every one registered and good enough to head any herd. Stockmen in need of bulls will appreciate this opportunity when they see this herd.

SALE WILL COMMENCE PROMPTLY AT 12:30 P. M.

TERMS: Cash, or time by special arrangement before sale.
Hereford Headquarters: Rogerson Hotel.

All bulls will be cared for on ranch for thirty days if desired.

## C. A. McMaster, Sales Manager

Walters and Clayton, Austioneers. T. F. Warner, Clerk.

*A Few Shorthorn Bulls Will Be Offered.*
*Also Registered Percheron and*
*Belgian Stallions and Mares*

WRITE SALES MANAGER FOR CATALOG



# Dispersion Sale

On account of my ill health I will sell at public auction on

WEDNESDAY, MARCH 20, 1918, AT THE UNION STOCK YARDS, SPOKANE, WASH.,

my entire herd of Registered Shorthorns—beef and milk strains—without reserve, including my show herd. My herd bull, Western Star, by Scottish Star, and all his get, which will be seen on day of sale. Princess Louise, my show cow, is a heavy milker and has never been defeated in the show ring.

50 head bulls, cows and heifers, Spokane fair and Pacific International winners, 1917. All tuberculin tested. Heifers from this herd are giving 53 pounds of milk a day. For particulars and catalogues write either

**A Morrison** — VALLEY, WASH., Owner.

Or

**Harry C. Cranke** — NEZPERCE, IDAHO, Auctioneer and Sales Mgr.



# SHIRE HORSES

Young Stallions and Fillies of Best Blood Lines.
Write for pedigrees, description and prices.
J. H. SHERIDAN, SHEDD, ORE.

# College Education Can Be Had If You Will Pay the Price in Labor

By JEAN HENRI LE ROY.

Many farm boys and girls who feel that a college education would give them the opportunity they want hesitate to undertake it because of the expense. After dreaming this dream for a while they give it up and go to work. It never occurs to many of them that they can follow another track, namely, go to work and by means of work get a college education.

A great many farm boys and girls are doing this very thing. They have pluck and perseverance, and they go in for it, being willing to give perspiration in exchange for inspiration. If they are in earnest they always find help. This happens, fortunately, because many men in colleges in Washington hold out the helping hand to the one who is fighting for a chance. Of course, you want proof of this. Well, here it is:

Having occasion to write one of the college presidents about the college work of the present year, there came to me in reply a letter, a part of which follows:

"It is a daily problem with me to help poor farm boys and girls to find ways of helping themselves, for a very large percentage of our students must earn all or much of the money required for their college course. I have been enlisting the interest of newspapers to have our college boys carry papers. Some of them must be up at 5:30 in the morning for this purpose. I have interested, also, the gas company to employ a few of our young men, if possible, to read meters. A relatively large number of tradesmen are employing our boys and girls from the college for Saturday afternoon and evening. The restaurants require several waiters. We have three or four at work in the library, where assistance is much appreciated. A few gentlemen have given me a little money, to be used in employing our students needing help as workers in different ways for our colleges."

This letter is worth careful reading, for in it there lies the entire future of many farm boys and girls who feel that they could do better work in the world if they knew more.

What are the points of the letter?

1. The college president who wrote it is giving his time and his thought to helping poor farm boys and girls.

2. He actually goes out to get chances for them in newspaper offices, gas companies, restaurants and so forth.

3. He thinks about them, and recognizes that they have a right to a chance.

4. He knows that a boy with the right stuff in him is worth about a dollar and a half a day uneducated,—and as many thousands per year as there is brain in him, if he gets an education.

You who read this may be tempted to inquire who this college president is, and to ask that he get you a job so that you, too, may go to college.

Before you do that, think over these questions and answer them.

1. Are you willing to struggle with all your might for four years?

2. Are you willing to do two men's work for four years—the work of getting a living plus the work of a college education?

3. Is it clear to you that you really want a college education, or are you just a little dissatisfied with things as they are?

4. Do you know what you intend to do with a college education?

If the right stuff is in you these questions will show it up. If it is not there you would better keep at your job on the farm and be thankful that you have it.

A large number of farm boys and girls are really fighting the great fight.

What does it all mean?

That you can have what you want if you will pay the price in labor.

## Aged Tree Is Dying.

The original navel orange tree, planted 44 years ago, producer of the first navel oranges grown in the United States and parent of millions of trees now growing in California, is believed to be dying. Horticultural experts have begun efforts to diagnose the disease that threatens it in the hope of prolonging its life.

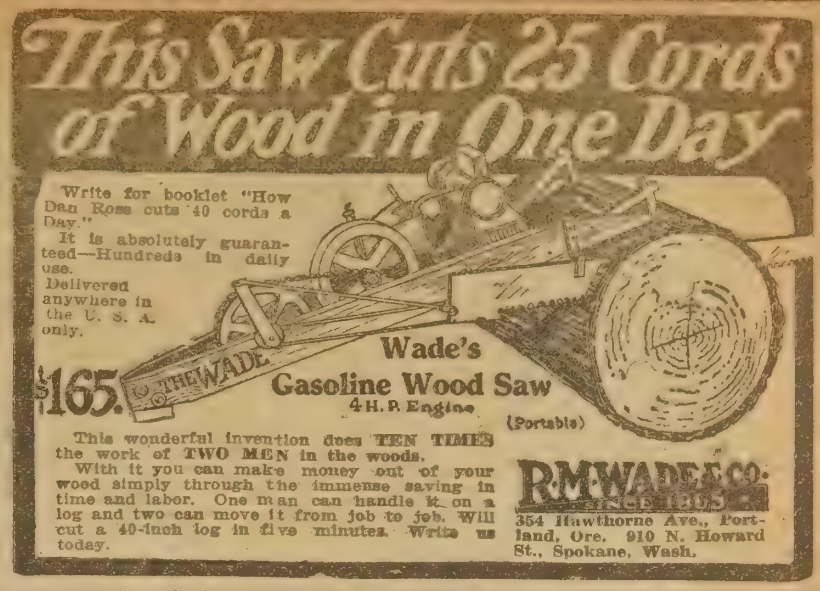
This tree, the most noted in the citrus industry of California, came originally from Bahia, Brazil. It was planted in 1873 by Mrs. C. L. Tibbetts, who obtained it from the botanical gardens in Washington, D. C.

## For Lease of Land.

Sealed proposals will be received at the office of the United States reclamation service at Yakima, Wash., until 9 a. m. March 11, 1918, and then opened, for the lease of lands withdrawn under first form of reclamation withdrawal in connection with the Palouse, Kittitas and Yakima projects. The land is suitable for grazing or dry farming purposes and the rental payment each year shall be based on the area used for each purpose. Information as to location and acreage of withdrawn land may be obtained at the Walla Walla and Yakima land office.

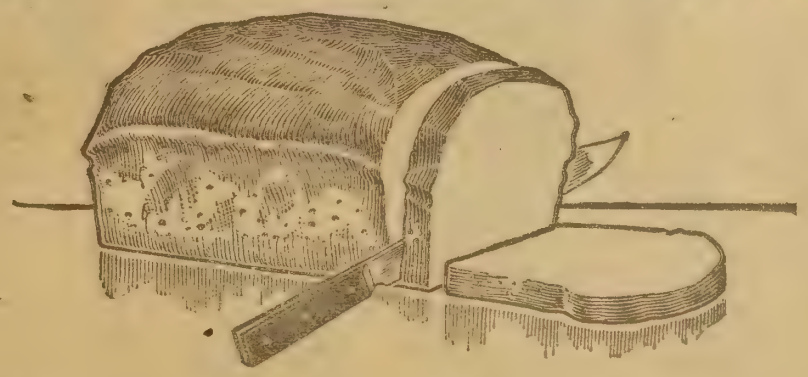
### Germany to Encourage Marriage.

To encourage marriage the common council of Lichtenberg, Prussia, has announced that it will provide the furniture for two rooms, a sitting room and a kitchen, for each newly-married couple. The furniture will cost about $300.


When you write to advertisers, be sure to say that you saw their advertisement in this paper.

# Help To Increase The World's Bread Ration



WITH famine creeping through Europe and every nation struggling to produce enough food to sustain life, the American farmer has a duty that he cannot shirk.

America must ship food to Europe for our soldiers. America must supply bread to starving peoples.

Bread is the staff of life. Grain for bread making must be sent abroad in enormous quantities and bread grains must be supplied for home use.

Raising food is a vitally important business and food raisers will be paid well for their efforts. It is no time to hesitate. Every acre must be made to do its duty.

Plant grain this spring, Mr. Farmer. Your country is looking to you for breadstuffs. No matter what other crops you raise, plant some of your acres to bread grains.

The wheat crop was millions of bushels short last year. Lack of seed threatens the corn acreage. Barley, oats, and rye production must be kept up and increased.

Plant grain. Plant all the wheat, corn, barley, oats and rye your farm can raise to advantage.

Begin with the best seed you can obtain. Use tested, reliable seed adapted to your soil, locality and weather conditions.

NORTHRUP, KING & CO., Seedsmen

United States Food Administration License No. G-32453

MINNEAPOLIS MINNESOTA

# FLORA FLIRT FINDS SOME ROUGH SLEDDING



The frosty air makes Flo Flirt thrill
As she goes to the coasting hill.



Her bright eyes flash, her cheeks turn red,
When she spies a youth with a fine big sled.



He flirts with her till she's delighted;
To coast with him she's soon invited.



Down the hill the swift sled flies—
She turns and gazes in his eyes.



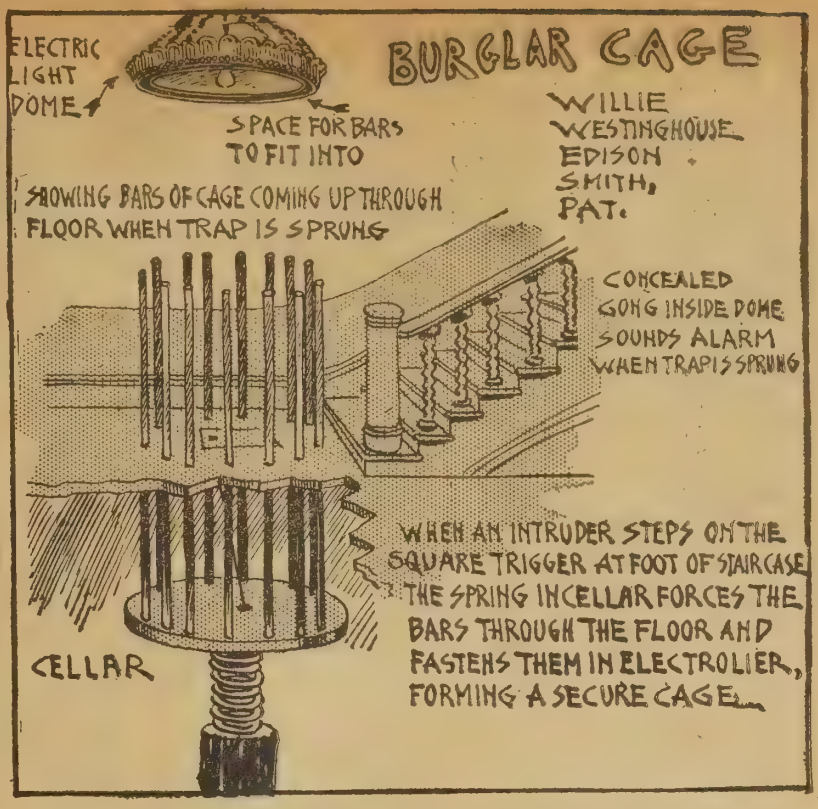

But just then, with an awful thump,
They crash into a submerged stump!

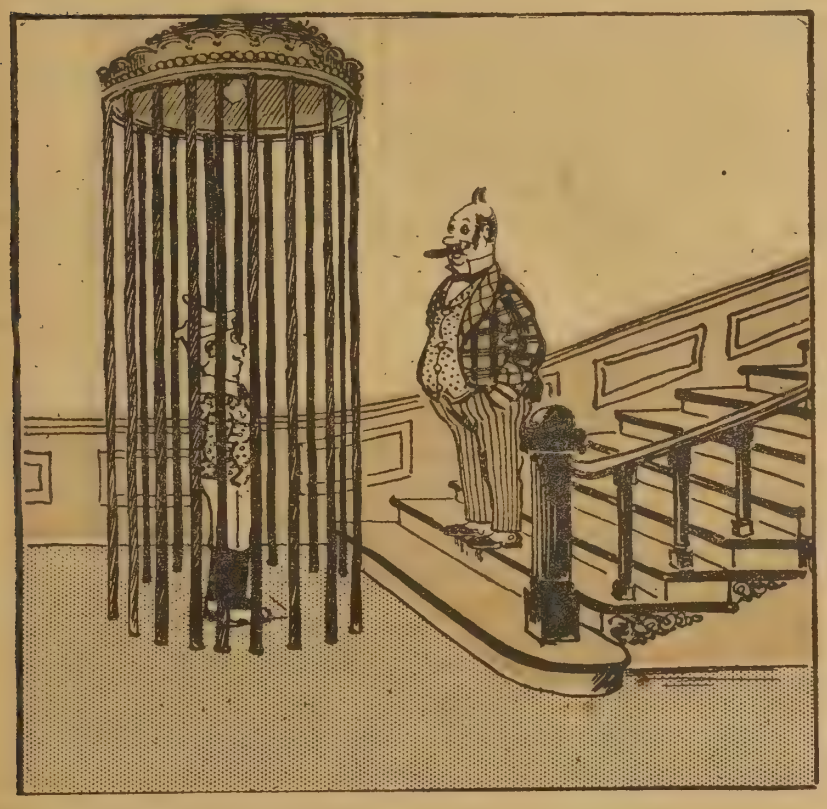


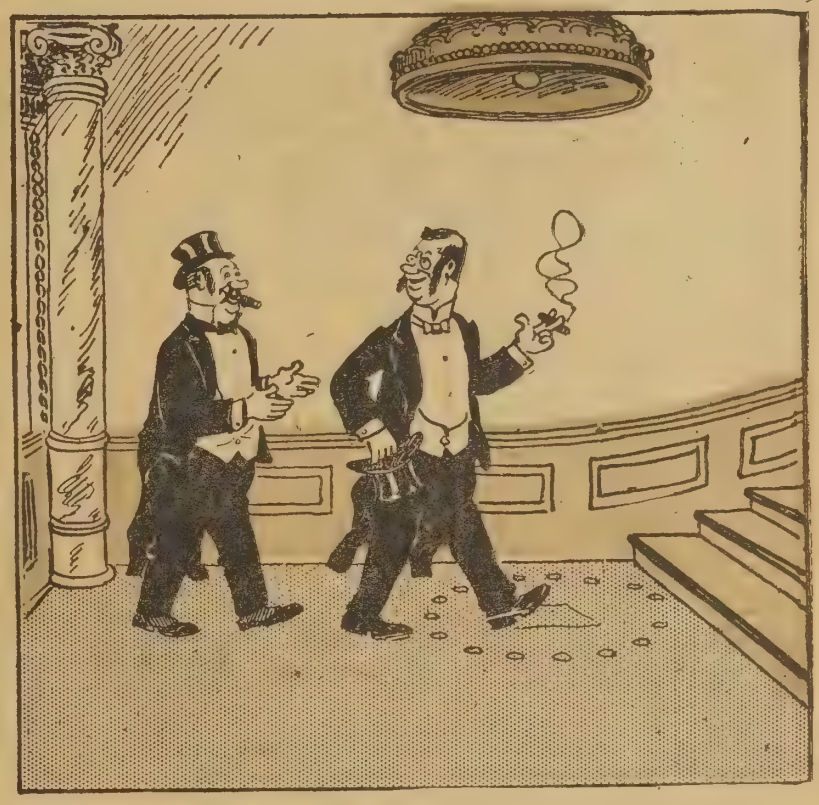
Away they fly at speed appalling,
And down the hill they both land sprawling.
**The Moral**—If in flirting you would revel,
First be sure you're "on the level."

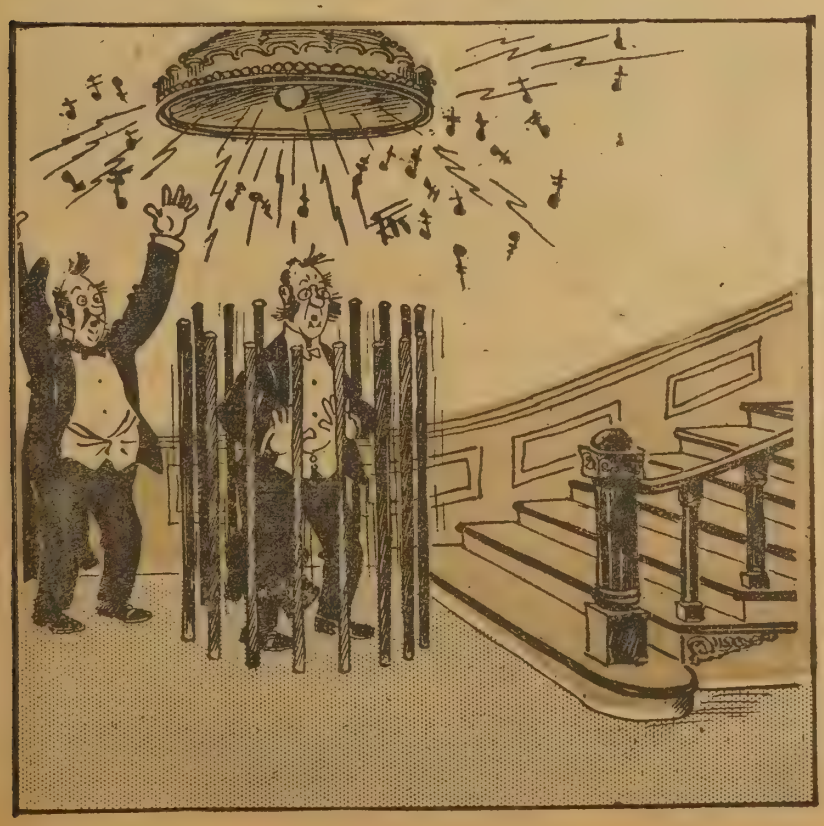
# WILLIE CAGES THE WRONG BIRD

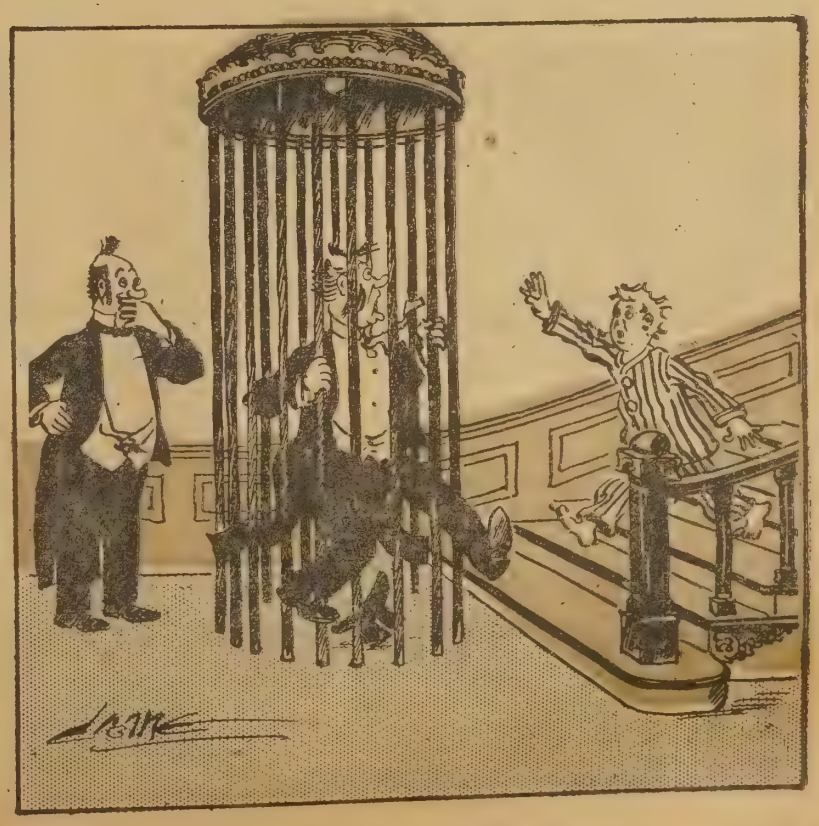










DEAR TOMMY: I invented this contrapti on after we had had a burglar scare at our house. The first night it was installed Papa and Uncle Jim went to a class reunion and got home late. They were so interested in talking about old times that Papa forget all about the trap until Uncle Jim got caged! Yours, etc., WILLIE.

# Japan to Take Hand

## *Will Protect Allied Interests in Siberia*

The developments of the war are about to lead to the active entrance of Japan into the conflict, notwithstanding that country's seeming isolation from the center of the struggle. Germany's advance into Russia has led to the possibility of their menacing rich stores of supplies and munitions in Siberia, and possibly gaining a control there that would greatly menace the national life of Japan. Recently Japan asked her allies—England, France and the United States—for an expression of sentiment on the proposal that she alone or assisted by these governments enter the conflict in the east for the purpose of preventing German aggression into the Siberian territory, with the ultimate possibility of a movement, through the trans-Siberian railroad, against Vladivostock, the Russian port on the Japan sea.

The situation has developed into one of the most serious diplomatic problems of the war. Suggestions have been bandied about as to whether this country and her European allies would join Japan in the protection of these interests, making the campaign in Siberia an international campaign, amounting to little less than a movement from the east to confront the German advance. At this writing it is virtually agreed that Japan shall be allowed to make the campaign alone, without being required to make any pre-campaign pledges as to what she shall do with Russian territory that she would necessarily occupy. Japan has, however, made a definite statement that she has no intention against Russia, but is acting solely for the purpose of protecting her own interests, and also those of the allies as the latter might be jeopardized by the capture by the Germans of Russian supplies in the east.

Whether or not the Russians can be made to believe Japan honest in this declaration is another problem. Should Japan make the expedition as planned, Russia might consider it the approach of another enemy from the east designing to conquer and appropriate territory in Siberia as Germany is now doing in the western part of European Russia. Suggestions have come from Russia favoring an expedition, if one must be made, by the Americans. This favoritism is likely due to the feeling that America would unquestionably evacuate any occupied territory, while Japan, who is in sore need of additional territory, might be loathe to give up what she had occupied.

It seems now however, extremely doubtful that this country or England or France will try to play an active part in the proposed expedition, owing to the difficulties of a campaign in that remote territory and the international questions that it would involve.

### Russia Signs Treaty.

As the Farmer is going to press it appears that Russia has submitted without reserve to the harsh terms of that country's Teutonic conquerors and signed the peace treaty as drawn up by Germany. The exact terms are not yet available for publication, but it is known that Russia cedes a large area of her western territory to the Germans, pays large indemnities and gives land in the southwest to extend the domain of the Turk. Whether the German advance against Russia will be stopped now or not, is, at this writing, uncertain, but it is reported that Germany has announced her intention of ceasing the forward movement. With all the stores of supplies and munitions lying further back in Russia, which supplies Germany so sorely needs, it is considered highly improbable that Germany will cease her advance unless by the peace terms Russia promises to provision the armies for their coming offensive against the French and English and Americans in the west.

### Can Eat Meat Now.

Because the production of meat has increased, and because the allies need wheat now more than meat, the national food administration has withdrawn its orders for meatless meals with one exception. It is still incumbent upon the people to observe Tuesday of every week as beefless and porkless. Otherwise, for an indefinite period, the length of which is not yet known, it will not be required that they observe a meatless meal a day, nor will it be required that they observe a porkless Saturday. In the northwest, this means that meat can be eaten at any time, except that pork must not be eaten on Tuesday. The beefless feature of Tuesday had been formerly suspended in the northwest. But the restrictions as to the use of wheat are to be made more stringent, as the need of more grain for the allies is daily becoming more serious.

### Will Deport Anarchists.

The United States department of labor has announced that it will not tolerate the presence in this country any longer of aliens who express opinions favoring the practice of sabotage. Any person not a citizen of the United States who is heard to express approval of the destruction of property as a means of gaining the supposed end of industrial betterment will be deported to their home country, says Secretary of Labor Wilson. The secretary, however, says that mere membership in the I. W. W. order will not be construed as cause for deportation under this regulation, but any alien I. W. W. member who expresses approval of sabotage will be liable to immediate dismissal from the United States.

### Americans Active.

Reports from somewhere in France indicate that the American soldiers on the battlefront are becoming equally active with their French and British allies. The reports likewise indicate that wherever they are taking part in actual warfare they are manifesting familiarity with modern war practices and showing the spirit of '76.

### New Liberty Loan Coming.

Although the amount of the third Liberty loan bond issue has not yet been determined the treasury department has announced that the campaign will be launched on April 6, which will be the first anniversary of the entrance of the United States into the war. That the issue will be a large one is indicated by the official statement that the amount will not be announced until action is taken by congress on measures to be presented by the treasury department. If the new issue were not to exceed $3,600,000,000 it seems apparent that no further congressional action would be necessary as there still remains an authorization for Liberty bonds to that amount. It is planned by Secretary McAdoo of the federal treasury to make April 6 a day of great demonstration throughout the entire country. "I know of no more fitting time for a patriotic response to the call of duty than the beginning of the second year of the war," says a statement by Secretary McAdoo.

# Bull Brings $900

## Shorthorns Sell Well at Portland

With a fair-sized crowd of buyers in attendance, the annual spring sale of Shorthorns at North Portland, February 25, resulted in fair values being paid. The high-class, well-fitted animals generally sold high. Those of indifferent quality and not in condition sold low, thereby reducing the average.

W. G. Cordiner of Walla Walla, Wash., for many years a big wheat farmer, now going into live stock, paid top price of $900 for Hercules Duke, a yearling bull consigned by Day & Rothrock of Sprague, Wash., that was made champion in the judging that preceded the sale. Mr. Cordiner also paid top price of $800 for Helen's Bride, the champion female consigned by A. D. Dunn of Wapato, Wash. J. B. Cornett's 4-year-old Clifton King sold for the bargain price of $450.

J. H. Beckley of Portland was the heaviest buyer of bulls, taking nine head for his Klamath county cattle interests for $1670. William Daughtrey, president of the Portland Union stock yards, took several and was a good bidder on others.

Mr. Miller of the Brook Nook stock ranch of Home Park, Mont., who placed the ribbons in the judging in the forenoon, purchased one of the good yearling heifers of the Dunn consignment for $500.

### North American Birds.

A recent census of North American birds shows an increase of 125 species and subspecies since 1910. But though there are really new birds in the list, many of them belong to subspecies, up to this time unrecognized.

### Control Fertilizers.

Governmental control of the fertilizer industry has been ordered by President Wilson in a proclamation requiring manufacturers and distributors to obtain licenses from the secretary of agriculture. Authority for the action is contained in a food-control law.

Dealers in some fertilizing ingredients, including ammonia and its compounds, already are under license by the food administration and they are excepted in the proclamation. Among the ingredients not already under license and now put under control are sulphuric acid, phosphate, rock, bone, sodium nitrate, potash salts, cement and blast furnace dust, wood ashes, cotton seed hull and meal, potassium nitrate and tobacco waste.


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Please remember, when undecided as to where you shall place your *Life Insurance,* that each officer of this company is a *Specialist* in his line.

**New World Life**

Spokane

John J. Cadigan, President.



## New Things Are Always Advertised

The inventive genius of America is constantly at work improving the farm machinery which is playing such an important part in feeding the hungry nations of the world.

When a radical improvement is made in some implement how are the farmers of the country informed regarding it by the manufacturer? The answer is through the advertising columns of the agricultural publications.

Compare this issue of your state farm paper with some copy of a farm journal of twenty or thirty years ago and you will have a birdseye view of farm implement progress.

Perhaps some innovations have been adopted with which you are as yet unfamiliar. For news of these important matters read and reread our advertising columns. And remember that we safeguard you in your dealings with our advertisers.









**Weigh your Culverts**

**Get What You Pay For**

BE SURE that your culverts are full weight—full gauge. Weigh them. Check them up with the diameter and weight cards which your nearest "Armco" Iron Culvert Manufacturer will gladly furnish. This card tells what each size of corrugated pipe should weigh per foot—standard weight. You are only doing yourself justice in seeing that every pipe you buy conforms to these standards.

**"ARMCO" IRON CORRUGATED CULVERTS**

will be found to be always *full weight* and *full gauge,* or a little heavier, not merely on the end sections but all the way through. The standards they must meet are as definite and as rigid as those governing the quality of their material. "Armco" Iron Culverts are the 100% Culverts in weight, diameter, quality, strength and longevity. They are not affected by frosts or spring freshets. Stand up under heavy loads. Can be installed quickly and by unskilled labor.

Armco Iron Culvert & Flume Manufacturers' Association

CINCINNATI, OHIO

# Easum Buys Purebreds

By J. E. Nessly.

George A. Draper of Elberton has sold 11 head of purebred registered Red Polled cattle to A. J. Easum of Oroville, Wash., for $1450. The lot included a bull which Mr. Draper brought from the east two years ago, and the other 10 head are females of various ages. Mr. Easum plans to breed Red Polled cattle and keep up the registration and expects to found a good-sized herd of this breed on his ranch in Okanogan county.

"I have been breeding Red Polled cattle for 20 years, and think they are admirably adapted to this western country," said Mr. Draper to The Farmer correspondent. "The demand is so great that I have reduced my herd to 16 head, and one or two of these is sold. I sold 10 head at the Northwest Live Stock show at Lewiston in November, and have had a number of sales since then. I plan to go back to Iowa and buy a large herd of these cattle and bring them to my ranch."

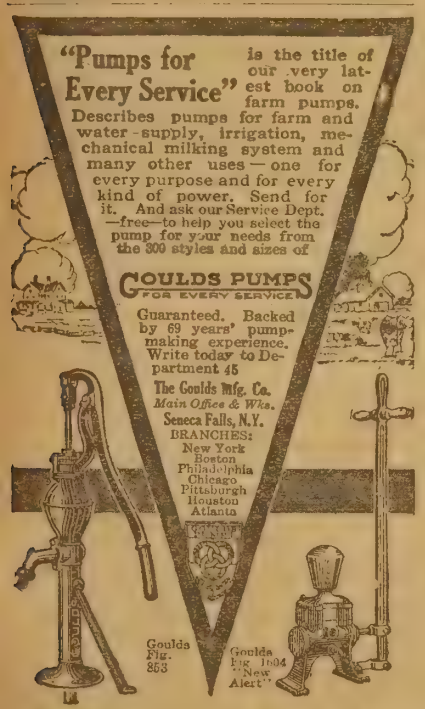
Mr. Draper combines purebred cattle, horses and hogs with his wheat farming. He is farming 400 acres of rich wheat land near Elberton, but plans to put a part of it into grasses and devote more time and attention to the live stock part of the business. Alfalfa and clover do well on his land, and a part of his wheat fields are to be plowed up and planted to these grasses. He has been raising some alfalfa for many years, but the field needed to be plowed and reseeded, and he believes that after the war, when prices drop to normal, cattle, hogs and sheep will pay better than grain farming. Mr. Draper keeps a registered draft stallion, purebred hogs and a good sized herd of grade hogs in addition to his registered cattle and other interests. He had planned to go back to Iowa for a large shipment of Red Polled cattle this month, but his mother, who is 86 years old and makes her home with him, has been in ill health, and he may not be able to go after the cattle until the spring seeding is done. Mr. Draper is one of the pioneer purebred cattlemen of this county, and has been in the business continually for more than 20 years.


"Pumps for Every Service" is the title of our very latest book on farm pumps. Describes pumps for farm and water-supply, irrigation, mechanical milking system and many other uses—one for every purpose and for every kind of power. Send for it. And ask our Service Dept.—free—to help you select the pump for your needs from the 300 styles and sizes of

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510 Union Station Plaza, Kansas City, Mo.


# Buys Flour Mill

## Farmers' Union Pays $10,000 Cash

A deal of importance to Palouse and to the farmers of that district has been closed by which the farmers' union of Palouse becomes the owner of the electric flouring mill, for which $10,000 in cash was paid. The property is to be at once taken over by the new purchasers, the Farmers' Union Warehouse company, which already has a large grain warehouse in Palouse.

The mill had been closed for a year. The machinery, or a portion of it, is to be sold, an offer of $3000 having been made for it, and the chopping machinery will be retained. The flour mill will not be operated by the new purchasers, but the building and equipment are desired for handling bulk grain. The mill has an elevator with capacity for 40,000 bushels of bulk grain and elevator machinery to operate it.

The Palouse Farmers' Union Warehouse company is a business organization that has been in operation for a number of years and has been highly successful. Capitalized at $5000, its property and business in Palouse had increased in value before this mill was bought, until it was invoiced at $20,000, or 300 per cent increase since the company was started some 10 years ago. The capital stock was increased from $5000 to $10,000 at a recent meeting to provide funds to buy the mill, which was paid for in cash.

The farmers will continue to operate their sacked grain warehouse, but will also operate the elevator for handling bulk grain, giving them a warehouse or elevator on each of the two railroads, the Northern Pacific and the Spokane & Inland Empire electric road. The elevator stands on the Northern Pacific. The sacked grain warehouse stands on the electric.

With the mill and elevator as a nucleus it is claimed that a very little additional expense will give it capacity for 100,000 bushels of bulk grain, which will be a valuable addition to the grain handling capacity of Palouse. Farmers near Palouse are preparing to handle a large portion of their grain in bulk this year, and will cut out sacks at 25 cents each wherever it is possible to do so. J. E. N.

# To Do His Utmost

To the Editor of The Washington Farmer: During December and January your editorial department was conducting an inquiry as to intentions and plans of farmers for this year's production. "More or less" was the question in a coupon "What is your utmost?"

As a subscriber and to be farmer on an irrigated tract in Hayden Lake irrigated district, I suppose I would not be in the class of big farm farmers to whom your appeal was mainly addressed, yet we feel as though small operators are responsible in proportion to areas they control and we just want to say the 10 acres of irrigated land will not be a slacker. If I can not get up there to work it with my own hands I expect to rent it on shares and make it produce its utmost. Will use the advice of two county agricultural agents, Shinn of Spokane and Beiers of Kootenai.

We like The Washington Farmer. Every owner even of small tracts can find in it a great deal of help and encouragement. WILLIS E. LAMB.
Spokane, Wash.

## Will Make Potato Flour.

Machinery is being installed by the Lewiston Milling company in a plant at Yakima where potato flour will be manufactured at an early date. It is planned to give the mill a capacity of 30 barrels of flour per day for the time being.

### A Cherful Thought.

Be cheerful. Mental depression checks digestion. Poor digestion wastes food. Wasted food helps the enemy. Cheerfulness is conservation.

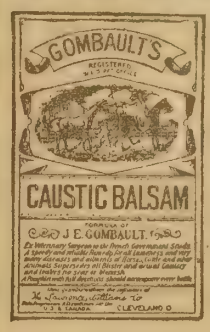

This is the Kind of Horse the Government Wants



No horse with a Spavin, Splint, Ringbone, Curb, Bony Growth, Capped Hock, Wind Puff, Strained Tendon or Sweeny can now pass the keen-eyed Inspectors of the Government Remount Stations.

Splendid-looking horses—otherwise sound—are being turned down because of some blemish that could be quickly cured with

Gombault's Caustic Balsam




Here is your chance to make money for yourself and at the same time help in the Government's great Thrift and Production movement.

Put your horse into condition with **Gombault's Caustic Balsam.** A safe and reliable remedy.

**Gombault's Caustic Balsam** if applied immediately after burns, bruises or cuts, is a perfect ant-septic—soothing and healing. An absolutely safe external remedy for man or beast.

Every bottle of **Caustic Balsam** sold will surely give satisfaction. Price $1.50 per bottle. Sold by druggists, or sent by parcel post with full directions for its use. Send for descriptive circulars, testimonials, etc.

The Lawrence-Williams Co., Cleveland, Ohio



Closing Out Clydesdales

Four mature mares, also two fillies and one stud foaled last spring. Two of the colts are by the grand champion Clyde at the Oregon state fair, 1916, and two mares by a former grand champion, he a son of the grand champion Royal McQueen.

W. B. DAVIS, Shedd, Ore.



Just What You Want

may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.



# Trio Ad Sells Draft Horses

Kennewick, Wash., Feb. 2, 1918.

Pacific Northwest Farm Trio,
Spokane, Washington.

Gentlemen:

Enclosed please find check No. 567, for $12.23, to pay for 3-inch ad in the Pacific Northwest Farm Trio for the month of January, as per enclosed bill.

Kindly receipt bill and return and oblige.

Our business has been very good. We have sold several horses this month. The demand for real good draft stallions is the best it has been for several years. There is no question but that we will have every stallion of serviceable age sold by the middle of May.

With best wishes for the success of the Pacific Northwest Farm Trio, I beg to remain,

Yours respectfully,
(Signed) WM. T. TRACY.

# Grain Bags Will Cost 24 Cents Each

**Twenty-five cents a bag, but plenty of them to take care of the 1918 wheat crop, is the gist of a promise made by the federal food administration to the farmers. The differential between sacked grain and grain in bulk will not exceed nine cents per bushel and will not be less than seven cents per bushel. This is a further announcement of the food administration.**

Whether or not there is existing an actual grain bag shortage is a question still debatable. The food administration assures the farmers that there are plenty of bags in Calcutta, but that the shortage of vessels in which to ship them or the material from which they are made compels the producers of this country to pay the unusually high price which has been agreed upon. The food administration points out that the freight rate from Calcutta to American ports is more than $100 per ton on the jute from which grain bags are manufactured.

From the statement issued by the administration it becomes evident that the farmer who sells his grain in bags that cost him 25 cents each will receive in return for that bag not to exceed 18 cents and possible not more than 14 cents. Whether or not an arrangement will be made to eliminate the usual dockage of three-quarters of a pound or more per sack, which is likewise a loss to the farmer, has not been announced.

At the grain conference in Spokane several weeks ago one large bag compan of the Pacific coast made an offer to furnish the farmers of the northwest with a million grain bags at a rate of 25 cents each. At that time the proposal was merely laughed at, though there were many farmers present who felt that even at that rate it were more economical to sack their grain than to equip themselves to handle it in bulk. The majority of the farmers present, however, appeared to favor the bulk system and there can be no doubt that the assurance that bags will cost a quarter of a dollar each will stimulate the bulk handling movement enormously. The following is a telegram from Food Administrator Herbert C. Hoover, announcing and explaining the agreement for the securing of grain bags for the 1918 season:

In order to assure the import of enough bags to take care of the crops in the Pacific states, and to assure the supply of bags, we have entered into the following afrangement with the bag makers:

"The bag manufacturers hereby agree with the United States food administration that they will sell all standard 22 by 36 inch, 12-ounce new Calcutta and domestic wheat bags on hand, or bought, or to be manufactured, at a price not greater than 25 cents per bag f. o. b. tidewater, provided that the food administration grain corporation within two weeks from the date hereof fixes a differential in its buying basis of wheat in bags over wheat in bulk of not less than 7 cents nor more than 9 cents per bushel, to be hereafter determined. If our importations now arranged are affected by unusual increases in cost because of variations in exchange, or freights, or for other causes, the United States food administrator will consider proper modifications of this maximum price. They further agree that they will sell these bags only in the normal channels of distribution, the intention being to try to assure producers of wheat that the bags will reach them at a price of not over 25 cents per bag f. o. b. tidewater, plus freight and distributor's normal charges."

Considering the overseas freight of over $100 per ton on jute material we consider the arrangement very satisfactory.

# Food Values of Fruits

(Continued from page twenty-one.)

which are commonly eaten, such as the cereal grains, and beans, peas, and other legumes, the nitrogen-tree extract is quite largely made up of starches. In fruits, however, sugars and the so-called pectin bodies, with very often more or less starch, make up the group. The principal sugars in fruit are cane sugar, grape sugar (glucose), and fruit sugar (levulose), the last two being usually present together in equal quantity and designated invert sugar or reducing sugar. The stage of growth and the degree of ripeness have a very marked effect on the kind and amount of sugar, and it is therefore difficult to give average figures for the quantities present which will be fairly representative. An idea of the range in the sugar content of ripe fruits may be gathered from figures quoted from a summary published several years ago. According to these data, invert sugar ranged from 2 per cent in round numbers in large early apricots to 15 per cent in grapes and a variety of sweet cherries. A number of fruits (strawberries, gooseberries, raspberries, and apples) contained about half the latter quantity. The cane sugar ranged from less than 1 per cent in lemons to 14 per cent in a variety of plums. Bananas also contained a fairly high percentage, namely, 11 per cent.

Fruit sugar rarely occurs unaccompanied by grape sugar, but has been thus reported in the mango and in amounts large in proportion to the grape sugar in sweet apples and sweet pears and a number of varieties of grapes. In the case of grape sugar large amounts—18 to 30 per cent—have been reported in juice of different sorts of grapes, while in dried fruits the values are even higher, 32 per cent having been found in prunes, 54 per cent in Zante or "English" currants, which are, of course, a small seedless grape, 61 per cent in raisins, 49 per cent in figs and 66 per cent in dates.

The acid in fruits, which in proximate analyses is not usually determined separately, varies within rather wide limits, 1 to 2 per cent being reported on an average in such fruits as apples, pear, plums, strawberries, etc., and as high as 7 per cent or more in lemon juice. It often happens that of two fruits with the same acid content one has a much sourer taste than the other because the acid is not so much masked by sugar.

Fruits contain a comparatively small amount of mineral matter—less than 1 per cent on an average—consisting quite largely of potassium salts, with a little phosphoric acid, iron, lime, etc.

As a class it is apparent that fresh fruits are directly comparable with green vegetables and root crops rather than with more concentrated foods, such as flour or meal. The dried and some of the preserved fruits, which are more concentrated than the fresh, compare favorably with bread, dried beans and similar foods on the basis of total material present. There is this difference, however, that the cereals and dried legumes contain fairly large proportions of protein, while the quantity present in fruits is always small. In other words, fruits—fresh, dried and preserved—are sources of energy rather than of tissue-forming material.

### New Railroad Map.

The state public service commission, Olympia, Wash., will be glad to furnish the latest railway map of the state, issued in 1917, giving all the railroads of the state in operation, as well as dotted lines indicating railroads projected or under consideration. The map also indicates the county boundaries and an alphabetical list of towns of the state, indicating those having a railway station, a telegraph station or a telephone station, or all three, and so arranged as to be easily found on the map.

The public service commission will be glad to send this map to any reader of The Twice-a-Week Spokesman-Review if postage is sent, as follows: Mounted wall map, 15 cents; unmounted map, 2 cents; folded map, 2 cents.

### True to His Word.

When son gets home from school he taken off his new shoes and puts on the old ones, just as he said he would. He does it one evening.


*Borrowers From the*

**FARM LOAN BANK**

can close their loans quickly by having their titles examined and insured by us.

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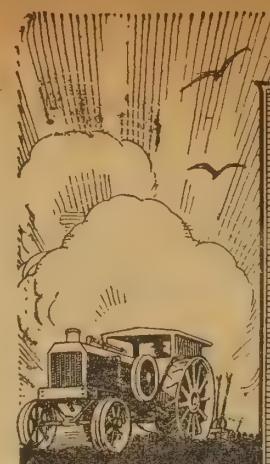
It will pay you or the secretary of your association to write us at once for particulars and terms.

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A special ring for engines that pump oil. Used in top grooves only of pistons to control excess oil, with McQuay-Norris LEAK-PROOF Rings in lower grooves to insure maximum compression and fuel economy.

**Power for the Big Pull**

Power measures the amount of work done, time consumed, and cost of operation—and power depends on piston rings.

To get maximum power and get it continuously requires a set of

**McQUAY-NORRIS LEAK-PROOF PISTON RINGS**

The rings that check compression losses and turn wasted fuel into power for automobile, draw-bar or belt work. Their light tension causes least friction loss—more power gained. They reduce carbon—higher engine efficiency. Economical in fuel and oil.

Your dealer can get you any size or over-size quickly. Over 300 jobbing and supply houses in all parts of the country carry complete size assortments. If you have any difficulty getting them, write us.

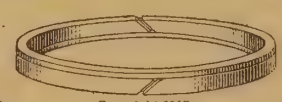
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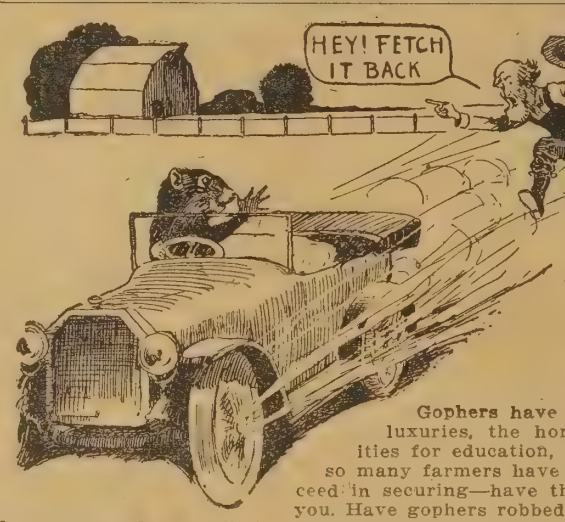
2837 Locust Street St. Louis, Mo.



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Gophers have stolen the automobiles, the luxuries, the home comforts, the opportunities for education, the good things of life that so many farmers have drudged for and never succeed in securing—have they stolen such things from you. Have gophers robbed your farming of profit? Or have you made a profit in spite of them? Thousands have barely broken even or have run behind. Every farmer would be hundreds of dollars ahead if he kept gophers off from his land. It might mean only a bushel of grain more per acre—that's worth getting—or it might mean five bushels or even more in extra profit. That is what using Kill-Em-Quick has meant to thousands of farmers.




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**Gopher Poison**

Every farmer who has tried the gopher killer knows that gophers can be destroyed—kept off his land. He knows that Kill-Em-Quick pays him hundreds of times its cost in profits. Kill-Em-Quick is a sure killer—a ready-prepared poison, the strongest on the market.

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**SPOKANE SEED CO. Distributors Spokane**






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Sows Land Plaster evenly in any quantity desired. Two horses draw it anywhere. Send for leaflet giving full description.

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# Poultry Losses Are Enormous

## *Hatching Season Is Critical Time in Food Production*

By JAMES DRYDEN.

The new crop of chicks will soon be coming out of the shells by the million. There will be some millions that die in the shell. Other millions will die in the first month of their life. The loss is very great. The losses in hatching and rearing the chicks have put many a poultryman out of business. The losses in eggs that are put into the incubator and under the sitting hen run into millions of dollars. It is a great wastage of eggs. Then there are the losses of chicks in the first few weeks of their life. That means as many millions more.

That has been going on year after year. Every farmer loses small chickens at times and loses eggs that are put under hens to hatch. The hen sometimes breaks the eggs and sometimes leaves the nest and the eggs do not hatch. The hen is not always a success in brooding the chicks, she may not hover them enough; she trails them through the cold, wet grass and they chill and die. Lice and mites may kill them. Rats and cats get many. Poor feed and feeding kill thousands. The farmer says little about it; it is a small affair, he thinks. In the aggregate, it is a big affair.

The losses are not confined to the general farmer with a small flock. The losses are often greater in proportion to numbers on the large poultry farms where modern methods, so-called, sometimes miscalled, prevail. Here, where artificial methods are used and where there is no trouble with sitting hens quitting the job, where lice and mites are not a factor and where there is no trailing through the tall grass, the losses are often so serious as to bring disaster to the business.

Then, again, it often happens that the incubation and brooding methods are not at fault. The incubators may be properly run, the brooders may work smoothly and the feeding may be right; the hen may sit steadily on the job, there may be no lice or mites and no tall grass or rats or cats to get them and yet the chicks may die off like flies. This is a problem that goes back to the egg itself, the egg that produced the chick. The fact that the chick gets out of the shell does not mean that it is a good chick; it may have the strength to hatch, but not the vitality to live or thrive. The trouble is in the egg. We have proved that heavy egg laying is transmitted by the hen that laid the egg and the male that fertilized it through the egg to the pullet. It is just as certain that the ability to hatch well and to live well after being hatched is transmitted in the same way through the egg from the sire and dam of the chick. So that the germ in the egg from which the chick grows may produce a weak chick that will not live, or, if it lives, will grow up without the vigor to produce well or to reproduce well. This lack of vigor is not always apparent in the breeding fowls; they may look all right, but they may not have the vigor to produce chicks that have the vigor to live and grow well and produce well.

These are the foundation problems back of the successful hatching and rearing of chicks. When the eggs do not hatch and the chicks do not live the trouble is to diagnose the case properly. It may be the fault of the incubators or the sitting hens or the breeding stock or the brooders or the feed. The poultryman is a wise man if he can properly diagnose the trouble. It is easier sometimes to state the problem than find a solution.

I want to discuss in this article the first part of the problem, that of the breeding stock. We must have good vigorous breeding stock or the incubation and brooding will be unsatisfactory. It is a question largely of vigor. The hen and male inherit vigor; there is no question about that. Weak parents will produce weak offspring. The breeding stock may sometimes exhibit signs of weakness and yet produce good chicks. Appearances are deceptive. The parents may be from a long line of ancestors with strong constitution that will influence to a great extent the vigor of the chicks. The problem here is to select breeding stock on the basis of vigor shown in the ability to lay strong fertile eggs that produce strong, physically fit chicks. By the use of the trapnests and pedigreeing the chicks the breeder can get a line on the individuals that are good reproducers of strong chicks as well as good producers of eggs. There is probably as much difference in the ability of the hen to produce vigorous chicks as in her ability to produce many eggs. So that the expert breeder will breed for vigor as well as heavy production, and the best test of vigor in breeding stock is the fertility test of the eggs and the livability of the chicks.

Another thing that affects the vigor of the breeding stock is what is popularly called environment. In that is included feeding, housing, range, etc. The feed and method of feeding have a great deal to do with the hatchability of the eggs and the vigor of the chicks. Careful attention should therefore be paid to feed. It is better, how much better is not known, that the breeding stock be in their second year or older. A hen is not fully mature until she has finished a year of laying and passed through a molt. Pullets that lay a good egg, however, and are about a year old may, and often are used successfully for breeding. The breeder often has to choose the lesser evil. A pullet of good breeding, or, for example, from a good laying strain, would better be used than a year-old hen that is not a good layer. Other things being equal, it is better to use year-old or two-year-old stock for breeders.

There should be a variety ration and it should be fed in such a way as to induce the hen to exercise as much as possible. A hen that gets little or no exercise and is heavily fed is invariably a poor breeder. They should not be fed too heavily on mashes, especially wet mashes for they will eat so much and take so little exercise that they will lay on so much fat as to render them unfit for breeding. The breeding

(Continued on page forty-two.)


# Win the War by Preparing the Land, Sowing the Seed and Producing Bigger Crops

**Work in Joint Effort the Soil of the U. S. and Canada—Cooperative Farming in Man Power Necessary to Win the Battle for Liberty.**

The Food Controllers of United States and Canada are asking for greater food production. Scarcely 100,000,000 bushels of wheat can be sent to the allies overseas before the crop harvest. Upon the efforts of the United States and Canada rest the burden of supply.

**Every Available Tillable Acre Must Contribute; Every Available Farmer and Farm Hand Must Assist.**

Western Canada has an enormous acreage to be seeded, but man power is short, and an appeal to the United States allies is for more men for seeding operations.

**Canada's Wheat Production Last Year Was 225,000,000 Bushels; the Demand From Canada Alone, for 1918, is 400,000,000 Bushels.**

To secure this she must have assistance. She has the land, but needs the men. The Government of the United States wants every man who can effectively help to do farm work this year. It wants the land in the United States developed first, of course; but it also wants to help Canada. Whenever we find a man we can spare to Canada's fields after ours are supplied, we want to direct him there. Apply to our Employment service, and we will tell where you can best serve the combined interests.

**Western Canada's help will be required not later than April 5. Wages to competent help, $50 a month and up, board and lodging.**

Those who respond to this appeal will get a warm welcome, good wages, good board, and find comfortable homes. They will get a rate of one cent a mile from Canadian boundary points to destination and return.

For particulars as to routes and places where employment may be had, apply to

**U. S. Employment Service, Dept. of Labor**


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# Home Owning Gives Opportunity to Make Life Worth While

By PROF. P. G. HOLDEN

AMERICA has marvelous wealth. It is rich in fertile soil; in its mines; in its water power; in its forests. But, above all, America is rich in people—rich in workers on the farm and in the factory. Its largest single industry, however, is agriculture. One-third of the toilers of America are farmers; more than one-half of the people of this country live under rural conditions. The farm home has been an important factor in American history. It has been the nursery of great men and noble women. It should belong to the one who tills the soil.

The American home began when the first Indian pitched his tepee on the western continent. Its evolution has been marked by the characteristics of the people of the various ages.

The home of the pioneer was built, not as he should have preferred to have it, but as the necessities of the time required. He lived alone and placed his cabin without regard to social experience. He lived a lonely and independent life, but the beginning of the family group dated from his advent.

The pioneers established the farm home in America, and the land farmer, who followed him brought it to a high state of perfection.

The land farmer lived in a time of plenty. He reaped the first values of a virgin land. He developed personality. He perfected the family group. He built a homestead representing his idea of domestic and family comfort. He built for permanence and established the classic period of American life. The typical American home as it lives in sentiment, in literature, in idealism, was the home of the land farmer. He considered his estate as belonging to his family group, but had no idea of community prosperity.

Realizing that the home owner is the community builder, the people of every community, whether of town or country, sheuld adopt some cooperative plan which would tend to convert the tenant into the home owner.

But much depends upon the individual. Buying a house and lot or a farm is more of a philosophical conclusion than a physical or financial transaction. He who is afraid to own his own home may be a good citizen, but the best citizen is he who has the courage to own property; to pay taxes on it; to build it up and improve it; to help support the community; to be useful to himself, his children and the world. Such a man embraces the opportunity which home owning affords—the privilege and duty of merging the struggle for life into the struggle for life of others. This takes the sting from the toil for existence. It makes life worth while.

The money invested in a home is securely invested. It is not subject to the accidents and misfortunes common to capital invested in trade or manufacture. Money used for the purpose and improvement of a home is as well secured as the nature of human affairs will permit.

The beauty of the country, suburban or small-town home, the pleasures and tranquillity which it guarantees and the independence which it affords are not provided for by any other form of investment.

A community of home owners is a community of good schools and churches, of excellent social conditions, of high moral environment, of beautiful homes and general prosperity.



**Here is the one investment that can always be depended upon—the home. The home owner is the one safe asset upon which the country can rely, and the nation that can boast a large percentage of its citizens owners of their own homes is inevitably the stable nation. When a family own the house in which they live there is a personal interest that tenancy does not breed.**

## SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

## How It Feels to be Operated On—The Doctor's Own Story



Dr. Hirshberg.

"Doctor, heal thyself," and "a dose of his own medicine" stand out with more amazement than ever in my consciousness these days. For the first time since "childhood's happy hour," it has fallen to my lot to require an operation, to call upon a great surgeon, Professor Thomas Cullen, and be operated upon.

As a patient, my situation was not such an unhappy one, after all. I have ordered operations for so many others, and have heard so much wailing and gnashing of teeth, hesitation and fear, excitement and worry therefor that I was really keen to be operated upon for other reasons than the necessity of the knife.

What indeed was my astonishment to find the whole thing, including the various days in the hospital, the usual exaggerations of those possessed by the native human tendency to pose in true camouflage colors, as a martyr to be petted or pited.

Sunday night I telephoned the surgeon my diagnosis on myself. Said Dr. Cullen:

"All right. Go to the infirmary—a certain hospital—tomorrow, and I'll operate on you early Tuesday morning."

"Do you wish to examine me?"

"No. You've made the examination. That's enough."

Mrs. Hirshberg was then told, and became shocked and frightened. I reassured her as best I could, An operation even of the most serious nature nowadays, if not done by half-baked surgeons, is usually as safe as a "cold" and safer than the measles.

The day before I entered the hospital I wisely decided almost to starve myself, as well as to take a half-bottle of citrate of magnesia as in internal flush and cleanser. These precautions made the hour or more under gas and ether a pleasant and safe experience.

Monday evening I was in the hospital with a light heart and a lighter stomach. A good night's sleep until 5:30 a. m., when the house physician gave me an enema, made me feel as fit as a fiddle. At 6:30 a. m. another enema was tried, but the fast and the magnesia made it valueless.

### Under the Ether.

Then a hot tub bath, and the reply, "No, I have no false teeth," started me on the road to several new experiences. For the first time in my life I sat in a rolling chair. But I wasn't permitted to show my variegated Turkish bath robe and Sioux slippers to the pretty nurses who lined the corridors.

In the ether room my much perturbed and sleepless better-half awaited my humorous greeting with a wan smile.

Laughingly, I mounted the ether table, shook hands with the anesthetist, Dr. Griffith Davis, who asked:

"Ready?"

I said, "Shoot."

Then the various surprises, nearly all at variance with the tales of patients operated on, began.

I took two ordinary breaths, just as I breathe regularly after I say my prayers at night—I did not say my nightly or any prayer for ether—and I was in the Land of Nod, or rather the land of Ann S. Thesia.

Really, I knew nothing whatsoever for an hour and a half. Then I awoke in a hospital bed with Mrs. Hirshberg and several other beautiful nurses smiling at me.

My first words were: "Isn't ether a winderful thing? A giant operation has been performed and I feel well enough to get up."

There was no sick stomach, no nausea, no vomiting, no headache, nothing unusual, except pain in the wound. But man is made to stand pain, and this pain was no greater than that which accompanied the trouble before the operation.

### Not a Martyr.

Moreover, it could have been eased with hypodermics of codeine, but I requested rather to suffer some pain for a few days while the wound healed and the stitches came out.

For perhaps 10 minutes, as I awakened from the magic sleep of ether, incoherent, and rambling talk burst forth from my throat. It appears that I kept them all full of laughter and laughed myself like a Leon Errol jag.

However this may be, the very fact that I have never touched liquor or alcohol in any form in my life, made this ether jag—ether is close kin to alcohol—simple and quickly over with.

Patients by the score rave talked and made a fuss of the pains, agony and suffering, which are claimed to be associated with this and similar operations. The whole novel experience was in the nature of a holiday to me.

If the surgeon is well selected, if you are able to deny yourself a few things a day or so ahead of the planned operation, if you take the whole matter as a simple, unimportant affair, if you have the will to make the pleasant best of almost any situation which life and the world bring to you, perhaps the worst and most serious operation will be made an enjoyable event, to be like a political party's assertion, "pointed to with pride," not an enfeebling, absurd, pseudo martyrdom.

## The Wheat Price

### May Be Too Low, but It Is Fair

While we still think that a higher Chicago basic than $2.20 for wheat would have brought better results from a national and allied viewpoint, the government will find a ready and loyal acquiescence from the grain growers of Washington, Oregon, Idaho and Montana. With $2.20 as the Chicago basic, and a government price of $2.28 at New York, the prices fixed for the Pacific northwest markets are fair, and fair and equal treatment is all that our farmers have ever demanded.

E. T. Coman of Spokane, member of the delegation that went to Washington to urge just prices for this region, explains the adjustment briefly and clearly as follows:

"Under the price plan announced, the New York price is $2.28. The freight rate from Portland to New York has been fixed by the shipping board on the basis of $3.50 a ton or 10 cents a bushel. The Spokane rate to Portland is 10 cents a bushel, which is also the rate from the average interior point to Portland. The average interior price then, including Spokane, will be the New York price of $2.28, less 10 cents freight to Portland, less 10 cents freight Portland to New York, or $2.08.

"This will yield the northwestern wheat grower 10 to 15 cents a bushel more than he received for his wheat in 1917. The average 1917 price in the interior was $1.95. Because of abnormal crop conditions, many farmers got as low as $1.75 and the average probably was around $1.80 a bushel.

"Some of the Oregon counties will enjoy a price even higher than $2.08 a bushel this year because of their closer proximity to Portland. Mr. Hoover is standing squarely by his original promise to the delegation."

It is evident that this settlement of the question is final for 1918. Several bills for a higher basic price than $2.20 are still pending in congress, but there is no likelihood that any of them will be passed. Producers should now go forward with their plans for increased production, and the quick decision by the government will prove helpful.

For that quick and just settlement the Pacific northwest is under obligation to Mr. Hoover. He saw at a glance the reasonableness of our case for equal treatment with other regions and promptly threw the weight of his powerful influence in support of it.

Credit is also due Chairman Edward N. Hurley of the shipping board for his friendly and just aid in fixing an ocean freight rate from the northwest to New York of $3.50 a ton. That was the key to the problem.

The Farmer realized months ago the importance of ships in this connection and repeatedly urged a large program of Pacific coast ship-building. Proof of the soundness of that judgment is now visible in the better prices our farmers will receive for their 1918 wheat crop. While the Chicago basic is no higher than last year, our growers will net from $6,000,000 to $9,000,000 more for the 1918 crop than they would have received on the basis of last year's northwestern markets. If ships had not been available to move the crop to the higher New York market, they would have had to sell their wheat on the Chicago basic, less the 30 cent freight rate from this region to Chicago. Shipping facilities give them these added millions.

## English Crop Conditions.

In its January report on the condition of the crops in England and Wales the board of agriculture says:

The crop reporters of the board, in reporting on the crops and agricultural condition on January 1 state that December proved on the whole very favorable for field work. Nearly four-fifths of the area intended for wheat have already been sown whereas at the corresponding date last year only two-thirds of the wheat area had been got in; and the total area actually under wheat at the end of 1917 was fully 15 per cent greater than a year ago. The young crop everywhere looks promising, although that sown late has received some check from the frosts. Of other autumn-sown crops, the area under barley and oats is about the same as at this time last year, that under rye a little greater and the bean area smaller. All these autumn crops are generally satisfactory.

## Silos in New South Wales.

Recently the New South Wales government department of agriculture announced that funds would be provided for assisting farmers in the erection of silos and numerous inquiries have been received, especially from dairy farmers. Many of the applicants have signified their willingness to pay much larger deposits than was anticipated. Owing to the abundance of rainfall in many districts silos will greatly benefit dairy farmers by enabling them to conserve the fodder harvested druing the rainy season.

## See About That Grain Tank.

The grain tank question is an important one to the wheat farmer at this time, and the slogan, "Order early," holds good this year as it did last. Farmers should make close calculation right now as to their needs and place their orders, for it is evident that if a large proportion of orders are bunched together late in the season it may be difficult to either get the bins or get transportation for them.

# Corriedale Sheep Points

Corriedale sheep are booming in Australia, and shipments are being made from there to this country. In appearance the Corriedale at once gives the impression of a heavy sheep of remarkably hardy constitution—the rams of rare character and bold outlook. The Corriedale being a dual-purpose sheep, in judging equal regard should be given to wool and carcass, says the London Live Stock Journal.

In comparison with the size of the carcass, the head of the Corriedale is on the small side, though that of the ram of masculine appearance—wide open nostrils. A wedged or peaky nose most undesirable; dark nose preferable, denoting a hardy constitution. Black spots on face or ears allowable, but brown spots on any part of animal is considered a defect. A good top-knot of wool, but clean open face preferred, though not too bare—wool blindness being a drawback.

The breed has no horns or sign of horns. The neck is broad and particularly strong, with a good scrag.

Shoulders are wide and deep; great width between the shoulder blades.

Brisket is deep and broad, assisting to give the sheep a very square appearance.

The back is long, level and very broad—a wonderful saddle of mutton—ribs deep and particularly well sprung.

The thighs well apart and deep, giving a wonderfully large and well-shaped leg of mutton.

Legs are of moderate length and good bone, set straight and well apart. Cow or sickle hocks condemned. Good, hard, well-formed feet, dark in color preferred.

The Corriedale being the great dual-purpose sheep, must carry a heavy, even fleece of good length, dense staple and pronounced crimp or character, with an even tip. There must be no body wrinkles. Spinning quality: The object quality is a long-stapled, bulky dense 56's, but, of course, climatic conditions largely govern the quality and condition of the fleece. A peculiarity of the pure Corriedale sheep is the remarkable evenness in the length, density and quality of the fleece throughout.

This feature must be rigidly protected—straight-fibered, coarse, hairy wool on any part of the fleece being most undesirable. In the males the purse should be covered with wool, not too coarse or hairy in texture.

Stud Corriedale rams should cut from 15 to 25 pounds of wool, according to climate and condition, valuable on account of its length, soundness, character freedom from fault or excess of yolk—Corriedale wool giving a very high yield of clean scoured wool.

Stud ewes should cut from 12 to 20 pounds, similar to above, but of slightly finer quality.

Some breeders encourage wool to the toes, and a very woolly head, but wool blindness or a tendency to same must be considered a drawback.

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# There's a Difference

## Plant by Hand or by Machinery?

**By Ray W. Felton.**

Lou S. Smith, assistant agriculturist for the O.-W. R. & N. company was called upon the other day to tell what he knew about the teachings of his father, the veteran agriculturist of that company. It happened at one of the sessions of the Clarke county (Wash.) farmers' institute. Potato planting was the subject under discussion. D. F. Morrow of Vancouver said he had planted an acre according to the directions of "Farmer" Smith, with the "eyes up" and with each piece of seed firmly pressed into the bed. He did all the work by hand and just as carefully as "Farmer" Smith could have done it himself, Mr. Morrow asserted. He then planted another acre with one of the common makes of potato planters in use and found at harvest time that he realized equally as good results from the acre planted with the mechanical planter as he did from the acre planted by hand and with the seed sown "eyes up."

"'Farmer' Smith Jr. is here. Let's see what he has to say for his father," remarked H. W. Sparks, smiling.

Mr. Smith declared the system recommended by his father was absolutely sound and practicable.

"If I had no other proof of it than the fact that he advocates it I would insist on its reliability," he said, as his eyes twinkled. "The longer we stay in the business of farming the more often do we find that two men can do the same thing in what appears to be absolutely the same way and yet each will experience results different from the other one."

## Best Persian Camels.

The best Persian camels are the powerful one-humped kind, which are bred in the province of Khorassan. This animal can carry a burden of 600 pounds at the rate of 20 miles a day. The ordinary Persian camel, however, will carry 400 pounds at the rate of 15 miles a day.

## Lumber in New Zealand.

Most of the better furniture and industrial lumber used in New Zealand is imported, such as oak, ash, hickory, etc., and comes largely from the United States, united kingdom and Japan.

### Carbolic Acid Factory.

The Japanese government has established a factory for the production of carbolic acid from coal tar.

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# The Tomato

## Queen of the Vegetable World

The tomato is the Cinderella of the vegetable kingdom. Like Cinderella, its virtues were long unknown; its proud sisters of the garden looked on it with contempt. Then a prince came along one day and sought it out for favor and esteem, and now it is the queen of the vegetable world.

Elderly people can recall a time when the tomato was grown for ornamental display, and many of us remember our grandmothers saying that when they were little girls the tomato was called the "love apple" and people thought it poisonous.

People got over that notion long ago. More tomatoes were canned in 1917 than all other vegetables combined. A tabulation just compiled by the national food administration and the National Canners' association shows that more than 15,000,000 cases of tomatoes were packed last year—360,000,000 cans.

Maryland led, with a pack of 5,993,239 cases, enough to supply every person in the United States and France with a can. California came second, with 2,603,019 cases. Delaware was third, with 1,380,805, and the two Virginias fourth, with 1,170,504.

It is interesting to note that from the Andes mountains in South America the world received the two vegetables, hitherto unknown to Europe and Asia, that now surpass in popularity all others—the potato and the tomato.

In canned fruits the peach easily leads, with a total pack last year of nearly 4,000,000 cases. The pineapple was second choice and the apple third.

The complete statistics of vegetables and fruits as published by the national food administration, follow:

**Vegetable Pack for 1917.**

| Commodity. | Cases. | Can size No. |
|---|---|---|
| Hominy | 504,873 | 3 |
| Succotash | 134,002 | 2 |
| Spaghetti | 60,786 | 3 |
| Tomato pulp | 1,023,474 | 10 |
| Beans, green or wax | 1,892,407 | 2 |
| Red kidney | 423,135 | 2 |
| Lima, green dried | 450,807 | 2 |
| Pork and beans | 1,729,721 | 2 |
| Kraut | 1,379,169 | 3 |
| Cabbage | 113,953 | 3 |
| Spinach | 332,305 | 3 |
| Asparagus | 1,648,703 | 2 |
| Sweet potatoes | 238,250 | 3 |
| Beets | 739,565 | 3 |
| Pumpkin and squash | 1,065,483 | 3 |
| Other vegetables | 1,664,661 | 3 |

**Fruit Pack for 1917.**

| Commodity. | Cases. | Can size No. |
|---|---|---|
| Apples | 1,280,637 | 3 |
| Apricots | 925,034 | 3 |
| Cherries | 591,991 | 2 |
| Grapes | 43,106 | 3 |
| Peaches | 3,861,969 | 3 |
| Pears | 717,928 | 3 |
| Pineapple | 2,652,315 | 3 |
| Berries | 781,420 | 2 |
| Plums and prunes | 423,242 | 2 |
| Other fruits | 8,017 | 2 |

**A Surgical Glove.**

A surgical glove has been invented which will enable a man who has lost the use of the tendons in the back of his hand to be able to write just as well as if he had those tendons there.

**Cod Fish Flour.**

In Iceland cod fish are dried and ground into a flour for use in bread.




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# Sidelights

**A Diplomat.**

Teacher—"Willie, what does the Monroe doctrine mean?"

Willie—"It means to shinny on your own side."—Exchange.

**Must Have Been a Colonel.**

Teacher of Scripture Class—"Yes, children, then Nero ordered his centurion to give the slave 20 stripes—"

Mabel (whose father is in camp)—"Lord, mum, that must a' made 'im a blooming colonel.—New York Herald.

**Mutual Wonder.**

Pussy—Miss Sweetly told me last night that she'd heard a lovely compliment for me. I wonder what it could have been?

Cat—So do I.—Tiger.

**A Real Financier.**

"Now, Johnnie," the teacher queried, "what would you do if you had a goose that laid golden eggs?"

"I'd set her on some of the eggs," replied the youngster, "and hatch out more geese of the same kind."

**Nice Business.**

"I think I'll go into the real estate business."

"Looks good to you, eh?"

"Yes; the real estate business seems to be one in which two men can swap property and both make money."—Louisville Courier-Journal.

**A Clew.**

Jinks—"Have you ever seen a chicken with four legs?"

Binks—"I've never actually seen them! But that must be the variety that is scratching up my garden."—Chicago Daily News.

**Why a Wife?**

"Say, Johnsing," commented Rastus, looking up from his paper, "It says heah dat in Sumatra a man kin buy a wife foh foah dollars."

"Foah dollars!" gasped Johnsing, "Ef a man's got foah dollars he don't need a wife."—Exchange.

**Growing.**

Friend—I understand that your practice is getting larger.

Young Doctor — That's true. My patient has gained nearly 10 pounds in the last few weeks.—Boston Evening Transcript.

**War Yarns.**

"Have you any war yarns?" asked the lady entering the department store.

"Surely, madam," replied the floorwalker.

"In which direction will I find the proper department?"

"Do you want them for reading or knitting, madam?"—Yonkers Statesman.

**Appropriate Title.**

"Edgar?"

"Yes, mother."

"What are you children doing?"

"Playing royalty. I am a Knight of the Garter and Edwin is Saturday."

"That is an odd name for royalty."

"Oh, it is just a nickname on account of his title."

"What is his title?"

"Night of the Bath."—Youngstown Telegram.

**Unnecessary Fears.**

Of course the eloping couple's rollerskate of a car had no chance against the old man's high-powered roadster. He soon came up with them.

"Do not take her back," pleaded the young man with tears in his eyes.

"Take her back?" echoed the stern parent. "Why, I have come to bring her knitting outfit and chewing gum so she would never have an excuse to come back."—Boston Transcript.

**Playing Safe.**

Even the war has its bright side. Two negro porters were discussing it as they waited for a train to pull into the station.

"Man," said the first, "dem Germany submaroons is sho'ly gwine to sink de British navy. Yas, sir'ree, dey's sho'ly gwine to 'splode dem naval boats dat's waitin' out yonda."

"Sho!" said Porter No. 2. "An' what's gwine to happen den?"

"Why, dem Germany submaroons 'll come right on 'cross de ocean an' 'splode de rest of de naval boats ob de world. Dhat's what'll happen den, Sambo!"

"Well, looky heah, George. Aint yo' an' me better decla' ouahselves a couple o' noot-notral-nootralities?"

"Man," said Gawge, "yo all kin be a notrality if yo' wants. Ah'm a German!"


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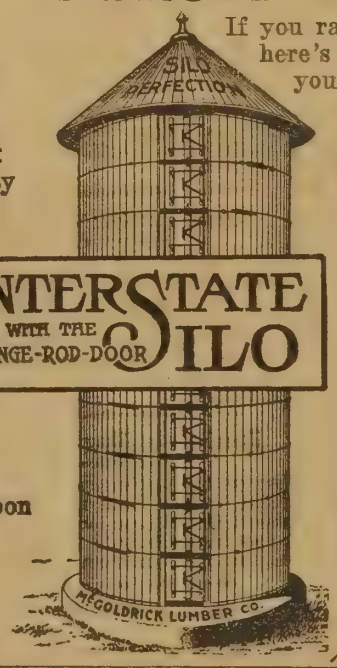
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## American Commander Returning From a Review



Com. on Public Information.

General Pershing and his staff in France are shown returning from a review of our marines in camp not far behind the French front lines. The commander of the American forces is shown on the extreme left of the picture.

## Cabbage Tree.



A New Zealand plant, called cabbage tree because the top of its stem is like a cabbage.

## Wealthiest Officer in U. S. Navy



Photo by International.

Ensign Vincent Astor, U. S. navy, and Mrs. Astor visited the grave of an aviator who was killed in action. Ensign Astor has been serving aboard a U. S. patrol boat. Mrs. Astor has been in France aiding the American war relief.

## U. S. Artillery Off to Lorraine Front



Com. on Public Information.

A section of the United States field artillery lined up for inspection by officers high in the command of our forces in France. The men are about to take up a position in the Lorraine sector, where our men are now holding eight miles of territory against the Germans.

## Shut Out Again




—Chicago Daily News.

## Back to Nature.



This pleasant looking gentleman stroller is an artist and a Russian. He is also a philosopher and believes in getting just as close to nature as possible. He has defied the cold weather of this winter and has discarded his shoes and all the clothes he possibly could without infringing on the conventions, and is shown in the above picture taking his early morning stroll through Central park of New York.

## Commander Belknap.



When the government found it necessary to obtain a thoroughly versed man to direct the movements of freight and troop ships, Commander Charles Belknap of the United States navy was chosen. Though only 37 years old, Commander Belknap had immediate success in working out the naval overseas transportation service problem, despite the fact that the navy department turned over to him 200 ships, with a total tonnage of 60,000.

## Tired of Giving?



—The Spokesman-Review.

## After the Accomplice




—Baltimore American.

# Trappers of the Ozarks

**The Adventures of Two Young Pioneers in the Wilds of Upper Louisiana, Now the State of Missouri.**

**By LEWIS B. MILLER**

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## CHAPTER III.

### In the Heart of the Ozarks.

EARLY next morning they were tramping again. And so they kept on, day after day. The country was now much broken, and there was not a little climbing. But the scenery was fine and the weather delightful, and they enjoyed every minute of their journey.

Finally they came to where the Indian trail bent too far to the north. There, with many regrets, they had to abandon it. After that their progress was slower and harder. And it soon grew worse; for they were entering a wilder, more broken country than any they had yet traveled over.

"We must be nearing the Big Niangua," Ben remarked one night, while they were sitting by their campfire in a wild, picturesque mountain glen.

"How far do you think we are from it?"

"That I don't exactly know. When Boucher and I made our trapping trip into this country last winter from our camp on the Piney Fork I tried to notice every conspicuous object. As yet, though, I haven't recognized any landmarks. But of course a wooded country looks very different in winter than the way it looks when the woods are in full leaf."

Next morning, when the time came to start, Spunky was still without saddle or pack, and still grazing at the end of his lariat. But Ben, leaving Jodo to look after the camp, shouldered his gun and set off over the hills alone. And it was noon when he returned.

"Yes, I found the Big Niangua," he reported. 'I didn't visit the place where I'm expecting our camp to be, but I was at the mouth of the same creek about two miles below."

"No end of creeks in this country. Sure you found the right one?"

"Very sure. I found some trees that I'd blazed when my Frenchman and I were here. And I even found one that I'd whittled my initials on."

"That ought to be reliable evidence."

"It's rather farther away than I thought it was when I started out this morning. But we can get



**It is doubtful if any other human beings, even the red men of the wilderness themselves, had ever ventured to sail the underground sea of the Ozarks until Ben and Jodo ventured to navigate it. The younger lad made no effort to conceal the nervousness which he felt as they paddled the canoe rod after rod into the dark cavern, not knowing at what moment their craft might strike a snag and they and their dogs and guns be plunged into the icy waters far from daylight and where no outside help would be possible.**

there by camping time, I'm pretty sure. We shall have to be cautious, though, or Spunky and his pack will go rolling and tumbling down some of those steep hillsides. Instead of urging him on now you may have to grab a tail hold and pull back."

"Not any tail holds on Spunky for Jodo Henderson, thank you! If there's back-pulling to do I'll fasten the lariat to his breech strap or his tail."

They did not have to use any such device; but they did have to pick their way carefully as they went down several steep hillsides. One of Spunky's not too numerous good traits was his sure-footedness. He could scramble up and slide down steep places where most horses would have gone rolling.

At length, when the sun was only an hour or two high, the travelers stood at the foot of a steep, wooded hill and on the bank of a clear, picturesque river.

"Yes, this is that stream you've been hearing so much about—this is the Big Niangua," Ben informed his younger companion.

After gazing at the scenery for a few minutes they followed the bank downstream till they came to where a good-sized creek joined the river. There they turned and traveled up the creek.

This smaller stream flowed between two rows of limestone cliffs. One row made the north bank of the creek and the other rose not far back from the south bank. It was along the foot of this latter cliff that the travelers were making their way.

Two miles up the creek they came to where the cliff bent back from the north bank, leaving a little semicircular valley about four hundred yards wide at the widest part between the cliff and the creek. The creek's own banks were so steep and there was so much water that the travelers made no attempt to cross here. They followed up the south bank until above the valley, then forded the creek and went down between the cliff and the north bank. Here there was barely room for them to pass. And in that narrow space ran a well-beaten game path.

As the travelers came to where they could look into the valley several elks took to flight and soon disappeared in the woods along the creek at the far side. The animals had been drinking at a little spring that issued from the foot of the cliff.

Ben pointed. "That's the salt spring—the spring we brought our pots for," he informed Jodo.

The sun had already set, and they did not stop, but moved on across the valley to the west side. About midway of the valley they came to a good-sized running stream, which, they could see, issued from a big-mouthed cave under the cliff. But that was farther over to the east. After crossing the stream Ben and Jodo proceeded up the west bank and stopped under an overhanging cliff not far from the big cave. Ben began to unfasten the girths of the pack-saddle.

"Well, this is the place at last—the place where we're to spend the winter," he remarked.

"It's certainly a picturesque, well-sheltered spot," answered Jodo, with a glance upward and around at the great frowning cliffs more than a hundred feet tall, which shut in the valley.

After Spunky's pack had been laid off Jodo proceeded to kindle a fire, while Ben led the mule out in the valley and tethered him to a bush. With the exception of some timber along the creek bank and a few trees scattered up and down the cave stream the whole valley was meadow, and thickly covered with green grass a yard deep. The mule fell to grazing greedily.

Returning to the camp under the cliff, Ben unpacked their things, and the two set about preparing supper. And scarcely was the cooking started when they began to hear a faint roar.

At first the noise sounded far away; but it seemed to be coming nearer. Both listened intently, but failed to make out what it was or where it came from. The dogs heard it, and seemed as much puzzled as were their masters. Tinker barked and Bose kept listening and gazing around.

The roar was growing louder, and presently all could make out that it came from far back in the big cave.

That discovery only increased the mystery. Ben and Jodo stood staring into the blackness of the cave's mouth. Neither of them had ever heard such a strange noise before.

## CHAPTER IV.

### The Cabin Under the Cliff.

"What under the sun can it be?" Jodo finally burst out. Both he and Ben had instinctively caught up their rifles. Ben did not answer, but approached a few yards nearer the big cavern. Tinker ran into the cave a short distance and barked loudly. Soon the explanation appeared.

Forth from the mouth of the cave fluttered a great swarm of dark-winged things, which promptly scattered and set all the air in motion round about.

"Bats," cried Jodo, in no small relief at finding the explanation so simple. "But did anybody ever see such a swarm?"

"I certainly never did. But we shall be likely to see many times as many pretty soon, I'm guessing."

And they did. Bats kept swarming out of the big-mouthed cavern like bees swarming out of a hive, till it seemed that millions of them must have flown out. The dogs barked at them, especially Tinker; and the two young men stood and watched them till the roar began to die away and the dark, fluttering cloud to grow thinner.

"Don't you s'pose we'd better move our camp?" Jodo finally inquired.

"No necessity of that, unless you object to the noise. And the noise will soon cease. So far as human beings are concerned, there's nothing more harmless than a bat."

The young travelers were glad to be at their long journey's end. Naturally they could not help feeling a little lonely, away out here so far from home and civilization and in the very heart of the wilds. They were also well aware that they were now in more or less danger from Indians, and would be as long as they remained here.

"So this little cove is to be our headquarters for the winter, eh?" Jodo remarked, while they were eating their supper.

"So far as I know, yes. That is, if the Osages don't discover us and make this place too hot."

When the time came to make their bed the two went out from under the cliff and cut some grass—they had a reap-hook in their pack—to put under their blankets. The hard ground under the cliff was not the most comfortable to sleep on. And they preferred not to get out of the cliff's shelter, because there were indications of rain.

Some rain fell late in the night; and after that the sky cleared, the wind shifted to the north and the weather became almost cold. More than once during the later hours of the night either Ben or Jodo had to get up and put more wood on the fire. For bedding they had but two blankets apiece. Additional bedding would have to be provided for winter weather.

Weary though the travelers were from their nearly two weeks' tramp, they were up before daylight next morning and were eating their breakfast while day was breaking. And scarcely had the morning begun to brighten when a whirring and fluttering of wings set up again, and all those swarms of bats—all that the cold had not yet driven to shelter—began to make



**When the young hunters approached the mouth of the great cave at the foot of the mountain they saw more winged creatures than they had supposed the whole earth contained. Thousands of them, millions of them, in fact, were fluttering out for their night's work and the roar of their wings echoed and re-echoed away into the heart of the mountainous cavern, adding to the chills which the young fellows felt chasing each other up and down their spines. Had they not known that the bats, which the creatures proved to be, were totally harmless, they would have been frightened indeed.**

their way back into the cave. The partners watched them with much interest.

Breakfast over and broad daylight at hand, the two walked around a little. First they watered Spunky and moved him to fresh grass. Then, crossing the Cave branch, as they called the little stream that flowed across the valley, they went on to the salt spring at the east edge of the valley. They found it trickling out of a crevice in the cliff at a point where the cliff approached the creek. It was only a tiny stream, and ran not far before disappearing into the ground.

"Where shall we locate our salt camp? If we run fires over here they'll scare all the game away from this lick."

"We had better do our boiling at our own campfire, I'm thinking. And when we set up some kind of winter quarters we'd better arrange to have our pots inside. It'll be some work to carry the salt water there. But pots boil more easily indoors in cold weather, and it'll save fuel and save work in the end."

"Then we shall have to lug the pots over here every time we want to fill them. We can't carry the salt water in our little camp pot."

"As to that part, I think we'd better dig out a trough—a trough that will hold just about as much salt water as we can carry. That spring is higher than the ground down here. We can make a spout and spout the water right into our trough. Then we'll pick up the trough, carry it over to camp and fill our pots."

"When shall we do that?"

"The sooner the better. We might dig a hole now to teach water till we can make a trough. We shall have to bring our pots over here to fill them for the present."

Jodo agreed, and they went to work at once. Ben said:

"Instead of dulling our tommy-hatchets in this gravelly ground, let's make us some wooden paddles to dig with."

That was what they did. And when their hole in the ground was large enough they went and brought their pots over, and also their tincup to dip with. Having filled one pot with the brine, they carried it back and set it on their campfire to boil. Then they returned for the other pot and soon had it on the same fire.

"Behold!" exclaimed Jodo. "The Armstrong and Henderson saltworks are already in operation!"

"The Armstrong and Henderson saltworks don't show up very well. But I believe they'll boil us down some money if we keep them cooking till spring."

A little while later, with their ax and an adz they had brought for digging out their canoes, they went up the creek till they found a big, suitable tree. That they cut down, and then they chopped off its top. From the smaller end they chopped off a piece four or five feet long on which they promptly fell to work with ax and adze and tomahawks. Both had done similar work before. In a comparatively short time they had hollowed out the piece of log till they had something similar to a box, with two short handles at each end to carry it by.

Next they cut down a small tree, split it open, and with their adze and tomahawks hollowed half of it into a long spout.

"The rest of our log will make a good canoe to ship our salt to market in," Jodo observed, as, with their trough and spout, they were starting back to their cliff-walled valley. "And when shall be begin to dig it out?"

"The first minute we can get a little time. The log will be easier digging while it's green. And we might need a canoe for some purpose—to cross the river if for nothing else."

On coming to the spring they fixed one end of their spout under the place where the water came out. The other end they rested in a fork. Now they put the trough under the spout's lower end, to catch the water.

"So far so good!" exclaimed Ben. "We've got no end of things to do here, but we must keep our salt-boiling under way every minute. Now for something else!"

"What first? Shall we put up some kind of shelter to live in? Or shall we set our traps?"

"The shelter first, by all means. Our trapping can wait as well as not—better than not. All furs will be sorry till cold weather makes them good. It's wasting valuable animals to trap them now."

"What kind of a shelter shall we make? A half-faced lean-to?"

Ben shook his head. "A lazy man's makeshift, that. I don't know anything better than an ordinary log cabin."

"How covered?"

"Well, I had thought of covering it with grass. That's one reason we brought that reaphook with us. But grass makes a sorry roof at the best. Too much danger of fire. We should never go away from home without half expecting to find our house in ashes when we came back; and we could never fall asleep without some fear of being waked by fire raining on us."

"Then what's to be done? Could we cave?"

"Caves do well enough for bats, but they make sorry dwelling places for human beings. The parts of them that are light and dry are always cold in cold weather. That is, if they have any such parts. And farther back they're damp and dark and chilly. This big cave here, with a stream flowing out of its mouth, is bound to be very damp. And you have to camp right at the cave's mouth so as to have your fire inside. Otherwise you'll fill the cave with smoke."

"Then how are we to live? In an outdoor camp, with the cliff to shed off the rain and snow?"

"No. Too hard to keep warm in an open-air cabin. My present plan is to build us a cabin under the cliff somewhere to the west yonder, where the cliff overhangs farther. It's just the right height, and the rock will make a fireproof, water-tight roof."

Three days were now spent in putting up their cabin. They had been careful to cut slim logs, so that two could lay them up in the wall. They notched deeply, so as to fit the logs closely together. In the outer end of the cabin they left a large opening for a fireplace, and a small opening in the same end, and rather higher up, for a window. The opening for the door was at one side of the cabin, and well back under the cliff. The cabin had, of necessity, been placed with its outer end almost even with the outer wall of the cliff, so that their chimney could start the smoke up the face of the cliff.

When the cabin had been completed, the two workers agreed that they were as comfortable as trappers in a wilderness could reasonably expect to be. So, the weather being still not cold enough to make furs valuable, they pushed their salt-making, and at the same time turned their attention to other matters. Important among these was the laying in of a winter's supply of meat.

Also, knowing that there was constant danger, they were all the time keeping a cautious lookout for Indians.

## CHAPTER V.

### Sailing an Underground Sea.

Game was plentiful in all the surrounding country, as well as very fat, and providing a winter's supply of meat was no big undertaking. To get as great a variety as possible, the young hunters killed several deer, two elk and a half-grown bear. Usually Spunky was taken along when they went hunting, to carry the meat back to camp, as they called their cabin under the cliff. There, after being salted, it was hung up on sticks in a back corner. They soon got the idea of taking home with them a few hundred pounds of cured meat, to sell.

"One thing we must do, and that very soon," Ben told Jodo one day. "We must either turn little Spunky loose and start him home while the grass is still good, or we must decide to keep him here all winter, and till grass starts up in the spring. Mean as the little rascal is, we can't turn him out to starve. And if we're to keep him here all winter, we must cut a lot of hay—enough to feed him during cold weather."

Their haymaking began next morning. Having only a reap-hook to cut with their task proved not a very easy or a very rapid one. But the grass was thick and waist deep all over the valley. And as it grew close up to the cliff, they had not far to carry it. In a few days a good-sized mound of cured hay was piled back under the cliff, and fenced around with poles and brush. The fence was to keep Spunky from eating it before the time.

The mule was kept at the end of his hair lariat at night, but in daylight he was hobbled and belled and turned loose to graze where he would. He seemed to like the valley here, with its abundance of grass, water and salt, and its great cliff to shelter him when bad weather came. Indeed, he showed himself so well satisfied that, later, he was allowed to run loose both day and night, with only his bell on.

Though their trapping had not yet begun, the two young men were always busy at something. Their haymaking finished, they went to work on their big log, first shaping it and then hollowing it out. When completed it was a light and well formed canoe. After using it for carrying purposes, they expected to be able to dispose of it at a fair price in St. Louis. They slid it into the creek, and then brought it down stream to the point nearest their cabin. There they concealed it under the creek bank, and under some overhanging brush and vines.

By this time rather cold weather had set, in, and the two young fellows lost no time in putting out their traps. They had only a few steeltraps, and those they set out up and down the creek. But Ben knew how to make deadfalls, and they soon had a large number of them scattered over the surrounding country. Both liked those better than steeltraps for most animals, because they killed the game outright instead of merely seizing it and holding it.

After two weeks of trapping, they had the outer walls of their cabin almost covered with 'coon skins, mink skins, otter skins and beaver skins, all stretched and tacked up there to dry.

In addition to their fur catching and their salt boiling, they were also saving their venison hams and the best parts of their other game. There was a fair market for wild meat in St. Louis. And both disliked the idea of slaying animals for their skins and then letting the flesh go to waste.

"We can add $50 to our winter's profits by saving the best pieces of our game," Ben told his partner.

"If we can, let's," answered Jodo.

The Cave of the Bats, as they had named the big cave with a stream issuing from its mouth, had from the first been an object of curiosity to the trappers. But both had been so busy that they had never ventured more than 50 or 75 yards into it—as far as daylight shone in. However, they fully expected to explore it further, some time when they were not so busy. One day, while out hunting, they came upon a rotten pine log and carried nearly a dozen of the knots to camp. Pine knots seem never to rot.

"Now we can explore our cave whenever we feel like it," Jodo remarked, as they threw down the knots by the cabin door.

"I have some curiosity to know what's in there besides bats, and how big and how long the hole is.'

"So have I, Benoni. And why not take a little peep in there tonight?"

"After supper tonight will suit me as well as any time."

Having tacked up the day's catch of furs against the outer wall, and carried over a trough full of salt water to fill their pots, they cooked their supper and ate it. A little later they were ready for their exploring trip. Not knowing what wild animals might have dens in the cave, they took all their weapons, and allowed the dogs to follow.

The stream that flowed out of the cave's mouth was perhaps a foot deep at the deepest part. But it had worn itself a channel, and there was plenty of room to walk in at one side without stepping in the water—a few yards of room, in fact. And the dry space widened as the explorers advanced. For the cave began to enlarge a hundred yards back from its mouth. Soon, as they held aloft their blazzing torches, the roof seemed 30 or 40 feet above their heads; and the walls had widened accordingly.

Many of the bats were now out; for the weather had grown rather mild again. But there were still thousands of them in the cave, clinging to the limestone roof. Disturbed by the torches, great flocks of them could be seen fluttering about overhead.

The first thing noticed by the explorers was a very perceptible and almost chilly breeze blowing out of the cave. It was strong enough to fan their torches. Also, there was a dull but very distinct roar inside. The stream, flowing over its rocky bed, made some noise, which the confinement of the walls magnified many times.

The two explorers advanced cautiously, not knowing at what minute they might happen upon a bear or a panther. Each carried his rifle in one hand and a blazing pine-knot in the other. The dogs, plainly somewhat bewildered, kept near their masters, looking and sniffing the air, but seemingly in doubt as to what to make of such strange surroundings.

After following along the edge of the stream for 200 or 300 yards, the two explorers came to where they could advance no farther. The whole floor of the cave was covered with water from black wall to black wall.

"An underground sea!" exclaimed Jodo, as they held their torches high to gaze as far as they could into the dark, watery cavern beyond.

Soon the little exploring party turned and made their way slowly back to the cave's mouth, gazing about them curiously as they went.

During the next few days, as they busied themselves with visiting their traps and deadfalls, boiling down salt water and hunting, they talked much of the big cave and its strange, underground lake. Finally they decided to make an effort to get their canoe into the cave.

After paddling the canoe up to the mouth of Cave Branch, they fastened a second rope to it. Then, one on either bank, they began to tow the light craft up the smaller stream. The water was deep enough in most places to float the canoe; but a few times they had to drag it over shoals—gravel-beds. But at last they got it to the cave and inside. There they pulled it well up on dry ground and left it. Just now they had more important things on hand than exploring caves—things that must be done in daylight. Their exploring would have to be done, and could just as well be done, after dark.

"There's one thing we must keep an eye out for while this wild weather lasts," Ben remarked, after they had returned to their cabin. "That's a bee-tree. I'm very fond of sweets, and especially of honey; and I'd like a good supply for the winter. We ought to be able to find a tree or two."

Next morning the two visited their traps early, then came back and busied themselves near camp till noon. After that they ate their dinner, then armed themselves and started out honey-hunting. They tramped as long as they could see, and did not reach their cabin till a good while after dark. No bee-tree had they discovered; but they had noticed a few bees flying about.

The partners did no honey-hunting the next afternoon; nor did they go hunting. They busied themselves with stirring off some salt, and with packing away a number of dry pelts. But after supper they agreed to explore the Cave of the Bats.

So, with rifles and lighted torches, and followed by Bose and Tinker, they entered the big cavern. The canoe was where they had left it. With an auger they had brought, and with their hunting knives and tomahawks, they gouged out in each end a hole large enough and deep enough for a torch to stand in. Then, with the torches in place, they towed the canoe along the shallow, noisy stream till they got it into the lake. They now drew it up to a block of stone, and after putting their guns in, they themselves stepped in.

When both dogs were in the canoe, the young trappers took up a paddle apiece, dropped to their knees, and fell to paddling. Both had had plenty of experience with canoes, and felt very much at home in this one.

On glided the canoe into the blackness, which parted a few yards ahead to let them enter, and shut together a few yards behind.

Sometimes, as the canoe glided through the dark, gloomy water, the walls widened till they appeared to be at least a hundred feet apart, and the arching roof rose till it looked to be 50 or 75 feet high. Jodo took a torch from its socket and, standing erect, held it aloft while they gazed about them.

"Strangest place I ever got into," he soon declared, in awed tones. "Wonder how deep this water is."

Ben thrust down his paddle full length. "Deeper than this paddle's long," he answered.

"Uncanny sort of a place to be in!" Jodo shivered a little, partly at the chill and dampness, and partly at their

(Continued on the following page.)


# "Baby Bonds" Will Down the Kaiser

Whenever a person helps his country he helps himself, but it is not always true that when a man helps himself he is helping his country. This is true, however, when he helps himself to a thrift stamp or a war savings stamp. When he purchases either he is making a gilt-edge investment and at the same time is aiding materially in the conduct of his country's war. It costs nothing to purchase stamps of either variety through this paper. Simply use the coupon herewith, and order some of these little kaiser killers by return mail.

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# Handicraft For Girls

By Dorothy Perkins

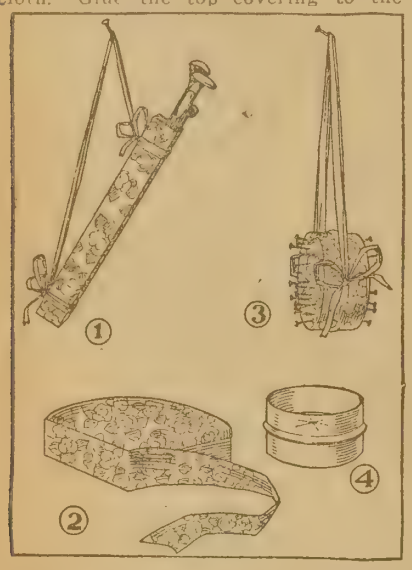
(Copyright by A. Neely Hall.)

## A Dresser Set in Cretonne.

A dresser set of cardboard boxes covered with cretonne of a small pattern, in colors that will harmonize with the furnishings of the bedroom is something every girl will be proud to own. The illustrations show a few of the cretonne covered articles, and you can fashion a handkerchief box and other pieces in the same way.

The hatpin receptacle in Fig. 1 requires a long, slender box such as hatpins are sold in. Sew or glue the cover on the box, cut off the end so the box will be several inches shorter than the hatpins and cover with cretonne, pulling the cloth tight over the sides and closed end, lapping the edges and sewing. Then tie a loop of ribbon near the ends of the holder by which to hang it up.

Figures 2 and 3 show two dainty pincushions. The square one is made of a small box cover, filled with sawdust, with a covering of cheesecloth fastened over the top to hold this filling in, and a second covering of cretonne fastened over the cheesecloth. Glue the top covering to the

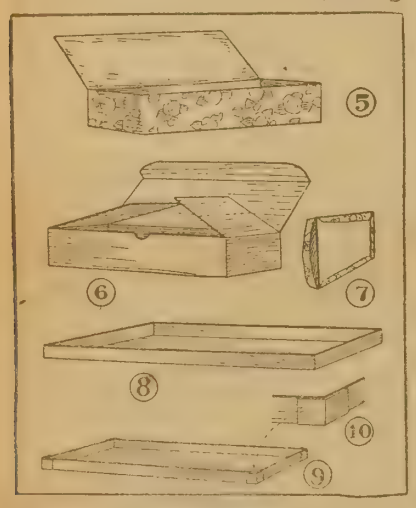



edges of the cover. Finish by sewing a band of cretonne around the edge.

The hanging pincushion (Fig. 3) requires two round pill boxes. Glue these together bottom to bottom, as shown in Fig. 4, then fill one at a time with sawdust, cover and finish by sewing a band of cretonne about the edge of the boxes, and attaching a loop of ribbon to hang it by.

## Glove Box and Brush Tray.

The glove box in Fig. 5 is made of a cracker box of the form shown in Fig. 6. First cut off the end flaps so they will be just long enough to turn down and fasten to the inside of the ends (see dotted lines in Fig. 6), and remove the flap on the lid. Cover the outside of the box and lid with cretonne first; then cut pieces of cardboard to fit the inside, bottom, ends and side; cover these with padding

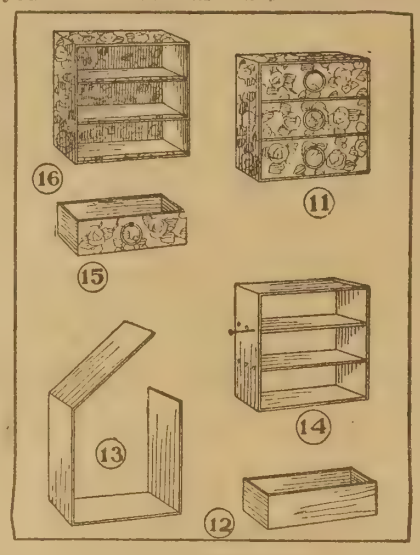



and then with silk (Fig. 7) and glue in place.

Get the cover to a shoe box for the brush and comb tray shown in Fig. 8. Reenforce the corners with pieces of cardboard folded and glued to them, as shown in Figs. 9 and 10. Then put on the cretonne covering. Cut one piece of the right size to fit the bottom of the cover and lap over the rim and on to the inside, then, after stitching this in place, cut a piece of cardboard to fit the bottom inside, cover it with cretonne (Fig. 7), and glue this covered piece to the inside of the cover. This completes the tray.

## Trinket Chest.

Figure 11 shows a dainty trinket chest with three drawers. After seeing how to construct it you can make yours to contain as many drawers as




you wish. Small cardboard boxes form the drawers (Fig. 12). You can get empty spool boxes at a dry goods store. Pile one upon another and figure out the dimensions for the chest. Then fold a piece of cardboard as shown in Fig. 13 to make a case of the right size, and after bringing the folded ends together, bind them with a strip of paper (Fig. 14). Next cut strips of cardboard for shelves, and fasten these between the ends of the case by running pins through into their ends, as shown in Fig. 14. When the shelves have been adjusted properly, cover the back, ends, top and bottom of the case with cretonne (Fig. 16), also the front of the drawer boxes (Fig. 15), and sew a fancywork ring to the center of the front of each drawer (Fig. 11) by which to open them.

# Trappers of the Ozarks

(Continued from the preceding page.)

strange surroundings. "And just look at that branch cave making off!"

"Yes. I've noticed several of those."

"Do you s'pose there's any danger of our getting lost in one?"

"Not while we've got our lights and keep our heads. People who lose themselves in caves commonly lose their heads first. IIf we did get lost, though, no telling when we could find our way out. But let's paddle on and try to reach the other end of this place."

For a good while they kept advancing, gazing about them in awe and wonder. The blackness and gloom that shut them in, all but one little spot of light, seemed to oppress them. Even the dogs must have felt the gloom, for they could be heard whining shiveringly from time to time.

"How far would you say we've come, Ben?" inquired Jodo at length.

"A mile at least. A mile and a quarter would be my guess."

"That's a long, long way to bury yourself in the earth." The young fellow shivered a little. "What if we upset our canoe and put out our pineknots! Do you think we should ever see daylight again?"

"Hard telling, that, Jodo boy. We should certainly have a time of it. And we should stand a fine chance never to see any kind of a light again. But we mustn't upset our canoe."

"Plenty of canoes have been upset. There's always some risk. Hadn't we better turn round and paddle back?"

"But we haven't finished exploring this subterranean sea. We don't know how long it is."

"What matters it, after all, how long the sea happens to be? And if we found the other end, it would just be something like the end we've already seen. This chilly, soggy, gloomy place gets onto my nerves. I've never made any trips to the center of the earth till now."

"Neither have II. All right! Back we go, whenever you say the word! This is certainly a depressing sort of a place."

"Well, I say the word now, if you leave it to me."

Just then Tinker, resting his paws on the edge of the canoe, pointed his nose straight toward the rock-roof and proceeded to emit a long-drawn-out, dismal howl. When the howl was ended, Jodo reached back and patted him.

"Little dog, 'them's my sentiments'! That's exactly the way this black hole makes me feel. We'll get out of here!"

They did not turn the canoe, but the paddlers merely faced about and began to paddle with the other end first.

"Well, when we go home, we can tell that we've sailed an underground sea," Jodo remarked.

"Yes—or navigated it. That would be a more accurate word, I suppose."

"But we could sail it. Just feel that wind, and watch how it ripples the water! And it's blowing our way too. Lend me your paddle, Benoni. We will sail it yet."

Jodo took off his buckskin coat and knotted one sleeve around the handle of his own paddle, and the other around the handle of Ben's paddle. Then he held the paddles up, one in each hand, with the coat spread between them. The coat caught the breeze, and the light craft was soon moving before the wind. And it sailed still faster after getting under way.

(To be continued.)

## Will Get Fruit Cars.

Announcement has been made that Director General McAdoo, in charge of the railroads for the government, has promised the fruit and potato growers of central Washington that they shall have approximately 60 cars a day delivered to them during the next few weeks for the purpose of shipping their products. Similar action is being taken, it is understood, in regard to the shipping conditions in other states of the northwest. National Food Administrator Hoover is cooperating with northwestern leaders to secure adequate shipping facilities.

### Curved Headstones.

In the old Erie Street cemetery, Cleveland, Ohio, is to be seen an interesting scientific phenomenon which, as yet, has not been explained. Not even the United States geological survey has an explanation to offer. In this cemetery are 55 curved stones, 50 of them curving west and five to the east. These stones are marble and about two inches thick.



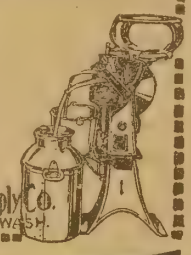


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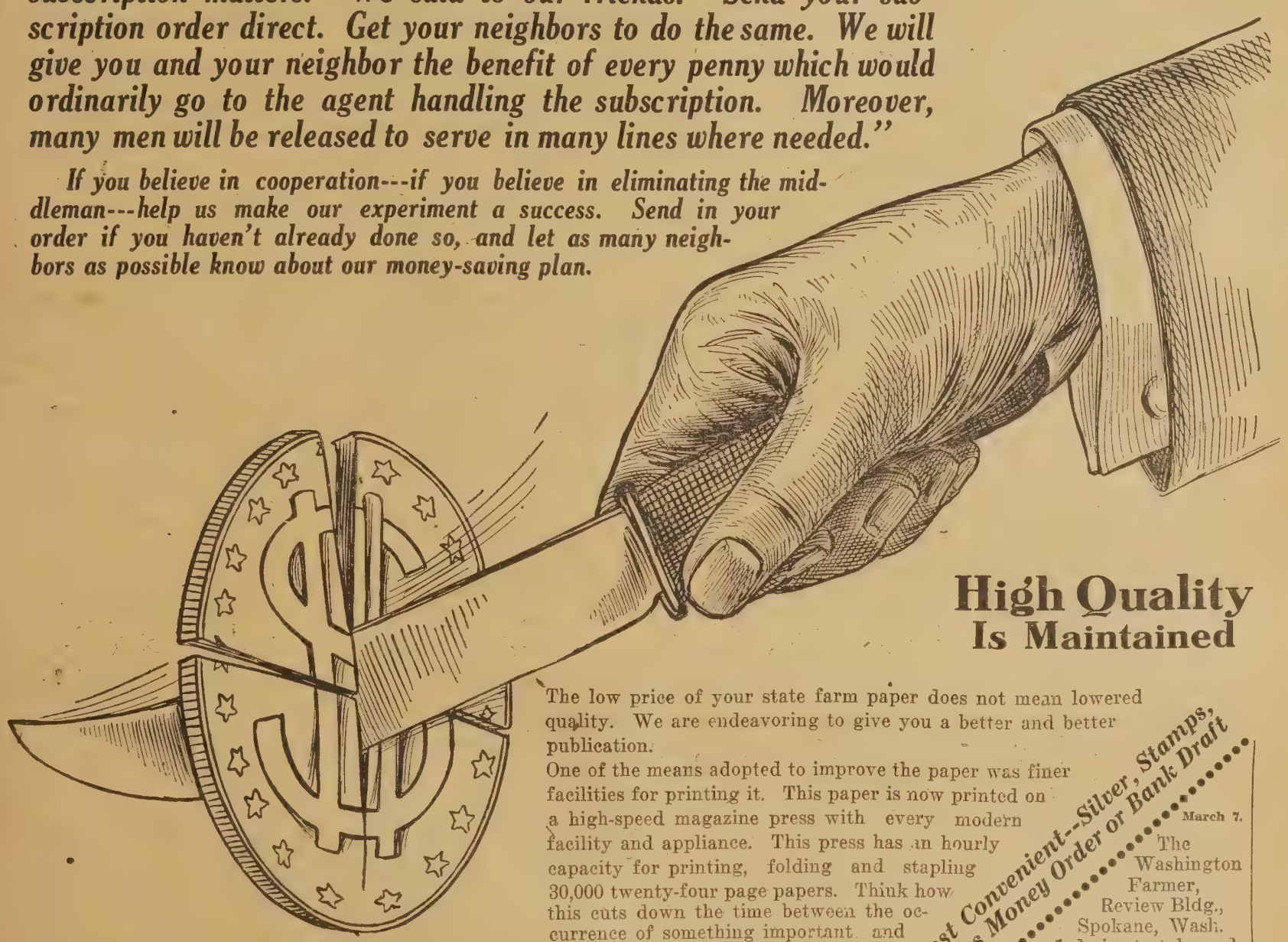
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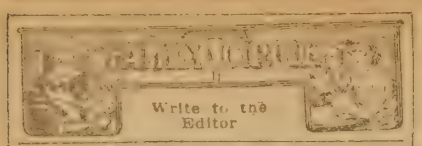
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ALICE W. BARLAND,
Editorial Contributor.

# Cheaper Than Meats

These are cheaper than meats and good. They should be used, but eat some milk or cheese besides, says a circular of the United States food administration.

**Kidney Bean Stew.**

One and one-half cups dried kidney or other beans, two cups canned tomatoes, half a cup of rice, two tablespoons flour, one onion, one tablespoon salt.

Wash the beans, put in covered kettle, and soak over night in two quarts of cold water. Cook the beans slowly in the water in which they soaked. If necessary, add more water to cover and continue the cooking until they are nearly tender, usually about two hours. Wash the rice, cut up the onion and add with the tomatoes to the beans. Cook until rice is tender—about 30 minutes. Mix the flour with a little cold water and stir in carefully to thicken. A small piece of salt pork cut up in cubes and added to the beans at the beginning of the cooking gives a pleasant flavor to the dish.

This stew will make a whole meal in itself, with bread and butter and fruit for dessert, to serve five or six people.

**Pea Souffle.**

Four tablespoons flour, four tablespoons fat, one cup skim milk, one cup mashed cooked peas, (any kind), three eggs, one teaspoon salt, one-fourth teaspoon pepper, few drops of onion juice.

Make a white sauce from flour, fat and milk, as in preceding recipe. Mash the cooked peas to a pulp. Beat white and yolks of eggs separately. Mix vegetable pulp, seasonings, sauce and well-beaten yolks. Fold in stiffly-beaten whites, put in greased baking dish and bake in slow oven until firm. Lima beans, split peas, cowpeas, or fresh or canned green peas may be used.

## MAKE A BIRD BATH

### See the Birds Enjoy Themselves

It is still winter. The birds are still, most of them, taking their baths in the sunny southland. But "the day is always coming when the birds go north again." Within a few weeks they will be here. Within a few months the hot days of summer will be here and the pools and streamlets will be dried up in many instances.

Make a bird bath. It need not cost you a dollar, yet every day of the summer you can see your little feathered friends of all the colors of the rainbow fluttering about in it with unconcealed joy and thankfulness.

Any boy or girl or man or woman with a little ingenuity can make a bird bath. A basin of any kind will do if there is some source of supply of clean, cool water. If you can have a little fountain in the center of it so the birds can take a shower bath you'll have just that much more fun watching them, but it is not absolutely essential. Clean water, not too deep, is the first and only absolute essential, and water is the cheapest thing on earth in most places. Try it this season. Try it right away—at the same time that you build your bird house. Everybody's going to build a bird house this year.

# Hoover Recipes

**Potato Bread.—One-Pound Loaf or Rolls.**

1 and two-thirds cup mashed potatoes.
1 teaspoon salt.
1-4 cake yeast, dry or compressed.
2 tablespoonfuls lukewarm water.
3 cups flour.

Method: Clean potatoes, boil with skins on, pare, and mash thoroughly, add salt, let cool, then add yeast, part of flour and let rise till light. Add remainder of flour, knead thoroughly, making very stiff dough. Let rise till treble in bulk, shape into loaves, let rise in pans till double in bulk. Bake 45 or 50 minutes.

**Corn Meal Bread.**

One egg beaten light, add to this 1 pint of buttermilk or sour milk (not too sour), 1 teaspoonful soda, add 2 1-4 to 2 1-2 cups of corn meal (preferably white, if yellow is used add 1-4 cup of white flour), 1 tablespoon fat melted in pan for baking. Pour mixture into pan with melted fat, being careful not to have the pan too hot. Bake 15 minutes in a quick oven. Sugar may be added if desired. The batter is thin, and should be baked in a thin loaf.

**Oatmeal Bread—a One-Pound Loaf.**

1 cup liquid.
1 teaspoon salt.
1 cup rolled oats.
1-4 yeast cake, dry or compressed.
1-4 cup lukewarm water.
2 1-2 cups white flour.

Method: Scald the liquid, add salt and pour over rolled oats; cool slowly, letting stand one-half hour. Add yeast and sifted flour, knead and let rise until double its bulk. Knead again, put into loaf, let rise in pan until light. Bake in moderate oven 50 or 60 minutes.

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These recipes, taken from a pamphlet issued by the U. S. food administration, are good for children and grown-ups, too. The recipes provide enough for a family of five.

**Milk-Vegetables Soups:** One quart milk (skim milk may be used), 2½ tablespoons flour, 2 tablespoons butter or margarine or other fat, 1 teaspoon salt, 2 cups thoroughly cooked vegetable finely chopped, mashed or put through a sieve. Spinach, peas, beans, potatoes, celery or asparagus make good soups. Stir flour into melted fat and mix with the cold milk. Add the cooked vegetable and stir over the fire until thickened. If soup is too thick, add a little water or milk.

**Rice Pudding:** One quart milk, 1-3 cup rice, 1-3 cup sugar, 1-2 cup raisins or chopped dates, 1-2 teaspoon salt, 1-8 teaspoon ground nutmeg or cinnamon. Wash the rice, mix all together, and bake three hours in a very slow oven, stirring now and then at first. This may be made on top of the stove in a double boiler, or in a fireless cooker. Any coarse cereal may be used in place of rice.

**Saves Peanut Butter.**

To the Editor: An economy worth while is, when using peanut butter on the table, to dilute half with water and mix thoroughly, add a little salt. Do not mix a very large amount at a time, as it will sour easily if kept too warm. Most everybody likes it prepared this way as it does not stick to the teeth as when used clear.

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2062—Ladies' waist. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires two and a half yards of 44-inch material for a 36-inch size. Price, 10 cents.

2170—An ideal house dress. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires for a 38-inch size, six and seven-eighths yards of 36-inch material. The dress measures about three yards at the foot. Price, 10 cents.

2166—Boys' "overall" or play suit. Cut in four sizes: 2, 3, 4 and 5 years. It requires one and one-fourth yards for the blouse and two and one-eighth yards for the overalls, of 27-inch material, for a 3-year size. Price, 10 cents.

2372—Girls' dress. Cut in four sizes: 2, 4, 6 and 8 years. Size 6 requires three and one-fourth yards of 36-inch material. Price, 10 cents.

2200—Girls' dress. Cut in five sizes: 4, 6, 8, 10 and 12 years. It requires three and five-eighths yards of 36-inch material for an 8-year size. Price, 10 cents.

2364—Ladies' kimono. Cut in four sizes: Small, 32-34; medium, 36-38; large, 40-42; and extra large, 44-46 inches bust measure. Size medium will require six and five-eighths yards of 36-inch material. Price, 10 cents.

1906—Girls' dress. Cut in four sizes: 6, 8, 10 and 12 years. It requires one yard of lining 36 inches wide for the underwaist, and three and one-fourth yards of material for the dress, for an 8-year size. Price, 10 cents.

**Catalogue Notice.**

Send 10 cents in silver or stamps for our up-to-date spring and summer, 1918 catalogue, containing 550 designs of ladies', misses' and children's patterns, a concise and comprehenesive article on dressmaking, also some points for the needle (illustrating 30 of the various, simple stitches), all valuable hints to the home dressmaker.




Please fill in this order and mail with remittance to:
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Enclosed find.....cents for which send me the following:

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Pattern No.....Size..... Pattern No.....Size.....

Name .....

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R. F. D. No.....Box No.....Street No.....

Be sure to give the pattern number and the correct size.

## Household Hints.

To the Editor: I notice in The Farmer your invitation ot write to the editor. I am sending two very good Hoover recipes which you might use in your columns, also a couple suggestions.

**Brown Bread I.**

Two cups sour milk, one teaspoon soda, two and one-half cups graham flour, one tablespoon molasses, salt. Mix and bake for 35 or 40 minutes.

**Brown Bread II.**

One even cup corn meal, two heaping cups graham flour, one cup molasses, one teaspoon soda, one teaspoon salt, one pint hot water. Mix water and molasses, add to other ingredients. Stir well and cook in greased cans. Steam for three hours. Dry off in oven.

**When Canning Beef.**

In canning beef I manage it so as to can roast and steak at the same time. I add a good deal of finely cut suet to the roast and water as for ordinary roast. To save using so much fat in filling the cans of steak I use the liquid obtained from the roast, as there is more than enough to fill the cans of roast.

**Removes Fish Smell.**

To remove the smell of fish from your frying pans rinse with vinegar before washing. MRS. L. L. R.
Buckeye, Wash.

## Scalloped Potatoes and Cheese.

Arrange a layer of sliced raw or boiled potatoes in greased baking dish and sprinkle with grated cheese and a little flour. Repeat until dish is nearly full. Pour milk over the whole, about one-half cup to every three potatoes. Skim milk is good. Bake in a moderate oven until done. The length of time required depends upon whether the potatoes are raw or boiled and whether the baking dish used is deep or shallow. Boiled potatoes baked in a shallow dish will take only 20 minutes. Raw potatoes in a deep dish may take as much as 1½ hours.

**A Shepherd's Pie.**

Grease a baking dish; cover the bottom with mashed potatoes. Add a layer of cooked mince meat or fish, seasoned well and mixed with meat stock or gravy. Cover with mashed potatoes. Bake long enough to heat through—20 to 30 minutes.

**Good Mashed Potatoes.**

Peel the boiled potatoes, mash and beat until very light, adding salt, butter or oleomargarine and hot milk, a half cup of milk to six potatoes. If dinner is not ready to serve pile lightly in a pan and set in the oven to brown.

# War Admonitions

The following may be found on posters in some sections of the country: "The meatless days, the wheatless days, the sweetless days and heatless days, which the nation is observing, in order to win the war, should cause some of our men to take notice of the treatless days and smokeless days."

"Do not waste, while your wife saves. Do not smoke while your family observes wheatless, meatless and sweetless days. When the railroad companies are unable to furnish transportation for food and travelers do not require them to haul smoking cars on every train in order to accommodate the smokers, but if you do require it, then you should pay the extra cost yourselves and not require the traveling public to pay it."

**Soap for Wounds.**

Common yellow soap, the kind used by housewives in washing clothes and dishes, has been found to be a wonderful cure for wounds in French hospitals and its use has spread to the British medical stations. A solution is made from a cake and injected into soldiers' wounds even in the latest instances into the deepest bullet holes, where it has proved itself to be a superior antiseptic to hydrogen peroxide and most other germ killers, and in addition a strangely effective healer of torn tissues

Wounds treated with soap need fewer dressings and lessen pain far more than do wounds treated with other antiseptics. These facts greatly expedite the work of the surgeons, who can handle more men than when using other solutions.




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# Prosperity Hits Western Canada

Big crops with war-time prices have put western Canada farmers on a prosperity footing that was undreamed of in pre-war days.

54 bushels of wheat and 90 bushels of oats to the acre were not uncommon yields last year; the average being 30 bushels of wheat and 53 1-3 bushels of oats. With wheat at $2.20, government set price, it is scarcely to be wondered that probably more western Canada farmers are wintering in California than ever before.

As another evidence of their prosperity more than sixteen thousand motor cars were bought in Saskatchewan during the year, which was a greater number than the total number of cars in Saskatchewan up to 1917. Over-subscription to the Victory Loans and large contributions to various war relief organizations also point vividly to the wealth of the country.

Many of our neighbors' richest farmers acquired their land free, while still others bought their land from the Canadian Northern railway at $15 to $25 per acre.

Canada still has 128,000 (160-acre) farms to give free to settlers, and countless other farms for sale at low prices. Detailed information and FREE BOOK may be had by writing P. P. Brostedt, D. F. & P. A., 805 Hastings st., Vancouver, B. C.—Adv.

## Designs Her Own Clothes



The young lady in the picture is Miss Mary Goody, daughter of Mr. and Mrs. J. A. Goody, 2322 Monroe street, Spokane. She is now a student in the department of elementry science of the Washington State college at Pullman, Wash. The hat she is wearing was designed and made by her as a part of her class work. It is made of velvet, buckram, "wiring," lining, beads and other smaller items, the total cost of which was less than $4—the cost of the hat to her. The hat, duplicated in quality and workmanship, in the trade would command not less than $18.

The dress she is wearing was likewise designed and made by her in her class work. Five yards of crepe poplin are in the dress, along with silk thread, buttons of best quality, and other items, the total of which cost $8.50. A. L. Rogers, the pioneer merchant of Waterville, Wash., who saw the dress on exhibit during Housekeepers' week at the state college, stated that a dress of its quality and workmanship would command, in the trade, not less than $18.

Miss Goody made her hat and dress in the one-year millinery and dressmaking course which she is taking at W. S. C.

**New Burglar Alarm.**

Partly mechanical and partly electrical is a Chicago inventor's alarm that fires five blank cartridges in succession if a burglar enters or tries to wander around a building.

**Silk from Italy.**

In 1916 the total value of silk of all classes exported to the United States from Milan, the chief center of the trade in Italy, was $10,372,813, against $14,276,474 in 1915.




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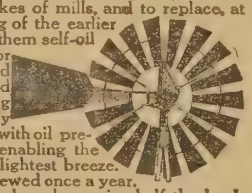
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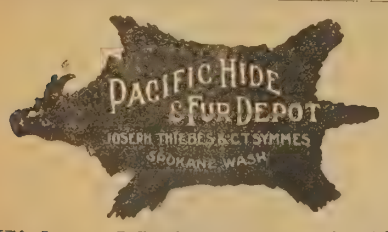
has become so popular in its first three years that thousands have been called for to replace, on their old towers, other makes of mills, and to replace, at small cost, the gearing of the earlier Aermotors, making them self-oiling. Its enclosed motor keeps in the oil and keeps out dust and rain. The Splash Oiling System constantly floods every bearing with oil preventing wear and enabling the mill to pump in the lightest breeze. The oil supply is renewed once a year. Double Gears are used, each carrying half the load



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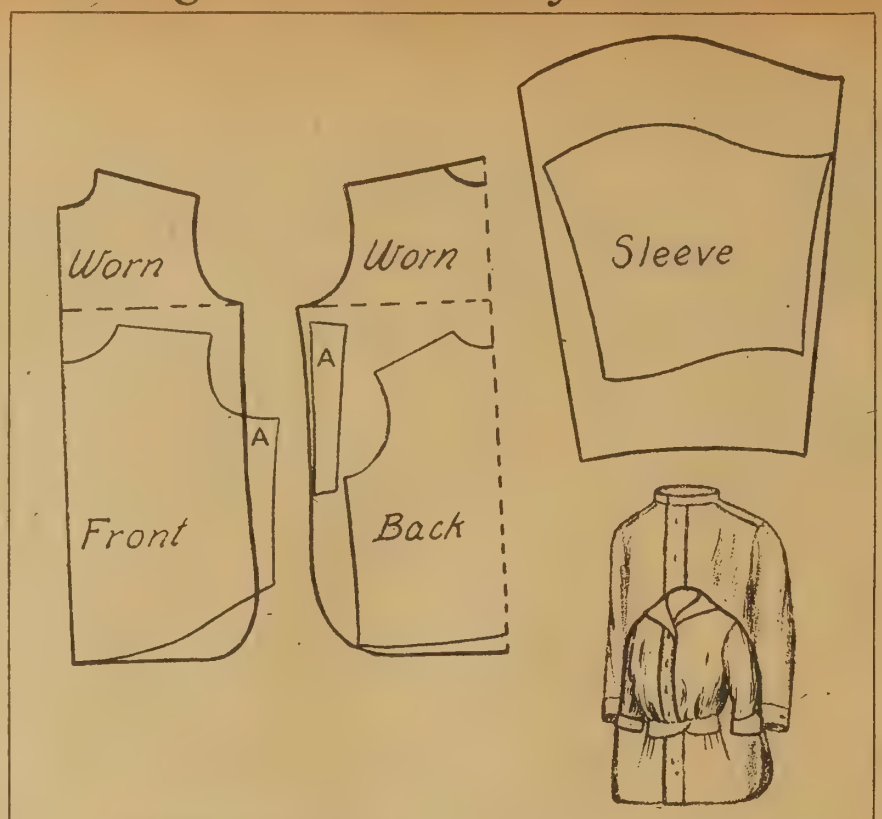

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# Making Over the Partly Worn Shirt




**By using white material for the collar and cuffs, a waist can be made from a partly worn shirt.**

Men's clothing may be cut over into smaller garments, says Hazel Manning in a bulletin of the Wisconsin College of Agriculture. Overcoats make good top coats for both the small boy or girl or even a whole suit for a boy. Under garments, especially woolen ones, may be easily made over for children. The lower part of a good woolen shirt will make a warm petticoat for a child.

**"The Tale of a Shirt."**

The story of the things that can be done with a partly worn shirt is a long one. In this day of gay striped madras the lower part may be used to make a dress for a little girl or a blouse for a small boy. Even mother can make a shirtwaist for herself by using plain white material for the collar and cuffs. It will be necessary to finish the lower part with a belt or peplum since there will not be enough material to extend below the waist line. The sleeves may also have to be shortened.

**The Little Touches.**

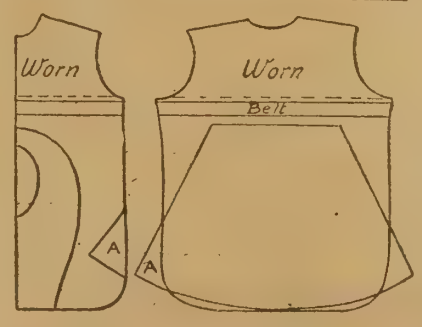
Bias bands for trimming plain colors can be cut to very good advantage from shirts. Pretty collars and cuffs for plain dresses or suits may also be cut from these partly worn garments. A small round apron for mother or a little sleeveless apron for sister, to be worn after school and at meals, may be cut from the tail of this useful garment—the partly worn shirt—with very little trouble.

**Using the Silk Skirt.**

Striped silk always makes pretty collars, cuffs and belts as well as bias folds and facings for plain materials. A silk shirt lends itself well to these uses.




**An old shirt made new—A shirt may be cut into a serviceable blouse for a little boy.**




**A shirt-apron—The skirt of the apron may be cut from the back of the shirt and the upper part from the front.**


The HOOVER DRESS



A practical and attractive house dress approved by the U. S. Food administration, as a cooperation war-time conservation.

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Very well made in good quality Chambray Gingham, in pink, lavender and blue, with white binding on all edges. The collar and the detachable "button-on" cuffs are of wide-wale white pique; excellent quality white pearl buttons.

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The present war is the greatest, most far reaching and stupendous conflict in the history of the world. You and your family will want to keep in touch with every move in this tremendous drama of the nations. You can do so at low cost by accepting our clubbing offer. The Twice-a-Week Spokesman-Review presents a reliable, condensed review of all current events.

Being a member of the Associated Press, the important happenings are flashed to it without delay from every capital and village, and from every far flung battle line, where the history of our day is being recorded. It pays particular attention to the war news of special interest to the people of the Pacific Northwest. It reports the progress of the draft; and from its pages you will learn who among your friends and neighbors have joined the colors.

If any of the young men you know are killed, injured, or taken prisoner on any of the battle fronts, you will be given the information in The Twice-a-Week Spokesman-Review as soon as it is issued by the military officials.

In addition to this intensely interesting and important war news, the Twice-a-Week brings you an accurate summary of local, state, national and international events. It is published every Tuesday and Friday. Purchased in any other way it costs $1 per year. Certainly an offer so liberal should appeal to every one of our readers. Every issue contains important news. If you have not acted already send in your dollar now.

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**The Washington Farmer**
SPOKANE, WASH.

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# Horse Ailments Are Genuine Scourge

(Continued from page four.)

that react should, of course, be destroyed and the disease should be handled by those in authority of the sanitary police measures of the state in which the animals are owned. Frequently indemnities are paid for animals destroyed on account of their being affected with glanders and in many respects this greatly assists in the control of the malady. Owners should be particularly careful in purchasing horses where glanders is known to exist. It would be well to demand an ophthalmic mallein test before purchase because this precaution will generally be the means of protecting the entire band of horses in which the newly purchased animals are placed.

Glanders, apparently, is not as easily contracted as is often supposed.

Dark, badly ventilated and dirty stables are the principle means whereby the infection is spread. Watering troughs doubtless play some little role in the spread of this disease.

Abortion in mares is not a disease of great importance of the Pacific northwest. Apparently certain districts have been troubled with what might be termed an infectious abortion of equines. Generally speaking, these troubles can be largely traced to errors in watering and diet. Frequently trouble has been reported in districts where an unusually cold period has been experienced. The ice naturally prevents horses ranging outside from drinking at will. For this reason horses are frequently caused to go a considerable time without water and, when permitted to drink, gorge themselves so completely that a chilling is brought about and abortion results. Probably the feeding of moldly food or rye hay which contains much smut or clover on which ergot has formed has been responsible for reported loses.

**Navel Disease in Colts.**

Navel ill in colts is another source of great loss to breeders. This could be largely avoided if owners would make the necessary arrangements for their mares at foaling time. Clean stalls are absolutely essential. The infection that produces this disease is, generally speaking, taken into the colt's system through the naval cord or possibly frequently through the digestive tract. A precaution could hence be had by washing off the navel cord soon after birth with a solution of formaldehyde. Also, it would be well to bathe the mother's breast with this solution because frequently the colt is thought to take the infection into its system while nursing. For those animals which show the infection, there has been developed a bacterin or treatment which will in most cases, cure a considerable proportion of those showing infection.

This treatment must be given early in the onset of the disease and can be administered only by qualified veterinarians.

During the winter months probably no disease is so prevalent as food and forage poisoning. In many districts this trouble has taken on the name of stack bottom poisoning and in other sections it has been termed straw stack poisoning. Frequently the name forage poisoning is used. All of these troubles are found to be closely associated with the formation of certain poisonous molds. Aside from avoiding straw stack bottoms during the spring months little can be suggested in a precautionary line other than carefully watching the animals that show symptoms of the infection and immediately placing them under treatment. The onset of the disease is so sudden that occasionally little can be hoped for by medical intervention. During the last year there has been perfected a certain vaccine which has been largely used in the state of Illinois. It is reported that it has been possible to immunize horses against this nature of food poisoning. Very frequently foods that are poisonous for horses are not poisonous for cattle, and valuable foods can hence be made use of by utilizing them for cattle or sheep feed.

**Pasture Poisoning.**

Poisonous plants doubtless play a considerable importance in maladies that are experienced by range breeders in the northwest. Lupine is known to be poisonous under certain conditions. The same may be said of loco weed, and, to a limited extent, death camas, fern or braken and horsetail weed or rush. These poisonings are always seen during the fall or winter months of the year and are largely brought about by a shortage of foods. As a rule a majority of these poisonous plants may be guarded against by the early administration of antidotes to horses which are showing symptoms of plant poisoning. No antidote seems to be so good as potassium permanganate given in half drachm doses, together with a small amount of aluminum sulphate. For the bowel paralysis which frequently results from some of these plants good results have been had by resorting to the use of drachm doses of formin.

As a rule all of the maladies of horses may be largely guarded against by proper care and handling. A practical system of personal hygiene for the horse makes him doubly able to successfully resist disease. With good food and the proper counsel and use of your local veterinarian your equine losses may be brought to a minimum.

# Poultry Losses Are Enormous

(Continued from page twenty-nine.)

stock, if possible, should have wide range and not too much feed during the fore part of the day. In the evening a good feed should be given. The fowls that rustle on the farm for a large part of their living usually lay eggs that hatch well. This is not probably all because of the rustling but partly because they find in the fields some feed that is necessary and not always supplied by the poultryman. A well balanced ration, however, and plenty of exercise make for vigor, especially reproductive vigor.

Another thing, the stock must have good housing. That does not mean expensive houses. It means rather open fresh air houses. Nothing is more conducive to vigor in the fowls than fresh air. Crowding them into small ill-ventilated houses will produce a loss of vigor quicker than anything. Better let them roost in the trees than in close houses. Poor housing, therefore, by affecting the vigor will affect the hatching quality of the eggs.

The importance of the male is often overlooked. The hen makes the egg, but the chick is not made from the egg; it is made from the fertilized germ in the egg, and the chick comes from this germ which is the combined product of male and female. It is true that the chick as it develops in the shell feeds upon the egg, but the egg does not make the chick any more than the feed that the poultryman gives to the chicks in the brooder makes the chicks. The care and feeding of the male is as important as that of the hen. The male must be good, otherwise all the eggs from the breeding pen will not be good for hatching. The male should be tested before the regular season for hatching. That is a few of the eggs from the hens to which he is mated should be incubated to see whether he is fertilizing them or not. It sometimes happens that a male will not fertilize the eggs, and it should be known in time so that another male may be substituted.

An egg laid two days after the male has mated with the hen will be fertile, but he may not mate with all the hens when first put in the pen, and it will not be safe to use the eggs before a week after mating if a good per cent fertility is desired.

One good male will serve 15 to 20 hens. I have had three males with 80 hens and got good fertility. For the heavy and slower breeds, however, there should be fewer hens to the male.

There are two reasons why more pains should be taken this year than ever before in hatching and rearing chicks; first, a patriotic duty to conserve all possible food supplies. Food is wasted when eggs that are not fertile are set and when chicks are hatched from eggs that come from breeding stock of low vitality. The second reason for greater efficiency is that eggs are higher in price this season than ever before, and the poultryman can not well afford to incubate eggs that are low in fertility and that do not produce livable chicks. The eggs may be just as good for eating even though the germ from which the chick comes will not produce a good chick.

## Set Aside a Steer.

When the stockmen met in conference in Spangle recently, Frank T. McCullough, representing the war savings stamp movement suggested to them that when they prepared the next shipment of stock to market they set aside one animal of the shipment, the sale price of which should be used in the purchase of thrift stamps or war savings stamps. He declared that the purchase of such stamps was an excellent investment as well as a patriotic act.


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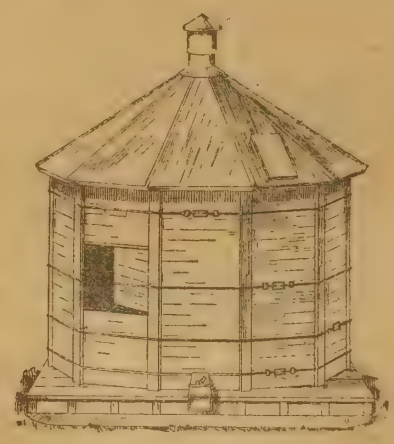
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My dears, a lot of you have done some good work in the contest during these weeks, and I know you are anxious to know who has won. I was going to tell you this week, but I did not get quite ready. But watch for next week's corner and the winners will be announced.—Aunt Nellie.

Address all letters to Aunt Nellie, care of The Washington Farmer, Spokane, Wash.

**Some Curious Pets.**

Dear Aunt Nellie: One beautiful spring morning I heard a peculiar noise, just outside the back door of our little kitchen. I went quietly to the door, opened it, and looked out. There, perched on some carrot tops, and trying to eat bits of carrots, was a curious little bird. It had a yellowish-green back, bright green tail, and dark brown wings. Its head was small and round, and its beak, which was sharp and black, was decidedly crossed. This curious little cross beak finch was surprisingly tame. It would pick at the carrots, then turn its head and look me over. It surely decided that I would not harm it, because it was not at all afraid of me. When I took a saucer of fruit out to cool, the little finch flew up, perched on the edge of the saucer and began to eat the fruit. Then I went inside the house and the little bird flew away. After a while I walked around the house looking for it. Soon the pretty finch came from a nearby tree, lit on my hand, and looked through an open window into the sitting room of our little home. After a while I had to go to work in the kitchen and our old gray cat caught and killed my precious little cross beak finch. One evening about four weeks after this my father was walking in our orchard when he saw a very large brown bird perched up in an apple tree and eating the fruit. He came to the house, got a large rifle and went back to the orchard. He stood behind a tree and shot at the strange bird. It fell to the ground as if it had been killed, and father brought it to the house. By this time the bird, which proved to be a great horned owl, was recovering, for it had only been stunned. It stood up, opened its large round eyes and stared at us. We saw its sharp curved beak, and sharper claws, and mother wanted to have it killed. But my sister and I thought it so pretty, with its smooth brown feathers, its large yellow catlike eyes, its feathered legs, and its tufts of feathers on its head that looked like horns, that we wanted to keep it for a pet. Mother said we might at least for a while, so we put our new pet in the coal shed and closed the door. After supper my older brother wanted to feed it, so he put a cooked bean on a long, pointed stick and went to the coal shed where the owl was kept. He was afraid of the owl, but he pointed his stick at it, and put the bean in its mouth. Mr. Great Horned Owl did not like this way of being fed, so after a few days I fed him with a teaspoon because he would not eat unless the food was put in his mouth. He seemed to like me more than any other one of our family. I think it was because I fed him more, and didn't poke him with a stick. When he saw me coming with a spoon and tomato he would open his mouth and wait to be fed. But after being kept in this manner about eight days, Mr. Owl thought he would like to go back to his mate and little ones, which were somewhere far away. So he escaped one night and flew far, far away to his nest. Now these two curious pets are both gone, but there is another still. This is Mistress Spider Grey. She has her home, which is a large silver web, on the outside of a kitchen window. There she lives, catching flies and bugs in her web. She now lives in a little tight bedroom at the top of the window in the daytime and at night, when we have the lamps lighted, she comes down in her silver web to see the bright light.—Alice Clinesmith, age 13, Lantz, Wash.

**Mother Knits for the Red Cross.**

Dear Aunt Nellie: I am writing to you for the first time. I am 14 years old and will be 15 the 25th of May. I am in the seventh grade. There are two other girls in my grade. My teacher's name is Miss Short. I like her fine. I like to go to school. There are 12 children going to our school now. I have about one-half of a mile to go to school. We have two horses. Their names are Frank and Ned. Papa wants to sell them or trade them for a good Ford car and $150. They are very large horses, one is black with a white face and white feet and the other is black with a little white place in his forehead. We have two cows and one calf. Our cows' names are Red Wing and Cherry. The calf's name is Biddy. Mama is making six pounds of butter a week. Mama is knitting socks for the Red Cross now. I can knit. I will start on some socks as soon as I get the yarn. I am knitting quilt blocks now. I have two cousins in the army, but no brothers. Both of them are too young. One is 12 and the other is 7. The oldest is Oscar and the other is Virgil. Oscar is in the fourth grade and Virgil is in the second. I have three sisters. Their names are Lillian, 21; Rosa, 17; Dorothy, 4. My sister Lillian is married and she has two little children. Their names are Charles, age 3, and La Vinia, age 2, and they are so sweet.—Lydia Lowery, box 51, Benge, Wash.

**Rides Horseback a Great Deal.**

Dear Aunt Nellie: I have been reading the other cousins letters in the Farmer for a long time. I think all of the cousins write nice letters. I am going to school now. Our school began September 17. There are 19 pupils enrolled. Our schoolhouse burned about a year ago and we have a new modern building now. It has a basement with a furnace in it. We have a good time playing games at intermissions. I live in the country and I don't like to live in town. I like to ride horseback and I do ride a great deal. I had a little black pony named Midget, but she died suddenly about three weeks ago. We don't know what caused her death. I felt very badly about it. I have a pretty little black horse that will be three years old in March. My papa gave it to me when it was just a tiny colt and I named it Monte Claude. My brother is going to break it for me to ride next spring. I have one brother, 19 years old. His name is John. I am 13 years old. My birthday is the 17th of December. Have I a twin? If I have I wish she would write to me. One of my best friends is writing to you. Her name is Mildred Riley. She goes to the same school I do and we both are in the eighth grade. I send my love to Aunt Nellie and to all the cousins.—Ellen Christine Elsensohn, R. F. D. 2, Pomeroy, Wash.

**Wants the Corner to Grow.**

Dear Aunt Nellie: I love to read the children's letters. We take the Farmer and I believe I like to read the children's letters better than any other department. May I become a cousin? I am 13 years old. My birthday is January 17. Have I a twin. I am sending you two riddles. (1) Father, mother, sister, brother, run all day and can't catch each other. (2) A man rode over the London bridge, and yet he walked. I live on a cattle ranch near Skootnia lake, but I am going to school about 12 miles from there. I have two sisters and we have two dogs and one kitten. I have a light complexion and I am in the seventh grade. I certainly hope the Children's Corner will grow larger. My sister is writing too. I think it would be nice for the cousins to correspond through the Corner.—Pearl Utter, Othello, Wash.

**Olive Will Keep on Writing.**

Dear Aunt Nellie: I enjoy reading your letters very much. We live on a 40-acre farm. Thirty acres are under cultivation. We have two horses, one cow and three calves. We have about 24 Plymouth Rock chickens and three rabbits. I have two brothers. Their names are Elsworth and Orville. I have four sisters. Their names are Stella, Marie, Brica and Ida. I go to school every day. Our teacher's name is Miss Ruth Oslund. I like her fine. I would like to join your Corner. I am 12 years old and in the seventh grade. My birthday is November 29. Have I a twin? If so write to me. I would like for the consins to write to me. This is not the last time I am going to write to you.—Olive Ervin, R. F. D. 2, Mead, Wash.

## The Giraffe of Africa

The giraffe is found wild only in Africa. The first one ever seen in Europe was shown by Julius Caesar in the circus in Rome. Others were afterwards exhibited by emperors. After the fall of Rome no live giraffe was ever taken to Europe until 1872 when the pasha gave one to the English. Many giraffes have since been brought from Africa and shown in menageries both in Europe and in this country. A full grown giraffe is 16 or 17 feet high or nearly three times as tall as a man. Its long neck enables it to eat from the tops of trees, the leaves of which make a large part of its food. Its tongue is long and slender and can be run far out to draw leaves and branches towards its mouth. Between its ears are two short horns, not like those of an ox, but only bones covered with a hairy skin. Its body is short and is higher in front than behind so that the backbone slants downward. Its legs are slender and the feet have cloven hoofs like those of an ox. Giraffes live usually in families of about a dozen, generally on the edge of a desert where they can see all around. Their chief enemies are the lion and panther from which they can run away in the open country. The giraffe can see very far and it has also a very strong scent and can smell a man a great distance off if the wind happens to be blowing toward it. On this account hunters find it very hard to get near enough to one to shoot it, and can do so only by creeping up against the wind behind grass and bushes.



**Skate at School Noons.**

Dear Aunt Nellie: I suppose you have heard about Skagit's flood. We had a seepage in front of our place. We had three nights of hard frost, so when I go to school I ride on the ice on my bicycle. At noon about 40 of us girls and boys skate. I enjoy it very much. I wrote about a year ago to the Children's Corner about our trip back east. We have 20 acres of land, two horses named Bob and Ginger. We are milking 12 cows. Their names are Beulah, Rose, Dutchess, Blackie, Queen, Dolly, Molly, Daisy, May, Gypsy, Bessie and Spot. We have about 40 chickens and one dog named Prince and one cat named Paul. I am 12 years old and in the sixth grade.—Inez Gagen, Mt. Vernon, Wash.

**Brothers Have All Enlisted.**

Dear Aunt Nellie: Have I a twin? If so I would like to hear from her. I am 9 years of age. I will be 10 February 15. I am in the third grade. My teacher's name is Miss Jennie Bullock. I like her very much. I go to school in town. There are three schools in our town and I go to the grammar school. I like the town very much. I have a kitty and his name is Dick. I have three brothers and one sister. Their names are Chester, Valdie, Henry and Zelda. My brothers all enlisted in the army. Chester is in California and Henry and Valdie are in Georgia. My sister goes to high school.—Civilla Allyn, Goldendale, Wash.

**School Children Work for Red Cross.**

Dear Aunt Nellie: I enjoy reading the other children's letters. May I be a cousin? I am in the fifth grade at school. I have eight studies. All the children in my room have been working for the Red Cross. My teacher's name is Miss Williams. She has been my teacher two years. I walk a mile and a half to school. Have I a twin? I would like to have them write to me. I am 10 years old. My birthday is the 19th of June.—Alva S. Yeager, Grand Mound, Wash. (We are glad to welcome you as a cousin, Alva, and hope that you will write to us as often as you can. Aunt Nellie.)

**War Saving Stamps.**

Dear Aunt Nellie: It has been an awful long time since I wrote. It seems like ages to me. My subject is "War Saving Stamps." For my birthday I got $7. I am going to put it all in war saving stamps. Our hired man bought $100 worth of them tonight, or 20 stamps. I am 11 years old now. Have I a twin? If so I wish she would write to me. I got a letter tonight just as I was writing, so I stopped and read it. I got a birthday present in it. Well, I think I'd better go to roost or the other chickens won't let me on when I do get started.—Edna Light, Pomeroy, Wash.

**Live on a Big Fruit Ranch.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I enjoy reading the letters very much. I hope this will not be the last one. I am going to school and am in the fourth grade. I was nine years old last October 21. I have two brothers. Their names are Daniel and Otto. I have one sister. Her name is Ruth. I am the oldest. We live on a big fruit ranch. We have four horses and three cows and about 60 chickens. I do love to go coasting down the hill. My teacher's name is Miss Welch.—Esther Hellena Reimann, Dryden, Wash.

**The Boys and Girls at School.**

Dear Aunt Nellie: I have seven brothers and their names are Fred, Bee, Sam, Joe, Frank and Tony. I haven't any sisters. Have I any twin? If so I wish she would write to me. There are five girls at school. Their names are Alice, Gertrude, Ella and Frances. Frances did not come to school for a long time, but I wish she would come. There were seven girls, but two do not come now. There are six boys. Their names are Edwin, Arthur, Paul, Vern, Rocky and Tony. That is all I have to say this time.—Tracy Germont, R. F. D. 1, Greenacres, Wash.

**Totem Helps Hunt the Cows.**

Dear Aunt Nellie: I am 13 years old and live on a 27 1-2-acre farm, about three miles from Darrington. We have a dog, a cat and a horse, also five cows and three calves. Our dog's name is Totem. Dad said that when the Boy Scouts went cow hunting, they would take a Totem along to help. The Boy Scouts meant my brothers and me. Have I a twin? My birthday is on the 11th of July. I hope my letter will be in print.—Charlie Atkins, Darrington, Wash.

**Zenia Knows How to Knit.**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I am going to school. I like my teacher fine. Her name is Miss Stirewalt. There are 24 pupils in our school. I am in the third grade in language and spelling and fourth in arithmetic reading and geography. I have joined the Red Cross. I know how to knit.—Zenia Light, Davenport, Wash.

**Skate on the Meadow Pond.**

Dear Aunt Nellie: I like to read the cousins' letters. There is a hill beside our barn and we slide down it on our sleds. We have a bobsled. There is a pond on our meadow where we skate. We have 67 chickens. They are White Leghorns. We get 25 and 30 eggs a day. I finished the sixth grade and am now in the seventh.—Margaret King, Matlock, Wash.

**A Thrift Stamp Campaign.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 8 years old. I am in the third grade and I have two brothers and four sisters. My two brothers' names are Alvin and Kenneth. We have two cows, one named Blossom, the other Buttercup. We have nine horses and two colts, one named Jean and the other Queen. We live in town in the winter and in the summer we live on a 320-acre farm. We have 40 chickens. I have a cat. Its name is Snookums and my dog is called Shep. I have learned to knit and I am making squares for the Red Cross. Our Red Cross has a service flag with 62 stars in it. My birthday is the 7th of October. Have I a twin? We had a colonial program on Washington's birthday. My teacher's name is Miss Morris. We are having a thrift stamp campaign in our school. We have raised about $75 already and we are also going to organize a Junior Red Cross in our school soon.—Jean MacDonald, Medical Lake, Wash.

**Party for the Soldier Boys.**

Dear Aunt Nellie: I have written to the Children's Corner once before. I like to read the Children's Corner. I know how to crochet and tat. Some of our friends gave a party last night. We were invited, so we went. We came home at one o'clock. It was for the boys who are going to Camp Lewis soon. I have a dog and a cat. My dog's name is Spotty, and my cat's name is Tommie. School started Tuesday. I go to school every day. My birthday is December 14. We have a river three miles away. Its name is Dungeness. It took the bridge away this winter. I shall write again.—Elsie Gronka, R. 2, Box 31, Sequim, Wash.

**Wants the Cousins to Write.**

Dear Aunt Nellie: I enjoy reading the children's letters. I have two brothers. Their names are Lee, aged 11 years, and Raymond, age 7. I have one little sister. Her name is Edith. She is 2 1-2 years old. I am 10 years old and in the third grade. I would like to see my letter in print. I was 10 years old December 18. Have I a twin? If I have I would like to hear from him or her. We have no stock. We sold all our cattle and are going to move away. I have blue eyes and light hair. I would like very much if some of the cousins would write to me.—Viola Barbley, Mossy Rock, Wash.

**A Ranch by Skootnia Lake.**

Dear Aunt Nellie: I enjoy reading the letters and the stories also. I hope to see this letter in the Corner. I am 11 years old. My birthday is the 5th of February. If I have a twin I wish they would write to me. I live on a ranch by Skootnia lake. We have a few cattle. I have two cows of my own and their names are Mary and Lory. I have two calves of my own and one colt. I write a few poems. Do you publish poetry?—Opal Utter, Othello, Wash.

**All Busy Doing Their Best.**

Dear Aunt Nellie: I have one sister. Her name is Roberta. I was 12 years old the 28th of January. I am in the sixth grade at school. We are all busy helping Uncle Sam win the war. We must all do our bit. I have 10 Thrift stamps and soon will have a War Saving stamp. I have knitted seven squares and when the Red Cross gets some yarn I am going to knit a sweater. I almost forgot to tell you what our teachers' name is. It is Mrs. Collier. I like her very much.—Evelyn Moore, Newport, Wash.

**Walks a Mile to School.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am seven years old and I am in the fourth grade. I have three sisters and three brothers. My sisters' names are Ellen, Laura and Mable, and my brothers' names are Frank, Joe and Manuel. We live on a 61 1-4-acre farm. We have nine cows and three horses and four pigs. We have 14 chickens. I walk one mile to school. We have a Ford.—Lucile Almaden, Box 15, Sequim, Wash.

**Aunt and Cousins Staying With Them.**

Dear Aunt Nellie: This is the second time I have written to the Corner. My aunt and cousins are staying with us. Arthur is 5 and Florence is 3 years old. My sister's names are Inez and Ione. My brother's name is Donald. Inez is 17 and Ione is 12 and Donald was 9 the 26th of February. Papa takes the Farmer and I enjoy the letters very much.—Erma Aldrich, R. F. D. 2, box 140, Selah, Wash.

**Katherine's Second Corner Letter.**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I enjoy reading the paper very much. I am 11 years of age and my birthday is October 22. I live one and one-fourth miles from school. There are 13 children in my school. There are four boys and nine girls. We have three cows, one calf, two colts, two horses, one cat and one dog.—Katherine A. Briner, Winthrop, Wash.

**Ralph Lives 16 Miles from Town.**

Dear Aunt Nellie: I enjoy reading the letters in the Farmer. We live 16 miles from town. We have four horses and one colt. We have two cows, one calf, one pig, five ducks, 40 chickens, one dog and one cat. I hope to see my letter in print.—Ralph Emerson, R. F. D. 6, Spokane, Wash.

# News for Breeders

G. O. Swales of Johnson, Wash., has recently strengthened his already strong Duroc Jersey herd by the purchase at a long price, at the Leisy sale in Nebraska of a fine March gilt, a granddaughter of Illustrator. The gilt is bred to King of Orions, the pig for which Leisy paid $1300 at the McAndrews sale, a sale at which 20 boars averaged over $520, and 30 sows $437.

Writing of King of Orions, Fred DeVore, who made the purchase for Mr. Swales, says: "This is really a wonderful boar, very heavy bone, splendid feet, great length and depth and a real boar."

It will be remembered that Mr. Swales purchased the grand champion Duroc sow at the Spokane Interstate fair last fall and two of her gilts, one a blue ribbon winner. He reports being practically sold out and says the demand for breeding hogs is very strong.

H. A.

## This Pork Comes High.



Recently a Berkshire boar pig sired by Epochal, the imported Berkshire boar owned by H. W. Gossard of the Gossard breeding estates, Martinsville, Ind., was sold to Thomas Stanton, Wheaton, Ill., for the reported sum of $10,000, which is said to be a new record price for the breed, as well as the highest price on record for a boar of any breed.




There are more owners of Purebred HOLSTEINS Than there are members of

ALL THE OTHER PUREBRED COWS IN THE U. S. COMBINED

**Why?** The purebred Holstein holds all records for production of milk and butter fat. They have been definitely proven the most profitable breed. Write for free information.

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CONSERVE YOUR STOCK

USE PERFECT EAR TAGS

The Perfect Ear Tag is being adopted by stockmen all over the United States, because it is so very light in weight—made of aluminum. It is non-corrosive and non-poisonous. There is liberal space for name and address of owner and number of animal. Attached instantly with one operation. Offers perfect identification. We own the patent and are sole manufacturers.

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YORKSHIRE SWINE

FALL PIGS

Both boars and gilts of best breeding. Now booking orders for spring pigs. Can furnish pairs or trios.

WM. NEUENSCHWANDER, Gaston, Ore.

JERSEY CATTLE

Jersey Home Dairy

Young bulls, winners at Washington State Fair, make good herd sires. Attractive prices for quick sale.

Erickson Bros. Prop.

North Yakima, Wash.

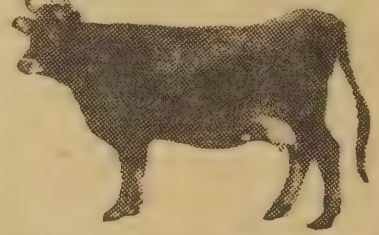

## Epidemic of Bull Calves.

"There may not be such a thing as luck," remarks C. T. Bracken, farm manager on Dr. Willis' Guernsey farm at Redmond, Wash., "but it sometimes looks as if there were such a thing as bad luck. When we were getting started in the Guernsey business we had a regular epidemic of bull calves. They were out of all proportion to what they should have been. We brought in a bull from another part of the state, famous in his neighborhood as a getter of heifer calves—and the bull calves continued. Of course a pure-bred bull calf is worth something, but you can't sell him and buy a heifer of the same breeding with the money. What did we do about it? Why, what could we do? We just stayed in the game till our luck—if there is such a thing—changed. We're getting our share of heifer calves now, although of course we would be glad to get even more."

Before Mr. Bracken came to King county and began raising Guernseys for Dr. Willis he had farmed in Colorado and in Nebraska.

"In the parts of those states in which I lived," he comments, "there was not much dairy farming. There were plenty of beef cattle, particularly in western Nebraska, back in the days before the homesteaders began to come in. Homesteading was not an unmixed blessing for that part of the country, I can assure you; it broke up the range for the cattle men, and on the other hand it worked a hardship on many of the settlers by setting them the task of farming where it could not be done successfully. Many of those homesteads have seen a series of settlers come and go, as one after another starved out. As a range country, it was as fine as any I know of. The buffalo grass on which the cattle fed during the winter was really nature-cured hay, and when they had been feeding on that they could be shipped to market without anything else."

## Blue Bell's Princess.



The photo herewith shows the Jersey heifer, Blue Bell's Princess of M. L. P., a few days before her first freshening in January. She is owned by Robert L. Burkhart, owner of Maple Lawn place, Albany, Ore. Her dam is a daughter of Gov. Marigold, is sired by Mr. Burkhart's bull, Karnak Noble, and her calf is by Moose o'Fernwood, that is a double grandson of the great Spermfield's Owl. Her dam will soon finish a year's test, with over 600 pounds of butter. Mr. Burkhart now has 13 Jerseys on official test and will soon have two more. His cows are making a number of big records.

Mr. Burkhart has put a concrete water trough in his cow sleeping shed, where his cows run loose every night and on cold or rainy days. The shed has drop windows, allowing ventilation without draft. It has six box stalls, in which cows about to calve or those indisposed from any cause can be kept. It is kept deeply bedded with straw all winter, providing a comfortable place for the cows and conserving manure.

H. A.

## Community Breeding.

A new venture in community breeding and selling of purebred live stock was launched in the Rogue river valley recently by the formation of the Rogue Valley Holstein association. River Banks farm, owner by the Leonard Estate company; Winona ranch and Homewood farms, all of Grants Pass, Ore., are cooperating in this movement. Other members will be added later as further registered Holstein herds are established in the Rogue river valley. An attractive cooperative catalogue listing all the registered sires and reserve cows owned by members of the association, together with their breeding and A. R. O. records, has been published, and an advertising campaign has been started, which will be greatly widened as the herds of the association are enlarged. F. R. Steel of Winona ranch, Grants Pass, Ore., is the sales manager of the new association.

**Increase Exports to Italy.**

Since the war began the United States has furnished to Italy from four to five times, in value, its pre-war proportion of imports.


# Jerseys Win Economy Test



In a recent test at the Ohio State University, 157 Jerseys and 131 members of another dairy breed were entered. The Jerseys required only 75.3 per cent as much digestible nutrients per lb. of fat produced as did the other breed. Further, they produced 1.2 per cent more milk, 25.6 per cent more solids and 59.3 per cent more fat per 1000 lbs. live weight. Jerseys produce the largest *net profits* from every pound of feed. Build a Jersey herd. Write to breeders for prices.



*Send today for free book, "The Jersey Cow in America."*

The American Jersey Cattle Club, 314 West 23rd Street, New York City

## Jersey Isle Stock Ranch

Herd headed by Bright Light's Knight 103741, a line-bred Gamboge Knight-Combination. Castilian Lady 26628 made 603.3 lbs. fat (713.3 lbs. butter) and 11,530 lbs. milk in 11½ mos., and my herd has highest average test of 399.8 lbs. fat in Buhl Cow Testing association. Young stock for sale.

C. E. LONG, Buhl, Idaho.

BREEDER OF GOLDEN GLOW'S CHIEF 61460.

35 daughters average 533.9 lbs. fat. Sire of world record Junior three-year-old. Two of his sons heading our herd. Some choice bull calves out of cows with records up to 856 pounds for sale. Sold out of bulls over six months old.

LADD FARM, Oswego, Ore.

## 914 Pounds of Butter

This is the official record for a year of the dam of a choice bull calf by Rosaire Olga Lad, sire of 29 tested daughters. He and others priced according to quality.

ED CARY, P. O., Carlton, Ore.
Station, LaFayette, Ore.

## Ashwood Farm Jerseys

FOR SALE—BULL CALVES sired by ST. MAWES OF ASHWOOD and out of daughters of HOLGER now making creditable Register of Merit records.

McARTHUR & STAUFF, Rickreall, Ore.

## Bull Calf For Sale

Dropped June 19, '17; dam is Noble's Jewel of Fair Acres in R. of M., with record of 457 lbs., 4 oz. butter at 2 yrs., 3 mos. Sire is Holger, also in R. of M. Price $75 for quick sale. For particulars address,

WOODLAWN FARM, Vega, Wash.

## A Bit of Courtesy

When writing to any of the Jersey breeders advertising in these columns, you will confer a favor to the breeder and to the American Jersey Cattle club by mentioning this paper, as they want to be able to trace the exact source of their inquiries. Will you do this, please?

## 763 Pounds Butter

and 11,501 lbs. milk is the average of the Register of Merit records of the three nearest dams of this handsome bull dropped Aug. 28, 1917. Dam Stockwells Dahlia, 619 lbs. butter and grand champion Oregon State Fair twice. Sire Dominus, who is out of an 817-lb. cow and a son of an 853 lb. cow. Price $150.

J. B. STUMP & SON, Monmouth, Ore.

## ASHBURN FARM

Register of Merit Jerseys

In nearly 13 years we have yet to get our first poor heifer or dissatisfied customer. We have the best of the Golden Glow's Chief and St. Mawes strains, with the cross of our great Kentucky bull, Valentine's Ashburn Baronet.

J. M. DICKSON & SON, Shedd, Ore.

## Waikiki Farm

Register of Merit Jerseys. Largest Jersey herd in the northwest. Young stock for sale.

IRA P. WHITNEY, Manager.

ROUTE 7, SPOKANE, WASH.

## Jersey Bull for Sale

dropped Oct. 14, 1917. Sired by Prosser Pogis 136859, a son of Hood Farms' great bull, Pogis, 99th of Hood Farm 94502, and full brother of Sophie's Agnes—record, 14149.7 lbs. milk, 982.3 lbs. butter.

E. O. RICE, Prosser, Wash.

GOLDEN GLOW HERD

Winner of 1st and 2d prize in butter test, Oregon State Fair, 1917, (all breeds, 20 entries); breeder and owner of grand champion cow in show ring, 1916; breeder of grand champion cow, 1917. Breeder and owner of world's champion 3-year-old, with 1115 lbs. butter, 80 per cent fat. Every female a daughter, granddaughter or great granddaughter of Golden Glow's Chief, sire of 34; 14 over 700 lbs.; 32 over 600 lbs.

PICKARD BROS., Marion, Ore.

OAK RIDGE JERSEY FARM.

Thirty years breeding Jersey cattle. Young bulls from Register of Merit dams. Also a few choice females.

RILEY E. HULBURT. Albany, Ore.

## La Creole Farm Register of Merit A. J. C. C. Jerseys

under U. S. government control for health. No. T. B. or abortion ever in herd. A breeder for 15 years; high-class stock, for high production.

We offer you a bull that is O. K., guaranteed; sired by Oxford You'll Do Jr.; daughters producing over 2 pounds B. f. per day. His dam, Morrow's Select 828 lbs., is the first tested daughter of Golden Glow's Chief. She was 5 weeks on fair circuit while on test and only dairyman's care when at home, otherwise she would have produced close to 1100 lbs. This bull is 2½ years old and solid color. We have a bull calf from this cow, otherwise would not sell. Priced right.

W. O. MORROW, Independence, Ore.

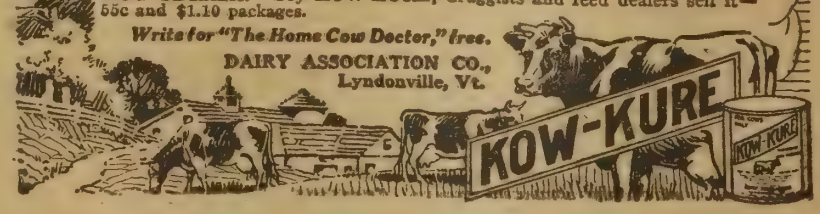
## The Cow's Health - First of All

To think of the milk yield first and the cow's health afterward is putting the cart before the horse. Many "poor milkers" only need to have their systems working properly to become good producers.

KOW-KURE, the great cow medicine, makes cows healthy and *keeps* them healthy. Working on the digestive and genital organs, it is a prompt, sure remedy for Abortion, Barrenness, Retained Afterbirth, Scouring, Lost Appetite and Bunches. Try KOW-KURE; druggists and feed dealers sell it—55c and $1.10 packages.

*Write for "The Home Cow Doctor," free.*

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Lyndonville, Vt.




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Distributors Spokane, Wash.


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# Breeders' Department

## DUROC-JERSEY SWINE

### September Durocs

I have a bunch of September gilts and boars in fine condition and ready for service soon. They are true to type and conformation and altogether one of the finest layouts ever produced on my ranch. They weigh from 100 to 160 pounds. Sired by Sprong's Prince and Yakima Willeta's Wonder. Dams largely Advance Wonder blood. Ancestry prize-winners wherever shown.

CHARLES G. SPRONG.
Grandview, Wash.

### IOKA FARM DUROCS

Boar pigs for sale, sired by the noted Duroc sire GOLDEN ROD.

DOERFLER BROS., Silverton, Ore.
A. N. Doerfler, Mgr.

### LOCUST LAWN HERD

Sold Out.

W. F. HOWARD & SONS, Caldwell, Idaho,
S. Kimble Ave.

IDAHO CHAMPION DUROCS—At state fair of Idaho our Durocs won more prizes than all other exhibitors combined. Stock of all ages for sale.
Richards Live Stock Co., Virginia, Idaho.

AVONDALE STOCK FARM.
Registered Durec-Jersey hogs. Inspection invited. Corespondence solicited.
H. C. POLLY. Route 3, Burley, Idaho.

PATHFINDER BOARS—Choice Duroc Jersey boars for sale. Sired by Richard Pathfinder, 1st prize and junior champion Utah state fair. Priced to sell and guaranteed. ERICK W. OLSON, Virginia, Idaho.

OTTO'S DUROC JERSEYS.
Stock doing fine, splendid prospects for spring crop of pigs. For sale Jr. yearling boar with a show record; very classy individual. Filer, Idaho.

DUROCS.
Boars and open or bred gilts of excellent breeding.
E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE, Yakima, Wash.

## POLAND CHINA SWINE

SPECIAL PRICES ON BOAR PIGS.
Fall farrow, best breeding, good individuals. Also a few choice gilts. Quality and utility our hobby. Poland Chinas our breed.
FRANK NEEDHAM, Eugene, Ore.

GREENLEAF STOCK RANCH.
Big type Poland Chinas, either sex, for sale at all times.
Wilson Bros., A. L. Wilson, Mgr.
Greenleaf, Idaho.

BIG TYPE POLAND CHINAS
Herd headed by Sammy (79,833).
Correspondence Solicited.
Fruitland Stock Farm, C. Royston, Mgr.
Payette or Fruitland, Idaho.

QUALITY HERD.
If you want to improve your herd, try stock from my winners at the Oregon state fair.
RAY J. FOX, Lyons, Ore.

PURE BRED POLAND CHINAS
Some choice Sept. and Aug. pigs, $25 to $35 each, either sex; also a good herd boar. Will ship C. O. D., subject to approval
HERBERT WILLARD, Dayton, Oregon.

## BERKSHIRE SWINE

### Kintrye Farm Berkshires

A few good gilts bred for spring farrow.

CLARK BROS., Prosser, Wash.

### Riverby Orchard Berkshires

Riverby Orchard Berkshires won 12 out of 15 first prizes at the Washington state fair, 1916, also many prizes, including grand champion sow at the Panama-Pacific world's fair. We offer for sale a few good boars and young sows.
D. C. BUNN, Prosser, Wash.

## HAMPSHIRE SWINE

### Unrelated Fall Pigs

Both sexes, good individuals of best breeding. My herd has shown the winners at all the leading fairs in the northwest for the past seven years, and a barrow of my breeding was first at Chicago International last December.
J. M. FRUITTS, Enterprise, Ore.

## SHEEP

### SHEEP

Full blood Lincolns, Romneys, Cerridales and Hampshires. Ewes and rams small or large lots. For sale by

H. STANLEY COFFIN,
Breeder and Importer. Yakima, Wash.

## SHORTHORN CATTLE

### Herd Bulls

Imported Doune Radiance No. 609412
and
Gainford Perfection No. 442173.

### Hercules Shorthorns

We can supply you with choice, well grown bulls and females of breeding age. Your inspection of our herd is invited. Visitors always welcome.

### Day & Rothrock Company

205 Exchange Bank Bldg. Spokane, Wash.

## HOLSTEIN CATTLE

MOOREHEAD RANCH.
Registered Holsteins.
Herd sire, Model Annie De Kol Segis, grandson of the famous King Segis. We have no bulls of service age, all having been sold, but we have some splendid young stuff, from 6 to 8 months old, coming on. If you are looking for real foundation stock, write us for particulars and pedigrees.
MOOREHEAD & HOBSON.
Breeders of Purebred Holsteins.
Outlook, Wash.

### 365-DAY HOLSTEINS

24,667 lbs. milk—1026 lbs. butter—is the a. o. advanced registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.
THE HERD WITH YEARLY RECORDS.
WESTERNWOLD RANCH, Prineville, Ore.

### LaConnor Flats Stock Farm

Pure bred registered Holstein cattle. Herd sire Segis Pontiac Acme; average of three of nearest dams; butter, 1 year, 1030.82 lbs.; milk, 24,380.3.
J. H. HULBERT, Mt. Vernon, Wash.

### Record Holsteins

Young bulls, some of them ready for service, by a sire whose 5 nearest dams average 26.17 pounds butter, or another with 29.67-pound dam, and out of high-record A. R. O. dams. Priced to sell.
ERNEST WERNER, AURORA, ORE.

### Bargains in Bull Calves

Sired by Segis Riverside Pontiac, that sold in Pacific international sale, 1914, for $1025, and whose dam has A. R. O. record of 31.47 lbs. butter in 7 days; 113.89 in 30 days, and big records all through his pedigree.
ERNEST JOHNSON, Scappoose, Ore.

REGISTERED HOLSTEINS.
One 30-lb. bull with grand champion sire and dam; also young bull calves. Here is production and type we hear so much about.
H. R. BOOMER, New Plymouth, Idaho.

### HOLSTEINS

Well bred young bulls for sale.
THOS. CARMICHAEL. Gaston, Ore.

REGISTERED HOLSTEINS.
Bull calves for sale with good A. R. O. backing.
BEEBE BROS., R. F. D. 2, Rupert, Idaho.

## BROWN SWISS CATTLE

### Brown Swiss Stock Farm

Breeders of Brown Swiss Cattle, the Farmer's Dairy Cow. Young stock for sale.
THEO. BRUGGER, Route 3, Gresham, Ore.

In writing advertisers, be sure to say that you saw their advertisement in this paper.

## SHORTHORNS

A few young stock for sale by such noted sires as Precious Goods, a son of the great Golden Goods, and Scottish Sunrise 2d.

R. E. BOYCE, Baker, Ore.

WEST SIDE AUGUSTUS (514271).
heads my herd of registered Shorthorns and D. S. Poll Durhams. West Side Augustus by Count Augustus was first prize winner at Intermountain Stock show, Salt Lake, 1917. Stock for sale. Correspondence solicited.
R. A. PARSONS. Blackfoot, Idaho.

### LELAND BROTHERS

Breeders of top registered Shorthorn cattle. Correspondence solicited.
WENDELL, Idaho.

### H. H. Schildman

breeder of registered Shorthorn cattle, Hampshire sheep and big-type Poland China hogs.
Filer, Idaho.

REGISTERED SHORTHORN COWS,
Young bulls and heifers, sired by Scotch bulls; liberal terms.
CALDWELL CATTLE CO., Caldwell, Idaho.

## GUERNSEY CATTLE

### Orchard Hill Farm

"Home of High-Class Guernseys."
Dr. Park Weed Willis, Owner.
Redmond, Wash.

### FAIRVIEW FARM

Breeders of high class registered and grade Guernseys.
A. J. SINNES.
Route 5. Mt. Vernon, Wash.

MIDDLEDALE FARMS GUERNSEYS.
Herd founded in 1904, May Rose breeding. Most all granddaughters of Jethro Bass (11366), son of Imp. King of the May. Have a few heifers, calves for sale. Goshen, Ore.

## ABERDEEN ANGUS

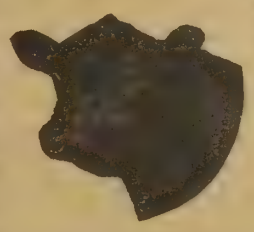
### ANGUS CATTLE

In the famous valley of the Yakima there is located one of the best herds of Aberdeen Angus in America. Proof of this is evident by the many prizes won by this herd at all of the greatest shows of the northwest and central states, including the Chicago International.
Fifty extra good range bulls are now offered for sale. Also fancy herd headers and show cattle of both male and female. All prices very reasonable.
CONGDON & BATTLES.
OTTO V. BATTLES, Manager.
Yakima, Washington.

### Aberdeen Angus Cattle

A. H. EAGLESON & SONS.
Boise, Idaho.

### When Breed Meets Breed



The world's greatest live stock show, the International Live Stock Exposition, held annually at Chicago, has given the following honors over all breeds to Aberdeen-Angus cattle:
Grand Championship over all breeds 10 out of 16 times for single steer.
Grand Championship over all breeds 13 out of 16 times for Fat Carlot.
Grand Championship over all breeds 15 out of 16 times for Fat Carcass.
Write for literature to
Western Field Representative E. T. Davis,
Iowa City, Iowa.
Union Stock Yards, Chicago.

### MORE BULL PER DOLLAR

Because we sell ours cooperatively and save advertising cost. Bull calves all ages. Good individuals. A. R. O. sires and dams. Satisfaction guaranteed. Write for catalogue.

ROGUE VALLEY HOLSTEIN ASSN.,
F. R. Steel, Sales Mgr. Winona Ranch, Grants Pass, Ore.

## POULTRY

VIBERT STRAIN S. C. REDS.
Cockerels, $2.50 to $25; eggs, $8 per hundred; $1.50 to $15 per sitting. Three special pens headed by cockerels from a 289-egg trapnested hen. One pen headed by magnificent cock bird that has kept his wonderful color through the moult and well into his second season. He is one great bird. If you need new Red Blood, you need Vibert blood from the largest pure Vibert flock on the Pacific coast.
MRS. ROMINGER. Underwood, Wash.

### White Leghorns

Baby chicks or hatching eggs from hens hatched from stock whose trap-nested records average 259 eggs per year. Special rates on lots of 100 and over.
MOUNTAIN BROOK POULTRY FARM.
Mr. and Mrs. W. A. Newton,
Myrtle Creek, Ore.

RHODE ISLAND REDS AND WHITES
both combs. Mammoth Bronze turkeys and Mammoth Touluse geese. My birds are true blue—winners and qualities. Have a few S. C. Red and R. C. White cockerels at $3 and $5 each. Have a limited number of Mammoth Bronze gobblers at $8 and $10 each. We are booking orders for eggs. Write for mating list. No baby chicks.
Highland Fruit and Poultry Ranch.
J. Nonnenmacher, R. F. D. 3, North Yakima, Wash.

### BABY CHICKS

Rhode Island Reds, White Leghorns. Don't wait until March or April to order and then be disappointed because you can't get them. But order now from our heavy-laying strain. Send card for price list.
MAPLEBROOK POULTRY FARM.
Box 3, Southworth, Wash.

HATCHING EGGS.
BARRED PLYMOUTH ROCK — Thompson's Ringlet strain and Morningside trapnested, bred-for-eggs strain.
S. C. RHODE ISLAND RED — Tompkins' strain.
S. C. WHITE LEGHORN — Trap-nested English strain. Also a few Tompkins' Rhode Island Red breeding cockerels left for sale. Write for prices. Morningside Poultry Farm.
FEHNEL & KIRCHNER, PROPS.
Box 146. Blackfoot, Idaho.

### S. C. White Leghorns

Day old chicks and hatching eggs from 600 trap-nested breeders. My prices are reasonable. My service prompt. I guarantee satisfaction. Write me your wants today.
H. L. BLANCHARD'S POULTRY FARM,
Chimacum, Wash.

PRIZE WINNING W. ORPINGTONS.
Kellerstrass strain, S. C. eggs, $10 per 100; $3 per 15. 1 hen scored best fowl at 1916 Wash. state fair; several others over 280 eggs. 1st prize cock, 1st hen, 1st pullet, 1st pen, cock and hens; 1st pen, ckl. and pullets, state fair, 1915.
MRS. E. B. WADE, R. 4, Yakima, Wash.

### Barred Rock Cockerels

Have some good birds at $3 and $5 each, from good laying stock. Send me your list of wants; will try and please you.
C. A. STARK, Box 242, Sutherlin, Ore.

### Mammoth Bronze Toms

Strong vitality, $6 to $8 each; no charge for crates. Barred Rock eggs for hatching, $10 per 100; $2 per setting.
S. M. WILSON, Carley, Wash.

### BABY CHICKS

S. C. White Leghorns. Eggs for hatching and day-old chicks from heavy laying strains.
G. W. BURT, Roseburg, Ore.

### S. C. White Leghorns

Heavy laying strain. Hatching eggs from hens averaging 245 eggs per year, $2 per 15.
E. C. FISK, Olalla, Wash.

### S. C. Rhode Island Reds

Golden Sebright and Black Bantams.
CHAS. E. LUCAS, R. F. D. 3, Missoula, Mont.

PARKS BRED-TO-LAY BARRED ROCKS,
My pen, 5 Barred Rocks, at Pullman laying contest laid in Nov. 88, Dec. 100, Jan. 104 eggs. Eggs from this winter-laying strain, $1.50 15, $8 per 100.
F. J. WIBTNER. Mica, Wn., R. 1.

S. C. AND R. C. RHODE ISLAND REDS.
Cockerels, $2.50 to $3.50; eggs from S. C. R. I. Reds, heavy winter layers, $1.50 per 15; $7 per 100. Flemish Giant does, $1.50.
W. T. WILSON, R. 3, Weiser, Idaho.

## TAMWORTH SWINE

ROUND KNOLL RANCH NO. 3.
Herd headed by Knoll Slope Colonel, assisted by Jolly Lad IV. Correspondence solicited.
Bliss, Idaho.

## CHESTER WHITE SWINE

### COVE STOCK FARM

Unrelated fall and spring Chester White pigs from prize winning stock.
ARCHIE CONLEY, Cove, Ore.

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, March 4.—Corn prices hardened today, influenced largely by scarcity of good grades and by reports that the number of cars available was inadequate to meet rural needs. Futures closed firm at the same as Saturday's finish to 1-8c higher, with March $1.27 3-4 and May $1.27 1-8. Oats gained 3-8@1-2 to 1-2@5-8. The outcome in provisions varied from 15c decline to 7c advance.

Despite big receipts demand for corn showed urgency for the better qualities and displayed some improvement as to the less desirable kinds. One of the leading industries which has been out of the markets 10 days became a purchaser again. Complaints of car shortage were chiefly from Illinois and Iowa.

Persistent buying of oats took place throughout the session. Gossip was current that a better outlet east was likely.

Packers rallied provisions from an early decline. The initial weakness was ascribed to a setback in the value of hogs.

Chicago Futures.

| | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| Corn— | | | | |
| March | .... | ..... | ..... | 1.27¾ |
| May | 1.27 | 1.27¼ | 1.27 | 1.27½ |
| Oats— | | | | |
| March | .89⅞ | .90¾ | .89⅞ | .90¾ |
| May | .87⅝ | .88¾ | .87⅝ | .88 |
| Pork— | | | | |
| May | 47.85 | 48.50 | 47.85 | 48.20 |
| Lard— | | | | |
| May | 26.07 | 26.25 | 26.09 | 26.15 |
| July | .... | 26.40 | 26.37 | 26.37 |
| Ribs— | | | | |
| May | 25.17 | 25.35 | 25.13 | 25.20 |
| July | 25.57 | 25.70 | 25.50 | 25.57 |

Cash Quotations.

CHICAGO, March 4.—Corn—No. 2 and 3 yellow, nominal; No. 4 yellow, $1.60@1.65.

Oats—No. 3 white, 91⅞@92½c; standard, 92¼@92¾c.

Barley, $1.80@2.24.

Rye—No. 2, $2.77.

Timothy, $5@8.

Clover, $28@31.

Lard, $26.40.

Ribs, $24.75.

Minneapolis Grain.

MINNEAPOLIS, Minn., March 4.—Flour—Unchanged. In carload lots standard flour quoted at $9.80 a barrel in 98-pound cotton sacks. Shipments, 57,629 barrels.

Barley, $1.85@2.23.

Rye, $2.76@2.78.

Bran, $32.50.

Wheat—Receipts, 218 cars compared with 410 a year ago.

Corn—No. 3 yellow, $1.75@1.80.

Oats—No. 3 white, 90½@91½c.

Flax, $4.03@4.06.

## Live Stock Quotations.

At Omaha.

OMAHA, March 4.—Hogs—Receipts 9000; market 5c lower. Heavy, $15.90@16.25; mixed, $16@16.20; light, $15.95@16.25; pigs, $10@15; bulk of sales, $16@16.50.

Cattle—Receipts, 9500; slow to 10@15c lower. Native steers, $9@13; cows and heifers, $7.50@11; western steers, $8.50@12; Texas steers, $7.75@10.25; cows and heifers, $7.50@9.25; canners, $6.50@7.50; stockers and feeders, $6.50@11; calves, $9@13; bulls, stags, etc., $7@10.

Sheep—Receipts, 23,000; slow, lower. Yearlings $12@14.50; wethers, $11.50@13; ewes, $9.75@12; lambs, $15@16.75.

At Chicago.

CHICAGO, March 4.—Hogs—Receipts, 53,000; unsettled at Saturday's average to 10c lower. Bulk, $16@16.80; light, $16.45@17; mixed, $16.15@17; heavy, $15.70@16.65; rough, $15.75@15.90; pigs, $12.75@16.25.

Cattle—Receipts, 21,000; weak. Native steers, $8.75@14.15; stockers and feeders, $7.60@10.80; cows and heifers, $6.65@11.85; calves, $8.75@14.25.

Sheep—Receipts, 15,000; firm. Sheep, $10.35@13.40; lambs, $14@17.50.

At Portland.

PORTLAND, March 4.—Cattle—Active; receipts, 1186. Medium to choice steers, $10.35@11; good to medium steers, $9.35@10.35; common to good steers, $8@9.40; choice cows and heifers, $8@10; common to good cows and heifers, $6.75@8.15; canners, $4.25@6.25; bulls, $5@8; calves, $7.50@12; stocker and feeder steers, $8@9.50.

Hogs—Higher; receipts, 1480. Prime light, $16.25@17.15; prime heavy, $16.60@16.85; pigs, $14@15; bulk of sales, $16.50.

Sheep—Dull; receipts, 210. Western lambs, $15@15.50; valley lambs, $14.50@15; yearlings, $13@13.50; wethers, $12.50@13; ewes, $9@11.

Shorn sheep, 2 1-2c to 3c under quotation.

Spokane Stockyards, Monday.

Hogs—Receipts, 147; market higher. Prime light, $16.75@17; prime heavy, $16.75@17; pigs, $14.50@15.25; stockers and feeders, $12@14; bulk of sales, $16.25.

Cattle—Receipts, 154; market strong on heavy beef steers, steady to strong on other grades. Best beef steers, $10.25@11.50; good steers, $9.25@10.25; common to good steers, $8@9; best beef cows and heifers, $8.75@9.50; good cows and heifers, $7.50@8.50; ordinary to good cows and heifers, $6.25@7.50; canners, $4@6.25; bulls, $5.75@8; calves, $7@11; stocker and feeder steers, $6@8.25.

Sheep—Receipts, 150; market strong. Prime lambs, $14.50@15.25; good lambs, $13.25@14; prime yearlings, $12.50@13.25; prime wethers, $12@12.75; best mutton ewes, $9@10.75.

## Seattle Wheat.

SEATTLE, March 2.—Unless prices of barley are regulated much of the acreage planted to wheat last year will go into barley this spring in Washington, according to advices received by Seattle millers from country station managers. The high price and comparatively double yield per acre is the reason for the barley talk.

Grain men here received the facts about wheat prices for 1918 with mixed emotions. Millers almost unanimously complained of the so-called injustice that would follow, while farmers and grain buyers were pleased. It is taken to mean that prices at Seattle will be the same as at Chicago, and it was thought that one of the reasons for making the price the same as in 1917 was to prevent a carry over. The government is in great need of wheat and expects, it is believed, to remove any inducement to farmers for holding.

It is the impression among dealers here that the Coast terminal price will be $2.15, but Mr. Hoover's later announcement of his intention, in response to the request of the grain committee from Spokane, to permit of another adjustment of prices may change the entire face of the situation.

Grain buyers here take it that prices fixed by the proclamation are on the basis of No. 1 hard wheat, 60 pounds to the bushel. As little of the wheat raised in this territory comes up to that weight, values will settle down to the 58-pound basis and not all of the crop will bring $2.05 to the farmer, as happened last year.

The prices of wheat substitutes are higher proportionately than those of wheat, and the result will be a greater acreage of barley and oats and less of wheat for the spring crop. Government regulation would, of course, check this tendency if action is taken in time, as urged by the grain and feed committee of the merchants' exchange by telegraph to President Wilson and Mr. Hoover.

## Portland Market.

PORTLAND, Ore., March 2.—Trading in the egg market was at a standstill at the close of the week. With the market declining daily, local retailers are buying only from hand to mouth. Outside business has ceased for the time being and stocks are beginning to accumulate on the street. The generally quoted case count price was 33@34 cents.

Butter was firm with 50 cents obtainable on country creamery extras.

Dressed meats and poultry were unchanged with light receipts and a good demand.

In the following list of quotations the grain, hay, mill feed, hops, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 2 white, $69.50 per ton.

Millstuffs—Bran, $30 per ton; shorts, $32.

Barley—No. 1 feed, $69; brewing, $72 rolled, $67@69.

Hay—Buying prices: Timothy, eastern Oregon, $27; alfalfa, $24.50; grain, $22.

Eggs—Oregon ranch, case count, 33@34c per dozen; candled, 36c.

Poultry — Ducks, 32@35c; turkeys, live, 26@27c; geese, 20@22c.

Butter—City creamery, prints, 52@53c per pound; cubes, extras, 48 1-2@48 2c.

Cheese — Tillamook triplets, 25c; Young Americas, 26c.

Dressed meats—Veal, 20@20 1-2c; pork, 21@21 1-2c.

Hops—1916, nominal; 1917 crop, 16@17c.

Potatoes—Oregon, buying price, 85c@$1 per hundred.

Wool—Eastern Oregon, 44@65c; valley, 50@55c.

Beans—Buying prices: Oregon white, 9 1-2@10c; colored, 8 1-2c.

## Butter and Eggs.

PORTLAND, Ore., March 4.—Butter—Firm. City creamery prints, 52c; cartons, 53c; buying price butter fat, 56c, Portland; cube extras, 50c; prime firsts, 49½c; dairy, 32c.

SAN FRANCISCO, March 4.—Butter—Extras, 50½@52c. Eggs—Fresh extras, 36c; firsts, 34c; fresh extra pullets, 34½c. Cheese—Young Americas, fancy, 28c.

CHICAGO, March 4.—Butter—Creamery, 42½@45c. Eggs—Steady; receipts, 557 cases; firsts, 34c; ordinary firsts, 32@33c; at mark, cases included, 32@32c.

## Spokane Market.

WHOLESALE.

Vegetables—Cabbage, $2.75@5 cwt; carrots, $1.25@1.50 cwt; bunch carrots, 75@90c doz; bunch beets, 75@90c doz; beets, $1.50 cwt; rutabagas, $1.75 cwt; parsnips, $2 cwt; hothouse lettuce, $1 5-lb box; head lettuce, 65@85c doz, $2.75@3 crate; turnips, $1.50@1.75 cwt; bunch turnips, 75@90c; California new turnips, $2 cwt; red bell peppers, $1.25 box; chilli peppers, 25c lb; green peppers, 11c lb; Mexican tomatoes, $2.50 crate; celery, $1@1.10 doz; hothouse cucumbers, $2.50 doz; cauliflower, $1.75 doz; new garlic, 10@12½c lb; parsley, 35c doz bunches; horseradish root, 12½c lb; brussels sprouts, 12½c lb; radishes, 40c doz bunches; rhubarb, $2.25 25-lb box, 10c lb; spinach, $1.35 crate.

Onions—California onions, $3 cwt; yellow onions, $2.50; green onions, 40c doz bunches.

Grapes—California cluster raisins, $2.25 box, 20 packages.

Tropical Fruits—Bananas, 5¾c lb; lemons, $7.50 case; navel oranges, $5.50@6.50 case; seedling oranges, $5@5.50 case; Florida grapefruit, $4.75@6 case.

MEAT.

Beef—Beef steers, 15@17½c lb; cow beef, 13½@16½c lb; heifers, 17c lb; cuts beef loin, 27c lb; steer chucks, 13½@15c lb; prime ribs, 20@23c lb; rump and round, 17@19c lb.

Mutton—Wethers, 23c lb; ewes, 22c lb; breakers, none; leg of mutton, 26c lb.

Lamb—None.

Pork—Packer dressed hogs, 26@27c lb; pork loins, 28@29c lb; legs, 26c lb; shoulders, 24c lb; leaf lard, 28c lb; tenderloins, 40c lb; spareribs, 18c lb; country dressed hogs, with head on, 19c lb to producer.

Smoked Meats—Washington hams, 33c lb; T. C. hams, 33½c lb; T. C. bacon, 45½c lb; Washington bacon, 40½@41½c lb; picnics, 25c lb; Boston butts, 26½c lb; English bacon, 36½c lb.

Dry Salt Meats—Clear bellies, 30c lb; lean backs, clear, 29c lb; sides, 29½c lb.

Lard—Tierces, 28c lb, $16.55 case; compound, tierces, 24c lb.

POULTRY.

Dressed Poultry—Frozen hens, 28c lb; frozen springs, 28c lb; frozen broilers, 32c lb.

GRAIN AND FEED.

Rice—Fancy head, $7.50@9.50 cwt.

Flour—Bluestem, $9.80; Blend, $9.80; Montana hard wheat, $10.40; graham, $9; whole wheat, $9.20; eastern rye, $10.60; eastern rye meal, $10.80; oat flour, $13.10.

Wheat—$70 ton; cracked, $71 ton.

Oats—$73 ton whole, $75 rolled, delivered in city.

Corn—$77 ton; cracked corn, $79 ton.

Bran—$31.70 ton; shorts, $33.70 ton; bran and shorts, $32.70 ton.

Barley—Rolled, $71 per ton.

Oil Meal—$78 per ton.

Hay—Timothy, $32 per ton, $31 ton by carload; alfalfa, $27 ton, $26 ton by carload.

GASOLINE, LINSEED OIL, ETC.

Gasoline—Red Crown gasoline, bulk, 24c gal; cases, 34c gal; Shell gasoline, 24c gal; refined oil, Pearl, bulk, 13c gal; cases, 23c gal; eocene, 15½c gal in bulk; cases, 25½c gal; engine distillate, 15c gal, bbl, 25c case; V. M. P. naptha, bulk, 23c; cases, 33c.

Linseed Oil—Raw, bbl $1.55, case $1.73 gal; boiled, bbl, $1.57 gal; cases $1.75 gal.

Turpentine—Bulk, 65c gal; cases, 85c gal.

White Lead—Strictly pure white lead in oil, ton lots, 11¾c lb; 500-lb lots, 12½c lb.

## Seattle Market.

SEATTLE, March 2.—The Washington apple has reached a dominating position on Western avenue, from which jobbers are moving the fruit, which now has no competition, on a strong to higher market. Wholesalers regard it as singular that 90 days ago apples out of which they could scarcely get the cost price were dull, and all stimulants applied failed of their purpose. Today it is a wholesalers' market, and buyers are compelled to pay stiff prices, which are buoyant and upward.

Potatoes are holding barely steady. Growers of both eastern and western Washington are going through a period of fright, and federal grades of Yakima Gems are being quoted freely at $21. There have been offers to jobbers here this week down to $18 for this class of stock. Puget Sound locals are $15@16 f. o. b., and the market is a little stronger.

The onion market is steady. All Yakimas have been cleaned up, and Oregons are moving at $2.50 per hundred. Imported Australian browns have begun to arrive, but few have gone on the market. Quotations are 4@4½ cents. Holdings of locals of all descriptions are very light and the season will be closed within 30 days.

Protests of producers and feed dealers against any more depressions of the fresh ranch egg market have had one marked effect, that of changing the views of wholesalers as to the probable storage level for this season. A month ago all were agreed that eggs must go into storage this spring at not to exceed 30@33c. Today it is not believed that jobbers will be able to buy eggs under 35c.

BUYING PRICES.

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots, f. o. b. Seattle:

Poultry—Springs, 25c lb; 4 lbs and under, 25c; old roosters, 16c lb; squabs, large, $3.50 dozen; geese, fat, live, 18c lb.

Butterfat, 58c lb; dairy butter, 35@36c.

Beef—Buying prices: Prime beef steers, 11@12c lb; cows, fat, 9@11c lb; heifers, 10@11c lb.

Hogs—Light, 18@20c lb; heavy, 17@18c lb.

Veal—Fancy light, 17@18c lb; heavy, 9@16c lb.

Hides—Salted, 14c lb; flint-dry hides, 29c lb; salt kip, 16c lb; green hides, 11c lb; green calf, 23c lb; dry calf (under six pounds), 29c lb; bulls and dry salts, 4c lb less; green bulls, 9c lb; dry salts, 4c lb. less; green bulls, 9c lb. Clean long wool, western Washington flint dry pelts, 39c per lb.; heavy to clean eastern Washington flint dry pelts, 30@35c lb.

HOPS, HIDES, WOOL.

NEW YORK, March 2.—Hops, hides and wool unchanged.

HIDES
WOOL, PELTS, MOHAIR, CASCARA BARK
We do the largest consignment business in the northwest. Equally fair treatment on all shipments, large or small. Returns at full market value mailed same day as goods are received. Trial shipments wanted and appreciated, but are handled as regular shipments and not at inflated values.
THE H. F. NORTON CO.
53-55 No. Front St., PORTLAND, ORE.
206 3d Ave. So., SEATTLE, WASH.

MAYERDALE S. C. WHITE LEGHORNS
Pullets out of stock averaging over 200 eggs in one year, have been laying 50 to 70% steadily since last September. We have mated these with males out of 200-egg hens and whose sire was out of a hen laying 302 eggs in her pullet year. Eggs from this making for sale at $2.00 per setting.
Special prices on large orders.
MAYERDALE POULTRY YARDS. MOSIER, OREGON.

The surface of any spindle shows rough through the microscope. But the powdered mica in Mica Axle Grease fills up this roughness and makes spindles smooth as glass. Then the grease works better and lasts twice as long. No hot boxes. Get a can from your dealer today.
STANDARD OIL COMPANY (California)

MICA AXLE GREASE

# Want Ads

## HELP WANTED—MALE 3

WANTED—ACTIVE MEN WITH FARMER acquaintances, to sell Pipeless Furnaces; splendid line; good proposition to offer. Richardson & Boynton Co., 171 W. Lake st., Chicago, Ill.

## EDUCATIONAL 45

BEHNKE-WALKER, PORTLAND, NORTHwest's largest, finest business college, can not supply half the calls for trained young men, women. Enroll now. Free success catalog. Positions secured.

## MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

If you are going to build, or remodel your house, let us send you our illustrated catalog No. 27, of sash, doors, finish, paints, builders' hardware, plaster board, roofing, etc. Sent free, postpaid, on request.

Cottage front doors ..... $2.75
2:6x6:6 five-cross panel doors ..... $1.92
24x28, two-light windows ..... $2.06
One-ply prepared roofing ..... $1.35
Two-ply prepared roofing ..... $1.70
Three-ply prepared roofing ..... $2.10

We sell any one, ship anywhere, and guarantee safe delivery.

The largest factory in the west selling direct to consumer.

O. B. WILLIAMS CO.
1943 First Ave. So., Seattle Wash.

BUILDING MATERIALS AT WHOLESALE prices — Doors, windows, roofing paper, porch columns, plaster boards. All building materials shipped promptly. Send for our complete illustrated catalogue; gives you lowest net prices. P. A. ROVIG CO., 2229 First ave., So., Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

## MISCELLANEOUS—WANTED 63

WANTED—BELGIAN HARES. WE ARE paying 15c per pound, alive, f. o. b. Spokane. Commercial Creamery company, Spokane, Wash.

## FARM LIGHT PLANTS. 73

WARNERLITE ELEC. LIGHT PLANTS absolutely guaranteed. Thousands used by satisfied farmers. Live agents wanted. Warnerlite Co., Temple Court bldg., Spokane.

## JUNK SHOPS 90

CENTRAL HIDE AND JUNK CO.
BUYERS HIDES, WOOL, METAL, RUBBER, SACKS, ETC. WRITE FOR PRICE LIST IF INTERESTED. QUICK RETURNS. W200 MAIN AVE., SPOKANE, WASH.

## MACHINERY FOR SALE. 93

TRACTOR ENGINE, RUMLEY OILPULL, 30-60 H. P.; first class condition; a bargain. J. H. Dickey, Wenatchee, Wash.

## STOVE REPAIRING 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

## PATENTS 150

WRITE FOR HOW TO OBTAIN A PATent. List of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. Victor J. Evans & Co., 710 Ninth, Washington, D. C.

## POULTRY 174

BABY CHICKS.

White Leghorn chicks, $14 per 100. Barred Rock and Rhode Island Red chicks, $18 per 100.

HATCHING EGGS.

$1.50 per setting of 15 guaranteed.

INCUBATORS AND BROODER STOVES.

We are agents for the famous Queen incubators and brooder stoves. Also have a line of hot air, hard wood, first-class hatchers at ½ their real value. Also cheaper machines; 70 eggs, $5, and 120 eggs, $7.50

CUSTOM HATCHING.

We do custom hatching, 3c per egg. Catalog free.

QUEEN HATCHERY, 89 Pike, Seattle, Wn.

S. C. RHODE ISLAND RED AND WHITE Leghorns; best western prize winning stock, crossed with my own trap-nested birds; cocks and cockerels, $2.50 to $5; a few hens and pullets, $1.25 and up; eggs, $1.50 for 15; $7 100; no chicks. F. H. Volland, Kennewick, Wash.

BABY CHICKS.

Famous Carnation White Leghorn; vigorous, early maturing, heavy winter layers; also breeding stock. E. W. Raush, Carnation Poultry Ranch, Kent, Wash.

BABY CHICKS—S. C. WHITE LEGHORNS; real mortgage lifters; the kind that lay while mere kiddies; 21 years on the job. Catalogue. L. D. Casey & Sons, R. 6, Waitsburg, Wash.

PETALUMA HATCHERY—CAN SHIP DAY-old chicks to points reached in 3 days. Why not have the best? We challenge the hen. Free circular. L. W. Clark, Petaluma, Cal.

S. C. WHITE LEGHORNS — PRESENT breeders averaged 15 doz. each last season. Mated to high-record males. Hatching eggs. Mary Jessup, Cooks, Wash.

WHITE WYANDOTTES, BRED FROM Martin's famous bred-to-lay Dorcas line fowls. Eggs, $2.25 and $3.50 per 15. Thos. Thorson, Cashmere, Wash.

PURE BRED S. C. BROWN LEGHORNS; best winter layers; hardy, free range stock; eggs, $1.50 to $3 for 15. Vail's Poultry Ranch, Loomis, Wash.

FOR SALE—PUREBRED BARRED ROCK cockerels, Barronett strain; choicest birds, $5. August Anderson, R. No. 1, Pullman, Wn.

PARKS BRED-TO-LAY BARRED ROCKS, winter layers. Eggs, $1.50 for 15; $8 per 100. W. G. Neyland, Spokane Bridge, Wn.

FOR SOMETHING GOOD IN SILVER Wyandottes, S. S. Hamburgs or Golden Campines, write G. G. Wherry, Payette, Ida.

BARRED ROCK EGGS, $2 PER 15. W. D. Good, Mt. Vernon, Wash.

### Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

# Want Ads

Send for card giving lower rates for ads running one month or longer.

### How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

## POULTRY 174 Continued.

S. C. REDS; EGGS $1.50 TO $5 SETTING. A card will bring mating list. Sure to please. J. S. Benson, Cottage Grove, Oregon.

RANCH RAISED WHITE WYANDOTTES. Good vigorous birds, eggs and stock for sale. Jas. A. Hills, Jonathan, Wash.

FOR SALE—INDIAN RUNNER DRAKES; fawn color; $2 each; eggs in season, 15c each. J. F. Medaris, Wapato, Wash.

MAMMOTH PEKIN DUCK EGGS, $1.25 setting. Leonard Ziniker, Cresswell, Ore.

## LIVE STOCK 177

FOR SALE.

A choice lot of pure bred Shire stallions, coming two years old; also pure bred yearling Shorthorn bulls. Address WILSON RANCH, ROCKLYN, WASH.

ABORTION IN COWS CURED AFTER seven days' treatment. Write me in regard to the matter. The best references in Linn county, Ore., on application. Wm. Schneider, R. 1, Box 43, Albany, Ore.

FOR SALE OR TRADE FOR CATTLE, colts, good work stock, or anything of value; registered Shire stallion; six years old; fine disposition and great sire. Wm. M. Porter, Pullman, Wash.

FOR SALE—DARK IRON GRAY REGISTered Percheron stallion, coming seven years old; weight 2000 lbs; guaranteed breeder. Write W. H. Kollenborn, R. 4, Caldwell, Idaho.

BERKSHIRE BRED SOWS AND GILTS, March, April and May farrow. Write for special price list today. SILVER BIRCH FARMS, Newport, Wash.

FOR SALE—WILLOWMOOR PETER PAN 19th, registered Ayrshire bull; 5 yrs. old; gentle, sure breeder. Randolph Brown, R. 3, Junction City, Ore.

JERSEY CATTLE—BULLS, COWS AND calves are included in private sale list now ready. SILVER BIRCH FARMS, Newport, Wash.

POLAND-CHINAS; BIG TYPE; SPRING pigs by Young Chief N. 79349, from good, rangy sows. James A. Hills, Jonathan, Wn.

FOR SALE—25 REGISTERED RED, white and roan Shorthorn bull calves and yearlings. Wm. Mulhall, Fenn, Idaho.

GOOD JACK, SALE OR TRADE. C. D. Muman, Penawawa, Wash.

## HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

## RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

## TAXIDERMISTS 426

WE MOUNT ANYTHING, FURS TANNED and made into furs and robes. Raw furs bought. Mohr, 82 Bernard, Spokane.

## BARBER SHOPS 455

MEN ONLY—RAZOR, HONE AND STROP for $3.50. Write Eagle Barber Shop, Laurel, Mont., Mail Order Dept.

## BUSINESS OPPORTUNITIES 516

$6500 BUYS A WELL-EQUIPPED DAIRY plant and business in a beautiful college town in So. Calif. Brings in about $400 per mo. For full particulars and terms write R. F. D. 1, Bx. 86, Yelm, Wash.

## PLUMBING, STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

## SEEDS 620

VETCH, CLOVER AND FIELD SEEDS.

We carry a complete line of grasses, wheat, oats and other seeds too numerous to mention. Our prices are right. Will be glad to send samples and quote prices.

CORVALLIS FLOURING MILLS.
CORVALLIS, ORE.

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.,
Portland, Oregon.

NEW SEED CATALOG—COMPLETE LIST of Tested Seeds for Western planting. Write for your copy today—MAILED FREE. An experience of 25 years in the Northwest. Aabling-Boyce Seed Co., 89 Pike St., Seattle, Wash.

VOGELER'S PURITY SEEDS.

Alfalfa and clover seeds—full of life—carefully cleaned and tested. Also the finest seed grains. Write for catalog and price. VOGELER SEED CO., Salt Lake City, Utah.

CLOVER SEED, FANCY RED, STRICTLY pure; buy from the growers and save. Sample and price. Write Shadeland Farms, Amity, Ore.

WE SPECIALIZE IN TIMOTHY, ALFALfa, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Ida.

LADY WASHINGTON SEED BEANS; best quality; ten-lb. lots, 20c lb., f. o. b. Weiser, Idaho. P. V. Du Bois.

FOR SALE—HOME-GROWN ALFALFA seed at famous prices. C. W. Bond, R. 2, La Grande, Ore.

## NURSERY STOCK 621

PROGRESSIVE STRAWBERRY PLANTS, bear first year set, from July to November. $2 per hundred; $1.50 for more. G. F. Thayer, Payette, Idaho.

## NURSERY STOCK 621 Continued.

PLANTS.

CLARK SEEDLING STRAWBERRY

The variety that made Hood River famous. No other variety makes as much money for the grower. You can't buy better plants than we are offering. By express, not prepaid, $2.50 per 1000. Trimmed, ready for planting. W. R. Gibson & Son, Route 2, Hood River, Ore.

NURSERY STOCK — ITALIAN PRUNE trees, grafted walnuts, pure strain of Vrooman Franquette walnuts, and all other kinds of nursery stock; small fruits of all kinds. Buy direct and save 50 per cent. Brooks Nursery, Lafayette, Oregon.

EVERBEARING STRAWBERRIES ARE money makers. You can pick strawberries all summer and fall the same season they are replanted. Don't delay order now. Fred Leissler, R. 6, Box 429, Lake Forest Park, Seattle.

FAY'S PROLIFIC RED, BLACK NAPLES currant and Oregon champion gooseberry cuttings, $3 per thousand f. o. b. here. J. E. Newton, R. 3, Bx. 198, Puyallup, Wash.

EVERBEARING STRAWBERRIES ARE mortgage lifters. We have plants, strong and thrifty. Send for price list. F. I. Moffett, Ellensburg, Wash.

## FARM LANDS—FOR SALE 651

CANADIAN LANDS.

WHEAT, STOCK AND GRAZING—Special bargains in new Alberta section, just being developed; crop payments. Come, go with us and look them over. Some parties paid for their lands with one crop. Lands broken, with some improvement, sell for handsome advance. Fine chance for those prepared to break lands and sell, or take contracts. Easy terms of sale.

FARMS FOR SALE.

Crop payments. Wheat, stock and truck farm. 120 acres, all in cultivation; 15 miles city; good roads; good buildings, water, etc. Might take other property as first payment.

LINCOLN TRUST CO.

Cor. Sprague and Howard, Spokane, Wash. Address Mr. Allin.

BASSANO DISTRICT, ALBERTA.

1720 acres of real w-h-e-a-t land; good, black soil; 850 acres ready for spring sowing; 850 acres stubble; $40 per acre, including $25,000 worth of live stock and machinery. Enough seed wheat to plant 1000 acres. Good buildings. Seven-room house, completely furnished. Near R. R. station and grain elevator. It will take entirely too much space to tell all the good things about this place. It will not last. Absolutely the best buy in Aberta, $30,000 in cash, easy terms on balance.

HOUSE AND LAND ASSOCIATION.

514 Riverside Avenue, Spokane, Washington.

FULLY EQUIPPED STOCK RANCH
$2000 BELOW VALUE.

160 acres beaver dam land; all tillable except 2 acres; 80 acres in meadow; 5 head of horses, 8 head of cattle; all farm machinery; good 2-story house, barn, wagon shed, garage, blacksmith shop and other outbuildings; good well and creek. Price $5500; $4000 cash, bal. long time.

This is one of our many.

JAMES W. BOOTHE & CO.
510 FIRST AVE. SPOKANE, WASH.

FOR SALE BY OWNER—ONE OF THE best dairy farms in the Snoqualmie valley; in Snohomish county; 110 acres; 90 river bottom; 50 under cultivation; 40 in pasture; good new buildings; gravity water system, with water power in the barn; also 134 acres state land joining place, all bottom land, under lease. For information address Nick Person, R. No. 1, Box 87, Monroe, Wash.

MONTANA FARM—BIG BARGAIN.

840 acres close to Wilsall, Mont., on N. P. Ry. Only 30 miles from Livingston. 300 a. in cultivation: 400 a. ready for plow; 140 a. fine pasture; abundance of water year round; ideal farm for grains, hay, stock raising; will sell all or divide and will make attractive terms, or will take smaller farm or property in Seattle with some cash. J. E. Osborne, 703 Seaboard Bldg., Seattle, Wn.

MONTANA FARM—REAL SNAP.

1920-acre diversified, partly improved ranch; 60 per cent tillable; fertile soil; nearby forest reserve; two miles from good town; $15 per acre, fourth cash, balance ten years. Excellent subdivision proposition.

EQUITY REALTY CO., 104 First ave., S., Great Falls, Montana.

CULTIVATED CANADIAN WHEAT LANDS. 3000 acres ready for drill; in quarters, halves, or sections; every convenience; easy terms or crop payment. Final payment 1937. Where can you equal it? Western Canada Properties, Ltd., 401 Herald building, Calgary, Alberta, Canada.

IN THE FAMOUS OKANOGAN VALLEY; an ideal sheep ranch; a big hay ranch; three bargains under irrigation project; several good grain ranches; dairy, fruit and alfalfa lands; excellent water, timber, range and climate. J. W. Graham, Tonasket, Wash.

HEAD FOR THE HEADWATERS OF the old Missouri; splendid grain and stock ranches. For information about climate and soil write Chamber of Commerce, Three Forks, Montana.

HOMESTEADS, 160 AND 320 ACRES, ALfalfa, wheat and stock farms, $40 to $100 per acre; paid water. This is a farm and stock country. John Hardwick Realty Co., Vale, Ore.

## FARM LANDS—FOR SALE 651 Continued.

SMALL FARMS FOR SALE.

We have for sale at lower than prevailing market prices—and on terms to suit purchaser—3 small farms, ranging from 10 to 80 acres each—Some improved with house, barn, well, etc., at $80 to $120 an acre, just half former prices. Finest black Palouse soil—just the kind that insures "sure" crops of grain, fruit or garden; located 14 miles from Spokane, on electric line, and paved highway. Surrounding growing suburban community—active trading center.

These are among best bargains offered today. You buy from us as owners. Call at office, or write for full particulars, with plat, before you buy anywhere. One of these tracts will surely suit your needs.

HANAUER-GRAVES COMPANY.
601 Old National Bank Bldg.
Spokane, Wash.

BUY WHERE THEY RAISE THE PRIZE CROPS
IN SNOHOMISH COUNTY.

40-acre farms, $25 per acre. Ten yearly payments, 6 per cent interest. Visit our office and see the great exhibit of PRIZE-WINNING vegetables, fruits, grains, alfalfa and other grasses raised on the adjoining farms. They prove our claims that this is the best land in WESTERN WASHINGTON.

Paved roads. Four passenger trains a day. Graded school, cannery, creamery, cheese factory, plenty of work for the laboring man in the mills and camps, where 75 settlers are all boosters. DON'T LOSE A DAY in asking for our illustrated literature.

BROWNELL LAND CO.
904 THIRD AVE., SEATTLE, WASH.

5000-ACRE WHEAT FARM

in Saskatchewan, Canada; highly improved and equipped; tractors, horses, cattle, hogs, implements; nearly 4000 acres cultivated; 3000 acres for crop this year (1500 acres summer fallow); several sets of fine buildings; finest wheat belt in Canada; high yields; no crop failures; fully equipped for live stock (sheds, meadows, lakes, pastures); 1 mile from elevator. $50 per acre, everything included except grain on hand. $100,000 handles it, balance easy.

THE FRED B. GRINNELL COMPANY.
815 OLD NATIONAL, SPOKANE, WASH.

GOING — IRRIGATED ALFALFA AND stock ranch of 111 acres; gross income $6000; situated on the bank of the Yakima river; ideal for all kinds of stock; properly cultivated, will raise 100 bu. corn and 10 tons of potatoes to the acre. Horses, cows, registered $1000 Holstein bull, Berkshire hogs, chickens, farm implements, etc.; eight-room house, barn, silo, hog and chicken houses. This ranch is second to none in the Yakima valley. Reason for selling, old age. Price for all $28,000; one-half cash. Address B 7, care Washington Farmer, Spokane.

TWENTY-FIVE HUNDRED-ACRE WHEAT and stock ranch; western Canada; completely equipped; caterpillar tractor; thirty horses, cattle, hogs, implements, buildings; close to railway, schools and churches; settled community; telephone, rural mail, good roads; 1200 acres ready for drill. Price, $125,000; one-third cash, balance half crop payment. Western Canada Properties, Ltd., 401 Herald building, Calgary, Alberta, Canada.

JORDAN VALLEY PROJECT—LET OUR office explain this project to you that you may fully understand it. It is so wholly different that you are sure to be interested sufficiently to wish to see it. Literature and information on request. Our autos will take you from Boise to look the project over. Harley J. Hooker, Shaw bldg., Boise, Idaho.

ALBERTA FARM LANDS

in the famous Vermillion district, where land produces as high as 64 bushels of wheat per acre, and other crops accordingly. Also the best stock district in Alberta. We can sell you 160 acres to 12,000 acres and take trade to half its value. Price $16 to $30 per acre.

UNION INVESTMENT CO.
406 ZIEGLER BLK. SPOKANE WASH.

617 A. FINE, LEVEL, EASTERN WASH. wheat land, stubble; fair buildings; good well, windmill; 2-mile haul; great bargain at $12,000. Terms. Low interest. 120-a. diversified farm, 15 miles from Spokane; mile to station; all deep, rich, subirrigated soil; new buildings; fine well; fine roads. Snap at $10,500. J. A. Wilson, Fernwell blk., Spokane, Wash.

FOR LESS THAN THE SOIL WILL PRODuce in one year at present prices—$6000; $3650 cash; 160 acres; 80 under ditch; 25 alfalfa, some ready for seeding; joins range; all implements. For description (with photo, send 25c in postage). Address Box 23, Vale, Ore.

FOR SALE CHEAP—IN WESTERN WASHington; 10 acres land; 5 cleared; no overflow; good country home. Address L, Box 6, Sauk, Wash.

314 A. IN WHITMAN COUNTY; NEAR Oakesdale, with or without crop. Address Box 17, R. D. No. 2, Oakesdale, Wash.

SOUTHERN BRITISH COLUMBIA VALley lands at bedrock prices. Write for list to Barlee, Grand Forks, B. C.

ALFALFA, PLOW LANDS, HOP YARDS, orchards, business investments. Lum Land Co., North Yakima, Wash.

MONTANA IN A NUTSHELL. FREE LITerature. Johnson Bros, Dillon, Mont.

## FOR SALE OR EXCHANGE 702

FOR SALE, OR EXCHANGE

for small farms, one section or more improved choice hay, grain or stock farm. Write description and price of your offer. Thos. Metcalf, owner, Finn, Mont.

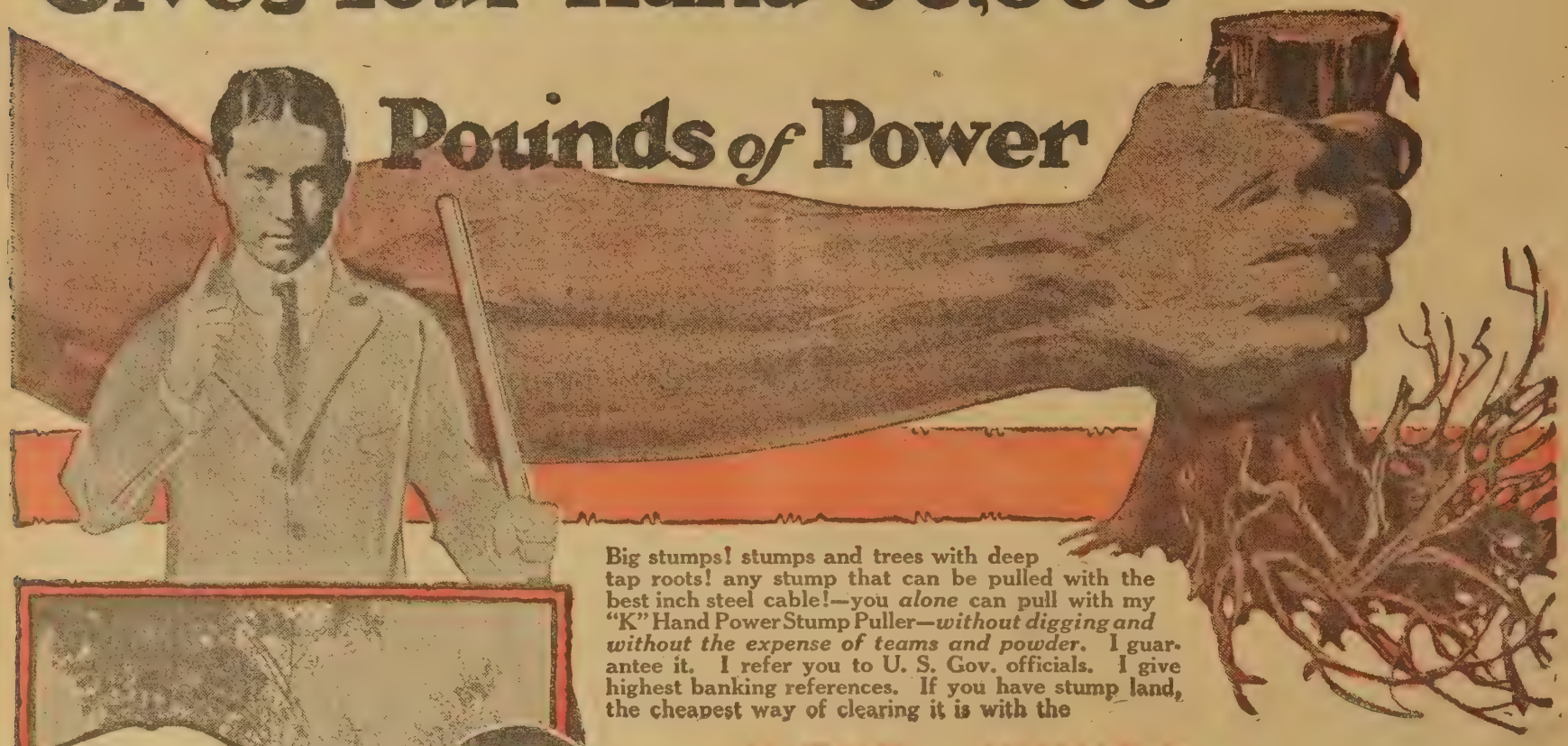
## TO EXCHANGE—REAL EST. 705

WILL EXCHANGE THE BEST 25-ACRE 9-year commercial apple orchard in Spokane valley; 1½ mi. from station; fruit warehouse across road; want well-watered stock ranch. Write, giving full particulars, to A. J. West, 901 First ave., Spokane, Wash.

**When you write to advertisers be sure to state that you saw their advertisement in this paper.**

# My K Hand Stump Puller

## Gives Your Hand 96,000 Pounds of Power



Big stumps! stumps and trees with deep tap roots! any stump that can be pulled with the best inch steel cable!—you *alone* can pull with my "K" Hand Power Stump Puller—*without digging and without the expense of teams and powder.* I guarantee it. I refer you to U. S. Gov. officials. I give highest banking references. If you have stump land, the cheapest way of clearing it is with the

HAND POWER

# K Stump Puller

Frank Hance, a *one-armed* farmer of Bowie, Md., pulling a double silver maple 3 ft. 8 in. in diameter at the ground, with deep tap roots. This is an easy pull for the "K," as the cable can be hitched high and the leverage is consequently greater.

### How the "K" Pulls Biggest Stumps

The "K" works on the leverage principle of the ordinary lifting jack, except that the power is applied on a cog-wheel instead of a standard. 100 lbs. push on the lever develops a 48-ton pull on the stump—all an inch steel cable will hold. One man operates it alone—no teams to pay for—no walking.

### A Mechanical Wonder

Made of Krupp steel—guaranteed against breakage. Weighs only 171 lbs.—easily carried or hauled about on its own truck wheels. Has two speeds—60 feet per minute for hauling in cable or for small stumps—slow speed for heavy pulls. *Works equally well on hillsides and marshes where horses can not go.*

### Owners Praise It

H. Sinclair of the Dept. of the Interior, a U. S. Gov. official, writes: "The stump puller is a wonder."

Ernest Thompson Seton, author and naturalist, declares the "K" "a great success."

Hundreds of owners write in, telling of pulling six- and seven-foot stumps, of pulling faster and pulling bigger stumps than by any other machine.

**Special Offer** I am making a special offer to get a "K" Stump Puller introduced in every neighborhood. Write me today for full information and for free book on Land Clearing.

**Walter J. Fitzpatrick**

Box 538 182 Fifth St. San Francisco, Cal.



H. G. Hunzicker of Foster, Wash., pulling a 24-inch fir stump with deep tap roots out of hard ground, without using powder or cutting any roots.

**Tear Out and Mail Today**

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Box 538, 182 Fifth St., San Francisco, Cal.
Send me full particulars on your special offer and your free booklet on Land Clearing.

Name_____

Address_____

THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XLI. NO. 11. MARCH 14, 1918. ** WEEKLY

# Sheep Increase in Both Number and Value



—Photo by Frank Palmer, Spokane.

There are more sheep in the states of Washington, Oregon and Idaho now than there were one year ago. They are worth more money than the sheep in these states a year ago were worth. The percentage of increase in value is much greater than the percentage of increase in number. These are statements of the United States department of agriculture, the figures being based on data on hand January 1.

The State of Washington on that date had approximately 661,000, as again 585,000 one year before. The value of the sheep in Washington on January 1 was approximately $7,535,000, as against a value of $4,154,000 a year before.

Idaho leads the northwest with 3,202,000 head, as against 3,170,000 head a year ago, the values in that state now and then being estimated at $42,587,000 and $25,994,000. Oregon estimates show 2,448,000 sheep this year, as against 2,400,000 a year ago. The estimated value of this year's number is $29,621,000, as against $19,440,000 a year ago.

For the State of Washington the figures show a gain in the number of sheep of about 13 per cent, while the enormous increase in value of more than 80 per cent is shown. The department estimates the value of lambs in Washington on January 1, this year, at an average of $9 per head; the value of ewes one year old and over, an average of $12 per head, and the value of wethers one year and over, an average of $11.50 a head.

The estimates of the department of agriculture give the total number of sheep in the United States at the beginning of this year as 48,900,000, an increase of 2.7 per cent. over one year ago. It likewise gives the total value of sheep this year as $577,867,000, an increase of about 70 per cent in value.

Continued on page three.

CHEVROLET

*The Product of Experience*

# *ACHIEVEMENT!*

Putting within reach of the public a necessary article it has never before been able to secure is what makes a success of any business.

Offering the public a completely equipped automobile at a price never before possible is what made the Chevrolet a success.

Low price and high quailty were made possible by the erection of large and modern factories at strategical distributing points throughout the country—guaranteeing volume production and efficient delivery—the two main factors in building an exceptionally high-grade car at an exceptionally low price.

That Chevrolet has jumped from a production of 5000 cars in 1914 to 125,000 in 1917—a record never equaled—is proof that it is a GOOD car, for no automobile ever attained universal popularity without having true merit.

People are buying more Chevrolets today in the Pacific Northwest than any other electrically equipped car, for this car combines Appearance, Comfort, Performance, Service and Economy of Operation with low first cost to a greater degree than does any other car. Everybody knows "Chevrolet" means the highest point in motor efficiency.

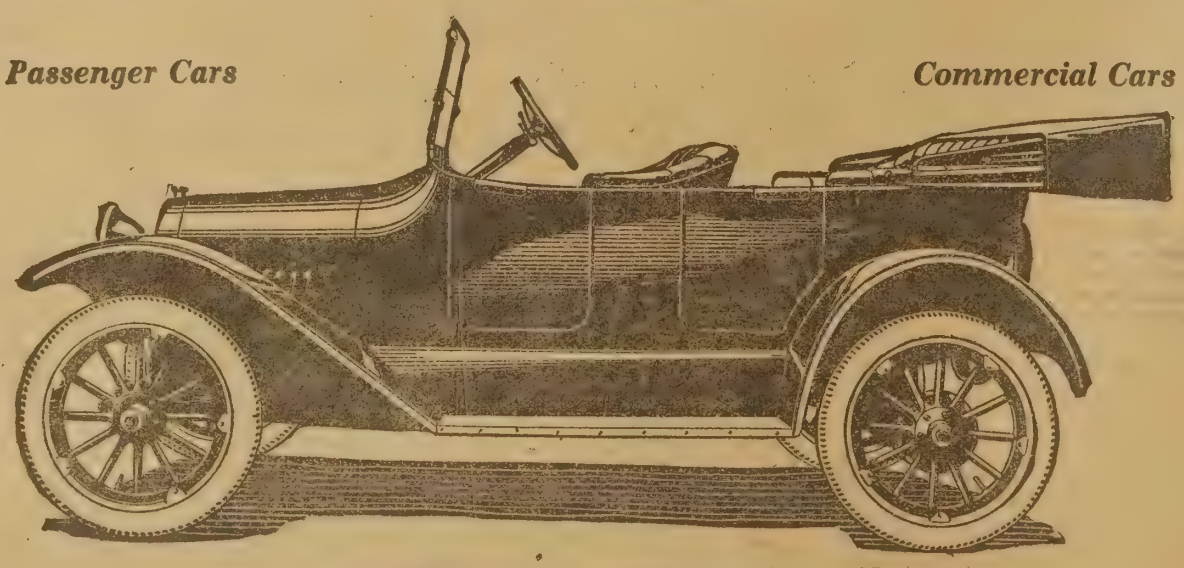
Possession of a Chevrolet will open up to you unbounded possibilities for pleasure and profit, and its price places it within the reach of all.

See your Chevrolet dealer or write to

**CHEVOLET MOTOR COMPANY OF CALIFORNIA**

**Spokane, Wash.** **Oakland, California** **Portland, Ore.**

***Passenger Cars*** ***Commercial Cars***



**This One $765.00**

**At Pacific Coast Points**

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 11 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF March 14, 1918

## May Face Penalty

### Income Tax Statements Mandatory

As indicated in these columns the government has extended to April 1 the time within which income tax statements may be made without penalty. Reasons for this extension were the greatly increased volume of work laid upon officials by the new law, inability to get sufficient blanks in time for the old limit date of March 1, and a realization that a great many people had not yet become conversant with the law.

**The law requires that every individual whose net income in 1917 was $1000 or more, if the person is unmarried, or $2000 or more if married, must make a sworn statement on blanks supplied by the internal revenue collector in his district.**

**Where an individual refuses or neglects to file his return within the required time the amount of the tax is increased by a penalty of 50 per cent, and there is a further penalty of not less than $20 nor more than $1000.**

The 50 per cent will not be added where the return is later filed voluntarily and before notice from the collector, and it appears that the delay was not wilful but was due to a reasonable cause.

If a return is falsely or fraudulently made with intent to defeat or evade the tax the person making such return is guilty of a misdemeanor, and is subject to a fine of not exceeding $2000, or imprisonment for one year, or both.

Where a false or fraudulent return is wilfully made the tax is to be increased by 100 per cent of its amount.

Where a corporation renders a false or fraudulent return, whether wilfully or not, it is subject to a penalty of not to exceed $10,000.

A Washington dispatch of March 8 says that income tax regulations for farmers, issued that day by Internal Revenue Commissioner Roper, provide that all gains, profits or income received in 1917 from sale or exchange of farm products, whether raised on the farm or purchased and resold, must be included in the return. The rules apply to all persons or corporations operating ordinary farms, ranches, plantations, stock, dairy, fruit or truck farms.

Deductions from gross income may be claimed only for expenses connected directly with farming operations for last year and made during the year, even though crops on which the expenditures were made were not sold within the year. A former ruling that the cost of stock purchased for resale is an allowable deduction under the item of expense is annulled, and these expenditures now are regarded as capital investments. Consequently, when the live stock is sold the original cost may be deducted from the sale price to ascertain the profit, which is taxable.

Under the same procedure, if the cost of stock or farm products purchased in any year previous to 1917 were deducted in returns of those years and the stock sold last year, the entire proceeds are to be included in the taxable income. This applies only to farmers who have made income tax returns heretofore. If this deduction had not been claimed it may be taken from the selling price of stock last year to determine the taxable profit.

Farmers who keep books according to some approved method of accounting which clearly shows net income, and who take annual inventories may prepare their returns in accordance with their inventory record. Live stock purchased for draft, breeding or dairy purposes may be included in the inventory for each year at a figure which will reflect the reduction in value estimated on the basis of increased age of the animals.

These regulations relate only to farm operating income and not to profit which may have resulted from sale of a farm. Neither is a farmer required to include in his taxable income the value of farm produce consumed by himself and family. If produce is exchanged for merchandise the market value of the material received is to be considered as income.

**Alaska Minerals.**

In 1917 Alaska produced minerals valued at $41,760,000.

## What Lies Back of Silverdale Eggs

### *Cooperative Spirit Rules and Standard Product Is Result*

Down on Western avenue, in Seattle, "Silverdales" are a staple in the produce trade, much as is sugar on the general market. "Silverdales," it may be well to explain at this point, are eggs; eggs produced at Silverdale, Wash. They owe their reputation to the fact that they are dependable in quality, and are put out under a trade name which is a guarantee of this dependableness. Back of "Silverdales" lies Silverdale, premier cooperative community of western Washington.



**A good bird belonging to D. Tancred of the Silverdale association.**

Cooperation is always a mental condition before it becomes a physical fact, and so it happens that for a time the progressive farmers of Silverdale thought cooperation and talked cooperation, but were forced to buy their chicken feed and their groceries at one of the privately owned stores in Silverdale. But the cooperative virus was in the very air, and these poultry farmers wanted to patronize themselves when they bought provisions. In due course of time they purchased one of the local private stores and the cooperative store of the Silverdale Poultry association came into being.

Under the old competitive methods operating expenses came to 12.7 per cent; now they amount to about 6.3 per cent, and because of this big saving in running expenses it may be said that the business is paying for itself.

The Silverdale Poultry association, Inc., is practically a stock company, with each member's holding of stock limited to one share and with dividends paid not on stock, but on patronage. There are about 250 members at present, and the great majority of these are loyally and whole-heartedly with the cooperative enterprise. The store building which it now occupies with its general merchandise business forms the center of the community, economically. These officers are: Thomas Hagener, president; Olaf Nyberg, secretary; directors, Thomas Hagener, J. P. Johnson, J. M. Smail, W. A. Somers, J. L. Neil.

## What Are Your Regular War Savings?

All over this nation there is now being taken a census of men and women over 16 years of age and under 60 years. All manner of questions are being asked, so that the government will be able to know just the man power and the woman power of the country. Here is one of the questions: "What are your monthly war savings?"

That's one of the most vital questions on the card. It is one of the most important things right now before the American people, this thing of saving. We have been careless and wasteful long enough. Now is the time to stop it and fall into line with the great, world-wide sentiment of economy and industry.

The government wants to know exactly what each one of us is doing about the war savings and thrift stamps that it is offering us, and every one of us should be able to say definitely in answer to that question: "I am buying so many war savings stamps each day or each week." We must answer that question. Good business and good patriotism demand that we be able to give the right kind of answer. Let every one of us save systematically. If you want to be able to make the right kind of answer to that question, the Farmer will help you. Decide how many stamps you want and use the coupon herewith.

## Clip This Convenient Order Blank

Address all communications concerning thrift or war savings stamps to the Washington Farmer, War Savings Department, Room 26, Review Building, Spokane, Wash.

Remittances may be in any form desired, including personal check.

The Washington Farmer, War Savings Department, Room 26, Review Building, Spokane, Wash.

Gentlemen: I wish to invest in ..... U. S. government thrift stamps at 25 cents each.
(number desired.)

I wish to invest in ..... U. S. war savings stamps at $4.14 each.
(number desired.) March figure.

Amount enclosed $.....

Full Name .....

Town ..... State .....

R. F. D. No. .....

I have already bought.....Stamps and have a.....
(kind of stamp.) (card or certificate.)

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## Sheep Show Increase

(Continued from page one.)

The sheep industry of the entire United States has been stimulated not only by the increase in mutton value, but by the great increase in wool prices, which, during the last year, have reached the highest mark on record. Illustrating the increase in wool values the department shows that one year ago on the Boston market wool classed as "Ohio fine unwashed" was quoted at 40 to 44 cents per pound, while on the same date this year the same class of wool is quoted at from 65 to 67 cents per pound. Likewise a year ago "best tub washed" wool on the St. Louis market was quoted at 48 to 49 cents a pound, while this year it is quoted at 83 to 85 cents per pound.

In the northwest as in many other sections of the country the sheep raising industry has been marked during the last year by a tendency to increase the number of small farm flocks. Agricultural leaders everywhere have urged the advisability of a few sheep on the farm to utilize waste feeds and at the same time bring a very considerable profit to the raiser.

**Trappers of the Ozarks.**

Are you reading the "Trappers of the Ozarks?" If so tell your neighbor what a good story it is. If you are a new subscriber or if you have not begun it before just turn to page 28 and see what you think of it.

**The Garden Contest.**

On page 4 of this issue is given the first instalment of letters received in competition for the prizes offered by the Farmer. Owing to the large number of plans submitted the decision has not been made yet as to the winners. Letters will be published from time to time, and the announcement of winners made within a short time. Don't fail to read the plans on page 4 and in subsequent issues.

# "Out of Our Garden Comes Most of Our Living"

## *Dozens of Gardeners Enter Prize Contest and Tell How to Produce Food to Win the War*

"Out of our garden comes the most of our living," writes Mrs. E. C. Ford of Fairfield, Idaho, in the letter that she submitted in the war garden contest announced some time ago by The Farmer.

To those that do not know the value of a garden that declaration should be an inspiration. To those who do know the value of a plentiful supply of fresh and winter vegetables it should be a stimulus to redoubled effort this season.

That sentence indicates the possibility of a farm garden in helping to solve the food problem of this strenuous war time. Not only can the gardener produce wholesome food for the home family, thus greatly decreasing the consumption of other foods that should be conserved, but he can also supply the needs of others less fortunately situated and aid them in conserving those things for which the allied armies are pleading.

On this page are a number of letters or extracts from letters received in the garden contest. When reading them remember that they do not all refer to the same soil and climatic conditions. Use good judgment in adopting their suggestions, or parts of them, but raise a garden. It is one of the easiest ways of doing your bit. It is your patriotic duty.

"Fortunate indeed," says Mrs. La Verne Gahley of Parma, Idaho, "especially during our nation's need, is the housewife who takes a pride in preparing various dishes which may be prepared from the many garden vegetables; for she it is who has it in her power to respond to the call for economy in foodstuffs.

"One can hardly realize what a great part of the living may be prepared from vegetables of a well-kept garden unless one has tried it. Go into the garden business with the idea of seeing how much you can save on the grocery bill, and you will accomplish things that will surprise you.

"Raise enough in your war garden to do some canning and drying for winter. The simple process of canning the smaller vegetables by filling the cans with the vegetables salted a little, and then boiling them three hours in boiling water in the cans, has wonderful results. The secret of success lies in boiling them long enough and getting them sealed perfectly tight while very hot. Corn and peas both are very fine dried."

Letters and plans from other follow:

### Study the Season.

In my opinion one acre of garden and early potatoes would not be too much to use on a farm tract. Less, of course, would be used on city lots, but always use the longest rows possible to simplify cultivation. An acre about 20 rods long and 8 rods wide makes a nice shaped garden plot and should be as near the house as possible and it should have a southern or eastern exposure or slope, and the soil should be well tilled and fertilized. Lay off a strip full length of garden nearest house for small and early vegetables so wife and children can do their bit easily. The first spring seeds sown should be such hardy plants as radishes, lettuce, spinach, beets, carrots, parsnips, seed onions, peas, etc. These can be planted in rows as soon as ground can be worked. Seeds soaked 24 hours in water germinate much more quickly than dry. A few rows of early potatoes should be planted about the same time; if treated with formalin and allowed to sprout will come through the ground with a few warm days. Of course one should have such plants as cabbage, tomatoes, celery, etc., planted in boxes in the house if not in a hotbed. Early tomatoes such as the Earliana, also early Wakefield, cabage could be used very early in summer by care. The plants should be transplanted in damp weather as soon as danger of frost is past. Later kinds can be planted in rows and thinned out. Sweet corn, cucumbers, squash, pumpkins and the like must be reserved to plant later than the hardier seed or when field corn and potatoes and beans are planted. Long ago I learned a little lesson on the time to plant each kind of seed and do not plant by calendar, as we do not always have the same kind of spring. If one watches the fruit trees as they bloom they can make good by planting the hardier kinds when peaches, plums and cherries blossom. These include the first named varieties. When apple trees are in full bloom plant the more tender sorts, such as late peas, string beans, sweet corn, sweet potatoes and also vines, and when blossoms are all gone and fruit set, it will be safe to transplant and sow such things as cabbage, tomatoes and that sort of stuff. Cauliflower and pepper are along the same line. I have found one can have a nice double crop by planting field or navy beans, also string beans with the sweet corn or even field corn, also pumpkins and squash. It does not seem to hurt the amount of corn raised. Get good seed from a reliable firm and get it early on account of scarcity. Test it same as corn so as not to make any mistake. There are many other good things that could be raised easily. I like some perennials such as rhubarb, horse radish, winter onions, garlic, asparagus and some of the herbs such as sage, thyme, etc. These can be planted along a fence, so as not to bother "the man with the plow" but, of course, do not make a full crop the first year.

Another little scheme I have learned on a small place is, when one has not a strawberry plot, to make one by building a mound, say 6 to 10 feet at base, or whatever size is convenient, slanting to 2x4 at top, about 3 1-2 feet high. Set a row of bricks or stones around it with spaces say two inches. Keep on with the rows and break joints until all is covered. The spaces must be full of good ground, and in that space plant strawberry plants. Progressive I found best and then one can have berries from June to November, as one can cover such a strawberry patch. The brick or stone hold moisture and the runners can be kept cut off. The berries are large and clean and make a wonderful help in the menu.

The best method I find for cultivating a garden is by horse cultivator or wheel cultivator as it saves time and strength. Of course one has to do some hand-picking and thinning, but that is easier than the hoe method. Small wheeled drill cultivator and hoe can be bought reasonably, and by the way right here I will say that a few Belgian hares would use all the weeds and plants thinned out of rows, as well as every unsightly weed around the place and without any material cost, and is a great help in the meat question as they are very prolific and easy to care for, but must be kept inside of wire netting or they will help themselves to garden too frequently.

The harvesting of a garden is usually the most dreaded, but as it is generally done by piece work, while canning, cooking, drying, etc., it does not leave such a harvest at one time. A plow or cultivator can be used to dig the potatoes if a digger is not at hand. The dry beans pulled by hand, the root crop by use of a garden fork, and so on along the line.

For cutworms, which is the first pest, use bran sweetened, and use orange juice as a decoy, mixed with water and paris green or some commercial poison, as advertised in all our seed catalogues. Sprinkle around where you intend to transplant, and cover with paper over night, and the worms come up, eat it and die. Keep the poultry out of the garden when using this poison. Paper rolled around the stalks and plants, with bottom open, is a help too. The garden mole is easier to trap than to poison. Potato bugs and all that kind of pests can be kept in check by spraying with paris green in water. The cabbage worm can be kept out of commission by spraying with a solution of formalin when the white butterflies appear.

A good plan to make use of the garden stuff is to use all we can while green, to save other things. Then can all that is possible, especially tomatoes, corn, beans and such like. Dried corn is very good, and string beans made as sweet pickles also can be put down in salt and freshened when wanted. Cucumbers are also good pickled this way. Sauerkraut is a treat to many, even if it a German dish. Whatever is not made up into food of this sort ought to be carefully put into a dry, well ventilated cellar or root house. All our staple vegetables can be kept almost as long as potatoes this way.

When planning your garden leave plenty of room for transplanting cabbage, tomatoes and such things, and with the field potatoes, beans and such useful things we will help win the war, each and every one of us.

MRS. J. M. FOYE.
Valleyford, Wash.

## Prepares Table to Illustrate Method

I have used as a model the standard garden, 75x150 feet, for a family of five, and have used the main crop vegetables that we grow in western Washington. I place the different varieties so that each may receive the most sunshine. With endive I've put flowers; most of us have so little time for flowers that we would welcome a row or two among our vegetables. In one of the smaller European countries now at war, the gardeners always plant some flowers among the vegetables.

We do not have many garden pests. The mole or mountain beaver is the worst. Some trap the mole, others put red pepper with seeds as they plant them, and others have used poisoned raisins. Potato blight may easily be prevented by treating the seed in a solution of formaldehyde. The worms that bother cabbages and cauliflowers will stay away if the plant has been watered at planting time with a very weak solution of carbolenum.

Harvesting and preserving vegetables often requires as much time as planting them. In this climate, cabbage, broccoli, celery, turnips, rutabagas, beets, carrots and parsnips may be left in the ground. Potatoes should be stored in a cool, dark, dry place after they are dug. Good shell beans can be grown here and if not quite ripe when frost comes, the drying process can be finished by artificial heat. Cucumbers are best pickled. Squash and pumpkins can be stored. Cabbage is best used in sauerkraut; and green beans may be preserved in a similar way. In a jar thoroughly sterilized place a layer of beans, then one of salt and alternate until filled, on top place a weight or a saucer. When using the beans, they should be soaked in several waters. Beans, peas, cauliflower, corn and root crops are, as we all know, delicious when canned in the cold pack way; peas and corn should be canned within 24 hours of the picking to prevent flat sour. Corn is better dried for the fine lavor is then retained. Onion sets will bring more satisfactory results than the seeds, for they mature six weeks sooner. After the bulb has grown the tops should be tramped down, the bulb left to ripen before digging.

Never in the history of our country has the raising of our food been as needful as it is at present. We can raise almost our entire supply and by having an "all year 'round" garden, and using and preserving the products, we will eat less meat, wheat, fats and sugar and thus do our best instead of our bit and help win the war, for win we must. It is our privilege to produce.

MRS. WINIFRED BUCKINGHAM.
South Bend, Wash.

Here is Mrs. Buckingham's table showing time and method:

| Kind of vegetable | Seeds required | Time of planting | Fertilizer | Cultivation. |
|---|---|---|---|---|
| Beans | Bush, 2½ qts. Pole, ½ pt. | Apr. or May | Cow stable manure | Shallow cultivation |
| Cabbage, Cauliflower and broccoli | 75 cabbage 18 cauliflower 18 broccoli | April and May July | Cow stable manure | Frequent hoeing, a little carbolenum mixed with water keeps worms away. |
| Celery | 75 plants | June | Any fertilizer that contains potash | Water often |
| Corn | 1¼ qts. | May | Liquid manure | Hoe often |
| Cucumbers | 1 pkt. | June | Cow stable manure | Plant around a perforated tin can sunk in the ground and water often |
| Lettuce | 1 pkt. | April | Liquid manure or nitrate of soda | Hand cultivation, water |
| Onions | ¾ qt. of sets | April | Old manure | Hoe and keep entirely free from weeds |
| Peas | 3 pts. | March | Chicken house manure | Hoe |
| Potatoes | 532 seeds | March | Wood ashes and good manure | Frequent hoeing |
| Squash and Pumpkin | 1 pkt. each | May | Lots of cow stable manure | Keep soil loose around roots |
| Radishes | 1 pkt. | March or April | Commercial fertilizer | Spread cheesecloth frame over to keep off flies that lay eggs; water |
| Turnips, bagas beets, carrots and parsnips | 1 pkt. each | July April | Well rotted manure rich soil | Keep loose soil, free from weeds |

### Begins With Onions.

Just received a seed catalogue, and oh my! what a lot of good things they do picture out. How nice if we only could grow such garden "sass." Well we set to planning at once what we shall have in our farm garden. We must all have berries, strawberries, dewberries, raspberries, blackberries. We must have rhubarb and horse radish, multiplying onions and herbs of all kinds, also asparagus.

Now for garden seeds. Let us order early and have variety, for out of our gardens comes the most of our living. We must have our rows as long as possible and as straight as we can make them, although a few crooks and curves look more natural and take the measured, too mucth planned effect away.

Onions are always my starting point of feeding. White bunch and Australian Browns are the favorites. When we seed our onions, carrots, parsnips, parsley and oyster plants we put in a few radish seeds to guide us in hoeing, as the radishes come up quickly and if seeded with these other vegetables eight or 10 inches apart we have our radishes for the table and a row marker for slower vegetables. We want ox heart carrots, plenty of them, as our fowls will eat all the surplus ones not needed for the table. We want three kinds of peas, the dwarf, Notts Excelsior for intermediate and the telephone for late peas. We want Early Jersey Wakefield cabbages for early use and they can be started in the rows with onions or carrots, also the old-fashioned flat Dutch cabbage for late. We want tomatoes of the early kind, also the husk tomato for we think they make finer preserves than anything we can grow. We would not do without bush squash, as they are either fruit or vegetable, according to the way they are cooked. We must have Hubbard squashes and in our corn patch we will grow Japanese pumpkins. If we are to have help to cultivate our garden we will have both watermelons and muskmelons. Of beans, let us have a plenty, both string beans and the kind to use dry.

We salt our beans instead of canning them for winter. Place a layer of beans and a layer of salt, etc., till your beans are all used up. You may add to them any time, put a weight over them, and they will form their own brine. We like them better than the canned beans. We dry peas when they are green and just fit for the table. Both peas and beans must be soaked before cooking.

We want a few beets, lettuce, turnips and rutabagas, and it is nice to have a few more of all vegetables than we need, for we can always find a sale for them at our nearest town. We never forget to grow cucumbers, kale and cauliflowers. The cucumbers we plant in rows about six inches apart in the rows and the rows about four feet apart. When seeded this way the first flowers seem to be pollinized easier, as they are closer together than in the hills, and the first blossoms do not blight.

We use plenty of well-rotted manure for fertilizer, and find that we can not cultivate our ground too often. A hand cultivator is useful, and a black-handled three-tined fork does splendid work with us in the rows of young plants. We start our tomato plants in the house in the month of March. We love flowers, and sometimes scatter old-fashioned poppy seeds in the rows of vegetables, and they help to brighten the garden. Our happiest summer hours are spent in the garden.

MRS. E. C. FORD.
Fairfield, Idaho.

# Why We Must Save Our Wheatstuffs

## *Allies Must Have Hundreds of Millions of Bushels This Year or Lose Battle*

Lord Rhondda, British food controller, recently cabled Mr. Hoover: "Unless you can send us 75,000,000 bushels (meaning immediately and from last year's crop) we can not hold out until your army is ready to strike."

That is why the government is begging the American people to save wheat and urging American farmers to make extraordinary efforts to increase this year's production.

The Wall Street Journal, a painstaking statistical authority, finds that our European allies and the small neutral countries of Europe will need imports the coming year of about 650,000,000 bushels of wheat. Where can this wheat be found?

A high official of Australia said recently that his country had nearly 300,000,000 bushels of surplus, the accumulations of three harvests. But Australia is on the other side of the world from Europe, and with ships lacking for that long voyage and the German U-boats cutting steadily into ocean tonnage there is no prospect of getting the Australian wheat to Europe. Since the first of January Australia has shipped only 3,380,000 bushels, Argentina 2,680,000, and India 800,000. "Almost enough to set the tables two days shipped in six weeks."

Increasing dependence, therefore, must be placed on America, and the Journal finds that on the basis of prewar consumption and reserves 250,000,000 bushels would represent the limit of what North America could supply. But Europe needs 650,000,000 bushels.

David Lubin, delegate of the United States to the international institute of agriculture at Rome, said the other day that there is a continued shortage of foods and three methods of overcoming it suggested themselves to his mind: Payment of bounties by the government, the guaranteeing of high prices, or irrigation. Mr. Lubin thinks that the third plan, for more extensive irrigation of arid lands, would be likely to prove the most effective. On that point he said:

"There are, no doubt, vast tracts of land in Idaho, in Montana, in New Mexico, in Wyoming, in Utah, in California, in Arizona, in Colorado, in Nevada, in Texas and other states which, when supplied with the necessary water, could be made available for cattle and sheep ranges. These vast tracts of land, when irrigated, would afford a means for largely increasing the area of livestock production.

"But would not the construction of extensive irrigation systems be likely to take more time than the needs of the case would permit?

"Well, as the time required for construction would depend largely upon the number of laborers employed, it would follow that by increasing their number the time could be shortened.

"But even then, is it not likely that by the time such systems were gotten into working order the war would be over?

"Supposing the war were to be over, there would still be the shortage of needed livestock, for cattle, sheep and hogs can not be multiplied as rapidly as other productions of the farm. There is, therefore, bound to be a shortage of livestock for several years to come, whether the war be ended or not.

"Assuming, however, that this irrigation proposal be taken up, under whose auspices should it be carried out?"

"The construction of the extensive irrigation systems should largely, if not altogether, be done by the government, for this would, in the first place, expedite the work, and secondly, it would place the whole matter under government control.

"But would not such action be unprecedented?

"It certainly would, but then, are we not at present living under conditions which are unprecedented?

"The marvelous dexterity with which the momentous political situation has been handled is such that on the surface all seems normal and quiet. Hardly a ripple seems to ruffle the calm of the financial and industrial life of the American people.

"But below the surface what is to be seen? A raging, ravaging, devouring war; a great war; the greatest war in history; a war which consumes on a scale in geometric ratio to that of other wars—where former wars killed by the thousand this war kills by the hundred thousand. Where the sufferers could formerly be counted by the million, they can now be counted by the hundred million. Where former wars consumed money by millions, this war consumed it by billions.

"And the war still goes on.

"We are called upon to exert all our power; to leave no stone unturned; to sift, weigh, measure, adopt and carry out all honorable means that may lead toward victory. And in so doing we should not overlook the importance of the question of augmenting the livestock resources of the nation.

"It, therefore, follows that if there be the vacant land and the water available for the plan proposed it is incumbent on the government to carry it out. More than this; the government should exert its influence toward having similar measures taken up in Argentina, Brazil, Mexico and in other Central and South American countries. Thus by augmenting the livestock resources of the United States and those of our neighbor countries we would strengthen an important and essential factor toward victory for ourselves and for our allies."

Mr. Lubin is a high authority, but we question the practicability of a plan so vast and difficult when the nation is at war. Not only for the objections which he himself has pointed out and answered, but on account of the stupendous difficulty of putting settlers on the reclaimed tracts. Eastern farmers do not understand irrigation methods, and even in peace times are slow to move west and settle on reclamation projects already constructed. It takes a lot of education to make a successful irrigation farmer.

We do believe, however, that the government should make extraordinary efforts to put under cultivation all the lands now under irrigation. When that has been done it will be time to engage in yet moe ambitious projects.

The sure remedy will be found in better prices for food products. Prices that will justify the cultivation of enormous areas, in the aggregate, of second-class land.

We do not like the prospect of laying yet higher costs of living on the masses of the American people, but there is a graver evil than high cost of living—a pinching food shortage, and if the authorities are well advised, that is what is confronting the United States and its allies.

# Farmers Bid Against Each Other

## *Lack of Uniform Wage Aggravates Farm Labor Trouble*

That many farmers throughout the northwest are adding to their own and to their neighbors' labor troubles is indicated by reports from many localities that some of them are bidding against each other, and community against community, for farm hands. There is, however, throughout the northwest a strong tendency for statewide agreement between farmers on wage scales to be paid during the present season, and in many localities agreements are being reached and fairly well lived up to, according to reports. Especially is this believed to be true in the state of Idaho where the state farm bureau has taken the matter up and agreed upon a wage scale.

The wage scale in Idaho as agreed upon provides for $60 per month with board for the regular farm hand, with $80 per month for those who are so situated as to board themselves. For harvest help it is agreed in Idaho that common harvest labor shall receive not more than 30 cents per hour or $3 per day of 10 hours, with not more than 45 cents an hour for time put in in excess of 10 hours a day. This is in cases where the employer boards his men. One dollar additional would be allowed per day where the laborer boards himself.

A tendency for similar agreements for this is noted in the other states of the northwest and considerable success appears to be resulting. Where agreements have been reached, $60 a month with board is the wage usually agreed upon. Farm organizations county agents and others in Oregon, Montana and Washington are working on the problem.

However, it is evident that individual farmers, fearful that they will be unable to secure the needed assistance in putting in their crops, are making concessions in wages that will greatly handicap the agricultural industry, not only of their communities, but of the entire district.

J. C. Scott, federal farm help specialist for the state of Washington, reports that instances have been called to his attention where farmers have agreed to pay as high as $110 a month with board and room. Oother instances are on record of $75 and $100 a month. Mr. Scott is conducting a campaign in the state of Washington for the establishment of a comprehensive system of farm labor bureaus under which practially every farm community shall have a local bureau to assist the farmers in securing the help they need and likewise to assist the laboring man to secure the employment they seek. Mr. Scott believes that there is an abundance of farm labor available, but that much of it is holding back waiting for increased wages.

## Study Grain Grades

For the purpose of ascertaining the views of the wheat growers of the Inland Empire on the proposed grain grades for 1918, the grain market bureau of the United States department of agriculture has called a public conference for Spokane on March 18. Wheat growers are urged as largely as possible to attend in order to give the federal authorities the greatest amount of information possible upon which to fix the details of the grain grades.

**A Knitting Shop.**

Philadelphia has opened a knitting shop where soldiers and sailors are given instructions in using needles.

**Third Instalment.**

You have missed something worth while if you have failed to read the first two instalments of "Trappers of the Ozarks" in the last two issues of the Farmer, but you can begin now if you did miss them. Turn to page 28, read the synopsis of past chapters and then read about that buffalo chase and the adventure with a bear.

## Nine Cents for Sacks

R. A. Lewis, vice president for the federal grain buying corporation, has announced that farmers who sack their grain this year will be allowed nine cents a bushel for their sacks. That is, the price of sacked grain will be nine cents a bushel more than that of bulk grain. This will amount to a return of about 20 cents a sack for the sacks used, depending upon how the sacks are filled by the threshing crew.

There has been agitation over the high prices being asked for bags for the new crop. A full investigation was held last week in Washington, before the war trade board and the evidence went to show the present high prices are due to the high prices demanded for bags in Calcutta, and not to any speculation on the part of the bag men here. While no definite allowance is set for barley, it is known that the value of the second-hand bags is added to the bulk value of the barley, and indirectly the farmer will get back just about the same proportion of the cost of his bags when he sells his barley.

The assurance of the new price, so far as the grain corporation is concerned, is contingent upon the fact that the end of the war or other causes might be such that the grain corporation would not handle the wheat crop this year as they have in the past, and the allowance of 9 cents a bushel is based on the present bag market and would only be revised if conditions radically changed.

**FORM GARDEN ARMY.**

**Government Organizes Children.**

The United States department of the interior and the department of agriculture have announced a movement designed to enlist 500,000 children into a great garden-producing army for the coming season. The organization of the children in the cities, towns and villages will be under the direction of the department of the interior, while the organization in the country will be under the department of agriculture. In order to stimulate the work of the youngsters there will be special honors in the form of prizes, badges and the like. To give it a sort of military status the members will be entitled to display in one form or another the insignia of the new service, U. S. G. A., meaning United States garden army. It is understood that the parochial schools of the Catholic church will participate the same as the common schools of the country, the movement being pushed largely by the school authorities. Cardinal Gibbons has announced his approval of the plans for parochial schools to participate.

# It Takes a Lot of Food to Feed the Army

Uncle Sam must draw heavily on the farms, orchards, gardens and ranges to feed his army of 1,500,000 men now in service or in training. It takes a lot of food to satisfy the hunger of all those huskies. They will eat in a single day 3000 beeves, 750 tons of potatoes, 225,000 pounds of bacon and 40,000 pounds of prunes.

Canned goods are consumed in enormous quantities. The army takes 275,000 cans of condensed milk daily. Its vegetable diet includes 130,000 cans of tomatoes daily, 36,000 cans of corn, 24,000 cans of green peas, 2500 cans of green beans, 1800 cans of cabbage.

In fruits the army consumes every day 7500 cans of peaches, 3000 cans of pineapple and 225,000 cans of jam, supplemented by other cans of strawberry and raspberry preserves.

Some food, that! As the daily army ration weighs about four and a half pounds, it will take 6,750,000 pounds of food daily. Loaded on cars, that would mean three long trains of 33 cars, or 1095 such trains to transport a year's supplies. If all these trains were put in a continuous line it would extend from Montana to Puget sound.

These interesting facts we have compiled from a recent address by Colonel William R. Grove, quartermaster, U. S. A., before the National Canners' association. Colonel Grove went on to say that before the war there were four authorized schools for cooks and bakers in the army. These were promptly expanded into 20, with a new school in each national army cantonment. There were 10 regular bakery companies, with a personnel of 10 officers and about 800 men. This force was enlarged to 200 officers and more than 10,000 men. These men were successfully recruited and trained in two months. A bakery company now trundles along with each division, and provides sufficient fresh bread for that division. It is good bread, too.

Rolling kitchens will follow every company in France to insure hot meals when most needed. These kitchens cook while in motion, and the hot meal is ready to serve when a halt is made. It is the intention to feed the army well; to feed it liberally; to provide it freely with all those food elements necessary to keep its physique, its power of effort and endurance at the highest point of efficiency. But it is not the intention to be in the least liberal with that great enemy of the wasteful American people, the garbage barrel.

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## The Cost Outruns the Price

G. F. Warren, professor of farm management at Cornell university, warned the senate agricultural committee at Washington recently that food production in the United States this year, from present indications, would be less than three-fourths of normal.

Many other authorities also dissent sharply from Secretary Houston's serenely confident belief that all is rosy and that the United States will easily supply home needs and the requirements of our allies.

The weight of expert opinion is against Secretary Houston. They find that many obstacles are to be overcome, such as light winter seeding in some districts, shortage of seed in others, high price of farm labor and all kinds of supplies, discouragement in the hearts of many grain growers in Dakota, Montana and other dry regions of the west, shortage of capital, and inability to get tractors and other farm machinery except at almost prohibitive prices.

Unfortunately a false impression lies in the minds of millions of city people that the farmers are making excessive profits and that high prices of food products are going to stimulate extraordinary production this year. It seems impossible to drive into their minds the fact that increased cost of production has outrun the increase in prices, and that $2 wheat this year is less enticing than $1 wheat would have been a few years ago.

Potatoes have been a losing crop with thousands of farmers this year. Dairy products cost the farmers more than ever before. And many other products of the soil have been marketed the past winter at a positive loss.

It costs more to produce, and it costs more to market. National Food Administrator Hoover said recently that, taking farm products in general, the spread between the prices the farmers receive and the prices the producers pay has actually increased and in many instances is the greatest in modern times.

This false idea that the farmers are rolling in wealth is largely responsible for the dangerous over-confidence in many minds that food will be abundant the coming year. But Secretary Houston should know better. He is in a position to command the facts.

## Lords and Ladies of Creation

We have always heard of the lords of creation, but now the ladies of creation are becoming the determining factor in the world's civilization. Woman has generally been regarded as the queen of the home, but those who so regarded her generally believed that the home was her sphere, a boundary out of which she could not pass, but now it is not in the home alone that her influence is felt, but in the schools, in the social circles, the literary clubs, as producers of the world's literature, the industries and in politics.

It may be considered a small matter that during the present war women take the places formerly occupied by men as telegraphers, ticket agents, street car conductors, bookkeepers, sales agents, employes in the shops and on the farms. In the struggle to utilize all the available human power to win the war every patriot will be glad that these women can fill so many important places, but the war will end some time and there will be a readjustment of economic conditions.

Then will we think it good that so many women have taken the places of men who were employed as manufacturers of war materials, or who were volunteers in the army. Personally, I believe that permanent good must result from this new order of things, and that we will in time be glad that every one is trying to be something to earn a living.

The old idea that the lady or the gentleman should not be required to perform any kind of useful labor, while some one else did the work for them, is being exploded. From birth to death every one costs something. Some one, or some group of persons must pay the cost, whatever it is, to support every individual in the world. To permit others to pay for what I must have in order to live is for me to become a parasite.

The time when women could be regarded as dolls has passed away, and they are assuming their individuality, their God-given independence, and are feeling that no one has so good a right to pay what they cost society as they themselves. They feel, too, that there is no justice in requiring that others shall keep them without they themselves rendering an equivalent to society for what they cost. G. L.

## Eat Home-Grown Foods

The Farmer is glad to note that Food Administrator Hebberd of Washington is planning a state-wide campaign to urge consumers in the towns and cities to eat more potatoes. This campaign has a double purpose: the conservation of wheat and other foods needed in Europe, and the encouragement of many farmers who, finding no market for their potatoes, feel with reason and justice that the public is not cooperating as it should with their efforts to increase production.

This subject is engaging the attention of many thoughtful editors. The New York Commercial reminds the government that enormous supplies of potatoes in the northwest will either rot in cellars or be fed to stock unless something is done to increase consumption and provide a market. That paper makes a good point—that, while practically everybody knows how to boil or bake potatoes, not one woman in 10 in the cities can make good bread from the various substitutes approved by the food administration.

With increased use of potatoes should go fuller consumption of apples. Washington, Oregon, Montana and Idaho have several million boxes of this fruit that are not high grade enough to ship to distant eastern markets, but yet are plenty good enough for home baking or conversion into apple sauce and apple butter.

These facts ought to be hammered into the minds of consumers in Seattle, Tacoma, Portland, Spokane, Butte and other northwestern cities. They should be urged to quit the economic waste of buying bananas from the tropics, grapefruit from Florida and oranges from California. That practice is doubly one of evil. It burdens the railroads unnecessarily and discourages our own home producers, to say nothing of the extravagance of paying high prices for imported products while letting our own good and cheap products go to waste.

A. D. Dunn of Wapato, the well-known Shorthorn breeder, and a regent of the State College of Washington, is a profound believer in cooperative live stock shipping associations. "I believe we will come to that mode of handling our live stock transportation problems," said Mr. Dunn. "Especially would it be advantageous here in the west, where we frequently have to ship our stuff a long distance."

Once more we must ask those who write communications to us for publication to give their names and addresses. They will not be printed if the writer does not wish it, but we need to know where queries come from. Sometimes this knowledge will save a vast deal of time and help the one who asks the question or writes to us for help or information.

## Washington Gleanings

The Pashastin Fruit Growers' association of Wenatchee, by unanimous vote, has authorized the building of a new packing plant to cost $30,000.

The Educational club last fall gathered flower and vegetable seeds in Walla Walla park and home gardens, and will sell them for the benefit of the Red Cross.

Agriculturist C. F. Monroe of Grays Harbor county has accepted a position as assistant state leader of county agricultural agents under State Leader R. B. Coglan.

The Chehalis Potato Growers' association has been recently organized. The association will encourage growing of farm products and will engage in a general marketing business.

Grain sacks distributed from the state penitentiary jute mill at Walla Walla in June this year will cost Washington farmers 19 cents apiece, and the supply is limited to a total of 850,000.

State Land Commissioner Savidge reports that there is a demand for good wheat lands in the state. Some renters are willing to pay as high as $4 an acre, the rent to be paid in cash, and for five years.

The Oregon Packing company of Vancouver is seeking large tracts planted to corn, beans and pumpkins. It is urging the farmers of its vicinity to consult with the cannery before planting their spring garden crops.

In order to stimulate the pig and calf clubbing among the boys and girls of Clarke county the National bank at Vancouver has offered to loan the money to buy the pig or calf, give instructions and some supervision in raising the stock.

The second rural life conference, one of whose aims is the more effective application of education to the practical needs of life, will open at the state normal school at Bellingham on the night of March 20, and will continue throughout March 21 and 22.

Labor Commissioner White of Seattle, in a message to Immigration Inspector Fairs, says that everything possible will be done to relieve the farm labor shortage near Walla Walla. Efforts will be made to turn the surplus labor seeking employment in shipyards back to the wheat farms.

Individual farmers of Columbia county and the Whetstone-Turner Warehouse company of Dayton will erect grain elevators this season for the storing of 200,000 bushels of grain. This addition will make Columbia county capable of handling a half million bushels of grain in bulk, saving the farmers $50,000, which would otherwise go for sacks.

## What Others Say

American Poultry Advocate: The hen that lays is the hen that pays.

Farm and Home: The farmer gets it going out and coming in! He sells at wholesale, buys at retail, and is "regulated" besides.

Successful Farming: The farmer does not want to meddle with national affairs of which he knows nothing, but he does want recognition in all that pertains to his business—that of production of food and clothing stuffs.

National Stockman and Farmer: Horses which show "a bit of blood," either trotting or running blood, are conspicuously superior for army work to other horses, and officers always pick them out first for mounts or for any other service to which they are adapted.

Country Gentleman: Organize to survey the local labor needs, count every available hand on farms, in village and town, and make plans to see that the farms of the locality do not fail. Pool the labor and capital resources of the farmers and tradesmen to the end of getting the farm work done.

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# Sell No Scrubs

## Shorthorn Men State Attitude

On the evening of February 25, following the Shorthorn sale in Portland the Northwest Shorthorn Breeders' association held a meeting at the Imperial hotel, which was largely attended and at which a number of important matters were discussed.

Among other things the question of a committee to pass on animals before allowing them in the sale ring was taken up. While no final action was taken it was the concensus of opinion that allowing any except high class animals of serviceable age to be sold tends to discredit the breed, is unfair to the buyer and should be discouraged.

The question of allowing any but pure bred bulls to run on the range, in violation of the Oregon law, was also discussed. It was by motion referred to the Oregon Cattle and Horse Raisers' association, with this association favoring enforcement of the law.

Professor E. L. Potter of Oregon Agriculture college suggested a Shorthorn congress which should be in the nature of a school for young breeders, at Farmers Week at the college. After considerable discussion the association went on record as favoring and asking for such a congress.

Frank Brown, after paying a tribute to W. O. Minor, as one of the most constructive Shorthorn breeders, and most unselfish advocate of the breed, as well as a man of sterling integrity and true friendship, announced that this sale closed Mr. Minor's breeding operations and moved a vote of thanks for what he has done for the breed. After several others paid tributes to Mr. Minor, the motion was enthusiastically passed.

The following officers were all reelected: President, A. D. Dunn, Wapato, Wash.; vice president, F. M. Rothrock, Sprague, Wash.; secretary-treasurer, E. L. Potter, Corvallis, Ore. The directors were also all reelected.

# Planning Sabotage

## I. W. W. Are Preparing Campaign

Indications from all over the northwest point to a renewal of activities of the I. W. W. this spring with their usual purpose of destroying property wherever possible and preventing the production of foodstuffs and other staple articles. It is evident that instead of cooperating for a solution of the labor shortage problem, leaders of this organization are doing all in their power to handicap the industries of the northwest. This is true not only in the farming industry, but in the lumbering industry as well.

It is reported from some of the lumbering districts that members of I. W. W. order are following out a unique method of destroying foodstuffs. Instead of cooperating with their employers in the conservation of food supplies, they are reported to be deliberately spoiling foods that are placed on the table, such as bread, butter, sugar, so that they will be of no further use as food.

From some of the I. W. W. headquarters throughout the northwest messages have been sent to their representatives in many districts clearly indicating the line of procedure to be followed in the campaign to handicap industry as much as possible.

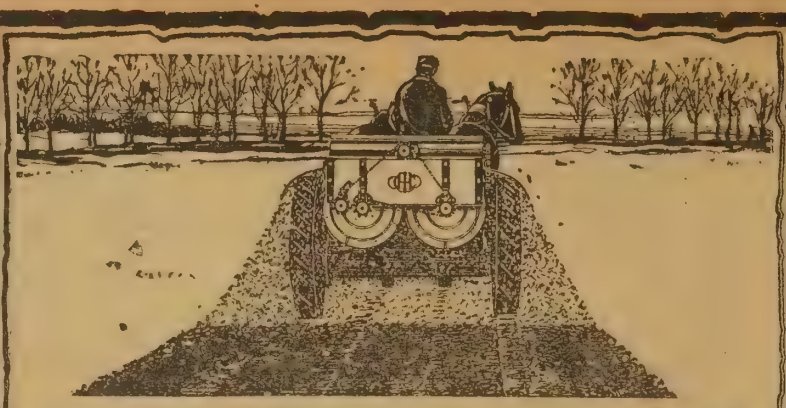
## Personality Counts.

R. A. Blanchard, formerly an Oregon county agent, but now field representative of the Live Stock State Bank of North Portland, told the stockmen at the recent Spokane conference that the first two considerations of a banker in making a loan were the security offered and the personality of the man asking the loan. He laid emphasis on the fact that a man with a sound business record could always get money if he could make any reasonable showing of security at all. He pointed out that the average income on farms in America was comparatively low, not exceeding $318 a year.

## Better Loading Saves Cars.

More than 11,500 freight cars were made available for public use through better loading on the Pacific system of the Southern Pacific company during January, according to figures compiled by the company.

More than 1,500,000 tons of freight were handled in 59,257 cars, and if each car had been loaded with the same tonnage as in January of last year, the traffic would have required 70,809 cars, the company officials said.

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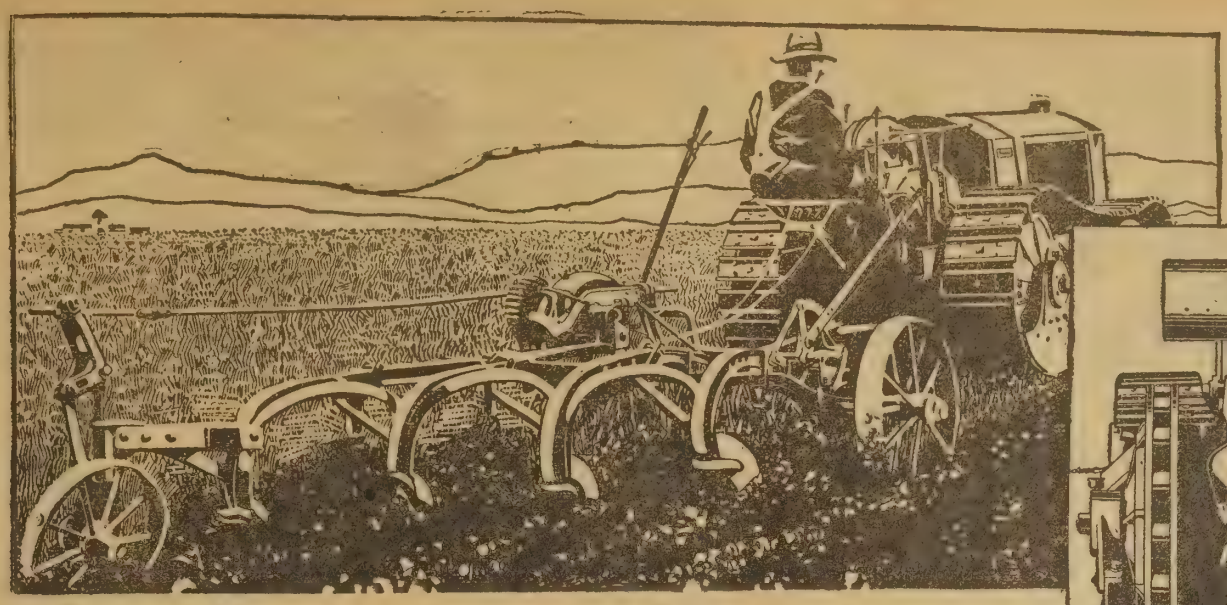
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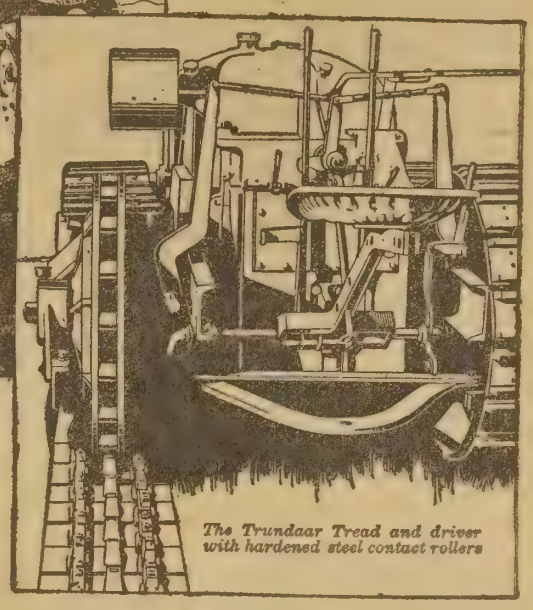
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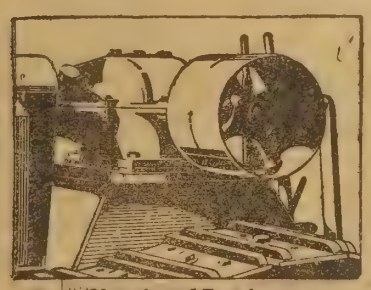
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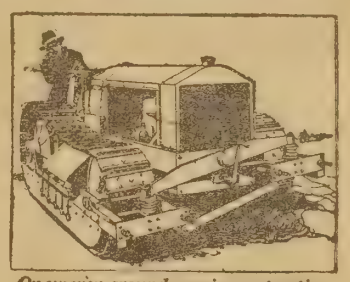
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# Farmers Are Showing Results

## *Hoover Says They Are Making Good in Food Producion*

National Food Administrator Herbert C. Hoover has issued a statement to the effect that the farmers of the United States had answered the call for increased production, especially in the production of hogs. Partially for this reason but more especially for the reason that the allies are in dire need of more foodstuffs, the food administration has withdrawn its previous meatless meal regulation and is now asking the people to observe only one meatless day a week and that only beefless and porkless. In the northwest for the time being that merely means porkless, for the beefless regulation had previously been withdrawn in the northwest. For some time, probably a few months, it will be incumbent upon the people of the northwest therefore to abstain from the use of pork on Tuesday.

"Experience shows, says Mr. Hoover, that the consumption of breadstuffs is intimately associated with the consumption of meat. Our supplies of meat for the next two or three months are considerably enlarged and we can supply the allies with all of the meat products which transportation facilities render possible and at the same time somewhat increase our own consumption In these circumstances the food administration considers it wise to relax the voluntary restrictions on meat consumption to some extent with a view to further decreasing bread consumption."

Concerning the pork production situation, Mr. Hoover's statement reads as follows:

"The farmers of the United States are responding to the national call to increase hog production. Their increase, to all appearances, is being attained more rapidly. Of more immediate importance, however, are several complex factors which have effected an immediate increase in meat supplies.

"The transportation schedule, before the government took over the railroads, the bad weather in January and early in February, the large percentage of immature corn in the last harvest and the necessity of feeding this corn as rapidly as possible to save it from decay, have not only resulted in backing up the animals—particularly hogs—on the farms for a longer period of feeding, but have resulted in a great increase in their average weight and will result, with improved transportation conditions, which already appear, in larger than normal arrivals at market for the next two or three months.

"The weight of hogs coming to the market for the last two weeks indicates an increase in weight of from an average of 203 pounds last year to the almost unprecedented average of 232 pounds, or a net increase in their meat value of over 15 per cent.

"The response of the public to our requests for reduced consumption of meat during the last months has been most gratifying, and this service alone has enabled the government during this period to provide such supplies as transportation to the allies permitted. The enlarged supplies are likely to last for two or three months, after which there will be the usual seasonal decrease in the amount of animals coming to market."


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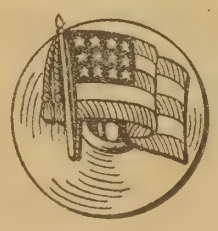
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## Tractor and the War

The United States department of agriculture estimates, as the result of a thorough survey, that there were were 34,371 tractors at work on American farms in 1917. Great numbers of tractors have also been exported to our allies since the beginning of the war. The total export of tractors, according to United States government figures for the first eight months of 1915 was 380. During 1916 we exported 2019 tractors, while the figures for 1917 are 7339.

In Canada the Ontario department of agriculture has 135 tractors at work on farms, operating under reasonable rental fees. One American tractor manufacturer, in addition to shipping 700 of his tractors to England last month, also turned over his patents to the British government.

The French, it is said, with their wonderful mechanical talent, began to manufacture tractors very shortly after the war began. But the output was insufficient to meet the grave needs of the people. France turned, therefore, to the United States and has been receiving large numbers of American tractors.

The Italian minister of agriculture issued a decree early in 1917, offering to all companies or societies who should purchase farm tractors for plowing a premium of 30 per cent of the value of the tractors and accessories purchased. There was also offered a 20 per cent premium to individual farmers purchasing tractors and accessories. Many American tractor manufacturers are exporting modern farm tractors to Italy.

From all this it would appear that the farm tractor, as well as its giant brother, the British tank, is helping the world over to win the war.

### Fond of Army Life.

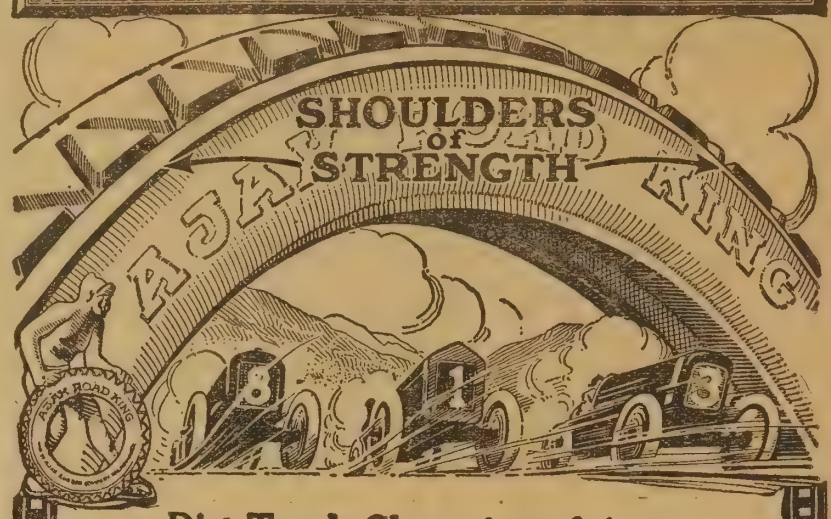
Pete, an army mule at a camp near Portland, Me., was left on an island in Casco Bay. The soldiers built a shed for him and left food and water, but Pete got homseick, He kicked off the top of the shed, gnawed his halter until he was free, plunged into the sea and swam back to the camp.

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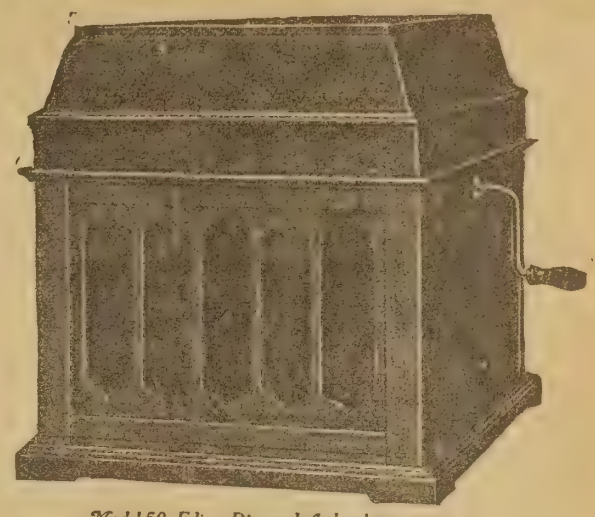
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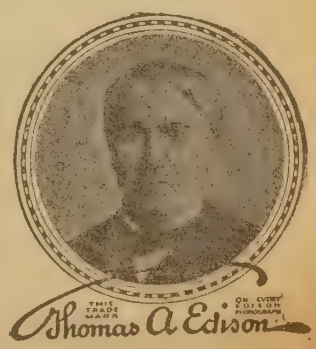
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A. B. NYSTROM, Editorial Contributor

# The Sire Is More Than Half the Herd

Two men met at a farmer's institute. One was Mr. (A), the other Mr. (B). These two men began to converse about things in general until finally it developed that one, Mr. A, was a thrifty dairyman who had a splendid herd of pure bred Holsteins and doing remarkably well with them, and the other was Mr. B, a "retired dairyman," who was now going into raising apples as a business.

"I used to be interested in the same line of work that you are in," said Mr. B.

"That so," said Mr. A. "Were you once in the dairy business?"

"Yes, I was in the business for nearly 20 years. I used to keep from 20 to 25 cows and run a retail milk route in a small town in Ohio. I know what it is to get up at 4 o'clock every morning in the year, work 16 hours a day, and get no pay for it. I barely made a living out of it."

"Well," said Mr. A, "I'm sorry to hear that you were so unfortunate. Did you have any bad luck with disease such as abortion?"

"No," answered Mr. B. "Taking one month with another and one year with another, I had about as good luck one time as another, only I seemed to make less and less year after year, until finally I was forced to sell out. Now I have come out west to go into the fruit business. I think it will pay better than dairying."

"What breed of cows did you have back there in Ohio?"

"O, no particular breed—they were mixed to some extent, but there were some good milkers among them."

"I suppose you had a pure-bred bull of some particular breed."

"No, I used whatever bull I could get in the neighborhood. Sometimes it was a Holstein, sometimes a Jersey, and one or two years I used a Shorthorn. But it didn't make much difference to me for I didn't raise any calves."

"Didn't you even raise the heifers?"

"No, how could I afford to feed the milk to the calves when I could sell it for 20 cents a gallon?"

"If you didn't raise your heifers, how did you replace the cows that died or those you sold?"

"I bought my neighbors' heifers. I let them feed expensive milk to the calves and then I bought the heifers at a low figure."

"Isn't it likely that your neighbors sold you the culls, for weren't they in the dairy business, too?"

"I hadn't thought of it in that light. But how else could I do? Would you advise feeding 20 cent milk to calves?"

"Yes. Calves need whole milk only a couple of weeks. Then skim milk will do just as well provided you make the change gradually. You should have bought a pure-bred sire from a high producing cow and stuck to one breed. Then if you had kept every heifer calf you could well have afforded to spare some of the 20 cent milk in raising them, for every one would have developed into a better cow than her mother."

The foregoing conversation shows how some "would be" dairymen fail to look ahead. If this man had realized the value of a good sire and had raised his heifers as suggested, he would not have been forced out of the dairy business.

Too much emphasis can not be placed on the matter of selecting a sire to head the herd. Any old sire may do to have the cows freshen once a year, but the time has passed when the dairyman had no more foresight than to the end of the month when he would get his milk check. He must look five to 10 years in advance. He must make sure he is building up a herd that will be better in a few years than the one he now has.

Let us all look back 10 years. Are the cows we now have any better than those we had then? If they are not we have not practiced proper methods. More than likely the blame can be placed on the sire, or rather, we must take the blame ourselves for not having provided the proper sire.

The old statement that "the bull is half the herd" is not quite strong enough these days. For if we have a grade herd and a good prepotent sire the bull will be more than half the herd. The offspring will inherit more of the characters from the sire than from the dam.

It is not possible to ascertain exactly the probabilities of the results of breeding in dollars and cents, and still if we accept the first law of breeding that "like produces like," without taking into account other laws, we can illustrate the value of a sire by figures. Assume that the cow is worth $100 in each case. Assume also that the dam of the bull is worth from $100 to $500 as a milk producer, and that the bull will transmit these characters to his offspring, then we have:

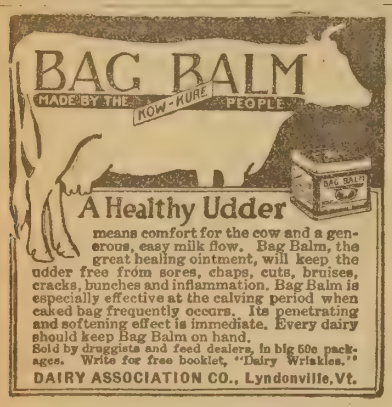
| Producing Value of cow..... | Producing Value of Bull..... | Producing Value of Offspring | Gain on One Calf..... | Gain on 10 Calves..... | Gain on 35 Calves..... |
|---|---|---|---|---|---|
| $100 | $100 | $100 | | | |
| $100 | $200 | $150 | $ 50 | $ 500 | $1750 |
| $100 | $500 | $300 | $200 | $2000 | $7000 |

The last column shows to what extent a community can benefit by getting an extra good sire.

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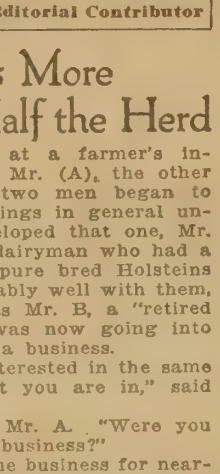


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means comfort for the cow and a generous, easy milk flow. Bag Balm, the great healing ointment, will keep the udder free from sores, chaps, cuts, bruises, cracks, bunches and inflammation. Bag Balm is especially effective at the calving period when caked bag frequently occurs. Its penetrating and softening effect is immediate. Every dairy should keep Bag Balm on hand.
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The De Laval is not only a cream saver but a time and labor saver, and with the present shortage of farm help every farmer needs to utilize time and labor saving machinery wherever it is possible to do so.

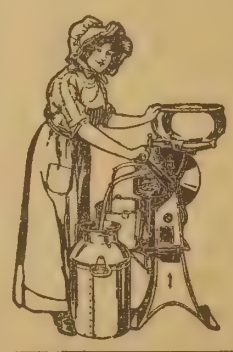
**Save for Uncle Sam**

It is the patriotic duty of every cow owner to save butter-fat. We are a nation at war, and not a particle of fat should be wasted. When all European countries are encouraging the use of the best cream separator, can we do less?

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Railway delays are so serious that deliveries can't be depended upon, and if you don't order your De Laval early there is no telling when you can get it. Then, too, labor and material conditions may compel higher prices. The sooner you get a De Laval, saving butter-fat and labor for yourself and Uncle Sam, the sooner it will pay for itself.

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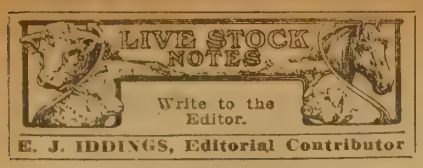


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E. J. IDDINGS, Editorial Contributor

# Crops for Feed

## Prof. Severance Talks to Stockmen

Professor George Severance of the agricultural department of the Washington State college presented in concise form at the recent Spokane live stock conference the question of the crops they should grow for feed. Cheap feeds, he declared, were the prime necessity of success in the stock business at the present time. These, he said, could most nearly be secured through pasture, silage or quick growing hay crops.

While local conditions influence crop production largely, Professor Severance said that in general alfalfa and orchard grass are the best adapted for pasture purposes. They will do well in ordinary localities that have 18 inches or more of rain annually. Both grow early and late, an essential characteristic in good pasture. Orchard grass and alfalfa grown together, he said, were less likely to bloat cattle than either clover or alfalfa grown alone.

Speaking of sweet clover, while not enthusiastic over it, he said that in alkali or acid soils it was sometimes quite successful, probably more so than many other forage crops.

He said that rye was not fully appreciated as either a forage or hay crop and recommended the planting of it by many on the semi-arid lands having perhaps seven to 12 inches of rain. One virtue of rye, he pointed out, is that it begins to grow again quickly after being eaten off, which is not so true of wheat or oats.

He emphasized the necessity of giving pastures good care and urged the stockmen not to begin to pasture it too early and not to pasture it too closely at the beginning of winter. He recommended also the dividing of pasture lands so that one plot could be making strong growth while another was being pastured down.

He stamped corn as the king of silage crops wherever it can be grown and recommended growing it on summer fallow lands in many cases. He said one should grow as large and as late growing a variety of corn as would mature well in his locality. Ordinarily seven tons per acre of silage in the wheat belt is all that can be expected of a corn crop. In some cases wheat and rye make good silage, but it is hard to beat peas and oats.

He said there was a general tendency among farmers to cut their silage too green. Silage is richer in food value if the crop is allowed to crowd maturity a little bit rather than if cut a little too green. In ordinary crops it is probably advisable, he thinks, to let it almost reach the dough stage of the grain.

On the point of hay crops, Professor Severance favors peas and oats. The pea seed this year for the next crop of this kind would cost probably 8 cents per pound, he said, and should be sowed at the rate of about a bushel per acre with the oats.

Sweet clover as hay, he said, differed from the other legume crops in that it should be cut before it comes into blossom rather than just after.

Whatever you do, says Professor Severance, don't experiment with undemonstrated crops now. Experiments are constantly being made with the newer variety of forage crops, such as Sudan grass, feterita, etc., but Professor Severance is not yet ready to recommend any of them for general production.

# Veterinary

Dr. S. B. Nelson

**Lice on Cattle**—Please give me a simple remedy for lice on cattle.—J. H. T., Glenwood, Wash.

One of the good simple remedies for lice on cattle is to rub a piece of blue ointment of mercury about as large as a pea or a bean over the area where the lice are the thickest. Do this once daily. The reason that you can not use a much larger quantity than this is because the mercury absorbs and is hot. This has been used by many stockmen as a simple remedy to overcome lice on cattle.

**Mares Have Worms**—I have some mares that are heavy with foal. They have worms. The worms are about three or four inches long tapering at both ends. They are white and sometimes reddish in color—W. E. C., Wauconda, Wash.

It is better not to give very much treatment while the mares are heavy with foal. Try giving one teaspoonful of copperas on the feed night and morning for a week. After the mares have foaled, then you can give them a complete treatment of 10 grains of Santonin and 15 grains of calomel. Follow this the following day with one quart of raw linseed oil with one ounce of turpentine well shaken up with the oil.

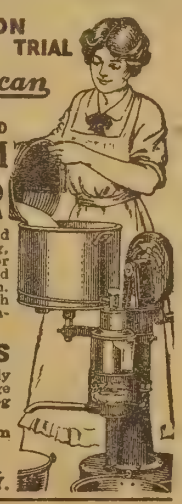
**Horse's Legs Swell**—I have a 3-year-old mare that has a swelling in her hind legs something like a spavin, but there is a small swelling on both inside and outside of the legs. At times they seem to go away so it is hardly noticeable, then come back. I have been riding her for a couple of months, but that is all the work she has done. She never gets lame.—J. G. F., Glenwood, Wash.

The trouble with your mare is either that she has a bog spavin which goes through the leg, that is, if the swelling is below the hock joint. If it is above and behind the hock joint it is a thoroughpin. Complete rest is the very best treatment, but of course this is most difficult to give. If it is a thoroughpin lowering the toe and raising the heel by means of a thick shoe is of very great value. If it is a spavin you will need the services of a veterinarian without doubt. In the meantime a liniment composed of soap liniment, four parts; tincture of iodine, three parts, and oil of origanum, one part, may be of value.

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Ready and willing to be mobilized into active service to win the war. Hoover says: "Don't kill calves for veal, we must have beef and hides!"

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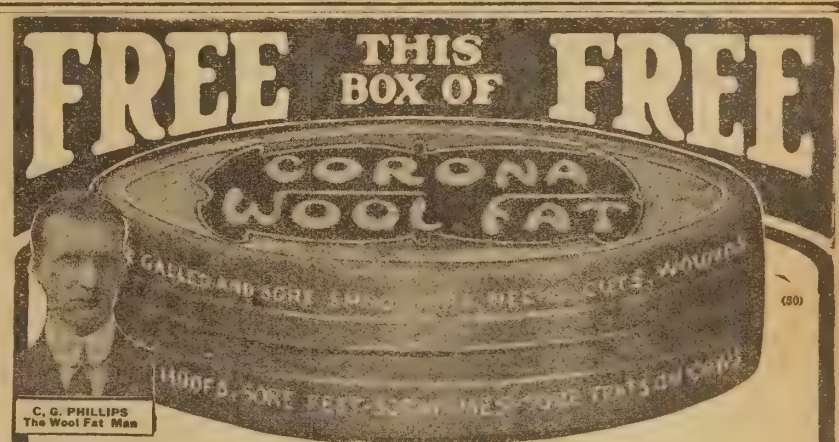
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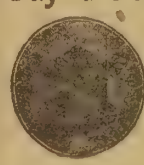
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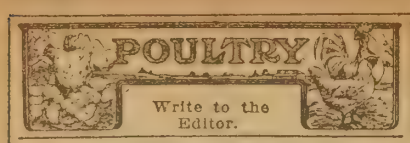
Over the top and under the hide, the International Live Stock exposition has proven the Aberdeen-Angus the beef breed supreme. Every Grand Championship but one in sixteen shows have been won by Aberdeen-Angus carcasses. Thirteen out of sixteen Grand Champion carlots have been Aberdeen-Angus. Ten out of sixteen of the Grand Champion steers have been Aberdeen-Angus and one of the other six was a cross-bred carrying Aberdeen-Angus blood.

Annual Spring Bull sales of the Association at E. St. Louis, March 26; Chicago, March 27; Sioux City, Iowa, April 2; Omaha, April 3, and St. Joseph, Mo., April 4.

Write for Catalogs of Sales.

Western Field Representative, E. T. DAVIS, Iowa City, Iowa.

American Aberdeen-Angus Breeders' Association Union Stock Yards, Chicago




JAMES DRYDEN,
Editorial Contributor.

# Eggs for Hatching

## Exercise Care in the Selection

Care should be exercised in selecting the eggs to be used for setting. Some eggs are perfectly good for eating, but not for hatching, and at the present price of eggs it pays to examine them and use for eating all that are not suitable for hatching, but good for eating.

1. Select eggs of good size. The size of egg laid is a matter of heredity. Eggs laid by hens that lay large eggs will usually produce pullets that lay large eggs. It might be, however, that the male mated to the hen that laid the egg was from a hen that laid small eggs, and in that case it would be a question whether the pullet would take after one side of the house or the other, and in the size of egg she lays, or whether the pullet would compromise and lay a medium-size egg. I know, however, that the size of the egg laid is frequently due to the influence of the dam regardless of the sire's dam. The better plan is to select not only the large eggs, but to make sure that they were fertilized by a male whose dam laid a large egg. That means, selecting the male as well as the egg.

The eggs, however, should not be abnormally large. The two-ounce egg is the standard, or one and one-half pounds to the dozen. Eggs weighing 27 to 28 ounces a dozen are desirable, but there is no advantage in larger eggs. The large eggs of course cost more to produce. Eggs are made from the feed and the more feed the hen puts into them the more they cost, and the chances are the hen that lays very large eggs will not lay as many as the hen that lays medium-size eggs.

2. Cull out those that are ill-shaped. They will not hatch well, but will eat well. Sometimes they are flattened at one side and sometimes ridgy or corrugated and in other ways are not normal in shape. These should not be set.

3. Checked or cracked eggs should not be used. Sometimes they have cracks or checks that can not be seen without close examination. A good plan is to tap the eggs together, and it is easy to tell from the sound whether the egg is cracked or not.

4. Fresh eggs should be used for hatching, the fresher the better. If eggs are kept in a cool, dry place they will keep two or three weeks and sometimes longer and hatch, but the longer they are kept the smaller the percentage of them that will hatch. If the eggs are very valuable it will pay to take a chance on them hatching, even at a month old. For best results in keeping they should be kept at a low temperature, not lower than 35 nor higher than 60. An even temperature or 40 to 50 degrees is about right. At that temperature they may be kept satisfactorily for two weeks. At a higher temperature they will not keep so long. The practice is to turn the eggs about once a day. If they are packed in a basket or box carefully, with lid on, the turning is easily done without having to handle the eggs each time. Care should be taken not to handle the eggs with dirty hands. To smear them with oil or grease will spoil them for hatching. J. D.

# Feeding for Eggs

A subscriber asks: "What is the best feed for hens for winter eggs?" The problem is not so much as to what is the best feed as what is the most profitable feed. The best single feed might be porterhouse steak, but it would not pay to feed it at the price.

The hen will produce eggs cheaper if fed the scraps of meat that the butcher can not sell to the human, than if they are fed porterhouse steaks. There is more profit in feeding the scraps of meat at 2 to 5 cents a pound than the best cuts at 25 cents. It is not a question of the best feed altogether; it is a question of the most available feed, or the feed that will produce eggs the cheapest.

We have at the present time, however, the anamalous situation that what is probably the best grain feed for poultry is at the present time about the cheapest we have, but it is not available; we can not use it for patriotic reasons. It may be that some farmers have wheat that is not suitable for milling into flour that they can use for feeding. If they have they are fortunate and can continue using it. The government allows him to use in any event 10 per cent wheat in the ration. If he has oats or barley he can use wheat with it to the extent of 10 pounds of every 100 pounds of grain fed. That is so small that it will have little effect on production of eggs. There has been no maximum price set for other grains, and the result is that while wheat is two dollars a bushel, oats, barley and corn have increased in price until they are as high or higher than wheat in this territory. The poultryman, however, must make his selection of whole grain feed from corn, oats and barley, but as to which he uses or the proportions of each that he uses he must be governed by the prices at the time he purchases. The prices are changing so often that he must adjust his ration frequently to the changed prices.

The question that troubles us is to know just what the hen-feeding value is of one grain compared with another. If corn, for example, is selling at $70 a ton what can we afford to pay for oats to replace it? Oats are not worth as much, pound for pound, as corn. The latter at $70 would be as cheap as oats at about $60 a ton. Then the oats of last year's crop are not worth as much as in average years, not being as plump and meaty.

The cheapest foods we have now are bran and shorts, and it will pay to feed a larger amount of these than ordinarily. The more bran and shorts the fowls eat the less whole grain they will eat. The oil meals, such as linseed, cocoanut and cottonseed oil meal are also relatively cheap, but on account of their richness these can not be fed in large amounts.

The following is a suggested ration without wheat, the amounts given in pounds for one hen for a year:

Corn, 25 pounds; oats, 15 pounds; bran 10 pounds; shorts, eight pounds; ground oats or barley, five pounds; linseed oil meal, five pounds; ground corn, five pounds; meat scrap, five pounds.

The next thing is how to feed this. Two things should be remembered here: First, feed in such a way as to induce the largest amount of exercise possible; second, feed two to three, that is two of the ground grain to three of whole grain. Preferably feed the mash in the evening; then gave them a feed of corn in the morning as soon as the fowls are ready to eat. Cover this in a deep litter of straw so as to force them to scratch. At noon give a feed of oats, as much as they will clean up in about an hour. Then in the evening half an hour before roosting time give them all the mash they will eat. Mix the mash preferably with skim milk or buttermilk, using about the same weight as of the dry mash. Salt it a little and mix thoroughly. Keep the meat scrap in a hopper by itself all the time where the fowls can help themselves at will, and never let the hopped get empty. If cocoanut meal can be obtained cheaper than linseed, use it instead of linseed meal. If ground corn can be obtained at a reasonable price, add one part of it to the mash.

Give them all they will eat without having feed left over.

Green food must be supplied regularly. This is very important. Don't feed high priced feed to fowls that have no green food. It is a waste to feed high-priced cereals and neglect the cheaper food of greenstuff. Without the green food the fowls will not give a profit on the grain. Also without the meat scrap they will not lay eggs enough to pay for the feed. If they have all the milk or buttermilk they will drink, with no water to drink, they will not need meat scrap. Grit and oyster shell should also be kept before them in boxes where they can help themselves.

It frequently happens that a good ration is fed and the feeding is properly done and yet enough eggs are not produced to pay for the feed. It may be because the fowls are not properly housed. We will discuss this subject in a later article. J. D.


**Tells why chicks die**

E. J. Reefer, the poultry expert, 466 Reefer Bldg., Kansas City, Mo., is giving away free a valuable book entitled, "White Diarrhoea and How to Cure it." This book contains scientific facts on white diarrhoea and tells how to prepare a simple home solution that cures this terrible disease every time and usually raises 98 per cent of every hatch. All poultry users should certainly write Mr. Reefer for a copy of this valuable book. It is free.

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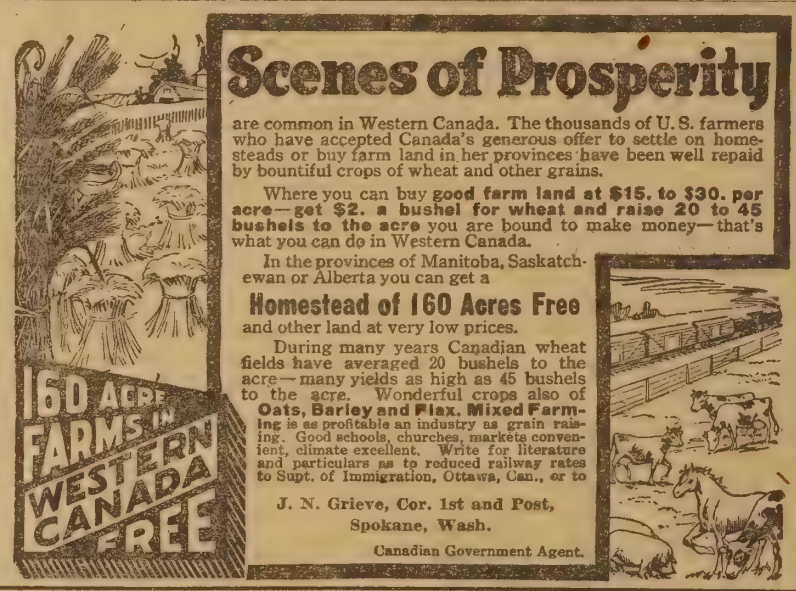
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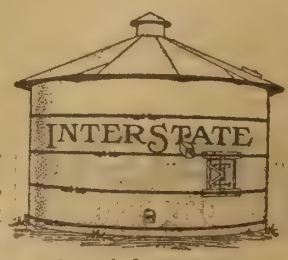
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GRANVILLE LOWTHER,
Editorial Contributor.

## Points on Grafting

During the last year or two I have been gathering information on certain methods of grafting and budding of fruit trees. I am not ready at present to give a complete account of my work because the results are not yet completed, but I can with reasonable certainty say that in selecting grafts or buds it makes a great difference whether they are from trees that bear heavily or lightly. Every one who has observed knows that there are great differences in the bearing quality of trees of the same varieties, and in the same orchard. There are the same differences in the values of animals, for instance, in the milking of cows of the same stock, and the laying qualities of chickens of the same breeds. These differences are observed, not only in different trees of the same varieties of apples, peaches, or pears, but in different limbs on the same trees.

In southern California I find the citrus fruit growers awake to this subject. I visited one nurseryman who is growing orange and lemon stock and who has been giving special attention to this subject for a number of years. This man has carefully selected buds from the best bearing trees and from the best branches of the best trees for the growing of his nursery stock. He told me that he was not able to supply the demand for stock grown in this way, and several men told me that orchards of the old type were being dug up in order to plant trees produced in this manner. They have tested it out and find that it pays to plant the new trees and wait for them to grow, rather than to continue the old stock.

**Individuality in Apples.**

Records are kept of the yields from each individual tree in the orchard at the central experimental farm, Ottawa, Can., hence it is known what each tree produces. It has been found that there is a marked variation in trees of the same age planted at the same time and growing under very similar conditions. It is now recognized by some of the best authorities that each bud of a tree has individual characteristics which separate it from all other buds and, although the differences in buds are, in most cases, so slight that it is impossible to detect them, yet in some instances they may be quite marked. Fruitgrowers have noticed that one tree or bush is more productive than another or bears larger, more highly colored or better flavored fuit than other trees of the same variety, but few persons have recorded the yields from different trees, and little definite information has been published on the subject. From the records kept at the Ottawa experimental farm it is known that some trees have yielded from two to four times as much as others.

I speak from experience and observation when I say that in the selection of grafts we have not thought much about tree variation or bud variation, but have only been careful about varieties and not always accurate in that particular, so that sometimes we thought we were grafting to one variety and when the tree came into bearing we had something else.

G. L.

## Feed Prune Trees

"The secret of building up a prune orchard lies largely in feeding the trees the right plant food," says Frank Russell of Washougal, president of the Clarke County (Wash.) Prune Growers' association. "After years of experimenting I have found nothing so good as sheep manure. I have gone into sheep feeding in order to get enough of it and have at the present time from 9000 to 10,000 head of sheep and am able to sell much of the fertilizer. I use about five tons to the acre.

"Sheep manure acts slowly and it takes time to bring an impoverished orchard back into good condition. I once took an orchard which had borne well and was in bad shape. I pruned, sprayed, cultivated and manured it heavily. The orchard did nothing the first two years and very little the third, but the fourth season it bore well and for seven years afterward it brought in approximately $850 per acre gross. I would promise nothing for three years and would use much sheep manure.

"I have absolute faith in the sheep manure as fertilizer for prune orchards, but thorough cultivation is needed, too. I cultivate a mature orchard 20 times in a season.

**Brown Rot Is Enemy.**

"Brown rot is the worst enemy I know of, and no spray I have ever tried has done away with this disease. I believe Bordeau mixture is the best, but the high price for blue vitriol makes this spray almost out of the question. Spraying is not a cure of disease, but a preventive.

"I believe too much heading back and pruning has been done. When I first started in, I headed back my trees the first year, and each head produced two branches; heading them back I got four, and so on till the tops of my trees were full of wood. Keep this up and you get 75 tons of wood from your orchard, but no prunes. I never top a tree after the first time. I seek three branches from the center of the tree. Where there is a shoot in the center I keep it. Under no circumstances would I top back more than two years, and the second year I would top very high up."

Mr. Russell believes also in the use of ground limestone.

## Root Maggot Pest.

J. W. Wolfe, R. 3, Vancouver, Wash., says he keeps his garden free from the root maggot pest by the use of common mosquito netting. After he has carefully prepared his seed bed Mr. Wolfe sows the seed and then covers it with the mosquito netting. This prevents the fly from depositing the egg near the seed bed and the plant later develops without the root maggot pest to retard it. Mr. Wolfe says the mosquito netting also serves to keep the seed bed warm in the early spring and later gives some shade to the tender plants at a time when they need it.

R. W. F.

**Use for Coffee Grounds.**

The question of what to do with the coffee grounds has at last been satisfactorily answered. Just dump them into the garden. They contain some valuable fertilizing properties, including a large percentage of nitrogen and a fair amount of potassium and phosphorus.—Popular Scientic Monthly.


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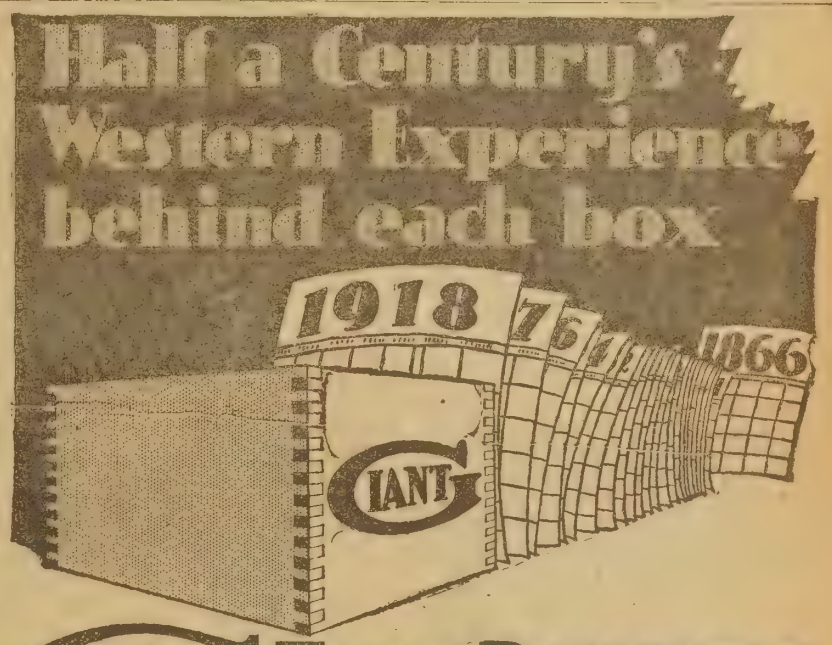
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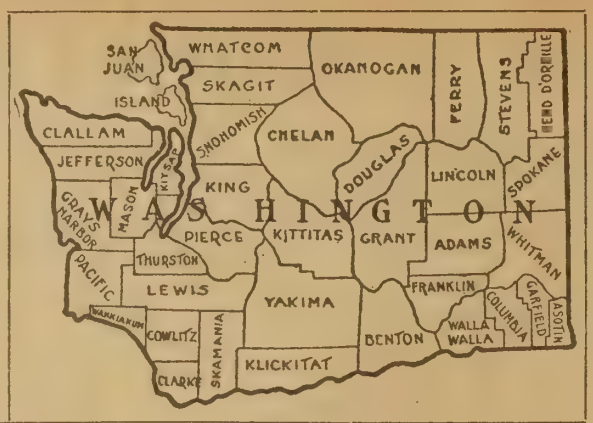
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# Anything Goes as Good Hay Now

## Wild or Tame, It Is Hay in the Colville District, and Sells Readily at Top Price, Which Usually Is About $30 Per Ton.




COLVILLE, Stevens County, Wash., March 2.—The market conditions in this section are somewhat unusual this winter, owing to the failure or partial failure of some of the crops usually depended on by farmers for cash income.

The summer frost that affected many parts of the northwest last year caught the oats and late wheat at a critical period and most of these crops were finally cut for hay. The winter wheat made a fair yield, as did the timothy hay, but the serious drouth of the late summer put the finishing touches on profits for most of the later maturing crops.

There has hardly been a sufficient supply of hay to meet the local demand, as several carloads of alfalfa have been needed to meet the needs of dairymen and others. A curious feature of the hay market is the wiping out of grades and a corresponding scale of prices. Everything from wild grass to timothy is simply sold as hay and brings the top price without regard to quality. This price runs close to $30 per ton and is retailed at a usual advance of $2.

There has been a sufficient supply of wheat to meet the running capacity of the local mills, the top price being $1.90, with considerable lower ranges in price, due to poor quality offerings. Chicken feed demand is readily met by these lower grades and a large quantity of grain is fed in this way. The buyers aim to make an average profit of 10 cents per bushel on all stuff handled below milling grade.

There is a decided difference in the prices paid for produce by the cash buying produce houses and the stores which handle it on a trade basis. The latter presumably aim to break even on such buying and consequently take in produce at somewhat higher prices. Many farmers who need the money prefer to take lower prices for what they have to sell.

The potato market is sluggish at from 90 cents to $1 per 100. The buyers tell me that they handle them on a margin of 20 cents per 100, which would not seem exorbitant. Eggs are 38 cents per dozen and are handled on a close margin. Veals range from 11 to 14 cents per pound, according to weight, the limit being 135 pounds. Much of it is reshipped to Spokane.

From a study of prices it would not appear that the profits of the buyers are greatly out of range and are probably lower than those received for the usual merchandise sold at the stores.

It has been a delightful winter so far and the prospects for a good season are cheering. The snow is being all absorbed as it melts and the moisture conditions should prove much better than last year. Much interest is being taken in increased crop production and it will doubtless show up far better than last season. Even the handling of pigs is gaining headway and this can hardly be considered a top notch pig country. Many sheep and some goats are to be found on the farms.

Farm sale prices appear to hold up well. E. E. ELLIOTT.

### Horse Market Stiffens.

GARFIELD, Whitman County, Wash., Feb 25.—Market conditions are variable. Buyers, especially at country points, are inclined to beat the price down to producer, but hold it up to the retail trade. To illustrate my point I will just give one incident which happened in our immediate vicinity about six weeks ago:

A farmer wished to market some hens. In one local town he was offered 12 cents per pound, in another 14 cents. Believing the price was unjustifiably low, he decided to do his own shipping, eliminating the middle man. As a result, after paying express on gross weight and return express on coops, he received net 20 3-4 cents per pound for his hens.

Hay is very scarce in this vicinity and jobbing locally at about $25 per ton. Oats also scarce at about $60 per ton. Fat hogs about 15 cents, common beef stock about 6 cents, not-

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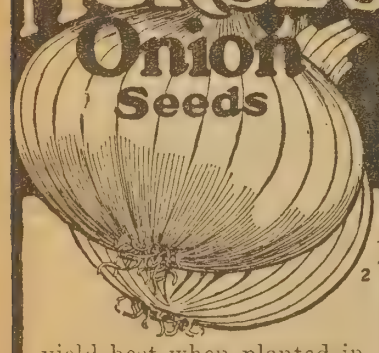


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withstanding the consumer pays from 25 cents to 50 cents for his meat. Potatoes are 75 to 85 cents per hundred and plentiful. Consumers are inclined to complain that while wheat prices are held low compared with other grains and they are requested not to use it even at the price, all the substitute cereals are permitted to soar to unheard of prices. In order to save $1 worth of wheat we have to buy $2 of substitute. The horse market is stiffening as spring approaches. What fall wheat was sown, although late and not very promising at best, is wintering very satisfactorily. At the relative prices of meat and grain there is being very little interest manifested in the production of hogs or poultry and I believe that unless the price of wheat is advanced the spring wheat acreage will be materially reduced in favor of other grain, especially if the spring should be late.

MRS. MARILLA KIDWELL.

### Feel Labor Shortage.

CHIMACUM, Jefferson County, Wash., March 2.—As spring is rapidly approaching the labor shortage is being felt considerably. There are plenty of work horses and may be a few for sale around this part of the country. Small horses are a drug on the market. Tractors have not been tried out to any extent, as we have too much bottom lands or peat that is full of roots or logs which I think would not be very good land for a tractor to work in. There seems to be an ample supply of farm machinery here and the old ones will have to be repaired.

There is no meat or rather beef on the market or to be put on this spring, as all of the surplus stock had been disposed of in the fall or before the feeding period started in. The farmers raise or feed most of their stock on pasture, which is abundant during the growing season. Most of the bottom land pasture is composed of a native grass mixed with red top, blue grass and timothy.

JOHN VAN TROJEN JR.

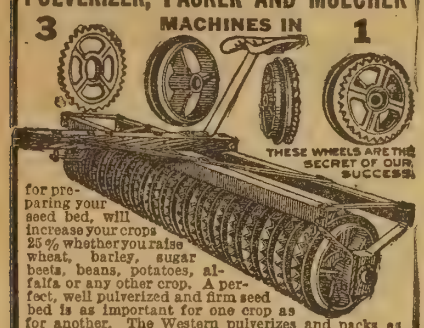
### Will Feel Labor Shortage.

CASTLE ROCK, Cowlitz County, Wash., March 4.—The labor shortage in this section will be felt as the spring advances. At the present time there has not been very much call among the farmers for help on the farm. The work horses seem to be in abundance for the man help to manage them, and the good machinery on the farm has been repaired and replenished so that there will not be any lack for this. As to the outlook for seeding and planting the new crop, the farmers are up in the air as to the acreage. Many who have potatoes on hand have only themselves to blame, for a fair price was offered them when they were digging and they stored them waiting for a better price. Now the order has gone forth that they must be graded for selling, which cuts into the pile about half in some cases, others less, besides about one-third in price compared to the fall market. The cattle, sheep and pig market has made all strain themselves to increase the output, but it is also seen that some are selling off the young stock to be fed on the lower Columbia river flats, which does not necessarily decrease the market value, and will leave the home lands for pasturage for milch cows and young stock too young to be taken away. The most valuable pasturage is where running water and rich grasses of the jointed type grow on a sandy loam soil, which does not have that flashy rank growth, which, used in moderate amount, gives a rich, nutritive substance, and with some roots or potatoes will increase the flow of milk materially. The best results obtained from mill feeds has been in mixing the bran and middlings together, about fifty-fifty; for hog feed, more middlings than bran. A farmer who has been experimenting with hogs feeds a light bran mash in the morning, with plenty of skimmed milk in troughs that are clean, and gives them a yard to exercise in. For the noon meal skimmed milk and cooked oats, with a feed of artichokes for them to pick on during the afternoon; evenings, cooked potatoes and middlings. Hogs fed in this way will gain one and one-half pounds per day until they reach 250 pounds, when the gain is less, and it does not pay to try to make them much heavier than this. It has been proved that clean, healthy food will do better than slops, and mud knee deep in the pen. Conditions are bringing about and into use the best methods for housing the stock and the silo has done a great deal, and the cream separator, rightly used, is a godsend to the farmer, but if allowed to clog and fill up it is a detriment.

C. C. BROWN.

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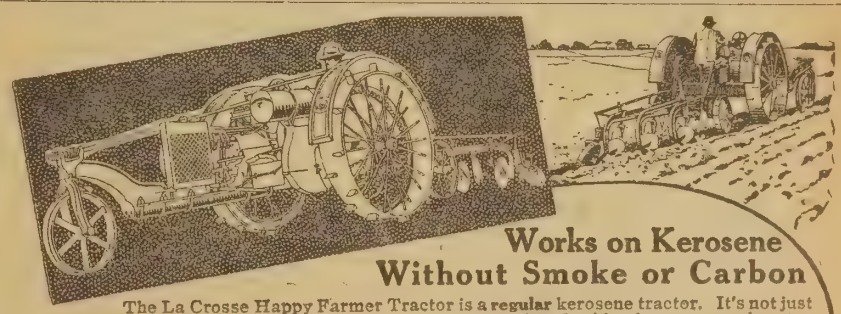
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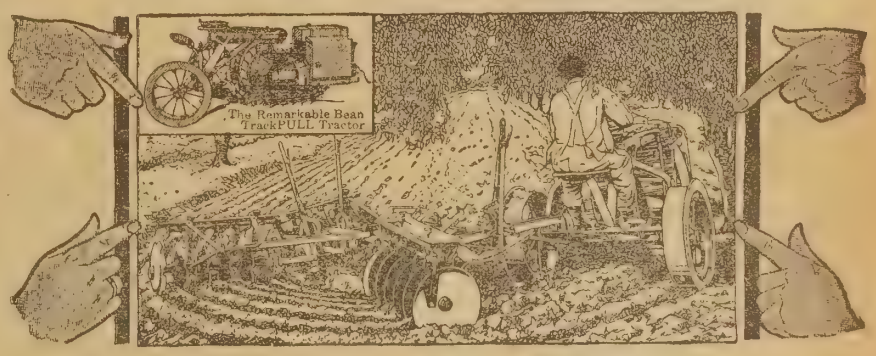
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# Another Revolution

## *Bolshevik Regime in Russia Totters*

Another revolution, this time directed against the previous revolution leaders, the bolsheviki, appears to be under way in Russia with the view on the part of its promoters of overthrowing the bolshevik authorities and setting up a government that will again oppose the German horde that is overrunning that country. This element is reported to be organizing an army of considerable strength, originating largely in Siberia. There is even talk of accepting assistance from Japan in overthrowing the bolshevik government, which is looked upon in many quarters as little if any short of a German government in Russia. Conditions remain in such a state of chaos in Russia that it is impossible to estimate the result of the present government, but it is evident that a strong anti-German feeling is manifesting itself and that the hope is high in the hearts of the great mass of the Russian people that a solid front can yet be presented against Prussianism.

Nikolai Lenine, the bolshevik premier of Russia, is conducting a movement designed by the element that he represents to effect the ratification of the peace treaty with the central powers at a meeting that is called for March 14.

It is evident that the bolshevik strength is rapidly waning from the number of its prominent men who have withdrawn from it, among them being Leon Trotzky, its commissioner of foreign affairs.

In the meantime there appears no certainty as to the German attitude toward Russia. Promises of cessation of hostilities appear to have been totally disregarded by the German authorities, who have continued to advance into the various sections of Russia, capturing stores of supplies, guns and munitions and much territory. The Russian government has withdrawn from Petrograd and reports indicate that large numbers of the residents of that city have likewise fled farther into the interior.

### Japan's Action Uncertain.

The plans of Japan regarding the entrance into Siberia to protect stores of supplies and also to protect her own political interests have not been made clear at this writing. The allied governments have virtually agreed to allow Japan a free hand to do as she likes in that connection, though the United States has not joined formally in any agreement on the matter. Miscellaneous reports indicate that the bolshevik faction in Russia is strongly opposed to the entrance of Japan into the fray. Reports have been received of the destruction of portions of the Siberian railway by the bolsheviki with a view to preventing the entrance of Japan's troops.

### Curtail War Reports.

For the purpose of withholding from the enemy information considered to be of value to him the American military authorities have announced that they will no longer give out for publication the addresses of American soldiers killed on the battle front. The committee on public information will give out the names when desired, withholding all identification, but it appears generally agreed among newspapers and press associations that reports of this kind would be valueless and it is doubtful if they will ever be published. However, the war department will notify relatives, those nearest of kin, immediately in all cases of casualties.

### Hold Eight Miles of Front.

Reports from the battle front in Europe indicate that the American troops now on the field are covering a stretch of eight miles of the battle front in northern France. The length of this line will be increased as additional troops are enabled to be placed in service. Reports to the war department say that the movement of American soldiers, supplies and munitions is being kept on schedule time and that the preparation for participation in the spring campaign is being carried forward successfully and exactly as had been planned. Reports continue to come of small engagements between German and American military parties with some casualties on each side.

### Wait for Offensive.

When the promised German offensive against the allies in northern France will begin is a matter causing much speculation at the present time. In the past years of the war the spring activities have been launched in the month of April, but the records are said to show points of failure in these offensives due to it being too early. Some military authorities, therefore, feel that the Germans will probably not launch their offensive until the first of May and probably not until up into the month. No information comes from the war authorities as to whether or not the allies may be planning an offensive of their own or whether they are merely planning a defensive war until such time as the American forces may be strengthened so as to warrant an attempt to break through the German lines.

### Baker to Europe.

Announcement has been made that Secretary of War Newton D. Baker has gone to Europe on a purely military, and not diplomatic mission. His arrival in a French port has been announced.


**Second Annual Sale**

Tillamook County

**Holstein Breeding Association**

**Fairgrounds, Tillamook, Oregon, Monday, March 18**

Including

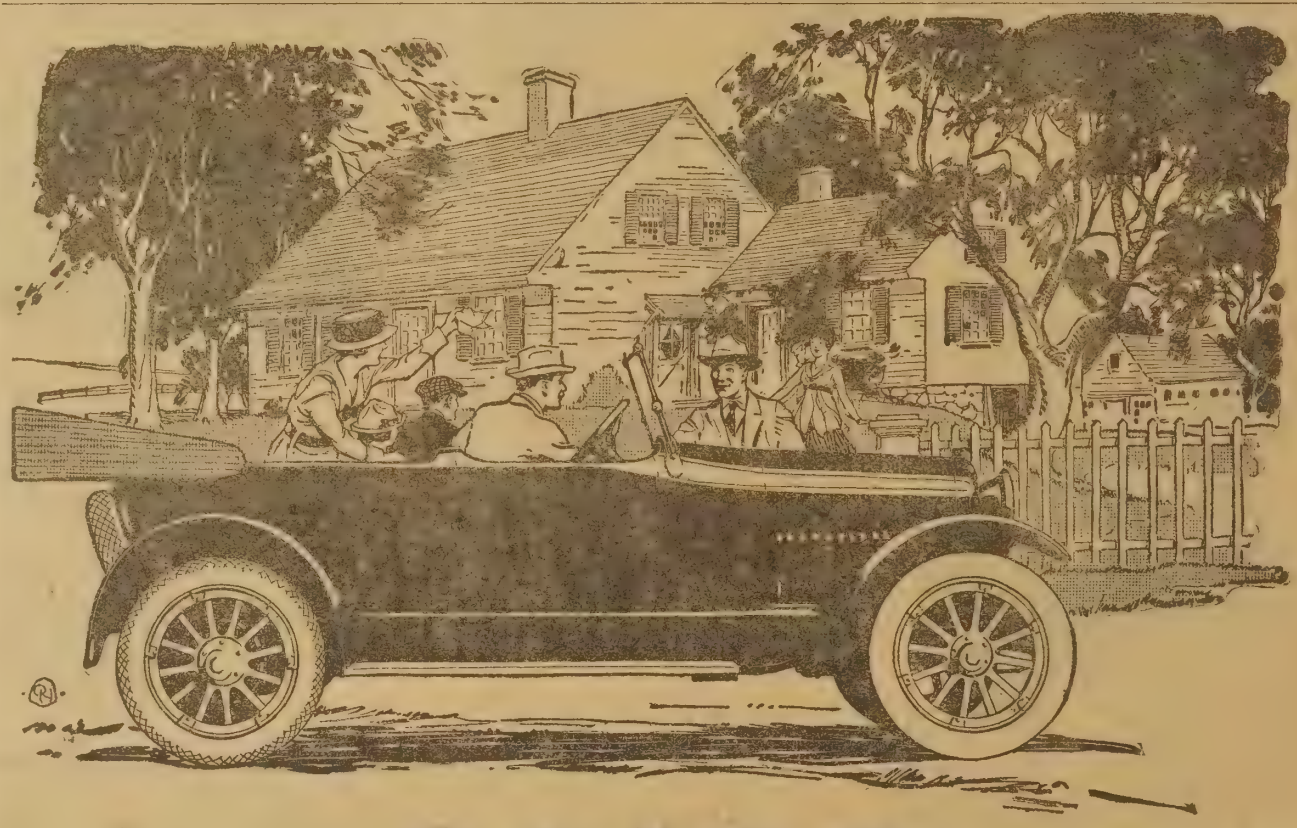
**16——Females——16**

1 bull from female of world's breeding.
1 cow with 1000 lbs. butter record.

For Catalog Write

**ROY WATSON, Secy., Tillamook, Oregon**


In answering advertisements don't fail to mention this paper.

PAIGE

*The Most Beautiful Car in America*

# Make The Minutes Count

In these war days you must realize that it becomes a *patriotic duty* to own a motor car.

The business of the nation must move forward on high gear. There must be no "let ups"—no wasted effort—no inefficiency. Every true American is expected to quicken his stride and make each minute a *productive* minute.

On the farm, especially—where distances are great—a dependable motor car is quite as necessary as the telephone. It is the most efficient form of transportation that has ever been developed—and transportation is the key to our entire national problem.

So, by all means, get a motor car—for yourself and Uncle Sam. *Any* car is better than a slow, plodding, horse-drawn vehicle, but common sense will dictate the wisdom of buying a good one while you are about it.

Take up the matter in the same careful way that you select agricultural machinery. Look for enduring *quality* rather than mere price. Buy a manufacturer's reputation rather than four wheels and a painted body.

If you make your selection on this basis, we are quite content to abide by the result. If you search for motor car quality you *must* find the Paige.

PAIGE DETROIT MOTOR CAR COMPANY, 247 McKINSTRY AVENUE, DETROIT

# FLORA FLIRT—SHE MEETS AN IRISH LAD



Flora Flirt thinks she s a queen—
You see she's wearing of the green.



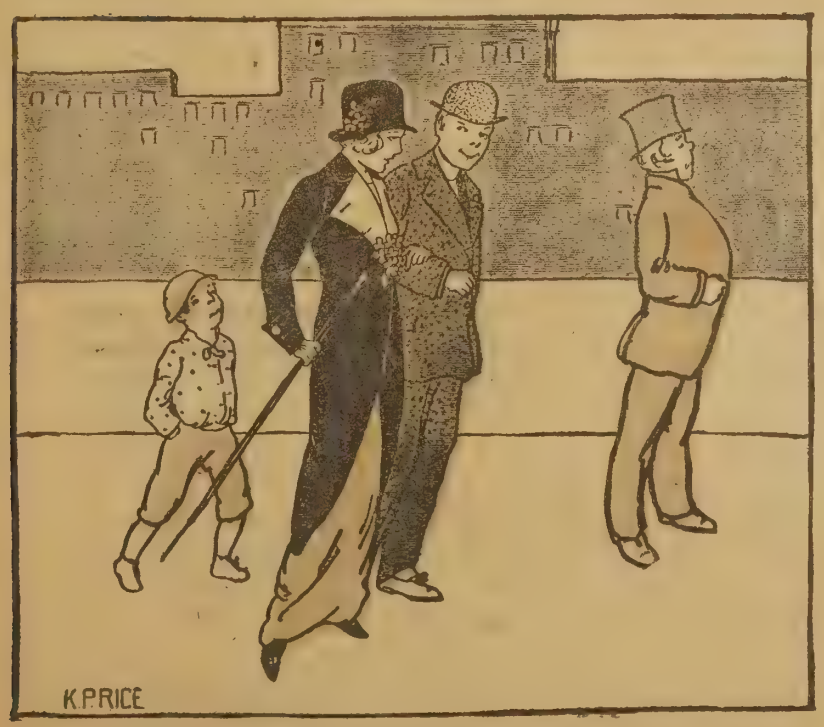
On an Irish laddie Flo's eyes light.
She smiles and flirts with all her might.



He winks his eye. "Acushla," says he,
"I wish my sweet colleen you'd be."



He says she's fair as Lake Killarney.
Flora swallows all his blarney.




Flo saunters home—not unattended.
For her St. Patrick's day has ended.



Flora nearly faints away
When she sees that lad next day.

*The Moral*—To flirt with men 'twill never do—
Unless you're sure they're in "Who's
Who."



# A Patriotic Challenge to the Stockmen of Washington

STOCKMEN and Farmers, the War Savings plan is a challenge to our thrift and patriotism; a challenge which we must all meet if these brave men who are fighting in defense of American honor and freedom are to be BACKED UP in their struggle, with the millions and billions needed to make them effective warriors.

This is our country's call for the surplus earnings of every man, woman and child in the United States. Our country needs our quarters and dollars NOW, and promises to pay them back in five years, with four per cent interest.

A Country Worth FIGHTING FOR Is Worth SAVING FOR!

**W.S.S.**
**WAR SAVINGS STAMPS**
**ISSUED BY THE UNITED STATES GOVERNMENT**

Are Your QUARTERS Enlisted in Freedom's Cause?

War Savings Stamps are the answer of a great democracy to the demand for a democratic form of government security. They are "little baby bonds." Like Liberty Bonds they have behind them the entire resources of the government and people of the United States. They have the additional advantage that they steadily increase in value from the date of purchase until the date of maturity, and this increase is guaranteed by the government. These stamps are issued in two denominations, the 25-cent stamp and the $5 stamp.

By buying Thrift Stamps you can save 25 cents at a time to invest in War Savings Stamps.

War Savings Stamps will be cashed by the United States Government on January 1, 1923, five years from now.

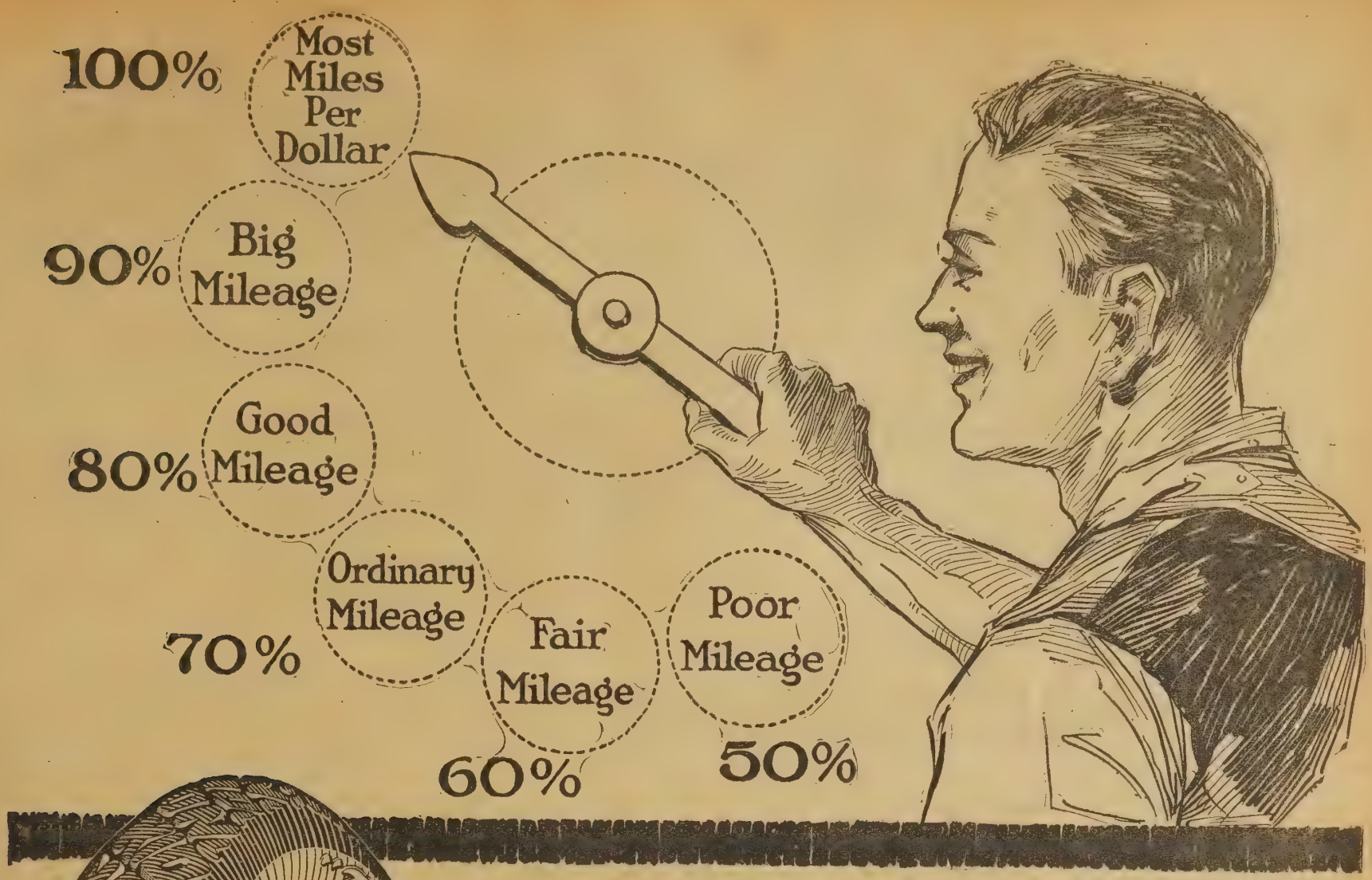
Each War Savings Stamp will cost you $4.14 to $4.23, according to the month in which you buy it—they can be purchased up until the end of 1918. On January 1, 1923, the government will pay $5 for each War Savings Stamp. This is return of the purchase price with interest at four per cent compounded quarterly.

## Buy at Least a Quarter's Worth of W.S.S. "Baby Bonds" Every Day. Have everyone in your family do the same. Your bank or mail carrier sells them!

This Space Contributed by

## Spokane Union Stock Yards Company

Spokane, Washington







# Men of the farms—get a maximum tire value at once

THERE are all kinds of tire values. You can have small value, moderate value, or top-notch value in Most Miles per Dollar. The choice is yours. Don't blame anyone but yourself if you choose tires carelessly and pay the penalty in tire disappointment.

These are the reasons why Firestone Tires come up to the 100% mark: In the Firestone Fabric Tire: tougher tread; more cushion stock; more rubber between layers; reinforcement in side wall. In the Firestone Cord Tire: numerous walls of stout cord; each cord imbedded in pure gum; reinforced bead; hinge thrown high where strain has least effect.

Don't be content with anything less than this tested Firestone construction and the resulting advantages. One Firestone Tire will lead you to become a Firestone enthusiast.

Firestone Tire and Rubber Company, Akron, Ohio
Branches and Dealers Everywhere

# Firestone
## TIRES

# KATE AND KARL FIND SOME MAD MARCH HARES





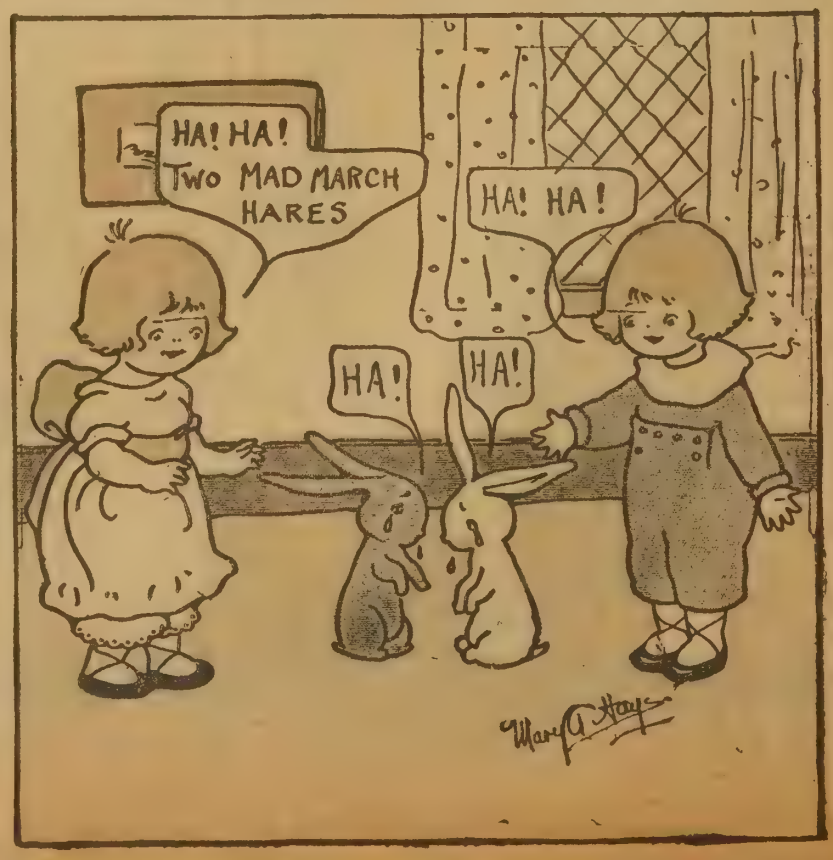










# Poultry Will Help Feed the World

## *No Northwest Farm This Year Should Fail to Produce a Chicken Flock*

While the campaigns are on for a brood sow on every farm, a lamb on every lawn, a garden on every vacant city lot, and in fact something of a food-producing nature everywhere, the farmers of the northwest should not forget that there lies before them a great opportunity for food production by means of the poultry flock. Every farm, large or small, should produce a few chickens this season. Those chickens in the majority of cases should be of the meat varieties or of a dual purpose variety. This rule of course would not apply to the poultry specialist whose industry is built up for egg production. His problem is different from that of the average farmer.

Although there is a clear tendency on the part of farmers and stockmen to increase the production of pork to supply the needs of the allies, it is equally evident that it will be with great difficulty that the absolute needs can be supplied. Therefore, the production of any meats that can reduce the consumption of pork and pork products in this country is greatly to be desired.

With the poultry specialist and with any one who raises poultry on a large scale, the feed problem is a troubling one, especially in view of the increased prices of the substitutes for wheat which the government is urging poultrymen to use.

It would be extremely foolish to advocate the production of hogs on a large scale on the average farm, and in like manner it would be foolish to advocate the production of poultry on a large scale, but there are on every farm materials constantly going to waste which could be readily converted into war-winning foodstuffs by way of the poultry flock. There are few farms in the northwest that could not produce from a dozen to 50 chickens without any material decrease in the other productions of the farm, and the situation in which America now finds itself makes it little less than a patriotic duty for the farmers to add this bit to the food supplies of the world.

Owing to the difficulties of the poultry feed situation there is now being started a movement to urge upon congress the regulation of prices of poultry feed. The dealers and the consumers of these feedstuffs propose to ask that some definite price be set on such feeds as barley, oats and corn so that not only the dealers may know what they may charge and therefore what profit they may make, but so that the poultryman may also know exactly what his feed will cost him for a given period.

Comparatively few farmers are familiar enough with the production of turkeys and ducks and geese to warrant any widespread movement for the production of these birds, but there are many opportunities for increase in these lines that would be beneficial not only to the producer but to those who must have meats.



Here's a flock of little folks that will add to the food supply when they grow up.

### Goes East for Shorthorns.

Joe Turner of Meyers Falls has gone east for the purpose of securing about two carloads of purebred Shorthorn cattle to add to his already large herd of that breed. He is attending the sales at Des Moines and at Sioux City, at which places a total of about 350 head of Shorthorns are being offered. If Mr. Turner finds the kind of stock he desires he will bring back with him probably 30 or 40 head, which would add some $10,000 to the value of his holdings at Meyers Falls. He says he doesn't want to bring back anything that is not around the $300 or more class in value. He now has about 50 head of purebreds on his farm.

## Must Back Promises

Senator E. L. French of Vancouver, Wash., when addressling the prune conference there recently, emphasized the necessity of standing behind advertising and fine displays with the very best prunes that can be produced. When the growers will understand that they must stand together and not allow unfit fruit to be dried, then the marketing problem will be comparatively easy, he said. "The time is coming," he declared, "when the growers will have to sell their own product. Just how this is going to work out I do not know, but I am satisfied that it will come, sooner perhaps than we expect."

Mr. French also paid his respects to brown rot. "I have tried to produce it and make it grow," said he, "for the sake of studying the process, and I have failed. I have tried to eliminate it and I have failed. I have sprayed for it and sometimes it disappears, and sometimes the trees I spray have it and the unsprayed trees do not. The more I study it, the less I seem to know about it."

This opinion seemed generally that of all the prune growers.

**Are You Reading It?**

The third instalment of the serial story, "Trappers of the Ozarks," begins this week on page 28. Are you reading it?

### Would Purchase Seed.

The agricultural committee of the house of representatives has recommended to congress that it pass a bill that has been presented appropriating $5,000,000 with which to purchase seed for farmers in the semi-arid sections of the country. The bill also appropriates $2,500,000 to aid the secretary of agriculture in the work of aiding in the solution of the farm labor problem.





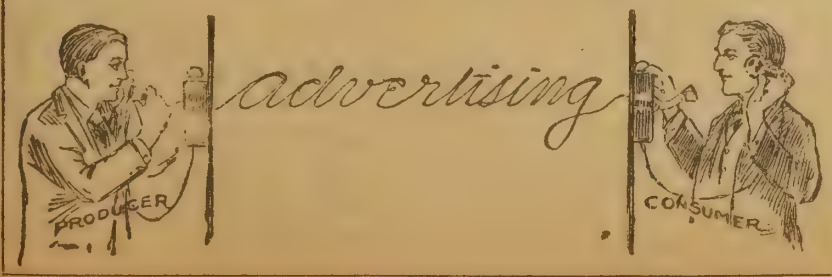
## ADVERTISING BRINGS PRODUCER IN TOUCH WITH THE CONSUMER

The following remarks are from a letter addressed to the New York Times by the watch manufacturer, William H. Ingersoll, and emphasize some of the reasons why it pays to buy advertised goods:

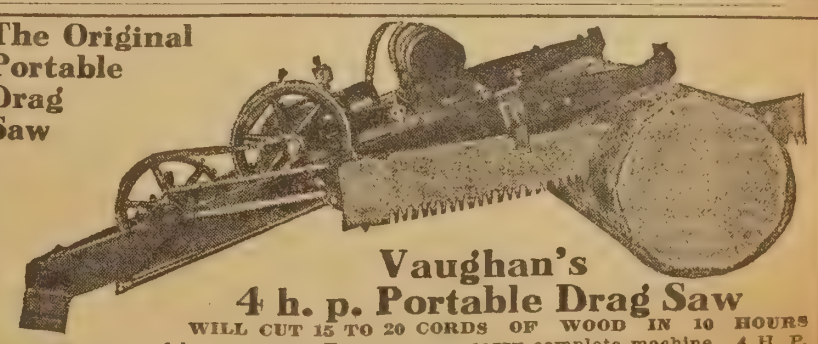
"The consumer of any article always bears two distinct items of cost when he buys it. The first of these is the cost of production. The second is the cost of getting it from the producer to the consumer. Advertising has taken the large place that it has in the second of these two costs because it reduces the cost of distributing goods and therefore reduces the total cost to the consumer.

"Advertising frequently lessens the cost of goods very materially by providing a market, allowing production on a greatly magnified scale, thereby permitting economies which smaller production would not allow. A large enough market to make the dollar watch a possibility would not have been attainable except through advertising, yet this article has saved money to millions of those who have purchased."

In the advertising columns of this paper you will find many articles described which are noteworthy for their low price, high quality, and improved design.




**The Original Portable Drag Saw**



**Vaughan's 4 h. p. Portable Drag Saw**

WILL CUT 15 TO 20 CORDS OF WOOD IN 10 HOURS

Can be operated by one man. Two men can carry complete machine. 4 H. P. gasoline motor mounted on frame. One gallon gasoline required to cut 3 to 12 cords of wood. Engine can be used for other work without removing from frame. No gears, cogs, belts or pulleys. Friction clutch prevents breakage if saw pinches. Saw makes about 125 strokes per minute. Will cut any size log up to 6 feet. Sprockets and cranks, etc., made of cast steel. All working parts guaranteed against defects in material and workmanship.

Net cash price for complete machine as shown in cut, $160 f. o. b. Spokane and common points. FOR SALE BY

**Washington Machinery & Supply Company**

8122 Monroe. SPOKANE, WASHINGTON

# CALICO

BY

JOE L. ASHLOCK

**Flight From Indians and Rescue of Baby Girl Make a Better Man of Bill Jamison.**

Bill Jamison, cowboy, Indian-fighter, broncho-buster, the best man of his class that ever rode the Lazy B hills, was in the tapering-off stage of a regular old-fashioned cowboy drunk. Forth from the howling wilderness Bill had come thirsting for the joys of civilization. Cow Creek had welcomed him. Dutch Jake had immediately put the Fountain and its stock of Mountain Dew at Bill's disposal, and Bill, summoning the other cowboys to his side, had slaked his thirst copiously and treated till his friends could no longer be treated. After two weeks of bacchanal hilarity Bill proclaimed himself satisfied, swore off, vowed he would never drink another drop, shot a few holes in the already riddled ceiling of the barroom by way of emphasis, and mounting Calico, shoved the wind for the Lazy B. Thus we find him: Cow Creek 20 miles in the rear, the Lazy B ranch 30 miles ahead, and Calico to jog the 50 without a stop.

Again and again the far distant ridge that reared against the brassy horizon had been reached, then another in view, farther away, dimmer in the leaden haze than ever. Doubtless Calico sighed in his patient cayuse way as he sized up the expanse of plain before him and felt the sodden weight on his back, sunfished through the air a couple of times, then galloped away, leaving Bill to the questionable resources of his own legs. But not Calico! He jogged along patiently, sometimes of his own accord quickening his pace to a gallop; then, if Bill reeled too much, slowing down to his perpetual jog, his steadily pattering hoofs stirring up puffs of alkali dust that rose like white smoke about him and his rider.

Suddenly Calico halted and threw up his head. An instant later, with ears pointed sharply forward and eyes glancing to the left, he uttered the keen, ripping snort characteristic of the western broncho when alarmed. With a startled grunt Bill straightened up, and, surprisingly alert, tipped his sombrero to shield the sun from his eyes and took a careful survey of his surroundings. On all sides, far away till lost in the haze of Indian summer, the prairie stretched away, its curling, brown bunchgrass and straggling clumps of sagebrush and cactus only heightening the general lifelessness. But Bill's eyes were keen. He recognized in what to an untrained eye would have seemed but a distant group of motionless sagebrush a group of horsemen. Immediately after discovery the horsemen wheeled, and at a gallop disappeared behind a knoll, showing as they went a twinkle of red and yellow blankets. Bill swore at the knoll as if it, instead of the Indians, was the offending object.

Sobered and alert, Bill urged Calico forward at a gallop, but before proceeding a hundred yards the horse again stopped, scooted backward, uttering snort after snort. Following the glance of the panic-stricken horse, Bill could at first see nothing, but a keener glance revealed what seemed to be a bundle of rags lying near a large sagebrush which partly overhung the path a couple of rods ahead. In the instant of its discovery the bundle moved and unmistakably a human voice came from it. Wondering and puzzled, Bill dismounted and approached the object, Calico prancing and snorting as far behind his master as the full length of the hacamore rope would permit.

At his first touch another human cry came from the bundle and Bill uttered a loud exclamation of astonishment. It was a baby. Amazed and concerned Bill stood helplessly staring at the baby with confused recollections of ghost stories crowding through his mind, any of which were feasible in comparison with this discovery. Moved at length by a desire to do something he gathered the baby up in his arms, and with awkwardness that would have been ludicrous under any other circumstances, strove to comfort it. Mechanically he drew a flask of whisky from his pocket, but as he was in the act of administering some of the liquor it occurred to him that whisky might not be a proper restorative for so small a child. Debating mentally he noticed the baby's pretty brown eyes that blinked hard and were covered with the tiny hands to keep out the glare of the sun. The innocent baby mouth and the soft, pure flesh, though dirty and sun-blistered, seemed of an element that excluded whisky and rough words. Thinking thus Bill tossed the flask aside, and forbearing to swear, became speechless. Tightening his hold on the baby he mounted Calico, whose astonishment had now rendered him incapable of else than obedience, and took the path at a swift gallop. He felt that other things would be found shortly. Storks do not leave year-old babies lying unprotected on the desert.

A short distance ahead, as the path sank suddenly into an arroya, Bill's expectations were realized. A wagon was turned lengthwise across the path, and the horses which had drawn it had been shot dead while in the harness. One of them lay across the broken tongue of the wagon, and the other in his struggles had apparently almost freed himself before receiving the death wound. He lay facing the wagon with head and neck across the body of the horse that lay on the broken tongue. There was a man, a woman and three children—seasoned and tough though he was, not unused to Indian horrors, Bill, with face dusty white covered the bodies with the wagon-canvas, and then, in half-paralysis, glared hither and thither in the surrounding haze, vainly seeking a glimpse of the redskin murderers whom he knew were not far distant. But all was blank and motionless as the end of creation.

The baby was crying lustily, and Bill, in a dazed fashion began rummaging through the camp belongings in search of something to "feed the kid," as he mentally expressed it. He knew very little about babies, but realized that this one must be hungry and thirsty, and that in some way it must be fed. What or how he had not the slightest idea, but simply searched for an inspiration. He wondered by what sort of an accident the baby had been spared to his care. Perhaps in the last moment, realizing the end that was to come, the mother had hidden it in the great clump of sage. Or, compassion (this Bill greatly doubted) in some savage breast may have stayed the tomahawk, leaving the work to be done by the less merciful things of the desert. But Bill, as his search progressed, became more greatly concerned with the present necessity than with the how or why of his situation.

He presently came upon a flask of whisky, which he tossed aside with a growl of impatience. A moment later he discovered a can of condensed milk, and instinct told him that this was what he needed. Feverish with haste, he poured some of the thick cream into a cup which he had found; then weakened the sugary stuff to what he thought to be the right consistency with water, a meager supply of which he had found in a camp keg. This he offered to the baby, humble in attitude and fearful lest his offer should be refused as if he were serving the mightiest monarch on earth. But his fears were needless. The baby eagerly seized the cup and guzzled and drank till Bill was terrified lest it should be strangled. Bearing in mind that cattle, when crazed by thirst will drink themselves to death, Bill removed the cup when he thought that the baby had taken enough. Whereupon baby raised such a clamor of indignation that Bill half feared that the spirits of the desert would be aroused against him.

Calico's increasing uneasiness warned Bill. He again and again scanned the surrounding plain, and saw naught but the same expressionless expanse. But he was not deceived. He knew that from somewhere in the death-silent waste fierce eyes were glaring at him, and that if he tarried long, hideous, painted bodies would be bellying nearer to him, stealthily, invisibly, from sage to sage, to make surer the quest of a rifle bullet. With these thoughts in mind, Bill deliberately heaped the scattered belongings over the bodies, added some dry sage brush which he found near, then touched the match. As the blaze rose and crackled dryly he mounted Calico, and, holding the baby in his arms, galloped away. He felt that he had no time to bury the bodies, so took this means to save them from vultures and animals.

Bill surmised that the Indians that he had seen by the knoll were the miscreants, and in this he was probably correct. He doubted not that they were watching him all the time, and that as soon as he seemed in a fair way to make his escape they would appear in pursuit. In this he was also right. A score or more warriors came suddenly in view, mysteriously as if they had risen from the ground. As they appeared from the direction of the knoll where first they were seen and flanking him on the right and left Bill judged that they had been attempting to surround him while he had been engaged at the scene of the murder, and that he had taken the trail just in time to keep them from closing in front of him. As it was they were all in the rear. He therefore resolved to make straight for the Lazy B ranch, and if Calico fell dead before the 30 miles were run, there would certainly be Indian ponies just as dead if they followed till he did drop.

At a word from Bill Calico's hoofbeats came quicker, and his stride lengthened. He shot ahead, every movement watch-like in precision, and in a few moments had visibly widened the distance back to his pursuers. Then Bill reined him in, wishing to save the horse's strength as much as possible. With even chances he knew that Calico was a better horse than any of the ones in pursuit, but he also knew that during the two weeks duration of his "spree" in Cow Creek Calico had had his share of the fun, standing tied to a post the greater part of the time, unfed and unnoticed, save by an occasional kick from his drunken master. These were hardships even for a bronco, and now the strain would tell.

However, as the first miles sped by Calico, as if joyous in his iron muscles

(Continued on page thirty.)

# SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

## How to Care for Your Feet---Exercises Strengthen Them



Dr. Hirsberg.

If you have read a few of the reasons why men are turned away from service in the army by the medical examiners, you probably have noticed that one of the prevalent causes of rejection is "bad feet."

It may suprise you to know that if women were put to the same kind of physical examination as are the young men, they would most likely be turned down in greater numbers for the very same reason.

Women's feet are too frequently deformed, either by neglect or ignorance of hygiene which have to do with the care of the feet.

Perhaps to safeguard permanent disability of your feet, and the feet of those who come under your care, you must do your utmost to guard against aches, callouses, colds, weak ankles and weak arches.

If your feet are sensitive and tender, give them a cold spray both morning and evening. The pressure of the cold water from the faucet upon your feet drives the blood flow from the skin into the inner muscles, makes it flow faster, and the result is somewhat like a tonic for the weary extremities. A feeling of lightness and restfulness is the reward of this simple exercise, and you are often justified in the remark, "Gee, I feel as if I could run a mile!"

**Follow These Suggestions.**

See to it that no moisture is allowed to remain between the toes, for it may cause irritation of the skin, and at times might result in colds, a condition often due either to the too rapid evaporation of water, or to a too thorough chilling of the blood exposed there. The vigorous use of a dry Turkish towel may ward off trouble.

Boric acid—a white powder—is a good application for tender feet. A rub with this refreshes the feet. It is very beneficial to change your hose and shoes every day. If you can, it is wise to have two pairs of shoes, and wear each pair on alternate days, so that the same hose and shoes are not worn successively.

Cold feet are made warm by the cold spray. High shoes are appropriate for winter wear, but low ones are just as good for those who are accustomed to them. Shoes that are too tight or too loose, are uncomfortable and injurious. Tight shoes may cause callous spots to appear on the toes, and loose ones may rub blisters on your feet.

It is preferable never to cut the callous, because you are apt to irritate the skin and perhaps inflame it. Rub callouses with pumice stone and use vaseline and cold cream to make them soft.

Apply splits of camphor on a piece of cheese cloth to relieve light blisters. If the blisters are large and inflamed in appearance, paint them with collodion to prevent friction from the hose and shoes.

Ingrown toenails are the natural results of tight shoes. Sometimes a V-shaped incision in the upper middle part of the nail gives relief. If the ingrowth is not "too far gone," the nail may grow toward the center V-cut, and as it closes in the nail under the skin is apt to withdraw toward the center. If the nail, however, looks red and sore, infection is present and a specialist should be consulted.

**Correct Faulty Posture.**

A correct posture prevents some of the ailments common to the feet. If you stand so that your toes are only a few inches apart, and parallel to each other, and hold your knees stiff, you throw your weight upon the stronger part of your feet. If you stand with a toe-outward position, however, you throw your weight on the weaker, inner side of each foot and thereby tend to impair the strength of the arches.

Among the many symptoms of weakened arches are a feeling of shakiness on the inside of the foot and ankle, a slight pain in the back of the leg between the knee and the ankle, a severe pain in the knee or the hip, painful, sensitive heels, or stiff muscles. The assumption of a proper standing position will cause these aches and pains to disappear sometimes.

If you have used the incorrect poise for years, however, you will probably need special maneuvers to get quick relief from the bad effects of that posture. Heels neither too high nor too low are really essential.

The following exercise, taken in the morning and before bedtime, will help:

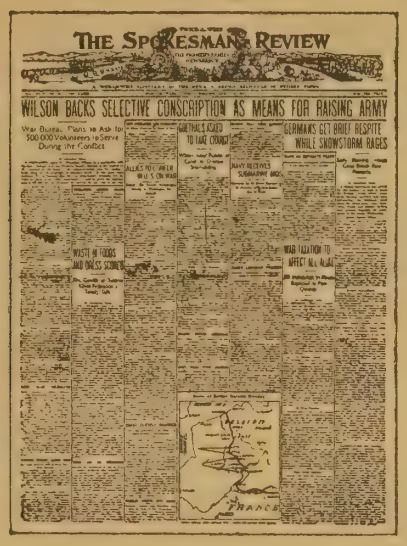
Sit on a chair and cross your feet, right knee over left. Stretch the right foot downward so that your toes point toward the floor. Bend that food inward so that your toes point this time toward the left leg, and the inner side of the right foot is raised. Then bend the foot outward so that the toes point away from the left leg and the inner side of the foot is raised. Continue the rotative movement inward, upward, outward, particularly emphasizing the inner side of the foot in each position. Do the same with the left foot. Under no condition, however, jerk the feet, but make the movements slowly and thus avoid the displacement of bone or muscle.

If you know and prefer the bow-legged walk, club-foot walk, or can walk on your toes or on the outer edge of each foot, you may indulge in any of these movements with perhaps equal profit as is possible to be derived from the exercise outlined.

**Just What You Want**

**may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.**

# FOLLOW THE WAR


THE SPOKESMAN-REVIEW

WILSON BACKS SELECTIVE CONSCRIPTION AS MEANS FOR RAISING ARMY

War Duties Plans to Ask for 500,000 Volunteers to Serve During the Conflict

GERMANS GET BRIEF RESPITE WHILE SNOWSTORM RAGES

WAR TAXATION TO AFFECT ALL ALIKE

Twice-a-Week Spokesman-Review brings you a complete, accurate survey of current events the world over---gives you the facts about the history of our day as fast as it happens. It's a paper your family should surely have.

Twice-a-Week Spokesman-Review 1 Year
The Washington Farmer 3 Years--Both for **$1**

THIS liberal offer puts within your reach a paper which you and your family will surely want in these stirring war times.

We recommend The Twice-a-Week Spokesman-Review to our readers because its news is complete and reliable. Its semi-weekly summary of the war will keep you up-to-date without your having to wade through a great deal of reading matter. The Twice-a-Week pays particular attention to the events of special interest to the people of the Pacific Northwest; covering the progress of the draft, troop movements, and all other details in which you are particularly interested. Names of killed, injured and missing will always be given as soon as issued by the military authorities. In addition the Twice-a-Week brings you a reliable summary of the general news of the day.

Purchased in any other way The Twice-a-Week will cost you $1.00. For that $1.00 you can now get The Twice-a-Week for a year and your state farm paper for three years as well. It is a remarkable offer at any time; especially so in these war times.

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This is the season of preparation on the farm. There's many a timely and practical suggestion on equipment, etc., to be gleaned from our advertisements these days. Read them.

# Write Washington

## Information Bureau Can Help You

A great many of the readers of the Farmer are availing themselves of the opportunity to secure valuable information and instruction along many lines from the Farmer's free information bureau at Washington, D. C. This bureau is maintained for the purpose of aiding this paper's readers, and those in charge are always glad to receive inquiries and there is practically no question to which the answer does not exist in the national capital.

Right now, in addition to the Hoover cook book, which has been previously announced, the information bureau is ready to send any reader a copy of the knitting instruction book. This book explains exactly what the Red Cross wants in the line of knitting and will be a great aid to those securing it in furnishing knit goods not only to the soldiers but to members of their own families where this is desirable. Either of these books can be had for the asking. Merely enclose one 2-cent stamp each to cover postage when you write.

It makes no difference what your particular problem might be, write to the information bureau about it. For instance, if you want to put up eggs during the coming season for use next winter, when they will be probably twice the price of the summer months, you can find out from this bureau how to put them up. If you want to know exactly how to address letters to American soldiers in Europe, ask the information bureau. If you want to know something about the income tax law and your liability to pay income tax, you have only to ask. These are merely suggestions and there are thousands of questions, any one of which you may be vitally interested in, that can be answered by this department.

Do not address your letters to the state office of this paper, but write directly to The Washington Farmer Information Bureau, Washington, D. C.

# Sidelights

**No Thought for the Morrow.**

"Another ha'penny, please, my boy. Bread's gone up a ha'penny today."

"Then I'll take one o' yesterday's, please."

**Sixes and Sevens.**

Mexicans threaten to shell our motor trucks. Gently, Carranza, gently! You may shed our blood, but dare you spill our gasoline?—Life.

**Something Just as Good.**

Traveler in country store—What have you in the shape of automobile tires?

Clerk—Fresh doughnuts.

**Actions Speak.**

Bertha Mae—So you told Paul of your love?

Sister Clara—Well—a—not just exactly that—we just went through the motions.—Awgwan.

**A Logical Reason.**

Guest—"Why do you give your daughter such an awful nickname as 'Misery'?"

Host—"Because she loves company."—Judge.

**Flax in Ireland.**

The British government soon will launch a $50,000,000 scheme for increasing the cultivation of flax in Ireland, owing to the importance of flax for the manufacture of airplane wings.

**Proper Appreciation.**

Husband (half cracked with joy)—"Mary, stop the pianola! Great Scott, woman, where is your appreciation? Don't you hear our half ton of coal rattling down the chute?"—Boston Transcript.

**Misses Don't Count.**

Two Irishmen arranged to fight a duel with pistols. One of them was distinctly stout, and when he saw his lean adversary facing him he raised an objection.

"Bedad," he said, "I'm twice as big a target as he is, so I ought to stand twice as far away from him as he is from me."

"Be aisy now," replied his second. "I'll soon put that right."

Taking a piece of chalk from his pocket he drew two lines down the stout man's coat, leaving a space between them the width of his lean opponent.

"Now," he said, turning to the other man, "fire away, ye spalpeen, and remember that any hits outside those chalk lines don't count."




# The Miracle of the Marne

The battle of the Marne halted the rush of the Germans towards Paris. It aroused the French to superhuman bravery. They fought as if led by the spirit of the Maid of Orleans herself.

The Marne was a demonstration of the power of patriotism with its back against the wall. The same sacrifice of self, the same love of country and unity of purpose that inspired the French people must inspire us, and we must win the war.

We are sending our best manhood to fight for us. They must be armed, fed and clothed, cared for through sickness and wounds. This is the work of every individual as well as the Government.

It is the proud duty of the Bell System to coordinate its purpose and equipment to the other factors in our national industrial fabric, so that the manufacture and movement of supplies to our boys abroad be given right of way.

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# Win the War by Preparing the Land, Sowing the Seed and Producing Bigger Crops

**Work in Joint Effort the Soil of the U. S. and Canada—Cooperative Farming in Man Power Necessary to Win the Battle for Liberty.**

The Food Controllers of United States and Canada are asking for greater food production. Scarcely 100,000,000 bushels of wheat can be sent to the allies overseas before the crop harvest. Upon the efforts of the United States and Canada rest the burden of supply.

**Every Available Tillable Acre Must Contribute; Every Available Farmer and Farm Hand Must Assist.**

Western Canada has an enormous acreage to be seeded, but man power is short, and an appeal to the United States allies is for more men for seeding operations.

**Canada's Wheat Production Last Year Was 225,000,000 Bushels; the Demand From Canada Alone for 1918, is 400,000,000 Bushels.**

To secure this she must have assistance. She has the land, but needs the men. The Government of the United States wants every man who can effectively help to do farm work this year. It wants the land in the United States developed first, of course; but it also wants to help Canada. Whenever we find a man we can spare to Canada's fields after ours are supplied, we want to direct him there. Apply to our Employment service, and we will tell where you can best serve the combined interests.

**Western Canada's help will be required not later than April 5. Wages to competent help, $50 a month and up, board and lodging.**

Those who respond to this appeal will get a warm welcome, good wages, good board, and find comfortable homes. They will get a rate of one cent a mile from Canadian boundary points to destination and return.

For particulars as to routes and places where employment may be had, apply to

**U. S. Employment Service, Dept. of Labor**

# All the World's a Stage, and All the Men and Women Merely Players

## American Nurses Do Great Work



A group of American nurses and some of the convalescent British officers at the American Red Cross hospital at St. Catherine's lodge, Regent Park, London, are shown. The wonderful work of the American nurses in England and France has been greatly appreciated by both governments.

## British Girl Helpers Cheery



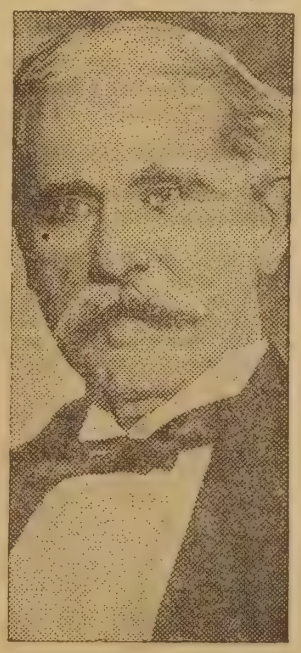
These pretty misses are members of the English Women's Auxiliary Army corps. They are resting between the halves of a hotly contested hockey game between girls of the different barracks.

## Takes Bride Home Through Clouds




Lieutenant Lawrence Sperry, naval aviator, and his bride, formerly Miss Winifred Allen of New York, were married at Governors Island following their trip in an airplane. They left the island by the same route after the ceremony.

## Chaplain in Navy.



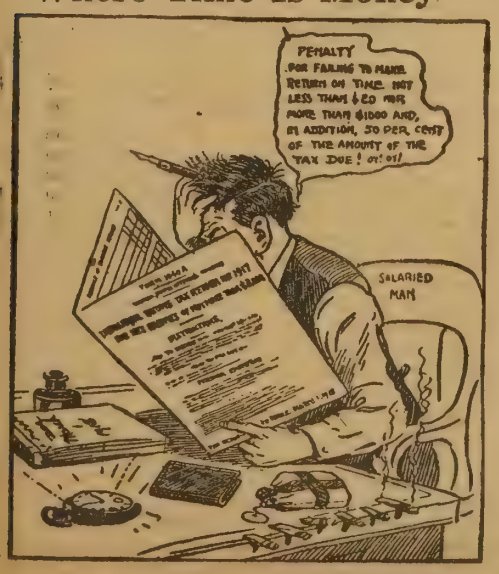
The photograph of Dr. Henry Van Dyke appears above. He was former American minister to The Netherlands and has reported for duty as chaplain at the Charlestown navy yard. Dr. Van Dyke is a member of the naval reserve with the rank of lieutenant commander.

## Patriotism and Thrift




—Washington Star.

## Where Time Is Money



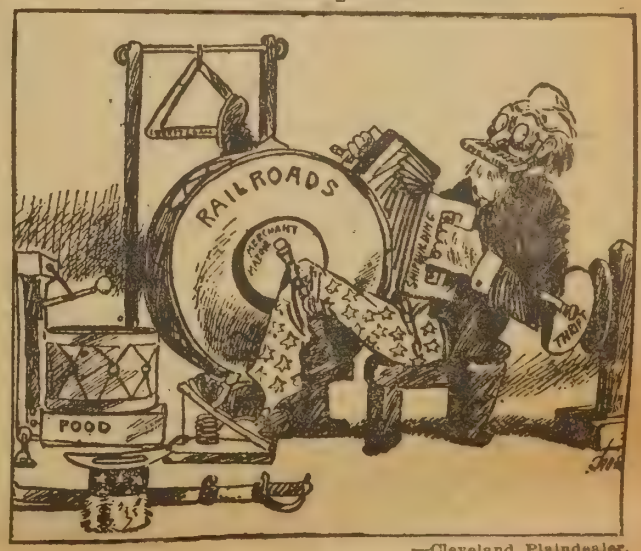

—Seattle Times.

## Hard to Look Pleasant




—Baltimore American.

## He Can Play 'Em All




—Cleveland Plaindealer.

# Trappers of the Ozarks



## The Adventures of Two Young Pioneers in the Wilds of Upper Louisiana, Now the State of Missouri.

By LEWIS B. MILLER

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### SYNOPSIS.

In September, 1811, two young men who lived near St. Louis—Ben Armstrong and Jodo Henderson—taking with them their two dogs and donkey, Spunky, started on an all winter's hunt in what was at that time an unsettled region, where Indians held full sway, in the wilds of upper Louisiana, now the state of Missouri. After a perilous trip over old Indian trails and dangerous streams, they reached their destination—a salt spring, close to the river Big Niangua, which Ben had visited before and from which they expected to secure salt for sale with their furs when they returned to civilization the following spring. Here they erected a rough cabin for their winter quarters close to the mouth of a large cave that was full of water and bats, and started their salt making and hunting.

If you haven't read the previous chapters, begin with this instalment. You will readily pick up the thread, and once picked up, you'll follow it to the end.

### CHAPTER VI.

#### When the Buffalo Bull Turned.

FOR several minutes the canoe glided through the subterranean sea, pushed by the wind, while the two explorers gazed about them. Much of their progress was attended by the fluttering of wings overhead. But sailing was slower than paddling; and Jodo presently began to grow chilly without his coat. Then he lowered their improvised sail, and, after putting it on, he, as well as Ben, went to paddling again.

"If we had the right kind of a sail, and a mast to carry it, we could sail all the way out of here without lifting a hand," he remarked.

"We certainly could, Jodo. This is a lovely breeze for sailing."

They moved faster going out than they had moved going in. Once their light craft ran aground, perhaps upon a pile of something that had fallen from the roof. But there was plenty of deep water close by, and they soon had the canoe floating clear and were paddling on again. At length they began to hear a dull roar, which they knew was made by the stream that flowed out of the cave.

At last the canoe touched ground, they were at the end of the lake. There both men and dogs sprang out, and the canoe's rope was made fast around a bouldler. Then Ben and Jodo took up their rifles and torches and, following the edge of the noisy stream, soon emerged from the cave's mouth. The hour, as indicated by the stars, was now near midnight.

"It's a relief to escape from that big, gloomy hole," Jodo remarked, as they were moving toward their cabin.

"Yes, it is, in a way. But I would have liked to reach the farthest shore of our underground sea. It's bound to stop somewhere. One of these days, when we don't happen to have anything that needs doing outside, we may make another voyage on that sea. Then we'll keep going as long as there's water enough to float our canoe."

One afternoon, only a day or two later, Ben and Jodo crossed Cave Branch, on a bridge of poles they had made, and went on toward the little salt spring, for a trough of salt water to fill their pots. The day was mild and the sun shining brightly. Jodo happened to glance upward, at the mouth of the little cave in the face of the cliff. Suddenly he stopped and stood gazing.

Ben walked on several yards, then looked back. "What in the world are you staring at, Jodo?" he demanded.

The other made no reply, but kept gazing upward, For a minute or two he gazed, without lowering his eyes. Ben glanced at the face of the cliff, but failed to see anything.

"Jodo, boy, do you often take such spells as that?"

"Only once in ever so long," the other replied, without for a moment lowering his eyes.

But presently the gazer started and cried out: "There he goes! I saw 'im fly in!"

"Saw what fly in where?" demanded Bed.

"Why, I saw a bee fly into that little cave up there. The first time I glanced up I noticed something fly out. The thing was out of sight, though, before I could make sure what it was. But the one that went in flew just like a bee, and I'm pretty sure it was a bee."

"Interesting news if it's true, that is," Ben said. "If a swarm of bees are keeping house in that cave, that will explain why we failed to discover a bee-tree. But I don't know that it's good news. The cave's a long way up. We may not be able to get to it.

"No chance to climb the face of the cliff. But we've got rope enough. Couldn't we go up to the top, and one let the other down?"

"It would be a long let-down. And we should be risking our necks. Must be at least 75 feet from that cave to the top of the cliff. I'd rather try to get up from below. Only about 35 or 40 feet from here."

"Yes. And there ought to be some way to get up. But we'd better watch a while and make sure that the flying things I saw are bees. No need for us to climb up there if they're not."

They did watch again, and both had soon convinced themselves that bees were flying in and out.

"Now if we can only get up there, Ben, we ought to find all the honey we need, and maybe several times as much."

They soon went on for their trough of salt water. During the rest of the day, and for several days following, both busied their brains with trying to devise some way to reach the little cave; but without any success.

"Maybe when we get hungry enough for something sweet, that hunger will stimulate us mentally till we can think of some plan," Ben remarked.

One afternoon a steady rain began to fall, rather warm at first, but turned cold as the wind veered to the north, and soon changed to sleet. When morning came, the world was white with snow, and winter seemed to have set in in earnest. The young trappers welcomed it, for cold weather would soon improve the furs they were catching.

Early every morning, usually by the time they could see, Ben and Jodo started out to visit their traps and deadfalls. On returning to camp, they tacked up the morning's catch of furs, and took down those that were dry and packed them away inside, in a bundle. That done, they emptied out their pots, if there was salt enough to boil off, and refilled the pots with salt water. Then, after eating their dinner, they usually went hunting.

Deer elks and bears were numerous and not very hard to kill. But as yet the hunters had not so much as caught sight of a buffalo. With the coming of the first severe winter weather they found themselves longing for at least two buffalo-robes to sleep between.

A few mornings after the snow-fall while returning to camp from a visit to their traps they came upon a very noticeable trail in the snow.

"Looks like somebody's cattle had passed—" Jodo began to remark.

"Not cattle, buffaloes!" exclaimed Ben.

The younger man became excited at once. "Wouldn t I like to see 'em? And wouldn't I like to knock over at least one?" he cried.

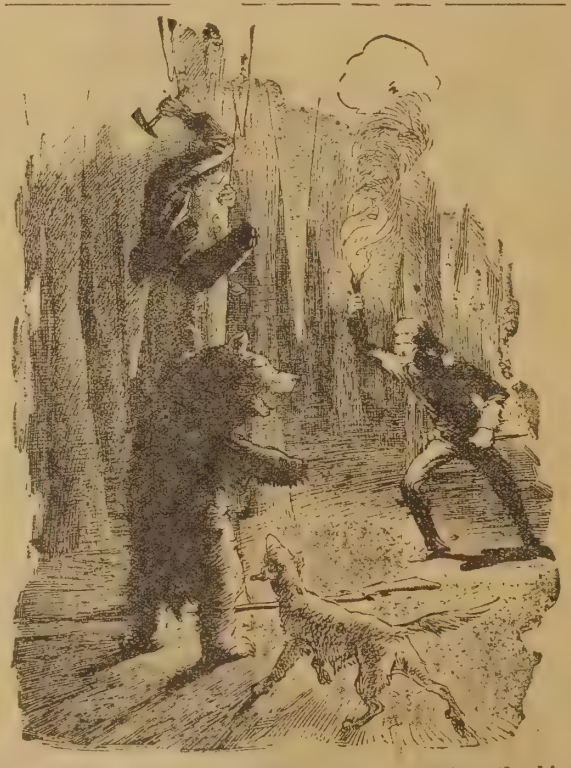
"No reason you shouldn't do both. "Let's follow their trail."

"What shall we do with these pelts?" Jodo meant those from the animals their traps had caught during the night.

"Let's hang them up." Ben wound a sapling, bent it down, and after tying the pelts in a fork, let it fly back.

Now the hunters, after examining the priming of their rifles, set out on the buffaloes' trail.

Doubtless the big game had passed several hours before. Mile after mile the two hunters tramped, without catching sigh of them. Often, in spots of prairie, they came to where the buffaloes had pawed away and nosed away the snow to get to the grass.



**If either Ben or Jodo had been alone when the big bear attacked them he probably would have lost the battle. But two boys and two dogs were too much for him. The tomahawk fell upon him with deadly effect.**

The farther the young hunters followed the trail, and the fresher the signs became, the more excited Jodo grew. At last they stood on the top of a hill, and looking across a valley below, they discovered nearly 20 buffaloes browsing on the opposite slope. But the buffaloes discovered the hunters, and the whole drove fled. Soon they were lost to sight.

The hunters followed. But by the time they could cross the valley and climb the hill beyond, the drove was far away. Almost at a trot the pursuers were now going. After a good while they again came in sight of the game; and again the buffaloes, being out in the open, discovered the hunters in good time and took to awkward flight.

Twice more the same thing happened. It seemed impossible to surprise the wary animals.

By this time the short winter day was drawing to a close. Ben and Jodo were already miles from their cabin, and must return to it for the night. So, reluctant as they were to give up the chase, they got their bearings and started back by the shortest route. It was an hour after dark when they entered the cabing under the cliff.

But by the middle of the next forenoon they had attended to their traps and were ready to go buffalo-hunting again. This time, so confident did they feel of getting at least one animal, that they were taking Spunky along, with his pack-saddle, to carry back the hide and such parts of the meat as they would care to save.

"You can ride Spunky if you want to, Jodo. A pack-saddle may not make the easiest seat in the world, but maybe it will beat walking."

Jodo glanced at the mule. "I doubt that, Ben. You ride yourself if you care to. I prefer to foot it."

"So do I. And I'm rather heavy for such a little mule anyhow. If I tried it, I'd feel that I ought to take turn about with him—carry him as much as he carried me. But he could carry me all right."

"Then we'll lead and drive, as usual, and let him be rested for the load he's to bring back—if he comes back loaded."

"Oh, he must! Sorry hunters we should have to be to let all those buffaloes escape us."

Straight across the country they set out, toward where they dropped the trail the night before. Jodo was leading the mule and his partner driving. When at length they came upon the trail again, they followed it as fast they they could.

The buffaloes, as the trail indicated, had lain down during the night; but not till the hunters had tramped several winding miles did the come in sight of the drove again. Bose and Tinker saw the buffaloes promptly, and were eager to be off in pursuit. They were ordered to the rear. But the big game, now in a half-prairie country, saw or scented the hunters and were in full flight.

"They're unusually wild. Somebody must have been hunting them. Osages, maybe. We're likely to have a time getting within rifle-shot."

"Can't we drive 'em into the woods, Ben?"

"They seem to have an instinct that warns them to keep in the open when danger is nigh. They won't stop in the woods."

Three or four times more the hunters came in sight of the game. And just as many times the game took to flight before anybody could get close enough to fire a shot. Ever time the buffaloes fled, it took the hunters a good while to overtake them.

"At this rate they'll wear us out before we can run them down, I'm afraid."

"Ben, I'm just bound to have a buffalo—to be able to say when I go back home that I've killed a buffalo. Can Spunky out run one of those shaggy fellows, do you think?"

"I rather believe he could."

"Then I'll tell you what. The Indians commonly hunt buffaloes on horseback, I've been told; and they don't shoot till theyre almost again the beast. That's what I'm going to try. Next time, we come in sight of that bunch, I'll jump on Spunky and take after 'em just as hard as I can clatter. And I'm going to keep after 'em till I overtake 'em and bring one down—or find out that I can't."

"Think you can manage Spunky and your rifle at the same time?"

"I'm not going to try. I'll let you keep my gun and I'll wear your pistol and mine. I can shoot a pistol with one hand all right."

"The whole business will be pretty awkward. For one thing, you have no bridle. And I'm sure a pack-saddle must be an inconvenient thing to ride, though I've never yet straddled one."

"Oh, it's little I care for the awkward part, or the inconvenient part, if I can only get a buffalo. And as for a bridle, I'll just take a loop around the mule's nose with his rope."

"All right, Jodo! If you want to try hunting buffaloes after the manner of the plains red men, sail into it! I'll give you all the help I can."

It was half an hour later when the hunters caught sight of the game again. Ben and Jodo were behind a screen of bushes, but, as usual, the buffaloes were out in the open, and too far away for a bullet to reach them.

"Now Jodo, here's the very chance you're longing for," Ben said, after ordering the dogs to be quiet.

Hastily, nervously, Jodo began his preparations. After leaning his rifle against a bush, he thrust Ben's pistol into his belt with his own. Then, having made a loop around the mule's nose, he climbed into the stirrupless saddle. There was some uncertainty as to what Spunky would do, though he had been ridden often before. But, as a matter of fact, he did nothing.

Now Ben drew his hunting-knife and cut three switches. One he gave to Jodo. "Whenever you're ready, say the word."

Jodo adjusted himself in the saddle, and raised his switch. "Ready!" he exclaimed, and brought the switch down sharply against Spunky's flank. At the same moment Ben rapped the mule with his switches, one on each hip.

Thus encouraged, Spunky bounded forward, and dashed away at the top of his mulish speed. Ben followed and tried to strike a second time, but his blows fell short. Jodo guided his mount straight toward the buffaloes, and kept plying his switch.

Oddly enough, the buffaloes did not run as quickly as heretofore. They threw up their heads and all stood gazing at the mule and rider bearing down upon them. When presently they did turn and take to flight, they were less than a hundred yards ahead of their furiously riding pursuer.

Now followed an exciting chase. Plying switch and heels vigorously, Jodo was soon only about 25 yards behind the hindmost buffalo—a big, ungainly bull. But by this time the buffalo, fully aware of his peril, was running with all his ponderous might. Jodo urged the mule to better speed; but Spunky, too, seemed to be doing his best. And in spite of that the distance between him and the fleeing buffalo remained about the same. At length the chase led into a tract of scattering woods.

Seeing that it was probably impossible for the little, short-legged mule to overtake the buffalo, and fearing that the game would escape altogether, Jodo drew one of his pistols, took as good aim as he could at the big beast's hinder parts, and fired. He hoped to cripple the bull and thus check his speed.

But after the shot the buffalo kept running at the same headlong gait. Seemingly, the hastily fired bullet had not touched him.

Thrusting the empty pistol back into his belt, Jodo drew the loaded one. This time he took a more careful aim. Scarcely had the pistol cracked when the buffalo, wounded in the ham, began to limp. And after limping a short distance he stopped, turned suddenly and faced his enemy, angrily, defiantly. A frightful-looking picture the great bull, with fury in his eyes and murder in his heart!

One glance showed Ben the situation. Had the danger been less serious he would doubtless have laughed. But, as it was, he only ran to one side, hoping to get a shot at the shaggy fellow. And at the same time the two dogs, excited beyond endurance, dashed away from Ben and made for the buffalo.

Before Ben could get a chance to shoot, something unexpected happened. Spunky put his fore feet into a hole, and as his head went down his hind parts flew up!

## CHAPTER VII.

### Moccasin-Tracks in the Snow.

Spunky's heels kept rising till he turned a complete somersault, coming down on his back. Jodo had the presence of mind to throw himself to one side, thus escaping being mashed between the pack saddle and the ground.

What might have happened had nobody been near to divert the bull's attention is uncertain. But as the little mule took his tumble, the dogs dashed forward and began barking fiercely at the big buffalo. Seeing Ben approaching, the beast turned to face him and the dogs. But as both Jodo and the mule leaped to their feet, but a few yards away, the shaggy fellow started for them again.

This was Ben's chance. One rifle was quickly laid down, and the other went to his shoulder. When the gun cracked sharply, the bull stood in his tracks for a few moments. Then his legs seemed to stiffen under him, and he dropped heavily to the ground. The bullet had passed through his heart, and he was dead when he fell.

By this time Spunky, having struggled to his feet, was making off again, braying loudly as he ran.

"Are you hurt, Jodo?"

The young fellow addressed, after making sure that the bull was past pursuing farther, felt himself over carefully before replying.

"Just jarred up a little is all, I guess. But Spunky may have crippled himself."

"Not past running, certainly!" Ben laughed as he watched the fleeing mule.

After fleeing 200 or 300 yards, Spunky stopped and stood gazing back at his prostrate enemy. Plainly he half expected the bull to bound up and start after him again.

"Well, you got 'im, didn't you, Ben? For a little while I thought he was bound to get me."

"How did he come to turn on you?" And when Jodo had explained, Ben said: "He certainly did look frightful as he came charging after you! Yes, we brought him down—both together. But if you hadn't wounded him and fetched him back, I never could have got in shooting distance of him."

Both felt the big beast's shaggy coat. "This ought to be good to cover with on a bitter-cold night," Jodo remarked.

"It will be—not a doubt of that. But his meat will be too tough for anything but dog feed."

After catching the mule and tying him close by, and assuring themselves that the pack-saddle was not broken, the two hunters went to work on the buffalo with their knives. When the big hide was off, they spread it out on the snow, hairy side up, and gazed at it admiringly. Later they rolled up the hide and fastened it and some of the meat on Spunky. Then they started for camp.

"Shall we try for another of that bunch tomorrow?" Jodo inquired, as they were tramping along.

"Well, not necessarily tomorrow. But if they stay anywhere in this vicinity, I'm hoping we can land a few more of them."

"We must get at least one more, so as to have two robes to sleep between."

The partners did not go buffalo-hunting next day. But a few days later they started out again with Spunky. More snow had fallen, and the weather was pretty cold. For miles the hunters wandered over the hill-country, without discovering either the drove of buffaloes or their trail. Finally they abandoned the search and started back toward camp.

But before going a mile in that direction they heard Bose utter a quick excited bark. Looking off through the woods, they caught a glimpse of the two dogs eagerly following a trail.

Hurrying in that direction the hunters learned that their dogs were nosing the trail of a bear. And the tracks in the snow indicated that the bear was of unusual size.

"Big enough to rip a dog wide open with one rake of his paw!" Ben said. "We must follow as fast as we can."

Away they went on the trail. Both the hunters and Spunky were soon going at a trot. After a few hundred yards they began to hear fierce barking somewhere in the woods ahead. Now they put Spunky to a gallop. Soon they could make out the cause of the commotion.

The dogs had overtaken the bear and brought him to bay. Reared up on his haunghes, the fierce-looking beast was striking at his assailants, first with one paw and then with the other. Bose had had experience with bears, and was too cautious to let those claw-armed paws get near him. But Tinker, more foolhardy, rushed in again and again to snap at the shaggy brute. Fortunately the little dog's alertness and quickness compensated for his rashness. The paw that reached for him was always just the fraction of a second too late.

Before the hunters could approach to within shooting-distance, the bear dropped to his all-fours and was off at a surprisingly rapid gait. The dogs followed promptly, and the hunters started after the dogs. Soon both bear and dogs were lost to sight among the trees and brush.

Fast as the hunters hurried, they failed to catch even a glimpse of the bear till the noisy barking of the dogs indicated that they had brought him to bay again. But a second time, as the hurrying hunters drew near, the bear dropped down and took to flight.

(Continued on the following page.)



**To be chased by an enraged bull buffalo was a new experience for Jodo, but he made good at the venture.**

the big fellow made as he stood with his great, shaggy head lowered till his nose almost touched the ground.

As the bull turned to confront him, Spunky stopped suddenly—so suddenly that Jodo had to clutch the pack-saddle to keep from plunging over the mule's head. Never had Spunky beheld such a frightful monster before. The little fellow snorted loudly with terror, his long ears pointed straight ahead, and he seemed on the point of turning and taking to flight.

For a minute or so Jodo himself was too much astonished at the unexpected situation to know what to do. Then he began to reload one of his pistols. He was very nervous, but at length had the powder and bullet in the barrel and the priming in the pan.

"Now, my big fellow, if you'll just hold still a few seconds longer, that shaggy coat of yours will be mine to sleep under!" he was thinking.

After trying in vain to quiet Spunky, he cocked the pistol, took a careful aim, and pulled the trigger.

Had he been more experienced in hunting buffaloes, Jodo would have known that a buffalo bull's skull would turn a rifle bullet, and that a pistol bullet had no chance at all to penetrate it.

The shot was not without effect, however. As he felt the bullet sting where it pierced his hide, the angry beast, feeling that this second wound was too much to be borne, charged his enemy furiously!

The bull and Spunky were scarcely a dozen yards apart. By the time the terrified mule could turn, the enraged buffalo was almost upon him. Now began another wild race, in the opposite direction, with Spunky leading the way for life, and the bull making furious efforts to overtake him.

Scarcely had Jodo started in pursuit of the buffaloes when Ben, catching up both rifles, started in pursuit of Jodo. He followed as fast as he could, but lost sight of the chase when the bull and Jodo plunged into the woods. He kept on, however, and was little more than a hundred yards from the nearest trees, when he saw Spunky and Jodo burst from the woods, coming out even faster than they had gone in. Both fugitives seemed half-wild with terror. And just behind them charged

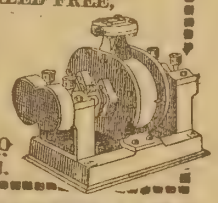




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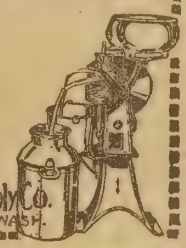
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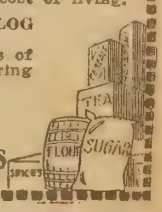


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# Trappers of the Ozarks

(Continued from the preceding page.)

Again and again that was repeated. At last the retreating beast was seen to make straight toward the side of a hill and disappear into it.

"There! He's taken refuge in his den!" exclaimed Jodo. "Chances are we shall have a time rousting him out—if we ever can."

After t ying Spunky to a bush, and leaving the dogs to watch the bear's den, the partners hurried here and there in search of a dead pine-tree. Finally a shout from Jodo brought the two together at the cave. Jodo came carrying a piece of wood that had just been pulled out of the ground.

"Rich old pine-root," he told Ben. "I know it's got plenty of rosin in it, because it's the only part of the pine-tree that hadn't rotted."

On the little fire kindled to light the grass they now laid the root, till it began to blaze freely. Then Ben took it up.

"Now, Jodo boy, if you feel bold enough, we might crawl in and tackle his bearship. But you don't want to try it unless your nerves are steady. For you're likely to have to shoot quick and shoot for your life. It's the bear's life or yours when you venture into his lair. I'll carry the torch, and you can keep just a yard or two ahead of me. That way the light won't be in your eyes. I'll hold the torch high enough to throw the light over your head and as far beyond you as possible."

"Shall we let Bose and Tinker go in, or leave 'em out here to keep Spunky company?"

"We'll take them with us. They can discover the bear before we can."

"I know. But they're likely to get in the way when I want to shoot."

"Then we'll make them stay behind us. Or at least I can make Bose stay back. When Tinker gets excited he's likely to dash out in spite of orders."

So the two hunters started to crawl under the ledge, Jodo with his rifle cocked. The dogs followed at their heels. The men advanced very cautiously till they came to where they could stand erect. Then they felt safer. The dogs sniffed and growled, but it seemed to be because the bear had been here recently rather than because he was here now.

Slowly, alertly the two hunters moved forward. The cave was not large as yet, and they searched every inch of it with their eyes as they advanced. The bear was not to be seen.

"He's retreated to the back end," Ben remarked, after they had penetrated a good many yards.

"Maybe there isn't any back end. Maybe there's just another outlet, and the bear has gone on through."

At length, as the hunters advanced, they came to a place where the cave grew smaller, the roof being so low that they had to stoop a little to pass under it. But soon it began to open out, the roof rising and the walls spreading apart, till they were in a huge cavern, 20 feet high, 50 feet across, and longer than their torch would throw light.

And a very peculiar-looking cavern it appeared to the hunters. Numerous white columns, seemingly set there for support, reached from the floor to the roof. Some were as large as a good-sized tree-trunk, and others as slim as a sapling. Also a few, though they reached up a yard or more from the floor and down a yard or more from the roof, failed to come together. All

(Continued on page thirty-six.)

# Calico

(Continued from page twenty-four.)

and bellows-like lungs, held his own. The blue, misty ridge that rose in the distance ahead grew higher, nearer, then swept by and another breasted the horizon in the same leaden distance. No tougher horse than Calico ever set a hoof on the Lazy B range. From sunup till evening he had put 100 miles behind him, and in the morning was ready for another hundred. His neck was short and thick like a bull's—the bronco neck—his legs were short, but slender and graceful, and at times it was hard to tell whether the twinkle in his brown eyes was wickedness or merriment. He loved the race, and now, whenever an exasperated whoop from one of the pursuing Indians reached his ears he would glance back, seemingly measuring the strength of the broncos that were pitted against him.

More miles sped by and Bill saw a look of anxiety steal into the intelligent brown eyes. Then the horse no longer looked back and Bill began to finger his rifle nervously. Specks of white foam spattered Bill's red shirt, and finally, in a mighty heave for breath the horse's stride shortened. Instantly the spurs jingled, and, with head up and eyes fierce with insulted pride, the horse leaped forward.

The baby, lulled by the cradle-like motion of the horse had fallen asleep immediately after the race began. Bill was glad it slept. Somehow the peaceful, baby face seemed to make the danger less fearful, and, in spite of Calico's shortening breath, he felt that in some way the race would not be in vain. Inwardly he railed at himself for having mistreated Calico so badly during the last fortnight. Otherwise the bronco could have fled in front of his pursuers till they dropped, and then had strength enough left to resume his perpetual jog on to the Lazy B. Rather astonished, Bill presently began to blame whisky for it all and wondered if some of the slanderous things Salvation Army Jack had said about whisky and drunkenness were not partly true. He vowed that if he lived through this scrape, while he might again go back to "life" in the settlement, yet he would henceforth see that what he did to himself would be such as would not bring suffering to others. What he meant by the resolve he hardly knew, but he knew that if the baby was brained with a tomahawk, and he shot and scalped it would be because he had been drunk in Cow Creek and neglected to feed his horse.

Calico stumbled. Then he staggered, and, with a great, heart-broken groan, sank to the ground and rolled over on his side. With his rifle in one hand and holding the baby lightly as a flower in the other, Bill freed himself from the saddle. A bullet cut a furrow through his thick, red hair as he stooped to lay the baby on the ground, and, dodging quickly, he flattened himself behind the body of the prostrate horse and glanced along the barrel of his rifle, seeking a victim, and sprang to his feet with a yell of astonishment. The Indians were fleeing. Whirling about, Bill saw galloping over a ridge ahead, all of them not yet in view, a company of soldiers. In the same moment the blue-coated fellows swept by him, diverging from right to left to avoid the fallen horse, each man striving to be first. As Bill afterward expressed it, "the hull bunch of Siwashes wuz rounded up like a bunch of beeves." The warriors saw that they were outnumbered and that resistance was useless, so, stoically, serenely indifferent of everything, animate or inanimate, they lay down their arms and awaited the order to march to Fort Wright, where the military authorities would hang a couple of them if sufficient evidence could be collected (which was doubtful), and turn the rest of them loose.

After the Indians were safely under guard those of the soldiers not on duty gathered about Bill with many questions, which for a time were unanswered. Bill had Calico's head on his lap and was trying to force the contents of a large, black flask down the horse's unwilling throat. With assistance from one of the soldiers he was finally successful, then life came back to the big brown eyes, but clearly, no expression of thanks for the treatment. Under the stimulation of the whisky—bad though it was—Calico was soon able to snort feebly at the soldiers, and, a moment later, staggered to his feet.

After Calico had been thus cared for the situation was discussed. In as few words as possible Bill told his recent experience, and learned in turn that the soldiers had been ordered out from the fort at daybreak, reports of a general uprising among Bad Dog's braves having been brought in. When thus informed Bill vaguely remembered having heard some such talk while he was on his "tear" in Cow creek; how the news had filled him with wrath, and with drawn six-shooter he had vowed to shoot full of holes every siwash within a hundred miles of the Fountain. He was for beginning his onslaught immediately, but Dutch Jake, scenting trouble, had contrived to exchange a quart flask of mountain dew for the flourishing revolver, and Bill, with the less deadly weapon in his hand, had soon allowed his predatory design to vaporize.

After the order had been given to march the captain approached Bill, complimented him ceremoniously for his bravery in rescuing the baby, further stating that he knew of a family at the fort with whom the child could probably be placed; whereupon Bill tightened his arms around the baby, and replied laconically that he guessed "the kid would be tended to all right."

The reader may think this happened a long time ago, or not at all, but in either case he will be mistaken, for it did happen only a few years ago, comparatively speaking. But in these few years the Indian teepees have gone and the homes of white men built in their place; the cattle are gone, the cowboys are gone, and the desert plain across which Bill Jamison raced for his life and that of a year-old baby girl is likewise gone. What was a desert only seemed so, for with the touch of the plow the soil became fertile, and when the plains were plowed the rains came, and the wheat grew, and the wild cowboy days were gone forever.

There is one of the wheat-kings of this region who numbers his acres by thousands. When the settlers came to plow up the cattle ranges he did not join in the general opposition of the stockmen to the newcomers, but was among the first to bid farewell to the old regime. They say the stand he took in this respect was due to the influence of his daughter—not his, but an adopted one—who had been placed in an eastern college when a child, but during the years that she was there had never failed to write Bill from one to two letters each week. In these letters she had discussed the new turn of affairs with him, and had made him understand that they were inevitable.

When the young lady had graduated (or "post-graduated" as Bill says), the finished product of the greatest masters in the world, she came back to Bill and the Lazy B; not the Lazy B, however, but the new country that the farmers had made of the Lazy B. With her she brought a young man, a former classmate, whom she introduced to Bill as her husband. This being Bill's first information of the marriage he was naturally astonished, but gulping down his emotions he swore softly and straightaway appointed the young man as his overseer. Later he caused him to use his engineering skill in the construction of an immense irrigation ditch, which is now reputed to be one of the greatest feats of its kind in the Pacific northwest.

I visited them a short time ago and was introduced to another little baby girl who snubs her papa and mama a dozen times a day for a place in Bill's hungry arms. She is just big enough to ask questions about the scar on Bill's head, and I chanced to be present when the story was told. She, of course, is too small to understand all of the tale, but she knows that Calico was a brave and noble horse, and that he is buried under the big box-elder tree out in the pasture. Bill often takes her out to play under this tree and as he watches her flit about in her childish amusements often he will exhale a giant puff of tobacco smoke, swear softly and mutter, "It's queer how things do come about."




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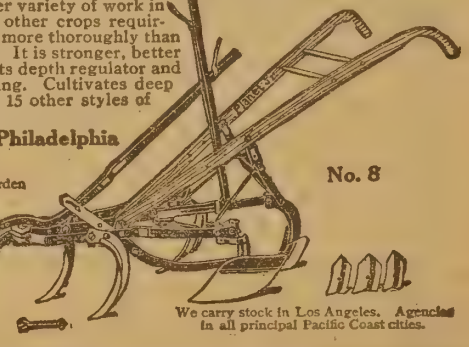
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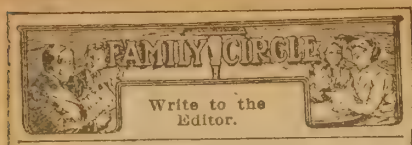
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ALICE W. BARLAND,
Editorial Contributor.

# Must Organize

## Nation Calls Women to Service

To the Women of the Family Circle: I happen to be in very close touch with the war work for women, which has been planned by the national council of defense at Washington. It is the purpose of that council to have this whole country from ocean to ocean, organized into various committees with chairmen to oversee the work along different lines, which are of vital interest to this country. A very large factor in this organization is the women's committee. The special duty of this women's committee is to give effectiveness and unity of purpose to the work of women in food conservation. Americanization, education in patriotism, Liberty loan and thrift campaigns, the Red Cross and a number of other lines of work.

Do you realize that if we are ever going to do anything worth while to help win this war we must have organization. Nothing of any account has ever been done without organization. Perhaps I should state that this national council of defense is a special war-service body to conduct all necessary war activities and consists of the United States' secretaries of war, navy, interior, agriculture, labor and commerce, and advisory commissions. The above council appointed a women's committee to take the guidance of all war activities for women and to work with and through all women's organizations along lines that the government recognizes as most serviceable. This women's committee is to be a mouth-piece of the government to all women's societies of the country.

This is a very wonderful plan for united effort on the part of women. Let me tell you the system. The national council of men, consisting of the various secretaries, selected a central committee of 10 women with headquarters at Washington. These in turn appointed a chairman in each state, whose duty it is to organize her state. With this state chairman is a council composed of the presidents of the organizations that have a statewide organization. This state council appoints a chairman for each county and she in turn appoints vice chairmen or helpers in number sufficient to cover the entire territory of her county.

There are several more lines of work than I mentioned, eight all told. It is comparatively easy for the county chairman to get the helpers in the towns, but in the farming districts it is very much harder. It is so hard to get in touch with the women. Now this is what I am asking of you: When you are approached by some county chairman to be a helper among your neighbors, line right up and don't refuse.

I venture to say that there is not one woman who is reading this article but can do something to aid in this work. There are no paid workers. The county chairmen all work for nothing and, unless the county is very large, pay their own traveling expenses. There is so much selfishness and indifference in the matter of food conservation, which is a big word for food saving! Are you making war bread? Are you using less and less sugar? Are you cutting out your doughnuts and all other things that require fat to fry? I just had a long talk with a man who, for the last seven years, was living in Germany and had only returned ast September. He told me that a pound of sugar could not be purchased in Germany for any sum, no matter how large. During the last two years that he was in Germany his family, made up of himself, wife and two children, were permitted to buy just one and one-half pounds of beef a week. They were allowed two small slices of rye bread to each person a day. The bread was weighed, but I have forgotten the number of drachms, and was procured by presenting a card. That is organization. He also told me that if Germany had taken Paris when she hoped to do so, she would have had 50,000 soldiers in London within 24 hours. Organization again.

We Americans have lived such a happy-go-as-you-please life it is very hard to realize that some one is standing ready to snatch our wonderful liberty away from us. We must wake up to the seriousness of the war situation. Some of us are so much awake that we can't sleep as we used to, but there are others, and many of them, too many, who seem to do no particular thinking about the subject.

It is because these conditions exist that the lines of Americanization and education in patriotism are included with the others as being necessary subjects to bring before the people.

Let us remember all the time that our work is just as important as any and that it is our work, and no one else can do it.

You will be sure to hear of this council if you have not already. Be ready to do your bit. Yours for victory,

ALICE W. BARLAND.

# Women Can Help Win

A lot is heard these days about women taking the place of men in the field to help in crop production. Some people have gone so far as to recommend that the housewife and her daughters don the overalls and run a team, pitch hay, plow, haul wheat and do the other regular work of a man on the farm.

Now, that is good. There are thousands of women in the country that can do just that. They are as good "hands" as the average man, and in some cases much better. Many of them like to work outdoors; like to do the rougher sorts of work, and grow strong and rugged as a result of it.

But the mistake must not be made of believing that country women are an idle reserve of labor to be called upon to relieve a labor shortage. Be it known right now and for an undeniable certainty that the women on the farms of this country are as hard working a class of people as can be found anywhere. They work as hard and as long hours as do the men on the farm; they are not idle, waiting merely to be called into the field.

The usual work of the farm woman, revised according to the special needs of this critical period in the world's history, is of the war-winning variety. Hers is the work of food conservation; hers is the work of stimulating of production; hers is the work of spreading the sentiment of patriotism and applying it to the practical tests that make for victory over the enemy.

Let the woman who wishes to and who is so situated that she can, go into the field and toil, but banish forever the thought that the woman whose hands never touch the plow handle or the pitchfork, but are employed hour after hour, day after day and week after week, cooking, canning, gardening, mending, and in a thousand other ways indoors, is not serving her country. This war is to be largely won in the kitchen and there should be a gold medal set aside for every farm woman who stays loyally by her household duties this summer, making palatable and wholesome foods out of what she might waste, making war breads where she might make something that she and her family like better, canning and preserving fruits and vegetables and saving what American soldiers and their allies must have if they are to be kept efficient.

### Oyster Farms.

One of the large salt water farm of Japan consists of 50 square miles covered with 5 to 15 fathoms of water. Here the pearl farmer plants rocks and stones which are soon covered with oyster spat. The oysters are then left in special beds until the third year. When they grow large enough a tiny speck of irritating substance is introduced in to the bodies of these oysters and three or five years more are necessary for the foreign substance to become hidden in the layers of nacre which make up the pearls.

### Greek Restaurants.

Greek restaurants are now divided into five classes: Luxury restaurants, first class, second class, third class and fourth class restaurants. Saloons are ranked with the second class places. Prices of the various dishes are fixed in accordance with the class of each place, and must not be exceeded. The quantity of each portion is specified by law.

### Cause of Army Rejections.

The records of 10,000 Americans passed for military service and then rejected by camp surgeons show that nearly 22 per cent of the final rejectionss resulted from defective eyes. Teeth were responsible for 8.50 per cent; hernia, 7.47 per cent; ear, 5.94 per cent; heart disease, 5.87 per cent; tuberculosis, 5.37 per cent.

### An Appetizing Corn Dish.

Canned corn is very good when turned into a baking dish, milk and seasoning added, and the whole heated through in the oven and allowed to brown on top. Outside stalks of celery cut up, a green pepper, or both, added before baking, make the dish more appetizing.


# A Piano House of High Ideals

In the last quarter of a century Sherman, Clay & Co. have occupied a position on the Pacific coast second to none, building carefully from day to day a reputation for selling only goods of merit, of true musical worth and asking only fair and consistent prices.

Our customers and friends are legion. We are most careful what we recommend and when we do recommend, it is with the desire to **serve** the customer and serve him well. We study his needs with the desire to place in his home the instrument that best suits his purpose without it being an undue strain upon his pocket book.

We have only one price—the price tag on every instrument is in plain figures—there is positively no deviation from that price.

We offer no "special" inducements, no insurance, no "club" prices, no free music or scarf (bench or stool of course are considered part of the piano.) We do not have "sales" on one pretext or another. Our prices are fair. We aim to be consistent—to sell good reliable instruments at a reasonable price.

We pay the freight anywhere in our territory. We gladly arrange convenient payment terms on any instrument.

If you are in the market for a Piano or a Player Piano, it is to your interest to call upon us or write us for information—to see what we have to offer.

**We invite you to call at any of our stores—or write us asking for illustrated catalogues and prices.**

*We are dealers in Steinway and other Pianos, Pianola Pianos, Aeolian Player Pianos, Etc.*

**Sherman, Clay & Co.**

**Sixth and Morrison Streets, Portland.**
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**808-10 Sprague Avenue, Spokane.**
Stores also at San Francisco, Oakland, Sacramento, Stockton, Fresno, San Jose, Santa Rosa, Vallejo.

# Immediate Deliveries On the



# Universal Tractor Attachment

# $290 F. O. B. Spokane

Converts your automobile into a powerful tractor. Will do the work of four horses. **These attachments were thoroughly demonstrated last year, and we are prepared to make immediate delivery.** Send for literature.

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**RIEGEL BROTHERS**

**1307 W. First Ave., Spokane, Wash.**

**Did you ever stop to think what a difference there is between READING the advertisements in this paper and just GLANCING THEM OVER? In the advertisements we publish week by week there are frequently bits of practical information that may be the means of making or saving you hundreds of dollars. Don't "skim over" the ads. Read them. It will pay you.**

# Patterns

2371-2370—Ladies' costume. Waist, 2371, cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 will require 3 1-4 yards of 36-inch material. The skirt requires 3 1-2 yards of 45-inch material for a 24-inch size. It is cut in seven sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. The skirt measures about 2 1-8 yards at the foot. Two separate patterns, 10 cents for each pattern.

2366—Girls' dress. Cut in four sizes: 6, 8, 10 and 12 years. Size 10 requires 4 7-8 yards of 36-inch material. Price, 10 cents.

2180—Girl's one-piece dress with guimpe. Cut in five sizes: 4, 6, 8, 10 and 12 years. It requires 1 3-4 yards for the guimpe and 4 yards for the dress, of 27-inch material, for a 10-year size. Price, 10 cents.

2369—Dress for misses and small women. Cut in three sizes: 16, 18 and 20 years. Size 16 requires 4 1-2 yards of 36-inch material. The skirt measures about 2 yards at the lower edge. Price, 10 cents.

2205—Ladies' house dress. Cut in four sizes: Small, 32-34 inches bust measure; medium, 36-38; large, 40-42, and extra large, 44-46. Size medium requires 6 1-8 yards of 36-inch material. Price, 10 cents.




2176—Girl's dress. Cut in four sizes: 8, 10, 12 and 14 years. It requires 1 3-4 yards of 27-inch material for the guimpe, and 3 1-2 yards for the dress, of 36-inch material, for a 10-year size. Price, 10 cents.

2374—A smart dress for home wear. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 6½ yards of 36-inch material. The skirt measures about 2 1-4 yards at the foot. Price 10 cents.

1940—Ladies' dress. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 2 1-2 yards of 44-inch material for the underwaist, and 3 7-8 yards for the over dress, for a 36-inch size. The skirt measures 3 yards at its lower edge. Price 10 cents.

1798—Ladies' combination. Cut in 3 sizes: Small, medium and large. It requires 3 1-2 yards of 36-inch material for a medium size. Price 10 cents.

1806—Boys' suit. Cut in 4 sizes: 3, 4, 5 and 6 years. It requires 2 3-4 yards of 44-inch material for a 4-year size. Price 10 cents.

1807—Ladies' shirt waist. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 3 1-4 yards of 27-inch material for a 36-inch size. Price 10 cents.

2386—Girls' dress with guimpe. Cut in 4 sizes: 6, 8, 10 and 12 years. Size 8 requires 7-8 yard of 36-inch material for the guimpe and 2 1-8 yards for the dress. Price 10 cents.

Please fill in this order and mail with remittance to:
PATTERN DEPT., PACIFIC NORTHWEST FARM TRIO, Spokane, Wash.

Enclosed find.....cents for which send me the following:

Pattern No.....Size..... Pattern No..... Size.....

Pattern No.....Size..... Pattern No..... Size.....

Name .....

Postoffice ..... State .....

R. F. D. No.....Box No.....Street No.....
Be sure to give the pattern number and the correct size.

## War Apple Cobbler.

To the Editor: I have a very good recipe for war apple cobbler, which I would like to see in your paper:

Two cups middlings, ½ cup flour, 1 teaspoon baking powder, pinch of salt, 1 large baking spoon lard or fryings, milk enough to make batter. Grease pan well and cover with batter; slice thin, good cooking apples and cover batter real thick with apples, spice and sugar. Cover with batter and bake in slow oven. Serve with cream.

MRS. C. W. ANDERSON.
Colby, Wash.

### Communal Kitchens.

The latest proposal for the elimination of waste in food and the supply of meals at minimum cost in England, includes, what for a better term is called, communal feeding. The communal kitchen has been proposed on several occasions but, save for a few spasmodic experiments, it has not been given a thorough trial. Lord Rhondda is interested in the new proposal and acting with a committee of social workers he is devising plans to give the scheme a real test. With so many women doing war work and with consequent neglect of household duties, some such plan as is proposed will have to be carried out if the rising generation is not to suffer seriously in health.


# Unlike Most Others

which die out after one effort, Crescent Baking Powder stays on the job till the dough is raised. Ask your grocer. Send 4c stamps, for Crescent Cook Book, to Dept. PN., Crescent Mfg. Co., Seattle, Wash.




**CRESCENT** Double Acting Baking Powder. **25c Lb.**

## "The store where I do my trading"

THROUGHOUT the West—go where you may—big town, small town, cross-roads store—there you will find Ghirardelli's.

This West-wide distribution has been made necessary *by demand*—a demand for a delicious, sustaining food-beverage; a demand that is met by Ghirardelli's, and by this alone.

Result? Today Ghirardelli's Ground Chocolate is in daily use in more homes in the West than all other brands combined.

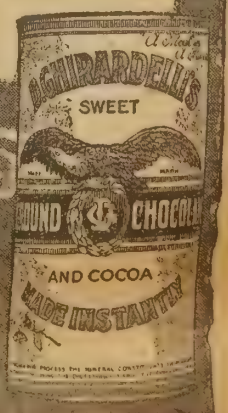
As a beverage it is beneficial; as an aid in baking and cooking it is invaluable.

Be sure to ask for it —at "the store where you do your trading."

*In ½ lb., 1 lb. and 3 lb. cans; a tablespoonful—one cent's worth—makes a cup.*

D. GHIRARDELLI CO.
Since 1852 San Francisco

Ghirardelli's Ground Chocolate






Dear Nephews and Nieces: I have just spent a whole day judging your letters and such a time as I had! And yet I wish there were more of them—more letters and more dear nephews and nieces. The saddest thing comes when I have graded them all and decided which are the best—there are so many splendid letters that do not win prizes. There are only three prizes and there are so many good letters. Many of the cousins have asked just what they must do to win a prize. Your letter must be interesting; it must be written well and written by yourself; words spelled correctly; punctuated properly, neatly written and only on one side of the paper. I know that you are saying, how can I expect a little one of 8 or 9 to write as well as a boy or girl of 14 or 15. Shall I tell you that this is all taken into consideration and for that one reason I have asked you all to always put your age at the last of your letter, just after your name.

You will notice that I always try to guide you in your writing a letter of interest, by suggesting a subject; they are always subjects that the cousins should know of and learn to express their opinion on.

However, there is one prize that every cousin gets if he or she tried to write a good, interesting letter. Every one who takes pains and really tries, gives a prize to himself or herself. Trying to do something better brings a real reward worth having.

One thing I have noticed in the past contests. The children are always glad to hear of the winners and often they speak about their good letters. That is a fine spirit, worth more than winning prizes.

One little girl has asked what a "Twin" is. Finding "twins" is a game that the cousins started more than a year ago, and it is very interesting to find somebody else whose birthday comes on the same day as yours. Aunt Nellie has found several "twins" of her own.

Yes, you may write to cousins through the Corner if you wish. A few have done so and it was nice for the one written to as well as the rest who all read the letters.

One little cousin has asked about making paper beads. I haven't room in this issue to tell you, but it shall be in the next issue.

You don't know how much I love you all, dears. There isn't one of you who does not have a corner in my heart, and I wish I could know you all and see you and talk with you. How thankful I am I have such a big family of nephews and nieces, fine happy boys and girls who are all trying their best to do something worth while and are growing up to be fine men and women.

I almost forgot to tell you what the Roll of Honor was: There are so many good letters, not quite good enough for the prize winners, but too good not to receive anything, so I started this Roll of Honor. If your name appears in the Roll of Honor three consecutive times, a special prize is given. You will notice that we have an Honor Roll of 15 at the close of each contest. Let us all try for the prize. Your loving AUNT NELLIE.

The new contest will conclude May 1, and the suggested subjects are:

**Hooverizing.**
**Your War Garden.**
**Sunshine.**

The prize winners for the contest just closed are:

**Greta Dietz, Ione, Wash.**

**Leland Griffin, Warden, Wash.**

**Alice Clinesmith, Lantz, Wash.**

**Special—Sallie Salina Garry, Miles, Wash.**

**Roll of Honor.**

Lillian Lehman, Paha; Elva Green, Penawawa; Gordon Keiser, Waitsburg; Goldie Yohnka, Ritzville; Ellen Elensohn, Pomeroy; Ruth Jones, Newport; Virginia Gibson, Eastsound; Anna Larson, Montesano; Walborg Brandt, Mt. Vernon; Jerome Gottwals, Govan; Helen Schoenburg, Prosser; Evelyn Moose, Newport; Stella Davis, Fruitland; Alice Case, Tokeland; Agnes Sunnell, Mt. Vernon; Esther Dale, E. Stanwood; Glyness Simonson, Corfu.

**Birthday Comes on Easter This Year.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I hope it will not be the last time. I enjoy reading the letters very much and I hope to see this in print. I am 12 years old. I have two sisters and two brothers. Their names are Arthur, Oliver, Ethel and Maude. Maude is my youngest sister. She and I go to school every day. She graduated this January and I hope to in May. I will be 13 the last day of March. My brithday comes on Easter this year. Have I a twin? I have two little pet bantams and a nice playhouse and a little gray cat. My teacher's name is Miss Polk. I have just a short way to go to school. I come home for dinner every day.—Ada Meek, R. F. D. 6, Box 65, Spokane, Wash.

**A Joke on Brother.**

Dear Aunt Nellie: This is the second time I have written to The Farmer. I have been reading the letters and like them very much. I do not know the answers to the riddles in The Farmer the last time. I wrote to one of the cousins, but she never answered it. I surely had a good time Christmas vacation. My brother was down home the other day and asked me why I didn't write to Aunt Nellie and tell her all I knew about him like the other girls do about their brothers. He reads the letters in The Farmer and just to play a joke on him I am going to write some about him. My brother is about five or six feet tall and he is red-headed and has brown eyes, and likes the girls pretty well. He has one girl and he thinks lots of her. He only gets about a dozen letters a week and always looks for more, as if that isn't enough. My brother is full of fun. I think he will be an old bachelor because he will wait till he gets so old no one will have him. Well, I think that is all the good I know about him, so I will write about something else. My brother and I were up to see my sister last night and stayed there till this morning. Well, I will ask the cousins a few riddles. What has eyes and can't see? What has ears and can't hear? What has tongue and can't talk? What never stops running? Within a marble dome confined, whose milk white walls with silk are lined, a golden apple doth appear, steeped in a bath of crystal clear, no doors, no windows to behold, yet thieves break in and steal the gold? I will stop for this time, hoping my brother will read this.—Elva Green, Penawawa, Wash.

**Knits and Buys Bonds.**

Dear Aunt Nellie: This is my first letter to the Children's Corner. I love to read the letters of the boys and girls in the Farmer: I was 11 years old November 24. I am in the fourth grade. My teacher's name is Miss Michaels. The studies I like best are geography and spelling. We keep here in town two cows and a calf. We have 35 chickens; one is mine, but I wouldn't know which one it is, they are so much alike. I have no pets, but I have a bicycle that I got for a birthday present and a Buffalo Racer sled I got for Christmas. I haven't got to use my sled much because there isn't much snow. I have a pair of skates that I got at Long Beach, Cal., three years ago. Have I a twin? If I have, I wish he or she to write to me. I have four sisters and three brothers. Their names are Mabel, Hazel, Velma, Helen, Chester, Verl and Donald. Verl is a sergeant in the army in France. We have three farms. Chester lives on Valley View farm and Mr. Howell lives on Summit Hill farm. The other farm is near Winona. We have just bought a new Premier Sedan car. It is the fourth car we have had. I am knitting on my second Belgian square and it is red, white and blue. I have a Liberty bond and I belong to the Red Cross and have a few war savings stamps. I think I have done my bit to end the war. Donald took our new car and the Waitsburg girls' ball team to Dayton, about 11 miles from here, this evening to play Dayton. I hope our team wins, as Velma and Helen are in the team. Papa just got us a new electric washing machine last week and we like it very much. I got nine valentines this year and I wonder how many the little boys and girls writing to the Children's Corner got. I would be very much pleased to see my first letter in print.—Gordon Keiser, Box 324, Waitsburg, Wash.

## The Flying Fish.



Fishes swim chiefly with the tail, which acts like an oar in sculling. Like the fins, it is made of a skin stretched over a bone frame work. Most fishes have four kinds of fins which may be seen in the acmopanying picture, one or more on the back called dorsal fins, a pair of side fins called pectoral, a pair beneath called ventral fins and one or more anal fins between the belly and the tail. The pectoral fins answer to the forelegs and the ventral to the hind legs of land animals. In the flying fish the pectoral fins are so large that they are almost equal to wings. With their aid the fish can spring out of the water and fly through the air several hundred feet before it drops back again. Moost fishes can swim very fast. The salmon can go 20 to 25 miles an hour.

**Sallie Is in the Best of Health.**

Dear Aunt Nellie: This is my fifth letter to the Children's Corner. I am in the healthiest condition. I got over my T. B., the doctor cured me so I came home already. I am 14 years of age. I'll soon be 15. My birthday comes March 24. I am five feet and four inches tall and I weigh 127 pounds. I am sure some of you will think I must be a coyote to weigh that light. One thing that makes me glad and happy is because there is not very much snow here and fine weather. The cattle and cayuses are getting along fine. I lost some of my property. My cat German died, but I still have two ugly dogs, Topsey and House. I haven't gone to school for over a year. I wanted to learn more but I can't find a place to go to. I came as fourth grade. I don't know where I'll go. We have three day schools on this Spokane Indian reservation, one by McCoy and one at Wellpinit, another at Walker's Prairie. We also have four churches out here, two Protestant and two Catholic. We have two Indian sawmills, one here at McCoy Lake and one at Wellpinit right close by the agency. We had a superintendent. He is very good-natured and brave. His name is Mr. O. A. Upchurch. He has a little girl and she is the prettiest little girl you ever saw. If I got a good chance I'd like to steal her from him, but I'll think it over. His wife is real nice lady. We live on a 100-acre farm. It is my own allotment. It has two springs on it. I stayed at the hospital from July 23, 1917, until February 13, 1918. Now I'll tell some silly, crazy riddles and see if any one will guess them. Something that walks all day and all night. It will never stop walking, but it will never reach the door. Something that has two legs, two eyes, but can't see or walk. I was sitting down on a chair. I saw something, some of them has two eyes, some have four eyes. They won't see. Something that is happy, happy all the time, singing, singing all day, all night. It will never stop singing until the end of the world. Something that has four legs and a long, long neck that eats and eats, but it never gets full. Patch upon patch, patch upon patch, but still there is a hole on the top. Something that is waving, waving all the time. It will never get tired waving. I guess I had better close my mouth for a moment and think what to say. Oh! Yes! Daddy has just finished some arrows and I hope he is getting ready to go and fight the Germans. I don't mean my cat, German; but I mean those soreheads. I joined the Red Cross already. I had about 25 or 30 cousins and I lost some of their addresses, so if they didn't get any letters from me please write to me again and I'll surely send them a letter. My doctor's name is Dr. J. R. Collard. He is a very nice doctor. Please be waiting patiently for another letter from bushy top Sallie. I wish you all good luck.—Sallie Salina Garry, Day School 1, Miles, Wash.

**Belongs to Golden Rule Bird Club.**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I am going to tell you about what I have and what I do. I have four dolls and one is as big as a real baby. I have two cats, Martha Washington and Tom. I have a phonograph and 53 records to play on it. I got it for Christmas. I have read the Children's Corner for a long time and I have noticed that lots of the cousins ask if they have twins? Whatever that means, I will ask if I have one? I would like to correspond with Cousin Sally Garry, Fort Spokane hospital, Miles, Wash. My father owns a store. We have about two acres of land. We have about 70 pigeons and 12 chickens and two horses. Their names are Tony and Molly. I am 10 years old and I am in the fifth grade. My teacher's name is Mrs. Julian. Her name used to be Miss Waite the first part of the term. My birthday is the 14th of December. I am going to tell you some riddles: In what way is a school room and a Ford automobile alike? What is the difference between a woman and an umbrella? What is something that is black and white and read all over? What is full of holes and yet does hold water. I will give the answers to these riddles in my next letter. I take Little Folks. It has letters in it, too. I can knit. I belong to the Golden Rule Bird club, the Red Cross and the Chronicle Juniors. I have a Liberty bond and some thrift stamps. Well, I must say good night to all cousins.—Mildred Elizabeth Tormey, Nine Mile Falls, Wash.

**Going to Knit and Snip.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner and I hope it will not be the last time. I enjoy reading the letters in the Corner. As quick as it comes home from town I open it and turn to the letters. I am 9 years old and I am in the fourth grade. My birthday is September 19. Have I a twin? If so, I wish they would write to me, for I like to get letters. I have two brothers and two sisters. My brothers' names are Warner and Edwin. Edwin is the baby. My sisters' names are Agnes and Alice. My teacher's name is Miss Castator. She is a good teacher. I like her. I like to go to school. There are 19 pupils in my school. We have four cows and three horses. We have two cats and about 100 chickens. We have two calves. I live on a 40-acre farm. I have about a half mile to go to school. I walk every morning. We have about two miles to go to town. I am a Red Cross member. I am going to knit and snip for the Red Cross. There is a creek that goes through our land. We go swimming and wading when summer comes. Last summer mama and papa and Edwin and I were to Seattle in our auto. I had a good time there. It took a day to get there. We were at Carbonado the same time, too. My sister is in Seattle now. She has been taking violin lessons. She is working now. I had a good time Christmas. I think I will have to stop writing now, as my letter is getting too long. I hope to see it in print. I can knit and crochet. I crocheted one yoke already and I am crocheting another one now.—Edith Gunell, Winlock, Wash.

**New Riddles to Guess.**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I will be 11 the 21st of March. I am in the fifth grade. We have 40 children in our room. My teacher's name is Miss Burtch. I like her very much. I have a cow and a calf. Their names are Spot and Rose. We have four horses and a pony. We drive the pony to school every day. The horses' names are Pete, Rolly, Spud and Kurly and the pony's name is Betsy. I am taking music lessons now. I hope this war will quit pretty soon. We have two and one-half miles to drive to school. I can knit and I hope the cousins know how to. We are having lots of cases of diphtheria around here. We have seven pigs. We have a car and it is a Dodge. My sister belongs to the Red Cross and they are knitting shawls for the soldiers. I will give you some riddles to guess. What goes around the house and peeks in every crack? What goes around the house and drags a bunch of bushes behind her? As I was going over Brooklyn Bridge I met a Brooklyn scholar. He doffed his cap and drew his cane, can you tell me this scholar's name? I go to the Moxee Central school. We have not had any snow this winter to speak of. We had a Lincoln program on Lincoln's birthday. We take our milk to the Moxee cheese factory.—Lucile Turnley, Box 140, Moxee City, Wash.

Address all letters to Aunt Nellie, care of The Washington Farmer, Spokane, Wash.





New Models in
DREADNAUGHT
SUITS
for
BOYS

Sent Prepaid.



$7.50 two pair pants

Combining Style and Service

This illustration shows the new Trench model with slash pockets and loose belt with buckle. Tailored from gray and tan mixtures and dark striped suitings.

**Each Suit With an Extra Pair of Full-Lined Knickerbockers.**

Sizes from 6 to 18 years, priced, prepaid, at ..... **$7.50**

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**The Department Store, Seattle, Wash.**

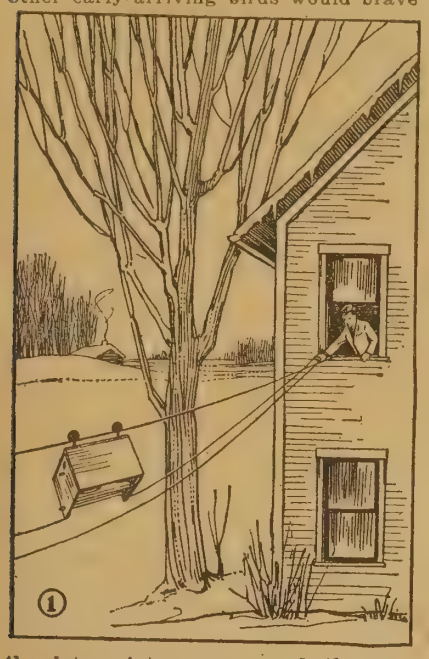
# Handicraft For Boys

**By A. Neely Hall**

(Copyright by A. Neely Hall.)

### A Birds' Dining Car.

If food were plentiful many birds would stay with us during the winter months. Also robin-redbreast and other early-arriving birds would brave

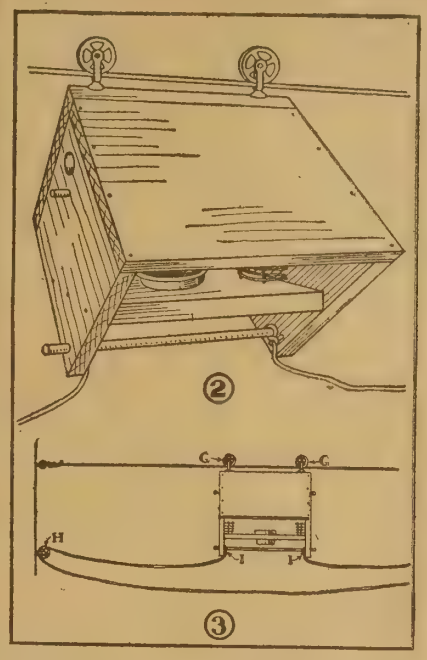



the late winter snows and the raw winds of early spring were it possible to obtain enough food to subsist upon. Here is a little problem which you boys can solve, and having witnessed the gratefulness with which the birds receive your offerings, I am confident that by next fall you will install a permanent bird restaurant with "meals served at all hours." This daily task of feeding birds will be one of the most interesting services you have ever performed.

Suet, scraps of fresh beef, bread crumbs, nuts and birdseed are the proper foods to supply. This may be scattered upon a walk or window sill, but a better plan is to provide a dining car to run along a wire far enough above the ground to afford protection from cats and other bird enemies.

### Made From Grocery Box.

Figure 1 shows the dining car and the arrangement for transporting it, and figure 2 shows a large detail of the completed car. If you can get a small grocery box of equal width and depth there will be but little work to convert it into a car. Remove one side of the box in addition to the cover (Fig. 4), and then saw off the projection of the bottom board as indicated



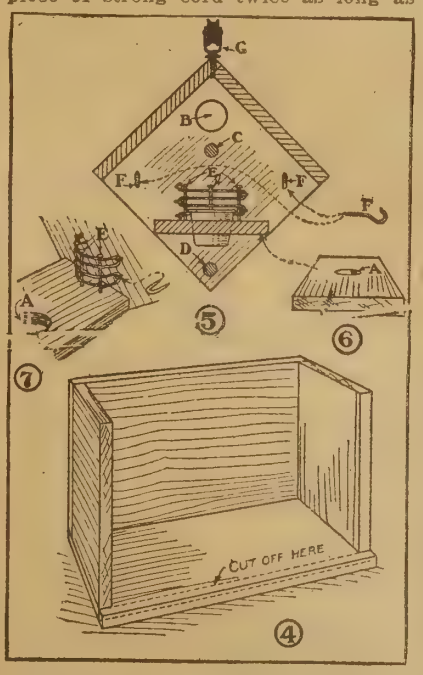

by the dotted line. The bottom and remaining side form the peaked roof of the car when the box is inverted. The board shown in figure 6, fastened between the box ends, forms the feeding shelf (Fig. 5). Bore the hole A (Fig. 6) large enough to hold a small crockery dish for drinking water.

Hole B (Fig. 5) bored through each end of the box near the peak, is not necessary, but will be used by the birds as frequently as the lower side entrance if provided. Bore a hole below B (C), and another below the shelf (D), for perch sticks, and cut the sticks long enough so the ends will project beyond the box ends as shown in figure 2.

Figures 5 and 7 show a food rack, one of which should be fastened to each end of the car, inside. It is made by driving three nails (E) into the shelf, and several double-pointed tacks into the box end, then running wire through the double-pointed tacks and around the nails. Screw a pair of hooks (F, Fig. 5) into the box ends to hang suet on.

### Heavy Wire for Cable.

A piece of heavy wire should be used for the cable. Fasten one end to a window frame and the other end to a tree or to something of the same height as the window. Screw a pair of clothesline pulleys into the peak of the car (G, Figs. 3 and 5), and as a means for pulling the car back and forth get a piece of strong cord twice as long as




the cable, run it over a clothesline pulley fastened 12 inches below each end of the cable and tie the ends to the lower perch stick at I (Fig. 3).

### Can Save Wet Corn.

Millions of bushels of soft and wet corn can be saved if farmers will promptly salt their stocks, says Assistant Secretary Vrooman of the department of agriculture, in advocating the remedy to prevent serious loss of grain, the saving of which as food and feed he said is extremely urgent.


There's Profit in HOME CANNING

The Safest, Quickest Method Is by Steam Pressure.

Steam pressure canning affords the only thorough sterilization, say authorities—**and is one-third the time of other methods.** Our Complete Sanitary Outfit is a **permanent canning equipment** for home or community use. Get the right outfit and you can be sure of the right results.

Our Sanitary Outfits include H. & A. retorts, cans, modern can-sealing machines, instructions—**everything you need,** including a $2 book of recipes that tells you about the great variety of fruits and vegetables you can put up with the right equipment.

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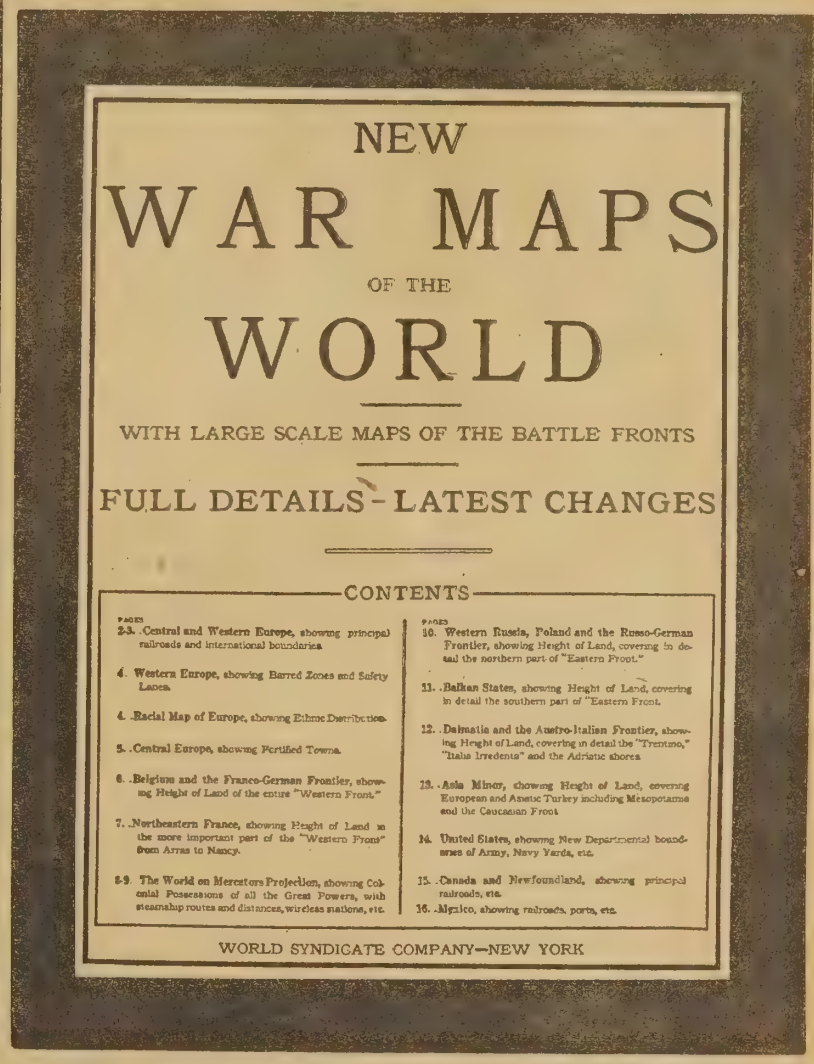


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# Trappers of the Ozarks

(Continued from page thirty.)

the columns had a whiteness as of marble; and because of that whiteness the one torch lighted up the cave better than it would otherwise have done.

Involuntarily the hunters stopped to gaze about them. Neither had ever been in a place like this till now. The two dogs, leaving their masters' heels, moved out cautiously among the white columns, and were soon out of sight. But a little later Bose, who had gone on into the dark part of the cavern, was heard to utter a fierce growl. Then suddenly, there burst forth an uproar of barking and growling, and back came both dogs with a rush. And after them rushed the bear, with his mouth open!

On reaching the men, the dogs turned to face their pursuer. But the bear, paying little attention to the dogs now, rushed straight at the two hunters!

Jodo, who had half believed that the bear had escaped from the cave by another outlet, was taken by surprise. Swinging round, he threw up his gun and fired. The bullet wounded the bear, but instead of killing him it only enraged him. Straight ahead he rushed, furiously bent on punishing these intruders into his private quarters.

Jodo leaped back, striking at the beast with his rifle-barrel. Ben, unable to manage his long rifle with one hand, and fearing to drop his torch, lest they should be left in the dark, but down his rifle, jerked the pistol from his belt and attempted to shoot. But the weapon missed fire. Dropping it, he tried to seize his rifle again; but the bear was so close that he had to run backwards and thrust the torch at his face to keep him from being attacked.

At the same time he snatched the tomahawk from his belt and stood ready to strike with that if the bear came within reach.

The dogs were now harassing the bear, but he brushed them aside and sprang at Jodo. That excited young hunter retreated, running backwards, and jerked out his pistol and fired as he ran. But just as he fired he stumbled over something and fell sprawling on his back. The bullet went wild, and the bear rushed at hime.

But at this time of danger Bose dashed in and "nailed" the bear by the hind leg. Tinker also began snapping at the other hind leg. The bear turned to defend himself, and the prostrate hunter scrambled to his feet.

"Climb! Climb a tree, Jodo! And use your tomahawk if he comes up after you! I'll finish him as quick as I can get hold of my rifle!"

By "tree," as Jodo understood, Ben meant one of the numerous tree-like, limestone columns. He had not time to think of the word stalagmite. Jodo, knowing that he could not shoot again, lost no time in acting upon the suggestion. Clamping the nearest column with arms and legs, he went up rapidly.

Ben was now trying to get hold of his rifle, but the bear and the dogs were over it. Soon the bear rushed at him again. He had his tomahawk, and believed he could finish the bear with it, but was afraid to engage in a hand-to-hand contest lest something should happen to their torch, and the hunters be left in the dark. So he retreated around one of the largest columns, pursued by the bear, and the bear by the dogs.

Seeing the way clear, Jodo slipped down from his stalagmite and tried to get Ben's rifle. But the bear saw him and made a furious rush. Hastily Jodo started up a column again. The bear reared up as if to follow him, and Jodo only saved himself from being seized by aiming a furious blow at the beast with his tomahawk. The bear dodged and the blow missed him.

But at this moment the dogs began barking at the brute fiercely, and biting his hind legs. The bear did not drop down, but turned a snarling nose toward the dogs. That was Jodo's opportunity.

Sliping down the column a few inches, he raised his tomahawk. The brute, snarling and growling at the dogs, had his eyes turned downward, and the back of his head was now exposed. Down fell the tomahawk, as hard as the desperate, excited young hunter could strike!

After admiring their game for a few minutes, the hunters explored the back end of the cave and found a bed. It was only some loose earth raked together, with a depression in the center where the bear had slept.

Soon, with their torch stuck in a hole in a stalagmite, the hunters were busy skinning the bear and cutting up the meat. When that task was finished, they divided the burden between them and started out. They reached the cave's mouth not a minute too soon; for by this time their torch had burnt so short that they could scarcely hold it.

A little later, with the bear-skin covering Spunky's pack-saddle, and the meat hanging across it, they were making their way toward camp. They went back as they had come, following their own trail and the bear's.

But before they had traveled 200 yards, Ben, who was in the lead, stopped suddenly and stood staring at the snow.

"What's the matter, Benoni? Have you discovered another bear's trail?

"Bear's trail—no; I only wish it were a bear's trail. Just look at those tracks, will you!"

Jodo hurried around from behind Spunky. Then he, too, stood staring at the trail in the snow that crossed their own trail. Finally he exclaimed:

"Moccasin-tracks, as sure as I'm alive!"

(To be continued.)

### New Inventions.

An Iowa inventor's scarecrow contains mechanism that makes it emit loud bellows at intervals.

A factory in which radium is being produced has been opened in Scotland by a Scotch chemist.

Burned but a few years ago as useless rubbish, there now is a wide demand for the waste from Spain's cork factories.

An electric egg candler has been invented for use in public places where the freshness of an egg can be demonstrated.

### Naturally So.

"That bargain offer the salesman made me this morning was only a blind."

"Why shouldn't it be? He's in the window shade department."—Exchange


## Complete Dispersion Sale
## 55--Head of Jerseys--55

**Tillamook, Ore., April 2, 1918**

Herd headed by POPPY'S GOLDEN ST. MAWES, son of Rosaire Olga Lad, sire of over 30 Register of Merit daughters and out of the great cow St. Mawes Poppy, R. of M. record, 1120.5 pounds butter in a year. This bull, a number of his daughters and heifers bred to him will be sold. Except a few not yet a year in milk.

## Every Cow in Register of Merit

Besides the St. Mawes and Rosaire Olga Lad blood, they include daughters of Rinda Lad of S. B., sire of 18 R. of M. daughters.

Sale comprises my entire herd of cows, heifers and a few young bulls, and is the GREATEST OFFERING EVER MADE IN THE NORTHWEST, OF HIGH PRODUCING Jersey blood lines.

Send for catalogue giving complete pedigrees and full information to

**H. H. CURTIS, Owner** — Pullman, Wash.

**J. W. HUGHES, Auctioneer** — Forest Grove, Ore.



# SAVE ALL YOUR WHEAT



The day of the grain sack has passed—they cost more than they are worth, even if you could get them. And wheat today is too valuable, in dollars and cents as well as for food, to lose any of it through improper handling.

The way to save ALL your wheat, this year and in the years to come, is to build a

## Tung-Lok Elevator

**Home-Built, Singly or in Series.**

The TUNG-LOK Elevator provides **permanent** storage for **all** your wheat. It is quickly and easily erected without skilled labor and it lasts a lifetime. A group of Tung-Lok Elevators (see accompanying cut), built by community cooperation, cost so little they will pay for themselves in one year in grain saved from deterioration and loss.

Notify us NOW, and one of our agents will call on you and explain the Tung-Lok method to you and your neighbors. That costs you nothing. **Now is the time to act, if you would save all of this year's wheat!**

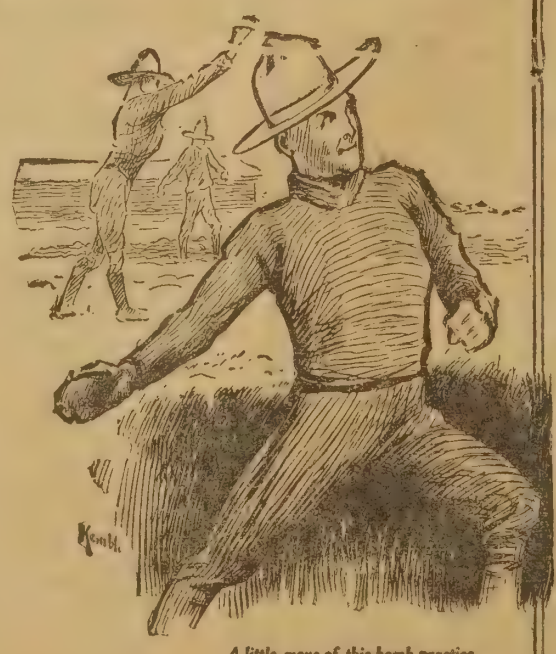
You realize, of course, that labor conditions have been extremely unsettled in all industries in the last year, and the future is uncertain. While conditions with us now are such that we can take care of all orders promptly, we ask that you act at once if you are planning to erect a Tung-Lok Elevator this year. Don't wait for the summer rush!

## UNION LUMBER COMPANY

Makers of the Famous Tung-Lok Silo.

Union Mills, Dept. B. — Washington.





*A little more of this bomb practice, and he'll be ready to sit down and enjoy a little chew of the Real Gravely the folks back home sent him.*

## Who is Going to Send Him another pouch of Real GRAVELY Chewing Plug

**Real Gravely Plug is the tobacco to send the Boy—not ordinary plug loaded up with sweetening, but *condensed quality*—with the good Gravely taste that satisfies and comforts and lasts a long while.**

Give any man a chew of Real Gravely Plug, and he will tell you *that's* the kind to send. Send the best!

Ordinary plug is false economy. It costs less per week to chew Real Gravely, because a small chew of it lasts a long while.

If you smoke a pipe, slice Gravely with your knife and add a little to your smoking tobacco. It will give flavor—improve your smoke.

**SEND YOUR FRIEND IN THE U. S. SERVICE A POUCH OF GRAVELY**

Dealers all around here carry it in 10c. pouches. A 3c. stamp will put it into his hands in any Training Camp or Seaport of the U. S. A. Even "over there" a 3c. stamp will take it to him. Your dealer will supply envelope and give you official directions how to address it.

**P. B. GRAVELY TOBACCO CO., Danville, Va.**

*The Patent Pouch keeps it Fresh and Clean and Good —it is not Real Gravely without this Protection Seal*

Established 1831

## News for Breeders

According to a recent census taken by the American Guernsey Cattle club there are in the United States 48,603 registered Guernsey cattle. Wisconsin has the largest number of any state, with 11,434. New York comes next, with 6311 and Pennsylvania is a close third. Washington has 377; Oregon, 329, and Idaho, 79, while California has 229; Utah, 72; Wyoming, 59, and Montana, 31.

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Tilly Alcartra, a Holstein cow owned by A. W. Morris & Sons, Woodland, Cal., has, on official test, produced in seven days 32.45 pounds of fat, or 40.78 pounds of 80 per cent butter, giving her the honor of being the first cow west of the Rocky mountains to enter the 40-pound class. This great cow already had several creditable seven-day tests and five yearly tests, in which she is credited with the unparalleled amount of 123,251.3 pounds of milk and 4819.12 pounds of butter.

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A most important sale of Jerseys and one that should interest Jersey breeders and dairymen all over the northwest is that of H. H. Curtis of Pullman, Wash. Mr. Curtis, who is a big Palouse wheat farmer, a few years ago started the building up of a purebred Jersey herd. He selected wisely and has a very satisfactory lot of cattle, but in the wheat region the securing of competent dairy hands has become increasingly difficult until Mr. Curtis has decided to entrely dispense his herd and devote his entire energies to raising wheat, as his most efficient means of helping to feed our own people and our allies. At the head of Mr. Curtis' herd is a son of Ed Cary's great cow, St. Mawes Poppy, with 1120 pounds of butter in a year, and a lot of the heifers to be sold are bred to him. Mr. Curtis' cows are from the Cary asd other best Jersey herds.

Because of the strong demand for Jerseys in Tillamook county, Oregon, it has been decided to sell the herd there, the date being set for April 2. It is expected that outside buyers will strongly compete with Tillamook Jersey fanciers for some of the good offerings, and the bull is expected to elicit especially lively bidding.

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L. L. Guichon of Quilchana, B. C., recently purchased five young registered Shorthorn bulls from J. B. Cornett of Shedd, Ore., and five from A. Chalmers of Forest Grove, Ore. Mr. Guichon, who runs a big herd of grade cattle, selected well and took home with him a nice lot of bulls, with which he was well pleased. He reports that the Shorthorns of this region have a good reputation in his country.

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The Shorthorn congress and sale at Chicago, February 19 to 22, was a great meeting and a great sale. Shorthorn breeders were present from nearly every state and all parts of Canada. At the sale, February 20 and 21, 102 bulls were sold for an average of $776 and 197 females for an average of $719. Forty-five hundred dollars was top price and the sale was remarkable rather for its uniform values and general high-class offerings than for single sensational values. On the 22d 55 head of milking Shorthorns were sold, the bulls averaging $335 and the females $517, so that the 354 animals brought $241,639. When the number of animals is considered it is one of the greatest sales of cattle ever held.

## BERKSHIRE SWINE

**Riverby Orchard Berkshires**

Riverby Orchard Berkshires won 12 out of 15 first prizes at the Washington state fair, 1916, also many prizes, including grand champion sow at the Panama-Pacific world's fair. We offer for sale a few good boars and young sows.

D. C. BUNN, Prosser, Wash.

## POULTRY

### TRAP-NESTED BARRED ROCKS



All hen-hatched and hen-raised. Every hen trap-nested. First pen has, I believe, for past two years highest Barred Rock av. egg record in the world. All other pens practically same blood lines.

Pen 1, 12 hens, av. over 240 eggs, crossed to yearling cock, parents av. 260 eggs, $5 setting of 15. Pen 2, 25 yearling hens, av. over 200, crossed to 2 sons of No. 44, 708 eggs in 3 yrs., $5 setting of 15. Pen 3, about 20 hens and pullets, with reserve cocks and cockerels, same breeding, $3.50 per 15. A few cocks and cockerels from $5 up. IRVINE P. GARDNER. Riddle, Ore.



### MY BARRED ROCKS

won this season at the Inter-State fair, 6 blues out of a possible 10; at Coeur d'Alene 1 and 2 cockerel; at Wenatchee, 1, 2 and 3 pullet, 1 and 2 cockerel and 2d cock. At Moscow, 1, 3 and 4 cockerels pullet bred. Eggs from exhibition pens $3 per 15; choice pens, $2 per 15.

J. E. HORTON, 2408 Altamont Blvd., Spokane.

### Mammoth Bronze Toms

Strong vitality, $6 to $9 each; no charge for crates. Barred Rock eggs for hatching, $10 per 100; $2 per setting.

S. M. WILSON, Carley, Wash.

**PRIZE WINNING W. ORPINGTONS.**

Kellerstrass strain. S. C. eggs, $10 per 100; $3 per 15. 1 hen scored best fowl at 1916 Wash. state fair; several others over 280 eggs. 1st prize cock, 1st hen, 1st pullet, 1st pen, cock and hens; 1st pen, ckl. and pullets, state fair, 1915.

MRS. E. B. WADE, R. 4, Yakima, Wash.

### S. C. White Leghorns

Heavy laying strain. Hatching eggs from hens averaging 245 eggs per year, $2 per 15.

E. C. FISK, Olalla, Wash.

### 15 EGGS $3.50

From show and laying strain of S. C. R. I. Reds.

N. S. FELTHOUSE, New Plymouth, Idaho.

**PARKS BRED-TO-LAY BARRED ROCKS.**

My pen, 5 Barred Rocks, at Pullman laying contest laid in Nov. 88, Dec. 100, Jan. 104 eggs. Eggs from this winter-laying strain, $1.50 15, $8 per 100.

F. J. WIETNER. Mica, Wn., R. 1.

**VIBERT STRAIN S. C. REDS.**

Eggs, $8 per hundred; $1.50 to $15 per sitting. Three special pens headed by cockerels from a 289-egg trapnested hen. One pen headed by magnificent cock bird that has kept his wonderful color through the moult and well into his second season. He is one great bird. If you need new Red Blood, you need Vibert blood from the largest pure Vibert flock on the Pacific coast.

MRS. ROMINGER. Underwood, Wash.

**RHODE ISLAND REDS AND WHITES**

both combs. Mammoth Bronze turkeys and Mammoth Touluse geese. My birds are true blue—winners and qualities. Have a few S. C. Red and R. C. White cockerels at $3 and $5 each. Have a limited number of Mammoth Bronze gobblers at $8 and $10 each. We are booking orders for eggs. Write for mating list. No baby chicks.

Highland Fruit and Poultry Ranch.
J. Nonnenmacher, R. F. D. 3, North Yakima, Wash.

### BABY CHICKS

Rhode Island Reds, White Leghorns. Don't wait until March or April to order and then be disappointed because you can't get them. But order now from our heavy-laying strain. Send card for price list.

MAPLEBROOK POULTRY FARM.
Box 3, Southworth, Wash.

**SINGLE COMB BROWN LEGHORN**

male birds, $3 and $5 each; mated breeding pens, $15. Eggs for hatching. Write for mating list. The Up-to-Date Poultry Farm.
ARTHUR W. WADE, Box 3, Marysville, Wn.

**S. C. RHODE ISLAND REDS.**

Eggs for hatching from heavy winter laying stock; $1.50 per 15, $7 per 100. Young Flemish Giant hares.

W. T. WILSON, R. 3, Weiser, Idaho.

### White, Buff and Blue Orpingtons



(Capt. De Bathe Strain.)

Speckled Sussex and Anconas. All single comb. Aldrich strain Orpingtons, Sheppard Anconas. My birds took first prizes at all leading shows of Pacific Coast. Prices for stock, eggs and chicks reasonable. All from best laying birds. Finest lot of cockerels I've ever raised. A few White Holland and bronze turkey toms for sale.

IRA N. DELINE, Olympia, Wash.

### 20 Head——Jacks and Jennets For Sale——20 Head

For forty years we have been breeding them. For twenty-eight years they have won every premium offered through Oregon and Washington, with one exception. They are native-bred, and all of them make good. We have mules to show from them, and we make prices that are lower than importers can meet. Come and see them, or write.

EASTERN OREGON JACK FARM.
B. F. Swaggart, Proprietor. Lexington, Ore.

# Breeders' Department

## SHORTHORN CATTLE

### Herd Bulls

Imported Doune Radiance No. 609412
and
Gainford Perfection No. 442173.

### Hercules Shorthorns

We can supply you with choice, well grown bulls and females of breeding age. Your inspection of our herd is invited. Visitors always welcome.

**Day & Rothrock Company**
205 Exchange Bank Bldg. Spokane, Wash.

### LELAND BROTHERS

Breeders of top registered Shorthorn cattle.
Correspondence solicited.
WENDELL, Idaho.

## HOLSTEIN CATTLE

**MOOREHEAD RANCH.**
Registered Holsteins.

Herd sire, Model Annie De Kol Segis, grandson of the famous King Segis. We have no bulls of service age, all having been sold, but we have some splendid young stuff, from 6 to 8 months old, coming on. If you are looking for real foundation stock, write us for particulars and pedigrees.

MOOREHEAD & HOBSON.
Breeders of Purebred Holsteins.
Outlook, Wash.

### 365-DAY HOLSTEINS

24,667 lbs. milk—1026 lbs. butter—is the a. o. advanced registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.

THE HERD WITH YEARLY RECORDS.
WESTERNWOLD RANCH, Prineville, Ore.

**REGISTERED HOLSTEINS.**

One 30-lb. bull with grand champion sire and dam; also young bull calves. Here is production and type we hear so much about.

H. R. BOOMER, New Plymouth, Idaho.

## AYRSHIRE CATTLE

**Edgewater Farm**

Government accredited herd, headed by Peter Pan, 63d. Bull calves available.

E. M. CHANDLER, Burbank, Wash.

**REGISTERED SHORTHORN COWS,**

Young bulls and heifers, sired by Scotch bulls: liberal terms.

CALDWELL CATTLE CO., Caldwell, Idaho.

## JERSEY CATTLE

### Waikiki Farm Jerseys

We offer several young bulls and heifers of exceptional breeding. Send for descriptions and breeding.

WAIKIKI FARM, R. 7, Spokane, Wash.

## DUROC-JERSEY SWINE

### IOKA FARM DUROCS

Boar pigs for sale, sired by the noted Duroc sire GOLDEN ROD.

DOERFLER BROS., Silverton, Ore.
A. N. Doerfler, Mgr.

**DUROCS.**

Boars and open or bred gilts of excellent breeding.

E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE, Yakima, Wash.

## SHEEP

### SHEEP

Full blood Lincolns, Romneys, Corridales and Hampshires. Ewes and rams, small or large lots. For sale by

H. STANLEY COFFIN,
Breeder and Importer. Yakima, Wash.

### Choice Offerings of Hendershot Live Stock

I am closing up the affairs of the E. M. Hendershot estate and placing on the market the following offerings from the farm of the Hendershot Land & Live Stock Co. Scan the list and then write for further details.

10 richly bred Hereford heifers, 2 years old, bred to 1917 State Fair first premium Hereford bull.
1 Mammoth Kentucky black jack, 4 years old, stands 16 hands high, standard measure.
1 yearling Mammoth jack, 14 hands high, standard measure.
2 3-year-old Percheron stallions.
1 2-year-old Percheron stallion.
1 1-year-old Percheron stallion.
2 3-year-old Percheron mares.

Terms to responsible parties. Everything priced to sell quickly. Hendershot Land & Live Stock Co.

E. M. HENDERSHOT ESTATE.
Address O. P. Hendershot, Boise, Idaho.

# The Last Notice

for you to arrange to attend my

# Dispersion Sale of Registered Shorthorns

at

UNION STOCK YARDS, SPOKANE, WASH.,
Wednesday, March 20, 1918.

Due to ill health I am retiring from the breeding business and will sell my entire registered Shorthorn herd—beef and milking strains—consisting of

50—BULLS, COWS AND HEIFERS—50.

Including winners at Pacific International and Spokane fairs. All tuberculin tested.

**Don't miss this sale. It is your opportunity** to buy registered stock at your own price. For information and cataloge write

ALEX MORRISON.
Owner.
Valley, Wash.

HARRY CRANKE
Auctioneer and Sales Manager.
Nez Perce, Idaho.

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, March 11.—Liberal receipts did a good deal today to weaken the corn market, especially cash quotations, and so, too, did withdrawal of export bids. Futures closed steady at the same as Saturday's finish to 1-8c lower, with March $1.28 and May $1.27 1-4. Oats lost 1-4@3-8c to 3-8@1-2c net, and provisions 12c to 17c.

Arrivals of corn in Chicago alone aggregated 615 cars, and there was a general disposition to look for a continued movement far above the average for this time of the year. Meanwhile the United States visible supply total showed an increase of more than 2,300,000 bushels, making the amount in sight only 1,400,000 bushels less than a year ago. A general embargo on shipments to eastern domestic consumers counted as a bearish influence.

Notable progress of seeding made oats average lower. A little export business gave the market some stimulus, but the effect failed to last.

Lower quotations on hogs weakened provisions. Declines were checked somewhat though by export of lard and meats during the week.

### Cash Quotations.

CHICAGO, March 11.—Corn—No. 2 yellow, nominal; No. 3 yellow, $1.71@1.75; No. 4 yellow, $1.65@1.72.
Oats—No. 3 white, 94¼@95½c; standard, 94¾@95½c.
Rye—No. 2, $2.90@2.93.
Barley, $1.80@2.43.
Timothy, $5@8.
Clover, $28@31.
Pork, nominal.
Lard, $24@24.50.
Ribs, $24@25.50.

### Chicago Futures.

| | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| Corn— | | | | |
| March .... | .... | ..... | ..... | 1.28 |
| May ..... | 1.23⅜ | 1.27⅝ | 1.27¼ | 1.27 |
| Oats— | | | | |
| March .... | .92 | .92⅛ | .91⅝ | .91⅝ |
| May ..... | .89⅝ | .89⅞ | .89¼ | .89¼ |
| Pork— | | | | |
| May ..... .... | | 48.70 | 48.55 | 48.55 |
| Lard— | | | | |
| May ..... .... | | 26.12 | 26.00 | 26.00 |
| July ..... .... | | 26.32 | 26.22 | 26.22 |
| Ribs— | | | | |
| May .....25.12 | | 25.12 | 25.00 | 25.00 |
| July ..... .... | | 26.47 | 25.40 | 25.40 |

### Pacific Northwest Grain.

PORTLAND, Ore., March 11.—Grain, 30-day options bid: Oats, No. 2, $70; barley, feed, $74.50; brewing, $80. Eastern oats and born in bulk bid: Oats, No. 3 white, $65.50; 30-pound clipped white, $66; corn, No. 3 yellow, $72; No. 3 mixed, $71; oats, No. 3, $65.75; clipped, $66.50; corn, mixed, $71.50.

### Minneapolis Grain.

MINNEAPOLIS, March 11.—Wheat—Receipts, 107 cars, compared with 641 a year ago.
Corn—No. 3 yellow, $1.80@1.85.
Oats—No. 3 white, 92 1-4@93 1-4c.
Flax—$4.26@4.31.
Flour—Unchanged. Shipments, 39,135 barrels.
Barley—$2.02@2.37.
Rye—$2.94@2.96.
Bran—$32.98.

## Live Stock Quotations.

### At Omaha.

OMAHA, Neb., March 11.—Hogs—Receipts, 12,000; market, 15 and 25 cents lower. Heavy, $16.30@16.65; mixed, $16.40@16.50; light, $16.33@16.75; pigs, $11@15.50; bulk of sales, $16.40@16.60.

Cattle—Receipts, 16,100; market, strong to 10c higher. Native steers, $9.35@13.35; cows and heifers, $7.50@10.75; western steers, $8.50@12; Texas steers, $7.75@10.50; cows and heifers, $7@9.50; canners, $6.50@7.75; stockers and feeders, $6.50@11.50; calves, $9@13; bulls, stags, etc., $7.35@9.75.

Sheep—Receipts, 12,500; market strong, 10c higher. Yearlings, $12.50@14.75; wethers, $11@13; ewes, $10.85@12.85; lambs, $15.25@17.25.

### At Chicago.

CHICAGO, March 11.—Hogs—Receipts, 60,000; tomorrow, 40,000, unsettled at Saturday's average to 10 cents lower. Bulk, $16.75@17.50; light, $17@17.85; mixed, $16.35@17.65; heavy, $15.90@17.20; rough, $15.90@16.15; pigs, $13.50@17.30.

Cattle—Firm; receipts, 21,000; tomorrow, $18,000. Native steers, $8.60@14; stockers and feeders, $7.70@11.20; cows and heifers, $6.60@11.70; calves, $8.75@14.75.

Sheep—Steady; receipts, 22,000; tomorrow, 12,000. Sheep, $10.75@13.60; lambs, $14.25@17.85.

### At Portland.

PORTLAND, Ore., March 11.—Cattle—Higher; receipts, 948. Medium to choice steers, $10.50@11.50; good to medium steers, $9.50@10.50; common to good steers, $9@10; choice cows and heifers, $8.55@9.75; common to good cows and heifers, $8.50@9.50; canners, $5.25@6.25; bulls, $5@9; calves, $7.50@1; stocker and feeder steers, $6.50@9.50.

Hogs—Steady; receipts, 1335. Prime light, $16.85@17; prime heavy, $16.60@16.85; pigs, $14@15.25; bulk of sales, $16.50@16.95.

Sheep—Steady; receipts, 2142. Western lambs, $15@15.50; valley lambs, $14.50@15; yearlings, $13@13.50; wethers, $12.50@13; ewes, $9@12.

Shorn sheep, 2½c to 3c under quotations.

### Spokane Stockyards, Monday.

Hogs—Receipts 83, market steady to strong. Prime light, $16.50@16.75; prime heavy, $16.50@16.60; pigs, $14.50@15.25; stockers and feeders, $12@14; bulk of sales, $16.50. Hog quality fair.

Cattle—Receipts 168, market steady to strong. Two loads of 41 head of fat steers bringing $11.25. Best beef steers, $10.50@11.50; good steers, $9.25@10.25; common to good steers, $8@9; best beef cows and heifers, $8.75@9.75; good cows and heifers, $7.50@8.50; ordinary to good cows and heifers, $6.25@7.50; canners, $4@6.25; bulls, $6@10; calves, $7@11; stockers and feeder steers, $6@8.50.

Sheep—Receipts none, market steady. Prime lambs, $14.50@15.25; good lambs, $13.25@14; prime yearlings, $12.50@13.25; prime wethers, $12@12.75; best mutton ewes, $9@10.75.

## Portland Market.

PORTLAND, Ore., March 9.—The first shipments of 1918 clip of Yakima wool have reached Portland. The lot contained 64,000 pounds and the wool was pronounced better than the 1917 clip. There is still a considerable stock of old wool in warehouses here. The market is firm and unchanged.

The announcement at the close of the week that the grain corporation will allow a differential of 9 cents a bushel on sacked wheat over the government bulk price, grain men here believe will stop further building of elevators in the wheat sections. With the maximum sack price fixed at 25 cents each, the cost of sacking wheat, they declare, will be less than the building and operation of elevators.

The coarse grain markets continue very dull with practically no offerings, though the crop report issued Friday showed fairly large reserves of barley and oats in the northwest. At the local exchange bids on brewing barley have been raised to $77.50. On the basis of latest sales of northwestern barley in the east it is held that the cereal is worth about $85 here.

Eggs are ruling steady at 35 cents, case count, with moderate receipts and a good local but a poor shipping demand.

Butter is scarce and firmer. Shipments are being made back to some of the country creamery districts.

Dressed meats and poultry are holding firm at former prices.

Potatoes are very weak and shipments are falling off. Farmers, however, are not trying to sell, notwithstanding the slumps in practically all the markets of the country.

In the following list of quotations the grain, hay, mill feed, hops, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 2 white, $70 per ton.
Millstuffs—Bran, $30 per ton; shorts, $32.
Barley—No. 1 feed, $72; brewing, $77.50; rolled, $77@78.
Hay—Buying prices: Timothy, eastern Oregon, $27; alfalfa, $24.50; grain, $22.
Eggs—Oregon ranch, case count, 35c per dozen; candled, 36@38c.
Poultry — Ducks, 32@35c; turkeys, live, 26@27c; geese, 20@22c.
Butter—City creamery, prints, 52@53c per pound; cubes, extras, 50c.
Cheese — Tillamook triplets, 26c; Young Americas, 28c.
Dressed meats—Veal, 20@20 1-2c; pork, 21@21 1-2c.
Hops—1916, nominal; 1917 crop, 16@17c.
Potatoes—Oregon, buying price, 85c @$1 per hundred.
Wool—Eastern Oregon, 44@65c; valley, 50@55c.
Beans—Buying prices: Oregon white navy and Lady Washington, 10¼@10½c; white kidney, 10c; colored, 9c.

## Seattle Wheat.

SEATTLE, March 9.—Seattle millers are not so hopeful that the grain corporation intends to leave the visible supply of wheat of the three northwestern states in the original territory to be ground. M. H. Houser, agent of the corporation in this territory, reports thta he is receiving shipping orders and has no notice to turn any of them down.

It has developed that at a conference in Portland two weeks ago between the grain and flour administrators of the government and the millers that the visible supply of wheat was to remain here to be ground on condition that the mills refuse to ship out any of the flour excepting on orders from the government. While this reached no farther than a tacit understanding, the hopes of millers were built high on this basis, as they would then be able to keep in operation into the new crop year. If this deal falls through Seattle mills at least will have been ground out of wheat by April 15 and will be compelled to lie idle until new 1918 wheat is harvested.

The agreement if carried out would relieve the mill feed situation here immeasurably and solve the problem of poulterers as to how to get enough feed to mature their birds.

The special committee appointed by M. H. Houser to take a census of all wheat holdings in Washington, Oregon and Idaho has abandoned its work and has been discharged. L. P. Baumann, secretary of the committee and assistant general manager of the Centennial mills, said today that it was almost impossible to get at the facts. The best estimates of the holdings in the three states, however, are placed at 23,000,000 bushels.

In response to its request for regulation of barley, oats and corn prices in order to save the poultry flocks of western Washington the grain and feed committee of the merchants' exchange is in receipt of a wire from Herbert Hoover stating that the Washington delegation in congress was heartily in favor of the move and that the matter had been taken under advisement by the food administration.

## Seattle Market.

SEATTLE, March 9.—The apple market today is $1.75@2.50 per box, Winesap basis, with 25@50c higher in sight for April trade. Cheap fruit, which has acted as a check on upward tendencies of fancy and extra fancy, is so nearly cleaned up that it has ceased to be a factor. Puget sound producers are sending in but little of the secondary fruit, and jobbers infer that there is not much more to move.

### BUYING PRICES.

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots, f. o. b. Seattle:

Eggs—Local, 37c per dozen.

Poultry—Spring roosters, live, fat, 2½ to 5 lbs., 26@27c; old roosters, 17c lb; squabs, large, $3.50 dozen; geese, fat, live, 20c lb.

Butterfat, 58c lb; dairy butter, 35@36c.

Beef—Buying prices: Prime beef, steers, 11@12c; cows, fat, 9@11c lb; heifers, 10@11c.

Hogs—Light, 18@20c; lb; heavy, 17@18c lb.

Veal—Fancy light, 17@18c lb; heavy, 9@16c lb.

Hides—Salted, 14c lb; flint-dry hides, 29c lb; salt kip, 16c lb; green hides, 11c lb; green calf, 23c lb; dry calf (under six pounds), 29c lb; bulls and dry salts, 4c lb less; green bulls, 9c lb; dry salts, 4c lb less; green bulls, 9c lb. Clean long wool, western Washington flint dry pelts, 39c per lb; heavy to clean eastern Washington flint dry pelts, 30@35c lb.

### SELLING PRICES.

Feed—Scratch, $79 per ton; all grain chop, $77 per ton; oats, $76 per ton; rolled oats, $77.50 per ton; bran, $34 per ton; shorts, $33.50 per ton; soy bean meal, $67 per ton; whole corn, $78 per ton; cracked corn, $79 per ton; alfalfa meal, $36; rolled barley, $77; sprouting oats, $78 per ton; Milo maize, $75 per ton; white gyp, $75 per ton.

Hay—Eastern Washington timothy, $35@36 per ton; alfalfa, $28@29 per ton; double compressed, $40@41 per ton; wheat hay, $28 per ton; Puget sound, $27@28 per ton; straw, $14.

Butter—Washington creamery extras, cubes, 52c lb; do bricks, 53c lb.

Eggs—Fresh ranch, 40@42c dozen.

Potatoes—Puget sound, $20@23 per ton; eastern Washington, $25@28 per ton.

## Spokane Market.

### WHOLESALE.

**Vegetables**—Cabbage, $2.75@5 cwt; carrots, $1.25@1.50 cwt; bunch carrots, 75@90c doz; bunch beets, 75@90c doz; beets, $1.50 cwt; rutabagas, $1.75 cwt; parsnips, $2 cwt; hothouse lettuce, 75c 5-lb box; head lettuce, 65@85c doz, $2.75@3 crate; turnips, $1.50@1.75 cwt; bunch turnips, 75@90c; California new turnips, $2 cwt; red bell peppers, $1.25 box; chilli peppers, 25c lb; green peppers, 11c lb; Mexican tomatoes, $2.50 crate; celery, 90c@$1 doz; hothouse cucumbers, $2 doz; cauliflower, $1.75 doz; new garlic, 10@12½c lb; parsley, 50c doz bunches; horseradish root, 12½c lb; brussels sprouts, 12½c lb; radishes, 40c doz bunches; rhubarb, $2.25 25-lb box, 10c lb; spinach, $1.35 crate.

**Onions**—California onions, $2.75 cwt; yellow onions, $2.50; green onions, 40c doz bunches.

**Grapes**—California cluster raisins, $2.25 box, 20 packages.

**Tropical Fruits**—Bananas, 6c lb; lemons, $7.50 case; navel oranges, $5.50@6.50 case; seedling oranges, $5@5.50 case; Florida grapefruit, $5.25@6 case.

### MEAT.

**Beef**—Beef steers, 16c@18½c lb; cow beef, 14½@17½c lb; heifers, 18c lb; beef loin, 23@27c lb; steer chucks, 13½@15c lb; prime ribs, 20@23c lb; rump and round, 16@18c lb.

**Mutton**—Wethers, 23c lb; ewes, 22c lb; breakers, none; leg of mutton, 26c lb.

**Lamb**—None.

**Pork**—Packer dressed hogs, 26@27c lb; pork loins, 29@30c lb; hogs, 26c lb; shoulders, 24c lb; leaf lard, 28c lb; tenderloins, 40c lb; spareribs, 18c lb; country dressed hogs, with head on, 19c lb to producer.

**Smoked Meats**—Washington hams, 33@34c lb; T. C. hams, 34c lb; T. C. bacon, 46½c lb; Washington bacon, 41@44½c lb; picnics, 23½c lb; Boston butts, 26½c lb; English bacon, 36½c lb.

**Dry Salt Meats**—Clear bellies, 30c lb; lean backs, clear, 29c lb; sides, 29½c lb.

**Lard**—Tierces, 28½c lb, $15.40 case; compound, tierces, 24c lb.

### POULTRY.

**Dressed Poultry**—Frozen hens, 28c lb; frozen springs, 28c lb; frozen broilers, 32c lb.

### GRAIN AND FEED.

**Rice**—Fancy head, $7.50@9.50 cwt.
**Flour**—Bluestem, $9.80; Blend, $9.80; Montana hard wheat, $10.40; graham, $9; whole wheat, $9.20; eastern rye, $10.60; eastern rye meal, $10.80; oat flour, $13.10.
**Wheat**—$70 ton; cracked, $71 ton.
**Oats**—$73 ton whole, $75 rolled, delivered in city.
**Corn**—$77 ton; cracked corn, $79 ton.
**Bran**—$31.70 ton; shorts, $33.70 ton; bran and shorts, $32.70 ton.
**Barley**—Rolled, $71 per ton.
**Oil Meal**—$78 per ton.
**Hay**—Timothy, $32 per ton, $31 ton by carload; alfalfa, $27 ton, $26 ton by carload.

### GASOLINE, LINSEED OIL, ETC.

**Gasoline**—Red Crown gasoline, bulk, 24c gal; cases, 34c gal; Shell gasoline, 24c gal; refined oil, Pearl, bulk, 13c gal; cases, 23c gal; eocene, 15½c gal in bulk; cases, 25½c gal; engine distillate, 15c gal, bbl, 25c case; V. M. P. naptha, bulk, 23c; cases, 33c.
**Linseed Oil**—Raw, bbl, $1.63, case $1.81 gal; boiled, bbl, $1.65 gal; cases, $1.83 gal.
**Turpentine**—Bulk, 65c gal; cases, 85c gal.
**White Lead**—Strictly pure white lead in oil, ton lots, 11¾c lb; 500-lb lots, 12½c lb.

## Butter and Eggs.

PORTLAND, Ore., March 11.—Butter prints, extras, 52@53c; cubes, extras, 51c; prime firsts, 50c; dairy, 34c.

Butterfat, Portland delivery, No. 1 sour cream, 55c.

CHICAGO, March 11.—Butter lower. Creamery, 43@45 1-2c. Eggs lower. Receipts 4459 cases; firsts, 34@34 1-4c; ordinary firsts, 33@33 1-2c; at mark, cases included, 34 1-2@35c.

SAN FRANCISCO, March 11.—Butter, fresh extra, 51 1-3@53c. Eggs, fresh extras, 39 1-2c; firsts, 38c; fresh extra pullets, 38c. Cheese, young Americas, 28 1-2c.





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If you are going to build, or remodel your house, let us send you our illustrated catalog No. 27, of sash, doors, finish, paints, builders' hardware, plaster board, roofing, etc. Sent free, postpaid, on request.

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SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

**MISCELLANEOUS—WANTED 63**

WANTED—BELGIAN HARES. WE ARE paying 15c per pound, alive, f. o. b. Spokane. Commercial Creamery company, Spokane, Wash.

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## FARM LANDS—FOR SALE 651 Continued.

IN ORDER TO SETTLE THE E. M. HENdershot estate and close up the Hendershot Land & Live Stock company's business, I will sell one hundred and sixty (160) acres of irrigated Boise valley land, located nine miles from Boise on the Boise Valley Traction car line, and adjoining the town of Meridian, on macadam road to Boise. This is an ideal dairy farm in a dairy country, only one-half mile to cheese factory, and ten miles to milk condensary. The farm has running water the year through, electricity for pumping, washing, separating, cooking, lighting, etc.; good house with fair outbuildings. Car service to Boise every hour, get on and off at the front yard gate. Hendershott Land & Live Stock Co., E. M. Hendershot Estate. Address O. P. Hendershot, Boise, Idaho.

$75 AN ACRE, ON TERMS, FOR rich alder bottom and clay loam land, included in the old homestead of former Governor Stevens, in prosperous district of Thurston county, Wash.; 10 to 40 acre tracts, many of them crossed by running stream; railroad station quarter mile from property; good crops; good schools; good roads. Write for particulars.
A. H. REID & CO.
314 NEW YORK BLK.
SEATTLE, WASH.

STOCK, WHEAT AND ALFALFA.
480 a., with 320 a. irrigated from private water right; 100 per cent plow land; dark loam soil; 100 a. timothy meadow; 200 a. to be put in spring wheat; close to outside range; going with this are 50 head cattle, 10 head good work horses, tractor to pull 6 plows, complete threshing outfit; 6-rm. house, barn housing 16 head; sheds for 150 head stock, and other outbuildings.
Farm fully equipped and ready to move onto. Close to good town.
SNAP PRICE, $40 PER A. TERMS.
BEVAN & STEELL.
521 PEYTON BLK., SPOKANE WASH.

YOUR CHANCE IS IN CANADA—RICH lands and business opportunities offer you independence: Farm lands, $11 to $30 acre; irrigated lands, $35 to $50; twenty years to pay; $2000 loan in improvements. Loan of live stock; taxes average under twenty cents an acre; no taxes on improvements, personal property, or live stock. Good markets, churches, schools, roads, telephones; excellent climate—crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Allan Cameron, general superintendent land branch, Canadian Pacific Ry., 30 Ninth ave., Calgary, Alberta.

FULLY EQUIPPED STOCK RANCH
$2000 BELOW VALUE.
160 acres beaver dam land; all tillable except 2 acres; 80 acres in meadow; 5 head of horses, 8 head of cattle; all farm machinery; good 2-story house, barn, wagon shed, garage, blacksmith shop and other outbuildings; good well and creek. Price $5500; $4000 cash, bal. long time.
This is one of our many.
JAMES W. BOOTHE & CO.
510 FIRST AVE. SPOKANE, WASH.

ALL IMPROVED — 130-ACRE FARM; cross-fenced, good buildings; 115 acres under plow; six miles from city of Spokane, on main highway. Owner has lived 27 years on this place and now wants to retire on account of age. All tools and stock goes with the place for $20,000; terms to suit at 7 per cent. This place makes money every year.
HEIFNER & TOWNSEND.
514 RAILWAY EXCHANGE BUILDING,
SEATTLE, WASH.

FOR SALE BY OWNER—ONE OF THE best dairy farms in the Snoqualmie valley; in Snohomish county; 110 acres; 90 river bottom; 50 under cultivation; 40 in pasture; good new buildings; gravity water system, with water power in the barn; also 134 acres state land joining place, all bottom land, under lease. For information address Nick Person, R. No. 1, Box 87, Monroe, Wash.

FINE FARM FOR LITTLE MONEY. 95 acres; 1½ miles from Dallas, Oregon; ideal location; best soil; 30 acres commercial apples; owner guarantees $1000 for fruit alone, 1918, balance general farming; good buildings; mighty cheap at $150 per acre. Write for details. OTHER FARMS, ALL KINDS, ALL SIZES.
BADLEY INVESTMENT CO.
404 N. W. BANK, PORTLAND, OREGON.

A GENUINE FARM BARGAIN.
320 acres; 200 a. fenced; 50 a. in cultivation; 70 a. natural meadow; 40 a. saw timber; 2000 cords wood; good well; good 6-room house and other buildings; two fine streams; only 5 miles from Deer Park; most ideal dairy, grain and hay ranch in Spokane county. $45 per a. $5000 cash, bal. annual payments.
S. H. GROSHONG, Deer Park, Wash.

TWENTY-FIVE HUNDRED-ACRE WHEAT and stock ranch; western Canada; completely equipped; caterpillar tractor; thirty horses, cattle, hogs, implements, buildings; close to railway, schools and churches; settled community; telephone, rural mail, good roads; 1200 acres ready for drill. Price, $125,000; one-third cash, balance half crop payment. Western Canada Properties, Ltd., 401 Herald building, Calgary, Alberta, Canada.

CULTIVATED CANADIAN WHEAT LANDS. 3000 acres ready for drill; in quarters, halves, or sections; every convenience; easy terms or crop payment. Final payment 1937. Where can you equal it? Western Canada Properties, Ltd., 401 Herald building, Calgary, Alberta, Canada.

## FARM LANDS—FOR SALE 651 Continued.

SMALL FARMS FOR SALE.

We have for sale at lower than prevailing market prices—and on terms to suit purchaser—8 small farms, ranging from 10 to 80 acres each—Some improved with house, barn, well, etc., at $80 to $120 an acre, just half former prices. Finest black Palouse soil—just the kind that insures "sure" crops of grain, fruit or garden; located 14 miles from Spokane, on electric line, and paved highway. Surrounding growing suburban community—active trading center.

These are among best bargains offered today. You buy from us as owners. Call at office, or write for full particulars, with plat, before you buy anywhere. One of these tracts will surely suit your needs.

HANAUER-GRAVES COMPANY.
601 Old National Bank Bldg.
Spokane, Wash.

BUY WHERE THEY RAISE THE PRIZE CROPS
IN SNOHOMISH COUNTY.
40-acre farms, $25 per acre. Ten yearly payments, 6 per cent interest. Visit our office and see the great exhibits of PRIZE WINNING vegetables, fruits, grains, alfalfa and other grasses raised on the adjoining farms. They prove our claims that this is the best land in WESTERN WASHINGTON.
Paved roads. Four passenger trains a day. Graded school, cannery, creamery, cheese factory, plenty of work for the laboring man in the mills and camps, where 75 settlers are all boosters. DON'T LOSE A DAY in asking for our illustrated literature.
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JORDAN VALLEY PROJECT—LET OUR office explain this project to you that you may fully understand it. It is so wholly different that you are sure to be interested sufficiently to wish to see it. Literature and information on request. Our autos will take you from Boise to look the project over. Harley J. Hooker, Shaw bldg., Boise, Idaho.

617 A. FINE, LEVEL, EASTERN WASH. wheat land, stubble; fair buildings; good well, windmill; 2-mile haul; great bargain at $12,000. Terms. Low interest. 120-a. diversified farm, 15 miles from Spokane; mile to station; all deep, rich, subirrigated soil; new buildings; fine well; fine roads. Snap at $10,500. J. A. Wilson, Fernwell blk., Spokane, Wash.

FOR LESS THAN THE SOIL WILL PROduce in one year at present prices—$6000; $3650 cash; 160 acres; 80 under ditch; 25 alfalfa, some ready for seeding; joins range; all implements. For description (with photo, send 25c in postage). Address Box 235, Vale, Ore.

ARE YOU LOOKING FOR A WHEAT, dairy or general farm in Oregon? Write us what you want. We specialize in farms and have a big list of bargains. Lueddemann Co., 913 Chamber of Commerce, Portland, Oregon.

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HOMESTEADS, 160 AND 320 ACRES, ALfalfa, wheat and stock farms, $40 to $100 per acre; paid water. This is a farm and stock country. John Hardwick Realty Co., Vale, Ore.

314 A. IN WHITMAN COUNTY; NEAR Oakesdale, with or without crop. Address Box 17, R. D. No. 2, Oakesdale, Wash.

SOUTHERN BRITISH COLUMBIA. VALley lands at bedrock prices. Write for list to Barlee, Grand Forks, B. C.

FOR PRICES AND INFORMATION ON stock and grain ranches write D. W. Yeargin, Republic, Ferry county, Wash.

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MONTANA IN A NUTSHELL. FREE LITerature. Johnson Bros, Dillon, Mont.

## FARM LANDS—WANTED 654

WANTED—TO HEAR FROM OWNER OF farm or unimproved land for sale. O. K. Hawley, Baldwin, Wisconsin.

## FARM LANDS—FOR RENT 657

440-ACRE FARM FOR RENT—WESTERN Oregon; good grain and dairy farm; close to station. $1000. Address Box 20, R. No. 3, Junction City, Ore.

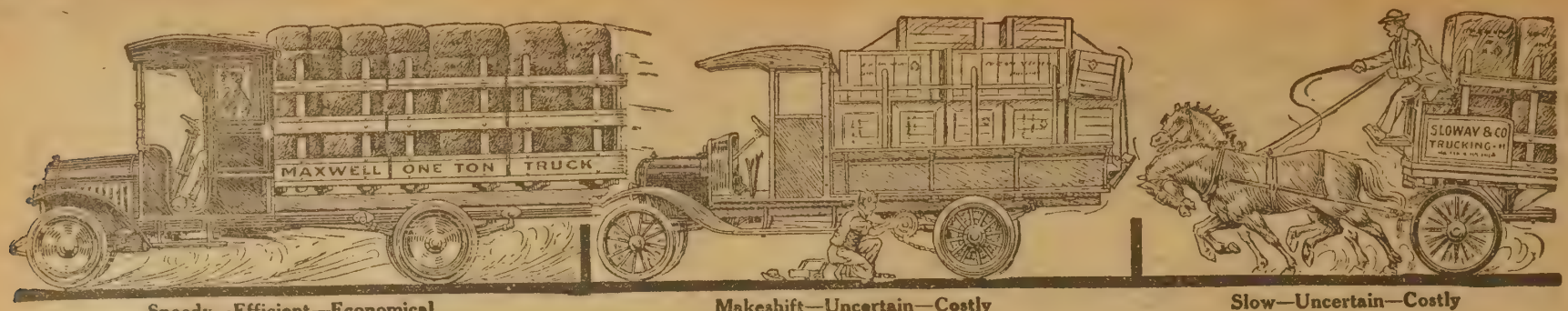
## FOR SALE OR EXCHANGE 702

FOR QUICK SALE OR TRADE—273 ACRES irrigated land; 7 miles from town; 12-room house and barn; 100 acres cultivated; 540 inches of decreed water right; one mile to store and school; immediate possession. Reduced price $60 per acre. Easy terms. A snap. Write for particulars and list.
JOHNSTON BROTHERS, REAL ESTATE.
HAMILTON, MONTANA.

FOR SALE, OR EXCHANGE
for small farms, one section or more improved choice hay, grain or stock farm. Write description and price of your offer.
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## TO EXCHANGE—REAL EST. 705

WILL EXCHANGE THE BEST 25-ACRE 9-year commercial apple orchard in Spokane valley; 1½ mi. from station; fruit warehouse across road; want well-watered stock ranch. Write, giving full particulars, to A. J. West, 901 First ave., Spokane, Wash.




Speedy—Efficient—Economical | Makeshift—Uncertain—Costly | Slow—Uncertain—Costly

# Be Cold Blooded When You Choose Your Truck —and Choose Now!

**As a business farmer, you must have a truck. Don't postpone decision longer. Buy now while you still can get one. Don't wait until only the money-wasting makeshifts are left.**

Be just as coldblooded as a traffic expert is in selecting the right truck. Base your choice on the same considerations as he does and you will be right.

This is the way the traffic expert would look on your trucking problem:

1. **Horse Service**—Always unreliable, limiting your scope and delaying you unexpectedly. Under present conditions growing more costly than ever.
2. **Miniature Truck**—¾-ton; too small for practical conditions, or for your ever-increasing traffic. Costs just as much tc run as a good one-ton truck.
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4. **3-Ton Truck**—Over-heavy for everyday work. Wasteful unless always used at full load.
5. **Unproved 1-Ton Trucks**—Partly experimental. Not made of highest grade steel. Over-heavy. Uncertain as to service. Costly to operate.
6. **Standardized, Time-Tested Maxwell One-Ton Worm-Drive Truck.** Low first cost. Low operating cost. Complete truck designed wholly as a truck. Made of high-grade automobile steels. An engine which has proved its reliability in years of use on hundreds of thousands of cars under all possible conditions. Worm drive of the same type as on trucks costing $5,000. Completely enclosed drive, safe against derangement by the worst roads or worst weather.

**Get the facts. Write us a letter. The more coldblooded your judgment in choosing your truck, the better we will be pleased.**

**The new and coming conditions are changing the whole of the transportation experts' judgment as to what truck is most economical in operating costs as well as in first costs.**

**If you decide in time, you can still get one of these trucks of proved reliability and 100 per cent. efficiency; cash or easy terms.**

**There is a Maxwell dealer near you. But we have some new information that we want to send you direct. Send us a postal card today.**

*One-Ton Chassis, $1085; Chassis with Cab and Windshield, $1125; Combination Box Body, $1135; Combination Box Stake Body with Cab and Windshield, $1175; Stake Gate Body with Cab and Windshield, $1180; Express Conopy Body, $1195. F. O. B. Detroit*

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## Maxwell Motor Sales Corporation

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# MAXWELL ONE-TON WORM-DRIVE TRUCK

MOST MILES PER GALLON - MOST MILES ON TIRES

# THE WASHINGTON FARMER

SUCCESSOR TO

THE RANCH PACIFIC DAIRYMAN HORN[illegible] HOOF

VOL. XLI. NO. 12. MARCH 21, 1918. ** [illegible]VEEKLY.




# BRAINS



It ta re than mere material and equipm build a good automobile—it takes E . It takes an efficient plant, equipm trained workmen; but above all it n experienced executive—a guiding to co-ordinate and use these resourc e fullest extent, for



Back of the motors humming,
Back of the belts that sing,
Back of the hammers drumming,
Back of the cranes that swing
There is the eye that scans them
Watching through stress and strain,
There is the mind that plants them,
Back of the brawn—the BRAIN!

Might of the roaring boiler,
Force of the engine thrust,
Strength of the sweating toiler,
Greatly in these trust,
But back of them stands the schemer,
The THINKER who drives things through,
Back of the Job—the Dreamer
Who's making the dream come true!

(Dedicated to Mr. W. C. Durant by Berton Braley)

The Chevrolet is the brain-child of W. C. Durant, "the master mind of the automobile industry," and is the result of his dream to make a high-grade automobile at a price within the reach of all. His experience of years culminates in the Chevrolet.

Combining low first cost with small operating cost and maximum degree of performance, the possession of a Chevrolet will put you in a position to realize the best possible results from your time and efforts—something absolutely essential in these days calling for the utmost results from the individual.

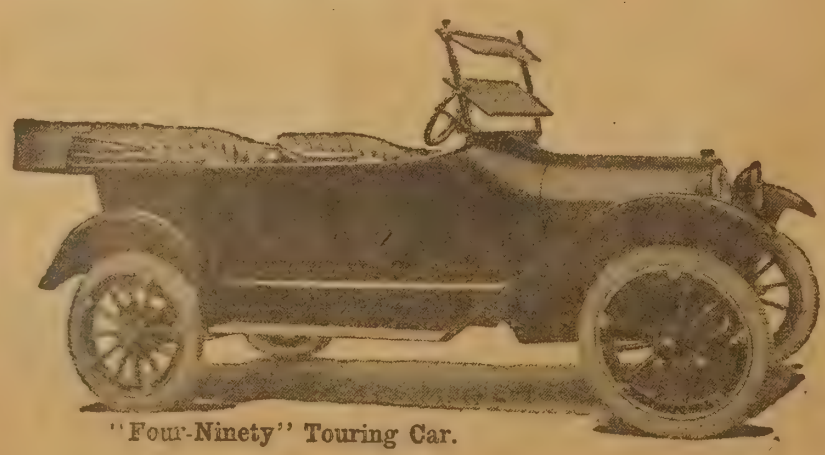
**Ask the Chevrolet dealer in your district to show you this car, or write to**

## CHEVROLET MOTOR COMPANY OF CALIFORNIA

**OAKLAND, CALIFORNIA**

**Factory Branch:**
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**Factory Branch:**
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"Four-Ninety" Touring Car.

**PRICES**

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| "Four-Ninety" Roadster | $750 |
| "Four-Ninety" Touring | $765 |
| Royal Mail Roadster | $1050 |
| Baby Grand Touring | $1050 |
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FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 12 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF March 21, 1918

## Farmers Are On the Battle Field

### *Production of Wheat Is as Essential as the Production of War Munitions*

"The farmer who can grow spring wheat is on the battle field right now just as surely as are the boys in the trenches and he must win his part of the battle in the wheat field before the boys in khaki can win theirs in the trenches."

This is the message brought to the farmers of the northwest by J. W. Shorthill of Nebraska, one of the directors of the grain buying corporation, a member of the food administration's committee which fixed the price of wheat, and secretary of the Farmers' Grain Dealers' association of Nebraska. Mr. Shorthill, now on a tour of the wheat producing sections of the country, reports that he finds no serious criticism on the part of the farmer of the price of wheat as it is now fixed, but that he does find a great deal of dissatisfaction among all classes of people because of the high price of substitutes for wheat flour. Although the consumers of this country are now paying a million dollars a day more for substitutes than they are paying for wheat products, says Mr. Shorthill, if it had not been for the fixing of wheat price there would now be little wheat flour to be had at any price. The food administration, he says, is doing all it can to solve the gigantic problems that confront it and he urges the people to bear whatever seeming burdens may come upon them without complaint, keeping their thoughts constantly on the one big issue of winning the war.

"I have been asked man times why it was that the local market was taken away from the farmer of the Inland Empire," said Mr. Shorthill when interviewed by a representative of this paper. "Why can he not now sell his wheat for Chicago prices the same as he formerly did in normal times? The federal government took charge of the farmers' wheat and fixed a price on it based on Chicago. The farmers of the northwest get the Chicago price less the freight charge from their farms to Chicago. It now moves east by rail at a high freight cost. Formerly it went for export by way of the Pacific at a low freight cost. The farmer got the difference in the freight cost which gave him practically the Chicago price or made his local Pacific market about the same as the Chicago market. But shipping has been taken from the Pacific. The Atlantic demanded it. Until the shipping can be restored to the Pacific it will not be possible to entirely restore that local Pacific market for the farmer. The proper question is not, why was this market taken away, but who took it way at a cost of 25 cents a bushel to the farmer? The answer is, it was the imperial kaiser with his ruthless submarine campaign; it wasn't Uncle Sam.

**Stick to Wheat.**

"An occasional suggestion has been made that it may be more profitable to raise some other crop than wheat—barley for instance. The present price of barley is attractive to the farmer who can raise barley. The fixed price of wheat is also highly remunerative and it has the added advantage of being sure; the future price of barley is not sure. The farmer who has a leaning toward barley instead of wheat should consider very carefully the situation and prospects and he should also consider past experience. It might be well for him to talk with the potato grower who saw such attractive profits in potatoes last fall, profits that did not come with the spring. In these uncertain times it will certainly be wise to stick to the sure thing and leave speculation alone. My suggestion is that the farmer continue to sow wheat. There is now no other crop so safe and sure. No matter how big the crop there will be no glutted market and no fears of getting caught because of car shortages.

"Our government has asked our farmers to grow wheat because it needs wheat as it never needed it before. It is needed not only to feed our domestic population, but it is needed to feed the soldiers of the allies—and our soldiers. It must be had to win the war. By July 1 we will be out of wheat. Even our little necessary 'carry over' will be almost wiped out. Should anything give us a short crop in 1918 there will be calamity indeed. Those farmers who can raise winter wheat have done what they could. The opportunity to help still more lies now only with those who can grow spring wheat. The government is asking them to do what they can by raising wheat for the 'boys' at the front. We are not only in this awful war, but the farmer who can grow spring wheat is on the battle field right now just as surely as are the 'boys' in the trenches, and he must win his part of the battle in the wheat field before the boys in khaki can win theirs in the trenches.

"And now, since I am a direct representative of the farmer, it may seem that I have been criticising him. That is not my purpose. I am attempting to give him information; information that he needs; information that he wants. I would not be true to myself, true to the farmer or true to the nation if I did not do this now. I have now been in every state of our Union that raises any considerable amount of wheat and I have found that when correct information has been given the farmer, he has been as ready to respond promptly to the real needs of the nation as has any other citizen and in his loyalty as a class he takes second place to none. This is true of the farmers of the northwest as I see them just as it is true of the farmers of any other part of our country.

**Must Realize Situation.**

"Just one great thing is lacking yet. It is a proper appreciation by all of us of the real gravity of our situation; of the need of our government for our assistance which we must give it; of the need for all of us as citizens to stand together as one man and help each other in order to best help the government. The farmers are rapidly acquiring this frame of mind. They are goinng to do their best. And if after the farmers have done their best to raise the wheat that we need so badly, then, if they "get up against it" in their efforts to save it it will be "up to" those who can do so to help save it, and the fellow who can then help the farmer and will not do it will be just as much of a slacker as the fellow who turns his back on the enemy in the trenches. Our patriotism in the present crisis is going to be measured pretty accurately by the degree in which we stand together. It is the wheat farmers' opportunity now. Later it will be the opportunity of other citizens to back up the farmer when he needs help. The whole situation is our supreme test and our patriotism will be measured by our response. The supreme need of our government now is for the farmers to grow wheat and for other citizens to back them up and help save it when the time comes.

"All of this may and no doubt will cause most of us some extra effort, some sacrifice and some inconvenience, but we must do it and in doing it we must remember that it is mighty inconvenient for the 'boys' at the front who are there to preserve the privileges the rest of us enjoy at home. For the sake of those 'boys' and for our own sake in the end we must all work together to grow and save wheat."

## That Income Tax!

### Must File Statement by April 1

Have you filed your income tax return? The time for making returns expires April 1 and severe penalties are provided for failure to report. The following are subject to the income tax:

**Every person not the head of a family receiving a net annual income of more than $1000.**

**Every married man or head of a family receiving a net income of more than $2000.**

**Every man and wife living together whose combined net income, together with that of their minor children, exceeds $2000.**

**Every mercantile, manufacturing or business corporation.**

Generally speaking, banks and postmasters understand the requirements of the law and will give free information to persons seeking it, or, if in doubt themselves can give the applicant the name and address of the collector of internal revenue in his district.

While April 1 is the last day for filing one's return, in case of sickness or absence of the person who is required to execute the return, the collector of internal revenue may grant one extension of not to exceed 30 days, upon written application therefor, made before the return is due.

The return may be mailed to the collector and will be considered as on time if place in the mails, properly addressed and postage paid, early enough so that it would, in due course of mail, reach the collector within the required time. The return is not filed in time merely because it is deposited in the mails on the day that it should be filed.

Where an individual refuses or neglects to file his return within the required time the amount of the tax is increased by a penalty of 50 per cent, and there is a further penalty of not less than $20 nor more than $1000. The 50 per cent will not be added where the return is later filed, voluntarily and before notice from the collector, and it appears that the delay was not wilful, but was due to a reasonable cause.

Still heavier penalties are provided for false or fraudulent returns.

## Discuss Grain Grades

### Meetings Being Held This Week

Beginning with the meeting held in Spokane Monday of this week where the matter of grain grading standards was taken up by the department of agriculture and northwestern persons directly interested, a number of meetings are being held this week throughout Washington and Oregon. Next week's issue of this paper will contain a report of the Spokane hearing at which a number of important questions were discussed.

At Portland on Saturday of this week another important meeting will be held, one of the features of which will be an address by Dr. H. H. Brown of the federal bureau of chemistry on the subject of smut explosions and how to prevent them. A similar meeting will be held at Corvallis March 27. In connection with the meetings H. M. Houser, northwestern representative of the food administration's grain buying corporation issued the following statement:

"The bureau of chemistry, department of agriculture, has devoted considerable time to the study of grain dust explosions and devising means for their prevention. The investigations of this department have developed the fact that the grain dust explosion problem has not been thoroughly understood by many millers, elevator operators and threshing machine men. As a result, certain practices are now being carried on which are felt to be dangerous and which may cause extensive grain damage by fire or explosions. A number of various disastrous fires and explosions have occurred during the last year, many if not all of which could have been prevented.

"A special emergency campaign of education is now being carried on by the department in conjunction with the food administration grain corporation. Dr. H. H. Brown of the bureau of chemistry has been detailed to present the smut dust explosion work in the Pacific northwest. A series of meetings has been arranged for millers, elevator operators and farmers.

"In the course of Dr. Brown's lecture graphic illustrations will be exhibited by means of lantern slides and motion picture reels; miniature grain dust explosions will also be shown.

"The vital and important nature of this exhibition is such that it is hoped every one interested will arrange to attend one of these meetings."

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## Get Seed Wheat

### Government Announces Methods

Chairman R. A. Oakley of the U. S. seed stocks committee of the federal grain corporation is sending to market bureaus and agricultural heads throughout the country information of that committee's activities in securing seed wheat for the spring crop.

Communities should work together in securing seed under the conditions announced by the committee when there is insufficient seed of proper varieties available locally. The following three announcements are contained in the committee's statement, the second being of special importance to the people of Idaho, Oregon and Washington:

1. The food administration grain corporation has approved the plan of the U. S. seed stocks committee to accumulate large stocks of Marquis and Kubanka durum spring wheat for seed purposes. These will be made available throughout the spring wheat belt, from Montana, Wyoming and Colorado on the west to Illinois, Indiana, Ohio, New York and New England on the east. These stocks may be purchased in car lots through the zone agents of the grain corporation in Minneapolis, Chicago, Toledo (the zone agent in Philadelphia) and Buffalo.

2. Stocks of seed of adapted varieties of spring wheat for the districts west of the Rocky mountains have also been accumulated by the grain corporation. Early Baart and Pacific Bluestem have been especially recommended to their attention. Application for these seeds in car lots for use in Idaho, Oregon and Washington should be made to H. M. Houser, zone agent, grain corporation, Portland, Ore.

3. Permission to export Marquis wheat from Canada for seed purposes only has been granted by the board of grain supervisors of Canada. Applications for permission to import such Marquis wheat for seed purposes in the United States should be made to Frank L. Carey, zone agent, grain corporation, Board of Trade building, Minneapolis, Minn. These applications will then be subject to approval by a Minneapolis representative of the U. S. seed stocks committee. Orders so approved will be transmitted by Mr. Carey to the Canadian board of grain supervisors at Winnipeg. It is understood that the Canadian seed purchasing commission will cooperate in the selection of the Marquis wheat to be exported for seed.

# Horse Cultivation of Gardens Is Urged

## *Producers Give Plans for Increasing Food Supplies by Means of the Farm War Garden*

**The letters herewith constitute the second installment in the publication of those letters received from readers of this paper in the war garden contest which closed February 28. The decision has not been made yet as to the winner of the contest, but as stated last week, will be made in the near future. In reading these letters every one should bear in mind that difference in localities, climate, soil and the like, require the use of thoughtful judgment before the details of the plans given are put into practice. A plan that might be successful in the irrigation districts would not be successful on the heavy soils of the uplands or on the soils near the Coast. In many cases, therefore, the advice given in these letters must be accepted as suggestive rather than definite directions for the community in which the reader may live.**

It would be difficult to give a plan or specific arrangement for a garden that would suit all demands, and such a plan must be devised by each individual grower. Suggestive arrangements, however, are here presented. Provision is made so that all cultivation may be done by horse-drawn tools, no intricate companion croppings or successions being used but common rotations, following early crops.

**Garden Plan 50 Feet by 100 Feet.**

| Row. | | Between Rows. |
|---|---|---|
| 1. | Asparagus, rhubarb | 4 ft. |
| 2. | Winter squash, pumpkins, cucumbers | 8 ft. |
| 3. | Early sweet corn, late sweet corn | 6 ft. |
| 4. | Tomatoes, peppers, eggplant | 4 ft. |
| 5. | Late beets, late carrots, parsnips | 2½ ft. |
| 6. | Dry onions | 2½ ft. |
| 7. | Bush beans (followed by late cabbage), peas (followed by Scotch kale) | 2½ ft. |
| 8. | Bunch beans, kohl rabbi, bunch carrots (followed by by fall and winter cauliflower | 2½ ft. |
| 9. | Early cabbage, head lettuce, radishes (followed by early and late celery) | 2½ ft. |
| 10. | Muskmelons, watermelons, parsley, sage, mint, horseradish | 6 ft. |

In addition to the above plan and which can be modified to meet the demands of each individual or family, the following notes are added: Between rows 1 and 2 if asparagus and rhubarb be just now started, vegetables can be grown as lettuce, beans, beets, carrots, parsnips, etc. Between rows 2 and 3, early in the season dwarf peas may be grown. In row 3 after the early sweet corn is finished, beans or fall lettuce may be planted. In row 4 tomatoes may be of three varieties one early, one second early, and one main, or late. In row 7 bush beans should be planted in successive sowings.

In choosing a place for the garden consider all the factors that will cause the best growth of the vegetables. Sandy loam soil is the best, although any soil with a heavy coating of barnyard manure will do. The lay of the land has considerable influence upon the time that the soil can be worked and a gentle slope toward the south is most desirable for the production of early crops; good natural drainage of the garden area is also of prime importance. A good fence around the plot is almost indispensable, serving as a safeguard against all farm animals, including poultry, and proximity to the house or other buildings should be considered.

As to time of planting, garden peas are hardy and should be planted very early, in fact, even while frosts occur nightly. Early potatoes and spring-planted spinach follow, and if heavy frosts threaten after the potatoe tops are several inches high, they may be covered with earth for protection. Lettuce, beets, radishes, turnips, carrots, onions and parsnips may be planted early, too; and other crops like beans, cucumbers, melons, etc., should not be planted until the ground warms up and frosts have practically ceased. "Apple blossom time" is about right.

Quick germination of seed causes a vigorous growth of plants. The successful gardener knows that all time spent in putting the soil in fine physical condition, is time used to the greatest advantage. Vegetable seeds are small, and in order to have them germinate evenly in the seed bed, thereby producing a uniform stand of plants, the soil must be smooth, fine, loose, free from coarse material; such a soil condition can only be obtained by diligent work in pulverizing the ground thoroughly, and afterwards raking it well. The garden should be plowed or spaded deeply in the spring as soon as the soil is in good working condition.

Cultivation after the plants are up is to retain moisture, to kill weeds and to liberate plant food, and should be given at least every 10 days when rains do not interfere. Since rain packs the ground it should be cultivated as soon as dry enough.

The best method of fighting garden pests are as follows: For cut worms, use a bran mash consisting of coarse bran 16 pounds, paris green ¼ pound, salt ¼ pound, cheap syrup one quart, and add warm water to make a coarse, crumbly mash. Put a small amount around each plant. For green cabbage worms, which are usually found on members of the cabbage family, the easiest way is use hot water, up as high as 122 degrees, pouring it over plants in the field. A strong salt solution will also be effective. Twelve-spotted cucumber beetle is a serious pest, attacking the foliage of squash, cucumber, beans, etc. Dust the young plants with the following preparation: Powdered arsenic of lead to five parts of sifted wood ashes, sulphur or road dust. Mix material thoroughly and place in cheesecloth bag, dusting over plants in the early morning when dew is on. Repeat about every 10 days. This same preparation is also used for slugs.

Vegetables should be harvested as soon as ripe and before rains and frosts. Some fruits can be handled with straight water, rhubarb and gooseberries being frequently put up in this way. A good, sound fruit must be used. In drying vegetables gather, wash, grade or sort if necessary, prepare and blanch with steam or boiling water, sometimes salted, generally five to eight minutes, where blanching seems advisable. Spread on trays or drying surface, evaporate at proper temperature and store where there is no danger of spoiling.

In order to produce in variety and quality the largest amount of food for the farmer's family table with the least interference with other necessary farm production, the work is usually done in spare hours when other farm operations are not rushing, a certain portion of the garden could be allotted to each boy or girl in the family, and a prize given to the one who makes the best garden. FRED STADELI.

Silverton, Ore.

### MAKE ROWS STRAIGHT.

### Eliminate Hand Work if Possible.

We are very busy farmers, and haven't much time to waste, so have to hit on a plan of gardening to save as much time as possible.

We plant on an average of an acre each year. This includes our potatoes. Our garden is as near the house as possible, so no time may be lost in going and coming and the spare time may be used in hoeing. It is in two plots, one generally used for potatoes and the other for vegetables.

The rows should be as long as possible, and straight. With the exception of perhaps tomatoes, one can scarcely get the ground too rich for vegetables. Here, in our part of western Washington, the soil is mostly heavy clay, so we don't plan for extra early garden, as the ground is too wet to work early and too cold to plant in, but our late summer and winter garden is a thing of beauty, and we feel well paid for the little time used in caring for it.

Manure the ground very heavily with the cleanings from the horse barn and plow lengthwise of the patch as early as possible in spring. When we are ready to plant, which is about the middle of April or first of May, we first test the ground to see if it is dry enough. Dig up a spadeful of ground, take up a handful of earth and squeeze it firmly in the hand. If, when you open your hand, the dirt crumbles easily, it is dry enough to work, but if it forms a hard mud ball it is still too wet, and will only give a crop of large clods. By this time there will be plenty of weeds coming after the first warm days of spring, so John takes the disc harrow and put in all the "cuts" and goes over the ground lengthwise once or twice, then with the drag harrow, then the roller or clod masher, and our first crop of weeds are out of the war in good shape, with no back-breaking hoeing.

Now mark off your rows for carrots, parsnips, turnips, cabbage and all small seeds, the full length of your patch; take a hand rake and rake off at path straight through; down the middle of this drag or chop a little trench about as wide as the palm of the hand and an inch or two deep, put in your seeds and cover by reversing the rake and pulling the dirt in level or nearly so, and don't smooth down too firmly. Our best seeds we plant in drills, too, but prefer to put three or five seeds in a hill (as they are more easily thinned) and six or eight inches apart; also corn and beans we plant in this way. One takes the hoe and chops into the dirt, lifts it up, and another drops in the seed, then the hoe is pulled out and the hill stepped on, and so on down the row.

For peas we plant a double row about six inches apart. When they are tall enough for support drive down a number of strong stakes and stretch several rows of string on these stakes (between the rows).

Squash, cucumbers, pumpkins are made into hills, also in rows, and everything is then ready for the horse cultivator. When we can see the row or even just parts of it we hoe out the weeds just as close as possible, then when the little plants begin to be about a couple of inches high we thin and weed them. This is important, as no vegetable likes too near a neighbor. Leave them a little closer together than need be, and soon the largest are ready for table use and the others are left for winter use. You can have things in beds by planting the same thing in several rows for so far, then putting in something else in the rows for a way. We do this when we wish to plant more than one kind of corn.

Corn should be "bunched" or planted in a square, as the rows don't pollenate properly.

Make a solution of lime water and pour along your radish rows to kill worms; a solution of stock dip is also good for cabbage. When the cabbage is just heading sprinkle plentifully with table salt and pepper. Insect powder for tomato beetles, and they should be watched closely after planting out, and powder should be sprinkled over them after a rain or when the plant is wet with dew.

One half day is all now that is needed each week to keep your garden beautifully clean and growing prolifically. Use the horse cultivator thoroughly once a week until haying, and you can feel sure of plenty.

If you want beans to use as dry beans, use the bush kind; don't irrigate and don't use from these vines for green beans, as water and picking both tend to make the vines keep green and make new pods, which isn't to be desired as the frost will kill them. If allowed to set pods and mature they will ripen and be ready to gather before rains. Corn we can as it is nicer than when dried. Use all glass jars if possible. Use only the true Hubbard squash and small pie pumpkins. Store in a dry place in the attic or a room which has a flue passing through. My squash keep until July and August and pumpkins all winter, so I don't need to can or dry them and thereby save time and strength. Our carrots and parsnips we leave in the ground and they keep much finer than any stored ones. Cabbage should be stored with most of the outer leaves and all of the stem and root.

We plant our potatoes about the first of June for late crop and they keep green during the hot weather and mature with fall rains. We plow or furrow them in and then go over the patch lengthwise of the rows with the drag harrow once or twice just before they are up or after the first leaves begin to show; this loosens the ground and gets rid of the first heavy weed crop. Then the horse cultivator can be used. We generally go through once with the hand hoes to clean between the plants. By the time the summer rush is on our pumpkins, squash, potatoes and some other things meet across the rows and what weeds do come are very puny. We keep ahead of them and only have three or four mornings' work with the hoe. Try it.

I will add that as I am too busy for a flower garden my sweet peas, dahlias, asters, etc., go into spare places in the garden rows and in time delight the hearts of myself and friends with their cheery blooms.

Use fresh, clean garden seeds and grow them yourself if possible.

L. AUSTIN.

Oakville, Wash.

> To the Editor: I have read The Washington Farmer occasionally for several years, but it was not until lately that I felt a need for it. In making your paper the voice of the farmer, in recording incidents of farming interest from various parts of the state, and in championing progressive measures that are for the betterment of the farmer and the industry you are following a worthy policy.
>
> J. V. COUGHLIN,
> Agricultural Club Leader.
> Bellingham, Wash.

### Uses Ashes Freely.

I am enclosing a plan for a garden that I believe will meet all requirements for a farm garden in war times or at all times.

Garden is to be cultivated with a horse, rows being mostly three feet apart, except in the case of melons, cucumbers and squash, which are more, also late peas, which are sowed in double rows to enable them to withstand the drouth better. Radishes, lettuce, early beets, early turnips, China cabbage, potatoes, parsnips and onions should be sown as soon as the ground will permit in the spring, also include early peas. Tomatoes, celery and early cabbage and cauliflower set out as soon as danger of frost is over, usually about the 8th or 10th of May in our locality. Early corn and beans, carrots, cucumbers, melons, squash, vegetable oyster should be sown about the same time, while late cabbage, corn, beans and peas about the 20th of June.

I have found that wood ashes will keep off almost all insects that bother garden vegetables, and most of us have plenty of them at all times. Sprinkle the ashes over tomatoes, melons, squashes and cucumbers and it will keep those little insects off, and put around the stalks of beans and plants at the time of setting them out and it will keep the cut worms away. It is also beneficial sprinkled over cabbags to keep cabbage worms off, but in all cases it has to be applied after each rain until the pests are gone.

Peas and beans should always be gathered morning or evenings or on cool days, never in the heat of the day as it causes them to wilt, and this is true of cucumbers. Late beets, turnips, rutabagas, carrots, parsnips and oysters should be pulled when the day is bright and warm, allowed to dry and stored in a cool, dry place and are better if buried in sand. Squash should be picked carefully and stored in cool, dry place without bruising, and before they are frosted. Late cabbage should be pulled and hung up roots up, in a dry place. The best method of keeping peas, beans, corn, early beets and cauliflower and tomatoes is canning. Cucumbers should be put in a keg or stone crock and covered with a strong salt brine and a weight put on it to keep them from rising out of the brine. Melons may be kept a long time if picked a little under ripe and carefully buried in dry sand where they won't freeze.

I believe in using a horse to cultivate a garden as most farmers have more land than time, but one has to use the hoe to hill up vegetables and to loosen soil in center of double rows of peas, and to take the weeds out of the rows. MRS. JOHN LAWSON.

Daisy, Wash.

### Will Furlough Soldiers.

Reports from Washington tell of the passage of a bill permitting soldiers in this country who desire to be granted relief from duty for the purpose of performing farm labor to withdraw temporarily and return to the farms. The measure does not provide, however, for sending any soldier back to the farm if he does not wish such furlough.

# New Wrinkle in Forage Production

## *Benton County Producing Two Crops of Silage Same Year on Same Land*

By J. L. ASHLOCK

Thirty-five county agricultural agents now are employed in Washington, and State Leader R. B. Coglon is looking for three more. The 38 will serve 34 counties in the state. The counties of Spokane, King, Benton, Okanogan, Thurston and Walla Walla each have two country agents. According to plans now under consideration Garfield, Columbia and Asotin counties expect to share between them the services of a county agriculturist.

Seventeen eastern Washington counties now have established county agricultural offices, their areas including all of the east half of the state, with the exception of Lincoln, Kittitas and Ferry counties. San Juan and Skamania counties, in western Washington, have now employed county agriculturists. Of the five Washington counties now without agricultural offices Lincoln is the only large farming county, its property valuation amounting to 28 millions, against 19 millions for Kittitas, five millions and a little more for Skamania, less than three and a half millions for Ferry, and $1,480,000 for San Juan. In listed property valuation Lincoln is outranked by only eight counties in Washington.

Normally, that is, in times of peace, the county agriculturist works in his county for "good farming, attractive country homes and happy country people." Since this motto is alive in the mind of every county agriculturist and looks to a more productive agriculture, and since greater agricultural production is the preeminent war need of America, by the fortunes of war made the bread basket of the world, the entrance of America into the world war effected no drastic changes in the work of the county agriculturists. Such changes as were made naturally looked to immediate increases of production, all other county agricultural projects being held subsidiary and tributary to this.

Benton county established a county agricultural office four years ago, and the war last April found this county well organized in the work. There has been in Benton in the last year a persistent endeavor to increase live stock, which necessitated an increase in the forage for live stock. Many farmers there have adopted the expedient of sowing grain in their alfalfa when the latter was not thick enough to entirely cover the ground, and the acreage increases in forage secured by this practice run from a ton to a ton and a half.

Agent Lampson states that there is developing in this county a new system of crop rotation, such as planting potatoes or corn after alfalfa or some other legume. Many carloads of sheep manure have been shipped into the farming communities from adjacent lambing camps and range corrals and hauled out to the farms. At least 15 farms received a heavy application of sheep manure, which, in the experience of Benton county farmers, greatly increases the productivity of the soil. Leguminous cover crops are now being used in the orchards. Agent Lampson states that now less than 5 per cent of the orchards of Benton are "clean cultivated." In 1913, when the county agricultural office was established, about 80 per cent of the orchards were cultivated clean.

Reporting in to the state college a few weeks ago, Mr. Lampson stated that 35 silos were then under construction in the county or being planned. The past year has witnessed a considerable extension in dairying, marked by the saving from slaughter of many of the best heifer calves, the laying down of new sweet clover pastures and the distribution of about 150 milk record sheets, all of which are now in use on milk-producing farms of Benton county. A new wrinkle in forage crops which has come out of Benton county is the producing of two crops of silage in one year on the same land. It is done by fall planting to wheat or rye and about corn-planting time in the spring, when the fall wheat or rye is in rank, green growth, siloing it and replanting the ground to corn. The corn is siloed in the fall. The wheat or rye silage put down in the spring serves for summer succulence in lieu of soiling crops.

About one-third of the irrigated farms in Benton county now have from half a dozen to a hundred sheep. The sheep live for the most part on waste vegetation of the farm and in so doing help keep the ditch banks clear of grass and weeds. Last year for practically the first time the practice of "hogging off" crops of peas and various grains was taken up and over 100 farmers called on the county agricultural office for help in planning rations for hogs, indicating somewhat of a rise in the pork production of this section.

Early last year, preceding the canning season, Mr. Lampson planned a series of schools and institutes in different parts of the county, where food preservation was the burden of the work given. He says that stores throughout the county sold from twice to ten times the number of jars and cans sold previously, indicating a great increase in the county's work in this phase of food conservation and preservation.

Douglas county has about one-half of a million acres of wheat land, approximately a third of which is summer fallowed every year. Soil and climate make the county more adaptable to spring winter than to spring wheat. The annual precipitation is between 10 and 12 inches. All of this is quoted from the recent annual report of County Agriculturist A. M. Richardson, now succeeded by H. E. Lattig, and gives a birdseye view of the county's farming.

Since wheat is the main crop of Douglas county, Mr. Richardson during the several years of his work there took as a main project the working out of a system of soil management that would produce maximum returns; the idea that among the various farming practices in vogue in the county some one ought to be better than all the others. The idea was to devise or discover this best one and then let everybody know about it.

Since there was only 10 or 11 inches of moisture a year, holding to this moisture naturally was the prime consideration. Acting with the cooperation and advice of the wheat men, Richardson finally was able to give substantial proof of the merits in the following system of soil management:

Disk the land in the fall. Double disk again in the spring when the weeds begin to start. Follow the double disking with summer fallowing, reasonably early. Pack immediately after the plow. Harrow right after the packer with a spring-tooth. During the summer work the land often enough to keep down weeds, preserve the mulch and prevent the forming of a crust under the mulch. Sow the wheat in midfall or a little earlier.

Last year, one of the driest in the history of Douglas county, wheat land handled as above yielded 43 to 45 bushels per acre, with adjacent land handled otherwise yielding 15 bushels for spring and 25 for winter wheat. In the part of Douglas county where this cooperative work was done last year there was no rain from May until the 3d of November. Nevertheless, by the tillage system above outlined farmers were able to retain the soil moisture sufficiently close to the surface to bring up a good stand of fall-sown wheat in advance of the rain of November 3d.

### RETURN FLOUR
### People Asked to Aid Distribution

In order that all persons may be placed on an equal basis, and that flour supplies may be more evenly divided, Charles Hebberd, food administrator for Washington, is calling on all persons having in their possession more than a 30-day supply of flour to return it to their merchant by March 25.

This situation arises from the fact that it has been the custom for many persons to purchase enough flour in the fall to do them for a year, and the stock they now have on hand came to them in a perfectly proper manner. However, the administrator hopes they will return the flour which is not necessary for their immediate needs. Such returns will add considerable to the general supply in the channels of trade.

So far as possible citizens are asked to return the flour to the merchant from whom it was purchased. When this is not practical the food administrator in the county is asked to assist any who wish to return their surplus.

### Revive Jefferson County Fair.

The commissioners of Jefferson county, Wash., have taken steps to revive the county fair which once was a regular institution in that part of the Olympic peninsula.

Tentative arrangements entered into for the coming fair season contemplate the turning over to County Agent McWhorter $800 to be used to secure an exhibit which will be a credit to the county and to take it to the Washington State fair at Yakima in September.

Two hundred dollars has been set aside for boys' and girls' industrial work. The latter is playing no small part in fostering interest in agricultural pursuits in the county.

### Will Distribute Labor.

The Washington state council of defense announces that there are United States employment offices located in this state at the following points: Seattle, Spokane, Tacoma, Aberdeen, Everett, Bellingham, Yakima, Walla Walla and Wenatchee. These are permanent offices in charge of paid agents who will be in daily touch with the labor needs of sub-agencies throughout the state during the growing and harvesting seasons this year. They will also be in daily touch by wire with the larger centers of labor supply.

# Gave Up Law to Produce Pork

## *Grows Wheat and Alfalfa Together for Hog Feed*

By J. E. NESSLY.

One of the most successful hog farmers in eastern Washington is Milan Still, who gave up the law to raise hogs and is making a big success of the venture. Mr. Still had 1000 acres of land below the foot of Rock lake, in Whitman county, Wash., and he fitted the land for hog raising. He fenced it all hogtight and into fields of various sizes, managing to have water in each. He raises alfalfa and grain, but has no farming machinery. He sows wheat with his alfalfa, disking up the alfalfa land after the roots have become well established. The results have been highly satisfactory. The wheat does not produce very heavy straw, but there seems to be certain properties in the alfalfa or the soil that cause the wheat to head well and produce a fine quality of grain.

Mr. Still pastures the wheat and alfalfa when it is young and then takes the stock off it and cuts a good crop of hay. He feeds the alfalfa and wheat to hogs, using shorts, which he obtains at the Winona mills, to "finish" the hogs ready for market. He has no harvesting machinery at all and threshes no grain. A mowing machine and rake are all his harvesting machinery, and he has no threshing or sack bills to pay.

"I find the best hog house is an alfalfa hay stack," said Mr. Still. "I put posts in the haystack so that it can not fall over and smother the hogs when they root around the bottom of it. They eat the leaves and the heads of wheat, and I go out every morning and throw the loose stems and hay that they have pulled out but have not eaten over the fence to the cattle, and they clean it up, so there is no waste."

Mr. Still fences his haystacks so they hogs can get to them but the cattle can not. He has a capacity for raising and fattening about five carloads (500 head) of hogs a year, and at prices that have ranged for the past year he gets an average of more than $30 each, or about $15,000 for a year's output of hogs. Mr. Still claims to be the second largest pork producer in Whitman county, first place being held by Dan Kinsinger of near Almota. Discussing the question of whether the food administration or gain commission would prohibit the feeding of wheat to hogs under the rulings for saving wheat, Mr. Still says:

"I want to observe the regulations of the grain commission and food administrator, but I can not change my entire plant and raise wheat for market. I prefer wheat to barley, but if not permitted to feed wheat will plant barley this spring. I can not afford to buy expensive farm and harvest machinery to raise wheat for a few years. Prohobiting me from feeding wheat to my hogs will not increase the output of wheat one bushel, for I can not raise wheat and thresh it, but it will reduce the output of pork to some extent, and I take it that the government needs pork about as much as it needs wheat."

Mr. Still claims the championship carload of hogs, which he shipped to the Spokane Union Stock Yards recently. He got $18.35 per 100 pounds for them without a pound dock on the entire carload. They weighed between 250 and 300 pounds each.

Only a part of his land is tillable and part of it is irrigated, but it all furnishes feed for both cattle and hogs, and his income from his stock farm is much greater than his income from the law practice which he gave up to become a real "hayseed," as he terms himself, after practicing law in Colfax many years.

# Need Potato Storage

## Cooperative Warehouses Needed

Asher Hobson, state director of farm markets, is interesting potato growers in some sections of Washington in plans looking to the establishment of cooperative potato warehouses, following the adoption of a standard grade.

"In the first place," Mr. Hobson told a meeting of farmers in Clarke county recently. "I claim a field run potato will not sell during a slack season like this when there are graded potatoes to be had. But we must devise ways and means of grading and handling our potatoes in a manner that will call for a minimum of expense and trouble and at the same time give us the results we desire.

"In the east and middle west potato growers have gone together in many instances and established co-operative warehouses, equipped with mechanical graders. I believe such a move would be practical here, if your area is a commercial one. Establish a grade and stick to it, then build your warehouse, bring your potatoes to it, pool them and grade them.

"Ordinarily I am reluctant to recommend cooperative enterprises because so many of them are not practical and call for experience and an outlay of money not in keeping with the possibilities of the business to be operated. But a cooperative potato warehouse doesn't require high technical skill; neither does it require any great outlay of money. It does require that you sign up your potatoes—agreeing to deliver them to and market them through the warehouse association. If you are not willing to do that there is no longer any use of contemplating the idea.

"Small capital is required. A plan in common use in some districts provides that the grower give the association a collateral note on an acreage basis. This note is discounted at the bank and serves as a loan to the association, in proportion to the potato acreage he has. Two dollars an acre is a good amount to figure on. Care then should be exercised to keep out any person who is not actually a grower. The expense of operation can be handled in the same way. When you decide to discontinue business each will get out of what money there may be on hand, a sum in proportion to what he has shipped through the warehouse.

"In the meantime you have handled your crop from year to year in a more systematic manner than you possibly would have been able to had you tried to do it alone; your facilities have been improved so that you turn your potatoes off at less trouble and with less expense and you are at no time involved to any great extent."

At this same meeting M. J. Newhouse, agriculturist for Clarke county, reported, with others, on his trip to Beaverton, Ore., where a potato starch factory has been established and is in operation. The company operating the Beaverton plant desires to get a foothold in Washington and has offered to establish factories in Clarke county if the desired amount of acreage is guaranteed. One thousand acres for every factory is required. The growers must enter into a contract to grow this amount for a period of five years and to deliver one-third of all their cull potatoes to the factory. In return they are guaranteed a price of at least 50 cents a hundred and as much more as two-thirds of the returns from the starch manufactured therefrom, will bring.

Mr. Newhouse made his investigation in company with Mr. Hobson, Professor Morris of Washington State college, and others. All were inclined to look with favor on the plan. All the growers would have to take a chance on would be their cull potatoes for one season. If at the end of that time the factory was not a going proposition their contracts would automatically be abrogated.

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## Don't Waste a Grain

One thing that the war is doing—or will do—is the stimulating of the sense of economy on the part of practically all the people of earth. There is no place where this sense needs stimulus more than in the stock-feeding pens on the farm. Too often it is the practice of those feeding stock to do it not only with little reference to the balancing of rations, but with comparatively little care to prevent actual waste of valuable feeds. Feed troughs, feed racks and feed floors are a necessity today on the stock farm as they never were before, and any feeding system that permits the tramping of grain or hay into the mud of a feeding yard or pen is just to that extent uneconomical and unpatriotic. With corn or barley costing the unprecedented prices of today it takes but little loss from the pig troughs to more than pay for a platform or a floor that would prevent that loss. With hay at $25 and $30 a ton it takes comparatively little loss in the mud or cattle yards to pay for a good feed rack.

## Should Depend Upon Ourselves

The government of this country is designed to be one of, by and for the people. For this reason any citizen should feel free at any time to call upon the government for help to solve any problem that may confront him. But not until the individual or the community affected by the given problem has done his or its utmost to solve the problem at home should appeal be made to any department of government. Complaint is frequently heard against the government for doing things which individuals consider detrimental to their interests, and in practically the same breath come complaints against it for not doing things which the individual considers to his advantage. The government can't do everything, nor can it be faultless in all that it does do.

The labor situation throughout the country is a matter justifying appeal to the government of state or nation for aid in meeting, but not until the individual, the community, the county and the district have done their utmost to solve it for themselves. There is everywhere man power that is not being utilized. In some instances it is sufficient to completely relieve the labor shortage, could it be made effective. In such cases it is the unquestionable duty of those affected to strive to make available the labor that is within its reach, whatever may be the cause of its present inactivity. It is the height of folly to go beyond our own community or county border to secure help when that help could be obtained if proper measures were used right at home.

The solution of the labor problem is in one sense a real opportunity and not a calamity. In thousands of localities it will bind the various elements of the community together in effort for the common good and, in addition, it will teach the lesson of community efficiency as few situations heretofore experienced have done.

## Some Predict Low Interest Rates

Most American farmers have occasion from time to time to borrow money, either by mortgaging their farms for long-time loans, or by giving their notes at the bank for short-time advances. Farmers, therefore, like other business men, are wondering what the war's effect will be on future interest rates.

As an off-hand opinion most persons would say that money rates will be higher after the war, but the financial authorities are not agreed on that forecast. A London cablegram reports a remarkable divergence of opinion there. It is held by a majority of British monetary experts that rates will be high because capital will be in large demand for trade and reparation of the damage done by war.

A minority, however, which commands respect owing to the recognized prominence of many of its members, declares that after the establishment of peace capital will be unlendable except on very low rates of interest.

One London millionaire is telling his friends that he is putting his money in investment securities for the first time in his life, because he believes he will be unable to loan it as he has always done hitherto. Others who are identified with international interests express similar opinions. They do not explain their theory, but sense a period of cheap money.

There is a thought here worth tucking away for future consideration. Public opinion has a great deal to do with the fixing of prices of any commodity. If public belief becomes general that money rates will be high after the war, it will be easier for capital to ask and get the expected higher rates. Conversely, if the borrowing public "has its mouth fixed," as the saying goes, for cheaper money, capital will find it necessary to make considerable concessions.

## Signs of the Times

The complaint that we are not awake to our perils and needs is true, doubtless, and yet we imagine that more people realize these things than is manifest yet. The temper of the people is being tried; we believe it will be found to ring true and firm and strong.

The I. W. W. or anybody else, who tempts the patience of a roused people, fails to estimate the significance of the times. Because we have put up with unbridled language and failed to resent violence sometimes in the past has tempted some to regard us as easy of habit and sluggish of mind.

Already some have found to their cost that there has arisen a spirit that will brook no unpatriotic acts any more. Those who are wise will not strain the taut string of public endurance to the breaking point. Perhaps we are slow in waking, but more people have their eyes open than we seem to realize.

## The Farmer's Duty

With the officers of state and nation urging city dwellers to grow food on vacant lots and in back yards, the farmer must keep his sense of proportion clear. With a famine threatening, whatever the city man and his family can raise will be good, and it will help some, but we must not forget that city people are not experts in production. A great increase of production will come only if the farmers themselves—the men whose business it is to make grain and vegetables and animals grow—make a determined effort to increase production.

Two things are needed—a patriotic desire to serve our nation and help the world, and the knowledge and ability to make the desire a reality. Nobody can do this but the farmer; the work of the rest is subsidiary to his.

## Washington Gleanings

A 70,000-bushel grain elevator will be built in Macbeth to handle the 1918 crop.

Oroville citizens have subscribed for half the stock in a $15,000 venture for their town.

William Bangs, a former Washington State college student, has been appointed agriculturist for Skagit county.

The Okanogan County Live Stock association has set April 4 and 5 as the dates for the annual sessions at Okanogan.

The contract for a 50,000-bushel elevator at Sokulk, Whitman county, has been secured by Jonah C. Lewis of Oakesdale.

On a unanimous vote, the Grays Harbor county commissioners agreed to take over the Grays Harbor Fair association, and will back the fair hereafter.

The Eagle Rock Box and Lumber company has been formed by Cashmere men, with the object of erecting and operating a box factory and sawmill on Birch mountain.

The fathers' and mothers' clubs of Bellingham are asking congress to establish a new national memorial day in honor of those American soldiers and sailors killed in the present war.

The Arlington Cooperative Agreement Bull club has been formed by eight men with 65 cows in the district near Arlington. It is hoped by this means to increase the well-bred cattle in the county.

County Organizer George Meyers of Connell organized a local of the Farmers' Educational and Cooperative union at Eltopia recently, with Walter Lebbs president, H. J. Rozensweig secretary and treasurer.

The first of a series of elevators to be erected by the Whetstone-Turner company in Columbia county has been started at Longs, near Dayton. The elevator is to have a capacity of 75,000 bushels, and will cost about $15,000.

The Farmers' Union Warehouse company at Palouse has purchased the Electric flour mill property in order to secure more elevator room. It is planned to increase the space to 100,000 bushels. The consideration was $10,000.

The Snohomish Dairy Products company for the time being has stopped making butter and will turn over its cream to the Holcomb Dairy company. All attention will be given to the manufacture of condensed milk.

The county commissioners of Snohomish county and the Automobile Club of Western Washington have entered into arrangement whereby the important roads in Snohomish county will be marked by signboards for the benefit of tourists.

At the auction sale held recently on the R. Hogan farm, near Chehalis, good prices were given for 20 grade Holstein cows. An average of $121 each was paid, one registered Holstein cow sold for $275, and 17 grade Holstein heifers sold for an average price of $51 each.

Agricultural Agent Walter A. Holt recently received four Duroc-Jersey gilts for Okanogan ranchers, who are going into the hog raising business on a proper scale. The purchasers are Frank Garber, E. W. King and Joe Iddings of Okanogan, and Hugh Miller of Pine Creek.

Farmers from the Burbank and Pasco districts recently met in Pasco to form a melon growers' union in order to interest a sufficient number of growers to devote 40 acres or more to the production of cantaloups this summer, that being the minimum requirement necessary to assure carload shipments. The following directors were elected: F. E. Hood, J. S. Riley of Burbank; George M. Reasoner, W. S. Kirk and J. B. Conroy of Pasco.

## What Others Say

Farmers' Review: We are a long, long way from being far enough along in the war to slow up in our efforts the tiniest bit.

Farmer and Stockman: Much has been said about food winning the war, but the full significance of this has not yet been driven home with sufficient force to make us all realize just what it means.

Farm and Home: By each of us doing well our pur part, also in cooperation with our neighbors, 1918 can be made the banner year for the American farmer, as we all trust it will be a victorious year in the great war.

Farm and Fireside: In times of national crisis when food is scarce a natural tendency is to encourage intensive cultivation too far. It is well to remember that while the war has taken hundreds of thousands of our workers it has not taken one acre of our land. The land is all here, but the problem is to crop it.

# Pasture Mixture
## *for* Logged-Off Land

**$15.00 per 100 pounds**

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¶ This mixture, consisting of alsike, red clover, timothy, rye grass, orchard grass and red top, contains the correct proportions of these early, medium and late grasses necessary to supply pasture continuously through the long season.

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# VEGETABLES




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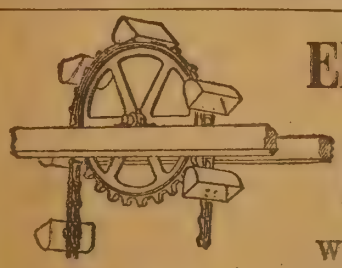
Lists Roots, Strawberries and Small Fruits.

Also contains description and prices on our full line of pruning knives, shears, saws and sprayer outfits.

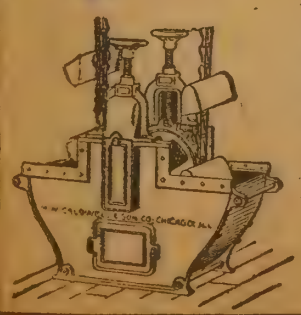
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for handling
# Bulk Grain



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# Janssen Cuts ONE THIRD OFF THE PRICE OF COFFEE



"Serve the best coffee on your table. I'll see that the price doesn't hinder you."
—John F. Janssen.

## You Save One-Third When Uncle Sam Makes the Delivery From Importer to Consumer

I know how the housewife has been called on to meet constantly climbing prices on nearly everything that she serves on her table. She has had either to accept these higher prices or sacrifice the quality of her meals, for which she has such an enviable reputation.

To help the housewife fight this advance I have spent a great deal of time and money in perfecting a system that has already proven a power in cutting the average cost of foods.

I want every family to have the best coffee. And I have made that possible through the Janssen system of direct importation and direct distribution. I import my own coffee, pack it in a way that eliminates the usual expensive container, and send it directly to you through Uncle Sam's delivery system, paying the postage myself. This saves you a third on your coffee.

## HERE IS MY OFFER ON COFFEE
### A Weapon to Fight Advancing Prices

**10** Pounds "Extra Choice" perfectly delicious blend of high-grown coffees—better than the most and as good as the best 45-cent coffee on the market..... **$3.30**

For two years I have unreservedly guaranteed the quality and safe delivery of this coffee and have never received a single order back.

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The foregoing price of only $3.30 for 10 pounds of 45-cent coffee includes parcel post to any place within 300 miles of Seattle.

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What a few of them say:

"Delicious."

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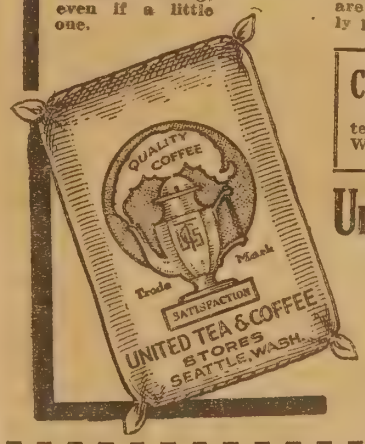
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for which send me, postage prepaid, 10 pounds Extra Choice Coffee.

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| DO YOU WANT IT | | |
|---|---|---|
| Whole. | Ground medium. | Ground fine |
| | | |

| ARE YOU USING | | |
|---|---|---|
| Percolator | Coffee pot | Drip bag. |
| | | |

Place X in proper space above.

Please Sign Your Nam e Above Very Plainly.

R. F. D. AND BOX NO. | TOWN.

COUNTY. | STATE.

WI




A. B. NYSTROM, Editorial Contributor

# Work Cows Harder

## Dairyman Urges Intensive Method

Ira P. Whitney, one of the prominent dairymen of the Inland Empire, is not optimistic over the dairy outlook, but is bending every effort to make good in what apears to him, as to many other men in the industry, a critical period. Mr. Whitney believes that a system of intensive dairying in which the cows should be worked to capacity, as he puts it, is about the only salvation for the industry. He recommends that the number of cows on the average dairy farm be reduced by about one-third, the less productive one-third being eliminated and the remaining two-thirds being fed practically the same amount of feed as previously given to the entire herd. He believes that this system will produce more economic milk and butter than the system now in vogue.

"We are keeping more cows than we need and working them at only half capacity," says Mr. Whitney. "We haven't made the feeding and care of dairy stock the science that it should be. We must become feeders in the real sense of that word."

Mr. Whitney says that the Waikiki dairy farm, near Spokane, Wash., of which he is manager, is trying the experiment which he recommends, and is finding that it can produce more economically than under their former systems. The system includes not only feeding more intensively but milking more intensively, as milking is done during the experiment three times a day instead of twice.

Mr. Whitney says that it is a grave mistake commonly made among dairymen to reduce the feed of the dairy cows during their non-milking period. He believes that it is vitally essential that a cow be fed so as to be kept in perfect condition during this period so that when she freshens she will be in ideal condition to produce a maximum of milk and butter fat.





Booklet, "The Home Cow Doctor," free.

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# Dairy Questions

## Are Answered by A. B. Nystrom

To the Editor: I have a young Jersey cow that was mated for her second calf on July 29, and aborted January 16. She seemed otherwise well, eats heartily, but gives only six quarts of milk per day. I shall mention a few incidents that I know occurred and would like to know if any of these would be a cause for abortion or whether it is the result of disease. The day before she aborted my neighbor's young heifer broke into my pasture, wanting a mate and I suppose my cow was riding the heifer before I discovered it. Still another cause: When I open the stable door of evenings she goes almost on a run for her feed, and sometimes she slips on the planks. I know of nothing else that might be a cause and I would like to have your opinion as to whether she is probably diseased and whether it would be advisable to try to breed her again. Thanking you in advance for your opinion and advice, I am, S. B. H.

Answer—Every case of abortion should be treated as contagious abortion. It is not possible to determine definitely what the cause is until you find most of the herd aborting, one after another. Then it is too late. It is possible that the cow has injured herself by a fall or otherwise, but I would not be content with accepting this as a fact, but would treat the case as contagious abortion.

The foetus and membrane should be burned or deeply buried. The hind parts of the cow must be washed with a coal tar disinfectant. The stall or premises where the aborting occurred must likewise be disinfected. The uterus must be irrigated with a weak disinfecting solution as long as there is a discharge. Do not breed the cow until all discharge has disappeared.

### Difficult Churning.

To the Editor: Can you inform us on butter making? We have trouble to get butter to come at times; would like to know if there is a difference in cows about making butter. We have a Jersey four years old, her cream does not seem to come to butter without a great amount of work and time. We try for two or three days at times to bring it to butter. We have the temperature all the way from 65 to 80 churning at different temperatures up and back, churning all the time. The cream is five to six days old. Have owned my cow for six months. It very rarely ever comes without considerable time and work. J. W. M.

Answer—When cows are in an advanced stage of lactation and at the same time are getting dry feeds they often produce fat with extremely hard fat globules. Usually this can be remedied by ripening the cream well before churning, but sometimes a change in the ration is necessary. I would suggest that you write to the state college for their bulletin on butter-making on the farm and follow the instructions carefully. If your cow is not getting succulent feed I would suggest that you add some roots, silage or green feed of some sort.

### Cheese a Valuable Food.

A more extensive use of cheese, which is a most valuable and wholesome food, would help conserve meat. And there is no cheese more valuable as food or better to the taste than American whole milk cheese. Many people have cultivated an appetite for foreign, imported cheese, which is not half as rich in nutriment as our own. As a cheesemaker said to the writer not long ago, referring to an imported chese, "It hasn't enough grease in it to oil a gimlet."

### A Bed Device.

The spring of a new bed can be folded to form a chair so that a sick person can sit erect.





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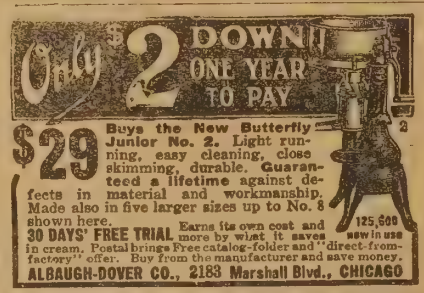
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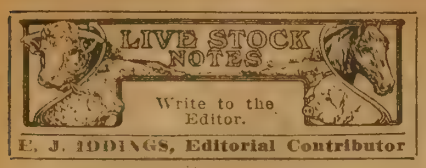


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E. J. IDDINGS, Editorial Contributor

# Stock Winter Well

## Spend Winter on the Open Range

It is probable that no spring in 25 years has found the live stock of the northwest in such good condition. This is due perhaps to two conditions, the principal one of which is the unusually open winter that has prevailed in nearly all sections of the northwest.

The two previous winters have been unusually severe, causing heavy losses and excessive feeding costs. The winter of 1916 and 1917 was especially bad, but the winter of 1917-18 in almost all districts has been open to such a degree that thousands of head of sheep and cattle have been enabled to secure from 25 per cent to 75 per cent of their food on the open range.

As a result, the hay producing districts, as a rule, have an unusually large amount of hay on hand or have recently placed it on the market. While this condition has caused considerable reduction in the incomes of hay producers this reduction has been less marked than might have been expected owing to excellent hay markets in other states. In Texas and California the most damaging drouths in history were experienced last summer and resulted in the absolute necessity of shipping in large quantities of feed to save the lives of cattle and sheep. As a result thousands of tons of northwestern grown hay have been shipped to these and other states.

With the coming of an early spring it would seem that there will be much live stock ready for market earlier than usual. This may not be the case in some districts however owing to the fact that cattle have refused to eat fattening feeds during the period when they otherwise would have been on fattening rations choosing rather to wander over the pastures and ranges in pursuit of green grass.

## MAY GET CONVENTION

### Northwest Pulls for 1920 Meet

The cities of Portland, Ore., and Spokane, Wash., were contenders for the 1919 convention of the American National Live Stock association at the recent meeting in Salt Lake City. Neither of them got it, owing to too strong a sentiment in favor of other cities. The 1919 convention goes to Denver, but the northwestern interests are apparently united on Spokane, Wash., for the 1920 gathering.

This is what E. F. Benson of the Washington state department of agriculture, told the live stock conference in Spokane recently. Mr. Benson added that the national wool growers' association should meet in the northwest at the same time, and that if the two did accept the invitation it would put this territory strongly on the live stock map.

# Veterinary

Dr. S. B. Nelson

**Wire Cut**—Please advise me what to do for a horse that has a wire cut on right hind foot just above the hoof. The leg is swollen some and looks as if there was proud flesh. Now it looks to me as if the flesh is growing out in place of growing down as there is a large lump and the full length of the cut. J. C. H.

Freewater, Ore.

You really should have the services of a veterinarian because it is quite possible that the only treatment which will really give you good results will be to cauterize the foreign growth at certain intervals, and give the skin a chance to grow over the wound. In the meantime you might try dusting out the wound morning and evening with a powder composed as follows: Tannic acid, one part; burnt alum, one part; boracic acid, two parts. Whenever the scab forms hard give it a rest for several days.

**Cow Is Lame**—I have a cow that was sick and now she is over that, but she is lame in both of her hind feet. They seem to be swollen between her hoofs and duclaws. The cow when first turned out of a morning will shake her feet as though she was in deep snow and she has run down in flesh, but her appetite is good. Will you please tell me, if you can, what it is and what to do for it?

A SUBSCRIBER.

Yakima, Wash.

You should cast your cow, preferably by the triple half-hitch around the neck and two about the body and then wash the feet very carefully and see just where the trouble is. If there is a swelling between the duclaws back and a slight growth there it may be that rubbing the right size rope which can pass between the duclaws back and forth will burn it sufficiently to cause the destruction of the growth, after which apply tar daily to the part. If, however, the infection is up in under the skin the treatment is very difficult, and I think you will need the services of a veterinarian. In the meantime, however, you can see if you can arrange to have her stand in an antiseptic solution composed of one part of copper sulphate to 500 parts of water.


**SELDOM SEE**

a big knee like this, but your horse may have a bunch or bruise on his ankle, hock, stifle, knee or throat.

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will clean it off without laying up the horse. No blister, no hair gone. Concentrated—only a few drops required at an application. $2.50 per bottle delivered. Describe your case for special instructions, and Book 8 R free. ABSORBINE, JR., the antiseptic liniment for mankind, reduces Painful Swellings, Enlarged Glands, Weins, Bruises, Varicose Veins; allays Pain and Inflammation. Price $1.25 a bottle at druggists or delivered. Liberal trial bottle postpaid for 10c.
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Spring Bull Sales

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As a Human Remedy for Rheumatism, Sprains, Sore Throat, etc., it is invaluable. Every bottle of Caustic Balsam sold is Warranted to give satisfaction. Price $1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address
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We are offering a choice bull calf by St. Mawes of Ashwood and out of a daughter of the great Holger. This youngster carries the best blood in Jerseydom and is fit to lead any herd. Price on application, but don't delay, as he will cost more after his dam completes her present register of merit test.
M'ARTHUR & STAUFF, Rickreall, Ore.

**We Have a Herd Average of 700 Lbs.**

85 per cent BUTTER for 11 head. Sold six bull calves in the past 4 mos.; 3 of the last ones brought $250 each. These were sons of our herd bull, G. P. St. Mawes; just one bull calf left.
F. A. DOERFLER, Silverton, Ore.

OAK RIDGE JERSEY FARM.

Thirty years breeding Jersey cattle. Young bulls from Register of Merit dams. Also a few choice females.
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and 11,501 lbs. milk is the average of the Register of Merit records of the three nearest dams of this handsome bull dropped Aug. 28, 1917. Dam Stockwells Dahlia, 619 lbs. butter and grand champion Oregon State Fair twice. Sire Dominus, who is out of an 817-lb. cow and a son of an 853 lb. cow. Price $150.
J. B. STUMP & SON, Monmouth, Ore.

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Register of Merit Jerseys

In nearly 13 years we have yet to get our first poor heifer or dissatisfied customer. We have the best of the Golden Glow's Chief and St. Mawes strains, with the cross of our great Kentucky bull, Valentine's Ashburn Baronet.
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Oxford You'll Do Jr., R. of M., A. J. C. C. Jerseys, under U. S. Government control for health. No t. b. or abortion ever in herd, we are offering you your choice of a bull sired by the above bull, 30 months old. A full sister now on test produced in 169 days 271¼ pounds butter fat; the dam, Morrow's Select, 198788, 828 pounds butter. Oxford You'll Do Jr.'s half sisters have records up to 933 pounds butter. Or we will sell you a calf from the same dam, sired by Golden Cicero, daughters' records up to 783 pounds butter. These sire are fit to head any herd.
W. O. MORROW, Independence, Oregon.

## POULTRY

Write to the Editor.

JAMES DRYDEN,
Editorial Contributor.

Hatch early. March and April chicks are best. If you can not get them in March and April, hatch some war chickens in May.

Talking about organization, let us get busy and organize a chicken flock and they will work and scratch for the soldiers.

If you haven't an incubator, use the broody hen. Give her good care and she will do the job well. She hatches millions every year.

If you haven't an incubator or broody hen, buy day-old chicks, but don't send too far for them. There are chicks to be had from as good laying strains in the northwest as in any part of the Union.

The hatching season has begun. Now for a big chicken crop!

Get the best information you can on the subject and help win the war by raising some good meat chickens and some egg producers.

Talking about talking, raise a flock of pullets, and they will talk the lunch basket full quicker than some human talkfests. J. D.

## Small Chicks

### Methods of Feeding in England

Many will no doubt be interested in the method followed by Tom Barron of England in feeding small chicks. His method as outlined herein was under conditions of two or three years ago, and since then, owing to the shortage of grains and the restrictions put upon feeding good grain to chickens, this method has probably been modified. It will be noted that he feeds the chicks first at 24 hours of age. Many of our good poultrymen will take exception to feeding them so early after hatching. It is also noted that he feeds dry, hard cracked grain or chick feed for the first two weeks, and after that he begins with a moist feed. Some of our poultrymen will also question this, but it will show at least that there is more than one way of successfully raising chickens, and Barron, all will admit, has been a successful poultryman, especially those who have contended with him in the laying contests. His method follows:

"The first 24 hours the chicks are left entirely unfed. After that we give them a dry chickfeed, as bought at any of the corn dealers' shops—these are often advertised. This is given for the first fortnight only. The feed is put onto bits of bread or slate, until the chicks are used to picking. It is then thrown into the scratching litter. We make a point of keeping them nice and active—feeding often and a little at a time. We feed five times a day in the litter of chaff or peat moss, this being clean and useful for the purpose. When the chicks are a fortnight old, we cook them a rice pudding each day. We keep eight or nine cows and run the milk through a separator, and it is the separated milk with which the pudding is made. A bucketful of rice is put into a tin in the boiler in the morning, and this is steamed until it is quite swollen and the milk is practically dried up in the rice. The pudding is then taken out and mixed with biscuit dust, thirds, a few ground oats and a little bran—drying off well the meal until crumbly—never on the wet side. This is the soft feed given until the chicks are about five months old. They never have more than one soft feed per day, and that is given at dinner time. After this they are put on the adult stock ration." J. D.

## Lice on Setting Hen

The pestiferous insect makes the job of the setting hen a strenuous one. Many a good, well-meaning hen is found dead on the nest because she stayed at her post while the enemy suched her life blood out of her. That is the mite that sucks the blood of the hen and breeds in the nest and cracks of the wall. If the nest is thoroughly painted with a good sheep dip, or coal oil and crude carbolic acid, two to one, before the hen is set, there should be no trouble with the mites and the hen will enjoy her job. There is another insect, however, that does great damage, but that needs different treatment; it is the body louse. This insect stays on the hen all the time, but does not suck the blood like the mite. But the lice make the hen uncomfortable, and when the chicks hatch the lice kill them. When the hen is set she should be thoroughly dusted with a good insect powder. Use sodium fluorid if it can be secured. Give a second application two or three days before hatching time. If this is thoroughly done there will be little trouble with lice on the chicks. But watch the chicks for lice on the head. If found, rub a little lard on the head, or use sodium fluorid. J. D.

### Cheapest Horse Feed.

Dr. S. B. Nelson of the State College of Washington says that experiments seem to prove that alfalfa, oats and a little corn in proper proportions comprise the cheapest feed for horses in war service. Dr. Nelson says that it is a common fault with farmers to feed their horses too heavily though this, of course, does not mean that feeders should be skimpy.


**Tells why chicks die**

E. J. Reefer, the poultry expert, 466 Reefer Bldg., Kansas City, Mo., is giving away free a valuable book entitled, "White Diarrhoea and How to Cure it." This book contains scientific facts on white diarrhoea and tells how to prepare a simple home solution that cures this terrible disease over night and actually raises 98 per cent of every batch. All poultry raisers should certainly write Mr. Reefer for one of these valuable FREE books.




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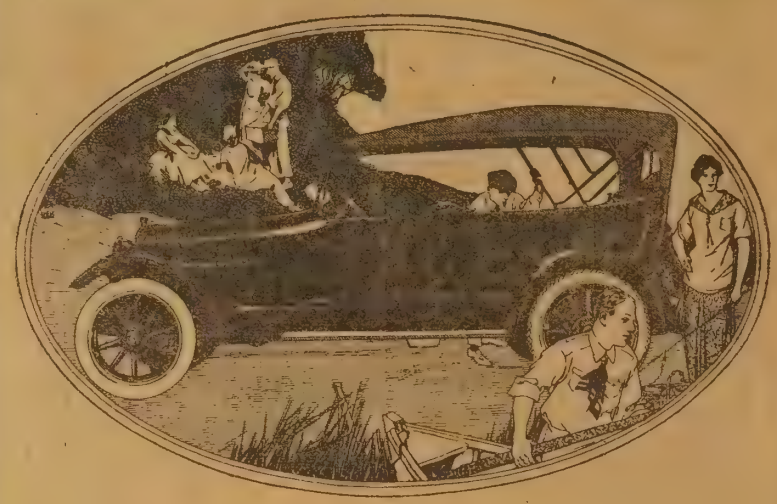
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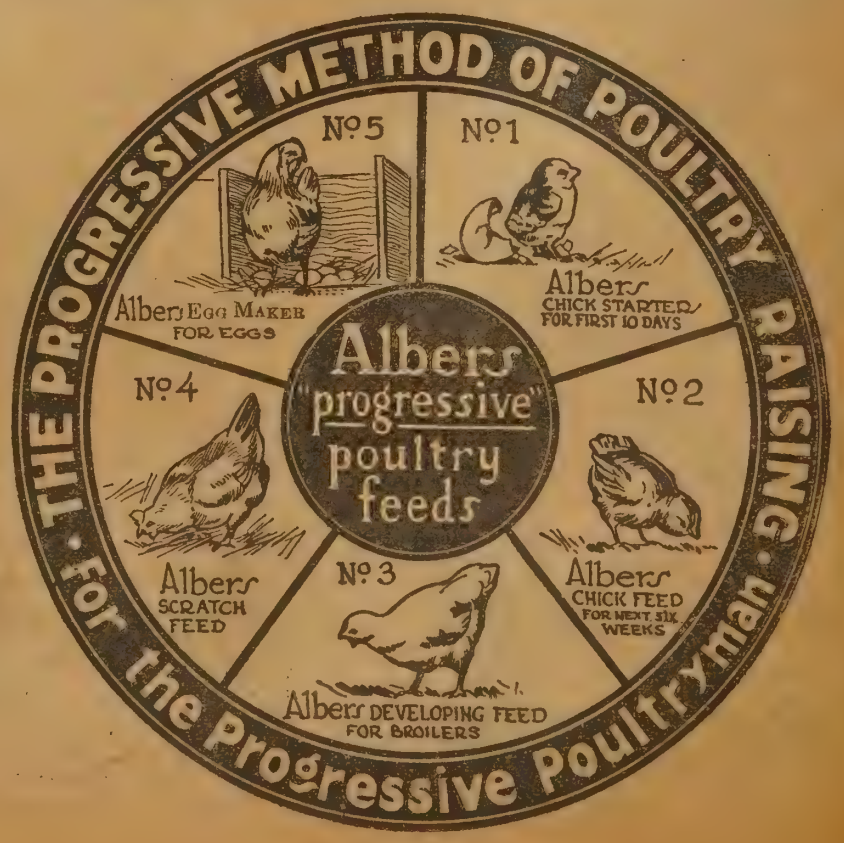
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GRANVILLE LOWTHER,
Editorial Contributor.

# Swat the Pest

## If You Don't, He Will Swat You

W. T. Ham, a representative of the United States department of agriculture, who has been participating in farmers' meetings in the northwest this spring, recommends a vigorous warfare on the common pests of the garden, orchard and potato. There are two kinds of insect pests, he points out, the kind that bite and eat and the kind that simply suck the juice from the plant on which they feed. Those that eat may be poisoned, the same as a squirrel may be poisoned. Those that suck must be suffocated, as it is difficult to get the poison in such form as to be taken by them. Those that eat can in some cases be repelled by spraying the plant on which they feed with a substance distasteful to them.

Owing to the high cost of paris green, Mr. Ham recommends the use of arsenate of lead in most cases for poisoning the biting insects. Most insects, he says, will be killed by a mixture of two pounds of arsenate of lead paste or one pound of arsenate of lead powder to 50 gallons of water, this to be used as a spray.

For suffocating the sucking insects it is necessary to use something in the form of an oil or a dust spray. Tobacco sprays are perhaps the most successful. The most common one in use is the black leaf 40, which Mr. Ham says should be mixed at the rate of four or five ounces to 40 or 50 gallons of water. It is well to mix with this also one or two pounds of soap.

For repelling insect pests, Bordeaux mixture is used successfully, Mr. Ham says. This spray is used largely to combat fungus diseases also. To combat the potato beetle, Mr. Ham recommends the use of arsenate of lead.

Many insects live over the winter usually in the soil to a depth of from 2 to 10 inches, and it is therefore advisable to plow in the fall, with a view to disturbing their winter beds and allowing them to die. Many insects live in old trash, such as cabbage stalks, corn stalks, potato vines, etc., and it is advisable, therefore, to keep the field clean of all such matter as this.

To combat the red spider, Mr. Ham recommends to spray with sulphur or nicotine in some form.

For wire worms he says to plow in the fall. In the spring, before planting, a great many of the wire worms that are in the ground can be killed if the following method is used: Plant potatoes throughout the area infested, marking the place where each potato is buried. After a day or so, or possibly a few days, go to each potato and inject a little carbon bisulphide into the ground. This will destroy all the worms in the immediate vicinity of the potato.

To eradicate cut worms take a mixture in the proportion of 30 pounds of bran, shorts, alfalfa meal, or something of this nature, to one pound of arsenate of lead or paris green. Scatter this mixture around where the cut worms feed. The same can be used successfully to combat grasshoppers.

The tuber moth, which has done great damage to potatoes in some sections, though the northwest is comparatively free of the pest, can be combated with reasonable success by fumigation with carbon bisulphide.

The corn and tomato worm will yield to the arsenical sprays lead arsenate dust in meal of some kind, at the rate of one pound of lead to 30 pounds of meal, being a satisfactory mixture.

The root maggots that wreak so much havoc with cabbage growers and radish growers are hard to combat. For the cabbage maggot use paper disks two or three inches wide when the plants are set out. Cut a slit in the disk and place it around the stem of the plant, so that it will lie flat on the ground. This will prevent the placing of the egg from which the root maggot comes. This applies to cauliflower, kale, brussels sprouts, and the like, as well as to the cabbage.

Mr. Ham says that the radish maggot is one for which no infallible remedy has been found.

In treating beans in the field, great care should be used not to burn the leaves with the arsenate of lead spray. The solution should be no stronger than one pound of paste to 50 gallons of water. If there is any possibility at all of pea or bean weevils, the seeds should be thoroughly fumigated before planting, with carbon bisulphide. This can be accomplished by the use of from one half to one pound of the carbon bisulphide to 100 cubic feet of space in which the seed is stored, the storeroom then being closed tightly for 36 or more hours.

## Plan Stock Company.

The Yakima Valley Fruitgrowers' association, in central Washington, after nine years' experience in attempting to succeed as a fruit-selling agency on a strictly cooperative basis, without capital stock, is now completing plans to become a stock corporation. The plan proposed contemplates exchanging of membership certificates valued at $100, for common stock with the voting privilege, and issuing preferred stock in exchange for sinking fund notes and equities in district warehouses and other physical property. As reorganized the association would not only handle the fruit of its members, but buy and sell fruit.

### Uses Fins, Not Wings.

The flying fish does not really fly, but raises itself from the water by means of its long fins. It can support itself in the air until they become dry, when it drops back into the sea.


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Dealers all around here carry it in 10c. pouches. A 3c. stamp will put it into his hands in any Training Camp or Seaport of the U. S. A. Even "over there" a 3c. stamp will take it to him. Your dealer will supply envelope and give you official directions how to address it.

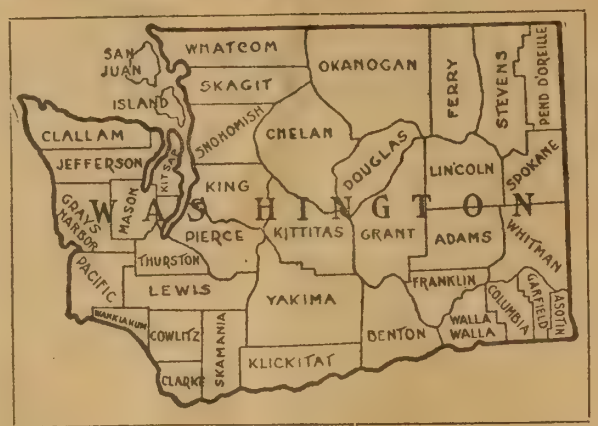
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# Sheep Will Shear Pound More

## Grant County Flocks Come Out of Winter in Excellent Condition and Without Having Eaten Their Value of Winter Feedstuffs




WILSON CREEK, Grant County, Wash., March 3.—The market conditions in this vicinity seem to be satisfactory, excepting beef, cattle and hides. Average price received for wheat was about $1.85 per bushel, according to quality. Oats from $50 per ton up, and is about $73 per ton now. Hay, $20 to $35 per ton, baled, dropped in the last few weeks to $20; hogs, on foot, $15 per 100 pounds; dressed, 18 cents per pound. Potatoes are $1.50 to $2.50 per 100 pounds, according to quality; eggs and butter about 5 cents under Spokane markets. The dealers selling groceries, produce, flour and cereals are very fair. Some of our produce is shipped out, what can not be consumed at home, such as wheat, oats, hay, hogs, chickens or other poultry, beef, hides, horses, mules, eggs, butter or cream. It is almost impossible to say what it costs to produce 100 pounds of pork, as prices of feed vary and the almost impossibility of getting shorts, which is the cheapest feed that we can feed hogs, especially stock hogs. As spring approaches the weather conditions, as far as moisture is concerner, are very favorable. Very little winter wheat was sown last fall, but what was sown is up and looking fine. There will be a very large acreage sown to spring wheat, so wheat seems to be the staple crop. Sheep have come out of the winter in first class condition without feeding any hay, and will shear about one pound of wool more to the head than last year. J. P. SCHROEDER.

### Ensilage Claims Interest.

SOUTH BEND, Pacific County, Wash., March 9.—This is the coldest winter month that we have had this year. Very little planting has been done. As this is not a grain raising section our farmers do not require the machinery that other sections do. The larger farms have lots of the acreage in pasture land; diked tideland is the best pasture land. Gradually there will be more power and machinery added to the farms to supply the shortage in labor. Silos and ensilage have claimed the attention here. One farmer experimented with different kinds of ensilage and found that his cows did the best on corn ensilage. Quite a few animals have been put upon the market because the cost of feeding is so high that stockmen have watched their herds for "boarders" very closely this winter. There will be an increase in poultry this spring if "sitting hens" are an indication. One of our Lebam residents is going to experiment with sugar beets. His object will be to supply his own sugar or at least syrup, for he feels confident that he can raise the beets and get the product to the syrup stage.

There are more questions facing us than ever before. Here are a few: How are we going to supply shortage in labor? How can we establish a good market price for eggs? How can we make sugar from beets? How can we raise the best ensilage?

MRS. WINNIFRED BUCKINGHAM.

### Fall Grain Looks Good.

BOSSBURG, Stevens County, Wash., March 3.—About all the farm produce has been sold except a little hay and some potatoes. Hay is now selling at $30 per ton for both timothy and alfalfa, which has been shipped out to the north. We believe our local merchant gives all a square deal as he sells eggs and butter and other farm products for the same price in cash that he pays the farmer in trade. Our local market is small and most of the farm products are shipped to other markets by the farmer. We have had but little pork to sell this year, as most farmers kept fewer hogs than usual on account of the high price of feed. But at the present prices of 15 to 16 cents for hogs there is some profit to the man who has some pasture and is careful how he handles them.

The snow is beginning to go and what grain was sown last fall is looking fine, but there was less seeded than usual. The land is in fine condition for spring crops, as last fall was very dry and frost came early, killing out most of the weeds. We have had a good snow and rainfall the past winter and but little frost in the ground, so we have plenty of moisture and every acre will be put in this spring. We believe there will be more wheat, oats and barley and less potatoes and beans, and very little land will be seeded to alfalfa and other forage crops. W. W. PALMER.

### Push Orchard Work.

OMAK, Okanogan County, Wash., Feb. 27.—Apples are the main crop here. There is very little difference in the market conditions here and elsewhere. The general market conditions would apply to this section. Apples from this district are sold in east and middle west, hence the dealer buys very little from the farmer. As spring approaches crop conditions seem to be about the best that could be expected at this time. There being a light fall of snow in the mountains there is some alarm that there will not be a sufficient amount of water for irrigation purposes, unless there should be a heavy rainfall in the spring or early summer. Pruning is being pushed as fast as possible, and most of the orchardists will be through in time to take up their regular spring work. A great many farmers have put up a large quantity of ice for the coming summer; also some hay is being baled. J. O. WOODS.

### Snow Still on Ground.

METHOW, Okanogan County, Wash., Feb. 27.—The average price received by the farmer for his product here is as follows: Beef, on foot, 8 to 9 cents per pound; pork, on foot, 13 1-2 to 14 cents; dressed, 16 1-2 cents; wheat, $1.94 per bushel; oats, 8 cents per pound; eggs, 40 cents per dozen; butter, 45 cents per pound. He pays $2.85 for 50-pound sack of flour, 75 cents for a nine-pound sack of oatmeal, $10 for a sack of sugar, 100 pounds; beans, 10 cents per pound; eggs and butter are generally traded out at the store and sold at the same price, while grain of all kinds are sold at a 25 per cent profit. Our community markets mostly at distant points. Ninety per cent of the cream is shipped out, the auto stage taking the full cans and returning the empty ones for 25 cents. Nearly all the beef and hogs are shipped to Seattle and Spokane markets. I think it costs about $15 or $16 to produce 100 pounds of pork. The farmers are not making any more profit than they did when pork was $10 per hundredweight, owing to the high price of everything. While the land is still covered with snow, conditions are fairly good for a crop, but it is all owing to the amount of rain if we have a big crop or not.

CHARLES GRANT.

### Grass Green All Winter.

STEVENSON, Skamania County, Wash., March 4.—The season has been very fine and unusually mild, which has been a great boon to the stock, as nearly all forage is shipped in and the grass has been green all winter, thereby enabling us to get along with much less feed than usual. Market conditions continue about the same, with the exception of pork, which is higher. Potatoes are lower—are now $1 per sack; eggs, from 40 to 50 cents per dozen; hogs are $16.85 to $17; cattle, $10.35 to $11. Apples are from $1 to $2 per box; lard, 30 cents a pound, and cordwood $5 to $5.50 a cord. Our market is strictly local. It costs about $12 per 100 pounds to produce pork. General crop conditions are excellent for what grain is grown in this locality, but very little fall-sown grain is grown here. W. T. JACKSON.

### Anxious for Spring.

RITZVILLE, Adams County, Wash., March 5.—Spring is rather slow in coming, and it keeps the farmer from working in the soil. The market conditions on products sold by the farmer have changed very little, but nearly everything else is going up in price, including machinery. The market on potatoes, fruits and the like is purely local, but the grain is mostly shipped to distant points. Under present conditions it will cost pretty close to $20 to raise 100 pounds of pork, the same being true of cattle. It costs as much or more to raise them as we can get for them on the market. The frosty weather increases the board bill on stock. JACOB HARDER.

### His Favorite Dish.

"No wonder women go into politics," ventured Mistress Malloch; "men are such brutes and devoid of sentiment. The other night I asked Will, in my sweetest way, what his favorite dish was, and he said, 'The ash-tray.'"


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VEGETABLE SPRAY
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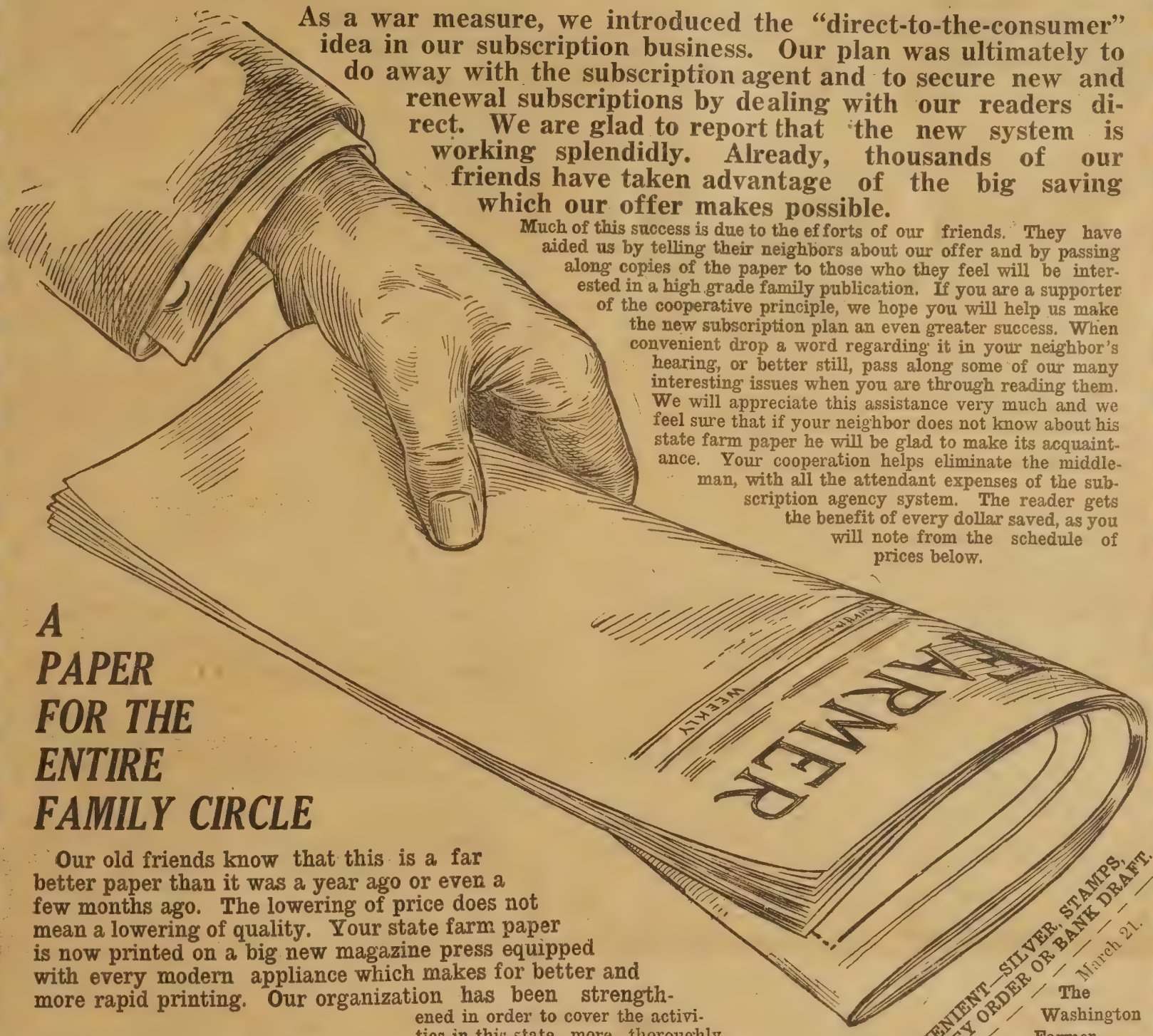
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WESTERN farmers, always on the watch for improved equipment to save time and money in getting the crops off the fields, are paying a lot of attention to **Deering Harvester-Threshers** these days. Many of them have bought and are using these efficient machines. Their success and enthusiasm means a big advance in rapid harvesting this fall.
Modern grain handling means harvesting and threshing in one operation, turning the threshing expense into clear profit, doing away with the big threshing bill and burden, saving time and long-drawn-out labor.
The **Deering Harvester-Thresher** is a Western necessity. Get acquainted with it. The **Deering** cuts a 9-foot swath, harvests 15 to 18 acres per day, and threshes clean as any thresher. Requires 8, 10, or 12 horses, and one or two men, depending on attachment used. In most cases, an International kerosene tractor can be used to best advantage.
The **Deering** has proved that it is designed and built right in every particular—strong and lasting, simple, of light draft. It can be used as a stationary thresher, too, by adding cylinder and beater pulleys, which are supplied at extra cost. A 10-h. p. engine does the work. Capacity 30 to 50 bushels of wheat per hour. Write us for an interesting folder on the **Deering Harvester-Thresher.**
International Harvester Company of America
(Incorporated)
Billings, Mont. Crawford, Neb. Denver, Colo. Helena, Mont.
Los Angeles, Cal. Portland, Ore. Salt Lake City, Utah
San Francisco, Cal. Spokane, Wash.

# LET SOMEONE ELSE ENJOY IT

*SCORES OF OUR FRIENDS ACTED ON OUR SUGGESTION TO PASS THEIR PAPER ON TO A NEIGHBOR WHEN THROUGH READING IT. WE TRUST THAT MANY MORE WILL DO THE SAME WITH THIS ISSUE; AND CALL ATTENTION TO OUR MONEY-SAVING OFFER*




**As a war measure, we introduced the "direct-to-the-consumer" idea in our subscription business. Our plan was ultimately to do away with the subscription agent and to secure new and renewal subscriptions by dealing with our readers direct. We are glad to report that the new system is working splendidly. Already, thousands of our friends have taken advantage of the big saving which our offer makes possible.**

Much of this success is due to the efforts of our friends. They have aided us by telling their neighbors about our offer and by passing along copies of the paper to those who they feel will be interested in a high grade family publication. If you are a supporter of the cooperative principle, we hope you will help us make the new subscription plan an even greater success. When convenient drop a word regarding it in your neighbor's hearing, or better still, pass along some of our many interesting issues when you are through reading them. We will appreciate this assistance very much and we feel sure that if your neighbor does not know about his state farm paper he will be glad to make its acquaintance. Your cooperation helps eliminate the middleman, with all the attendant expenses of the subscription agency system. The reader gets the benefit of every dollar saved, as you will note from the schedule of prices below.

## *A PAPER FOR THE ENTIRE FAMILY CIRCLE*

Our old friends know that this is a far better paper than it was a year ago or even a few months ago. The lowering of price does not mean a lowering of quality. Your state farm paper is now printed on a big new magazine press equipped with every modern appliance which makes for better and more rapid printing. Our organization has been strengthened in order to cover the activities in this state more thoroughly. The most popular type of fiction has been secured for our pages. The household department has been made more interesting and helpful. In fact there have been improvements all along the line. Through our cooperative plan you actually get this superior paper for a mere fraction of what it has cost in the past.

## A Real Saving

*Following Rates Now in Effect for Subscriptions to The Washington Farmer*

**25c** *FOR ONE YEAR*

**50c** *FOR THREE YEARS*

**$1** *FOR FIVE YEARS*

## *Act Now!*



YOUR REMITTANCE MAY BE IN ANY FORM MOST CONVENIENT—SILVER, STAMPS, PERSONAL CHECK, POSTAL MONEY ORDER, EXPRESS MONEY ORDER OR BANK DRAFT.

March 21.

The Washington Farmer,
Review Bldg.,
Spokane, Wash.

I desire to take advantage of your plan to deal direct with your readers in securing and renewing subscriptions, thus saving the middleman's cost and releasing men for productive labor.

Enclosed is $..... for ..... years subscription. In Canada add 1 cent per copy for extra postage.

If you are already paid in advance your subscription will be set forward from the date to which you are paid.

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TOWN .....R.F.D.....

STATE .....

## It Is a Patriotic Duty to Prevent Loss of Cattle.



PROTECT THEM FROM BLACKLEG

by using

# Blacklegoids

Double and Single Vaccinations in pill form.

ACCURATE. EASY TO USE. EFFICIENT.

## GERM-FREE BLACKLEG VACCINE

A Blackleg Filtrate for the Prevention of Blackleg.

## Anti-Blackleg Serum

For the Preventive and Curative Treatment of Blackleg.

WRITE FOR FREE BOOKLETS ON BLACKLEG

Animal Industry Department of

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# CUTTER'S Blackleg Filtrate and Blackleg Tissue Aggressin

*The New, Safe and Efficient Agents for Protecting Calves from Blackleg.*

**Cutter's Blackleg Filtrate positively protects** against Blackleg.

**Cutter's Blackleg Aggressin,** made directly from animal tissues, **affords even greater protection.**

**Neither the Filtrate nor the Aggressin can possibly produce Blackleg** in even the most susceptible animals.

These products will probably never supplant Blackleg Vaccine. Still, under some conditions, they have advantages that should be known to every stockraiser.

**Write us for full information regarding them.**

**THE CUTTER LABORATORY, Berkeley, California.**

*"The Laboratory that knows how"*



## 510 Pounds of Butter

In 292 days at 4 years 6 months, is the R. of M. record of the dam of a bull calf dropped July 28, 1917. Sire's dams R. of M. record 657 lbs., good individual. Only $75 if taken soon. Others at bargain prices.

**R. B. SEELY, Rt. 5, Sherwood, Ore.**

Shipping station, Wilsonville, Ore.

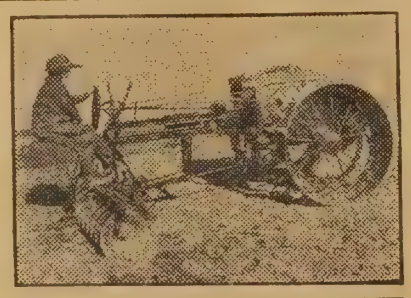

**In writing advertisers, be sure to say that you saw their advertisement in this paper.**

# Tractors Making Good

It is doubtful whether any piece of present-day farm equipment is as universally under discussion as the tractor. As a practical solution to the "greater production per man" that confronts a world at war, the tractor is unquestionaly making good. It has taken its place as one of the important factors in present-day farming.

What the tractor is doing on farms in the Pacific northwest is of especial interest. So for some weeks past we have been interviewing and writing to scores of those who are tractor farming in this section of the country. Some have been using their tractors for several seasons; some only a single season; but we have not yet heard from a tractor owner who is not well pleased with his machine.

It is quite possible that some individual mistakes have been made in the selection of a tractor. This could hardly be otherwise with so many types of tractors now being offered. It is also certain that some who are satisfied now will find cause for dissatisfaction



with their machines later on. But it must be remembered that the tractor is in a process of evolution just as the motor car has been for a good many years.

On his 400-acre farm near Grangeville, Idaho, C. C. Sherwin has been using a tractor for two years. "My machine pulls three 14-inch bottoms," he tells us, "and I also use it for pulling a combine, for roadmaking, for sawing wood, for stretching fence, for ditching and for grinding feed. I have also used it for moving buildings.

"My tractor is a 'one-man rig,' burns distillate and has made it possible to dispense with eight head of horses. It has solved the hired-help problem to a great extent, as it can run long hours and requires but one man for plowing where formerly two were required. I find the tractor cheaper in every way than farming with horses, and we can get our work done in season, besides being able to plow both deep and fast—a thing impossible with horses. We plowed 100 acres last fall at a cost of $65."

L. C. Bishop of Greenacres, Wash., used a tractor on his 600-acre farm last season. "I have a 20-35 machine," says Mr. Bishop, "which I operate on distillate. We draw six 12-inch plows and I do a variety of other things with it besides. One man is all that is required to run it and it has enabled me to dispose of 15 head of horses. With one man my tractor does what it would require three men to do with horses."

Further comparing horse and tractor, Mr. Bishop says: "A good tractor has every advantage over the horse. It saves on hired help, works untiringly and it does not have to take into account heat or drouth."

However, he sounds this note of warning: "The farmer who anticipates the purchase of a tractor should investigate the various types of machines and weigh thoroughly the requirements of his farm and the ability of the makes and models he inspects, to do his work. Then get a tractor with more rather than less power than he feels he actually needs and know, or have some member of his family know, personally, how to operate it."

## Would Fix Labor Wage.

For the purpose of agreeing upon a farm wage scale, if possible, farmers met at Connell recently at the call of the Franklin County Agricultural Preparedness league and agreed that $60 a month, with board and lodging, was an equitable wags to be paid up to harvest time. An effort is being made to have all the farmers of Franklin county agree to this wage and pledge themselves not to compete with each other for farm hands. A number of employment bureaus were established, among them being the following, the men in charge being as indicated: Kahlotus, Logan Perry; Mesa, P. M. Edes; Eltopia, W. T. Anderson; Connell, Otto Ulrich; Pasco, A. F. Wehe.

### Much Demand for Dogwood.

Shuttle factories and other manufacturing plants use more than 7,500,000 feet of dogwood annually in this country.


# LOUDEN





WM. LOUDEN Barn Specialist

**The LOUDEN Architectural Department**

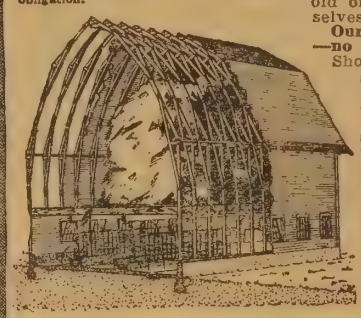
Is the greatest organization of barn specialists in America. At your service free of charge for suggestions and preliminary sketches in which your own ideas and special needs are carried out in the most economical manner. Write us what kind of barn you have in mind, number and kind of stock you wish to house.



**Get This Book**

**LOUDEN Barn Plans**

Not a catalog, but a 112-page book devoted entirely to barn building problems. Shows 74 barns of all styles and sizes, and other farm buildings, with estimated cost of each. A post card brings it to you. No charge—no obligation.



## Helps to Solve Your War-time Labor Problem

American farmers and dairymen are now confronted with the most difficult problem ever presented to them. They are striving to meet the nation's urgent demand for increased production, in face of the fact that thousands of young patriots have been withdrawn from the farms to fight the nation's battles. In this great emergency

## LOUDEN Labor Saving Barn Equipments Come to Your Rescue

They cut overhead expense, do away with a large part of the barn work and make what is left of it easier—enable a boy to do a man's work, or one man to perform the tasks of two or three men.

Easily installed in any size or style of barn, old or new. Cost little—always pay for themselves in a short time.

**Our new 224-page illustrated catalog postpaid—no charge—no obligation.**

Shows the complete Louden line, including stalls and stanchions, feed and litter carriers, animal pens of all kinds, horse barn equipment, hay unloading tools, cupolas, ventilators, automatic water bowls, barn and garage door hangers—"everything for the barn."

There is a Louden distributor near you. Call on or address

**Polson Implement Co., Seattle, Wash.**
**Spokane Seed Co., Spokane, Wash.**
**Wallace-Corcoran & Co., Portland, Ore.**

## THE LOUDEN MACHINERY CO.

3100 Court St., Fairfield, Iowa.



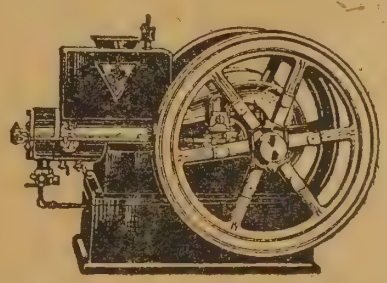
# 1½ to 28 H.P. Alpha Engines

For Gasoline Distillate or Kerosene

THE REAL VALUE OF AN ENGINE IS MEASURED BY THE SERVICE IT GIVES

THE low cost of operation, the freedom from breakdowns and repair expense combined with the years of service an **Alpha Engine** will give, make it the most economical engine wherever dependable power is wanted.

The finest materials are used—perfect machine work and perfect balance of Alpha Engines insure a smooth flow of economical power under light, heavy or varying loads.



**EQUIPPED WITH HIGH-GRADE BUILT-IN MAGNETO**

No Batteries Needed.

**START EASILY ON MAGNETO WITHOUT CRANKING**

Hopper Cooled or Closed Jacket

Stationary or Portable

**SEND FOR SPECIAL ENGINE CATALOG**

and ask for Bulletin 106, "How to Determine the Power Required for Pumping," mailed free.

**Warehouse Stocks Carried at Seattle and Portland**

## DE LAVAL DAIRY SUPPLY CO.

61 BEALE ST., SAN FRANCISCO, CAL.



## Clydesdale Headquarters

Stallions and mares, from yearlings up; sired by great horse Massasoit, 13530; grandson of the breed's greatest sire, Baron's Pride, 9122, making them the best bred horses in Oregon. The number of prizes won have been equaled by no firm in this country for the last ten years.

**JOHN PAINTER, Salem, Ore.**



## Just What You Want

**may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.**

# The Wheat Producer Pays the Bill

## *Should Law of Supply and Demand Be Allowed to Govern?*

When he was in Spokane recently J. W. Shorthill, a director of the federal grain-buying corporation, and also a member of the food administration's price-fixing committee, said that—

"If the government had not taken over the control of the wheat market the people in cities would today be breaking in the doors of the stores and taking over the control of the flour market themselves."

By implication, at least, that is equivalent to saying that the government, to appease the demand of city populations for cheaper bread, deemed it necessary to repeal the laws of supply and demand and make the American wheat growers pay for it.

Undoubtedly the government's action has given the consumers cheaper bread than they would have had if prices had been left to the law of supply and demand. But whether that action will bring the increased production that is wanted is a question that can be better answered after the next harvest.

Many thoughtful and well informed observers believe that it was an economic mistake. They point out that wheat is wanted above all other products and contend that it is illogical to cut down wheat prices while leaving the prices of other products to the law of supply and demand. The effect, they think, will be just the opposite of what is wanted.

In a recent address before the American Farm Management association G. F. Warren discussed this question with considerable insight. In part he said:

"Patriotism helps a farmer to raise crops, but he needs other things also. Too much dependence is being placed on patriotism, exhortation and scolding," he said. "Farmers are responding to the patriotic appeal as far as they can with the family labor, but in order to hold hired labor they must be able to pay wages that will compete with the factories that make talking machines, moving pictures, candy, gum and beer.

"One-third of the farmers are tenants and have little to give their country except children and labor. They can not sell crops grown with hired labor for less than they cost, because they have no capital to lose. In 1910 only 36 per cent of the farmers owned all the land that they operated and were free from mortgage.

"One of the important problems of the war is whether to attempt to arbitrarily keep down prices and wages in spite of an inflated currency, or let the cheaper dollar do part service by letting prices and wages rise. Thus far the public agitation has been in the direction of price control. The public seems to have decided to repeal the law of supply and demand.

"Unfortunately, the repeal applies to supply as well as to demand. Some persons believe that since we are at war, the law of supply and demand fails to operate. It would be as logical to say that a heavy weight repeals the law of gravitation. We should not make the mistake of assuming that man can repeal either law.

"When the consumer is in power the goose that lays the golden egg is in danger.

"The ordinary consumer thinks of price control as a chance to have more. It makes a shortage look like plenty. For ages cheapness and abundance have been synonymous. The public has not worried itself about which was the cause and which effect. It has, therefore, been all too easy to fall into the error of assuming that control of price will make food cheap, and therefore abundant. When asked why low prices will be a benefit, nearly every one replies, 'so that we can have more to eat.' To a very considerable extent the agitation for low prices is a protest against having to economize.

"Many of the food plans advanced are copies of what was done in Europe—plans that resulted in a food shortage there. Europe was justified in its procedure, since it could call on America for food. If we pattern our work after Europe we, too, will as surely have a food shortage, but where will we go to get food? If we keep up our production we will have to study America rather than Europe.

"Not only do low prices tend to reduce production but they tend to reduce the present supply. If prices of corn and feed are fixed the horses will be fed more liberally and there will be less feed for other classes of live stock.

"We are eating our present wheat crop too fast. Had prices been allowed to take their own course, the farmer would be getting much more for his wheat, and the higher price of flour would have limited consumption. The high price of wheat would have caused a very large planting. Having upset the natural course of events, two more regulations were necessary, one to encourage planting and one to prevent consumption.

"To encourage planting, a minimum price was promised to the farmers. It is probable that this resulted in planting a smaller area than would have been planted had no regulation been attempted. To discourage the large consumption that naturally follows a low price, we are depending on voluntary action by the consumer. Much has been accomplished, but it is very doubtful whether this alone will lead us to save enough wheat for next summer's use.

"It is difficult to convince the public of the necessity of saving when prices do not indicate such a necessity. The fixing of the price of wheat at less than it was worth made it cheaper than corn. This not only tended to increase human consumption, but resulted in having more than the usual amount of wheat fed to live stock.

"Prices fixed on the average cost are below the cost for about half of the farms. Such prices will decrease production. If greater production is to be obtained, the marginal land must be used and the marginal last bushel obtained at average cost but at very high cost.

"There is no solution of the food problem except more food, and the only way to get more food is either to get out of the way and let it be produced, or else do the things that will cause it to be produced. We can not get it by wishing, or by editorials, or by reducing prices."

To return to Mr. Shorthill's observations, we find him reporting conditions "thoroughly encouraging." He is confident the wheat crop will be increased. The Farmer cordially hopes that his prediction will be verified, but can not entirely close its eyes against contrary expectations voiced by others.

Investigation by the New York Tribune among country bankers and agricultural experts indicates a shortage of farm labor this year of from 20 per cent in the central and southern states to 40 per cent in the western states, this shortage being attributable to the draft and higher wages by war industries. Farmers are afraid to plant all they can because of a probable shortage of harvest hands. In some sections farm wages have advanced to $75 and $100 a month, with board and other inducements, while the average for the country is $48 a month against $28 normally.

The Washington correspondent of the New York Journal of Commerce reports that notwithstanding the opti-

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Put a little cream and some bread crumbs into Hamburger steak and it will be deliciously juicy.

# Will Go Over the Top in War Savings

The people of Washington are realizing the double value of the war stamp, first to Uncle Sam and second to themselves, and as a result they are going to go over the top in the matter of stamp purchases.

Probably no other plan in the nation's history has afforded the people such perfect opportunity to make safe investment of small capital. Through the thrift stamp plan investment of even 25 cents can be made. Through the war savings stamp plan anything from $4.14 to $1000 can be made, and a stamp of this kind draws interest at 4 per cent compounded quarterly. Not only are these advantages true, but if a person later needs to have his money back he does not have to wait until the date of maturity of the stamps, which are nothing more or less than "baby bonds," but he can get his money practically upon demand.

Any one desiring to make use of this paper in securing these stamps can do so by enclosing the amount required and mailing with the accompanying coupon.

## Clip This Convenient Order Blank

Address all communications concerning thrift or war savings stamps to the Washington Farmer, War Savings Department, Room 26, Review Building, Spokane, Wash.

Remittances may be in any form desired, including personal check.

---

The Washington Farmer, War Savings Department, Room 26, Review Building, Spokane, Wash.

Gentlemen: I wish to invest in ..... U. S. government thrift stamps at 25 cents each.
(number desired.)

I wish to invest in ..... U. S. war savings stamps at $4.14 each.
(number desired.) March figure.

Amount enclosed $.....

Full Name .....

Town ..... State ..... ...

R. F. D. No. .....

I have already bought.....Stamps and have a.....
(kind of stamp.) (card or certificate.)


NEW WORLD LIFE

**Nearly Two Million Dollars**

of absolutely *New* wealth has been brought to the northwest by this company.

*A New World Life* policy will assure you the utmost in *Protection;* besides the satisfaction of patronizing a company that helps in a big way to develop this district.

**New World Life**
Spokane.

JOHN J. CADIGAN, Prest.

*A splendid opening for a local representative in your locality.*


The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.




**Be "U. S. Protected" When Chilling Rains Pelt**

Sloshing around in pneumonia-breeding weather, your feet need the rubber footwear that will keep them warm, dry and comfortable and keep you healthy.

U. S. Rubber Footwear meets the situation—"U. S. Protection" is the all 'round comfort, long wear and economy which you are sure of in every pair of "U. S." Protection for your feet, your health and your pocketbook. Made for heavy service, double duty, reinforced where the wear is greatest, they are bound to give utmost satisfaction.

There are styles suited to every outdoor worker. Every pair carries the "U. S. Seal," the trade mark of the largest rubber manufacturer in the world.

For sale everywhere. Your dealer has the style of U. S. Rubber Footwear to meet your needs, or can get it for you.

*This seal is your protection. Look for it.*

**United States Rubber Company**
New York

U. S. Rubber Footwear

# FLORA FLIRT TURNS THE WRONG HEAD



Feeling fine as fine could be,
Flora Flirt went to a tea.



With downcast eyes and air serene,
Flora entered like a queen.



Greeting her hostess as she entered,
On a gentleman her glances centered.



She smiles and flirts, until she feels
She has him following at her heels,




To turn her head, Flo isn't able
Until she bumps into a table!



Over it goes. With misery,
Flora shrieks—she's drenched with tea!

*The Moral*—Now, dear girl, don't turn your head,
But turn the gentleman's instead.

# THE MILLION-DOLLAR KID BUYS AN EASTER PRESENT




# PUP MUST HAVE NINE LIVES OR MORE



# Russia Ratifies Peace

## *Germany's Shameful Terms Accepted*

The so-called all-Russian congress ratified the terms of peace recently dictated to the Russian delegates by the kaiser's military power. Dissension and revolt characterized the consideration of the resolution of ratification, and when the vote was taken, showing a large majority for the acceptance of the terms, the opposition were strong in their declarations that Russia would not for long submit to the oppression of Germany, even though she did at this time, by force of circumstances, bow to the disgraceful peace.

### Get Ships From Holland

The seizure of Dutch vessels totaling approximately 1,000,000 tons shipping capacity now in the harbors of the United States and England has been made by those two countries in behalf of the allies. The taking over of the vessels is not in the form of an act against Holland, but is done in accordance with provisions of international law, just compensation to be made for them by the allied governments.

### I. W. W. Start Riot.

The first notable activity of the I. W. W. in the northwest this year was that which took place at St. Maries, Idaho, last week when some 200 members took exception to the removal of one of their crowd to Coeur d'Alene for trial upon charges previously preferred against him. They attacked the sheriff, seriously beating him. As a result military forces have been put in charge at St. Maries. Governor Alexander of the state of Idaho has issued a statement promising drastic action against the I. W. W. if they disturb the peaceful operation of the industries of the state.

### Another Peace Offer.

English officials will not openly confirm, but neither will they deny rumors that Germany has made a peace offer to England. They do, however, state emphatically that England will consider no peace offers until all the allies can make peace together on terms dictated by humanity and not by German militarism.

### Build Concrete Ships.

A concrete ship was launched at a Pacific coast port of the United States last week and may mark the beginning of a class of shipbuilding that will turn the tides of war more and more in favor of the allies. The government has authorized the construction of four concrete ships as an experiment and orders are given for the one just launched to be given a thorough trial at once. One serious question is the effect of the salt water on the concrete and the iron used in construction.

### Sending Too Many Gifts.

The postoffice department has announced that the packages being sent to the soldiers abroad are becoming so numerous that curtailment of the parcel post privileges will result unless the people use better judgment in sending gifts. Many of the things that are being sent are obtainable from the canteen department of the American army in France at prices that do not warrant their being sent by mail.

### Preparing Air Protection.

The war department has announced that there will be sufficient airplanes of American manufacture in France by July to guarantee protection to the American forces.

### Germany Starves Neutrals.

Evidence is in the hands of the allied governments tending to show that Germany has been and still is using her submarines in the destruction of neutral shipping, with a view to starving the northern neutrals, such as Sweden and Norway, into a state of dependence upon the war lords of the Teutonic nations.

### No Statement From Japan.

Exactly what Japan's plans are relative to the entrance into Siberia for the purpose of protecting herself and also the interests of the allies has not been officially learned at this writing. That she will move troops to prevent the encroachment of Germany upon the supplies in Siberia is apparently decided upon, though to what extent her action may involve battling with German and Austrian forces, if at all, is problematical. The result of the ratification last week of the German peace terms by Russia apparently places squarely before Japan the duty of being in instant readiness to defend allied interests in the east.

### American Forces Active.

Reports of raiding activities on the part of the Americans along the French front come daily, with evidence that the Americans are proving equal to the tasks before them. The raiding activities are considered largely for the purpose of securing information concerning German positions and defenses.

### Charges Reckless Spending.

Senator Reed of Missouri, a democrat, is charging before the senate that the national food administration is spending its money recklessly. He said that about $5,500,000 had been appropriated for the food administration, and that more than $4,000,000 of it had already been spent or arranged for spending. Senator Hitchcock of Nebraska, also a democrat, defended the administration, pointing out the stupendous accomplishments of Administrator Hoover and his force of workers.

### Pass Deficiency Bill.

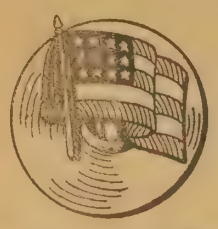
Both the senate and the house have passed the deficiency appropriation bill, totaling $1,800,000,000. It is now being considered by a conference of both houses for the purpose of agreeing upon amendments. One feature of it is an appropriation of $10,000,000 for the purchase of nitrate of soda for fertilizer purposes. As fertilizer purchased with this money is sold, the money received for it will be reinvested in fertilizer, the fund being a revolving one.

### Will Save Daylight.

Congress has passed the bill requiring that all clocks of the country be turned one hour ahead on March 31 and remain the one hour fast until September 29. The idea is to save daylight, which in turn will save the country hundreds of thousands of dollars that would otherwise be expended for lights and fuel to make them. The changes of the clocks will take place in both instances on Sunday, thereby eliminating much confusion that might otherwise result. Work will continue exactly as now so far as the face of the clock is concerned, though in fact it will begin and end an hour earlier than the clock shows.


**FREE!**

**Coat Lapel Button**



Just like illustration, only smaller. The perfect size for your coat lapel. A dandy American flag in red, white, blue and gold.

One of these flags will be given free to any one sending two one-year subscription orders to The Washington Farmer.

Your own subscription counts for one.

Send 50 cents and two subscriptions to

The Washington Farmer
Review Bdg.
Spokane, Wash.


## Ask Questions

### Information Bureau Will Answer

This paper maintains its information bureau at the national capital, Washington, D. C., for no other purpose than to serve its readers, and it is glad to receive report from Washington that they are availing themselves in large numbers of the opportunities offered.

Just now there is a matter of special importance that the bureau can do for you—send you its war garden book. It is of special value in helping to plan the kind of garden most appropriate for these war times when maximum food production is so essential. This book, the knitting book, the "soldiers of the sea" book or the cook book can be had by addressing the bureau, enclosing a 2-cent stamp and saying which one you want. Two cents will bring any one of them.

And remember, any question that you wish answered, fire it at the information bureau. If it is a reasonable question it will be answered by a personal letter as nearly by return mail as possible.

Address your inquiries direct to The Washington Farmer Information Bureau, Washington, D. C.

# Plans State Production Schedule

## *State College Works Out System for Producers of Food*

With a view to systematizing the effort of the farmers of this state in the production of increased food crops this year, the extension department of the state college has prepared a bulletin of advice on the various staple crops suitable for this territory. The bulletin is prepared by Professor George Severance, vice dean of the college of agriculture, and W. A. Linklater, superintendent of the western Washington experiment station, aided by other members of the college and station faculties.

The plan as outlined covers such subjects as better soil tillage, better seed, the utilization of fertilizers, production of vegetables and fruits, the control of pests and plant diseases, the production of pork, the production of poultry, the meeting of the labor situation, the growing of wheat, the solution of dairy problems, the irrigation of crops and a large number of other allied agricultural subjects.

The bulletin issued on the subject is prepared with the special object in view of assisting county agricultural agents, club leaders, farm organizations and the like to carry to the individual farmers of the districts specific and detailed advice on the phases of agriculture particularly applicable to them.

In addition the college is furnishing to the members of its staff throughout the states and to individual farmers and organizations that desire help a time table covering farm operations for the spring and early summer. The subject matter of the time table includes all principal farm and garden crops of Washington. Special prominence is given to wheat, corn, peas and beans, with advice as to the selection of seed, the preparation of seed beds and the choice of soil in which the planting of these crops is advisable.

One prominent idea on the part of the college authorities in preparing these advices is to prevent losses on the part of farmers through the planting of the wrong crop in a given locality or in a given field, it frequently being the case that failure is due to the lack of some particular essential in the soil or climate for the crop planted, while some other crop probably would yield satisfactorily in that particular location.

The general propaganda covers not only the production of foods, but their marketing and conservation.

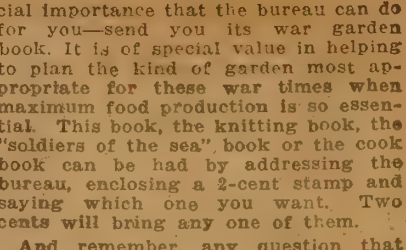
One of the important things emphasized by the writers of the bulletin is the necessity of sticking to those crops during the war time which have been demonstrated to be successful. Experimentation with new crops or crops not previously tried out in a given locality offers too much risk for a time such as the present.

The movement is designed to stimulate the production of the staple crops, both those for exportation to the allied armies and those that will enable the people of this country to conserve those that can be exported. Emphasis is placed on the possibilities of vegetable and poultry production as a means to aid in this conservation of wheat stuffs and the classes of meat that can readily be exported for use by the armies.

### Will Sell at Ontario.

Joe Turner of Meyers Falls, Wash., sales manager for the Northwest Shorthorn Breeders' sale at Ontario next month, announces that there will be from 60 to 80 head of purebred animals offered at that place. The sale occurs on April 25, the day following the convention of the Oregon Cattle and Horse Raisers' association at Ontario. Mr. Turner has been designated by the Shorthorn association as a committee of one to see every animal consigned to the sale before the consignment is accepted.


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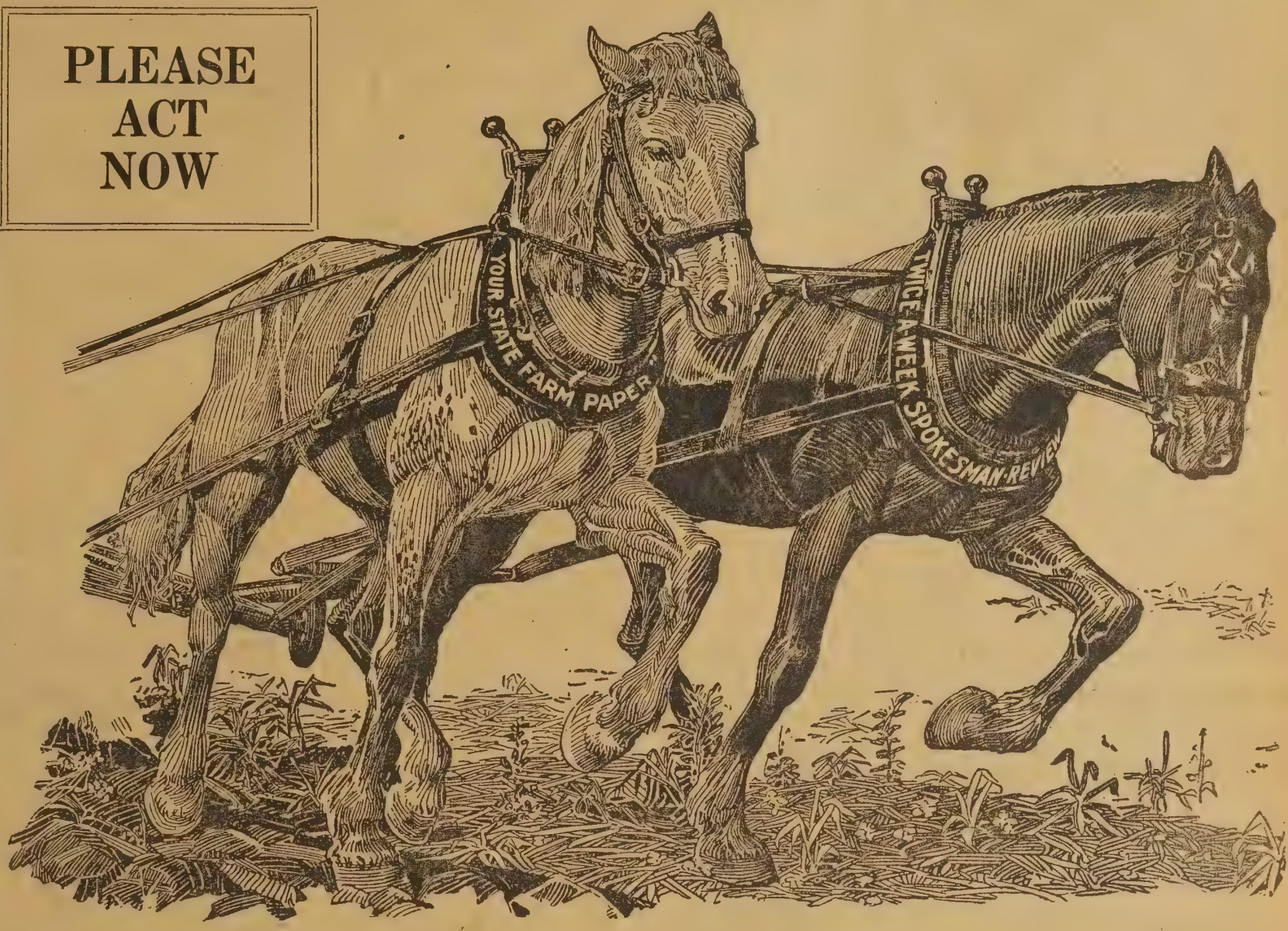
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March 21

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# Good Roads Will Pay for Themselves

## *Saving in Auto Tires, Time and Quality of Produce Will Pay the Cost*

By GRANVILLE LOWTHER

Some of the readers of this paper may remember that several years ago I championed the voting of bonds for good roads in my home state, that I was in favor of getting through the legislature whatever state aid we could have appropriated and then voting county bonds for the rest. There were two arguments that were urged on the other side of the question that have considerable force and that at that time mostly prevailed in the public mind. Those arguments were: First, that we do not desire to vote a mortgage for the next generation to pay. Second, we do not know the best methods of road building and we would, therefore, pay too much for inexperience and unsatisfactory work.

I acknowledge the force of these arguments, but I do not believe that they furnish sufficient reason why we should rumble, jolt, jiggle and bobble over rough, bumpy, rocky roads for a whole generation until the men who are doing things today have passed away and will get no benefit from the roads they might have enjoyed at least a part of their lives.

This generation is handing down a marvelous heritage to the future. In the three northwestern states, in particular, they are clearing land of sagebrush and heavy timber. They are building irrigating ditches and reservoirs, making farms, homes, building houses that will be comfortable for their children, building schoolhouses, courthouses, churches and various other improvements that will become the heritage of the next generation. As compared with the manner in which the pioneers of this country started, their children will have a paradise. Furthermore, it is evident to my mind that if bonds are voted and the roads are built, the benefits the next generation will derive from them will much more than pay the price of the bonds. I desire to give a statement made to me by Willis Eason of Pasadena, Cal., a calculation based on his own experience and observations. Mr. Eason said:

"Los Angeles county voted $3,000,000 for good roads. The first road was a rock macadam. Then the state voted $18,000,000, part of which Los Angeles county received, in addition to the $3,000,000 she had already voted upon herself. The state built mostly concrete or cement base.

"The difference between good roads and poor in auto travel is seen in my own car. I have tires which the auto manufacturers guarantee to run 3500 miles. Allowing that with good care they would run 2500 miles more that would be 6000 miles on ordinary roads. On our roads they will run more than 12,000 miles. Allowing that tires cost $100 per annum for each machine and that the value of the tires can be doubled by good roads, there is a saving in good roads on tires alone of $100 per annum for each and every machine. In California there are said to be 180,000 machines. If $100 is saved in one year on each and every machine, that would make $18,000,000, or the total cost appropriated by the state for the building of good roads. This does not take into the account the extra wear and tear or breakages of machines on bad roads as compared with good roads. It takes no account whatever of the time saved in travel, of the saving to farmers in the hauling and marketing of their crops. It takes no account of the pleasure derived from travel on good roads as compared with bad roads, but it simply shows that the saving on tires alone will build the roads. In bulletin No. 49, U. S. department of agriculture, Frank Andrews says:

| | Average cost. Per load. | 100 lbs. |
|---|---|---|
| Maine | $ 4.74 | $0.22 |
| New Hampshire | 2.02 | .08 |
| Vermont | 2.62 | .09 |
| Massachusetts | 2.63 | .08 |
| Connecticut | 2.80 | .14 |
| New York | 2.15 | .09 |
| New Jersey | 2.51 | .09 |
| Pennsylvania | 2.73 | .12 |
| Virginia | 2.88 | .10 |
| West Virginia | 4.00 | .17 |
| Ohio | 2.14 | .10 |
| Indiana | 4.20 | .18 |
| Illinois | 1.25 | .05 |
| Michigan | 2.06 | .08 |
| Missouri | 2.56 | .12 |
| Kentucky | 2.20 | .14 |
| Tennessee | 2.62 | .17 |
| Arkansas | 4.76 | .28 |
| Oregon | 6.02 | .23 |
| California | 10.40 | .23 |
| Geographic divisions— | | |
| North Atlantic | 2.53 | .10 |
| South Atlantic | 3.18 | .12 |
| North central | 2.26 | .10 |
| South central | 3.11 | .19 |
| Western | 8.36 | .23 |
| States represented | 2.79 | .12 |

These figures were compiled before the days of good roads in California. Now they claim this cost is reduced to 50 per cent of the former cost.

The subject of good roads is one that is of special importance to the fruit grower. The general farmer can haul his product to market without any considerable damage on account of rough roads; his loss in hauling over bad roads is mainly in the fact that it takes more power to transport a given amount of the farm produce to the market than it requires where the roads are good. But with the fruit grower there is the additional reason that in hauling over bad roads his fruit is damaged by jolting, bruising, disarranging the pack, etc., so that when it reaches the market it is of less value and brings a less price than if it reached the market in good shape.

Here are comparative costs of hauling on various grades: If the cost of a 15 per cent incline is $2.50 per load, the cost of a 10 per cent incline is $2 per load, the cost of a 6 per cent incline is $1.50 per load, the cost of a 4 per cent incline is $1 per load, the cost of a 2 per cent incline is 75c per load, the cost of a level grade is 50c per load, it will be seen here that a level grade is only one-fifth as expensive as a 15 per cent grade. An instance is given by a Wisconsin farmer who held 1000 bushels of potatoes in his cellar waiting for a good price. He was offered 92 cents in March, but they must be delivered in town and the roads were so bad he could not haul over them. When he finally got them to market his potatoes brought him 30 cents a bushel. Bad roads, therefore, cost him $620.

**Produce Coke in Sweden.**

An extensive plant will be built in Sweden for the production of coke and byproducts by a process invented years ago by German scientists.

# SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

## Sunlight One of the Best Aids to Normal Well Being



Dr. Hirshberg

Praises are constantly heard about the virtues of fresh air. The plentitude and resources of open sunlight are only too often passed over lightly or not at all.

Ancient worship of the sun perhaps had more substance and reality in it than many of the claims made for fresh air. True enough, clean, active air full blown from blue hills and green fields, invigorates the tissues and whips up the blood to do its best, but the nebulous star we call the sun works more health magic than does the atmosphere. Indeed, it is the sunlight which refreshes and restores the stale, used-up, dirt-laden air to its proper health status.

You need more open sunlight in the summer and only a little less in the winter than you need fresh air. How many of earth's mortals are in the sun six or seven hours a day? Very few, indeed. Those, however, who work and play in the great sunlit out-of-doors several hours daily are more nearly normal in their physical and mental states than are those who bathe in the sun only an hour or so, or not at all.

**Many Windows Help.**

One of the modern abominations, a hand-me-down from the days when there were no such things as glass or mica, is the absence of many huge, wide windows and full glass doors in houses, homes, offices, factories and stores. There is even nowadays too often neglect on the part of building commissioners, architects and constructors of free admission for liberal amounts of sunshine. The roofs of houses are still made of opaque materials instead of being one gigantic skylight. Doors are made today almost as thick and impenetrable to the eyes as they were in King John's time.

So essential to the well being of man is sunlight that it should be made a penalty to build houses with roofs or doors that are not transparent to natural light.

In the winter the sunlight seems to be relatively stronger than at other seasons of the year. The days are darker and shorter, and Arctic temperatures and dampness drive many persons indoors. Artificial lights flare forth earlier in the afternoons and remain aglow later in the mornings. All of these things make the fleeting hours of sunlight appear all the more precious. Seize them and make them serve your health.

**What Sunlight Does.**

Tuberculosis is treated more successfully in open sunlight than by fresh air alone. As a matter of careful and frequent observation animals kept in perfectly fresh air, yet in gloomy, dark quarters, succumb to tuberculosis, while those which live in foul air, but in sunshine, recover fully. Sun baths help heal the ravages of tuberculosis, anemia, emaciation, gout, malnutrition and other states of deficient health.

The quality of your blood as well as the number of red corpuscles has been noted to increase 10 per cent within a week even in a Pittsburger or an East Side New Yorker who changes his dingy, smokey indoor life to one which includes one to five hours in the open sunshine.

Finally, to clinch the proofs of the practical value of sunlight, any public health official or bacteriologist can demonstrate to you that sunlight soon kills the bacilli of tuberculosis, diphtheria, poliomyelitis, tonsilitis and other maladies, while twilight, half-lights, gloom and Stygian blackness encourages them to breed and flourish like green bay trees.

## All as One Family

To the Editor: Well, I should say we do appreciate "memories of the sweet long ago in the Big Bend," by our Washington children, and enjoy reading them; but we can hardly realize how quickly the time has sped by, and it only seems a few years since Ida C. Young was a little girl, and one of the scholars in my Sunday school class, and one who was always so ready and willing to surmount every obstacle when we were ready for an entertainment at the old Union schoolhouse. The snow was never too deep, or weather too cold, or the wind blowing too hard (and it did howl sometimes) for my class to be ready to practice songs and help out in many ways; but Ida was one who never failed, and in after years as teacher in the school room, her success was due to her faithfulness in these small undertakings when a child. Had she been a man I think her occupation would have been that of a carpenter, as I well remember the set of furniture she whittled out with a jackknife. Wish she would give her address so we could write and talk over old times of the long ago, when we older ones, as parents, were endeavoring to keep the boys and girls in that new Big Bend from getting lonesome, and those entertainments seemed to fill the bill, and we all seemed as one family when gathered around the organ with Mrs. P. J. Young as leader and sang those old-time melodies and then sat down to rest and eat popcorn. Wonder if the old bachelor in that play has any recollections of how the girls powdered his hair white with flour from a pepper can, and how next morning he put water on his head, not thinking of the flour. He said after that it took a week to get all the sour dough out. MRS. A. L. DAVIS.

Twisp, Wash.

## Shows Sharp Contrast

Contrasted with the German proclamation threatening punishment upon the women and children of Udine, Italy, if they failed to work in the fields for 16 hours per day under German domination, the order issued by the British commander to the people of Jerusalem after the capture of that city shows the different manner in which the entente and the central powers wage war. The British order reads:

"It is my desire that every person should pursue his lawful business without fear of interruption. Furthermore, since your city is regarded with affection by three of the great religions of mankind and its soil has been consecrated by the prayers and pilgrimages of the devout for many centuries, therefore, be it known, that every sacred building, holy spot, shrine, pious bequest or customary place of prayer will be maintained and protected according to the existing customs and beliefs of those to whose faiths they are sacred."


## Advertised Goods or Makeshifts?




Advertised goods almost without exception are goods which have stood the test of time.

When you buy an advertised article you know that it is something which the manufacturer is willing to back to the limit. Otherwise he would not spend money to send out information about it.

It is usually far more economical to buy the standardized and advertised article than it is to get along with a makeshift or an inferior substitute. Perhaps you could knock together an incubator or silo of your own design; but the chances are that you would lose more money in a year from poor hatches and spoiled silage than the entire saving amounted to. On the other hand, by buying the advertised goods, you would have the printed statements of the manufacturer to refer to, and if your incubator, silo, or other article did not come up to specifications you would have a strong basis for satisfactory adjustment.

In addition to these advantages in buying advertised implements and merchandise you have the iron clad, water-tight guarantee printed on the editorial page in every issue of this paper.

# All the World's a Stage, and All the Men and Women Merely Players

## Make a Ceremony of Shooting



A German war lord pointing out a notable victim among the fallen lords of the forest. The etiquette is very strict at the court hunts, and no one not presented at court can attend, says James W. Gerard in a story on "German Junker Sports." There are no jumps on these hunts. When the boar has been brought to bay by the dogs, the right to dispatch him with a long hunting knife is reserved for the most distinguished man present. If a royalty is present he distributes small sprigs of oak leaves to those present, as a souvenir.

## Red Cross Canteen First Aid



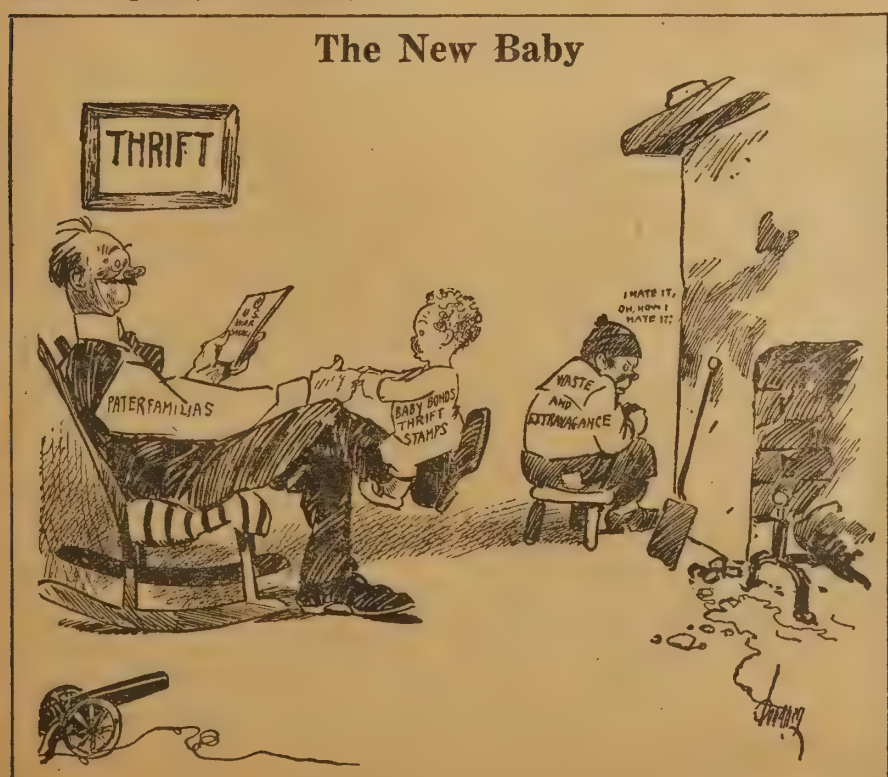
The above picture, showing a bunch of Red Cross workers giving Polius on leave a good meal, isn't the only thing the American and French women in the Red Cross canteens of Paris are able to do. Each canteen has its little first aid room, where wounded French soldiers are made more comfortable with fresh dressings and friendly care. The Red Cross nurses in England and France have been greatly appreciated by both governments.

## Some One Thinks of Me



Mail time always brings a smile to the faces of our boys "over there" when they are fortunate enough to receive that long looked-for letter from the folks at home, or perhaps a package containing some of the necessities which to them seem the greatest of luxuries.

## The New Baby




—Cleveland Plaindealer.

## Enlist Bryan, Hart, Chaplin



William S. Hart, W. J. Bryan and Charlie Chaplin are all booked for Liberty loan speaking tours. The former secretary of state will speak first at Little Rock, Ark., and will spend two weeks in the west. The moving picture stars also expect to devote two weeks to the work, Chaplin going south and Hart west.

# Trappers of the Ozarks



## The Adventures of Two Young Pioneers in the Wilds of Upper Louisiana, Now the State of Missouri.

By LEWIS B. MILLER

Copyright, 1914, 1915, by Lewis B. Miller.

### SUMMARY OF PRECEDING CHAPTERS.

In September, 1811, two young men who lived near St. Louis, Ben Armstrong and Jodo Henderson, taking with them their two dogs and donkey Spunky, started on an all-winter's hunt in what was at that time unsettled region, where Indians held full sway, in the wilds of upper Louisiana, now the state of Missouri. After a perilous trip over old Indian trails and dangerous streams, they reached their destination — a salt spring close to the river Big Niangua, which Ben had visited before and from which they expected to secure salt for sale with their furs when they returned to civilization the following spring. Here they erected a rough cabin for their winter quarters close to the mouth of a large cave that was full of water and bats, and started their saltmaking and hunting. After exciting experiences with a buffalo herd and with a bear in a cave, they find their first fresh sign of Indians — moccasin tracks in the snow.

### CHAPTER VIII.

#### Visitors at the Dead of Night.

"That's just what they are—moccasin-tracks!" agreed Ben.

"When did they pass along here, do you think? While we were in the cave?"

Ben examined where two trails had crossed. "No, they passed before we did. Here you can see where one of the bear's tracks has nearly filled up a moccasin-track."

"Yes, I see. Lucky thing for us. If they'd come along after we did, they'd have trailed us and caught us in the cave. That is, if they were Indians. Of course plenty of white people wear moccasins in Upper Louisiana."

"It's pretty safe to say they were Indians. White men wouldn't be likely to step in one another's tracks, like those fellows did most of the time."

The party of red hunters, as appeared from the signs in the snow, had been trailing a little drove of elks. The white hunters had crossed this trail before; but having their eyes on the running bear, they had failed to notice it. Now they tied Spunky and followed the Indian trail a few hundred yards, to see what they could learn.

"Seven in the party," Ben announced, when he and his partner had halted on the trail. "And they passed either last night or early this morning."

"What tribe would you guess, Benoni?"

"Osages, I should say. But that's pure guessing."

"Well, they were traveling away from our cabin. That's something to be thankful for. The Osages are bad enough. But these may happen to be even worse. They may be Pottawatomies."

"That's all so. But it doesn't make much difference as far as I can see. Any of them are dangerous for us.

"Do you think there's much chance of their discovering our camp?"

"Yes, there is, especially just now. If they happened along here again, or anywhere that we've been since the last snow-fall, they couldn't help seeing our trail. And then all they'd have to do would be to follow it far enough, either backward or forward, and they'd find themselves at our cabin-door."

"And what had we better do, Benoni?"

"We can go back to camp and stay close about there for a few days, till we see what's going to happen. Or we might track the redskins and find out where they've gone."

"I don't see much good in tracking the Indians. Camp's the place for us."

"That's my opinion, too. And the sooner we get there the better."

With Jodo leading and Ben driving the bear-laden Spunky, the hunters moved on toward their little, cliff-walled valley. They longed for some way to wipe out their trail, but that was impossible. So they only hurried on as fast as they could.

After entering the valley, they approached their cabin anxiously, and looked everywhere for moccasin-tracks. They also watched the top of the cliff, lest an enemy should be lurking there, ready to shoot down at them, or to roll stones down upon them. But they discovered neither Indians nor moccasin-tracks, and entered their cabin to find everything just as they had left it.

"Now, after taking care of the bear-meat and the bear-skin, and feeding Spunky some hay under the cliff, they sat down on a bench before their fire to discuss what they should do next. Ben, it could be seen, was not a little worried over the situation. If a band of Indians was camped in the vicinity, hunting, it seemed scarcely possible that they could fail to discover the trappers' headquarters sooner or later.

"I'll tell you, Ben. If they come, why couldn't we retreat into the big cave, take to our canoe and paddle away on the underground sea? There we could keep out of their reach till they grow tired and leave the country."

"If we could take our furs and salt and meat with us, that plan would be all right. But if we went off and left everything, ten chances to one we'd come out and find nothing left but ashes."

"Of course there's danger of such a thing. But even that's better than losing everything and our lives to boot."

"Undoubtedly. But we could have done still better by staying at home. What I want is to save our possessions and our lives, too."

"How can we be sure of doing that, Benoni?"

"More than I can tell you yet, that is. What we need is some safe place to cache our things—our most valuable things. We can't hide the cabin. If it got burnt down, though, we could soon put up another. But if we lose our furs and our salt and our meat, we shall be just that much short when the time comes to start home."

"How would the Cave of the Bats do to hide our things in? We could find some little pocket, off to one side, and stowe them away there for a few days. Even if the redskins ventured into the cave, it's not likely that they'd find what we'd hid."

"That would be better than nothing, maybe. But with so much water and dampness in it, our furs and meat would soon spoil and our salt melt."

Just at sunset the trappers made their way by a round about course to the top of their cliff, and there climbed the steep hill that rose back of the cliff. From that elevation they could make out the smoke of a camp-fire, several miles up the river. And there was no reason to doubt that redskins had kindled the fire.

During the next few days Ben and Jodo visited their traps and deadfalls early every morning; but after that they remained near their cabin, doing such things as they could find to do there. Among other work, they made some clay mortar and daubed the cabin—filled the spaces between the logs both inside and out. That would not only make the cabin warmer, but would render it less easy for an enemy to shoot between the logs.

A day or two after this the weather turned still colder, and some more snow fell; not much, but enough to cover any tracks the trappers had tracked while tramping about the country. That made them feel much safer. But every night and morning they could see smoke rising not many miles away, and had no doubt that a band of red hunters was still in the vicinity.

"Pity we can't get into that little cave up there and take out some honey while we're hanging around camp," Jodo remarked one day. They were on their way to the salt spring for a trough of water for their pots.

"Don't know anything I'd like better, Jodo. I'm getting pretty hungry for something sweet. We'd better set our wits to work and devise some way to get up there. That cave might prove to be the very place to cache our furs and other things. But getting to it is not going to be as easy as rolling off a log."

"There are some trees right over the cave on top of the cliff. Couldn't we let a rope down from one of 'em, and then climb it from below?"

"We might. That's a long climb, though, for anybody not used to climbing with his hands. It's every inch of 40 feet up to the bottom of that cave. A sailor could go up, I've no doubt. But sailors practice that kind of thing and we don't."

"Couldn't we knot some sticks in the rope? That would make it easier holding for our hands; and if we got too tired, we coulld stop and rest our feet on a stick. With some sticks to help, I'd be willing to try to get up."

"That's not a bad suggestion, Jodo. If we've got rope enough to reach from the top of the cliff to the bottom, we might try that."

After carrying over the trough of water and filling their pots, they did try it. Tying all their ropes securely together, and knotting an occasional short stick in the lower 40 feet, they went round and up to the top of the cliff and let it down. It reached to within a yard of the ground. They tied it fast to a tree, so that it hung across the mouth of the cave. Now they went down and made ready to climb it.

"Guess maybe I'd better go up first, Benoni. I'm lots lighter than you are."

"Yes, but the rope will hold either of us—or both of us. And I've got a stronger grip."

"All right, then. No matter. If there's anything up there to climb for, I'll come up later."

So Ben grasped the rope and started up. It was a rather long climb, but sometimes he stood or sat on a stick to rest his arms. At last he was standing in the cave's mouth. It was but a little higher than his head.

After resting a few minutes, he disappeared back into the cave. Several minutes passed before he was seen again.

"How far back does that hole run?" Jodo now called up.

"About 40 feet. And there's some saltpeter in the back end."

"Have you found the bees?"

"No, I haven't. Fact is, I'd forgotten to look for them. I've been thinking what a fine place this will make to cache our things in, and especially our furs. And we can put our salt and meat up here, too, if we think it best. The whole place is as dry as powder, excepting a little snow here at the mouth. It's all of solid rock, too—roof, walls and floor. And I can't discover a bat in it. Too cold for bats, I suppose."

"Wait a minute or two. I want to see what's up there."

After a few minutes of climbing, Jodo, too, stood in the cave. Soon he and Ben explored the cave again. After convincing themselves that it would make a good hiding-place for whatever they chose to put here, they began to search for the bees. The weather was now far too cold for the insects to be flying in and out, and there was nothing to guide the search. But at length they were found in a hole in the rock wall, not far from the entrance. The cavity where they had their nest appeared large enough to hold two or three bushels.

Jodo now went down the rope, and soon Ben was drawing up the rope with a bundle of furs tied to the lower end. And on the bundle sat their little camp-pot. When he had put away the furs in the back part of the cave, Ben cut out honey enough with his knife to fill the pot, and sent it down.

When all their marketable stuff had been stored in this place of safety, and another pot of honey had been sent down, Ben descended the rope. For the present the rope would be left hanging.

"If the Indians came, we could climb up there, pull up the rope, and fight 'em off from that cave. It would take 'em a long time to get us out of there."

"Yes, it would, Jodo. With a water-supply up there, we could stand an indefinite siege."

"We could empty out one of our big pots, and pull it up full of fresh water."

"Yes, but that would take a good deal of time—something you don't have much of when redskins come. In fact, that's the most serious objection to that little cave as a place to fight from. It takes too long to get into it. The Indians would have us dead before we could hand-over-hand that forty feet of rope. The big cave has a great advantage in that respect. We can dash into it at a moment's notice, and keep running till we come to our canoe, then jump in and paddle away. Now that we've got our valuables out of reach, the big cave is the place for us if we have to abandon the cabin. But we won't abandon the cabin as long as we can stay with it."

Just before dark, the young trappers took a stroll up to the top of the wooded hill back of the cliff. To their relief, they could not make out the smoke of any camp-fire. Now they were hopeful that the Indian hunting-party had moved on. So they came down, fed Spunky some hay under the cliff, and then went indoors and began to prepare supper.

"Now that we've got plenty of honey, the one thing we need is about two skilletfuls of hot biscuits. Honey and biscuits always seem to me to go hand in hand."

"So they do to me, Ben. And let's be sure to have enough, for once."

Next morning, while Jodo was stirring off some salt and refilling their pots, Ben went up to the hill-top to look for smoke again. He soon discovered a smoke, but it was a few miles away, and in another direction from where the Indians had been camped heretofore.

The fact that redskins were still near made the young white men cautious. They went out to visit their traps and deadfalls, but remained near the cabin during the rest of the day. They even tried to keep their fire from making much smoke.

When night came, they shut themselves up inside, and cooked and ate their supper as usual. Afterwards they talked a



**Inside this cabin Ben and Jodo and their two dogs are wondering what the Redskins outside are planning to do. The boys are not to be laughed at for feeling cold chills playing up and down their backs. It is no fun to have savages plotting against you 'way out in the wilderness.**

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while. Just as they were on the point of going to bed, Bose sprang up from before the fire, growling slightly. Moving over to the door, he stood listening.

Jodo stepped to the door and was about to let the dog out; but Ben told him, in cautious tones, to leave the door shut.

"If it's some wild animal, such as a bear or a panther, the dogs couldn't kill it by themselves. And if Indians are out there, they might kill the dogs. So we'd better bar up tightly till we find out for certain what's around."

The door and the window were soon made as secure as possible. By this time Bose and Tinker were at the door, where they kept growling and manifesting other signs of anger. So excited did they become that Ben took the wooden shovel and covered the fire with ashes, till the cabin was dark inside. Then he and Jodo stood by the door, listening intently.

More than once, the December night being still, they thought they could detect light footfalls near the cabin. That they did hear something could scarcely be doubted. For every time they seemed to hear movements, the dogs growled.

Suspecting that there might be Indians outside, the trappers did not think it prudent to open the door, even far enough to peep out. Every minute they expected an attack; and they stood near the door, with their rifles in their hands, their powder-horns and ammunition bags in place, and their other weapons belted on. More than once they tried to peep out between the door timbers; but it was very dark outside, and they failed to see anybody.

After an hour or longer, the dogs ceased to be excited, and went back and lay down by the fire. But Ben and Jodo, feeling sure that Indians had been near, and might return at any minute, decided that it would not be prudent for both to go to sleep at the same time. So Ben went to bed, and Jodo remained up to stand guard during the first half of the night. After that he waked Ben, and the two exchanged places till daylight.

Just as soon as there was light enough, the trappers unbarred their door and went out to look for signs.

Out from under the cliff they came upon a trail through the snow, where two pairs of moccasined feet had approached the cabin. And not far from the first trail they came to where the same two pairs of moccasined feet had passed back across the valley, going away. In the snow, at the outer edge of the cabin, as well as in the dust around the cliff-sheltered walls, moccasin tracks indicated that the two visitors had passed round the cabin more than once.

"Well, they've located our camp, and that in spite of all our precautions," Ben remarked, after he and his partner had trailed the Indians down to where they had crossed the creek on the ice.

"But they are afraid to attack us."

"Maybe so. Anyhow, they haven't attacked us yet.."

"Do you think they'll come back, Benoni?"

"There's not a doubt of that—not a doubt in the world. And there'll be more than two in the party when they visit us again."

"When do you think they'll some?"

"Hard telling, that. They may be on the way here this very minute. At the best their coming won't be delayed more than a day or two."

"And what shall we do when they come?"

"That we've got to decide. Pretty soon, too."

"Hadn't we better climb up into our cave, and pull a pot of water and the rope up after us?"

"And leave poor Spunky and the dogs to shift for themselves? I don't think so."

"I'd forgot Spunky and the dogs. Of course we could put a rope around Bose and Tinker and hoist them up to the little cave. But we couldn't hoise Spunky. And I don't see anything we can do with 'im if we stay down. We can't even take him inside of our cabin. The Indians can do what they please with 'im. Those Indians could have led 'im off last night, and we couldn't have helped ourselves."

"No. But Spunky might have helped himself. At any rate they'd have had trouble catching him. The cave of the bats is the place for us to run into when the running time comes. We can hustle all of our live stock in there. But I doubt if the running time has come yet. It took not a little work to chop the logs and put up our cabin. I don't want to leave it for the redskins to make a bonfire of, unless we just naturally have to. I'm for staying in our cabin and defending our cabin as long as we can."

(To be continued in the next issue.)


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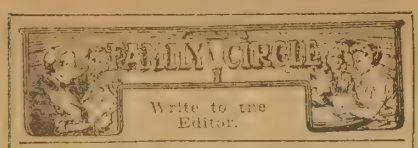
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ALICE W. BARLAND,
Editorial Contributor.

# A Woman's Decision

By Jean Henri Le Roy.

"All my girl chums are married. I do not think that I shall ever marry. I might as well make up my mind to that. But even if I am not going to marry I am not going to be an 'old maid,' not the sour kind. I have decided that, and I have also decided that the way to do is to keep in touch with young life. Since I am to have no children of my own, I am going to try to be as interested in and as much with my girl friends' children as is possible."

That is the decision that a young woman whom I know made a year ago.

And in that year it has actually so changed and sweetened her from the rather embittered and self-sufficient young person which she was then that her acquaintances are continually saying to each other:

"What has come over Florence? She has improved so."

And that decision is the secret.

Isn't it a splendid one?

Think of the people that have been affected by it. There are Florence's friends who today enjoy her bright, jolly presence, whereas a year ago they almost avoided her rather caustic, self-sufficient ways.

There are Florence's father and mother, who are delighted beyond words at having their daughter so much happier and more contented. There are half a dozen of her friends' children who have learned to call her "Aunt Florence," and to rush to the door to greet her whenever she comes to see them.

And best of all, there is Florence herself, who is replacing discontent and dreariness and unrest by contentment and peace and serenity.

I remember years ago, hearing a woman say, as she looked at another woman's baby:

"That is the hardest thing in my life to me. I don't mind so much not being a wife, but the terrible thing is to think that I shall never be a mother—that no little boy or girl will ever say that dear word 'mother' to me."

It seems to me as if deep down in her heart every unmarried woman must have the same feeling, and I can not think of anything finer than my friend's determination to be a mother by proxy, since she can not be a real one.

I wonder if there are not some unmarried women among my readers who might make their own and their friend's lives sweeter by adopting that resolution.

# Make Victory Bread

Try one of these breads the next time you bake. These recipes are from a bulletin issued by the U. S. food administration. Each recipe will make three good-sized loaves.

Handle and mold these bread doughs with greater care than white bread. If the doughs stick to the hands when kneading down, add more flour at this time.

Always keep the dough at an even warm temperature (about 75 degrees F.).

If you have a good rule for bread, use it, but in place of part of the white flour use one of these other grains—either all or part of the time.

If dry yeast is used, a sponge should be made at night with the liquid, the yeast, and a part of the white flour.

**Potato Yeast Bread.**

This bread is especially valuable because of the body-regulating substances which it contains.

One or two cakes compressed yeast, one cup lukewarm water, four teaspoons salt, three tablespoons corn syrup, three and one-half cups mashed potatoes, seven cups flour (more or less may be needed).

Mix as follows: Soften the yeast in the liquid and then add (1) salt, (2) syrup, (3) potato and (4) enough flour to make a stiff dough. Mix and knead thoroughly. Let rise three and one-half hours, or until double in bulk. Knead or cut down the dough, add the remaining flour, and let rise again until double in bulk (about one and one-half hours). Shape into loaves. Let rise in pans until double in bulk. Bake 50 minutes to one hour.

**Corn Meal Yeast Bread.**

One quart water, one or two cakes compressed yeast, three and one-half teaspoons salt, three tablespoons corn syrup, one and one-half cups corn meal and eight cups flour.

Mix as follows: Soften the yeast in one-half cup of the water (lukewarm.) Heat the rest to boiling, then stir in the cornmeal. Let it boil up once. Cool, add the salt and syrup, and when lukewarm, add the softened yeast. Then add the flour to make a stiff dough. Follow the directions for kneading, rising and baking, given for potato bread.

**Oatmeal Yeast Bread.**

One quart water, one or two cakes compressed yeast, four teaspoons salt, three tablespoons molasses, three cups rolled oats, eight cups flour.

Mix as follows: Soften the yeast in one-half cup of the water (lukewarm.) Heat the rest to boiling, then stir in the rolled oats. Let it boil up once. Cool, add the salt and syrup and when lukewarm, add the softened yeast. Then add the flour to make a stiff dough. Follow the directions for kneading, rising and baking given for potato bread.

**Rice Bread.**

One quart water, one cup rice, one or two cakes compressed yeast, one-half cup lukewarm water, four teaspoons salt, three tablespoons corn syrup, six cups flour.

Mix as follows: Cook rice until soft, in the one quart of water. Cool until lukewarm, then add (1) the yeast softened in the one-half cup of lukewarm water, (2) the salt, (3) syrup, and (4) the flour. Follow directions for kneading, rising and baking given for the potato bread.

**Barley Bread.**

One quart water, one cup pearl barley, one or two cakes compressed yeast, one-half cup lukewarm water, five teaspoons salt, two tablespoons corn syrup, seven cups flour.

Mix as follows: Soak the barley in the one quart of water over night. Boil in the same water until soft, mash fine, then cool until lukewarm. Add (1) the yeast softened in the one-half cup of water, (2) the salt, (3) syrup, and (4) flour to make a stiff dough. Follow the directions for kneading, rising and baking given for potato bread.

**Bean Bread.**

One quart water, one cup beans, one or two cakes compressed yeast, one-half cup lukewarm water, five spoons salt, two tablespoons molasses, eight cups flour.

Mix as follows: Soak the beans over night. Drain off the water in which they were soaked and cook until soft in the one quart of water. Put through a sieve or a potato ricer, cool and when lukewarm, add (1) the yeast softened in the half cup of water, (2) the salt, (3) the molasses and (4) the flour to make a stiff dough. Follow directions for kneading, rising and baking given for potato bread. The beans may be simply mashed and the hulls used in the bread if desired.

**Bread Crumb Bread.**

One quart lukewarm water, one or two cakes compressed yeast, four teaspoons salt, two tablespoons molasses, four cups fine bread crumbs and eight cups flour.

Mix as follows: Soften the yeast in one-fourth cup of water. Add to the rest of the liquid (1) the yeast mixture, (2) the salt, (3) the molasses, (4) the crumbs and (5) flour to make a stiff dough. Follow directions for kneading, rising and baking given for potato bread.

# Sidelights

**Hard to Stop.**

"I notice that a woman prominent in war activities got hurt in a motor car accident."

"Was she badly injured?"

"Evidently not. The car turned turtle. When it was raised she was found underneath it, still knitting away for dear life, but much flustered because she had dropped a stitch."—Birmingham Age-Herald.

**Well Answered.**

A British officer who was inspecting the line in Flanders came across a raw-looking yeoman.

"What are you here for?" asked the officer.

"To report anything unusual, sir."

"What would you call unusual? What would you do if you saw five battle cruisers steaming across the field?"

"Take the pledge, sir."

**Valuable Misinformation.**

Deer folks: Now I know why editors go mad. I ben trying to run this paper while the editor is on his vakashun. For three (3) days and nites I ben reading questions and trying to answer them, and if I don't quit I'll be going around talking to myself. I'm going to answer a few more then go to the ball game.—(Jimmie, the office boy.)

1. What is limberneck? (J. Jones.)

Limbernek in the country is a strange disease of fowls and chikens. In the city it is a disease of human persons caused by watching fouls—and chikens.

2. Do small cows give condensed milk? (Mabel B.)

'No, Mable. Condensed milk is made by trying to get a quart of milk into a "quart milk bottle."

3. Please tell me how hash is made. (W. M.)

Hash is not made. It akumulates.

4. Is it right to feed hogs corn-in-the-ear? (G. K.)

No. Put it in the trof and let them help themselves.

5. I am in love with a homely girl who works for us but she don't seem to care for me, while a pretty girl with lots of money wants to marry me. What shall I do? (Will M.)

Marry the one you love and send me the name and address of the other one.

6. My hair is beginning to fall out. What can I get to keep it in?

A sack.

7. Please tell me how to raise a nice fat hog of about 500 pounds.

Get a derrik.

8. How can I tell when the water is the right temperature for bathing baby? (Young Mother.)

If the kid gets red and hollers the water is too hot. If he gits blue and shivers it's too cold.

9. I am 40 years old, have a nice little farm and am thinking of taking a wife. What would you advise? (Old Batch.)

I would advise you to be kerful whose wife you take.

10. Our old red bull is chasing me round a 40-acre field. What shall I do? (Mike F.)

I don't know, but don't give up, Mike. The editor will be back in a week.—L. L. De Bra, in Successful Farming.


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## Making Over Stockings.

To the Editor: I notice a good deal in the Farmer along the art of making over. Following is another way, one of the methods mother used in making over stockings for the little ones, and, indeed, it may be used for the grown-ups if the tops of the stockings are good and long. For light weight stockings a very neat and shapely stocking can be made, but for heavy ribbed kind, I like the method that has already been printed in your paper. In either case, the stocking should be cut so a deep seam may be taken, the seam flattened and the raw edges stitched down with an overcast stitch, so there will be no rolls or lumpy places to hurt the feet. To make these stockings the sole should be first stitched on with the sewing machine, the stocking then doubled together and stitched around the heel and up the back, and the seams flattened as per directions. The sole and heel are now joined by lapping and whipping the raw edge down on the inside, then turn and overcast on the outside, with close stitches. For grown-ups' stockings only the feet and ankle may or need be shaped. MRS. R. B. WOODY.
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To secure this she must have assistance. She has the land, but needs the men. The Government of the United States wants every man who can effectively help to do farm work this year. It wants the land in the United States developed first, of course; but it also wants to help Canada. Whenever we find a man we can spare to Canada's fields after ours are supplied, we want to direct him there. Apply to our Employment service, and we will tell where you can best serve the combined interests.

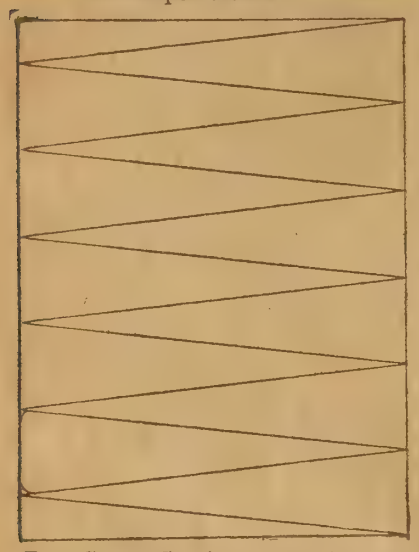
**Western Canada's help will be required not later than April 5. Wages to competent help, $50 a month and up, board and lodging.**

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Paper Beads.



Dear Corner Cousins: Some time ago one of our little cousins asked me to tell how paper beads were made and I am going to tell you. I wish I could have you all in a class around me and so I could talk and tell you better, but as I can not I will try to explain on paper. You will see by the accompanying drawing that the strips may be nine inches long and one and one-quarter inches wide, or as wide as you wish your beads. If you wish your beads small make the paper narrower, or if you wish them wider, make the paper wider and the length of the paper determines the thickness of the bead. They should taper to the point. Round the corners of the large end so that they will wind easily and use a small hatpin and wind tightly and use mucilage to stick the tiny end down. The backs of bright-colored magazines or bright-colored ads should be used and make the prettiest beads. After you have them made, string on a thread and shellac them several times so that they will be glossy and shine and when strung on a string with a small glass bead between they make pretty strands.

I hope that each one that tries to make them will have success and if you do write me and tell me. If you have trouble, please write me, too, and I will try to help you in any way that I can. With much love to you all until next time, AUNT NELLIE.

---

**Roy Joins the Corner.**

Dear Aunt Nellie: I am in the third grade. I am nine years old. Have I a twin? I have two cats and one dog. My cats' names are Tiddledy-Winks and Pussy. My dog's name is Rover. My mother has 15 old hens and eight young ones. They are Rhode Island Reds. I have one calf named Lady S. I like to see my letter in print. My mother has one cow. There are 42 pupils in my room.—Roy Seger, Yelm, Wash.

**Where Is Theodore's Twin?**

Dear Aunt Nellie: I am 10 years old. I will be 11 the 27th of June. Have I a twin? I am in the third grade. I have two sisters. Their names are Vernie and Irene. We have about four miles to go to school. We go in a car, but it is a Ford. We live on a 680-acre farm. We have about 100 head of cattle. We have six geese and about 40 hogs. My grandpa and grandma and Aunt Maud are staying here now, but will go home this spring. They live about one-half a mile away.—Theodore Kaufman, Riverside, Wash.

**A Surprise Party for Teacher.**

Dear Aunt Nellie: We live on a farm of 160 acres. I have five sisters and four brothers. My oldest brother is a soldier at Camp Lewis. I have blue eyes and light hair. I am 10 years old. My birthday is October 17. I am in the fourth grade. There are 18 pupils in our school. My teacher's name is Miss Della Barckely. I like her fine. We had a surprise party on her. We had it at the schoolhouse. We have lots of fun at school. My playmate is Stanton Walker. — Jack Kindall, Oakesdale, Wash.

**John Can Swim, Dive and Float.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. My birthday was the fifth of February. I am nine years old. I walk one and a half miles to school. I am in the fourth grade. I have a black dog. His name is Nig, and I have one cat and 17 turkeys, and 37 chickens. We have three horses, three registered Holstein cows, five calves. I have only lived on the ranch two summers. I like it fine. I go swimming in the Okanogan river in the summer. I can swim, dive and float on my back. I do not see any letters from boys in the Corner. Why don't some of them write? I would like to see some other boys' letters in the Corner. I will try and write again.—John F. O'Neil, Riverside, Wash.

**Agnes Is in the Fourth Grade.**

Dear Aunt Nellie: I have been reading the Children's Corner. I though I would write to the Children's Corner. I have two sisters and three brothers. We live on a farm. I go to schook. I am in the fourth grade. I am 11 years old. My birthday is April 26. I hope I see my letter in print.—Agnes Jensen, box 44, Kittitas, Wash.

**Robert Helps Papa Milk.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I have been reading the letters and like them very much. I am 11 years old the 28th of February. I am in the third grade. I haven't been tardy at school this term. I have a nice pony and saddle and like to take the cows to the pasture when I ride horseback. I help papa do the milking. I milk four cows. My brother Wilfred has a pony, too. I drove the stacker team for my papa last summer and will do the same this summer. I hope my letter will be printed.—Robert Edwards, Ellensburg, Wash.

**Brother Is a Sailor Boy.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 10 years old. My birthday was January 28. I have three sisters and two brothers. My big brother is in the United States navy. My sister and I are twins. I am in the fourth grade in school. I like to go to school. We have four cats and one dog. The dog's name is Sport. We have 44 sheep and six lambs. We have two horses. Their names are Jack and Topsy. I would like to see my letter in print.—Bertha Jonsen, box 33, Colby, Wash.

**Is in the Eighth Grade.**

Dear Aunt Nellie: This is the first time that I have written to the Corner. I would have written before but I didn't know your address. I think it would be a good plan to put your address in the paper and maybe you would be able to get more to write to you. I am 12 years old and my birthday is February 10. Have I a twin? If so I wish she would write to me. I am in the eighth grade. I have found one twin. Her name is Sally Garry. I wrote to her, but she has not answered my letter yet.—Elizabeth Van Trojen, Chimacum, Wash.

**Live Near the Beach.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 10 years old. For my birthday I got a string of beads, a doll, pencil and a handkerchief. I got some birthday cards, too. My teacher's name is Miss Row. There are 18 children in our school. I like spelling and reading the best. I have a cat named Pussy and a dog named Sport. We live near the beach. My sister and I are twins. I have two brothers and three sisters. I would like to see my letter in print.—Lena Jonsen, Colby, Wash.

**Doris Is Eight Years Old.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I enjoy reading the letters very much. I go to school. I am in the second grade. I am 8 years old and my birthday is October 23. Have I a twin? I would like very much if she would write to me. I have three brothers. Their names are Harold, Willie and Lawrence. We have seven horses named Ballie, Jack, Nellie, Dolly, May, Dixie, King. We have two cows. My teacher's name is Miss Ethel Wright. We are having snow. I hope to see my letter in print.—Doris Yaeger, Box 24, Daisy, Wash.

**Clara Just Loves Snow.**

Dear Aunt Nellie: This is my fourth letter to the Children's Corner. It will not be my last. I saw my last letter in print so I am writing again. Alice Case, a Corner cousin wrote to me and I was very glad to hear from her. I answered her letter the very day I got it. I saw her last letter in the Corner and thought it was very interesting. I would like to hear from her again. It has been snowing here lately. I just love snow. I like to go coasting. I am knitting five-inch squares for the Red Cross. Then I am going to knit a pair of socks. I passed into the seventh grade.—Clara Haida, R. D. 3, Box 164, Puyallup, Wash.

**Best Wishes to the Corner Children.**

Dear Aunt Nellie: I am a farm girl, 12 years old and in the sixth grade. I read with the seventh grade. I have about a mile to walk to school. There are 21 children going to our school. My teacher's name is Miss McMeen. I like her very much. I live on a farm of 160 acres. We have 12 head of cattle, two horses and a pony. I have three brothers and two sisters. My brothers' names are Andrew, Robert and Ernest. My sisters' names are Helen and Ethel. Andrew is 10, Robert four, Ernest two, Helen eight and Ethel six. My birthday is the 28th of December. Have I a twin? For Christmas I got a little iron, a pretty pin and an apron. I got a ring on my birthday. I think I have written enough for the first time, so I will quit, with best wishes for Aunt Nellie and the Corner children.—Freda Boawn, Gerome, Wash.

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# Handicraft For Boys

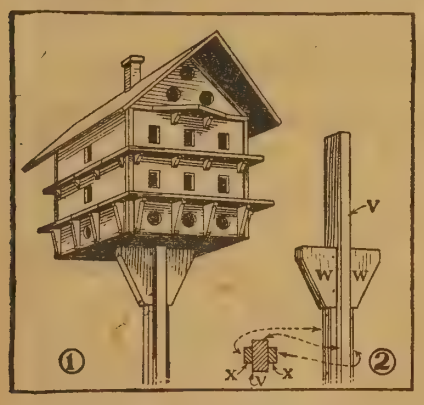
By A. Neely Hall

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## A Martin House.

When providing quarters for purple martins build one large house of many rooms, rather than several small houses, because these interesting birds are very sociable and build their nests in colonies. They are not content with one-or-two compartment houses if more commodious quarters are obtainable.

A 30-room house like that in Fig. 1 is none too large. In designing this I have made the construction of the simplest possible form, with the walls and roof built in sections so they may be separated for cleaning out the compartments (Figs. 3 and 4). The house is 24 inches wide, 30 inches long and 35 inches high. First construct the frame which forms the first story walls, out of boards four inches wide (A, and B, Fig 3), then the second

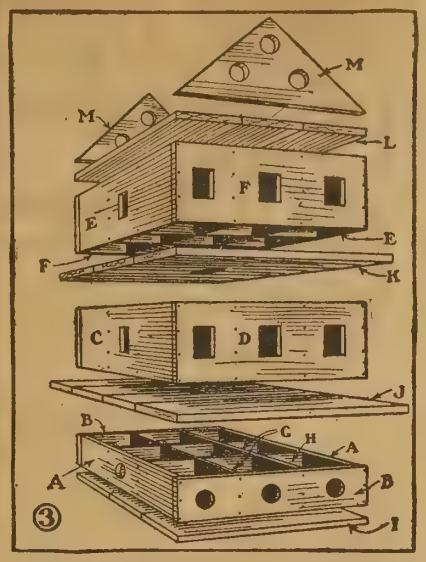



story out of eight-inch boards (C and D, Fig. 3), and then the third-story frame out of eight-inch boards (E and F, Fig 3). Cut boards A, C and E 28 inches long, and boards B, D and F 24 inches long.

## Marking Off the Partitions.

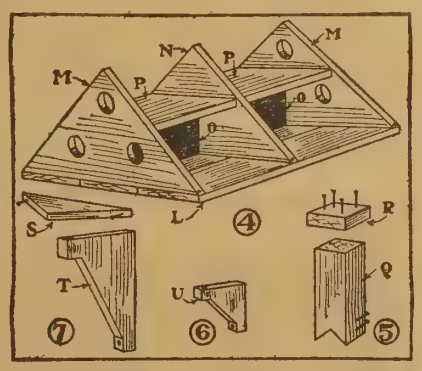
Cut the doorways before nailing the frames together, but as these should come in the centers of the compartments first mark off the position of the partitions upon the boards. The first-story diagram shows how two long partitions (G) and six short partitions (H) are set. There will be one round doorway in boards A, and three in boards B. For martins these openings must be two and one-half inches in diameter. Bore several small holes and connect them into one large hole with a chisel. There is one square doorway in boards C and E, and three in boards D and F, two inches wide and three inches high. After marking them out bore holes in the corners and cut from one hole to another with a small saw.

After cutting the doorways and nailing together the frames, cut and




fasten the partitions in place. Then prepare floor board I to fit the first-story frame, floor boards J to form a three-inch projection upon all sides of the second-story frame, floor boards K to form a two-inch projection upon all sides of the thiru-story frame, and floor boards L to fit the third-story frame. A hole must be cut through the exact center of floors I, J and K for the post support V (Fig 2) which extends through the first and second stories. Nail floor boards I, J and K to the under side of the first, second and third-story frames. These sections need not be fastened to one another, because the support will tie them together when they are slipped over it.

Cut gable ends M and partition N (Fig. 3) out of 12-inch boards, making the angle at peak 45 degrees, and bore three two and one-half-inch doorways through ends M. Nail floor boards L




to the bottoms of these pieces (Fig. 4), then fasten partitions O (4 inches wide) between ends M and partition N, and fasten floors P on top. Screw floor L to the third-story walls E.

## Projecting Roof Boards.

Cut roof boards long enough to project six inches over the gable ends and side walls, fasten these together in two sections with battens, and screw to the gable ends. Nail the small shelf S (Fig. 4) to the top floor below the gable ends.

Fig. 5 shows the chimney (Q) and its cap (R), Fig. 6 the small brackets U which fasten below shelves S and floor K, and Fig. 7 the brackets T which fasten below floor J.

The bird-house support (V, Fig. 2) is a 2 by 4. Cut brackets W out of two-inch stuff and spike them to V. then nail the 1 by 2-inch strips X to the wide faces of V, below the brackets, so as to make the post of the same form on all sides. Set the support four feet into the ground, and brace it on all sides with diagonal braces.

Paint the martin house with two coats of oil paint.

## Hints for Pie-Bakers.

The next time you bake pies, especially juicy pies, try adding a little corn starch to the crust. One teaspoonful to a pie will prevent the under crust from being heavy.

Try mixing the sugar and flour and adding it to the fruit before putting your pie together. The pie will be more evenly sweetened and you will not bite into any lumps of flour.

Do not stretch the top crust tight. In pressing the edges together push the edge of the top crust toward the center of the pie. This allows plenty of room for the fruit to cook and prevents the crust from bursting open and the juice escaping. Save an ounce of juice or an ounce of meat or potato.


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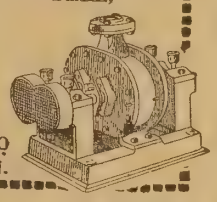
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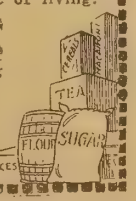
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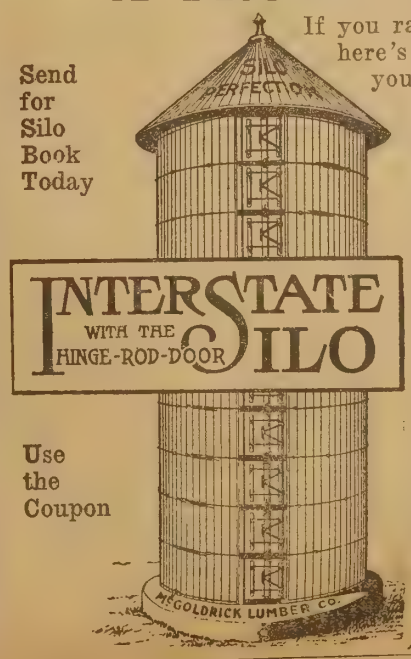


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# News for Breeders

W. G. Cordiner of Walla Walla, Wash., proved himself a true sport when, at the Portland Shorthorn sale, February 25, he not only purchased the champion bull and female, but put up a choice bull calf he had paid $500 for and, without cataloging or previous advertising, took a chance on getting his money back. Mr. Cordiner had purchased the calf, that was not quite a year old, together with four high-class registered Shorthorn cows, from Alex Chalmers, just a few days prior to the sale. But he liked the champion bull so well he decided to buy him and take the chance. He was rewarded by receiving $485 for the youngster, Mr. Bertrand of Olequa, Wash., being the buyer. And he, as well as Mr. Cordiner, was well satisfied with the deal.

Wapato Belzewere Fayne, one of the good Holstein heifers owned by Thomas Carmichael of Gaston, Ore., has recently completed a seven-day official test, with a production of almost exactly 13 pounds of butter. The cow is a junior two-year-old with first calf and was tested without any special preparation. She was increasing her milk flow when the test was finished. Mr. Carmichael has two more heifers that will soon be tested and will give his entire herd official records.

## A Flag on Every Farm.

President A. D. Dunn of the Northwest Shorthorn Breeders' association is urging every Shorthorn breeder in this territory to show his patriotism by planting a flag pole on his farm and flying the Stars and Stripes over his herd until kaiserism is driven from the face of the earth.

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## HOLSTEIN CATTLE

**MOOREHEAD RANCH.**
Registered Holsteins.
Herd sire, Model Annie De Kol Segis, grandson of the famous King Segis. We have no bulls of service age, all having been sold, but we have some splendid young stuff, from 6 to 8 months old, coming on. If you are looking for real foundation stock, write us for particulars and pedigrees.
**MOOREHEAD & HOBSON.**
Breeders of Purebred Holsteins.
Outlook, Wash.

### 365-DAY HOLSTEINS

24,667 lbs. milk—1026 lbs. butter—is the s. o. advanced registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.

THE HERD WITH YEARLY RECORDS.
**WESTERNWOLD RANCH, Prineville, Ore.**

### LaConnor Flats Stock Farm

Pure bred registered Holstein cattle. Herd sire Segis Pontiac Acme; average of three of nearest dams; butter, 1 year, 1080.82 lbs.; milk, 24,380.3.

**J. H. HULBERT. Mt. Vernon, Wash.**

### Record Holsteins

Young bulls, some of them ready for service, by a sire whose 5 nearest dams average 26.17 pounds butter, or another with 29.67-pound dam, and out of high-record A. R. O. dams. Priced to sell.

**ERNEST WERNER, AURORA, ORE.**

### Bargains in Bull Calves

Sired by Segis Riverside Pontiac, that sold in Pacific international sale, 1914, for $1025, and whose dam has A. R. O. record of 31.47 lbs. butter in 7 days; 118.89 in 30 days, and big records all through his pedigree.

**ERNEST JOHNSON, Scappoose, Ore.**

**REGISTERED HOLSTEINS.**
One 30-lb. bull with grand champion sire and dam; also young bull calves. Here is production and type we hear so much about.

**H. R. BOOMER, New Plymouth, Idaho.**

### HOLSTEINS

Well bred young bulls for sale.

**THOS. CARMICHAEL. Gaston, Ore.**

**REGISTERED HOLSTEINS.**
Bull calves for sale with good A. R. O. backing.

**BEEBE BROS., R. F. D. 2, Rupert, Idaho.**

## GUERNSEY CATTLE

### Orchard Hill Farm

"Home of High-Class Guernseys."
Dr. Park Weed Willis, Owner.
**Redmond, Wash.**

### FAIRVIEW FARM

Breeders of high class registered and grade Guernseys.
**A. J. SINNES.**
Route 5. Mt. Vernon, Wash.

**MIDDLEDALE FARMS GUERNSEYS.**
Herd founded in 1904, May Rose breeding. Most all granddaughters of Jethro Bass (11366), son of Imp. King of the May. Have a few heifers, calves for sale.
**MIDDLEDALE FARMS, GOSHEN, ORE.**

## AYRSHIRE CATTLE

### Edgewater Farm

Government accredited herd, headed by Peter Pan, 63d. Bull calves available.

**E. M. CHANDLER, Burbank, Wash.**

## BROWN SWISS CATTLE

### Brown Swiss Stock Farm

Breeders of Brown Swiss Cattle, the Farmer's Dairy Cow. Young stock for sale.

**THEO. BRUGGER, Route 3, Gresham, Ore.**

### Highland Stock Farm

offers for sale Hereford bulls, one or two years old. One or a carload.

**PLATT BROS. Genesee, Idaho.**

## TAMWORTH SWINE

**ROUND KNOLL RANCH NO. 3.**
Herd headed by Knoll Slope Colonel, assisted by Jolly Lad IV. Correspondence solicited.

**Bliss, Idaho.**

## SHEEP

### SHEEP

Full blood Lincolns, Romneys, Corridales and Hampshires. Ewes and rams, small or large lots. For sale by

**H. STANLEY COFFIN,**
**Breeder and Importer. Yakima, Wash.**

## POLAND CHINA SWINE

**SPECIAL PRICES ON BOAR PIGS.**
Fall farrow, best breeding, good individuals. Also a few choice gilts. Quality and utility our hobby. Poland Chinas our breed.

**FRANK NEEDHAM, Eugene, Ore.**

### LOCUST LAWN HERD

Sold Out.

**W. F. HOWARD & SONS, Caldwell, Idaho,**
S. Kimble Ave.

**GREENLEAF STOCK RANCH.**
Big type Poland Chinas, either sex, for sale at all times.
**Wilson Bros., A. L. Wilson, Mgr.**
Greenleaf, Idaho.

**BIG TYPE POLAND CHINAS**
Herd headed by Sammy (79,833).
Correspondence Solicited.
**Fruitland Stock Farm, C. Royston, Mgr.**
Payette or Fruitland, Idaho.

**QUALITY HERD.**
If you want to improve your herd, try stock from my winners at the Oregon state fair.
**RAY J. FOX, Lyons, Ore.**

**PURE BRED POLAND CHINAS**
Some choice Sept. and Aug. pigs, $25 to $35 each, either sex; also a good herd boar. Will ship C. O. D., subject to approval
**HERBERT WILLARD, Dayton, Oregon.**

## DUROC-JERSEY SWINE

### SPRING DUROCS

I am now booking orders for weanling pigs, pairs or trios, unrelated. These pigs carry the very best blood lines procurable. Tracing their ancestry back to Inventor, Climax II., Top Notcher, Tip Top Lad and Proud Advance. All prize winners in state and interstate shows.

Also have a few very fine gilts, either open or bred.

**CHAS. G. SPRONG, Grandview, Wash.**

**IDAHO CHAMPION DUROCS**—At state fair of Idaho our Durocs won more prizes than all other exhibitors combined. Stock of all ages for sale.
**Richards Live Stock Co., Virginia, Idaho.**

**AVONDALE STOCK FARM.**
Registered Duroc-Jersey hogs. Inspection invited. Correspondence solicited.

**H. C. POLLY. Route, 3, Burley, Idaho.**

**PATHFINDER BOARS**—Choice Duroc Jersey boars for sale. Sired by Richard Pathfinder, First prize and junior champion Utah state fair. Priced to sell and guaranteed. **ERICK W. OLSON, Virginia, Idaho.**

**OTTO'S DUROC JERSEYS.**
Stock doing fine, splendid prospects for spring crop of pigs. For sale Jr. yearling boar with a show record; very classy individual. **Filer, Idaho.**

**DUROCS.**
Boars and open or bred gilts of excellent breeding.
E. E. PRICE, CABINET, IDAHO, OR
**JAMES N. PRICE. Yakima, Wash.**

## BERKSHIRE SWINE

### Kintrye Farm Berkshires

A few good gilts bred for spring farrow.

**CLARK BROS., Prosser, Wash.**

### Riverby Orchard Berkshires

Riverby Orchard Berkshires won 12 out of 15 first prizes at the Washington state fair, 1916, also many prizes, including grand champion sow at the Panama-Pacific world's fair. We offer for sale a few good boars and young sows.

**D. C. BUNN, Prosser, Wash.**

## HAMPSHIRE SWINE

### Unrelated Fall Pigs

Both sexes, good individuals of best breeding. My herd has shown the winners at all the leading fairs in the northwest for the past seven years and a barrow of my breeding was first at Chicago International last December.

**J. M. FRUITTS. Enterprise, Ore.**

## YORKSHIRE SWINE

### FALL PIGS

Both boars and gilts of best breeding. Now booking orders for spring pigs. Can furnish pairs or trios.

**WM. NEUENSCHWANDER, Gaston, Ore.**

## CHESTER WHITE SWINE

### COVE STOCK FARM

Unrelated fall and spring Chester White pigs from prize winning stock.

**ARCHIE CONLEY, Cove, Ore.**

## POULTRY

### "Blue Ribbon" White Leghorn

Hatching eggs, chicks, pullets and matings. Five years' careful trap-nesting and selection for egg production.

BEST SHOW RECORD in central Washington.

RECORD 1918 SHOW: 1st sweepstakes, young pen; 1st and 2d sweepstakes, old pens. 1st, 2d, 3d pullet and 2d hen. Best mating 15 hens average 217 eggs. Hatching eggs, $1.50, $3 and $5 per setting. Satisfaction guaranteed.

**MRS. HANS J. SMITH, Wenatchee, Wash.**

### S. C. White Leghorns

Day old chicks and hatching eggs from 600 trap-nested breeders. $2 per setting of 15, $8 per 100; $15 per 100 day old chix. Special prices on large orders. My service is prompt. I guarantee satisfaction. Write me your wants today.

**H. L. BLANCHARD'S POULTRY FARM,**
Chimacum, Wash.

### White Leghorns

Baby chicks or hatching eggs from hens hatched from stock whose trap-nested records average 259 eggs per year. Special rates on lots of 100 and over.

**MOUNTAIN BROOK POULTRY FARM.**
Mr. and Mrs. W. A. Newton,
Myrtle Creek, Ore.

**VIBERT STRAIN S. C. REDS.**
Eggs NOW $6 per hundred; settings NOW $1.50 to $5 per 15. Three special pens headed by cockerels from a 289-egg trap-nested hen. One pen headed by magnificent cock bird that has kept his wonderful color through the moult and well into his second season. He is one great bird. If you need new Red Blood, you need Vibert blood from the largest pure Vibert flock on the Pacific coast.
**MRS. ROMINGER. Underwood, Wash.**

**RHODE ISLAND REDS AND WHITES**
both combs. Mammoth Bronze turkeys and Mammoth Touluse geese. My birds are true blue—winners and qualities. Have a few S. C. Red and R. C. White cockerels at $3 and $5 each. Have a limited number of Mammoth Bronze gobblers at $8 and $10 each. We are booking orders for eggs. Write for mating list. No baby chicks.
**Highland Fruit and Poultry Ranch.**
J. Nonnenmacher, R. F. D. 3, North Yakima, Wash.

### BABY CHICKS

Rhode Island Reds, White Leghorns. Don't wait until March or April to order and then be disappointed because you can't get them. But order now from our heavy-laying strain. Send card for price list.

**MAPLEBROOK POULTRY FARM.**
Box 3, Southworth, Wash.

### MY BARRED ROCKS

won this season at the Inter-State fair, 6 blues out of a possible 10; at Coeur d'Alene 1 and 2 cockerel; at Wenatchee, 1, 2 and 3 pullet, 1 and 2 cockerel and 2d cock. At Moscow, 1, 3 and 4 cockerels pullet bred. Eggs from exhibition pens $3 per 15; choice pens, $2 per 15.

**J. E. HORTON, 2408 Altamont Blvd., Spokane.**

### Mammoth Bronze Toms

Strong vitality, $6 to $8 each; no charge for crates. Barred Rock eggs for hatching, $10 per 100; $2 per setting.

**S. M. WILSON, Carley, Wash.**

**PRIZE WINNING W. ORPINGTONS.**
Kellerstrass strain, S. C. eggs, $10 per 100; $3 per 15. 1 hen scored best fowl at 1916 Wash. state fair; several others over 280 eggs. 1st prize cock, 1st hen, 1st pullet, 1st pen, cock and hens; 1st pen, ckl. and pullets, state fair, 1915.

**MRS. E. B. WADE, R. 4, Yakima, Wash.**

### 15 EGGS $3.50

From show and laying strain of S. C. R. I. Reds.

**N. S. FELTHOUSE, New Plymouth, Idaho.**

**PARKS BRED-TO-LAY BARRED ROCKS.**
My pen, 5 Barred Rocks, at Pullman laying contest laid in Nov. 88, Dec. 100, Jan. 104 eggs. Eggs from this winter-laying strain, $1.50 15, $8 per 100.

**F. J. WIRTNER. Mica, Wn., R. 1.**

### BARRED ROCK EGGS

From good utility stock; good layers; $1.50 per sitting. Send me your orders.

**C. A. STARK, Box 242 Sutherlin, Ore.**

### BABY CHICKS

S. C. White Leghorns. Eggs for hatching and day-old chicks from heavy laying strains.

**G. W. BURT, Roseburg, Ore.**

**SINGLE COMB BROWN LEGHORN**
male birds, $3 and $5 each; mated breeding pens, $15. Eggs for hatching. Write for mating list. The Up-to-Date Poultry Farm.
**ARTHUR W. WADE, Box 3, Marysville, Wn.**

**S. C. RHODE ISLAND REDS.**
Eggs for hatching from heavy winter laying stock; $1.50 per 15, $7 per 100. Young Flemish Giant hares.
**W. T. WILSON, R. 3, Weiser, Idaho.**

When you write to advertisers be sure to say that you saw their adverisement in this paper.

## SEVENTH SEMI-ANNUAL SALE

# Western Washington Holstein Breeders' Association

### at KENT, WASH., April 17th, 1918

### 85 HEAD OF "THE BEST IN THE WORLD"---A Son of King of the Pontiacs Will Be Sold

**Full Particulars Later**

**A. B. WINTER, Secretary** **EVERETT, WASHINGTON**

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# COLFAX BLUE RIBBON STUD

COLFAX, WASHINGTON.

**IMPORTERS, BREEDERS AND DEALERS IN PERCHERON, SHIRE, CLYDESDALE AND BELGIAN STALLIONS AND JACKS**

We are confident and fully believe that you will find here a **GREATER, LARGER,** and **BETTER** selection of the **FOUR** principal draft breeds than can be found in any stable in the northwest, and on the most **LIBERAL TERMS,** and we know that if you will visit our barns that you will find our prices within the reach of any one wanting a stallion, and that you will save considerable money, believing that we are in a position to make you prices that **DEFY COMPETITION,** and a **GILT-EDGED BREEDING GUARANTEE** with every stallion sold. Write us your wants.

**COLFAX BLUE RIBBON STUD, COLFAX, WASH.**

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## *Imported and American Bred* Percheron, Shire and Belgian Stallions

They are of the very best breeding obtainable and are guaranteed to be breeders. They will be sold at very reasonable prices.

If in need of a good stallion weighing from 1800 to 2200 pounds, come direct to my stables and see them or write for description and terms to

**WM. T. TRACY, Kennewick, Wash.**

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# 40 STALLIONS---12 JACKS

We can show you more big TON imported and native bred

**PERCHERON, BELGIAN AND SHIRE STALLIONS AND MAMMOTH KENTUCKY JACKS**

than any other **two firms** in the northwest. Many of the stallions in our barns are winners at the Chicago International and the leading western shows. Come and make your choice. Our prices, terms and guarantee will suit you.

## S. METZ & SONS

**Commercial Barns, Pendleton, Ore.**

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## Herd Bulls

**Imported Doune Radiance No. 609412 and Gainford Perfection No. 442173.**

## Hercules Shorthorns

We can supply you with choice, well grown bulls and females of breeding age. Your inspection of our herd is invited. Visitors always welcome.

## Day & Rothrock Company

**205 Exchange Bank Bldg.** **Spokane, Wash.**

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## Hunter Ranch Percherons

The Grand Champion KROUMIR at head of herd. Young stallions for sale at all times at breeders' prices.

**A. R. HUNTER,** **Island City, Ore.**

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**REGISTERED PERCHERON HORSES.**
E. O. WALTER, AUCTIONEER.
**WALTER BROS.**
Buhl and Filer, Idaho.

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## JERSEY CATTLE

## Jersey Home Dairy

**Young bulls, winners at Washington State Fair, make good herd sires. Attractive prices for quick sale.**

## Erickson Bros. Prop.

**North Yakima, Wash.**

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## 20 Head——Jacks and Jennets For Sale——20 Head

For forty years we have been breeding them. For twenty-eight years they have won every premium offered through Oregon and Washington, with one exception. They are native-bred, and **all of them make good.** We have mules to show from them, and we make prices that are lower than importers can meet. Come and see them, or write.

**EASTERN OREGON JACK FARM.**
**B. F. Swaggart, Proprietor.** **Lexington, Ore.**

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# 55--GREAT JERSEY SALE--55

## Tillamook, Oregon, April 2, 1918

## Richest Blood and Highest Records

**St. Mawes Golden Poppy,** the herd sire, 3½ years old, will be sold. He is a son of St. Mawes Poppy (1120.5 pounds butter in a year), and of Rosaire Olga Lad, sire of over 30 Register of Merit daughters.

Almost every cow has a high Register of Merit record, most of them made with first calf. These cows will increase their records when tested again. All the cows are young, only one having reached seven years.

Most of the cows and heifers, not daughters of St. Mawes Golden Poppy, are bred to him and include several daughters of **Rinda Lad of S. B.,** another great sire, with 21 R. of M. daughters.

It is positively the greatest opportunity ever offered in the northwest to get high producers with high record ancestors.

**H. H. CURTIS**
**Owner**
**Pullman, Washington.**

**J. W. HUGHES**
**Auctioneer**
**Forest Grove, Oregon.**

**Mail bids may be sent to Horace Addis, Field Editor, Oregon Farmer, Portland, Ore.**

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## First Eastern Oregon

# Shorthorn Sale

### At Ontario, Oregon, Thursday, April 25th.

**UNDER AUSPICES OF THE NORTHWEST SHORTHORN BREEDERS' ASSOCIATION.**

In Conjunction With

**OREGON HORSE AND CATTLE RAISERS' ASSOCIATION CONVENTION**

Ontario, Ore., April 23d and 24th.

## 75 Registered Shorthorns 75

**Males and Females**

Including some of the finest stock in the northwest.
For catalogs and other information write
**Joseph Turner, Manager Sales, Meyers Falls, Wash.**
**Gue & Cranke, Auctioneers.**

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## BUY COOPERATIVE BULL BABIES

You get more for your money from us because we sell all the Holsteins raised in Josephine county. We have A. R. O. records, good individuals, and we guarantee satisfaction. Prices reasonable.

## Rogue Valley Holstein Association

**F. R. Steel, Sales Mgr.** **Winona Ranch, Grants Pass, Ore.**

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, March 18.—Fresh measures to curb speculation led to general evening up of trades today in grain, especially on the part of shorts. After a number of lively price changes corn closed firm ½c to 1⅜c net higher, with March $1.27⅜ and May $1.25. Oats gained 2½c to 3⅛c. The outcome in provisions varied from 2½@5c decline to a rise of 12c.

Temporarily, a ruling by the exchange directors that no one interest could at any given time be long or short more than 200,000 bushels of future deliveries led to a good deal of flurried trading in the corn pit. At first sellers were greatly in the majority, owing to big receipts, but quick covering which shorts began brought about a sudden decided upward swing. All of the gains were afterward lost only to be replaced by new advances higher than before.

Gossip that exporters were buying oats at the best premium on the crop was largely responsible for the strength of oats.

Heavy receipts of hogs made provisions average lower.

**Chicago Futures.**

| | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| Corn— | | | | |
| March .... | 1.26½ | 1.27⅞ | 1.26½ | 1.27⅜ |
| May ..... | 1.22 | 1.25⅛ | 1.22 | 1.25 |
| Oats— | | | | |
| March .... | .84⅛ | .87¾ | .84⅛ | .87¾ |
| May ..... | .81 | .84¾ | .81 | .84⅝ |
| Pork— | | | | |
| May .....47.30 | 47.70 | 47.30 | 47.70 | |
| Lard— | | | | |
| May .....25.45 | 25.70 | 25.45 | 25.65 | |
| July .....25.55 | 25.82 | 25.55 | 25.80 | |
| Ribs— | | | | |
| May .....24.15 | 25.45 | 24.15 | 24.45 | |
| July .....24.60 | 24.80 | 24.60 | 24.80 | |

**Cash Quotations.**

CHICAGO, March 18.—Corn—No. 2 yellow, nominal; No. 3 yellow, $1.45; No. 4 yellow, $1.30@1.45.

Oats—No. 3 white, 87 3-4@90c; standard, 87 3-4@90c.

Rye—No. 2, $2.80.

Barley—$1.75@1.95.

Hay—Timothy, $5@8; clover, $28@31.

Pork, nominal; lard, $25.45; ribs, $23.35@23.45.

**Pacific Northwest Grain.**

PORTLAND, Ore., March 18.—Grain, 30 days' options: Oats, No. 2, $69 bid; barley, feed, $74; brewing, $82. Eastern oats and corn in bulk: Oats, No. 3 white, $63.50 bid; 38-pound clipped, white, $64.50; corn, No. 3 yellow, $69; No. 3 mixed, $67.50; oats, No. 3, $63.50; clipped, $64.50; corn, yellow, $68.50; mixed, $67.

**Minneapolis Grain.**

MINNEAPOLIS, March 18.—Flour—Unchanged. Shipments, 43,161 barrels.

Barley—$1.70@2.12.

Rye—$2.89@2.92.

Bran—$32.78.

Wheat—Receipts, 180 cars, compared with 20 a year ago.

Corn—No. 3 yellow, $1.65@1.70.

Oats—No. 3 white, 88 1-4@89 1-4c.

Flax—$4.07@4.10.

## Live Stock Quotations.

**At Omaha.**

OMAHA, Neb., March 18.—Hogs—Receipts, 14,500; market, 40 to 50c lower. Heavy, $16.20@16.80; mixed, $16.30@16.70; light, $16.30@16.90; pigs, $11@15; bulk of sales, $16.30@16.70.

Cattle—Receipts, 10,000; market, slow to 10c lower. Native steers, $9.30@13.30; cows and heifers, $7.50@11; western steers, $8.75@12.25; Texas steers, $7.50@10.50; cows and heifers, $7.50@9.50; canners, $7@8; stockers and feeders, $7@11.50; calves, $9@13; bulls, stags, etc., $7.50@9.50.

Sheep—Receipts, 19,000; market slow, 10 to 15c lower. Yearlings, $13@16.50; ewes, $11.85@13.85; lambs, $16.50@18.

**At Chicago.**

CHICAGO, March 18.—Hogs—Receipts, 66,000; tomorrow, 45,000; active, mostly 30c under Saturday's average. Bulk, $16.85@17.50; light, $17@17.75; mixed, $16.50@17.70; heavy, $16@17.20; rough, $16@16.25; pigs, $13.50@17.

Cattle—Receipts, 26,000; tomorrow, 15,000; weak. Native steers, $9.40@14.50; stockers and feeders, $8.20@12.15; cows and heifers, $7.10@12; calves, $10.50@16.50.

Sheep—Receipts, 17,000; tomorrow, 14,000; weak. Sheep, $11@14.35; lambs, $14.50@18.30.

**At Portland.**

PORTLAND, Ore., March 18.—Cattle—Steady to strong; receipts, 1471. Medium to choice steers, $10.50@11.70; good to medium steers, $9.50@10.50; common to good steers, $9@10; choice cows and heifers, $8.55@10; common to good cows and heifers, $8.50@9.50; canners, $4.25@6.25; bulls, $5@9; calves, $7.50@12; stockers and feeder steers, $6.50@9.50.

Hogs—Steady; receipts, 1630. Prime light, $16.85@17; prime heavy, $16.60@16.85; pigs, $14@15.25; bulk of sales, $16.50@16.95.

Sheep—Steady; receipts, 270. Western lambs, $15@15.50; valley lambs, $14.50@15; yearlings, $13@13.50; wethers, $12.50@13; ewes, 9@12.

Shorn sheep, 2½ to 3c under quotation.

**Spokane Stockyards, Monday.**

Hogs—Receipts, none; market, steady. Prime light,$16.50@16.75; prime heavy, $16.50@16.60; pigs, $14.50@15.25; stockers and feeders, $12@14.

Cattle—Receipts, 240; market, steady to strong. Best beef steers, $10.50@11.50; good steers, $9.25@10.25; common to good steers, $8@9; best beef cows and heifers, $8.75@9.75; good cows and heifers, $7.50@8.50; ordinary to good cows and heifers, $6.25@7.50; canners, $4.25@6.25; bulls, $6@10; calves, $7@12.50; stocker and feeder steers, $6@8.50.

Sheep—Receipts, none; market, steady. Prime lambs, $14.50@15.25; good lambs, $13.25@14; prime yearlings, $12.50@13.25; prime wethers, $12@12.75; best mutton ewes, $9@10.75.

## Portland Wheat.

PORTLAND, Ore., March 18.—Coarse grain prices were revised downward very sharply at the close of the week in sympathy with the slumps at Chicago. At the merchants' exchange 400 tons of yellow bulk corn were sold at $68.50 and $69, prices $2@2.50 less than were bid on the preceding day, while offers for mixed corn were reduced $2.50@3 a ton.

Oats bids were lowered $2 and barley prices were cut 50c@$1.

With the more active members of the trade at Spokane attending the wheat standard hearing, not much business is expected in the grain market here for several days.

Activity has developed in the hop market after a lull of several weeks. A demand for contracts has sprung up and about 1000 bales have been contracted for at 16@17 cents. Dealers can not explain why the market for futures should revive with so many uncertainties facing the brewing industry, yet there is clearly a more optimistic feeling in the trade. Spots have likewise moved better, between 700 and 800 bales changing hands at 14@15 cents. In California there has been even more activity with prices a cent better than here. Several hundred acres of Oregon hop land were plowed up this winter, but with favorable spring and summer weather a crop equal to last year's is expected. Some growers report their roots rotted during the mild winter months, and the proportion of missing hills promises to be larger than normal.

## Seattle Wheat.

SEATTLE, March 16.—Prospects for one of the largest crops of wheat in the history of this state are flattering to date, according to most authentic advices obtainable by millers through country agents and the inspectors of grain in this city.

The outlook for a big crop of spring wheat is bright. Winter wheat is in good condition through ample moisture, but the difficulty was in getting seed. This obstacle it is expected will be overcome and a larger yield produced in 1918 through increase in the spring acreage.

There will be a greater acreage of early bart, the new hybrid member of the bluestem family of soft white wheats. This wheat brought 2c per bushel more money in 1916 than bluestem, due to its hardy nature. It withstood the ravages of hot winds and extremely high temperatures better than any other and at times seemed impervious to heat of any kind.

More corn than ever before will be planted in this state. With production of 1,500,000 bushels in Washington last year, this will be greatly increased. Three carloads of Washington seed corn was shipped to Madison, Wis., recently.

Announcements regarding new wheat standards have brough considerable satisfaction to grain dealers and millers here. It is felt that if the rules are relaxed farmers will get more money for their crop.

## Seattle Market.

SEATTLE, March 16.—The peak of the apple movement for early spring is expected to be reached next week on a strong to higher market. Seattle jobbers are advised today that Wenatchee holders demand $2.10 f. o. b. for 175's in Winesaps and larger. Fifty carloads held by eastern buyers are being quoted at $2.25.

Spuds are steady, but the movement is not what it should be in view of pressure exerted by the government in the effort to stimulate consumption. Extra fancy Yakima Gems for the week end, while quoted at $25@28, are being moved at $24, despite attempts of jobbers to support the higher levels.

Early Rose seed potatoes, of high qualtiy and selection, are rolling into market. Prices are $1.25 per hundred as against $4.50 and $5 this date a year ago. Jobbers point out the advantage of home gardening and the inducements to early and extensive planting in aid of the conservation program.

The onion market all along the coast has broken down and it has become a buyers' opportunity.

There is a brisk movement of Oregon eggs in this market at 40@41c, but careful buyers who demand weights produced by Puget sound eggs are buying carefully.

Butter is firm. Some stock is arriving from California. Sunshine and warmer nights are needed to develop grass feed.

**BUYING PRICES.**

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots, f. o. b. Seattle:

Eggs—Local, 37c per dozen.

Poultry—Spring roosters, live, fat, 2½ to 5 lbs., 26@27c; old roosters, 17c lb; squabs, large, $3.50 dozen; geese, fat, live, 20c lb.

Butterfat, 58c lb; dairy butter, 35@36c.

Beef—Buying prices: Prime beef, steers, 11@12c; cows, fat, 9@11c lb. heifers, 10@11c.

Hogs—Light, 18@20c; lb; heavy, 17@18c lb.

Veal—Fancy light, 17@18c lb; heavy, 9@16c lb.

Hides—Salted, 14c lb; flint-dry hides, 29c lb; salt kip, 16c lb; green hides, 11c lb; green calf, 23c lb; dry calf (under six pounds), 29c lb; bulls and dry salts, 4c lb less; green bulls, 9c lb; dry salts, 4c lb less; green bulls, 9c lb. Clean long wool, western Washington flint dry pelts, 39c per lb; heavy to clean eastern Washington flint dry pelts, 30@35c lb.

**SELLING PRICES.**

Feed—Scratch, $79 per ton; all grain chop, $77 per ton; oats, $76 per ton; rolled oats, $77.50 per ton; bran, $34 per ton; shorts, $33.50 per ton; soy bean meal, $67 per ton; whole corn, $79 per ton; cracked corn, $80.50 per ton; alfalfa meal, $36; rolled barley, $82 per ton; Milo maize, $75 per ton.

Hay—Eastern Washington timothy, $36@37 per ton; alfalfa, double compressed, $40@41 per ton; wheat hay, $28 per ton; Puget sound, $27@28 per ton; straw, $14.

Butter—Washington creamery extras, cubes, 52c lb; do bricks, 53c lb.

Eggs—Fresh ranch, 41@42c dozen.

Potatoes—Puget sound, $20@23 per ton; eastern Washington, $25@28 per ton.

## Spokane Market.

**WHOLESALE.**

**Vegetables**—Cabbage, $4@5 cwt; carrots, $1.25@1.50 cwt; bunch carrots, 75@90c doz; bunch beets, 75@90c doz; beets, $1.50 cwt; rutabagas, $1.75 cwt; parsnips, $2 cwt; hothouse lettuce, 75c 5-lb box; head lettuce, 65@85c doz, $2.75@3 crate; turnips, $1.50@1.75 cwt; bunch turnips, 75@90c; California new turnips, $2 cwt; red bell peppers, $1.25 box; chilli peppers, 25c lb; green peppers, 11c lb; Mexican tomatoes, $2.50 crate; celery, 90c@$1 doz; hothouse cucumbers, $2 doz; cauliflower, $1.75 doz; new garlic, 10@12½c lb; parsley, 50c doz bunches; horseradish root, 12½c lb; brussels sprouts, 12½c lb; radishes, 50c doz bunches; rhubarb, $2.25 25-lb box, 10c lb; spinach, $1.35 crate.

**Onions**—California onions, $2.75 cwt; yellow onions, $2.50; green onions, 40c doz bunches.

**Grapes**—California cluster raisins, $2.25 box, 20 packages.

**Tropical Fruits**—Bananas, 6c lb; lemons, $7.50 case; navel oranges, $5.50@6.75 case; seedling oranges, $6@6.25 case; Florida grapefruit, $5.7@56.25 case.

**MEAT.**

**Beef**—Beef steers, 16½@17c lb; cow beef, 15½@18c lb; heifers, 18½c lb; beef loin, 23@27c lb; steer chucks, 13½@15c lb; prime ribs, 20@23c lb; rump and round, 16@18c lb.

**Mutton**—Wethers, 23c lb; ewes, 22c lb; leg of mutton, 26c lb.

**Pork**—Packer dressed hogs, 26@27c lb; pork loins, 29@30c lb; legs, 26c lb; shoulders, 24c lb; leaf lard, 28c lb; tenderloins, 40c lb; spareribs, 18c lb; country dressed hogs, with head on, 20c lb to producer.

**Smoked Meats**—Washington hams, 33@34c lb; T. C. hams, 34c lb; T. C. bacon, 46½c lb; Washington bacon, 41@44½c lb; picnics, 23½c lb; Boston butts, 26½c lb; English bacon, 36½c lb.

**Dry Salt Meats**—Clear bellies, 30c lb; lean backs, clear, 29c lb; sides, 29½c lb.

**Lard**—Tierces, 28½c lb, $15.40 case; compound, tierces, 24c lb.

**POULTRY.**

**Dressed Poultry**—Frozen hens, 28c lb; frozen springs, 28c lb; frozen broilers, 32c lb.

**GRAIN AND FEED.**

**Rice**—Fancy head, $7.50@9.50 cwt.

**Flour**—Bluestem, $9.40; Blend, $9.40; Montana hard wheat, $10.40; graham, $8.60 bbl, 49-lb sacks; whole wheat, $8.80; eastern rye, $10.10; eastern rye meal, $10.30; oat flour, $13.10.

**Oats**—$74 ton whole, $76 rolled, delivered in city.

**Corn**—$77 ton; cracked corn, $79 ton.

**Bran**—$30 ton; shorts, $32 ton; bran and shorts, $31 ton.

**Barley**—Rolled, $7½ per ton.

**Oil Meal**—$78 per ton.

**Hay**—Timothy, $32 per ton, $31 ton by carload; alfalfa, $27 ton, $26 ton by carload.

**GASOLINE, LINSEED OIL, ETC.**

**Gasoline**—Red Crown, bulk, 24c gal, cases, 34c gal; Shell, 24c gal; refined oil (Pearl), bulk, 13c gal, cases, 23c gal; eocene, 15½c gal. in bulk, cases, 25½c gal; engine distillate, 15c gal, bbl, 25c case; V. M. P. naptha, bulk, 23c, cases, 33.

**Linseed Oil**—Raw, bbl., $1.68, case $1.86 gal; boiled, bbl., $1.70 gal, cases $1.88 gal.

**Turpentine**—Bulk, 65c gal; cases 85c gal.

**White Lead**—Strictly pure white lead in oil, ton lots, 11¾c lb; 50-lb lots, 12½c lb.

**LINSEED.**

DULUTH, Minn., March 18.—Linseed, 4.06@4.17c; May, 4.10c bid; July, 4.08c; October, 3.60c asked.

## Portland Market.

PORTLAND, Ore., March 15.—A number of cars secured for delayed shipments have enabled egg handlers to reduce the surplus here, but the impression prevails that the market may go a cent or two lower this week, as receipts are increasing fast. General storing will not begin until the price is nearer the 30-cent mark.

Butter is holding firm at 50 cents for cube extras, with city creameries the main buyers. Prints were advanced a cent at the close of the week. Fair shipments of California butter have been received and a car of Utah butter is also on the market.

Very few potatoes are moving, as Oregon growers are not yet disposed to take the lower prices offered by dealers, which are around 75@80 cents. Jobbers quote Burbanks at 90c@$1.20 and are selling a few Yakima Netted Gems at $1.25@1.35. Onions drag with street sales at $1@1.50 a sack.

In the following list of quotations the grain, hay, mill feed, hops, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 2 white, $67.50@68 per ton.

Millstuffs—Bran, $30 per ton; shorts, $32.

Barley—No. 1 feed, $74; brewing, $82; rolled, $77@79.

Hay—Buying prices: Timothy, eastern Oregon, $27; alfalfa, $24.50; grain, $22.

Eggs—Oregon ranch, case count, 35c per dozen; candled, 36@38c.

Poultry — Ducks, 32@35c; turkeys, live, 26@27c; geese, 20@21c.

Butter—City creamery, prints, 52@54c per pound; cubes, extras, 50c.

Cheese — Tillamook triplets, 26c; Young Americas, 28c.

Dressed meats—Veal, 20@20 1-2c; pork, 21@21 1-2c.

Hops—1916, nominal; 1917 crop, 14@15c.

Potatoes—Oregon, buying price 75@80c per hundred.

Wool—Eastern Oregon, 44@65c; valley, 50@55c.

Beans—Buying prices; Oregon white navy and Lady Washington, 10¼@10½c; white kidney, 10c; colored, 9c.

## The Wool Market.

BOSTON, March 15.—The Commercial Bulletin will say tomorrow:

"There has been a fairly keen interest in the local market this week in all medium wools which are available and free of government control. Fine wools also are held more firmly, although relatively less strong than medium grades. The government terms for transferring foreign wools under its import options indicate that it will take the great bulk of the wool included under those options. Manufacturers report a very firm situation, with little effort on their part to sell goods. The new clip wools apparently have not begun to move in the west yet, owing to the lack of transportation. The government has stated that it has no intention to interfere with the marketing of this year's domestic clip."

Scoured basis:

Texas—Fine 12 months, $1.68@1.72; fine eight months, $1.55@1.60.

California—Northern, $1.70@1.75; middle county, $1.55@1.60; southern, $1.45@1.50.

Oregon—Eastern No. 1 staple, $1.80@1.82; eastern clothing, $1.50@1.60; valley No. 1, $1.65@1.70.

Territory—Fine staples, $1.82@1.85; halfblood combing, $1.70@1.75; three-eighths blood combing, $1.50; fine clothing, $1.60@1.65; fine medium clothing, $1.55@1.60.

Pulled—Extra, $1.80@1.85; AA, $1.70@1.80; A supers, $1.45@1.50.




**Highest Market Prices Paid**

for hides and prompt returns made same day shipment arrives. Write for price list and shipping tags. Address

**PACIFIC HIDE & FUR DEPOT.**

**Joseph Thiebes and C. T. Symmes.**
**1101-9 Railroad Ave., Spokane, Wash.**

# Want Ads

**HELP WANTED—MALE 3**

GENERAL FARM HAND; KNOWLEDGE pedigreed Ayrshires. Hinman milkers used. Bunkhouse, hot and cold water, shower bath, board; forward references, state wages first letter. Meadow Brook Farm, J. A. Pringle, mgr., Montesano, Wash.

WANTED—ACTIVE MEN WITH FARMER acquaintances, to sell Pipeless Furnaces; splendid line; good proposition to offer. Richardson & Boynton Co., 171 W. Lake st., Chicago, Ill.

**EDUCATIONAL 45**

BEHNKE-WALKER, PORTLAND, NORTHwest's largest, finest business college, can not supply half the calls for trained young men, women. Enroll now. Free success catalog. Positions secured.

## MUSICAL 38

"ALL HAIL TO OUR FLAG SO GRAND." This new song, with its beautiful words of sentiment and swinging military music, touching the heart of every loyal American. Single copy 30 cts. Published by
J. E. COOLEY,
MARSHFIELD, OREGON.

## TEACHERS' AGENCIES 46

TEACHERS REGISTER WITH B. F. WESTmore, Mgr. Hazard Teachers' Agcy. $1 registers you at three offices. 911 Old Nat'l Bank bldg., Spokane, Washington.

TEACHERS NEEDED FOR NEXT FALL. Write for information. Clark Teachers' Agcy, 412 Ch. of Com. Bldg., Spokane.

## MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.
If you are going to build, or remodel your house, let us send you our illustrated catalog No. 27, of sash, doors, finish, paints, builders' hardware, plaster board, roofing, etc. Sent free, postpaid, on request.
Cottage front doors ..... $2.75
2:6x6:6 five-cross panel doors ..... $1.92
24x28, two-light windows ..... $2.06
One-ply prepared roofing ..... $1.35
Two-ply prepared roofing ..... $1.70
Three-ply prepared roofing ..... $2.10
We sell any one, ship anywhere, and guarantee safe delivery.
The largest factory in the west selling direct to consumer.
O. B. WILLIAMS CO.
1943 First Ave. So., Seattle Wash.

BUILDING MATERIALS AT WHOLESALE prices — Doors, windows, roofing paper, porch columns, plaster boards. All building materials shipped promptly. Send for our complete illustrated catalogue; gives you lowest net prices. P. A. ROVIG CO., 2229 First ave., So., Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

ONE GOAT AND SHEEP SHEARING MAchine, 3½ Winona wagon, small cider mill; all used but little; 50-gal. sprayer; ¾ leather top buggy. A. R. Fanno, R. 9, Milwaukee, Ore.

## MISCELLANEOUS—WANTED 63

WANTED—BELGIAN HARES. WE ARE paying 15c per pound, alive, f. o. b. Spokane. Commercial Creamery company, Spokane, Wash.

## FARM LIGHT PLANTS. 73

WARNERLITE ELEC. LIGHT PLANTS absolutely guaranteed. Thousands used by satisfied farmers. Live agents wanted. Warnerlite Co., Temple Court bldg., Spokane.

## MACHINERY FOR SALE. 93

THE U. S. CREAM SEPARATOR, LIKE John Brown's soul, goes marching on. If you want to know about the new United States or need repairs for the old one, write H. E. Walker, sales mgr., Box 364, Portland, Ore., or Box 194, Salt Lake City, Utah.

"WITTE" GASOLINE ENGINES save labor, and are carried in stock by HIGGINS MACHINERY COMPANY. 312 FIRST AVE., S., SEATTLE. Write for Catalogue.

FOR SALE—ONE 10 H. P. STEAM tractor, cheap; $300. H. C. Rutledge, Littlerock, Wash.

## AUTOMOBILES 114

NIGHT COMFORT FOR FORD TOURISTS with our sleepers; bed inside; $5.50. Auto-Sleeper Co., 936L, Sacramento, Cal.

## STOVE REPAIRING 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

## PATENTS 150

WANTED—NEW IDEAS. WRITE FOR list of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. VICTOR J. EVANS & CO., Pat. Attys., 710 Ninth, Washington, D. C.

## POULTRY 174

BABY CHICKS.
White Leghorn baby chicks; sturdy, good laying stock; weekly hatches; immediate shipment. Write for prices. Randall-McLaughlin, 79 Madison st., Seattle, Wash.

BABY CHICKS—LEADING VARIETIES. We guarantee safe arrival and full count; strong, vigorous chicks from the finest flocks of free range stock in this country. 1918 price list and care of baby chicks if you mention this paper. Lasher's Hatchery, Petaluma, Calif.

200,000 WHITE LEGHORN BABY CHICKS —Bred for eggs, vigor, size. Safe arrival in good condition guaranteed. Free catalog and book on "Raising the Chicks." Oak Heights Poultry Farm, Route 3, Box T 67, Tacoma, Wash.

BABY CHICKS, WHITE LEGHORNS, CUSTomers say they are "husky," "lively," "vigorous," "healthy," "strong," "hard to beat," "thrifty," "great layers." Write at once. Free catalogue. Freshlaid Farm, Colfax, Wash.

BABY CHICKS.
Famous Carnation White Leghorn; vigorous, early maturing, heavy winter layers; also breeding stock. E. W. Raush, Carnation Poultry Ranch, Kent, Wash.

BABY CHICKS—S. C. WHITE LEGHORNS; real mortgage lifters; the kind that lay while mere kiddies; 21 years on the job. Catalogue. I. D. Casey & Sons, R. 6, Waitsburg, Wash.

## Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and i t s associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

# Want Ads

Send for card giving lower rates for ads running one month or longer.

## How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

## POULTRY 174 Continued.

HOGANIZED BABY CHICKS.
We have several thousand thoroughbred Hoganized White Leghorn chicks for sale at $14 per 100 for March and April delivery. Rhode Island Red and Barred Rock chicks $18 per 100. Safe delivery guaranteed. Established 10 years. Queen Hatchery, 89 Pike St., Seattle, Wash.

PETALUMA HATCHERY—CAN SHIP DAYold chicks to points reached in 3 days. Why not have the best? We challenge the hen. Free circular. L. W. Clark, Petaluma, Cal.

WHITE LEGHORN EGGS $1.50 PER SETting; $8 per hundred. Special mating Pen-A, eggs 50c each; Pen-B, eggs 25c each. Waikiki Farm, R. 7, Spokane, Wash.

SINGLE COMB WHITE LEGHORNS; THE world's greatest egg machines. Write for our "War Measure." Help Hoover win the war. Broadview Farm, Curlew, Wash.

S. C. WHITE LEGHORNS — PRESENT breeders averaged 15 doz. each last season. Mated to high-record males. Hatching eggs. Mary Jessup, Cooks, Wash.

WHITE WYANDOTTES, BRED FROM Martin's famous bred-to-lay Dorcas line fowls. Eggs, $2.25 and $3.50 per 15. Thos. Thorson, Cashmere, Wash.

PURE BRED S. C. BROWN LEGHORNS; best winter layers; hardy, free range stock; eggs, $1.50 to $3 for 15. Vail's Poultry Ranch, Loomis, Wash.

S. C. RHODE ISLAND RED EGGS $2 PER setting; $10 per 100. Fertility guaranteed. Waikiki Farm, R. 7, Spokane, Wash.

S. C. RHODE ISLAND REDS.
GOOD LAYERS. EGGS $2 PER SETTING. MRS. WALTER LIVERMORE, Pasco, Wash.

PARKS BRED-TO-LAY BARRED ROCKS, winter layers. Eggs, $1.50 for 15; $8 per 100. W. G. Neyland, Spokane Bridge, Wn.

FOR SOMETHING GOOD IN SILVER Wyandottes, S. S. Hamburgs or Golden Campines, write G. G. Wherry, Payette, Ida.

RANCH RAISED WHITE WYANDOTTES. Good vigorous birds, eggs and stock for sale. Jas. A. Hills, Jonathan, Wash.

WHITE WYANDOTTE EGGS, CKL'S, BABY chicks. J. D. Baker, Payette, Idaho.

BARRED ROCK EGGS $1.50 PER 15. August Anderson, Pullman, Wash.

BARRED ROCK EGGS, $2 PER 15. W. D. Good, Mt. Vernon, Wash.

## LIVE STOCK 177

FOR SALE.
A choice lot of pure bred Shire stallions, coming two years old; also pure bred yearling Shorthorn bulls. Address
WILSON RANCH, ROCKLYN, WASH.

POLAND-CHINAS; BIG TYPE; SPRING pigs by Young Chief N. 79349, from good, rangy sows. James A. Hills, Jonathan, Wn.

FOR SALE—25 REGISTERED RED, white and roan Shorthorn bull calves and yearlings. Wm. Mulhall, Fenn, Idaho.

FINE GRADE ROAN DURHAM BULL calf; 8 weeks old. $35. Dam is very heavy milker. J. H. Rowley, Westfall, Ore.

## HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

## RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

## TAXIDERMISTS 426

WE MOUNT ANYTHING. FURS TANNED and made into furs and robes. Raw furs bought. Mohr, 82 Bernard, Spokane.

## BUSINESS OPPORTUNITIES 516

$6500 BUYS A WELL-EQUIPPED DAIRY plant and business in a beautiful college town in So. Calif. Brings in about $400 per mo. For full particulars and terms write R. F. D. 1, Bx. 86, Yelm, Wash.

## PLUMBING, STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

## SEEDS 620

VETCH, CLOVER AND FIELD SEEDS.
We carry a complete line of grasses, wheat, oats and other seeds too numerous to mention. Our prices are right. Will be glad to send samples and quote prices.
CORVALLIS FLOURING MILLS.
CORVALLIS, ORE.

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground. Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.,
Portland, Oregon.

NEW SEED CATALOG—COMPLETE LIST of Tested Seeds for Western planting. Write for your copy today—MAILED FREE. An experience of 25 years in the Northwest. Aabling-Boyce Seed Co., 89 Pike St., Seattle, Wash.

VOGELER'S PURITY SEEDS.
Alfalfa and clover seeds—full of life—carefully cleaned and tested. Also the finest seed grains. Write for catalog and price. VOGELER SEED CO., Salt Lake City, Utah.

PEAS FOR SALE—ALASKA, BANGALIA, Blue Prussian, White Canadian and Admirals. Seed peas tested and fumigated. Washburn & Wilson, Moscow, Idaho.

BANGALIA FIELD PEA SEED AND Early Bart wheat seed, testing over 62 lbs., for sale. Write W. A. Yeomans, R 2, Mead, Wash.

WE SPECIALIZE IN TIMOTHY, ALFALfa, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Ida.

## SEEDS 620 Continued.

LADY WASHINGTON SEED BEANS; best quality; ten-lb. lots, 20c lb., f. o. b. Weiser, Idaho. P. V. Du Bois.

FOR SALE—HOME-GROWN ALFALFA seed at famous prices. C. W. Bond, R. 2, La Grande, Ore.

SEED PEAS—SAMPLES AND PRICES sent. Jos. Bruna, Mica, Wash.

## NURSERY STOCK 621

CLARK SEEDLING STRAWBERRY plants, the variety that made Hood River famous. No other variety makes as much money for the grower. You can't buy better plants than we are offering. By express, not prepaid, $2.50 per 1000. Trimmed, ready for planting. W. R. Gibson & Son, Route 2, Hood River, Ore.

NURSERY STOCK—ITALIAN PRUNE trees; grafted walnuts; pure strain of Vrooman Franquette walnuts, and all other kinds of nursery stock; small fruits of all kinds. Buy direct and save 50 per cent.
BROOKS NURSERY, Lafayette, Ore.

EVERBEARING STRAWBERRIES ARE money makers. You can pick strawberries all summer and fall the same season they are replanted. Don't delay order now. Fred Leissler, R. 6, Box 429, Lake Forest Park, Seattle.

LOGANBERRY TIPS,
Well rooted; from vigorous patch, $2.50 per 100; $20 per 1000; special price on large orders; no order filled for less than 100. O. B. Miles, Salem, Ore.

FAY'S PROLIFIC RED, BLACK NAPLES currant and Oregon champion gooseberry cuttings, $3 per thousand f. o. b. here. J. E. Newton, R 3, Bx. 198, Puyallup, Wash.

EVERBEARING STRAWBERRIES ARE mortgage lifters. We have plants, strong and thrifty. Send for price list. F. I. Moffett, Ellensburg, Wash.

CLARK'S SEEDLINGS.
Finest plants in the valley, $2.50 trimmed; f. o. b. Hood River. Address A. M. Sawyer, Route 2, Hood River, Ore.

EVERBEARING ST. REGIS RASPBERries, $1 dz. S. C. Dixon, R. A., Portland, Or Ore.

## FARM LANDS—FOR SALE 651

SMALL FARMS FOR SALE.

We have for sale at lower than prevailing market prices—and on terms to suit purchaser 8 small farms, ranging from 10 to 80 acres each—some improved with house, barn, well, etc., at $80 to $120 an acre, just half former prices. Finest black Palouse soil—just the kind that insures "sure" crops of grain, fruit or garden; located 14 miles from Spokane, on electric line, and paved highway. Surrounding growing suburban community—active trading center.

These are among best bargains offered today. You buy from us as owners. Call at office, or write for full particulars, with plat, before you buy anywhere. One of these tracts will surely suit your needs.

HANAUER-GRAVES COMPANY.
601 Old National Bank Bldg.
Spokane, Wash.

BIGGER CROPS, PLEASANTER CLIMATE are enjoyed by farmers in Eastern Washington, Northern Idaho and Western Montana. The same work will bring you more per acre than in the middle west; no extreme heat or cold to injure crops and take a lot of joy out of life. Attractive opportunities here for the farmer, dairyman, stock man, poultry man and market gardener looking for land at reasonable prices. Farm land bought now is bound to increase in value. Write for our free folder, "A Farm Home for You." Tell us the kind of place you want. Farm Development Bureau, 618 Chamber of Commerce building, Spokane, Washington.

FULLY EQUIPPED STOCK RANCH
$2000 BELOW VALUE.
160 acres beaver dam land; all tillable except 2 acres; 80 acres in meadow; 5 head of horses, 8 head of cattle; all farm machinery; good 2-story house, barn, wagon shed, garage, blacksmith shop and other outbuildings; good well and creek. Price $5500; $4000 cash, bal. long time.
This is one of our many.
JAMES W. BOOTHE & CO.
510 FIRST AVE. SPOKANE, WASH.

TWENTY-FIVE HUNDRED-ACRE WHEAT and stock ranch; western Canada; completely equipped; caterpillar tractor; thirty horses, cattle, hogs, implements, buildings; close to railway, schools and churches; settled community; telephone, rural mail, good roads; 1200 acres ready for drill. Price, $125,000; one-third cash, balance half crop payment. Western Canada Properties, Ltd., 401 Herald building, Calgary, Alberta, Canada.

ALBERTA FARM LANDS
in the famous Vermillion district, where land produces as high as 64 bushels of wheat per acre, and other crops accordingly. Also the best stock district in Alberta. We can sell you 160 acres to 12,000 acres and take trade to half its value. Price $16 to $30 per acre.
UNION INVESTMENT CO.
406 ZIEGLER BLK. SPOKANE, WASH.

CULTIVATED CANADIAN WHEAT LANDS.
3000 acres ready for drill; in quarters, halves, or sections; every convenience; easy terms or crop payment. Final payment 1937. Where can you equal it? Western Canada Properties, Ltd., 401 Herald building, Calgary, Alberta, Canada.

FOR SALE CHEAP—IN WESTERN WASHington; 10 acres land; 5 cleared; no overflow; good country home. Address L, Box 6, Sauk, Wash.

## FARM LANDS—FOR SALE 651 Continued.

CANADIAN LANDS.

WHEAT, STOCK AND GRAZING—Special bargains in new Alberta section, just being developed; crop payments. Come, go with us and look them over. Some parties paid for their lands with one crop. Lands broken, with some improvement, sell for handsome advance. Fine chance for those prepared to break lands and sell, or take contracts. Easy terms of sale.

FARMS FOR SALE.

Crop payments. Wheat, stock and truck farm. 120 acres, all in cultivation; 15 miles city; good roads; good buildings, water, etc. Might take other property as first payment.

LINCOLN TRUST CO.

Cor. Sprague and Howard, Spokane, Wash. Address Mr. Allin. Phone M. 1066.

BASSANO DISTRICT, ALBERTA.

1920 acres of real w-h-e-a-t land; good, black soil; 850 acres ready for spring sowing; 850 acres stubble; $40 per acre, including $25,000 worth of live stock and machinery. Enough seed wheat to plant 1000 acres. Good buildings. Seven-room house, completely furnished. Near R. R. station and grain elevator. It will take entirely too much space to tell all the good things about this place. It will not last. Absolutely the best buy in Alberta. $30,000 in cash, easy terms on balance.

HOUSE AND LAND ASSOCIATION.

514 Riverside Avenue, Spokane, Washington.

BUY WHERE THEY RAISE THE PRIZE CROPS
IN SNOHOMISH COUNTY.
40-acre farms, $25 per acre. Ten yearly payments, 6 per cent interest. Visit our office and see the great exhibits of PRIZE WINNING vegetables, fruits, grains, alfalfa and other grasses raised on the adjoining farms. They prove our claims that this is the best land in WESTERN WASHINGTON.
Paved roads. Four passenger trains a day. Graded school, cannery, creamery, cheese factory, plenty of work for the laboring man in the mills and camps, where 75 settlers are all boosters. DON'T LOSE A DAY in asking for our illustrated literature.
BROWNELL LAND CO.
904 THIRD AVE., SEATTLE, WASH.

FINE PAYING OREGON FARMS.
1240-acre wheat farm; Eastern Oregon; nearly all farmed; 600 in wheat; all necessary farm buildings; good well, stock and farm tools included. Price $35 per acre, reasonable terms. Two good crops will pay for this.
Big diversified farm; Willamette valley; close to station; 320 acres; nearly level; 210 in crop; 9-room house, barn, 50x150; other good buildings; good water; 20 milch cows, 20 young stock, 8 horses, plenty feed; all kinds farm tools. A bargain for $25,000. Reasonable terms.
We have anything you want in farm line, large or small. Lueddemann Company, 913 Chamber of Commerce, Portland, Ore.

JORDAN VALLEY PROJECT—LET OUR office explain this project to you that you may fully understand it. It is so wholly different that you are sure to be interested sufficiently to wish to see it. Literature and information on request. Our autos will take you from Boise to look the project over. Harley J. Hooker, Shaw bldg., Boise, Idaho.

617 A. FINE, LEVEL, EASTERN WASH. wheat land, stubble; fair buildings; good well, windmill; 2-mile haul; great bargain at $12,000. Terms. Low interest. 120-a. diversified farm, 15 miles from Spokane; mile to station; all deep, rich, subirrigated soil; new buildings; fine well; fine roads. Snap at $10,500. J. A. Wilson, Fernwell blk., Spokane, Wash.

GOOD SOIL, GOOD CROPS, GOOD ROADS, good schools, good neighbors, good transportation for the owners of Thurston county farms; 10 to 40 acre tracts of rich alder bottom and clay loam, now selling at $75 an acre; ideal climate, good district, settling up rapidly. Write us. A. H. Reid & Co., 314 New York blk., Seattle, Wash.

80-ACRE DAIRY FARM; IN WHATCOM county, Wash.; good land; 6-room house, barn and other buildings; orchard; with or without stock and equipment. Also 160 acres wheat land; 90 a. in winter wheat. Address owner, J. M. Henderson, R. 1, Goshen, Wash.

HOMESTEADS, 160 AND 320 ACRES, Alfalfa, wheat and stock farms, $40 to $100 per acre; paid water. This is a farm and stock country. John Hardwick Realty Co., Vale, Ore.

FOR PRICES AND INFORMATION ON stock and grain ranches write D. W. Yeargin, Republic, Ferry county, Wash.

ALFALFA, PLOW LANDS, HOP YARDS, orchards, business investments. Lum Land Co., North Yakima, Wash.

## FARM LANDS—WANTED 654

WANTED—TO HEAR FROM OWNER OF farm or unimproved land for sale. O. K. Hawley, Baldwin, Wisconsin.

## FARM LANDS—Wanted Rent 660

WANTED — TO RENT, SMALL PLACE, fair buildings, fruit. Box 13, Conley, Ore.

## ACRE TRACTS—FOR SALE 669

FOR SALE—FIVE ACRES APPLES AND Franquette walnuts, 5 yrs. old; near Portland. Price $3000; equity $1200; will accept Liberty bonds, balance easy payments. Harry Stibbs, Box 1203, Seattle, Wash.

## FOR SALE OR EXCHANGE 702

UNUSUAL OPPORTUNITY IN LOTS.
Will sell or trade 3 lots in Mesa, Wash., 50x100 each, containing garage, blacksmith shop and equipment and water works supplying town with water. Property all clear and a very profitable investment. P. M. Eades, Mesa, Wash.

# Wade's Drag Saw More Than Pays for Itself in One Season

## —saws 25 cords in a day




HUNDREDS of WADE Gasoline Drag Saws are making light work of sawing logs into short lengths for farmers all over the West. It is the most popular farm machine that has ever been put on the market, because it is a big time, labor and money saver. The initial and upkeep costs are almost nothing when compared to the immense savings it makes for you in a single season.

**The New 1918 Model of the WADE DRAG SAW Is Now Ready**

All 1918 Model Wade Drag Saws are to be equipped with our new improved **4-H. P. ENGINE** — we have **INCREASED** the **HORSEPOWER** of the engine **WITHOUT INCREASING THE COST.** This 4-h. p. engine gives you an abundance of power, and, therefore, a greater output per day—be sure to get a **WADE**—accept no substitutes.

**Wade's Gasoline Wood Saw**
(Portable)
**$165 DELIVERED** Anywhere in the U. S. A.
**1918 Model With 4 H. P. Engine**

The WADE is made of the best materials throughout, and the whole machine is constructed for hard work in the woods—practically never gets out of order, and is always ready for use. The husky little 4-H. P. engine used on the Wade fairly hums the 6-foot saw through your toughest logs. (Larger saw blades on special order.)

One man can move the WADE along the log, while two men can easily move it from log to log. It weighs only 285 pounds complete. The WADE is especially low in upkeep cost and gasoline used—the tank holds 2 gallons (enough to cut 16 to 20 cords). It is the cheapest, easiest, fastest way for you to saw your logs.

**How Dan Ross Saws Forty Cords a Day**

COUPON

R. M. WADE & CO.
Portland, Ore., 322 Hawthorne Ave. (W. F.)
Spokane, Wash., N910 Howard St.

Gentlemen: Please send me the Booklet, "HOW DAN ROSS SAWS FORTY CORDS A DAY," also full information on the NEW 1918 MODEL WADE DRAG SAW.

Name .....

Address .....

.....

## Does 10 Times the Work of 2 Men!

Think of it! TEN TIMES as much as two men can do! The WADE will easily cut 25 cords of wood in one day.

Can you afford to pay for slow, expensive day labor when you clean up with a WADE the same amount of work in one-tenth the time?

Fuel and labor are higher than ever before—and present conditions indicate that they will continue so for a number of years—get a WADE Drag Saw and keep your labor costs down and sell your wood while it is high in price.

A good many WADE Drag Saw owners are making good money by helping their neighbors saw their wood.

Send today for this interesting booklet, "How Dan Ross Saws Forty Cords a Day." Dan Ross lives at Corbett, Oregon, and has used a WADE Drag Saw ever since they first came out. You will profit by reading his experience.

FILL IN COUPON TODAY

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THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XLI. NO. 13. MARCH 28, 1918. WEEKLY.

# Reduced Wheat Ration Is War Necessity

## *Food Administration Issues Vital Order; Congress May Increase Price of Wheat*

Two important actions relative to the wheat situation took place during the past week. One was the passage of a measure by the United States senate which would, if approved by the house of representatives and the president, increase the price of wheat for the 1918 crop to $2.50. The other was the action taken by the national food administration virtually rationing the people of this country so far as eating of wheat products is concerned.

Under the food administration's action it is required that hereafter, at least until the 1918 wheat crop begins to come in, the consumption of wheat products shall be limited to one and one-half pounds per person per week. This would be a reduction approximately of one-half in the amount of wheat stuffs ordinarily consumed. The action is taken by the food administration on the ground of being a "military necessity."

"If we are to furnish the allies with the necessary proportion of wheat to maintain their war bread from now until the next harvest—and this is a military necessity—we must reduce our consumption to 21,000,000 bushels a month as against our normal consumption of about 42,000,000, or 50 per cent of our normal consumption, reserving a margin for distributing to the army and for special cases," says the order. "This leaves about one and a half pounds weekly per person.

"With improved transportation conditions we now have available a surplus of potatoes. We also have in the spring months a surplus of milk, and we have ample corn and oats for human consumption. The drain on rye and barley as substitutes has already greatly exhausted the supply of these grains. To effect the needed saving of wheat we are wholly dependent upon the voluntary assistance of the American people, and we ask that the following general rules shall be observed:

"FIRST — Householders to use not to exceed a total of one and one-half pounds per week of wheat products per person.

"This means not more than one and three-quarters pounds of Victory bread, containing the required percentage of substitutes, and about one-half pound of cooking flour, macaroni, crackers, pastry, pies, cakes and wheat breakfast cereals all combined.

"SECOND—Public eating places and clubs to observe two wheatless days per week (Monday and Wednesday), as at present.

"In addition thereto not to serve in the aggregate a total of more breadstuffs, macaroni, crackers, pastry, pies, cakes and wheat breakfast cereals containing a total of more than two ounces of wheat flour to any one guest at any one meal; no wheat products to be served unless specially ordered; public eating establishments not to buy more than six pounds of wheat products per month per guest, thus conforming with limitations requested of the householders.

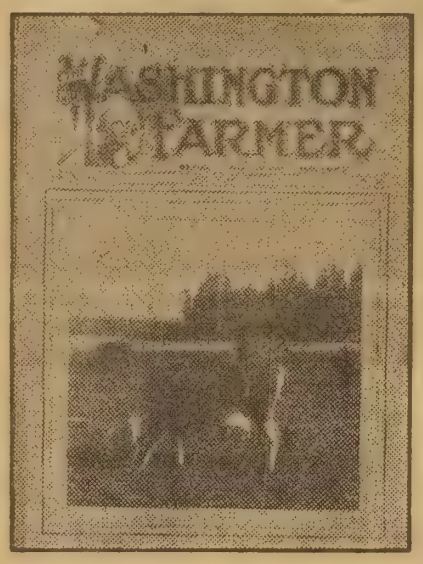
"THIRD—Retailers to sell not more than one-

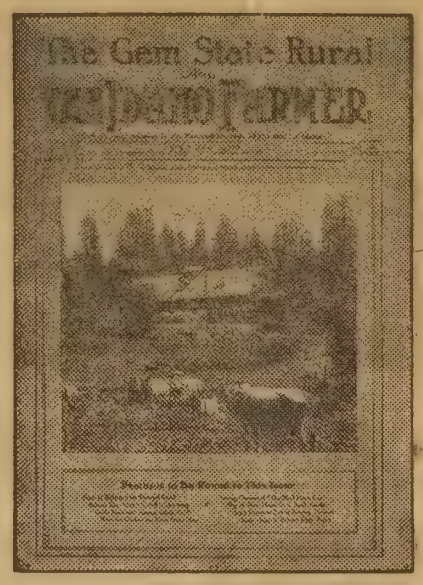


Senator Thomas Gore of Oklahoma, who introduced amendment that may increase wheat price.

Continued on page twenty-two.

# "Want" Ads in These Papers Are Economical and Effective







## Take Advantage of the Low Combination Rate for Insertion of "Want" Ads in These State Farm Papers

The "want" ad is a method of communication which will prove helpful at various times to all of our farm folks.

Do you desire to get in touch with a reliable, experienced hired man? The "want" ad brings your need to the attention of competent workers throughout three states.

Do you wish to turn used machinery into cash? The "want" ad reaches farmers in other districts who have use for your discarded implements, and who will probably be glad to make the saving you will be able to offer them.

Have you farm products to sell, such as live stock, poultry, seeds or dried fruits? Once more, the "want" ad in the three state farm papers offers a solution for the difficulty. It reaches the very class of homes where there is a constant demand for these things.

Have you a piece of land for which you are eager to find a buyer? The "want" ad in The Washington Farmer, The Oregon Farmer and The Idaho Farmer affords a splendid method for making a sale; inasmuch as these three papers are read by tens of thousands of farm owners and farm renters, a goodly proportion of whom are considering the purchase of farms or orchards in other sections.

To sum up, our "want" ads enable you to reach the people who have what you want or who want what you have. They are easy to insert. They are low in cost. Even if there is nothing you care to advertise at this time, you will always find interesting, profitable reading in our "want" ad columns.

Rates are printed at the top of these columns in every issue. Don't miss the "want" ad page today!

**Send Orders and Inquiries Regarding "Want" Ads to The Washington Farmer, 617 Central Bldg., Seattle, Wash.**

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 13 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF March 28, 1918

## Inoculate Peas

### Success Usually Depends on It

By J. R. SHINN.

In growing of peas early seeding of the crop is very important for successful results. The amount of seed usually required per acre depends upon the conditions under which the crop is grown and where the climate is as dry as it is in the Odessa section the best plan would be to put the peas in rows so that they may be cultivated to conserve the moisture. A double row system should be employed under such conditions. The method by which the seed is planted in this manner is to leave two holes of the grain drill open and stop three holes. This places the seed in double rows with 24 inches between each of the double rows where six-inch drill is used. Where an eight-inch drill is used the rows will be 32 inches apart.

With the Bangalia variety of peas 50 pounds of seed will be required per acre when the above method is employed. However, with the White Canadian variety 60 pounds of seed will be needed.

In case the peas are seeded with oats for either hay or silage it is necessary to use one bushel of peas and one bushel of oats. The White Canadian is the best hay and silage pea.

One of the needs is emphasized over and over again and that is that peas require inoculation if a successful crop is to be secured. Unless one has grown peas successfully in the garden where the soil is known to possess the bacteria which form the nodules on the roots of the peas it is well to send to the experiment station of the state college and buy the cultures for inoculating the seed. These cost 25 cents per acre and may be relied upon to give good results. Be sure to plant this seed deeply in the ground, whether the peas are grown for hay or for seed purposes.

### FOOD PROBLEMS

### Harrah and Hagenbarth Appointed.

W. W. Harrah, Pendleton, Ore., has been appointed by the secretary of agriculture and the food administrator as a member of the advisory committee of farmers and live stock growers to assist the government in working out food problems.

Frank J. Hagenbarth of Spencer, Idaho, has also been appointed on this committee, these two being the only representatives from the Pacific northwest. The committee has been called to meet in Washington March 28 to confer with the department of agriculture and the food administration on farm and live stock problems which will arise during the season of 1918.

#### Bank Has Agriculturist.

The Farmer's Savings bank of Walla Walla has employed C. L. Jamison to act as their bank agriculturist. It is planned to give such individual assistance to farmers and stockmen as is possible, and to aid in the development of the agricultural resources of the Walla Walla valley. Mr. Jamison was formerly agricultural agent in Wheeler county, Oregon, and in Johnson county, Wyoming.

### Save for War Purposes.

Elsewhere in this issue is a coupon enabling you to order thrift stamps or war saving stamps direct through this paper. Clip it out, enclose however much you wish to invest in these little "baby bonds," mail to us and your stamps will be sent by return mail. We are simply helping Uncle Sam help you and helping you help Uncle Sam.

## Urgent Pleas Are Made to President Wilson to Assume World Leadership in War Conduct

Two national magazines of great influence in their current issues call forcefully upon President Wilson to rise to the demands of this critical hour in the world's history and assume the leadership in the conduct of the war that destiny seems to have intended for him. The magazines are The World's Work and The North American Review, the former, under the heading, "An Open Letter to President Wilson," containing these significant paragraphs in an article urging the organization of a great war council in America that will coordinate all this country's war activities:

"Dear Mr. President: This letter contains a digest of opinion of a great number of men who have had an opportunity both from near to and from a distance to study the workings of our war machine.

"Very many who have been by long habit somewhat cynical of improving standards of international morality have been caught and invigorated by your enthusiasm for human freedom and the possibilities of improving civilization. And, as a nation, having subscribed to the high doctrines which you have formulated, our endeavor to attain them will bring us to a higher level than we should otherwise even have striven for. The standards you have set are held very preciously by the American public. Along with this feeling, and as universal among those who are where they can see the war machine, is the feeling that the vision which you have put into our war aims is lacking in our war conduct. Some blame you for this. Many others blame Mr. Baker. But those who have analyzed the situation most carefully blame the Council of National Defense. That body was created to make the comprehensive plan by which the whole strength of the nation could be turned toward the conduct of war.

"Mr. President, almost no one believes that the Council of National Defense has had this vision or has it now, or that it has a sufficiently comprehensive grasp of the raw material, labor, industry and transportation possibilities of this country to create and guide a plan to make use of them to their utmost.

"When the breakdowns in our war machinery came, you summoned new men to repair the damage and get the machine under way again, but in practically every case, Mr. President, the difficulty has been given to you to solve after it was in a serious condition, and not in time to prevent serious delay from arising.

"When, finally, these various problems are brought to you, you remedy them one by one, but you have not supplied the deficiency which has allowed them to occure and become acute. That deficiency is in the council of national defense. It has not functioned successfully as a war cabinet with vision, foresight and authority.

"The general belief is that the relief for this situation is in a body working directly under you and clothed with your authority, containing a combination of men acceptable to you who have knowledge of finance and government policy, and also men who, like Mr. Stettinius, for example, are familiar with the industrial processes of the country. Senator Chamberlain was pointing in this direction with his war council bill, but no one would haggle for any specific bill. If the council of national defense could be invigorated and relieved of other duties and perhaps reduced in numbers, it might serve. But its failure so far is against it."

The World's Work article and that of the North American Review are remarkable in these two particulars at least: They come simultaneously, and they express in different language the same ideas and the same purposeful appeals. After reviewing the grave position in which the United States and its allies find themselves as a result of varying fortunes and policies, Colonel Harvey, whose high rank among editors is known the world over, closes the North American Review's article with this gripping appeal:

"We can not, we will not believe it. Black as the outlook is and black as we should frankly recognize it to be, ultimate triumph is as certain as that there is a God in heaven if we will but clear our vision and press on and on, be it for one year or for 10. What the mighty forces of civilization need and all they need is a leader. Our war-worn but indomitable allies know this and admit it; and they recognize the man—Woodrow Wilson, whom above all others they would prefer to have in person at the head of the great council, and whom, even as merely but suitably represented, they stand ready and glad to heed and to follow. But the president himself holds back; he keeps aloof as a "cobelligerent"; he outlines programs without consultation with accredited representatives of the associate nations; he consults only one elderly and amiable, though estimable, gentleman; he is surrounded and supported almost exclusively by profes-

(Continued on page twenty-seven.)

### Children's Specialty Is Coming.

In the near future this paper will publish an issue with the children's department enlarged to contain a lot of things of interest to the young folks that we have been gathering for some time. Boys and girls, watch out for it. Be ready for some fun and entertaining reading. And have your wits well sharpened to solve some of the problems that will be put up to you in that issue.

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## Economic Law

### Should Be Followed as to Prices

Farmers are patriotic; no class of American citizenship is more so. They want to help the government win this war, and they want the government to make the fewest possible mistakes in assembling its resources for the struggle.

If it could be demonstrated that the government's present plan of controlling wheat prices while allowing the law of supply and demand to have free play with corn, oats and other products will attain the desired object—the growing of more wheat—farmers generally would cheerfully accept that method. They will accept it loyally in any event. But a belief is growing that this plan runs counter to sound economic principles and that the government ought to take one horn or the other of the dilemma—either adopt a general policy of price-fixing or let wheat go free of government control.

A delegation of farm representatives presented this question with great force of reason recently before Food Administrator Hoover. They produced figures showing that the high prices of corn, barley, rye and oats now make it more profitable to raise those grains than wheat and that this will have a tendency to reduce the amount of spring wheat sown. It was further pointed out that wheat was now in many places the cheapest feed for stock, and was being used for feed purposes.

Congressman Steenerson of Minnesota accompanied the delegation and made this suggestion to Mr. Hoover:

"I propose that the food administration shall announce at the beginning of August, 1918, it will pay a price for wheat that will bear the same ratio to the prices of corn, rye, barley and oats as the price ratios to these grains were the three years before the war; that is to say, if the price ratio of these grains was as three to four for wheat, then the government will pay a price according to that ratio. This, in principle, is the same as is already being done by the food administration in regard to Pacific coast wheat prices. The president, in his last proclamation, fixed $2.05 per bushel as the Portland price for wheat, but the grain corporation, under date of March 1, 1918, announced that, in the event of certain conditions as to shipping are realized, it will pay $2.20, a raise of 15 cents per bushel This is 3 cents higher than the Minneapolis price. In like manner, if the grain corporation would announce that in event of abnormal rise in prices of coarse grains it will, to encourage the planting of a large area of wheat and the discontinuance of the use of wheat for food, pay a price which will bring the price of wheat relatively to the price of coarse grains as it was before the price regulation began, the area in the spring wheat regions of Minnesota and the Dakotas that woulid seed to wheat will be immensely increased."

### Boys and Girls Get Hogs.

Big medium Poland China gilts from the purebred herd of J. E. Straw of Wilbur, Wash., were distributed at Spokane Wednesday of last week. Twenty of these animals were sent into the Greenacres country, two to Deer Park, one to Elk, one to Orchard Prairie and two to Deep Creek. Seventeen of these hogs were sent to boys' and girls' pig clubs and 19 of them were financed by the Exchange National bank of Spokane. O. S. Fletcher, now assistant city agent for Spokane county, and Mr. Horne, the boys' and girls' club leader for the county, were instrumental in obtaining these Poland China hogs from Mr. Shaw and distributing them.

### Gardens and Parks.

All undeveloped park property in St. Paul, Minn., will be converted into gardens again this season. To raise 100,000 pounds of vegetables in home gardens and make St. Paul self-supporting in 1918 so far as garden productions are concerned, is the goal set.

# Should Grow Vegetables Needed

## *Don't Stop With Summer Supply; Dry or Can Them for Winter Uses*

A strip of ground 30x130 feet will, if properly fertilized and tended, furnish sufficient vegetables for the average family, excepting potatoes. The hoe, hand cultivator, and wheel cultivator are the principal tools for cultivation. I would not recommend a horse for cultivating a garden. There are usually odd times when one can attend to gardening and one hour a day will be sufficient to take good care of a garden of this size.

For fighting garden pests you will need a small spray pump, and a few of the prepared remedies sold by all seed dealers. For caterpillars, beetles and the like, use arsenic of lead, or paris green to kill them. Tobacco dust is merely a preventive. For aphis, use kerosene emulsion. For red spider, spray frequently with water containing a few drops of carbolic acid. For mildew, dust with sulphur. For leaf spot, rot, rust, or blight, remove affected parts, if possible burning them. and spray with bordeaux mixture. For cut worms use poison bran, composed of one part of wheat bran, one teaspoon white arsenic, one teaspoon molasses; place it around the young plants and the worms will eat it and die. To make kerosene emulsion dissolve 1-2 pound laundry soap in one quart of boiling water. Add two gallons water and two gallons coal oil, or (two cubic inches of soap, one quart of water, one quart kerosene).

Harvest the crop before injury by frost. The storing of vegetables in their natural state requires proper moisture, right temperature and ventilation. For this reason a cellar can not suit all. To keep onions and sweet potatoes, store in very dry and cool place. Make a lattice bottomed bin at least 4 inches from the floor for onions. Do not pile more than a foot deep, and protect from freezing. For carrots, parsnips, beets, turnips, etc., dig a trench 12 or 15 inches wide and deep, and as long as necessary to hold the crop. Fill the trench and cover only sufficiently to prevent from freezing. See that the trench is well drained. A short piece of one-inch pipe or very small tile will make a good ventilator. If parsnips are allowed to freeze it will add to their flavor, but all others must be protected.

Pull the cabbage up roots and all and pile in long narrow ricks, with the heads down, cover with straw and just enough dirt to prevent freezing. For celery, make box 12 feet by 12 feet by 12 inches, put three or four inches of sand and sawdust in the bottom and place in the cellar. Pull celery roots and all and reset them in the box, packing them in closely. Water occasionally by using a long necked funnel or from a hole in the side of the box. Do not wet the celery tops.

Peas, string beans and sweet corn are usually canned for winter use. The ordinary kitchen utensils will be all that is necessary for canning. Any of the vegetables may be dried and placed in the pantry for immediate use in winter.

To dry vegetables, prepare as for cooking, slice about 1-4 inch thick, spread on fruit tray and place near the stove or in the sun. Sweet corn must be cut from the cob before it gets too hard. Green peas should be scalded. String beans may be salted down the same as cucumbers, and they will make their own brine and keep indefinitely. An effective and economical home drier may be arranged by making six or more lattice bottomed trays about 2 1-2 inches deep and just the size of the top of stove. Place them on four bricks over the stove. Fill the top tray first, when you have prepared another tray full, place it on top of pile, moving first tray nearer the stove. Continue until all trays are full. Always place the newly filled tray on top, keeping the driest one nearest the stove. If the green fruit or vegetables are put nearest the stove they will burn. Do not use too much fire. Damp nights, rain, flies, yellow jackets, chickens and birds are to be dealt with when trying to dry anything in the sun.

A few notes on planting may not be out of order at this time. Put the tallest plants, corn, pole beans, and the like on the extreme north or east side of the garden. Do not plant anything but onion sets, rhubarb, horseradish and asparagus before March 15.

Don't walk on the damp ground while planting seeds or when gathering vegetables soon after a rain. It packs the ground, causing it to bake. Put down a few old 1x6 boards to walk on.

Plant all the earliest garden nearest the entrance gate, you can then get it without molesting the other plants. For

### Garden Contest.

This is the third instalment of the letters received in the Farmer's garden contest. We have many others, some of which will be published, but many of which can not be given because of lack of space and the passing of the early spring time. The decision on the contest will be announced at an early date.

best results use liquid manure during the growing season.

J. D. STEWART.

Multnomah, Ore.

### Take Plenty of Space.

A farmer should select about one acre and a half to two acres of good rich soil, which should be a south hill slope, quite steep and running down on a flat. As early as possible in the spring the garden should be plowed and worked until the soil is good and loose. As soon as the ground is prepared it is time to plant the early garden.

The early garden should consist of lettuce, onions, radishes, peas, turnips, carrots, beets, parsnips, spinach, cabbage seed for plants, and a couple of rows of six weeks potatoes. This should be planted near the bottom of the slope. All the garden should have rows long enough to be cultivated with a cultivator, and the rows far enough apart so they wouldn't get covered with dirt. Fine seed should not be covered too deep. A couple of packages of seeds of each kind of early vegetables is plenty to plant, with the exception of onions, which should be a few more, as the winter crop must be planted early in order to allow plenty of time for them to ripen.

As soon as the weather is warm enough to prevent frost by the time the seed would come up, is time to plant the remainder of the garden. A place at the highest part of the garden should be left for tomatoes and ground-cherry plants; next to that plant watermelons and cantaloups. Plant the hills six feet apart. Then plant two rows of Tom Thumb corn, putting the hills two feet apart; then a row of cucumbers, hills four or five feet apart; next, ten rows of sweet corn, putting a couple squash seed in every sixth hill of corn; then twelve rows of beans, selecting a good variety of string beans and the kinds that ripen early; next, a half row of grass peas, the remainder lentils. A third of a row each of beets, turnips, carrots, and parsnips for winter use. Plant the remainder of the garden to potatoes, which ought to raise a hundred sacks. Set the cabbage plants out where the early garden has been used and in the remainder of the lowland, mix in a few cauliflowers with the cabbage, and at the extreme bottom of the garden, plant a row of celery.

### Kill the Squirrels.

Either shoot, trap or poison the squirrels near the garden. If you find a gopher working in the garden, dig the dirt away until you find his den and put a couple of poisoned raisins in it. Use plenty of Parisgreen on the potato vines to keep the potato bugs away.

In storing the winter supply, don't let any go to waste. Can and dry the corn; can, dry and thresh the beans; can the tomatoes, and preserve the ground cherries. Dig the beets, turnips and carrots, top them and put them in the cellar. Leave most of the parsnips in the ground until spring. Put a little dirt over what you need in the cellar After the onions have ripened they should be toped and put in the cellar. Pull the cabbage, turn heads down in garden and put a little dirt around them. Bury the potatoes you don't need in a pit, until spring.

This garden was raised near Garfield, Wash., and I consider it an ideal war garden.

MRS. PAUL KILDE.

Spokane, Wash.

### Must Cultivate Well.

To economize in time and labor I would have the rows of sufficient length to permit of cultivation with the two-horse cultivator. For the average family one-half acre of good ground will produce an abundance. This plot should be given a good dressing of stable manure early in the fall and then plowed under, plowing about four inches deep. Then as early in the spring as the weather will permit, replow, this time from 8 to 10 inches deep. Follow this with the disk, smoothing harrow and plank leveler. Then the ground is ready to mark off in rows. This I do with a home-made three-row, two-horse marker. The rows are made three feet apart. After this is done I am ready to plant.

My first or early planting is made any time after March 15 that weather permits, the earlier the better. We will say our garden plot is 300 feet long. That would make 25 rows in the one-half acre. In row one I plant 3 pounds of onion sets, or little onions, which will take about 50 feet of drill. As the marker has already made a furrow of sufficient depth all I have to do is drop the bulbs in the furrow right end up about three inches apart, and then firm the loose dirt around with the hands. Then in succession I plant 25 feet of drill of each of the following: Lettuce, radishes, mustard, spinach, turnips and beets. The seed is dropped in the furrow made by the marker, and covered with the garden rake. The balance of row one I plant to good early peas. Skip rows two, three and four and at intervals of two or three weeks, until June, plant in the rows more lettuce, radishes, mustard, spinach, turnips, beets and peas. After each of these first four rows are planted take a handful of thousand-headed kale seed and drop a few seeds about three feet apart in the rows and thin to one plant in a hill, when six inches high. The kale will not interfere with the growth of the other vegetables and will produce a lot of good succulent feed for the cows in early fall.

Row five—Plant to carrots and parsnips.

Row six—Plant to early potatoes. This will finish the early planting.

The balance of the garden plot redisk and work down again about May 1. In row seven set out about 50 early cabbage, and 50 tomato plants. Row eight plant about half to early string beans. The balance of the row plant to late string beans about June 1. In row nine and 10 plant to shell beans, May 1 to 15. Rows 11, 12 and 13 plant to squash and pie pumpkins, May 1 to 15. Rows 14, 15, 16, 17 and 18 plant to sweet corn May 1 to 15. Rows 19, 20, 21, 22, 23 and 24 plant to late potatoes, May 25 to 30. In row 25 plant seed of late cabbage and cauliflower a few seeds every two feet. Thin to best plants when six inches high.

Begin cultivating as soon as vegetables are up, and first two times cultivate deep and close to plants, gradually giving more shallow cultivation on through the growing season. One hour a week with a two-horse, or two hours with a one-horse cultivator, should do the job, and do it well. One or two hoeings and perhaps a little hand weeding and thinning may be necessary, but this will be reduced to a minimum if early and thorough cultivation is given.

This is also one of the best methods of fighting plant diseases and garden pests. As a strong, vigorous plant will be the last to succumb to the attacks of disease and insect pects.

During the summer the surplus vegetables—and there should be a surplus—such as peas, string beans, tomatoes, sweet corn and any other vegetables that otherwise would be wasted, should be canned for winter use. In western Oregon carrots, beets and parsnips can be left in the ground all winter and dug as needed for the table. Late cabbage can also be left in the garden a good part of the winter and if a few of the thousand headed kale are also left they will furnish the family table with the best of greens during the entire winter. The suash and pumpkins should be gathered in before the first frost in the fall and stored in a dry and moderately warm place, and if protected from the freezing weather should keep until March or April. Potatoes should be dug when fully matured and stored in a cool, dry place.

LEONARD GILKEY.

Thomas, Ore.

### Raise What Is Necessary.

As a rule the garden should be plowed early in the fall, as it allows the ground to become settled before the crop is sown, thus making it less likely to become too dry during the summer. The ideal condition for soil in which common garden crops are to be grown are: First, a loose surface soil; second, a firm, moist, mellow seed bed below the loose surface; third, a subsoil which contains a considerable amount of moisture, that in time of drouth may be passed up to the seed bed to be used by the growing plants. The garden should be well harrowed and cultivated before planting. A person should raise things now that are necessary for home use. We should eat more potatoes and fruits instead of the meat and wheat necessary for the soldiers. Potatoes should be planted in April or early May, so they will have a chance to grow before the dry, hot weather comes, for potatoes grow better in rather cool weather, when the soil is reasonably moise.

Corn is another food that is necessary because everybody should have corn bread or any kind except white bread. Corn is, as a rule, planted in May. There is, however, no set day for planting, but it should be planted as early in the spring as the soil can be and is prepared, and is warm enough for the seed will germinate rapidly. It should be planted about one or two inches deep and about three feet apart.

Beets, carrots, cucumbers, watermelons, pumpkins and radishes and lettuce are also good vegetables. Cucumbers and watermelons are planted in May after the frost is gone. They are planted in hills about four feet apart and about three feet from each row, thus giving the vines plenty of room to spread, and during the summer when lack of rain makes it dry, they can be easily irrigated by means of small ditches and hoses.

Radishes and lettuce can be planted quite early so that they can be ready for table use in May or early June. They should be planted in rows about one inch deep, and the rows about two feet apart. Carrots, pumpkins and beets should be planted in rows. If too thick, they can be thinned out. Pumpkins are planted about the first of May. They are planted in hills and about three seeds in each hill, and the hills about four feet apart.

Strawberries and raspberries are also good foods. They are raised in the warm places and the strawberries are propagated by runners, the runners growing out from the old plants. If the plants purchased seem weak or wilted, or if the field at that time is exceedingly dry they should not be set immediately. It is much safer to shake them out well and put them close together in a row where they may be easily protected from the wind and kept well watered. Here they will freshen, perhaps start to grow and be ready for the field when conditions are more favorable. Strawberry plants may be set out at any time from early spring until as late as the first of June, providing the plants are strong and the ground moist. However, the earlier they are set the better, as they have a longer growing season and the roots seem to form more abundantly in the cooler weather of spring. In setting the plants, the roots should be shaken or spread out as naturally as possible, and the dirt firmly packed about them. Strawberries are either set in hills or in matted rows. When set in hills, they are usually three by three feet apart, or two feet in rows and rows four feet apart. When set in matted rows, the common practice is to set out single rows four feet apart, plants twelve inches apart in rows. The runners are then allowed to cover a space of from six to nine inches on either side of the plants, making a matted row from twelve to eighteen inches wide and leaving a space of from 30 to 36 inches between the rows for cultivation and convenience in harvesting.

In cultivation of potatoes, if potatoes are planted with a hand planter or by dropping into furrows, it is a good plan to go into the field with a cultivator after they have been planted a few days, and give the plot a good cultivation. Set the shovels so as to throw the dirt onto the row, thus making a ridge over each row. This should be followed every few days, by harrowing. Cultivation of potatoes should continue at frequent intervals from the time they are planted until the vines cover the ground to keep down weeds and to check the evaporation of moisture. Corn is cultivated in the same way, the cultivation destroying the weeds.

The best cultivation for beets, cucumbers, watermelons, pumpkins, radishes, and lettuce is hoeing. They are such tender vegetables they can not be cultivated with a cultivator, and the hoeing destroys weeds. Carrots can be cultivated with the cultivator.

The cultivation of strawberries should be shallow, yet deep enough to destroy weeds. To protect the plants from freezing and thawing, mulch is applied. The mulch is usually of coarse material as hay, cornstalks or straw and is applied late in autumn or early winter, and is removed in the spring. Raspberries are cultivated in about the same way, and they are covered with earth to protect them from freezing and thawing and removed in the spring.

WINIFRED MACKLICT,

Colfax, Wash.

# "Block System" in Purebred Sires

## *Raise Quality Value of Cattle in Each Block $4000 in Three Years*

In Klickitat county, County Agent B. W. Cooney, advised by the farmers of his county and acting in cooperation with them, is carrying on work relating to the control of crop pests and diseases, farm crops and soils, draining and diking, orchard and garden management, and farm management.

Those in his county who have studied the problem with him, estimate that the smut loss of the county runs as high as 96,000 bushels of wheat, or a money loss of about $192,000. This was for last year's crop and prices. They are working to put in force control measures throughout the county that will save at least a hundred thousand dollars of this loss next year.

Reporting in to the state college on the dairy and live stock work in Klickitat, Mr. Cooney tells of the recent organization of a Live Stock Breeders' association, which has in view the working out of a "block system" of bringing in and making use of purebred sires. Four purebred bulls were purchased last spring for use on the ranges in their respective blocks, and it is believed that these sires can raise the quality value of the cattle in their respective blocks $8000 in three years. In one district, 15 purebred cows of the Shorthorn breed were recently purchased to start a foundation herd for the improving of blood lines and a source of purebred bulls.

There will be in next year's wheat crop in Klickitat county a marked improvement due to the use of cleaner seed more closely selected as to variety. In years heretofore, it has been possible to go into many Klickitat wheat-fields and find five or six varieties of wheat, with one variety, perhaps, predominating to the extent of 50 per cent. This situation was taken up by the wheatmen of the county last year, and Mr. Cooney was asked to locate fields of wheat as nearly as possible free from disease, and unmixed. Three fields were selected on this basis, plus the general condition of the crop. Much of this wheat was held in the farmers' cooperative elevators, re-cleaned, and when seed requests came to the county agricultural office, they were referred to these elevators. The same practice has been followed in reference to alfalfa, sweet clover, peas, beans and red clover.

A "marketing project" is included in the work of the agricultural office in Klickitat county. Mr. Cooney states that the grain-growers have built two cooperative elevators in the last year, which do a cooperative marketing and purchasing business. The books of these elevators showed $241,000 worth of business done last year, with an estimated saving to their patrons of $12,000. The products sold include wheat, oats, barley and live stock. The goods purchased include farm machinery, lumber, wood, fertilizer, flour and mill feeds. A small, 10-barrel cooperative flour mill is already in operation, and two larger mills are expected next year. About 35 carloads of flour are shipped into the county annually, and it is to avoid this additional expense to the consumers that the local mills are being planned and built.

The farmers of the county have asked Mr. Cooney to help in a country-wide campaign for "the conservation of farm machinery," and the basis and reason for this movement is an estimate of $120,000 worth of farm machinery left out of doors in all kinds of weather, depreciating 12 to 15 per cent every year; that is, a money loss of $10,000 to $15,000, when an 8 per cent depreciation

By J. L. ASHLOCK

on $120,000 worth of farm machinery would be reasonable, if the machinery were properly housed.

Walla Walla county established its agricultural office on November 1, 1913. It now has two agriculturists, who are H. H. Boone and A. W. Holland, O. V. Patton, the former agent now being assistant state leader. The leading projects of the agriculturists during the last year pertain to live stock, marketing, the labor situation, the production of sugar beets, "pure seed," farm organization, the dairying indudstry, and the determining and announcing of codling moth spray dates.

Codling moth spray dates are those periods in the life of the insect when spraing will kill the maximum number of worms, and have since the establishing of the county agricultural office been determined by the agriculturist by means of moth cages, band records, temperature records, and orchard observations. About 90 per cent of the apple-growers of the Walla Walla valley now are following the spray dates secured in this way, many of whom report 1 per cent of culls, and less.

A cow-testing association has been organized, and 500 cows are signed up for the testing of next year. The board of directors of the association employs a tester who spends a day each month at each place, and the records he keeps include the date when the cow became fresh, when bred, pounds of milk for each month, pounds of butterfat for each month, amount and kind of feed consumed, cost of feed, cost of feed for each pound of butterfat, cost of feed for each 100 pounds of milk, and the statement of monthly profit or loss for each cow. This association was organized in the fall of 1915, and since that time the members of the association have been able to raise the average of their milk production by 627 pounds per cow, per year.

Negotiations now under way look to the planting of five or six hundred acres of beets next spring, and the building of a sugar factory in 1919, if 6000 acres of beets can be planted within reach of the factory that year. An increasing acreage of field peas and beans are occupying the summer-fallowed land of the county, which hitherto has been left uncropped during the off wheat-year. One hundred and forty farmers of the valley cooperated with the agricultural office in the production of beans last year, many of whom planted the crop experimentally. In the dryest year the valley has had in 15 years, this bean crop on summer-fallow, amounted to more than $25,000. Field peas on summerfallow made from 8 to 35 bushels per acre in a very unfavorable year. The net results of the work with peas, thus far, show that conditions in Walla Walla county at the foothills of the Blue mountains especially favor this crop.

J. N. Price, formerly extension specialist, in dairying for the State college, took charge of the agricultural office of Yakima county last May, succeeding L. W. Fluharty, who had been there but a few months when he resigned to accept another position. The beginning work of the Yakima agricultural office, according to Mr. Price's recent report, consisted of an agricultural production survey of the county. This survey, last fall, developed such items as 10,000 carloads of Yakima valley fruit, a half million tons of alfalfa, 600,000 bushels of wheat, 840,000 bushels of corn, 360,000 bushels of barley, 480,000 bushels of oats, 84,000 tons of potatoes, 96,000 tons of sugar beets, and 600 tons of beans.

Milk, cream, butter and cheese produced in the valley, for the year-period of the survey, amounted to $673,000. There were 117,000 sheep, 12,000 milch cows, 27,000 other cattle, and 15,000 horses.

Upon the entrance of the United States into the world war, a county committee on Food production was organized to help stimulate production. A total of 14,750 acres of new land was brought under cultivation and into production for such crops as corn, wheat, potatoes and beans. An important part of the food conservation work has been the increasing of storage facilities for fruit and potatoes. Cold storage has been increased from 1150 cars to 2300, and common storage from 1250 to 4000.

In the concluding part of his report, Mr. Price says:

"The chief agricultural problem for next year, as affected by the war, can be summed up in increased food production. The chief problems in connection with increased food production in Yakima county are the increasing of corn and live stock, and the labor problem. I feel that this county can aid more by increasing the corn than the wheat, since the former yields about 60 bushels per acre, wheat yielding only 30 bushels. The growing of wheat on new land will be urged. A campaign for early seeding and better irrigation of spring wheat will be carried on. But a large corn production supplementing our immense production of alfalfa will enable us to greatly increase our live stock."

# Grain Standards Are Discussed

## *Hearing at Spokane Develops Many Problems*

At the hearing held by the department of agriculture in Spokane last week on the matter of grain grades for the coming season, one of the big issues debated was whether or not 60 pounds or 58 pounds should be used as the minimum weight per bushel for No. 1 wheat. Over this question the 200 or more farmers and millers present showed considerablee disagreement, one element arguing for the maintenance of a high standard with a view to stimulating the production of a better quality of wheat and the other element favoring more liberal grading rules with a view to increasing the quantity of grain produced.

W. W. Harrah of Pendleton, who was present, representing many farmers in the eastern Oregon districts, argued strongly for the 60 pound provision as adopted by the department of agriculture. The Spokane delegation, headed by R. J. Stephens, expressed favor generally with the idea of a lighter test weight for No. 1 grain.

Another question that resulted in considerable debate between the mills and the producers was that of the cleaning and scouring of wheat. Representatives of the producing interests declared that the farmers were losers by the common custom of leaving all the cleaning to the millers. Almer McCurtain of Davenport, Wash., one of the most active men in the interests of the wheat producers of the Inland Empire, declared that farmers' organizations had prepared in some instances and could prepare in many others to clean their wheat as satisfactorily as the millers themselves coulid clean it. Representatives of the milling interests, however, declared that they could not purchase scoured wheat as sent to them from the farm. The new grading rules of the department define treated wheat as wheat, 20 per cent of which has been scoured, limed, washed or treated in any other manner. The former definition of treated wheat allowed only 10 per cent.

The regulations provide that wheat in grades No. 1, 2 and 3, shall be cool and sweet; wheat in grade No. 1 must be bright and No. 1 of the grade of hard red spring shall not include more than 10 per cent of wheat of the humpback variety. Grade No. 1 of the class Durum shall not include more than 10 per cent of wheat of the variety Red Durum. Wheat in grade No. 4 must be cool, but may be slightly musty or sour.

Any wheat which does not come within the requirements of any one of the grades 1 to 4, or which has an commercially objectionable foreign odor except that of smut, garlic or wild onion, or is musty, sour, hot, heating, infested with live weevil or other insects that injure stored grain, shall be classed as sample grade.

One of the interesting phases of the grain conference was the discussion of Red Russian wheat in relation to the 60-pound bushel standard. Red Russian is grown extensively in certain sections of the Inland Empire, and many of its friends feel that the fixing of the 60-pound standard is in the nature of a dimcrimination against this variety of wheat. President A. A. Elmore of the Farmers' union for eastern Washington and northern Idaho opposed the fixing of this standard to cover Red Russian, and in connection with his argument read the following communication from R. C. McCroskey of Oakesdale, in whose community much Red Russian wheat is grown:

"The quantity, quality and food value of flour produced by No. 1 Red Russian are equal to that produced by 60 pounds of Jones fife and the other varieties named in this class, as has been frequently demonstrated by the chamist of the state college.

"The fact that this variety is required to reach a minimum test of 60 pounds, which it never actually does, throws the No. 1 of this variety into grades 2 and 3, most generally in grade 3, thus imposing a penalty of from 3 to 6 cents, generally 6 cents per bushel, on the farmer for producing this variety, without any good reason for the same.

"There are produced in the northwestern states from 7,000,000 to 10,000,000 bushels per annum of Red Russian wheat, which would entitle it to the consideration asked.

"It produces from 4 to 7 bushels per acre, under given conditions in a large part of the Inland Empire, more than any other winter variety.

"Despite the increased yield, many farmers are induced to use other less profitable varieties because of the fact that the Red Russian is penalized from 3 to 6 cents per bushel.

"And last, but by no means least, is the fact that the farmer in the localities suited to the production of Red Russian contributes, with the same effort, a larger amount of foodstuff for the allied armies of Europe than he can by raising any other variety.

"We, therefore, believe that wisdom, justice to the wheat raiser and the policy of the government, in encouraging food production by every means possible, all point to the fact that the handicap or penalty should be removed from the production of Red Russian wheat."

# No Grain for Booze

To the Editor of The Washington Farmer: At a farmers' institute held at the Chamber of Commerce building, Spokane, Thursday, February 28, a resolution was unanimously adopted pledging all the farmers present to write a personal letter to Herbert Hoover, federal food administrator, asking him to prohibit the use of grain for malting purposes, or for the manufacture of spirituous liquors for the duration of the war. This is not to be construed as prohibition propaganda, but as a strictly war necessity. The motion also included a request that those present should induce as many farmers as possible to go and do likewise. The undersigned believes the pages of The Washington Farmer to be the best medium for reaching the greatest number of farmers and their wives, in the Inland Empire, and asks all who may read this to get busy.

HARRY JOLLEY.

Rockford, Wash.

# Growing Beans

## The Market Must Be Considered

To the Editor: You have helped so many by your paper that I am wondering if I also can get some help. What kind of beans should I plant this spring? The Farmer of February 14 said that the white navy bean and the Martha Washington were about the best. I want to plant the white navy but our neighbors say they do not get ripe quick enough. They have the Mexican tree bean, and I bought some seed from them. Should I plant them? Or what kind should I plant?

A. J. G.

Ridgefield, Wash.

The above question was referred to R. J. Barnett, pomologist at the Washington State college, who replies as follows:

In growing beans for the general market, we have to pay attention constantly to what is desired. It has been found that for a dry bean the most popular varieties are the navy beans and the Martha Washington. These can be sold, if of good quality, in any quantity that may be produced. Other varieties should not be produced except for home markets which one knows will take care of them.

The growing of beans requires a fairly high summer temperature, a long growing season, and perhaps, above all others, a harvest season which is free from rain. Unless these requirements and a fairly fertile and warm soil are available, bean culture for the general market should not be undertaken.

The rows of beans are planted 14 to 30 inches apart, depending on the type of cultivation that is to be used. For horse cultivation the wider spaces would, of course, be left. The dwarf beans, such as named above, are planted three to four inches apart in the rows. If pole beans are to be used, a very common system of planting is in hills about three feet apart each way. Four or five plants are grown in each hill, and must, of course, be supplied with support.

Small quantities of the Mexican bean might be grown for home use, but in general it would be difficult for a Washington grower to compete with the Mexican and California growers in the general market with this variety.

### Argan Nut Tree.

Is there anything stranger than the undisputed fact that in Morocco pigs climb trees in search of nuts? Not only pigs but goats. The puzzle is not in the pigs and goats, however, for they are of the common variety that we see here. It is the tree that is strange. It is called the argan nut tree and it grows near Agadir. Usually it shoots out from a steep hillside. The trunk is broad and flat and almost horizontal, and so are the main branches, forming ample and solid foothold for any animal that may be tempted by the olive-shaped nuts growing within easy reach of the main branches.

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## *Must Fight It Out on Western Front.*

By signing a peace treaty with Rumania, Germany has opened a highway for her armies into the rich wheat-growing regions of southern Russia and apparently has solved its problem of bread supplies.

When Russia collapsed, the little kingdom of Rumania, which had fought gallantly on the side of our allies, found itself entirely cut off from its friends. On one side lay Austria-Hungary, on the other Russia, and the bolshevik government of Russia suddenly became hostile to our isolated ally. It had to make such terms as Germany and Austria would grant it. It has rich oil fields and is compelled to sell their yield to Germany. The victors further stipulated that Rumania must give transport facilities for the troops of the central powers to Odessa.

Germany followed up that advantage quickly by sending an army which is now in possession of Odessa, key to the vast resources of southern Russia. Odessa is on the Black sea. Into that great inland ocean, which has an outlet into the Mediterranean, flow the Dnieper and Danube rivers, both navigable for long distances. Grain and other cargoes can be brought down the Dnieper into the Black sea and be conveyed thence by way of the Danube into the heart of Austria-Hungary and from Austria into Germany by railroad.

It would do no good to underrate the advantage thus accruing to the enemy. These new developments seem to eliminate, at least for a while, the possibility of bringing Germany to terms through hunger. It looks now as if we must fight it out in hard battles on the western front.

## *Hoover Is Loyal and Patriotic.*

Senator Reed of Missouri attacked Mr. Hoover viciously in the senate recently, but other senators came to the defense of the food administrator, and the net result of the spirited debate was to increase public confidence in him and his labors.

Mr. Hoover takes these attacks in good spirit. He took up his work with no illusions. He understood from the beginning that his path would not be strewn with roses, and frankly said, when the president appointed him, that in all probability he would have to arouse many antagonisms. The job of a food controller is not enviable. As Lloyd-George, the English premier, said in the house of commons last week, "there has been only one successful food controller in the history of the world—the one who made five loaves and two small fishes feed a multitude."

But Mr. Hoover's shoulders are broad; his capacity to work and take abuse is stupendous, and, on the whole, while he may have made some minor mistakes, the public realizes that he is doing a great work, is loyal and patriotic, and that the president made no mistake when he called him to service at the gigantic salary of one dollar a year.

## *High Price Stimulates Production*

A belief is growing in the minds of many public men and economists that it would have been better national policy to have left wheat prices to the law of supply and demand. They reason that, since an increased production was the chief consideration, the prospect of high prices would have stimulated seeding on great areas of semi-dry lands and soil usually cropped to other produce, and that the present law has defeated its own ends, holding down the price of wheat and preventing increased production, while at the same time leading to the feeding of wheat to live stock in many districts because prices of corn and other cereals are free from government control and therefore high priced.

Seth J. T. Bush of Rochester, who has been active in the formation of the Farmers' league in New York state, declared in an address last week that if the laws of supply and demand were allowed to operate, or if farmers were guaranteed a profit of 10 per cent, there would be produced in this country this year enough food to feed ourselves and our allies without any wheatless or meatless days.

On first thought the suggested 10 per cent guarantee rather appeals to the mind, but reflection will show its impracticability. Since some farmers could make 10 per cent profit on prices that would mean losses for others, there could be no stabilizing of prices. Under this scheme the government would have to pay $3 a bushel or more to some growers and probably only $1.50 to others. And a gigantic organization would have to be constructed to investigate the claims of millions of producers.

Moreover, a guarantee of that kind would invite slipshod farming and careless financing, and would end in the payment of extravagant wage to farm labor. While undoubtedly most farmers would deal conscientiously with the government, a large number would cast off responsibility, take life easy, pay any wages that might be demanded, and fall back on the promise of 10 per cent profit.

Suggestions of this nature, however, are wide of the mark for when the government makes its decision it is our duty to adjust ourselves in good spirit to the plan that is adopted.

## *Fight the Kaiser on the Farm.*

Wheat, more wheat, is the cry from our European allies. Strive as our farmers may, they can not grow enough this year to supply home needs and meet the necessities of a hungry and war-worn world.

> We are on the closest rations at any time since the war. The food situation is as serious as it ever has been, but is being greatly relieved by the supplies you are sending us.

Thus spoke, the other day, Lord Reading, British high commissioner to the United States. Lord Reading was speaking in public and probably tempered his utterances. It is not improbable that he is speaking with greater gravity to the president. It is not improbable that his message prompted Mr. Hoover to call the recent conference in Washington of food administrators from nearly every state in the Union. At all events, Mr. Hoover impressed upon their minds the necessity for yet further conservation of wheat so that the allies may be supplied.

England is on bread rations. So is France. and if American production should fall down this year, whether from adverse weather or insufficient planting, the American people may also be put upon rations.

Let these facts inspire every farmer to put his best thought and effort into every detail of wheat-raising labor. Whether one is plowing or sowing, harrowing or discing, harvesting or threshing, his labor will take on a grandeur never before associated with farm industry. He will be serving the great cause of world freedom, of popular government, of future safety.

We can not win the war without food.

## *Washington Gleanings*

Forty acres will be released for cultivation near Castlerock, by the draining of Huntington lake.

At a recent meeting of the trustees of the Bellingham normal school, it was decided to hold the school open all year.

Every mill and logging camp of the Grays Harbor district now has a Loyal Legion of loggers and lumbermen organization.

At a recent meeting of the commissioners of Whitman county it was reported that contracts on roads and bridges amounting to nearly $275,000 have been allowed.

R. M. Leid of Waitsbury recently purchased 65 acres belonging to the G. W. Loundagin estate, and which adjoins his place on the Coppei. The consideration was $175 per acre.

The capacity of the Libby, McNeill & Libby cannery at Yakima will be doubled this season and the company will expend $150,000 for machinery and additional equipment.

Federal Expert Ward H. Foster is urging more bee culture for western Washington, reporting that this part of the state has many advantages for an exceptional bee raising country.

Twenty-nine vessels cleared from Grays Harbor in February, carrying 22,229,000 feet of lumber. The number of clearances was six under January, and 6,500,000 feet less of lumber were shipped.

A 45-horsepower caterpillar tractor and a train of six Troy dump cars have been added to the road building equipment of Cowlitz county through a recent purchase by the board of county commissioners.

The Utah-Idaho Sugar company has been campaigning for 500 acres of sugar beets for experimental purposes this season, and as a result 400 acres has been pledged by the farmers of the Walla Walla valley.

E. F. Banker of Winthrop has been commissioned by the farmers of the Winthrop valley to select from the Kansas City territory, about 26 head of young bulls and heifers of Shorthorn and Hereford breeds for their herds.

Skagit county has decided not to hold the fair this year, owing to the "rightful undivided utilization of human activities everywhere in helping the country win the war." However, the farmers' picnic will be held on July 4.

One of the oldest ranches in Garfield county changed hands, when Jerry Seely sold his Central Ferry place to J. N. Cardwell Sons, and Bob Young. The new owners are overhauling the ferry, and intend to operate it day and night.

A Potato Market association has been organized at Satsop, with W. J. Wharton, E. R. Brady, and Charles Mouncer as directors. The association has a membership of about 20 growers, and plans to have a total acreage of over 75 in standardized potatoes, all of which will be handled through the association.

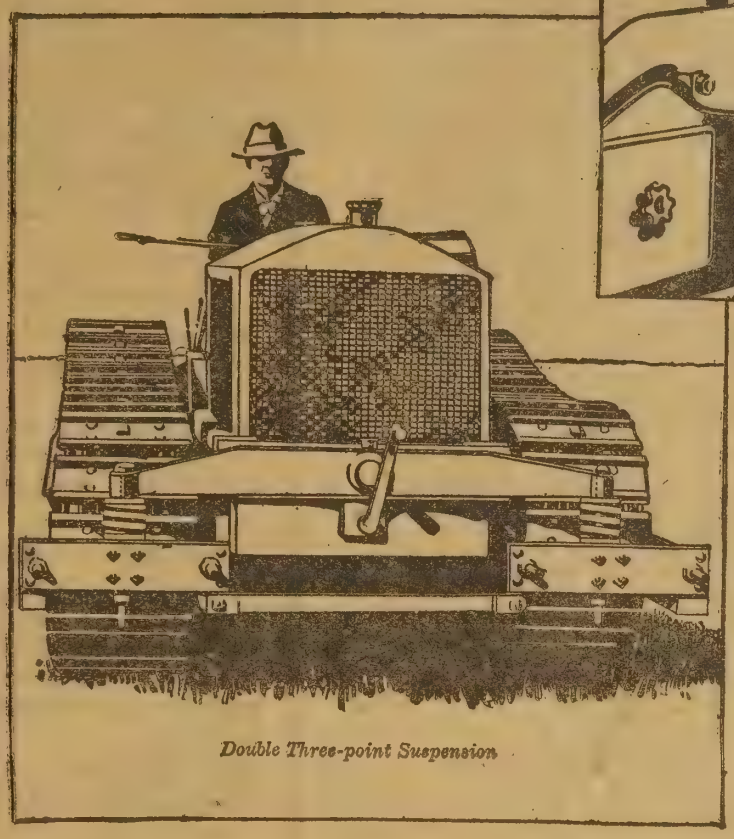
## *What Others Say*

Rural New Yorker: In the coming sweetless year a hive of bees will give you a little handle on the sugar trust.

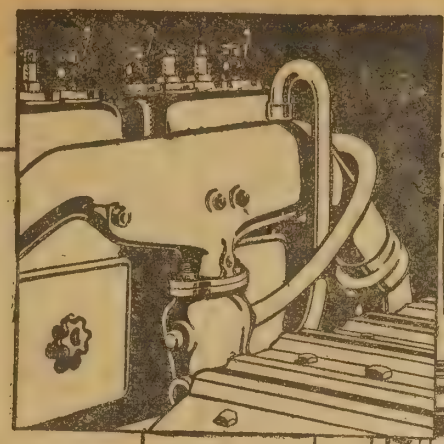
Ohio Farmer: The world needs our products and present prices offer unusual opportunities if costs can be kept within bounds. It is particularly a time to study how to save time and labor.

Nebraska Farmer: The time is not far distant when the marketing question is going to be solved in part by good roads and transportation facilities that will enable hauling grain and live stock directly from the farmer's dooryard to the central markets. Every thoughtful farmer will do his share to hasten the coming of that day.

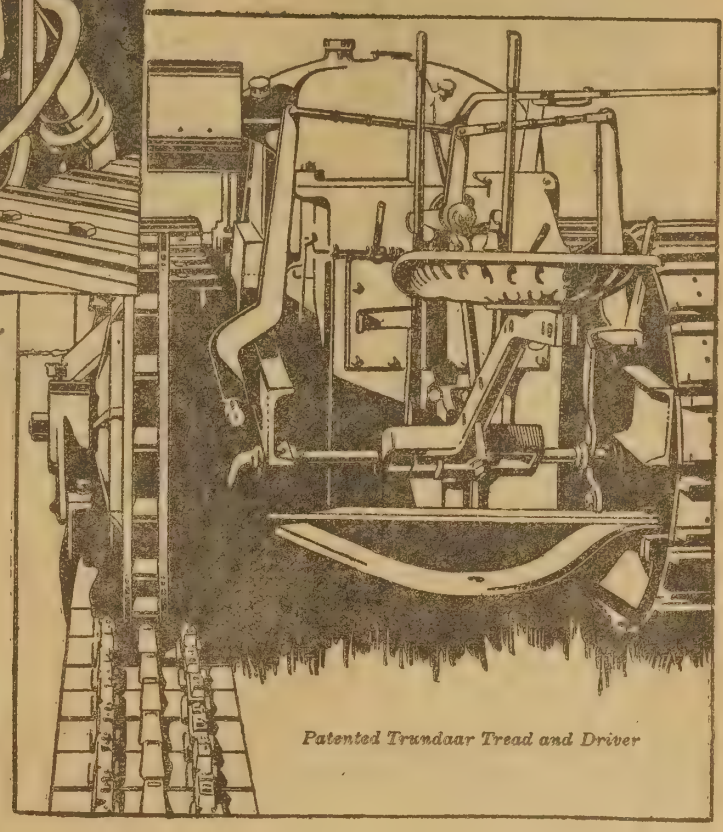
Denver Field and Farm: Every single handed worker on the ranches where stock is kept has had a tough time of it this winter, nor is the trouble half over at this time. The plowing comes next with all its grief. Ranching is no longer a long dream on horseback with nothing to do but ship the cattle and get the money. The golden day of the easy sledding has passed from us and it is scratch gravel or starve on short rations.



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# Dairy Farms Are Best for Hogs

## By-Products on the Dairy Farm Enable Cheaper Production; Can Produce Pork for Twelve and One-Half Cents a Pound




TWISP, Okanogan County, Wash., March 11.—There is a sharp demand for some articles of farm produce such as live stock, dairy products and eggs; but grain, spuds and fruit have been slow. The price of live stock depends on the quality and condition. The average price for beef is about 8½ to 9 cents. Hogs are bringing about 14 cents delivered at our market railroad point. Butter fat has been 57 cents at our local creamery since early in the winter. Eggs are down to 30 cents per dozen. The farmer gets 3 cents a pound for his wheat and pays 6 cents per pound for his flour. Lard is 30 cents and bacon 60 cents a pound at the grocery stores, and sugar is about 12½ cents. Most of our live stock and dairy products are shipped out and some grain is shipped; but poultry, eggs and garden stuff are used here. Dairymen can produce pork cheaper than others. Even with the high price of grain and labor I believe pork can be produced at a small profit for 12½ cents, live weight. Crop conditions are about normal. The snow didn't get as deep as usual the past winter, but there seems to be more moisture than we have had for two or three years.

GEO. LA RUE.

### Expect Average Crop.

GARFIELD, Spokane County, Wash., March 18.—As spring approaches there seems to be plenty of farm labor, but there will be a shortage of farm power in the way of horses. This shortage is being met in a way by some of the most progressive farmer by buying farm tractors. There will be five or six of the crawler, tracklaying type tried out for spring plowing. It is always necessary to buy a certain amount of new farm machinery each year, so regardless of the high prices, new machines will be purchased whenever it is needed. Old machinery is being repaired, but not to any greater extent than in most normal times. With such high-priced labor it doesn't take much time with an old machine to pay, or partly pay, for a new machine. Meat animals were pretty well sold off last fall. Pasture will be utilized to its fullest extent in raising the farm stock this coming season, as grain is high and hard to get. The late-sown fall wheat seems to be coming through the winter in good condition. The acreage is small, however, with the contemplated spring grain an average crop will be grown for this season. ROY G. ADAMS.

### Labor Is Plentiful.

WILSON CREEK, Grant County, Wash., March 19.—There is no labor shortage at Wilson Creek, in fact we have a surplus of labor. Horses and tractor power is sufficiently provided for spring seeding. The horse market is fair, although there is a surplus of horses here. The caterpillar tractor is coming into prominence with the rancher farming on a large scale. Quite a number of small combine harvesters are being contracted for the next harvest, and old machinery is being repaired for farm use. Very little beef will be put on the market this spring; the demand for cattle is poor, and very little attention is paid to pasture. J. P. SCHROEDER.

### Spring Work Progressing.

RAINIER, Thurston County, Wash., March 16.—Weather conditions this last week have been fine for plowing and other spring work, with considerable frosty weather, and some seeding has been done. In regard to the labor problem, I do not think the farmers will try to hire to any extent this spring. What they can not do themselves will have to go undone, because most of them are not making enough money to justify the wage. The country is full of potatoes for which there is no sale, and many bushels are being fed to cows. Milk products, and feed, are high, and everything else is high. For instance a manure spreader of standard make, before the war would have cost $130, now it costs $200 to $230. The supply of work horses is ample. There are no tractors in this immediate vicinity, but a number of trucks and automobiles. Quite a number of manure or litter carriers have been installed, and there is a fair supply of farm machinery. Beef animals have been pretty well disposed of. A few dressed hogs are being shipped out. Most of our pasture under fence is burned over timber land, seeded to tame grass, and some prairie, while others turn their cattle out at large.

Seed costs about as follows, per hundred pounds: Rye, $4; oats, $3 to $4; wheat, $5; vetch, $4.50 to $5; peas, $6 to $8, and clover seed, $33. There will be a good sized acreage seeded this spring, which will mean many dollars in seed. L. F. DAVIS.

### Specialize in Wheat.

MEAD, Spokane County, Wash., March 18.—Speaking of labor shortage, the season is hardly advanced enough to tell just what that will be. There will be also some shortage of horse power. Prices are so high for good horses that few will be able to buy what they need. There are practically none for sale in this community. A few people are going to try out the tractor. There is also a light shortage of drills and binders, with prices out of sight for the small grain grower. There are very few meat animals to be put on the market this spring. Most of the people are paying little attention to stock; all their attention being put to the raising of wheat, as the most important thing to aid in the war. So much attention is given to wheat there may be a shortage of oats this fall. The question of why a limit is put to the price a farmer may get for the most important of his products, while the manufacturer and dealer in farm machinery may charge what they please, will not down, and is causing more discouragement, discontent and protest than any other one thing at this time. However, this is not going to cause them to halt in their efforts to do the very best they can to carry out the wishes of the government. The farmer is patriotic if he does not do as much shouting as some others.

GEORGE HINGSTON.

### Advance in Cattle Business.

EPHRATA, Grant County, Wash., March 16.—Grant county does not seem to be suffering from a shortage of labor at the present time. It has been well organized by the county agricultural agent and every town in the county has a local labor agent who is securing the help for the farmers. The price they are paying is $60. The Spokane federal labor agency has been able to furnish good men for work on the farms and so far the men have been very satisfactory. There are more than enough horses in this county to do the work as there is a considerable number of well-bred horses for sale. The farmers have been breeding Percherons for a number of years and nearly all the young stuff is Percheron, although there are some Shires. There has been no horse market in the county outside the local demands and there are many first-class horses for sale. The farmers have been anxious to sell their horses and they have a mighty good type for sale. Tractors are coming into prominence. There are a few wheel types that are being used on level land, but they do not work very well on the hilly land as the wheels do not hold in the loose soil. The farmers are well supplied with farm machinery, having enough to do their work. About the same amount of farm machinery is being purchased this year as usual though it is higher. They have been urged to repair their machinery earlier in the season and I believe are doing so. Farmers in this county have been purchasing pure-bred bulls for the last two or three years and there will be a better quality of cattle shipped out for killers this year than ever before. The cattle business is being increased for breeding purposes. Farmers are realizing the necessity of preparing for better feeding next year and are making their plans accordingly. Several have fed Russian thistle as hay with very good results. H. W. REAUGH.

### Tractor Is Favored.

PORT ANGELES, Clallam County, Wash., March 15.—In regard to the shortage of power on the farms of this county other than labor shortage, I believe there are enough work horses in the community to meet the requirements. Of course, there are short seasons when more horses could be used, but there have been a number of horses for sale. The horse market is not very lively just now. Tractors have a place on a goodly number of farms in the county and it is only a matter of time until a considerable number will be used. Quite a little farm machinery is being purchased this year, and of course, the thoughtful farmers are putting their old machinery in shape. There is entirely too much farm machinery left to winter in the fence corners. The output of meat animals is probably a little less than last year. There will be an increased number of hogs raised this year, however. Silos will be utilized this year to better advantage than ever before, and a considerable number of new silos will be constructed. M. R ALLEMAN.

### Horse Is Preferred.

LACROSSE, Whitman County, Wash., March 11.—Farm labor is about as scarce as it can get without greatly hindering farming operations. Work horses are about normal. Farm tractors are coming into use, but generally speaking, most farmers will rely on horses for some time to come as there are many difficulties yet to overcome in the tractor line. The same may also be said in regard to combnies, although more new makes of combines will be tried out in 1918 here than tractors.

Weather has been quite frosty and most field work was done in the afternoon. With warmer weather seeding will be general within a few days. Ground is in excellent condition.

M. E. SCHRECK.

### Horse Is Stand-By.

SHELTON, Mason County, Wash., March 8.—Willing labor is having its inning now. It always has, for willing labor finds work, at living wages, at any time, where thrift rules. But now high wages in the shipyards and logging camps drives the laborer away from the farm and many times puts the farmer to his wits end to contrive how he will get his land

(Continued on page thirty.)




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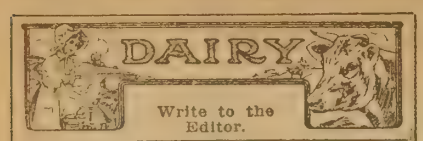
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This Third Loan will take more money than the first and second Liberty Loans together. It's a big thing! The biggest financial job America ever tackled—and America is you, each and every one.

*"OVER THE TOP"*

# Third Liberty Loan

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A. B. NYSTROM, Editorial Contributor

# Skimmilk for Calves

By R. A. LAMSON.

With butter quoted at 40 cents, how long can a dairyman afford to feed wholemilk to calves? One Holstein breeder claims that it pays him to feed $2 worth of butterfat to his calves daily. Another breeder finds that he gets just as good a calf by feeding wholemilk for two weeks and then by feeding skimmilk.

Although the rougher appearance of the coat of the calf for the first month on skimmilk will not be quite as satisfactory, just as good or even a better calf in size, quality, thrift and value, will be obtained at the end of seven or eight months.

The method of rearing calves employed on one of the best dairy farms is as follows: First, allow the calf to take the colostrum milk for the first three or four days, or until the milk is fit for human consumption. Colostrum milk is particularly fitted for the young, as its gentle laxative action cleans the digestive tract. Bucket feeding of whole milk for two or three weeks is next advisable, that the young animals may have a good start in life. As stated above, the use of skimmilk fed fresh and warm from the separator is as good a feed as you can get for calves from this time up to six or eight months of age. A full week, however, should be taken for the change from wholemilk to skimmilk to avoid any digestive difficulties due to a less gradual change. Substitute a pound or two of skimmilk for an equal quantity of wholemilk each day until the change is complete. Skimmilk may be fed two or three times daily; feed four pounds twice daily or three pounds thrice daily. In this way, the young calf gets eight or nine pounds in 24 hours. Increase the allowance, gradually, as the calf gets older and larger and demands more. At six to eight months it should be getting eight pounds twice daily to make good gains. During this period they should have liberal quantities of some good legume hay, such as clover or alfalfa. In the earlier stages the skimmilk may be supplemented by a mixture of equal parts of shelled corn, oats and bran. After three or four months the grain should be ground. Just enough of this grain mixture should be fed to keep them in good physical condition.

The early use of grain and plenty of roughage is most advisable. This starts the calf to "chewing the cud" at an early stage and this seems to help in getting all four stomachs to working and in preventing stomach disorder.

One of the conclusions reached at Purdue regarding the value of skimmilk was obtained through investigation with the feeding of skimmilk to chickens. "The feeding value of skimmilk was $2.04 per hundred and it may pay to feed skimmilk to the poultry instead of to the hogs on the farm," states Professor Phillips in Indiana bulletin 182, which records this investigation. When fed skimmilk, pullets laid slightly better in December and January. This is the time when eggs are scarce and high in price. The farmer can see the desirability of feeding skimmilk to chickens for this advantage alone. It costs 9.7 cents to produce a dozen eggs in the skimmilk pen and the birds in this pen were kept at a greater profit than in any of the other pens.

# Makes Dairying Pay

By RUDOLPH C. JOHNSON,
Tester Whitman-Spokane County Cow Testing Association.

The following report on the herd of E. J. Paulson of Palouse, Wash., for January should answer the question whether or not dairying pays and incidentally the value of cow testing associations.

The herd consisted of 15 grade cows, carefully selected, by association testing and were well cared for. The price of milk was based upon the Spokane market at which place the milk was sold.

The daily milk production was 423.9 pounds, which amounts to 13,141 pounds for the month. We find that 13,141 pounds of milk testing 4.38 per cent contains 575.3 pounds of butterfat. This amount of milk at $3.51 per hundred is worth $461.25. The express and war tax paid in shipping this milk cost $34, leaving the net returns of $427.25.

The feeds consumed for the month were as follows:

| | |
|---|---|
| 5270 pounds alfalfa | $ 52.00 |
| 13,485 pounds apple pomace | 16.86 |
| 3272 pounds bran | 56.42 |
| 860 pounds oil meal | 24.94 |
| Total feed cost | $150.92 |

By subtracting the cost of feeds from the net returns for the milk, a profit of $276.33 for the entire herd of 15 cows for the month is shown. This is an average of $18.42 per cow. The prices of feed were somewhat lower at the time Mr. Paulson bought his than they were during the month in which these calculations were made, due to the fact that he bought at an opportune time. By adding 33 1-3 per cent to the prices paid, so that it will more nearly equal the market prices, there is still a profit of $15.07 to the credit of each cow.

The returns for $1 spent for feed were $3.06.

Feed cost of one pound of butterfat was 26 cents.

Feed cost of 100 pounds of milk was $1.15.

Feed cost of producing one gallon of 4.38 per cent milk was 10 cents.

The profits as calculated above do not take into consideration the other factors of expense such as cost of labor and interest on capital invested in lands, buildings, cattle and equipment. Nevertheless, it can be seen that by careful management, which not only includes judicial buying and selling, but the elimination of "boarder" cows by testing, a herd can be made to yield the owner a good profit. It is needless to say that Mr. Paulson is a cow testing association enthusiast.


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# Milch Goats

## Problem Is in Finding the Goats

That little article you published in the Farmer over my name not long ago in which an argument was advanced on behalf of the much-neglected nannie goat as a profitable milk animal seems to have aroused something more than passing interest. The most appreciated fact about it was the seriousness with which it was received and which the writer intended for it. Several farm journals have copied or referred to it favorably, one chamber of commerce of a western city asked for aid in getting a goat propaganda started in its community and the only discordant note was an offer from a man down in the Palouse to sell me a billy goat with which to start my dairy.

From the interest shown I am convinced it would not be difficult to get the goat dairy business started in several different towns if one very important consideration could be met, the securing of foundation stock. It is true that there are goats scattered throughout the country in considerable numbers, that is, goats of the common short haired breeds as distinguished from the angoras.

These goats, however, are just common everyday goats. They are here, as the soldier boys would sing, simply because they are here.

They are goats because they are goats and few of them could give any good excuse for being here. They grow no fleece for the market as does the valuable Angora and their capacity to give milk is solely measured by the capacity of their kids to consume it. Everybody knows how soon a young goat becomes able to take care of itself.

The true milk breeds or strains of goats are not numerous in this country and they are almost an unknown factor in this part of the west. The efforts of the government through the department of agriculture to introduce from Switzerland and the island of Malta certain breeds of known excellence as milkers have not been crowned with great success, although considerable numbers have been placed near some of the eastern cities. The Maltese goats showed a lack of stamina when imported and developed not only weakness of constitution under changed climatic conditions, but they also brought over some serious animal diseases which the department found necessary to eradicate. This is not strange when the native home of these goats is recalled as having an almost sub-tropical character.

It is unusual for any living thing, plant or animal, to be successfully transplanted from an extremely warm to a colder and more rigorous climate. The goats secured from Switzerland were found to be much more hardy, as well as better milk producers. Their native home is in the Swiss Alps, where they have been bred carefully for one specific purpose, large milk production. The various breeds in that country, as well as those in the adjoining regions of Germany, are well established and defined as to breed characteristics.

A flock of Toggenburgs or Saanens, for instance, would all look as uniform in size and color markings as a herd of Holstein or Jersey cows. Their vigor and vitality are apparent in their upstanding, alert appearance, in contrast with the goats from warmer countries.

The limited number in this country is due to the difficulty met with in securing them for importation, the Swiss government being opposed to allowing any considerable number to leave the country.

I doubt if it would be possible at this time to import any, even if transportation could be secured across the water.

The goat problem in this country, therefore, is finding the goats. Common everyday goats such as are to be found in the suburbs of every considerable town, would be as serviceable for milking purposes as the average range bred cow would prove as a dairy animal. Probably even more so, for the range cow frequently keeps her calf at foot until it is well able to take care of itself unless the calf is taken away for weaning. Any effort to work up a profitable yield of milk from animals of this sort would be discouraging, although here and there will be found goats above the average supply. This is more likely to be the case with importations made from Italy by immigrants coming from that country. Whether any considerable number might be found or brought together is extremely doubtful.

My idea as to the usefulness of goats for producing milk is based upon their adaptability to the small family living in small towns or the suburbs of our larger cities where they would be handled under tether or fed without much expense. This would be especially true where colonies of foreigners are gathered together and where the milk supply is likely to be sadly neglected or obtained in too limited supply. I do not figure that the American farmer will ever take up with the milk goat and the only place in which it would gain his approval would be in dairies undertaking to supply milk to the special trade demanded by hospitals and for supplying infants and children. The price paid for goat milk is always higher than for that produced by cows. It is conceded to be superior for these purposes.

If breeding stock could be procured of assured milking strains, many people whose families require only a limited amount of milk, but of a high quality, would doubtless find the goat even more satisfactory to handle than the cow. The half-gallon average yield which a good goat will produce is more than ample for the ordinary family, and there would be something in the satisfaction of having the family milk supply under personal control.

The real problem is in finding the goats.

E. E. ELLIOTT.

Colville, Wash.

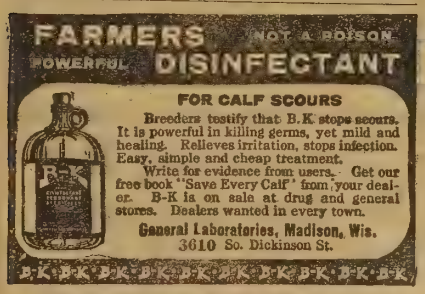
# Tan Angora Skins

At Salem, Oregon, is what is claimed to be the largest Angora rug factory in America, tanning more Angora skins with the hair on than any other tannery in America. While many of these are finished for rugs, by far the greater number are sold to manufacturers of chaps. The Salem factory colors the skins as well as tanning them, leaving nothing but the shaping and sewing to be done. This season the Salem factory bought about 5000 skins in Chicago, most of which are supposed to have come from Texas and some from Nevada. They do not compare in quality with the Oregon pelts. The hair is generally shorter, and has no such lustre, either with or without dying, as the Oregon skins. Goat meat is becoming more and more staple on the market and the number of skins available is growing yearly.

H. A.

**You Needn't Pay Insurance.**

A house actually fireproof has finally been devised. It is made of steel and cement. The roof is of concrete, with a water proof film. Of if you wouldn't like that kind of a housee, you can have one built of concrete lumber. The boards, joists, rivets, etc., all are of concrete and the building has a concrete foundation. Another advantage of such a house is that it doesn't cost $100 or $200 every year to keep it up.

Breeders testify that B-K stops scours. It is powerful in killing germs, yet mild and healing. Relieves irritation, stops infection. Easy, simple and cheap treatment.
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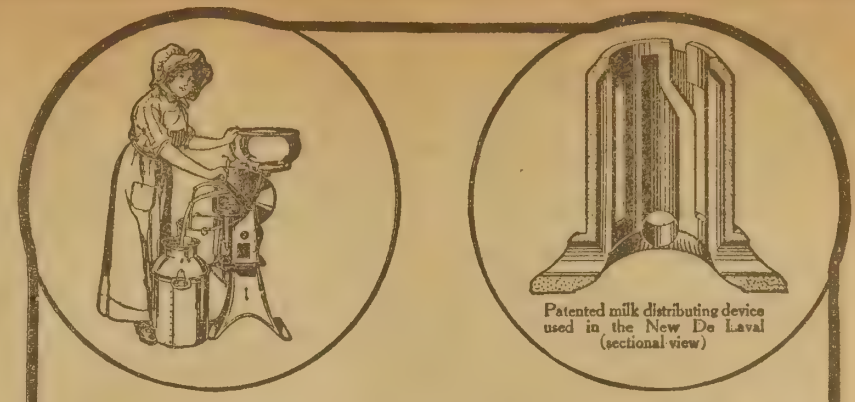
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100 lbs. makes 100 gallons of milk substitute, costing only one-third as much as milk.
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HAS SPEED-INDICATOR: Every New De Laval is equipped with a Bell Speed-Indicator, the "Warning Signal" which insures full capacity, thorough separation, proper speed and uniform cream.

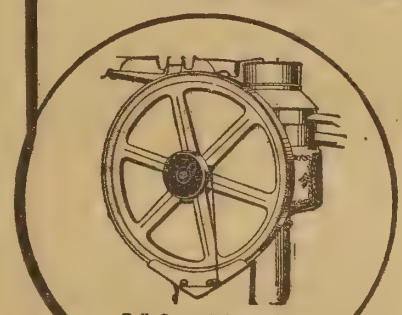
EASIER TO TURN: The low speed of the De Laval bowl, the short crank, its unusually large capacity for the size and weight of the bowl, and its automatic oiling throughout, make it the easiest and least tiring to the operator.

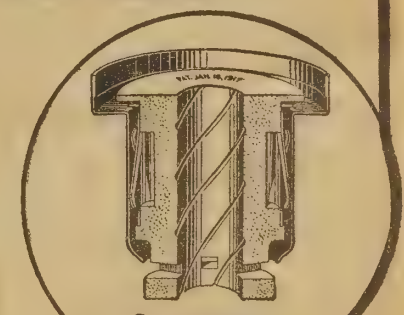
WEARS LONGER: Due to its much lower bowl speed, high grade of materials used, and careful and exacting workmanship, the De Laval outlasts and outwears other makes by far.

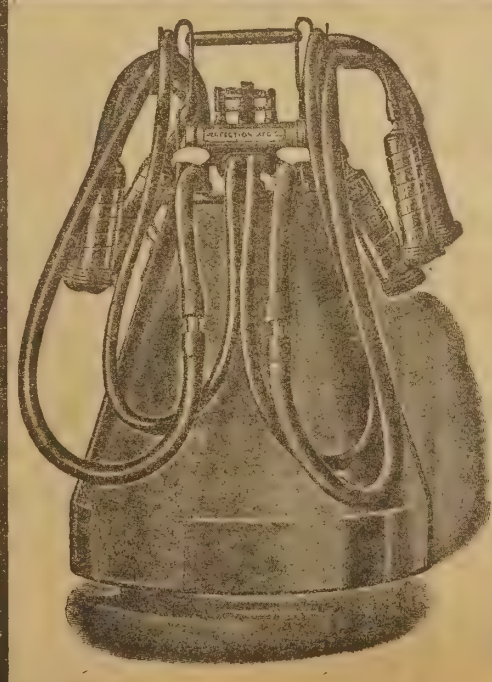
ASSURED SERVICE: In almost every locality there is a De Laval representative, able and ready to serve De Laval users.

If you haven't the spare cash right now, that need not stand in the way of your getting a New De Laval at once. We have an arrangement with De Laval agents which makes it possible for any reputable farmer to secure a De Laval on the partial payment plan—a small payment at the time of purchase and the balance in several instalments—so that your De Laval will actually pay for itself while you are using it and getting the benefit from it.

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LARGEST DAIRY SUPPLY HOUSE ON THE PACIFIC COAST.
Alpha Gasoline and Distillate Engines, Ideal Green Feed Silos, Acme Ensilage Cutters and Blowers, Irrigation Equipment, Centrifugal and Deep Well Pumps and Alpha Spraying Outfits. Send for special catalog.
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Bell Speed-Indicator insures proper speed in every New De Laval


Cross-section of New De Laval self-oiling top spindle bearing



THE PERFECTION MILKER

It does the work right and pleases the user.

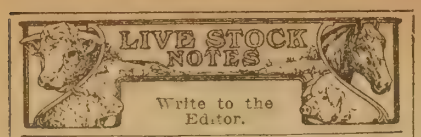
**D. E. Woodin, Sunnyside, Wash., says:**
"I have used the Perfection Milker for about a year and a half; have had no expense on it except one set of teat cup rubbers; it is working fine, and the longer I use it, the better I like it."

**J. U. Miller, Clatskanie, Ore., says:**
"I would recommend the Perfection to any one needing a milker, as I have given milking machines some study and have seen different machines work."

**C. F. Balch, Dufur, Ore., says:**
"I have used three milkers, but I think the Perfection the best I have had."

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E. J. IDDINGS, Editorial Contributor

# Poisons Coyotes

## Method Explained by Mr. Averill

The farmers and stockmen of the northwest should never miss an opportunity to slay a coyote, urges E. F. Averill, predatory animal inspector for the northwestern region. This animal is acknowledged to be the most active spreader of rabies known, not only inoculating cattle and sheep with the disease but inoculating dogs which in turn inoculate the domestic animals.

Mr. Averill gives the following directions for poisoning the animals and recommends that every farmer in a district where there are coyotes known to exist, make an effort to get them by this method:

Mix lard and sugar in the proportion of one cup of each, take a bit of this mixture when cool the size of a walnut and insert into it a small capsule containing two grains (about one 480th of an ounce) of strychnine.. Be sure that this poisoned bait is touched at no time by the hand. Mix it and handle it at all times with sticks or paper. The poison balls can be carried about loosely in paper for distribution so that they can be dropped without having been touched by the hand. They should be placed from horseback when possible, being dropped along trails where the coyotes are known to pass.

When asked whether or not there was danger of live stock getting the poison when put out in this form, Mr. Averill said that he had never known an instance of stock poisoning in this way though he had known thousands of instances where the poison had been placed freely on the cattle ranges. It is apparent, however, that it would not do to place this poison where hogs could get at it, for they undoubtedly would eat the sugar and lard bait.

### Doddies in Queensland.

Much progress has been made in the breeding of pedigree Aberdeen-Angus cattle in Queensland during the last two years. J. Moir, writing to the Queenslander, tells a story of a big volume of trade that has passed between lovers of the doddie in Queensland and firmly established breeders in New Zealand.

### New 16-Inch Guns.

The new giant 16-inch guns of the United States, defending the Panama canal and New York at Sandy Hook, shoot projectiles weighing 2370 pounds, which is more than a ton.

NEW WORLD LIFE

THREE MILLION DOLLARS

has been invested *Exclusively in the Northwest* by New World Life.

One Million Seven Hundred Thousand of this is absolutely *New* wealth, paid in by our ten thousand stockholders from all over the world, only a small percentage of which was contributed by local people.

NEW WORLD LIFE
Spokane.

*A splendid opening for a local respresentative in your locality*

# Raise the Runt

## He Will Make a Good Hog in Time

It is a seriously mistaken idea to allow the runt pig of the litter to make his own way or die, as is so often done on the farms of the country. Not only should the runt be cared for the same as the other pigs, but owing to the fact that he is a runt he should be given better treatment than his stronger brothers and sisters.

Dr. S. B. Nelson, dean of the College of Veterinary Science of the State College of Washington, recommends strongly that a little calcium chloride and a little lime be placed where the pigs can get it, especially the pig that needs some special stimulus. The calcium chloride and lime should be mixed in about the proportion of 11 grams of the former to 15 grams of the latter. A mixture of salt, slacked lime, sulphur and charcoal should be kept before the pigs and growing shoats at all times. This should be in the proportion of one part lime, two parts sulphur, three parts salt and perhaps five parts of charcoal in one form or another.

Dr. Nelson says that shorts and milk will frequently play havoc with small pigs because they form too rich a combination of feed. Pigs need roots and roughage feeds, not only to balance the ration, but to dilate the stomach and help form a basis for large body development. Ground oats with the hulls still on, roots such as carrots, potatoes, turnips and alfalfa leaves and plenty of exercise are among the things that every young pig should have. Regarding the exercise of little pigs Dr. Nelson recommends a simple method. Merely take a piece of old newspaper, he says, wad it into a little ball, throw it into the pig pen and watch a minute. The first thing you know a little pig will go up to the paper ball, smell of it, push it a little bit with his nose and presently with a twist of his body will jump about it and the first thing you know the whole litter are playing, running and bucking about all over the pen. C. M Talmadge of Newport, Wash., a successful swine breeder, follows this practice regularly with his pigs, seldom going to the pens without throwing a paper ball to inspire a little frolic on the part of the piggies.

# Veterinary

## Dr. S. B. Nelson

**Lice on Cows.**—One of my cows has lice and I would like to know some simple remedy for it, and a friend of mine has a cow and she would like to know what is the matter with her. She was in good condition until about a month ago and she seemed to fall away and seems as though she gets the hay in her mouth and can't swallow it and sometimes she can spit it out and other times she has to be thrown and it has to be taken out of her mouth. It is as large as a person's arm around and eight or ten inches long. She doesn't seem to slobber much when eating, but is getting so poor that she is nothing but skin and bones. Do you think this cow has lost her cud? How does a cow act when they lose their cud? D. W.
Pilot Rock, Ore.

For your cow, which is affected with lice, try the following: Oil of staves-acre, one part; olive oil, 12 parts. Mix thoroughly and apply. This is a very effective remedy for lice.

Regarding your friend's cow, it would be very necessary to make an examination of the jaws, mouth and the throat to determine the trouble. Naturally, there is some trouble in that region. What the specific remedy is only a personal examination will determine.

If you have a number of chickens ailing, send a specimen to the veterinary department at the state college of Washington and the professor of pathology will be glad to make a microscopic examination for you and advise you what he finds and, if possible, give you a remedy for same.

**Stomach Clogged.**—I lost a good cow a short time ago with the first stomach choked right up with dry straw. We gave her salts, but they did not move it and we did not know what did kill her until I opened her to try and find out what it was. Am writing to know what to do in case this happens to any of the other cows.
MRS. M. K.
Grass Valley, Ore.

Of course, the principal thing for you to do is not to feed one feed alone so as to prevent the particular feed from clogging the first stomach or rumen. You gave her salts, you say. The trouble was that there was not



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Prevents waste of high-priced corn—it delivers the bacon.

In these days you can't afford to feed grain to mud-holes. It's pork we need.

Concrete feeding floors mean permanent floors—no filth, no disease, no place for rats to nest.

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Win the War by Preparing the Land, Sowing the Seeds and Producing Bigger Crops

**Work in Joint Effort the Soil of the U. S. and Canada—Cooperative Farming in Man Power Necessary to Win the Battle for Liberty.**

The Food Controllers of United States and Canada are asking for greater food production. Scarcely 100,000,000 bushels of wheat can be sent to the allies overseas before the crop harvest. Upon the efforts of the United States and Canada rest the burden of supply.

**Every Available Tillable Acre Must Contribute; Every Available Farmer and Farm Hand Must Assist.**

Western Canada has an enormous acreage to be seeded, but man power is short, and an appeal to the United States allies is for more men for seeding operations.

**Canada's Wheat Production Last Year Was 225,000,000 Bushels; the Demand From Canada Alone, for 1918, is 400,000,000 Bushels.**

To secure this she must have assistance. She has the land, but needs the men. The Government of the United States wants every man who can effectively help to do farm work this year. It wants the land in the United States developed first, of course; but it also wants to help Canada. Whenever we find a man we can spare to Canada's fields after ours are supplied, we want to direct him there. Apply to our Employment service, and we will tell where you can best serve the combined interests.

**Western Canada's help will be required not later than April 5. Wages to competent help, $50 a month and up, board and lodging.**

Those who respond to this appeal will get a warm welcome, good wages, good board, and find comfortable homes. They will get a rate of one cent a mile from Canadian boundary points to destination and return.

For particulars as to routes and places where employment may be had, apply to

U. S. Employment Service, Dept. of Labor
Seattle, Tacoma, Bellingham or North Yakima, Wash.

sufficient water and salts given to your cow. In these very severe cases of impaction there is generally one thing, and one thing only, that will save the cow, and that is an operation to the flank through which a large quantity of the contents of the stomach or rumen is removed, after which the cow is given sufficient water and a purgative, including salts and linseed oil raw, in order to remove the offending material. You might try giving from a pound to a pound and a half of Epsom salts in the morning, a quart of raw linseed oil in the evening and repeat for two or three or four days if necessary.

**Colt Has Crippled Hoof:** I have a 2-year-old colt with crippled hoof which I think is contracted hoof. I cut his hoof and found dry blood which I think are corns. He seems to have considerable pain in his foot because he is lame. R. Y.

Trim the corn off completely until you get to the diseased portions. Then wash out carefully with a four per cent solution of lysol. Afterwards apply some of the following liniments to the wounded parts: Zinc sulphate one part, lead acetate one part, water eight parts. Around the hair line at the foot apply the following: Pine tar, one part; lard, one part. Melt the lard and mix the tar in. Apply once daily.

**Lame in Front Leg:** Have a horse 10 years old that is lame in the front leg. He has gradually grown worse in the last two years until he is quite lame now. The hoof has contracted until now it is between two-thirds and three-fourths the size of the other hoof, which is normal size. He points with that foot continually and favors it at all times. However, when he is warmed up in the harness he is not quite so lame. Kindly advise as to the ailment and its possible treatment. G. A.

Roberts, Idaho.

I would rather suspect that your horse is suffering from navicular trouble, and that he small navicular or coffin bone of the foot is diseased. I do not believe any simple remedy will avail. It is quite likely that it is not susceptible to treatment at all. Inject the wounded portion with tincture of iodine, one part; water, one part. Do this daily.

**Lumpy Jaw**—I have a heifer that has a lump on the left side of her jaw. Is there anything that I can do for it, and is it catching with other stock and is the milk good to use?

Davenport, Wash. I. W.

Your heifer is probably suffering from lumpy jaw, which is an infectious disease and dangerous to your other cattle. You ought to report the case to the commissioner of agriculture at Olympia, Wash. If the lump is loose in the skin the animal should be cast and the lump removed surgically and the wound treated daily with tincture of iodine. Also, the heifer should be given one drachm of potassium iodide in a pint of water morning and night for approximately 10 days. Then rest 10 days, and then repeat the potassium iodide treatment.

**Feet Are Cracked**—I have two cows whose feet are cracked between the toes clear to the bone. One has it on a hind foot about seven weeks. Another both front feet about a month. When the first one started our veterinary was in and advised us to keep her in the barn on plenty of clean bedding, bathe and disinfect the foot twice a day in creolin water. Then put some preparation which he said was the best healing he knew of between the toes and pine tar on the bottom and sides of the hoofs which has been done faithfully, but I see no betterment. One neighbor told me his were cured once by putting the affected feet in boiled tallow and then cure the blisters. Another one burnt his with hot irons and then cured the burns and they were all right. Can you advise me what will heal up the cows feet? The sores have been kept clean and healthy and what is the cause of it? A SUBSCRIBER.

Chehalis, Wash.

The infection which you describe affecting your cow's feet is probably infectious cellulitis, and is a very aggravating trouble, and is hard to treat because the disease extends to the cellulose tissues up around the foot even as far as the ankle. I think that your veterinarian has given you fine advice regarding the trouble, but you might try the injection of a one per cent solution of formalin into the tissues or one to five-hundredths solution of copper sulphate. This latter solution may be fixed so that the cow can step in it and soak the foot for some time in it. It is absolutely necessary to destroy the invading organism, which is causing the trouble. The actual calking, which you say that one of your neighbors use is sometimes necersary and gives good results.

## Urges Keeping of Sheep

More sheep are needed on the farms, says Judge Grant B. Dimick of Oregon City, Ore., and the farmers who raise them will be benefited as well as the whole country that badly needs them. Judge Dimick has greatly increased his sheep holdings in the last two years, and now has over 900 ewes, including a few registered Oxfords and Hampshires and a flock of 57 registered Shropshires. Mr. Dimick says the number of sheep in Clackamas county has multiplied in the last few years in the region south of Oregon City, especially in the Molalla valley and on into the foothills. There is now a fairly strong sheep and goat protective association in the county.

Judge Dimick quotes government statistics to show the decrease in the actual number of sheep in America and in Europe and Australia. Because the range is used up and much of it homesteaded we can not expect an increase there, hence it is up to the farms to supply the deficit, and there was never a time when a farmer could so profitably keep a small flock. Besides their direct profit they are the one animal that evenly fertilizes the ground over which they graze.

Judge Dimick admits the dog menace and says there must be fewer dogs. He says many farmers do not know they have the remedy in their own hands, and calls attention to chapter 22 of general Oregon laws, passed in 1917, which gives the right "to put out poison upon enclosed premises between sunset and sunrise of any day."

Judge Dimick also says all sheep and goats should be dipped when sheared, to destroy ticks and other parasites and in the case of sheep it is much better that they be dipped again in the fall. H. A.

**Newspapers in China.**

In all China there are about 440 newspapers, and of these only about 50 have good circulation. The average is not more than 3000 copies an issue. One newspaper in Shinghai claims a daily circulation of 30,000.

## California Cattle Need Feed.

Owing to the unprecedented drouth in California during the last year, pasture and cattle feed in that state is so short that stockmen are in many cases seeking to place their cattle in other states where feed is more plentiful. Persons in the northwest who have pasture or feed for sale could do themselves and the cattle men of California a favor by getting in touch with L. A. Nares, president of the California Live Stock association, San Francisco.

**Importance of Farm Machinery.**

The government has recognized the importance of farm machinery by giving the raw materials from which it is made a rating of B-1, second only to munitions of war. Implements have been given priority in shipping, so the farmers need not be delayed any longer than necessary in receiving new machinery. Before the time for use comes it is wise to look over a machine and order any parts needed as far in advance as possible.





# Which? Profit or Loss

Today the dairy industry of the West faces a crisis. Many men are losing money—are figuring on selling their dairy herds at a time when all possible production is needed.

In the same neighborhood where these men are losing money others are **adding to their bank accounts** almost daily. They're **increasing their herds,** because they find the business **profitable.** What is the difference?

# INDIANA SILO

These Indiana Silo owners are the most progressive dairymen of Oregon, Washington, California and Idaho. They preserve all their feed-crop, while the silo-less man goes to the expense of a crop and then allows 40% of its feeding value to dry up, evaporate and go to waste.

These silo-less men have to replace 40% of their crop with other feed—mostly grain, needed now to win the war. Experts claim that the average use of a silo conserves enough foodstuffs to feed 80 soldiers 30 days.

Even with our great facilities—our own standing timber, our logging camps and factories—we don't believe we can build enough Indiana Silos to supply the West this year.

So don't delay—mail the coupon today for complete Indiana Silo facts, and prices. Do it now.

**The Chas. K. Spaulding Logging Co.,**
**Silo Dept., Salem, Oregon**
**Portland** **San Francisco**

***Distributors "Money-Maker" Safe Silage Cutters***
***Write us for prices on Grain and Water Tanks***

The Chas. K. Spaulding Logging Co.,
SILO DEPT., SALEM, OREGON.
I want to make a profit out of dairying, instead of sending my cows to the stockyards. Send me your Indiana Silo facts, free. This inquiry does not obligate me in any way.

Name .....
Address .....
Number of cows .....
W. F.

POULTRY

Write to the Editor.

JAMES DRYDEN,
Editorial Contributor.

# Hogan Test

## Results at Pullman Contest

By James Dryden.

The Hogan system of selecting layers is pretty generally understood among poultrymen. The claim made for the system is that the egg-laying capacity of the hen may be determined by making certain measurements of the hen. In other words, that there are external anatomical differences in good and poor layers that indicate their worth, according to Hogan.

The system has been the subject of more or less investigation by poultry experimenters and others without arriving at a decision that would be accepted as conclusive. The experiments did not encourage the Hogan idea. At the Pullman egg-laying contest Mr. Hogan was given his first opportunity to demonstrate publicly and officially the merits of his system.

At the opening of the contest in October, 1916, Mr. Hogan examined and "scored" all the pullets entered in the contest, about 1200 in number. Every pullet was given her number before the contest began; that is, Mr. Hogan gave the number she would lay during the year based on a physical examination of the pullet. The depth of abdomen from the pelvic bones to the keel bone and the thickness of the pelvic bones form the basis of his system.

A report has just been received giving the comparisons between the predictions and the actual trapnest records. This report does not seem to show any very decided correlation between the Hogan predictions and the trapnest records.

It might be said in explanation of Mr. Hogan's apparent failure in this test that on account of an epidemic of disease that ran through the flock and affected the records, the conditions were not fair to him. The records secured were low and probably did not represent the true egg-laying ability of the fowls. Taking the average of the flocks, Hogan's figures or predictions were invariably higher than the trapnest records, but the question can not be decided by the averages of flocks. It might happen that the average of the predictions was the same as the actual trapnest records though the predictions and trapnest records of individual hens were widely apart. The individual records must be studied, not the averages, to get at the truth. If the individual predictions were characteristically higher than the trapnest records, the system could not be condemned because the conditions of the contest were not such as to bring out the full laying capacity of the fowls. Hogan's predictions are not based upon what the fowls actually do, but upon what they are capable of doing under proper conditions.

But so far as the individual records are given, there appears to be no such agreement. This will be seen in the following table giving the records of all hens laying 200 eggs or more with Mr. Hogan's prediction. The first figure in parenthesis gives the number of eggs laid in the year as shown by trapnest records; the second figure gives Mr. Hogan's scores: (237-160), (232-130), (230-160), 224-175), (221-145), (217-145), (217-338), (213-82), (212-205), (210-220), (208-115), (207-220), (207-160), (206-175), (200-24).

In two cases only were Hogan's scores higher than the trapnest records. If the conditions had been good for high egg records and the trapnest records much higher there would have been a greater disparity between the the predictions and the actual records. On the other hand, as already stated, the predictions as to flock averages were considerably higher than the actual records, showing no agreement between the averages and the individual records of the best hens.

But the report gives other tabulations a study of which shows disparity. The results for different breeds are given separately. In the case of 335 white Leghorns which finished the year in good condition the prediction was 144.51 eggs a hen average, while the trapnest records showed an actual average of 124.94. The report says: "Of the 335 birds, the egg records of 49 differed from Mr. Hogan's prediction by 10 or less eggs; 31 differed by from 11 to 20 eggs; 36 differed by 21 to 30 eggs; 37 differed by from 31 to to 40 eggs; 21 differed by from 41 to 50, and 161 differed by more than 50 eggs."

The same thing is true of all the breeds; there seems to be no uniformity in the difference. In the case of one breed the prediction was an average of 191 eggs a hen, while the actual average shown by record was 84.6.

The Hogan system has failed in this test. I believe it possible to make from the book, without ever seeing the hens, a more accurate prediction than was shown in this test. A close study of the pedigree of a pullet showing the egg record of its ancestors for several generations is surer than measurements of bones. There is no royal road to high egg-producing strain.

# Use Sodium Fluorid

To the Editor: Can you please tell me what will help my chickens? They are kept clean and have the right kind of feed, but they are bothered with lice. They also pick feathers from one another until they kill some of the chickens. MRS. W. H. P.
Idaho Falls, Idaho.

For body lice, use sodium fluorid, which may be purchased in the city drug stores. In applying it, the following method is recommended (Farmers' Bulletin 801): One pinch on the head, one on the neck, two on the back, one on the breast, one below the vent, one on the tail, one on either thigh, and one scattered on the underside of each wing when spread. Push the thumb and fingers through the feathers and release the powder. Hold the fowl over a shallow pan so as to ctach the powder that may fall. A pound of the powder is sufficient for about 100 fowls.

There are various commercial powders that are more or less effective. Dust is nature's remedy for lice; the fowls therefore should have access to a dust bath at all times.

Feather eating is usually due to a lack of animal food in the ration. If the fows have plenty of meat scrap or milk they seldom learn this vice.

J. D.

### A New Shaving Brush.

The handle of a new shaving brush is hollow and is surrounded by an electric heating unit, supplied with current from a lighting socket, to warm water and soap placed in it and injected into the bristles by pressing a button.


Do You Want a Well Drilled?

If so, write us, as we can very likely put you in touch with a competent driller in your section.
We manufacture the famous

KEYSTONE
WELL DRILLING MACHINES
and Downie Deep Well Pumps.

Upwards of 1000 Keystone outfits now in successful operation in Pacific Northwest. Drop us a card today for name of driller nearest you. Will any of your neighbors want wells drilled?

J. H. Harris 1210 Ide Ave. Spokane, Wn.
Pacific Northwestern Distributor for Keystone Driller Co., Beaver Falls, Pa.

It's Time To Mend Your Ways
IN THE BEST AND CHEAPEST WAY POSSIBLE
THE GLIDE Digs A Ditch Levels The Land Repairs Roads
THE 1-MAN 2-HORSE MACHINE
SHIPPED ON FREE TRIAL

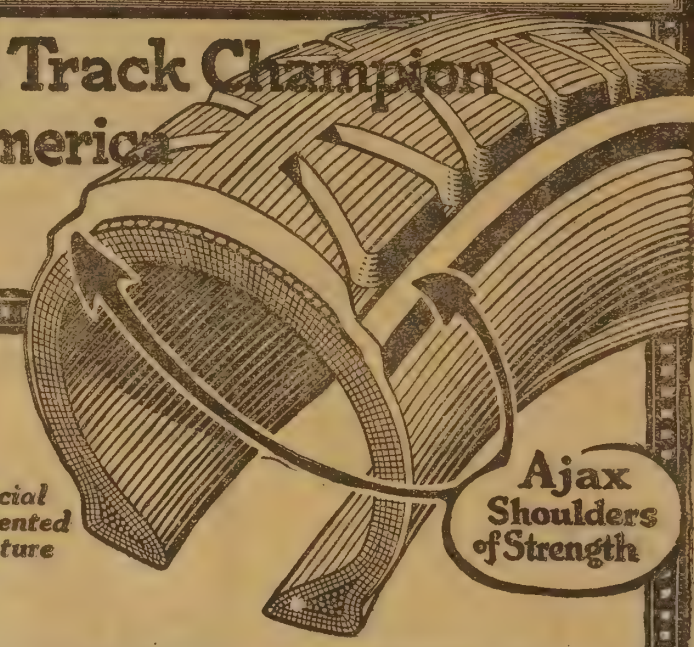


THE machine you surely need. With one team of horses and a Glide you can dig your ditches, laterals, terraces and perform every phase of work required for preparing irrigated land. Will dig a V-shaped ditch from 14 to 30 inches deep.

For road work Glide Machines have no equal. They are the most practical, economically operated and easily handled machines on the market. Thousands of satisfied users have proven their very efficient worth.

MADE IN TWO SIZES:
No. 1 Weight 750 lbs., 1 man, 2 horses
No. 2 Weight 1500 lbs., 2 men, 2 or 4 horses
Write for catalogue and free trial order blank.
Glide Road Machine Co., 505 Huron St., Minneapolis, Minn.

AJAX TIRES
GUARANTEED IN WRITING 5000 MILES
Dirt Track Champion of America



Special Patented Feature
Ajax Shoulders of Strength

Nation-wide victories won for Ajax Tires the *Dirt Track Championship of America.* State Fair crowds from Texas to Massachusetts witnessed these Ajax triumphs.

*These dirt tracks are country roads with a fence around them.* Ajax victories on them mean Ajax service for you. On proved performance Ajax Tires become your natural selection—the sure service, money-saving tire for the farmer.

SHOULDERS of STRENGTH

The picture shows you Ajax Shoulders of Strength—a special patented feature found only on Ajax Tires.

These Shoulders of Strength give more tread on the road—more rubber where it should be—mean added wear—more miles. Because of them road friction is evenly distributed over the entire width of the tread instead of centering in one spot and wearing through to the fabric.

AJAX ROAD KING
*"More Tread on the Road"*

In competition ON THE ROAD, Ajax Road King will prove its superiority. Built for city streets or farm highways. Note triangle barb tread—an added safety factor.

97% Owners' Choice

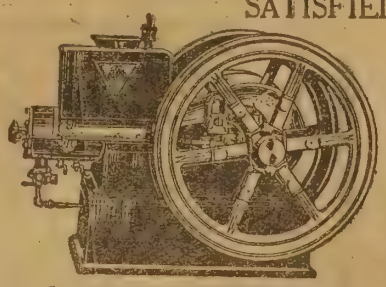
This huge percentage of Ajax total factory output goes to car owners as their individual choice over other tires that came with their cars.

Ajax Tires—Ajax Inner Tubes give real service. Booklet on Ajax Shoulders of Strength mailed free on request.

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"While Others Are Claiming Quality, We Are Guaranteeing It"

1½ to 28 H.P.
Alpha Engines
For Gasoline Distillate or Kerosene
THE HIGH QUALITY STANDARD
BETTER SERVICE, LONGER LIFE
SATISFIED USERS



The low cost of operation, the freedom from the breakdowns and repair expense combined with the years of service an ALPHA ENGINE will give you, make it the most economical engine wherever dependable power is wanted.

The finest materials are used—perfect machine work and perfect balance of Alpha Engines insure smooth flow of power under light, heavy or varying loads.

HIGH-CLASS BUILT-IN MAGNETO. Easy to Start Without Cranking. No Batteries—No Troubles.

SEND FOR CATALOG—DON'T BUY AN ENGINE UNTIL YOU KNOW ALL ABOUT THE DEPENDABLE ALPHA

DE LAVAL DAIRY SUPPLY CO.
61 Beal St., San Francisco, Cal.
Shipment made from SEATTLE or PORTLAND

# Test Your Corn

## Will Greatly Increase Production

It is absolutely necessary that a widespread campaign of ear testing be begun at once, in order to obtain a sufficient supply of seed corn of strong germination, says the United States department of agriculture. Some preliminary work can be done by culling out ears which upon inspection are obviously unfit for seed, but individual ear tests are for the most part necessary.

The rag doll method of testing individal ears is one of the simplest and economical, and is efficient. The tester consists of a strip of cloth, preferably bleached muslin, 16 inches wide and from three to five feet long. The cloth should be marked off into squared sections and the squares all numbered. The ears to be tested should also be given corresponding numbers. Six or more kernels should be selected from different parts of each ear, and placed in the proper section. When the tester is filled, fold over each side so that the edges meet in the center, roll up and soak the tester for a few hours in lukewarm water. Drain the excess water off, and place the dolls in a warm place to germinate. They should be sufficiently well germinated to show their fitness for seed.

Farmers' Bulletin 948, "The Rag Doll Seed Tester," describes fully this method of testing seed corn.

# Battle With Germans

By FRED SCHWENDIMAN,
Sugar City, Idaho.

Last summer a farmer in eastern Idaho had a field of wheat in which there were also growing, throughout the entire field, a few thrifty but scattering weeds. One day he looked the situation over and decided that these weeds were very detrimental to the crop, and that they would be a great hindrance in harvesting, as he wished to cut the wheat with a combined harvester. Labor being very scarce, he wondered how he could get those weeds taken out, but that night he met two young boys on the street in town and asked them if they would cut weeds for him the next day. They replied that they would be glad to, and would get as many more boys as he wanted, all of whom were in the habit of merely roaming the streets. The farmer went to the hardware store and bought a dozen grass hooks, and had them sharpened to a keen edge. Arriving on the scene the farmer said: "Boys, you see the weeds standing in this wheat? We will take the field strip by strip and will destroy every weed. We are the American army. The weeds are the Germans."

He had intended to give an order to fire, but before he could finish his instructions the boys were all whacking down Germans at a terrific rate. All went smoothly, and thousands of weeds were soon cut down to wither in the hot sun. After a few hours of steady work, however, one brave little fellow rushed a distance ahead of the rest, chopped down one monstrous big weed, and tramped it completely in the earth with his feet. The farmer watched the proceeding closely, and when the boy returned to the crowd he was warned never to leave the army, as it was against the rules, and extremely dangerous, to which the little soldier replied with a broad smile on his face, "Well I have killed the kaiser."

## Learn of Labor Saving Machinery



If we still used the scythe or the cradle to reap our harvests of grain it would be impossible to meet the demand of the hungry nations of the world for bread.

Modern ingenuity has replaced man power with machine power to a very great extent. In the production of food, mankind has the tremendous help afforded by such inventions as the combine, the tractor, the automobile, the silo, the cream separator and almost countless other articles.

Today the food problem is more pressing than ever, while the labor problem grows increasingly perplexing.

Not unlikely some machine or implement will help you with your labor troubles.

Advertising has played a very large part in the introduction of the combine, the tractor, the automobile, the silo, the cream separator and other inventions. It is through the advertising columns that you are almost sure to learn of improved implements of all kinds. By spreading the knowledge about farm machinery advertising has played a big part in feeding the world. It is still on the job. Read the advertisements in this paper and you will agree.

# Must Grow Legumes

"Let's grow peas on summerfallow to help increase production."

This is the appeal of County Agriculturalist J. H. Shinn of Spokane county, Washington, who is a strong advocate of peas and sweet clover as crops that should be grown on thousands of farms in the northwest. Mr. Shinn says that if we are going to make a permanent success of farming in the northwest we must grow a legume crop of some kind to keep the soil in proper condition.

Although last year was an unusually poor year for pea growers in the northwest, Mr. Shinn reports that in a number of cases pea crops produced excellent profit either through selling the threshed peas or through hogging them off. He recommends the Bengalian variety of field peas and the Alaska variety of garden peas for the ordinary farm of the northwest.

Not only are the peas an excellent grain crop, but the straw has real feeding value, says Mr. Shinn, though he recommends that care be used in feeding it to horses. There is danger of them gorging themselves and it should, therefore, be fed with some other roughage.

Mr. Shinn considers sweet clover valuable on the drier and lighter soils of the northwest. He had induced a number of farmers to experiment with it and in a majority of cases it appears that they have found it successful, not only as to yield, but as to actual feeding and pasture value. Mr. Shinn recommends the planting of about 10 pounds of sweet clover to the acre and emphasizes the point that the seed must be kept moist until it has thoroughly germinated. It should be covered from one to one and one-half inches.

## Free Labor Agents.

Grant county is well organized to handle the labor problem. Every town has a man who has offered his services as free local labor agent and we believe that this will not only be a help to the people who are looking for laborers, but will also be a great help to the people who are hunting places to work. The local agency will cooperate with the Spokane federal agency. The local free labor agents are as follows: Trimidad, Frank Kelble, merchant; Quincy, J. L. Fields, postmaster; Ephrata, county agricultural agent; Wilson Creek, F. D. Mordhorst, Wilson Creek State bank; Krupp, H. W. Hull, Farmers' union; Wheeler, C. G. Henderson, Farmers' union; Warden, Edward G. Bowker, real estate; Coulee City, J. W. Jones, implements; Hartline, W. J. Armstrong, Hartline State bank.

## Is Heavy Milker.

What is reported unofficially as a world's record for milk production is that made by Raphaells Johanna Aaggie 3d, a registered Holstein owned by the Napa State hospital of California. This cow is credited with a reported production of 918.6 pounds of milk in seven days.

## More Boys' and Girls' Clubs.

Boys' and girls' poultry club leader, County Agent McWhorter of Jefferson county, has just completed organizing the committees of Quilcene, Brinnon, Chimacum and Dabob, for boys' and girls' club work this season.





QUICK AND ECONOMICAL TRANSPORTATION

# Replace Teams With Nash Trucks

If horses were not so scarce and so high in price, Nash trucks would still be an economy hauling your loads of wheat.

Of much greater capacity and speed than the team and wagon, Nash trucks in your service not only cut down the number of trips to town in busy harvest time but release valuable harvest hands for more important work. For one Nash two-ton capacity truck will do the work of several teams and wagons, do it better and do it at less cost.

You can leave home later and get back earlier. Measured by the clock, the distance to town and back is less by hours. And the Nash truck does not have to rest, but can haul as far and as often as necessary.

The Nash two-ton capacity rear driven truck is particularly adapted to long and heavy hauls because it, like all Nash trucks, is equipped with an automatic locking differential. When, for any reason, one driving wheel loses traction momentarily, its mate gets practically all the power and drives the truck ahead out of difficulty.

This lets Nash trucks get through where other trucks without this important feature cannot go.

Let a Nash transportation expert tell you the many ways a Nash truck can save you money hauling your loads.

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| One Ton Chassis, - - - | $1495 |
| Two Ton Chassis, - - - | 1875 |
| New Quad Chassis - - - | 3250 |

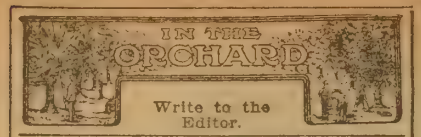
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DISTRIBUTORS
For Washington, Oregon, Northern Idaho, Western Montana and Alaska.

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VALUE CARS AT VOLUME PRICES (203A)




GRANVILLE LOWTHER,
Editorial Contributor.

# Berry Culture

## Loganberry Juice in Demand

A letter has been received by B. McKellep, Mukilteo, Snohomish county, Washington. The letter reads as follows:

I am after information as to which is the best berry to raise for the market—the Phenomenal or the loganberry? I see in the papers prices quoted for loganberries, but no mention of the others. Some people say one is the best, and some say the other. How long after being set out before they come into full bearing? Which is your choice of blackberries for the market? I have the Giant Himalaya, which are great producers, but some people don't like them. What variety of red raspberry do you prefer?

Mr. McKellep's letter was addressed to me at Spokane, forwarded to Yakima, my home, and from there to Pasadena, Cal. The answer has therefore been delayed. There are four questions of importance in this letter.

First—Which is the better berry to raise for the market, the loganberry or the Phenomenal?

Second—How long after being set out before they are in full bearing?

Third—Which is your choice of blackberry for the market?

Fourth—Which variety of red raspberry do you prefer?

To attempt a satisfactory answer to the first question I would have to know more about local conditions in Snohomish county and the fluctuations of the berry market than I know at present. So much depends on climate, soil and other conditions that without experience under those conditions or expert knowledge from observation an answer might be misleading. I have most of my life known something of berry culture, but have never specialized in that as I have on apples, peaches, pears or some other fruits. However, I am judging by what I have observed in my travels in different states that the loganberry would be the more desirable of the two. My reason for that is that it is used for the manufacture of juice that is placed on the market and sold at the drink stands with grape juice, cider and other soft drinks. The demand for these drinks increases as the states pass prohibitory liquor laws. In some towns loganberry juice seems to be in as great demand as grape juice. The human system requires a certain amount of acids, and the fruit juices will supply that demand in the absence of alcoholic liquors. Since the state of Washington passed the prohibitory liquor law the breweries and distilleries have mostly been employed in preparation of fruit juices for the markets. Cider and loganberry juice are among their principal preparations. One firm in the state of Washington claims to have put onto the market last year more than a million gallons of "soft drinks." I am concluding, therefore, that there will be an increasing demand for loganberries. I have no information that any other variety will meet this demand, although the Phenomenal is recognized as one of the good market berries and, similar in some respects to the loganberries.

Then, too, the selling prices of things do not always indicate their real merit. For instance, we have a variety of apple called the "Arkansas Black." It is not the best apple for eating, but it brings as good prices on the average as any of the best varieties because of its beautiful deep red color, its good shipping qualities, its shape and excellent keeping qualities. I would say that if I were going to set an orchard of berries on the west side of the mountain range I would write to Professor M. L. Dean, state horticulturist, Olympia, Wash; W. H. Paulhamus, Puyallup, Wash.; Professor O. M. Morris, Pullman, Wash., and Professor C. I. Lewis, Corvallis, Ore. These men might possibly disagree on some points, but all of them would give valuable information and form a basis for a reasonable conclusion.

The second question, how long before they will come into full bearing after setting? I would say they ought to bear a very fair crop the third year.

The third question is answered in my remarks on the first.

The fourth question, which variety of red raspberry do you prefer? Personally, I prefer the Cuthbert, but that also is a question largely of local conditions.

G. L.


## Trees

We offer a few choice prune, pear and cherry trees, select Vrooman Franquette walnut trees, and other first-class nursery stock at special low prices. Order today.

BENEDICT NURSERY CO.
185 E. 87th St., N., Portland, Ore.

## WAR GARDENS

Write for my interesting catalog of EVERBEARING AND STANDARD varieties of

**Strawberries and Vegetable Plants**

30 years of cultural advice free. Send postal today.

KELLY GARDENS, Sta. B, Spokane.

## STRAWBERRIES

Best for the West.

Americus Everbearing, $1.50 per 100, $3 per 250. Write for price list of other varieties.

CANYON HOME NURSERY.
Ellensburg, Washington.




MALMO & Co.

1913 Westlake Avenue, Seattle
MAIL THIS AD. FOR CATALOG AND
SPECIAL OFFER
Name ..... W.
Address .....


# Raise White Beans

The United States food administration is urging wholesale and retail grocers to push the sale of colored beans, both dried and canned. The food administration declares that in food value the colored bean is equal, if not superior, to the white bean.

"In response to a request for patriotic production the farmers of the west produced the largest crop of colored beans the country has ever known," says Charles Hebberd, state food commissioner for Washington. "They can be put on the market, however, at a price which is considerably lower than for white beans."

Federal Food Administrator Hebberd urges Washington farmers to increase their white bean acreage, although the only argument for greater consumption of the white bean, with consequent neglect of the colored varieties, is based on an unreasoning preference. Admiral McCowan, paymaster general of the United States navy, has caused scientific experiments to be made which show that the pinto and pink bean have many advantages not possessed by the white bean. He is anxious, however, for the boys on the fighting line and the boys on our war ships to have the white bean because they are accustomed to them.

"The food administration is urging the public to eat beans. Their greater use will help to decrease the consumption of meat. And in urging the greater use of beans, the food administration is asking that preference be given to the colored varieties."

## Long Keeping Apples.

The Post Falls Advance of March 1 says:

"A. W. Gordon and S. W. Berry have each brought into this office good apples which have been kept from the 1916 crop. The first were Black Ben's and the latter York Imperial."

### Women Deputy Sheriffs.

The war department commission on training camp activities now has 55 women deputy sheriffs working in vicinities of camps in all parts of the country.





## Big-Scale Harvesting

ONE of our customers, who realized that his opportunity had come for cutting out a lot of the old delays, worries, and high costs of his yearly harvesting, invested in a **Deering Harvester-Thresher.** This letter of his describes the good average experience:

American Falls, Idaho, Aug. 23.

"The Deering Harvester-Thresher, purchased from the International Harvester Company, has proved very satisfactory, having cut about 150 acres, averaging about 15 acres per day, with but one man, cleaning and saving the grain better than any thresher I have operated. The machine is very economical, being the cheapest way of harvesting I know; the same is true of the cost of help. The saving in my thresher bill for this year will more than pay for the cost of the machine; in addition, a great saving of work in the house has been made, and in the feeding and help that is required for the old-time way of harvesting. Yours truly,

Martin Garn."

**Do your harvesting and threshing in one operation, turning the old unnecessary threshing expense into clear profit, saving time, doing away with the risks of long-drawn-out harvest. Own a Deering Harvester-Thresher for this year's harvest. Let your threshing-bill saving pay for it. Write for folders.**

**International Harvester Company of America**
(Incorporated)
Billings, Mont. Crawford, Neb. Denver, Colo. Helena, Mont.
Los Angeles, Cal. Portland, Ore. Salt Lake City, Utah
San Francisco, Cal. Spokane, Wash.

## 15% Nitrogen

is immediately available in

## Nitrate of Soda

Do you know that 100 pounds off Nitrate will furnish more nitrogen to sugar beets early in the spring than you can get from 10 tons of well-rotted manure?

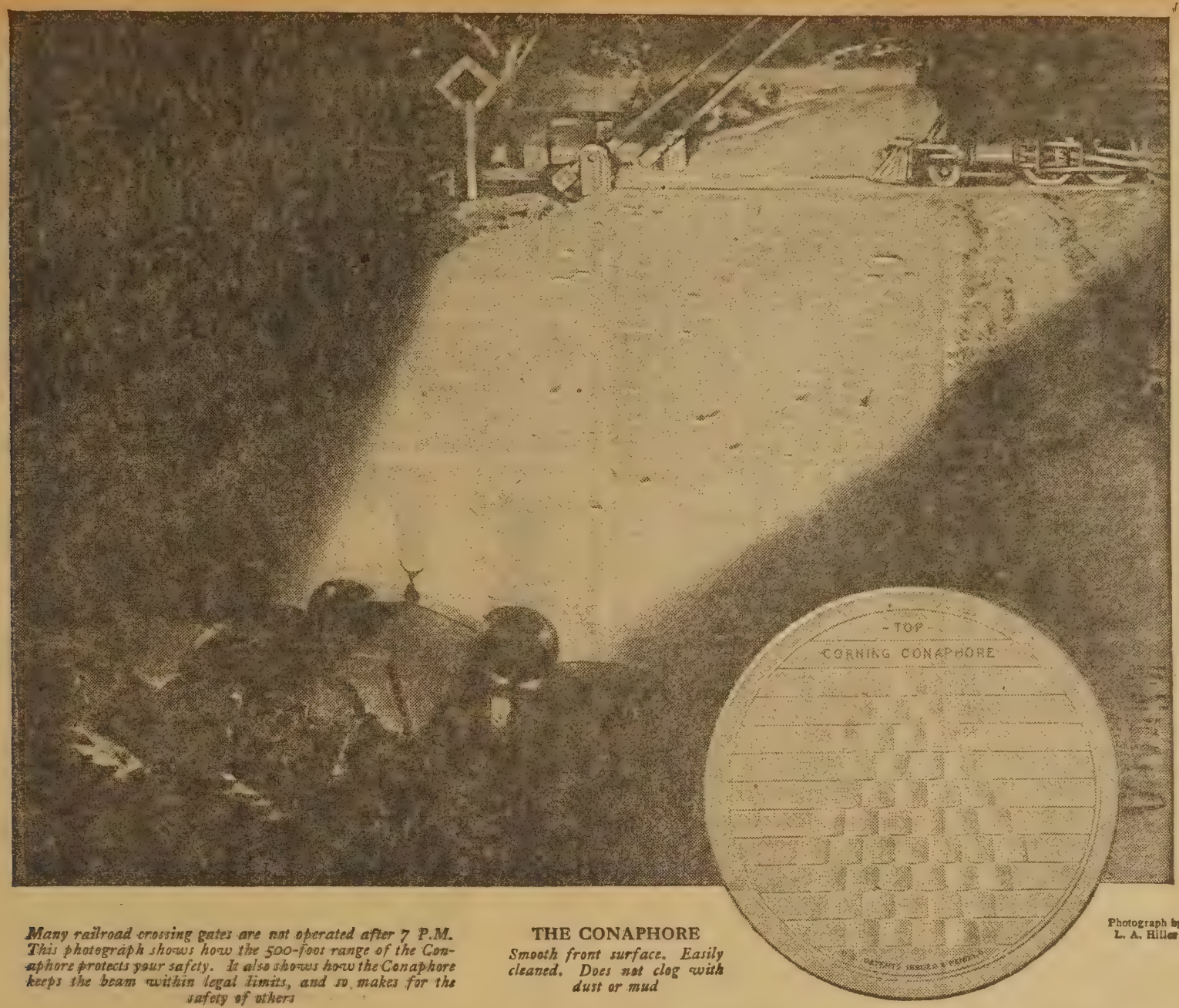
Manure will help later crops, but for an early start YOU MUST use Nitrate.

Nitrate is the cheapest and best fertilizer because it supplies most available nitrogen quickest and at least cost, also it is clean, odorless, easy to handle. The increase of sugar beets through its use will run from 2500 to 4500 pounds per acre.

Write us today for complete information.

**NITRATE AGENCIES CO.**
210 Leary building, Seattle






*Many railroad crossing gates are not operated after 7 P.M. This photograph shows how the 500-foot range of the Conaphore protects your safety. It also shows how the Conaphore keeps the beam within legal limits, and so makes for the safety of others*

**THE CONAPHORE**
*Smooth front surface. Easily cleaned. Does not clog with dust or mud*

Photograph by L. A. Hiller

# Country roads demand long range

## *Safety demands no glare*

NOTICE how brightly the Conaphore beam lights up the railroad crossing and the engine in the photograph above. Then see how far beyond the crossing it illuminates the road.

The Conaphore does not diffuse and scatter the light in all directions. Neither does it dump the light directly in front of your car. Instead it shoots a long, broad beam ahead for 500 feet and more.

Notice, also, that where the Conaphore beam strikes the engine, the light is not more than 42 inches above the road. If a motorist were approaching from the other direction, the Conaphore rays could not dazzle or confuse him even to the slightest extent.

### Conaphore design patented

Conaphores give you the range you need and to which your own safety entitles you. Yet they eliminate all glare and so make for the safety of others.

The Conaphore permits the bulb to be focused for maximum range. Its efficiency is due to scientific design.

A series of patented corrugations on the inner surface of the Conaphore bends down the beam, while cylinders in the center fan ample light sidewise.

These corrugations also limit the height of the beam to 42 inches. There is no chance of blinding the other fellow, and you are within the requirements of any state or local headlight law.

### Pierces fog and dust

The Conaphore is made of Noviol Glass *patented*—invented by Conaphore designers and used in no other headlight device. This unique yellow-tint glass causes the light to pierce fog and dust, without "back-glare."

Blue and violet rays present in all white light are the chief cause of "back-glare," because they are easily diffused by the fog or dust particles. Noviol Glass absorbs these blue and violet rays, but projects all the rest of the light. Thus the Conaphore eliminates "back-glare" and gives you perfect road vision even when the night is thick. *The Noviol beam makes the easiest light for your eye to follow.*

Conaphores are also made in clear glass, but we strongly recommend the Noviol.

### Help fight the glare evil

On dark country roads the glaring headlight danger is found at its worst. Put Conaphores on your car at once, and do your share to stamp out the glare evil. They give you the long range you want, yet take all glare out of your headlights.

Easy to install. Sizes made to fit all cars. If your dealer has not yet received his supply, write us and we will see that you are promptly supplied.

| Retail Price List (per pair) | Noviol Glass | Clear Glass |
|---|---|---|
| 5 to 6⅞ inches inclusive | $2.40 | $1.60 |
| 7 to 8½ inches inclusive | 3.50 | 2.50 |
| 8⅝ to 10 inches inclusive | 4.50 | 3.00 |
| 10⅛ to 11½ inches inclusive | 6.00 | 4.00 |

Prices 25 cents more per pair west of Rocky Mountains
Sizes vary by steps of ⅛ inch above 6½ inch size

Manufactured by the World's Largest Makers of Technical Glass

**CONAPHORE**

Range 500 feet—No Glare—Pierces Fog and Dust

CONAPHORE SALES DIVISION
EDWARD A. CASSIDY CO., Mgrs.
523 Foster Building - - New York City

**CORNING GLASS WORKS**

CORNING GLASS WORKS ALSO MANUFACTURES PYREX TRANSPARENT OVEN DISHES AND PYREX CHEMICAL GLASSWARE

# Great Drive Is On

## *Germany Launches Terrific Battle*

At about 5 o'clock last Thursday morning the expected assault on the allied lines of the western battle front was launched by the Germans over a 50-mile front in the region of Cambrai and northward. Since that hour to the present time it has raged violently, the most terrific battle in the world's history. It is evident that it is the desperate effort of Germany, without regard to the loss of life on her own or her enemies' side, to win the war by a gigantic thrust. So great has been the battle that so far no estimates of casualties have been attempted, though it is believed that they already run into the hundreds of thousands. Reports show that Germany has massed between 500,000 and 1,000,000 men, thoroughly equipped with guns and ammunition, along this 50-mile front with a view to maintaining the withering fire with such power and for such time that no human resistance will be possible to endure it.

Up to this writing, while the British armies under the command of General Haig have retreated at points along a 20-mile front near Cambrai from one to nine miles, this retreat is reported to be of a strategic nature, made in an orderly fashion and with a much less loss of life than that suffered by the Germans. It is clearly the aim of General Haig and his allied advisers to allow his lines to bend, thereby avoiding the terrible losses of life that a rigid defense would make inevitable, and at the same time returning the enemy fire with a view to the maximum destruction of life and munitions on the side of the enemy.

The outcome of this stupendous engagement is wholly problematical. One day may reverse the situation one way or another. No one but the military experts of the contending forces know the extent of the equipment and supplies of the two sides. No estimate can be made of how long the Germans can keep up the unprecedented bombardment, nor of how long the British can return the fire. The struggle is so desperate that only two elements enter into the solution of the questions that arise: The number of men on each side and the quantity of guns, ammunition and food stocks available for the armies.

Kaiser William is himself in personal command of the German army, apparently in the hope of winning the victory and going down in history as the victor in the world's greatest conflict.

From the allied military headquarters come assurances to the people of all the allied countries that the situation is "serious but not alarming." Exactly what is happening was to be expected, say the official reports. The organization of the British defense is not destroyed up to this time, and it is believed that the German onslaught will necessarily slacken soon, leaving the British in a position to strike counter blows with effect against the enemy lines.

Little fighting has been done along the French frontier or where the American soldiers are situated, though minor engagements have been taking place at many points.

An unexplained declaration is made from Paris that that city has been bombarded by shells that must come from at least 62 miles. This is the nearest point of the German lines to Paris. Up to the present time no gun has been known to fire a shot more than 22 miles, and the world is waiting to learn if Germany has invented a gun of the undreamed-of range of over 60 miles.

### Germany Threatens Holland.

As the result of Holland's action in granting the request of the United States and England that she turn over to them approximately a million tons of her vessels for carrying allied commerce Germany has threatened to make war on Holland. Under the terms of international law the United States and England appropriated Holland's idle vessels for use in carrying foodstuffs and munitions for the allied armies. International law is understood to grant the privilege to warring nations of pressing into service any neutral shipping vessels that are withdrawn from their usual course of trade as were the vessels of Holland.

### Continue to Overrun Russia.

Notwithstanding the ratification of Germany's peace terms by the Russian congress 10 days ago German armies continue to advance into that country, establishing authority over enormous areas and many cities and industrial districts. The Russian government has been removed from Petrograd to Moscow, since which removal the German armies have evidenced their intentions to proceed on to the capture of Moscow. The situation in eastern Russia remains in doubt, no definite information regarding Japan's intentions having been made public. The continued invasion by the German forces, however, seem practically to insure the intervention by Japan in the territory adjoining the orient.

### Restrict Railroad Building.

Director General McAdoo, in charge of the railroads of this country since they were taken over, has announced that only those railroad extensions and improvements considered absolutely essential to the adequate conduct of the business of this country will be considered during the period of the war.

President Wilson last week signed the bill which formally gives the government control of the railroads until 21 months after the close of the war, at which time, unless further legislation is enacted, they will return to private ownership. The bill as signed appropriates $500,000,000 as revolving fund out of which the government will conduct the affairs of the roads.

### Take Over Alien Property.

Under a proclamation by the president this country is now making an exhaustive survey of the property owned in the United States by German citizens or corporations with a view to the legal confiscation of such property. It is probable that German property in America has a common value of a few million dollars. A considerable less valuation of property is held in Germany by American citizens or corporations and it is expected that that government will take similar action regarding it.

### La Follette's Man Loses.

Irvine L. Lenroot, republican candidate for nomination for United States senator from Wisconsin defeated his opponent, James Thompson, at the primaries of that state last week. Interest in the contest was strong, due to the fact that Thompson was recognized as the representative of the La Follette pacifist sentiment. The election of United States senator in Wisconsin takes place next Tuesday, April 2, when Lenroot will contest with the democratic candidate.

### Submarines Can't Win.

The British government has given out figures heretofore withheld in secrecy showing the effect of the submarine program against allied shipping. The figures show that up to January 1 of this year, allied and neutral shipping had lost vessels with 11,827,000 tons shipping capacity. Up to that time shipyards had constructed vessels with a shipping capacity of 6,606,000 tons. German and Austrian ships totaling 2,589,000 tons carrying capacity had been appropriated one way or another by the allied governments up to January 1. This means that during the submarine warfare the ships available for carrying on the commerce of the allies was reduced by the net amount of approximately 2,632,000 tons carrying capacity. These figures were given out for the double purpose of showing the people of the allied nations the absolute necessity of constructing ships as rapidly as possible and at the same time showing that if this construction is carried out as it should be, the German submarine policy will continue to be largely a failure.

### Settle Labor Disputes.

With a view to avoiding labor troubles in railroad operations during the war, Director General McAdoo of the railroads has approved a system whereby committees representing the government, the railroad executives and brotherhoods will attempt to settle any disputes that may arise over wage scales and hours of employment. There will be one committee dealing with the questions that may arise through the four leading railroad brotherhoods, one for those affecting shop men and probably another for those affecting clerks and other classes of employes.

### Pope Wants Peace.

Pope Benedict has issued an Easter message to the people of the United States in which he expresses a hope for the establishment in the near future of a just and lasting peace which he urges should be based upon the fear of God and love of humanity, giving to the world a new organization of peoples and nations united under the aegis of true religion and inspiring to a nobler, purer, kinder civilization.

### Anti-Tipping Laws.

Six states now have anti-tipping laws. Illinois, Iowa, South Carolina, Tennessee, Missippi and Arkansas, and in last fall's sessions of the state legislatures bills were introduced with the object of ending the practice of tipping in seven other states, New York, West Virginia, Kentucky, Minnesota, Missouri, Colorado and California. Iowa has recently refused to repeal its anti-tippig law.

### The Garden Book.

Don't forget to write to the Farmer information bureau at Washington, D. C., enclosing a two-cent stamp for the book on war gardens.


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# Makes Suggestions

## Farm Council Gives Crop Advice

Following the organization recently of the Spokane County Agricultural council that organization issued in condensed form a mass of advice to farmers on the subject of food crop production this season. The new organization is headed by George Cannon of Buckeye, president; A. H. Poston of Spokane, vice-president; and J. R. Shinn, who is county agriculturist, secretary. The following is the advice in brief as issued to the farmers of that county and indicates points of value to food producers in any locality of the northwest.

Wheat production:

We must rely largely upon spring wheat.

Land in peas in 1917 furnishes excellent conditions for spring wheat after disking and harrowing.

Stubble land, if put to spring wheat, should be disked early and then plowed.

Varieties recommended: Early Blart for lighter lands, Marquis for heavier lands.

Seed wheat for these varieties to be held by warehouses for farmers.

Pork production:

Use alfalfa, clover and similar pastures where available. Where these are not available plant, winter wheat, winter rye or sweet clover.

Glean waste products from grain and pea fields.

Provide proper housing.

Save all pigs farrowed, by special care at farrowing time.

Allow no hogs to be slaughtered, that are not finished, when peas and other feeds are going to waste in the fields.

Induce each family to keep at least enough hogs to produce its own meat supply and beef.

**Build More Silos.**

Dairy and beef cattle:

Build silos on all dairy and beef cattle farms.

Plant sweet clover for pastures on all cattle farms.

Utilize pea straw, sweet clover for hay.

Cow testing association work should be organized.

Keep all heifer calves from high-producing stock.

Use home-prepared calf meals as substitute for skim milk for feeding calves.

Have food administrator undertake at once the determination of cost of production and distribution of market milk.

Poultry:

Grow such crops as peas, clover and sweet clover to furnish cheap feed.

Keep the usual number of poultry on each farm.

Swat the roosters after breeding season.

Sheep:

Keep sheep on farms as weed destroyers and wool and mutton producers.

Save lambs by proper housing of ewes at lambing time.

Eliminate scrubs and replace them with well-bred stock.

Encourage the destruction of curs and worthless dogs.

**Increase Fruit Yield.**

Fruit production:

Determine spray dates by trapping moths.

Fertilize orchards for continued production.

Intercrop orchards with legumes, such as peas, vetch.

Pasture hogs and sheep on peas grown between trees.

Farm labor:

Transfer teams, tools and men from timber sections to help in harvests in large grain area.

Organize local labor bureaus to cooperate with federal labor bureau in Spokane to facilitate getting an ample labor supply.

Recommend to board of education that men teachers working on farms this summer be given same credit as those taking course in summer school.

Farmers' vegetable garden:

Each farm shall have its half acre for garden and truck to provide an ample supply of vegetables for summer and winter use.

Squirrel poisoning:

Work out a plan for county-wide squirrel poisoning day for each community.

Organize for purchasing alkaloid of strychnine and saccahrine in large quantities.

### Ask Anything.

Anything that you want to know you can find out by addressing the information bureau of this paper at Washington, D. C. It is that bureau's business to answer any reasonable question that readers of the Farmer ask. Don't write to the state office of the Farmer, but address the information bureau at Washington.





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Every year for the last 9 years the Northwestern Mutual Fire Association has had a far lower loss ratio than the average loss ratio of the nine other leading fire insurance companies doing business in Washington.

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Does it pay to be careful with fire? Ask any of our close to 50,000 policyholders; they are the beneficiaries!

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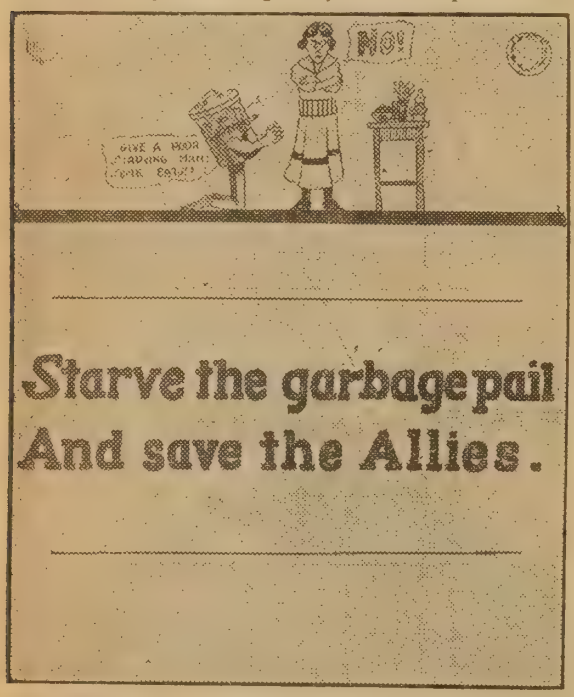



By J. L. ASHLOCK

A school boy of Washington recently wrote an essay on how to save sugar. He advised everybody to eat fruit instead of candy, bread instead of cake, more vegetables, and only one "block"—one lump—of sugar in tea or coffee. He urged that the girls be given flowers instead of candy, pointing out the fact that this would keep down dental bills as well as save sugar. He said that housewives waste a lot of sugar in the fruit-canning season. They use more than they need, spill it, burn the sirup, and throw away bits of sweetened fruit or juice.

Girls, he said, should study domestic science, and practice what they learn at home—which would save lots of things besides sugar.

Another boy, a fifth grader, made the point in his




sugar-saving essay thus: Three boys had a fight. The boy that licked the others was named Sam. We are having a big war now. The old boy that is going to win this big war is named Sam, too. Sam is saving his sugar for his soldiers across the sea; and, say, fellows, let's all get in and help Sam save sugar. He's our uncle.

The thousands of sugar-saving essays which have been written by the school children of Washington state and mailed to Librarian W. W. Foote of the Washington State college, collectively contain 1001 ways of saving sugar, and indict the sugar-tooth of childhood for lack of patriotism.

Mr. Foote is library director for the Washington state branch of the United States food administration. Following the suggestion of Miss Edith Guerrier, head of the library division of the food administration, he reached the school children of the state through their superintendents, principals and teachers, and asked them to write and send to him sugar-saving essays and sugar-saving posters and cartoons of their own contriving.

In the deluge that followed, no conceivable way of saving sugar for the sugar-hungry world overseas from Uncle Sammyland was overlooked.

Here is what a high-school girl has to say:

"Use less candy. Use less sweet drinks, and use less sugar in tea and coffee. Coffee really tastes better without sugar, unless you have cultivated your taste for sweetened coffee. If you have, you probably will think:

"'Sugar is sweet, but Oh, how bitter,
To ask for "sug." and not to git 'er.'

"But isn't it a pleasure to know of some brother in France who has the bit of sugar he craves, through our saving for him? All of us can surely do without sweets for a while. So don't be 'bitter' if you don't get all the sugar you want.

"Do not frost or ice your cakes, and in making your cakes, use brown sugar instead of white. Use honey, maple sirup and dark sirups for hot-cakes and waffles. Do not stint your sugar in putting up fruits and jams, for these take the place of butter, which is also running short."

A little girl in an orphans' home writes:

"I have learned that I can make a substantial meal without sugar. Beverages such as tea, coffee and cocoa, can be used without sugar, or with much less than lots of people use. Milk and water can be used as a substitute for these sweetened drinks. Cereals can be used with much less sugar than most people want. Dry or milk toast can be substituted for the cereals that require sugar. Pastries, as pies, tarts, puddings, cakes and cookies can be substituted with baked apples, fresh fruits, and sauces. Nuts cut fine, or sliced ripe bananas, are a good substitute for the frosting on cakes.

"Confectionery, candies, creams, and 'specials' can be substituted with fresh fruits, as apples, oranges, pears, bananas, grapes, cherries and watermelons, according to the season. If I use one ounce less of sugar a day it will not mean much to me, but it may mean a great deal to some soldier boy in France."

A sixth grade boy says that we must save sugar and give it to our men in France because they can't raise it in the trenches. Like hundreds of others, he scores those who use too much sugar in tea, coffee, cocoa, and postum; and says we should satisfy our sweet tooth with corn sirup and maple sugar.

A little girl says

"We need to save sugar for our boys in France. Sometimes when they are fighting they have to walk in mud up to their knees, and that takes lots of energy. Don't put three teaspoonfuls of sugar in coffee and not stir it up."

A boy remarks that soldiers in France have to fight, which takes lots of energy. So we ought to send them all the sugar they need, for sugar produces energy.

"Dip lighter in the sugar-bowl—that's the way to save sugar," says a big high school boy. He proceeds by saying:

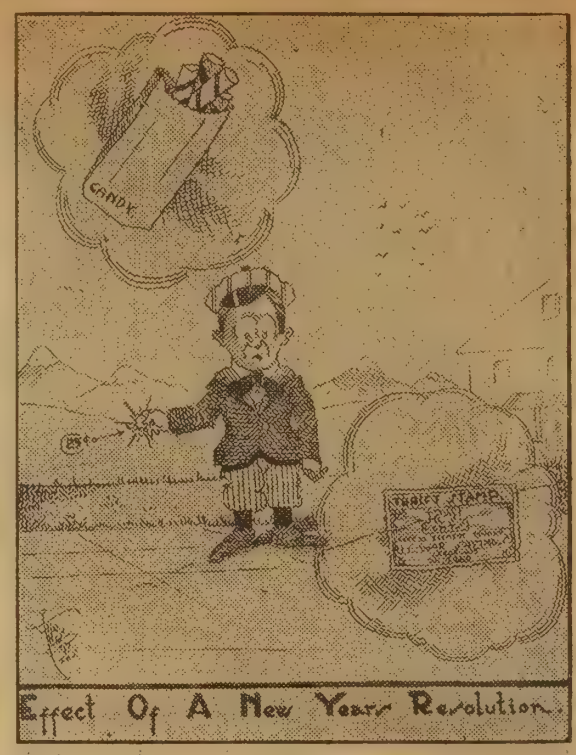
"In some of the more extravagant homes and places they think they must have a lot of cakes, pies, cookies, puddings, and candies which are richly sweetened, and for which they are willing to pay a high price every meal. Unless they get what they want they grumble at the cook. They might as well quit grumbling. It is not a good idea to form the sugar-habit, but if you've got it, break away as soon as possible, and save sugar for those that need it more than you do, in order to keep their bodies in healthy condition.

"People who are in bee-raising districts should substitute honey for sugar. Honey is just as healthful as sugar, and tastes fine. Others can substitute molasses, dates, raisins, figs and a lot of things like that, for white sugar.

"Most people think that on holidays of all kinds they ought to eat a lot of candy and sweet things. Why not eat fruits and other things we like as well as candy, and maybe save a doctor bill. There are a lot of soft drinks that contain much sugar, and do absolutely no good, except to the one who sells them to us. All these unnecessary things should be done away with in time of war."

A little boy whose home is in the prairie district of central Washington, where wild rabbits abound, mixed sugar and meat in his economy essay. He wrote:

"We must save sugar for the soldiers. It gives them energy. We can save sugar by eating less candy, more




honey and corn sirup, more vegetables, by not using frosting on cakes, by not eating pies, by leaving sweet drinks alone, by eating more fish and not spillingg any (sugar?); and by eating more jackrabbits, which are thick around here."

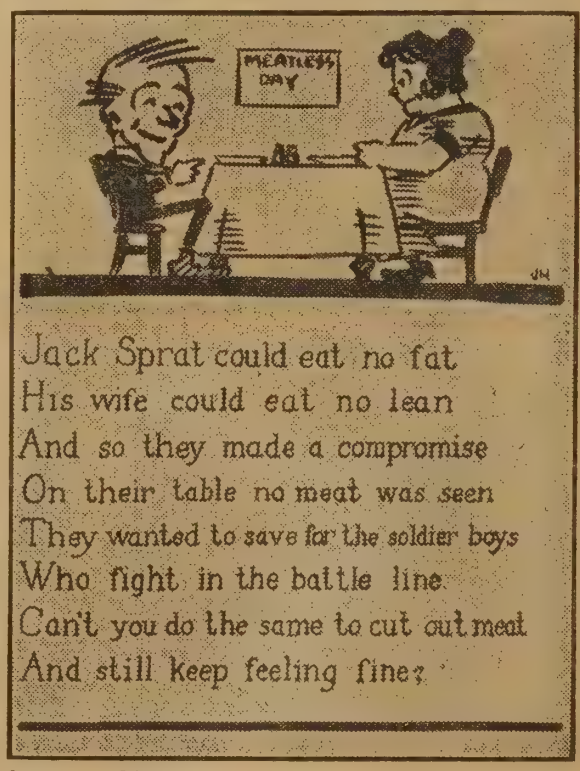
This shot at those who sweeten their coffee excessively came from a girl:

"Remember this in your coffee:
"One lump is patriotism.
"Two lumps is slackerism.
"Three lumps is desertion.
"Four lumps is treason."

And this from a boy in the fourth grade:

"Once there was two nations fighting. Their names were England and Germany. They got into a big war and fought for a long time. People thought it would be over in about a year. But it wasn't.

"After while, England began to starve. Russia and France had helped her out. But in about a year they began to starve too. Germany began to whip them, Uncle Sam heard about them starving to death. And




began to ship sugar over there, and things to supply them.

"That made German mad. Germany declared war on Uncle Sam. And we will have to save our sugar, eat honey, dates, corn sirup, and figs, and eat less cakes and pies.

"If we don't, Germany will win the war."

## ORGANIZE FAIR.

### Walla Walla Men Finance Move.

The organization of the Walla Walla Agricultural & Live Stock fair has been perfected at Walla Walla with subscriptions for stock totaling more than $35,000, nearly all of which has been paid in. The association has grounds covering 32 acres and buildings and grandstands practically adequate for a big season. The association, it is understood, starts off debt free. Oscar Drumheller, one of the prominent farmers of the Walla Walla valley, is president and F. S. Dement, a miller of Walla Walla, is vice president. The board of directors is composed of these two officers and the following farmers and businessmen of the valley: Matt Ennis, J. A. McLean, Wess Lloyd of Waitsburg, F. J. Aldrich and H. H. Hanson of Touchet.

## City Growth in Australia.

A large percentage of the people of Australia live in the principal cities of the different states. Sydney, with a population of 763,000, represents over 40 per cent of the people of New South Wales; Perth, with a population of 122,000, represents 38 per cent of the inhabitants of Western Australia; Brisbane, with 162,000, represents nearly 24 per cent of the people of Queensland; Hobart, with 40,000, has under 20 per cent of the people of Tasmania; Melbourne, with a population of 684,000, contains 48 per cent of the total population of Victoria, and Adelaide, with 205,000, has over 46 per cent of the people of South Australia.

## Adopts War-Time Slogan.

The state council of defense of Washington has announced the adoption of a slogan to be used during the farming season of 1918. "Everybody busy" is the watchword. This sentiment, it is hoped by the council, will permeate every class of people in the state and result in the elimination of idleness on the part of everybody who might lend a hand in increasing food production this year.

## CHICKS ARE PARCELS.

### May Be Shipped by Parcel Post.

The postal authorities have issued a statement announcing that chicks can be legally shipped by parcel post hereafter. It is understood that the regulation is made in order to stimulate the production of poultry this season, enabling hatchers of chickens to distribute their young birds, and likewise enabling the man who doesn't wish to hatch his own to more readily obtain some to grow to maturity.

Under the new regulation, the chicks can not be sent collect on delivery, and they must not be shipped a distance that requires more than 72 hours.

# The Farm Should Have Its Bee Hive

## *Bees Will Find Sugar Substitute and Bring It to You*

By GEORGE W. YORK, Sandpoint, Idaho.

The importance of beekeeping for the average farmer is not sufficiently appreciated. Especially is this true in these latter days when there is a ban upon the accustomed free use of sugar. There is no good reason why nearly every farmer should not have two or three hives of bees for the production of honey for his own family use. With ordinary care and attention, in almost any locality, a few hives of bees should average from 50 to 100 pounds of surplus honey during the season.

Perhaps only a few people will believe that the keeping of bees for the production of honey is really a business. But it is, in many localities. A beekeeper in California produced 112,000 pounds of honey in one season; another, in New York state, had 70,000 pounds, and this latter amount was all secured from 700 hives of bees in just one beeyard. Of course, this was very unusual, as only 50 to 100 hives of bees are ordinarily kept in one place.

But I started out to tell how a farmer might easily begin with bees.

Spring is the best time of the year in which to get the bees. But in order to make the greatest progress it would be better to begin the fall before, by subscribing for one or more of the three or four excellent bee papers published in the United States; also get at least one of the standard bee books, of which there are several. A good bee paper and a copy of one of the best bee books can be had for from $2 to $2.50 for the two. Then read both carefully, so as to become familiar with the technical terms used in the business, and also learn the habits of bees. It is a most fascinating study and at the same time fairly profitable when one succeeds in the production of honey.

If it is necessary to send very far away for a start in bees, then I would suggests getting say a 3-frame nucleus with a queen, or two or three such combinations. They will be shipped by express, and upon arrival each 3-frame with queen should be placed in a hive previously provided. The hive will contain room for either eight or 10 frames, so after the three frames are put in fill the other five or seven frames with comb foundation, which will aid the bees much on their way to a populous hive or colony. A good bee-book will give all details of procedure, which would take too much space to describe in the narrow limits of this article.

I may say that some years ago when I lived in the city of Chicago I had a backyard apiary. One spring I got five three-frame nuclei with queens, about May 1, and from them that season I secured 300 pounds of choice comb honey, besides increasing them to six colonies with ample honey stores to carry them through the succeeding winter. I have no doubt many others could do as well, or better, as in the country bees should do much better than in a back yard in a crowded city.

Just to show further what can be done in city beekeeping, how is this: A friend beekeeper of mine in Chicago had 20 hives of bees on the flat roof of his two-story residence. From them he secured 3000 pounds of extracted (liquid) honey in one season. I visited his roof apiary, and afterward purchased his honey, so I know this to be a fact. But this is no news to the experienced beekeepers of the country.

A beekeeper in Cincinnati had 50 colonies of bees on the roof of his store, right in the heart of the city, and they produced good crops of honey from year to year.

But I am not urging city beekeeping. I want the farmers to get busy and produce their own honey. But don't go at it in a haphazard manner. Get the bee literature as suggested, also the bees, and follow it in an intelligent and careful way. You will succeed if you are determined.

There need be no "honeyless" days on any farm when once the keeping of bees becomes a regular part of the diversification that should be followed. For the amount of financial investment I dare say there is not another line that can be followed that will prove as profitable as the bees.

Yes, I know they have stings, but you'll get used to them! I did. But I soon learned how to handle them with a minimum of stings and a maximum of pleasure. So don't get discouraged, but "dip right in," and soon be producing all the honey you want for your table, and sell the rest to your neighbors who are not so enterprising as to have a "honey factory" in connection with their other farm operations.



**A backyard apiary in Chicago, where bees gathered a valuable product from the ways and byways.**

# Horse Market Strong

"The future for horse breeders has never been as bright as at present and every farmer ought to raise as many horses as he can. He should keep brood mares and breed them every year. Europe is entirely out of horses and after the war American horse owners can set their own price for good horses and they will get it. We will not have to ship to Europe, for buyers from Europe will come here and buy our horses. The demand will be far in excess of the supply. The heavy loss of ships by submarine warfare has entirely stopped the exportation of horses to Europe, but as soon as the war ends this will be renewed and every horse we can spare will be bought for use in the countries where the war has taken all of the horses and left the farming districts entirely denuded of work stock."

This is the statement of M. E. Metz of Colfax, who is showing his faith in his own statements by breeding horses for the future market.

Mr. Metz has a letter from Alexander Mowat, a horseman of international reputation, who attended a sale of Clydesdale draft horses at Lanmark, Scotland, in December. The sale lasted four days and Mr. Mowat wrote: "It would appear from the result of this sale that draft horses were never in such demand as now. The first day of the sale 80 geldings ranging in age from 3 years upward sold for an average of $571, as compared with an average of $336 paid for geldings at the Lanmark sale in 1916, which was the previous high record. On the first day 53 mares were also sold. They ranged upward from 3 years and brought an average of $495. On the second day 147 colts sold for an average of $211 per head. On the third day of the sale 94 yearling fillies brought an average of $369 and 274 2-year-old fillies averaged $475. The offerings on the fourth day consisted of 110 yearling geldings that averaged $247 each and 325 2-year-old geldings that averaged $378. When you remember that these high prices were paid for geldings you can form some idea of the demand there is now for horses in Europe and that this demand will be greatly increased when the war and rebuilding of the war-stricken districts begins."

The annual horse show, which was a great feature in Colfax for many years, but was abandoned a few years ago when the price of horses declined and people began to fear that tractors were to succeed horses, is to be revived if present plans are carried out, and an effort will be made to revive the old-time interest that made the annual horse show a great event in Colfax and in Whitman county.

J. E. N.

## Little Wheat on Hand.

A statement issued by E. T. Marchetti of the federal bureau of crop estimates at Spokane, shows the amount of wheat on hand in this state March 1 to be much lower than that of the same date either last year or the previous year. The following table compares the amounts of corn, wheat, oats and barley in the state on March 1 of the last three years respectively:

| | 1918. | 1917. | 1916. |
|---|---|---|---|
| Corn | 182,000 | 183,000 | 158,000 |
| Wheat | 3,506,000 | 4,516,000 | 7,713,000 |
| Oats | 2,810,000 | 3,978,000 | 3,654,000 |
| Barley | 937,000 | 1,022,000 | 1,453,000 |

The amount of wheat retained on the farms March 1 is substantially below the amount usually retained at that time of year. The fixed price of wheat, with no prospect of future increase, the patriotic response of the growers to market their crop early in the season, and their efforts to feed less wheat on account of the abnormal demand for export, have influenced the marketing early in the season of what percentage of wheat succeeding planting season in the spring. Practically the only wheat remaining on the farms is feed and seed and a small percentage that was not utilized for seeding in the fall, due to unfavorable climatic conditions.

The estimates of oats and barley represent practically only the feed and seed requirements of the individual farms.

# Many Attend Meets

Agricultural week in Clarke county brought out a large number of interested farmers. The meetings, instead of being held at one point throughout the week, were divided among the communities of La Center, Ridgefield, Mill Plain, Washougal, Battle Ground and Vancouver. The speakers were moved about from place to place. The attendance was greastest at the small centers.

A. B. Nystrom, late of Washington State college and now agriculturist for Lewis county, had charge of the dairy instruction; H. W. Sparks, formerly with the state experimental station and now a practical farmer of Clarke county, led in the discussions and demonstrations on crops and soils; Professor Morris of the state college lectured on prune culture; Asher Hobson, director of farm markets for Washington, discussed marketing problems and Lou S. Smith, assistant agriculturist for the O.-W. R. & N. company, urged the necessity of building silos.

Miss Elizabeth Jackson of the extension department of the state college, had charge of the home economics work. The women of the various communities displayed marked interest in the practical suggestions she offered and in the demonstrations of labor and money-saving methods which can be employed at home.

Milton J. Newhouse, agriculturist for Clarke county, planned the meetings with the aid of his county agricultural council. Mr. Newhouse is doing splendid work and his efforts are meeting with hearty response on the part of Clarke county farmers.

## Plan St. Joe Grazing.

The St. Joe Forest Users' association met recently at Colfax, Wash., to transact general business and lay plans for the grazing of cattle and sheep in the forest reserve this season. The arrangements will permit the grazing of perhaps 1000 head of cattle and 50,000 head of sheep.




"Coffee costs less when you buy it direct. Read my offer and be convinced."
JOHN F. JANSSEN.

# HOW JANSSEN CUTS the AVERAGE COST of Foods

Just as you save time and effort when you cut cross-lots through the pasture, so you save money when you buy your coffee **direct** from the **importer.**

Now, you know as well as I do that you are paying more than is necessary for your coffee. And, remember, coffee and tea play an important part in your total food costs because you use them so regularly and so often.

Here's a sensible question to ask yourself; answering it has solved the problem for hundreds of thinking people. It is simply this: "If my coffee came to me direct from the man who imports it, would it cost as much as I am now paying?"

Well, such a system has been perfected; you **can** buy direct from the importer, and you **do** save. My method has already proven a power in cutting the average cost of foods. I import my own high-grade coffee, pack it in a way that eliminates the usual expensive container, and send it directly to you through Uncle Sam's delivery system—paying the postage myself. This saves you a third on your coffee and helps reduce the cost of your foods.

**A COMPLETE STOCK OF TEAS AND COFFEES**

No matter what your preference in the line of tea or coffee, I am sure I can satisfy you. Write for free price list showing our complete line.

**Note the heavy cloth bag in which the coffee is packed. The material may be used for toweling—another saving, even if a small one.**

## *Read My Offer on Coffee*

**Direct Dealing Makes It Possible:**

**10** pounds "extra choice," a perfectly delicious blend of high grown coffees — better than the most—and as good as the best 45-cent coffee on the market ..... **$3.30**

For two years I have unreservedly guaranteed the quality and safe delivery of this coffee, and have never received a single order back.

## I PAY THE POSTAGE

The price includes parcel post to any place within 300 miles of Seattle.

**Guarantee**—Your money will be quickly returned if you are not satisfied with the coffee. The goods are securely packed, and safe delivery is guaranteed.

**UNITED TEA AND COFFEE STORES**
**1003 Western Avenue, Seattle.**
**JOHN F. JANSSEN, Manager.**




## *For Direct Action Fill in This Blank*

**UNITED TEA AND COFFEE STORES**
**SEATTLE, WASH.**

Please send me by return mail 10 pounds of your "Extra Choice" guaranteed coffee. Here is check, money order (cross out one) for $3.30. Ground—? for Percolator—coffee pot—drip bag—? (Put X in proper space.)

Name .....

Address .....

W 2

# Wheat Rationing Is Now War Necessity

(Continued from page one.)

eighth of a barrel of flour to any town customer at any one time, and not more than one-quarter of a barrel to any country customer at any one time, and in no case to sell wheat products without the sale of an equal weight of other cereals.

FOURTH—We ask the bakers and grocers to reduce the volume of victory bread sold by delivery of the three-quarter-pound loaf where one pound was sold before, and corresponding proportions in other weights.

We also ask bakers not to increase the amount of their wheat flour purchases beyond 70 per cent of the average monthly amount purchased in the four months prior to March 1.

FIFTH—Manufacturers using wheat products for nonfood purposes should cease such use entirely.

SIXTH—There is no limit upon the use of other cereals, flours and meals, corn, barley, buckwheat, potato flour, etc.

"Many families throughout the land are now using no wheat products whatever except a very small amount for cooking purposes and are doing so in perfect health and satisfaction. There is no reason why all of the American people who are able to cook in their own households can not subsist perfectly well with the use of less wheat products than one and one-half pounds a week, and we specially ask the well-to-do households in the country to follow this additional program in order that we may provide the necessary marginal supplies for those parts of the community less able to adapt themselves to so large a proportion of substitutes in order that we shall be able to make the wheat exports that are absolutely demanded of us to maintain the civil population and soldiers of the allies and our own army.

"We propose to supplement the voluntary cooperation of the public by a further limitation of distribution, and we shall place at once restrictions on distribution, which will be adjusted from time to time to secure as nearly equitable distribution as possible. With the arrival of harvest we should be able to relax such restrictions. Until then we ask the necessary patience, sacrifice and cooperation of the distributing trades."

The measure to increase the price of wheat from the $2.20 price fixed some time ago by President Wilson was in the form of an amendment to a bill appropriating money for the use of the United States department of agriculture. The main bill had already passed the house of representatives and had reached the senate for its action. The amendment was proposed by Senator Gore of Oklahoma, and was finally adopted by the senate by the vote of 49 to 18, practically all the western senators voting for the increased price. All six of the senators from Washington, Oregon and Idaho (Senators Poindexter and Jones of Washington, Chamberlain and McNary of Oregon and Borah and Nugent of Idaho) voted for the increased price.

What will be the final outcome of the measure is still problematical. The bill carrying the amendment must go to a conference committee composed of members of both the senate and the lower house before the $2.50 price provision can become law, and must be approved by the lower house and signed, as a part of the agricultural department appropriation bill, by the president. Should the house approve the increase and the president veto it, it would have to be repassed by both senate and house by a two-thirds majority of each before it could become a law. While the senate passed the amendment originally by more than a two-thirds majority, it is considered highly doubtful that it would vote as largely to pass the measure over a presidential veto.

The action taken by the senators voting for the increased price was on the ground that although farmers might make a reasonable profit on wheat at the price previously fixed by the president, the unprecedented need for wheat now requires a price guarantee that will insure the planting of every possible acre this season.

A vital feature of the increase as voted by the senate is that it would apply not at the primary markets, as does the price previously fixed by the president, but would be a freight guarantee at the railroad shipping point in every farm community.

Few people realize the seriousness of France's appeal for wheat, and the seeming impossibility of America fully meeting the call. In a speech at Baltimore last week, Andre Tardieu, French high commissioner to the United States, said the American people must send over more wheat.

"You must do it because it is a necessity," he declared, "because it must be done. For these last three months shipments of cereals from America to Europe have been short one-third of the supply recognized as indispensable to strictly compressed needs."

It is not easily done when the wheat account stands like this:

The March report of the United States department of agriculture estimated the quantity of wheat in farmers' hands at 112,270,000 bushels. The "visible supply," that is, the quantity of wheat in mills and elevators, was only 9,739,000 bushels.

Taking, therefore, the known supply, both farm and visible, the total is but 121,000,000 bushels, compared with 145,000,000 last year and 307,000,000 the year before.

From this 121,000,000 bushels about 30,000,000 bushels must be taken for spring seeding, leaving 91,000,000 bushels for home consumption, reserves and exports until July 1, when the new crop will begin to come on the market from the southern states.

It is not enough for home consumption unless the American people still further reduce their eating of wheat. Our pre-war consumption was about five bushels per capita, but if between now and July 1 we ate every bushel of the present supply it would be at the average rate of three and a half bushels.

Yet Europe is calling frantically for 100,000,000 bushels, 9,000,000 more than we could supply if we did not eat another kernel of wheat until July.

We must send wheat to the last bushel that can be spared, and fortunately the problem is not as impossible of solution as it might appear from the foregoing figures. They deal in wheat and omit the flour stocks already ground. Flour in mills, in dealers' hands and in home stocks will help us to tide over the shortage until July.

Send corn, someone will say. But it is doubtful if we shall have the corn. The first corn crop returns sounded big—a crop of 3,159,000,000 bushels, but a great part of it was caught by frost and only about 2,000,000,000 bushels was marketable. To make use of the soft corn, farmers fed large quantities to stock, and that increased the supply of meat. Hence, the food administration's action in lifting the ban on the eating of mutton and beef and its insistent appeal to the people to save more wheat.

Meanwhile no effort should be omitted that will contribute to the production of a great crop of wheat this year. The nation is looking to the west for heavy seeding this spring and the west must not disappoint that expectation.

This further fundamental fact the American people must realize, and come to a realization of it at once. The issue of the war depends solely upon the power of the allies to keep their armies supplied with food, powder, guns and other munitions. The allied armies are invincible if adequately equipped, but will inevitably fail if the time comes when they go hungry or lack ammunition to return the withering fire of the enemy.

## Sheep Shearing Under Way.

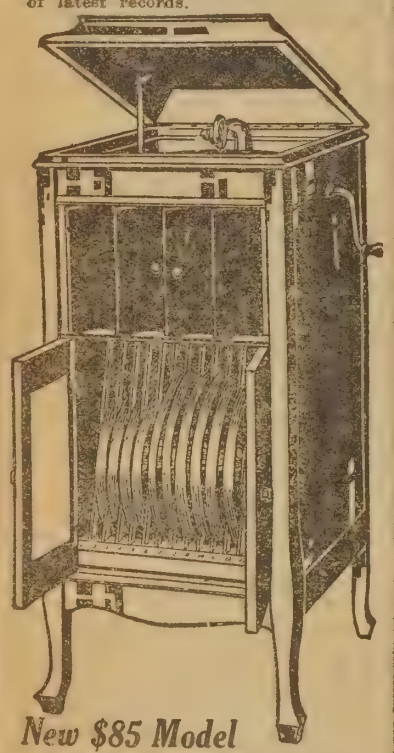
The sheep producing sections of the northwest are now experiencing their annual rush of shearing. In general the weather has been favorable and operations have been rushed by many producers. Reports of the wool market indicate that approximately the same price as ruled last season will goven this year's clip.

## Hoover Cook Book.

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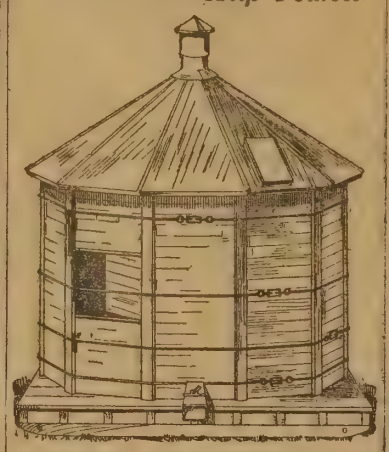
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**SAVE MONEY!** *Help Yourself*



The farm labor problem is the gravest question facing the farmer today; 12,000 men, eight regiments, would be saved for other service if the Inland Empire bulked all its wheat. Each thresher bulking frees two men—elevator releases four more. Figure your own share of this—figure the worry and uncertainty of securing help; figure its cost, and then remember that what you pay for sacks each year will buy tanks that will last you indefinitely. The

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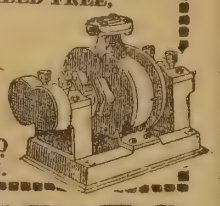


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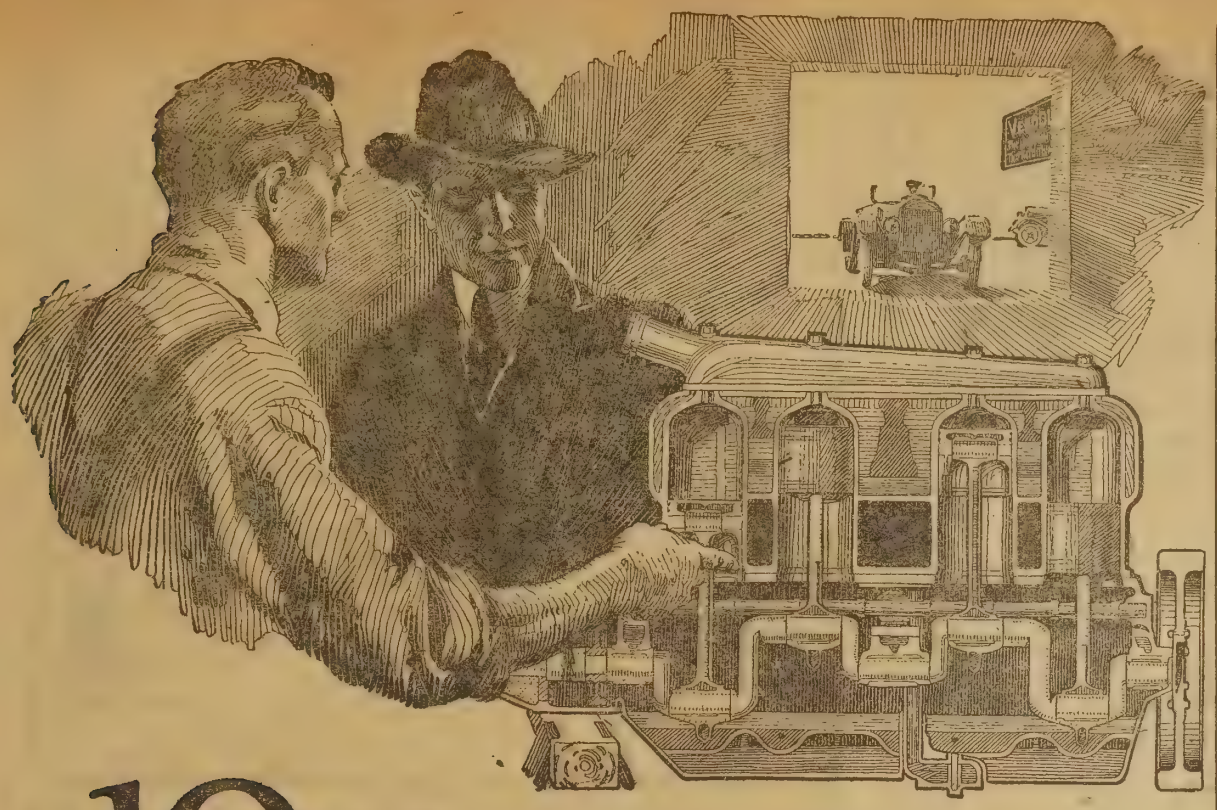
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**A fountain pen or a pencil are good things to always have handy, together with postal cards. Then you can write friends or relatives or answer advertisements while you think about it and not run the risk of forgetting.**



**19 places where sediment damages your engine**

1. Cylinder walls
2. Pistons
3. Piston rings
4. Wristpins
5. Wristpin bearings
6. Crankshaft main bearings
7. Crankshaft
8. Connecting-rod bearings
9. Connecting-rods
10. Valves
11. Valve seats
12. Valve cams
13. Camshaft bearings
14. Camshaft
15. Timing gears
16. Ignition driveshaft bearings
17. Generator shaft bearings
18. Oil circulating pump
19. Spark plugs

# 19 places where sediment damages your engine

WHEN your engine loses power, knocks, bucks and overheats, nine times out of ten it is sediment in the oil that is to blame.

Just look at the long list of vital parts that will quickly show serious wear when sediment is present in any considerable amount.

Ordinary oil cannot resist the intense heat of the engine—200° to 1000°F. It breaks down quickly. The resulting sediment crowds out the oil with true lubricating qualities from points where it is needed most. Moving metal surfaces, which should always be separated by a protecting film of lubricant, are thus thrown into direct contact.

## Why sediment causes wear

A strong magnifying glass reveals millions of microscopic teeth covering the apparently smooth surface of a bearing or other working part.

When the cushioning oil film between these surfaces is destroyed or excluded by sediment these tiny metal teeth grind together, thus causing friction and wear.




Ordinary oil after Use — Veedol after Use

*Showing sediment formed after 500 miles of running*

When this happens in any important part of an engine, costly *replacements* soon become necessary. Damage due to sediment in ordinary oil *can never be repaired.*

That is why you cannot afford to buy ordinary oil at any price. The cost of using it is appalling, because of its injurious effects on your engine.



A. Ludlow Clayden, Engineering Editor of Automotive Industries, and one of the most prominent engineers in the automobile field, says:

*"In the past, too little attention has been paid to lubrication. Oil needs to be chosen for an engine almost more carefully than food for a child."*



P. M. Heldt, recognized authority on internal combustion engines, and author of "The Gasoline Automobile," declares:

*"The proper selection of oil for the lubrication of an automobile engine is a very important matter. The grade of lubricant used affects not only the efficiency of the engine but also its life."*



Chas. A. Duryea, consulting engineer and a pioneer in automobile construction, states:

*"Buying inferior oil is the poorest economy a motorist can practice. Inferior oils must be used in greater quantities and, even then, they increase friction, loss of power, fuel consumption, heat and repair bills.*

*"Good oil costs a little more per gallon, but far less per mile."*

## How the problem was solved

As a result of exhaustive research and comprehensive practical tests the formation of sediment in dangerous quantities has been successfully overcome.

Today over a million motorists avoid the sediment menace, with its accompanying troubles and repair expense, and keep their cars running like new, at reduced operating cost, by using Veedol — the lubricant that resists heat.

How Veedol reduces sediment 86% is made plain by the two bottles, showing the famous Sediment Test, at the left of the page.

When figured by miles of service, and not by cost per gallon, Veedol proves much more economical than ordinary oils.

The average motor oil acts like water in a kettle. When water is subjected to intense heat it evaporates as steam. Under the terrific heat of the engine ordinary oil evaporates very rapidly through the oil-filler in the form of vapor.

Veedol not only resists destruction by heat and the consequent formation of sediment, but also reduces evaporation in your engine to a minimum. You will get from 25% to 50% more mileage per gallon with Veedol for this reason.

## Buy Veedol today

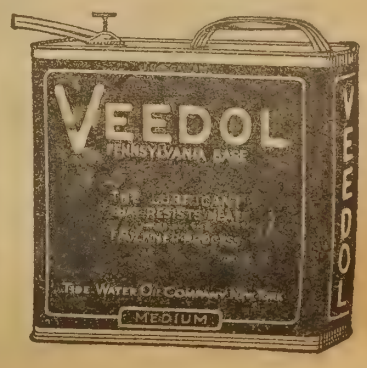
Your dealer has Veedol in stock, or can get it for you. If he does not, write us for the name of the nearest dealer who can supply you.

## An 80-page book on lubrication for 10c

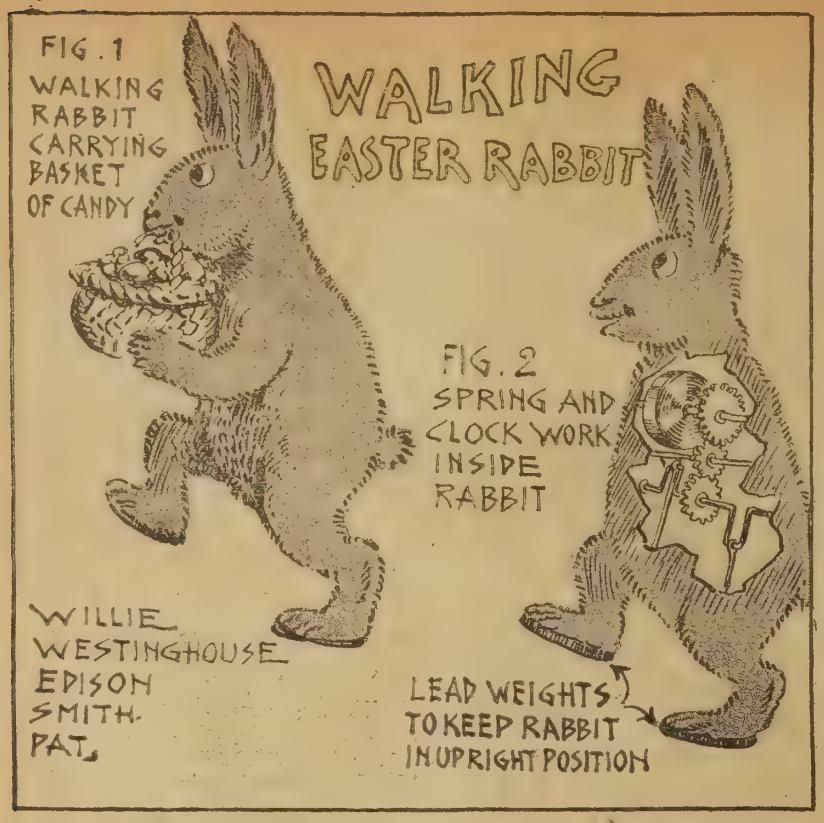
The most complete book ever published on automobile lubrication, written by a prominent engineer, and used as text book by many schools and colleges. Describes and illustrates all types of lubrication systems; tells how to keep your car running like new at minimum expense. Also contains Veedol Lubrication Chart, showing correct grade of Veedol for every car, winter or summer. Send 10c for a copy. It may save you many dollars.

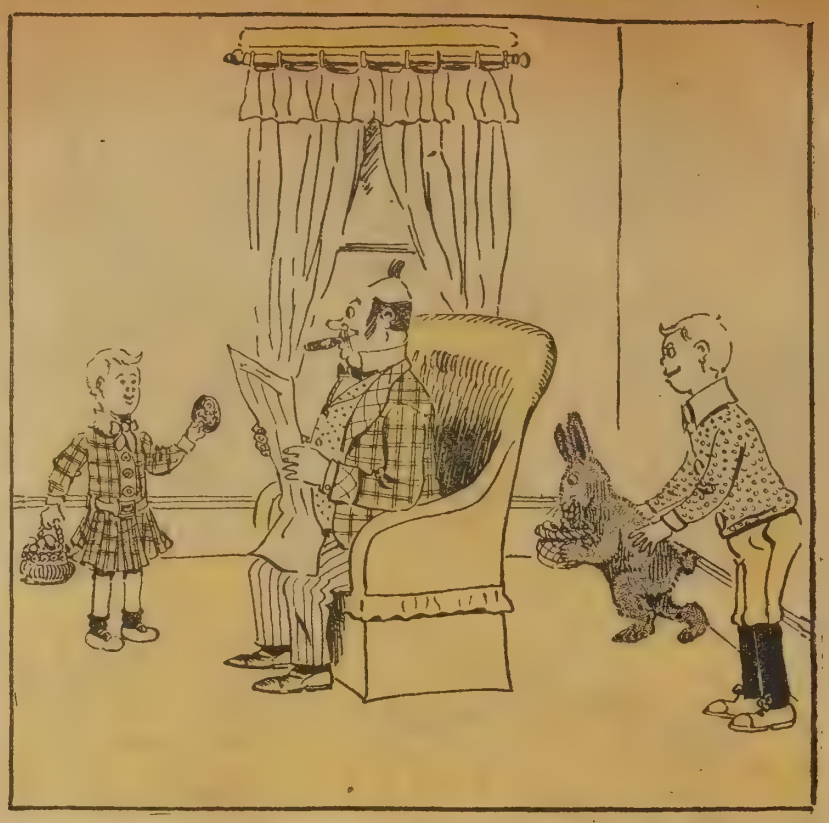
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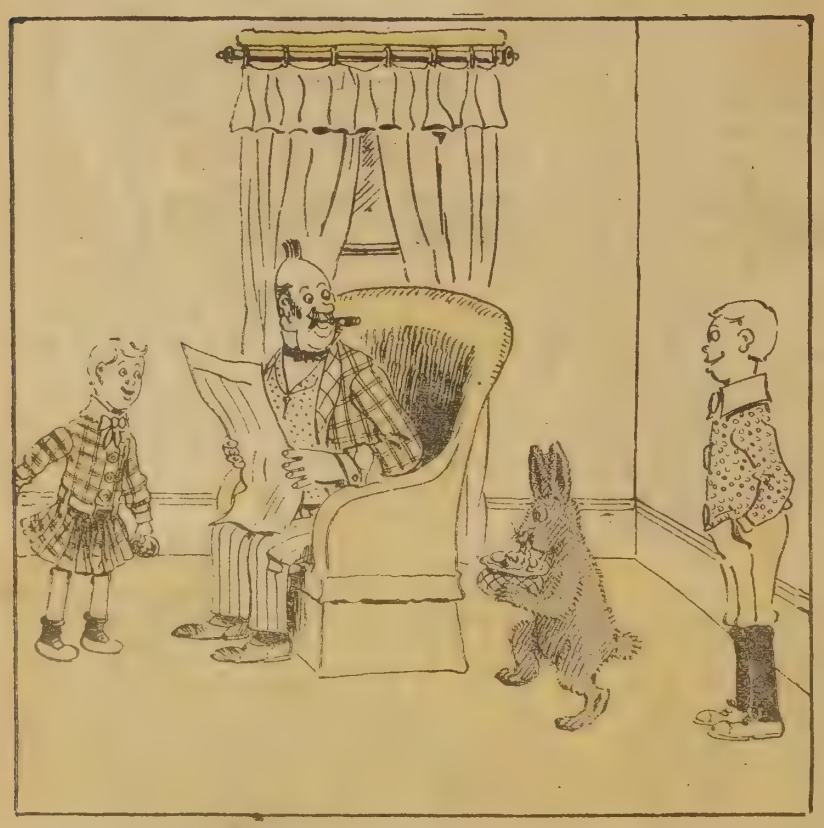
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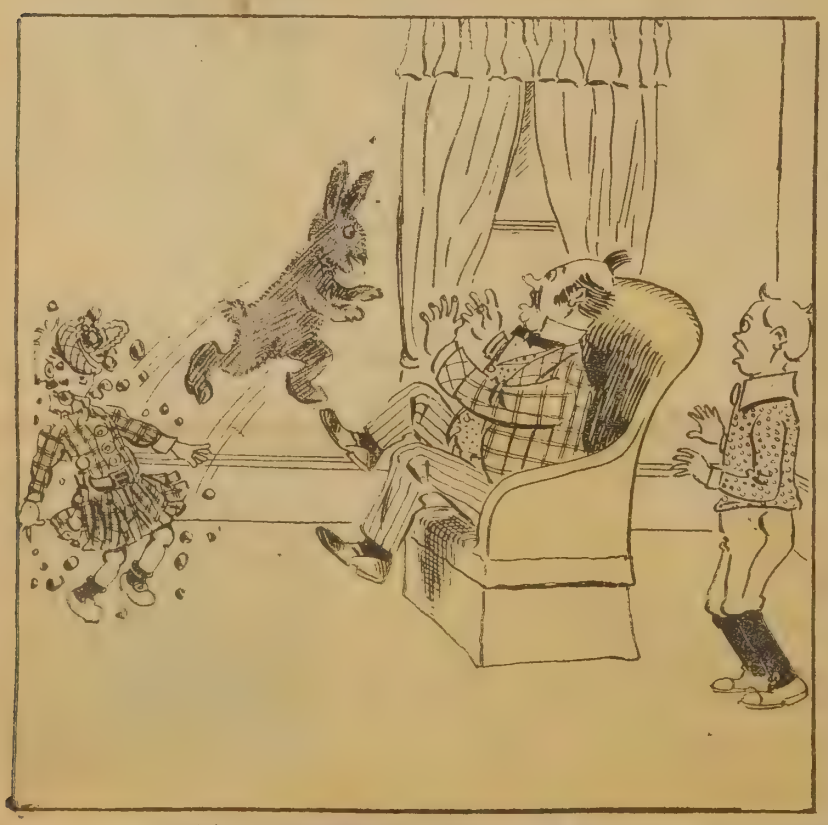
# WILLIE'S EASTER RABBIT COULD JUMP AS WELL AS WALK

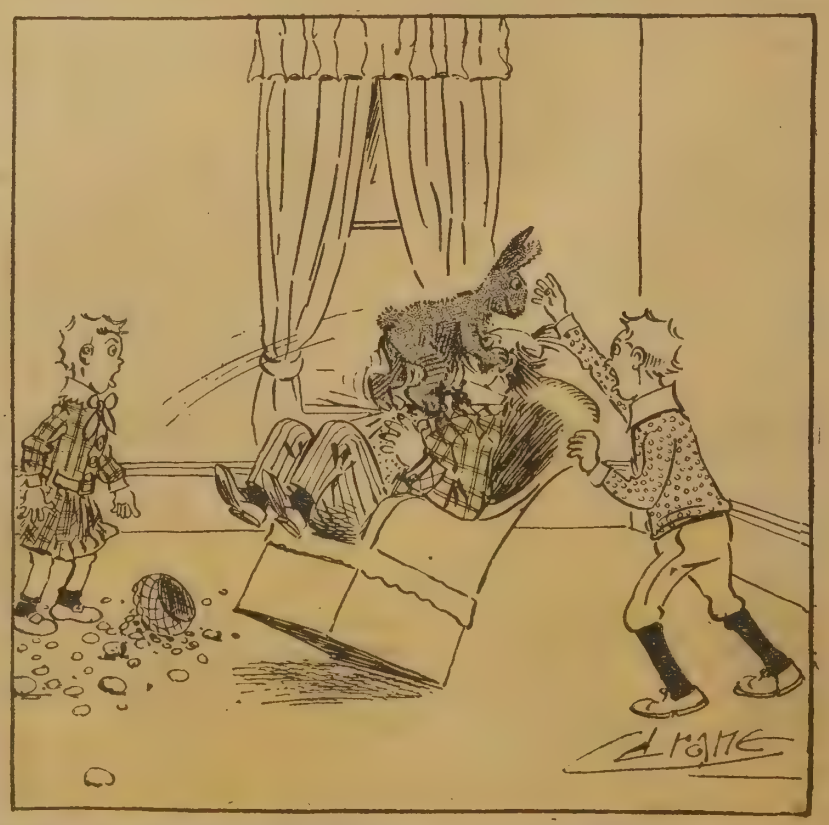








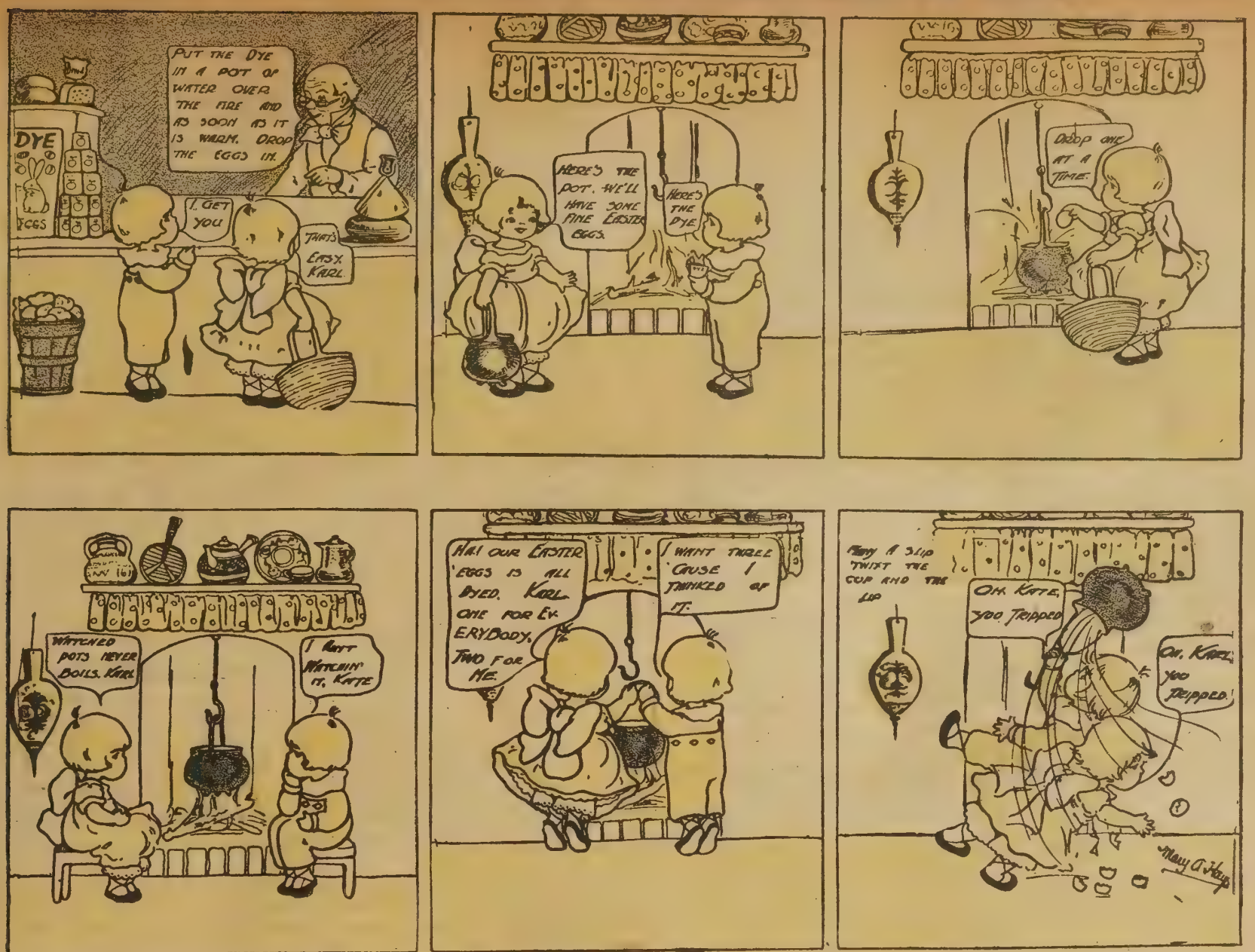


DEAR TOMMY: This is a diagram of an Easter toy I made for little Reggie. It walked all right when I put it on the floor, but just as Reggie was about to take the basket of candy it started to jump. Gracious, but how it frightened papa!

Yours, etc.,

WILLIE.

## KATE AND KARL PREPARE SOME EASTER EGGS




## MUGGSY HELPS LEVY SELL AN EASTER SUIT



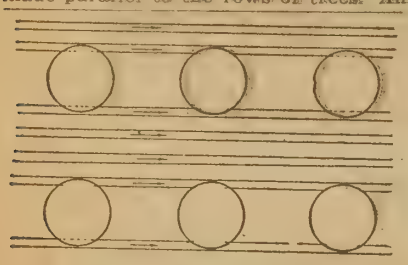
# Applying Water to Furrows in Orchards

In 1908 an orchardist of Hood River, Ore., irrigated three acres of apple trees in furrows 350 feet long, spaced three feet apart, says Samuel Fortier in Farmers' Bulletin 882 on "Irrigation of Orchards." About a miner's inch of water was turned into each alternate furrow from a wooden head flume and kept on for about 48 hours. After the soil had become sufficiently dry it was cultivated and in eight or 10 days thereafter water was turned into the alternate rows, which were left dry during the first irrigation.

For the most part, the furrows are made parallel to the rows of trees. An arrangement of this kind is satisfactory in young orchards, but as the trees reach maturity their branches occupy more of the open space between the rows and prevent the making of furrows near the trees. This is shown in the illustration given here, where a space of six to 12 feet square, according to the size of the trees, is not furrowed. This space usually becomes so dry that it is worthless as a feeding ground for roots. In order to moisten these dry spots a larger stream often is carried in the two furrows next to each row of trees and the surplus is led across in short furrows in the manner shown in the accompanying illustration. Instead of continuing straight and cross furrows, as is done here, use is frequently made of diagonal furrows to moisten the dry space between the trees. This last method is best adapted to grades of five inches to 100 feet or more.



Cross-furrowing the dry places.



Furrow irrigation, showing dry spaces.

## Says Farmer Must Live.

To the Editor: We must have food, as well as men, to win this war; and I hope the farmer will have the same show as manufacturers, wholesale people and retailers have to show what they can do. The farmer is as patriotic as any other man or woman. Just give him a chance and he will do his bit. My father voluntered in the Canadian overseas forces and gave his life for a good cause, and if I was a man I would enlist for service in some branch.

There should be different laws to control the price of the foodstuff the farmer raises. Dairying and poultry raising are the chief products of this section of the country, and all the feed we buy to produce our milk is so high that there is nothing made in dairying in this part of the country; and on the other hand the poultrymen are in a tight place, because the chicken feed is so high and one-fourth of the feed we are forced to buy for our poultry is feed that the chicken won't eat. If we could buy our chicken feed separate, and sprout our oats, they would answer as a green food and so be eaten up, and there would be no waste. There won't be many chickens raised in this country, as there is no profit in it, and we must have some profit if we live, as everything we must buy is so high.

I raised a large garden last year, and the result was that I could not sell it, and what we could not use wasted; and it was the same way with potatoes. You can go to the store and ask if they can handle any potatoes, and they reply that they can't sell them so can't take any. The farmer must live, as well as the rest of the world, and if he can't make something farming then he must leave the farm and go to town and seek other occupations for a livelihood.

MRS. MAE PUGH

Ferndale, Wash.

# What Is a Farm?

The federal farm loan board has issued the following rules for the guidance of the land banks in determining what area constitutes a farm for loaning purposes:

"First. Generally—The farm must be of sufficient area to yield at the hands of an ordinarily capable farmer, putting it to the use to which it is generally adapted and using average methods, an income sufficient to maintain the family of the applicant and discharge the interest and amortization payments.

"Second. Specifically—Where through intensive farming or the practice of a specialty a sufficient income has been regularly derived from a tract deficient in area for ordinary farming, or where the application of the prospective borrower shows that he is by experience capable of producing such an income from such a tract, such area may be accepted as sufficient, provided the land has a stable and permanent market value sufficient to warrant the loan applied for. This ruling does not apply to fruit and orchard lands which have already been the subjects of definite rulings by this board."

Under the first paragraph of this ruling loans may be made to the ordinary farmer on the basis of average skill and efficiency, and no tract of land will be accepted as a farm eligible for a loan under the federal farm loan act unless it is large enough to support the family and take care of the loan under the average farm conditions of the neighborhood.

But under the second paragraph of the ruling the intensive farmer or the man who practices a profitable specialty, or who shows himself able to do so, will be given financial support by the federal farm loan system, even though his farm may be too small for ordinary farming purposes, provided that the land quite apart from its use has a stable and permanent land value which will make the loan safe whether it is well operated, or badly operated, or not operated at all.

The national Shorthorn congress has been placed on a permanent basis and will occur again at Chicago the third week in February, 1919.

# Jim Hill Mustard

To the Editor: Please give the many readers of the Farmer an opinion on the value of the Jim Hill mustard as a commercial forage plant.

A. M. NEWSON.

Spokane, Wash.

The above question was referred to E. G. Schafer, professor of farm crops, State College of Washington, and the following is his reply:

We have found that there is not a uniformity of opinion as to the suitability of tumble mustard for forage purposes. I may say, however, that it is not in general use for this purpose. We placed a quantity of mustard in a silo with barley, and from this experiment we did not obtain wholly satisfactory results.

## Will Export More Meat.

Arrangements are being made by the food administration to increase the exportation of meat from this country to the allies approximately 50 per cent. The object in view is the building up of the meat supply of the allies from the surplus that has accumulated on the markets in this country. Inadequate shipping facilities, however, are a considerable handicap to carrying out the proposal. The food administration reports that the cold storage houses of this country are practically full at the present time and that room must be made for additional supplies that are destined to come from the slaughter pens during the next few weeks or months.

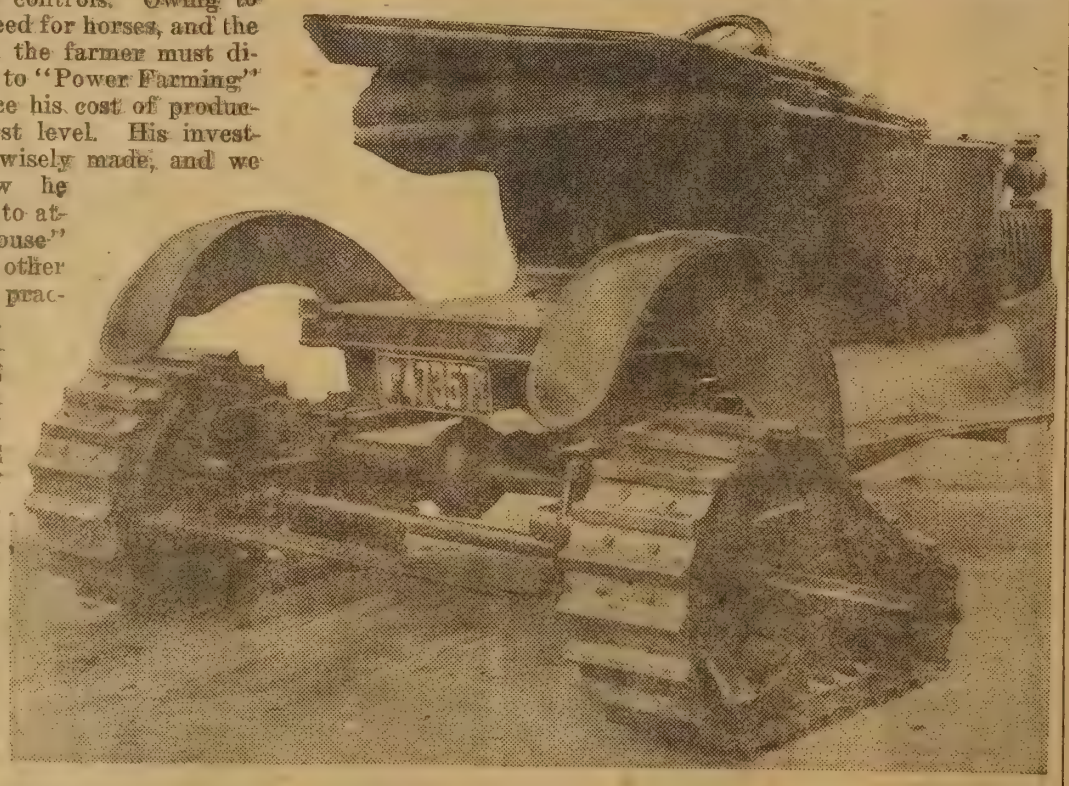
### The Harvest Moon.

The circumstance which has made the full moon noticeable and has given rise to its name, at or near the autumnal equinox, September 20, is the fact that for several evenings the moon rises at about the same hour and is of unusual brilliancy, thus favoring the farmers' work during the harvest. At this time the moon is moving over that part of its orbit where the angle with the ecliptic is very slight, and the earth, moon and sun are in such relative positions that the moon is full. This phenomenon occurse in March in the southern hemisphere.


# CATTERLOUSE

## This Attachment Is a Success and Before Deciding the Tractor Problem, Investigate and See How It Pulls on High Gear

The conditions right now demand that every farmer put under cultivation every available piece of land he owns or controls. Owing to the high cost of feed for horses, and the scarcity of labor, the farmer must direct his attention to "Power Farming" in order to reduce his cost of production to the lowest level. His investment should be wisely made, and we do not know how he can do as well as to attach a "Catterlouse" to his Ford or other car and make a practical tractor of it. THE NEIGHBORS OF THOSE WHO PURCHASED LAST YEAR ARE PLACING THEIR ORDERS WITH US NOW FOR SPRING DELIVERY.



For Fords $265

For Most Other Cars $365

You "HOOVERIZE" When You "TRACTORIZE" Your Automobile With a "CATTERLOUSE"

**GALLAGHER & CO., Inc.**

Manufacturers, Spokane, Wash. Cor. Ash and Sinto.

# Make Substitutes

## State's Capacity Is Calculated

Mills of the state are capable of turning out 30,135 barrels of wheat flour substitutes every 30 days, according to returns made by county food administrators to the office of Charles Hebberd, food administrator for Washington. In addition, it is possible, by converting wheat mills, to add at least 5250 barrels of other cereals, making the grand total 35,435 barrels.

This information was asked by the national food administration to ascertain if this state could go on a straight 50-50 basis as to wheat flour and substitutes. It is believed that this can be done with the help of the corn meal importations recently arranged for.

The administration asked for a report on mills having a capacity of more than 75 barrels a day, also those under 75 barrels capacity. The tabulation shows those over 75 barrels as follows:

| | |
|---|---|
| Barley flour | 15,850 |
| Corn meal | 7,100 |
| Rolled oats | 3,200 |
| Rice flour | 1,650 |
| Corn flour | 685 |
| Oat flour | 370 |
| Buckwheat | 250 |
| Total | 29,505 |

The figures for those having a capacity of less than 75 barrels a day are:

| | |
|---|---|
| Corn meal | 250 |
| Rice flour | 200 |
| Buckwheat | 175 |
| Barley flour | 90 |
| Total | 680 |

These figures will be sent at once to Washington and will be used by the national administration in its food survey of the entire country.

The largest milling centers in the state are Seattle, Tacoma and Spokane. The figures from H. S. Griggs show that Tacoma can turn out 3400 barrels of corn meal and 1850 barrels of barley flour, and of all substitutes approximately 9000 barrels in 30 days. The Seattle figures are almost as much. The Spokane contribution of substitutes amounts to 2275 barrels of rolled oats every 30 days.

The reports indicate that if the raw materials were available many mills in the state could grind substitutes. The car situation also precludes production in some localities.

Yakima and Whitman counties are among the places where substitutes may be produced if necessary. Dayton, Wash., is grinding 160 barrels of barley flour daily. Vancouver, Wash., reports that 10 to 15 barrels of corn meal are being turned out and more could be produced.

Dr. S. B. L. Penrose, administrator for Walla Walla county, says that they are short on substitute materials there and that barley flour is not considered by the millers as profitable. The milling company at Waitsburg is grinding 225 barrels of barley flour daily. Everett reports that considerable rice flour could be produced if the rice were available. Pasco says that only oats are being rolled for stock feed. At Prosser the mill is preparing to grind corn meal.

# Should Plant Trees

With the opening of spring will be inaugurated a statewide experiment in the planting of trees and ornamental shrubs by the forest department of the state college, in which trees and shrubs of all commonly used varieties will be sent at small cost to persons desiring to try them in an experimental way.

The work is directly supervised by A. D. Decker, head of the forestry department, who announces the following lists for selection:

Black locust, honey locust, Norway maple, sycamore, sugar maple, silver maple, black walnut, white ash, red oak, eastern white pine, Engelman spruce, jack pine, western yellow pine, western white pine, Austrian pine, blue spruce, Norway spruce, Douglas fir, concolor fir, Scotch pine, Russian olive and box elder. The trees are limited as person, ranging from 100 of the black person, ranging from 100 of the black locust to 10 of the black walnut. Not more than 300 trees of all varieties will be sent to any one person. The costs cover merely the expense of production and shipping, being no more than 5 cents and no less than 1 cent each for any of the trees named.

"Transplant" trees will be furnished from the following variety list:

Norway maple, red oak, sycamore maple, sugar maple, silver maple, white ash, Austrian pine, blue spruce, Norway spruce, red spruce, Douglas fir (Coast form), Scotch pine, western white pine, eastern white pine, concolor fir, balsam fir, Douglas fir (Rocky mountain form), cypress, western yellow pine and Russian olive.

A limited number of extra large and fancy trees, the number of which ranges from two to 25 for any one person, will be distributed in different parts of the state:

Norway maple, sycamore maple, silver maple, sugar maple, Japanese maple, white ash, mountain ash, Douglas fir, arborvitae, Scotch pine, jack pine and Norway spruce.

Small trees in length 4 to 18 inches, according to variety, will be distributed in lots of 1000 or more, the following being available for distribution: White ash, western white pine, Douglas fir and Scotch pine.

Cuttings will be offered from the following: American willow, purple willow, golden willow and silver poplar.

### Save the Pennies.

"Save the pennies and the dollars will take care of themselves." The way to save pennies is to invest them, 25 at a time, in U. S. thrift stamps. You will not only be saving pennies, but you will be saving the lives of American soldiers. Clip the coupon printed elsewhere in this paper and order your stamps by using it.

# Urgent Pleas Are Made to President

(Continued from page three.)

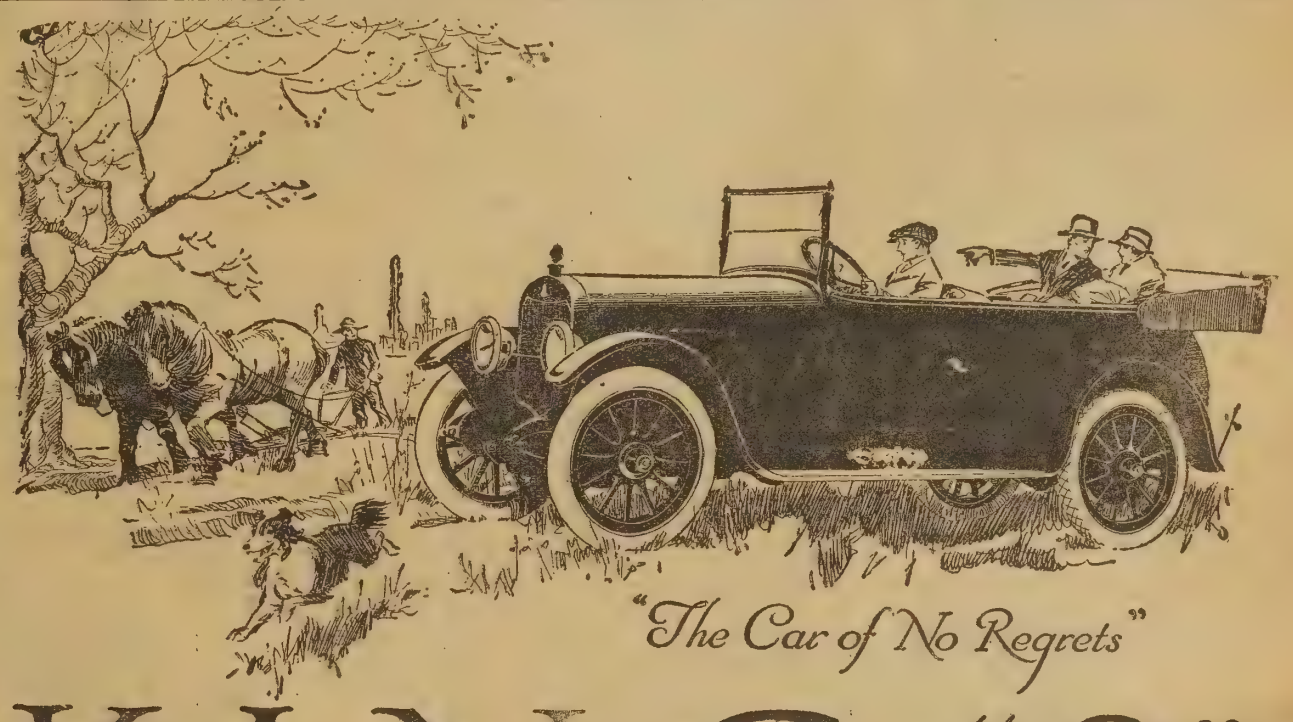
sional pacifists; he addresses the congress, the country and the world, not as the leader of God's children, fighting, bleeding and dying by the million in the great cause of human freedom, but as a judge between all nations, powers of darkness and evil no less than peoples of light and good.

"This can not go on. We must win. Our allies are drifting, drifting from lack of direction, aggression and inspiration, which Woodrow Wilson alone can give. We beseech him to sever the bonds which now hold him fast, to delegate to others, better trained for the purpose than himself, the work of organizations and reorganizations, to slough off the infinitely distracting details of management, to charge responsible political leaders with the shaping of domestic legislation and the execution of the laws, to rid himself of pandering, palavering pacifists, to call to his aid and counsel the fighting souls of America; in a word, to take a fresh perspective and then apply the full power of that remarkable intellectual force and indomitable will which have constituted him the natural, inevitable and universally recognized spokesman of civilization and leader of the world in the greatest crisis the world has ever known.

"God grant that he, this son of destiny, may see the light and fail not!"

### Gets Rich Legacy.

By the will of Whittier Keeser the Odd Fellows' lodge of Fort Davis, Texas, is to receive $100,000.

"The Car of No Regrets"

KING "8"

*The KNOWN car will have a "waiting list" this year*

UTILITY is now the national buying reason. The public wants only cars of proved reliability built by established companies. With output reduced because of war manufacture there will be a shortage of preferred cars. If you expect to buy a KING this year, ORDER EARLY.

Following a successful but smaller "Eight" and a popular "Four", this sixty horse power King is beginning its third year of world-wide operation, with practically no mechanical change except a general refinement which continues at all times. The chassis has proved its power, stamina and economy in every climate the world over and its recent use for armored cars and war ambulances is final evidence of its reliability under all conditions.

The King "Foursome"—a body type originated by this Company, and now widely followed—was declared by many to be the handsomest at the New York Automobile Show. You are urged to examine and drive this remarkable car.

A 7-passenger Touring Car and a 7-passenger Sedan are two other popular King models.

*Send for catalog and name of nearest dealer.*

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# Some "Good Times" Were Recorded in the Early Days

By IDA C. YOUNG.

It seems to me as I look back that I could write a whole book just about the good times we had in the early days of Douglas county. After the first Christmas tree there followed the first Fourth of July celebration at Burk's grove—a big clump of willows about nine miles north and east of us. Here was opportunity for the creative ability of the mothers at least; such contriving and planning to make whole families presentable at the first public social function that any of us had experienced in two, three and maybe four years. I remember more or less discussion went on about it between mother and Mrs. Anthony Rusheau or Rusho—(strange that I've forgotten exactly how they spelled their name). However, only my own clothes and those of Sister Frances remain clear in my mind. I had a little buff chambray dress which was purchased somewhere along the route of our travel as we made our way by team to the golden west. This dress was trimmed with white feather edge braid, and lace edging and had a wide bow sash, tied behind. It was washed, starched and ironed for the occasion and was pretty enough for anybody. The hat that went with it was also made by mother's hands, of scraps of lawn and lace. These days it would pass as a lingerie hat; at that time, I had seen none like it—it was an entirely original conception of mother's—and I was somewhat doubtful and critical as to its suitability. However, it was dainty and pretty and I made no mention of my doubts, for it was a choice between the hat and my gingham sunbonnet unless I chose to go bareheaded. I wore the hat and was happy.

The question of shoes was more difficult. My only pair had been worn steadily since the preceding October until the weather was warm enough in the spring to go barefooted. They were heavy, coarse and clumsy at their very best, and after the snows and slush, mud and scabland hardships, they were not improved any. However, we had shoe polish and we used it lavishly and splendidly, and the shoes certainly did shine. I felt very fine and happy when I was all arrayed and ready to start.

Frances' shoes were entirely worn out so mother made some little cloth moccasins of black broadcloth, a remnant of father's wedding suit. They had soft leather soles from old uppers of shoes and little satin bows. Her dress was an old white one of mine made over, and her hat like mine. Brother Ed announced proudly after it was all over that some of the boys with whom he had played, pointed Frances out on the picnic grounds and wondered who that little city girl was. Praise could reach no higher than that.

Then there was the preparation of a suitable lunch. There was a wonderful lemon pie, made from lemons saved from the spring trip to town, or maybe some neighbor chanced to make a summer trip, for that sometimes did happen. There was also a frosted cake, the first since we had come to the country. One or two dollars worth of sugar in the spring and as much in the fall does not encourage the making of icings or candy. Hooverism presents no difficulties to some of these old timers who economized so closely on everything but fresh air, sunshine, bunchgrass and water. We children hung about the house all day that third of July, almost fearful of losing any of the fragrance of that wonderful cooking. It was a perfect marvel to me; I hadn't known that such things could be, and here was our own mother creating enchanted food in a most matter-of-fact and casual way.

Things got themselves done finally that day and the next morning at daylight father got up to hunt the horses out on the bunch grass. He was gone until nearly breakfast and when we were just beginning to get anxious; here he came. I remember nothing more until we were on our way. Our conveyance was the old lumber wagon that took us from Iowa to Greely, Colo., and from Ogden, Utah, to our bunchgrass homestead by the spring, the intervening distance being covered by train. Hitched to the wagon was the cream colored mare, Mag, and our good black mule, Queen. We were perhaps a mile on our way when Anthony Rusho with his family hove in view to the rear. They had the bows and canvas over on their wagon and were doing things in style. They also had a matched team; at least they were both mules, old white Kate, and black Jenny. There was no time to lose, the outfit bore swiftly down upon us and clattered by at a swinging lope and with a joyful shout disappeared in the distance.

It was almost noon when we arrived and there were more cakes and icings and pink and green and blue sugar trimmings, gold and white pies and red, juicy pies, picnic biscuits and fried and baked chicken and pink slices of ham. But the excitement had been too much for me, my appetite was quite gone, I could only gaze at the quantities of luscious food and nibble a little here and there in an effort to get some little flavor from the display.

After dinner there was dancing on the rough board platform that was roofed over with willow boughs, then father was called upon for an extemporaneous speech and after that we went home.

After this first celebration there was more effort made to prepare programs of which music was a most important part. They came to our place to practice because we had the organ. There were Mrs. Alice Jones and Anne Williams, who rode in from nine miles south. Mrs. Jones sang a lovely soprano, while Miss Williams furnished the alto. Then there was George Roberts with his really unusual tenor, and John R. Lewis on the base; Mr and Mrs. Davis, Mr. and Mrs. Sherman Emmerson and father added their voices and mother was organist. Mr. Lewis had the longest distance to come, some 12 or 15 miles, but they always came and seemed to enjoy it, and I know these occasions of meeting to practice gave our family great pleasure.

But for regular, everyday enjoyment there was nothing that surpassed the companionship of the Rusho children. Anthony Rusho, with his four girls, lived only a mile away, and there was always something to bring us together. Their cows ranged over the same scab land and sagebrush and bunch grass, so it was a very common occurrence for us to ride together, sometimes all of us, often two on a horse, down the trail through the little canyon to the break where it sheered off steeply into the Grand coulee. Then we tied our horses, took a long drink and slipped, slid and scrambled on down to the very bottom of the Grand coulee. From here we could look back up and quite a distance to the left, where the edge of the talus reached the sheer wall. There was a trickle of water and we must drink, and up we struggled over the rough and rugged shell rock, drank thirstily of the warm water—this exploit always took place on the very hottest days—then plunged down again and took the trail for the top. There was never a special reason for going down. It just seemed that every so often in summer time all of us needed to go to the bottom of the coulee, and so we did.

Since I've grown up I've often thought about how fortunate we really were never to get hurt in any way, with all the chances we took. There was the matter of rattlesnakes, as an instance. Of course, no one thinks of being afraid of a rattler any time except August, when they are blind and sluggish. In all the nine years of our travels among those rocky recesses and scab lands I saw only six rattlesnakes. The other girls and boys had better luck and displayed their strings of rattles with more or less pride. Any rattlesnake that made its escape after being seen by any of us was considered a distinct loss. At one time when Ella, one of the Rusho girls, was on a hot chase after a snake it started down a squirrel hole. It was almost gone when Ella grasped it by the rattles and snatched it out, flinging it backward on the ground, where she promptly dispatched it, adding the rattles to her store. The Rusho's were not quite fortunate in choosing their building site, for they killed over 20 rattlesnakes about the home during the first year or two of their residence there.

I will not say that the snakes especially added to the joy of life among us, but they did provide a little flavor of excitement and there were so many things to give us pleasure that we were not really conscious of any unpleasantness regarding these pests. We never, for instance, outgrew the raptures of springtime, with the haunting calls of the killdeer, the curlew and the crane through the day and cheerful melody of the frogs and the ground owl at evening. Then there were the wild flowers that drew us on and on over miles of bunch grass and scab land with the irresistible power of color and smell; many were entirely odorless, but there were the wild roses, the birdbills and wild pansies that were equal to all the perfumes of Arabia. These wild flowers are of the created things that have lost nothing since the day God looked and saw all the things that he had made, and behold they were very good.

I sometimes wonder could it be possible for every particle of explosive and every engine of destruction to vanish in the twinkling of an eye; then instead of the instrument of death, if every warring hand found itself filled with fragrant lilies of the valley and heaven-scented stars of Bethlehem would humanity understand the significance of it all? Certainly, it is a strangely gracious God that permits the miracle of springtime, with its music and its beauty and perfume to occur and reoccur with absolute regularity through all the confusion and clamor of this sin-mad world.

Another joy of springtime to us children was the water that came with the melting of the snow. There was

(Continued on page forty-four.)

On account of the great variation in local climatic conditions, moisture, soil, etc., it is up to the readers of The Washington Farmer always to remember that methods which prove successful in one locality may not work out in others. It is our aim to gather the experiences of farmers in every section of this state and pass these experiences on to our readers, that they may try out or adopt such as may be applicable to their locality and conditions.


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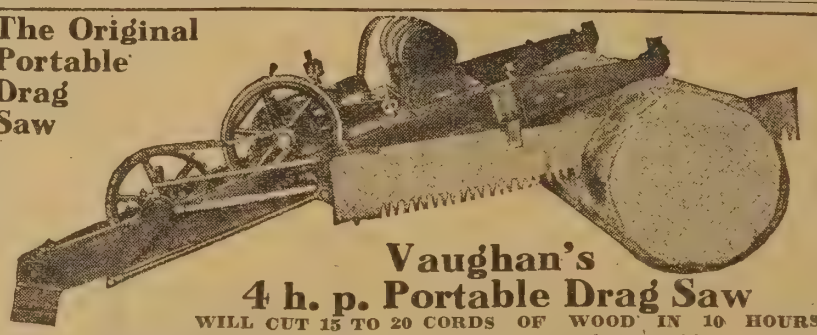
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WILL CUT 15 TO 20 CORDS OF WOOD IN 10 HOURS

Can be operated by one man. Two men can carry complete machine. 4 H. P. gasoline motor mounted on frame. One gallon gasoline required to cut 8 to 12 cords of wood. Engine can be used for other work without removing from frame. No gears, cogs, belts or pulleys. Friction clutch prevents breakage if saw pinches. Saw makes about 125 strokes per minute. Will cut any size log up to 6 feet. Sprockets and cranks, etc., made of cast steel. All working parts guaranteed against defects in material and workmanship.

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Please send me full particulars regarding your grain tanks.

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# Sugar Beet Syrup

## Farmers Can Make It Themselves

Rowland Moore, of New Philadelphia, Ohio, and Mrs. Richard D. Reeves, of Moscow, Idaho, have written to The Farmer, asking how to grow sugar beets and make syrup and sugar from them. The following has been summarized from Farmers' bulletin 823, of the United States department of agriculture.

Sugar beets may be grown in any locality which has tillable soil that is capable of producing good crops of vegetables. A few rows of beets are sufficient to furnish a whole family with syrup, and a spade, a hoe, and a rake are about the only tools necessary.

After being grown, the beets are thoroughly cleaned, cut in thin slices—a kraut cutter is good—and soaked in hot water. This extracts the sugar. The liquid is then boiled down to the required consistency, and bottled while hot, and tightly sealed or corked to prevent molding.

In raising sugar beets and producing sugar or syrup from them there are some details to which heed should be given.

Well drained, fairly fertile soil is best, and extremely poor, shallow, sandy or hard soil is undesirable. Richly fertilized ground is not best, since this produces large beets poor in sugar. Beet roots when mature should weigh one to two pounds each. Thirty to 40 beets will make a bushel, and a bushel of beets should yield three to five quarts of syrup.

Sugar beets, either raw or cooked, are excellent feed for chickens, hogs, and other live stock.

Sugar-beet seed should be planted in rows about 20 inches apart, and may be dropped either in continuous rows, or in hills. If in hills, the hills should contain three to six seed balls, and the hills should be about 10 inches apart. A half-inch is sufficiently deep to cover the seed. During the growing season, the beets should be well cultivated, kept free from weeds, and thinned so that the plants do not crowd one another.

The plants mature in four to six months, depending upon differences of season and region. When ready to pull the foliage is beginning to yellow up, and the roots will come up almost free from soil.

In storing, either in pits, mounds, or in the cellar, two points should be kept in mind: First, to keep the roots cool without permitting them to freeze; second, to keep them from wilting.

**Making the Syrup.**

Thoroughly clean and top the beets. To top them, cut them at the point of the lowest leaf scar. The reason for this low topping is that the upper part of the beets contains a large part of the salts taken from the soil in process of growth, and it is desirable to have the syrup as free as possible from these mineral salts, which, if present in too large quantities, would render the syrup unpalatable.

In cleaning the roots they may be placed in a tub or other suitable receptacle and covered with cool water, to loosen the soil and to make the roots more crisp. For scrubbing them off, a coarse brush with stiff bristles or wire is useful. A three-bladed kraut cutter securely fastened on top of a barrel offers a satisfactory way of cutting them in thin slices, which, later, are immersed in boiling water and soaked about 60 minutes, agitating the barrel or other container meanwhile. No pressing is required. Strain the water off through several thicknesses of cheesecloth. The resulting liquid, in which most of the sugar of the thin beet slices is contained is of a light brown color and a sweetish-bitter taste. The refuse beet slices are valuable feed for chickens, hogs and other live stock. No more water than is necessary to cover the sliced beets should be used, since an excess of water increases the amount of evaporation required to reduce the liquid to syrup.

Some people like a thin syrup. Others like it thick. Care not to burn the juice should be exercised, and while boiling is progressing, the skum that rises to the top should be carefully skimmed off. This operation removes the strong beet-like flavor and leaves a wholesome, palatable product.

The syrup thus produced is of a dark color, and serves well for table use on buckwheat cakes, for example; and in the making of dark colored cakes. It contains nothing but the pure juice of the beet root, and is wholesome, nutritious, and of a pleasant flavor. Its dark color would be an obstacle to placing it on the market, but makes the product rone the less valuable in reducing the home sugar bill.

Any method of bleaching or otherwise removing the color would require considerable skill and some outlay of money, and likely be impracticable for home use. If the evaporation is carried far enough and the syrup is allowed to stand, a dark sugar will settle out. This sugar will be found satisfactory for home uses in cases where refined sugar is not necessary, such as in the making of home-made candies, pies and dark colored cakes. Reducing this sugar to the white granulated form, would, as in the case of whitening the syrup, require rather more skill and outlay of funds for scientific equipment than would be feasible in most homes.

# Rye for Silage

To the Editor: I would like to hear from some one in regard to rye for silage. At what time is it best to cut it and is it absolutely necessary to chop it when put in the silo? And does the stock like it? E. T. KETTERER.

Zillar, Wash.

This question was referred to E. G. Schafer, professor of farm crops, State College of Washington, who replies as follows:

"In general it is desirable to leave a grain crop until the grain is well formed and just starting to harden—when it is in the dough stage—before it is cut for silage. If the crop is cut before this time you will lose in total weight on the crop, as it should be increasing in the amount of food material up to this time.

"On the other hand, if you leave it until later, the crop will become coarser and will be less digestible. Also it will contain a larger amount of crude fiber. After this stage it also begins to dry out and packs less well in the silo.

"I believe it is very important that rye or any crop be cut before placing in the silo. It should not only be cut, but tramped well. One of the chief purposes of this is to force all air out of the mass of silage. As the stems of rye are hollow they contain a certain amount of air, which it would be difficult to remove if the rye were left whole or placed in the silo just as it comes from the field.

"I would not say that it is absolutely essential in all cases to have it cut fine, but I believe too great a risk would be taken by placing it in the silo uncut."

## Clip This Convenient Order Blank

Address all communications concerning thrift or war savings stamps to the Washington Farmer, War Savings Department, Room 26, Review Building, Spokane, Wash.

Remittances may be in any form desired, including personal check.

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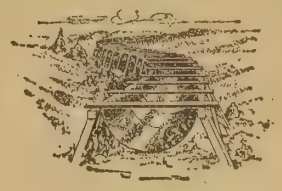
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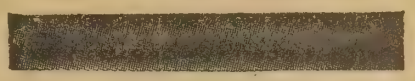
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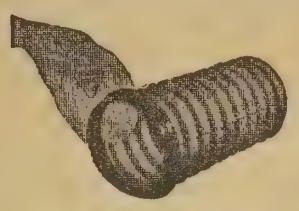


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# Kaiser Hits the Dairy Business

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Dairymen of the Inland Empire are far from the sounding sea, but the ocean touches their interests as powerfully and directly as if they lived on the shore. Every ship sunk by a German submarine means a loss to the dairy industry of the United States, for it increases the scarcity of ocean vessels and to the extent of that loss cuts off exports of condensed milk, butter, cheese and other products to our allies across the Atlantic.

Curtailment of three-fourths of the export milk business of the United States has been brought about by government regulation, which has reduced the available shipping from 24,000 tons monthly to 6000 tons. Under these conditions, canners say, there will be an over-production of 6,000,000 cases of condensed and evaporated milk in 1918. All of this milk is badly wanted abroad, but lack of ships prevents its shipment across the Atlantic.

It is developments of this nature that compel the food administration to make frequent changes in its program. A few weeks ago it was urging the American people to save milk. Now it has issued a bulletin advising freer consumption in the United States and calling attention to the food value of milk and milk products.

Already there has been a decline of 50 cents a case in the United States and further reductions are not impossible. Under existing conditions it is pointed out that milk is the one unrestricted food fat available to the public. During the last three years the production of milk has been tremendously stimulated throughout the United States and has been equal even to the extraordinary export demand up to the present moment.

This production of milk can not be stopped by any governmental order. The demand for this milk has existed, and does exist, and the tremendous supply of milk gathered to meet the demand must now find other markets. The supply of raw milk must continue, and if the farmers do not have a market for it they must sustain a big loss. Momentarily, this may result in reduced prices to consumers of raw milk. In general, however, milk authorities do not believe that this will solve the situation, because the cost of producing milk at the present time is high as a result of price of mill feeds, labor, etc., and if the farmer is forced to sell at a materially lower figure for any length of time he will be tempted to sell off his dairy herds.

This is a condition which the government has steadily sought to avoid, as it makes certain a milk famine at such time as it is possible to supply the demand already existing abroad. A farmer may kill off his dairy herd in three hours, but he can not replace it in three years.

There is but one remedy for this evil—to build more ships. But the government's ship-building program is hampered by strikes, and more serious yet, held back by workers who are slacking on their job, demanding and receiving increasing pay, but themselves delivering, as shown by government investigations, less than half the labor they could leasily perform and what they were performing before the war.

## WANT MORE POULTRY.

### Administration Urges Increase.

Following up its recent ruling that hens should not be marketed during the hatching season the national food administration has now sent out a slogan urging the production of more poultry on the farm. "One hundred hens on every farm," is the watchword. The report of the United States department of agriculture that 40 carloads of hens averaging some 4000 per car, were shipped from the state of Texas alone betwen January 1 and February 11, indicates the government's reason for placing the recent embargo on hen sales.

This means that 160,000 birds that were laying or about ready to lay were prevented from turning into eggs the food they had consumed without return during the winter. Had these birds been kept until April 30, as urged by the department of agriculture and as required by the food administration for those remaining on the farms on February 11, it would have meant at an estimate an addition of 400,000 dozen eggs to the food supply of the nation, with little added expense for food, and would merely have postponed use of the birds themselves as food until after May 1.

# Don't Hold Wheat

## Early Marketing Urged by Hoover

Federal Food Administrator Herbert C. Hoover has issued a statement to the wheat raisers calling upon them not only to produce as much wheat as possible this season, but also to place their present holdings upon the market during the next few weeks. Except for necessary seed supplies the administration urges that all wheat be marketed by May 15. The following from Mr. Hoover's appeal explains the purpose of the early marketing request.

"In order that we may comply with the urgent demands of the allies for wheat and at the same time take care of our own domestic supplies, we urgently need this year an earlier and more complete marketing of the wheat in the farmers' hands than usual. The allies are taking from us 50 per cent of cereals other than wheat to mix in their bread. Inasmuch as the people in the allied countries and the soldiers must be fed with bread baked in bakeries it is impossible for them to prepare bread made wholly out of other cereals and we must furnish them with sufficient wheat to maintain their bakery loaf. I therefore appeal to the farmers that they shall bring all of their wheat crop except their necessary reserves for seed to market before May 15.

"This is a war call and a service for Uncle Sam, who is fighting for his life. If your local miller is unable to buy all the wheat that is offered, market it in other customary trade channels, through which it will reach the food administration grain corporation."

# Dairy Farms Are Best for Hogs

(Continued from page eight.)

cleared and his crops in and harvested. His faithful horse stays by him while his hired man is a variable and not always a satisfactory quantity. There are in the county plenty of horses to take care of the farm work and a goodly lot of our farm women have assumed the part of the driver, while the farmers good son has taken up his march to France.

Farming in this county has not reached a volume to cause the farmer to substitute the tractor for the horse. He considers the horse too much of a friend and all-round helper to discard him for any tractor he is willing to risk or has the means to pay for. Besides the tractor still has the cranky spells of a "tin Lizzie" or a motor boat and then he may have neither the "Lizzie" or the boat, he hears the laugh go around. Meat animals for spring market are few and far apart. Even chickens are on the retired list. The farmer's need is pasture but he realizes it is an expensive thing to get and maintain. Many have concluded it is better to quit the pasture and raise feed to sustain stock the year around. They believe they can get better results in milk and meat by feeding the year through, instead of relying on pasture. This seems to be generally conceded but the old habit is hard to quit.

SCOTT HAYES.

## Machinery Not Needed.

GIG HARBOR, Pierce County, Wash., March 7.—This section of the state is not sufficiently agricultural in its nature to warrant the use of any great amount of agricultural machinery. The farm tractor would hardly pay its way here. Our fields are too small and too scattered—only here and there a few acres fit for use through lack of water and fertility. We can hardly afford the most common implements that are absolutely essential to farming anywhere. Here and there a farmer with a place rather above the average is adding the disk and other pulverizers, a manure spreader, or the tools necessary to silo filling. Such farmers keep a horse team. Some of the smaller ranchers also keep a good team and use them a part of the year on the roads and also do days work with them for their less well-equipped neighbors. Probably eight out of ten of our ranchers keep but one horse—many none at all. The cost of keeping horses is very high here. Horses are not particularly high in price here. They are easily obtained in these Coast towns where the auto delivery and auto truck are constantly displacing them.

Quite a few fattened pigs are going onto the market this season. Not many cattle. They were tremendously thinned out by the unprecedented slaughter of last fall. With the grazing season opening up, there will not be very heavy slaughtering until next fall. Springy hillsides and creek bottoms only can be depended upon for all summer grazing.

W. B. BOYNTON.

## Tractor to Be Tried Out.

PORT ANGELES, Clallam County, Wash., March 4.—Referring to your inquiry regarding labor shortage on the farm, this problem is causing some difficulty here in Clallam county and no doubt will be instrumental in introducing the tractor. Lincoln Sand of Quillayute prairie will have the first tractor shipped to the county within a week, and if it proves its value and comes up to the expectations, others will follow. There is no lack of good horses, but good, practical farm labor is not to be had, consequently the farmer turns to mechanical means as a substitute. There is not enough machinery, but the interest is awakened and it is very noticeable.

Our county will be short of meat animals, as compared with normal years, and we find the reason for this in the previous two winters, which were severe on stock. The farmers disposed of their stock last fall and took no chances in wintering them.

J. P. CHRISTENSEN.

## Markets Vary.

CENTERVILLE, Klickitat County, Wash., March 6.—The market conditions here are quite changeable with regard to different stores or trading places, some stores wanting a profit of more than five cents per dozen eggs. Prices vary up to about seven cents per dozen, some paying trade at a rate within two cents of the Portland price. Butter is not so plentiful now, consequently is steadier here in the local market, receiving here at the present 90 cents per two-pound roll; and those buying the same getting it for nearly 10 cents more on the roll. In the line of plow supplies, some dealers are asking nearly a profit of 100 per cent. Our community market is quite local as regards potatoes, but eggs, butter and cream and the like have quite a shipping trade. I do not know the cost here to make a 100-pound hog product, but guess that it is near the 15-cent line now, as our main crop is wheat to feed all kinds of stock. Some barley is raised here, but has been used mostly as feed locally, as well as the oats raised. It is a little early yet to decide about the wheat prospect. Some looks good and some does not, but the prevailing comments seem to be that the present wheat condition is nearly average with last year. Our snow has gone, leaving us clear nights with a good deal of freezing and thawing. The fruit looks good at the present, as there has been no severe freezing at any time during the winter season.

C. A. LESTER.

## Still Have Lots of Hay.

PROSSER, Benton County, Wash., Feb. 27.—This has been a fine winter, not more than two inches of snow all told has fallen this winter, and there were only a few days that a man could not plow during the winter. We have lots of hay in this valley yet. A local man is paying $20 per ton baled; we also have about 75 or 100 tons of beans and about 400 tons of potatoes that we can't get rid of at any price. We can not buy wheat for chicken feed, so we buy oats at $5 per sack; eggs 42 cents; butter, 40 cents; flour, $2.70 for 48 pounds; hogs, 15 cents per pound; cattle, 4 and 4 1-2 cents at the dealer's; pork, 25 cents, and beef, 16 cents and up. The most of our products have to be shipped to distant points. I think it costs all of $15 for 100 pounds of pork at the price of grain today. What wheat there was sown last fall looks good, but not growing at this time.

G. W. WILGUS.


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SPOKANE SEED CO., Spokane, Wash.



FREE!

Coat Lapel Button



Just like illustration, only smaller. The perfect size for your coat lapel. A dandy American flag in red, white, blue and gold.

One of these flags will be given free to any one sending two one-year subscription orders to The Washington Farmer.

Your own subscription counts for one.

Send 50 cents and two subscriptions to

The Washington Farmer
Review Bdg.
Spokane, Wash.

## CATTLE SELL WELL.

### Milking Shorthorns Are Dispersed

More than 40 head of Shorthorn cattle, most of which were purebred milking Shorthorns, averaged $315 each when placed on sale at Spokane last week by Alex. Morrison of Valley, Wash. The highest price of the sale was paid by D. A. Gunning of Reardan, Wash., when he paid $625 for Olive V. 2d. A pair of twin calves by her side were included in the purchase. Another cow, well known to the Shorthorn breeders of the northwest from her show ring record, Princess Louise, 10 years old, sold to J. E. Trimble of Garfield, Wash., for $335. The herd sire, Western Star 2d, was bought by P. S. Carmichael of Chewelah, Wash., for $500. Other sales deserving special mention were: Bonnie Less, $530; Augusta Hopper, $390; Olive V.'s Jewel, $410; Reddy, 450; Duchess, $300; Princess, $300; White Lady, $350; Violet of Valley, $340; Bonnie Violet, $330; May Belle, $375; Louise Folsom, $425; Helen Gould, $355.

Harry C. Cranke and George Gue were the auctioneers.

## HOLSTEIN BANQUET.

### On the Day of the Sale at Kent.

The Northwestern Holstein Breeders' association will hold its semi-annual meeting and banquet April 17, 1918, at a place and hour to be announced at the Western Washington Holstein Breeders' sale at Kent on that date. The coming sale grows in interest as the date set, April 17, approaches. One feature of the sale alone, the consignment of King Korndyke Pietertje Pontias No. 127387 lifts the occasion out of the ordinary and makes it an event of importance in northwestern breeding history. This great western sire is truly bred in the purple, for he is a proven son of the great king of the Pontiacs. The Pontiac family is also represented in the consignments to this sale by two A. R. O. daughters of King Korndyke Pietertje Pontiac, one of which has for her dam a 27-pound daughter of DeKol Burke, the other a 28-pound daughter of Sir Johanna Ruth Fayne.

## Reaugh, County Agent, Quits.

H. W. Reaugh, who has been county agent in Grant county for nearly three years, is now manager of a 38,000-acre irrigation project in the Moses lake district owned by the Grant Realty company. The Grant Realty company now holds the land formerly owned by the Neppel Townsite company, the Manhattan and the Stade and Park Irrigation company.

The county work at present will be carried on by the assistant county agent, Bruce Lampson, who was put on under the government emergency fund and has been with Mr. Reaugh a short time.

## Plant Large Pea Acreage.

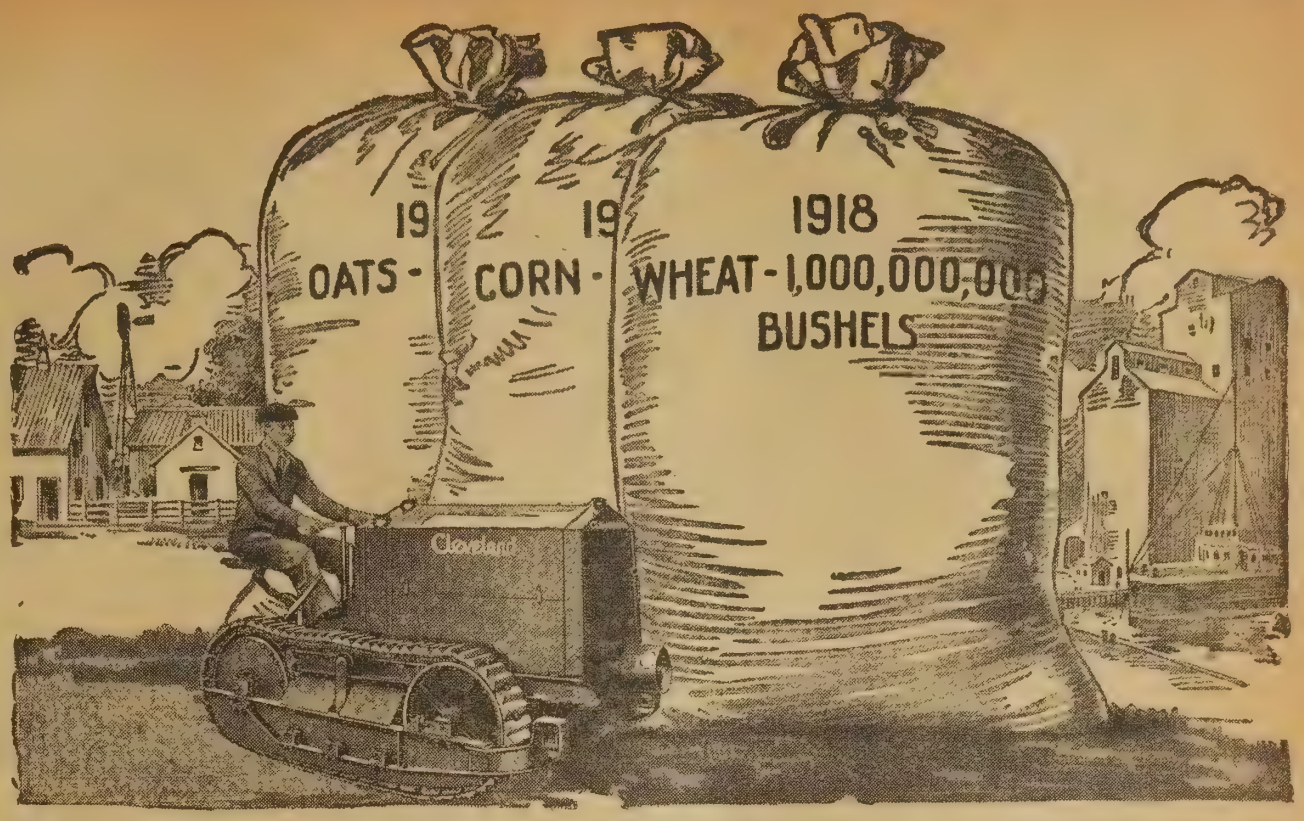
Notwithstanding the near failure of the last year's pea crop when the farmers of the Spokane district planted about 30,000 acres to peas, there will be planted in that district this year about 50,000 acres. This is the statement of Spokane County Agriculturist J. R. Shinn, who has been active in promoting pea growing for several years. "The farmers realize that peas are a great war crop," says Mr. Shinn. He says that seed companies are contracting with the farmers to pay 4 to 5 1-2 cents a pound for this year's crop.

### Chinese Cook By Rule.

It is said by those who have employed them that the Chinese always cook by rule, if they have any rule to go by—following the receipts with the same scientific exactness with which the druggists put up a prescription. Hence their results are equally satisfactory. They never burn or spoil anything, nor spill materials on the floor; consequently, nothing that goes through their hands is wasted.

### Ask Anything.

Anything that you want to know you can find out by addressing the information bureau of this paper at Washington, D. C. It is that bureau's business to answer any reasonable question that readers of the Farmer ask. Don't write to the state office of the Farmer, but address the information bureau at Washington.


# The Task Before the Nation's Farmers

One billion bushels of wheat must be produced in this country this year.

An enormous increase in the yield of corn and oats is necessary.

Thousands of extra acres must be cultivated. Each individual farmer must produce about one-third more grain than last year.

The task before the nation's farmers is stupendous. Intensive methods of every kind must be employed. Machinery must take the place of muscle wherever possible.

In the face of this emergency the Cleveland Tractor becomes an absolute necessity. Its tremendous value to the farmer is emphasized more than ever.

## Cleveland Tractor

The Cleveland Tractor not only conserves time and labor—it does far *cheaper* and *better* work. And by doing better work it makes possible the production of larger and better crops—enabling you to do your part for the government—*and make more money for yourself.*

The Cleveland Tractor shows the way. It plows 3½ miles an hour—8 to 10 acres a day. It travels on its own tracks like the great "tanks" of Europe. It will go practically anywhere—through ditches, gumbo, sand and gravel. It is steered by the power of its own engine—simply and easily, and will turn completely around in a twelve-foot circle.

It will not pack the soil, will not mire, will not slip or flounder. It has 600 square inches of traction surface. The track is designed for long service. The sections are constructed to prevent filling or packing with mud, and protection is provided to prevent dirt and mud from falling into the track. The sections are joined with hardened steel pins which have their bearings in hardened steel bushings. The Cleveland weighs less than 3200 pounds. It can be housed in less space than is required for one horse.

The Cleveland develops 12 h. p. at the drawbar for hauling and gives 20 h. p. at the pulley belt—plenty for stationary work of all kinds.

But in spite of its unusual power, the Cleveland is small and can readily be used in orchards and under and among small fruit trees.

Rollin H. White, the famous motor truck engineer, designed the Cleveland Tractor. He has used only the best materials. Gears are protected by dust-proof, dirt-proof cases and are of the same high quality as those of the finest trucks.

Prepare *now* to produce the enormous crops which we must have—and incidentally make more money for yourself. Get ready *now* for the great tasks before you. Order your Cleveland Tractor *now.*

Write to us for complete information and the name of the nearest Cleveland dealer.

**THE CLEVELAND TRACTOR COMPANY, Dept. BK Cleveland, Ohio, U. S. A.**

## Northwest Distributors

# McNEFF TRACTOR CO.

**225 Pittock Block**

**PORTLAND, ORE.**

SHOULD you wish to buy something you do not find advertised in this paper, write us about it and we will locate it for you with the least possible delay. This is a part of our service to you as a subscriber. Also, if any transaction you have with any firm or individual, whether advertising with us or not, is unsatisfactory, let us know. We stand for fair play.

# Plant Root Vegetables Now for Seed

Growers of root crops of all kinds who are likely to need seed for planting in 1919 would do well to take steps to insure at least a partial supply by growing it themselves. This can be done only by the use of roots already grown and now in the ground or held in storage. Such crops as carrots, beets, onions, turnips, rutabagas, parsnips, and salsify are involved.

This is the advise and information given by the United States department of agriculture.

Weather conditions in the regions where the chief seed supply of these crops is produced have been very unfavorable so far this year. This fact, together with the certainty that the usual European sources can not be relied upon to supply us, threatens a very considerable shortage for next spring's planting. Since it takes two years to produce these seeds, this shortage can only be alleviated by the planting for seed of roots already grown.

Seed of the crops mentioned above can readily be grown over a wide range of the northern states. It is highly desirable that persons having uniform, well selected and sound roots should plant some of them for seed.

Parsnips and salsify, being hardy, can be most easily provided. The shortage of these is not serious, as the amounts needed are not large. For such roots as must be stored the time is at hand to choose those to be used for planting for seed production. It is of paramount importance that they be gotten into the ground as early as the soil and weather conditions permit. The prospect for a successful seed crop of these roots is very much improved if there is opportunity for root growth before the tops are started by warm weather. It is necessary to cover the roots with one or two inches of soil to protect them from frost and light freezing after planting.

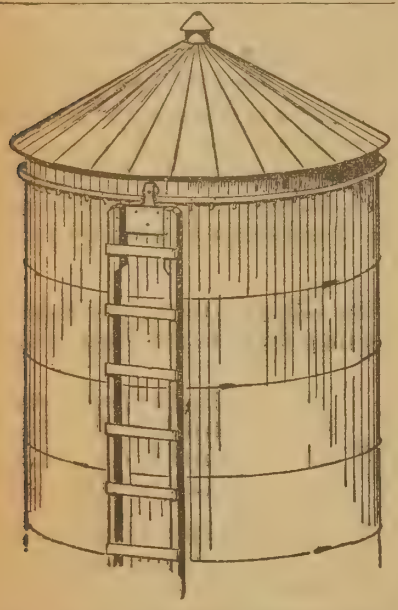
Rows of beets, carrots, onions, turnips and rutabagas should be spaced from three to four feet apart. Plants should stand from two and a half to three feet in the row for all but onions, which may be spaced six inches. Cultivation should be thorough and shallow. The soil should be in good condition and should be fertile.

It is often desirable to support the seed stalks by staking, but not essential in any case except that of onions. Farmers' Bulletin No. 884 gives directions for the home production of seed of these and other vegetables.

# Swings Silo Ladder

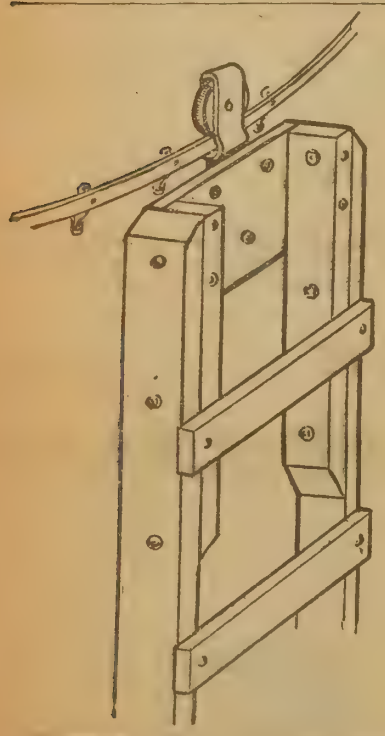
## Attachment Perfected at Union

In a letter to the Farmer, Robert Withycombe, superintendent of the eastern Oregon agricultural experiment station, submits sketches of a device for attaching a ladder to a silo,



the object of the ladder being to facilitate repairing and painting the silo when occasion arises and also to make it convenient to get to the top of the silo.

"It has always been quite a problem



for the farmer to tighten and loosen the hoops on a wood stave silo in order to take care of the expansion and contraction of the staves at various times during the year," says Superintendent Withycombe. "Especially is this true in cases where the silo is 30 or more feet in height. We have overcome this inconvenience at the experiment station by suspending a ladder by means of a nondetachable pulley and a barn door track placed at the top of the silo. In this way the ladder may be readily moved to any part of the silo. It can be used for going up and down during feeding operations, to tighten or loosen hoops and for painting and other outside repairs."

The illustrations herewith show the position of the ladder on the track around the top of the silo and also the details of the pulley device.

# Keep Floor Warm

By J. A. WILLIAMSON.

In our farm home at Cocolalla, Idaho, the living room, which is kitchen and dining room with us, is large and has a high ceiling. We were much troubled with cold feet; not the kind of "cold feet" the boys speak of, but the real thing; cold feet from a chilled condition of the air on and near the floor. In my way of thinking there is a reason for everything and a remedy for nearly every wrong. The reason for our trouble was that the heat of the stove arose up to the ceiling and warm air being lighter remained overhead and the cold air about our feet. Naturally the remedy for this condition would be to reverse the forces that were the couse of the trouble. So I made a hole in the brick flue near the ceiling and put in a stovepipe that reached down to within 6 inches of the floor, with a good damper in the pipe.

The draft of this ventilator pipe creates a mild current that draws the cold air and carbonic acid gas off the floor and the warm air that has gone to the ceiling is drawn down to take its place and thus we have a warm floor.

The hole in the flue can be made with a cold chisel and hammer, care being taken to not try to take out too big pieces of brick, as by so doing you may damage the flue; take care to close all cracks so that live pieces of soot will not fall out.

If all factories, rooms and offices where a number of persons work were ventilated in this way there would be a great reduction in the cases of headache, rheumatism and many other ills due to heat overhead and cold floors.

## Farm Tractors in France.

Professor Max Ringelmann, director of the French official bureau for testing agricultural machinery, makes the following statement concerning the future of machinery in French agriculture:

Of the 130,965,000 acres included within the frontiers of France before the war, the agricultural territory amounted to 123,552,000 acres, of which the cultivated area formed 113,668,000. Plows drawn by cattle or horses were employed upon 43,737,000 acres. Assuming that only the tenth part of the above figure—that is to say, 4,374,000 acres—admits of the economical employment of machinery, it would appear that 17,000 farm tractors could be used for plowing purposes in France.

**Rather Unpleasant.**

"I won my wife by saving her from drowning."

"Ah, that was romantic."

"It seemed so once. But now every time I do anything that doesn't suit her she tells me she wishes I had let her drown."—Kansas City Journal.


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COSTS LESS FOR REPAIRS BECAUSE IT IS BUILT AS SIMPLE AS POSSIBLE. ALL WORKING PARTS ARE ACCESSIBLE

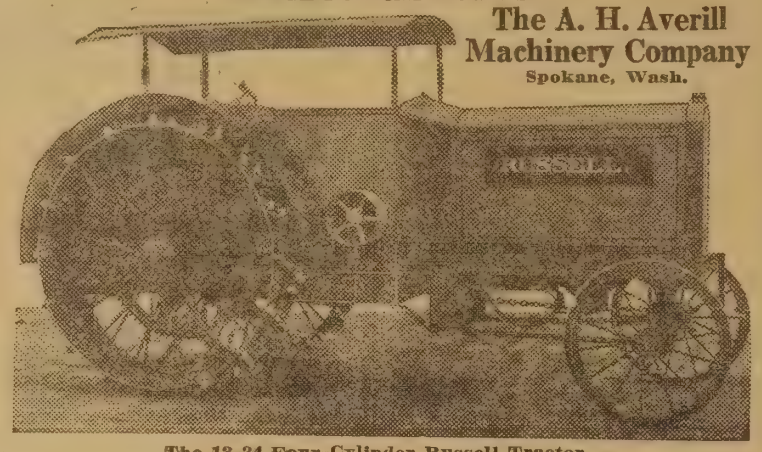
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and can make immediate shipments.

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Spokane, Wash.




The 12-24 Four-Cylinder Russell Tractor.



**DELCO-LIGHT**

**Increases Farm Efficiency**

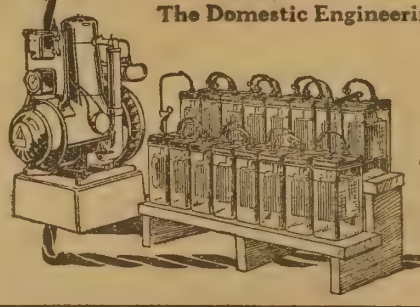
1. **Saves time and labor**—Work formerly done under poor light and by hand can be done better and in less time with the aid of electric light and power.
2. **Labor is attracted to the farm**—The "back to the farm" movement is made practical when the conveniences afforded by electric light and power can be had in the country.
3. **Keeps the boys and girls on the farm**—Electric service on the farm offsets city attractions. Valuable labor and valuable young manhood and womanhood are saved to the country community.
4. **Solves the retired farmer problem**—Electric light and power make the farm home so attractive and comfortable that the farmer and his wife remain on the farm where their advice, experience, and immediate interests are of great practical value.
5. **Lightens burden of the housewife**—Increased farm work in war times means increased labor for the housewife. Electricity offers the only practical means of taking the drudgery of household tasks from her shoulders.

Delco-Light is a compact electric plant for farms or country homes. Self-cranking. Air-cooled. Thick plate, long-lived battery. Ball bearings. No cells.

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Over 50,000 Satisfied Users throughout the World.



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# GREAT BATTLE NEAR

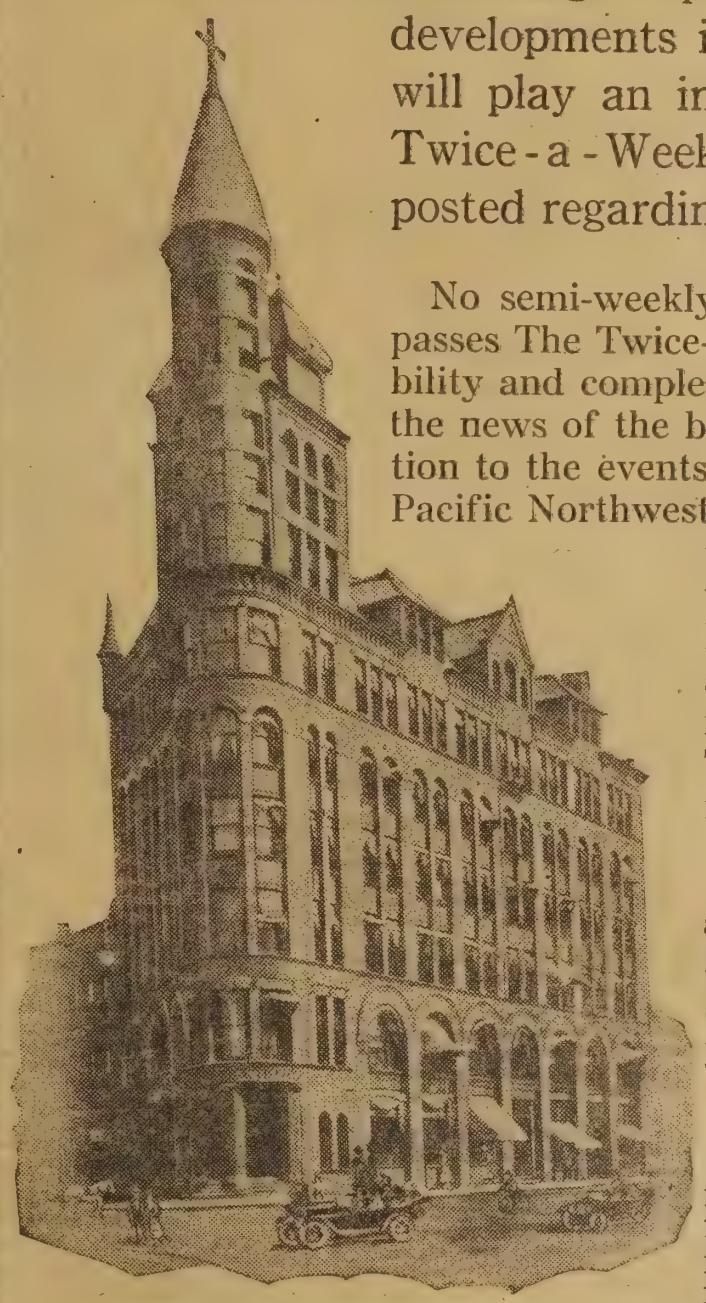
## *Twice-a-Week Spokesman-Review, 1 Year $1*
## *The Washington Farmer, 3 Years--Both for $1*

ALL winter a great battle has been brewing on the western front in France.

With the coming of spring there are sure to be tremendous developments in this sector; and American troops will play an important part in them. Get The Twice-a-Week Spokesman-Review and keep posted regarding the details of this great struggle.

No semi-weekly newspaper in the United States surpasses The Twice-a-Week Spokesman-Review in the reliability and completeness of its war news. It will bring you the news of the big spring drive. It pays particular attention to the events of special interest to the people of the Pacific Northwest; covering the progress of the draft, troop movements, and all other details in which you are particularly interested. Names of killed, injured and missing will always be given as soon as issued by the military authorities. In addition The Twice-a-Week brings you a reliable summary of the general news of the day.

Purchased in any other way The Twice-a-Week will cost you $1 per year. For that $1 you can now get The Twice-a-Week for a year and your state farm paper for three years as well. It is a remarkable offer at any time; especially so in these war times.



**HOME OF TWICE-A-WEEK SPOKESMAN-REVIEW.**

**Above is a picture of the Review Building, Spokane, Wash., built, owned and occupied by the Spokesman-Review. It is the home of a great news gathering organization; the center of world-wide activities in securing reports of the war and all other important events for Spokesman-Review readers.**

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**THE WASHINGTON FARMER, Spokane, Washington.**

Gentlemen:

I desire to take advantage of your special clubbing offer. Enclosed is $1 in full payment for one year's subscription to The Twice-a-Week Spokesman-Review and three years' subscription to THE WASHINGTON FARMER.

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# American Farmers Alone Can Win War

## *Germany Wins Only in Case of American Crop and Money Failure*

What is would have meant for this country to have submitted to the demands of Germany a year ago and what can prevent a submission now are indicated in the following extracts from an article written by Herbert Quick, one of this country's noted editors and students of world affairs:

To have submitted would have cost us dear in prosperity; but that would have been the least of our loss.

We should have had to grovel before the German government.

We should have had to accept murder as a thing against which we could not defend ourselves.

We should have allowed this new horor to become a part of all future wars, and have been responsible for its incorporation into international law.

We should have proved that because the fire which burns up our farms' usefulness is beyond the horizon, we will submit to the kindling of it.

We might have accepted the 70 cents or less for wheat, the 6 cents for cotton and the like in case of misfortune, but we could not do it merely because we were commanded to do it.

By so doing we should have accepted degredation. We should have accepted at the behest of a half-crazed autocrat in Europe, a lower standard of living in America. We should have given up at his command the hope for our children's education, the payment of the mortgage, the better school, the new church, that whole scheme of better rural life which is based on freedom to produce and freedom to market what we produce. We should have begun, after winning our freedom in our own revolution, after establishing a Union on the foundation of liberty in the blood and tears of our war between the states, after wresting these states from the wilderness, after gaining religious freedom, and freedom of speech and of the press—after all these victories won by a people gathered from every nation of Europe in the name of freedom, we should have begun to knuckle under to autocracy! We should have basely yielded up our birthright as Americans.

Such a thought is intolerable, when we come to understand it. Peace at such a price would not be peace, but only a preparation for a future revolt against subjugation. Better any sort of war, better war forever than that. Let us remember little Holland, which fought the great empire of Spain for 80 years and finally won her liberty.

This then is the war in which we are fighting. Whenever the time comes for new sacrifices, let us remember that we fight for liberty. Not only for the liberty of the Belgians, the French, the Serbians, the Russians, the British, the Montenegrins, the Rumanians, the Italians, but of all nations, even for the German people themselves, and most of all for our own liberties. Not for our own liberties tomorow, or next year, or 20 years from now, but for our freedom today. Not for the right to live in the future, but for the rignt to make a living this year.

German oppression had begun to pinch us before we entered the war. If we had not declared war, but had accepted the conditions of life ordered for us by the kaiser, we should today be a poverty-stricken people, our factories shut down, our workmen unemployed, our people starving, our farmers ruined by the poverty of those for whose consumption we grew our crops. There is loss and sacrifice in the war, but there would have been far more of loss and sacrifice in accepting the German terms. We should have lost more in money than we have spent in the war, but we should have lost something far more precious. We should have lost our souls.

The farms of this country could carry the war to a victorious conclusion even if all the rest of the nation should quit. The rest will not quit; but we could win it without them if we had to do it.

The farmers of the United States can whip Germany.

We can whip them with guns.

We can whip them with our products.

We can whip them with our money.

Every farmer in the United States must remember that the war has a first mortgage on every cent he has. The last spare cent in the pockets of every farmer in America should be devoted to the war.

The kaiser began foreclosing his mortgage on our farms when he declared ruthless submarine warfare, and the war is our answer to his bill of foreclosure.

Our contribution is, first our sons and brothers for the trenches; second, the last pound of food-products which we can grow by mobilizing our scanty labor-supply, utilizing the man, women, children and the townspeople about us; and third, money for Liberty bonds.

This is the crucial year of the war. Our soldiers are at the front, hundreds of thousands of them in the trenches, and a million more ready to go. The while burden of carrying on our own part in the war and of aiding our sister nations in arms, rests on the United States treasury.

If the treasury fails or falters or finds itself unable to respond to every call upon it, the war is lost. Do you realize that?

Your son, and all the nation's sons are relying on the United States treasury to furnish things with which they may fight.

Their lives are lost if the treasury fails. Our country is lost if the treasury fails.

Germany wins if the treasury fails.

Therefore, every cent you can rake and scrape together belongs to the treasury that our soldiers may come back to us alive and victorious. This is literally true. We can whip the Germans with our money; but not with the money in our pockets or bank accounts. It must go into the United States treasury in subscriptions to Liberty bonds.

While Gerard was our ambassador in Berlin, the kaiser said to him one day that he would stand no nonsense from America after the war.

Do you know what that means? It means that the Germans intend to subjugate this country if they come out of this war victorious.

The German imperial government has preached the superiority of Germany to all the rest of the world until the German nation is drunk with megalemania. One of their great writers expressed the prevailing, official view in 1903, when he wrote:

"The Teutonic race is called upon to circle the earth with its rule, to exploit the treasures of nature and of human power, and to make the passive races servient elements in its cultural developments * * * Whoever has the characteristics of the Teutonic race is superior. All the dark peoples are mentally inferior, because they belong to the passive races. The cultural value of a nation is measured by the quantity of Teutonism it contains."

Are you one of the darker races?

Are you willing to be rated as one of the "servient elements" in Germany's cultural development?

You began to be one of the servient elements when peaceful people were slaughtered as they carried your produce to markt. Was it bcause you belonged to a "passive race?"

This war is for the purpose of saying to that insane claim, with the roar of a hundred thousand cannon, "No!"

In von Tannenberg's book, "Grossdeutcheland," he says—and in saying it he voiced the orthodox official view —"It is Gefmany's task today to pass from the position of a European power to that of a world power * * * A policy of sentiment is folly. Enthusiasm for humanity is idiocy. Right and wrong are notions needed in civil life only. The German people is always right because it is the German people and because it numbers 67,000,000."

If the people of the United States should ever go insane enough to think such things of itself, it would be the duty of the rest of the world to crush the United States the moment it drew its sword and started out to establish itself on that superman basis. It would be its duty to crush us, not only for the sake of the world, but for our own sakes. Until this thing is crushed out of Germany, all other nations will be looked upon by Junkerdom, as they now look upon us, as "servient elements" in the development of German kultur, as "passive races," while they are the active ones, as "mentally inferior," as peoples in dealing with whom Germany will never be so foolish as to be guided by those notions of right and wrong which are needed in "civil life only."

Never since the Turks threatened to overwhelm Europe, perhaps not even then, was the world in such danger as now. Germany is not yet defeated. We must defeat her this year. Unless we win our place in the world it is lost, and our history as one of the "servient elements" begins. We must withhold nothing from the support of the war. We must give our sons. We must bring forth food in abundance, mutiplying our labor to that end. We must give into the treasury of the United States every cent we can spare.

This summer the support of the war is up to the farmers; and Uncle Sam has never called upon the farmers in vain!

# Relief Work in France

Twelve hutments of the Salvation Army already are in operation at American camps in France, five are in the United States, more are in course of construction. It was said there are a total of 188 Salvation Army huts in France. In each of these and where else they will greet the wounded and the sick in body and soul are the colors of the Salvation army—red (blood of Jesus), blue (purity) and yellow (the flame of the spirit).

Bread and pastry baked by Salvation Army lassies in huts at the trenches already have gained fame all over the battle areas in Europe. Women officers of the organization, who with the men are ordained as ministers, also sew for the soldiers and teach them what most of their mothers have urged —to "take care of yourself."

So far no casualties have been reported from Salvation Army headquarters in France, although men and women officers have frequently been in zones of fire and have been outfitted with rubber boots and coats, steel helmets, gas masks and revolvers.

# Bad Company

## It Wrecks a Great Many Lives

**BY JEAN HENRI LE ROY.**

'Way back in the winter of '91 I met Frank Lofton. He was born and raised on a farm and was a most remarkable prisoner in many ways. He served goodness know how long for a crime he said he committed while under the influence of Demon Rum. He was charged with complicity in holding up a saloon.

His two companions were early freed of their alleget part in the crime, but Lofton, who confessed that he had some part in the affair, was left to serve his full term.

The crime for which he was convicted was one of the most sensational in that section of the state. It was shown in the testimony by the prosecuting attorsey that he had been in prison before.

Lofton was an old broken-down grafter. He'd been out of the institution a few years when I ran across him one evening. I'd been having a high fling at faro and monte and my bank roll looked like a cyclone had struck it.

I had dropped into the hotel to look up some of the boys and there I ran across Lofton.

He sidled up to me as I stood at the bar and muttered something about being married and living on the level.

After that I met him quite often. He had the nicest kiddies and a beautiful wife.

One night he sent for me. Would I come and spend the night with him? Of course I would.

That night as I sat before a glowing fire in his cosy parlor, he told me of a little incident which happenet in his quiet life that I must pass along.

"You may think it's an unreasonable tale," began Lofton, "but it ain't. I just got to tell somebody.

"It was one fine, but cold December day in '90, there came here to board, in company with two men, a young man of good appearance. He was gentlemanly, neat, reserved, sad and quiet.

"My wife said she would like to know what his past life had been, but did not think it proper to ask him. He was slow to enter into conversation, and seldom took part in our games or music, except to sing a song sometime.

"My wife was every boy's mother, and she took care of his clothes and made him feel at home, and so he stayed with us some time. One day she asked him if he had parents living, and he replied, 'A father,' but was so embarrassed that she did not question more.

"Four days after Christmas I had a little conversation with him," Lofton said warmly, "and I finally said, "Now Fred, we have become quite well acquainted, and I believe you are in trouble; tell me all about it, if you wish, and perhaps Mrs. Lofton and I can help you. I do not ask out of curiosity, but as a friend.

"'Well,' he said, 'I am in trouble. I was not satisfied at home on the farm and so wandered away, here and there until I had no friends except the rough sort. I have ever managed to keep well dressed, but have not been able to keep good company.

"'I know you would help me if you could, but I am so discouraged. I do not want to do anything bad. If I could get a good situation here as expert accountant or a stenographer, I would try to be a man—but that seems impossible to obtain.'

"Mrs. Lofton told him it would pay to be a man anyway," stammered Frank, "and life was worth living aright. Soon after we bade him good bye and told him to be true to himself and he went to work in the Zuni mountains down in New Mexico.

"The next we heard of him was through a newspaper. Three men had been arrested for holding up a saloon and gambling house. They were living in the woods and getting out props for the coal mines at Gallup.

"Among the names we read Fred Stern.

"'Oh,' we said, 'he is not guilty—it is the result of evil companions.

"They were sentenced—I think"—paused Loften, "15 years in the penitentiary at Santa Fe. Six years later Mrs. Loften and I were in the bank one afternoon when she called my attention to some one standing by the door of the bank.

"She said, 'I am sure that is Fred,' and walking up to him, said, 'Are you not Fred Stern?' His eyes filled with tears as he recognized us and said, 'Yes, what is left of me. If it had not been for your advice and kindness to me, I might still be in the penitentiary serving out a sentence for something I was never guilty of.'

"Oh, we knew, said my wife, you were not guilty of doing such a thing as robbing a saloon and gambling house.'

"'No,' said he, 'but we were in the tent together when the sheriff and deputies arrested us. The appearances were against me, but I never had anything to do with the crime. It was bad associates again—he's one of them, take him along.'

"No friends, no money, no home—a stranger and a very discouraged and weak boy—no wonder they thought him guilty when in such company," cried Lofton.

"'When I was in my cell day and nights I had time to think over things, and see where I had made mistakes that had prevented me from doing better,' Fred told us, 'and I remember your kindness and advice, and so took courage to do my best, and so they released me much sooner.

"'But, Oh, how I have suffered no one can ever know, but perhaps you may have some idea of it from this,' and as he removed his hat," whispered Loften, "we saw that his hair was quite gray.

"We shed tears together, and begged him to look forward and not backward. He married a rich and beautiful widow here the next Christmas, and has lived an honorable Christian life ever since."

Some might think this too unnatural to be true. But very often do we hear and read of just such instances where circumstantial evidence and evil company have put men and women behind prison bars to suffer for the crimes of others.

"Strange things are transpiring every day," continued Loften, "and no boy or girl who keeps bad company is sure of the future.

"How much better to seek such society as will strengthen the good that lies dormant in so many hearts, and make them true noble men and women to fill some worthy place in life and assist others to better things.

"No one can stand still in life," said Lofton, "he is becoming either worse or better, either learning or forgetting.

"Now, you see," whispered Loften, "I've squared it and settled down to try and give the kiddies an education. I want them to be somebody."

**Get the Habit.**

We have come to the end of a wheatless day.
We have eaten no cookies or pie.
We have had no bread that was made of wheat;
It was made out of corn or rye.
And we liked it so well that when war is past
And a glorious victory won,
We'll keep on observing wheatless days
And we'll eat corn pone for fun.

# All the World's a Stage, and All the Men and Women Merely Players

## The Women Bear Their Burden



Of the healthy men in France, practically all are engaged in transportation or in the manufacture of munitions, leaving agriculture absolutely to the women. Not only this, but they have stepped into the place of work animals—women of magnificent, noble womanhood are hitched to the plough and cultivate the soil. Uncomplaining, with high devotion, with an attitude that amounts almost to religious exaltation, the woman of France bears the burden.

## Succeeds Gen. Maude.



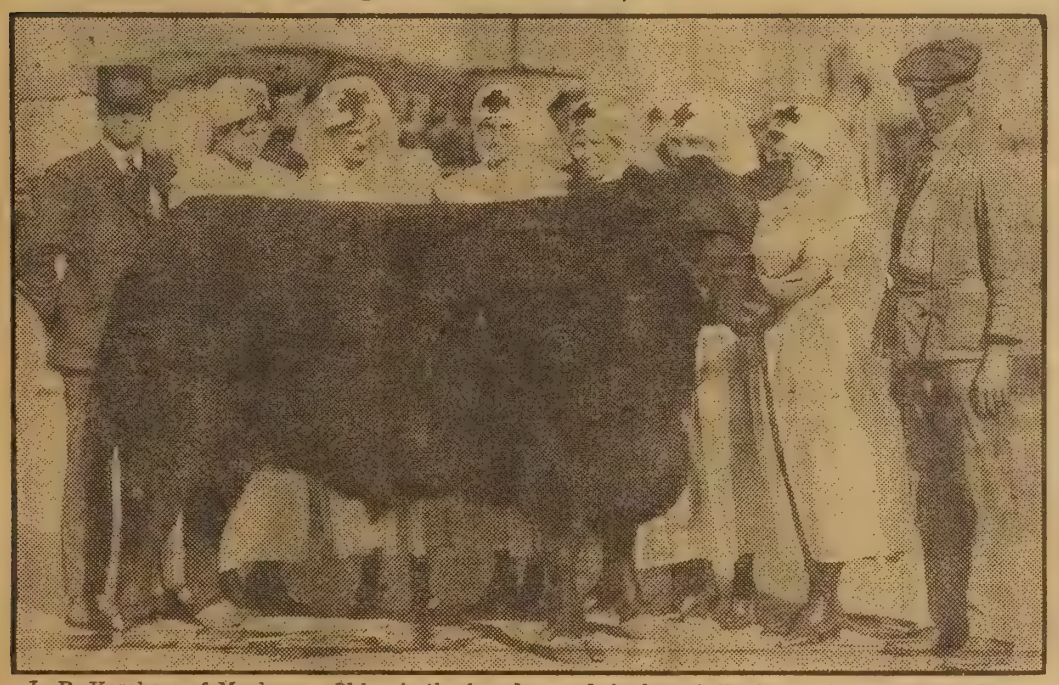
Lieutenant General Sir Walter Marshall, who is in command of the British forces in Mesopotamia, succeeding General Sir Stanley.

## Prepare Battlefield for Harvest



French peasant women stringing vines over barbed wire entanglements which separated the French and German trenches. The Germans have been driven back and these brave women are trying to rebuild their homes.

## Brings Red Cross $5828



L. R. Kershaw of Muskogee, Okla., is the breeder and feeder of Kuskogee Boy, which sold recently at Oklahoma City for $3.10 a pound for the benefit of the Red Cross. As the steer weighed 1880 pounds the sum received, $5828, was also a record for one steer. The hide goes to make President Wilson a coat and the steaks and roasts under the hide go to General Pershing in France. This steer was grand champion over all breeds at New Orleans, Atlanta and Nebraska in 1917, champion of the Angus at Chicago International, and grand champion at Oklahoma City.

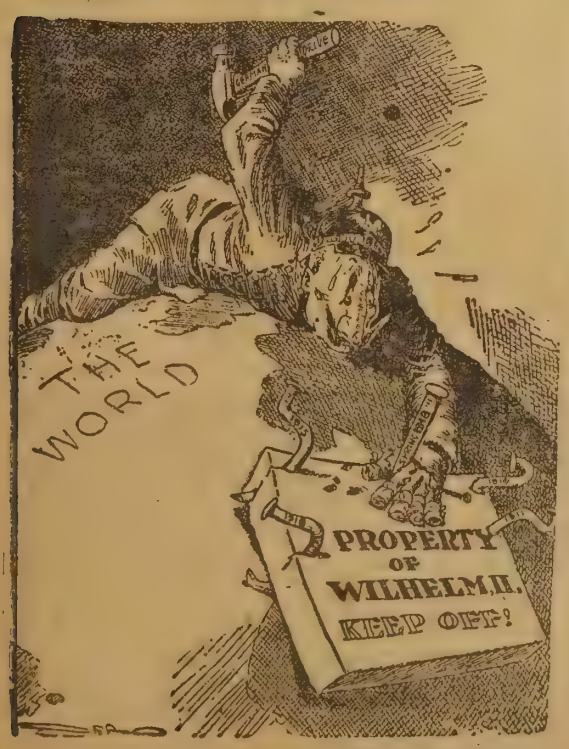
## Trying Their Mental Ability



(Com. on Public Information.)

An army recruiting officer testing the mentality of a negro applicant by means of cutout blocks. The applicant must place the blocks in their proper place within a specified time. He is then rated for accuracy and speed.

## His Final Effort



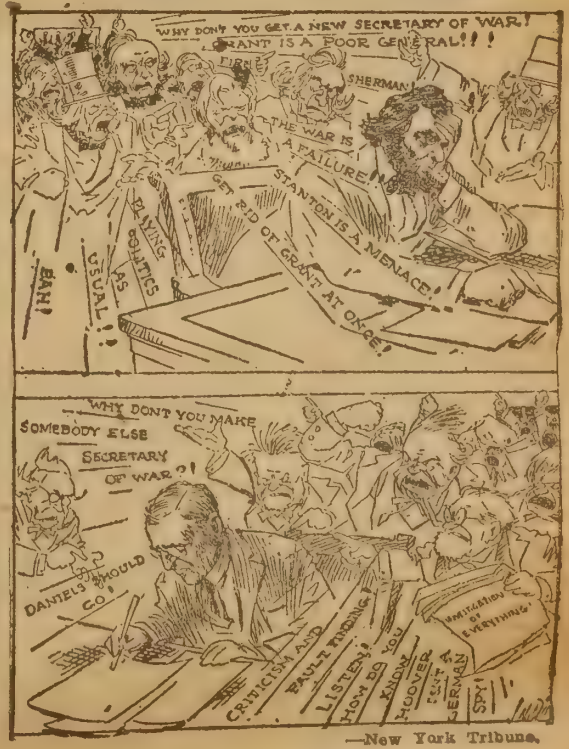

—Chicago Daily News.

## The New Recruit




—Louisville Courier-Journal.

## A Lesson From History




—New York Tribune.

# Easter Gifts That Are Easy to Make

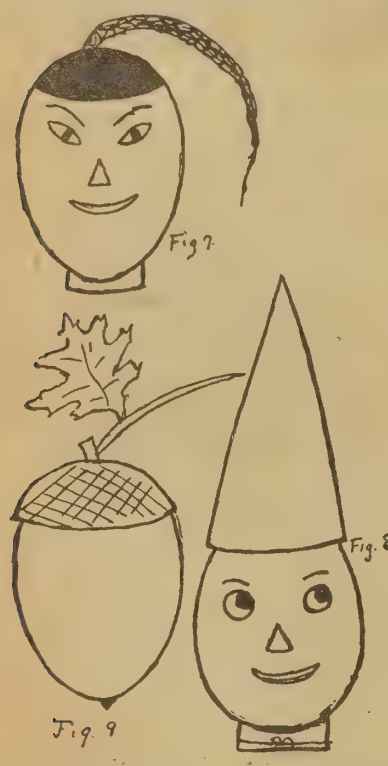
By BESSIE M. PRATT.

Some of the prettiest Easter remembrances can be made from egg shells and hard boiled eggs. It is best to use a darning needle or hat pin and make a small hole in each end of the egg and blow out the contents, except a few of the very whitest, for the dishes may have only one small end. The empty shells are better than hard boiled eggs as they can be kept indefinitely unless broken and they are not nearly so frail as one would think.




**Be Very Careful.**

To make the dishes, take white egg shells with the small end removed and chip them around evenly, a pair of tweezers are a help, but they may be broken satisfactorily with the fingers if care is taken. The paper for the handles, base, covers and saucers should be of the weight of good writing paper. Pink, light blue or green is prettier than white. The strip of paper (figure c) for the base is pasted together in a circle, then the top edge is covered with glue and the shell set on and pressed down gently for a minute. The strip (figure b) is curled slightly at each end by being rolled in the fingers and is then glued to the proper position. The cover (figure d) is made of a round piece of paper with one quarter cut out and the two cut edges glued together. The handle for the cover (figure e) is made of a tiny strip of paper pasted over the top. The saucer is made of a round piece of paper about two and one-half inches in diameter. The spout for the coffee pot or cream pitcher is made as shown in figure a, folded first in the center and then the two sides folded back and used for gluing the spout in position. The dishes are prettier if water color paints are used to decorate them, with a little gilt around the edge, or tinted to harmonize with the paper used. The set consists of coffee pot, sugar bowl, cream pitcher and cup and saucer. The set of dishes might be placed on a pretty tray made of cardboard.




The acorn (figure 9) is made from a very dark egg, or one boiled in coffee for one-half hour. The acorn cup is made of brown tissue paper and a stem is made by twisting the paper tightly and inserting it through a slit made in the paper cup, which is then glued in place. Two or three oak leaves may be added, either brown or green paper being used.

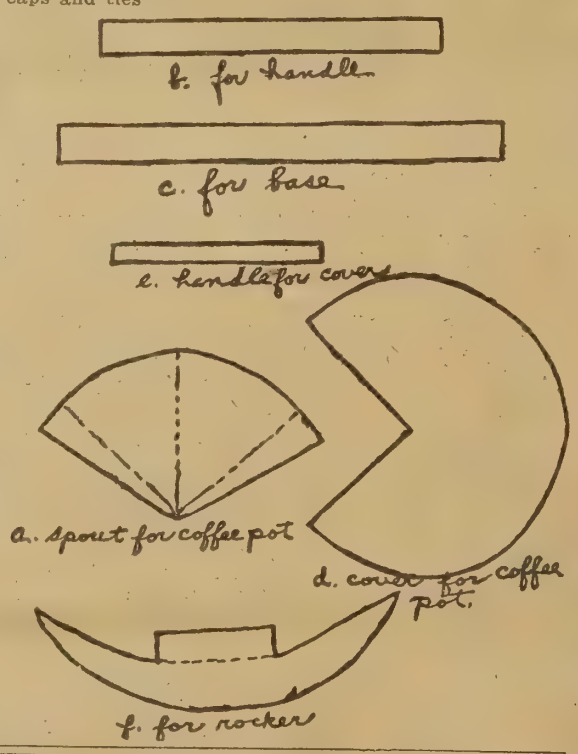
**Cradle for the Baby.**

The cradle is made of a white egg shell with one quarter broken out as shown in figure 4. The rockers are cut by the pattern shown in figure f, the straight piece to be folded over and glued to the bottom of the cradle. Put a tiny bit of cotton in the cradle and a little doll an inch long, the kind you get for a penny.

The brownie (figure 8) may be varied by making different colored caps and ties and the features drawn in differently. The base is made of white writing paper which makes brownies sit up straight and also acts as a collar. A little strip of colored paper is glued in place and tied for a tie. The cap is made of bright colored tissue paper in cone shape. The brownie is the most popular and also easiest to make.

**Can Make a Chinaman.**

The Chinaman (figure 7) is made from an egg shell carefully blown out. Mr. Chinaman's cue is made of coarse black cotton thread braided and stuck in the hole at the top. The rest of the hair is painted black with ink or water colors and the features are drawn in with pen and ink. He will also need a strip of writing paper glued on for a base. The little chick in figure 2 should be yellow and the rest of the egg left white. It would be nice to write "Easter Greeting" on the other side in gilt and tie a ribbon around it with a pretty bow.




## To Aid Liberty Loan.

The United States treasury department has announced a plan to have every rural schoolhouse made a community center, from which the work of selling Liberty loan bonds will radiate during the campaign which opens on April 6. This is the date on which this country one year ago formally entered into the war and has been chosen as a logical date for the launching of the third and largest liberty loan campaign. The amount of the third bond issue has not yet been announced.

## Soldiers Eat Potatoes.

The soldier boys in the encampments in the west and southwest will require 4,500,000 pounds of potatoes during the month of April, according to advices received by Robert L. Ringer of the United States bureau of markets. They will likewise need 275,000 pounds of onions.




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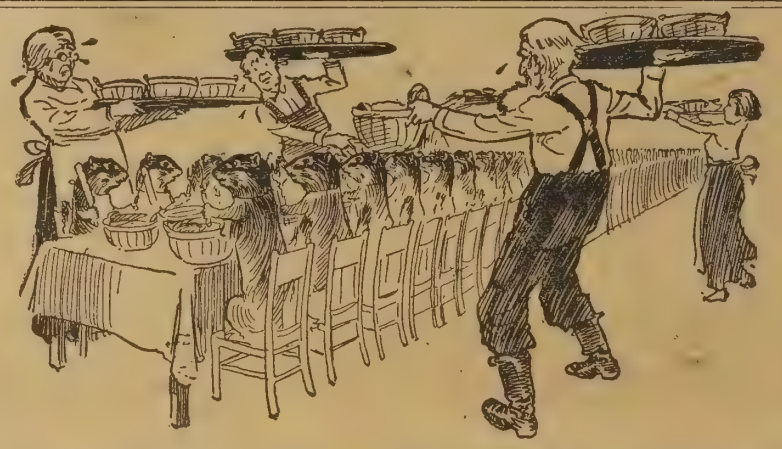
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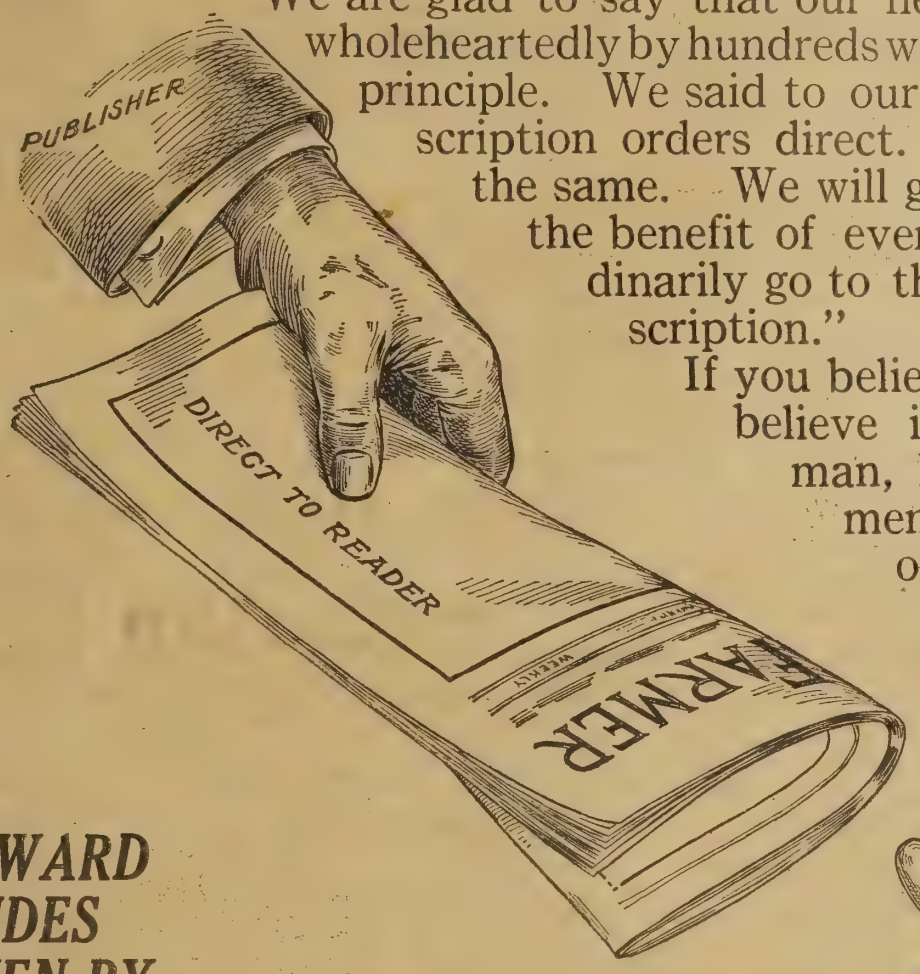
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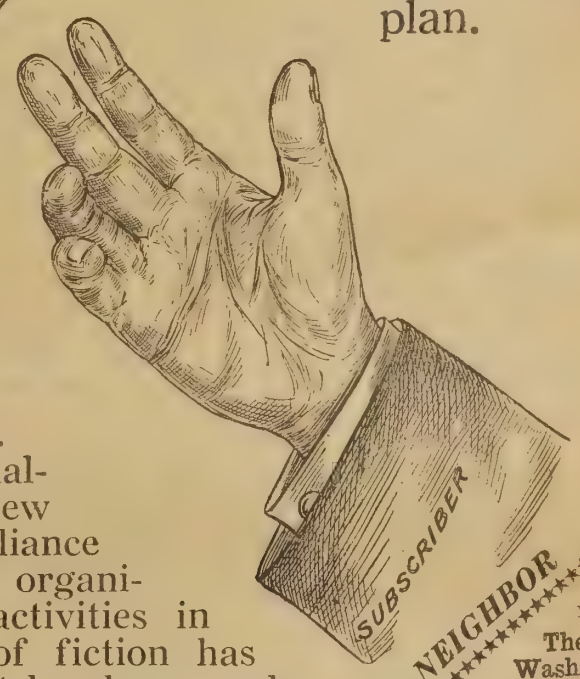
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# Trappers of the Ozarks



## The Adventures of Two Young Pioneers in the Wilds of Upper Louisiana, Now the State of Missouri.

By LEWIS B. MILLER

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**SUMMARY OF PRECEDING CHAPTERS.**

In September, 1811, two young men who lived near St. Louis, Ben Armstrong and Jodo Henderson, taking with them their two dogs and donkey Spunky, started on an all-winter's hunt in what was at that time unsettled region, where Indians held full sway, in the wilds of upper Louisiana, now the state of Missouri. After a perilous trip over old Indian trails and dangerous streams, they reached their destination — a salt spring close to the river Big Niangua, which Ben had visited before and from which they expected to secure salt for sale with their furs when they returned to civilization the following spring. Here they erected a rough cabin for their winter quarters close to the mouth of a large cave that was full of water and bats, and started their saltmaking and hunting. After exciting experiences with a buffalo herd and with a bear in a cave, they find their first fresh sign of Indians — moccasin tracks in the snow. And then, in the dead of night, a scouting party visited them preparatory to an attack.

### CHAPTER IX.

**The Earth Sets Up a Quaking.**

Noontime came, and still no Indians had made their appearance. Soon after the partners had eaten their dinner, Ben cautioning Jodo to remain near the cabin, armed himself and set off to visit their traps and deadfalls. In due time he returned with several skins. The two now stretched the furs up against the walls, on the inside this time. Later they boiled down their pots and placed about three gallons of wet salt on flat stones before the fire to dry. And when it was dry they poured it into one of their salt bags.

Brightly, warmly shone the sun today, and in most of the open places the snow melted off. That was a relief, for now the trappers could tramp about the country without leaving such a conspicuous trail. Though, in reality, now that their cabin had been discovered by the Indians, that would probably be of no great advantage.

As night was coming on the trappers carried some hay into the big cave. And there, in a dry place at one side of the noisy stream, they fed Spunky. They were trying to conceal him. They also took down the rope used in reaching the little cave. After that they brought over some salt water for their pots, carried in a good supply of fire wood, and went in and barred both the door and the window. That the night now coming on would bring them trouble they had not a doubt.

First they cooked their supper and ate it. Not long after that Ben said:

"Jodo, you tumble into bed and catch some sleep while you can. I'll stay up and keep watch."

"Hadn't I better stay up with you? I'm not the least bit sleepy."

"One can stand guard as well as two. The dogs are really the only guards needed. I'll wake you the first minute anything suspicious occurs."

"All right, then." Jodo went back and crawled into their bunk with his clothes on. He was soon asleep.

Ben covered up most of the fire, then sat down in front of what remained, with his elbows on his knees and his head in his hands. After an hour or two he got up, unbarred and opened the window shutter, and stood gazing out. There was nothing to alarm him, and he fastened the shutter and sat down in front of the fire again.

Several times he did this. At last he unbarred the door, opened it noiselessly and stepped outside, followed by the dogs. It was already past midnight by the stars. That the Indians would come sooner of later the young trapper had little doubt. But it now seemed scarcely probable that they would come tonight. Having assured himself that there was nobody near, he went in, calling Bose and Tinker, and barred the door again. After covering the rest of the fire he lay down by Jodo for a nap.

Scarcely had he fallen asleep, as it seemed to him, when he and his bedfellow were awakened by the growling of Bose and the barking of Tinker. Both sprang out of bed and seized their rifles.

Now very distinct noises could be heard outside. Somebody was trying to open the door. Ben found a crevice between the slabs and applied his eye to it. The moon had risen since he had gone to sleep, and there was a dim light outside. And by that light he could catch a glimpse of numerous Indian warriors near the door.

For a few minutes the Indians kept working at the door. At first they worked quietly, as if trying to discover how the door-shutter was fastened. Later, becoming impatient, they shook the door till it rattled noisily. And after that they seemed to be pushing hard against it. But the bars held it fast.

At length the working at the door ceased. The trappers peeped out between the slabs. The Indians were still out there. They were busy at something, and could be seen moving back and forth.

"What can we do?" whispered Jodo.

"That's to be seen. But we must keep them out. We don't want to hurt them, though, unless we have to. These are Osages, I think. They rob and mistreat white people, but they've never been bad to kill us. As long as we don't hurt any of that bunch our lives ought to be at least halfway safe. If we kill any of them, though, they'd be likely to burn the cabin down with us inside of it. An Indian will do anything for revenge."

"But unless we shoot, how can be stop them if they try to break in?"

"Oh, we'll shoot! But we'll shoot to scare and not to kill."

"I'm wondering if we can scare away that big bunch without hurting some of them."

For several minutes slight noises could be heard outside. Then, suddenly and unexpectedly, a thunderous crash struck the door and shook the whole cabin.

Peeping between the slabs Ben could see that several Indians now had a log—one that had been left over when the cabin was built—and were swinging it so the end struck the door like a battering-ram. And scarcely had he made that discovery when the log struck again, this time with a violence that threatened to splinter the door even if it could not break it or break loose the bars.

Well knowing that the assault must be stopped, Ben gouged a small hole in the mud daubing by the side of the door, thrust his pistol barrel through and sent a bullet out among the warriors. He had been careful not to hit any of them. But the Osages evidently did not know that; for they gave up their attempts to break open the door. However, they moved round to the back side of the house and began an assault on the wall.

Again and again the battering-ram struck. Everything in the cabin shook under its blows, but the wall stood firm.

Finally the red men, seeing that they were accomplishing nothing against the solid logs, moved round to the other end and began an attack on the chimney. At first the stones seemed to defy their blows, but, laid only in clay mortar, they were not firm, and at the third blow one corner of the fireplace fell out.

Ben had reloaded his pistol, and he now squatted before the fireplace, intending to send a bullet through the opening just made. But before he could shoot the battering-ram struck again and the whole chimney tumbled down with a crash. A few of the stones fell inside of what remained of the fireplace, but most of them fell outside.

And following the fall of the chimney, and seemingl as a result of it, the whole cabin began to tremble, and then to quiver, and soon to shake violently.

Now the trappers were greatly alarmed; and the Osages themselves must have been amazed at the commotion they had started. For not only did the whole cabin shake, but the ground under it was shaking, and the cliff that covered it was shaking.

Ben sprang to the fireplace—the opening where the fireplace had been—and looked out. The Indians had dropped their log and could be seen gazing around wildly, as if in terror of what they themselves had done.

"What in the world are the red varmints up to?" Jodo cried out, in his fright.

Ben made no reply at first. He was waiting for the quivering to cease. But instead of subsiding it only grew worse, till the limestone cliff could be heard grinding against the logs overhead. Now he understood.

"The Osages are not doing this! It's the earth shaking! There's an earthquake on!"

Jodo said nothing. The two stood in the center of their quivering cabin, wondering vagnely what was about to happen. The dogs, well aware that something was wrong could be heard whining as if in terror. Soon Tinker set up a doleful howl. And scarcely was the howl ended when a noisy clattering of hoofs could be heard as Spunky dashed out of the big cave and fled across the valley, his loud, terrified braying echoing from the cliffs as he ran.

But doubtless the attacking band of Osages, gathered at the outer end of the trappers' cabin, were the most terrified of all. Not only was the ground shaking under their feet, but soon gravel and stones, loosened on the mountainside above the cliff, began to shower down around them, and some even upon them. Less than a hundred yards away, toward the southwest, a huge block of the cliff, weighing many tons, fell to the earth with a tremendous reverberation.

That last, together with the stones raining down on their heads, was too much for the savages. With yelps and yells of terror they fled. Ben, looking out through the chimney hole, saw them running toward the creek. There appeared to be more than twenty in the party. He watches till they had disappeared into the woods along the creek bank.

But the earth was still quaking frightfully, and the cabin itself seemed about to tumble down. It was a terrifying time, and the fear of redskins was forgotten.

"Let's get out of here, before the whole cliff crashes down on top of us!" shouted Jodo.

Ben was more than willing. Hastily the door was unbarred, and the two, carring only the guns that were in their hands, rushed forth and took to flight, followed by the dogs. As they dashed out from under the cliff a shower of gravel pelted their bare heads, and a boulder weighing a few hundred pounds dropped to the earth but a yard or two behind them. They only fled the faster. Nor did they pause till at least a hundred yards from that dangerous cliff.

Still the ground kept shaking under their feet—shaking as with an ague. The dogs, frightened at what was taking place, stayed close by their masters, and kept up a constant whining.

And scarcely were the young trappers out in the open when they became conscious of a roar close by. Looking toward the big cave, they saw a dark cloud fluttering forth from its mouth—bats!

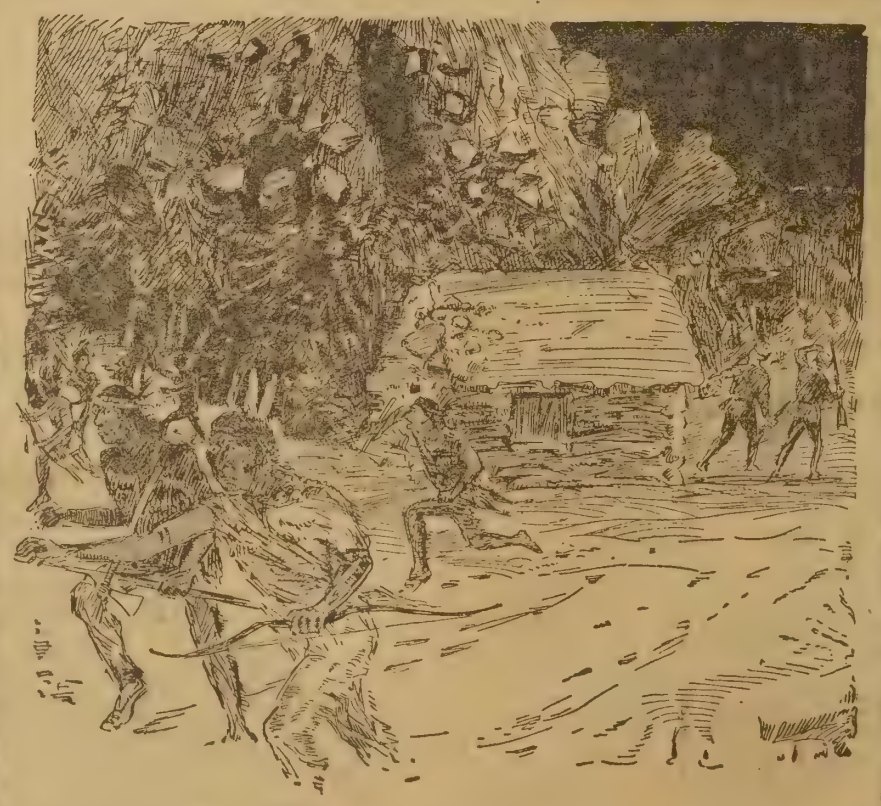
"They're swarming out by the million!" cried Jodo.

The creatures of the cave and darkness, frightened by the vibration of the rock roof and walls, seemed all to be trying to escape at once. Out they fluttered, regardless of the frosty air, and scattered in every direction.

And already still another roar, louder and very different, was beginning to be heard. That, too, seemed to issue from the mouth of the cave. Louder and louder it swelled, as the earth kept swaying and rocking, till the noise became almost deafening. To Ben and Jodo, as they listened and watched, it sounded as if the whole earth were being ripped open by some awful convulsive force.

But soon the roar burst from the cave, and the watchers saw that it was made by a torrent of water. The torrent, as wide as the cave's mouth and a yard deep, now came sweeping and thundering down Cave branch's channel toward the creek.

Probably the quaking of the earth had produced a sort of tidal wave in that subterranean sea, which was carrying much water forward and out of the cave's mouth.



**Not only the sudden coming on of a violent earthquake, but also the superstition of the Red Men contributed to save the young hunters from their enemies, though the former, shaking boulders from the cliff above their cabin, jeopardized their lives even more than did the attack of the savages.**

For perhaps an hour, from first to last, the earth kept up its rocking and swaying. After that followed numerous tremblings and quiverings, each a little lighter than the one before it. Gradually, however, the earth's foundations seemed to become fixed again.

When the most violent quaking had ceased the torrent soon ceased to pour out of the cave's mouth. Indeed, even the little stream that had been flowing from the cave now ceased to flow altogether. The bats were no longer coming out; but those already out were hurrying to get back inside, to escape the frosty air.

When the worst had passed Ben and Jodo talked of the recent disturbance. They had been through some slight earthquakes before. Such things occur from time to time in the vicinity of St. Louis. But never had they experienced anything half as frightful as what they had passed through tonight. They knew that this had been no inconsiderable earthquake; and they surmised that it might have been even worse elsewhere than here. But months must elapse before they would learn how extensive and how destructive this agitation of the earth had really been.

The young trappers, alone and far out in the wilds, had many things to worry them just now. There was still a slight trembling of the earth from time to time, and they were afraid to go back to the cabin lest a violent shock should shake the overhanging cliff down and crush them. And yet they were afraid to remain out in the open, not knowing at what minute the Osages might come back. Jodo worried more about the In-

(Continued on page forty-one.)

FAMILY CIRCLE

Write to the Editor.

ALICE W. BARLAND,
Editorial Contributor.

# Split Beans

## Make a Good Wheat Substitute

By MRS. W. F. STECHER, Pullman.

In the bean growing districts of this country many tons of split beans go to waste annually simply because no one knows how to use them. Yet these split beans—split in threshing—make one of the best wheat substitutes we have. If housewives were taught to make bread, cake, cookies, etc., by using part beans with the flour, a market would be created for this product, which would give the farmer a fair profit and help save wheat. The cost of cleaning split beans is comparatively small and if sold at a reasonable price to the public, all split beans and peas could be used for food. By partly cooking them they make good poultry feed. They are as good as the whole beans for soup, bean loaf or bean sausage, and do not require as long a time to cook. As a meat substitute beans take a prominent place.

To use beans for bread or pastry simply cook tender, allowing as much of the water as possible to boil away without scorching them. While still warm, run through a potato dicer or colander and mash the beans very fine. This is necessary to insure success in bread and pastry made with beans or peas.

**Bean Doughnuts No. 1.**

Take a lump of risen bread dough the size used for an ordinary loaf, add a cup of warm milk, half a cup of sugar or honey and wheat flour, to make as stiff as bread dough. Knead well, let rise and roll out and cut doughnuts. Lay these on a cloth to raise and when light fry brown in hot fat. These absorb very little fat in frying. If wanted warm for breakfast, place in the oven a few minutes and roll in sugar before serving.

**Bean Doughnuts No. 2.**

One cup cooked beans, one-half cup sour milk, two-thirds cup sugar, one-fourth teaspoon salt, one-half soda, and a little nutmeg and wheat flour to make dough as soft as you can handle. Fry in hot fat.

**Bean Cookies.**

One cup sugar, one cup cooked beans, one-half cup cold water, one-half teaspoon salt, one-half teaspoon soda, four tablespoons melted fat, one cup corn starch, one cup barley flour, one cup wheat flour, six teaspoons cocoa, one-fourth teaspoon cloves, one teaspoon cinnamon. Mix sugar, salt, beans and fat, add soda dissolved in the cold water, then the dry ingredients sifted together. Roll out thin, sprinkle with sugar and bake in a moderate oven.

**Sugarless Bean Cookies.**

One cup cooked beans, one cup Karo syrup, four tablespoons melted fat, one-half teaspoon salt, grated rind of one lemon, one-half teaspoon soda, one-fourth cup hot water, one cup wheat flour, two cups barley flour. Mix beans, syrup, fat and the soda, dissolved in the hot water. Add salt, grated lemon rind and stir well. Add flour, roll out thin and bake in a moderate oven.

**Bean Cake.**

One cup sugar, two eggs, one cup cooked beans, three tablespoons melted fat, one teaspoon lemon extract, one cup sweet milk, two cups wheat flour, three teaspoons baking powder. Beat eggs, sugar and half a teaspoon salt together, add the melted fat, milk and flour sifted with the baking powder. Bake in a loaf and frost with chocolate or raisin frosting.

**Bean Sausage.**

Two cups cooked beans, one cup stale bread crumbs, one onion, one egg. Mash beans very fine, add dry crumbs, finely chopped onion. Season highly with salt, pepper and sage, add the egg. Mix well and let stand an hour or longer, then shape into sausages or flat cakes, fry in very hot, deep fat. If the fat is not hot enough to brown the sausages in a few minutes they will lose shape and absorb an unnecessary amount of fat. It is not wasteful to fry in deep fat, as food so fried absorbs less than any other way of frying. Only be sure your fat is deep enough to cover the food to be fried by at least half an inch, and hot enough to brown a bread crumb thrown into it almost instantly. This fat can be used again and again.

# Sweets Without Sugar

Popcorn is a splendid substitute for sugar sweet. Pop the dried corn in a regular popper or a covered iron frying pan, shaking vigorously and taking care not to let it burn. A cup of dried corn will make three quarts when popped. It is good mixed with a little salt or melted butter and salt.

To make a sweet of it, combine with sirup. Boil together one cup corn sirup and one tablespoon vinegar until a few drops harden in water. Pour over the popped corn while the sirup is hot. This amount of sirup will cover three quarts of popped corn. As soon as the mass is cool enough to handle, grease the hands well and form into balls.

**Stuffed Prunes and Dates.**

Soak the prunes overnight, dry, and stuff with chopped nuts, raisins or apricots. Wash the dates, dry them, and stuff the same as prunes. These and the Parisian Sweets are good to eat and good for you.

# Make Soap at Home

"Let us revive the old industry of home soap-making," says P. F. Trowbridge of the University of Missouri college of agriculture. "Save the wood ashes separately from the coal ashes, build an old-fashioned leach and secure a good supply of lye. Save all the waste fat from the kitchen, including the ham and bacon rinds. These fats when fed to the chickens or hogs are worth but little more than the same amount of grain. They are worth three or four times as much when made into soap. The ham and bacon rinds and other waste kitchen grease can be boiled up with the lye without previous rendering of the fats and will make a good soft soap for scrubbing or laundry purposes.

"For making a good hard soap for general household use the fat should preferably be rendered and clarified. Custic soda should be used instead of the lye from the wood ash leach. At slaughtering time any smeared fat that is not fit for making lard or any tallow that is not wanted for edible tallow should be rendered for soap grease. In this connection it is recommended to cook up the cleaned entrails for hog or chicken feed. The grease should be skimmed off and used for soap grease.

"The following directions, if followed, will give a good quality of soap for all housesold purposes," says Dr. Trowbridge. "Put one pound of lye into an iron or stone vessel, pour on slowly one and one-third quarts of cold water. Stir with a stick until dissolved, then allow it to cool. Heat eight pounds of soap grease or tallow until it is all melted. Cool until it is lukewarm, then pour the cooled lye solution into the warm grease and stir thoroughly until well mixed and of a uniform consistency. Then pour into a wooden box lined with waxed paper or wetted cloth. Cover and set in a warm place for several days. Turn out of box and cut into bars."

# SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

## How Some "Little Things" May Cause Big Eye Troubles



Dr. Hirshberg.

Your eyes are as much a part of your bodily organization as your stomach, heart, hands or feet. They are not just two large balls set into your head to shine and sparkle, irrespective of the other members of your anatomy. You can hardly imagine for a moment your eyes, although they seem not to cooperate in the bodily labor union, can hold out just as long as you choose to drive them. Your eyes are not independent of the other members of your mechanism. When the other organs decide to quit because of the stress and pressure of overwork, do not think that your eyes will continue to sparkle bright, clear and unaffected by the other disturbances. If they refuse to strike along with the other organs, they will be made at least to cooperate in the conspiracy against your anatomical unity and help disrupt your mechanical structure.

**Never Permit Overstrain.**

All the other rebellious divisions have to do to accomplish this is to send the scarlet stream which circulates through them to the eyes. Then it is only a matter of hours or minutes at times until the muscles of your eyes cease to be accurate in their relaxation and contraction. They will probably feel weary and droop, or else they will feel an almost unbearable strain. At this point, then, your brilliant sparklers have joined the discontented factions of your physical makeup.

Perhaps this is a condition not so very frequent, however, for presumably you would not allow all your parts to deteriorate one by one without an attempt at least to keep the coordination between them. Just as you would try to aid your inner tubes and vessels in the proper execution of their tasks, so you can help your eyes in their struggle for an unmarred existence.

It is perhaps the easiest thing in the world to keep a normal machine at work. You can hardly use oil to grease the parts of the eyes, for there is no lubricant that can perform this service for them. The exercise which you give the other parts of your anatomy indirectly acts as oil to the mechanism of the eyes. It helps to change the blood, which, because of rapid circulation, makes the eyes muscles more active. Direct exercises for the eyes, however, is negative. It consists of "don't do this and don't do that."

**Points to Remember.**

Maybe you have never thought it wrong to read in bed, flat on your back. To make matters worse, you perhaps never even thought of the dimness of the light. You rub your eyes every once in a while, and probably squeeze them, too, and then continue to read. In a little while you rub again, and so on until your eyes droop and close for the night. You perhaps continue the process, and in a month, two months or perhaps a year, you begin to take notice and wonder why you need glasses or stronger lenses.

Just a little forethought could have told you that to hold the eyes in a single position for any length of time strains a certain group of muscles. Try to hold your arm extended in one direction for a while to prove this, and it will become so tired in a few minutes that you will perhaps feel stiffness of the muscles for a day or two.

Again, it does not need much contemplation to realize that reading or working in a dim light causes you to strain beyond repair another group of muscles. In a short time, if you are not careful, you will have too rapid or two slow secretion of the eye fluids, and you may soon need lenses an eighth of an inch thick and maybe have to wear eye shades besides.

By means of the roundabout flow of the blood, the stomach, heart, brain and all the other members of your organization will most likely feel the effect of visual disorders, for not a single physical division can escape the injuries done to any other. They either hang together, as a rule, or else your whole anatomical structure becomes disrupted by illness and your physical kingdom is overthrown.


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## To Can Trout

To the Editor: Can you tell me how to bottle the native trout so that they will be like canned salmon and the bones be soft. I can put up quite a few fish for winter use, next summer, if I just knew how.

MRS. AXEL ANDERSON.
Marysville, Idaho.

The above question, referred to Miss Edna Walker, extension specialist in home economics, Washington State college, is answered as follows:

The trout should be drawn and cleaned, and skinned by putting them in boiling water, little at a time. This immersion should not be long enough to break the skin, as this will cause loss of the oil or fat that the skin contains. Scrape the trout gently till the skin becomes white and clean. Wipe them dry, but do not wash them in water. Salt the fish and pack it in jars in as large pieces as will go in, cutting across and leaving the backbone in. To a quart jar, put one teaspoon of olive oil or butter on top of the fish. Clean the edges of the jar, put on the lid and let it cook 90 minutes in a pressure cooker at 10 to 15 pounds pressure; or, three and one-half hours in a wash boiler.

To make the bones soft, increase the time for the pressure cooker, at 10 ot 15 pounds, by one-half—that is, 45 minutes. It is doubtful if the bones could be softened by other than the steam pressure method of cooking. It is the intense heat of steam plus pressure that softens the bones.

### Uses for Kerosene.

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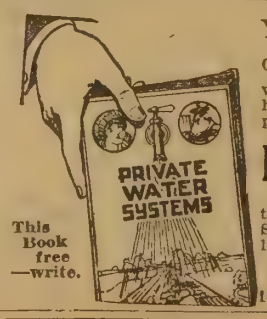
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# Trappers of the Ozarks

(Continued from page thirty-eight.)

dians than did his partner. Ben, having seen that war party fleeing as if for their lives, was confident that they would not be in any great hurry to return.

What to do now was a puzzle. Both would have preferred to start a campfire out here and sit by it till morning. But even the possibility of an arrow or a bulelt from some lurking redskin made sitting by an exposed campfire seem as dangerous as the earthquake. And the night was altogether too frosty to stay out long without fire, unless they could keep walking.

After a good while, no more violent shocks being felt, the trappers mustered up courage enough to go back and enter their cabin. They raked some fallen stones from their ash-covered fire and put wood on it instead. Then, sitting so far to one side that they could not be seen through the chimney opening, they waited to learn what would happen next. Both were ready to rush out and off at a moment's warning.

"You might as well lie down if you feel sleepy," Ben finally said. "I'll wake you promptly if old mother earth starts to cutting capers again."

Jodo laughed in a nervous way. "I couldn't sleep a wink to save my neck—not even if you glued my eyelids together."

So they continued to sit by the fire. When at last this strange, perilous night had ended, the two went out to see by daylight what damage the earthquake had wrought.

First they visited the huge block of limestone that had split off and dropped from the cliff not far to the southwest. Then they noticed a row of stones and boulders that had fallen over the cliff's top, from the hillside above. They saw likewise that the channel of Cave Branch was still without water. Not even the tiniest stream was flowing out.

"That quake must have cracked the floor somewhere, and allowed the water to escape by a lower outlet," Jodo remarked.

"Something of the kind may have happened. And I can't think of anything else that will account for it. When we go in again we're likely to find our underground lake drained as dry as a bone."

"I wonder if that torrent swept our canoe out."

"Not much telling. I hardly think so, though. It was tied hard and fast."

He was right. They afterwards found the canoe floating just as they had left it.

After a walk around the little valley, and seeing numerous frozen bats, the two returned and built up their fireplace and chimney as high as they could reach. Then they went indoors and cooked and ate their breakfast. Knowing that the Osages might come back, the trappers stayed close to their cabin till noon. After dinner Ben shouldered his rifle and set out to visit their traps. While he was returning, Jodo met him at the east edge of the valley, near the salt spring.

"Well, it's flowing again," he reported.

"What's flowing again, Jodo?"

"Why, that little creek from the big cave. It's running just as it has always run. It didn't find itself another outlet, after all."

"So I see. The rocking of the earth must have 'sloshed' a lot of water out of the underground lake; and the lake had to fill up again before there would be any overflow—before a stream could flow out of it."

"Guess that must have been about the way."

"I climbed a pretty high hill over yonder, and looked for smoke from that Indian camp-fire. But—"

"And did you see any smoke?" questioned Jodo, eagerly.

"Not a trace. I'm hoping that the whole band got such a scare from that ground-shake that they'll never stop running till they're far from this country."

"No such good luck, I'm afraid. But we'll see."

About sunset the two shouldered their guns, and after making their way around to where they could get up, they climbed to the top of the wooded mountain back of the cliff to look again for smoke. To their relief, there was none in sight. But even while they were gazing a smoke was seen to start up, as if from a just-kindled camp-fire. It was many miles away, though, and toward the northwest. Ben watched it a few minutes, then remarked:

"That smoke looks good to me. My guess is that those red fellows, after scampering away from here, hurried back to their camp, packed their belongings, and struck a bee-line for their village. And they haven't rested much till now. Let's hope they'll keep on, and that they won't visit this country again till next summer."

"We'll not get lonesome without 'em. But what would you say they thought of that earthquake? That we brought it on?"

"No telling. They may think exactly that. Savages as they are, and full of superstition, they probably connect us with it in some way. It started up just at the right time to make them think that."

"If they once get it into their heads that we can make earthquakes, or that earthquakes protect us, they'll not be apt to trouble us again soon."

After watching the distant smoke till dusk hid it from view, the two went down to their cabin. Next morning they visited their traps as usual, and in the afternoon they set off hunting. While wandering about they came upon the place where the Osages had been camped.

The fires had not yet gone out, and the rib-poles of more than a dozen wigwams were still standing. But little else was to be seen except the bones of the game the hunting party had killed. Taking the Indians' trail the trappers followed it for a mile or two. It led toward where the smoke had been seen to start up. There was no doubt that the Osages had really left the country.

"Yes, they're gone. But they'll be likely to come back sooner or later," Jodo remarked.

"We'll hope it will be later, but I'm afraid it will be sooner."

After a hunting-round, Ben and his companion returned to camp. That the Osages had departed and were not likely to trouble again for a while, was a wonderful relief to the trappers. They had troubles enough to worry them. From the night of the earthquake on for two or three weeks slight but very perceptible tremblings of the earth could be felt. Those did no harm. But they kept the dwellers under the cliff anxious lest another nard earthquake should start up—start up at any moment.

(To be continued.)


## Free War Map 64 Inches by 21 Inches in Size

A splendid four-page war map of the battle front in France, originally published in the Spokane (Wash.) Spokesman-Review will be sent free to any one who mails us one new subscription to The Washington Farmer or one new subscription for The Washington Farmer and The Twice-a-Week Spokesman-Review combined.

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**THE WASHINGTON FARMER**
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### Louisiana's New Product.

Louisiana has a new product. It is cactus candy. The cactus is peeled, dipped in hot syrup of molasses and coated with powdered sugar. Sugar mills are also taking it up as a side product to be turned out during the slack seasons of the year.

# Apt to Hit Mark

## If Each Farmer Does His Part

By GEORGE LA RUE, Twisp, Wash.

What is the most profitable crop to grow, is one of the perplexing questions that many farmers are trying to solve at this period of the season. Of course the majority that are prepared to grow wheat have the problem already solved, and will grow all the wheat they can, and are apt to neglect other farm crops that may prove more important than wheat. There will be much wheat needed, and if the summer season is favorable there will be a wheat crop in this country that will make all previous records look small. We hope such will be the case.

It is a true saying that one extreme follows another. Last year until it was too late to plant potatoes, most farmers were excited over the prospect of a small fortune from a few acres of potatoes. The result was an over supply, and many were disappointed with the over supply of potatoes and brisk demand for other farm produce; and the tendency we have to supply the strongest demands is apt to lead to a short potato crop for 1918.

Even if the government does control the price on the staple products of the farm, the supply will influence the price to a certain extent. The farmers raise their produce for the market and if they can't get the government price they will sell for less. The high price of meat and especially pork has encouraged hog raising until it is only a question of time until the supply will be too great for the demand and there will be a great slump in prices.

We are not pessimistic, but we are trying to show how often we miss it by getting excited over something that is exciting everybody else. We see how the farmer is showing his wisdom and patriotism by raising all the farm produce he possibly can. About all lines of farm industry are more promising now than they have ever been, and if we do our part in grain farming, stock raising, dairying, poultry raising or gardening we are very apt to hit the mark this year. Famine and starvation has been predicted for the American people before the end of this present year; but with a favorable season and our best efforts those horrid conditions predicted for us can be reversed and we can as well enjoy prosperity with plenty for ourselves and a surplus for our allies. Each of us will in a degree be responsible for his condition at the end of the year. The industrious will be more prosperous than usual and the lazy, shiftless ones will see harder times.

### Modern Conveniences.

A Berkshire (Mass.) man has rigged up a device whereby he can rock and read and smoke and saw the wood at the same time. The sawing arrangement is attached to his rocking chair.


## Wheatless Gems Most Palatable With Syrup Made With MAPLEINE



Your appetite will surely call for more, for there is nothing more delicious than that mapley syrup—just sugar and water flavored with Mapleine. Easy to make, costs less.

**Your grocer sells it—2-oz. bottle 35c**
**(In Canada 50c)**

Send 4c in stamps and carton top for Mapleine Cook Book, Dept. PN, Crescent Mfg., Co., Seattle, Wash.

CRESCENT MAPLEINE THE DELICIOUS GOLDEN FLAVOR

## "—use foods that require less sugar"

THIS is one of the most important recommendations of the Food Administrator: "In cooking and baking use foods that require *less sugar.*"

In other words—use Ghirardelli's. Use it freely and wisely—in place of other less nutritious and more expensive foods. Not only will you save money but you will help in food conservation.

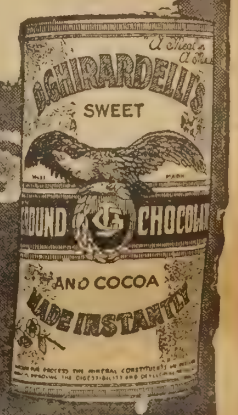
Cooking and baking require less sugar when you use Ghirardelli's. Because—it contains in itself the sweetening flavor you need. More than this—it adds a new touch of richness to your icings, your puddings and other desserts.

*In ½ lb., 1 lb. and 3 lb. cans; a tablespoonful—one cent's worth—makes a cup.*

D. GHIRARDELLI CO.

Since 1852 San Francisco

Ghirardelli's Ground Chocolate






Dear Corner Cousins: Have the cousins ever wondered what Aunt Nellie's favorite flower is? I will tell you what it is and why. The chrysanthemum is my favorite flower, not because it is a hard name to spell, but because it blooms in the winter time. It blooms when nearly everything else is still. Its blossoms are here when the snow is on the ground and when the rain is falling and the earth is frozen. I like the other flowers, too; there is the early arbutus and the volets and hyacinths and crocuses that come when the first warm days are here; and then the daisies, the roses, asters, pinks, lilacs and, about June or July, almost any flower will bloom. But the chrysanthemum blooms in the winter time.

It reminds me of a faithful friend—one that is always ready. When the winter time of sickness and loss of money comes, the faithful friend is at hand, there to cheer you up and help you, but the fair weather friend is only friendly when we are in good health and have plenty of money and everything goes nicely—the pleasant summer time. For you know there is a saying:

It is easy enough to be pleasant
When life flows along like a song;
But the man worth while
Is the man who will smile
When everything goes dead wrong.

That is a kind of a friend we want—one that will stay by us "when everything goes dead wrong." That is the time that we need to be cheered up; that is the kind of a flower the chrysanthemum is—it blooms in the winter time when life is lowest and most things are dead or sleeping.

So let us select our friends with the utmost care and take those who are real friends—who will be with us in the winter time of sadness as well as in the summer time of gladness.

Don't you like chrysanthemums, too?
Lovingly, AUNT NELLIE.

### Luella Will Write Again.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I hope it won't be the last. I enjoy reading the letters very much. I go to the Fallsview school and am in the eighth grade. I will tell you what I got for Christmas. I got a pair of gloves, a pin with the bluebird on it, a lavalliere, a handkerchief and some candies and nuts. I have five brothers and two sisters and their names are Carl, Otto, Willie, George, Alfred, Emma and Clara. My oldest brother is married. My nieces' names are Verna and Louise. They are Carl's babies. They are very cute. We have lots of horses, cows, calves, chickens and pigs on our farm. There are only six pupils in our school. Their names are George, Alfred, Clara, Julius, Ray, Bumgarner and me. My birthday is December 17 and I am 17 years old. I think my letter is getting too long. I will write again if I may join the Corner. May I?—Luella Venneberg, Manson, Wash. (We are glad to welcome another new cousin, Luella, and we do want you to write again.—Aunt Nellie.)

### Open the Corner Door for Leland.

Dear Aunt Nellie: Tap, tap, tap. I am knocking on the door of the Children's Corner. I am 13 years old and live on a farm in southern Grant county, 10 miles from Warden, our postoffice. Our school is known as the Liberty school. Our teacher is one of the best teachers we ever had. His name is J. Elmer Bovey. H is also a musician and we have organized a brass band. The band is known as the Liberty school band. All of the children have instruments. Last Wednesday afternoon the school was dismissed to take part in a patriotic rally at Wheeler, a town 10 miles from here. Our band played several selections. The town gave us a free supper and we certainly had a fine time. Hon. H. J. Hibschman and Professor Schlough of Spokane gave addresses in the afternoon and evening. The lectures were instructive and interesting. I wish the cousins good luck.—Leland Guffin, box 23, Warden, Wash.

### Viola Has Not Written Before.

Dear Aunt Nellie: I have not written to the Corner before so I thought I would write. I like to read the Corner very much. I am 11 years old. Have I a twin? If I have I wish someone would write to me. I have two sisters and one brother. We have one cow and one calf. We have a few chickens and 40 pigs. My brithday is December 29.—Viola Jessie Rudes, Box 8, Kennydale, Wash.

### Whitefaced "Funny" Is Gazel's Pony.

Dear Aunt Nellie: This is the first time I ever wrote to the Children's Corner. My birthday is the sixth of August. I have brown hair and brown eyes. Have I a twin? If so, I would like for them to write to me. We live one and a half miles from school and seven miles from town. We have 15 horses and seven cows. We also have six pigs, two dogs, four cats and about 60 chickens. I have one sister and no brothers. I am 12 years old and in the eighth grade. We walk to school. I have a pony. She has a white face and white spots on her stomach. Her name is Funny. Our cats' names are as follows: Bobby, Tom Grey and Sicy. Our dogs' names are: Joe and Santa. Our horses' names are: Queen, Chub, Darkey, Jake, Babe, Frisco, Collie, Kate, Roan, Colonel, Pitty, Dandy, Dicky, Billy and Funny. Our cows' names are: Beauty, Red, Slipper, Betsy, Flossy and Jim. We have not had any winter hardly at all. The sun has been shining daily. I hope to see my letter in print. It isn't very long. I like to read the stories in the Children's Corner.—Gazel Elizabeth Rosenkranz, St. John, Wash.

### Mama Teaches Them at Home.

Dear Aunt Nellie: May I be a a cousin? I am a little girl 6 years old. My birthday was December 17. I have only gone to school five weeks. I have two sisters, Freda, 8 years old, and Lola Maud, 4 years old. Mama teaches us at home. We are doing the second grade work. When we are at home we live on a homestead in Stevens county, but we are living in a little old log cabin in a lumber camp this winter. The men are putting logs down the hill near the cabin where we are living. They bring them to the top of the hill with teams, then they shoot them down the hill. There they are piled on skidways, from which teams take them to the mill. There is about 30 inches of snow here. We like to play in it. We are not having much candy this winter, for mama says we must Hooverize. We like to read the Children's Corner.—Gretta Dietz, Ione, Wash.

### Snow Battles Are Lots of Fun.

Dear Aunt Nellie: It has been a long time since I last wrote to you. I am 12 years old and in the sixth grade at school. My birthday was January 7. I have brown hair and blue eyes. Have I a twin? If I have I would like to correspond with her or him through the Children's Corner. I have two sisters and one brother. Bernice is 10, Mary is 8 and Jimmie is 2 years old. We live on our grandfather's farm. One night a mink got into grandma's henhouse and killed 14 hens. Grandpa killed the mink and is curing the skin now. My sisters and brother and I have lots of fun playing in the snow. Sometimes we have snow battles. I enjoy reading the Corner letters and I hope that every one will try to write to it. I am going to write again some other time.—Kathryn Margaret Smith, care A. W. Craig, Northport, Wash.

### Cuts Snips for Soldiers' Pillows.

Dear Aunt Nellie: This is the second letter I have written to the Children's Corner. I hope every cousin enjoys reading the letters as I do. I have not found my twin, but I hope I will some time. I do wish some of the cousins would write anyway, and even if you are not cousins, write to me just the same. I am 12 years old and in the sixth grade at school. My teacher's name is Mrs. Hallany. She is a good teacher. My birthday is September 27. We live on a 30-acre farm. I like the place fine. I have brown hair and dark brown eyes. My complexion is dark. I go to the Swanton school. We live four and one-half miles from town, which is Oak Harbor. It does not seem so far to town now that we have a car. The name of our car is the Buick. I am cutting snips for the Red Cross. I like to cut snips for our soldiers' pillows. I hope all the Corner children are doing something for the soldiers or the Red Cross. I do not have any brothers in the war, but I have a cousin that is expected to go across the ocean any time. Now, some one please write to me, for I am looking for a letter every day.—Bertha Millenaar, Oak Harbor, Wash.

### Mabel Was Born in Virginia.

Dear Aunt Nellie: This is the first time that I have written to you. I live in the country. I am 8 years old. My birthday is February 10. I was born in the state of Virginia. My parents came to Oroville when I yas 2 years old. My father raises wheat, alfalfa and cattle. We have 30 head of cattle and six horses. We have 40 chickens. Our hens lay 18 eggs a day. We have two pet dogs and one pet cat. My little sister thinks lots of it. We have two hogs. Sister's name is Lillian. She and I attend school in town. Sister and I often put the little calves in the barn and drive them to pasture. Our school gave a Christmas entertainment. Little sister and I sang five songs. My teacher's name is Miss Pickering. We will have some drills and songs on George Washington's birthday. I have three brothers. Their names are Roy, Talmadge and Carl.—Mabel Bogge, Oroville, Wash.

### A Long Time Since Necia Wrote.

Dear Aunt Nellie: It has been about a year since I last wrote to you. I am 8 years old. My birthday is September 21. I am in the third grade at school. Have I a twin? If I have I would like to have a letter from her. There was a girl named Anna who wrote to the Corner. She was 8 years old. Her birthday is September 17. I was going to write a letter to her, but I lost her address. I have a little pony. Her name is Maud. My papa has a new Ford car. I have a little sister. Her name is Martha. She is 2 years old. Here is a riddle: Old Mother Twichitt had but one eye and a great long tail which she let fly, and every time she went into a gap a bit of her tail was caught in a trap. Can you guess that riddle?—Necia Hire, R. F. D. 3, Box 21, Odessa, Wash.

### Good Times Coasting at School.

Dear Aunt Nellie: This is the third time I have written to the Children's Corner. I enjoy reading the letters in the Corner. We have about nine inches of snow. I belong to the Red Cross and know how to knit. I go to school and am in the fifth grade. I am nine years old and will be 10 May 14. Have I a twin? At school we have fun coasting. There is a hill in front of the schoolhouse. We start clear from the top and come down. Then it is quite level and we go down with such a force that we go down another hill. I will write to some of the cousins in the Corner. We had our term examinations and I received an average of 91 per cent. I do not have to take any more examinations this year.—Eva Boud, Valley, Wash.

### Up in the Mountains Last Summer.

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I would like to find a twin. I will soon be 10 years old. My birthday is February 25. I got 20 valentines on Valentine's day. I made 21 and over, I guess. The snow is melted enough just to make the ground muddy. My brother Carl went to Cloverland today. Papa sent him after some overshoes, but he forgot them. I had a pet grouse, but the pig turned him out and I guess he went back to his own range again. Papa was up in the mountains all summer last year. My cousins, Mr. Mizer and all of us went up to the mountains three days. Isn't this war awful? We had a new pupil come to school about two weeks ago.—Viola Thornbrne, box 74, Cloverland, Wash.

### Bernard, Our Cousin From Yelm.

Dear Aunt Nellie: This is my first letter to the Corner and I hope not the last one. I am 14 years old and will be 15 the first of April. I am in the eighth grade at school and my teacher's name is Mr. Temperly, and I like him fine. I have blue eyes, light hair and a light complexion. Have I a twin? If so I wish they would write. I live on a 10-acre farm on the Yelm prairie, in Thurston county. I have not been going to school because we had the measles in our family. May I be a cousin? I hope to see my letter in print.—Bernard La Pine, Yelm, Wash.

### Pussy Willows in the Woods.

Dear Aunt Nellie: I have dark brown hair, dark brown eyes and a dark complexion. I am nine years old and in the fourth grade. My birthday is January 3. Have I a twin? If so let them write to me. I have three sisters and one brother. Their names are Mathilda, Henrietta, Cornelia and John Henry. There is a large woods back of our house. My sister and I often go to gather pussy willows and all kinds of floers.—Jacoba Muyskens, R. R. 1, Lynden, Wash.

### A Pet Dog Named Prince.

Dear Aunt Nellie: I have never written to the Children's Corner before. I am 13 years old. My birthday is on August 27. I saw a letter in the Corner which was written by my cousin Verna. I like to go to school very much. Our teacher's name is Miss Burns. I like her very much. My papa does not take the Farmer, but my grandma takes it, so she said I could write, any way. There are certainly some very interesting letters in the Corner and I do love to read the letters. I have one brother whose name is Leslie. He is in the second grade. I am in the sixth and seventh grades. My brother has a pet dog named Prince. Have I a twin? I would like to have one to correspond with me.—Etolin Thompson, Port Stanley, Wash.

## Aunt Sally



Among the old-time games was "Aunt Sally," played by any number of person, who threw sticks at the head of "Aunt Sally," a block of wood shaped and painted to represent the face of an old colored woman. This is placed on a pole set into the ground and decorated with an old woman's cap. A dress is then put upon the figure and a tobacco pipe is stuck into the mouth. Sometimes pipes are stuck into the ears also. Players stand about 25 feet from the figure and in turn throw sticks 20 inches to two feet in length at "Aunt Sally's" head, trying to break the tobacco pipes. The side pipes count each one point and the front one two points. He who scores the most points in a given number of throws is the winner.

### Will Gracie's Twin Write Her?

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I have been reading the letters for a long time and so I thought I would write to the Corner. I am 10 years old and in the fourth grade. My birthday is September 29. Have I a twin? If I have a twin please write to me. I will write to you. I live on a 160-acre farm. I live one and one-third miles from school. There is a store there and a mill, but the postoffice is at Republic, which is a mining town. I have two brothers. Their names are Cecil and Lloyd. My oldest brother Cecil is in the same grade as I am. My little brother is going to start to school about March 15.—Grace Blackwood, R. F. D. 1, Box 107, Republic, Wash.

### Little Sunshine Is Our Cousin.

Dear Aunt Nellie: Will you let a little Grant county cousin into the Children's Corner? I would like to tell the rest of the cousins how I pass the time out here on the prairie, 10 miles from the postoffice. We have a literary at the schoolhouse every Tuesday evening. Papa and the other men debate. Us children have band music, dialogues, recitations, etc. I play an alto horn. My brother, Leland, who is 13 years old, plays a tenor. I think it is lots of fun to play in a band. The band has elected me for their librarian. Our teacher calls me little Sunshine. We all like our teacher and we hope we may get him to come back next year. Here is a kiss for Aunt Nellie and best wishes for all the cousins.—Delma Guffin, box 32, Warden, Wash.

### Hopes to Get a Certificate.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I hope I will see my letter in print. I am in the fourth grade in school. My birthday is August 23. Have I a twin? If so I would like for them to write to me. I would surely answer their letter. I like to go to school. I like to read the Farmer. We have a pet chicken and cat. I have two sisters and three brothers. Their names are Rhoda and Olive, John, Paul and Addison. I go to school every day and haven't missed yet this year. I hope I will get a big certificate this year. I was sick several times last year. There are 10 scholars in our school.—Gladys Mabel McCully, R. F. D. 3, box 61, Colfax, Wash.

### Girls Go for Horseback Rides.

Dear Aunt Nellie: This is the first time I have ever written to the Children's Corner. I have light brown hair and blue eyes. I am 14 years old. My birthday is October 27. I go to school every day. I am in the seventh grade. I like to go to school. I like my teacher. Her name is Miss Ida Stuliff. I have a black saddle horse with a white star in his forehead. His name is Coalie. I have two chums. I will tell you what their names are. They are Minnie and Olive Wilkinson. They have two black saddle horses with white stars in their foreheads. The girls come over sometimes with their horses and we go for horseback rides. —Lottie Mae Diggs, Ford, Wash.

### Snowy and Browny Are Pet Chickens.

Dear Aunt Nellie: This is the first time I have written to the Corner. I like to read the Children's Corner very much. I go to school at District 166 and am in the fourth grade. I am nine years old. My birthday is October 10. Have I a twin? If so please write. I hope to see my letter in The Farmer. I have two sisters and three brothers. We have a chicken named Jack and I have one pullet named Browny and one named Snowy. I have not been absent or tardy as long as I have gone to school. My teacher's name is Mr. Martin.—Olive McCully, R. F. D. 3, Box 61, Colfax, Wash.

### Fourteen in Her School.

Dear Aunt Nellie: This is my first letter. I am eight years old. I am in the third grade and I weigh 56 pounds. We live on a big farm. We have 107 cows and 50 horses and mules. Mama has 100 chickens. Papa has 60 pigs. I have three cats and one dog, one cow and one horse is mine. I have one brother. His name is Joe and he is three years old. He weighs 34 pounds. Fourteen children go to our school. My teacher's name is Minnie Dorrance. I would like to see my letter printed.—Irene Vera McCown, R. F. D. 3, Waitsburg, Wash.

### Has a War Saving Stamp.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 11 years old and I am in the sixth grade. My birthday is August 22. I have light brown hair and blue eyes. Have I a twin? I have three brothers and one sister. My brothers' names are Glenn, Willis and Jack. My sister is Marjorie. I joined the Red Cross and have a war saving stamp.—Marguerite Starcher, R. D. 1, Box 21, Yakima, Wash.

Address all letters to Aunt Nellie, The Washington Farmer, Spokane Wash.

# Handicraft For Girls

## By Dorothy Perkins

(Copyright by A. Neely Hall.)

### Pranks for April 1.

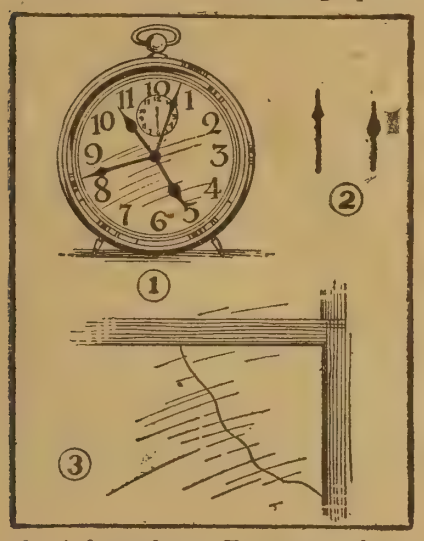
Nobody objects to being fooled on April 1, providing the prank is free from every element of danger that might result in personal injury or damage of some sort.

The success of an "April fool" prank depends upon knowing how and when to play it. You must take a person unawares, when he is not thinking of what day it is, and your actions must be natural.

During the early morning, the clock is probably the most looked upon object in the house. Therefore, if it develops an extra pair of hands overnight, the abnormality is not likely to escape any one. You must be right on the spot, of course, to greet each exclamation of surprise with "April fool!"

Figure 1 shows a four-handed clock, and Fig. 2 how the extra minute hand and hour hand are cut out of black paper. Paste the hands in place.

One of the most surprising and annoying things for father or mother to discover is a fresh crack across the corner of one of the large panes




of window glass. You can make a perfect imitation of a broken window pane by gluing a piece of cotton wrapping twine to the glass in the manner indicated in Fig. 3. Put only a touch of glue here and there, where you make a turn with the string. I have never known this deception to fail, even when the person examining the window has stood but three feet away. After every one has seen the "crack" and all are wondering "who did it!" remove the string, and have your laugh.

### Overturned Ink Bottle.

Quite as startling as the "broken" window pane is the sight of an overturned ink bottle upon one's writing desk. The ink bottle used in this prank must be empty, of course, and the spilt ink must be represented by a piece of black paper placed so as to extend up to the mouth of the bottle (Figs. 4 and 5).

You will have the job of cleaning up after playing the paper-shower window shade prank, but never mind the work, you will have had your fun.

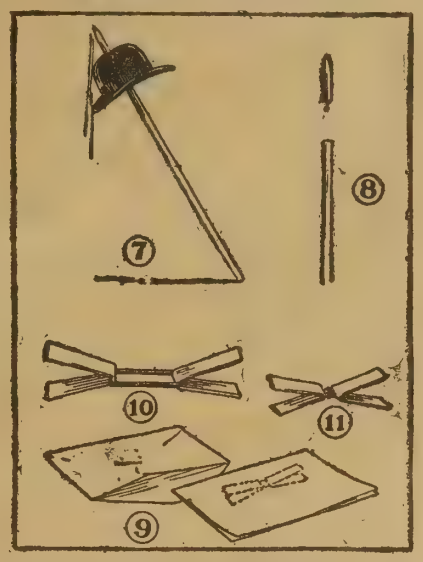



Take down the window shade roller from its fixtures, unroll the shade, scatter paper over the unrolled portion (Fig. 6), then roll it up again, and replace the roller in its fixtures. Be on hand when it is time to draw the shades at nightfall, but be careful not to have the duty imposed upon yourself, else the joke will be upon you.

Father or brother may be greatly excited upon seeing a stick apparently running right through the crown of his everyday hat (Fig. 7), but this prank does not damage in the least, because the upper end of the stick is sawed off (Fig. 8), and only a needle runs through the hat crown.

### The Flutterer.

The flutterer shown in Figs. 9, 10 and 11 may be mailed in due time to be received on April first. By having it come by mail no suspicion will be




aroused. The flutterer consists of two rolled-up pieces of paper, folded over, and connected by a rubber band. Letter "April Fool!" upon the pieces. Twist the papers in opposite directions, until the rubber band is twisted very tight. Then place between the folds of a sheet of note paper, slip the paper into an envelope, and seal, address, stamp and mail.

Upon removing the paper from the envelope, the flutterer will jump about very lively until the rubber band is entirely unwound, when the person receiving it will be able to read the "message."

# Sidelights

**One Thing.**

"Before I take the case," said the lawyer, "there is one thing to be looked into."

"I presume," said the client, "your refer to my pocketbook."—Boston Transcript.

**Wouldn't Start Even That.**

"What became of that sign you had in your bank which read: 'If you're looking for trouble, start something?'"

"Oh, we had to take it down. New customers read it and were afraid to start a bank account.—Boston Transcript.

**Certain to Win.**

"How's your boy getting on at the training camp?"

"Wonderful!" replied Farmer Applecart. "I feel a sense of great security. An army that can make my boy get up early, work hard all day an' go to bed early can do most anything."—From the People's Home Journal.

**Classified News.**

The politician rushed past the official Cerberus into the editorial sanctum.

"What do you mean?" he roared. "What do you mean by insulting me as you did in last night's Clamor?"

"Just a moment," replied the editor. "Didn't the story appear as you gave it to us, namely that you had resigned as city treasurer?"

"It did. But you put it under the head, 'Public Improvements.'"

**Too Rich Cream.**

"To illustrate the uses of advertisements," says a well-known theatrical manager, "there is one experience I had of which I often think.

"I was driving when I came to a farm where there was a meadow to let. The owner of this farm would have made a good avertisement manager, for the big poster announcing that the meadow was to let was worded:

"'This field to let, 17 acres, for grazing. Persons having old cattle, or cattle with strong appetites, had better be cautious in turning them out to graze here, as my grass is so rich that it wouild be liable to injure them for the first week or so.'"


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# Some Good Times

(Continued from page twenty-eight.)

the Rush pond that filled up regularly every spring and furnished interest and excitement until frost came. It was a big flat between two rock ledges, not more than 200 yards from the house, and along in March, when we first discovered it full of water, our thoughts flew to boating. Ed and I coaxed the big wooden tub away from mother and away we went to the pond. We set the tub upon the water and it floated beautifully. Then Ed took up the two light poles we had brought for propellers, steadied himself on one foot and set the other in the tub, which he had drawn up beside a flat-topped rock that made a landing place in about two feet of water. Now he lifted the other foot, expecting to place it also in the tub, but the tub shot out and away with startling and unseemly velocity, and feet, boy, poles and all landed in the pond with much display and watery noise.

"That won't work," he announced with conviction a few moments later, when order was restored. I agreed entirely and the experiment was at an end. Then we worked for days dragging down posts, fragments of boards and an old barn door. We nailed and hammered and toiled like slaves until we had made a raft. It was too small and part of it always sagged under water with our weight. However, we put the tub upon it and stood inside to keep our feet dry when it was too cold for comfort, and when it grew warmer we went barefoot and dispensed with the tub.

Now it was that sister Frances began to have ideas; she wanted to go swimming. Ed and I were given to following beaten paths, but Frances was more likely to blaze out new and startling trails. Long and heated were the discussions which took place, to pursuade her out of her notion. Then one day, when it was her turn on the raft, she fell off. It was a complete surprise to her and she spluttered and splashed and scrambled to get back on. The water was only waist deep, and Fanny, our little black dog, was swimming joyously round and round the raft. All at once Frances backed off and straightened up. "I'm going to swim," she announced. "No, sir," we protested. "You're wet; you've got to go home and get dry." We argued and counter argued till she had been in the water as long as she probably would have been had she gone in expressly to swim. Then she came out and went dripping off up the path to the top of the rock ledge and out of sight to the house.

When the water dried off in this pond the tules grew up higher than a man's head, and we made trails and runways and hidden places that rivaled the jungles of Africa. After three or four years a lot of cousins came from the east; the Hennings and more Youngs, and there was always a full program when we came together. There was one specially watery day in March when the bunch of us started down the road to grandfather's. The road ran in and out among clumps of tall sagebrush, stretches of rimrock, little gullies and potholes; every dip and hollow full of running snow water. We were cautioned not to get our feet wet; wise caution which we really meant to heed. I know I tried carefully at first to avoid puddles and deep places. I conscientiously hopped from rock to rock, and from one sod clump to another; but there came a time when one foot and then another slipped and went into the water. There were holes to let the water in and to let it out all over our shoes, and I became careless. The other children were going through the same process of disintegrating conscience, and by the time we were at grandfather's gate we were every one going far out of our way to find deep places to wade through. Grandma was horrified, and persuaded us to take off all our shoes and stockings, which she hung around the stove to dry. There were five or six pairs, and they made quite a display. Finally they were considered dry enough to put on and we started back, just as firmly determined to keep dry as we had been when we started from home. However the program repeated itself in every detail, and we got home wetter than before. I don't remember that mother said anything; she was pretty well used to startling exploits, and a new one more or less made little difference.

Another feature that contributed largely to our entertainment was the Indians. Every year, in springtime, they camped by the spring to dig roots for the next winter's food supply. There was the camas, the roots of the rock roses and the chuck-a-loosie—I never saw the word in print. This last root we children found quite palatable, with a flavor somewhat like a parsnip. It was like a little turnip, and grew deep, deep down in the earth among the rocks, and at the end of a very slender stem. We had no irons with which to dig them, but with our bare hands and a little stick scratched and poked and pried with an amazing amount of patience and energy to gather maybe three or four, which we proceeded to enjoy with great relish. We probably would not have cared to eat them had we not worked so hard to get them, for we never cared to eat the camas or rock rose roots.

One summer there was a consumptive Indian in the camp. We children stood by one day while he explained to father his troubles and needs. "Halo butter, halo eggs, halo milk," he finished up simply, and was silent for some time, gazing stolidly off into the west from his position on the ground, where he sat leaning against a pile of Indian luggage. After that we took great interest in bringing him fresh milk from the corral every evening, for which he and his squaw were very thankful.

One evening when it was my turn to bring the milk there was no one outside the tents in the camp. It was a raw, cold evening, and they were all inside. I didn't know which tent, but took a chance at the nearest, which was also the biggest. I parted the flap at the little entrance, stooped over and looked around inside. They were all there, sitting flat on the ground in a big circle around the little campfire in the center. The sick man's wife sat nearest the entrance and took the pitcher with a friendly smile. Then I backed out and was starting to the house when a voice called behind me. I turned, and there was the squaw looking out and beckoning me. I returned, she parted the flaps and in I crawled. Then she patted the ground beside her and I sat down. Now she drew forth one of the big leather saddle bags that can hold the Indian's entire earthly kingdom. Out of this bag she presently brought forth a pair of buckskin moccasins, which she proceeded to put, with her own hands, upon my bare feet, showing me exactly how and where they were to be adjusted and tied. Then I stood up, resting first on one foot then on the other, looked them over, said "hiu skookum" as gracefully as I could, for I was somewhat bothered by the silent inspection of the whole circle, and went away to the house.

Another evening as we were lingering near I became interested in watching one of the men roast a mouse. He had it caught in a small willow fork, and was carefully singeing off the hair. It was just getting nice and clean when we were called to the house. I hurried back as soon as I could to see what had been done with the mouse, and stood around for some time without seeing any evidence of it. Then I noticed a year-old baby taking something sleek and brown and shiny from its mouth. I edged up closer and saw it was the head of the mouse, but who got the rest of the juicy morsel has always remained a mystery.

The only time that unpleasantness suggested itself in connection with Indians was during a spell of what we later considered religious excitement among the tribes across the Columbia. There was a period of uncertainty and wild rumors, but no definite information or action, and at last it all quieted down and everything went on as before. And life was not entirely spent in pleasure seeking and joy making. I hope in time to tell of real work that had to be done in order to keep alive anr fairly comfortable during those first years of bunch-grass homestead life.

# Pocket Gophers

To the Editor: Can you inform me, through your paper, the best method for getting rid of pocket gophers? They are in our alfalfa in large numbers and give much trouble and worry in watering the land. I try to trap them, but it is slow work. J. W. MOORE.
Grandview, Wash.

The above question, answered by the zoologist, W. T. Shaw of the State College of Washington, is as follows:

We now know that much of the food used by the gopher is stored in little side pockets off the runways underground. It is therefore possible to poison the gopher in the spring by dropping poison bait down itno his runway where he is accustomed to finding his food. The direction of the runway is indicated by the way in which the mound has been made in throwing out the earth from the burrow. About a foot back of the mound prod around in the earth with a sharp peg about the size of a fork handle. When the burrow is struck, drop three poisoned cubes down into it and cover with a little dead grass to keep out most of the light.

The poison cubes are made in the following way: Cut sweet potatoes into cubes of half an inch; wash and drain well. While the sides of the cubes are still moist, sprinkle four quarts of them with this mixture:

Strychnine (alkaloid, powdered) one-eighth of an ounce.

Saccharine, one-eighth of an ounce.

The strychnine and saccharine are mixed dry.

In case sweet potatoes can not be secured, carrots or parsnips may be used. It is important that the work of extermination be done early in the season, when the ground is most free from vegetation.


**Guernsey Grades Won In Wisconsin Test**

At the Wisconsin Dairy Cow Competition held at the Experiment Station, 23 grade Guernseys averaged 10,073 lbs. milk and 475 lbs. butter fat for the year. The 4 leading cows were Guernsey grades. One produced 15,744 lbs. of milk and 729 lbs. of butter fat, and calved again during the year. She yielded a profit of $130.35 above the cost of feed. (9)

Write for our valuable book—"The Grade Guernsey"



American Guernsey Cattle Club
Box W
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in carload lots of not less than 25 tons each. Write for prices if interested.

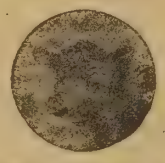
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BE SURE AND MENTION THIS PAPER

**1917 INTERNATIONAL FACTS**



Aberdeen-Angus in open competition won Grand Championships over all breeds for Carload of Fat Cattle, for Short-fed cattle and for Feeder cattle. Ed Hall's Grand Champion load of Aberdeen-Angus Steers sold for the world's record price of $42.50 a hundred pounds, and his seven loads of Aberdeen-Angus steers won $2150 in prize money over all breeds. Not only did Hall have the Grand Champion load of the Show, but the Reserve Grand Champion load, and the reserve to the Reserve Grand Champion load—the three best loads at the show—and all ABERDEEN-ANGUS.

*"The Doddie Does a Bit at Every Bite."*

AMERICAN ABERDEEN-ANGUS BREEDERS' ASSN.,
Record Bldg., Stock Yards, CHICAGO



*After the day's grind, a rest and a chew of Real Gravely. This is solid tobacco comfort; and to think—Sis sent it, too!*

**His Best Friend Sent Him a pouch of Real GRAVELY Chewing Plug**

You will be sending your friend more tobacco comfort and satisfaction in a pouch of Real Gravely Plug than in a half a dozen plugs of ordinary tobacco. Real Gravely is worth sending a long way. It is *condensed quality.*

Give any man a chew of Real Gravely Plug, and he will tell you *that's* the kind to send. Send the best!

Ordinary plug is false economy. It costs less per week to chew Real Gravely, because a small chew of it lasts a long while.

If you smoke a pipe, slice Gravely with your knife and add a little to your smoking tobacco. It will give flavor—improve your smoke.

SEND YOUR FRIEND IN THE U. S. SERVICE A POUCH OF GRAVELY

Dealers all around here carry it in 10c. pouches. A 3c. stamp will put it into his hands in any Training Camp or Seaport of the U.S. A. Even "over there" a 3c. stamp will take it to him. Your dealer will supply envelope and give you official directions how to address it.

P. B. GRAVELY TOBACCO COMPANY, Danville, Va.

*The Patent Pouch keeps it Fresh and Clean and Good —It is not Real Gravely without this Protection Seal*

Established 1831

## News for Breeders

Last November T. M. Meikle of Castle Rock, Wash., sold 10 head of grade Shorthorns to C. A. Pauley of Kelso, Wash., who brought them with a car load to the Portland Stock yards. A Chicago buyer, who was at the Pacific International Stock show, selected a pure bred barren heifer and a roan steer and took them to Chicago for Christmas beef. The cattle were off the aftermath of a meadow, with no grain. They were not exceedingly fat and the flesh they had was put on with good grass and hay. The result is quite an honor to Mr. Meikle and to western Washington beef.

B. B. Hailey of Boise, Idaho, recently purchased from Ed Carey of Carlton, Ore., a young Jersey bull out of St. Mawes Coffee Violet, that has an official record of 914 pounds of 85 per cent butter in a year. Mr. Hailey, who has a pure bred and grade Jersey herd and does a retail milk business in Boise, has made a good buy and deserves credit for his enterprise in securing so good an animal. Mr. Carey has 11 of his Jerseys on test and is making some big records as usual. Among other St. Mawes Susie will considerably increase her record of 936 pounds if no accident happens.

### Many Shorthorn Prizes.

By far the largest amount ever offered in cash prizes for Shorthorns will be awarded at the county, district, state and national shows this year, says the Shorthorn Breeders' association. The total offered by the American Shorthorn Breeders' association will exceed $60,000, and as this amount is offered on the basis of $1 appropriated by the association to every $2 offered by the fair and show organizations the combined amount will approach $200,000. In addition to this are numerous special prize offers and a great many local and county fairs have cash prize lists.

### West Washington Holstein Sale.

The coming sale of the Western Washington Holstein Breeders' association, which will be held at Kent, April 17, promises to be one of the most successful in the entire history of the organization. In the first place, this is the first sale to be held in the big sales pavilion recently leased for a term of years by the association. This will give buyers and consignors the benefit of the most convenient and the largest sale pavilion in this part of the country, while the location, midway between Seattle and Tacoma, is practicaly a central point for western Washington patrons.

In common with all sales conducted by this association, the coming sale will carry with it a guarantee of all animals disposed of, all of which will be sold subject to a 60-day retest privilege. All the leading breeders of western Washington are consigning some of their best animals—among these being the entire herd of D. J. DeHogg of Lynden, Wash., while the Greenback company will sell their proven son of the King of the Pantiacs.

P. E. T.

### Buys Young Herefords.

John A. Platt of the Platt Bros.' Highland stock farm, Genesee, returned recently from Iowa where he purchased a carload of young Herefords. Mr. Platt says that Herefords are selling at unusually high prices in the middle west, but that many are being distributed notwithstanding the high figures at which they are held.

# Breeders' Department

## HOLSTEIN CATTLE

**MOOREHEAD RANCH.**
Registered Holsteins.
Herd sire, Model Annie De Kol Segis, grandson of the famous King Segis. We have no bulls of service age, all having been sold, but we have some splendid young stuff, from 6 to 8 months old, coming on. If you are looking for real foundation stock, write us for particulars and pedigrees.
**MOOREHEAD & HOBSON.**
Breeders of Purebred Holsteins.
Outlook, Wash.

## 365-DAY HOLSTEINS

24,667 lbs. milk—1026 lbs. butter—is the s. o. advanced registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.

**THE HERD WITH YEARLY RECORDS.**
**WESTERNWOLD RANCH, Prineville, Ore.**

**REGISTERED HOLSTEINS.**
One 30-lb. bull with grand champion sire and dam; also young bull calves. Here is production and type we hear so much about.
**H. R. BOOMER, New Plymouth, Idaho.**

## HOLSTEINS

Well bred young bulls for sale.
**THOS. CARMICHAEL. Gaston, Ore.**

**HOLSTEINS BRED FOR PRODUCTION**
and
Berkshires of Quality.
Stock of All Ages, Either Sex, for Sale.
**HUGH NISBET. Chimacum, Wash.**

## AYRSHIRE CATTLE

## FOR SALE

**AYRSHIRE BULL CALVES.**
World record backing on sire's side, from good, producing cows, $75 to $100 f. o. b. any station, Oregon, Washington, Idaho. Write for snap shots and full particulars.
**MEADOW BROOK FARM, Montesano, Wn.**
J. A. Pringle, Mgr.

## Edgewater Farm

Government accredited herd, headed by Peter Pan, 63d. Bull calves available.
**E. M. CHANDLER, Burbank, Wash.**

**In answering advertisements don't fail to mention this paper.**

## HEREFORD CATTLE

## Highland Stock Farm

offers for sale Hereford bulls, one or two years old. One or a carload.
**PLATT BROS. Genesee, Idaho.**

## DUROC-JERSEY SWINE

## IOKA FARM DUROCS

Open and bred gilts and one excellent boar at breeding age.
A. N. DOERFLER, MGR.
**DOERFLER BROS. Silverton, Ore.**

**DUROCS.**
Boars and open or bred gilts of excellent breeding.
E. E. PRICE, CABINET, IDAHO, OR
**JAMES N. PRICE. Yakima, Wash.**

## BERKSHIRE SWINE

## Riverby Orchard Berkshires

Riverby Orchard Berkshires won 12 out of 15 first prizes at the Washington state fair, 1916, also many prizes, including grand champion sow at the Panama-Pacific world's fair. We offer for sale a few good boars and young sows.
**D. C. BUNN, Prosser, Wash.**

## POLAND CHINA SWINE

## Poland Chinas, 2 Service Boars, $30

each; one 17 mo., $45. 12 Bronze turkeys, no better. Barred Rocks, Buff Orpingtons, White and Brown Leghorns, Guineas, Pekin and Indian Runner ducks. Eggs, $2 per setting; A1 stock.
**E. A. KRAUSE, Roseburg, Ore.**

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## SHEEP

Full blood Lincolns, Romneys, Corridales and Hampshires. Ewes and rams, small or large lots. For sale by
**H. STANLEY COFFIN,**
Breeder and Importer. Yakima, Wash.

## 20 Head——Jacks and Jennets For Sale——20 Head

For forty years we have been breeding them. For twenty-eight years they have won every premium offered through Oregon and Washington, with one exception. They are native-bred, and all of them make good. We have mules to show from them, and we make prices that are lower than importers can meet. Come and see them, or write.
**EASTERN OREGON JACK FARM.**
**B. F. Swaggart, Proprietor. Lexington, Ore.**

## COLFAX BLUE RIBBON STUD

**COLFAX, WASHINGTON.**

**IMPORTERS, BREEDERS AND DEALERS IN PERCHERON, SHIRE, CLYDESDALE AND BELGIAN STALLIONS AND JACKS**

We are confident and fully believe that you will find here a **GREATER, LARGER,** and **BETTER** selection of the **FOUR** principal draft breeds than can be found in any stable in the northwest, and on the most **LIBERAL TERMS,** and we know that if you will visit our barns that you will find our prices within the reach of any one wanting a stallion, and that you will save considerable money, believing that we are in a position to make you prices that **DEFY COMPETITION,** and a **GILT-EDGED BREEDING GUARANTEE** with every stallion sold. Write us your wants.

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## Hercules Shorthorns

We can supply you with choice, well grown bulls and females of breeding age. Your inspection of our herd is invited. Visitors always welcome.

## Day & Rothrock Company

**205 Exchange Bank Bldg. Spokane, Wash.**

**REGISTERED SHORTHORN COWS,**
Young bulls and heifers, sired by Scotch bulls: liberal terms.
**CALDWELL CATTLE CO., Caldwell, Idaho.**

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Breeders of top registered Shorthorn cattle.
Correspondence solicited.
**WENDELL, Idaho.**

## POULTRY



## White, Buff and Blue Orpingtons

**(Capt. De Bathe Strain.)**

Speckled Sussex and Anconas. All single comb. Aldrich strain Orpingtons, Sheppard Anconas. My birds took first prizes at all leading shows of Pacific Coast. Prices for stock, eggs and chicks reasonable. All from best laying birds. Finest lot of cockerels I've ever raised. A few White Holland and bronze turkey toms for sale.
**IRA N. DELINE, Olympia, Wash.**

**VIBERT STRAIN S. C. REDS.**
Eggs NOW $6 per hundred; settings NOW $1.50 to $5 per 15. Three special pens headed by cockerels from a 289-egg trap-nested hen. One pen headed by magnificent cock bird that has kept his wonderful color through the moult and well into his second season. He is one great bird. If you need new Red Blood, you need Vibert blood from the largest pure Vibert flock on the Pacific coast.
**MRS. ROMINGER. Underwood, Wash.**

**RHODE ISLAND REDS AND WHITES**
both combs. Mammoth Bronze turkeys and Mammoth Touluse geese. My birds are true blue—winners and qualities. Have a few S. C. Red and R. C. White cockerels at $3 and $5 each. Have a limited number of Mammoth Bronze gobblers at $8 and $10 each. We are booking orders for eggs. Write for mating list. No baby chicks.
**Highland Fruit and Poultry Ranch.**
J. Nonnenmacher, R. F. D. 3, North Yakima, Wash.

## BABY CHICKS

Rhode Island Reds, White Leghorns. Don't wait until March or April to order and then be disappointed because you can't get them. But order now from our heavy-laying strain. Send card for price list.
**MAPLEBROOK POULTRY FARM.**
Box 3, Southworth, Wash.

## MY BARRED ROCKS

won this season at the Inter-State fair, 6 blues out of a possible 10; at Coeur d'Alene 1 and 2 cockerel; at Wenatchee, 1, 2 and 3 pullet, 1 and 2 cockerel and 2d cock. At Moscow, 1, 3 and 4 cockerels pullet bred. Eggs from exhibition pens $3 per 15; choice pens, $2 per 15.
**J. E. HORTON, 2408 Altamont Blvd., Spokane.**

## Mammoth Bronze Toms

Strong vitality, $6 to $8 each; no charge for crates. Barred Rock eggs for hatching, $10 per 100; $2 per setting.
**S. M. WILSON, Carley, Wash.**

**SINGLE COMB BROWN LEGHORN**
male birds, $3 and $5 each; mated breeding pens, $15. Eggs for hatching. Write for mating list. The Up-to-Date Poultry Farm.
**ARTHUR W. WADE, Box 3, Marysville, Wn.**

**S. C. RHODE ISLAND REDS.**
Eggs for hatching from heavy winter laying stock; $1.50 per 15, $7 per 100. Young Flemish Giant hares.
**W. T. WILSON, R. 3, Weiser, Idaho.**

## "Blue Ribbon" White Leghorn

Hatching eggs, chicks, pullets and matings. Five years' careful trap-nesting and selection for egg production.
BEST SHOW RECORD in central Washington.
RECORD 1918 SHOW: 1st sweepstakes, young pen; 1st and 2d sweepstakes, old pens. 1st, 2d, 3d pullet and 2d hen. Best mating 15 hens average 217 eggs. Hatching eggs, $1.50, $3 and $5 per setting. Satisfaction guaranteed.
**MRS. HANS J. SMITH, Wenatchee, Wash.**

## S. C. White Leghorns

Day old chicks and hatching eggs from 600 trap-nested breeders. $2 per setting of 15, $8 per 100; $15 per 100 day old chix. Special prices on large orders. My service is prompt. I guarantee satisfaction. Write me your wants today.
**H. L. BLANCHARD'S POULTRY FARM,**
Chimacum, Wash.

## Black Sumatra, Buff Orpington

S. S. Hamburg, I. R. duck eggs from first prize winners, 12½c each. Others 7c. M. B. turkey eggs, 25 to 50 cts. each.
**J. WELLBORN, Warren, Ore.**

## HATCHING EGGS

Barred Plymouth Rock. Thompson's Imperial Ringlet strain and Morningside, trap-nested, bred-for-eggs strain. S. C. Rhode Island Red, Tompkins strain. S. C. White Leghron, trap-nested English strain. Write for prices. Morningside Poultry Farm.
**FEHNEL & KIRCHNER, PROPS.**
Box 146, Blackfoot, Idaho.

**EGGS AND BABY CHICKS**
from trap-nested and Hoganized Golden Campines, White faced Black Spanish, Barred Rocks and S. C. White Leghorns. Prices reasonable. Write for folder.
**ED BRYANT, R. 2, Roseburg, Ore.**

**S. C. R. I. RED EGGS FOR SALE.**
Mated with Batten's cock birds, producing great layers and beautiful show birds. Mine are among the highest record Reds in the west. Prices for eggs reasonable.
**VERNAL FORREST, R. 1, McMinnville, Ore.**

## TRAP-NESTED BARRED ROCKS



All hen-hatched and hen-raised. Every hen trap-nested. First pen has, I believe, for past two years highest Barred Rock av. egg record in the world. All other pens practically same blood lines.
Pen 1, 12 hens, av. over 240 eggs, crossed to yearling cock, parents av. 260 eggs, $5 setting of 15. Pen 2, 25 yearling hens, av. over 200, crossed to 2 sons of No. 44, 708 eggs in 3 yrs., $5 setting of 15. Pen 3, about 20 hens and pullets, with reserve cocks and cockerels, same breeding $3.50 per 15. A few cocks and cockerels from $5 up.



**IRVINE P. GARDNER. Riddle, Ore.**

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, March 25.—Grain prices weakened today, owing chiefly to the bearish effect which war developments appeared to have exercised temporarily on the New York stock market. Corn closed unsettled, 1-8 to 1-4@3-8 net lower, with March $1.27 3-4 and May $1.25 3-4@1.25 7-8. Oats finished 1-2@5-8 off to 1-8 advance. Provisions wound up at virtually the same figures as on Saturday.

Reports that an increase of oats acreage would be at the expense of corn helped somewhat to steady the corn market in the late dealings. Rallies in Wall street quotations tended likewise to give a little more courage to holders.

New buying on the part of export interests aided in counteracting weakness of the oats market. War happenings and a likelihood that the Illinois acreage of oats would be enlarged had previously led to general commission house selling.

In provisions demand from packers overcame the influence of lower quotations on hogs.

**Chicago Futures.**

| | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| Corn— | | | | |
| March .... | 1.27¾ | ..... | ..... | 1.27¾ |
| May ..... | 1.25⅝ | 1.26 | 1.25⅝ | 1.25¾ |
| Oats— | | | | |
| March .... | .89⅜ | .90¾ | .89⅜ | .90 |
| May ..... | .84¾ | .85¾ | .84¾ | .85¼ |
| Pork— | | | | |
| May ..... | ..... | ..... | ..... | 48.60 |
| Lard— | | | | |
| May .....26.15 | | 26.27 | 26.15 | 26.25 |
| July .....26.17 | | 26.22 | 26.15 | 26.20 |
| Ribs— | | | | |
| May .....24.90 | | 24.97 | 24.90 | 24.97 |
| July .....25.32 | | 25.32 | 25.30 | 25.30 |

**Cash Quotations.**

CHICAGO, March 25.—Corn—No. 2 and No. 3 yellow, nominal; No. 4 yellow, $1.55@1.62.

Oats—No. 3 white, 91¼@92c; standard, 91½@92c.

Rye—No. 2, $2.91.

Barley, $1.55@1.85.

Timothy, $5@8.25.

Clover, $28@31.

Pork, nominal.

Lard, $26.20.

Ribs, $24.07@24.57.

**Pacific Northwest Grain.**

PORTLAND, Ore., March 25.—Grain 30-day options: Oats—No. 2, $70 bid; barley feed, $74; brewing, $81. Esatern oats and corn in bulk: Oats—No. 3 white, $64.50 bid; 38-pound clipped white, $65.50; corn No. 3 yellow, $68; corn No. 3 mixed, $67: oats No. 3, $64.50; clipped oats, $65.50; corn yellow, $68; mixed corn, $67.

**Minneapolis Grain.**

MINNEAPOLIS, March 25.—Wheat—Receipts, 184 cars, compared with 856 cars a year ago.

Corn—No. 3 yellow, $1.75@1.80.

Oats—No. 3 white, 89@90c.

Flax, $4.06 1-2@4.08 1-2.

Flour unchanged. Shipments, 39,948 barrels. Rye, $3@3.02.

Barley, $1.60@2.

Bran, $32.78.

## Live Stock Quotations.

**At Omaha.**

OMAHA, Neb., March 25.—Hogs—Receipts, 14,600; market, 10c to 15c lower. Heavy, $16.25@16.85; mixed, $16.35@16.55; light, $16.30@16.95; bulk, $16.30@16.60.

Cattle—Receipts, 9500; market, steady to 10c lower. Native steers, $9.75@13.75; cows and heifers, $8@11; western steers, $8.50@12.50; Texas steers, $7.75@10.50; cows and heifers, $7.50@9.75; caners, $7@8; stockers and feeders, $7@12; calves, $9@13; bulls, stags, etc., $7.50@10.

Sheep—Receipts, 13,000; market, steady to strong. Yearlings, $13@15.50; wethers, $12@14.25; ewes, $11.50@14; lambs, $16.25@18.25.

**At Chicago.**

CHICAGO, March 25.—Hogs—Receipts, 77,000; weak, 15c to 25c under Saturday's average. Bulk, $17.10@17.55; light, $17.05@17.70; mixed, $16.70@17.65; heavy, $16.10@17.35; rough, $16.10@16.40; pigs, $12.75@16.50.

Cattle—Receipts, 12,000; weak. Native steers, $9.50@14.40; stockers and feeders, $7.90@11.75; cows and heifers, $7.10@12; calves, $10.50@16.

Sheep—Receipts, 18,000; weak. Sheep, $11@15; lambs, $14.50@18.65.

**At Portland.**

PORTLAND, Ore., March 25.—Cattle—Strong, receipts 1322. Medium to choice steers, $11@11.80; good to medium steers, $10@11; steers, $8.50@10; choice cows and heifers, $9@10; common to choice cows and heifers, $8@9; canners, $4.25@6.25; bulls, $5@9; calves, $7.50@12; stockers and feeders, $6.50@9.50.

Hogs—Weak; receipts, 1930; prime light, $16.85@17; prime heavy, $16.50@16.75; pigs, $14.75@15.75; bulk of sales, $16.90@17.

Sheep—Steady; receipts, two. Western lambs, $15@15.50; valley lambs, $14.50@15; yearlings, $13@13.50; wethers, $12.50@13; ewes, $9@12. Shorn sheep, 2½c to 3c under quotation.

**Spokane Stockyards, Monday.**

Hogs—Receipts, none; market, steady. Prime light, $16.75@17; prime heavy, $16.75@16.85; pigs, $14.50@15.25; stockers and feeders, $12@14.

Cattle—Receipts, 300; market, strong to higher, four loads of prime heavy steers bringing top price of $12 per cwt., breaking records for these yards. Best beef steers, $11@12; good steers, $9.75@10.75; common to good steers, $8.25@9.75; best beef cows and heifers, $9@10; good cows and heifers, $7.75@8.75; ordinary to good cows and heifers, $6.25@7.50; canners, $4.25@6.25; bulls, $6@10; calves, $7@12.50; stocker and feeder steers, $6@8.25.

Sheep—Receipts, none; market, steady. Prime lambs, $14.50@15.25; good lambs, $13.25@14; prime yearlings, $12.50@13.25; prime wethers, $12@12.75; best mutton ewes, $9@10.75.

## Portland Market.

PORTLAND, March 25.—There was no trading in the local grain market at the close of the week. The exchange was closed to give the members an opportunity to hear the grain dust explosion lecture by Dr. H. H. Brown of the United States bureau of chemistry. Dealers reported a keen demand in the country for milling barley and $80 f. o. b. was offered wherever any barley was available. Oats are dull with no offerings and but little inquiry.

Egg storing is proceeding on a larger scale. Local handlers have about come to the conclusion that prices will be no lower this spring. There is a good city trade, but not much shipping inquiry.

City creameries found they could not make the recent one-cent advance in print butter stick, in the face of the general weakness of the market, so they have cut prices four cents to 49 cents in plain wrappers and 50 cents in cartons. At the same time they lowered the buying price of butter fat four cents to 51 cents for No. 1 grade. This brought down cube prices and at the close of the week extras were going at 47 cents.

Country dressed meats are ruling very firm with limited receipts. Poultry arrivals are small and prices are more or less nominal.

In the following list of quotations the grain, hay, mill feed, hops, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 2 white, $60 per ton.

Millstuffs—Bran, $30 per ton; shorts, $32.

Barley—No. 1 feed, $74; brewing, $81; rolled, $77@79.

Hay—Buying prices: Timothy, eastern Oregon, $27; alfalfa, $24.50; grain, $22.

Eggs—Oregon ranch, case count, 34½@35c per dozen; candled, 36@37c.

Poultry—Ducks, 32@35c; turkeys, live, 26@27c; geese, 20@21c.

Butter—City creamery, prints, 49@50c per pound; cubes, extras, 47c.

Cheese—Tillamook triplets, 26c; Young Americas, 28c.

Dressed meats—Veal, 20@20½c; pork, 21@21½c.

Hops—1916, nominal; 1917 crop, 14@17c.

Potatoes—Oregon, buying price, 75c per 100.

Wool—Eastern Oregon, 44@65c; valley, 50@55c.

Beans—Buying prices: Oregon white navy and Lady Washington, 10¼@10½c; white kidney, 10c; colored, 9c.

## Butter and Eggs.

PORTLAND, Ore., March 25.—Butter—Prints, extras, 49@50c; cubes, extras, 47c; prime firsts, 46c; dairy, 31c. Butterfat, Portland delivery, No. 1 sour cream, 51c.

CHICAGO, March 25.—Butter—Higher; creamery, 35@41c.

Eggs—Lower; receipts, 17,001 cases; firsts, 34¼@34½c; ordinary firsts, 33@34c; at mark, cases included, 33@34c.

SAN FRANCISCO, March 25.—Butter—Extras, 46½@48c.

Eggs—Fresh extras, 39c; extra firsts, 37c; firsts, 36½c; fresh extra pullets, 37c; firsts, pullets, 35c.

Cheese—Young Americas, 27½c.

**METALS.**

NEW YORK, March 23.—Bar silver, 92 7-8c.

LONDON, March 23.—Bar silver, 46d.




If you want cows that yield the greatest net profit learn why

PURE BRED **HOLSTEINS**

Are the most Profitable Cows on Earth.

They yield the largest quantities of milk, butterfat and profits. They are strong, vigorous, persistent milkers and thrive anywhere.

Let us show you—send for free booklets.

**The Holstein-Friesian Association of America, Box 205 Brattleboro, Vt.**


## Seattle Market.

**BUYING PRICES.**

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots, f. o. b. Seattle:

Eggs—Local, 37c per dozen.

Poultry—Spring roosters, live, fat, 2½ to 5 lbs., 26@27c; old roosters, 17c lb; squabs, large, $3.50 dozen; geese, fat, live, 20c lb.

Butterfat, 53c lb; dairy butter, 35@36c.

Beef—Buying prices: Prime beef, steers, 11@12c; cows, fat, 9@11c lb; heifers, 10@11c.

Hogs—Light, 18@20c; lb; heavy, 17@18c lb.

Veal—Fancy light, 17@18c lb; heavy, 9@16c lb.

Hides—Salted, 14c lb; flint-dry hides, 29c lb; salt kip, 16c lb; green hides, 11c lb; green calf, 23c lb; dry calf (under six pounds), 29c lb; bulls and dry salts, 4c lb less; green bulls, 9c lb; dry salts, 4c lb less; green bulls, 9c lb. Clean long wool, western Washington flint dry pelts, 39c per lb; heavy to clean eastern Washington flint dry pelts, 30@35c lb.

**SELLING PRICES.**

Feed—Scratch, $79 per ton; all grain chop, $77 per ton; oats, $76 per ton; rolled oats, $77.50 per ton; bran, $34 per ton; shorts, $33.50 per ton; soy bean meal, $67 per ton; whole corn, $79 per ton; cracked corn, $81 per ton; alfalfa meal, $36; rolled barley, $35 per ton; Milo maize, $75 per ton.

Hay—Eastern Washington timothy, $36@37 per ton; alfalfa, double compressed, $40@41 per ton; wheat hay, $28 per ton; Puget sound, $27@28 per ton; straw, $14.

Butter—Washington creamery extras; cubes, 48c lb; do bricks, 49c lb.

Eggs—Fresh ranch, 41@42c dozen.

Potatoes—Puget sound, $20@23 per ton; eastern Washington, $25@28 per ton.

## Spokane Market.

**WHOLESALE.**

**Vegetables**—Cabbage, $4@5 cwt; carrots, $1.25@1.50 cwt; bunch carrots, 75@90c doz; bunch beets, 75@90c doz; beets, $1.50 cwt; rutabagas, $1.75 cwt; parsnips, $1.75 cwt; hothouse lettuce, 75c 5-lb box; head lettuce, 65@85c doz, $2.75@3 crate; turnips, $1.50@1.75 cwt; bunch turnips, 75@90c; California new turnips, $2 cwt; red bell peppers, $1.25 box; chilli peppers, 25c lb; green peppers, 11c lb; Mexican tomatoes, $3 lug; celery, 90c@$1 doz; hothouse cucumbers, $2 doz; cauliflower, $1.50 doz; new garlic, 10@12½c lb; parsley, 50c doz bunches; horseradish root, 12½c lb; brussels sprouts, 12½c lb; radishes, 50c doz bunches; rhubarb, $2.25 25-lb box, 10c lb: spinach, $1.35 crate.

**Onions**—California onions, $2.75 cwt; Oregon onions, $2.75 cwt; green onions, 40c doz bunches.

**Grapes**—California cluster raisins, $2.25 box, 20 packages.

**Tropical Fruits**—Bananas, 6c lb; lemons, $7.50 case; navel oranges, $6@6.50 case; budded seedling oranges, $5.75@6.25 case; Blood oranges, $3.50 half case; Florida grapefruit, $5.75@6.25 case.

**MEAT.**

**Beef**—Beef steers, 16½@19c lb; cow beef, 15½@18c lb; heifers, 18½c lb; beef loin, 25@27c lb; steer chucks, 16½@17½c lb; prime ribs, 22@24c lb; rump and round, 19c lb.

**Mutton**—Breakers, 25c lb.

**Lambs**—26@27c lb.

**Pork**—Packer dressed hogs, 26@27c lb; pork loins, 29@30c lb; legs, 26c lb; shoulders, 24c lb; leaf lard, 28c lb; tenderloins, 40c lb; spareribs, 18c lb; country dressed hogs, with head on, 20c lb to producer.

**Smoked Meats**—Washington hams, 33@34c lb; T. C. hams, 34c lb; T. C. bacon, 45½c lb; Washington bacon, 40½@44½c lb; picnics, 23½c lb; Boston butts, 28½c lb; English bacon, 36½c lb.

**Dry Salt Meats**—Clear bellies, 30c lb; lean backs, clear, 29c lb; sides, 29½c lb.

**Lard**—Tierces, 27½c lb, $14.85 case; compound, tierces, 23½c lb.

**POULTRY.**

**Dressed Poultry**—Frozen hens, 28c lb; frozen springs, 28c lb; frozen broilers, 32c lb.

**GRAIN AND FEED.**

**Rice**—Fancy head, $7.50@9.50 cwt.

**Flour**—Bluestem, $9.40; Blend, $9.40; Montana hard wheat, $10.40; graham, $8.60 bbl, 49-lb sacks; whole wheat, $8.80; eastern rye, $10.10; eastern rye meal, $10.30; oat flour, $13.10.

**Oats**—$74 ton whole, $76 rolled, delivered in city.

**Corn**—$77 ton; cracked corn, $79 ton.

**Bran**—$30 ton; shorts, $32 ton; bran and shorts, $31 ton.

**Barley**—Rolled, $7½ per ton.

**Oil Meal**—$78 per ton.

**Hay**—Timothy, $32 per ton, $31 ton by carload; alfalfa, $27 ton, $26 ton by carload.

## Seattle Wheat.

SEATTLE, March 23.—Pending adjustment of the wheat price for the 1918 crop, as announced from Washington, Seattle millers and grain dealers are studying the effects of a $2.50 per bushel price. If, as has been outlined, Seattle bacomes a primary market, wheat at this point will be worth the same as at Chicago.

Millers have taken the position that they would be unable to compete with the government in the purchase of wheat here, and that their flour would be placed at such a disadvantage because of the high price at which it would have to sell that they could not find a market unless the government took their entire output.

Seattle millers, however, do not believe that such a high wheat level will be allowed, and that by the time the measures reaches President Wilson, who has already been appealed to, it will be checked.

# Want Ads

**HELP WANTED—MALE 3**

SHEEPMAN TO HELP MANAGE SHEEP company. Must put in $1000. Help win the war, big profits. Call 416 Hyde blk., Spokane.

**AGENTS—WANTED 9**

AGENTS ARE COINING MONEY WITH Cramer Fibre Broom; outlasts four corn brooms. Retail $1. Cramer Mfg. Co., Wichita, Kansas.

**EDUCATIONAL 45**

BEHNKE-WALKER, PORTLAND, NORTHwest's largest, finest business college, can not supply half the calls for trained young men, women. Enroll now. Free success catalog. Positions secured.

**TEACHERS' AGENCIES 46**

TEACHERS REGISTER WITH B. F. WESTmore, Mgr. Hazard Teachers' Agcy. $1 registers you at three offices. 911 Old Nat'l Bank bldg., Spokane, Washington.

TEACHERS NEEDED FOR NEXT FALL. Write for information. Clark Teachers' Agcy, 412 Ch. of Com. Bldg., Spokane.

**FRESH FOOD PRODUCTS 56**

FISH! FISH!

100 LBS. SALMON IN BRINE, SHIPping weight 165 lbs., $11. Smoked salmon, 20 lbs. net., $3.25. Ask for fresh and cured price list. T. A. Beard, 4322 Winslow place, Seattle, Wash.

**HONEY, BEESWAX—Wanted. 58**

SEND SAMPLES OF YOUR HONEY AND beeswax; state quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

**MISCELLANEOUS—FOR SALE 60**

SASH AND DOORS.

If you are going to build, or remodel your house, let us send you our illustrated catalog No. 27, of sash, doors, finish, paints, builders' hardware, plaster board, roofing, etc. Sent free, postpaid, on request.

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|---|---|
| Cottage front doors | $2.75 |
| 2:6x6:6 five-cross panel doors | $1.92 |
| 24x28, two-light windows | $2.06 |
| One-ply prepared roofing | $1.35 |
| Two-ply prepared roofing | $1.70 |
| Three-ply prepared roofing | $2.10 |

We sell any one, ship anywhere, and guarantee safe delivery.

The largest factory in the west selling direct to consumer.

O. B. WILLIAMS CO.
1943 First Ave. So., Seattle Wash.

BUILDING MATERIALS AT WHOLESALE prices — Doors, windows, roofing paper, porch columns, plaster boards. All building materials shipped promptly. Send for our complete illustrated catalogue; gives you lowest net prices. P. A. ROVIG CO., 2219 First ave., So., Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

**MISCELLANEOUS—WANTED 63**

WANTED—BELGIAN HARES. WE ARE paying 15c per pound, alive, f. o. b. Spokane. Commercial Creamery company, Spokane, Wash.

**FARM LIGHT PLANTS. 73**

WARNERLITE ELEC. LIGHT PLANTS absolutely guaranteed. Thousands used by satisfied farmers. Live agents wanted. Warnerlite Co., Temple Court bldg., Spokane.

**MACHINERY FOR SALE. 93**

THE U. S. CREAM SEPARATOR, LIKE John Brown's soul, goes marching on. If you want to know about the new United States or need repairs for the old one, write H. E. Walker, sales mgr., Box 364, Portland, Ore., or Box 194, Salt Lake City, Utah.

FOR FARM LUMBERING USE "AMERICAN" PORTABLE SAWMILLS. Carried in Stock by HIGGINS MACHINERY COMPANY. 312 1st Ave. So., Seattle. Write for Catalog.

FOR SALE—ONE 10 H. P. STEAM tractor, cheap; $300. H. C. Rutledge, Littlerock, Wash.

FOR SALE—ONE 10-H. P. STEAM TRACTor cheap, $300. H. C. Rutledge, Littlerock, Wash.

**AUTOMOBILES 114**

YOUR FORD WILL USE HALF COAL OIL, or all distillate if you use our 1918 carbureter; 34 miles per gallon guaranteed; one-third more power; use cheapest gasoline or one-half kerosene; quickly starts cold motor, even at zero, and moves right off with full power; no spitting or popping; slow speed on high; fits exactly, attach it yourself; 30 off list where no agent; big profits selling our goods. We fit all motors. Write for 30-day trial offer and money-back guarantee. The Air-Friction Carburetor Co., 321 Madison st., Dayton, Ohio.

NIGHT COMFORT FOR FORD TOURISTS with our sleepers; bed inside; $5.50. Auto-Sleeper Co., 930L, Sacramento, Cal.

**Just What You Want**

**may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.**

## STOVE REPAIRING 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

## PATENTS 150

WANTED—NEW IDEAS. WRITE FOR list of patent buyers and inventions wanted, $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. VICTOR J. EVANS & CO., Pat. Attys., 710 Ninth, Washington, D. C.

## POULTRY 174



HOGANIZED BABY CHICKS.
We have several thousand thoroughbred Hoganized White Leghorn chicks for sale at $14 per 100 for March and April delivery. Rhode Island Red and Barred Rock chicks $18 per 100. Safe delivery guaranteed. Established 10 years. Queen Hatchery, 89 Pike St., Seattle, Wash.

BABY CHICKS—LEADING VARIETIES. We guarantee safe arrival and full count; strong, vigorous chicks from the finest flocks of free range stock in this country. 1918 price list and care of baby chicks if you mention this paper. Lasher's Hatchery, Petaluma, Calif.

200,000 WHITE LEGHORN BABY CHICKS —Bred for eggs, vigor, size. Safe arrival in good condition guaranteed. Free catalog and book on "Raising the Chicks." Oak Heights Poultry Farm, Route 3, Box T 67, Tacoma, Wash.

BABY CHICKS, WHITE LEGHORNS. CUSTOMERS say they are "husky," "lively," "vigorous," "healthy," "strong," "hard to beat," "thrifty," "great layers." Write at once. Free catalogue. Freshlaid Farm, Colfax, Wash.

WHITE LEGHORN CHICKS FROM STOCK trap-nested for high egg production; safe delivery and satisfaction guaranteed. The Quivira Farm, Black Diamond, Wash.

BABY CHICKS.
Famous Carnation White Leghorn; vigorous, early maturing, heavy winter layers; also breeding stock. E. W. Raush, Carnation Poultry Ranch, Kent, Wash.

BABY CHICKS—S. C. WHITE LEGHORNS; real mortgage lifters; the kind that lay while mere kiddies; 21 years on the job. Catalogue. I. D. Casey & Sons, R. 6, Waitsburg, Wash.

PETALUMA HATCHERY—CAN SHIP DAY-old chicks to points reached in 3 days. Why not have the best? We challenge the hen. Free circular. L. W. Clark, Petaluma, Cal.

WHITE LEGHORN EGGS $1.50 PER SETting; $8 per hundred. Special mating Pen-A, eggs 50c each; Pen-B, eggs 25c each. Waikiki Farm, R. 7, Spokane, Wash.

M. B. TURKEY EGGS, PUREST OF BLOOD, ten for $3.50. Choice B. P. Rock chicken eggs, 14 for $2. Safe arrival by express guaranteed. Effie Shepardson, Kelso, Wash.

BARRED ROCK EGGS; COCKERELS heading pens from "Albert Kastner" trap-nested stock; $1.25 per setting. Miss A. B. McKeown, R. A. B. 279, Gresham, Ore.

SINGLE COMB WHITE LEGHORNS; THE world's greatest egg machines. Write for our "War Measure." Help Hoover win the war. Broadview Farm, Curlew, Wash.

ANCONAS: MY 12 YEARS OF SELECtion have developed great layers; fine shape and mottle. Eggs, $1.50 per 13. A. G. Propst, R. 6, Box 54, Albany, Ore.

S. C. WHITE LEGHORNS — PRESENT breeders averaged 15 doz. each last season. Mated to high-record males. Hatching eggs. Mary Jessup, Cooks, Wash.

WHITE WYANDOTTES, BRED FROM Martin's famous bred-to-lay Dorcas line fowls. Eggs, $2.25 and $3.50 per 15. Thos. Thorson, Cashmere, Wash.

S. C. RHODE ISLAND RED EGGS $2 PER setting; $10 per 100. Fertility guaranteed. Waikiki Farm, R. 7, Spokane, Wash.

TOULOUSE GEESE, MAMMOTH PEKIN fawn and white Indian Runner ducks' eggs. Chas. Johnson, R. 1, Medical Lake, Wn.

S. C. RHODE ISLAND REDS.
GOOD LAYERS. EGGS $2 PER SETTING. MRS. WALTER LIVERMORE, Pasco, Wash.

PARKS BRED-TO-LAY BARRED ROCKS, winter layers. Eggs, $1.50 for 15; $8 per 100. W. G. Neyland, Spokane Bridge, Wn.

RANCH RAISED WHITE WYANDOTTES. Good vigorous birds, eggs and stock for sale. Jas. A. Hills, Jonathan, Wash.

FOR SALE — INDIAN RUNNER DUCK eggs, 15c each, from prize-winning birds. J. F. Medaris, Wapato, Wash.

LARGE TYPE R. I. R. EGGS FOR HATCHing; ranch raised. Mrs. F. O. Gillett, King Hill, Idaho.

BARRED ROCK EGGS, $2 PER 15. W. D. Good, Mt. Vernon, Wash.

## LIVE STOCK 177

CHOICE REGISTERED DUROC-JERSEY gilts, bred to farrow in June; well bred and choice individuals; shipped on approval, $60 each. Also 4 Toulouse geese and gander, $2.50 each. Ben Kelley, Penawawa, Wash.

CALVES.
I have several hundred bull calves for sale. Holstein bull calves at $4 per head, Durham bull calves at $6 per head. Prices f. o. b. Tillamook. Smith, the Calf Man, Tillamook, Ore.

FOR SALE.
A choice lot of pure bred Shire stallions, coming two years old; also pure bred yearling Shorthorn bulls. Address
WILSON RANCH, ROCKLYN, WASH.

DAIRY FOR SALE—55 COWS, WITH good milk route in Portland and six-year lease on good farm. Write B 4, Oregon Farmer, Portland, Ore.

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Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

## LIVE STOCK 177
Continued.

POLAND-CHINAS; BIG TYPE; SPRING pigs by Young Chief N. 79349, from good, rangy sows. James A. Hills, Jonathan, Wn.

FOR SALE—25 REGISTERED RED, white and roan Shorthorn bull calves and yearlings. Wm. Mulhall, Fenn, Idaho.

FINE GRADE ROAN DURHAM BULL calf; 8 weeks old. $35. Dam is very heavy milker. J. H. Rowley, Westfall, Ore.

## HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

## RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

## TAXIDERMISTS 426

WE MOUNT ANYTHING. FURS TANNED and made into furs and robes. Raw furs bought. Mohr, 82 Bernard, Spokane.

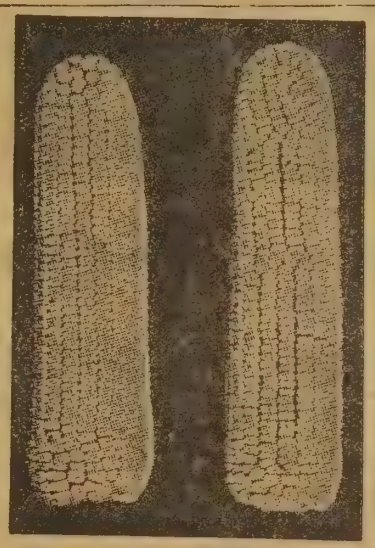
## BUSINESS OPPORTUNITIES 516

$6500 BUYS A WELL-EQUIPPED DAIRY plant and business in a beautiful college town in So. Calif. Brings in about $400 per mo. For full particulars and terms write R. F. D. 1, Bx. 36, Yelm, Wash.

## PLUMBING, STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 312 3d st., Portland, Ore.

## SEEDS 620



IF YOU HAVE ACCLIMATED SEED TO sell, it will pay you to advertise it in this classification. If you want to buy seed adapted to western soil and climate watch what is offered in this department.

VETCH, CLOVER AND FIELD SEEDS.
We carry a complete line of grasses, wheat, oats and other seeds too numerous to mention. Our prices are right. Will be glad to send samples and quote prices.
CORVALLIS FLOURING MILLS.
CORVALLIS, ORE.

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.,
Portland, Oregon.

NEW SEED CATALOG—COMPLETE LIST of Tested Seeds for Western planting. Write for your copy today—MAILED FREE. An experience of 25 years in the Northwest. Aabling-Boyce Seed Co., 89 Pike St., Seattle, Wash.

VOGELER'S PURITY SEEDS.
Alfalfa and clover seeds—full of life—carefully cleaned and tested. Also the finest seed grains. Write for catalog and price. VOGELER SEED CO., Salt Lake City, Utah.

PEAS FOR SALE—ALASKA, BANGALIA, Blue Prussian, White Canadian and Admirals. Seed peas tested and fumigated. Washburn & Wilson, Moscow, Idaho.

BANGALIA FIELD PEA SEED AND Early Bart wheat seed, testing over 62 lbs., for sale. Write W. A. Yeomans, R 2, Mead, Wash.

WE SPECIALIZE IN TIMOTHY, ALFALfa, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Ida.

LADY WASHINGTON SEED BEANS; best quality; ten-lb. lots, 20c lb., f. o. b. Weiser, Idaho. P. V. Du Bois.

SOUDAN GRASS SEED; POPULAR drought-resisting forage plant, 30c per lb. Wm. Ritchie, Arlington, Cali.

FOR SALE—HOME-GROWN ALFALFA seed at famous prices. C. W. Bond, R. 2, La Grande, Ore.

MIXED BLUE BELL PEAS, 5C PER LB. H. S. Smith, Coupeville, Wash.

SEED PEAS—SAMPLES AND PRICES sent. Jos. Bruna, Mica, Wash.

## NURSERY STOCK 621

CLARK SEEDLING STRAWBERRY plants, the variety that made Hood River famous. No other variety makes as much money for the grower. You can't buy better plants than we are offering. By express, not prepaid, $2.50 per 1000. Trimmed, ready for planting. W. R. Gibson & Son, Route 2, Hood River, Ore.

## NURSERY STOCK 621
Continued.

NURSERY STOCK—ITALIAN PRUNE trees; grafted walnuts; pure strain of Vrooman Franquette walnuts, and all other kinds of nursery stock; small fruits of all kinds. Buy direct and save 50 per cent.
BROOKS NURSERY, Lafayette, Ore.

LOGANBERRY TIPS.
Well rooted; from vigorous patch, $2.50 per 100; $20 per 1000; special price on large orders; no order filled for less than 100. O. B. Miles, Salem, Ore.

EVERBEARING STRAWBERRIES ARE mortgage lifters. We have plants, strong and thrifty. Send for price list. F. I. Moffett, Ellensburg, Wash.

CLARK'S SEEDLINGS.
Finest plants in the valley, $2.50 trimmed; f. o. b. Hood River. Address A. M. Sawyer, Route 2, Hood River, Ore.

EVERBEARING ST. REGIS RASPBERries, $1 dz. S. C. Dixon, R. A., Portland, Or

## FARM LANDS—FOR SALE 651

SMALL FARMS FOR SALE.

We have for sale at lower than prevailing market prices—and on terms to suit purchaser 8 small farms, ranging from 10 to 80 acres each—some improved with house, barn, well, etc., at $80 to $120 an acre; just half former prices. Finest black Palouse soil—just the kind that insures "sure" crops of grain, fruit or garden; located 14 miles from Spokane, on electric line, and paved highway. Surrounding growing suburban community—active trading center.

These are among best bargains offered today. You buy from us as owners. Call at office, or write for full particulars, with plat, before you buy anywhere. One of these tracts will surely suit your needs.

HANAUER-GRAVES COMPANY.
601 Old National Bank Bldg.
Spokane, Wash.

1455-A. DIVERSIFIED FARM; 80 A. NOW in alfalfa; 250 more suitable for alfalfa or grain crops; part irrigated, more can be; 250 a. more good wheat or barley land; 375 a. good pasture; abundance spring water; good improvements; most fields hog tight, and running water; small orchard; on railroad. Ideal place to raise cattle and hogs, well adapted to handling thoroughbred stock. This is a going, paying ranch and the large variety of crops raised, favorable climate, good transportation facilities and cheap price insure a good income and a big future for this place. No trades considered, but will allow easy terms on two-fifths of the price of $55,000. Will include some equipment, stock and a few registered brood sows if satisfactory sale made at once. Visit the place near Purington, or write Ben Kelley, Penawawa, Wn.

BIGGER CROPS PLEASANTER CLIMATE are enjoyed by farmers in Eastern Washington, Northern Idaho and Western Montana. The same work will bring you more per acre than in the middle west; no extreme heat or cold to injure crops and take a lot of joy out of life. Attractive opportunities here for the farmer, dairyman, stock man, poultry man and market gardener looking for land at reasonable prices. Farm land bought now is bound to increase in value. Write for our free folder, "A Farm Home for You." Tell us the kind of place you want. Farm Development Bureau, 618 Chamber of Commerce building, Spokane, Washington.

YOUR CHANCE IS IN CANADA—RICH lands and business opportunities offer you independence; farm lands, $11 to $30 acre; irrigated lands, $35 to $50; twenty years to pay; $2000 loan in improvements; loan of live stock; taxes average under twenty cents an acre; no taxes on improvements, personal property, or live stock; good markets, churches, schools, roads, telephones; excellent climate—crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Allan Cameron, general superintendent land branch, Canadian Pacific Ry., 30 Ninth ave., Calgary, Alberta.

FULLY EQUIPPED STOCK RANCH
$2000 BELOW VALUE.
160 acres beaver dam land; all tillable except 2 acres; 80 acres in meadow; 5 head of horses, 8 head of cattle; all farm machinery; good 2-story house, barn, wagon shed, garage, blacksmith shop and other outbuildings; good well and creek. Price $5500; $4000 cash, bal. long time.
This is one of our many.
JAMES W. BOOTHE & CO.
510 FIRST AVE. SPOKANE, WASH.

TWENTY-FIVE HUNDRED-ACRE WHEAT and stock ranch; western Canada; completely equipped; caterpillar tractor; thirty horses, cattle, hogs, implements, buildings; close to railway, schools and churches; settled community; telephone, rural mail, good roads; 1200 acres ready for drill. Price, $125,000; one-third cash, balance half crop payment. Western Canada Properties, Ltd., 401 Herald building, Calgary, Alberta, Canada.

CULTIVATED CANADIAN WHEAT LANDS. 3000 acres ready for drill; in quarters, halves, or sections; every convenience; easy terms or crop payment. Final payment 1937. Where can you equal it? Western Canada Properties, Ltd., 401 Herald building, Calgary, Alberta, Canada.

240-ACRE FARM NEAR LYLE; ¾ UNDER cultivation; ¼ now in grain; 10-acre orchard; other crops; good buildings; fences; water and soil. Price $40 per acre, including ½ crop. D. D. Bathrick, Lyle, Wash.

ALFALFA, PLOW LANDS, HOP YARDS, orchards, business investments. Lum Land Co., North Yakima, Wash.

## FARM LANDS—FOR SALE 651
Continued.

CANADIAN LANDS.

WHEAT, STOCK AND GRAZING—Special bargains in new Alberta section, just being developed; crop payments. Come, go with us and look them over. Some parties paid for their lands with one crop. Lands broken, with some improvement, sell for handsome advance. Fine chance for those prepared to break lands and sell, or take contracts. Easy terms of sale.

FARMS FOR SALE.

Crop payments. Wheat, stock and truck farm. 120 acres, all in cultivation; 15 miles city; good roads; good buildings, water, etc. Might take other property as first payment.

LINCOLN TRUST CO.

Cor. Sprague and Howard, Spokane, Wash. Address Mr. Allin. Phones M. 1066, M. 2750.

BASSANO DISTRICT, ALBERTA.

1920 acres of real w-h-e-a-t land; good, black soil; $50 acres ready for spring sowing; 350 acres stubble; $40 per acre, including $25,000 worth of live stock and machinery. Enough seed wheat to plant 1000 acres. Good buildings. Seven-room house, completely furnished. Near R. R. station and grain elevator. It will take entirely too much space to tell all the good things about this place. It will not last. Absolutely the best buy in Alberta. $30,000 in cash, easy terms on balance.

HOUSE AND LAND ASSOCIATION.

514 Riverside Avenue, Spokane, Washington.

ALDER BOTTOM AND CLAY loam land, formerly owned by Isaac Stevens, Washington's first governor; selected by him when he had the pick of the whole country; 10 to 40 acre tracts, many crossed by running stream; rural mail delivery, bus service for school children; railroad station almost on the land; good roads; good neighbors; ideal climate. Price $75 an acre. Terms. Write us now.
A. H. REID & CO.
314 NEW YORK BLK.
SEATTLE, WASH.

BUY WHERE THEY RAISE THE PRIZE CROPS
IN SNOHOMISH COUNTY.
40-acre farms, $25 per acre. Ten yearly payments, 6 per cent interest. Visit our office and see the great exhibits of PRIZE WINNING vegetables, fruits, grains, alfalfa and other grasses raised on the adjoining farms. They prove our claims that this is the best land in WESTERN WASHINGTON.
Paved roads. Four passenger trains a day. Graded school, cannery, creamery, cheese factory, plenty of work for the laboring man in the mills and camps, where 75 settlers are all boosters. DON'T LOSE A DAY in asking for our illustrated literature.
BROWNELL LAND CO.
904 THIRD AVE., SEATTLE, WASH.

MONTANA FARM—BIG BARGAIN.
340 acres close to Wilsall, Mont., on N. P. ry; only 30 miles from Livingston; 300 a. in cultivation; 400 a. ready for plow; 140 a. fine pasture; abundance of water year round; ideal farm for grains, hay, stock raising; will sell all or divide and will make attractive terms, or will take smaller farm or property in Seattle with some cash. J. E. Osborne, 703 Seaboard bldg., Seattle, Wn.

617 A. FINE, LEVEL, EASTERN WASH. wheat land, stubble; fair buildings; good well, windmill; 2-mile haul; great bargain at $12,000. Terms. Low interest. 120-a. diversified farm, 15 miles from Spokane; mile to station; all deep, rich, subirrigated soil; new buildings; fine well; fine roads. Snap at $10,500. J. A. Wilson, Fernwell blk., Spokane, Wash.

682-A. IMPROVED WHEAT FARM; SEVEN miles south of Hartline, Wash.; on Sunset highway; good land; all in cultivation except 15 acres; 300 a. in summer fallow; all fenced; large house, fine barn, good outbuildings; plenty water. Only $45 per acre. $6000 cash will handle. A. L. Tucker, Coulee City, Wash.

GET A FARM IN TILLAMOOK CO., ORE. Famous for its grass and cheese. My 167-acre farm for sale for $5000. $1000 cash will handle it; good soil, buildings; state road; out range. Address owner, W. W. Yates, Hebo, Ore.

ALL KINDS OF STOCK RANCHES WITH hay and grazing lands; irrigated bottom, hay and seed alfalfa land; finest in state; acreage and terms to suit any buyer. Rosebud Realty Co., Rosebud, Mont.

SOUTHERN BRITISH COLUMBIA; 1600 acres; 1200 range; 400 cultivated; good house; two never failing creeks; railroad siding one mile. $25 per acre; quarter down. Barlee, Grand Forks, B. C.

OREGON OPPORTUNITIES.
Fine farms; big and little; well improved; in rich Willamette valley, near good towns; attractive prices and terms. Write J. H. Moran, Monmouth, Ore.

HOMESTEADS, 160 AND 320 ACRES, alfalfa, wheat and stock farms, $40 to $100 per acre; paid water. This is a farm and stock country. John Hardwick Realty Co., Vale, Ore.

## ACRE TRACTS—FOR SALE 669

FOR SALE—FIVE ACRES APPLES AND Franquette walnuts, 5 yrs. old; near Portland. Price $3000; equity $1200; will accept Liberty bonds, balance easy payments. Harry Stibbs, Box 1908, Seattle, Wash.

## FOR SALE OR EXCHANGE 702

160 ACRES IN S. IDAHO; 80 ALFALFA; no rocks; heavy soil; water and buildings; 1½ miles to school and P. O.; trade for Washington or Oregon farm. Terms. Address P. O. Box 14, Stone Idaho.

# Overland

The Thrift Car

$795



**Now is the time to get your Overland car**

"Since McCormick invented a reaping machine, no other invention has been so beneficial to farmers as the automobile."

And when it comes to farmers' wives, what *compares* with the automobile?

The fact that farmers have bought 60 per cent of the cars we have built, we consider the greatest evidence of their value.

For farmers, above all other business men, need and look for those qualities of performance on which Overland supremacy is founded—efficiency, dependability and economy.

Farmers particularly need the room and riding comfort of the Overland.

Farmers' wives tell us of their appreciation of the style distinction of the Overland.

These Overland qualities are of even greater importance today when time and energy are demanded on the farm as never before.

So now while thousands of other farmers and their families are saving time, energy and money with this Overland Thrift Car—

We suggest that you let the Willys-Overland Dealer show you how this same Model 90 will earn its way for you.

**In your interest, today is none too early to place your order.**

*Appearance, Performance, Comfort, Service and Price*

*Light Four Model 90*
*Touring Car $795, Sedan $1240—f. o. b. Toledo*

Willys-Overland Inc., Toledo, Ohio
Willys-Knight and Overland Motor Cars and Light Commercial Cars
*Canadian Factory, West Toronto, Canada*
*Catalog on request, please address Dept.* 1192

*—Prices subject to change without notice*

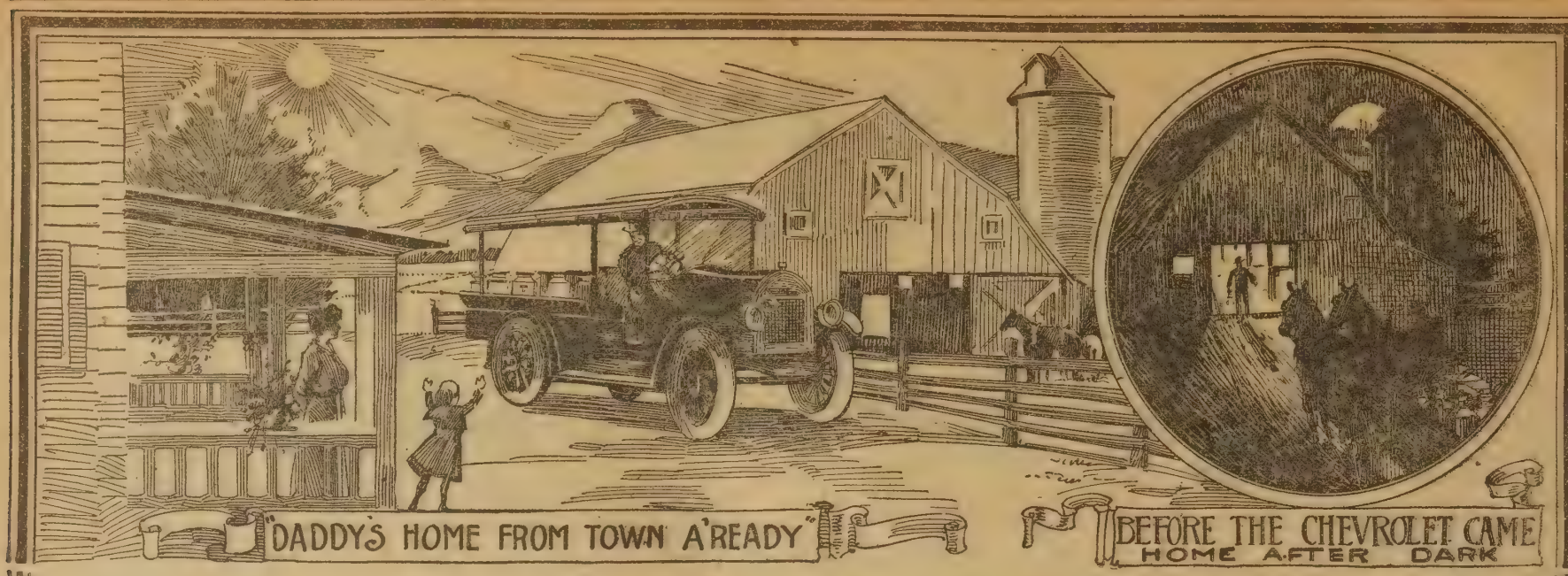
# THE WASHINGTON FARMER

SUCCESSOR TO

THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XLI. NO. 14. APRIL 4, 1918. ** WEEKLY.




# BUSINESS FARMER—CONSERVE YOUR TIME

Study the picture. It has a vital message for you. It is an object lesson in conservation.

Are you spending hours of valuable time on the road, behind a plodding team, or are you meeting modern conditions with modern methods?

It costs no more to feed a motor vehicle this year than it did last year. How about the great increase in the cost of feed for your horses?

Motor power in place of horsepower is conserving the farmer's time and energy—increasing his profits and releasing man power for national service.

Time is your most valuable asset. You must realize on it to the fullest extent, for there are obligations binding you in this respect. It is your patriotic duty to use your time that your government may be profited by it, else it fail in its greatest task—the winning of the war. And remember, that unless we win this war, your time will be worth but little to you. Then there's your duty to your family—they have a right to expect a portion of your time. They need your companionship, your advice, your more mature judgment.

That boy of yours! What about him? You are looking to him as your assistant and—in time—your successor. You know the best possible place for him is on the farm with you, but you must compete with the city for him. Eventually he will choose the farm or the city. Give him an opportunity to work without drudgery, time to study and a part of your time for counsel and advice, if you would keep him with you.

The motor car is the greatest conserver of time. Men and women, urged to crowd the most service possible into every working day, turn more and more to the motor car. With this need for the motor car comes the need for economy of purchase price and economy of operation, the guarantee of which in a car makes the purchase of such a car an investment instead of an expense.

Recognizing these facts, the Chevrolet Motor Company placed on the market, in addition to its passenger cars, a complete line of light delivery cars, especially adapted to meet the needs of the progressive business farmer. These cars will solve your marketing and other problems for you, as they have for scores of other northwest farmers.

It is poor economy to use a heavy truck to carry a few hundred pounds load to or from town—it would be slow and expensive. Nor can you afford to run your passenger car for such use. The Chevrolet light delivery car will solve your problem for you—at a minimum and QUICKLY.

There are three different models of these delivery cars. Ask your Chevrolet dealer to show them to you today, or write the nearest Chevrolet branch.

*No. 5 Delivery, no top, $715.00*
*No. 6 Delivery, detachable top, $735.00*
*No. 7 Delivery with full panel body $785.00*
*At Pacific Coast Points*

## Chevrolet Motor Company of California

## Oakland - - - California

Factory Branch, Spokane, Wash. W. S. DULMAGE MOTOR CO. Seattle, Tacoma, Everett, Wash. Factory Branch Portland, Ore.



This One $735 at Your City.

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 14 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF April 4, 1918

# Ready for Third Liberty Loan

## *Campaign Will Be Launched in Three Billion Dollar Drive on April 6*

On April 6, just one year from the date of the entrance of this country into the war against Germany, the third Liberty loan campaign will be launched. Three billion dollars is the amount to be offered, but the treasury department announces that all oversubscriptions this time will be accepted for the Liberty loan bonds issued for the full amount. Secretary McAdoo of the treasury department has announced that it is the hope of the administration that during the campaign a total of four billion dollars will be subscribed. The bonds of this issue will bear four and one-fourth per cent interest, a quarter of one per cent more than the bonds of the second loan and three-quarters of one per cent more than those of the first loan. It is especially noted also that the bonds of this issue will not be convertible into bonds of a subsequent issue as was the case in each of the two previous loans.

The bonds of the first and second Liberty loans may be converted into those of the third loan by those who wish to increase the rate of interest which their investments will bear.

The treasury department plans the establishment of a sinking fund by means of which it will be possible to purchase bonds if they should be thrown on the market in such amounts as to result in a price too much below par. The object of this fund would be to help maintain the stability of the Liberty bond issues.

While the campaign has not yet been started for the sale of the bonds of this third issue, applications to a considerable amount have already been received by the campaign leaders from those about the country who plan the purchase of greater or smaller blocks of the bonds. In speaking of the campaign which opens Saturday, Secretary McAdoo said:

"I am sure that the people will respond to the third Liberty loan with the same loyalty and enthusiasm that characterized their support of the first two loans. The great events now happening in France must fire the soul of every American with a new determination to furnish all the dollars and all the material resources of America that are needed to put an end to the execrable atrocities of German militarism. Defeat faces the kaiser. Let us hasten it by asserting America's might with increased vigor in concert with our gallant comrades."

Organization is being perfected in every state, every county and practically every locality for the sale of the three billion dollar bonds to be offered, and especially in view of recent developments on the battle fronts in Europe it is hoped that the people will respond with even greater enthusiasm than they did when they oversubscribed the first and second issues.

## Farm Help

### Sixty Dollars for a Steady Job

"Please give the widest publicity," says a telegram from the Washington state council of defense, "that the state council and the United States employment service are starting an active and practical campaign to secure farm help for all districts in need. Don't let farmers reduce their acreage fearing a labor shortage. Reasonable wages must be paid. Sixty dollars and board seems to be recognized as fair for a steady job, with a reasonable increase for short periods or special skill. Please wire the views of your community on this feature. It is very important to establish a labor wage as uniform as possible."

In his reply N. W. Durham, chairman of the Spokane county council of defense, telegraphed that from the best information obtainable he believed that the wage schedule proposed would be generally satisfactory to farmers of the Inland Empire, provided that efficient labor can be supplied, adding:

"I am giving your telegram publicity in The Washington Farmer, The Oregon Farmer and The Idaho Farmer, having a very large combined circulation."

Commenting on the state council's telegram, E. E. Flood, formerly a large dairy farmer and now vice president of a Spokane bank, said:

"Sixty dollars a month and board is double the wage that was paid for farm labor in 1914, before the war, and counting the increased cost of boarding men it is more than double. But the increase is here and will have to be met. All things considered, the state council's schedule seems reasonable all around."

## As to Sweet Clover

To the Editor: Can you give me any information concerning sweet clover? I seeded down a field to clover and timothy last spring, but the seed did not come up well—in fact, it is not half a stand. I was wondering whether if sweet clover seed were sown on this field and then rolled or floated down it would catch and yield a good crop of hay this year. It is a big expense to have to replow the field and sow it to oats, clover and timothy again. Also, will sweet clover catch if sown on wild, rocky land, for pasture?

A. L. BECKETT.

Orting, Wash.

E. G. Schafer, professor of farm crops, Washington State college, to whom the above question was referred, makes the following reply:

I can not tell, from the information submitted, whether the land is in proper condition for the seeding of sweet clover, or not. Sweet clover, like alfalfa or red clover, does best where the seed bed is properly and carefully prepared. In case you seed it to sweet clover, you should seed it very early in the spring; that is, as early as the soil is in condition for tillage or for working.

Sweet clover is a biennial crop, and makes a fair growth here. However, you could not expect as large a crop of sweet clover the first year as you can the second year.

In using sweet clover, it is desirable either to use it for pasture or to cut it very early for hay. The stems become woody as the plant nears maturity. Very often, live stock will refuse to eat sweet clover for hay if the cutting is delayed too long.

Sweet clover might be seeded in the same manner as red clover or alfalfa. If it is seeded, using the clover seeder attachment with a drill, it should not be seeded very deep, say half an inch, early enough in the spring so that the surface soil will not dry out. If your land is not in proper seed-bed condition, it might be well to disk thoroughly as early in the spring as possible and before seeding. It depends more or less upon the condition of the land whether or not replowing would be necessary, or if the seed bed could be put in proper condition by simply disking or harrowing.

## Change the Clock

Everybody must do it or be out of step with the rest of the country from now till October 27. There has been a feeling in the minds of many that the measure recently passed by congress and signed by the president, advancing the official time of the nation one hour from March 31 to October 27 would result in a great deal of confusion, but there is no ground for such fear, unless it be that large numbers have failed or will fail, to change their clocks according to the official schedule.

The system has been worked out beautifully. The official clocks were advanced one hour at 2 a. m. Sunday, March 31. They will be turned back that hour at 2 a. m. Sunday, October 27. Sunday being a day of rest generally throughout the country the change in either case should cause no inconvenience.

But it is vitally essential in order to avoid confusion that everybody, no matter where or what his occupation, keep his clock on the official schedule. Trains will run on the new schedule, postoffices will open and close upon it, banks and business houses will regulate their hours according to it, schools will conform to the new law and the man or woman who insists on running according to sun time will be the one to suffer.

Last Sunday was the first 23-hour day in the history of the United States. October 27 will be the first 25-hour day, and it is interesting to note that the former was Easter Sunday, and that the latter will be the strenuous Theodore Roosevelt's birthday. The colonel will be 60 years old on that date.

## FIVE DOLLARS IN THRIFT STAMPS FOR WOMEN OF THE FARM HOME

A First Prize of $3 and a Second Prize of $2.

These prizes are for the women and girls of the farm home which has

1. An automobile, or
2. A farm lighting system, or
3. A farm water system.

A first prize of $3 and a second prize of $2 in Thrift stamps will be given for the best article written from your own experience on either of the following:

Why you would not be without an automobile, or

Why you would not be without your farm home lighting system, or

Why you would not be without your farm home water system.

The contest will close May 1.

Write on one side of the paper and mail your article to The Editor of The Washington Farmer, Spokane, Wash.

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### A Bee on Every Farm.

Next week this paper will begin a series of articles on the A. B. C. of bee management. They will be written at our special request by George W. York of Sandpoint, Idaho, for several years prior to coming west editor of the American Bee Journal. It is a well-recognized fact that there are hundreds of thousands of dollars' worth of nectar lost every year in this country for lack of honey bees to harvest it. It is a fact, equally well known, that half the world is well-nigh starving for sugar or its equivalent at the present time. Hence the great need of more bees scattered everywhere throughout the county. Mr. York in the introductory paragraph of his first article, which will appear next week, April 11, explains his purpose and method as follows:

"I shall endeavor not only to go into details quite minutely, but I will also try to use such terms in describing methods and equipment as shall be easily understood by any one not having the slightest previous understanding of the subject. I do not expect to interest the expert beekeeper—the man who has already made a success with bees. My aim will be to try to get the common, everyday farmer to take an interest in the work of beekeeping."

## Make Idle Acres Work

Nearly every farm has some portion of it that is either not used at all or is used in such a way as to produce very little. On many farms there are patches of low ground which can not be tilled because they are too wet. Usually when drained these wet areas are the richest land on the farm.

Just at present, when the world is engaged in the most gigantic struggle in its history, the forces of democracy against those of autocracy, the product of these idle acres is needed. This is an excellent time to put them into use. Small patches of wet land can be drained at small expense. Every farmer, part of whose farm is unproductive because it needs drainage, should take advantage of the present opportunity to add to his cropping area by supplying the necessary drainage. These lands will produce more than average farm lands. Every product will help to win the war.

### Death of T. B. Wilcox.

Theodore B. Wilcox, federal milling commissioner for the Pacific northwest, died at his home in Portland Sunday of acute intestinal troubles. Mr. Wilcox was the dominant figure in the milling industry of the Pacific northwest. He was born in Massachusetts in 1856 and moved to Oregon in 1877.

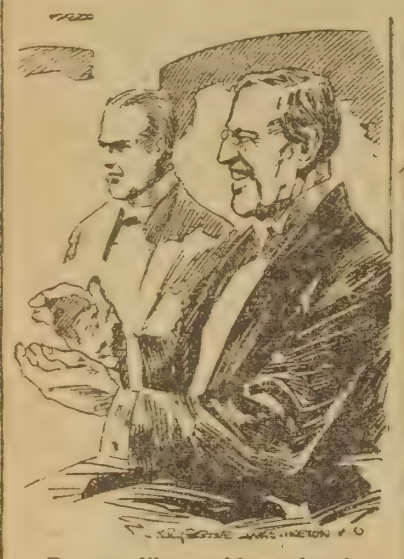
### Help Mobilize Labor.

Secretary William B. Wilson of the United States department of labor has issued a call to 736 daily newspapers throughout the country urging upon them that they help mobilize labor for the farms this year.

# Boom City of the West Springs Up Within Historic Washington

NATIONAL CAPITAL SKETCHES

PRESIDENT AT THEATER.
(From the Washington Herald.)



Do you like problem plays? No? Well, you need not be ashamed, for the president of the United States doesn't like them, either, and never goes to see them.

His idea of a real show is good vaudeville, with lots of action and some good lines. When he doesn't get vaudeville, he wants a good, clean comedy or a snappy musical comedy.

He hasn't got the movie habit—yet.

When a situation or the lines of the show amuse the president he throws back his head and lets out a real laugh that you can hear half across the theater.

At first this was a terrible shock to Washington, which is notoriously the coldest show town in the country—old-time Washingtonians consider it almost a crime to let any one hear them laugh.

But they are gradually getting used to it, and with the influx of red-blooded folks which the war has brought to the capital, laughing at theaters may even become the fashion in Washington.

Were it not for the Washington monument and the historic buildings one could readily imagine the national capital to be a boom city of the west. Buildings of a more or less temporary nature are going up everywhere. Whole blocks are occupied by these structures three stories high and filled with war time offices. These blocks, one after another, dozens of them, are tenanted with thousands and thousands of clerks called by the exigencies of the war. At 4:30 in the afternoon these thousands of clerks finish their day's work and stream out into the streets. There is hustle and hurry everywhere. The play houses and the movies are crowded to the limit and one has to make early reservations.

The exacting duties and the serious responsibilities connected with the conduct of the war may require the multiplying of diversions. How seriously these thousands and thousands of clerks and other residents of Washington are pressed with the burdens of the war the reader may judge, but that there are persons weighted with and it is perhaps to save himself from this mighty burden, that the president this seriousness of the war at the national capital goes without the saying, himself finds it necessary to seek relaxation.

From this point of view it may not be surprising to learn that the morning before reaching Washington (this was shortly before the big German drive) I read in the morning paper that the president, Mrs. Wilson, and their party had attended the theater, the president himself breaking the record by making a speech from the theater box. The next morning, I think it was, the society columns of the papers contained an account of a camouflage party, the society event of the season. This was an elaborate affair with costumes and masks and Gypsy fortune telling booths and so on. The presidential party entered heralded by a commander of the navy and a lieutenant of the army, together with other due escorts, visiting the scene at 10:30 in the evening and taking part and leaving soon after midnight. The next afternoon the society columns announced that the president and Mrs. Wilson, accompanied by Miss Bones, Miss Benham and John Randolph Bolling, occupied the presidential box at the National theater, at a program of French music which was followed in the evening by the president and Mrs. Wilson attending a theatrical performance. I think it was the following afternoon, according to announcement in the papers, that the president and Mrs. Wilson accompanied by Mrs. Bolling, Miss Bolling and John Randolph Bolling, mother, sister and brother of Mrs. Wilson, attended a performance at the theater, the president and Mrs. Wilson playing an early game of golf in the morning at a suburban club.

E.A.S.

# Millions Loaned to Farmers

## *Federal Farm Loan Bank Succeeds in Pacific Northwest*

The record of loans to March 1, 1918, is conclusive proof that the government made no mistake in placing a federal farm loan bank in the Pacific northwest. Only one of the 12 banks leads the Spokane institution in volume of loans, and that is the St. Paul bank, which also serves the great northwest to the Montana line.

Since the establishment of the land banks up to March 1, the nation's farmers have made 28,495 loans, amounting to $64,532,343, divided among the 12 banks thus:

| | |
|---|---|
| St. Paul | $11,939,200 |
| Spokane | 10,734,925 |
| Wichita, Kan. | 9,505,800 |
| Omaha | 6,278,040 |
| Berkeley, Cal. | 4,546,000 |
| Houston, Texas | 4,529,438 |
| New Orleans | 3,839,945 |
| Louisville, Ky. | 3,779,000 |
| St. Louis | 3,088,195 |
| Baltimore, Md. | 2,427,250 |
| Springfield, Mass. | 1,931,195 |
| Columbia, S. C. | 1,915,445 |

It is surprising to find that the south is not using these banks to the extent that was anticipated. The call for a federal farm loan system was especially strong from that section, where the highest interest rates in the United States were said to rule, and six of the 12 institutions were placed in the south. These six southern banks have loaned an aggregate of only $19,579,273, a sum less than the combined loans of the Spokane and St. Paul banks. With half of the institutions, the south has taken but 30 per cent of the total loans.

The federal farm loan board is planning a campaign to induce state legislatures in the state where farm loan boards are not now legal investment for all public and private funds to enact legislation admitting these securities. The board believes that as the bonds are, in effect, secured by mortgages on all lands on which government money has been lent, they should be regarded as gilt-edged and above all criticism.

So far only about $30,000,000 in farm loan bonds have been sold to the general public, and the board and the 12 federal land banks feel that it would be good advertising and a long step toward popularization of these securities if all states would formally accept them as suitable for investment for insurance companies and fiduciaries. Farm loan bonds now are legal investment for all public and private funds in 22 states. The board intends to seek the cooperation of the legislatures in the other 26 states, so that the indorsement will be unanimous. The states now accepting the bonds are Arkansas, California, Colorado, Delaware, Florida, Idaho, Maine, Minnesota, Mississippi, Nebraska, New Hampshire, New Jersey, Ohio, Oklahoma, Oregon, Pennsylvania, South Dakota, Tennessee, Texas, Utah, West Virginia and Kansas.

The Spokane district comprises Montana, Idaho, Washington and Oregon. Idaho and Oregon now recognize these bonds as legal investments for all private and public funds.

## Protects Depositors

"The Washington bank depositors' guaranty board, created by the legislature of 1917, is just what its name implies—an organization, under state supervision, to protect depositors against losses in the event of failure of any member bank," says R. L. Rutter, president of the Spokane & Eastern Trust company and member of the Washington bank depositors' guaranty fund board. Mr. Rutter stated further: "The law under which the board operates provides for the ultimate recovery of every dollar deposited in guaranteed banks."

"The law enacted in Washington, as it had been in Oklahoma, Kansas, Nebraska, Texas, North Dakota and South Dakota, because the members of the legislature felt it the duty of the banks to provide the same protection for individual depositors as is required by the United States government, the state, the city and the county for the protection of their deposits.

"Federal, state and municipal governments require for the protection of their deposits either first-class securities or the guarantee of a reputable surety company. In view of these facts the members of the legislature saw no valid reason why the individual depositor should not have the same measure of protection.

"The Washington guaranty law provides that a deposit in securities of the class acceptable as security for savings deposits by the United States government be placed in the hands of the state treasurer as security for the payment of assessments levied against the fund for expenses or for the payment of losses due to the failure of a member bank or banks.

"The work of the federal reserve bank and the guaranty fund board do not conflict in the least. The purpose of the first-named is to finance the United States government and provide for the expansion and contraction of currency, as it is necessary for the conduct of the commercial business of the nation, while the purpose of the guaranty fund law is to protect individual depositors against losses by the failure of guaranteed banks.

"There is not the least doubt in my mind that the guaranty of deposits will in time become national and that the public will demand that their deposits be treated in the same manner and given the same protection as those of the government or state."

**An Economical Shortening.**

An economical shortening is made by combining rendered suet and margarine or chicken fat and cottonseed oil.

## Clip This Convenient Order Blank

Address all communications concerning thrift or war savings stamps to the Washington Farmer, War Savings Department, Room 26, Review Building, Spokane, Wash.

Remittances may be in any form desired, including personal check.

The Washington Farmer, War Savings Department, Room 26, Review Building, Spokane, Wash.

Gentlemen: I wish to invest in ..... (number desired.) U. S. government thrift stamps at 25 cents each.

I wish to invest in ..... (number desired.) U. S. war savings stamps at $4.15 each. April figure.

Amount enclosed $.....

Full Name .....

Town ..... State .....

R. F. D. No. .....

I have already bought..... (kind of stamp.) Stamps and have a..... (card or certificate.)

# Must Not Handicap Production

## *Roosevelt Joins Hand Against Arbitrary Price-Fixing*

In an address delivered in Portland, Maine, last week, Colonel Theodore Roosevelt expressed unqualified disapproval of experimental or arbitrary price-fixing, declaring that anything that interfered with the production of staple foodstuffs at this time was greatly to be disapproved. The following are extracts from the colonel's address touching upon the subject of price-fixing and upon the subject of farm ownership and operation:

"Let us steadily keep in mind the one great fact that nothing must be allowed to interfere with ample production. There must be no limitation of production. This means that there must be no attempt by the government at price-fixing which shall result to the detriment of the farmer. Any experiment in price-fixing, and especially in maximum price-fixing, should be entered into only most cautiously, and only when there has been such thorough canvass of the situation as to enable us to guarantee that good and not harm will result. The price-fixing by the government during the last year has worked nothing but mischief. It has slowed up production, it has aggravated existing inequalities by making some prices too high and some too low."

"It is a mere truism to say that the prosperity of the farmer stands as basic to the prosperity of the nation. On the whole, in every great crisis in the past, the farmer has stood as preeminently the archtypical American, who in peace and in war took the lead in the work without which the republic must succumb. In our country the typical farmer has been the man who owned the land which he himself, with his own hands, assisted by is sons and by one or two hired men, tilled—and this is the farmer of whom I especially speak.

"We can not afford to have him supplanted by the man who merely holds his land as a tenant for an absentee owner. We can not afford to have his farm absorbed by a big landowner. Yet in sections of our country the tenant farmer has tended to increase ominously at the expense of the man who owns his farm, and in other sections there has been an equally ominous tendency to see the big landowner, especially the big absentee landowner, grow at the expense of the small landowner. We should sharply discriminate in favor of the actual farmer against the moneyed man, not really a farmer at all, who buys thousands of acres and holds them for speculation. We must in every way favor the man who lives upon the land which he owns and which he himself cultivates. Moreover, we must render it possible for the man who works on the farm, but who does not own any land, for the hired man who is not a tramp laborer, but a hard working, steady, industrious worker, to acquire and to own a farm for himself.

# Don't Cultivate Orchards Clean

## *It Starves Both Orchardists and Orchards, Says Expert*

By P. S. DARLINGTON.

Many orchardists are coming to feel as the author of this article, Mr. Darlington, does concerning the matter of orchard cultivation. There are yet, however, many who believe in the thorough cultivation of orchard land rather than the growing on it of cover crops. This article is an address delivered by Mr. Darlington, field horticultural inspector of this state, before the Washington Horticultural society convention at Kennewick several weeks ago.—Editor.

Up until recent years the fruit business in this state has been on a very unstable basis.

We clean cultivated our orchards, kept little or no livestock, and perhaps not even a garden. We were so enthusiastic over the fruit business that we forgot that there might come a year when there would not be a profit in the fruit business with which we could buy our provisions at the store. We have since seen some such years. We have seen years when the credit of a good many of our fruit growers at the grocery store was not gilt edge, and, in fact, some of them got hungry and walked out.

In 1911 we shipped into Wenatchee 150,000 pounds of butter, 20 carloads of canned milk, 200 gallons of fresh milk a day, 43,000 dozen eggs, 20 carloads of packing house products and about 1800 tons of hay. Our farmers, if they could be called that, were going to town and buying their milk, butter, eggs, meat, etc. Wenatchee probably carried this condition to a greater extent than most other sections of the state, but perhaps necessity has caused the orchardists of Wenatchee to advance farther toward correcting this condition than has been the case with the orchardists of most other districts.

Clean cultivation was not only starving our orchardists, but was also starving our orchards. If there is any one here that does not know what a starved orchard looks like, just take a drive out through any of the older orchard sections next summer and you will see here and there an orchard with small, sparse and yellowish looking foliage, red or yellowish bark and probably a light crop of small apples. These are indications of partial starvation. This condition may be brought about by any one of a number of different causes, but whatever the cause the effect is partial starvation.

In some cases it may be due to lack of water, but since all plant food must be taken up in the form of solution lack of water is starvation. In a light, sandy soil it may be due to too much water, in which case the soluble elements of plant food are leached away. It may be due to an impoverished soil, but there are comparatively few of our soils but what contain enough of the elements of plant food to properly nourish the trees if the elements of plant food that are in the soil are made available to the tree.

This appearance of starvation is most frequently due to the fact that the elements of plant food which are in the soil in abundance are, on account of the lack of proper physical condition of the soil not made available to the tree. An ideal apple soil is a rich, heavy loam. But this type of soil, as well as other types, if clean cultivated for a period of years, becomes void of humus and organic matter. The soil particles then rapidly run together. In this condition the soil breaks up cloddy. It puddles easily when wet. It does not take water readily. In fact, a strata just beneath the surface cultivation develops which becomes almost impervious to water and almost as hard as hardpan. A soil in this condition, though it may be ever so rich in the elements of plant food, will not release or make available to the tree plant food in sufficient quantities to properly nourish the tree.

This condition of the soil has been brought about by the continuous burning up and the almost continuous exhaustion of the organic matter in the soil. This is the result of continued clean cultivation without addition of organic matter to the soil. The point that I want to bring out most forcible here is that our soil troubles are mostly physical rather than chemical and that the addition of chemical or commercial fertilizers can do little toward the permanent upbuilding of our conditions. Further, without an adequate supply of humus, or organic matter, we do not get get full benefit of whatever chemical we may use.

To build up and maintain a constant supply of available plant food with the least possible waste we must have humus or organic matter in the soil. Humus is decomposed organic matter. Humus acts as a sponge to not only hold moisture, but to hold available elements of plant food. In the decomposition of organic matter various weak acids are formed, known as humic acids. These weak acids have a dissolving effect upon the soil particles, and change the otherwise unavailable elements of fertility into available form. Humus holds the soil particles apart and prevents the soil from becoming hard and compact.

In my opinion any system of orcharding in our semi-arid irrigated districts which does not provide for a goodly supply of organic matter in the soil is not a permanent or sound system of orcharding.

I shall not enter here into any extended discussion of the different methods of supplying that humus any more than to say that under conditions existing generally in our fruit sections far the cheapest and most economical method of supplying that humus, together with additional fertility, is by means of cover crops. Neither is it my purpose here to enter into a discussion of the merits and demerits of the different cover crops any more than to say that in my opinion no other crop has been introduced yet that has much to recommend it as an orchard cover and manure crop of alfalfa.

Alfalfa produces an immense mass of vegetable matter, not only above but also below the ground. I believe that it is unexcelled in this respect by any other crop than we can grow in our orchards, and as is explained above it is vegetative or organic matter in the soil that we need.

Alfalfa is a soil renovator. It is a more successful soil renovator than plow or harrow or even dynamite. No clods form in an alfalfa field nor in an orchard sowed to alfalfa. Alfalfa roots penetrate the soil to the depths of 20, 30 or 40 feet, and have been known to go down to a depth of 127 feet. The decaying roots and side laterals of the alfalfa keep the soil open and porous for the penetration of air and water.

Alfalfa is a legume, and therefore a nitrogen gatherer. It not only gathers nitrogen from the air, but it penetrates the soil far below the reach of ordinary plants, brings up other elements of plant food and makes them available at the surface. It has been estimated at the New Jersey experiment station that the amounts of plant food gathered by a test acre of alfalfa in two years were equivalent in nitrogen to 3500 pounds of nitrate of soda in phosphoric acid, to 600 pounds of bone black superphosphate and in potash to 1200 pounds of muriate of potash. This amount of fertilizers purchased at ordinary prices of commercial fertilizers before the war would cost about $124, the nitrogen alone being worth about $105, and this was taken almost entirely from the air.

The water requirement is usually the first question that interests most growers in the discussion of this subject. The water requirements depend almost entirely upon the methods of handling alfalfa in the orchard, and will be discussed more fully below. I will simply say here that conservation of moisture is one of the benefits that may be derived from alfalfa in the orchard.

I have mentioned some of the reasons why alfalfa should be beneficial to the orchard. This may be just theory. But the proof of the pudding is in the eating. We have plenty of evidence to show that the alfalfa actually does get results. I might mention the Barney & Williams orchard, which has been in alfalfa for about 20 years. This is the oldest alfalfa orchard that I know of, and had the largest bearing record of any orchard that I know of. I have the bearing record of this orchard for the six years from 1907 until 1912, inclusive. The average bearing per tree for those six years were 19 boxes per tree per year. Mr. Williams told me since he has harvested his 1917 crop that these trees still keep up the same performance. I could mention many other instances of beneficial results. In fact the results have been so generally satisfactory that about 75 per cent of our orchards at Wenatchee are now in alfalfa.

So far I have spoken of alfalfa as a cover and manure crop and of its direct benefit to the orchard. The ideal method of handling alfalfa as strictly a cover crop and manure crop for the most rapid upbuilding of the soil and for the conservation of moisture is to allow the whole crop to fall on the ground and rot. However, there is the other phase to be considered, the matter of providing our own living, as much as possible, on the orchard farms. This is a phase that can not be overlooked at this time. It is a phase that is in line with the recommendations of the food administration, and further than that it is in line with a policy of permanent thrift. Every orchard farm should have its family cow, a hog or two, chickens and a garden.

Where there is no shortage of water there is no reason why a crop or two of alfalfa, or even three crops, can not be taken from the orchard if it is fed on the ranch and the manure put back on the orchard. In this way the feeding value as well as the greater part of the fertilizing value can be obtained. If we have to go out and buy feed for work stock and other animals today we are in a bad way. Alfalfa hay is selling for $30 a ton at Wenatchee, and it is the cheapest feed we can buy, at that.

As I have said, the water requirements of alfalfa in the orchard depend largely upon the methods of handling. If your alfalfa is a strictly

(Continued on page fifteen.)

# Thousand Tons of Pea Straw

## *Worth $10 a Ton, Produced in Spokane County*

By J. L. ASHLOCK.

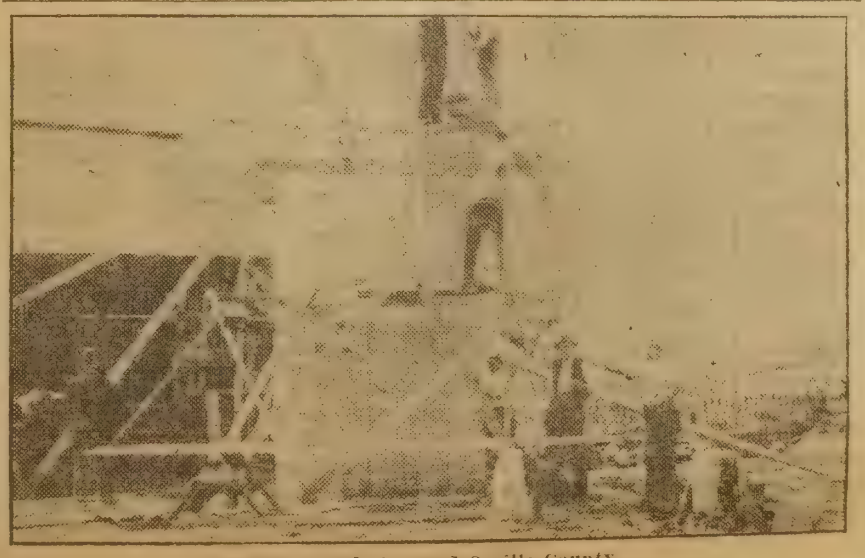
Reporting on the work of the Spokane county agricultural office the last year, Agent J. R. Shinn speaks of attempts to extend the growing of peas, clover and sweet clover, the building of silos and use of silage, more and better live stock on every farm and extension of boys' and girls' club work in every rural community.

Five thousand acres of peas were contracted for in 1916 and in 1917 the acreage increased to 32,000. Fourteen companies contracted for peas in Spokane county and they were from California, Connecticut, Michigan, Colorado and Wisconsin. Mr. Shinn estimates that no less than 20,000 hogs have been fattened for market by pasturing on shattered peas left in the fields and knows definitely of 1938 hogs that last year were pastured in this way, making gains of 75 pounds per hog while on the pasturage of shattered peas. At least 100 tons of pea straw, worth $10 a ton, was produced in Spokane county last year, which was the most unfavorable for peas of any yearss ince the establishing of the agricultural office. Wheat grown on pea land, according to records given Mr. Shinn by the farmers, made, in one instance, 28 bushels per acre, against 18 bushels on summer fallow. Many instances are cited showing that peas when used as an interwheat crop in lieu of leaving the land in bare fallow the off-wheat year, serve to increase, rather than diminish, production of the year following the peas.

The agricultural office in Pend Oreille county was established less than a year ago. County Agricultural Agent M. J. Newhouse's first report tells of beginning progress in such county projects as dairying, the construction of silos and use of silage, the introduction of pure-bred sires, impetus to poultry production, cure and prevention of animal diseases, the organization of farmers for purposes of cooperative marketing and buying and to help in carrying on approved agricultural projects; reclamation of land by drainage and diking, the use of more fertilizers and boys' and girls' club work.

Up in Okanogan county, according to Agent W. A. Holt's report, more live stock and more feed for live stock are dominant in the agricultural development there. Okanogan county stockmen have a winter feeding season varying in length from two to four months, and, naturally, the temptation to start the season with feed for two months has been strong, resulting in losses. The building of many silos for the storage of winter feed and the production of more forage are looked to as corrective measures. Other propects of the county agricultural office are the control of crop pests and diseases, drainage and irrigation, control of animal disease, farm crops and soil problems and the forming of a county council of agriculture.

Stevens county opened up an agricultural office less than a year ago and Agriculturist A. R. Hahner's first annual report, like others from the northern and wooded counties, deals with live stock and the supplementary problems of feed, control of disease among animals and the introduction of purebred sires. A county agricultural council has been organized. The county at times apparently is not quite self-supporting in the matter of feed, nine carloads of alfalfa hay, two of pea straw and three of barley having been shipped in for farmers around Colville and Addy. The rapid advance of forage production, marked by the putting down of additional alfalfa fields, control of the squirrel problem, elimination of noxious weeds, the construction of silos and use of inoculation for new fields of alfalfa and peas, all spoken of by Mr. Hahner in his report, indicate that the county is more apt to have a surplus of feed than a shortage in the immediate future.



Building a Silo in Pend Oreille County.

# Fakers at Work

## Misrepresent the Farm Loan Bank

Farmers should pay no attention to any one who appears in their community offering to organize federal farm loan associations and charging a fee for his services, says a statement made by the farm loan board. The board has recently discovered a swindling scheme that is said to be being practiced in some sections of the country.

A man advertising himself as an authorized organized of national farm loan associations is sending out advertising matter emblazoned with the national flag, stating that he will organize such associations at $500 each, and will teach others the trick for a certain sum of money. His advertisements have reached farmers and business men over a large part of the United States. He claims to be so busy organizing national farm loan associations that he needs help, but will take time to teach others for a monetary consideration.

All such representations are fraudulent. In order to borrow under the farm loan act, it is necessary for farmers to organize cooperative national farm loan associations in their local communities. It is a violation of a ruling of the federal farm loan board, published more than a year ago, for a national farm loan association or a joint stock land bank to spend any money for promotion purposes. Associations thus organized will not be chartered by the federal farm loan board. Farmers are warned therefore against any one asking a fee for his proffered services in connection with applying for a loan under the federal farm loan act.

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## Allied Citizens Must Be Calm

When the great German offensive was launched several days ago there was a feeling of dread, if not actual fear, in evidence among many of the people of the allied countries. Perhaps there was and is cause for those feelings in greater or lesser degree. The allied armies are facing a powerful, desperate and barbaric foe—a foe that has descended to the lowest levels of the brute creation in his war practices. His stupendous drive against the allies on the western front, the greatest in the world's history, was launched with a fury born of desperation and backed by material power before which it seemed nothing short of the superhuman could stand.

The enemy made successful attacks in several quarters. Before this writing reaches the readers his advantages may be increased or the cause of the allies advanced. But, whether or not, the spirit of doubt or fear or dread must not be allowed to weaken the home support of the armies of civilization. Germany can not win this war. The righteous cause of the civilized peoples of the earth will triumph, whatever may be the fortunes of the first days or weeks of the great battle. On the battle front are hundreds of thousands of men facing the death-dealing implements of German barbarism. They are not faltering. They are facing death, if death must come, as it will to thousands of them, calmly and with bravery that should put to shame the heart that palpitates with misgivings at home.

German ingenuity is great, but the ingenuity of England and France and our own America is greater. German resources of men and materials are great, but the men and materials of the allied nations are greater. German patriotism is great, but the patriotism of British and French and American is greater, for it is founded upon the eternal principle of honor and right dealing and love of mankind. Germany is doomed to defeat, be it this year or ten years hence, as certainly as the night is doomed to defeat before the rising of the sun.

Hence, without fear or doubt or misgiving, let every American whose wonderful privilege it is to remain in peace at home in these trying times stand firmly behind those heroes on the battlefield, certain that the God in heaven will crown the cause of righteousness with victory in His own good time.

## Potatoes for Patriotism

That this country can save large quantities of wheat by the more intelligent use of potatoes in the many forms in which they may be prepared for eating is the sentiment expressed by the New York state food commission in a bulletin, "Potatoes for Patriotism." Here is an extract from the bulletin:

"By eating potatoes instead of wheat, the people of the United States can help win the war. We have not enough wheat for the allies and ourselves. We have an abundance of potatoes. Wheat flour is a concentrated food and therefore good for shipping; potatoes are bulky and are consequently not suited for limited shipping space, nor are the allies so short of potatoes as of wheat. Next to cereals, potatoes have been in this country the mainstay for starchy food, which supplies energy.

"The more potatoes we eat, the less wheat we need. A medium-sized potato, weighting about three and one-half ounces, supplies about as much starch as two small slices of wheat bread one-half inch thick. In other respects, also, the potato measures up well with wheat bread and even has the advantage over it in supplying certain salts which the body needs to counteract the acidity resulting from the use of such foods as cereals, meat and eggs."

## Big and Loyal Thought

The honor of being first to go "over the top" in the third Liberty bond campaign in the New York district goes to John Muir, and he went over in a big and patriotic way.

"Please enter my subscription," wrote Mr. Muir, "for one million dollars third Liberty loan. I do not yet know the rates these bonds will bear. I do not much care. I do know the necessity for the success of the issue. I know the peril of this country which would result from a failure. And now that I know that $50 and $100 denominations will be included, and that partial payment facilities will be offered to all, I am confident that the loan will be successful, if larger subscribers participate as whole-heartedly as the smaller subscribers are sure to do."

There is a big and loyal thought in that. The interest rate is of little consequence. The big thing is to win the war, to make America safe and keep it free, to make the world a safe place to do business in; and to win the war we must all "come through."

We owe that to the boys in France and the boys who are training to go to France. We owe it to Uncle Sam. And we owe it to our children who will be here when we are gone and are entitled to the same full measure of freedom that we have enjoyed living in the America that our fathers gave to us.

## What the Roar of the Battle Says




The roar of the battle is telling the people of America to save wheat and bacon by eating corn or potatoes or poultry or vegetables—something that will conserve the staple necessities for the men who are facing the shrapnel and poison gas in the trenches. The report of each German attack is a fresh plea to the heart of America.

P. S. Darlington, field horticultural inspector of Washington, is an ardent advocate of cover crops for orchards, as he indicated in an address before orchardists recently. Not only has there been a loss of crops through clean cultivation of orchards, he says, but there has been a loss of nourishment and protection to the fruit trees. It sounds paradoxical to argue for the soil to produce two things better than one, but many authorities are now urging the growing of alfalfa or some other cover crop in the orchard.

## Washington Gleanings

The farmers of western Whitman county are preparing for the "spring drive" by dragging and grading the roads.

The dairies and farms of Thurston county are furnishing nearly 1800 gallons of milk daily to the soldiers at Camp Lewis.

The dairymen in the Chehalis district are contemplating an organization in order to combat the recent cut in milk prices made by the Chehalis condenser.

Vancouver, Clark county, is to have an immense kiln-drying plant, which will be able to handle between 8,500,000 and 10,000,000 freet of spruce a month.

Frank H. Patten of Kennewick has been named federal labor agent to work with Benton County Agriculturalist Lee M. Lampson and the county agricultural council.

At a meeting of 20 potato growers of the Satsop valley, in Grays Harbor county, each man in attendance agreed to raise 100 acres of spuds during the coming season.

Frozen whale meat is to be shipped to all sections of the United States this year by a whaling company which has opened a cold storage plant at Bay City, Grays Harbor.

School children of Grays Harbor county will raise upwards of 150 pigs this year for a contest being staged by the Aberdeen Chamber of Commerce. The chamber of commerce is offering $225 in prizes.

Philip Kinger of Uniontown recently added another section of land to his Alberta holdings, now owning a section and a half in that country, 830 acres of which will be in crops this season.

The first commercial shipment of broom corn from the Hanford valley was made recently by E. H. Stradling to a broom factory in Seattle. The shipment consisted of 12 bundles, approximately 3000 pounds.

As a test of loyalty to the United States, and to weed out and identify, if possible, those of pro-German sympathies in the community, every resident of Castle Rock was compelled to pass before the flag and salute it. The demonstration was arranged by a committee of citizens.

R. M. Turner, county agriculturist; W. H. Whitaker, poultry specialist for the state college, and Miss Olga Grizzle, home economics demonstrator for the seven northwestern counties, have been holding a series of meetings in the various communities of Skagit county to stimulate better production.

A group of farmers in Thurston county have purchased a 30-ton car of limestone to be used as a neutralizer for their soils. Tests made on the prairies about Lacey showed that the soil was so sour that nothing could be expected of it without neutralizer being used, and in some cases at least a ton to the acre will be required.

## What Others Say

The Dakota Farmer: Eating twice as many vegetables will relieve the food shortage. A good garden is a rear guard.

The Fruit Grower: He is a wise farmer who will keep a few sheep and who keeps them out of a low-headed orchard and protected from dogs.

Rural New Yorker: Ten to one a good hired man will do a better job in some new "skilled industry" than the skilled workman could ever do on the farm.

Wallace's Farmer: It is high time a stop was put to some of these blue-sky enterprises. All of the spare money of all of the people is going to be needed for war expenses of one sort and another before peace comes.

Farmers' Mail and Breeze: If the end of the world is about here there is one thing certain, I can't help it or prevent it. Maybe this is as favorable a time for a general smashup as any, though I presume most of us are selfish enough to wish to put off the final day for some future generation.

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THAT IS TO SAY, those principles of design and of construction which made that great Reo famous the world over for dependability and low upkeep, have all been retained.

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SO WE FEEL that the best possible recommend for this latest Reo—this new Light Four—is to say that all those principles of design and that same quality have been retained.

REFINEMENTS have been made at many points however.

WE PREFER THE TERM "refinements" rather than improvements. For, truth to tell, no owner of a Reo Four could suggest an improvement in that great car.

REO ENGINEERS, at the same time the most experienced and the most progressive, are always seeking opportunities to refine details of Reos.

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IN A WORD, for your convenience—in every case. For still greater accessibility. For still longer life. And for still lower cost of upkeep.

ASK HIM about these things.

WHEN YOU SEE THIS REO you will say the body lines, the finish, the upholstering are the finest Reo has ever turned out.

A LUXURIOUS EQUIPAGE; as handsome in appearance as it is excellent mechanically; yet at a price less than you had planned to pay for such a car.

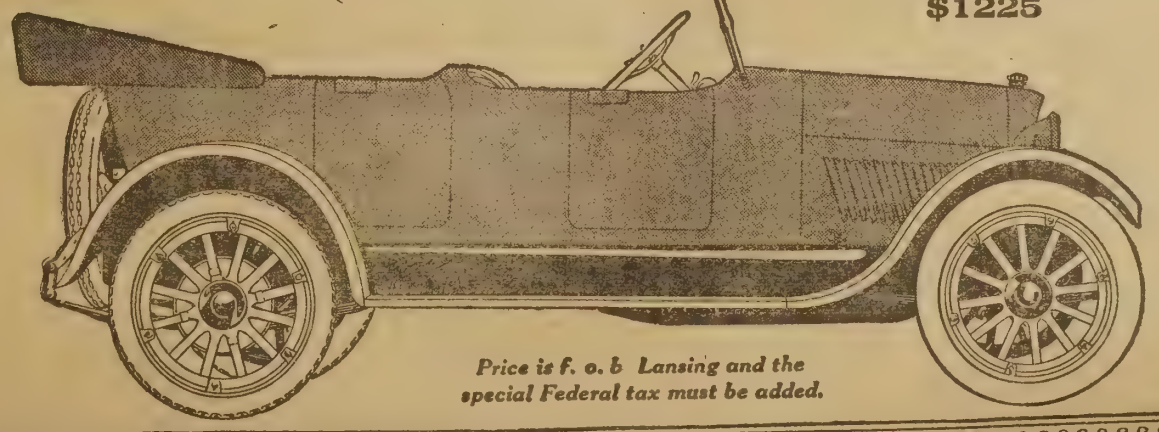
DEMAND SEEMS unlimited. At present, almost hopelessly in excess of factory output.

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**$1225**



*Price is f. o. b Lansing and the special Federal tax must be added.*

# More Oats, Fewer Milk Cows

## Hard to Get Good Help at Any Price Because of the Demands for Men in Other Industrial Enterprises




DARRINGTON, Snohomish County, Wash., March 24.—This month has been the coldest and roughest of the winter, storming, and at present unusually wet, delaying all spring work. No planting has been done yet. Farmers are somewhat puzzled as to what to raise. It looks as if there will be less potatoes raised this season, as there seems to be a surplus of spuds on hand. Logging camps have taken a lot, and will use a lot of them yet. The price paid for them is about $25 per ton. More grain, oats principally, will be planted this spring, and a few cows less will be kept, as some think they make more raising oats than milking a lot of cows with hired help. Fifty dollars per month and board is the least you can get a man for to work on a farm, and it is almost impossible to get an ablebodied man to work on the farm at any price, as the camps are paying good wages and work only eight hours. Alfalfa hay costs the few that have to buy some $32 per ton laid down at Darrington. Cream brings 62 cents a pound (butter fat); eggs 45 cents per dozen, pork from 18 to 20 cents, but there is no money in raising hogs as it costs about as much to raise them.

The Red Cross is doing splendid work around here, and everybody, young and old, is buying war savings stamps. C. B. NEIDERPRUM.

### Hog Production Increased.

SPOKANE, Spokane County, Wash., March 15.—In Spokane county, there does not seem to be a shortage of labor this year. In practically every instance farmers who find it necessary to hire labor have been provided sufficient help to care for the planting of the crops. In the matter of power for putting in the crops, horses are relied upon as a chief source of supplying the same. There are plenty of work horses in the county and in some communities there is a surplus of lighter weight horses. Tractors are not coming into permanent use as yet and until the companies demonstrate that these are staisfactory for work on hill land it is not likely that they will replace horses to any considerable extent.

There will be a great increase in the hog production this season and as a matter of increasing this production the office of county agent has been placing many brood sows upon the farms throughout the county. Sows that have been shipped to market but which are due to farrow this spring are returned to the farmers where they can assist in increasing pork production this fall. Through this effort we expect to increase greatly the number of hogs and farmers are availing themselves of every opportunity of making use of brood sows in this manner.

The matter of pasture is an important one here and beyond all question the greatest pasture crop that we have tried in the county has been sweet clover. It is good alike on the better and also upon the thinner soils in timber sections.

Spokane county has recently organized a county agricultural council and we have laid out a very definite system for increasing food production this coming year. J. R. SHINN.

### Pastures Are Excellent.

CATHLAMET, Wahkiakum County, Wash., March 13.—Due to the fact that so many young men have been called to the colors from this community, there will be some decrease in the amount of work that has been done on farms of this county. We have an excellent dairy section and little plowing is done on the average farm of the county. We have horses to take care of the local work, but no more than is necessary.

Pasture is the one crop which we have in abundance. Excellent pasture for so many months of the year enables the farmers to be quite independent from the purchase of feeds from the outside. Orchard grass, rye grass, timothy and clover are found in most of the meadows in the county. A. T. FLAGG.

### Grain Crops Looking Fine.

CENTERVILLE, Klickitat County, Wash., March 26.—We talk about the labor shortage here and if we are able to supply the demand for farm help, even at from $55 to $65 per month and board. It is just impossible at present as only those that contracted for their help ahead are making a success of the help proposition. Even all work on the wagon roads are cut off a good deal, the most work being done on rural route roads. Our supply of farm power is being renewed quite a good deal. There are a good many new tractors to be used this fall to see which kind of tractor is the best adapted here. There are plenty of work horses, and I think plenty of feed to get the crop in, with maybe a skimp for some. I do not hear so much of the sale of horses to the government, but suppose there is about the usual amount. The farm machinery proposition is a question, and most farmers have looked ahead for repairs or new machinery. There are quite a number of small combines being sold in the neighborhood, so as to take the place of the usual threshing outfit at which you always had to take your turn. I believe our usual stock of beef animals is being prepared for market, some stock going already toward the mountain pasture. There is quite an acreage of alfalfa being plowed up this year, possibly for change to be sown to wheat, and also to get a full new reset in clover, as all fields grow thin by years of use. The winter wheat is in good condition, generally, some very good, with a general average quite in advance of the last few years at this time of the year. Everybody here is doing their best on food increases, both as crop increase and saving of grain. The spring sowing of grain will soon be on, as there is plenty of spring seed as far as I can see. The weather is fine on the winter wheat, as it is shooting out rapidly. Some gardening of the early kind is being started. C. A. LESTER.

### Spring Work in Full Swing.

PROSSER, Benton County, Wash., March 21.—Spring is here and spring work is on in full blast, plowing, seeding and planting. The ground is in good shape. The farmers in this community have enough workhorses to do their work, but not many for sale. There is enough good machinery of all kinds. Some of the farmers are getting tractors, and quite a few new spraying machines are being bought. This community is shipping from one to two cars of meat animals per month. There is no pasture in this community. We have to feed the year round, but out on the hills there is plenty of bunch grass. I planted some field peas last year and I had a good crop, but the peas had lots of weevils in them. Can some one tell how to keep them out? G. W. WILGUS.




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# Man Needs a Balanced Ration

By P. G. HOLDEN.

Feeding the family is as important as feeding the animals. Food, whether it be for man or animal, has two functions to perform:

First, to build up the body and repair wasted tissue.

Second, to furnish energy for the production of heat and motion.

By observing a few general suggestions it is possible to keep a diet well enough balanced for practical purposes.

Both the growth of the body and its working capacity are dependent upon the amount and kind of food we eat. This should be borne in mind in these days when our country needs our best efforts and every ounce of food must be utilized to the utmost.

People must have protein substances to build up muscles and tissue. The protein is secured manly from meats, eggs, milk and cheese, or from legumes and cereals.

The legumes and cereals have such a large per cent of starches and sugars that if we were to depend entirely upon vegetables for our protein we would eat too much of the starches and sugar. Furthermore, the vegetable protein is not so easily digested as that found in animal food. For these reasons it is usually thought best for us to eat a mixed diet and secure a considerable part of our protein from meats, eggs, milk and cheese.

The best energy-producing foods are sugars and starches in cereals and vegetables. Corn, wheat, potatoes and rice should make up a large part of our diet. The fats are used in the same way as the sugars and starches, but have a much higher energy and fuel value and should be taken in much smaller quantities.

Fat is secured from butter, oils, olives, fat meats, nuts, etc. Cereals and vegetables contain a small quantity of fat.

Fruits, green vegetables and relishes furnish bulk, juiciness, flavor and the needed mineral element.

Water helps to dissolve and distribute the foods in the body and carries off the waste material.

A great deal of water is supplied to us through food material, such as milk and green vegeaables, but this is not a sufficient amount. People should drink a great deal of water besides that consumed with meals.

# Relieves the Horses

On a 60-acre irrigated farm in Yakima county, Washington, E. M. Chandler uses a small tractor principally for haying. "I farm with ton and better registered Percherons used also for breeding purposes and use the tractor to relieve them of heavy grind," says Mr. Chandler. "With tractor and 6-foot mower I cut 12 to 14 acres heavy alfalfa per day when in July in hot weather can cut only five with team. also use tractor for heavy spring-toothing in spring, discing corn land, and expect to use it in future to draw corn binders, two way plow for alfalfa sod, manure spreader and to operate silo filler and feed grinder and wood saw from pulley provided. I learned to run my tractor in a few minutes and my foreman had as little difficulty."

George C. Hardin of Tieton, Wash., says he has replaced eight horses and two men on his farm of 130 acres. Some idea of Mr. Hardin's activities with his tractor in one season is given in his own words: "In the spring of 1917 I put in 130 acres of spring wheat, plowing, harrowing and seeding at the same time. Then I plowed 40 acres of alfalfa sod, for another party, and after getting done with my own crops, broke up about 20 acres of sage brush land for another. Following this I disked 110 acres, plowed more sod and last November I started to plow stubble. Find I can plow six acres of stubble on 20 gallons of gasoline, running on high gear at the rate of 3 3-4 miles per hour."

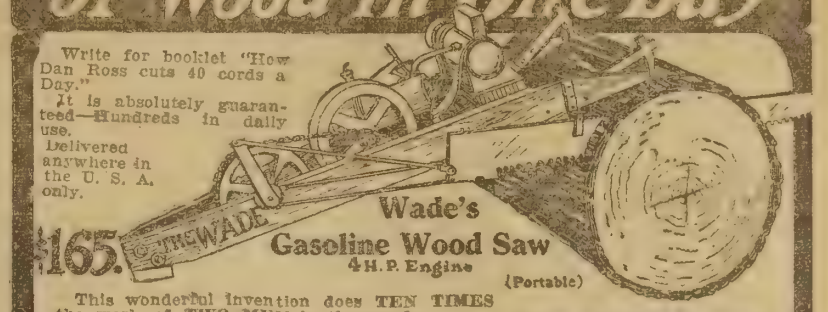
Asked what he considered the main advantages of the tractor Mr. Hardin says: "Tractor works rain or shine, hot or cold, does not cost as much to feed as the number of horses it replaces, and the repair bill on my machine has been less than the cost of keeping six horses shod. It doesn't eat when not working. I believe I can get 10 years' profitable service out of my tractor, running it myself and replacing worn parts as soon as they begin to need replacing."


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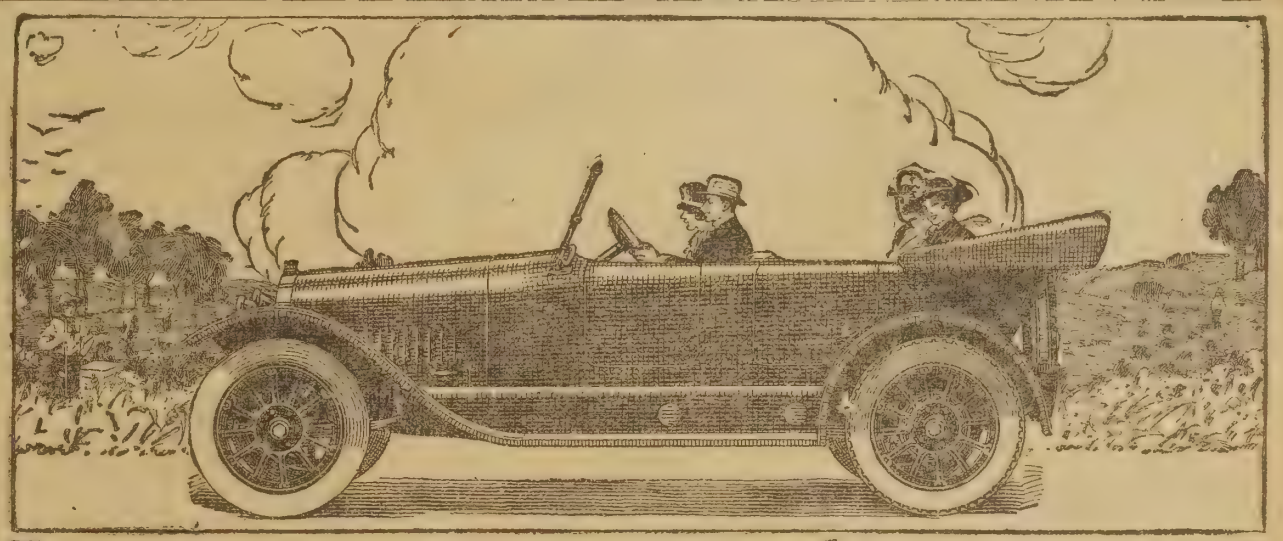
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Write for our catalog, then see this car—our latest— at your nearest Mitchell Showroom. It comes in five body styles. Write today, for we cannot guarantee this price against advance.

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A. B. NYSTROM, Editorial Contributor

# Wooden Hoop Silo

## Must Use First Class Material

By A. B. Nystrom.

There is a question in the minds of some prospective silo owners as to the advisability of putting up the home-made wooden hoop silo. They are not sure that it will stand the test.

This much must be understood, that if this type of silo is to be compared with any other wooden stave silo, the same grade of material must be used in both or the comparison will not be just. It is the belief of the writer that if the material that goes into a wooden hoop silo is selected with the same care as that which goes into the better grade of stave silos there will be little or no difference in the length of time the silos will remain in good condition.

Material for wooden hoop silos must be clear, straight grained and properly sized. Especially is this necessary for the hoop material. This should be about three-eighths inch thick, at least three inches wide, and in lengths from 12 feet upward. These should be nailed on from four to five ply, depending on the size of silo.

While this high quality material is required for a silo that will last for 20 to 25 years, a shorter lived silo can be made out of cheaper material. In one instance that has came to the writer's notice ordinary one by six common, not sized and full of knot holes, was used for the sides and short lengths of barn bats were used for the hoops. In spite of the poor quality of material the silage in this silo this year is of No. 1 quality—much better than the silage found in other types of silos in the community. The owner is more than satisfied with the results.

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# Dairy Questions

## Are Answered by A. B. Nystrom

To the Editor: Will you please advise me through your paper if it is safe to feed parsnips to milch cows? I have several hundred pounds which are too small for market and nothing will eat them but the cows. L. D. O.

Answer—Parsnips are very desirable for dairy cows. They are very high in digestible nutrients as compared with other root crops. The following table, taken from Henry and Morrison, shows comparative analyses:

| | Per cent protein. | Carbo-hydrates | Fat. | Total |
|---|---|---|---|---|
| Parsnips | 1.3 | 12.5 | .4 | 14.2 |
| Carrots | .9 | 8.6 | .2 | 9.7 |
| Mangels | .8 | 6.4 | .1 | 7.3 |

In some of the European countries parsnips are widely used for dairy feeding, but in this country they have not come into very general use because of the low yields per acre.

**Buttermaking on the Farm.**

To the Editor: My trouble is about making butter. I have not had any farm experience until lately, so consequently I find buttermaking rather difficult. If you can enlighten me I will be grateful to you. R. R.

Answer—There are certain definite rules that are very useful in buttermaking. I will enumerate them as follows:

1. Good butter can be made only from good, clean flavored cream.
2. Cream containing about 30 per cent fat is the best for buttermaking.
3. Keep cream as cold as possible until time to churn. Then warm it to 65 to 75 degrees Fahrenheit and hold for six or eight hours or until a mild acid taste develops.
4. Always use a thermometer to ascertain the right temperature.
5. Overripe cream makes a poor quality of butter.
6. The churning temperature should be such that the churning will require about 30 minutes and at the same time have firm granules—from 52 to 60 in the summer and from 58 to 60 in the winter.
7. Clean, scald and cool all churning utensils before using.
8. Stop churning when the granules are about the size of small peas.
9. Wash these granules with pure water of about the same temperature as the buttermilk after the latter has been drained off.
10. What buttermilk is left must be washed out not worked out.
11. Add salt at the rate of ¾ ounce to each pound of butter.
12. Work butter just enough to distribute the salt evenly and to give it a solid, smooth body.
13. Overworked butter has a sticky body.
14. Mottled butter is caused by the uneven distribution of salt.
15. Put up butter in neat, attractive packages, wrapped in parchment.

**Milk Fever.**

To the Editor: Is there any way to prevent milk fever? I lost one cow last summer from that and the other day I nearly lost another. M. H.

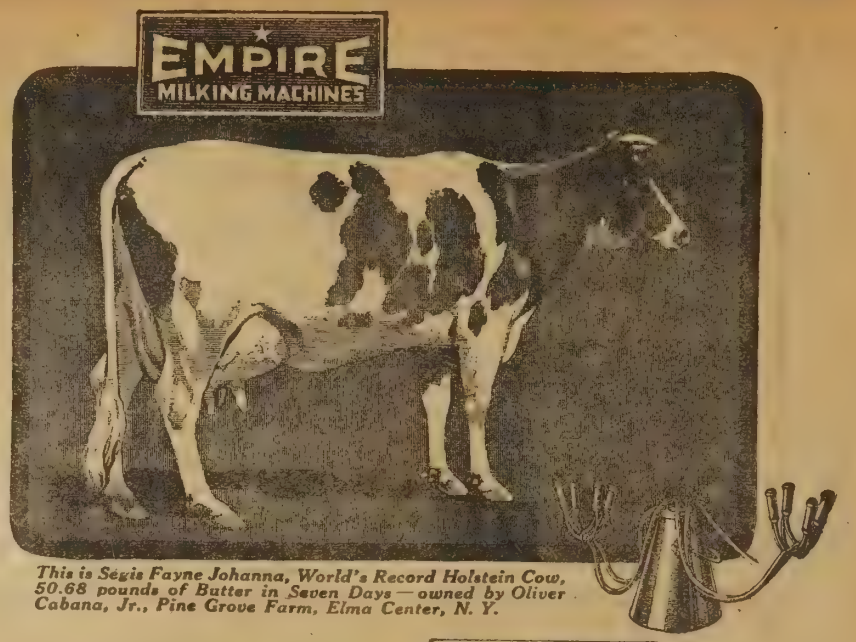
Answer—Cows that are susceptible to milk fever should be fed laxative feeds previous to calving. If the cow gets down with the trouble use a milk fever outfit at once and pump filtered air into each quarter of the udder. Tie a piece of wide cotton tape around the base of the teat to hold in the air. The pressure made by the air will stimulate the milk secreting cells into activity and the cow is up in a short time. If a milk fever outfit is not available use a bicycle pump, some rubber tubing and a sterile milking tube. This treatment is almost infallible.

## Open Alaska Farm Land.

With a view to increasing the agricultural production of Alaska, surveys are to be made this summer by the national forestry service as a result of which much land suitable for cultivation in Alaska will probably be eliminated from the forest reserves and placed open to settlement.

**Oregon Jerseys Win.**

Among the six highest Jersey records completed during 1917 Oregon had two—Viva La France owned by Pickard Brothers, and Goldie's Nehalem Beauty owned by Clifford Reid. No other state had two animals among these six top Jerseys last year.




*This is Segis Fayne Johanna, World's Record Holstein Cow, 50.68 pounds of Butter in Seven Days—owned by Oliver Cabana, Jr., Pine Grove Farm, Elma Center, N. Y.*

**Why?** EMPIRE MILKING MACHINES

**HERE are the names of a few of the many famous breeders of registered dairy cows of every breed, who use EMPIRE MILKING MACHINES:—**

Oliver Cabana, Jr., Pine Grove Farm, Elma Center, N. Y.; Senator A. T. Fancher, Fancher Farm, Salamanca, N. Y.; Charles Pratt Estate, Glen Cove, L. I.; Sherwin Farm, Willoughby, O.; Woronoak Farm, Westfield, Mass.

And these are a few of the thousands of market milk producers who use EMPIRES:

E. W. Smith, Richford, Vt.; Glen W. Jeffers, DeKalb Junction, N. Y.; Frank Baumgartner, Joliet, Ill.; Fred Pabst, Oconomowoc, Wis.; C. P. Fisher, Owatonna, Minn.; Chas. McFrederick, Jerusalem, Ohio; F. M. Helm, Fresno, Cal.; C. H. Conrey, Durango, Colo.

Why do the foremost breeders and the most successful dairymen of every class use EMPIRE MILKING MACHINES?

The reasons are these: Empire Milking Machines solve their labor problems and at the same time safeguard their cows. They milk uniformly—*the same way every day.* They lengthen the cow's period of lactation. They make it possible for one man to do the work of three or four hand milkers, thus saving many times their cost in wages in a remarkably short time. They produce better, cleaner milk than is possible by hand milking—and frequently *increase* the milk flow. They work equally well on easy and hard milking cows.

If you're milking more than eight cows you will want an Empire Milker—*you need it.* Our factory is overcrowded with orders, so see the Empire Dealer at once, so you will not have to wait for your Empire Outfit.

Write for catalogue No. 48

EMPIRE CREAM SEPARATOR COMPANY

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DISC UNITED STATES

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THE HANDLE'S OWN WEIGHT, as it comes gradually down to "A," puts the Bowl into rapid motion. It requires but slight ADDITIONAL POWER to bring bowl to full speed.



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**Requires but 42 turns of crank per miuute**

Saves your strength to extent of from 600 to 1000 turns a day.

The only Separator that starts the easy way—by "pumping"—which means pressing downward on crank for a quarter turn, then bringing crank back to starting point, repeating several times, before making full turns. In getting up momentum DOWNWARD PRESSURE IS EASIER THAN UPWARD LIFT.



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Largest Importer in the United States.



# "THE MILKY-WAY FARM"

Federal Inspected Cattle

We have listed in the Western Holstein Breeders' sale at Kent, April 17, a few young cows just freshened or ready to freshen. These cattle are from the very best of breeding, heavy producers and will be a paying proposition right from the startoff. They have the conformation, size and breeding. Free from all diseases. And are guaranteed as represented in sales catalogue.

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ALBERT E. SMITH, Owner
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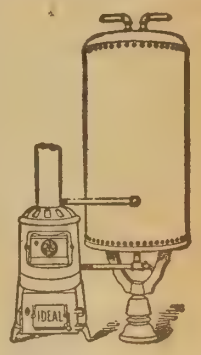
You will always find a prosperous farm where IDEAL heating has changed the *house* into a *home*. IDEAL Boilers burn the cheaper fuels—hard and soft coal, wood, lignite, slack, screenings—and are the greatest heat developers—now saving over millions of tons to their users. Most easily operated. No more work than to run one stove for one room. No coal gas or dust and the outfit of IDEAL Boiler and AMERICAN Radiators will outlast even the building itself.




IDEAL Boiler fuel pots mix the air and coal gases as in a modern gas mantle, extracting ALL the heat from the fuel.

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7th SEMI-ANNUAL SALE

# Western Washington Holstein Breeders' Association

85 HEAD OF THE BEST IN THE WORLD
At KENT, WASHINGTON, APRIL 17th, 1918

*ALL THE LEADING BREEDERS OF WESTERN WASHINGTON, Consignors*

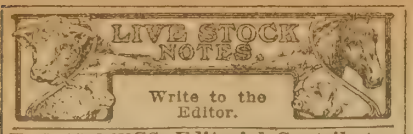
The Guarantee Sale of the West. 60 Day retest privilege goes with each animal

A Proven Son of the KING OF THE PONTIACS Will Be Sold

For Catalog Address A. B. WINTER, Secretary, Everett, Wash.

N. B.—The Northwestern Holstein Breeders' association will hold its semi-annual meeting at close of sale. Meeting place to be announced at sale. All friends of the Noble "Black and White" are invited to attend.

E. B. MARKS, Secretary.




E. J. IDDINGS, Editorial Contributor

## WOMAN IS SHEEPMAN.

### Operates Big Washington Ranch.

One of the prominent sheep breeders of the northwest is Mrs. Zora Jackson of Dayton, Wash., who operates a large sheep farm in Columbia county. It is stated that her investment approximates $380,000, the land under her control totaling 17,000 acres, some of which is good farm land, but the bulk of which is pasture land. She features the Rambouillet breed of sheep. It is understood that her flocks now total between 7000 and 8000 head.

The Jackson sheep have taken prizes at Chicago, St. Louis, Denver, San Francisco and Portland. Shipments have been made to customers in South Africa, Australia and to practically every wool growing state in this country. The band produced a single fleece weighing 69 pounds, which is yet intact at the Tucanon farm.

The winter quaters for the sheep on the Tucanon are equipped with every modern appliance, including an electric plant for lighting the buildings and supplying power for shearing machines and other necessary purposes. Although Mrs. Jackson directs her enterprise very largely from her home in Dayton she pays frequent visits to the mountain camps during the summer season, and keeps in close touch with the affairs of her business at all times. She contributes to the winning of the war by supplying from 80,000 to 100,000 pounds of wool and thousands of mutton sheep annually and the services of two sons at the front in France.

## GET READY FOR SHOW.

### Prospects at Lewiston Are Good.

With a view to working out details for the live stock show at Lewiston the coming fall the executive board of the northwest live stock show held a meeting at Lewiston recently. Considerable revision of the premium lists was made, the object being to strengthen a number of departments where improvement was considered possible. The board agreed upon and announced the following department heads:

General superintendent of grounds—D. S. Wallace, Lewiston.

Horses—W. J. Kressley, Fenn.

Beef cattle—H. L. Summers, Bozeman, Mont.

Dairy cattle—Ira T. Whitney, Spokane.

Swine—A. L. Wilson, Greenleaf, Idaho.

Sheep—J. L. Chapman, Asotin.

Young people's classes—J. H. McCroskey, Fishtrap, Wash.

Transportation—W. J. Jordan and L. M. Foss.

Improvement of grounds—Thomas F. Wren, D. S. Wallace and O. P. Hendershot.

The executive board consists of Thomas F. Wren, president; Henry Thiessen, D. S. Wallace, James McCroskey, E. J. Iddings and O. F. Hendershot.

## Veterinary

Dr. S. B. Nelson

**Milk Flow**—I have a 5-year-old cow that has always been a good milker and is now fresh again about two weeks ago and giving 28 to 30 pounds of milk a day. But she has not come to her milk in either front teat. Probably gives less than a pint in the two together. I can't discover anything wrong with her bag. It simply acts like a dry udder. Bag was slightly caked, but that has about disappeared. Can you suggest any treatment that will restore the milk flow?

W. W. S.

Newberg, Ore.

Try giving your cow one and one-half pounds of Epsom salts in two quarts of water. Two days later begin giving her approximately half a teaspoonful of potassium chlorate in one pint of water once daily. I am not sure that this treatment will give you results, but it is the one that seems to me to be indicated in the case you relate.

**Mare's Legs Swollen**—One of my mare's hind legs is badly swollen and inflamed. The hair is coming off and I have been doctoring for mud fever, but without results. A. G.

Yelm, Wash.

Try applying the following ointment to the mare's leg: Zinc oxide, one part; starch, one part; glycerine to make an ointment. Apply that once daily. Then give her in her feed one ounce of Fowler's Solution of Arsenic morning and evening for a week or 10 days.

**Affected With Piles.**—I have a pig that is in perfect health only it has the piles, but not so very bad. Is there any cure for it and what is it?

M. B.

Mossy Rock, Wash.

Apply to the affected portion the following liniment: Fluid extract of ergot, one part; fluid extract of belladonna, one part. Apply morning and evening with a little cotton.

**Calves Cough**—I have a bunch of calves that cough continually and some have a discharge from the nose. This cough seems to stay with them until they are about a year old. They are well fed, but do not seem to grow as they should.—A. L., Trout Lake, Wash.

Try treating your calves for lung worms. Place the calves in a tight or fairly tight room. In the center of the room place a tub with two inches of water in it with two bricks in the center. On the bricks put a tin pan full of flowers of sulphur. Set fire to the sulphur and then let the calves breathe the sulphur fumes for 15 to 20 minutes. Repeat the treatment two or three times four to six days apart.

**Started With a Limp.**—I have a sick horse and do not know what the trouble can be. She started to limp a little in the right foot. Think it is in the shoulder. The first time we noticed this was in June, and from then on did not work her. At harvest we woked her three days and on the fourth day she limped on the left hind leg so bad that we could not use her any more at all, and she is still in the barn, doing nothing. She is almost well in the hind leg and now has it also in the other front leg. When she lies down and gets up she can only move the front legs six inches at one time till she gets to moving around. Then she can step ahead at full length. She feels good when she gets out and jumps and kicks, but has not a very good appetite. She will be 7 years


DOES BETTER WORK COSTS YOU LESS



THE Viking Cream Separator is made of the finest grades of iron and tool steel in the largest separator factory in the world. It costs you less but there is no finer machine made than the

VIKING CREAM SEPARATOR

Easy running, has greater capacity, close skimming, easy to clean, strong and durable. Write us now for the Free Viking Separator Book and learn why the Viking is used all over the world.

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515 S. Wells St. Chicago, Ill.




Make Longer Cream Shipments

This Sturges refrigerator can has a special heat and cold proof insulation between its inner and outer walls.

In a test it lost only eight degrees "coolness" in twelve hours in a steady heat of ninety-two degrees. 24-hour hauls safely made. Just the thing for sweet cream shippers. Widen your market—save work of icing, using felt jackets, cones, etc.

*Write for Booklet No. 141*

Sturges & Burn Mfg. Co.
*Established 1865*
Chicago, Ill.

Sturges Refrigerator Car

Draft Stallions and Mares

The best of the breeds at all times.

Note Our Winnings at the Principal Shows in the West



81 FIRST PREMIUMS.
17 CHAMPIONSHIPS.
4 GRAND CHAMPIONSHIPS and SILVER CUPS. 176 HORSES COMPETING.
17 SECOND PREMIUMS.
4 RESERVE CHAMPIONSHIPS.

We realize that the trade demands the best horses obtainable at a reasonable price.

You get them when buying of us—fully guaranteed.

BROWN & MOOD Write us what you want, or Call us at our expense.

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IMPORTERS, BREEDERS AND DEALERS IN PERCHERON, SHIRE, CLYDESDALE AND BELGIAN STALLIONS AND JACKS

We are confident and fully believe that you will find here a GREATER, LARGER, and BETTER selection of the FOUR principal draft breeds than can be found in any stable in the northwest, and on the most LIBERAL TERMS, and we know that if you will visit our barns that you will find our prices within the reach of any one wanting a stallion, and that you will save considerable money, believing that we are in a position to make you prices that DEFY COMPETITION, and a GILT-EDGED BREEDING GUARANTEE with every stallion sold. Write us your wants.

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Send a postal card or write your name on the edge of this page—get the Book that tells all about old-reliable Carley Roller Feed Mills, standard of the Northwest for 17 years.




Carley Mill No. 8 Rolls 40 to 50 bushels of oats or 60 bushels of wheat or barley per hour

Use 25 Per Cent Less Feed

—by rolling your oats, corn, barley and wheat with a new improved Carley. Built for YOUR needs—7 different sizes. Nothing to get out of order. Sold under our Ironclad guarantee. Write today for Free Book




Colfax Iron Works, Colfax, Wash. (Successors to Carley Bros.) Oldest-Largest Mfrs. of Feed Mills in West
703 S. Main St.



Imported and American Bred Percheron, Shire and Belgian Stallions

They are of the very best breeding obtainable and are guaranteed to be breeders. They will be sold at very reasonable prices.

If in need of a good stallion weighing from 1800 to 2200 pounds, come direct to my stables and see them or write for description and terms to

WM. T. TRACY, Kennewick, Wash.

40 STALLIONS---12 JACKS

We can show you more big TON imported and native bred PERCHERON, BELGIAN AND SHIRE STALLIONS AND MAMMOTH KENTUCKY JACKS than any other two firms in the northwest. Many of the stallions in our barns are winners at the Chicago International and the leading western shows. Come and make your choice. Our prices, terms and guarantee will suit you.

S. METZ & SONS

Commercial Barns, Pendleton, Ore.

20 Head——Jacks and Jennets For Sale——20 Head

For forty years we have been breeding them. For twenty-eight years they have won every premium offered through Oregon and Washington, with one exception. They are native-bred, and all of them make good. They are all registered in Standard Jack and Jennet Register of America. We have mules to show from them, and we make prices that are lower than importers can meet. Come and see them, or write.

B. F. Swaggart, Prop. EASTERN OREGON JACK FARM. Lexington, Ore.

old next spring and weights over 1200 pounds. When she stands she keeps moving her front legs or shifts from one to another constantly. Will you kindly tell us what the trouble is?
Chilco, Idaho. J. I.

Give your horse a powder, morning and evening, of the following: Potassium iodine, one-half ounce; powdered colchicum, two drams; potassium bicarbonate, one ounce; powdered anise seed, one ounce. Have this made into four powders and give one night and morning. You can repeat the treatment in four or five days if necessary.

**Trouble With Teats**—Last fall one of my cows had trouble with her teats. A little scab formed on the end of the teat and I had to pick it off before I could milk. This scab bothered for several days and then went away. The teat appeared to be all right but I could get hardly any milk out of it. The other quarter also stopped giving milk. The cow wasn't giving much so I quit trying to milk her. She came fresh about six weeks ago and the two quarters that were affected give very little milk. One about two cupsful and the other about half that much. I think for the last few days there has been more milk coming into one quarter than I can get out. Another cow has a little hard lump in the end of two teats. The lumps almost close the milk passage and it is very hard to get the milk. The lumps came about two months ago and seemed to be sore at first. Can you tell me what is the cause of this trouble and cure if there is any. L. C. H.
Alsea, Ore.

The scab which formed on the end of the teat was probably due to necrosis bacillus. It may be possible that they affected the entire quarter. I do not know of any treatment that will bring the milk back except the gradual massage of the udder. The treatment of the scab is to dip the teat into tincture of iodine before and after each milking. That frequently gives good results.

Regarding the other cow that has little hard lumps in the end of the teat I wonder if you mean the lower end of the teat or the upper end? If it is the lower end of the teat I would advise the application of iodine ointment after each milking. If you have a veterinarian at your command he could probably take an instrument and remove the lump from the interior of the udder by surgical means but I do not believe that it would be possible for a layman to do this and have it come out successfully, therefore you had better try the iodine ointment. You can get that at any drug store.

**Potato Water for Hogs**—I was told that in feeding cooked potatoes to hogs they did better if the water they were boiled in was not used, and would like to know if that is true. That is, when they are boiled with the skin on. I have a sort of mange or poison of some kind among my cattle which starts about the eyes and takes the hair off, spreading in spots over the body. Does not make a scab at first, but does some later. What can I do for it?
Camas, Wash. D. H. S.

Regarding the first part of your question, there is no definite evidence that the water which potatoes are boiled in is detrimental to hogs. However, during the spring of the year, when potatoes begin to grow, sometimes there is a little danger that some of the poisonous substance which is contained in the skin of the potato, solafine, might by continuous boiling, go into solution and be detrimental. For that reason it is better not to feed the water along toward the spring of the year.

Regarding the scabs around the eyes of your cattle, that is very likely ringworm. Treat the cattle by painting the spot and one-half inch around the spot with tincture of iodine once a day for a few days.

**Blood Poisoning From Cut.**—A colt 6 months old got a cut, either wire or snag, on front ankle joint of front foot. Blood poison evidently set in. I never knew he was cut till he went lame. Used flaxseed poultice for three weeks, then soap and sugar poultice. Leg swelled clear to body, but mainly at ankle. Was lanced 11 times, exuding yellow pus. Swelling now gone out of leg except joint and mainly in front. He is very lame and it broke open lately, exuding bloody pus. This case is now eight weeks old. I am now using white liniment. Have always bathed leg in warm carbolic water. C. D.
Felt, Idaho.

Give the colt, internally, 15 grains of potassium iodine night and morning for about a week and then stop the treatment. There may be a diseased tissue in the bone, which will break at any point, but gradually the growing bone will get better, I think.

**Mare Does Not Get Fat**—I have a mare eight years old that will not get fat. She seems to be in good condition in every way, has a good appetite and has a nice, glossy coat. I had her teeth worked on a couple of years ago and they seem to be in good shape. It seems to me that it may be worms, but can not tell for sure. I have been feeding chopped barley and straw lately, but before had been feeding grain hay. Please give me your opinion on her.
Wallowa, Ore. G. C. M.

Try giving your mare one-half ounce of Fowler's solution of arsenic once daily on her feed for 30 days.

**May Be Ringworm**—I have a yearling heifer that has some kind of skin disease around its eyes. A white scab forms a large circle around each eye and the hair comes out. It seems to be all sore and is getting larger every day. Now I notice that my cow and calf are getting the same thing. Is it a catching disease and would it infect a person if he touches it?—W. F. B., Leland, Idaho.

Your yearling heifer is probably affected with ringworm. There are a number of treatments available for this deases. Just the application of lard daily will sometimes cause a cure; also the painting of the spots daily with tincture of iodine gives relief, and a still better treatment is to paint the spots with a 4 per cent solution of silver nitrate, and immediately after paint it with tincture of iodine. It is very seldom the trouble is ever transmitted to man, although it occasionally occurs.

**Is Cow With Calf?**—About the 1st of February I bought a young registered Holstein cow. Is there any definite way of telling whether she is with calf or not? She shows no sign of coming in heat. Will you tell me what will remove small warts from old cow teats?—Subscriber.

It is a very difficult task indeed to definitely tell whether a cow is pregnant or not unless she is fairly well advanced, past the fourth or fifth month. After that time it may be told generally by a person who is experienced.

In regard to the small wart on the old cow try the application of the prescription which has appeared in the Farmer on numerous occasions.

**Calf Going Blind**—I have a calf about 4 months old which is going blind. I noticed it about a month ago. The pupil of her eye is too large and her eyes look dark green when you look straight at her when it is a little dark. Is there anything I can do for them? C. E. A.
Gloyd, Wash.

I am not able to make a specific diagnosis of the trouble affecting your calf. Therefore, I can not give you a treatment for it. I am of the opinion that it is probably some trouble with the optic nerve and that treatment will not avail.

**Sucks Herself**—I have a very valuable cow that sucks herself. What could I do to prevent it? She has only been doing it just the last two weeks.
R. R.
Parma, Idaho.

About the only way to keep a cow from sucking herself is by putting a mechanical appliance on her which will prevent her from being able to turn her head so far back that she can reach the udder. Generally by placing a strap around the body just behind the fore-legs and have this go through a slot in a stick which passes between the front legs up to and fastens to the halter you can prevent her from sucking herself.


First Eastern Oregon

# Shorthorn Sale

## At Ontario, Oregon

**Thursday, April 25th**

UNDER AUSPICES OF THE NORTHWEST SHORTHORN BREEDERS' ASSOCIATION.

**75 Registered Shorthorns 75**

**Males and Females**

Drawn from the following well known herds of

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| Day & Rothrock | A. D. Dunn. |
| Jas. McCroskey & Son. | W. O. Cummings |
| W. J. Townley. | W. W. Green. |
| Joe Turner. | G. W. Delay. |

and Hutchinson & Sherman.

**Breeders, Farmers and Rangemen** will find this sale an exceptional opportunity to select a class of cattle best suited to their requirements.

Included in the offering are some of the best bulls ever entered for sale in the northwest, both as to pedigree and individuality.

The females are **very high class** and should draw the attention of discriminating buyers, therefore any one wishing to strengthen his herd should not overlook this opportunity.

All stock will be judged day preceding sale by F. W. Harding of Chicago, secretary American Shorthorn Breeders' Assn.

**For catalogues and other information write**
**Joseph Turner, Manager Sales, Meyers Falls, Wash.**
**Or Ontario, Oregon, Moore Hotel.**
**Gue & Cranke, Auctioneers.**



# PUBLIC SALE

## Pure Bred Percheron Stallions and Mares

### By Emmet Mulhall

23 HEAD, 10 STALLIONS, 13 MARES

SATURDAY MAY 20, 1918.

These Percherons are well bred, representing the blood of Moulinet, Carnot, Calypso, Rabelais, Etudiant, Powerful, and Seductor; well grown and well conditioned and as workers and breeders are the kind that are an asset on every farm. In this consignment is the coming three-year-old colt Minet, by Moulinet, out of a Rabelais dam who in the get of a sire group at Illinois state fair defeated the leading sires in the United States. This colt should be heard from on the Pacific coast circuit this fall. Also General Funston, a well turned coming three-year-old colt teeming with quality, possessing remarkable finish and wonderful action. These colts should head a herd of pure bred mares. Also several prize winning mares in eastern shows.

This is an opportunity to make a selection for the breeder, beginner or stallion buyer. The catalogue will interest you. Mention the Pacific Northwest Farm Trio.

Geo. A. Gue, Harry C. Cranke } Auctioneers — Emmet Mulhall, Fenn, Idaho.

Fenn is located sixty miles southeast of Lewiston; on the Camas Prairie railroad.





*"Setting up work" puts him in fine condition. And what an appetite—and how good the little chew of Real Gravely does taste!*

## It's Easy to Send Him a pouch of Real GRAVELY Chewing Plug

**That's the tobacco for him—Real Gravely Chewing Plug—condensed quality—the most tobacco satisfaction in the smallest space, ready to give him the solid comfort of tobacco wherever he happens to be.**

Give any man a chew of Real Gravely Plug, and he will tell you *that's* the kind to send. Send the best!

Ordinary plug is false economy. It costs less per week to chew Real Gravely, because a small chew of it lasts a long while.

If you smoke a pipe, slice Gravely with your knife and add a little to your smoking tobacco. It will give flavor—improve your smoke.

**SEND YOUR FRIEND IN THE U. S. SERVICE A POUCH OF GRAVELY**

Dealers all around here carry it in 10c. pouches. A 3c. stamp will put it into his hands in any Training Camp or Seaport of the U. S. A. Even "over there" a 3c. stamp will take it to him. Your dealer will supply envelope and give you official directions how to address it.

**P. B. GRAVELY TOBACCO COMPANY, Danville, Va.**

*The Patent Pouch keeps it Fresh and Clean and Good —it is not Real Gravely without this Protection Seal*

Established 1831

## POULTRY

Write to the Editor.

**JAMES DRYDEN,**
**Editorial Contributor.**

### Testing Out Infertile Eggs.

It is not possible to tell whether an egg has been fertilized or not until it has been in the incubator or under the hen for a few days, in other words, until it has been subjected to an incubating temperature of 103 degrees to start the development of the germ or embryo. The tested out eggs are good food for the chicks, and they are even good for cooking purposes. An infertile egg doesn't go rotten; it remains clear, and if tested out in four or five or six days it is good food for the chicks and may be used for human food. They should not, however, be sold as good eggs. It might subject the person doing it to arrest and punishment.

There are usually some infertile eggs in every setting, and in large incubator lots the number is quite an item. Probably the best use to make of them is to feed them to the newly hatched chicks. There is nothing better for them.

White shell eggs may be tested in four or five days after set; brown eggs in two days later. They are tested by the ordinary methods of candling. It can be done at night or during the day in a dark room. There are various ways of candling eggs. One simple method is to hang an electric bulb inside of a shoe box or cereal box, cutting a hole opposite the bulb about the size of the egg, a little smaller. An ordinary coal oil lamp may be used instead of the electric light. The light is turned on, and the eggs, one at a time, are held up at the opening. An infertile egg will show clear or like a fresh egg, while a fertile egg will show the beginning of the chick or darker, the embryo and blood veins being plainly visible. Test out the infertiles and save them for food for the chicks.

J. D.

### Certainly Not!

We have received the following question from one of our readers: "Do we have to let other people's turkeys eat up our crop, and what course should we take to stop it?"

Poultry, including turkeys, are not looked upon as live stock and therefore are not entitled to free range privileges as is the case with some other animals. We are very certain that if a neighbor's turkeys trespass upon another's crop, the person owning the crop has recourse through the courts to secure damages. However, we recommend in all such cases as this that efforts be made as between man and man to prevent the necessity of taking the matter to the courts.

### Storrs Contest.

At the end of the first four months of the Storrs egg-laying contest a pen of Oregons from the Oregon Agricultural college stood in second place, with a pen of Wyandottes owned by Obed Knight, Rhode Island, first.

## Buy War Stamps, Too

The great campaign is on for the sale of the third Liberty loan bonds in the sum of $3,000,000,000, but the little thrift stamp and the war savings stamp remain on the market as an ideal investment for any sum ranging from 25 cents to $1000.

The purchase of a dollar's worth of these little "baby bonds" by each of the people in this country would produce for the conduct of the war the sum of $100,000,000 or more and in addition would mean the investment of that amount at a good rate of interest in gilt edged security.

The beauty of the war stamp is that it takes only a small amount to purchase it and that that amount can be taken back if needed practically upon notice to the postoffice in your community. The 25 cents that you throw away for luxury if spent for a thrift stamp will be saved for your future use when you need it and will in the meantime help this country and the allies stem the stupendous attack of the barbarians of central Europe. Four dollars and fifteen cents invested this month in a war savings stamp will be worth $5 on the first of January, 1923, or, if you should need the money earlier, it will be worth the purchase price plus 3 per cent interest up to whatever time you find it necessary to call for your money back.

On another page of this issue there is printed a coupon by means of which you can readily order thrift or war savings stamps from this paper. We are glad to offer our services in helping our readers and Uncle Sam get together in this little financial transaction. Look up the coupon, fill it out, clip and mail it to us and your stamps will be sent by return mail.




"WOOD-LARK"
TRADE MARK
SQUIRREL AND GOPHER POISON
QUICK, CERTAIN, DEADLY.

READY FOR INSTANT USE.
NEVER FAILS.

Destroy squirrels, gophers, prairie dogs, sage rats. Apply early in Spring when the hungry pests awake from Winter's sleep. Money back if it ever fails. "Wood-Lark" for 25 years has stood every test. It's crop insurance against rodent pests. If your dealer hasn't it, write us.

Clarke, Woodward Drug Co.
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THE INLAND SEED CO. SPOKANE, WASH.

Field Seeds

Sweet clover, white and yellow blossom perennial, Grimm Alfalfa, Dwarf Essex Rape, Sand Vetches, Millets, Clovers and Grasses.

The Inland Seed Co., SPOKANE, WASH.

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SAFE AS A U.S. BOND

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GOODRICH SAFETY TREAD

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IN the purchase of any product, security lies in a name and a trademark which for years have stood sponsor for good service in the product, and good faith in the maker. They safeguard a buyer from deceiving appearances.

The Goodrich trademark on any rubber means it is as safe a buy as a U. S. Government Bond; for Goodrich has stood for the best in rubber since man harvested with scythe and sickle.

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GOODRICH Tires today are guaranteed by the old-time Goodrich good service and good faith. Goodrich security is doubly valuable in purchasing tires, since nowhere are appearances more deceitful than in tires. Whatever tire you need on the farm, be it large or small automobile tires, truck tires or bicycle or motorcycle tires, Goodrich tires give you the same sure service pledged and proven in—Goodrich Tested Tires.

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TESTED service means service proved out against actual road conditions the nation over by Goodrich Test Car Fleets.

Goodrich Tires have fought against rock, sand and gravel, through mud, snow, and sand, in hot and cold climates, and conquered with phenomenal mileage.

Safeguard yourself in all tire purchases with the Goodrich brand. Safeguard yourself in pneumatic Tires by buying the tires that have mastered America's roads. Safeguard the service of your truck with truck tires that outwear steel. Make sure of tire economy and dependability with "America's Tested Tires."

Where You See This Sign Goodrich Tires are Stocked

Buy from Goodrich Dealers Located Everywhere

W.S.S.
Count that day best which buys a War Saving Stamp.
For sale at every Goodrich Branch and Depot

THE B. F. GOODRICH RUBBER CO.

THE CITY OF GOODRICH · AKRON, OHIO.

WE WILL
HATCH YOUR EGGS
or sell you a
Buckeye Incubator

Write us about hatching eggs in the Buckeye Mammoth 2440 incubator, or selling day old chicks.

Spokane Seed Co.
Distributors Buckeye Incubators, Standard Colony Hovers.
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MUST HELP
## FEED THE NATION




A SANITARY NECESSITY
IN RAISING
## HEALTHY POULTRY

KILLS LICE AND MITES.
WILL HELP STOP LOSS FROM DISEASE.

**One Gallon**
**Makes 72 Gallons**
of Solution ready for use.

EQUALLY GOOD FOR ALL LIVE STOCK.

Write for Free Descriptive Booklets on Poultry and Livestock Sanitation.

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**PARKE, DAVIS & CO.**
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of this company is not in its vaults, but in the good will of its thousands of Northwestern policyholders.

They have insured with this strong local company; it in turn is assisting in a big way, through its investments, to build up the Northwest. Insure with

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*Some splendid openings for local representatives.*






**WANTED--1000 tons of mixed country scrap iron**
In carload lots of not less than 25 tons each. Write for prices if interested.

PACIFIC HIDE & FUR DEPOT.
Joseph Thiebes and C. T. Symmes.
1101-09 Railroad Ave., Spokane, Wash.


# Do Not Cultivate the Orchard Clean

(Continued from page five.)

cover crop and manure crop and you allow it all to lay on the ground, I am satisfied that it does not require any more water than clean cultivation, and I earnestly believe that it requires less, although I have no accurate data to prove this. I am personally unfortunate enough to be interested in an orchard for which we have to raise water over 200 feet by means of pumps. You can readily see that with us conservation of moisture is a feature. We had the last season, in our part of the state, the most severe long drouth that we have had in recent years, but our orchard suffered less from drouth this year than ever, because we cut only a portion of the first crop of alfalfa and none after that. It seemed a shame to see that dense mat of alfalfa fall down and rot on the ground, but we could get only a limited amount of water, and we did not dare cut the alfalfa and take it off. The alfalfa saved our apple crop. As I see it now, however, we could have installed an additional pump and doubled our water supply and paid for the pump and the extra power with the alfalfa we could have saved, figuring it at $30 a ton. We are negotiating for a pump to double our water supply next year.

We have learned something also this year about handling our water. Up until this year we have used four or five small furrows between the tree rows, but have always experienced considerable difficulty in getting our water through these small ditches. This year we made just two large ditches with a turning plow, with very much better results.

We have always had the best success sowing the alfalfa about the middle of August on soil that has been clean cultivated all summer. At that time it is necessary to irrigate it up and is sometimes necessary to irrigate it once after that. If the soil should get dry at the time the seed is germinating or soon after that you will not have much success getting a stand. Alfalfa sown the middle of August should get about six or eight inches high before winter, and is then ready to start off good and strong in the spring.

Let me give you a word of caution. Do not expect beneficial results the first year after the alfalfa has been sown. In fact, it requires quite a little care the first year to prevent detrimental results. Your stand is not likely to be heavy enough the first year to afford the soil sufficient protection, and the ground is apt to bake. Further than this the little seedlings are yet shallow-rooted and are taking their moisture and food from the first two or three feet of soil, right in competition with the feeding roots of the trees. The alfalfa will need more water and more care the first year than any year after that, and you are not likely to see any beneficial results until the second or third year.

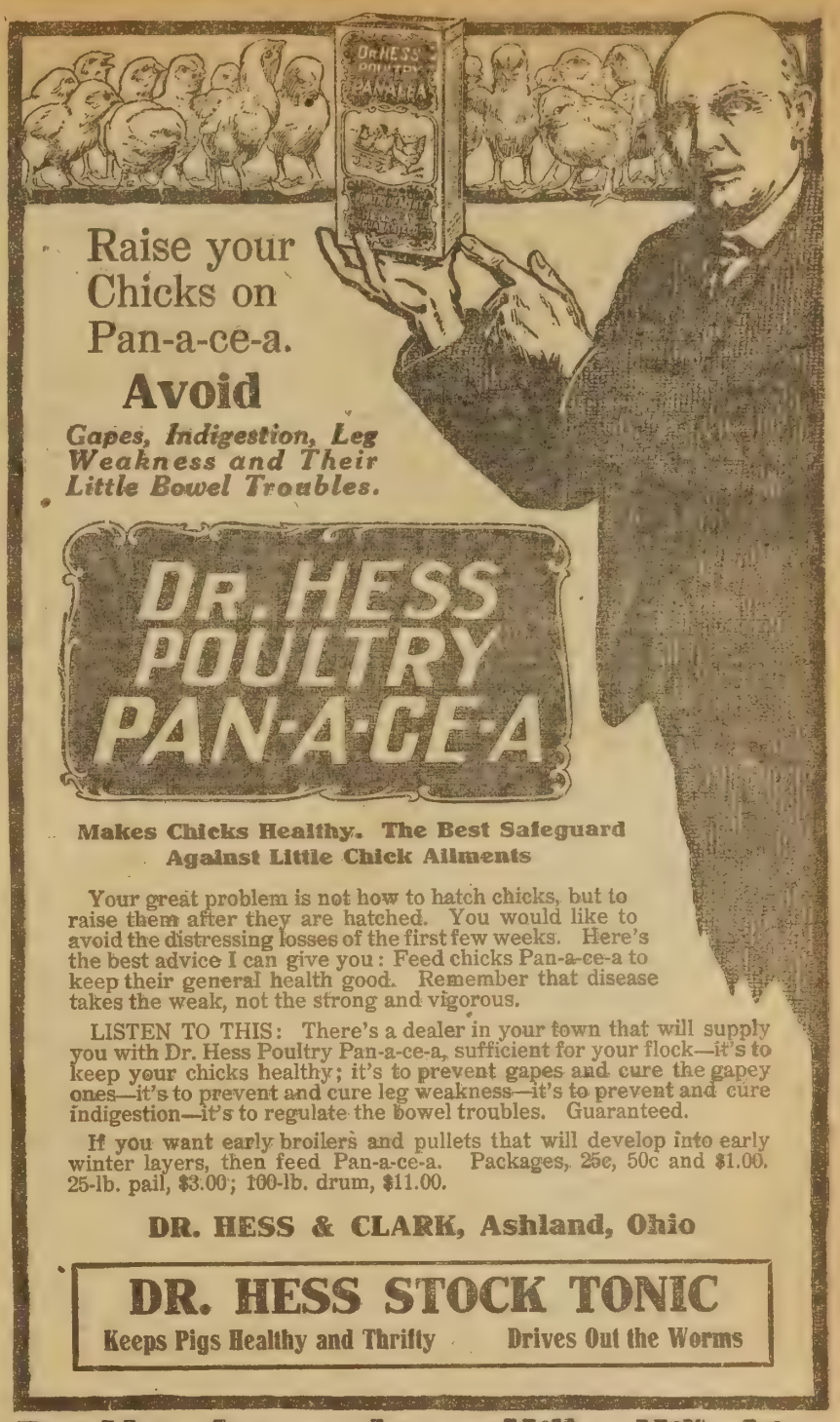
Do not think that it is necessary to plow alfalfa under to get results on the orchard. Your results become accumulative year after year, and the longer your alfalfa remains in the orchard the better for your orchard.

# Leads Cow by the Tail

Freemont Kelley of North Bend, Wash., is the author of a unique method of leading a stubborn cow. In a communication to the Farmer Mr. Kelley tells of his struggle with an unruly animal and of his final victory over her.

Unable to lead her by the halter he tied a rope loosely about her horns, passed the free end through the loop and back so that it could be tied to the end of her tail. He tells his experience in the following words:

"Now I pulled gently upon the head with the lead rope then with the other rope gave a few jerks upon the tail and she went like a shot past me. But now I was master for I had dropped the lead rope on her head and took both hands hold upon the rope running through the loop around her horns and tied to her tail, which by her movement drew her head rigid by her side. Naturally she fell. But I soon got her up and petted her and tried again to lead by the lead rope but got the same refusal. So I renewed the jerk upon the tail which of course repeated the former bolting. Gradually she got timid about the bolting and if she would not follow by a gentle pull upon the lead rope, just to jerk lightly upon her tail made her take the hint to come on. In a short time she would walk as fast as I could and was not any bother whatever after that."


Raise your Chicks on Pan-a-ce-a.

**Avoid**
***Gapes, Indigestion, Leg Weakness and Their Little Bowel Troubles.***

**Makes Chicks Healthy. The Best Safeguard Against Little Chick Ailments**

Your great problem is not how to hatch chicks, but to raise them after they are hatched. You would like to avoid the distressing losses of the first few weeks. Here's the best advice I can give you: Feed chicks Pan-a-ce-a to keep their general health good. Remember that disease takes the weak, not the strong and vigorous.

LISTEN TO THIS: There's a dealer in your town that will supply you with Dr. Hess Poultry Pan-a-ce-a, sufficient for your flock—it's to keep your chicks healthy; it's to prevent gapes and cure the gapey ones—it's to prevent and cure leg weakness—it's to prevent and cure indigestion—it's to regulate the bowel troubles. Guaranteed.

If you want early broilers and pullets that will develop into early winter layers, then feed Pan-a-ce-a. Packages, 25c, 50c and $1.00. 25-lb. pail, $3.00; 100-lb. drum, $11.00.

**DR. HESS & CLARK, Ashland, Ohio**

**DR. HESS STOCK TONIC**
Keeps Pigs Healthy and Thrifty — Drives Out the Worms

**Dr. Hess Instant Louse Killer Kills Lice**



# Dependable!

Here is a portable drag saw that you can depend upon.

Built especially strong for heavy duty work and backed by one of the oldest implement houses in the West.

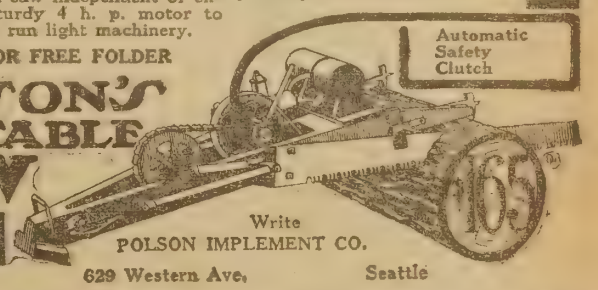
You make no mistake when you buy the Polson.

**Will do the work of 20 men sawing cord-wood shingle bolts, clearing land and cut from 15 to 30 cords of 4-foot wood per day.**

Equipped with Safety Automatic Clutch so you can start saw independent of engine and use sturdy 4 h. p. motor to pump water and run light machinery.

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**POLSON'S PORTABLE SAW**




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POLSON IMPLEMENT CO.
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Catalogue Free
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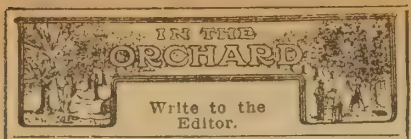
# The Man-Saver

THE Martin **Ditcher** is a man-saver, and a time-saver—therefore a money-saver. Two men, four horses and a Martin will make or clean more ditch *in one day* than they could plow and shovel out in *three weeks*—time and man saving are big items *now*.

**Fine for Terracing, Dykes and Roadwork**

Made in 2, 4 and 6 horse sizes; can be used with tractor. Works equally well on side hill or level, or in wet or dry soil. Handles rocks and cuts alfalfa roots without plowing. Cuts or cleans ditches down to 4 feet deep. *All Steel, Reversible and Adjustable. Investigate the Martin NOW.*

OWENSBORO DITCHER & GRADER CO., INC.
1376 Wazee Street Denver, Colorado




GRANVILLE LOWTHER,
Editorial Contributor.

# Control Tomato Blight

Preventive measures that may be taken against western blight of tomatoes are described in a recent statement from the United States department of agriculture. The disease is distinguished by a marked upward and inward curling of the leaves, by a yellow color of stems and foliage, and by failure of the plants to produce fruit. It is believed to be due to a soil fungus which attacks and kills the feeding roots. This parasite can live on organic matter in the soil and is beyond the reach of sprays. Control, therefore, is difficult and has not as yet been fully accomplished. The following precautionary or preventive measures are advised:

Grow the tomato seedlings in soil in which tomatoes have shown no symptoms of the diesase or in soil sterilized by steam or boiling water.

There is some advantage also in setting out large plants, as they make considerable growth before the fungus invades their tissues, and therefore produce fruit.

It should also be helpful so to grow the plants that their roots will not be injured in transplanting. Although a parasitic fungus can invade uninjured tissues of its host plant, it usually enters more readily through wounds. If from the seedbed the plants are pricked off into paper pots, dirt bands, or paper drinking cups without bottoms, they can be grown to considerable size and transplanted to the field without removing the paper or injuring the roots. This is also a convenient and relatively economical method of doing the work.

One of the most effective means of controlling tomato blight is the use of other crops in rotation with tomatoes. As the parasite is unable to live on other crops, it is obliged to exist saprophytically; that is, living on dead or decaying organic matter, in competition with other fungi. This does not entirely eliminate it, but greatly reduces it in quantity. To prevent its accumulation, tomatoes should not be grown on the same land oftener than once in four or five years.

The breeding of blight-resistant varieties is the most hopeful means of controlling this disease. Some preliminary tests of resistance are now being made with a view of developing a resistant variety, but every grower should also make selections for himself. Select from a badly infested part of the field only the plants that are free from the disease, and plant the seed of the selections from the average disease resistance and yield and quality of fruit of their progeny. Do not mix selections nor save seed from any but the one that transmits the most desirable qualities to its progeny. When this is found multiply it and use it as seed for the field crop.

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Write for my interesting catalog of EVERBEARING AND STANDARD varieties of

**Strawberries and Vegetable Plants**

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KELLY GARDENS, Sta. B, Spokane.

**STRAWBERRIES**

Best for the West.

Americus Everbearing, $1.50 per 100, $3 per 250. Write for price list of other varieties.

CANYON HOME NURSERY.
Ellensburg, Washington.

**Till Your Orchard**

as thoroughly as you cultivate your cornfield. Intensive tillage conserves the moisture and sets plant food free. For more and better fruit, use an

**"Acme" Orchard Harrow**

Works right under the branches. The sharp-ground coulters work the soil easily, cutting out weeds and leaving a loose dust mulch at the top. Extension and regular styles—1 horse to 4 horse sizes—3 ft. to 17½ ft. wide.

Our free book, "The Acme Way to Crops That Pay," points the road to bigger orchard profits. Send today.

**Duane H. Nash Inc.**

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**SHOULD YOU ASK**

us what the advantages are we offer in

**Stevens County Logged Off Lands**

we would answer:

1. The soil is especially adapted to diversified farming and stock-raising.
2. The prices are low.

ten years to complete the instal-

3. Our payment plan is arranged to suit you, by allowing ments.
4. The land is close to good town and to railroad.

We will gladly tell you more about the land if you will ask for our free booklet. Use the coupon.

PHOENIX LUMBER COMPANY

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Phoenix Lumber Co., Farm Dept. Spokane, Washington.

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# How to Grow

From U. S. Dept. of Agriculture

## Cauliflower.

The cauliflower requires a rich, moist soil, and thrives best under irrigation. It will not withstand as much frost as cabbage, but is very sensitive to hot weather. To make a success of the crop it is best to plant it about the time of the last killing frost in spring, using plants grown in the hotbed or window box. This gives it time to mature before hot weather comes. The rows need not be more than 2½ to 3 feet apart for horse cultivation, or 24 to 30 inches apart for hand work. The plants should be from 14 to 18 inches apart in rows. The culture is the same as for cabbage until the heads begin to develop, after which the leaves may be tied together over the heads to exclude the light and keep the heads white.

This crop is one of the aristocrats of the garden. If you succeed in growing high-grade cauliflower you will qualify as a good gardener.

## Kohl-rabi.

The edible portion of the kohl-rabi is the thickened stem. It is closely related to cabbage and cauliflower. It should be started in the hotbed or window box and set in the open ground about the time of the last frost. The method of planting and the cultivation is similar to that practiced for cabbage. It can be planted in the open at the same time. Early sowings are made and if thinned to 4 to 6 inches apart the plants will soon grow to edible size under favorable weather conditions. This plant should receive much more consideration than usually is given it. It is really a poor man's cauliflower.

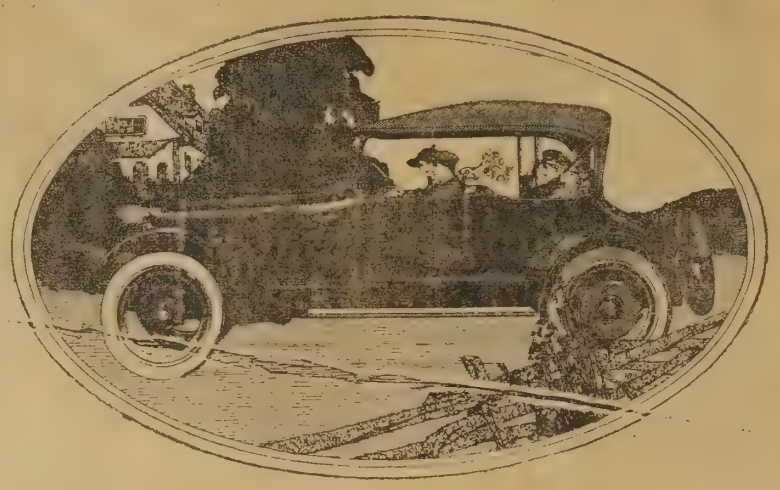
## Okra.

Okra is a delicious vegetable that deserves a better acquaintance with the home garden than it now posses. Say "Chicken Gumbo Southern Style" to the initiated; that is all the argument needed in favor of growing this crop.

It thrives on any good soil, and the seeds should be sown in rows 4 to 5 feet apart after all danger of frost is past, or about the same time as tomato plants are set in the open. The plants should be thinned until they stand about 2 feet apart in the rows. The edible portion of the okra is the pods, which must be gathered while young. They are used in soups or as a stewed vegetable.

**CHANDLER SIX**

*Famous For Its Marvelous Motor*



**It Offers So Much More For So Much Less**

DON'T choose the Chandler just because the price is so fair.

Choose the Chandler because of its wonderful motor, now in its fifth year—constantly refined, never radically changed, and now approximating perfection in power, flexibility and endurance.

Choose the Chandler because of the extraordinary excellence which distinguishes the whole Chandler chassis.

Choose it for the beauty and comfort of its bodies; for the economy of its operation.

And meanwhile remember that the Chandler positively offers you value not found in other cars priced at hundreds of dollars more.

*Seven-Passenger Touring Car, $1595*
*Four-Passenger Roadster, $1595*
*Four-Passenger Sport Model, $1675*

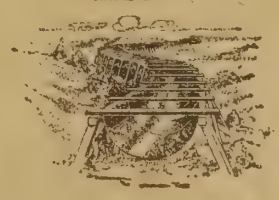
**Choose Your Chandler Now**

There are Chandler dealers in all principal cities and in hundreds of towns. Some one of them is in position to show you the newest Chandler models. Write us today for catalog and folder "How the Chandler Checks with High Priced Cars."

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"ARMCO" Iron Flume
ALL SIZES



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ALL SIZES AND GAGES
With Elbows, Y's and T's



Swivel Head Irrigation Hydrants

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Saves you trouble. Cost is small.





If you irrigate, write us. We specialize in that line.

**Coast Culvert & Flume Co.**

PORTLAND, OREGON

## HOLSTEINS SELL WELL.

### Record of Western Sales Made.

The most remarkable sale of registered dairy cattle and what is declared to be the highest average price ever received at a sale of cattle, of any breed in the Pacific northwest and possibly in the entire Coast region, must be recorded as the result of the Holstein sale at Tillamook, Ore., March 15.

Just one carload—16 head of females—had been brought in. They were from the Maplecrest farm at Chadron, Ohio, and the Cleveland, Ohio, City farm, and were of some of the greatest producing blood lines of the breed, with world record blood in almost every pedigree, and the Tillamook Holstein men showed their appreciation by paying what they were worth.

Top price of $1100 was paid by F. R. Beals for Maplecrest High Lawn Korndyke, a bred heifer, with two world record sisters and a half sister with a world record. Mr. Beals took one other for $775. John Ebinger paid $825 for the great cow Nina DeVries Schuling and Fred Maurer $785 for Maplecrest Hengerveld Burton, a very promising 2-year-old.

Colonel J. W. Hughes, auctioneer, drew the high dollar on every animal sold. The total for the 16 head was $9180, or an average of $573.75. While not showing the rich breeding, the following is a complete list of animals, buyers and prices:

Maplecrest High Lawn Korndye, born September 15, 1916; sold to F. R. Beals, Tillamook, Ore. ....$1100
Nina De Vries Schuling, born May 21, 1908; John Ebinger, Tillamook, Ore. ..... 825
Maplecrest Hengerveld Burton, born October 29, 1915; Fred Maurer, Tillamook, Ore. ..... 785
Forest City Pontiac Segis Salome, born June 12, 1915; Fred Maurer ..... 375
Forest City Pontiac Dolores, born September 11, 1915; John Ebinger ..... 600
Forest City Pontiac Lucile, born June 25, 1915; H. A. Springer, Tillamook, Ore. ..... 495
Forest City DeKol Hilda, born May 2, 1915; Ben Neilson, Tillamook, Ore. ..... 465
Forest City Pontiac Angeline, born September 14, 1915; John Ebinger ..... 575
Forest City Pontiac Constance, born February 21, 1916; L. D. Smith, Tillamook, Ore. ..... 500
Maplecrest Bonostine Lady, born March 18, 1915; L. D. Smith.... 750
Maplecrest Nina Pontiac, born January 22, 1915; F. R. Beals.. 775
Forest City Pontiac Myra, born December 9, 1915; C. A. Saling, Beaver, Ore. ..... 350
Forest City Highlawn Ella, born October 23, 1916; Ben Neilsen.... 365
Forest City DeKol Ladoska, born March 1, 1916; W. Kuppenbender, Tillamook, Ore. ..... 320
Ruby Pietertje Hengerveld, born September 13, 1913; Rollie Watson, Tillamook, Ore. ..... 550
Forest City DeKol Camille, born January 23, 1916; Fred Maurer. 350

Besides the above, Rollie Watson sold a bull calf, born in Tillamook, for $200, and two greatly bred bulls had been purchased and brought with the females on consignment. These were Maplecrest Hartog DeKol 2d and Maplecrest Beauty DeKol, both sons of Friend Hengerveld DeKol Butter Boy. They had cost $1000 and $700, respectively, and are owned jointly by A. J. Rogers, B. A. Folks and J. Ebinger. They will be used on the herds of these gentlemen and allowed to serve other cows.

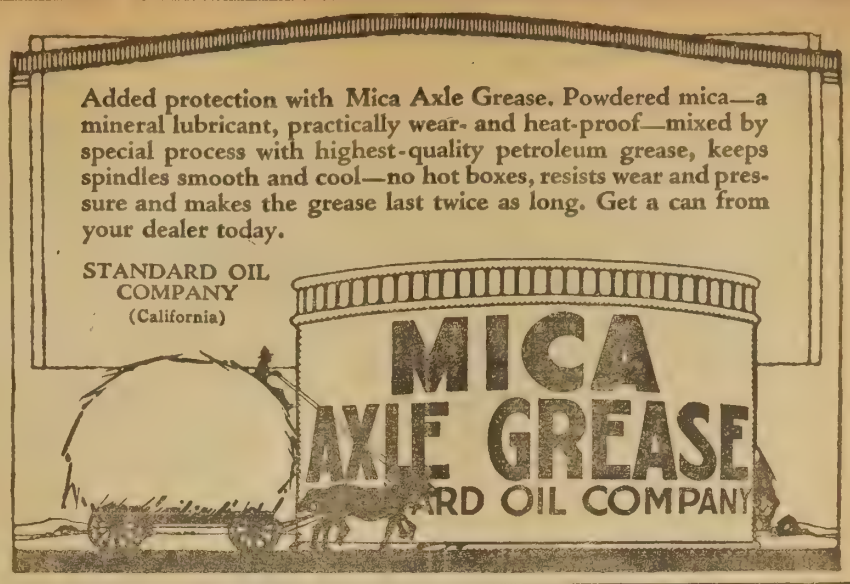
H. A.

## Preparing Garden Soil.

A simple test to determine when garden soil is ready for plowing or working is to take a handful of earth from the surface and close the fingers tightly on it. If the earth compacted in this way is dry enough for cultivation, it will fall apart when the hand is opened.

### Skim Milk.

Many people do not realize how nutritious skim milk really is.—Oregon Countryman.


In answering advertisements please mention this paper.


## 150 Scientific Recipes

Appreciating the universal demand for good food, properly and attractively prepared, The Washington Farmer offers its readers an exceptionally useful booklet containing 150 new recipes for canned goods by the highest scientific authorities.

Every housewife will be glad to have this book and preserve it for reference.

These recipes include a wide variety of sauces, soups, salad dressings, salads, desserts, etc., selected from the investigations of the Research Laboratory of the National Canners' Association. They will help any woman to keep herself posted on the latest scientific methods of preparing nutritious and appetizing foods.

You can secure them free by sending a 2-cent stamp for return postage, with your name and address, to

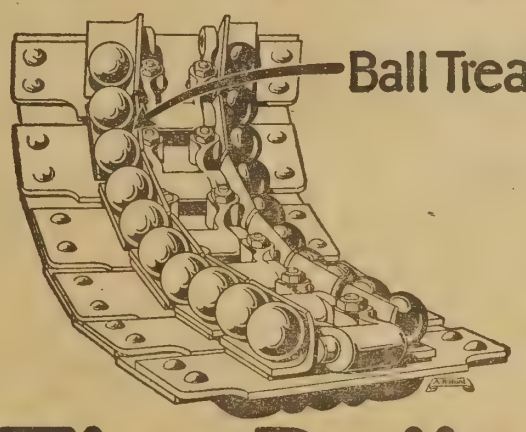
**The Washington Farmer Information Bureau,**
**Washington, D. C.**

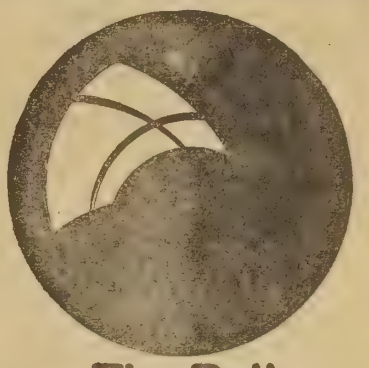

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# The Balls don't care

whether the weight is on the top or either side—no difference at what angle the machine is running. The balls are round, they take the thrust from any direction. THRUST—(Dictionary) to push with sudden impulse from any direction, shove with more or less force; to force ahead; to push; to drive; to press; to urge; to impel; to attack; to crush.

The balls are held in place by the rigid steel frame and the shoe below. For side-hill work the **Yuba Ball Tread Tractor** is the most serviceable.

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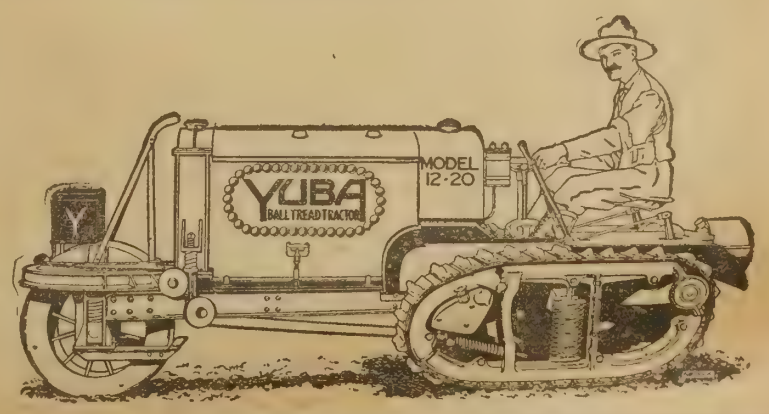
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# The Big Test Is On

## *Crisis in Battle Has Been Reached*

At this writing, after 10 days of furious fighting resulting in an advance by the Germans of from one to 37 miles and what appears now to have been a masterful, strategic retreat by the British, indications are that the great test of the conflict is on. British, French and American forces apparently have begun the promised counter blows designed not only to halt the German advance, but to regain the territory lost and possibly to push the enemy back to the starting point of the present fighting. What any day may bring forth is wholly problematical, but reports from the allied headquarters are optimistic in tone, and there appears little doubt that the crisis of the present encounter has been reached.

Statements from both the French and British headquarters have told of gains in practically every part of the battle line. Several points previously taken by the Germans have been retaken by the allies.

Especially interesting is the official statement that the formal offer made by General Pershing to General Foch of the entire American forces for the service of the allies wherever and whenever wanted had been readily accepted, and that "more than 100,000 Americans" had been ordered into the front line of the battle. The rules of censorship prevented the revealing of the exact number of Americans called into the battle, or the positions that they would take.

So closely have the reports from the battlefields been consored by the allied government that it is impossible for the person outside the inner circle of military affairs to know what the exact situation is. No intimation has yet been given of the probable casualties suffered by the allies and nothing but wild guesses as to the losses suffered by the Germans and Austrians. Reports from Berlin say that the German authorities claim to have captured 70,000 allied soldiers and 1100 guns.

Another matter that is not clear in the mind of the average person is whether or not the British retreat was forced upon them by the Germans or whether it was in accordance with a pre-arranged plan of the allied military leaders. A general belief that the allies were carrying out a program exactly as planned when it became evident that the Germans were going to launch the great drive appears to be borne out. This belief was given strength last week when Major General J. Franklin Bell of the United States army, who recently returned from Europe, told the senate military affairs committee that he had been given confidential information while in Europe concerning the plans of the British and French when the attack should be launched, and that this plan had been carried out exactly. If this is true it would appear that the allies had planned to make a considerable retreat before the strongest attack of the Germans, holding both flanks, however, with a view of making vigorous counter attacks on the flanks of the German advance movement after the Germans had been exhausted as much as possible.

As the situation existed at the time of the allied counter attack the German army in the north, probably not less than a million men strong, had made advances of from one to 37 miles. the British army being partially forced back and retreating partially for strategic reasons to these distances. The foremost point reached by the Germans was considerably farther into allied territory than it was when the allies made their famous offensive a year ago. This point is only a few miles east of the city of Amiens, a vital railroad center for the allies. This city is believed to have been the immediate object of the Germans' attack.

It will be seen from this that the German line, some 50 or 60 miles in length, had taken on a somewhat semi-circular shape with the allies strongest at both ends of the semi-circle. Intense interest has centered about the question of whether or not the allied plan would be the centering of vigorous counter attacks on these points of the semi-circle with a view to forcing the Germans back toward their base of supplies, which would have the effect of endangering the support of the enemy soldiers that had advanced farthest into the allied territory. Should such movement occur, it has been argued, and be successful it would necessarily require the retreat of the Germans from the territory which they have now captured in order to avoid the cutting off of a large part of their forces.

Up to this time the British army, the French army and the American army has each been controlled by its own military leaders, but in order to coordinate the efforts of all three allies, agreement has been reached whereby General Foch of the French army will assume the supreme command of all allied forces during the present campaign.

General Pershing, who is in charge of the American forces in France, appeared before General Foch last week and formally offered to him the services of all the American resources, both of men and material, now in France, or that can be placed in France in time to be of service. The reports of the entrance of the American soldiers into the battle indicates that the offer was accepted at once.

Reports from the Italian front indicate that very soon, probably before this will have reached the readers of this paper, the Austrian army will be massed for an attack on Italy second in enormity only to that launched on the British by the Germans in the north. Evidence indicates the presence of at least half a million men forming against the Italians, and a stupendous effort will probably be made at once with a view to putting Italy out of the war, as Russia and Rumania have already been put out of it. A cheering fact, however, in the situation is the official statement from allied headquarters that there have been no British or French soldiers withdrawn from the Italian front. This means one of two things: That the British and French defending the French frontier have not felt the need of their reenforcements from Italy, or that they have felt confident that a great drive would be made against the Italian front requiring the presence of British and French soldiers there. No information is available as to how many British and French men there are in Italy ready to help bear the shock of the Austrian attack.

Though most of the interest of the past two weeks has centered about the warfare on the western front, reports have continued to come from Russia showing that the Germans are still overrunning that country. Conflicting reports concerning the possession of Odessa, the Russian port on the Black sea, have been made, some claiming that the Russians have still maintained possession of it against the attacking Germans and others claiming that the port is in the possession of the German forces. Little has been heard recently of the movement of

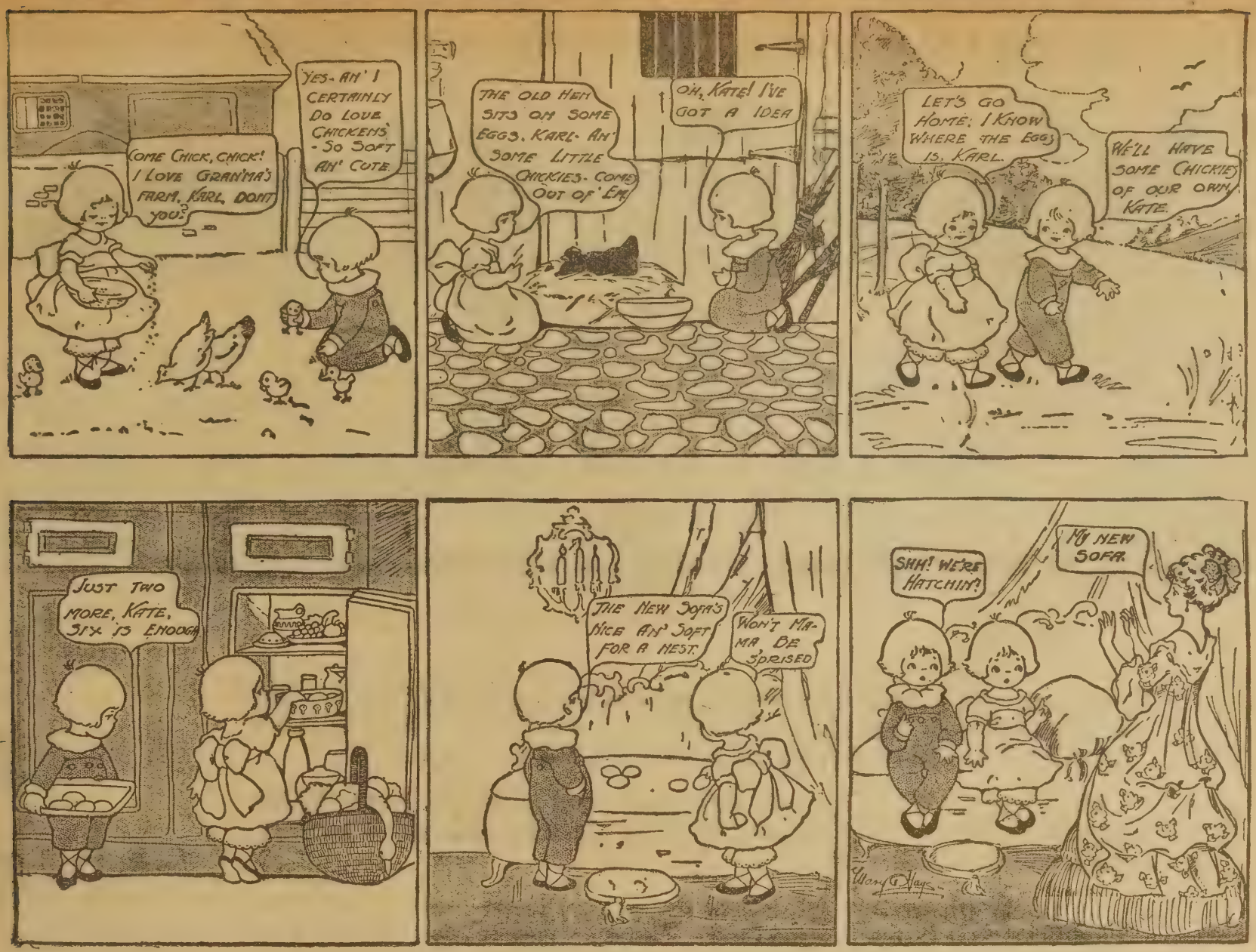
(Continued on page twenty-three.)

## What Will We Do?

**The bread ration of the allied soldiers now facing the fearful onslaughts of German guns and gas has been reduced! Why? Because they haven't enough to go around! They haven't enough wheat to make their war bread out of! What are we going to do about it?**




# KATE AND KARL LEARN A LESSON AT GRANDMA'S FARM




# MUGGSY PLAYS A MEAN APRIL-FOOL JOKE ON MULLIGAN



# Washington's




Across the glorious years of America's freedom stretches the hand of George Washington to lead and inspire the state that so proudly bears his name in the third loan for Liberty.

For George Washington's ancestral coat of arms, from which America's starry flag was born, is to be the state of Washington's emblem of honor.

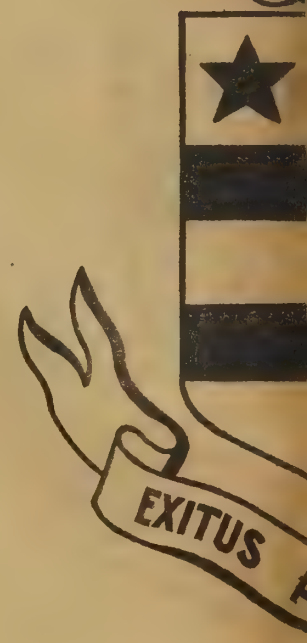
In many places special honor days have been set apart for Washington's honor subscribers. Their badge of patriotism and glory will be George Washington's arms, entwined through all America's history with the founding of this land whence freedom sprang.

All those who come forward in the first inspiring days with the dollars that will make the world a safe place to live in may feel within themselves the well-springs of duty splendidly done.

They may see their names leading Washington's vanguard of patriotism; they may know that the share they performed in carrying the third Liberty loan to success will be recorded in the archives of the United States government at Washington, D. C.

Nor will this honor shield go indiscriminately to all who buy. The man who can and should buy $100,000 worth of Freedom's securities and who with smug complaisance would walk with the elect when he has bought only $1000 worth is a slacker. So is the man who could buy a $100 bond and takes only a $50 bond.

Your conscience must decide whether you are doing your full share. You are "on your honor."




**George Washin**

*Freely translated th*
*by the Result." A*
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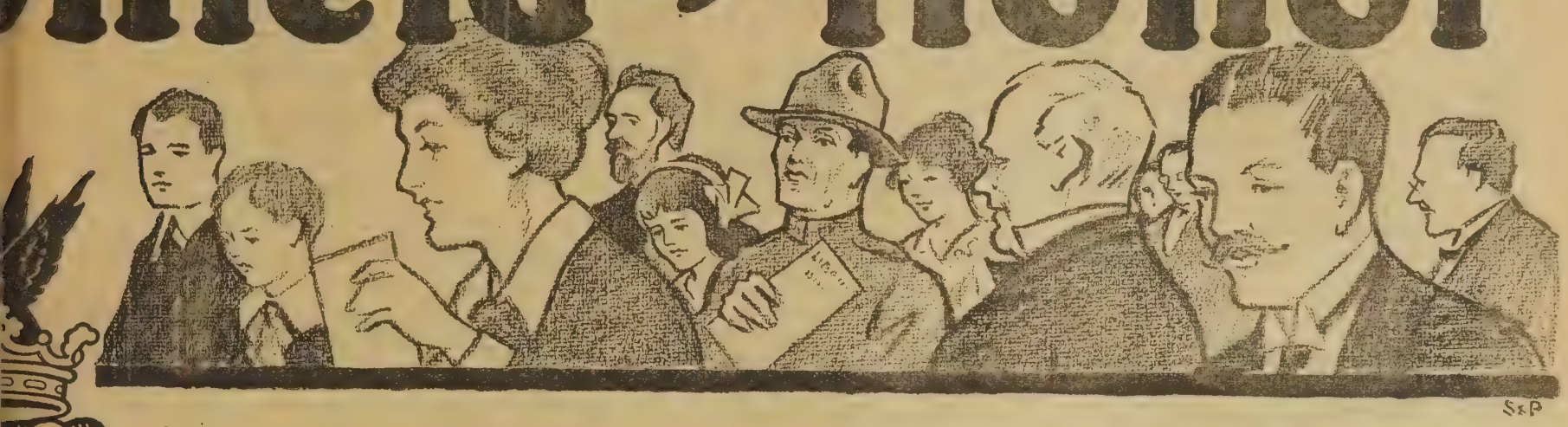
**Washington Libe**

Joseph A. S
Central

This page contributed to the Third Liberty Loan Campaign by the Sperry Flour Company.

# Pay Your War Bills

# Shield of Honor







**'s Coat of Arms**

*o is "Judge the Action his to the Third Liberty riotism by America's*

With its minimum of $3,000,000,000 and its unlimited maximum, the Third Liberty Loan is to America's patriotism at once a challenge and an opportunity.

It is a challenge to oversubscription on such a scale as to show the German kaiser that one hundred million Americans are in this war to the last man, to the last dollar, to the last heart-beat.

It is an opportunity to supply the Government with so much money for the prosecution of the war that the next succeeding Liberty loan will be thrust far back in the future.

With a thrill of patriotic pride, in the spirit of that greatest of all Americans, let's make Washington lead the Nation. Let's make other states set their pace by Washington. Let's bring to the Evergreen State the great Honor Flag that the federal government promises the first commonwealth submitting its full quota in the Third Liberty Loan.

You are going to subscribe—every one is going to subscribe.

Step up! You'll find representatives of the Liberty Loan Committee in every bank, in every precinct of city and county—at every turn.

The Kaiser will soon know that America counter-attacks his last desperate lunge on the western front. Not only with her brave sons, but with so many billions of dollars that victory will quickly spread her shining wings upon the Stars and Stripes and the banners of our allies.

Subscribe the first day instead of the last!

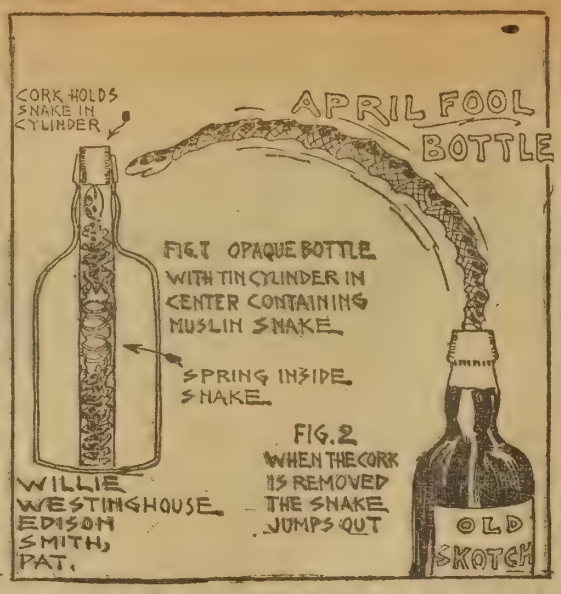
**Loan Committee**
**well, Chairman**
**ling, Seattle**

# Third Liberty Loan

This page contributed by the O. B. Williams Co., Sash and Doors, Seattle, Wash., U. S. A.

# WILLIE'S APRIL-FOOL BOTTLE LOSES PAPA A CUSTOMER







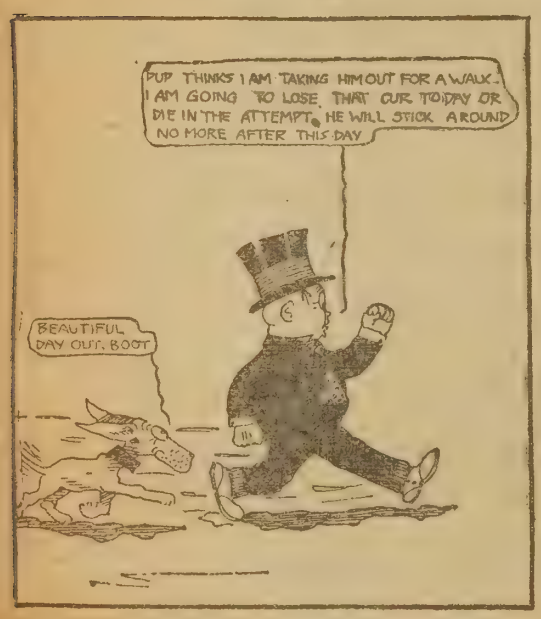

DEAR TOMMY: I fixed up a bottle like this to break our bookkeeper of the drink habit after I caught him sneaking drinks from Papa's wine closet. Shortly after I had put the trick bot in the cabinet, Mr. Isaacs, from Denver, came in and told Papa such a funny story that he forgot about the April-fool bottle and handed it to Mr. Isaacs! Yours, etc. WILLIE.







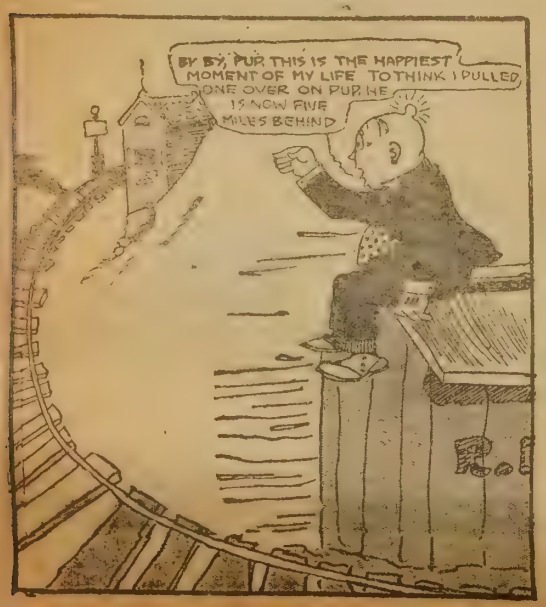
# BOOT MAKES UP HIS MIND TO LOSE THE PUP














# Succeeds With Alfalfa in Skagit County

## *Man Who Grew 75 Tons Corn Silage to Acre, Turns Attention to Alfalfa*

By PAUL E. TRIEM.

On the cover page of this issue is a photograph of Mr. Hall, referred to in this article, standing in his barn door beside some of his Skagit county corn.

John Hall of Skagit county admits that he can raise 75 tons of corn silage to the acre. He not only admits it, but he has proof in the form of an affidavit, the latter setting forth that on a certain date a reputable merchant of Mt. Vernon journeyed to the Hall farm and then and there measured a typical plot of ground in Mr. Hall's cornfield, cut the corn growing thereon and weighed it. The bulk of corn and cars produced was at the rate of 79 tons per acre. Mr. Hall has the affidavit framed, so that the next time a visiting agricultural lecturer tells a Mt. Vernon audience that no man can raise that much silage to the acre he will have something to offer in rebuttal. On a former occasion he was caught unprepared.

But last year, however, it was not corn about which the Mt. Vernon man proved successful in western Washington.

"As far as corn is concerned, I believe I have proved that we can raise more silage to the acre than can be raised in any other part of the world," he comments. "But that isn't all—we can raise alfalfa. Skagit county farmers don't have to buy their hay across the mountains—and when I tell you that I am able to back up my claim by the fact that I have been raising alfalfa in Skagit county for 10 years or longer. This patch," pointing to a nearby field, "is 10 years old. I cut it four times each year and get about eight tons of hay to the acre. When people try to tell you that alfalfa doesn't do well here on the sound, just remember this field. As a matter of fact, I have found alfalfa growing in a logging camp high up in the foothills, and have also seen a fine patch within 40 feet of salt water. It does as well here as anywhere in the world—once you get it started."

In getting alfalfa started, however, is just where the majority of growers have fallen down. Mr. Hall laughed when I told him so.

"Perhaps they are too easily discouraged," he commented. "I tried six or eight times before I could get it to grow on my farm. No, it isn't the soil—this 10-year-old patch is growing on heavy clay, although many people will tell you that it must be raised on a light, sandy soil. The water table is important—never try to raise alfalfa, in this part of the state at any rate, where water stands closer than four feet to the surface in the summer time. Apparently there is little danger of its drowning out during the winter—this field is covered at times during the rainy season. And I'll tell you one thing more, although a good many people will dispute it: alfalfa doesn't have to be inoculated to do well on Puget sound. None of my seed was treated."

Here are some of the things that must be done in order to secure a satisfactory stand, according to Mr. Hall:

"The most important point in the whole business," he says, "is to have your land thoroughly tilled and free from weeds. Weeds are the greatest menace to a new field of alfalfa, and unless the ground is pretty free from them to begin with there is hardly a chance of securing a good stand of hay. And the soil must be firm. After deep plowing and thorough harrowing the land should be firmed with a heavy roller.

"And then sow your seed. Sow it without a nurse crop—many a farmer has failed because he violated this rule. If alfalfa is unable to compete with weeds during its early stages it stands to reason that it will not be able to make headway against a thickly sown nurse crop. Sow it by itself about May 15. You should get two cuttings the first year and four cuttings annually after that.

"The last point in connection with growing and harvesting alfalfa applies with equal force to the handling of all other hay crops in western Washington," Mr. Hall concluded. "Use hay caps! There isn't a country in the world where they are more needed. Of course they are pretty expensive just now, but you must remember at the same time that hay is high. And hay caps are one of the biggest helps in the world in securing prime quality hay."

## The Big Test Is On

(Continued from page eighteen.)

Japan in the far east, though it is understood that that country is standing in readiness to take active part in Siberia for the protection of stores of supplies against the Germans should such supplies be menaced by the invaders.

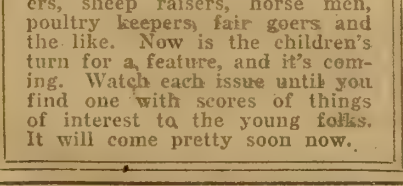
### More Meat; Less Wheat.

The national food administration has issued an order permitting the eating of meat including pork without restriction for the next 30 days beginning March 30. This order is issued, it is officially stated, because a large number of hogs are being placed on the market. This together with the large amount of beef and mutton available is about to have the effect of congesting railroad facilities and the meat eaters will be permitted to secure the benefit, though it may mean an additional hardship on the allies

The wheat situation, however, has not been relaxed, but has been made more rigid. The food administration has issued orders prohibiting the use of any wheat in any form in hotels and restaurants and it is reported that hotel and restaurant keepers are falling in line with the new regulation readily. This wheat order is issued because of the extreme shortage of wheat in Europe. Reports from the trenches say that bread rations of the soldiers have been reduced considerably owing to inability to secure enough wheat to tide them over until the harvesting of this year's crop. The food administration is therefore making strenuous efforts to conserve every available bushel of wheat in this country. Even if all the wheat now in storage in America were shipped to Europe it would be scarcely adequate to maintain the American, French, British and Italian armies on normal rations until the 1918 crop comes in.

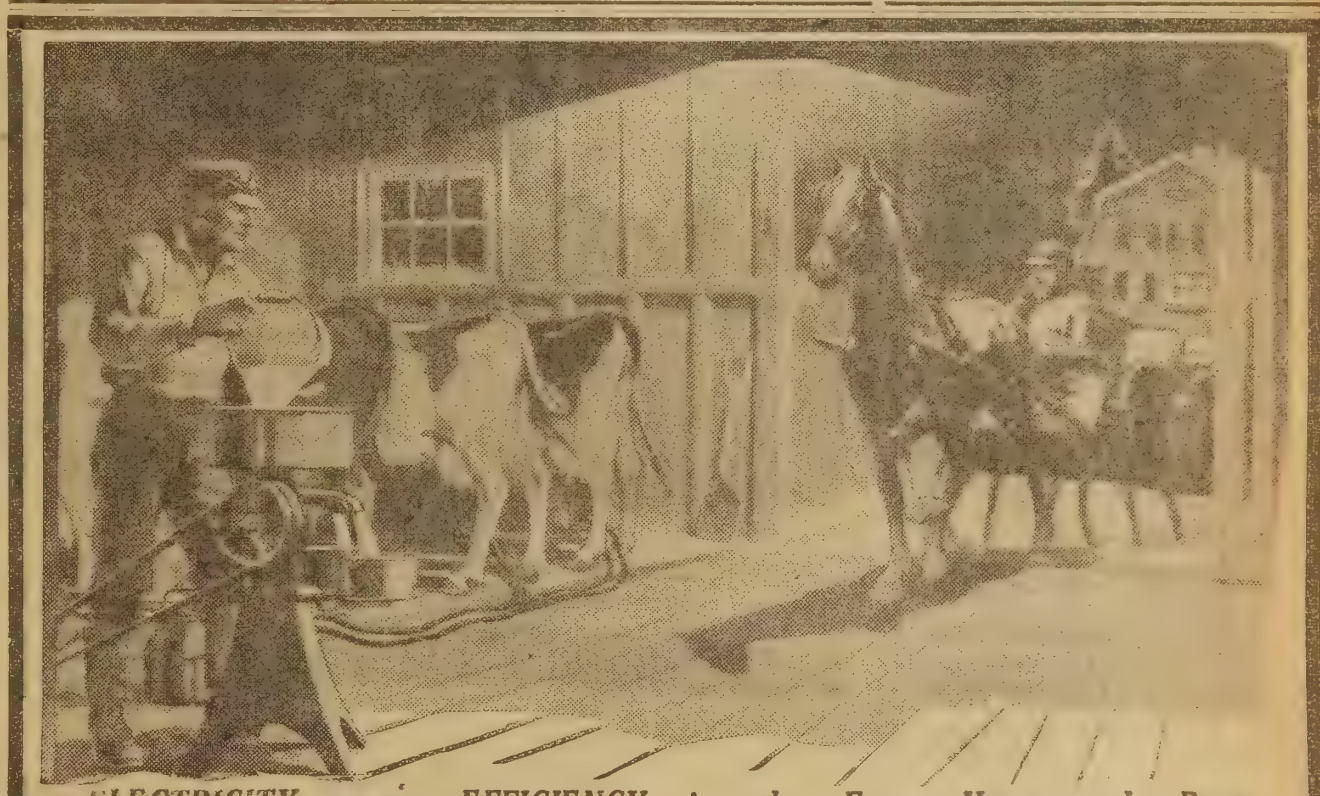
### It's Coming.

The Farmer has frequently featured things of special interest to cattle men, wheat growers, sheep raisers, horse men, poultry keepers, fair goers and the like. Now is the children's turn for a feature, and it's coming. Watch each issue until you find one with scores of things of interest to the young folks. It will come pretty soon now.


LATHAM'S AUTOMATIC ICE MOLDS. a perfect invention. Plan now to make your own ice next winter. Write for information on ice houses and ice making to WARREN LATHAM, Spokane, Wash.





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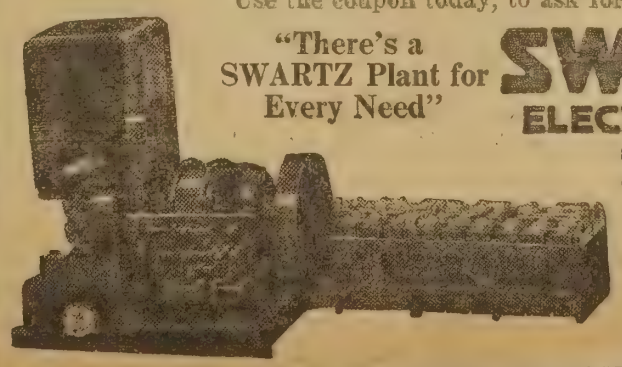
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# An Old Man's Prayer, and Other Things

By GRANVILLE LOWTHER.

I was walking recently in a section of Los Angeles, looking at the lawns, the flowers, the buildings, home gardens, and reading the signs, when I happened to see the sign "Old Fashioned Revival Now Going On."



Dr. Lowther.

I was curious to see what it was like; thought it would be a good place to rest and perhaps hear something of interest, so I went it. The tabernacle would seat perhaps 2000 people, and was about one-third full. I found a comfortable seat and began to take observations, not in a spirit of criticism, but in that feeling of respect for every one's religion that I would wish every one to feel toward mine.

The meeting was what it was advertised to be, "An old fashioned revival" of the emotional, vociferous, gesticulating, shouting type.

The feeling of the audience was approaching fever heat, when an old man, large, square-shouldered, and loud voiced, got down on his knees to pray. Gradually he warmed up to the occasion, and as he did so he gradually lost control of himself, and expressed his feelings without much reference to modern customs or literary style. After paying his respects to "the world, the flesh and the devil," he came to the war, and said:

"Oh Lord, bless our boys in the trenches in Europe, and bless every one who is called to fight for his country. Bless the folks at home, and help them to save and work and sacrifice for success, and not fool away their time and money for fashions, fandangoes, tomfooleries and folderols. Oh Lord, send us peace, but don't send it, Lord, on the kaiser's terms."

"Amen! Amen!" was shouted from every part of the room.

The old man continued: "Oh Lord, you know we can not trust anything the kaiser says, for he is such a devil of a liar. I mean, Lord, he lies like the devil. I mean, Lord, he is — — he is — — I mean——."

Here he paused again and when a voice from the audience said: "You had it right in the first place. Let 'er go at that."

"Amen!" came a response, "Amen!"

The old man then seemed to get possession of himself and said: 'Oh Lord, you know what I mean, even though I can't say it right. I don't mean to use bad language and I don't mean to swear, or anything of the kind, but I can't say what I feel about the kaiser without saying the worst things I know of. Good God, if it is wrong, forgive me. And now, Lord, bless my boy on the firing line in France. Bless all the boys over there, and send them back to their homes, their wives and their sweethearts as good and as pure as when they went away."

"Amen!" "God grant it!" "Heaven help," were some of the responses that came from all parts of the building.

As the old man arose from his knees, I went out, wiping the brine from my cheeks, and saying: "I probably would not agree with that old man's theology or demonology, but I would like to see in the United States a million revivals like that, going on in a million places all at the same time, and I would like to feel that a hundred million people in this country had the old man's faith, devotion to the cause of justice, and his large heart of love. What are hair-splitting theologies, philosophies or political prejudices in the presence of a world where whole nations are bleeding in their efforts to give birth to a new age of justice to all races of mankind?"

### WHAT HAS THE RAIN DONE FOR YOU?

"Oh Lord, I wish it would quit raining," said a grand opera singer from New York, as she sat at a hotel in Los Angeles, where she was spending the winter, and she yawned and stretched and looked disgusted with everything about her. "We can't get out, and we can't see anything, but just look out of the window and watch the gloom."

"Why," I said, "the farmers are happy over this rain, and some of them are praising whatever fates there are and some of them are praising a kind Providence and want another week or two of it. By the way, did you read in the papers that out here in a little town the people met to pray for rain?"

"No," she said, "and I don't think it would do any good, either."

"Perhaps not," I said, "but if I wanted to convince them that prayer had no effect on the weather I would try to select a case where they had not succeeded in getting what they prayed for."

"Well, said she, "if I had been praying I would have asked for clear weather, so there you are, and the prayers would have been in conflict."

"Yes, I said, "but the farmers beat you to it. They wanted rain for their wheat, potatoes, beans, oranges, lemons alfalfa, and a thousand and one things which the farmers grow, and without which they could not live, and without which the rest of us would get pretty hungry. They are calling this their 'billion dollar' rain and you ought to see the broad smiles on their faces as they look forward to the crops they will get. Do you remember one of our poets said:

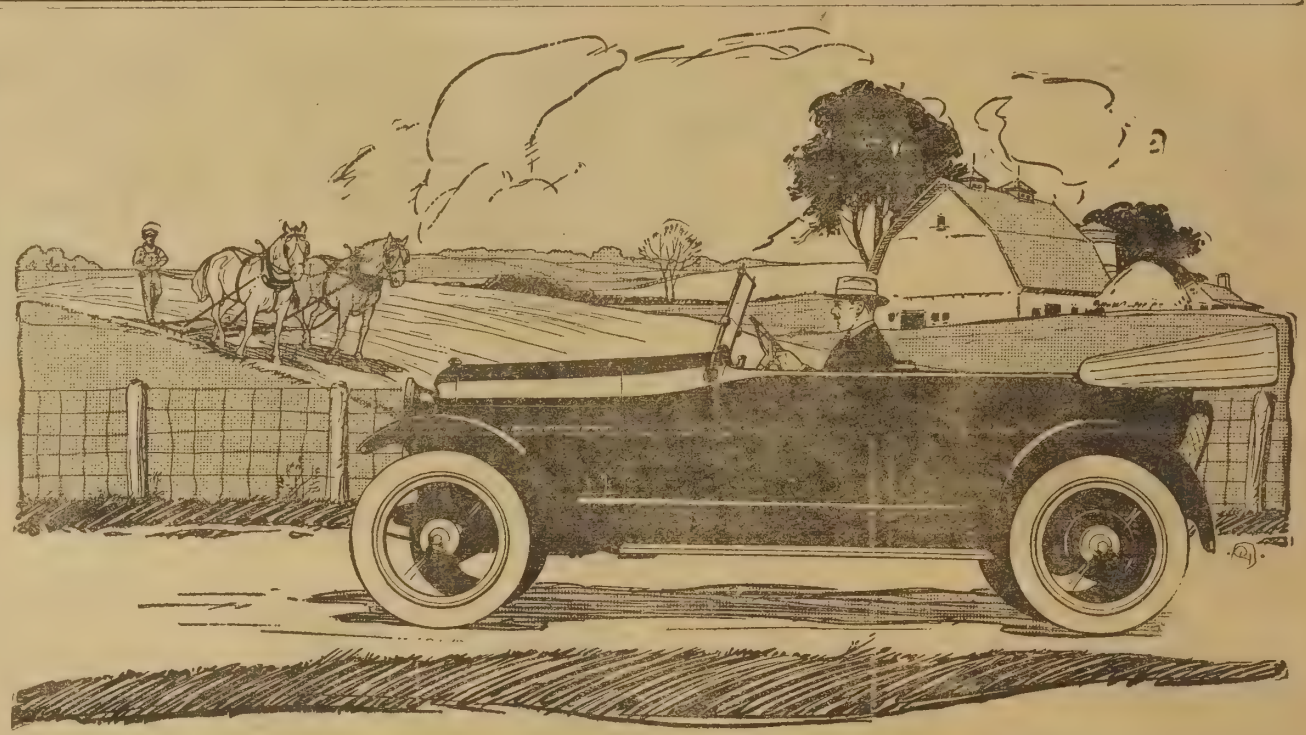
'It is not raining rain to me, it is raining daffodils,
In every dimpled drop I see wild flowers on the hills.'"?

"Well, these poets are an impractical class. They profess to see and enjoy things no one else ever could see, and things that may not exist. I don't want to gamble in futures about flowers that are not sprouted yet. I would rather have something now, something certain."

"When you trained your voice," I said, "for the stage, it seems to me you were gambling in futures. When you married your husband, if he's like they say most men are, you took another chance that was about as uncertain as when you trained your voice. When you brought your child into the world, there was an element of risk in it that you could not estimate, and now that you are educating your daughter, it is in the hope that something good will result from the efforts you are making and the money you are expending. In the northwest were we grow those big apples you see in large dishes in the dining room, we look for the rains and the melting snows to fill the reservoirs in the mountains, so that we will have water for irrigation, and it is just as easy for the orchardist to think of the beautiful fruit the rain will produce and that he will harvest next fall, as it is to think of the mud on his boots. Let it rain, I see great, big red apples, and I enjoy them."

### Eyes of Fish.

The eyes of a South American fish are divided into two parts, the upper being adapted for vision in the air, the lower for use under water.

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# Time Is Money

How much time do you waste in "hitching up" when you drive to town in the buggy? How long does it take you to get there—and back? What is your time actually worth in dollars and cents?

If you answer these questions correctly, you are bound to arrive at two very startling conclusions. First, you can't *afford* to get along without a motor car. Second, you are paying for a car *now*—whether you own it or not.

Time, please remember, is money. A productive hour is worth just so many bushels of wheat, so many barrels of flour, so many loaves of bread. A wasted hour is worth precisely nothing.

Because this is true, you can't afford to use your horses for a task that the motor car will perform ten times more efficiently.

because this is true, you can't afford to lose the profits that would *pay* for a car—and show a handsome surplus to boot.

You actually need a car; there can be no question about that. But you also need a *good* car—a reliable car—a comfortable car.

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# All the World's a Stage, and All the Men and Women Merely Players

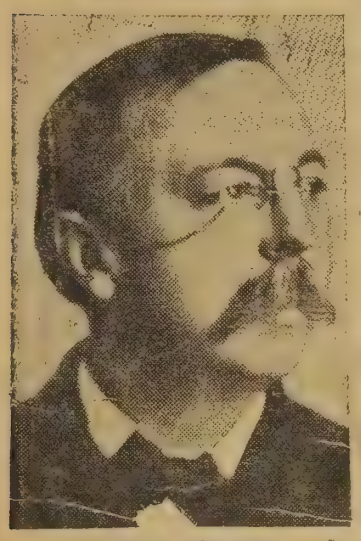
## They Work for Us at National Capital



Miles Poindexter.



Wesley Jones.



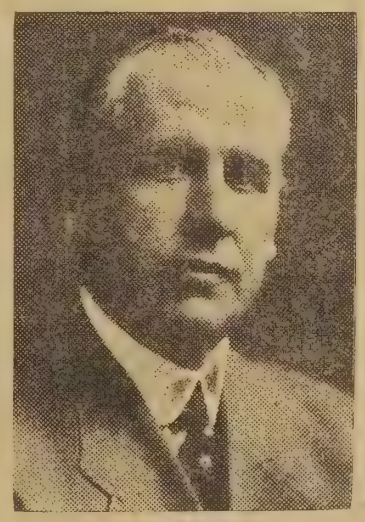
G. E. Chamberlain.



Charles McNary.



W. E. Borah.



John Nugent.

Here are the six senators from Washington, Oregon and Idaho, now attending the session of congress at Washington, D. C.:

**Washington.**

Miles Poindexter, republican, was elected senator from Washington for the term 1911-17. Poindexter was born at Memphis in 1868 and was educated at Fancy Hill academy, Va., and the Washington and Lee university, receiving his degree of bachelor of laws at the latter institution in 1891. The same year he removed to Walla Walla, Wash., and in 1892 was elected prosecuting attorney of Walla Walla county. He located in Spokane in 1897 and became prosecuting attorney for the county in 1898, serving till 1904, when he became judge of the superior court, serving till 1908.

Wesley Livsey Jones, republican, Washington's other senator was born in N. Bethany, Ill., in 1863. In 1889 he moved to the territory of Washington, just before its admission as a state. He became senator in 1909, being reelected in 1915, his term to expire in 1921.

**Oregon.**

George Earl Chamberlain, democrat, was elected to the United States senate from Oregon for the term 1909-15, and reelected for the 1915-21 term. Chamberlain was born in Nachez, Miss., in 1854. He came to Oregon in 1876 and was elected member of the Oregon house of representatives in 1880. He was governor of Oregon before going to the senate.

Senator Charles Lindsay McNary, republican, was born on a farm eight miles from Salem in 1874. He attended public school and worked his way through Stanford university. On May 20, 1917, the governor of Oregon appointed him to the United States senate to fill the unexpired term of Senator Harry Lane, deceased. Senator McNary is the owner of a fruit farm near Salem, and has always taken a great interest in the industry.

**Idaho.**

William Edgar Borah, republican senator from Idaho since 1907, was born at Fairfield, Ill., in 1865. He was educated at the Southern Illinois academy at Enfield, and the University of Kansas. He was admitted to the bar and practiced law at Lyons, Kan., for two years, coming to Boise in 1891.

John F. Nugent of Boise was appointed by Governor Moses Alexander to succeed the late Senator Brady. He will serve until a successor is elected at the coming November election. Nugent was born at LaGrande, Ore., in 1869.

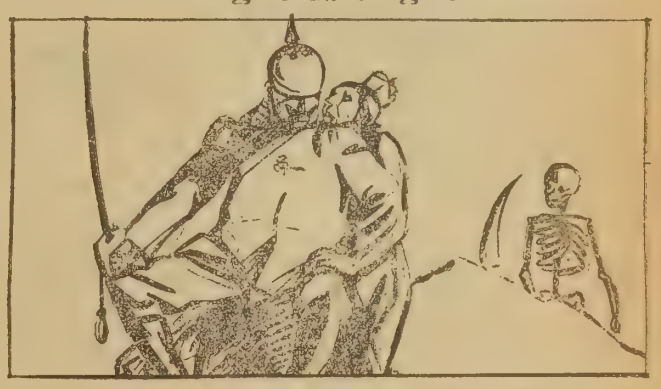
## Huge Message of Death



(Photo by Int.)

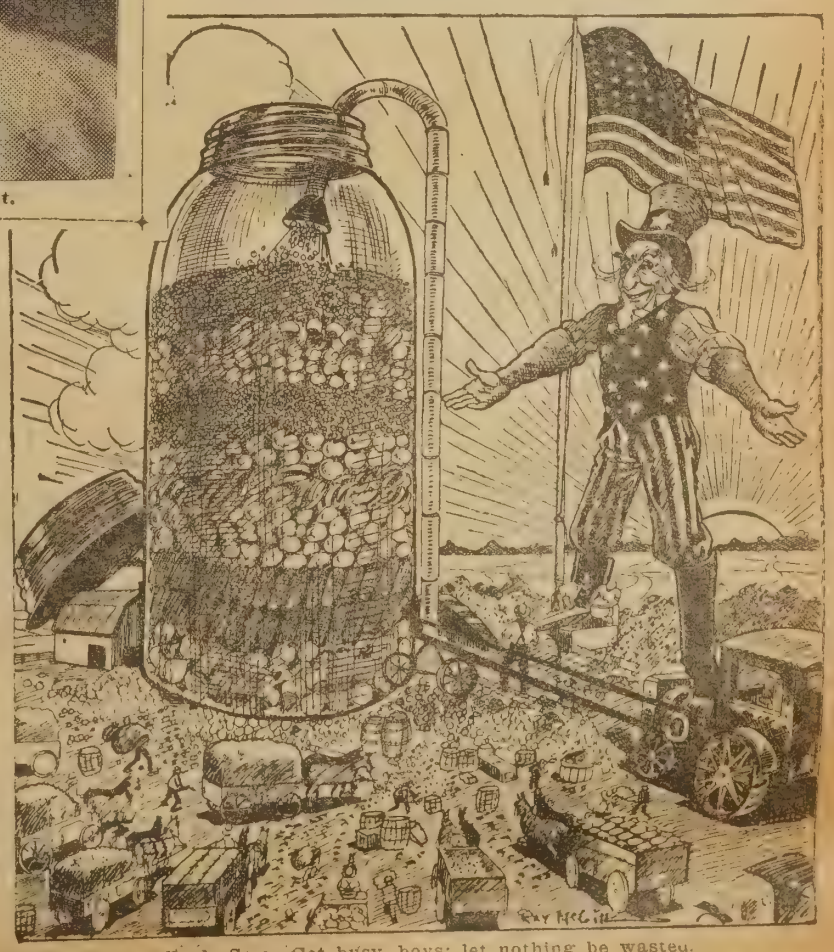
These huge shells are for use in the 380 m. French guns on the Somme front. The howitzers have proved their superiority in many artillery duels.

## Might Is Right



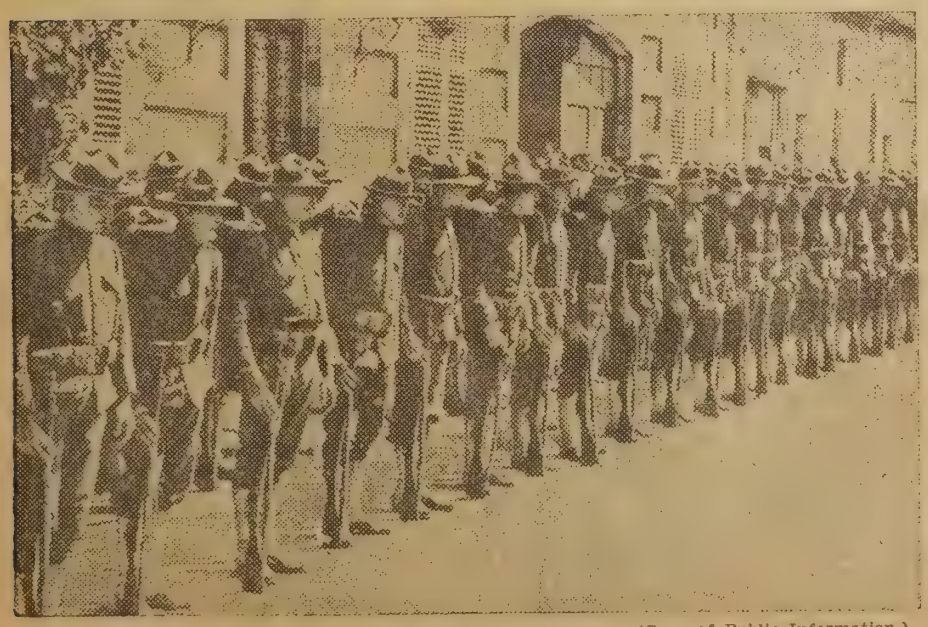
Germania—Yes, but when I have no more might.—La Victoire, Paris.

## Serve Nation by Saving Food



Uncle Sam—Get busy, boys; let nothing be wasted.

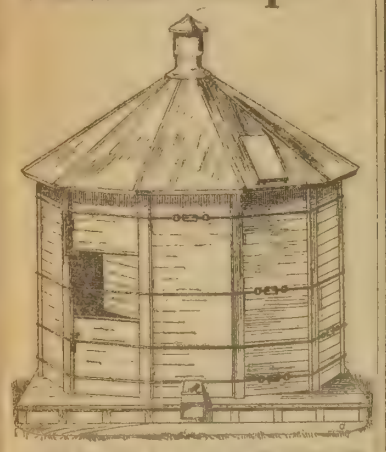
## Soldiers of the Sea Ready to Attack Hun



(Com. of Public Information.)

Here is shown part of a long line of Uncle Sam's land and sea fighters drawn up for inspection "somewhere in France." The men are lined up preparatory to leaving for the front lines.

# If the Inland Empire



## BULKED ALL ITS WHEAT

there would be saved for other service 12,000 men, equal to eight regiments. Think what this means in helping win this war! Each thrasher bulking frees two men; each elevator frees four more.

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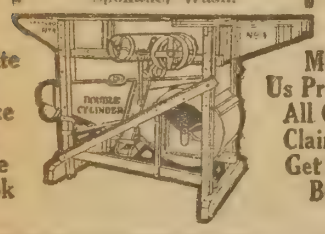
from the largest to the smallest size, embody the essential features necessary to **thresh all varieties of peas and beans** direct from the rankest vines without splitting any of the seed.

They have more separating space and capacity than any machine on the market.

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They are the standard the world over. Built in sizes to suit any size grower from the smallest to the largest, and there are none better at any price.

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**The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.**

# Alfalfa Seed Growing

To the Editor: Can you tell me whether alfalfa seed can be grown with as little precipitation as wheat? Would like to raise 300 to 500 acres of alfalfa seed, either first or second crop. Will it live and bear one crop of seed on 20 inches of rainfall? Am very anxious to know facts about alfalfa seed growing in Washington, Idaho and Oregon.
W. H. KAUFMAN.
Bellingham, Wash.

Following is the answer to the above question by E. G. Schafer, professor of farm crops, State College of Washington:

There is a comparatively small amount of alfalfa seed grown in the state of Washington. Often alfalfa makes a good growth, blossoms profusely, yet the blossoms fall before maturing seed without any known reason. The best crops of alfalfa are grown under irrigation when the water is withdrawn early enough so that the soil becomes fairly dry, just about the blossoming period. Thus we find that it uses its strength for producing seed rather than producing vegetative growth. Where alfalfa is planted thick on dry land very often there is difficulty in getting seed. In many cases the first crop will not set seed, and there is not enough moisture to grow a second crop for seed. This seems to be particularly true in the Palouse country. It would seem as though 20 inches of rainfall would probably be the minimum under which it would be safe to grow alfalfa for seed without irrigation.

It occurs to me, however, that the grower would be running a very great risk in taking a chance on 300 or 400 acres of alfalfa for seed, before he has experimented on a smaller scale and proved his ability to produce alfalfa on a smaller scale. There is a good deal to learn about alfalfa-growing with seed production, and unless one is very well informed on the subject, the entering upon the project in so large a way might result in disaster.

# More Live Stock

A recent estimate of the number of live stock in the principal countries of the world, compiled by the International Institute of Agriculture, shows that in spite of the war there are about 47,000,000 more animals now than before the war. Of this number, cattle show an increase of about 18,000,000, sheep about 15,000,000; swine about 11,000,000 and horses 1,000,000. European Russia has the highest gains to her credit. Paraguay shows large increase in cattle, and the United States makes a marked gain in swine.

The figures for the United States are as follows:

| | Jan. 1, 1918. | 1914. |
|---|---|---|
| Cattle | 66,830,000 | 56,592,000 |
| Sheep | 48,900,000 | 49,719,000 |
| Swine | 71,847,000 | 58,933,000 |
| Horses | 21,563,000 | 20,962,000 |

## At the Editor's Desk.

One of the most interesting booklets of recent publication is the War Cyclopedia, issued byt hen ational committee on public information. This cyclopedia, issued by the national compages, is sold by the government printing office at Washington, D. C., for 25 cents and contains exhaustive information concerning the war. One special feature which it contains is a chronology of the events of the war from the murder of Archduke Francis Ferdinand in June, 1914, to the taking over of the railroads of this country by the government the last of December, 1917.

Among the garden catalogs received are those of the Inland Seed company and the Spokane Seed company, both of Spokane, Wash.

Three interesting pamphlets in the nature of personal experiences, written by Jean Henry Le Roy, dealing with the experiences of a colored inmate of a state penitentiary before, during and after incarceration, are obtainable from the Volunteer Industrial store, W26 Main avenue, Spokane, Wash. The titles of the pamphlets, which come at 20 cents postpaid, indicate their subject matter: "Letters You Should Read." "After Thirty-Two Years of Bitter Remorse" and "Fourteen Years Behind the Walls of Prison."

## Must Save Eggs, Too.

Mrs. Herbert Hoover joined her husband in the work of food conservation recently when she headed a commitee of prominent women of the nation in urging upon the people of this country an eggless Easter. The idea of the committee was that the custom of eating eggs on Easter has resulted in the eating of many more than are needed, which amounts to a waste of hundreds of thousands of eggs. The committee said that conservative estimates indicated that an eggless Easter would save the country 60,000,000 eggs.

## COW MAKES RECORD.
### Six Years Old; Has Seven Calves.

Olive V. 2d, now owned by D. A. Gunning of Reardan, Wash., who purchased the animal last week from Alex. Morrison of Valley, Wash., at the latter's dispersal sale of milking Shorthorns at Spokane, has a record worthy of note.

She is only 6 years old, yet she has raised or is raising seven calves of her own. The first time she freshened she had only one calf, the second, third and fourth time, two each. Her youngest twins are now only a few days old, going with her to Mr. Gunning's farm when he bought the mother for $625.

## Sheep Dipping Probable.

The prevalence of ticky sheep may compel the first dipping of all the animals in the state this year, according to Veterinarian Lytle. Under the law the dip is to be an annual affair, but may be suspended any year by proclamation.

### Control Near Beer.

Near beer and temperance drinks coming within the designation of malt liquor are included in the president's proclamation limiting brewers of beer to 70 per cent of the amounts of grains and other food materials that were used last year.


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# Girl to Do Farm Work



Miss Margaret Weeks of Carter, Mont., is a student of domestic science in the State College of Washington and her brother went to France, she made ready to operate a tractor on the 700-acre wheat farm of her father in Montana. Her parents are Mr. and Mrs. J. H. Weeks, formerly of Pullman. Writing in to the state college Mr. and Mrs. Weeks said:

"The papers state that there will be an effort made soon to mobilize women for farm work. Not much prospect here for farm help. Help to run tractors we must have if we get in the 700 acres of wheat I planned for. Our son Vance is in the service in France and that leaves us without help. Our tractor was idle quite a while last fall after Verne left. We will have a tractor for Margaret, which is easy to handle."

Miss Weeks was one of over 100 students, mainly men from all parts of the state, who took the short course in the operation of gas and steam tractors recently given by the department of elementary science of the State College of Washington.

# Scabby Potatoes

To the Editor: Will potatoes that have been planted in soil that has been manured this winter have a tendency to be scabby? If soil becomes infested with scab is there any way to overcome this, or will potatoes raised on this ground always be scabby?

E. G. ROGERS.

Opportunity, Wash.

The above question was referred to F. E. Heald, department of plant pathology, Washington State college, and is answered as follows:

It is not good policy to plant potatoes on ground that has been manured during the winter. Such a procedure has a tendency to increase the amount of scab in case there is any of the organism in the soil. You will note from reading bulletin 106, of the Washington state experiment station, that scab may be either present in the soil, or carried into the field by the use of infected manure, or by the planting of diseased seed stock without treatment. If ground has become thoroughly infested with scab there is no way that you can treat it so as to produce an absolutely clean crop, but the severity of the disease can be lessened to a considerable extent by certain treatment. The most feasible thing, under present conditions, is the application of sulphur. This may be broadcasted and worked into the surface soil just before planting at the rate of 350 to 900 pounds per acre. At the rate of 500 pounds or over per acre the yield may be reduced somewhat, but the scab will be more reduced than the yield of potatoes. There is no seed treatment that you can employ that will prevent dry rot in potatoes. Corrosive sublimate, which we are recommending for the treatment of seed stock, lessens the amount of scab, blackleg, or the "rhizoctonia" disease, but has no effect on dry rot. For more complete information on potato diseases I refer you to bulletin 106, which, if not already in your possession, can be secured by writing to the state college at Pullman, Wash.




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# 43½ Bu. Wheat per acre

Wht. 30 bu.
Oats ... 53½ bu.
Potatoes ... 148 bu.
Barley ... 37 bu.
Rye ... 27¾ bu.
Flax ... 13½ bu.
This is the 1915 average per acre from Government statistics.

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# Trappers of the Ozarks



## The Adventures of Two Young Pioneers in the Wilds of Upper Louisiana, Now the State of Missouri.

By LEWIS B. MILLER

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### SUMMARY OF PRECEDING CHAPTERS.

In September, 1811, two young men who lived near St. Louis, Ben Armstrong and Jodo Henderson, taking with them their two dogs and donkey Spunky, started on an all-winter's hunt in what was at that time unsettled region, where Indians held full sway, in the wilds of upper Louisiana, now the state of Missouri. After a perilous trip over old Indian trails and dangerous streams, they reached their destination — a salt spring close to the river Big Niangua, which Ben had visited before and from which they expected to secure salt for sale with their furs when they returned to civilization the following spring. Here they erected a rough cabin for their winter quarters close to the mouth of a large cave that was full of water and bats, and started their saltmaking and hunting. After exciting experiences with a buffalo herd and with a bear in a cave, they find their first fresh sign of Indians — moccasin tracks in the snow. And then, in the dead of night, a scouting party visited them preparatory to an attack. The attack followed soon, and would have resulted in the capture of the boys by the savages had not a violent earthquake frightened them away.

### CHAPTER X.

#### In the Hands of the Osages.

When at last the earth tremors had ceased altogether Ben and Jodo mixed some clay mortar and rebuilt both their fireplace and chimney. They also replaced the mud daubing that had been knocked out of the log walls by the Osages or shaken out by the earthquake. After that their trapping and salt making and hunting and meat curing went on as before the red men had come to trouble them. But morning and night, and sometimes oftener, they climbed a hill to look for Indian camp fires.

They talked much of the earthquake, and speculated not a little as to the amount of damage it might have done, particularly in and around St. Louis. But there were few stone and brick buildings in that trading post. All their friends lived in wooden houses—most of them in log houses—and there was no reason to worry on their account.

Being very busy, the trappers found that time passed rapidly. Not caring to lose themselves, they were keeping count both of the day of the week and of the month. Each night, just before going to bed, they marked the record. The earthquake had occurred on the 16th of December. Soon the year 1811 ended and the year 1812 began.

The weather had by this time become sharply bitingly cold; and it continued cold. This was an advantage. It improved the quality of the furs the trappers were taking. Nature provides an animal with good fur only when it is needed. Their trapping was unusually successful, and bale after bale of excellent pelts was drawn up and hid away in the little cave in the face of the cliff. The partners also stored their salt up there, and the meat they were curing. Having little doubt that the Osages would come back sooner or later, the trappers had prudently resolved to keep everything of value in a place of safety till they were ready to start home.

Day after day and week after week slipped by—busy days and busy weeks. Between attending to their traps, keeping their salt-pots boiling, and watching for Indians and hunting, the partners were busy from dawn till dusk every week-day. And even on Sunday there was work enough that must be done to make the day pass rapidly. And so January slipped by, and part of February.

Then, one morning, Jodo, who had been up to the mountain-top to look for smoke, came hurrying back to report that there was a camp-fire only two or three miles down the river. Ben now hurried up to inspect the smoke for himself. On returning he said:

"Not much doubt about it, I guess. The Osages are in the country again. And as they know where our cabin is, they're likely to show up here at any minute. We can't safely count on anything else."

"And what can we do?"

"One of two things. Either we must get ready and fight them when they come, or we shall have to pack up and travel. We being in the Indians' country, I'm strongly of the opinion that we'd better travel."

"Travel toward home?"

"No. We're not ready for that yet. I think we'd better cache nearly all our things, then take Spunky and the dogs and set out for a little trapping-trip. We can make a circuit of a hundred and fifty or two hundred miles toward the southwest or south. Our salt-cooking will have to rest while we're absent. But maybe we can take more furs to make up for that. By the time we get back here, the Osages will probably be gone, and then we can go about our affairs in peace."

"But what will they do to our log-camp if we leave it?"

"No telling. At the worst they can only do what they're likely to do if we stay in it—burn it down. But we can either build another one when we come back or camp under the cliff. The weather may be comparatively mild by that time. But when they see we've abandoned it, the chances are they won't go to the trouble to stick fire to it."

Jodo agreed with his partner that a trapping-trip was the wisest thing for them under the circumstances.

"And the sooner we start the better," he declared.

So they hung their spliced rope, the lower part with sticks in it, down the face of the cliff, and across the mouth of the little cave. Then Jodo climbed it, and was soon drawing up their big pots and all their other things, except their blankets and weapons and traps. It would not do to start out with more because they hoped to have Spunky loaded down with pelts by the time they got back. All their cooking-vessels and tools they hid away, and also what remained of their flour and meal. During the two weeks they expected to be absent, they would have to rely wholly on their rifles for food, and on broiling-sticks to get it cooked. They would not even take their tent.

When everything had been put away up in the cliff-cave, Jodo came down. While he was making his round to the top of the cliff, to drop the rope, Ben caught Spunky, girded the pack-saddle on him, and tied their roll of blankets on the saddle. Then away they started up the creek, one leading and the other driving. And they threw their deadfalls and gathered up their traps as they went. When the last trap was on the pack-saddle, they changed their course and set out toward the southwest.

All the rest of the day they traveled steadily, not halting for dinner, and not kindling any camp-fire till after dark. The weather was clear and cold. They hid their camp in a deep gorge, and slept by a roaring fire. Next morning they were up early, and had eaten their breakfast and got on the march by daylight. They traveled till the middle of the afternoon, then camped on a creek. Being now at least forty miles from the Osage hunting-camp, they felt reasonably safe, and decided to do some trapping before traveling farther. So they spent the rest of the day setting their traps along the creek, and in killing a deer to feed themselves and their dogs.

Early next morning they started out to visit their traps, leaving Bose and Tinker to guard the camp, and Spunky lariated to a bush close by. Somewhat to the trappers' surprise, their traps had caught nothing worth mentioning. After making the round they decided to move a few miles down the creek before trying again. So they came back to camp crossing the creek on the ice, and intending to eat their dinner, and then gather up their traps on the way down.

"Spunky's on hand all right, but where are Bose and Tinker?" remarked Jodo, as they approached their smoldering camp-fire.



Suddenly, tomahawk in hand, a savage appeared before them.

"Not far off, I'd guess. Some kind of game may have passed by and they ran after it. They'll be coming back pretty soon."

The remains of the deer were hanging to a limb. After opening the live coals, the trappers got their broiling-sticks, cut some good-sized slices of venison, and sat down to broil and eat their dinner. While they were still eating, and wondering why the dogs failed to return, an Indian warriar suddenly emerged from some brush in front of them!

Both sprang up and turned to grab their rifles, which had been lying on the grass close by. The rifles were there; but instead of lying on the grass, they were in the hands of two warriors.

"White mans, we got you now!" exclaimed one of the Indians, a big fellow, and rather fat.

The trappers had their pistols; but with all those weapons confronting them, resistance was out of the question. There was nothing but to make the best of the matter. So Ben answered, pleasantly:

"Yes, I see you've got us. And now the question is: What are you going to do with us:

The big Indian flourished his bow. "You run, us shoot!"

"Yes. But what will you do with us if we don't run?"

"You wait! You see what!"

More than a dozen Indians now gathered round the prsioners, removing all weapons from their belts. Ben repeated his question.

"Maybe so chop head off," answered the big warrior.

"Chop our heads off! That's no way to treat people. You'd better let us go. We've never done you any harm."

"What white mans do at Osages' country?"

"Is this the Osages' country?"

"Yes: All Osages' country. Always Osages' country. What you do here?"

"We're trapping—trapping and hunting."

"You nebber hunt Osages' country nudder time—no!"

"Oh well, if you don't want us to hunt here, of course we'd better stop it and go home." Ben looked around, as if thinking of starting home at once.

"You no go home now. You go by us. You no go by us, you go dead!"

Ben tried to talk with the big warrior further; but the Osages seized both captives and tied their hands together behind them.

Soon the warriors were busy broiling meat, some of it cut from the white men's own deer, and eating their dinner. When the meal was ended, they began to make preparations to travel.

All the Indians were traveling afoot. Each was carrying a small pack, with a blanket or a buffalo-robe in it. But when the time came to start, the Indian who spoke English, and who seemed to be the head of the band, was seen gazing at Spunky, as if he thought riding a mule would be easier than walking. So Spunky was brought up, and while some of the warriors were girting the pack-saddle on him, the fat Indian said to Ben:

"Me Snappy Turtle." He struck himself on the breast. "Heap big Osage chief!"

"Well, I'm glad to know you, Snapping Turtle. Hope we may get to be better friends than we are now. I'm Ben Armstrong, and he's Jodo Henderson." He inclined his head toward his fellow-captive.

"You Strong Arm, him Dodo," repeated the chief, as if to fix the names in his memory. "Maybe so not be Strong Arm when head chop off."

The pack-saddle was on by this time, and had been girted fast. To the surprise of his owners, the little mule had stood perfectly still. But there was a look in his eyes which meant that he was not too well pleased with his surroundings.

Presently Snapping Turtle walked up to the mule and climped awkwardly into the pack-saddle. From his manner he did not appear to be much of a rider. For a few moments Spunky gave no sign. Then his ears fell flat, and he suddenly almost stood on his head in an angry, determined effort to rid himself of this burden. And the first effort was successful, the fat chief plunging over the mule's head promptly and easily.

The Indian fell on his hands and head, turned a somersault, and uttered a loud grunt as he struck the ground. The prisoners wanted to laugh aloud, but only smiled.

Up bounded the chief, red in the face and very angry. He made no attempt to mount again, but seemed to be urging some of his followers to mount. One after another declined, but finally a warrior consented to ride Spunky.

He, too, climbed into the pack-saddle awkwardly, but without trouble from Spunky. However, his troubles began immediately afterwards, when the mule's hinder parts got in swift motion. The warrior clutched the saddle desperately, and for a minute or two held himself in place. At last he was thrown so high that his hold broke, and then he, too, flew over the mule's head.

At this a few of the savages laughed, but the others stood solemnly. Snapping Turtle was one of those who laughed.

Three other Indians tried to ride Spunky, one after another; and three other Indians shot over Spunky's head with more or less promptness. Finally, unable to induce others to make the attempt, the chief turned to Ben:

"Strong Arm ride mule!"

Ben grinned and shook his head. "Not today, Snapping Turtle! That mule's got mischief in him just now. We don't commonly ride him anyhow. He just carries things for us."

"What for Strong Arm no ride mule?"

"He's too little for me to ride much. He's just a pack-mule."

The chief said nothing more, but he seemed to understand. Now the warriors made a bundle of all their buffalo robes and blankets and put them on the pack-saddle. Ben told the chief how to strap them fast. Spunky took another kicking-spell, but the pack remained in place. Then the party started.

But the mule proved so stubborn with his new managers that they had hard work to get him along. When he stopped they struck him, and every time they struck he kicked out furiously. Finally Ben, to save the mule brutal treatment, turned and held out his hands to Snapping Turtle as he said:

"Untie us, and we'll get him along for you."

The chief shook his head. "No untie. Strong Arm run away."

"Run away!" exclaimed Ben. "Can't fourteen Osages keep two white men from running away without tying their hands?"

This seemed to impress the big chief. He talked with his warriors, and soon the hands of the captives were unbound. Now Jodo led the mule, while Ben got a switch and drove him along. With his accustomed handlers Spunky gave little trouble.

The whole party marched toward the northwest.

"What do you s'pose has become of Bose and Tinker?" Jodo found an opportunity to say to Ben. "Did the Osages kill 'em?"

"I hardly think so, or they'd have been lying somewhere near our camp. Though, of course, the Indians

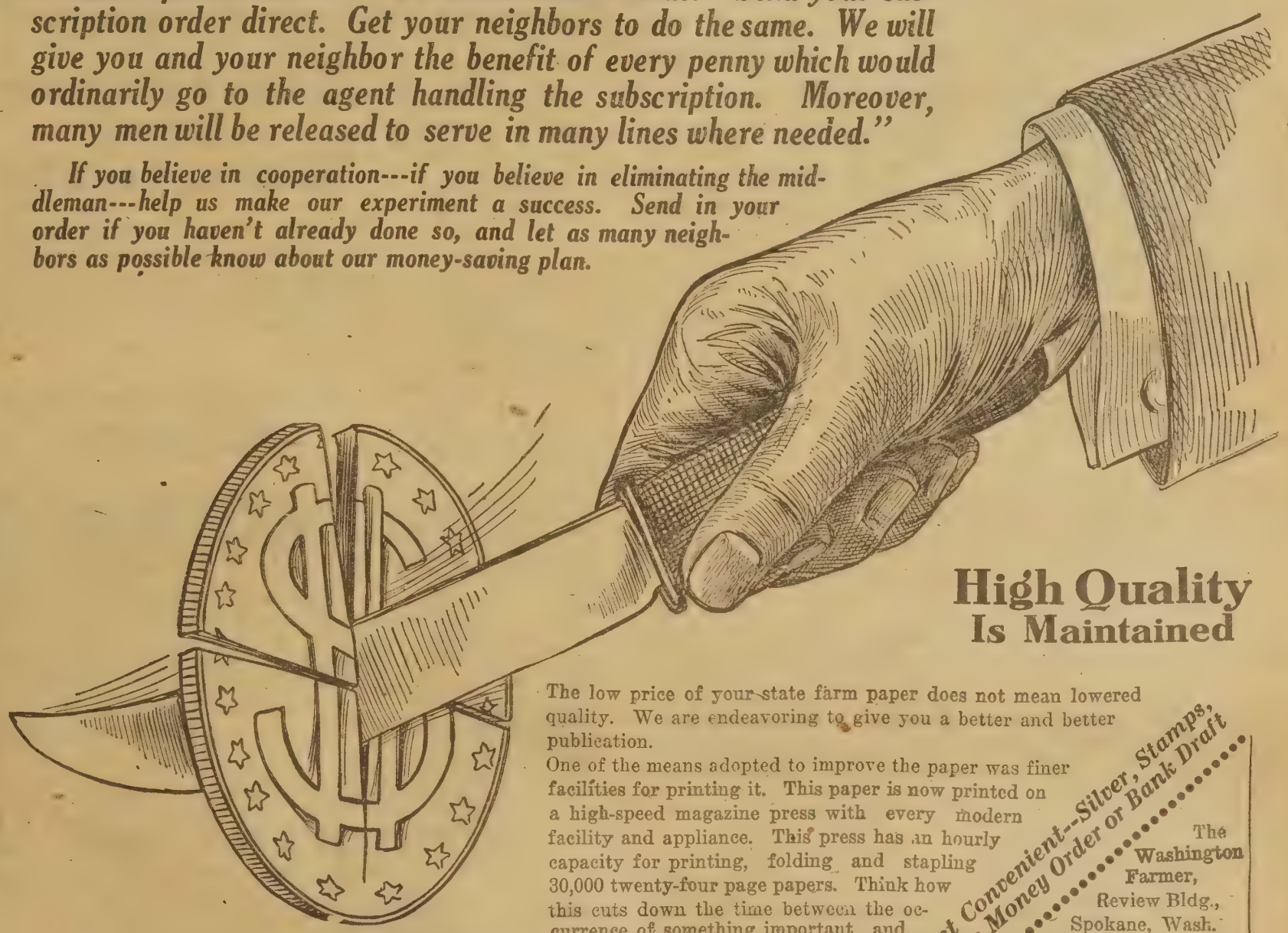
(Continued on page thirty.)

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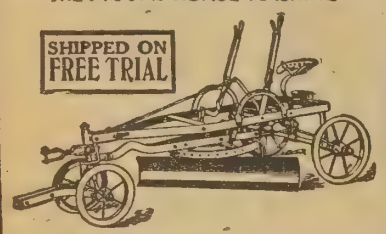


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# Trappers of the Ozarks

(Continued from page twenty-eight.)

might have carried them away and concealed them. My guess is that when the Osages came the dogs were prudent enough to take to flight. They may be wondering around somewhere in search of us; or they may have taken the back trail to the cabin under the cliff. At any rate, we're pretty sure to find them when we return to headquarters."

"And when do you think we can get back there?"

"That I don't know. Depends upon how long it takes us to give these fellows the slip. We'll make it, though, sooner or later."

"We don't want to escape without our guns and some ammunition."

"No. Better captivity with the Osages than wandering unarmed in this wilderness."

By this time the Indians seemed to be noticing their talking, and the captives said no more. But a few minutes later Ben found an opportunity to add:

"I'm going to get on friendly terms with Snapping Turtle if I possibly can. The fact that he speaks English is pretty good evidence that he has been associated with white people, and has been friendly with them."

When the party camped for night, the prisoners were allowed some of the venison the Indians had killed, and were given sticks to broil it on. Snapping Turtle seemed to be the only Osage that spoke or understood English. From him Ben learned that the party were marching toward the Osage village, which was somewhere on the Osage river, a few days' travel to the northwest. As to what would be done with the captives when they arrived there, the only answer Ben could get from the chief was: "Maybe so chop head off."

That was not very encouraging, and the trapper did not press the matter further.

When sleep-time came, the captives were given their own blankets to lie on. But their hands were tied together, and their feet tied together. The Indians started to tie the captives' hands behind them; but Ben protested to Snapping Turtle, and their hands were tied in front. They slept together, near the camp-fire, and in the midst of sleeping warriors. Also, there was one warrior that did not go to sleep, but stayed up on guard.

"Not much chance to escape tonight, I guess," Ben whispered to Jodo, after they had lain down. "In fact, I doubt if they'll give us any chance on this trip. These red fellows don't seem to have much to do but to guard us."

Jodo was both tired and discouraged. "Do you s'pose we'll ever see home again, Benoni?"

"Yes, we will—that we will! We'll find some way to get free. Maybe I can persuade old Snapping Turtle, as he calls himself, to turn us loose. At any rate, it won't do any harm to try."

Next morning the party was up early any traveling again. And so they kept on for a few days. Again and again they crossed good-sized streams, on the ice. But at last, late one afternoon, they found themselves on the bank of a river, which the captives surmised was the Osage. And a further march of three or four miles brought them, at dusk, to their destination—the Osage village.

(To be continued.)

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### Spontaneous Combustion.

Spontaneous combustion is caused, chemists tell us, by floating particles of coal dust or other inflammable material jostling and clashing against one another until the friction they set up raises their temperature to the ignition point. If this explanation is correct, it would appear as if such fires could be prevented by perfect ventilation. Such, however, is not the case, for ventilation may actually help to bring about fire by spontaneous combustion. Air facilitates oxidation, really fanning the warm dust into a blaze. Keep air damp and quiet to avoid fire.


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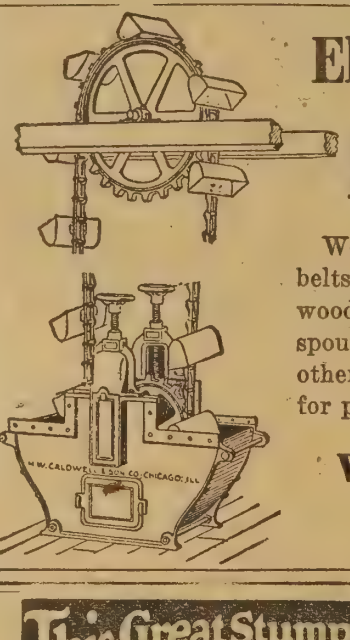
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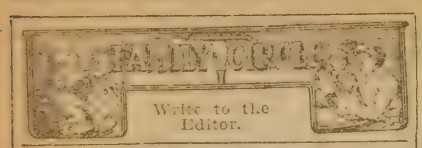
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ALICE W. BARLAND,
Editorial Contributor.

# Women Must Awaken

## Get to Work for Boys at Front

Dear Sisters of the Family Circle: I felt moved to write you a heart-to-heart letter this time about our country, and what we as women can do to help in this war. I will put it stronger and say, what we as women must do if we win this war.

I wonder how many women in the United States there are who have calmly thought over the outcome for Americans in the event of our not winning the war? I heard a speaker talking on the task of interest that is manifest among some people in the different lines of what we call war work. She said: "It is quite time we realize that there is danger of losing the war. It is time we direct our efforts toward our boys in khaki instead of being absorbed in our own affairs to the exclusion of all other interests." I think these remarks were well timed. It is time we waked up; there is too much dreaming. All yesterday afternoon I sat at a power sewing machine and made bandages. I shall be doing it again tomorrow and every alternate day for heaven only knows how long. Faithful women come day after day and week after week, and too frequently, in all the Red Cross headquarters, the same women are seen working day after day, and this is true all over the country. I am sure, in very many instances, the explanation of this lack of interest is due to the fact that a full realization of what we, as a country, have before us has not yet sunk into the minds of very many, both men and women.

It would seem that every woman who has enjoyed the safety and freedom of our country would be enthusiastic in her efforts to defend our government against the alien who would seize our land and make ironclad laws, backed up by guns, telling us what we shall do and what we shall not do.

When the boys are willing to leave behind all who are dear to them and go out prepared to die, should we, here at home, do less than feed and clothe them?

This is peculiarly a woman's war. Never before in any war was there so many ways where women can help. It is time, then, that we enlarge our horizon to reach beyond the petty duties under our own roofs and within our own households. It is the gigantic task of us Americans of putting in the field such an army as the world has never seen, one which must be strong and clean and confident of success. We must let the boys know we are behind them down to the last ditch. It is this knowledge which sends them "over the top" with a smile on their lips and takes half the sting out of suffering and death.

Oh, women! If I can but make you see the vital importance of every one of us doing everything possible to help, if I can stimulate you to post yourselves as to how your helpfulness can become most effective, I am confident results will follow. Every woman can influence at least one more, and it is like an endless chain.

In another letter I will give some definite plans for effective war work which none but us women can carry out and where you will see the matter is squarely up to us and us alone. It is time we realized our responsibility.

ALICE BARLAND.

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# SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

## Gossip, Though "Innocent," a Danger to Mind and Body



Dr. Hirshberg.

"Thy friend has a friend and thy friend's friend has a friend, so be discreet." Gossip, report, scandal, "they say" and "I heard" or "Is it true?" are all tale-makers and tale-bearers, commonly part and parcel of the same evil. The mischief they brew and spread can seldom be caught up with.

When nearly everybody says a thing, it is probably not true. Psychologically, what most people quickly agree upon is accepted as a self-evident truth. But pschology, logic, mathematics and reason all prove that there are but very few self-evident facts. Almost all assertions must not be agreed upon until they are searched, analyzed, tested and examined according to actual circumstances and not accepted by word of mouth, repetition and head-shaking rumors. Gossip often makes much unhappiness and ill health in neighborhoods and communities.

Curiously enough, this "malicious small talk" is generally not spread by enemies or envious persons. Sometimes it owes its origin to greed, jealousy, rivalry or quarrels, but, as a rule it is taken up and scattered far and wide by neutral of indifferent individuals with that normal human nature which twirls an unpleasant or far from usual circumstance upon the lips as a delectable morsel.

Since the makeup of a perfectly sane man's intellect arises from the realities of the physical world, which are interwoven in him through his muscles, feelings, sights, sounds and other perceptive structures, the immeasurable amount of ill health, injury and destruction done to many persons by slander, scandal and gossip can better be judged than calculated, as the following case shows:

### A Case in Point.

Mr. ——, a gentleman attended recently by several distinguished physicians, was in good health and happy until he applied not long ago to the government for a position to help win the war. He had only a motive of self-sacrifice and heroic endeavor, and would have received neither financial compensation nor any honor glory as a reward.

His name when presented happened to be heard by a person who did not know him personally, but who had heard once from some other person in Gath or on the streets of Askelon that he did not live with his wife. This gossip at once blurted out the mischievous lie with the result that the applicant's name was held up without his knowledge. He had already begun to do some of the work of the expected appointment, for no thought of rejection ever entered his head.

The scandal-monger was not acquainted with him, but some one less neutral, if not envious, did see him at his patriotic, unselfish work, and asked him, half-curiously, if he had been appointed.

"Not yet," said Mr. ——, "but I expect the appointment any day now."

The evil which lurks in many a less successful person's heart made the interlocutor write a vigorous protest at once to a friend of his in authority, saying that "Mr. —— was unfit for such sacrificial duties, and that he should be expelled because of his imposture."

Meanwhile the innocent victim of these abominable untruths, with his wife, was hard at work, devoting all his time and much of his money to patriotic service, with never an inkling of the gossip that was going on about him.

### The Wreck Complete.

Finally, after he investigated the delay of his eternally postponed appointment, he was told, to his chagrin and surprise, that he would not be acceptable because he was separated from his wife, was a drunkard, liar and an impostor.


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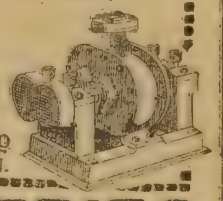
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# Patterns

2067—Ladies' One-Piece Dress—Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires for a 36-inch size 6 yards of 44-inch material. The dress measures about 3 yards at the foot. Price, 10 cents.

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2405-2410—A Good Outing Dress.—Blouse 2405 cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 2410 cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. It will require 6⅝ yards of 44-inch material for the entire dress. The skirt measures about 2⅜ yards at the foot, with plaits drawn out. Two separate patterns, 10 cents for each pattern.

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The skirt measures about 2½ yards at the foot. Price, 10 cents.

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2056—Girls' Dress—Cut in 5 sizes: 6, 8, 10, 12 and 14 years. Requires 3¾ yards of 44-inch material for a 12-year size. Price, 10 cents.

1477—Ladies' Combination Corset Cover and Skirt—Cut in 3 sizes: Small, medium and large. It requires for cover, 1 yard, and for skirt with ruffle, 2⅜ yards of 36-inch material for a medium size. Price, 10 cents.

1609—Girls' Dress, with or without Bolero—Cut in 4 sizes: 4, 6, 8 and 10 years. It requires 3⅜ yards of 44-inch material for a 6-year size. Price, 10 cents.

2234—Ladies' Apron—Cut in 4 sizes: Small (32-34), medium (36-38), large, (40-42), and extra large (44-46). Size medium requires 4¾ yards of 36-inch material. Price, 10 cents.

## Always Make a Suds.

Always make a suds in which to wash woolen materials, says Leta M. Meacham in the Oregon Countryman. Never rub the soap directly onto the material. The soap, too, should be a neutral soap, free from alkili, as alkilis have a corroding effect on wool fibers. Blankets should be washed by what is known as the "sousing" process, that is, rubbed gently between the hands and agitated in the suds. Blankets should never be rubbed hard as on a board.

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To secure this she must have assistance. She has the land, but needs the men. The Government of the United States wants every man who can effectively help to do farm work this year. It wants the land in the United States developed first, of course; but it also wants to help Canada. Whenever we find a man we can spare to Canada's fields after ours are supplied, we want to direct him there. Apply to our Employment service, and we will tell where you can best serve the combined interests.

**Western Canada's help will be required not later than April 5. Wages to competent help, $50 a month and up, board and lodging.**

Those who respond to this appeal will get a warm welcome, good wages, good board, and find comfortable homes. They will get a rate of one cent a mile from Canadian boundary points to destination and return.

For particulars as to routes and places where employment may be had, apply to

**U. S. Employment Service, Dept. of Labor**

Seattle, Tacoma, Bellingham or North Yakima, Wash.




Address all letters to Aunt Nellie, care of The Washington Farmer, Spokane, Wash.

**What Cousin May Does All Day.**

Dear Aunt Nellie: This is the fourth time I have written to the Children's Corner. My subject is what I do all day. I get up in the morning, dress, wash my face and hands. Then I set the table and eat my breakfast. Then I wash dishes. My mama combs my hair and I get my clean dress on, wash my teeth, get my books and dinner, put on my coat and hat and start for school. I get in the school wagon and ride to school. I take off my coat and hat and go into the room and put my books in my desk. Then I go out and play till the bell rings and then the teacher reads a story to us. Next we study our reading, then our spelling and arithmetic. Then we eat our dinner and after that we study our reading again and then have language and geography. Now school is out and we get our wraps and get in the school wagon and go home. I get in my wood and set the table. After I eat my supper and wipe the dishes I study my lessons and go to bed. I wrote to Edna Smith, who was the same age, in the same grade and lived on the same number of acres as I do. I haven't heard from her yet. We are going to try to start a Junior Red Cross. I have one brother that is in the war and one brother that is home. The one who is home wrote to you and got a prize, so I am doing my best. We have 23 pupils in our room who joined the Red Cross. I live on a farm and I am glad of it. Some of the cousins think that the Corner is growing little. But I don't. This time I had one whole page.—May Millam, Menlo, Wash.

**Brother's on His Way to France.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner and I hope it will not be the last. I will describe myself. I am 14 years old, about five feet two inches tall and weigh 80 some pounds. I have light hair and blue eyes. I have a pug nose and some freckles, so now you and the cousins know how homely I am. Is there any cousins the same age as I am? I go to the South Bay school. It is a consolidated school. There are over 100 pupils going to the school. We have two school buses. One bus makes two trips after the children every morning and the other one makes one. There are three rooms in our school. Each room has three grades. I have had two teachers this year and so has my sister, who is in the sixth grade. I have five sisters and five brothers and one brother who is dead. My sisters' names are Ruby, Emma, Mabel, Abbie and Edna, and my brothers' names are Ernest, Elmer, Frank, Norman and Donald. My brother Ernest is on his way to France. He got the mumps or he would have been on the boat that was sunk just a little while ago. He has been sick ever since he went over to the eastern states. I live on a 10-acre farm. We have two cows, one pig and about 30 chickens. Our school is closed now for a week on account of Liberty measles. I missed two weeks of school on that account.—Flora B. Reed, R. F. D. 3, Box 72, Olympia, Wash.

**Shirley Austin a New Cousin.**

Dear Aunt Nellie: This is my first letter to you. As I was reading the letters this afternoon I thought I would write to the Children's Corner. I am 13 years old and in the seventh grade. I will be 14 the 11th of May. My teacher's name is Miss Lena Gollehur. She is away now and we are not having school. For pets I have a dog named Keno, and a pony named Jack. I like to ride horseback. Sometimes I go over to the postoffice. Quite often I get some groceries and some mail. Sometimes I get our neighbor's. We have had hardly any winter yet. There is a little snow on the ground now. It rained today and it is quite slushy. I took music lessons on the organ for about three years. I play for the children to sing at school. I have only one sister and no brothers. My sister's name is Hazel. My cousins live not very far from us and there is a big family of them, three girls and three boys. Their names are Edith, Viola, Eva, Loren, Wallace and Clarence. We have 320 acres of land. We have two places. I think we will move over to the other place in the spring. We have six horses and one cow and one calf. Our horses' names are Jack, Jeff, Owen, Molly, Spike and Toodles. Our cows' names are Spot and Lulu. Have I a twin? If I have, write me.—Shirley Austin, Gloyd, Wash.

**Lilies and Bluebells Are Coming.**

Dear Aunt Nellie: This is my first letter to the Corner. My father takes the Farmer. We get the Farmer every Saturday. I read the letters every time it comes. Have I a twin? If I have I wish they would write to me. I am 10 years old. My birthday is November 24. I am in the fourth grade at school. My teacher's name is Miss Brown. I like her very much. We have 28 pupils in my room. I have a sister and a brother. My sister's name is Hildur and my brother's name is Rudolph. We have three horses, nine milking cows, five heifers and two bulls. We have 25 pigs, three dogs and one cat. Her name is Pussy. I am going to learn to knit. I can crochet a little bit. I live on a 155-acre farm. May I join the Corner? We used to have a mill by our house, but they tore it down. There is a creek by our house. We have lots of fun in the summer time going swimming. We have two big orchards. One is a pear orchard, the other is an apple orchard. The lilies and bluebells will be coming out pretty soon. I think I had better stop for this time.—Elve Hillstrom, box 10, R. F. D. 1, Oakville, Wash.

**Derla Makes Her Own Clothes.**

Dear Aunt Nellie: It has been a long time since I have written to the Corner. I like to read the letters very much. We have three horses, one cow, two dogs, five cats and several calves. The horses' names are Topsy, Snip and John. The dogs are Locus and June. I have four cats and my sister has the other. Their names are Gray, Spot, Hornet, Yellowjacket and Dandy. We call the cow Sanfred. I have one sister and one brother. My sister's name is Frances and my brother's name is Dea. I live on a 160-acre farm eight miles from Othello. I go one-fourth of a mile to school and am in the eighth grade. My teacher's name is Miss Headrick. Our school is the Deadman school. We have five pupils. There are four girls and one boy. I can tat and crochet. I just finished a crocheted yoke and am making a tatted one. I make my own clothes, too. I got a wrist watch for Christmas. I will be 14 July 8, and I have blue eyes and brown hair. Have I a twin?—Derla McManamon, Othello, Wash.

**Helps Mother in Many Ways.**

Dear Aunt Nelie: May I join the Children's Corner? This is the first time I have written to the Corner. I am 9 years old and in the third grade. I like to go to school. I have one playmate. Her name is Anna Wraspier. I have one sister and one brother. My brother's name is Lee and my sister's name is Violet. Lee is four years old and Violet is 2 years old. Violet will be 3 years old August 17. Lee will be 5 years old June 6. We live on a farm three miles from town. But we move to town so I can go to school. I wash dishes for mama and many other things in the house. Last year I raised some flowers and some cabbage, some beans, beets, radishes and two sacks of potatoes and sold them and got $4. I had one dollar and so putting them together I had $5. I put it in the bank at Spokane. I feed the chickens every night. We have 35 chickens. One is mine. I call her Golden Neck. My papa has eight horses, but one horse is mine. Her name is Nellie. We have two calves. One is mama's and the other is mine. I will be 10 years old in September. Our horses' names are Snip, Babe, Billy, Nellie, Prince, Fannie and Molly. My calf's name is Spot. Mama's calf's name is Jersey. It has been raining today.—Agnes McMurray, Irby, Wash.

**Reads the Letters First Thing.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner and I hope to see my letter in print. I am 10 years old. My birthday is December 29. Have I a twin? I have one dog and one cat. The dog's name is Tip. We have about 150 chickens and six horses, three cows and two calves. The calves' names are Buttercup and Torpedo. The cows' names are Boss, Teddy and Louise. I go to school every day. I am in the fifth and sixth grades. My brother Russell is in the fourth grade. There are 22 in our school. There are seven in first grade and six in second grade. Our teacher's name is Miss Georgia Land. She has been down here three times to stay all night. I walk one mile to school, whenever it is bad, papa takes us. We take the Farmer. Just as soon as I get home from school I read the boys' and girls' letters. We also take the American Thresherman. It has good letters in it, too, but there are not many from LaCrosse, Wash. I am going to write to it some day.—Elizabeth Schoeff, box 58, R. F. D., LaCrosse, Wash.

**Baby Looks Cute in His Jumper.**

Dear Aunt Nellie: May I join the Children's Corner We live on a 10-acre place one-half mile from Meyers Falls. I have twin sisters, 13 years old. I have one brother 7 months old and he has six teeth. My sisters' names are Maebelle and Clarebelle. I am 7 years old and in the third grade. My birthday is June 10. Has any one a birthday the same day as mine? Please write to me if you have. Brother is very cute in his jumper and his name is Chester Allen. I have a kitty and his name is Jimmy. We have a cow named Dinah and 30 White Leghorn chickens. The Colville river is back of our place. We have a fine swimming place. I have learned how to knit.—Alta Lucile Winnifred Gerking, age 7, Meyers Falls, Wash.

**Goes After the Cows on Horseback.**

Dear Aunt Nellie: This is my first time to write to you. I am 9 years old. I will be 10 April 1. I go to school and am in the fifth grade. My teacher's name is Miss Bessie Long. I have half a mile to go to school. There are 18 pupils in school. I like school fine. I expect to finish the fifth grade this year. There are seven girls and 11 boys in school. We have about five dozen chickens, two cows and two calves, one pig and about 14 head of horses. I have no brothers or sisters. I have a little pup. His name is Spot. I have two cats. Their names are Mamie and Negro. I like to ride horseback after the cows. I live on a 320-acre farm.—Bertha Gash, Mold, Wash.

**Taught Mother How to Knit.**

Dear Aunt Nellie: This is the first time I have written to the Childrens' Corner. As I glanced over the paper I saw the name of a girl who is almost my twin. I am 11 years old and my birthday is January 12. The twin I have reference to is Margaret Binning. We live three miles north of Medical Lake and three miles south of Deep Creek. We go to Deep Creek school. I like my teacher. Her name is Miss Florence Woodward. There are three rooms in our school. I am in the fifth grade. My biggest brother is in the 10th grade and the smallest brother is in the third grade. I have a girl chum at school. Her name is Marjorie Bly. I see her mostly every day and just about every Sunday. I would be glad to see my letter in print. Also if one of the cousin girls would write to me. In February 15 the Farmer had 31 cousins who wrote. I want to join those and be a member. I joined the Red Cross and I made a pair of wristlets and am starting on another pair. As soon as we can get the sweater yarn we will knit sweaters. My school teacher has knit a couple of sweaters and so has my sewing teacher. I taught my mother how to knit, too.—Eleanor Bursch, R. F. D. 1, Medical Lake, Wash.

**Would Answer the Cousins' Letters.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 12 years old and will be 13 July 10. I am going to school and am in the fifth grade. I am going to the Edgerton school, district No. 66. My teacher's name is Miss Light. We live on a 40-acre farm. I have two brothers and one sister. Their names are James, Clarence and Avaline. James is 11, Clarence is 5 and Avaline is 1. She will be 2 years old March 30. If the cousins would write to me I would answer their leters.—Mabel Bar, Eatonville, Wash.

**Stevens County Baby.**



The above picture shows Faye Little, daughter of M. S. Little, a well-known Stevens county rancher residing at Fruitland.





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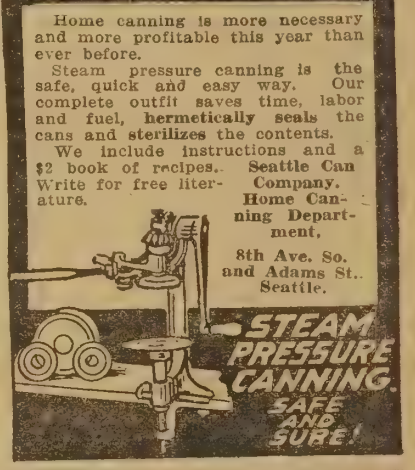
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# Handicraft For Girls

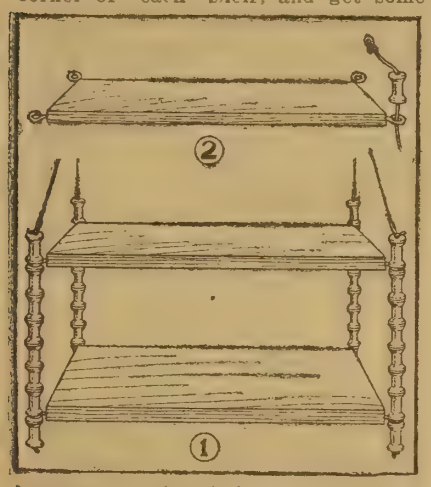
## By Dorothy Perkins

(Copyright by A. Neely Hall.)

### For a Girl's Room.

There are many things a girl can make out of wood without having had experience in wood working, and among them are the shelves, fancy-work box and bolster roll shown in the illustrations.

What girl would not like to own the set of shelves shown in Fig. 1, to hang upon the wall in her room? The shelf boards should be about three-fourths inch thick and ten inches wide, by whatever length you wish to have them. Buy eight half-inch screw-eyes and screw one into each corner of each shelf; and get some



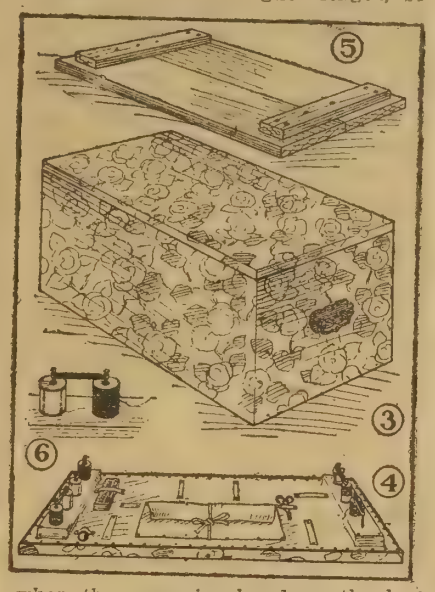

heavy wrapping twine on which to string the corner spools.

The illustrations show how the spools are strung, with a spool below the screw-eyes of the bottom shelf, and another above those of the top shelf, with a knot tied upon the lower end of the cords, and a loop upon the upper end, to hold the spools together. The cords must be pulled tight, and the loops tied close to the top spools, to make the corner stiff.

Paint the woodwork with two coats of paint, and when dry hang the shelves from picture hooks by means of picture wire attached to the loops on the corner cords.

### Handy Work Box.

Every girl needs a work box like that shown in Fig. 3. The only carpenter work necessary is the fastening together of the cover boards with a couple of strips nailed across them as shown in Fig. 5. Place these cross strips close enough to the ends, and make them of the right length, so



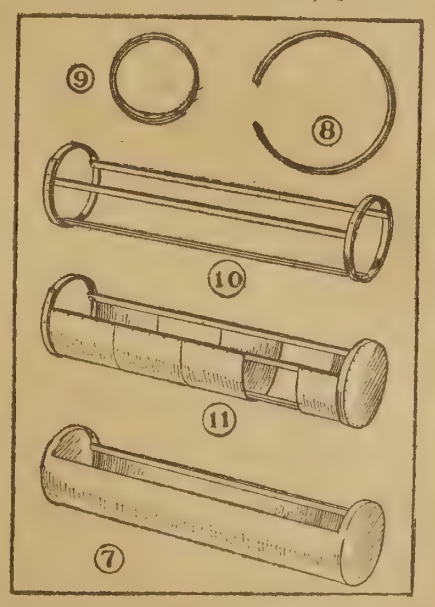

when the cover is placed on the box they will prevent the cover from shifting lengthwise and crosswise. This makes hinges unnecessary.

The box must be covered to conceal the roughness of the boards. A pretty figured cretonne looks well for the outside, and a plain colored lining is best for the inside. Before the covering is put on, tack a layer of cotton wadding to the wood for padding. Screw a brass handle to the center of each end.

Fig. 4 shows how a cloth pocket and elastic tapes should be tacked to the inside of the cover; also how to make a spool rack by driving nails into the cover and slipping rubber bands over the nail heads (Fig. 6) to keep the spools from dropping off.

### Bolster Roll.

A bolster roll to encase the pillow is quite the proper thing for a girl's bed, and a roll like that shown in Fig. 7 is not difficult to construct. Get two barrel hoops for the ends, and three wooden strips one-half inch thick and one and one-half inches wide with which to connect them (Fig. 10). The length of the strips should equal the




width of the bed the roll is made for.

The diameter of the hoops must be made 11 inches from outside to outside. Remove the hoop fastenings, turn in the ends until the right diameter is obtained, and renail (Figs. 8 and 9). Connect the hoops with the strips, spacing these equidistantly around the inside.

Two-thirds of the framework must be covered with cardboard, the other third is left open. Cardboard boxes may be used for covering material. Bend this around the framework, being careful to curve each strip. Also cover the barrel hoop ends with cardboard (Fig. 11). Then reenforce the cardboard with paper pasted lengthwise, both inside and out, to conceal the joints between the pieces of cardboard; also, tack padding over the edges of the barrel hoops. Then cover the entire roll with cambric lining.


## Free War Map 64 Inches by 21 Inches in Size

A splendid four-page war map of the battle front in France, originally published in the Spokane (Wash.) Spokesman-Review will be sent free to any one who mails us one new subscription to The Washington Farmer or one new subscription for The Washington Farmer and The Twice-a-Week Spokesman-Review combined.

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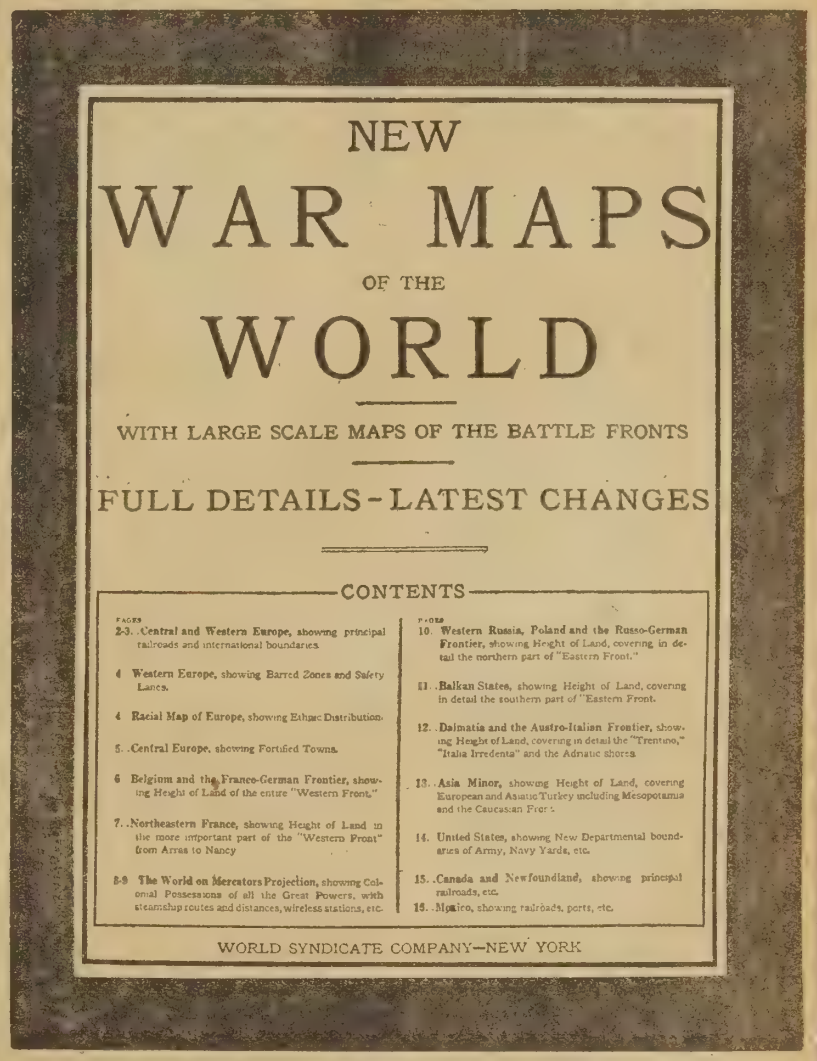
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## News for Breeders

George Beirsdorf of Cornelius, Ore., for the month of January had nine pure bred Jerseys that averaged an income of over $30 each. All except one are by William Schulmerick's bull Golden Maid's Prince. She is by Mr. Schulmerick's other bull, Monmouth Noble, and yielded an income of $46. The milk was sold to the Forest Grove condensery at $3 a hundred and Mr. Biersdorf finds that, in spite of high priced feed, he can still make some profit with good pure bred Jerseys.

A $2000 offer for a bull that cost them $405, made by the man who sold him, is making Pomeroy & Son of Scappoose, Ore., proud of their buy. At the North Portland Holstein sale last November the Messrs. Pomeroy were the successful bidders for Hollywood Lileth Korndyke at the price above mentioned. The dam of the bull, Petiertje Korndyke Abbekirk, already had an A. R. O. record of 25.8 pounds of butter. She was on official test again at the time, and increased her record to 31.26 pounds. Now she is again on a 30-day test, and has good prospects of producing 35 pounds of butter in seven days. Mr. Stimson, proprietor of Hollywood farm, wired Mr. Pomeroy offering $1000 or a bull from a 30-pound cow and $600. H. A.

### Rides Pure Bred Bull Calf.



The accompanying photo shows little Miss Lida May Hanna of Independence, Ore., riding a registered Holstein bull calf at her home on the Hanna farm. H. H. and J. I. Hanna purchased two of the good cows at the Jones Holstein sale at the Oregon State fair a year ago last fall. For one of them, Queen Small Hopes Juliana, they paid $500, and for Small Hopes Clothildemar they paid $400. Each of the cows dropped a fine bull calf by Sir Johanna Fayne Bonheur and it is one of them that Lida May is riding. The cows now have each a heifer calf by a son of Johanna De Kol of Rushcourt, the cow that made a world's milk record for age as a two-year-old for Mr. Jones. The Hannas have a large grade dairy herd. They are still well pleased with their Holstein purchases and will build up a purebred herd. H. A.

### Trade "Sight 'n Unseen."

Carnation Stock farms, Kent, Wash., report the recent sale of a bull calf for $250, the transaction being carried to a conclusion without the purchaser having looked at the animal he was buying.

"This purchase," an official of the company explains, "was made solely by getting the buyer's interest up to the point of buying a purebred sire, through our little folder and our guarantee, which goes with the animal, to be healthy in accordance with the United States bureau of animal industry test and our guarantee that each animal is just as represented. The pedigree and records closed the sale."

**A Novel Watch.**

A bullet-throwing weapon has been made in the shape of a watch. Called on to surrender your watch, you may use it to shoot


# Cutter's
*Germ Free*
# Blackleg Filtrate
*and*
# Blackleg Tissue Aggressin

*The New, Safe and Efficient Agents for Protecting Calves from Blackleg.*

**Cutter's Blackleg Filtrate positively protects** against Blackleg.

**Cutter's Blackleg Aggressin,** made directly from animal tissues, **affords even greater protection** and is recommended for Pure Breds.

**Neither the Filtrate nor the Aggressin can possibly produce Blackleg** in even the most susceptible animals since **both are germ free.**

**Both have given 100% protection** wherever used.

**Prices—**

| | | |
|---|---|---|
| 10 | dose pkge. Filtrate | $2.00 |
| 50 | " " " | 8.00 |
| 100 | " " " | 15.00 |
| 10 | dose pkge. Tissue Aggressin | 4.00 |

**N. B.**—Cutter's Filtrate (a "cultural product" aggressin) is full 5 c.c. to the dose, as we believe that smaller doses, whether concentrated or not, afford less protection.

**Write for booklet** telling what germ free vaccines are and wherein **"cultural product" Aggressins differ from Cutter's Aggressin** made from animal tissues.

**While these new "germ free vaccines" have advantages** that should be known to every stockraiser, we see no reason for a quick change to them by stockraisers who have had satisfactory results from the use of

## CUTTER'S BLACKLEG PILLS

**"California's Favorite" for nearly 20 years**

**Year in and Year Out** they have given better satisfaction than any other vaccine made, and as far as price and convenience of administration are concerned, they have all the advantage.

**Prices:**

| | | |
|---|---|---|
| 10 | dose pkge. Single pills | $1.00 |
| 50 | " " " | 4.00 |
| 10 | dose pkge. Double Pills | 1.50 |
| 50 | " " " | 6.00 |
| | Cutter's Pill Injector | 1.50 |

**Insist on Cutter products.** If unobtainable, order direct. We pay shipping charges.

**The Cutter Laboratory, Berkeley, Calif.**
(U. S. LICENSED)
"The Laboratory That Knows How"



**FARMERS** NOT A POISON **POWERFUL DISINFECTANT**



**FLUSH COWS AFTER CALVING**
Most valuable for bringing after-birth and also for treating barren cows and controlling abortion. B-K kills the infecting germs, heals the uterus, removes the slime and acid—no odor—no straining. More effective than lysol, Lugol's solution, carbolic and cresols—much safer. Send for our Bulletin 52 "Contagious Abortion" and testimony from leading breeders. Special Trial Offer
General Laboratories—Madison, Wis.
361 So. Dickinson St.

## SPOKANE SEED CO.
Distributors,
SPOKANE, WASH.



**HIDES** WOOL · PELTS FURS · TALLOW

SHIP TO US
NO CARTAGE · NO COMMISSION
HIGHEST CASH PRICES PAID
PROMPT RETURNS · HONEST WEIGHT
WRITE FOR PRICE LIST AND SHIPPING TAGS
HIBBARD-STEWART CO. INC.
SEATTLE
BE SURE AND MENTION THIS PAPER





**ABSORBINE STOPS LAMENESS** from a Bone Spavin, Ring Bone, Splint, Curb, Side Bone, or similar troubles and gets horse going sound. It acts mildly but quickly and good results are lasting. **Does not blister or remove the hair** and horse can be worked. Page 17 in pamphlet with each bottle tells how. $2.50 a bottle delivered. **Horse Book 9 R free.**
**ABSORBINE, JR.,** the antiseptic liniment for mankind, reduces Painful Swellings, Enlarged Glands, Wens, Bruises, Varicose Veins; heals Sores. Allays Pain. Will tell you more if you write. $1.25 a bottle at dealers or delivered. Liberal trial bottle for 10c stamps.
W. F. YOUNG, P. D. F., 371 Temple St., Springfield, Mass.


## GUERNSEY CATTLE

### Orchard Hill Farm

"Home of High-Class Guernseys."
Dr. Park Weed Willis, Owner.
**Redmond, Wash.**

### FAIRVIEW FARM

Breeders of high class registered and grade Guernseys.
**A. J. SINNES.**
Route 5. Mt. Vernon, Wash.

**GUERNSEY BULL.**

Two years old; 1 young bull, one month old. May Rose blood. 4 Duroc gilts, three months old, the 4 for $75 if taken at once.
**MIDDLEDALE FARMS,** Gosben, Ore.

**AGED GUERNSEY BULL.**

Also two of his calves, one old enough for service. For full particulars address
**W. F. YOUNG,** Sherwood, Ore.

## PERCHERONS

### Hunter Ranch Percherons

The Grand Champion KROUMIR at head of herd. Young stallions for sale at all times at breeders' prices.
**A. B. HUNTER,** Island City, Ore.

**REGISTERED PERCHERON HORSES.**
E. O. WALTER, AUCTIONEER.
**WALTER BROS.**
Buhl and Filer, Idaho.

## CLYDESDALE

### Clydesdale Headquarters

Stallions and mares, from yearlings up; sired by great horse Massasoit, 13530; grandson of the breed's greatest sire, Baron's Pride, 9122, making them the best bred horses in Oregon. The number of prizes won have been equaled by no firm in this country for the last ten years.
**JOHN PAINTER,** Salem, Ore.

## SHEEP

### SHEEP

Full blood Lincolns, Romneys, Corridales and Hampshires. Ewes and rams, small or large lots. For sale by
**H. STANLEY COFFIN,**
Breeder and Importer. Yakima, Wash.

## HAMPSHIRE SWINE

### Unrelated Fall Pigs

Both sexes, good individuals of best breeding. My herd has shown the winners at all the leading fairs in the northwest for the past seven years and a barrow of my breeding was first at Chicago International last December.
**J. M. FRUITTS.** Enterprise, Ore.

## TAMWORTH SWINE

**ROUND KNOLL RANCH NO. 3.**
Herd headed by Knoll Slope Colonel, assisted by Jolly Lad IV. Correspondence solicited.
**Bliss, Idaho.**

### Just What You Want

may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.

## POULTRY

### "Blue Ribbon" White Leghorn

Hatching eggs, chicks, pullets and matings. Five years' careful trap-nesting and selection for egg production.
BEST SHOW RECORD in central Washington.
RECORD 1918 SHOW: 1st sweepstakes, young pen; 1st and 2d sweepstakes, old pens. 1st, 2d, 3d pullet and 2d hen. Best mating 15 hens average 247 eggs. Hatching eggs. $1.50, $3 and $5 per setting. Satisfaction guaranteed.
**MRS. HANS J. SMITH,** Wenatchee, Wash.

### S. C. White Leghorns

Day old chicks and hatching eggs from 600 trap-nested breeders. $2 per setting of 15, $8 per 100; $15 per 100 day old chix. Special prices on large orders. My service is prompt. I guarantee satisfaction. Write me your wants today.
**H. L. BLANCHARD'S POULTRY FARM,**
Chimacum, Wash.

**LAST BULL SOLD.**

Three register of merit cows, freshen in March, two in April. Baby bulls are sold so reasonably you can't afford to buy a bull of service age. Raise your own bull and save money. Prices, pedigrees, photos, etc., sent on request. Can spare a few good register of merit cows.
**JOHN B. STUMP & SON,** Monmouth, Ore.

**RHODE ISLAND REDS AND WHITES**
both combs. Mammoth Bronze turkeys and Mammoth Toulouse geese. My birds are true blue—winners and qualities. Have a few S. C. Red and R. C. White cockerels at $3 and $5 each. Have a limited number of Mammoth Bronze gobblers at $8 and $10 each. We are booking orders for eggs. Write for mating list. No baby chicks.
**Highland Fruit and Poultry Ranch.**
J. Nonnenmacher, R. F. D. 3, North Yakima, Wash.

### BABY CHICKS

Rhode Island Reds, White Leghorns. Don't wait until March or April to order and then be disappointed because you can't get them. But order now from our heavy-laying strain. Send card for price list.
**MAPLEBROOK POULTRY FARM.**
Box 3, Southworth, Wash.

### HATCHING EGGS

Barred Plymouth Rock. Thompson's Imperial Ringlet strain and Morningside, trap-nested, bred-for-eggs strain. S. C. Rhode Island Red, Tompkins' strain. S. C. White Leghorn, trap-nested English strain. Write for prices. Morningside Poultry Farm.
**FEHNEL & KIRCHNER, PROPS.**
Box 146, Blackfoot, Idaho.

### MY BARRED ROCKS

won this season at the Inter-State fair, 6 blues out of a possible 10; at Coeur d'Alene 1 and 2 cockerel; at Wenatchee, 1, 2 and 3 pullet, 1 and 2 cockerel and 2d cock. At Moscow, 1, 3 and 4 cockerels pullet bred. Eggs from exhibition pens $3 per 15; choice pens, $2 per 15.
**J. E. HORTON, 2408 Altamont Blvd., Spokane.**

### BARRED ROCK EGGS

From good utility stock; good layers; $1.50 per sitting. Send me your orders.
**C. A. STARK, Box 242 Sutherlin, Ore.**

### BABY CHICKS

S. C. White Leghorns. Eggs for hatching and day-old chicks from heavy laying strains.
**G. W. BURT,** Roseburg, Ore.

**EGGS AND BABY CHICKS**
from trap-nested and Hoganized Golden Campines, White faced Black Spanish, Barred Rocks and S. C. White Leghorns. Prices reasonable. Write for folder.
**ED BRYANT,** R. 2, Roseburg, Ore.

**S. C. R. I. RED EGGS FOR SALE.**
Mated with Batten's cock birds, producing great layers and beautiful show birds. Mine are among the highest record Reds in the west. Prices for eggs reasonable.
**VERNAL FORREST, R. 1, McMinnville, Ore.**

**WINNING STOCK.**

Barred Rocks, S. C. White Leghorns and S. C. Black Minorcas. Stock and eggs from exhibition and laying strains.
**WILBER CLAYTON,** Payette, Idaho, R. 1.

**PARKS BRED-TO-LAY BARRED ROCKS.**
My pen, 5 Barred Rocks, at Pullman laying contest laid in Nov. 88, Dec. 100, Jan. 104 eggs. Eggs from this winter-laying strain, $1.50 15, $8 per 100.
**F. J. WIRTNER.** Mica, Wn., R. 1.

**SINGLE COMB BROWN LEGHORN**
male birds, $3 and $5 each; mated breeding pens, $15. Eggs for hatching. Write for mating list. The Up-to-Date Poultry Farm.
**ARTHUR W. WADE, Box 3, Marysville, Wa.**

**S. C. RHODE ISLAND REDS.**
Eggs for hatching from heavy winter laying stock; $1.50 per 15, $7 per 100. Young Flemish Giant hares.
**W. T. WILSON.** R. 3, Weiser, Idaho.

The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

# Breeders' Department

## Herd Bulls

Imported Doune Radiance No. 609413
and
Gainford Perfection No. 443173.

## Hercules Shorthorns

We can supply you with choice, well grown bulls and females of breeding age. Your inspection of our herd is invited. Visitors always welcome.

**Day & Rothrock Company**
205 Exchange Bank Bldg. Spokane, Wash.

## HOLSTEIN CATTLE

### TILLAMOOK HOLSTEIN BULL CALF

Born Jan. 6, 1918. Well marked, good individual. Sire three-fourths same blood as Jessie Fobes Bessie Homestead, once world-record 4-year-old, and his dam's record 17,800 lbs. milk and 780 lbs. butter in a year. Calf's dam, 11,200 lbs. milk and 475 lbs. butter as a junior two-year-old, under adverse conditions. Her dam, 17,500 lbs. milk and 750 lbs. butter. Only $100 if taken at once.

**EBINGER & SON,** Tillamook, Ore.

## SHORTHORN CATTLE

### SHORTHORNS

A few young stock for sale by such noted sires as Precious Goods, a son of the great Golden Goods, and Scottish Sunrise 2d.

**R. E. BOYCE,** Baker, Ore.

### H. H. Schildman

breeder of registered Shorthorn cattle. Hampshire sheep and big-type Poland China hogs.

Filer, Idaho.

### LELAND BROTHERS

Breeders of top registered Shorthorn cattle.
Correspondence solicited.
**WENDELL,** Idaho.

**REGISTERED SHORTHORN COWS,**
Young bulls and heifers, sired by Scotch bulls; liberal terms.
**CALDWELL CATTLE CO., Caldwell, Idaho.**

## ABERDEEN ANGUS

### ANGUS CATTLE

In the famous valley of the Yakima there is located one of the best herds of Aberdeen Angus in America. Proof of this is evident by the many prizes won by this herd at all of the greatest shows of the northwest and central states, including the Chicago International.

Fifty extra good range bulls are now offered for sale. Also fancy herd headers and show cattle of both male and female. All prices very reasonable.

CONGDON & BATTLES.
OTTO V. BATTLES, Manager.
Yakima, Washington.

### Aberdeen Angus Cattle

A. H. EAGLESON & SONS.
Boise, Idaho.

## AYRSHIRE CATTLE

### FOR SALE

AYRSHIRE BULL CALVES.
World record backing on sire's side, from good, producing cows, $75 to $100 f. o. b. any station, Oregon, Washington, Idaho. Write for snap shots and full particulars.
**MEADOW BROOK FARM, Montesano, Wn.**
J. A. Pringle, Mgr.

### Edgewater Farm

Government accredited herd, headed by Peter Pan, 63d. Bull calves available.
E. M. CHANDLER, Burbank, Wash.

## HEREFORD CATTLE

### Highland Stock Farm

offers for sale Hereford bulls, one or two years old. One or a carload.
**PLATT BROS.** Genesee, Idaho.

### BULL RANCH

Hereford Cattle.
Berkshire Hogs.
Hampshire Sheep.
**CHAS. BULL.** Mabton, Wash.

## BROWN SWISS CATTLE

### Brown Swiss Stock Farm

Breeders of Brown Swiss Cattle, the Farmer's Dairy Cow. Young stock for sale.
**THEO. BRUGGER, Route 3, Gresham, Ore.**

**MOOREHEAD RANCH.**
Registered Holsteins.
Herd sire, Model Annie De Kol Segis, grandson of the famous King Segis. We have no bulls of service age, all having been sold, but we have some splendid young stuff, from 6 to 8 months old, coming on. If you are looking for real foundation stock, write us for particulars and pedigrees.
**MOOREHEAD & HOBSON.**
Breeders of Purebred Holsteins.
Outlook, Wash.

### 365-DAY HOLSTEINS

24,667 lbs. milk—1026 lbs. butter—is the s. c. advanced registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.
THE HERD WITH YEARLY RECORDS.
**WESTERNWOLD RANCH, Prineville, Ore.**

**THE MOST PROFITABLE COWS**
in the world are Holsteins. This is not a claim, it is a fact. We have two beautiful young bulls, bred right and fit to head any herd. For further particulars and pedigrees address
Maplewood Farm.
**POMEROY & SON,** Scappoose, Ore.

### LaConnor Flats Stock Farm

Pure bred registered Holstein cattle. Herd sire Segis Pontiac Acme; average of three of nearest dams; butter, 1 year, 1089.82 lbs.; milk, 24,380.3.
**J. H. HULBERT.** Mt. Vernon, Wash.

### Record Holsteins

Young bulls, some of them ready for service, by a sire whose 5 nearest dams average 26.17 pounds butter, or another with 29.67-pound dam, and out of high-record A. R. O. dams. Priced to sell.
**ERNEST WERNER, AURORA, ORE.**

### Bargains in Bull Calves

Sired by Segis Riverside Pontiac, that sold in Pacific International sale, 1914, for $1025, and whose dam has A. R. O. record of 31.47 lbs. butter in 7 days; 118.89 in 30 days, and big records all through his pedigree.
**ERNEST JOHNSON,** Scappoose, Ore.

**COOPERATIVE BULL BABIES.**
More value for your money because lower per cent of selling cost. ARO records. Good individuals. Bull calves, all ages.
**ROGUE VALLEY HOLSTEIN ASS'N.**
F. R. Steel, Sales Mgr., Winona Ranch, Grants Pass, Ore.

**REGISTERED HOLSTEINS.**
One 30-lb. bull with grand champion sire and dam; also young bull calves. Here is production and type we hear so much about.
**H. R. BOOMER,** New Plymouth, Idaho.

### HOLSTEINS

Well bred young bulls for sale.
**THOS. CARMICHAEL.** Gaston, Ore.

**HOLSTEINS BRED FOR PRODUCTION**
and
Berkshires of Quality.
Stock of All Ages, Either Sex, for Sale.
**HUGH NISBET.** Chimacum, Wash.

**REGISTERED HOLSTEINS.**
Bull calves for sale with good A. R. O. backing.
**BEEBE BROS., R. F. D. 2, Rupert, Idaho.**

## JERSEY CATTLE

### Jersey Home Dairy

Young bulls, winners at Washington State Fair, make good herd sires. Attractive prices for quick sale.

**Erickson Bros. Prop.**
North Yakima, Wash.

### ASHBURN FARM

REGISTER OF MERIT JERSEYS.
In nearly 13 years we have yet to get our first poor heifer or dissatisfied customer. We have the best of the Golden Glow's Chief and St. Mawes strains, with the cross of our great Kentucky bull, Valentine's Ashburn Baronet.
**J. M. DICKSON & SON,** Shedd, Ore.

**GOLDEN GLOW HERD**
Winner of 1st and 2d prize in butter test, Oregon State Fair, 1917, (all breeds, 20 entries); breeder and owner of grand champion cow in show ring, 1916; breeder of grand champion cow, 1917. Breeder and owner of world's champion 3-year-old, with 1115 lbs. butter, 80 per cent fat. Every female a daughter, granddaughter or great granddaughter of Golden Glow's Chief, sire of 34; 14 over 700 lbs.; 32 over 600 lbs..
**PICKARD BROS., Marion, Ore.**

### Jersey Isle Stock Ranch

Herd headed by Bright Light's Knight 103741, a line-bred Gamboge Knight-Combination. Castilian Lady 26628 made 603.3 lbs. fat (713.3 lbs. butter) and 11,530 lbs. milk in 11½ mos., and my herd has highest average test of 399.8 lbs. fat in Buhl Cow Testing association. Young stock for sale.
**C. E. LONG,** Buhl, Idaho.

BREEDER OF
**GOLDEN GLOW'S CHIEF 61460**
35 daughters average 533.9 lbs. fat. Sire of world record Junior three-year-old. Two of his sons heading our herd. Some choice bull calves out of cows with records up to 856 pounds for sale. Sold out of bulls over six months old.
**LADD FARM,** Oswego, Ore.

### All High Record Blood

Bull calf out of Lucy of P. V., full sister to St. Mawes Susie; 936 lbs. butter in a year; to St. Mawes Blossom 823 lbs., and to Susie's Twin Maiden, 642 lbs. Sire, Poppy's St. Mawes, son of St. Mawes Poppy, 1120 lbs.
**ED CARY,** Carlton, Ore.
Station, La Fayette, Ore.

### BUY A REAL SIRE

We are offering a choice bull calf by St. Mawes of Ashwood and out of a daughter of the great Holger. This youngster carries the best blood in Jerseydom and is fit to lead any herd. Price on application, but don't delay, as he will cost more after his dam completes her present register of merit test.
**M'ARTHUR & STAUFF,** Rickreal, Ore.

### We Have a Herd Average of 700 Lbs.

85 per cent BUTTER for 11 head. Sold six bull calves in the past 4 mos.: 3 of the last ones brought $250 each. These were sons of our herd bull, G. P. St. Mawes; just one bull calf left.
**F. A. DOERFLER,** Silverton, Ore.

### Bull Calves for Sale

Bull calves from advanced registry cows for sale. Jerseys, Holsteins and Ayrshires. Description supplied on request.
**Department of Dairy Husbandry,**
Oregon Agricultural College, Corvallis, Ore.

### WAIKIKI FARM

Register of Merit Jerseys. Largest Jersey herd in the northwest. Young stock for sale.
IRA P. WHITNEY, Manager.
Route 7, Spokane, Wash.

### 510 Pounds of Butter

In 292 days at 4 years 6 months, is the R. of M. record of the dam of a bull calf dropped July 28, 1917. Sire's dams R. of M. record 657 lbs., good individual. Only $75 if taken soon. Others at bargain prices.
**R. B. SEELY,** Rt. 5, Sherwood, Ore.
Shipping station, Wilsonville, Ore.

### OAK RIDGE JERSEY FARM

Thirty years breeding Jersey cattle. Young bulls from Register of Merit dams. Also a few choice females.
**RILEY E. HULBURT, Albany, Ore.**

### LA CREOLE FARM

Oxford You'll Do Jr., R. of M., A. J. C. C. Jerseys, under U. S. Government control for health. No t. b. or abortion ever in herd, we are offering you your choice of a bull sired by the above bull, 30 months old. A full sister now on test produced in 159 days 271½ pounds butter fat; the dam, Morrow's Select, 198788, 823 pounds butter. Oxford You'll Do Jr.'s half sisters have records up to 933 pounds butter. Or we will sell you a calf from the same dam, sired by Golden Cicero, daughters' records up to 783 pounds butter. These sires are fit to head any herd.
**W. O. MORROW,** Independence, Oregon.

## DUROC-JERSEY SWINE

### SPRING DUROCS

I am now booking orders for weanling pigs, pairs or trios, unrelated. These pigs carry the very best blood lines procurable. Tracing their ancestry back to Inventor, Climax II., Top Notcher, Tip Top Lad and Proud Advance. All prize winners in state and interstate shows.

Also have a few very fine gilts, either open or bred.

**CHAS. G. SPRONG,** Grandview, Wash.

**DUROC SOWS FOR SALE.**
A few choice Duroc gilts, bred to farrow early next May, daughters of grand champion Richards Defender and bred to Junior Champion Richards Pathfinder. No better breeding east or west. Also a few good boars ready for service. Price very reasonable. We furnish pedigree and guarantee satisfaction, or will refund your money and pay express both ways.
**RICHARDS LIVE STOCK CO., Virginia, Ida.**
Home of the Champion Durocs.

### IOKA FARM DUROCS

Open and bred gilts and one excellent boar at breeding age.

A. N. DOERFLER, MGR.
**DOERFLER BROS.** Silverton, Ore.

**AVONDALE STOCK FARM.**
Registered Duroc-Jersey hogs. Inspection invited. Correspondence solicited.
**H. C. POLLY.** Route, 3, Burley, Idaho.

**PATHFINDER BOARS** — Choice Duroc Jersey boars for sale. Sired by Richard Pathfinder, First prize and junior champion Utah state fair. Priced to sell and guaranteed. **ERICK W. OLSON, Virginia, Idaho.**

**OTTO'S DUROC JERSEYS.**
Stock doing fine, splendid prospects for spring crop of pigs. For sale Jr. yearling boar with a show record; very classy individual. Filer, Idaho.

**DUROCS.**
Boars and open or bred gilts of excellent breeding.
E. E. PRICE, CABINET, IDAHO, OR
**JAMES N. PRICE.** Yakima, Wash.

## POLAND CHINA SWINE

### Poland Chinas, 2 Service Boars, $30

each; one 17 mo., $45. 12 Bronze turkeys, no better. Barred Rocks, Buff Orpingtons, White and Brown Leghorns, Guineas, Pekin and Indian Runner ducks. Eggs, $2 per setting; A1 stock.
**E. A. KRAUSE,** Roseburg, Ore.

### LOCUST LAWN HERD

Sold Out.
**W. F. HOWARD & SONS, Caldwell, Idaho,**
S. Kimble Ave.

**GREENLEAF STOCK RANCH.**
Big type Poland Chinas, either sex, for sale at all times.
**Wilson Bros., A. L. Wilson, Mgr.**
Greenleaf, Idaho.

**BIG TYPE POLAND CHINAS**
Herd headed by Sammy (79,833).
Correspondence Solicited.
**Fruitland Stock Farm, C. Royston, Mgr.**
Payette or Fruitland, Idaho.

**QUALITY HERD.**
If you want to improve your herd, try stock from my winners at the Oregon state fair.
**RAY J. FOX,** Lyons, Ore.

**PURE BRED POLAND CHINAS**
Some choice Sept. and Aug. pigs, $25 to $35 each, either sex; also a good herd boar. Will ship C. O. D., subject to approval
**HERBERT WILLARD,** Dayton, Oregon.

## YORKSHIRE SWINE

### FALL PIGS

Both boars and gilts of best breeding. Now booking orders for spring pigs. Can furnish pairs or trios.
**WM. NEUENSCHWANDER,** Gaston, Ore.

## CHESTER WHITE SWINE

### COVE STOCK FARM

Unrelated fall and spring Chester White pigs from prize winning stock.
**ARCHIE CONLEY,** Cove, Ore.

## BERKSHIRE SWINE

### Riverby Orchard Berkshires

Riverby Orchard Berkshires won 12 out of 15 first prizes at the Washington state fair, 1916, also many prizes, including grand champion sow at the Panama-Pacific world's fair. We offer for sale a few good boars and young sows.
**D. C. BUNN,** Prosser, Wash.

### Kintrye Farm Berkshires

A few good gilts bred for spring farrow.
**CLARK BROS.,** Prosser, Wash.

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, April 1.—Burdensome arrivals of low-grade corn had a bearish effect today on the corn market. Prices closed unsettled, 5-8c net lower, with May $1.25 1-4. Oats finished 1 3-8c to 1 5-8c off. The outcome on provisions ranged from 20c decline to a rise of 5c.

Depression in the corn market developed in the main after cash dealings had shown that poor to rotten samples had fallen in value 20c to 25c a bushel. Corn that was out of condition proved hard to sell even at the bottom figures reached, which were about the lowest so far on the 1917 crop.

Oats underwent a decided setback on account of lowering of bids from the seaboard.

Provisions averaged lower as a result more or less of a falling off in shipments. Supplies of hogs in March exceeded all previous records for that month.

**Chicago Futures.**

| | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| Corn— | | | | |
| May | 1.25¾ | 1.26 | 1.24½ | 1.25¼ |
| Oats— | | | | |
| April | .89 | .87½ | .87⅝ | |
| May | .84¾ | .83⅝ | .83⅝ | .83⅝ |
| Pork— | | | | |
| May | | 27.70 | 47.47 | 47.65 |
| Lard— | | | | |
| May | 25.70 | 25.85 | 25.60 | 25.85 |
| July | 25.75 | 25.95 | 25.65 | 25.95 |
| Ribs— | | | | |
| May | 24.50 | 24.50 | 24.17 | 24.35 |
| July | | 24.80 | 24.60 | 24.75 |

**Cash Quotations.**

CHICAGO, April 1.—Corn—No. 2 yellow, $1.75@1.80; No. 3 yellow, $1.50@1.60; No. 4 yellow, $1.40@1.50.

Oats—No. 3 white, 89 1-2@91 1-2c; standard, 90@92c.

Rye—No. 2, $2.87.

Barley—$1.65@1.95.

Hay—Timothy, $5@8.25; clover, $28@31.

Pork—Nominal; lard, $25.75; ribs, $23.47@23.97.

**Pacific Northwest Grain.**

PORTLAND, April 1.—Grain, 30-day options: Oats—No. 2 white, feed, $69; barley, standard feed, $74; brewing, $81. Eastern oats and corn in bulk—Oats, No. 3 white, $63.50; 38-pound clipped, $63.50; No. 3 yellow, $66; No. 3 mixed, $65.50; 30-day: Oats, No. 2, $70; barley, feed, $74; brewing, $81.

**Minneapolis Grain.**

MINNEAPOLIS, April 1.—Wheat—Receipts, 199 cars, compared with 769 cars a year ago.

Corn—No. 3 yellow, $1.55@1.60.

Oats—No. 3 white, 87 3-4@88 3-4c.

Flax—$4.07@4.09.

Flour—35c higher; in carload lots, standard flour quoted at $9.55 a barrel in 98-pound sacks. Shipments, 54,334 barrels.

Rye—$2.89@3.

Barley—$1.45@2.02.

Bran—$33.14.

## Live Stock Quotations.

**At Omaha.**

OMAHA, Neb., April 1.—Hogs—Receipts, 13,000; Market 5c to 15c higher. Heavy, $16.45@16.85; mixed, $16.60@16.75; light, $16.50@17; pigs, $12@16.50; bulk of sales, $16.50@16.80.

Cattle—Receipts, 8700. Market steady to strong. Native steers, $10@14; cows and heifers, $8@11.50; western steers, $9@12.50; Texas steers, $8.50@10.50; cows and heifers, $7.75@10.25; canners, $7.50@8.50; stockers and feeders, $7@2.25; calves, $9@13; bulls, stags, $7.75@10.25.

Sheep—Receipts, 11,000; market strong to 15@25c higher. Yearlings, $14@17; wethers, $12.50@15.50; ewes, $11.50@14.50; lambs, $16.75@19.25.

**At Chicago.**

CHICAGO, April 1.—Hogs—Receipts, 55,000; firm, 10c to 15c above Saturday's average; bulk, $16.85@17.40; light, $16.90@17.60; mixed, $16.50@17.55; heavy, $15.75@17.15; rough, $15.75@16; pigs, $12.50@16.50.

Cattle—Receipts, 21,000; steady. Native steers, $9.70@14.65; stockers and feeders, $8.40@11.60; cows and heifers, $6.30@12; calves, $10.50@16.

Sheep—Receipts, 12,000; strong; sheep, $11.75@17; lambs, $15.25@19.50.

**At Portland.**

PORTLAND, Ore., April 1.—Cattle steady to higher. Receipts, 1339. Medium to choice steers, $11@12; good to medium steers, $10@11; common to good steers, $8.50@10; choice cows and heifers, $9.75@10.75; common to good cows and heifers, $8@9.50; canners, $4.25@6.25; bulls, $5@9; calves, $7.50@12; stockers and feeders steers, $6.50@9.50.

Hogs steady; 10c higher. Receipts, 917. Prime light, $16.85@17.10; prime heavy, $16.50@16.75; pigs, $14.75@15.75; bulk of sales, $16@17.

Sheep steady; receipts, 9. Western lambs, $15@15.50; valley lambs, $14.50@15; yearlings, $12@13.50; wethers, $12.50@13; ewes, $9@12.

Shorn sheep, 2 1-2c to 3c under quotation.

**Spokane Stockyards, Monday.**

Hogs—Receipts 80, market steady. Prime light, $16.50@16.75; prime heavy, $16.50@16.65; pigs, $14.50@15.25; stockers and feeders, $12@14; bulk of sales, $16.65.

Cattle—Receipts 92, market steady. Best beef steers, $11@12; good steers, $9.75@10.75; common to good steers, $8.25@9.75; best beef cows and heifers, $9@10; good cows and heifers, $7.75@8.75; ordinary to good cows and heifers, $6.25@7.25; canners, $4.25@6.25; bulls, $6@10; calves, $7@12; stocker and feeder steers, $6@8.75.

Sheep—Receipts none, market steady. Prime lambs, $14.50@15.25; good lambs, $13.25@14; prime yearlings, $12.50@13.25; prime wethers, $12@12.75; best mutton ewes, $9@10.75.

## Seattle Wheat.

SEATTLE, March 30.—The car situation enters heavily into the distribution of Washington wheat and flour, and while the shortage of rolling stock is beneficial in keeping the wheat in this territory it is also working against Puget sound millers in the way of preventing shipments of wheat from the interior to this city. If Washington wheat can be brought in here in place of being shipped east local mills will be able to keep in operation until the new crop year.

Millers have been more vitally interested this week in the proposal of the department of agriculture to lower the wheat grades for the 1918 crop than in any other phase of the grain situation. There has been vigorous objection here to this plan of getting more money for farmers. The alternative would be to work this through price differentials. It is pointed out by Charles J. Brand that change of grades would be only during the war, but Seattle millers say that months of weary effort have been expended in establishing a satisfactory grading basis and that to tear it down at this time not only would fail of its object, but would create dissatisfaction after the war.

Crop conditions in so far as Seattle millers can get them from country representatives and agents are flattering. Seeding in the Ritzville district is practically completed. In the Big Bend country, where a large percentage of bluestem is being put in, operations will be under good headway within a week. There have been some misgivings as to the moisture supply, owing to the fact that there is no snow in the Cascade mountains, but this situation has occurred before at this time of the year without any serious consequences and anxiety is not widespread.

Seattle millers frankly say that it will now be impossible for the food corporation, under the conditions of the car shortage, to move the wheat out of the state in time to be of service to eastern millers in supplying the flour requirements and that undoubtedly it will have to be ground here.

## Seattle Market.

**BUYING PRICES.**

Unless otherwise stated, the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots, f. o. b. Seattle:

Eggs—Local, 34@35c per dozen; eastern Washington, Oregon and Idaho, 34c.

Poultry—Spring roosters, live, fat, 2½ to 5 lbs., 26@27c; old roosters, 17c lb; squabs, large, $3.50 dozen; geese, fat, live, 20c lb.

Butterfat—51c lb; dairy butter, 35@36c.

Beef—Buying prices: Prime beef steers, 11@12c; cows, fat, 9@11c lb; heifers, 10@11c.

Hogs—Light, 18@20c lb; heavy, 17@18c lb.

Veal—Fancy light, 17@18c lb; heavy, 9@16c lb.

Hides—Salted, 14c lb; flint-dry hides, 29c lb; salt kip, 16c lb; green hides, 11c lb; green calf, 23c lb; dry calf (under six pounds), 29c lb; bulls and dry salts, 4c lb less; green bulls, 9c lb; dry salts, 4c lb less; green bulls, 9c lb. Clean, long wool, western Washington flint dry pelts, 39c per lb; heavy to clean eastern Washington flint dry pelts, 30@ 35c lb.

**SELLING PRICES.**

Feed—Scratch, $79 per ton; all grain chop, $77 per ton; oats, $76 per ton; rolled oats, $78 per ton; bran, $34 per ton; shorts, $33.50 per ton; whole corn, $79 per ton; cracked corn, $81 per ton; alfalfa meal, $36; rolled barley, $85 per ton; Milo maize, $75 per ton.

Hay—Eastern Washington timothy $36@37 per ton; alfalfa, double compressed, $40@41 per ton; alfalfa, $29 per ton; Puget sound, $27@28 per ton; straw, $15 per ton.

Butter—Washington creamery extras; cubes, 47c lb; do bricks, 48c lb.

Eggs—Fresh ranch, 40c dozen.

Potatoes—Puget sound, $20 per ton; eastern Washington, $25 per ton.

## Portland Market.

PORTLAND, Ore., March 30.—Butter production is increasing at a more rapid rate and the market is weakening. City creameries announce another cut of a cent in the print price and they have reduced the buying price of butterfat 2 cents. Cubes sold down to 45 cents and are tending lower.

Apples are closely sold up, only a few lots of Romes, Newtowns and Red Cheeks remaining on the market. Prices are firmer.

Walla Walla spinach is holding steady at $1.25 a crate.

In the following list of quotations the grain, hay, mill feed, hops, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 2 white, $70 per ton.

Millstuffs—Bran, $30 per ton; shorts, $32.

Barley—No. 1 feed, $74; brewing, $81; rolled, $77@79.

Hay—Buying prices: Timothy, eastern Oregon, $29@30; alfalfa, $24@24.50; grain, $22.

Eggs—Oregon ranch, case count, 35c per dozen; candled, 36@37c.

Poultry—Ducks, 32@35c; turkeys, live, 26@27c; geese, 20@21c.

Butter—City creamery, prints, 48@49c per pound; cubes, extras, 45c.

Cheese—Tillamook triplets, 26c; Young Americas, 28c.

Dressed meats—Veal, 18 1-2c; pork, 21 1-2@22c.

Hops—1916, nominal; 1917 crop, 14@15c.

Potatoes—Oregon, buying price, 75c per 100.

Wool—Eastern Oregon, 44@65c; valley, 50@55c.

Beans—Buying prices: Oregon white navy and Lady Washington, 10¼@10½c; white kidney, 10c; colored, 9c.

## Spokane Market.

**WHOLESALE.**

**Vegetables**—Cabbage, $4@5 cwt; carrots, $2 cwt; bunch carrots, 75@90c doz; bunch beets, 75@90c doz; beets, $1.50 cwt; rutabagas, $1.75 cwt; parsnips, $1.75 cwt; hothouse lettuce, 50c 5-lb box; head lettuce, 65@85c doz, $2.75@3 crate; turnips, $1.50@1.75 cwt; bunch turnips, 75@90c; California new turnips, $2 cwt; red bell peppers, $1.25 box; chilli peppers, 25c lb; green peppers, 11c lb; Mexican tomatoes, $3 lug; celery, 90c@$1 doz; hothouse cucumbers, $2 doz; cauliflower, $1.75 crate; new garlic, 10@12½c lb; parsley, 40c doz bunches; horseradish root, 12½c lb; brussels sprouts, 12½c lb; radishes, 40c doz bunches; rhubarb, $4 box, 10c lb; spinach, $1.35 crate; asparagus, 16c lb; new peas, 15c lb; artichokes, $1.50.

**Onions**—California onions, $2.25 cwt; Oregon onions, $2.75 cwt; green onions, 40c doz bunches.

**Grapes**—California cluster raisins, $2.25 box, 20 packages.

**Tropical Fruits**—Bananas, 6c lb; lemons, $7.50 case; navel oranges, $6@6.50 case; budded seedling oranges, $5.75@6.25 case; Blood oranges, $3.50 half case; Florida grapefruit, $5.75@6.25 case.

**MEAT.**

**Beef**—Beef steers, 16½@19c lb; cow beef, 15½@18c lb; heifers, 18½c lb; beef loin, 25@27c lb; steer chucks, 16½@17½c lb; prime ribs, 22@24c lb; rump and round, 19c lb.

**Mutton**—Breakers, 25c lb.

**Lambs**—26@27c lb.

**Pork**—Packer dressed hogs, 26@27c lb; pork loins, 29@30c lb; legs, 26c lb; shoulders, 24c lb; leaf lard, 23c lb, tenderloins, 40c lb; spareribs, 13c lb; country dressed hogs, with head on, 20c lb to producer.

**Smoked Meats**—Washington hams, 33@34c lb; T. C. hams, 34c lb; T. C. bacon, 45½c lb; Washington bacon, 40½@44½c lb; picnics, 23½c lb; Boston butts, 28½c lb; English bacon, 36½c lb.

**Dry Salt Meats**—Clear bellies, 30c lb; lean backs, clear, 29c lb; sides, 29½c lb.

**Lard**—Tierces, 27½c lb, $14.85 case; compound, tierces, 23½c lb.

**POULTRY.**

**Dressed Poultry**—Frozen hens, 28c lb; frozen springs, 28c lb; frozen broilers, 32c lb.

**GRAIN AND FEED.**

**Rice**—Fancy head, $7.50@9.50 cwt.

**Flour**—Bluestem, $9.40; Blend, $9.40; Montana hard wheat, $10.40; graham, $8.60 bbl, 49-lb sacks; whole wheat, $8.80; eastern rye, $10.10; eastern rye meal, $10.30; oat flour, $13.10.

**Oats**—$74 ton whole, $76 rolled, delivered in city.

**Corn**—$77 ton; cracked corn, $79 ton.

**Bran**—$30 ton; shorts, $32 ton; bran and shorts, $31 ton.

**Barley**—Rolled, $7½ per ton.

**Oil Meal**—$78 per ton.

**Hay**—Timothy, $32 per ton, $31 ton by carload; alfalfa, $27 ton, $26 ton by carload.

**GASOLINE, LINSEED OIL, ETC.**

**Gasoline**—Red Crown, bulk, 24½c gal cases, 34½c gal; Shell, 24c; refined oil (Pearl), bulk, 13c gal, cases, 23c gal; eocene, 15½c gal in bulk, cases, 25½c gal; engine distillate, 15½c gal, bulk.

**Linseed Oil**—Raw, bbl., $1.68, case $1.86 gal; boiled, bbl., $1.70 gal. cases $1.88 gal.

**Turpentine**—Bulk, 65c gal; cases 85c gal.

**White Lead**—Strictly pure white lead in oil, ton lots, 11¾c lb; 50-lb lots, 12½c lb.

## Portland Wheat.

PORTLAND, Ore., April 1.—It was announced at the close of the week that the food administration had removed the embargo on the shipment of whole barley from California to Oregon and Washington. Following this some business was worked in southern barley for Portland and there was also buying for shipment to Seattle. It is not believed that any large trade will develop, as barley stocks in California have been cut into deeply by exporters. Although there is a decided scarcity of barley in the north, millers at the moment are not showing much interest and prices at the exchange closed unchanged.

Oats and corn are very dull, with offerings small, and the trade apparently supplied amply for the present.

The hay market is firm, with indications that stocks of everything except alfalfa will clean up closely by the time the new crop arrives.

**COTTON.**

NEW YORK, April 1.—Spot cotton steady; middling, 34.95c.

## Butter and Eggs.

PORTLAND, Ore., April 1.—Butter prints, extras, 48@49c; cubes, extras, 43c; prime firsts, 42c; dairy, 30c. Butter fat, Portland delivery No. 1 sour cream, 49c.

SAN FRANCISCO, April 1.—Butter—Extra, 43@44c. Eggs—Fresh extras, 39c; extra firsts, 38c; firsts, 37c; fresh extra pullets, 38c; firsts pullets, 37c. Cheese—Young Americans, 26½c.

CHICAGO, April 1.—Butter—Steady; creamery, 35@41½c. Eggs—Higher; receipts, 32,663 cases; firsts, 34¼@34½c; ordinary firsts, 33¼@33½c; at mark, cases included, 33@33½c.

**HOPS, HIDES, WOOL.**

NEW YORK, April 1.—Hops—quiet; state medium to choice, 1917, 35@43c; 1916, nominal; Pacific coast, 1917, 20@22c; 1916, 14@16c.

Hides—Steady; Bogota, 30@33c; Central American, 29@32c.

Wool—Firm; domestic fleece, XX Ohio and Pennsylvania, unwashed, 65@66c.

# Want Ads

**SITUATION WANTED—Male 21**

WANTED—BY MARRIED MAN, WORK on farm; experienced; A1 references. Address Ed Feighner, 1547 S. E. st., Tacoma.

**EDUCATIONAL 45**

BEHNKE-WALKER, PORTLAND, NORTHwest's largest, finest business college, can not supply half the calls for trained young men, women. Enroll now. Free success catalog. Positions secured.

**TEACHERS' AGENCIES 46**

TEACHERS REGISTER WITH B. F. WESTmore, Mgr. Hazard Teachers' Agcy. $1 registers you at three offices. 911 Old Nat'l Bank bldg., Spokane, Washington.

TEACHERS NEEDED FOR NEXT FALL. Write for information. Clark Teachers' Agcy, 412 Ch. of Com. Bldg., Spokane.

**FRESH FOOD PRODUCTS 56**

FISH! FISH!

100 LBS. SALMON IN BRINE, SHIPping weight 165 lbs., $11. Smoked salmon, 20 lbs. net., $3.25. Ask for fresh and cured price list. T. A. Beard, 4322 Winslow place, Seattle, Wash.

**HONEY, BEESWAX—Wanted. 58**

SEND SAMPLES OF YOUR HONEY AND beeswax; state quantity, price. Oregon Farm Products Co., 330 Halsey st., Portland.

**MISCELLANEOUS—FOR SALE 60**

SASH AND DOORS.

Before building be sure and get our prices on sash, doors, finish, paints, plaster board, roofing, etc.

We will send you our large illustrated catalog, No. 27, free on request, post-paid.

| | |
|---|---|
| Cottage glass doors | $2.75 and up |
| 5x panel doors | $1.80 and up |
| 20x24 2-light windows | $1.63 |
| One-ply roofing | $1.35 |
| Two-ply roofing | $1.70 |
| Three-ply roofing | $2.10 |
| 3-ft., 4-ft. and 5-ft. cedar lap siding | $3 |
| Regular lengths | $10 |
| 1x4 flooring, 3-ft. to 5-ft. | $20 |
| 4-in. beaded ceiling, 3-ft. to 9-ft. | $20 |

The largest factory in the west selling direct to consumer. We sell any one, ship anywhere, and guarantee safe delivery.

O. B. WILLIAMS CO.
1943 First Ave. So., Seattle, Wash.

DO YOU USE SOEZY?

Soezy is one of the greatest discoveries of the age. Makes washday a pastime and women better natured. Sold on approval. FREE SAMPLE on request. Will not injure clothing. One package does 8 ordinary washings. Price 25 cents per package, postpaid. Agents wanted in unoccupied territory. Soezy sells itself. Sold only by agents.

JONES CO., LAFAYETTE, OREGON.

BUILDING MATERIALS AT WHOLESALE prices — Doors, windows, roofing paper, porch columns, plaster boards. All building materials shipped promptly. Send for our complete illustrated catalogue; gives you lowest net prices. P. A. ROVIG CO., 2229 First ave., So., Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

**MISCELLANEOUS—WANTED 68**

CASH FOR OLD FALSE TEETH; SOME worth up to $19.50 per set (broken or not). Send at once. We return cash same day we receive package. We pay highest prices for old gold jewelry, gold crowns, bridges, platinum, silver. (Cut out adv.) U. S. Smelting Works, 609 Caswell, Milwaukee, Wis.

POULTRY WANTED — THE FOOD ADministration permits the sale of poultry for market purposes after April 1. Send us your cream, poultry, dressed meats and hides. Commercial Creamery Co., Spokane, Wash.

**MACHINERY FOR SALE. 93**

"WITTE" GASOLINE ENGINES save labor, and are carried in stock by HIGGINS MACHINERY COMPANY, 312 FIRST AVE. S., SEATTLE. Write for Catalogue.

## MACHINERY FOR SALE. 93
Continued.

THE U. S. CREAM SEPARATOR, LIKE John Brown's soul, goes marching on. If you want to know about the new United States or need repairs for the old one, write H. E. Walker, sales mgr., Box 364, Portland, Ore., or Box 194, Salt Lake City, Utah.

FOR SALE—ONE 10 H. P. STEAM tractor, cheap; $300. H. C. Rutledge, Littlerock, Wash.

## AUTOMOBILES 114

YOUR FORD WILL USE HALF COAL OIL, or all distillate if you use our 1918 carbureter; 34 miles per gallon guaranteed; one-third more power; use cheapest gasoline or one-half kerosene; quickly starts cold motor, even at zero, and moves right off with full power; no spitting or popping; slow speed on high; fits exactly, attach it yourself; 30 off list where no agent; big profits selling our goods. We fit all motors. Write for 30-day trial offer and money-back guarantee. The Air-Friction Carburetor Co., 321 Madison st., Dayton, Ohio.

NIGHT COMFORT FOR FORD TOURISTS with our sleepers; bed inside; $5.50. Auto-Sleeper Co., 930L, Sacramento, Cal.

## STOVE REPAIRING 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

## PATENTS 150

WANTED—NEW IDEAS; WRITE FOR list of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. VICTOR J. EVANS & CO., Pat. Attys., 710 Ninth, Washington, D. C.

## PETS—DOGS, BIRDS, ETC. 171

AIREDALE DOGS AND PUPS, VIBERT strain. Marc Tuttle, Beach, Wn.

## POULTRY 174



HOGANIZED BABY CHICKS.
We have several thousand thoroughbred Hoganized White Leghorn chicks for sale at $14 per 100 for March and April delivery. Rhode Island Red and Barred Rock chicks $18 per 100. Safe delivery guaranteed. Established 10 years. Queen Hatchery, 89 Pike St., Seattle, Wash.

BABY CHICKS—LEADING VARIETIES. We guarantee safe arrival and full count; strong, vigorous chicks from the finest flocks of free range stock in this country. 1918 price list and care of baby chicks if you mention this paper. Lasher's Hatchery, Petaluma, Calif.

200,000 WHITE LEGHORN BABY CHICKS —Bred for eggs, vigor, size. Safe arrival in good condition guaranteed. Free catalog and book on "Raising the Chicks." Oak Heights Poultry Farm, Route 3, Box T 67, Tacoma, Wash.

BABY CHICKS, WHITE LEGHORNS, CUSTOMERS say they are "husky," "lively," "vigorous," "healthy," "strong," "hard to beat," "thrifty," "great layers." Write at once. Free catalogue. Freshlaid Farm, Colfax, Wash.

WHITE LEGHORN CHICKS FROM STOCK trap-nested for high egg production; safe delivery and satisfaction guaranteed. The Quivira Farm, Black Diamond, Wash.

BABY CHICKS.
Famous Carnation White Leghorn; vigorous, early maturing, heavy winter layers; also breeding stock. E. W. Raush, Carnation Poultry Ranch, Kent, Wash.

BABY CHICKS—S. C. WHITE LEGHORNS; real mortgage lifters; the kind that lay while mere kiddies; 21 years on the job. Catalogue. I. D. Casey & Sons, R. 6, Waitsburg, Wash.

WHITE LEGHORN BABY CHICKS FROM heavy-laying (Hoganized) stock, $10 per 100. We guarantee safe arrival. The Pioneer Hatchery, 401 Sixth st., Petaluma, California.

PETALUMA HATCHERY—CAN SHIP DAY-old chicks to points reached in 3 days. Why not have the best? We challenge the hen. Free circular. L. W. Clark, Petaluma, Cal.

WHITE LEGHORN EGGS $1.50 PER SETting; $8 per hundred. Special mating Pen-A, eggs 50c each; Pen-B, eggs 25c each. Waikiki Farm, R. 7, Spokane, Wash.

M. B. TURKEY EGGS, PUREST OF BLOOD, ten for $3.50. Choice B. P. Rock chicken eggs, 14 for $2. Safe arrival by express guaranteed. Effie Shepardson, Kelso, Wash.

BARRED ROCK EGGS; COCKERELS heading pens from "Albert Kastner" trap-nested stock; $1.25 per setting. Miss A. B. McKeown, R. 2, B. 279, Gresham, Ore.

SINGLE COMB WHITE LEGHORNS; THE world's greatest egg machines. Write for our "War Measure." Help Hoover win the war. Broadview Farm, Curlew, Wash.

ANCONAS: MY 12 YEARS OF SELECtion have developed great layers; fine shape and mottle. Eggs, $1.50 per 13. A. G. Propst, R. 6, Box 54, Albany, Ore.

S. C. WHITE LEGHORNS — PRESENT breeders averaged 15 doz. each last season. Mated to high-record males. Hatching eggs. Mary Jessup, Cooks, Wash.

S. C. RHODE ISLAND RED EGGS $2 PER setting; $10 per 100. Fertility guaranteed. Waikiki Farm, R. 7, Spokane, Wash.

# Want Ads

**Want Ad Rates 30c Per Line**

Want ads are run at this rate in The Washington Farmer and its associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

**How to Figure Cost of Ads**

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

**Send for card giving lower rates for ads running one month or longer.**

## POULTRY 174
Continued.

WHITE WYANDOTTES, BRED FROM Martin's famous bred-to-lay Dorcas line fowls. Eggs, $2.25 and $3.50 per 15. Thos. Thorson, Cashmere, Wash.

TOULOUSE GEESE, MAMMOTH PEKIN fawn and white Indian Runner ducks' eggs. Chas. Johnson, R. 1, Medical Lake, Wn.

PARKS BRED-TO-LAY BARRED ROCKS, winter layers. Eggs, $1.50 for 15; $8 per 100. W. G. Neyland, Spokane Bridge, Wn.

TRAP-NESTED WHITE LEGHORNS AND Barred Rocks. Eggs, $1.50 per 15, $8 per 100. Mrs. W. M. Roberts, Elmira, Ore.

RANCH RAISED WHITE WYANDOTTES. Good vigorous birds, eggs and stock for sale. Jas. A. Hills, Jonathan, Wash.

FOR SALE — INDIAN RUNNER DUCK eggs, 15c each, from prize-winning birds. J. F. Medaris, Wapato, Wash.

PUREBRED BARRED ROCK EGGS FROM two year old hens, $8 per 100, $2 for 15. S. M. Wilson, Carley, Wn.

S. C. R. I. RED EGGS, $1.50 TO $5 PER setting; $6 per hundred. Mrs. Rominger, Underwood, Wash.

LARGE TYPE R. I. R. EGGS FOR HATCHing; ranch raised. Mrs. F. O. Gillett, King Hill, Idaho.

MAMMOTH PEKIN DUCK EGGS, $1.25 setting. Leonard Ziniker, Creswell, Ore.

BARRED ROCK EGGS, $2 PER 15. W. D. Good, Mt. Vernon, Wash.

BARRED ROCK EGGS, $2 PER 15. W. D. Good, Mt. Vernon, Wash.

## LIVE STOCK 177

FOR SALE.
MULHALL'S ANNUAL PUBLIC SALE OF SHORTHORNS
will occur at Lewiston, Idaho, on May 1, 1918. We are offering a useful lot of young bulls, cows and heifers with calves at foot, and rebred to our first prize and grand champion bulls. Apply early for catalogues and mention the Farm Trio.
WILLIAM MULHALL, FENN, IDAHO.

CALVES.
I have several hundred bull calves for sale. Holstein bull calves at $4 per head, Durham bull calves at $6 per head. Prices f. o. b. Tillamook. Smith, the Calf Man, Tillamook, Ore.

FOR SALE.
A choice lot of pure bred Shire stallions, coming two years old; also pure bred yearling Shorthorn bulls. Address
WILSON RANCH, ROCKLYN, WASH.

11 REGISTERED AND HIGH-GRADE Holstein cows, 3 past yearling heifers, 3 heifer calves and registered bull, for sale by R. H. Gray, R. 1, Post Falls, Ida.

WANTED — 1 BERKSHIRE GILT, BRED to farrow in May or June. Must be registered. Papers furnished. A. G. Kugler, Box 287, Soda Springs, Idaho.

DAIRY FOR SALE—55 COWS, WITH good milk route in Portland and six-year lease on good farm. Write B 4, Oregon Farmer, Portland, Ore.

POLAND-CHINAS; BIG TYPE; SPRING pigs by Young Chief N. 79349, from good, rangy sows. James A. Hills, Jonathan, Wn.

FINE GRADE ROAN DURHAM BULL calf; 8 weeks old. $85. Dam is very heavy milker. J. H. Rowley, Westfall, Ore.

## HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

## RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

## TAXIDERMISTS 426

WE MOUNT ANYTHING, FURS TANNED and made into furs and robes. Raw furs bought. Mohr, 82 Bernard, Spokane.

## BUSINESS OPPORTUNITIES 516

$6500 BUYS A WELL-EQUIPPED DAIRY plant and business in a beautiful college town in So. Calif. Brings in about $400 per mo. For full particulars and terms write R. F. D. 1, Bx. 86, Yelm, Wash.

## PLUMBING, STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

## SEEDS 620

SEEDS—THE KIND THAT GROW. You can't keep them in the ground. Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.,
Portland, Oregon.

NEW SEED CATALOG—COMPLETE LIST of Tested Seeds for Western planting. Write for your copy today—MAILED FREE. An experience of 25 years in the Northwest. Aabling-Boyce Seed Co., 89 Pike St., Seattle, Wash.

EXTRA GOOD SEED POTATOES.
Recommended by Idaho state potato specialist as exceptionally fine seed stock. Netted Gem, Irish Cobbler, Idaho Rural. Very reasonable price. Fred Baisch, Emmett, Ida.

SEED CORN—TOBIAS YELLOW DENT. Silver King, Idaho ensilage; 98 per cent germination. Order now, cash with order. 12½c per lb, shelled, graded, f. o. b. Chas. C. Tobias, Caldwell, Idaho.

PEAS FOR SALE—ALASKA, BANGALIA, Blue Prussian, White Canadian and Admirals. Seed peas tested and fumigated. Washburn & Wilson, Moscow, Idaho.

## SEEDS 620
Continued.



IF YOU HAVE ACCLIMATED SEED TO sell, it will pay you to advertise it in this classification. If you want to buy seed adapted to western soil and climate watch what is offered in this department.

WE SPECIALIZE IN TIMOTHY, ALFALfa, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Ida.

SEED CORN, WHITE AND YELLOW Dent, 10c per lb. Guaranteed for germination. S. M. Wilson, Carley, Wn.

SOUDAN GRASS SEED; POPULAR drought-resisting forage plant, 30c per lb. Wm. Ritchie, Arlington, Cali.

POTATO SEED, BALL SEED, 15C PER packet by mail. A. N. Wikander, R. F. D. 4, Box 25, Tacoma, Wash.

FOR SALE—HOME-GROWN ALFALFA seed at famous prices. C. W. Bond, R. 1, La Grande, Ore.

MIXED BLUE BELL PEAS, 5C PER LB. H. S. Smith, Coupeville, Wash.

## NURSERY STOCK 621

CLARK SEEDLING STRAWBERRY plants, the variety that made Hood River famous. No other variety makes as much money for the grower. You can't buy better plants than we are offering. By express, not prepaid, $2.50 per 1000. Trimmed, ready for planting. W. R. Gibson & Son, Route 2, Hood River, Ore.

EVERBEARING STRAWBERRIES ARE mortgage lifters. We have plants, strong and thrifty. Send for price list. F. I. Moffett, Ellensburg, Wash.

EVERBEARING ST. REGIS RASPBERries, $1 dz. S. C. Dixon, R. A., Portland, Or

## FARM LANDS—FOR SALE 651

SMALL FARMS FOR SALE.

We have for sale at lower than prevailing market prices—and on terms to suit purchaser 8 small farms, ranging from 10 to 80 acres each—some improved with house, barn, well, etc., at $80 to $120 an acre, just half former prices. Finest black Palouse soil—just the kind that insures "sure" crops of grain, fruit or garden; located 1¼ miles from Spokane, on electric line, and paved highway. Surrounding growing suburban community—active trading center.

These are among best bargains offered today. You buy from us as owners. Call at office, or write for full particulars, with plat, before you buy anywhere. One of these tracts will surely suit your needs.

HANAUER-GRAVES COMPANY.
601 Old National Bank Bldg.
Spokane, Wash.

BIGGER CROPS, PLEASANTER CLIMATE are enjoyed by farmers in Eastern Washington, Northern Idaho and Western Montana. The same work will bring you more per acre than in the middle west; no extreme heat or cold to injure crops and take a lot of joy out of life. Attractive opportunities here for the farmer, dairyman, stock man, poultry man and market gardener looking for land at reasonable prices. Farm land bought now is bound to increase in value. Write for our free folder, "A Farm Home for You." Tell us the kind of place you want. Farm Development Bureau, 618 Chamber of Commerce building, Spokane, Washington.

TWENTY-FIVE HUNDRED-ACRE WHEAT and stock ranch; western Canada; completely equipped; caterpillar tractor; thirty horses, cattle, hogs, implements, buildings; close to railway, schools and churches; settled community; telephone, rural mail, good roads; 1200 acres ready for drill. Price, $125,000; one-third cash, balance half crop payment. Western Canada Properties, Ltd., 401 Herald building, Calgary, Alberta, Canada.

CULTIVATED CANADIAN WHEAT LANDS. 3000 acres ready for drill; in quarters, halves, or sections; every convenience; easy terms or crop payment. Final payment 1937. Where can you equal it? Western Canada Propefties, Ltd., 401 Herald building, Calgary, Alberta, Canada.

ALFALFA, PLOW LANDS, HOP YARDS, orchards, business investments. Lum Land Co., North Yakima, Wash.

## FARM LANDS—FOR SALE 651
Continued.

STOCK AND GRAIN RANCH.

4880 acres in Whitman county, Washington, of which 1800 acres are good wheat land, 100 acres of nonirrigated bottom land in alfalfa and the balance very choice bunchgrass pasture. No better stock proposition in the state. Several springs, one of which is very large and in about the center of the property. Railroad siding within just a short distance from the buildings. We have secured a price on this property of $65,000 for a very short time only. We consider this $25,000 less than the actual value of the property. Good terms can be arranged.

THE FRED B. GRINNELL COMPANY.
ESTABLISHED 1887.
815 OLD NATIONAL, SPOKANE.

CHOICE TIMOTHY RANCH.

$30,000 buys the finest and best located timothy ranch in the northwest; this ranch contains 361 acres, of which 290 acres is black bottom land, with a very fine gravity irrigation system; all of this bottom land is in new seeding of timothy and clover, except 50 acres, which will be in oats and wheat this year; excellent set of buildings; railway station within 200 yards of buildings; spring water piped to all buildings; fine dairy herd can be purchased with ranch if desired; school, store, postoffice and church on one corner of ranch.

THE FRED B. GRINNELL COMPANY.
ESTABLISHED 1887.
815 OLD NATIONAL, SPOKANE.

BUY WHERE THEY RAISE THE PRIZE CROPS
IN SNOHOMISH COUNTY.
40-acre farms, $25 per acre. Ten yearly payments, 6 per cent interest. Visit our office and see the great exhibits of PRIZE WINNING vegetables, fruits, grains, alfalfa and other grasses raised on the adjoining farms. They prove our claims that this is the best land in WESTERN WASHINGTON.
Paved roads. Four passenger trains a day. Graded school, cannery, creamery, cheese factory, plenty of work for the laboring man in the mills and camps, where 75 settlers are all boosters. DON'T LOSE A DAY in asking for our illustrated literature.
BROWNELL LAND CO.
904 THIRD AVE., SEATTLE, WASH.

WRITE A. H. REID & CO.,
314 NEW YORK BLK.,
SEATTLE WASH.
for information about good alder bottom and clay loam land in prosperous Thurston county, Wash., where many progressive farmers are now settling; 10 to 40 acre tracts, $75 an acre, on terms. Fine roads, good schools, good train service, big crops, big markets nearby. Arrange to see this land.

FULLY EQUIPPED STOCK RANCH
$2000 BELOW VALUE.
160 acres beaver dam land; all tillable except 2 acres; 80 acres in meadow; 5 head of horses, 8 head of cattle; all farm machinery; good 2-story house, barn, wagon shed, garage, blacksmith shop and other outbuildings; good well and creek. Price $5500; $4000 cash, bal. long time.
This is one of our many.
JAMES W. BOOTHE & CO.
510 FIRST AVE. SPOKANE, WASH.

IMPROVED IDAHO GRAIN FARM.

One of the best grain farms in west; 160 a. excellent land, all in cultivation; 40 a. in crop; 60 a. plowed for spring seeding; 60 a. in summer fallow; only 4 miles from Genesee; 1 mile to good school; A1 improvements; fine spring; possession November 1, 1918, with 1-3 this year's crops. $18,000. Attractive terms. C. F. Burr, Genesee, Idaho.

682-A. IMPROVED WHEAT FARM; SEVEN miles south of Hartline, Wash.; on Sunset highway; good land; all in cultivation except 15 acres; 300 a. in summer fallow; all fenced; large house, fine barn, good outbuildings; plenty water. Only $45 per acre, $6000 cash will handle. A. L. Tucker, Coulee City, Wash.

ONE OF THE BEST FARMS IN THE Boise valley, consisting of 131 acres, with free water right, fine soil, good buildings; on electric car line and state highway; 12 miles from Boise City, Idaho. Price $20,000, ½ cash, balance easy payments. Wm. G. Messersmith, P. O. Box 1206, Boise, Idaho.

$7 ACRE.
640 acres; 1 mile from R. R.; in Bonner county, Idaho; 400 acres fine agricultural land, when cleared; enough timber to twice pay for the place. Sykes Brokerage, 512 Eagle bldg., Spokane, Wash.

20-ACRE TRACT; IN YAKIMA VALLEY; under Sunnyside canal; 4-room house; 2 acres bearing orchard; 16 acres alfalfa; leased for present season, $125 acre; assume $1000 encumbrance and $1500 cash will take it. Address D 4, Washington Farmer, Spokane, Wash.

GET A FARM IN TILLAMOOK CO., ORE. Famous for its grass and cheese. My 167-acre farm for sale for $5000. $1000 cash will handle it; good soil, buildings; state road; out range. Address owner, W. W. Yates, Hebo, Ore.

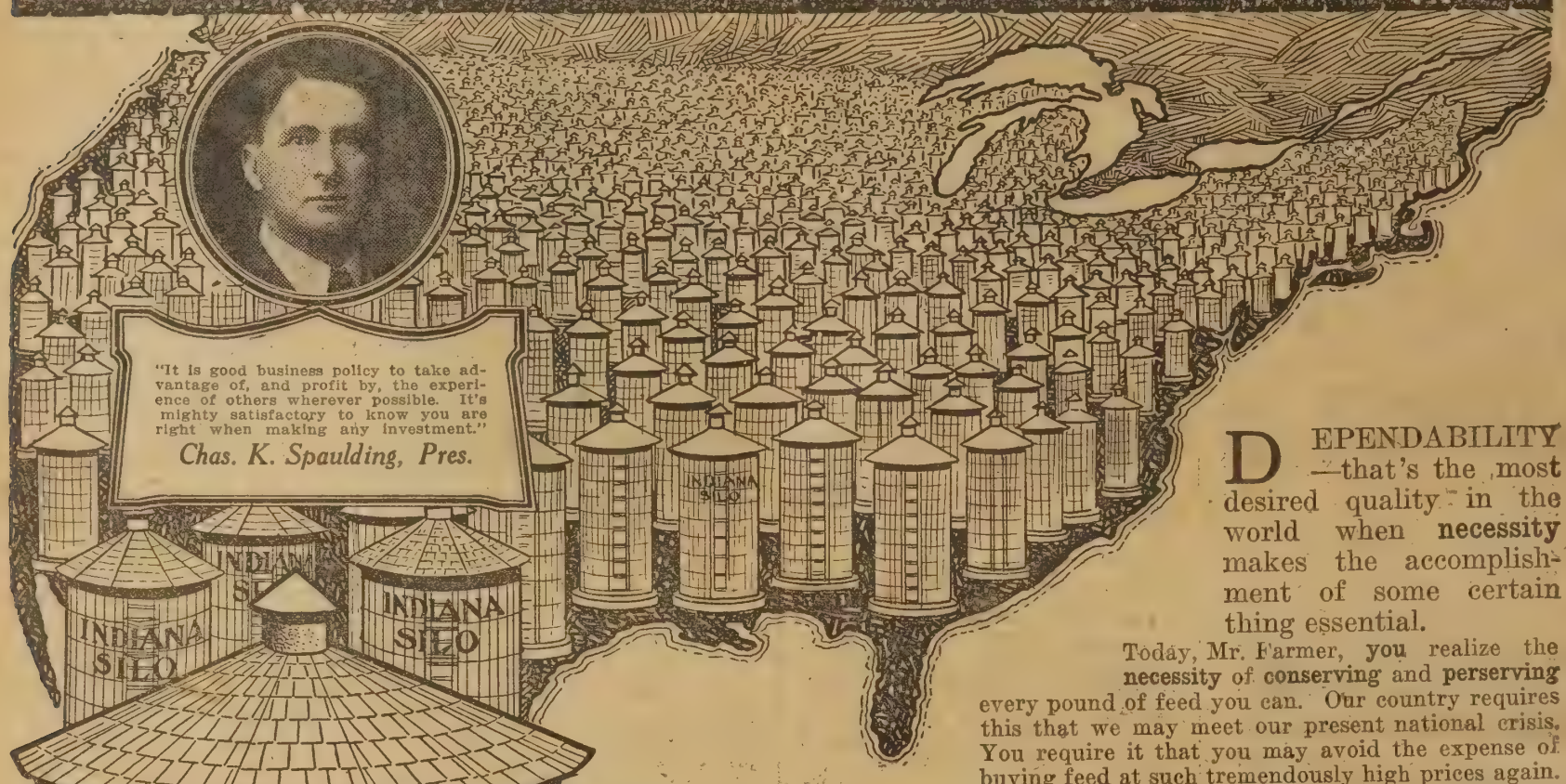
ALL KINDS OF STOCK RANCHES WITH hay and grazing lands; irrigated bottom, hay and seed alfalfa land; finest in state; acreage and terms to suit any buyer. Rosebud Realty Co., Rosebud, Mont.

SOUTHERN BRITISH COLUMBIA; 1600 acres; 1200 range; 400 cultivated; good house; two never failing creeks; railroad siding one mile. $25 per acre; quarter down. Barlee, Grand Forks, B. C.

## ACRE TRACTS—FOR SALE 669

FOR SALE—FIVE ACRES, APPLES AND Franquette walnuts, 5 yrs. old; near Portland. Price $3000; equity $1200; will accept Liberty bonds, balance easy payments. Harry Stibbs, Box 1908, Seattle, Wash.

# 65,000 IN USE




DEPENDABILITY—that's the most desired quality in the world when **necessity**—makes the accomplishment of some certain thing essential.

Today, Mr. Farmer, **you** realize the **necessity** of **conserving** and **perserving** every pound of feed you can. Our country requires this that we may meet our present national crisis. You require it that you may avoid the expense of buying feed at such tremendously high prices again.

A silo is essential to your **success** this year. It spells the difference between **profit** and **loss** in the handling of your livestock. It means that the **average silo will save** enough **foodstuff to feed 80 soldiers 30 days.** It helps **you,** and it helps **the nation.**

There are other duties for you to follow, too. The duty to yourself. Your crop is the result of a lot of expense and hard work, you can't afford to risk putting it into a silo of **unknown merit.** Buy a silo that you absolutely **know** will give back to you a ton of rich, nourishing feed for every ton put into it. Get a silo of proven quality—an

# INDIANA SILO

Indiana Silos are made from the best **material** that money can buy or **skilled manufacturing** can produce. A silo constructed according to the best ideas gained through 15 years of **exclusive** silo manufacturing. A silo tested out in actual use on the farms of 65,000 American farmers—**successful ones.**

Guaranteed to do all for you that it has done for them. Backed by **warranty** with **millions** of **resources** behind it. There is no doubt remaining as to the Indiana Silo's efficiency. Other types MAY be as good—but we KNOW what the Indiana Silo will do. Its **results** are **established** by 65,000 **successful silos.**

**Conditions demand that you have a silo—NOW. Don't wait until next fall. Raw materials are fast being diverted for government use. So to avoid disappointment order AT ONCE. You can pay us later. Mail your name on Post Card for Indiana Silo Book—FREE!**

## The Chas. K. Spaulding Logging Co.

PORTLAND, OREGON SALEM, OREGON SAN FRANCISCO, CAL.

Address all inquiries to Salem office

# O.K'D BY THE NATION

# THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XLI. NO. 15. APRIL 11, 1918. WEEKLY.


# Force to the Utmost Is America's Answer

"There is, therefore, but one response possible from us: Force, force to the utmost, force without stint or limit, the righteous and triumphant force which shall make right the law of the world, and cast every selfish dominion down in the dust!"

IN these words President Wilson expresses the sentiment that is rapidly sweeping over this country, the sentiment favoring the utmost physical force necessary to wipe from the face of the earth the Prussianism that knows no law but the law of might. The president's declaration, perhaps the most definite and vigorous of any that he has made, came at the conclusion of an address delivered before 15,000 people at Baltimore, Maryland, last Saturday, April 6, the anniversary of this country's entrance into the war and the opening day of the Third Liberty Loan campaign. It only re-emphasizes this country's determination to carry on the war until the despotic, inhuman government now ruling over the people of Germany and seeking world dominion is destroyed and the people of that country and of the world freed from its inhumanity. The following is the address of President Wilson in full:

Fellow Citizens: This is the anniversary of our acceptance of Germany's challenge to fight for our right to live and be free, and for the sacred rights of free men everywhere. The nation is awake. There is no need to call to it. We know what war must cost, our utmost sacrifice, the lives of our fittest men, and, if need be, all that we possess.

The loan we are met to discuss is one of the least parts of what we are called upon to give and to do, though in itself imperative. The people of the whole country are alive to the necessity of it and are ready to lend to the utmost, even where it involves a sharp skimping and daily sacrifice to lend out of meager earnings.

They will look with reprobation and contempt upon those who can and will not, upon those who demand a higher rate of interest, upon those who think of it as a mere commercial transaction. I have not come, therefore, to urge the loan; I have come only to give you, if I can, a more vivid conception of what it is for.

The reason for this great war, the reason why it had to come, the need to fight it through, and the issues that hang upon its outcome, are more closely disclosed now than ever before.

It is easy to see just what this particular loan means, because the cause we are fighting for stands more sharply revealed than at any previous crisis of the momentous struggle. The man who knows least can now see plainly how the cause of justice stands and what the imperishable thing is he is asked to invest in. Men in America may be more sure than they ever were before that the cause is their own and that, if it should be lost, their own great nation's place and mission in the world would be lost with it.

I call to you to witness, my fellow countrymen, that at no stage of this terrible business have I judged the purpose of Germany intemperately. I should be ashamed in the presence of affairs so grave, so fraught with the destinies of mankind throughout all the world, to speak with truculence, to use the weak language of hatred or vindictive purpose.

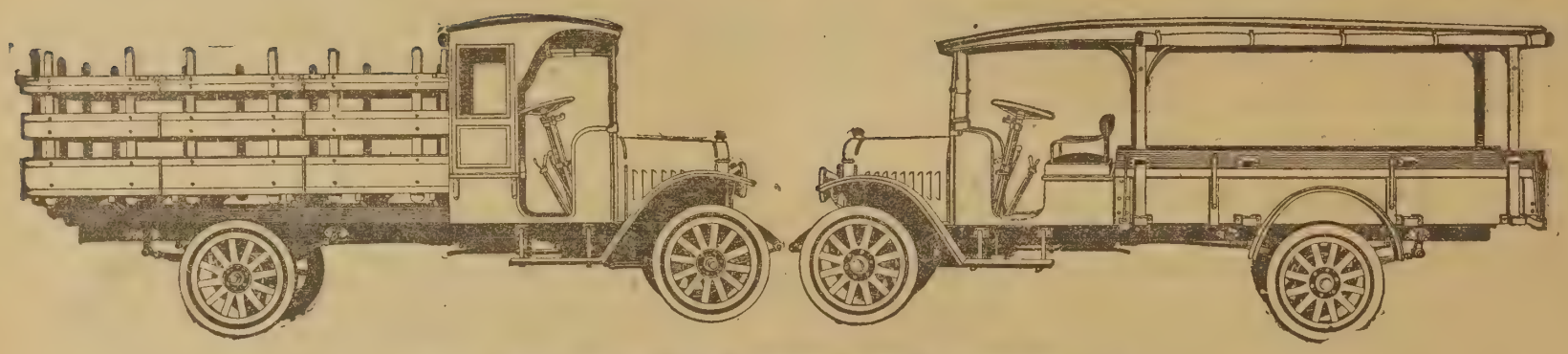
We must judge as we would be judged.

I have sought to learn the objects Germany has in this war from the mouths of her own spokesmen, and to deal as frankly with them as I wished them to deal with me. I have laid bare our own ideals, our own purposes, without reserve or doubtful phrase, and have asked them to say as plainly what it is that they seek.

We have ourselves proposed no injustice, no aggression. We are ready whenever the final reckoning is made to be just to the German people, deal fairly with the German power, as with all others. There can be no difference between peoples in the final judgment, if it is indeed to be a righteous judgment. To propose anything but justice, even handed and dispassionate justice to Germany, at any time whatever, the outcome of the war would be to renounce and dishonor our own cause. For we ask nothing that we are not willing to accord.

Continued on page three.

# *More Brains than Metal are Used in Building this*



# MAXWELL TRUCK

This truck costs little more than a first class team, wagon and harness. Costs less when you figure up-keep. Eats only when it works. Requires one-twenty-fifth the care and attention horses do. Travels the 7 or 12 or 16 miles to market, under load, in one-fourth the time.

The farm hand who formerly took all day to drive to mill with a load of grain can now go and return in two hours.

Here is a truck with all the features of $5000 trucks, and sold under the same guarantee. Worm drive. Electric lights and generator. 10-foot loading space. Gas consumption, 16 miles to every gallon. A tire miser. Mechanical trouble practically unknown. Repair bills are too low to mention.

This Maxwell is built for the farm. Weighs 2500 pounds. Goes faster than heavier and more expensive trucks and goes where they daren't follow.

6600 Maxwell trucks are in service. 1100 on farms. Service records show a verdict of 99.6% perfect based on all the trucks now in use. You'll find no mechanical faults in the Maxwell. A safe investment and a paying one.

You save $400 the day you buy this Maxwell truck, for its price is $1085. And $1085 is $400 less than any other truck of similar capacity on the market.

$1085 Chassis only, f. o. b. Detroit. Electric lights. Electric generator. Worm drive. 10-foot loading space. 2500 pounds. 16 miles on a gallon of gas.

## MAXWELL MOTOR SALES CORPORATION

DETROIT, MICHIGAN PORTLAND, OREGON

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 15 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF April 11, 1918

## One Million a Month

### *Farm Loan Bank Celebrates Its Anniversary*

The Spokane branch of the federal farm loan bank has just completed its first year's activities and the records show the remarkable fact that it has placed in the hands of the farmers of the four northwestern states an average of more than a million dollars a month for the 12 months of the year. The statement just issued by the board of directors shows total loans made up to April 1 of $12,615,905.

The scope of the activities of the bank is also indicated by the statement that 5425 farmers have received loans during the year.

While the foregoing figures are themselves large they indicate only in part the enormous task that the land bank has developed for itself during the first year of its life in these states. During that year there have been more than 17,000 loans applied for. Of these to date 9198 have been approved and 2622 rejected. This means that there are now on file in the offices of the bank considerably more than 5000 applications for loans—which the office force is working hard to act upon at the earliest possible dates.

The total amount of money applied for by the farmers of the northwest during the year was more than $43,000,000. The total amount of loans approved by the bank approximates $21,000,000.

The charge has been made at times that the land bank was making loans too loosely, charges of this kind having come primarily from private loan and mortgage companies into whose business the land bank was necessarily breaking. That such charge is poorly founded is indicated by the fact that the 2600 applications for loans rejected totals more than $5,650,000. These loans have been rejected because the applicants were unable to meet all of the conditions required of them by the bank board. It has been from the first the policy of the bank to require ironclad security for all loans allowed. This policy is based on the fact that the continuance of the work requires the issuance of land bank bonds, the farm mortgages accepted by the bank being used as the security back of these bonds. In order to insure these bonds being safe investments at all times and thereby finding ready market, it has been necessary to prevent the possibility of a criticism on the ground of inferior security back of them. The first annual statement of the bank at Spokane shows that these farm loan bonds have been issued up to the present time to a total of $11,750,000.

The bank started business with the appropriation from the government of $750,000. This was all the capital it had, and the only means of securing additional capital under the provisions of the law was the adding from time to time of stock subscriptions taken by borrowers.

The law requires that every farmer who borrows money from the land bank shall purchase stock in the bank equal to five per cent of the loan which he secures. The accumulation of these purchases of stock has increased the capital of the bank from the $750,000 with which it started to $1,382,742.

### Fresh Beef Exports.

During a three and one-half year period, beginning July 1, 1914, the United States exported to the allies more than 616,000,000 pounds of fresh beef and nearly 203,000,000 pounds of canned beef.

## Washington Jerseys Sell

Tillamook county, Oregon, is a record making county, and it made three new records when the entire herd of 53 Jerseys of H. H. Curtis of Pullman, Wash., was dispersed at Tillamook April 2 for a total of $18,010, an average of $339.81. The six bulls sold for $2580, an average of $430, and the 47 females for $15,430, an average of $323.30. The highest price ever received in the west for a Jersey bull or cow, and the highest average price at a Jersey sale in the west were received at the sale. The herd carried the greatest producing and the most sought for blood lines in the west, and was entitled to bring the prices. There were quite a number of outside bidders, and many mail bids, but the highest-priced and most of the best animals were purchased in the county.

Only one animal, a baby bull calf, went for less than $100.

**Females.**

St. Mawes Waltz Rosiare, born Sept. 25, 1911—Sold to Wm. M. Maxwell, Tillamook, Ore. .....$850
Eminent Lad's Pussy, born Jan. 6, 1911—Joe Donaldson, Tillamook, Ore.$650
Blossom's Orinda and baby calf, born June 12, 1915, E. M. Clark, Nehalem, Ore. .....$590
St. Mawes Hazel, born Oct. 28, 1917—McArthur & Stauff, Rickreall, Ore. .....$285
St. Mawes Pauline, born Sept. 22, 1917, J. J. Van Kleek, Beaverton, Ore....$330
LaCreole's Violet, born Sept. 6, 1915, Joe Donaldson .....$275
St. Mawes Pretty Princess, born July 27, 1916—Gus Peterson, Tillamook, Ore. .....$310
St. Mawes Countess, born Feb. 19, 1917—I. Nordstrom, Bandon, Ore.....$200
Katy's St. Mawes Malden, born Oct. 3, 1916—P. W. Todd, Tillamook, Ore.$335
St. Mawes Rosiare's Rose, born Oct. 27, 1917—Albert Johnson, Bay City, Ore. .....$150
Merry Glynllyn's Poppy, born May 9, 1916—Joe Donaldson .....$470
St. Mawes Majesty Bess, born Nov. 25, 1917—McArthur & Stauff.....$400
St. Mawes Lady Pearl, born Jan. 8, 1917—T. W. Todd .....$215
St. Mawes Gertie's Stoke Pogis, born June 16, 1917—T. W. Todd.....$185
Rinda Lad's Matilda, Aug. 14, 1915—E. M. Clark .....$390
Lad's Carnation of M. F., born June 17, 1912—Claude Ackley, Tillamook .$340

(Continued on page thirty-six.)

**Beekeeping.**

Don't fail to read every article by Mr. York on the subject of beekeeping on the average farm. The first one is on page 5 of this issue, and others will follow regularly during the next several weeks.

## Forced to the Utmost

(Continued from page one.)

It has been with this thought that I have sought to learn from those who spoke for Germany whether it was justice or dominion and the execution of their own will upon the other nations of the world that the German leaders were seeking.

They have answered, answered in unmistakable terms. They have avowed that it was not justice, but dominion and the unhindered execution of their own will.

The avowal has not come from Germany's statesmen. It has come from her military leaders, who are her real rulers.

Her statesmen have said that they wished peace and were ready to discuss its terms whenever their opponents were willing to sit down at the conference table with them.

Her present chancellor has said—in indefinite and uncertain terms indeed, and in phrases that often seem to deny their own meaning, but with so much plainness as he thought prudent—that he believed that peace should be based upon the principles which we had declared would be our own in the final settlement.

At Brest-Litovsk her civilian delegates spoke in similar terms; professed their desire to conclude a fair peace and accord to the peoples with whose fortunes they were dealing the right to choose their own allegiance.

But action accompanied and followed the profession. Their military masters, the men who act for Germany and exhibit her purpose in execution, proclaimed a very different conclusion.

We can not mistake what they have done—in Russia, in Finland, in the Ukraine, in Rumania. The real test of their justice and fair play has come. From this we may judge the rest.

They are enjoying in Russia a cheap triumph in which no brave or gallant nation can long take pride.

A great people, helpless by their own act, lies for the time at their mercy. Their fair professions are forgotten. They nowhere set up justice, but everywhere impose their power and exploit everything for their own use and aggrandizement; and the peoples of conquered provinces are invited to be free under their dominion.

Are we not justified in believing that they would do the same things at their western front if they were not face to face with armies whom even their countless divisions can not overcome? If, when they have felt their check to be final, they should propose favorable terms with regard to Belgium and France and Italy, could they blame us if we concluded that they did so only to assure themselves of a free hand in Russia and the east?

Their purpose undoubtedly is to make all the Slavic peoples, all the free and ambitious nations of the Baltic peninsula, all the lands that Turkey has dominated and misruled, subject to their will and ambition, and build upon that domination an empire of force upon which they fancy they can then erect an empire of gain and commercial supremacy—an empire as hostile to the Americas as to the Europe which it will overawe—an empire which will ultimately master Persia, India and the peoples of the far east.

In such a program our ideals, the ideals of justice and humanity and liberty, the principle of the free self-determination of nations upon which all the modern world insists, can play no part. They are rejected for the ideals of powers; for the principle that the strong must rule the weak, that trade must follow the flag, whether those to whom it is taken welcome it or not; that the peoples of the world are to be made subject to the patronage and overlordship of those who have the power to enforce it.

The thing is preposterous and impossible! and yet is not that what the whole course and action of the German armies has meant wherever they have moved? I do not wish, even in this moment of utter disillusionment, to judge harshly or unrighteously.

What then, are we to do?

For myself I am ready, still ready even now to discuss a fair and just and honest peace at any time that it is sincerely purposed—a peace in which the strong and the weak shall fare alike, but the answer when I proposed such a peace came from the German commanders in Russia and I can not mistake the meaning of the answer.

I accept the challenge.

I know that you accept it. All the world shall know that you accept it.

It shall appear in the utter sacrifice and self-forgetfulness with which we shall give all that we love and all that we have to redeem the world and make it fit for free men like ourselves to live in. This now is the meaning of all that we do.

Let everything that we say, my fellow countrymen, everything that we henceforth plan and accomplish, ring true to this response, until the majesty and might of our concerted power shall fill the thought and utterly defeat the force of those who flout and misprize what we honor and hold dear.

Germany has once more said that force, and force alone, shall decide whether justice and peace shall reign in the affairs of men, whether right as America conceives it or dominion as she conceives it shall determine the destinies of mankind.

There is, therefore, but one response possible from us:

Force, force to the utmost, force without stint or limit, the righteous and triumphant force which shall make right the law of the world, and cast every selfish dominion down in the dust!

## Clip This Convenient Order Blank

Address all communications concerning thrift or war savings stamps to the Washington Farmer, War Savings Department, Room 26, Review Building, Spokane, Wash.

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Amount enclosed $.....

Full Name .....

Town ..... State .....

R. F. D. No. .....

I have already bought.....Stamps and have a..... (kind of stamp.) (card or certificate.)

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# Home Grown Seed Grain Proves Best

## *The Matter of Acclimation of Seed Is Important, Experience Seems to Prove*

By E. F. GAINES.

The question often confronts the farmer of the northwest, "Shall I send to Montana or Minnesota and get a supply of pure seed wheat, or oats, or barley, or shall I plant what I grew last year?"

Some interesting experiments have been conducted during the last eight years at the Washington state experiment station at Pullman, which may help answer this question for some of the farmers of the Palouse country.

In the spring of 1910, 10 pounds of Minnesota Blue Stem was sent to Pullman, Wash., and 10 pounds to St. Paul, Minn. The seed from these original samples has been grown continuously by each of these stations for seven years. Each year the two stations have exchanged seed for a control plot to be grown beside the continually home grown material.

**Minnesota Not Superior.**

The yields of wheat from seed grown continuously at Pullman may be readily compared with the yield produced by seed that was introduced from St. Paul each year. They are as follows:

| Year. | Washington Seed. | Minnesota Seed. |
|---|---|---|
| 1910 | 43.9 bu. | 44.8 bu. |
| 1911 | 33.8 bu. | 30.7 bu. |
| 1912 | 57.6 bu. | 51.6 bu. |
| 1913 | 44.9 bu. | 41.3 bu. |
| 1914 | 25.3 bu. | 27.5 bu. |
| 1915 | 38.3 bu. | 39.8 bu. |
| 1916 | 41.8 bu. | 49.2 bu. |
| Average | 40.87 bu | 40.70 bu. |

Some years the seed introduced from Minnesota produced more grain per acre than the home-grown seed, other years the home-grown seed yielded the highest; but an average of the seven years shows a slight percentage in favor of the home-grown seed.

The experiment with Williston, N. D., seed showed the same result, according to the following figures:

| Year. | Washington. Seed. | N. Dakota. Seed. |
|---|---|---|
| 1913 | 44.9 bu. | 39.6 bu. |
| 1914 | 25.3 bu. | 31.2 bu. |
| 1915 | 38.8 bu. | 39.4 bu. |
| 1916 | 41.8 bu. | 45.2 bu. |
| 1917 | 27.0 bu. | 22.2 bu. |
| Average | 35.56 bu. | 35.52 bu. |

This indicates that seed wheat under proper control does not run out. It also indicates that the matter of good seed wheat is entirely a seasonal fluctuation, and that on the whole, the Inland Empire has better seasons for growing good seed than either North Dakota or Minnesota. In a critical season like last year the seed that has been grown here during the several years shows decided superiority.

**Quality Not Superior.**

The grain which came from Minnesota and North Dakota each year was hard and horny compared with the more starchy material grown at Pullman. The hard and horny character did not seem to be inherited in the least for the difference between the home-grown and introduced seed was entirely wiped out in the succeeding crop. One could not tell from the threshed grain what state the parent seed came from. According to present government standards, the grain from all the plots in 1916 and 1917 graded Dark Northern Spring. According to actual test, the Minnesota seed produced 2.1 per cent more yellow berries and the Dakota seed produced 1.7 more yellow berries than the Washington seed. Therefore the crop produced from the introduced seed was not superior in quality and actually showed a slightly higher percentage of starchy kernels in 1916 and 1917.

A more striking illustration of the advantage of home grown seed is shown in an experiment with Emmer, which was carried out in the same manner as was the experiments with wheat. The Emmer was tested at Pullman, Wash.; Highmore, S. D., and Bozeman, Mont. The following table shows the result in bushels per acre. In 1915 there was a crop failure in South Dakota and Montana, consequently no seed was sent and no record was obtainable.

| Year. | Wash. Seed. | Mont. Seed. | S. Dakota Seed. |
|---|---|---|---|
| 1910 | 46.0 bu. | 44.8 bu. | 48.6 bu. |
| 1911 | 51.4 bu. | 53.4 bu. | 56.9 bu. |
| 1912 | 116.5 bu. | 102.0 bu. | 65.0 bu. |
| 1914 | 50.0 bu. | 52.0 bu. | 42.4 bu. |
| 1915 | 71.0 bu. | 64.8 bu. | 70.6 bu. |
| 1916 | 70.5 bu. | 76.9 bu. | 78.6 bu. |
| 1917 | 46.2 bu. | 42.0 bu. | 44.5 bu |
| Ave. | 64.51 bu. | 62.27 bu. | 58.09 bu. |

From this table it will be seen that in four years out of seven the introduced seed from one station or the other outyielded the home-grown seed. Yet an average of seven years shows that Washington seed produced 2.24 bushels per acre more than Montana seed and 6.24 bushels per acre more than Dakota seed. If we average these two results, we get 4.33 bushels average yearly loss from introduced seed. Assuming this experiment to be generally applicable, it will be seen that the Washington farmer who sent east of the Rocky mountains for his seed lost 30.3 bushels per acre plus the freight during the seven years' period.

The Wing Seed company of Mechanicsburg Ohio, sent a sample of their Pedigree Beardless barley to the Washington station at Pullman for a test in 1917. The Washington Beardless barley outyielded this sample by 66 per cent. In discussing this test the Wing Seed company wrote: "We are not surprised at the results of the test. We find in changing your grain to our climate that we have the same results. * * * This selection in our country is far above the average, and we do not hesitate in offering it to our customers as a good thing, but felt that we were going too far away from home when we sent to you."

Nowhere in the United States is there finer harvest weather than in the Pacific coast states. Especially in the Palouse and Big Bend countries, the months of July, August and September are practically rainless. This affords the most ideal conditions for maturing and storing seed grain on the farm.



**A state college experiment. The three plots are of seed from different states. They show little difference so far as straw is concerned. There are many things to be considered in experimentation.**

# Pasturing Stock on Alfalfa

## *Declared One of the Big Puzzles of Farming*

The published proceedings of the fifth annual meeting of the Washington Irrigating institute contain many good suggestions in papers and in the discussions following these papers. Here is an extract from a discussion following the address of I. D. O'Donnell of Billings, Mont., on "Sheep on Irrigated Farm."

Voice: I think there are a number here who are interested in pasturing sheep on alfalfa. Will you explain it in detail?

Mr. O'Donnell: Pasturing any kind of stock on alfalfa is one of the big puzzles. I have pastured it for 35 years and have never lost enough stock to give it any consideration whatever. My alfalfa has been the most profitable part of my farming. But it has been tried in various places and there are various ways. Some farmers in our country put bits on the dairy cows. I struck a man in Wyoming the other day who never turns a cow into alfalfa without a bit. In bringing in range stock we fill them on dry hay or something before letting them in the pasture. In Arizona they only pasture the full grown alfalfa. They let a field get up full grown. They never turn onto it when it is small or growing fast, but let it get its growth. I saw a thousand head of steers in one alfalfa pasture in Arizona with alfala clear up to their briskets, and they told me they never lost one. There are various ways, and I would figure out some scheme so I would not lose the pasture. In a small pasture some keep a rack of hay there at all times during the summer. The next thing is when you turn stock on alfalfa leave them on it. Some of the dairymen in our country leave them on it all the time. When they begin to fill up don't drive them, but leave them alone. The best illustration I have had of that happened in our home town of Billings. A man who had 50 head of dairy cows sold a neighbor 25 of them. He delivered them at 10 o'clock in the morning. They had been on an alfalfa pasture. In driving them a half mile he lost 23 out of the 25; the other two was turned into the pasture and there was one left, showing that the exercise and the driving must certainly have killed them. There is a lot to learn about bloat. I can't tell you all. There are a great many things to use. We occasionally find lambs bloated on a beet top—not bloated, but choked. For that we use a piece of three-quarter-inch hose and shove it right down the lamb's throat and he goes off all right. That is our main remedy where they choke. They say on a cow they use a whalebone horsewhip that you can shove clear down.

Mr. Bean: There is one other thing on which I must take issue with Mr. O'Donnell. I dislike bringing up points of contention with a man who has had the experience Mr. O'Donnell has had; however, I think I will be borne out in this contention by a majority of farmers, and certainly my own observation would require that I make this statement, that there is a cure for alfalfa bloat. (Applause.) It is an absolute cure, and is the only one. Keep stock off it. While Mr. O'Donnell hasn't had any loss from alfalfa bloat for awhile, he will probably be like Mr. Benson, who has had no loss until this year, or like Mr. Splawn, who once thought he had a "cinch" on alfalfa bloat until he went out one morning and found seven dead cattle. The balance between an animal bloating and not bloating is a very delicate balance. Sometimes the animal seems to bear a charmed life and can gorge itself with alfalfa with apparently no ill effect, and perhaps the very next day a few mouthfuls of alfalfa under, so far as we can see, exactly the same conditions, will cause a bad case of bloat. The only practice I can suggest with any degree of certainty is this: Some sheep men make a practice of corralling the ewes in one corner of an alfalfa field and allowing the lambs to go into the alfalfa for pasture and come back and suckle the ewes. There seems to be something about ewe's milk that will prevent bloat, possibly a property the milk has in stimulating digestion. I hope we will some day have more definite information on this, but so far no lambs are known to have been lost by this practice.

Mr. Richards: Isn't that a fact also with calves?

Mr. Bean: I think it is.

Mr. Lampson: I may have been somewhat responsible for this sheep bloat question, as I asked for detailed information on how to handle sheep on alfalfa to keep them from bloating. I am glad to have Mr. Bean's suggestion, because it is at least definite. My own experience in this valley with sheep and cattle both has been exactly the same. I have found a number of instances where sheep and cattle had been pastured for a number of years without any bloat. I can give you the names of men who have pastured four or five years on alfalfa without any trouble from bloat, and then run into the condition that Mr. Benson has found this year. Men like Duncan Dunn tell us that we can figure on a loss of 10 to 15 per cent of our investment as long as we pasture on alfalfa. I am just mentioning that as the experience of men who pasture up and down this valley, so that it may prevent some person being misled. Possibly under some conditions it is better to take chances on losing an animal once in awhile rather than to let the alfalfa go to waste. I am not arguing that point; men can figure that out for themselves. But I believe as long as we continue to pasture on alfalfa we can figure on 10 to 15 per cent loss each year.

Mr. Burlingame: I feel very sure that 90 per cent of this is in the man who handles the stock. The sheep men in this valley, I believe, pasture entirely on alfalfa, and we do in our valley, too. We have one big sheep man who has been coming into the valley for years with sheep and he loses practically none. Other people come in there, and lose 25 to 30 in a day. By inquiring closely you will find it is entirely in the man. One turns them loose and sits down and reads his paper, and does not stir until it is time to go out and skin two or three sheep. The other man lets them eat a few feet and then turns them back over it again, and watches them constantly, and he loses none. I have 10,000 sheep on my alfalfa field, and some of the men are not losing any, and with some the losses are heavy. There is no cut and dried rule, but it is largely a matter of horse sense. You have got to learn the alfalfa business and the sheep business, too.

# Build Elevators

## Planning to Handle Grain in Bulk

The Farmers' Union Mill and Grain company of Tekoa, Wash., have the material on the ground ready to start the erection of their new 75,000-bushel bulk grain elevator. This elevator when completed, will have floor space of 40x42 feet, with elevation height of about 100 feet. The foundation will be concrete, while the body of the elevator will be wooden cribbing.

The same company have the plans drawn for a 50,000-bushel elevator which they will erect at Lone Pine, after the same model in construction. They also contemplate an increase of their capitalization to $50,000. They are now capitalized at $16,000, with a surplus available of over $25,000 for the much needed development.

Both elevators have adequate railroad trackage serving their present warehouses, where they have been handling crops under the old sack system.

L. J. Lauritzen of Tekoa, secretary-treasurer of the company, has been in the grain and milling business in Tekoa for 25 years. A. B. Willard is president and C. H. Langbehn vice president of the company. W. S. C.

## More Cranberries.

The remarkable growth of the cranberry industry on the Long Beach peninsula, southwestern Washington, was seen from the fact that in 1916 2500 barrels were harvested, in 1917 8000 barrels, and this year a total of 25,000 barrels is predicted. A call is being made upon the commercial clubs of Seattle, Tacoma and Portland to be ready to offer help in harvesting the crop.

# Bee-Keeping Offers Opportunity

## *Average Farmer Can Handle Bees and Make It Worth While*

By GEORGE W. YORK.

ARTICLE I.

In this series of articles on beekeeping for the farmer that I have been requested to write for the great farm trio of agricultural papers I shall endeavor not only to go into details quite minutely, but I will also try to use such terms in describing methods and equipment as shall be easily understood by any one not having the slightest previous understanding of the subject. Briefly, then, I do not expect to interest the expert beekeeper—the man or woman who has already made a success with bees. My aim will be to try to get the common, every-day farmer to take an interest in the work of beekeeping—to keep at least two or three hives of bees on his farm, so as to help produce the major portion of the sweets needed on his own table during the year. And when he has honey produced by his own bees, right on his own farm, it will taste all the sweeter, of course.

There are three kinds of bees that are found in every normal colony. (Perhaps I would better say at the start that I shall use the word "colony" when I refer to all the bees found in a hive. The word "hive," then, properly designates the box or receptacle in which the bees or the colony live and "keep house.") These three kinds of bees are, first, a queen bee; second, worker bees, and third, drone bees.

**The Queen Bee.**

The queen is the mother of the colony. She lays all the eggs that produce not only the workers but also the drones. The queen is quite a little longer in form than the workers and drones, and commonly lives from two to three years. From the egg it requires 16 days to rear a queen bee. There is only one queen in a natural colony of bees, and during the busy



**Here are the three kinds of bees that it takes to make up the bee world. Note the large, long-bodied queen in the center, the smaller drone at the left and the worker bee, with his nectar-gathering equipment, at the right.**

working season she will lay as many as 3000 eggs in a day of 24 hours. The queen may begin to lay eggs as early as February, but her maximum capacity may not be reached until the last of May or the first of June in the north or colder section of our country.

Should the queen accidentally become lost or killed it will be necessary to secure another by mail from some queen breeder or let the colony rear a successor, which they will do if the old queen left any freshly laid eggs before her departure. From three to four weeks' time will be saved, however, if a queen can be secured promptly by mail, although it is not always easy to introduce a queen successfully to a colony that has been queenless for some time. Several methods of introducing queens will be described later on.

The worker bees constitute the main portion of the colony. They are what may be called "neuters." It is not within their province to lay any eggs, and yet there is occasionally a case of laying workers that may develop in any colony, and if so, their eggs always hatch drone bees, as they (the laying workers) have not been fertilized through connection with the drone as has the queen bee. Laying workers are surely a nuisance in any colony, for if they can not be overcome the colony will soon result in only a lot of drones and thus become extinct as a working colony.

It requires 21 days to hatch a worker bee from the egg. And during the busy working season, when nectar is being gathered and stored rapidly from the flowers, the life of a worker bee is only about six weeks. It will thus be seen the necessity for the queen bee to lay a large number of eggs daily, to be hatched into worker bees in order to replace the thousands of workers that die off every six weeks.

The worker bees, as noted before, not only gather all the nectar that is brought into the hive, but even prepare the food for the queen bee and feed it to her. They must also gather the food for the drones, and of course it is their work to see that all the young baby bees are fed properly and sufficiently.

**The Drone Bees.**

Lastly come the drone bees. They are really the "gentlemen" of the hive. In a colony consisting of from 10,000 to 20,000 bees about 500 of them are likely to be drones.

Now, the drone is quite generally charged with much laziness, because he doesn't seem to work any at all—at least he never has been caught at doing any work. And yet he shouldn't be lambasted for that, for he is not to blame—he has no tools for gathering nectar or manipulating wax for the making of honeycomb. His sole object in life is to fertilize the queen. This is accomplished while both are on the wing. If successful, the queen is fertilized for life, and after returning to the hive does not again leave the hive except at swarming time. (Swarming will be treated in another article.)

A queen that has not met the drone will lay eggs, but they will all hatch into drones. A queen that is fertilized has the power at will to lay eggs that will produce either drones or worker bees. But the eggs that produce drones are laid in comb cells that are a little larger than ordinary worker cells, the former or drone cells measuring in diameter about five to the inch, while the worker cells run about four and one-half to the inch.

The cappings of drone cells and worker cells vary also, the latter having a flat cap or cover, while the drone cell caps are raised and appear on the comb somewhat like a lot of little bullets. Drone cells are thus very easily distinguished from worker cells.

Queen cells are usually built at the bottom of a comb in the lower part of the hive. They hang down, and appear something like a peanut. The egg in the cell is surrounded with an abundance of a white jelly-like substance called "royal jelly." Usually as soon as one queen bee hatches the other queen cells are torn down by the bees, as a normal queen will not tolerate a rival to rule in the colony, except in very rare instances a mother and daughter have been known to get along together in the same hive for a time. In case more than one queen hatchces out at the same time, there is forthwith a royal combat to prove the survival of the fittest.

No house has ever been large enough for two human queens to rule under the same roof, and so no beehive seems to be large enough for two queen bees to get along peaceably together.

# Dairymen's Association

## *Breadth and Strength of Control Is Needed*

At a meeting of the Inland Empire Dairymen's association held in Spokane, April 6, 1918, the work of organization made several big strides toward completion. The talk by Ashur Hobson, state director of markets, was the feature of the meeting, and the plan of organization outlined by Mr. Hobson was received with great enthusiasm by the dairymen.

The first point made by the speaker was that a stock organization such as had been suggested at a former meeting of the producers was not a practical mechanism for the ends in view.

"It takes butter fat to make a successful creamery, and it takes patronage to make a successful producers' association of any kind," declared Mr. Hobson. "The mere ownership of stock will not secure the loyalty of your members. It promotes the spirit of 'Let George do it.'"

Mr. Hobson was strongly in favor of the employment of a skilled, diplomatic and intelligent selling agent to direct the marketing of milk controlled by the farmers. He was almost as strongly opposed to the idea of the producers turning manufacturers or distributors.

"It will be time enough for you to make a permanent investment in machinery after you have tried out your organization two or three years, and have found that it will work in its simpler form," he explained.

Turning to the practical details of the plan, Mr. Hobson stated that the association must figure on controlling the output of at least 2000 of the 4000 cows now supplying milk to Spokane. Financial maintenance will be provided by a charge of one-half cent per gallon of milk handled, which, on the basis of one gallon daily per cow, would bring in about $3600 yearly. This would go for the salary of a selling agent, his office rent and clerical work.

In addition to this and in order that the organization could be incorporated under the state laws, it would be necessary to sell each member one share of stock, nontransferrable and bearing no interest, which would really be in the nature of an entrance fee. The $5 received for this share of stock would not be returnable under any circumstances.

The teeth in the proposed contract would be furnished by each member's depositing with the board of directors, at the time of joining the association, a noninterest bearing note at the rate of $5 per cow for every cow signed up, the principal of this note to be forfeited in case of a violation of contract. Mr. Hobson called attention to the fact that this feature is absolutely essential to the success of a selling association of this character.

"Your board of directors can't go to any one and make a satisfactory bargain for your milk," he assured his audience, "unless they can say, 'We have the output of 2000 cows right here in our hands, and are able to deliver it where we think best.'"

In conclusion, Mr. Hobson advised the dairymen against any organization unless the requisite breadth and strength of control could be obtained. The contract whose main features he described has been examined by state and national authorities on legal matters, he explained, and could be depended upon to hold in line all those who signed it.

Following the offer of County Agricultural Agent Shinn to take upon himself and his office the work of signing up the requisite 2000 cows, a motion was passed extending the time for organization to April 27, when another meeting is to be held. It is confidently expected that by that time everything will be ready for the signing of permanent contracts.

# Wheat Price Stands

While congress has not, at this writing, taken final and definite action on the movement for the increase of the wheat price for 1918 to $2.50 a bushel, reports from the capital indicate that the price will remain as previously fixed by the president.

The senate voted to increase the price to $2.50. This provision was in the form of an amendment to an agricultural appropriation bill already passed by the house of representatives. The measure as amended had to go back to the lower house for approval, and the committee to which it was referred appears to have voted to disapprove the wheat price amendment. It is believed that the senate will recede from its amendment rather than hold the bill up in deadlock if the house fails to agree to the amendment. Final action should be taken at an early date, probably this week.

## Cow Testing.

The latest monthly report of the 12 cow-testing associations in Washington shows the Chehalis district association was a close second in the average production of milk per cow for the month, with 697 pounds of milk, as compared with 711 pounds for the White River Valley association. The average butter fat per cow for the latter was 27 pounds and for the Chehalis district 26.9 pounds.

## Thurston Farmers Have Seed.

Reports from 36 farmers' meetings held throughout Thurston county, called by County Agent C. A. Cole, give evidence of enough seed on hand for all the farmers in the county, and a few still have some to sell.

## Elwha Valley Potatoes.

A shipment of 1300 sacks of potatoes raised in the lower Elwha valley has just been made from Port Angeles to the government for use at various military posts.

# City Folks Are Learning

After a year of painstaking investigation, the food price committee of the Merchants' association of New York city, has rendered an able, courageous and sound report to the public of that great metropolis. It frankly tells the consuming public that there are economic reasons why the farmers must receive higher prices, and that it is futile for consumers to expect or strive for a return to the old order of cheap agricultural products grown at actual loss to the producers. The fact that many producers did not realize at the time that they were "mining out" their soil and actually marketing their crops at a loss does not alter the fact. The report well says:

"During the last 50 or 75 years (principally since 1840), while the large cities in this country and Europe have been growing, the established agricultural areas that produced food were supplemented by the opening up of new lands in the middle west, Canada, Brazil, Argentina, South and Central America, Australia and Siberia.

"Food products, chiefly grains and meats, were produced on virgin, unfertilized lands. Emigrant labor was employed and subsequently there was cheap railroad and steamship transportation, so until recently (about 1905) the people in cities have been fed on food produced and sold at a price which did not take into consideration the cost of production and the value of plant food contained in crops which must be returned to the soil to maintain productivity.

"Today conditions are changed. There is not much unclaimed virgin soil. Fertilizers, needed to maintain and augment soil productivity, are scarce and consequently increasing in price. Labor is scarce and high in price. Taxes, capital, costs (higher land values) and transportation costs (because of longer distances) have increased. The increased costs arising from changed conditions have resulted in increased food prices compared with those of former days when virgin soils produced bountifully, when there were low land values, a plentiful supply of low-priced emigrant labor, cheap transportation and practically no overhead charges.

"The actual cost of distribution of food products, after they reach the city limits, has greatly increased since 1905 and is steadily increasing, due to (1) the crowded conditions of the population and traffic, (2) higher wages paid to the 400,000 persons employed in distribution, and (3) lack of intensive, detailed study by carriers, distributers, consumers and educational and regulative agencies to see how each class of food products could be most efficiently distributed after reaching the city."

Consumers, the report concludes, will do well to drop impossible expectations and get down to a practical basis of working out plans for relief. It recommends more effective cooperation of producers, manufacturers, carriers, distributors and consumers, and educational and regulative agencies. That is substantially what the Farmer has been saying all along. The consumer long enjoyed cheap food at the producers' expense. By working himself, his family, his hired help and his stock to the limit of endurance, and by wearing out his soil, the farmer went on year after year delivering low cost of living to the consumers, not only in the United States, but in Europe and even in Asia. We have been exhausting our virgin soil for the benefit of nations across the seas.

It will take time to impress that economic fact upon the masses in the great cities of the land, but reports like that just made by the New York committee will set thoughtful people to thinking along right lines.

Meanwhile for a time at least, and probably for the duration of the war, the trend of food prices will be upward instead of downward. They are certainly upward now, as pointed out in the last Monthly Crop Reporter of the U. S. department of agriculture:

The level of prices paid producers of the United States for the principal crops increased about 6.3 per cent during February. In the last 10 years the price level increased about 2 per cent during February. On March 1 the index figure of prices was about 39.9 per cent higher than a year ago, 108.4 per cent higher than two years ago and 107.9 per cent higher than the average of the last 10 years on March 1.

The prices of meat animals (hogs, cattle, sheep and chickens) to producers of the United States increased 0.5 per cent from January 15 to February 15. In the last eight years prices increased in like periods 3.2 per cent. On February 15 the index figure of prices for these meat animals was about 34.3 per cent higher than a year ago, 82.2 per cent higher than two years ago and 83.3 per cent higher than the average of the last eight years on February 15.

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Entered as second-class matter January 13, 1916, at the postoffice at Spokane, Washington, under the act of March 3, 1879

GUARANTEE OF ADVERTISEMENTS.

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## *Only Slackers Are Idle*

Mayor Hays of Boise, Idaho, has issued orders, according to reports, for the police inspection of pool halls and other loafing places with a view to rounding up loafers and idlers and seeing that they earn their bread by the sweat of their faces.

The state of Idaho has taken vigorous action on such matters as this and the officers who are taking the lead are greatly to be commended therefor. There is no room in America for the loafer at any time. He is a parasite living off the public, though the public perhaps scarcely realizes it. He is a millstone about the neck of progress and the sooner he is cut loose and allowed to sink to the oozy depths of oblivion the better it will be for the industrious and patriotic citizens of this country.

The present period is one which demands the utmost in a constructive way of every citizen. Those who work should work harder; those who save should save with greater sacrifice; those who make their living at the expense of those who toil, whether they be the pool hall loafers or pool hall proprietors, should be wiped out of existence by whatever means are necessary. Many public officials sit back supinely defending their inaction on the ground that there is no law on the statute books giving them authority to close unproductive places of so-called business or to compel industry and loyalty where laziness and disloyalty now exist.

But this is a day of necessity, call it military necessity or what not. The people are in no mood to tolerate the parasite, and the official who will act against him need have little fear of public disapproval. A hundred cities in the northwest would do well to take inspiration from the order of Mayor Hays and go and do likewise.

## *Buy Live Stock at Home*

The fascination of elsewhere still seems to bewitch some of our prospective purchasers of live stock, and we have entirely too much "going east" after pure bred stock of various kinds.

Live stock prices in the central states are now so high that no one there can afford to send stock out west unless it be something that nobody wants. There was a time a few years ago when the reverse was true, but the rapid development of the herds and flocks of the northwest has entirely changed the situation.

We will admit that it may in some cases be possible to buy better stock in the east, but it takes a mighty good judge with a pocket full of money to do it. One of the best cattlemen in the west recently remarked that one could not get anything in the east that would do either the buyer or the breed any good for less than $2000. It is our belief that he put the figure low enough.

The prospective breeder should be especially careful about where he buys his foundation stock. He should remember that when he buys his foundation stock in the east he is cutting the ground from under himself, and that later in the game his prospective customers will probably do the same thing, and, taking his example, go east to get poorer stock for less money.

## *Guard Your Optimism*

It is often the case that a pessimistic outlook on a situation works a great injury to the cause, but it is also true that too much optimism frequently works similar injury.

The American people have taken an optimistic view of the war from the time the first shot was fired by Germany to the present time, but that optimism, while it should not be supplanted by pessimism, has worked, and will continue to work, strongly against the interest of this country and her allies. Hope for the early cessation of the war obtains in the mind of the average American, it would seem, almost to such a degree as to lead him to look for an early and sudden cessation of the great conflict, but those who are studying the situation say no. General Pershing, who heads this country's soldiers on the battle front in Europe, is one of those who predict a long war. He scouts the idea that the war will be over in a few months, and voices the sentiments of scores of military leaders when he says that it may last one, two, five or even more years. That Germany is today taking steps for her military strength 25 years hence in case of defeat in the present struggle can not be denied by any one at all conversant with the situation.

That the easy going and optimistic habit of this country is reflected in easy going and optimistic methods in handling the war problem at the national capital is a charge made by many of the leaders in the business world. Just now a statement is given out by Wadell Catchings, chairman of the war committee of the Chamber of Commerce of the United States, voicing this sentiment. He says that business men have been denied the privilege of playing their part in this country's conduct of the war. "There are few business men in the councils of the nation," he said in a recent address in New York. And he might well have added that there are few representative farmers in the councils of the nation at this grave period in the nation's and the world's history. War is the most strenuous business known to the world, and it takes the ablest business minds, whether commercial or agricultural, to carry on the war activities behind the lines, just as it requires the ablest military strategists on the battle front.

## *A Balanced Food Ration*

Do we know the importance of a balanced ration? Do we know what it means to feed a horse alfalfa hay, and give him no other kind of food, or to feed him grain without hay, or any particular food alone, without properly balancing it with something else? Do we know what it would do for us if we had to live on potatoes alone?

Wheat flour makes good bread, but we would get very tired of wheat bread alone. The food experts are studying, as they have never studied before, the subject of a properly balanced food, and are publishing some exceedingly valuable things on the subject.

It is now generally known that the acids neutralize the sodas and the alkalies, and that the sodas and the alkalies also neutralize the acids. For instance, if I am making a trip across the country and I fear that the water is too heavily charged with alkali, I will take with me lemons, oranges, apples, fruit juices or vinegar, and mix with the water I drink. It is known that prunes, figs and some other fruits act as laxatives, while others, like blackberries, tend to correct troubles arising from that cause.

It is known that celery is a nervine, while onions, lettuce and some other vegetables, are not so much in the nature of nerve builders as in the fact that they quiet the nerves. Fats, sugars and starches produce heat, while water and foods heavily charged with water, tend to counteract heat, and are therefore good in fevers, so we might go on indefinitely. G. L.

## *Washington Gleanings*

Frank Warner of Southern Idaho recently paid $100 an acre for a 170-acre ranch near Garfield.

Women are now employed in making doors in Tacoma, the Buffelen Lumber and Manufacturing company has just put several of them to work.

The Great Northern railway is boosting war garden work by offering their right-of-way lands to employes and others to be made into gardens this year.

Owing to the mild weather of the last two months, the water to irrigate the 25,000 acres under the Tieton project will be turned into the main canal on April 10.

A new organization recently formed at Lynden under the name of the Producers' Warehouse company, by James D. Zylstra and Ray H. Slade, has taken over the City Feed mill.

The Chehalis Citizen's club is urging cucumber growing in that section for pickling. The prices offered for contracts are very attractive, and it is hoped to secure at least 25 acres.

As a result of the sending of samples of Yakima pink beans to the government officials, the Yakima groweres have recived an offer to take the pink beans uncleaned, in 100-pound sacks at eight cents a pound.

Vancouver, Clarke county, is to have an immense kiln-drying plant, which will handle between 8,500,000 and 10,000,000 feet of spruce a month. At present the unseasoned timbers have been sent to airplane works in the east.

The lumber and logging industries have been booming owing to the demand for airplane spruce and ship timbers. During the last few weeks more than 25 incorporation papers for firms just entering the lumber and logging business have been filed with the secretary of state.

A patriotic resolution has been passed by the Centralia school board permitting all high school boys 18 years of age and over to quit school in April to follow agricultural pursuits and giving them credit for a full term's work, providing they are up in their studies at the time they quit school.

District Forester George H. Cecil is urging greater carefulness and economy in forest fires this year as a war duty. Last year fires caused a loss of $1,358,600 to the government in timber, and in addition to this loss extra expenditures of $1,121,451 were entailed. This means that to hold fires down large numbers of men have to be withdrawn from productive work and much money spent for supplies.

## *A Warped Viewpoint*

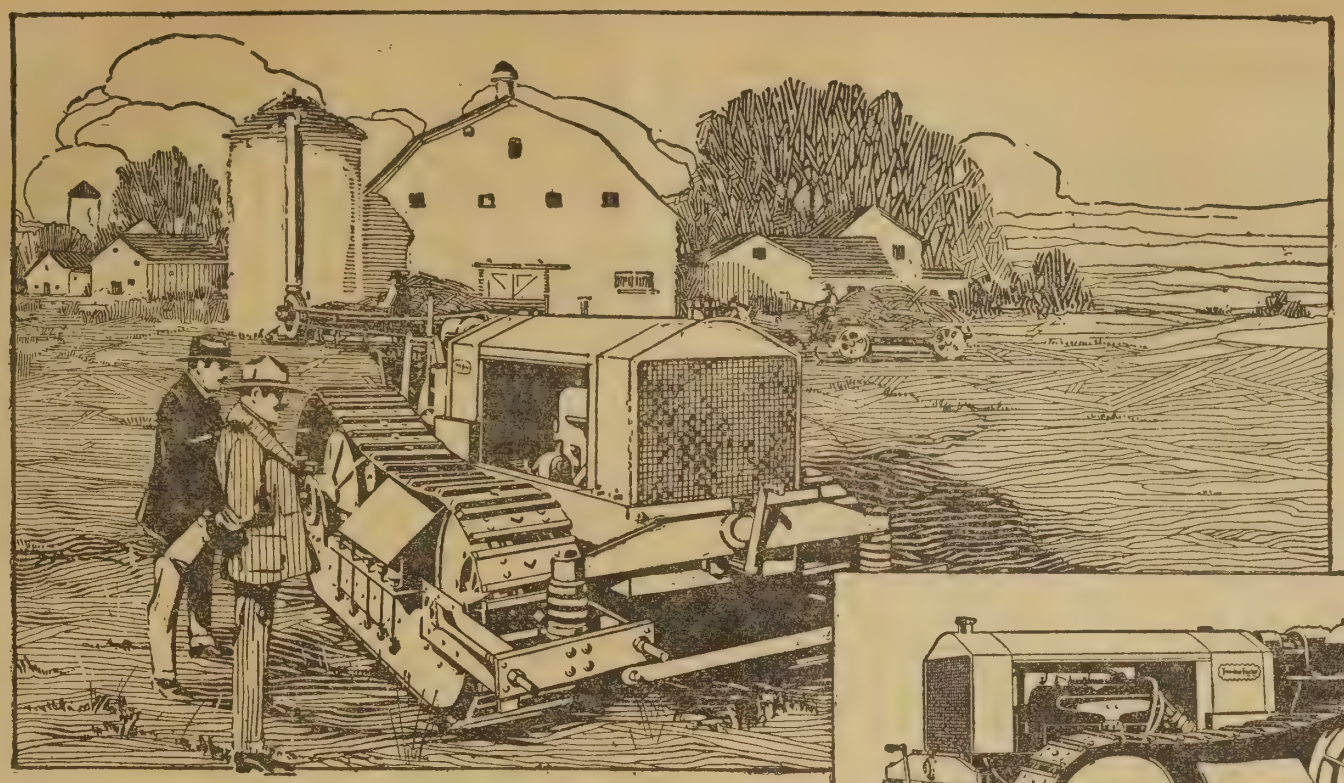
(From the Country Gentleman.)

When a group of consumers, as represented by the Federation of Labor, sought to get together with a group of producers, represented in the Pennsylvania grange, they were discomfited to hear that the farmer can not guarantee cheaper food as a matter of philanthropy any more than the laboring class can give away its labor. They seemed rather amazed to learn that the farmer must either get back cost of production plus a living profit or else go out of business.

The grange members assured the labor representatives that the farmer would gladly sell food cheap to the laboring man if the cost of production, in which labor is a large item, was made sufficiently low to enable him to do so.

Such a condition can be possible only when the farmer is able to borrow money for operating expenses at a low rate of interest and is assured an adequate supply of labor. It is astounding that organized labor should remain blind to these essential facts and maintain the warped viewpoint that the farmer is a "capitalistic profiteer." Just so long as the great laboring class refuses to see, and refrains from throwing the weight of its support with the farmer, production will lag and food prices will continue on the ascent.

The farmers and organized labor constitute the two great groups who may bring about conditions that make for the prosperity of four-fifths of the people. Working together they can bring about reforms in food distribution that will stabilize prices and prevent wastes. The laboring man has the farmer's sympathy. Why doesn't labor respond to the emergency and help the farmer to guarantee an abundance of food through increased production?



*You can operate a Trundaar Tractor as a stationary power plant when it is not doing work in the field*

# Speed up farm production and increase your profits

## *America looks to you for bigger crops. Your business success demands reduced operating costs*

*"Speed up your farm. Grow bigger crops. Lower the cost of production."*

This is the appeal of the United States Government to *you* as a business farmer.

Already the effect of this appeal is perceptible. Probably you, like other experienced business farmers, are analyzing your operating costs, and the crop yields of your farm.

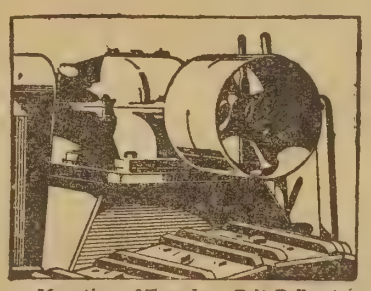
*To make* your farm a profitable business you must invest in a tractor—but you want that tractor to be *right*.

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All the accumulated knowledge and experience of 23 years in the tractor industry have been built into the Trundaar. The result is that every part of the Trundaar Tractor gives economy of operation, reliability and maximum service.

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Positive traction is provided by the patented Trundaar Tread, which is an endless belt type, built on the same principle as a log-chain. The Trundaar Tread requires no lubrication. It is practically wear-proof, and each link and grouser plate may be detached in a moment.



*Mounting of Trundaar Belt Pulley*

Tractors frequently jar and rattle themselves to pieces traveling over uneven ground. The Trundaar Tractor can travel for days over the roughest going without damage, as the double three-point suspension absorbs all shocks and strains.

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### Low-grade fuel

The Buckeye-Deppé Integrator makes low-grade fuel operate like high-grade gasoline. It is one of the exclusive features of the Trundaar Tractor.

Ample power for all field and stationary work is provided by the Buckeye-Waukesha special tractor engine, size 4¾ x 6¾.

It is easy to operate the Trundaar, because of the flexibility provided by the powerful drive clutches. It is easy-riding, due to the spring-suspended seat.

The massive transmission will give constant service for years without showing signs of wear. It requires no differential and delivers the maximum amount of power at the drawbar.

Find out about the other exclusive features that make the Trundaar the most practical tractor on the market today.

Write today to our nearest distributor for our illustrated advance catalog which describes it in detail.

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Anderson Indiana

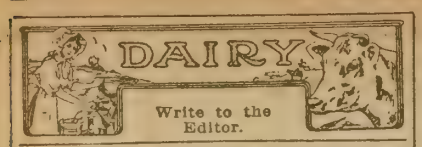
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SPEEDS UP THE BUSINESS OF FARMING

*Provides positive traction without packing the soil*




A. B. NYSTROM, Editorial Contributor

# Can't Feed Calves

## So J. M. Smith Buys the Scrubs

A peculiar industry, but one of considerable importance in Tillamook county, Oregon, is the selling of baby calves. Owing to the fact that every farm in the county is a dairy farm and that, with the exception of less than half a dozen, every dairy sells its milk to a cheese factory, there is no skimmed milk on which to feed calves, nor any whole milk, for that matter; it is worth too much except for pure-bred calves. Further, the pastures are crowded with milch cows and with the high price of land and the importation of high-priced hay and grain there is no cheap feed or pasture on which to feed calves. So the average dairyman finds it cheaper to replenish his herd by buying cows than by raising them.

This situation has developed the selling of "Tillamook calves" outside of the county. J. Merrel Smith saw the opportunity to build up a business and grasped it. He offers to take all the baby calves that are brought to him, paying from $1 up, according to value. If he can make no other use of a scrub calf he skins it and sells the hide. But he gets many calves from really high-class dairy cows and I was surprised to learn that he sometimes gets bulls and once in a while heifers from pure-bred dams, while over half are by registered sires. They comprise Jerseys, Holsteins and "milk strain Durhams," of which latter there are many good ones in the county.

So Mr. Smith advertises "Tillamook calves" and has helped make the county famous by the big trade he has built up, "Smith, the calf man," being now almost a household word in the northwest. Mr. Smith shipped 3160 calves in 1917 and in the last four seasons has shipped 11,646. H. A.

## CUT OUT WASTE.

### But Do Not Cut Down Rations.

"This war is going to eliminate the man who knows no dairying, and who fails to feed and breed properly and follow other proper methods," said M. O. Maughan, instructor in dairying at the state agricultural college, speaking before the Washington State Dairymen's convention.

Continuing, Mr. Maughan called attention to the tendency on the part of some dairymen to cut down the amount eaten by their cows, rather than to eliminate waste in feeding. As the cow must supply the needs of her own body before turning anything into the milk pail, this practice is readily seen to be a mistake.

Here are some of the genuine economies in dairy feeding suggested by the state college man:

First, cut the roughage and grind the grain, thus eliminating the waste of coarse stems and undigested grains. "Not only does it pay to grind the hay, but also the straw," comments Mr. Maughan. "The cost of cutting hay is often figured at 75c per ton."

Second, "Utilize the various straws which have hitherto been wasted. They can be fed alone, but preferably with some other feed which is highly palatable." Among straws, Mr. Maughan mentioned field peas and oats as being particularly valuable.

Third, "Feed a balanced ration and a good ration. When a ration is continually fed that is not balanced its digestibility is decreased and hence increased waste results."

Fourth, "Study each individual cow and give her the best possible care. No two cows are the same. We can generally save by grooming the cow occasionally. Warm and comfortable quarters during the cold weather will also pay."

Fifth, "Build a silo.

Sixth, "Feed dry stock and young calves and bulls carefully through the winter. Too many people try to keep their growing heifers in show condition. To do this requires unnecessary feed. Baby calves can be started out on low testing whole milk and at the end of 10 days or two weeks gradually changed to separated milk, so that by three weeks of age they will be on skim milk entirely. The bulls, too, will do better work if fed only liberally."

Seventh, "Get thoroughly acquainted with your business, and know what each cow is doing. This can best be done by belonging to a cow testing association and keeping records."

# Cause of Odor in Milk

To the Editor: Can you tell me what causes a disagreeable odor in the milk of some of our cows? Is there any remedy?

Idahome, Idaho. W. O.

Freshly drawn milk from a healthy cow should have a characteristic sweetish, pleasant odor. This is probably due to the gases which it contains. Under normal conditions the odor is not pronounced and upon standing passes away entirely. But milk absorbs foreign odors quickly. These may come from feeds such as green rye, rape, leek and other feeds with pronounced aroma that the cow has eaten; it may come from dust in the air or from particles of dirt that have fallen from the udder and flanks into the milk pail. If the cow is in poor health with poor circulation there may be a lack of circulation in the udder, and this will give the milk an obnoxious odor. A. B. N.

## DAIRY CALVES.

### Does It Pay to Raise Them Now?

With whole milk selling at unusually high prices, and the possibility of getting from 60 to 75 cents per hundred for skim milk, when fed to hogs, at the present time, the question the dairy farmer must answer is: Does it pay to raise dairy calves now?

Dairymen who sell butter fat and keep their skim milk on the farm will find just as much profit in raising heifers as in raising hogs. The practice of killing the calves can not help but prove disastrous though the effects will not be felt for three or four years. The most prosperous dairymen are those that look ahead and plan for a better herd in the years to come. This better class of dairymen use a good purebred sire and save all the heifer calves from their best cows regardless of the cost of raising them. And the same argument holds true in the condensery districts, for by using a minimum of whole milk with the proper grain mixtures, the calves can be raised at a cost only slightly greater than when skim milk is available. A. B. N.

## ROOTS AND TUBERS.

### Valuable Feed for Dairy Cows.

The winter months and the early spring are the times when the dairy cow may be fed to advantage, the roots, tubers and the cull apples. They are not only much liked by the cow, but help to balance the ration, and to lessen the expense of the high priced forage. In the list of the root crops and tubers may be included the beet of different kinds, the parsnip, carrot, artichoke, and the potato. Some also like the turnip and the rutabaga, but the Idaho Farmer editor prefers the other articles, and feeds them when they are available each winter and spring. Farmers should aim to grow these crops, especially in these times of increased prices in hay and other feed. They do well with the alfalfa and with the silage, and owing to their heavy yields, make a comparatively cheap, as well as wholesome ration. As for the cull apple it is always relished by the cow and when it can not be utilized to better advantage, helps out the ration materially.

### Model Housing Expenses.

The contemplated model housing program of the government will require the expenditure of about $35,000,000.

# Silo Lifts Mortgage

O. Jorgensen of King county, Wash., declares that the silo is the mortgage lifter for dairy farmers, and says he would not take $500 for his 90-ton silo if he could not obtain another. Even during the backward weather of last summer he obtained from six acres of land enough silage corn nearly to fill the silo.

"The big thing the farmers have got to learn is how to grow more of their feed," Mr. Jorgensen commends. "There's nothing in dairying if you've got to buy everything you feed; and when it comes to this matter of producing a large quantity of milk producing food from a given acreage of land, silage corn probably comes first of all our forage crops. I grew three varieties last year, with Pride of the North coming first for productiveness and Minnesota No. 13 second. Wisconsin White Dent did not do well for me."

### Whitman-Spokane Cows.

According to Rudolph C. Johnson, tester, there were 254 cows tested in the Whitman-Spokane (Wash.) Cow Testing association during the month of January. Forty-six of these produced 40 to 49.9 pounds of fat; 25 produced 50 to 59.9 pounds; 10 produced 60 to 69.9 pounds; three produced 70 to 79.9 pounds, and one produced 80 pounds.

Jay P. Graves' pure-bred Jersey cow produced the highest per cent butter fat, 86.90 pounds.

### Welcomed to Jail.

The word "Welcome" stands out in bold letters over the door of the new concrete jail at Downieville, Cal. In pouring the cement the workmen caused the letters to be traced.


NEW WORLD LIFE

"Team-Work"

This company is cooperating with residents of the Northwest by investing every dollar of its great bulk of assets *in the northwest.*

This district needs such financial institutions. You can not do better than patronize New World Life when safeguarding wife and child.

New World Life
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Splendid openings for local representatives in many districts.

Only $2 DOWN ONE YEAR TO PAY



$29 Buys the New Butterfly Junior No. 2. Light running, easy cleaning, close skimming, durable. Guaranteed a lifetime against defects in material and workmanship. Made also in five larger sizes up to No. 8 shown here.

30 DAYS' FREE TRIAL Earns its own cost and more by what it saves in cream. Postal brings Free catalog-folder and "direct-from-factory" offer. Buy from the manufacturer and save money. 125,000 now in use

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*What Hoover wants is full-grown stock, beef, fats, hides.*

*To raise every calf is good war tactics and good finance. "Let the farm earn honor too!"*

No Need to Feed Milk

when you feed LILLY'S Calf Meal. It is distinctly a milk substitute, having all the necessary elements for calf nutrition.

LILLY'S Calf Meal also costs you much less than feeding milk. It is without question the amplest and most perfect food for calves

LILLY'S Calf Meal is not only a scientific, but it is common-sense food

It is endorsed by Pacific Northwest dairymen everywhere. Dealers sell it.

*CALF BOOK FREE ON REQUEST*

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"That Air-Tight Door."

This is a war of peoples, not of limited military organizations. Never before have each of us entered into war's responsibilities as today. And never before has the farmer faced such grave personal duties. That food will win the war rings absolutely true. It will. The

**Weyerhaeuser SILO**

is a means to an end—it means, on your farm, increased efficiency; means healthier stock, more milk, more butter fat, more food at less cost. When you have a silo you ARE DOING YOUR BEST AND DOING YOUR BIT. That's all.

ORDER EARLY.
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**VIKING CREAM SEPARATOR**

HERE is a separator made in the *largest separator factory* in the world—of superior construction, yet low in price.

The Viking Cream Separator is made of the finest materials. It is scientifically constructed by separator experts. The Viking skims to a mere trace, has *greater capacity*, is easy running, simple to clean, strong and durable. Write immediately for Free Separator Book.

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"Good to the Last Drop"

*Raise Your Calves on*
**Blatchford's Calf Meal**
*and Sell the Milk*

More calves have been raised on Blatchford's Calf Meal than on all other milk substitutes combined.

100 lbs. makes 100 gallons of milk substitute, costing only one-third as much as milk.

Prevents scouring and insures the early maturity of sleek, handsome calves.

It is steam-cooked and no trouble to prepare or use.

**Write for Pamphlet** "How to Raise Calves Cheaply and Successfully with Little or No Milk." At dealers, or Blatchford Calf Meal Co., Dept. 58 Waukegan, Ill.



**SPOKANE SEED CO.**
Distributors.
SPOKANE, WASH.


In answering advertisemcnts don't fail to mention this paper.

# Milk in England

## The Difficulties of Price Regulation

At a large meeting of farmers and milk producers recently held at Leeds, England, it was pointed out that a milk-shortage would cause more hardship than probably anything else. Men and women might stand an enormous amount of privation but nothing would so depress the hearts of the people as the seeing of children starving for want of milk. One of the speakers declared that he believes the dairy farmers of England would do their utmost to maintain the supply, but they could not be expected to produce it at a loss; that there was a very strong feeling in that part of England that Lord Rhondda, food controller, had been badly advised in the matter that it cost more to produce milk in the north of England than it did in the south.

That the milk problem is a complex one in England as well as in the United States seems to be indicated by the following extract of the report of the meeting in the London Livestock Journal:

"Alderman Jackson said he thought they would be able to prove to Lord Rhondda that 1 shilling per gallon for May and June, and 1 shilling 2 pence for late in the season, were quite impossible prices for the West Riding. Speaking of his own experience in a colliery district, he said the miners, being unable to get their customary supplies of meat, were now having basins of boiled milk after coming out of the pit. The cost of production varied enormously. Even in the West Riding it varied from 8 pence to 2 shilling 4 pence a gallon. It could not be produced near the large towns at anything like the lower price. For one thing, the feeding value of the land in these districts was diminishing because of the poisonous fumes from the munition works. Then the cost of labor, of feeding stuffs, and, indeed, everything on the farm, had gone up to such an extent that it was an impossibility to produce milk at the prices suggested. He worked out his own cost of production at 1 shilling 2 pence a gallon, but in May it was 1 shilling 1 pence. Yet he was asked to sell it at 1 shilling. No doubt there were many in the meeting whose cost of production worked out at 1 shilling 6 pence to 2 shilling a gallon.

"R. Garnett said if a shortage of milk occurred and brought with it social unrest, Lord Rhondda would not be able to say tferward that he was not warned in time.

"On Tuesday Lord Rhondda received a Yorkshire deputation upon the matters debated above, and promised them every consideration and the formation of a scheme that would effect fairness all round."

## LARGER ACREAGE.

### Expects Increased Production.

In answer to an inquiry sent out by the Farmer, E. C. Stone, secretary-treasurer of the American Hampshire Swine Record association, writes:

To the Editor: I do not agree with any man with a pessimistic view of things that "the actual present prospect is that acreage planted this year must be greatly reduced, with consequent short crops, meaning still higher food prices." The acreage will be increased and if we have a reasonable season our production of foodstuff will be materially increased in 1918 over that of 1917.

We have on hand now everything in the way of seed for garden vegetables, potatoes, etc., at less than half the price of a year ago. We have plenty of good corn seed and plenty of almost everything you can think of, with soil throughout almost the entire United States working easier and better than in many, many years. I have been connected with the farm and farming for the last 40 years. I have been in every state from Florida to South Dakota in the last three months, and know what I am talking about.

We do need to push more. Criticism has no place at this time. Do more and fuss less will cause more production than you have ever heard of in past history.

E. C. STONE.
Peoria, Ill.

## Cat Skins as Coat Linings.

According to an Amsterdam newspaper, skins of black cats find a market in the provoince of Friesland for 7.50 florins ($3) each.

Inquiry in Amsterdam discloses that black-skinned cats are in active demand also. The skins are used for men's fur-lined overcoats.




**COW OWNERS EXPECT MORE FROM A DE LAVAL**

— more cream
— longer wear
— better service
— better value,

**AND THEY GET IT**

A catalog of the NEW De Laval Machines will be gladly sent on request, and if you don't know your nearest local agent please simply address the nearest De Laval main office as below.

**DE LAVAL DAIRY SUPPLY CO.**
LARGEST DAIRY SUPPLY HOUSE ON THE PACIFIC COAST.
We specialize in Alpha Gasoline and Distillate Engines, Ideal Green Feed Silos, Irrigation Equipment. Centrifugal and Deep Well Pumps and Alpha Spraying Outfits. Send for special catalog.
101 DRUMM STREET, SAN FRANCISCO
50,000 BRANCHES AND LOCAL AGENCIES THE WORLD OVER



**DISC UNITED STATES**

A new DISC BOWL that skims cleaner and washes easier than any ever made before.

Bell Indicator to govern speed





The same famous smooth, clean one piece frame. The same famous U. S. oil splash. The same lasting easy running gears, handy supply can and quick catching clutch. Can have pulley one side and crank opposite side.

ASK FOR FULL PARTICULARS

**UNITED STATES LIGHTING PLANTS**

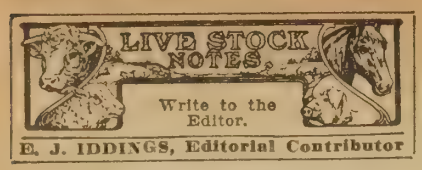


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Branch offices: Salt Lake City; Oakland, Cal.; Chicago, Ill.




E. J. IDDINGS, Editorial Contributor

## MILL FEEDS

### Enforce Maximum Margins.

The food administration announces that it has set up machinery for the vigorous enforcement of the regulations on the selling price of wheat mill feeds and that federal food administrators in the various states will receive complaints and promptly investigate all cases.

A new schedule of margins has been established which should bring all feed to the consumer at a maximum of $4.50 over the mill price of the feed, which in the case of bran has already been established at 38 per cent of the cost of one ton of clean wheat at the mill, with differentials for other grades of wheat mill feed.

FARMERS NOT A POISON
POWERFUL DISINFECTANT



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A retained afterbirth—neglected may cause Abortion or Barrenness. B-K as douche brings afterbirth naturally and saves hand removal. B-K kills infecting germs and odors, heals uterus, removes slime and acid—no straining. Send for Bulletin 52, "Contagious Abortion" testimony from breeders "trial offer." If your dealer does not have B-K, send his name.
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In writing advertisers, be sure to say that you saw their advertisement in this paper.

### Remedy for Bots.

In addressing a meeting of farmers recently Dr. S. B. Nelson of the State college of Washington recommended that during the summer months the legs and shoulders of horses should be treated with an oil of some kind, such as a mixture of raw linseed and fish oil each one part, to prevent the bot flies from placing the eggs where the horses would get them when scratching with the teeth. As a remedy for bots the doctor recommends that an animal be denied feed of all kinds for two meals and that he then be given one ounce of carbon bisulphide in a cold capsule to be followed two hours later by a quart of raw linseed oil.

## Veterinary

Dr. S. B. Nelson

**Stringy Milk**—I have a good cow that gives stringy milk when she is about four months in calf. It doesn't matter what we do. She goes dry about four months before finding the calf. Please let me know if it can be cured, also would it be advisable to raise a heifer from her.—W. S., Agate Beach, Ore.

I do not know of any remedy which will prevent your cow going dry four months before finding the calf. Stringy milk might be changed by giving a purgative and the following day begin giving a teaspoonful of hyposulphite of soda in a pint of water once daily. I do not believe it would be advisable to raise a heifer from her at all.

**Horse Has Scratches**—I have a horse 11 years old that had a severe case of scratches about a year and a half ago. Since then his hind legs will swell at times as far as the knee. I am working him lightly all the time. Is the swelling due to the scratches and what will cure it? I have a colt also that is now about 9 or 10 months old. She has both upper and lower lips covered with warts. I bought her when she was about 6 months old. Then she had but one wart on her upper lip. Lately they spread rapidly until they are all around her mouth. Can they be taken off in any way?—P. K., Burley, Idaho.

Give your horse one ounce of Fowler's solution of arsenic morning and evening on his feed for a week or 10 days or two weeks. Then apply to the scratches on the heel an ointment of zinc oxide, one part; starch, one part; listerine sufficient to make a soft paste. Apply this ointment once daily. For the colt apply castor oil to the lips morning and evening for a week or 10 days.

**Removing Warts**—I see that W. B. asked how to remove warts on a cow's teats in your issue of February 21. I have tried several remedies which failed, but here is one that never fails. Take a pair of pincers and jerk the small ones off. They are only skin deep. Apply something to heal large warts. Tie a stout ligature around close to the base tight and repeat in three days until they drop off. Tie the cow's legs if necessary. J. M. Clarkston, Wash.

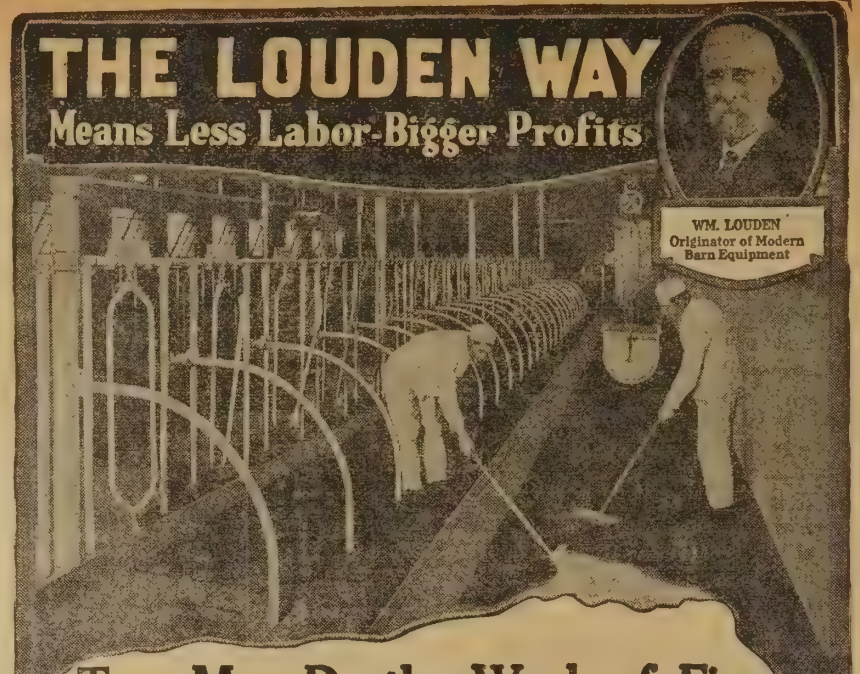
Yes, I believe that snipping the warts off with a pair of dull scissors is better and more humane than jerking them out with a pair of pincers.

**Foundered Horse.**—I have a horse used for farm work which has been foundered. One hoof does not expand. In fact, it appears to contract. Have been creasing it without any apparent results. Would you please let me know what to do for a case of this kind? W. S.
Walla Walla, Wash.

The foundered horse is such a difficult thing to treat when it has become chronic, as your letter indictaes that it has in the case of your horse, that I would suggest to you that you consult your local veterinarian, because without seeing the horse and knowing what the trouble is, it is impossible for me to give you a remedy. It may be that the horse should be blistered above the coronary band of the foot. It may be that the hoof should be creased so as to give the hoof an opportunity to be expanded. It may be that the toe should be lowered and a half shoe put on so as to make the horse walk on the frog to make the foot spread whenever she steps on the foot. According to conditions, any one or two of these treatments would be effective. For that reason I suggest consulting your local veterinarian.

**Cow Is Paralyzed**—I have a cow that freshened January 17th and a few days later she seemed as if she was paralyzed in her hind parts; had a hard time to get up and had considerable fever and she shrank up in her milk and almost dried up in one front teat and only gives a few squirts with it now. I at first thought it was milk fever and got the veterinarian. He pronounced it spinal fever and put a plaster on her back in front of the hips

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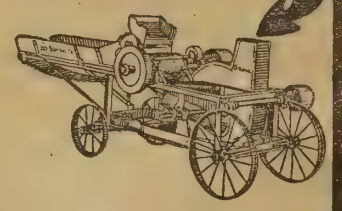
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THE LIGHT RUNNING
ACME FEED CUTTER SILO FILLER



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SEATTLE
BE SURE AND MENTION THIS PAPER

and gave me some medicine to give her to cure the fever. She came out all right. That is, she feels well and eats and drinks well, but yet she does not handle herself as easy as before. Would you kindly advise a remedy for the ailment?
Goshen Wash. H. L.

I am sorry to say that I cannot prescribe a remedy for the trouble affecting your cow from the description that you give. The milk fever treatment, of course, is well known to many farmers and dairymen, but the final fever might deserve a different treatment, according to the specific symptoms manifested. I do not feel that I would be competent to give a reply to this question under those conditions, which I regret.

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**Give Pig Carbolic Acid**—I saw a remedy in a recent issue for rheumatism in hogs. I had a pig that got awfully bad with rheumatism. Two neighbors said to give him carbolic acid. I gave one teaspoonful in feed three mornings in succession, then missed one morning and gave him one more teaspoonful and now give it twice a week. This pig will weigh about 100 pounds. One neighbor told me he had a pig weighing 200 pounds that was so bad with rheumatism that he could not get on his feet. He gave one tablespoonful twice the first day in feed and the next morning he could walk. My pig could hardly stand to lay on his belly to root and now he can run faster than I can.
Blaine, Wash. F. W.

In all the literature that I have at my command I do not mind carbolic acid described as a remedy for rheumatism. However, it may be that it has value in that respect, carbolic acid being a strong disinfectant. In therapeutic doses it is converted into phenolsulphonatis when taken into the intestinal tract, and as such as a general rule it is a pretty strong disinfectant, against the bacteria in the intestinal canal. It may be that the destruction of the bacteria causes the suspension of the formation of the poisonous toxins which sometimes is given credit for causing those painful muscular symptoms, which is known as rheumatism. It is of value to know that it has this action, and it would be of additional value if the strength of the carbolic acid used could be given.

---

**Cow Affected With Grubes**—I have a 3-year-old cow that will be in fresh the latter part of June. She has lots of hard lumps on her back with yellow tops which dry up and crumble off. It makes her look so bad and she rubs her neck till the hair comes off. She has a clean place to sleep in and plenty of straw. She has been kept in the barn a good deal during the last three months. Will you kindly advise me as to what can be done? C. H.
Colby, Wash.

Your cow is affected with grubes, which is simply the larval stage in the life history of the gad fly, as it is sometimes known. This fly may stick on the hair of the cow, generally during the latter part of June, in July and in the early part of August. Sometimes the ox warble fly may lay eggs as early as in May. The larva then gains access to the body for the next five or six months. It then takes life in the animal's body, especially in the muscular tissues and along toward spring it begins to make its way toward the back where when the grubes are ripe it breaks out and falls to the ground and burrows and passes into another stage before coming out as a wing fly. The treatment at the present time is to place a receptacle like a cup over the warble and squeeze the grubs out and then destroy them. This should be done every day as they ripen. Some authorities advise the injection of a little coal oil and a little turpentine or any other strong irritant into the sacs. Others do not. The best thing to do is to treat the animal during the summer months by painting the front legs and the neck with a composition of oil like, for instance, raw linseed oil and fish oil each one part. Some add a little bit of tar to this mixture. That means by the application of this that the eggs can not be fastened to the hair and consequently there being no place for the propagate.

---

**Cow Has Warbles**—I have a 4-year-old Jersey cow in good health, but she has warbles along her back bone. What can I put on to kill them? I feed her alfalfa hay and beet pulp and bran mixed. E. M. D.
Bremerton, Wash.
See answer to C. H.

---

**Diarrhoea:** I have a 12-year-old horse that has had dirrhoea more or less for over four months. The discharge from the bowels is watery. He also passes much wind or gas, but he never shows signs of pain or colic. When he is the worst the thirst is excessive. I feed oat hay, timothy and clover. He is fat and has not been working much all winter. J. H.
Eatonville, Wash.

Cut your horse's feed down to one-fourth of what you are feeding him at the present time. At the same time give him in his drinking water one teaspoonful of listerine morning, noon and night. Gradually increase his feed as he gets better.


# Win the War by Preparing the Land, Sowing the Seeds and Producing Bigger Crops

**Work in Joint Effort the Soil of the U. S. and Canada—Cooperative Farming in Man Power Necessary to Win the Battle for Liberty.**

The Food Controllers of United States and Canada are asking for greater food production. Scarcely 100,000,000 bushels of wheat can be sent to the allies overseas before the crop harvest. Upon the efforts of the United States and Canada rest the burden of supply.

**Every Available Tillable Acre Must Contribute; Every Available Farmer and Farm Hand Must Assist.**

Western Canada has an enormous acreage to be seeded, but man power is short, and an appeal to the United States allies is for more men for seeding operations.

**Canada's Wheat Production Last Year Was 225,000,000 Bushels; the Demand From Canada Alone, for 1918, is 400,000,000 Bushels.**

To secure this she must have assistance. She has the land, but needs the men. The Government of the United States wants every man who can effectively help to do farm work this year. It wants the land in the United States developed first, of course; but it also wants to help Canada. Whenever we find a man we can spare to Canada's fields after ours are supplied, we want to direct him there. Apply to our Employment service, and we will tell where you can best serve the combined interests.

**Western Canada's help will be required not later than May 5. Wages to competent help, $50 a month and up, board and lodging.**

Those who respond to this appeal will get a warm welcome, good wages, good board, and find comfortable homes. They will get a rate of one cent a mile from Canadian boundary points to destination and return.

For particulars as to routes and places where employment may be had, apply to

**U. S. Employment Service, Dept. of Labor**
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**Tobacco is about the only comfort the soldier has—and no chance to smoke on duty! But a satisfying chew of Real Gravely Plug—he can enjoy that even in a shell hole in No Man's Land.**

Give any man a chew of Real Gravely Plug, and he will tell you *that's* the kind to send. Send the best!

Ordinary plug is false economy. It costs less per week to chew Real Gravely, because a small chew of it lasts a long while.

If you smoke a pipe, slice Gravely with your knife and add a little to your smoking tobacco. It will give flavor—improve your smoke.

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Dealers all around here carry it in 10c. pouches. A 3c. stamp will put it into his hands in any Training Camp or Seaport of the U. S. A. Even "over there" a 3c. stamp will take it to him. Your dealer will supply envelope and give you official directions how to address it.

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7th SEMI-ANNUAL SALE

# Western Washington Holstein Breeders' Association

85 HEAD OF THE BEST IN THE WORLD
At KENT, WASHINGTON, APRIL 17th, 1918

*ALL THE LEADING BREEDERS OF WESTERN WASHINGTON, Consignors*

The Guarantee Sale of the West. 60 Day retest privilege goes with each animal

A Proven Son of the KING OF THE PONTIACS Will Be Sold

For Catalog Address A. B. WINTER, Secretary, Everett, Wash.

N. B.—The Northwestern Holstein Breeders' association will hold its semi-annual meeting at close of sale. Meeting place to be announced at sale. All friends of the Noble "Black and White" are invited to attend.
E. B. MARKS, Secretary.

## POULTRY

Write to the Editor.

JAMES DRYDEN,
Editorial Contributor.

### EGGS TO SAVE PORK.

### They Are Valuable as a Food.

The old fashioned and ever modern dishes of ham and eggs and bacon and eggs should be, to a great degree during the war, just plain eggs without the ham and the bacon. Across the water there are hundreds of thousands of soldiers that need the bacon and the ham to sustain them in their strenuous battle against Germans and wet, cold trenches and the hardships of camp life in general.

Every farm in the northwest should be producing eggs this season and making use of them, either at home or elsewhere, as substitutes for the foods so necessary for exportation. The opportunity in the poultry line, either for the production of meat or eggs, is unprecedentedly great this year, and should be seized by every one where it is at all possible.

### Wartime Poultry Ration.

Inland Empire poultrymen have always thought that it would be impossible to successfully produce poultry without a very heavy use of wheat in the ration.

In February of this year the department of poultry husbandry of the University of Idaho started some war-time feeding experiment work and is feeding less than 9 per cent wheat in the entire ration, and indications are that the wheat could be eliminated entirely, says Pron Moore, poultry husbandman.

The scratch food or grain is:
41 pounds corn.
28 pounds oats.
15 pounds wheat.
4 pounds kaffir corn.

This mixture is fed at half ration; that is to say, four quarts per day per 100 hens. Eight quarts per day is full ration. The balance of the grain ration is made up of barley (steam rolled) and soaked in skimmed milk, or buttermilk, for 24 hours. Some time was required to arrive at a proper feeding basis, but by way of illustration we have 52 White Leghorn hens and four cockerels in one pen. These hens range in age from 2 to 4 years old. They are fed one and one-third quarts of scratch food morning and noon and five pounds of soaked barley between 3 and 4 o'clock in the afternoon. This means, then that we are feeding about four pounds of scratch food and five pounds of barley. The barley is soaked in six pounds of milk. More milk should not be used in soaking, as it makes the food too sloppy. If milk is not obtainable, use water, but by all means use milk if possible. If water is used, it would be well to soak alfalfa meal and use the water from it.

A dry mash is kept before the fowls at all times, and it is as follows:
6 pounds middlings (bran and shorts mixed).
3 pounds finely ground oats.
3 pounds finely ground corn.
2 pounds beef scrap.
1 per cent charcoal.

Grit, shell and bone are kept constantly before the fowls and green food is fed in the form of mangel wurtzels. Since the middle of February to this, the 22d day of March, this pen of fowls has averaged to lay a little better than 60 per cent, which is good laying at any time under any system of feeding for old stock.

### Knowledge of Meat Production.

At a conference of representatives of live stock producers' associations in Washington, it was decided that the food administration will select a man to be added to the staff of the chief of the meat division, who shall have practical knowledge of meat production, such person to be selected from the list of names to be submitted by the gentlemen present in Washington representing the live stock feeders in the corn belt.

Moreover, "the food administration has from its initiation, and does now, heartily subscribe to the principle that the producers of food necessary to the carrying on of the war, the feeding of our armies, the armies of the allies, our civil population and the civil population of the allies, should have, in addition to the cost of production, a fair and reasonable profit," and that the food administration will do what it properly can through the buying agencies of the government to relieve the situation by increasing the proportion of purchases of higher grades of beef and the employment of such other agencies as may be at its command.

**"In stating the principle above, it must be recognized that it is not in the practical powers of the food administration to give guarantees to producers without legislative action.**

"The food administration suggests that for demonstration of the situation and guidance of the government, an independent tribunal should determine the cost of producing meat."

### Raising Turkys Again.

Mrs. C. R. Lowry, who sold her entire stock of turkeys in Payette last spring, is now located near Boise, Idaho. She recently received a fine trio of Mammoth Bronze turkeys from a high-scoring, prize-winning flock in Tennessee. The birds are from 50-pound stock and the tom at 10 months old weighed 30 pounds.

### MAKE GRAIN FARM.

### Will Convert Great Cattle Ranch.

One of the largest cattle ranches in Montana, that of Child & Anceney in Gallatin county, will this year discontinue growing of hay with which to fatten animals and while still raising a large number of range cattle will put between 8000 and 12,000 acres of its irrigated hay lands into wheat this spring in an effort to help solve the food shortage which threatens the American people and the allied nations and armies.

#### Gigantic Aeroplane.

A gigantic military aeroplane has just been finished at the military arsesenal, Tokio. It was chiefly designed by the late Lieutenant Sawada, who met a tragic death at Tokorozawa. The machine has been a year and a half under construction, during which time vast improvement has been made in aerial navigation. This aeroplane is equipped with three 1000-horse power engines, and is capable of maintaining 80 miles an hour for six hours' continuous flight. The machine will carry five passengers.

#### Curing Elephant's Cold.

A circus man, caught in the act of curing an elephant of a cold, was dared to take his own medicine. He declined, but invited the interviewer to return the next day and see the elephant cured. And the next day the elephant was rid of the cold. The keeper placed a bucket of boiling hot vinegar in a bag and then tied the latter about the animal's trunk so that he was compelled to inhale the beneficial fumes whether he wished to or not.

#### A Large Graphophone.

A graphophone nearly eight feet high and correspondingly powerful, although only the usual records are used, has been built by a Tacoma musician for concert purposes in public parks.





Spring is Cleaning-Up Time

The garbage can, sinks, drains, closets, cesspools, all foul-smelling and disease-breeding places need attention. Get out the sprinkling can and make a liberal use of Dr. Hess Dip and Disinfectant. Do this regularly to establish health conditions—to destroy disease germs and purify the air. There is no better way to avoid contagious diseases. Use it also about the poultry house, pig pen and stables. One gallon makes 100 gallons of disinfectant. GUARANTEED.

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These same winning Ajax Tires, successful on dirt tracks at high speed, will be equally successful for you on your roads at your speed.

Dirt tracks are the same road-bed as the country roads surrounding them. Success on dirt tracks means service on country roads.

AJAX TIRES on proved performance, are the money-saving, mileage-giving tires for the farmer.

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The picture shows these supports built into Ajax Tires on both sides of the tread, giving them more tread on the road—more rubber where it should be. They give longer life to Ajax Tires because road friction is thus distributed evenly over the tread. On Ajax Tires there can be no centering of friction in one spot to wear through to the fabric.

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*"More Tread on the Road"*

Ajax Road King proves its superiority in competition with other tires, ON THE ROAD. Built for city streets or farm highways. Ajax Road King has "more tread on the road" than other tires. Note its triangle barb tread—an added safety factor.

97% Owners' Choice

is a practical endorsement of Ajax quality unequalled by any other large tire manufacturer. This huge percentage of Ajax output is the choice of car owners to replace other tires that came on their cars. All Ajax Tires—and Ajax Inner Tubes—give real service. Write for booklet on Ajax Shoulders of Strength.

AJAX RUBBER CO., Inc., 1796 Broadway, New York

*"While Others Are Claiming Quality, We Are Guaranteeing It."*

AJAX TIRES
GUARANTEED IN WRITING 5000 MILES

Diamond CHICK FOOD



SAVES LITTLE CHICKS and helps them to grow into big, strong healthy birds

¶ A clean, wholesome, natural food—no dust—no waste. Keeps the chicks healthy and makes them grow fast.

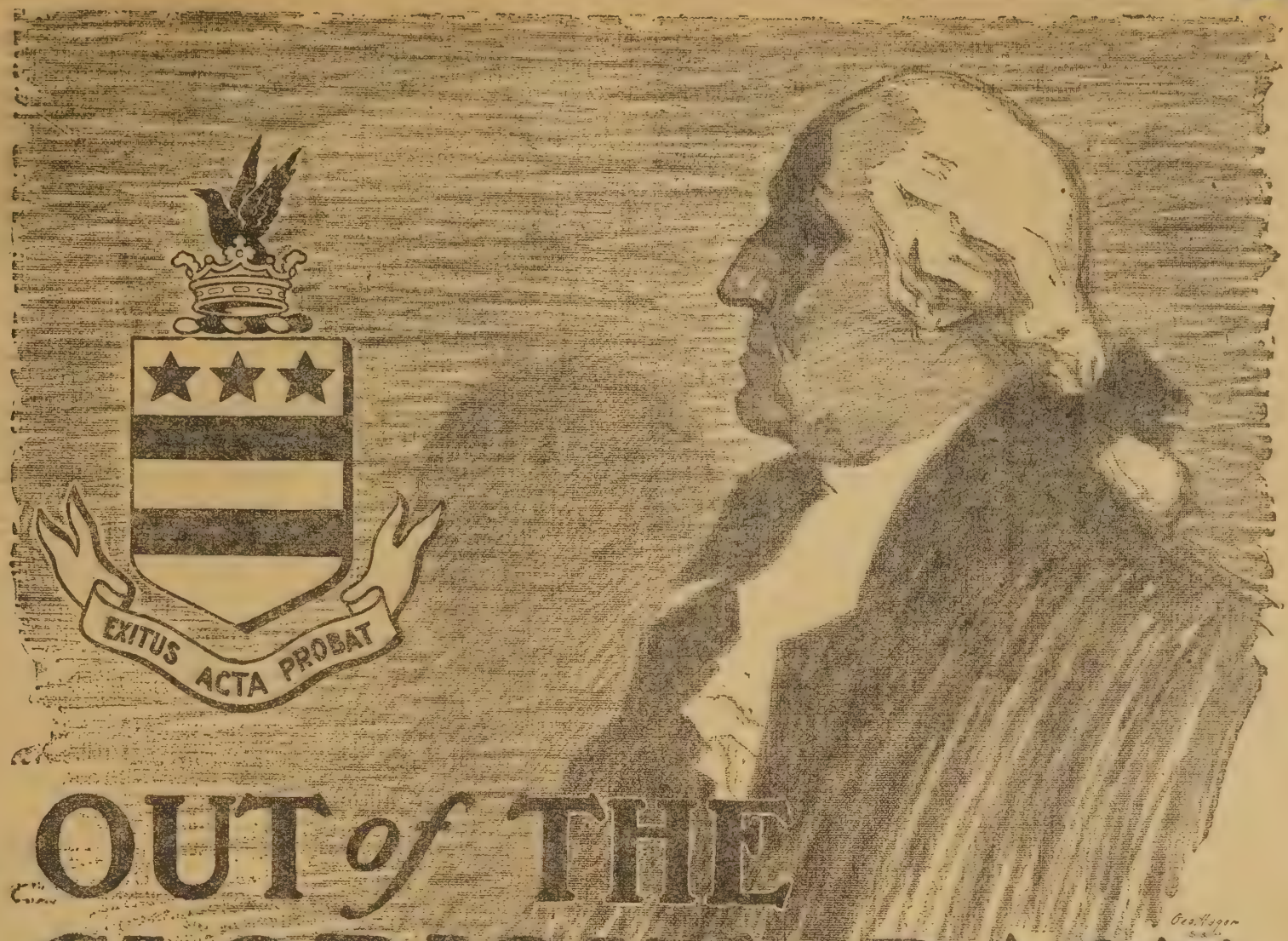
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OUR 1918 CATALOGUE

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PORTLAND SEED CO.
PORTLAND OREGON
PORTLAND Diamond SEED Quality COMPANY

Western Agents "Buckeye" Incubators and Brooders.




# OUT of THE GLORIOUS PAST

**Comes the spirit of that greatest American, to spur us on to Victory.**

**Comes memory of dark and bleeding Valley Forge, followed by victorious Yorktown, to inspire and cheer state and nation in a crisis that shakes a world.**

**Comes George Washington's Coat of Arms, sire of the Stars and Stripes, as honor badge for the State of Washington in the Third Loan for Liberty.**

**Upon the breast of every loyal Washingtonian who does his share right at the start of the Third Liberty Loan, George Washington, figuratively speaking, pins this shield of honor.**

**County after county of Washington is presenting George Washington's emblem to Liberty Loan subscribers, as recognition of patriotism, these first HONOR DAYS.**

**Who can be so calloused to our most hallowed traditions, so indifferent to the days that gave freedom birth, as to ignore this call to action?**

**Who will delay his subscription to the last when Washington's call is NOW—before these first few days have run their speedy course?**

**Our foe is a monster without conscience or heart. Until he is beaten back into his lair, the world is in peril—civilization retreats to history's dawn; our vaunted progress is all for naught.**

**Our task here at home is to provide MONEY. A huge war bill awaits our payment.**

**This Liberty Loan is the third instalment.**

**Will you lend the money to Uncle Sam, or pay tribute to the kaiser?**

**Those boys who are "Over There," protecting you, in Europe's bloody trenches—will you support them or desert them?**

There is only one answer—buy Liberty Bonds to your limit, and **DO IT NOW.**

At any bank or from your local Liberty Loan Committee.

WASHINGTON LIBERTY LOAN COMMITTEE
JOSEPH A. SWALWELL, CHAIRMAN

# Third Liberty Loan

This Page Contributed as a Patriotic Donation to the Third Liberty Loan Campaign by The Eldridge Buick Company, Seattle and Spokane

IN THE ORCHARD

Write to the Editor.

GRANVILLE LOWTHER, Editorial Contributor.

# Pollenization

## Has Much to Do With Fruit Yield

By GRANVILLE LOWTHER.

In order to understand the subject of pollenization it is necessary to know the definitions of the terms used. I therefore give herewith a few explanations.

Self-sterility: The inability of pollen to fertilize ovules of the same variety. This does not imply that the pollen is sterile in relation to other varieties, for it may fertilize ovules of another variety; but will not fertilize the female of its own kind.

Self-fertile: A plant is said to be self fertile when the pistils will accept pollen from a plant of the same variety and the ovules become fertilized by the pollen grains.

Cross-pollenation: The union of the pollen cell and ovule of two distinct horticultural varieties, like the Lambert and Montmorency cherries, the Bartlett and the De Anjou pears, Arkansas Black and Jonathan apples, etc. In no case do horticulturists mean the transfer of pollen from flowers of the same tree nor the transfer of pollen from one tree to another of the same variety, when they use the word "cross-pollenation."

Pollenation is the act of transferring the pollen of one flower to the pistil of another; or from pollen to pistil of the same flower, depending on the nature of the flower.

Fecundation is a word used to represent the union of pollen cell and ovule. Fertilization is a term used to represent the two processes, pollenation and fecundation.

### Isolation.

Every one has probably noticed that certain kinds of fruit trees, when isolated from others of the same species, will bloom profusely but fail to bear fruit. We used to note that the mulberry was an example of this; also the "Wild Goose plum." Sometimes the fruit will set and not develop, but generally it is manifest by the dropping of the fruiting organs.

### Pollenation of Apples.

Among the early apples, the Gravenstein Oldenburg and Red Astrachan will pollenate one another. In some localities these varieties bloom late enough to pollenate other varieties also. Among the late varieties the Arkansas Black, the Baldwin, Ben Davis, Black Twig, Gano, Grimes Golden, Jonathan, McIntosh Red, Yellow Newtown, Northern Spy and Ortley will cross pollenate. The Wealthy, Yellow Transparent and Tetofski are early varieties that will cross-pollenate.

The Red-Cheek Pippin, Rome Beauty, Spitzenburg, Wagener, Willow Twig, Winesap, White Winter Pearmain and Yellow Bellflower are late varieties that will cross-pollenate.

### Pollenation of Pears.

Among the early pears that will cross pollenate are the Bartletts, Anjous and Clairgeaus. Also the Howell and the Keiffer will cross.

Among the late pears that will profitably cross are the Bosc and Comice; also the Easter Beurre, Barry and Winter Nellis will cross-pollenate.

# Skim Milk for Food

All skim milk should be used—none wasted. In this food emergency skim milk should be made to furnish the maxium of human food. It does this best when used direct or as cottage cheese, prepared buttermilk, or other by-product. Skim milk is used economically in feeding hogs for pork production, yet 100 pounds of skim milk will produce 15 pounds of cottage cheese as compared with only 4.8 of dressed pork when fed with corn.

Skim milk when made into cottage cheese furnishes nearly seven times as much protein and nearly as much energy as the pork that it will produce when fed with corn. In addition, when cottage cheese is made from skim milk, about 85 per cent of the latter remains as whey, which has about half the value of skim milk for hog feeding, a still greater increase of nutrients is returned for human food. So far as possible, therefore, skim milk should be used for human food, and only the excess fed to live stock.

A leading authority on hog feeding says: "To find the value of 100 pounds of skim milk when fed alone, multiply the market price of live hogs in cents per pound by five; if fed in combination with corn or barley multiply by six." Thus, when hogs bring 10 cents a pound, skim milk is worth 50 cents a hundredweight when fed alone, or 60 cents when fed with corn or other grain.

According to another authority, "the value of 100 pounds of skim milk, when fed along with corn for fattening hogs, is half the market price of corn per bushel." That is, when corn costs $1 a bushel, skim milk is worth 50 cents a hundredweight.

Buttermilk is equal to skim milk for feeding hogs, while whey is half as valuable. Whey, being low in protein, is not well suited for young pigs and should be fed to older animals.

Ordinary grass pasture, or green rye, oats, sorghum, rape, clover, alfalfa, peas or beans can take the place of skim milk after the little pigs get a start. Much green feed can be raised without greatly reducing the acreage of other crops.—U. S. Department of Agriculture.

## ONE WOMAN'S SUCCESS.

### Producting Tomatoes in Mexico.

The present is the fourth year devoted to the production of tomatoes in the Mazatlan consular district in Mexico for the export trade. Four years ago an enterprising Mexican woman who has agricultural lands whose soil is suitable for the growth of tomatoes conceived the idea of exporting tomatoes to the United States, and planted a trial crop, which proved to be such a success and caused a large number of others to take advantage the following year of the ready market in the United States for all they could produce. During the third year, 1917, there were 300 cars of tomatoes exported, and this year will afford about an equal quantity.


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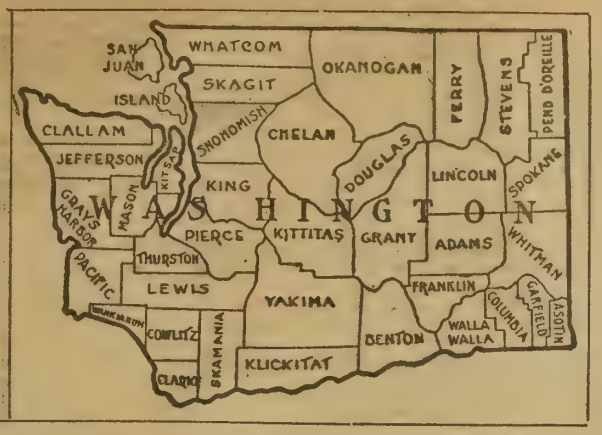
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# Must Have Team Work

## Flour Came Back When It Was Learned That Hoover Had Requested That All Over-Supply Was Needed to Relieve Shortage.




CHEHALIS, Lewis County, Wash., April 2.—The people of Lewis county are noted for their patriotic spirit. There has not been a Red Cross, Liberty loan or Y. M. C. A. fund campaign but what Lewis county has taken out more than her allotment. I feel that the same will be true regarding food production. Every farmer is bending every effort to increase crop acreage and crop yields for the year 1918. While a few farmers feel that the government has made some mistakes, they are still awake to the fact that team work is desired now more than ever, and they are willing to sacrifice now for the sake of the nation. When Herbert Hoover's order came to take back to the store all but 30 days' supply of white flour, farmers who had put a few sacks away for a "rainy day" flocked back and gladly delivered their extra flour to the merchants. In this section the season is very favorable to the seeding of a large crop acreage. The lack of seed in some instances will be a handicap, but steps are now being taken to have all available grain in this and adjoining counties used for seed rather than for feed. Taking everything into consideration the outlook for an increased food production this year is very bright. There will undoubtedly be an increase in grain, hay and stock feed in general, and as a result there will be increased stock production. A. B. NYSTROM.

### Prepare for Busy Season.

FERNDALE, Whatcom County, Wash., March 26.—After a mild, though very disagreeable, winted Ferndale and its adjacent country communities are beginning to make preparations for an unusually busy spring. The branch of the Mount Vernon Condensary company that located here three years ago is enlarging their local plant so that its present capacity will be more than doubled, a large storehouse is also in course of construction. Nor is the milk industry the only one that is growing, the Ferndale Canning company is enlarging its buildings this spring in order to handle the fruits and vegetables they expect to receive this year. A meeting of fruit growers and government officials was held at the cannery this week that was exceptionally well attended by those interested. M. L. Dean, state commissioner of horticulture and two federal officials, a pathologist and an entonologist were present and gave very interesting and instructive talks on the care of fruit trees and berry hushes, as well as the most approved methods of combating the diseases of plants that are prone to crop out at this season of the year. Mr. Carroll, county agriculturist, was also present. He deserves much credit for the many noticeable improvements that have been made in this country the last year. When a county agriculturist was first spoken of here many people regarded the office as superfluous, but Mr. Carroll's achievements have convinced even the most dubious that it is well-nigh indispensable.

MRS. JACK PLASTER.

### Install Pumping Plants.

NEPPEL, Grant County, Wash., March 26.—The labor situation at present is fairly good, as a heavy demand for labor is not here yet, but will come later in this district owing to its varied products. Power of all kinds is in demand and will be more so in the future, as wellbred heavy horses, 1300 pounds and up, are in demand and hard to find As for power for pumping water and traction power combined we are in need of improved machinery along that line. A few parties are installing pumping plants this spring, where a tractor would serve two purposes, pumping water for irrigation and hauling machinery and produce. I am in need of 25-horsepower now for that purpose, and several others could be benefitted here by a dual purpose power plant Machinery is being repaired as never before, as prices have advanced greatly. Still a tremendous amount of good machinery will be in demand here in the near future, and a great development will take place among the flats along the shore of Moses Lake, as the Moses Lake Water Users association will soon stop the unjust delegation stopping the development of this land. There will be some grass fed beef for market here this season, but hogs are not very plentiful that are fit for market. Alfalfa is our best pasture for stock and rye is next on dry land. The fishing companies are now at work loading cans of carp for the eastern market. One or more cars per week are secured from Moses Lake and packed in ice and shipped. Our greatest need here is a strong pull all toghther to settle forever the water rights, and the quick production of foodstuff to help win the war for liberty and democracy.

MARTIN PENHALLICK.

### Meat Animals Are Scarce.

COLVILLE, Stevens County, Wash., March 25.—From present indications there will be no shortage of horses for farm labor. A survey of the county indicates that there are more horses on the farms this year than at this time last year. However, logging operations during the winter have been hindered by lack of snow, and this may draw some horses from the farms for logging work this spring and summer. There have not been many sales of horses, and the few that have changed hands have done so at about the same price received last spring. Last fall horses were a drug on the market, and many were offered at about half price without any takers. After wintering them through they are now asking normal prices. I know of five tractors being placed in the county, but as yet there is much discussion as to their use on the smaller farms, largely diversified. Their usefulness is yet to be demonstrated. There have been numerous complaints regarding the high price of farm machinery, and this will tend to keep down the purchase of new machinery, where the old can possibly be repaired. In some districts the dealers have made special effort in asking the farmers to order their repairs early. No great number of meat animals will be placed on the market this spring for meat purposes. The high prices of feed during the winter have more than overbalanced the advantage of spring prices. In most cases meat animals fit for market last fall were sacriificed at the low prices, the farmers keeping only the breeding and growing animals. A few hogs will be marketed this spring.

Many farmers have practiced the seeding of burnt-over areas for pasture, and the practice is rapidly spreading. Usually some form of clover forms the basis of the pasture mixture, in most cases red clover, alsike or white sweet clover. With this is mixed timothy, orchard grass and red top. The great variations in soils prevents the widespread use of any one mixture. The farmers in general recognize their obligations and opportunities and are doing their best to increase production of crops, even under the handicap of a shortage of good seed and a previous short season. A. R. HAHNER.




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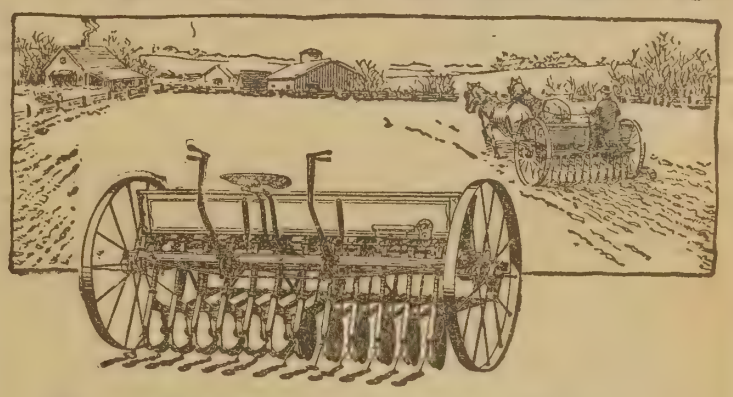
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# Magazine Department of The Washington Farmer

## Dinging Away on Tiresome "Don'ts"

By ROBERT DOUBLEDAY.

There are too many "don'ts" around the farm and in the farm neighborhoods. I honestly believe that children have had their little minds warped and soured, that young people have been made dissatisfied and that the older folks have become discouraged and embittered by the everlasting "don'ts."

There may be instances where the "don't" is well enough, of course; where it will help for the moment to avoid the hard knock. But those instances are few and far between and at best the don't is only negative advice. It is a good deal like handing a measly dime to a hungry man and saying to him, "Now, don't be recklessly extravagant, and don't go and overindulge in a lot of broiled lobsters and welch-rarebit, because they are hard on the digestion." About nine times out of 10 the fellow who is so ready and generous with his "don'ts" could not tell you a better way to save his life and would not lend you a hand on the better way if he knew it.

Dinging away on the tiresome "don't" very soon and very easily becomes a habit. It becomes, in fact, so merely habitual that if to say "don't" ever had any good influence it is utterly lost in chronic repetition.

The idea that this will not pay and that will not pay and the other will not pay is harped upon until it really appears to most people that there is nothing that will pay. There is so much insistence on the notion that this is bad and that is bad, this fellow is bad and the other fellow is bad, that even though we do it unconsciously, we easily grow into a condition of mind where everybody seems more or less evil and everything bent on going to the devil generally.

I have actualy seen communities where there was not a man, woman or child whom I did not hear berated and "talked about" by somebody in the neighborhood, and where, if you were to believe all that you heard, God must have settled a curse on that locality, covering everybody and everything. Now, an all-wise and all-loving God doesn't do things of that sort. I am forced to confess that in such communities there appeared, merely appeared, to be some grounds for much that was said, but really it was only an appearance, and even the appearance was the result of wrong state of mind, and I doubt not that the state of mind had its origin in a whole lot of promiscuous, needless, ill-natured "don'ts.'

Now, there is only about so much space in a human life, only about so much room, as we might say, in a human mind. Instead of cluttering it with a miscellaneous assortment of senseless and rancid don'ts and rubbish of evil, why not crowd out the don'ts and the evil and the misfortune with an abundance of cheerful and well thought-out do's? Why not make cheer take the place of gloom? Why slosh around in a status that you can not find anything but a grouch comment for? Why not say, let us do this other thing, that will be good for all of us.

If what we deem our good efforts do not produce the results that good efforts should, let us find out why; not by thinking evil and misfortune or by conjuring obstacles, but by looking for the open road. There is an open road to good and to comfort and to happiness and to all the so-called success that is necessary. To deny that would be to assert that there is no such thing as a dominant power of love or a central source of good, and that an all-wise creator does not, after all, know how to provide possible success and happiness and comfort for his children. Really, that would be a fine strain of nonsense, now, to put it mildly, would it not?

Whenever you bury the dismal dont's you will resurrect a fine lot of cheerful do's.

### A Valuable Hint.

If onions are put in water and allowed to stand some time before peeling, they will not smart the eyes.

## LARGEST INCOME TAXES.

### Rockefeller Pays Enormous Sum.

After the Revolutionary war George Washington was one of the wealthiest men in the United States, but his fortune did not approximate a million dollars. Even in the days of Lincoln and the civil war the United States had few millionaires. A hundred thousand dollars was then counted a handsome fortune, and men with $50,000 had great influence.

John D. Rockefeller is generally rated as the wealthiest man in America, and the most authoritative estimates put his holdings at $1,200,000,000, a sum that would make 1200 millionaires. It will be noted that Rockefeller tops the list and leads by a long way his nearest neighbor in the following tabulation giving the names, estimated yearly income and income tax based on these estimates, of the 30 wealthiest men and women in the United States:

| | Estimated Yearly Income. | Income Tax Based on This Estimate. |
|---|---|---|
| J. D. Rockefeller .. | $60,000,000 | $38,400,000 |
| H. C. Frick ..... | 11,250,000 | 7,160,000 |
| Andrew Carnegie .. | 10,000,000 | 6,400,000 |
| George F. Baker ... | 7,500,000 | 4,800,000 |
| William Rockefeller | 7,500,000 | 4,800,000 |
| Edward S. Harkness | 6,250,000 | 4,000,000 |
| J. Ogden Armour .. | 6,250,000 | 4,000,000 |
| Henry Ford ..... | 5,000,000 | 3,200,000 |
| W. K. Vanderbilt .. | 5,000,000 | 3,200,000 |
| Edward H. R. Green | 5,000,000 | 3,200,000 |
| Mrs. E. H. Harriman | 4,500,000 | 2,560,000 |
| Vincent Astor ..... | 3,750,000 | 2,400,000 |
| James Stillman .... | 3,500,000 | 2,240,000 |
| Thomas F. Ryan .. | 3,500,000 | 2,240,000 |
| Daniel Guggenheim. | 3,500,000 | 2,240,000 |
| Charles M. Schwab | 3,500,000 | 2,240,000 |
| J. P. Morgan ..... | 3,500,000 | 2,240,000 |
| Mrs. Russell Sage .. | 3,000,000 | 1,920,000 |
| C. H. McCormick .. | 3,000,000 | 1,920,000 |
| Joseph Widener ... | 3,000,000 | 1,920,000 |
| Arthur C. James ... | 3,000,000 | 1,920,000 |
| Nicholas F. Brady.. | 3,000,000 | 1,920,000 |
| Jacob H. Schiff .... | 2,500,000 | 1,600,000 |
| James B. Duke .... | 2,500,000 | 1,600,000 |
| George Eastman ... | 2,500,000 | 1,600,000 |
| Pierre S. du Pont .. | 2,500,000 | 1,600,000 |
| Louis S. Swift ..... | 2,500,000 | 1,600,000 |
| Julius Rosenwald .. | 2,500,000 | 1,600,000 |
| Mrs. Lawrence Lewis | 2,500,000 | 1,600,000 |
| Henry Phipps ..... | 2,500,000 | 1,600,000 |

### Me-e-o-ow! Me-e-o-ow!

At the banquet held following the Holstein sale at Tillamook, Ore., Tabitha Hengerveld Segis Mooie Korndyke Cornucopia Beets DeKol Watson, sired by Thomas Segis Hengerveld DeKol, was sold for the benefit of the Red Cross. Tabitha, etc., is a beautiful black and white "Holstein" cat and was donated by Cordelia Oatfield, a miss of 13 years. With a bid of $25 by the Tillamook Holstein association and $1 each or less added by many of those present, the sum realized and turned over to the local Red Cross was $52.25. H. A.

## Sidelights

### The Newest Theology.

A boy at a recent examination in scripture was asked where Cain went after he killed Abel. He replied that he went to bed. The teacher wanted to know how he made that out. He said "It's in the chapter, sir, that Cain, after he had killed Abel, went to the land of Nod."—Christian Herald.

### Related Somehow.

"You say, madam," remarked the lawyer to a woman in the witness box, "that the defendant is a sort of relation of yours. Will you please explain what you mean by that—just how you are related to the defendant?"

"Well, it's just like this: His first wife's cousin and my second husband's first wife's aunt married brothers named Jones, and they were own cousins to my mother's own aunt. Then, again, his grandfathers on my mother's side were second cousins, and his stepmother married my husband's stepfather after his father and my mother died, and his brother Joe and my husband's brother Henry married twin sisters. I ain't never figured out just how close related we are, but I've always looked on 'im as a sort of cousin."

### Echoes of the Cold Spell.

"Mercy! that clanking radiator," said Mrs. Jones, stopping her ears.

"Pr-r," shivered Jones. "It makes me think of one of Shakespeare's plays."

"'The Tempest,' I suppose."

"No; 'Much Ado About Nothing.'"—Boston Transcript.

### The French Lesson.

Military Inspecting Officer—Now, sergeant, what precautions do you take against infected water?

Sergeant—Well, sir, first we boil it.

Officer—Good!

Sergeant—Then we filter it.

Officer—Excellent!

Sergeant—Then we drink wine!—Imp.

### Grammatical Knowledge.

When General Leonard Wood was a small boy he was called up in the grammar class. The teacher said:

"Leonard, give me a sentence and we'll see if we can change it to the imperative mood."

"The horse draws the cart," said Leonard.

"Very good. Now change the sentence to an imperative."

"Get up!' said young Wood.—Christian Register.

### His Punishment.

An angler died and went to his "right place," which, of course, was also the residence of his good friend Baron Munchausen. Oodles of time skittered along, and one day as the Big Boss was going by the angler said: "Please, your santanic majesty, can't I try my luck somewhere else? I've been fishing from this blamed place for 200 years and I haven't had a bite."

"That's the hell of it," explained the Big Boss, and passed on.—Boston Transcript.

## SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

## How the "Humors" of the Blood Depend on the Glands



Dr. Hirshberg.

"Humors in the blood" belong to the time when there were owlish discourses on phlegm, yellow bile or choler, and black bile, the cardinal humors to which distempers of the mind and the anatomy were traced and much of our language as to human dispositions, temperaments and diseases were laid at the door of an excess of the one or the other.

One person is said to be phlegmatic, another melancholic, other choleric, bilious, full of spleen or venom. Those who are sanguine are of good blood and kindhearted. The very words on your lips bespeak the physiology of yesteryear and its emphasis upon the humors of man.

Unluckily, however, a myriad of researches made by zoologists, physiologists and experimental psychologists now multiply to prove that the mental, emotional, temperamental and diseased states of man are now known to be largely controlled by and dependent upon the fluids and substances which flow along with and are dissolved in the blood.

The glands, such as the thyroid, spleen, adrenals, piuitary and lymphatics are not the only ones which make these strange humors. There is the pancreas, with a wrist-watch like channel to extend from the left side of the abdomen to the right side, where it empties into the "duodenum" or loop of intestine linked to the stomach.

### Some Glandular Duties.

This opening carries the fluids or humors to aid in the digestion. The pancreatic juice, so-called, is stirred to torrential proportions if the blood which traverses the pancreas contains particles or fluids from the pineal thyroid, pituitary, adrenals or other glands.

When a man's mood is violent and angry it is known that the thyroid gland, in contrast to the pancreas, is working overtime to pour forth its confections into the blood stream.

When the temper is overwrought with blood pressure high it is often said in jest or sarcasm that a person is "in a sweet humor." The adrenal glands, little, marshmallowlike nests of tissue above the kidneys, are in this instance the humor factories. Strange to say, the humors or hormones sent out by them actually do sweeten the blood in an effort to sweeten the disposition of the highly tense individual.

If the blood of a highly emotional person is analyzed there will be found strange humors present, sugar released from its storehouses in the liver and muscles and other commodities unleashed from the humor factories of the thyroid, spleen, bile cells, pancreas, adrenals, pineal, parathyroids, pitualtaries, lymphatics and the like.

### Other Strange Effects.

When the thyroid is absent or deficient in its output the humors necessary to buoy the individual with trembling hope and faith are gone. Depression, stupid stolidity and apathy take the place of alterness and intelligence.

When the thyroid becomes a cataract and overflows its boundaries, tremors, palpitation, bulging eyes, fear and trembling assert themselves. Enlarged anatomically, the thyroid becomes a goitre; if the eyeballs protrude also frog fashion this is called exophthalmos.

If the pituitary gland—a little torpedo-shaped gland which hangs like a pear from its stalk beneath the brain—is absent or diseased there may be a dwarf instead of a full-sized man, with a corresponding infantile disposition and demeanor. Undeveloped structures of the whole anatomy, especially the sexual glands, often accompanies this.

Giantism, on the other hand, attends reverse changes on the pituitary gland—also named the hypophysis. Jumbos of men and women, the kind pictured in fairy stories, are found to have disorders in this gland, and an excessive creation of the pituitary humors.

It is to be seen from these facts that "humors," when understood to be "hormones," or substances made in the glands, are real things with definite power over the moods, humor, dispositions, temperaments and diseases of man.

### What We Can Do.

We can buy a bond, though it take our farms,
There are boys "over there" who are giving arms.
We can give when asked to the Y. M. C. A.,
There are some giving lives who receive no pay.

We can give our time to the Red Cross work,
The boys "over there" do not think we shirk,
We can sew and knit till our eyes grow dim,
It's little enough we can do for "him."

We can eat corn bread with a cheerful face
In our own home land, in the same old place.
"Over there" are boys who are hungry and cold,
They need our wheat and they need our gold.

Some day when the yar is fought and won,
When the last heroic deed is done,
We'll eat wheat bread and we'll buy more farms,
But what of the chaps who have given arms?

Will we dare to look at an empty sleeve
When we think of the trifles that made us grieve,
Will we dare to give them a greeting gay
When we think of the little we had to pay.

—Agnes Just Reid.



Whenever in any religious faith, dark or bright, we allow our minds to dwell upon the points in which we differ from other people, we are wrong, and in the devil's power. That is the essence of the Pharisee's thanksgiving—"Lord, I thank thee that I am not as other men are." At every moment of our lives we should be trying to find out, not in what we differ with other people, but in what we agree with them; and the moment we find we can agree as to anything that should be done, kind or good (and who but fools couldn't?), then do it; push at it together; you can't quarrel in a side-by-side push; but the moment that even the best men stop pushing and begin talking they mistake their pugnacity for piety, and it's all over.—Ruskin.

# All the World's a Stage, and All the Men and Women Merely Players

## Following the American Forces in France



Com. on Public Information.

These ever-welcome field kitchens follow the American boys in France on the march. Many of the hikes are from 20 to 30 miles from seaport to training camp, and hot meals are necessary.

## Reviews Americans Testing Masks



General Pershing watching American troops braving the horrors of poisonous gas. The men, wearing gas masks, enter the gas chamber to prove that their masks are ample protection against German raids.

## Need Stevedores.



Colonel Austin, in command of a regiment of stevedores in France, has returned for recruits. He says two additional regiments are needed at once and promises that men who volunteer will be sent to France immediately.

## Three New Big League Managers




The opening of the baseball season will see three new major league managers. Barrows will manage the Boston Red Sox, Miller Huggins will act as mentor; Hendricks will handle the Cardinals.

## The Food Hoarder




—News of the World, London.

## Quicksands




—Memphis Commercial Appeal.

## Our Gallant Dead Are Revered



Committee on Public Information.

The burial of Corporal James R. Gresham, Privates Thomas F. Enright and Merle D. Hay, the first Americans to die in the great war, was marked with impressive ceremonies.




**Use the wind for pumping**

**-costs $1.65 a year**

ECLIPSE Wood Windmills will do your pumping and save you a lot of money each year. They have been sold for 50 years and we know of farmers who have

**ECLIPSE MILLS**
**—over 38 years old**

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The ECLIPSE is a time tried mill. Its solid construction makes this pumping record possible. Automatically turns in and out of wind—practically storm-proof. Direct stroke, no gears—but little friction—noiseless—needs only occasional oiling.

Talk over the ECLIPSE Mill and Tower with your dealer and you'll buy an ECLIPSE—like thousands of other farmers.

**FAIRBANKS, MORSE & CO.**
**Chicago, Illinois**
*Manufacturers*




# KEEP BEES!

**HONEY IS THE BEST SUBSTITUTE FOR SUGAR**
***and is more Wholesome and Delicious***

IF you own an orchard or keep bees, you should have a copy of our Catalog. It lists everything for the successful handling of bees and the production of honey.

We are pioneers in the bee supply business in the Northwest, are thoroughly familiar with local requirements and carry a large and complete stock.

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**Chr. Hansen's Preparations** are used by champion cheese and butter makers everywhere, because pure, concentrated and simplest to use. Always dependable.

**Hansen's Rennet Tablets for cheese making; Cheese Color Tablets; Danish Butter Color and Junket Buttermilk Tablets.**

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**10 Days' Trial—Money-Back Guarantee**

Write for complete catalog and list of users near you. Postal will do.

**OWENSBORO DITCHER & GRADER CO., Inc.**
**1576 Wazee Street Denver, Colo.**


# For Farm Service

## Government Helps With Labor

The farm service division of the United States employment service, created two months ago as a special arm of the service devoted to handling the farm-labor problem, makes the following summary of the service's plans for ascertaining the labor requirements of the farmers of the country and recruiting and distributing all available labor:

A special farm-service division is being established in most of the 100 offices of the employment service, with men in charge who have had experience with farm-labor problems. These divisions are devoting their entire time and attention to looking after the labor needs of the farmers in their respective districts and developing ways and means of meeting all calls.

Special field agents are being sent into districts in which acute farm-labor shortage exists, or where unusually large numbers of men will be needed, to study the local situation at close range and devise ways of relieving the immediately pressing needs.

Posters announcing the location of all federal and state employment offices are being hung in postoffices, railway stations, general stores and other public places, telling farmers and farm workers how and where to apply for labor or jobs.

A weekly bulletin will be issued in which all opportunities for farm employment received and the needs of particular districts for seasonable labor will be listed. This will be posted in the postoffices in all towns and cities in the country of 2000 population and more and given to the press.

By an agreement between the postoffice department and the department of labor, all third and fourth class postoffices, numbering 55,000, are authorized farm-labor employment offices. Their postmasters and rural carriers have been authorized to act as "farm-labor agents" for the United States employment service. The postmasters and their carriers cover all rural sections which are not convenient to a regular branch office of the employment service and bring every farm gate in touch with the machinery of the service and the local and distant sources of farm-labor supply. Each postmaster and rural carrier furnishes application blanks to farmers wanting help. Upon receipt of a filled application the postmaster displays a bulletin announcing the details of the call, so as to attract any local available farm labor. If the application is not promptly filled locally, the postmaster forwards it to the nearest regular office of the employment service, which has a large field from which to draw labor.

## On the Editor's Desk.

Frederick J. Drake & Co. of Chicago have issued "Farm Mechanics" by Herbert A. Shearer. This excellent little volume is fully illustrated and practical for the beginner and contains much useful information adapted to farms. It discusses the tools needed, farm shop work, mechanical power, farm machines and conveyances and farm conveniences.

Armour's Farmer's Almanac for 1918 is in the mail. It is a cleverly prepared booklet and contains much information.

The manual of industrial club work for Oregon, prepared by N. C. Maris and L. P. Harrington, has reached this office. It is one of the most inspiring things to read what the boys and girls say of their experiences, difficulties and triumphs.

### Tried in Vain.

One afternoon two acquaintances chanced to meet, and during the gabfest that followed one of them took the other to task for the latitude in boasting that he allowed his wife.

"Say, Jim," said he, "why on earth do you permit your wife to go around telling the other women that she made a man out of you? You never hear my wife say anything life that."

"No," rejoined Jim, with a merry little chuckle, "but I have heard her say on more than one occasion that she had tried her hardest."—Philadelphia Telegraph.

### Cultivated Rubber.

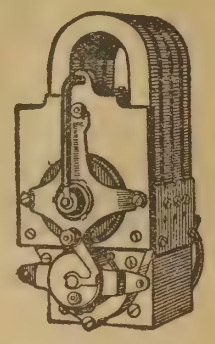
British Malaya is now firmly established as the leading country in the production of cultivated rubber, and the industry has added very substantially to the prosperity of the Malay peninsula during the last nine or 10 years.

### What Is the Matter.

When one woman out of a hundred has nothing to say the other ninety-nine are asking what is the matter with her.




**Plow This additional Acreage Without Fuel Cost**



Owners of tractors equipped with K-W Magnetos find they can fire thinner mixtures and cheaper grades of fuel and still develop full horse-power, than they could by any other system of ignition.

The intense hot spark that a K-W produces gets all the power out of every drop of fuel. It turns the ordinary wasted fuel into extra work *without* cost. A

**TRADE K-W MARK High Tension MAGNETO**

will start your tractor quickly and easily regardless of how cold the weather and will operate on all the low grades of fuel. It gives continuous—no trouble ignition.




Forty tractor manufacturers pay more for K-W Magnetos because they want their users to have the best. K-W Ignition is one of your guides as to quality in your selection of a tractor. Insist that your new Tractor be K-W equipped.

If you are not using a K-W on your present tractor and wish to cut fuel cost—write us. There is a type of K-W Magneto that will do this.

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2891 CHESTER AVE CLEVELAND, OHIO. U.S.A.

# Food Will Win the War

THE government says so. It is deeply in earnest. It asks you to supply the food—more food and more food—for ourselves and our allies. Your patriotic duty to your country now is to produce food.

**Modern** methods include power farming, deeper plowing, better cultivation, greater economy. The farm tractor offers the way.

**On the University Farm** at Davis, California, April 17th, 18th and 19th, there will be a tractor demonstration. On April 20th there will be the annual farm picnic, but no demonstration.

**There** will be tractors, plows and other modern and improved farm implements in actual operation. Big exhibit tents will be filled with power-operated machinery. The University will conduct scientific tests to show tractor efficiency.

**Make** reservations with the Chamber of Commerce of Sacramento or Davis, or write for information to Room 1015 Monadnock Building, San Francisco.

**The California Tractor and Implement Association**

# FLORA FLIRT GETS INTO A SPRING FLIRTATION




Flora Flirt, in spite of warning,
Went to walk on a bright spring morning.




Flora's eyes are filled with joy—
She sees a handsome college boy,




An ardent glance to her he gave,
And Flo can't make her eyes behave.



He stops and is about to speak;
A rosy flush tints up Flo's cheek.




Down comes the rain—and helter-skelter
That youth leaves Flo and runs for shelter!



Poor Flora's drenched; she hides her head—
She almost wishes she were dead.
*Moral*—On cloudy days don't flirt with fellows
Unless you both have umbrellas.

# Battle in Doubt

## *Only Leaders Know Actual Situation*

The fortune of battle on the western front is in doubt at this writing, though there are still strong indications that the Germans are unable to drive the British back and capture the railroad center, Amiens, which seems to be their present objective. Present reports indicate that the Germans have hurled their utmost strength into the fray over the short front before Amiens, intending if possible to break through by virture of force only, utterly regardless of the losses of men and munitions that the thrust costs. At this time the British are holding successfully, and British and French leaders declare that there is no occasion to fear the fall of Amiens. General Foch, in supreme command of the allied forces for the present campaign, says that Amiens will not fall. David Lloyd George, British premier, said in a published statement last week that Germany is destined to meet the surprise of her life within the next 10 days. Just what such statements may mean is problematical, but it is a general belief, possibly born of hope to some degree, that the allies are stronger than some think, and that a great offensive is soon to start that will deal a crushing blow to the invading Germans.

Throughout the last week the situation has been as doubtful as during the previous week so far as the average citizen of America has been able to size up. Indications the early part of the week were that the allied leaders were ready to make a stand and launch vigorous counter blows at the enemy. For two or three days the attacks of the Germans were reduced to such degree as to lead to the belief that the attack had spent its force. The allies in a number of occasions and at a number of points launched counter attacks which resulted in the reoccupation of some of the territory lost during the great drive of week before last, but the week passed and the counter blows by the allies were not struck as had been predicted. But instead the Germans launched a second terrific attack in the territory east and south of Amiens, the railroad center toward which the great drive had been directed as an objective. As the week closed it appeared that the attack, while still serious and menacing to allied interests, was destined to be unsuccessful. That it was a following up of the original effort not only to capture Amiens and railroad facilities there, but to break the line of the allied forces, thereby dividing the French and English, was evident on the meager reports that the censors allowed to be published. The French, English and American authorities who know conditions as they exist on the front have maintained strict silence as to all details of the fighting. No definite information has been given as to the losses suffered by the allies or the actual fighting strength. The withholding of this information, though the latter is greatly desired by the public, is considered absolutely essential for the successful prosecution of the war, as much depends upon keeping the enemy in the dark as to the forces that may be brought to bear against him.

### Enormous Expenses.

The expenses of the American government at the present time are averaging approximately a billion dollars each month. For the first year of this country's participation in the war, which ended April 6, the total expenses of the government reached the huge total of $9,000,000,000 approximately. This is not all actually expended by this country, however, as approximately half of it has gone in the form of loans to the allies and will be paid back ultimately if the allies are successful in the conduct of the war. A third of the nine billion has been spent in building up the army, a tenth of it has gone into improvement and extention of the naval service. The magnitude of these expenditures is readily understood when it is remembered that the average expense of running this government in peace times is only about three-quarters of one billion dollars.

### Complete Packing Probe.

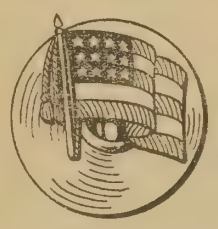
Attorney Francis J. Heney has returned from Chicago to California following the completion of the taking of evidence in the probe of the five big packing companies under the auspices of the federal trade commission. It is announced that Victor Murdock, a member of the commission, will compile the reports from the records that have been taken in the public hearings at various cities in the east. This report will be submitted to President Wilson upon its completion. The hearing was for the purpose of discovering, if possible, the truth of the charges that had been made that the big packing companies were in control of the stockyards and railroads with a view detrimental to the best interests of the live stock industry and the public at large.

### Don't Forget

That the information bureau of this paper at Washington, D. C., has all manners of opportunities to secure the answer to any question that you might wish to ask and that it also has a large number of pamphlets and booklets that are of much value to those who take the trouble to secure them. For instance, the United States public health service has prepared a special paper telling how to combat the common everyday cold which infests every community with the breaking up of winter. Also there is a booklet obtainable on war gardens and one on the preparation of war-winning foods, according to the Hoover program. These are only a few of the things that the information bureau of this paper at Washington, D. C., will be glad to supply you. When writing for any one of these merely inclose a two-cent stamp to pay the postage. Feel free at any time to write direct to Washington and ask any question in which you are interested or for any of the booklets that have been announced. Address Washington Farmer, Information Bureau, Washington, D. C.


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**Coat Lapel Button**



Just like illustration, only smaller. The perfect size for your coat lapel. A dandy American flag in red, white, blue and gold.

One of these flags will be given free to any one sending two one-year subscription orders to The Washington Farmer.

Your own subscription counts for one.

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**The Washington Farmer**

Review Bdg.
Spokane, Wash.

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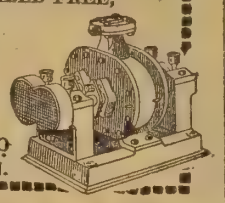

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which completely describes our line. We have a pump for every farm use. Buy from the manufacturer and save money.



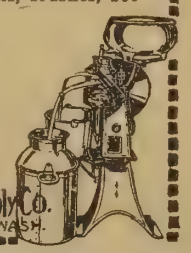
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SEATTLE, WASHINGTON.

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Northwest Creamery Supply Co.
306 SECOND AVE SEATTLE WASH.

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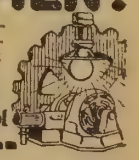
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All branches of engineering, gas engine, farm tractor, automobile courses; electrical engineering, mechanical drawing, etc. Write for complete catalog.



Seattle Engineering School
SEATTLE-WASHINGTON

**A fountain pen or a pencil are good things to always have handy, together with postal cards. Then you can write friends or relatives or answer advertisements while you think about it and not run the risk of forgetting.**

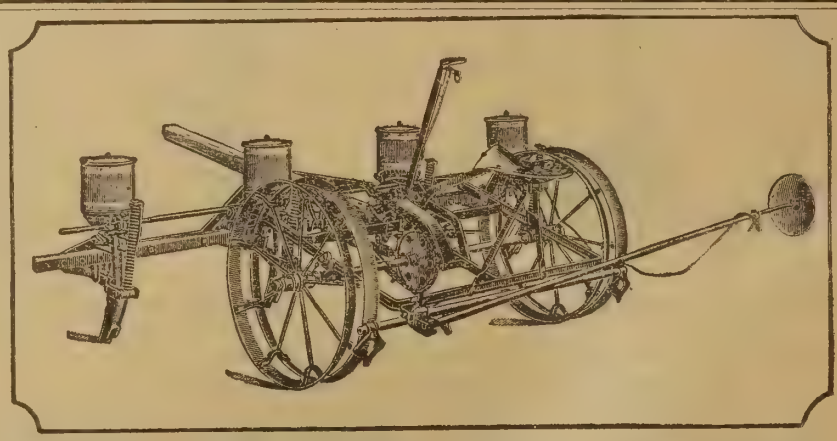
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**Moline Four-Row Bean Planter**

**Saves Time Planting Any Kind of Seed**

For the man who has large acreages to plant, not only of beans but any other seed as well, the Moline Four-Row Bean Planter is a great time saver. It does the work just as well as the ordinary two-row planter, and twice as fast.

Any kind, shape or variety of seed ranging in size from cane seed to lima beans can be planted in the best possible manner in the shortest time by the Moline Four-Row Bean Planter.

You have the choice of using either edge or flat drop plates. Each style has its advantages—both styles are regularly furnished.

Seeds of a rounded character—such as kaffir corn, milo maize, navy beans, cranberry beans, etc., are best handled by a round hole plate, while such seed as kidney beans, lima beans and field corn the edge drop plate with cells properly fitted is better adapted.

A uniform planting depth is maintained because each furrow opener is held to the ground independently of the others by spring pressure. Rows from 24 to 36 inches apart can be planted with the Moline Four-Row Bean Planter.

It is well constructed throughout, seed cans and furrow openers being supported on a heavy, square and very stiff steel pipe.

Seed cans are easily tipped to change plates or empty them of seed.

Steel marker is easily and quickly adjusted.

The Moline Four-Row Bean Planter will save you time this year. See your Moline dealer now, or write us for further information.

MOLINE LINE

*Corn Planters, Cotton Planters, Cultivators, Corn Binders, Grain Binders, Grain Drills, Harrows, Hay Loaders, Hay Rakes, Lime Sowers, Listers, Manure Spreaders, Mowers, Plows (chilled and steel), Reapers, Scales, Seeders, Stalk Cutters, Tractors, Farm Trucks, Wagons and Stephens Salient Six Automobiles.*

Address Department 60

MOLINE PLOW CO. MOLINE, ILLINOIS
MANUFACTURERS OF QUALITY FARM IMPLEMENTS SINCE 1865

In answering advertisements don't fail to mention this paper.

## FIVE DOLLARS IN THRIFT STAMPS FOR WOMEN OF THE FARM HOME

A First Prize of $3 and a Second Prize of $2.

These prizes are for the women and girls of the farm home which has

1. An automobile, or
2. A farm lighting system, or
3. A farm water system.

A first prize of $3 and a second prize of $2 in Thrift stamps will be given for the best article written from your own experience on either of the following:

Why you would not be without an automobile, or

Why you would not be without your farm home lighting system, or

Why you would not be without your farm home water system.

The contest will close May 1.

Write on one side of the paper and mail your article to The Editor of The Washington Farmer, Spokane, Wash.

## Specials for the Children This Week

The best and most valuable crop raised on the farms of the northwest is the boys and girls, but sometimes they do not get their fair share of consideration in the paper. Cattle and horse raisers, wheat growers and orchardists have special attention paid to their interests and it is now the children's turn. Therefore, more than the usual space is dedicated to them this week. On page 30 is a special story in addition to the regular serial story about the hunter boys. And then there are letters from the children themselves. Aunt Nellie is glad to get so many nice letters lately and hopes that every one who has written will write again and that a lot of others who have not written will do so. Besides the letters published in this issue, there is still a big pile on Aunt Nellie's desk that will be published as soon as space can be found, in the order in which they were received. They are from the following:

Ivan Graham, Geanie Amundson, Carl Allison Tubb, Blanche Hamilton, Loretta Owens, David LeRoy, Ina M. Stewart, Harold Skinner, Stella Davis, Elsie M. Ashmore, Emma Louis Mehus, Amanda Marie Johnsen, Grace Jones, Thelma Smith, Fern Daniels, Alice E. Johnson, Irene M. Larsen, Esther Bergman, Dorothy Bickel, Nina V. Anderson, Hattie Malone, Connie May, Elsie Hoglund, Willis Botsford, Levena Stone, Reta Cantrell, Ella Littlejohn, Elvin Littlejohn, Pearl Mathis, Auretta Barnes, Nellie Salvage, Effie Salvage, Emil White, Myrtle Lee, Kenneth Wallace, Hazel Defreece, Fatima O. Lowght, Hazel Saltmarsh, Florence Anderson, Lenore Fox, Bessie Charlotte McFarlane, Beulah Maud Walker, Beulah Violet Shaw, Mary Gustin, Ruth Walsh, Lilly Pederson, Wynona Tella, Ruby Warren, Virginia Gibson, Dick Engle, Vonda Boulden, Matie Burchett, Alice Pohlman, Julia Jacobson, Elna Mattson, Lucile Reinbolt, Thusnelda Kilian, Evis Erickson, Elizabeth Williams, Elvira Blyton, Violet Gray, Anna Thomson, Helen Schoenberg, Elsa Matson, Elva Nelson, Eva Friddy, Linda Anderson, Iris Billingar, Virginia Mae Rouse, Lena J. Hornibrook, Charlotte Utter, Leland Guffin, Delma Griffin, Gwen Baldwin, Rosie Wietz, Hector Mae Kinnon Davies, El Berta Cantwell, Roberta Keith, Ella Sophia Brown, Edith Mildred Tovis, Edith Tideo, Jennie Hay, Vesta Andersen, Victor Anderson, Benjamin Franklin.

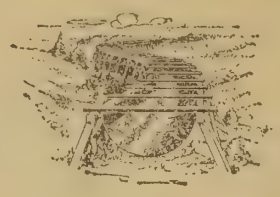
Merle Holman, Elizabeth Bowen, Maveria Green, Ellen Steen, Harriet Blyton, Gladys Norman, Bessie Cheyney, Clista Casey, Edna Mattson, Wilma Little, Leta Lane, Jennie Lane, Vera Baker, Sylvia Richardson, Ora Lynch, Brooks McCain, Lucile McKinney, Ludvig Peterson, Mabel Barr, Helen Barry, Ruth Bailey, Ruth Carlson, Orris May, Barbara Hofmeister, Dora Estella Mitchell, Marie Krom, Vera Elanora Garton, Karen Pederson, Edna Peterson, Maurine Reedy, Lorena Thomson, Earl Jenkin, Harry Thomas, Mildred Jean Riley, Henry Besel, George M. Brown, Minnie Meloy, Violet Georgia Waech, Frances Rena Patterson, Herbert L. Moore, Frankie Baldwin, Ida Shaw, Hilma Anderson, Gazel Elizabeth Rosenkranz, Leona Decker, Valetta Royalene McMurry, Thelma Peterson, Edna Requa, Ellen Johnson, Marie Ganguin, Lois Muzzall, Oliver Curtis, Margaret Dunning, Jessie Duffy, Marguerie Costello, Hilda Thompson, Freda Evelyn West, Marjorie Johnson, Effie Luddington, Dortha May McKenzie, Irene Alma Clark, Delia Geneva Johnsen, Helen Calkins, Hilda Knutson, Hope Ferguson, Olive Ervin, Roger Haythan Tarbert, Effie Borden, Iva R. Cook, Lewis F. Kime, Mazie Lea English, Eunice Pool, Rhoda Barden, Tracy Germont, Gerda Jensen, Cornelia Muyskens, Marjorie Starcher, Sarah Jensen, Graham Potter, Helen Huster, Jane Osborn, Thelma Mae Searle, Dorothy Palmer, Thelma Lois Green, Esther Dorn, Mary Kennett, Bessie Ross, Eva Fern McKenzie.

## Put Away the Pennies

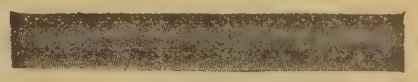
Elsewhere in this issue is printed the coupon enabling readers of this paper to secure thrift or war savings stamps by merely clipping the coupon and mailing it together with the money desired to be invested to the address as given. While every one who can should invest this week or next in a Liberty bond of the third issue, there are many who can not, but who can to their own advantage and to that of Uncle Sam as well put away a few pennies, nickles, dimes or quarters and lend them to their country by means of the war stamp investment.


# Irrigation Supplies

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ALL SIZES



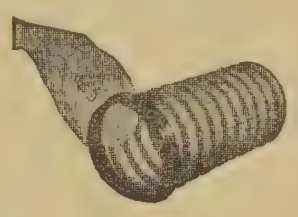
"ARMCO" Iron Pipe
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With Elbows, Y's and T's



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# How to keep your Ford engine running like new

Every car has different lubricating problems. In the Ford the special problem arises from the exclusive and ingenious construction by which the disc clutch and transmission gears are enclosed with the engine.

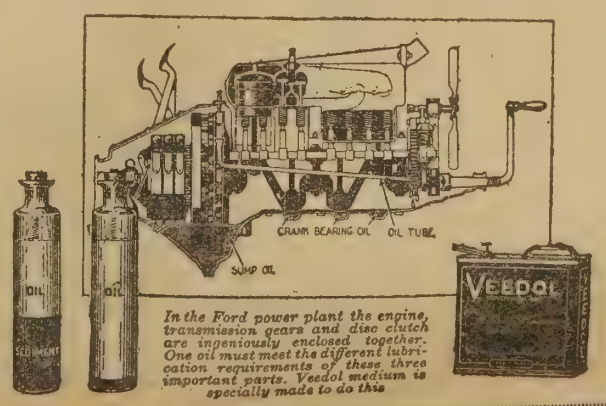
In other makes of cars, these three parts are separate, and the oiling requirements of each are met by a different lubricant.

In the Ford, one oil must lubricate all three of these parts—the engine, transmission gears and the disc clutch.



### Faulty lubrication causes 90% of trouble

A careful analysis of the causes for trouble in the Ford engine shows that improper lubrication is to blame for 90% of them. This is largely due to the sediment formed by ordinary oil which breaks down under the heat of the engine. This sediment crowds the oil with lubricating qualities away from points where it is most needed, causing friction and rapid wear.




*The famous Sediment Test, showing how Veedol reduces the formation of sediment under engine heat 86%. The left-hand bottle contains ordinary oil and the right-hand bottle Veedol, both taken after 500 miles of running*

*In the Ford power plant the engine, transmission gears and disc clutch are ingeniously enclosed together. One oil must meet the different lubrication requirements of these three important parts. Veedol medium is specially made to do this*

### The ideal lubricant for your Ford

Ford owners are rapidly learning that Veedol Medium is the ideal lubricant for their cars.

It is heavy enough for the engine and gears, yet light enough so that the clutch does not drag.

Ordinary oil evaporates rapidly under the heat of the engine. Ford owners get 25% to 50% more mileage per gallon with Veedol, because Veedol not only resists destruction by heat and minimizes the consequent formation of sediment, but also reduces evaporation loss to a negligible quantity.

### An 80-page book on lubrication for 10c

The most complete book ever published on automobile lubrication, written by a prominent engineer. Contains Veedol Lubrication Chart, showing correct grade of Veedol for every car, winter or summer. Send 10c for a copy. It may save you many dollars.

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# TOMMY TARBABY WALKS IN HIS SLEEP—HE JESS CAN'T HELP IT




# PUP IS NOT A BLOODHOUND; BUT HE KNOWS WHERE HE LIVES



# Trappers of the Ozarks



## The Adventures of Two Young Pioneers in the Wilds of Upper Louisiana, Now the State of Missouri.

By LEWIS B. MILLER

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**SUMMARY OF PRECEDING CHAPTERS.**

In September, 1811, two young men who lived near St. Louis, Ben Armstrong and Jodo Henderson, taking with them their two dogs and donkey Spunky, started on an all-winter's hunt in what was at that time unsettled region, where Indians held full sway, in the wilds of upper Louisiana, now the state of Missouri. After a perilous trip over old Indian trails and dangerous streams, they reached their destination — a salt spring close to the river Big Niangua, which Ben had visited before and from which they expected to secure salt for sale with their furs when they returned to civilization the following spring. Here they erected a rough cabin for their winter quarters close to the mouth of a large cave that was full of water and bats, and started their saltmaking and hunting. After exciting experiences with a buffalo herd and with a bear in a cave, they find their first fresh sign of Indians — moccasin tracks in the snow. And then, in the dead of night, a scouting party visited them preparatory to an attack. The attack followed soon, and would have resulted in the capture of the boys by the savages had not a violent earthquake frightened them away. It was only a short time, however, till they were in the hands of the savages, led away captives.

### CHAPTER XI.

### To Be Burned at the Stake.

The two prisoners gazed about them. Through the middle of the village, and up and down the valley ran a wide, open way, or street, with wigwams arranged in straight rows on both sides of it. Back of those, however, the other wigwams were scattered around, very irregularly, through the scattering woods. There appeared to be several hundred Indians in the village, by far the greater part squaws and children. Many of them swarmed around the returning warriors, and kept staring at the white captives and at the little mule.

When the excitement of the homecoming had subsided and the crowd were dispersing to their wigwams a warrior approached the captives and made signs for them to follow him. They complied, and their guide led them to a small wigwam between the street and the river. There he drew back a buffalo-robe door and pointed inside. They stooped down and entered. The buffalo-robe fell over the doorway again, and the captives were left alone. The only things in the wigwams were a roll of buffalo robes lying at one side and a small fire burning in the center.

"Well, here we are, in a hide-and-pole house of our own! Wonder what the red people expect to do with us, now that they've got us here?"

"Who knows, Jodo? If no other way, we can find out by waiting. Their main grievance seems to be that we've taken the liberty of hunting and trapping in the Osages' hunting grounds. That's a pretty serious offense in their eyes. But I hardly think they'll be very severe with us."

"They may not. But there's some uncertainty about that. And it's the uncertainty that worries."

Some time later, after night had come on, Ben said: "I wonder if we're being guarded." Then he sprang up, pushed open the door and looked out, first to the right and then to the left. And not in the least surprised was he to see two warriors standing, one on each side of the wigwam. The night was cold, and both had their faces almost concealed in their buffalo robes. At that the captive withdrew. Then he and Jodo sat by their fire and waited—waited to see what would happen.

At length the hide door was pushed aside slightly, and an armload of wood was dropped into the wigwam. They put some of the sticks on the fire and laid the others close by. By the time the fire had got to burning well the hide door moved aside again and a fat hand was thrust through the opening. In the hand were two pieces of uncooked meat. Jodo made haste to receive the meat, and the hand disappeared. They laid the slices on the coals, and when they were broiled raked them off and ate them. There was enough to satisfy their hunger.

While the captives were still eating the same or a similar hand was thrust in again, and Jodo received a gourd.

"What comes now?" demanded Ben.

The opening was in the end of the gourd's handle. Jodo smelled of the gourd and then shook it. "Something in here that rattles." He turned the gourd up and poured a little of its contents into his hand. "Parched corn!" he exclaimed, and held out the gourd to his fellow-prisoner.

"We'll try to save at least half of this," Ben remarked.

"What for?"

"To carry with us when we escape. There's a lot of strength in parched corn. We could travel a hundred miles on a gourd full of this and a little jerked venison."

Being thirsty after eating the dry corn, Jodo thrust his head out at the door and made signs of drinking. The guards motioned him back, and he supposed that no attention had been paid to his request. But a little later a gourd of water was reached in to him.

"Whatever the Osages propose to do with us, they're not going to starve us to death," Jodo remarked, after the two had finished eating and drinking.

Later, while the were sitting by the fire discussing the situation, their own blankets were thrust in to them. They now unrolled the buffalo robes, made their beds, and were soon asleep.

From force of habit both awoke early. And when various noises told them that the Indians were astir they, too, got up and dressed and put some wood on their fire. While they were doing this that same fat hand was thrust in, and they found themselves in possession of two slices of meat for their breakfast.

"Whose is that mysterious hand, Jodo? It's fat enough to belong to old Snappy Turkle."

"Yes, it's fat enough, but it's not his, I think. My guess is that it's a squaw's hand. But no matter whose it is, it's a very, very useful hand for us. I'm tempted to give it a squeeze to let the squaw know how much we appreciate her kind attentions."

"You'd better restrain your affectionate impulses. You might frighten the hand away. Then we'd have to go hungry."

After breakfast Jodo went to the door and thrust his head out. The guards were still there—the same or some others—and they promptly motioned him back. He seated himself near the fire again.

"Now we know how it feels to be in jail," he observed.

"Hope they won't keep us in too long. This would grow monotonous in the course of a few years. But for the present we shall have to cultivate patience. Wonder where Bose and Tinker are now."

"They're back at our cabin on the Big Niangua, I'd guess. And they're wondering why we don't come home. That is, if the Osages didn't pass by there when they followed us and burn the cabin down. In any case, I'm wondering if they'll starve before we get back to them."

"I don't think so. They're both good hunters. And there are many small animals around there, such as rabbits and squirrels and 'coons and 'possums. They may not keep as fat as when they were eating after our rifles and traps, but they stave off starvation."

"Yes. And even if they found only ashes where the cabin stood they can retreat into the big cave in the worst weather."

Now the hide door was thrust aside, and a big Indian entered the prison wigwam. It was Snapping Turtle.

"How!" greeted the fat chief, in a gruff but not unpleasant way.

"Howdy! Howdy, Snapping Turtle!" returned Ben. "Have a seat here by the fire."

Without a word the Indian seated himself on the ground. He remained silent, but sat and gazed stolidly at the blazing sticks.

"I'm glad you've come to see us. We want to talk with you."

"What fur you want to talk, Strong Arm?"

"We want to find out just how long you expect to keep us penned up here, and what you're going to do with us."

The Osage gazed into the fire for a full minute. "Maybe so, chop head off."

Ben waved the suggestion away. "Don't mention it, Snapping Turtle—don't mention such a thing. You'll hurt our feelings. As I told you before, that's no way to treat people. If you came down to our country we wouldn't chop your head off. We'd say, 'Sit up to the table and eat a bite, Snapping Turtle.' And when you got ready to come home we'd tell you goodby, and invite you to stop and see us again when you were passing."

"Big chief Osages gone way off, hunt buf'lo." He pointed toward the southwest. "When big chief come back, him say what do with white mans."

"I see. But when will that big chief of yours come back?"

Snapping Turtle shook his head. "Maybe so five day, maybe so ten day, maybe so twenty day, maybe so long time. No know."

"And are you going to keep us shut up here and under guard till he comes home from the hunt? What's the use of that? Don't you know we wouldn't dare run away without our guns and a good supply of powder and ball? If we did we should soon starve to death this time of year. You couldn't drive us off without our rifles, not even if you sicked the dogs on us."

The chief looked at Ben for a few moments, and then seemed impressed with the common sense of this suggestion.

"Me see what," he soon answered. "Maybe so Strong Arm and Dodo walk about, look at Osages' town, come back here, eat, sleep."

"Of course! That's the way to treat us. No use to guard us. We haven't done anything mean. Let us out, so that we can walk around and get acquainted with your people. The whites think the Osages are pretty good Indians. If you treat us nicely, we'll them they think right."

Snapping Turtle soon got up and went away. Perhaps he wanted to consult with some of the other Indians. But he came back later and called the captives out. He had already sent their guards away; and now he told them they would be permitted to wander about the village as much as they pleased, but must not venture out of sight of the village.

The captives expressed their thanks for the liberty given them. And after the Osage had gone they went for a stroll up and down that dividing street. The children and squaws stared, and sometimes the dogs barked at them, but nobody offered to harm them. When they returned it was noon, and they found a fat squaw, who had been good-looking when not so fat, waiting at the door of their wigwam. She had seated herself in the sunshine, and was waiting patiently. But she rose as the young white men drew near. She was dressed mostly in buckskin, but had a red blanket around her shoulders.

"Hello, here! Who's this?" exclaimed Ben.

"Me Watermelon," the squaw said, by way of introducing herself. She held out a small pot of stewed venison she had brought them.

"We're glad to know you, Mrs. Watermelon," Ben answered. "I'm wondering if it was you that have been bringing us all those things to eat—meat and parched corn and water. If it was, we want to thank you. We're——"

He stopped suddenly. For the blank look on the woman's face could only mean that she understood not a word of what he was saying. Further attempts to talk with her convinced the captives that she knew little or no English.

After she had gone they took the pot inside and made a hearty meal of her stewed meat. When she came with some uncooked elk meat for their supper they gave her back her pot.

That night the captives slept without any guard. And they felt not a little relieved at the change. During he next few days they wandered about the village as much as they pleased. Later they got to going a short distance beyond the village for wood for their fire. But even with that liberty both soon grew restless.

All the Osage men and boys that were in the village—most of them had gone with their head chief to the buffalo country—started out early every morning to hunt. Long accustomed to an active, busy life, Ben and Jodo were eager to go hunting also. The fat squaw, Watermelon, who had been appointed to look after their wants, was still supplying them with meat, raw when it was to be broiled, and in a pot, and sometimes cooked, when it was for stewing. She also kept their corn gourd filled with parched corn.

One day they stopped at Snapping Turtle's wigwam, and were invited inside. They were quick to notice that their rifles and other weapons were there, and also their pack saddle. After some conversation Ben said:

"Snapping Turtle, why don't you give us back our guns and let us go hunting? We'd rather kill our own meat."

"White mens git rifle, maybe so run away."

"But you can give us just a bullet or two apiece. How could we travel all that distance home unless we had plenty of powder and lead?"

Snapping Turtle considered the matter. He seemed to think favorably of the suggestion. "You wait. Me tell you some udder time," was his answer.

Early next morning he appeared at their wigwam with their rifles, their belts and their ammunition bags. But their pistols had been taken from their belts and the bullets from their ammunition pouches. Ben thanked him, and tried to get powder and lead enough for another load apiece. But the Indian refused.

So, very glad of this improvement, the captives set off across the country to hunt. Having a suspician that they were being followed and watched they tramped toward the west—almost the opposite direction from that of their cabin camp on the Big Niangua. Soon after they had started Ben said:

"I recollect hearing Daniel Boone tell how, when he was carried away into captivity by some northern Indians, and they let him go hunting with only two bullets, he saved some lead to run away with by cutting his bullets in half and shooting a half bullet at a deer. In that way he reached home all right."

"But these Osages don't give us a chance to do that. They hand us our guns already loaded, and don't trust us with any other ammunition."

"Maybe they'll treat us better next time if we do well today."

"Then we ought to lug home some meat if it's at all possible."

Knowing that game must be both scarce and wild near the village, they tramped straight ahead for a few miles before they tried to do any hunting. Finally they caught sight of a little flock of deer browsing not far away. Putting a thicket between themselves and the game, they approached noislessly, cautiously. When near enough they whispered together for a few moments, then took careful aim.

(Continued on the following page.)



A mysterious hand feeds the captives.

# Trappers of the Ozarks

.....BY.....
LEWIS B. MILLER

(Continued from the preceding page.)

Ben's target fell dead almost as his gun cracked. Jodo's animal ran a hundred yards, then fell as suddenly. Both hunters were much elated over their success.

With their knives they opened the animals and threw away the entrails, to lighten them. Then each shouldered his deer and started for the village.

The distance was several miles, and the burdens grew heavy before the long tramp was ended. They passed through the village the longest way, and were careful to go but a few steps from Snapping Turtle's wigwam. Scarcely had they thrown their game down at the door of their own lodge when Watermelon, the fat squaw, came, promptly took possession of it, and began to remove the skins.

They tried by signs to make her understand that they could now provide for themselves and cook for themselves. But she went on with her work, finally hanging the meat on a cord stretched between two limbs of a nearby tree. They gave her half of one deer.

Snapping Turtle came over soon after the meat was hung up, and seemed well pleased with their success. Most of the Indian hunters had come in without any meat.

Next morning, when the two went to him for more ammunition, he gave them a bullet apiece and let them pour from one of their own powder horns powder enough to load their guns.

"But, Snapping Turtle, we ought to have at least one more bullet apiece, and the powder to blow it out."

"Strong Arm, me give you nudder ball nudder day. You go hunt now, fetch back deer."

"But what if we only wounded a deer, and it was getting away from us? Or what if we wounded a bear, and he was coming straight at us?"

"You got knife; you got tomahawk." He pointed to their belts.

"Yes. And you've got a knife and a tomahawk, but you don't go hunting with one arrow."

Finally the chief gave each of them his own pistol, and they set off, well pleased.

"No run away!" the Indian called after them.

"Run away! It seems to me you ought to be glad to get rid of us. What good are we here?"

"White mans run away, maybe so chop head off, maybe so roast 'um 'live."

"Now, there you go again, Snapping Turtle! And worse than ever this time! You oughtn't to talk like that. It's not nice of you. And while I thing of it, do you know what has become of our little mule? We haven't seen him of heard him for two or three days."

The savage frowned disgustedly. "Mule no good! Much kick. Heap much kick up. Run away. Heap no good. Let um go."

The hunters made no reply, but set off on their hunt.

"That means that little Spunky got disgusted with life among the Indians and has struck out for St. Louis. I wish we could do the same," Jodo remarked.

"We will—we'll do that very thing some of these fine days. This is not a good time for either mules or men to attempt such a trip. Spunky may make it through by browsing industriously. But the folks can count his ribs when he gets there. I wish now we'd let him go home last fall. And if I'd known he was going to start when he did I'd have tried to send the folks a note by him."

"Little good your trying would have done. You left Rachel's vial back there in the cliff cave, I recollect. If you'd tied a note on 'im he'd have raked it off in the brush or washed it off in some river."

A light snow had fallen the night before, and flakes were still falling. All day long the two white hunters tramped, without finding any game. Late in the day they came upon the trail of three deer. Reluctant to go back without any meat, they followed the trail as long as they could see the tracks. At last, disappointed, they turned and started for the Osage village.

But they had tramped far and wound about not a little, and the night soon grew so dark that they doubted if they could find their way back. So, having their flints and steels and some tinder in their ammunition pouches, they decided to start a fire and not try to find the village till morning.

In a sheltered spot among some bushes, and by a log, they kindled their fire. And they sat by it all night, with their backs against trees. Sitting up, they dozed and napped fitfully. But just before dawn they both fell into a sound sleep.

When they awoke day was at hand, and they were surrounded by Osage warriors. Now their hands were tied behind them and they were promptly started toward the village. Both tried to protest, but the warriors could not understand. So there was nothing to do but to submit.

Arriving at the village, they were marched on to their own lodge and pushed inside. Then their feet were tied together and a guard was left on the outside. They kept calling out that they wanted to see Snapping Turtle, and at last the chief thrust his head in at the door.

"What make Strong Arm run away? What make Dodo run away? No good run away. Now maybe so chop head off. Maybe so roast um 'live."

"But we didn't run away, chief," protested Ben, indignantly. "We only stopped and kindled a fire to——"

But the head had disappeared and Snapping Turtle was gone, without even waiting to hear their explanation.

The tightly-bound captives lay wondering what would happen next. And they had not long to wonder. The guards came in, and after untying their feet, marched them out and through the village, amid the hoots and gibes of the squaws and children that followed. Soon they came to where most of the village had assembled.

The guards held each prisoner, one by each arm. Jodo was stopped back in the crowd, but Ben was marched on to an open spot in the center of the crowd. His back was turned to the post and his hands were drawn back and tied together behind it. Then he and the post were wrapped round and round with many turns of green buffalo-hide rope. Not till the captive was unable to move either hand or foot did the Indians cease to wind the rope.

Jodo, held firmly by his two guard, and with his own hands still bound together behind him, stood staring at those savage preparations in half-stupefied horror. And when numerous squaws and boys came with armfuls of brush and dry wood, and began to pile the fuel around Ben, Jodo could scarcely keep from crying out in his terror.

Not till Ben stood waist-deep in the fagots did the squaws and boys cease their gruesome task. Then other squaws came with dry grass and blazing firebrands, and applied them at the bottom of the pile of fagots. Quickly smoke was boiling up in great clouds, as the fire seized upon the grass and the dry brush.

(To be continued.)

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.....

## Fish Oils for Motor Boats.

According to "Politiken" of Copenhagen experiments have been made with motors for fishing boats to determine the practicability of using fish oils for operating motors. It is said that this has proved a success, and that it may be possible for the fishermen who now have boats equipped with kerosene motors to make some slight changes which will enable them to operate with fish oils. It is even proposed that the fishermen may make their own cod-liver oil while on the sea for use in their motors.

# The Tractor Replaces Work Horses



Within the past weeks letters have been received from 29 tractor owners in various parts of Washington, Oregon and Idaho. They show that the number of horses replaced by the tractor on these 29 farms averages 10. This is a pretty high average; but on some large ranches where extensive wheat growing is practiced, as high as 45 horses have been replaced with one big tractor. Many tractor owners say that their machines are proving more economical than horses on farms of from 120 acres up to 2500 acres.

Albert S. Roberts of The Dalles, Ore., says that the large 75 horsepower tractor he is using on his 2400-acre farm has taken the place of 40 to 45 head of horses and enabled him to reduce his help to the extent of six to eight men. Mr. Roberts estimates that he can plow at an average cost per acre of 70 cents—this figure taking care of distillate, lubricating oil, grease, repairs and upkeep.

"The advantage of the tractor," Mr. Roberts says, "is that it is 'multum in parvo',—much in little. Its power is wonderful and in my own case, its care and upkeep light. We feel that our great saving is in man power—which means a great deal these days of scarcity of men, also when feed is so high for teams. The tractor will stand crowding to the maximum load and speed which horses can not endure. With our tractor, my two sons did the work of about six men and 40 to 45 horses. We pulled 12 14-inch bottoms about nine inches deep and a harrow behind the whole. The harrow is a great conserver of moisture when following right afte rthe plow. Horses can't stand deep plowing."

"We have been farming with a tractor nearly two years," reports James Feeley of Rathdrum, Idaho. "We have 440 acres of rolling land and are doing with tthe tractor practically all the work on the farm that we formerly did with horses. Our tractor displaced eight horses and we can plow at least two more acres per day than we found it possible to do with horses. In that it does more work, better work and does it at a decided saving over horses, I have found the tractor in my own case decidedly superior to the horse."

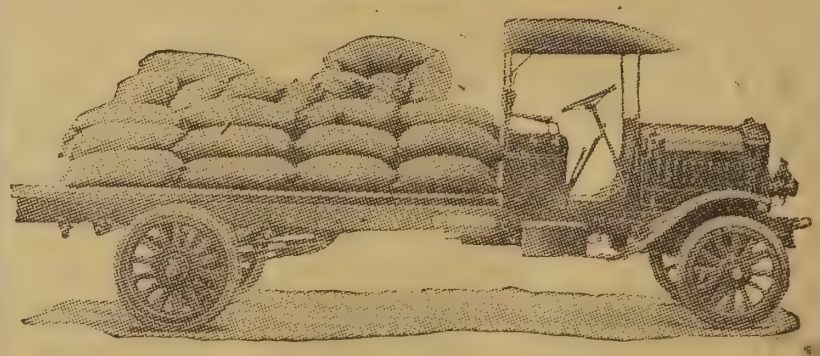
## Privation and Economy.

The bread ration of the French soldiers has been cut from 25 ounces to 21 ounces, the civilian bread card allows 10 ounces per day, which is about one-third of the average bread consumption of the French peasant or workman. The manufacture of crackers and pastry has been absolutely prohibited. Consumption of sugar has been reduced 49 per cent and of rice 61 per cent. The import of dried vegetables has been reduced 52 per cent and of fats 48 per cent.

### America Is Saving.

That the American war savings drive is already running ahead of the English campaign, in volume of weekly treasury receipts, is shown by comparative figures made public by the national war savings committee.

**Velie**



**A Velie Truck Is a Paying Investment Twelve Months in the Year for the Farmer, Stockman and Fruit Grower**

**Velie Trucks make money** for you on the farm by their economy of operation, low upkeep cost and adaptability to all hauling conditions. There is a Velie truck for every purpose on the farm. It is our business to figure the usefulness of our trucks and how they can make you money.

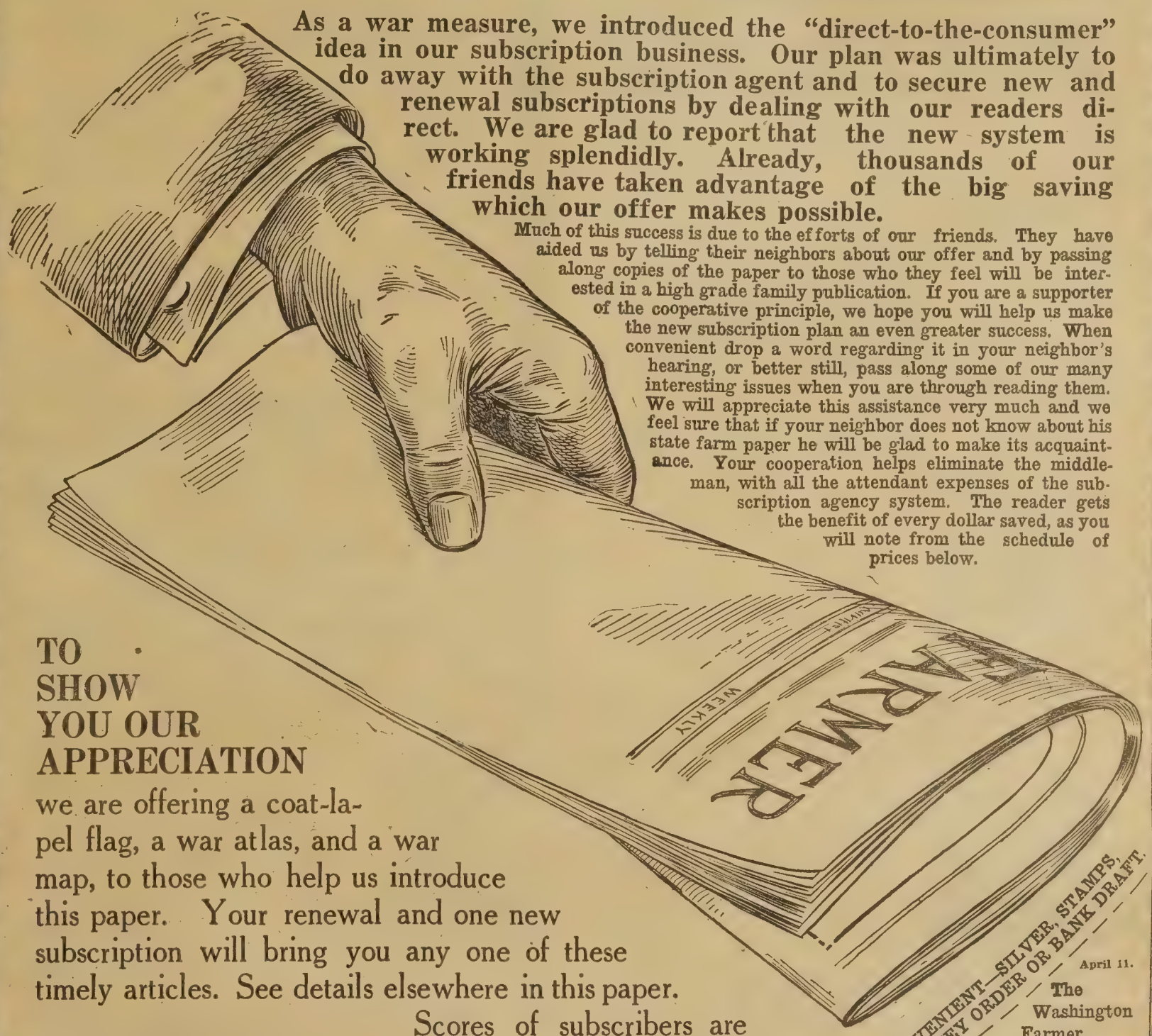
It doesn't cost you anything to investigate, but it may mean money in your pocket. Write today to the nearest distributor for a Velie catalog.

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Pine St. and Boren Ave.
SEATTLE, WASH.

**Interstate Auto Co.**
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# PLEASE PASS IT ALONG

*SCORES OF OUR FRIENDS ACTED ON OUR SUGGESTION TO PASS THEIR PAPER ON TO A NEIGHBOR WHEN THROUGH READING IT. WE TRUST THAT MANY MORE WILL DO THE SAME WITH THIS ISSUE; AND CALL ATTENTION TO OUR MONEY-SAVING OFFER*




**As a war measure, we introduced the "direct-to-the-consumer" idea in our subscription business. Our plan was ultimately to do away with the subscription agent and to secure new and renewal subscriptions by dealing with our readers direct. We are glad to report that the new system is working splendidly. Already, thousands of our friends have taken advantage of the big saving which our offer makes possible.**

Much of this success is due to the efforts of our friends. They have aided us by telling their neighbors about our offer and by passing along copies of the paper to those who they feel will be interested in a high grade family publication. If you are a supporter of the cooperative principle, we hope you will help us make the new subscription plan an even greater success. When convenient drop a word regarding it in your neighbor's hearing, or better still, pass along some of our many interesting issues when you are through reading them. We will appreciate this assistance very much and we feel sure that if your neighbor does not know about his state farm paper he will be glad to make its acquaintance. Your cooperation helps eliminate the middleman, with all the attendant expenses of the subscription agency system. The reader gets the benefit of every dollar saved, as you will note from the schedule of prices below.

**TO SHOW YOU OUR APPRECIATION**

we are offering a coat-lapel flag, a war atlas, and a war map, to those who help us introduce this paper. Your renewal and one new subscription will bring you any one of these timely articles. See details elsewhere in this paper.

Scores of subscribers are writing us how much they like this paper, and we feel sure everyone of your neighbors will want it when they once make its acquaintance.

## A Real Saving

***Following Rates Now in Effect for Subscriptions to The Washington Farmer***

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YOUR REMITTANCE MAY BE IN ANY FORM MOST CONVENIENT—SILVER, STAMPS, PERSONAL CHECK, POSTAL MONEY ORDER, EXPRESS MONEY ORDER OR BANK DRAFT.

April 11.

The Washington Farmer,
Review Bldg.,
Spokane, Wash.

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If you are already paid in advance your subscription will be set forward from the date to which you are paid.

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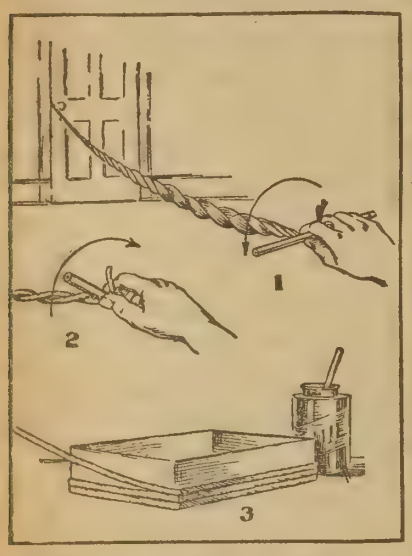
# Handicraft For Girls

**By Dorothy Perkins**

(Copyright by A. Neely Hall.)

### Made With Paper Rope.

There is a brand new idea for making pretty baskets, trays and boxes, and I am going to tell you all about it because the work is very easy to do and you will find it a great deal of fun. All that you need are some cardboard boxes for the foundations of the articles, crepe paper, out of which




to twist rope strands for covering material, glue and some light wire for handles. You can buy the crepe paper at almost any stationery store. In fact strands of paper rope are sold ready twisted, but you can twist them just as well yourself and have the fun of doing it, saving money besides. Buy a roll of crepe paper of any color you may select. A chocolate brown is pretty for the articles here described.

Open the roll of crepe paper and cut the entire length into eight strips of equal width. That will make strips about two and a half inches wide. To prepare the rope strands, first take a single strip, pinch one end in a door jamb and make a loop in the opposite end through which to slip a pencil. Then twist the pencil from right to left as indicated in Fig. 1, pulling firmly as you twist to make the twists even and tight. When the strip has been tightly twisted from end to end, remove it from the door, and twist a second strip in a like manner. Then placing an end of each of the two twisted strips together, pinch them in the door jamb, slip a pencil in loops made in the opposite ends, and twist the two strands together, twisting from left to right as indicated in Fig. 2. Instead of pinching one end of the strips in the door jamb, two persons may hold the ends and do the twisting. The work can in this way be done much quicker.

### Serving Tray.

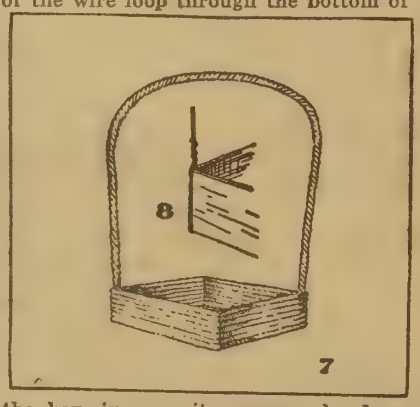
The cover to a large sized cardboard box—one having a narrow rim—is needed for the serving tray shown in Fig. 4. It requires a pair of handles, and these are made of pieces of light wire bent into loops, with the ends pierced through the ends of the rim of the box cover, bent over and twisted as shown in Fig. 5. With the handles in place, wrap them with a piece of crepe paper and then with the paper rope.

Lap and paste a strip of crepe paper over the edge of the box to conceal it. Then coat the outside surface of the rim with glue, and starting at the bottom wrap a strand of the paper rope around and around the box, pushing each row of the rope close against the preceding row (Fig 3). When the top of the rim has been reached, coat the inside surface of the rim with blue, run the rope over the rim and wind it around the inside; then coat the inside of the bottom with glue and wind the strand of rope around and around, working in from the outside rim until the center is reached. Cover the outside of the bottom in the same way, and the tray will be finished. Nothing could be simpler than this work of glueing the rope strands in place.




### Paper Covered Basket.

Select a small square cardboard box for the little basket shown in Fig. 7. Then, first of all, make its long handle out of a piece of wire, stick the ends of the wire loop through the bottom of the box, in opposite corners, bend up over the outside of the box, and twist as shown in Fig 8. Wrap the wire with a piece of crepe paper, then with the paper rope, and when the handle has been completed cover the tray inside and out with the rope, winding it around the surfaces in the manner described for covering the serving tray.




**Radium in Dew.**

An Italian university professor says he has found radium in ordinary dew.

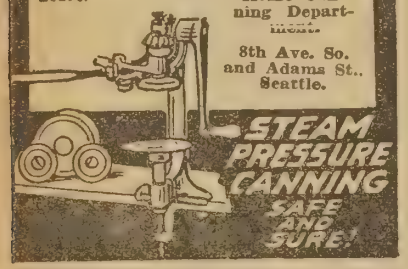

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We include instructions and a $2 book of recipes. Write for free literature.

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After a Hard Day's Work—

WITH the chores done, the stock 'tended to, everything ship-shape and air-tight for the night—

It's pretty nice to settle down to supper with a steaming cup of Ghirardelli's at your elbow. Pretty nice and warm and comforting!

And in the morning—up early (what with help so scarce!) and a hundred and one things to do—it's right comforting to know that Ghirardelli's will be there at the breakfast table to greet you.

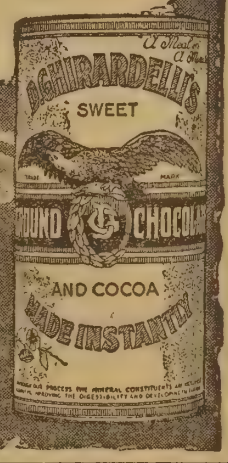
A delicious, sustaining food-beverage—drink it every day for health and economy.

*In ½ lb., 1 lb. and 3 lb. cans; a tablespoonful—one cent's worth—makes a cup.*

D. GHIRARDELLI CO.

Since 1852 San Francisco

Ghirardelli's Ground Chocolate






"Take a pencil and figure what a third of your coffee bill would total—for just one month. Wouldn't it be worth saving? Direct dealing will do it."—John F. Janssen.

Coffee Costs a Third Less When Uncle Sam Delivers

Yes, Uncle Sam's parcel post will help cut the price of your foods!

You know that you are paying too much for your coffee. But remember this: **What your coffee costs you depends upon the number of men who handle it**—for they each take a profit.

When it comes through the mail right from Janssen, the importer, you keep those profits in your own purse. I am making you a special offer to show how large this saving really is.

Read My Offer on Coffee

**10** pounds Extra Choice, a perfectly delicious blend of high-grown coffees—better than the most, and as good as the best 45-cent coffee on the market. **$3.30**

See How Direct Dealing Saves You Money.

For two years I have unreservedly guaranteed the high quality and safe delivery of this coffee, and have never received a single order back.

I PAY THE POSTAGE

The price includes parcel post to any place within 300 miles of Seattle.

NOTICE THE GUARANTEE.

Your money will be quickly refunded if you are not absolutely satisfied in every respect with the Extra Choice Coffee. The goods are securely packed, and safe delivery is guaranteed.

UNITED TEA AND COFFEE STORES
1003 Western Avenue, Seattle.
JOHN F. JANSSEN, Manager.

A BIG STOCK TO SUIT YOUR TASTE.

All at a saving, because direct to you.

No matter what your preference in the line of tea, coffee, chocolate or cocoa, I am sure I can satisfy you. Write for free price list showing our complete line.

Note the heavy cloth bag in which the coffee is packed. The material may be used for toweling—another saving, even if a small one.




To Save a Third Fill In This Blank

UNITED TEA AND COFFEE STORES,
SEATTLE, WASH.

Please send me by return mail 10 pounds of your "Extra Choice" guaranteed coffee. Here is check, money order (cross out one) for $3.30. Ground—? for percolator—? coffee pot—? drip bag—? (put X in proper space.)

Name .....

Address .....

W4

# IMPORTANT WAR NEWS

Battles of a magnitude hitherto unknown in the history of the world are being fought on the battle front in France. Every week new developments of the utmost importance are recorded. It is certain that the American army will play an important part in the big campaigns of spring and summer. You and your family will want to keep in close touch with what is happening at the front, and will also want to learn of what is taking place in our own country. Subscribe for

## *The Twice-a-Week Spokesman-Review*

This is a splendid semi-weekly home newspaper which brings you every Tuesday and Friday a complete, accurate, condensed review of local, national and word events. It gives you a reliable narrative of history in the making. Being a member of the Associated Press, the important happenings are flashed to it instantly from every capital and village, and from every far-flung battle line.

We are very glad to be in a position to offer THE TWICE-A-WEEK SPOKESMAN-REVIEW at a big saving when taken in combination with THE WASHINGTON FARMER. It is a paper especially appropriate for our subscribers because it is a paper primarily designed for busy readers.

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These are days of high and rapidly rising costs in the publishing business. Clubbing offers are rare. This fact makes the clubbing proposition of The Twice-a-Week Spokesman-Review with your state farm paper especially noteworthy. Our advice is not to delay but to accept this liberal offer at once.

**Address orders to**

# The Washington Farmer

**Review Bldg., Spokane, Wash.**

## ORDER BLANK

April 11

**THE WASHINGTON FARMER, Spokane, Washington.**

Gentlemen:

I desire to take advantage of your special clubbing offer. Enclosed is $1 in full payment for one year's subscription to The Twice-a-Week Spokesman-Review and three years' subscription to THE WASHINGTON FARMER.

**In Canada add 1 cent per copy for extra Postage.**

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# Patterns

2406—Girls' dress. Cut in five sizes: 6, 8, 10, 12 and 14 years. Size 12 requires 3 1-4 yards of 44-inch material. Price, 10 cents.

2397—Girls' dress. Cut in five sizes: 2, 4, 6, 8 and 10 years. Size 6 requires 3 1-8 yards of 36-inch material. Price, 10 cents.

2416—Child's set of short clothes. Cut in five sizes: 6 months, 1 year, 2, 3 and 4 years. The dress will require 2 yards of 36-inch material. The petticoat 1 5-8 yards of 27 or 36 inch material. The drawers 1 1-4 yards of 27 or 36 inch material, for a 3-year size. Price, 10 cents.

2403-2412—A splendid middy suit for misses and small women. Blouse, 2403, and skirt, 2412, are both cut in three sizes: 16, 18 and 20 years. Size 16 will require 6 3-4 yards of 36-inch material. The skirt measures 1 3-4 yards at the foot. Two separate patterns, 10 cents for each pattern.

2392-2400—Ladies' costume. Waist 2392 cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure.




Please fill in this order and mail with remittance to:
PATTERN DEPT., PACIFIC NORTHWEST FARM TRIO, Spokane, Wash.

Enclosed find.....cents for which send me the following:

Pattern No.....Size..... Pattern No..... Size.....

Pattern No.....Size..... Pattern No..... Size.....

Name .....

Postoffice ..... State .....

R. F. D. No.....Box No.....Street No.....
Be sure to give the pattern number and the correct size.

Skirt 2400 is cut in seven sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. The entire dress will require eight and five-eighths yards of 36-inch material for a medium size. The skirt portion measures about one and three-fourths yard at the foot. Two separate patterns, 10 cents for each pattern.

2229-2228—Dress for business or home wear. Waist 2229 cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 2228 cut in seven sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. A medium size will require six and seven-eighths yards of one material, 36 inches wide. The skirt measures two and one-half yards at the foot. Two separate patterns, 10 cents for each pattern.

1673—Girls' middy dress, with skirt attached to an underwaist. Cut in five sizes: 4, 6, 8, 10 and 12 years. It requires four and one-eighth yards of 40-inch material for an 8-year size. Price, 10 cents.

2241—Lady's house dress. Cut in 7 sizes: 34, 36, 38, 4$, 42 and 44 inches bust measure. Size 36 requires 5 5-8 yards of 44-inch material. The skirt measures about 2 5-8 yards at the foot. Price, 10 cents.

1832—Lady's shirt waist. Cut in 6 sizes: 34, 3n, 38, 40, 42 and 44 inches bust measure. It requires 3 yards of 44-inch material for a 36-inch size. Price, 10 cents.

2387—Lady's apron. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 6 1-2 yards or 36-inch material. Price, 10 cents.

2395—Lady's night dress. Cut in 4 sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. Size medium requires 5 5-8 yards of 27-inch material. Price, 10 cents.

2243—Lady's skirt, with or without yoke. Cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. It requires 3 3-8 yards of 44-inch material for a 24-inch size. Skirt measures 2 1-4 yards at the foot. Price, 10 cents.

# Patriotism

## Think, Talk, Act and Pray for It

By ALICE W. BARLAND.

Dear Sisters of the Family Circle: I find myself wondering why there is so much indifference among many, concerning war questions. I have decided it is a lack of realization of the great importance of all of us working together. This is everybody's war and every one should keep that fact in mind constantly and it is the duty of those who have a full realization of it to keep the rest remembering.

My sisters, how much do you know about what is taking place "over there?" I don't like to dwell upon the awful atrocities taking place on the other side, but it does seem that if every American fully understood what we are face to face with, this easy-going indifference would cease over night.

Listen while I tell you of what has happened to a young farmer boy who lived with his people not 40 miles from where I am sitting. This young fellow was among the first to go to France and has been taken prisoner by the Germans. A few weeks ago his parents sent him a watch. Just recently they had a letter from him, which, of course, had been censored. He said he was well and comfortable, was receiving good treatment as a prisoner of war. He said he was returning the watch as he had a wrist watch and could not use any other kind.

In the course of time the watch reached the family and as the soldier brother suggested, it was given to a young brother. The watch would not run so was taken to a jeweler for repairs. Wedged back inside the works the jeweler found a tiny piece of paper with printing so fine he read it under a magnifying glass, and here is what was printed: "I don't think I can live through this, but if I do I shall never return to you. They have cut off both my ears and my nose."

This is one, just one, instance of the heartless, worse than barbarous treatment dealt out by the world's great enemy. I could multiply them by hundreds. It seems to me I can not bear these things. Do we want these monsters across the sea to invate our country and make us bow the knee to such a government?

It seems to me I am not making my purpose clear in this letter, yet I very much desire to do so. It is, first, that every doubt be banished that this is our war, that it is a life or death struggle for the freedom of ourselves and our children from the yoke of Prussianism, which a man mad with greed for power, would saddle on the world Do you say the struggle is so far away that it will never reach our shores? Don't you believe it. That man over in Germany, crazy for power, and the glory of possession, has four sons and he plans a monarchy for each, reserving one for himself.

Would you like to see one of the kaiser's sons in the White House at Washington? When Germany conquered Belgium she needed people to till her land and work in her factories, so she drove those Belgians into Germany and made them work for her. Women who had never been trained to work were put into the fields and at the point of a bayonet were forced to dig and slave at work they were not fitted to perform and about which they knew nothing. Germany did not hate Belgium, yet see what she did to her, so small and unimportant. But Germany does hate us, with a great jealous hatred. We are so big, so wonderful in resources, she hates us and she covets our country. She has trained her army thoroughly, she has laid her plans carefully. Should we stand back, and say it is not our quarrel and leave the allies to fight alone against such odds, it would not be long until every barrier would be wiped out and we would be left to fight Germany alone and not only her, but all those whom she would conquer and force to fight with her and against us. This is not an impossibility at all. It is something we should face squarely. I have such faith in the American people that I know every one will pull together, when they fully understand. Let us not waste time. I would make the purpose of this letter revolve around one central idea, namely: Grasp beyond question, the necessity for standing by the government to the letter, in every request made. When we realize the necessity we will act.

Use the war flours, save on fats, save on sugar, buy war stamps, buy Liberty bonds—do it as if your very life and liberty depended upon it for they do, they surely do. You are all good women and will line up for victory I am sure. Pray for patriotism, think it, talk it, act it! All of us for the U. S.!

### Chinese Canals.

At what period the Chinese began to dig canals, there is no authentic record to prove. Sometimes it seems as if these remarkable people must always have had canals and other works, so long have they been familiar to them and so well established have they been as a part of the country as the men from the Occident first visited it. One thinks of the grand canal of China and the great wall of China together, although, of course, they have nothing whatever to do with each other, except that they are both ancient and remarkable works of the Chinese people.

### Ours a Splendid Burden.

"Ours is the splendid burden of feeding the world. There is no magic way of making food win the war. It can be done but one way; the way of voluntary and eager resolution and action of the whole people in every shop and every kitchen, and at every table in the land."

### Kitchen Walls.

Kitchen walls should be painted so that they may be wiped with a damp cloth, making cleanliness possible without great demand on strength and without the disarrangement caused by whitewashing or calcimining.





Field Seeds




Sweet clover, white and yellow blossom perennial, Grimm Alfalfa, Dwarf Essex Rape, Sand Vetches, Millets, Clovers and Grasses.

The Inland Seed Co., SPOKANE, WASH.

# Foods for Children

"A useful body and an alert mind are largely the factors of the problem of proper feeding. The mother who wants to make the best citizen out of her child should feed it properly," says A. Grace Johnson in a bulletin issued by the Oregon Agricultural college.

In order to do this she should know what kind of food to feed, how much to feed, and how often to feed. Children need more food in proportion to their size than adults, and it is therefore wise to give more than three meals a day; on the other hand, food must not be given so often that the stomach will have no time to rest. This can be avoided if children are fed at the same hour every day. The digestive organs of children are not strong enough to care for the hearty foods of adults; therefore, their food should not be so strong.

Milk is an important form of food in the child's diet up to the 10th or 12th year, and should be supplied at any cost. A quart a day should be provided for each child if it is at all possible.

It is important that children be taught the chewing habit. For this purpose crusts of bread and crisp crackers are introduced when the child has several teeth. Cereals, preferably from whole grains, should be a part of every day's food. Long cooking (three or four hours) is necessary for breakfast cereals. They should be served with top milk, and no sugar. The drinking of a liberal amount of water is necessary to the health of the child. Several glasses a day should be taken, preferably between meals, for if water is taken during meals the food is "washed down" before being sufficiently chewed. Candy, always the purest, or loaf sugar, ay be fed sparingly at meals, but never between meals, for that spoils the natural appetite.

Soft cooked (never fried) eggs should always be a part of the child's diet. Serving eggs in custards or soups gives variety. One egg a day is sufficient for the child. Since fruits and fresh vegetables are rich in minerals, so important in bone and muscle building, they should be fed to children. For the younger children, begin with the mild-flavored vegetables, well cooked and rubbed through a sieve. Orange juice and prune pulp are the most desirable fruits. Any mild, fresh fruit in perfect condition may be used for the older children. The sweet fruits should be cooked and served without sugar.

Provide plenty of bread and butter. The milk and eggs given to younger children take the place of some meat. After the age of 8 years children may be fed more liberally of meats with little fat, such as broiled beefsteak, stewed chicken, baked haddock, halibut or cod, roast beef or mutton.

The following foods should be avoided with children until after the 10th year: Ham, bacon, sausage, pork, fried food of any kind, hot bread, fresh rolls, pastry, all rich cakes, sirups, preserves, nuts, tea, coffee, lemonade, soda water, raw vegetables, such as cucumbers, onions, radishes, celery, and the following cooked vegetables: Corn, cabbage and lima beans.

We must remember that learning to eat the right kind of food is one of the most important parts of a child's education. The giving of this education rests upon the parents, who must therefore train the child to accept the fact that his food is different in kind from that of adults, and that, though he eats at the family table, he can not taste everything that is offered as food for the family. All bad food habits are due to the lack of knowledge or indulgence of the parents, and not to the inherited tastes of the child.

## THE OTHER FELLOW.

### His Acts Do Not Concern You.

Here is an extract taken from a letter from A. G. Avery of the law enforcement division of the food administration to Frank W. Guilbert, Spokane county food administrator:

"The people who are trying to split hairs with the food administration and who pride themselves on getting the best of it (as has been done) should blush, not exult, at their success in preventing us from sending food to the soldiers who are trying to protect them. Instead of demanding, in this heart-breaking time, every insignificant right and privilege that was accorded them before the war, they should every night, before they sleep, humbly and on bended knees thank God that they do not have to lie in a shell-swept trench with Flanders mud for a pillow. They should thank God that their morning call will not be at 5 o'clock to 'go over the top,' but to peace, comfort, a loving family and kind friends. If it is possible by speech or pen to awaken these people from their smug, self-satisfied sense of security, from their assurance that they are doing their full duty, do so.

"There is another class with which you say you may experience some trouble. I refer to those people who are so much concerned about what the 'other fellow' is doing that they lose sight of the real fellow concerned. A man of this class will say that he is very patriotic, has subscribed to the Red Cross fund, for Liberty bonds, and has done other commendable things, but he insists 'My neighbor does not adhere to the food regulations and you can not expect me to do so,' or a merchant of this class may say, 'I will follow the food regulations if my competitor does, but you can not expect me to if he does not.'

"People of this character fail utterly in their attempt to measure their so-called sacrifices. They look only at their neighbor or competitor when they should look at the men—aye boys—who have offered all to stand between them and defeat; who are giving up their lives so that these people may live in peace."

## Foods for Old People.

"As people grow older there are unavoidable changes in the circulatory and digestive organs of the body," says A. Grace Johnson, in a bulletin issued by the Oregon Agricultural college. Absorption of digested foods is less active, there is no building of muscle as in children, there is usually less bodily activity and at the same time the power to eliminate body waste is much lessened. For the above reasons the food of the aged should be restricted.

No rules can be given which can be followed in every case, for the reason that the changes incident to old age may vary greatly in different individuals. The following suggestions, however, should be the guiding principles in feeding the aged:

1. Diminish the amount of food eaten.
2. Use food in small quantities at regular intervals.
3. All food should be simple and easy of digestion.
4. The amount of muscle-building foods should be very materially decreased.


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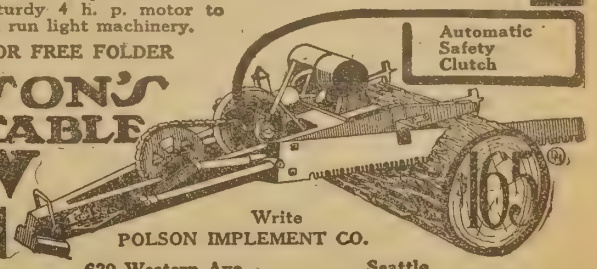
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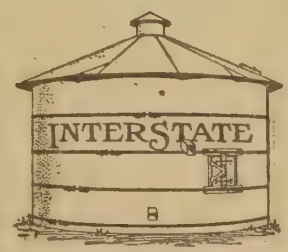



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# The Old Bent Tree

## *A Story for the Young Folks at Home*

Once cpon a time, in what was then the far west, there lived in the country a little flock of girls so nearly of an age and size that they were like the steps in a stair, each one just about such a height taller than the next younger. There were four—Nanny, the rosy-cheeked, being the eldest, and Jane, the little pale-face, the next. Then came Dumpling (so called because she was as round as a ball every way), and Dot, the 5-year-old "baby."

Nanny was the head and front of all mischief, merry of heart, and so sweet of temper that it was hard either ever to correct her or to punish her. Little Jane, on the other hand, was the conscience of the family, fearful of doing wrong, always ashamed of Nanny's pranks, and never of her own accord doing any forbidden thing. It must be confessed that this was far from being a merit in the eyes of the others, who often thought her opinions both tame and troublesome. Dumpling, the near-sighted, grave and droll little girl, was just as reliably correct as Jane, yet full of demure frolics and ready to follow wherever Nanny might lead. And Dot was a frail, dimpled, kittenish creature, the toy and treasure of the household.

Back of the house was a wood, and in that wood was an old tree, a stout oak, that bent from the roots in an arch, the top branches touching the ground. It was a belief with the children that the Indians had bent it, long before, though it had probably been partially upturned by the wind at some early day and had grown in that position by the weight of its own branches. This tree was the favorite resort of school children when they could go in a large party and they climbed from the root over the great trunk, either high up into its branches or directly over it to the ground again, as if it had been a bridge. Many wonderful feats were performed in way of reaching the highest limbs, and in perching upon crotches and clefts, like squirrels.

But the woods were so dense all about it that children did not usually like to go there alone to play. The stillness had something mysterious in it, and there were stories current among them of Indians and bears and wolves. One winter, when the snow was deep, the tracks of a bear had been found about it, and that forever after added a zest of real danger to the place.

So, unless their numbers warranted it, their voices were rarely heard in that leafy stillness. Moreover, some of their parents doubted the safety of letting children go there, as the height from the ground was considerable, and with a crowd of boisterous girls and boys, there was danger of falls and broken limbs.

But Nanny, true to her instinct for forbidden pleasures, liked the old bent tree better than any other playground. With her as leader it was often visited at noon and after school at night; and she was more fearless than any one in all the climbing and perching and swinging. From the ground her rosy face and little scarlet dress made her look more like an apple than anything else up among the leaves.

Our story begins with one summer day in vacation, when playhouse and swing and haymow had been exhausted by the restless Nanny and her following flock of sisters; when dolls and visiting had been voted a bore, and there yet remained many long, hot hours to be got through with before bedtime. It was 4 o'clock. What should be done?

"Let's go to the old bent tree," brightened Nanny, as with an inspiration.

"Oh! I'm afraid!" protested timid Jane, but only half above her breath, for she knew Nanny would laugh.

"I'm not afraid," put in stout little Dumpling.

"Nor I," twittered Dot, with a gambol and frisk; too much of a baby to know anything about consequences.

"You're forever afraid, Jane," said Nanny with a high scorn for such lack of spirit. "I wonder you're not afraid to come out of the house at all. What is there to be afraid of, I'd like to know?"

"The bear," said Jane, with something of a show cause on her side and bringing out the standard but stale objection.

"Nonsense!" retorted Nanny. "Bears only come in the winter. Nobody ever saw a bear in summer."

"But mother don't like us to go there," ventured Jane, as a forlorn hope.

'But she never said we mustn't," replied Nanny.

Jane had exhausted her opposition, and after the victory was won Nanny deigned to argue and persuade at length. This made the bold ones bolder and utterly silenced cowardice; and, without a word to their mother, they all started for the wood.

As soon as they reached the welcome shade of the trees, they took off their sunbonnets, the better to feel the cool breeze in thir hot faces.

They loitered, picking up now and then a pebble, here and there a flower, and made their way slowly through some hazel thickets and then through deep woods to the old bent tree. They always reached it with a shout of welcome, for its fine bent figure, so in contrast with the straight old monarchs all about, was a perpetual delight to them.

A cloud had hidden the sun, and Jane sat down to wipe her heated face with her apron, while Nanny sprang at once up the curved trunk, Dumpling and Dot toiling cautiously after. "See me!" and "See me!" were the shouts from various points along the journey. But Jane was not an enthusiastic looker-on. She was very tired; and thought she heard just now, with a thump at her heart, a distant muttering of thunder.

If there was anything that terrified her more than another, it was a thunder shower; and that, as well as the haunting and undefinable "bear" dread, made her very miserable.

"Why don't you come up, Jane?" piped the little Dot, perched like a fairy close to the first branch. Then all at once it dawned on Jane that, if a bear should come, she would be alone on the ground and probably the first victim. This was a sting to her already roused fear, and she made a wild scramble to join her laughing sisters on the tree.

Their merriment seemed to her like the most reckless defiance of near and sure danger, and, though ashamed to express her fears, for she knew that she was always foreboding alarms and troubles, she managed to say: "I—thought—it thundered."

At this, Nanny, from her high perch, burst into such a fit of laughter that she almost lost her hold, and Dumpling and Dot followed suit.

"Oh, Jane," said the little one, "don't be so 'fraid. We're all here!"

Jane made a brave effort to overcome her weakness, and followed her sisters up into their leafy bridge. It was exciting to be so far from the ground and to hear the rustle of the boughs so near her. She thought that birds in a nest might feel as she did —so high and light and breezy.

But it was true that she had heard thunder, and the black cloud could now be distinctly seen shutting out the sun. Even Nanny noticed the growing shadow; but was unwilling to yield an atom of her courage, and, though herself not overbrave in view of a storm, strove to keep up a show of indifference. Then Dot, as if to help her out, began to complain of being hungry. This offered a loophole of honorable escape, and she all at once remembered it must be near supper time.

"We'll have to go," she said; "for mother don't know where we are."

The getting down from the tree was easy work to the nimble and experienced Nanny, and, in fact, to all except to the unpracticed little Dot. She had only crawled to the first limb, and the high main arch was still to be crossed, and that involved getting round and under interfering branches, and keeping a steady head when the greatest height was reached. On the other hand, the return down the steep trunk, without twig or bough of any kind to cling to, was even more formidable. It had been easy enough to climb up, with friendly hands behind to "boost," and the rough bark to cling to, and a waiting help at the top in the form of a nimble sister, who had got up beforehand; but the getting down threatened not to be so easy.

Dot saw her strait, and had much more reason to cry than Jane had had with her imaginary fears. But she listened to Dumpling's encouraging logic —"You can't fall, Dot, for I couldn't!" and tried to do all the contradictory things that Nanny and Jane advised: "Now sit still, Dot," from Jane, who had a vague idea that presence of mind implied sitting still; and, "Now run from that branch to the next one," from Nanny, whose resources were all active. She instinctively tried to follow Nanny's advice; but the result was that she followed Jane's, and clung helplessly to the tree.

Nanny, who had got down, climbed again to where Dot was clinging, and cheered and tried to help her. She wanted Dot to go on in advance; but, failing in persuading her to that, passed her, and tried to lead her. But the height had turned Dot's little head giddy, and the consciousness that her plight was a difficult one soon set her to crying, and then she could do nothing.

What was to be done? Jane's head was full of expedients, but none of them seemed practicable. Finally, sensible Dumpling declared that they would have to go home for help; and, seeing how really hopeless it was that Dot could ever get down, it was finally decided that that must be done. But who should go and who should stay?

Their planning and parleying had occupied a good deal of time. Meanwhile the thunder grew more frequent and the air darkened. All of Jane's vague "bear" fear was lost sight of in view of the near and real distress. Either to go or to stay was dreadful—to go alone through the woods or to stay alone with Dot through the storm. She was not selfish; she clung to each little sister and wanted to share the peril of each. She had no idea of choosing; but left it all to Nanny.

Nanny was sobered in earnest, and for once the dimples relaxed in her apple cheeks and she looked almost as solemn as Jane herself. Dot settled the matter finally by saying: "Oh! Nanny, stay with me."

"Janey and Dumpling, you run home and tell father that Dot can't get down. You know I can climb better than you and Dot and I won't be one bit afraid," said Nanny.

Just then they heard the wind rising and saw it turn the white sides of the leaves uppermost; otherwise there was a deathly stillness. Jane took Dumpling's hand in her own and started, and with a parting pang looked back and saw Nanny and Dot sitting on the tree next to the great limb and watching them—Dot tearful and Nanny trying to laugh. This put wings to Jane's feet, and she dragged the helpless but willing Dumpling after. On, on, toward home, with the dense black cloud fronting them and the strong wind blowing in their faces. A flash of lightning, followed by a heavy rumble, only added to their speed. They must not wait to cry for the ones left behind in danger, but they must hurry, hurry! They were bareheaded and the thick hazel bushes scratched and hindered them, but not a word of complaint or terror from either of them—Dumpling, composed, though eager, making as rapid progress with her sturdy, heavy little body as did Jane, with her slim, slight one.

Did it sprinkle? One drop surely fell on Jane's hot cheek. But if it only needn't lighten any more, she wouldn't care for the wetting.

But it did lighten—a bright, fierce flash, and a quick heavy volley after it, and down poured the drenching drops and on they fled! Poor little girls! They had little breath or strength left when they reached the gate, at last, and found their mother nearly wild with anxiety. She had watched with dismay the coming shower, wholly ignorant as to where they were and with no idea in which direction to search for them. Their story was quickly told, and the father and brother were off at once to the rescue, with shawls and umbrellas.

And Nanny and Dot! As soon as Jane and Dumpling were out of sight little Dot's courage vanished, and Nanny began to comfort her. "Play we're the Babes in the Wood," she said; but that only made Dot cry the harder, for that had always been too sad a story for her warm little heart.

"Well," said Nanny, "play we are gipsies and live in a tent. You sit close up to the limb, Dot, and I'll make a tent of my apron." Then she kissed Dot, and said she didn't think there ever was such fun as to play gispy; and she chattered and planned, and didn't give Dot a chance to be frightened, until the flash of lightning came. When it did come, Nanny gave a great jump and grew pale; but rallied, and turned it off by drawing the apron over both their heads, and saying, "Oh, isn't it fun, Dot?"

But now she felt the wind was dangerously strong, and might blow the little girl down from the tree, in spite of herself. She thought to herself that if Jane was there she would be afraid the tree would blow over. So she placed Dot as securely as she could against the limb, and, putting one arm around her, held on with the other with all her strength. She had to sit astride the great runk in order to keep her place at all. But still she ran on with her light tongue, and wished they had something there better than an apron for a tent; and for her part she wouldn't be the least afraid to stay there all night, but thought it would be jolly.

Then the rain came, drenching them to the skin and pouring in streams down their hair and faces.

"Oh! isn't it fun?" choked Nanny; and Dot piped a feeble "Yes."

"Hold tight to me, Dot," said Nanny, catching her breath. "That's—the—way—the—gipsies—do!"

And Dot clung, and tried to laugh and feel it was having fun; but every other breath was a sob. The hand by which Nanny clung to the tree was nearly blistered; but she held fast, and when she saw Dot's quivering lip she poked her under the arm and "tickled" her, as she sometimes did in their morning frolics in bed, before they were fairly awake enough to get dressed.

The father and brother were not slow in reaching the tree; nor were they any too soon, for Nanny's strength was nearly gone. Dot dropped her dripping little body with perfect trust into her tall father's outstretched arms; and she liked that way of gipsying best—having a shawl wrapped nicely around her and being borne along under an umbrella.

Nanny scrambled down, spry as a spider, and trudged bravely along after her brother, though the storm buffeted her so that she could not keep the shelter of his umbrella; but she was very content and cheerful, notwithstanding the smarting of her torn and bleeding hand.

When they got to the house, and the little sisters met them at the door, Dot cried out, her trials all forgotten, "Oh, Dumpling, we played gipsy!"

Nanny's hand was bound up, all the wet things were removed, the hungry stomachs had their nice bread and milk, and the only rebuke they got was: "Children, never give mother another such a fright by going away without letting her know."

"It was all my fault, mama," said Nanny "and we never will." — Mrs. Clara Doty Bates, in the Independent.

### Little Freda Gnavauch.



**Little Freda Gnavauch, 5 years old, one of our corner cousins, with her little pets. She writes good letters to the other cousins of the Children's Corner. Her home is at Echo, Ore.**

### Making It Easy for Her.

It was the boss talking.

"Miss Flimmer, you are a very pretty young woman."

"Why, thank you, sir."

"You dress neatly and you have a well modulated voice. I might add that your deportment is also above reproach."

"But I don't understand why you, a man of family, pay me so many compliments of a strictly personal nature."

"For this reason. I want to put you in a cheerful frame of mind before taking up the matter of your spelling and punctuation."—Birmingham Age-Herald.

### Fifty-Fifty.

An Irishman who had walked a long distance, feeling very thirsty and seeing a milkman, asked the price of a quart of milk.

"Threepence," replied the milkman.

"Then give me a quart in pints," said Pat.

Pat, on drinking one pint, asked, "How do we stand?"

The milkman replied, "I owe ye a pint."

"And I owe you one," said Pat, "so we are quits."—Chicago Herald.




**Cook Their Lunches at School.**

Dear Aunt Nellie: I am going to join the Corner if you don't mind. I am 12 years old and in the sixth grade. My teacher's name is Mrs. Van Brocklyn. We have seven cows. Their names are Bessie, Rose, Fanny, Daisy, Jersey, Susie and Beauty. We have three heifers. Their names are Hertu, Pansy and another Suse. We have two horses, Jolly and Billy. We have one little calf. Its name is Benny. I have two thrift stamps. I think every one ought to buy them or they ought to buy war savings stamps. There is a girl whose name is Mildred Tormey. She said that her mother died when she was young. I think that is really too bad. Tell her to write to me, please. I like the story that is in the Farmer now. I wish the rest of it had been there. Dear Aunt Nellie, put some more stories in the Farmer. We have 19 pupils at school. We have an oil stove so that we can cook at school, so that we can have a hot lunch every day. I know how to milk and drive the horses, but I don't have to do very much of that kind of work. I have two brothers. Their names are John and Daniel. John goes to school. He is seven years old. In our school some children's eyeballs get all red. One of my eyes is like that. When I look at the lamp it looks like it was dark. Do you know what it is? Last time we had a big Corner. I hope to see my letter in print.—Selma Rajala, Box 24, Toledo, Wash. (We are all glad that you want to join the Corner. I know that Mildred Tormey would like to write to you. Why not write to her, yourself, and ask her? I hope your eye will soon be all right.—Aunt Nellie.)

**Has Baby Ella Marie a Twin?**

Dear Aunt Nellie: It has been a long time since I wrote last to you. I've come to the conclusion of writing a few lines. I've read almost every letter in the Children's Corner and have been watching and waiting for a twin. I am 12 years old and my birthday is April 3. If I have a twin I wish she would write to me. I am in the eighth grade at school. There are eight pupils in our school. We also have a very nice teacher. His name is Mr. Smith. I will tell you about my little niece. She will be one year old March 10. She has light hair and a light complexion and has dark blue eyes. She weighs about 24 pounds and her name is Ella Marie. She can wave her hand at you and say, "Bye." She will throw kisses at you and will kiss her parents. She can also pat-a-cake, - pat-a-cake-a baker's-man. She is a very active and healthy baby and never keeps still a minute when awake. I wonder if Ella Marie would have a twin? If so, will some one please write and tell me? I have one and one-fourth miles to go to school and three of us children drive a black horse every day. I go with two of our neighbor children. We have lots of fun driving. I am living with my two brothers on a 240-acre farm. We have about 18 to 20 horses and mules and about five cows. I am corresponding with Ida Morey, Kendrick, Idaho. I was writing to Ida Dilio and Margaret Thompson, but have lost their addresses. The children in our school have joined the Red Cross. We have not yet got our work. I can crochet a little, but would rather know how to knit. I will close, hoping this will not be my last letter to the Corner. —Mary M. Brodin, Hubby, Wash.

**Three Friends Write a Letter.**

Dear Aunt Nellie: This is the first time we have written to the Children's Corner. We were all glad to see a whole page of letters last time. We are three friends. Our names are Jeanette Guist, Eulala Cosgrove and Velma Martin. Jeanette is seven years old. Her birthday is October 22. She has one sister and no brother. Eulala is 11 years old. Her birthday is January 1. She has four sisters and no brother. Velma was 12 years old November 23. She has two brothers and no sister. Jeanette's mother is sick in the hospital and she is staying with Velma. Velma is sick today and Eulala is over reading stories to her. We have good times playing together. Have we any twins? If so we wish they would write to us. Jeanette is in the third grade. We all have gardens and chickens and Jeanette has rabbits, too. We live about two miles from the business center of Aberdeen. We hope to see our letter in print soon.—Jeanette Guist, 414 Jeffries street; Eulala Cosgrove, Box 907; Velma Martin, 2222 Railroad avenue, Aberdeen, Wash.

**Glad When She Can Play Outdoors.**

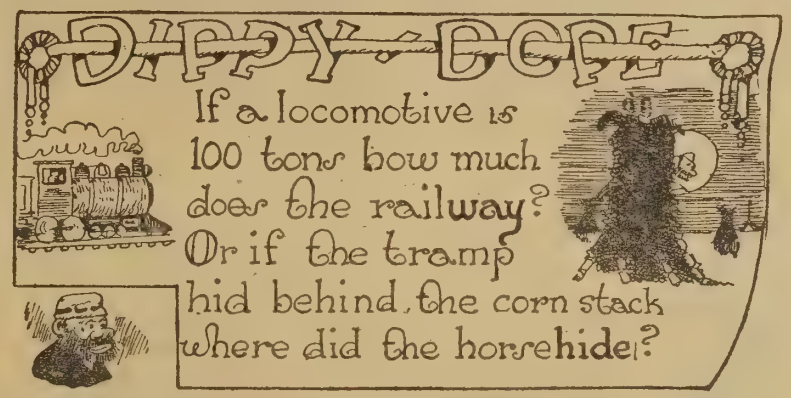
Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I have blue eyes and red hair and am 5 feet and 2 inches tall. My birthday is September 21. I am 12 years old. Have I a twin? I live on a farm of 334 acres. We have 18 head of horses, three pigs, 300 chickens, six cows and 12 calves. I have a plant. It is a petunia. It is awful tall and has been blooming all winter long. I have a knitting bag. I am knitting a wash rag for myself, but as soon as I can knit good I am going to knit for the Red Cross, if mama will let me. Papa is taking the Farmer and I love to read the Children's Corner, so I thought I would write to see if my letter would be put in. My, I will be glad when spring comes, so that we can get out and play. I have been sick and missed school two days. We have three and a half miles to walk to school. Papa said that I could write this time and see if my letter was in print and if it was I could write often. I wish some of the cousins would write to me. If they do I will be glad to write to them. I am sending Aunt Nellie a picture of myself when I was a little girl.—Libbie Latimer, R. F. D. 1, Plaza, Wash. (It was dear of you to send the picture, Libbie. Aunt Nellie thanks you for it and will keep it to remember you by.—Aunt Nellie.)

**The Skagit River Runs by Their Farm.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 13 years of age and my birthday is November 22. We have 10 cows and two horses and four calves, two pigs, a dog named Flip and I have a big cat named Tom. I have one brother and no sisters. My brother is nine years old. I am in the fifth grade and my brother is in the third. The school that my brother and I go to is in a little town and it takes us 10 minutes to walk to school. My teacher's name is Miss Violet Shellhamer and my brother's teacher's name is Miss Edna Graham. My papa has 55 acres in bottom land and our house is on upland. We have two barns and the Skagit river runs by our lower barn. Our horses' names are John and Nellie. John is black and Nellie is white. There is a railroad that is in front of our house and we can see the train go by every day.—Alta Kruse, Lyman, Wash.

**Uncle and Cousin Are With Colors.**

Dear Aunt Nellie: This is the very first time I have written to the Children's Corner. I have two miles to go to school. We ride our ponies, Bill and Dolly. My teacher's name is Miss Addie Emes. I like her fine. I go to Mount View school. I am in the sixth grade and am 13 years old. My birthday is August 23. If I have a twin I would like to hear from them. I have two sisters and three brothers. My sisters' names are Mildred and Grace. They are 6 years and 3 years old. My brothers' names are Leonard, Perry and Charles. Leonard is 11 years old, Perry is 8 years old and Charles is 1 year and 1 month old. We live on a 160-acre farm. We have four horses, one cow and one calf, three cats, one dog, two hogs, 43 chickens. My father takes the Farmer and thinks it is a good paper. I read the Corner every time we get it, and enjoy the letters very much. We take the Spokesman-Review, the Farm Journal, the Rural Weekly and the Saturday Evening Post, also. I can crochet and my brother can, too. My Uncle Louis has enlisted in the navy and my cousin Charles has enlisted in the marines.—Sadie L. Olin, R. F. D. 1, Baird, Wash.




**Goes to Sterling School.**

Dear Aunt Nellie: I am going to write to you for my first time. My father has been taking the Farmer for several years and I always enjoyed reading the letters. I am 12 years old. My birthday is September 27. Have I a twin? If I have I would like to hear from her. I go to the Sterling school. My teacher's name is Miss Shidler and I like her very much. There are 32 children in my room. I am in the fourth grade. I have three sisters and three brothers. My brothers' names are Roy, Walter and Raymond. My sisters' names are Myrtle, Hazel and Alice.—Elise Martin, R. F. D. 1, Burlington, Wash.

**Belongs to the Wide-Awake Club.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 9 years old and I am in the third grade. I have a sister and a brother. Their names are Floy and Howard. I have a pet cat. It is named Brighteyes. I have a pet dog named Don. We got 11 head of cattle. I have a calf of my own and we have two horses. Their names are Dot and Babe. I joined the Red Cross and Wide-Awake club. My birthday is July 6.—Cecil H. Bartoo, Box 285, Sumas, Wash.

**Laura Has Three Little Nephews.**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I surely enjoy the letters of other children. I will be 10 years old the 2d of June. Have I a twin? This has been such a lovely winter in the Big Bend. I have a dog, cow and a duck. Best of all, I have three little nephews. My oldest nephew will be three in June and his name is Freddie. My second nephew will be a year old in January and his name is William, and my last little nephew is four months old and his name is Jack. Jack and Freddie are my sister Emily's babies and William is my brother Lee's baby I have two brothers and five sisters. Just one of my sisters is married and one of my brothers is married. My sister has a cayuse and her name is Cricket. I like to ride her.—Laura D. O'Neal, R. F. D. No. 1, Box 29, Hartline, Wash.

**Stanley Writes for the First Time.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 9 years old and I am in the fourth grade. My birthday is August 18, 1918. Have I a twin? I have two brothers. Their names are Eric and Gilbert. Eric is 12 years old and Gilbert is 5 years old. We live on a farm of 160 acres. We have two horses and six cows and six calves, three cats and two dogs. The horses' names are Charlie and Queen. The cows' names are Star, Beauty, Redit, Blossom, Rose and Bud. The calves' names are Lady, Cleveland, Snowball, Buttercup, Frank and Fly.—Stanley Swanson, Waukon, Wash.

**Has Jessie a Twin?**

Dear Aunt Nellie: This is my first time to write to the Children's Corner. I am 9 years old and my birthday is in October. I am in the third grade. I have a brother. His name is Gene. His birthday is in October, too. We have six horses, their names are Fanny, Bess, Dolly, May, Nell and Jim. We have two cows. Their names are Topsy and Bossy. We have one dog. His name is Kaiser. We have one pig. We have three cats. I have a doll that is 28 inches tall. I have two miles to go to school. My teacher's name is Miss Hood. My brother's teacher's name is Miss Sisson. Have I a twin? —Jessie Duffy, Midvale, Wash.

**Has a Good Teacher.**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I hope it won't be the last time. I am 12 years old and my birthday is February 1. Have I a twin? I am in the seventh grade at school. My teacher's name is D. B. Hess. He is a good teacher. My brother and I have six cats. Their names are Pussy, Tom, Bill, Blossom, Della and Rose. I have three brothers, named Walter, Arnold and Albert. I hope my letter will be in print this time.—Bertha C. Franz, Schrag, Wash.

**Evelyn Is Lydia's Friend.**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner and I hope it won't be the last. Evelyn and I had a lot of fun Sunday. We did a lot of tricks. She went home at 5 o'clock and I went over to play with some other children. Mama made me a new dress. Papa is lying on the couch and when I get this written he wants me to read it to him. I got nine valentines and Evelyn got the same. I will be glad to see my letter in the paper. Evelyn is my little girl friend.—Lydia Y, Mount Vernon, Wash.

**Likes the Letters Fine.**

Dear Aunt Nellie: We take the Farmer and I like the children's letters fine. I hope I see my letter in print. I am 7 years old. My birthday is March 25. Have I a twin? We have chickens, horses, cows and pigs. I have a mule. Her name is Jessie. I have an old horse. His name is Ned. I like to ride them both. My dog's name is Boston. I harness him and haul wood in with him. He is a bull terrier. Our cat's names are Violet and Rose Queenie.—May Drew Speed, Bridgeport, Wash.

**Knitting Blocks for a Quilt.**

Dear Aunt Nellie: This is the first time I have written to the Corner. I am in the sixth grade. I was 13 years old January 22. I have five sisters and two brothers. I have a pony named Bonny. We have two cows. Their names are Beauty and Spot. My teacher's name is Miss Jennie Peterson. I am knitting African blocks for a quilt for the Red Cross. I got several presents for Christmas.—Hazel Elsie Stoch, R. F. D. 1, Castle Rock, Wash.

**James Goes to Edgerton School.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I enjoy reading the cousins' letters. My father takes the Farmer and I always read the Children's Corner. I am going to Edgerton school and am in the fifth grade. My teacher's name is Miss Naomi Light. I will be 12 years old November 21, 1918. If I have a twin I wish he or she would write to me. I hope to see my letter in print.—James Barr, Eatonville, Wash.

**Black Chickens One Week Old.**

Dear Aunt Nellie: We have 55 head of horses. We live on a 900-acre farm and we have eight cows and calves. We have two dogs. One is 14 years old and the other one is only 2 years old. We have some little chickens They are all black. They are just about a week old. We have two cats. They try to kill the little chickens. I have three brothers. Their names are Roy, Ralph and Frank and I have three sisters, Grace, Levado and Edith. I have one brother and two sisters in high school. Our teacher's name is Miss Larson. We have 11 pupils in our school. I am going to a country school. I am in the fifth grade. My birthday is June 29. I am 9 years old. I live two and one-half miles from the nearest school. We have lots of fun at school playing games. I weigh 85 pounds and my cousin weighs 63 pounds and is 10 years old.—Myrtle Effie Jordan, Bickleton, Wash.

**Father Went to Alaska.**

Dear Aunt Nellie: I am 12 years old. My birthday is January 11. Have I a twin? If I have I wish he or she would write to me and I will gladly answer all letters received. I have two brothers. Their names are Elton and Virgil. I have two dogs, Teddy and Snookums. We have a dance hall in this community. I am in the sixth grade in school and I have been going five years. My teacher's name is Miss Goss, and I like her very well. We have 32 pupils in our school. My father went to Alaska last Tuesday. He went on the Admiral Watson. I will write some riddles for the cousins to guess. Black within and red without, four corners round about? How do you make ice water without ice? I like the Farmer better than any other paper we take. My friend, Helen Olsen, is enclosing her letter with mine.—Muriel Vetters, Bangor, Wash.

**Six at School, Counting Teachers.**

Dear Aunt Nellie: It has been a long time since I wrote to you and the cousins. I am in the fourth grade at school. I am 10 years old. My teacher's name is Miss Hamilton. I like her fine. Our school will soon be out. John and I walk two and one-half miles to school. We sometimes get a ride in our Ford. We like it just fine. I go to school No. 8. There are six of us, counting the teacher. Their names are Annie Litt, Mollie Litt, Louise Litt, Harry Wegle, John Seleen and I. Harry, Annie and I are in the fourth grade. Mollie and John are in the second grade. Louise is in the first grade. We are milking 12 cows. Their names are Dollie, Flora, Bunch, Roaney, Gugie, Nig, White Face, Daisy, Star, June, Rosie, Duffie.—Ellen Seleen, Wilson Creek, Wash.

**Tony and Chieftain Are Pets.**

Dear Aunt Nellie: I have been reading the cousins' letters and enjoy them very much. May I be a cousin? I am 10 years old and I will be 11 May 20. Have I a twin? I go to school and am in the fourth grade. My teacher's name is Miss Bur. I like to go to school. I have a kitten named Tony and a canary named Chieftain. It is raining here almost all the time. I know the answer to the second riddle Pearl Utter gave. It was the dog's name, Yeti, and he walked. I have some riddles: When is a dog's tail not a dog's tail? When is a cow not a cow? Higher than a house, higher than a tree, oh whatever can that be? I am knitting for the Red Cross. I have no brothers or sister. I would like for some of the cousins to write to me. —Bonnie Herrin, Blaine, Wash.

**Ride to School on the Train.**

Dear Aunt Nellie: I am 10 years old. My birthday is September 17. I am in the fifth grade. Have I a twin? If so, I would like to hear from her or him. We have two rabbits. Their names are Bessie and Bettie. We have two kittens. Their names are Beauty and Rosie. We live two and a half miles from school. We ride on the train most of the time. My teacher's name is Miss Newton. I like her fine. There are eight children in my grade.—Dorothy Tuten, age 10, Steptoe, Wash.

**Dorothy's in the Second Grade.**

Dear Aunt Nellie: This is my first letter to the Corner. I am 7 years old. My birthday is November 25. I am in the second grade. My teacher's name is Miss Johnson. I have one brother. His name is Ernest. My sister's name is Louise. We have four cows. Their names are Daisy, Blossom, Lady and Brindle.—Dorothy Brown, Route 1, Box 8, Tumwater, Wash.

**Doris Can Knit and Crochet.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 10 years old. I know how to knit and crochet. We have 240 acres. We have horses, geese, turkeys, cows and pigs.—Doris Decker, Toledo, Wash.

**Helps Father Dig Carrots.**

Dear Aunt Nellie: I have been reading the letters of the Corner and enjoy them very much, and I sit down and read every one before I stop. I go one-half of a mile to school and have only missed when we had the measles. My teacher is a lady and her name is Mrs. Kline and I like her very

(Continued on the following page.)

# Children's Corner

Aunt Nellie

(Continued from the preceding page.)

much. I have not been knitting for the soldiers, but I have been knitting blocks for a quilt which I am going to make this summer. I have been helping my father dig carrots, for we live on a farm and have lots of them. We have 12 cows and three horses and about 50 chickens, six geese, five little pig and six little Easter chickens.—Leona Hoskins, age 10, Elma, Wash.

**A Fruit Ranch in the Yakima Valley.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I enjoy reading the letters, so I thought I would write. I hope my letter is in print. I am 10 years old. I will be 11, June 23. I live on a small fruit ranch in the Yakima valley. I am in the fifth grade in school. We have 36 scholars in our room. My teacher's name is Miss Marion. I have three sisters and one brother. I can crochet. I can not knit yet, but I am going to learn. My grandfather and grandmother live on a chicken ranch not far from here. I spend most all my vacation down there. I stay two or three weeks at a time. We have two horses, one cow and one pig. We have 105 chickens. We get three or four dozen eggs. We have no dogs, but one cat. He is black. My little sister is just crazy over him. Have I a twin? If I have one, will they please write.—Esther Grunden, R. F. D. 6, Box 40, Yakima, Wash.

**Herberta Writes a Good Letter.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I enjoy reading their letters. When I get home I read the children's letters. I walk a mile and a half to school. We have 13 chickens, one cow, two horses, one pig, two dogs and two cats. The cow's name is Jude. The horses' names are Nigger and Prince. The pig's name is Bess. The dogs' names are Cully and Sport. The cats' names are Snow and White. We live on a 40-acre farm. I go to the Montborne school, district No. 41. I am in the fifth grade. I like my teacher fine. His name is Mr. Burlingame. We have two rooms. Mrs. Burlingame teaches the other room. If I have a twin, please have them write. I am 12 years years old. I was 12 February 24. The name of the books I have read are Joe's Luck and Robinson Crusoe and Five Little Stars on a Canal Boat.—Herberta Gilpin, Montborne, Wash.

**Meowisky Is a Playful Kitten.**

Dear Aunt Nellie: I have written to all my aunts, but I have never written to you before. My little friend, Alice Brown, was writing to you. She lives across the street from me. I have a little kitten. It is very playful. When she gets mad at me she growls and bites my nose, but it does not hurt me a bit. I call her Meowisky because she meows so much. Gray Brother is her father. He is just the oposite from her. He does not meow hardly at all. He sounds like we did when we had our tonsils out. We think he must have had his out. I am 10 years old and in the fifth grade. I like to go to school. Spring is a busy time here. We have the gardening to do and two Jersey cows that will soon be fresh. Then we have Nibs, the pig, with her family, then all the little chickens and the cat with her kittens.—Marion McCormick, Nennydale, Wash.

**Myrtle Is in the Third Grade.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am nine years old. My birthday is March 19. I have two sisters and no brothers. My sisters' names are Hazel and Mary. Hazel is 12 years old and Mary is two. I am in the third grade at school. We have about 43 pupils in our school. We have two cats and one kitten, and a dog. The cats' names are Bob and Spot. The kitten's name is Dotty. The dog's name is Clide. We go a mile and a half to school. It is snowing tonight. I am writing by lamplight. We have two horses and five cows. The horses' names are Molly and Jip. The cows' names are Molly, Susie, Cherry, Nannia and Queen. We have nine calves and a few pigs also. I will close for this time.—Myrtle Webster, R. F. D. 1, Box 62, Olalla, Wash.

**Will Be Busier This Summer.**

Dear Aunt Nellie: It has been some time since I have written to the Corner. I thought I would write a few lines. I hope all the cousins are all well as everyone is down here. The teacher is reading the story of Robinson Crusoe. I think it is interesting in places. There are a lot of girls who write to me. There are just three more months of school. I will have more work to do in the summer, but I will have fun because there is lots to do that I like. I am running out of news so will close for this time.—Alice Case, Tokeland, Wash.

**Make the Things the Soldiers Need.**

Dear Aunt Nellie: My father takes the Farmer and I like to read the letters in it. May I become a Corner cousin? I am a girl of nine years and in the fifth grade at school. My teacher's name is Miss Marie Maddux; I like her fi[illegible] three brothers youngest names are Samuel [illegible]harles, Jack Augustine. I have two uncles. Their names are Charlie and Archie. Archie is in France. Charlie is a marine. I have three uncles that are not enlisted yet. We school children are knitting for Uncle Sammie's soldiers, like sweaters, caps, mittens, wristlets, quilts, napkins, handkerchiefs. We knit washrags too. Just the things that they need we make. I have many books to read and I've read a great deal of them. We live on a 10-acre farm. We have one horse, one milch cow, one calf, about 27 chickens, four pigs. I have a cat. Her name is Poor Pussy.—Iva May Day, Granger, Wash.

**Have Moved to a Large Farm.**

Dear Aunt Nellie: I suppose you think I have forgotten all about you and the cousins, but I have not. We have been so busy since we moved that I neglected to write. Then we have been very busy in school, too, because we are going to have a spelling contest with a school called Nooksack. We have a large farm over here. We have 23 cows and three horses. I like this school fine. My teacher's name is Mr. Van Der Mei. We go to Sunday school, too, every Sunday. There are about 28 pupils in this school, that is, in one room. In all the rooms there are about 150.—Enna Brune, Everson, Wash.

**Evelyn Is in a Grade by Herself.**

Dear Aunt Nellie: I am going to be 9 years old March 23. I am in the second grade. I am in a grade by myself. There are 10 children in our school. There are five boys in our school. I am going to tell you a couple of riddles: What can you hear but can not see? What has ears and can't hear? There are seven in our family. My sisters' names are Alice and Lorena and my brother' name are Johnnie, Clarence, Fred and Walter.—Evelyn Kupers, Box 34, Mohler, Wash.

**Charles Lives in the Mountains.**

Dear Aunt Nellie: The snow is about 18 inches deep. We all hope it will go off soon. We have five horses. Their names are Pet, Queen, Nellie, Dick and Ballie. Nellies is our pony we ride to school. I am 10 years of age. My birthday is July 8. I am in the fifth grade. I am 5 feet 2 inches tall and weight 103 pounds. I was sick quite a bit until we came to the mountains.—Charles Homer McCann, age 10, Boundary, Wash.

**Four Classes in School.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am nine years old and in the fourth grade. There are about 30 scholars in our room. There are four classes in our school. Our teacher's name is Miss Berard. I have three sisters and one brother. Two of them go to the school that I go to. One of my sisters is in the fifth grade. Their names are Iva, Bessie nd Esther. Esther is 10 years old, Bessie is five years old and Iva is 27 months old. She is the baby. My brother's name is Andrew. He is seven years old. I hope to see my letter in print.—Glora Grunden, R. F. D. 6, Box 40, Yakima, Wash.

**Gladys Loves Her Teacher.**

Dear Aunt Nellie. May I join the Corner? My father takes the Farmer. I read the letters and would like to know something about the Corner. I am 11 years old. My birthday is the fifth of July. I have two brothers and two sisters. Their names are Wesley, Lesley, Elsie and Edith. I have two cats, a cow and pony. Their names are Red my cow and Dick my pony. I ride my pony to school every day. I live three miles from school. my teacher's name is Miss Lane. I love my teacher. I am in the fifth grade. We have 13 in my class.—Gladys Warden, Okanogan, Wash.

**Only Five Pupils at School.**

Dear Aunt Nellie: I am 12 years old and am in the sixth grade. I have three sisters and one brother. Their names are Floy, Esther, Ruth and Johnnie. There are five pupils in our school. Our teacher's name is Wilma Fuher. I have a little calf, 1 year old; her name is Rachel. We have 18 head of cattle, four horses, one sheep, 10 pigs, one dog and three cats and 21 chickens. I milk two cows. I would like to join the Corner if I may. If any of the cousins will write to me I will answer their letter.—Mabel Crofoot, Route 2, Mead, Wash.

**Helen Goes a Mile to School.**

Dear Aunt Nellie: I am 9 years old. My birthday is June 25. I like to read the Children's Corner. I am in the second grade at school. I have a mile to go to school. There are 32 pupils. I have two sisters and their names are Anna and Esther. Anna is in the second grade and she is 7 years old and Esther is 1 year old. I have two brothers and their names are Hugo and Vieno. Hugo is 6 years old and Vieno is 4 years old. Have I a twin? If so, I wish they would write to me. We live on the farm. We have 30½ acres. We have nine cows and one calf. We have one horse called Nellie. I have two cats and their names are Pussy and Dick. I have a dog and his name is Popi. We have two pigs.—Helen J. Hanhi, Box 27, Rosburg, Wash.

**Knitting Soldiers' Wristlets.**

Dear Aunt Nellie: My birthday is September 29. Have I a twin? I am 10 years of age. If I have a twin I wish she or he would write to me. I have no sisters or brothers but I have two cousins living close to me. I joined the Junior Red Cross and I am knitting wristlets for the soldiers. I have a half a mile to walk to school. My teacher's name is Mrs. Richards. I like her for a teacher, too. I have one pet and that is a white bantie. I am buying thrift stamps. I have four of them now. We are living near a logging camp and my father works in the camp. He is engineer on an engine.—Una Cumming, R. F. D. 1, New Kamilche, Wash.

**Are Doing Their Bit.**

Dear Aunt Nellie: I am in the eighth grade and am 12 years old. My birthday is April 5. Have I a twin? I have three sisters and two brothers. Their names are Alice, Frances and Flossie, Erwin and George. George is helping the U. S. Ervin tried but was exempted. We gave $4.50 to the Red Cross. A member of the U. S. food administration sold Red Cross stamps at Christmas. We raise vegetables and now are buying thrift stamps. I think we are doing our bit, don't you? We have one cow and one pig and a few chickens.—Gladys Helen Bright, R. F. D. 4, Box 93, Tacoma, Wash.

**It Is Pretty Where This Cousin Lives.**

Dear Aunt Nellie: I am 13 years of age and in the seventh grade. My teacher's name is Miss Wallace. I have nine thrift stamps and I joined the Junior Red Cross. I am making gun wipers for the soldiers. I have read Daddy Long Legs, Boy Scouts in Camp, Store Boy, Kazan and a lot of others. For Christmas I got quite a few thrift stamps. We never had a very big Christmas on account of the war. I think everybody should help Uncle Sam and win this war. I am trying to do my bit. We have only one room in our school and there is from the first grade up to the eighth. It is very pretty out here. You can go along and you will come to a little creek with big fir or maple trees all around and moss on the ground. It hasn't snowed very much out here. Fragaria is about 15 miles from Seattle. My sister, Marie, has written twice to you. We used to go and fish out of a creek close by our place and we would catch trout. They were so pretty all speckled. We have had two days holiday on account of teachers' examinations.—Lahville Fountain, Fragaria, Wash.

**Valmore Can Knit for Red Cross.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I was 13, March 17. I am five feet one inch tall. My hair is dark brown, my eyes are blue. I live on a 960-acre farm. We have 32 horses, 10 cows, one dog, five cats, 40 chickens and three pigs. My Aunt Ceena and Aunt Ivy are going to be at our house this Thursday to stay 10 days. Our school is not very large. We have 11 pupils. We have the first, second, fifth, seventh and eighth grades. I am in the seventh grade and eighth grade at school. I know how to play on the organ or piano. Our teacher's name is Miss Larsen. We live nine miles from town. Have I a twin? I don't care whether it is a boy or girl. I can knit for the Red Cross. I am a Junior Red Cross member.—C. Valmore McMurry, Bickleton, Wash.

**A Knitting Class Every Friday.**

I am 12 years old and am in the fifth grade at school. I like my teacher fine. Her name is Miss Canfield. I also have a knitting teacher. Her name is Miss Sutter. We have one horse. His name is Nig. We also have two cows, two cats and one dog. The cows' names are Spot and Bess. The cats' names are Jappie and Buddie. The dog's name is Prince. We live about half way between North Bend and Snoqualmie. I go to school in Snoqualmie. I know how to crochet, tat, hemstitch, crossstitch and knit. I knitted a pair of wrislets for my brother. He enlisted in the fourth engineers. We are knitting six-inch squares for the Red Cross at school now. We have to make 8 squares to make a shawl for the soldiers. I have made three squares already. There are eight girls in our knitting class at school. We have just about one and-half hours to knit every Friday before noon. I like to knit fine. I have six sisters and three brothers. I have a friend in Snoqualmie. She said she was going to write to the Children's Corner. She and I both were just waiting because we didn't know the address. Her name is Julia Winter. I had the measles this winter. May I be a Corner cousin? Have I a twin? I will certainly be glad to answer all the letters I get.—Rose Holby, North Bend, Wash.

**Soldier Boy Over in France.**

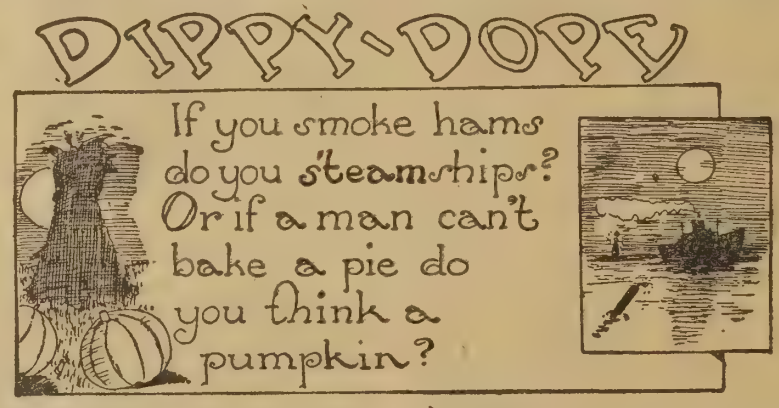
Dear Aunt Nellie: I am 11 years of age. My birthday is June 16. I have dark hair and eyes. Have I a twin? If I have I would like to have them write to me. I am learning to tat and I know how to crochet now. We have 11 horses, two of them are colts. We have two cows, two calves, about 50 chickens and I have one bantam and a dog and cat. The dog's name is Tip and the cat's name is Spart and the chick's name is Banty. My teacher's name is Miss Ivy N. Emerson. We are going to make things for the Red Cross. I have four brothers and one sister. Their names are: Zona, Arthur, Orvel, Elmer and Charley. Elmer is a soldier boy over in France.—Opal Edna Jane Cavanaugh, Ephrata, Wash.

**Lowest Grade was 90 Per Cent.**

Dear Aunt Nellie: I enjoy reading the letters very much. I am going to school and am in the fourth grade. I am nine years old. My birthday is April 5. Have I a twin? If so I wish she would write. There are 39 pupils in my room. My teacher's name is Miss Lynch. I like her fine. I have not missed a day yet nor have I been tardy. There has been 25 weeks of school. My lowest grade so far has been 90. I have missed only two words in spelling so far this terms. I live one and one-half miles from town on a wheat farm. I belong to the Red Cross and can knit, crochet, make tatting, cross stitch and make battenberg.—Ina Moller, R. F. D. 1, Davenport, Wash.

**Slide Down Hills in Winter.**

Dear Aunt Nellie: I would like to become a member of the Children's Corner. I am 13 years old, my birthday is September 23. I am in the sixth grade. There are 12 children in my class. There are seven children in our family, three girls and four boys. Dora and Lenora are my sisters' names and Herbetr, Dennis, Clifford and Keith are my brothers' names. Four of us go to school. We go three miles in a school wagon. We go to Menlo school. We live on a five-acre farm. We have two cows and also two calves. We have a pair of pigeons and two young ones. The young ones haven't any feathers on them yet. I have joined the junior and senior Red




STATEMENT OF THE OWNERSHIP, management, circulation, etc., required by the act of congress of August 24, 1912, of The Washington Farmer, published weekly at Spokane, Washington, for April 1, 1918.

State of Washington, county of Spokane, ss.

Before me, a notary public in and for the state and county aforesaid, personally appeared J. F. Young, who, having been duly sworn according to law, deposes and says that he is the vice president of The Washington Farmer, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor and business managers are:

Publisher, Cowles Publishing Company, Spokane, Washington; editor, ——; managing editor, Edwin A. Smith, Spokane, Washington; business managers, none.

2. That the owners are: (Give names and addresses of individual owners, or, if a corporation, give its name and the names and addresses of stockholders owning or holding 1 per cent or more of the total amount of stock.) Cowles Publishing Company (a corporation), Spokane, Washington; W. H. Cowles, Spokane, Washington; H. O. Cowles, Spokane, Washington; J. F. Young, Spokane, Washington; F. J. Whaley, Spokane, Washington.

3. That the known bondholders, mortgagees and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages or other securities are: (If there are none, so state.)

4. That the two paragraphs next above, giving the names of the owners, stockholders and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company, but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association or corporation has any interest, direct or indirect, in the said stock, bonds or other securities than as so stated by him.

COWLES PUBLISHING COMPANY.
By J. F. YOUNG, Vice Pres.

Sworn to and subscribed before me this 28th day of March, 1918.

(Seal) F. J. WHALEY.

(My commission expires Oct. 17, 1919.)

Cross. I have four thrift stamps. My brother has seven. He is a Boy Scout. I am knitting a square for the soldiers. There are 103 children in our school. All of them belong to the Junior Red Cross. We are going to have a service flag pretty soon. We have a brown schoolhouse trimmed in green. There are six rooms, an auditorium and a library and a large basement. We have a large school ground and a large part is on the hill. The underbrush is cleared and it is fun to play in the woods. In winter we slide down hills. There are three lawn swings and four rope swings. I will write to the Corner again.—Laura Clapshaw, Willapa, Wash.

**Two Lakes on the Farm.**

Dear Aunt Nellie: I am 13 years old and my birthday is June 13. I have brown hair and brown eyes. I am in the eighth grade. Have I a twin? If so, please write. There are four of us going to school now. We have about three and one-half miles to go, but we drive our pony, Elk. We go to Rockland school. We have 25 little lambs now and 11 little calves. In the summer we go swimming, flower-picking, and on picnics. There are two lakes on our place so we can go swimming any day. I have a friend writing to the Corner. Her name is Irene Clark. We go to the same school, but are not in the same grade. We have good times together. I have five brothers and three sisters, but two of my sisters are married. I have two brothers and one sister going to school. Their names are Richard, Neil and May.—Eleanor Dickenson, Grand Dalles, Wash.

**A Chum Named Lelah.**

Dear Aunt Nellie: This is my first experience in writing to the Children's Corner. I will write again if you will accept my letter. Have I a twin? I hope so. I am 12 years old and my birthday is December 12. I am in the sixth grade at school. My teacher's name is Miss Snider. I am buying thrift stamps. I belong to the Red Cross that my mother does. She is the president of the Yelm auxiliary. I also belong to the Junior Red Cross. We sew for the Red Cross in school. I have one brother. He is 18 years old and his name is Fred. We have two horses and some cows. I have a young heifer. Her name is June. We have a dog named Pat. My grandfather is building a new house. We have a car. I have a chum. Her name is Lelah Mosman. I hope the Corner will grow, as I like to read it.—Mildred Price, Yelm, Wash.

**"Sputtermeow Spuffington."**

Dear Aunt Nellie: I like to read the Children's letters in the Farmer. May I be a cousin? I live on a farm and have lots of fun. I am nine years old and my birthday is June 10. I am in the fourth grade. Have I a twin? I have three sisters but no brothers. My sisters are younger than I. My uncle is living with us and is going to our school. He is 13 years old. I would like to have some of the cousins write to me. My sisters and I have four cats. Their names are Tommy, Betty, Polly and Spitfire. My aunt has a big blue cat and his name is Sedrick Lemuel Sput Sputtermeow Spuffington and he is some cat.—Esther Schaulks, R. F. D. 1, Box 76, Auburn, Wash.

**Have Sewing Every Wednesday.**

Dear Aunt Nellie: I hope you and all of the cousins are feeling very well. I was not feeling very well yesterday. I am 13 years old and I hope there are some cousins that are just as old as I am. My birthday was October 16. I hope I have a twin. This is the second time I have written to the Corner. My sister has been home from Seattle visiting. She is going home soon. We are going to have sewing today. We have sewing every Wednesday. We are going to make dust caps. We were knitting some washrags last time we had sewing. I am taking music lessons from Mrs. Smith. She teaches the primary room. She was my school teacher when I was in the intermediate room. I am in the grammar grade now. I am in the seventh grade. It is not so very hard. I thought seventh grade was always hard. I have a nice, good teacher. Her name is Miss Swanson. It was snowing Monday and it was blowing yesterday. There are many drifts. I hope Aunt Nellie will tell some of the cousins to write to me. I like to read the letters. My father takes the paper. I have a friend that is only two days younger than I am. I wish she was just as old as I am.—Jennie Loreen, R. 3, Everson, Wash.

**Goes to the Liberty School.**

Dear Aunt Nellie: My father takes the Farmer and I enjoy reading the letters very much. I was 12 years old March 3. I am in the sixth grade at school. I go to the Liberty school. There are 17 pupils. There are three in my grade. My teacher's name is Miss Charlotte Lang. She lets us girls take our crocheting to school. I like to crochet very well. I live on a farm of 320 acres. We have 10 horses, four colts, some cows, chickens and ducks. I have three sisters and two brothers. My oldest sister is the oldest of the family and she is 21 years old. My youngest sister is the baby of the family. She was 2 years old March 11, 1918. She and I ate our birthday dinner together.—Alice Stenson, Route 1, Spangle, Wash.

**Two Brothers Are in the Army.**

Dear Aunt Nellie: This is the first time I have written to you. I was 11 years old March 11. I am in the fourth grade at school. I have a very dear teacher. Her name is Miss Fincke. I have two brothers and three sisters. My youngest brother is in California, in the army. The other one enlisted two weeks ago. He will be in the army, too. Two of my sisters are married and the other one goes to high school. I am learning to knit. I expect most of the cousins can knit. I belong to the Red Cross at school. The high school and four grammar schools had a patriotic program two weeks ago. It was very good. I will write again.—Clara Celiz Curtis, Glen Cove, Wash.

**Will Take Music Lessons Again.**

Dear Aunt Nellie: How are you and all the cousins? I hope to find you all well. This is the second time I have written to you and hope it won't be the last. My friend, Edna Requa, wrote to you some time ago. She is just 10 months older than I. We go to the Kirby school. I have a sister older than I who goes to school with me. My sister and I took 18 music lessons last spring and got into the second grade, so this summer we are going to take them again. Have any of the cousins taken music lessons? If they haven't they ought to because it would come in handy when they get older. I have 19 nieces and nephews altogether. I have seven sisters and three brothers.—Mattie Malone, R. F. D. 2, Pomeroy, Wash.

**When Beulah's Pony Bucked.**

Dear Aunt Nellie: I am 13 years old. My birthday is June 20. Have I a twin? I have two sisters and one brother, dead. Their names are Ora, Lyman, Walker, and my sisters' that are alive are Hazel, Violet and Mildred Isabell. Hazel is 15 and Mildred is 14 months old. She is awful cute. I have a bay pony. Her name is Lady. She is hard to catch sometimes. One day when I caught her I got on her back and I had a weed caught between two of my toes and she began to buck. I first lit on her neck and then be-

(Continued on the following page.)

## Molalla Cousin Sends a Picture



Dear Aunt Nellie: I have been reading the letters in the Corner for some time and enjoy them very much, so I thought I would like to join in; the Corner is very interesting to me, and so I thought I might write something that would be of interest to others, but as I am not used to writing I hardly know how to make it interesting. Nevertheless I will try my best. We have been taking the Washington Farmer for some time and we all like it very much and I always read the letters in the Corner first.

I have a picture that I think so much of that I wish it could be printed in the Corner. I will send it with this letter. The picture on the left is of my mother, with our black cow, Nancie, which we all think so much of, and her test is 5.6. She is 6 years old. The picture on the left is of my father, with Nancie's first calf, which is 4 years old and her test is 6.8.

I have so much to tell you that I will have to save some for next time, so will close.—Evangeline Palmer, Molalla, Ore. (We all welcome you and will look for your next letter.—Aunt Nellie.)




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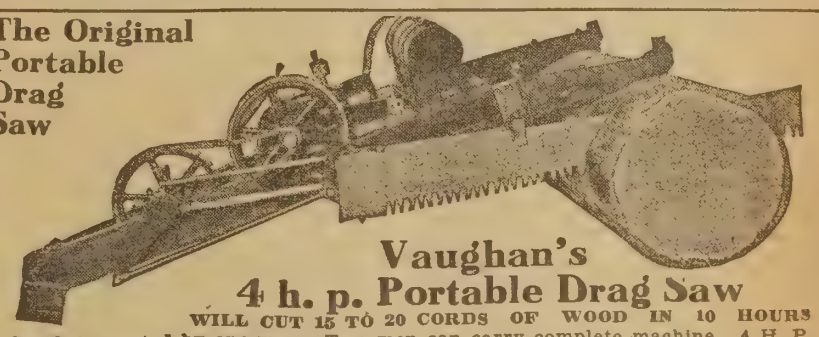
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# Children's Corner

Aunt Nellie

(Continued from the preceding page.)

tween her ears and then I lit in some water. When I got up I staggered around. I caught my pony and gave her a whipping. I could hardly see out of my left eye for a long time. How many of the cousins can knit? I can not knit yet, but I am going to learn. I can crochet and make some of my dresses. I will send a puzzle: I rode to town on horseback and yet I walked. What is the answer? I can answer some of Blanch Weaver's puzzles. Two is a newspaper and the third is milk. I notice the Corner is getting larger. Our school has only nine pupils in it and we all take home credits. We all earned a half-holiday and the whole school went across the Columbia river and visited Rufus school. Even our teacher, C. M. Ryman, went.—Beulah M. Walker, Cliffs, Wash.

**Belongs to a Poultry Club.**

Dear Aunt Nellie: I wonder if there is room for one more girl to be a Cousin of the Corner? I am 13 years old. My birthday is July 23. I am 5 feet 2 inches tall and I am in the seventh grade. My teacher's name is Mrs. Davis. We like her fine. I have two brothers, but no sisters. My oldest brother is 15 years old and is in the ninth grade. My younger brother is 9 years old and is in the fourth grade. We have a half mile to go to school. There are about 31 pupils in our school and we have two teachers. I belong to the Red Cross and to a poultry club. A man from the state college came to our school and gave us a talk about the club. I have a cousin in the navy and he has been over at Gibraltar, Spain and over to Italy. He sent us some pictures that he took while he was over there and they are very interesting. He was at New York for a week, but is now on his way back to Gibraltar. I would like to correspond with Irene Clarke. I saw her letter in the Corner, but I lost her address.—Virginia Clarke, Penawawa, Wash.

**The Oldest Town in Washington.**

Dear Aunt Nellie: We have had no snow. Spring is here now. The flowers are in bloom. The birds are singing. The plants are coming up. The sun is shining. The sky is blue and pretty. We have some herring. I have a twin. She wrote to me. We are going to have a program March 8, 1918. We had examinations. I got 98 in arithmetic. I got too low in spelling to tell you what I got. I got 92 in geography. My sister got 100 in spelling. Our school and the big school got some moss for the Red Cross. We got eight sacks. We picked it in one and one-half hours. This is the second time I have written. I will describe where I live. I live between the Pacific ocean and Willapa Bay. We get our herring in the bay. I told you before that we got some herring. I live between Oysterville and Nahcotta. There are two rooms in the school at Oysterville. One is the small school and big school. Oysterville is the oldest town in Washington.—Mary Sargent, Nahcotta, Wash.

**Cousin Clara's War Garden.**

Dear Aunt Nellie: This is my fourth letter to the Children's Corner. I hope it will not be my last. I am going to write about my war garden. I have a garden of my own every year and this year I am going to have a big one. In nearly every one of my gardens I have peas, carrots, cucumbers, turnips and all different kinds of vegetables. My father said I could have a big piece of ground this year. I know how to knit, crochet and tat. Now I am knitting a pair of socks. I tatted a yoke for my sister. I am 12 years old and I am in the seventh grade. I take piano lessons and like it very much. I am in the third grade of music.—Clara Haida, R. F. D. 3, Box 164, Puyallup, Wash.

**Is in the Third Grade.**

Dear Aunt Nellie: I am in the third grade and am 8 years old. My teacher's name is Miss Cora Wilson. There are 25 scholars in the little room. I will write all the names of our family. My name is Anna. The others are Elsa, Minnie, Herbert and papa and mama. Elsa is 7 years old, Minnie is 2 years old, Herbert is 9 months old. My birthday is May 2. Elsa's birthday is December 1, Minnie's birthday is August 4. Herbert's is June 16. My mother's is July 9 and father's is February 16.—Anna Pearson, R. F. D. 3, Ferndale, Wash.

**Opal Is Six Years Old.**

Dear Aunt Nellie: This is the first time I have written to the Corner. I am six years old July 16. I am in the first grade. I got many things for Christmas. I have one brother. His name is Earl. My teacher's name is Miss Rogers. I like to go to school. There are 11 children going to my school. It is the Pilot Rock school. We coasted with the sled on the ice. I have a little colt.—Opal Irene Jenkin, Coulee City, Wash.

**To Have a Nice New Schoolhouse.**

Dear Aunt Nellie: This is the second time that I have written to the Corner. I like to read it and wrie to it. I am a member of the Junior Red Cross. We had a program at our school the night before Washington's birthday. We sold pies, coffee and cake. We made $35.50, which goes for the benefit of the Red Cross. I know how to knit. Our teacher bought an oil stove to cook hot lunch for the children. We started to cook last Tuesday. Every day about three children have to bring something to cook. When all the children have brought something we start from the beginning again. Our teacher's name is Helen Custard. She is the best teacher we ever had. I hope she will teach us next year too. Today was school election. We will have a nice new schoolhouse. My birthday is September 23. I was 12 years old on my last birthday. Have I a twin? If I have I wish she would write to me.—Martha Arndt, R. F. D. 2, Box 14 A, Ridgefield, Wash.

**Bridge Fell Down in December.**

Dear Aunt Nellie: This is my first letter to the Corner. My father takes the Farmer. I will be 10 years old May 29. Have I a twin? If I have will they please write to me? I have one brother and his name is Hjalmer. He will be 8 years old July 13. I am in the third grade at school. My teacher's name is Miss Conover, and I like her well. I can not go to school now because the bridge fell down last December when the river was high. We have 22 head of stock. I have a cow of my own and her name is Beauty. We have two horses and their names are Queen and Nellie. We have one dog and his name is Shep. We have two cats. We live on a 100-acre farm and I like to live on a farm. I wonder if this letter will be in print before it touches Mr. Wastebasket? If I see my letter in print I will write again. I hope every one had a good Christmas last year and you, too, Aunt Nellie.—Olga Hamilton, R. F. D. 3, box 87, Arlington, Wash.

**Helped Tap Trees for Maple Syrup.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner and I hope it won't be the last. I am 10 years of age and in the fifth grade at school, and for the last two months I have had everything excellent. I have been reading the Children's letters for a while and they interest me very much, so I thought I would write one too, and I hope to see it in print. I live on a farm and we have two cats, a dog, three pigs, 49 chickens, a horse, 10 cows, and a calf. I like the farm very much. Mama made six pints of maple syrup and it is the first I ever heard of in Washington. I went and helped tap trees, too, and it was great fun. We are getting over 32 eggs a day now.—Lola Miller, Route 1, Box A, Sedro-Woolley, Wash.

**Her First Cake Turned Out Well**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I go to school. I am in the third grade. I was born on Easter Sunday. My birthday is March 27. I have six brothers but no sisters. My brothers' names are Rollo, Vernor, Warren, Robert, Wilson and Allan. Rollo just received his eighth-grade certificate. He is 14 years old. Our baby is 1 year old today. I live on the farm. I baked my first cake today. I was so surprised that it turned out so good.—Ruth Jane Fackenthall, Nine Mile Falls, Wash.

**Most Spoiled Cat She Ever Saw.**

Dear Aunt Nellie: I am 11 years old and in the sixth grade. My birthday is April 19. I live on a farm about three-quarters of a mile from Valley. We have three horses, one pig and a number of cows and chickens. I go to the Valley school. My teacher's name is Miss Burrows. I like her very much.

## Rides the Family Cow.



Dear Aunt Nellie: I wrote to the Children's Corner not long ago, and now I am sending a picture. This is the family cow. Four of us can milk her at once. As many as can get on her can ride her. This picture shows how we can ride her. We bridled and saddled her one day, and then had this picture taken. I hope some of the cousins have cows like her.—Derla McManamon, Othello, Wash.

We have a large, brick, modern schoolhouse with eight rooms and two large halls. I have two cats. Their names are Tommy and Bobby. Tommy is the one I like best. He is so cute I can't help but like him. He is the most spoiled cat I ever saw. Our house is painted brown and is trimmed in white. We have seven rooms in it. I would like to have some of the cousins write to me.—Annie Herzner, Box 315, Valley, Wash.

**Visited Relatives in Vancouver.**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I enjoy reading the letters that the children write to you. My birthday is March 26. I will be 10 then. Have I a twin? I like to go to school. I am in the fourth grade this year. My teacher's name is Miss Ginger. She is very good to me. We have 27 pupils in our room this year. It snowed night before last, about four inches. I will tell you some riddles. What chops and chops and never gets a chip off Hangs and hangs and it never blossoms? I have three brothers. Their names are Harold, Willie and Edward. I was over to Vancouver with my mother and brother to visit my great-grandmother, uncles and aunts in January. I have an uncle. He is a soldier in England.—Ruth Zwaschko, Everson, Wash.

**Only Seven Pupils in School.**

Dear Aunt Nellie: I will write you a letter for I read the letters every week and I think it is very nice for all the children to write to you, but still I think the Corner could be a little larger, don't you? I go to school every day, but I missed two weeks of school before Christmas. I am 11 years old and in the seventh grade. My teacher's name is Miss Edna O'Connor. There are only seven pupils in our school, but I think it would be pleasanter if there were more. There are five boys and two girls. We have all joined the Red Cross and I think we will get our pins soon. I will now close as I am out of news.—Marie Johnson, R. F. D. 2, Anacortes, Wash.

**Likes to Make Red Cross Pillows.**

Dear Aunt Nellie: Hello there! This is the second time I have written to the Corner. I like to write to you very much. Did you have a good time Christmas, Aunt Nellie? I did, and I hope you and the cousins did, too. How many of the cousines are making Red Cross pillows? We are. I like to make them. I am 10 years old and I am in the fourth grade at school. I like my teacher. Her name is Miss Snider. I can wash and wipe dishes, sweep, make beds, dust and I can do a great many other things. I have a new brother now. He is just 12 days old. I think he is very cute. Aunt Nellie, I am very glad our Corner is growing.—Maudie Shincke, Yelm, Wash.

**Martha and Florence Are Her Playmates.**

Dear Aunt Nellie: This is the first time I have written to you. I am a little girl 10 years old. My birthday is August 4. My teacher's name is Miss Margrette Cuvey. I like her fine. I have one sister and one brother. Their names are Ruthie and Howard. I hope I will see my letter in print. If so I will write again. Have I a twin? I can knit very well. My playmates are Martha Robinson and Florence Spencer. We have three cows and 72 chickens and a pet dog and cat. My letter is getting a litle bit long so I will stop.—Evelyn McLean, R. F. D. 1, Box 39, Yelm, Wash.

**Fern Joins the Happy Cousins.**

Dear Aunt Nellie: This is the first time I have written to the Corner. My birthday is July 10. I will be 9 years old then. I have brown hair and brown eyes. I have two sister and one brother. My brother and I walk one mile to school. I am in the second grade. We have four horses and 11 little pigs. My brother and I are going to join the pig club. Aunt Nellie, I will close for this time. I hope to see my letter in print.—Fern Martin, Bossburg, Wash.

**Live on a Ranch in the Big Bend.**

Dear Aunt Nellie: I thought I would write you a letter. We live on a ranch in the Big Bend, a few miles west of the Grand coulee. We have about 60 chickens, two cows, one steer, two calves and six horses. One of the horses is mine. We have two cats and a dog. I am 10 years old. My birthday is October 13. Have I a twin? I go to school every day. I am in the fourth grade.—Anna Mae Brandt, Leahy, Wash.

**Vola Is a Clarkseon Cousin.**

Dear Aunt Nellie: This is the first time I have written to you. May I be a cousin? Have I a twin? If I have I wish they would write to me. I am 9 years old and my birthday is November 9. I am in the fourth A at school. My teacher's name is Miss Garver. I have joined the Junior Red Cross. I am going to a party this afternoon.—Viola Carlson, route 1, Clarkston, Wash.

**Will Have a Garden This Summer.**

Dear Aunt Nellie: I enjoy reading the letters that the children write very much. I live in the country on a 30-acre farm. We have one horse, five cows, two heifers, one calf and 30 chickens The horse's name is Prince, two of the cows are mine. Their names are Dolly and Pearly. We have one pet dog, but no cat. The dog's name is Teddy. I know how to tat, knit and crochet. I think I am going to have a garden this summer. I am 12 years old. My birthday is October 22. Every one asks if they have a twin so I think I will, too. I have to walk about one mile to school. At school we play hopscotch, pump, pump, pull away, and tag. There are 38 children in the room I am in. There are only three grades in the room, the fourth, fifth and sixth. There are 16 in the sixth grade. I am in the sixth grade. My teacher's name is Miss Reese. Have I a twin? If I have I wish she would write to me. I will answer her letter.—Adeline Bostedt, R. F. D. 2, Box 14A, East Stanwood, Wash.

**Brother Is at a Training Camp.**

Dear Aunt Nellie: This is the first letter I have written to the Children's Corner. I am nine years of age and my birthday is November 19. Have I a twin? I go to the same school as my cousin, Muriel Vetters, does. I have four sisters and one brother. Their names are Anna, Neva, Nora, Gladys and Samuel. My brother Samuel is in the training camp in New York. We have eight cows and calves altogether and their names are Blossom, Specky, Star, Sukey, Daisy, Nancy, Pansy and Bessy. Star is mine. I have one dog, Bobby, he is about eight months old. I will give my cousins a riddle: There is an old cow upon a hill, if you give her hay she will fly; but if you give her water she will die.—Helen Olsen, Bangor, Wash.

**Live Four Miles From Palouse.**

Dear Aunt Nellie: This is the first time I have written to the Corner. I live on a 100-acre farm. I can knit, crochet and tat. I live one-half mile from school. I am in the sixth grade. My teacher's name is Miss Leah Smith. There are 15 pupils in our school. There are four in my class. I am 11 years old and will be 12 August 9. Have I a twin? If I have I would like to hear from her. I have one sister and one brother. My sister's name is Lillian. She is 8 years old. My brother's name is Elmer. He was a month old the first day of March. May I join the Corner? We live four miles from town.—Hazel Violet Soniville, R. F. D. 3, box 63, Palouse, Wash.

**Has a War Saving Stamp Already.**

Dear Aunt Nellie: I read some of the letters in the Farmer and I think they are just fine. I have a war saving stamp already. I am 13 years old. My birthday is December 17. Have I a twin? We are milking 11 cows now, but there is a cow coming in soon. We have three calves, one dog, four cats, 15 rabbit and about 40 chickens. We are getting about 12 eggs a day.—Robert Davis, Rainier, Wash.

**To Have a Patriotic Program.**

Dear Aunt Nellie: This is the first time I have written to the Corner. I was 10 years old December 19. Have I a twin? If I have I wish they would write to me. I have three sisters and three brothers. Their names are Elsie, Marie and Clara, and my brothers' names are Victor, Chester and William. We each have one war saving stamp, $4.12. We joined the Red Cross. I am in the third grade. My teacher's name is Miss Haupt. My sister's teacher's


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name is Miss Argyle. We have eight work horses, four saddle ponies. Their names are Collie, Dolly, Tony, Bird, and we have three colts also. We have 30 head of cattle and four calves, 23 old sheep, 17 lambs and we have one dog named Bluche. We have three miles to go to school. We ride horseback. We are going to have a patriotic program at the schoolhouse.—Alice Ganguin, Goldendale, Wash.

**Ralph's Dog Shakes Hands With Him.**

Dear Aunt Nellie: I am 12 years old and have gray eyes and dark brown hair. I am in the eighth grade. I have a big dog. I have taught him to shake hands with me and he will chase anything you tell him to. I live on an 820-acre farm. We have 20 horses, two cats, two dogs, three cows and three calves. Here are some riddles: Upon two sticks there is a barrel, upon the barrel there is a bottle, upon the bottle there is a ball, upon the ball there grows some trees, in the trees there runs some horses. Why is a pup on ice like a kiss? Why is a pipe like a watch? Answers: 1, a man combing his hair; 2, because it is dog-on-ice; 3, because they both have stems. I belong to the Junior Red Cross and am trying to help it out.—Ralph Jordan, Bickleton, Wash.

**Teacher Is 74 Years "Young."**

Dear Aunt Nellie: I live on a farm four miles from town. I have two sisters, Jennie and Ethel. We live about a half mile from West Beach, Strait of Juan de Fuca. We see many big boats go by. I think the beach is fine. Sometimes we go camping on the beach. We live a mile from school. Our teacher's name is Mrs. Holland. She is 74 years young she wants us to say. March 7 we gave her a surprise party. She liked it very much. There

## Twinkle, Twinkle, Little Star

Twinkle, twinkle, little star,
How I wonder what you are!
Up above the world so high,
Like a diamond in the sky.

When the blazing sun is gone,
When he nothing shines upon,
Then you show your little light,
Twinkle, twinkle, all the night.

Then the traveler in the dark
Thanks you for your tiny spark;
How could he see where to go,
If you did not twinkle so?

In the dark blue sky you keep,
Often through my curtains peep,
For you never shut your eye,
Till the sun is in the sky.

How your bright and tiny spark
Lights the traveller in the dark!
Though I know not what you are
Twinkle, twinkle, little star.

are 29 children in our school. At our place we have a Shetland pony. His name is Franky. We have a little buggy for him and a saddle. His color is brown. We go to church with him nearly every Sunday. We have about 200 chickens. They are brown Leghorns. I am 16 years old. My birthday is June 8. Have I a twin?—Edith Nymeyer, Oak Harbor, Wash.

**Piano for a Christmas Gift.**

Dear Aunt Nellie: This will be my third letter to the Corner. I hope the Corner will grow. I bought $4.12 worth of war saving stamps. We have a horse. His name is Ben. I am going to join the Red Cross. We have two little pigs. One has such curly hair. All our cows come in but one. There is no school this week, for the teachers' institute is being held and our teacher has gone to it. We have a piano. We got it for a Christmas gift. Tomorrow school is going to start again. Our teacher is supposed to come home today. I have brown eyes and brown hair.—Onida Wilson, Box 102, Grays River, Wash.

**A Homestead 17 Miles From Town.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am nine years of age. My birthday is September 6. We live on a homestead. We are 17 miles from town and postoffice, also school. We do not go to school. We have a dog. His name is Bob. We have no stock. I hope I will see my letter in print.—Howard Fox, Keller, Wash.

**Play Baseball at School Noons.**

Dear Aunt Nellie: This is the second time I have written to the Corner. I am 10 years old and in the third grade. I go to the McKinley school and go three miles. My teacher's name is Miss Uler. She is a good teacher and I like her. We play baseball at noon and play tag at recess.—Rudolph Freelund, R. F. D., Box 18, Olympia, Wash.

**Eight Black and White Pigeons.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. My hair is dark and my eyes are blue. I am eight years old. Have I a twin? I am in the third grade. My teacher's name is Mrs. Ramser. I like her very well. We have four cats and one dog, named Jip. We have three horses. Their names are Billy, Polly and Bobby. We have eight pigeons. They are black and white. Some are all white. I have two sisters, Barbara and Mary. We have 100 acres of land. I go to school at Bossburg. We have 26 hens and two cocks. We have six cows and 12 calves.—Tresa Hofmeister, Bossburg, Wash.

**Likes to Tend to Her Chickens.**

Dear Aunt Nellie: This is the second time I have written to the Corner. I enjoy reading the letters. I would like to be on the Roll of Honor. My sister Vera and I go to school. We have a nine-month term. There is an average of 31 scholars. Our teacher's name is Mr. Cory. I think he is a fine teacher. We hope he will teach next year. My sister got her diploma last January and she was glad. I have 16 chickens and one old hen has a baby chicken a month old. That was all that hatched out of 13 eggs. Four other hens are sitting. One is sitting on banty eggs. I think banties are very cute. My chickens have laid all winter long. I have sold 10 dozen eggs and they brought me $4.45. I like to tend to my chickens. My sister Lillian owns a calf. When it gets larger she will sell it. I live on a farm of 97 acres. We have 23 head of cattle and four horses. I am 13 years old; my birthday is September 4. I have dark blue eyes and light gray hair and weigh 95 pounds. I am in the seventh grade. Have I a twin? There is a girl that wrote to the Corner named Agnes Laund and I lost her address and would like to write to her if I knew it. I belong to the Red Cross and have $30 worth of war savings stamps. Six of us, including grandma, belong to the Red Cross. Grandma lives a few yards from our place.—Fernie H. Park, R. F. D. 1, Box 59, Daisy, Wash.

**Wishes She Could Knit.**

Dear Aunt Nellie: This is the second time that I have written to the Children's Corner. I always read the cousins' letters and enjoy reading them very much. The weather here is fine now and I haven't missed a day in school yet and I hope I won't miss any this term. Well, what do you know about it, I have surely found a twin. Her name is Myrtle Gladys Lee, and she lives in Mt. Vernon, Wash. I was so surprised when I read her letter. My birthday is October 18. I have joined the Junior Red Cross, but I can not knit, but I wish I could. I am in the sixth grade. I live on a farm and I surely like to go horseback riding. I have about two miles to go to school and there are 13 pupils in our school. But two of the biggest boys quit school for they have to work at home. We have a Saxon car. We just have a month and a week more school. I got the most valentines in school. I got 18. We had a program at school March 16. I wish you and the cousins could have all been there. May I join the Children's Corner? I can not answer many of the riddles that the cousins sent.—May Nightengale, age 12, box 28, Schragg, Wash.

**Three Sheep Ran Away.**

Dear Aunt Nellie: I have been reading the Children's Corner letters and I like them very much. We live on a 160-acre farm. We ride three miles to school on horseback. I have one sister named Zoa and one brother named Raphael. I am 8 years old and in the third grade. We had three sheep, but they ran away and we could not find them. One of our neighbors found them. We have had lots of fun coasting this winter, but I am glad it is coming spring. We were looking for buttercups yesterday and I caught cold so I had to stay out of school today. Last year I went to Spokane with my teacher, Miss Mason, to visit my auntie when school was out.—De Vota Shaw, box 155, Curlew, Wash.

**Hazel and Brother Play Duets.**

Dear Aunt Nellie: I am 14 years old and am five feet four inches tall. I have brown hair and hazel eyes and a medium fair complexion. I am in the eighth grade. Have I a twin? If so I should like to have her or him write to me through the Corner. I have a brother who is 12 years old. He and I play duets on the piano. We are going to take music lessons this summer. I have a baby sister 3 years old. We live on a 480-acre ranch. We have a car. We have two pet hens, Biddy and Old Bramah. Biddy is red and very large. Old Bramah is white with a collar of black feathers. We expect to have some eggs hatch soon.—Hazel Frances Long, Davenport, Wash.

**Likes to Read the Letters.**

Dear Aunt Nellie: My brother takes the Farmer. I like to read the letters. My teacher's name is Miss Rogers. I like her very much. I have five brothers and two sisters. My sisters' names are Alta and Blanche. My sister Blanche is married and has three children. My brothers' names are William, Herman, Sidney, Thomas and Glenn. There are 11 children go to my school, three boys and eight girls. We have three cats, five pigs and one dog. We have 26 cows and calves. Have I a twin? If I have I wish he or she would write to me.—Beulah Hiday, Coulee City, Wash.

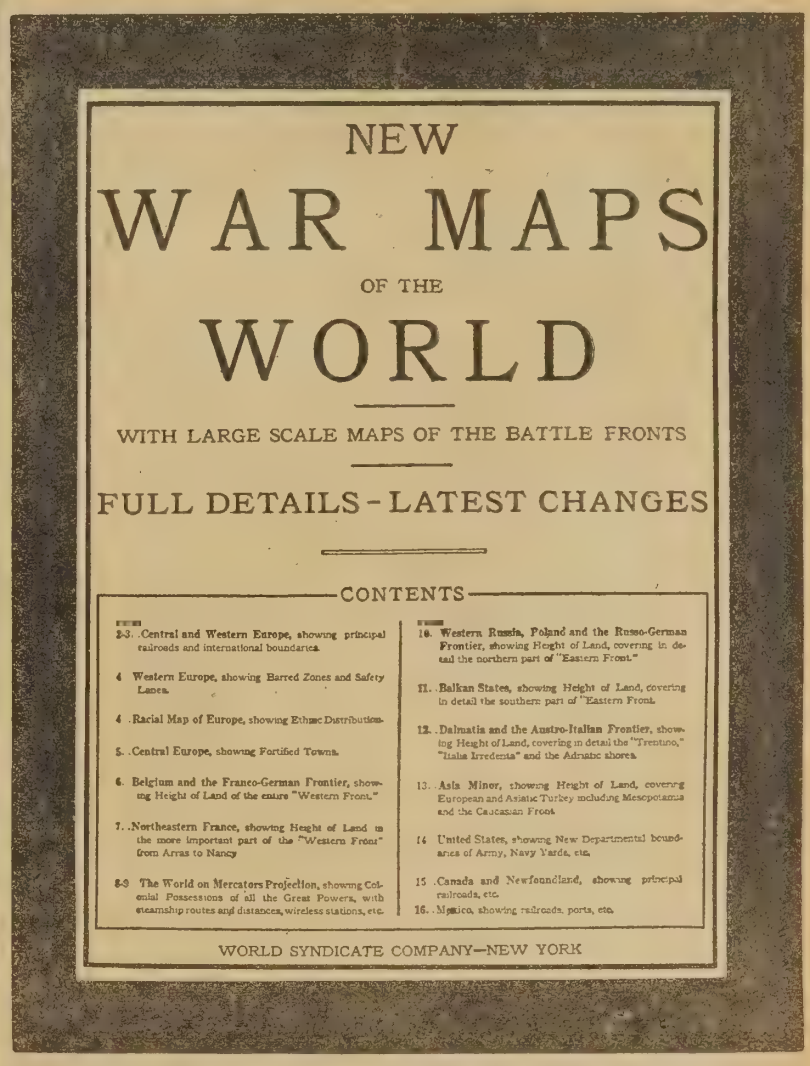
**Twenty Pulpils in Harry's Room.**

Dear Aunt Nellie: I am going to school and there are 20 pupils in my room. The school teacher is Mr. More. He lets us out at 4 o'clock and I get home at 5 o'clock. We have about 25 chickens and two cows.—Harry Koppermann, Gig Harbor, Wash.

Address all letters to Aunt Nellie, care of The Washington Farmer, Spokane, Wash.


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# News for Breeders

## Drop Name "Holstein"

The eighth annual meeting of the British Friesian society has just been held in London. The present membership is 660, an increase of nearly 150 during the last year. The receipts for the last year were over $3000 in excess of its expenditures. The assets of the society are over $54,000 in excess of liabilities. The following extract from the report of the London Live Stock Journal will be read with interest by the Holstein breeders of this country:

V. A. Malcolmson moved that the word "Holstein" be omitted from the name of the society. He was in close touch with agricultural and pastoral interests in many parts of the empire, and he knew that it would be very much appreciated outside this country if the word "Holstein" were dropped, if the suggestion was a feasible one.

L. Souchon seconded and, after a discussion, in which it was pointed out that the British breed had no connection with Holstein, and that the name was a complete misnomer, the motion was adopted.

A. F. Chillingworth proposed that the Holstein-Friesian Association of America be informed of the decision and asked to consider the possibility of making a similar alteration in the name of their association and breed. The meeting agreed to the suggestion.

The meeting then proceeded to consider the revised rules as submitted by the council, and, after consideration of each proposal, and amendment of certain details, they were approved and ordered to be accepted as the rules of the society. The chief alterations are (1) that the practice of electing life members is to be discontinued; (2) that the voting of the members for the election of the council shall take place in time for the results to be known at the annual general meeting; (3) that the following bulls shall not be eligible for entry in the Herd Book (a) being dun, or dun-and-white, or the son of a dun or a dun-and-white cow or heifer, (b) having a wholly white head or a white head with black ears, or being the son of a cow or heifer with a white head or a white head with black ears, (c) not having white socks on all four feet, and (4) that certain of the rules, especially those dealing with Herd Book matters, be altered to bylaws, which may be added to or altered by the council from time to time.

## Washington Jerseys Sell

(Continued from page three.)

Lad's Marine, born Dec. 22, 1913—Harry Neilson, Tillamook, Ore.....$455
Orinda's Blossom, born Sept. 8, 1913—Joe Donaldson .....$420
Olga Irene St. Mawes, born April 20, 1916—A. P. Johnson, Bay City Ore. .....$105
St. Mawes Duchess Nan, born Mar. 5, 1915—William Robitsch, Bay City, Ore. .....$380
Olga Lad's Dewbell, born Aug. 17, 1915 (and baby calf)—Daniels Bros., Tillamook, Ore. .....$415
Fern's Fairy Fox, born Dec. 5, 1915—Carl Posetti .....$135
Olga Lad's Daisy Girl, born Oct. 16, 1914—Solly Smith, Tillamook ...$400
St. Mawes Queen Ester, born Oct. 23, 1915—Arthur D. Tippein, Garibaldi, Ore. .....$500
Olga's Onedda, born Oct. 24, 1915—Claude Ackley .....$335
Belle's Rosaire, born Oct. 10, 1914—Cyrus Randell, Tillamook.....$400
St. Mawes Dairy Maid, born May 9, 1917—Carl Posseti, Bay City, Ore. ...$150
LaCreole Crystal Queen, born July 15, 1911—Mrs. M. J. Bays, Woods, Ore. .....$300
Rinda Lad's Bracelet, born Feb. 1, 1918—McArthur & Stauff.....$155
Victoria of Mistletoe, born Aug. 19, 1911—Carl Posetti .....$455
Margaret of Mistletoe, born Aug. 23, 1911—Daniels Bros. .....$310
Katy of Shady Lawn Farm, born June 30, 1915—Joe Donaldson.....$500
Marie of Shady Lawn Farm, born April 16, 1914—Marie Hathaway, Ore...$260
Buttercup's Gertie, born April 23, 1918—Solly Smith .....$255
Gertie's Merry Glynllyn, born May 10, 1913—E. M. Clark .....$400
Hermit's Graceful Pussy, born July 9, 1915—Claude Ackley .....$400
Majesty's Honeymoon Bess, born Nov. 10, 1915—Carl Posetti.....$300
Majesty's Eminent Lass, born Oct. 27, 1917—L. A. Edgar, Tillamook....$110
Hermit's Pussy Fancy, born Feb. 17, 1917—Joe Donaldson .....$210
Sultana's Ozaw, born July 24, 1917—E. M. Clark .....$240
Sultana's Foxy Mona, dropped Sept. 24, 1915—A. D. Tippin .....$155
Sultana's Lilly Carnation, born May 7, 1914—M. J. Bays, Woods, Ore.....$260
Jolly Medora, born May 2, 1913—E. M. Clark .....$370
Retta's Viola Marigold born Aug. 27, 1914—E. M. Clark .....$325
Illahe Stoke Pogis' Belle, born April 6, 1914—Claude Ackley .....$310
Spotsie's Fern Fox, born Feb. 8, 1914—Marie Hathaway .....$125
Princess Starette, born June 11, 1912—S. V. Anderson, Tillamook .....$325

**Bulls.**

Poppy's Golden St. Mawes, born Sept. 11, 1914. Tillamook Jersey Breeders' Cooperative Bull Association (10 members) .....$1700
Golden St. Mawes Rosaire, born Jan. 12, 1917—Joe Donaldson .....$400
St. Mawes Rinda Lad's Rosaire—Owen A. Thompson, Tillamook, Ore....$125
St. Mawes Rinda Lad, born April 8, 1916—David Fitzpatrick, Tillamook, Ore. .....$130
Rinda Lad's Rosaire, born Dec. 30, 1914—M. M. Bays, Cloverdale, Ore...$175
Eminent's Pilot Lad, born Jan. 17, 1918—J. S. Diehl, Tillamook.....$50


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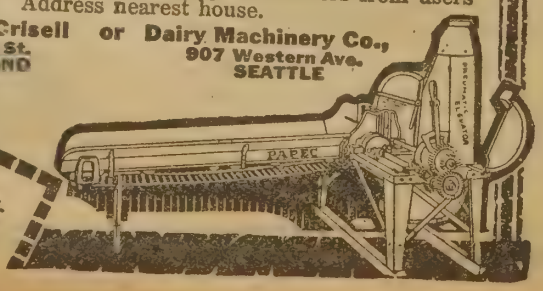
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# Breeders' Department


First Eastern Oregon
## Shorthorn Sale
At Ontario, Oregon
Thursday, April 25th

UNDER AUSPICES OF THE NORTHWEST SHORTHORN BREEDERS' ASSOCIATION.

75 Registered Shorthorns 75
Males and Females

Drawn from the following well known herds of

Day & Rothrock — A. D. Dunn.
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Breeders, Farmers and Rangemen will find this sale an exceptional opportunity to select a class of cattle best suited to their requirements.

Included in the offering are some of the best bulls ever entered for sale in the northwest, both as to pedigree and individuality.

The females are very high class and should draw the attention of discriminating buyers, therefore any one wishing to strengthen his herd should not overlook this opportunity.

All stock will be judged day preceding sale by F. W. Harding of Chicago, secretary American Shorthorn Breeders' Assn.

For catalogues and other information write
Joseph Turner, Manager Sales, Meyers Falls, Wash.
Or Ontario, Oregon, Moore Hotel.
Gue & Cranke, Auctioneers.

FARE AND A THIRD (on certificate plan) from all points in Oregon, Washington and Idaho on all railroads to Oregon Horse and Cattle Raisers' Convention and Shorthorn Sale, April 23, 24, 25.

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Pen 1, 12 hens, av. over 240 eggs, crossed to yearling cock, parents av. 260 eggs, $5 setting of 15. Pen 2, 25 yearling hens, av. over 200, crossed to 2 sons of No. 44, 708 eggs in 3 yrs., $5 setting of 15. Pen 3, about 20 hens and pullets, with reserve cocks and cockerels, same breeding $3.50 per 15. A few cocks and cockerels from $5 up. IRVINE P. GARDNER. Riddle, Ore.



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Both combs. Stock for sale. Eggs, $6 and $3 per 100. Mammoth Toulouse geese and Mammoth Bronze turkeys. Eggs for sale. Write for mating list. No baby chicks. If you want quality and egg production, as well as vitality, get some of our stock and eggs. HIGHLAND FRUIT AND POULTRY RANCH. J. Nonnenmacher, R. F. D. 3, Yakima, Wash.

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from trap-nested and Hoganized Golden Campines, White faced Black Spanish, Barred Rocks and S. C. White Leghorns. Prices reasonable. Write for folder.

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Barred Rocks, S. C. White Leghorns and S. C. Black Minorcas. Stock and eggs from exhibition and laying strains.

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### BABY CHICKS

Rhode Island Reds, White Leghorns, $15 per 100; $12.50 per 100. All chicks now sold to May 15. If you want chicks this season, order now.

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won this season at the Inter-State fair, 6 blues out of a possible 10; at Coeur d'Alene 1 and 2 cockerel; at Wenatchee, 1, 2 and 3 pullet, 1 and 2 cockerel and 2d cock. At Moscow, 1, 3 and 4 cockerels pullet bred. Eggs from exhibition pens $3 per 15; choice pens, $2 per 15.

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Eggs for hatching from heavy winter laying stock; $1.50 per 15, $7 per 100. Young Flemish Giant hares.

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# SHORTHORN SALE

In this sale of Shorthorns at Lewiston, Idaho, on Wednesday, May 1st, 1918, there will be sold 21 young bulls of breeding age, and 13 cows and heifers heavy in calf and with calf at foot. They are sired by our first prize and champion herd bulls, Prince Booth 377105, Cloverleaf Pride 2D 506682, a son of Maxwalton Pride and a grandson of Avondale; and Types Model 429408, a son of Cumberland Type, 36 times grand champion in that many shows. In this offering buyers will have the opportunity of securing individuals that are regarded as among the best of the breed. Therefore those wanting top specimens, either in bulls or females, should be attracted to this sale, which will be held at the NORTHWEST LIVESTOCK SHOW AND FAIR GROUNDS, at Lewiston, Idaho. The catalogue will be of value to every prospective buyer. Write for it now.

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## HOLSTEINS

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## HORSES AND JACKS

# PUBLIC SALE

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### By Emmet Mulhall

23 HEAD, 10 STALLIONS, 13 MARES

SATURDAY MAY 20, 1918.

These Percherons are well bred, representing the blood of Moulinet, Carnot, Calypso, Rabelais, Etudiant, Powerful, and Seductor; well grown and well conditioned and as workers and breeders are the kind that are an asset on every farm. In this consignment is the coming three-year-old colt Minet, by Moulinet, out of a Rabelais dam who in the get of a sire group at Illinois state fair defeated the leading sires in the United States. This colt should be heard from on the Pacific coast circuit this fall. Also General Funston, a well turned coming three-year-old colt teeming with quality, possessing remarkable finish and wonderful action. These colts should head a herd of pure bred mares. Also several prize winning mares in eastern shows.

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## SHEEP

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# Grain and Produce Markets

## Chicago Grain.

CHICAGO, April 8.—Bullish interpretation of the crop report, together with official notice that new style trading would go into effect on Thursday led to a material upturn today in the value of corn. Prices closed firm, 5-8 net higher, $1.27 1-4 for May. Oats gained 1 1-4@1 3-8 to 1 3-8@1-2, and provisions a shade to 10 cents.

Corn exhibited strength right from the outset. General belief prevailed that the May delivery would reach the maximum level of prices as soon as business in new style future deliveries began, for the change in rules makes the commercial grades of corn the contract grades.

Oats were firmer, largely in sympathy with corn. The government figures on the probable wheat yield tended also to lift the oats market, as the estimate was less favorable than had been looked for.

### Cash Quotations.

CHICAGO, April 8.—Corn—No. 2 yellow, $1.90@1.9; No. 3 yellow, $1.65@1.73; No. 4 yellow, $1.60@1.65.

Oats—No. 3 white, 92½@93c; standard, 92¾@93¼c.

Rye—No. 2, nominal.

Barley, $1.70@1.90.

Timothy, $5@8.25.

Clover, $2[illegible]@31.

Pork—Nominal.

Lard, $[illegible].65.

Ribs, $2[illegible].82@23.82.

### Chicago Futures.

| Corn— | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| May | 1.26⅞ | 1.27¼ | 1.26⅞ | 1.27¼ |
| Oats— | | | | |
| April | .... | .90⅛ | .89⅛ | .90⅛ |
| May | .85¾ | .86⅝ | .85⅛ | .86⅝ |
| Pork— | | | | |
| May | .... | .... | .... | 48.00 |
| Lard— | | | | |
| May | 25.67 | 25.72 | 25.62 | 25.72 |
| July | 26.02 | 26.17 | 26.00 | 26.10 |
| Ribs— | | | | |
| May | 25.15 | 24.27 | 24.12 | 24.20 |
| July | 24.65 | 24.75 | 24.62 | 24.72 |

### Pacific Northwest Grain.

PORTLAND, Ore., April 8.—Grain, 30-day options: Oats, No. 2, $69 bid; barley, feed, $73; brewing, $80. Eastern oats and corn in bulk: Oats, No. 3 white, $64 bid; 38-pound clipped, white, $64.50; corn, No. 3 yellow, $66; No. 3 mixed, $65; oats, No. 3, $64; clipped, $65; corn, yellow, $66; mixed, $65.

### Minneapolis Grain.

MINNEAPOLIS, April 8.—Wheat—Receipts, 190 cars, compared with 201 a year ago.

Corn—No. 3 yellow, $1.55@1.65.

Oats—No. 3 white, 90¼@91¼c.

Flour—Unchanged; shipments, 52,130 barrels.

Rye, $2.91@2.92.

Barley, $1.50@1.90.

Bran, $33.14.

## Portland Wheat.

PORTLAND, Ore., April 6.—The first barley bids for several days were made at the exchange at the close of the week, $80 being offered for brewing and $73 for feed barley with no sellers. Oats are holding fairly steady at $69, but the market is very dull. No changes were recorded in the hay market at the close.

The Portland merchants' exchange has indorsed Joseph W. Ganong, vice president and general manager of the Portland Flouring Mills company for the position of chairman of the north Pacific coast milling division of the United States food administration, left vacant by the death of Theodore B. Wilcox. It is held by local grain men that the office should remain in Portland, inasmuch as the grain corporation zone agent, M. H. Houser is located here, and it is necessary for the two offices to work in common.

## Live Stock Quotations.

### At Omaha.

OMAHA, Neb., April 8.—Hogs—Receipts, 10,000; market, steady to 5c higher. Heavy, $16.30@16.70; mixed, $16.40@16.65; light, $16.40@16.90; pigs, $10@15; bulk of sales, $16.40@16.65.

Cattle—Receipts, 7800; market, 10 to 25c higher. Native steers, $11@13.25; cows and heifers, $8.50@12.25; western steers, $9.50@12.50; Texas steers, $9@10.50; cows and heifers, $8@10.50; canners, $7.50@8.75; stockers and feeders, $7@12.50; calves, $9@13; bulls, stags, etc., $7.75@11.75.

Sheep—Receipts, 10,500; market, steady. Yearlings, $13.50@17.50; wethers, $13@16.50; ewes, $12.50@15.50; lambs, $10.85@20.50.

### At Chicago.

CHICAGO, April 8.—Hogs—Receipts, 68,000; mostly 25c under Saturday's average. Bulk, $17.10@17.55; light, $17@17.65; mixed, $16.80@17.65; heavy, $16@17.40; rough, $16@16.30; pigs, $12.75@16.70.

Cattle—Receipts, 24,000; unsettled. Native steers, $10.10@15.50; stockers and feeders, $8.30@12; cows anl heifers, $6.75@12.90; calves, $11@17.

Sheep—Receipts, 14,000; weak. Sheep, $12.50@17.50; lambs, $16@20.60.

### At Portland.

PORTLAND, Ore., April 8.—Cattle—Strong; receipts, 1295. Good to choice steers, $11.50@12.10; good to medium steers, $10.50@11.50; common to good steers, $6.50@10; choice cows and heifers, $9.75@10.75; common to good cows and heifers, $6@9.50; canners, $3@5; bulls, $5@9; calves, $7.50@12; stockers and feeder steers, $6.50@9.50.

Hogs—Strong; receipts, 1220. Prime light, $17@17.50; prime heavy, $16.50@16.75; pigs, $14.75@15.75; bulk of sales, $16.90@17.

Sheep—Steady; receipts, 73. Western lambs, $15@15.50; valley lambs, $14.50@15; yearlings, $13@13.50; wethers, $12.50@13; ewes, $9@12.

Shorn sheep, 2½ to 3c under quotations.

### Spokane Stockyards, Monday.

Hogs—Receipts, 149; market, steady to strong. Prime light, $16.80@17.05; prime heavy, $16.80@16.95; pigs, $15@16.25; stockers and feeders, $14@16; bulk of sales, $17.

Cattle—Receipts, 61; market, steady to strong. Best beef steers, $11.25@12; good steers, $10@11; common to good steers, $8.25@10; best beef cows and heifers, $9@10; good cows and heifers, $7.75@8.75; ordinary to good cows and heifers, $6.25@7.25; canners, $4.25@6.25; bulls, $6@10; calves, $7@12.50; stockers and feeders, $6@8.75.

Sheep—Receipts, none; market, steady. Prime lambs, $14.50@15.25; good lambs, $13.25@14; prime yearlings, $12.50@13.25; prime wethers, $12@12.75; best mutton ewes, $9@10.75.

## The Wool Situation.

The only condition that prevents extreme activity in all types of wool is the transportation problem, says the Columbia Basin Wool and Warehouse company in its regular news letter. Buying has been delayed somewhat because of lack of shipping facilities, it is stated. The letter further says that the sentiment favoring price fixing is changed because the manufacturers are solicitous that nothing shall be done to handicap production. Barring unusual conditions, a firm market is predicted

Cross-bred wools have been selling at prices ranging from 54c to 65c for eastern Oregon and Idaho wools. Valley wools have sold from 52c to 68c. Fine wools have been rather inactive, but can be readily moved on the scoured basis of $1.75 to $1.82 for staple fine wools, $1.60 to $1.70 for clothing. Braids, 53c to 56c in the grease.

It appears now that the establishing of prices on the present clip will be governed in a measure by the necessary arrangements that the growers have made to finance their holdings. It is evident that dealers will use great care in contracting wools, and will not do so except with absolute certainty that the wools are resold or for the account of manufacturers.

The activity of the market will depend largely upon transportation facilities, and we would not be surprised to see markets open slowly. There is no reason to expect lower prices to prevail than have been prevailing for some weeks.

BOSTON, Mass., April 5.—Trading in wool here was stopped today by vote of the trade and all the unsold stock was placed at the disposal of the government at prevailing values. The directors voted unanimously to help out in the emergency and ordered an immediate inventory of all unsold stocks.

The Commercial Bulletin will say tomorrow: "The wool market continues keen for the limited stocks available or for stocks to be imported, free of government restraint. Sales for the week were about two million pounds, including a fair proportion of territory and Cape wools of the fine and fine medium grades at fully last week's quotations. The tendency is to mark up prices on wools still on hand.

"The government is occupying more and more machinery at the mills on military fabrics and has taken over one woolen plant in its entirety. The west is still inactive."

Scoured basis: Texas fine 12 months, $1.68@1.72; fine eight months, $1.55@1.60.

California northern, $1.70@1.75; middle county, $1.55@1.60; southern, $1.45@1.50.

Oregon: Eastern No. 1 staple, $1.80@1.82; eastern clothing, $1.55@1.60; valley No. 1, $1.70.

Territory fine staple, $1.85@1.87; half blood combing, $1.75@1.78; ⅜ blood combing, $1.50@1.55; fine clothing, $1.60@1.65; fine medium clothing, $1.55@1.60.

## Spokane Market.

### WHOLESALE.

**Vegetables**—Cabbage, $4@5 cwt; carrots, $2 cwt; bunch carrots, 75@90c doz; bunch beets, 75@90c doz; beets, $1.50 cwt; rutabagas, $1.75 cwt; parsnips, $1.75 cwt; hothouse lettuce, 50c 5-lb box; head lettuce, 80c doz, $2.75@3 crate; turnips, $1.50@1.75 cwt; bunch turnips, 75@90c; California new turnips, $2 cwt; red bell peppers, $1.25 box; chilli peppers, 25c lb; green peppers, 11c lb; Mexican tomatoes, $3 lug; celery, 90c@$1 doz; hothouse cucumbers, $1 doz; cauliflower, $2@2.25 crate; new garlic, 10@12½c lb; parsley, 40c doz bunches; horseradish root, 12½c lb; brussels sprouts, 12½c lb; radishes, 40c doz bunches; rhubarb, $3.25 box, 10c lb; spinach, $1 crate; asparagus, 18c lb; new peas, 15c lb; artichokes, $1.80 doz.

**Grapes**—California cluster raisins, $2.25 box, 20 packages.

**Onions**—California onions, $2 cwt; green onions, 40c doz bunches.

**Tropical Fruits**—Bananas, 6c lb; lemons, $7.50 case; Valencia oranges, $6.75@7 case; medium sweet oranges, $6@6.75; budded seedling oranges, $5.75@6.25 case; blood oranges, $3.25 half case; Florida grapefruit, $6 case.

### MEAT.

**Beef**—Beef steers, 16½@19½c lb; cow beef, 15½@18c lb; heifers, 18½c lb; beef loin, 24@28c lb; steer chucks, 16½@17½c lb; prime ribs, 22@26c lb; rump and round, 19c lb.

**Mutton**—Breakers, 24@25c lb.

**Lambs**—26@27c lb.

**Pork**—Packer dressed hogs, 26@27c lb; pork loins, 29@30c lb; legs, 28c lb; shoulders, 24c lb; leaf lard, 28c lb; tenderloins, frozen, 35c lb; spareribs, 18c lb; country dressed hogs, with head on, 20c lb to producer.

**Smoked Meats**—Washington hams, 33c lb; T. C. hams, 34c lb; T. C. bacon, 45½c lb; Washington bacon, 40½@44½c lb; picnics, 23½c lb; Boston butts, 28½c lb; English bacon, 36½c lb.

**Star Brand**—Hams, 34@35c lb; Shield hams, 31@34c lb; picnics, 23½c lb; bacon backs, 33c lb; Star bacon, 46½@48½c lb; Shield bacon, 40¼@44½c lb; Simon Pure lard, $17.30 case.

**Dry Salt Meats**—Clear bellies, 30c lb; lean backs, clear, 29@31c lb; sides, 28½@29½c per lb.

**Lard**—Tierces, 27½@28½c lb; $14.85@15.39 case; compound, tierces, 23¾c lb.

### POULTRY.

**Dressed Poultry**—Frozen hens, 28c lb; frozen springs, 28c lb; frozen broilers, 32c lb.

### GRAIN AND FEED.

**Rice**—Fancy head, $7.50@9.50 cwt.

**Flour**—Bluestem, $9.40; Blend, $9.40; Montana hard wheat, $10.40; graham, $8.60 bbl, 49-lb sacks; whole wheat, $8.80; eastern rye, $10.10; eastern rye meal, $10.30; oat flour, $13.10.

**Oats**—$74 ton whole, $76 rolled, delivered in city.

**Corn**—$77 ton; cracked corn, $79 ton.

**Bran**—$30 ton; shorts, $32 ton; bran and shorts, $31 ton.

**Barley**—Rolled, $71½ per ton.

**Oil Meal**—$78 per ton.

**Hay**—Timothy, $32 per ton, $31 ton by carload; alfalfa, $27 ton, $26 ton by carload.

## Grain Bag Shortage.

WALLA WALLA, April 7.—There will be a shortage of fully 8,000,000 grain bags this year, and farmers must arrange to supply the deficiency either by getting other bags or by building farm bins and granaries, M. K. Snyder of the Washington State college told the farmers' union yesterday. He said the farmers had a mistaken idea that the government was going to take care of the farmers by furnishing them sacks.

Arrangements were made for 24,000,000 bags, and these have been taken, he said.

## Seattle Market.

SEATTLE, Wash., April 6.—Probably not more than 50 per cent of the potato acreage grown last year will be seeded for the coming season, according to statements by wholesalers of Western avenue and seed dealers today. While the conditions of the reduction are not quite so pronounced in eastern Washington, similar results are expected from the slow movement of seed stock in all portions of the state.

One of the features this year is the

### BUYING PRICES.

Unless otherwise stated the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots, f. o. b. Seattle:

Eggs—Local, 35c per dozen; eastern Washington, Oregon and Idaho, 34c.

Poultry—Spring roosters, live, fat, 2½ to 5 lbs., 26@27c; old roosters, 17@20c lb.; squabs, large, $3.50 dozen; geese, fat, live, 18c lb.

Butterfat—46c lb.; dairy butter, 30@32c.

Beef—Buying prices: Prime beef, steers, 11@12c; cows, fat, 9@11c lb.; heifers, 10@11c.

Hogs—Light, 18@20c lb.; heavy, 17@18c lb.

Veal—Fancy light, 17@18c lb.; heavy, 9@16c lb.

Hides—Salted, 14c lb.; flint-dry hides, 29c lb.; salt kip, 16c lb.; green hides, 11c lb.; green calf, 23c lb.; dry calf (under 6 pounds), 29c lb.; bulls and dry salts, 4c lb. less; green bulls, 9c lb. Clean, long wool, western Washington flint dry pelts, 39c per lb.; heavy to clean eastern Washington flint dry pelts, 30@35c lb.

## Portland Market.

PORTLAND, Ore., April 6.—A 4-cent drop in butter prices was announced by city creamery men in the latter part of the week as a result of the offering of cheap butter from California. Cubes followed prints down grade. The trade does not believe that prices will go much lower.

In the following list of quotations the grain, hay, mill feed, hops, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 2 white, $69 per ton.

Millstuffs—Bran, $30 per ton; shorts, $32.

Barley—No. 1 feed, $73; brewing, $80; rolled, $77@$79.

Hay—Buying prices: Timothy, eastern Oregon, $29@30; alfalfa, $24@24.50; grain, $22.

Eggs—Oregon ranch, case count, 34@35c per dozen; candled, 36@38c.

Poultry—Hens, 26@27c; stags, 22c; ducks, 32c; turkeys, live, 26@27c; geese, 20@21c.

Butter—City creamery, prints, 44@45c per pound; cubes, extras, 39@40c.

Cheese — Tillamook triplets, 24c; Young Americas, 25c.

Dressed meats—Veal, 19c; pork, 21½@22c.

Hops—1916, nominal; 1917 crop, 14@15c.

Potatoes—Oregon, buying price, 65@75c.

Wool—Eastern Oregon, 44@65c; valley, 50@55c.

Beans—Buying prices: Oregon white navy and Lady Washington, 10¼@10½c; white kidney, 10c; colored, 9c.





**WANTED--1000 tons of mixed country scrap iron**

in carload lots of not less than 25 tons each. Write for prices if interested.

PACIFIC HIDE & FUR DEPOT.
Joseph Thiebes and C. T. Symmes.
1101-09 Railroad Ave., Spokane, Wash.


## Figures Showing Comparative Prices April 4

| | Portland. | Omaha. | Chicago. |
|---|---|---|---|
| **Cattle.** | | | |
| Receipts | 50 | 4600 | 11,000 |
| Tone of market | steady | 10-15 hr. | firm |
| Prime steers | not quoted | 10.50-14.50 | 10.10-15.20 |
| Good to choice steers | 11.00-11.50 | 11.25-12.50 | |
| Med. to good steers | 10.50-11.50 | 9.50-10.00 | |
| Com. to med. steers | 9.00-10.00 | | |
| Choice cows and heifers | 9.75-10.75 | 11.00-17.10 | 11.25-12.40 |
| Com. to good cows and heifers | 8.00- 9.50 | 8.10- 9.75 | 6.80- 9.75 |
| Canners | 4.25- 5.25 | | |
| Bulls | 5.00- 9.00 | | |
| Calves | 7.50-12.00 | 9.00-13.00 | 11.20-16.75 |
| Stockers and feeders | 5.50- 9.50 | 7.50-12.25 | 8.40-12.00 |
| **Hogs.** | | | |
| Receipts | 400 | 13,000 | 25,000 |
| Tone of market | steady | 10 lower | slow |
| Prime light | 17.00-17.25 | 16.70-17.20 | 17.45-18.00 |
| Prime heavy | 16.75-16.90 | 16.50-17.90 | 17.40-17.65 |
| Pigs | 14.75-15.75 | 12.00-16.50 | 15.00-17.25 |
| Bulk | 16.90-17.00 | 16.65-17.00 | 17.40-17.90 |
| **Sheep.** | | | |
| Receipts | 100 | 3600 | 9000 |
| Tone of market | steady | 10 hr. | firm |
| Western lambs | 15.00-15.50 | 18.35-20.35 | 15.75-20.50 |
| Valley lambs | 14.50-15.00 | | |
| Yearlings | 13.00-13.50 | 16.00-18.80 | |
| Wethers | 12.50-13.00 | 14.00-17.00 | 14.50-17.10 |
| Ewes | 9.00-12.00 | 13.00-15.50 | 12.25-15.00 |


# Want Ads

**HELP WANTED—MALE 3**

WANTED — A FIRST-CLASS CHEESEmaker, to begin work May 1. Siletz Prairie Co-Op. Cheese Co., Siletz, Ore. Ralph Hamer, Sec.

**EDUCATIONAL 45**

BEHNKE-WALKER, PORTLAND, NORTHwest's largest, finest business college, can not supply half the calls for trained young men, women. Enroll now. Free success catalog. Positions secured.

**TEACHERS' AGENCIES 46**

TEACHERS REGISTER WITH B. F. WESTmore, Mgr. Hazard Teachers' Agcy. $1 registers you at three offices. 911 Old Nat'l Bank bldg., Spokane, Washington.

TEACHERS NEEDED FOR NEXT FALL. Write for information. Clark Teachers' Agcy, 412 Ch. of Com. Bldg., Spokane.

**FRESH FOOD PRODUCTS 56**

FISH! FISH!

100 LBS. SALMON IN BRINE, SHIPping weight 165 lbs., $11. Smoked salmon, 20 lbs. net., $3.25. Ask for fresh and cured price list. T. A. Beard, 4322 Winslow place, Seattle, Wash.

## HONEY, BEESWAX—Wanted. 58

SEND SAMPLES OF YOUR HONEY AND beeswax; state quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

## MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.
Before building be sure and get our prices on sash, doors, finish, paints, plaster board, roofing, etc.
We will send you our large illustrated catalog, No. 27, free on request, post-paid.
Cottage glass doors .....$2.75 and up
5x panel doors .....$1.80 and up
20x24 2-light windows .....$1.63
One-ply roofing .....$1.35
Two-ply roofing .....$1.70
Three-ply roofing .....$2.10
3-ft., 4-ft. and 5-ft. cedar lap siding ...$8
Regular lengths .....$10
1x4 flooring, 3-ft. to 5-ft. .....$20
4-in. beaded ceiling, 3-ft. to 9-ft. .....$20
The largest factory in the west selling direct to consumer. We sell any one, ship anywhere, and guarantee safe delivery.
O. B. WILLIAMS CO.
1943 First Ave. So., Seattle, Wash.

BUILDING MATERIALS AT WHOLESALE prices — Doors, windows, roofing paper, porch columns, plaster boards. All building materials shipped promptly. Send for our complete illustrated catalogue; gives you lowest net prices. P. A. ROVIG CO., 2229 First ave., So., Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harners, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

## MISCELLANEOUS—WANTED 63

CASH FOR OLD FALSE TEETH; SOME worth up to $19.50 per set (broken or not). Send at once. We return cash same day we receive package. We pay highest prices for old gold jewelry, gold crowns, bridges, platinum, silver. (Cut out adv.) U. S. Smelting Works, 609 Caswell, Milwaukee, Wis.

POULTRY WANTED — THE FOOD Administration permits the sale of poultry for market purposes after April 1. Send us your cream, poultry, dressed meats and hides. Commercial Creamery Co., Spokane, Wash.

## MACHINERY FOR SALE. 93

FOR FARM LUMBERING USE
"AMERICAN" PORTABLE SAWMILLS.
Carried in Stock by
HIGGINS MACHINERY COMPANY.
312 1st Ave. So., Seattle. Write for Catalog.

FOR SALE—ONE 10 H. P. STEAM tractor, cheap; $300. H. C. Rutledge, Littlerock, Wash.

## AUTOMOBILES 114

FORDS CAN BURN HALF COAL OIL, ALL distillate, or cheapest gasoline, using our 1918 Carburetor; 34 miles per gallon guaranteed; easy starting; great power increase; attach it yourself. Big profit selling for us. 30 days' trial. Money-back guarantee. Styles to fit any automobile. Air-Friction Carburetor Company, 321 Madison st., Dayton, Ohio.

NIGHT-COMFORT FOR FORD TOURISTS with our Sleeper. The bed inside! $5.50. Auto-Sleeper Co., 930L, Sacramento, Cal.

## STOVE & FURNACE REPAIRS 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

## PATENTS 150

WANTED—NEW IDEAS. WRITE FOR list of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. VICTOR J. EVANS & CO., Pat. Attys., 710 Ninth, Washington, D. C.

## PETS—DOGS, BIRDS, ETC. 171

FOR SALE.
Walker Fox Hound Pups.
Price $4 Each.
W. GINGERY, PLAINS, MONT.

## POULTRY 174



HOGANIZED BABY CHICKS.
We have several thousand thoroughbred Hoganized White Leghorn chicks for sale at $14 per 100 for March and April delivery. Rhode Island Red and Barred Rock chicks $18 per 100. Safe delivery guaranteed. Established 10 years. Queen Hatchery, 89 Pike St., Seattle, Wash.

200,000 WHITE LEGHORN BABY CHICKS —Bred for eggs, vigor, size. Safe arrival in good condition guaranteed. Free catalog and book on "Raising the Chicks." Oak Heights Poultry Farm, Route 3, Box T 67, Tacoma, Wash.

BABY CHICKS, WHITE LEGHORNS, CUSTOMERS say they are "husky," "lively," "vigorous," "healthy," "strong," "hard to beat," "thrifty," "great layers." Write at once. Free catalogue. Freshlaid Farm, Colfax, Wash.

WHITE LEGHORN CHICKS FROM STOCK trap-nested for high egg production; safe delivery and satisfaction guaranteed. The Quivira Farm, Black Diamond, Wash.

BABY CHICKS.
Famous Carnation White Leghorn; vigorous, early maturing, heavy winter layers; also breeding stock. E. W. Raush, Carnation Poultry Ranch, Kent, Wash.

# Want Ads

**Want Ad Rates 30c Per Line**

Want ads are run at this rate in The Washington Farmer and i t s associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

**How to Figure Cost of Ads**

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

**Send for card giving lower rates for ads running one month or longer.**

## POULTRY 174
Continued.

BABY CHICKS—LEADING VARIETIES. We guarantee safe arrival and full count; strong, vigorous chicks from the finest flocks of free range stock in this country. 1918 price list and care of baby chicks if you mention this paper. Lasher's Hatchery, Petaluma, Calif.

BABY CHICKS—S. C. WHITE LEGHORNS; real mortgage lifters; the kind that lay while mere kiddies; 21 years on the job. Catalogue. I. D. Casey & Sons, R. 6, Waitsburg, Wash.

WHITE LEGHORN BABY CHICKS FROM heavy-laying (Hoganized) stock, $10 per 100. We guarantee safe arrival. The Pioneer Hatchery, 401 Sixth st., Petaluma, California.

PETALUMA HATCHERY—CAN SHIP DAY-old chicks to points reached in 3 days. Why not have the best? We challenge the hen. Free circular. L. W. Clark, Petaluma, Cal.

WHITE LEGHORN EGGS $1.50 PER SETting; $8 per hundred. Special mating Pen-A, eggs 50c each; Pen-B, eggs 25c each. Waikiki Farm, R. 7, Spokane, Wash.

M. B. TURKEY EGGS, PUREST OF BLOOD, ten for $3.50. Choice B. P. Rock chicken eggs, 14 for $2. Safe arrival by express guaranteed. Effie Shepardson, Kelso, Wash.

SINGLE COMB WHITE LEGHORNS; THE world's greatest egg machines. Write for our "War Measure." Help Hoover win the war. Broadview Farm, Curlew, Wash.

ANCONAS: MY 12 YEARS OF SELECtion have developed great layers; fine shape and mottle. Eggs, $1.50 per 13. A. G. Propst, R. 6, Box 54, Albany, Ore.

S. C. WHITE LEGHORNS — PRESENT breeders averaged 15 doz. each last season. Mated to high-record males. Hatching eggs. Mary Jessup, Cooks, Wash.

TOULOUSE GEESE, MAMMOTH PEKIN fawn and white Indian Runner ducks' eggs. Chas. Johnson, R. 1, Medical Lake, Wn.

S. C. RHODE ISLAND RED EGGS $2 PER setting; $10 per 100. Fertility guaranteed. Waikiki Farm, R. 7, Spokane, Wash.

BARRED ROCKS.
Nicely barred, and fine layers. Eggs, $1.50 per 15. Wm. Heimsoth, R. 2, Baker, Ore.

PARKS BRED-TO-LAY BARRED ROCKS, winter layers. Eggs, $1.50 for 15; $8 per 100. W. G. Neyland, Spokane Bridge, Wn.

TRAP-NESTED WHITE LEGHORNS AND Barred Rocks. Eggs, $1.50 per 15, $8 per 100. Mrs. W. M. Roberts, Elmira, Ore.

RANCH RAISED WHITE WYANDOTTES. Good vigorous birds, eggs and stock for sale. Jas. A. Hills, Jonathan, Wash.

FOR SALE — INDIAN RUNNER DUCK eggs, 15c each, from prize-winning birds. J. F. Medaris, Wapato, Wash.

SHOW WINNING STOCK AND EGGS. Barred Rocks, S. C. Leghorns, large. C. E. Dibble, Payette, Idaho.

PUREBRED BARRED ROCK EGGS FROM two year old hens, $8 per 100, $2 for 15. S. M. Wilson, Carley, Wn.

S. C. R. I. RED EGGS, $1.50 TO $5 PER setting; $6 per hundred. Mrs. Rominger, Underwood, Wash.

LARGE TYPE R. I. R. EGGS FOR HATCHing; ranch raised. Mrs. F. O. Gillett, King Hill, Idaho.

BARRED ROCK EGGS, $1.50 PER 15. August Anderson, Pullman, Wash.

BARRED ROCK EGGS, $2 PER 15. W. D. Good, Mt. Vernon, Wash.

## LIVE STOCK 177

FOR SALE.
MULHALL'S ANNUAL PUBLIC SALE OF SHORTHORNS
will occur at Lewiston, Idaho, on May 1, 1918. We are offering a useful lot of young bulls, cows and heifers with calves at foot, and rebred to our first prize and grand champion bulls. Apply early for catalogues and mention the Farm Trio.
WILLIAM MULHALL, FENN, IDAHO.

FOR SALE.
A choice lot of pure bred Shire stallions, coming two years old; also pure bred yearling Shorthorn bulls. Address
WILSON RANCH, ROCKLYN, WASH.

3-YEAR-OLD COAL BLACK REGISTERED Percheron stallion, weight 1750; sound as a dollar. Will sell at a bargain on account going to war. Write M. M. Dickson, 811 Nora, Spokane, Wash.

DAIRY FOR SALE—55 COWS, WITH good milk route in Portland and six-year lease on good farm. Write B 4, Oregon Farmer, Portland, Ore.

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## FARM LANDS—WANTED 654

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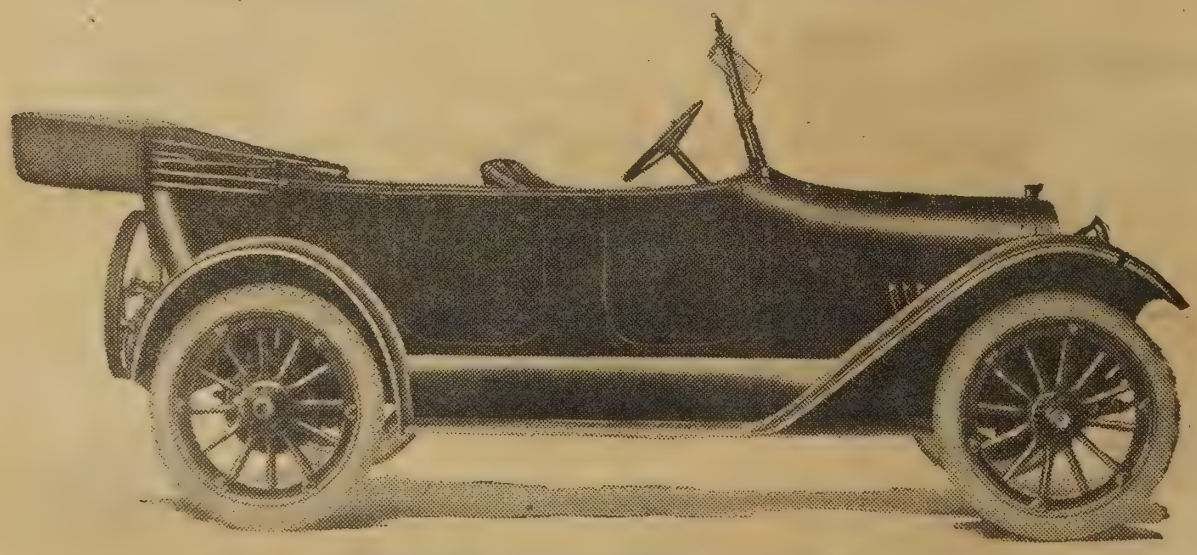
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# THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XLI. NO. 16. APRIL 18, 1918. WEEKLY.


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# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 16 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF April 18, 1918

## Italian Bees Best for Northwest

### *Start in on Small Scale and Learn Business as You Go*

Article 2, By GEORGE W. YORK.

Like most other domesticated animals, such as cattle, poultry, etc., there are several varieties or breeds of bees from which to select. I might mention Carniolans, from Carniola, Austria; the Cyprians from the Island of Cyprus; Holy Lands, from Palestine, and the Italians, from Italy. The latter are considered the best all-purpose bees in this country, and so they are recommended by all who make anything of a business of beekeeping. They were first brought to this country about the years 1860, and have continued to prove their worth as they have been handlled and bred from year to year.



Italian Bee.

The native bees are a kind of black or dark-colored small bee, very irritable, and do not stick to their combs very well. But the Italians are comparatively quiet, docile, hardy, excellent workers, and more likely not to tolerate the presence of the bee moth in their hives. The bee moths are very destructive to honey combs, and when they are not opposed strenuously they soon make havoc of a colony of bees.

**Start on Small Scale.**

So I advise getting Italian bees. But don't make the grievous mistake of starting with more than two or three colonies. Let them increase with your increase of experience in handling them and studying their nature and characteristics.

If possible to do so, get your first bees from some bee-keeping neighbor. But if none are to be had nearby then you will need to send your order to some bee-keeper who offers bees for sale.

In case you send away for bees, do not order full colonies, as the express charges might be rather high, especially if they have to be shipped a long distance. In that case order two or three three-frame nuclei with a queen bee in each nucleus. These nuclei can be boxed together with a thin partition between them, so that the bees and queen of each nucleus will be kept separate while on the journey.

A three-frame nucleus of bees with good queen should not cost over $4.50 at the shipping point, and with proper care and sufficient flowers to work on such nucleus should not only increase into a strong eight or ten frame colony, but should store a surplus of from 40 to 50 pounds of honey during the season. Here in the northwest such nucleus should be received not later than May 15 in order to yield the surplus mentioned. Of course, the size of the return in honey from either a nucleus or a full colony will depend upon the kind of season, abundance of nectar-yielding flowers in the vicinity, and also upon the care and attention given the bees at the proper time by the beekeeper.

Now for a few simple directions to be followed upon the receipt of a nucleus of bees: We will suppose that a hive has been secured in advance to receive the bees when they arrive by express. The bees will have been enclosed very securely with wire cloth, which is to be removed very gently from the top of the crate or box containing the frames of comb and bees. Before opening, a little smoke from burning wood or rags should be blown upon the bees through the wire cloth from the top of the box, which will have the effect of slightly stupefying them, thus rendering them less likely to sting the operator.

There are several styles of bellows bee smokers on the market, any one of



Bee Smoker.

which will answer the purpose very well indeed. (See cut herewith of one style.)

Having subdued the bees, and with the wire-cloth removed as directed, lift each frame separately and place it at one side in the hive. Do the same thing with the other two frames of the nucleus, having the three frames hanging side by side in the hive just as they were in the light shipping box in which they were received. They should be spaced about 3-8 of an inch between the combs.

If your hive is an eight-frame one, then fill in the rest of the hive with five empty frames; or if a 10-frame hive, then fill in the seven empty frames. Of course, if one could have these five or seven frames filled with empty honeycomb it would be a great help to the new colony of bees; but next to that would be to have the frames filled with comb foundation, which will be described in the next article. You see, one can not tell about everything in one article or in two. There are really so many details about the management of bees that it will require quite a few articles the length of this one in order to familiarize the reader with the whole subject, if he has had no previous understanding of it.

In the next article I will expect to have a picture of a modern beehive and several other illustrations that will help the reader to a better understanding of what I am trying to write. You will be surprised to find that there is so much of interest connected with the little busy bee and its profitable management.

## Farm Gardens

### Please Answer These Questions

Farmers are paying more attention to their gardens this year than ever before. This means that one farm family is more interested than ever before in information regarding how other farm families are managing their gardens this year. If you will supply this information by answering the following questions and giving any other suggestions we will be glad to pass it on through the columns of the Farmer:

How large is your farm garden?

Is it larger or smaller than last year?

What vegetables do you raise, and to what extent do you practice successive planting for fresh vegetables throughout the season?

How is your garden coming on this season?

How much of your year's supply of food is furnished by your garden?

Who is the best gardener in your family

Please mail your letter to the Editor of The Washington Farmer, Spokane.

**Crusty.**

There are two kinds of Victory loafs. One is bread and the other is a slacker. The slacker has the most crust.—San Francisco Bulletin.

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## Don't Cease Effort

### Third Liberty Loan May Win War

If your community is one of the many throughout the nation that went over the top the first week of the third Liberty loan campaign it doesn't mean that the effort should be stopped or even allowed to slacken. Unceasing work should be continued until the largest amount of subscriptions possible are taken, even though it means an oversubscription of the loan by several times.

The northwest claims the honor of having the first state to reach its minimum quota, Oregon, which went over the top with a bound long before the first week was finished. While neither Washington nor Idaho reached its quota during the first week the subscriptions came in rapidly and loyally, indicating that before the month's campaign is over their minimum will have been far oversubscribed.

There are some commendable features and some perhaps not so commendable about the results of the first week over the nation as a whole. Indications are that the rural districts, especially in the northwest, subscribed with greater speed than did the cities. It is also shown that far more individuals with small subscriptions are being recorded than in either of the two previous loans. This is as the government desires it. The government has urged that 20,000,000 people take bonds of from $50 to as high as possible.

The end of the first week saw official totals reaching nearly $573,000,000, but this, large as it seems, is only little more than one-sixth of the minimum that must be sold. It is remembered, however, that the latter weeks of the first and second campaigns brought in floods of subscriptions, and it is anticipated that the $3,000,000,000 minimum will be greatly oversubscribed before the close of the month's campaign.

### Outlet to Columbia River.

Work has begun on a survey of the state road between Goldendale and Marys Hill, in Klickitat county. This is to be graded this spring and when completed will give Goldendale and vicinity a fine outlet to the Columbia river for auto trucks with a minimum grade. Much of the product of the Klickitat valley can be hauled for shipment through the Celilo locks to Portland.

### Hens No Longer Exempt.

After Saturday, April 20, the hen will not be a privileged character in this country, as she has been for the last couple of months. The food administration has announced that on that date the regulation that has prohibited the slaughter of hens for market would be withdrawn.

THE WASHINGTON FARMER believes that the speeding up of food production is a war measure of the first importance. The Washington Farmer believes that every farm, as well as every farmer, every farmer's wife and every farm boy or girl actively speeding up food production, is entitled to a star of honor on the **FARM SERVICE WAR FLAG,** a reduced design of which, in colors, will be found on page 7 of this issue. The central star in the flag stands for the farm, and small stars may be added to represent every farm worker in the family. With this belief in the loyalty of the farmers and their families, The WASHington Farmer has designed a Farm Service War Flag distinct from the War Service Flag. This design is dedicated to the farmers of the Northwest and of the entire nation.

The U. S. Department of Agriculture, to whom the Farm Service War Flag was submitted, declares it "appropriate" and "attractive." The design of this flag was submitted to the U. S. Commissioner of Patents in person by the editor of The Farmer, who offered to donate to the United States any and all rights in this design. The commissioner assured the editor that the rights of the farmers to the exclusive use of this design could be amply protected by an application for a patent until the patent office reached decision in the matter.

# Raise a Garden; Raise a Garden

## *Failure Last Year Should Spur On to Greater Effort*

By GRANVILLE LOWTHER.

After the experiences of last year, I know it is not popular to urge people to grow gardens; but listen! The people who succeed are those who rise above a few disappointments and keep at it until they learn by study and experience the best methods. They keep patiently, persistently, determinedly at it. They eliminate from their vocabulary words that express failure, and from their minds thoughts that lead to defeat. If the soldiers in the trenches do not whip the Germans in the first skirmish they will keep at it until they have a battle, and if they do not win in the first battle, they will keep at it until their enemies are defeated. If we do not succeed as we had hoped in our first effort at food production, we will try again, for it is true now, as it was last year when every one was trying to add something to the food supply, that the need for food is great, in order that we win the war.

One cause of failure was the inexperience of many persons who undertook to grow vegetables. It could not reasonably have been expected that everybody would succeed, more especially those who are not accustomed to the work. It would be better for persons without experience to plant small areas of land, until they learn something about it.

In so far as the potato crop was concerned, there was an over-supply for home consumption and for our evaporators. The shipping facilities were also inadequate to the demands. Some cast the blame for this situation on the government, and say that after it had taken over the railroads it failed on account of inefficient management and therefore did not supply the people with cars. These persons forget that there was a shortage of cars the year before, under circumstances in which the demands for cars were less than they are now. Some blame Mr. Hoover, the food administrator, for recommending that the people plant so many potatoes. We must consider that war on a large scale is something to which this generation of Americans is wholly unaccustomed, something for which we were not prepared, something that a great many believed we would never have to meet, and something to which a democratic form of government is not adapted.

In Germany, the government would command the growing of gardens if the authorities believed that that would contribute to military success, and the people have no choice about it. In this country, the authorities do not command; they recommend the growing of gardens, and the people do as they please about it.

**The Same Needs as Before.**

There are today the same needs for the growing of gardens as last year, when it was urged with so much vigor by the food administrators. In fact, there is greater need, for the war has taken on larger proportions. We will have before another crop can be marketed, a million men in Europe, whom we must feed and at the same time, furnish food in considerable quantities for the allies.

When we consider our boys in the trenches and the needs likely to arise out of the present situation it seems selfish to appeal to the profit side of the question. It is like appealing to a father to feed his child and keep it alive because when it grows up he can make money out of its labor. Generally, men keep their stock in good condition because it is profitable to do so, but in the feeding of their children, they generally act from higher motives. However, there is the profit side to be considered by those who are not sufficiently enthused with patriotic principles to act without it. I would call attention to the following crops that I think might be planted with profit, cultivated at odd times when it would not interfere with other work, and furnish food for the family and perhaps others besides.

Notwithstanding the losses which some incurred last year in the planting of potatoes, I would recommend planting this year the same crops. I do so in harmony with the general rule that I have followed with but few exceptions. That rule is: "Plant when the seed is cheap." Last year I violated that rule and planted potatoes when the seed cost me $6 a bushel. I did so because I felt that perhaps the war conditions would justify the planting. Now I would follow the rule again. This year seed can be bought at very reasonable prices. Because the seed is cheap it looks to the masses as if there was no profit in potatoes, therefore, tens of thousands of people will not plant as much as they

(Continued on page fourteen.)

# Trappers of the Ozarks

Since February 28, when the opening chapters of the serial story now running in the Farmer were published, so many new readers have joined the Farmer family that it has become necessary to give a comprehensive summary of the chapters of this story that have been published up to this time. While each chapter is in itself virtually a short story, the interest of each is greatly increased by knowledge on the part of the reader of those stirring incidents of adventure narrated in the previous chapters. With the purpose therefore of giving our new subscribers an equal chance at the enjoyment in the succeeding chapters of this story, "Trappers of the Ozarks," a summary of the first 11 chapters follows:

ONE September afternoon nearly 107 years ago, Benoni Armstrong and Jodo Henderson, two young fellows living near a little fur trading post on the Mississippi river, now the city of St. Louis, left their homes for a winter of adventure and profit seeking in the wilds of the Ozark mountains of Missouri. With them, carrying their provisions and keeping them company, were their little donkey, appropriately named Spunky, and their two dogs.

The experiences through which the lads were to go were not new to Benoni, the older of the two, but this was the first trip that Jodo had ever made so far from home and little did he dream of the hardships and dangers through which they were to pass before the coming of spring, when they could return to their homes in the more nearly civilized district about St. Louis. It was with happy prospect for a winter of successful hunting and the enjoyment of camp experiences that the two bade their parents and brothers and sisters goodby. "Risk us to keep a sharp lookout for all redskins and all kinds of redskins," Ben replied lightly when Rachael Henderson, Jodo's sister and Ben's sweetheart, warned him solicitously as they prepared to depart.

During the succeeding months they did keep a sharp lookout for the redskins and the redskins kept a sharp lookout for them. But this was not all. Earthquakes, enraged buffalo, turbulent mountain streams, ravenous wolves, bear and other trouble makers, in addition to wild and savage tribes of Indians, made the winter one of danger and terror to them.

THOUGH numerous dangers were encountered on their trip westward the first notable incident occurred shortly after they had established camp on the Big Niangua river, miles and miles from the habitation of any human beings save hostile Indians. With a view to securing both meat and robes, the boys undertook the capture of part of a herd of buffaloes. Unable to approach them on foot within firing distance, Jodo mounted the little pack donkey and bore down upon the herd at full speed. A shot from his pistol wounded the shaggy bull of the herd, which, infuriated by the injury, turned upon Jodo and the donkey and charged with head lowered and hoofs clattering. Without waiting to be urged, the donkey turned and ran for dear life. Escape would have been easy had not his forefeet broken through into a badger hole causing him to fall, throwing both himself and Jodo headlong with the infuriated buffalo bull but a few paces behind. Fortunate, indeed, was it that Jodo's partner was nearby to send a ball from his trusty rifle into the heart of the beast, thus bring to a happy end their first dangerous experience.

Ben and Jodo had pitched their camp near the mouth of a cave out of which a clear, cold stream of water gurgled down the ravine to join the Niangua. In this sheltered spot they built their cabin of logs, with a stone chimney, while they were waiting for the winter to set in, when the furs would be prime. As the sun was setting one evening they went to the mouth of the big cave, attracted by a roaring sound from within, as of the rushing of the wind. For a moment they stood wondering what it might be, when suddenly from the mouth of the cave fluttered a swarm of bats, hundreds of thousands of them, a veritable cloud, increasing the darkness that was settling over the wild region in which their winter was to be spent. The great flock of bats were starting out on their nightly hunt for food, the cave serving as their shelter from both enemies and the light during the day time.

THE spirit of adventure was uppermost in the minds of the young hunters and they determined to investigate the cavernous interior of the cave next day. In a little dugout canoe which they had hewn from a log they ventured into the cave, finding a great subterranean sea of cold, clear water. For hours they paddled about, exploring by the light of their torches until, knowing that night must be approaching, they turned about and sailed and paddled to their winter home under the cliff.

One cold night as the boys were sitting about the fire in their cabin a growl from one of their dogs startled them. With keen ears they listened and what they heard was a crunching of snow about their cabin. Quietly and quickly they extinguished their lights and as they listened in the darkness they became sure that savage red men were walking about their cabin, seeking means to enter, but the bolted door would not give way before their stealthy attack and after a bit all became quiet. The next morning investigation of the tracks revealed the fact that two Indians had been their visitors and the boys knew that sooner or later their savage companions would return for the purpose of capturing the young hunters.

THE return visit came soon enough. Only a few nights later the boys became aware of the fact that their cabin was surrounded by enemies, but they had prepared themselves for the attack. The door was firmly fastened on the inside so that it could not be opened without demolishing the door or its fastenings, but the Indians were not to be defeated in this way. Seizing a heavy log that had been left over from the building of the cabin, a dozen of them made of it a battering ram and began an onslaught on the stone chimney, which soon began to crumble under the attack. Inside, the boys prepared to defend themselves with their weapons, ready at any minute to send a rifle ball into the first Indian who appeared before the opening when the chimney came down.

But nature did not intend that they should be captured or that they should defend themselves in this way that night. Suddenly the boys realized that there was a commotion about their cabin not made by the savages' attack. The whole cabin, the whole earth about it and the stone cliff above it were trembling and shaking. Through the opening in the half-demolished chimney they could see their Indian visitors terror stricken and ready for flight.

Realizing the cause of the violent commotion, which was nothing else than an earthquake in the dead of night, the boys unfastened the door and while the Indians fled in one direction, they fled in another, to get from under the cliff that was sending down about their cabin tons and tons of rock and boulders. From the dangers of that night they escape, and the experience of the earthquake was so terrifying to the ignorant natives of the Niangua that they did not molest the boys again for several weeks.

The winter slipped by rapidly, busy days and weeks for Ben and Jodo attending their traps, hunting and boiling down salt water from a salt spring that they had discovered. One morning in February Jodo came hurrying down from the top of the cliff above the cabin to announce breathlessly to his partner that the smoke of a campfire could be seen two or three miles down the river, indicating for sure that the Osages were again in the community and probably would be seeking the capture of the hunter boys. Fearing further trouble with the Indians, they had cached most of their camp equipment in a small cave well up the side of the cliff, not far from their cabin.

ONE day in this month they were out visiting their traps and while they were eating their lunch at noontime the bushes in front of them suddenly parted and a savage warrior stood before them, tomahawk in hand. Instinctively the boys turned to reach their rifles, only to find that other red men had approached from behind and had already secured possession of their weapons. They were helpless in the hands of their captors and were led away to the Osage village. Time and again on the trip Chief Snapping Turtle boasted to the boys hoy they might have their heads chopped off, be burned alive or be scalped alive and sent home to their people as a warning against further invasion of the Osage territory by the palefaces.

But the boys behaved in such manner that upon arrival at the Osage village they were accorded better treatment than they had dared to hope for. Not only were they given a teepee of their own to live in, but every day during the early part of their captivity a big, fat hand parted the door flap and furnished them with cooked venison and parched corn. At first the teepee was constantly surrounded by warrior guards, but after a time Chief Snapping Turtle became so trustful of the boys that he not only took away the guard but allowed them to go on short hunting trips in the neighboring country. It was not until the boys, on one of their hunting trips, became lost in the forest and failed to return to the village one night that they lost the confidence of the savage chief. From that instant began their real danger at the hands of the savages.

(Chapter 12 of this story, which appears on page 27 of this week's issue, contains the story of perhaps the most fearful experience of the boys on their whole western expedition.)

## Clip This Convenient Order Blank

Address all communications concerning thrift or war savings stamps to the Washington Farmer, War Savings Department, Room 26, Review Building, Spokane, Wash.

Remittances may be in any form desired, including personal check.

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The Washington Farmer, War Savings Department, Room 26, Review Building, Spokane, Wash.

Gentlemen: I wish to invest in ..... U. S. government thrift (number desired.) stamps at 25 cents each.

I wish to invest in ..... U. S. war savings stamps at $4.15 each. (number desired.) April figure.

Amount enclosed $.....

Full Name .....

Town ..... State .....

R. F. D. No. .....

I have already bought.....Stamps and have a..... (kind of stamp.) (card or certificate.)

## Live Day-Old Chicks May be Sent by Mail.

Order No. 1177.

Office of Postmaster General, Washington, March 8, 1918.—Effective March 15, 1918, section 476 of the postal laws and regulations is amended by the addition of the following as paragraph 2:

"2. Live day-old chicks shall be accepted for mailing, without insurance or C. O. D. privileges, when the package in which they are contained is properly prepared and can be delivered to the addressee within 72 hours from the time of mailing."

A. S. BURLESON,
Postmaster General.

## Beet Workers in Yakima.

As an assurance for those who contemplate planting sugar beets in the Yakima valley this year Manager T. R. Horne of the Utah-Idaho Sugar company announces that 600 workers employed in the Montana beet fields last year already have arrived in the valley and several hundred more will be furnished.

## P. R. Clark Appointed.

P. R. Clark has been appointed federal food administrator for Adams county.

# Grain Bag Supply Causes Concern

## *Food Administration Urges Farmers to Place Orders Without Delay*

**How are you going to handle your grain this season, bulk or sacks?. If in bulk, have you your storage and handling facilities prepared?. If in sacks, have you ordered your needed supply? Not one bushel of wheat must be allowed to go to waste in the northwest this year for lack of preparedness on the part of the producer or handler. The problem of how to handle it is exceedingly complicated, but every farmer should prepare, by one method or another, to guarantee himself and the country against the loss of any part of his crops. Soldiers can not fight on empty stomachs.**

"Anything you can do to get the consumer to place his orders quickly for any bags required will be a helpful service to the consumer, to the bag importers and to the food administration."

This is the closing sentence in a telegram from the national food administration at Washington to The Washington Farmer in response to an inquiry made by this paper relative to the grain bag situation.

The advice that farmers who need grain bags should order them at once appears to be based on the facts that a considerable number of bags must yet be imported from India; that it is extremely difficult to secure vessels in which to import them, and that the cost of importation even when vessels are secured is so great that importers will not take the risk unless guaranteed of the sale of such bags after they are received in this country.

Some time ago the largest importers in this country and the food administration entered into an agreement whereby bags were to be sold for 25 cents f. o. b. tidewater. Under that agreement, which was entered into by five of the largest companies, approximately 24,000,000 bags were included. Including prison bags those in the hands of importers who were not parties to the 25-cent agreement and other miscellaneous lots here and there, it is estimated by the food administration that 42,000,000 bags are available for this year's crop. Estimates of the grain crop for the west, which territory uses about all the sacks that are used, indicate a bag shortage of anywhere from 5,000,000 to 10,000,000, according to some of the best grain authorities. M. K. Snyder, of the State College of Washington, estimates the shortage at 8,000,000 sacks.

**More Than Twenty-Five Cents.**

When the announcement was made a few weeks ago that the agreement had been made for 25-cent bags the erroneous impression was spread abroad that this meant that the farmers would only have to pay 25 cents each for their bags. The truth about it is that this 25 cents is the price at tidewater points, and that the price to be paid by the farmers for the 24,000,000 bags under the agreement is 25 cents plus freight and handling charges from the coast to interior distribution points. Bags under the agreement have been selling to the farmers at something like 27 cents each on an average, it being understood between the importers and the food administration that the 25-cent price would mean about 27-cent sacks in the interior.

Bags not included under the agreement, but which are yet to be secured by the importers from India or elsewhere, will cost the farmers more than 27 cents, according to the best information obtainable. This paper has taken the question up with all four of the big bag concerns in the northwest and has found only one of them stating a definite price on bags that are yet to be imported. The Balfour-Guthrie company, with northwestern headquarters at Portland, Ore., states that they will accept orders for grain bags now at 28 1-2 cents f. o. b. tidewater or 3 1-2 cents higher than the agreement made with the food administration covering sacks that were on hand at the time of the agreement. This latter price, however, is subject to change without notice, the company stated, and may, in fact, be changed before this article reaches the readers of this paper. The Ames-Harris-Neville company, with northwestern headquarters in Portland, declined to state a price on bags not now on hand, but made it clear that they could not sell at the 25-cent price under present conditions. The Bemis Bag company, with headquarters at Seattle, Wash., and the Mitsui Bag company, with headquarters at the same place, stated that they were unable to quote prices on bags that were not included under the food administration agreement.

"The government food officials asked the grain bag importers to meet in Washington February 26," said D. W. La MacGregor, speaking for Balfour, Guthrie & Co., "and we did so. At that time we were asked not to charge more than 25 cents on bags available. That included sacks on hand and ordered. This we agreed to, provided the government would raise the differential on sacked grain to 9c per bu., which was done. We sold these sacks at the price agreed or at least until the available supply reported was exhausted. The price, you understand, was 25c f. o. b. at tidewater.

"At present we have been sold out, but we accept orders. However, we can not accept them for 25 cents, as the cost has risen very considerably. We will take orders for grain bags now at 28 1-2 cents f. o. b. tidewater. This price is not for any stated time, and is subject to change without notice. It is my opinion that the farmer who needs sacks would do well to buy them even at this advanced price, for I think they will go higher."

A representative of the Ames-Harris-Neville company said:

"We reported 8,000,000 bags of the 23,000,000 reported to the authorities. We agreed not to sell them for more than 25 cents, provided no extra expense was incurred. As a matter of fact, some of the sacks cost us more, but we stayed by the agreement. The 8,000,000 sacks are all sold, and we certainly could not sell more at the same price under the present conditions. We would not accept orders at present, at all events."

Although the Bemis Bag company were unable to quote prices at the present time on bags yet to be ordered, a few days ago they did issue a statement urging farmers to order bags at once, assuring them that the price would go up to an amount considerably in excess of the 25-cent agreement. This statement was made while there were yet sacks to be distributed under the 25-cent agreement, and it is stated by importers and by the food administration that the supply under the agreement is now exhausted. The Bemis company stated that farmers who did not have their orders placed prior to the exhaustion of the supply under agreement would probably have to pay 29 or 30 cents each for their bags.

**Situation Complicated.**

Many factors enter to make it impossible to calculate the exact number of grain bags that will be required this season. The yield is altogether problematical; the amount that may be handled in bulk is likewise yet to be determined; the double service that can be rendered by bags being used, emptied and reused during the season is likewise a factor.

With crop prospects favorable as they have been with the opening of spring in the northwest it has been estimated by parties familiar with the situation that the yield of Washington, Oregon and Idaho will approximate 60,000,000 bushels of wheat. It is likewise estimated, though it is extremely difficult to get accurate information on the problem, that 10,000,000 bushels will be handled in bulk, leaving 50,000,000 bushels or thereabout to be handled by the sack method. This should require some 22,500,000 bags. The California crop of wheat and barley, together with the northwestern barley and oat crops, brings the total of sacks needed up well toward the 50,000,000 mark. The use of bags for handling peas, beans and the like adds another doubtful feature in the supply needed.

Many are of the opinion that the decision of the food administration to make a differential value of 9 cents per bushel between grain in bulk and grain sacked is doing much to stimulate the farmers to again handle their grain in sacks. Bags which cost the farmer 27 cents, as they did on an average under the 25-cent price agreement would, if filled with two and one-quarter bushels of wheat, return to the grower about 20 cents, leaving a net cost of something like 7 cents per bag, or 3 1-2 cents per bushel. This does not include the usual dockage of half a pound or more for the sack in the weight when selling the wheat.

On the other hand, many believe that the terminal bulk handling facilities will be taxed to their limit regardless of the sack price question.

L. M. Jeffers, whose address is 310 Worcester building, Portland, Ore., a representative of the United States department of agriculture, has sent out notice that the department has placed men in the northwest thoroughly prepared from the practical standpoint to give advice and assistance regarding bulk elevator construction and equipment for farm elevators to those who desire such advice and assistance. These men, says Mr. Jeffers, will be glad to meet with individuals, organizations or committees to map out plans for this work.

The following is the telegram sent by The Farmer to the food administration and the latter's reply:

"Experts in northwest predict grain bag shortage and increased price. Please wire indicating number of bags under 25-cent agreement, number available not under agreement, possibility of increased price on latter and prospects of adequate supply or shortage for northwest."

**Administration's Reply.**

"The new bag supply was estimated at 42,000,000, of which 24,000,000 were in the hands of four importers, Bemis, Ames, Balfour and Mitsui, who agreed to sell all the bags they had unsold at that time at 25 cents. About 4,000,000 prison bags would be sold at prices fixed as usual. The other bags, estimated at 14,000,000, were made up of all the importations other than the four mentioned, and although not included in the food administration agreement, they could not be sold higher than 25 cents so long as bags were being offered at that price by others. It was estimated that there would probably be 3,000,000 to 5,000,000 second-hand bags good enough for grain, and by all means should be used to the utmost extent; that some part of the crop would be handled in bulk, also that some wheat could be sacked and dumped into bulk cars at railway stations and empty sacks returned immediately to be used again. The size of the crop was still unknown. These various factors made it very difficult to tell whether the supply of bags would be sufficient or not, and on account of high prices and risk of loss importers were unwilling to import additional supplies without being sure of demand at the high price. Of the 25-cent bags covered by food administration agreement, Bemis, Balfour and Mitsui are sold out and at last reports Ames had only a small quantity remaining unsold. No information is available as to number of bags unsold in other hands. We understand a few million additional bags, perhaps three or four million, are now obtainable at about 28 1-2 cents. Further supplies may be difficult to arrange. The question of shortage still remains undetermined, and if there is a shortage it is important to know of it as soon as possible, so that steps may be taken to do whatever can be done. All consumers who have not yet bought their bags should buy as quickly as possible in order that the requirements may be known. Consumers are warned to look out for their requirements and not to trust to luck, as bags may not be obtainable later on in the season.

"It is getting late to import bags from Calcutta under present difficult ocean freight and slow cable conditions. Consumers should not expect the food administration to accomplish the impossible, not to arrange for the importation of large quantities of high-priced bags without positive knowledge that the bags are required. Anything you can do to get consumers to place their orders quickly for any bags required will be a helpful service to the consumers, to the bag importers and to the food administration."

After discussing the great need of bags for war fortification purposes, another statement by the food administration says:

"Unless the bag dealers can determine now what the shortage of bags, if any, is to be, they can not incur the risk of more imports at present prices. The only way that this shortage can be ascertained is by the prompt placing of all orders for 1918 requirements. Bag buyers who do not book their orders while the 25-cent bags are available may have to pay from 28 to 30 cents or more. Recent quotations for importing additional bags from Calcutta, if freight space is obtainable, were about 27 to 29 cents.

"In addition to ordering all new bags needed, farmers are strongly advised to prepare for use all bags which can be made serviceable and to store them where damage from weather and rodents will be reduced to a minimum. The entire matter is one from which little relief is in sight until the shipping situation is greatly improved."

# Too Many Idle Men

That this is no time for loafing or the waiting for something to turn up is a sentiment which will meet with general indorsement. The Farmer is glad to publish the following letter from S. M. Cleaver, secretary-treasurer of the American and Delaine-Merino Record association:

To the Editor: In answer to your communication would say that I think it of special importance for this government to not only retain all the farmer boys, but if necessary, draft help from the ranks of idle loafers to force the greatest production in America for 1918 that the world ever knew. It is possible to double that of 1917 if the force is intelligently handled. Our country is full of idleness that should be forced in to work under a suitable manager, either in tilling the soil or handling the musket after a sufficient number is selected to work the saw and hammer.

We have too many idle men, too many that are waiting for something to turn up that will make them easy money. These are not easy times, they are times that every man should be proud of his action towards helping the government each day. S. M. CLEAVER.

# Spring Grain

## Whitman to Plant Big Acreage

By J. S. NESSLY.

An immense amount of spring work has been done in Whitman county already and the indications are that the acreage of spring grain will be the largest in the history of the county. In the western part much seeding has been done. In the northern and eastern sections, where the soil is heavier and the rainfall was greater, much of the low land is yet too wet to plow.

In the vicinity of St. John report is made that the ground has been drying out too fast and rain is needed. The soil is crusted on top and rain is needed to soften it. About St. John there was little wheat sown last fall, owing to the extreme dry weather, no rain falling from June until December. Much land was summerfallowed preparatory to planting it to fall wheat, but the dry fall prevented this and it was planned to plant it to spring wheat and a good portion ot it has been planted, but the grain needs rain. If weather conditions are favorable a large acreage of wheat will be planted in that locality.

The farmers are crowding every hour of daylight to get the crop in as early as possible. There is some scarcity of farm labor, but almost enough for all purposes, although a few are short handed. Good wages are being paid and at $60 per month, with board and room, the farm laborer is believed to be getting more than the man in town who gets $100 to $125 per month.

Crops are "spotted" in the Palouse country this year. Some winter wheat looks well and some fields are thin and there are many places where the ground is almost bare. Some of the wheat was winter killed. In some fields, sown late last fall, only a portion of the seed grew and there are bare spots and much of it is thin. The condition is generally below normal for this time of year.

But the ground is generally in good condition for spring seeding and farmers are depending largely on spring wheat, the acreage of which will be the largest since fall wheat became the staple crop of the Palouse country. Marquis will predominate, with Red chaff and Baart and club following in the order named, in the eastern and northern parts of the county, but in the western part there will be a big acreage of bluestem, which has been a standard crop in that section for many years.

Farmers are turning their attention more to sheep and the number of farms with a small band of sheep on them show a marked increase over a few years ago, but there is a marked and noticeable decrease in the number both of hogs and cattle. A prominent retired farmer who has been buying and shipping cattle and hogs and grain for several years, says there is not more than 10 per cent as many hogs in the Palouse country as there were two years ago and that there are fewer cattle than ever before. Farmers are taking more interest in horses and are preparing to raise more and better horses in the future.

**New Hosiery.**

New hosiery is made in "rights" and "lefts" to fit the feet and ankles more snugly.

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## *Force Must Combat Force*

That peace-loving America is fast realizing that the day when the lion and the lamb shall lie down together is not yet here is indicated by two outstanding incidents of the last few days. One of these incidents was the declaration of President Wilson, whose patience with Prussian violation of human right has been almost past the understanding of the American people, that "force, force to the utmost, force without stint or limit" must be exerted to meet the war methods of Germany. The other is the whole-hearted way in which the people of this country have responded and are responding to the call of the third Liberty loan.

The president's words as he opened the campaign for the third Liberty loan were the words of the American people, and from across the sea has come back the answer that they were the words of America's allies, the words of the civilized world. Germany has proved beyond further question that her word is not to be accepted as truth, that her actions are based solely upon selfish and unholy purposes and not upon the fundamentals of right as between man and man and nation and nation. Germany has made no pledge to any people that has not been ruthlessly broken the hour that it became to her advantage to break it. Germany's war tactics and war methods have been practiced without regard for any of the rules of right for which the allied nations of the world are now fighting the world's greatest war. Humanity and liberty, even with regard to her own people, she has trampled under foot with utter disdain. She has proved herself in all respects a beast totally incapable of being reasoned with.

Against such a nation no argument can be presented effectively save the argument of physical force. As that historic patriot of '76 put it, "An appeal to arms and to the God of Hosts is all that is left us." As President Wilson put it on that world anniversary, April 6, and as the American people have put it through their liberal subscriptions to the Liberty loan bond issue, "There is, therefore, but one response possible from us: Force, force to the utmost, force without stint or limit, the righteous and triumphant force which shall make right the law of the world and crush every selfish dominion down in the dust."

## *Open Your Mouth, Shut Your Eyes*

Recently I have been making some investigations in reference to certain organizations or companies doing a commission business in the northwest and appealing to fruit growers for patronage. After getting some information in reference to the reliability of these companies I have come to the conclusion that quite a percentage of us in the northwest have been a little like the old proverb, "Open your mouth and shut your eyes, and I'll give you something to make you wise." When I was a small child and my mother used to say, "Open your mouth and shut your eyes, and I'll give you something to make you wise," I always knew that I would get something desirable in my mouth; but when I grew to be a little older, and the boys on the school ground would say, "Open your mouth and shut your eyes," I learned that I generally got something undesirable.

So it is in all the affairs of life. It is not farmers alone that must keep their eyes open to all the conditions that surround them and the probable results of their actions, but all classes of people must do the same thing. We can not afford to shut our eyes to the consequences of any action or course of conduct, because there is some relation between everything we do and the results that follow.

The recent action of the Russian people in turning their government over to the kaiser is an illustration where a whole nation has acted in the manner described. Germany made them certain promises, which they trusted Germany to fulfil Germany has not, and will not, fulfil her promises and is now requiring 60 to 80 per cent of their food products, besides requiring possession of the most strategical positions in the country. G. L.

## *A Meritorious Bill*

Representative Baer of North Dakota, the only representative of the Nonpartizan league in congress, is author of a meritorious bill to loan $7,500,000 to grain farmers who lack the money necessary to buy seed wheat. This measure was made the text in the house the other day for bitter assaults on the league. The spirit of such attacks is wrong. The bill should have been discussed on its merits.

The measure finally passed the house by the decisive vote of 251 to 67, but an amendment was tacked on that the president must investigate the food situation and determine that the appropriation is necessary before any funds can be paid out. Opponents of the bill are reported to be confident that this amendment will delay the operation of the measure until the planting season is over. They count also on delay in the senate. But Congressman Baer seems confident that the bill will become a law in time to provide needed relief in several sections of the west where farmers are suffering from crops failure or short yields last year. After the bill had passed the house he said:

"I hope the president will decide that he has enough information on the food situation to be able to conclude his investigation very shortly. I am confident that unless the old guardsters, who see no objection to loaning millions to munitions plants and broken down railways, but regard similar loans to farmers as socialistic, succeed in stalling off action in the senate, this bill will become law in time to be of real aid. I am confident the president will finish his investigation in ten minutes and issue the necessary proclamation."

## *Damage to Fruit Exaggerated*

People should not be stampeded by early reports of damage or heavy losses from sharp weather. With each recurring season the alarmist is heard in the land, and too often either sends out premature or greatly exaggerated reports about damage from unseasonable cold. The fact that "when the returns are all in" the reserve and uninjured fruit buds usually show plenty of fruit the average season seems to make no difference with those forecasters.

Doubtless considerable injury to early apricots and peaches has been done by the sharp nights that marked the first week in April, and quite likely the damage to those and other tender fruits that were in bloom during this weather will prove more serious in some localities than others. But there is nothing yet to show, with any degree of certainty, that there has been any extensive injury to the commercial orchards of the Pacific northwest. Should this prove the case, there will be time enough to proclaim it when the facts are definitely known. In the meantime why not wait and claim the benefit of the doubt, if there is doubt? In any event, it is safer "not to know so much than to know so much that isn't so." A. E. G.

## *Law-Making Needs "Revising"*

The conviction seems to be steadily growing that present day methods of making public laws are becoming a good deal of a farce. Have we outgrown the prevailing system? It sometimes looks very much that way, and the same may be said of our election system. Do we get service and efficiency under our present methods? Under the theory of our government, and the traditions that we foster, every citizen is supposed to be eligible to seek public position, no matter how responsible. While the "theory" is all right and should probably not be abridged, should it not presuppose reasonable preparation and fitness for such position?

Whatever the food administration may do about price regulation, however hard some order may hit us, let us not for one day shirk our duty of adding our utmost to the food production of the world, even though we have to make actual sacrifice to do it.

## *Washington Gleanings*

Many millions feet of lumber are being shipped from Washington mills to South American and Australian ports.

E. G. Harsh has been appointed deputy horticulturist of Columbia county, to succeed J. Davis of Huntsville, resigned.

Recently 63,900 trout fry from the Spokane hatchery were released into the small streams of Columbia and Garfield counties.

Frank Wattle of Seattle has been superintending the remodeling of the creamery at Twisp into an up-to-date cheese factory.

Chehalis has declared war on the loafers. The business men have asked the city commission to see that the loafers either get busy or leave the city.

The sale of the Ernest Weld farm of 280 acres, six miles south of Goldendale, to Columbus Barnes of Goldendale is reported. Consideration was $14,000.

Governor Lister has appointed Judge Kenneth Mackintosh of the King county superior court to succeed the late Justice George E. Morris upon the supreme court bench of this state.

Beet growers of Walla Walla, Sunnyside, Toppenish, Yakima and Ellensburg districts have been offered $10 a ton for the 1918 crop if they will increase their acreage to 18,000 for the coming season.

The farmers of Garfield county have agreed to pay $60 per calendar month for steady work, and $3.50 per day and board for married men, and $3 per day for single men for short employment of not over 15 days.

The new tractor and grader recently purchased by Klickitat county commissioners are grading and smoothing 15 miles of good road per day, at a cost of less than $1.50 per mile, including overhauling and all.

Work has begun on a 60,000-bushel concrete elevator at Mondovi for the Davenport Farmers' union. The company is also changing its new warehouse in Davenuort, giving it additional storage room for 50,000 bushels of bulk grain.

A. C. Bush, representing the Northrup King Seed company of Minneapolis, has been investigating the Upper Columbia country, as to suitability of that region for seed growing. He is recommending to his firm that seeds be furnished to enable the ranchers to make a thorough test this season.

Stevens county has purchased two motor trucks, which are to be utilized exclusively for road repairing. A tryout was made recently with one of these vehicles, which accomplished the surfacing of 1200 feet of road on a two-mile haul with a crew of five men, including the driver.

The Walla Walla agricultural and stock fair was recently organized, with the following officers: President, Oscar Drumheller; vice president, F. S. Dement; Trustees, Oscar Drumheller, F. S. Dement, Matt Ennis, J. A. McLean, Wess Lloyd, Waitsburg; F. J. Aldrich, Waitsburg, and H. H. Hanson, Touchet.

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## Bunting Pennant

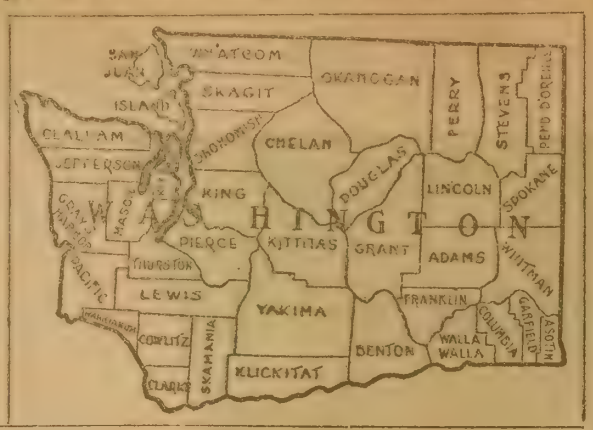
A pennant, 9x22 inches, made of cotton bunting (just the thing for the auto, front porch or the flag pole), will be mailed postpaid to any one sending us THREE SUBSCRIPTIONS TO THIS PAPER. Secure three of your neighbors under our special bargain rates and receive a bunting "Farm Service War Flag."

**Patent Applied For**

**See Page Three**

# Everybody Works Patriotically

## Farmers Show Patriotism in Production of Foods and in Purchase of War Stamps; Permit No Pro-Germanism




MONTESANO, Grays Harbor County, Wash., April 3.—The great majority of farmers in this community are decidedly patriotic. I know of no cases where persons are intentionally neglecting to produce as much foodstuffs as is possible on their farms. Of course, we have a few persons who are against any move our government makes, but I suppose this type is found in every community. A few of these people are native born Americans, but there is still another class of which we have fortunately only a few representatives, who came to this country with little or no money in their pockets, that have now become well to do, from the farmer's standpoint. Some of these people are buying Liberty bonds and assist the government in such ways, but at heart they are still pro-German, which can be found out by conversation with them. It seems unfortunate that there is no way to rid our community of such people, but in a few cases I am sure they are finding that their sentiments do not meet with the approval they had hoped for.

The spring season is opening a little earlier than for the last two years. From all indications there still will be an increased acreage of the cereal crops and silage crops. There will be some decrease in acreage devoted to hay and root crops. All classes of live stock except beef cattle show an increase.

As yet lack of labor and machinery are not proving serious handicaps to the earlier spring work. A few farmers have purchased tractors in order to speed up the spring plowing. Four free farm labor agencies have been established in the strictly agricultural section of the county. It is hoped they will prove of service in making better use of local labor and in bringing in outside labor as conditions warrant.

C. F. MONROE.

### Farmers Cooperate.

PORT ANGELES, Clallam County, Wash., April 1.—I can assure you that Clallam county is among the foremost counties as measured by the standard of patriotism, and the statement is evidenced by the record of war savings stamps sold here and patriotic outbursts in the way of compelling pro-Germans to respect the flag. Our farmers are doing their utmost in the way of increasing the crops and dairy products. Of noteworthy features I may mention that the farmers here consolidated in bidding for the sale of a large quantity of potatoes to the government to be used at Camp Lewis, the delivery of which terminated successfully and distributed considerable money among them. Another feature of cooperation of the farmers here was the purchase by them of Glendale's creamery plant here from the Ladd & Tilton interests. The creamery under local management has been in operation two months, and they are encouraged at the success very much. Live stock is short here, but what there is is in very good condition after wintering.

J. P. CHRISTENSEN.

### Is Dairying Center.

CHEHALIS, Lewis County, Wash., April 2.—The Pacific northwest is as intensely and practically patriotic and loyal with its best young men, with all it takes to feed, clothe and equip them, with its ships to carry them across the waters, and horses to carry them to the front, as any part of the United States. The slogan is "we must win this war" and exact peace for all the world for all future time. Untold thousands of brave women and girls are donning overalls and doing yeoman service in gardens, fields, factories and mills. There enough older men can not be found to make three shifts to speed the big saws every moment men are offering to work 12 hours a day at straight pay so two shifts can keep a steady hum without any extra bonus for overtime. Stockmen, farmers and dairymen are all determined to keep their end up. This is the center of a great and growing dairy section. A Lewis county milk producers' association is being formed that will probably be a unit in a strong state association that can and will aid in securing stable prices, so when a dairyman equips a big drove of cows, sells all his pigs and calves and contracts steady men to run his dairy he may at least exact cost for his milk. Lewis is one of the leading diversified farming counties of the state and produces big crops of good wheat and buys many carloads from sister counties.

L. K. COGSWELL.

### Will Raise Peas.

MARIETTA, Whatcom County, Wash., April 1.—Farmers hereabouts seem to be well satisfied with the government's handling of the food situation and seem ready to cooperate in any way. Only one case has come to my knowledge of dissatisfaction, and he probably wishes by now that he had held his tongue. Seeding has just got started, and much more grain will be planted. The weather the last week has been ideal, and I think with this extra hour farmers hereabouts can find plenty of use for it. Plenty of farm machinery on hand, and there seems to be no trouble anticipated in regard to securing labor. Very little wheat is raised in this section, mostly oats, barley and peas. Considerable peas will probably be planted, as a factory is being built at Sumas in this county to handle them and it will be very easy for the farmers to find a ready market for their crop.

S. B. MAYHEW.

### Will Increase Output.

LACROSSE, Whitman County, Wash., April 1.—There is no lack of patriotism in Lacrosse community. Farmers are bending every effort to produce maximum crops, and no expense is spared to put soil in as good condition as possible. The weather has been very favorable for field work and nearly 80 per cent of seeding is completed with early seeding coming up nicely. In another week seeding should be practically finished in western Whitman county. A good rain would be most welcome at this time. Live stock is in good condition and pasture is better than in years at this time of the year. Fall wheat wintered well, and a few fields seeded last July are certainly in best of condition. No doubt with normal conditions, crops ought to be better than average.

M. E. SCHRECK.

### Will Do Their Share.

CASTLE ROCK, Cowlitz County, Wash., March 31.—The season is hardly advanced enough to get accurate information on the crop situation, but the indications are that there will be a supreme effort put forth by our loyal farmers to raise as much on their ground as possible for the home demand as well as the outside calls for food. Prices are so high for good horses that few will be able to buy what they need, and a few are going to try out the tractor, which seems to be




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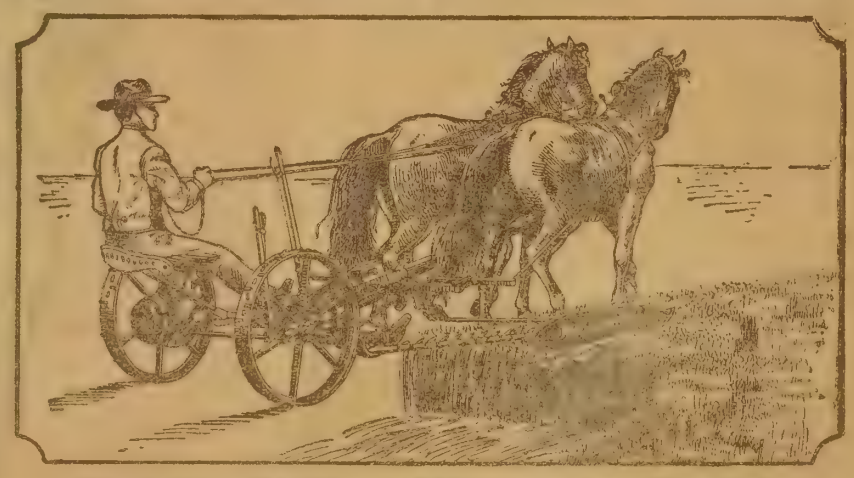
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On the rear of the Moline Mower you will notice a bell shaped gear. When this gear gets into motion it has the same effect on the sickle as a fly wheel on any machine and carries the mower through heavy and difficult cutting where other mowers fail. You can always depend on the Moline.

This is the same principle that was used on the old Adriance Buckeye Mower 60 years ago, and you won't find it on any other mower on the market. In fact, this mower is the old original Buckeye, now called the Moline Mower, and is greatly improved. Every user of a Moline Mower profits by these years of service and knows his Moline Mower will not fail him in a "pinch."

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Other features such as, one-piece main frame; cold rolled steel axle and shaft; pawls and ratchets in plain view; coupling frame hinges which will not bind; five-inch driving wheels, extra heavy cutting parts; removable wearing plates; alignment device for the cutter bar; spring draft; forward acting foot lever and many other distinctive features, carry the Moline Mower through tough cutting year after year.

It will be worth a whole lot to you to have a Moline Mower at work on your farm. Remember when you get a Moline Mower you get the product of one of the oldest and most reliable concerns in the business. This means that you can always get repairs for a Moline Mower.

Your Moline dealer will be glad to show you the Moline Mower or if there is no Moline dealer in your locality write us for full information. Address Dept. 50.

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meeting with favor. None are so narrow in their views as to become disgruntled over mistakes made by the government and hesitate in planning to put forth their best efforts to grow all the food supplies that their limited farm help will stand. All are awake to the situation, willing to overlook hardships, and do their utmost even to the extent of personal sacrifices. Already there are long hours and strenuous times, for their best help has gone and even though a man is willing, when he gets to the age of 60 years, he can not stand the long grinding hours on the farm as he did at 25. Old men are hiring out for the farm, but the result is the same—the head is willing, but the flesh is weak. In this section diversified farming gives the best results, but little wheat is grown compared with the wheat growers east of the mountains; so it means long hours hand labor with team around the stumps and logs. If the soil was not of the best there would be but little farming in this locality. The outlook for live stock is bright for the coming season and crops above the average at this time of year. Despite the slump in the potato market it has been the sentiment of the growers to put in as large an acreage as last season and get in shape to avail themselves of the first market that they have in the fall. This is where a great many over-estimated the demand there would be for spring deliveries. If there could be some kind of a guarantee put on the potatoes the same as wheat they would know just what to expect. Eggs have dropped down to 30 cents; butter down to 48 cents. Scratch food is $4.25 per hundred weight. The dairymen are feeding shorts and bran mixed, two parts bran and one part shorts. The grass has started up on the lowlands, but not enough to keep the stock from needing some hay. Weather conditions are fine for plowing and other spring work and some seeding has been done. There will be a large list of "war gardens," mostly in the towns and small farms, but the help will come mostly from the women. Our coun has been well organized by the county agriculturist, and a man has been appointed in each one of the towns in the county to take care of the labor shortage; that will help in a measure to get the capital and laborers together. As a rule it takes some time to break in the raw recruits. It has been suggested that the stores close up two days in a week to help put in the crop, but the farmer looks at it with a squint in his eye, and says that the majority will come out for a big feed, work themselves up into a sweat, sit down, take cold, have lung fever, putting themselves out of commission for anything else. There is one thing very commendable among the farmers. They are saving and using all the manure around the barns that have in past years been allowed to accumulate and leach off in the wet weather, making mud, slop and filth in the barnyard. Silos will be utilized this year to better advantage than ever before, and a considerable number of new ones will be built. Beef animals have been pretty well picked up. None is being offered for the market. Pastures will be utilized to the fullest extent in raising the stock as grain is high and hard to get. C. C. BROWN.

### Will Raise Sugar Beets.

GRANDVIEW, Yakima County, Wash., March 22.—There are plenty of horses for farm purposes and some to sell. Good horses are bringing a fair price. There is only one tractor in the community, most of the farms peing too small for tractors. I think most of the old machinery will have to do this year, for the price of new is too high. There are not many fat cattle in this community and only a few hogs, for feed is scarce. I think there will be quite a lot of sugar beets raised this year for the new sugar factory at Sunnyside. Spring work is well along and nearly all pruning is done, and some have sprayed, but not many.

E. H. FAULKNER.

### Community Plan Favored.

FORT ORCHARD, Kitsap County, Wash., March 28.—There will be for this section, as well as in many other sections of our state, a shortage of farm labor and the farmers will have to resort to more community work of exchanging help with their neighbors. Farm power, both horse and engine, are at a minimum in this county. The supply of horsepower is low at the present time, and very few farmers are raising any horses. Community ownership of farm tractors should be taken advantage of here in this county. No place lends itself more easily to this kind of power. The farms are all small and close together, and I think could be very easily arranged to get the maximum amount of work out of a tractor with very little trouble in planning ahead. The community ownership of some farm machinery is being successfully worked out but not enough of it. More farm implements of all kinds could be very well used. But farmers are not buying farm machinery. They are striving to get along with what they have at the present time. Old machinery has been pretty well repaired and in readiness for the season's work.

There will not be very many meat animals put on the market this spring from this county. They are not to be had. The dairymen are culling their herds closely, and any cow that is not thought to be paying her way is fed and fitted for the market.

C. B. SPRAGUE.

### Conditions About Normal.

METHOW, Okanogan County, Wash., March 29.—There are enough horses for farming here, but no more than the community needs. No tractors here so far, the farms being rather small, I think, for tractors. There is enough machinery to do this season, not very much is being bought. About the same number of meat animals as usual will be marketed. Alfalfa is the pasture most generally used here.

CHARLES GRANT.


# Grimm Alfalfa

We have been hearing a great deal about **Grimm Alfalfa**, its frost and drouth resisting qualities, its great yield, and other good properties.

We have this in stock and consider it well worth a thorough trial.

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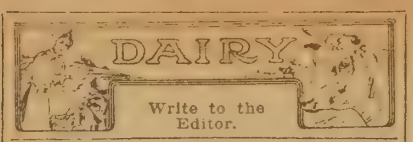
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A. B. NYSTROM, Editorial Contributor

# Difficult Churning

## Too Many Potatoes in Ration

I have a 3-year-old cow with first calf, in perfect health, gives good quantity and quality of milk, but the cream will not churn. We sometimes churn from an hour to an hour and a half, the butter seems to break, but the granules will not stick together but remain as fine grains in the milk. The cow is fed on the best of hay (alfalfa), beet pulp, bran and shorts and potatoes. The milk is kept in a cool place and we use an old-fashioned dash churn. What is the cause and the remedy? S. T. K. Hillyard.

**Answer.**

Cows fed potatoes usually produce butterfat made up of extremely small fat globules. They are also very hard. These do not stick together readily during churning. This is probably the cause of the difficult churning. If succulence other than potatoes is given or if the amount of potatoes is cut down this property of the fat is not so pronounced. Adding some oil meal to the grain ration will also have the effect of softening up the fat and making larger globules. Difficult churning may also result if the cow is fed dry feeds and is well along in her lactation period. Stripper's milk, especially in early spring before grass comes, contains small, hard fat globules that do not churn readily.

Usually the proper ripening of the cream and modification of the churning temperature will overcome the difficulty. In many cases it will be found necessary to modify the ration as suggested above. This simply means to feed such feeds that produce soft rather than hard fats. A. B. N.

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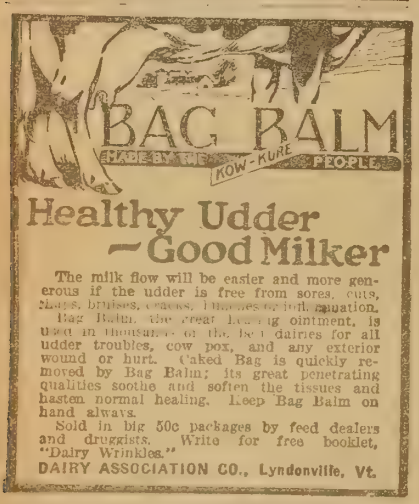
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Healthy Udder —Good Milker

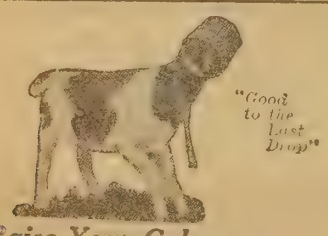
The milk flow will be easier and more generous if the udder is free from sores, cuts, chaps, bruises, cracks, lumps or inflammation. Bag Balm, the great healing ointment, is used in thousands of the best dairies for all udder troubles, cow pox, and any exterior wound or hurt. Caked Bag is quickly removed by Bag Balm; its great penetrating qualities soothe and soften the tissues and hasten normal healing. Keep Bag Balm on hand always.

Sold in big 50c packages by feed dealers and druggists. Write for free booklet, "Dairy Wrinkles."

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Raise Your Calves on Blatchford's Calf Meal and Sell the Milk

More calves have been raised on Blatchford's Calf Meal than on all other milk substitutes combined.

100 lbs. makes 100 gallons of milk substitute, costing only one-third as much as milk.

Prevents scouring and insures the early maturity of sleek, handsome calves.

It is steam-cooked and no trouble to prepare or use.

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## CARE OF COW.

### Feed Her Well Before Calving.

To the Editor: I would like your advice on feeding and getting the most profitable results from five cows which are now soon to come fresh.

My practice has been just feeding hay and turning them on the pasture to eat grass. I would have to buy everything but hay; have no green feed. Cows are Jerseys. Please advise me on feeding while they are carrying their calves. Is it advisable to feed just turnips and hay? W. B.

Willamina, Ore.

**The Answer.**

The above question was referred to L. W. Wing Jr., instructor in dairy husbandry at the Oregon Agricultural college whose reply follows:

The first thing in the handling of your cows is to get them in good condition before calving. Feed them well, for the cow will return product in her next lactation period for any extra feed while dry.

To meet the food requirements for milch cows, some grain is generally necessary. This depends on the productive capacity of the animal. For dairy animals of medium production 200 to 225 pounds of fat a year the most economical ration may be either legume hay and silage, legume hay and pasture, or legume and roots.

As a grain mixture, would use the following: Brain, 200 pounds; shorts, 100 pounds; ail meal, 25 pounds. Some of these concentrates may be quite hard to obtain on your market so you might in place of shorts, make it 300 pounds of bran and in place of the 25 pounds of oil meal, substitute either soy bean or cotton seed meal. Should any of the cows produce as much as two and one-half to three gallons of milk a day, 20 to 25 pounds, feed one pound of the grain mixture per day for each half gallon of milk produced per day. Allow the cow all the hay she will eat. Feed each cow as an individual and according to her productive capacity. One gallon of the grain mixture given weighs two and one-half pounds.

During the time before calving, would supply the cow with some of the grain mixture. Feed from one and one-half to two pounds a day. The day of calving, instead of feeding the grain mixture, feed a warm bran mash.

The hay best adapted for dairy cattle is that either from a legume plant or from the small grain and a legume plant combined, such as alfalfa, clover, oats and vetch, etc.

It is advisable to feed only turnips and hay when you are able to supply sufficient nutrients to the cow to meet the requirements for her maintenance and for the milk she is producing.

## Milk and Dairy Exposition.

New York will be the mecca for thousands of dairymen and others directly interested in the milk industry who will come from all parts of the country to attend the National Milk and Dairy Farm exposition which is to be held in Grand Central palace the week of May 20.

Three floors of the huge building will be devoted to the exposition, during which a series of important conferences will be held. There will be exhibits and practical demonstrations of all forms of milk foods and milk products, processes of milking, handling, machinery and equipment, and all manner of things relating to the dairy farm and its allied interests. One of its chief purposes will be to demonstrate the fact that milk is one of nature's most valuable, as well as one of the cheapest, of foods.

Dr. Charles E. North, managing director, is arranging a series of contests in which prizes are offered for milk dealers for the cleanest and best put-up milk; cheese now being made in quantities by American dairymen in varieties that were formerly imported; butter, pot-cheese, condensed milk, ice cream, milk chocolate, evaporated cream, milk powder, etc.

Model dairy farms, live cows milked by electricity and by quaintly attired milkmaids, will be among the exhibits in addition to educational features relating to all processes of milk culture. The keynote of the entire exposition will be that the conservation of dairy farm products will help win the war.

**Standing Timber in U. S.**

Revised estimates place the amount of standing merchantable timber in the United States at approximately 2,767,000,000,000 board feet. Of this amount 1,464,000,000,000 board feet, or 53 per cent of the total, is in California, Oregon, Washington, Idaho and Montana.

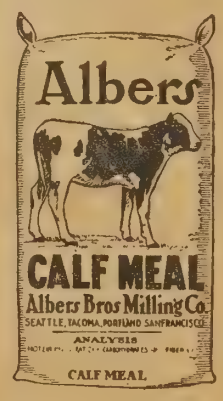
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and the farmer who is feeding this Calf Meal in place of milk is taking advantage of the present big milk prices and is enlarging his profits, as Albers Calf Meal does the work of milk and costs a great deal less.

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is made from a splendid assortment of meals, including ground Oatmeal, the most valuable body builder known. All ingredients used are easily digested, and assists the farmer to build up a strong, sturdy herd. Successful farmers substitute Albers Calf Meal for milk, because, like other brands of Albers Feeds, it brings the results expected and it is practicing economy. If your dealer cannot supply you, write us direct.




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Clear your stump land cheaply. No expense for teams or powder. One man with a K HAND POWER Stump Puller can outpull 16 horses. Works by leverage—same principle as a jack. 100 lbs. pull on the lever gives a 48-ton pull on the stump. Made of the finest steel—guaranteed against breakage. Endorsed by U. S. Government experts.

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# The Tractor Question

A great number of farmers in the Pacific northwest are asking themselves whether or not they should buy tractors, along with other questions that the possible purchase of a tractor brings up.

Among these, here are some of the points that most frequently come up: How many acres per day will a tractor average? What is the cost per acre for tractor plowing? What size of tractor would be best for my farm?

The best way to answer such queries is to pass along the experiences of those who are "tractor farming" in this section of the country.

On his 900-acre ranch near Pullman, Wash. Reade M. Young is using a 45-horsepower caterpillar tractor. Speaking of his work with the tractor, Mr. Young says: "My farm is 100 per cent hill land, the soil being a heavy black volcanic ash. My tractor does excellent hillside work. I use it for disking harrowing, hauling grain, etc., and find it does my work better, easier and much faster than I could do with 18 head of good horses. As compared with horse farming, it is far superior and a money saver as well. At present I am disking stubble land, pulling two eight-foot discs and covering 30 acres of hilly land a day at a cost of 25 cents an acre. This does not include cost of operating machine, as I do that myself and did not figure it in. Engineers get about $4 here."

From Baker county, Oregon, E. H. Homer writes his experience on a 400-acre rolling farm, where he has used a 40-horsepower tractor for two years. "I have no difficulty pulling six plows and consider I can do the work of 12 horses and four men per day. Last fall I plowed 300 acres of sagebrush



**Sowing the Seed With Tractor Power.**

land and 100 acres alfalfa sod. Pulled four 14-inch plows six inches deep in sod and averaged one and one-fourth acres an hour, at a cost of $11.50 for nine-hour day—allowing $5 for driver and $2 for wear on machine. I consider a tractor a good investment on a farm of 300 acres or more, but think it means too much money invested for small farms. Every owner should be able to operate his tractor by all means, as it is very hard to get competent men."

A. T. Sandquist of Troy, Idaho, has been using a small 8-16 h. p. tractor on his 200 acres for two seasons. "I use my machine mostly for disking," he writes. "It has taken the place of five horses, but it hasn't saved me any labor on account of its being too small. I use six head of horses and the tractor in farming my 200 acres. The advantage of the tractor is that it doesn't cost anything to keep during the winter and between working seasons, and again a tractor doesn't get tired like a horse. The only disadvantages I know of would come from trying to work on ground too wet or too steep."

G. W. Berrier of Rathdrum, Idaho, says of the advantages of the tractor as compared with horses on a 200-acre farm: "It works without tiring and does many things well. I use my small 9-18 tractor for threshing and breaking sod among stumps, etc. Weather conditions do not cause one to lay up and with my tractor I can break sod for just one-fourth what it would cost with horses. To keep it in good working order requires about the same work as caring for five horses, but, on the other hand, it takes the place of nine horses and an extra man, so I think it a good investment."

If there is any particular question any one wishes to ask about the tractor, the editor of this paper will be glad to give what information is available upon it.

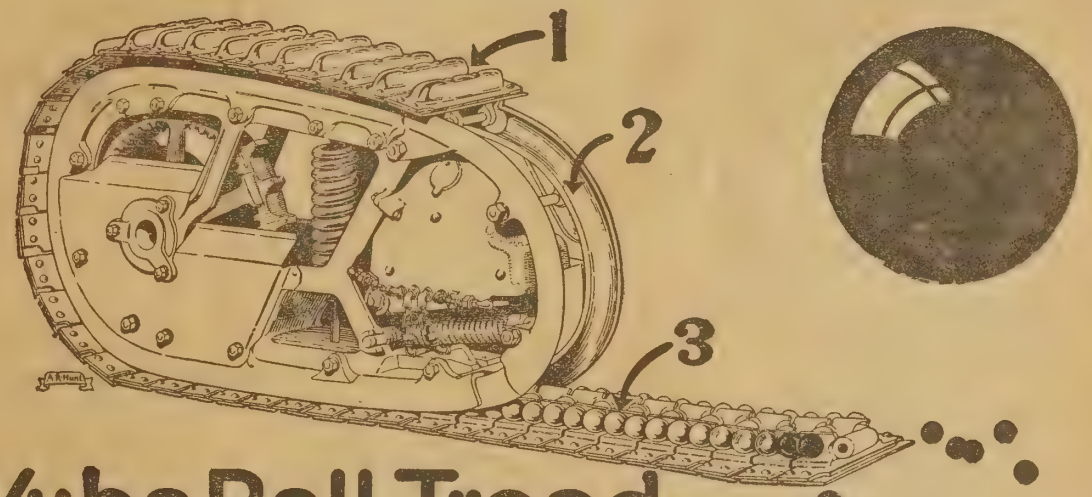
### Women Shipbuilders.

In nearly all the shipbuilding plants in England and Scotland women are employed in large numbers. One plant alone employs more than 6000 women.





In answering advertisements don't fail to mention this paper.




# Yuba Ball Tread

There are three features to the "Yuba Ball Tread" to make it superior to all others:

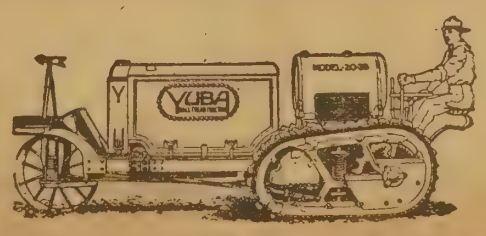
[1] The Tread
[2] The Solid Inner Base
[3] The Polished Steel Balls

The tread lies on the ground; it does n't move, the rolling balls carry the machine over it. It is tightly drawn over the ball race—no slack to take up—no power wasted—the power generated by the engine is mostly delivered at the draw-bar.

The solid inner base prevents slack.

The steel balls carry the load, and roll easily.

Ball-bearing machines of all kinds are replacing those which consume more power to propel their own mechanism. The less *friction* the less FUEL; the less *friction* the less OIL; the less *friction* the less WEAR & TEAR—*economy in power is money in your pocket.*




Yuba Manufacturing Company
433 California Street
San Francisco
Department C-2

Factories at
Marysville and
Benicia

Model 12-20
Model 20-35
Model 40-70

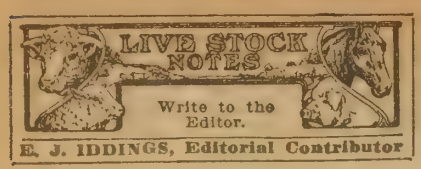



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MADE of highest grade steel plate—tinned and retinned after rivet holes are punched. Pure solder sweated into all inside seams, making surface smooth as glass. Sanitary to the finest degree. Guaranteed capacity—each Sturges Can is built to measure. Saves work in shipping—insures accuracy.

Sturges Cans are built with the experience of 50 years in making milk cans. Ask your dealer for them. Write for catalog No. 133.

**Sturges & Burn Mfg. Co.**
*Established 1865*
Chicago, Illinois




E. J. IDDINGS, Editorial Contributor

# Potatoes for Hog Feed

The animal husbandry department of the Oregon Agricultural college sometime ago purchased eight tons of cull potatoes to be used in feeding hogs, paying $10 a ton for them, delivered at the barn. Professor Fjelstad, who is in immediate charge of the hog department, calls attention to their value as a cheap hog feed. He thinks they might well be used much more than they are. To get the best results they must not only be cooked, but cooked thoroughly. If half cooked, the pigs will not eat them clean, but will waste considerable; while if they are cooked to a complete mush every particle will be eaten. If cooked just right, the amount of potatoes that a hog will eat is enormous and they are good either for fattening hogs or for brood sows. The college steams its potatoes, but where they are cooked in water, care must be taken that too much water is not used or the hogs will not eat them clean.

The past winter every brood sow at the college has been on pasture every day, rain, snow, or shine; and they traveled 20 rods to reach it. Now they are farrowing successfully and bringing good litters of fine, strong pigs, nearly all of which live. Professor Fjelstad is a strong advocate of regular exercise for brood sows and points to the college sows as examples of its effects. H. A.

ABSORBINE
TRADE MARK REG. U.S. PAT. OFF.
Reduces Bursal Enlargements, Thickened, Swollen Tissues, Curbs, Filled Tendons, Soreness from Bruises or Strains; stops Spavin Lameness, allays pain. Does not blister, remove the hair or lay up the horse. $2.50 a bottle at druggists or delivered. Book 1 R free.
ABSORBINE, JR., for mankind—an antiseptic liniment for bruises, cuts, wounds, strains, painful, swollen veins or glands. It heals and soothes. $1.25 a bottle at druggists or postpaid. Will tell you more if you write. Made in the U. S. A. by
W. F. YOUNG, P. D. F., 371 Temple St., Springfield, Mass.

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SAVE YOUR CATTLE
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DOUBLE AND SINGLE VACCINATIONS IN PILL FORM.
NO DOSE TO MEASURE.
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ACCURATE. EASY TO USE. EFFICIENT.
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BLACKLEG VACCINE
A blackleg filtrate for the prevention of blackleg.
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for the preventive and curative treatment of blackleg.
Order through your Veterinarian or Druggist.
Write for Free Booklets on Blackleg.
ANIMAL INDUSTRY DEPARTMENT OF
PARKE, DAVIS & CO.
DETROIT, MICHIGAN.

## Farm Trio Cup.

STATE COLLEGE OF WASHINGTON.—To the Editor: It is with pleasure that I receive your letter of April 1, announcing that the Pacific Northwest Farm Trio will award its silver cup to the students' judging team receiving the highest average at the Pacific International Live Stock show at Portland, Ore., this fall.

If the conditions will permit it and if we have enough students in the department next fall to justify us in selecting a team, we will be very glad indeed to take part in the contest. I want to thank you very cordially for offering this silver cup and am sure it will be of great value in giving the boys a greater incentive to do better judging work.—C. E HOWELL, instructor in animal husbandry. April 8, 1918.

# Veterinary
Dr. S. B. Nelson

**Mare Dead on Her Feet**—I have a mare 4 years old that has always run on the range until about a month ago I took her up and broke her to work. The last week or so she has been falling off and seems dead on her feet. After driving about seven miles she gave out entirely. She is with foal. I have been feeding timothy hay straight. Do you think that has anything to do with her illness?

E. M. N.

Boles, Idaho.

I do not believe that timothy hay contains sufficient nourishment for a mare with foal to work on. She should have grain. I would judge that she should have approximately a pound to a pound and a quarter of grain per hundred pound weight per day.

**May Not Get Enough Milk.**—I purchased 15 ewes last October and they were not in very good condition at the time, as the party that I bought from had a band of a thousand head and they were not getting the proper feed. Those that I got I gave good care for the winter and fed them on alfalfa and housed them, but there are five in the bunch that don't seem to pick up or do well. Two of them had lambs, one had a single lamb and one had twins. When the single lamb was a week old it died and now one of the twins has died. I am thinking that those sheep may have some disease, as I am not posted on the diseases of sheep. Any information you can give me will be kindly received.

P. J. H., Rice, Wash.

Watch very carefully and see whether or not the ewe is giving milk. It is quite possible that the lack of milk may be the trouble. If the ewe is not giving milk you will have to raise the lambs on the bottle. In that case dilute cow's milk about one-third to one-half and add a little sugar.

**Cows Have Cowpox.**—I am writing to find out what is the matter with my milch cow's teats. They get a hard lump on the teats and it gets dark color under the skin on these lumps and then the skin breaks and it forms a scab on it. They get one and then it seems to spread and some of them come up on the udder. One cow had it first and now three have it and the first cow still has some of them. They get well in a short time and then more come on. If they come where your hand rubs them when milking they are hard to heal up. They look like boils, only they don't run and scabs come where a boil would run and on the largest ones when you pull the scab of it is a pretty deep sore.

E. C. R., Freewater, Ore.

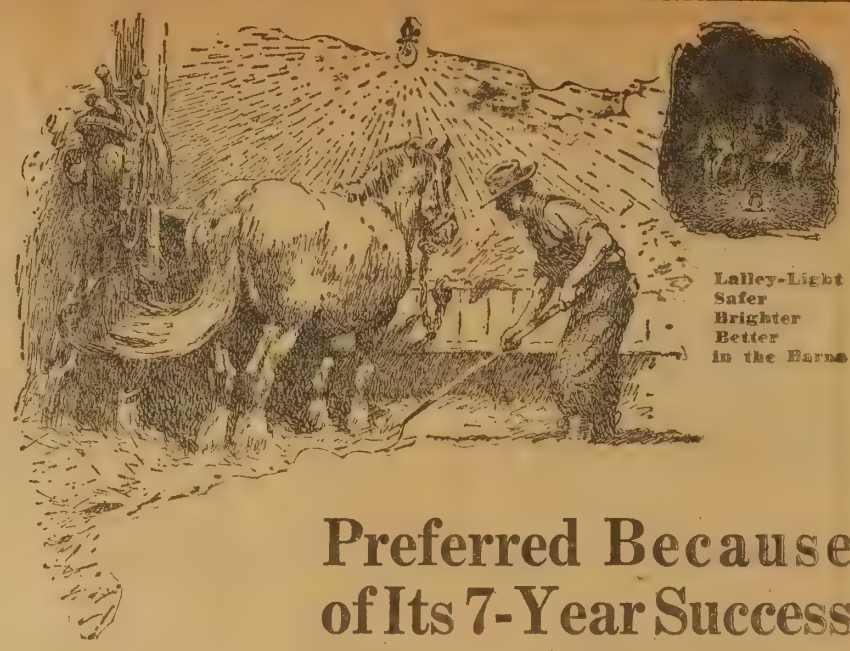
It is quite possible that your cows are affected with cowpox. The symptoms that you give indicate that this is the disease. For treatment be sure to milk the cow that is affected last of all the cows. Then when you milk the rest of the cows wash the udder before milking with a 2 per cent solution of lysol. Rub it dry. When you milk the affected cow wash the udder with the disinfectant both before and after milking, and then after that has been done after milking apply to the sores a small amount of benzoated zinc oxide ointment.

**Mare Lame in Left Hind Leg.**—I have a 5-year-old mare which has been lame in the left hind leg for two months. She walks on the point of her hoof mostly and is sure to over rough places. Walks a whole lot better in plowed ground. There is nothing in her foot unless it is a gravel. I have examined it often. The frog has a bad odor. The mare eats and feels well. She runs in a rocky hillside pasture.

W. G. A.

Grangeville, Idaho.

The fact that the mare walks better on plowed ground than on rough ground indicates that the trouble is in or near the bottom of the foot. The fact that she walks on her toes on rough ground indicates that it is in the posterior part of the foot. Since you




Preferred Because of Its 7-Year Success

In the past year Lalley-Light has won distinct preference among electric light plant buyers, because of its more than seven-year record of success.

This success has been registered in practical, everyday use on thousands of busy farms.

Since the first Lalley-Light plant was sold, down to the present time, we do not know of one that has worn out in normal service. We do not know of a single dissatisfied owner.

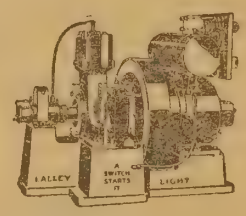
Lalley-Light stands high because it is scientifically designed and built, primarily and expressly, to furnish electric light and power for farm use.

It has proved its low cost, its absolute safety, its reliability, wherever it has gone.

It has brought new comfort, convenience and cheer to every farm family that has installed it. It saves time and work.

Now, more than ever, Lalley-Light is needed to help the farmer in the extra work made necessary by the increased production of war-time.

Write to us today for complete information, cost of the complete plant delivered to you, and name of nearest dealer prepared to show you Lalley-Light in actual operation.




Generating Plant is 27 inches long, 14 inches wide, 21 inches high. Storage battery is included in complete outfit.

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LALLEY-LIGHT
"Always runs at full night"

Win the War by Preparing the Land, Sowing the Seeds and Producing Bigger Crops

Work in Joint Effort the Soil of the U. S. and Canada—Cooperative Farming in Man Power Necessary to Win the Battle for Liberty.

The Food Controllers of United States and Canada are asking for greater food production. Scarcely 100,000,000 bushels of wheat can be sent to the allies overseas before the crop harvest. Upon the efforts of the United States and Canada rest the burden of supply.

Every Available Tillable Acre Must Contribute; Every Available Farmer and Farm Hand Must Assist.

Western Canada has an enormous acreage to be seeded, but man power is short, and an appeal to the United States allies is for more men for seeding operations.

Canada's Wheat Production Last Year Was 225,000,000 Bushels; the Demand From Canada Alone, for 1918, is 400,000,000 Bushels.

To secure this she must have assistance. She has the land, but needs the men. The Government of the United States wants every man who can effectively help to do farm work this year. It wants the land in the United States developed first, of course; but it also wants to help Canada. Whenever we find a man we can spare to Canada's fields after ours are supplied, we want to direct him there. Apply to our Employment service, and we will tell where you can best serve the combined interests.

Western Canada's help will be required not later than May 5. Wages to competent help, $50 a month and up, board and lodging.

Those who respond to this appeal will get a warm welcome, good wages, good board, and find comfortable homes. They will get a rate of one cent a mile from Canadian boundary points to destination and return.

For particulars as to routes and places where employment may be had, apply to

U. S. Employment Service, Dept. of Labor
Seattle, Tacoma, Bellingham or Yakima, Wash.

# Cutter's

*Germ Free*

## Blackleg Filtrate

*and*

## Blackleg Tissue Aggressin

***The New, Safe and Efficient Agents for Protecting Calves from Blackleg.***

**Cutter's Blackleg Filtrate positively protects** against Blackleg.

**Cutter's Blackleg Aggressin,** made directly from animal tissues, **affords even greater protection** and is recommended for Pure Breds.

**Neither the Filtrate nor the Aggressin can possibly produce Blackleg** in even the most susceptible animals since **both are germ free.**

**Both have given 100% protection** wherever used.

**Prices—**

10 dose pkge. Filtrate....$2.00
50 " " " .... 8.00
100 " " " ....15.00
10 dose pkge. Tissue Aggressin ..... 4.00

**N. B.**—Cutter's Filtrate (a "cultural product" aggressin) is full 5 c.c. to the dose, as we believe that smaller doses, whether concentrated or not, afford less protection.

**Write for booklet** telling what germ free vaccines are and wherein **"cultural product" Aggressins differ from Cutter's Aggressin** made from animal tissues.

**While these new "germ free vaccines" have advantages** that should be known to every stockraiser, we see no reason for a quick change to them by stockraisers who have had satisfactory results from the use of

## CUTTER'S BLACKLEG PILLS

**"California's Favorite" for nearly 20 years**

**Year in and Year Out** they have given better satisfaction than any other vaccine made, and as far as price and convenience of administration are concerned, they have all the advantage.

**Prices:**

10 dose pkge. Single pills $1.00
50 " " " " 4.00
10 dose pkge. Double Pills 1.50
50 " " " " 6.00
Cutter's Pill Injector.... 1.50

**Insist on Cutter products.** If unobtainable, order direct. We pay shipping charges.

**The Cutter Laboratory, Berkeley, Calif.**
(U. S. LICENSED)
"The Laboratory That Knows How"



## ONE PURE BRED HOLSTEIN EQUALS 3 ORDINARY COWS

Why feed three cows when you need feed only one? Look at these figures. **All Holstein tested semi-officially average 7000 Quarts of milk and 504 lbs of fat a year.** **All cows in the U. S. average 1823. Quarts of milk and 166 lbs. of fat a year.**

Pure bred Holstein cows have given as high as 15,000 quarts of milk and 1500 lbs. of butter in a year.



You can make money with pure bred Holsteins. Write for free information.

**The Holstein-Friesian Association of America, Box 205, Brattleboro, Vt.**


**The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.**

say there is a bad odor at the frog. I suggest to you that you take a paring knife and clean the foot out completely between the frog and the hoof, and all over until everything is perfectly white. You do not have to go very deep to do this. It is quite possible that just at the edge of the frog you will find a little cut. In case you do pour on to that part of the frog after cleaning a little tincture of iron, after which pack that part of the foot well with calomel. Repeat the dressing of calomel daily for a few days.

**Infection of Mucus Membrane.**—In the fall of 1916 I had a 2-year-old Guernsey heifer to drop a calf. I broke her and milked her for about two months when there was a marked increase in the flow of milk from her left front eat, increasing until double the flow of the other teats. After a couple of weeks there appeared small clots of blood in her milk. These increased in size and number until six months ago when the milk from this teat became bloody. In a couple of weeks the teat became swollen and very sore and when the milk was forced out it was thick like library paste. Soon after the teat ulcerated close up to the udder and ran large quantities of puss. After a couple of weeks the teat healed up the swelling left, but the teat remained hard and tender. After a few weeks the teat became swollen again and ulcerated as before. This was repeated three times during the summer and fall of 1917. In January, 1918, I turned the cow dry, the teat still being hard and tender. The teat behind it gives as much as the two did formerly; I am afraid of her losing this teat also when she freshens again in April. Kindly inform me what is the trouble and the best thing to do.
SUBSCRIBER.
Fenn, Idaho.

Your cow suffers from an infection of the mucus membrane of the milk well, this infection being caused by one of the pus producing bacilla, probably a strepticuccus. I doubt whether there is any remedy to restore this affected quarter to production again. If the abcess is still running, I would recommend the washing out of the abscess with a 2 per cent solution of lysol followed with the injection of a 1 per cent solution of Lugols solution of iodine once daily.

**Milk Has Disagreeable Taste.**—I bought a cow two weeks ago that is to be fresh April 7. She is still giving about six quarts of milk per day, which has such a disagreeable taste that we can not use it for any purpose. As near as I can describe the taste that it has, it is old and strong. Also, we tried to churn some cream at different temperatures and we could not get any butter, nothing but foam. I am feeding her all the alfalfa and straw she will eat, with a mash night and morning of about one and one-half gallons made of bran middlings and a few raw potatoes. Her appetite is very good. I have started leaving a little milk in her udder to try to dry her up to some extent. She seems to have caught a cold since I got her. At least, she has a cough, but it is getting better. Do you think the condition of her milk is anything to worry over, or is it a natural condition with some cows at that period? What would you recommend for her?—W. S. N., Kellogg, Idaho.

No, I do not think you need to worry over the condition of her milk. Dry her up as fast as you can, and give her a rest before she calves.

**Mare Is Stiff.**—I have a mare which took cold working in the rain and took a touch of distemper. I smoked her with feathers and sulphur and got the cold out of her head, but she is stiff all over her body, and when walking staggers so she can hardly walk. She eats and drinks well and has no fever. Can you tell me what to do for her?—W. B., Dalkena, Wash.

I would suggest that you give the following in one ounce of the following liquid; this is to the mare morning, noon and night for a few days:

Fluid extract of digitallis, one-half ounce; fluid extract of belladonna, one ounce; alcohol, eight ounces, and water enough to make a pint. Take one ounce of this and give in a pint of water three times a day.

**Hard Lump on Udder.**—Can you tell me what is wrong with my cow? About a week ago a hard lump started to come on the udder by the right front teat and now there are several on that quarter of udder. One is just starting on the right hind quarter. They start about the size of a half dollar and then spread. There is no fever in udder, but it is swollen some, is not sore and gives her milk down good. Should we use the milk or not? Cow was fresh the 7th of March.
O. E., Colville, Wash.

I am not able to tell what is the trouble with your cow, except that it is probably some form of infection. I suggest that you consult your local veterinarian. He may be able to give you advice regarding her after he has made a careful examination of the animal.

**Curved Ladder Prevents Drowning.**
A curvey ladder has been invented on which drowning persons can be placed and drawn into boat without danger of capsizing it.


# STEPHENS *Salient Six*

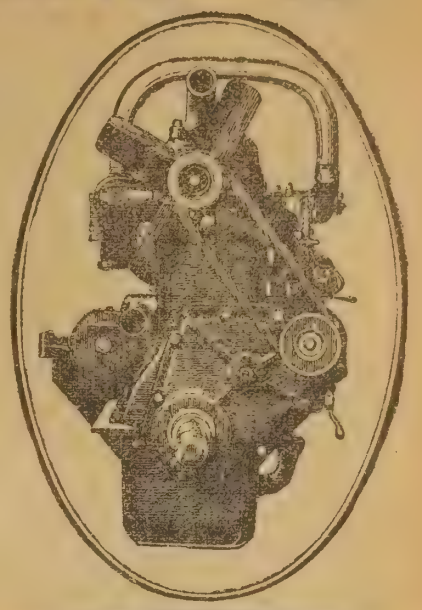
## WHY THE NAME?

Take any five definitions of the word "Salient." The Stephens Salient Six fulfills them all. For instance:

1. Shooting out, projecting—fulfilled by quick acceleration and excess power through scientific gas handling.
2. Attention commanding—met by perfection of detail you cannot forget.
3. Prominent—obvious, through being built by the Moline Plow Company, an organization of globe-wide influence and 53 years' successful operation.
4. Conspicuous—fulfilled by a conservatively different, quietly individual body design.
5. Noticeable—an obviously better engine, burning all the gasoline of today and the still poorer grades of tomorrow, with no waste.

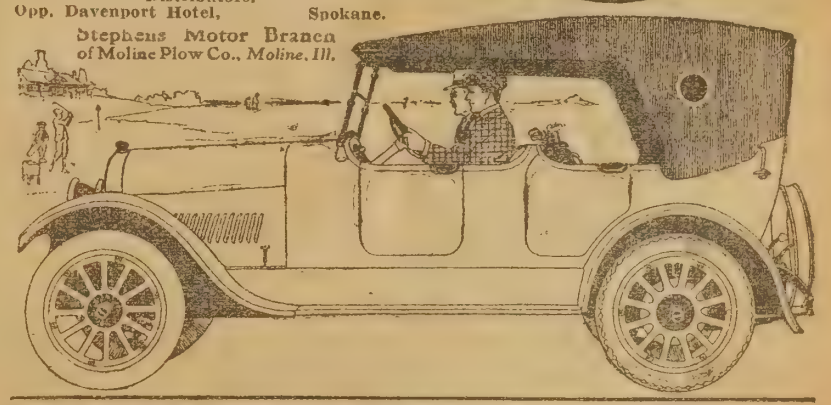
Five models; each a masterpiece of the coach builder's art, with superb upholstery and finish.

*We hope for the pleasure of a demonstration.*



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Distributors.
Opp. Davenport Hotel, Spokane.

Stephens Motor Branch of Moline Plow Co., *Moline, Ill.*





Clean and Clear as Water



Awarded Gold Medal Pan.-Pac. Expo.

## For Contagious Abortion

Thorough use of B-K as outlined in our Bulletin 52, "Contagious Abortion," is the surest means known of controlling Contagious Abortion, preventing Barrenness, and removing Retained Afterbirth.

Complete irrigation of the uterus and vaginal tract is easy with B-K. B-K kills the infecting germs and foul odors—heals the uterus—removes the slime and acid—no irritation—no straining. B-K is much more effective and safer to use than lysol, carbolic acid, Lugol's solution or coal-tar disinfectants, which do not cleanse the uterus, but make it more acid.

If your dealer does not have B-K, send us his name.

FREE BULLETINS: Send for complete information—"Special trial offer" and bulletins No. 52, "Contagious Abortion," and No. 136, "Calf Scours."

**General Laboratories**
3613 So. Dickinson St.,
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## SPOKANE SEED CO.

**Distributors** **Spokane, Wash.**





**A Guarantee That IS a Guarantee**

We guarantee every pump recommended by our Service Department for given conditions to operate successfully.

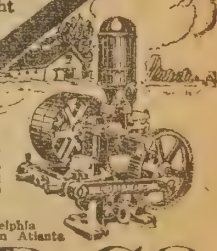
When you select a pump be sure and get the right pump the first time. Our expert engineers will help you make a selection from more than 300

**GOULDS PUMPS**
FOR EVERY SERVICE

Hand, windmill, engine and motor driven. All rigidly tested. Send for our new free book, "Pumps for Every Service." Address Dept. 45

Goulds Fig. 857 Lift and Force Pump for hand-pumping

Goulds Fig. 1531 "Pyramid" Power Pump for pressure or elevated tank water systems



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*Main Office and Works:*
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## SPOKANE SEED CO.

**Distributors of Spray Pump Line.**
**SPOKANE, WASH.**



## FRUIT BOX LABELS

We manufacture a complete line of labels for all kinds of fruit boxes and cans.
Write for prices and full information.

**TUCKER-HANFORD CO.**
Seattle, Wash.


**In answering advertisements please mention this paper.**

## POULTRY

Write to the Editor.

JAMES DRYDEN,
Editorial Contributor.

# Cull the Flock

## Let the Fittest Always Survive

The dairyman has long since realized that he must eliminate the boarder cow from his herd if he is to make a profit. Why not the poultryman eliminate the boarder hen from his flock? Feed costs too much these days, and it takes too much trouble to house and care for the bird that does not produce returns.

H. L. Kempster of the University of Missouri has urged upon poultrymen that they study their fowls from the day they are hatched with a view to eliminating those that are least fitted to produce. Speaking of the selection of breeders, he says:

"The time to begin to select breeders for the next season is when the chicks are hatched. Those birds that show a tendency toward weakness should be marked at the time that this weakness is noticed in order that they may never find their way into the breeding pens."

He urges that any bird that is ever found to possess weakness, even though it appear to be only a temporary illness of some kind, be forever excluded from the breeding flock. He argues for nothing but a strong-constitutioned bird for breeding, and holds that illness of even a minor and temporary kind is a sign of constitutional weakness.

"A good constitution is indicated by a broad, deep chest, long body, active disposition, keen, bright eye, a broad head and bright, broad comb, glossy plumage and a well-curved neck. Birds which have any tendency toward an elongated head, commonly known as "crow heads," should be eliminated from the breeding pens. Females that have heavy abdomens and excessive fat so that they bag down behind should be sent to market, for they are generally poor breeders and always poor producers. The bird which is first off the roost in the morning and last to go onto the roost at night should be used.

"The worst faults of the usual methods of breeding are: (1) the use of inferior males; (2) the breeding immature or poorly developed stock, (3) the breeding from the entire flock, poor as well as good, and (4) the selection of hatching eggs from the general basket.

"The farmer should select a few of the best females and then mate them with a good, vigorous male. A few hens properly handled will produce all the eggs needed for hatching and will produce much better progeny."

# Raise a Garden

(Continued from page four.)

would plant if seed cost five or 10 times more than it will cost this year.

There is no place in the United States where potatoes grow to better advantage and where they make a finer quality than in the volcanic ash soil of the northwest. This soil lacks humus and without fertilization is not as well adapted to some crops as the richer soil of the valleys in some of the humid sections, but it is especially well adapted to potatoes. They should not be planted in alkali soil, nor where the soil is too heavily manured.

The early varieties of potatoes that seem well adapted to the northwest art the Early Rose and Early Ohio. The late varieties that seem well adapted to our soil are Netted Gems, Burbanks and Rural New Yorker.

When early vegetables are grown on a certain tract of land with proper selection, late vegetables may be grown on the same land after the early vegetables are taken off. Some varieties of early cabbages are Early Jersey Wakefield and Early Charleston. Late varieties are Flat Dutch, Autumn King, Wingstadt, Danish Ball Head, and Danish Round Head. The late varieties of cabbage may follow the early varieties of potatoes on the same ground, or late potatoes may be grown on the same ground occupied by early radishes, beets and peas. Turnips may follow either early potatoes or early cabbages, but it is not well to raise an early crop of potatoes and a late crop of potatoes on the same ground.

### Plant Small Areas.

Some think that because they can not plant large areas, they will not plant at all. This I believe to be a mistake. If you will plant a small piece of land and give it close attention at times when you are not otherwise engaged, you will be surprised how much you can produce. I have carefully watched gardeners who have learned the art in the old countries, Danes, Swedes, Russians, Germans, Italians, Japs and Chinese. I have been astonished at the amount they can produce on a 50-foot lot or on the back part of a 50-foot lot, or on any small area of land. I have seen a garden of just one square rod of land produce more than some people would produce on 10 times the area. I have watched in the suburbs of some of our towns and cities how people grow vegetables on small areas immediately surrounding the houses in which they live, where every available foot of land is utilized, leaving only enough for walks, and these persons can teach us some valuable lessons in land economy. In the United States we are so accustomed to large farms and large areas that we do do not know how to utilize land as is done in some of the more densely populated countries. Our fence corners, strips of land adjacent to the roadways and other portions are left to grow up in weeds, where they might be utilized for the production of profitable crops. Of course, I know that this requires labor, and that labor is the principal asset in this country, especially since our boys, so many of them, are going to the war, but I am presuming that much of this gardening work will be done by persons not able to do regular work, and that it will be done at times that will not interfere greatly with other enterprises, and if it is it will be an economy of time, labor and food production that will greatly help our conflict.

### Reelect Fair Officers.

The Columbia county fair board met in St. Helens and reelected W. J. Fullerton president and J. W. Alles secretary of the association. The county fair will be held September 18, 19 and 20.


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4 per cent lactic acid

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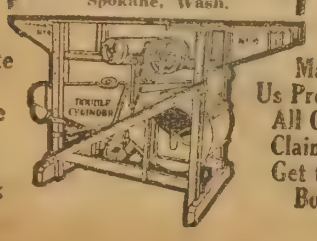
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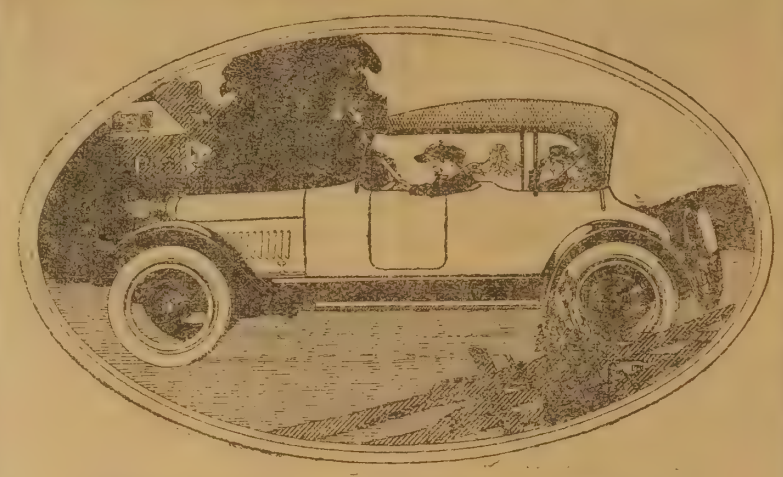
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# Wider Use of School Plan

## *Rural District School Coming Into Its Own*

The national government after searching everywhere for the best means of promoting its war-time activities, the food conservation campaign, the Liberty bond campaign, the thrift campaign, the Red Cross campaign and every patriotic movement, is forced back to the little neighborhood and community as the primal source of influence in American life. Through the council of defense and the Red Cross especially have there been made efforts to effect neighborhood organization naturally center around the school district.

The rural district school is coming into its own. The common school system of the United States is built upon the rock of community and neighborhood interest.

To do this the Washington school law provides for the "wide use of the school plant," that school districts of the second and third class

May employ special supervisors;
May erect teachers' cottages;
May provide themselves with community halls,

and in general may acquire real and personal property to carry out the objects named in the act.

In carrying out these extraordinary powers the school district must obtain the approval of a commission headed by the state department of education, and including the heads of the extension departments of the state college and the state university. These three members are supplemented by the county school superintendent and a fifth member from the county together with two members representing the school district desiring to make the improvement, one of the latter being a woman.

Something of what the public school system can do, the wideness of its field, may be seen in this law passed by the state legislature of Washington in 1913. This act made it easy for rural school districts to promote frequent meetings of the people for study and recreation. It empowered the little school district to acquire and house material for the dissemination of information of any use and interest to

The farm,
The home,
The community,

and to assemble facilities for experiment and study, especially in matters pertaining to

The growing of crops,
The improvement and handling of live stock,
Marketing of farm products,
Plan construction of farm buildings,
Subjects of household economy,
Good roads,
Home industry,

as well as community vocations and industries in general.

When the government in its war-time activities was driven to arouse the interest of every neighborhood in the nation, it found the state of Washington had already provided to do this under the law for the "Wider Use of the School Plants." Not only this, but Mrs. Preston, the superintendent of public instruction, has been for many years persistently pushing rural community center movements by means of the school system. Mrs. Preston now reports that 22 counties in the state of Washington have been thoroughly organized and are 100 per cent efficient for community activities. Many of the other counties are well organized and organization work is progressing satisfactorily in others.

The common school system is the one organization supported by taxation and free to every citizen, which lends itself to the widest development of community life in every neighborhood of the state and nation. There is probably no law in any other state which sanctions such breadth of opportunity for community growth as does this law in the state of Washington in its "Wider Use of the School Plant."

Already there are 186 teachers' cottages furnished by the school districts in this state; 10 other properties rented for instructors, and 27 new cottages are planned.

A principal occupying a teacher's cottage in an eastern Washington school district writes that he is the leader in the pig and garden clubs of his community, he raises a model garden each year, promotes interest in poultry clubs, takes an active part in the grange work, cares for the school building and plant at all times, conducts declamation contests and spelling bees, and teaches in the community Sunday school. His wife, who teaches in the same school, helps in these activities, directs sewing and canning clubs, drills pupils for neighborhood entertainments, prepares patriotic programs, heads the Red Cross auxiliary, serves a warm lunch each noon to the pupils in the little two-room school and teaches a Sunday school class for the girls.

This principal and his wife live in a teacher's cottage within a stone's throw of the school building. They are 12 months in the year with rural community activities and rural school education. They declare the cottage they occupy is largely responsible for the success of their work in the community because it gives them the opportunity to devote their time to community activity.

### Hennequen Accumulates.

Lack of shipping to move the hennequen has caused that product to accumulate in the ports at Yucatan. Reports from Merdia say the hennequen is even being stored in churches.


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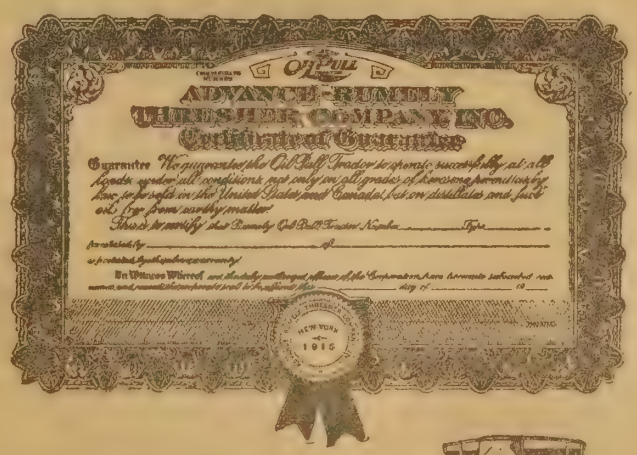


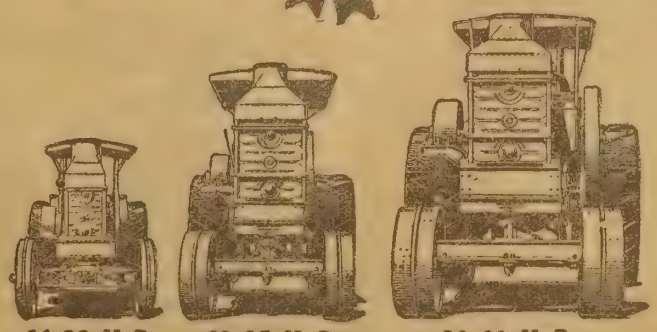
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Did they make good? The best answer is that over 7000 OilPulls are now in use, those sold ten years ago delivering the same *sure* service as this year's machines. *Ask any owner—anywhere.*



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Oil burning was a fundamental in designing the OilPull. Not one of the 7000 OilPulls in use today but is using kerosene or lower grade oil for fuel. To make it *sure*, every OilPull carries a *written guarantee* that protects the owner without time limit.

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### Closest Speed Regulation

Watch the OilPull on the belt—for close regulation it is without equal. Adjustment of engine speed to changes in the load must be as quick as a flash. The hand can't control it, but the governor in the OilPull does—*instant* regulation of power to every variation in the load.

### A Standard Design

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GRANVILLE LOWTHER,
Editorial Contributor.

# Orchard Diseases

## Easy to Cure If Causes Are Known

It is easy to cure diseases anywhere, in any form of life, if we know the causes and can remove them. This proposition needs no proof, for it is common observation that the tendency of all forms of life is in the direction of repair and growth. Disease is abnormal and grows out of two general causes:

First, the conditions of the organism.

Second, the nature of the environment as related to the needs of the organism.

An illustration of the first cause is the fact that a flesh wound will heal much more readily if there are few toxins in the blood—such as alcohol, nicotine, uric acid, etc. In the sap of a tree also there may be enzymatic conditions which tend to hinder a return to normal health. Conditions of environment, on the other hand, can be illustrated by removing a plant having large and porous leaves capable of evaporating a large amount of water, and therefore adapted to a humid climate, into an arid region. Trees planted in an unsuitable environment soon sicken and die.

With these conditions in mind, let us consider a specific instance of plant disease. Apple rosette has been assigned to at least 20 different causes by many intelligent and observing persons. Let us see if there is not a larger cause which includes all of the smaller causes observed by these various observers. One man found rosette where the trees had been injured by gophers. He killed the gophers and the trees recovered. Another found rosette where there was a lack of water. He put on more water, and the trees recovered. Another found that his trees were rosetted where there was too much water. He put in drains and the trees recovered. Rosette has been observed also where there was an excess of fertilizer, where the land is strong in alkali, where there was woolly aphis on the roots. More orchards have been cured of rosette by sowing alfalfa among the trees than by perhaps all other methods combined. This doubtless points to the fact that in the northwest the soil tends to puddle under the process of irrigation, while the alfalfa roots, penetrating the puddled section, aerate the soil and drain off the surplus moisture.

All of the causes named are contributory, while back of them is the primary cause, which includes the rest. I base my claim that there is such a primary cause on the fact that I have examined more than 600 trees, the roots of which were diseased or injured, and the tops rosetted. I think so further because of the nature of the organism.

The root system of a tree has millions of little stomata, too small to be seen by the naked eye. These suck the food from the soil and supply the top system. Now suppose something destroys these organs, what results? The result must be lack of food; that means lack of growth and energy, and that, in turn, is just what has occurred in the case of a tree that has apple rosette. The tree is starving because its organs for extracting food from the soil are injured or destroyed.

The only reason for the above remarks is that a great many people are still inquiring what to do to cure their orchards of apple rosette. My answer is that the best general cure is alfalfa, but that there are causes which alfalfa will not reach, so that we have to study local conditions for contributory causes and remove the latter if we can.

G. L.

# Old Grape Vine

## Was Planted in the Year 1775

At San Gabriel, Cal., is an old grape vine that is reported to have been planted in 1775. It is, therefore, 143 years old. Last year, after having visited in El Paso, Texas, and made some observations in the Rio Grande valley, I discovered an old pear tree that was said to be 300 years old. Up to that time I had supposed that a pear tree, still healthy and growing in West Virginia, and that has now reached the age of 125 years or more, was the oldest in the United States, but in the Rio Grande valley is one that is more than twice as old as the West Virginia tree. Now I am going to be too cautious to say that this old grape vine is the oldest in the United States, but it is the oldest with which I have any acquaintance, and I desire to draw a lesson from these old trees. It has been my privilege to visit the principal orchard sections of the United States and to observe the conditions under which orchards are grown. There are a great many sections in the older states where the apple trees are some of them more than 100 years old. In every case where fruit trees have reached the century mark or more there have been peculiar soil conditions.

**What Are the Soil Conditions?**

It is of exceeding importance to know the conditions under which trees may be made to live more than twice the usual period of time, and to bear profitably during that longer period. In every case there have been a rich loam generally mixed with sand and humus. This gives plenty of food for whatever grows upon the surface. In every case there has been plenty of water, generally from a substratum that percolates through the soil several feet below the surface or from seepage from the hillsides above. It is important that this water shall not stand on the surface of the soil or near the surface so as to submerge the roots, but it must moisten the earth from which the roost take their food substances and drain away, leaving the earth moist, but not saturated. To my mind there is an important lesson here in regard to the drainage of irrigated soils. Sometimes the subsoil is of such a character as to hold the water near the surface. In many cases in the northwest if trees reach an old age it will become necessary to build drainage systems to carry off the underground water.

G. L.





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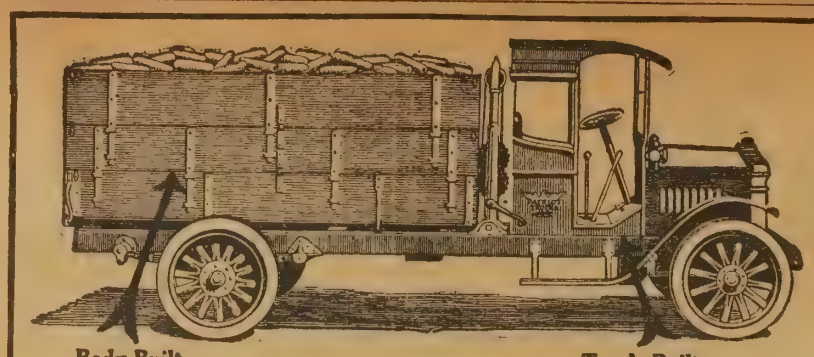
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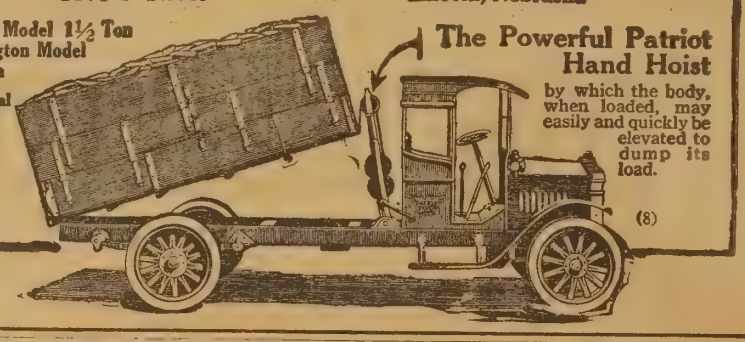
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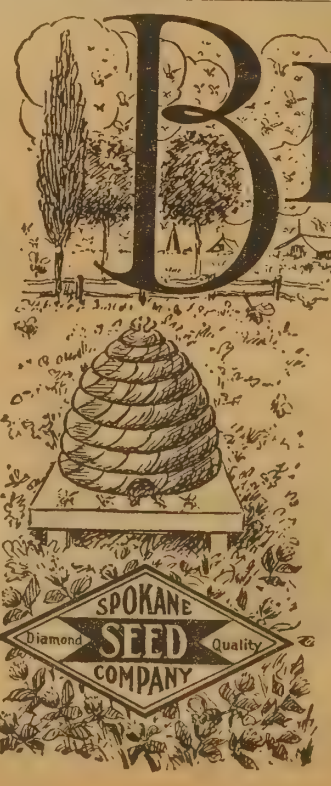
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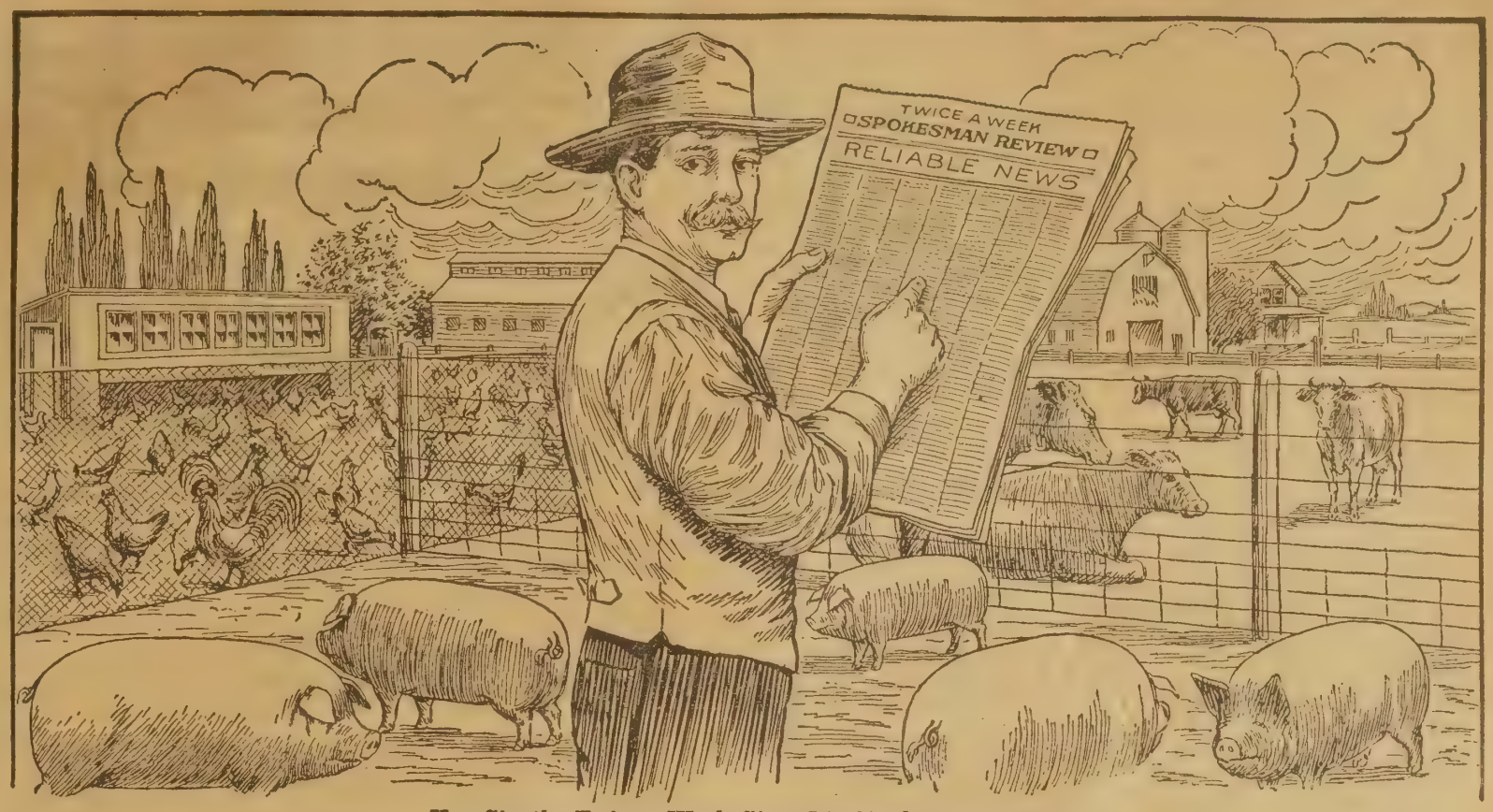
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# Battle Still Rages

## *Crisis in Conflict Seems Reached*

At the end of another week the fighting along the northern front in Europe continues unabated and with no victory for either side. More than three weeks have passed since the stupendous assault was launched by the Germans. They have gained much territory, but its strategic value is somewhat doubtful. But it appears that now the allied leaders realize that they have retreated as far as safe, and are preparing to make a stand and fight it out with the invading forces. During the fighting up to this time it has been apparent that General Haig, commanding the British forces, has preferred to retreat slowly rather than stand firm against the well-planned and powerful German attack, and thereby lose heavily in men and munitions. It is believed that by this retreat he not only has saved his own men and equipment for use in the counter attack that seems imminent as this is written, but that he has wrought unprecedented havoc with the enemy. Cold-blooded as it may seem, the ferocious assaults by the German armies under their reckless leaders has led the allies to a purpose of killing as many of the enemy as possible, and the German leaders seem to have been sacrificing them wholesale in the hope of being able to win a great victory over the armies of England and France before American forces could be prepared in large numbers.

The attacks have all been centered against the British forces in the north, for the apparent two-fold purpose: First, the cutting off of the British from the French and dealing them a crushing blow that would virtually put them out of the fighting for the next year if not for all time to come, and second, the capture of the ports on the English channel, through which English armies and supplies have been coming to France.

Kaiser William and his war leaders seem determined upon victory now, regardless of the cost in men and means. That he will not cease his tactics until thoroughly whipped or his goal attained is a general belief. The war critic on the Paris Times gives this paragraph, which reads like a reasonable explanation of the reckless continuance of the German attack:

> In a struggle of this character a blow missed can become singularly dangerous for the one who attempted it, and we have the feeling that the success obtained up till now by the adversary is of doubtful result. He has gained advantages, but they have placed him in an unstable situation, which can become perilous. Completely engaged, he is obliged to pursue his plan to the end.

A week ago it was Amiens, the railroad center of the allies in the northern territory, that appeared to be in particular jeopardy. The invaders had reached to within 10 miles of it, and their most vigorous attacks were made with the apparent view to capturing it. It was of strategic value, and the British stiffened and prevented its capture. Then the German attack was moved farther north, and in that region the British retreated, leaving Armentieres and other places, some insignificant and some with some strategic value, in the hands of the enemy. But at the close of the week the British appeared to be making a stand with a view to preventing the further advance of the Germans, as was done before Amiens, farther south. A statement by General Haig to the British army indicated this purpose. The statement said:

"Three weeks ago today the enemy began his terrific attacks on a 50-mile front. His objects are to separate us from the French, to take the channel ports and to destroy the British army.

"In spite of throwing already 106 divisions into the battle and enduring the most reckless sacrifice of human life, he has yet made little progress toward his goals.

"We owe this to the determined fighting and self-sacrifice of our troops. Words fail to express the admiration which I feel for the splendid resistance offered by all ranks of our army under the most trying circumstances.

"Many among us now are tired. To those I would say that victory will belong to the side which holds out the longest. The French army is moving rapidly and in great force to our support. There is no other course open to us but to fight it out.

"Every position must be held to the last man. There must be no retirement. With our backs to the wall and believing in the justice of our cause each one of us must fight to the end. The safety of our homes and the freedom of mankind alike depend upon the conduct of each one of us at this critical moment."

The full significance of General Haig's statement that the French were moving to the support of the British is not easily understood, but it is not improbable that the fighting on the front before this reaches the readers of this paper will have explained it. It was believed in many circles to indicate that the promised counter blows were soon to be struck. It did not necessarily mean that the French were moving northward to the point of strongest attack against the British, but might as well have meant that they were ready to strike a blow farther south, probably on the flank southeast of Amiens, that would compel the Germans to divert their attention from the British to the southern point.

In the view of some officers the German front as it now stands places the Germans in jeopardy in two places. The wide salient driven toward Amiens appears to them susceptible of flank assault by the French from the south and southwest, while in Flanders the narrow salient driven into the British lines leaves the Teutonic flanks exposed.

To what extent the American forces are in the actual fighting is not revealed in the reports coming from the battle front, but it is known that they are at the service of General Foch, supreme commander for all the allies during the present drive. Some of them are known to be on the front lines. One regiment from the northwest is known to be taking part. Not only is it not known how many are in the fighting, but it is still a military secret how many are actually in Europe. While no figures are available as to how fast they are being transported to Europe, it is stated that they are now leaving three times as fast as at any previous time. It is likewise stated that troops now in this country, but nearly ready to sail, will see service in Europe within 60 days.

The British have issued a statement showing that since the opening of the war more than 13,000,000 troops have been transported over the seas with a loss from enemy submarines or other attacks of less than 3000. It is interesting to note that no Canadian troops have been lost while en route to Europe, the only transport vessel from America to be lost being the Tuscania, when nearly 200 out of 2500 aboard, mostly American soldiers, were lost.

### Pennsylvania Coal.

Nearly half of all the coal produced in the United States is mined in Pennsylvania.


NEW WORLD LIFE

**A GIANT'S STRENGTH**

New World Life has deposited with the State Treasurer of Washington an amount sufficient to protect every Washington policyholder it has.

(This deposit is independent of the ***Millions of Other Assets*** possessed by this company as a further protection to its policyholders.)

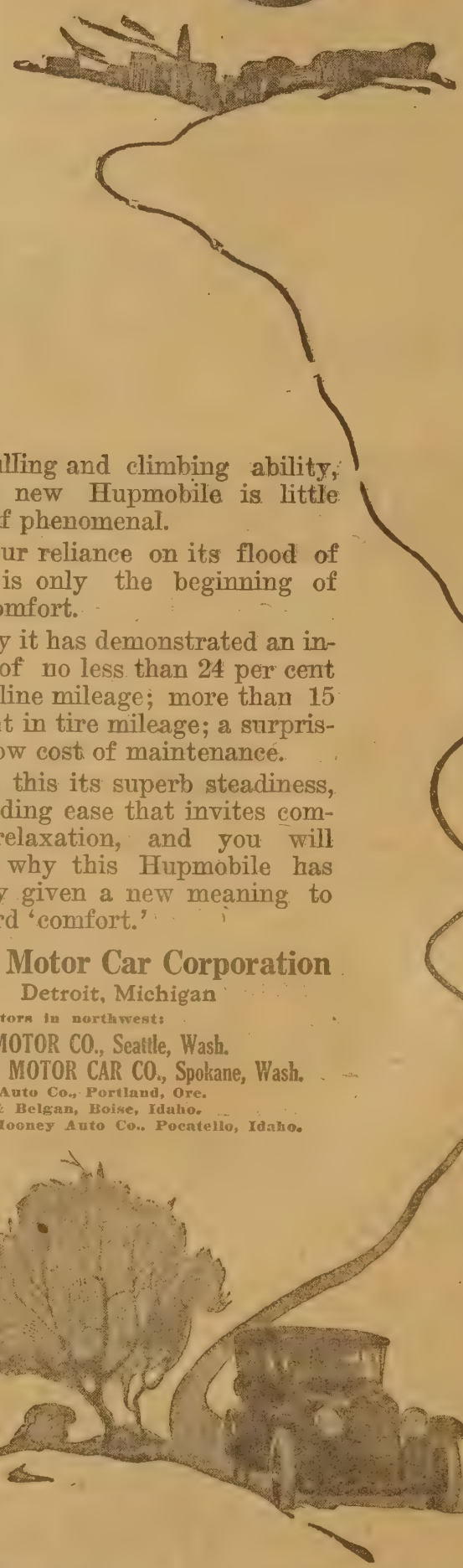
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A splendid opening in your locality for a district representative.



**The Comfort Car**

H



IN pulling and climbing ability, the new Hupmobile is little short of phenomenal.

But your reliance on its flood of power is only the beginning of your comfort.

Already it has demonstrated an increase of no less than 24 per cent in gasoline mileage; more than 15 per cent in tire mileage; a surprisingly low cost of maintenance.

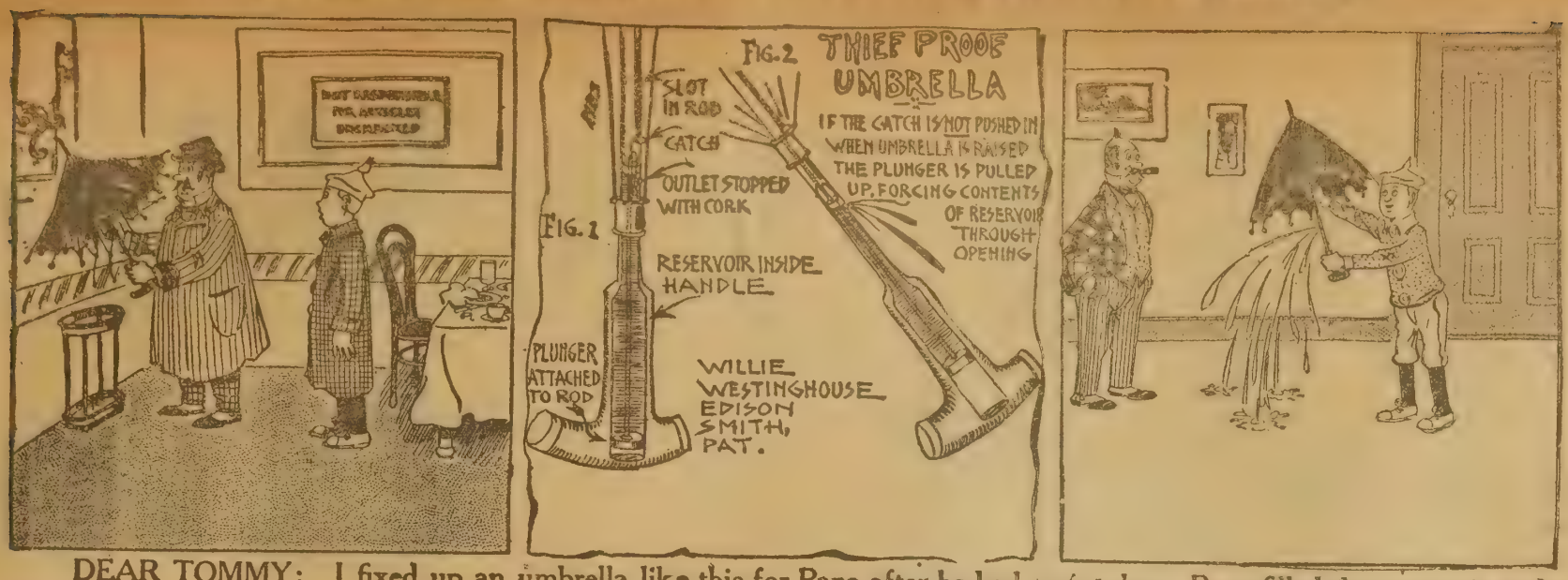
Add to this its superb steadiness, with riding ease that invites complete relaxation, and you will realize why this Hupmobile has actually given a new meaning to the word 'comfort.'

**Hupp Motor Car Corporation**
Detroit, Michigan

Distributors in northwest:
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E. W. Mooney Auto Co., Pocatello, Idaho.

**Hupmobile**

# THE MINISTER DEMONSTRATES ONE OF WILLIE'S




DEAR TOMMY: I fixed up an umbrella like this for Papa after he had one stolen. Papa filled the reservoir with ink; but before he had a chance to use it, Mamma handed it to the Minister, a shower having come up while he was calling on us. Say, Tommy, it worked perfectly!

Yours, etc., WILLIE.



# UNLUCKY LOOIE FALLS FOR GENTLE SPRING






# We tha

## Washington Liberty Loan Committee

JOSEPH A. SWALWELL.
State Chairman.

R. R. FOX.
Chairman Seattle
Auxiliary District.

A. L. HAWLEY
King County
Chairman.

This Advertisement Contributed by

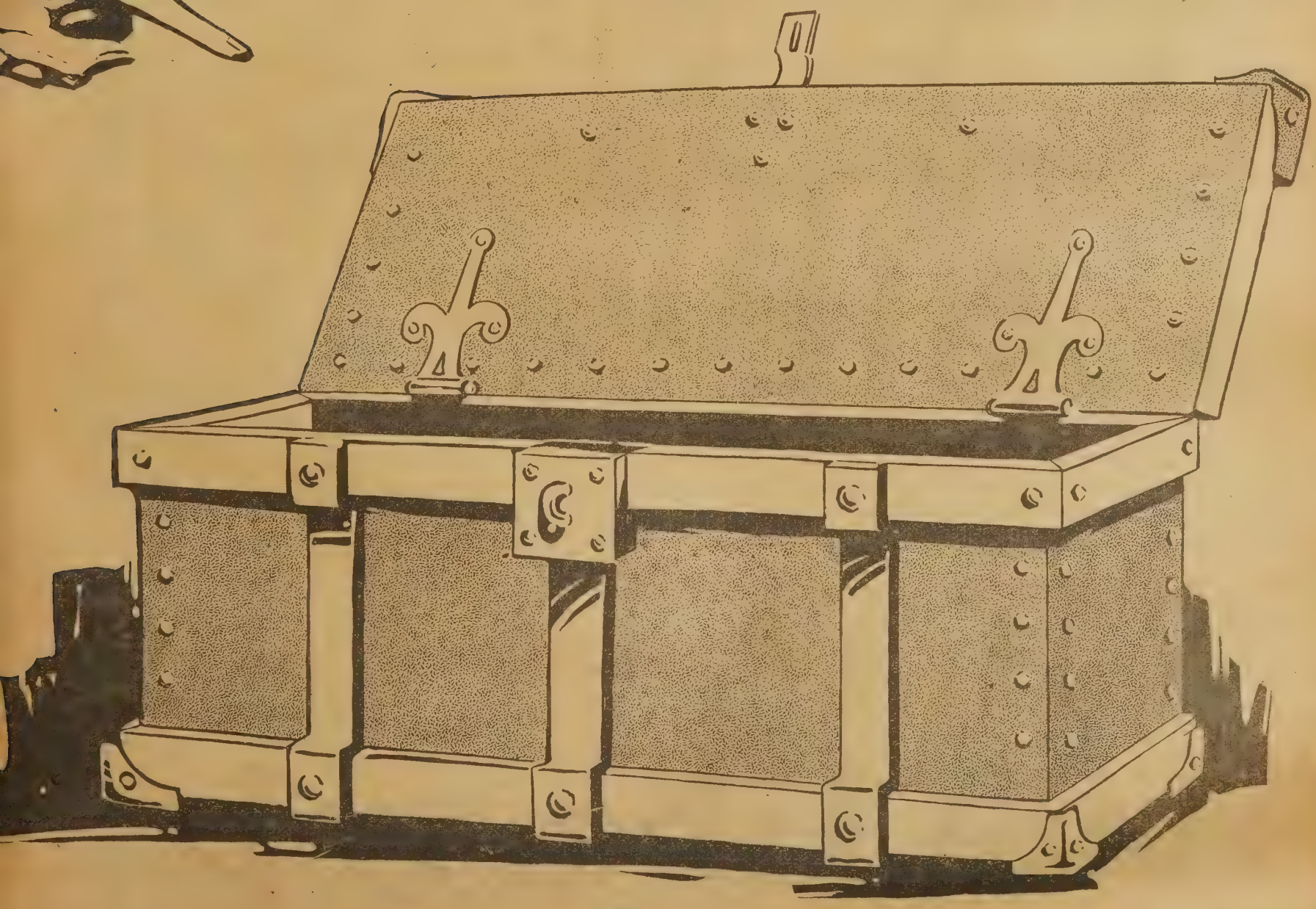
LILLY'S

Seattle. Established 1885. Port

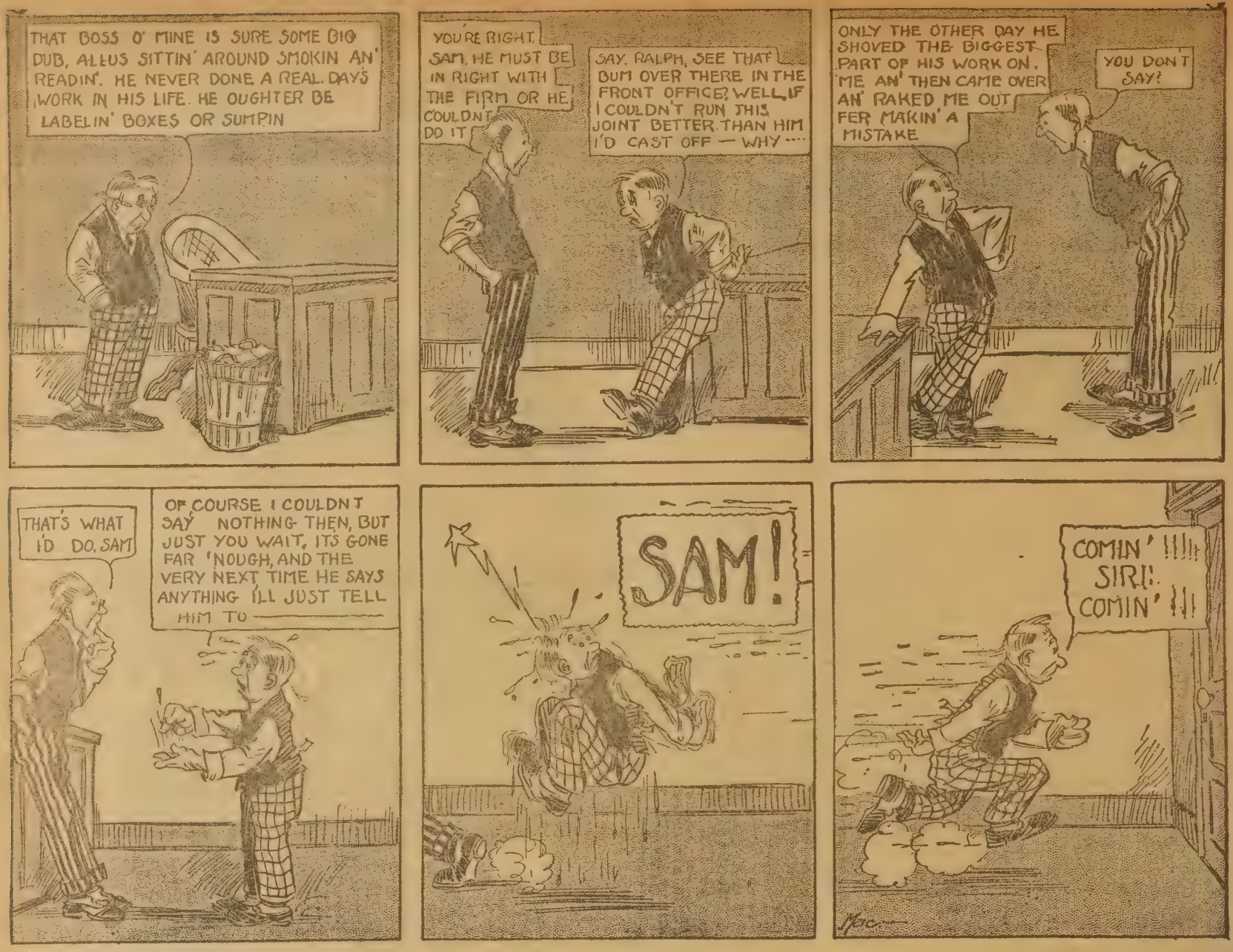
# Third Liberty Loan

# must fill war Chest.

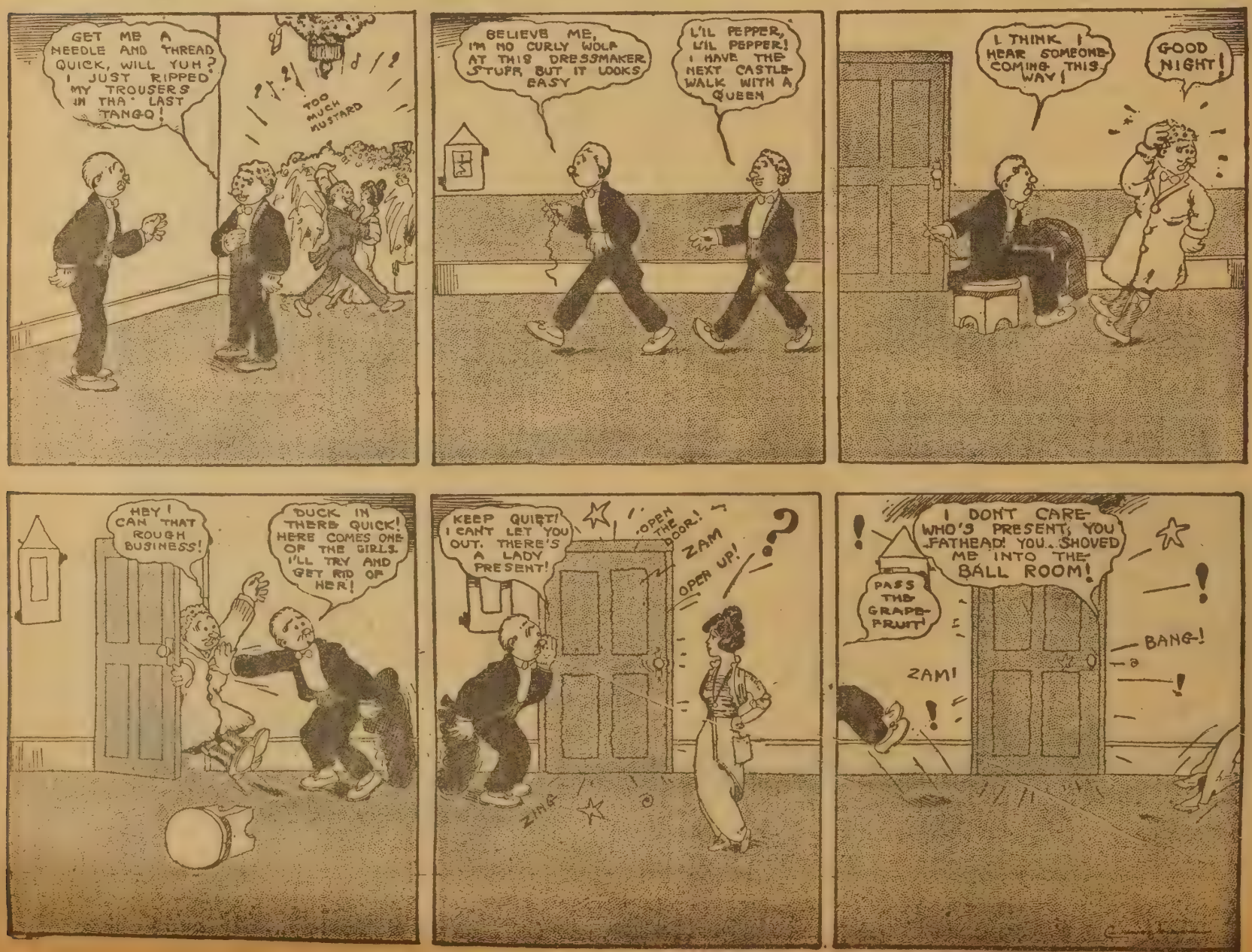
**Yes! That is the spirit of 1918! And Washington farmers know its meaning! The THIRD LIBERTY LOAN is Liberty's call to all Americans. "We must fill that War Chest!" We must feed and look after those boys at the front, and we'll leave it to them to whip the Hun!**



# HAS THIS EVER HAPPENED TO YOU?




# SAMMY STAHL APPEARS AT THE TANGO PARTY



# Use Pure Water

## Advice on How to Get It Is Free

Among the booklets that the information bureau, conducted by this paper in Washington, D. C., is offering its readers is one prepared by the federal public health service on the matter of pure water supply. It is recognized everywhere that pure water is one of the best guarantees of good health that can be had and that on the other hand impure water is one of the greatest dangers to health. This book tells how to purify and protect the home water supply.

Other booklets that may be secured from the information bureau include the famous Hoover cook book, the war garden book and the booklet on how to combat spring colds. Inclose a 2-cent stamp for postage when writing for any one of these booklets.

Any question on any subject that you wish information on will be answered by our bureau in Washington. Address all communications to the Washington Farmer Information Bureau, Washington, D. C.


**WHITE ORPINGTON HISTORY MADE**

by my pen in all-northwest laying contest, Montana state show. Won 1st place in 1st contest for December. Have two Dec. winners tied for 1st place in second contest. One pullet repeats with 29 eggs in Jan. Some winter layers. Won every first, two sweepstakes and state cup at Montana state show. Why not the best? Send for mating list.

MRS. W. T. THOMPSON, Bozeman, Mont.



**Bargains!**

*Lumber, Shingles, Millwork, Sash, Doors, Mouldings, Paint*

Direct to YOU

**Offered Subject to Prior Sale at Record Breaking Prices**

Red Cedar Bevel Siding $8.95 per 1000 feet. Clear Fir Drop Siding $29.75 per 1000. Shingles "A" $3.27 per 1000. Barn Sash Glazed 52c each. Barn Paint 30c a Gallon. House Paint $1.73 a Gallon. Two Ply Roofing $2.07 per Roll and 100 other items in our Free Bargain Bulletin. Send 10c for Complete Plan Book, "Better Buildings." Address

**Hewitt-Lea-Funck Co.**
458 Funck St. Sumner, Wash.



**MUD!**

—it gets in your ditches—then grass grows and refuse piles up—and then your ditch is hard to clean with plow and shovel. The job is easy with

Cut shows Model 20, made in 2, 4, 6 horse and tractor sizes. Makes new ditches, cleans old ones, to 4 ft. deep.

THE Martin DITCHER & GRADER

**FINE FOR GRADING, TERRACING AND DYKING**

Does the work of 50 men and does a better job. Is simple, practical and efficient. No wheels or gears. No repair bills. Fully illustrated catalog with prices and list of users near you free. Write for it today.

OWENSBORO DITCHER & GRADER CO.
1576 Wazee Street Denver, Colorado




**You can reverse this cuff when soiled—and it wears twice as long—A feature of Blighty—the new**

**HALLMARK SHIRT**

**On Khaki ground—stripe patterns that absolutely will not fade. And "Blighty" Fabric and Detail Quality is Kept Up. Ask your dealer.**

HALL, HARTWELL & CO., Makers, Troy, N. Y.

In writing advertisers, be sure to say that you saw their advertisement in this paper.


# LIVE STOCK REPORT.

## Washington Reports Improvemen

The condition of live stock in Washington is much better than a year ago, according to report issued by E. T. Marchetti, field agent of the bureau of crop estimates. The Washington statistics follow:

| | 1918. | 1917. | 10-Yr. Ave. |
|---|---|---|---|
| Mortality— | | | |
| Horses | 15 | 16 | 20 |
| Cattle, disease | 12 | 15 | 16 |
| Cattle, exposure | 5 | 11 | 14 |
| Sheep, disease | 7 | 13 | 17 |
| Sheep, exposure | 5 | 25 | 22 |
| Lambs, disease | 20 | 39 | 41 |
| Swine | 14 | 16 | 19 |
| Condition— | | | |
| Horses | 98 | 97 | 98 |
| Cattle | 98 | 96 | 97 |
| Sheep | 100 | 97 | 98 |
| Swine | 99 | 98 | 98 |
| Brood sows | 98 | 90 | .. |

There has been considerable improvement, says Mr. Marchetti, in the condition of live stock and losses from disease have decreased throughout the entire state on account of improvement in grade of all classes of stock, better care, ability of stock to resist disease due to the open favorable winter, adequate provisions for feed on account of severe losses sustained the last two years through lack of forage, and vaccination of hogs for cholera, calves for black leg and milk cows for tuberculosis, which has resulted in only occasional losses and no extensive epidemics. There have been noticeable decreases in the loss of swine from cholera in the southeastern counties and in the Yakima valley, where cholera has prevaailed in preceding years and has been practically eliminated this year. Lambing is progressing under favorable conditions and the percentage is greater with few exceptions than during the last two years and in many instances greater than in the average year.

The state reports for Oregon, Idaho and Montana also show like improvements as regard conditions and mortality.

### United States.

The following table gives the mortality per 1000, and the condition of live stock throughout the United States for the last two years, together with 10-year average as compiled by the bureau of crop estimates:

| | 1918. | 1917. | 10-Yr. Ave. |
|---|---|---|---|
| Mortality— | | | |
| Horses | 16.5 | 16.9 | 19.4 |
| Cattle, disease | 18.2 | 19.4 | 20.0 |
| Cattle, exposure | 13.3 | 14.6 | 14.3 |
| Sheep, disease | 19.8 | 21.8 | 24.4 |
| Sheep, exposure | 20.0 | 32.4 | 30.2 |
| Lambs | 49.3 | 60.2 | 58.8 |
| Swine | 42.1 | 48.6 | 67.5 |
| Brood sows | 109.5 | 96.5 | .. |
| Condition— | | | |
| Horses | 96.2 | 95.8 | 96.2 |
| Cattle | 95.6 | 94.4 | 95.2 |
| Swine | 96.3 | 95.0 | 93.7 |

## Ranch Storage Plants.

Practical assistance right on their ranches will be given the orchardists in the Wenatchee valley by an expert from the United States department of agriculture in the construction of ranch storage plants.

## Winter Wheat Condition.

The department of agriculture rates the conditions of Washington winter wheat at 93, as against 70 this time last year and a 10-year average of 92 on April 1.

## Farmers and Advertising.

Advertising has played a mighty important part tin the agricultural development of America.

The tillers of the soil have benefited from advertising in innumerable ways. Through this agency they have learned of countless improved methods for cultivating their farms and of many conveniences for their homes. Advertising has been the good friend which has introduced the silo, the telephone, the harvester, the incubator, the cream separator, water and lighting systems and dozens of other useful articles.

It is an almost invariable rule that the manufacturer does not advertise until his product is thoroughly perfected. If the new implement or machine is advertised farmers can depend on it.

Without this widespread confidence in advertising modern "machine" farming would certainly not have advanced as it has in America.

Advertising will continue to perform a useful service. It will pay you to read and investigate the advertisements in every issue of your state farm paper.





*Your Guide To True Tire Service*

On every road you see Racine Country Road and Multi-Mile Cord tires. Always they're doing their bit—users satisfied and happy.

These tires are Extra Tested in Racine Rubber Company factories. Because they *are* Extra Tested, you can expect *extra* wear—better service than from other tires.

**RACINE Country Road *and* Multi-Mile Cord TIRES**

Extra Tested is more than a phrase. Much more. It reflects the *extra* care in the factory that results in *extra* wear on the road.

Take the Extra Test for rubber fitness, for example: rubber is blended and re-blended until the supreme degree of toughness is obtained. Out on the road you can see the extra mileage this Extra Test gives.

*Racine Country Road Tires*—scientifically built and Extra Tested for hard daily service over country roads. 5000 Mile Guarantee.

*Racine Multi-Mile Cord Tires*—cord quality proved in actual use, and bonded by the many Extra Tests.

Also red and gray inner tubes—Extra Tested.

It will pay you to know the dealer who sells them.

*For Your Own Protection Be Certain Every Racine Tire You Buy Bears The Name*

RACINE RUBBER COMPANY
Racine, Wis.

**Dependable!**

Here is a portable drag saw that you can depend upon.

Will do the work of 20 men sawing cord-wood shingle bolts, clearing land and cut from 15 to 30 cords of 4-foot wood per day.

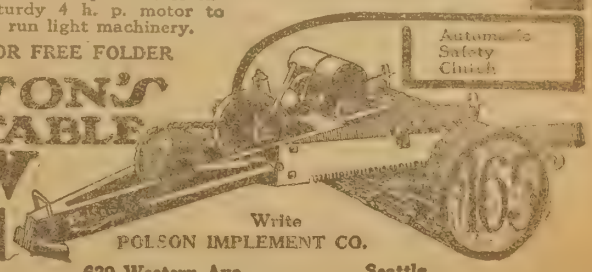
Built especially strong for heavy duty work and backed by one of the oldest implement houses in the West.

Equipped with Safety Automatic Clutch so you can start saw independent of engine and use sturdy 4 h. p. motor to pump water and run light machinery.

You make no mistake when you buy the Polson.

WRITE FOR FREE FOLDER

**POLSON'S PORTABLE SAW**




Write
POLSON IMPLEMENT CO.
629 Western Ave. Seattle

**HIDES**

**WOOL, PELTS, MOHAIR, CASCARA BARK**

We do the largest consignment business in the Northwest. Equally fair treatment on all shipments, large or small. Returns at full market value mailed same day as goods are received. Trial shipments wanted and appreciated, but are handled as regular shipments and not at inflated values.

THE H. F. NORTON CO.

53-55 No. Front St., PORTLAND, ORE.
206 3d Ave. So., SEATTLE, WASH.

In writing advertisers, be sure to say that you saw their advertisement in this paper.

# Have You Become Thoroughly Acquainted With Your Camera?

By PAUL E. TRIEM

When the average amateur photographer sees a snapshot which is decidedly better than his own average he is pretty apt to say, "The man who took that picture had a better lens than mine." The truth of the matter is, however, that good photographs can be taken with any camera on the market, and that picture making is nine-tenths "know how" and one-tenth equipment. It is to supply this "know how," particularly in reference to picture making about the farm, that the present series of talks on photography has been undertaken.

The very first thing to do, on purchasing a camera, is to get acquainted with it. Every camera consists essentially of three parts: First, the box or body, at the rear of which is an arrangement for holding films or plates; second, the lens, or "eye" of the camera, which directs the rays of light falling upon it in such a way that they form upon the sensitive film or plate an inverted picture of the object or scene in front of the camera; and third, the shutter, which controls the length of the exposure, or the time which this image is allowed to rest upon the film.

Most cameras have an adjustable opening in connection with the lens called the "diaphragm." Below the lens, usually, is an indicator connected to this diaphragm in such a way that as the latter is closed the indicator points to successively larger numbers. Perhaps the numbers will read "4 8 16 31," or they may read "f-8 11 16 22." In either case the amount of light admitted into the camera to form the picture decreases as the pointer is moved to the larger numbers, and because of this decrease in quantity the exposure must be lengthened.

If the diaphragm scale is marked with the numbers "4 8 16," etc., in which each number is just double that of its predecessor, the uniform system, or U. S. is being used. If the scale reads "8 11 16 22," the f system is used. The important thing to remember in either case is that as the pointer is moved to successively larger numbers the opening in the diaphragm is made smaller and the exposure must be increased. The 16 stop is the same in both systems, and this is the one which will be most used in taking pictures of buildings, cattle, etc., where sharpness and detail are wanted.

The shutter which controls the length of the exposure, is usually marked "T B I (or M)," these abbreviations standing for "time," "bulb" and "instantaneous" exposures. In making a time exposure one motion of the shutter release or "trigger" opens the shutter and the next closes it. In a bulb exposure the shutter remains open as long as the release is pressed. An instantaneous exposure is made by pressing the release, when the shutter quickly opens and closes. If but one speed of instantaneous exposure is provided, this will be about one-twenty-fifth of a second.

All of these details sound rather forbidding to begin with, but they are soon mastered. A few practical suggestions made at this time will enable the beginner to undertake his or her work with the new camera with less uncertainty and with fewer failures than usually fall to the amateur's lot. In the first place, never try to make an instantaneous exposure or "snapshot" on a dull day; rather, place the camera on a firm support and give a quick bulb or time exposure—with the diaphragm indicator pointing to sixteen this should be about one second. Second, learn to hold the camera very steady when making snapshot exposures, and never try to hold it for anything longer. Third, keep a record of your exposures, jotting down the size of the diaphragm, length of exposure, time of day and condition of weather as to cloudiness. When your films are developed study them in connection with this record and you will soon learn to judge exposure almost instinctively. In another issue we will describe the appearance of under-timed and over-timed exposures, so that you will be able to tell by looking at your films on which side, if either, you erred; also, we will give you an exposure table which will enable you largely to eliminate these mistakes.





Ninety-nine per cent of all amateur pictures are snapshots, while probably 99 per cent of all professional work is made by the time exposure method. This one little fact, so often overlooked by the camera enthusiast, accounts for much of the annual waste of films and plates, carloads of which are sacrificed in the effort to make good pictures by an impossible method.

Sometimes a picture must be a snap-shot or nothing. That is because there are many instances when only a very brief exposure will "stop the motion" in a scene. Suppose, for instance, that you wish to photograph a group of youngsters playing in the front yard. You adjust your camera for the estimated distance between yourself and the children (unless you have a camera working at universal focus, when this adjustment for distance is unnecessary). Then you locate the group in your finder and wait till they fall into a pose which seems desirable, when you press the release—and the picture is made. A very short or "snap-shot" exposure was necessary because of the movement of the subject you were photographing.

In cases of this kind, of course, the snap-shot is justifiable; but in the many cases where there is no need of speed, it is a mistake to limit yourself to an instantaneous exposure. Even where there is the likelihood of some slight motion, as in photographing chickens or cattle or even children who are more or less at rest, a time exposure is possible, by watching your chance, and the quality of the resulting picture will pay for the added trouble. For a time exposure outdoors, turn the indicator of your diaphragm to 16 and place your camera on a steady support. This will allow of the longer exposure required without motion on the part of the camera, which would blur the picture. With this sort of exposure, you will gain sharpness and detail in your picture and will also secure greater depth of field, which means that objects near the camera and at a considerable distance from it will appear sharp, rather than fuzzy.

Now as to the time of exposure: First, in those cases where you must make a snap-shot, or nothing, working anywhere in the northwestern states in the late spring, summer or early fall, between the hours of 10 and 4, with no heavy shadows close to the camera, turn your diaphragm indicator so that it points to 4, if you have the U. S. system (see last week's article for explanation) or to 8 if you have the f system, and give 1-25 of a second. If your camera has but one instantaneous exposure, that will be about 1-25. Remember that this is a very short time for the light to act upon the film, and unless conditions are favorable, the result will not be pleasing.

For time exposures: First, be sure your camera is rigidly supported—use a tripod or a box or a fence-post for this; second, turn the indicator to 16, either system; third, be sure your finder includes the view you wish to photograph and that the distance between the camera and the object to be photographed corresponds to the distance indicated on the focusing scale, if your camera is fitted with one; and, fourth, give one-half second exposure on bright days, with no heavy shadows close to the camera, or one second on cloudy days or where there are heavy shadows within 30 feet. Between the hours of 8 in the morning and 5 in the evening you will find these exposures about correct.

Remember to keep a record of your exposures, as advised in the first article in this series, and to study your results. Remember, too, that if you photograph a scene which lacks both high lights and shadows, your resulting picture will be "flat"—will lack snap and contrast.

**The next article will take up the matter of what to photograph, and of how to choose the correct "point of view."**

## Rural Life Conferences.

Beginning with Clarke county on April 10, rural life conferences are being held in every county of the state. These have been called by Mrs. Josephine Corliss Preston, state superintendent of public instruction. In calling the conferences the state superintendent has asked a large number of organizations to be represented, like the granges, bankers, good roads, labor organizations, ministerial associations, community center leaders and commercial bodies. Of course rural teachers are in the forefront of those who will attend.

The rural life conferences in every county will be preliminary to the state rural life conference, which will meet at Yakima during June. The state department of education is working in cooperation with the normal schools in promoting these conferences. In a circular announcing the conferences, Mrs. Preston says: "While this entire system of county conferences is right in line with the work of like character suggested by the United States government, it goes considerably farther than the government plan for the reason that the state of Washington has made such rapid progress in community organization."

The law enacted by the state legislature in 1913 for the wider use of the schoolhouse and grounds furnishes authority for doing many things which school directors have not been able to do heretofore. Every reader of The Farmer will be interested in an article describing what may be done by school districts under this law, which will appear soon in its columns.

### Algeria's Wine Crop.

The wine crop of Algeria for 1917 is distinctly inferior to that of a year ago. The official statistics of the vintage will not be issued for several weeks; but, according to the general estimate, the yield approximates 6,000,000 hectoliteres (158,502,300 gallons), compared with 8,781,266 hectoliters (231,975,100 gallons) in 1916.

## Columbia Farm Survey.

M. J. Newhouse, county agriculturist, has just made an agricultural survey of Clarke county. It was learned by the survey that wheat acreage is much increased and potato acreage decreased, caused, no doubt, by the low price of potatoes this year.

### Peterhof Founded in 1711.

The town of Peterhof, 18 miles from Petrograd, was founded in 1711 by Peter the Great. The imperial palace there is built in imitation of the famous palace of Versailles.

## Twisp Gets Busy.

At a rousing community meeting the people of Twisp, Okanogan county, have decided to go into the boys' and girls' club business. Miss Mazie Wilson, emergency district club leader for northeastern Washington, explained the purpose and results of club work. Miss Myrtle Witt of Witte, a member of the Twisp canning club two years ago, will act as assistant for Mrs. F. M. Fulton who will lead the canning club. W. G. Hughes of the Twisp bank will lead the pig club and will be assisted by George W. Sprouse. The Rev. M. R. Brown will lead the garden club. R. E. Sacket will have charge of the poultry club. There will be meetings held once a month and there will be field trips and club members will visit each other's projects and a club fair will finish the year's work in the fall.

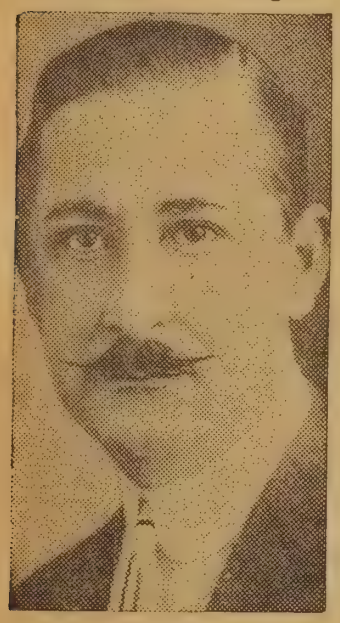
# All the World's a Stage, and All the Men and Women Merely Players

## Wins Trap Tournament.



C. H. Newcomb of Philadelphia, national amateur trapshooting champion, defended his title recently at Pinehurst, N. C. His total score was 576 hits out of a possible 600, at 16 yards.

## Profiteer, Is Charge.



Harry S. Harkness, who recently sued the government for $401,250 which represents the difference between the real and appraised value of his yacht, which was taken over by the government last summer.

## Fighters in France Get Their Coin



Copyright Com. on Public Information.

The paymaster is always heartily welcomed by the boys "over there." Here are a few of the marines in line for the pay envelope.

## Aged Members of U. S. Senate



Copyright International.

United States senators who have long since passed their Biblical allotment of life. From left to right they are: Dillingham of Vermont, Warren of Wyoming, both 74 years old; Gallinger of New Hampshire, 81; Baird of New Jersey, 70; Page of Vermont, 74; Tillman of South Carolina, 71; Nelson, 75, and Colt, 71, of Rhode Island.

## Office for Taft.



Sergeant Major Charles P. Taft, son of the ex-president, has been recommended for promotion to the commissioned rank.

## Rainbow Division in Action



—Brown in Chicago Daily News.

## Ach! Such Central Powers




—Brooklyn Eagle.

## Side-Door Pullmans "Over There"



Copyright Com. on Public Information.

The above photograph shows some happy American marines riding in "side-door Pullmans" from a seaport to their training camp in France.

# Forty Years as a Day

## *Official Washington Apt to Take Its Time*

Forty years ago or thereabouts I happened in the city of Cologne, Germany, and, of course, had no difficulty in recognizing its marvelous cathedral, as it is one of the noted models of church architecture in Europe. Plenty of time had been taken to build the Cologne cathedral. The foundations had been laid 600 years before and, in common with the continuous procession of visitors, I contributed my coin toward its completion.

Two or three years after this visit to Europe I was in Washington. Finding a room I was eager to see the sights of the national capital. Thought I would take in a "morning" session of congress. Reaching the house of representatives about 10:30 I found the "morning" session consisted of janitors mopping the floors and dusting the desks. There were, however, many attractions to engross my attention. I was taking in the sights going from the hall of the house of representatives into the rotunda under the big dome. Looking up to the lofty ceiling I saw a rude chair made out of lumber and suspended by ropes. The chair was vacant and I learned that the famous artist, Constantino Brumidi, had fallen from this chair a day or two before, from the effects of which he died shortly after.

Nearly 40 years later on my next visit to Washington you may imagine my surprise on entering the rotunda of the capitol and looking up at the high ceiling to see another chair suspended and to be told that the work of completing the fresco on the frieze was on again. Of course, if it takes 600 years to build a cathedral in Europe no one should complain if it takes 40 years to decorate the frieze around the dome of the national capitol. Americans may think that governmental affairs at Washington are a little slow, but they are as the passing of the ships in the night as compared with certain European dates.

The father of Brumidi, painter of the fresco in the capitol dome, was a Greek and his mother an Italian. He learned the art in Rome. Brumidi was a captain of the papal guards during the revolutionary times in Rome before Rossi was assassinated. Refusing to execute commands to turn the guns of his company upon the oppressed, Brumidi's house was surrounded by soldiers in the dead of night and he himself arrested and thrown into prison where he lay for 13 months. He was released at the intervention of the pope, whose friendship he had won by the execution of two paintings of his eminence, upon condition that he immediately leave Italy.

Brumidi first landed in New York, but finding little demand for his art departed for Mexico in the hope of richer patronage. He returned after three years to Washington, which he had previously visited, to enter upon his life work at the capitol.

The ceiling of the rotunda was finished by Brumidi in 1865. The fresco of the frieze upon which Brumidi was engaged and the larger part of which he himself completed represented scenes in the history of the new world from the time of its discovery. Following the landing of Columbus in 1492 were:

**The entry of Cortez into the halls of Montezuma in 1521.**

**Pizarro's conquest of Peru in 1533.**

**The midnight burial of De Soto in the Mississippi in 1541.**

**Pocahontas saving the life of Captain John Smith in 1606.**

**The landing of the Pilgrims at Plymouth in 1620.**

**Penn's treaty of peace with the Indians in 1682.**

**From Brumidi's death Filippo Costaggini was engaged to continue the frieze according to Brumidi's designs. These represent:**

**A scene in the earliest days of Plymouth colony.**

**The treaty of peace between Governor Oglethorpe and the Indians in 1732.**

**The battle of Lexington in 1775.**

**The reading of the Declaration of Independence in 1776.**

**The surrender of Lord Cornwallis in Yorktown in 1781.**

**The death of Tecumseh at the battle of the Thames in 1813.**

**General Scott's entry into the City of Mexico in 1847.**

**The discovery of gold in California in 1848.**

Here are a series of events in the history of America which might well serve the young folks of the family circle, as a test in American history.

In May 1889 work upon this frieze was suspended and what was my surprise to find a larger chair suspended in the place of the one I had seen nearly 40 years ago and the work just resumed after a cessation of about 30 years.

It may be of interest to be reminded that the art of fresco, which has long flourished in Italy, was known and practiced by the Egyptians, Greeks and Romans. Fresco is the Italian word for fresh. The process is so called because the plaster is wet when the colors are applied. The colors are liquefied with water and so naturally sink into the prepared background and become a part of it. As the wet plaster is much darker than the dry it is an art so to apply the colors which change materially in drying that the tone is preserved harmonious throughout. Mineral or earth colors only can be used, as the lime in the plaster which is used for white eats and destroys all other paints. The artist in fresco must produce his flesh tints by clever combinations with light and Indian reds.

**A prize of $1 in thrift stamps will be given by The Farmer to any school boy or girl for the best description in 200 words of any one of the historic incidents pictured in the frieze around the dome of the capitol in Washington enumerated in the above article. These articles must be accompanied by the name and postoffice address of the writer and the name of the teacher and the number of the school district must be added.**

## Stock and Stock

### Live, Purebred, Grade and Watered

At a meeting of farmers not so very long ago, one of them expressed great suspicion of the dairy organization of which the meeting was representative.

"Their rules are not fair," he declared.

"What, for instance?" asked one of the members.

"Why, you can't even sell a cow unless you offer her to your organization first, at its price, too."

"I never heard of any such rule. Where did you hear that?"

"It's right in our bylaws," shouted the suspicious one.

"Show me!"

"I'll do it. Listen to this: 'No stockholder of this company shall sell or transfer his stock to any person, firm or corporation without giving the——"

But the rest of his quotation was drowned in a roar of laughter.

The difference between shares of stock and live stock has confused more than one man, however.

### Fine Pasture Is a Creation.

"Fine pasture is a creation, not an accident," says a writer in "The Shorthorn in America." "One achieves a good pasture only by patient endeavor and by prudent restraint in its use, one secures a good pasture through eternal vigilance in guarding its herbage from the encroachment of weeds and by welcoming a variety of grasses; one maintains its luxuriance by generous treatment in the matter of enriching the soil through frequent dressings of fertilizing material. This making of a pasture is an undertaking that succeeds best on a home farm under the master's eye."

### Educate Blind Soldiers.

The ablest educators of the blind in the country are cooperating with the government in its plans for the most complete system of reeducation for blinded soldiers that has ever been undertaken. When their education has been perfected the committee will find employment for soldiers and aid them in filling their old places in the community. Mrs. T. Harrison Garrett has offered her Baltimore estate of 99 acres to serve as a hospital school for the blinded officers and men.

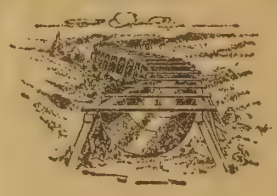
**Superfluous.**

"I say, my man," said the nervous tourist in the Alps, "this seems to be a very dangerous precipice. I wonder why they don't put up a notice board?"

"They did once," said the guide. "It was up for two years and then, as nobody fell over, they took it down again."


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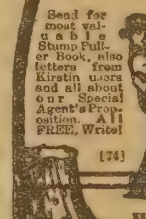
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# Trappers of the Ozarks



## The Adventures of Two Young Pioneers in the Wilds of Upper Louisiana, Now the State of Missouri.

By LEWIS B. MILLER

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**SUMMARY OF PRECEDING CHAPTERS.**

On another page in this issue is given a comprehensive summary of the 11 chapters that have gone before, so that all new readers may get the main points of the early part of the story.

## CHAPTER XII.

### After the Manner of Pocahontas.

The horror of what was taking place before his very eyes so affected Jodo that he found himself growing faint and weak in the knees. Utterly helpless himself, there was nothing he could do to stop the fearful deed about to be committed. Doubtless, too, his own turn would come next. Ben, perhaps realizing the uselessness of words, had not uttered a sound. But as the smoke and flames began to mount upward around the victim at the stake Jodo, with drops of cold sweat on his face, glanced around. In the crowd, and scarcely a dozen feet away, he noticed the fat figure of the chief.

"Snapping Turtle, what does this mean?" he cried out, in his distress and desperation. "You have no right to do such a cruel thing! We didn't run away at all! And we've never harmed you! Why don't you order that stopped?"

All eyes were turned toward the young white man. Soon Snapping Turtle answered:

"Dodo, you make too much big noise. Maybe so roast um you nudder time!"

"But you have no right to do such a horrible thing! The Osages have always claimed to be friendly to white people! This will be known back at the settlements! And when it does become known you savages can look out! The whites will make you pay dearly for this day's work! You'll stand a fine chance——"

The chief had been edging nearer. "Dodo, you make big noise!" Then he added, in a whisper: "You wait, you see what!"

Something in the way those words were uttered caused the young fellow to hold his peace. But he stood staring at his friend tied to the stake, who could scarcely be discerned through the veil of smoke. For perhaps five minutes, as the fire climbed up through the pile of fuel, he watched and waited and wondered.

Then forth from the crowd suddenly rushed Watermelon, the fat squaw, with a long knife in her hand. For a few moments Jodo believed she was about to put the victim out of his misery. But instead of using the knife she began to scatter the burning sticks furiously, hurling them right and left, some of them among the spectators!

Nor did she pause for a moment till the last stick had been cleared away. Then she promptly attacked the buffalo-hide rope with her knife, severing strand after strand, and the cords that bound Ben's hands, till he stood entirely free.

Now there were many cries from the crowd, which sounded to Jodo like cries of satisfaction at the way the matter had ended. At the same time his own arms were released and his hands untied. Promptly he rushed forward.

"Benoni, are you hurt?"

"No, only smoked a little."

"But you had a narrow escape."

"I certainly had."

Watermelon was still standing close to Ben. And she smiled benignly upon him as she said:

"Me cookee your meat allee time. Me your squaw now."

Ben stared at her, and then his face flushed. "The mischief you are!" he blurted out.

Here all the crowd pressed together till the captives and Watermelon were completely surrounded, and Snapping Turtle explained to Ben:

"Watermelon save Strong Arm, no roast um. Now Watermelon your squaw. Cook your meat all time now. Strong Arm Watermelon's man."

Ben's face reddened, and he almost gasped. But at first he uttered not a word. Finally he turned to his friend:

"Jodo, do you know what these red folks are up to?"

"If I understand, Ben, Watermelon has kept you from being burnt at the stake, and for that reason she claims that you belong to her. And to me that seems a reasonable claim."

"It does, eh?"

"Why, yes. Don't you think so?"

"But what if I refuse to agree to any such arrangement?"

"I don't know—unless they tie you to that stake again and go on with the torture. But I'd advise you to accept and make the best of it, Ben. It's a horrible thing to be burnt to death. I know you're thinking of Rachel. But she can get plenty of fellows. And of course you wouldn't make much of a husband for her after you're—reduced to ashes. I'll explain to her that it was Hobson's choice with you. And I'll tell her just how——"

"Tell her that I loved her devotedly till the last, and that the only reason I gave her up was that she had such a fool brother!" answered Ben, turning away angrily, disgustedly.

The crowd soon began to break up. Nobody interfering, the two captives walked away to their own wigwam. And scarcely had they arrived there when Watermelon came carrying their two rifles, their ammunition pouches and their belts with their knives, tomahawks and pistols in them. And close behind her followed Snapping Turtle, to explain that the squaw was a widow, her husband having been killed in a fight with some Pottawatomies, and that because of her having saved Ben's life she had a good claim on him.

"But, Snapping Turtle, don't you see—see how the matter stands? I've got one—one squaw back at home, near St. Louis. Of course I can't take another."

The Indian merely shrugged his shoulders in an unconvinced way. "Huh! Me got five squaw. Want nudder squaw, too." Then the fat fellow turned and deliberately winked at Jodo.

Something in that wink convinced Jodo that the whole performance of burning Ben at the stake had been arranged for the purpose of enabling Watermelon to capture a husband. Smarting under Ben's mention of himself as Rachel's "fool brother," Jodo promptly decided not to tell his fellow-captive of that wink.

"And so you want another squaw, do you, Snapping Turtle?" Ben was saying, eagerly. "All right! You just—just tie yourself to the Widow Watermelon, and let me out of this little business."

The chief shook his head decidedly. "Watermelon Strong Arm's squaw. You her man. Watermelon too fat. Snappy Turkle no like fat squaw." And without more words he turned and stalked away.

Watermelon was still standing patiently by. "Me cookee your meat all time. Me your squaw now." She started to enter the wigwam.

But Ben stepped in front of her. "Not much you don't, my red beauty! We're first-class cooks and housekeepers ourselves! You take yourself off to where you're wanted!" He pointed back the way she had come.

The squaw went meekly, obediently. Jodo watched her. "Nice way for you to treat your Pocahontas!"

"Well, I'm glad to have our weapons back. That means, I suppose, that we're at liberty to go hunting again whenever we please."



Watermelon rushes to Ben's rescue.

Not that afternoon did the two go out again in quest of game. They had slept but little the night before, and wanted to get some sleep. But late in the day they were awakened by a voice at their wigwam door:

"Me cookee your meat allee time. Me your squaw now."

Watermelon started to enter, but Ben sat up quickly and waved her back.

"None of that—none of that, if you please, ma'am! We appreciate all you've done for us, but we can't use any cooks here!"

The woman turned obediently and went away. Jodo looked after her and remarked:

"That's what I've always heard. If there's anything a squaw ever learns it's to obey when her husband commands. But that's a pretty way for you to trifle with the affections of that poor Indian, just because she's red. I shall have to tell Rachel of your heartlessness—if we ever get home."

"If you don't promise not to mention any of this foolishness to Rachel, at least till after I get the law on her, I'm likely to dump you into the Missouri river before we reach home."

Scarcely had they got their fire to burning next morning when the buffalo hide was thrust aside and a familiar voice announced:

"Me cookee your meat allee time. Me your squaw now."

Ben started up impatiently. "Out with you, you everlasting nuisance! Clear out, I tell you! If we want any cooke we'll send for you!"

The red woman darted away. But Jodo sprang to the door and called after her:

"Don't be discouraged, Pocahontas! Ben's affections are turning toward you, slowly but surely. You just keep out courting him, and he'll learn to love you yet!"

"Shut up there, will you?" ordered Ben. He reached for a stick of wood, and Jodo dodged away from the door.

Next morning the captives went hunting, starting out with the Indian hunters. Late in the day they returned, carrying one deer between them. And scarcely had they thrown the game down when Watermelon appeared.

"Me cookee your meat allee time. Me your squaw now."

"Well, for mercy's sake! Shall I ever hear the last of that? Jodo, look after this deer!" Ben ducked into the lodge and disappeared.

Jodo permitted the squaw to help him skin the deer, and gave her part of the meat. After that she went away, apparently satisfied.

"Pocahontas is certainly not going to forget you, Ben."

Ben sighed miserably. "This Pocahontas business will be the death of me yet! I'm ready to run. What do you say to escaping, Jodo?"

"When?"

"Right away. As soon as we possibly can."

"And how shall we escape?"

"That we've got to decide. I don't know yet whether it's better to start hunting and keep going or to slip away soon after dark some night."

"But how are we to get a supply of powder and bullets? They give us only a load at a time?"

"I see no possible way to obtain ammunition here. But if we can start out with food enough to eat on the way we ought to reach the Big Niangua without firing a shot. And when we once arrive there, we can soon supply ourselves with powder and lead."

"How, Ben?"

"You recollect that little three-pound bag of sulphur I brought from St. Louis? I wanted to experiment at making gunpowder, but we couldn't find time. There's some saltpeter in that little cliff cave, you know. And it's not hard to burn charcoal. Those three things are all that are needed to make gunpowder. I helped to make some while I was working for Colonel Moses Austin, down there at Potosi. And I know just how it's made."

"But we couldn't shoot with powder alone. What could we do for balls?"

"That's the easy part. I recollect seeing some lead ore over there on a hillside—some blossom of lead, as miners call it. I'm pretty sure I can find the place again. And with that it won't take us long to melt plenty of bullets. True we both left our bullet molds at home. But I can soon make some."

"If we can manufacture all the ammunition we need, I'm ready to start whenever you say the word, Ben."

"Now the question is, how shall we go? If we start— If there isn't that pesky squaw out there again! See what she wants, Jodo. She'll drive me to desperation yet!"

Jodo went out, and soon came back, laughing, with something in each hand.

"You needn't be so afraid of your Pocahontas. See what she brought us—a pot of stewed meat and a gourdful of parched corn."

"That's not so bad," admitted Ben. "We'll live on the stewed meat, and jerk all of our venison to carry with us. And I'm glad of the corn. There's a lot of strength in that. We'll save every grain of it to travel on."

"I believe I can coax Watermelon to bring us some more. That is, if I can make her understand that you're fond of parched corn. She'd do anything for you. You have that poor woman completely infatuated."

Ben made an impatient gesture. "Let up on that, will you? But get all the corn you can. Pay her for it in deerskins. We don't need those. Now the question is, how shall we escape?"

"With the snow on the ground the Osages could easily trail us."

"They could—and they would. Our only hope would be to get as long a start as possible, and then outtravel them."

"A hard thing to do, I imagine."

"Undoubtedly. But, Jodo boy, we've got to do hard things to regain our liberty. These red people seem determined to hold us in captivity. It occurs to me that we might borrow one of their numerous canoes and paddle back to our trapping headquarters. The river is about clear of ice now. And the water leaves no trail."

"But when they missed a canoe wouldn't they guess how and where we'd gone, and post off down the river after us?"

"They certainly would. And what's more, they'd overtake us, too. So that plan wouldn't be any safer than escaping by land."

Jodo sat thinking. "Ben, how would it do to borrow a canoe and then paddle up the Osage instead of down? We could hide somewhere for a few days, till the Indians got tired of hunting for us below. After that we could paddle down the Osage, taking care to pass here in the night, and then paddle up the Niangua to our camp among the cliffe."

"Jodo, I believe that plan will work. There's some little danger of severe weather that would freeze the river over. But we shall have to risk that. We'll think about it, and if we decide we can make good our escape we won't lose any time getting started."

For an hour or two they sat over their fire, half cooking and half drying strips of venisan and discussing Jodo's plan. They were not long in agreeing to make the attempt.

"I'm tired of hanging around this gang," Ben told his companion. "We're not making a red cent here. And we didn't come all the way out to this country to amuse ourselves. If the redskins won't let us do any more trapping in peace we'll load our furs and our salt into canoes and drift away toward St. Louis."

(Continued on the following page.)

# Trappers of the Ozarks

(Continued from the preceding page.)

"What do you s'pose the Osages would do with us if we stayed here?"

"That's more than I can even guess. One thing's sure: They won't let us leave the country with anything but our lives if they can help themselves."

Before going to bed the two made a bag of one of their dry deerskins and emptied the parched corn into it. When morning came Jodo succeeded in getting another gourd of corn from Watermelon, giving her a deerskin for pay. During the forenoon Ben walked over to Sapping Turtle's lodge, and after a time back, carrying their pack-saddle.

"I blarneyed the chief into turning this over to me," he said.

Jodo stared at him. "What in the round world did you want with that, now that Spunky's gone? Do you expect to take it in the boat with us?"

"No, I don't. I didn't really want the saddle. What I did want I was afraid to ask for, lest I should arouse suspicion. That was this." He touched the hair-lariat, which had been coiled up and tied to the pack saddle. "We shall need this to reach our things in the cliff cave when we get back to headquarters."

"Yes, it's all right to take the lariat with us. We can't do much without it."

In the afternoon the two prisoners went hunting. They did not go far, however, and came home rather early, without any game. They could have shot some smaller animals, but thought it safer not to do so. If they asked for powder and bullets to reload their rifles before morning the chief's suspicions might be aroused. Then they would either have to go with empty rifles or wait till the following night to start. And they were both impatient to get started without delay. The approaching night was the time set.

Knowing that they would have to be up most of the night, both lay down after returning from their hunt, and slept till sunset. When they awoke and went outside to look around they were well pleased to note that the night was going to be cloudy. With thick darkness to favor them, they were very hopeful of making good their escape. For all that, Jodo found himself growing somewhat nervous when the time to start drew nigh.

As the captives well knew, sentinels were stationed around the village at night. But that was on the land side. No watch was kept along the river bank. As their wigwam stood not far from the river, they hoped to reach a canoe and paddle away without being discovered. They were in the habit of visiting the river often, sometimes to wash their hands and faces, and sometimes to fill their water gourd.

Just before dusk they took their gourd and went down there. While washing they picked out, from the numerous dugout canoes tied along the bank, the one that seemed best suited for their purposes. And they were careful to make sure that there were two paddles in it.

On returning to their wigwam they ate their supper, and then began their preparations to escape. Into the deerskin bag with their parched corn they thrust all the jerked venison they had been preparing. After that they covered their fire with ashes and made a roll of two of their blankets and of two buffalo robes. The other blankets they would wear, as they were accustomed to do when the weather was raw. Now they sat in the dark and waited for the Osages to go to sleep.

(To be continued.)

# Red Cross Next Month

It was the original intention to begin raising the $100,000,000 needed for the Red Cross on May 6, but fear that it might detract even slightly from the forthcoming Liberty loan campaign, prompted the war council of the Red Cross to postpone the date for two weeks. This action fixes the date for the second war fund campaign 11 months after the first, which was carried on the week of June 18, 1917.

The war council had been appointed by President Wilson five weeks prior to the start of the first money-raising campaign, and the first great task was to provide the means of carrying on relief work on a scale commensurate with the military operations.

More than $100,000,000 was contributed in response to the first call for financial aid and the contributions, plus interest, brought the total receipts from the first drive to $105,099,257. Of this amount $17,006,121 was refunded to chapters for local relief work. Of the balance $77,721,918 has been appropriated, leaving a balance available for appropriations of $10,371,217. France has been the beneficiary of American Red Cross appropriations in the sum of more than $30,000,000.

During the week preceding Christmas the American Red Cross conducted a membership drive which resulted in the enrolment of approximately 22,000,000 new members. This was followed last month by a campaign conducted by the junior membership of the American Red Cross, which resulted in the enrolment in that collateral organization of virtually all the school children in America.

## BRITISH FOOD SITUATION.

That great grain trade authority, George Broomhall's Corn Trade News of Liverpool, in its issue of March 5, says:

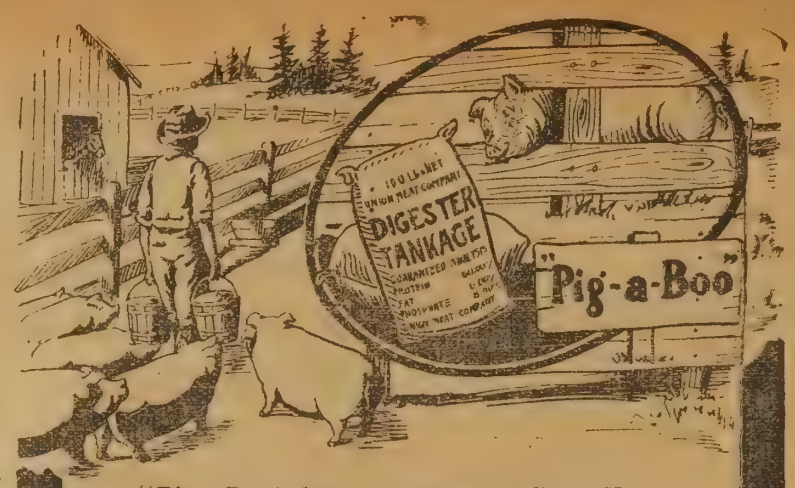
"The developments of the last week as regards supply have certainly done nothing to induce any modification of the statements of Lord Rhondda and Sir John Beale that our difficulties with regard to food in the coming months will be very great."

A little later a more hopeful view is taken:

"Looking farther ahead to prospective supplies in the new season we are pleased to be able to say that the outlook is becoming distinctly brighter."

### Spain's Exports to United States.

Total declared exports from Spain to United States and possessions during 1917 were valued as follows: To United States, $35,733,492 against $33,768,822 in 1916; Philipines, $985,330 against $1,022,757; Porto Rico, $887,583 against $851,601; total, $37,606,415 against $35,643,180.


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It is built of thoroughly seasoned, selected staves, hooped with strong billet steel hoops, bound with malleable lugs—has an anchorage system that makes it staunch and firm even when not filled and hinge-rod doors that can't sag, swell or freeze into the frame. At least

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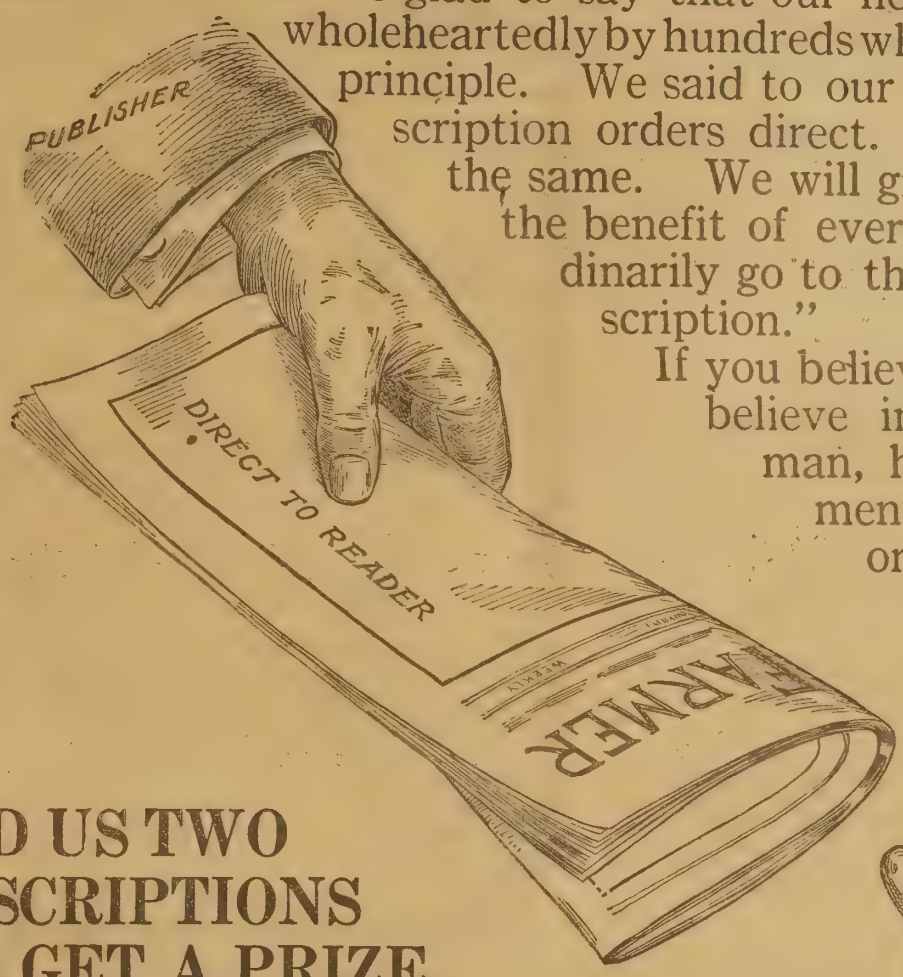
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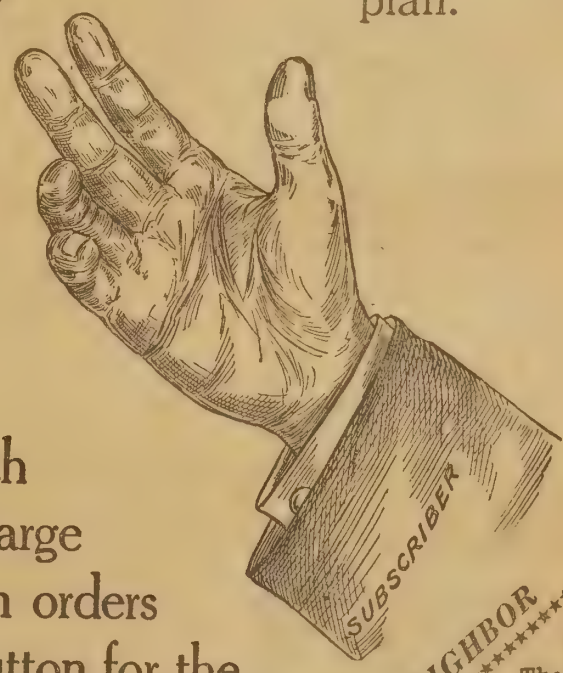

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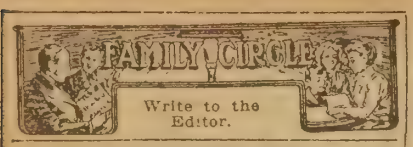
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ALICE W. BARLAND,
Editorial Contributor.

## Save Wool Waste

Every one who has traveled along a road where sheep have been driven or across sagebrush land where they have grazed has noticed the tufts of wool left on the fence wires and the sagebrush. Wool is worth money now—a lot of money, and the state of Idaho is setting the pace in the movement to prevent the waste of these tufts of wool that are stolen by the brush and wire. It has organized what is known as the Liberty Service Volunteers, having its headquarters at Mountainhome, and will make any one a member who will pluck from the sagebrush and fences one pound of wool, left there when the grazing sheep have it rubbed from their sides, and forward it to headquarters. After the first pound the organization will pay the going price for wool in thrift stamps for every additional pound of wool forwarded. The sale of the first pound will be used to defray expenses. The organization will dispose of all the wool later and use the money raised from it for some war cause. Thousands of pounds are lost annually on the sagebrush as the great flocks graze back and forth. Wool is worth money.

## A Serious Condition

In reply to a letter urging that the food production campaign be put upon a more energetic basis Governor Holcomb of Connecticut writes: Your letter is received. I agree with you that the growing of food is one of the serious problems of this country, and much more serious under the present conditions than it ever has been, because the laborers are being absorbed in the army, and the price paid, especially in the east, in manufacturing industries are much more than the farmers can afford to pay. It is a serious condition, and growing more and more so. We are doing what we can in this state to stimulate agricultural production, but as you know, Connecticut is a manufacturing state, and the most profitable agricultural pursuit here, outside of tobacco growing, is truck farming, and that does not add much to the permanent food supply. MARCUS H. HOLCOMB.

## Greens as Food

The word "greens" is used to designate the leaves and stems of certain varietise of young plants used as food. These plants are generally boiled, sometimes with a piece of bacon, and when cooked are eaten with salt and vinegar. Rather a large list of plants is used in this way, among them the following:

California peppergrass.
Cardoon, the prickly artichoke, native of the Mediterranean region.
Chard, a variety of white beets, cultivated for its large leaves, leaf stalks and midribs.

Chervil, a garden herb, native of Europe, of the parsley family, the young leaves of which are used for greens, soups and salads.

Chicory, a perennial herb of the aster family, native of Europe and Asia, naturalized in the United States, has a dandelion-like roots and heads of bright blue flowers.
Chinese amaranth.
Chinese artichoke.
Chinese cabbage.
Chinese mustard.

Chives, small perennial herb of the lily family, allied to the leek and onion.

Corn-salad, called also lamb's lettuce.
Cress.

Dandelion, a perennial or a biennial herb of the aster family with a large yellow flower, the leaves sometimes used for food.

Dock, of which there are many varieties or species, but it is the leaves of the yellow dock which are used for food.

Endive, of which there are numerous varieties, forming two grops, viz., the curled and narrow leaved, and the Batavian or broad leaved.
Globe artichoke.
Goosefoot, called also lamb's quarters, pigweed.

Ice plant, a creeping plant of the fig-marigold family.

Kale, a variety of headless cabbage, yielding curled and wrinkled leaves.
Lettuce.
Malabar nightshade, a slender climbing plant of the goosefoot family—care should be used in nightshade, for some varieties are poisonous.
Mustard.
Nasturtiums.
Orache, the garden orache or mountain spinach.

Parsley, much used in garnishing dishes and flavoring soups.
Peppergrass.
Pigweed, a plant that belongs to the goosefoot family and the variety used for greens is sometimes called "lamb's quarter."

Pokeweed, a stout, smooth, perennial herb with large, tender leaves, sometimes used as green, but the root is more or less poisonous, is purgative, emetic and somewhat narcotic—the leaves should be used when they are young and tender.

Sorrels, of which there are several varieties, having a sour, acid, pleasant taste, used as pot herbs, and in the making of pies.
Spinach.
Turnip.
Purslane, familarly known as "pusley," a prostrate fleshy annual of the gardens and waste places of both the old and new world, with thick and reddish-green leaves and stems.

G. L.

## Boys' Calf Club.

The Illinois Shorthorn Breeders' Association has taken steps to cooperate with banks or anyone interested in organizing calf clubs. They offer their services in the selection of kinds and ages of calves desired, and in other ways.

## Sidelights

**How It Happened.**

Two young employes of a florist in Philadelphia, who are supposed to be variously employed in the rear of the establishment while the boss looks after things in the front, were recently startled by the appearance of an "old man" while they were engrossed in a game of checkers.

The proprietor was justly indignant. "How is it," he demanded, "that I hardly ever find you fellows at work when I come out here?"

"I know," volunteered one of the youths, "it's on account of those rubber heels you insist on wearing."

**Outranked in the Kitchen.**

The son of the well-to-do family had recently joined up as a private, and was spending his Christmas leave at home.

Returning from a walk, his mother espied a figure in the kitchen with the housemaid.

"Clarence," she called to her son, "Mary's got some one in the kitchen. She knows perfectly well that I don't allow followers. I wish you'd go and tell the man to leave the house at once."

Clarence duly departed to the kitchen, but returned in about half a minute.

"Sorry, mother, but I can't turn him out."

"Can't turn him out? Why on earth not?"

"He's my sergeant!" — Saturday Night.

**The Good Old Times.**

Think of the great age we live in! Think of the marvels of rapid transit.

That's what I am thinking of. And I am thinging also of the days when a good old canal boat would bring down all the coal you wanted in less than a week.—Washington Star.

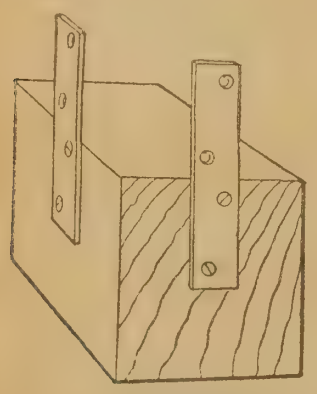
**Not That Kind of Woman.**

Doctor—You should be constantly at your husband's side, as you will need every little while to hand him something.

Mrs. Casey—Niver, doctor! Sure, O'im not the woman to hit a man whin he's down.—Boston Transcript.

## Kitchen Tables Usually Too Low

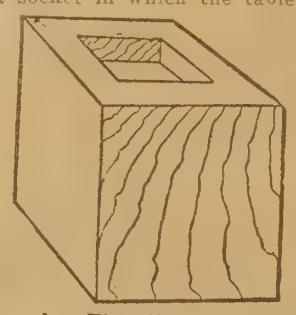
Kitchen tables and the bottom of sinks are usually too low for working surfaces when the housekeeper is standing, says Farmers' Bulletin 927. Low working surfaces are often responsible for tired backs and rounded shoulders because of the undue stooping and the strain on the arms and shoulders. The following figures show



the proper level of working surfaces for the height of the housekeeper:

| Height of Woman. | Proper Height of Working Surface. Inches. |
|---|---|
| 4 feet 10 inches | 27 |
| 5 feet | 28 |
| 5 feet 2 inches | 29 |
| 5 feet 4 inches | 30 |
| 5 feet 6 inches | 31 |

The kitchen table can be raised to the proper height by the use of blocks of wood. Different types of blocks for raising the height of tables are shown herewith. The one is a block of wood with a socket in which the table leg



fits securely. The other is a block of wood with metal strips and screws or nails for fastening the table legs or the cabinet table.

### Date Pudding.

Following is a good pudding, substituting syrup and sweet fruit for sugar.

Two cups milk.
One-half cup corn or maple syrup.
Twelve seeded dates cut up small.
Three tablespoons cornstarch.
One-half teaspoon salt.
One teaspoon vanilla.

Mix the cornstarch with one-fourth cup milk. Heat the remaining milk in a double boiler. Add the cornstarch, syrup, dates and salt, and stir until thick, cover and cook for 20 minutes. Add the vanilla and pour into a dish to cool. Serves five people. Prunes are good instead of dates.


# Is Your Bank Account Guaranteed?

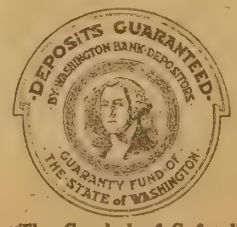
Do you know that at the last session of the legislature a law was passed that gives absolute protection to money deposited in certain designated banks of the State of Washington? And that this protection is limited to banks that are members of what is now known as the Washington Bank Depositors' Guaranty Fund?

Have you been told by YOUR banker that there is such a law? And that it does not cost the depositor anything for this legal assurance that his money is absolutely secure against loss?

A large number of the most carefully conducted banks in Washington, with combined resources of approximately FIFTY MILLION DOLLARS, have been admitted to membership in the Washington Bank Depositors' Guaranty Fund.

The Washington Bank Depositors' Guaranty Fund is positive protection, plus faith and trust in the honesty and integrity of your banker.

Guaranty Fund banks are designated by the official Symbol of Safety, a sign that means careful, conservative banking.




The following banks are guaranty Banks, offering absolute protection to their thousands of depositors under the rigid provisions of the State Guaranty Law---insuring your money at not one penny of cost to you:

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Ballard Branch, Scandinavian-American Bank, Seattle.
Commercial Bank & Trust Co., Wenatchee.
Commercial Bank, Chesaw
Chesaw Branch, Bank of Conconully.
Citizens' State Bank, Auburn.
Commercial Bank of Conconully.
Citizens' Bank & Trust Co., Everett.
Citizens' Bank of Bremerton.
Clarke County Bank, Washougal.
Duvall State Bank.
Eltopia State Bank.
Farmers' State Bank, Almira.
Farmers' Bank of Ellensburg.
Farmers' Bank of Krupp.
Farmers' State Bank, St. John.
Farmers' State Bank of Reardan.
Farmers & Merchants' Bank of Centralia.
Farmers' State Bank of Centerville.
Field & Lease, Bankers, Centralia.
First State Bank, Yacolt.
German-American State Bank, Ritzville.
Grant County Bank, Ephrata.
Guardian Trust & Savings Bank, Seattle.
Harrington State Bank.
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Kalama State Bank.
Kittitas State Bank, Kittitas.
Kitsap County Bank, Port Orchard.
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Lincoln County State Bank, Davenport.
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People's State Bank, Enumclaw.
Pullman State Bank.
Ruff State Bank.
Scandinavian - American Bank, Seattle.
Security State Bank, Palouse.
Scandinavian - American Bank, Spokane.
Security State Bank, Spokane.
San Juan County Bank, Friday Harbor.
Spokane & Eastern Trust Company, Spokane.
State Bank of Enumclaw.
State Bank of Spangle.
State Bank of Conway.
State Bank of Kent.
State Bank of East Stanwood.
Skagit County Savings Bank & Trust Co., Mount Vernon.
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## Is Your Money Deposited in a Guaranteed Bank?

# Patterns

2360—Ladies' Dress—Cut in 6 sizes, 34, 36, 38, 40, 42 and 44 inches bust measure. Size 36 requires 8 yards of 36-inch material. The skirt measures about 2 1-2 yards at the lower edge, with plaits drawn out. Price, 10 cents.

2217-2218—Ladies' Costume—Waist 2217 cut in 6 sizes, 34, 36, 38, 40, 42 and 44 inches bust measure. Skirt 2218 cut in 6 sizes, 22, 24, 26, 28, 30 and 32 inches waist measure. It requires 8 yards of 27-inch material for a medium size, for the entire dress. The skirt measures 2 1-8 yards at the foot. Two separate patterns, 10 cents for each pattern.

2377-2383—Ladies' Costume—Waist 2377 cut in 7 sizes, 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 3 1-8 yards of 36-inch material. The skirt 2383 is cut in 7 sizes, 22, 24, 26, 28, 30, 32 and 34 inches waist measure. Size 24 requires 8 yards of 36-inch material. The skirt measures 2 1-8 yards at the foot. Two separate patterns, 10 cents for each pattern.

2367—Girls' Dress—Cut in 4 sizes, 10, 12, 14 and 16 years. Size 14 will require 4 3-4 yards of 36-inch material. Price, 10 cents.

2007—Girls' One-Piece Dress—Cut in 4 sizes. 4, 6, 8 and 10 years. It requires 3 3-4 yards of 36-inch material for a 6-year size. Price, 10 cents.




2359—Ladies' House Dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 6 yards of 36-inch material. The skirt measures about 2 3-8 yards at the foot. Price, 10c.

2114—Sports Coat. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 3 1-4 yards of 54-inch material for a 36-inch size. Price, 10 cents.

1799—Ladies' Apron. Cut in 3 sizes: Small, medium and large. It will require 4 3-4 yards of 36-inch material for a medium size. Price, 10 cents.

2376—Girls' Dress. Cut in 4 sizes: 4, 6 8, and 10 years. Size 8 requires 3 1-2 yards of 44-inch material. Price, 10 cents.

2158—A Practical Undergarment. Cut in 4 sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44 and 46 inches bust measure. Size medium requires 3 1-4 yards of 36-inch material. Price, 10 cents.

2162—Ladies' Two-Piece House Dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires for a 38-inch size, 5 3-8 yards of 36-inch material. The skirt measures about 2 5-8 yards at the foot. Price, 10 cents.

2137—Girls' Dress. Cut in 4 sizes: 4, 6, 8 and 10 years. It requires 3 3-4 yards of 36-inch material for an 8-year size. Price, 10 cents.

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## Some Uses of Baking Soda.

Good for insect sting: Moisten a pinch of soda with water and apply to the wound.

For pimples, fever blisters, burns, poison from ivy: Mix one teaspoonful of soda with one-half glass of water and apply with a soft cloth.

To remove sunburn: Mix one teaspoonful of soda to one-half glass of vinegar and apply with cloth to face and hands just before retiring.

For bathing: Add a little to the water.

For sore throat: Hold a small quantity in the mouth, or mix a little with water and gargle frequently with it.

For cuts and barb-wire fence wounds: Mix one dessert spoonful of soda to one cup of boiling water and apply with a soft rag as it can be endured.

## Popcorn.

The following is a simple recipe for popcorn balls:

Pop the dried corn in a regular popper or a covered iron frying pan, shaking vigorously and taking care not to let it burn. A cup of dried corn will make three quarts when popped. It is good mixed with a little salt or melted butter and salt.

To make a sweet of it combine with syrup. Boil together 1 cup corn syrup, and 1 tablespoon vinegar until a few drops harden in water. Pour over the popped corn while the syrup is hot. This amount of syrup will cover three quarts of popped corn. As soon as the mass is cool enough to handle grease the hands well and form into balls.

## Gingerbread.

For a wholesome and inexpensive gingerbread recipe try the following:

1 cup cornmeal.
1 cup wheat flour.
2 teaspoons cinnamon.
2 teaspoons ginger.
1-2 teaspoon salt.
1 teaspoon baking powder.
1 teaspoon baking soda.
1 cup molasses.
1 cup sour milk or buttermilk.
2 tablespoons fat.

Sift the dry ingredients and add molasses, milk and fat. Beat well and pour into a greased pan. Bake 25 minutes. Notice that this recipe uses cornmeal for half the wheat flour ordinarily used.

### Motor Accidents.

More than 2000 motorists who failed to stop, look and listen, were killed at grade crossings in 1916, and many more were injured. The number of the killed and injured in these accidents is increasing 25 per cent a year.

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# Prosperity Hits Western Canada

Big crops with war-time prices have put western Canada farmers on a prosperity footing that was undreamed of in pre-war days.

54 bushels of wheat and 90 bushels of oats to the acre were not uncommon yields last year; the average being 30 bushels of wheat and 53 1-3 bushels of oats. With wheat at $2.20, government set price, it is scarcely to be wondered that probably more western Canada farmers are wintering in California than ever before.

As another evidence of their prosperity more than sixteen thousand motor cars were bought in Saskatchewan during the year, which was a greater number than the total number of cars in Saskatchewan up to 1917. Oversubscription to the Victory Loans and large contributions to various war relief organizations also point vividly to the wealth of the country.

Many of our neighbors' richest farmers acquired their land free, while still others bought their land from the Canadian Northern railway at $15 to $25 per acre.

Canada still has 128,000 [illegible] farms to give free to settlers, and [illegible] other farms for sale at low prices. Descriptive information and FREE Booklet may be had by writing F. P. Brosseau, D. P. A., 805 Hastings st., Vancouver, B. C. Adv.

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# Handicraft For Boys

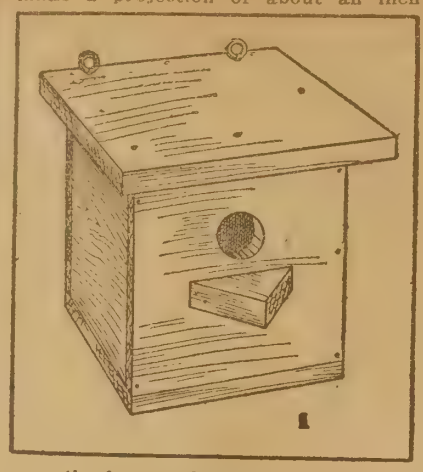
By A. Neely Hall

(Copyright by A. Neely Hall.)

## Home Made Bird Houses.

A bird house need not be elaborately constructed. In fact houses of good simple designs are much better suited to the purpose of providing homes for bird tenants and certainly in better taste than houses adorned with meaningless jig-sawed brackets and carvings. So when you build bird shelters remember to make them plain.

The cube-shaped house in Fig. 1 may be hung upon a wall. That is why a pair of screw-eyes are screwed into the top (see illustration). A box measuring eight inches in width, depth and length is plenty large enough. Cut a hole one inch in diameter in one side of the box near the top for a doorway. If you haven't a bit-and-bitstock with which to bore the hole, you can make a small hole with a nail or screw-eye, and then enlarge it to the right size with a sharp knife or small compass saw. Make the perch below the opening triangular in shape, and fasten it to the box with short nails. For the roof cut a piece of board of the right measurements to make a projection of about an inch



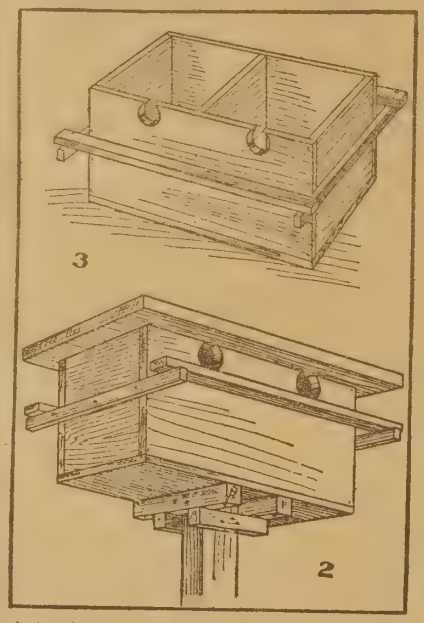
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over the front and sides of the box, and nail it to the top edges.

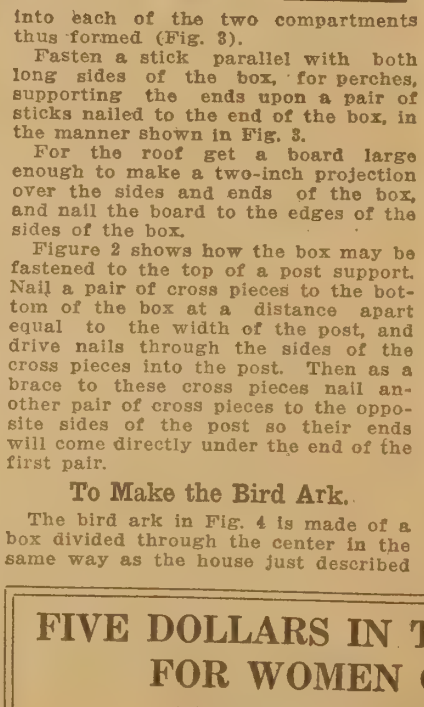
## Two-Compartment House.

The two-compartment house in Fig. 2 is made of a box about 12 inches long, eight inches wide and six inches deep.

The box is divided in the center of its length by a partition, and a doorway is cut through one side of the box



3



2

into each of the two compartments thus formed (Fig. 3).

Fasten a stick parallel with both long sides of the box, for perches, supporting the ends upon a pair of sticks nailed to the end of the box, in the manner shown in Fig. 3.

For the roof get a board large enough to make a two-inch projection over the sides and ends of the box, and nail the board to the edges of the sides of the box.

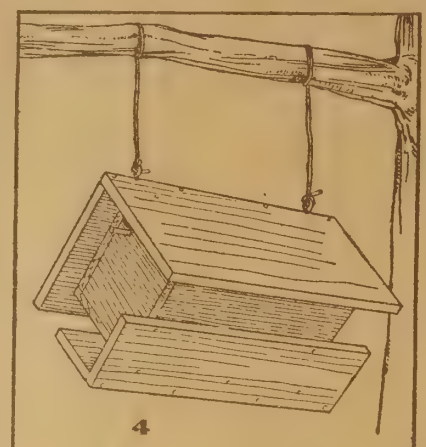
Figure 2 shows how the box may be fastened to the top of a post support. Nail a pair of cross pieces to the bottom of the box at a distance apart equal to the width of the post, and drive nails through the sides of the cross pieces into the post. Then as a brace to these cross pieces nail another pair of cross pieces to the opposite sides of the post so their ends will come directly under the end of the first pair.

## To Make the Bird Ark.

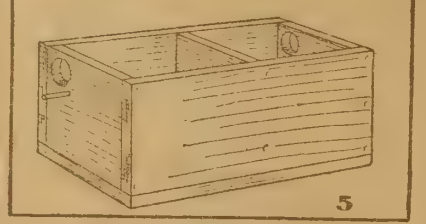
The bird ark in Fig. 4 is made of a box divided through the center in the same way as the house just described was divided, but instead of cutting the doorways through the sides, make one through each end near the corner (Fig. 5). When the box is turned on edge in the position shown in Fig. 4, the openings will come directly below the peak of the roof. Fasten a short peg into a hole below each doorway for perches.

Make the roof boards large enough to form two-inch projections over the sides and ends of the box.

The base or hull of the ark is made of two boards of the length of the



4



5

roof pieces and one-half as wide. Nail an edge of one to an edge of the other; then nail to the box.

Screw a pair of screw-eyes into the peak of the roof, and suspend the ark with ropes from the limb of a tree, or from a bracket fastened to the side of a wall.

## Get the Thrift Habit

On another page of this issue will be found a coupon by means of which any reader of this paper can secure thrift stamps or war savings stamps by merely filling it out and mailing it to the office of the paper.

If you are in position to invest considerable sums, the Liberty bond is your opportunity. But this war stamp scheme is ideal for the safe investment of amounts from 25 cents up to a few dollars and investments of this kind are of real value to the government in the conduct of the present war.

## Girl Farms for Soldier Boys.

Elizabeth Miller of Lake Basin, near Billings, Montana, is plowing and seeding 40 acres of oats in the Golden valley, near Broadview. Last week she drove six miles to ask the chairman of the Golden Valley Red Cross auxiliary if she would accept the proceeds from one acre of oats from that crop. The offer was gratefully accepted by Mrs. J. L. Forkner, chairman.

### Children Need Milk.

The housewife must not practice economy at the expense of the health of her family. Growing children must have good milk to drink, as well as other nourishing food.

## FIVE DOLLARS IN THRIFT STAMPS FOR WOMEN OF THE FARM HOME

A First Prize of $3 and a Second Prize of $2.

These prizes are for the women and girls of the farm home which has

1. An automobile, or
2. A farm lighting system, or
3. A farm water system.

A first prize of $3 and a second prize of $2 in Thrift stamps will be given for the best article written from your own experience on either of the following:

Why you would not be without an automobile, or

Why you would not be without your farm home lighting system, or

Why you would not be without your farm home water system.

The contest will close May 1.

Write on one side of the paper and mail your article to The Editor of The Washington Farmer, Spokane, Wash.


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Can your surplus foods in a modern, scientific way that will make them easy to sell.

Steam pressure canning hermetically seals the cans and sterilizes the contents. You save time, labor and fuel with our complete outfit, which includes full instructions and $2 recipe book. Write for information.

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Home Canning Dept.
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It Saves You a Third.

10 pounds Extra Choice, a perfectly delicious blend of high-grown coffees—better than the most, and as good as the best 45-cent coffee on the market..... $3.30

This is the Coffee which I have unreservedly guaranteed for two years, and have never received a single order back.

I PAY THE POSTAGE

The price includes parcel post to any place within 300 miles of Seattle.

NOTICE THE GUARANTEE.

Your money will be quickly refunded if you are not absolutely satisfied in every respect with the Extra Choice Coffee. The goods are securely packed, and safe delivery is guaranteed.

Say whether you want the coffee for coffee pot, drip bag or percolator; and whether ground or whole. Enclose only $3.30, as I pay postage.

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JOHN F. JANSSEN, Manager.
W-5

Children's Gingham Dresses

as pictured.



59¢

A dainty and well-made Tub Frock for the small girl—in serviceable plaid gingham, with plain-color collar and cuffs matching the color in the material.

Several pretty color combinations to choose from. Sizes from 2 to 5 years. Price 59c.

Detailed information regarding Spring fashions for women and children supplied through our Mail Order Letter Service. We pay the postage on dry goods shipments to any point in Washington, Oregon, Idaho, Montana or Alaska.

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89 PIKE STREET SEATTLE


A fountain pen or a pencil are good things to always have handy, together with postal cards. Then you can write friends or relatives or answer advertisements while you think about it and not run the risk of forgetting.




### Won Eight Thrift Stamps.

Dear Aunt Nellie: This is my first letter to the Corner and I hope it will not be my last. I am 12 years old and was born August 4, 1905. I was born in Spokane. Have I a twin? I have bought one war savings stamp and have enough thrift stamps for another. I won the first prize at a masquerade. The prize was eight thrift stamps. I haven't got any brothers or sisters. My papa is dead, but I still have my mama. There is a little girl of the same age and who was born in the same month who says she lives on a 118-acre farm. I do wish she would write me. I was going to write to her, but I lost the paper. I am in the sixth grade. I love horses. I have one on the mountain. I have a dog named Taft and a cat named Muffins.—Marie Driscoll, 15 North E street, Wenatchee, Wash.

### Will Join a Thrift Stamp Club.

Dear Aunt Nellie: This is the first time I have ever written to the Children's Corner, and I hope it won't be the last. I am 10 years old and I will be 11 December 7. Have I a twin? I am in the fifth grade at school. I live on a farm. I enjoy reading the Children's Corner very much. We have four cows. Their names are Bess, Blackie, Linnie, Pansy, and two calves named Nellie and Queen. I am the only child in the family. I have five pets, a cat, a dog and three hens. My cat is a white Angora and my dog is a collie. I bought one war saving certificate, and I think I will join a thrift stamp club.—Doris Miller, Wickersham, Wash.

### Brother Helps to End the War.

Dear Aunt Nellie: I am 9 years of age and in the fourth grade. I have five brothers. One of my brothers is in the navy. He has been in the navy eight months. He is trying to end this awful war. I wish he would. We have three cows and one calf. We have three horses. Their names are Queen, Nell and Prince. We have a pet cat. She is gray and white. At night she stays at the barn and in the daytime stays at the house. I am going to school now. Our teacher's name is Miss Nero. I like my teacher.—Beryl Boyce, Friday Harbor, Wash.

### Had a Contest at School.

Dear Aunt Nellie: This is the first time I have written to the Corner and I hope it will not be the last. We have one horse and his name is Billy, one cow named Spotty and about 30 chickens. I have two kittens and their names are Pet and Blackey. We had a contest at school between the upper and lower room and the upper room beat. I bought $4 worth. I have dark blue eyes and dark brown hair. My birthday is September 20. Have I a twin? I go to Buena Vista school and I like it fine.—Laurella Farthing, R. R. 1, Prosser, Wash.

### A Consolidated District.

Dear Aunt Nellie: I am writing to ask if you would like to have me tell you about my visit to the Spokane and Eastern Trust company's bank. W. T. Trinieli, my teacher's brother, who is secretary of the bank, took us through and then gave us lunch. When I say us I mean the fourth, fifth, sixth and seventh grades of Normandie school, which is seven miles west of Spokane on the Sunset boulevard. We have a consolidated district. There are four schools that have the first seven grades, and the high school, which has eighth, ninth and tenth grades, and then they go to the Cheney normal. The last week in February we formed a Junior Red Cross. I am knitting a sweater now and I have knit a pair of wristlets, a water bottle cover and a wash cloth already. I was 13 the 15th of last October. I would like to correspond with any cousin who is my age and in the seventh grade. There is a boy at school in my class who is the same age as I am and his birthday comes on the same day as mine. Please let me know if you wish me to write about my trip to the bank. —Selena Elizabeth Deno, age 13, R. F. D. 1, Spokane, Wash. (I know the cousins would be glad to hear about your trip and I am sure that I would, too. Write about it soon, Selena, and we will watch for your letter.—Aunt Nellie.)


## ON WHEATLESS DAYS

USE NO BREAD, CRACKERS, PASTRY OR BREAKFAST FOODS CONTAINING WHEAT.




### Wheatless Sponge Cakes.

It happened one day late in March. A conference was on at the United States food administration and the subject was wheat. In the midst of solemn debate a triumphant cook entered the room. She bore a tray with the evidences of her triumph—three sponge cakes, one of corn flour, one of rice flour and one of barley flour.

Not a dust of wheat flour was used in these cakes and again the American woman had triumphed.

Here they are: Proceed carefully; either weigh materials, following the old-fashioned rule for sponge cake, or use a measuring cup. Sift flour before measuring and measure lightly.

### Barley Sponge Cake.

Barley flour, one and one-third cups; sugar, one cup; eggs, four; lemon juice, one tablespoon; salt, one-eighth teaspoon.

### Corn Flour Sponge Cake.

Corn flour, one cup; sugar, one cup; eggs, four; lemon juice, two tablespoons; salt, one-eighth teaspoon.

### Rice Sponge Cake.

Rice flour, three-fourths cup; sugar, one cup; eggs, four; lemon juice, two tablespoons; salt, one-eighth teaspoon.

### Directions for Mixing.

Separate the yolks and whites of the eggs. Beat the yolks until light, add the sugar, the salt and the lemon juice. Fold in alternately the flour and the stiffly beaten whites.

### A Little Fair for the Children.

Dear Aunt Nellie: This is the first time I have written to the Corner; and I enjoyed reading the letters. I am 10 years old. My birthday was March 10, and my brother's was March 11. He was 21 years old. I live on a farm. I have one little Bantam; she has laid four eggs already this year. I have four brothers and two sisters. Their names are Ray, John, Virgil and Marion. These are my brothers' names. Grace and Delia are my sisters' names. I go to school; my brother goes, too. I have about two miles to go to school. There are 22 children in my room. There are three rooms and three teachers. My teacher's name is Miss McDough. I like her fine. I am in the second grade. I haven't been absent or tardy yet this year. We have every year a little fair for the children; last year for prizes I got 50 cents for making a basket and paper beads, and the year before that I got a doily for sewing. This year I have taken gardening and canning.—Lucille DeLong, Vancouver, Wash., R. F. D. No. 3, Box 132.

### Grandmother Knits for Red Cross.

Dear Aunt Nellie: There were so many letters that I have seen in the Farmer that I thought I would write. I am going to be 11 years old September 9. There are 11 children in our school. We have two and a half miles to go to school. There are seven children in our family, three girls and four boys. Five of us go to school. Every night when I get home from school I have to milk. We have three cows to milk. I like to tie up colts. There are eight colts to tie up. We have not very many chickens. I do not like this war. None of my brothers have to go to the war. My grandmother is knitting for the Red Cross. I am going to see who can answer my riddles: A riddle, a riddle, as I suppose, a hundred eyes and never a nose. I went to the wood and got it; I sat me down to look at it; the more I looked at it the less I liked it, and I brought it home because I could not help it? Why is Uncle Sam Red, White and Blue?—Alice Kupers, Mohler, Wash.

### Cousin Elizabeth Can Knit.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. May I become a member? I am 13 years old and I am in the seventh grade. I am about five feet and three inches tall and have blue eyes and light brown hair. I can knit and crochet. I helped mama and my sister knit some socks for the soldiers, and I also knitted a part of a quilt block. I belong to the Junior Red Cross. We knit every Friday afternoon at school from 2:45 until 3:30. I like to knit. We have three horses, one cow, one cat and one dog. Our horses' names are Nig, Ben and Prince. Our cow's name is Daisy. Our cat's name is Patrick and our dog's name is Pete. I have a big doll. She is two feet four inches tall. She has four teeth and dark brown hair. Her name is Marian Helen. I have had her since I was 8 years old. I hope I have a twin? My birthday is September 7.—Elizabeth M. Dorn, Box 46, Naches, Wash.

### Columbia River Is Beautiful.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. Peach is located on the Columbia river, which is very beautiful. Peach consists of about 360 acres. It is almost all a large fruit ranch. I am a girl with brown hair and eyes of the same color. I have two sisters and one brother, the latter is going to school at Cheney. My father and mother own a fruit ranch. We have some live stock. My pet is a large dog which we have raised. I am hoping to hear from some one who has written to the Children's Corner.—Yula Pugh, Peach, Wash.

### Harry Thomas Joins the Corner.

Dear Aunt Nellie: I was looking over the Farmer tonight and I happened to run on to the Corner. I read it and now I want to become a cousin. I am 12 years old now and my birthday is September 11. Have I a twin? I go to school every day. I have two miles to walk. My brother and sister go to school, too. I live on a fruit ranch near Ephrata. There is 36 acres of orchard and four acres in a hill that runs through our place and 10 acres across the road. I have a third interest in a heifer calf, a pig and chicken, and a half interest in a turkey. We have two horses, two cows, three heifer calves, and four pigs and about 30 chickens. I am in the seventh grade now and my teacher says that I will pass. This is my fourth term in school. My brother is in the fifth grade and my sister in the second.—Harry Thomas, Ephrata, Wash.

### Buttercups Are Blooming.

Dear Aunt Nellie: I have been reading the letters in the Children's Corner for a long time so at last I decided to write too. There are buttercups blooming. I go to Kirby school and I am in the eighth grade. I walk almost two and one-half miles to school. Miss Lexie B. Adams is my teacher and I like her very much. There are 19 pupils going to my school and we have a fine time playing at noon and recesses. One of my little playmates has written before. Her name is Ellen Elsensohn. Lydia Lowery is almost my twin. Her birthday is May 25, and she is 14 years old, while my birthday is May 23 and I am 13 years old. Have I a twin? If I have I would like to correspond with her. I would like to hear from Lydia Lowery and Alice Clinesmith. I have one sister seven years old. Her name is Maurene. I sends lots of my love to you, Aunt Nellie, and to all of the cousins.—Mildred Jean Riley, R. F. D. 2, Pomeroy, Wash.

### Two Pairs of Twin Cousins.

Dear Aunt Nellie: I will be 12 years old May 9. I am in the fifth grade. Have I a twin? I see Lila Smith is 12 May 7. She is almost a twin. I hope she will write to me. We live 10 miles from Seattle on Vashon island. We like the fruit out here, as in Dakota, where we came from, there was not much fruit. My teacher's name is Mrs. Copeland. We have 19 pupils in our school. I live half a mile from school right up a hill all the way. I live with my grandma and grandpa. We have two pair of twins, my cousins. They are 8 years old and 3 years old. Their names are Lillie and William, which are a boy and girl, and Minnie and Linnie, two girls. Their mama is dead. My grandpa has a cow and about 60 chickens, two rabbits, one pig and two cats. When we go to Seattle or Tacoma we have to take a boat. We like the Farmer very much.—Minnie Meloy, Box 55, Lisabeula, Wash.

### Call Their Farm "Idlewild."

Dear Aunt Nellie: I am 11 years old December 6. If I have a twin I wish he or she would write to me. I live on a farm of 640 acres. We have 16 horses and two colts. We have three cows and five calves. I am in the sixth grade. I like to go to school. The name of our farm is Idlewild. We have water works in our house. There is a stream running by our place that runs about eight miles. I have two cousins in the army, one drafted, the other volunteered. I have knitted two wash cloths and might knit more for the soldiers. I will be glad when spring comes so I can pick flowers and play outdoors. I have one dog. His name is Towser. We have about 90 chickens. Mama and papa got my sister and I a $5 war saving stamp each. I hope this war will soon end.—Earl Jenkin, Coulee City, Wash.

### A Little Sorrel Pony to Ride.

Dear Aunt Nellie: I have a brother and one sister. Their names are Anna and Johnnie. I have been reading the letters of the Corner. My father takes the Farmer and I read all the letters. I am 11 years old and will be 12 August 14. We live 12 miles from Goldendale out east. I have joined the Red Cross and my sister has too. I live on a 600-acre farm. I like to go riding horse back in summer. I have a little pony to ride. It is sorrel and has a white spot in its face. Its name is Tip. I go to school in Pleasant Valley. We go one mile and one-half to school. My father has six horses. We have two cats. My brother is trying to pull my hair tonight. He will be two years old June 22. My teachers' names are Lillian Houpt and Miss Helen Argyle. We have a new building in Pleasant Valley. It has two rooms. Have I a twin? If I have I wish they would write.—Lorena Thomson, Goldendale, Wash.

### Sister Is in College.

Dear Aunt Nellie: This is my second letter to the Corner. I like to read the letters in the Corner. They are very interesting. I like them very much. I go to school most every day. I like school very much. We have about 38 pupils in our school. I am in the third grade. My sister is in the fourth grade at college. She is 13 years old. Her name is Hazel. She has written to the Corner before. We have two horses, five cows, seven calves, 15 pigs, one dog, three cats and seven chickens. The horses' names are Molly and Jip. The cows' names are Molly, Susy, Cherry, Nanny, Queen.—Myrtle Webster, Route 1, R. F. D., box 62, Olalla, Wash.

### A Member of the Red Cross.

Dear Aunt Nellie: This is the first time I have written to the Corner, but I hope it will not be the last. I am in the seventh grade and am 13 years old. My teacher's name is Mrs. Prigemore. We live on a 20-acre farm and have five cows and four calves. We have a horse, a pig and about 30 chickens. We also have a dog and two kittens. I walk two and one-half miles to school every morning. I am a member of the Red Cross and am knitting. I have three sisters and two brothers, Elvira, Signa and Elna, Edwin and Sigfried. Have I a twin? If so I wish they would write. My birthday is March 2.—Nina Nordquist, Winlock, Wash.

### All Have Red Cross Buttons.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 10 years old and will be 11 July 21. Have I a twin? My teacher's name is Mr. Pence. I like him fine. I have four sisters. Their names are Selma, Emma, Alta, Ebba. I have no brother. We have started a Junior Red Cross. We all got a Red Cross button. There has not been very much snow this year. I have a cat. It is white and gray. We made some paper beads in school like those in the Farmer. I got the first prize in them. I will close for this time.—Christina Jasperson, St. Andrews, Wash.

### Can Run the Caterpillar.

Dear Aunt Nellie: This is the first time I have written to you. I am 11 years old and I am in the fifth grade. My birthday is December 2. My teacher's name is Nellie Balch. I like her fine. Have I a twin? If I have I wish they would write to me. We have a caterpillar. I know how to run it too. I have two sisters and two brothers. My sisters' names are Rosa, age 18, and Vena, age 16. My brothers are Jake, age 23, and William, age 14. We have nine horses and two colts. We have four milk cows and five calves.—Henry Besel, Farmer, Wash.

### George Walks Two Miles to School.

Dear Aunt Nellie: I enjoy reading the cousins' letters so I thought I would write one to see if I had a twin? If I have I wish she or he would write to me. My birthday is December 16. I am nine years old. I have one sister. Her name is Olivida. I have two cats. I live on a 20-acre farm. I go to the Zillah school. I have to walk about two miles. My teacher's name is Miss Dorothy Williams. I am in the fifth grade.—George M. Brown, R. F. D. 1, Zillah, Wash.

### George Rides Horseback to School.

Dear Aunt Nellie: This is the first time I have written to the Corner. I am 10 years old and in the fourth grade at school. My teacher's name is Miss Root. I have six brothers and six sisters. I ride horseback to school. We have a mile and a half to go to school. My father takes the Farmer and I like the letters in the Corner very much.—George W. Bentley, R. F. D. 1, Reardan, Wash.

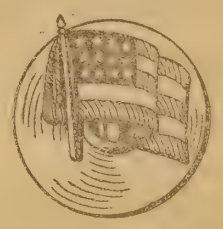
### Wishes the Corner Would Increase.

Dear Aunt Nellie: I am 10, almost 11 years old, for my birthday is June 4. I have one twin whose name is Marion Hagon and her birthday is the exact day mine is. I am in the fifth grade and my teacher's name is Miss

(Continued on the following page.)


## Coat Lapel Button

for securing two subscription orders to the Washington Farmer



Just like illustration, only smaller. The perfect size for your coat lapel. A dandy American flag in red, white, blue and gold.

One of these flags will be given free to any one sending two one-year subscription orders to The Washington Farmer.

Your own subscription counts for one.

Send 50 cents and two subscriptions to

**The Washington Farmer**
Review Bdg.
Spokane, Wash.

# Children's Corner

Aunt Nellie

(Continued from the preceding page.)

Goddard. I go to the Harvard school. We live in Midland out in the country. We own one acre. We have one cow named Beauty and we have some chickens. I have two sisters, whose names are Gertrude, 9 years old, and Bernice, 6 years old. I know how to knit, tat and crochet. I like to read the letters of the cousins and I wish the Corner would increase a bit.—Violet Georgia Waech, R. F. D. 94, Route 4, Midland, Wash.

**Roger's First Letter to the Corner.**

Dear Aunt Nellie: I am seven years old. My birthday is May 2. I will be eight then. Have I a twin? I am in the second grade at school. I am sick in bed, so don't go to school now. I have three brothers and three sisters. We live on an 80-acre farm. We have two horses, two colts, two cows, and two calves. We also have 30 hens and two roosters. We have on dog. Her name is Ring. She is black and white. This s my frst letter to the Farmer.—Roger Naythan Tarbert, Deer Park, Wash. (We are glad to have you write to us, Roger. We want a lot of boys to write so the Corner will be more interesting for them. We hope you will soon be able to be back at your school again. Aunt Nellie.)

**Goes to a Small Country School.**

Dear Aunt Nellie: I have been reading the letters in the Corner for some time, but this is the first time I have written, but it shall not be the last if I see this letter in print. I am 13 years old and in the eighth grade. My father has some land in Montana and I am saying in Walla Walla with my uncle and aunt. I have light hair and blue eyes and am five feet four inches tall and weigh 120 pounds. I go to a small country school in district seven, Walla Walla county. I have to walk about one-fourth of a mile to school with my cousins. I shall not write any more now, but shall write more if I see my letter in print. I should like to correspond with some of the cousins.—Hope Ferguson, Route 3, Walla Walla, Wash.

**Brown Hair and Light Blue Eyes.**

Dear Aunt Nellie: This is the first time I have written to the Corner and I hope it will not be the last. I have dark brown hair and light blue eyes. I am 9 years old. Have I a twin? We have a farm of 100 acres. We have three horses. Their names are Billy, Polly and Bob. We have six cows and 12 calves. I have two sisters, Tresa and Mary.—Barbara Hofmeister, Bossburg, Wash.

**Effie Likes to Go to School.**

Dear Aunt Nellie: This is my first time to write and I hope it won't be the last time. I am 9 years old and in the third grade. I have two brothers and two sisters. My youngest brother is 1 year old. My birthday is August 31. My sisters' names are Rhoda and Viola. I hope to see my letter in print. I have a cat and a dog. We have a cow and a calf, a horse and a colt. I like to go to school. I go a mile and a half to school. I will close for this time.—Effie Borden, R. F. D. 1, Box 17, Pateros, Wash.

**Wishes Her Twin Would Write to Her.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner, but hope it won't be the last. We live on a rented farm of 50 acres. I like to go to school. My teacher's name is Mrs. Morrow. There are three rooms and 11 grades in our school. I have to go about one-fourth of a mile to school. We come home for our dinner when the weather is nice. I have two brothers and two sisters. My oldest brother is 17 and he is in the 11th grade. We have three pigs, about 75 chickens, six calves, four cows and 21 horses. I hope to see my letter in print. My birthday is Septemebr 13. Have I a twin? If I have I wish she would write to me.—Iva R. Cook, Box 66, Cloverland, Wash.

**Let Each One Do His Part.**

Dear Aunt Nellie: We live one mile from town on an apple orchard tract. I am in the seven A class. My teachers' names are Miss Newberg and Mrs. White. The pupls of our school are joining the Junior Red Cross. Thirty-nine out of 47 have joined in our room. We have organized a Red Cross society on our street. We have met three times. We have made 1700 gun wads, 139 comfort blocks, 16 triangles, and cut one and three-fourths of a pound of moss. This is the second time I have wrtten to the Corner. I would like to see it grow. Let each one do his part. —Eunice Pool, Box 134, Wenatchee, Wash.

**Has Hattie a Twin Cousin?**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 10 years old. My birthday is December 11. I have one sister and three brothers. My sister's name is Gertrude and my brothers' names are Orvil, Carl and Walter. I am in the third grade in school. I like to go to school. We have to go about two miles. We have two cats and one dog. The dog's name is Queen. We have two horses. Their names are Maud and Bill. Have I a twin? I would like to see my letter in print.—Hattie Van Der Yacht, Linden, Wash., R. F. D. 1, box 61.

**Have Lots of Fun at School.**

Dear Aunt Nellie: I enjoy reading the letters from the Corner and I think I would like to write to them all the time. I think I will tell you about our school. I am in the third grade and I like my teacher. Her name is Miss Larson. There are 22 in our room. We have lots of fun at our school. I am staying at my grandfather's and grandmother's house. My mother is dead and the last time I heard from my father he was in Idaho. My grandmother died when I was in the first grade.—Frances Rena Patterson, R. F. D. 4, Box 93, Tacoma, Wash.

**Has a Farm in Montana.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 8 years old. My birthday is June 16. I have a twin brother. His. name is Elton Bentley. We have had the whooping cough. But we are all over it now. We have three cows and one calf. Their names are Blossom and Reddy, June and the calf's name is Sally. My father takes the Farmer. My father has a farm in Montana. My sister is married. She is in Montana. My teacher's name is Miss Root. I go to the Spring Creek school.—Esther Elsie Bentley, Reardan, Wash.

**Lewis Has a Dog Named Rover.**

Dear Aunt Nellie: I am 10 years old. My birthday is August 20. We have five horses, and their names are Bell, Babe, Nellie, Dan and Nell. Our cows' names are Bird, Star and Dick. My dog's name is Rover.—Lewis F. Kime, Deer Park, Wash. (We are surely glad to welcome another boy to our Corner for one boy's letter will interest other boys and then perhaps some day we will have as many boys in the Children's Corner as girls. Write to us again soon, won't you, Lewis? Aunt Nellie.)

**Blanche Is in the Eighth Grade.**

Dear Aunt Nellie: This is the first time I have written to the Corner. I am 13 years old and will be 14 next January 9. I am in the eighth grade at school. I was operated on for appendicitis the first of February and came home from the hospital February 25. I have seven brothers and five sisters, so I have lots of playmates. I wish Thelma Hazel Owens would write to me as we are nearly the same age and if I have a twin I wish he or she would write to me.—Blanche J. Bentley, R. F. D. 1, Reardan, Wash.

**Hilda Is a Busy Little Girl.**

Dear Aunt Nellie: I am 10 years old. My birthday is March 2. Have I a twin? If so, would like to hear from them. I have no brothers or sisters. I live on a 160-acre farm. My papa has four mules and I have a pony named Dick that I ride to school. My schoolteacher's name is Miss Buchers. I have been missing school. I have been sick for some time. I am in the third grade. There are 10 scholars in our school. The name of the school is Sage Hill. I live six miles from school. I got three chickens for a Christmas present, and lots of candy and nuts. I do like to read the farm paper. It has such interesting stories. I suppose all like to read interesting stories. I have been reading "Black Beauty" and am going to read "Beautiful Joe." "Beautiful Joe" is more interesting than "Black Beauty." When I get started to read, you can't make me stop until I get through. I am going to join the Red Cross. I found a twin, Thelma Hazel Owens, Oakesdale, Wash. I have a dog and a cat. My dog's name is Tippy and my cat is Pattie. My dog is a bird dog. I can crochet and do little fancy things. My mama is going to show me how to do embroidery work and tatting. I help mama wash dishes and sweep and get dinner and make baking powder biscuits and sew aprons. I help fix gardens, and get my own eggs in. Sometimes I get two eggs, sometimes one. I got one rooster for my birthday present and two hens. I will have to set my hen pretty soon. I think little chicks are very pretty when they are tiny. I will be glad when the little chicks come. We have taken the farm paper for some time. My papa is seeding with his four mules. —Hilda Knutson, Ringold, Wash.

**Has Knitted Eight Squares.**

Dear Aunt Nellie: This is my second letter to the Corner. I was 8 years old March 15. I will soon finish my second reader. There is only one more story to read. I have eight squares done and I am on my first wash cloth. Harriet has four squares done and she is going to knit a wash cloth. She wishes that she had brought the cotton home last night so that she could knit today. Tiger is sitting on the chair by me.—Elizabeth Cook, R. F. D. route 2, box 46, Mansfield, Wash.

**Mazie Has Two Brothers.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am eight years old. I have two brothers. Their names are Delmar and Claude. We have two horses and two cows and two calves. The horses' names are Queen and Bell. Our cows' names are Daisy and Rosie. The calves' names are Bill and March. My teacher's name is Miss Clack.—Mazie Lea

**A French Officer at Their School.**

Dear Aunt Nellie: This is my first letter to the Corner. I live on a 24-acre farm. I am 11 years old. My birthday is November 18. I have one brother His name is Robert. I am in the sixth grade. I have a cat. Our dog got killed last Saturday. I have several thrift stamps. There was a French officer at our school yesterday. —Jennie Stewart, Sumner, Wash.

**About Their Washington Program.**

Dear Aunt Nellie: This is the fourth time I have written to the Children's corner. I am going to tell you about our Washington program. We had two songs and we had a tea party by three girls and the colors by the same girls—Alice, Gertrude and Tracy. There were eight people there. They all said it was fine. I went to school every day. I was never late.—Tracy Germont, rout 1, Greenacres, Wash.

**The Way Helen Does Her Bit.**

Dear Aunt Nellie: I have just been looking over the list of prizewinners and have just read that long, beautiful letter you wrote. I read Alice Clinesmith's letter the week before. It was surely a lovely letter; so interesting. We surely, surely are Hooverizing here. Eat cornbread once a day, and observe meatless day and wheatless day. I have one brother in the navy and one sister in the Red Cross service. I have written to you before and inquired about a twin, and found two—James Sanders and Edna Reinbold. I got one letter from each. I answered them both, but got no reply. I have joined the boys' and girls' gardening club. I have received some literature on gardening and expect to put my garden out in a little while. I am going to try to do my bit by having a garden. One of my neighbors has two children, and when she goes out at night she does not like to take them along, so she hires me to come and stay with them. She pays me 25 cents for staying and helping her with the work in the morning. I am going to buy thrift stamps with that which I have saved, after buying seeds for my garden. There are four birds building nests in our house, one over the porch door and one in some vines and one on the east side of our house. I take lessons on the violin and my sister takes piano lessons. My schoolteacher gives me lessons, with four others; one plays the flute, one the clarinet, one the trombone and one the cornet. We want an orchestra and are doing our best to have one. The girls of our school have organized a Red Cross society. Our teachers are at the head of it. We have made one quilt already. I am knitting a muffler for one of my soldier friends.—Helen Calkins, Age 13, R. F. D. 1, Sunnyside, Wash.

**Oris Stays with Grandmother.**

Dear Aunt Nellie: This is the first letter to the Children's Corner. I am eight years old and I go to school. I stay with my grandmother. I am in the frst grade and like it fine. I have one brother. His name is Lee. I go home on Friday to see the little lambs and three pigs. I am going to join the Red Cross. My brother is four years old. I wish good luck to the Children's Corner.—Oris May, Dxe, Wash.

**Will Write More Next Time.**

Dear Aunt Nellie: This is the first time I have written to the Corner and I hope it won't be the last time. I have two brothers and two sisters. We have a cow, calf, a horse and colts. I will not write much this time and if I see my letter in print I will try and write more next time.—Rhoda Barden, R. F. D. 1, box 17, Pateros, Wash.

**Birthday Comes in February.**

Dear Aunt Nellie: I am 8 years old. I have one sister and one brother. My sister's name is Evelyn. My brother's name is Harold. My teacher's name is Miss Wagoner. We have six horses, four cows, two cats and two dogs. I am in the third grade. My birthday is February 10.—Lucile McKinney, R. F. D. 1, Rockford, Wash.


## Big War Map for Two Subscription Orders

A splendid four-page war map of the battle front in France, originally published in the Spokane (Wash.) Spokesman-Review, will be sent to any one who secures and mails us one new subscription to The Washington Farmer.

This map is printed in four sections and when pasted together, according to directions furnished, will give you a map 64 inches long and 21 inches wide; presenting the details of the great fighting territory in such a way that you will be able to follow every detail of the big battles which are now brewing.

Send orders for new subscription and war map to

**The Washington Farmer**

Review Bldg., Spokane, Wn.



First Eastern Oregon

# Shorthorn Sale

## At Ontario, Oregon

**Thursday, April 25th**

UNDER AUSPICES OF THE NORTHWEST SHORTHORN BREEDERS' ASSOCIATION.

**75 Registered Shorthorns 75**

**Males and Females**

Drawn from the following well known herds of

Day & Rothrock
Jas. McCroskey & Son.
W. J. Townley.
Joe Turner.
A. D. Dunn.
W. O. Cummings
W. W. Green.
G. W. Delay.

and Hutchinson & Sherman.

**Breeders, Farmers and Rangemen** will find this sale an exceptional opportunity to select a class of cattle best suited to their requirements.

Included in the offering are some of the best bulls ever entered for sale in the northwest, both as to pedigree and individuality.

The females are very high class and should draw the attention of discriminating buyers, therefore any one wishing to strengthen his herd should not overlook this opportunity.

All stock will be judged day preceding sale by F. W. Harding of Chicago, secretary American Shorthorn Breeders' Assn.

**For catalogues and other information write**
**Joseph Turner, Manager Sales, Meyers Falls, Wash.**
**Or Ontario, Oregon, Moore Hotel.**
**Gue & Cranke, Auctioneers.**

**FARE AND A THIRD (on certificate plan) from all points in Oregon, Washington and Idaho on all railroads to Oregon Horse and Cattle Raisers' Convention and Shorthorn Sale, April 23, 24, 25.**

## News for Breeders

S. F. Zysset of Scio, Ore., reports that he has already sheared his Angoras and that the fleeces were heavier than ever before. His does are dropping their kids early, some of them before shearing. Goats generally over the county have done well and are coming onto spring pasture in fine condition, which Mr. Zysset attributes to the open winter, with exceptionally good feeding conditions.

A. E. Wescott of Banks, Ore., recently sold to A. W. Cope of Langlois, Ore., his herd bull, Oneida's Oregon Pogis, by Merry Miss' Son and out of Pogis Oneida. The bull bred by William Ladd has headed Mr. Westcott's herd several years and is a proven sire of good producers. Mr. Cope also took four females from Mr. Westcott all of them bred by William Schulmerick. Two are mature cows, one with a 550-pound official record and two are heifers by Monmouth Noble, with records made with first calf. Mr. Cope, who has two big dairy ranches in Curry county, is thus making a good start in pure bred Jerseys.

### Record Breaking Sales.

"Surely it is unusual for us to publish in our columns the results of the public sales of three different breeds of purebred stock in the same week whereat the averages far exceed those of any previously recorded," says the London Live Stock Journal. "At Mr. Oakey's sale the Guernseys realized over £64 ($312) each, and must have almost made as much as the freehold value of the little 135-acre farm where they were reared. Mr. Hiscock's average of £35, 15 shillings 3 pence ($174.11) for 43 Berkshire pigs was more than double that of Mr. Hudson's often-quoted 'highest average' of £16 ($77.92) and the £27 7 shillings 8 pence ($123.33) for the Middle White pigs far exceeded any previous figure, and, compared with the average for the 1851 head of purebred Shorthorn cattle, sold at 40 different sales in 1892 for £23 12 shillings 9 pence ($115.07) each, is a strange sign of the times."

### Another 40-Pounder.

Minnesota has now the honor of having a 40-pound cow. The purebred Holstein, Bess Burke Ormsby 203801, recently completed her test with the production of 42.31 pounds of butter in seven days. With this record Bess Burke Ormsby becomes the 28th purebred Holstein cow that has yielded more than 40 pounds of butter in a week. Her sire is Sir Pietertje Ormsby Mercedes 186784. Her dam is Spring Brook Bess Burke 98734. She was bred and is now owned by E. C. Schroeder, Moorhead, Minn.

### A Young Jersey Breeder.

G. O. Swales, the Duroc Jersey breeder of Johnson, Wash., who is also quite a wheat farmer, reports securing a new farm manager. The boy was born March 27; weight, seven and a half pounds, and is somewhat autocratic in the authority he exercises. Swales also reports 11 pigs from his grand champion sow at the Spokane Interstate fair last fall; 15 from the first prize gilt in 1915, and 11 from the fine sow he bought in the east. These are all by his herd boar, Burke's Cherry King.

H. A.

### Long Dispersal Sale.

C. E. Long, well-known Jersey breeder, of Buhl, Idaho, is announcing a dispersion sale of his herd, together with a consignment of fine stock from the Rose Lawn herd, S. H. Kayler of Twin Falls and C. D. Irwin of Kimberly Mr. Long promises a collection of Jerseys of unusual merit. The sale date is May 2 and the place is Buhl. Colonel Walters of Filer and Colonel Hughes of Forest Grove, Ore., will have charge of the sale ring. Both are well known stock men and auctioneers.

## BROWN SWISS CATTLE

**Brown Swiss Stock Farm**

Breeders of Brown Swiss Cattle, the Farmer's Dairy Cow. Young stock for sale.
THEO. BRUGGER, Route 3, Gresham, Ore.

## AYRSHIRE CATTLE

**EDGEWATER FARM**

Choice registered stallions available with breeding guarantee and easy terms at farmers' prices.
ELBERT M. CHANDLER, Burbank, Wash.

# Breeders' Department

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Gainford Perfection No. 442173.

**Hercules Shorthorns**

We can supply you with choice, well grown bulls and females of breeding age. Your inspection of our herd is invited. Visitors always welcome.

**Day & Rothrock Company**
205 Exchange Bank Bldg. Spokane, Wash.

**SHORTHORNS**

A few young stock for sale by such noted sires as Precious Goods, a son of the great Golden Goods, and Scottish Sunrise 2d.

R. E. BOYCE. Baker, Ore.

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breeder of registered Shorthorn cattle. Hampshire sheep and big-type Poland China hogs.
Filer, Idaho.

**LELAND BROTHERS**

Breeders of top registered Shorthorn cattle. Correspondence solicited.
WENDELL, Idaho.

REGISTERED SHORTHORN COWS,
Young bulls and heifers, sired by Scotch bulls; liberal terms.
CALDWELL CATTLE CO., Caldwell, Idaho.

## ABERDEEN ANGUS

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In the famous valley of the Yakima there is located one of the best herds of Aberdeen Angus in America. Proof of this is evident by the many prizes won by this herd at all of the greatest shows of the northwest and central states, including the Chicago International.

Fifty extra good range bulls are now offered for sale. Also fancy herd headers and show cattle of both male and female. All prices very reasonable.

CONGDON & BATTLES.
OTTO V. BATTLES, Manager.
Yakima, Washington.

**Aberdeen Angus Cattle**

A. H. EAGLESON & SONS.
Boise, Idaho.

## POULTRY

**BABY CHICKS**

Rhode Island Reds, White Leghorns, $15 per 100; $12.50 per 100. All chicks now sold to May 15. If you want chicks this season, order now.

MAPLEBROOK POULTRY FARM
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**Rhode Island Reds and Whites**

Both combs. Stock for sale. Eggs, $6 and $8 per 100. Mammoth Toulouse geese and Mammoth Bronze turkeys. Eggs for sale. Write for mating list. No baby chicks. If you want quality and egg production, as well as vitality, get some of our stock and eggs. HIGHLAND FRUIT AND POULTRY RANCH, J. Nonnenmacher, R. F. D. 3, Yakima, Wash.

EGGS AND BABY CHICKS
from trap-nested and Hoganized Golden Campines, White faced Black Spanish, Barred Rocks and S. C. White Leghorns. Prices reasonable. Write for folder.
ED BRYANT, R. 2, Roseburg, Ore.

WINNING STOCK.
Barred Rocks, S. C. White Leghorns and S. C. Black Minorcas. Stock and eggs from exhibition and laying strains.
WILBER CLAYTON, Payette, Idaho, R. 1.

**BARRED ROCK EGGS**

From good utility stock; good layers; $1.50 per sitting. Send me your orders.
C. A. STARK, Box 242 Sutherlin, Ore.

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S. C. White Leghorns. Eggs for hatching and day-old chicks from heavy laying strains.
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Eggs for hatching from heavy winter laying stock; $1.50 per 15, $7 per 100. Young Flemish Giant hares.
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**365-DAY HOLSTEINS**

24,667 lbs. milk—1026 lbs. butter—is the s. o. advanced registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.

THE HERD WITH YEARLY RECORDS.
WESTERNWOLD RANCH, Prineville, Ore.

MOOREHEAD RANCH.
Registered Holsteins.
Herd sire, Model Annie De Kol Segis, grandson of the famous King Segis. We have no bulls of service age, all having been sold, but we have some splendid young stuff, from 6 to 8 months old, coming on. If you are looking for real foundation stock, write us for particulars and pedigrees.
MOOREHEAD & HOBSON.
Breeders of Purebred Holsteins.
Outlook, Wash.

**The Most Profitable Cows**

in the world are Holsteins. This is not a claim, it is a fact. We have two beautiful young bulls, bred right and fit to head any herd. For further particulars and pedigrees address

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Pure bred registered Holstein cattle. Herd sire Segis Pontiac Acme; average of three of nearest dams; butter, 1 year, 1080.82 lbs.; milk, 24,380.3.

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Young bulls, some of them ready for service, by a sire whose five nearest dams average 26.17 pounds butter, or another with 29.67-pound dam, and out of high-record A. R. O. dams. Priced to sell.

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Sired by Segis Riverside Pontiac, that sold in Pacific International sale, 1914, for $1025, and whose dam has A. R. O. record of 31.47 lbs. butter in 7 days; 118.89 in 30 days, and big records all through his pedigree.
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Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.
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Well-bred young bulls for sale.
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Stock of All Ages, Either Sex, for Sale.
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Bull calves for sale with good A. R. O. backing.
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offers for sale Hereford bulls, 1 or 2 years old. One or a carload.
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Hereford Cattle.
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Young bulls, winners at Washington State Fair, make good herd sires. Attractive prices for quick sale.

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REGISTER OF MERIT JERSEYS.
In nearly 13 years we have yet to get our first poor heifer or dissatisfied customer. We have the best of the Golden Glow's Chief and St. Mawes strains, with the cross of our great Kentucky bull, Valentine's Ashburn Baronet.
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GOLDEN GLOW HERD
Winner of 1st and 2d prize in butter test, Oregon State Fair, 1917, (all breeds, 20 entries); breeder and owner of grand champion cow in show ring, 1916; breeder of grand champion cow, 1917. Breeder and owner of world's champion 3-year-old, with 1115 lbs. butter, 80 per cent fat. Every female a daughter, granddaughter or great granddaughter of Golden Glow's Chief, sire of 34; 14 over 700 lbs.; 32 over 600 lbs..
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35 daughters average 533.9 lbs. fat. Sire of world record Junior three-year-old. Two of his sons heading our herd. Some choice bull calves out of cows with records up to 856 pounds for sale. Sold out of bulls over six months old.
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**All High Record Blood**

Bull calf out of Lucy of P. V., full sister to St. Mawes Susie; 936 lbs. butter in a year; to St. Mawes Blossom 823 lbs., and to Susie's Twin Maiden, 642 lbs. Sire, Poppy's St. Mawes, son of St. Mawes Poppy, 1120 lbs.
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**BUY A REAL SIRE**

We are offering a choice bull calf by St. Mawes of Ashwood and out of a daughter of the great Holger. This youngster carries the best blood in Jerseydom and is fit to lead any herd. Price on application, but don't delay, as he will cost more after his dam completes her present register of merit test.
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Three register of merit cows, freshen in March, two in April. Baby bulls are sold so reasonably you can't afford to buy a bull of service age. Raise your own bull and save money. Prices, pedigrees, photos, etc., sent on request. Can spare a few good register of merit cows.
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Register of Merit Jerseys. Largest Jersay herd in the northwest. Young stock for sale.
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One dropped February, 1917, sire, Minna's Baronet, whose dam made 480 lbs. butter in a year as senior yearling. Young bull's dam now on official test, will make about 60 lbs. fat (70 lbs. butter) third month and good record for year; milked twice a day. The other bull by St. Mawes of Ashburn. Full particulars of either on request. Bargain prices.
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**We Have a Herd Average of 700 Lbs.**

85 per cent BUTTER for 11 head. Sold six bull calves in the past 4 mos.; 3 of the last ones brought $250 each. These were sons of our herd bull, G. P. St. Mawes; just one bull calf left.
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We are offering a nine months' old bull from a young cow that is making good. His sire is a grandson of St. Mawes Poppy, with record of 1120 lbs. in one year. Priced low for quick sale.
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Thirty years breeding Jersey cattle. Young bulls from Register of Merit dams. Also a few choice females.
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Oxford You'll Do Jr., R. of M., A. J. C. C. Jerseys, under U. S. Government control for health. No t. b. or abortion ever in herd, we are offering you your choice of a bull sired by the above bull, 30 months old. A full sister now on test produced in 159 days 271½ pounds butter fat; the dam, Morrow's Select, 198788, 828 pounds butter. Oxford You'll Do Jr.'s half sisters have records up to 933 pounds butter. Or we will sell you a calf from the same dam, sired by Golden Cicero, daughters' records up to 783 pounds butter. These sires are fit to head any herd.
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A few cents spent for Real Gravely will buy *more tobacco satisfaction* than many times the money in ordinary plug.

Give any man a chew of Real Gravely Plug, and he will tell you *that's* the kind to send. Send the best!

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Dealers all around here carry it in 10c. pouches. A 3c. stamp will put it into his hands in any Training Camp or Seaport of the U. S. A. Even "over there" a 3c. stamp will take it to him. Your dealer will supply envelope and give you official directions how to address it.

**P. B. GRAVELY TOBACCO CO., Danville, Va.**

*The Patent Pouch keeps it Fresh and Clean and Good it is not Real Gravely without this Protection Seal*

Established 1831



# Second Annual SHORTHORN SALE

In this sale of Shorthorns at Lewiston, Idaho, on Wednesday, May 1st, 1918, there will be sold 21 young bulls of breeding age, and 13 cows and heifers heavy in calf and with calf at foot. They are sired by our first prize and champion herd bulls, Prince Booth 377105, Cloverleaf Pride 2D 506682, a son of Maxwalton Pride and a grandson of Avondale; and Types Model 429408, a son of Cumberland Type, 36 times grand champion in that many shows. In this offering buyers will have the opportunity of securing individuals that are regarded as among the best of the breed. Therefore those wanting top specimens, either in bulls or females, should be attracted to this sale, which will be held at the NORTHWEST LIVESTOCK SHOW AND FAIR GROUNDS, at Lewiston, Idaho. The catalogue will be of value to every prospective buyer. Write for it now.

AUCTIONEERS:
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**WILLIAM MULHALL**
**FENN, IDAHO**



# COMPLETE DISPERSION SALE

*of the*

## Imported and Island Blood Jerseys

*of* C. E. LONG, OF BUHL, IDAHO

*Together With Consignments From*

ROSELAWN HERD OF S. H. KAYLER, Twin Falls, Idaho, and C. D. IRWIN, Kimberly, Idaho

## MAY 2, 1918, BUHL, IDAHO

## Greatest Collection of Jerseys for Type-Breeding and Production Ever Sold in Idaho

Sale includes the Island Bred Herd Bulls:

**BRIGHT LIGHT'S KNIGHT 103741**
**BELLE VICTORIA DUKE 113964**

and younger bulls of great quality and conformation.

## SUCH COWS AS

Imp Castilian Lady, 595 lbs. fat (743 lbs. butter) in 11 months.
Imp Fanstna Maurier, 478.2 lbs. fat in 11 months.
Imp Lad's Bright Light 468.7 lbs. fat in 10 1-2 months.
Kathie's Peer, 411 lbs. fat in 11 months.
Castilian Lady 2nd, produced 64 1-2 lbs. fat last month, first calf.
Merivale Mary, 366 lbs. fat as 2-year-old in 11 months.
Bright Light's Princess, 348 lbs. fat as 2-year-old, 11 months.
Joy's Drip of Sunny Lea, Register of Merit, 400 lbs. fat, 10 1-2 months.
Lovely Lad's Gypsy Maid, Register of Merit, 346 lbs. fat, 11 months. Many others equally good.

All records made on dry feed without silage or pasture.
Send for catalogue—it contains full account.

Arrange to attend sale. Come the evening before sale, as train arrives too late for sale on sale date.

Auctioneers: COL. J. W. HUGHES, Forest Grove, Oregon
COL. E. O. WALTER, Filer, Idaho

Clerk: S. J. Hammel, Buhl, Idaho.


When You Want to Buy Live Stock Consult the Breeders' Department of this Publication. Seventy-five Different Advertisements Appear this Week, and the List Includes Many of the Foremost Breeders of the Pacific Northwest.

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### Orchard Hill Farm

"Home of High-Class Guernseys."
Dr. Park Weed Willis, Owner.
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### FAIRVIEW FARM

Breeders of high class registered and grade Guernseys.

A. J. SINNES.
Route 5. Mt. Vernon, Wash.

**GUERNSEY BULL.**

Two years old; 1 young bull, one month old. May Rose blood. 4 Duroc gilts, three months old, the 4 for $75 if taken at once.

MIDDLEDALE FARMS, Goshen, Ore.

**AGED GUERNSEY BULL.**

Also two of his calves, one old enough for service. For full particulars address

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### SHEEP

Full blood Lincolns, Romneys, Corridales and Hampshires. Ewes and rams, small or large lots. For sale by

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Breeder and Importer. Yakima, Wash.

## DUROC-JERSEY SWINE

### SPRING DUROCS

I am now booking orders for weanling pigs, pairs or trios, unrelated. These pigs carry the very best blood lines procurable. Tracing their ancestry back to Inventor, Climax II., Top Notcher, Tip Top Lad and Proud Advance. All prize winners in state and interstate shows.

Also have a few very fine gilts, either open or bred.

CHAS. G. SPRONG, Grandview, Wash.

**DUROC SOWS FOR SALE.**

A few choice Duroc gilts, bred to farrow early next May, daughters of grand champion Richards Defender and bred to Junior Champion Richards Pathfinder. No better breeding east or west. Also a few good boars ready for service. Price very reasonable. We furnish pedigree and guarantee satisfaction, or will refund your money and pay express both ways.
RICHARDS LIVE STOCK CO., Virginia, Ida.
Home of the Champion Durocs.

**AVONDALE STOCK FARM.**

Registered Duroc-Jersey hogs. Inspection invited. Correspondence solicited.
H. C. POLLY. Route, 3, Burley, Idaho.

PATHFINDER BOARS — Choice Duroc Jersey boars for sale. Sired by Richard Pathfinder, First prize and junior champion Utah state fair. Priced to sell and guaranteed. ERICK W. OLSON, Virginia, Idaho.

**OTTO'S DUROC JERSEYS.**

Stock doing fine, splendid prospects for spring crop of pigs. For sale jr. yearling boar with a show record; very classy individual. Filer, Idaho.

**DUROCS.**

Boars and open or bred gilts of excellent breeding.
E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE. Yakima, Wash.

## POLAND CHINA SWINE

### LOCUST LAWN HERD

Sold Out.
W. F. HOWARD & SONS, Caldwell, Idaho,
S. Kimble Ave.

**GREENLEAF STOCK RANCH.**

Big type Poland Chinas, either sex. for sale at all times.
Wilson Bros., A. L. Wilson, Mgr.
Greenleaf, Idaho.

**BIG TYPE POLAND CHINAS.**

Herd headed by Sammy (79833). Correspondence solicited.
Fruitland Stock Farm, C. Boyston, Mgr.
Payette or Fruitland, Idaho.

**QUALITY HERD.**

If you want to improve your herd, try stock from my winners at the Oregon state fair.
RAY J. FOX. Lyons, Ore.

### PURE BRED POLANDS

A good herd boar for sale; also booking orders for spring farrowed pigs. Will ship C. O. D. subject to your approval.
HERBERT WILLARD, Dayton, Ore.

## HAMPSHIRE SWINE

### Unrelated Fall Pigs

Both sexes, good individuals of best breeding. My herd has shown the winners at all the leading fairs in the northwest for the past seven years and a barrow of my breeding was first at Chicago International last December.

J. M. FRUITTS. Enterprise, Ore.

## BERKSHIRE SWINE

### Riverby Orchard Berkshires

Riverby Orchard Berkshires won 12 out of 15 first prizes at the Washington state fair, 1916, also many prizes, including grand champion sow at the Panama-Pacific world's fair. We offer for sale a few good boars and young sows.

D. C. BUNN. Prosser, Wash.

## CHESTER WHITE SWINE

REGISTERED
O. I. C.
### SWINE

Fine, thrifty pigs, either sex, ready to ship. Write me. Ringgold Farm, J. H. West, Prop., Centralia, Wash., R. 1, Box 157.

### COVE STOCK FARM

Unrelated fall and spring Chester White pigs from prize winning stock.

ARCHIE CONLEY, Cove, Ore.

## YORKSHIRE SWINE

### Booking Orders for Weaned Pigs

Can furnish pairs or trios, best stock, $15, at eight weeks.

WM. NEUENSCHWANDER, Gaston, Ore.

## TAMWORTH SWINE

ROUND KNOLL RANCH NO. 3.
Herd headed by Knoll Slope Colonel, assisted by Jolly Lad IV. Correspondence solicited.
Bliss, Idaho.

## HORSES AND MULES

### The I X L RANCH
### 20 Registered Percheron Stallions

From one to 4 years old.

Many prize winners and all by my imported registered champion stallion Krepin and out of my imported two-ton mares. They are large, rugged and exceptionally heavy boned; also Shetland ponies and registered Shorthorn bulls and heifers.

P. A. Sorenson.

I X L RANCH
MERIDIAN, IDAHO.
Boise Phone 10R1.

### Hunter Ranch Percherons

The Grand Champion KROUMIR at head of herd. Young stallions for sale at all times at breeders' prices.

A. R. HUNTER, Island City, Ore.

### Edgewater Farm

Government accredited herd, headed by Peter Pan, 63d. Bull calves available.

E. M. CHANDLER, Burbank, Wash.

**REGISTERED PERCHERON HORSES.**

E. O. WALTER, AUCTIONEER.
WALTER BROS.
Buhl and Filer, Idaho.

### FOR SALE



Some Fine Stallion Colts Sired by

ABOUKIR

A Great Winner of Champion and Sweepstake Honors.

A PRODUCER OF CHAMPIONS AND GRAND CHAMPIONS.
Write for list of his colts I am selling this spring.

Sylvester Egan R. 3, Kent, Wash.

### MISSOURI and KENTUCKY JACKS

STOCKTON, CAL. P. O. Box 679.
JAMESPORT, Missouri.
LOS ANGELES, CAL. P. O. Box 1117.

SPOKANE, WASH.
W1728 Fourth Ave. Phone Main 1647.

### H. B. THORNBERRY

Dealer in

REGISTERED AND PEDIGREED JACKS, JENNETS, PERCHERON AND SHIRE STALLIONS AND GAITED KENTUCKY SADDLE HORSES
Largest Importer in the United States.

### COLFAX BLUE RIBBON STUD

COLFAX, WASHINGTON

Our new, large and commodious stables which we have been building are almost ready for us to move into and we will therefore, for the next 30 days offer to the Public an EXTRAORDINARY lot of Shire, Percheron, Clydesdale and Belgian Stallions, big, young and Absolutely Sound and at RECORD BREAKING PRICES. Easy terms and a GILT-EDGE BREEDING GUARANTEE.

We have a stallion for every purse, and we will save you plenty of money on the most LIBERAL TERMS, and you don't have to pay a long price to get a first-class stallion.

If you are in the market for a stallion now is the time to take advantage of these remarkable 30-day special sale prices.

COLFAX BLUE RIBBON STUD, COLFAX, WASH.



### *Imported and American Bred* Percheron, Shire and Belgian Stallions

They are of the very best breeding obtainable and are guaranteed to be breeders. They will be sold at very reasonable prices.

If in need of a good stallion weighing from 1800 to 2200 pounds, come direct to my stables and see them or write for description and terms to

WM. T. TRACY, Kennewick, Wash.

### 40 STALLIONS---12 JACKS

We can show you more big TON imported and native bred
PERCHERON, BELGIAN AND SHIRE STALLIONS
AND MAMMOTH KENTUCKY JACKS
than any other two firms in the northwest. Many of the stallions in our barns are winners at the Chicago International and the leading western shows. Come and make your choice. Our prices, terms and guarantee will suit you.

S. METZ & SONS
Commercial Barns, Pendleton, Ore.

### 20 Head——Jacks and Jennets For Sale——20 Head

For forty years we have been breeding them. For twenty-eight years they have won every premium offered through Oregon and Washington, with one exception. They are native-bred, and all of them make good. They are all registered in Standard Jack and Jennet Register of America. We have mules to show from them, and we make prices that are lower than importers can meet. Come and see them, or write.

B. F. Swaggart, Prop. EASTERN OREGON JACK FARM. Lexington, Ore.

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, April 15.—Increased receipts had much to do with weakness today which characterized the corn market. Prices closed unsettled at $1.27 1-8 for May and $1.49 5-8 to $1.49 3-4 for July, with the market as a whole 7-8 off to 1-8 advance, compared with Saturday's finish. Oats gained 1-4 to 1-2, and provisions 5 to 15c.

Notwithstanding rallies due to profit-taking by shorts, the corn market averaged decidedly lower the greater part of the day. In addition to the liberal supplies which crowded the sample tables, country advices of shipments appeared to indicate a continued free movement to terminal markets.

Buying on the part of houses that last week were thought to have made sales to the government gave strength to oats. No export bids were in evidence.

Provisions responded to announcement that exports for the week were the largest ever known. Big supplies of hogs had only a transient depressing influence.

### Cash Quotations.

CHICAGO, April 15.—Corn—No. 2 yellow, nominal; No. 3 yellow, $1.55@1.65; No. 4 yellow, $1.45@1.50.
Oats—No. 3 white, 90@91c; standard, 90¼@91½c.
Rye—No. 2, $2.60
Barley, $1.10@1.75
Timothy, $5@8.
Clover, $20@31.
Pork—Nominal.
Lard, $25.57.
Ribs, $23.20@23.70.

### Chicago Futures.

| | Open. | High. | Low | Close. |
|---|---|---|---|---|
| Corn— | | | | |
| May | 1.27 | 1.27⅞ | 1.26⅝ | 1.27⅛ |
| July | 1.49¾ | 1.50 | 1.49⅛ | 1.49⅝ |
| Oats— | | | | |
| April | .87½ | .88⅛ | .87½ | .88⅛ |
| May | .83½ | .84⅛ | .83½ | .84⅛ |
| Pork— | | | | |
| May | 47.90 | 48.07 | 47.82 | 48.00 |
| Lard— | | | | |
| May | 27.60 | 27.70 | 27.55 | 27.67 |
| July | 25.87 | 25.95 | 25.85 | 25.95 |
| Ribs— | | | | |
| May | 24.05 | 24.15 | 23.97 | 24.10 |
| July | 24.15 | 24.20 | 24.05 | 24.17 |

### Pacific Northwest Grain.

PORTLAND, Ore., April 15.—Grain: 30-day options: Oats, No. 2, $67.50 bid. Eastern oats and corn in bulk: Oats, No. 3 white, $62.50 bid; 38-pound clipped, $63; corn, No. 3 yellow, $65; No. 3 mixed, $64; oats, No. 3, $62.50; clipped, $63; corn, yellow, $65; mixed, $64.

### Minneapolis Grain.

MINNEAPOLIS, April 15.—Wheat—Receipts, 213 cars, compared with 520 cars a year ago. Corn, No. 3 yellow, $1.59@1.60.
Oats—No. 3 white, $7@88c.
Flax, $4.10@4.12½.
Flour—Unchanged. Shipments, 65,953 barrels.
Rye, $2.64@2.66.
Barley, $1.50@1.87.
Bran, $33.14.

## Live Stock Quotations.

### At Omaha.

OMAHA, Neb., April 15.—Hogs—Receipts, 13,000; market, 5 to 15c lower. Heavy, $16.90@17.10; mixed, $17@17.15; light, $17@17.20; pigs, $10@15; bulk of sales, $17@17.15.

Cattle—Receipts, 11,500; market, steady to higher. Native steers, $12.2?@16.25; cows and heifers, $9@13.25; western steers, $9.50@13.50; Texas steers, $9@11; cows and heifers, $8.75@11.25; canners, $7.50@8.50; stockers and feeders, $7.50@12.50; calves, $9@13; bulls, stags, etc., $8.50@12.

Sheep—Receipts, 8500; market, steady. Yearlings, $15@18; wethers, $14.50@16.50; ewes, $14.25@16.25; lambs, $18.80@20.80.

### At Portland.

PORTLAND, Ore., April 15.—Cattle—Strong; 25 @40c higher. Receipts, 294. Good to choice steers, $11.75@12.25; good to medium steers, $10.75@11.75; common to good steers, $8.75@10.25; choice cows and heifers, $10@11; common to good cows and heifers, $6@9.50; canners, $3@5; bulls, $5.50@9.50; calves, $7.50@12; stockers and feeder steers, $6.50@9.50.

Hogs, 15@25c higher; receipts, 1367. Prime light, $17.50@17.65; prime heavy, $17@17.50; pigs, $15@16; bulk of sales, $17.25@17.50.

Sheep—Steady; no receipts. Prime spring lambs, $19.50@20; yearlings, $15.25@16.50; wethers, $13@13.50; ewes, $12@12.50.

Shorn sheep, 2½c to 3c under quotation.

### Spokane Stockyards, Monday.

Hogs—Receipts, 50; market, steady. Prime light, $17.10@17.35; prime heavy, $17@17.25; pigs, $15.25@16.50; stockers and feeders, $14@16; bulk of sales, $17.15.

Cattle—Receipts, 225; steers 25c higher, cows and heifers steady. One load steers selling for $12.25, record breaking price for these yards. Best beef steers, $11.50@12.25; good steers, $10.25@11.25; common to good steers, $8.50@10.25; best beef cows and heifers, $9.25@10.25; good cows and heifers, $7.75@9; ordinary to good cows and heifers, $6.25@7.50; canners, $4.25@6.25; bulls, $6@9; calves, $7@12.50; stockers and feeders, $6@8.75.

Sheep—Receipts, none; market, steady. Prime lambs, $14.50@15.25; good lambs, $13.25@14; prime yearlings, $12.50@13.25; prime wethers, $12@12.75; best mutton ewes, $9@10.75.

### At Chicago.

CHICAGO, April 15.—Hogs—Receipts, 65,000, slow, 15c under Saturday's average; bulk, $17.40@17.70; light, $17.25@17.85; mixed, $17.10@17.80; heavy, $16.25@17.70; rough, $16.25@16.70; pigs, $13@17.

Cattle—Receipts, 25,000. Firm. Native steers, $10.60@16.40; stockers and feeders, $8.70@12.50; cows and heifers, $7.25@13.50; calves, $10@15.

Sheep—Receipts, 12,000; strong. Sheep, 13@17.85; lambs, $16.50@21.

## Condition of Winter Wheat.

The crop reporting board of the bureau of crop estimates, United States department of agriculture, takes the following estimates from reports of correspondents and agents:

The average condition of winter wheat on April 1 was 78.6 per cent of a normal, against 63.4 on April 1, 1917, 78.3 on April 1, 1916, and 83.6, the average condition for the last 10 years on April 1. There was a decrease in condition from December 1, 1917, to April 1, 1918, of 0.7 points, as compared with an average decline in the last 10 years of 5.7 points between these dates. Upon the assumption of average abandonment of acreage and average influences on the crop to harvest, condition April 1 forecasts a production of about 560,000,000 bushels, which compares with 418,070,000 bushels, the estimated production in 1917, and 480,553,000 in 1916.

The average condition of rye on April 1 was 85.8 per cent of a normal, against 86 on April 1, 1917, 87.8 on April 1, 1916, and 89, the average condition for the last 10 years on April 1.

For the four northwestern states the winter wheat and the rye prospects, as compared to normal, are given as follows: Washington, winter wheat 90 per cent as against 70 per cent last year and a 10-year average of 92 per cent; rye 94 per cent as against 86 per cent last year and a 10-year average of 96 per cent. Oregon—Winter wheat 97 per cent as against 84 per cent last year and a 10-year average of 95 per cent. Idaho—Winter wheat 97 per cent as against 99 per cent last year and a 10-year average of 96 per cent; rye 97 per cent as against 92 per cent last year and a 10-year average of 96 per cent. Montana—Winter wheat 94 per cent as against 93 per cent last year and the same for a 10-year average; rye 95 per cent as against 96 per cent last year and 95 per cent for a 10-year average.

## Portland Market.

PORTLAND, Ore., April 16.—Butter prices have been reduced 2 cents by local creamery men and the buying price of butterfat has been cut 3 cents. This brought down the price of cube butter. At the decline the market has become steadier with a better movement.

Eggs are sluggish, with receipts rather large, but prices are on a steady basis and the large handlers do not think the market will go lower.

Demand for poultry is very strong, as receipts are far under local requirements. Dressed pork is also higher. Veal is about holding its own.

Green produce jobbers expect to receive the first Walla Walla asparagus in a few days. Rhubarb from that point is more plentiful and has displaced the California article, selling readily at $2.25 a box. Walla Walla spinach is also in good supply and moving at $1.25 a crate.

The potato market is lifeless, with practically no sales in the country, where 60@75 cents are the nominal quotations. On the street Burbanks are jobbing in a small way at 75c@1 for No. 1 grade.

Between 500 and 600 bales of Oregon hops were sold in the latter half of the week at $15@16 cents and there was a fair demand for contracts at around 17 cents, but growers would not consider business.

All wool contracting has been halted pending the closing of the government deal in spot wools in the east.

In the following list of quotations the grain, hay, mill feed, hops, wool and hide prices are those paid to producers. The other quotations are prices from jobbers to retailers.

Oats—No. 2 white, $68 per ton.

Millstuffs—Bran, $30 per ton; shorts, $32.

Barley—No. 1 feed, nominal; brewing, nominal; rolled, $77@79.

Hay—Buying prices: Timothy, eastern Oregon, $29@30; alfalfa, $24@24.50; grain, $22.

Eggs—Oregon ranch, case count, 33@33½c per dozen; candled, 35@36c.

Poultry—Hens, 27@28c; stags, 22c; ducks, 32c; turkeys, live, 26@27c; geese, 20@21c.

Butter—City creamery, prints, 42@43c per pound; cubes, extras, 37½@38c.

Cheese — Tillamook triplets, 24c; Young Americas, 25c.

Dressed meats—Veal, 19c; pork, 22½@23c.

Hops—1916, nominal; 1917 crop, 15@16c.

Potatoes—Oregon, buying price, 65@75c.

Wool—Eastern Oregon, 44@65c; valley, 50@55c.

Beans—Buying prices: Oregon white navy and Lady Washington, 10¼@10½c; white kidney, 10c; colored, 9c.

## Seattle Market.

SEATTLE, April 16.—The apple season, so far as further shipments to this market are concerned, is practically closed. It is estimated that there are no cars excepting what has been sold for eastern account in Wenatchee, and a few at Yakima. Less than 20 cars, it is stated, remain unsold in the state. The cleanup has been about two to three weeks earlier than last year. Closing prices, Winesap basis, are $2 f. o. b. for 175s and larger, of which 10 per cent is to be 188s or smaller, to each car.

Butter, which threatened during the week to break, has strengthened perceptibly. California distributors are not as willing to ship as formerly, indicating that the surplus there to some extent has been marketed. Local production is barely sufficient to meet the demand. Much will depend upon what price condenseries name next Tuesday for the ensuing two weeks for sweet milk.

Oregon is shipping new cheese into this market. Western Washington manufacturers have been discussing resumption of business if the price of milk falls to or below $2.50 per hundred pounds, but actual operations have not yet been started.

### BUYING PRICES.

Unless otherwise stated the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots, f. o. b. Seattle:

Eggs—Local, 35c per dozen; eastern Washington, Oregon and Idaho, 33c.

Poultry—Spring roosters, live, fat, 2½ to 5 lbs., 26@27c; old roosters, 17@20c lb.; squabs, large, $3.50 dozen; geese, fat, live, 18c lb.

Butterfat—46c lb.; dairy butter, 30@32c.

Beef—Buying prices: Prime beef, steers, 11@16c; cows, fat, 9@11c lb.; heifers, 10@14c.

Hogs—Light, 18@20c lb.; heavy, 17@18c lb.

Veal—Fancy light, 13@19c lb.; heavy, 10@17c lb.

Hides—Salted, 14c lb.; flint-dry hides, 29c lb.; salt kip, 16c lb.; green hides, 11c lb.; green calf, 23c lb.; dry calf (under 6 pounds), 29c lb.; bulls and dry salts, 4c lb. less; green bulls, 9c lb. Clean, long wool, western Washington flint dry pelts, 39c per lb.; heavy to clean eastern Washington flint dry pelts, 30@35c lb.

### SELLING PRICES.

Feed—Scratch, $80 per ton; all grain chop, $77 per ton; oats, $76 per ton; rolled oats, $78 per ton; bran, $34 per ton; shorts, $33.50 per ton; whole corn, $79 per ton; cracked corn, $81 per ton; alfalfa meal, $36; rolled barley, $85 per ton; Milo maize, $75 per ton.

Hay—Eastern Washington timothy, $36@37 per ton; alfalfa, double compressed, $40@41 per ton; alfalfa, $29 per ton; Puget sound, $27@28 per ton; straw, $15 per ton.

Butter—Washington creamery extras, cubes, 43c lb.; do bricks, 44c lb.

Eggs—Fresh ranch, 40c dozen.

Potatoes—Puget sound, $17@20 per ton; eastern Washington, $18@25 per ton.

## Spokane Market.

### WHOLESALE.

**Vegetables**—Cabbage, $4@5 cwt; carrots, $2 cwt; bunch carrots, 75@90c doz; bunch beets, 75@90c doz; beets, $1.50 cwt; rutabagas, $1.75 cwt; parsnips, $1.75 cwt; hothouse lettuce, 60c 5-lb box; head lettuce, 80c doz, $2.75@3 crate; turnips, $1.50@1.75 cwt; bunch turnips, 75@90c; California new turnips, $2 cwt; red bell peppers, $1.25 box; chilli peppers, 25c lb; green peppers, 11c lb; Florida tomatoes, $5 6-basket crate; celery, $1@1.10 doz; hothouse cucumbers, $2 doz; cauliflower, $2.25@2.50 crate; new garlic, 10½@12½c lb; parsely, 40c doz bunches; horseradish root, 12½c lb; brussels sprouts, 12½c lb; radishes, 40c lb; brussels sprouts, barb, $2 box, 10c lb; spinach, $1 crate; asparagus, 15c lb; new peas, 15c lb; artichokes, $1.80 doz.

**Grapes**—California cluster raisins, $2.25 box, 20 packages.

**Onions**—California onions, $2 cwt; green onions, 40c doz bunches.

**Tropical Fruits**—Bananas, 6c lb; lemons, $7.50 case; Valencia oranges, $6.75@7 case; medium sweet oranges, $5@6.75; budded seedling oranges, $5.75@6.25 case; blood oranges, $3.25 half case; Florida grapefruit, $5@6.50.

### MEAT.

**Beef**—Beef steers, 17½@19¼c lb; cow beef, 16½@18c lb; heifers, 18½c lb; beef loin, 24@28c lb; steer chucks, 16½@17½c lb; prime ribs, 22@26c lb; rump and round, 19c lb.

**Mutton**—Breakers, 24@25c lb.

**Lambs**—26@27c lb.

**Pork**—Packer dressed hogs, 26@27c lb; pork loins, 29@30c lb; legs, 23c lb; shoulders, 24c lb; leaf lard, 28c lb; tenderloins, frozen, 35c lb; spareribs, 18c lb; country dressed hogs, with head on, 20c lb to producer; country dressed veal, 17c lb to producer.

**Smoked Meats**—Washington hams, 33c lb; T. C. hams, 34c lb; T. C. bacon, 45½c lb; Washington bacon, 40½@44½c lb; picnics, 23½c lb; Boston butts, 28½c lb; English bacon, 36½c lb.

**Star Brand**—Hams, 34@35c lb; Shield hams, 31@34c lb; picnics, 24½c lb; bacon backs, 33c lb; Star bacon, 46½@48½c lb; Shield bacon, 41@44½c lb; Simon Pure lard, $17.50 case.

**Dry Salt Meats**—Clear bellies, 30c lb; lean backs, clear, 29@31c lb; sides, 28½@29½c per lb.

**Lard**—Tierces, 27½@28c lb; $14.85@15.12 case; compound, tierces, 23@23½c lb.

### POULTRY.

**Live Poultry**—Live hens, large, 26c lb; small, 23c lb; roosters, 18c lb to producers, f. o. b. Spokane.

### GRAIN AND FEED.

**Rice**—Fancy head, $7.50@9.50 cwt.

**Flour**—Bluestem, $9.40; Blend, $9.40; Montana hard wheat, $10.40; graham, $8.60 bbl, 49-lb sacks; whole wheat, $8.80; eastern rye, $10.10; eastern rye meal, $10.30; oat flour, $13.10.

**Oats**—$74 ton whole, $76 rolled, delivered in city.

**Corn**—$77 ton; cracked corn, $79 ton.

**Bran**—$30 ton; shorts, $32 ton; bran and shorts, $31 ton.

**Barley**—Rolled, $71 per ton.

**Oil Meal**—$73 per ton.

**Hay**—Timothy, $32 per ton, $31 ton by carload; alfalfa, $27 ton, $26 ton by carload.

### GASOLINE, LINSEED OIL, ETC.

**Gasoline**—Red Crown, bulk, 24½c gal cases, 34½c gal; Shell, 24c; refined oil (Pearl), bulk, 13c gal, cases, 23c gal; eocene, 15½c gal in bulk, cases, 25½c gal; engine distillate, 15½c gal, bulk.

**Linseed Oil**—Raw, bbl., $1.68, case $1.86 gal; boiled, bbl., $1.70 gal, cases $1.88 gal.

**Turpentine**—Bulk, 65c gal; cases 85c gal.

**White Lead**—Strictly pure white lead in oil, ton lots, 11¾c lb; 50-lb lots, 12½c lb.

## Butter and Eggs.

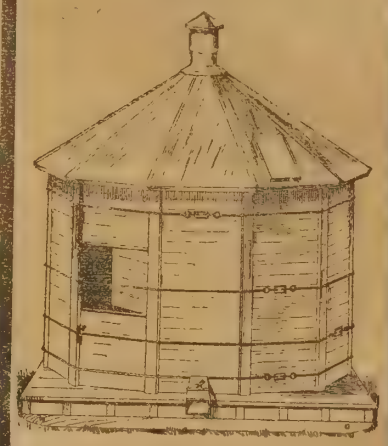
PORTLAND, Ore., April 15.—Butter prints—Extras, 42@43; cubes, extras, 38; prime firsts, 37; dairy, 29. Butterfat, Portland delivery, No. 1 sour cream, 41; No. 2 blank.

SAN FRANCISCO, April 15.—Butter, extra, 39@40 1-2.

Eggs—Fresh, extra, 39 1-2; firsts, 38; fresh, extra pullets, 37 1-2; firsts, pullets, 36.

Cheese—Young Americas, 26 1-2.


SHERMAN
Didn't
Hesitate



Bulk Your Grain

General Sherman did not hesitate when he realized what had to be done to win THAT war! Now, today, every farmer is faced with the same need for DECISION. Every farmer must win THIS war.

Weyerhaeuser Grain Tanks

will help you. They will save you labor, and labor is your gravest problem this year. Do not hesitate one moment—there is no question this year of the need and of the true economy of BULKING YOUR GRAIN.

**No carpenters needed to erect the Weyerhaeuser Grain Tank.**

Weyerhaeuser Timber Company

EVERETT, WASH.




WANTED--1000 tons of mixed country scrap iron

in carload lots of not less than 25 tons each. Write for prices if interested.

PACIFIC HIDE & FUR DEPOT.

Joseph Thiebes and C. T. Symmes.
1101-09 Railroad Ave., Spokane, Wash.

## HELP WANTED—MALE 3

WANTED — A FIRST-CLASS CHEESEmaker, to begin work May 1. Siletz Prairie Co-Op. Cheese Co., Siletz, Ore. Ralph Hamer, Sec.

## EDUCATIONAL 43

BEHNKE-WALKER, PORTLAND, NORTHwest's largest, finest business college, cannot supply half the calls for trained young men, women. Enroll now. Free success catalog. Positions secured.

## TEACHERS' AGENCIES 46

TEACHERS REGISTER WITH B. F. WESTmore, Mgr. Hazard Teachers' Agcy. $1 registers you at three offices. 911 Old Nat'l Bank bldg., Spokane, Washington.

TEACHERS NEEDED FOR NEXT FALL. Write for information. Clark Teachers' Agcy, 412 Ch. of Com. Bldg., Spokane.

## FRESH FOOD PRODUCTS 56

FISH! FISH!

100 LBS. SALMON IN BRINE, SHIPping weight 165 lbs., $11. Smoked salmon, 20 lbs. net., $3.25. Ask for fresh and cured price list. T. A. Beard, 4322 Winslow place, Seattle, Wash.

## HONEY, BEESWAX—Wanted. 58

SEND SAMPLES OF YOUR HONEY AND beeswax; state quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

## MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

Before building be sure and get our prices on sash, doors, finish, paints, plaster board, roofing, etc.

We will send you our large illustrated catalog, No. 27, free on request, post-paid.

Cottage glass doors .....$2.75 and up
8x panel doors .....$1.80 and up
20x24 2-light windows .....$1.63
One-ply roofing .....$1.35
Two-ply roofing .....$1.70
Three-ply roofing .....$2 10
3-ft., 4-ft. and 5-ft. cedar lap siding ...$8
Regular lengths .....$10
1x4 flooring, 3-ft. to 5-ft. .....$20
4-in. beaded ceiling, 3-ft. to 9-ft. .....$20

The largest factory in the west selling direct to consumer. We sell any one, ship anywhere, and guarantee safe delivery.

O. B. WILLIAMS CO.
1943 First Ave. So., Seattle, Wash.

BUILDING MATERIALS AT WHOLESALE prices — Doors, windows, roofing paper, porch columns, plaster boards. All building materials shipped promptly. Send for our complete illustrated catalogue; gives you lowest net prices. P. A. ROVIG CO., 2229 First ave., So., Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

## MISCELLANEOUS—WANTED 63

CASH FOR OLD FALSE TEETH; SOME worth up to $19.50 per set (broken or not). Send at once. We return cash same day we receive package. We pay highest prices for old gold jewelry, gold crowns, bridges, platinum, silver. (Cut out adv.) U. S. Smelting Works, 609 Caswell, Milwaukee, Wis.

POULTRY WANTED — THE FOOD ADministration permits the sale of poultry for market purposes after April 1. Send us your cream, poultry, dressed meats and hides. Commercial Creamery Co., Spokane, Wash.

## MACHINERY FOR SALE. 93

"WITTE" GASOLINE ENGINES
save labor, and are carried in stock by
HIGGINS MACHINERY COMPANY,
312 FIRST AVE. S., SEATTLE,
Write for Catalogue.

FOR SALE—1917 SELF-PROPELLED Holt harvester; good condition. Geo. A. Buehler, Ritzville, Wash.

## AUTOMOBILES 114

FORDS CAN BURN HALF COAL OIL, ALL distillate, or cheapest gasoline, using our 1918 Carburetor; 34 miles per gallon guaranteed; easy starting; great power increase; attach it yourself; big profit selling for us; 30 days' trial; money back guaranteed; styles to fit any automobile. Air-Friction Carburetor Company, 321 Madison st., Dayton, Ohio.

## STOVE & FURNACE REPAIRS 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

## HARES AND RABBITS 173

FLEMISH GIANT RABBITS—BREEDER of large stock only; correspondence solicited. Chas. L. Barnett. Box 284, Anacortes, Wn.

## POULTRY 174

300,000 WHITE LEGHORN BABY CHICKS —Bred for eggs, vigor, size. Safe arrival in good condition guaranteed. Free catalog and book on "Raising the Chicks." Oak Heights Poultry Farm, Route 3, Box T 67, Tacoma, Wash.

WHITE LEGHORN CHICKS FROM STOCK trap-nested for high egg production; safe delivery and satisfaction guaranteed. The Quivira Farm, Black Diamond, Wash.

BABY CHICKS.

Famous Carnation White Leghorn; vigorous, early maturing, heavy winter layers; also breeding stock. E. W. Raush, Carnation Poultry Ranch, Kent, Wash.

**This is the season of preparation on the farm. There's many a timely and practical suggestion on equipment, etc., to be gleaned from our advertisements these days. Read them.**

# Want Ads

**Want Ad Rates 30c Per Line**

Want ads are run at this rate in The Washington Farmer and i t s associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

**How to Figure Cost of Ads**

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

**Send for card giving lower rates for ads running one month or longer.**

## POULTRY 174
Continued.

BABY CHIX—WHITE LEGHORNS; NOT only bred to lay, but bred to live and thrive with the vigor and vitality necessary to make dividend payers bred into them by 15 years of breeding at the oldest established hatchery in the state; chix last half of May, $12; June, $10 per 100; delivery in good condition guaranteed. The Lakeside Poultry Farm, Roy, Wash.

HOGANIZED BABY CHICKS—THOROughbred White Leghorn chicks, hatched from Hoganized parent stock; April delivery, $14 per hundred; May, $13. Rhode Island Red and Barred Rock chicks all sold for April. Will book May orders for $17 per hundred. Safe delivery guaranteed. Established for ten years. Queen Hatchery, 89 Pike st., Seattle, Wash.

BABY CHICKS, WHITE LEGHORNS, CUSTomers say they are "husky," "lively," "vigorous," "healthy," "strong," "hard to beat," "thrifty," "great layers." Write at once. Free catalogue. Freshlaid Farm, Colfax, Wash.

BABY CHICKS—S. C. WHITE LEGHORNS; real mortgage lifters; the kind that lay while mere kiddies; 21 years on the job. Catalogue. I. D. Casey & Sons, R. 6, Waitsburg, Wash.

WHITE LEGHORN BABY CHICKS FROM heavy-laying (Hoganized) stock, $10 per 100. We guarantee safe arrival. The Pioneer Hatchery, 401 Sixth st., Petaluma, California.

PETALUMA HATCHERY—CAN SHIP DAYold chicks to points reached in 3 days. Why not have the best? We challenge the hen. Free circular. L. W. Clark, Petaluma, Cal.

WHITE LEGHORN EGGS $1.50 PER SETting; $8 per hundred. Special mating Pen-A, eggs 50c each; Pen-B, eggs 25c each. Waikiki Farm, R. 7, Spokane, Wash.

M. B. TURKEY EGGS, PUREST OF BLOOD, ten for $3.50. Choice B. P. Rock chicken eggs, 14 for $2. Safe arrival by express guaranteed. Effie Shepardson, Kelso, Wash.

SINGLE COMB WHITE LEGHORNS; THE world's greatest egg machines. Write for our "War Measure." Help Hoover win the war. Broadview Farm, Curlew, Wash.

ANCONAS: MY 12 YEARS OF SELECtion have developed great layers; fine shape and mottle. Eggs, $1.50 per 13. A. G. Propst, R. 6, Box 54, Albany, Ore.

S. C. WHITE LEGHORNS — PRESENT breeders avcraged 15 doz. each last season. Mated to high-record males. Hatching eggs. Mary Jessup, Cooks, Wash.

TOULOUSE GEESE, MAMMOTH PEKIN fawn and white Indian Runner ducks' eggs. Chas. Johnson, R. 1, Medical Lake, Wn.

S. C. RHODE ISLAND RED EGGS $2 PER setting; $10 per 100. Fertility guaranteed. Waikiki Farm, R. 7, Spokane, Wash.

BARRED ROCKS.

Nicely barred, and fine layers. Eggs, $1.50 per 15. Wm. Heimsoth, R. 2, Baker, Ore.

PARKS BRED-TO-LAY BARRED ROCKS, winter layers. Eggs, $1.50 for 15; $8 per 100. W. G. Neyland, Spokane Bridge, Wn.

S. C. R. I RED AND S. C. W. LEGHORN eggs, $1.50 to $5 per setting; $6 per hundred. Mrs. Rominger, Underwood, Wash.

TRAP-NESTED WHITE LEGHORNS AND Barred Rocks. Eggs, $1.50 per 15, $8 per 100. Mrs. W. M. Roberts, Elmira, Ore.

RANCH RAISED WHITE WYANDOTTES. Good vigorous birds, eggs and stock for sale. Jas. A. Hills, Jonathan, Wash.

FOR SALE — INDIAN RUNNER DUCK eggs, 15c each, from prize-winning birds. J. F. Medaris, Wapato, Wash.

SHOW WINNING STOCK AND EGGS. Barred Rocks, S. C. Leghorns, large. C. E. Dibble, Payette, Idaho.

PUREBRED BARRED ROCK EGGS FROM two year old hens, $8 per 100, $2 for 15. S. M. Wilson, Carley, Wn.

LARGE TYPE R. I. R. EGGS FOR HATCHing; ranch raised. Mrs. F. O. Gillett, King Hill, Idaho.

BARRED ROCK EGGS, $1.50 PER 15. August Anderson, Pullman, Wash.

BARRED ROCK EGGS, $2 PER 15. W. D. Good, Mt. Vernon, Wash.

## LIVE STOCK 177

FOR SALE.

MULHALL'S ANNUAL PUBLIC SALE OF SHORTHORNS

will occur at Lewiston, Idaho, on May 1, 1918. We are offering a useful lot of young bulls, cows and heifers with calves at foot, and rebred to our first prize and grand champion bulls. Apply early for catalogues and mention the Farm Trio.

WILLIAM MULHALL, FENN, IDAHO.

FOR SALE.

A choice lot of pure bred Shire stallions, coming two years old; also pure bred yearling Shorthorn bulls. Address
WILSON RANCH, ROCKLYN, WASH.

3-YEAR-OLD COAL BLACK REGISTERED Percheron stallion, weight 1750; sound as a dollar. Will sell at a bargain on account going to war. Write M. M. Dickson, 811 Nora, Spokane, Wash.

DAIRY FOR SALE—55 COWS, WITH good milk route in Portland and six-year lease on good farm. Write B 4, Oregon Farmer, Portland, Ore.

POLAND-CHINAS; BIG TYPE; SPRING pigs by Young Chief N. 79349, from good, rangy sows. James A. Hills, Jonathan, Wn.

HEAVY TYPE POLAND CHINA PIGS FOR sale. John Bushaw, R. F. D. No. 2, Anacortes, Wash.

## HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

## RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

## BUSINESS OPPORTUNITIES 516

$6500 BUYS A WELL-EQUIPPED DAIRY plant and business in a beautiful college town in So. Calif. Brings in about $400 per mo. For full particulars and terms write R. F. D. 1, Bx. 86, Yelm, Wash.

## PLUMBING, STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

## SEEDS 620



IF YOU HAVE ACCLIMATED SEED TO sell, it will pay you to advertise it in this classification. If you want to buy seed adapted to western soil and climate watch what is offered in this department.

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.,
Portland, Oregon.

NEW SEED CATALOG—COMPLETE LIST of Tested Seeds for Western planting. Write for your copy today—MAILED FREE. An experience of 25 years in the Northwest. Aabling-Boyce Seed Co., 89 Pike St., Seattle, Wash.

UNION SEED & FUEL CO., BOISE, IDA. Send for catalog. Compare prices on tested Idaho acclimated field and garden seeds. Complete line of poultry supplies and stock foods.

FOR SALE — 9000 LBS. OF BANGALIA seed peas. Seed recleaned and free from weevil. Price 8c per pound, f. o. b. Pullman, Wash. Address Roy W. Nash, Pullman, Wash.

WE SPECIALIZE IN TIMOTHY, ALFALfa, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Ida.

SOUDAN GRASS SEED; POPULAR drought-resisting forage plant, 30c per lb. Wm. Ritchie, Arlington, Cali.

BANGALIA FIELD PEA SEED, CLEANED, 8c lb., f. o. b. Spokane. Write W. A. Yeomans, R. 2, Mead, Wash.

ACCLIMATED SUDAN GRASS SEED; ALL hand-picked, 25c per pound. Ira P. Holcomb, Metolius, Oregon.

MIXED BLUE BELL PEAS, 5C PER LB. H. S. Smith, Coupeville, Wash.

## NURSERY STOCK 621

STRAWBERRIES FRESH FROM THE vine all summer and fall by getting from me the genuine Progressive Everbearing plants, $2.50 per 100, $1.50 per 50, by parcel post, prepaid; safe arrival guaranteed. Enclose money order or check with order. Act quick. Stock limited. A. N. Riff, 926 5th st., Bremerton, Washington.

## FARM LANDS—FOR SALE 651

CANADIAN WHEAT FARMS
ON CROP PAYMENT.

No. T. 391—320 acres; 3½ miles from Three Hills; school 2 miles; 300 acres tillable; 155 acres broken; 15 acres summer fallowed; 50 acres fall plowed; 5-room house; barn, 18x28, with leanto, 16x24; 2 granaries; creek; all fenced; 6 work horses, 3 milch cows, one calf, 6 hogs; full line of implements; 50 tons of hay; 50 head poultry. Price $43 per acre. $3000 cash, balance crop payment.

No. Y. 214—320 acres; 6 miles from Youngstown; practically all tillable; 117 acres broken; homestead improvements. Price $17.50 per acre. $500 cash, balance crop payments.

LINCOLN TRUST CO.

MAIN 1066 AND MAIN 2750.
Cor. Sprague and Howard, Spokane, Wash.

ONE OF THE BEST FARMS IN THE Boise valley, consisting of 131 acres, with free water right, fine soil, good buildings; on electric car line and state highway; 12 miles from Boise City, Idaho. Price $20,000, ½ cash, balance easy payments. Wm. G. Messersmith, P. O. Box 1206, Boise, Idaho.

## FARM LANDS—FOR SALE 651
Continued.

GOING TO MONTANA? GO WITH ME TO the famous Judith basin! Can show you some improved farms that will delight you. Money crops growing! Take your check book along so you can close on the spot! Delay means loss to you, as others are buying! Sample No. 175: 200 a.; 5 mi. R. R. and town; 2 to school; small bldgs.; mountain stream; a dandy for stock and mixed farming. $4600. Sample No. 176: 600 a.; ¼ mi. to R. R. and town; 310 in cult.; 210 more can be; good bldgs.; a combination stock and grain ranch which has made the present owner wealthy and he wants to retire. $26,400; ¼ down, bal. 5 years, 6 per cent. Have others, different sizes. Write me in advance when you can go, and I will arrange accordingly. G. M. Colburn, 904 Old National Bank bldg., Spokane, Wash.

A FARM HOME FOR YOU, WHERE crop failures are unknown; can be found in Eastern Washington, Northern Idaho and Northwestern Montana. In addition to the certainty of satisfactory crops and good markets, a fine climate makes life worth living; it never gets too hot or too cold. Write for our free folder, "A Farm Home for You." It gives you descriptions and prices of farm land opportunities in this favored country where you can get the benefit of the advance in values sure to come in a section that has rich soil, ample rainfall and splendid climate. Farm Development Bureau, 618 Chamber of Commerce bldg., Spokane, Wash.

PALOUSE LAND BARGAIN.
IN FREEMAN DISTRICT.

One-fourth mile from O.-W. R. & N. railroad station; 177 acres; 90 per cent practically level; all but 5 acres can be cultivated; fine buildings; lots of good fresh water; spring and two (2) streams; 20 acres in cultivation; 40 acres more ready for plow; this land was second choice in Coeur d'Alene Indian reservation. Price $6000. Terms. Absolutely the biggest bargain in the Inland Empire.

HOUSE & LAND ASSOCIATION.
514 RIVERSIDE AVE., SPOKANE, WASH.

LOOK HERE, MR. WORKMAN!
YOUR COUNTRY NEEDS YOU ON A FARM.

And we are offering you a 40-acre ranch at $25 per acre; 10 yearly payments; in the best agricultural part of Snohomish county; paved roads, railways, mills, factories, schools; plenty of work for the laboring man; the best proposition on the market for the man who wants a farm. Send for illustrated literature. BROWNELL LAND CO., 904 Third ave., Seattle Wash.

FULLY EQUIPPED STOCK RANCH
$2000 BELOW VALUE.

160 acres beaver dam land; all tillable except 2 acres; 80 acres in meadow; 5 head of horses, 8 head of cattle; all farm machinery; good 2-story house, barn, wagon shed, garage, blacksmith shop and other outbuildings; good well and creek. Price $5500; $4000 cash, bal. long time.

This is one of our many.

JAMES W. BOOTHE & CO.
510 FIRST AVE. SPOKANE, WASH.

IMPROVED IDAHO GRAIN FARM.

One of the best grain farms in west; 160 a. excellent land, all in cultivation; 40 a. in crop; 60 a. plowed for spring seeding; 60 a. in summer fallow; only 4 miles from Genesee; 1 mile to good school; A1 improvements; fine spring; possession November 1, 1918, with 1-3 this year's crops. $18,000. Attractive terms. C. F. Burr, Genesee, Idaho.

TWENTY-FIVE HUNDRED-ACRE WHEAT and stock ranch; western Canada; completely equipped; caterpillar tractor; thirty horses, cattle, hogs, implements, buildings; close to railway, schools and churches; settled community; telephone, rural mail, good roads; 1200 acres ready for drill. Price, $125,000; one-third cash, balance half crop payment. Western Canada Properties, Ltd., 401 Herald building, Calgary, Alberta, Canada.

FOR SALE BY OWNER—GOOD GENERAL purpose farm; near Polson, Mont.; close to P. O. and school; good running water; some timber, dark soil; adjoins open range; 640 acres in farm; 10 head cattle, 2 mares and 2 yearlings; all machinery. Only $13.50 per acre, part cash, bal. on time, 6 per cent. Address Lock Box 373, Polson, Mont.

MONTANA FARM LANDS.

Crop to buyer; 140 acres in this 360-acre bench land; fine soil and only few miles to depot, $35 per acre. Priced to sell quick; long, easy terms. Several other farms and irrigated tracts on crop payment terms. Some our own lands. Equity Realty Co., 104 First ave. S., Great Falls, Mont.

682-A. IMPROVED WHEAT FARM; SEVEN miles south of Hartline, Wash.; on Sunset highway; good land; all in cultivation except 15 acres; 300 a. in summer fallow; all fenced; large house, fine barn, good outbuildings; plenty water. Only $45 per acre. $6000 cash will handle. A. L. Tucker, Coulee City, Wash.

CULTIVATED CANADIAN WHEAT LANDS.

3000 acres ready for drill; in quarters, halves, or sections; every convenience; easy terms or crop payment. Final payment 1937. Where can you equal it? Western Canada Properties, Ltd., 401 Herald building, Calgary, Alberta, Canada.

GET A FARM IN TILLAMOOK CO., ORE.

Famous for its grass and cheese. My 167-acre farm for sale for $5000. $1000 cash will handle it; good soil, buildings; state road; out range. Address owner, W. W. Yates, Hebo, Ore.

FOR SALE, OR WANT PARTNER — 375 acre diversified farm, Columbia river. Your own price, time, terms. Partner to take full charge, as I am too old for active life. Drawer 6, Hanford, Wn.

ALL KINDS OF STOCK RANCHES WITH hay and grazing lands; irrigated bottom, acreage and terms to suit any buyer. Rosebud Realty Co., Rosebud, Mont.

ALFALFA, PLOW LANDS, HOP YARDS, orchards, business investments. Lum Land Co., North Yakima, Wash.

## FARM LANDS—WANTED 654

WANTED — TO HEAR FROM OWNER OF farm or unimproved land for sale. C. K. Hawley, Baldwin, Wisconsin.

## FOR SALE OR EXCHANGE 702

160 ACRES IN S. IDAHO; 80 ALFALFA; no rocks; heavy soil; water and buildings; 1½ miles to school and P. O.; trade for Washington or Oregon farm. Terms. Address P. O. Box 14, Stone, Idaho.

Back of the Vast Reputation for Sterling Performance of the

# CHEVROLET

Stands the Principle of

## VALVE-IN-HEAD

Motor Construction

*CHEVROLET "490" Touring Car $765 Pacific Coast Terminals*

*CHEVROLET Delivery Car $780 Pacific Coast Terminals*




Valve-in-head means responsive motor power.

There is no waste whatever. The gasoline vapor is introduced directly to the combustion chamber where the explosion takes place.

CHEVROLET passenger cars are bringing town and ranch so close together as to entirely eliminate all the inconveniences of out-of-the-city residence.

CHEVROLET light delivery cars have brought the market to the farmer's very barnyard. They are used for many purposes in farm work—and always they do their tasks like thoroughbreds.

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**Factory Branches at Spokane, Portland, Los Angeles and Oakland**

Dealers everywhere. Immediate deliveries.

# THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XLI. NO. 17. APRIL 25, 1918. ** WEEKLY.






# WAR NEWS

Battles of a magnitude hitherto unknown in the history of the world are being fought on the battle front in France. Every week new developments of the utmost importance are recorded. It is certain that the American army will play an important part in the big campaigns of spring and summer. You and your family will want to keep in close touch with what is happening at the front, and will also want to learn of what is taking place in our own country. Subscribe for

## *The Twice-a-Week Spokesman-Review*

This is a splendid semi-weekly home newspaper which brings you every Tuesday and Friday a complete, accurate, condensed review of local, national and world events. It gives you a reliable narrative of history in the making. Being a member of the Associated Press, the important happenings are flashed to it instantly from every capital and village, and from every far-flung battle line.

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***Twice-a-Week Spokesman-Review, 1 Year***
***The Washington Farmer 3 Years, Both for $1.00***

These are days of high and rapidly rising costs in the publishing business. Clubbing offers are rare. This fact makes the clubbing proposition of The Twice-a-Week Spokesman-Review with your state farm paper especially noteworthy. Our advice is not to delay but to accept this liberal offer at once.

### ORDER BLANK

April 25

THE WASHINGTON FARMER, Spokane, Washington.

Gentlemen:

I desire to take advantage of your special clubbing offer. Enclosed is $1 in full payment for one year's subscription to The Twice-a-Week Spokesman-Review and three years' subscription to THE WASHINGTON FARMER.

In Canada add 1 cent per copy for extra Postage.

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R. F. D. .....State .....

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**The Washington Farmer**

Review Bldg., Spokane, Wash.

EVERY farm that is speeding up food production as a war measure is entitled to a Farm Service War Flag. Every farmer, every farmer's wife and every farm boy or girl speeding up food production is entitled to a star of honor on the Farm Service War Flag. The Washington Farmer makes it easy for you to get the flag. Read announcement elsewhere.

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 17 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF April 25, 1918



# Ring the Bell With a Liberty Bond

## *Save the Blood of American Soldiers With American Dollars; Tomorrow Is Liberty Day*

Tomorrow, April 26, just one year and twenty days after the formal entrance of this country into the war, has been designated by President Wilson as Liberty Day. At the president's call there will be meetings of citizens in thousands of communities and cities throughout the land tomorrow afternoon, the object being to make it the red-letter day in Liberty bond subscriptions.

The first half of the campaign, taking the nation as a whole, did not appear as satisfactory as had been anticipated, the subscriptions received not exceeding half of the minimum total to be obtained, though the northwest has succeeded well. It is planned by the authorities in charge of the campaign to make a sweeping drive during the closing days with a view to securing a huge subscription over the $3,000,000,000 minimum planned for the issue. The following is President Wilson's proclamation setting aside tomorrow as Liberty Day:

"By the President of the United States of America:

"A PROCLAMATION.

"An enemy who has grossly abused the power of organized government and who seeks to dominate the world by the might of the sword challenges the rights of America and the liberty and life of all the free nations of the earth. Our brave sons are facing the fire of battle in defense of the honor and rights of America and the liberty of nations. To sustain them and to assist our gallant associates in the war a generous and patriotic people have been called upon to subscribe to the third Liberty loan.

"Now, therefore, I Woodrow Wilson, president of the United States of America, do appoint Friday, the 26th day of April, 1918, as Liberty day. On the afternoon of that day I request the people of the United States to assemble in their respective communities and liberally pledge anew their financial support to sustain the nation's cause. Patriotic demonstrations should be held in every city, town and hamlet throughout the land under the general direction of the secretary of the treasury and the immediate direction of the liberty loan committees organized by the federal reserve banks. Let the nation's response to the third Liberty loan express in unmistakable terms the determination of America to fight for peace, the permanent peace of justice.

"For the purpose of participating in Liberty day celebrations all employes of the federal government throughout the country whose services can be spared may be excused from 12 o'clock, noon, Friday, the 26th of April."

## Women of the Farm

You have had a bit of a heartache with all your pride as you saw that tall, husky farm boy of yours start off for the training camp. You have snatched the time from home duties for a day at the Red Cross headquarters, rolling bandages or making pajamas, that some mother's boy will wear during the weary days and nights in some hospital over there. You have reached down into the hiding place for your savings, and have taken out those hard-earned dollars from your savings to subscribe for the various war work that has called for help.

The government—your government—has sent out another call for help, the third Liberty loan appeals to you.

## Lend It or Lose It




—Birmingham Age-Herald.

## Big Job in a Big Way

With a big job which has to be done in a big way on its hands, the United States government will go to the farmers and stockraisers in the third Liberty loan for their help. To accomplish this the general executive board of the Liberty loan for the states of Washington, Oregon, Idaho, California, Utah, Nevada and Arizona, under orders from Secretary of the Treasury McAdoo, has created the agricultural division, with D. O. Lively, president of the California Practical Farmers' association, as director.

The other day a California farmer said to Mr. Lively: "We farmers are doing our part. Wheatmen, sheepman, cattle man, beanman, orchard man, all of us are doing our part to increase our production. Prices are high, but so are expenditures, and we are making no more than we did before the war. I don't see why the government should expect us to buy bonds."

"You are right," said Lively. "I'm a farmer and I know. But we farmers are no better than the men of our army and navy. The government has gone to them to lend their savings. And those soldiers and sailors came through with millions of dollars. Those soldiers and sailors who offered their lives when they donned uniforms didn't say, 'I don't see why the government should expect us to buy bonds.' No! They bought more than the government could, with fairness, sell them. And when you consider that the average pay of these boys who are giving up their homes and lives for their country is only $30 a month, we farmers haven't a leg to stand on in our plea that we are doing our part."

"You're right, Lively; I hadn't thought about it that way before. This is not a question of prosperity. It's just a question of lending what we have and can make to Uncle Sam. I don't see how I can afford it, but I'm going to subscribe for $1000 worth of bonds April 6, if I have to buy them on the instalment plan."

What Lively said to that farmer he wants to say to every rancher and stockraiser in the west.

He asks you, Mr. Wheatman; you, Mr. Stockman; you, Mr. Orchardist; you, Mr. Poultry man; you, Mr. General Farmer, to see your banker today about buying Liberty bonds.



# Federal Farm Loan System

## *Figures of the First Year Show Increasing Interest*

According to statistics compiled from the United States census bureau, farms of the United States are mortgaged for a total of $4,000,000,000. Probably a fifth of this stupendous sum is maturing yearly, so new mortgages must be written annually to an amount of $800,000,000.

The Farm Mortgage Bankers' association of America calculates that every minute of the day and night $418.56 in interest accrues on farm land debts in the United States. This is $25,114 every hour or $602,739 every day. This is for every day in the year, not excepting Sundays or holidays, and this daily payment would make $220,000,000 in a year, the annual interest on $4,000,000,000 at an assumed average rate of 5 1-2 per cent, which is probably under the real mark.

This gigantic business is still almost wholly in private hands, for the federal farm loan system, while showing gratifying growth, has only begun as yet to nibble at the country's farm mortgage loans.

That there is increasing interest in the system is shown by the statistics of operations. The first charter was granted to a federal land bank on March 1, 1917, and the first charter to a national farm loan association on March 27, 1917. At the end of the month of February, 1918, statistics showed that, since the system was started, 75,924 loans had been approved, to the amount of $154,054,349, and for the same period 28,495 loans had been closed, to the amount of $64,532,343.

In other words, the business actually closed in the first year of operation of the federal system amounted in principal to less than a third of the total annual interest payments made by farmers of the United States.

Or, considered in another way, the total of loans approved up to March 1, $153,054,349 (the approvals are always ahead of the loans actually closed), amounted to less than 4 per cent of the total volume of farm mortgages in the United States.

As we have previously pointed out, the greatest development of the federal farm loan system has been in the northwest, and according to the Wall Street Journal, the largest amount of loans has been made by the banks at Spokane. The smallest development has been in New England.

The cities in which the banks are located, with the districts they serve, are as follows:

Springfield—Main, New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island, New York and New Jersey.

Baltimore—Pennsylvania, West Virginia, Virginia, Delaware, Maryland and District of Columbia.

Columbia—North Carolina, South Carolina, Georgia and Florida.

Louisville—Tennessee, Kentucky, Indiana and Ohio.

New Orleans—Alabama, Mississippi and Louisiana.

St. Louis—Illinois, Missouri and Arkansas.

St. Paul—North Dakota, Minnesota, Wisconsin and Michigan.

Omaha—Iowa, Nebraska, Wyoming and South Dakota.

Wichita—Kansas, Oklahoma, Colorado and New Mexico.

Houston—Texas.

Berkeley—California, Utah, Nevada and Arizona.

Spokane—Idaho, Montana, Oregon and Washington.

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### Clawson Is Field Manager.

O. T. Clawson, who recently returned from a year's work in Brazil where he had been engaged by the Brazilian government on agricultural experiment work, has accepted the position of field manager of the Skookum Packers' association.

# Advisory Committee of Farmers

## *To Consult With Secretary Houston and Food Administrator Hoover*



A committee of representative citizens identified with agriculture in its various phases has been organized by Hon. D. F. Houston, secretary of agriculture, and Hon. Herbert Hoover, food administrator, to meet in Washington on call from time to time to advise with the department of agriculture and the food administration concerning agricultural and food problems as they arise. The first meeting was held on March 28. The members of the committee are as follows:

**Henry C. Stuart, Virginia.**

Henry C. Stuart is one of the leading farmers of Virginia; operates a tenant system and 35,000 acres of land. He is a cattle breeder and feeder and interested especially in the development of the live stock industry on southern cut-over lands of the coastal plains region. Mr. Stuart has served as governor of Virginia.

**W. L. Brown, Kansas.**

W. L. Brown is a wheat grower. He went to Kansas in 1876, proved a claim, taught school, and farmed. He has served for three sessions as a member of the state legislature. He was the first man in his state to enlist in the Spanish war, and raised a regiment and was commissioned as major. Mr. Brown is a member of the state board of agriculture and is on the executive committee of the State Cattlemen's association. He has had a wide experience in breeding of pure bred cattle and hogs, and his farming experience has also included the raising and production of many kinds of grains and fruit.

**David R. Coker, South Carolina.**

David R. Coker is one of the most successful farmers in South Carolina, and is especially interested in cotton growing. The long staple cotton developed by Mr. Coker now displaces 75 to 90 per cent of the short staple cotton formerly marketed in his county. He operates one of the most extensive seed and experimental farms in the south. He is president of a pedigreed seed company and operates a plant breeding, live stock and seed business. Mr. Coker is president of the South Carolina Plant Breeders' association. He is chairman of the South Carolina Council of National Defense, and director of the Richmond Reserve bank.

**Elbert S. Brigham, Vermont.**

Elbert S. Brigham has specialized in dairying and has developed an excellent dairy herd. He is also an extensive bean and potato grower, developing a special market for seed potatoes. For a number of years he has served as institute worker in Vermont, and during the last four or five years Mr. Brigham has been commissioner of agriculture for the state.

**Milo D. Campbell, Michigan.**

Milo B. Campbell is a native of Michigan, born in 1851. His chief vocation is farming and his specialty dairying. He is now president of the National Milk Producers' federation. He has held other public offices, and taught school.

**C. S. Barrett, Georgia.**

C. S. Barrett for several years has been president of the National Farmers' union, one of the largest farmers' organizations in the United States. He is an experienced and successful farmer and has long been identified in his state and in the south with agricultural progress.

**Eugene Funk, Illinois.**

Eugene Funk is one of the foremost producers of seeds in the United States. During the last several years he has conducted a seed business at Bloomington, distributing numerous varieties of seeds, but specializing in seed corn. He operates a large farm, and during the last two years has cultivated approximately 20,000 acres of grain and corn. He also is a feeder of cattle and hogs. He is ex-president of the National Grain association, charter member and president of the National Corn association, and a member of the Illinois Seed Corn Growers' association. He represented the producing interests in the preparation of rules and regulations for the enforcement of the United States grain standards act.

**W. R. Dodson, Louisiana.**

W. R. Dodson lives on his large farm near Baton Rouge, La. He is thoroughly informed regarding the cotton, sugar, rice, truck and live stock farming of the lower Mississippi valley. He received his university training at the Universities of Missouri, Michigan and Harvard. For many years he has been director of the Louisiana agricultural experiment station and dean of the College of Agriculture of Louisiana State university. He is a member of the State Council of National Defense.

**N. H. Gentry, Missouri.**

N. H. Gentry, farmer and hog breeder, has done a great deal to improve the Berkshire breed of hogs. His herds have often taken the blue ribbons at the International Live Stock exposition and at state fairs. He has represented the agricultural interests and especially the swine industry on many occasions.

**Wesley G. Gordon, Tennessee.**

Wesley G. Gordon is a successful farmer in Gibson county, Tennessee. He has demonstrated improved agricultural methods on his own farm, and with other leading farmers he has exerted an influence for the improvement of the agriculture of his county, especially in introducing crimson clover and other legumes. He is interested in live stock and general farming in his region.

**John Grattan, Colorado.**

John Grattan has been farming for the last 10 years near Broomfield, Colo. He is a cattle feeder and grain and alfalfa grower. Mr. Grattan is a member of the grange, the Farmers' union and a member of the board of directors of the American National Live Stock association and of the farmers' congress. Mr. Grattan was in the banking business near Medford, Okla., for four years, and during the last five years has been a member of the board of directors of the Stockyards bank at Denver, Colo. He has been editor of the live stock department of Ranch and Range, a Western agricultural paper.

**J. N. Hagan, North Dakota.**

J. N. Hagan has spent 17 of his 45 years in farming. He grows spring wheat on a large scale. In 1916 he was elected to the office of commissioner of agriculture and labor of North Dakota.

**Isaac Lincoln, South Dakota.**

Isaac Lincoln is one of the most prominent growers of special varieties of seed grains in South Dakota. On his large stock ranch of 1760 acres near Aberdeen he personally superintends the growing of choice stocks of wheat, oats, barley, flax, emmer and corn. He is a strong advocate of better quality grain and seed. Mr. Lincoln went to the Dakotas in the eighties and became the owner of large tracts of farm land. He has given much attention to forwarding the development of the country, particularly about Aberdeen. Mr. Lincoln is president of the State Savings bank at Aberdeen, and director of the Scandinavian-American National bank at Minneapolis. As vice president of the state fair he has been instrumental in developing it to its present successful status.

**Frank J. Hagenbarth, Idaho.**

Frank J. Hagenbarth is heavily interested in sheep and wool growing and in cattle raising. He has encouraged modern methods of range and forest development in the west. Formerly he operated large ranches in Mexico. For many years he has been president of the National Wool Growers' association.

**W. W. Harrah, Oregon.**

W. W. Harrah is known as one of the largest wheat growers in the Pacific northwest. He is a director of the Oregon seed stocks committee and has devoted much energy to increasing the acreage of wheat and distributing seed wheat. He is a director of a large terminal warehouse company of Seattle, a director of the Farmers' union grain agency of Pendleton, and a member of the Farmers' Educational Cooperative union.

**C. W. Hunt, Iowa.**

C. W. Hunt and his sons are engaged in general farming, but give special emphasis to swine production and cattle feeding. They produce large corn crops. Mr. Hunt has served in the Iowa state legislature and in other ways has been honored by his community and state.

**H. W. Jeffers, New Jersey.**

H. W. Jeffers is manager of a large and successful dairy enterprise, including several farms. On one farm between 400 and 500 dairy cows are kept for the production of high grade market milk. Alfalfa and potatoes are major crops. Recently he was made president of the Walker-Gordon Laboratory company. He is a member of the New Jersey state board of agriculture and interested in a broad way in all agricultural activities.

**D. O. Mahoney, Wisconsin.**

D. O. Mahoney is a farmer specializing in cigar leaf tobacco in Vernon county, Wisconsin. He has devoted much time to the organization of the tobacco growers in his state for the collective selling of their crops. He is a graduate of the University of Wisconsin, and has served the public in many ways. For several years he was county judge. He has been president of both the state branch and of the national organization of the American Society of Equity.

**David M. Massie, Ohio.**

David M. Massie is a business man with large farm interests. He gives much attention to practical farm questions, and is interested in agricultural problems in relation one to another and from a standpoint of their relation to other lines of business.

**William F. Pratt, New York.**

William F. Pratt is a successful farmer in western New York. He is engaged in general farming and has given considerable attention to feeding lambs. For a long period he has been an agricultural representative on the board of trustees of Cornell university. He is a member of the state farm and markets council.

**Oliver Wilson, Illinois.**

Oliver Wilson has been prominent for some time as a farmer, and especially as an officer of the national grange. He was editor in chief of the National Grange Monthly for many years. Prior to 1911 he filled the office of master of the state grange of Illinois, and was lecturer for the national grange. In November, 1911, he was elected master of the national grange, which office he has held since.

**C. J. Tyson, Pennsylvania.**

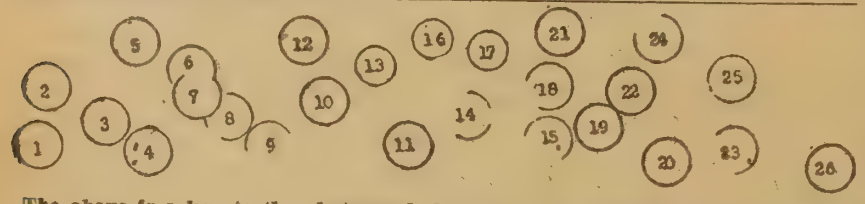
C. J. Tyson is widely known as a general farmer and fruit grower, specializing in apple production and marketing. For many years he was an active worker in the Adams County Horticultural society and the State Horticultural association of Pennsylvania, of which he was secretary for several years and president in 1914.

**Marion Sansom, Texas.**

Marion Sansom has been identified with the live stock industry in the southwest for the last 40 years as farmer, feeder and breeder. Formerly he was a live stock commission merchant. He is a director of the Federal Reserve bank, Dallas, Texas.

**George C. Roeding, California.**

George C. Roeding is a fruit grower, nurseryman and irrigation farmer. He has been especially active in the development of raisin, fig and olive production in California. Mr. Roeding is president of the agricultural society of his state.




**The above is a key to the photograph herewith, the numbered circles representing the members of the advisory committee in the positions in the photograph. They are:**

**1, David M. Massie, Chillicothe, Ohio; 2, Clarence Ousley, assistant secretary of agriculture; 3, H. W. Jeffers, Plainsboro, N. J.; 4, J. N. Hagan, Deering, N. D.; 5, F. R. Harrison, assistant to the secretary; 6, Marion Sansom, Fort Worth, Tex.; 7, C. J. Tyson, Floradale, Pa.; 8, Elbert S. Brigham, St. Albans, Vt.; 9, D. F. Houston, secretary of agriculture; 10, Oliver Wilson, Peoria, Ill.; 11, Henry C. Stuart, chairman, Elk Garden, Va.; 12, N. H. Gentry, Sedalia, Mo.; 13, Milo D. Campbell, Coldwater, Mich.; 14, Eugene Funk, Bloomington, Ill.; 15, Wesley G. Gordom, Humboldt, Tenn.; 16, Isaac Lincoln, Aberdeen, S. D.; 17, Frank J. Hagenbarth, Spencer, Idaho; 18, George C. Roeding, Fresno, Cal.; 19, W. R. Dodson, Baton Rouge, La.; 20, C. S. Barrett, Union City, Ga.; 21, C. W. Hunt, Logan, Iowa; 22, W. L. Brown, Kingman, Kan.; 23, R. A. Pearson, assistant secretary of agriculture; 24, D O. Mahoney, Viroqua, Wis.; 25, W. W. Harrah, Pendleton, Ore.; 26, H. L. Russell, U. S. food administration.**

**Not shown in picture: David R. Coker, Hartsville, S. C.; John Grattan, Broomfield, Col.; William F. Pratt, Batavia, N. Y..**

# Bee Handling Equipment

## *Smoker Is One of the First Essentials*

ARTICLE 3, BY GEORGE W. YORK.

Owing to an unavoidable delay in getting the illustrations that I wanted for use in this series of articles, I was compelled to use one or two cuts in the preceding articles that were not as desirable as might be. But from now on I will be able to have most of the pictures that I want.

**The Bee-Smoker.**

The cut of the bee-smoker shown herewith is one of the very best made. The hinged nozzle is a very great convenience, as it is not constantly falling off and dropping to the ground. It sometimes becomes rather hot, making



**A modern bee smoker.**

it hard to adjust were it not hinged to the fire barrel, which prevents the fuel from closing the opening or draft through which the air is forced by the bellows, which is worked with the hand when in use.

The fuel most commonly used in bee-smokers is such as will make the greatest amount of smoke—old rags, worn-out gunny sacking, or wood of almost any kind. The idea is to make a dense smoke, and not a blaze, as the latter, when blown on the bees, would singe their wings.

I would not think of handling bees, opening hives or anything connected with their manipulation without using a bee-smoker. While its usual price is about $1, I would not be without it even if it cost $5 or even $10. But in getting a bee-smoker do not make the mistake of getting a toy one, but be sure that the fire barrel is three or more inches in diameter, otherwise it will not hold enough fuel, and thus burn out too soon—go out at just the critical moment.

The original direct draft, and possibly the best bee-smoker ever invented, was the one made by the late T. F. Bingham of Michigan, as long ago as 1878. It is still manufactured in large quantities and sold all over the world, or wherever bees are kept.

By the way, one of the bee supply dealers some 40 years ago offered as a gift a fairly good bee-smoker to any beekeeper who was addicted to the use of tobacco if he would promise to discontinue its use. If he ever broke his promise and returned to the use of tobacco he was to refund the price of the bee-smoker. I think something like 20,000 of those bee-smokers were thus given away. Occasionally one of the recipients would go back to the use of the weed, and then refund the 50 cents, which I believe was the price of the smoker.

**Comb Foundation.**

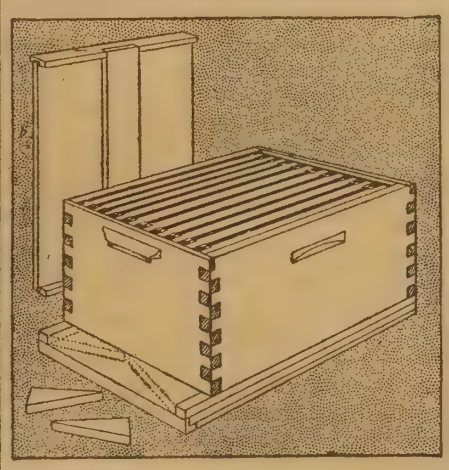
In the preceding article I mentioned the use of comb foundation, an illustration of which is shown herewith. This is made of pure beeswax, which by a patented process is rolled into sheets say about eight inches wide and any length desired. These smooth, long sheets are then run between metal rollers, not unlike a clothes wringer in appearance, except instead of the rolls being smooth, one roller has short metal pins sticking out of it, each with a blunt, six-sided end, and the other roller has depressions in it to receive the pins of the other roller. When the beeswax sheets are then run between the two rolls it comes out in appearance like the foundation or midrib of a honey-comb.

These waxen sheets are then cut into proper lengths to fit into the hive frames which hold the combs. Most modern brood frames are made with two sawkerfs in the under side of the top bar. One kerf is a trifle wider than the other, and the two are about a thirty-second of an inch apart. The edge of the comb foundation is placed in the larger kerf, and then a small wedge the length of the inside of the frame is pressed into the other kerf. The sheet of comb foundation is thus held firmly. Sometimes the bottom bar of the frame is made of two narrow strips of wood, between which the lower edge of the sheet of comb foundation is placed when nailing on the bottom bar. This, however, is not a common practice.

There are two kinds of combs in a beehive, one being what is called "brood comb" and the other "surplus-honey comb." The former is usually in the lower part of the hive, called the "brood chamber," as there is where the queen lays her eggs for the rearing of the brood to populate the hive. The other comb is usually above the brood chamber, in what is called a "super," which holds the little square boxes or "sections" in which is stored the honey that is sold in the market.

The standard brood combs, or frames, are 9 1-8x17 5-8 inches, outside measure, four of which are shown in the picture herewith; also the ends, which indicate how they are self-spaced by the end bars having projections near their tops, or being wider at the bottom. The spacing is thus very accurate, being 1 3-8 to 1 1-2 inches from center to center, which gives the proper space between the waxen combs.

The value of comb foundation to the bees is very great, though it usually sells at about 75 cents per pound. It not only aids the bees in building straight combs, but also saves them much labor, for they at once go to work to draw out their cells on both sides of the sheet on comb foundation in each frame. It also saves much honey, for honeycomb is all made out of honey which is used by bees in elaborating their wax for comb construction. It has been found by careful experimentation that it requires from eight to 10 pounds of honey for the bees to make one pound of honey-



**Dovetailed, or lock-cornered hive.**

comb. So it will readily be seen that comb foundation is both an economical and wonderful thing in practical beekeeping. It may surprise the uninitiated (but it is nevertheless the fact) to learn that hundreds of tons of beeswax are used annually in the manufacture of comb foundation in the United States alone.

**The Beehive.**

While bees would store just as much honey (and just as good and sweet honey) in a barrel or any old box, still



**Comb foundation.**

it is very desirable to use the modern beehive.

As mentioned in a preceding article, beehives are usually of the sizes taking either eight or 10 frames in the brood chamber.

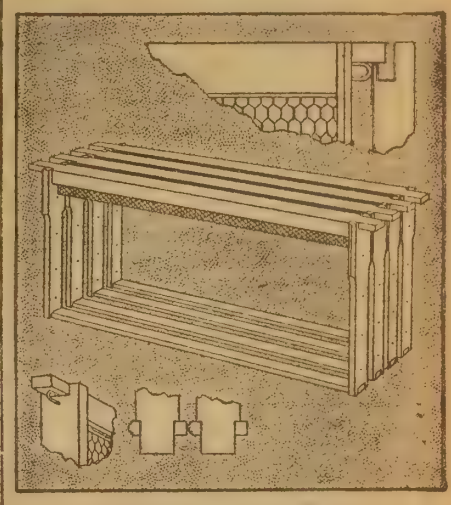
A complete hive consists of the bottom or floor board; upon it the brood chamber; above that the super for holding the surplus or commercial honey, and on that the hive cover. Around three edges of the bottom board are narrow cleats which raise the brood chamber say 3-8 of an inch or more, so that the bees can go in and out at the front, thus forming the hive entrance in a very simple manner.

One of the illustrations herewith shows what is popularly known as the dovetailed or lock-cornered hive. While it is not a true "dovetail," it does make a very neat and strong corner. Still, the halved-corner is also very good, and more easily made by the ordinary carpenter, or by the use of simpler machinery than that required to make the "dovetailed" hive corner.

The question is often asked if the amateur or beginner can not make his own hives just as well as to buy them from the regular bee-supply dealer or manufacturer. Yes, he can make them, but as all the measurements should be very accurate it is advisable to get at lease a sample complete hive ready made, as then, if the prospective beekeeper is something of an expert carpenter or cabinet maker, he will be more likely to make additional hives more nearly as they should be made in order to give the best satisfaction.

Referring again to the use of comb foundation, I may say that it is used both as full sheets and as narrow starters in the frames. Full sheets are better, as the bees will be more likely to build straight and even combs than if compelled to work downward in the frame from only a starter say an inch deep. And then, if only a starter is used, the bees might be inclined to build more drone-comb, which is very undesirable. Practically all comb foundation is made in worker cell size, so that the bees must go to quite a little extra work if they want to change it to drone size in order to rear the few drones that are necessary in a colony.

Let me add here that while I may be able to give the reader quite a few points in this series of brief articles, every one who desires to make a real success of the bee business should not only secure one of the standard bee books, but should also have one or more of the excellent bee periodicals that are issued monthly. Doubtless the publisher of the Oregon Farmer can supply you with whatever current bee literature you may desire. I can only



**Self-spacing brood frames.**

hope to "whet your appetite" for more information about bees and their profitable management. It is a wonderful subject, and also worthy of close investigation as well as actual practice, especially in these times of shortage of sugar.

Produce your own honey, and help lick the kaiser!

# Red Cross Bull $2035

## *Western Washington Holstein Breeders' Sale*

By PAUL E. TRIEM.

Abnormally high prices in the feed and labor market, together with the general uncertainty of all farming conditions, produced an unmistakable effect in lowering prices at the seventh semi-annual sale of the Western Washington Holstein Breeders' association, held in Kent April 17. This was the first sale held in the new home of the association, and aside from the drawback of extremely low prices for the grade of cattle offered everything went off in apple-pie order.

Colonel George A. Gue, the auctioneer, referred in his opening remarks to the difficulty of farming at a profit under present conditions, but predicted that with the closing of the war the tables would be turned, so that dairy farmers and stockmen would have all the advantage over those who are going into grain and hay exclusively. Colonel Gue explained the present price of hay by saying that government contracts have kept the market from breaking, even though there is much unsold hay in eastern Washington.

William Bishop, in his talk, referred to the old rumor that the association had been formed to dispose of the culls from the breeders' herds. As a matter of fact, the Chimacum dairymen explained, many of the breeders had stretched a point and had done more than could reasonably be expected of them in their determination to see that every patron of the sales was satisfied.

One of the amusing features of the sale was the unconscious attempt of a prominent West Side breeder to bid in one of his own heifers. When his attention was called to the fact that he was bidding on his own property he met the jokes which were leveled at him by commenting: "Well, I showed that I knew good breeding when I saw it, at any rate."

The Red Cross bull donated by E. A. Stuart was bid in successively by Carnation Stock farms, Hollywood farms, Mr. Fisher, Dr. Taylor, Mr. Keda and J. F. Benson, the last of whom retained the animal after it had brought the good cause a total of $2035.

The average for the sale was slightly under $250 per head, including the various sums received for the Red Cross bull. Francy Hartog, a grand young animal consigned by J. von Herberg and probably without a superior in breeding on the Coast, went to E. B. Marks of North Yakima for the bargain price of $675. This was the top of the sale, and apparently justified the comment of H. C. Davis of Granger.

"I don't know that I ever saw cattle of this class go so cheap," said Mr. Davis. "No, I don't pretend to understand it. When good grades are bringing $200 and better a head, I can't get at the logic of purebred cows like these going at these prices. It is true that it is difficult to make a profit on dairying at this time even with the best of cows—I have found that it costs me better than 70 cents a pound to produce butterfat on my farm, which is perfectly adapted for the purpose; but if it can't be done with purebreds it certainly can't be done with grades!"

**THE SALES.**

Canary Oak DeKol, No. 160084, born November 17, 1910; H. Zenkert, Renton, $200.

Jeannie Pontiac of Greenbank, No. 274311, born January 3, 1915; J. von Herberg, $300.

Mary Pledge Rag Apple, No. 345112, born February 17, 1914; J. C. Bush, Chehalis, $230.

Fay Pontiac Burke of Greenbank, No. 290512, born April 1, 1915; G. Weda, Kent, $205.

Star Hengerveld Cornucopia, No. 335907, born April 16, 1916; Thomas Yarr, $155.

Duchess Homestead De Kol, No. 139533, born September 9, 1909; Thomas McGee, $160.

Skykomish Belle, born July 25, 1916; John B. Mullen, $130.

Lady Marie Von Count Korndyke, No. 244036, born June 16, 1913, C. H. Fisher, $250.

Whatcom Elgin Beets, No. 244032, born November 7, 1912; John B. Mullen, $190.

Zozo Katherine De Kol, No. 294273, born October 29, 1914, G. Keda, $180.

Nudine Katherine De Kol, No. 394981, born January 9, 1917; John Binzzell, Clipper, Wash., $170.

Dame Pontiac Nudine Burke, No. 394979, born October 1, 1916; Charles Eldridge, Chimacum, $115.

Lady Marie De Kol Burke, No. 594980, born October 2, 1916; W. E. Harbert, Mount Vernon, $105.

Whatcom Elgin Burke, No. 340282, born February 10, 1916; G. Keda, $180.

Mondamin Pietertje Burke, No. 340281, born May 12, 1916; G. Keda, $200.

Donnybrok Nudine De Kol, No. 264443, born December 27, 1914; E. J. Rounds, Seattle, $355.

Laura Colantha of Donnybrook, No. 392164, born November 21, 1916; J. C. Bush, $180.

Jewess Johanna Mechthilde, No. 157921, born March 14, 1911; Mrs. F. C. Baker, Olympia, $340.

Schillaard Fayne of Donnybrook, born August 4, 1917; T. G. Bowen, $165.

Aaggie Fayne of Donnybrook, born July 20, 1917, J. C. Bush, $110.

Donnybrook Hariet Waldorf, No. 298041, born March 22, 1915; James Chamberlin, Ceres, Wash., $300.

Donnybrook Cornelia 2d, No. 298040, born March 22, 1915, H. Zankert, $205.

Ormsby Waldorf of Donnybrook, born May 23, 1917, John C. Chamberlain, $130.

Sophie Ormsby of Donnybrook, born May 13, 1917, J. C. Bush, $125.

Donnybrook Segis Fayne, born August 30, 1917, J. C. Paulsen, Stillwater, $110

Hollywood Bessie Howtje Fayne, No. 384872, born July 5, 1916, Carnation Stock Farms, $155.

Hollywood Spring Brook Elzevere, No. 460492, born November 18, 1916, Carnation Stock Farms, $200.

Hollywood Bessie Pearl, No. 295832,

(Continued on page seven.)

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We guarantee every subscriber against loss through dishonesty or swindle by any advertiser in this publication; we do not attempt, however, to adjust trifling differences between subscribers and honest, responsible advertisers, nor will we pay the debts of honest bankrupts. Complaints must be sent us within 30 days from the date of the transaction, and the subscriber must have mentioned The Washington Farmer when writing the advertiser. This guarantee applies to live stock, except that we will not be responsible for claims for damages on account of disease in stock sold through these columns.

## *Will We Be Blameless?*

Some day our boys will come back from France; but not all will return. Some will lie there forever, and all too many of those who do return will come home to America with mutilated bodies as a constant reminder of their high sacrifice to duty's call.



When that time comes can we search our conscience and say with an unfaltering voice and unfalling eye that we, too, did our duty, as best those left at home can meet their duty, to give them the support that is always due the men who fight and the men who fall in their country's cause? Shall we so fulfil our duties now that we can confidently say: "Blame not us that so many of your comrades lie in distant graves. Blame not us that you come home with grievous wounds."

When the war is over shall we be able to say, with serene conscience, to the mothers and fathers in mourning and the sisters and wives in brief: "All that was humanly possible to save your brave boys from death we have done faithfully and well."

Not unless we buy Liberty bonds to the last dollar we can afford to yield. Not unless we shall have responded to every call of the Red Cross. Not unless we shall have responded with patriotic fire to every authorized appeal that our government shall make.

An army that is not supported by its people at home is an army lost. Every dollar given to our country's call, every additional hour of labor given to the production of food, will tend to make our armies safer over there.

These are the times that test the souls of men and try the hearts of the women of this land. Let us so face our duty now that no bitter remorse will sup with us when this dreadful war is done and lie down with us at night to troubled sleep.

## *Use but Do Not Misuse Furlough*

By act of congress it is now possible to secure the furlough of soldiers in the training camps for farm work under certain conditions. Applications must be made by those desiring the service of the soldier or soldiers, and the local exemption board, and later higher authorities, must be satisfied of the justice of the application.

Where there is an actual shortage of labor this provision will be of much service. It should be used by farmers who need help. To allow acres to go unfarmed this season because of shortage of help when the work could be done through the temporary use of soldiers from the training camps would be poor economy.

But on the other hand, it would be equally poor economy to take soldiers from the camps unless their services were genuinely needed. Soldiers require training. They must have training of the most strenuous and persistent sort. Boys from the farm or elsewhere can not be transformed into soldiers in a day or a week or a month. Right now and for the next few months, at least, there is urgent demand for putting trained soldiers into the battlefields with the utmost speed. It is, therefore, an act against the best interests of the allied cause to withdraw a single individual from training unless there is actual need of his service on the farm.

## *Religion as Taught By War*

Major C. W. Gordon, better known to the world as the author of "The Sky Pilot," "Black Rock" and other books, has temporarily returned from the battle lines to his home country, Canada, and the United States to tell of conditions on the front and inspire those of us at home to do our utmost. He was a famous Canadian preacher of one of the orthodox churches, but he says that the experiences of war have wiped from his religious creed everything except two fundamentals: God and duty.

"As a man leaves behind him all superfluous baggage when he goes over the top and across no man's land, just so does the man when he goes into the vicissitudes of battle leave behind him all the superfluous baggage of religion and take with him just God and a profound sense of duty," I heard the major say as he thrilled the audience in a crowded Congregational church in Spokane.

Then he told a story. A young man, little known even in his home community, was in the trenches. A shell landed among his comrades, likely at any moment to burst and scatter death along the trench. The young fellow grasped the situation instantly, leaped upon the shell and hugged it to himself as it exploded. He saved his comrades, but gave his own life.

With a sweep of his hand toward heaven, Major Gordon brought cheers from his audience when he said:

"I care not what that young man's past may have been; I am willing to take my chances with the like of him before Almighty God."

F. W. C.

An army officer from one of the allied armies, a man who left a wife and six children at home to enter the service of his country, said recently: "We do not pray for our boys to be kept safe and brought back home to us. We want them back, but we have learned to pray only that they may be able to do their duty."

There's nothing so wonderful about it—it's just plain ability patriotically expressed—but travelers in Columbia county, Washington, report seeing two women in the fields, each driving a six-horse team on a gang plow. Isn't it true, after all, that women are equal to a greater number of emergencies than men?

A. B. Nystrom, county agriculturist for Lewis county, who is listing every man who can spare all or part of his time in food production, reports a hearty response from every town in the county. Close to 100 names have been secured in Chehalis alone, and four or five times that many are expected in the county.

The trial of more than 100 I. W. W. leaders on charges of disloyal conduct is opening in Chicago. Great difficulty is being experienced, according to reports, to get a jury to hear the cases. The trial will determine in considerable degree the future status of the I. W. W. propaganda in this country.

The war has thrown another opportunity before the women and girls of the land. They can now become rural mail carriers, and appointment of the first for this service has been announced.

Work—good, hard, manual labor—is one of the finest things for a man that can be given. Indulged in in moderation, it cures many of his bodily ailments, and it keeps his mind occupied and his hands out of mischief.

The day for any old seed planted over a great acreage is going fast. Selected seed that will produce more, perfect preparation of soil and thorough cultivation will lessen our work and increase our profits.

## *Washington Gleanings*

The Snohomish County Fruit Growers' association has decided to do a strictly cash business.

A farm of 320 acres, six miles east of Palouse, was recently purchased by S. I. West for $32,000 cash.

The W. V. Ewing farm of 480 acres west of Palouse has been purchased by Harry Linden for $48,000.

The annual picnic of the pioneers of Lincoln and Adams counties will be held this year at Crab creek, on June 18-20.

The Grays Harbor commissioners recently decided to build only needed roads this year, and invest the road money in Liberty bonds.

The old Slade homestead landmark, consisting of three acres, with its log house, near Lynden, has been sold to F. P. Cheney for $2000.

Plans are being drawn for a new high school in the Boisfort consolidated district near Klaber. The new school will cost between $15,000 and $20,000.

A new two-story warehouse and factory building that will cost with equipment $20,000, has been authorized by the Lewis County Canning association for the Chehalis cannery.

The milling plant of the F. M. Martin Grain and Milling company at Cheney was destroyed by fire April 14. The loss, including buildings, wheat, flour and feed, amounts to $150,000.

Governor Ernest Lister has appointed Joe Stingle of Spokane as chief deputy game warden for eastern Washington. Mr. Stingle succeeds R. B. Wales, who has held the office since 1913.

During the last year there has been an increase of 151 industrial plants in the state of Washington. It is also reported that there are 44,000 more men and 2500 women employes in the state industries.

At a recent meeting the Okanogan County Stockmen's association elected J. E. Ford of Oroville, president; Bert Hart, Chesaw, vice president; Hugh Miller of Riverside, secretary-treasurer.

A. G. Avery, head of the law enforcement division of the state food administration, has been appointed assistant to State Administrator Hebberd. He will be in charge of the office during Mr. Hebberd's absence.

Fire, supposedly set by incendiaries, destroyed a barn on the W. H. Gross farm near Walla Walla. The blaze destroyed grain, 18 horses and mules, two cows, several sets of harness, as well as hay and feed. The loss was about $10,000.

An appeal is to be made to the game commission of Thurston county to allow the soldiers to fish in that county without procuring regulation hunting and fishing licenses. Pierce county has permitted the soldiers the freedom of her streams and lakes for some time.

Three thousand bushels of choice seed wheat from the wheat belt of the Big Bend country has been distributed among the farmers of the Okanogan valley by one concern. Of this amount, practically 2800 bushels has gone to homesteaders on the reservation, which represents the planting of 3000 acres of land.

Canning operations at the Yardley plant of the Puyallup and Sumner Canning company in the Spokane valley will not begin before the middle of May, according to Sheldon B. Coon, manager of the plant. The first canning will consist of spinach, and the early fruits and vegetables will follow.

The stockmen of southeast Benton county have organized themselves into a protective association against stock rustlers. Although the stealing has not been so pronounced lately as a few years ago, nevertheless it is sufficient to demand action, and so cooperating with the county commissioners they are offering a reward of $500 for the apprehension and conviction of the cattle thieves.

Plans for completing the organization of the Lewis County, Wash., Dairymen's association, are in the hands of a committee, of which J. A. Scollard of Chehalis, Wash., is chairman. The report may be submitted before this is printed, the general idea being to formulate a plan by which the dairymen may have a voice in setting the price of milk and butterfat. Over 350 dairymen attended the first meeting and the prospect seems good for united action.

# Red Cross Bull $2035

(Continued from page five.)

born November 24, 1914, James Chamberlin, $285.

Hollywood Veeman Fayne, No. 381302, born June 28, 1916, Oliver F. Hartline, Tacoma, $160.

Hollywood Sunnyside Fayne, No. 328719, born June 12, 1915, John Binzzeli, $380.

Model Annie Snowball, No. 252190, born March 9, 1914, John T. Matson, Kent, $180.

Hollywood Segis Hengerveld 2d, No. 269719, born April 8, 1914, Peter Halkjar, Enumclaw, $250.

Hollywood Aaggie Peitertje, No. 370715, born April 20, 1916, John Binzzeli, $230.

Hollywood De Kol Hengerveld, No. 396238, born October 17, 1916, John B. Mullen, $120.

Hollydod Sita Palmyra De Kol, No. 388672, born August 17, 1916, Henry Lillisjo, Issaquah, $175.

Hollywood Bessie Genieve, No. 405718, born December 1, 1916, J. C. Bush, $125.

Sir Johanna of Lulu, No. 214490, born March 23, 1917, John Binzelli, $200.

Queen Hengerveld Gelsche, No. 284974, born June 4, 1915, Hollywood Farm, $275.

Bracelet Liscomb Posch, No. 126753, born November 9, 1909, Hugh Nesbit, Chimacum, $155.

De Kol Korndyke Queen, No. 200728, born February 24, 1912, J. H. Hulbert, Mt. Vernon, $250.

Rag Apple Princess, No. 282307, born November 14, 1913, T. D. Page, Kent, $235.

Carnation Wayne Segis, No. 208037, born December 27, 1916, R. Tomaka, Orilla, $200.

Daisy Johanna Netherland 2d, No. 283439, born June 2, 1915, Oliver Hartline, $275.

Hollywood Midnight Fayne 2d, No. 232430, born July 31, 1915, Hollywood farm, $200.

Bracelet Liscomb Posch 2d, No. 194703, born April 1, 1912, Samuel Hill, Seattle, $335.

Pearl Watson Canary, No. 192585, born December 7, 1912, J. C. Bush, $230.

King Korndyke Pietertje Pontiac, No. 127387, born April 24, 1912, T. G. Bowen, $560.

Violet Blossom Artis Cornucopia, No. 213139, born March 9, 1913, J. G. Peters and son, Dryden, Wash., $450.

C. K. K. S. V. Maid, No. 398124, born May 6, 1917, J. C. Bush, $175.

Chimacum Wayne Paul, No. 318129, Yarr Brothers, Crimacum, $125.

Chimacum Netherland Pietertje, No. 328334, born January 23, 1916, J. von Herberg, $320.

Sir Chimacum Lutscke Vale, No. 214980, born March 16, 1917, Henry Lillsjo, $180.

Miss Mutual Fobes Mooie, No. 295158, born September 31, 1915, J. H. Hulbert, $300.

Francy Hartog, No. 321937, born July 4, 1913, E. B. Marks, Yakima, $675.

Duke Mechtchilde Newman, No. 148452, born July 5, 1916, Alex. Fox, Tacoma, $155.

Starlight Segis Pontiac, born September 1, 1917, Carnation Stock farms, $205.

Queen Riverside Pietertje, No. 417677, born May 16, 1917, Carnation Stock farms, $205.

Laura Fobes Homestead, No. 124166, born November 14, 1908, J. A. Burnham, Enumclaw, $225.

Bonnie Nelson Queen, No. 177975, born February 2, 1912, E. J. Rounds, $305.

Inka Queen Susie De Kol, No 209696, born December 26, 1912, John B. Mullen, $200.

Aaggie Sena De Kol, No. 169772, born August 1, 1911, Alex Fox, $170.

Rose Segis De Kol, No. 135263, born December 18, 1909, T. D. Page, Kent, $230.

Hollywood Longfield Lilith, No. 330008, H. F. H. B., Hollywood farm, $245.

Hollywood Palmyra Aaggie, No. 334917, born February 6, 1916, Peter Halkjar, $230.

Red Cross bull, bid in by J. F. Benson, total sales $2035.

## SPRING WHEAT.

### Ten Per Cent Acreage Increase.

Spring wheat will show a 10-per cent increase in acreage in this state, according to State Grain Inspector P. J. Sweeney of Seattle.

The natural shortage of labor has been overcome in part by the use of tractors and the state will attempt to produce a record-breaking crop.

It is estimated this state has on hand 4,000,000 bushels of last year's crop as compared with 10,000,000 bushels of old wheat on hand at the same period last year.

### Control of Smut Explosion.

The harvesting season in the wheat areas of eastern Washington will be preceded by a series of meetings at 14 wheat centers, given over to lectures and illustrated talks on the control of smut explosion by representatives of the United States department of agriculture and the state college, as follows: Walla Walla, April 27; Dayton, April 29; Pomeroy, April 30; Pullman, May 9; Lacrosse, May 10; Colfax, May 11; Rosalia, May 13; Oakesdale, May 14; Garfield, May 15; Tekoa, May 16; Waverly, May 17; Ritzville, May 20; Palouse, May 21; Uniontown, May 22.

### Topping Bull Sales.

A news item from Chicago says that to the Pacific northwest has come the honor of "topping" the annual bull sales of the American Aberdeen Angus association held this year at St. Louis, Chicago, Sioux City, Omaha and St. Joseph. Not only did Knight of Rosemere, a great show bull of the Congdon and Battles herd of the Yakima Valley sell for $1000, but his younger brother, Knight of Rosemere 2d, brought $900 and his still younger brother sold for $650. The $1000 bull went to Iowa, the $900 to Tennessee and the calf to Texas. Mr. Battles declares after a tour of the southwest that "never has the opportunity for good, purebred Aberdeen Angus cattle been so promising." Congdon and Battles again will show two herds of breeding cattle around the fair circuits of the northwest and east. They will also, for the first time, fit some steers to show farmers and stockmen the finishing qualities of the breed.

### What's the Use?

What's the use of growling about it? You don't like a growling puppy.


# HELP WIN THE WAR

Add to the food production of your country—thereby doing your patriotic duty and at the same time making for yourself a legitimate profit.

Cut-over lands in the upper Columbia river valley offer a wonderful opportunity at this time.

Excellent railroad facilities; good roads; schools; an abundant market right at home; and every advantage that could be desired. Unexcelled for diversified farming or for stock.

We can sell you tracts of any size you wish at extremely low prices and on terms that any industrious man can meet.

Write for descriptive booklet and full information.

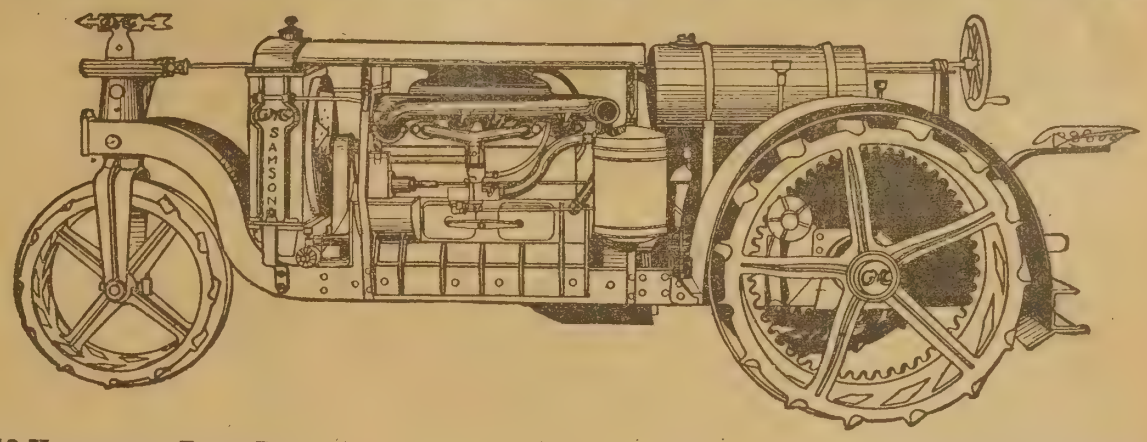
**THE FRED B. GRINNELL COMPANY**

SPOKANE, WASHINGTON.

C. E. ALLISON, Local Agent. Northport, Washington.


In answering advertisements please mention this paper.


# THE SAMSON TRACTOR




12 Horsepower Draw Bar. 25 Horsepower Belt

## What Constitutes a Successful Farm Tractor?

Isn't the ability to operate successfully and economically under the peculiar condition under which it must work, after all, the real test?

Fritz Benz of Toppenish has replaced 16 horses with his Samson.

Clarence Young of Chehalis plows at a cost of 25 cents an acre for oil and gas.

Gus Johnson of Mt. Vernon plows with two 16-inch bottoms at a less cost and with greater speed than he could with teams.

Grant Clarence of Goldendale finds his Samson lowest in price of work done, and better adapted for his work than any other tractor.

Guy Hudson of Port Stanley uses his Samson to pull a road grader for the county, taking the place of eight horses.

These are only a few examples of the ability of the Samson Tractor to operate successfully under different conditions in the Pacific Northwest.

SAMSON TRACTORS are operating successfully on the sandy farms of Eastern Washington, the hills of Walla Walla county, on the reservation and irrigated land of Yakima county, down in Klickitat county, near the Columbia River, in orchards of Chelan county, in gumbo soil of Lewis county, peat land of Skagit, marshes on Lopez Island, and under almost every conceivable condition to be met in Washington, Oregon, Idaho, or California.

***Samson owners are carrying the Great Northwest through to a glorious victory over waste, inefficiency and shortage of Labor.***

***Owners everywhere, and not one record of dissatisfaction.***

Write for literature today. It won't obligate you a bit, and we know you will be interested.

**Eldridge-Buick Company**

**Seattle Spokane**

TEAR THIS OFF AND MAIL TODAY.

ELDRIDGE-BUICK CO.
Seattle, Spokane.

Please send me your monthly magazine, without charge or obligation, telling how Samson Tractors are making money for their owners.

Name .....

Address .....

Acreage .....

# Ask The Washington Farmer Any Question You Like

The Washington Farmer's free information bureau is a unique public service institution of the widest scope.

Summed up in a phrase, the object is to tell you, without charge, "whatever you want to know."

You are urged to consider the possibilities of this service in regard to your own problems—personal, household or business.

There is no limit to the number of times you can call on the bureau for service.

There is no charge of any kind, and all inquiries are held strictly confidential.

The sole requirement is that you enclose a 3-cent stamp for return postage on your query.

The special pamphlets and bulletins that are advertised from time to time require only a 2-cent stamp for return postage because they are sent unsealed.

The maintenance of this bureau, having all the great resources of the federal government to draw upon, for the free use of its readers is only another expression of The Washington Farmer's conception of rendering real public service to its patrons.

You have only to try this service once and you will depend upon it thereafter.

Here are a few samples of questions and answers:

**Where should I ship trench candles?**
Answer—The Red Cross officials state that they are not shipping any more trench candles to France, as they have not proved satisfactory.

**Are women accepted as rural mail carriers?**
Answer—Yes, the postoffice has just made this ruling as a war emergency measure. The first examination will be given on April 27.

**How many members of congress are foreign born?**
Answer—Ten, as follows: Julius Kahn, Germany; Adolph J. Sabath, Austria; Niels Juul, Denmark; P. P. Campbell, Nova Scotia; Knute Nelson, Norway; S. H. Durkker, Holland; Meyer London, Russia; Joseph McLaughlin, Ireland; George F. O'Shaunessy, Ireland, and Edward Voight, Germany.

**What is the best way to send money to France?**
Answer—The postoffice department says that the best way to send money to soldiers abroad is to purchase a domestic money order and have the postmaster make it out to the United States Army Postal Service, American Expeditionary Forces.

Do not address your letter to Spokane. Send your question to

**THE WASHINGTON FARMER INFORMATION BUREAU.**
**WASHINGTON, D. C.**

# College Boys Take Dairy Show Prizes

The efficiency of the dairy department of the Washington State college in training students in the science of dairying was demonstrated at the recent dairy products show at Yakima, when students representing the state college teams won seven out of 13 prizes offered for proficiency in judging dairy cattle and butter. The winnings included three out of four first prizes offered for teamwork, two of the three first prizes for individual judging and $75 out of $150 offered in cash prizes. Three teams competed in the judging, that of the Oregon Agricultural college, the University of Idaho and Washington State college.

Professor M. O. Maughan was coach of the team which won first in judging dairy cattle. The team was composed of R. W. McKenna, C. A. Phillips and H. M. Wivell.

G. M. Hinman of the state college was high man in individual judging. Mr. Hinman scored 477 out of a possible 500 points, leading the second highest man by 42 points.

In the butter-judging contest a team composed of George Steele, Fred Burmaster and William Wieck, coached by Professor G. D. Turnbow, won first prize, Mr. Burmaster also winning the prize as high man in the individual butter judging. The following is a list of the prizes won by the teams representing the state college:

**Team Prizes.**

First prize, banner—Dairy cattle judging team.
First prize, banner—Short-course judging team.
First prize, cup—Highest combined score of collegiate and short course butter-judging teams.

**Individual Prizes.**

First prize, $25—G. M. Hinman, collegiate butter judging.
First prize, $25—Fred Burmaster, short-course butter judging.
Second prize, $15—H. M. Wivell, dairy cattle judging.
Third prize, $10—R. W. McKenna, dairy cattle judging.

## Tacoma Poultry Association.

At the twenty-ninth annual meeting of the Tacoma Poultry association, held recently, the following officers were elected: Henry A. Durr, president; John White, vice president; Charles B. Staples, treasurer; Harry H. Collier, secretary. Directors, Fred A. Johnson, Charles B. Staples, John White, Sam F. Hawkins, A. H. Miller, E. R. Ninman, J. H. Erlanger, A. Hartley and H. A. Durr. The meeting adopted the dates for the annual shows that have been used for the last 10 years, the full week that follows the Christmas holidays. The dates will be December 31, 1918, to January 4, 1919.

## New County Agents

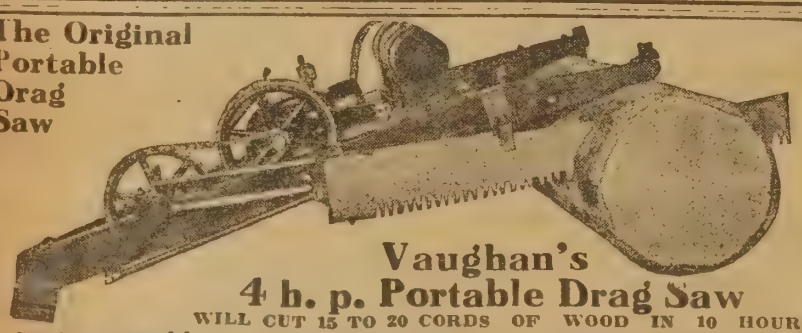
T. L. Kennard began his duties as county agent for Whitman county March 13, with headquarters at Colfax. Mr. Kennard has been superintendent of the University of Minnesota northwest experiment station at Crookston for the last three years. For three years prior to this he was professor of agronomy at the University of Idaho.

G. S. Ray, professor of agronomy at the University of Idaho, has been appointed county agent for Adams county, where he has begun his work. Ray is a mature man and has had valuable experience in dry farming in Wyoming and Colorado. He is a graduate of the College of Agriculture, University of Colorado.

William Meikle has recently been appointed county agent of Chelan county. Mr. Meikle has had extensive experience in practical horticulture in the Chelan district. He is a graduate of the State college of Washington, 1912, where he completed the course in the science of horticulture.

**What Is the Reason?**
Why is ocean water salty?


**The Original Portable Drag Saw**



**Vaughan's**
**4 h. p. Portable Drag Saw**
WILL CUT 15 TO 20 CORDS OF WOOD IN 10 HOURS

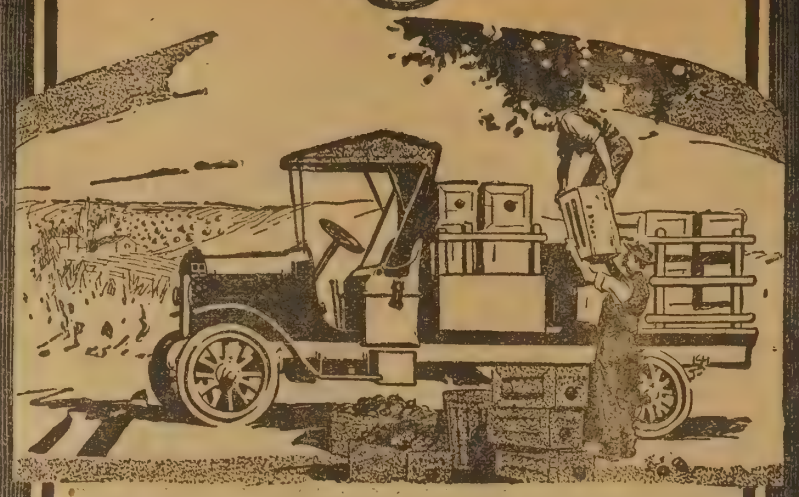
Can be operated by one man. Two men can carry complete machine. 4 H. P. gasoline motor mounted on frame. One gallon gasoline required to cut 8 to 12 cords of wood. Engine can be used for other work without removing from frame. No gears, cogs, belts or pulleys. Friction clutch prevents breakage if saw pinches. Saw makes about 125 strokes per minute. Will cut any size log up to 6 feet. Sprockets and cranks, etc., made of cast steel. All working parts guaranteed against defects in material and workmanship.

Net cash price for complete machine as shown in cut, $160 f. o. b. Spokane and common points. FOR SALE BY

**Washington Machinery & Supply Company**
8122 Monroe. SPOKANE, WASHINGTON



NASH



QUICK AND ECONOMICAL TRANSPORTATION

# Nash Trucks Save Your Time

Moving loads about the farm, or between farm and town, in the busy fruit season, Nash trucks save your time.

Equipped with M & S automatic locking differentials and internal gear drive rear axles, they also have many other mechanical features which enable them to speed up your hauling and reduce its costs.

Because of the automatic locking differential, the Nash truck's drivin g wheels cannot spin. This saves fuel, saves tires and allows the Nash truck to get through where other trucks without this important feature cannot go.

The unusually strong internal gear drive axle is not only much lighter and simpler than others but delivers more power to the wheels, especially at low engine speeds.

Our transportation expert will be glad to tell you which Nash truck will best serve your purpose.

| | |
|---|---|
| One Ton Chassis | $1495 |
| Two Ton Chassis | 1875 |
| Nash Quad Chassis | 3250 |

*Prices f. o. b. Kenosha*

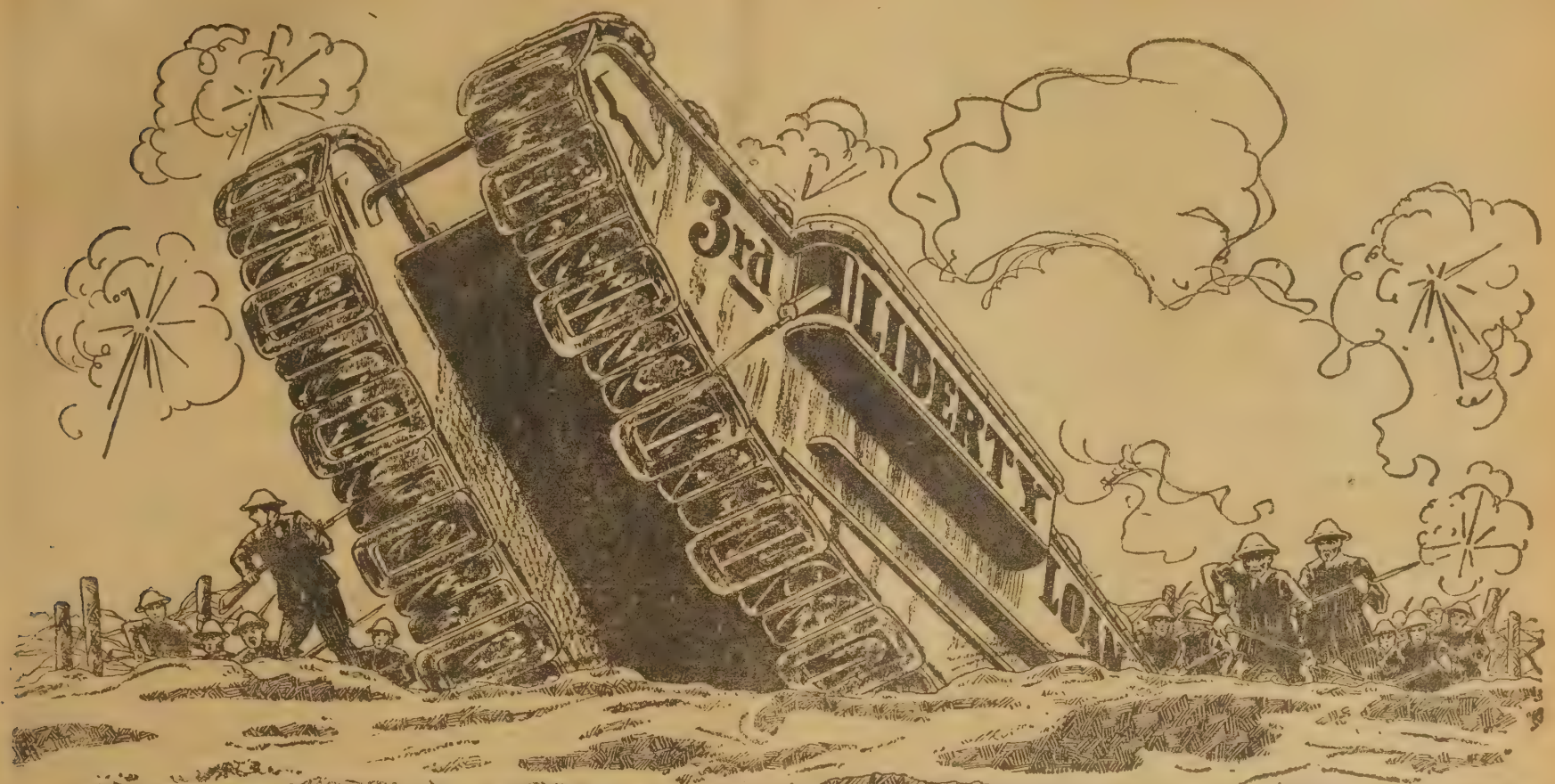
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*Manufacturers of Passenger Cars and Trucks Including the Famous Nash Quad*

**CHILCOTT-NASH MOTOR CO.**
921 East Pine, Seattle, Wash.
DISTRIBUTORS.
For Washington, Oregon, Northern Idaho, Western Montana and Alaska.

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VALUE CARS AT VOLUME PRICES (707)




# —put it over!

# N-O-W!

America calls for two billion more dollars in the Third Liberty Loan. With three billion practically assured, the cry comes from across the sea for more men, more money. Our allies are at bay before the terrible onslaught of the Hun!

Washington has done splendidly, but Washington must do more. Washington must not let her own record in the Second Liberty Loan stand—the Third MUST BE GREATER.

Germany's foes need help as never before. Dollars NOW will DO the work that hundreds of dollars might FAIL to do later. Washington's response has been wonderful—but a new goal has been set—five instead of three billions. WE MUST NOT FAIL!

This comes right home to YOU—you who are reading this page now. It means that the money you have put into Liberty Bonds must be only a starter, if you are to hold this freedom that means more to us Americans than life itself. If you have bought a $50 bond in this drive, go down in your pocket for another, and yet another. If you have bought a thousand $50 bonds, you still have not done enough.

If you have bought no Liberty Bonds—and have two hands that will earn you the money to pay for them—then something's the matter with your patriotism, with your Americanism.

This drive is only beginning. America wants twenty million citizens to be holders of Third Liberty Bonds. That is 300,000 for Washington.

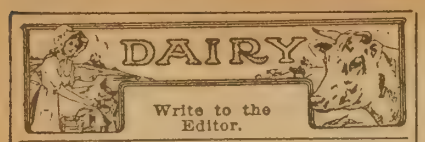
Where do YOU stand?

**WASHINGTON LIBERTY LOAN COMMITTEE**

J. A. Swalwell, Chairman. Central Building, Seattle.

# Buy a Liberty Bond TODAY

This page gladly contributed to the Third Liberty Loan cause by Col. Roland H. Hartley, Everett, Wash.




A. B. NYSTROM, Editorial Contributor

# Calf Feeding

1. Feed three times daily the first week.

2. Keep the calf a little hungry rather than to overfeed.

3. Be regular in time and manner of feeding.

4. Make changes in the ration very slowly.

5. Absolute cleanliness as to pails and quarters is a necessity.

6. Allow the calf plenty of exercise out of doors and access to dry, warm quarters.

7. Keep the calf growing constantly. A. B. N.

## RAISING CALVES

### Some Substitutes for Milk.

There is really no good substitute for milk to be obtained at any price. This fact has recently been proven by scientists, though practical feeders have thought so for years. But supplementary feeds can be found that will cut the cost of raising calves materially. Aside from the patent calf meals on the market the following home mixed feeds can be fed to advantage if used by a careful feeder:

**Mixture Number 1.**

Low grade flour .....16 2-3 pounds
Whole flaxseed meal ...33 2-3 pounds
Linseed oil meal .....50 pounds

Directions: Take 2 1-2 pounds of the mixture as a daily allowance for each calf. Scald with boiling water. Afterward add more water so as to make two gallons. Add a little sugar and salt before feeding.

Begin to add a little of this mixture to the whole milk when calf is two weeks old; gradually decrease the milk and increase the substitute until complete change is made. This should take from 10 days to two weeks. Weak calves must have a little of the milk for two or three weeks longer.

**Mixture Number 2.**

22 pounds ground oat flakes.
10 pounds flaxseed meal.
6 pounds flour middlings.
11 pounds fine corn meal.
1 1-2 pounds blood meal flour.
1-2-pound salt.

Directions—Make a gruel by adding three and one-half to four ounces of the mixture to each quart of water. The meal is first stirred with a little cold water to get out the lumps and to convert it into a paste. A quart of boiling or very hot water is then added and the mixture thoroughly stirred and allowed to stand until luke warm, in which condition it should be fed. Begin to feed at two to three weeks of age, making the change very gradually, as with mixture No. 1.

It takes milk to make strong, healthy calves, but very good results can be obtained by substituting a part of the milk with one of the above mixtures. A. B. N.

# Milking

## Some Points to Be Remembered

By L. T. HALL.

Here are some points to remember in handling milk cows: If you want a gentle cow to milk, never let her suckle her calf. This prohibition has two advantages: First that the cow is not apt to learn to kick, and second that the calf will not afterward have to be weaned. Be gentle with a cow always, but especially just after calving when the udder is apt to be tender.

Watering the cow just before milking will tend to make her let down her milk. Warm water is better for this purpose then cold. Also, before beginning to milk, give the cow her feed, then wash and massage the udder. Do not let your head touch the cow lightly, as this will cause switching. Milk high up on the teat, as the end are always tender. Keep your finger nails trimmed, unless you wear rubber gloves or merely strip.

Now as to feed: Barley causes an increase in the milk flow, but not in its richness. Corn, mangles and oil meal (the last to be fed but a tablespoon to each cow) go to form cream. In addition to these feeds, the cow needs roughage, such as hay and alfalfa. Kale has a tendency to flavor the milk unpleasantly, and acorns and pumpkins to dry up the milk flow. A little salt should be fed each day.

A cow will milk sooner if not bred too soon after calving.

Above all, feed plenty and see that the cow gets all the water she needs, warm if possible in cold weather.

## COWS FOR FARM.

### Kind That Requires No Coddling.

R. M. McKoy of Cheney, Wash., says that no "fancy" cows need apply for admission to his farm. Mr. McCoy thinks the somewhat-better-than-average cow which the somewhat-better-than-average farmer usually manages to secure is after all the best for his purpose, as she requires no coddling.

Mr. McKoy is very sure, also, that the man who studies cattle rather than the individual members of his herd is making a serious mistake.

"In my orchard back east," he comments, "I used to know what every individual tree needed, what its peculiarities were, and what it could be depended upon to do. Cows have got to be handled in the same way. We've got to know them as individuals, not as a herd.

For his own use, Mr. McKoy favors the dual purpose Durham, as he feels that farming built around animals of this type has more adaptability than straight milk or beef farming.

## One Quart of Milk.

Dr. Rosenaw of Harvard university says that the actual food value of one quart of milk is equal to three quarters pound of beef, two pounds of chicken, eight eggs, or two pounds of codfish. Each of these costs more, to say nothing of the time, labor and fuel required in preparation. A glass of milk costs about 2 3-4 cents in Corvallis today. The food value of that glass of milk is equal to two large eggs, or a large serving of lean meat, or two moderate sized potatoes, or five tablespoons of cooked cereal, or two tablespoons of cooked rice, or two slices of bread. In other words, a meal consisting of one glass of milk and two slices of bread gives you as much food value as you would get out of four eggs.




# IF COWS COULD TALK

"Good morning, Mrs. Fawncoat. I hear that all the cows in the county are joining the 'Win-the-War' Club."

"Yes, Mrs. Starface; Secretary of Agriculture Houston says we must increase the production of butter-fat, and we cows have all promised to do our 'bit.'"

"There's one thing I want to say right now," spoke up Mrs. Black. "The farmers have got to back us up in this movement. I'm with the rest of you, heart and soul, but what chance have I got?"

"Why, Mrs. Black, what's the matter? You have a fine warm barn and plenty to eat and drink."

"Yes, I know; but what can I do as long as they use that old cream separator on the place? It never was any good, anyway, and now it wastes so much cream I'm just plain discouraged."

"Well, you're not so badly off as some cows, where they haven't any cream separator at all."

"I don't know about that. There's a lot of cream separators in this county that are only 'excuses'—not much better than none at all. I tell you, Mrs. Fawncoat, with butter at present prices and the people at Washington begging every one to save fat, it's almost a crime to waste butter-fat the way some of these farmers do."

"That's one thing I'm thankful for," said Mrs. Fawncoat, "there's no cream wasted on this farm. We have a De Laval Cream Separator and everybody knows that the De Laval is the closest skimming machine."

"Well," said Mrs. Starface, "we never used a De Laval on our place until last fall and supposed one separator was about as good as another; but, honest, the De Laval is the first cream separator we've ever had that gave us cows a square deal."

P.S. Of course your cows can't talk—but if they could you'd never have a moment's peace until you got a De Laval Cream Separator.
Remember that a De Laval may be bought for cash, or on such liberal terms as to save its own cost. See the local De Laval agent, or if you don't know him, write to the nearest De Laval office as below.

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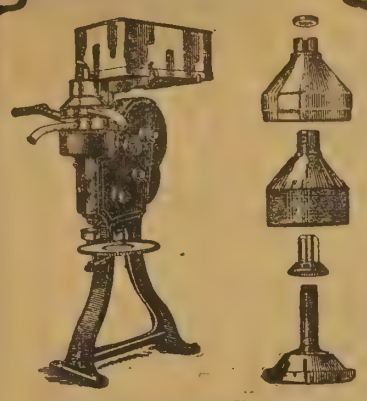
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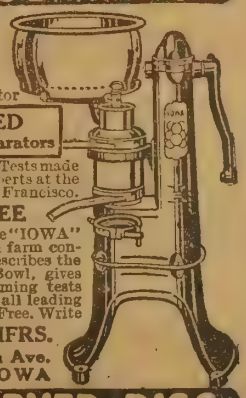
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In answering advertisements don't fail to mention this paper.

## Profiteering

### Hoover Penalizes Swift & Co.

Will H. Hays, the new chairman of the republican national committee, declared in recent public addresses in the Pacific northwest that "there is too much profiteering in this country and not enough volunteering."

Food Administrator Hoover evidently agrees with Mr. Hays, for he is after the profiteers with a sharp stick. In a single day he penalized 21 bakeries in New York city, closing them outright for three days, and on the same day he penalized Swift & Co., the big packers, for even buying eggs from a profiteering dealer. His findings in the latter case are as follows:

"There is no evidence in the case to establish that Swift & Co. themselves profiteered, but while they may not themselves have profiteered they bought 12 carloads of storage eggs from a profiteer at a price which they knew gave the seller an unreasonable profit, and with full knowledge that the food administration had ruled that the profit, and therefore the price, was unreasonable. By making the purchase they assisted the seller to profiteer.

"They evidently thought that the responsibility was upon the party who made the excessive charge, and not upon the party who paid it; but in as clear a case as this we shall not hesitate to penalize both parties.

"We, therefore, approve the findings of the federal food board of New York, and order Swift & Co. to suspend all dealings in eggs in New York city for the 30-day period beginning midnight, April 10, 1918, with such exceptions only as the federal food board may deem necessary in the interest of the public.

"They are further ordered to apply to the purchase of Liberty bonds of the present issue a sum equal to the margin between the price paid for the eggs and their average selling price without allowance for expense, and to turn over the Liberty bonds to the New York chapter of the American Red Cross, furnishing to the federal food board the chapter's receipt for the same, accompanied by the usual certificate that this contribution is not to affect in any way their future contributions to patriotic or charitable purposes."

## Spokane Interstate Fair

The 25th anniversary week of the Spokane Interstate Fair and Live Stock Show will open on Labor day, Monday, September 2, 1918, and close on Saturday night, September 7. The fair is putting forth every effort to cooperate with the United States government war aims in every way. The boys' and girls' club work will occupy a most prominent place on the program for fair week. The main building will be devoted entirely to the automobile show, while the woman's department, which has occupied the balcony of the main building for many years, will be installed in new quarters in the large hall at the north end of the grandstand. The premium list has just been issued and can be obtained by addressing the secretary of the Spokane Interstate Fair, Spokane, Wash.

### Enjoys Bee-Keeping Articles.

To the Editor: I wish to congratulate you "firstly" and the readers of the Farmer "secondly" upon your completing arrangements with George W. York of Sandpoint, Idaho, for a series of articles on beekeeping from his pen. I have been personally acquainted with Mr. York for a number of years and can assure your readers that his articles will be practical, pointed and profitable to those who accept and practice the advice in them cotnained. His experience as an apiarist, as well as having been editor and publisher of the American Bee Journal for a number of years, particularly fits him to write this series. E. W. PEASE.
Cove, Ore.

### More Wheat in Japan.

Japan is now making efforts to increase her wheat acreage greatly; also to build ships for carrying Japanese and Australian wheat in the Pacific trade.

**Cheerfulness Under Fire.**

"What's for breakfast, Bill?"

"Well, if we 'ad heggs we might 'ave 'am and heggs, except we ain't got no 'am!"—Passing Show.




*What Hoover wants is full-grown stock, beef, fats, hides.*
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No Need to Feed Milk

when you feed LILLY'S Calf Meal. It is distinctly a milk substitute, having all the necessary elements for calf nutrition.

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LIVE STOCK NOTES

Write to the Editor.

E. J. IDDINGS, Editorial Contributor

# Cull Potatoes

## Cook Them and Feed to the Pigs

By E. L. POTTER.

We have often discussed the feeding of cull potatoes, but feel it desirable to again mention the matter since there are large quantities of potatoes in the northwest which must be used within the next few weeks, or they will rot. Grains of all kinds are very scarce and high priced just now, and potatoes may, to a certain extent, take their place.

Potatoes could entirely replace corn or wheat or barley were it not for the fact that fattening animals can not eat enough of them to make good gains. For exampe the amount of water needed by a fattening pig weighing from 100 to 200 pounds is about 12 pounds a day. Sixteen pounds of potatoes contain 12 pounds of water and four pounds of dry matter. This four pounds of dry matter lacks about three pounds of being enough as the pig will need about seven pounds. The deficiency must, therefore, be made up with grain since the pig can not consume enough potatoes to meet his needs. Breeding stock, however, do not have to be fed so heavily and may not need grain in addition to the potatoes.

On account of their very low protein content potatoes must be supplemented with some protein feed such as skim milk, butter milk, tankage, oil meal, or alfalfa pasture. The value of such supplements is very great with the grain and is much more imperative with potatoes.

Potatoes require cooking to give their best results, and in that way differ from all other common feeds since other feeds have their digestibility lowered by cooking. Potatoes not only have a higher nutritive value when cooked, but are more palatible and may be fed in larger amounts without scouring. Experimental tests show that six pounds of raw potatoes are equal to one pound of grain, while four pounds of cooked potatoes are equal to one pound of grain. Cooked potatoes may be fed at the rate of five or six pounds of potatoes to one pound of grain to fattening pigs, while with raw potatoes not over two or three pounds should be fed with one pound of grain.

Steaming is generally considered the best method of cooking, although this is not well proven. If boiled in water just as little water as possible should be used. Some feeders say that the water in which potatoes are cooked should never be fed, but should be poured off. This water, however, contains a little nutrient value and it has been used extensively without bad results. It would therefore seem poor economy to waste it. Where no steaming facilities are available potatoes may be cooked in a scalding vat, in a kettle over an open fire, or if in not too large amounts in any large vessel on the kitchen stove. If only a very few are available it may be better to use them only in small amounts and to feed them raw.

Grain or mill feed may be mixed with the cooked potatoes, but the grain should not be cooked as cooking lessens its digestibility.

## CONCENTRATE MEALS

### Comparison of Different Kinds.

To the Editor: Please tell me something about concentrate meals. How do they compare? Any information will be appreciated.—G. B.

There are several concentrates offered in the form of meal, such as soy bean meal, cottonseed meal, lineed oil meal and cocoanut meal. The first of these is not plentiful on this market. The second is produced in the south, but has been sold and used to some extent in the northwest. Linseed oil meal has been manufactured in the northwest and is very common. Cocoanut meal, formerly marketed in San Francisco, is now available in the northwest.

Of the three which are marketed in the northwest, the following may be said: Cottonseed meal is the highest in protein; however, some animals do not like it and it must be fed cautiously. Linseed oil meal has great value, which is well known to all experienced livestock men. It is a concentrate of much worth, having a high protein content. It has a laxative effect also, which most concentrates do not possess. Cows relish it with other feeds. Cocoanut meal, which is the ground meat of the cocoanuts after the oil has been extracted, is favorably reported wherever it is used as a dairy feed. No reports have been made to us on other stock so far. It is fairly high in protein and has the advantage of being relished by animals. It has been used for a number of years near San Francisco, and reports there were to the effect that it was a good dairy feed, producing butter of great firmness. It is also reported that this latter concentrate is about the only one on the local market at present.

The following table may be of interest, although it must be said that even correct analyses do not tell the whole story, as the highest protein feed may not bring the greatest results if stock does not eat it with a relish:

| | Crude Protein | Carbohydrates | Fat |
|---|---|---|---|
| Cottonseed meal | 37.6% | 39.9% | 8.2% |
| Linseed oil meal | 33.9% | 44.1% | 7.5% |
| Cocoanut meal | 20.9% | 56.5% | 8.1% |

These percentages are taken from Henry's Feeds and Feeding.

Prices vary so that quotations are of no value. Inquire of local dealers.

—H. H. B.

### Horse Needs to Be Hardened.

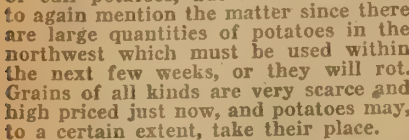
"A good many people don't seem to realize that a horse needs to be hardened before you start him into full work in the spring," said W. L. Sheard, of Dayton, Ore. "Right now my horses can't do a full day's work without being pretty stiff and sore, so I break them in gradually, and after a while they will be fit and hard and can do twice as much. I also think we can economize on feeding somewhat without doing any harm to the animals. When I come in from the field I give hay first and let them chew on it for, say an hour; then I feed them oats and I feed less. I think I get more benefit from the oats in this way. The horses can get all the nutriment from the grain and there is less waste, so with a smaller measure I get the same returns."

### Argentine Meat-Packing Plant.

Some months ago a group of Patagonian capitalists sought and obtained a concession from the Argentine government to establish a packing plant in Rio Grande, in the territory of Tierra del Fuego, the southernmost district of the republic. The plant was to furnish a market for the stock of the sheep and cattle owners of that district, and to stimplate the growth of the industry there. The company organized, brought in the necessary machinery, and commenced at once on the construction of the plant itself. On February 20 operations were begun with the killing of 10,000 animals.

### Girl Mail Carrier.

Billings, Mont. has its first girl mail carrier. Miss Genevieve Olson, 18 years old, has been assigned to rural free delivery route No. 3, which is 30 miles long. Miss Olson has a horse and buggy, as well as automobile.

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Dealers all around here carry it in 10c. pouches. A 3c. stamp will put it into his hands in any Training Camp or Seaport of the U. S. A. Even "over there" a 3c. stamp will take it to him. Your dealer will supply envelope and give you official directions how to address it.

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1576 Wazee Street Denver, Colo.

# Veterinary

Dr. S. B. Nelson

**Liver Trouble in Ewe**—I have just lost a valuable registered Shropshire ewe six years old. She began to lose flesh about two weeks ago, eating less and less and finally quit eating entirely. When I opened her there was a quantity of fluid the color of urine in her surrounding the intestines. Her liver was three times the normal size and full of little yellow lumps. The gall bladder was three times too large. Otherwise I saw no signs of disease. What was her disease and is it contagious? D. S.
Gales Creek, Ore.

The ewe died without doubt from the liver trouble with which she was affected. As to what the specific disease was this could not be determined without a bacteriological or pathological examination. If possible I suggest that you send a specimen of the liver to the veterinary department of either or both the Oregon Agricultural college or the State College of Washington, who would be glad to be of service to you if they can.

**Pigs Suffering From Worms**—I have 17 pigs from three to four months old. There are four among them that are stunted, anyway they are not one-half of what the rest are in height or weight. Their hair stands straight from them, although they are round and fat. Can you give me a remedy for it? E. T.
Siletz, Ore.

It is quite possible that the little pigs may be suffering from worms. I suggest that they be placed in a pen by themselves, starved for a meal, and then each one given about three to four grains of santonin with three grains of calomel. This may be well mixed with feed and the pigs turned in and allowed to drink it. The next day give each one about an ounce of castor oil in the swill in the same way. Then try to give them a little extra feed such as half a pound of grain for every 25 pounds of body weight per pig.

**Collie Has Mange.**—I have a fine Scotch collie pup that is about eight months old and is a fine stock dog, but has the mange so bad it keeps him busy scratching. He has sores all over his body. I have tried different remedies, but nothing has cured him. Could you give me a remedy that would cure him?—J. C. V., Frances, Wash.

Mange is a general term for several parasitic diseases affecting dogs. One of them is a fistular form and is a very difficult one to treat, I am sure. The best suggestion that I can give you is to send your dog to the veterinarian hospital of the State College of Washington and let them treat the animal for you, provided that you have not a veterinarian any nearer than that you can employ. Write to Dr. E. N. Wegner, veterinary department, State College of Washington, and he can give you details.

**Pimples on Udder**—I have a young cow that has been fresh for about eight weeks and about two weeks ago I noticed a large pimple or boil on her udder and since that time more have appeared until now they are all around between the teats and some are coming on the teats. They first are large pimples and hard, then they keep getting larger. I have been putting carbolated vaseline on boils after milking and also am giving one teaspoonful of sulphur in her feed twice a day. She is getting plenty of rye hay at night and bran and shorts at milk time. What is the best thing I could do to relieve her of the trouble?—M. D. M., Almira, Wash.

Although I am not quite clear as to what you mean by large pimples or boils, yet your general description rather fits in with cowpox affecting the cow's udder. I recommend the washing of the udder with a 2 per cent solution of lysol before and after each milking. Then apply to the pimples a small quantity of benzoated oxide ointment after each milking. To aid in reestablishing the circulation around the pimples it might be well to give the cow one and one-half pounds of epsom salts in about three to four quarts of water.

**Pigs Were Dead.**—I had a sow farrow last night, having six live pigs, and then six dead ones. It appears the dead ones were matured, yet had been dead some little time. The sow has had plenty of hay and mangles, runs at large and had plenty of exercise all winter. She is an old sow and in good condition when bred. On March 5th I started to feed potatoes which I bought of sortings from a spud buyer. Some were rotten and some got frozen the night I brought them home, but were put in the cellar. Can you tell me what the trouble is?—L. C. B., Rigby, Idaho.

No, I can not tell you what the trouble was. The feeding of the potatoes, depending on the quantity, might have had something to do with death of half the litter.

**Medicine Burned Horses**—Last spring I purchased a certain manufactured application for the prevention of gnats and mosquitoes and put it on my team according to directions. It burned the horses so bad that I could not do anything with them for close on to two months. They were so badly swollen that it was almost impossible to get them to water and back. It affected them between the front legs and one horse on the hind legs. They are not healed entirely yet. The sores don't seem to stay healed. They heal a bit and then break open. The horses are stiffened considerably from the effects. What would you advise me to do? H. S.
Spirit Lake, Idaho.

Apply a small quantity of the ointment of oxide of mercury to the part morning and evening.

**Cow Has Night Sweats**—I have a milk cow that has night sweats. She is giving milk and holding up in good shape. She stands on a barn floor every night in a warm barn. I feed her alfalfa hay, shorts and bran. What can I do for her? E. J.
Moscow, Idaho.

There must be some specific cause for the cow having peculiar night sweats constantly. The night sweats are symptoms, or the result of disease. I suggest that you consult one of your local veterinarians, and he will probably find out what the trouble is and give you advice to remedy it.


CATERPILLAR
Reg. U.S. Pat. Off.

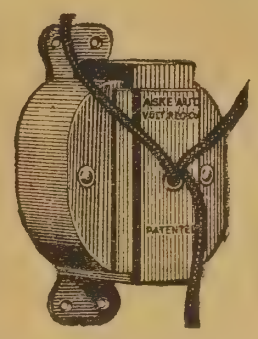
We Hope You Have Bought Your
**Third Liberty Bond**

We are devoting our efforts to Liberty Bonds this month and buying liberally ourselves and urging every one else to do likewise.

Yours for a cheaper harvest.

**The Holt Manufacturing Co.**
Spokane






POLICE DEPARTMENT LIKES THE ASKE.

We are "tickled to death" with the Aske Regulator; it's worth its weight in gold to all Ford owners.—Joseph A. Lee, Police Department, Hall of Justice, San Francisco, Cal.

This is but one of the many testimonials received.

*Why*

Every Ford Owner Wants
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Bright Lights at All Speeds

The "ASKE" $5.00

The only patented device on the market guaranteed to continue the operation of one light without increased voltage should one light burn out.

"The Aske" is a safety necessity—for on rough roads at slow speed you can have bright lights.

For regulator and tail light diagram. With dimmer, $6.

Play safe—"Ask for an Aske."

**Get Your "Aske" Now—Play Safe.**



ASKE INSTRUMENT BOARD

The Aske Instrument Board is highly finished in black enamel—complete with flush type dustproof clock, dimmer and push and pull switches, which are standard with the higher priced cars, and wired with the best lighting cable cut to lengths for installation; also rear lamp adapter for converting oil lamp into electric.

Aske Dual Lighting System adds beauty, utility and distinction to your car, decreases steering wheel vibration, eliminates all lighting and starting trouble and gives a wonderfully efficient system.

ELECTRIFY AND BEAUTIFY YOUR FORD

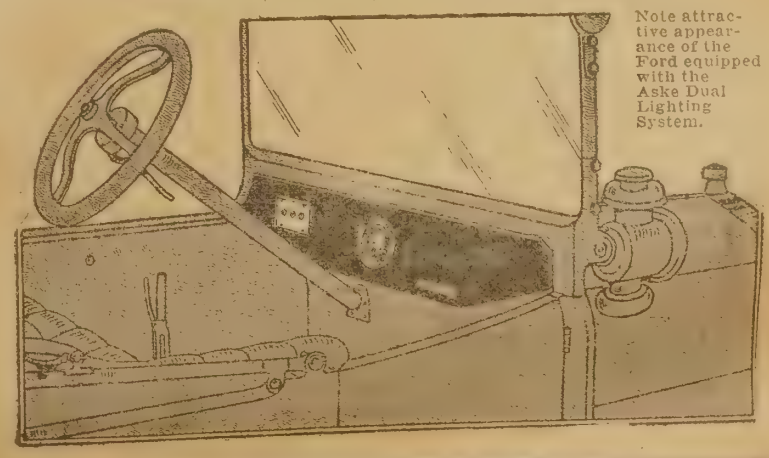
Your Ford equipped with the Aske Instrument Board and Regulator has all the lighting conveniences of higher priced cars. The added beauty and convenience make the Aske Lighting Units worth many times its price to any Ford owner.

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THE ASKE LIGHTING UNITS are sold at most dealers—or will be sent direct to you upon receipt of price and dealer's name.

Write for our descriptive booklet.

Instrument board, complete with regulator ..... $18.00
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Flush type clock ..... $3.50
Instrument board, without equipment ..... $1.25

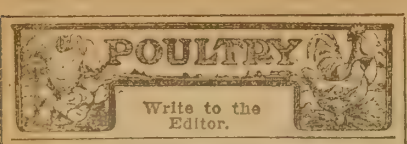


Note attractive appearance of the Ford equipped with the Aske Dual Lighting System.

**Aske Regulator Co.**

**DULUTH, - - Minn.**

NOTE—The Aske Regulator can only be used on 1915 and later model Ford cars, commencing with factory number 566155, unless car is equipped with 1915 or later model magneto, which can be secured from any Ford dealer at small cost.




JAMES DRYDEN,
Editorial Contributor.

## Poultry House Needs

The first essential of the poultry house is that it is sufficient to protect the fowls against rain, snow, wind and cold. The cold is not so much a handicap to the hen as are the rain, snow and wind, but it is poor policy to allow the poultry to be chilled, either old or young. Especially is this true when cold winds blow. When a hen is using most of her vital energy to overcome the cold occasioned by poor housing in bad weather she has insufficient energy left with which to produce eggs or meat. This is a very simple explanation of the falling off in egg production with the coming of a cold snap.

But there is such a thing as housing poultry too well. One of the vital essentials to a poultry house is plenty of fresh air. As one writer on poultry matters has appropriately said, what the hen really needs is a sleeping porch house. It has been estimated that a hen required double the amount of oxygen per pound of weight that a horse or a man requires, and this explains in part the absolute necessity of plenty of fresh air.

## Potatoes for Poultry

With potatoes at $1 a hundred pounds and corn at $4, according to chemical composition they would have the following relative values: Four dollars will buy in corn 10.5 pounds of protein and 69.6 pounds carbohydrates. Four dollars will buy in potatoes 8.4 pounds protein and 69.2 pounds carbohydrates. Corn has a slight advantage at those prices.

I have heard that potatoes could not be sold in some sections, and then the small potatoes are hardly marketable, while for feeding purposes they are as valuable as large potatoes. Under those conditions a liberal use should be made of potatoes for poultry feed.

Potatoes are, of course, too bulky to make of them an exclusive diet, but the amount of grain might be materially reduced by feeding potatoes.

They should be boiled and mixed with bran and shorts. A little linseed oil meal or cocoanut oil meal may be added to advantage, the potatoes constituting the bulk of the mash. Give the hens a feed of this in the evening, the last feed of the day, all they will eat. During the day give them a light feed of whole grain in the morning and another about noon, just enough to keep them busy scratching it out of the straw litter, and not so much that they will not be ready for a good feed of the potato mash in the evening. The mash when mixed may constitute two-thirds of the total weight of feed for the day. Keep skim milk or buttermilk before the fowls all the time and no water. If milk is not available, keep a hopper of meat scrap or fish scrap before them all the time, and give water.

There is no reason why potatoes should not be fed liberally if fed in proper combination with other feeds.

J. D.

## Provide Some Shade

Any one who has watched the poultry flock on a hot summer day will remember having seen them lounging about in the shade with their wings raised and their mouths open, doing their best to keep cool. This is not merely a matter of pleasure with them, but an essential to their wellbeing. Hot, dry weather is detrimental to the interest of the poultryman and the successful raiser is the one who provides against the vicissitude of summer as much as possible by supplying shade and plenty of cool water for his flock.

Most poultrymen and many farmers who keep a few chickens are compelled to confine them to small quarters and unless special care is taken these quarters soon become poor places for them. It is natural for the hen to scratch, and if the ground of her pen becomes so hard that she can not scratch or that there is nothing to scratch for she must content herself with the unnatural condition of idleness. Dust, straw or soft ground should always be available to the poultry flock.

### Chickens Die.

To the Editor: Could you tell me what is wrong with my flock of chickens? I had 50 hens and two roosters, Rhode Island Reds, and they were doing well until about a week ago when they started dying. They would sit on the roost with their heads down and seemed to have no control of their necks; would linger for a day or two. Have been feeding oats once a day and wheat and some chopped feed.—Mrs. B. A., Ashton, Idaho.

It would be impossible to say from this description what the trouble was. The little information that is given might indicate poisoning from eating putrid meat of some kind. J. D.

### Chicks Get Sore Feet.

To the Editor: I am a subscriber to your paper and would be glad if you could tell me what is the matter with some of my incubator chickens. As soon as they come out they are all strong and lively, but some of them get sore feet and legs. They swell and are inflamed. What is the cause of it? MRS. T. C.

Big Lake, Wash.

If this correspondent will tell us her method of brooding and feeding the chicks we may be able to suggest a remedy. The trouble may be toe picking. If this is the case the toes will usually be bleeding, as it is the taste of blood that induces the picking. This vice is caused by lack of animal food and not enough exercise. J. D.

### Eggs for Hatching.

**By C. A. Muths, Salem, Ore.**

The eggs intended for hatching ought to be cared for so that they will not dry out, and kept cool. We pack our eggs in cardboard boxes that hold from two to four dozen eggs; each box is labeled with the date when laid and number of eggs it contains; then the lid is tied down, the boxes are set in a cool place and are turned once a day. In this way it is but a few minutes' time to turn 1000 eggs. The writer has had 16 years' experience in the poultry business with incubators and brooders and found that a good many make "evaporators" instead of hatchers of their incubators.

### Insure Green Feed.

There are two advantages to allowing poultry, especially the young growing birds, to have free range. They get exercise and get much food material that they otherwise would be unable to secure. Especially is this latter true in regard to green feeds, which are highly desirable for the development of the chicken. Wherever it is possible a patch of alfalfa, vetch or clover should be provided for the flock to run to, but if they must be kept in small quarters it is even more vital that green feed be regularly supplied to them.

**Improving the Devil.**

Devil. Drop the first letter and you have evil. Drop the next and you have vil(e). Drop the next and you have il(l). Drop the next and you still have ——l.


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Used by champions and experts everywhere, for cheese and butter making. Pure, concentrated, easy to use, always dependable.

Hansen's Rennet Tablets for cheese making; Cheese Color Tablets; Danish Butter Color and Junket brand Buttermilk Tablets.

At most drug and grocery stores, or direct, postpaid. Send for valuable free literature on cheese making.

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Dairymen, poultrymen, stockmen or all sorts who have used

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say their animals relish it; that it increases production cheaply, and is

***Satisfactory.***

What better recommendation could we ask or you want? Write for full particulars to

***Kaola Company***

Portland, Ore., Manufacturers.
THE GEO. FROST CO.,
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Note how these sturdy shoulders brace the tread. They distribute road wear evenly over the entire wearing surface. Friction can't center in one spot to quickly grind through to the fabric. Shoulders of Strength—a special patented feature—give Ajax Tires more rubber where it should be—more tread on the road.

**237 Race Triumphs**

Shoulders of Strength, most of all, are the reason Ajax Tires are the Dirt Track Champions of America. Daredevil race drivers, using Ajax Tires, in 1917 won sweeping victories in 237 grinding dirt track races at state fairs from Texas to Massachusetts. **They win on the roads you drive on.**

**97% Owners' Choice**

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The Ajax line is complete—headed by the famous Road King—a monarch in quality, a democrat in service. **Guaranteed in Writing 5,000 Miles.**

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**—victory or defeat?**

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Buy as Liberally as You Can of

**THIRD LIBERTY LOAN BONDS**

SPOKANE SEED COMPANY

Spokane, Washington

Home of SPOKANE SEED COMPANY Quality Seeds

In answering advertisements please mention this paper.

# Tractors Are Fighting in France

"One acre out of every four in France now lies idle from sheer lack of man and animal power to plow, seed and harvest crops upon it," says Henry Morgenthau Jr., in an article dealing with the tractor expedition that he has led to the country to aid in re-establishing agriculture. "French crop production in 1917 was more than one-third less than the year before the war. All able-bodied Frenchmen up to 50 years of age are fighting and though the women, children and old men have made heroic efforts to maintain the agriculture of the country on a normal basis, the burden has exceeded their strength and endurance."

Hence, the expedition of 1500 Americans tractors and plows with experts to put them into operation. It is believed that these machines will not only greatly increase the 1918 harvest, but will be an inspiration to the French people similar to that furnished by the presence of American soldiers on the battle front.



Henry Morgenthau Jr.

"The tractors will operate mainly in the battle-scarred portion of northern France which has been retaken from the Germans," says Mr. Morgenthau. There property lines have been largely obliterated. The fields are consequently large and the batteries of tractors will be able to work most effectively. Thus in a few months foods crops, especially wheat and potatoes, will be growing in French soil plowed by American tractors—soil that a few months ago was the 'no man's land' between the great battle lines.

"The tractors and plows in this expedition are purchased by the French high commission with money loaned to them by the treasury department, and the expense of the mechanics who accompany them is being met by adding a lump sum to the purchase price of the tractors. Judging from past experience these outfits will plow about half a million acres for wheat, potatoes andsugar beets this spring, and a million acres for fall planting of wheat.

"In addition to the beneficial effect the machines will have on the morale of the French people, the land plowed by the tractors in 1918 is expected to produce 1,500,000 tons of sugar beets and potatoes and 450,000 tons of wheat; and this increased production in France, amounting to nearly 2,000,000 tons of food, will obviate the sending of about 400 large shiploads from America through the perilous submarine zone."


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Will do the work of 20 men sawing cord-wood shingle bolts, clearing land and cut from 15 to 30 cords of 4-foot wood per day.

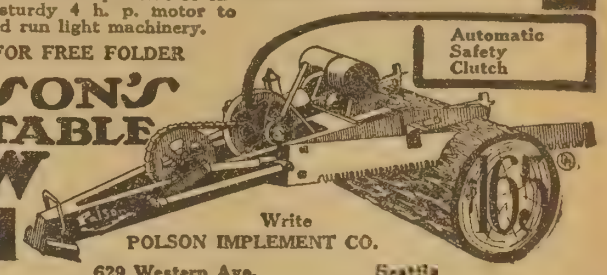
Built especially strong for heavy duty work and backed by one of the oldest implement houses in the West.

Equipped with Safety Automatic Clutch so you can start saw independent of engine and use sturdy 4 h. p. motor to pump water and run light machinery.

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POLSON IMPLEMENT CO.
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Put it in the dust bath—that's always a good thing to do. Just as good for animals as for poultry. **DO THIS:** With one hand stroke the hair the wrong way, with the other sift in Instant Louse Killer. Especially good for lousy colts and calves right now.

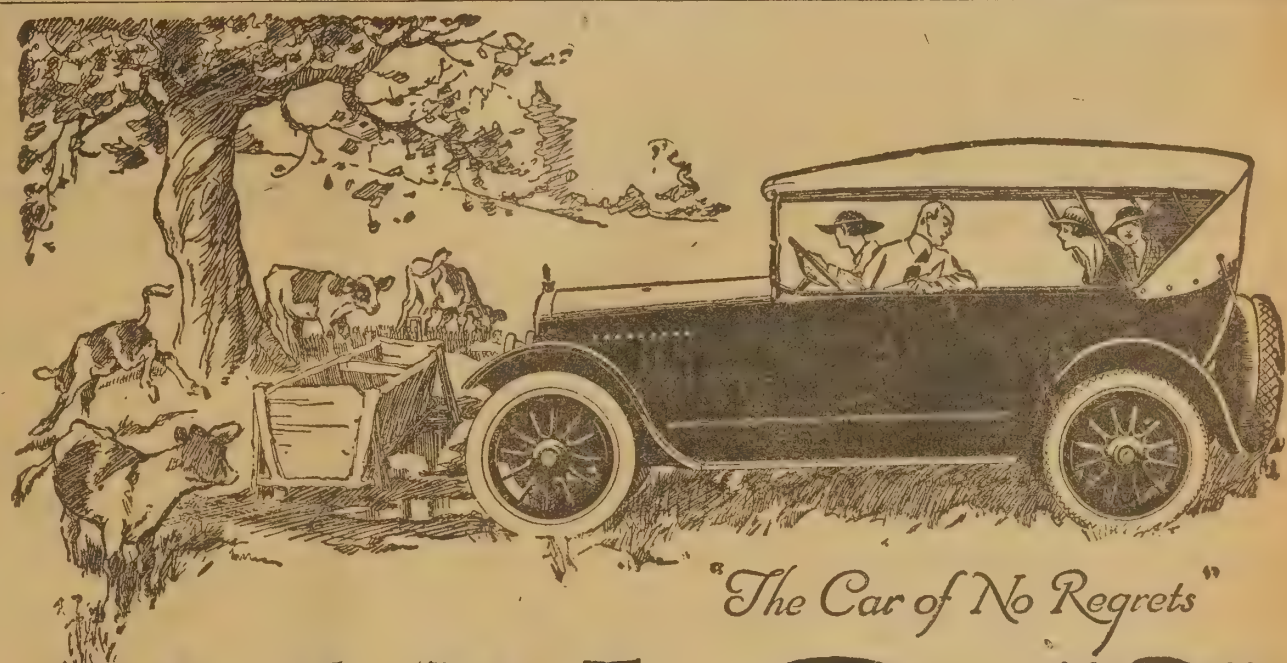
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1 lb. 25c, 2½ lbs. 50c (*except in Canada*)

DR. HESS & CLARK, Ashland, Ohio







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## The Car-Owning Farmer Serves the Nation Best

HE conserves time and energy to devote to his farm by putting the automobile to work. It does the "going to town", keeping the horses in the fields. It can be driven by women and children with safety, saving time for the men. Driving it hard does no harm, it's always fresh for the next job. And if it's a King it needs little attention or repair.

This year it is a duty to buy more carefully than ever before. For reasons of economy and assured performance you should select a pioneer car of matured mechanical design and moderate up-keep, built by a reliable and long-established Company. Investigate the KING!—and because of limited "war-year" output and freight embargoes, *order early.*

This sixty horse-power King is now in its third year of world-wide service, following a smaller "Eight" and a successful "Four". The chassis is designed throughout for utmost simplicity and surplus strength. Comparative light weight for a car of this power and size is the big factor in its low cost of maintenance. The King has long body room because of compact engine, and its 120 inch wheelbase gives a short turning radius, which together with its fine taper roller bearings and easily reached and operated levers, make it remarkably simple to handle. Women especially appreciate its easy driving qualities. Built low it holds to the ground at high speed. Long cantilever springs and deep, correctly tilted upholstery banish riding fatigue.

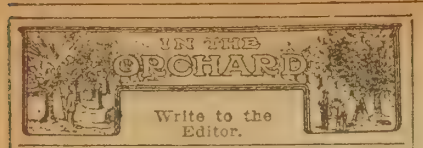
The car shown above is the seven-passenger Touring model. FOURSOME—is the King 4-passenger sport model and considered by many the handsomest of its type. A 7-passenger Sedan, richly finished, is the popular closed model.

*Send for catalog and name of nearest dealer*

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EASTERN WASHINGTON DISTRIBUTORS.
1201 First Ave., at Jefferson, Spokane, Wash.




GRANVILLE LOWTHER,
Editorial Contributor.

# Small Fruits

## Need Attention When Spraying

Those in the spraying campaign should not overlook the shrubs and small fruit canes or bushes. These are often badly infested with scale insects, San Jose, in particular. The currant bush is one of the worst of all for infestation, and should be thoroughly sprayed, where scale is found on it. People who have orchards, with small fruits connected with them should, therefore, watch for the scale on the latter, as well as on the fruit trees. The facility with which some of the small fruits and shrubs attract the scale, and the liability to overlook the pest on such places have led many commercial orchardists to discourage their planting near the fruit trees. But if they have been, or are to be planted, as already stated, they should not be overlooked in the spraying campaign. A. E. G.

### English Walnuts Near Spokane.

A subscriber inquires: "Can English walnuts be successfully cultivated in the vicinity of Spokane? How should they be cultivated, and how soon after planting would they come into bearing?"

I am reasonably certain that English walnuts can be grown successfully in the vicinity of Spokane. In our Yakima orchard we have four English walnut trees 22 years of age, and conditions here are not very different than they are in Spokane. I believe that the hardier varieties, such as the Franquette, will succeed in either climate.

I would plant the nuts late in the fall or early in the spring, let them grow one year, then bud them without transplanting. Plant three or four nuts in a place and select the strongest.

The walnut tree is a heavy feeder, and needs a deep, rich soil. If it is planted where there is subirrigation and a gravel base, all the better.

The trees ought to bear profitably in 10 years. G. L.

### How to Combat the Root Maggot.

Professor W. T. Ham, specialist in entomology, connected with the United States department of agriculture, and A. B. Nystrom, county agriculturist of Lewis county, Washington, have been holding a series of meetings in the county to further food production. Illustrated lectures on insect pests and methods of control have been given. The root maggot, which infests radishes, turnips, cabbage, kale and similar plants, is one of the worst pests of this order. Ways of combatting it have been told, and in addition Professor Nystrom issues a bulletin in which he says:

"One of the most effective ways to fight the maggot which does so much damage to cabbages, cauliflower, radish, turnip and other similar vegetables, as shown by tests carried on in Oregon, is to sprinkle in the hole prepared for the young plant or along the shallow trench for seed, either tobacco dust, a commercial preparation, or, second best, a mixture of white hellebore, 1 part and air-slaked lime 5 parts, according to directions we have from W. T. Ham, insect specialist, State College of Washington. He states further that it is often advisable to renew the treatment during the early growth period by sprinkling some of the material about the plants once a week or so and working it into the soil with a hoe." H. A.

# Garden Plan

## Reasons Behind the Arrangement

The plan shown on the next page may be used exactly or as a suggestion. It has, however, the following features to recommend it. The tall growing plants are on the west side, so as not to shade the lower growing ones; winter roots remaining in the ground are in outside row; rows run lengthwise making quicker and easier cultivation and the legumes (peas and beans, nitrogen gatherers) are interspersed throughout the garden to benefit soil.

Tomatoes, cabbage and cauliflower should be started under glass about the middle of February. If you haven't a hotbed and do not care to bother with house grown plants, buy a few; three dozen tomato plants; two dozen early cabbage, and one dozen cauliflower will be enough. The cabbage, cauliflower and Brussels sprouts for later use can be grown in a seed bed out doors and transplanted in May of June.

Carrots are slow to germinate so we give them a nurse crop of radishes, planting one or two seed every five or six inches. These mark the row so you can cultivate and break the soil so the more delicate plants can get through. They are soon used, when the carrots have all the room. The same plan can be followed with parsnips. Peas are planted in double rows, about eight inches apart, with three feet between the double rows.

Late planting of turnips has never proved successful with me,

There are some worthwhile vegetables not very well known. New Zealand spinach should be raised by every family caring for "greens" as it will furnish a supply until frost. There is a kale offered by some seed houses called Spring Kale, that supplies excellent early "greens" and furnishes an abundance of food for poultry through the summer. Mustard is sometimes scoffed at, but it has many uses. The first leaves make a fine salad, later they are appetizing when cooked and you can as well raise your own seed for pickles as to buy it. Swiss chard is not as common as it should be. It tastes much like beets and is a "cut and come again plant. The white stalks can be cooked like asparagus and the leaves separate or both together. It is excellent anyway. While an annual, on the Coast it lives through the winter. Brussels sprouts are as easily grown as cabbage, more hardy and furnish a nice change from the usual things. On the Coast they can be left out through the winter. Another very

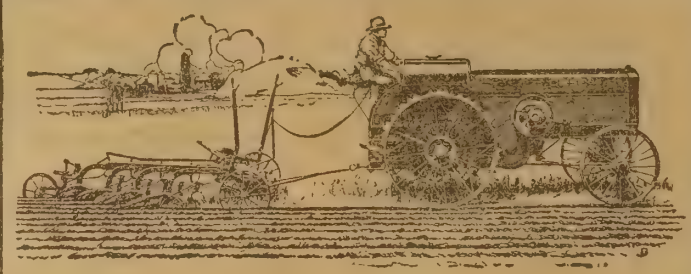
STRAWBERRIES
Best for the West.
Americus Everbearing, $1.50 per 100, $3 per 250. Write for price list of other varieties.
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J. N. Grieve, Cor. First and Post Sts.,
Spokane, Wash.
Canadian Government Agent.

160 ACRE FARMS IN WESTERN CANADA FREE

convenient vegetable is celeriac, which has edible turnip shaped roots with the flavor of celery, which can be stewed or used in soups for seasoning. Chives live on when once planted and add a mild onion flavor to salads.

There are some garden pests that will cause a lot of trouble unless controlled, probably the root maggot is one of the worst, distroying among other things, cabbages and cauliflower; quite a successful check for them is a Carbolic acid emulsion made by dissolving one-half pound of hard soap in two quarts of boiling water; then adding one cup crude carbolic acid. One part of this is added to 35 parts of water. Pour about four tablespoonfuls of this solution around each plant every 10 days until the last of May. Black Leaf Forty used according to directions causes the annihilation of green lice or aphis. Cabbage worms are usually plentiful, but may be killed by sprinkling plants with water at a temperature of 130 without injuring the plants. There are cutworms sometimes, but a band of tarred paper around the plant when setting it out will save its life. Tobacco dust is effective against the flea beetle. These are about the worst pests we have to content with and are not so bad after all when once you have been acquainted with the potato beetle and the tomato worm of the east.

Caring for the garden produce so that it shall last until the gardening season is here again is not the least important part. Most farm homes have cold cellars, where vegetables can be stored in boxes of earth. Lacking these, outdoor cellars can be made by digging an excavation about two feet in depth and dimensions according to needs. Boards keep the sides in place. Make a gable roof with the center resting on a ridge pole held by posts four to five feet high. When severe weather comes, hay or straw are thrown over the roof. A door should be provided at one end. Celery, cabbage, Brussels sprouts, as well as hardy vegetables may be stored here and will keep in fine condition.

Parsnips, salsify and Scotch kale may be left in the ground until needed. Turnips, rutabagas, carrots and beets should have the tops cut off and be stored in pits, outdoor cellar or house cellar before freezing weather comes. If stored in the house cellar, place in boxes of soil or sand. Cabbages may be placed head down in a trench one foot deep and covered with six inches of straw, or they may be placed in the outdoor cellar, standing them upright. Onions like cool, dry air best. Place on slatted shelves or trays in a cold, airy room. Potatoes can be stored in a dry, cold cellar or pit. Pumpkin and squash keep best in dry atmosphere.

Beans can be canned or dried as snap beans and canned or dried as shell beans. Peas may be canned and the surplus dried for soups. Spinach and other greens may be canned or dried. Beets canned when very small are more satisfactory than stored ones. Corn may be canned or dried. Tomatoes may be canned plain or in soup, catsup, or chilli sauce and may also be used green for making pickling. Eggplant, cauliflower, turnips, summer squash, carrots and cabbage may all be satisfactorily canned as well as combinations of vegetables for soups. One should not forget to make a goodly supply of sauer kraut, which can be canned through the winter as jars are emptied.

Nearly every housewife knows how to can vegetables successfully, but a recipe may be a help to some just starting. To can beans, string and wash. Cut or not. Cover with boiling water, add one teaspoonful of salt and boil 20 minutes. Drain and pack into jars. Fill jars with cold water, adjust tops loosely, stand in a boiler, the bottom of which is protected by a rack. Surround the jars partly with cold water, cover the boiler and boil one hour. Adjust rubbers after dipping in boiling water, screw down lid, cover and boil 30 minutes.

To dry pumpkin and winter squash; pare, cut into thin strips, then into pieces. Spread on boards and dry in sun or warm oven. To cook—soak over night in cold water.

JENNIE SIMMONS. Tolt, Wash.

| Width to next row. | Vegetables. | Sown or planted by | |
|---|---|---|---|
| 4 ft. | Beans, pole and lima | May | Bears until frost |
| 3 ft. | Peas, early and midseason | April | |
| 4 ft. | Corn, sweet, late | Mid May | Pumpkin and Hubbard |
| 4 ft. | Corn, sweet, mid-season | Mid May | squash planted in corn |
| 3 ft. | Corn, sweet, early | Mid May | rows |
| 3 ft. | Potatoes, early | March | |
| 4 ft. | Cucumbers and summer squash | May | Cabbages between vines |
| 3 ft. | Tomatoes (from hotbed) | May | Bears until frost |
| 2½ ft. | Beans, bush variety | May | |
| 1 ft. | Onion sets | March | Spinach for spring |
| 1 ft. | Onions from seed | April | |
| 1 ft. | Beets, early and late | April | |
| 1 ft. | Spinach, kohlrabi, lettuce | April | Followed by cabbage and cauliflower |
| 1 ft. | Carrots, radishes | | |
| 1 ft. | Turnips, early and late | April | |
| 1 ft. | Lettuce, celery Chinese cabbage | April | Followed by Brussels sprouts |
| 1 ft. | Rutabagas and Swiss chard | June | |
| 3 ft. | Peas, late | April | Through season |
| 3 ft. | Peas, late | | |
| 2½ ft. | New Zealand spinach and cabbage, late | May May | |
| 2½ ft. | Cabbage, spring kale | April | |
| 1½ ft. | Lettuce, mustard Scotch kale | April | Lettuce followed by celery |
| 1½ ft. | Parsley, chives (2) parsnips, salsify. | April | |


# FARMERS, BUY A BOND

Subscribe to the Third Liberty Loan.

This is the government's call to the farmers of our country and we are confident every farmer in the Pacific northwest is ready to "go the limit" for our boys "over there." Liberty bonds are easily purchasable through any bank on easy terms.

EVERY DOLLAR invested in bonds is a silver bullet to help end the war. Do your part now.

**The A. H. Averill Machinery Co.**

Spokane Wash.

Pacific northwest distributors of the "OLD RELIABLE RUSSELL LINE" of Grain and Pea and Bean Threshing Outfits.

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# Thrift

# FIRE INSURANCE

**WHEN THRIFT is the call of the Nation—when Thrift may win the war—why not apply the THRIFT principle to fire insurance?**

**Why pay more for fire insurance than it actually costs? Why pay a profit to the stockholder of some company, when through the Northwestern Mutual Fire Association you can pay that profit—and more—to yourself?**

**This principle is so perfectly attuned to the new spirit of our national life as to evoke immediate response from property owners of every class who are not now enjoying the benefits of insurance in the Northwestern Mutual and allied mutual companies.**

**When you take out a fire insurance policy in the Northwestern Mutual you are one of the owners of the company, and receive your share of the profits, in the form of CASH DIVIDENDS.**

**This means that you and all the other policyholders—almost fifty thousand—have a direct incentive for reducing the number of fires. For the fewer the fires the greater the profits returned to you. We are so organized as to help you reduce fire danger to a minimum.**

**Not only do you receive the ordinary "underwriting" profits, such as a stock company would make for its stockholders, but you increase these greatly by reducing fires—by conserving property.**

**Last year, for instance, policyholders in the Northwestern Mutual in the State of Washington suffered a fire loss of only 16 per cent, while the policyholders in the next nine companies—stock companies—average a loss of 32 per cent. In other words, Northwestern-protected property is twice as safe—stands only half the chance of burning down!**

**Again, you save money in the economical administration of our MUTUAL office, for its costs us only about half as much to "do business" as the average insurance company. That is due to careful development of business efficiency along modern, progressive lines.**

**Is it any wonder the Northwestern Mutual's dividends and other savings so far have exceeded $2,500,000.00? Total profits to policyholders doing business through the Northwestern Mutual office, in our company, and in allied mutuals, exceeded $900,000.00 for 1917 alone.**

**Guaranteed by our great reserves, the Northwestern Mutual writes absolutely non-assessable fire insurance. Every policy is stamped "NON-ASSESSABLE."**

Get into the Northwestern Mutual for your next policy—home, barn, garage, automobile, property of any kind. Put the thrift money into your own pocket—or better yet—into Liberty Bonds or Thrift Stamps. Write or phone us NOW the date of the expiration of your present policies.

**Northwestern Mutual Fire Association**

INLAND EMPIRE OFFICES
Old National Bank Bldg., SPOKANE

F. J. MARTIN, President

Main Offices, Central Bldg.
SEATTLE


In answering advertisements don't fail to mention this paper.

# Price of Oats Tempts Farmers

## Some Would Sell Dairy Cows in Order to Grow Money Crop, But All Are Intensely Patriotic




MOUNT VERNON, Skagit County, Wash., April 4.—There is very little or no disloyalty in evidence here. If there is any coolness it is kept exceedingly quiet. Most of our people seem to feel that it is up to us to produce every bit of food that is possible. We sometimes hear arguments pro and con as to government efficiency or inefficiency, but most of us agree that it would be hard to get a set of men who could handle the job better. I am of the opinion that in years to come we will look back and be proud of the part our country had in the great world war. The only grain grown to any great extent here is oats. The spring season has been very favorable so far. Much plowing has been done and some are beginning to seed. Weather conditions at present are very favorable. The price of oats is tempting some farmers to sell their cows and raise oats. There are lots of potatoes here and very little demand. When they can be sold they bring about $14 a ton.

C. S. PHILIPS.

### Labor the Big Problem.

RITZVILLE, Adams County, Wash., April 10.—Labor continues short, but other powers on the farm are in abundance. We have more work animals than we need, and in the market the horse is a bad actor, especially the unbroke stock. Tractors are being used and it looks as if they will take the place of the horse. We have plenty of machinery to operate our farms. Farmers are buying what they need. The trouble is we don't repair enough old machinery, partly due to lack of time. We will have more meat animals to put on the market than last year. The pasture condition don't look promising in this community, because we had no flood waters to fill the pot holes and everybody is short of pasture. The natural pasture is about the only kind we have here. Spring started out early and fine and seeding is finished, with plenty of moisture, and if the June rains do not fail we are sure of a good crop. Where are we going to get our help during haying and harvesting?

JACOB HARDER.

### Machinery Question Is Puzzle.

COLVILLE, Stevens County, Wash., March 30.—An observer of farm conditions can not fail to be impressed with the efforts of farmers to adjust themselves to the changing necessities of the times. This is not so apparent in the matter of labor in this section as it is regarding farm equipment and management. There will be some labor shortage, or at least there is the fear of it, and the tendency is to get prepared against such a calamity. I find farmers investigating the tractor idea with a vew to getting into the front line as soon as it appears necessary. They are not yet sure that the tractor is fully demonstrated and they are disinclined to do much experimenting on their own account, but when the real thing in tractors has arrived it will find a warm welcome. A few will be used in this section this year for the first time, but they will necessarily be of the smaller types, since extensive grain farming is not carried on. A great many horses are still demanded, as logging and ore hauling require many teams throughout the year and particularly during the winter, when tractors can not operate. Many of these are farm teams which are shifted as may be needed, according to the season. A large amount of poles and lumber comes to the railroad by tractor and a considerable cut in transportation expense is claimed.

It is interesting to note the attitude of farmers toward new machinery. An implement dealer in this county seat tells me that farmers are undoubtedly trying to tide over the era of high prices by repairing up the old machines and extending their period of usefulness. He says that they come in and look over the new stock, examine the improvements, ask the prices and then shake their heads and go home to drag out the old implement and look it over again. Some of them find it necessary to replace parts of the old outfit, generally in the line of plows and harrows, but there will be few harvest tools bought and practically no new fangled implements will be considered. I talked with a practical blacksmith and machinist regarding repair work and he declared that few farmers were bringing in their tools for refitting and replacement and were altogether inclined to buy too much new stuff. Possibly putting these two reports together we might conclude that the farmers were neither buying or repairing, but simply taking a chance on getting through without doing anything more than they had to. There are many public sales and it is interesting to note some of the reasons given by the proprietors. Sometimes it is old age and the lack of suitable help, but more often it is stated as a desire to change the system of farming. There is an undoubted disposition to throw live stock on the market at the present high prices, but most of this still remains in the community, merely changing hands.

E. E. ELLIOTT.

### Frost Catches Early Fruit.

GIG HARBOR, Pierce County, Wash., April 6.—Like many other sections of the northwest, it must be admitted that we have hereabouts a considerable sprinkling of people who do not seem to be in harmony with the government of the United States in its participation in the great world's struggle. As this is not a wheat producing regions—does not in fact produce any crop in a large way that the government is calling for most strenuously—this mental attitude of some of our people will hardly effect the agricultural output from this section of the state. The season is opening up hopefully with good average prospects for such crops as are grown here. Some of the earlier blossoming fruits are probably injured by the sharp frosts of these early April days. Seedings of grains and grasses are coming on finely. The supply of stored moisture in the ground is uncommonly large. Milch cows in much demand and are bringing high prices.

W. D. BOYNTON.

### Set Aside Money for Farmers.

The state council of defense in Maine has set aside $250,000 to be loaned to farmers.

BUY A BOND

PHOENIX LUMBER CO
Spokane Wash.

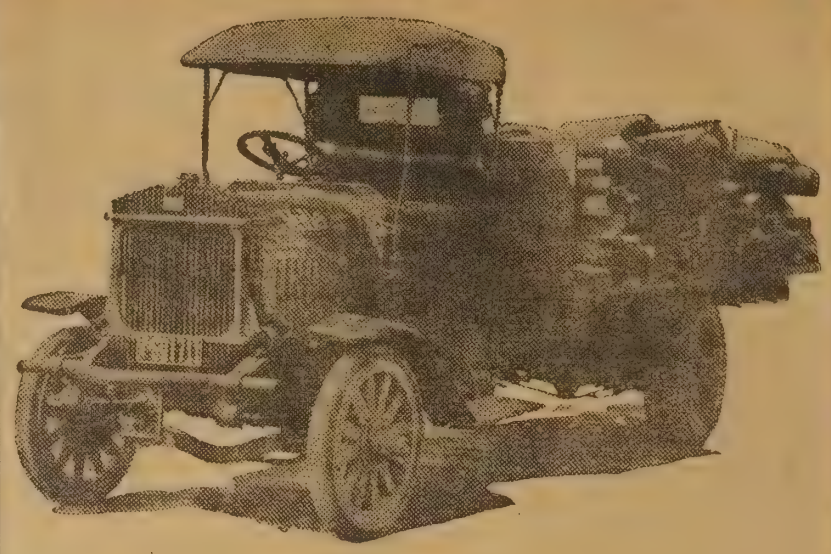
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Phoenix Lumber Co., Farm Dept.
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For General Farm Hauling



The Velie Truck

Farmers in the Pacific Northwest are realizing the necessity of the motor truck in their business. Many are buying a VELIE TRUCK because they are investments in efficiency and economy.

Write us today about your rural haulage problem. We can furnish data which will help you materially in choosing a truck.

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Plant With These Drills

DRILL-PLANTED fields produce greater yields. Remember that at planting time this year, when every bushel added to your harvest field counts.

The use of **Empire Jr., Hoosier, or Kentucky Drills** means not only more grain per acre, but better prices. Drill-planting improves the quality of the grain, for when seed is properly planted, at even depth, and covered as it should be, it comes up all at the same time, grows uniformly, and ripens evenly. Such grain grades high and brings good prices.

The drill that will do the best work for you is in one of these lines. It is handled by some local dealer not far from your farm where you can see it, or you can find out all about it by writing us for drill catalogues. There are drills for planting every kind of grass or grain, with or without fertilizer, in every kind of soil.

The dealer, or the catalogue, will tell you all about feeds, furrow openers, bearings, attachments, etc. All we can tell you here is that you will find just the drill for your work in the **Empire Jr., Hoosier, or Kentucky lines**, and that without any trouble or expense on your part beyond the writing of a letter or post card. Why not write it now, before you forget?

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# FLORA FLIRT IN THE MAYPOLE DANCE



On a bright and sunny day,
Flora Flirt is queen of May.



The May pole's ready on the green,
To start the dancing all are keen.



Flora sees a dandy chap,
Who to her takes off his cap.



Her head is turned, she's making eyes
She never heeds the warning cries.




A trailing ribbon her feet ensnare,
She trips and falls, shrieks rend the air.



Flora lands upon the green,
In sadder plight she's never been.
*The Moral*—When you're flirting, first make sure
That your footing is secure.

# Allies Stand Firm

## *Great Generalship Is Seen in Battle*

Two weeks ago the strategic railroad center, Amiens, on the western battle front was the object of the gigantic German drive. With the invaders only some 10 miles away the British defense stiffened and checked the movement for the time being, saving the railroad that connected the northern part of the allied lines with Paris and the southern part of the line. Then there was a lull in the battle for a few days, followed by the most sanguinary attack of the war farther north, which resulted in considerable gains in that section by the Germans. The object in their mind at that time was the destruction of the British army in so far as possible, and the capture of the railroads and channel ports over and through which the supplies for the British army were brought. Again the British stiffened their defense, the French came to their aid and the Germans were again halted. Now the indications are that another attack is to be launched by the Germans in the Amiens region, and it is freely predicted that the present week or the next 10 days or two weeks will witness the slaughter of thousands of soldiers on both sides along the Amiens front.

Throughout the past week the situation along the battle front was such as to keep the entire world in a state of nervous tension. The efforts of the Germans destroyed any possible doubt that their aim has been and is yet to destroy the British army. While they have continued to keep a strong force distributed along the entire western front, they have made no great effort to break through or disturb the allied lines except in the north, where the lines were defended by the British. Early in the week an attack second to none during the spring drive was launched against about a 30-mile front at a point about the same distance from the North sea and some 25 to 30 miles east of the English channel, directly across from Dover, England. Unprecedented fighting was experienced when the German hordes undertook the drive against Bailleul and neighboring points, which were strategic positions owing to the location of the railroads serving the British armies. About the middle of the week they were successful in driving the British out of some of these points, greatly jeopardizing that part of the British army farther to the north. The move apparently was intended to effect exactly this result, namely, the compelling all British at the extreme north end of the line in the vicinity of Ypres to withdraw because of lack of supplies and munitions over the jeopardized railway.

The British defense stiffened, however, at this time, and during the remainder of the week the Germans not only were unable to make any noteworthy advance, but were repulsed in some instances and driven out of certain strategic positions that they had captured.

The hand of General Foch, who is in supreme command of the allied force during the spring drive, is seen in the movement northward of a considerable number of French troops, although how many was not made public. They have been moved northward to a position such as to greatly strengthen and support the wearied British armies where the latter have been bearing the brunt of the tremendous attack against them. Late in the week came the announcement also that Italian troops in some numbers were moving north, possibly to take the place of French that had been moved to back up the British lines.

While the strength of the German army during the present drive has undoubtedly been superior to that of the allies, it is wrong to assume that the retreat of the British has been due solely to their being overpowered. It is perfectly clear that the allied war leaders have coolly and skilfully planned to wear out the superior German forces by a slow retreat, during which the utmost possible destruction of German armies and munitions would be effected. There are still no figures available to the public to indicate the extent of the German losses or those of the allies, but it is reasonable to assume the attacking army, which has rushed its troops into the fray in great masses, has suffered much heavier losses than has the defending army. Reports seem to indicate that the Germans have used many more of their reserve forces than have the allies.

Undoubtedly, the present situation, or that which has existed for the last month, is the most critical in the history of the war. What the actual ideas back of the German move may be are wholly problematical, but it seems from the best information that can be gathered that conditions at home, most likely due to food shortage, the destruction of all civil business enterprises and the terrible destruction of home life have caused the war leaders to decide upon one tremendous and supreme effort to force the allied nations to accept peace terms. Another consideration that has undoubtedly affected the German plans greatly is that of the increasing number of American troops on the battle front. Information is wholly lacking as to the number of Americans now in Europe or to be placed in Europe this spring and summer, but if it were only half a million men that would be available to go into the heat of the fray it would mean that the allied armies, so far as actual man power is concerned, would be made thereby as strong as when the Germans began their present drive, as the losses of the allies during this drive can hardly approximate this number. Whether there are half a million Americans, only half that number, or two or three times that number in Europe or en route, is information that can not, for obvious reasons, be learned.

Though at no time underestimating the gravity of the present situation the leaders of the allies have expressed supreme confidence that Germany will not be able to win the present drive to such degree as to greatly jeopardize the allied cause.

### Austria in Trouble.

Last week Premier Czernin of Austria resigned as a result of charges made against certain Austrian officials that they had made peace overtures to France. It is stated that the political situation in Austria at the present time is extremely delicate and capable of almost any possibilities. Considerable discontent is reported. One seemingly official report says that the socialist party in that country has set aside May 1 as a day for meetings throughout the country in the interest of peace.

### Curtail Nonessentials.

The federal government has taken action through the fuel administration that has for its purpose the curtailment of all building operations that are not strictly essential to the conduct of the war. The regulations issued curtail the manufacture of a large number of building materials, some of them as much as 50 per cent.

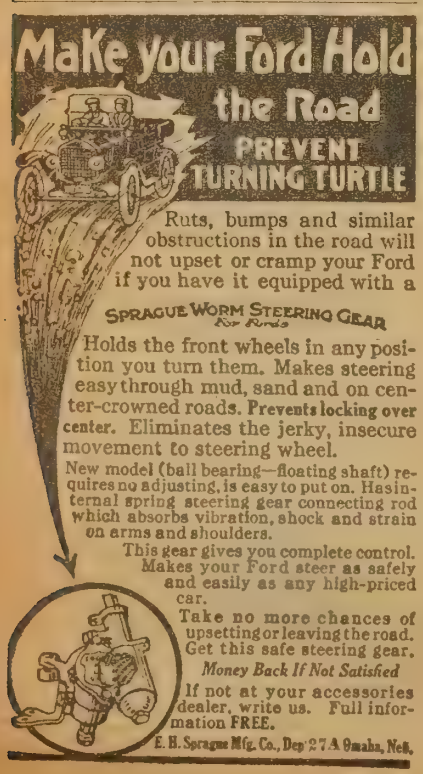
### Secretary Baker Home.

As quietly as he went away two or three weeks ago Secretary of War Baker has returned to this country. While in Europe he conferred with most of the allied war leaders and visited many parts of the battle front. He expresses pleasure at the condition and activities of the American troops in France and predicts the ultimate success of the allied armies.

### Traitor Pays Penalty.

Bolo Pasha, convicted by a French court martial of treason to his country, paid the death penalty last week before a French firing squad in that country. He was convicted of having accepted German money for the purpose of spreading German propaganda in America. His arrest took place several months ago in this country.


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This gear gives you complete control. Makes your Ford steer as safely and easily as any high-priced car.

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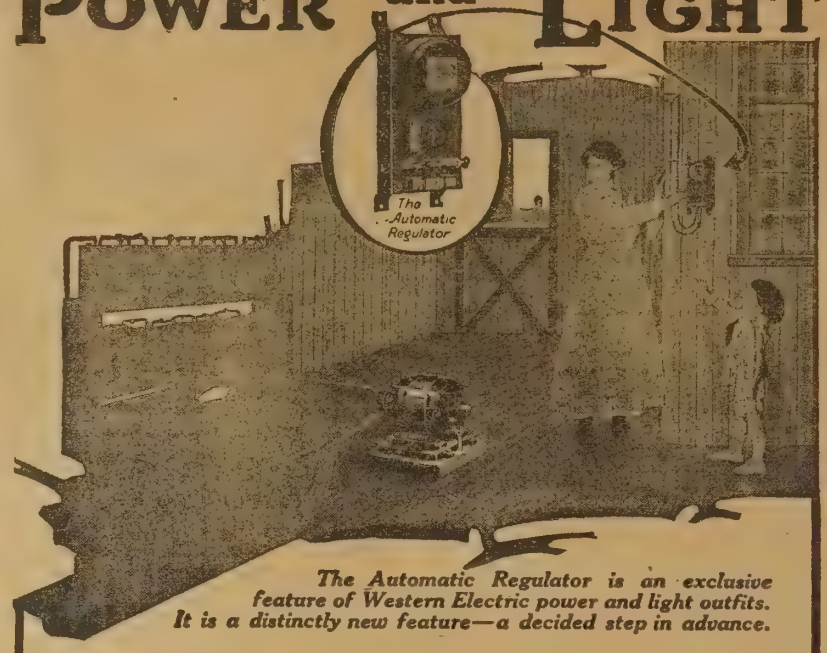
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# Win the War by Preparing the Land, Sowing the Seeds and Producing Bigger Crops

**Work in Joint Effort the Soil of the U. S. and Canada—Cooperative Farming in Man Power Necessary to Win the Battle for Liberty.**

The Food Controllers of United States and Canada are asking for greater food production. Scarcely 100,000,000 bushels of wheat can be sent to the allies overseas before the crop harvest. Upon the efforts of the United States and Canada rest the burden of supply.

**Every Available Tillable Acre Must Contribute; Every Available Farmer and Farm Hand Must Assist.**

Western Canada has an enormous acreage to be seeded, but man power is short, and an appeal to the United States allies is for more men for seeding operations.

**Canada's Wheat Production Last Year Was 225,000,000 Bushels; the Demand From Canada Alone, for 1918, is 400,000,000 Bushels.**

To secure this she must have assistance. She has the land, but needs the men. The Government of the United States wants every man who can effectively help to do farm work this year. It wants the land in the United States developed first, of course; but it also wants to help Canada. Whenever we find a man we can spare to Canada's fields after ours are supplied, we want to direct him there. Apply to our Employment service, and we will tell where you can best serve the combined interests.

**Western Canada's help will be required not later than May 5. Wages to competent help, $50 a month and up, board and lodging.**

Those who respond to this appeal will get a warm welcome, good wages, good board, and find comfortable homes. They will get a rate of one cent a mile from Canadian boundary points to destination and return.

For particulars as to routes and places where employment may be had, apply to

**U. S. Employment Service, Dept. of Labor**
Seattle, Tacoma, Bellingham or Yakima, Wash.

# Requisition Wheat

## Farmers Must Sell Grain at Once

Under an order by the state food administrator, Charles Hebberd, any wheat held on the farms of Washington after May 15 will be requisitioned by the government. This is being done at the request of the national food administration. The following order has been sent by Administrator Hebberd to all county food administrators in the state:

"The latter part of March a call was issued to the farmers of Washington in pursuance of the request of Herbert Hoover, United States food administrator, that they bring to market by May 15 all wheat in their possession except their necessary reserves for seed.

"Most of the surplus wheat on the farms has already gone to market. There are, however, considerable quantities in some localities still retained on the farms. In some cases holders of this wheat have been influenced by pro-German motives and in some instances by the erroneous expectation of receiving a higher price. The higher price established for 1918 wheat in the Pacific northwest district, or any price that might be established hereafter by congressional act, is for 1918 crop only. There is no way, therefore, that any grower can benefit by holding his grain after May 15, and in case of such hoarding it can only be presumed that the hoarder is influenced by improper motives.

"The food administration, therefore, calls upon all grain producers, as a patriotic service, that they bring to market by May 15 all surplus wheat. If the local miller is unable to buy all of the wheat that is offered it should be marketed in the other customary trade channels through which it will reach the food administration grain corporation.

"The county food administrators in the several counties are asked to secure at once all possible data as to surplus stocks of grain remaining on the farms in their respective counties and to report to the federal food administrator of the state on May 15 each case where surplus grain is still held on farms, specifying name and address of owner and approximate quantities held.

"After May 15 surplus stocks hoarded from unpatriotic motives will be requisitioned under executive order, as provided in section 10 of the federal food act. Mr. Hoover, as United States food administrator, has given the federal food administrator of the state special power of attorney to requisition and take possession of such wheat.

"In view of the need for wheat for the use of the army and navy and for other public uses connected with the common defense no one has a moral or legal right to hoard wheat, and power to requisition all wheat for that purpose is expressly conferred by the food act. It is hoped that recourse to requisitioning will be necessary in but few cases. However, if there are in the state any slackers who, from pro-German or other unpatriotic purposes, refuse to comply with the present request to bring all surplus wheat to market by May 15, prompt action to requisition such surplus will be taken by the federal food administration of the state."

# What $50 Bond Will Do

Protect 1000 soldiers from smallpox and 666 from typhoid. It will assure safety of 139 wounded soldiers from lockjaw, the germs of which swarm in Belgian soil.

Will render painless 400 operations or supply two miles of bandages—enough to bandage 555 wounds.

Will care for 160 injuries in the way of "first-aid packets."

Will furnish adhesive plaster and surgical gauze enough for thousands of wounded men.

## RETURN FLOUR

### It Will Help Allies to Win the War

Food administrators of Washington, Idaho and Oregon continue to impress upon the people of the northwest the necessity of returning to dealers any surplus amounts of wheat flour that they may possess. Under the plan that has been worked out the flour so returned will be resold in the community in which it is returned and flour that it saves from the milling centers will be shipped direct from these milling centers to Europe and the soldiers. This not only saves cost of shipment, but makes possible the shipping of flour to the soldiers much more rapidly. The following statement signed by the food administrators of the three northwest states and by representatives of the grain department indicates the exact object of the movement:

"Mr. Hoover has wired all federal food administrators that the excess stocks of flour held by public eating places, bakers, dealers and consumers may be voluntarily surrendered for the use of the army and navy and the allies.

"This practical method of handling such returned flour will be through the local merchant, who is hereby requested to receive all such flour and pay the holding consumer the actual cost of same, and then redistribute it without any additional charge to the ultimate consumer. Where merchants accumulate more than their 30 days' supply and all hotels, bakers, etc., that have an excess amount that can not be disposed of locally, they should immediately communicate with M. H. Houser, grain commissioner of the food administration, Board of Trade building, Portland, and he will arrange for the transportation to the seaboard. All flour returned to the merchant that is resold to the consumer should be reported to Mr. Houser in order that an equal amount may be released for shipment to the allies.

"The whole object of the above arrangement is to provide a channel through which all excess quantities of flour may reach the army and navy or the allied armies as a voluntary offering of the people of this country.

"(Signed) Charles Hebberd, food administrator for Washington, Spokane; R. F. Bicknell, food administrator for Idaho, Boise; W. B. Ayer, food administrator for Oregon, Portland; M. H. Houser, grain commissioner, Portland; J. W. Ganong, milling commissioner, Portland."

## House-Mover Uses "Tank."

James Hargrave has found new use for Tacoma's caterpillar tractor. He has rented it to haul his house away from the atrillery range at Camp Lewis. Every time a shell whizzed in his direction Hargrave had stage fight. Finally he believed it was up to him to move, but he objected to leaving his house. Then he hit upon the idea of renting the caterpillar tractor to haul his house a distance of three miles. He offered $50 a day for its use and the offer will be accepted.


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Photograph by L. A. Hiller

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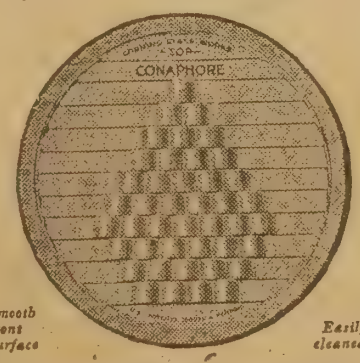
BOTH these cars are equipped with Noviol (yellow-tint) Conaphores—*legal everywhere.* The photograph shows them as they meet at a dangerous turn on a dark country road.

The instant a driver sees the yellow-tint Noviol lights he knows that they will not blind him—and feels perfectly safe. The soft mellow light is easy on his eyes and helps him to see past the oncoming car.

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**Ample side light.** Cylinders fan strong rays out over the roadside. Light spreads 25 feet at each side of the car 75 feet ahead.




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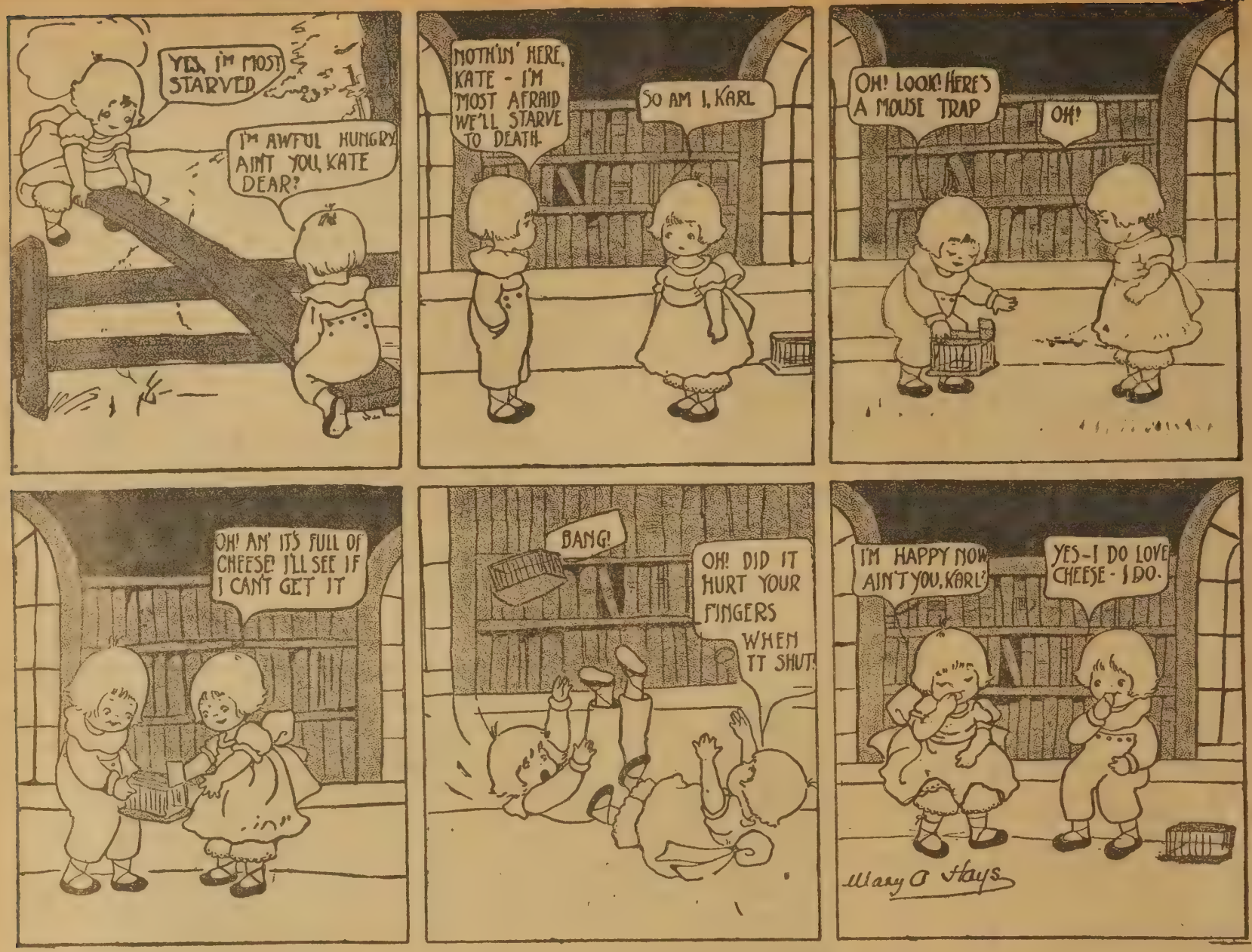
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# MUGGSY BUYS A SNAKE AND WINS A DOLLAR



# Study Your Likes and Dislikes; Photograph Things You Like

By PAUL E. TRIEM.

ARTICLE III.

After you have bought your camera and have become reasonably familiar with it the real test of photography lies before you. What are you going to photograph? What will make a good picture?

The answer to these questions depends somewhat upon your mental makeup. What are you most interested in? Live stock? Then photograph cows, horses, hogs or chickens. Are you a lover of the beautiful in nature? Then try landscapes or flower photographs. Study your real likes and dislikes first of all, for you will never do good work on anything which you do not really like.

Let us suppose that you are interested in horses and cattle, and want to be able to photograph these farm animals well. The first thing to decide upon is your background. The more simple you can make this the better your picture will be. For light colored animals, Holsteins, with much white on them, for instance, this background should be dark, the side of a red building, preferably free from doors and windows, will be just right. Dark-colored animals, including roans, reds and bays, should, if possible, be photographed against a light colored background. Either light or dark subjects can be photographed with the sky for a background, where it is possible to line them up against it.

After you have decided upon your background get your camera ready. Set it up on a tripod if possible. If you are using a "kodak," or other type having a view finder, set your diaphragm at 16 and your distance indicator at 25 feet. Have a fresh film in place and your shutter set for bulb exposures, unless a one second exposure is provided by the shutter itself.

Now, you are ready for your subject, which should be led to the position you have chosen, between camera and background. The man who leads or "handles" an animal which is being photographed must have plenty of tact and patience, for time will be required to get the subject just where you want it. Look into your view finder and be sure the subject is well placed, not too near any of the margins of the picture, and that the image is large enough.

You are now ready for the critical moment—exposure. With the bulb or release in our hand, look the animal over carefully to be sure that it is standing in a good position, well balanced on all four feet, both ears forward at the same angle, tail in typical position. Now, after some slight movement on your subject's part and just as it settles into a resting posture, press your bulb or release. If you have an automatic exposure of one second, that is all. If you are using a bulb exposure, hold the shutter open while you count three, deliberately, then let it close.

You will soon discover, if you have never known it before, that one second is a long time. Probably you will spoil a few films before you get the knack of reading an animal's mind and knowing when it is going to stand still. This is one of the biggest tricks in animal photography and is worth learning.

Nothing has been said about posing farm animals. The position in which a horse or a cow is photographed depends upon the points you are trying to emphasize. Study the farm magazines and breeders' journals for good poses, then apply all that you know about the typical trails of the breed, and you will have no trouble with this matter.

Getting a satisfactory photograph of a house or barn is a much easier matter than photographing farm animals. Remember that every building has a favorable side, from which it should be photographed. Usually it is best to set your camera to one side or the other of the front. Get the foundation of the building fairly close to the base of your picture, so as to eliminate as much uninteresting foreground as possible. Be sure that the camera is level. Make your exposure when the sun is behind or at one side of the camera, rather than directly in front. Stop the lens down to 16 and give one second exposure. It may be well to add in this place that the method by which your films are developed or the light conditions under which you work may require less exposure than I am recommending. During the summer months, one-half second is often sufficient for light colored objects, with the lens at 16. If you find that your films, when developed, are too "dense"—that is, too black and opaque to the light, either decrease your exposure, or, preferably, decrease the size of your diaphragm opening by one number.

The mistake you will probably make in trying to photograph a pleasing landscape will lie in the direction of including too much. A little experiment and observation will show you that you must choose bits or fragments, rather than broad effects. This means that you must work fairly close to your subject. Also, remember that color effects will be lost in your photograph, and that all you will be able to retain is variations of light effect—shadows, highlight and half-tones—and "lines." Lines, in photography, are formed by trees, the horizon, buildings, and the margins of bodies of water, etc. You must have lines in your picture, but they must be simple and harmonious. Here again experiment and observation will teach you more than many books on composition. Study your subject before you photograph it, try to select the most favorable viewpoint, and then study your finished print. In this way you will learn as much by your failures as by your successes.

## British Price of Margarine.

The food ministry announces the retail price of margarine at 11 pence (22 cents) per pound on sale to persons purchasing between 28 and 224 pounds weekly for consumption and not for sale. Other sales by retail, 1 shilling (24 cents) per pound plus 1-2 pence per pound on delivery made to premises.


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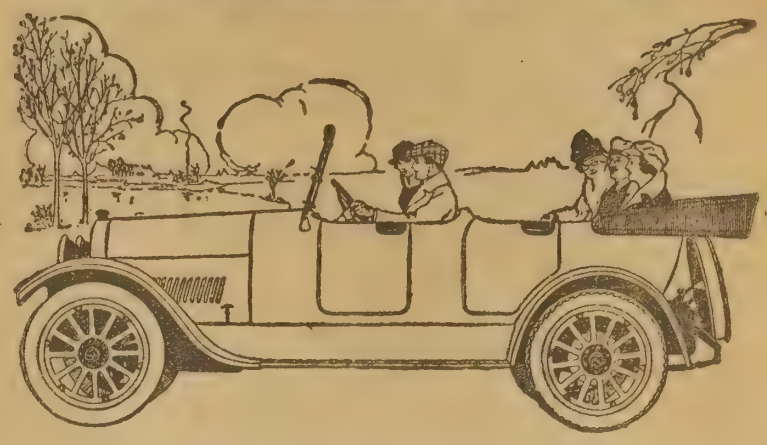
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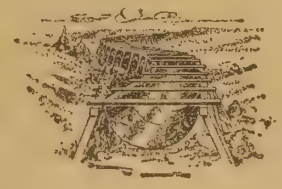
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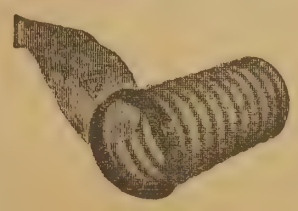
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# Magazine Department of The Washington Farmer

## THROUGH MY OPEN WINDOW—*By Joe L. Ashlock*

I WAS grieved to learn that Lester Steele had been killed in an automobile accident. His married sister was in the auto with him, and was badly shaken up. So were the others.

His married sister! When last I saw his married sister she was sprawling on the floor with a nursing bottle in her mouth—or no, it wasn't! She had tugged the nipple loose from the bottle, and the milk had splashed over her face and in her eyes and ears and hair. She had a good deal for so young a baby. But none of the milk was getting in her mouth where it was needed. "Married sister's" mother shook her good, and told her that if she didn't quit pulling that nipple off she'd spank her good, too!

The paper said that Lester was a mail-carriers when he lost his life. When last I saw him his nose was all freckles, three teeth were missing in front, and he was mostly arms, legs, eyes, questions and racket. He wanted to know where I was going. To college, I said. Where was college? What was it? What did it look like? What was it made of? How long would I stay? Would anybody else be there? What was I going for, anyway? Would he ever go—or what?

I have had Lester in mind ever since then. Just the day before I read that he had been killed I had thought of writing and asking him if he was ready to come to college.

Too late! I didn't realize that time was going so rapidly. Time has a habit of stealing upon us, though; and baby girls become married sisters and get silver in their hair before we are aware that our yesterdays have slipped back two or three decades.

In this steady march of time there is something that uncoils the kinks of our unruly souls when we stop to think about it. Time moves just so fast, and no faster. But it keeps on going—never runs out of gas, or blows up a tire. We humans divide our personal allotments of time into the year-spaces required by our earthly home for each of its migratory flights around the sun. If our earth rolled along its circular path a bit faster than now, time would move faster, too, would it not? Or would it? What about that, anyhow?

We're pretty sure, from what I hear, that time, as now organized, is traveling right smart, and has been at it quite a spell. Time makes married sisters of baby girls, and young men of freckled boys in a way that is elusive, stealthy and tricky. He is a foxy old boy, is this Father Time of ours, and his scythe is whetted always—or was, till the war began. I heard the other day that on account of the kaiser, Father Time had traded his scythe for a wide-gage, power-driven mower.

Thinking of the last time I saw Lester Steele makes my mind turn back its pages to the place where I saw him first. Cal Steele and Lester's mother-to-be had arrived in our western bunchgrass country from somewhere east. A baby arrived presently, and those certainly were snowy, cold days for the stork to be a-storking. But he storked away, and the baby was named Lester.

When I looked at Lester he was red-faced, baldheaded and squirming. He was born in a one-room, pine board shanty out there in the bunchgrass. When his mother was up and about she kept him warm in a cradle Cal had made of a pine box. A wonderful cradle it was, for Cal was handy with a jackknife and tools in general. He used the jackknife and all his tools in making Lester's cradle of pine.

It was a winter of deep snow and cruel winds that searched out cracks in the house of pine boards and fought to reach the cradle with its icy breath. But Lester's mother knew the tricks of the winter wind. She kept the cradle near the sheet-iron stove, and often the stove was roaring and red with the sagebrush she had piled within it.

Toward spring when the storm king had gone north to the Klondyke country, the sagebrush Cal hauled in from the bunchgrass had many sage ticks in it. The ticks were warmed in the pile of cut sagebrush behind the stove. They liked to bite Lester because he was young and tender, I suppose. But the baby's mother watched the ticks as sharply as she had watched the north wind, and very few of them found their way to the cradle.

My mind skipped some pages just now—20 years of them to the time not so very long ago when somebody else's married sister I know went to Philadelphia and said goodby to her husband of four months: Captain Billy Blank, off to France with General Pershing and the first American regiment to start for foreign soil.

Father Time is prompting me from the back of life's stage over which I am wandering. A while before Captain Billy Blank left Philadelphia he and his bride were in New York. They were walking about one evening, avoiding any discussion of certain uncertainties which attend the life of a soldier in France. It was futile. Each knew the other's unspoken thoughts, and they may as well have talked aloud.

**THERE is sadness in the pages of the Book of life that lies open by the window as memory drifts by, sweet as the breath of spring, and turns the pages. A while ago I was wandering on life's stage with Father Time, who is everywhere all the time, prompting me from behind the scenery. Now it is an open window with memories adrift, and the breeze turning my pages every which way. What next!**

In the Metropolitan Museum they presently stood before the looming gray skeleton of a dinosaur. The bony head of the thing seems to grin at you.

"See that old philosopher," said Captain Billy. "He's been dead a million years, and is still grinning; so why worry about France—and the other things?"

Good philosophy thought this married sister I know. So down at Philadelphia a few weeks later she smiled and didn't tell Captain Billy Blank of the baby she knew about—thought it would make his goodby harder. She hasn't told him yet, but is going to, after while, when she can send a penciled outline of the baby's hand along with the news.

A while back this mother-to-be sent her captain over the sea a new photograph of herself. He wrote back by and by, and said that when he went over the top the photo would be right over his heart. I hope he doesn't go over till he gets the pencil picture of the baby's hand. Somehow, I have a queer notion that the hand of the babe will help its mother keep away the German bullets. Every night, every hour, she prays that her captain-lover may come back from the trenches, safe and sound, to her and the baby; and that will help the picture, and the baby's hand, too, if it gets there in time.

I remember once when Cal Steele left home to be gone only a few days, his young wife prayed nightly and hourly that he might come back, safe and sound, to her and Lester. Cal laughed at her prayers and her fears when he came back. Why was she that way, anyhow! Were all women that way?

I think they are when they love their husbands and their babies. At least I know that Captain Billy Blank's wife is that way. She didn't laugh at all at what he meant for a joke. Referring to her picture over his heart, he said that when he went over the top she might get shot. I wish he hadn't said that, even thought it was only a soldier's way of joking. His wife, I am afraid, is not quite as good a soldier as he—at least, she does not enjoy jokes of the soldier kind.

Cal laughed, and cracked a joke about what his mother-wife could do some day when she really was a widow. Well, she became a widow a decade or so afterwards. Father Time and his scythe came along and Cal was in the way. I'm not forgetting that the old executioner now is at large in France, with his scythe rubbished to make way for more up-to-date harvesting machinery. The prayers, the photograph and the pencil picture of baby's hand will have plenty to do if they bring Captain Billy Blank home sound and happy. But I believe they will.

If they don't? —well, the baby will never see its father, and the father will never see his baby. The big, gray skeleton is still grinning: dead a million years, and still grinning. So why worry?

My windows are open. My book of Life is spread out before me, and the breeze is slipping the pages every which way. Lester Steele, Captain Billy Blank, the big, gray skeleton looming out of the prehistoric past and still grinning, and the baby—I wonder, will it be a boy or a girl!

The breeze is mixing my pages all up, and here I am in a new place in my Book of Life. I am at the old Hartline graveyard where Lester Steele now lies. Captain Billy Blank, when he and I were little boys together, lacked just one dollar of being able to help pay for that graveyard. There is quite a bit on this page of my Book of Life, but I think I'll tell about it anyway.

There were no graveyards in the early days of the bunchgrass west. He who died by the trail was buried by it, and the wagon train passed on.

But the time came when the wagons ceased to move forward. Farms and homes dotted the bunchgrass, and became thicker as time went on. Finally the time arrived when the neighborhood needed a graveyard. No one was dead—indeed no one was sick; but we all needed a graveyard just the same.

A tract of land was selected on Joe Mires' place, just a little way from our pine-board town. Some money must be raised to pay for the land. Various ways of getting the money were suggested, and finally we concluded to have a basket supper at which the baskets would be auctioned to the highest bidder.

The women trimmed baskets with lace and tissue paper, filled the baskets with many good things to eat, and the sale was held on a winter's evening in the school house. No one knew whose basket he was buying till he had vanquished all rival bidders, and with the basket in his secure possession lifted the lid and read the name on the slip of paper inside. (Continued on page twenty-six.)

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# Through My Open Window

(Continued from page twenty-four.)

Much fun they had auctioning those baskets. The auctioneer pretended to smell chicken in one basket, pie in another, cake in another, and so on till he had run through the list of bunchgrass table delicacies; and then he proclaimed the great "heft" of the baskets, and smelled chicken, pie, cake and other things all over again. He urged everybody to bid lively, and they did. The bunchgrass folk did not have much money—but they were paying for their own graveyards. So they spent money like kings, and fairly made the old schoolhouse shake with the sounds of their merriment. They spent all they had. A few baskets went up to $8 or $10. None went for less than a dollar.

I wore on this occasion my first suit of store clothes—long pants, coat-and-vest, and a lovely sky-blue tie. In my brand new pocket was a dollar and twenty cents, which I had been six months in accumulating for the next Fourth of July. But graveyards come before Fourth of Julys.

When the baskets soared to eight and ten dollars, I could have wept. No supper for me, in spite of my brand new suit of clothes!

A small, not very well decorated basket finally appeared. The auctioneer had been smelling chicken, pie and cake all evening, and had told how heavy the baskets were so often that we ceased to laugh at his sallies of wit. He didn't know exactly what to say about this small, plain basket. In fact, it was not a basket. It was only a pasteboard shoe-box so thinly decorated with tissue paper that you could read about the shoes shrough the tissue.

I thought no one would pay $8 for such a basket. With a quake in my voice I bid "fifty cents," supposing that some one would immediately say, "five dollars." But no one did. Presently another little boy piped up, "fifty-five cents." I came back with 60 cents and he to 65.

Thus we fought each other, nickel at a time. Finally I reached my limit—a dollar twenty! He promptly came back with a dollar twenty-five. He had me!

Everybody looked at me and smiled, supposing that I would come on with another nickel. But I didn't. Instead, I scrooched down in my seat and tried to get out of sight.

Right there, the day was saved for me. Something hard, round, and heavy was pressed into my hand. Startled, I look at it, and beheld a dollar. To this day I do not know who gave me the dollar, although I have always suspected one of our bachelor neighbors who sat in the seat behind me. "Bid up," came to my ears in a whisper; but I was looking at the shoe-box basket which was about to be "knocked down" to my rival, and did not turn to see who whispered.

"Two twenty," I fairly whooped.

It was the other boy's turn to scrooch—and no one slipped him a dollar; so I got the shoe-box.

The baskets that came after that were large, fat affairs decorated with lace, tissue paper, ribbons, dotted muslin and even beads. My rival didn't have the nerve to bid fifty cents, or even a dollar twenty-five on any of these large, fat baskets, which fairly bulged with fruit, both fresh and preserved. In the excitement, no one noticed his silence but me. At first I gloated over his downfall; but as the bidding went merrily on and he scrooched lower and lower in his seat with merely a wan, sidewise smile now and then, which no one noticed, I began to be sorry for him. Finally, the last basket sold for six dollars. My late rival caught my glance of sympathy and tried to smile. He wes a good sport, even if poor in purse.

Well, I was agreeably surprised when I looked inside my shoe-box. It was a large shoe-box, for one thing. For another, no space inside it had been wasted. There were large, fat pieces of chocolate cake, four nicely browned breasts of young chicken, sweet cucumber pickles, sandwiches of snowy bread well buttered, goosberry and pumpkin pie in large pieces, a couple of nice ripe bananas, two oranges, and some candy in sticks stripped like a barber pole! How would you like to break into such a shoe-box?

The girl who had filled this shoe-box was young, but she was the prettiest little girl in all our bunchgrass country-side. Her mother was said to be the best cook in our bunchgrass country, and this pretty little girl "took after her mother," the people said. An old bachelor neighbor of ours was wont to say that "that little girl will sure make some good man a wife some day," and, as you shall see presently, she has.

So I was lucky in the purchase of a basket. The other little boy was doubly unlucky.

She and I found a seat somewhere. She began to spread the things out on my lap and her own. But my appetite was gone.

"I guess—I guess Billy Blank didn't get a basket," I ventured. "I—I feel like a pig eating all that."

"I should think you would," she replied brightly. "Why don't you ask him to eat with us?"

I was on my feet in an instant.

But Billy Blank was not yet a captain in the American army; nor had he yet stood before the looming, gray skeleton in the Metropolitan museum and remarked to his wife of six months, she who was destined to make a good man a wife some day, that the thing, though dead a million years was still grinning. Billy Blank then was only a little boy and was sad and forlorn, and in response to my invitation refused to come out of the dark corner where he had hid, to dine with me and the girl whose basket he had been unable to buy.

"People would see me — and then they'd all laugh," he said sadly. I persisted, but he was obdurate.

"They'd all laugh at me," he said.

I went back to Nellie and reported.

"Why can't we go over where he is?" she wanted to know.

We could and did. Billy, poor youngster, was so bruised in soul that it was hard to revive him; but we did—that is, she did. She insisted that he make the first selection of the pie, the cake, the chicken, the fruit, the sandwiches, and the candy that was striped red like a barber pole. By and by she made him smile.

You'll have to guess the rest, for I haven't time to tell it. Billy Blank is a boy no longer. He is a captain of marines in France. Nellie is a little girl no longer, but she is a good cook just as the bunchgrass folk said she would be, seeing that she took after her mother so much. Captain Billy wrote home the other day and said that the American supply system was thus far a marvel—but that just the same he'd like to break into one of Nellie's shoe-boxes again.

I believe in prayer, and I believe prayers are answered. Just the same, I think Captain Billy's chances to occupy space in the graveyard we paid for at the basket social are not nearly so good as mine. If Father Time had just hung to his scythe a bit longer and left the mower alone it might have been different—yes, the whole world would have been different.

For a long time after Billy and Nellie and I ate supper from the shoe-box, which I had bought for two dollars and twenty-five cents, the new graveyard remained empty. "Who will be first?" everybody wondered.

Maybe you bought a new Bible, once. There in the family record you wrote such dates of marriages and births as you had for the new pages. When you came to that sinister looking page headed, "Deaths," you halted. "Who will be first?" you wondered; and closed your new Bible with a sigh, perhaps.

This is how we passed our new graveyard during the several years it remained untenanted on the corner of Joe Mires' farm.

We always guessed that the first would be Old Lady Higgins. Gracious, she was old. I doubt if she knew how old she was, and know we didn't. All she knew of American history was what she remembered, and it seems to me that she remembered clear back to the Declaration of Independence and Bunker Hill. She remembered all the presidents clear back to Andrew Jackson, but skipped from there to George Washington, so I judged that from Washington to Jackson she must have been pretty young. Her own father "crossed the Delaware" with Washington, and was at the siege of Yorktown. She surely was old, and we had a right to guess that she would be the first to raise a mound of new earth in our graveyard.

But she wasn't. It was the strongest, healthiest, happiest man in our bunchgrass country—Dave Reeves, the storekeeper, who at the basket social had bid higher than any one else. He got Old Lady Higgins' basket, which was plain as an old shoe, had not a stitch of decoration on it, and was filled mainly with old-fashioned corn pone, fried fat bacon, potatoes boiled with their jackets on, and some dried apples stewed with sweetening of "black strap" molasses.

After Dave Reeves, Old Lady Higgins next, of course! Everybody said so as they left the graveyard. Wrong again!

Old Man Beale, who spent his lonely winters trying to invent a new kind of wagon wheel, was out on a mid-spring day cutting bunchgrass hay. Homeward bound, he had a runaway, and a wheel ran over him. He died in three days.

Old Lady Higgins next! Not so. Dick Gilbert, young, full of promise, fell in the new well he was digging. Frank Jones, his hired man, looked down into the well, which was 60 feet deep, and saw Dick lying there. He called down—no reply. Dick was dead.

Frank went to the house, where Dick's wife was busy cooking dinner, and told her what had happened. Holding her in a grip of steel he made her promise and swear on her honor and her Bible that she would not go to look in the well while he rode four miles to get the nearest neighbor to help get Dick out of the well. She promised and kept her promise. When Frank returned, there she sat on the doorstep, stony-faced and gray, with her weeping children huddled about her.

So the new graveyard was filled with those who died young and those who died old, all gathering beneath its bunchgrass sod. But never Old Lady Higgins! By my holiest word, she kept above its dust and clods till the place was getting crowded, and people were saying that they needed a bigger graveyard, and would have to hold another basket supper.

I started with Lester Steele, but it just happened that way. He, I think, was laid to rest in the new part of the graveyard. His father is in a graveyard somewhere else.

Look up and smile! Looming from the prehistoric past is the great gray skeleton; dead a million years and still grinning. Why worry!

## Tractors in Columbia County.

News comes from Dayton that since the introduction of the crawler type of tractor two years ago 15 have been put into general use in Columbia county. The plow, the disk, the harrow, in fact every farm implement, is being operated with the tractor, even to the combined harvester. Other uses to which the crawler has been adapted include dragging the roads, hauling grain and other farm products to market, pulling stumps and moving houses. Those using the engines in Columbia county include Courtney Brothers, Mrs. J. J. Rose, George Price, Homer Price, Ray Cyrus, Theodore Grote, Ernest Hopkins, Berton Delany, Robert E. Lee, Frank J. Thompson, William Weller, Mrs. C. A. E. Duncan, J. L. Duman, Smith Gwinn and Roy Ream.

## Practice Fox Farming.

Owing to the excellent market for furs, fox farming in Alaska is becoming more prominent as an industry though it continues to be something of a fad with those who follow it. The islands along the southeastern Alaska coast are the seats of the fox farms. It costs money to go into the fox raising business, however, as an ordinary fox costs from $50 to $250. The valuo of fur, however, makes the industry not only interesting, but profitable wnere it can be conducted successfully.


# PRIZES! Farm War Service Flags are Offered

Get one of our farm service flags, showing a big star to represent your farm and smaller stars for each member of your family who is helping produce food. This is the big, new idea in service flags. It is distinct from the war service flag; as it applies exclusively to the farm. Described as "appropriate" and "attractive" by the department of agriculture. In sending your order state the number in your family who are aiding in food production and we will supply the correct number of stars without extra charge.

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***Paper Pennant***

A pennant, 9x22 inches, printed on heavy enamel paper in full colors, will be postpaid to any one securing and sending in ONE NEW subscription to this paper. (One year 25c, three years 50c.)

**Offer No. 2.**

***Bunting Pennant***

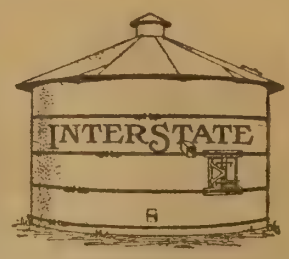
A pennant, 9x22 inches, made of cotton bunting (just the thing for the auto, front porch or the flag pole), will be mailed postpaid to any one sending us THREE SUBSCRIPTIONS TO THIS PAPER. Secure three of your neighbors under our special bargain rates and receive a bunting "Farm Service War Flag."

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# All the World's a Stage, and All the Men and Women Merely Players

## Wash Day at Camp.



Not one of the most up-to-date laundries, but it serves the purpose of the boys in the cantonments.

## Having a Little Recreation in France



(Copyright by Com. on Public Information.)

A few of the boys of an American ambulance company in France having a little recreation in front of their billet.

## Learn to Iron.



Another common phase of camp life. This picture and its companion are taken from a recent issue of the Red Cross Magazine.

## Another Drive for Victory




—Oakland Tribune.

## Red Cross Cares for War Orphans



The American Red Cross has established depots where repatriated children from the conquered provinces are being cared for, and maintains several hospitals for tubercular children.

## New Carnegie Library at Hermiston



The Hermiston (Oregon) public library, shown above, has just been completed. The building was erected with Carnegie funds and the site was donated by J. H. Raley of Pendleton. It is of Spanish and Italian architecture.

The building contains a main library room 24x50, a lecture room 24x26 and a committee room 12x14, with modern equipment.

Mrs. M. E. Benedict has been appointed librarian and is now in charge of the library, which is to be maintained by the city of Hermiston. The library board that obtained the funds and constructed the building is as follows: Mrs. J. T. Hinkle, chairman; Mrs. C. E. Butler, secretary; H. M. Straw, E. P. Dodd, Mrs. F. A. Phelps and Father Butler. The board was assisted by Miss Sabra L. Nason of Pendleton, county librarian.

## Oliver Twist Hoover




—Dallas News.

# Shall We Hang German Spies?

Ex-President Taft declared in a speech in Oklahoma the other day that "spies should be courtmartialed, lined up and their citizenship ended by bullets." Most people will heartily subscribe to that, for we know that Germany has its spies everywhere, and their job is to make it easier for the kaiser's armies to kill American soldiers in France.

We have now been at war with Germany for a year, but has any one authentic information that a single spy has been shot? Some of them have been put in internment camps, where they are supplied with good food, comfortable beds and medical care, all at the expense of the people of the United States.

It is difficult to fix the blame for this lenient way of dealing with dangerous enemies of the United States. One reason is the inadequacy of our policies and laws. For example, congress has not yet declared war on Bulgaria and Turkey, though those countries are allies of Germany. Their subjects in this country are therefore technically friendly aliens and the government must deal with them as such.

Several months ago the United States department of justice told congress that legislation was needed for more vigorous prosecution and punishment of male spies, and after much delay a law was passed relating to German and Austrian male spies. But at that time the administration asked that the new laws should not apply to female spies, though the fact is well known that the kaiser employs women spies in large numbers.

Later the department of justice, realizing that a mistake had been made, asked that the law be amended to apply to women, but the bill is still pending, and even if a woman spy were caught she could not be given severe punishment.

Last January the administration asked congress to give it sufficient law to punish pro-Germans who interfere with the sale of Liberty bonds. The third bond drive came on and congress had not passed the needed legislation.

Most people imagine that if a man puts bombs on American transports carrying American boys to Europe and he is caught that, of course, he can be shot at sunrise or hanged or electricuted. But the fact is he can not get more than about 18 months in jail and a $2000 fine. Herr von Rintelen, master German agent, was caught in such a conspiracy, but the only statute on which he could be prosecuted was interference in interstate commerce. The bills asking for severe penalties have not been acted upon.

Most people imagine that when there are big fires and destruction of American property in munition plants and war factories, swift and condign punishment can be meted out to offenders. But there is no federal law to punish arson or the bombing of American ships by the hiding of explosives aboard, and the destruction of government property can be carried on without fear of serious consequences to the offenders. For this congress is to blame.

When the government itself is so slow in dealing with war problems can it be wondered at that so many people have not yet awakened to the fact that this country is really at war? The remark is often heard: "The country will wake up when our soldiers get into hard fighting and the people scan long lists of killed and wounded." But why wait for that frightful sacrifice of American blood? Why not emphasize the fact that we are at war by hanging several hundred German spies, casting out several disloyal congressmen and dealing generally in vigor and resolution with the traitors of all degrees who are helping the kaiser and playing false with Uncle Sam?

## Financial Difficulties.

I don't know why, but to be frank,
I'm always flustered in a bank.
I always wish the check I' brought
Had larger figures on its face,
The kind of check a fellow ought
To bring to such a busy place.
The atmosphere is charged with awe.
A check for seven-fifty! Pshaw!

I reach the wicket in my turn,
Hand in the check, and then I learn
That I've forgotten to indorse.
I take the blamed thing to a shelf
And write my name. Some blots, of course.
Then back in line I place myself
And hum a little tune—or try
To show how self-possessed am I.

Again the wicket faces me.
My fingers fumble helplessly.
I drop a coin. The line is stopped
While I go hunting on the floor
And find it is a cent I've dropped.
I turn and hurry to the door
And reach the street, a nervous wreck,
Still clinging to that blasted check.
—Walter G. Doty in New York Times.

## Why We Must Eat Less Wheat

Bread comes first. Bread means wheat. The people of the allies, eating war bread darker and heavier than any we are asked to adopt, must have enough to make the raised loaf. They are eating corn and barley and rye; that they may have bread we must send them 75,000,000 bushels of wheat.

To create that supply, we must cut down our own use of wheat by one-third. To sustain them against famine, to protect the armies from disaster, loyal Americans are eating victory bread.

## Sidelights

**New Word to Her.**

Ellen was a strong, fine looking young Irishwoman and thought herself possessed of more than average ability. Taking advantage of the scarcity of labor of all sorts she decided to accept a position as clerk in one of the local stores.

One morning she was called before the manager to explain why she was performing a certain part of the duties assigned to her in a careless manner.

"Miss Finnegan," said the manager, "for the last two weeks your work has been very perfunctory. We can not—"

"Mr. Miller," interrupted the young woman, "I've been working here four months now, and although I've tried my best, that's the first bit of praise I have received since I've been here."—Harper's Magazine.

**What Puzzled Her.**

When the car left the terminus a very stout lady, clad in muslin was hanging on to a strap for dear life.

A very small soldier, who was wedged in on the seat, struggled to his feet and in quite the Old-World manner offered his seat to the ample lady.

Smilingly she thanked him and then, looking rather bewildered, said: "Thanks so much! But where did you get up from?"—Tit-Bits.

**Most Useful Part.**

Teacher—(at object lesson)—So now, children, you know how a knife is made. I want you, Marjorie, to tell me which is the most important part of a knife.

Marjorie—Er—er—er——

Teacher—Well I'll help you. What part of his knife does your father use the most?

Marjorie—The corkscrew.—Pearson's.

**The Correct Adjective.**

"Don't cuff the little fellow, madam," remonstrated a passerby. "Surely he has done nothing very bad, a sweet child like that."

"Sweet child is right," said the wrathful woman. "'E's been an' swallowed our sugar ticket."

**Molasses from Barbados.**

There were 753,170 gallons of molasses, valued at $257,585, invoiced at the American consulate at Barbados, British West Indies, for the United States during 1917, compared with 1,522,427 gallons, valued at $305,746, for 1916.

**Combination Job.**

Briggs—Did the doctor build you up as he said he would?

Griggs—Yes, and judging from his bill he charged me both as a physician and a first-class constructor.

**Must Be Housecleaning.**

Marporie came in with some pussy willows. "Oh, mamma," she cried, "just see those cunning little muffs the kitties have hung out to air."

**His Method.**

Farm Visitor—How do you find out if a fowl is tender enough for roasting?

Farmer—I axe her, miss.





The Mighty Arm of a Giant

No lesser force could crank a big tractor motor fast enough to deliver a starting spark as intense as that delivered by a

TRADE K-W MARK High Tension MAGNETO

Equipped With a K-W Impulse Starter.

No matter how slowly you turn your tractor motor over—even if you use a crowbar—the shaft or rotor of the magneto (held back until the firing point of the engine is reached) is driven forward at a high rate of speed by this powerful impulse starter. This produces a hot, intense starting spark even when the motor is stone cold. It absolutely prevents back firing while cranking even if the spark control is fully advanced. It *guarantees* an immediate start and entirely eliminates troublesome self starters, coils and batteries.

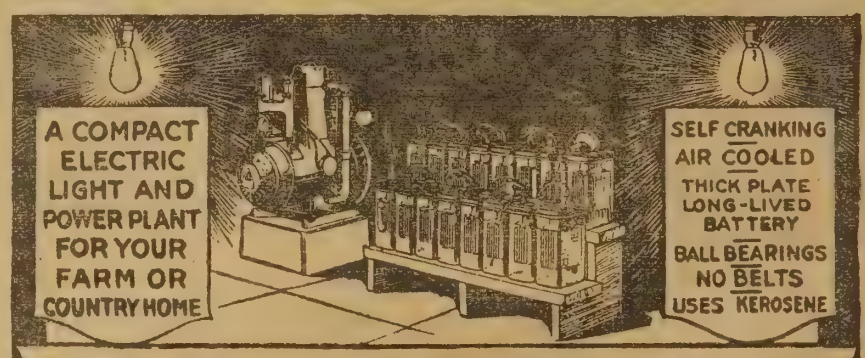



Write for a list of K-W equipped Tractors

The K-W Impulse Starter, found *only* on K-W Magnetos, was the *first* impulse starter. It has stood the test of time. It is a fit team mate for K-W Magnetos whose efficiency and reliability has led 40 manufacturers to adopt them as standard equipment of 83 models of tractors.

A K-W Magneto assures a positive start—without fussing. Its reliability keeps your tractor going. Its efficiency cuts fuel cost to the bone. Insist that your new tractor be K-W equipped.

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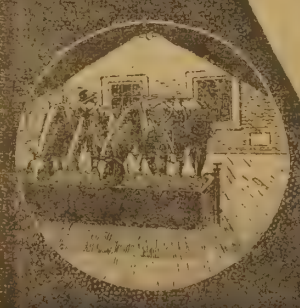

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# Trappers of the Ozarks

## The Adventures of Two Young Pioneers in the Wilds of Upper Louisiana, Now the State of Missouri.

By LEWIS B. MILLER.

Copyright, 1914, 1915, by Lewis B. Miller.



**Synopsis of Preceding Chapters.**

In September, 1811, two young men who lived near St. Louis, Ben Armstrong and Jodo Henderson, taking with them their two dogs and donkey Spunky, started on an all-winter's hunt in what was at that time unsettled region, where Indians held full sway, in the wilds of upper Louisiana, now the state of Missouri. After a perilous trip over old Indian trails and dangerous streams, they reached their destination — a salt spring close to the river Big Niangua, which Ben had visited before and from which they expected to secure salt for sale with their furs when they returned to civilization the following spring. Here they erected a rough cabin for their winter quarters close to the mouth of a large cave that was full of water and bats, and started their saltmaking and hunting. After exciting experiences with a buffalo herd and with a bear in a cave, they find their first fresh sign of Indians — moccasin tracks in the snow. And then, in the dead of night, a scouting party visited them preparatory to an attack. The attack followed soon, and would have resulted in the capture of the boys by the savages had not a violent earthquake frightened them away. It was only a short time, however, till they were in the hands of the savages, led away capive. They remained captive for some time, narrowly escaping being burned at the stake by their enemies. Ben was saved by Watermelon, a big, fat squaw, who claimed him as her husband.

### CHAPTER XIII.

**Paddling the Unpathed Waters.**

When at last the Indian village had become quiet, Ben emerged from the wigwam with a water-gourd in his hand. He walked noislessly, but made no attempt to hide. If any of the Osages should see him, they would doubtless believe that he was going to the river for water. He wore his blanket, and besides the gourd, which was carried openly, he was carrying their provision-bag and his rifle under the blanket. The hair-lariat was also wrapped around his waist.

After Ben had been gone several minutes, Jodo emerged from their wigwam. His rifle was concealed under his blanket; but the roll of buffalo-robes and blankets had been left behind. That he would return for as soon as he could make sure that the way was clear. But he soon came upon an Indian, a squaw, scarcely distinguishable in the dim light. She turned to look at Jodo. Whether she suspected anything he could not tell; but she passed on and out of sight, while he kept on toward the river.

Down the bank he made his way, and found the canoe. Ben had been lying concealed in it, but he rose up when Jodo's figure appeared. While stooping at the water's edge, Jodo whispered about the suspecious squaw. For they knew that every Indian seemed to be keeping an eye on them.

"I've got to go back for our bedding," he whispered, if there's anybody near our lodge, I shall have to wait till the way is clear. Any Osage would give an alarm if he saw me coming toward the river with that roll of things."

"That's right. We must get those things to the river without being seen. You step in here, and crouch down out of sight. I'd better go back for the roll. I won't start with it till the way seems clear."

So Ben stepped ashore, and Jodo concealed himself in the canoe. Ben, leaving his gun, walked boldly back to their lodge. On approaching the lodge he thought he detected an Indian near it. If so, the Osage dodged off into the darkness as the white man appeared. Going inside, Ben found the roll of bedding and lay down against it, in the dark. He thought it safer to wait a few minutes.

And it was well that he waited. Before he had been there long, the door-hide moved aside enough to let in some cold air, and Ben felt rather than saw that dark eyes were trying to peer inside. He kept still for a few moments, then had the presence of mind to say: "Jodo, are you asleep?"

The door-hide soon dropped into place, and the listener thought he could detect the softest of footfalls gliding away from the wigwam. Still he lay motionless, waiting and listening. Finally he sprang up, went outside and walked entirely around the wigwam. Seeing and hearing nobody, he got the roll and started toward the river with it.

He had to pass near two wigwams, and this time he was careful to step so noislessly as not to be heard. He reached the river-bank without seeing any body.

"I was beginning to think you'd been discovered," Jodo whispered, as Ben drew the canoe up against the frozen bank and laid the roll in it. Then he untied the hide-rope that held the canoe, and himself stepped in.

Both now crouched as low as they could. After pointing the canoe in the right direction, Ben put his paddle against the bank and gave a push, which sent the light craft 30 yards out into the stream. Then he began to paddle noislessly, and kept paddling till they were almost against the far bank. Now Jodo took up the other paddle and began to help.

Slowly, cautiously they kept paddling up stream, till the village had been left behind. After that they were less careful, and moved faster. Soon the canoe was cutting through the water fully as fast as was safe in the dark.

At first the air felt chilly, and the escaping captives were inclined to shiver, even under their blankets. But using the paddles soon warmed them up. Hour after hour they paddled on, partly to get as far from the Osage village as they could, and partly because it wouldl be well-nigh impossible to pick out a good hiding-place till daylight came.

"Where can we hide—what kind of a place can we hide in?" Jodo wanted to know, when at last the long winter night was wearing to its end, and the east was growing a little lighter.

"We shall know the right hiding-place when we find it. As we must stay there a few days, of course we want it as comfortable a place as possible. No chance for a fire in the daytime; and the only place we can be half-way comfortable without fire this weather is in a cave."

"Plenty of caves in this country. We ought not to have much trouble finding one."

"I'm hoping we can find one without tramping about much, and making too plain a trail in the snow."

"If there was some cave we could get into from the water, I'd prefer that."

"So would I, Jodo. And it's possible that we can find such a cave. For that we ought to paddle up some creek."

They kept their paddles going. As soon as there was light enough, they began to watch the river-banks for the mouths of creeks. After passing by several smaller streams, they came to one that looked large enough to be navigable by their canoe. So they paddled into it.

At first the banks were of earth, and not very high. But after crossing a narrow valley, the fugitives came to where the creek had cut its way through solid rock. Here, as they paddled slowly along, they began to look for some kind of an opening.

And they soon found what they were looking for. For a distance of 50 yards or more the stream had cut far back under a cliff; and at one point there was an opening which led still farther back, till lost in darkness. The shelving cliff here was scarcely a yard above the water, and the cave was of about the same height. They paddled under to the water's edge, then tried to peer back into the dark hole.

"Not the most inviting place in the world," was Jodo's opinion of it.

"No. But it looks safe to me. Our canoe pulled up here will be out of sight except to somebody in another canoe. And we can crawl to our hiding-place without leaving any sign visible from without."

"Yes. Guess we can't find a safer hole."

"Believe I'll crawl in and see, or rather feel, what kind of a place it is."

"Getting out of the canoe, Ben crawled on into the darkness. He soon disappeared, and for a few minutes his companion neither saw nor heard him. At length he came crawling out.

"Did you go to the back end?"

"No. But I made my way in so far that the place felt almost warm. It's not much nicer than it looks. Still, it would be habitable for a few days, I've no doubt.

"What's wrong with it?"

"Damp. Every time this creek gets up, the water backs into that cave. The back-water hasn't been in there since last spring, maybe; but a cave dries out slowly. If we'd brought only our blankets, I'd say look farther. But with two buffalo-robes under our blankets, I think we can defy the damp."

So Jodo got out, and after drawing their canoe well up on dry ground, they made it fast to a piece of rock with its buffalo-hide rope. Then they took out everything and began to crawl into the cave, pushing the things before them. When they had made their way so far in that the cold outside seemed not to follow them they stopped and spread down their bedding. The rock-roof was still so low that they could barely sit upright.

"Now for some breakfast, and after that a good, long sleep!" said Jodo. "That is if it will be safe for us both togo to sleep at once."

"For the present I think it will be safe enough. The Osages didn't miss us till daylight, I guess—may not have missed us yet, for that matter. And even if they could come straight to our hiding-place, it would take them several hours to get here, whether by land or water. But I don't believe they'll come this way at all. In fact, I'm well-nigh sure they won't till they've scoured all the lower country for us."

"And about the time they quit hunting for us down there and go to looking up this way, we'll shift our hiding-place to the lower country."

"That's our plan, Jodo, unless some hitch occurs in carrying it out."

After a hearty breakfast of jerked venison and parched corn, the two had soon stretched themselves on their buffalo-robes, covered themselves with their blankets, and gone to sleep. It was late in the day when they awoke.

Now they crawled down to the edge of the stream, to get a drink and fill their water-gourd, and also to find out about the weather. To their relief, the air was still raw.

"I don't think there's much danger of a thaw tonight, Jodo. But we've got to be on our guard. If that snow should start to melt, it wouldn't be long till this creek would be high enough to send the water up to where our things are. It won't do for us to sleep too long or too soundly."

"Well, there's no great danger, I guess, Ben. The roaring of the creek would be apt to wake us. And even it it didn't the water would get to us and stir us out before the mouth of the cave would be closed up."

"Yes, but not before the creek would be two feet deep along here. Then we'd have to crawl all the way to our canoe through ice-water."

"Which would feel too chilly to be funny."

They soon crawled back to their things and went to eating their supper. While they were eating, the bright spot that was the mouth of the cave began to fade, and kept fading till scarcely visible. After supper the two lay and talked for a good while. But finally they fell asleep; and they slept most of the time till the light spot had grown bright again.

By this time both had rested from their night of hard paddling. Accustomed to an active life, they soon began to grow restless. If the rock-roof had been high enough for them to stand upright and walk about, they could have had some relief. But the only way to exert themselves now was by crawling around over the half-muddy ground on hands and knees or all-fours. And the darkness and dampness of the cave were also having a marked effect on the spirits of the two hiding there.

After breakfast they talked of getting into their canoe and taking a row down the creek to the river. But there was some danger that their pursuers might be in the vicinity by this time. Of, if not that, it was altogether possible that some of the Osage hunters might be hunting up here. So there was nothing for them to do but spend anotherday in their damp dungeon.

But by noon they were debating the prudence of getting out; and by night they had fully made up their minds to go down the river under cover of the approaching darkness. The sky seemed to be clear, but there would be no moon, and they hoped to drift by the Osage village without being discovered.

Their supper was eaten before the bright spot had begun to fade. And they carried all their things down and loaded them into the canoe while there was still some light in the cave. But they waited till the light was very dim before they pushed out from under the cliff and glided away down the creek.

"It feels nice to have a paddle to stretch your muscles with," Jodo little more than whispered, as they were making their way along the narrow, winding, rock-walled stream.

"It certainly does seem nice. I feel like I could paddle a hundred miles tonight without growing tired."

"Well, the farther we paddle the better it will be for us, I'd say."

The western sky was still bright with the trail of the setting sun when the canoe arrived at where the creek met the Osage. So, as a matter of prudence, the canoemen waited there till the night was as dark as it was likely to become. Then they made straight for mid-river, and from there went paddling on down stream. This was a better night for finding their way than the night when they had come up, but by no means as good for hiding. All the time, as they kept their canoe moving, they were painfully conscious that they could probably be seen by anybody on either bank. Hungry for exercise after their confinement, they paddled swiftly, but at the same time were careful to make very little noise. They wanted to get by the Osage village and as far down the river as possible before daylight drove them to seek a hiding-place.

Having the current as a helper now, they could, of course, travel much faster than they had traveled while coming up. Consequently they were not surprised when, even before midnight, they began to hear dogs barking ahead, and knew that they were approaching the Indian village.

When at last they could dimly make out wigwams on the south bank, they found themselves growing anxious. After paddling well over toward the north bank, they laid their paddles aside, and both threw themselves down so that the canoe would conceal them. So lying, they waited in anxious suspense while the slow current—it was sluggish near the bank—

(Continued on the following page.)



In the dead of night they make their escape.

# Trappers of the Ozarks

.....BY.....
LEWIS B. MILLER

(Continued from the preceding page.)

carried them along by the village. Both lay in such a position that they could peep over the side of the canoe.

At first they could make out nobody. But a dog in the village began to bark, and soon a dozen dogs were strung along the bank, barking noisily toward the drifting canoe. Whether they merely saw the canoe in motion, or both saw and scented its occupants, could only be guessed. Soon several Indians, attracted by the noise the dogs were making, could be seen standing on the bank. Fortunately the stream was wide here; and they were looking down upon the water, and would be less likely to see the canoe than if they had been on a level with it.

Slow, frightfully slow, the movement of the canoe seemed to its impatient occupants. But at length the few hundred yards of village had been passed, and the clamor of the wolf-dogs was being left behind. Now the white fugitives were beginning to breathe freely again, and were thinking of sitting up to go to paddling, when they began to hear paddles somewhere. At first they believed the noise to be up stream, and that Osage canoemen were coming in pursuit of them. But soon they could make out that the paddling was down stream. Now they surmised that Indians who had been down the river for some purpose were returning late to their village. Probably they were a party who had gone in pursuit of the escaping captives.

Had the canoemen and the drifting canoe met, there is little room to doubt that the Osages would have noticed the canoe and would have stopped it. But fortunately the Indians were paddling along near the south bank, while the canoe with white occupants was still drifting along near the north bank.

At length the two parties passed each other. Not till their canoe had drifted a mile or so farther, and no more Indians had been seen or heard, did the fugitives dare to sit up and use their paddles again. Now they took the middle of the stream and paddled swiftly, steadily.

Sometimes, though, lest other Indians might be coming up the river, they ceased paddling and sat still for a few minutes to listen. But they met nobody else, and were miles below the village when the cold light of dawn began to paint the east.

"Soon be time for us to hunt another hiding-place." Ben was gazing toward the lofty cliffs which here made the river-bank on the south.

"What kind of a place shall we look for this time? Another cave?"

"I can't think of any better. And I don't know of a better place to find a cave than in some creek. Keep a 'watch-out' for one."

At length they came to the mouth of a creek that looked promising, and they paddled into it. But before going a hundred yards the canoe was aground. So they had to return to the river and try again.

By this time they were feeling a little anxious. The sun was coming up, and there was no telling how many Osages might be along the river, scouring the country high and low for the escaped captives. The two kept themselves as close to the south bank as possible, and made themselves as inconspicuous as possible.

At length they came to another creek, and lost no time in turning aside and hiding themselves in it.

From the start this stream had high, upright, limestone cliffs for banks. They were hopeful of finding a cave similar to the one they had concealed themselves in before, but drier.

For half a mile or more they paddled up its windings, sometimes noticing ice along the banks where the water was still. They watched each rock-wall for a cave, and were not long in discovering one. It was not on a level with the water, this cave, but was about 12 feet up, in the rock face of the cliff. Though it was not large, there was room for a man to stand erect in its mouth.

"There's no place here to hide our canoe, Ben."

"No. But the country is so mountainous on both sides that I'm doubtful if any Indians will happen along here. If they come at all, it will be up the creek, in their canoes, as we've come. And if they come that way, they'll discover our canoe anyhow, no matter how well we conceal it. So I believe we shall be fully as safe up there as in any place we could find, even if we hunted all day."

"But can we get up there?"

"I think so, Jodo. Yonder's a leaning tree on top of the cliff. I can tie a stone in the end of the hair-lariat and toss it over that big limb. The rope is long enough to double down."

"All right, then. I'm ready to try it. But we must tie our canoe to something."

"Here's a crevice in the rock. We can wedge the rope in there with a stick. We shall have to go back to where we can pick up a stone, and we'll fetch a stick of the right size."

Soon they had found both a stone and a stick, and were back under the cave again. Now Ben stood up, and after several throws succeeded in tossing the weighted end of the hair-lariat over a limb, 30 feet above. When the weighted end had dropped down within reach, he tied the two ends together. Now, grasping the double rope, he went up the face of the cliff.

"What kind of a place do you find?" inquired Jodo, when the climber was standing in the mouth of the cave.

"Wait a minute and I'll tell you."

Ben disappeared for a little while, then stood in the mouth of the cave again.

"We can't find a better place to hide in," he reported. "I followed it back to the warm part, but couldn't make out the other end. And every inch of it is as dry as dust. We can walk or run here as much as we please; and we ought to be comfortable enough as long as we care to stay. I'm of the opinion we'd better hide here for several days. As to that, though, we can decide later. Now make a loop in the rope and put our guns in it, and I'll draw them up, and our other things."

Jodo complied, and soon everything except Jodo and the canoe was up in the cave.

"Now, Jodo, I think you'd better paddle back to where you can pick up a few sticks, and send them up. We might want to start a little fire sometime. Plenty of leaves have blown in here, but there's no wood."

Jodo paddled down stream again. But he had soon returned and was sending up a little armful of dry wood, and also the paddles, in a noose of the hair rope. Then he made the canoe fast, and himself went up, with his feet against the cliff, and climbing hand over hand.

"But how can we get down from here?" he demanded, when safe in the cave's mouth. Ben was untying the ends of the lariat, so as to pull it from over the limb.

"Oh, never fear. We'll manage that part all right," Ben assured him, while drawing in the rope and coiling it.

A little later the two were sitting back in the twilight part of the cave, eating their breakfas. And not long after breakfast they were lying in their buffalo-robes and blankets, sleeping the sound sleep of weariness.

(To be continued in the next issue.)

## War Work.

What art thou doing, sister of mine?
What is thy work for this country of thine?
Knitting and sewing,
Freely bestowing
Largess and laughter
Though grief come after?
See that thou give them all of thine heart,
Thankful and glad to be doing thy part,
Sister of mine!
What art thou doing, brother of mine,
Since thou art spared from the firing line?
Toiling and saving,
Poverty braving,
Gallantly living,
Ceaselessly giving?
Though never bullet be aimed at thine heart,
Still art thou acting a soldierly part,
Brother of mine!
What are thou doing, free land of mine?
What is thy task for these children of thine?
Keeping them pure,
Strong to endure,
Teachihng them right,
Yielding them might,
Holding them close to the pulse of thine heart,
Bearing them, nursing them—blest be thy part,
Free land of mine!

—Nora Archibald in Good Housekeeping.

### Soldier's Allowance.

The French soldier is paid $20 a year; the German, $38 a year, the British, $89 a year, and the American soldier gets $30 a month, or $360 a year.

### Merely Skimmed the Subject.

"Edith is engaged."

"Did she tell you all about it?"

"Mercy, no! I only spent the afternoon with her."—Boston Transcript.


# There are Two Kinds of Real Americans

**One kind of an American shoulders a gun. The other kind backs him to the limit with his dollars.**

Between them the War Department and the Treasury Department have a list of real Americans. If you can't get into uniform under a gun, write your name on the Treasury Department's roster of Americans by buying a Third Liberty Bond.

# Your Country Calls You

as a real American to back the Army and Navy.

Uncle Sam wants $3,000,000,000. Liberty Bonds pay a substantial interest on your savings. **Any bank will help you buy a Liberty Bond, or buy from the local Liberty Loan organization.**

**This space contributed to the Third Liberty Loan campaign by the Modern Appliance Co., E. H. Epperson, Pres., 508 First Ave. S. Seattle.**

# PAPEC Throws as it blows - Fills the highest Silo!

"It blew into a 32-foot silo with ease. I tried to choke it down, but couldn't do it," wrote Mr. W. Sams, Skamania, Wash.

There's no silo too high for the Papec Cutter and it's a great power saver. With a Papec you can cut your fodder at just the right stage and save all its nutriments.

# PAPEC CUTTER

Every man who wants to make the biggest profits out of silage needs a Papec. You can run it with your own farm engine. Cut your silage slowly and let it settle —you get *more* in the silo then and it is *better silage.*

Papec Cutters built in all sizes—from the 3-ton-an-hour machine, operated with a 4-h.p. engine, to 30-ton-an-hour size.

Write for free Papec catalogs, and what many owners in the Northwest have to say for this Cutter.

*Use coupon below—or a postal. Address nearest house.*

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**907 Western Ave. Seattle**
**or**
**Monroe & Crisell**
**91 Front St. Portland**




Sign and Mail

**Send me Papec Catalogs, free, without obligation.**

Name..... Address.....




ALICE W. BARLAND,
Editorial Contributor.

# Raise White Flowers

By LISSIE C. FARMER.

There are many occasions when white flowers are singularly suitable for decorations. There are births and christenings and other baby events, graduations, weddings and funerals, and the country dweller who usually has more room for flowers can easily have a few varieties of white bloomers stretching over the whole season so that she will be able to furnish blossoms for any of the occasions when white is especially in demand.

Sweet peas are easily grown everywhere and can be had in pure white as well as the numerous colors in which they flaunt themselves. The white vine, however, must be planted by itself for if it is planted beside any of the bright colored peas, it is apt to mix with them and take on their colors.

White can be had in nearly all the bulb growing plants as tulips, hyacinths, narcissus, etc., and from them we may have very early blooms, while other flowering plants are getting ready to bloom. In larger flowers, there are pure white roses and dahlias, columbines and peonies, Sweet alyssum in the pure white makes a very prettty border for beds, is a good bloomer and works easily into small wreaths and bouquets.

Then there are the "everlasting" flowers that grow wild in most of our northwest. They are a species of the common old-fashioned straw flowers, and it is well worth one's while to gather some of the seed and plant it in the yard. The little, round roselike flowers last for weeks, and are very dainty and pretty and especially suitable for funeral wreaths. Feverfew is another pretty and easily grown small flower in white, which can be started from seed, but is a perennial. There is white larkspur, candytuft, and balsam or lady's slipper—all easily grown. Asparagus is one of the prettiest greeneries to go with all kinds of white flowers, quite as dainty and pretty as anything that can be had at the florist's.

## EGG BREADS.

### Make Good Spring Breakfasts.

Eggs and milk are plentiful and now is the time to make egg breads. The milk and eggs that go into muffins and cakes are not lost; you get it all back in the bread. There is more food in cornmeal muffins than in wheat biscuit and less meat can be served with such breads.

Below are recipes for seven egg breads.

**Cornmeal Waffles.**

Half cup corn meal, half cup flour, one tablespoon melted butter, half teaspoon soda, one cup boiled rice, two eggs well beaten, one teaspoon salt, one cup sour milk.

Sift together the flour, soda and salt; add the other ingredients and beat thoroughly; have irons hot and well greased.

**Corn-Rice Muffins.**

One cup corn meal, one cup boiled rice, one cup milk, two eggs, one tablespoon fat, one teaspoon salt, two teaspoons baking powder.

Mix corn meal, rice, milk and shortening together; beat five minutes; then add well-beaten eggs, beat two minutes, then add the baking powder. Bake in hot greased muffin tins or in shallow pan. Boiled hominy may be used in the above recipe instead of rice.

**Buckwheat Muffins.**

One cup milk, one tablespoon fat, one tablespoon syrup, one egg, one teaspoon salt, four teaspoons baking powder, one cup wheat flour, seven-eighths cup buckwheat flour.

Sift dry materials together. Add to the cup of milk and melted fat, syrup and beaten egg. Combine these two mixtures stirring lightly, without beating. Bake about 30 minutes in a moderately hot oven.

**Spoon Bread.**

One cup white cornmeal.
One and one-half cups boiling water.
One cup sweet milk.
One teaspoon salt.
Two teaspoons baking powder.
Two eggs.

Sift meal into a bowl. See that the water is boiling vigorously. Pour over the meal, stirring at the same time. When lukewarm, add the sweet milk, the well beaten egg yolk and beat thoroughly. Add the baking powder and last fold in the stiffly beaten whites. Pour into a hot, well greased baking dish and bake in a moderately hot oven 30 minutes. Serve from the baking dish, with a spoon.

**Rice Crumpets.**

One and one-half cups milk.
One tablespoon fat.
Three eggs.
One teaspoon salt.
Two teaspoons baking powder.
One cup boiled rice.
One cup cornmeal.
One-half cup flour.

Combine as for muffins. Cook on hot greased griddle, eat with syrup.

**Barley Muffins.**

One cup milk.
One tablespoon fat.
One tablespoon syrup.
One egg.
One teaspoon salt.
Four teaspoons baking powder.
One cup wheat flour.
One and one-half cups barley flour.

Follow directions for making buckwheat muffins.

**Oatmeal Muffins.**

One cup milk.
One tablespoon fat.
Two tablespoons syrup.
One egg.
One teaspoon salt.
Four teaspoons baking powder.
One-half cup wheat flour.
One and one-fourth cups oatmeal.

Sift the salt, baking powder and the flour together, mix in the oatmeal. Add to the cup of milk, the melted fat, syrup and beaten egg. Combine these two mixtures stirring lightly without beating. Bake about 30 minutes in a moderately hot oven. Use granulated oatmeal or put rolled oats through food chopper.

# Conservation Pies

War long ago uncovered the sacred American pie, now the bottom crust as known to our mothers has disappeared, and the latest offering of "Yankee ingenuity" is rice pie crust. Rice has a natural affinity for the things that usually constitute pie fillings, and this new camouflage from the first camoufleur—woman—is good for the duration of the war.

**Rice Pie Crust.**

Line a greased pie pan with cold boiled rice, bringing the rice well over the edge of the pan and shaping it with a spoon dipped in milk. Bake the crust in a moderate oven until it is slightly brown. Use the crust like any pastry for a one-crust pie.

**Sour Milk Pie.**

One cup buttermilk or thick clabbered milk.
Two tablespoons cornstarch, mixed with four tablespoons cold water.
Three-quarters cup maple syrup.
Two egg yolks, beaten.
One lemon, juice and grated rind.
One tablespoon melted butter.

Heat the milk in a double boiler. When it is warm, add the cornstarch mixed with cold water. Cook the mixture until it is thick, and add the other ingredients. Cook the mixture until it is clear. Turn it into a baked pie crust made with rice, cover it with meringue, and bake it in a slow oven for 25 minutes.

**Meringue.**

Whites of two eggs.
One-fourth teaspoon vanilla.
Four tablespoons maple syrup.

Beat the egg whites until they are stiff, add the syrup gradually, and then the vanilla.

**Cottage Cheese Pie.**

One cup cottage cheese.
One-half cup maple syrup.
Two-thirds cup milk.
Yolk of two eggs, beaten.
Two tablespoons melted butter.
Salt.
One-half teaspoon vanilla.

Mix the ingredients in the order given. Bake the pie in one crust made of rice. Cool it slightly, cover it with meringue, and brown it in a slow oven.

**Cake Without Sugar.**

Following is an excellent, sugarless cake recipe:

1-4 cup butter, oleomargarine or other fat.
2 cups corn syrup.
2 eggs.
3 cups flour.
1 1-2 tablespoons baking powder.
1-4 teaspoon salt.
1 cup milk.

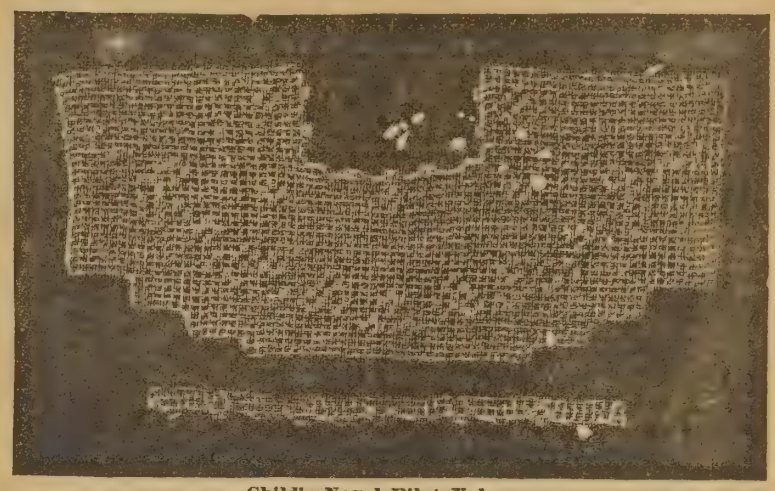
Cream the shortening, add the syrup and the egg, and mix well. Add the milk. Sift the baking powder and flour together; add it slowly to the mixture and beat. Bake in a moderate over as a loaf or layer cake or small drop cakes. One-fourth cup of raisins added to the batter gives more flavor and sweetness.

**Cottage Cheese Real Food.**

The trouble about cottage cheese, according to officials of the department of agriculture, has been that housewives somehow have got the impression that it is merely a relish or the material for a salad, and not what it is—a real staple food.

# Crochet and Tatting Designs

By WINIFRED WORTH.



**Child's Novel Filet Yoke.**

Here's the new design promised in our last instalment. You simply can't make too many yokes for the children.

Use 1 ball No. 60 Cordonnet. If you use a finer sized cotton the yoke will be smaller; if a coarser size, the yoke will be larger.

25 mesh. Follow pattern to 7th row, add 4 mesh.

At the end of 13th row add 2 mesh. Continue following pattern until opposite side is reached, then leave off 2 mesh and so on to end of design.

Finish off lower edge with dc.

For neck, 10 dc., 4 t. Continue around neck, being careful not to pull the corners.

Edge 48 mesh.

1st Row—1 block, 7 mesh, 1 block, 7 mesh, repeat until you have 7 blocks.

**2d Row**—Ch. 3 blocks over block. 5 m., 1 b., 1 m., 1 b., 5 m., repeat to end, turn.

**3d Row**— 1 b., dc. in 3 m., ch. 5, sk. 1 m., dc in 2 m., and 1 b., 1 b. dc over b. and 2 m., ch. 5, repeat to end.

Instalment number 52 features a very chic and dainty Maltese Lace Collar.

## Knitted Goods to Soldiers.

The following shows the number of knitted artciles distributed by the Red Cross to the soldiers and sailors in the various cantonments and camps in the United States during the month of January, 1918:

Sweaters 470,962; mufflers, 133,526; wristlets, 177,536; helmets, 103,751; socks, 282,979.

**Use Your Brains.**

How to save your share of that 100,000,000 bushels of wheat is mostly a matter of ingenuity. When you get in a tight place use your head—substitute brains—but above all do the job.

## Stuffed Prunes and Dates.

The following are delicious substitutes for candy:

Soak the prunes overnight, dry, and stuff with chopped nuts, raisins or apricots. Wash the dates, dry them, and stuff the same as prunes. These and the Parisian sweets are good to eat and good for you.

**Parisian Sweets.**

Use equal quantities of figs, dates and nuts. The nuts may be omitted and prunes or raisins added. Put through a food chopper. Mix well and roll in a little powdered sugar or grated cocoanut.


# Superior Player Pianos

We handle the products of the famous Aeolian Co., the largest Piano manufacturers in the world, makers of the famous Pianola, the Stroud, Steck, Wheelock and Weber Pianos and the wonderful Aeolian Pipe Organ.

We offer as our lowest priced player the **Aeolian Player Piano,** which contains most of the features of the Pianola—it is a beautiful instrument, sweet toned, plays all the 88 note music. It will give much pleasure and render long and efficient service. Price $480.

Then we offer the **Pianola** line. The Pianola is distinguished from all other player instruments because of its many exclusive and wonderful features—the Metrostyle, the Themodist, the Automatic Sustaining Pedal, etc., etc. The Pianola line begins with the Aeolian Pianola at $585; then the prices range upward according to the Piano model—whether in the Stroud, Steck, Weber or Steinway.

The climax of the Player line is the Duo-Art—which is first a "straight" piano; secondly a player piano playing any roll, the motor being operated electrically enabling the player to devote his entire attention to the expression devices; and thirdly—with the special Duo-Art rolls, reproducing the actual playing of the world's greatest artists—Bauer, Gabrilovitch, Grainger, Saint-Saens and scores of others. (We cordially invite you to hear this marvelous instrument.)

We will arrange convenient payment terms on any Player instrument.

**We invite you to call at any of our stores—or write us asking for illustrated catalogues and prices.**

*We are dealers in Steinway and other Pianos, Pianola Pianos, Aeolian Player Pianos, Etc.*

**Sherman, Clay & Co.**

Sixth and Morrison Streets, Portland.
Third Avenue at Pine Street, Seattle.
928-30 Broadway, Tacoma.
308-10 Sprague Avenue, Spokane.

Stores also at San Francisco, Oakland, Sacramento, Stockton, Fresno, San Jose, Santa Rosa, Vallejo.

# Handicraft For Boys

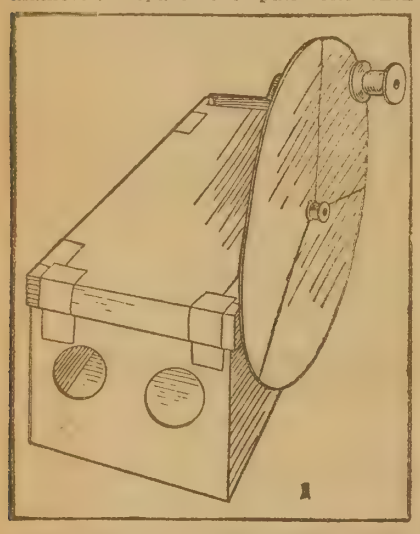
By A. Neely Hall

(Copyright by A. Neely Hall.)

## A Postcard Colorscope.

With the home-made colorscope shown in Fig. 1 you can make uncolored picture cards appear colored, and colored cards in colors other than those in which they have been printed.

A shoe box forms the colorscope case, and Fig. 2 shows how the box and its cover should be prepared. Cut the opening A in one side of the box, near one end, making it about three inches wide by the full depth of the box. Then from the rim of the cover cut a piece of corresponding width, in the right position to come directly over the opening in the side of the box. Across the top of the cover, at the same end of the cover that opening A has been cut through, cut a slot about one-quarter inch wide (B, Fig. 2). Leave about one-quarter inch between this slot and the box end, and the same distance between the ends of the slot and the side edges of the cover. In the end of the box opposite to that on which you have been working cut a pair of holes about one and one-quarter inches in diameter. Space the pair one inch

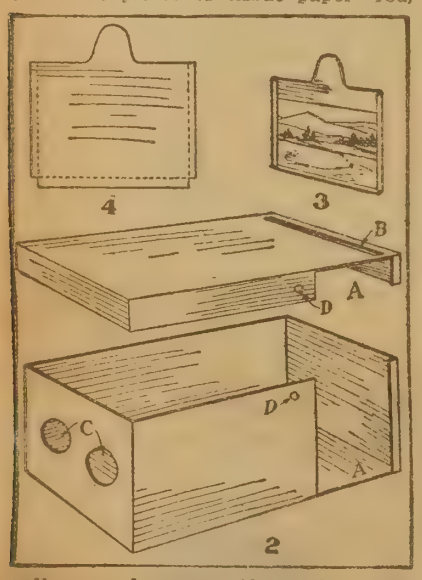


apart. With the cutting done, fasten the cover to the box with paper strips.

## Postcard Holder.

Figures 3 and 4 show how to make the holder for the picture postcards that are to be viewed. The dotted lines in Fig. 4 shows where to bend over the edges to form grooves for the pictures to slide into.

The color screen, shown in detail in Figs. 5 and 6, is of a cardboard disk about 12 inches in diameter. Three openings of an equal size should be cut in this disk, with straps left between them just wide enough to hold the center in place, and a rim around them wide enough to be rigid (Fig. 5). Get three pieces of tissue paper—red,

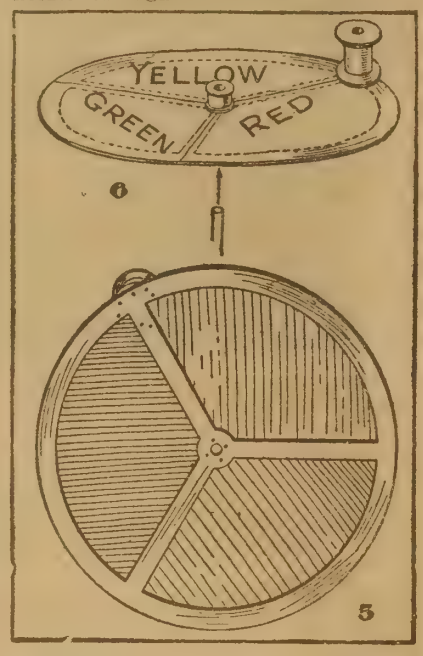



yellow and green, if possible, and paste them over the openings in the disk as shown in Fig. 6. Then punch a one-quarter-inch hole through the center of the disk and fasten a small silk-thread spool over the hole for a hub. To the outer edge of the rim fasten a common thread spool for a handle.

For mounting the disk upon the box you need a stick shaft, and a hole must be punched through each side of the box, in the position shown at D (Fig. 2), for this shaft to run through. The spool hub should fit snugly upon the shaft, so disk and shaft will turn together. Make the shaft long enough to extend through the box.

## To Operate the Colorscope.

To opertae the colorscope, slip a postcard into the holder and drop the holder through the slot in the box




cover; then stand beside a window, with the side of the box on which the disk is mounted turned toward the light; look through the pair of hole in the end of the box, and turn the disk handle so as to allow the light to pass through each of the three pieces of colored tissue paper. The light passing through the yellow tissue paper will produce a sunlight effect, that passing through red will produce a sunset effect and that passing through the green an effect of moonlight.

# See Box Shortage

## Manufacturers Issue Statement

The fruit box manufacturers of the northwest declare that there will be a shortage of 10,000,000 fruit boxes for the northwest this season unless orders are placed at once at prices that will keep the lumber suitable for their construction at home, instead of allowing it to be shipped east for other purposes. The following is a telegraphic report sent out from Portland, Ore., following the meeting of manufacturers there last week:

The supply of boxes for fruit growers and shippers of the Pacific northwest will fall short of the demand during the coming season by approximately 10,000,000 boxes unless orders are placed soon at prices which will compete with present quotations in the east of lumber formerly devoted to box making, according to representatives of the box manufacturers in the Inland Empire, the west coast and California, who met April 9 in Portland. It was asserted that 22,000,000 containers are used normally each year by the fruit growers of Oregon and Washington.

Contracts have been placed for 25 per cent of the fruit boxes needed, according to the estimate of the box manufacturers. Stocks of boxes on hand in the mills were estimated at more than 60 per cent below normal for this period of the year. Stocks of pine logs on hand or in sight in the logging operations are placed at approximately 50 per cent of normal and spruce logs available are fully 66 per cent below normal.

### Cost Less Than Salmon Boxes.

The increase in fruit box prices is proportionately less than the increase in the price on containers for the salmon canneries, according to a statement given out by the box makers after their meeting. Apple boxes which sold two years ago for 10 and 11 cents will be 18 and 18½ cents this year, whereas the containers used for canned salmon, which cost 10½ and 11 cents two years ago, were supplied this spring for 21 cents.

In explanation of the scarcity of available material for boxes the manufacturers pointed out, in a statement, that No. 4 pine boards, pine box stock and No. 2 and No. 3 shop pine lumber is now selling in the east and middle west at $22 to $27 and the lower grades of spruce are bringing $18 to $20 there. These prices are all f. o. b. in the Pacific northwest.

Available box material, both sawed and in the log, was canvassed by the men at the meeting. The government's commandeering of fir timbers for shipbuilding has taken off the market the common and fir dimension stock, which is being replaced in the eastern and middle western market by spruce.

In an informal discussion of current prices which followed the meeting several of the larger box makers declared that they have orders booked which will occupy their plants until November or December and that they are off the market entirely so far as new box orders are concerned.

"These statements are actual facts and not intended merely to 'bull the market,'" said Henry Shanker, president of the Kootenai Box company, of Spirit Lake, Idaho, who presided over the meeting. "Not only is the available supply less and our costs of material and labor higher, but prices in the east are higher and material which in former times has gone into boxes in the northwest is going to the east. The users of fruit containers will have to compete with the eastern market."

## Market Wheat Before May 15.

Our daily bread and the daily bread of millions across the seas depends on the marketing of wheat. In order to maintain a continuous shipment of wheat to the allies, farmers in the middle and southern states are urged by the U. S. food administration to market what is left of their wheat, after seed requirements are satisfied, by May 1. Those in the extreme northern states will be urged to market by May 15.

# Federal Reserve Bank Will Help Farmer to Buy a Tractor

The decision of the federal reserve board at Washington, D. C., authorizing the 12 federal reserve banks to rediscount notes secured by farm tractors, is a distinct aid to American agriculture, and particularly western farming.

It means this: That when a farmer goes to his banker and asks for a loan to buy a tractor he need not be put off with the assertion that "money is very scarce now." This order, if faithfully carried out, will make money abundant for this very purpose.

Suppose that a public-spirited banker, who wants to help his community, desires to lend money to any number of successful farmers who may want it to buy tractors. Uncle Sam will help him. Uncle Sam simply says to him: "Very well, go ahead and supply those farmers with the needed credit; take their notes, with the tractors as security; send those notes to me at any of my 12 federal reserve banks or branches, and I will rediscount them." That is, the government will reimburse that banker with another loan and his cash reserves will not be depleted.

When the borrowing farmer pays his note to the local banker, the local banker in turn repays the government; the money flows back to the federal reserve bank.

In accordance with this decision instructions have been issued by the federal reserve board to the federal reserve banks authorizing them to rediscount tractor paper presented by any member bank, provided it has maturity not exceeding six months and the tractors are purchased for agricultural purposes. The United States department of agriculture explains that this action of the federal reserve board means that notes given for the purchase of farm tractors will be treated in the same manner as other agricultural paper, thus making it easier for farmers to obtain tractors where needed.

Awarded GRAND PRIZE at the P. P. I. E.

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If your dealer cannot supply you, we will send them, charges prepaid, on receipt of price, $1.00 each.
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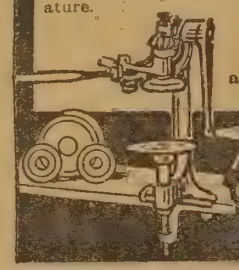
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Home canning is more necessary and more profitable this year than ever before.

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Post and Sprague Spokane, Wash.

# Patterns

2231—Girls' dress. Cut in four sizes: 3, 4, 6 and 8 years. Size 6 will require 2 3-4 yards of 36-inch material. Price, 10 cents.

2095-2096—Ladies' costume. Waist, 2095, cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 2 7-8 yards of 36-inch material for a 36-inch size. Skirt pattern, 2096, cut in six sizes: 22, 24, 26, 28, 30 and 32 inches waist measure, and requires 5 1-4 yards of 36-inch material for a 34-inch size. The skirt measures about 3 1-2 yards at the hem. Two separate patterns, 10 cents for each pattern.

2404—Ladies' dress. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 38 requires 6 1-2 yards of 44-inch material. Price, 10 cents.

2418—Play or work uniform for boys. Cut in five sizes: 4, 6, 8, 10 and 12 years. Size 10 will require 4 yards of 36-inch material. Price, 10 cents.

2238—Dress for misses and small women. Cut in three sizes: 16, 18 and 20 years. Size 18 requires 6 1-4 yards for skirt and bolero and 2 5-8 yards for the waist, of 24-inch material. The skirt measures about 2 3-8 yards at the foot. Price 10 cents.

2417—Ladies' waist. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 2 3-8 yards of 44-inch material. Price 10 cents.

2414—Ladies' dress. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 6 3-4 yards of 36-inch material. The dress measures about 2 5-8 yards at the lower edge. Price 10 cents.

2394—Girls' dress. Cut in four sizes: 8, 10, 12 and 14 years. Size 12 requires 3 7-8 yards of 44-inch material. Price 10 cents.

2130—Girls' dress, with or without bolero. Cut in 4 sizes: 6, 8, 10 and 12 years. It requires 1 1-8 yards for the bolero and 3 3-4 yards for the dress, of 27-inch material, for a 6-year size. Price, 10 cents.

2388—Ladies' negligee. Cut in 4 sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. Size medium will require 5 1-4 yards of 36-inch material. Price, 10 cents.

2413—Girls' dress. Cut in 4 sizes: 8, 10, 12 and 14 years. Size 10 will require 3 3-8 yards of 44-inch material. Price, 10 cents.

1629—A popular "Twenty Minute" apron. Cut in 3 sizes: Small, medium and large. It requires 5 1-2 yards of 27-inch material for a medium size. Price, 10 cents.




Please fill in this order and mail with remittance to:
PATTERN DEPT., PACIFIC NORTHWEST FARM TRIO, Spokane, Wash.

Enclosed find.....cents for which send me the following:

Pattern No.....Size..... Pattern No.....Size.....

Pattern No.....Size..... Pattern No.....Size.....

Name .....

Postoffice ..... State .....

R. F. D. No.....Box No.....Street No.....
Be sure to give the pattern number and the correct size.

**One and One-half Pound Wheat.**

The housekeeper who can not take wheat wholly from the menu is requested to cut each member of her family to at least as little as one and one-half pounds per week. How she shall do this and how much greater reduction she can make is left entirely to the individual. The food administration believes that the imperative necessity for this measure will be well understood and that its request will receive ready response from the intelligent class.

**Good Plumbing a Necessity.**

Plumbing is becoming a necessity in both city and country homes, not only for comfort and convenience, but even more for health and cleanliness. It also provides for the proper disposal of the wastes of the household which should by no means be neglected.

**FIVE DOLLARS IN THRIFT STAMPS**

The farm women's contest letters telling of the best articles written from one's own experience of the advantages of an automobile, a farm lighting system, a farm water system, from the standpoint of the farm home, are beginning to arrive. A first prize of $3 and a second prize of $2 are offered. The contest will close May 1, and those wishing to enter should mail the articles at once to The Editor of The Washington Farmer, Spokane, Wash.

## Sugar for Canning

The food administration is making every endeavor to see that the country is provided with a supply of household sugar on the basis of three pounds of sugar for each person per month. Do not consume more. Saving from this supply enough for use during the approaching canning season is not regarded as hoarding.

It is also the intention of the food administration to supplement the three-pound per month allotment during the canning season with an additional amount that will be ample for necessary canning operations The full utilization of all methods which will save sugar is, however, strongly advised. Such methods include putting up fruits in their natural juices, the use of syrups, drying and the storage of fruits and vegetables in pits and cellars.

**It's Nothing to Brag About.**

If you are wiser and keener than other folks, you should be thankful, not proud. You didn't make yourself.


It takes the fuss out of breakfast

THANKS to Ghirardelli's—breakfast-making is not the job it used to be. There's no fuss—no muss—no time lost.

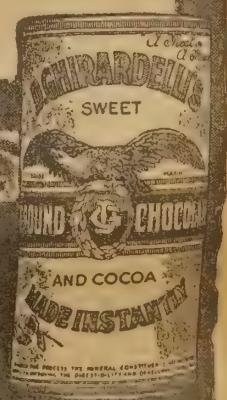
If a chocolate pot does not happen to be handy—you use an ordinary stew-pan. It takes but a minute or two. And then—you have the most delicious of all food-beverages steaming hot, ready to serve.

An ideal blend of ideal foods—cocoa and pure sugar—Ghirardelli's supplies the maximum nutriment at minimum cost. Always keep a can on hand.

*In ½ lb., 1 lb. and 3 lb. cans; a tablespoonful—one cent's worth—makes a cup.*

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Address all letters to Aunt Nellie, care of The Washington Farmer, Spokane, Wash.

**A Bay in Front of the House.**

Dear Aunt Nellie: I am well and hope the cousins are. A few days ago I got well from the measles. I like to go to school. There are 10 boys and four girls. At school we play Flying Dutchman, Lame Fox, Pump Pull, Pull You Away, Steel Sticks, Black Man, Sheep Pole Down, Tag. I live on a hill. In winter when there is snow we coast down over the hill. In summer I swim. There is a bay in front of the house. I like to swim. I am going to learn to dive. I pick wild berries and last year I picked 35 cents worth of blackberries. We have a strawberry patch. I like chickens and am going to keep garden. On the beach we build sand houses. I like the country best. I like to lie in the hot sand in the summer after swimming a while. It warms pou up. My birthday is on June 15. I like the fractions. They aren't hard. I like all the studies. My teacher's name is Miss Cooke. She is good. I like her. I joined the junior Red Cross. Every one in the school joined it. I have a cat. Her name is Baby Queen.—Ellen Johnson, Ilwaco, Wash.

**Boys in France Glad to Get Things.**

Dear Aunt Nellie: I will write another letter to the Children's Corner and hope it will not be the last one. We have 17 little lambs and 22 old sheep and one stray one came to our place, which makes 23 in all. We have four calves and one of them is a pet calf. Two of my friends told me to write and so I am. My sister Elsie and I have a horse. Elsie's horse is very pretty with a large star in his forehead and two white feet and his name is Tony. My horse is a gray one and her name is Dolly. We ride them to school. We have three miles to go to school. We are starting to work for the Red Cross making napkins, tray cloths and hospital mops. It takes 25 cents to join. I joined and almost every one in our school joined. How many of the cousins joined the Red Cross? I think it would be nice if every one joined because the poor soldier boys back in France would be glad to get things from the other people whom they might never see again. I have one cousin in France and don't know how many more. He wrote in the Goldendale Sentinel that they arrived in France all right. I own a war saving stamp worth $4.12 and I think it would be nice if every one had one.—Marie Ganguin, R. F. D. 3, Box 37, Goldendale, Wash.

**New Riddles for the Cousins.**

Dear Aunt Nellie: I belong to the Red Cross. The girls at school have made a quilt, and so have the boys made one. We are starting another now. Our teacher's name is Miss Verna Merkey. She has taught two terms. I have to walk a mile and a half to school. I am going to have a war garden this summer. I have $1 worth of seeds. There are 17 pupils going to our school. I am in the fifth grade. I will give some riddles: Way down in a dark dungeon there is a bright light, all saddled, all bridled, all ready for a flight. I've told you three times and you don't know it tonight. (2) A goose flew upon a barn and how does he get down? He doesn't jump or fly down. (3) I have a little sister; they call her pretty Peep. She wades in the water deep, deep, deep, and climbs the mountain high, high, high. Poor little thing she has but one eye. (4) Upon a hill there is a mill, by the mill there is a walk and on the walk there is a key. What city? (5) White as snow and snow it wasn't; green as grass and grass it isn't; red as blood and blood it isn't; black as ink and ink is not. What is that? I will write again and give you the answer to the riddles. Have I a twin? If so I would like to hear from him or her. My birthday is June 4.—Ida Shaw, age 11, Govan, Wash.

**Gladys Is Making a Sweater.**

Dear Aunt Nellie: I am 12 years of age. My birthday is September 27. I read Bertha Millenaar's letter. I am her twin. I am going to write to her soon. We have a farm of 20 acres. I joined the Junior Red Cross and I am knitting on a sweater. My home at present is among the rhododendron at the old mill town, Port Discovery, where my father is working on the state road. I will write again. I would like for the cousins to write to me.—Gladys Norman, Port Discovery, Wash.

**Like Other Brothers She Knows.**

Dear Aunt Nellie: This is my first attempt to write to the Children's Corner and my letters would have been coming long ago had I only known just where to send them. I thought the letters were fine last week and the Corner seems to be growing. May I be a cousin? I am so glad that Sallie Garry is well again and I wish that she would write another letter, for I think her letters are so good. I am 12 years old and will be 13 November 14. If I have a twin I wish she would write to me. We have nine little lambs that we are raising on the bottle and we are going to get some more. Aunt Nellie, I wish you would write more letters because I think they are so nice. I thought Elva Green's letter was fine and her brother must be like some other brothers that I know. I live on an 1100-acre farm three and one-half miles from town. They are making a new road near our house and they are grading it with an engine, but it is not working today. Well, dear cousins, I must close now, with the hope that my letter does not meet Mr. Wastepaper Basket in its travels. —Frankie Baldwin, P. O. Box 214, Lacrosse, Wash.

**Play They Are Gipsies.**

Dear Aunt Nellie: I enjoy reading the letters in the Farmer very much. I am 12 years old and in the seventh grade. I will be 13 August 6. I have a dark complexion and dark brown hair. Have I a twin? If so, I wish they would write to me. I have a brown and white spotted pony. Her name is Funny. My aunt and I ride her to school. My aunt's name is Helen Krieger. We have 15 horses, seven cows and one pig with six little pigs. I have a bantam rooster. I did have a hen but she died. I have one sister and no brothers. Her name is Theon. She is seven years old. We have two dogs. Their names are Joe and Santa Claus. We live in the country. I do not like to live in town. I can knit, crochet, tat and embroider. There are two teachers here at my school. My teacher's name is Mr. Babb. On Saturday and Sunday my aunt, sister and I ride horseback and we sometimes play we are gipsies. May I become a cousin?—Gazel Elizabeth Rosenkranz, St. John, Wash.

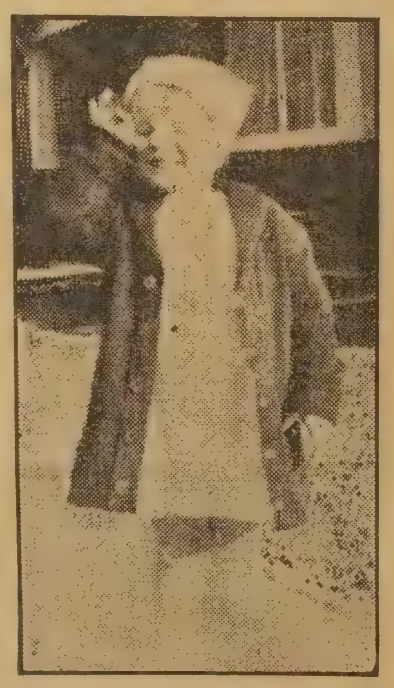
**School Painted Blue and White.**

Dear Aunt Nellie: I live on a 960-acre farm. We have 32 horses, nine head of cattle, counting the litle calf, five cats and one dog. Her name is Topsy. I am in the fifth grade. I was 11 March 26. I have brown hair and blue eyes. I have two brothers. The youngest is Aaron. He is in the second grade. He is seven years old. His birthday is July 28. Valmore was 13 March 17. There are 11 pupils in my school. There will soon be 14. Our teacher's name is Miss Larsen. I go to a country school, district No. 60, Pleasant Ridge school. The color of the school is blue and white. My cousin is writing too. We go to the some school. I will tell you what I got in spelling examination. I made 96 per cent. I have a new pony. His name is Billy. My papa is going to break him for mama. He isn't broke to lead yet. I live one-half mile from school. I am learning how to knit.—Veletta Royalene McMurry, Bickelton, Wash.

**Hilma Writes About Sunshine.**

Dear Aunt Nellie: It is a long time since I wrote last. This is my fifth letter to the Corner. I like all the letters fine. I hope all the cousins are well and happy. I like Easter very much. My brother's birthday was March 20. He was seven years old. He is in the first grade at school. It has been raining very hard today. Laurie and Grace Looney and Hope Bolender were going to come to see me this afternoon and Grace was going to stay all night, but it rained so hard they didn't come. My subject this time will be sunshine. The sunshine makes everything grow. It dries up the wet ground after it stops raining. In the summer the sun rises in the east very early in the morning. It sets very late in the evening. The earth would be dark always if it were not for the sun. The sun is very bright and you can not look at it. When I try to look at it tears come into my eyes. My birthday is August 8. I am 11 years old. I haven't found a twin yet. I hope I shall find one some day. I am in the fifth grade. My teacher's name is Miss Foxwell. There are 20 pupils in my class. My sister is nine years old. —Hilma Anderson, R. R. 3, box 191, Olympia, Wash.

## A Little Patriot



"With Liberty Bonds and Justice for all" is the way the Allegiance to the Flag is ended when little Miss Beth Fitchen says it. She is the daughter of Mr. and Mrs. G. H. Fitchen, Butte, Mont., and although only three years old, has Liberty bonds and Thrift stamps all her own.

**Wants Two Pages for Our Corner.**

Dear Aunt Nellie: I have not written to you for a long time, so thought I would. Can I still be a cousin? I have two brothers in the war. Their names are Ora and Elmer. I wish we could have two pages for our Corner. I read the letters and like them very much. I am 10 years old and my birthday is November 24, 1918. I am in the fourth grade. I have dark hair and dark eyes. I have a dark complexion. I have joined the Red Cross and am helping piece quilts. My dolls' names are Flora, Bertha, Mabel, Minerva, Dorotha, Alice, Bessie and Carol. Carol was a Christmas doll. My cousin sent it to me. My teacher's name is Miss Lang. Miss Cook did tecah, too, but she quit, and so Miss Lang finished.—Effie Luddington, route 1, Baird, Wash. (Yes, you are still a cousin, Effie, and we are glad to hear from you again. Do not wait so long next time. Aunt Nellie.)

**Uncle Has Sailed in War Zone.**

Dear Aunt Nellie: I have been reading the Corner letters for some time. My father takes the Farmer and likes it very much. I live about two miles from our school. I like my teacher and school very much. Our school has joined the Junior Red Cross and I am knitting a sweater. My sister is going to knit a pair of socks. I have one uncle in the navy and one in the veterinary corps. The one in the navy has been down to Montevidio, S. A., and over to the war zone. He is on the U. S. S. South Dakota. I am in the seventh grade at school. My sister is in the sixth and my brother is in the first. I would like to have any of the cousins write to me. I am 13 years old and have dark eyes and dark, curly hair. I like to live on the island very much.—Lois Muzzall, R. F. D. 1, Oak Harbor, Wash.

**Thelma Has Three Playmates.**

Dear Aunt Nellie: I am a little girl 6 years old. I have a pair of twin sisters, Edna and Edith. I have a brother 12 years old and in the seventh grade. I am in the second grade and my sisters are in the fifth. I have two kittens and a bird named Dick. I like to go to school. We have 11 head of horses, 60 hens, two roosters and six pigs. We are just beginning to get lots of eggs. I will be glad when it comes nice weather so I can go to Sunday school and church. In the winter we can't run the car and I love to go to Sunday school better than anything else. We have four cows and two calves. I have five dolls and a cradle and old Santa Claus brought me lots of nice things. I have three playmates. Their names are Shirley, Edna and Frances. I live five miles from town. —Thelma Peterson, Box 2036, Pomeroy, Wash.

**Chickens Are Happy When Fed.**

Dear Aunt Nellie: I live on a 240-acre farm. I enjoy farm life very much. We have about 200 chickens. I enjoy feeding them. They seem so happy when I come with the feed. We have nine horses. We have two that my sister and I ride. We often go riding and enjoy it very much. I have three sisters and one brother. Their names are Elma, Inez, Nora and Lester. I am going to Kirby school. My teacher's name is Miss Adams. I like her very much. I am in the sixth grade. I am 13 years old May 11. My best friend is writing to you, too. Her name is Hattie Malone. I enjoy reading the children's letters of the Corner.—Edna Requa, Pomeroy, Wash.

**Papa Makes Big Snow Man.**

Dear Aunt Nellie: I am 7 years old. I have two sisters. I go to school and I am in the first grade. I have to go three miles. We have one horse, a cow, and 15 chickens. I like to play in the snow. Every time it is snowy papa makes a big snowman. This is my first letter.—Ludvig Peterson, Route 3, Box 18 A, Olympia, Wash.

**A Little Boy in the First Grade.**

Dear Aunt Nellie: This is my first letter to the Children's Corner and I like to read the letters and hope the Corner will grow. I am a little boy in the first grade and my teacher's name is Miss Corbette. I am 8 years old.—Orris May, Dixie, Wash.

**Cornelia Is a First Grader.**

Dear Aunt Nellie: I have blue eyes and brown hair. I am six years old and in the first grade. Have I a twin? If so let them write. My teacher's name is Miss De Valois. There are six in the first grade, three in the second grade, nine in the third grade and seven in the fourth grade.—Cornelia Muyskens, R. R. 1, Lynden, Wash.

**Busy Doing Her Best.**

Dear Aunt Nellie: I enjoy reading the letters very much. I saw a letter in the Farmer written by Elva Green. She was an old friend of mine and was a schoolmate when she used to live up in northern Idaho. She described her brother all right, only she didn't tell what a good boy he was, never causing his mother any trouble or worry as some boys do. I have two sisters, but no brother. My birthday is January 13 and I am 12 years old. I am in the sixth grade. How many are working for the Red Cross? I joined last winter and have sewed some and also helped to get some other people to join. I am going to try to raise a garden next summer. I think we all ought to do our bit to help Uncle Sam in these times.—Leona Decker, R. 1, Rockford, Wash.

**Knitting for Belgian Children.**

Dear Aunt Nellie: I am 9 years old and in the third grade. I will be 10 July 29. I have a birddog and his name is Bruce. My brother has a horse and his name is Prince. I had two little bantams. The roster died. I have one brother and his name is Gareld. He is 12 years old and in the sixth grade. I have two miles to walk. We are knitting squares for the Belgian children. Have I a twin? If so I wish she would write to me.—Vera Baker, Box 191, Thorp, Wash.

**Republic School Has Twelve Rooms.**

Dear Aunt Nellie: I have been reading the Children's Corner and I am anxious to write, too. I am 9 years old. My birthday was February 25. Have I a twin? I have three brothers and no sisters. I have three miles to go to school. I live on a 160-acre ranch. I like to see my letter in print. There are 12 rooms in the Republic school. There are about 26 scholars in my room. My teacher's name is Miss Brown.—Helen Barry, Republic, Wash.

**Edna's Birthday Comes in June.**

Dear Aunt Nellie: I am in the third grade. I like to go to school. There are five girls in our room. I am in the little room. I have two sisters. One's name is Elna and my other sister is Elsa. I have just been washing my glass and my spoon. I am eight years old. My birthday is June 7. There are 10 boys in the little room. There are 21 children in the big room. My sister has two chicks. I got so much for Christmas. I am so glad that we have no school Thursday and Friday.—Edna Mattson, R. F. D. 5, Box 32, Mt. Vernon, Wash.

**Chehalis River Runs Nearby.**

Dear Aunt Nellie: In reading the letters of The Farmer I saw a letter from my cousin, Hazel Jane Webster, and thought I would write, too. I am 12 years old and am in the sixth grade. My oldest sister, Mabel, is nearly 14 years old and in the eighth grade. Vera, my smallest sister is three years old. My brother, Gerald, is five years old. The school is about two and three-fourths miles from here. I go to school every day and walk about three-fourths of a mile and go the rest of the way on the auto school stage. We


## Coat Lapel Button

for securing two subscription orders to the Washington Farmer



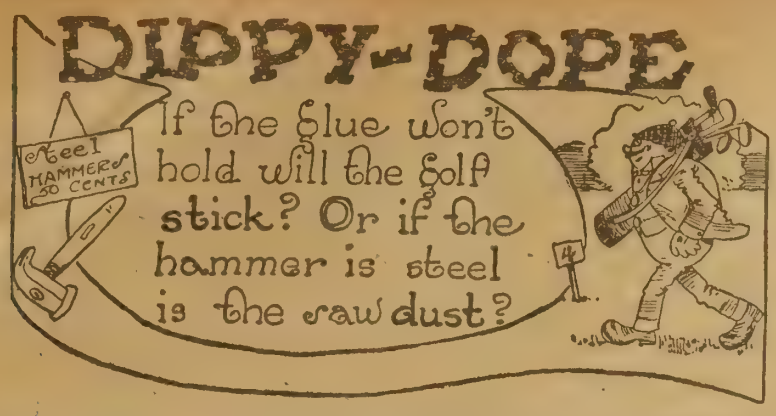
Just like illustration, only smaller. The perfect size for your coat lapel. A dandy American flag in red, white, blue and gold.

One of these flags will be given free to any one sending two one-year subscription orders to The Washington Farmer.

Your own subscription counts for one.

Send 50 cents and two subscriptions to

**The Washington Farmer**
Review Bdg.
Spokane, Wash.




have just moved on our 65-acre farm. There is about 35 acres cleared and 30 to be cleared. Papa has about 10 acres plowed and is plowing now. We have one pig, two cows, Bess and Rose, two horses, Queen and Prince, one dog, Fido, one cat and 12 chickens. I like the place fine for the Chehalis river runs along the west end of it.—Oliver Curtis, R. F. D. 1, Box 172 B, Centralia, Wash.

**Jessie's Aunt Is Coming to Visit.**

Dear Aunt Nellie: My grandpa lives across the road from us. We had six rabbits, but pretty near all of them have been killed. I am 9 years old now, but I will be 10 years old October 30. We have a little calf named Daisy. We live on a 160-acre farm. I enjoy reading the letters. We have about 26 chickens. Have I a twin? If I had I would like to hear from her. We have an Edison phonograph and 50 records for Christmas. I hope I will see my letter in print. We are having our roads graveled now. Most all the farmers have cars. All my aunts and uncles live in Chicago. I have an aunt who is coming to visit us next summer. I hope all the cousins are well. Washington's birthday I was in a play. We had lots of fun, too. We live about two blocks from a depot. It is named Midvale. My brother has a bicycle. He will be 13 years old October 5. On Valentine's day I got about five valentines. I have two brothers and one sister. My big brother is named Gene. May is my sister. She is 5 years old. Ray, my brother, is 7 years old.—Jessie Duffy, Midvale, Wash.

**Every Pupil Joined the Red Cross.**

Dear Aunt Nellie: As I have been reading the letters the cousins have written I thought I would like to join the Corner and make it larger. I enjoy reading the letters very much. I am 12 years old and in the sixth grade. My birthday is June 6. I have light hair and blue eyes. If I have a twin I would like to correspond with her. I have two sisters and one brother. My sisters' names are Mary and Anna. My brother's is Eber. Mary is going to Reardan high school. She is in the 10th grade. Anna has passed the eighth grade. Her average was 91. I don't think Eber will go to the war because he is just 18 years old. He may, though, if it lasts long enough. I am a member of the Junior Red Cross. All the pupils in our school joined the Red Cross, too. We are going to learn how to knit. We have had two teachers at Little Falls school this term. I like my new teacher very much. Her name is Miss Natalie Mosso.—Margaret Dunning, Star Route, Reardan, Wash.

**All "Costellos" at Her School.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 9 years old and in the fifth grade. There are five in our school. Two are my cousins. The other two are my sister and brother. My teacher's name is Miss Mary Hewitt. We are all Costellos that go to school. I have three sisters and one brother and his name is Joseph. My sisters' names are Helen, Marian and Genevieve. Genevieve is the baby and she is very cute. She will be 2 years old the first of June. My birthday was January 17 and I got a little pin cushion doll and Genevieve liked it very much. So I put it on top of the piano away from her. One day I was in the parlor where the piano was and she came in just as I went out and when I came in again she had crawled on top of the stool and then on top of the keys after the pin cushion. Then I called mother in to see her.—Marguerite Costello, Sprague, Wash.

**Reads the Letters Most Every Time**

Dear Aunt Nellie: May I join the Children's Corner? I will be 9 years old April 14. Have I a twin? If so I want her to write to me. I go to school and I am in the third grade. I haven't gone but once. This is my second term. We have two kittens and three little calves. Their names are Whiteface and Pansy. The other one hasn't got any name yet. I have one sister and two brothers. Their names are Ross and Ivan. My sister's name is Lois. Papa takes the Farmer. I read the letters most every time. I will send some riddles. If a pound of butter costs 20 cents how much will a ton of coal make? Why is a colt like an egg? If a hog and a half costs a hollar and a half, how much will 10 hogs cost? You can pile everything up in the house and I can take my shoes and stockings off and jump over them.—Freda Evelyn West, Dot, Wash.

**Glad to See the Corner Grow.**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I am very glad to see the Corner growing larger. I am 12 years old. My birthday is October 3. Have I a twin? If so I would like to hear from her. It has been raining here today. All the snow is gone. The roads are very muddy. We were going to have a program and some speakers from Spokane were coming out to our schoolhouse, but they got mired in the mud and could not come. We had already started, but one of our neighbors told us, so we came back. I can crochet and tat. I am going to learn to knit for the Red Cross. I am 4 feet 11 inches tall. I have light hair and blue eyes. I am in the sixth grade at school. I hope to see my letter in print.—Eva Fern McKenzie, route 1, box 55, Deer Park, Wash.

**Marjorie Can Knit a Bit.**

Dear Aunt Nellie: I can knit a little bit and I am 10 years old. I have brown hair and brown eyes. My birthday is on April 12. Have I a twin? If I have I wish they would write to me. I have one sister and two brothers. My sister's name is Erma. She is 6 years old and in the second grade. My brothers' names are Gilbert and Albert. I live a mile and a half from school. I am in the sixth grade. My teacher's name is Miss B. Stocks. May I join the Corner?—Marjorie Johnson, Vancouver, Wash.

**A New Piano for Christmas.**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I am glad to see that the Corner is growing. I will be 11 years old March 29. Have I a twin? If so I would like to hear from her. We got a piano for Christmas and we were very glad to get it. My sister and I are taking lessons. I can tat and crochet both and like to do both. I am 4 feet 6 inches tall. I have dark brown hair and blue eyes. I am in the fifth grade.—Dortha May McKenzie, route 1, box 55, Deer Park, Wash.

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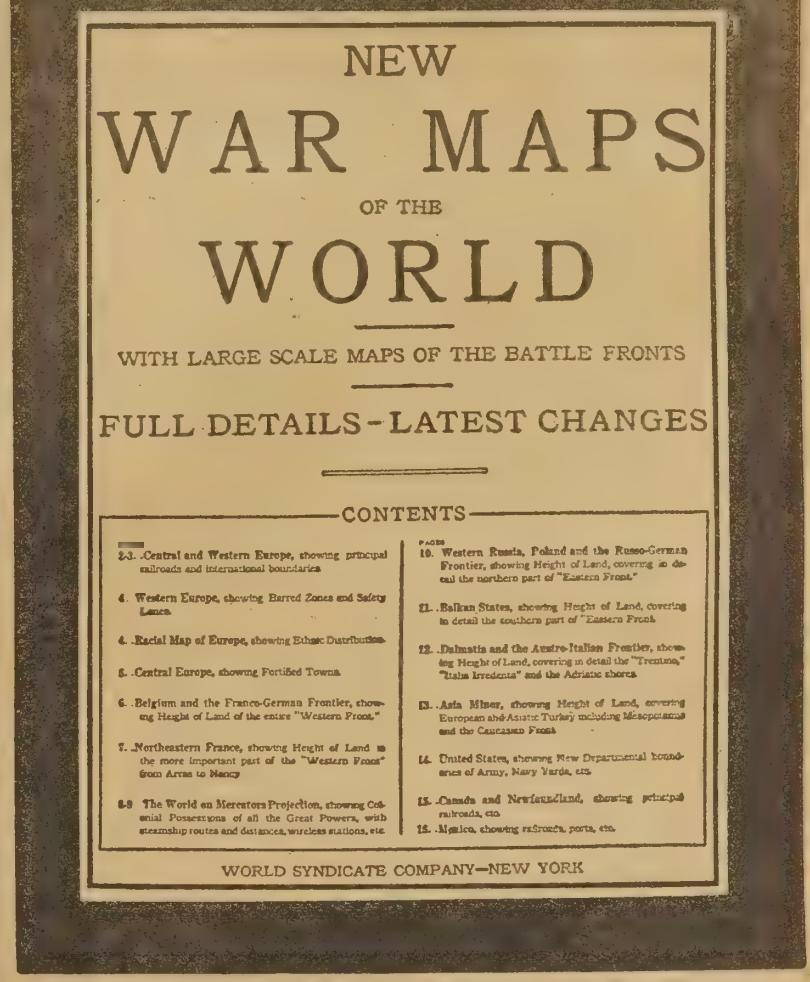
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# News for Breeders

## Big Dispersal Sale.

The Glen Tana dairy farms of near Spokane have announcerd the gale of approximately 250 head of purebred and high grade Jerseys and Holsteins. The sale will occur at the Spokane Interstate fairgrounds on June 5 and 6. The animals listed for sale include some with excellent records for milk and butter production. Many of them are in the class that test 5 per cent butter fat. One of the animals that will be offered, Eminents Jimps Owl, promises to go over 16,000 pounds of high testing milk during the year beginning May 14 last. Up to April 1 she had produced 15,399 pounds. She is a four-year-old.

## Eleven Pigs to a Litter.

An average of 11 pigs to a litter were farrowed by six pure bred Poland China sows recently belonging to W. F. Howard, one of the leading pure bred Poland China hog breeders of Canyon county, Idaho, who resides near Caldwell.

## Shorthorn Transfers.

T. N. Harding, secretary of the American Shorthorn Breeders' association, reports that the receipts for pedigrees and transfgers for the last three months are 25 per cent greater than for a corresponding period a year ago.

## SHEEP

### SHEEP

Full blood Lincolns, Romneys, Corridales and Hampshires. Ewes and rams, small or large lots. For sale by

H. STANLEY COFFIN,
Breeder and Importer Yakima, Wash.

## DUROC-JERSEY SWINE

ROOT & MASON,
Breeders of early maturing, easily fed type. Some choice stock for sale. Defender and Overbrook strains.
Hermiston, Oregon.

### Pure-Bred Duroc-Jerseys

Some fine March pigs for sale. Correspondence solicited.
B. B. Doerfler, R. 3, Silverton, Ore.

DUROCS.
Boars and open or bred gilts of excellent breeding.
E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE, Yakima, Wash.

## CHESTER WHITE SWINE

REGISTERED
O. I. C.
### SWINE

Fine, thrifty pigs, either sex, ready to ship. Write me. Ringgold Farm, J. H. West, Prop., Centralia, Wash., R. 1, Box 157.

## BERKSHIRE SWINE

### Riverby Orchard Berkshires

Riverby Orchard Berkshires won 12 out of 15 first prizes at the Washington state fair, 1916, also many prizes, including grand champion sow at the Panama-Pacific world's fair. We offer for sale a few good boars and young sows.
D. C. BUNN. Prosser, Wash.

## YORKSHIRE SWINE

### Large Yorkshires

weanling boars of best breeding.

BROADMEAD FARM,
Chehalis, Washington.

## PERCHERON HORSES

### FOR SALE
### Registered Percheron Stallions
### Prize Winners

Two coming four years, five coming three years, eight coming two years and seven coming one year. Also some yearling fillies. Sire and dams are all imported prizewinners and weight over one ton. I am overstocked and will sell if price and terms will do it. Write or call

P. A. SORENSON,
Meridian, Idaho. Phone 10R1,

five miles south of Beatty station. Also some very choice registered Shorthorn yearling bulls, heifers and springers.

## EDGEWATER FARM

Choice registered stallions available with breeding guarantee and easy terms at farmers' prices.
ELBERT M. CHANDLER, Burbank, Wash.

## POULTRY

### TRAP-NESTED BARRED ROCKS



All hen-hatched and hen-raised. Every hen trap-nested. First pen has, I believe, for past two years highest Barred Rock av. egg record in the world. All other pens practically same blood lines.
Pen 1, 12 hens, av. over 240 eggs, crossed to yearling cock, parents av. 260 eggs, $5 setting of 15. Pen 2, 25 yearling hens, av. over 200, crossed to 2 sons of No. 44, 708 eggs in 3 yrs., $5 setting of 15. Pen 3, about 20 hens and pullets, with reserve cocks and cockerels, same breeding $3.50 per 15. A few cocks and cockerels from $5 up. IRVINE P. GARDNER.



Riddle, Ore.

### Rhode Island Reds and Whites

Both combs. Stock for sale. Eggs, $6 and $3 per 100. Mammoth Toulouse geese and Mammoth Bronze turkeys. Eggs for sale. Write for mating list. No baby chicks. If you want quality and egg production, as well as vitality, get some of our stock and eggs. HIGHLAND FRUIT AND POULTRY RANCH, J. Nonnenmacher, R. F. D. 3, Yakima, Wash.

### BABY CHICKS

Rhode Island Reds, White Leghorns, $15 per 100; $12.50 per 100. All chicks now sold to May 15. If you want chicks this season, order now.

MAPLEBROOK POULTRY FARM
Southworth, Wash., Box 3.

### EGGS HALF PRICE

For the balance of the season I will sell my exhibition Barred Rock eggs for half price, viz., 1st pens. $1.50 for 15; choice pens, $1 per 15.

J. E. HORTON.
2408 Altamont Blvd., Spokane.

WHITE ORPINGTON HISTORY MADE
by my pen in all-northwest laying contest, Montana state show. Won 1st place in 1st contest for December. Have two Dec. winners tied for 1st place in second contest. One pullet repeats with 29 eggs in Jan. Some winter layers. Won every first, two sweepstakes and state cup at Montana state show. Why not the best? Send for mating list.
MRS. W. T. THOMPSON, Bozeman, Mont.

WINNING STOCK.
Barred Rocks, S. C. White Leghorns and S. C. Black Minorcas. Stock and eggs from exhibition and laying strains.
WILBER CLAYTON, Payette, Idaho, R. 1.

PARKS BRED-TO-LAY BARRED ROCKS.
My pen, 5 Barred Rocks, at Pullman laying contest laid in Nov. 88, Dec. 100, Jan. 104 eggs. Eggs from this winter-laying strain, $1.50 15; $8 per 100.
F. J. WIRTNER, Mica, Wn., R. 1.

S. C. RHODE ISLAND REDS.
Eggs for hatching from heavy winter laying stock; $1.50 per 15, $7 per 100. Young Flemish Giant hares.
W. T. WILSON, R. 3, Weiser, Idaho.



### White, Buff and Blue Orpingtons

(Capt. De Bathe Strain.)

Speckled Sussex and Anconas. All single comb. Aldrich strain Orpingtons, Sheppard Anconas. My birds took first prizes at all leading shows of Pacific Coast. Prices for stock, eggs and chicks reasonable. All from best laying birds. Finest lot of cockerels I've ever raised. A few White Holland and bronze turkey toms for sale.
IRA N. DELINE, Olympia, Wash.

# Breeders' Department

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Breeders of top registered Shorthorn cattle. Correspondence solicited.
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Young bulls and heifers, sired by Scotch bulls: liberal terms.
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24,667 lbs. milk—1026 lbs. butter—is the s. o. advanced registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.
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Registered Holsteins.
Herd sire, Model Annie De Kol Segis, grandson of the famous King Segis. We have no bulls of service age, all having been sold, but we have some splendid young stuff, from 6 to 8 months old, coming on. If you are looking for real foundation stock, write us for particulars and pedigrees.
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Breeders of Purebred Holsteins.
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One 30-lb. bull with grand champion sire and dam; also young bull calves. Here is production and type we hear so much about.
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### HOLSTEINS

Well-bred young bulls for sale.
THOS. CARMICHAEL. Gaston, Ore.

## JERSEY CATTLE

### 100—Dispersal Sale—100
### Glen Tana Registered Jerseys
and
### 150 Grade Jerseys and Holsteins 150

AT INTERSTATE FAIR GROUNDS, SPOKANE, JUNE 5 AND 6.

### Registered Stock Sale June 5
### Grade Jerseys and Holsteins June 6

Among some of the cows that will be offered are:

Eminents Jimps Owl, daughter of Princess Jimps Eminent; Class AA; producing 359.15 fat, 8492.1 milk; 2 yrs. 11 mos.

First reentry. (Test started May 14, 1917, and up to April 1 has given 15,399.05 lbs. milk, which will easily go 4¼% and is giving 39 to 40 lbs. milk now, April 10.) How is this for a 4-year-old?

King Milan's Mabel, sired by King Milan, Class AA; record 426.73 fat, 8124.3 milk; 6 yrs. 10 mos.

First reentry, Class AA; record 577.61 fat, 11,154.5 milk; 8 years.

(Just finished 3d test with 10.043 lbs. milk.)

Golden Maid's Clarabelle, sire Imperial Golden Maid's Prince, Class AA; produced 434.59 fat, 8573.1 milk; 5 yrs. 7 mos.

First reentry, Class AA; produced 467.54 fat, 9252.2 milk; 6 yrs. 10 mos.

Bonny Berry, sire Bonny Golden Fox, Class AA; 368.99 fat, 8388.7 milk; 4 yrs. 4 mos.

Reentry, Class AA; 457.03 fat, 9652.2 milk; 5 yrs. 3 mos.

(Now on test 3d time. Has given in 5 mos. 7504 lbs. milk. Will go easy 4½%.)

We have many Jersey heifers and bulls from Register of Merit dams like above that will enable you to form an idea of the quality of stock offered in this sale.

KEEP THE DATE AND PLACE IN MIND. Write for Catalogue.

### T. S. Griffith, Prop.
### Glen Tana Stock Farm

Office 905 Main Ave., Spokane, Wash.

### This Is a Bargain

Rockwood Stockwell, sire Stockwell of S. B., dark brown color; A No. 1 individual; 5 years old. I have four of his daughters in milk. All test over 5, one 6 per cent, and all are heavy milkers. Only $100.
R. S. KEATLEY. Castle Rock, Wash.

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RABBITS.
All about selecting, breeding, housing, feeding and cooking rabbits with price list of our high grade BREEDING STOCK of New Zealand Reds. One dime in stamps of any denomination.
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Some Fine Stallion Colts Sired by

**ABOUKIR**

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A PRODUCER OF CHAMPIONS AND GRAND CHAMPIONS.

Write for list of his colts I am selling this spring.

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# COLFAX BLUE RIBBON STUD

COLFAX, WASHINGTON

Our new, large and commodious stables which we have been building are almost ready for us to move into and we will therefore, for the next 30 days offer to the Public an EXTRAORDINARY lot of Shire, Percheron, Clydesdale and Belgian Stallions, big, young and Absolutely Sound and at RECORD BREAKING PRICES. Easy terms and a GILT-EDGE BREEDING GUARANTEE.

We have a stallion for every purse, and we will save you plenty of money on the most LIBERAL TERMS, and you don't have to pay a long price to get a first-class stallion.

If you are in the market for a stallion now is the time to take advantage of these remarkable 30-day special sale prices.

**COLFAX BLUE RIBBON STUD, COLFAX, WASH.**

# Complete Dispersion Sale

of the

## Imported and Island Blood Jerseys of C. E. LONG, BUHL, IDAHO

together with consignments from ROSELAWN HERD of S. H. Kayler, Twin Falls, Idaho, and C. D. Irwin, Kimberly, Idaho.

## MAY 2, 1918, BUHL, IDAHO

GREATEST COLLECTION OF JERSEYS FOR TYPE-BREEDING AND PRODUCTION EVER SOLD IN IDAHO

Sale includes the Island Bred Herd Bulls, Bright Light's Knight, 103741, and Belle Victoria Duke 113964, and younger bulls of great quality and conformation. Also such cows as

Imp Castilian Lady, 595 lbs. fat (743 lbs. butter) in 11 months.
Imp Faustina Maurier, 478.2 lbs. fat in 11 months.
Imp Lad's Bright Light 468.7 lbs. fat in 10 1-2 months.
Kathie's Peer, 411 lbs. fat in 11 months.
Castilian Lady 2nd, produced 64 1-2 lbs. fat last month, first calf.
Merivale Mary, 366 lbs. fat as 2-year-old in 11 months.
Bright Light's Princess, 348 lbs. fat as 2-year-old, 11 months.
Joy's Drip of Sunny Lea, Register of Merit, 400 lbs. fat, 10 1-2 months.
Lovely Lad's Gypsy Maid, Register of Merit, 346 lbs. fat, 11 months.
Many others equally good.

AUCTIONEERS:

COL. J. W. HUGHES, Forest Grove, Ore.
COL. E. O. WALTER, Filer, Idaho
Clerk, S. J. Hammel, Buhl, Idaho

Arrange to attend sale. Come the evening before sale, as train arrives too late for sale on sale date.

# Second Annual SHORTHORN SALE

In this sale of Shorthorns at Lewiston, Idaho, on Wednesday, May 1st, 1918, there will be sold 21 young bulls of breeding age, and 13 cows and heifers heavy in calf and with calf at foot. They are sired by our first prize and champion herd bulls, Prince Booth 377105, Cloverleaf Pride 2D 506682, a son of Maxwalton Pride and a grandson of Avondale; and Types Model 429408, a son of Cumberland Type, 36 times grand champion in that many shows. In this offering buyers will have the opportunity of securing individuals that are regarded as among the best of the breed. Therefore those wanting top specimens, either in bulls or females, should be attracted to this sale, which will be held at the NORTHWEST LIVESTOCK SHOW AND FAIR GROUNDS, at Lewiston, Idaho. The catalogue will be of value to every prospective buyer. Write for it now.

AUCTIONEERS:

Harry C. Cranke, Nez Perce, Idaho.
Geo. A. Gue, Yakima, Wash.

**WILLIAM MULHALL**
FENN, IDAHO

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, April 22.—Corn developed considerable strength today, largely as a result of increasing belief that receipts would fall off to a material extent from now on. The market closed firm at $1.27@1.27⅛ for May and $1.47⅛ to $1.47¼ for July, with the finish as a whole ranging from a shade off to 1⅞ net advance. Oats closed unchanged to ⅞c higher and provisions down 15c to 25c.

Renewal of talk about prospective diminished arrivals led to free covering by shorts in corn, chiefly during the last half of the session. In the early part of the day the market was unsettled and bears had the advantage a good share of the time, owing to the fact that, contrary to expectations, receipts were fairly liberal and that the weather here had turned fine.

Fresh demand from the seaboard gave strength to oats. Excellent crop conditions, though, made the July delivery incline to drag.

Provisions sagged owing to packers unloading and to a drop in the value of hogs.

**Chicago Futures.**

| | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| Corn— | | | | |
| May | 1.27¼ | 1.27¼ | 1.27 | 1.27 |
| July | 1.45 | 1.47⅞ | 1.45 | 1.47⅛ |
| Oats— | | | | |
| May | .83¼ | .84⅛ | .83 | .83⅞ |
| July | .73½ | .74⅛ | .73⅛ | .73⅞ |
| Pork— | | | | |
| May | .... | 47.30 | 47.00 | 47.10 |
| Lard— | | | | |
| May | 24.85 | 24.87 | 24.65 | 24.75 |
| July | 25.15 | 25.20 | 24.95 | 25.05 |
| Ribs— | | | | |
| May | 24.00 | 23.00 | 22.67 | 22.77 |
| July | 23.50 | 23.50 | 23.17 | 23.27 |

**Cash Quotations.**

CHICAGO, April 22.—Corn—No. 2 yellow, $1.68@1.72; No. 3 yellow, $1.60@1.68; No. 4 yellow, $1.45@1.57.

Oats—No. 3 white, 88@89¼c; standard, 88½@89¼c.

Rye—No. 2, nominal; No. 3, $2.50.

Barley, $1.40@1.78.

Timothy, $5@8.

Clover, $18@28.

Pork, nominal.

Lard, $24.70.

Ribs, $22.15@22.77.

**Pacific Northwest Grain.**

PORTLAND, Ore., April 22.—Grain: 30-day options—Oats, No. 2, $66 bid; eastern oats and corn in bulk: Oats, No. 3 white, $61; 38-pound clipped white, $62; corn, No. 3 yellow, $65; corn, No. 3 mixed, $64.50; oats, No. 3, $61; oats, clipped, $62; corn, yellow, $65; corn, mixed, $64.50.

## Live Stock Quotations.

**At Omaha.**

OMAHA, Neb., April 22.—Hogs—Receipts, 13,300. Market, 10@15c lower; heavy, $16.70@17.10; mixed, $16.80@17.10; light, $16.85@17.25; pigs, $10.50@15.50; bulk of sales, $16.80@17.10.

Cattle—Receipts, 10,500; market steady, 10c to 15c lower. Native steers, $12@17; cows and heifers, $9@13.50; western steers, $10@14; Texas steers, $9.50@11.50; cows and heifers, $9@11; canners, $7.50@9; stockers and feeders, $8@12.50; calves, $10@13; bulls, stags, $8.50@13.

Sheep—Receipts, 3500; market steady to 25c higher; yearlings, $15@17; wethers, $13.50@16.75; ewes, $13@16.50; lambs, $19.50@20.15.

**At Chicago.**

CHICAGO, April 22.—Hogs—Receipts, 55,000; tomorrow, 26,000; slow, bulk, $17.10@17.60; light, $17.10@17.75; mixed, $16.95@17.70; heavy, $16.10@17.35; rough, $16.10@16.60; pigs, $13.25@17.25.

Cattle, 24,000; weak; native steers, $10.85@17.25; stockers and feeders, $8.30@12.60; cows and heifers, $7.40@13.90; calves, $9@14.75.

Sheep, 12,000; firm; sheep, $13@17.85; lambs, $16.50@21.80.

**At Portland.**

PORTLAND, Ore., April 22.—Cattle, $1@1.75 higher; receipts, 454. Good to choice steers, $12.75@13.75; good to medium steers, $11.75@12.75; common to good steers, $10.25@11.25; choice cows and heifers, $11.25@12.25; common to good cows and heifers, $7.25@10.25; canners, $4.25@6.25; bulls, $6.25@10.75.

Hogs, 15c higher; receipts, 1050. Prime mixed, $17.65@17.90; medium mixed, $17.35@17.50; rough heavy, $16.35@16.50; pigs, $15@16; bulk of sales, $17.35@17.65.

Sheep steady; receipts, 300. Prime spring lambs, $19.50@20; heavy lambs, $16.50@18; yearlings, $15.25@15.50; wethers, $13@13.50; ewes, $12@12.50.

Shorn sheep, 2 1-2c to 3c under quotation.

**Spokane Stockyards, Monday.**

Hogs—Receipts 21, market steady to strong. Prime mixed, $17.50@17.75; medium mixed, $17.40@17.60; pigs, $15.25@16.50; stockers and feeders, $14@16; bulk of sales, $17.50.

Cattle—Receipts 117, market higher. Best beef steers, $12.75@13.75; good steers, $11.75@12.75; common to good steers, $10.25@11.25; best beef cows and heifers, $11.35@12.25; good cows and heifers, $9.75@11; ordinary to good cows and heifers, $7.25@9.50; canners, $4.25@6.25; bulls, $7@11; calves, $8@13.25; stockers and feeders, $6.75@9.

Sheep—Receipts none, market strong. Prime lambs, $16.50@18; good lambs, $14.50@15.50; prime yearlings, $14@15; prime wethers, $12.50@13.25; best mutton ewes, $10@11.50.





**WANTED--1000 tons of mixed country scrap iron**

In carload lots of not less than 25 tons each. Write for prices if interested.

PACIFIC HIDE & FUR DEPOT.
Joseph Thiebes and C. T. Symmes.
1101-09 Railroad Ave., Spokane, Wash.


## Spokane Market.

**WHOLESALE.**

**Vegetables**—Cabbage, $4@5 cwt; carrots, $2 cwt; bunch carrots, 75@90c doz; bunch beets, 75@90c doz; beets, $1.50 cwt; rutabagas, $1.75 cwt; parsnips, $1.75 cwt; hothouse lettuce, 50c 5-lb box; head lettuce, 30@35c doz, $2.75@3 crate; turnips, $1.50@1.75 cwt; bunch turnips, 75@90c; California new turnips, $2 cwt; red bell peppers, $1.25 box; chilli peppers, 25c lb; green peppers, 11c lb; Florida tomatoes, $5 6-basket crate; celery, $1@1.10 doz; hothouse cucumbers, $2 doz; cauliflower, $2.25@2.50 crate; new garlic, 10@12½c lb; parsley, 40c doz bunches; horseradish root, 12½c lb; brussels sprouts, 12½c lb; radishes, 40c doz bunches; rhubarb, 5c lb; spinach, 90c@$1 crate; asparagus, 15@16c lb; new peas, 15c lb; artichokes, $1.80 doz.

**Grapes**—California cluster raisins, $2.25 box, 20 packages.

**Onions**—California onions, $2 cwt; green onions, 40c doz bunches.

**Tropical Fruits**—Bananas, 6c lb; lemons, $7.50 case; Valencia oranges, $6.75@7 case; medium sweet oranges, $6@6.75; budded seedling oranges, $5.75@6.25 case; blood oranges, $3.25 half case; Florida grapefruit, $5@6.50.

**MEAT.**

**Beef**—Beef steers, 19@22c lb; cow beef, 13@20c lb; heifers, 20½c lb; beef loin 30@32c lb; steer chucks, 18½c lb; prime ribs, 25@28c lb; rump and round, 20@21c lb.

**Mutton**—Breakers, 24@25c lb.

**Lambs**—26@27c lb.

**Pork**—Packer dressed hogs, 26@27c lb; pork loins, 30@31c lb; legs, 28c lb; shoulders, 25c lb; leaf lard, 28c lb; tenderloins, frozen, 32c lb; spareribs, 19c lb; country dressed hogs, with head on, 20c lb to producer; country dressed veal, 17c lb to producer.

**Smoked Meats**—Washington hams, 34c lb; T. C. hams, 35c lb; T. C. bacon, 45½c lb; Washington bacon, 40½@45½c lb; picnics, 23½c lb; Boston butts, 30@30½c lb; English bacon, 38½c lb.

**Star Brand**—Hams, 35c lb; Shield hams, 33@34c lb; picnics, 24½c lb; bacon backs, 33c lb; Star bacon, 46½@48½c lb; Shield bacon, 41@45½c lb; Simon Pure lard, $17.50 case.

**Dry Salt Meats**—Clear bellies, 30c lb; lean backs, clear, 29@31c lb; sides, 28½@29½c per lb.

**Lard**—Tierces, 28c lb; $15.12 case; compound, tierces, 23½@24c lb.

**POULTRY.**

**Live Poultry**—Live hens, large, 26c lb; small, 23c lb; roosters, 18c lb to producers, f. o. b. Spokane.

**GRAIN AND FEED.**

**Rice**—Fancy head, $7.50@9.50 cwt.

**Flour**—Bluestem, $9.40; Blend, $9.40; Montana hard wheat, $10.40; graham, $8.60 bbl, 49-lb sacks; whole wheat, $8.80; eastern rye, $10.10; eastern rye meal, $10.30; oat flour, $13.10.

**Oats**—$74 ton whole, $76 rolled, delivered in city.

**Corn**—$77 ton; cracked corn, $79 ton.

**Bran**—$30 ton; shorts, $32 ton; bran and shorts, $34 ton.

**Barley**—Rolled, $76 per ton.

**Oil Meal**—$78 per ton.

**Hay**—Timothy, $32 per ton, $31 ton by carload; alfalfa, $27 ton, $26 ton by carload.

**GASOLINE, LINSEED OIL, ETC.**

**Gasoline**—Red Crown, bulk, 24½c gal, cases, 34½c gal; Shell, 24c; refined oil (Pearl), bulk, 13c gal, cases, 23c gal; Eocene, 15½c gal in bulk, cases, 25½c gal; engine distillate, 15½c gal, bulk.

**Linseed Oil**—Raw, bbl, $1.68 gal, case, $1.85 gal; boiled, bbl, $1.70 gal, cases, $1.88 gal.

**Turpentine**—Bulk, 65c gal; cases 85c gal.

**White Lead**—Strictly pure white lead in oil, ton lots, 11¾c lb; 50-lb lots, 12½c lb.

## Western Crop Prospects.

The following is a digest by states of the crop conditions as indicated by recent official bulletins and surveys:

Oregon—Cold, cloudy weather during the week past has retarded development. Rains in some localities delayed operations, but was beneficial to grains and forage crops generally. Winter grains appear thrifty though somewhat delayed by the cold weather. Considerable spring grain seeding has been under way. Damage to fruit crops because of frost is serious in some localities, but less serious in general than anticipated. Warmer weather is following the cold wave with beneficial results.

Washington—Deficient sunshine, cool weather and frosty nights during the later part of the week were unfavorable for rapid growth. Winter and spring wheat both need rain. Spring wheat seeding will be mostly finished in another week. Winter rye and barley are reported fine. Seeding of oats continues slowly.

Idaho—Fall-sown grains are in excellent condition and were benefited by good rains, but growth was somewhat retarded by cold weather. In the early districts seeding is well along, and early-sown wheat and barley are growing nicely, but in most localities preparation for seeding is the principal activity.

California—Wheat, barley and oats have a good color and they are growing rapidly. Some barley is beginning to head. Meadows and alfalfa are excellent. First cutting of alfalfa begun. Corn planting is now general.

Nevada—Weather was favorable except it was too cold Saturday and Sunday. Wheat seeding is practically finished except in the higher elevations, and barley and rye are being sown. At lower elevations ranchers are striving for increased production of barley, wheat and oats.

Utah—Generally favorable week with good rains, but crop growth has been rather slow except winter wheat and alfalfa, which are improving. Planting of spring grains is in progress.

Arizona—The general crop outlook is unusually favorable, except in the southeastern portion, where there has not been sufficient rain. Alfalfa cutting continues, crop fair. In the northern counties seeding of wheat and oats and planting of corn continues.

## Seattle Market.

**BUYING PRICES.**

Unless otherwise stated the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots, f. o. b. Seattle:

Eggs—Local, 35@36c per dozen; eastern Washington, Oregon and Idaho, 33c.

Poultry—Spring roosters, live, fat, 2½ to 5 lbs., 26@27c; old roosters, 17@20c lb.; squabs, large, $3.50 dozen; geese, fat, live, 18c lb.

Butterfat—45c lb.; dairy butter, 30@35c.

Beef—Buying prices: Prime beef, steers, 11@16c; cows, fat, 9@11c lb.; heifers, 10@14c.

Hogs—Light, 18@21c lb.; heavy, 18@20c lb.

Veal—Fancy light, 13@19c lb.; heavy, 10@17c lb.

Hides—Salted, 14c lb.; flint-dry hides, 29c lb.; salt kip, 16c lb.; green hides, 11c lb.; green calf, 23c lb.; dry calf (under 6 pounds), 29c lb.; bulls and dry salts, 4c lb. less; green bulls, 9c lb. Clean, long wool, western Washington flint dry pelts, 39c per lb.; heavy to clean eastern Washington flint dry pelts, 30@35c lb.

**SELLING PRICES.**

Feed—Scratch, $80 per ton; all grain chop, $77 per ton; oats, $74 per ton; rolled oats, $76 per ton; bran, $34 per ton; shorts, $33.50 per ton; whole corn, $78 per ton; cracked corn, $80 per ton; alfalfa meal, $36; rolled barley, $85 per ton; Milo maize, $75 per ton.

Hay—Eastern Washington timothy, $36@37 per ton; alfalfa, double compressed, $40@41 per ton; alfalfa, $29 per ton; Puget sound, $27@28 per ton; straw, $15 per ton.

Butter—Washington creamery extras, cubes, 42c lb.; do bricks, 43c lb.

Eggs—Fresh ranch, 40c dozen.

Potatoes—Puget sound, $17@20 per ton; eastern Washington, $27 per ton.

Asparagus—Local, 15c lb.

## Seattle Wheat.

SEATTLE, April 20.—With a perceptible increase in the car supply for the week, millers have been shipping wheat into the Minneapolis territory, M. H. Houser, agent of the Grain Corporation, it is announced, has no modifications in his orders to ship Washington wheat east to relieve the strain upon millers engaged on the April allotment of flour purchases for the government.

Seattle jobbers in Montana and Dakota hard wheat flour have been advised that for the next quarter they will be unable to ship more than 15 per cent, due to the shortage, or an average of 45 per cent of last year's allotment for the six months. This has a direct bearing on the Washington soft wheat supply, as flour stocks which have tended to accumulate here must come out into the bakery trade to furnish the wheat flour with substitutes. Bakers have not been buying soft wheat flour, claiming that it is so short of gluten that a satisfactory loaf can not be produced in combination with substitutes. Nevertheless, this is a condition which they will be forced to meet early in the summer, it is believed. There is no millfeed and prices are firm. Millers have cleaned up the surplus that was produced on the winter government grind.

## Butter and Eggs.

PORTLAND, Ore., April 22.—Butter—Prints extras, 42@43c; cubes, extras, 37½c; prime firsts, 37c; dairy, 29c. Butter fat, Portland delivery, No. 1 sour cream, 41c.

SAN FRANCISCO, April 22.—Butter—Extras, 41@42½c. Eggs—Fresh extra, 40½c; extra firsts, 40c; firsts, 38½c; fresh extra pullets, 39c; firsts, pullets, 37c. Cheese—Young Americas, 27½c.

CHICAGO, April 22.—Butter—Steady; creamery, 34@42c. Eggs—Higher; receipts, 31,230 cases; firsts, 33@34½c; ordinary firsts, 32@33c; at mark, cases included, 32@33c.

## Winter Wheat

### Pacific Slope Conditions High

If the U. S. department of agriculture is well advised, the outlook for a generous wheat crop next harvest is cheering. The department forecasts a winter wheat yield of 560,000,000 bushels and the prediction was unofficially made at Washington that if the spring wheat crop maintained the same ratio the next harvest would furnish sufficient wheat to take care of the needs of this country and the allies next year.

The department's forecast is based on its reports up to April 1. These indicate a present condition of winter wheat of 78.6 per cent of normal, against 63.4 per cent on April 1, 1917.

Assuming that the spring wheat crop will yield the same ratio of increase as the winter wheat crop, and that these conditions will hold through to harvest, there will be a total crop of about 850,000,000 bushels, or an increase of about 200,000,000 bushels over last year, when the entire wheat crop was estimated at 651,000,000.

In addition, there is an increase of 26,000,000 bushels in the prospective rye crop, or a total prospective increase over last year of about 225,000,000 bushels of bread grains.

There is also hope of an increase of 100,000,000 bushels of wheat over last year in Great Britain and France, and also an increase in Canada.

As will be noted from the following table, winter wheat conditions are high in the states of the Pacific slope.

| | Condition April 1, 1918. | Av. 10-yr. 1917 | Dec. 1, 1917 | Price. April 1, 1918 | 1917 |
|---|---|---|---|---|---|
| Montana | 94 | 93 | 89 | $1.96 | $1.61 |
| Idaho | 97 | 90 | 85 | 1.91 | 1.55 |
| Washington | 93 | 79 | 92 | 73 | 1.96 | 1.55 |
| Oregon | 97 | 84 | 95 | 90 | 1.90 | 1.54 |
| California | 93 | 83 | 88 | 90 | 2.09 | 1.65 |

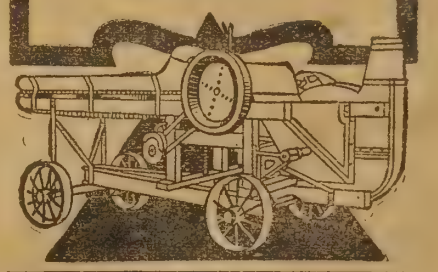

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GET all the profit. ROWELL CUT and properly packed means good ensilage. J. W. Kerr, Galena, Mo., says, "I can say that the Rowell Automatic is all right and everybody here likes it better than any cutter because of its efficiency and the class of ensilage it produces." Buy the

**Rowell Automatic Silo Filler**

Thoroughly dependable. Strong, easy running, big capacity, no danger of accident. Seven sizes. Complete machines and parts carried at distributing points for quick delivery. *Free Illustrated Catalog*

THE I. B. ROWELL CO.
Waukesha, Wis.




# Want Ads

**SITUATION WANTED—Male 21**

MAN, 33, WITH FAMILY, 4 HORSES AND wagon, wants steady ranch work. Experienced and capable of taking full charge. Go anywhere. A. V. Wright, Hermiston, Ore.

**EDUCATIONAL 45**

BEHNKE-WALKER, PORTLAND, NORTHwest's largest, finest business college, can not supply half the calls for trained young men, women. Enroll now. Free success catalog. Positions secured.

**TEACHERS' AGENCIES 46**

TEACHERS REGISTER WITH B. F. WESTmore, Mgr. Hazard Teachers' Agcy. $1 registers you at three offices. 911 Old Nat'l Bank bldg., Spokane, Washington.

TEACHERS NEEDED FOR NEXT FALL. Write for information. Clark Teachers' Agcy. 412 Ch. of Com. Bldg., Spokane.

**MISCELLANEOUS 57**

CUT YOUR SUGAR BILL; HELP UNCLE Sam; raise "Sugar Substitute" in a small corner of your garden. It sweetens and is easily made. Send 50c for complete directions, to M. James, Oakesdale, Wash.

INSTRUCTIONS FOR MAKING two rat traps, 25c, postpaid. Money back if they don't work. C. H., Box 115, Kuna, Idaho.

**HONEY, BEESWAX—Wanted. 58**

SEND SAMPLES OF YOUR HONEY AND beeswax; state quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

## MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

Before building be sure and get our prices on sash, doors, finish, paints, plaster board, roofing, etc.

We will send you our large illustrated catalog, No. 27, free on request, post-paid.

Cottage glass doors .....$2.75 and up
5x panel doors .....$1.80 and up
20x24 2-light windows .....$1.63
One-ply roofing .....$1.35
Two-ply roofing .....$1.70
Three-ply roofing .....$2.10
3-ft., 4-ft. and 5-ft. cedar lap siding ...$2
Regular lengths .....$10
1x4 flooring, 3-ft. to 5-ft. .....$20
4-in. beaded ceiling, 3-ft. to 9-ft. .....$20

The largest factory in the west selling direct to consumer. We sell any one, ship anywhere, and guarantee safe delivery.

O. B. WILLIAMS CO.
1943 First Ave. So., Seattle, Wash.

BUILDING MATERIALS AT WHOLESALE prices — Doors, windows, roofing paper, porch columns, plaster boards. All building materials shipped promptly. Send for our complete illustrated catalogue; gives you lowest net prices. P. A. ROVIG CO., 2229 First ave., So., Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

## MISCELLANEOUS—WANTED 63

POULTRY WANTED — THE FOOD ADministration permits the sale of poultry for market purposes after April 1. Send us your cream, poultry, dressed meats and hides. Commercial Creamery Co., Spokane, Wash.

## JUNK SHOPS 90

CENTRAL HIDE AND JUNK CO.
BUYERS HIDES, WOOL, METAL, RUBBER, SACKS, ETC. WRITE FOR PRICE LIST IF INTERESTED. QUICK RETURNS. W200 MAIN AVE., SPOKANE, WASH.

## H.NERY FOR SALE. 93

FOR SALE—A FEW NEW BULL TRACTors which have never turned a wheel. Priced for quick sale. This tractor will do your plowing and can be used as a stationary engine on the farm. We have recently taken the northwest distribution for the Samson Tractor and have a few new Bull Tractors we will sacrifice at about the same price as a good team. Will consider trade. Write Mr. Harwood, Eldridge-Buick Co., 802 East Pike st., Seattle, Washington.

FOR FARM LUMBERING USE "AMERICAN" PORTABLE SAWMILLS. Carried in Stock by HIGGINS MACHINERY COMPANY, 312 1st Ave. So., Seattle. Write for Catalog.

FOR SALE—NEW 12-H. P. R. & V. GASOline engine, heavy type, purchased by me last year and used only 10 days. On account of putting wind stacker on separator am compelled to get more power. Engine is in A1 condition and guaranteed. Address J. H. Kruse, Yoncalla, Oregon.

FOR SALE—1917 SELF-PROPELLED Holt harvester; good condition. Geo. A. Buehler, Ritzville, Wash.

## AUTOMOBILES 114

FORDS CAN BURN HALF COAL OIL, ALL distillate, or cheapest gasoline, using our 1918 Carburetor; 34 miles per gallon guaranteed; easy starting; great power increase; attach it yourself; big profit selling for us; 30 days' trial; money back guaranteed; styles to fit any automobile. Air-Friction Carburetor Company, 321 Madison st., Dayton, Ohio.

## STOVE & FURNACE REPAIRS 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

## PATENTS 150

WANTED — NEW IDEAS. WRITE FOR list of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. VICTOR L. EVANS & CO., Pat. Attys., 710 Ninth, Washington, D. C.

## HARES AND RABBITS 173

FLEMISH GIANT RABBITS—BREEDER of large stock only; correspondence solicited. Chas. L. Barnett. Box 284, Anacortes, Wn.

## POULTRY 174



BABY CHIX—WHITE LEGHORNS; NOT only bred to lay, but bred to live and thrive with the vigor and vitality necessary to make dividend payers bred into them by 15 years of breeding at the oldest established hatchery in the state; chix last half of May, $12; June, $11 per 100; delivery in good condition guaranteed. The Lakeside Poultry Farm, Roy, Wash.

80 USED INCUBATORS FOR SALE, SEVenty to seven hundred egg capacity; all in perfect condition; bargain prices. ST. HELENS INCUBATOR CO. TOLEDO, WASH.

100,000 WHITE LEGHORN BABY CHICKS —Bred for eggs, vigor, size. Safe arrival in good condition guaranteed. Free catalog and book on "Raising the Chicks." Oak Heights Poultry Farm, Route 3, Box T 47, Tacoma, Wash.

# Want Ads

**Want Ad Rates 30c Per Line**

Want ads are run at this rate in The Washington Farmer and i t s associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

Send for card giving lower rates for ads running one month or longer.

**How to Figure Cost of Ads**

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

## POULTRY 174
Continued.

HOGANIZED BABY CHICKS—THOROughbred White Leghorn chicks, hatched from Hoganized parent stock; April delivery, $14 per hundred; May, $13. Rhode Island Red and Barred Rock chicks all sold for April. Will book May orders for $17 per hundred. Safe delivery guaranteed. Established for ten years. Queen Hatchery, 89 Pike st., Seattle, Wash.

BABY CHICKS.

Famous Carnation White Leghorn; vigorous, early maturing, heavy winter layers; also breeding stock. E. W. Raush, Carnation Poultry Ranch, Kent, Wash.

BABY CHICKS, WHITE LEGHORNS, CUSTomers say they are "husky," "lively," "vigorous," "healthy," "strong," "hard to beat," "thrifty," "great layers." Write at once. Free catalogue. Freshlaid Farm, Colfax, Wash.

BABY CHICKS—S. C. WHITE LEGHORNS; real mortgage lifters; the kind that lay while mere kiddies; 21 years on the job. Catalogue. I. D. Casey & Sons, R. 6, Waitsburg, Wash.

WHITE LEGHORN BABY CHICKS FROM heavy-laying (Hoganized) stock, $10 per 100. We guarantee safe arrival. The Pioneer Hatchery, 401 Sixth st., Petaluma, California.

PETALUMA HATCHERY—CAN SHIP DAYold chicks to points reached in 3 days. Why not have the best? We challenge the hen. Free circular. L. W. Clark, Petaluma, Cal.

WHITE LEGHORN EGGS $1.50 PER SETting; $8 per hundred. Special mating Pen-A, eggs 50c each; Pen-B, eggs 25c each. Waikiki Farm, R. 7, Spokane, Wash.

M. B. TURKEY EGGS, PUREST OF BLOOD, ten for $3.50. Choice B. P. Rock chicken eggs, 14 for $2. Safe arrival by express guaranteed. Effie Shepardson, Kelso, Wash.

SINGLE COMB WHITE LEGHORNS; THE world's greatest egg machines. Write for our "War Measure." Help Hoover win the war. Broadview Farm, Curlew, Wash.

ANCONAS: MY 12 YEARS OF SELECtion have developed great layers; fine shape and mottle. Eggs, $1.50 per 13. A. G. Propst, R. 6, Box 54, Albany, Ore.

S. C. WHITE LEGHORNS — PRESENT breeders averaged 15 doz. each last season. Mated to high-record males. Hatching eggs. Mary Jessup, Cooks, Wash.

S. C. RHODE ISLAND RED EGGS $2 PER setting; $10 per 100. Fertility guaranteed. Waikiki Farm, R. 7, Spokane, Wash.

BARRED ROCKS.

Nicely barred, and fine layers. Eggs, $1.50 per 15. Wm. Heimsoth, R. 2, Baker, Ore.

PARKS BRED-TO-LAY BARRED ROCKS, winter layers. Eggs, $1.50 for 15; $8 per 100. W. G. Neyland, Spokane Bridge, Wn.

S. C. R. I RED AND S. C. W. LEGHORN eggs, $1.50 to $5 per setting; $6 per hundred. Mrs. Rominger, Underwood, Wash.

TRAP-NESTED WHITE LEGHORNS AND Barred Rocks. Eggs, $1.50 per 15, $8 per 100. Mrs. W. M. Roberts, Elmira, Ore.

CRYSTAL WHITE ORPINGTON EGGS, $1.50 per 15, from large, heavy-laying stock. Mrs. A. S. Reams, Wendell, Ida.

RANCH RAISED WHITE WYANDOTTES. Good vigorous birds, eggs and stock for sale. Jas. A. Hills, Jonathan, Wash.

SHOW WINNING STOCK AND EGGS. Barred Rocks, S. C. Leghorns, large. C. E. Dibble, Payette, Idaho.

PUREBRED BARRED ROCK EGGS FROM two year old hens, $8 per 100, $2 for 15. S. M. Wilson, Carley, Wn.

LARGE TYPE R. I. R. EGGS FOR HATCHing; ranch raised. Mrs. F. O. Gillett, King Hill, Idaho.

R. I. REDS, BOTH COMBS, $1.50 PER 15, $8 per 100. Nelson Farm, Coeur d'Alene, Idaho.

BARRED ROCK EGGS, $2 PER 15. W. D. Good, Mt. Vernon, Wash.

## LIVE STOCK 177

FOR SALE.

MULHALL'S ANNUAL PUBLIC SALE OF SHORTHORNS

will occur at Lewiston, Idaho, on May 1, 1918. We are offering a useful lot of young bulls, cows and heifers with calves at foot, and rebred to our first prize and grand champion bulls. Apply early for catalogues and mention the Farm Trio.

WILLIAM MULHALL, FENN, IDAHO.

FOR SALE.

A choice lot of pure bred Shire stallions, coming two years old; also pure bred yearling Shorthorn bulls. Address WILSON RANCH, ROCKLYN, WASH.

FOR SALE—GUERNSEY BULL; TWO years old; Yeksa's breeding; ten May Rose two-year-old heifers, daughters of Langwater Emigrant; Duroc boars and gilts, registered. Middledale Farms, Goshen, Ore.

A $50 LIBERTY BOND AND $10 CASH will buy a fine Duroc-Jersey bred gilt. Tried sows, bred gilts or pigs for sale; all registered and good individuals. Ben Kelley, Penawawa, Wn.

POLAND-CHINAS; BIG TYPE; SPRING pigs by Young Chief N. 79349, from good, rangy sows. James A. Hills, Jonathan, Wn.

HEAVY TYPE POLAND CHINA PIGS FOR sale. John Bushaw, R. F. D. No. 2, Anacortes, Wash.

## HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

## RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

## PLUMBING, STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

## SEEDS 620



IF YOU HAVE ACCLIMATED SEED TO sell, it will pay you to advertise it in this classification. If you want to buy seed adapted to western soil and climate watch what is offered in this department.

GIANT MARROW CABBAGE'S OFFICIAL record was eighty edible tons per acre; no waste as with kale; its trunk solid "marrow" quickly increases egg, butter and meat production; hardiest, richest "greens"; some 1917 plants grew ten feet high, bore leaves a yard long, half as wide; 500 guaranteed, pedigreed seeds, 25c; acre supply $2; photos free. "Golden Potlatch" (bush) pea, so sweet, green and tender that well-soaked ripe seeds properly cooked palatable as "canned." Packets 10c. Richest, earliest ripening, best adapted to northwest bush and pole beans—(some frost-resisting)—packets, 10c. "Purple Perfection" potato, frost proof, extra prolific, July ripener, "Salad" special, sample, 10c, 4 lbs. $1, prepaid. E. E. Martin, Guaranteeing Seedsman, B-1, Banger, Wash.

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SEATTLE, WASH.
for information about good alder bottom and clay loam land in prosperous Thurston county, Wash., where many progressive farmers are now settling; 10 to 40 acre tracts, $75 an acre, on terms. Fine roads, good schools, good train service, big crops, big markets nearby. Arrange to see this land.

ALBERTA FARM LANDS.

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THE ALBERTA LAND MAN.

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219 Montgomery street, San Francisco, Cal.

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IN FREEMAN DISTRICT.

One-fourth mile from O.-W. R. & N. railroad station; 177 acres; 90 per cent practically level; all but 5 acres can be cultivated; fine buildings; lots of good fresh water; spring and two (2) streams; 20 acres in cultivation; 40 acres more ready for plow; this land was second choice in Coeur d'Alene Indian reservation. Price $6000. Terms. Absolutely the biggest bargain in the Inland Empire.

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LOOK HERE, MR. WORKMAN!
YOUR COUNTRY NEEDS YOU ON A FARM.

And we are offering you a 40-acre ranch at $25 per acre; 10 yearly payments; in the best agricultural part of Snohomish county; paved roads, railways, mills, factories, schools; plenty of work for the laboring man; the best proposition on the market for the man who wants a farm. Send for illustrated literature. BROWNELL LAND CO., 904 Third ave., Seattle Wash.

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FULLY EQUIPPED STOCK RANCH
$2000 BELOW VALUE.

160 acres beaver dam land; all tillable except 2 acres; 80 acres in meadow; 5 head of horses, 8 head of cattle; all farm machinery; good 2-story house, barn, wagon shed, garage, blacksmith shop and other outbuildings; good well and creek. Price $5500; $4000 cash, bal. long time.

This is one of our many.

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TWENTY-FIVE HUNDRED-ACRE WHEAT and stock ranch; western Canada; completely equipped; caterpillar tractor; thirty horses, cattle, hogs, implements, buildings; close to railway, schools and churches; settled community; telephone, rural mail, good roads; 1200 acres ready for drill. Price, $125,000; one-third cash, balance half crop payment. Western Canada Properties, Ltd., 401 Herald building, Calgary, Alberta, Canada.

NO. 1004—75 ACRES; ON RIVER; NEAR steamboat wharf; 1500 fruit trees, mostly young peach and apple; 8-room dwelling, front porch, 2 halls, attic, shade, well fenced; 15 acres of woodland, chestnut and oak; 7 acres in meadow; 6½ miles from county seat; barn and stable; new pig pens, 12x60; buildings worth $3500. Price only $3250. Russell Realty Co., Baltimore, Md.

FOR SALE BY OWNER—GOOD GENERAL purpose farm; near Polson, Mont.; close to P. O. and school; good running water; some timber, dark soil; adjoins open range; 640 acres in farm; 10 head cattle, 2 mares and 2 yearlings; all machinery. Only $18.50 per acre, part cash, bal. on time, 6 per cent. Address Lock Box 373, Polson, Mont.

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CULTIVATED CANADIAN WHEAT LANDS. 3000 acres ready for drill; in quarters, halves, or sections; every convenience; easy terms or crop payment. Final payment 1939. Where can you equal it? Western Canada Properties, Ltd., 401 Herald building, Calgary, Alberta, Canada.

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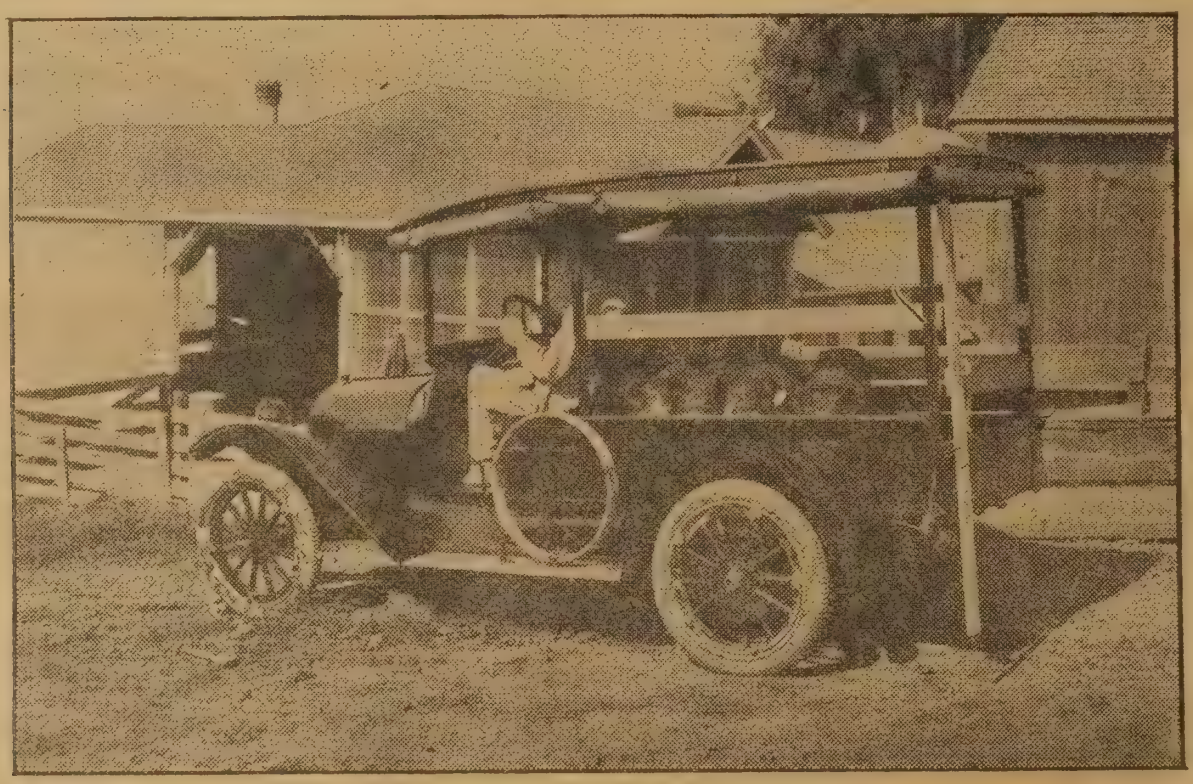
CHEVROLET

# "Bringing Home the Bacon"

Greater and greater grows the popularity of the CHEVROLET light delivery car on the farm and ranch. It answers every purpose.

No longer does the truck farmer get up the night before to get to the market—ten or twelve miles away—by daylight. Now he loads up and goes to bed. The alarm clock is set for a reasonable hour. The CHEVROLET does the rest at the proper time. It starts on the first press of the pedal. It goes along the road as fast as safety dictates—and farmer and produce are on the job to get the highest prices at the right time.

Neither does the dairy man nor the hog raiser worry about 'driving' his stock to market. Just chases them into a little chute, onto the bed of his CHEVROLET light delivery car, clamps on the side slats—and away they go. No draggly looking calves and pigs at the end of the trip. No worn out producer to take the first price offered him and drag his weary way homeward again.



*"Bringing Home the Bacon," or in taking it away, the CHEVROLET light delivery car, $735, like this one, at Pacific Coast terminals, does the work.*

Economy and efficiency! With the Chevrolet light delivery car they go hand in hand. With the CHEVROLET on the job farm work is no longer a dreary grind. It's a pleasure, with each task well done, and cheerfully, too.

Look at your neighbor with his CHEVROLET and compare his lot to yours, with your out-of-date equipment. He PAYS himself for being better off, for the CHEVROLET can be bought for the price of a good team—and the CHEVROLET doesn't eat when it isn't working.

Think it over, and then ask your neighbor how his CHEVROLET is behaving. Then our nearest dealer will make prompt delivery of the car you want.

CHEVROLET MOTOR COMPANY OF CALIFORNIA

**FACTORY, OAKLAND, CALIF.**

**Spokane, Portland, Los Angeles, Oakland.**

**Immediate deliveries from dealers everywhere.**

# THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XLI. NO. 18. MAY 2, 1918. ** WEEKLY.




Yakima's Lamb Orphanage

CHEVROLET

# Turn Your Delivery Costs Into Profits

Getting produce to the market after it has been raised is one of the big problems of modern truck farming.

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The CHEVROLET light delivery car is the happy solution of your problem. Mounted on the famous CHEVROLET "490" chassis, it is sturdy and light, fast and powerful, easy to operate and cheap to keep up. The wonderful CHEVROLET Valve-in-Head motor has power to spare, whether for steep grade or heavy sand. CHEVROLET owners pay their repair bills with pennies, not dollars.

Back of it all stands the CHEVROLET organization, with its millions of resources and unfailing dependability, backing up CHEVROLET dealers in all their business dealings. The CHEVROLET is a product of the WEST, for WESTERN people. Its factory is in Oakland, California, assuring prompt service and immediate delivery of both cars and parts. CHEVROLET Service throughout its dealers' organization is the marvel of the retail automobile industry.

Blot out the Red Ink figures in your books with a CHEVROLET light Delivery Car.

## Chevrolet Motor Company of California

Factory, Oakland, California.

Spokane, Los Angeles, Oakland, Portland

Dealers Everywhere Make Immediate Deliveries on All Models

**Chevrolet Light Delivery Car $715 Pacific Coast Terminals**

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 18 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF May 2, 1918

## Mothering 92 Orphan Lamblets

By SOSTER I. ANTHON.

**"Today I took these pictures of the lamb orphanage handled by two of our Yakima girls, and I thought you might like to have them with the enclosed story."**

**These are the words accompanying a most unique story of how two Yakima girls mothered nearly a hundred orphan lambs. Two of these pictures are reproduced on the cover page of this issue of The Washington Farmer.**

Necessity is the mother of invention—but were you ever faced by the necessity of being foster-mother to 92 orphan lamblets in these days of war conservation?

When old Mother Nature dumped the 92 orphan lambs along with the hundreds of other lambs at the Wright sheep ranch, the two Wright girls, now Mrs. Kennedy Foresman and Mrs. Thomas Boyd, decided instantly that something must be done. Not in these days could the lambs be allowed to starve. It would be unpatriotic, most unpatriotic, and besides—they were such cuddly, stumbly little wigglers that no one would have the heart to let them die without making all sorts of sacrifices to keep them alive.

So the two girls hied themselves to their ready refuge in farming troubles, the state college leaflets of advice.

"Feed lambs warm milk every hour," read the directions, simple, lucid and explicit.

There were 92 lambs. There are 24 hours to the day. Ninety-two times 24 is 2208; it meant 2208 feedings daily for the two girls, for the men on the place were all too busy to bother about 92 orphans. Big as that number is, it is inconspicuously small when compared with many thousand.

"We've just got to save them," pronounced Mrs. Foresman. "With Kennedy a soldier, and the government asking for more meat, and all, we just can't let them all die. They will, if we don't do something."

"Well, it's certain we can't feed them every hour, the way the directions say," countered Mrs. Boyd, who has the distraction of a small toddler of her own and so naturally couldn't be expected to rave over the charming babiness of the lambs.

"Let's try feeding them every two hours at first," suggested the other. "That ought to be enough."

No sooner said than done. The girls invested heavily in nursing bottles, the ones with the big nipples, and holding as many bottles as possible in each hand, fed the orphans warm milk. It worked like a charm, but it meant steady work. Some of the lambs, in fact most of them, knew nothing about day and night. They wanted to be fed every two hours regardless of little matters like light and dark. It was all right for a couple of days and then two tired, coveralled girls faced each other in some desperation and exasperation.

"We can't keep this up," they agreed. "The book says they have to be fed like this for a month. We just can't do it. I'm so sleepy now I could drop."

But there, faced by the necessity, came the invention. After considerable scheming, the girls devised an automatic foster mother. It consists of a long trough with holes bored on each side. Big nipples are attached to the holes. The troughs are filled with hot milk, the lambs are led nippleward—and the lambs do the rest. It isn't at all like leading a horse to water; there's no trouble about getting the lambs to drink. They do it so lustily, with such sucking and guzzling enjoyment of their meal that they fairly quiver from stem to stern while their tails wiggle and waggle as though they were doing military gymnastics in double-quick time.

Now that the lambs are getting older, the period between meals is being lengthened and, when a few weeks have passed, the lambs will be turned out to pasture to become real gambolers on the green. At present they are noisily absorbing all the milk furnished by the five cows on the place and a daily purchase of 60 pounds as well. But how they are thriving! At meal times one can fairly see them swelling—and some of the increase apparently sticks for it would be hard to find huskier, heavier lambs than the 92 orphans though, under the circumstances, it does seem as if the number saved should be 99.

"We wouldn't have done it if the government hadn't wanted us to do our bit," explains Mrs. Foresman. "But my husband is a soldier and I thought I ought to do what I could here. Ninety-two lambs ought to give wool for quite a few soldiers' uniforms and some good mutton stew beside. It's our bit for the war."

### Spokane Fruit Growers.

Arrangements have been completed whereby the Northwestern Fruit exchange, with headquarters at Seattle, will sell and market in 1918 the entire crop produced by the members of the Spokane Fruit Growers' company. The Spokane company has 1200 growers as members, and operates 40 shipping stations. It penetrates into the Yakima valley and also serves the Columbia river basin, including White Bluffs, Hanford and Kennewick, and controls about 100 per cent of the Kennewick-Richland district. The company's tonnage for the coming season is estimated at 1500 to 2000 cars.

## Better Than Early Sowing

### *Thorough Preparation of Soil Pays Best*

By GEORGE SEVERANCE

The unfavorable fall of 1917 threw an unusual amount of work into the spring. With the urgent need for a heavy spring planting there is grave danger of hurrying in many crops with very poor preparation in order to seed an increased acreage in good season. It is poor patriotism to seed crops without sufficient preparation to insure reasonably good results. While we do not wish to encourage late sowing, especially, it is a matter of common observation that comparatively late seeding on well prepared soil is safer than early sowing on very poorly prepared soil. A prominent seed company seeded a considerable area of peas near Fairfield in the spring of 1916 from three to six weeks later than the majority were seeding and secured practically full crops. They informed the writer that they do not place nearly as much importance upon early seeding as upon proper soil conditions.

In my own experience many of the very best crops that I have had anything to do with have been seeded quite late upon well prepared land. Early seeding can never make up for poor preparation, but thorough preparation often enables a late seeded crop to produce a full yield. Thorough preparation takes more time, but it also lengthens the period of time over which the preparation and planting may be safely done and lessens risks. This is no time for taking heavy risks in seeding. Every blow in this great struggle should be thoughtfully planned and carefully executed.

Of course, in certain sections scarcity of moisture is so serious a limiting factor that very early seeding is imperative, and no possible soil preparation can ordinarily justify very late seeding. Again, shortness of season in some sections is such a limiting factor for certain crops that the range of time over which they may be planted is very limited. With the majority of crops and conditions, however, thorough preparation of the soil is more important than a definite time of seeding.

In the wheat region it is better to summer fallow land that can not be properly prepared before seeding. One hundred acres of wheat on well prepared land good for 20 bushels per acre, with 100 acres in addition of good summer fallow for the 1919 crop is manifestly better than 200 acres of wheat on very poorly prepared land good for 10 bushels per acre or less, with none of the land in good shape for the 1919 crop.

By proper preparation we do not mean an impractical ideal. Good preparation usually means a good job of plowing at moderate depth, about six inches in most places for spring plowing, harrowing close after the plow to break down the furrow before it dries, and enough additional tillage to work the loose furrow down onto the subsoil beneath, shutting out the open holes between and underneath the furrows, and to pulverize the furrows reasonably well if inclined to be lumpy.

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**SWARMING OF BEES.**

The fourth article in the series of "Bee-Keeping for Farmers" will appear in next week's issue, that of May 9, the copy reaching the editorial office too late for this week's issue.

### OKANOGAN STOCKMEN.

#### J. E. Ford Is Chosen President.

At the third annual session of the Okanogan County Stockmen's association the following officers were chosen to serve for the coming year: J. E. Ford, Oroville, president; Bert Hart of Chesaw, vice president; Hugh Miller, Riverside, secretary and treasurer; E. F. Banker of Winthrop, J. M. Meyers of Conconully, Joe Gregory of Wauconda, Stanley Evans of Loomis and T. S. Anglin of Anglin, members of the advisory board.

There were several hundred stockmen in attendance.

Among those who addressed the convention during the two days' session were State Land Commissioner Clark V. Savidge, T. P. MacKenzie, assistant district forester, of Portland; Senator J. W. Faulkner of this city; John H. Roberts, manager of the Spokane Union stockyards; C. M. McAllister, C. E. Hanson, Harry Marble, Allan Wetsel, Walter A. Holt, George Ellis, R. C. Coglan and Robert Picktin.

George Ellis, U. E. Fries, L. E. McDaniels, Hugh Miller and Marion Warren formed the resolutions committee.

Among the resolutions adopted was one instructing the legislative committee to draft and properly brief a bill for passage through the next session of the legislature requiring that all estray stock be advertised as estrays in the official county paper for not less than three successive issues, said advertisement to begin within 15 days after the animal or animals are taken up, the description of the estrays to be full and complete as regards color, age, sex, ear or other distinctive marks, breed and where found, etc.

### Dairymen Organize.

Lewis county dairymen are effecting an organization of an association designed to work for the improvement of the dairy industry in the Chehalis valley. The immediate cause of the formation of the association is said to be a recent cut of the milk price by the milk companies buying the product of Lewis county dairy farms.

### Buys Land Near Ritzville.

James E. Alberg has bought 320 acres west of Ritzville for $64,000. The place is improved and in cultivation, and Mr. Alberg is making his home there.

ACCORDING to a Washington dispatch the creation of a labor administration, with a director in general of labor, is under consideration by President Wilson. The new office would take over much of the work heretofore performed by the labor department. The chief need of the new national labor administrator is indicated to be along the line of coordinating the activities of various labor and wage adjustment bureaus now operated by governmental departments. This is exactly along the line for which the Farmer has been contending vigorously for months. If a national war-time labor administrator is needed there is equal or greater need of a national wartime food production administrator who shall coordinate the multitudinous agencies now engaged in speeding up food production.

The government has a labor department with a cabinet officer at its head, just as it has an agricultural department with a cabinet officer also at its head. National department bureaus do not seem to be adapted to the speeding up process. The food production campaign, as a national issue, is yet in crying need of the ablest available executive in the country, who shall bring order out of the more or less chaotic and wasteful conditions now prevailing. The campaign for a national war-time food production administrator remains an issue of far-reaching import.

# With More of Farm Energy at Washington, Ships Would Have Been Built Long Ago

A farmer who ran his farm as the government has managed its shipbuilding program would wind up in the poor farm. As a study in procrastination here is a record that makes a patriotic citizen grit his teeth. When Europe went to war in 1914 it was apparent that the United States would need a fleet of merchant ships, as we had been dependent before on foreign fleets to move our surplus products to market across the sea, and the war needs of the fighting countries would surely withdraw them from our shores.

Congress slept on the subject for about two years, and after long discussion the bill creating the shipping board became a law on September 7, 1916.

That was 600 days ago.

Then the president took 106 days to appoint the members of the board.

The board organized on January 31, 1917, 40 days after its members were appointed, and 146 days after their appointment and organization was made possible.

And all this while ocean freight rates were soaring and it was costing the grain growers of the United States more and more to move their wheat to the markets in the old world.

It was April 17, 1917, 11 days after the United States declared war, and 222 days after the shipping board was created, that the emergency fleet corporation was organized.

On July 24, 1917, after 98 days of the emergency fleet corporation's existence and a long period of quarreling between the members, Chairman Denman of the shipping board and General Goethals, general manager of the fleet corporation, were forced out of office.

Three hundred and ten days had then elapsed since the president had signed the shipping board measure. Edward N. Hurley then became chairman of the board and Rear Admiral Capps succeeded General Goethals as general manager of the corporation.

In one year less one day the emergency fleet corporation had five general managers—Goethals, Capps, Harris, Piez—and now Charles M. Schwab, probably the right man at last, but appointed 586 days after congress put into the hands of the government the power, by degrees made absolute, to create the fleet that every man knew we must have whether we went to war or not.

Can you beat it for circumlocution, procrastination and general somnolence?

Some people think the farmer's notions are slow, but they know nothing about farm life. Against the foregoing record of indefensible delay we are going now to set down the faithful record of a single busy day in a farmer's life.

Up at 5 o'clock, starting the kitchen fire and doing the morning chores while the good wife prepares the breakfast.

Afield at 6 o'clock and in continuous action till noon.

One hour for dinner and rest.

Back in the field at 1 and going steadily till 7, or maybe till 8.

Supper and the evening chores, and then the family climbs into the automobile to attend a patriotic meeting at the schoolhouse or the hall, a mile or two or five away.

Back home at 10:30 or 11, to wind the clock, bring in a bucket of fresh water, lock up for the night, and say your prayers.

We need more of farm energy at Washington. If we had had it there since this war started, the ships would have been built long ago.

# Farm Service War Flag



Foster the spirit of patriotism of your boys and girls on the farm by giving each one of them a star on the Farm Service War Flag in just recognition of what they are doing to speed up food production. This flag is for all who deserve it. The "patent applied for" is only to prevent its use by those who do not deserve it. Farmers have responded liberally in buying Liberty bonds; their sons are in the military or naval service of their country; some of them are in France already and some are preparing to go thither; and this is giving evidence of the high patriotism not only of the boys who go, but of those who stay behind. Farmers also have responded to the patriotic call for increased food production, and there is every reason why the patriotic farmers should have some insignia to display in their windows of their homes, to nail to their gateposts, to fly from their automobiles, giving evidence of patriotic service which is just as essential for success of the war as that of making or carrying arms.



Every farmer, every farmer's wife, every farm boy or girl who is speeding up the food production in these days of war is doing a patriotic duty and deserves a flag. The flag is entirely distinct from the war service flag which you hang in your window for the absent son who has gone forth to serve his country in army or navy.





# Power Farming Demonstration

## *For the Pacific Northwest, Pullman, May 29-31*

A power farming demonstration for the Pacific northwest will be held at Pullman, Wash., this spring, May 29, 30 and 31. This demonstration is in charge of the state college of Washington cooperating with the United States department of agriculture, the tractor and implement dealers of the northwest and the Pullman Chamber of Commerce.

At the present time the greatest possible food production is demanded. The available labor is scarce. Horses can not furnish enough farm power. The extensive use of labor and horse saving machinery is urgent. The farmers of the northwest are progressive and anxious to farm all their acres to the best advantage, but they can not justly be expected to purchase and use new equipment before seeing it in actual operation, so that they may decide whether or not the implements will operate successfully on their own farms. As a matter of education and information the demonstration will prove of great value to the agricultural interests of the Pacific northwest.

**What Demonstration Will Do.**

It will bring together a large aggregation of tractors and plows, tillage implements, harvesting machinery, motor trucks and modern labor-saving machinery in general. This demonstration will be more complete than the machinery section of a state fair, and will be of much greater value to the farmers as it will show the machines in actual field work. Here every one can see and compare the work of a large number of tractors in one field, an opportunity that can be had only at such a demonstration. Since both level and hill fields will be farmed it will be possible to draw better conclusions as to what type of tractor will be successful on individual farms.

The public will be shown the use of tractors in connection with belt-driven machinery such as silage cutters, threshers and similar farm equipment. The latest harvesting and grain handling machinery will be shown and demonstrated. In short, machinery that will save man and horsepower will be on demonstration so that all who attend will see with little expenditure of time the possibilities of doing their work more efficiently with modern equipment, and also to quickly compare the different machines for doing any particular class of work.

**How It Will Be Conducted.**

Over 200 acres of land in one body near Pullman is available for the tractor demonstration. This ground will be plowed by the demonstrators. During the forenoon the companies are at liberty to make individual demonstrations in fields assigned to them. At this time demonstrations of belt-operated machines and implements other than tractors will be made. In the afternoon the regular public demonstration will be held, during which all the tractors will plow on assigned plots in one large field. After plowing part of the afternoon the plowed ground will be gone over with tillage implements such as harrows. No demonstrations of other machines will be permitted while the tractors are operating in the afternoon.

Something of interest will be going on all the time, so that it will be to everyone's advantage to attend the demonstration the entire time.

The demonstration grounds are about two and a half miles from Pullman on a paved road. Automobile and truck service will be maintained between the city and the grounds. A large number of people can be accommodated as regards rooms and meals in town. As the weather is usually excellent at this time of year many will bring tents and camp in the grove adjacent to the demonstration field. A lunch counter will be on the grounds, so that it will not be necessary to make trips to the city for meals.

Pullman is readily accessible to all the northwestern states, being located on the O.-W., R. & N. and the Northern Pacific railroads. Pleasant and easy automobile trips can be made to the demonstration from Washington, Oregon, Idaho, Montana and Alberta. A parking place for automobiles will be in charge of a watchman.

Everyone in the northwest who is interested in agriculture and is following the rapid development of modern farm machinery with its wonderful time and labor saving possibilities should not miss the great opportunity of seeing this machinery at work side by side in one large field.

For other information communicate with the Department of Agricultural Engineering, State College of Washington, Pullman, Wash.

## Thank America for Wheat Saved.

Cablegrams expressing the thanks of the French, Italian and English governments for the willingness of the American people to reduce their wheat consumption have been received by the food administration from the food ministers of the allied countries.

# Washington Young Men In War Service

From the Twice-a-Week Spokesman-Review.



**EARL FREYTAG, Leavenworth, Wash.** — Was born in Ellensburg November 1, 1886, and has lived with his parents, Mr. and Mrs. Charles Freytag, on their farm near Leavenworth. He entered the service October 7, 1917, and is now with Sg. 437, care Polson Log Co., Camp 10, Hoquiam, Wash.



**VIRGIL B. BELL, White Salmon, Wash.**—Enlisted at El Paso, Texas, December 13, 1917. He has made two cruises on the U. S. S. Huntington, and is very proud of his ship and her crew. His parents, Mr. and Mrs. F. L. Bell, and brother Wendell P., live at White Salmon.



**DONALD L. NILES, Washougal, Wash.** — At the age of 19 years enlisted in the hospital corps of the U. S. army, March 22, 1917. He is now located at Fort Worden, and is very anxious to "go across the pond." He is the only son of Mr. and Mrs. Schuyler Niles at Washougal.

# Nonpartizan League

The Nonpartizan league sends out from its national headquarters at St. Paul, Minn., the following platform for the state of Washington, adding that "the Nonpartizan league is organizing the farmers of your state that they may act together to secure political power in proportion to their population.

1. State-owned packing plants, canneries, creameries, milk condenseries, terminal elevators and flour mills.
2. State-owned warthouses and storage plants for eggs, fruit, potatoes and other farm products.
3. Exemption of farm improvements from taxation.
4. Rural credit banks operated at cost.
5. A more equitable system of the grading of grain.
6. Equal taxation of property of railroads, telegraph, telephone, electric light and power companies, and all public utility corporations as compared with that of other property owners.

As to "disloyalty charges" the national authorities of the Nonpartizan league say:

Obviously no group of men, no matter how loyal, leading in the organizing of farmers to obtain political power as outlined above, could escape the charge of disloyalty at this time. The anti-farmer interests are unscrupulous enough to use it against any and all who oppose their domination over the livelihood of the people. The charge, therefore, means nothing without proof before the duly constituted courts of the state or nation. The farmers are not disloyal before being organized and certainly will not be when organized. None of the commonly used proofs of league disloyalty have been sustained by the courts and are in fact without basis. No one on the league lecture or organization staff has been found guilty of any unpatriotic act. One of the league organizers, whose arrest for disloyalty has been made the excuse for unlawfully interfering with league meetings in some parts of Minnesota for the last three months, was acquitted by jury trial early in April. The people of Washington have probably heard of these arrests for political purposes, but arrests are not convictions and our respect for constituted authority ought not to go so far as to throw us off our guard when officials use their office for political persecution.

**Run Out of Town.**

W. B. Edwards and A. Knutson, organizers for the nonpartizan league, were taken from their rooms in the hotel in Winlock, western Washington, about 2 o'clock Friday morning by a company of 50 citizens, loaded into their automobiles and sent out of town. Knutson was given a taste of tar and cotton, no feathers being handy. The men were taken following a two-hour conference in the hotel, in which Knutson is alleged to have divulged the inner workings of the league to Edwards, who is a comparatively new man to the organization. The entire conversation was overheard by four witnesses and the facts brought out led to the expulsion of the two men. Alfred Knutson, the Washington state manager of the National Nonpartizan league, has his office in Spokane.

**Alfred Crowe Jailed.**

Alfred Crowe, organizer for the nonpartizan league, was arrested at Walla Walla Saturday and held in jail under instructions from federal officials. Crowe is charged with representing he was a government official in his soliciting work among farmers, exhibiting a badge marked "deputy sheriff." Crowe is said to have secured hundreds of members for the organization.

# Shorthorn Sale at Ontario

## *Average of $256 for Bulls; $268 for Females*

By E. L. POTTER

The sale of the Northwest Shorthorn association at Ontario, Ore., April 25, with an average of $256 for bulls and $268 for females, was in every way a success. There were new consignors to the auction and many new buyers. The Shorthorn breed received a material boost in the Snake River valley and many good cattle were placed where they will do a lot of good to the industry, to the community and to the owners. There are many small Shorthorn breeders in this vicinity who profited materially by the sale. Many range men also learned for the first time that there is no better place to buy bulls than at the sales of the Northwest Shorthorn association.

It is quite likely that an association sale will be held next year at the time of the next meeting of the Cattle and Horse Raisers' association at Bend. It is also to be hoped the sale at Ontario may be made an annual event. There are a lot of buyers in that part of Oregon and Idaho who do not come to the Portland, Lewiston or Spokane sales, and also many possible consignors do not care to ship their cattle so far.

The consignment consisted of a few nice females and a large number of good range bulls with a few herd headers. None were in show condition. Four bulls and one female brought $400 or more. The top of the sale was $495, paid by Guy Galloway of Weiser, Idaho, for the champion bull, Gloster Knight, consigned by Joe Turner of Meyers Falls, Wash. Gloster Knight was a very blocky, meaty red bull and a general favorite. Charles Peterson of Crane, Ore., paid $445 for Cumberland's Goods, another good, red bull consigned by Mr. Turner. This bull was first in the yearling class. The second prize yearling bull, Hercules Director, consigned by Day & Rothrock of Spokane, Wash., was taken by W. A. Payton of Baker, Ore., for $425.

The champion female was a beautiful red heifer consigned by W. J. Townley of Union, and sold to G. W. De Lay of Hot Lake, Ore.

A very large proportion of the offering consisted of good range bulls from 11 to 15 months old. These sold readily at from $145 up to $350, with the bulk bringing $175 to $275. Rutherford Bros. of Malheur bought eight head at an average of $176, and W. B. Kurtz of Boise, Idaho, bought 15 head at an average of $240.

### THE SALES.

**Consigned by A. D. Dunn, Wapato, Wash.:**

Scarlet Duke 602142 (red bull), calved December 18, 1916; W. B. Kurtz, Boise, Idaho, $295.

Charity King 262230 (roan bull), calved December 4, 1916; Byron Vandecar, Baker, Ore., $350.

Scarlet Comet 602140 (red bull), calved January 17, 1917; Frank Flitner, Ola, Idaho, $280.

Scarlet Crest 602141 (red bull), calved December 31, 1916; North Powder Cattle & Horse Range association, by W. J. Townley, Union, Ore., $275.

Superior 602994 (red bull), calved January 9, 1917; W. B. Kurtz, Boise, Idaho, $185.

Red Judy 662993 (red bull), calved September 17, 1916; H. E. Kinney, Cambridge, Idaho, $200.

Julia Prince 602992 (red bull), calved September 3, 1916; W. B. Kurtz, Boise, Idaho, $270.

Beauty Queen 542340 (roan cow), calved June 5, 1916; W. W. Green, Union, Ore., $335.

Caroline 538209 (roan cow), calved April 20, 1916; C. C. Yount, Payette, Idaho, $265.

Dunbro Beauty 2d 613659 (roan cow), calved October 22, 1916; G. L. Cruikshank, New Plymouth, Idaho, $295.

Hazel 592254 (red cow), calved August 10, 1916; W. A. Hall, Caldwell, Idaho, $130.

Red Cassie 592261 (red cow), calved August 15, 1916; M. E. Nesbitt, Payette, Idaho, $340.

Rose Lavender 592265 (roan cow), calved October 5, 1916; William Pearson, Weiser, Idaho, $285.

**Consigned by Day & Rothrock, Sprague, Wash.:**

Hercules Director 605954 (roan bull), calved April 26, 1917; W. A. Peyton, Baker, Ore., $425.

Golden King 605953 (red bull), calved February 14, 1917; W. B. Kurtz, Boise, Idaho, $260.

Young Dale 611137 (red bull), calved February 15, 1917; Frank Flitner, $300.

Red Dale 611132 (red bull), calved March 5, 1917; W. B. Kurtz, Boise, Idaho, $255.

Blenz's Best 632191 (roan bull), calved May 1, 1917; H. H. Tunny, Ontario, Ore., $375.

Butterscotch Lad 632192 (red bull), calved April 10, 1917; W. B. Kurtz, Boise, Idaho, $255.

My Choice 632198 (red bull), calved March 9, 1917; H. E. Kinney, $325.

Palouse King 632209 (roan bull), calved May 2, 1917; Byron Vandecar, Baker, Ore., $350.

Count Victor (roan bull), calved March, 1917; Albert Campbell, New Meadows, Idaho, $375.

Old U. S. A. 632199 (roan bull), calved April 2, 1917; A. R. McDonald, $405.

Selma 2d 475558 (red cow), calved September 10, 1915; W. E. Green, Union, Ore., $380.

**Consigned by Joe Turner, Meyers Falls, Wash.**

Cumberland Lad 616182 (roan bull), calved September 15, 1916; W. B. Kurtz, Boise, Idaho, $365.

Minnie's Chief 629611 (roan bull), calved December 20, 1916; H. E. Kinney, Cambridge, Idaho, $300.

Gloster Knight 594546 (red bull), calved June 24, 1916; Guy Galloway, Weiser, Idaho, $495.

Gay Charmer 570847 (red bull), calved March 25, 1916; Ed Walker, New Plymouth, Idaho, $350.

Jilt's Challenger 570462 (red bull), calved August 12, 1916; North Powder Cattle & Horse Range association, by W. J. Townley, Union, Ore., $290.

Groundhog's Pride 617348 (roan bull), calved February 2, 1917; W. B. Kurtz, Boise, Idaho, $285.

Carlton 598841 (roan bull), calved August 13, 1916; W. B. Kurtz, Boise, Idaho, $285.

Cumberland's Goods 618181 (red bull), calved September 20, 1916; Charley Peterson, Crane, Ore., $445.

Orange Rose 488943 (red cow), calved May 24, 1915; J. W. Smead, Caldwell, Idaho, $305.

Young Mary 238702 (roan cow), calved Febrruary 20, 1914; S. G. Tucker, Notus, Idaho, $450.

**Consigned by W. O. Cummings, Mt. Vernon, Ore.**

Admiral Ward 608305 (red bull), calved April 19, 1917; W. B. Kurtz, Boise, Idaho, $165.

Sunburst 608317 (red bull), calved May 24, 1917; T. Brosnan, Ontario, Ore., $150.

Prince De Rohan 608314 (roan bull), calved April 12, 1917; Joe Alexander, Durkee, Ore., $185.

Robin Hood 608316 (roan bull), calved April 27, 1917; Rutherford Bros., Malheur, Ore., $200.

Cap Christy 625530 (red bull), calved April 20, 1917; Rutherford Bros., Malheur, Ore., $200.

General McArthur 625531 (roan bull), calved June 15, 1917; Joe Alameda, Durkee, Ore., $195.

King George 608476 (roan bull), calved December 23, 1916; Rutherford Bros., Malheur, Ore., $170.

Pere de Orr 608478 (red bull), calved November 5, 1916; J. W. Watkins, Caldwell, Idaho, $135.

Old Gold 608477 (red bull), calved September 14, 1916; Rutherford Bros., Malheur, Ore., $170.

R. B. Cant R. 562783 (red bull), calved May 6, 1916; Rutherford Bros., Malheur, Ore., $145.

Robert Garrett R 562784 (roan bull), calved March 2, 1916; A. McWilliams, Ontario, Ore., $185.

Dean Hole 608308 (red bull), calved March 31, 1917; Rutherford Bros., $175.

Paul Neyron 608311 (roan bull), calved April 14, 1917; Rutherford Bros., Malheur, Ore., $170.

William Sheen 608318 (roan bull), calved May 10, 1917; Byron Vandecar, Baker, Ore., $200.

Excelsa 608309 (red bull), calved April 20, 1917; Rutherford Brothers, $175.

**Consigned by W. J. Townley, Union, Ore.:**

Royal David 561166 (red bull), calved January 29, 1917; M. S. Nesbitt, Payettem, Ore., $310.

Mound's King, 381st 561637 (red bull), calved April 9, 1917; W. B. Kurtz, Boise, Idaho, $255.

The Mound's Rosebud 561170 (red cow), calved March 20, 1917; G. W. De Lay, Hot Lake, Ore., $400.

Gay Mary 352d 575167 (roan cow), calved March 27, 1917; W. A. Hall, Caldwell, Idaho, $180.

Violet 330th 612686 (red cow), calved April 7, 1917; W. A. Hall, Caldwell, Idaho, $170.

The Mound's Fairy 612685 (roan cow), calved April 17, 1917; G. L. Cruickshank, New Plymouth Idaho, $215.

**Consigned by G. W. De Lay, Union, Ore.**

Prospector 621833 (red bull), calved April 19, 1917; J. H. Ross, Weiser, Idaho, $150.

Rixson 624083 (red bull), calved April 2, 1917; W. B. Kurtz, Boise, Idaho, $190.

Cypress 2d 621863 (roan cow), calved June 1, 1917; J. W. Smead, Caldwell, Idaho, $180.

Darling 621863 (roan cow), calved April 25, 1917; W. A. Hall, Caldwell, Idaho, $160.

May Queen 605123 (red cow), calved May 18, 1917; John B. Fisher, New Plymouth, Idaho, $200.

**Consigned by Sherman & Hutchinson, Union, Ore.**

Welcome's Guest 633197 (red bull), calved April 16, 1917; W. B. Kurtz, Boise, Idaho, $200.

General Sherman 558784 (roan bull), calved April 30, 1916; A. McWilliams, Ontario, Ore., $200.

Lord George 646024 (red, little white, bull), calved February 22, 1917; Byron Vandecar, Baker, Ore., $300.

**Consigned by W. W. Green, Union, Ore.**

Linwood Lad 634576 (red bull), calved March 7, 1917; W. B. Kurtz, Boise, Idaho, $150.

Linwood Boy 634575 (red bull), calved March 28, 1917; W. B. Kurtz, Boise, Idaho, $155.

**Consigned by A. D. Bideler, Union, Ore.**

Marsh Violet 2d 520036 (red cow), calved May 8, 1916; J. W. Smead, Caldwell, Idaho, $200.

### World's Tallest Chimney.

Japanese have built the world's tallest chimney, a reenforced concrete structure 570 feet high, which stands upon a hill that is 430 feet higher than the copper smelter which it serves.

### War Garden Contest.

The war garden plans submitted to The Washington Farmer made one of the most valuable and interesting features of our paper. In awarding the prizes it is only just to say that there was some difficulty in deciding between the better plans, they were so generally excellent. The first prize is awarded to Mrs. Winnifred Buckingham, South Bend, Wash.; second to Mrs. J. M. Foye, Valleyford, Wash., and the third to Jennie Simmons, Tolt, Wash.

### Community Church Plan.

"Two towns in the Wenatchee district are to be chosen where we will establish our first community church plant in the Columbia River conference," is announcement made by the Rev. Robert Brumblay, district superintendent of the Methodist Episcopal church. The board of missions will make a proposition of furnishing each an equipment at a cost of $10,000 or more, one of these going into the wheat regions and the other being located in the irrigating belt. At each of these plants the church suggests such features as gymnasiums, shower baths, swimming pool recreation room and reading room will be equipped.

### Raspberry Pickers' Pay.

The Puyallup and Sumner Fruit Growers' association will pay 50 cents per crate for picking both the shipping raspberries and the raspberries for canning. This is 15 cents per crate higher than was paid last year. The directors also recommend that the growers pay at the end of the season to every picker doing satisfactory work and who stays through the entire season a bonus of 5 cents per crate.

# Fine Response by the Farmers

## *Patriotism a Virtue That Takes Deep Root in the Soil*

The Liberty bond organization at Chicago launched its campaign a fortnight ago with an unwarranted and foolish assertion that the farmers of the United States were financial slackers, and that farming communities were less patriotic than city people. The facts are an eloquent answer to that slander.

**"The outstanding fact of the third campaign so far," says an Associated Press dispatch from Washington, "is the liberal outpouring of subscriptions from farmers and other residents of rural districts, and the comparative slowness of big city communities. All the states which have gone over the top and won honor flags are largely rural."**

The country is shaming some of the cities and vindicating the Farmer's confident prediction that the rural districts would come in strong on patriotic service.

The reason for seeming early-hour apathy in the country in previous Liberty bond campaigns was easily apparent to those who knew the true heart of its people. They are scattered over wide areas and lack the means of quick assemblage that are given to town and city communities. Organization of necessity proceeded more slowly. But when the country people do form their organizations they are more closely knit than the city organizations and less subject to disintegrating influences.

There are still in the country, of course, a number of people who have not yet responded loyally to their government's call, but their position will become more and more unpleasant as the war goes on. It is more difficult to dodge one's duty there than in the city, where one can conceal his affairs more easily from his neighbors.

But there is another reason for this fine response by the farmers as noted in the news from Washington. Patriotism is a virtue that takes deep root in the soil. The farmer and the farmer's wife, and their sons and daughters, too, looking out over their broad acres, have a deepened consciousness of ownership of the land. Their farm is a visible part of "the land of the free and the home of the brave." When their voices lift in patriotic song the words have for them a deeper meaning than they can have for the city dweller. Even the children thrill to the inspiring line:

"I love thy rocks and rills,
Thy woods and templed hills."

More and more it will become apparent, as the war goes on, that the country is aflame with patriotic spirit and pulsating with action. After this superb response to the government's call for Liberty bond subscriptions we shall hear no more the unfounded assertion, occasionally made by persons who did not know the real spirit of its people, that the farmers and business men of the rural regions were less patriotic than the dwellers in the cities.

### There Is No Honor.

In doing the easiest thing.

# Cattle and Horse Raisers

Following the United States supreme court's action in sustaining the validity of the Idaho law providing for priority range rights on the part of cattlemen, comes the Cattle and Horse Raisers' association of Oregon, with a resolution petitioning the Oregon legislature for a similar statute. The resolution was adopted by the association at its meeting just held at Ontario,

Other resolutions of importance to the live stock industry received the approval of the association. Among them were the following:

**Asking the secretary of the interior to suspend the operation of the stock raising 640-acre homestead act until after the war and that preference be shown our soldiers and sailors in the matter of rights.**

**Indorsing the work of the marketing committee of the National Live Stock association and appropriating $300 for expenses.**

**Pledging the loyalty of the association to the government in this time of stress and appropriating $1000 for the purchase of Liberty bonds for the organization.**

**Asking the legislature to enact a law providing that no cattle or horses be assessed until animals shall have reached the age of 12 months.**

**Asking the animal husbandry department to furnish serum for the prevention and cure of blackleg and that the government be required to discontinue sending out vaccine, which has proved unsatisfactory.**

**Asking the legislature to abolish the indeterminate sentence law, as the statute in question is said to have worked a hardship in cases where cattle rustlers have been involved.**

Bend will be host next year. All the old officers were reelected. They are: President, William Pollman; first vice president, George H. Russell; second vice president, W. H. Daughtrey; treasurer, William Duby; secretary S. O. Correll; brand inspector, Gerry Snow.

Too much can not be said of the most excellent team work accomplished by the people of Ontario.

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## The Poultry Feed Situation

In the northwest states poultry feed costs more than human food. At the present time corn, oats and barley are selling for more than wheat. The food administration says that wheat must not be fed to poultry, except a small percentage of feed wheat, and poultrymen must use corn, oats and barley at higher prices.

Poultrymen can do without wheat. They can make up a wheatless ration that will produce as many eggs as a ration made up mainly of wheat. With the byproducts of wheat, bran and shorts, and corn and oats or barley, supplemented with the usual animal foods and green stuff, there is no necessity for feeding wheat.

But with cheaper corn, oats and barley, there would be more and cheaper human food. Congress would help the drive for more poultry and eggs by regulating the prices of these cereals as it has regulated wheat, and give poultry raisers cheaper feed. At the present prices of feed and eggs only those poultrymen who have heavy laying strains will make a profit. A great many will have to produce eggs at a loss or kill off their hens.

They are willing to sacrifice profits and keep their laying hens, if necessary, but some way should be found for remedying this situation.

Another point should not be overlooked. At the present prices of feed grains nothing but a strong patriotic impulse will keep farmers from sowing barley and oats in place of wheat.

There is a double reason why the prices of feed grains should be put on a parity with wheat.

J. D.

## The Irrepressible Loafer.

Everywhere there is a movement to put the habitual loafer to work, and a highly commendable movement it is. There should be some system devised if possible whereby every person who eats during this strenuous wartime could be made to earn by hard toil that which he eats. It is suggested that the closing of places where loafers lounge would help relieve the farm labor shortage. Possibly it would; probably it would not. At any rate the help would be insignificant. No farmer wants on his place in the guise of a hired man the man who is accustomed to spend his time in idleness. The farmer must pay $60 or more a month with board and lodging for hired help. The loafer is not worth the lodging alone, even though his quarters be the hay mow or the strawstack. While few farmers are deluded by the idea that they can secure help from the pool hall crowd or other habitual idlers, it is well for those few who may be so deluded to get rid of the idea at once. It may be that the loafer, like the poor, will be with us always. Certain it is that the only way to make a working man of him is to deny him every civil privilege, including food, until he reverses his entire system of life.

## Red-Blooded Boys

Ellensburg high school has been noted for several years along progressive agricultural lines. Now Mr. Zimmerman, who heads the agricultural department of that institution, has organized a class in farm motors. Not only is this class the largest in his department, but the teacher reports that "the boys are very enthusiastic about their work."

In the beginnings of manual training west of the mountains it was reported that the boys became so much interested that they broke into the school work shop Sundays. Red-blooded boys everywhere enjoy healthful work that brings results. It is easier for anaemic boys to sit quiet, learn their lessons, commit words, and not disturb the equanimity of the teacher during school hours.

## Sour Soil.

It is not a hard task to find out whether your soils are sour or not. The test is made with litmus paper, which may be bought at any drug store. Take a small amount of the soil you wish to test, wet it and make it into a ball; break it in halves, lay a strip of the blue litmus paper across one-half and press the two pieces together again. Leave it there half an hour or so and then remove the paper. If it has turned pink, the dirt has acid in it.

Drainage and lime are partial correctives of sour soils, but before applying cures make sure your tests are fair and are taken in the right places and at the right depths. One test is not enough to prove much on a large farm, for one spot may be sour or sweet and still not be the same as most of the field in which it is in, let alone a whole farm.

The adding of milk to butter and the churning of it or mixing the two together does not increase the quantity of butter. It merely swells the bulk. The buttermaker removes all the buttermilk he can. To mix any kind of milk in the butter undoes the work. It sours quickly in warm weather and is illegal for selling purposes. If one wishes to mix milk and butter it can be done for home use, but it needs no machine to do it. It can be mixed with an egg beater or simply with a fork.

Many of the garden seeds may still be tested before planting. If we are going to do our own testing we usually take from 50 to 100 seeds and plant them in a flat box of earth. They are planted as deeply as they would be if put out of doors, and the conditions are as nearly favorable as the most perfect season could be a little later on. We find out just how many of the seeds planted will develop into plants.

"If we are to have a band in Leavenworth we will have to teach the younger boys. The older ones have joined the army. We must have a band to meet the soldier boys when they come back from France." These are the words of James McDans, band master, who already has secured a number of new recruits and is after 20 more to organize the new band.

A reasonable price and a fair price which returns a good profit is what all breeders should strive for. This will best promote the interests of the breed, be it horses, cattle, hogs, sheep or chickens.

It has been the conclusion of years of observation that the man who does his best, and is always ready to take advantage of the weather when it does change, is the man who wins out.

## Washington Gleanings

A war savings contest for the boys and girls of Clarke county began April 22, and will end May 31.

Thomas P. Horn will be superintendent of the poultry department of the Southwest Washington fair.

The employes of the North Bank roundhouse at Vancouver are planting four acres to war gardens this season.

The Wahkiakum County Council of Defense was recently organized with William Stuart of Cathlamet as chairman.

Four medical men have been called from Monroe for war service, leaving the city practically destitute of physicians.

At a public auction at Dayton recently the farms of the late Joe Rose were sold, one bringing $125 an acre, and the other $112.75.

W. E. Weir, principal of the McKinley school at Toppenish has been appointed supervisor of the Boys and Girls' club work during this summer.

The Farmers' Elevator and Produce company of Valleyford has been organized with a capital of $15,000 to erect a grain elevator at that place.

In order to rid the city of the surplus of dogs, the Hoquiam officials are offering two thrift stamps to each boy for every dog he brings to them.

A Leghorn hen belonging to Sam Helton of South Bend, laid an egg which was eight inches around the long way and 6 1-4 inches around the other. It weighed over a quarter of a pound.

Earl Bell, a corporal in Company E, 361st infantry, stationed at Camp Lewis, has been granted a three-weeks' furlough to assist his father, John Bell, a prominent Centralia rancher, to get in his spring crops.

Mason county farmers recently sold three cars of potatoes to Camp Lewis, receiving $1804.09 for them. The total cost of handling and transportation was $3.43 1-2 per ton. The price received was $25 f. o. b. American Lake.

The sum of $500,000 has been requested from the government for construction of living quarters for employes of shipyards at Vancouver, Wash., two hotels of 600 rooms each, apartments, flats and numerous cottages to be built.

City Commissioner Charles A. Fleming of Spokane has been elected head of a committee to work out details for a state-wide crusade against diseases arising out of the social evil by the state health and public officials, who are meeting in Seattle.

The California Packing corporation at Yakima recently closed a successful season of handling Yakima fruit. The plant has been in operation since September 10, handling 7,000,000 pounds of fruit, mostly cull apples, for which it paid an average of $8 a ton.

Arrangements have been made for planting 20 acres of beets near Prescott and five acres near Waitsburg in Walla Walla county. Both plantings are in the nature of experiments to determine if sugar beets can be successfully grown on the non-irrigated wheat lands.

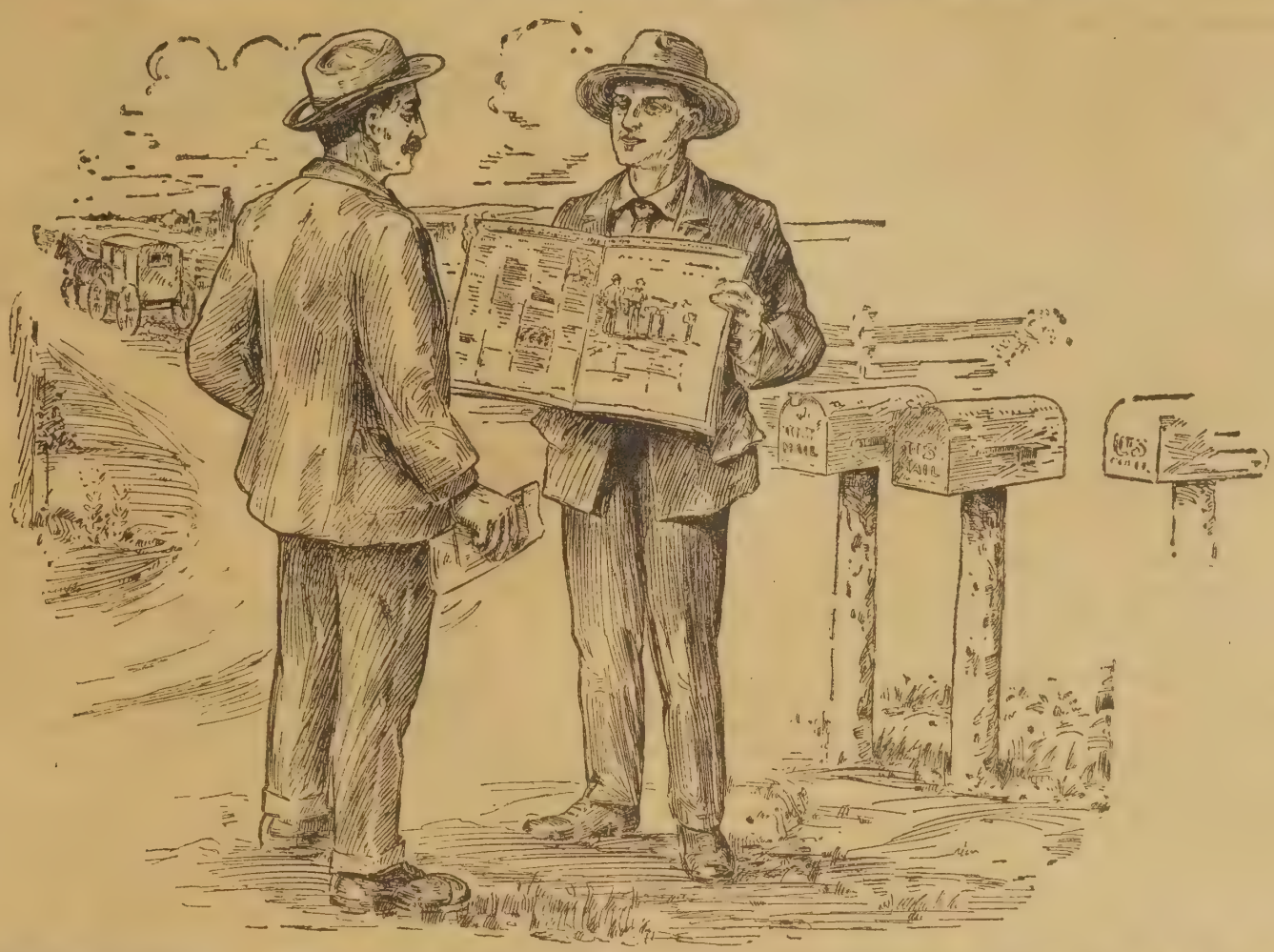
In a voluntary rate adjustment announced by the O.-W. R. & N., effective May 28, Spokane will receive a great reduction in live stock rates from southern Idaho and eastern Oregon points, and be placed on an equity with the Portland market from the same territory, overcoming a rate advantage Portland has enjoyed for years.

A conference of all the county food administrators of the state of Washington, as well as all other officials connected with the work, is called by Charles Hebberd, food administrator for Washington, to be held at Spokane on May 8. This, the first conference of its kind called, is to take up many phases of the work that need urgent attention.

With a recent purchase of 652 acres of land seven miles southwest of Lind, Adams county, John C. Lawrence & Co. of Spokane have increased their holdings in that part of the state to over 6000 acres. The new place is improved with a good house and barn and has 320 acres sown to spring wheat. The price was $22,000 and the land was purchased from G. O. Barnhart.

Eighteen hundred sacks of sphagnum moss, approximately 90,000 pounds in its moist state, are drying in the parks of Ilwaco here as the result of an excursion to the sphagnum beds west of Ilwaco by three companies of Fort Canby soldiers and hundreds of residents of Long Beach and Ilwaco. This was the first concerted effort to fill the demand made by the Red Cross for material for 500,000 sphagnum pads by July 1, and the sphagnum needed for surgical dressings was found in such quantities that L. L. Bush, superintendent of the moss-gathering campaign of Pacific county, believes that all the moss needed by the Red Cross can be supplied here.

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A. B. NYSTROM, Editorial Contributor

# Performance Register

## Would Quicken Dairy Industry

By D. R. HUBBARD.

When president of the Idaho State Dairy association and at other times the writer has urged the formation of a performance register for cows. Cow-testing associations are becoming quite prevalent over the Pacific northwest. Activity of farm advisers in organizing these societies and assisting in the work gives added value to this branch of extension work.

The farm adviser will become more of a personal factor in advancing better farming and be drawn more closely as a friend to the better class of dairymen.

The performance register would not only give added value to the service, but would make the results more permanent and vastly increase interest in testing cows.

Its greatest good would come in a desire of the farmer to breed his best cows to high-class, purebred sires. It would cause him to discriminate more carefully in the selection of such sires; to watch the results of such breeding, and increase the demand for and use of the best sires obtainable. It would quicken the betterment of dairy herds and give more pleasure to all concerned in the dairy industry.

**Benefit to Vender and Buyer.**

The performance register would, by its certificate of performance and registration, be of great value in standardizing the dairy cow for the benefit of both vender and purchaser.

Prepotency of the pure bred is a word very much played with by friends of the industry, and the "scrub" is greatly discredited as compared with registered and pedigreed stock. It is well known, however, that there are many "pedigreed scrubs," and prepotency of power to reproduce high quality in the offspring is only a relative term.

Many dairy herds of the older sections show a strong line of uniformly good milkers, all from "Old Brin" or "Roany" or some other dead, but not forgotten, maternal ancestor of the herd.

It would not be difficult to fix a minimum production of butter fat and milk, to make a cow eligible to registration. Cow-testing associations could authenticate the performance, and the certificate would be a matter of satisfaction quite as acceptable as the facts it announced.

The probable breed of the cow could be in the certificate, and this dam and her progeny by a purebred sire of the breed for, say four generations, would entitle a female to registry as purebred, provided the line carried the minimum performance to and including the fourth female.

For instance, if the minimum is 10 pounds of butter fat in seven days or 40 pounds in 30 days at a given age, and is carried for four generations with purebred males of a certain breed, the fourth female becomes a purebred by performance, and is entitled to registry in the purebred association of that breed.

**Improve the Breed.**

The effect would be to greatly improve the breed as compared to present rules, and create a greater interest in purebred cattle.

A male from the fourth cow and a purebred sire of the breed would be entitled to registration. This would start many good dairymen to aspire toward a purebred herd, and it would prompt many breeders of purebred cattle to keep test on and thereby improve their own herds.

The association could be at some central point in the Pacific northwest, and it could be kept in touch with cow-testing associations through farm advisers or officers of such associations. Local testing associations should issue certificates even for a lower standard, whenever a cow has been tested, as it will, in a measure, fix the value of the cow and be of especial service to those who are buying dairy cows, whether at private or public sale. This will mobilize and make effective the work of cow-testing associations and greatly increase popular interest in this form of herd improvement.

# Ferndale Cow Tests

During the month of February 385 cows were tested in the Ferndale Cow Testing association. The average pounds of fat per cow was 26.3. The average pounds of milk per cow was 628.8; $11.45 was the average cost of feed for each cow. Thirty-six cows produced each 1000 pounds of milk or more and 35 produced 40 pounds of fat or more. The average pounds of fat of highest herd, owned by Walter Jensen, was 32.7.

The following cows produced more than 50 pounds of fat during the 30-day period; N. P. Sorenson's pure bred Holstein, 1428 pounds of milk, 62.8 pounds of fat; J. H. Hermsen's grade Holstein, 1377 pounds of milk, 60.6 pounds of fat; C. W. Ritter's grade Holstein, 1326 pounds of milk, 58.3 pounds of fat; Jay Vail's grade Holstein, 993 pounds of milk, 54.6 pounds of fat; L. J. Sinnes' grade Holstein, 1179 pounds of milk, 50.7 pounds of fat; N. Jacobson's pure bred Guernsey, 936 pounds of milk, 50.5 pounds of fat; Vander Griend Bros. pure bred Guernsey, 1146 pounds of milk, 50.4 pounds of fat.

The following are the five herds that have the highest average of fat production for all months tested: B. S. Hillier, 32.7 pounds; Nels Jacobson, 31.4; E. W. Baer, 31.4; Allen Duncanson, 30, and Jay Vail, 28.9.

Victor Morgan is the official tester of the association.

## Care of Herds Tells.

As the end of winter feeding approaches the difference in general appearance and production between the herds properly fed and cared for and those poorly managed is strikingly apparent, says Elmer O. Leonard, official tester of Clallam county, Washington. A considerable number of cows have freshened in the last three months. Of these only those kept up in fair shape are making creditable returns.

**Sheep Killed by Dogs.**

Investigations by the department of agriculture in 15 states show that of a total of 6,836,492 sheep, 34,683 were killed by dogs in one year and were paid for by the counties.

**Poor Roads a Loss.**

The farmers of the United States have been allowing $300,000,000 in real money to escape from thieir pockets each year because of poor roads, according to the testimony of experts.


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He gets his mouth full of milk—then he swallows. And as he does, his tongue massages the teat backwards from tip to udder.

That's Nature's provision for the prevention of congested blood in the teat as a result of the calf's sucking. Sucking draws the blood to the tip of the teat. The tongue massages it back to the udder.

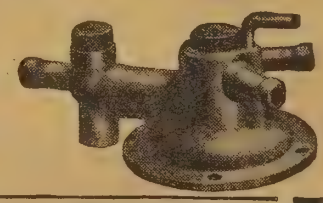
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with our new Super-Simple Pistonless Pulsator accomplish the same result. Stops the sucking and lets air flow in between the rubber lining and the walls of the teat cup.

This makes the rubber lining gently massage the teat *from tip to udder*, just like the calf. This action occurs regularly from 48 to 52 times a minute.

With our pistonless pulsator, there are no more leaky pistons resulting in irregular, nerve racking action. The suction is always uniform and gentle. Soothes the cow and results in far greater milk flow. Our local dealer will gladly show you the "Empire" without obligation. Call on him. Write for our new 1918 catalog No. 48

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# Veterinary

Dr. S. B. Nelson

**Lumpy Jaw**—I have a cow, a Jersey, that has had a kernel or lump about the size of a hen's egg under the left jaw which has been there for about two weeks. Have put liniment on it several times, but it seems to stay about the same. It seems hot and feverish, but the cow seems as well as usual, having a good appetite. What more can I do to relieve this condition? Also, at times I notice small lumps at the root of the teats, which is now showing on one of them, which are sore and tender. What can I do for this? Is there any danger of contracting disease from using the milk? We are boiling it for fear that such might be the case.—C. W. F., Jordan Valley, Ore.

It is possible that the lump, which has appeared on the underjaw of your Jersey cow may be due to the Actinomycosis fungus, and is a disease generally known as lumpy jaw. It would be advisable for you to write to your state veterinarian at Salem, Ore., and possibly ask him to see your cow or send a deputy to determine whether or not she is affected with a contagious disease. Small lumps on the teats may, or may not, be related to the trouble on the jaw. Only a personal examination could determine that.

**Richest Milk for Lambs**—Can you recommend a formula for lambs that are disowned by the ewe? Mine all die about the third day. They seem to have convulsions and their necks contract and become very stiff. I give them cow's milk diluted and warmed, using a nipple over bottle. Should sugar be used in the milk?

SUBSCRIBER.

American Falls, Idaho.

The milk of the ewe is richer in fat and in casein than cow's milk. It also contains less water in proportion to the amount of solids. For that reason lambs should be fed the very richest whole milk that can be produced, milk which will test 4.5 per cent to 5 per cent. I would suggest that if you have the trouble any more which you had with the lambs you mentioned that you add a half-teaspoonful of castor oil to the milk about the second day. Do not add sugar, as there is very little difference in the sugar content between the milk of the ewe and the milk of the cow.

**Cow Has Warts**—I have a cow that has been affected with warts on the teats that grow out like a root. A. C. Mt. Vernon, Wash.

Cut off the warts with a dull pair of scissors and apply tannic acid to the wound once daily.

**Use of Hind Legs Lost**—I have a pig that has partially lost the use of its hind legs. It eats heartily and is growing. What is the best thing to do for it?—J. E. G., Starbuck, Wash.

Give your pig according to its size from one to two ounces of castor oil. Then give the next day and for three days following 10 to 15 grains of potassium iodine in the feed once daily.

**Milk Is Bloody**—I have a cow which freshened the 20th of February, but have been unable to use the milk as it is bloody. The milk from the front teats being much worse than from the back. She gave about a gallon of milk up until within two weeks of calving and then dried up quickly. I feed shorts, carrots and clover hay. Have been told there was no cure for this ailment, but can notice an improvement in the last day or two. Would appreciate any advice you may be able to give me in regard to same. D. H. McKenna, Wash.

Try giving your cow one teaspoonful of sodium hyposulphite in one quart of water night and morning.

**Pigs Sick Three Months.**—I have three pigs that weigh about 100 pounds. They are stiff on their front and hind feet, and when they have to walk or move they squeal. They have been sick for three months. They eat well and are in good condition and sleep in a dry house. Please let me know what I can do for them.

J. B S., Oakesdale, Wash.

Try giving your pigs each two ounces of castor oil. The next day give them each one drachm of sodium salicylate, morning and evening, in the feed for three days. After that give them each 10 grains of potassium iodine in the feed once daily for four or five days.

**Mare Is Hard-Mouthed.**—I have an 8-year-old mare that is hard-mouthed. I have used severe kinds of bits without success. The mare is not vicious only when driving or working. It is almost impossible to hold her, or to turn around. Please let me know what kind of bit you would advise me to use.—E. S., Oakesdale, Wash.

I would suggest to you that you have the mare's mouth examined and see whether or not there are sharp points on the front molar. If there is not, it is possible that by making a very large easy bit, taking a straight bit and having it covered with a heavy leather that she will quit pulling as she does now. The condition is either habit, which if changed to a very easy bit may stop, or it may be that her teeth hurt her and so she bites to have the pressure hard against her teeth, which helps to stop the pain.

**Mare Too Weak to Work**—I have a 16-year-old mare that has been weak all winter. She eats only a little alfalfa hay and eats only the fine hay and leaves the coarse hay. When she lies down she can not get up by herself. Somebody has to help her, and when she does get up she is stiff and seems sore all over the body. She is lame when she starts to walk, but after she walks a little while she does not limp so much. She is too weak to work. I am feeding her a mash of one gallon of bran twice a day and I put in the mash a mixtrue of iron sulphate, saltpeter and ginger and give her a teaspoonful of nuxvomica twice a day. I rub her once in a while with white liniment on the back and on the legs. She had the teeth filed about three months ago, but she does not seem to chew the hay very well. She eats only a little and drinks little. For the last four years she had scours, but this winter she is constipated. I turn her out in the field in daytime and she eats what grass she can get. The grass is very short yet. Please tell me what I had better do with her. She is a good-sized mare and weighs 1300 pounds. The legs are not swelled and it does not make her sore when I rub with the hand. I do not know what the trouble is, but believe it is paralysis or rheumatism.

J. J.

Finley, Wash.

It is most difficult for me to make a diagnosis of the trouble affecting your mare. I am afraid that she has a number of troubles somewhat complicated. I am going to suggest to you at the present time to try giving her one dram of potassium iodine in a pint of water morning and evening for five or six days and see if that will help her.

**Plan System of Inspection.**

A standard system of inspection by which federal food administrators may keep a check on commercial bakers is being worked out by the department of agriculture and the food administration.


ICE FOR FARM AND DAIRY

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Know Where You Stand

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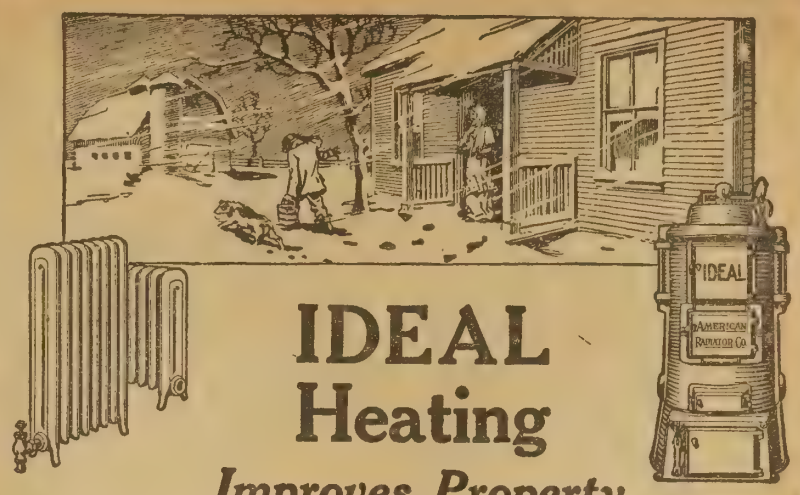
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Spend money for *permanent improvements* to your house and get the comforts and enjoyment that your present prosperity entitles you to. Land values have increased about 100% in the last five years. *Is your home modernized to keep up with this increase in value?* Do you still shiver in a drafty, damp house with old fashioned methods of heating?

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IDEAL Boilers and AMERICAN Radiators come in sizes to fit any cottage or farm house. Cellar or water pressure not necessary. Thousands of farm houses are so equipped. Cut down the work in your household and give your family IDEAL heating with its fuel savings and cleanliness.



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When a cow fails to "clean" promptly, she should be flushed out with B-K. A retained afterbirth neglected may cause Abortion or Barrenness.

B-K as a douche brings the afterbirth naturally—saves removing by hand. B-K kills the infecting germs and foul odors—heals the uterus—removes slime and acid—no straining—no irritation. B-K is much more effective and safer than lysol, carbolic acid, Lugol's solution and oily coal-tar disinfectants, which do not cleanse the uterus, but make it more acid.

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## LIVE STOCK NOTES

Write to the Editor.

E. J. IDDINGS, Editorial Contributor

### Aberdeen-Angus Judges for 1918.

The following judges have been recommended by the American Aberdeen-Angus Breeders' association to judge the breed classes at various 1918 fairs: American Royal, John Brown, Waterloo, Iowa. Illinois state fair, L. McWhorter, Aledo, Ill. Indiana state fair, J. H. Skinner, Lafayette, Ind. International live stock exposition, George Cran, Morlich, Scotland. Iowa interstate fair, P. J. Donohoe, Holbrook, Iowa. Iowa state fair, H. J. Hess, Waterloo, Iowa. Kansas state fair at Hutchinson, J. W. McClung, Indianola, Neb. Kansas state fair at Topeka, W. A. Cochel, Manhattan, Kan. Kentucky state fair, Charles Escher, Botna, Iowa. New Orleans fair, J. C. Burns, College Station, Texas. Louisiana fair at Shreveport, C. E. Buckle, Grand Junction, Tenn. Minnesota state fair, W. H. Pew, Ames, Iowa. Missouri state fair, E. A. Trowbridge, Columbia, Mo. Nebraska state fair, E. B. Laflin, Crab Orchard, Neb. North Dakota state fair, J. C. Hoke, Ellendale, N. D. Ohio state fair, Herbert W. Mumford, Urbana, Ill. Oklahoma breeders' show, O. V. Battles, Yakima, Wash. Oklahoma state fair, Robert Johnson, Burlington Junction, Mo. Pacific international, Charles Gray, Chicago, Ill. South Dakota state fair, M. H. Donohoe, Holbrook, Iowa. Southeastern fair, M. T. Aldrich, Michigan City, Miss. Tennesee state fair, E. F. Caldwell, Burlington Junction, Mo. Texas state fair, O. E. Bradfute, Xenia, Ohio. Tri-State fair, O. E. Bradfute. Western stock show, E. T. Davis, Iowa City, Iowa. Wisconsin state fair, Stanley R. Pierce, Creston, Ill.


# Cutter's

*Germ Free*

# Blackleg Filtrate

*and*

# Blackleg Tissue Aggressin

*The New, Safe and Efficient Agents for Protecting Calves from Blackleg.*

**Cutter's Blackleg Filtrate positively protects against Blackleg.**

**Cutter's Blackleg Aggressin,** made directly from animal tissues, **affords even greater protection** and is recommended for Pure Breds.

**Neither the Filtrate nor the Aggressin can possibly produce Blackleg** in even the most susceptible animals since **both are germ free.**

**Both have given 100% protection** wherever used.

**Prices—**

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| 10 | dose pkge. Filtrate | $2.00 |
| 50 | " " " | 8.00 |
| 100 | " " " | 15.00 |
| 10 | dose pkge. Tissue Aggressin | 4.00 |

**N. B.**—Cutter's Filtrate (a "cultural product" aggressin) is full 5 c.c. to the dose, as we believe that smaller doses, whether concentrated or not, afford less protection.

**Write for booklet** telling what germ free vaccines are and wherein **"cultural product" Aggressins differ from Cutter's Aggressin** made from animal tissues.

**While these new "germ free vaccines" have advantages** that should be known to every stockraiser, we see no reason for a quick change to them by stockraisers who have had satisfactory results from the use of

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**Year in and Year Out** they have given better satisfaction than any other vaccine made, and as far as price and convenience of administration are concerned, they have all the advantage.

**Prices:**

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| 10 | dose pkge. Single pills | $1.00 |
| 50 | " " " | 4.00 |
| 10 | dose pkge. Double Pills | 1.50 |
| 50 | " " " | 6.00 |
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(U. S. LICENSED)
"The Laboratory That Knows How"


### INFLUENZA.

### Control an Army Remount Depot.

Secretary Dinsmore of the Percheron Society of America has received a letter from an experienced horseman who has had more than six months' service in an army remount depot in dealing with influenza among the army horses. The method finally adopted in practically all the remount camps and one that is declared to be giving good results everywhere follows:

The final method and the one which seemed to be the best—at least, both per cent of sick and per cent of death rate dropped a good deal—might be summed up as isolation and sanitation. Cars were disinfected before shipment and one side closed. Plenty of fresh air was admitted through the open side, but no draft straight through. Corrals were disinfected by a special crew constantly at work with hand spray pumps. All corrals (feed racks, grain troughs, water troughs and fences) were gone over weekly and sick corrals three times each week. A veterinarian with a crew of men went through the new corrals twice a day. (I forgot to say that as stock came in it would be put in a corral for quarantine. Probably three days' arrivals could be put in each corral. They were held there for 10 days. These I have termed "new" corrals.) All animals showing symptoms of sickness were caught out and transferred to isolated influenza corrals. The influenza corrals each held around 500 head.

### DRAFT HORSES

### For War, City and Farm Use.

Draft horses are urgently needed for war, city and farm use. Not more than 1,000,000 of the 21,000,000 horses on the farms and ranches of the United States will, at maturity, weigh over 1600 pounds and classify as drafters. No other nation has draft seed stock in sufficient supply to produce a draft surplus of consequence. The United States alone can be counted upon to produce the draft horses, which the world needs.

Exports of horses to Europe for war purposes from September 1, 1914, to January 31, 1918, a period of 41 months, totaled 983,899 horses, valued at $207,283,114, and 343,435 mules, valued at $67,390,991. In addition to this, the United States army purchased more than 300,000 head of horses and mules between June 1, 1917, and March 1, 1918.

Additional purchases for war use depend on the length of the war, transport space available and number of troops used. One horse or mule is reckoned on every four men put in the field, exclusive of cavalry.

Presenting these facts, one can readily see how Wayne Dinsmore, secretary of the Percheron Society of America, is led to remark: "The breeder of good Percherons never faced a more favorable future."

### British and Irish Wool Clip.

The British war office announces that the price of the 1918 British and Irish wool clip has been fixed at 60 per cent above average price ruling in June and July, 1914; 35 per cent over 1914 prices was the basis of payment for the 1916 clip, and 50 per cent the basis of price for the 1917 clip. Schedule of prices for each grade will be drawn up by central advisory committee and will indicate definite maximum prices. Actual price received by farmer will depend upon quality and condition of his particular clip.

#### Meat Supply Declines.

English market reports, received by the food administration, show the amount of home-grown meat of all kinds coming to the principal markets has averaged since January 1 less than a fourth as much as for the same period of 1916. Hogs have shown the greatest decrease.


1905 1906 1907 1908

1904 1909

1903 1910

1902 1911

1901 1912

1900 1913

1899 1914

1898 1915

1916

1917

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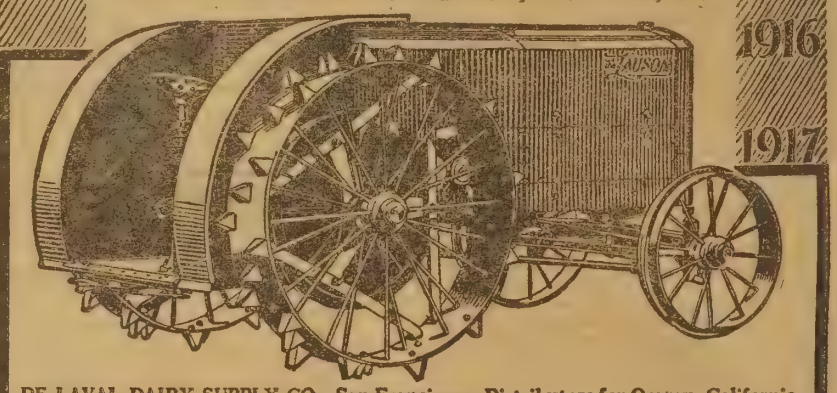
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Established 1831

# 640-Acre Homestead

## Also to Classify the Remaining Public Lands

After expressing the loyalty of every member of the Cattle and Horse Raising association of Oregon, William Powlan, the president of the association, in his annual address said:

It is very gratifying to me to announce at this time that the stockmen did not wait for a maximum or minimum price to be fixed on their cattle—but when the president said, "we need more meat and food supplies," the cattlemen last year increased the number of cattle in the United States by 3.5 per cent, or nearly three million head. And the catlemen and horsemen of Oregon did their full share in bringing about this increase.

Report of the senate committee at a hearing recently held in Washington shows that there are now in the United States 43,546,000 cattle of beef breeds, and 23,284,000 of dairy breeds.

The stockmen of Oregon have had a splendid winter and have gotten through the winter on less feed, though at a higher price, than for many years. There is every indication for a larger calf crop than we have had for many years. This, coupled with the fact that a good grass season is in sight, should make us all happy.

The outlook for prices for summer beef to me are excellent, and never looked so good as at the present time. While it is true that the cost of growing and fattening cattle has increased not less than 50 per cent in the last two years, yet I believe that by good, careful management there will still be a profit in cattle. Without good management you could not hope to make a profit regardless of price. It is not necessary for me to say to this bunch of men that the price of success is, work early and late, practice self-denial and attend to your own business. This is a rule that must be followed by all successful men, and especially by the man who is just starting in business, regardless of the nature of his business.

The forest service is doing all in its power to increase the grazing and improve the range to those who have grazing permits on the forest reserve, and I would advise cooperation upon your part with the department, believing you will find it more than anxious to assist you.

Now just a few words about the 640-acre stockraising homestead bill which became a law December 29, 1916. The appropriation necessary to make the classification and designation of lands thereunder was not granted until June, 1917. Up to the present time the work of the geological survey has been confined to the examination of the lands applied for under the law. In a few states this work has been completed and some designations will probably be made shortly. It has been conservatively estimated that the amount of land possible to be homesteaded under this act will not exceed 10 per cent of the unappropriated unreserved public domain. I believe it would be a good thing to urge congress to grant necessary funds to classify the remaining public lands so that they may be put under the supervision of the forest service, in order that there will be no trouble in the future as to the grazing of same between the stockmen.

It was a year ago at La Grande that I was appointed on the state board of food conservation. Last fall in making a trip with a number of stockmen through eastern, central and southeastern Oregon I talked to you on food conservation. To me this was then, and is now, one of the most vital points toward winning this war. I knew it was late in the season last year when I mentioned this important question to you, but it is early in the season now and I desire to repeat and, if possible, emphasize more strongly the great need of every individual conserving to the limit all his foodstuff. Now is the time to become active with your gardens and grow everything you need for the coming winter. It is absolutely necessary for you to grow practically all of the foodstuff you are going to consume. It should not be necessary for one of us to buy a can of goods or a pound of dried fruit of any kind during the coming winter. We should can and dry vegetables and fruits we will need. This will enable us all to have more money for Liberty bonds and trift stamps and to aid in all other war movements. Don't forget that we must all lay aside a goodly share of our earnings for war work so that when Uncle Sam says he wants to borrow a few billion dollars from his people, we can quickly respond without having to call a directors' meeting to consider the matter.

I attended the Wyoming Cattlemen's association meeting at Kemmerer on April 11 and 12 and while there I arranged for inspection of our association cattle in all the principle markets east where they maintain inspection, on a basis that we inspect for the Wyoming association in places where we maintain inspection. The work is to begin as soon as we can supply their inspectors with brand books. I also took up with some of the packers in California, when recently there, the subject of inspection in San Francisco. Those with whom I talked were in favor of it and say it would be no trouble if the California association will take hold. We hope to make an arrangement for inspection there this year. Seattle inspection must be had regardless of any other association. We must have inspection there this year and will probably deem it esesntial to have inspection in Spokane in the near future.

The coming year for this association will present many problems of importance, among which will be the completion of the inspection work which I have just mentioned.

Let us all continue this year to follow closely the orders and requests of our president and our government no matter what they may be and work vigorously to the end that we may produce more cattle and send more beef across the Atlantic to feed our boys who are gallantly fighting for the old flag and cause of freedom so dear to our hearts.

### Norway Encourages Development.

The Norwegian government has appropriated $7,000,000 to assist intensive agricultural development. Of this amount, $4,500,000 is to maintain low maximum prices for cattle feed and fertilizer.

### Attention to Farmers.

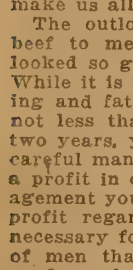
Perhaps never before were the farmers of America receiving so much attention at the hands of the government as now. In the matter of the necessity of farm machinery, the government has given the raw materials for its manufacture a rating in class B1, next to the materials for the making of munitions. The farm implement manufacturer thus is placed in a position to secure quick shipment of such material as he requires, and also is promised special haste in the shipment of his goods when completed. This gives farmers less hesitation about placing an order for agricultural machinery than is experienced by other lines of industry outside of munition making.

### Navy Uses More Vessels.

There are now four times as many vessels in naval service as a year ago. The estimated pay of officers and men in the navy for the first year of war was $125,000,000.

### Uncle Sam Putting Out Big Guns.

Our 14-inch guns weigh nearly 95 tons and are over 58 feet long, costing $118,000.

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JAMES DRYDEN,
Editorial Contributor.

## Egg Prices.

Egg prices are now probably at their lowest for the year. I understand cold storages are now buying eggs at 35 cents. They recognize that eggs are about as low as they should be considering the cost of production. That means that prices will likely be higher next winter than they have been the last winter. But nobody can tell in war times. It is not safe to predict. Meantime as a patriotic duty let us raise some chickens to help win the war while the boys are fighting our battles in Europe. It is reasonably certain that good laying pullets will pay a good profit next winter.

J. D.

## May be Wry Neck.

To the Editor: I have about 50 White Leghorn hens, most of them last summer's chickens. They seem to have a diarrhea. They get kind of droopy at first and later stretch their heads back and twist it from side to side. They die in a day's time. I am feeding them oats and boiled potatoes in a mash, with shorts and ground oats. They have free range and plenty of fresh water. Could you give me some advice? G. E., Olympia, Wash.

From the description given your fowls probably have what is called wry neck. This usually follows an overfat condition and lack of exercise. Heavy feeding of boiled potatoes and mash may have something to do with it. Try epsom salts at the rate of a quarter of a teaspoonful to a fowl. Dissolve the salts and mix in a mash of bran and shorts. Let them go about a day without feeding so they will be hungry, then feed it, giving them all a chance to eat it. Feed the oats in a deep straw litter, and feed the mash at night, so the fowls will take more exercise during the day.

J. D.

## Question of Breeds Again.

To the Editor: (1) What breed of chickens holds the record for laying? (2) will you name three or four of the best laying breeds? (3) Will you name two or three breeds of chickens comprising both size and good layers? (4) What breed or breeds of chickens have been demonstrated to be the most profitable on the farm? (5) Which is considered the most profitable, to have all one breed or several different breeds on a farm? (6) Of the different varieties of the Leghorn breed which is considered the best layers, the brown, the white or the buff. How can I get government bulletins on chicken raising?—M. W. M., Hay, Wash.

1. The White Leghorns probably have produced more good layers than any other breed, but there are good and poor layers in all breeds. Heavy production is more a question of breding than of breed. In selecting stock, the important thing is to select from a strain that is known to produce good layers.

2. If I should name three or four good laying breeds, there would be thirty-and-four breeders who would protest that I should have mentioned their particular breed among the three or four best. But if a vote were to be taken among commercial or utility breeders the majority would mention the following best four and probably in the order mentioned: White Leghorns, Barred or White Plymouth Rocks, Rhode Island Reds, and White Wyandottes.

3. The last three breeds mentioned above.

4. On the general farm the Barred Plymouth Rock has been more generally used than any other breed. The Rhode Island Reds and Wyandottes are of much the same type.

5. Usually it is best to keep one breed on the farm.

6. The white is the most popular variety of Leghorn. There are by far more whites than any other variety, and for that reason a better selection of good layers can usually be made from this variety. Their laying qualities have been very much improved by breeders during the last few years.

Write to the secretary of agriculture, Washington, D. C., for a list of poultry bulletins available, and then send a request for those you wish. If you can not get them, try a letter to the congressman or senator.—J. D.

## Cooperative Egg Selling.

By MARIELLA LADD.

Better eggs and better prices have followed the introduction of the egg-circle plan of selling in Canada. Perhaps the Farmer readers will be interested to know what these circles really involve to their members.

Each circle is organized for the express purpose of marketing eggs of the best possible quality and obtaining for them the best possible price. Each is governed by a board of directors who elect an executive committee of three and appoint a business manager on whose capacity and faithfulness much depends.

Only those are accepted as members who are approved by the board and who promise to obey the following regulations:

1. To deliver all eggs not used for their own housekeeping purposes or for breeding purposes at a time and place fixed by the directors in good condition, that is, unbroken, clean, fresh, of good size, and not more than one week old.

2. To stamp each egg before delivery with the association stamp which belongs to the association and must not be used for private purposes.

3. To use only false eggs as nest eggs.

4. To keep poultry houses and especially nests clean and sweet.

5. To gather eggs at least twice a day and keep them in a clean, dry, well ventilated room at a temperature not exceeding 60 degrees Fahrenheit.

6. To remove male birds from all pens from which eggs are to be marketed.

Fines may be imposed on members who fail to observe these rules. Entrance fees are charged to meet expenses.

It will be seen from the requirements above enumerated that successful cooperation depends greatly on the efforts of producers. Only by absolute faithfulness to rule can a superior article be guaranteed. This guarantee is the first essential to an advance in price. It is found, however, that where members do their duty and where they also choose the right managers, they soon educate the public to know the wide difference that exists between an egg that is perfectly fresh and one that has lost flavor and weight through haphazard handling.

## Hurt Hen to Fly?

To the Editor: I would like to know if it hurts a laying hen to fly or make her stop laying any. I have the White Leghorn hens and I have a window about three feet from the floor, and thye have to fly out that window in order to get in the outside pen.

D. K., Colville, Wash.

It will not hurt a hen to fly—unless she flies into a neighbor's garden. Nature gave the hen wings to fly with that she might get away from wild animals, but they are not of much utility now. They use them now for flying up to the roosts and down again; that's about all the use they are now. Flying down about three feet from the roosts or the window will not hurt the hens or stop them laying. If they light on hard ground or boards their feet would likely be injured. This causes bumble-foot and other troubles.

J. D.

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The Washington Farmer has founded a bureau of free information at Washington city, D. C. Your newspaper has done so in order to render continuous service to its readers whenever they wish to know how they may help their government win the war.
The bureau was established at the national capital because our government has accumulated enormous stores of knowledge there, and because it has mobilized the reserve of intelligence to the maximum of efficiency. Ninety-nine in every hundred Americans have no idea of these resources, and would not know how to use them if they knew.
If you have any question to ask, any special information desired, enclose a 3-cent postage stamp and address
THE WASHINGTON FARMER INFORMATION BUREAU, WASHINGTON, D. C.

### Grasshoppers.

The grasshopper would seem to have nothing in common with the seagull, yet grasshoppers have been picked up in swarms at sea, 1200 miles from the nearest land. The African grasshopper has been known to cross the Red and Mediterranean seas in destructive numbers, and even to fly to the Canary islands.

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Such remarkable reports are coming in every day from Western Canada. Farm crops in Manitoba, Alberta and Saskatchewan are making records never before equaled.
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Wheat .. 30
Oats ..... 53⅓
Potatoes 148
Barley .. 37
Rye ..... 27¾
Flax .... 13⅓
This is the 1915 average per acre from Government statistics.
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GRANVILLE LOWTHER,
Editorial Contributor.

## GRAPE INDUSTRY

### Large Field in the Northwest.

For several years I have believed that grape growing in the Columbia river basin would become a very important industry. I have not yet been able to prove to my own satisfaction the position I occupy on that question, but I have been gathering the information from all available sources and I still hold my former opinion. The winter of 1916-17, while visiting in western Texas, I found that the grape growers there were making large profits on certain varieties of grapes grown in that country and shipped into the eastern markets before the crop in general was ready for marketing. The same may be said to be true in California, but there are certain kinds of grapes for which the soil and climate are well adapted in the Columbia river basin. I would not think for a moment that we could compete with California in growing raisin grapes, nor would I think it profitable to undertake the growing of grapes for the manufacture of wine. With the growth of prohibition throughout the United States, the wine-grape growers of California have found that industry unprofitable and are digging up the vineyards formerly devoted to it. However, in the growing of table grapes and grapes for the manufacture of grapejuice or sweet wine there is still a large field for profit.

I have made investigation in reference to the profits received by the growers of table grapes in California, and I find that in 1916 they made very little profit and that many of them lost money. In 1917 the profits were large, running as high as $1500 net per acre. It was not at all uncommon for growers to make $700 net per acre, and in fact this seemed to be about the average profit. Experiences in failure often teach as valuable lessons as successes, and the question naturally arose, why should there be losses one year and exceedingly large profits the next? Of course, these differences can not be attributed all to one cause. Where there are extremes either of success or failure there are generally combinations of causes, and that proved to be true in the grape industry of 1916 and 1917. There were differences of market conditions, differences in the methods of marketing, and differences, also, in climatic conditions as well. During the year of 1916 the weather was not favorable during the packing period, because there was so much rain. This caused many of the growers to pack their fruit while it was damp, and even if the fruit were dry, as was true in some cases, it was injured by damp sawdust in which it was packed. When it reached the markets it was moldy, and in some cases decay had already begun. When the causes were discovered there was a combined and organized effort made on the part of the growers to remedy that difficulty for the crop of 1917. They came together and discussed the question, gave out general information on the subject, and in 1917 they were careful to provide for themselves a means of drying the grapes sufficiently to evaporate all the surface water and to dry the sawdust in which the grapes were packed. Then the organization sent information to the grape dealers in the east informing them of the precautions they had taken to pack their fruit in the best condition and to prevent molding or rotting. As a result the high prices already indicated were obtained, and profits that are making their land exceedingly valuable.

G. L.

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**The Washington Farmer**

Review Bldg.

Spokane, Wash.

## Second Crop Berries

By L. T. HALL, King County, Wash.

A second crop of strawberries is not a probability unless irrigation and mulching are practiced. For second crop berries, we believe that twin row planting is the better way, ex. plant two rows of berries a foot or 10 inches apart and from 16 to 18 inches apart in the rows and having a space wide enough for horse cultivating between the twin rows. This allows the mulching of one ordinary row with very little addiition to mulch two rows. Outside of leaf mold, strawberries require very little fertilizer, but do require a soil digester. Too much fertilizer results in much plant and little fruit. As soon as the first crop is picked the strawberry plants should be mowed and the tops raked and burnt. This burning is to kill insects. Then the field should be gone over with soap powder such as "Gold Dust." Mix one teaspoonful black pepper with each 25-cent box of soap powder and put one-half teaspoonful in the center of each hill. This is to kill the brown borer, which is the larva of a small beetle. Next cultivate and hoe the patch. Then mulch with straw, dried ferns, or dried leaves or the threshings of peas. This last is really the best as it produces when decomposed just the fertilizer the berry seems to need. Chicken guano or rabbit ordure used sparingly may also be applied. Now turn on the water and irrigate at regular intervals according to your temperature and climate, putting the water on after or near sundown. Your second crop will be ready to pick about the middle of August and if frost does not prevent may still be yielding in November.

### As to Explosives.

Before a dealer can sell any explosives he must have a license. Before a purchaser can purchase any explosives either from a dealer or a manufacturer he must have a license. Before a customer can secure delivery from a railroad company of any explosives shipped to him he must show the railroad agent his license. This federal war measure has created a false impression in some quarters that the government wants to restrict the sale of explosives. This impression is all wrong. The use of explosives for putting more land under cultivation is in line with the department of agriculture movement for increasing food production. This license matter is a very simple proposition. The license costs but 25 cents, and can readily be obtained from licensing agents located in every county. All that is necessary to do to secure appointment of licensing agents is to write to F. S. Peabody, Bureau of Mines, Washington, suggesting the name of a reputable lawyer. American citizen, such as a notary public or justice of the peace.









# Farmers Are Optimistic

## Weather Is Favorable in Most Sections Though Some Report Damage to Fruit by Frost. Stock Doing Well.




LEAHY, Douglas County, Wash., April 20.—The spring has been exceptionally favorable for sowing and planting spring crops and the acreage will be about normal. Labor and machinery are no serious handcipa to spring work here. The outlook for crops and fine stock is very favorable at the present time. The ground is in ideal shape and the weather fine. As everything is sky high, I think it will cost as much as we will get, to produce a bushel of wheat, unless the crop is better than the average in this community. W. A. GRAY.

### Fruit Damaged by Frost.

GRANDVIEW, Yakima County, Wash., April 19.—The frost has damaged peaches, pears and cherries. There is some wheat sown and some are planting corn. This is not a wheat country, but mostly alfalfa and orchards. Labor is not plentiful, but we are doing without. Young stock are being sent out to the range for the summer and are in good condition.

E. H. FAULKNER.

### More Hogs and Cattle.

OMAK, Okanogan County, Wash., April 20.—This section is devoted mostly to fruit culture and great attention is being given to conservation of moisture. There is every indication of a good crop this season. Everybody is trying to raise more hogs and cattle and to increase all farm products. There is a scarcity of help, which is making spring work a little behind, but not enough to do much damage so far. J. O. WOODS.

### Outlook Is Favorable.

COLVILLE, Stevens County, Wash.—This spring has been favorable to seeding, especially in the valley, which is subject to overflow. Land which was under water at this time last year can now be seeded. The cold weather has hindered the growth of grass and cereal crops. The outlook at this time is favorable, though a warm rain will be needed shortly. A. R. HAHNER.

### Work Is Well Advanced.

FARMINGTON, Whitman County, Wash., April 20.—The early spring here is making the farmers happy. Wheat seeding is about finished. Some different from last year, when spring plowing began about May 1. Our district over-subscribed its Liberty bond issue by about a third. Our district is the most northern of Latah county, Idaho, the crea mof the Palouse country. Land has advanced about 25 per cent in price this last year. And why not? Our normal wheat crop is around 45 bushels per acre. Prices are good and farmers are all optimistic.

E. O. SIMMONS.

### Pastures Are Better.

SHELTON, Mason County, Wash., April 20.—Up to yesterday spring conditions were exceedingly unfavorable for plowing and seeding Today brings our first cherry blossoms and vegetation is quickly responding to warmth and sunshine. Grazing has improved so that those whose stock got little or no hay during the last 30 days are being relieved of the depressing spectacle of lowing cows and yearling calves wandering through pasture woodlands in search of food. The grass responds quickly to warmth and sunlight and the cows again chew their cud.

SCOTT HAYES.

### More Wheat, Corn, Sugar Beets.

WAPATO, Yakima County, Wash., April 22.—The acreage of wheat, corn and sugar beets will show a heavy increase. In the 1917 season this county raised enough beets to supply one factory; the crop of 1918 is expected to supply three factories. The extra beet acreage will undoubtedly curtail the 1918 crop of alfalfa. Our particular section is largely a fruit district and there have been two heavy freezes that have been disastrous to the peaches and pears. While the loss is spotted, it is in some districts total. Apples have been hurt, but whether enough to affect the crop can not yet he told. Ranchers are doing as little work as they can and curtailing expenses wherever possible. Laborers are getting $50 to $60 and board, and while there is no particular shortage at this time, it is expected there will be when the crops begin moving.

J. F. M'CURDY.

### Large Acreage of Corn.

EUGENE, Lane County, Ore., April 19.—We have had a fairly favorable season for seeding a large crop acreage. The labor situation is somewhat serious. The conditions regarding farm machinery is going to become more severe this year than previously. The condition now for crop and live stock production in this county is excellent, except in regard to sheep. The number of sheep in this county is lower than in times past. The First National bank of Eugene here is considering plans, however, to help the farmers increase the number of sheep in the county. It is difficult to say what the wheat production will cost this year. Machinery is much higher and labor is more than double. This will mean increased cost, which under the varying prices at present, is difficult to estimate. One of the most noticeable instances in the increased crop production is the large acreage of corn that will be planted this year. The corn acreage for the coming year will be more than double. I believe this is a result of the successful corn show held here this last year. I think one is safe in saying the corn show was worth $5000 to the county last year.

N. S. ROBB.

### Weather Favorable to Seeding.

YAKIMA, Yakima County, Wash., April 18.—The spring in this county is especially favorable to the seeding of large crop acreage. While I have not had an opportunity to make definite survey of crop conditions, I believe it is safe to say that we have quite a large increase in the wheat acreage on irrigated land. This is especially true of the Indian reservation and the early seeded wheat is up in excellent condition. The conditions of labor and machinery have not proven any great handicap during the planting season. Wages are, however, considerably higher than in former years. I think we

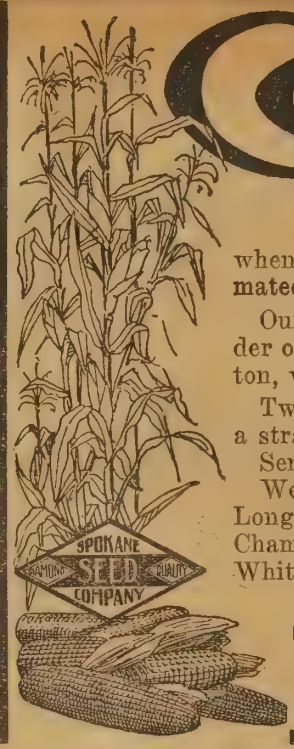
(Continued on page twenty.)


# Boost Your Citrus Trees

Why not buy your farm munitions ready for use, not subject to the losses which the other Nitrogens always suffer? Commercial sense dictates that money is saved by use of Nitrate, for its comparative low price strongly commends it to the business grower.

DR. WM. S. MYERS
*Chilean Nitrate Committee*
P. O. Box 248, Berkeley, Cal.

# CORN




## Is a Success

when planted under right conditions and acclimated seed sown.

Our PREMIUM YELLOW DENT is grown under our personal supervision in Eastern Washington, without irrigation.

Twelve years of steady selection has produced a strain of corn that matures.

Send us 10c in stamps for a sample ear.

We also handle Pride of North Yellow Dent, Longfellow, King Philip, Minnesota King Dent, Champion White Pearl, Compton's Yellow Flint, White Rice Popcorn.

## SPOKANE SEED CO.

Spokane, Wash.
Growers and Recleaners of Seeds.

# Dependable!

Here is a portable drag saw that you can depend upon.

Built especially strong for heavy duty work and backed by one of the oldest implement houses in the West.

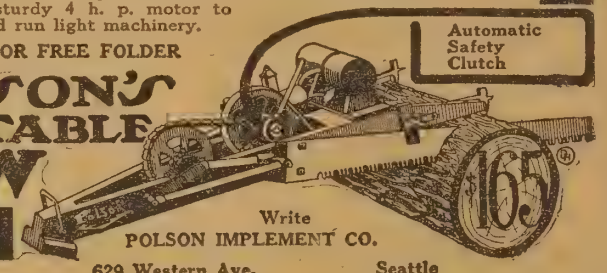
You make no mistake when you buy the Polson.

Will do the work of 20 men sawing cord-wood shingle bolts, clearing land and cut from 15 to 30 cords of 4-foot wood per day.

Equipped with Safety Automatic Clutch so you can start saw independent of engine and use sturdy 4 h. p. motor to pump water and run light machinery.

WRITE FOR FREE FOLDER

POLSON'S PORTABLE SAW




Write
POLSON IMPLEMENT CO.
629 Western Ave. Seattle



# "WOOD-LARK"

TRADE MARK

## SQUIRREL AND GOPHER POISON

QUICK, CERTAIN, DEADLY.

READY FOR INSTANT USE. NEVER FAILS.

Destroy squirrels, gophers, prairie dogs, sage rats. Apply early in Spring when the hungry pests awake from Winter's sleep. Money back if it ever fails. "Wood-Lark" for 25 years has stood every test. It's crop insurance against rodent pests. If your dealer hasn't it, write us.

**Clarke, Woodward Drug Co.**
PORTLAND, OREGON.

# FRUIT BOX LABELS

We manufacture a complete line of labels for all kinds of fruit boxes and cans.
Write for prices and full information.

## TUCKER-HANFORD CO.

Seattle, Wash.

# HIDES

## WOOL, PELTS, MOHAIR, CASCARA BARK

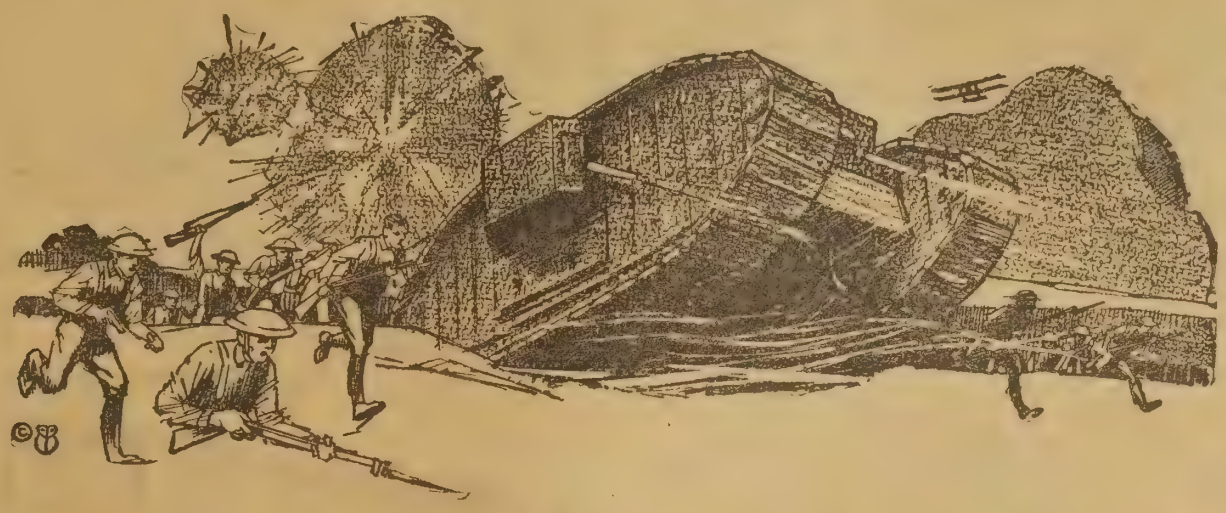
We do the largest consignment business in the northwest. Equally fair treatment on all shipments, large or small. Returns at full market value mailed same day as goods are received. Trial shipments wanted and appreciated, but are handled as regular shipments and not at inflated values.

**THE H. F. NORTON CO.**

53-55 No. Front St., PORTLAND, ORE.
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In answering advertisements please mention this paper.

# Get the War News



**Twice-a-Week Spokesman-Review, One Year**
**The Washington Farmer 3 Years, Both for** **$1.00**

THIS liberal offer puts within your reach a paper which you and your family will surely want in these stirring war times.

We recommend The Twice-a-Week Spokesman-Review to our readers because its news is complete and reliable. Its semi-weekly summary of the war will keep you up-to-date without your having to wade through a great deal of reading matter. The Twice-a-Week pays particular attention to the events of special interest to the people of the Pacific Northwest; covering the progress of the draft, troop movements, and all other details in which you are particularly interested. Names of killed, injured and missing will always be given as soon as issued by the military authorities. In addition the Twice-a-Week brings you a reliable summary of the general news of the day and many entertaining and instructive features for the family.

Purchased in any other way The Twice-a Week will cost you $1.00. For that $1.00 you can now get The Twice-a-Week for a year and your state farm paper for three years as well. It is a remarkable offer at any time; especially so in these war times.

## Please Tell a Neighbor About This Offer

**Address Orders to**

**THE WASHINGTON FARMER**

**Review Building**

**SPOKANE, WASH.**

## ORDER BLANK

**The WASHINGTON FARMER, Spokane, Washington.**

May 2.

Gentlemen:

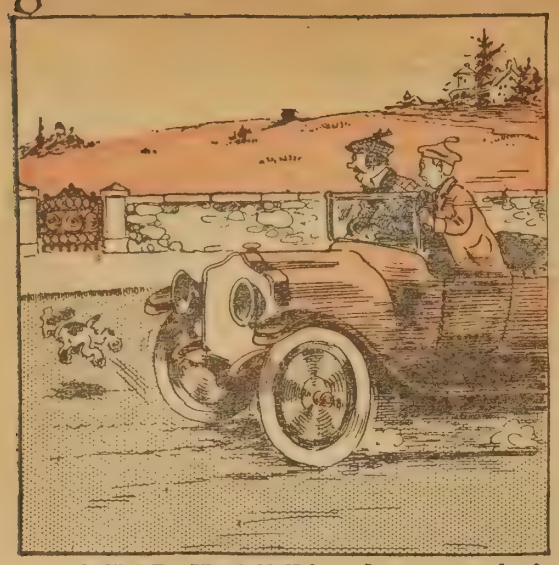
I desire to take advantage of your special clubbing offer. Enclosed is $1 in full payment for one year's subscription to The Twice-a-Week Spokesman-Review and three years' subscription to THE WASHINGTON FARMER. In Canada add 1 cent per copy for extra postage.

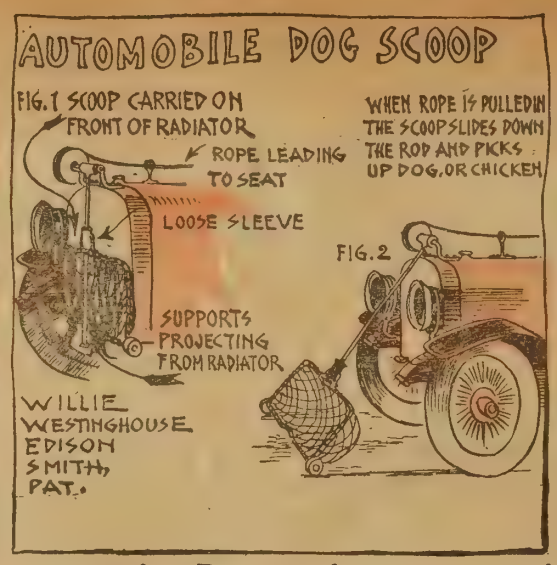
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Town .....

R. F. D. ..... State .....

# WILLIE SCOOPED THE CATS ALL RIGHT, BUT DIDN'T HOLD THEM



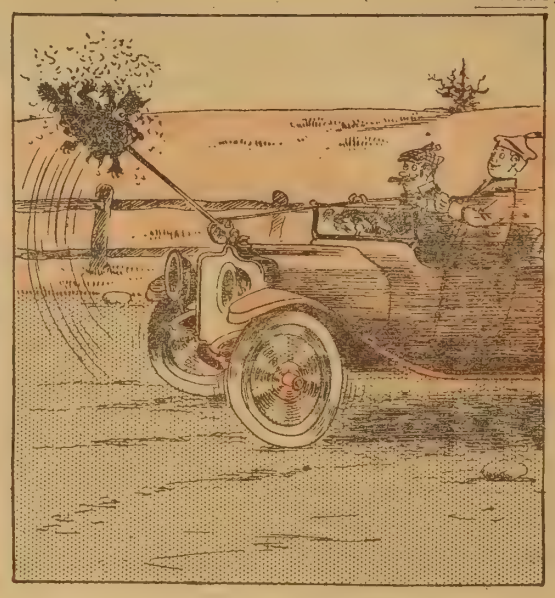


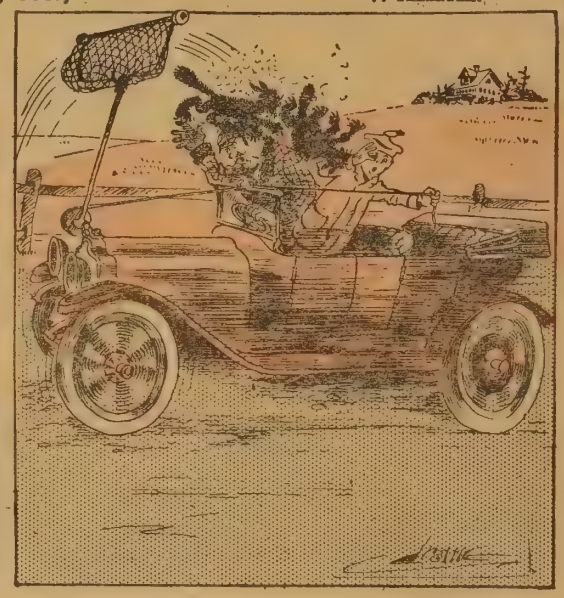



DEAR TOMMY: I invented this scoop after Papa nearly ran over a valuable dog. After practicing on Reggie's Teddy-bear, we gave it a road trial on two cats that were fighting in the middle of the road. I scooped them up all right, but pulled so hard on the rope that they were dumped on top of us! Then Papa made me take the scoop off the car!

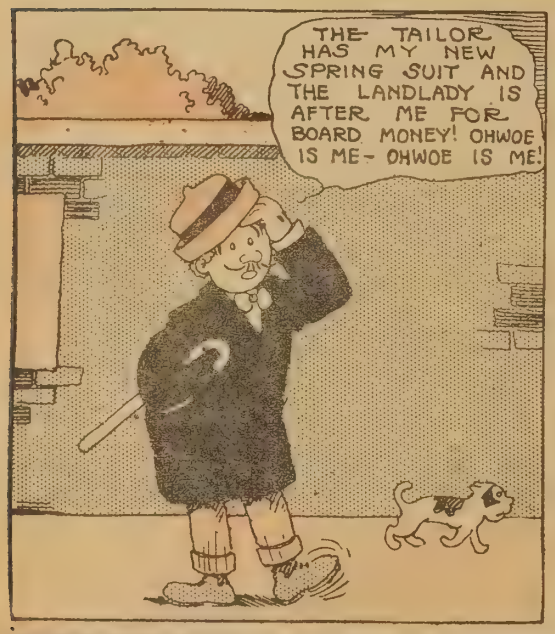
Yours, etc., WILLIE.

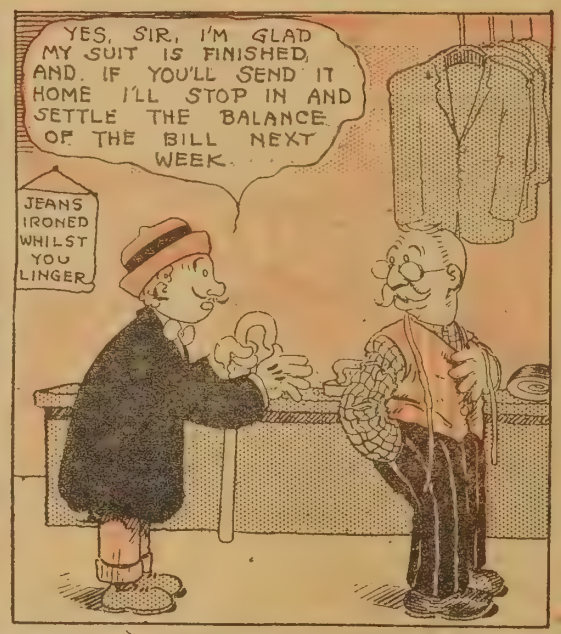






# SAMMY STAHL WILL HAVE TO PAY HIS BOARD BILL

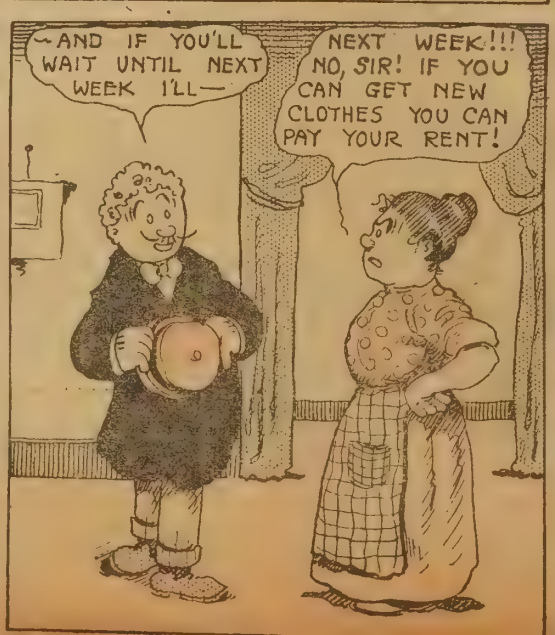




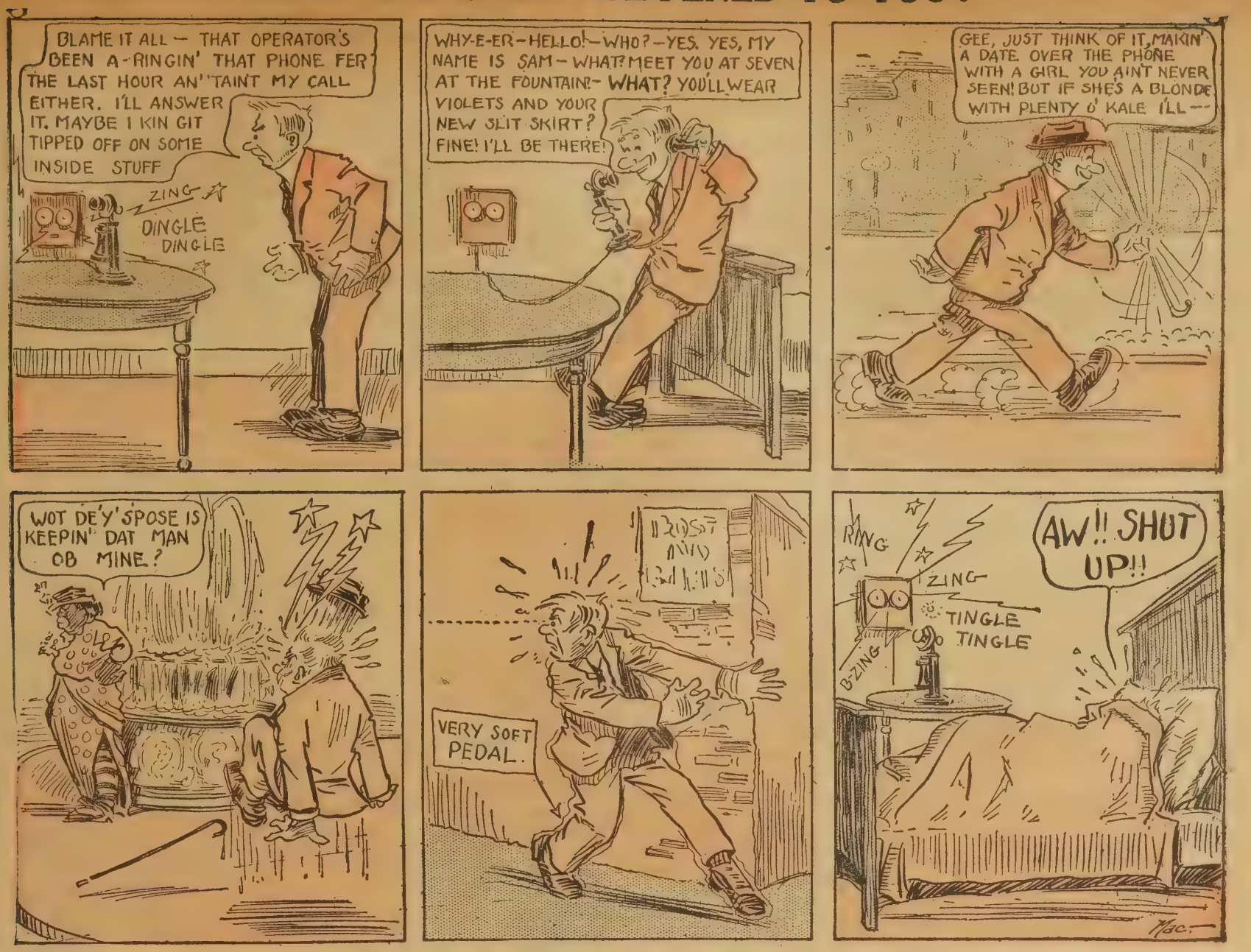







# HAS THIS EVER HAPPENED TO YOU?




# MUGGSY DISCOVERS A QUEER FIRE EXTINGUISHER



# Huns Take Kemmel Hill

## *French Offer Heroic Resistance*

Kemmel hill, a height which has been looked upon as the key to the southern side of the Yyres salient, and one of the most important strategic positions on the northern battlefront in France, has been taken by the Germans. After a defense which will become one of the heroic chapters of the war, the hill was surrounded and the French forces entrenched on its slopes were overcome.

The loss of the hill, which is admitted in an official statement by General Haig, brings to the allies a realization that the whole Yyres position is in peril from the German drive northward from the lowlands lying to the west of Armentieres.

The entire allied line in France and Flanders still stands firmly. Nowhere have the Germans been able to make a further dent in it. Hard fighting has been in progress on the Ypres sector around Voormezeele and to the south at Locre. Both places have several times changed hands, but at last reports Voormezeele had been recaptured by the British, but the Germans had obtained another foothold in Locre.

### The Last Reserves.

"In the end it will be a question of who has the last reserves," said General Delma Radcliff, chief director of the military operations in the London war office in a review of the western front situation. These reserves are now in the hands of General Foch, in whom both armies have the fullest confidence. He has so far employed only a small proportion of his available reserves, and this is a great augury for the future.

The Germans, in their attack on the northern battlefront, have occupied Kemmel Hill, General Radcliffe stated. He declared it was perfectly possible for the allies to hold onto the Ypres sector even with the Germans on Kemmel Hill, but that it was not convenient to have them there, and it was hoped to eject them.

"The net result in the Kemmel sector so far is that the Germans have gained about 2000 yards on a front of about 1200 yards. This gain is not large, but it involves very important ground, and there is no question that it is a very serious loss.

"There is nothing definite about the loss of Kemmel Hill, but it is one of the most important tactical features, as the hill is an observation point for all the ground to the north. It still remains to be seen, however, whether it will remain in the enemy's hands.

"Our line to the north is all right, and it is entirely possible to hold on to the Ypres sector even if the enemy is on Kemmel. But his presence there is not convenient, and we hope to get him off."

### A Daring Raid.

"A striking feature of the week was the daring and brilliantly performed raid of the British navy upon the submarine bases at Ostend and Zeebrugge. Immense damage was inflicted that will not improbably prevent further use of these bases by the submarines. A new and carefully adjusted campaign against them has begun which will deprive Germany's naval arm of power to interfere with the entente's transport of armies, munitions and other supplies. The encouragement afforded us by the success of this raid also has more immediate bearings. It may become feasible to land large forces in the rear of Germany's northern forces and outflank them from the coast.

"In all the fighting since April 23," General Radcliffe says, "we see the Germans at their old game of striking at the junction between the British and the French. It is still clear that the enemy's intention is to wear out the British army. He has been unable to break the line of defense of the British and French.

"There is no reason to alter the view that a big offensive on a far greater scale than ever is still to be expected between Arras and Amiens, with the object to drive in and separate the British and French."

### Wilson Wins.

Victory for the administration in the long senate fight over the bill to confer blanket authority on the president to reorganize government departments and war agencies was forecast Saturday in the defeat by narrow margins of amendments exempting the federal reserve board and the interstate commerce commission from the operations of the law. Opponents of the bill concentrated their strength on these amendments. The first was rejected 41 to 37 and the second 42 to 35. Democratic senators Chamberlain, Gore, Hardwick, Hitchcock, King, Reed, Smith (Ga.), Thomas, Underwood and Vardaman voted for the amendment, while republican senators Baird, Colt, Jones (Wash.), McLean, McNary, Nelson and Warren voted against the amendment.

### Third Liberty Loan.

Nineteen days of the third Liberty loan campaigning closed Saturday night, with the government assured of $2,178,877,050, or 70 per cent of the $3,000,000,000 minimum required. To reach the minimum by Saturday night, when the campaign closes, it will be necessary to maintain this week a daily average of $117,000,000, and to reach the desired oversubscription of $5,000,000,000, $445,000,000 is required for this week. Three districts, Kansas City, Minneapolis and St. Louis, had oversubscribed by Saturday night.

### Quit War Tasks.

It is understood at London that Lord Northcliffe, chairman of the London headquarters of the British mission to the United States and director of propagandas in enemy countries, has tendered his resignation on account of ill health, also that Baron Rhondda, the British food controller has resigned, having been absent from his position for some weeks owing to illness; also that Lord Rothermere, who is a brother of Lord Northcliffe, has resigned as secretary of state for the air forces as a result of ill-health.

### Embargo by Holland.

Holland has placed an embargo on the exportation from the Dutch East Indies of tin, tin ore, cinchona bark, quinine, quinine salts and kapok, all of which are needed in large quantities by the United States for war purposes. It is suggested that this embargo has been placed in retaliation for the American requisitioning of Dutch ships.

### Counter Revolution.

While no telegrams have been received from Petrograd for several days there are rumors from Finland that Grand Duke Alexis Nikolaievitch, son of the former emperor of Russia, has been proclaimed emperor, with Grand Duke Michael Alexandrovitch as regent, the real leader in Russian affairs. In well informed circles this is taken to indicate that Germany is intending to carry through a well-formulated plan for restoring the monarchy in Russia.


## Big War Map for Two Subscription Orders

A splendid four-page war map of the battle front in France, originally published in the Spokane (Wash.) Spokesman-Review, will be sent to any one who secures and mails us one new subscription to The Washington Farmer.

This map is printed in four sections and when pasted together, according to directions furnished, will give you a map 64 inches long and 21 inches wide; presenting the details of the great fighting territory in such a way that you will be able to follow every detail of the big battles which are now brewing.

Send orders for new subscription and war map to

**The Washington Farmer**

Review Bldg., Spokane, Wn.



## 100—Dispersal Sale—100 Glen Tana Registered Jerseys

and

## 150 Grade Jerseys and Holsteins 150

**At Glen Tana Ranch, 9 Miles North of Spokane, June 5 and 6.**

### Registered Stock Sale June 5
### Grade Jerseys and Holsteins June 6

Among some of the cows that will be offered are:

Eminents Jimps Owl, daughter of Princess Jimps Eminent; Class AA; producing 359.15 fat, 8492.1 milk; 2 yrs. 11 mos.

First reentry. (Test started May 14, 1917, and up to April 1 has given 15,399.05 lbs. milk, which will easily go 4¼% and is giving 39 to 40 lbs. milk now, April 10.) How is this for a 4-year-old?

King Milan's Mabel, sired by King Milan, Class AA; record 426.73 fat, 8124.3 milk; 6 yrs. 10 mos.

First reentry, Class AA; record 577.61 fat, 11,154.5 milk; 8 years.

(Just finished 3d test with 10,043 lbs. milk.)

Golden Maid's Clarabelle, sire Imported Golden Maid's Prince, Class AA; produced 434.59 fat, 8573.1 milk; 5 yrs. 7 mos.

First reentry, Class AA; produced 467.54 fat, 9252.2 milk; 6 yrs. 10 mos.

Bonny Berry, sire Bonny Golden Fox, Class AA; 368.99 fat, 8388.7 milk; 4 yrs. 4 mos.

Reentry, Class AA; 457.03 fat, 9652.2 milk; 5 yrs. 3 mos.

(Now on test 3d time. Has given in 5 mos. 7504 lbs. milk. Will go easy 4½%.)

We have many Jersey heifers and bulls from Register of Merit dams like above that will enable you to form an idea of the quality of stock offered in this sale.

**KEEP THE DATE AND PLACE IN MIND. Write for Catalogue.**

## T. S. Griffith, Prop.
## Glen Tana Stock Farm

**Office 905 Main Ave., Spokane, Wash.**



## Immediate Service on Piston Rings

When you want new piston rings, you want them at once. You can't afford to let your power machinery stand idle, or your automobile torn down, waiting for a set of rings to be made. That's when you need the prompt service given everywhere on

**McQUAY-NORRIS LEAK-PROOF PISTON RINGS**

All over the country we've placed complete assortments of all standard sizes. Your nearest dealer can get them for you quickly through his jobber or supply house. If the condition of the grooves or the cylinders requires oversize rings, we have over 2000 unusual sizes and over-sizes—all widths and diameters—on hand at the factory ready for immediate shipment anywhere. McQuay-Norris LEAK-PROOF Piston Rings are the best and promptest answer when any power or carbon trouble develops due to faulty or worn piston rings. They save fuel and oil—reduce motor wear. Give better service and will outlast any other make of piston ring.

SEND FOR FREE BOOKLET—"To Have and to Hold Power"—a simple, clear explanation of piston rings, their construction and operation.

Manufactured by

McQuay-Norris Mfg. Co., 2837 Locust St., St. Louis, Mo.

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**McQUAY-NORRIS Superoyl RINGS**

A special ring for engines that pump oil. Used in top groove only of pistons to control excess oil, with McQuay-Norris LEAK-PROOF Rings in lower grooves to insure maximum compression and fuel



## Field Seeds

Do not forget that millet produces well. We have on hand White Wonder, German, Hog, Siberian and Japanese.

**ALSO**

spring and winter vetches, cow peas, kaffir corn and buckwheat.

**THE INLAND SEED CO.** SPOKANE, WASH.

# Tobe and Mandy Sigh for U. S. Clerks

By CHARLES C. HART

"I was thinking this morning," said Tobias Simpkins, Clackamas county farmer, "as I was climbing the ladder with one hand and holding the lantern in the other hand, cautious-like so that it would not overturn and set the barn afire; hoisting myself, so to speak, by the bootstraps into the mow to throw down hay for the horses, I say I was thinking.

"That's right, I was thinking about the poor government employe in Washington, how he must be tossing and writhing in his dreams at that very minute of having to get up in the next three or four hours to be at work by 9 o'clock.

"Everybody nowadays almost is pleading for the starving Belginans, but charity, I'm telling you, ought to begin at home. Anyway my sympathy goes out, and it's going to keep on going out, for those poor government clerks, 50,000 of them in Washington, who are fighting desperately, single-handed and alone, as it were, to escape being forced to work eight hours a day.

"It's some labor crusher in congress —Borland I hear is his name, a fellow from Missouri—is trying to get a bill, or amendment or something, through congress to increase the working hours of these clerks from seven to eight hours a day.

"But going back to this morning, if anybody had seen me rubbing liniment on Prince's spavin, and a better, truer, more patriotic workhorse never lived, they'd a thought I was pitying Prince, but I wasn't. Not on your T. T. (Tin type).

"As I said before I wasn't sighing about Prince at all. Indeed no; I was 'all het up,' as Jed Thomas says. Just as I was on the edge of saying something out loud about the slavedrivers in congress who want to make Uncle Sam's clerks, the flower of the nation's manhood and womanhood, work from 8:30 in the morning to 5 o'clock in the afternoon instead of 9 to 4:30, Mandy let out an awful yell. Mandy was milking the cows in the cowshed built off the end of the barn, like as if this was the barn where we are sitting and the leanto kitchen was the cowshed.

"Well, you bet I took my hand off Prince's spavin and set the balsam down and rushed to the door of the cowshed to see what had happened to Mandy. A rat from the corncrib had strolled into the cowstable by way of taking his morning constitutional, and, being new on the job, a city rat perhaps, did not expect to meet up with any one at 4 a. m. Before he knew it, Mister rat found himself lost in the glare of the lantern. Blinded by the light, he began to tack, which took him at right angles square into lantern.

"Mandy saw the rat just as the rat saw the lantern and she must a squeezed the milking parts a little hard just then, because Rose—that's the cow's name—turned her head enough to see the commotion out of one corner of her off eye. Without a second thought she joined in the excitement with a strong right hoof to Mandy's forehead, countering just above the left eye as the prize-fighters would say.

"The bucket of milk, the lantern and Mandy all upset at the same time. The rat vanished into No Man's Land, which is a very large area of a farm barnyard in the darkness at 4 a. m.

"I picked Mandy up and untangled her right foot from the milking stool, and her ankle being sprained, I carried her to the house. We poulticed her ankle and her forehead, but for two days she tussled with a brain fever and was out of her head most of the time. As she came out of the fever, I was sitting by the bed holding her hand. She looked at me and saw my careworn countenance with grief written in every one of my old weatherbeaten wrinkles. She said:

"'Tobe, you're a good man, too good for me. You're worried—worrying about me just as though I was worth worrying about.'

"I looked straight at her and I said, 'Mandy, my flesh has been with you through these two terrible days that you have struggled between life and death, but my heart, Mandy, has been with those poor government clerks in Washington. It takes a good constitution to bear what you have gone through in the last two or three days, Mandy, but it requires the fortitude of Job to withstand the contemptible attacks on their daylight freedom that our government workers are going through in Washington in these dark days.

"Then I told Mandy about what some busy body was trying to do to the toilers in Washington and she cried and said she was ashamed of herself to let the kick of an ignorant and, at other times, phlegmatic cow put her to bed for two whole days—two days wasted for nothing except brain fever and a sprained ankle—when our boys and girls, and uncles, and grandfathers in government employ in Washington are enduring so much and complaining so little.

"So saying, she yanked the bandages off her pate and got up and walked and at 8 o'clock that night, when we turned in from work—for we usually quit earlier than our neighbors—I found Mandy doing the churning, which I told her she could do just as well the next day. But no! She said there would be no more saving daylight in our family until there was better news from the working front in D. C.

"I'm a changed man. Why, yesterday afternoon I was plowing a piece of new ground when the plowshare caught under a root and the plow handle kicked me like a Missouri mule in the grain sector. That's made me sick many's the time, but yesterday it never fazed me. You may know what it means to be kicked by a plow handle, but if you don't, my advice is, don't experiment.

"Two minutes later a horsefly about four inches from tip to tip got to buzzing around Prince's right flank. As I left the plow to turn my aircraft defenses on the big fly, Prince's tail came swinging around in the same direction. As I swatted the fly the swish of that tail caught me square across the nose and brought the blood out of my left cheek. It didn't pain me, just for pitying those clerks, but I'm not turning the other one.

"It was then 4 p. m. and in my mind's eye I could picture the poor government clerk leaning out of the window of some office in Washington, praying for the clock to strike 4:30 that he or she might turn away from seven miserable hours of—of waiting—waiting for 4:30.

"Jed and Alice Thomas came over to see us last night to ask Mandy and me to help them with some propaganda work. Their little girl, Marthy—I call her 'little' because I knew her as a baby in the cradle and she has never got married—had written them to get the neighbors to write to our congressman urging him to stand by the clerks.

"Marthy used to work for a lumber company in Portland and commute back and forth morning and evening on the traction cars which run right by the corner of the Thomas farm. Martha had it nice, but she got it into her head that she would like to go to Washington to work because she thought it would be great stuff to be where she could yell 'hello' to the president every day and see all kinds of statesmen and diplomats and congressmen and other queer things, and live in a flat, and nothing could hold her.

"The lumber company paid her $80 a month and Jed and Alice charged her nothing for board, but the United States would give her $100 a month. That looked big to Marthy, and besides it was high sounding to her to be able to say she was 'going east.'

"The lumber company offered to raise Marthy's wages, but nothing would do her but to go to Washington. Yesterday Jed and Alice got a letter from her, as I said before, telling about congress trying to perpetrate the eight-hour outrage. She said that heretofore on some days of the year grand opera singing had been given for the clerks at the theaters in Washington at 4:30 in the afternoon, the time that the department let out, and that if the Borland bill passed it would interfere with her opera education. She said, too, that it had always been nice for the lady clerks to go to the hair combers between the time the department let out

(Continued on the following page.)

## SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

## Just What Shell Shock Is, and How It's Now Treated



Dr. Hirshberg.

Shell shock, surgical shock, wound shock and similar serious, often fatal, states which have been associated with such wounds as compound fracture of the skull, scalp wounds, deeply penetrating wounds, perforation of the skull, head and abdominal wounds, became such a terrible menace to the armed forces of the allies that in August, 1917, the medical research committee of Great Britain appointed a special Anglo-American committee on investigation to attempt to discover some correct method of treatment of surgical shock and allied conditions.

Professor E. H. Starling of England was made chairman, with Professors W. B. Cannon of Harvard, A. N. Richards of the University of Pennsylvania, and half a dozen other physiologists. The researches were made in hospitals at casualty clearing stations a few miles back of that part of the line where there is and has been constant fighting for more than three years. Only the most serious cases of shock, those which could not be reasonably moved any farther back, were observed.

The essential study of shock had to do with the elevation or fall of the normal blood pressure. Scalp wounds with shock had a slight rise whereas compound fracture of the skull usually registered over 140. If the membranes—the meninges—which cover the brain were also torn, a low blood pressure was registered—often as low as 60. Perforating wounds of the skull exhibited blood pressures as high as 310 if the wounds were very deep into the brain.

**Care of Cases.**

It was in regard to the inquiry as to the effect of operations on the skull under an anesthetic that the attention of the scientists was directed toward blood pressure as an important clue to the solution of shell shock. A man with a severe skull wound, torn meninges, and perforated brain was operated on two hours after the shell hit him. It was not the custom then to take the blood pressure, so his prssure was unknown. The condition of the patient before operation appeared most promising, but changed rapidly for the worse. His unconsciousness deepened, his temperature dropped like a shot and death occurred.

Obviously, it was no easy matter to discover any explanation of such a rapid change. The time was too short for blood poisoning to set in; the heart was all right. There was not enough hemorrhage to cause death, nor did the injury itself touch any vital spot.

Then began a study of blood pressures in all head and abdominal wounds. Operations, too, were delayed for 24 hours and 48 hours with advantage, as was quickly learned from the blood pressure readings. General anesthetics, too, were changed to cocaine, morphine and hyoscine

Since this plan was adopted the surgeons have had no more disasters such as were very common—like the one mentioned.

Patients seen on arrival at a clearing station within six hours after receiving a shell wound in the abdomen had a blood pressure as low as 50; the pressure rose as the shock passed off. Warmth, rest and morphine help to bring about this condition. After 10 hours, however, loss of blood and infection, called sepsis or blood poisoning, again send the pressure downward.

**Blood Transfusion Best.**

"Normal salt solution," as a remedy or treatment for hemorrhage and shock, has brought disappointment. "Physiological" salt solution, it has been found, dilutes and increases the volume of the blood a bit, but it irritates the kidneys, skin and lymph channels, causing them to excrete it so quickly that presently the quantity of blood is less than ever and more concentrated than it should be.

Low blood pressure—hypotension—due to the profound shock of lost blood, sepsis, gas and pain, has been successfully combated by this combination:

| | Grammes |
|---|---|
| Chloride of lime (calcium) | 0.075 |
| Chloride of sodium (salt) | 1.325 |
| Gum acacia ..... | 2.000 |
| Sterile water ..... | 100.000 |

Direct blood transfusion for 15 to 22 minutes, which allows about a pint to a pint and a half of blood to enter the victim's veins, elevated the depressed tension very quickly and permanently.

The happy conclusions drawn from these researches are that excellent results follow the transfusion of blood into the victims of profound shock.

Injection of the calcium gum solution will produce an immediate rise of pressure in the shock of blood poisoning or hemorrhage or both. This may be enough to tide the patient through the operation, which is often his only chance to live. It permits the source of infection also to be sought and removed.

## Shall We Pray?

To the Editor: In these days of darkness when all the world seems to be in the hands of some sinister and deadly power upsetting and perverting all the principles of God, it is becoming more and more evident that people everywhere are turning to God in prayer. Humanity in its stress is groping for light, for courage, for hope. Much of this effort is erratic and confused, but the instinctive motive behind it all is a recognition of the divine spirit, the truth unchanged, unchanging and eternal.

In this strange and ghastly conflict between nations recognized as Christian, is it not possible to include in our prayers the very principle that is to free the world from oppression? Can we not pray for the enemy in this wise, "Lord give them light; give them understanding of eternal truth and righteousness; give them each and individually a strong and overwhelming desire for justice and peace and purity; a desire to do unto others as they would have others do unto them; give them the wisdom to give their cloaks to those who have taken their coats, and to those who have smitten them upon the one cheek to turn the other also, even the climax of all the prayers ever prayed, 'Lord forgive them for they know not what they do' "?

And while we pray for the enemy, shall we not ask for our own nation and people and all the world besides, these same things? The press of our nation is daily pouring forth floods of news describing man's inhumanity to man among the members of our own democracy. The periodicals and the newspapers of other nations are doing the same. Surely then we have sore need of all the light and wisdom there is, and the place to get it is at the very source of all light and peace and good. The way has been made so clear and straight that we have only to ask and it shall be given us. I sincerely believe that if even half or two-thirds of all professing Christians were to pray in this way world democracy would very shortly be an established fact.

In the meantime it is just as necessary to back up our prayers by unceasing activity in every coordinating line. Not activity in shrieking anathemas and bitter criticisms at those in authority who do not agree with us, but in serenely and earnestly doing with our best ability every task and duty set us by our government. It is entirely possible to "render unto Caesar that which is Caesar's and to God that which is God's."

If this were not so these words would not have been left on record by the one and only personality who knew the unfailing ways of peace and comfort and joy, and left such clear and unmistakable directions for humanity to follow, that no one need miss the way.

Only let us pray as Christ prayed, perform cheerfully all duties set for us by those in authority over us, remember the widow and orphan and know for a certainty "that neither angels, nor death, nor powers, nor principalities, nor kaiser, nor king can separate us from the love of God and all the good things of mind, spirit and body that this implies."

MRS. IDA C. YOUNG. Bend, Ore.

# Handicraft For Girls

## By Dorothy Perkins

(Copyright by A. Neely Hall.)

### Spool and Carboard Toys.

Did you ever see a better small doll's baby-carriage than that shown in Fig. 1, with its rounded ends, All that you need to make one like it are four common thread spools, wooden pegs cut of the right diameter to fit loosely in the spool eyes, and one-half inch longer than the spools, a piece of letter paper, some tacks, and glue.

Figure 2 shows details for making the carriage body. Slip two of the short pegs into the holes of a pair of spools (A, Fig. 2), making their projecting ends of equal length. Then cut the bottom strip B four inches long by the width of the spools, bend it slightly as shown, to give a curve to the carriage bottom, and tack the ends to the spools.

The sides C are of cardboard and should be one and one-half inches wide at the widest point, by the length of the carriage body. Punch holes through these sides in the right places for the ends of pegs A to stick through. Before fastening the side pieces to spools A, you must attach the wheels, Figs. 3 and 4. Cut the cardboard uprights D 3 1-2 inches long and 1-2 inch wide; then after cutting holes through each near the ends, for the spool pegs to slip through, cut down the width between the holes to about 1-4 inch (Fig.

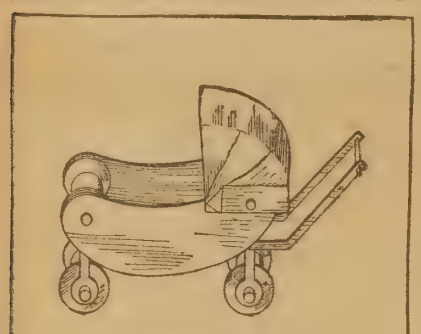
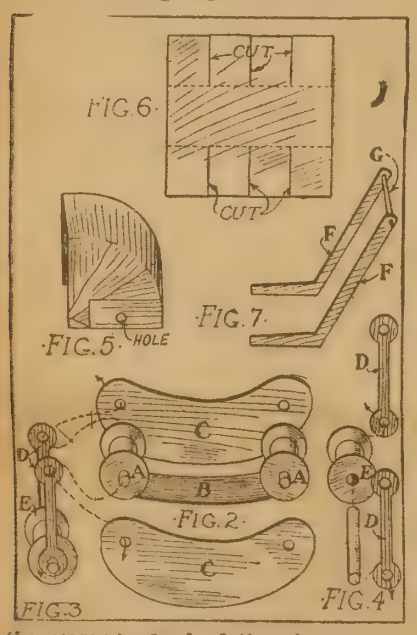


FIG. 1

4). Slip the lower ends of uprights D over the pegs in spool wheels E, then the upper ends over the pegs in spools A. Glue the upper ends to the ends of spools A, then slip the carriage sides C over the pegs of spool A.

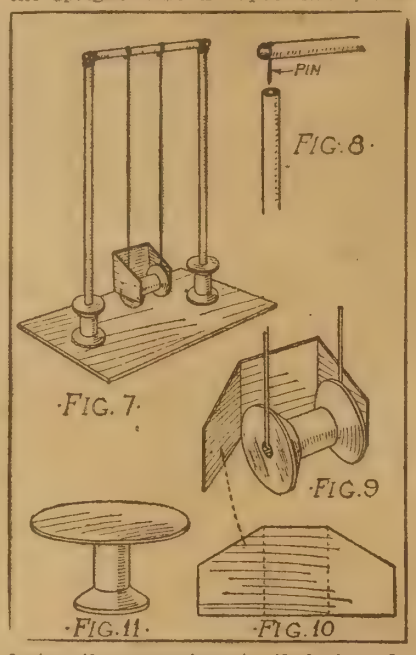
The carriage top (Fig. 5) is made of a piece of writing-paper about 4 1-2 inches square (Fig. 6), slashed in three places along two opposite edges for a distance of about 1 1-2 inches, and then folded over as indicated by dotted lines. Bring together the ends of




the slasned edged of the piece of paper, as shown in Fig. 5, coat them with glue, and press together until the glue has dried. Punch a hole through each side of the top as shown, for the projecting ends of the spool peg to slip through.

The carriage handle is made of two cardboard strips (F, Fig. 7) and a match (G). Stick the match through holes made near the ends of strips F, and glue the lower ends of the strips to the inside face of sides C (Fig. 1).

The doll swing shown in Fig. 7 has a cardboard base with two spools fastened to them four inches apart to support the framework. Tack the base to the ends of the spools. The framework uprights are tightly rolled tubes of paper 10 or 12 inches long, and the top crosspiece is another paper tube four inches long. Stick the lower ends of the uprights into the spool holes; then




fasten the crosspiece to their tops by running pins through the crosspiece and down into the upright ends (Fig. 8), and then lashing with thread as shown in Fig. 7.

The swing seat is made of a spool with a cardboard back fastened to it (Figs. 9 and 10). Suspend the spool with thread from the top of the swing crosspiece.

For the pedestal table shown in Fig. 11, mark out a cardboard top with a cup or saucer, and after cutting it fasten it to a spool with tacks.

# Tobe and Mandy Sigh for U.S. Clerks

(Continued from the preceding page.)

and supper time, and then she wrote something about something she sometimes goes to at 4:30, which she called a 'tea dansant.' I suppose that's something to do with the Red Cross, for it sounds like French; maybe it's bandages for the hurt boys in the trenches.

"Mandy was deep touched and so was I and last night neither of us could sleep for pondering. Finally about 3 o'clock Mandy nudged me and said, sobbing:

"'Tobe let's get up and write that letter to Washington before milking time. Mandy wrote the letter because the two front fingers of my pencil hand were skinner raw trying to teach a 2-days-old calf how to drink milk out of a bucket. I tell you taking a new calf away from its mother and putting it on the bucket is no fun. This is what we sent:

"'Dear Congressman:

"'As parties who voted for you at the last election, honored sir, we ask you to vote against the Borland bill, which aims to drive our United States workers into slavery; which would make our government offices a sweatshop and the rest of the nation ashamed of ourselves.

"'This question hurts us first thing when we get up before daylight every morning we talk about it at the supper table every evening. You don't know how hard it makes it for us to go back to the field after supper to finish the day's work. It is with heavy hearts that we turn in from our daily toil at dusk to do the chores, because we can't help thinking about the Borland bill, which will do so much to undo the Magna Charta and the Emancipation Proclamation.

"'Congressmen get elected and get to Washington and then forget about the wants of the folks back home and what's burning deep into our hearts.

"'Marthy Thomas, a neighbor girl, is one of the persons that will be helped if you vote right on this bill. We trust you to stand up for humanity.

"'Thank you for the calabash gourd seed sent last November and for the farmer's bulletin on "The Rearing and Education of the Mountain Goat," and the other one on "Farm Work as a Cure for Insomnia." Very respectfully,

"TOBIAS AND AMANDA SIMPKINS."

"P. S. Why not let McAdoo run congress? Ask Hoover if gourd seeds make a good substitute for white flour, and tell Wilson he's a brick the way he's going after Germany. Also thank Senator McNary for trying to get the farmers $2.50 a bushel for their wheat.

"'T. AND A. S.'"

# Farmers Are Optimistic

(Continued from page fourteen.)

might have been quite short of labor in some sections of the county had it not been for the fact that we had an open winter and a great deal of the plowing was done before the ordinary spring season opened. With the exception, perhaps, of a chance for short water supply in one or two districts the crop outlook for the county is excellent for this year and the live stock conditions are about as usual. I have not been in the county long enough to have any definite check on the cost of producing a bushel of wheat and putting it on the market so could not give you any information on that point. J. N. PRICE.

### Crop Outlook Bright.

BICKLETON, Klickitat County, Wash., April 13.—The weather this spring has been ideal for farming, no storms to speak of, and the ground is dry on top, but moist enough underneath. Farmers are about through seeding on the lower levels; around Bickleton they are just fairly started. Fall grain looks excellent. If it does not burn later on it is sure to be a large crop. No grain froze out this winter, even volunteer barley and oats lived through; weeds also did well. Mustard seed will lie in the ground three or four years, and when it comes an open winter like we had this time it will come up. There is a shortage of labor here, but not serious as yet. In harvest time it will be more keenly felt. Horses are higher than last year, and barely enough for farm work. Tractors do not seem to give satisfaction here. Several that bought them have gone back to horses or mules. More combines are being bought this year. There will be about 50 this year in eastern Klickitat, and I don't believe one will be pulled by a tractor. Machinery is so high this year that most every one is trying to make their old do another year. A 70,000-bushel elevator is being built at Mabton, and about a third of the wheat here will go there this year that last year went to Roosevelt, as there does rot seem to be any indication of one being built at the latter point. Every one has changed their clocks here, but it creates considerable confusion among the farmers. Most ranchers find it impossible to come in to dinner at 11 o'clock, and quit work with the sun two hours high.

BERT H. FAULKNER.

### Reseed to Spring Grain.

CENTERVILLE, Klickitat County, Wash., April 20.—The ground here is drying out fast, without any rain to speak of, and there is the usual rush to get the plowing done. There is a good deal of reseeding to spring grain.

While a good deal of grain is in fine condition, there is an inclination to reseed all the poor grain, as there is plenty of seed to be had. The labor question is a bad one. With some it will be impossible to get their work done because of no help to be obtained. Every engine that can be used for plowing purposes is being worked to the limit. The live stock condition is all right here; and a good many more than usual of the small farmers have a small bunch of sheep on hand. The cost of producing a bushel of wheat this year will naturally be considerably advanced. With a prospect of $6 a day harvest help the expenses will be high. It will be almost impossible to get the help at any price, the way I see it, as it is impossible to get a man to plow now at any wage, and it will be harder at harvest time. The fruit here, so far, is in good shape.

CLARENCE A. LESTER.

### Cattle in Fine Condition.

SOUTH BEND, Pacific County, Wash., April 5.—There does not seem to be any lack of patriotism among our farmers generally speaking. They are doing their utmost under often times trying situations with the labor problem. This is one of the biggest spruce sections in the United States, and men are needed in the logging camps and shipyards so badly that our farmers are working harder than ever to meet the shortage. One of our enterprising young farmers at Marlo has purchased a milking machine and a tractor. Dr. Garret, state veterinarian, completed a test for tuberculosis. He tested 51 animals and found that 98 per cent were free from tuberculosis. At a recent auction on the Dehinmen ranch good grade cows sold at prices ranging from $110 to $175, an excellent price for cattle. This winter has been an ideal winter for cattle. Some of them have been left to range all winter, and many are sleeker and fatter than those fed in the barns. We have been having a week of sunshine, and it has given opportunity to plow and sow the spring crops. The ground has dried out considerably in one week's time. We have had a few heavy frosts, but these did not damage the fruit buds, for the buds had not developed enough. The cranberry growers have an expert on the bogs tsudying, the plants for pests and diseases. An effort has been made to interest the boys and girls in pig clubs, rabbit clubs, garden clubs and canning clubs. The commercial club of South Bend has a committee composed of the county agriculturist, one of the ministers and the club secretary to look after this work. The children in the country are better organized than the children in town. One of the owners of the local cannery urges the children to raise vegetables and fruit for the cannery. He thinks children will be more interested if there are profits for them.

MRS. WINNIFRED BUCKINGHAM.

### Are Doing Their Best.

RAINIER, Thurston County, Wash., April 15.—As far as I know, every farmer is working to the utmost to raise as big a crop as possible this year. If we can get the weather to go with it we will have a bumper crop. If patriotism was lacking anywhere the third Liberty loan has put it into the shade, and great enthusiasm is shown everywhere. In the little town of Rainier the chairman just told me that he turned in to the county board on April 13 $25,100 for Liberty bonds, and applications were coming in right along; and Thurston county has gone over her allotment outside of what the state purchased. We had a very open winter, but since March 1, for the most part, it has been cold and rainy, and some heavy frost, with sleet April 14. Farm work is getting along in pretty good shape. Pastures are growing slowly, too much frost for much growth of grass. Fall sown vetch and wheat are doing well. Stock has come through the winter in good shape. About all the farmers are keeping all the dairy cattle they can take care of.

L. F. DAVIS.

### Promise Good Crops.

LA CONNER, Skagit County, Wash., April 13.—There seems to be no lack of patriotism in this community except in very few cases, and the people seem to be waking up to the fact that this country is really in this for keeps, and in nearly all cases they mean to stand back of the government to the last. The farmers are going the limit with their crops. This is not a wheat section and only small tracts are being put in. The strongest crops are oats, hay, field peas and garden seed. In the last named there are cabbage, beets, spinach, turnips, parsnips and mangel seeds. The spring work has been progressing very favorably and indications that large crop acreage will be put in without any handicap except that of labor, and that is causing no little trouble. The crop outlook at the present time is very promising, and in case of a contract crop the grower seems to have little fear of a failure. IVAN ALEXANDER.

### Spring Work Begins.

OMAK, Okanogan County, Wash., March 23.—After an open winter we are having an early spring, and pruning is pretty well along. Cultivation will soon begin. Work teams are scarce. Tractors are coming into use more every year, and farmers are getting more useful machinery and autos. The higher prices for farm product is making farm life more attractive. An unusual effort will be made this season to raise food, and this section will do all it can to supply the demand. Farm labor is scarce, and many will be handicapped for money to carry on the farm work to produce a crop. J. O. WOODS.

### Must Awake to Needs.

CATHLAMET, Wahkiakum County, Wash., April 5.—There is no lack of patriotism in Wahkiakum county as far as our farmers are concerned. No doubt the war situation is not felt as keenly here as elsewhere because this community is not thickly populated and is isolated from the rest of the world. While it is somewhat difficult for our people to practice food conservation it is not due to any unwillingness on their part. Gradually we find the people becoming more interested in the various activities of the war. A. T. FLAGG.

**American Sector on Firing Line.**

American troops permanently took over a part of the firing line as an American sector in January, 1918.

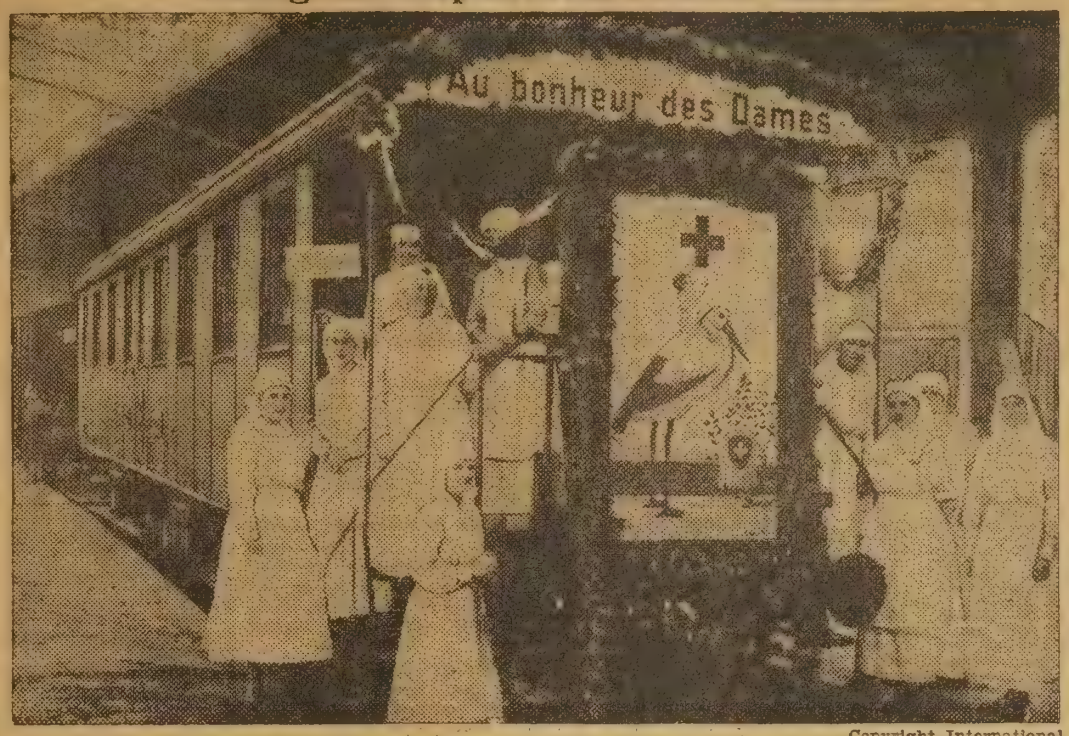
# All the World's a Stage, and All the Men and Women Merely Players

## Assistant to Baker.



Frederick P. Keppel, dean of Columbia university, recently appointed third assistant secretary of war, will have charge of the nonmilitary life of the army. Edward R. Stettinius, surveyor of army purchases, was appointed second assistant secretary and will be in charge of industrial and commercial work.

## Caring for Repatriated French Babies




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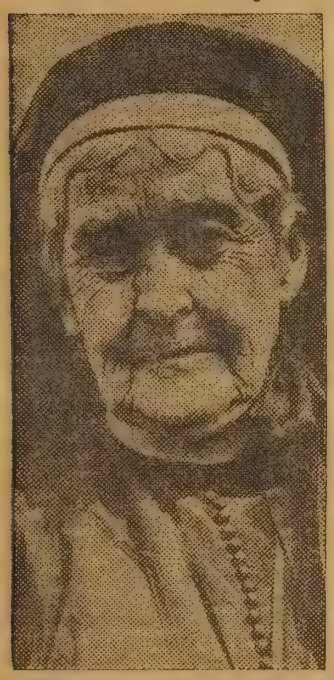
A Red Cross nursery train at Basle, Switzerland, where French repatriated children are cared for. The inscription above the poster, translated, means the "Happiness of Women."

## Australian Hero Dies.



Captain R. Hugh Knyvett of the Anzac scouts, died recently at his home in New York. His bride of three months, who was Miss Lillian Maude, was with him at the end. Captain Knyvett served three years in Egypt, Gallipoli and on the western front. He was wounded 20 times by a German shell while on the Somme front.

## Praises Our Boys.



Mrs. John Gordon, widow of the famous confederate general, says our soldier boys are as fine a body of men as were the boys in the 60's.

## Red Cross Workers "Over There"



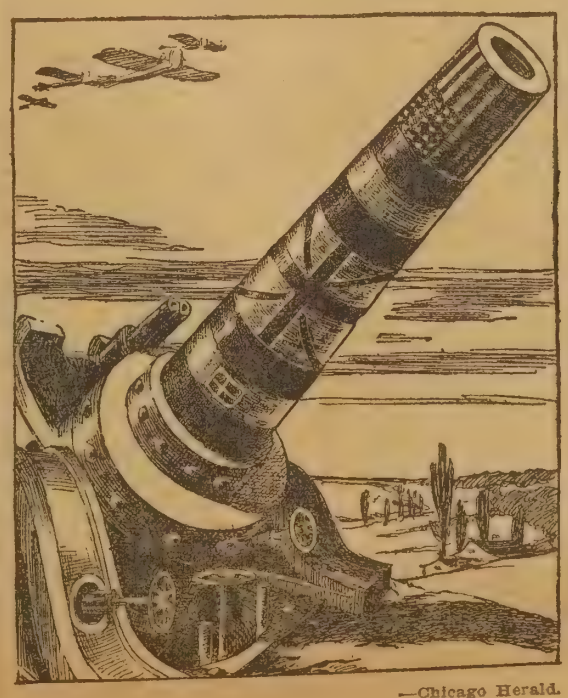
Tired and cold after a long sojourn in the trenches, the soldiers get refreshments and a cheery welcome from canteen workers.

## Listen, but Don't Stop and Look




—Brooklyn Eagle.

## Talking of Big Guns



—Chicago Herald.

## The Beast of the Seas



—Oakland Tribune.

# Trappers of the Ozarks

## The Adventures of Two Young Pioneers in the Wilds of Upper Louisiana, Now the State of Missouri.

By LEWIS B. MILLER.

Copyright, 1914, 1915, by Lewis B. Miller.



**Synopsis of Preceding Chapters.**

In September, 1811, two young men who lived near St. Louis, Ben Armstrong and Jodo Henderson, taking with them their two dogs and donkey Spunky, started on an all-winter's hunt in what was at that time unsettled region, where Indians held full sway, in the wilds of upper Louisiana, now the state of Missouri. After a perilous trip over old Indian trails and dangerous streams, they reached their destination — a salt spring close to the river Big Niangua, which Ben had visited before and from which they expected to secure salt for sale with their furs when they returned to civilization the following spring. Here they erected a rough cabin for their winter quarters close to the mouth of a large cave that was full of water and bats, and started their saltmaking and hunting. After exciting experiences with a buffalo herd and with a bear in a cave, they find their first fresh sign of Indians — moccasin tracks in the snow. And then, in the dead of night, a scouting party visited them preparatory to an attack. The attack followed soon, and would have resulted in the capture of the boys by the savages had not a violent earthquake frightened them away. It was only a short time, however, till they were in the hands of the savages, led away capive. They remained captive for some time, narrowly escaping being burned at the stake by their enemies. Ben was saved by Watermelon, a big, fat squaw, who claimed him as her husband. From both Watermelon and her savage tribesman Ben and Jodo escaped, but only to battle with terrible cold and starving wolves during their flight.

### CHAPTER XIV.

**Out at the Cave's Back Door.**

Ben awoke from time to time; but it was not till the sun had sunk low that he sat up and stretched himself, then got to his feet and walked out toward the mouth of the cave. When he looked down at the water, their borrowed canoe was where they had left it. He could not catch sight of the sun, but some tree-tops gilded by its yellow light meant that it was setting. When he returned to where their things were, Jodo was awake.

"What now, Ben? Shall we paddle back to the Osage as soon as darkness comes on, and then on down the river? Or shall we stay here tonight?"

"That's just what I've been debating. I'd like the best in the world to be at our camp on the Big Niangua, and to get to doing something there's money in. But if we hurry on back, I'm of the opinion we shall find the Osages there waiting for us. Of if not that, they'll be coming in a day or two, and they won't give us any peace. It'll be fight or run again. If we had Spunky and our pack-saddle and traps, I'd be in favor of making a circuit of a hundred and fifty or two hundred miles, like we started to do, and——"

"And maybe the Indians would overtake us again, like they did do."

"Yes. And maybe we'd be too sharp for them next time. But as we haven't either our pack-mule or our traps, I'm thinking we'd better linger by the way for a few days, till the Osages have time to visit our camp and find out we're not there. After that maybe they'll leave us in peace till we can close our winter's work and paddle away toward sunrise."

"Perhaps that's best. We're likely to get captured again if we return to our old stamping-ground just now."

When night had come on, and the light from the cave's mouth had almost faded out, the two in hiding, who did not care to sleep again, longed for a light. They could have kindled a fire, but so small was their supply of fuel that it seemed not worth while. And even a small fire would doubtless fill the cave with smoke. So they walked up and down in the dark, or sat on their bed and talked.

"If we stay here tomorrow, Jodo, as we shall have to do if we spend the night here, I'm in for getting out and looking up a few pine-knots. Then we can explore the cave while we've nothing better to do. I'm wondering if it extends far."

"Not very far, I'd guess. But we wouldn't dare try to explore it without a light. There's always danger in a cave—danger of getting lost, or falling over a ledge, or dropping into a hole."

Well on in the night, when they felt that they could sleep again, they lay down on their bed. For a while they kept talking, but at last they became silent, and both were half asleep, when they were aroused by soft but very distinct footfalls coming through the cave. Suddenly the footfalls ceased, as if the approaching beast had just discovered them, and a hoarse growl startled the cave's stillness! Both sat up instantly, wide awake.

"Must be a bear!" Jodo was feeling for his weapons.

"Bear or panther it sounded like!" And another growl answered Ben's words.

Both now leaped to their feet and stood with cocked rifles, listening for any evidence that the wild beast was approaching, but it was no nearer. Ben was thinking of trying to strike a light, when the footfalls were heard again, this time in retreat. Ben groped around till he found a loose stone, which he hurled toward the footfalls. Another growl was heard, now a good distance away. The two found other stones and threw them, only to awake the echoes of the cave.

"If I'd even guessed that varmint was in here, I couldn't have slept so soundly today."

"Neither could I, Jodo. We were in danger all the time and didn't know it. That beast might have come along any minute and landed kerplump on top of us!"

"I'm wondering how the creature got in here. I doubt if he could climb the cliff; and I doubt if he'd try it with that water under it."

"I doubt it, too. And if he didn't come in there, the cave must have another outlet."

"Well, no matter how the varmint got in here, we can't both go to sleep at the same time hereafter."

"No, I should say not. In fact, I couldn't sleep unless I knew somebody was on guard. So you can lie down whenever you feel drowsy, Jodo. It won't bother me to keep awake the rest of the night."

"I don't feel sleepy now. Later I may take another nap."

For a good while they sat and talked, to keep each other company. Finally Jodo fell asleep. Now Ben sometimes sat on the edge of their bed, and sometimes sprang up to tramp to and fro on the rocky floor. He had to depend wholly on his ears to warn him of the approach of danger. But the remaining hours of darkness passed without further cause for alarm.

When daylight came, Ben walked to the cave's mouth and look down. Their canoe was floating where they had left it. After gazing out a few minutes, he let their water-gourd down with their rope and drew it up full of water. When Jodo awoke, they ate their breakfast. After that Ben lay down to sleep, while Jodo stayed awake to watch.

While his companion was sleeping, Jodo, to relieve his restlessness, tramped back and forth, starting at the cave's mouth and walking as far back as there was light to see. Finally he seated himself on the edge of the bed, near his sleeping partner. He was thinking of his friends at home, and for some reason was feeling not a little discouraged and lonely. He wondered if he and Ben would ever see the settlements again. And even if they did, would they be able to take anything with them to pay for their winter spent in the wilds?

Suddenly his gloomy meditations were cut short by a not very loud, but very distinct sound. It came from beyond the cave's mouth. Perhaps his ears had deceived him, but the sound was much like the dipping of a paddle.

Startled the young fellow sprang to his feet, instinctively grasping his rifle as he did so. After listening a few moments, without hearing anything to confirm his suspicions, he stole noislessly toward the mouth of the cave. When near enough he stopped.

At the foot of the cliff, beside the canoe, floated another canoe with five Indians in it!

As it happened, none of the Indians was looking up at the moment, and Jodo dodged back without being seen. Swiftly he ran back through the cave and woke Ben.

Much surprised was that young man. Having found the stolen canoe under the cave, the Osages could scarcely fail to guess where their runaway captives were now hiding.

"What do you say they'll do, Ben?"

"That's not hard to guess. They'll try to get in here to us somehow."

"Yes, I've no doubt they will. They know we're not armed to speak of, and they won't be afraid of us. But can we keep 'em out?"

"We'll certainly do our best to."

Not thinking it prudent to put their heads out, they crept close to the edge and squatted down to listen. For a time they heard nothing. Finally, though, they saw something that startled them very much. It was a buffalo-hide rope that was being let down from above, past the mouth of the cave!

For a few moments they supposed that an Indian was about to come down the rope from the top of the cliff. But a little later the tightness of the rope told them that an Indian was coming up from the canoe below; and the rope's movements meant that he was being drawn up.

"I can stop that!" whispered Ben as he jerked out his hunting-knife and stood waiting.

The moment he caught sight of the Indian's black head, he leaned forward and drew his knife across the tightly-stretched rope.

Discovering Ben's knife, the Osage being drawn up uttered a fierce war-whoop. At the same time the Indians in the canoe below began to yell, and likewise those on the cliff above.

But it was all to no purpose. The buffalo-hide parted under the keen-edged knife, and the warrior dropped straight down, clutching at the rocky ledge as he fell! Ben leaned over, not in time to see the falling Osage strike, but in good time to see the canoe filled with Osages overturning, and to see all the Indians struggling together in ice water. There was now no danger from them and Jodo also came close enough to look down.

For the five Osages in the water the misadventure was no laughing matter. Between two upright walls of rock, they would have to swim more than a hundred yards downstream before they could find a place where they could climb out.

While Ben and Jodo were still gazing down, one of the swimming Indians glanced up and saw them. Their grinning faces must have provoked him, for he uttered a yelp of rage. Ben waved his hand at them, and called out the Osage word for cold.

"That disposes of those fellows for a time," he remarked, after the swimming Osages had disappeared. "The weather is pretty sharp today, and they'll have to start a fire and dry themselves before they can do much more. And they've all got their guns wet, or lost them altogether. They won't be dangerous for a good while."

"No. They'll try again, and keep on trying again."

"And what can we do?"

"Use our heads to outwit them. But they'll probably starve us out before we can tire them out. That's their advantage."

Hours passed, and nothing had been heard or seen of the Osages. Jodo suggested that as one of the two in the cave would have to be on guard all the time now, the other should be sleeping all the time. So they took turns at watching and lying down.

During the rest of the day the Osages made no further attempts to get into the cave. Ben, suspecting that something would be likely to happen not long after dark, chose to stand guard first.

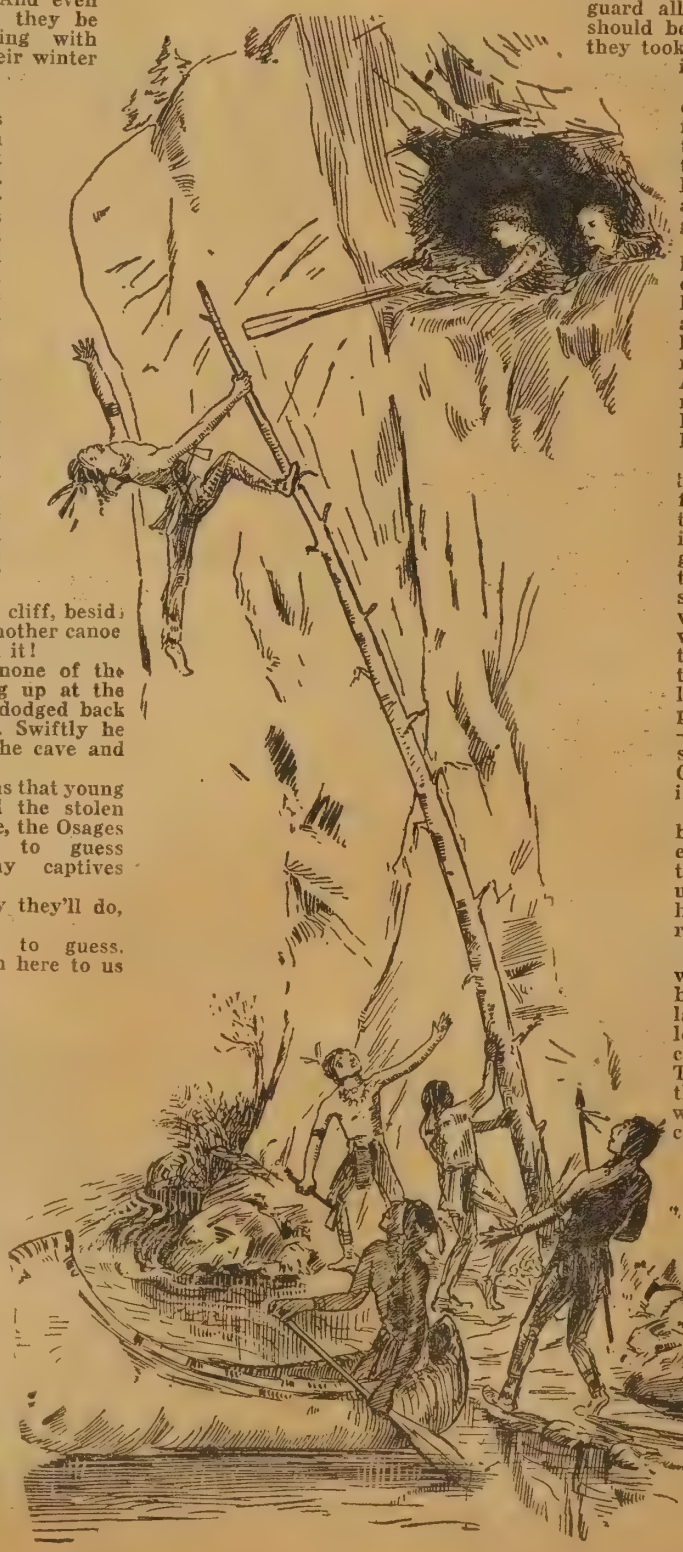
For an hour or two after his companion had lain down and gone to sleep, Ben walked restlessly back and forth in the cave; but he went often to the cave's mouth to look and listen. At length he began to hear noises in the water below. He crept to the edge of the ledge and peeped over.

Now he could make out two canoes down there, both filled with Indians. What they were doing or preparing to do he could not even guess. Later he discovered that they were pushing something up the limestone wall. He suspected what it was; and when the end of the pole came up a foot or two above the edge of the ledge, he knew that his suspicion was correct. The pole —an Indian ladder—had short limbs on it, and an Osage would soon be climbing it.

Ben did not wake Jodo, but crouched low and waited. He got hold of one of their paddles, intending to use that on any Indian's head that came within reach.

Soon he heard noises which told him that somebody was coming up the ladder. Peeping over the ledge, he saw a warrior climbing slowly, cautiously. The pole was standing in the water, but the Osage was coming from one of the canoes.

When the climbing Indian was so close his breathing could be heard. Ben put the paddle against the top of the pole and gave it a sudden outward push. And he kept pushing as long as he could reach it. Then he looked down and saw both pole and Indian falling away from the cliff. But scarcely had the splash occurred when two rifles crack-



The Indian fell with a crash down amongst his fellow redmen below.

ed from the top of the opposite cliff, and both bullets struck the rocky floor near the white man. But for the dim light he might have been killed.

Hastily he sprang back, out of sight of his enemies. Evidently the Osages were in a murderous mood, and stood ready to kill the fugitives if they could.

Jodo, awakened by the rifles, now came to join Ben. The two whispered together of the danger that threatened them.

"I think we can keep them from getting into the cave tonight, but I don't see how we can tomorrow, Jodo. In daylight, if we venture close to the cave's mouth, the redskins on the opposite cliff will see us and shoot us."

"If we just had plenty of powder and lead——"

"Yes, but we haven't any powder and lead to speak of. And even if we had, and could keep the Osages out, they could sooner or later starve us into surrendering."

"Then what can we do, Ben?"

"I'm thinking we'd better find the back door to this cave, if there is a back door, and get out of here and travel as fast as we can hoof it."

"And where shall we go?"

"I've been told that a few days' travel south of here one can find an occasional hunter's cabin. I'm thinking we'd better make for that country and try to obtain a supply of ammunition. After that we shall not feel so frightfully helpless."

"Well, then, the sooner we get started the better. We don't want to wait till we haven't any rations to travel on. But can we be certain that this cave has a rear outlet?"

"I don't know how else that growly beast got in here."

"But will the beast let us get by him?"

"When we go with a light, he'll be apt to keep out of our way. If he doesn't, we shall have to shoot him. He may be out himself. It's night-time, hunting-time with him, and the chances are that he is out."

"Well, we've got sticks enough to make a light. They're not good material for torches, but maybe they'll keep blazing till we get through."

"All right, Jodo. You gather up some of these leaves and go back there, entirely out of sight of the entrance, and strike a fire. When the sticks get to blazing well, let me know. I'll stay here and see that no redskins get in till we're ready to start."

"I will. But be careful, Benoni, and don't get shot. That would be dreadful, even if you were only wounded."

Jodo gathered up their few sticks and some leaves and went on into the cave. His companion sat down near the edge of the ledge to keep watch. Hearing paddling below, he found a good-sized stone and hurled it down. The canoe was quickly in retreat. He listened for it to return, but failed to hear it.

Soon Jodo came running through the darkness to report that the fire was burning, and that if Ben did not hurry the cave would be filled with smoke.

"We must leave the buffalo-robes and the water-gourd, but we'll take the lariat."

"Why leave the buffalo-robes, Ben? Raw as the weather is, we can't sleep warm without 'em."

"I know. But we've got to travel light and travel fast, or the Osages will run us down before we can reach a hunter's cabin."

"But we haven't much to carry. If you can take care of all the blankets. I can fold the robes up and make a small, tight package of them, and fasten it on my back. I've got deer-skin strings enough."

"All right, then; we'll try to take them."

Soon each had his pack on his back. With his rifle in one hand. Ben took up three of the blazing sticks, holding them together so that they would keep blazing. Jodo gathered up the sticks that remained. Then they started.

The cave, as they advanced in it, wound first in one direction and then in another; but it continued of about the same size, and apparently on the same general level.

When the fugitives had hurried on a few hundred yards, they heard a loud growl ahead. Peering into the darkness, they could see eyes shining, and could make out the faintest outline of a wild animal—a panther. Both stopped suddenly.

But Ben started on. "He'll get out of the way before these lights come very close, I'm guessing."

He was right. The beast stood growling till they were only a few yards away. Then he turned tail and fled, growling as he ran. Soon he was out of sight.

On the fugitives hurried. Not till they had traveled nearly a mile was there any change. Then the air felt colder, and they came to where the passage way was almost choked by boulders. Over the boulders they climbed, to find themselves under the open sky. They were on a steep hillside, and a mountain rose behind them. They had come under the mountain.

A snow-drift lay just outside of the cave, and they promptly thrust their blazing sticks into it, to extinguish them. The panther must have fled out of the cave, for they failed to catch sight of him again.

The stars were shining, and in the leafless woods there was light enough for the two fugitives to see their way. In all the open places the sunshine had melted the snow, and they would avoid the snow-patches as far as they could, at least for the first mile or two.

Fifty yards down the hill-side to a ravine, now dry, they hurried. Then they climbed a high, wooded hill. From the top of that hill they got their bearings, and were soon tramping southward as fast as they could walk. Very important was it that they should be many miles away when daylight came.

(To be continued.)

## What Big Brother Saw in One Day

How many of us, in these days of stress, take time to pause for a brief moment now and then, to see the beautiful things by which we in America are surrounded—especially those of us whose privilege it is to live in rural districts, close to nature, where God's handiwork is most apparent?

It seems to me that there never was a time in all the history of the present generation when an inventory of our daily blessings and the right thinking that follows would do as much to bring about that peace of mind which is so much needed during the troubled days which we are experiencing.

Desiring to encourage that idea among our children we planned a little contest between two of them, Big Brother, who is 9, and Little Sister, who is 6. To make the contest more spirited we offered a small cash prize, with war savings stamps in view, to the one who at supper time on the following day submitted a written list of the largest number of beautiful objects or activities which had come under his observation during that day. We explained that there is beauty in many of the most ordinary things we see every day if we would only look for it.

Well, the contest started the next morning. Both Big Brother and Little Sister were up early. Big Brother, of course, had the advantage. He was older in the first place and could make a note of the things he saw beauty in as he went to school and about his play. Little Sister was compelled to whisper her findings to her mother, who faithfully made note of every one. There was great activity as supper time drew near. As we had expected, Big Brother won. Here is the list of things beautiful which he observed in one day. The list is just as he prepared it:

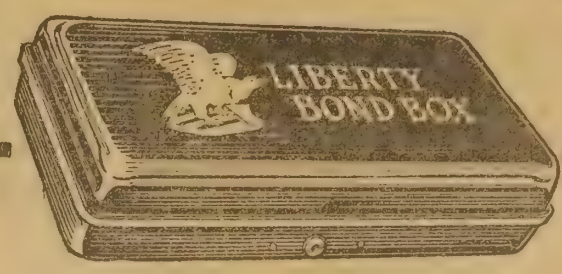
Saw morning star.
Saw boy help mother.
Saw boy help a bird with a broken wing.
Saw sunshine.
Saw dew on lawn.
Saw dew on hedge.
Saw robin building a nest.
Saw daffodil.
Saw peach blossoms.
Saw green fields.
Saw apricot blossoms.
Saw hyacinths.
Saw girl smile at me.
Saw a boy laughing.
Heard a meadow-lark sing.
Saw the green hills.
Saw mountains with snow on their caps.
Saw the blue sky.
Saw a United States flag waving.
Saw a girl give a boy a sheet of paper.
Saw sun when nearly down.
Saw a bluebird soar among the clouds.
Saw a robin on the lawn.
Saw the bees getting honey out of the fruit blossoms.
Saw all the children shout and laugh after school was out.
Saw James and Helmer playing in the sand pit, laughing.
Saw tulips.
Saw cloud shaped like a carrot.
Saw mother love Frederick.

Surely, Big Brother and Little Sister, too, have a little different outlook on life, even for the one brief day they spent preparing lists of the things that seemed beautiful to them. We are quite certain of one thing: That the little contest filled our home with more simple joy than had been found there for a long time. R. W. F.

### Winter Wheat Acreage.

The government reports 42,170,000 acres of winter wheat sown, the largest acreage in history, but under conditions not as favorable as last year. However, a crop of 582,000,000 bushels is within the possibilities. Last year's crop was 418,000,000 bushels.


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In years to come, when your Liberty Bonds and War Savings Stamps mature, you will want to be able to put your hands right on them. Now that you have sacrificed to buy them, in justice to yourself insure them against being lost or destroyed by putting them in this strong, permanent box. There is room enough to include your insurance and other private papers.

Made of Bessemer steel, handsomely finished in black hard-baked enamel and decorated with national emblem in gold, the safe-box is artistic and indestructible. The size is 11½ inches long, 5½ inches wide, 2½ inches deep. The box locks securely, and we supply you with two keys.



John F. Janssen.
Who cut one-third off the price of coffee?

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### *Read This Unusual Offer:*

Because I know that this box is needed in every home, and because the fine flavor of my coffee will make each purchaser my permanent friend, I am going to distribute 1000 of these boxes to patriotic families, as follows:

**10** pounds "Extra Choice," a perfectly delicious blend of high grown coffees—better than the most, and as good as the best 45-cent coffee on the market together with one of these handsome steel boxes..... **$3.95**

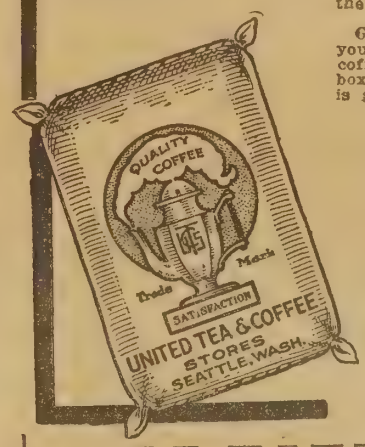
For two years I have unreservedly guaranteed the quality and safe delivery of this coffee, and have never received a single order back.

## I PAY ALL THE POSTAGE

The price includes parcel post on both the box and the coffee to any place within 300 miles of Seattle.

Guarantee—Your money will be quickly returned if you are not satisfied with either the extra choice coffee or the enameled Bessemer steel Liberty Bond box. The goods are securely packed, and safe delivery is guaranteed.

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**A BIG STOCK TO SUIT YOUR TASTE**
No matter what your preference in the line of tea, coffee, chocolate or cocoa. I am sure I can satisfy you. Write for free price list showing our complete line.

UNITED TEA & COFFEE STORES.
1003 Western Avenue, Seattle.

John F. Janssen
Manager.

## This Blank Makes Ordering Easy

J. F. Janssen, Manager.
United Tea & Coffee Stores.
1003 Western Ave., Seattle.

I accept your offer of Liberty Bond Box and 10 pounds of your Extra Choice Coffee, parcel post prepaid, with satisfaction guaranteed.

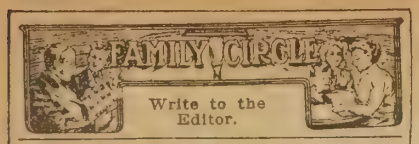
Enclosed find CHECK / MONEY ORDER (Cross out one) for $3.95

| IMPORTANT | | |
|---|---|---|
| DO YOU WANT IT | | |
| Whole | Ground Medium | Ground Fine |
| | | |
| ARE YOU USING | | |
| P'r'c'l'tor | Coffee pot | Drip bag |
| | | |

Place X in proper space above. W-8

..... Please sign your name above very plainly.

| TOWN R. F. D. NO. | COUNTY | STATE |
|---|---|---|
| | | |




ALICE W. BARLAND,
Editorial Contributor.

## "Summer Boarders"

By LISSIE C. FARMER.

The farmer's wife who wishes to swell her income during summer months by keeping "summer boarders" will find most of her patronage coming from salaried people, and women with children. These people come to the country for a change. Do not make the mistake of trying to give them just what they get in town, but rather, in the place of expensive salads, for instance, give them plenty of fresh cucumber, onion, lettuce and tomato combinations; hot and cold slaws with sour cream dressings; chow chow; pickled beets, potato salads, etc. All of these things the country woman can secure from her own garden, and with plenty of ripe fruit, yellow cream, fresh butter and eggs, chicken, and fish from the neighboring stream, the ideal bill of fare for city-tired people has been attained.

Save work, as far as possible. Serve as many raw combinations as you can, to save the heat and worry of cooking. Save laundry work by serving breakfast and luncheon without a tablecloth, substituting mats and doillies. Have plenty of wild flowers, greenery and grasses in the dining and living rooms. Big clusters of fir and cedar branches and oak and maple leaves are a delight to the eye. A screened-in and vine covered porch is a great comfort during hot weather. Choose large bedrooms, if possible, and don't clutter them up with knick-knacks.

Women and children are apt to cause annoyance if the other boarders are unmarried people, but as the former often stay the whole summer through, it is worth while to make a place for them. Often tents or shacks, with board at the farm house, will solve the problem. A fairly substantially built tent house, usually facing north or east, and with a bunk built against the wall, makes a very comfortable summer home. If the renters are to do their own cooking, often the cook-stove can be set up outside the tent. The heavier articles of furniture and cooking utensils should be furnished by the farmer, while the boarder will bring silver, linen, etc. Many mountain and beach resorts are adopting this plan. Keeping summer boarders or lodgers is a good line of business for the woman who manages it right.

### Cafe au Lait.

For the grownups French coffee, or cafe au lait, is a nourishing drink as well as a stimulating beverage.

Make strong black coffee, and while hot add to it one-third or one-half as much scalding milk. Cover and set in boiling water until needed. Add cream when served.

### CLOTHING TO SAILORS
### Must Be of "Regulation" Make

Hundreds of articles of clothing fashioned by loving hands at home must be disposed of by men undergoing training at naval stations as a result of the recent enforcement of rules prohibiting the wearing of non-regulation clothing.

The order which prohibits the wearing of the clothing also prohibits the possession of it, and hits a number of knitted sweaters, helmets, gloves, etc. The order, a copy of which has been posted at the San Diego training station, according to word received here, says in part:

"Men are cautioned that nonregulation clothing is not to be worn at any time on his station. Only clothing regularly drawn from 'small stores' will be permitted."

Practically every man on the station has some article from home which is affected by the ruling, it is said.

The trouble arises with the comforts made by individuals who do not take the trouble to obtain the Red Cross specifications.

### Fruit for Dessert.

By using fruit for dessert instead of rich pies and puddings you will conserve wheat flour and fats as well as sugar. Besides, the fruits are more wholesome and often less expensive. Bake or stew your fruit with corn syrup instead of sugar. The result is very good. For stewing use one-half cup of syrup to one pound of fruit. When dried fruit is used, soak it first in water overnight and cook for 10 minutes.

### War-Time Mucilage.

Get a large mouthed bottle, an ink or vaseline bottle will do. Gather the gum from cherry trees, put it in the bottle and cover with cold water and it is ready for use in 20 or 40 hours or less. As it is used, from time to time, add more water and in this way the children can use it freely with no cost to you. We have used it three years and it fills the bill.

MRS. I. RIGG.

Cheney, Wash.

### Drying Corn and Peas.

To the Editor: As it won't be long until we can dry corn and peas I will tell how I dry them. The corn I cook, then cut from the cob, put on a frame on which a flour or sugar sack has been tacked. Put corn on, cover with cheese cloth and it will dry so much quicker than when put on a table or shelf. The peas I shell, but don't cook. They dry quickly.

### Bullets Never Touch Him.

England has one army man who appears to have a charmed life. He is Captain George C. Foulds, who is now lecturing in this country. Foulds went to the Flanders front in 1915 and has gone through every big battle of the war without a scratch.

## Crochet and Tatting Designs

By WINIFRED WORTH.



**Novelty Braid Yoke.**

Here is something that really deserves the name novelty. You will be much pleased with the results of this design.

Take braid the desired bust measure.

Make 1 dc. in first L. 1 ch. 1 dc in next. Continue across. Going from one cone omit the 1 ch. finish both sides the same, crochet together. For shoulder strap take braid desired length crochet as the other. Attach shoulder straps.

To make beading crochet 1 dc. 4 ch. 1 dc. over 4th spoke. 4 ch. 1 dc. over 4th spoke. Continue around yoke.

**For Edge.** The first hole 1 sc. 3 ch. 1 sl. st. in same hole. 4 ch. 1 sl. st. in same. 3 ch. 1 sl. st. in same. 2 ch. 1 sc. in next hole. 3 ch. 1 sl. st. in same. 4 ch. 1 sl. st. in same. 3 ch. 1 sl. st. in same. Finish arm hole the same.

**Edge for Bottom of Yoke.** 1 dc. in first spoke, 2 ch., 1 dc. in 3d spoke. Continue.

Knit vest yokes are very popular. One of them is shown in the next instalment.


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# The Washington Farmer

617 Central Bldg., Seattle, Wash.

Review Building. Spokane, Wash.

# Patterns

2439—A good sport's suit. Cut in 4 sizes: 14, 16, 18 and 20 years. Size 16 requires 4 3-4 yards of 44-inch material. The skirt measures about 1 3-4 yards at the foot. Price, 10 cents.

2430—Girl's dress. Cut in 5 sizes: 2, 4, 6, 8 and 10 years. Size 2 requires 4 yards of 27-inch material. Price, 10 cents.

2116—A set of serviceable caps. The pattern includes the three styles portrayed. Cut in 2 sizes: Medium and large. No. 1 will require 1 yard; No. 2 will require 7-8 yard; No. 3 will require 7-8 yard of 27-inch material for the medium size. Price, 10 cents.

2428 Lady's dress. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 38 requires 5 1-2 yards of 40-inch material. The skirt measures about 2 yards at its lower edge. Price, 10 cents.

1719—Girl's apron. Cut in 5 sizes: 2, 4, 6, 8 and 10 years. It requires 2 1-4 yards of 36-inch material for a 6-year size. Price, 10 cents.

2435—Lady's apron. Cut in 4 sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. A medium size requires 4 5-8 yards of 36-inch material. Price 10 cents.

2449—Girl's dress. Cut in 4 sizes: 6, 8, 10 and 12 years. Size 10 requires 4 3-4 yards of 36-inch material. Price, 10 cents.

2046—Lady's house dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 6 1-2 yards of 44-inch material for a 38-inch size. The skirt measures about 2 2-3 yards at the foot. Price, 10 cents.

2422—Girl's dress. Cut in 5 sizes: 4, 6, 8, 10 and 12 years. Size 8 requires 2 3-4 yards of 36-inch material. Price, 10 cents.

2432—A pretty negligee. Cut in 4 sizes: Small, 30-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bubst measure. A medium size will require 6 1-2 yards of 36-inch material. Price, 10 cents.

2048—Lady's camisole. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 1 3-8 yards of material for a 38-inch size. Price, 10 cents.

2090-2079—A smart sport's dress. Waist 2090 cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 3 yards of 36-inch material for a 38-inch size. Skirt 2079 cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure, and requires 3 1-4 yards of 44-inch material for a 24-inch size. It measures 2 7-8 yards at the foot. Two separate patterns, 10 cents for each pattern.




Please fill in this order and mail with remittance to:
PATTERN DEPT., PACIFIC NORTHWEST FARM TRIO, Spokane, Wash.

Enclosed find.....cents for which send me the following:

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Name ..... ..... .....

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R. F. D. No.....Box No.....Street No.....

Be sure to give the pattern number and the correct size.

## Hot Milk Drinks.

Hot milk is the most restful of drinks when one is tired, and a sleep-inviting drink before going to bed. Hot milk is an agreeable change to offer children and a real addition to the supper meal. Why not hot milk between meals, instead of the customary piece of bread? Bring the milk to a simmer, but don't allow it to boil.

### How to Make Good Cocoa.

It is a truism that children should have milk, yet some dislike it. Cocoa, the universal favorite, is a solution. Cocoa and bread is a good supper. For children less cocoa can be used than the recipe calls for—they like it just as well.

1 teaspoonful cocoa
1 teaspoonful sugar
1-2 cup water and 1-2 cup milk or 1 cup milk.

Mix sugar and cocoa and stir in enough boiling water to make a paste. Add one-half cup boiling water, cook 15 minutes. Add milk, heat and serve. If all milk is used, boil the cocoa and sugar with just enough water to make a thin paste. Then add the milk.

### Short-Lived.

"Did you ever hear of an idle rumor that didn't work overtime?"

"Only one."

"And what was that about?"

"Someone who didn't know Mr. Grabcoin very well started a report that he would give away $10,000 to the deserving poor."—Birmingham Age-Herald.

### Time He Was Taxed.

Scoutmaster (on overnight hike with troop)—Bill, why eat so much grub?

Scout Bill (between bites)—I'm trying to produce a well-stuffed skin for the taxidermy merit badge.—Boy's Life.



What a multitude of horrible deeds have been done by men, of which animals have never been guilty!—Our Dumb Animals.

## Home-Made Soap.

To the Editor: I saw your article on making home-made soap in the last issue of The Farmer. As I have very good success making soap from pork cracklings and bacon rinds or rusty bacon after the streaks of lean meat have been removed, I think perhaps my recipe will prove more practical than one using clarified fat.

To each three gallons of water add one can of lye that will stand the boiling process. Heat this to boiling point in iron kettle, then add six pounds of fat and boil until all fat is dissolved. Try a little by cooling; if it hardens, it is done, if not, boil it longer. Remove from fire and cool, then cut into cakes and put to dry.

ANNA PENDLETON.

Molalla, Ore.

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It is built of thoroughly seasoned, selected staves, hooped with strong billet steel hoops, bound with malleable lugs—has an anchorage system that makes it staunch and firm even when not filled and hinge-rod doors that can't sag, swell or freeze into the frame. At least

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# Inexpensive Trimming for the New Garment

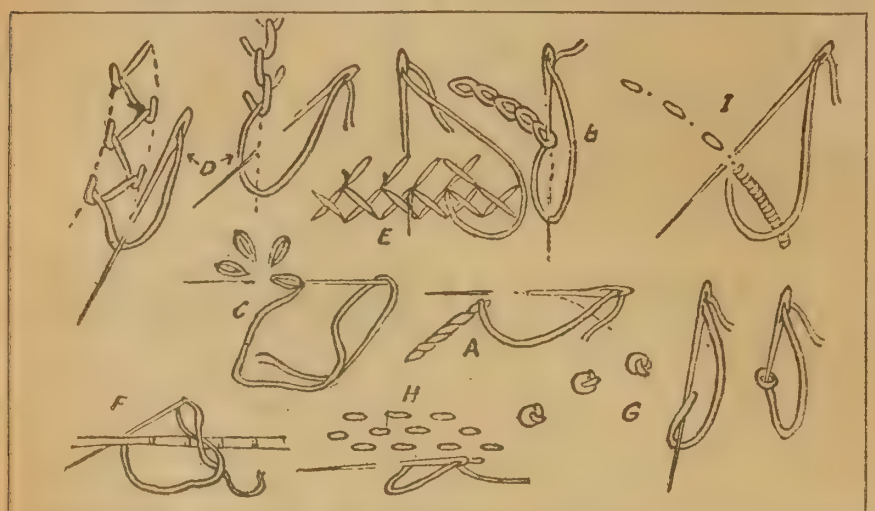
The decorations of a garment need not be elaborate or expensive, says Mary E. Robinson of the University of Missouri in her bulletin, "Principles of Sewing." Self-trimmings or simple embroideries add to the appearance.

A garment may be made very attractive and money may be saved if the trimmings used are of the same material as the garment itself. Following is a suggestive list of self-trimmings.

**Pipings, binding, folds, cordings, shirrings, tuckings, plaitings, pockets, bound buttonholes, buttons, reversed hems.**

If the right colors and materials are chosen, a touch of simple embroidery often adds to the distinctiveness of a garment.

**The outline stitch,** Fig. A, is made on a line from left to right, the stitch being longer on the right than on the wrong side. The thread must be thrown on the same side each time so that the effect will be regular.



**Decorative stitches—A, Outline; B, Chain; C, Lazy Daisy; D, Feather and Briar; E, Cross; F, Couching; G, French Knot; H, Darning; I, Satin.**

**The chain stitch,** Fig. B, may be used as an outline stitch. In making this stitch, a succession of blanket stitches are made one after the other. This stitch may be used for decoration or as a padding for satin stitch embroidery.

**The lazy daisy,** Fig. C, is a variation of the chain stitch. Two stitches only are needed for each petal of the daisy. The first is a chain stitch, the second is taken through the material to hold the first in place.

**Feather and briar stitches,** Fig. D, are variations of the blanket stitch. These stitches make beautiful and effective trimmings. The feather stitch is made with a slanting stitch toward the center, first on the right and then on the left side. The briar stitches are made more nearly parallel, but they alternate on the right and left.

**The cross stitch,** Fig. E, may be made over the threads in loosely woven materials, such as scrim or canvas. In fine materials canvas must be basted into place, the stitches made over this and the canvas removed; or if a pattern is stamped upon the material no canvas is needed. The stitch is made by taking the needle from the lower left-hand corner of the square to the upper right-hand corner, making a slanting stitch. Then a stitch is taken on the underneath over to the upper left-hand corner, brought through the material to the lower right-hand corner, thus making a second slanting stitch which crosses on top of the first and completes one cross stitch. The needle is again brought up at the lower left-hand corner of the next square and the operations repeated.

**Crouching,** Fig. F, is a decorative stitch, which may combine different shades or colors very attractively. Two threads are used in making this stitch. One is held in place on the material with the right hand. The second thread is used in making the stitches which hold the first thread in place. These stitches are made over the first thread and at right angles to it and are made one-fourth to one-half inch long on the wrong side.

**The French knot,** Fig. G, is made by bringing the needle through the material where the knot is desired; the thread is thrown over and under the left thumb, or over the needle, making a loop; the loop is pulled down to the material, and a small back stitch is taken, thus bringing the needle out where the next knot is to be. French knots are very attractive used alone or in combination with other stitches.

**Darning,** Fig. H, is a succession of parallel rows of short, regular stitches. This stitch combines well with the outline or satin stitches.

**The satin stitch,** Fig. I, usually has as its foundation the chain or outline. If the material is especially sheer the stitches are the width of a thread apart. The padding is always made at right angles to the direction in which the satin stitches are to be be made.

# Kulture Is Not New

"Every village they have passed through has been the victim of what is only organized pillage. Every city has been practically sacked, ransacked on system; its citizens plundered, its civil officials terrorized, imprisoned, outraged or killed. The civil populations have been, contrary to the usage of modern warfare, forced to serve the invading armies, brutally put to death, reduced to wholesale starvation and desolation. Vast tracts of the richest and most industrious districts of Europe have been deliberately stripped and plunged into famine, solely in order that the invaders might make war cheaply. Irregular troops, contrary to all the practice of war, have been systematically murdered, and civil populations indiscriminately massacred, solely to spread terror. A regular system of ingenious terrorism has been directed against civilians, as horrible as anything in the history of civil or religious wars. Large and populous cities have been, not once, but 20, 30, 40 times bombarded and burnt, and the women and children in them wantonly slaughtered, with the sole object of inflicting suffering. All this has been done not in license or passion, but by the calculating ferocity of scientific soldiers."

The above was not written, though it might have been, yesterday, last week, last month, or last year. It appeared in the English Fortnightly Review, February, 1871, shortly before the surrender of Paris. Frederick Harrison, the writer, is still alive. Its statements were true then, are true now. Julius Caesar in his Commentaries narrates events which show that even before the time of Christ the Germans demonstrated the possession of all of the rudiments of their modern "kulture." It is no new thing; and hundreds of thousands of men will have died in vain in this war if this sinister thing is not absolutely and utterly exterminated forever by the forces of civilization arrayed against it.

# Men Are Dying Today

As we go about our daily tasks in peace and safety men are dying every minute on the battlefields of Europe to save civilization. Our own gallant soldiers are shedding their blood in France, and our sailors engulfed in the waters of the Atlantic as they go in defense of America's rights and honor.

Upon our performance of the work committed to us depend the lives of thousands of men and women, the fate of many nations, the preservation of civilization and humanity itself; and the more efficient and prompt we people of America are in doing our part, the more quickly will this war come to an end and the greater the number of our soldiers and sailors who will be saved from death and suffering and the greater number of the people of other nations released from bondage and saved from death.

To work, to save, to economize, to give financial support to the government is a duty of the nation and to the world and it is especially a duty to our fighting men who on land and sea are offering their lives for their country and their countrymen.

## Salmon Pudding.

One can of salmon. Remove bones and skin. Fill a pie dish with alternate layers of bread crumbs and salmon, top layer, bread crumbs. Place small pieces of butter on top and moisten pudding with a little milk in which one egg has been beaten. Bake in a moderate oven 35 minutes.

### Sardine Toast Sandwich.

Two slices of bread one-half inch thick, toasted and buttered. Have ready minced sardines. Place layer between toast, and on top put two poached eggs. Garnish around plate with shredded lettuce slightly salted and peppered.

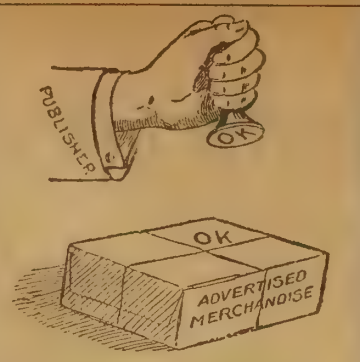
### Parkin.

Two tablespoonsful fine oatmeal; 1½ tablespoonsful corn syrup, 4 oz. shortening, 2 oz. brown sugar, ½ oz. ginger; a little milk, sufficient for one cake.

Method—Rub the shortening into the oatmeal, and add the sugar and ginger. Stir in the syrup with a wooden spoon. Rinse out the syrup vessel with sufficient milk to make the mixture smooth, but not to drop too easily from the spoon. Have ready a meat tin, lined with greased paper. Pour in the mixture and bake in a steady oven one hour. When the parkin is quite cold, cut into squares. Place in an air-tight biscuit tin and the parkin will keep for months. F. W.
Weston, Ore.

### Snake Starts Fire in a Grocery Store.

A snake, dropping from a bunch of bananas in a Cincinnati grocery store, so frightened Miss Edna Meader, a clerk, that she knocked over a stove, setting the store afire. Several customers who caught sight of the snake also fled, without attempting to extinguish the fire. A negro boy passing by took in the situation at a glance, used a bucket to extinguish the fire, then carried the snake by the tail into the street.


## Goods With a Reputation

The following from the "Christian Herald" voices an important principle regarding advertising:

"Everything costs so much!"

We hear it on every side. More than ever we must spend with care—must make our money go as far as possible—must know what we are getting.

We do this when we buy goods with a name—goods with a reputation—advertised goods.

Advertised goods are standardized. The maker's name or trademark is a bond of quality. He must live up to the claims he makes or he can not continue to advertise, because;

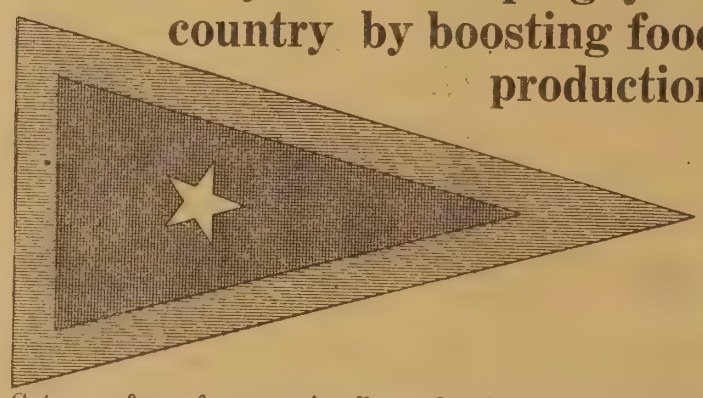
(1) People will not "come back" for more.

(2) Publications that value their readers' interests will not accept his advertising.

When you buy goods advertised in this paper you are practicing true economy. The advertiser stands back of them to see that you are satisfied; and we stand back of the advertiser.

# FARM SERVICE FLAG

## Display one of these pennants to show you are helping your country by boosting food production



Get one of our farm service flags, showing a big star to represent your farm and smaller stars for each member of your family who is helping produce food. This is the big, new idea in service flags. It is distinct from the war service flag; as it applies exclusively to the farm. Described as "appropriate" and "attractive" by the department of agriculture. In securing your order state the number in your family who are aiding in food production and we will supply the correct number of stars without extra charge.

## AWARDED FOR SUBSCRIPTIONS

**Offer No. 1.**

***Paper Pennant***

A pennant, 9x22 inches, printed on heavy enamel paper in full colors, will be postpaid to any one securing and sending in ONE NEW subscription to this paper. (One year 25c, three years 50c; 5 years $1.)

**Offer No. 2.**

***Bunting Pennant***

A pennant, 9x22 inches, made of cotton bunting (just the thing for the auto, front porch or the flag pole), will be mailed postpaid to any one sending us THREE SUBSCRIPTIONS TO THIS PAPER. Secure three of your neighbors under our special bargain rates and receive a bunting "Farm Service War Flag."

**THE WASHINGTON FARMER**
**SPOKANE, WASHINGTON.**




### Feel Lonesome Without Their Pets.

Dear Aunt Nellie: I am very interested in the children's letters. I have read all the letters in The Farmer. I am 11 years old and in the sixth grade. My sister's name is Lela and my brother's name is Gerald. Lela is 11 and Gerald will be 9 soon. Well, dear friends, I am going to tell about the Red Cross here. They had a sale, and it brought them $600. I have knit two squares. My sister has started a square. We knit the squares all together and make a quilt of them. I have a little calf. Her name is Daisy Bell. We three children have two young colts of our very own. Their names are Fern and Chief. They are a nice little team of bays. Uncle had a sale February 25. He has 20 horses left and 11 cows, 150 chickens, a 75-horsepower caterpillar, also a combine. It looked pretty to see the caterpillar pulling the combine. We have a dog. His name is Tip. He has tips on his toes, on his nose and tail. He is coal black, with a white strip down his breast. We have some Belgian hares. We had six big rabbits. We feel very lonesome when we live in town to go to school, without our pets. I forgot to tell you that our dog will talk. When we tell him to do anything he will go to the one we point to. He drives anything. Dear friends, I have something to say about doing our bit. Some people think Hooverizing with food and paper is silly. But when we stop to think, why we know we would want plenty to eat if we were over in France, or at these camps, and also we would like to have plenty of paper to write home to tell the folks and friends of our troubles and our good times. Now, who thinks the same as I do? Let me hear in their letter what they think of doing our bit. I am trying to do all I can, even if I am small in this world. My Uncle Andrew is taking The Farmer. That is how I get to read the letters—Delia Geneva Johnsen, Lock No. 101, Mansfield, Wash.

### Helen Tells About Her School.

Dear Aunt Nellie: I am going to write you about my school. There are 27 in each room. I have to walk one mile to school. The names of the children in my grade are: Blanch, Alice, Ella, Everet and Gerald. All of them are in the fifth grade. My sister is in the high school and my brother is in the eighth grade. My teacher's name is Mr. Parker. I like him very much. The girls at my school play ball most of the time. Sometimes we play hop-scotch. At our school the boys have one part of the school ground and the girls have the other half, but I would rather have the girls and boys together. We can play anti-I-over when we can both play together. The boys have all of the swings on their side and we can't swing in them. The girls have the pump on their side and the flag pole and the teacher's house. The boys have the barn and wood sheds on their side. The boys eat their dinner out in the woodshed and the girls eat their dinner on the cement steps and the sidewalk. I have red hair and gray eyes. I am 11 years old. My birthday is January 12. Have I a twin? If I have I would like to hear from them. I wish some of the cousins would write to me. I would be very glad to answer them.—Helen Schoenberg, Prosser, Wash.

### Sunshine in the Heart.

Dear Aunt Nellie: For my subject this time I will choose Sunshine. I suppose every boy and girl likes sunshine, do you? I do. I certainly think sunshine is needful all the time. In summer, sunshine makes flowers and grass grow and warms the world with cheer and happiness. I have read in books of low families live in dirty little nooks where no sunshine can reach them, I think that is miserable, don't you? I live in the country so whenever the sun shines we always have sunshine. Sunshine also kills germs and is the best cure for consumption. It also dries the ground and warms plants and trees in its kind way and helps them grow. If we had no sunshine this world would be dark and gloomy and very unpleasant to live in. There are two kinds of sunshine, one sunshine which shines and the other is sunshine in your heart. I suppose all cousins know what that means. I suppose that you all know that learning something good and worth while is getting good, pure sunshine in your heart. The missionaries put sunshine into many people's hearts by teaching them the good and right and teaching them the Bible, book of books. I hope that every boy and girl has some good pure sunshine in their hearts. I am 13 years old and my birthday is October 26. I have found one twin. Have I any more? I am in the eighth grade at school. I get out at 2 o'clock every day now because I only have two subjects to study, history and arithmetic. I am so glad when summer comes because then we can have lots of fun, go visiting, and take long rides to beaches and bays in the automobile. I take music lessons from Madame Edgren. She is a fine teacher. I have joined the Red Cross and have knitted one washcloth. I am making wristlets now. I simply love to knit. My sister and I got a beautiful piano for Christmas.—Elsa Mattson, age 13, R. F. D. 5, Box 32, Mount Vernon, Wash.

### Teacher Always Has a Smile.

Dear Aunt Nellie: When I saw Elva Green's letter I thought I would write too. I used to go to school with Elva when she lived at Lake Creek, Idaho. I wonder if she will remember me? I was 14 years old December 21. I am in the seventh grade. I hope to finish the eighth next year. I have one sister 11 years old. I have two brothers, one is 16 and the other is 20. My sister's name is Wauneta. My brother's names are Edwin and Freeman.

I like to go to school. We have one mile to walk. We have the nicest little teacher, I think, that could be found for miles around. Her name is Miss Newcomb. She always has a pleasant smile for us when we get to school. We live on a 20-acre farm right by Weller Siding, Idaho. The trains pass by going to and from Coeur d'Alene lake twice a day. We have three cows and two work horses. The cows' names are Lady, Jersey and Spot. The horses' names are John and Mollie. We also have three riding ponies. Their names are Jack, Daisy and Billie. We have a dog and his name is Jyp. This winter the girls in our school hemmed towels and handkerchiefs for the soldiers. I am a member of the Red Cross. I think every one should be a member and do all they can in every way to help win the war. We had a basket social and program at our schoolhouse about three weeks ago. We took in $88.25. Half of it went to the Red Cross; the other half to the school. Have I a twin?—Wynona Tella, Rockford, Wash.

### Cousin Julia Writes a Letter.

Dear Aunt Nellie: I have never written to the Children's Corner before. I will be 9 years old the second of June. I am in the third grade at school. I have two sisters and one brother. My sisters' names are Helen and Jennie. My brother's name is Edwin. We have two cows, a little calf, two little pigs and about 50 chickens. We are soon going to get some little chickens, too. My papa owns 10 acres of land here. May I join the Children's Corner? My papa gets the Farmer and I like to read the letters from the other children.—Julia Jacobson, Hobart, Wash.

### Went to Visit Mother.

Dear Aunt Nellie: I am 10 years old and in the fourth grade. I have brown eyes and brown hair. Have I a twin? This is the first time I have written to the Corner. I have one brother and one sister. I used to have four sisters. My mother lives in Seattle and I live in Freeland—that's an island. My other four sisters died, but my other brother and sister are adopted by a lady in Adrian, Wash. My mother was over to see me Tuesday and stayed till Thursday. I went over to see my mother at Easter. I have a mile and a half to walk to school.—Alice Pohlman, Freeland, Wash.

### Good Times With Her Chum.

Dear Aunt Nellie: We take the Farmer and I read the letters all the time. I will be 12 years old April 6. Have I a twin? If I have I wish she would write to me. I have gone to school every day and have not been absent or tardy in this year. There are about 12 pupils in my school. I go to the Grandview school. My teacher's name is Mrs. Mabel S. Preston. I am in the seventh grade. There are two in my class. My chum at school is Leta Houck. We have lots of fun together. I like her fine. I have one sister, whose name is Helen Fae. I may write again.—Clista Casey, age 12, Cheney, Wash.

### To Name the Island "Kilian G."

Dear Aunt Nellie: In my other letter I told you that I have two brothers, Hermann and Martin, who are up north with the Canadian arctic expedition and the explorer Steffanson. We had heard no definite news about them since September, 1916, until last month, when we received a letter. Today we received some letters. We got some mighty interesting news in them, too. One thing is that one of the islands which they discovered is to be named Kilian G. The Eskimos have some very funny names. Some of them are Gubluck and Split-the-Wind. My brothers think they will come out next fall. I also have another brother who is in the Norfolk navy yard on a submarine chaser. I have four brothers and two sisters. They are between 18 and 27 years of age. I am the youngest. My birthday was March 2 and I was 13 years old. I am not going to school this year because I am too young to go to high school, at least that is what we think. I belong to a gymnastic association here in Seattle and I go down to gym twice a week. I have much fun playing German batball, baseball, swinging Indian clubs, etc. We always talk German here at home. Both my mother and father were born in Germany, but they are American citizens now. I have to play the organ in our Sunday school because we have one here at home on which I can practice. I would like to correspond with Sallie Garry, as I am not corresponding with any one else. Do you think she will write to me?—Thusnelda Kilian, age 13, 2106 Ninth avenue, west, Seattle, Wash. (I think Sallie will be glad to write to you. Your letter is very interesting.—Aunt Nellie.)

### Glad That Olive Is Now a Cousin.

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I wrote to the Corner once before, but I put on the wrong address so it never reached Aunt Nellie. I hope this won't be the last time I write. My papa gets the Farmer and I like it very much. The letters are very interesting. May I join the Corner? I have four sisters and two brothers. We have two horses, one cow, one dog, three calves and about 30 chickens. I go to school every day. My teacher's name is Miss Ruth Oslund. I like her fine. My sister and I play for the church. I am 12 years old. I will be 13, November 29. Have I a twin? I wish Lila Smith would write to me. I surely would answer her letters. I think I would like her very much.—Olive Ervin, Mead, Wash.

### Goes to Sunday School.

Dear Aunt Nellie: This is the first time I have written to the Corner. I am 10 years old and I am in the fifth grade at school. My teacher's name is Miss Cecil Wallace. I go to Sunday school every Sunday. I have three brothers and four sisters, the youngest is a little girl 7 months old. We live on a 10-acre farm. We have 25 chickens, one pig and one cow.—Amanda Marie Johnsen, Fragaria, Wash.




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Fir Shiplap, 1x6 per 1000 feet $15.50. Fir Barn Studding 2x6 per 1000 feet $19.50. Fir Drop Siding 1x6 per 1000 feet $26.75. Shingles "A" per 1000 $3.27, and 100 other items in our Free Bulletin No. 7. We will figure your House or Barn Bill at April prices during first fifteen days this month. Write today. Send 10c for complete Plan Book "Better Buildings."

Hewitt-Lea-Funck Co.
458 Funck St. Sumner, Wash.

**"THE ADCOX WAY" "MEANS BIG PAY"**



If you have two hands, common sense, a backbone (not a wishbone), come to my school for five or six weeks and I will make you an expert auto and gas engine man. You will then be prepared to accept a position as—

**AUTO DRIVER**
**TRACTOR ENGINEER**
**STATIONARY ENGINEER**
**AUTO MECHANIC**
**AUTO ELECTRICAL SPECIALIST**

Thousands of skilled mechanics are needed right now for the aeroplane and other gas engine departments of the army.

**MY FREE BOOK** has many pictures and letters from graduates "right on the job," making good at the auto and tractor business.

Just write your name and address on the coupon below and mail it to me right now and you will immediately receive my

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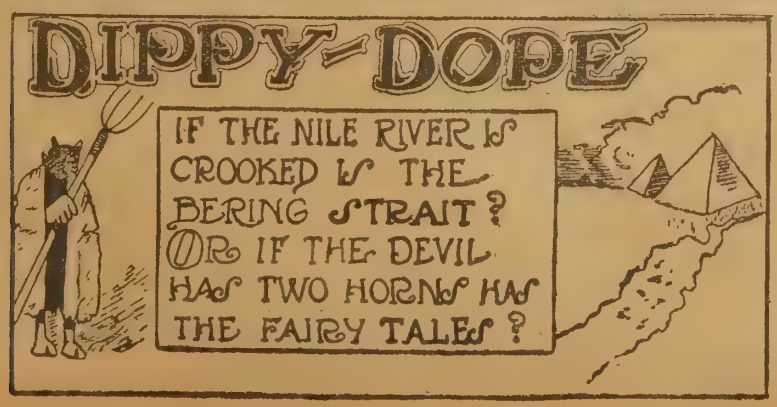
and a letter that will make you a friend of mine from the start. **I have placed almost twenty of my graduates in big paying positions within the last two weeks.**

**Adcox Auto and Gas Engine School**
Wasco St. and Union Ave., Portland, Ore.

THIS COUPON BRINGS CATALOGUE FREE.

ADCOX AUTO AND GAS ENGINE SCHOOL,
L. L. Adcox, Pres.
Union Avenue and Wasco Street, Portland, Ore.
Please send me your "Big Illustrated Catalogue."

Name .....
Town .....
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# NEWS FOR BREEDERS

J. H. Quick of Castle Rock, Wash., will probably show Jerseys for the first time at the Southwest Washington fair, Chehalis. Mr. Quick has at the head of his herd a son of Rosaire Olga Lad, a fine individual, and a few high producing young cows. He is successfully dairying and is building up a pure bred Jersey herd.

George H. Brewer of Stayton, Ore., is a young breeder who is building up a herd of Jerseys. His herd sire, Minna's Baronet, is by the bull that heads the J. M. Dickson & Son herd—Baronet of Ashburn. His dam made an official record of 480 pounds of butter, beginning under 2 years old, and has since increased her record. She is a granddaughter of Golden Glow's Chief. Mr. Brewer's cows are of Dickson and Doerfler breeding, and he is now proving them by giving them official records. One senior yearling will go close to, if not over, 400 pounds of butter for her year, and at least one mature cow over 600 pounds. H. A.

## Improve Their Herd.

A. V. Bradrick & Son, Holstein breeders of Palouse, Wash., have been making a change in their herd from grade stock to registered stock. They have recently added 23 head of pure-bred animals purchased in the Yakima valley. Nearly all of the milking cows are A. R. O., three of them with better than 26-pound records. They purchased seven A. R. O. cows from H. C. Davis and Buchart Bros. of Granger, Wash. Several excellent animals were purchased from the C. S. Mead herd of Zillah, Wash. The Bradrick herd is headed by King Segis of Brookside, a son of King of the Pontiacs. The photograph herewith is that of Olive De Kol Pieterje Walker,



one of the cows purchased from the Mead herd. She has a record of 26.4 pounds of butter after going through a severe attack of milk fever.

## Glenwood, King of Edgemoor.



Glenwood, King of Edgemoor, the Guernsey bull shown herewith, was recently sold by Dr. Clarence True Wilson to Carl Hunt of Tillamook, Ore.

(Continued on page thirty-one.)


# Gile's Guernseys Go at Auction

ASTORIA, OREGON, MAY 23, 1918

## 53 Head—Registered Guernseys and Grade Guernseys

On account of labor conditions this herd must be sold and will be taken from the Chicona Farm at Chinook, Wash., to Astoria, Ore., for the convenience of those coming by train. It consists of cows in milk, bred heifers, young calves, and a number of excellent young registered Guernsey bulls. Of the offering 25 are registered Guernseys and represent the best blood line of the breed and are excellent individuals. The herd of Guernseys from this farm has done much to make the breed famous both as producers and show winners.

Complete catalog will be issued giving details as to the offering and how to reach the sale. Send request to E. A. Rhoten, Salem, Ore., Sale Manager, and one will be mailed when published.

COL. J. W. HUGHES, Auctioneer.

A. L. GILE, Proprietor, Chinook, Wash.

# MISSOURI and KENTUCKY JACKS

STOCKTON, CAL. P. O. Box 679.
JAMESPORT, Missouri.
LOS ANGELES, CAL. P. O. Box 1117.

SPOKANE, WASH.
W1728 Fourth Ave. Phone Main 1647.

## H. B. THORNBERRY

Dealer in

REGISTERED AND PEDIGREED JACKS, JENNETS, PERCHERON AND SHIRE STALLIONS AND GAITED KENTUCKY SADDLE HORSES

Largest Importer in the United States.


# Breeders' Department

## SHORTHORN CATTLE


## Herd Bulls

Imported Doune Radiance No. 609112 and Gainford Perfection No. 442173.

## Hercules Shorthorns

We can supply you with choice, well grown bulls and females of breeding age. Your inspection of our herd is invited. Visitors always welcome.

## Day & Rothrock Company

205 Exchange Bank Bldg. Spokane, Wash.


## PERCHERON HORSES


# FOR SALE

## Registered Percheron Stallions

## Prize Winners

Two coming four years, five coming three years, eight coming two years and seven coming one year. Also some yearling fillies. Sire and dams are all imported prizewinners and weight over one ton. I am overstocked and will sell if price and terms will do it. Write or call

P. A. SORENSON,

Meridian, Idaho. Phone 10R1,

five miles south of Beatty station. Also some very choice registered Shorthorn yearling bulls, heifers and springers.

## Hunter Ranch Percherons

The Grand Champion KROUMIR at head of herd. Young stallions for sale at all times at breeders' prices.

A. R. HUNTER, Island City, Ore.

## EDGEWATER FARM

Choice registered stallions available with breeding guarantee and easy terms at farmers' prices.

ELBERT M. CHANDLER, Burbank, Wash.

REGISTERED PERCHERON HORSES.

E. O. WALTER, AUCTIONEER.

WALTER BROS.

Buhl and Filer, Idaho.

## SHORTHORNS

A few young stock for sale by such noted sires as Prime Prince, 421193, and Sultan Still, 493239.

R. E. BOYCE. Baker, Ore.

## H. H. Schildman

breeder of registered Shorthorn cattle. Hampshire sheep and big-type Poland China hogs.

Filer, Idaho.

## LELAND BROTHERS

Breeders of top registered Shorthorn cattle. Correspondence solicited.

WENDELL, Idaho.

REGISTERED SHORTHORN COWS,

Young bulls and heifers, sired by Scotch bulls; liberal terms.

CALDWELL CATTLE CO., Caldwell, Idaho.


## ABERDEEN ANGUS


## ANGUS CATTLE

In the famous valley of the Yakima there is located one of the best herds of Aberdeen Angus in America. Proof of this is evident by the many prizes won by this herd at all of the greatest shows of the northwest and central states, including the Chicago International.

Fifty extra good range bulls are now offered for sale. Also fancy herd headers and show cattle of both male and female. All prices very reasonable.

CONGDON & BATTLES.

OTTO V. BATTLES, Manager.
Yakima, Washington.

## Aberdeen Angus Cattle

A. H. EAGLESON & SONS.
Boise, Idaho.


In answering advertisements don't fail to mention this paper.


# COLFAX BLUE RIBBON STUD

COLFAX, WASHINGTON

Our new, large and commodious stables which we have been building are almost ready for us to move into and we will therefore, for the **next 30 days** offer to the **Public** an **EXTRAORDINARY** lot of **Shire, Percheron, Clydesdale** and **Belgian Stallions,** big, young and **Absolutely Sound** and at **RECORD BREAKING PRICES. Easy terms** and a **GILT-EDGE BREEDING GUARANTEE.**

We have a stallion for every purse, and we will save you plenty of money on the most LIBERAL TERMS, and you don't have to pay a long price to get a first-class stallion.

If you are in the market for a stallion now is the time to take advantage of these remarkable 30-day special sale prices.

COLFAX BLUE RIBBON STUD, COLFAX, WASH.


## HOLSTEIN CATTLE


## 365-DAY HOLSTEINS

24,667 lbs. milk—1026 lbs. butter—is the s. o. advanced registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.

THE HERD WITH YEARLY RECORDS.

WESTERNWOLD RANCH, Prineville, Ore.

MOOREHEAD RANCH.

Registered Holsteins.

Herd sire, Model Annie De Kol Segis, grandson of the famous King Segis. We have no bulls of service age, all having been sold, but we have some splendid young stuff, from 6 to 8 months old, coming on. If you are looking for real foundation stock, write us for particulars and pedigrees.

MOOREHEAD & HOBSON.
Breeders of Purebred Holsteins.
Outlook, Wash.

## The Most Profitable Cows

in the world are Holsteins. This is not a claim, it is a fact. We have two beautiful young bulls, bred right and fit to head any herd. For further particulars and pedigrees address

MAPLEWOOD FARM

Pomeroy & Son, Scappoose, Ore.

## LaConnor Flats Stock Farm

Pure bred registered Holstein cattle. Herd sire Segis Pontiac Acme; average of three of nearest dams; butter, 1 year, 1080.32 lbs.; milk, 24,380.3.

J. H. HULBERT. Mt. Vernon, Wash.

## Record Holsteins

Young bulls, some of them ready for service, by a sire whose five nearest dams average 26.17 pounds butter, or another with 29.67-pound dam, and out of high-record A. R. O. dams. Priced to sell.

ERNEST WERNER, AURORA, ORE.

## Bargains in Bull Calves

Sired by Segis Riverside Pontiac, that sold in Pacific international sale, 1914, for $1025, and whose dam has A. R. O. record of 31.47 lbs. butter in 7 days; 118.83 in 30 days, and big records all through his pedigree.

ERNEST JOHNSON, Scappoose, Ore.

## REGISTERED HOLSTEINS

Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.

H. R. BOOMER, New Plymouth, Idaho.

## HOLSTEINS

Well-bred young bulls for sale.

THOS. CARMICHAEL. Gaston, Ore.

HOLSTEINS BRED FOR PRODUCTION and Berkshires of Quality.

Stock of All Ages, Either Sex, for Sale.

HUGH NISBET. Chimacum, Wash.

REGISTERED HOLSTEINS.

Bull calves for sale with good A. R. O. backing.

BEEBE BROS., R. F. D. 2, Rupert, Idaho.


In writing advertisers, be sure to say that you saw their advertisement in this paper.

# Breeders' Department

## GUERNSEY CATTLE

**FOR SALE, IMPORTED GUERNSEY BULL.**

Hartfield, 43300, born June 18, 1916. Winner of 2d prize, yearling class, National Dairy Show, 1917. Sire—Hayes Kitchener, 29716. Dam—Hartfield Rose of the Couture 8th, 67882. Now doing A. R. work.

**WRITE W. W. MARSH.**
**Mullan Ave., Waterloo, Iowa.**

### Orchard Hill Farm

"Home of High-Class Guernseys."
Dr. Park Weed Willis, Owner.

**Redmond, Wash.**

### FAIRVIEW FARM

Breeders of high class registered and grade Guernseys.

**A. J. SINNES.**
**Route 5. Mt. Vernon, Wash.**

## HEREFORD CATTLE

### Highland Stock Farm

offers for sale Hereford bulls, 1 or 2 years old. One or a carload.

**PLATT BROS. Genesee, Idaho.**

### BULL RANCH

Hereford Cattle.
Berkshire Hogs.
Hampshire Sheep.

**CHAS. BULL. Mabton, Wash.**

## AYRSHIRE CATTLE

### Edgewater Farm

Government accredited herd, headed by Peter Pan 63d. Bull calves available.

**ELBERT M. CHANDLER, Burbank, Wash.**

## BROWN SWISS CATTLE

### Brown Swiss Stock Farm

Breeders of Brown Swiss Cattle, the Farmer's Dairy Cow. Young stock for sale.

**THEO. BRUGGER, Route 3, Gresham, Ore.**

## YORKSHIRE SWINE

### Large Yorkshires

weanling boars of best breeding.

**BROADMEAD FARM.**

Chehalis, Washington.

### Booking Orders for Weaned Pigs

Can furnish pairs or trios, best stock, $15, at eight weeks.

**WM. NEUENSCHWANDER, Gaston, Ore.**

## BERKSHIRE SWINE

### Riverby Orchard Berkshires

Riverby Orchard Berkshires won 12 out of 15 first prizes at the Washington state fair, 1916, also many prizes, including grand champion sow at the Panama-Pacific world's fair. We offer for sale a few good boars and young sows.

**D. C. BUNN. Prosser, Wash.**

## TAMWORTH SWINE

**ROUND KNOLL RANCH NO. 3.**

Herd headed by Knoll Slope Colonel, assisted by Jolly Lad IV. Correspondence solicited.

**Bliss, Idaho.**

## SHEEP

### SHEEP FOR SALE

1400 half-blood Lincoln yearling ewes, Corridale type, at $17.50 each. Not less than in carload lots or more.

**M. STANLEY COFFIN. Yakima, Wash.**

## RABBITS

**RABBITS.**

All about selecting, breeding, housing, feeding and cooking rabbits with price list of our high grade BREEDING STOCK of New Zealand Reds. One dime in stamps of any denomination.

**IDAHO RABBITRY, Boise, Idaho.**

**This is the season of preparation on the farm. There's many a timely and practical suggestion on equipment, etc., to be gleaned from our advertisements these days. Read them.**

## JERSEY CATTLE

### Breeding for Heavy Production

Bull calf, dropped Sept. 5, 1918. Sire, Rosaire Dolly Lad, son of Rosaire Olga Lad, out of a daughter of Oonan 23d's grandson; dam, Rosaire Queen Esther, also by Rosaire Olga Lad. This makes calf a double grandson of the great Rosaire Olga Lad, sire or over 30 register of merit daughters, two over 900 lbs. Solid color, good individual, fair size. Priced to sell. This ad will appear only this one time.

**E. P. Casey. GLEN THELMA FARM. McMinnville, Ore.**

### A Richly Bred Sire

LA CREOLE'S OXFORD DOLLY BOY.

Thirty months old. Dam, Morrow's Select, by Golden Glow's Chief, sire of 34 Register of Merit daughters, one a world's record. Morrow's Select is the dam of two R. of M. cows, one 820 pounds butter in a year, and has a record herself of 828 pounds. The bull's sire, Oxford You'll Do Jr., is a great show bull, sire of four R. of M. daughters, 10 more on test, all will qualify, and he is still a young bull.

**La Creole's Oxford Dolly Boy** has type and is a siring type. He has production back of him and his offspring will be producers. **"The bull is over half the herd."** Write for full pedigree and price.

**W. O. MORROW, Independence, Ore.**

### Jersey Home Dairy

**Young bulls, winners at Washington State Fair, make good herd sires. Attractive prices for quick sale.**

**Erickson Bros. Prop.**

**North Yakima, Wash.**

### ASHBURN FARM

REGISTER OF MERIT JERSEYS.

In nearly 13 years we have yet to get our first poor heifer or dissatisfied customer. We have the best of the Golden Glow's Chief and St. Mawes strains, with the cross of our great Kentucky bull, Valentine's Ashburn Baronet.

**J. M. DICKSON & SON, Shedd, Ore.**

**GOLDEN GLOW HERD**

Winner of 1st and 2d prize in butter test, Oregon State Fair, 1917, (all breeds, 20 entries); breeder and owner of grand champion cow in show ring, 1916; breeder of grand champion cow, 1917. Breeder and owner of world's champion 3-year-old, with 1115 lbs. butter, 80 per cent fat. Every female a daughter, granddaughter or great granddaughter of Golden Glow's Chief, sire of 34; 14 over 700 lbs.; 32 over 600 lbs..

**PICKARD BROS., Marion, Ore.**

BREEDER OF

**GOLDEN GLOW'S CHIEF 61460**

35 daughters average 533.9 lbs. fat. Sire of world record Junior three-year-old. Two of his sons heading our herd. Some choice bull calves out of cows with records up to 856 pounds for sale. Sold out of bulls over six months old.

**LADD FARM, Oswego, Ore.**

### All High Record Blood

Bull calf out of Lucy of P. V., full sister to St. Mawes Susie; 936 lbs. butter in a year; to St. Mawes Blossom 823 lbs., and to Susie's Twin Maiden, 642 lbs. Sire, Poppy's St. Mawes, son of St. Mawes Poppy, 1120 lbs.

**ED CARY, Carlton, Ore.**
Station, La Fayette, Ore.

### BUY A REAL SIRE

We are offering a choice bull calf by St. Mawes of Ashwood and out of a daughter of the great Holger. This youngster carries the best blood in Jerseydom and is fit to lead any herd. Price on application, but don't delay, as he will cost more after his dam completes her present register of merit test.

**M'ARTHUR & STAUFF, Rickreal, Ore.**

### LAST BULL SOLD

Three register of merit cows, freshen in March, two in April. Baby bulls are sold so reasonably you can't afford to buy a bull of service age. Raise your own bull and save money. Prices, pedigrees, photos, etc., sent on request. Can spare a few good register of merit cows.

**JOHN B. STUMP & SON, Monmouth, Ore.**

### WAIKIKI FARM

Register of Merit Jerseys. Largest Jersey herd in the northwest. Young stock for sale.

**IRA P. WHITNEY, Manager.**
Route 7, Spokane, Wash.

**TWO GOOD YOUNG BULLS**

One dropped February, 1917, sire, Minna's Baronet, whose dam made 439 lbs. butter in a year as senior yearling. Young bull's dam now on official test, will make about 60 lbs. fat (70 lbs. butter) third month and good record for year; milked twice a day. The other bull by St. Mawes of Ashburn. Full particulars of either on request. Bargain prices.

**GEO. H. BREWER, Stayton, Ore.**

### We Have a Herd Average of 700 Lbs.

85 per cent BUTTER for 11 head. Sold six bull calves in the past 4 mos.; 3 of the last ones brought $250 each. These were sons of our herd bull, G. P. St. Mawes; just one bull calf left.

**F. A. DOERFLER, Silverton, Ore.**

### This Is a Bargain

Rockwood Stockwell, sire Stockwell of S. B., dark brown color; A No. 1 individual; 5 years old. I have four of his daughters in milk. All test over 5, one 6 per cent, and all are heavy milkers. Only $100.

**R. S. KEATLEY. Castle Rock, Wash.**

### ANOKA FARM JERSEY

We are offering a nine months' old bull from a young cow that is making good. His sire is a grandson of St. Mawes Poppy, with record of 1120 lbs. in one year. Priced low for quick sale.

**R. B. SEELY, P. O. Sherwood, Ore.**
R. R. Station, Wilsonville, on Oregon Elec.

### OAK RIDGE JERSEY FARM

Thirty years breeding Jersey cattle. Young bulls from Register of Merit dams. Also a few choice females.

**RILEY E. HULBURT, Albany, Ore.**

### Lady Slipper's Oxford Lad

Dam, Gertie's Son's Lass; official record, 642 lbs. butter as a 2-year-old. She a daughter of Gertie's Lily. 845 lbs. butter at 9 years old and 582 lbs. at 15 years old. Sire, Lady Slipper's Oxford, sire of three R. of M. daughters, one 520 lbs. as a 2-year-old. His grandsire, Oxford Majesty, has more and higher producing daughters than any other Island bull.

Lady Slipper's Oxford Lad was dropped April 1, 1916, is solid light fawn color; excellent individual. Only $150. This ad will not appear again.

**J. H. TAYLOR, Montesano, Wash.**

## POULTRY

### TRAP-NESTED BARRED ROCKS



All hen-hatched and hen-raised. Every hen trap-nested. First pen has, I believe, for past two years highest Barred Rock av. egg record in the world. All other pens practically same blood lines.

Pen 1, 12 hens, av. over 240 eggs, crossed to yearling cock, parents av. 260 eggs, $5 setting of 15. Pen 2, 25 yearling hens, av. over 200, crossed to 2 sons of No. 44, 708 eggs in 3 yrs., $5 setting of 15. Pen 3, about 20 hens and pullets, with reserve cocks and cockerels, same breeding $3.50 per 15. A few cocks and cockerels from $5 up.



**IRVINE P. GARDNER. Riddle, Ore.**

**PARKS BRED-TO-LAY BARRED ROCKS.**

My pen, 5 Barred Rocks, at Pullman laying contest laid in Nov. 88, Dec. 100, Jan. 104 eggs. Eggs from this winter-laying strain, $1.50 15; $8 per 100.

**F. J. WIRTNER, Mica, Wn., R. 1.**

**S. C. AND R. C. RHODE ISLAND REDS.**

Cockerels, $2.50 to $3.50; eggs from S. C. R. I. Reds, heavy winter layers, $1.50 per 15; $7 per 100. Flemish Giant does, $1.50.

**W. T. WILSON, R. 3, Weiser, Idaho.**

**When you write to advertisers be sure to say that you saw their adveriesment in this paper.**

## DUROC-JERSEY SWINE

### SPRING DUROCS

I am now booking orders for weanling pigs, pairs or trios, unrelated. These pigs carry the very best blood lines procurable. Tracing their ancestry back to Inventor, Climax II., Top Notcher, Tip Top Lad and Proud Advance. All prize winners in state and interstate shows.

Also have a few very fine gilts, either open or bred.

**CHAS. G. SPRONG, Grandview, Wash.**

**DUROC SOWS FOR SALE.**

A few choice Duroc gilts, bred to farrow early next May, daughters of grand champion Richards Defender and bred to Junior Champion Richards Pathfinder. No better breeding east or west. Also a few good boars ready for service. Price very reasonable. We furnish pedigree and guarantee satisfaction, or will refund your money and pay express both ways.

**RICHARDS LIVE STOCK CO., Virginia, Ida.**
Home of the Champion Durocs.

**ROOT & MASON,**

Breeders of early maturing, easily fed type. Some choice stock for sale. Defender and Overbrook strains.

**Hermiston, Oregon.**

**PATHFINDER BOARS.**

Write me if you want a high-back, long and smooth boar, ready for service, sired by the Richard Pathfinder, junior champion Utah State Fair, 1917. Guaranteed to please.

**ERIK W. OLSON. Virginia, Idaho.**

### Pure-Bred Duroc-Jerseys

Some fine March pigs for sale. Correspondence solicited.

**B. B. Doerfler, R. 3, Silverton, Ore.**

**DUROCS.**

Boars and open or bred gilts of excellent breeding.

**E. E. PRICE, CABINET, IDAHO, OR**
**JAMES N. PRICE. Yakima, Wash.**

**AVONDALE STOCK FARM.**

Registered Duroc-Jersey hogs. Inspection invited. Correspondence solicited.

**H. C. POLLY. Route, 3, Burley, Idaho.**

**OTTO'S DUROC JERSEYS.**

Stock doing fine, splendid prospects for spring crop of pigs. For sale jr. yearling boar with a show record; very classy individual.

**Filer, Idaho.**

## POLAND CHINA SWINE

### LOCUST LAWN HERD

Sold Out.

**W. F. HOWARD & SONS. Caldwell, Idaho,**
S. Kimble Ave.

**GREENLEAF STOCK RANCH.**

Big type Poland Chinas, either sex. for sale at all times.

**Wilson Bros., A. L. Wilson, Mgr.**
Greenleaf, Idaho.

**BIG TYPE POLAND CHINAS.**

Herd headed by Sammy (79833). Correspondence solicited.

**Fruitland Stock Farm, C. Royston, Mgr.**
Payette or Fruitland, Idaho.

**QUALITY HERD.**

If you want to improve your herd, try stock from my winners at the Oregon state fair.

**RAY J. FOX. Lyons, Ore.**

### PURE BRED POLANDS

A good herd boar for sale; also booking orders for spring farrowed pigs. Will ship C. O. D. subject to your approval.

**HERBERT WILLARD, Dayton, Ore.**

## CHESTER WHITE SWINE

### REGISTERED O. I. C. SWINE

Fine, thrifty pigs, either sex, ready to ship. Write me. Ringgold Farm, J. H. West, Prop., Centralia, Wash., R. 1, Box 157.

### COVE STOCK FARM

Unrelated fall and spring Chester White pigs from prize winning stock.

**ARCHIE CONLEY, Cove, Ore.**

## POULTRY

### BABY CHICKS

Rhode Island Reds, White Leghorns, $15 per 100; $12.50 per 100. All chicks now sold to May 15. If you want chicks this season, order now.

**MAPLEBROOK POULTRY FARM**
Southworth, Wash., Box 3.

### R. I. Reds and Whites—Both Combs

Eggs from all pens, in either variety, $2 per 15 eggs, $3 per 30 and $5 per 100 eggs. Mammoth Toulouse geese eggs, 50c each. Mammoth Bronze turkey egs, 10 for $2.75. 20 for $5. Belgian hares and Flemish Giant rabbits, $5 per pair.

**Highland Fruit and Poultry Ranch.**
J. Nonnenmacher, R. F. D. 3, Yakima, Wash.

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, April 29.—Corn prices averaged much higher today, owing to clearer knowledge of the attitude of the food administration in regard to hedging sales. The market, however, failed to hold the advance, and closed unsettled at the same as Saturday's finish to 3-8c up, with May at $1.27 5-8 and July at $1.49 5-8 to $1.45 3-4. Oats lost 78c to 2 1-4c net, and provisions 15c to $1.

The reassuring development from a bullish point of view was that the government does not make it obligatory on grain handlers to hedge holdings. Unfavorable weather tended also to lift the market.

Favorable crop conditions together with slowness of eastern shipping call made the oats market collapse. Advances due to corn strength were thus far more than offset in the last trading.

Selling pressure on pork carried down all provisions. The market had no aggressive support.

**Chicago Futures.**

| | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| Corn— | | | | |
| May | 1.27¼ | 1.27⅜ | 1.27¼ | 1.27⅜ |
| July | 1.50 | 1.51 | 1.49 | 1.49⅝ |
| Oats— | | | | |
| May | .81½ | .82 | .79½ | .79¾ |
| July | .73⅞ | .74 | .72¼ | .72⅝ |
| Pork— | | | | |
| May | 46.50 | 46.50 | 46.20 | 46.20 |
| July | 46.50 | 46.50 | 45.50 | 45.50 |
| Lard— | | | | |
| May | 24.75 | 24.75 | 24.47 | 24.55 |
| July | 25.15 | 25.15 | 24.82 | 24.92 |
| Ribs— | | | | |
| May | 22.67 | 22.67 | 22.35 | 22.55 |
| July | 23.35 | 23.35 | 22.90 | 23.12 |

**Cash Quotations.**

CHICAGO, April 29.—Corn—No. 2 yellow, $1.73; No. 3 yellow, $1.63@1.65; No. 4 yellow, $1.50@1.53.

Oats—No. 3 white, 85@85¾c; standard, 85½@86c.

Rye—No. 2 nominal.

Barley, $1.40@1.85.

Timothy, $5@8.

Clover, $18@28.

Pork, nominal.

Lard, $24.52.

Ribs, $21.92@22.55.

**Pacific Northwest Grain.**

PORTLAND, Ore., April 29.—Grain, 30 days' option: Oats, No. 2, $62 bid. Eastern oats and corn in bulk: Oats, No. 3 white, $57; 33-pound clipped, white, $57.50; corn, No. 3 yellow, $61; No. 3 mixed, $60; oats, No. 3, $57; clipped, $57.50; corn, yellow, $61; mixed, $60.

**Minneapolis Grain.**

MINNEAPOLIS, April 29.—Wheat—Receipts, 321 cars, compared with 562 cars a year ago. Corn—No. 3 yellow, $1.55@1.65. Oats—No. 3 white, 81 1-4@82 1-4c. Flax — $4.02 1-2@4.03 1-2. Flour—Unchanged; shipments, 78,921 barrels. Rye—$2.70@2.72. Barley—$1.40@1.83. Bran—$33.14@33.24.

## Live Stock Quotations.

**At Omaha.**

OMAHA, Neb., April 29.—Hogs—Receipts, 7700; market 10c to 20c higher—Heavy, $16.75@18; mixed, $9@15; light, $17@17.35; pigs, $10@15.50; bulk of sales, $16.90@17.20.

Cattle—Receipts, 7,500; market 10c to 15c higher—Native steers, $10@17.25; cows and heifers, $9@13.50; western steers, $9.50@14.50; Texas steers, $9@11.75; cows and heifers, $8.75@11.25; canners, $7.50@8.50; stockers and feeders, $8@13; calves, $10@13; bulls, stags, etc., $8.50@13.

Sheep—Receipts, 6900; market slow to weak—Yearlings, $17@18.50; wethers, $15@17; ewes, $14@16.50; lambs, $18.75@20.75.

**At Portland.**

PORTLAND, April 29.—Cattle, 75c higher; receipts 97 2—Prime steers, not quoted; good to choice steers, $14@15; medium to good steers, $12.75@13.75; fair to medium steers, $11.75@12.75; common to fair steers, $10.75@11.75; choice cows and heifers, $12.75@13.75; medium to good cows and heifers, $9.75@12.75; fair to medium cows and heifers, $7.75@9.25; canners, $5@7; bulls, $7@11.50; calves, $3.75@13.

Hogs—Steady; receipts, 2244—Prime mixed, $17.90@18.10; medium mixed, $17.65@17.85; rough heavy, $16.65@16.85; pigs, $15.50@16.50; bulk of sales, $17.75@18.

Sheep—Steady; receipts,40—Prime spring lambs, $19.50@20; heavy lambs, $16.50@18; yearlings, $15.25@15.50; wethers, $13@13.50; ewes, $12@12.50.

**At Chicago.**

CHICAGO, April 29.—Hogs—Receipts, 43,000; strong, 5c above Saturday's average—Bulk, $17.20@17.65; light, $16.75@17.75; mixed, $16.90@17.75; heavy, $16.10@17.10; rough, $15.10@16.60; pigs, $13.20@17.35.

Cattle—Receipts, 14,000; firm—Native steers, $10.15@17.40; stockers and feeders, $8.25@12.20; cows and heifers, $6.80@13.90; calves, $7.50@13.50.

Sheep—Receipts, 14,000; weak—Sheep, $13@17.15; lambs, $16@21.40.

**Spokane Stockyards, Monday.**

Hogs—Receipts, 208; market steady to strong—Prime mixed, $17.60@17.85; medium mixed, $17.50@17.70; pigs, $15.25@16.50; stockers and feeders, $14.00@16.00; bulk of sales, 17.75.

Cattle—Receipts, 141; market steady — Choice steers, $13.75@14.25; good steers, @12@13; medium to good steers, $11@12; common to medium steers, $9.50@11; choice cows and heifers, $11.75@12.75; good cows and heifers, $10.75@11.50; ordinary to good cows and heifers, $7.50@10; canners, $4.75@6.50; bulls, $7@11; calves, $8.50@15; stockers and feeders, $6.75@9.

Sheep—Receipts, none; market steady—Prime lambs, $16.50@18; good lambs, $14.50@15; prime yearlings, $14@15; prime wethers, $12.50@13.25; best mutton ewes, $10@11.50.

## Spokane Market.

**WHOLESALE.**

**Vegetables**—Cabbage, $4@5 cwt; carrots, $2@2.50 cwt; bunch carrots, 75@90c doz; bunch beets, 75@90c doz; beets, $3 cwt; rutabagas, $1.75 cwt; parsnips, $1.75 cwt; hothouse lettuce, 50c 5-lb box; head lettuce, 80@85c doz, $2.75@3 crate; turnips, $2.50 cwt; bunch turnips, 75@90c; California new turnips, $2 cwt; red bell peppers, $1.25 box; chilli peppers, 25c lb; green peppers, 11c lb; Florida tomatoes, $5 6-basket crate; Mexican tomatoes, $3.50 lug; celery, $1@1.10 doz; hothouse cucumbers, $2 doz; cauliflower, $2.25@2.50 crate; new garlic, 10@12½c lb; parsley, 40c doz bunches; horseradish root, 12½c lb; brussels sprouts, 12½c lb; radishes, 40c doz bunches; rhubarb, 4@5c lb; spinach, 90c@$1 crate; asparagus, 12½c lb; new peas, 15c lb; artichokes, $1.80 doz.

**Potatoes**—Washington potatoes, 90c@$1.30 cwt.

**Strawberries**—California strawberries, $3@3.50.

**Onions**—California onions, $2 cwt; green onions, 30c doz bunches.

**Tropical Fruits**—Bananas, 7c lb; lemons, $7.50 case; Valencia oranges, $6.75@7 case; medium sweet oranges, $6@6.75; budded seedling oranges, $5.75@6.25 case; blood oranges, $4.25 half case; Florida grapefruit, $5@6.50.

**MEAT.**

**Beef**—Beef steers, 21@23½c lb; cow beef, 20@22c lb; heifers, 22½c lb; beef loin, 33c lb; steer chucks, 19@20c lb; prime ribs, 25@28c lb; rump and round, 22c lb.

**Mutton**—Breakers, 24@25c lb.

**Lambs**—26@27c lb.

**Pork**—Packer dressed hogs, 26@27c lb; pork loins, 30@31c lb; legs, 28c lb; shoulders, 25c lb; leaf lard, 28c lb; tenderloins, frozen, 32c lb; spareribs, 19c lb; country dressed hogs, with head on, 20c lb to producer; country dressed veal 17c lb to producer.

**Smoked Meats**—Washington hams, 34c lb; T. C. hams, 35c lb; T. C. bacon, 45½c lb; Washington bacon, 40½@45½c lb; picnics, 23½c lb; Boston butts, 30@30½c lb; English bacon, 38½c lb.

**Star Brand**—Hams, 35c lb; Shield hams, 33@34c lb; picnics, 24½c lb; bacon backs, 33c lb; Star bacon, 46½@48½c lb; Shield bacon, 41@45½c lb; Simon Pure lard, $17.50 case.

**Dry Salt Meats**—Clear bellies, 30c lb; lean backs, clear, 29@31c lb; sides, 28½@29½c per lb.

**Lard**—Tierces, 23c lb; $14.68@15.53 case; Diamond T. C. pureleaf lard, $16.25 case, $8.20 half case; Snowcap compound, tierces, 23½c lb.

**POULTRY.**

**Live Poultry**—Live hens, large, 26c lb; small, 23c lb; roosters, 18c lb to producers, f. o. b. Spokane.

**GRAIN AND FEED.**

**Rice**—Fancy head, $7.50@9.50 cwt.

**Flour**—Bluestem, $9.40; Blend, $9.40; Montana hard wheat, $10.40; graham, $8.60 bbl, 49-lb sacks; whole wheat, $8.80; eastern rye, $10.10; eastern rye meal, $10.30; oat flour, $13.10.

**Oats**—$74 ton whole, $76 rolled, delivered in city.

**Corn**—$77 ton; cracked corn, $79 ton.

**Bran**—$30 ton; shorts, $32 ton; bran and shorts, $31 ton.

**Barley**—Rolled, $76 per ton.

**Oil Meal**—$78 per ton.

**Hay**—Timothy, $32 per ton, $31 ton by carload; alfalfa, $27 ton, $26 ton by carload.

**GASOLINE, LINSEED OIL, ETC.**

**Gasoline**—Red Crown, bulk, 24½c gal, cases, 34½c gal; Shell, 24c; refined oil (Pearl), bulk, 13c gal, cases, 23c gal; Eocene, 15½c gal in bulk, cases, 25½c gal; engine distillate, 15½c gal, bulk.

**Linseed Oil**—Raw, bbl, $1.68 gal, case, $1.85 gal; boiled, bbl, $1.70 gal, cases, $1.88 gal.

**Turpentine**—Bulk, 65c gal; cases, 85c gal.

**White Lead**—Strictly pure white lead in oil, ton lots, 11¾c lb; 50-lb lots, 12½c lb.

**HOPS, HIDES, WOOL.**

NEW YORK, April 29.—Hops—Steady; state medium to choice, 1917, 35@43c; 1916, nominal; Pacific coast, 1917, 20@23c; 1916, 14@16c.

Hides—Firm; Bogota and Central America, 33@34c.

Wool—Nominal.


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and we supply your GROCERIES

**At Wholesale Prices**

Twelve years in Spokane handling exclusively GROCERIES TO FARMERS, HOTELS and CAMPS.

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Have you been able to buy

Superior, high-grade 40c coffee at ..30c
Large Italian prunes at .....12c
100 bars yellow laundry soap at ..$4.50

IMPERIAL TRADING CO.
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## Portland Market.

PORTLAND, Ore., April 28.—The potato movement has continued active in most parts of the country the last week and seems to be feeling the effects of the national campaign now being carried on for an increased consumption of potatoes. It has resolved itself into the task of "eating them to save them," for so many million bushels are still held in storage that a great economic waste is impending.

An increased demand is being felt in the northwest, but for a different reason. Stocks are cleaning up to a certain extent. That is, most of the first-class large lots have been moved here and in Washington. There are undoubtedly several hundred cars left in small lots which could be shipped if the price warranted the work of getting them ready for market. Also, the British Columbia stock is reported exhausted.

**Quotations.**

BUTTER—Cubes, extras, 37 1-2@38c; prime firsts, 37c; prints, extras, 44c; cartons, 1c extra; butterfat, No. 1, 43c delivered.

EGGS—Oregon ranch, current receipts, 35 1-2c; candled, 36 1-2c; selects, 37 1-2c per dozen.

CHEESE—Jobbers' buying prices, f. o. b. dock, Portland: Tillamook, triplets, 23 1-2c; Young Americas, 23 1-2c per pound.

POULTRY—Hens, 27@28c; broilers, 40c; ducks, nominal; geese, nominal; turkeys, live, 27@28c; dressed, 37c per pound.

VEAL—Fancy, 19c per pound.

PORK—Fancy, 23 1-2@24c per pound.

POTATOES—Oregon Burbanks, 75c@$1 per hundred; new California, 9@10c per pound.

## Seattle Wheat.

SEATTLE, April 27.—The car situation has improved to such an extent that shipments of wheat to the east are being hurried by the food administration grain corporation, and millers are moving the holdover to Minneapolis territory in increased volume. M. H. Houser, agent of the grain corporation in this territory, has advised the merchants' exchange that there is now a plentiful supply of boxcars at interior points, and that those who are not receiving as many per diem as they can unload should notify him at once. He has also asked that he be notified of the name and address of any person who is not inclined to haul the wheat in.

Assembling of cars for the new crop grain haul will be begun by the government about July 15, it is stated, and advantage is being taken of the lull in the interim to clean up all wheat holdings in this state.

From present appearances Seattle mills will be ground out of flour by June 15 unless the program of bringing in Australian wheat is carried out. The state grain department is advised that a cargo is now on the way across the Pacific, to be discharged at Tacoma for the local grind on government flour contracts, the millfeed to remain here.

Interior mills, by reason of the call of Agent Houser, are likely to be closed out of wheat very soon.

## Seattle Market.

**BUYING PRICES.**

Unless otherwise stated the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots, f. o. b. Seattle:

Eggs—Local, 35@36½c per dozen; eastern Washington, Oregon and Idaho, 34@35c.

Poultry—Spring roosters, live, fat, 2½ to 5 lbs., 26@27c; old roosters, 17@20c lb.; squabs, large, $3.50 dozen; geese, fat, live, 18c lb.

Butterfat—46c lb.; dairy butter, 30@35c.

Beef—Buying prices: Prime beef, steers, 11@16c; cows, fat, 9@11c lb.; heifers, 10@14c.

Hogs—Light, 18@21c lb.; heavy, 18@20c lb.

Veal—Fancy light, 13@19c lb.; heavy, 10@17c lb.

Hides—Salted, 14c lb.; flint-dry hides, 29c lb.; salt kip, 16c lb.; green hides, 11c lb.; green calf, 23c lb.; dry calf (under 6 pounds), 29c lb.; bulls and dry salts, 4c lb. less; green bulls, 9c lb. Clean, long wool, western Washington flint dry pelts, 39c per lb.; heavy to clean eastern Washington flint dry pelts, 30@35c lb.

## Butter and Eggs.

PORTLAND, Ore., April 29.—Butter—Prints, extras, 44@45c; cubes, extras, 38c; prime firsts, 37c; dairy, 30c. Butter fat, Portland delivery, No. 1 sour cream, 43c.

CHICAGO, April 29.—Butter—Higher; creamery, 34@42½c.

Eggs—Steady; receipts, 32,823 cases; firsts, 32@33c; ordinary firsts, 31½@32c; at mark, cases included, 31½@32½c.

SAN FRANCISCO, April 29.—Butter—Extras, 41@42½c.

Eggs—Fresh extras, 42c; extra firsts, 41c; firsts, 39½c; fresh extra pullets, 40½c; firsts, pullets, 39½c.

**COTTON.**

NEW YORK, April 29.—Spot cotton quiet; middling uplands, 26.75c.


**THE BEST LINIMENT**

OR PAIN KILLER FOR THE HUMAN BODY

**Gombault's Caustic Balsam**

IT HAS NO EQUAL

For the Human Body —It is penetrating, soothing and healing, and for all Old Sores, Bruises or Wounds, Felons, Exterior Cancers, Boils Corns and Bunions, CAUSTIC BALSAM has no equal as a Liniment.

We would say to all who buy it that it does not contain a particle of poisonous substance and therefore no harm can result from its external use. Persistent, thorough use will cure many old or chronic ailments and it can be used on any case that requires an outward application with perfect safety.

A Perfectly Safe and Reliable Remedy for Sore Throat, Chest Cold, Backache, Neuralgia, Sprains, Strains, Lumbago, Diphtheria, Sore Lungs, Rheumatism and all Stiff Joints

REMOVES THE SORENESS--STRENGTHENS MUSCLES

Cornhill, Tex.—"One bottle Caustic Balsam did my rheumatism more good than $120.00 paid in doctor's bills." OTTO A. BEYER.

Price $1.50 per bottle. Sold by druggists, or sent by us express prepaid. Write for Booklet R.

The LAWRENCE-WILLIAMS COMPANY, Cleveland, O.



**OWENS Double-Cylinder Bean and Pea Threshers**

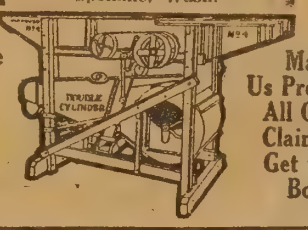
from the largest to the smallest size, embody the essential features necessary to **thresh all varieties of peas and beans** direct from the rankest vines without splitting any of the seed.

They have more separating space and capacity than any machine on the market.

If you need a pea or bean thresher at all, get an "Owens."

They are the standard the world over. Built in sizes to suit any size grower from the smallest to the largest, and there are none better at any price.

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Distributing Agents,
Spokane, Wash.



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**WANTED--1000 tons of mixed country scrap iron**

in carload lots of not less than 25 tons each. Write for prices if interested.

PACIFIC HIDE & FUR DEPOT.
Joseph Thiebes and C. T. Symmes.
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The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

# News for Breeders

(Continued from page twenty-eight.)

The bull's sire is by a full brother to Dairymaid of Pinehurst, that has a record of 910 pounds of fat in a year, as a 4-year-old and out of a half sister to her, with 616 pounds of fat as a mature cow.

His dam, Florham Dame, is the highest record daughter of Ne Plus Ultra, the May Rose bull whose daughters are in demand at present. She has a record of 685.8 pounds of fat. Ne Plus Ultra has 11 daughters that averaged 492 pounds of fat as 2-year-olds, and 14 of his daughters sold for an average of $1375 at the Florham sale.

H. A.

## Damsel Madge.



Damsel Madge, the young Jersey cow shown herewith, is owned by L. A. McCormick of Tillamook, Ore. She is fresh with her first calf and the second month produced 60 pounds of butter fat, or a little over 70 pounds of 85 per cent butter, as reported by the cow testing association to which Mr. McCormick belongs. It is a few such good purebred Jerseys as this that Mr. McCormick thinks justified him in taking a share in Poppy's Golden St. Mawes, the $1700 Jersey bull.

H. A.

## Cannon Dispersal Sale.

C. H. Cannon of Salem, Ore., will disperse his entire herd of Jerseys June 11. Most of the cows are by a 50 per cent Golden Glow's Chief bull, a few Melia Ann's King strain, one Faxhall, one by Emanon of Lakeside by a Morecan dam and one of St. Mawe's 2d. While there are only a few official records, it is a good working herd that has proved itself at the pail and churn. Mr. Cannon's ill health at this time of almost impossibility of securing labor is the one cause of the sale. H. A.

# Want Ads

### SITUATION WANTED—Male 21

MAN WITH SMALL FAMILY WANTS place on poultry ranch, to learn the business. Would run small ranch for absent owner, or would take place on stock ranch. Educated, reliable, experienced in general farm work. Permanent place wanted. Box 41, Fort Washakie, Wyo.

MAN, 33, WITH FAMILY, 4 HORSES AND wagon, wants steady ranch work. Experienced and capable of taking full charge. Go anywhere. A. V. Wright, Hermiston, Ore.

### EDUCATIONAL 45

BEHNKE-WALKER, PORTLAND, NORTHwest's largest, finest business college, can not supply half the calls for trained young men, women. Enroll now. Free success catalog. Positions secured.

### TEACHERS' AGENCIES 46

TEACHERS REGISTER WITH B. F. WESTmore, Mgr. Hazard Teachers' Agcy. $1 registers you at three offices. 911 Old Nat'l Bank bldg., Spokane, Washington.

TEACHERS NEEDED FOR NEXT FALL. Write for information. Clark Teachers' Agcy, 412 Ch. of Com. Bldg., Spokane.

### MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

Before building be sure and get our prices on sash, doors, finish, paints, plaster board, roofing, etc.

We will send you our large illustrated catalog, No. 27, free on request, post-paid.

| | |
|---|---|
| Cottage glass doors | $2.75 and up |
| 5x panel doors | $1.80 and up |
| 20x24 2-light windows | $1.63 |
| One-ply roofing | $1.35 |
| Two-ply roofing | $1.70 |
| Three-ply roofing | $2.10 |
| 3-ft., 4-ft. and 5-ft. cedar lap siding | $3 |
| Regular lengths | $10 |
| 1x4 flooring, 3-ft. to 5-ft. | $20 |
| 4-in. beaded ceiling, 3-ft. to 9-ft. | $20 |

The largest factory in the west selling direct to consumer. We sell any one, ship anywhere, and guarantee safe delivery.

O. B. WILLIAMS CO.
1943 First Ave. So., Seattle, Wash.

BUILDING MATERIALS AT WHOLESALE prices — Doors, windows, roofing paper, porch columns, plaster boards. All building materials shipped promptly. Send for our complete illustrated catalogue; gives you lowest net prices. P. A. ROVIG CO., 2229 First ave., So., Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harners, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

**Want Ad Rates 30c Per Line**

Want ads are run at this rate in The Washington Farmer and i t s associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

# Want Ads

Send for card giving lower rates for ads running one month or longer.

**How to Figure Cost of Ads**

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

### HONEY, BEESWAX—Wanted. 58

SEND SAMPLES OF YOUR HONEY AND beeswax; state quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

### MISCELLANEOUS—WANTED 63

CASH FOR OLD FALSE TEETH; SOME worth up to $19.50 per set (broken or not). Send at once. We return cash same day we receive package. We pay highest prices for old gold jewelry, gold crowns, bridges, platinum, silver. (Cut out adv.) U. S. Smelting Works, 331 Goldsmith bldg., Milwaukee, Wis.

POULTRY WANTED — THE FOOD ADministration permits the sale of poultry for market purposes after April 1. Send us your cream, poultry, dressed meats and hides. Commercial Creamery Co., Spokane, Wash.

### JUNK SHOPS 90

CENTRAL HIDE AND JUNK CO. BUYERS HIDES, WOOL, METAL, RUBBER, SACKS, ETC. WRITE FOR PRICE LIST IF INTERESTED. QUICK RETURNS. W200 MAIN AVE., SPOKANE, WASH.

### MACHINERY FOR SALE. 93

FOR SALE—MACHINERY FOR BEANS—Deere planter No. 999 with 80 rds. 36-in. check wire, $60; extra roll check wire, $3; two 2-horse walking cultivators, Oliver and Moline, $25 apiece; two harrow cultivators, $3 apiece; Owens harvester with extra knives, $50; Owens thresher, 16x20, $160; or $300 for lot. Practically new. Shipped on approval. John Washburn, Milton, Ore.

"WITTE" GASOLINE ENGINES
save labor, and are carried in stock by
HIGGINS MACHINERY COMPANY,
312 FIRST AVE. S., SEATTLE.
Write for Catalogue.

FOR SALE—NEW 12-H. P. R. & V. GASOline engine, heavy type, purchased by me last year and used only 10 days. On account of putting wind stacker on separator am compelled to get more power. Engine is in A1 condition and guaranteed. Address J. H. Kruse, Yoncalla, Oregon.

WE'LL BUY YOUR HIDES, PELTS, WOOL, furs, second-hand sacks and junk. Reliable, prompt. Nampa Hide & Junk House, Nampa, Ida.

FOR SALE—1917 SELF-PROPELLED Holt harvester; good condition. Geo. A. Buehler, Ritzville, Wash.

### AUTOMOBILES 114

FORDS CAN BURN HALF COAL OIL, ALL distillate, or cheapest gasoline, using our 1918 Carburetor; 34 miles per gallon guaranteed; easy starting; great power increase; attach it yourself; big profit selling for us; 30 days' trial; money back guaranteed; styles to fit any automobile. Air-Friction Carburetor Company, 321 Madison st., Dayton, Ohio.

### STOVE & FURNACE REPAIRS 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

### PATENTS 150

WANTED — NEW IDEAS. WRITE FOR list of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. VICTOR L. EVANS & CO., Pat. Attys., 710 Ninth, Washington, D. C.

### PETS—DOGS, BIRDS, ETC. 171

WANTED—RAT TERRIER PUPS, GOOD hunting strain. G. Kingsbury, Vaughn, Wn.

SHEPHERD PUPS, $5; PART AUSTRAlian. L. G. Foster, Pasco, Wash.

### HARES AND RABBITS 173

FLEMISH GIANT RABBITS—BREEDER of large stock only; correspondence solicited. Chas. L. Barnett. Box 284, Anacortes, Wn.

### POULTRY 174



BABY CHIX—WHITE LEGHORNS; NOT only bred to lay, but bred to live and thrive with the vigor and vitality necessary to make dividend payers bred into them by 15 years of breeding at the oldest established hatchery in the state; chix last half of May, $12; June, $11 per 100; delivery in good condition guaranteed. The Lakeside Poultry Farm, Roy, Wash.

50 USED INCUBATORS FOR SALE, SEVenty to seven hundred egg capacity; all in perfect condition; bargain prices.
ST. HELENS INCUBATOR CO.
TOLEDO, WASH.

200,000 WHITE LEGHORN BABY CHICKS —Bred for eggs, vigor, size. Safe arrival in good condition guaranteed. Free catalog and book on "Raising the Chicks." Oak Heights Poultry Farm, Route 3, Box T 67, Tacoma, Wash.

### POULTRY 174 Continued.

HOGANIZED BABY CHICKS—THOROughbred White Leghorn chicks, hatched from Hoganized parent stock; April delivery, $14 per hundred; May, $13. Rhode Island Red and Barred Rock chicks all sold for April. Will book May orders for $17 per hundred. Safe delivery guaranteed. Established for ten years. Queen Hatchery, 89 Pike st., Seattle, Wash.

BABY CHICKS.

Famous Carnation White Leghorn; vigorous, early maturing, heavy winter layers; also breeding stock. E. W. Raush, Carnation Poultry Ranch, Kent, Wash.

BABY CHICKS, WHITE LEGHORNS, CUSTomers say they are "husky," "lively," "vigorous," "healthy," "strong," "hard to beat," "thrifty," "great layers." Write at once. Free catalogue. Freshlaid Farm, Colfax, Wash.

50,000 S. C. WHITE LEGHORN BABY chicks for May and June delivery. Real Kaiser Cultural Fighters. Our war measure. Price $12.50 per 100. I. D. Casey & Sons, R. 6, Waitsburg, Wn.

UNCLE SAM SAYS: "RAISE POULTRY; don't be a slacker." Eggs and chicks, Tancred strain; trap-nested for 13 years. Special prices for May and June. Bert Hands, Cottage Grove, Ore.

WHITE LEGHORN EGGS $1.50 PER SETting; $8 per hundred. Special mating Pen-A, eggs 50c each; Pen-B, eggs 25c each. Waikiki Farm, R. 7, Spokane, Wash.

SINGLE COMB WHITE LEGHORNS; THE world's greatest egg machines. Write for our "War Measure." Help Hoover win the war. Broadview Farm, Curlew, Wash.

S. C. WHITE LEGHORNS — PRESENT breeders averaged 15 doz. each last season. Mated to high-record males. Hatching eggs. Mary Jessup, Cooks, Wash.

S. C. RHODE ISLAND RED EGGS $2 PER setting; $10 per 100. Fertility guaranteed. Waikiki Farm, R. 7, Spokane, Wash.

BARRED ROCKS.

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### LIVE STOCK 177

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# THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XLI. NO. 19. MAY 9, 1918. ** WEEKLY.


# Farmer Responds to Far Cry

## *Hastens Production to Feed the Stricken and to Strengthen the Soldier Boys*

The desperate hunger of women and little children in war-stricken France and Belgium makes an overpowering appeal to the American farmer. Also, when he is told that the nation with the last sack of wheat will be the nation that will win the war the American farmer is likewise on his job. He may grumble now and then about the stumbling blocks that are placed in his pathway. He may be less effusive and demonstrative in his patriotism, but he is loyal to the core when it comes to doing things for the soldier boys in France or when the cry of the widow or orphan is heard afar off.




As those who read this issue of the Farmer will see, as well as those who have been reading the Farmer for months back, well know that farmers of the Pacific Northwest have been doing their level best in increasing food production. This same sentiment of loyal war food production service on the part of the farmers generally throughout the country is voiced by Mr. Hoover in a recent address when he became quite optimistic over the prospects of an 800,000,000 or 900,000,000 bushel wheat crop this year.

However gratifying may be the cheering words of Mr. Hoover, yet this is no time to slacken a single effort in the way of the largest possible food production. Not long ago R. E. Prothero, the president of the British board of agriculture, the man who has planned, organized and directed the food production campaign in England, said: "The nation with the last sack of wheat will be the nation that will win the war." Mr. Prothero pointed out in the same interview that it is to the American farmers that the allies are looking to be saved; that the wheat needs of America herself are greater during war than during peace, adding, "The world when it fights must have more to eat."

Here is another paragraph of Mr. Prothero's utterances which should sink deeply into the heart of every American citizen though it is directed especially to the farmers of America: "The task before him (the American farmer) is titanic and the responsibility is immeasurably the greatest in all history, for if the American farmer does not find that last sack of wheat with which the war is to be won beyond all dispute the German farmer will."

The farm family that sends one or more of its members into the war service deservedly receives recognition in a war service flag with the stars indicating the number of those who have responded to the call of the nation.

The same family that is speeding up war production, doing its best under more or less difficulties, often because one or more of its efficient workers are in war service, deserves and should receive unstinted recognition for helping to produce that last sack of wheat and should have its own peculiar service flag. Turn to pages 16 and 17 of this issue and look at the **Farm Service War Flag** designed by the Farmer and

Continued on page 28.

# Haul Your Crops With a VELIE TRUCK



Money making on the farm depends on equipment. Figure the saving of moving your crops at the right time—in big quantities—to any distance in the shortest possible time. Figure also that a truck works at the minimum expense and is an expense only when it is making money for you.

VELIE TRUCKS stand up under all conditions. **Velie power** means more power than is ordinarily needed. It means sure service in emergencies—for the heaviest loads, over the worst roads.

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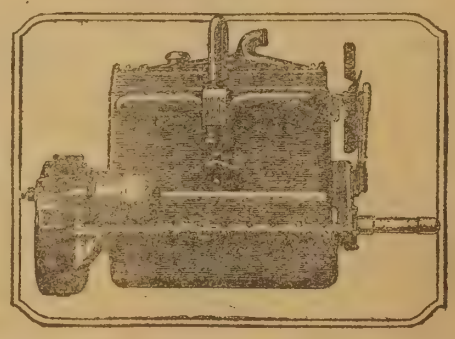
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# STEPHENS *Salient Six*

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*With Perfected Overhead-Valve Engine*



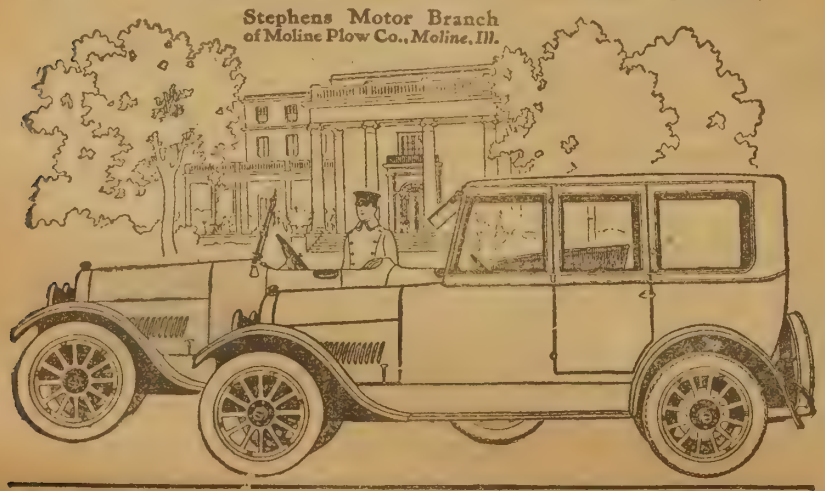
The Stephens Salient Six perfected overhead-valve engine converts every drop of fuel into power.

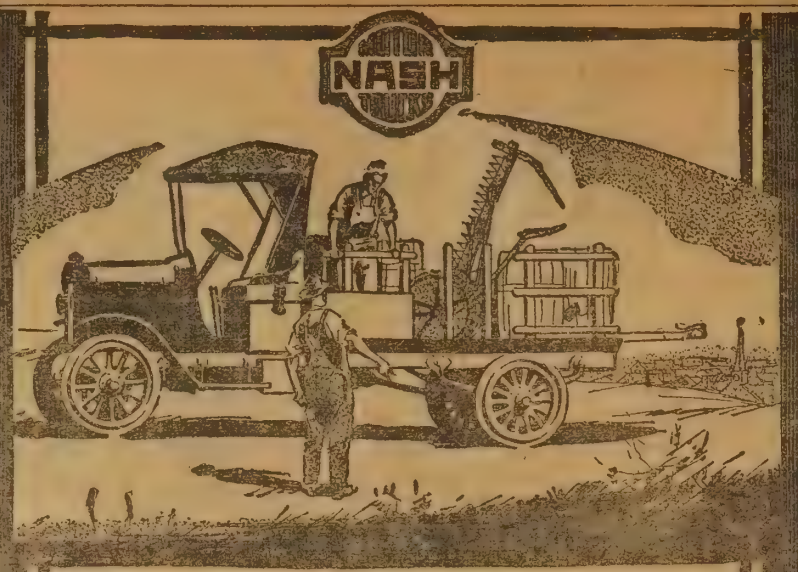
Its manifold in the cylinder head surrounded by heat thoroughly vaporizes and dries the gas so that it is in ideal condition for burning. Large valves then feed it into a small, perfectly cylindrical combustion chamber, where it is completely consumed, with every ounce of its energy exerted directly against the piston.

The Stephens Salient Six is built in five models, all of them beautifully, conservatively distinctive—latest examples of the coach builder's art. They have ideal balance and spring suspension, giving superb riding qualities. Their beauty, style and comfort are the lasting expression of judgment and good taste. *It is a pleasure to demonstrate.*

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# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 19 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF May 9, 1918

## For Housing, $60,000,000

### *Added to $50,000,000 for Ship Workers*

The housing question is now one of the most important factors in American war program. Only a month ago the emergency fleet corporation received an appropriation of $50,000,000 with which to provide houses for shipyard workers. Now the government is about to appropriate $60,000,000 more for housing facilities for industrial workers, including government clerks in the District of Columbia. The British government learned this lesson early and quickly started house building. It has already spent $700,000,000 in providing housing facilities for industrial workers, and it is now planning to spend $1,300,000,000 more.

**MUNITION OUTPUTS IMMENSE.**

According to fragments given by Colonel Samuel McRoberts, chief of the procurement of the United States ordnance bureau, Springfield rifles are now being made at the rate of 11,250 a day and there are 600,000 on hand. Of 2,500,000 Enfield rifles under contract 1,050,000 have been delivered. The volume of rifle manufacture is the greatest in the world, and so far exceeds immediate needs that some rifle factories have been diverted to machine guns. Forty thousand motor vehicles are being produced for the artillery faster than they can be shipped, at a cost of $175,000,000. Powder plants are making 650,000,000 pounds of explosives and produce smokeless powder at the rate of 1,300,000 pounds a day.

**WOOL PRICE FIXED.**

The United States war industries board officially announces that the government will allow dealers in raw wool a commission of 3 per cent for ungraded and 3 1-2 per cent for graded wool. It also makes official the price of raw wool to the producers to be that prevailing July 30, 1917. A new price, to be made effective August 1, will be fixed at a conference two weeks before the expiration of the three months' price. W. D. McKellar of Salt Lake City, buyer for a Chicago wool concern for many years, has been appointed to supervise the national distribution of approximately $390,000,000 worth of wool for the entire clip of the United States.

**ARMY, $15,000,000,000.**

The total army appropriation for the fiscal year 1918-19 submitted to congress by Secretary of War Baker is approximately $15,000,000,000, exclusive of the amounts carried in a separate fortifications bill covering coast defenses and heavy ordnance. Secretary Baker says his trip to Europe has opened his eyes to the magnitude of operations. There is a general sentiment among the members of the military committee to provide for 3,000,000 men more, and that a motion might be made to increase the number to 4,000,000 or 5,000,000. A provision giving the president authority to draft any number of men probably will be written into the army bill.

**FOOD PRODUCTION.**

The emergency bill authorizing the department of agriculture to spend $19,730,893 to increase production of food was ordered favorably reported Saturday by the house agriculture committee.

**BIG SHEEP PROBLEM.**

Unless the sheep industry of the United States adjusts itself to the changed economic conditions of the day production will continue to decline in the proportion it has in the past, in the opinion of the committee on statistics and standards of the chamber of commerce of the United States, which has completed an investigation of the industry. The principal remedies suggested in the committee report are the use of sheep grazing of the agriculturally worthless and cheap cutover timber lands of the country; the more general and systematic raising of sheep on the farms, and continued use of the great ranges of the west to their full capacity.

**THIRTY BILLIONS IN CEREALS.**

Thirty billion dollars' worth of the six chief cereals used for food—wheat, rye, barley, oats, corn and rice—is annually produced by the farmers of the world, according to the yearbook just issued by the International Institute of Agriculture, covering 10 years of agriculture throughout the world. "We find," declared the author of the book, "that the ascertainable yield of wheat throughout the world exceeds a thousand million quintals (one quintal being 3.67 bushels), and represents at present value more than $10,000,000,000. The yield of maize is nearly as large as of wheat and is worth $5,000,000,000. The yield of potatoes is over 1,500,000,000 quintals, and of beet sugar more than 500,000,000 quintals."

**FUR AUCTION, $6,250,000.**

The annual April international fur auction at St. Louis resulted in a total sale of $6,250,000 for 10 days. The last day was devoted to selling of musk rats, Argentine and Patagonia fox and beavers; 800,000 muskrats brought $750,000 and 12,500 sold for $175,000. The largest collection of silver foxes, 1200, offered in the last 12 years, was auctioned for $362,000. The 180,000 skunk skins brought $625,000. About 2000 Russian sable skins were sold for $250,000.

**FAVOR PROHIBITION.**

Responsive to inquiries sent out by Edwin Rawden of the anti-saloon league, 82 out of a total of 122 candidates for election to the next Oregon legislature say they will vote to ratify the prohibition amendment to the federal constitution, indicating the success of the prohibition measure in the legislature.

## Farm Lighting System

### *Eliminates Much of the Housewife's Drudgery*

The contest among women and girls of the farm home on the advantages of the automobile, a farm lighting system, or a farm water system closed May 1. The awards will be announced soon.

To the Editor of the Washington Farmer: We have found the electric lighting system a very valuable thing in our home and almost an essential one.

Besides being a means of lighting the dwelling house and outbuildings, it furnishes current for the iron, the washing machine, the carpet cleaner, and a host of other things. It does away with so much of the housewife's drudgery connected with the farm that it makes life worth while on the farm. It eliminates the beating of rugs, and the spring house cleaning as in the old-fashioned way.

Smokey lamps, lanterns and candles should be a thing of the past if electric power can be had. The gas that comes from the lamp is very injurious to the health and a lamp is also a dangerous affair, a great percentage of fires in the farm home having been caused by a lamp or lantern. For instance, we had this occur in our home before we had the electric lights. In the bedrooms we kept the matches on the dresser for lighting the lamps, and some one had laid one in the window for convenience, near the bed. During the day the window, which had been raised, fell and caused the match to light. It at once set the pillows afire, then the bed clothing, and we only discovered it in time to save the house from burning. The bed was completly ruined and I suppose if the walls hadn't been plastered the house would have burned. Therefore, I believe that the electric lights would prove much more satisfactory, and I believe, in the long run, cheaper. The work of caring for the lamp is also eliminated.

MISS CECILE STUBBLEFIELD.
Clarkston, Wash.

### Finds Auto Invaluable.

To the Editor of The Washington Farmer: I would not do without the automobile, because it would often mean going without the mail, as we are not directly on the mail route. We are two miles from school, and if we had not the machine the heildren often would be late. It also save them from many drenchings, as when a storm comes up I can get them quickly.

The car makes possible quick marketing of perishable articles which otherwise would be lost, thus saving us many dollars a season, as we're 18 miles from market.

It also makes it possible for us to attend grange, lodge and other places of benefit and recreation which we did not before having a machine.

For quick repairs and supplies at harvest time it is invaluable. A passenger license last year brought us enough returns to give us many little luxuries and kept us in gasoline. We have had three machines, and we figure that each one has paid for itself.

An accident two years ago made quick medical aid necessary. The auto made this possible, and an ugly scar on our little girl's face was prevented.

We could not do without our machine.

MRS. JOHN KNOPH.
Dungeness, Wash.

## E. H. Shepard

### Able Leader in Fruit Industry

After an illness from which he seemed to be recovering, E. H. Shepard of Hood River died in Portland, April 28

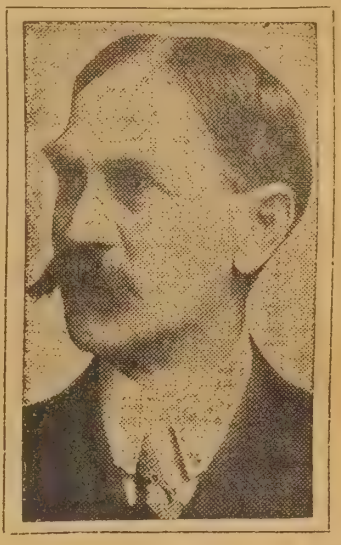
Edward Henry Shepard was born December 24, 1857, in Marysville, Cal. He was a graduate of the University of California. He came to Oregon as manager for the Sanborn, Vail art store. His health failing, he moved to Hood River and bought an apple orchard.

His business training made it clear to him that the fruit industry needed organization and he strongly advocated cooperative handling and selling. He took an active part in the formation of the Hood River Apple Growers' union and was its first manager. He was manager of the Hood River Fruit Growers' union, which handled strawberries and small fruit only. Both these unions merged with the Apple Growers' association of Hood River later.

He had learned fruit packing in California, and he formulated the first rules for grading and packing apples. These rules, amended and changed somewhat, were adopted by the fruit raisers of the northwest and are still used by them.

He realized the need of a fruit magazine, and was urged by his associates to start and conduct one. So about 18 years ago he founded "Better Fruit," of which he was editor and publisher at the time of his death.

"I did not know anything about printing or editing," said he a few months ago in speaking of the inception of the magazine, "but there was nobody else who would do it and it had to be done."



E. H. Shepard.

Mr. Shepard knew the value of publicity, but he had no desire for publicity for himself. He worked hard for the fruit industry and got but little out of it for himself. He worked unselfishly and sincerely for what he believed was right and best. He has done as much, probably, as any one man to advance the interests of fruit in the northwest.

He was a member of the American Pomological society, an honorary member of the state horticultural societies of Oregon, Washington and Idaho, and the only nonshipping member of the International Shippers' association.

Surviving Mr. Shepard are his wife, who is a member of the pioneer Failing family, and five daughters.

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HAVING designed and applied for a patent for a Farm Service War Flag, permission is hereby gladly given by The Washington Farmer to any patriotic farm home to display this emblem in the window, at the gate post, or in any other manner, as a mark of loyalty in speeding up the war food production. Further information will be found on page 16.

# War Time Farm Labor

## *If You Cannot Get the Best It is Up to You to Take the Next Best*

In these days when the world is upset by the engulfing of all the ways of peace it is good to be called to our senses by some sane words and to be made to remember that even daylight saving has not disturbed the length of the day nor changed the months of the year. Seed time and harvest are yet with us. Here is a sensible way of looking at the problem of farm labor. Colonel Clarence Ousley, assistant secretary of the department of agriculture, after discussing the furlough question, which has been treated fully in our columns, goes on to say:

**Town Men of Farm Experience.**

There is a widespread movement to mobilize town men of farm experience for a few days at a time, or for certain days of the week during the periods of labor strain, in planting, cultivating or harvesting. That was done successfully last year in many of the grain regions, and in some places the stores were closed for two or three days at a time and everybody joined in saving the crops. This is not the best farm labor; the town men are not "hard," but they can at least work a few hours a day, and in the aggregate they can furnish the necessary man-power for emergencies.

**Boys' Working Reserve.**

Many thousands of schoolboys between 16 and 20 years of age have been enrolled to do farm work. This is not the best labor, but it will serve in an emergency. In many places last year the boys, after a few days, learned to be quite skillful in certain farm tasks. If the farmers will be patient with them they can become very useful.

**Women on Farms.**

For many of the lighter labors on the farms, such as dairying, vegetable cultivation and fruit gathering, women can render efficient service. They have been successful in such endeavors in many places throughout the United States. Most important of all, women can relieve the men in the towns so that they may go to the farms temporarily or for a few days.

**Idlers and Loafers.**

In many places sheriffs and town marshals are rigidly enforcing local laws against vagrancy and loafing. In most towns it is against the law to loaf on the streets. A rigid enforcement of such laws will compel able-bodied men to find work of some sort, and whether they go to the farms or find other employment the effect will be to release labor and increase the man-power of the country. In view of the demand for labor it is proper for communities, by law or by public sentiment, to insist that every man, whatever his wages or his wealth or his condition, shall put in full time.

**Wartime Methods.**

It is not possible for us to wage a war of such proportions as that in which we are now engaged and at the same time maintain peace practices and indulgences. We must all sacrifice; we must all do things in other ways than the ways to which we are accustomed. If we can not get the best we must take the next best. War industries can not be suspended; shipbuilding must go on; munition plants must be operated; soldiers must go to France. With all these activities drawing upon our man-power in increasing volume it will become more and more necessary, from week to week and from month to month as long as the war lasts, for each of us not so engaged to readjust and reorganize as the circumstances require. More effective than any law that can be enacted by the national government is the force of public opinion. The best agency for the solution of these problems is the agency of community action. If the people of a community resolve that a thing shall be done they will find the means of doing it. There is no power in the government to creat labor, nor have we yet reached the point of national peril where it is necessary to conscript labor or to require farmers by law to grow certain crops. The truest test of a democracy is its ability to meet a local emergency without the compulsion of a national law. At any rate, it is impossible this year to organize a system of federal administration of agricultural labor, but it is easily possible for each state, each community and each neighborhood to solve its own problem. Notwithstanding labor difficulties last year, production was greatly increased; the situation this year is but little, if any, more difficult, but the more difficult it becomes the more necessity there is for united community action.

### Let No Flour or Meal Spoil.

To prevent losses from spoilage in certain flours and meals during hot weather, the United States food administration has issued instructions regarding their storage. Special care should be taken of the following products:

Bran, shorts and middlings, corn products containing the outer coating and germ (such as so-called water-ground cornmeal and grits), oats and oat meals, graham and wholewheat flour, rye flour, barley flour, peanut meal and soy bean meal.

These products should be kept moving and used as soon as possible. When storing is necessary keep in a cool, dry, well ventilated place. Raise bags of flour and meal sufficiently from the floor to exclude rates, mice and insects, also to permit cleaning the floor under the bags. When many bags are stored, arrange them in tiers, leaving space between the tiers to allow abundant ventilation. Large stocks should be reduced as much as possible before hot weather.

### Farming a Community Affair.

FARM AND RANCH: When the land produces townspeople laugh until their faces are red. They have good reason. Prosperous farms make prosperous cities and towns. When the farmers fail the towns fail. This proves that communities have an interest in the farms—that farming is not an individual matter so much as it is a community affair. The day is coming when every community will take an active interest in farm problems as community problems.

# Unlawful Associations

## *The I. W. W. Included in New Senate Bill*

If congress should pass and the president approve a bill that has just been adopted by the senate judiciary committee, the I. W. W. will either have to go out of business or alter its vicious principles and tactics.

This bill, which was framed by Senator Walsh of Montana would make such organizations unlawful, with a maximum penalty of 10 years' imprisonment and $5000 fine for membership, management, circulation of their literature, advocacy of their present doctrines or rental of rooms for meetings. The principal prohibitory clause of Senator Walsh's bill provides that—

**"Any association, one of whose purposes or professed purposes its to bring about any governmental, social, industrial or economic change within the United States, by the use, without authority of law, of force, violence or physical injury to person or property or by threats of such injury, or which teaches, advocates, advises or defends the use, without authority of law, of force, violence or physical injury to person or property, or threats of such injury to accomplish such change or for any other purpose and which during any war in which the United States is engaged, shall, by any means prosecute or pursue such purposes, or professed purpose or shall so teach, advocate, advise or defend, is hereby declared to be an unlawful association."**

If Washington were alive and president today, this bill would have his cordial approval. In his farewell message to the American people he expressly warned them against just such organizations as the I. W. W. He pointed out that the people had a government of their own creation and approval, and if changes should be deemed advisable, an orderly, fair and effective way had been provided for them. He admonished his countrymen to beware of any organization that should try to overawe the courts and the duly constituted officials of the government.

Very likely this bill will be opposed on the floor of congress, and fallacious arguments will be heard against it all over the country. I. W. W. sympathizers will try to make it appear that the rights of the people are being invaded and that some one wants to oppress the workingmen. Both contentions are false. The truth is that the I. W. W. itself constitutes the real menace to the rights of law-abiding citizens, and the enactment of this bill would not interfere in the slightest with any lawful labor organization.

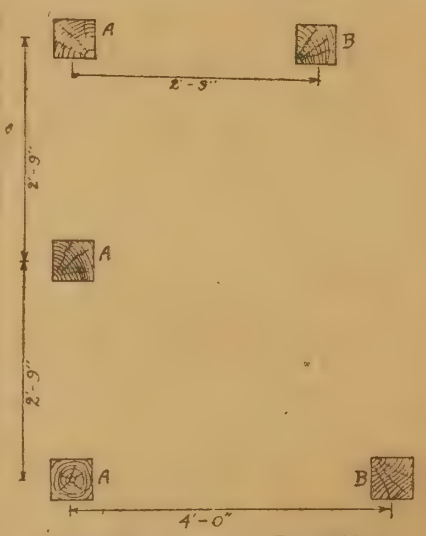
Federal officials say that 70 per cent of the members of the organization are aliens—subjects of foreign governments. These men have not thought enough of our institutions to become citizens, and many of them are undoubtedly in sympathy with Germany.

People who show such instant concern whenever a suggestion is made to curb the vicious activities of the I. W. W. would show themselves to be far more patriotic if they thought more of the safety of our soldiers in France and less of the so-called "rights" of this bolshevik organization.

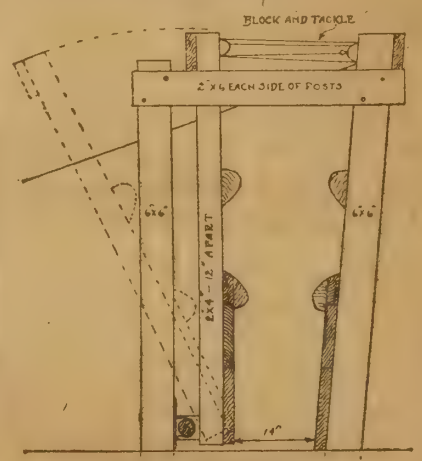
PLEASE find enclosed a money order for 75 cents, for which please send me as a premium the Farm Service War Flag, bunting pennant.

VENORA DUNNING.
Pullman, Wash.,
R. D. 3, Box 16.

# Building a Dehorning Chute---*By E. L. Potter*




GROUND PLAN OF POST HOLES.
POSTS 6"x6" OR 6" ROUND, 6' ABOVE GROUND.
POSTS A, A, A, LEAN OUTWARD 6"
OTHERS ARE PERPENDICULAR.

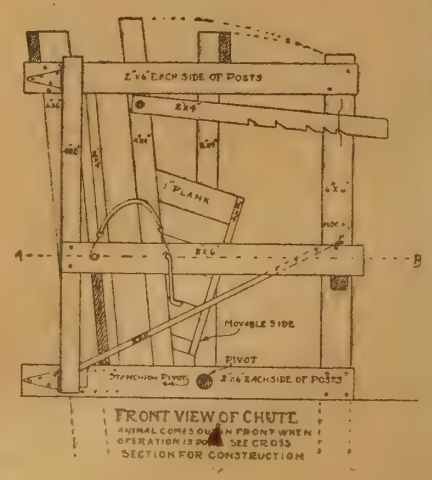



REAR VIEW OF CHUTE
NOTE BLOCKING TO KEEP ANIMAL FROM WORKING UP OR DOWN. TOP BLOCKS ARE 1" LOWER IN FRONT THAN BEHIND SPACE BETWEEN BLOCKS MAY BE BOARDED BUT NOT OPPOSITE THE HIPS

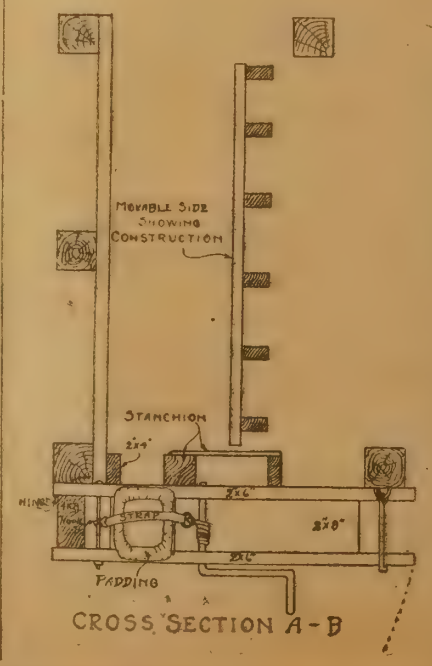
The accompanying drawings show in full the construction of a modern dehorning chute. The dimensions indicated are suitable for cattle weighing from 700 to 1200 pounds, and will work best on cattle weighing from 900 to 1000. No claim is made for originality. On the contrary every point has been proved in service. The only new feature of the chute is the blocking on the sides to keep the animal from working up or down. The absence of boarding on the side opposite the hip bones is also important, as this puts the pressure on the fleshy portions of the body and not only holds more firmly but does not skin the hips.

It will be noted that the front opens so that the animals may come out forward after being dehorned. A bar may be placed across behind the animal to prevent him from coming backward instead of forward when he is released.

The same chute may be used for branding, by cutting away the sides where the brand is to be used.




FRONT VIEW OF CHUTE
ANIMAL COMES OUT IN FRONT WHEN OPERATION IS OVER. SEE CROSS SECTION FOR CONSTRUCTION




CROSS SECTION A-B

# Food Products Inspectors

## *Condition of Fruits and Vegetables on Arrival*

A season's crops dumped or sold to cover freight, a good reputation for honest packing at stake—how many are the troubles of the farmer which are told in the telegram, "Rejected account arrival in poor condition. Advise disposal." A lifetime reputation for honest dealing, a trade relation with an entire community lost through misunderstanding—how many are the troubles of the dealer. A lawsuit against the railroad lost, or justifiable claim for damages not presented to the railroads—how many are the financial losses to all parties because no evidence of condition of arrival can be presented.

The growers' association may inspect the produce when shipped, the railroad may inspect it in its yards, the dealer may be perfectly honest in his decision to reject—but no court can accept without question inspection made by persons who have financial interests in the decision.

To meet this situation the U. S. department of agriculture (bureau of markets) has designated food products inspectors in the more important markets. These inspectors are authorized to investigate and certify to shippers the condition as to soundness of fruits and vegetables, as provided for in sectioon 8 of an act of congress approved August 10, 1917. The findings of the inspector will be considered as prima facia evidence by any court.

To date 34 cities have been designated by the secretary of agriculture as cities in which federal inspections may be obtained. In case a shipper desires inspection in a city to which an inspector has not yet been appointed, it may be possible to secure it by telegraphing to the food products inspector, bureau of markets, department of agriculture, Washington, D. C. In the Pacific northwest inspections may be obtained from the following inspectors:

Butte, Mont: L. J. Case, inspector, Unitel States bureau of markets.

Portland, Ore.: R. L. Ringer, inspector, chamber of commerce.

Seattle, Wash.: F. E. DeSellem, inspector, United States bureau of markets.

Spokane, Wash.: R. M. Rutledge, inspector, 424 Postoffice building.

Application for inspection must be made by the shipper or the shipper's agent. Inspection certificates are issued on written or telegrahic applications, but inspection may be made on verbal requests, provided a written request is made before the certificates are issued. No charge is made for this service.

# Patriotic Acts Speak Loud for Farmers

The loyalty of the farmers of the Pacific northwest is well expressed by the following paragraph from one of the correspondents of the Farmer:

We have no slackers among the farmers. While some may criticize the government's mistakes, its delays and its red tape, it does not prevent an honest endeavor to do their best. Our county, like most of the counties in this state, has oversubscribed its levy on Liberty bonds and will double its quota before it closes.

A widespread inquiry among our correspondents, scattered over the four states, shows a similar patriotic attitude. For instance, from our Idaho Falls correspondent, in the extreme southeastern part of that state, comes the word:

While some feel that in addition to fixing the price of wheat the government should fix the price of commodities the farmer has to buy, yet at the same time they are not complaining about this and are working faithfully to produce maximum crops on increased acreages, in addition to which the farmers have subscribed very liberally to the third Liberty loan, some communities reporting as high as 85 per cent of their population subscribing for bonds.

From the extreme southern section of Oregon, in Josephine county, our correspondent writes:

Once in a great while we hear some one commenting upon some of the mistakes that had been made by the government officials in the prosecution of their work, but they are pretty generally forgotten when it comes to the response, either in financial assistance or in production.

From Multnomah county, in northwestern Oregon, comes the word:

There is absolutely no lack of patriotism among the farmers in this community. I have traveled over the northwest rather extensively and find farmers from the 10-acre tract to the large farms intensely interested and full of the highest loyalty to the country.

Here is a word from Klickitat county, in southern Washington:

I have just canvassed our school district and every patron of the district has done his best, with regard to Liberty bonds, having secured over $700 in a very small district, this being our first try at the Liberty bond as a district.

Here is a sample from western Washington:

Mason county has its patriots as true blue as the sun anywhere shines upon, and the general standard of patriotism is high, as the record of "over the top" has shown in every call which the government and the various societies have made since the declaration of war.

One of our Okanogan county correspondents declares that "it is only the idle man who is grouching and knocking against his country," adding

Farmers are very busy these days and are using every means to grow all the land will produce and when people are hustling there is no lack of patriotism.

"There seems to be no lack of patriotism in this community," is the report from a Douglas county correspondent in central Washington, adding:

Farmers are all doing their utmost to produce maximum food crops. Everybody seems to be awake to the situation and willing to overlook hardships and do their utmost even to the extent of personal sacrifices.

PLEASE send me one of the 9x22 flags. Enclosed you will find 25c for one subscription.

MRS. L. C. MONEY.
Colton, Wash.

# Notable Progress

## Is Seen in Wenatchee Valley

By PAUL E. TRIEM.

Another year of achievement has begun in the Wenatchee valley. Progress is in the very air. The power sprayers and cultivators are evidence of it. Only a few years ago all the spraying was done with hand outfits. Now the standard machine is the high pressure pump, operated by gasoline power, and having a capacity sufficient to keep several men busy.

The city streets and the country roads are dotted with automobiles, autostages, and auto-trucks for heavy farm hauling; while here and there a bigboned mule team stolidly drags a cultivator or a manure spreader. The buckskin cayuse of a few years ago seems to have left the valley in company with hard times, and prosperity and twentieth century farm power have come in together. An additional change is seen in the attitude of the fruit growers toward their product. A get-together meeting recently held in Wenatchee by the Wenatchee and Yakima traffic associations illustrated the same trend of public opinion. The meeting was called to consider ways and means of moving the 1918 fruit crop. Local rivalries were forgotten, and these two fruit districts worked shoulder to shoulder in formulating plans which will work out for the advantage of the entire northwest. "Let nothing be wasted, and the raw material of soil and water and men's labor, to the finished product, the fruits of our orchards," is the spirit of this community in war time.

Cull apples have been used for cider making since the first orchard was planted, and with the spread of the dry movement the market for this product has increased. Cider, however, is only a part of the apple; a profitable disposal of the pomace has up to this time been apparently an unsolvable problem. Now the dairy industry makes its bow to Chelan county and says, "Let us have that pomace. We can turn it into milk!"

Orchards or parts of orchards are coming out in places, to make way for alfalfa and cows. Mike Horan, for instance, has a fine herd of grades, with a sprinkling of purebred Ayreshires. And there are two purebred herds near Wenatchee, which seem destined to play big parts in the future of the dairy industry in Washington: One is the J. T. Compton Holstein herd, the other the sturdy bunch of Ayrshires owned by E. W. Van Tassell.

Mr. Compton, who is one of the well known farmers of eastern Washington as well as a leading member of the grange, follows a rule established by many practical dairymen: Raise all the feed you can on your own farm. Alfalfa and silage corn are produced on the place. The corn chosen is a variety brought into the county many years ago by the missionaries.

Pride Fayne Valdessa, No. 187266, a young bull of grand conformation, who traces his descent from world's record producers on both sides, was purchased last year to head the herd of 25 registered Holsteins.

The E. W. Van Tassell herd of Wenatchee has been built up largely from stock secured from that thorough-going Ayrshire breeder, J. W. Clise, of Seattle. The animals are doing wonderfully well in their eastern Washington home, and under the management of H. Stellingwerf, farm manager for Mr. Van Tassell, they may be depended upon to give a good account of themselves in future O. A. R. work.

On the Van Tassell farm, apple pomace takes the place of silage. About 35 pounds per head is fed daily, in connection with alfalfa hay and mixed mill feed. The pomace is stored in a pit.

## Grain Standards.

The public service commission of Washington announces a hearing in the assembly room of the chamber of commerce in Spokane at 10 a. m. Friday, May 17, 1918, on the advisability of establishing and promulgating the same standards for the grading of wheat and corn as have been established by the U. S. department of agriculture, to become effective July 15, 1918, such standards so established to be known as Washington grades. The commission announces that "all persons desiring to be heard will be heard and may give such testimony as they may desire to offer at said hearing." It is especially desired to have the farming interests well represented

# A. C. Townley

## Given a Hearing at Washington

WASHINGTON, D. C., May 1.—President A. C. Townley, of the nonpartizan league, was given a hearing today before the senate committee on military affairs. He had asked for an opportunity to appear before the committee to answer recent accusations made before the same committee, by Judge John E. McGee, member of the Minnesota public service commission, that leaders of the organization were unpatriotic and some of them disloyal.

When Mr. Townley came into the committee room the senators saw a man of pleasing personality, amiable, not at all controversial, and possessed under heckling; a man with magnetic eyes, big domineering nose and mobile mouth. At times the laugh was on the witness, and at times on members of the committee.

It was on Townley when he told of a calf in Minnesota, whose hide brought only $3, while the farmer who sold it had to pay $100 for a lesser amount of hide contained in a harness. In an earlier day, Mr. Townley argued, the hide would have brought $6 and the harness $25.

Senator Weeks declared that calfskin was not made into harness, Senator Hitchcock that the figures were all wrong and Senator Reed demanded to know the exact date when calf skins sold for $6 and harness for $25.

"I am sorry I talked about that calf," said Townley, getting a laugh, "let's talk about people." So they proceeded to talk about him, intimating that he wasn't much of a farmer or else he would know more about calves and harness. Mr. Townley explained that he had farmed successfully for several years, and then lost all he had made in a later year cbeause it cost him more to raise farm products than he could sell them for.

"Like my experience in raising potatoes last year," said Senator Weeks. "They cost me $2.50 to raise and I sold them for $1.25." "You and I are both farmers," retorted Townley, admitting the Massachusetts man to fellowship in the lodge.

The laugh was on the senators when, in answer to a question why the Nonpartizan league had bought only $5000 worth of Liberty bonds, the witness asked in return why the republican and democratic parties had not invested. Representative Baer of North Dakota and Representative Jeannette Rankin of Montana showed keen enjoyment over this retort.

Extracts from the book of Lindberg, now nonpartizan league candidate for governor of Minnesota, were read to the witness, for his approval or condemnation. One phrase was "We have been dragged into this war by the intrigue of speculators."

Mr. Townley pleaded that he did not know what Lindberg meant by this. He also pleaded that Lindberg was not a leader of the league, and hence did not belong in the discussion. He drew a distinction, which the committee declined to accept, between a league leader and one who had been indorsed for office by the league. Another phrase from the Lindberg book, asserting that "wealth was so greedy for greater fortunes" that it had dragged this country into war, was read by Senator Reed, who wanted to know if Mr. Townley believed that, but the witness had no responsive answer.

To similar questions about some more similar statements, particularly ones charging organized wealth with responsibility for America's participation in the war, Mr. Townley replied that he would have to study them before making answer.

"Do they not strike you at once as being statements inclined to give aid and comfort to the enemy?" demanded Senator Reed, but Mr. Townley fenced and would not respond directly.

Senator Reed read Lindberg's phrases asserting that the people were being "driven as cattle to buy government bonds, subscribe to the Red Cross," and the like, and asked Mr. Townley if he approved that.

"I do not approve of the interpretation I get from your reading of it," was the reply.

It came out in the testimony that the league has about 50,000 members in North Dakota, about the same number in Minnesota and about 100,000 scattered through the 11 other states, in which organizations have been perfected, a total of 200,000 members, each paying into the league treasury $3 a year, giving a gross revenue of $1,600,000 a year. Mr. Townley testified that about 25 to 30 per cent is lost through members failing to pay their dues.

### As You Like It.

Treat the other fellow just as you would like to be treated.

# Washington Boys in War Service



WAGONER JOHN A. SCOTT, Mabton, Wash.—Entered the military service in April, 1917. He is now serving in the same company as his brother, "somewhere in France" with the 161st infantry, 41st division. He is 25 years old and a son of J. A. M. Scott of Mabton, Wash.



CORPORAL C. R. HAIGHT, Lakeside, Wash.—Enlisted at Faribault, Minn., May 31, 1917. He is at present stationed with Company B, 136th infantry, Camp Cody, Deming, N. M. His parents, Mr. and Mrs. B. L. Haight, reside at Lakeside, Wash.



HARRY MARK DEAN, Cheney, Wash.—Enlisted at Spokane in June, 1917. He is now doing his "bit" for his country "somewhere in France" With Company I, 161st infantry. Private Dean has been in France several months. His parents, Mr. and Mrs. George Dean, reside on a rural route from Cheney.

From The Twice-a-Week Spokesman-Review.

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## *Necessaries Before Luxuries*

As the summer wears away we shall have many reminders that the nation is at war; reminders that will reach down and grip our pleasures and conveniences, and take toll from our purse in various ways.

Automobiling may become a dwindling activity. Pleasure motoring is all but stopped in Europe now, forbidden in some countries by law, and practically made prohibitory everywhere by high prices for tires and gasoline.

Gasoline and tires are going up in this country, and no one can foresee the end. Importers of rubber have been notified that it is the intention of the war trade board to restrict imports of that commodity, as the government is face to face with the necessity of conserving cargo space as much as possible. Rubber is but one item, and it is the announced policy of the government to curtail as far as possible all future importations of luxuries and nonessentials. There has even been talk about cutting off imports of tea, but officials at Washington deny that they intend going that far.

Necessaries before luxuries is the order of the day, but the policy of the government is to bring about a gradual change, lopping off at first only those nonessentials that the country can well afford to spare.

## *Who Started This War?*

Who started this war? Germany. If further proof were needed, it is now supplied by the written memorandum of Prince Lichnowsky, who was the kaiser's ambassador to London before the outbreak of hostilities. Prince Lichnowsky is now practically under arrest for his candid revelations, and the kaiser is furiously angry with him.

He plainly states that while he and Sir Edward Grey, then the British foreign minister, were discussing means of preserving the world's peace, Germany was not only resolved upon war with France and Russia, but was reckoning upon war with England. "Thus ended my mission in London," he says. "It was wrecked, not by the perfidy of the British, but by the perfidy of our policy."

Our readers will recall that the assassination of the archduke and duchess of Austria, at Serajevo, in the spring of 1914, was the match that fired the fuse that blew up the world. Lichnowsky says that this assassination was merely a pretext for war. It afforded Austria an opportunity to make impossible demands upon Serbia (Serbian conspirators were accused of plotting the assassination) and thus drew Russia to the defense of the Serbian government. It has long been apparent, however, that Germany was inciting Austria, and that the kaiser's government was engaged in a desperate game of intrigue to start hostilities and have an excuse for the invasion of Belgium and the attack upon France.

The kaiser's former ambassador to England now confirms that fact beyond all further question. Austria was merely Germany's catspaw.

No wonder the German emperor is furious and has put his former ambassador under arrest, for these truthful revelations give the lie to his hypocritical assertions that Germany is fighting a defensive war.

## *Bees and Spraying*

A warning word comes from Dr. A. L. Melander of the State College of Washington. He fears a widespread destruction of bees in the Yakima and Walla Walla valleys, as well as in other sections of the state where beekeeping supplements fruitgrowing, unless the apple growers start to practice spraying for the codling moth before the petals are out of the apple blossoms.

Dr. Melander says that the misunderstanding as to when to spray is ruinous not only to the bee industry, but also to the apple industry, since the bees play an important part in pollenization.

Apple blossoms containing the petals contain also the bacteria, the nectar sought by the bees. By the time the petals fall the nectar is gone and the bees no longer frequent the trees. Moreover, arsenical spraying that is done when the petals are fallen will not harm the bees.

Another argument advanced by Dr. Melander for later spraying is that, after the petals are fallen the stamens of the blossoms open, so that the spray can more easily get down into the calyx cup, where it is needed to kill the worms.

The honey bee not only needs protection for the benefit of the orchard, but just now it can give help toward averting an international sugar famine.

The boy between 16 and 20 years old can do a real service by joining the Boys' Working Reserve, if he does not have an occupation that is contributing directly to the production of food or other war necessity. By so doing he becomes part of a federal organization, subject to call for farm service where it will do most good.

Formed of the blood of many nations, the American has a distinct personality. He is effervescent and yet capable of great fixity of purpose. He is quick and yet he has elements of persistency. No race is so adaptable; in none are the principles of freedom and high ideals more firmly rooted.

The proposal to raise the price of wheat to $2.50 a bushel did not get through congress. Some of us think it should have, but everybody is agreed that the greatest crop possible must be grown, regardless of the price. There is something in the world bigger than money.

War savings certificates enable everybody to take some part in financing the world war, in which the United States looms larger day by day.

ORDERS for The Washington Farmer's farm service war flags are just beginning to come in. Already among those received are orders from Soap Lake, Spokane, Big Lake, Odessa, Roy, Espanola, Richland, South Aberdeen, Lakeside, Amber, Pateros and Nasel, Coulee City, Shelton, Mold, Ferndale, Centerville, Rockford, Wheeler, Benge.

## *Washington Gleanings*

Mondovi is to have a new grain elevator.

Excess flour is being returned to the local dealers.

Methow Valley News: Our new cheese factory is now in operation, in full blast.

The apple tonnage of Omak was well above the 550 car mark for the last season.

The Yakima Potato Growers' association recently elected W. B. Myers president.

Fred Johnson of Attalia has had to reseed 30 acres of beets on account of the dry spell.

The Orondo Community Packing company has ordered material to increase the size of the plant.

Game Warden C. H. Rhode has just planted 100,000 silver trout in Waits lake in the vicinity of Chewelah.

Sprague has organized a home guard, with I. J. Putman, captain-commandant, to guard against I. W. W., fires and treason.

Big Bend Empire: Chris Aasen is going into thoroughbred stock this spring. He has purchased thoroughbred horses, cattle and hogs.

The annual picnic of the Horse Heaven grange will be held at the home of Thomas Horrell, May 25. Mr. Horrell lives on the old William Hayden place.

With the object of promoting rural and community life the state superintendent of public instruction has called a Grant county conference at Ephrata May 11.

Grangers of Whatcom county are planning to construct a large warehouse where buying and selling produce may be done cooperatively, and on a larger scale.

Fire totally destroyed the big furniture manufacturing plant of the Chehalis Furniture and Manufacturing company at Chehalis, April 19, entailing a loss of $110,000.

F. H. Krug, local manager for the Kennewick-Richland Marketing union, believes that the strawberrry yield this year will be one of the largest in the history of the valley.

A number of experiments in the cultivation of wheat, oats, kale and bluebell peas are to be carried out in Whatcom county this year under the direction of H. B. Carroll, county agent.

Returns of $2.12 net on Delicious, $1.72 on orchard run Winter Bananas, $1.31 on small sized extra fancy Jonathans and $1.09 on fancy Jonathans have just been made to Paul Dittman of Cashmere.

News comes from Prosser that 20 valuable sheep dogs near the Mercer sheep camp in the Rattlesnake have been immunized from rabies. Recently a number of dogs in that vicinity were bitten.

Dayton Courier Press: Fred Cushing started his farming outfit to Endicott Thursday. There were five wagon loads of machinery and implements and 100 head of work animals in the outfit that made the trip overland.

Toppenish Review: Some of the local farmers have raised the question of the right of the townspeople to clean their yards of cans and rubbish and then dump them along the roadway or by the fences of the farmers' fields.

The Waitsburg Patriotic league has adopted a resolution urged by the Progressive club of the town asking that the various clubs, lodges and societies pledge themselves not to serve food of any kind unless at a meal during the duration of the war.

Roadbuilding costing about $102,000 and extending over seven and a half miles is to be completed this summer in the Lake Quinault district, on the Olympic highway. The work will be done with federal forest road aid and state and county funds.

In the Waterville high school the gas engine class has just built an air pump engine. The boys have put on a kerosene attachment and say the engine can be run at a cost of six cents an hour, having a capacity of 375 gallons per hour from a 50-foot well.

Nine Allender, eighth grade pupil of the Okanogan public schools, was declared winner of the Okanogan county spelling contest, when she attained a grade of 100 per cent in the written and oral tests given her in competition with a class of pupils from different parts of the county.

At the county rural conference at Goldendale, April 20, there was a parade in the afternoon by the Goldendale Canning and Garden club and the Town Boys' Farm club. They marched down Main street carrying their hose and rakes and from there to the church, where they sang several songs and gave some club yells.

# Brunt Borne by British

## *Losses Estimated at Nearly 250,000*

The British military experts in Washington declare that everything points to the German offensive being continued almost immediately, and should the brunt of the attack again have to be borne by the British the situation undoubtedly would be serious unless sufficient troops are available to bring relief to the British divisions. It is believed that any German advances in the direction of the channel ports will be made at great cost to themselves and over the bodies of the British army, who have so often in the past shown bulldog determination in the defense. British losses in men killed, wounded, captured and missing on the western front since the German offensive began March 21 are estimated by the British military experts in Washington at nearly 250,000. The entire combatant forces of the British army have been almost continuously engaged. As an example of what the British have gone through the 21st division fought continuously from March 21 to March 28, and lost 4000 infantry men out of a total strength of 9000. Later, to drive back a German attack in which five German divisions were engaged, its losses increased to 6000. Statistics such as these bring home the terrible ordeal through which the British army is now passing.

**STUBBORN DEFENSE.**

A sober and long-headed look into the future confirms the belief that no matter what temporary successes may come to German arms, at an enormous cost of German lives, that it is no nearer downing France and England than it was six weeks ago. The capture of Kemmel may have made it more difficult for England to retain the Ypres salient, and the rear of those positions was threatened, but evacuation is not inevitable. On the 26th the French and the British prevented the Ypres situation from becoming a great German success. On the 28th and 29th German armies on three sides of Ypres hurled themselves against the Franco-British fronts, but these held like ramparts of granite and steel. Nowhere was Germany able to make a dent. Its frontal attacks betrayed German disbelief that Ypres can be outflanked from the south, and it appeared as if British withdrawal were not contemplated, for Haig gave no sign of retirement, and the British and the French showed strong faith that they can hold on. In 1914, when Germany's army was more efficient than it is in 1918, the English at Ypres withstood every German attack.

**AUSTRIAN DRIVE AGAIN.**

Vienna dispatches report Emperor Charles leaving for the front, and announce greatly increased activities along the Austro-Italian line. Meanwhile Austria-Hungary is confronted with a critical economical and political situation at home. The crisis in Vienna is marked by the dismissal of the Austrian parliament by the emperor's order, and the declaration that forcible measures would be taken to make a resumption of its sessions impossible. A statement issued makes it clear the government was embarrassed by the divisions in the legislative body over the grave food situation and the racial grievances in the Austrian body politic, and desired a free hand in the next few months.

**IS GREAT HONOR.**

One of the curiosities of the great world war comes to light in a letter of a youthful British soldier from Bethlehem to a friend: "I am on guard at present, and it is a great honor. I can tell you that I am guarding the birthplace and manger of our Lord. It is a wonderful place, and I never thought when I used to read about it that one day I should stand and guard it. The birthplace is marked by a 14-pointed silver star, presented by the French government. The stable is hung with lamps from all different countries and they look beautiful, and, I might add, they are always alight. The manger itself is cut in natural rock, but marble has been put in to keep it in a good state of preservation."

**THIRD LIBERTY LOAN.**

For the third time within a year the American people have heartily oversubscribed a war credit. As the third Liberty loan was closing Saturday night the treasury announced the campaign had been "an overwhelming success." Although $3,000,000,000 was the formal goal of the campaign, official reports, including only a small proportion of today's avalanche of pledges, showed the total as $3,203,655,400, and there were indications that the aggregate would be increased to nearly $4,000,000,000 this week, when banks have time to tabulate the multitude of last-minute applications. Official estimates placed the number of subscribers at between 12,000,000 and 15,000,000—far above the 10,000,000 of the second loan or 4,500,000 of the first loan.

**FOR $2.50 WHEAT.**

The senate has again formally recorded itself in favor of increasing the government minimum guarantee in the price of wheat from $2 to $2.50 a bushel, despite the reection of the proposal by the house. It insists on this wheat clause in the agricultural appropriation bill returning the measure to conference. Advocates in the price increase admit there is virtually no probability that the house conferees will yield.


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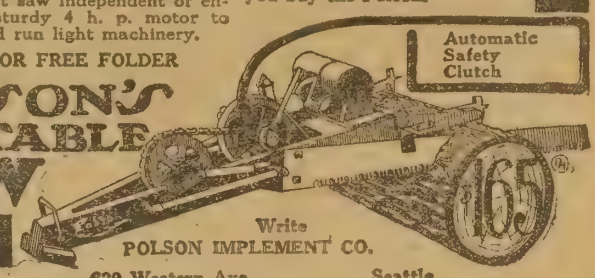
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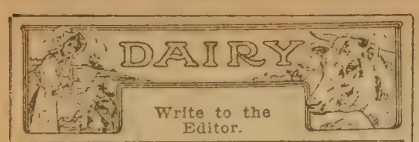
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A. B. NYSTROM, Editorial Contributor

# Freshen in the Fall

By A. B. NYSTROM.

The dairyman who supplies a small retail trade must have a definite supply of milk all the year round. He must also have the same quality of milk at all times. The best practice for him is to have his cows freshen all through the year, so that only one or two are dry at any one time. The best practice for most dairymen, however, is to have their cows freshen in the fall. This gives a high flow all winter, and when grass comes on in the spring there is a tendency for a rise in the flow, thus maintaining high production throughout the greater part of the year. Winter prices are always higher than in summer. The reason for this being that many farmers milk cows only during the summer months. Fall calves are more easily raised than spring calves. The dairyman has more time to look after them in the fall, and by the time spring pasture is ready fall calves will be old enough to use it. Pasture does not benefit spring calves; it may even cause scours and set the calf back a month or two.

If the cow has been properly fed during pregnancy the calf will be strong and vigorous at birth. Most of the trouble in calf raising comes from lack of proper development before birth. The cow should get nutritious, succulent feed of a laxative nature all through pregnancy, and especially when she is dry. The practice of turning dry cows to a straw stack giving them no other feed is not giving the calf a fair chance, to say nothing of the detrimental effects on the subsequent milk producing ability of the cow.

The calf should be taken away from its mother soon after it is born. Some dairymen allow the calf to run with the dam two or three days. This practice is commendable if the udder is caked, as the manipulation given by the calf will help to increase the circulation and carry away the congestion. However, if you think you will have difficulty in teaching the calf to drink from a pail it is best never to allow the calf to touch the cow.

In any case, the calf must have the "first milk" or colostrum, as it is called. This acts as a purgative and puts the digestive organs of the young calf in the proper condition to handle the normal milk which comes later. Feeding three times a day to calves less than a week old is a good practice, being careful to feed in small quantities and have strictly clean, warm milk fresh from the cow.

The amount of milk to feed varies with different calves. A weakling can only use six to eight pounds per day for the first week, while a stronger one will be able to handle from 10 to 12 pounds daily. Feed whole milk alone until the calf is 10 days old. Then begin adding a calf meal in small quantities, increasing the amount very slowly from week to week, decreasing the amount of milk slightly until it is getting about eight pounds of milk and eight to 10 pounds of the substitute daily. This amount of milk should be fed on the average up to 10 weeks of age.

Some calves will not respond to the substitute as well as others, and all calves will do better on the calf meal when a little milk is given with it.

If skimmilk is plentiful it is wise to keep feeding it until the calf is 4 to 5 months old. However, most calves will grow well on the substitute alone after they are 10 weeks old, provided they have never had a setback, have learned to eat grain and hay and are in good, thrifty condition.

## Form Clarke County Association.

Through the efforts of County Agent Newhouse, a Cow Testing Association has been organized in Clarke county, Washington. Four hundred and isxty cows were secured at the rate of $2 per cow per year. The herds for this association come from the districts around Washougal, Brush Prairie, Battle Ground and Heison.

The offices were elected as follows: LeRoy Dobbs president; A. J. Stickney, vice president; George Anderson, secretary; William Chandler, treasurer; Kasper Jenny, E. H. Austin and F. C. Schumacker, directors.

LeRoy Dobbs, president of the association, is an enthusiastic Jersey breeder of Washougal. The vice president, Arthur Stickney of Vancouver, is a member of the firm of Stickney Bros., Jersey breeders. They are using a milking machine at the present time which enables them to maintain their herd of 30 cows with no additional help.

The Holstein breeders are represented by having Kasper Jenny as a director. The sire in the herd of Mr. Jenny is a grandson of the famous bull, Colantha Johanna Lad.

We should watch with interest the work as done by this the first Cow Testing association in Clarke county, Washington.

F. M. COLCORD,
Dairy Field Agent.

Puyallup, Wash.

## Bitterness in Milk.

Will you please tell me what causes buttermilk to taste bitter, also the butter to have a queer taste? The milk is set in a clean, cool cupboard, with nothing else in except milk. The cow has been fed on timothy hay and chopped oats, with plenty of fresh water to drink. Her calf is about 4 months old. C. C. S.

Bitter milk is usually caused by abnormal fermentation. The organisms that cause it gain entrance to the milk either through a diseased udder or through contamination after the milk is in the pail. A dirty barn, unscalded utensils, unclean strainer cloth, and unsanitary milk houses are frequently responsible for the trouble. Thorough sterilization of all utensils and thorough cleanliness in the stable using small topped milking pail will tend to eliminate the trouble.

It is not likely that the feeding of the cow is at fault. A. B. N.

## First Prize on Cheese.

Hugh Barber, cheesemaker at the Fairview factory, Tillamook, Ore., won first prize at the National Dairy Show for this factory. Mr. Barber has won first twice at the Calofornia state fair and first in 1915, 1916 and 1917 at the Oregon state fair. Butter fat prices at this factory (and all the Tillamook factories) for January was 65 cents a pound. The average test was 4.4, making the price per hundred pounds for milk $2.86 with the whey back. When I was there, April 3, one farmer was delivering over 1000 pounds a day, or $855 worth for 30 days. And it is a fact that when the flush season is fairly on some dairymen deliver as high as 1500 pounds a day. H. A.

### Small Coinage Short.

The Japanese are short of small coinage and are beginning to feel the absence thereof quite as much as people in the United States. Their government has decided to issue small paper notes of 50, 20 and 10 sen denominations. The Japanese sen is equal to one-half cent of our currency.


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Saves your strength to extent of from 600 to 1000 turns a day.

The only Separator that starts the easy way—by "pumping"—which means pressing downward on crank for a quarter turn, then bringing crank back to starting point, repeating several times, before making full turns. In getting up momentum DOWNWARD PRESSURE IS EASIER THAN UPWARD LIFT.





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# Veterinary

Dr. S. B. Nelson

**Hard Lump Forms:** I have a cow about 7 years old that is about three-quarters Jersey. Was fresh about last October and about three months ago one of her hind teats got a hard lump at the base of the teat in the bag and the milk ducts of that teat are hard and rigid. The milk comes out of the teat all right. A year ago the state veterinarian tested our herd and pronounced them all right and healthy. I have been putting on salty grease and washing it in hot water and rubbing it. Will you tell me what to do for it?—O. W., Oakland, Ore.

It is quite possible that it would be advisable for you to secure the services of a local veterinarian, if that could be done, because the lump in the bag may be one of two or three things. Without a personal examination a person could not tell which. In the meantime, however, I am going to suggest to you that you apply at the base of the teat a little iodine ointment after each milking. That may gradually cause the lump to absorb.

**Hard to Milk:** I have a cow just come fresh, but she is so hard to milk. What can I do to help her in this respect? J. G. M., Blackfoot, Idaho.

If anything can be done to relieve the condition you mention in the way of treatment, about the only thing is that you go to your jewelry store and purchase the very largest violin string that can be purchased. Tie a knot in one end of the catgut and cut off about two inches of it. Place this in a 10 per cent solution of carbolic acid for a little while. Then pick up the string, tying the little piece below the knot, not the long end, and dip the long end into boiling water, washing off the carbolic acid. Prior to this time dip the teat of the cows that are hard to milk into tincture of iodine, so as to disinfect them thoroughly. Dip them into about a half an inch, so as to be sure to have the iodine go up into the opening in the teat. This is very important. After this slip the string into the teat, and leave it until the next milking. This, of course, should be done after each milking. The catgut in the teat will swell, so that the string can not come out, and the knot in the string will prevent it from going up into the teat. The swelling of the string may gradually dilate the teat so that it will milk easier. If this is not the case, probably the best thing to do is to put one or more calves on her, and let her pay for herself and her feed in that way.

**Ration for Milking Cow.**—What is the best ration to give to a milking cow to get the best returns? She now gets pasture, oat hay, alfalfa, shorts, a gallon, and oil meal, 3 cups twice daily. Can you suggest something that will give more milk and butter fat? She is fresh since the third of April and gives about three gallons a day. She is a 15-16 Swiss Jersey. Who could grade her? I have no papers.—N. F.

You are feeding your cow a pretty good ration, but it might be advisable to increase the shorts that you are feeding, so that the cow will get about three pounds of grain ration for every gallon of milk she gives. That may tend to increase her milk flow. If the cow is not a purebred cow I doubt whether you could get the papers for her from either the Swiss or the Jersey association.

**Hydrophobia**—My dog caught a coyote and killed it. I do not know whether the koyote had hydrophobia or not. I have the dog tied up. I would like to know the longest period before he would develop the rabies. J. W. T.
Winona, Wash.

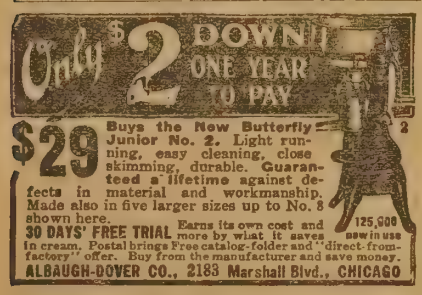
The shortest period from the time that an animal is exposed to hydrophobia or rabies is generally from 15 to 21 days. Many animals contract the disease and show symptoms from the 21st day—though authorities say that the average length of time before they show symptoms is 40 days. Animals have been known to show symptoms after several months, and even one year's time.

**Lampas**—I have a horse with lampas. What is the cause and what is the cure?—J. J. H., Port Angeles, Wash.

Lampas are caused by irregular feed or cutting the teeth in young horses, or indigestion in older horses. If your horses are young and they are cutting their teeth the irritation and swelling of the gums will disappear as soon as they have completed this. If your horses are older the chances are the cause is indigestion and you might give your horse a small purge of 6 drams of aloes and 2 drams of ginger made into balls. Two days later begin feeding your horse, beginning with only one-half of what you were feeding before, and gradually increase the feed. In the meantime, wash the swollen gums with a little saturated alum solution once or twice daily.

**Dead Tissue Somewhere.**—I would like some advice about a young mare. She was kicked by another horse about half way between the stiffle and hock on the front of a hind leg and with "neverslip" calks, which made a slight puncture and healed up at once. (This happened about two months ago). I didn't think much of the puncture, but used liniment for the lameness for several days, but the lameness did not leave. Then I used hot vinegar and salt one night and the next day her leg was swollen considerably and at night the punctured place broke open and pus started from it. I read in a veterinary book about punctured wounds, and so I sterilized my penknife and lanced it and used sterilized absorbent cotton on a small stick dipped in carbolic acid and water (15 drops to one quart of wtaer) and swabbed the opening as deep as I could get in, about 10 times, and new cotton each time. Then I swabbed twice similarly, using iodine; the next day the swelling was nearly gone and also the lameness and in two more days both were gone and have worked her steady since then, but the opening continues to run off pus. About a week ago I repeated the above treatment, lancing the second time, but there is no change yet. She is not lame in the least, instead is frisky on her feet and can pull her best. Around the puncture, about as big as a dollar, is a raised place which seems solid and is sensitive, and three inches away I can curry or brush and she pays no attention. I am afraid either of proud flesh or that the bone was injured. What would you advise me to do? There is no veterinarian within 25 miles of here.
A. J. C., Boyds, Wash.

The injury apparently was not a deep one, and there is under the skin and in the outlying tissues a little dead tissue somewhere. I think if you would be careful and follow the opening through which the pus is discharged into it gently and continue the treatment that you are giving, your mare will get well.


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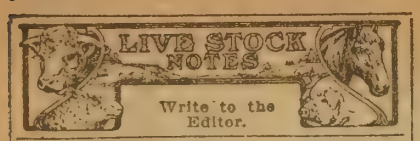
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E. J. IDDINGS, Editorial Contributor

# Live Stock Situation

By R. A. BLANCHARD.

So much has been written on the condition and loss of our live stock that we are in a dilemma as to the true condition. The International Institute at Rome says there are 47,000,000 head of live stock more in spite of the war, of this there are 18,000,000 more cattle and 15,000,000 more sheep and 11,000,000 more hogs, crediting European Russia with the highest gain and Paraguay with the highest increase in cattle. The best statistics available, however, have given Europe a loss of 28,000,000 cattle, 54,000,000 sheep and 32,000,000 hogs.

In the United States we are all aware of a rush to market of unfinished cattle, especially in the northwest, due to the high price of feed and the somewhat hysteria among the small farmer, In one day the record for America was broken when Kansas City received 100,000 head. Dairy cows were sacrificed, and the history of the hog production and markets of 1915 were still fresh in the memory of the farmer. The only apparent gain from our best sources of local information indicates a slight gain in sheep. The packing houses show an increase in their amount of frozen meat as follows:

| | |
|---|---|
| Frozen beef, increase | 73.3 pct. |
| Cured beef, increase | 61.5 pct. |
| Lamb and mutton, increase | 8.6 pct. |
| Frozen pork, increase | 5.0 pct. |
| Dry sale pork, increase | 4.3 pct. |
| Lard, increase | 9.3 pct. |

The most accurate figures obtained seem to indicate a decrease instead of increase in the northwest. That the beef supply has fallen off 51 million in 1917, and slightly over 40 million in 1915, a decrease of one-fifth in eight years, is a matter of common knowledge. Range flock sheep increased from 22 million in 1850 to 51 million in 1910 and has fallen to 48 million in 1917, or a per capita of .93 to less than half today.

Here are some points to be considered in the light of the above information:

The history of one crop system has never been a success in any country, and the highest yields of grains have consistently been recorded where live stock has been kept, which returns 85 per cent to the soil fertility.

In our irrigated sections, where hay has been raised for shipping, the most economical use is made through feeding to animals, and the tendency and collective effort on the part of farmers to hold hay for high prices is a short-sighted policy, for without stock to consume the hay there would be no market.

With the inclination to dispose of live stock at immature stages, urge your customers to retain breeding stock, and especially the best of their herds. "No time like the present" means much to the breeder using the pure-bred animal. The Minnesota station declared that $700,000 was lost annually in that state by the use of scrub stallions.

Encourage the growth of forage and its use in feeding. Bean straw has a high feeding value and pea straw has been recognized for years. No farmer should burn an oat strawstack. Not only does he lose $18.37 worth of fertility from the soil (old prices), but the oat straw, when cut and mixed with cut alfalfa and molasses (in sugar beet countries), gives a most effective fleshing feed for live stock, especially when fattening for live stock markets.

The use of the silo should be universally urged. Green corn, with dry pea straw, etc., and a variety of other crops can be stored and saved economically.

The use of concentrates should be anticipated for next winter. Cottonseed meal, oil cake, soy bean meal, cocoanut meal, will become valuable in supplementing and making effective some of the forages and fodder. The prohibitive prices of barley, oats and millfeeds and the concentrates, together with information as to relative feeding values, will determine the choice of feeding.

## Three Oxford Wether Lambs.

Three Fisk farm Oxford wether lambs will be a part of the University of Idaho, 1918 show flock of fat wethers. These lambs are the pick of Mr. Fisk's lamb crop and will be fitted for the wether competition of the state fair circuit and of the fall fat stock show circuit. They are February lambs and are already big, husky fellows. They were selected on a recent trip to the Fisk stock farm at Spring Valley.

Mr. Fisk's 1918 lambs are a distinct credit to him and an object lesson for the Inland Empire. He has the remarkable percentage of 175, made up of singles, twins, triplets and a set of quadruplets.

These results, which will unquestionably prove highly profitable to Fisk farm, come from good farm flock practice. The ewes were strong and vigorous and were in good condition at mating time. The ram is thoroughly masculine and of excellent Oxford type. Shelter was available and the ewes were well fed during the winter. Finally and of greatest importance, Mr. Fisk knows how to care for the flock at lambing time and was constantly on the job.

With thrifty, vigorous breeding stock, proper feeding methods and good care farm flocks of sheep will be unquestionably successful in the Inland Empire country and, in fact, everywhere in Idaho and contiguous states.

We need not, all of us, anticipate the remarkable showing made by Mr. Fisk, We can approach this record. The more careful skill manifested in handling the flock the more satisfactory will be our returns when the year's work is summarized. E. J. I.

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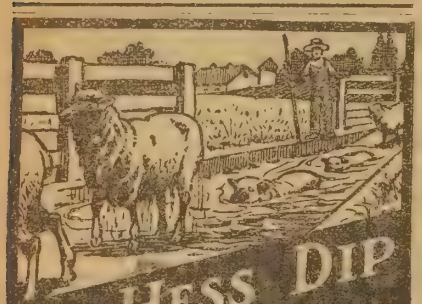
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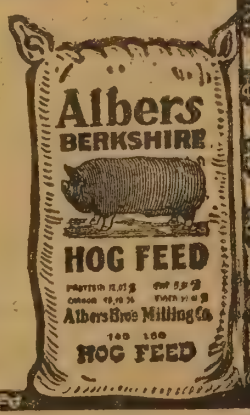




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# Swarming of Bees in May or June

## Article IV---By GEORGE W. YORK

In the north, in the month of May and June bees are likely to swarm, as that is their way of increasing. They usually wait till there are plenty of bees and honey in the hive before they swarm. Most swarms issue between the hours of 10 a. m. and 3 p. m. for first swarms; and from 7 a. m. to 4 p. m. for second or third swarms.

Bees are usually about to swarm if queen-cells are found with eggs or larvae about ready to seal over, when a swarm may issue in "a day or two after the first cell is sealed over, or as soon after as the weather will permit." The swarm after issuing usually whirls around in the air for a few minutes, and then the bulk of the bees will settle on the branch of a tree or bush, though sometimes they will cluster on a fence-post, trunk of a tree, etc.

The bees should be hives as soon as they have settled quietly, lest they leave for the tall timber; or, if another colony should cast a swarm at the same time, the bees of both swarms would likely unite.

If the queen should fail to accompany the swarm when it issues from the hive, because of her clipped wings, or for any other reason, the swarm will not skip out after clustering, but will return to its hive as soon as they find that their queen is not with them. Before bees swarm they fill themselves with honey, and then can be handled without much danger of their stinging.



**Limb of a tree, cut off with the swarm ready to hive.**

To hive a swarm when clustered on a limb, it may be cut off and carried to an empty hive previously prepared. The bees are usually shaken on the ground in front of the hive, when they will almost immediately begin to march in and "set up house-keeping." If the hive contains either empty drawn combs or comb foundation, it will help the bees greatly.

In case one does not want to mutilate the tree, the swarm of bees can be jarred off the limb into a large clothes basket, or light box, and then carried to the hive and dumped in front of it, as before suggested. Some spread a sheet over the top of the basket or box, pressing it down inside, and then after the bees have dropped on the sheet in the basket or box, the ends or parts of the sheet hanging over the edges of the basket or box may be thrown over the bees so as to cover them fairly well while being carried to their new home.

Sometimes, for unaccountable reasons, a swarm will leave their new home, but if a frame of brood and eggs from another colony is placed in the new hive it will help materially to prevent the swarm from leaving; and, if the queen should be lost, it will give the bees a chance to rear another queen.

In the olden days, it was thought helpful to beat tin pans or made any other kind of a noise or racket, in order to cause a swarm to settle. But as bees have no ears, all such fussing is of no avail whatever.

### Drone and Queen Trap.

This is a small box-like arrangement made mostly of perforated zinc or wires placed a certain distance apart and put over the hive-entrance for the purpose of preventing the going out of the queen, but the worker-bees can pass in and out very freely. In case a colony swarms when there is a trap on the hive, the bees will return, as the queen can not accompany them. Neither can drones get through the trap, and so if there is a surplus of them they can be caught in the trap and destroyed.

### Prevention of Swarming.

There are many experienced bee-keepers who would give a good deal if they could entirely prevent the swarming of their bees. It is quite a nuisance at times. Some even think, or did think, that the swarming habit could be bred out of bees; but to do that would likely be well-night impossable. Nonswarming bees, I believe, are no longer advertised, though they were some years ago.

Destroying the queen-cells by cutting them out, may help a little to keep down swarming, but it isn't always easy to find all the queen-cells. It is quite a job to go through perhaps 50 or 100 colonies of bees and cut out all the queen-cells.

Some may ask, "How, then, would you get any increase of colonies if bees did not swarm?" That would be easy enough. Simply divide the strong colonies and thus make some more. This can be done as follows:

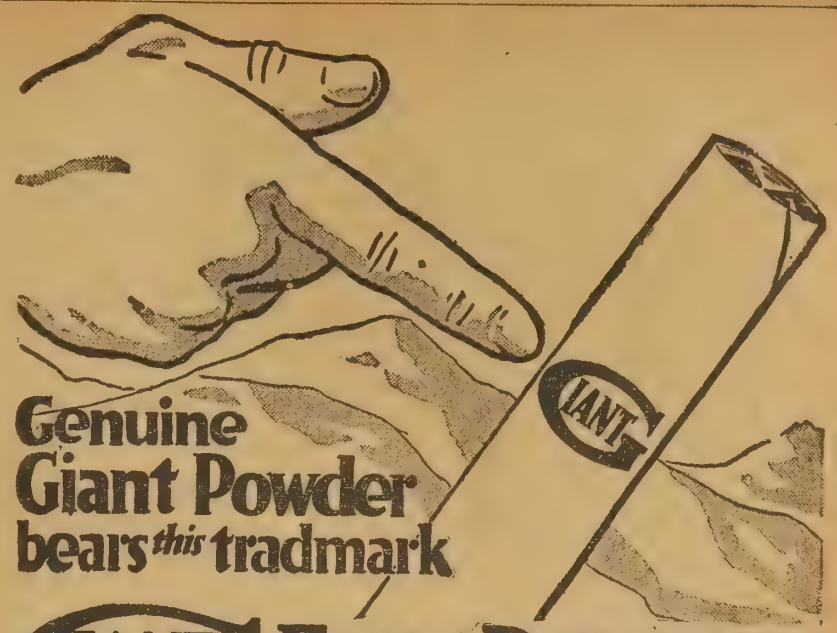
Suppose you have a colony crammed full of bees, in an eight-frame hive. Get an empty hive, and place it by the side of the colony to be divided, say with a foot or two of space between them. Then lift out 5 or 6 of the frames —with bees, brood and all—and put them in the new hive. But be sure that the queen is left in the old hive. If you take 5 combs out, then fill their places with five frames of comb foundation; and in the new hive put three frames of comb foundation.

Now, close both hives, by putting on the hive-covers. Carry the new hive several rods away from the old colony. Even then many of the old bees will return to the old home; but the young bees will remain in the new place, and as the brood is hatching all the time, it will soon be a fine colony.

As the new colony will have no queen, it is best to have ordered a queen for each new colony from some queen-breeder, and have her on hand before dividing any colony. In fact, the dividing should never be done till the queen is at hand, as it is often very difficult to introduce a queen to a colony that has been queenless one or more days. Next week I will tell how to introduce the new queen.

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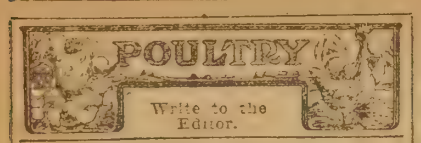
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JAMES DRYDEN,
Editorial Contributor.

# Capons and High Feed

To the Editor: I raise capons mostly and have 10-pound birds ready for the market at 6 months of age. I have just sold the last of them. Owing to the uncertainty of buying feed, I have had to cut my flock down to just a few for breeding stock, and if reports are true I will have to sell them on account of feed. I live near McCleary, Wash., and buy my feed there. The stores keep saying they are unable to buy feed any more, so you can see that the poultry raisers around my part of the country haven't very much encouragement in the business. I intended this year to raise enough chickens to get 500 capons for the winter market, but with chop at $3.35 for an 80-pound sack, and no chance to get it, I have had to give it up. I expect to raise enough feed to keep my breeders through the winter. It seems to me that the poultryman is being forced out of business, with eggs down to 35 cents and feed going up. I am raising the Champion strain of White Wyandottes. They are laying 70 per cent, so I am not losing at the present time. If you know of any remedy for my situation I would like to hear it, for I would like to do some caponizing this year. The lowest price I sold for last year was 30 cents per pound, live weight. I got as high as 40 cents live weight in February.

A. G. HILL.

Olympia, Wash.

The above letter throws light on some of the troubles of the poultrymen at the present time. The feed is not only high in price, but in some sections there is difficulty in getting feed at all. The price of bran and shorts have been set so low, compared with other feed, that the demand is so great that there is not enough to go around. Mr. Hill is apparently a successful capon grower, as evidenced by the fact that he raises them to weigh 10 pounds at six months of age and then sells them for 30 and 40 cents a pound. On that basis there should be money in them even at present prices of feed, but his difficulty is in getting the feed. As a general proposition, the growing of capons is a business that the government is not encouraging at this time. There is now some shipments of corn to the west, and it is possible that the price may be reduced somewhat, but there is no telling. It seems to me that boiled potatoes may be made profitable use of in the feeding of capons, as well as other fowls. The price of potatoes is so low now that a liberal use of them will reduce considerably the cost of feeding. They should be boiled and mixed with bran and shorts and a good feed of the mash given once a day, or probably twice a day in the case of fattening fowls. There should, of course, be some hard grain fed once a day, but heavy feeding of potato mash will reduce the amount of grain fed. Do not feed too heavily on potatoes at the start; go at it gradually. J. D.

## Green Food Supply.

Now is the time to prepare for the green food crop during the dry summer months. Nothing will pay better than a little foresight in this regard. We have no right to complain about high prices of feed if we neglect to grow green stuff for the chickens. Kale for summer use should be planted in March or early April, and for fall and winter use it may be planted in June and July. It requires rich soil. Rape is also a good crop planted now for summer and fall. The farmer who has green alfalfa or clover all the summer does not need early kale or rape, but for fall and winter some fresh kale or mangels should be provided. Anyway, be sure that there is something green all the time for the fowls and plenty of it. It is throwing money away to feed high priced grain to laying hens when they have no green food.

J. D.

## Must Have Bone.

Just as bone in a horse is essential to power, so is bone in the chicken essential to good body development. It is therefore vitally essential that the feed which the growing chick gets should have in it the materials out of which it may manufacture bone.

All of the common feeds such as wheat, corn and oats have some mineral in them out of which bone can be made but they do not contain enough of it. It must be supplied in some other form. The surest way to supply it is to feed them ground or broken bone. It is possible to supply this on the farm without going to market for it, but even if it is necessary to buy a box from the poultry supply house, it will be a mighty good investment in the long run

## Test for Tuberculosis.

To the Editor: Kindly give me what information you can in regard to the method for testing fowls for tuberculosis. MISS M. M.

The test for tuberculosis in fowls is called the VanEs test, after Dr. VanEs, the discoverer. It consists of injecting avian tuberculin into the wattles or comb of the fowl. If the fowl is infected the wattles will show a swelling and discoloration. If not infected there is no swelling or discoloration. The reaction shows in from 24 to 48 hours. It is a simple test and requires only care and some practice in making the injection. The tuberculin can be obtained by writing to Dr. VanEs, experiment station, Fargo, N. D. He will also furnish necessary instructions. J. D.

## Result of Crossing.

To the Editor: Will you please give me the name for the breed here described? They are coal black with dark blue legs. They weigh about five or six younds each. They have black bead eyes and also have topknots and also have a comb that separates in the middle and lays out on each side of the head, and oblige. A. R.
Marshfield, Ore.

Answer—There is no recognized breed in this country or foreign countries that I know of, having all the characteristics mentioned. The birds are no doubt the result of crossing.

J. D.

## Mix Potatoes With Feed.

Potatoes are about the only cheap thing in the way of food for man or beast, unless it be eggs, which are reasonably cheap. Try some boiled potatoes, mashed and mixed with bran and shorts, or meal that has a good protein content, such as linseed oil meal, and cocoanut meal. Potatoes besides furnishing considerable real food, will replace green food largely. J. D.


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GRANVILLE LOWTHER,
Editorial Contributor.

## TO PRESERVE FRUITS.

### For the Exhibitions and Shows.

For several years, about the time of the ripening of the strawberries, I have received one or more letters asking how to preserve fruits for exhibition. This year I have concluded to give information before, acting on the supposition that what the readers of the paper inquire about most, is of most value to them.

Fruits for preservation and show purposes should be put up when very firm, and for at least 48 hours after being put into the preservation fluid should be kept under a low temperature and in a darkened room. Following are some of the preservative formulas:

Formalin, one pint; salt solution, two pints; water, 17 pints. When made up, the solution weaker in formalin has also been used here satisfactorily. The proportions are: Formalin, three parts; salt solution, 10 parts; water, enough to make 100 parts.

For raspberries, the following mixture is recommended: Formalin, one part; glycerine, 10 parts; water, 89 parts.

Strawberries may be preserved fairly well in a saturated solution of common salt, and, better still, in a fluid composed of formalin, one ounce; alum, one drachm; glycerine, five ounces; water, three pints.

Red currants keep best in a solution of corrosive sublimate, one part; glycerine, 10 parts; water, 90 parts. The corrosive sublimate must be dissolved in hot water and the solution and fruit preserved in it should be labeled poison, as it is very deadly if swallowed. The glass stoppers of bottles and jars may be made perfectly tight by smearing the ground surface with a small amount of light-colored vaseline. This will also prevent in great measure the sticking of the stoppers when it is desired to remove them. G. L.

## PICKING FRUITS

### Knowledge as to Proper Time.

In his annual address as president of the Oregon Horticultural society Robert C. Paulus of Salem, Ore., pointed out that, while the picking of apples may be deferred too long, prunes are usually harvested too early.

Mr. Paulus urged the need in most sections of the state for more knowledge as to the proper time for picking various fruits, adding:

"There is also a need in most sections of the state for more knowledge as to the proper time for picking various fruits. Most growers who handle apples on a large scale know that apples, if left on the tree too long, exposed to the action of the sun, will ripen d great deal faster than if picked and stored slightly green, and deterioration starts in a great deal earlier necessitating a quick movement of the apples to the market, flooding the market and breaking it down when it should be the strongest if it does the grower any good. In the picking of prunes it has also been shown by experiments that the sugar content of the prune (which is one of the main factors in producing weight) increases rapidly in the last few days of ripening on the tree. Using the weight of dried fruit as a basis, the Oregon Agricultural college has found that in some instances a loss of 6 per cent of the total weight of the crop was caused by harvesting too early. In addition to this the immature prunes dried away more than the ripe ones. This resulted in an additional loss of 6 per cent in his crop, making a total loss of 12 per cent, or a monetary loss of $15 a ton, due to too early harvesting. Many of us, in our eagerness to get our prunes harvested before bad weather sets in, shake our prunes from the trees before the sugar has had sufficient time to form and we cause ourselves considerable loss on that account."

PLEASE find enclosed 5 cents for a farm flag. We live on our farm, four miles from Lynden and are trying to do everything to help this war along, for we must win. My husband and myself would like to have the flag in our window. We have the Red Cross and service flag and Hoover card in the window now.

MRS. F. A. PUGH.
Ferndale, Wash., R. 1.

## Spray! Spray! Spray!

The season is approaching when the fight of the apple orchardists against codling moth will begin. I can give no dates, because every particular community must be governed by local conditions and sometimes just a few miles distant or a few feet in altitude will make a difference in bud developments and the proper time for spraying. Every one must be his own judge about the time, and it is better to watch the press notices given out by the fruit inspector for any particular locality, but the watchword is "Spray! Spray! Spray! Spray with arsenate of lead to kill the codling moth as the kaiser sprays the nations with poisonous gases and German kultur, while the people fall and die like the petals of the flowers in an orchard.

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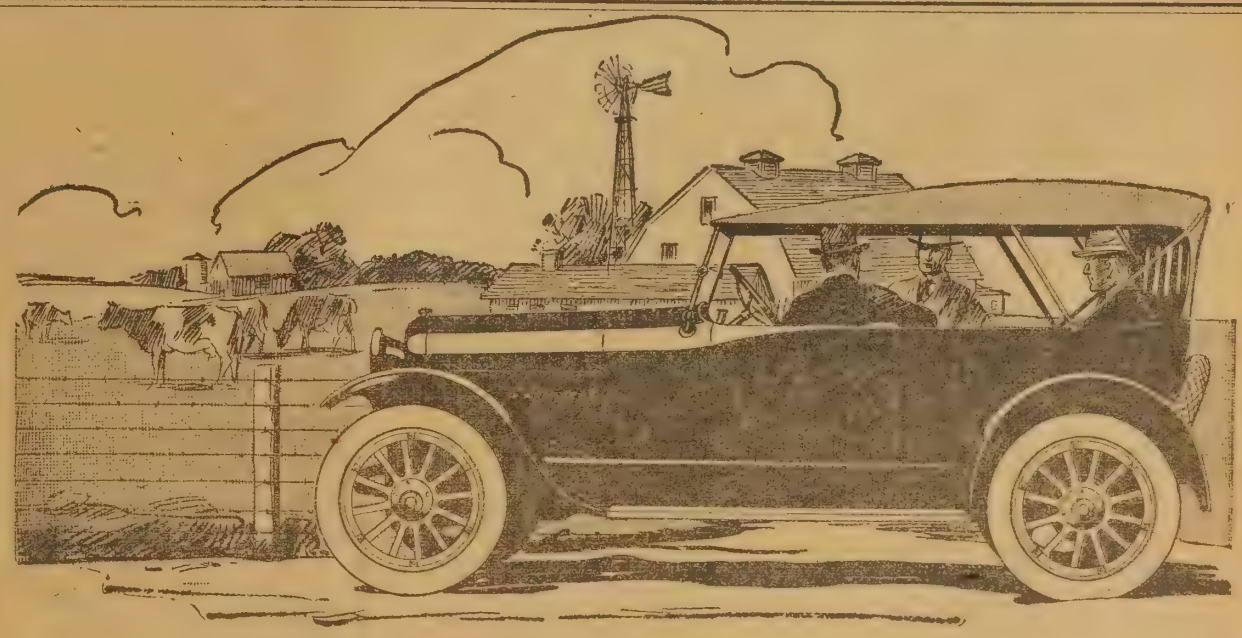
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All of that has changed now. The modern farmer has become a *business* man.

He employs the scientific information which is supplied him by our Government. He makes a study of his own local problems and plans his crops accordingly. He thinks in terms of markets as well as products, and, above all, he uses thoroughly efficient mechanical equipment.

He buys a motor car because sound analysis has convinced him that he can't afford to get along without one. Furthermore, he buys a good car—a *quality* car—because experience has demonstrated that inferior equipment is never economical.

Here, in a nutshell, you will find the reason why more than 70% of Paige production is sold in farming communities. It's a matter of cold blooded business judgment—the deliberate preference of intelligent men for a car that measures up to their requirements.

And here, incidentally, is the most convincing reason why *your* next car should be a Paige.

PAIGE-DETROIT MOTOR CAR COMPANY
247 McKINSTRY AVENUE, DETROIT

# Work for Maximum Crops

## Conditions Are Reported Favorable Now, Though Much Will Depend Upon the Weather During Next Two Months




RITZVILLE, Adams County, Wash., April 26.—Every farmer within my knowledge is putting forth every effort to produce maximum crops. The season has been favorable for seeding and ground worked up unusually well, but for some cause a few have failed to secure satisfactory stands and a very small percentage has been reseeded. There has been and is now, plenty of help and conditions for this locality right now might be said to be favorable for a good crop, but so much depends upon the weather for the next two months. It is very difficult to figure at this time, what the cost of a bushel of wheat will be as we are paying practically twice as much for feed, as before. Labor and machinery is higher than ever and no one can tell what it is going to cost to harvest, but would not be surprised to find the cost of producing a bushel of wheat practically doubled over normal years.

D. A. SCOTT.

### Farmers Need Rain.

PORT ANGELES, Clallam County, Wash., April 28.—The farm machinery and labor questions are of interest to all here. A few tractors are now being installed and others will follow if they prove of any benefit. The labor question on the farm is almost acute and the current topic among the farmers. The prospect for crops is good, but in places the farmers wish for rain, as the month of April has almost broken the record for a dry month in this part of the state.

J. P. CHRISTENSEN.

### Prospects Good for Wheat Crop.

OTHELLO, Adams County, Wash., April 24.—Some farmers are not planting any potatoes, as they claim it is cheaper to buy. There is a heavy seeding of grain. People are not generally going to any personal sacrifice as yet. Labor is sufficient so far. The prospect now is good for a crop of wheat. Plowing is progressing rapidly. The price of plowing is $2.50 per acre, and the cost of producing a bushel of grain now is, I think, double of the cost when we got labor at $30, now $60 to $75, and sacks at 27 cents; but the yield will be average. Taking all cost into consideration, the farmers will not get rich very rapidly. The writer last year raised a bunch of pigs and decided to feed a carload for spring market. We bought shorts to save wheat and fed them out, but the feed proposition here has been in such shape that we could not get shorts at all times. We hung on and fed those hogs when we knew we were going behind, but figured on a nice crop of pigs. But farrowing time was disastrous—saved 16 pigs and 13 sows, fed out the sows and sold them with the others at a total loss of about $300. We feel this to be a part of the sacrifice we must all make to win this struggle for humanity.

A. O. LEE.

### Spring Opens With a Rush.

CASTLE ROCK, Cowlitz County, Wash., April 28.—Spring has opened with a rush and conditions are favorable for seeding and planting potatoes. Corn has not been a decided success here in this section, but has proven one of the best crops grown for the silo, as it is easily handled and proves to be the one feed that produces results. Of course, there has been a shortage of help on the farms, but with the use of improved machinery and planning of the work, the crops are going into the ground; stock is taken care of and separator run by the home folks. Dairying is the main cash asset in the county. Potatoes have not proven a good marketable crop; any old price seems to be the thing offered for them now. Wheat can be raised here, but is not as profitable as other things in this section, as it is not a flour wheat and must be used for feeds which, in competition can not be handled at a profit. A few of the farmers are going to try to have homemade syrup from home-grown beets which, if it proves all right, will be a splendid thing, and will prove to the average man that he can live from his own farm products. A creamery organization has been under consideration for the county, which will act very much like an auditing system; it lets the creamery owner know what kind of work is being done in his creamery, and at the same time stimulates the maker to put forth his best efforts; gives the farmer confidence in what he is doing toward building up a uniform system, thus gaining the most for his efforts, doing away with the haphazard idea of handling his cream. Because of the almost universal presence of Rizoctonia (black scurf) and the frequent occurrence of scab and silver scurf on the potatoes, growers are dipping their seed potatoes. The common material used is formaldehyde and mercuric choloride. Because of the fact that formaldehyde does not control Rizoctonia, in addition to controling scab only, mercuric choloride should be used. The dyking district in and around Kelso is being cleaned up and plowing going on and a big crop of vegetables has been planned for the coming season. Woodland has a live organization that is trying to get an improvement district established for the lower end of the county, which will redeem hundreds of acres in and around Woodland.

C. C. BROWN.

### Prospects Are Bright.

CHEHALIS, Lewis County, Wash., April 27.—On the whole the farmers of this county are producing the maximum of food crops. Nearly every one is awake to the situation and is doing his utmost to help win the war. The spring has been ideal for the seeding of a large crop acreage; labor is short in places but on the whole there seems to be very little cause for decrease in crop acreage due to shortage of help. The farm tractor is coming into general use and the outlook for crops and live stock in this section is very bright indeed.

A. B. NYSTROM.

**The Drone Bee.**

The drone bee does no work.



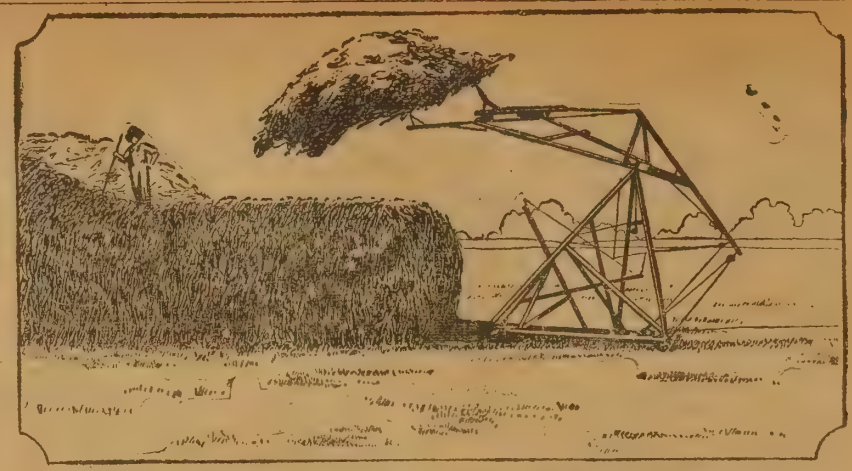

**Healthy Vegetables**

The U. S. Dept. of Agriculture recommends that you rid your seeds and soil of infection before planting, with the greatest known disinfectant—

**FORMALDEHYDE**
*The Farmer's Friend*

It prevents potato scab and black-leg that attacks beets and other vegetables. It guards against onion rot and onion smut and smudge, cucumber root rot. It prevents mould in celery, lettuce, parsnips and other covered seeds when applied to the beds before planting. One pint bottle of our Formaldehyde costs 35 cents. Big scientific book with full directions sent free upon request.

PERTH AMBOY CHEMICAL WORKS
100 WILLIAM STREET NEW YORK



**USE MOLINE HAY TOOLS**
**TO STACK HAY QUICKLY AND CHEAPLY**

FOR handling large acreages of hay, Moline Sweep Rakes and Stackers are the quickest and most economical means of getting the work done, requiring a minimum number of men to operate, because of the many conveniences and automatic features in their construction. With Moline hay tools, there is no danger of breakdown during the busy season, their construction being extremely strong throughout, and their operation simple, positive and reliable.

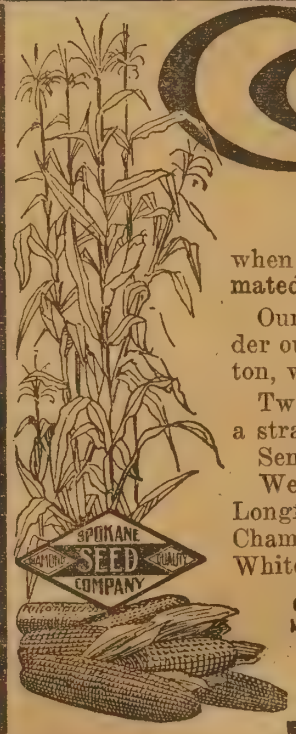
The Moline Swinging Hay Stacker shown in the above illustration is thoroughly representative of the Moline line, stacking hay to a height of twenty-five feet quickly and with the least amount of labor. It is entirely automatic in its operation, the fork being lifted, swung, discharged and returned to position for another load without attention on the part of operator.

With the Moline Swinging Hay Stacker two men constitute a full crew—one to guide the horse and one on the stack. The man on the ground quickly and easily adjusts the stacker to dump the load at any desired point while the fork is on the ground, after which all he has to do is to lead and back the horse, everything else being automatic. The fork can be operated from either side of the stacker, with only a minutes work to change positions.

Other dependable Moline hay tools are Moline Overshot Hay Stacker, Moline Power Lift Sweep Rake and Moline Pipe Axle Sweep Rake. See your Moline Dealer.

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*Corn Planters. Cotton Planters. Cultivators. Corn Binders. Grain Binders. Grain Drills. Harrows. Hay Loaders. Hay Rakes. Lime Sowers. Listers. Manure Spreaders. Mowers. Plows (chilled and steel). Reapers. Scales. Seeders. Stalk Cutters. Tractors. Farm Trucks. Wagons and Stephens Salient Six Automobiles.*

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MANUFACTURERS OF QUALITY FARM IMPLEMENTS SINCE 1865




**CORN**
**Is a Success**

when planted under right conditions and acclimated seed sown.

Our PREMIUM YELLOW DENT is grown under our personal supervision in Eastern Washington, without irrigation.

Twelve years of steady selection has produced a strain of corn that matures.

Send us 10c in stamps for a sample ear.

We also handle Pride of North Yellow Dent, Longfellow, King Philip, Minnesota King Dent, Champion White Pearl, Compton's Yellow Flint, White Rice Popcorn.

**SPOKANE SEED CO.**
Spokane, Wash.
Growers and Recleaners of Seeds.

**Field Seeds**

Do not forget that millet produces well. We have on hand White Wonder, German, Hog, Siberian and Japanese.

ALSO

spring and winter vetches, cow peas, kaffir corn and buckwheat.

**THE INLAND SEED CO.** SPOKANE, WASH.

**HIDES**
WOOL · PELTS
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SHIP TO US
NO CARTAGE · NO COMMISSION
HIGHEST CASH PRICES PAID
PROMPT RETURNS · HONEST WEIGHT
WRITE FOR PRICE LIST AND SHIPPING TAGS
HIBBARD-STEWART CO. INC.
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Farm
Service
War
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The
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Farmer

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for the
arm Family
and Add a
Star
for Every
Farm Worker



Patent Applied For.

THE WASHINGTON FARMER. .....1918.

Review Building, Spokane, Wash.

Enclosed find Five Cents (5c), for which please send me a Farm Service War Flag (printed on enamel paper) with ..... extra small stars for farm workers.

Signed ..... Box No. .....

R. F. D..... Postoffice..... State .....

# Snapshot Photography

## *How Accurate Is the Finder on Your Camera?*

By PAUL E. TRIEM

ARRTICLE IV.

From what has previously been written, it may seem that the possibility of making "snap-shots" and informal "just for fun" photographs is rather limited. To prove that this is not the case it may be worth while to describe some of the ways and means of snap-shot photography.

In the very beginning, you should make sure that you know just how accurate the finder on your camera is. When you are ready to take a picture and are looking into this little mechanism near the front of the camera, you see a small image of what you hope will be included in the final print. The fact is, however, that finders are not usually exactly accurate—that is, they do not register all that will be included in the print, or perhaps they go to the other extreme and include more than the lens really focuses on the film. It will pay you to learn once and for all just what the relation between the picture in your finder and the picture really included by the lens is.

The simplest way of getting this information is to photograph something in the nature of a large poster or advertisement, noting exactly what the image in the finder includes. A print made from this exposure will show you what the lens catches, and by comparing the two images, you will be able in future to tell just about what will be included in a picture by looking into the finder and making the allowances suggested.

After you have learned to use the finder, you are ready for real snapshotting. The usual method of making these quick exposures is to estimate the distance between the camera lens and the principle subject and to set the distance indicator at this estimated distance; next to see that the lens diaphragm is wide open or nearly so; and finally to estimate the exposure necessary, if the shutter provides more than one quick exposure. After making this complicated calculation and adjustment, the picture is snapped.

The trouble with this plan lies largely in the difficulty which most kodakers find in judging distance accurately, and in the hazy ideas in their minds as to the right exposure. Many over-exposures, under-exposures, and fuzzy, out-of-focus pictures result. The following simplified method for taking snap-shot pictures will raise the average amateur's record of successes many points, simply because it eliminates estimating distance, and reduces exposure time to a system:

If you are using a camera with a plate or film area not greater than post-card size or even 4x5, set your distance indicator at 25 feet and your exposure pointer at one-twenty-fifth of a second, or at "I" if the shutter is marked with just one automatic exposure. Next turn the pointer which indicates the diaghragm opening—this will usually be found below the lens, and shows the sized opening which is left available in the latter—to 16. You now have a universal focus, one exposure camera which will do justice to all objects not closer than six feet to the lens, provided exposures are made under good light conditions. Between the hours of 10 and 4 in the summer and 11 and 3 in the winter, with bright sunshine or light clouds, you will get snappy, fully exposed pictures by this method.

Probably some readers of this series will wonder why, if it is possible to give photographs of this kind one-twenty-fifth of a second exposure, I have advised in another place the use of a tripod, with the same lens opening and from one-half to a full second's exposure. Part of the reason is that the modern film or plate, as manufactured by the best makers, has a wonderful latitude of exposure. One-half second's exposure with the diaphragm at 16 probably represents the happy medium for out-of-door exposures, and under all reasonable light conditions will give what the professional photographer calls "fully timed exposures," with lots of detail in the shadows. Under the most favorable light conditions, however, such as those indicated in the above method, this time may be cut to one-twenty-fifth of a second, and still produce good negatives.

Just a word more on the subject of exposures: Insist on seeing all of your negatives, and compare these with the record of exposures I have elsewhere suggested your keeping. If you find that the exposure you are giving results habitually in dense, black negatives, shorten the exposure or diminish the light opening in the diaphragm. If, on the other hand, your negatives contain much clear glass or celluloid, so that the shadows print black, you may be sure that you are under-exposing. Give a longer exposure, or open the diaphragm so as to admit more light through the lens.

## Sidelights

**A Warning.**

"Oh, daddy! Isn't the world just too lovely for anything?"

"Er—yes—I suppose so. What's his name this time?"—Judge.

**His Circus.**

Willie—Have much fun watchin' the New Year in?

Tommy—You bet! 'Cause I was watchin' sister and her beau watch the New Year in.—Boston Transcript.

**Raised the Price.**

Food Administrator Hoover told at a meatless-wheatless banquet a story about a poultry profiteer.

"A woman entered his shop," said Mr. Hoover, "and asked the price of chicken.

"'Them birds in the winder?' said the profiteer. 'Wal, they're very fine quality stock. I can't let 'em go for less than 90 cents a pound.'

"'Indeed?' said the woman. 'Did you raise them yourself?'

"'Yep,' said the profiteer, absently. 'They was 70 cents yesterday.'"—Exchange.

**Wonderful Progress.**

She—How is your youngest daughter getting on with her music?

He—Splendidly! Her teacher says she plays Mozart in a way that Mozart himself would never dream of.—Boston Transcript.

**She Knew.**

A girl was asked to parse the word "kiss" and this was her result: This word is a noun, but it is usually used as a conjunction. It is never declined and is more common than proper. It is not very singular, in that it is generally used in the plural. It agrees with me.

**During the Coal Famine.**

Henry Watterson's paper tells this one:

"Say, John?"

"Well?"

"Did you feed the furnace?"

"You could hardly call it feeding, but I did give it a little light lunch, so to speak."

**Too Late to Change.**

"What were you saying, Homer?" asked a mother of her 6-year-old son.

"I was praying God to kill all the Germans; then our men wouldn't have to fight."

"Oh! you must not pray to God to kill all those men——"

"I can't help it now, mama; it will have to go, 'cause I have already said 'Amen.'"—Harper's.

**Dodging the Boss.**

A man named Dodgin had been appointed foreman in a brickyard, but his name was not known to all the employes. One day while on his round he came across two men sitting in a corner smoking, and stopped near them.

"Who are you?" asked one of them.

"I'm Dodgin, the new foreman," he replied.

"So are we," replied the other workers. "Sit down and have a smoke."—Pittsburg Chronicle.

**Corrected.**

At a dedication festival service at a country church the following announcement was made by the pastor:

"The collections today will be devoted to the arch fund, and not, as erroneously printed in the morning paper, to the arch fiend."—From Harper's Magazine.

**Why France Suits Him.**

"Have you heard from your boy in France," a man asked a Kansas farmer recently, relates the Kansas City Star. The boy is with the Pershing army "over there."

"Yes," was the reply.

"How does he like it?" the man continued.

"Bully," replied the farmer. "The kid is happy. He says he has nothing to do but drill 10 hours a day, and the Germans have dropped shells all around them, and he is expecting to go forward into the trenches anytime, but—the kid says it rains every day over there and they don't have to haul water to the stock. He sure is happy."

## SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

## Why Every Child Should Be Taught to Heal Own Cuts



Dr. Hirshberg.

You need not be "one of the first to fight" or a soldier in France to run a splinter in your hand, tear your skin, cut or otherwise wound yourself. The soil of Lorraine or the Champagne country is not a jot different in respect to its infective germs from the street dust and garden earth of America. Both contain their fair share of tetanus bacilli, lockjaw germs, gas infections and other poisonous bacteria.

Sores, cuts and wounds must be guarded as well "on this side" of the water as "over there." Blood must be stanched, pain relieved, germs unseen removed, and ever-present microbes kept out.

Every open cut in the skin of the human anatomy becomes immediately a gateway for man's eternally vigilant enemies, bacteria and microbes. Practically every injury which pricks, scratches, cuts or wounds the flesh is to be regarded at the outset as infected. It is absurd to say as many persons do: "My cuts heal easily, which proves that my blood is in good condition." Such a remark shows ignorance and contains several untruths.

Your blood may be almost perfect, yet the germs on the surface of the skin or in the pores may invade the wound and start it to fester. On the other hand your blood may be ever so poor and you may escape infection or blood poisoning by virtue of some antiseptic used as a disinfectant.

To be sure that a cut, scratch or other open injury heals cleanly without redness, pus or swelling, some definitely understood germ-killing combination should be applied to the wound and kept there.

**Don't "Take a Chance."**

If each person were practical enough to take to heart these facts based upon the principle that all openings thus made in the skin are infected or surely will be by the unseen dirt on your hands, in the air, on the food or in the water used, infection, blood poisoning and tissue decomposition would become almost as rare as smallpox or army typhoid.

The ideal way to heal all cuts should be taught to every child in the elementary classes of the public schools. If all boards of education would bestor themselves to this end the coming generation would almost annihilate lockjaw, wound infections and blood poisoning.

Instead of "taking a chance" that a scratch or cut will heal by itself, antiseptics should be used at once to destroy the ever-present bacteria anl prevent their development.

**The "Sure" Methods.**

Tincture of iodine, as popular as it is, is not powerful enough to make a large wound sterile, although for scratches it will do sometimes.

The skin around an open wound should be washed with a 14 per cent solution of salt water. This cleans away the blood and bleaches the skin. Then Dakin's fluid should be thoroughly used to irrigate the injury and douche the germs from the wound. Antiseptic gauze impregnated with Dakin's solution is then applied, and over it a thick layer of sterilized, nonabsorbent cotton. If the Dakin's fluid is not available the 14 per cent salt water is nearly as useful.

If the cut is a puncture, such as a nail, splinter, pin or other sharp instrument inflicts, the tetanus bacilli or lockjaw germs must be sought and routed out by means of deep injections of strong disinfectants, such as carbolic acid, to be followed at once by lockjaw antitoxins.

By the prompt use of tetanus antitoxin, the instant a puncture or any sort of wound occurs, the dread disease of lockjaw has been largely eliminated. For example, of 10,000 war wounds healed by Major Surgeon Picque of the French army not more than four delayed instances of lockjaw appeared.

## Inventions

By C. J. LYNDE, Macdonald College, Quebec.

### Prevents Fence Breaking.

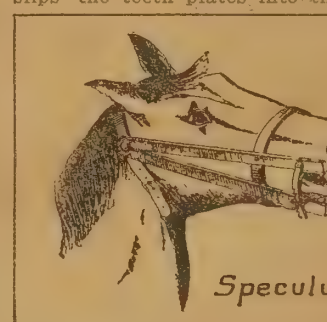
The object of this invention is to provide a yoke which will prevent




horses and cattle from breaking fences or jumping over them, and one which, at the same time, permits them to fraze freely.

### Speculum.

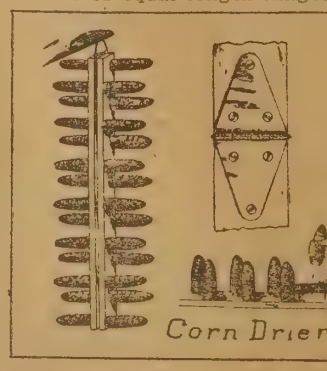
The operator in applying this device slips the teeth plates into the mouth




of the horse and then buckles the nose and neck straps. The notched bars keep the mouth open and leave a clear space for the tools.

### Simple Corn Drier.

This seed corn drier consists of two boards of equal length hinged togeth-




er; the spikes are ordinary wire nails driven through holes of slightly smaller diameter. You could make up a dozen in a very short time.

# In Time of War Prepare for Peace

"In time of peace prepare for war." In time of war prepare for peace. In what way shall American agriculture prepare for the readjustment that is surely coming when the kaiser is beaten to his knees, the Hohenzollern throne smashed into kindling wood, and our soldiers come home?

Most observers believe that high prices for farm products will continue for a year or two or even longer after the war, as time will be needed for the warring lands to settle back into normal life. But Julius H. Barnes, president of the United States food administration, grain corporation, believes that when that readjustment is made the American farmer will have to face keener competition than he faced before the war. Mr. Barnes predicts that after the war home markets must support home production so far as American agriculture is concerned.

Speaking before the trade convention at Cincinnati he said:

"In a broad way, we may assume at once that the markets for our surplus grain will be, after the war as now, in Great Britain and France and Belgium and Holland and Italy and possibly in Germany; but we may be well satisfied that in those markets we shall meet the keen competition of an impoverished Russia, of an India whose agricultural activity will have been stimulated by war prices; of a prosperous Argentina; and also the competition of the British possessions of Canada and Australia. And in those European markets we shall meet changed conditions.

"In France this year the area of arable land, excluding that in the occupied portions, has not been sown to an extent exceeding 75 per cent of what in the same territory was seeded to crops before the war. This is the result of the depletion of labor for farm purposes in France; but we are teaching France to repair that, and thereby we are building for ourselves the competition which will help to destroy the machinery advantage we have always held. We are shipping France farm tractors by the hundred, and we are teaching her to sow spring wheat in February. It may well be that after the war the thrifty agricultural population of France will have learned to use enough of American machinery to make that country once more independent of importation of wheat, as it has customarily been before the war.

"Belgium will always need to import grain, as her dense industrial population can not support itself, but the 20,000,000 or 30,000,000 bushels of wheat which she would require would not make her an active bidder among the other surplus wheat countries competing for her market.

"Italy can almost raise enough of food grains for her own requirements, and may easily do it under the stimulus of economic need at home.

"In Great Britain the steady market for wheat, which has hitherto absorbed 200,000,000 bushels of wheat per year, the food needs may be readily supplied by normal crops in Canada and Australia, and the normal shipping conditions which enable her to transport this wheat from her own colonies. Besides that, the submarine is teaching Great Britain to rely more and more upon her own crops, and the deficit in food crops in Great Britain, at the close of this war, may have shrunk to such a figure that it would no longer be so large and active a competitor for the surplus crops of the world.

"Germany, formerly a large user of foreign grain, has been self-supporting now for three years, and may have acquired the habit, which only the temptation of plenteous supply and low prices would displace. Remember that for these restricted consuming markets Canada, Australia, India, Russia, Argentina and our own surplus will compete as never before, and with the restoration of the shipping fleet of the world, that can face the longer voyage without menace to the national need, the trade advantage of our shorter ocean voyage will be lost.

"I am forced to the conclusion that within a certain space of time, after the close of this war, American agriculture must face the probabiliy that its home markets must support its home production. I do not think that this would be an evil, and it is quite probable that our foreign trade balances have so developed themselves along other lines that the old sustaining influence of the trade balances for grain crops may not be missed, or can be safely replaced."

# Milling and Distributing Profits

Flour milling and distributing profits were mounting rapidly when the government took a hand last year through the national food administration and the passage of the food control law. The federal trade commission, which has been investigating the food supplying industries, has placed in the hands of the president a report on wheat flour milling and jobbing that will interest both producers and consumers.

In the crop year of 1912-13, American millers and middlemen extracted a profit between them of 85 cents a barrel, divided as follows:

Miller's profits .....11 cents
Car-lot distributors .....22 cents
Small jobbers' profits .....52 cents

A total profit, between the farmer and the consumer, of 85 cents per barrel.

Then the jackscrews began to work all along the line, and in the crop year of 1916-17 profits had swelled to $1.93 per barrel, divided thus:

Miller's profits .....52 cents
Car-lot profits .....55 cents
Small jobber's profits .....86 cents

In four years profits grew 227 per cent.

Under present regulations, millers are allowed a maximum profit of 25 cents a barrel on flour sales, and also 50 cents a ton on feed sales, equivalent to about 1.7 cents a barrel of flour additional, or a total profit per barrel of a little less than 27 cents. In view of the fact that millers were making only 11 cents' profit in 1912-13, it is apparent that the government did them no injustice when it throttled down their legal profits to 27 cents.

This is profits, not increase in the price. It is what the miller is allowed to retain after he has paid all the increased costs of operation and manufacture.

## Clip This Convenient Order Blank

Address all communications concerning thrift or war savings stamps to the Washington Farmer, War Savings Department, Room 26 Review Building, Spokane, Wash.

Remittances may be in any form desired, including personal check.

The Washington Farmer, War Savings Department, Room 26 Review Building, Spokane, Wash.

Gentlemen: I wish to invest in ..... U. S. government thrift stamps at 25 cents each. (number desired.)

I wish to invest in ..... U. S. war savings stamps at $4.16 each. (number desired.) (May figure.)

Amount enclosed $.....

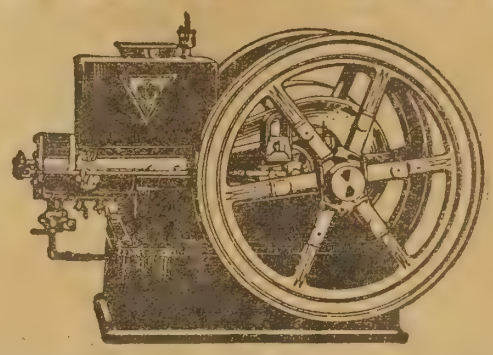
Full Name .....

Town ..... State .....

R. F. D. No. .....

I have already bought.....Stamps and have a..... (kind of stamp) (card or certificate.)


ALPHA



GASOLINE ENGINES

1 1-2 to 28 H. P. For Gasoline or Distillate.

Specially adapted for operating farmers' grain elevators, silo fillers, feed cutters, pumps or wherever dependable power is required.

A Type and Size for Every Requirement.

Own an engine that has real value built into it. You will be well repaid by the long, reliable service it will give. The repair expense will be low. Troublesome delays and breakdowns will be avoided. Such an engine is the ALPHA. Complete description free on request.

Warehouse stocks carried at Seattle and Portland.

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61 BEALE STREET SAN FRANCISCO

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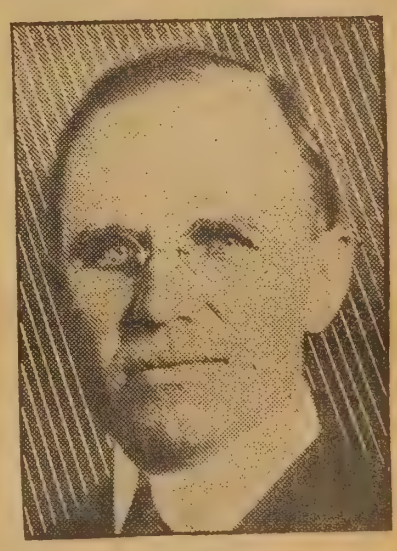
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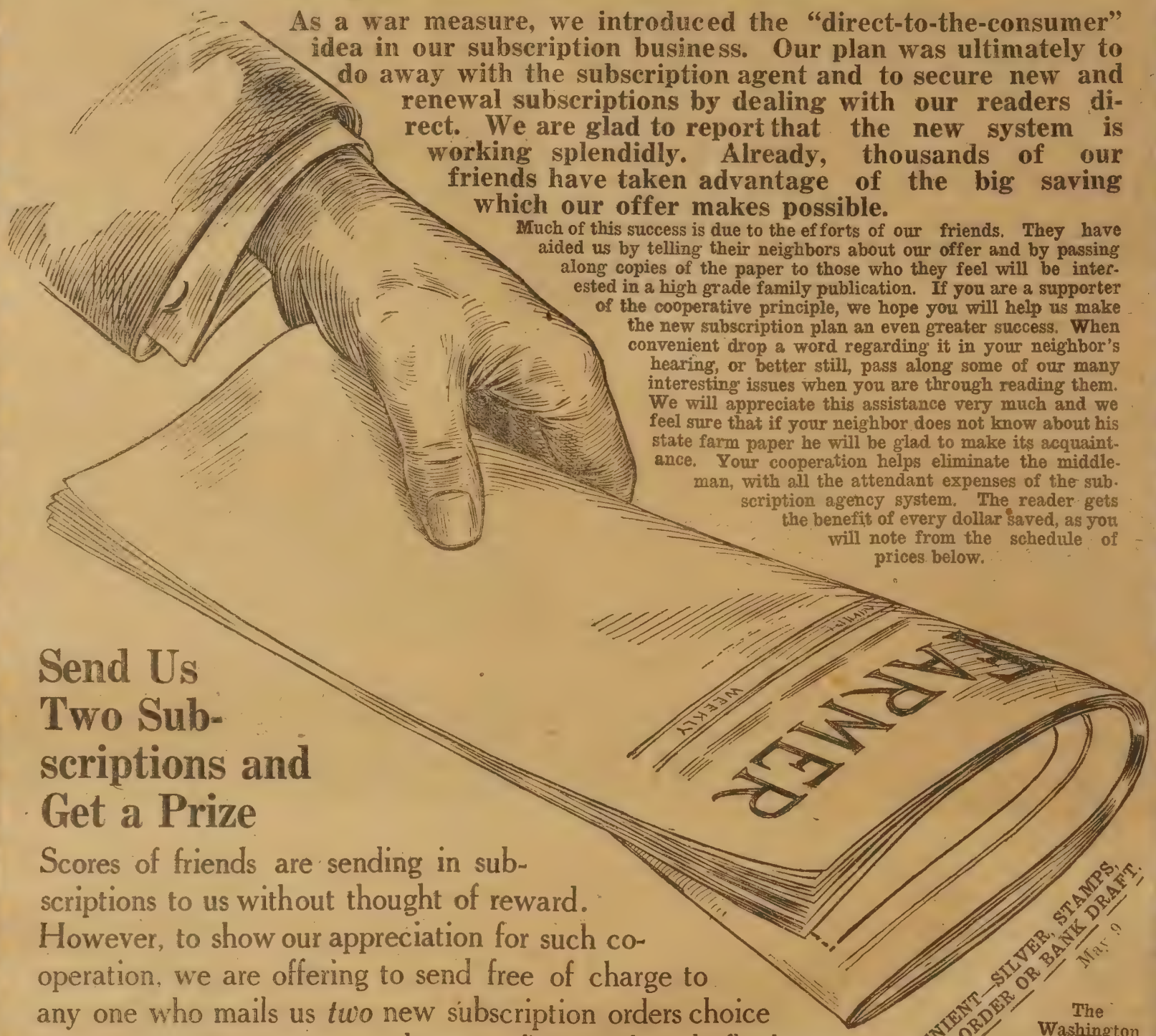
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# All the World's a Stage, and All the Men and Women Merely Players

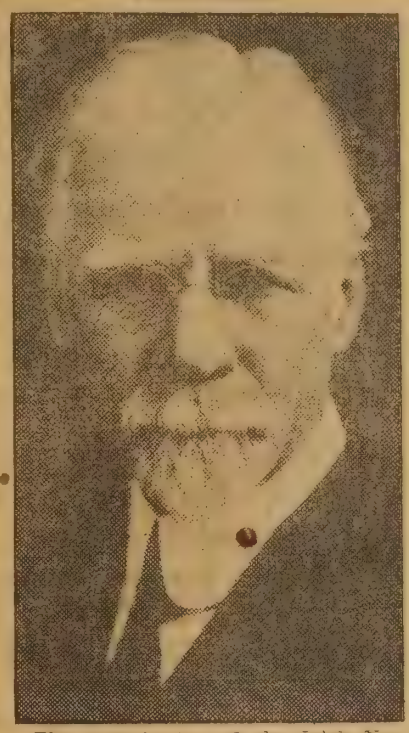
## Americans at Work "Over There"



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American soldiers in France have many duties besides "plain fighting." In the above illustration a few of them are seen cleaning out a trench mortar after firing.

## John Dillon.



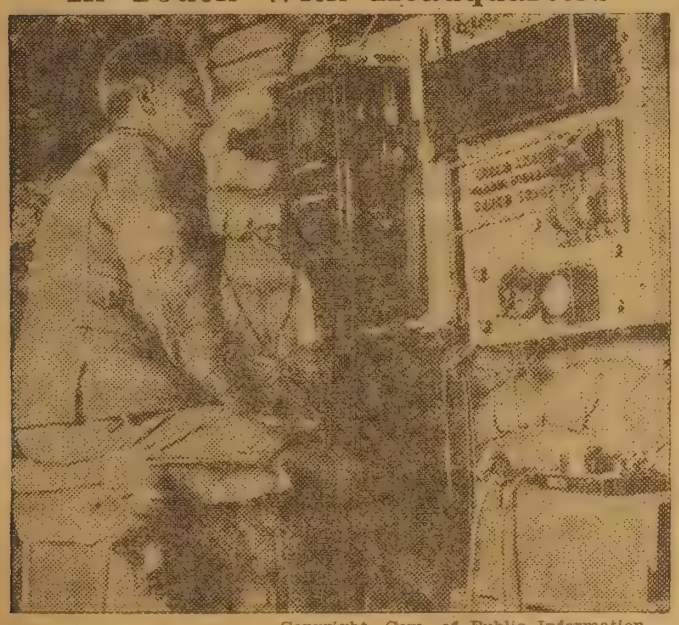
The new leader of the Irish Nationalists.

## Keeping a Keen Eye on the Hun



The above illustration shows American troops in the first line of trenches in France, watching suspicious movements of the enemy.

## In Touch With Headquarters



—Copyright, Com. of Public Information.

This telephone post on the British front in Palestine gives an idea of the communication systems in the trenches.

## Cleaning Up on Their Way to the Front



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Making a hasty toilet—American boys, members of the field artillery in France, cleaning their boots on the way to the battlefront.

## We Must Win the War, or—



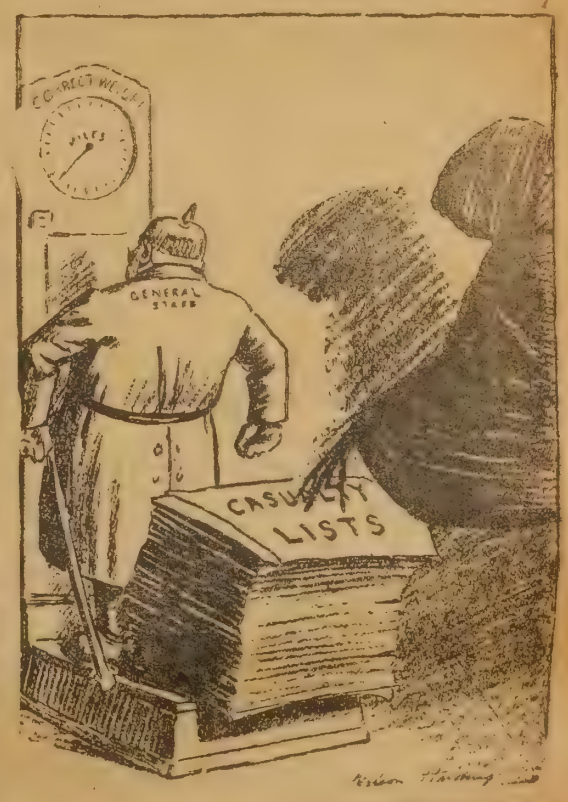

—St. Louis Republic.

## Adding in the Date




—The Passing Show.

## Daily Bulletin, "Germans Gain"




—Brooklyn Eagle.

# Trappers of the Ozarks



## The Adventures of Two Young Pioneers in the Wilds of Upper Louisiana, Now the State of Missouri.

By LEWIS B. MILLER.

Copyright, 1914, 1915, by Lewis B. Miller.

**Synopsis of Preceding Chapters.**

In September, 1811, two young men who lived near St. Louis, Ben Armstrong and Jodo Henderson, taking with them their two dogs and donkey Spunky, started on an all-winter's hunt in what was at that time unsettled region, where Indians held full sway, in the wilds of upper Louisiana, now the state of Missouri. After a perilous trip over old Indian trails and dangerous streams, they reached their destination — a salt spring close to the river Big Niangua, which Ben had visited before and from which they expected to secure salt for sale with their furs when they returned to civilization the following spring. Here they erected a rough cabin for their winter quarters close to the mouth of a large cave that was full of water and bats, and started their saltmaking and hunting. After exciting experiences with a buffalo herd and with a bear in a cave, they find their first fresh sign of Indians — moccasin tracks in the snow. And then, in the dead of night, a scouting party visited them preparatory to an attack. The attack followed soon, and would have resulted in the capture of the boys by the savages had not a violent earthquake frightened them away. It was only a short time, however, till they were in the hands of the savages, led away capive. They remained captive for some time, narrowly escaping being burned at the stake by their enemies. Ben was saved by Watermelon, a big, fat squaw, who claimed him as her husband. From both Watermelon and her savage tribesman Ben and Jodo escaped, but only to battle with terrible cold and starving wolves during their flight.

### CHAPTER XV.

**A Blizzard and a Wolf-Pack.**

Hour after hour, hour after hour, the two fugitives tramped, keeping the north star always at their backs. Not till long past midnight did they pause to eat some thing and rest a little while.

"Can they trail us where there's no snow, do you s'pose, Ben?" The two were sitting on some dry leaves, with their backs against the south side of a log, where the sun had melted the snow off.

"Some of them can, I've no doubt. But they can't follow a trail as fast as we can make it. And of course they can't trail us after dark. If we can't shake the varmints off, we ought to outtravel them by using plenty of the night. It'll keep us hustling, though. I don't know what the red heathen want with us, but they've set their fool heads to catch us."

"And we must set our wise heads not to be caught. I'm of the opinion that they don't want the Widow Watermelon to lose her husband." Jodo laughed.

"Deliver me from all such watermelons!" Ben didn't laugh.

Soon the two were up and tramping again. They were accustomed to much walking; and after being shut up in the cave for two days and a night, both felt that they could keep going long. Daylight came, and the sun rose and climbed far up the southern sky, before the fleeing pair halted for breakfast. The air was still not warm, but they found a sunny spot, behind a bank, and sat down, leaning against their packs.

For an hour or longer, after eating, they sat and rested. Indeed, encouraged by the warm sunshine, they even took a brief nap. After that they got up and tramped on. And they kept tramping, with their faces toward the south, for the rest of the day, and even till an hour or two after dark.

They found a deep ravine, and at a spot where the snow was gone they kindled a fire. Over that they broiled some pieces of what was left of their venison; and by the fire they slept till day was breaking. Then they got up, ate their breakfast, put out the fire by throwing snow on it, and set off southward again.

Just before sunrise they halted on the top of a lofty hill, and with their eyes swept the country behind them in quest of smoke. And they were not long in discovering a camp-fire.

To their relief, it was many miles behind them. While there was no way of making sure as to who had kindled the fire, there was little reason to doubt that Indians had done it—the Osages that were trailing the white fugitives.

So the two, knowing the danger behind them, tramped on as fast as they could, and avoided snow-patches as much as possible. Till noon they kept going, almost without a pause. And after a brief stop to eat and rest they were up and tramping again. And they kept hurrying on till the winter day had drawn to a close. They also made one or two attempts to tangle up their trail, so that the Osages would have trouble following it.

When night came down, the two stopped, kindled a little fire and ate their supper by it. After a rest of an hour, and a nap, they took up their bundles and weapons and marched on once more. And till midnight they kept marching, at their best gait. When they had started, after supper, the sky had been clear. But in time it became hazy, and then overcast with clouds. And gradually the clouds grew thicker, till there was not light enough for the travelers to pick their way, nor any stars to guide them in their course.

Now, of necessity, they stopped, in some thick woods. After kindling a fire, they lay down by it, and were both soon sleeping the sleep of exhaustion.

Later in the night Ben was partially aroused by something cold on his face. It was a snow-flake. He covered his head with the buffalo-robe and went to sleep again. By morning four inches of snow covered the ground, and the air was still thick with flying flakes. The weather had grown somewhat milder.

The fugitives breakfasted in the gray dawn, then put out their fire and tramped on again.

"This is glorious!" cried Ben. "We can't walk quite so fast as we've been walking, but we don't have to. Our trail has disappeared up to this point, and it'll soon be covered along here. And right here is where we're going to turn a little trick and throw the red wolves off the scent. East is our course from this point on, as nearly as we can locate it."

"How are we to know where east lies, such a gloomy day as this?"

Ben pointed to a tree. "Moss always grows on the north side. That's how Indians find their way in the dark—by feeling the trees. And there's no reason a white man shouldn't use the same expedient whenever it's needed. If the Osages hadn't taken our compass out of my ammunition-bag, we shouldn't have needed to use their compass."

All day long the two kept tramping, tramping. And all day long the white flakes kept settling down, sometimes rapidly, sometimes not so fast. Till noon the travelers' course was east. After that it was changed to southeast. If the Osages kept on south when they lost the trail, they and the fugitives would soon be far apart.

Several times Ben and Jodo noticed little droves of deer and elks; and once they saw a numerous flock of wild turkeys scratching in the snow under a big oak, for acorns. With their supply of food running low, the partners would have been glad of some fresh meat, but having only the powder and bullets in their rifles and pistols, they thought it unwise to fire a shot yet for a while. Animals of prey were everywhere in this country, and no telling when those bullets might be needed for self-defense.

Troublesome as was the walking through the snow, the two hardened young fellows believed that they



The terror of the wanderer in the wilderness.

tramped nearly 50 miles during this day. They had walked so hard that they thought it neither prudent nor necessary to drive themselves farther. So, as night was coming on, they camped down in a deep, wild gorge, kindling a fire under a great, overhanging rock. There, sheltered from both snow and wind, they ate and slept in reasonable comfort.

By morning the snow had almost ceased to fall. But the sky was still overcast with leaden clouds, and the air was bitingly, stingingly cold. They ate their breakfast before daylight. Then they wrapped themselves in their blankets, extinguished their fire to keep it from smoking, and tramped away toward the southeast.

A strong wind was blowing from the northwest, and in spite of vigorous walking the fugitives found it hard to keep warm. And all the time the weather was growing colder, colder. About noon they came to a good-sized stream; but it was frozen like a rock from bank to bank, and they had no trouble crossing.

A few miles beyond the river they came to a prairie, and pushed on across it. Out here the wind had full sweep. Some fine snow, mixed with sleet, was driving with it. The sting in the air seemed to be growing sharper every minute. Doubtless a thermometer would have indicated a temperature already several degrees below zero.

The prairie was several miles wide. When about halfway across, the two fugitives heard the long-drawn-out howl of a timber-wolf a good distance in the rear. They little more than noticed the sound at first. But later, when two wolves began to howl, and then more than two, Ben called his companion's attention to them.

"Sound to me as if they're trailing us."

"Do you think they're dangerous, Ben?"

"Well, they might be, this kind of weather especially, and out on this prairie. That is, if a good-sized pack of them should get together."

"If their number keeps on growing, there'll soon be a good-sized pack of 'em. I'll be glad when we strike the woods again. We can climb trees and wolves can't.

"It's little good tree climbing would do us such a time as this. Sitting on a limb, we should soon freeze as stiff as a poker and tumble off. A fire's what we want to depend on when we reach the woods."

"I've heard of wolves being so hungry and fierce that they'd venture right up to a fire."

The two travelers now tried to increase their speed; for the hungry pack on their trail were growing more numerous and drawing constantly nearer. At last, while crossing a high place, Ben and Jodo caught sight of the wolves. They were coming across a ridge more than a mile behind. There appeared to be 20 or 30 in the pack.

For a time the fugitives were fearful lest both night and the wolf-pack should overtake them out on the prairie. But they crossed another ridge, and soon found themselves in scattering woods. They hurried on, almost at a run, hoping to reach thicker woods, where they would be better sheltered from that cutting wind, before stopping to kindle their camp-fire.

Finally they reached thick woods, but were still hurrying on, in the hope of finding a deep ravine, when they caught sight of something that astonished them. It was a stone chimney standing in the midst of a little clearing. And it was standing alone.

Approaching in wonder, Ben and Jodo found the clearing fenched around with a peculiar kind of fence. The trees in the clearing had been felled, and then all rolled together in a rather high, long pile, the whole enclosing a circular tract of nearly an acre. And near the center of the tract stood the houseless chimney.

Hastily the two climbed over the ridge of brush and lodge and approached the chimney. Broad, and not very tall, it had a wide, deep fire-place in its south side. Soot in the fire-place meant that there had once been fire there, perhaps not so very long ago.

"This chimney and the log-pile fence and the thick woods around will make as good a shelter as we can find, especially with night coming on, and with that hungry pack yelping so close behind. I believe we'd better start our fire right here in this big fire-place. What do you think, Jodo?"

"I think yes! And let's be quick about it! That howling is getting frightfully loud! It makes me nervous! You strike fire into your spunk Ben, and I'll dig some dry leaves and twigs out from under that log-heap."

Ben hastily raked the snow out of the fire-place, then got down and, with flint and steel from his ammunition-pouch, began to strike sparks. By the time the sparks had caught in his piece of spunk and been blown to a blaze, Jodo came running with a double handful of leaves and twigs. Quickly both leaves and twigs were blazing, and Jodo was running back for larger fuel.

By this time dusk was at hand, and the wolves seemed to be but a few rods beyond the log-fence. And a frightful clamor they made.

Hastily, frantically the two now ran back and forth from the fence to the chimney, piling dry brush on the fire till it was blazing up brightly. Then they brought larger wood and laid it on, but were careful not to choke the blaze with it.

"What would you say became of the house that used to stand here?" inquired Jodo, after the fire had begun to roar and crackle and send its light far around.

"If the snow was out of the way, we could soon tell. Pretty safe guess, though, that it was burnt down."

"And who burnt it?"

"More likely to have been those Osage pests than anybody else."

"Who lived here?"

"It might have been a solitary hunter, or a hunting party; or it might have been a family. More probably it was a family; and they had some cattle or horses and cultivated a little patch of ground. Otherwise they wouldn't have made this clearing and piled up that fence around it."

"And what do you s'pose became of the family?"

"Well, they may have retreated toward the settlements, or the reds may have murdered them and burnt their house afterwards. If the ground was bare we might make out some signs. Maybe we can—Just look at that big wolf coming over the fence yonder! Oh, if we only had plenty of powder and lead!"

Ben caught up some blazing sticks and rushed toward the shaggy beast of prey with them. The animal retreated over the ridge of logs. But the whole pack were now yelping and howling in the thick woods that came up close to the enclosure.

Soon dense darkness had settled down. The night would be blackly dark as well as frightfully cold. Ben and Jodo kept visiting the log fence for more fuel, till they had a great fire roaring and crackling in the fire-place, and lighting up at least half of the fenced-in land. And every time either of the two went to the fence for fuel, he saw numerous fiery eyes glaring at him from the darkness beyond the fence.

In spite of the fire roaring in the chimney, so cold was the air that a yard or two away the snow was not melting.

Lucky we happened upon this spot," Jodo said. "Anywhere else we'd have had a hard job to keep from freezing. And we'd have had a hard job keeping off the wolves anywhere else."

"Yes. And from the noise they're making out there, we may have a hard job keeping them off even here."

"That high fence ought to be of some assistance to us."

"Not much. They can climb right over it, as easily as we could—more easily than they could over a high rail-fence. But we can see them as they come over, and after they get over. That's one advantage. Between the wolves and the awful cold, I doubt if either of us will dare sleep a wink tonight, dead-tired though we are."

"Don't I wish the house was still here!"

"It would certainly be a great protection to us this night. But wishing won't put it here. Let's be thankful for what we have, and do the best we can in the open air. We must try to—— Just listen to those hungry varmints out there! A great pack of them already, and more coming all the time, I'd say. They'll be bold enough to break over before morning. I'd feel safer if there was a tree or two inside here for us to climb, in case the blood-thirsty brutes get reckless and defy the fire."

"But there is no tree, Ben. And we'd freeze if we did climb one, unless it was right here against this fire, or over it. This chimney looks strong enough and solid. Some stone-mason put that up. If we have to climb anything, I'd rather get up on top of that. We could keep warm up here—or at least warm enough not to freeze."

Ben stepped back and gazed up at the stone structure. "That's not a bad suggestion, Jodo—not half-way bad. It's not very tall, the chimney, but tall enough to put us out of reach of the wolves when we get up there. The smoke will give us some trouble while we're sitting on top, but it will keep us warm. Yes, sir! The top of this chimney will be our place of refuge if the worst comes to the worst. And we'd better get something to help us climb."

They hunted around, and soon dug up out of the snow a rough, rather long pole. That they leaned against the chimney, at the back side.

"When we have to climb, Jodo, I'll hold the pole till you get up, and then you can hold it till I get up. But we'd better eat some supper while we can. We may be too busy later. And we mustn't forget to take our provision-bag up with us."

"Ben, s'pose you boost me up there and let me try it. Maybe we can't sit up there for the smoke."

"All right! Up you go!"

Ben held the pole with one hand and assisted the climber with the other. Soon Jodo was perched on the chimney-top and saying:

"The very place! A nice warm roost on a night like this! The wind whips the smoke away."

"Glad to hear it! Want me to reach you up some venison and corn?"

"No. I'll come down for supper."

Just then, hearing a snarl behind the chimney, Ben seized his rifle with one hand and a blazing brand with the other, and turned, to be confronted by a fiery-eyed wolf not 10 feet away. The brute had climbed over the fence and approached in the shadow of the chimney.

Straight at him Ben rushed. The beast of prey retreated, snarling and growling. Ben chased him over the fence. Then he came back and helped Jodo to climb down.

Very weary, they raked and swept away the snow before the fire, then spread down a buffalo-robe to sit on while they ate. The noise of the wolves was often so loud that nothing else could be heard. Practically unarmed, the young fellows shuddered as they listened to that howling, mingled with the snapping of hungry, fanged jaws just beylond the fence. And as they ate they had to keep turning themselves. For so intense was the cold that while half of one's body was burning the other half was freezing.

"Ben, I'm also sorry we're not in that Osage village still,"

"Undoubtedly we should be safer than here tonight, and more comfortable, too, probably. That is, if we'd never run away. Though I don't suppose an Indian wigwam is any too warm such weather as this. If we'd foreseen this frightful cold spell, we'd have put off escaping till later."

"Just listen to that blood-thirsty pack out there! Don't their teeth crack together! Those noises make my very blood run cold! No use shutting our eyes to the fact that we're in for a terrible night of it! And just look at those eyes glaring over the log-heap fence at us! The brutes won't keep out much longer."

"No. And we must be ready for them when they come. Jodo, I'm wondering if it wouldn't be safer for us to get our things together and mount this chimney while the way is clear. Otherwise we're likely to have it hand to hand with them pretty soon—knives and tomahawks against fangs."

(To be continued.)

## Motor on the Farm

**Muffler Paint.**

It is difficult to find a satisfactory paint for the exhaust pipe and muffler, because of the heat of those parts. Here is a highly recommended muffler paint: Boiled linseed oil 1-5 pound, Japan varnish 1-5 pound, turpentine 2-5 pound, lamp black 1 1-2 ounces, powdered graphite 1 1-2 ounces, powdered oxide of manganese 3-8 ounce. Mix the linseed oil and Japan varnish well together, then add in order, stirring all the time, the lamp black, the graphite and the powdered manganese. As the mixture thickens thin it down with turpentine, until the quantity mentioned has been used. This mixture should be used as soon as it is mixed, as it dries quickly. Every time the brush is dipped in it should be stirred. It is well to paint the muffler while it is hot, after having cleaned it thoroughly.

**Declutching at Corners.**

While it is a wise precaution to throw out the clutch when rounding a sharp corner, it also has a beneficial effect upon the tires. Whenever the car tends to skid, due to its deflection from a straight course, a cross strain is brought to bear on the tire treads, which is directly proportional to the weight of the vehicle and the radius of the curve and proportional to the square of its velocity. If the power is applied in rounding a curve the tendency to rip off the tires is further aggrevated by the backward drag due to traction. If the clutch is released, however, that factor is eliminated and the strain is thereby reduced.

**Oil for Small Parts.**

The brake mechanism seldom gets the lubrication it deserves. Oil is required on the pins supporting the brake shoes and upon the bearing points of the cams or toggle mechanism, which actuates the brakes. These parts usually depend for lubrication on the hand oil can. Beginning at the operating lever, every joint in the brake rod needs occasional oiling, as do the bearings of the compensating shaft.

## Washington County Fair Director

At a meeting of the county fair board at Forest Grove the following directors were elected for the coming year: E. A. Westcott, H. F. Wilson, Mrs. C. A. Brodersen, C. A. Littler, R. W. Feder, Mrs. Dorothy Seymour, George M. Littlehales, C. A. Brodersen, A. E. Scott, N. C. Jamison and N. A. Frost. The officers are A. E. Westcott, president; H. F. Wilson and Mrs. C. A. Brodersen, vice presidents; C. A. Littler, treasurer; R. W. Reder, secretary.

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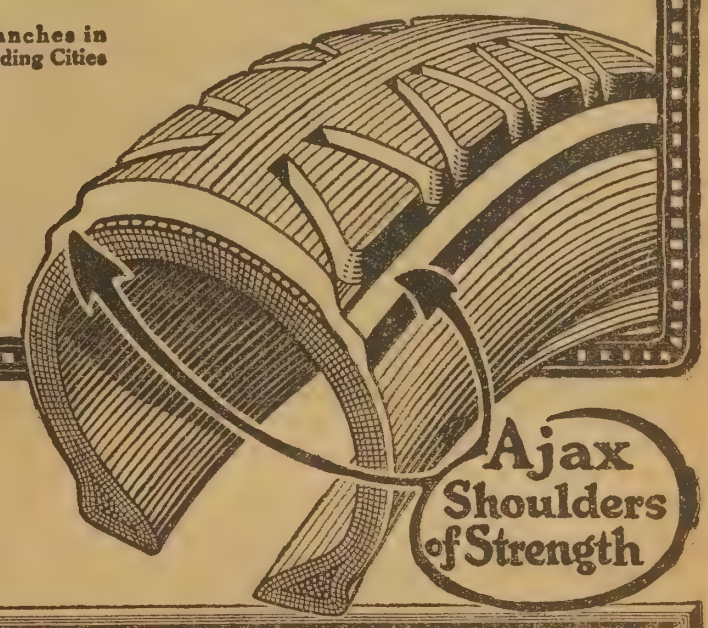
Ajax inner tubes are superior in value and service. Ajax tires and tubes will save you money. Try them.

Write for free booklet—"Ajax Shoulders of Strength."

**AJAX RUBBER COMPANY, Inc.**

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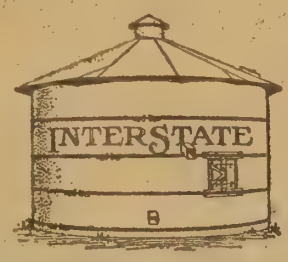

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MORE TREAD ON THE ROAD

In answering advertisements please mention this paper.

**THE DIFFERENCE IN DOLLARS**

Grain can be stored in a good grain tank much more cheaply than it can be handled in expensive bags that last but one season.

**INTERSTATE GRAIN TANKS**



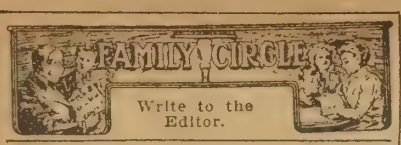

A Good Grain Tank Is a Permanent Investment

come to you complete and all ready to set up; floor, skids for moving, ventilator, spouts. There isn't a better grain tank made; very few as good. The Interstate tank is built for years of satisfactory service. You can not do better anywhere for so reasonable a figure.

*Look Into the Matter Now While You Have Plenty of Time*

**McGoldrick Lumber Co.**
Spokane, Wash.

SEND COUPON TODAY
McGoldrick Lumber Co., Spokane, Wash.
Please send me full particulars regarding your grain tanks.
Name .....
Address .....
R. F. D.




ALICE W. BARLAND,
Editorial Contributor.

# Fruit Canning

## Time to Think About It Again

By LISSIE C. FARMER.

In my neighborhood, the old style Mason fruit jar is from 20 to 40 per cent cheaper than any other I can buy, while on the other hand the newer types require more heat for canning, and do not preserve their contents in any better condition. For these reasons, I would advise the woman who has a supply of Mason jars to use them.

Fruit for canning should be ripe enough to have a good flavor, but not ripe enough to mash easily. For the same reason, it should be picked into small containers, even for home use. It is better to wash fruit, by holding basket and all under a faucet or dipping it into a pail of water before hulling or stemming.

An oilcloth apron is a good thing to wear when handling fruit, as the stains can easily be removed from its surface, but you must be careful about getting it near a blaze, as oilcloth burns very easily.

Make a syrup for your fruit by pouring boiling water over sugar in the proportion of one cup of sugar to a cup of water and stir until dissolved. Boil hard for 10 minutes. For juicy and moderately sweet fruit this will be about the right amount of sugar and water. Set on the back of the stove a vessel partly full of cold water, and in this lay on their sides, so that the water will be both inside and outside of them, as many as possible of the glass jars to be used; also the zinc tops and rubber bands. Heat evenly by turning often.

While these things are in progress, finish picking over your fruit and paring it if necessary, It is best to do the cutting, peeling, etc., immediately before putting the fruit into cans, to avoid discoloration.

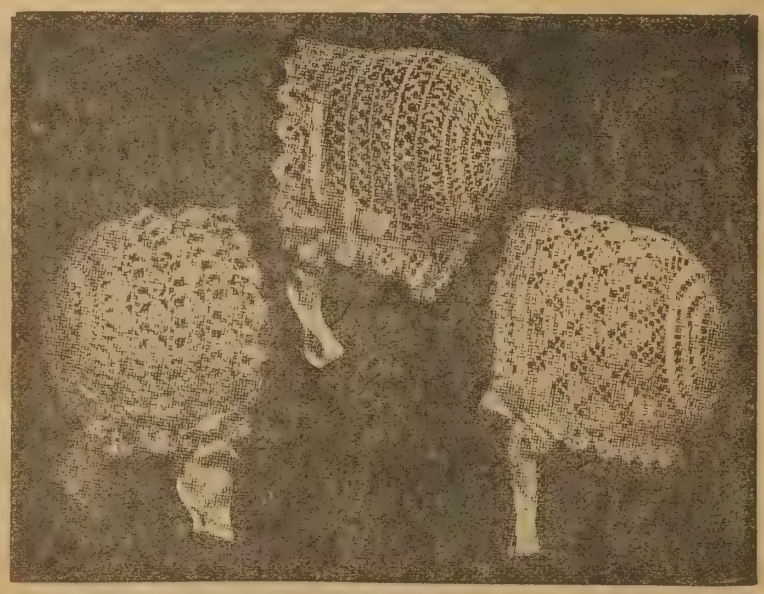
When the fruit is ready, pour the boiling syrup over it and set it on the stove. Push down the top layer of fruit occasionally. In a convenient position set the pan which is to hold your jars while you fill them, with cloths, a spoon and a silver fork close at hand. Do not use tin or iron utensils in fruit canning. As soon as the fruit begins to boil start in canning. Push the kettle containing the fruit back where it will just continue to simmer, but do not let it boil hard.

Have your jars as close to the fruit kettle as possible, and fill close to the top. Run the fork down one side of the jar and pass it around to break any air bubbles which may have gathered. Wipe the top, take a rubber band from the sterilizing pan and wipe it dry, fit it in place and screw a sterilized top down upon it. Turn the jar over, to see if the cover leaks anywhere, then set it aside before putting into storage for the winter. After the jars are thoroughly cooled the tops should be tightened still further.

The storage place for fruit should be cool and dark, but not damp.

# Crochet and Tatting Designs

By WINNIFRED WORTH.



**Baby Caps.**

What is more attractive than a neatly crocheted baby cap? Here are three beautiful designs to choose from:

**Shell Cap.**

Ch. 9, join ch. 6, wind thread around hook 14 times, catch thread through ring, catch thread again and draw through all loop on hook. Catch thread and draw through loop on hook; rp. 19 times; sl. st. last coil to top of 6th ch.

**2d Row**—Ch 3. 1 t., between 2 1st coils 3 p. of 3 ch. each on top of t., ch. 3, 1 dc. between next 2 coils; rp. (making 10 points of 3 p. each).

**3d Row**—Ch. 7, 1 dc in center p., around cap.

**20th Row**—Same as 8th row all around for outer scallop of cap.

**Maltese Baby Cap.**

Take up 3 loops, draw thread through 9 times, join. Ch. 2, join to 1 on side (draw thread) 2 on other (all around twice).

(Draw thread) 2 on side each side ch. 3.

1 row leave off 3 m. for crown.

5 rows for front join 3, ch. 3.

Edge. Join 2 loops ch. 5, take up 2 loops at time 7 times, ch. 1 join back ch. 2, put needle on underside, fold back, draw thread through 1 from each side until 5 on needle, draw thread ch. 4, 1 t. in dc. between points of previous row; rp. sl. st. to 4 ch. of 1st 7 made.

**4th Row**—6 t. under each 4 ch. around row, join.

**5th Row**—Ch. 5, sk. 1 t. of previous row, 1 t. in next t; rp. around.

**6th Row**—Same as 2d row, catching in each sp. and sl. st. to center p.

**7th Row**—Ch. 3, 1 dc. in center p. of each point of previous row.

**8th Row**—6 coils of 18 around hook to form shell in 2 point of 3 p., 1 dc. in 3d point shell in next; continue around cap in same manner.

**9th Row**—Ch. 9, 1 dc. in center of shell, ch. 5, 1 dc. in top shell, continue around cap sl. st. in 5th of 9 ch.

**10th Row**—Ch. 7, sl. st. m. 4th ch., make 2 more p., ch. 3, 1 dc. in 3d of 5 ch. of lower row, ch. 3, 1 t. in dc. of top of shell 3 p., ch. 3, catch in 3d of next 5 ch.

**11th Row**—Same as 7th row.

**12th Row**—Same as 8th row across all but 1 shell for back of neck.

**13th Row**—Turn, continue same as 9th row.

**14th Row**—Turn, same as 10th row.

**15th Row**—Turn, same as 7th row.

**16th Row**—Turn, same as 8th row.

**17th Row**—Turn, same as 9th row.

**18th Row**—Make points of 3 p. as in 10th row all around cap.

**19th Row**—Same as 7th row all through 1 at turns, open c. 2, join to loops and begin next scallop. Sew edge on.

**Lacet Baby Cap.**

**1st Row**—Ch. 5, join.

**2d Row**—Ch. 3, 15 in circle.

**3d Row**—Ch. 5, 1 dc., in each dc. ch. 2 between open row.

**4th Row**—Ch. 3, 2 dc. in each s., 1 dc. on dc. of last row.

**5th Row**—Ch. 5, 1 dc. in s.; continue this until 5 thick rows.

**11th Row**—Ch. 5, join (sk. 2 3 times), tu., sk. 3.

**12th Row**—Ch. 5, join all around twice (45 s.).

**13th Row**—Finish each row, 3 ch., 1 dc.

**14th Row**—Ch. 5, join ch., 2, 5 dc. in next s.

**15th Row**—Ch. 2, join ch., 5, join ch. 2, 5 dc. or shell.

**16th Row**—7 dc. or shell.

**17th Row**—9 dc. or shell.

**18th Row**—Ch. 2 between shells, for next shell leave off 3 shells in back and make 5 more for front.

**For Ribbon**—2 dc., 2 ch.

**For Edge**—Ch. 2, 2 dc., 2 ch., dc., 2 ch., join.

**2d Row**—Ch. 2, 1 dc. until 5 dc. ch. 2, join.

**3d Row**—Ch. 3, join, all around.

WE take your paper and like it fine. We find just what we want for the farm in it. It is good reading from start to finish, and we look eagerly for it each week. We have a fine garden. There are four of us who work the garden. We would like one of your Service Flags as described on page seven of the issue of April 18. We also have a large wheat farm and we are all glad to help raise food for the boys over there, as our motto is "We Will Win." The good old U. S. A. can't lose. Enclosed fine five cents. Please send us a paper pennant.

FRANK TIFFANY.
Centerville, Wash., R. 1.

## Store Eggs During May.

Housewives during the period of heavy egg production are urged by the food administration to store eggs during May. Information gathered by the food administration tends to show that eggs during the winter months, or the season of scant production, will be even higher in price than they were last winter.

"By storing eggs now by the water glass method, or any other method which assures preservation of the egg supply the housewife will not only assure herself a wholesome food product during the winter months, but will also aid the food administration in diminishing the use of other food products which can be shipped to our allies," says Food Administrator Charles Hebberd.

SANITARY CANNING OUTFITS

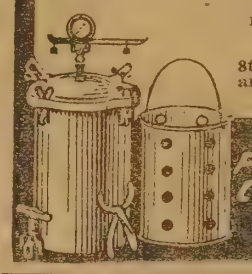
Home canning is more necessary and more profitable this year than ever before.

Steam pressure canning is the safe, quick and easy way. Our complete outfit saves time, labor and fuel, **hermetically seals** the cans and **sterilizes** the contents.

We include instructions and a $2 book of recipes.

Write for free literature.

**Seattle Can Company, Home Canning Department, 8th Ave. So., and Adams St., Seattle.**




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Tacoma's mail order grocery house will help you cut the cost of living.

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Soap, Oint., Talcum 25c. each. Sample each of "Cuticura, Dept. F, Boston."

What Is the A. B. C.?

**Audit Bureau of Circulations.**

This is an association, nation-wide in its scope, not conducted for profit. Every publisher having membership in this organization pledges himself to sell circulation as a commodity, both as to quality and quantity. Advertisers using our columns are safeguarded. They know that we give all the circulation we offer.




Scenes of Prosperity

are common in Western Canada. The thousands of U. S. farmers who have accepted Canada's generous offer to settle on homesteads or buy farm land in her provinces have been well repaid by bountiful crops of wheat and other grains.

Where you can buy **good farm land at $15. to $30. per acre—get $2. a bushel for wheat and raise 20 to 45 bushels to the acre** you are bound to make money—that's what you can do in Western Canada.

In the provinces of Manitoba, Saskatchewan or Alberta you can get a

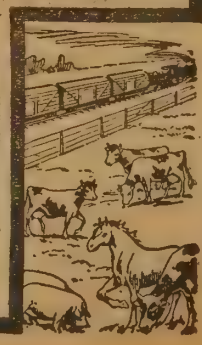
**Homestead of 160 Acres Free**

and other land at very low prices.

During many years Canadian wheat fields have averaged 20 bushels to the acre—many yields as high as 45 bushels to the acre. Wonderful crops also of **Oats, Barley and Flax. Mixed Farming** is as profitable an industry as grain raising. Good schools, churches, markets convenient, climate excellent. Write for literature and particulars as to reduced railway rates to Supt. of Immigration, Ottawa, Can., or to

J. N. Grieve, Cor. First and Post Sts., Spokane, Wash.

Canadian Government Agent.



# Patterns

2086—Girls' dress. Cut in four sizes: 2, 4, 6 and 8 years. It requires 2 3-8 yards of 44-inch material for a 4-year size. Price, 10 cents.

2479—Girls' dress. Cut in five sizes: 6, 8, 10, 12 and 14 years. Size 12 requires 3 3-4 yards of 44-inch material. Price, 10 cents.

2480—Ladies' dress. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 38 requires 6 yards of 36-inch material. The skirt measures a little more than 2 yards at the foot. Price, 10 cents.

2237—A popular model. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 36 requires 5 1-2 yards of 44-inch material. The lower edge measures about 2 5-8 yards. Price, 10 cents.

2458-2459—A smart business dress. Waist, 2458, is cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It will require 2 1-4 yards of 36-inch material for a 38-inch size. The skirt, 2459, is cut in seven sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. Size 24 requires 3 yards of 44-inch material. The skirt measures about 1 7-8 yards at the foot. Two separate patterns, 10 cents for each pattern.

2468—Lady's apron. Cut in one size—Medium. It will require 1 1-8 yards of 36-inch material. Price, 10 cents.

2263—Dress for misses and small women. Cut in 3 sizes: 16, 18 and 20 years. Size 18 requires 5 1-4 yards of 44-inch material. The skirt measures about two yards at the foot. Price, 10 cents.

1307—Lady's corset cover and petticoat. Cut in 3 sizes: Small, medium and large. It requires 3 1-4 yards of 36-inch material for a medium size, without the ruffle, which will require 3 5-8 yards of embroidery. Price, 10 cents.

2074—Lady's "cover all" apron. Cut in 4 sizes, small, medium, large and extra large. It requires 5 1-2 yards of 36-inch material for a medium size. Price, 10 cents.

2472—Girl's set of under garments. Cut in 6 sizes: 2, 4, 6, 8, 10 and 12 years. Size 8 requires for the waist, 7-8 yard; for the bloomers, 1 3-4 yards; for the petticoat, 1 5-8 yards of 36-inch material. Price, 10 cents.

2471—Lady's bloomers. Cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. Size 26 will require 1 3-4 yards of 36-inch material. Price, 10 cents.

2481—Girl's dress. Cut in 4 sizes: 8, 10, 12 and 14 years. Size 12 requires 3 5-8 yards of 44-inch material. Price, 10 cents.




Please fill in this order and mail with remittance to:
PATTERN DEPT., PACIFIC NORTHWEST FARM TRIO, Spokane, Wash.

Enclosed find.....cents for which send me the following:

Pattern No.....Size..... Pattern No.....Size.....

Pattern No.....Size..... Pattern No.....Size.....

Name .....

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R. F. D. No.....Box No.....Street No.....
Be sure to give the pattern number and the correct size.

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KOVERALLS
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Keep Kids Kleen



The most practical, healthful, playtime garments ever invented for children 1 to 8 years of age. Made in one piece with drop back. Easily slipped on or off. Easily washed. No tight elastic bands to stop circulation. Made in blue denim, and genuine blue and white hickory stripes. Also lighter weight, fast-color material in a variety of pleasing designs all appropriately trimmed with fast-color galatea. All garments made in Dutch neck with elbow sleeves or high neck and long sleeves. Folder (in colors) showing different materials sent free on request.

$1.00 the suit

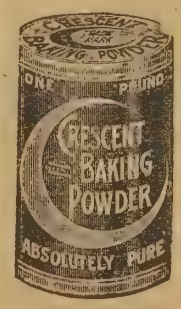
If your dealer cannot supply you we will send them, charges prepaid on receipt of price, $1.00 each. Satisfaction guaranteed or money refunded.

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Mfrs. of "Freedom-Alls"
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by using this wholesome baking powder that goes farther, saves flour and makes baking failures impossible.

25c Lb.—All Grocers

(B-237)

"Refreshments will be served"

IT makes little difference whether it's a dance, a school or church social, a Red Cross Chapter meeting, a "get-together" meeting of the Farm Bureau or a big rally—

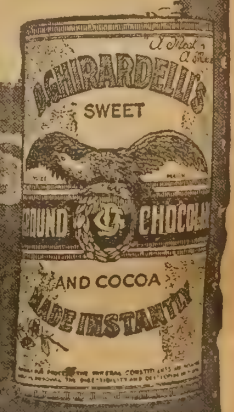
Chances are Ghirardelli's will be "among those present." And—for very good reason:

It promotes sociability. It provides added cheer and comfort. It is a delicious, refreshing food-beverage that is always in order at *any* social function.

*In ½ lb., 1 lb. and 3 lb. cans; a tablespoonful—one cent's worth—makes a cup.*

D. GHIRARDELLI CO.
Since 1852 San Francisco

Ghirardelli's Ground Chocolate



# Handicraft For Boys

By A. Neely Hall

(Copyright by A. Neely Hall.)

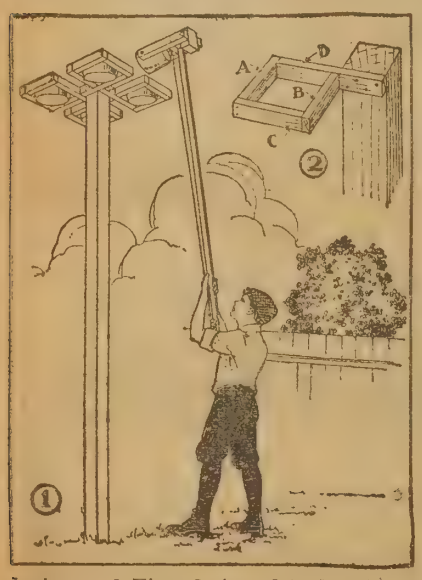
### BIRD BATHS.

It is not sufficient to put up houses for birds. We must also provide water for their bathing and drinking, to make our yard and garden attractive to them.

Small, shallow pans—individual bathtubs—are better than large, deep basins, because birds are timid bathers, and as a rule prefer tubs to themselves. And it is well to place these off the ground so the bathers will be and feel secure from neighborhood cats. In the illustrations I have shown two ideas for aerial baths, and also, two schemes for filling them.

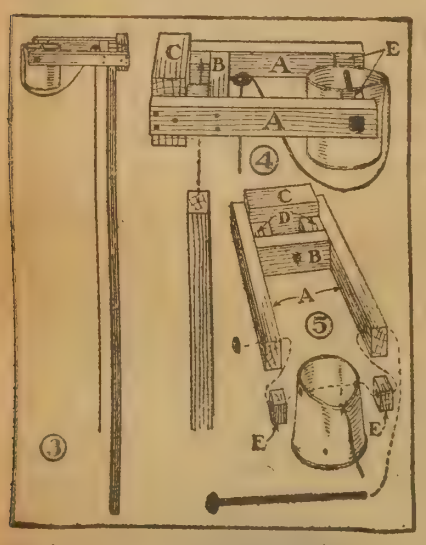
Fig. 1 illustrates a battery of four pan tubs. Get four saucepans five or six inches in diameter, and make a frame for each of just the right size so the rim will rest upon the upper edges (Fig. 2). By lapping the strips as indicated, A, B and C can be cut of equal length. Strip D must be enough longer to provide for nailing the frame to the post support. Nail one frame to each side of the support, and set the pans in them.

Fig. 1 shows the homemade filling




device, and Figs. 3, 4 and 5, details of its construction. Side strips A of the framework are 11 inches long, 1 inch thick and 2 inches wide; and the cross blocks B and C are 4 1-2 inches long—P of the width and thickness of strips A, and C a piece of 2 by 4. This framework is to be slipped over the end of a clothespole; therefore, in assembling its parts, fasten strip B at the right distance from C so a clothespole will fit snugly between them. Cut blocks D (Fig. 5) of the proper size to make the opening of the right width for the pole.

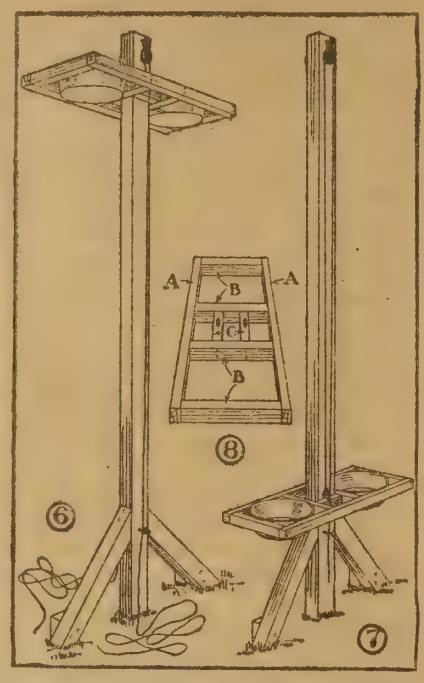
Fig. 5 shows how a can is flattened on its sides to form a spout, for the filling receptacle, and how holes are pierced through opposite sides for a




carriage bolt, by which to mount the can. Bore holes of the diameter of the bolt, through strips A near their open ends, and through two blocks E. Blocks E form washers to keep the narrow top of the can centered, so the bottom will not strike strips A when being inverted.

Fig. 4 shows how the cord for inverting the can is attached to the center of the top edge of strips C.

After slipping the framework over the post support, staple a pair of clothesline pulleys to opposite sides




spout, passed beneath and down through a screw-eye screwed into block B. You will readily see how, by pulling this cord, the can is emptied.

The duplex bath in Figs. 6 and 7 has a pulley arrangement for raising and lowering it. Fig. 8 shows the framework for holding the pans. The lengths of the strips A and B will be determined by the size of the pans; and the length of blocks C by the size of the post support, which must fit loosely in the center opening formed by them. Screw a screw-eye of the post, near to the top, on the same sides as the screw-eyes in strips C; then tie ropes to the screw-eyes in strips C, run them over the pulleys, and drive nails into the post near the base to fasten the rope ends to when the framework has been raised.

## FEDERAL FARM LOANS.

### Membership of 56,000 Farmers.

On April 15 the federal farm loan system had been in active operation just a year, and the farm loan board at Washington signalized the first anniversary by issuing a hopeful statement to the public.

About 2800 national farm loan associations have been incorporated. They have an average of 20 members, representing a total membership of about 56,000 farmer borrowers.

"The 12 federal loan banks have received applications for over 120,000 loans, amounting to about $300,000,000," says the board's statement. "Many of these applications have been rejected, reduced or withdrawn. About 80,000 loans have been approved, amounting to over $160,000,000, and on over 30,000 of these loans money has been paid to the farmers to the amount of about $80,000,000. Some loans approved were for reduced amounts which the borrowers declined to accept.

"Notwithstanding the unusual expenses incident to the operation of new machinery and to the appraisement and determination of title on many loans that have not yet been closed, the expense of the banks in doing business has been within such limits as to justify the expectation of the farm loan board that these banks will easily be able to operate on a difference of one-half of one per cent between the loaning rate and the rate which they pay on their bonds.

"None of the banks, of course, received any appreciable income from its business during the first half of the year, but during the last half the business of the Spokane Federal Loan bank, for example, was sufficiently profitable to come within about $10,000 of wiping out the excess of expenses incurred in the first half, and the volume of business on its books assures it a handsome surplus for the second year.

"Every borrower, when he takes out his loan, makes a subscription which increases the stock of the federal land bank to the extent of 5 per cent of the amount borrowed. These stock subscriptions of borrowers, in the case of several of the banks, are now so large that, in accordance with the provisions of the act, the retirement of the original stock of the banks, which was principally subscribed by the government, will begin within a few months."

### Wanted—A Big Fee.

"Well, old fellow, the doctor tells me that I simply have got to have my appendix removed."

"Dear me, is he so hard up as that?"—Life.


YOUR

# LOCAL HOME PAPER

AND

# THE WASHINGTON FARMER

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Through a special clubbing arrangement with a large number of newspapers in Washington, we can now send you **The Washington Farmer** and your Local Home Paper at the regular subscription price of your home paper.

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You alone know the great value of your local town paper. The part it plays in local affairs, the news of the happenings of your community, the gossip, social and commercial life that you wish to keep posted on. It brings the story of the home boys at the front who are fighting for you and our country.

## THE STATE FARM PAPER

The Washington Farmer is your family paper. It keeps you posted on the agricultural developments of your state. It is a complete family farm paper—all the farm news, latest and best serial stories, department for every member of the family—feature sections of every branch of farming, dairying, stock raising, fruit growing, etc. Also colored comic pages and a children's and family page. It is the biggest and best farm paper published in The Pacific Northwest.

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# The Washington Farmer

617 Central Bldg., Seattle, Wash.

Review Building. Spokane, Wash.




### Maurine Goes a Mile to School.

Dear Aunt Nellie: I am 11 years old. My birthday is September 25. Have I a twin? If so I wish she would write to me. I live on an 80-acre farm three miles west of Rockford. I have two sisters and two brothers. Their names are Hazel, Margaret, Garner and Fred. We have two horses, Prince and Maud. We have one cow named Jersey, one calf named Buster and we have four pigs. Papa takes the Farmer and we all enjoy reading it. My sisters and I go a mile to school. I like to go. I am in the sixth grade in arithmetic, grammar, spelling, history and physiology and in the seventh I take geography and reading. We have a dog named Prince and the cat's name is Toodles. I feed our calf sometimes. My teacher's name is Miss Hazel V. Morris. Her sister taught our school last year. The name of our school is Sylvan district No. 98.—Maurine Reedy, R. F. D. 2, Rockford, Wash.

### Will Fix Her Playhouse Up.

Dear Aunt Nellie: This is the first time I have written to the Corner. I am 6 years old and in the second grade at school. My teacher's name is Mrs. Ramser. I like her very much. My papa writes for The Farmer, so I thought I would write to the Corner. I like to read the letters. I have one sister. My birthday is October 7. Have I a twin? We have 20 chickens and one horse. I will be glad when summer comes. Then I can have my big playhouse fixed up. We had a program at out school on Washington's birthday. I have a doll and if you squeeze him he will say "Mama." I hope my letter will be in print.—Dorothy Palmer, Bossburg, Wash.

### Cousin Dora Makes a Discovery.

Dear Aunt Nellie: Last November papa subscribed for the Farmer and it was last month that I discovered the Children's Corner. I was always going to write to you, but never had a chance till now. I am in the seventh grade at school. May I become a cousin? I am 12 and will be 13 August 20. If I have a twin I wish he or she would write to me; I just love to receive letters and would like to hear from any of the cousins. I have one and one-half miles to go to school. I wish I did not have to go so far because it makes me tired. I have three brothers, but no sisters. I wish I had a sister. My brothers' names are Thomas, Charles and Johnnie. Johnnie is younger than I am, but the other two are older. Thomas is going to join the navy in the spring. I belong to the Red Cross and I can tat and crochet. I am going to learn to knit after a while. We live on a 30-acre farm and have two horses, Bill and Skookums. We have six cows, Reddy, Blossom, Daisy (my cow), Bessie, Josephine, Glendeline. Papa has two pedigreed hogs. Their names are Mitchell's Queen and Curly R. The last is a little curly-haired pig.—Dora Estella Mitchell, R. F. D. 2, Box 67, Ridgefield, Wash.

### Piano Was Surprise for Marie.

Dear Aunt Nellie: I read the Corner every week and enjoy it very much, so I thought I would try to write, too. May I be a Cousin of the Corner? I would like very much if I could. My complexion is fair. My hair is brown and my eyes are a grayish blue color. I am 12 years old. My birthday is September 8. Have I a twin? If so I would be very glad to hear from them. I am in the sixth grade in school. My teacher's name is Miss Ethel Viola Stone. I have six brothers and one sister. My brothers' names are John, Henry, Edman, Alvin, Bennie and Ernest. My sister's name is Esther. John just got married a short time ago. I live on a 960-acre farm. We did have 1170 acres, but we sold 210 acres to my brother John. We have about 25 head of horses and about 30 head of cattle. Say, I want to tell you a surprise. Last Friday when I came home from school mama took me to the parlor and there stood a nice, big piano for me! My, I was so glad I didn't know what to do! And now I am going to take music lessons.—Marie Krom, Penawawa, Wash. (You are a cousin now, Marie, and we want you to write often.—Aunt Nellie.)

### Some Riddles With Their Answers.

Dear Aunt Nellie: This is my first letter to the Children's Corner. I like to read the cousins' letters very much. Tell Cousin Elva Green that I think I can answer some of her riddles: A potato has eyes and can not see, corn has ears and can not hear, a shoe has a tongue and can not talk, a watch never stops running. I am 12 years old and my birthday is January 17. Have I a twin? If I have I wish she would write to me. I have two brothers and no sisters. My brothers' names are Kenneth and Veron. Veron is 15 and Kenneth is 13 years old. We are not having much snow here this year and I am glad of it because I do not like snow very well. I will ask some riddles. I will put the answers, too, so the cousins can ask their parents to guess: What is it that goes around a button?—A billy goat. There is a house and there are no doors, no crack, no chimney and no windows, and there is a man in the house, how does he get out?—He breaks out with the measles. Keep care of yourself, Aunt Nellie, and all of the cousins.—Vera Elanora Garton, Box 34, Chelan, Wash.

### Twins Find Plenty to Keep Busy.

Dear Aunt Nellie: My twin sister wrote a letter last year so I thought I would write this time. We live on a farm and I find lots of things to do to keep me busy. I enjoy living on the farm. Last summer my twin sister and I had a garden of our own and besides we helped mama to tend her garden. We want to have a little garden again this year. I am learning to milk cows and learning to knit and I want to learn to crochet and my twin sister and I are going to take music lessons this summer. I am very anxious to learn to play music. I love to go to Sunday school and church also. We are 10 years old and our birthday is June 26 and we are in the fifth grade. We have a pony to ride, but we fell off of her once and now we are afraid to ride her. My little sister, Thelma, has written you a letter, too, and we are going to send them together. I have an uncle and a cousin who have to go to war and it makes me feel very sad. My twin sister and I dress alike, look just alike and everything I do my sister does. I don't think I need to hunt to find a twin, for I already have a real twin.—Edna Peterson, Pomeroy, Wash.

### This Cousin Came From Denmark.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner, but I have been reading the letters. I am 10 years old. My birthday is May 7. I have one brother and three sisters. My brother's name is Willie and my sisters' names are Asta, Esther and Agnete. We have nine horses, one cow, one cat and one dog. My cat's name is Pussy. My dog's name is Shep and our cow's name is Black Eye. Our horses' names are Diamond, Molly, Queen, Turkey, Brownie, Bell, Dud, Billie and Anna. We have some colt. Her name is Nellie. We have some chickens. I am in the third grade. My teacher's name is Miss McEwen. I came from Denmark four years ago. I live on a 360-acre farm.—Gerda Jensen, Kittitas, Wash.

### Gets Breakfast Every Morning.

Dear Aunt Nellie: I am hoping that the Corner will grow a lot. I have one sister, but no brothers. My sister's name is Lily. I was 12 February 27. The schoolhouse is just about across the road, but we can not see it on account of trees in the orchard. I do not take my lunch, but I go home for dinner. I am in the sixth grade and Lily is in the fourth grade. Lily is in a different room. We have started a Junior Red Cross at our school. We have made handkerchiefs and soon we will make washrags and quilts. A lot of the children have bought thrift stamps and war savings stamps. I have six thrift stamps and will have two more pretty soon. One day in February papa said that if I would get up in the morning he would give me 50 cents a month for getting up and making breakfast. We do not live on a very large farm, but we have a large orchard of apples, pears and many different kinds of prunes and plums and have one peach tree. We have seven cows, three calves, two horses, two cats and one dog.—Karen Pederson, R. F. D. 1, Box 73A, Enumclaw, Wash.

### Likes the Country Real Well.

Dear Aunt Nellie: This is my first letter to the Children's Corner. My name is Thelma. We lived in the city until three years ago, when we moved on a 210-acre farm. I have four pets, a rabbit, dog, chicken and cat. My dog's name is Queen. I am 9 years old and am in the fourth grade at school. There are 21 children in our school. My teacher's name is Miss Avis Fisher. We have a mile and a half to go to school. It is most all up hill. We have lots of fun sleigh riding in the winter and fun in the summer time, too. I like the country real well. I have two brothers, Lawrence, 18, and Raymond, 13. We have six horses and 20 head of cattle. Lawrence killed a coyote and made a rug of it. I like to help my mother do the work. I dry the dishes, sweep, set the table, and gather the eggs in the summer.—Thelma Mae Searle, R. F. D., Bossburg, Wash.

### The Cat Is a Bluffer.

Dear Aunt Nellie: I have written to the Corner before and as I saw my letter in print will write again. I think the Children's Corner the best ever, and wish it was larger. I was 11 years old the 11th of February. I wonder if I have a twin? I am in the sixth grade at school. I hope I will be in the seventh grade next year. We live on a farm of 80 acres, although not much of it is in cultivation. We have a cow which gives plenty of milk for us. Her name is Daisy. We have a dog named Pete, a cat named Patrick Henry. My sister named the cat. Hasn't he a funny name? He is coal black and likes to have us play with him. He pretends he will bite us, but he is a bluffer. My smallest sister has the dog and cat. My large brother plays with the cat more than any of us others do. There are eight children in our family and one of my brothers is dead. I never got to see him. Counting father and mother we have 10. My hair and eyes are brown. My cheeks are pink and I am very fond of poetry.—Esther Dorn, Box 46, Naches, Wash.

### Lives on a Large Farm.

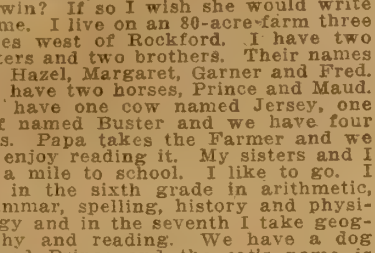
Dear Aunt Nellie: May I join the Children's Corner? I have been reading the letters and enjoy them very much. I am 12 years old and my birthday is October 23. Have I a twin? I so I wish she would write to me. I live on a large farm. I have two sisters and a brother. We have 37 horses and mules and 12 head of cattle. Now I will give some riddles and see if any of the cousins can guess them. What goes when the wagon goes, stops when the wagon stops, is of no use to the wagon, but the wagon can't go without it? There is an old red horse upon the hill that eats and eats and never gets full. What is it? I hope that some of the cousins will write to me.—Ethel Broyles, Penawawa, Wash.

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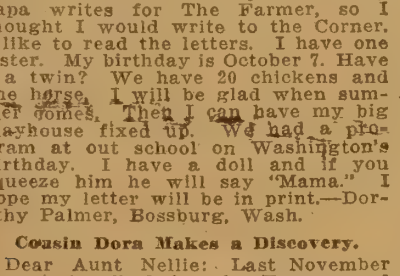
Address all letters to Aunt Nellie, care of The Washington Farmer, Spokane, Wash.

## An Elephant Stunt

Here is a diversion in which two persons imitate an elephant. One stands behind the other, as in figure 1, both bending their bodies so that their backs are horizontal, and the rear one rests his head and his hands on the one in front of him, as shown in the illustration. The first one holds a black cane with a curved handle to represent the



elephant's trunk, and the second has in each hand a roll of white paper for tusks. The tusks must be long enough to project in front of the trunk. A gray shawl is now thrown over both boys, two pieces of gray cloth are pinned in the proper places for ears, and round bits of white paper, with black spots in the middle, are fastened on for eyes (see figure 2). As the



animal walks, the trunk should be swayed slowly to and fro. A showman, gaudily dressed in colored shawls, with a white turban, should accompany the elephant, and exhibit him to the company. It adds to the amusement if the showman pretends to speak in the Hindu language, and what he says is explained to the audience by an interpreter. He can also lie down and let the elephant walk over him and perform other tricks usually shown in menageries.

ENCLOSED please find 5 cents in stamps to cover postage of farm service war flag. I would like to have one in my home.

GEORGE SCHOESSLER.
Wheeler, Wash.



# "Lafayette, Here We Are"

Through remote French villages resounds the unaccustomed tramp of American soldiers. But a little while ago and these men were in the quiet of their homes in a peaceful country. Today, in a strange land, they are facing the world's bloodiest struggle.

Pershing at the tomb of America's old time friend months ago reported, with true soldier eloquence, "Lafayette, here we are." And it is for us of the great American democracy to rally all our might to the support of our army and our allies.

From our shores to the battlefields of France are thousands of miles which must be bridged with ceaseless supplies to our troops. Every day calls for action here, no less than there. Cooperate! Sacrifice! These are the watchwords sent over the land by the Government.

In this national effort the Bell System has served with every other essential industry in order that communication, manufacture and transportation may be kept at the peak of efficiency to provide the munitions, ordnance and supplies so urgently needed.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY
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# FIELD NOTES

"Now why," said H. L. Fletcher, the O. I. C. hog breeder of McMinnville, "should anybody ship a breeding crate set up, when it could be knocked down and sent for half the sum?" He had just received a breeding crate from Indiana and the cost of shipping was as much as the cost of the crate, because they had not shipped it knocked down. Mr. Fletcher said he had sold most of the animals he had for sale at good prices. The purchaser which appeared to be most interested was a boy who had bought an animal, won on it and wanted more. "The O. I. C.'s are going big, especially in the south," he added. The national show is to be held in Atlanta this year.

Rollie Watson of Tillamook, Ore., whose activities include real estate, fire insurance, and an interest in pretty much everything of a public nature calculated to benefit the city or county, in 1915 purchased the best Holstein heifer, Canary Fobes May DeKol 330077. Canary was calved February 11, 1915, on the farm of Benjamin F. Berg, Lake Mills, Wis. She dropped her first calf on Easter Sunday, April 8, 1917. Up to the end of her lactation period she produced over 8000 pounds of milk. Considerably over 1000 pounds of the milk was used at home, but Mr. Watson sold sufficient in the city, at 10 cents a quart, to give her just $364.

At the fall fair, although Canary had been in milk four months, she was put in the milking contest and won third place, producing 4.99 pounds of butter in 48 hours. She was grand champion of all ages and the value of prizes won was $60. At the Holstein sale at Tillamook March 18, Mr. Watson sold her bull calf for $200, giving her a total income for her first year's work of $624, on an investment of $525.

At the sale referred to Mr. Watson purchased the cow, Ruby Pietertje Hengerveld, for $550 and expects her to be as profitable an investment as the heifer.

Professor A. B. Nystrom, county agriculturist of Lewis county, Wash., recently purchased a richly bred Holstein bull calf from Bouchard Bros. of Tono, Wash., from the Maplecrest Farm of Ohio. The bull's dam, Maplecrest Pontiac Hartog, has a 20-pound A. R. O. record as a 2-year-old, and is a full sister to Maplecrest Pontiac Flora Hartog that has a year's record of over 1200 pounds of butter. His sire is Friend Hengerveld De Kol Butter Boy, sire of Banostine Belle DeKol, 1322 pounds of butter in a year, a world's record when made; two others above 1200 pounds and a total of four above 1000 pounds; also of 37 A. R. O. daughters, 26 proven sons and 18 proven daughters. The calf's dam is sired by Pontiac Aaggie Korndyke, sire of six above 1000 pounds of butter in a year, four of them above 1200 pounds, 54 A. R. O. daughters, 15 proven sons and 15 proven daughters.

The Bouchard farm is up the Hanaford valley, about 12 miles from Centralia, Wash. One other richly bred little herd of Holsteins is owned in the valley, that of W. L. Rector, and that valley is getting in line for some great producing Holsteins. H. A.

There was just a touch of pathos in the sale of Ed Long's island bred Jerseys at Buhl recently. While a thoughtless crowd made foolish remarks about various animals brought into the sale ring Mrs. Long sat near, with moist eyes and aching heart. She saw passing into other hands the beautiful creatures of the pasture and barn lot which she had learned to love with a devotion only live stock fanciers understand. Both she and Mr. Long have worked far into the night at times over the fawnlike beauties which comprised the herd. It was their devotion and perseverance that made them the successful breeders they are.

S. S. Carvosso was told nine years ago he wouldn't live long unless he stayed outdoors. He then lived at Yakima. He took his doctor's advice and moved to Buhl, and he has never regretted the change. He has his health, a fine 80-acre farm and a half interest in a paying grocery store. Mrs. Carvosso has been a great help in keeping things moving, both in the store and on the farm. She enjoys one activity about as well as the other, and is a success in both capacities.

J. Silvers of John Day valley, Ore., runs 300 head of cattle and remembers the day when cattle corrals were never thought of. The range riders merely lined their cow ponies up in a circle when they had branding or roping to do, and it had to be a wild "critter" that could break through.

Frank Rothrock, Duncan Dunn and Frank Brown all agreed with W. J. Townley that they would attend the Union Live Stock show June 5, 6 and 7 and bring their wives. Union is going to have its usual good exhibit, and we are glad to observe general interest in the undertaking.

Oliver Hardman of Unity, Ore., bought nine head of Shropshire ewes last fall. He crossed them with a Lincoln buck and harvested a lamb crop this spring of 18. One ewe dropped only one lamb but another had triplets.

Alfred Campbell of New Meadows, Idaho, recently purchased eight head purebred Hereford heifers from George Chandler & Son of Baker. The shipment consisted of six yearlings and two 2-year-olds.

"I suppose that cow has paid you well," some one remarked to Herbert Chandler the other day when he pointed out a 15-year-old Hereford in the barn lot. "Well," replied Mr. Chandler, "father bought her in the east last year for $875, when she had a suckling calf. We sold the calf for $800, and she is about due to calve again."

R. C. Boyce has a first rate herd of Shorthorns on his farm not far from Baker, Ore. There are 60 head of registered stuff. R. W. F.

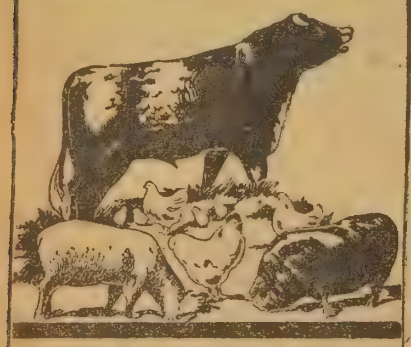
## Response to Far Cry

(Continued from page one.)

you will agree with the United States department of agriculture that this FARM SERVICE WAR FLAG, with its red border, with its blue field and with its white star, representing the patriotic farm family, is both "appropriate" and "attractive."

Already there have been received from many farm families in all parts of the Pacific northwest requests for this flag, and the Farmer sincerely hopes that this recognition of loyal farm service shall be seen on every farm in Oregon, Washington, Idaho and Montana, and that the movement shall spread and the farm service war flag shall find a companioned place with the Red cross, the Hoover shield and the Liberty loan emblem throughout the length and breadth of our nation.


**Our Country Needs Livestock and Poultry**



**Kreso Dip No. 1**

for

**FARM SANITATION**

will keep Livestock and Poultry healthy.

**KRESO DIP No. 1**

EASY TO USE.
EFFICIENT. ECONOMICAL.

Kills Sheep Ticks, Lice and Mites; Helps Heal Cuts, Scratches, and Common Skin Diseases.

**PREVENTS HOG CHOLERA.**

WRITE FOR FREE BOOKLETS ON POULTRY AND LIVESTOCK.

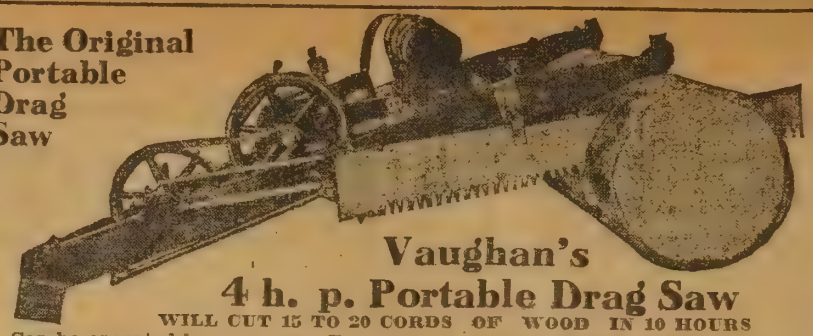
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**PARKE, DAVIS & CO.**

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**Vaughan's**

**4 h. p. Portable Drag Saw**

WILL CUT 15 TO 20 CORDS OF WOOD IN 10 HOURS

Can be operated by one man. Two men can carry complete machine. 4 H. P. gasoline motor mounted on frame. One gallon gasoline required to cut 8 to 12 cords of wood. Engine can be used for other work without removing from frame. No gears, cogs, belts or pulleys. Friction clutch prevents breakage if saw pinches. Saw makes about 125 strokes per minute. Will cut any size log up to 6 feet. Sprockets and cranks, etc., made of cast steel. All working parts guaranteed against defects in material and workmanship.

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# Breeders' Department

## HOLSTEIN CATTLE


**CARNATION HOLSTEINS**

Carnation Stock Farms

Over 300 in herd to select from. Herd has been under federal inspection for several years. Our herd sires are Matador Segis Walker, a grandson of King Segis, out of Matador Twist Minette 4th, with record of 33.69 lbs. His first five two-year-old heifers, to freshen, have averaged nearly 22 lbs. in 7 days; King Segis 10th; Johanna McKinley Segis, the 40-lb. bull. Write today your needs for a Holstein bull. Get them while they are young. Save money on cost price and on express charges. Careful attention given to mail orders.

FARM—CARNATION, WASH. Offices — 2030 Stuart Bldg., Seattle.

Visitors welcome. Correspondence solicited. Write for circular, Value of Pure Bred Sires.



**365-DAY HOLSTEINS**

24,667 lbs. milk—1026 lbs. butter—is the a. o. advanced registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.

THE HERD WITH YEARLY RECORDS.

WESTERNWOLD RANCH, Prineville, Ore.



MOOREHEAD RANCH.
Registered Holsteins.

Herd sire, Model Annie De Kol Segis, grandson of the famous King Segis. We have no bulls of service age, all having been sold, but we have some splendid young stuff, from 6 to 9 months old, coming on. If you are looking for real foundation stock, write us for particulars and pedigrees.

MOOREHEAD & HOBSON.
Breeders of Purebred Holsteins.
Outlook, Wash.



**REGISTERED HOLSTEINS**

Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.

H. R. BOOMER, New Plymouth, Idaho.



**HOLSTEINS**

Well-bred young bulls for sale.

THOS. CARMICHAEL. Gaston, Ore.



In writing advertisers, be sure to say that you saw their advertisement in this paper.


## GUERNSEY CATTLE


FOR SALE, IMPORTED GUERNSEY BULL.

Hartfield, 43300, born June 18, 1916. Winner of 2d prize, yearling class, National Dairy Show, 1917. Sire—Hayes Kitchener, 2971E. Dam—Hartfield Rose of the Couture 8th, 67982. Now doing A. R. work.

WRITE W. W. MARSH.
Mullan Ave., Waterloo, Iowa.



**ROSE CITY HERD**

Yeksa, Gov. of the Chene, Sequel and May Rose strains. More prizes at Oregon state fair, 1916 and 1917, than any other exhibitor for number of cattle shown. A few choice animals of both sexes now offered.

W. A. GOODIN, Cornelius, Oregon.



**Registered Guernsey Bulls**

From heavy producing cows, most of them with A. R. records, among them 402 lbs. fat (472 lbs. 85 per cent butter) and 392 lbs. fat (461 lbs. butter), both with first calf. Good type, well grown. Prices reasonable.

CHICONA FARM.
A. L. GILE, Prop. Chinook, Wash.


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**Firlawn Shorthorn Farm**

UNION, ORE.

We offer a young herd bull (registered), ready for service in four months, and 7 yearling heifers, all of imported Scotch blood. Bull and heifers unrelated. Prices reasonable. Write us and come to the Union Stock Show.

SHERMAN & HUTCHINSON,
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**LELAND BROTHERS**

Breeders of top registered Shorthorn cattle. Correspondence solicited.

WENDELL, Idaho.



REGISTERED SHORTHORN COWS,

Young bulls and heifers, sired by Scotch bulls: liberal terms.

CALDWELL CATTLE CO., Caldwell, Idaho.



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**Hercules Shorthorns**

We can supply you with choice, well grown bulls and females of breeding age. Your inspection of our herd is invited. Visitors always welcome.

**Day & Rothrock Company**

205 Exchange Bank Bldg. Spokane, Wash.

## JERSEY CATTLE

# JERSEY CATTLE SALE

## JUNE 12, 1918

**WITH BROKEN HEALTH** have leased my farm and must sell 18 head of my choicest Jerseys, including cows with records up to 783 lbs. b. Young bulls out of cows with records up to 828 lbs. b.

Included in this sale is the entire working herd of J. A. Wood of 14 cows and 7 choice heifers and one cow a 40-lb. milker, from the well-known herd of McArthur & Stauff.

Included in this sale will be my herd sire, Oxford You'll Do Jr., who has 4-year-old daughters that will make 600 lbs. fat this year. Every animal in this sale is guaranteed to be sound, a breeder and a first-class animal. There will not be a cull animal in the sale. We want every buyer to be a satisfied customer.

If you should want a show animal you can get it here, with production, which is the money-making end. Catalogues sent only upon request.

Sale will be held at my farm, 8 miles west of Salem, 6 miles north of Independence, Oregon.

## W. O. MORROW

**Independence, Oregon, Route 1, Box 71**

**J. W. HUGHES, Forest Grove, Ore.**
**B. L. SUDTELL, Halsey, Oregon.**
**Auctioneers**

# 100—DISPERSAL SALE—100
## Glen Tana Registered Jerseys
and
## 150—Grade Jerseys and Holsteins—150

**At Glen Tana Ranch, 9 Miles North of Spokane, June 5 and 6.**

## Registered Stock Sale June 5
## Grade Jerseys and Holsteins June 6

Among some of the cows that will be offered is:

Eminents Jimps Owl, daughter of Princess Jimps Eminent; Class AA; producing 359.15 fat, 8492.1 milk; 2 yrs. 11 mos.

First reentry. (Test started May 14, 1917, and up to April 1 has given 15,399.05 lbs. milk, which will easily go 4¼%, and is giving 39 to 40 lbs. milk now, April 10.) How is this for a 4-year-old?

We have many Jersey heifers and bulls from Register of Merit dams that will enable you to form an idea of the quality of stock offered in this sale.

**KEEP THE DATE AND PLACE IN MIND. Write for Catalogue.**

## T. S. GRIFFITH
905 MAIN AVENUE
SPOKANE, WASH.

**PROP. GLEN TANA STOCK FARM**

## Complete Dispersal Sale
# JERSEY CATTLE
## Tuesday, June 11, 1918

On account of ill health, and a big farm to manage, I am forced to sell my entire herd of Jerseys. This herd has been bred from the best American families and are rich in the blood of Golden Glow's Chief, Oregon Exile, and other noted bulls. The offering includes the entire herd of milch cows, herd bull, and young stock—all registered Jerseys; 30 head besides young calves that will be born before sale day.

The sale will be held on my farm four miles south of Salem. Catalog will be issued; send request to E. A. Rhoten, Salem, Ore., Sales Manager, and one will be mailed when published.

## C. H. Cannon,
**TURNER, OREGON**

**Col. J. W. Hughes, Col. W. F. Wright, Auctioneers.**

## AYRSHIRE CATTLE

### Edgewater Farm

Government accredited herd, headed by Peter Pan 63d. Bull calves available.

**ELBERT M. CHANDLER, Burbank, Wash.**

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offers for sale Hereford bulls, 1 or 2 years old. One or a carload.

**PLATT BROS. Genesee, Idaho.**

# MISSOURI and KENTUCKY
# JACKS

**STOCKTON, CAL.** P. O. Box 679. **JAMESPORT, Missouri.** **LOS ANGELES, CAL.** P. O. Box 1117.

**SPOKANE, WASH.**
W1728 Fourth Ave. Phone Main 1647.

## H. B. THORNBERRY

**Dealer in**

**REGISTERED AND PEDIGREED JACKS, JENNETS, PERCHERON AND SHIRE STALLIONS AND GAITED KENTUCKY SADDLE HORSES**

**Largest Importer in the United States.**

# COLFAX BLUE RIBBON STUD

**COLFAX, WASHINGTON**

Our new, large and commodious stables which we have been building are almost ready for us to move into and we will therefore, for the next 30 days offer to the **Public** an **EXTRAORDINARY** lot of **Shire, Percheron, Clydesdale** and **Belgian Stallions,** big, young and **Absolutely Sound** and at **RECORD BREAKING PRICES. Easy terms** and a **GILT-EDGE BREEDING GUARANTEE.**

We have a stallion for every purse, and we will save you plenty of money on the most LIBERAL TERMS, and you don't have to pay a long price to get a first-class stallion.

If you are in the market for a stallion now is the time to take advantage of these remarkable 30-day special sale prices.

## COLFAX BLUE RIBBON STUD, COLFAX, WASH.

## PERCHERON HORSES

# FOR SALE
## Registered Percheron Stallions
## Prize Winners

Two coming four years, five coming three years, eight coming two years and seven coming one year. Also some yearling fillies. Sire and dams are all imported prizewinners and weight over one ton. I am overstocked and will sell if price and terms will do it. Write or call

**P. A. SORENSON,**

**Meridian, Idaho. Phone 10R1,**

five miles south of Beatty station. Also some very choice registered Shorthorn yearling bulls, heifers and springers.

### EDGEWATER FARM

Choice registered stallions available with breeding guarantee and easy terms at farmers' prices.

**ELBERT M. CHANDLER, Burbank, Wash.**

## SHEEP

### SHEEP FOR SALE

1400 half-blood Lincoln yearling ewes, Corridale type, at $17.50 each. Not less than in carload lots or more.

**H. STANLEY COFFIN. Yakima, Wash.**

## BERKSHIRE SWINE

### Riverby Orchard Berkshires

Riverby Orchard Berkshires won 12 out of 15 first prizes at the Washington state fair, 1916, also many prizes, including grand champion sow at the Panama-Pacific world's fair. We offer for sale a few good boars and young sows.

**D. C. BUNN. Prosser, Wash.**

## DUROC-JERSEY SWINE

### IOKA FARM DUROCS

HOME OF GOLDEN ROD.

Bred gilts and weanling pigs for sale.

**A. N. Doerfler, Mgr.** Doerfler Bros., Silverton, Ore.

**ROOT & MASON,**

Breeders of early maturing, easily fed type. Some choice stock for sale. Defender and Overbrook strains.

**Hermiston, Oregon.**

**DUROCS.**

Boars and open or bred gilts of excellent breeding.

**E. E. PRICE, CABINET, IDAHO, OR JAMES N. PRICE. Yakima, Wash.**

## CHESTER WHITE SWINE

### REGISTERED
### O. I. C.
# SWINE

Fine, thrifty pigs, either sex, ready to ship. Write me. Ringgold Farm, J. H. West, Prop., Centralia, Wash., R. 1, Box 157.

**In writing advertisers, be sure to say that you saw their advertisement in this paper.**

## POULTRY

### BABY CHICKS

Rhode Island Reds, White Leghorns, $15 per 100; $12.50 per 100. All chicks now sold to May 15. If you want chicks this season, order now.

**MAPLEBROOK POULTRY FARM**
Southworth, Wash., Box 3.

### R. I. Reds and Whites—Both Combs

Eggs from all pens, in either variety, $2 per 15 eggs, $3 per 30 and $5 per 100 eggs. Mammoth Toulouse geese eggs, 50c each. Mammoth Bronze turkey egs, 10 for $2.75, 20 for $5. Belgian hares and Flemish Giant rabbits, $5 per pair.

**Highland Fruit and Poultry Ranch.**
J. Nonnenmacher, R. F. D. 3, Yakima, Wash.



### White, Buff and Blue Orpingtons

**(Capt. De Bathe Strain.)**

Speckled Sussex and Anconas. All single comb. Aldrich strain Orpingtons, Sheppard Anconas. My birds took first prizes at all leading shows of Pacific Coast. Prices for stock, eggs and chicks reasonable. All from best laying birds. Finest lot of cockerels I've ever raised. A few White Holland and bronze turkey toms for sale.

**IRA N. DELINE. Olympia, Wash.**

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, May 6.—Ideal weather and the bearish influence of peace gossip made the value of corn today average lower. Prices closed unsettled, at 7-8 net decline to 1-8 advance, with May 1.27 3-8 and July 1.47 3-4 to 1.47 7-8. Oats finished 1 1-8 to 2 1-8 down and provisions off 15 to 75 cents.

Until the last hour, pronounced weakness formed the rule in corn. Toward the end of the session, however, authoritative denials of peace reports were current and the market rallied.

Oats showed less rallying power than corn. One of the reasons was the outlook that the government crop report on Wednesday would prove to be in favor of the bears.

In the provision market the weakness of grains more than offset the influence of higher quotations on hogs.

**Chicago Futures.**

| | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| Corn— | | | | |
| May ..... | 1.27¼ | 1.27¾ | 1.27¼ | 1.27⅞ |
| July ..... | 1.48 | 1.48¼ | 1.46¼ | 1.47¾ |
| Oats— | | | | |
| May ..... | .76½ | .77¼ | .84⅝ | .75½ |
| July ..... | .68 | .68⅓ | .66¾ | .67⅛ |
| Pork— | | | | |
| May ..... | | 45.75 | 45.60 | 45.60 |
| July ..... | 46.10 | 46.25 | 45.90 | 45.90 |
| Lard— | | | | |
| May ..... | | 25.47 | 25.35 | 26.37 |
| July ..... | 25.82 | 25.90 | 25.67 | 25.72 |
| Ribs— | | | | |
| May ..... | | ..... | ..... | 23.40 |
| July ..... | 24.17 | 24.25 | 24.07 | 24.12 |

**Cash Quotations.**

CHICAGO, May 6.—Corn, No. 2 yellow, $1.63; No. 3 yellow, $1.50@1.65; No. 4 yellow, $1.40@1.54. Oats, No. 3 white, 76½@77¼c; standard, 76¾@77½c. Rye, No. 2, $2.57. Barley, $1.40@1.74. Timothy, $5@8.25. Clover, $18@28. Pork nominal. Lard, $25.37. Ribs, $22.77@23.40.

**Pacific Northwest Grain.**

PORTLAND, Ore., May 6.—Grain 30-day option bids: Oats, No. 2, $60. Eastern oats and corn in bulk: Oats, No. 3 white, $53; 38-pound clipped white, $53.50; corn, No. 3 yellow, $60; corn, No. 3 mixed, $59; oats, No. 3, $53; clipped, $53; corn, yellow $60, mixed $59.

**Minneapolis Grain.**

MINNEAPOLIS, May 6.—Wheat, receipts 236 cars, compared with 400 cars a year ago. Corn, No. 3 yellow, $1.52@1.65. Oats, No. 3, 73 1-4@75 1-4c. Flax, $4@4.02. Flour, 50c lower. In carload lots, standard flour quoted at $9.05 a barrel in 98-pound cotton sacks. Shipments, 75,381 barrels. Rye, $2.62@2.63. Barley, $1.25@1.75. Bran, $3@3.14.

## Live Stock Quotations.

**At Omaha.**

OMAHA, May 6.—Hogs—Receipts, 10,000; market steady, 5c to 10c higher. Heavy, $16.80@17.10; mixed, $16.90@17.10; light, $17@17.30; pigs, $16.50@16.50; bulk of sales, $16.90@17.10.

Cattle—Receipts, 10,300; market steady to stronger. Native steers, $10.50@17.50; cows and heifers, $9.50@13.50; western steers, $10@14.50; Texas steers, $9.75@11.25; cows and heifers, $9@11; canners, $7.50@8.75; stockers and feeders, $8.50@13.25; calves, $10@12.50; bulls, stags, etc., $9@13.

Sheep—Receipts, 2600; market steady. Yearlings, $17@18.50; wethers, $15@17; ewes, $14@16.35; lambs, $19@20.30.

**At Chicago.**

CHICAGO, May 6.—Hogs—Receipts, 43,000; strong, 5c above Saturday's average. Bulk, $17.20@17.70; light, $17.15@17.80; mixed, $16.95@17.80; heavy, $16.15@17.10; rough, $16.15@16.55; pigs, $13.50@17.25.

Cattle—Receipts, 15,000; firm. Native steers, $10@17.70; stockers and feeders, $8.30@12.60; cows and heifers, $6.80@14.10; calves, $8@14.

Sheep—Receipts, 10,000; firm. Sheep, $12.65@16.75; lambs, $15.50@21.10.

**At Portland.**

PORTLAND, Ore., May 6.—Cattle—Steady; receipts, 1735. Prime steers not quoted. Good to choice steers, $14@15; medium to good steers, $13@14; fair to medium steers, $10.75@11.75; common to fair steers, $10@11; choice cows and heifers, $13@14; medium to good cows and heifers, $7.75@11.75; fair to medium cows and heifers, $6@8; canners, $4@6; bulls, $6.50@11.50; calves, $8.75@13.

Hogs—Steady; receipts, 1304. Prime mixed, $17.40@17.50; medium mixed, $17.15@17.35; rough heavy, $16.15@16.35; pigs, $14.50@15.50; bulk of sales, $17.25@17.50.

Sheep—Steady; receipts, 620. Prime spring lambs, $19.50@20; heavy lambs, $16.50@18; yearlings, $15.25@15.50; wethers, $13@13.50; ewes, $12@12.50.

**Spokane Stockyards, Monday.**

Hogs—Receipts, 118; market steady. Prime mixed, $17.15@17.35; medium mixed, $17@17.20; pigs, $15@16; stockers and feeders, $13.75@15.75; bulk of sales, $17.25.

Cattle—Receipts, 335; choice steers and cows steady; other grades 50c lower. Choice steers, $13.26@14.25; good steers, $11.75@12.75; medium to good steers, $8@9.50; choice cows and heifers, $11.75@12.75; good cows and heifers, $9.25@10.25; ordinary to good cows and heifers, $6@8.50; canners, $3.50@5.75; bulls, $7@11; calves, $8@13; stockers and feeders, $6.75@9.

Sheep — Receipts, none; market steady. Prime lambs, $16.50@18; good lambs, $14.50@15.50; prime yearlings, $14@15; prime wethers, $12.50@13.25; best mutton ewes, $10@11.

## Seattle Market.

SEATTLE, May 4.—Some record high prices have been paid this week for local asparagus for early May. Receipts have been very light and jobbers are now convinced that eastern Washington will not produce enough of the stock to permit of accumulations or demoralized prices.

Quotations up to 18 cents were made this morning for Kennewick and Prosser locals. Frosts have been severe and the development of the asparagus plant retarded to such an extent that the demand has cleaned it up as fast as it came to market.

Reports today indicate that a few express shipments of Kennewick strawberries will arrive between May 15 and 20. The Olalla crop is being delayed by untimely cold weather and first arrivals are not expected before May 30.

The spud market is firm on selected Yakima grades. Growers are quoting $25 f. o. b. Spurred by a report in a Japanese newspaper that the market was to be firm and offerings scarce, Japanese growers of western Washington are holding tight to good stock and few transactions have been made during the week.

The poultry market, according to forecasts by leading jobbers today, will be weaker next week, running possibly to a decline. It is certain that receipts have been heavier than this market could absorb.

The fresh ranch egg market is up to 75 to 80 per cent of a lay and will be no heavier from now on, it is believed. The current market is steady.

Butter is holding firm, and this at a time when the tendency should be downward. There is a widespread conviction that butter will be little, if any, lower this year, and jobbers are preparing to pay 41 cents for their storage pack. Butter is offering today at 40 cents.

New cheese is coming slowly on the market, but none from western Washington has yet appeared.

**BUYING PRICES.**

Unless otherwise stated the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots, f. o. b. Seattle:

Eggs—Local, 30@37c per dozen; eastern Washington, Oregon and Idaho, 34@35c.

Poultry—Broilers, 35@40c lb.; live, old roosters, 17@20c lb.; squabs, large, $3.50 dozen; geese, fat, live, 18@25c; ducks, live, fat, 27@30c.

Butterfat—46c lb.; dairy butter, 30@35c.

Beef—Buying prices: Prime beef, steers, 16@17c; cows, fat, 15@16c lb.; heifers, 16@17c.

Hogs—Light, 18@21c lb.; heavy, 18@20c lb.

Veal—Fancy light, 17@19c lb.; heavy, 16@17c lb.

Hides — Salted, 14c lb.; flint-dry hides, 29c lb.; salt kip, 16c lb.; green hides, 11c lb.; green calf, 23c lb.; dry calf (under 6 pounds), 29c lb.; bulls and dry salts, 4c lb. less; green bulls, 9c lb. Clean, long wool, western Washington flint dry pelts, 39c per lb.; heavy to clean eastern Washington flint dry pelts, 30@35c lb.

Asparagus—Kennewick, 18c lb.; Oregon, 15@17c; Granger, 18c.

Apples—Winesaps, $1.25@2.50; jumble Winesaps, $1 box.

Potatoes—Puget sound, $17@22 per ton; eastern Washington, $28@30 per ton; seed, 1 1-4@1 1-2c per lb.

Feed—Bran, $34 per ton; shorts, $35.50; scratch feed, $80; all-grain chop, $75; oats, $72; sprouting oats, $78; whole corn, $75; cracked corn, $77; rolled barley, $77; clipped barley, $80; alfalfa meal, $36; oil meal, $72; egg mash, $65.

Hay—Eastern Washington timothy, $36@37 per ton; do double compressed, $39@40; alfalfa, $29; Puget sound, $27@28; straw, $15.

## Seattle Wheat.

SEATTLE, May 4.—Workings of the flour conservation program were shown this week when an agreement mill, or one that has stipulated with the government that in exchange for a supply of wheat it will ship no flour east of the Idaho state line, received an order for 1000 barrels of soft wheat flour from Memphis, a section that has been cultivated at great expense. The big mills of Washington, however, that have fallen in line with the agreement program have expressed no regrets. They point out that they have assurances of a wheat supply from the grain corporation as long as there is any in the state, and that when this fails they will be supplied from Australia, cargoes of which are now on the way, while plants that felt that they could get wheat without the good offices of the corporation are running out of both grain and flour and will be compelled to close down.

The car situation continues easy and the movement of Washington wheat to Minneapolis under government order has been heavy. In view of a possible shortage within the next 60 days some of the Puget Sound mills have been accumulating wheat. M. H. Houser, representative of the grain corporation in this zone, has protested vigorously against the practice, holding that the 10 per cent allowance for April and the prospective one for May should be ample to meet the situation.

If the eastbound movement of wheat were to be checked at this stage there would be enough wheat in the country to keep the mills in operation to August 1. The other alternative is the importation of Australian wheat. This grain will be ground for the government exclusively, but the millfeed will be marketed here, greatly relieving a tense situation.

All crop reports to millers from field representatives are similar in regard to the retarding of the spring-sown wheat through lack of moisture. It is too early, however, to warrant pessimistic forecasts of loss or damage, as conditions were very much the same in 1916 when the bumper crop of Washington was produced.

## Spokane Market.

**WHOLESALE.**

**Vegetables**—Cabbage, $4@5 cwt; carrots, $2@2.50 cwt; bunch carrots, 75@90c doz; bunch beets, 75@90c doz; beets, $3 cwt; rutabagas, $1.50 cwt; parsnips, $1.50 cwt; hothouse lettuce, 50c 5-lb box; head lettuce, 80@85c doz, $2.75@3 crate; turnips, $2.50 cwt; bunch turnips, 75@90c; California new turnips, $2 cwt; red bell peppers, $1.25 box; chilli peppers, 25c lb; green peppers, 11c lb; Florida tomatoes, $5.50 6-basket crate; Mexican tomatoes, $3.50 lug; celery, $1@1.10 doz; hothouse cucumbers, $2.25 doz; cauliflower, $2.25@2.50 crate; new garlic, 10@12½c lb; parsley, 40c doz bunches; horseradish root, 12½c lb; brussels sprouts, 12½c lb; radishes, 35@40c doz bunches; rhubarb, $1.25 box; spinach, 5c lb; Kennewick asparagus, $1.40@1.50 box; Walla Walla, $2@2.25 box; new peas, 10c lb; artichokes, $1.80 doz.

**Potatoes**—Washington potatoes, 90c@$1.30 cwt; California new potatoes, 10c lb.

**Strawberries**—California strawberries, $3.25 crate.

**Onions**—Bermuda onions, $2.50 crate; California onions, $1.60 cwt; green onions, 35@40c doz bunches; wax onions, $2.50 crate.

**Tropical Fruits**—Bananas, 7c lb; lemons, $6.75@7.25 case; Valencia oranges, $6.25@6.50 case; Sunkist Valencias, $6.75@7 case; medium sweet oranges, $5.50@6; blood oranges, $3.25 half case; Florida grapefruit, $5@6.50.

**MEAT.**

**Beef**—Beef steers, 21@23½c lb; cow beef, 20@22c lb; heifers, 22½c lb; beef loin, 33c lb; steer chucks, 19@20c lb; prime ribs, 25@28c lb; rump and round, 22c lb.

**Mutton**—Breakers, 24@25c lb.

**Lambs**—26@27c lb.

**Pork**—Packer dressed hogs, 26@27c lb; pork loins, 30@31c lb; legs, 28c lb; shoulders, 25c lb; leaf lard, 23c lb; tenderloins, frozen, 32c lb; spareribs, 19c lb; country dressed hogs, with head on, 20c lb to producer; country dressed veal 17c lb to producer.

**Smoked Meats**—Washington hams, 34c lb; T. C. hams, 35c lb; T. C. bacon, 45½c lb; Washington bacon, 40½@45½c lb; picnics, 23½c lb; Boston butts, 30@30½c lb; English bacon, 38½c lb.

**Star Brand**—Hams, 35c lb; Shield hams, 33@34c lb; picnics, 24½c lb; bacon backs, 33c lb; Star bacon, 46½@48½c lb; Shield bacon, 41@45½c lb; Simon Pure lard, $17.50 case.

**Dry Salt Meats**—Clear bellies, 30c lb; lean backs, clear, 29@31c lb; sides, 28½@29½c per lb.

**Lard**—Tierces, 27½c lb; $14.55@15.27 case; Diamond T. C. pureleaf lard, $16.25 case, $8.20 half case; Snowcap compound, tierces, 22¼c lb.

**POULTRY.**

**Live Poultry**—Live hens, large 24c lb; small, 22@23c lb; roosters, 18c lb to producers, f. o. b. Spokane.

**GRAIN AND FEED.**

**Rice**—Fancy head, $7.50@9.50 cwt.

**Flour**—Bluestem, $9.40; Blend, $9.40; Montana hard wheat, $10.40; graham, $8.60 bbl, 49-lb sacks; whole wheat, $8.80; eastern rye, $10.10; eastern rye meal, $10.30; oat flour, $13.10.

**Oats**—$74 ton whole, $76 rolled, delivered in city.

**Corn**—$77 ton; cracked corn, $79 ton.

**Bran**—$30 ton; shorts, $32 ton; bran and shorts, $31 ton.

**Barley**—Rolled, $76 per ton.

**Oil Meal**—$78 per ton.

**Hay**—Timothy, $32 per ton, $31 ton by carload; alfalfa, $27 ton, $26 ton by carload.

**GASOLINE, LINSEED OIL, ETC.**

**Gasoline**—Red Crown, bulk, 24½c gal, cases, 34½c gal; Shell, 24½c; refined oil (Pearl), bulk, 13c gal, cases, 23c gal; Eocene, 15½c gal in bulk, cases, 25½c gal; engine distillate, 15½c gal, bulk.

**Linseed Oil**—Raw, bbl, $1.68 gal, case, $1.85 gal; boiled, bbl, $1.70 gal, cases, $1.88 gal.

**Turpentine**—Bulk, 65c gal; cases, 85c gal.

**White Lead**—Strictly pure white lead in oil, ton lots, 11¾c lb; 50-lb lots, 12½c lb.

## Butter and Eggs.

PORTLAND, Ore., May 6.—Butter prints, extras, 44@45c; cubes, extras, 39c; prime firsts, 38c; dairy, 31c. Butterfat, Portland delivery, No. 1 sour cream, 43c.

SAN FRANCISCO, May 6.—Butter, 40½@42c. Eggs, fresh extras, 40c; extra firsts, 39c; firsts, 39c; fresh extra pullets, 38c; firsts, pullets, 37½c. Cheese, Oregon young Americas, 26c.

CHICAGO, May 6.—Butter, steady; creamery, 35@43c. Eggs, steady; receipts 17,846 cases; firsts, 32½@33¾; ordinary firsts, 31½@32c; at mark, cases included, 31½@32½c.

**LINSEED.**

DULUTH, Minn., May 6.—Linseed, $3.98@4.04; arrive, $3.98; May, $3.98 asked; July, $4.02½; October, $3.59 bid.

**COTTON.**

NEW YORK, May 6.—Spot cotton quiet; middling, 27.20c.





"Double the Use of Vegetables."

Help your country by raising vegetables for your own home and for market. But—to make your garden patch yield its utmost you can't afford to gamble with poor seeds. Play safe—

Plant Morse's Seeds

soil-tested and pedigreed, large yielding and sure. Morse's Seeds for fields and gardens have been producing profitable crops for farmers for forty years.

Our 1918 Garden Guide is just off the press. It tells you all about our new varieties of vegetables and flowers—as well as the old standbys. Send for your copy today—it's free.

C. C. MORSE & CO.
729 Front Street San Francisco

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The Aske Automatic Voltage Regulator, $5.00

With Dimmer .....$6.00

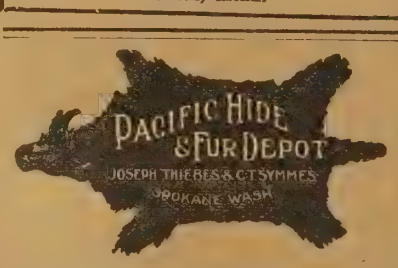
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The Aske Instrument Board

complete with clock, dimmer and push and pull switches, which are standard with higher priced cars, decreases steering wheel vibration, eliminates all starting and lighting troubles, adds beauty and distinction to your car and gives a wonderfully efficient system. The Instrument Board complete with Regulator and Dimmer $18.00, without regulator $13.00, without regulator and clock $10.00. The Instrument Board without equipment $1.25. The Aske Dual Lighting Units are sold at most dealers, or will be sent direct to you upon receipt of price and dealer's name.

Aske Regulator Co.
Duluth, Minn.




WANTED--1000 tons of mixed country scrap iron

in carload lots of not less than 25 tons each. Write for prices if interested.

PACIFIC HIDE & FUR DEPOT.
Joseph Thiebes and C. T. Symmes.
1101-09 Railroad Ave., Spokane, Wash.

This is the season of preparation on the farm. There's many a timely and practical suggestion on equipment, etc., to be gleaned from our advertisements these days. Read them.

## Corn Meal Output Doubled.

A canvass of the whole country by the food administration shows that the actual milling output of cornmeal increased from 3,000,000 barrels in October to nearly 6,000,000 barrels for March. During the last 18 months the output of corn flour has increased 500 per cent.

### Tomato or Garden Apple.

The tomato for a long time was considered poisonous, and no one would think of eating it. Tomatoes were allowed to grow, however, and some gardeners cultivated them for their beauty alone. They were originaly called garden apples.

# Want Ads

**Want Ad Rates 30c Per Line**

Want ads are run at this rate in The Washington Farmer and i t s associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

# Want Ads

Send for card giving lower rates for ads running one month or longer.

**How to Figure Cost of Ads**

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

### HELP WANTED—FEMALE 1

SUMMER COURSE IN TELEGRAPHY opens June 10. Jenkins Institute of the Spokane Y. M. C. A.

### SITUATION WANTED—Male 21

MAN WITH SMALL FAMILY WANTS place on poultry ranch, to learn the business. Would run small ranch for absent owner, or would take place on stock ranch. Educated, reliable, experienced in general farm work. Permanent place wanted. Box 41, Fort Washakie, Wyo.

### EDUCATIONAL 43

BEHNKE-WALKER, PORTLAND, NORTHwest's largest, finest business college, can not supply half the calls for trained young men, women. Enroll now. Free success catalog. Positions secured.

### TEACHERS' AGENCIES 46

TEACHERS REGISTER WITH B. F. WESTmore, Mgr. Hazard Teachers' Agcy. $1 registers you at three offices. 911 Old Nat'l Bank bldg., Spokane, Washington.

TEACHERS NEEDED FOR NEXT FALL. Write for information. Clark Teachers' Agcy, 412 Ch. of Com. Bldg., Spokane.

### FRESH FOOD PRODUCTS 56

NOTICE: ON RECEIPT OF 25C WE WILL ship, parcel post, 1 lb. of shrimp, or 10 lbs. for $2.25. Cash must accompany all orders. These are fresh from fisherman to consumer. Mendota Grocery Co., Dewatto, Wn.

### HONEY, BEESWAX—Wanted. 58

SEND SAMPLES OF YOUR HONEY AND beeswax; state quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

### MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

Fly time is coming. We make screen windows and doors. Get our large illustrated catalog, No. 27, of sash, doors and building material. Sent free on request.

Screen doors, mortised, glued and covered with heavy, galvanized wire mesh, $1.75 and up.

Window and sash screens, at, per sq. ft., 15c.

Cottage glass doors, $2.85 and up.

Five cross-panel doors, $1.92 and up.

20x24, 2-light windows, $1.79.

Prepared roofing at $1.35, $1.70 and $2.10.

We sell any one, ship anywhere, and guarantee safe delivery. The largest factory in the west selling direct to the consumer.

O. B. WILLIAMS CO.
1943 First Ave. So., Seattle, Wn.

BUILDING MATERIALS AT WHOLESALE prices — Doors, windows, roofing paper, porch columns, plaster boards. All building materials shipped promptly. Send for our complete illustrated catalogue; gives you lowest net prices. P. A. ROVIG CO., 2229 First ave., So., Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

### MISCELLANEOUS—WANTED 63

POULTRY WANTED — THE FOOD ADministration permits the sale of poultry for market purposes after April 1. Send us your cream, poultry, dressed meats and hides. Commercial Creamery Co., Spokane, Wash.

### JUNK SHOPS 90

CENTRAL HIDE AND JUNK CO. BUYERS HIDES, WOOL, METAL, RUBBER, SACKS, ETC. WRITE FOR PRICE LIST IF INTERESTED, QUICK RETURNS. W200 MAIN AVE., SPOKANE, WASH.

WE'LL BUY YOUR HIDES, PELTS, WOOL, furs, second-hand sacks and junk. Reliable, prompt. Nampa Hide & Junk House, Nampa, Ida.

### MACHINERY—FOR SALE 93

FOR SALE—MACHINERY FOR BEANS—Deere planter No. 999 with 80 rds. 36-in. check wire, $60; extra roll check wire, $3; two 2-horse walking cultivators, Oliver and Moline, $25 apiece; two harrow cultivators, $3 apiece; Owens harvester with extra knives, $50; Owens thresher, 16x20, $160; or $300 for lot. Practically new. Shipped on approval. John Washburn, Milton, Ore.

FOR FARM LUMBERING USE
"AMERICAN" PORTABLE SAWMILLS.
Carried in Stock by
HIGGINS MACHINERY COMPANY.
312 1st Ave. So., Seattle. Write for Catalog.

FOR SALE—NEW 12-H. P. R. & V. GASOline engine, heavy type, purchased by me last year and used only 10 days. On account of putting wind stacker on separator am compelled to get more power. Engine is in A1 condition and guaranteed. Address J. H. Kruse, Yoncalla, Oregon.

FOR SALE—1917 SELF-PROPELLED Holt harvester; good condition. Geo. A. Buehler, Ritzville, Wash.

### MACHINERY FOR SALE. 93
Continued.

FOR SALE—A FEW NEW BULL TRACTors which have never turned a wheel. Priced for quick sale. This tractor will do your plowing and can be used as a stationary engine on the farm. We have recently taken the northwest distribution for the Samson Tractor, and have a few new Bull Tractors we will sacrifice at about the same price as a good team. Will consider trade. Write Mr. Harwood, Eldridge-Buick Co., 802 East Pike st., Seattle, Washington.

### AUTOMOBILES 114

FORDS CAN BURN HALF COAL OIL, ALL distillate, or cheapest gasoline, using our 1918 Carburetor; 34 miles per gallon guaranteed; easy starting; great power increase; attach it yourself; big profit selling for us; 30 days' trial; money back guaranteed; styles to fit any automobile. Air-Friction Carburetor Company, 321 Madison st., Dayton, Ohio.

### STOVE & FURNACE REPAIRS 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

### PATENTS 150

WANTED — NEW IDEAS. WRITE FOR list of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. VICTOR L. EVANS & CO., Pat. Attys., 710 Ninth, Washington, D. C.

### PETS—DOGS, BIRDS, ETC. 171

FOR SALE—PURE BRED REGISTERABLE Scotch Collie pups. A. F. Mascher, Haines, Ore.

WANTED—RAT TERRIER PUPS, GOOD hunting strain. G. Kingsbury, Vaughn, Wn.

### HARES AND RABBITS 173

FLEMISH GIANT RABBITS—BREEDER of large stock only; correspondence solicited. Chas. L. Barnett. Box 284, Anacortes, Wn.

### POULTRY 174



BABY CHIX—WHITE LEGHORNS; NOT only bred to lay, but bred to live and thrive with the vigor and vitality necessary to make dividend payers bred into them by 15 years of breeding at the oldest established hatchery in the state; chix last half of May, $12; June, $11 per 100; delivery in good condition guaranteed. The Lakeside Poultry Farm, Roy, Wash.

HOGANIZED BABY CHICKS—THOROughbred White Leghorn chicks, hatched from Hoganized parent stock; April delivery, $14 per hundred; May, $13. Rhode Island Red and Barred Rock chicks all sold for April. Will book May orders for $17 per hundred. Safe delivery guaranteed. Established for ten years. Queen Hatchery, 89 Pike st., Seattle, Wash.

200,000 WHITE LEGHORN BABY CHICKS —Bred for eggs, vigor, size. Safe arrival in good condition guaranteed. Free catalog and book on "Raising the Chicks." Oak Heights Poultry Farm, Route 3, Box T 67, Tacoma, Wash.

BABY CHICKS, WHITE LEGHORNS, CUStomers say they are "husky," "lively," "vigorous," "healthy," "strong," "hard to beat," "thrifty," "great layers." Write at once. Free catalogue. Freshlaid Farm, Colfax, Wash.

50,000 S. C. WHITE LEGHORN BABY chicks for May and June delivery. Real Kaiser Cultural Fighters. Our war measure. Price $12.50 per 100. I. D. Casey & Sons, R. 6, Waitsburg, Wn.

UNCLE SAM SAYS: "RAISE POULTRY; don't be a slacker." Eggs and chicks, Tancred strain; trap-nested for 13 years. Special prices for May and June. Bert Hands, Cottage Grove, Ore.

WHITE LEGHORN EGGS $1.50 PER SETting; $8 per hundred. Special mating Pen-A, eggs 50c each; Pen-B, eggs 25c each. Waikiki Farm, R. 7, Spokane, Wash.

SINGLE COMB WHITE LEGHORNS; THE world's greatest egg machines. Write for our "War Measure." Help Hoover win the war. Broadview Farm, Curlew, Wash.

S. C. WHITE LEGHORNS — PRESENT breeders averaged 15 doz. each last season. Mated to high-record males. Hatching eggs. Mary Jessup, Cooks, Wash.

S. C. RHODE ISLAND RED EGGS $2 PER setting; $10 per 100. Fertility guaranteed. Waikiki Farm, R. 7, Spokane, Wash.

BARRED ROCKS.
Nicely barred, and fine layers. Eggs, $1.50 per 15. Wm. Helmsoth, R. 2, Baker, Ore.

PARKS BRED-TO-LAY BARRED ROCKS, winter layers. Eggs, $1.50 for 15; $8 per 100. W. G. Neyland, Spokane Bridge, Wn.

S. C. R. I RED AND S. C. W. LEGHORN eggs, $1.50 to $5 per setting; $6 per hundred. Mrs. Rominger, Underwood, Wash.

CRYSTAL WHITE ORPINGTON EGGS, $1.50 per 15, from large, heavy-laying stock. Mrs. A. S. Reams, Wendell, Ida.

### POULTRY 174
Continued.

BARRED ROCK EGGS, $2 PER 15. W. D. Good. Mt. Vernon, Wash.

### LIVE STOCK 177

ECLIPSE, NO. 122652, PERCHERON STALlion, sired by Vidocq, a son of Calypso, No. 25017, he by Theudis, No. 25015, and Theudis by Besigue, No. 19602, a line of breeding unequaled by American-bred descendants for show-ring performance in Percheron history (for analysis see page 601). Eclipse is a beautiful dark bay, with black points, will be 3 years old June 20, 1918, at which time he bids fair to weigh a ton. He is perfect in form and action, and will be sold with permanent certificate of soundness at $750. We also have on hand twenty head of stallion colts, 1, 2 and 3 years old, to select from. Wm. Mulhall, Fenn, Idaho.

FOR SALE—25 HEAD OF GOOD PRODUCing Holstein cows at a price that will sell. Must sell on account of other business. Geo. Hilton, Medford, Ore.

FOR SALE—4-YEAR-OLD REGISTERED Jersey bull. From a 990-lb. butter cow. Think of it. Right in every way; $300. R. D. Sanford, Ashland, Ore.

HEREFORD BULL CALVES.
25 head high grade Hereford bull calves for sale. Fall delivery. If interested write Box 27, Alderdale, Wash.

MY HERD OF 13 JERSEYS, INCLUDING subject to registry bull, $65 per head for quick sale. E. T. Keene, Curlew, Wash.

HEAVY TYPE POLAND CHINA PIGS FOR sale. John Bushaw, R. F. D. No. 2, Anacortes, Wash.

### HOTELS 306

WRITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

GALAX HOTEL; NEW AND MODERN; 75C and $1. Main and Bernard, Spokane.

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FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

### PLUMBING, STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

### SEEDS 620



IF YOU HAVE ACCLIMATED SEED TO sell, it will pay you to advertise it in this classification. If you want to buy seed adapted to western soil and climate watch what is offered in this department.

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.,
Portland, Oregon.

UNION SEED & FUEL CO., BOISE, IDA. Send for catalog. Compare prices on tested Idaho acclimated field and garden seeds. Complete line of poultry supplies and stock foods.

WE SPECIALIZE IN TIMOTHY, ALFALfa, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Ida.

SUDAN GRASS SEED FOR SALE—MAKES excellent late green feed, 30c per lb. Wm. Neuenschwander, grower, Gaston, Ore.

IDAHO ACCLIMATED SEED CORN; WELL tested, desirable Yellow Dent. Write H. C. Baldridge, Parma, Idaho.

ACCLIMATED SUDAN GRASS SEED; ALL hand-picked, 25c per pound. Ira P. Holcomb, Metolius, Oregon.

### FARM LANDS—FOR SALE 651

WONDERFUL FARM OPPORTUNITIES—Eastern Washington, northern Idaho and northwestern Montana hold most of the records for the best yield in the United States. The same work will bring you more per acre than in the middle west. There are attractive opportunities here for the farmer, dairyman, stockman and market gardener looking for land at a reasonable price, in a well-watered country with mild climate. Farm land bought now is bound to increase in value. Write for our free folder, "A Farm Home for You." Tell us the kind of place you want. Farm Development Bureau, 618 Chamber of Commerce bldg., Spokane, Washington.

### FARM LANDS—FOR SALE 651
Continued.

CANADIAN WHEAT FARMS
ON CROP PAYMENTS.

320 acres, 3½ miles from Three Hills; practically all tillable; 155 acres broken; 25 acres summer fallow and new breaking; 65 acres fall plowed; 5-room house; barn, 18x28; lean-to, 16x24; all fenced and cross-fenced; 5 head horses; full line of machinery. Price $41.50 per acre; $4000 cash, balance crop payment. No. T420.

800 acres; 8 miles from Three Hills; school 1 mile; 780 acres tillable; 400 acres broken; 100 acres summer fallow; 2-room house; barn, 32x48; good well. Price $40 per acre; $8000 cash, balance crop payment. No. T448.

160 acres; 10 miles from Youngstown; all tillable and all broken; 84 acres new breaking; 45 acres stubble on new breaking; small buildings and well. Price $3800; $1000 cash, balance crop payments. No. Y226.

320 acres; 6 miles from Youngstown; practically all tillable; 117 acres broken; homestead improvements. Price $17.50 per acre; $500 cash, balance crop payments. See Mr. Allin. No. Y214.

LINCOLN TRUST COMPANY.
COR. SPRAGUE AND HOWARD.
MAIN 1066 AN DMAIN 2750.
SPOKANE, WASH.

NO PAYMENT DOWN.
WE SUPPLY THE LAND AND ASK NO PAYMENT UNTIL YOU CAN MAKE SAME FROM CROPS. IT STANDS TO REASON WE MUST HAVE GOOD LAND TO OFFER YOU THESE TERMS. OUR LAND IS LEVEL, THE SOIL A SILT LOAM, NO BETTER LAND FOR ALFALFA, MILO MAIZE, FRUITS, NUTS, ETC. WATER FOR IRRIGATION IN ABUNDANCE WHENEVER NEEDED; GOOD DRAINAGE, CLIMATE AND TRANSPORTATION, SCHOOL ON TRACT; ON STATE HIGHWAY, WITHIN 3 MILES OF RED BLUFF, TEHAMA COUNTY (BANNER COUNTY OF CALIFORNIA). PRICE $150 PER ACRE. SEND FOR BOOKLET AND MAP.
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SEATTLE, WASH.

LOOK HERE, MR. WORKMAN!
YOUR COUNTRY NEEDS YOU ON A FARM.
And we are offering you a 40-acre ranch at $25 per acre; 10 yearly payments; in the best agricultural part of Snohomish county; paved roads, railways, mills, factories, schools; plenty of work for the laboring man; the best proposition on the market for the man who wants a farm. Send for illustrated literature. BROWNELL LAND CO., 904 Third ave., Seattle Wash.

FULLY EQUIPPED STOCK RANCH
$2000 BELOW VALUE.
160 acres beaver dam land; all tillable except 2 acres; 80 acres in meadow; 5 head of horses, 8 head of cattle; all farm machinery; good 2-story house, barn, wagon shed, garage, blacksmith shop and other outbuildings; good well and creek. Price $5500; $4000 cash, bal. long time.
This is one of our many.
JAMES W. BOOTHE & CO.
510 FIRST AVE. SPOKANE, WASH.

NO. 1004—75 ACRES, ON RIVER; NEAR steamboat wharf; 1500 fruit trees, mostly young peach and apple; 8-room dwelling, front porch, 2 halls, attic, shade, well fenced; 15 acres of woodland, chestnut and oak; 7 acres in meadow; 6½ miles from county seat; barn and stable, new pig pens, 12x60; buildings worth $3500. Price only $3250. Russell Realty Co., Baltimore, Md.

682-A. IMPROVED WHEAT FARM; SEVEN miles south of Hartline, Wash.; on Sunset highway; good land; all in cultivation except 15 acres; 300 a. in summer fallow; all fenced; large house, fine barn, good outbuildings; plenty water. Only $45 per acre. $6000 cash will handle. A. L. Tucker, Coulee City, Wash.

240-ACRE FARM NEAR LYLE; ¾ UNDER cultivation; ¼ now in grain; 10-acre orchard; other crops; good buildings; fences; water and soil. Price $40 per acre, including ½ crop. D. D. Bathrick, Lyle, Wash.

CALIFORNIA STOCK RANCH, SISKIYOU Co.; 320 a. (can be divided); 159 a. in cultivation; 290 a. tillable; open range; 6-room house, large barn, furniture, stock, tools included. No trade. S. E. Hummel, Tecnor, Cal.

10 ACRES, QUICK SALE; WILL TAKE $2800; some terms; all improved; good buildings, stock, tools; crop in. Owner, Roy Baron, Marysville, Wash.

2600 ACRES LOGGED-OFF LAND, CLOSE to Astoria; finest of small fruit, vegetable and dairy land. Only $25 an acre. L. A. Larsen, Astoria, Ore.

WE ARE AGENTS FOR THE BEST LAND in South San Joaquin Irrigation district on the easiest terms. Address Ripon Nursery Co., Ripon, Cal.

GOVT. LAND, ORE., CALIF. BOOKLET. Joseph Clark, Sacramento, Calif.

### FARM LANDS—WANTED 654

I WANT TO HEAR FROM OWNER OF farm or unimproved land for sale. Mrs. W. Booth, Pulaski, Iowa.

# Overland

## The Thrift Car




*With an Overland the farmer's family has a quick market for produce and benefits by easy accessibility to city stores.*




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*With an Overland the farmer's family can profit by all city advantages.*

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Willys-Overland Inc., Toledo, Ohio
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# Model 90—Farmer's Choice

## Complete Satisfaction Cannot Be Bought For Less

There are thousands of ways every day and every season in which Overlands are saving time for the farmers, multiplying their efficiency and adding to their families' comfort and happiness.

Hundreds of thousands of farmers drive Overlands and recommend them to their friends.

The result is that more than half of our vast production is now taken by farmers.

Improved methods of building cars, that build them better and *save millions* of dollars to the public is one of the substantial advantages you get in this Model 90.

Select this Model 90 and you save money in the first cost and in the maintenance cost. You can not get complete satisfaction from less advantages than it gives—

And you cannot get as much *value* in any other car for the low price of this Model 90

It has a powerful, fuel-saving motor; narrow turning radius; rear cantilever springs; 106″ wheelbase; 31x4 tires, non-skid rear. Auto-Lite starting and lighting and vacuum fuel system.

Because this Overland Model 90 gives every essential for complete satisfaction, the farmer's family can *enjoy* it as much as the farmer can *employ* it.

Order *your* Model 90 now.

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THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XLI. NO. 20. MAY 16, 1918. ** WEEKLY.

# Red Cross Week Brings Opportunity

## *People of Washington Share in Organization's Great Work of Battlefield Rescue*

WASHINGTON is asked to raise $1,000,000 next week as her share in the $100,000,000 that the people of this country are asked to contribute for the conduct of the relief work of the American Red Cross. This is not Washington's task; it is her privilege and opportunity. The people of the state responded liberally and loyally to the Liberty loan appeal; they will respond with equal liberality and loyalty to the appeal for funds with which to relieve the suffering and save the lives of American and allied soldiers and the homeless widows and orphans of war-stricken Europe.

The purpose of the Red Cross is so well known that it need scarcely be mentioned. The organization is purely an American institution, inspired, developed, financed and conducted by the great humanitarian heart of liberty-loving America. It has no other aim than to do good. Back of the lines in France and Belgium today there are scores of hospitals conducted by it. In them and on the battle fields, braving the dangers of gas and shell, are thousands of nurses and surgeons, serving for no compensation save that of the consciousness of duty well done. Many of them are bearing their own expenses.

This work has no source of support save that of the voluntary offerings of the people at home, of those blest with the blessings of a land of peace. Washington is so blest, and she will show her appreciation of those blessings in the contributions that she will make during the coming week.

President Wilson has officially set aside the week beginning May 20 as Red Cross week, calling upon all the people everywhere to respond loyally to its humanitarian call. His proclamation follows:

"Inasmuch as the war fund of 1917, so generously contributed by the American people to the American Red Cross for the administration of relief at home and abroad, has been practically exhausted by appropriations for the welfare of the men in our military and naval forces, and for those dependent upon them, and for the yet more urgent necessities of our allies, military and civilian, who have long borne the brunt of war;

"And inasmuch as the year of our own participation in the war has brought unprecedented demands upon the patriotism and liberality of our people, and made evident the necessity of concentrating the work of relief in one main organization which can respond effectively and universally to the needs of humanity under stress of war;

"And inasmuch as the duration of the war and the closer and closer cooperation of the American Red Cross with our own army and navy, with the governments of our allies, and with foreign relief organizations, have resulted in the discovery of new opportunities of helpfulness under conditions which translate opportunity into duty;

"And inasmuch as the American Red Cross war council and its commissioners in Europe have faithfully and economically administered the people's trust;

"Now, therefore, by virtue of my authority as president of the United States and president of the American Red Cross, I, Woodrow Wilson, do

Continued on page eighteen.

# What Our Red Cross Is

The American National Red Cross is, by Act of Congress, the official medium of communication between the people of the United States and their Army and Navy.

The President of the United States is the President of the Red Cross.

The War Department audits its accounts.

The work of the Red Cross for the war period is directed by a War Council created by President Wilson on May 10, 1917.

## The Red Cross organization is world-wide

The American Red Cross today is world-wide. It reaches into every American village, and overreaches all national boundaries.

A year ago there were 562 chapters in the United States and 486,194 members. Today there are 3551 chapters, 11,000 branches, 50,000 auxiliaries, 22,000,000 adult members, and a Junion Membership comprising a large proportion of the school children of the land.

## Red Cross ideals

The strength of the Red Cross is in its ideals.

The War Council expresses these ideals in three great aims:

**1 To be ready to care for our soldiers and sailors** on duty wherever and whenever that care may be needed.

**2 To shorten the war**—by strengthening the morale of the allied peoples and their armies by alleviating their sufferings in the period which must elapse until the American army can become fully effective abroad.

**3 To lay foundations for an enduring peace**—by extending a message of practical relief and sympathy to the civilian population among our allies, carrying to them an expression of the finest side of the American character.

The American people are translating these ideals into facts—into money and personal service. Last June the War Council asked for $100,000,000, and the people pledged $110,000,000, of which $108,000,000 has thus far been collected—collected at probably the lowest cost of collection in the history of such undertakings.

The Red Cross active workers are estimated at millions, and they are doing almost everything known to commerce and science, from bookkeeping to surgery, from knitting socks to feeding American prisoners in Germany.

## How Red Cross is organized

The great secret of Red Cross effectiveness is organization. Millions of people are working together through the medium of an organized machinery which coordinates the work of each with the work of all, and transmits the vast quantity of finished products to the people who need them.

The country is partitioned into thirteen divisions, and there is a fourteenth division for the territorial, insular and foreign chapters, with national headquarters as the coordinating force. In each division there is a manager and his staff, to whom the chapter officials are responsible, and the chapter workers deal directly with the chapter officers. The organization is military in its well-ordered effort, but quite nonmilitary in its democratic equalities, for the chapter worker is quite as important as the national headquarters official. The Red Cross is organized for efficiency, not for display of authority.

## Volunteer service

All of the division managers, and many of those on their staffs, are volunteers. Unpaid service is the general rule in chapters, divisions, and at national headquarters. Most of the department heads in Washington are volunteers.

## Every dollar of the war fund goes to war relief

Red Cross affairs are economically administered. Every penny has been spent under an appropriation by the war council after careful study. Membership dues pay the entire cost of operation, with a large balance for the handling of disaster relief and other work.

## The work of women

In all the volunteer service of Red Cross none is more notable for devotion, none so notable for extent as that which the loyal women of America are giving in their chapter work. It is estimated that there are two million of these women, many giving most of their time to this work, all giving unstintingly.

## Co-operation with the Army and Navy

The Red Cross is in close cooperation with the military authorities of the country.

Officers of the army, the navy and the United States public health service are assigned to national headquarters of the Red Cross to insure a thorough understanding at all times of the ways in which Red Cross service can be most helpful.

Red Cross commissions operate in France, Belgium, Italy, Greece, Serbia, Russia, Rumania, Palestine and Great Britain. The commissions and their staffs are in the theaters of war, cooperating with the army and navy forces and with the military and civil authorities of the allied countries; cooperating also with other relief agencies, avoiding duplication of effort and confusion of purpose, assisting other agencies and assisted by them.

## What the Red Cross does

The story of Red Cross accomplishment and its plans for the future will be told in more detail in other statements. Here are some of its principal activities, which suggest the importance and scope of its work:

Organization of base hospitals and ambulance companies.

Recruiting and training of nursing personnel for service in the army and navy medical corps.

Production of surgical dressings, hospital garments, refugee clothing, knitted goods, emergency supply service for our army and navy at home and abroad, sanitary service around cantonments.

Care of dependent families of soldiers and sailors.

Study of the problem of crippled soldiers and sailors.

Canteen service for troops en route.

Feeding of American prisoners in enemy countries.

Casualty information.

...e to convalescents.

Disaster relief.

And relief for our allies, including canteen work, tubercular work, hospital supply service, ambulance and hospital service, dispensaries, recreation centers, reconstruction of homes and villages, maternity work, repatriation of refugees, rehabilitation of mutilated men, and many other forms of service.

The Red Cross supplements the work of the army and navy. The Red Cross war council is endeavoring in every way to increase the effectiveness of the whole program of relief by the utmost cooperation with the commission on training camp activities, the Y. M. C. A., Knights of Columbus, Y. W. C. A., Y. M. H. A., and other great patriotic agencies.

Red Cross chapters have statements showing in detail how the war fund is being expended. Ask your chapter for these statements.

This is the first of a series of five announcements covering the work of the Red Cross.

Succeeding statements will deal with activities of the Red Cross in detail.

# The American Red Cross

The space for this announcement has been contributed by Sears, Roebuck & Co., Seattle, to aid the work of the Red Cross.

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 20 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF May 16, 1918

## To Sell 60 Cars of Strawberries

### *Kennewick District Is Increasing Fame This Season*

By HORACE ADDIS.

The fame of Kennewick (Wash.) strawberries has been increased this spring by the first shipment of two crates selling for $507. They were picked May 5 and shipped to Seattle, reaching that market May 7. The first crate brought the grower $30, but was resold at auction for the benefit of the Red Cross, and brought $365. The second crate brought $12, and was sold for the Red Cross by the cupful, bringing $142.

The berries were shipped by the Kennewick-Richland Fruit Marketing union, which this year includes over 98 per cent of the growers included in the Kennewick, Richland and (this year for the first time) Pasco district. There are 225 acres in the Kennewick district, 60 in the Richland district, and 40 in the Pasco district.

Right here it is appropriate to say that Pasco has just five growers in the union, but all have rather large acreage and each has offered to donate his first crate of berries to the Red Cross. Before this reaches the readers, the berries will probably be sold on the Spokane market.

The crop this year promises well and is estimated to go 50,000 crates, or over 60 carloads. Kennewick each year has the first ripe berries north of California, and is nearly done shipping before Hood River, Ore., begins. The Fruit Marketers' union is stronger than ever before and for the third year the Spokane Fruit Growers' company is doing the selling. This season this company is affiliated with the Northwestern Fruit exchange and H. G. Fletcher is sales manager. The berries go to Montana, Dakota, Utah and Coast points. Last year's strawberries netted the growers almost $1.75 a crate, above the cost of shipping, packing and picking. The average yield was close to 150 crates per acre. Though this season in Kennewick is early, rain delayed ripening a few days, but will mean larger berries and a larger crop. The success of union marketing is due to intelligent distribution, which scatters the fruit where it is wanted, instead of overloading some markets, while others are bare.

All the strawberries of the Kennewick union are Clark Seedling. The plants are set in the spring, after the ground is thoroughly worked and well irrigated. The rows are made from 30 to 36 inches apart and the plants are set 18 inches apart in the rows. The planter, with a shall, short-handled hoe, makes the holes with one motion, drops in the plant and covers it with another. A good hand sometimes sets 6000 plants a day. The bed is then irrigated regularly and the next year bears its first full crop. Once set it will last for years, if properly cared for. All growers go over it with a harrow, which tears out the old plants more than the young ones. But many growers run a plow just in the old row, which throws the row over about a foot and makes a row of mainly new plants. This plan moves the row each year and will keep a bed renewed longer than any other system.

In addition to the strawberrries the union controls about 100 acres of asparagus, not quite enough to ship in carlots, and yet a rather heavy crop for individual shipments. The crop is about 200 boxes of a net value to the growers of about $9600. The early potato crop is also controlled by the union. Last year it amounted to about 35 carloads and is expected to be as large this year.

F. H. Krug is local manager for the union. M. N. Hudnell, Kennewick, is president, and J. R. Gardner, Richland, secretary. The board of directors consists of L. E. Johnson, J. J. Rudkin and Ole Brue, Kennewick; John Erickson, J. E. Mowery and F. J. O'Brien, Richland.

I AM enclosing $1.00, for which please send me The Twice-a-Week Spokesman-Review, one year; The Washington Farmer for three years, and also send me one of your Farm Service War Flags.

J. D. PAGE.
R. D. 1, Box 40.
Turner, Wash.

### MILLS ARE GRINDING.
### Ship Flour and Keep Mill Feed.

According to J. W. Ganong, representing the milling division of the federal grain-buying corporation for the northwest, the mills of this section are doing their utmost to convert wheat into flour and mill feed before it is shipped out of this territory.

"We are informed by the federal shipping board that 50,000 to 80,000 tons of steel shipping will be ready for loading in June and July at northwestern ports," says Mr. Ganong, "and unless they are to go without cargo it is necessary that the mills continue in operation."

He states that the food administration prefers to ship the commercial product of the northwest in the form of flour rather than as unground wheat, as it not only reduces the amount of shipping facilities necessary, but has the effect of keeping the mill feeds in the territory in which they are produced, thereby eliminating much of the cost and delay of shipping back and forth. He says that there has been and is now an unusual demand for mill feed, notwithstanding the unprecedented prices to which it has gone.

## Hard Hit by Russian Losses

### *But The I. H. C. Has $20,000,000 in Home Profits*

The 1917 report of the International Harvester company was submitted to a meeting of stockholders last week by President Cyrus H. McCormack.

This great organization has two corporations. The International Harvester company of New Jersey sells machinery to American farmers. The International Harvester corporation handles foreign trade exclusively. The foreign branch was hard hit by Russian losses, but the domestic company made clear profits of 20 per cent on its actual capital of $70,000,000, or more than 11 per cent on its total working capital of $125,000,000. The difference between these two sums, $55,000,000, represents surplus profits earned in previous years and not paid out in dividends, but added to the nominal capital of $70,000,000.

An interesting feature of the report is that $9,750,421, or more than half of the $19,311,983 income, came from the operation of the company's steel properties, 60 per cent of their output having been sold in the general market.

The gross profits of the company in 1917 were nearly $20,000,000.

That vast sum remained after the company had paid all taxes, including excess profits war taxes. After various deductions had been made, such as interest, ore and timber extinguishments, depreciation reserve and other reserves, and appropriations of $1,300,000 for fire insurance fund, pension fund and profit-sharing fund, there remained a clear profit of $14,009,593, or 20 per cent on the capital stock of $70,000,000.

This was $3,500,000 more than the company earned in 1916, $5,500,000 more than was earned in 1915, and $6,500,000 mroe than it earned in 1914. The showing is all the more remarkable from the fact that the company paid no war taxes in the previous years.

"The agricultural implement industry," says Mr. McCormack, "has been recognized by the United States government as essential to the national welfare, and this company appreciates to the fullest extent the responsibility imposed upon it to supply labor-saving machinery promptly to the American farmer. The implement industry, through a representative committee, in which this company has membership, has been in constant cooperation with Washington in the effort to insure the uninterrupted manufacture of farm operation equipment and the seasonable delivery of the finished product to the country."

As noted above, the foreign end of the company, the International Harvester corporation, was hard hit by war conditions. America's entrance into the war and the Russian collapse have compelled the company, the announcement says, to charge off $13,941,168, of which $10,120,000 "represents unquestionable losses in Russian funds and $316,825 in the value of equipment commandeered by Germany at the Croix works near Lille, France. These losses absorbed the whole of the corporation's 1917 earnings and caused a deficit of $1,350,721 for the year." Of the remaining loss, it is explained, $2,556,175 represents an estimate of 50 per cent of receivables in Russia, Rumania, Belgium, Serbia and enemy countries, $948,167 represents inventory goods, materials and other property commandeered by Germany at the French works.

## Washington Boys in War Service

From The Twice-a-Week Spokesman-Review.



**CORPORAL ROBERT SCOTT, Mabton, Wash.**—Entered military service in 1916, and was at the Mexican border with the national guardsmen. At present he is serving with the 161st infantry, in France. He is 22 years old and the youngest son of J. A. M. Scott, a farmer, near Mabton, Wash.



**H. C. PURTEE, Almira, Wash.**—Who is now serving his country, is stationed with the 428th squadron, aviation signal corps. He is the son of Mr. and Mrs. John W. Purtee, who have a farm in Lincoln county on state route from Almira, Wash.



**GEORGE EARL MATTHEWS, Aeneas, Wash.**—Enlisted in November, 1917, in the 142d aviation squadron. He is now serving with the American expeditionary forces in France. He is the son of Mr. and Mrs. Fred C. Matthews, who reside at Aeneas, Wash.

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## Bayard T. Byrns

Bayard T. Byrns of Moscow, Idaho, died suddenly at his home last Saturday, May 11, aged 65. Death was probably due indirectly to a minor automobile accident that occurred a few days previously.

Mr. Byrns was one of the widely known live stock farmers of the northwest, having done much through the introduction of purebred stock to build up the industry in the Inland Empire, especially around Moscow, and in the general Palouse country. He operated extensive farms, the most highly developed of which was one of several hundred acres about three miles out of Moscow, just south of the University of Idaho farm. He has been a leader and a strong supporter in the movement for the building up of live stock associations, having done much toward the development of the Northwest Live Stock association. He has been not only an advocate of diversified farming, but one who practiced what he preached.

### Rural Life Conferences.

Mrs. Josephine Corliss Preston, state superintendent of public instruction, writes that it has seemed advisable to change the plan of holding the state rural life conference at Yakima in June on account of war conditions.

The local rural life conferences are reported to have been well attended, aggregating an attendance of nearly 5000 representative people.

The annual convention of county superintendents has been called at Ellensburg state normal school Wednesday, Thursday and Friday, June 12, 13 and 14. The first day of the meeting will be taken up with administrative duties of county superintendents: The last two days of the meeting will be devoted to a rural life conference. In cooperation with this meeting there will be a rural life conference held at Cheney state normal on Monday and Tuesday, June 10-11.

### Will Hold War Conference.

There will be a great war workers' conference in Spokane on May 27 and 28, at which time vital problems confronting the people of this state will be worked out. Speakers of national and international reputation will be present, including a representative of the French army.

### Works For Food Administration.

Frank M. Warren has been appointed as an assistant state food administrator in Oregon to assist V. B. Ayer, state administrator.

# Urges Potatoes

## Acreage Should Not Be Decreased

Robert L. Ringer, potato market specialist for the government, located at Portland, Ore., has gone on record strongly as favoring an increase rather than a decrease of the potato acreage for the present season. He has observed a tendency on the part of many growers to reduce their acreage this season on account of the unsatisfactory condition that prevailed in the potato business last fall and winter. He says that the producers are not generally recognizing the fact that "they spoiled their own market last fall." In speaking of the potato situation Mr. Ringer said:

"The various civic bodies of the country now are promoting campaigns for a large acreage of potato planting this season. Because of the prevailing prices the last winter, many growers are turning from potato raising in the hopes of securing greater returns in money. They are not generally recognizing the fact that they spoiled their own market last fall. The people were out of the way of eating potatoes to a certain degree, because of the high prices of a year ago. Instead of selling at a reasonable profit, the growers last fall generally asked big prices, which confirmed the people in doing without potatoes. Potatoes that cost $1.50 a barrel to raise in Maine, were put in storage even when $4 per barrel was offered for them. Hundreds of cars were stored in the Yakima section, for which $30 per ton was offered. To pay for the shrinkage, investment and cost of handling, the growers needed $50 a ton this spring to make such storing profitable, but instead they are letting go from $20 up.

"During the war it is evident that there will be a continual necessity to conserve the supply of wheat, so that potatoes will have to replace it largely in the American diet. Thousands of growers of experience know that a year of low price and large supply is followed by the opposite condition largely, so many such are planting extensively this year endeavoring to benefit themselves and do their share to help win the war."

# How to Get Sugar

## Allowed 100 Pounds for Canning

In order to insure the preserevation of large quantities of fruit this season the federal food administration has taken action allowing each family to secure sugar up to 100 pounds for the purpose of canning and preserving. Under this regeulation it is required that every person securing sugar for this purpose shall sign a certificate with his local dealer showing the quantity secured and the purpose for which it is to be used.

At the present time the general regulations throughout the country permits the purchase of sugar in lots of $1 or less for present uses without the signing of the certificate, but the certificate plan is designed to prevent the use of unnecessary amounts during the canning season. Farmers at the present time are generally allowed to secure sugar in 25-pound lots owing to their distance from markets. The certificate to be signed when securing sugar for canning purposes will be somewhat in the form shown herewith:

> I hereby declare to the United States food administration that I have purchased from . . . (grocer) . . . . . of . . . (address of grocer) . . . . an amount of . . . pounds of sugar for my use in preserving and canning purposes only
>
> I hereby promise, in consideration of the above, to endeavor to limit the use of sugar for all other purposes in my household to three pounds or less per person per month for the duration of the war.
>
> .....Name of purchaser.
>
> .....Address of purchaser.

Speaking of the conservation of fruit this season, W. B. Ayer, chairman of a federal committee and food administrator for Oregon, says that the people have responded loyally to the appeal that has been made for regulation of the amount or sugar used for ordinary purposes and that as a result there is an adequate supply in the states of Oregon, Washington and Idaho to insure the amount needed for canning and preserving this season.

### A Kansas Record.

A Chase county (Kansas) steer, which had just come in off pasture, gained 45 pounds in 24 hours the first day it was put on feed on the farm of Henry Starkey.

### Demand for Registered Stock.

Doerfler Brothers, the Duroc Jersey breeders of Silverton, Ore., say that "never have we known of such a demand for good registered stock as right now." They report sales in various parts of Oregon, Washington and California.

### Fruit Storage Houses.

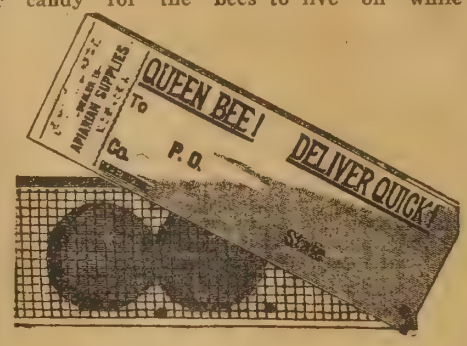
Storage houses are being built on many of the ranches and at shipping points in the Wenatchee district. The United States department of agriculture is cooperating actively with the horticultural inspectors and the county agents in promoting storage holding.

# Queen Bee Is Easily Introduced

## *She Readily Assumes Leadership of a Queenless Hive*

**Article 5, By GEORGE W. YORK.**

At the close of my last article I said I would tell this week how to introdudce a queen bee. But first I want to call your attention to the picture herewith showing a cage in which a queen bee is sent through the mails. It is made of a block of wood, about three inches long, about one inch wide, and perhaps half an inch thick. Three holes are bored in one side, and almost through the block. One of the end holes is filled with a soft sugar candy for the bees to live on while en route. The other two holes are for the queen and perhaps a half dozen escort worker-bees to occupy. A piece of fine-mesh wire cloth is tacked over the top of the cage; the bees are run in through a very small hole in the end of the cage, which is then covered with a little piece of tin.



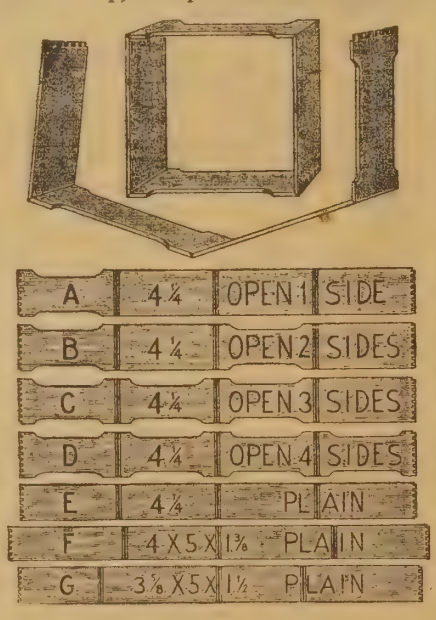

**Cage for mailing a queen bee.**

The candy end of the cage also has a small hole in it, across which is usually tacked a strip of cardboard, to prevent the bees escaping should they consume all the soft candy before arriving at their destination.

The cage with bees and candy usually goes through the mail for a one-cent stamp, which is stuck on the back of the cage.

This mailing cage is also used by many as a queen-introducing cage, as follows:

When the new queen arrives by mail, take her with the cage of bees to the queenless colony. Remove the address card, and lay the cage containing the bees, wire cloth side up, on top of the brood-frames. It is well first to put an empty super on the hive so that there will be nothing coming directly on top of the queen-cage. This will allow the bees of the hive to become acquainted with their new queen through the wire cloth. After, say, 12 hours, remove the strip of cardboard from the candy end of the cage, when the bees in the cage will, in another 12 or 24 hours, have eaten through the candy, and thus allow the queen to leave the cage and run down among the brood-combs, where she will very soon be laying eggs, and all will be well. The escort bees will look out for themselves.



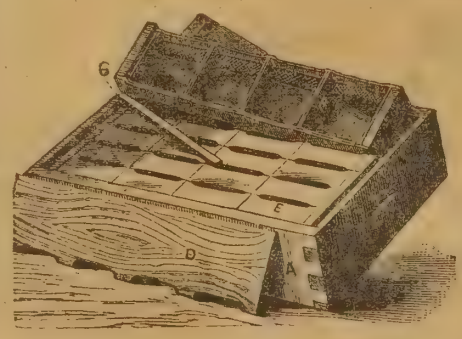

**Sections, or boxes, for holding honey.**

There are other methods of introducing queens, such as almost drowning them in thin honey and then while so besmeared with sweetness drop them in between the brood-combs, when the bees will promptly lick them off and accept them. The standard bee-books give the various methods, but I have almost invariably succeeded with the simple method I have described, using the cage in which the queen came through the mails.

### Holding Surplus Honey.

There are two forms in which honey is produced on the hive. One is in the small frames or boxes for comb-honey, such as are found in many grocery stores; and the other is in frames the same length as the brood-frames, but sometimes a little shallower, say about six inches deep. These latter are extracted when filled and returned to the hive for refilling, but I will tell of this in the next article.

Both the large frames and small boxes or sections are placed on the hive directly above the brood-chamber. Some bee-keepers put a perforated zinc queen-excluder between the super and brood-chamber so that the queen shall not go above and lay eggs, to hatch into brood, where the surplus honey is to be stored.




**Super of one-pound honey boxes.**

The illustration herewith represents a comb-honey super containing the one-pound sections or small boxes, in which the bees store the honey for market. A is the dovetailed super; D, the solid wood separator to go between the rows of sections; E, section-boxes; F, follower board to go in at one side of the section; G, wedge for between follower board and super side, to make all solid.

There are topless wide frames for holding the sections, four in a row. The super shown holds six of these wide frames, making 24 sections in the one super. It will be noticed that the sections have small starters of comb-foundation in them, which will help the bees to build the comb straight. Some good beekeepers put, say a one-half or three-fourths-inch starter in the bottom of the section also, which aids in making a much stronger comb in the section. This helps to hold the comb more firmly in the section for shipping on the cars.

The time to put a super on the hive is when the brood-chamber is well filled with bees, which in white clover regions is about the time the clover begins to bloom. If there is a good honey-flow, when the first super is about half filled with honey, raise it up and put another super between it and the brood-chamber. Sometimes one hive may have on it four or five such supers, though many do not use more than two or three supers, as the honey can be removed when the small combs are all sealed over.

Referring again to the section-boxes, it will be seen by the illustration that there are several styles, but the style most commonly used is perhaps the one 4 1-4x4 1-4 inches square, and 1 7-8 inches wide, slotted at top and bottom so the bees can readily go up and down through the supers should they be tiered one above another.

These section-boxes are dovetailed at each end, and also grooved at the three joints, so that they can be folded easily. They are usually put up in the flat in packages of 500 at the factories. But should they become very dry and brittle at the joints, simply dampen the backs of the grooves with a wet cloth or sponge, when the wood will become tougher and stronger again.

# Grange to Meet

## State Convention On Next Month

During this year's session of the Washington state grange, which will be held in Walla Walla from June 4 to 7, the important matter of choosing a master to succeed the late C. B. Kegley will come before the delegates. William Bouck, who, as overseer, became acting master on the death of Mr. Kegley, will undoubtedly be a strong candidate, as his record of loyal service to the grange is a long one. The office of overseer will also become vacant during this year's session, and it is probable that the necessity of filling these important offices will secure a record attendance at the Walla Walla meeting.

In the line of special business various phases of the farmers part in the conduct of the war, including his ability and willingness to feed the world, and also the matter of profiteering during war time are apt to come up for discussion. That the work of the nonpartizan league will be considered seems probable from the expected attendance of Ray McKaig, master of the North Dakota state grange and also a prominent nonpartizan leaguer.

# Powdery Mildew

## Spraying Controls in Northwest

Powdery mildew, the most serious fungous disease occurring on apples in the irrigated orchards of the northwest and sometimes causing considerable damage in semi-arid regions farther east and south, can be controlled by thorough spraying. Lime-sulphur, diluted 1 to 50, is the spray to use. This is the recommendation of D. F. Fisher, a specialist in the office of fruit disease investigations, United States department of agriculture, after a three-year field investigation of this disease. A serious attack of this mildew often results in a crop reduction the following year of more than 50 per cent, and it also causes a dwarfing and a russeting of the fruit, which greatly reduces its market value.

The first application of the spray should be made when the cluster buds have separated, but before blossoms have opened; the second when most of the blossoms have fallen and before the calyx has closed. In the second application the lime-sulphur should be combined with the arsenate of lead used for codling moth. It has been thoroughly demonstrated that there are no harmful effects from such a combination of sprays, and it is a great saving of time to make the two treatments in one application.

The treatment just described usually is sufficient to hold the disease in check, but in case of severe infection another spray may be necessary three or four weeks after the calyx spray and possibly still others at intervals of four weeks. In these later applications lime-sulphur can not be used in these regions of intense sunlight without severe spray injury. Bordeaux is unsatisfactory as a substitute, for in the almost entire absence of summer rainfall it remains as a heavy coating on the fruit and prevents it from coloring properly. Experiments have shown that ammoniacal copper carbonate is a satisfactory substitute for lime-sulphur in these later applications, completing the control of the disease without harmful effects.

Powdery mildew attacks the buds, twigs, foliage, fruit and sometimes the blossoms of the apple. The affected leaves become somewhat curled and narrowed and have whitish, feltlike appearance. The twig growth is checked, and in some cases the twigs are killed. Fruit bud formation is partially prevented and such buds as form are of low vitality.

A detailed report of the specialist's studies is soon to be published in a bulletin of the department of agriculture.

### An Early Season.

Rain which fell early in the week of May 5 was quite general over western Washington, according to G. N. Salisbury of the U. S. department of agriculture. Mr. Salisbury states that the present season is nearly two weeks earlier than the average, as compared with the four weeks' tardiness of last year.

### Does Itself Proud.

C. R. Campbell of Bellevue, reports splendid results from the organization work conducted by the Bellevue Council for Patriotic Service. During the recent Liberty bond campaign Bellevue was allotted $6500 worth of bonds, but practically within the first week $20,000 worth were subscribed for.

# Millers Increase Profits

## *Speculated Prices on Feed Are Added to the Liberality of Government*

It is made plain by the report of the federal trade commission that the government is dealing liberally with the millers of the United States. Many people will think too liberally.

Under the regulations of the food administration the mills are allowed a net profit of 25 cents per barrel on flour sales, and also 50 cents a ton on feed sales, equivalent to about one and three-fourths cents additional on a barrel of flour. That is two and a half times the average profits made by the flour mills of the United States in the fiscal year of 1912-13, a fairly normal year, when, as shown by the commission's report, they made a profit of 11 cents per barrel.

Grinding flour at 11 cents profit, the mills that year made a profit of 10 per cent on their investment. During the fiscal year 1913-14 the average net profit was 16 cents a barrel, yielding 13 per cent on the investment.

But in the fiscal year 1916-17 their profits shot up to 52 cents per barrel, due in part to the increased value of unsold stocks carried over from the preceding year and disposed of on a rising market, and also to speculative profits on feed, the prices of which increased greatly during the year.

If it had been necessary to increase the country's milling capacity (as it is necessary to increase its wheat production), the government would have been justified in authorizing exceptional profits to the mills. It would have been economically wise to induce the millers to enlarge their plants, and to reward them for that enlargement, which would have been made with considerable risk of investment.

But the federal trade commission's report shows there was no such necessity. It finds that the 7000 merchant wheat flour mills in the United States have been producing for the last three years an average of 116,000,000 barrels of flour annually, and have capacity sufficient to about double that output. They have present capacity to grind 1,100,000,000 bushels of wheat, which is far and beyond the wheat growing capacity of the country.

This excess of milling capacity explains, at least in part, the government's plan of bringing Australian wheat to the Pacific coast, to be milled here and shipped as flour to our European allies.

## Get the Information

How to can fruit, how to can vegetables, how to prepare Hoover foods, how to swat the fly, how to swat the mouse and the rat, how to plant and care for the garden, how to fertilize the garden and lawn—in fact, how to do almost anything that the housewife or farmer should know can be learned through this paper's information bureau at Washington, D. C. Of course, everything about all subjects can not be expected, but pointed questions will be answered pointedly and valuable information given on any subject of inquiry. The bureau has access to all the records in Washington, the national capital, and is enabled to send out booklets and bulletins issued by the various departments of the government, including the department of agriculture. If you want a booklet or pamphlet on the subject in which you are interested enclose a 2-cent stamp. If you want a personal reply to a question, enclose a 3-cent stamp. Address all your inquiries to The Washington Farmer Information Bureau, Washington, D. C.

### Best for State.

I am reading the Washington Farmer myself and know it is the best farm paper published for the state of Washington.

FRED SCHNETZ
Odessa, Wash.

### Liberty Day at Okanogan.

The Okanogan county council of defense will celebrate Saturday, May 25, as Liberty Day at Okanogan. Leading people in the county will discuss patriotic matters. The invitation includes the editors of every paper, every member of the county bar, every member of the county council of defense, every minister of the gospel, every four-minute man, every minute woman, every Liberty loan committee man and woman and every war savings stamp chairman in Okanogan county.

# Should Use Milk

## Food Administration Appeals

If a recommendation of the national food administration were accepted by the people of the entire country it would mean a great relief, not only to the food situation, but to the dairy situation as well. The administration urges that consumers substitute milk as much as possible for the meats which are so greatly needed for exportation to Europe. Milk can be used in many ways as a food and is recommended by food specialists everywhere as one of the cheapest articles of diet obtainable even at the present comparatively high prices.

For a long time the dairy situation in the country, especially in the northwest, has been suffering from a number of conditions, not only have feed prices been unprecedentendly high, but the cost of labor and the quality of labor obtainable have proved a great handicap to the conduct of the business. In addition it has been difficult to secure shipping facilities to transport the milk products, especially condensed milk, from the northwest to eastern markets or to ports for transportation to Europe. As a result many dairymen have either reduced their herds or have gone out of the business altogether and many of the smaller condenseries have quit business or greatly curtailed their operation. Therefore, to whatever extent milk can be consumed locally the dairy industry will be profited.

### BANKER MUST KNOW.

### Must Understand Farm Problems.

R. A. Blanchard, agriculturist for the Live Stock State bank of North Portland, was a visitor at the office of The Farmer recently. Mr. Blanchard, after a number of years in county agricultural agent work, is devoting his energy to developing the spirit of cooperation between the bankers and the farmers in the matter of financing agricultural production throughout the northwest.

He reports a growing realization on the part of bankers of their real relationship to the farmers, but says that there is yet too great a lack of understanding of farm problems on their part.

"How many bankers know what crop is best adapted to their communities?" asks Mr. Blanchard. "How many know what it should cost to feed a cow, to put on a pound of pork or to produce a pound of butter fat? How many bankers have called in their farmer customers when feed was soaring in price and consulted with them on methods to save the live stock rather than sacrifice them?"

These questions indicate, in the mind of Mr. Blanchard, the mutual understanding and cooperation that should exist between the bankers and the farmers of the agricultural communities of the northwest.

### FAVORS SUGAR BEETS.

### Valuable Both for Feed and Food.

A small tract of sugar beets will produce more hog feed than any other crop, according to a statement just made by E. F. Benson of the state department of agriculture. A patch of sugar beets, he says, will also help solve the sugar shortage problem. Part of the stateemnt by Commissioner Benson on this subject reads as follows:

"Many people will save sugar next year by growing a few sugar beets and making their own syrup. A bushel of beets will make three to five quarts of syrup. Write to the superintendent of publications, department of agriculture, Washington, D. C., for farmers' bulletin No. 823, 'Sugar Beet Syrup,' and learn how to grow the beets and make the syrup. It is most unfortuntae that people generally do not make use of the information available in the splendid bulletins of the United States department of agriculture and of the state college. The best information on every agricultural subject is found in these bulletins and they are free to every one for the asking."

### Invented Garden Seeder.

S. L. Allen, one of the prominent men of the country from the standpoint of improved methods of garden production, died recently at Miami, Fla., in his 77th year. Mr. Allen developed the garden seeder idea, his work along this line resulting in the origin, improvement and manufacture of the Planet Junior garden seeder.

### Movement of Sheep.

There is in progress a heavy movement now of sheep from the Yakima valley to points in Chelan, Okanogan, Colville and other parts of the state.

# Wheat Is a Luxury Which May Easily Be Dispensed With

At a recent meeting in Washington, D. C., Dr. L. E. Taylor of the U. S. food administration declared that the first necessity for us is to get a clear conception of the relation of wheat in the human diet, and to divest ourselves of all preconceptions that a life of generations of ease, indolence and luxury has bred in us. We are accustomed to regard wheat as a more or less indispensable article of diet. It isn't. It is an article of luxury and absolutely nothing else. Wheat possesses over oats, corn and rice absolutely no nutritional quality for man or beast. It has no more protein and no better protein. It has no more fat and no different fat. It has no mineral salt better or in larger amounts. It has no more fuel or better fuel. It is just one of the cereals, and there isn't the slightest evidence that it is the best one, because so far as comparative tests are concerned in animals, it isn't the best one, it is very far from the best one.

"Our predilection for wheat is solely a question of taste, comfort and convenience; it is absolutely nothing else. Wheat makes the nicest bread, the lightest bread, the bread that is transported best, the bread that keeps moist and sweet longest. It lends itself to the habits of ease and convenience of a people, and because it lends itself to the convenience of a people, we want it sent to Europe and not kept here, and we ask and expect the American man and woman in judging of every situation as contrasted with that of our allies, men and women, to ask who has the larger burden to bear, who has borne it the longest, who has wasted in resources the most, who has lost the most by sacrifice, who has suffered the most in death and destruction, we or our allies.

"And when we have a choice to decide as to whether we or they should increase or decrease our burden, it ought to be not the duty, but the joyful privilege of every American to lessen the burden of every man, woman and child in the allied countries of Europe, by accepting the heavier burden on this side. And because wheat is easier to prepare than oats and rice and barley—that is the very best reason in the world why we ought to accept the oats and the rice and barley, and to give them the wheat that is necessary to maintain a normal ration."

# Make Farm Service Flag a National Movement

COOPERATIVE EXTENSION WORK
IN
AGRICULTURE AND HOME ECONOMICS
STATE OF TENNESSEE

CARRIED ON BY COOPERATION BETWEEN THE UNITED STATES DEPARTMENT OF AGRICULTURE, THE COLLEGE OF AGRICULTURE, UNIVERSITY OF TENNESSEE, THE STATE BOARD OF EDUCATION, AND OTHER COOPERATING ORGANIZATIONS.

CEA:LT

HEADQUARTERS
DIVISION OF EXTENSION
KNOXVILLE, TENN.

May 1, 1918

Editor, Washington Farmer,

Spokane, Washington,

Dear Sir:

I have noticed with interest your campaign to secure and establish a Farm Service Flag.

This seems to me a splendid thing to do, and I wish you the best of success in making this a National movement. The Flag which you have suggested is a very attractive one.

Very truly yours,

C. E. Allred
Specialist in Farm Management.

P. S. Buy Liberty Bonds.

# "Wife and I Worked"

P. Schwantes of Ridgefield writes: "When wife and I started in on a rented farm 40 years ago we put in a large patch of cabbage, kohlrabi, sweet corn, cucumbers and melons. Everything grew fine. Wife and I worked hard nearly all day and night and kept that garden clean. We were proud of it and I felt good when I took a dozen nice large watermelons to town (Horicon, Wis.), but was thoroughly disgusted when I found I couldt hardly give them away. A few cabbage heads I sold for 5 cents apiece, but the most of them we fed to the cows. That was the first and last time I tried to raise and sell truck. We always have enough and to spare for our own use. This year especially the farmer can not afford to raise truck for sale. Help is too scarce and he had better do something that does not take so much hand work." Mr. Schwantes adds that "wife" is the gardener and all the vegetables needed for the entire year are raised. Mr. Schwantes helps out, however, in the garden. He hauls the manure and plows the garden or spades it, once in a while helps to hoe it if the weeds get too much for the wife, otherwise she claims it as her part of the farm.

# WASHINGTON FARMER

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## Near Bottom of Flour Bin

Not since the civil war, and probably not within 100 years, has the United States been so near the bottom of the national flour bin. Its visible supply of wheat (grain in mills, elevators and in transit) was down to 2,776,000 bushels on April 27, and supplies in farmers' hands are also known to be near the bottom.

A year ago the visible supply was 33,207,000 bushels, and that was considered a close margin, although it was 13 times the present holdings.

We realize now more fully than ever before the tremendous value of the service that Mr. Hoover has rendered the nation and our allies. If the American people had eaten wheat flour in normal quantity the last year, one of two calamities would have resulted: either we should have sent no wheat to our allies, or wheat flour would have disappeared entirely in this country several months ago. Mr. Hoover's persistent appeals to the people to use substitutes, and his steadily tightening regulations on the mills, the bakeries and the hotels and restaurants, have enabled us to send generous supplies to our allies and tide over the shortage in this country.

And we are not to forget that for that service he receives only $1 a year from the government.

## Stay With the Apple Industry

In recent years a good many persons engaged in the orchard business have become more or less discouraged because the results have not been what they expected. My advice has always been to stay with the apple business. It will come into its own under the law of the survival of the fittest. The apple industry in the northwest is bound to succeed, and those who give it the most care and attention, and who stay with it until the reaction comes, will have it greatly to their advantage.

The question is often asked: "Why is the Pacific northwest becoming so famous for the production of apples?" There are three general answers to that question. The first is that the latitude is in the great apple belt of the world. Even where the latitude would seem not to be far enough north the altitude of the hills and mountain ranges often compensates for the distance south and gives cool nights and a temperature favorable for the growing of the best fruits.

Second, in a large part of this country there is during the day a bright sunshine and at night a cool air, both of which tend to give color and flavor to the apple.

Third, the character of the volcanic ash soil, of which a large portion of this region is built, is favorable for the growth of the apple tree and its fruits. G. L.

## From Cow to Retail Store

Negotiations of deep interest to dairymen are announced by J. D. Miller, attorney for the Dairymen's league of New York and other adjacent states. Mr. Miller has informed the newspapers that the league has arranged for an option to purchase all of the country receiving stations of the Bordens' Farm Products company, the largest distributors of fluid milk. If the deal goes through this would mean that the producing dairymen will handle the milk from cow to retail store. The details are not revealed, but the New York Commercial says it is understood the league will have a long term of years in which to pay for the Borden stations, and that the price at which the company is said to be willing to part with these properties is approximately $5,000,000.

R. D. Cooper, president of the league, has long contended that farmers should own all the country producing facilities. He contends that thereby the producer would get the largest return for his milk and the consumer would get milk at the lowest possible price.

Under this plan all opportunity for tricky and dishonest testing of milk would be abolished and the members of the league would know that they were receiving at all times full pay for the butterfat contents of their product.

While details are yet lacking, it is probably the purpose of the league to deliver its milk in New York city to two classes of retail distributors—the retail stores and the present companies that distribute milk from door to door. This would be a distinct improvement over the present plan under which producers sell their product to the country receiving stations of the big distributors.

## Consult Food Administrator

After protests on the part of some farmers, the food administration has decided that conditions in the city and on the farm vary to such an extent that it would not be right to make the same rulings for both. For example, the farmer who has grown wheat substitutes should not be compelled to buy the substitutes when he buys wheat flour. If he is compelled to sell his substitutes and then rebuy them there is a loss for him, and the railroads have an unnecessary haul. The state food administrator should be consulted in person or by letter in such cases, and he has power to modify the rules in effect now.

We would like for the farmers to give us their idea as to the size of the horse most profitable for his use on the farm. Now is the time for you to express your ideas through the columns of this paper. If you believe in the extreme heavy weight horse or the extreme light weight horse give us your idea, or if you think favorable of a new breed of horses let us have your idea.

In these days of conflict and conflicting opinions there is a danger which we must carefully guard against of charging those who do not agree with us with lack of patriotism. It is natural enough to believe our own opinions are correct, but we must remember always that others feel the same way.

The labor shortage has not been so serious as was feared early in the season, so far as ordinary field work was concerned. When it comes to real experts, it is making itself felt more and more. This is a subject which calls for serious study and wise action.

We are very much like the man girt with a belt of gold and precious stones, who is cast away on a desert island. No nation is rich unless it is rich in possessions of value to its people. Without foodstuffs, of what value is gold, silver or even perfect credit?

## Washington Gleanings

Clarke county has every indication for a bumper prune crop this season.

R. C. Hamilton of Pullman has purchased the George F. Johnson 40-acre tract, east of Pullman, for $3800, or $95 an acre.

Pacific county is assembling the material to build five miles of pavement eight feet in width in the Holcomb neighborhood.

Enough perfect spruce material to make 300 airplanes each 24 hours is going forward from the war department cut-up plant at Vancouver.

Leon H. Cays, a practical dairyman of Jefferson county, has purchased the Andrew Smith ranch just east of Montesano, at a price said to be $42,000.

The Centralia police have started a crusade against loafers. All poolroom hangers-on will be rounded up and forced to go to work or serve jail sentences.

Fifty-five acres, covering a south sloping side hill in Lyle, has been sown to war gardens jointly by the Union Meat company of Portland and Dorr E. Keasey of Lyle.

Joseph Passenneau of Rosalia has been appointed to the staff of farm markets at Pullman, and will have charge of assembling market information for the farm markets news service.

The Sumner school board recently decided to refund to the state the bonds voted a year ago for the erection of a new high school building, thus saving further interest to the district.

Italians of the Yakima valley have decided to organize to lend financial aid to Italian soldiers wounded in the war. It is estimated 500 Italians are scattered throughout the valley.

More than 40,000 sheep will be shipped from Yakima ranges in the immediate future to points in the northern part of this state and Montana and Idaho, where they will go on the forest reserves.

Sheep will soon be seen grazing on the Capitol park and state house lawns, Olympia, to replace the lawn mowers. Commissioner Benson has donated the sheep, the wool to be sold at the end of the season for the Red Cross.

A thoroughbred stallion belonging to J. A. Willis of Ritzville, which contracted rabies, was examined by Dr. Donaghue of Ritzville and a veterinary surgeon of Harrington, and after the examination the animal, valued at about $2000, was killed.

The Anti-Tuberculosis league of Okanogan county was recently organized with Mrs. George W. Lee of Okanogan, president; Frank M. Dallam of Oroville, vice president; Mrs. W. C. Gresham of Okanogan, secretary, and C. M. Davidson of Okanogan, treasurer.

Robert Lenocker is the gardener in the family of D. A. Lenocker of Ruff, Wash. The garden consists of about one-fourth of an acre and produces onions, beets, peas, parsnips, carrots, radishes, lettuce and cucumbers. About one-tenth of the supply of the family's food is raised in the garden.

H. E. Robinson of White Bluffs reports a garden 100x150 feet, the same size as last year. He raises all the principal vegetables, plants in succession crops such as corn, carrots, radishes, peas, lettuce, etc. About 30 per cent of the year's supply of food is furnished by the garden. As to the best gardener in the family Mr. Robinson says he is the "goat."

M. W. Hodgson of Orient has one-half an acre in garden besides one acre in potatoes and one acre in carrots. One-half of the living is raised in the garden, while their eggs and milk furnish another fourth, or better, of the year's supply of food. The products consist of peas, turnips, lettuce, radishes, beans, corn, beets carrots, cabbage, tomatoes, and potatoes. He makes about three plantings during the season.

The county commissioners of Thurston county have sent a certified copy of the resolution appropriating $35,000, to match the $35,000 from the federal government for the Olympia-Camp Lewis paving project, to the state highway commissioner. This formality places the commissioners on record as accepting the terms of the federal aid road act, which provides that the county will match, dollar for dollar, the federal funds for the road.

You do not have to convince the visitor to Camp Lewis that horses are still demanded for war purposes. One of these declares that "everywhere one can see corrals, wagon houses and hay sheds and quantities of equipment. There are warehouses and silos at the stock yards where horses are loaded on trains and unloaded. There are great quantities of grain and hay stored in the warehouses and sheds and more is constantly coming in, for it takes 125 tons a day to feed the horses in use here. At present about 1800 are out in a field back of the remount station feeding on green forage."

# Castor Bean

## Long Growing Serson Is Needed

By E. G. SCHAFER.

It is expected that the federal government will require large quantities of the castor bean for war purposes. Since their requirement along this line has become known, numerous inquiries have been received at the State College of Washington concerning their probable success in Washington and methods employed in their cultivation. The following explanation received from the United States department of agriculture will show how the government demand for castor beans is being cared for. "The chief signal officer of the army, Washington, D. C., has contracted for a large acreage of castor beans throughout the southern states. The entire acreage allotted has been contracted for. No contract was written for less than 100 acres, since small contracts would involve too much government supervision."

In order to produce castor beans successfully it is necessary to have a long growing season and a warm climate. Where the crop is grown the following cultural methods are suggested for its production. The land should be prepared by plowing, followed by disking and harrowing. A seedbed which is suitable for corn, spring wheat or oats would be satisfactory for the castor bean. Seeding should be delayed until the soil is well warmed up and danger of frost is past. Where only a small area is to be planted, they may be put in by hand. The rows should be spaced about four to five feet apart and the seed planted in hills about four feet apart in the row. About three seeds should be planted per hill at a depth of one to two inches. When the plants are five to six inches tall they should be thinned to one plant to each hill. The cultivation of the castor bean should be very similar to that of other intertilled crops.

It would not seem that the climatic conditions of Washington would be suitable for castor bean production, except possibly in the valleys of lower altitudes where there is a comparatively long growing season. Their value, however, has not been proved even in the districts where they would most likely be successful.

# Farm Garden Reports

"All of us" are the gardeners in the family of Otis Robinson of Lantz. Only a small amount of the family's food supply is furnished by the garden. The garden consists of radishes, lettuce, onions, peas, beans, some parsnips and carrots. Mr. Robinson writes. "This dry part of Washington is not very favorable for gardening unless you can do some irrigating. Expect to plant a good patch of spuds, as they are our best garden fruit."

James Bowerman of Rosalia has a larger garden than last year, having this season about seven acres in small garden stuff and about seven acres in potatoes. He raises onions, peas, beans, carrots, beets, cabbage, potatoes, corn and turnips. Plants peas, turnips, potatoes and corn two or three times. About two-thirds of the year's supply of food is furnished by the garden.

All but groceries and flour are produced by T. Merriott on his one-sixteenth acre of garden at Kennewick. The garden is smaller than last year, having had to drop out of growing for market on account of age and too many strawberries and other work. "Wife" is the gardener.

H. B. Dennis of Addy has a larger garden than last year, about one-half an acre. All kinds of vegetables for the family use are planted and a good share of the living for the family comes from the garden. Mr. Dennis himself is the gardener of the family.

Cantaloups, asparagus and strawberries constitute the bulk of garden truck and fruits raised on ten acres by J. H. Hampden of Hover. About one-half of the supply of food for the family for the season is furnished by the garden and "Dad" is the gardener.

Potatoes, onions and melons are planted on eight acres by M. Schuster of Kennewick. Clarence Schuster is the gardener of the family.

Other garden reports will follow.

### Buys Fine Ranch.

A Younggren of Seattle has purchased the Dober ranch in the Valley Heights district near Prosser. This is one of the most valuable ranches in the district. The consideration was $31,000.

# Farm Test Plots Are Simple.

By HOMER A. COLLINS.

A soil analysis is still supposed by many people to be an exact statement of plant food, having much the same place as the balance sheet of a factory. The experiment stations are discouraging this implicit faith in soil analysis, and are pointing the way to a more dependable test of available soil fertility—namely, the use of test plots by the farmer. This test work in the fields is the only conclusive demonstration, in any case, and why should not the farmer do the work himself?

The requisites for a series of test plots are really very simple, being merely several plots of equal area, where soil, moisture, and previous yields have been as uniform as possible. With limited plots of this kind one can safely experiment by methods that are too risky and expensive to use on a whole field. Each plot can be anywhere from 1 to 16 square rods in area, eight being very convenient as it is one-twentieth of an acre.

There should be at least five experimental plots, so that the effect of lime, nitrates, potash and phosphates, singly, can be determined when compared with the untreated or check plot. With more plots than five, various combinations, such as nitrates and phosphate, lime and potash, or even three of these soil foods or amendments, can be worked out. The effect of green manure and barnyard manure can be tested in the same way.

Needless to say, the time of seeding, rate of seeding, cultivation and all such cultural details should be exactly the same for all plotes, unless cultural methods themselves are the subject of the test. This is extremely important.

At the end of the season, some results will show unmistakably, as lime might do on acid soils, while others will be harder to detect. In each case, however, the farmer will have something definite on which to base his calculations as to the profit in using fertilizers. False conclusions may sometimes be arrived at, but if the field has previously yielded uniformly and all the plots have been treated similarly, with the exception of the fertilizer, the results should be accurate.

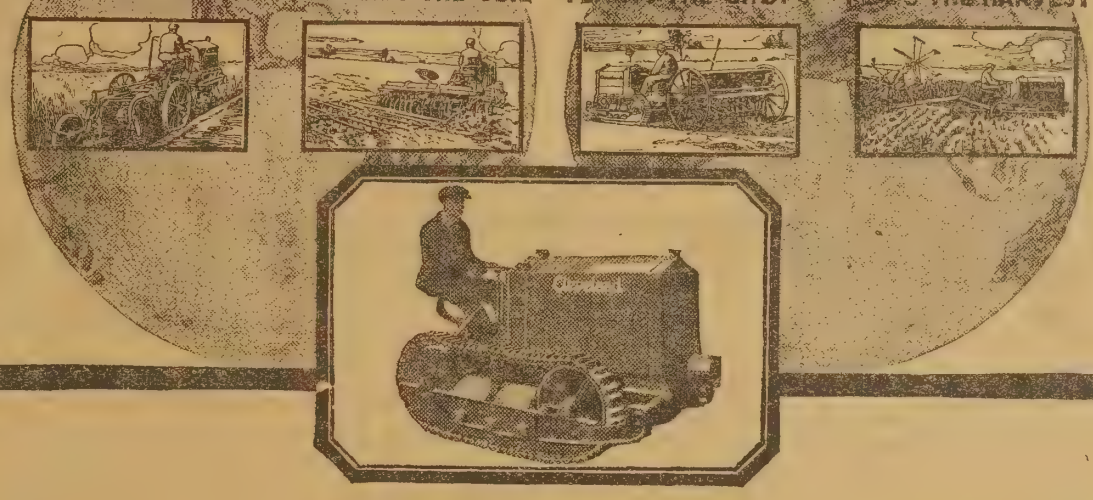
# Pulling Together

## Forget Local Disagreements

Never in the history of Spokane county were so many of the usual neighborhood disagreements—envyings, jealousies and bickerings of all kinds—never were these put into the background and forgotten as they have been during the last 30 days. This is the word I get from Frank W. Guilbert, who has been in charge of the war campaigns throughout the country, especially the liberty loan drive.

"Inside of 30 days we have driven 1600 miles, held 56 meetings, at which 1600 people were present. It made no difference where these meetings were held, in churches or schoolhouses, or grange halls, or any other place, the people have gathered together, forgetting the past, and pressing on toward the mark of their high calling in these momentous days of the world war. The Red Cross work has been especially influential in getting everybody into the harness."


# The Tractor for all the World




ALL year 'round utility characterizes the Cleveland Tractor. It performs its varied duties regularly, season by season. It is a "man-of-all-work."

It plows. It harrows. It plants. It reaps.

And it does all of these things *faster* and *better* than was possible before.

But that isn't all. It does the thousand and one other things that require mechanical power. It pulls your manure spreader. It runs your saw. It operates your pump. It cuts your ensilage. It drags logs and lumber. It pulls road machinery. It does practically everything that horsepower and stationary engines can do. It develops 12 horsepower at the drawbar for hauling and gives 20 horsepower at the pulley for stationary work.

The Cleveland Tractor plows 3½ miles an hour—eight to ten acres a day—which is equal to the work of *three* good men with *three* 3-horse teams.

*It travels on its own endless tracks which it lays down and picks up as it goes along.*

It operates easily over gullies, ruts, and uneven ground of all kinds. Because of its 600 square inches of traction surface it goes over sand, gumbo, mud and slippery clay without packing the soil, without sinking, miring or floundering.

The Cleveland weighs less than 3200 pounds and is so small that it can be readily driven under and among small fruit trees.

It steers by the power of its own engine and will turn in a twelve foot circle.

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The Cleveland Tractor was designed by Rollin H. White, the well known motor truck engineer—and is manufactured under his supervision.

He has designed the track for long service. The sections are constructed to prevent filling or packing with mud and protection is provided to prevent dirt and mud from falling into the track. The sections are joined with hardened steel pins which have their bearings in hardened steel bushings.

**Cleveland Tractor**

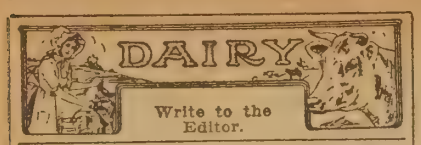
Gears are protected by dust-proof, dirt-proof cases and are of the same high quality as those used in the finest trucks. Materials used throughout are of the best.

Every step must be taken this year that will speed up farm work—that will enable machinery to replace muscle—that will help produce—and increase harvests.

The Cleveland Tractor is already bearing a big share of the war burden. Farmers are producing larger crops because of the Cleveland—*and are making greater profits.*

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**THE CLEVELAND TRACTOR CO., Dept. BK, Cleveland, Ohio, U. S. A.**




A. B. NYSTROM, Editorial Contributor

# Shortage of Ships

## Bad for American Dairy Industry

As the Farmer has noted in previous issues, the shortage of ships has resulted in considerable demoralization to the dairy industry of the United States. For lack of ships, stocks of condensed milk and cheese have been accumulating, and that exerts a depressing influence on prices paid to producers.

A similar problem has arisen in Canada and is being solved by governmental action. Advices from Ottawa say that the dairy produce commission, which is composed of members representing the British food ministry, the Canadian department of agriculture, the Canada food board, the producers and the trade, has been authorized by the British government to act for it in handling the exportable surplus of Canadian cheese, condensed milk and butter, and the make of the entire season of 1918. The price authorized for cheese is from 22 to 23 cents per pound. The price of butter will be determined as soon as there is a surplus available for export. It will be on a basis of parity with the prices of cheese and condensed milk.

It is pointed out that the chief advantages to the cheese and dairy industry of Canada under this arrangement are the assurance of a regular market at a fair and reasonable price for the whole output, regular shipments even under the present shortage of tonnage and the financing of a trade of about $40,000,000.

The only alternative method of disposing of the cheese of Canada would leave it open for the British ministry of food to purchase such quantities as they would require from time to time, and that without any assurance that they would purchase the whole quantity available for export. We have seen from experience in the United States that this latter plan is unsatisfactory.

Meanwhile our government should either enter into a similar working arrangement with our allies for the disposal of the American surplus or cease urging the American people to consume less milk, cream, butter and cheese. If we can not be provided with sufficient ships and allied markets for the present surplus, increased consumption in this country is the only means of stimulating and sustaining the industry.

# Premature Calves

## Straw Is Found Disturbing Factor

It is a pretty good idea to stick to approved methods of feeding stock. There doubtless is much more to be learned about feeds and feeding, about physiologically balanced rations, and yet as stated by a good authority: "Energy and proteins are the nucleus of good ration construction and calculating their proper proportion as prescribed in the standards should be continued. It will in the majority of cases bring success." As the same authority declares, the complete ration of the future will include more than protein and energy, it will mean "a proper mineral content, an absence of poisonous materials, an adequate quantity of vitamines and possibly things yet to be discovered."

It has already been demonstrated that the wheat plant can not be relied upon to furnish adequately the nutrients needed for a growing and reproducing heifer. In addition the grain carries a toxic material tending to pull the animal down. Wheat grain and wheat straw can be coupled by alfalfa hay or corn stover and probably other good roughages such as clover hay, thereby supplying the mineral deficiency and at the same time aiding greatly in overcoming the toxic effect of the wheat grain.

Rations made wholly from the oat plant will be incomplete and the offspring produced by the continued use of such a ration will be dead or weak. The straw is the disturbing factor. Due to its low mineral content the overabundance of a material like wheat straw in the ration is an important factor in premature births. While it is well known that considerable trouble from contagious abortion is often met in dairy districts, it should also be recognized by breeders that it is possible to produce dead or weak premature calves from the improper selection of feeds. The use of good roughage solves the problem.

### Salvation of Dairy Business.

Some communities are looking to the cow-testing association as the salvation of the dairy business. I believe that cow-testing association records, properly applied and studied, will solve nine-tenths of the questions that come to the dairyman. Those records should mean more than just being able to get $50 more for old Brindle because of the 300 pounds of butterfat which she produced in one year, says F. M. Colcord of the Washington State college. How about that heifer calf from Brindle and the new bull which you just purchased last fall? There is a sire with a record as long as our present "Liberty days," and you say you sold that calf for $10? Again, studying the cow-testing association records would show you that a heifer calf from a good cow and a poor bull is no better than a heifer from the poorest cow and a bull of strong breeding. These things must be studied and there is no better way to study them than to sit down with the county agent after the year's records are in and interpret the figures as they are, keeping in mind the breeding as represented from a certain bull that was used as well as the cows that stand at the top of the class.

### Italy Saves Paper.

Every household in Italy saves all the odd bits of paper. These are soaked in water and kneaded into balls then put in the sun to dry. They will serve to give a little heat later on. Walk down a fashionable street in Milan and you will see pyramids of these paper balls in the balconies of the houses of the rich.

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To make into beef, fats, hides.

Raise calves on Lilly's Calf Meal. It takes the place of milk because it has all the necessary elements for calf nutrition.

It is not only a scientific, but it is common-sense food, endorsed by Pacific Northwest dairymen everywhere. Dealers sell it.

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In answering advertisements please mention this paper.

# Veterinary

Dr. S. B. Nelson

**Mare Has Pole-Evil.**—I have a mare that has pole-evil on her head and I have tried many remedies, but can not cure it. Please let me know what to do for it. J. A. M., Red Bluff, Cal.

The best treatment at the present time is what is known as Williams' operation, which consists in making an incision lengthwse at the top of the head through the pole-evil area and taking out a portion of the top of the skull, so as to give free drainage. Any competent veterinarian can perform this operation for you.

**Wind Puffs.**—I have a mare that has wind puffs on her ankles, which make her quite lame at times. How can I take them off? Also, how are potatoes for hog feed? Better cooked than raw?—E. G., Driggs, Idaho.

Try raising the mare on her heels, by lowering the toes and putting on a little thicker heeled than toed shoe. At the same time you might, if you have the time, spray her legs with cold water for 10 or 15 minutes daily, and then rub them dry. The wind puffs are due to straining in hard pulling or hard traveling. There is not much difference between cooked and raw potatoes, when the cost of cooking is considered.

**Bottle Lambs Bloat**—Will you please tell me what causes my bottle lambs to bloat? The bottles are always thoroughly scalded and aired. The milk, too, is absolutely fresh, being given to them right from the cow. The lambs are about one month old. After they die the skin seems to be rotten and they sometimes burst.

F R. M., Elliston, Mont.

I regret that I am not able to tell you what causes your bottle lambs to bloat. Supposing that you try cuting the amount of milk feeding in two, and add to it a tablespoonful of lime water at each meal. Maybe that will help.

**Cow Is Dumpy**—Can you tell me what to do for my cow? She freshened April 13 and was on good alfalfa hay, but she was poor and gave two and one-half gallons of milk twice daily. Now on grass she keeps running down and will eat shorts only once in a while. She seems dumpy and has lost in milk. She has a whitish discharge from her eyes like milk in the corners.

J. T.

Grangeville, Idaho.

Give your cow one ounce of compound tincture of gentian in a pint of water once daily for a week or so. If her trouble is only an indigestion this will aid her and tone her up. If it is something more serious you will need the service of one of your local veterinarians to diagnose the trouble and give you definite advice for the specific trouble.

**Growth On Neck**—I have a heifer that has a growth on its neck just below the jaw. It has only been a week since I noticed it. It was about the size of a tea cup and hard and seemed to be very sensitive. At first I thought it was an absess, but it remains as hard as when I first noticed it. Will you kindly inform me what it is and if it can be cured? O. J. H.

Ilwaco, Wash.

It is possible that your heifer is affected with lumpy jaw. If it is at all possible you ought to obtain the services of a veterinarian to make a personal diagnosis of the trouble. As there is a possibility of this being the trouble you should not take any chance to have the tumor break and scatter the disease on the place. Place the heifer somewhere in local quarantine, so that she will not expose other cattle if you have them or the cattle of your neighbors. The disease is sometimes amendable to treatment, especially in the early stage that its now, if it is lumpy jaw. That is, by removing the tumor carefully and then packing the cavity with cotton, soaked in a tincture of iodine and leaving it there for 24 hours. Then daily inject the wound with tincture of iodine, giving the heifer daily internally one and one-half grams of potassium iodide in a pint of water night and morning for a week. Stop treatment for a week, continue for a week and then give her the last week's treatment. This has sometimes given beneficial results.

**Loco Weed**—Will you please advise me what to do for horses that are locoed? My horses are young mares six years old and are not troubled with loco very badly. A SUBSCRIBER,

Belfry, Mont.

The first thing that is to be done is to remove your horses from the pasture where it is impossible for them to obtain the weed, which many authorities believe causes loco. The weed, which is generally called the loco weed is the wooly loco or astragalus mollissimus. The general treatment consists of giving the animals a purge, preferably of raw linseed oil, about one quart. Feed hay and grain and then administer to them about one ounce of Fowler's Solution of Arsenic once daily on the grain. But remember that the principal treatment is to remove them fro mthe cause, which very likely is the wooly loco.

**Pigs Should Exercise.**—I have six small pigs, about two months old, and I keep them in the box stall. One died and the rest look sick and stagger. They eat very little. I also feed boiled potatoes and a little skim milk.—J. A. S., Friday Harbor, Wash.

Turn your pigs out for exercise and see that they get it. Feed some rolled or cracked oats with the skim milk. Lessen the amount of boiled potatoes. Your pigs are on entirely too wide a ration to grow and do well.

I have a colt about 8 months old that rubs and bites itself. It bites its sides, tail and hind quarters. It has a very heavy coat of hair and is not in as good flesh as should be, but has a good appetite. It is well fed on a variety of oat, timothy, alfalfa and clover hay, also chopped oats.

C. H.

Colville, Wash.

I would suggest that you give your colt two tobacco solution baths when the weather gets warmer. Make just a light brown solution by heating tobacco, or better tobacco stems if you can get them, and use a solution warm, washing the colt all over. Then blanket it carefully so that it does not catch cold. Repeat in about a week if possible. I would be glad to hear about it later.

**Bone Spavin**—I have a horse that has a bony growth on one hind leg that causes him to be quite lame. Our veterinary here said it was a bone spavin. He gave me some kind of red blister salve. It blistered but didn't kill the spavin. Since then I have used iodine and it has done no good. Would appreciate any cure you would recommend.

J. F. M., Anacortes, Wash.

Depending on the age of the spavin depends the probability of your horse getting well. I believe the best thing that you can do is to have your veterinarian thoroughly fire the animal and blister it and give it three-months' rest. I do not believe that simple blistering or the application of iodine or any light liniment will be of any value, but I do believe in a thorough firing and blistering with rest.


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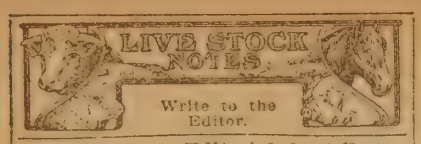
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E. J. IDDINGS, Editorial Contributor

## Ration for Sow

### Rich in Protein Before Farrowing

To the Editor: I have a sow that will farrow soon and, as far as I can tell, is in good health, but she will root until she finds a small stone, about the size of a peach pit, and chew on it until the froth runs out of her mouth. I think there is something she wants, but I do not know what it is. I have given her charcoal. I feed her cooked apples and potatoes, just a small amount of dishwater and a handful of bran and shorts twice a day. F. J. H., Chewelah, Wash.

The above letter was referred to C. E. Howell, assistant professor in animal husbandry at the Washington State college, whose reply follows:

**Professor Howell's Answer.**

The condition of the sow referred to above is due to the fact that she is not supplied with a sufficient amount of mineral matter. It is not uncommon for pigs that are kept in confinement or are not fed the proper kind of a ration to show a craving for charcoal, rotten wood, soft brick, and will often greedily devour many other seemingly unnatural substances. This lack of mineral matter is usually a lack of lime or phosphorus. This craving on the part of the animal should be satisfied by supplying the materials which contain these mineral elements. A good method of supplying this demand on the part of the hog is to keep before the animal a mixture of the following ingredients. Epsom salts, 3 parts; copperas, 3 parts; sal soda, 3 parts; common salt, 3 parts; sulphur, 1 part; wood charcoal, 2 parts; and bone meal or ground rock phosphate, 1 part. These ingredients can be bought at any drug store. They should be mixed well and kept before the hogs at all times.

This mixture is valuable not only in correcting the lack of mineral elements, but it also aids in keeping the animals healthy. It will aid in preventing the heaves in many cases, and is especially valuable as a preventive for worms.

The ration which you are feeding the sow is lacking not only in mineral matter, but also is deficient in protein. The brood sow, before farrowing time, should receive a rich protein ration.

One of the most satisfactory rations for a brood sow just before farrowing time is corn, 50 parts; shorts, 25 parts; bran, 15 parts, and tankage, 10 parts, by weight. This mixture should be fed in a 20 per cent ration. That is, if your sow weighs 200 pounds, she should be given four pounds of the mixture per day. If she weighs 300 pounds, then she should get six pounds of the mixture per day. In communities where the above named feeds are not readily available and are very high in prices there are quite a number of other feeds that can be fed with a fair degree of success. A ration composed of six parts of barley, three parts of bran, and one part of tankage will prove quite satisfactory.

In this sow's ration you are feeding both apples and potatoes. Both of these feeds are very bulky in nature, and you would have to feed quite a large quantity in order that the sow might receive very much nourishment from them. The handful of bran and shorts which you are giving twice a day was not sufficient for a pregnant sow. Apples and potatoes can be used to good advantage if they are given with judgment. Raw potatoes should not be given to pregnant sows. The potatoes should always be boiled and thoroughly cooked before being fed. The bitter tasting water in which the potatoes are cooked should be thrown away. This is especially true if the potatoes are decayed. All the sprouts from stored potatoes should be removed before they are given to hogs. They contain a poisonous compound and so cause serious trouble if they are given to swine.

One of the most economical ways of producing pork and of maintaining brood sows is to run them on a forage crop. Alfalfa is considered one of the very best forages for swine. The pregnant sow should be allowed all the alfalfa hay that she will consume, or else she should be allowed to run in an alfalfa pasture. If alfalfa pasture is not to be had then clover, vetch, or a combination of peas and oats, or rape and oats, make a very satisfactory forage.

The sow should not be fed very heavy the day before farrowing. The sow should not be given anything at all on the day she farrows. All that she will require is plenty of water to drink. The water should not be too cold, or it may produce chills in the sow. The sow should be gives a bran mash about 24 hours after she farrows, and then her ration should be carefully increased until she is getting the same kind of feed which she was receiving before farrowing. The sow should be back on full feed by 10 days or two weeks from the time she farrows.

If the brood sow is one that shows any inclination to eat her pigs then she should be watched very carefully at farrowing time. As a precautionary measure the afterbirth should be removed immediately from the pens so that the sow will not eat it. This has often been the cause of starting sows to eating their pigs. They would get the taste of the afterbirth and this would start their desire for eating the flesh and they would start in on the little pigs. If, after these precautionary measures have been followed out, the sow shows an inclination to eat her pigs it has been recommended that such an animal should be fed about 3 pounds of salt pork cut in strips. I have never had any experience in handling sows that ate their young pigs, but the above treatment has been recommended upon good authority.

Some of these suggestions which I have made to you may sound rather expensive, but if by these methods you are able to raise a larger and a stronger litter of pigs it will be very much more economical in the long run than if you feed a poor ration and run the chance of raising only a small litter, or perhaps of losing your sow.

## Purebred Cattle in Brazil.

The director of the bureau of animal industry of the Brazilian department of agriculture announces that the government is about to expend 600 contos in gold (about $300,000 United States currency) to assist in the importation of purebred cattle for breeding purposes, in orders placed by the several state and municipal governments, by the agricultural societies and experiment stations. In no case will the contribution of the government exceed 50 per cent of the cost of the animals plus the freight paid.

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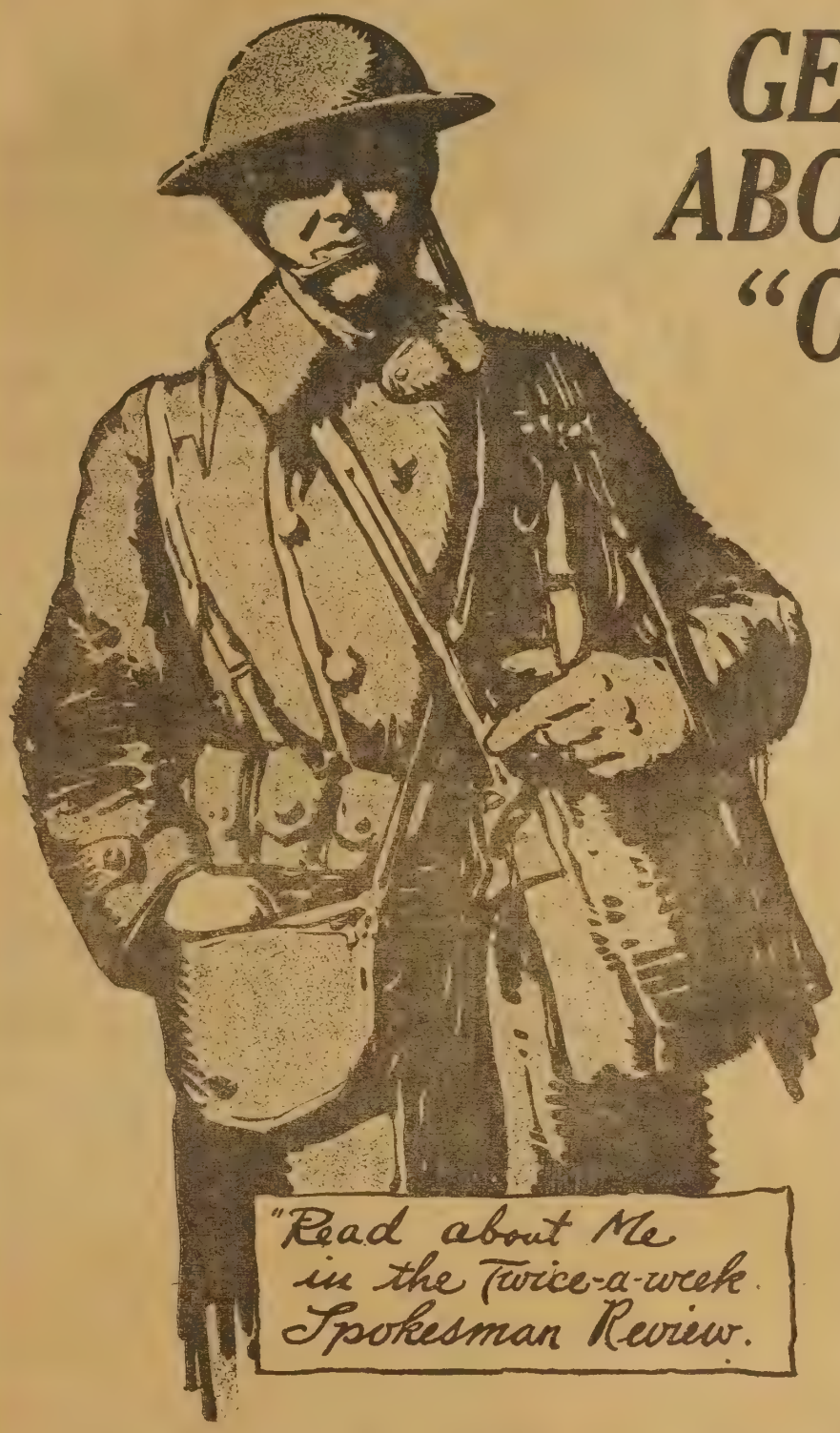



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JAMES DRYDEN,
Editorial Contributor.

## Scaley Leg.

To the Editor: Can you tell me how I can cure my chickens of scaley leg; also tell me the cause? I have a perfectly clean henhouse with no mites in it, also have a large place for them to be during the day. I applied turpentine twice, but it does no good.

MRS. A. L.

Northport, Wash.

Scaley leg is caused by a small parasite or mite under the scales of the fowl's leg. To cure it the mite must be killed. Take a tomato can, fill it with kerosene, then hold the chicken's legs in it about half a minute. The oil works up under the scales and kills the mite. Two or three treatments will be necessary if the case is bad. The legs should also be rubbed with grease or vaseline to soften the scales so that they can be removed without causing bleeding. J. D.

## Receives 500 Baby Chicks.

Marvin S. Howell, who two years ago started a poultry plant north of the college campus, at Pullman, Wash., has recently completed a good sized addition to his poultry house and has received a shipment of 500 day-old chicks from a Seattle hatchery. Mr. Howell now has a building 64 feet long and 14 feet wide, divided into five compartments, four for chickens and one for the storage of feed. He expects later to build concrete foundations under the building to provide a basement.

## Should Raise More Geese.

There is a notable lack of the production of geese in the northwest in the opinion of many who are interested directly or indirectly in poultry production. This is due probably to the fact that few persons are familiar with the habits of geese.

On considering the growing of this bird it must be remembered that he requires pasturage rather than the concentrated feeds required by chickens and ducks. He is an herbivorous animal. He does well in an alfalfa pasture or in a pasture of mixed grasses. In winter time he may be fed on such foods as caggage, kale, turnips, mangels and the like, but he does not require flesh foods.

The care of goslings for a few weeks after hatching is an important matter. For a week or 10 days they should have limited feeding. Stale bread soaked in milk is a good feed to begin with or they may be fed a mash of bran and shorts mixed with milk two or three times a day. At the same time they should have before them fresh, tender clover or alfalfa cut up so that they can readily take it. At the end of a week or 10 days they may be allowed to go on the pasture and very shortly no grain feed will be needed.

As to the breed of geese that should be selected by those desiring to produce some of this kind of poultry, the Toulouse or the Embden are the two best varieties.

## Encourage the Children

Recently a 10-year-old girl showed me her flock of chickens on her father's farm and said that she would like to make some changes in the way she hatched the chicks. I asked her what the trouble was, and she said she wanted to make "some improvements." I had to draw a plan on paper for her for hatching coops for hens, and she was going to get "Dad" to have them made. This Dad fortunately was one of those who did not grudge spending a dollar or two to encourage the children in such things. Too many farmers would either laugh at the idea or grudge the dollar as money thrown away, forgetting that it is not merely a question of dollars and cents but of character building; yes, character building. Poultry raising may be made a means of developing character and citizenship, and the love of poultry may help keep the boys and girls on the farm. J. D.

## Motors in War Times

The manufacturers of motor cars have unanimously voted to reduce the output of new cars 30 per cent this year. This will result in a shortage of passenger cars and although it will not make it impossible for those wishing new cars to secure them, it very likely will necessitate placing orders considerably in advance of time when delivery is wished.

In curtailing the output of new cars as a war measure auto manufacturers are unquestionably making a most commendable and patriotic move, since it is to conserve labor, war materials and coal. It does not follow, however, that those who contemplate buying a new car this season should hesitate—and particularly is this true of farmers because of the utility value of the motor car and the motor truck in present day farm life and farm operation.

To the family on the farm the motor car is not merely a "pleasure car." It is in a great majority of cases an economic necessity. It is the best means of conserving time, and the time element is vital to maximum production.

The motor truck, too, is coming more and more to be considered as a piece of modern farm equipment. A light truck solves the question of rapid transportation from farm to market, and sometimes permits doing in one day what team and wagon would require several days for. Most trucks are sturdily built and if given as careful attention as a team can be made to give many years of good service.

Those who can make either a passenger car or a truck enable them to accomplish more, now, when the maximum of accomplishment is called for, their own judgment should be used independently of what may be said by those who are inclined to be pessimistic.

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A Safe, Speedy and Positive Cure for Curb, Splint, Sweeny, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunches from Horses or Cattle.

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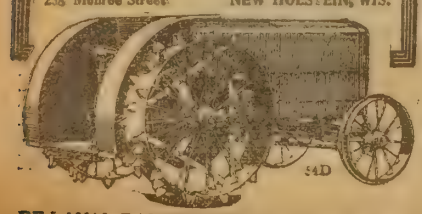
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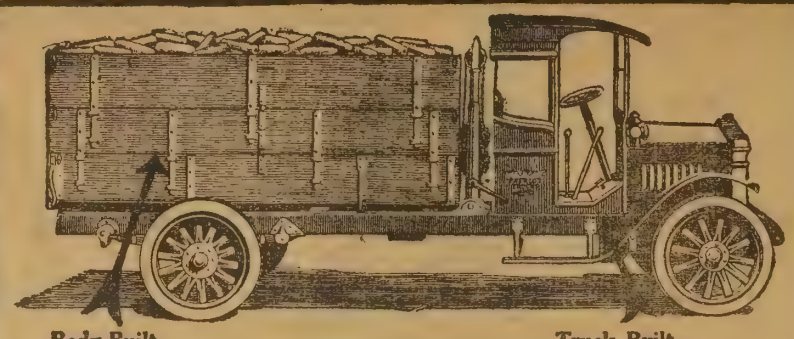
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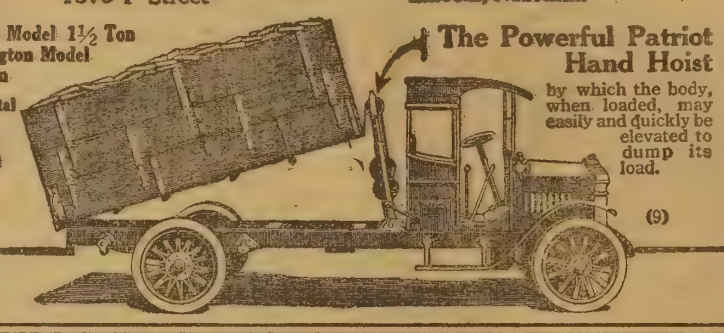
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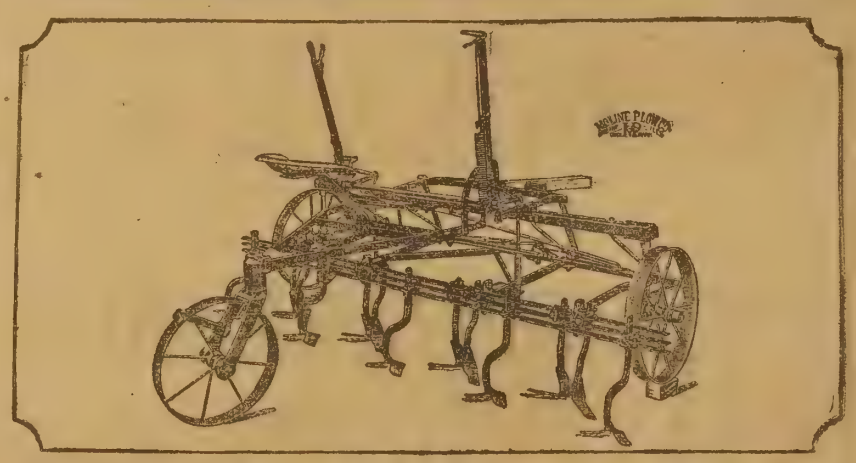
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GRANVILLE LOWTHER,
Editorial Contributor.

## SPRAY ORCHARDS

### Fruit Inspector Has Authority.

Recently I wrote an article on the damage to orchards being done by rodents, mostly by gophers. At that time I did not have in mind that the work of destroying them, or at least diminishing the damage they are doing, might be better done under the direction of the regular fruit inspector than under the present system, where each individual assumes the responsibility for himself and has no care whatever as to the results in his neighbor's orchard. I have been thinking the matter over and upon more careful reflection I have concluded that the damage by these pests is of sufficient importance to warrant a general effort for their extermination. If that effort is carried on it can not be done successfully by individuals. The reason why individuals can not successfully do the work is that there are a great many orchards owned by nonresidents. These owners, many of them, live long distances away. From my own personal knowledge there are orchards owned by men in Seattle, Tacoma, Spokane and other places from 100 to 200 miles away from the orchard. These orchards are cared for either by hired men or renters, and in a majority of cases are sadly neglected. There are a few exceptions, but generally they are not well irrigated, not well cultivated, pruned or sprayed. There is no effort in most cases to destroy gophers, field mice, ground squirrels or other rodents that injure the roots of the trees. Then, too, there are owners of orchards who have not properly estimated the damage that is being done to their trees by these pests. The result is that they not only damage the orchards of these careless owners and nonresidents, but they migrate to adjacent orchards and make extra work for those who are determined to control them. It is the same philosophy exactly that has caused the passage of a law in the states of Washington, Oregon, Idaho and several other states, requiring every orchardist to spray his trees as a safeguard against codling moth, scale, aphis and other pests. If these trees are not sprayed the pests infect the orchards adjacent and damage the man who is careful and industrious to eradicate them.

Under the law as it now stands the fruit inspector, in case the owner of an orchard does not spray, may do the work at the proper time and charge it up to the owner as a tax against the land. My belief is that if his duties extended so as to include gophers and other pests not now included, that it might be beneficial. Up to the present time this question has not been considered of enough importance to include gophers with such pests as scale and codling moth, but I have a growing conviction that it would be beneficial to do so. G. L.


Your 1918 Crops



will be worth more to you in your dairy output if you have a silo. On the contrary if you are without silage, every time you milk you may know that you lose! With

WEYERHAEUSER SILOS

you will not lose, but your crops will give up every cent's worth of their value. Exclusive features are embodied in the "Weyerhaeuser" which make it without question the silo "best for the West!".

Write for Our Silo Literature

Weyerhaeuser Timber Co.
Everett, Wash.


## TO DESTROY GOPHERS.

### No Pest So Damaging in Orchard.

Among the rodents there is no pest so damaging to orchards as gophers. Rabbits will peel the trees, but it is not difficult to build a fence of closely woven wire, that will keep them out. Field mice injure the trees but are not so large or vigorous as gophers. The gopher burrows in the ground. It eats the tiny roots of the trees and cuts off their food supply in just the proportion that the roots are destroyed. Rossetted top is a symptom that gophers have been at work on the roots. There are other cases of rossette, but this is one. If alfalfa is grown in the orchard, the gopher will feed on its roots and the tree roots will not be so greatly damaged.

I have tried several methods for their destruction; in fact I have tried almost every method that I could find recommended, and that, which to my mind is the easiest and most effective, is to put poisoned wheat in their holes and cover them over first with a bunch of grass or leaves and then with dirt.

The full formula is given by Professor H. E. Wilson.

The ridges and mounds of earth thrown up by moles are often incorrectly supposed to be the work of gophers. A few careful observations will show the difference.

The gopher piles up the dirt on the surface of the ground, building a mound by the addition of load after load on top of that already deposited. A mole simply heaves up the dirt from beneath, forming piles which show radiating cracks. Associated with these piles are the surface ridges, made by the animal when ranging in search of food. The feeding runways of the gopher never show in surface ridges.

The natural food of the gophers consists of the fleshy roots and underground stems of various plants. They are busy at almost every season of the year, unless the ground be frozen hard, but are more so in the spring and fall.

#### Raisin Formula for Gophers.

To prepare raisins to poison gophers, says A. G. Craig, take a raisin, punch a hole in it with a toothpick, then place a large grain of strychnine into the hole, and roll the raisin in the fingers until the strychinine is broken up and mixed with the pulp of the raisin. Prepare as many raisins as necessary for the day.

The gopher's mound is almost always located on a short run from the main run or hole. Dig down at the mound until the branch is located, and follow the branch until the main run is reached. Place two treated raisins in the run on each side of the branch run and cover the hole with a shingle or chip and soil. If any new mounds are thrown up, repeat the treatment. We have found it a sure remedy. G. L.

#### Mule and Wife Both Sick.

"You may put in the paper that my fine mule is sick," said a farmer to a reporter. "By the way, I almost forgot this: My wife is under the weather. I tell you, I'm worried about that mule. That critter cost me real money."—Atchison Globe.


CHANDLER SIX
$1595

Unusual Economy Without Sacrifice

THE Chandler Six has always been famous for its economy of operation—economy without the sacrifice of reserve power, without the sacrifice of roadability, without the sacrifice of beauty of design.

Thousands of Chandler owners all over America tell of gasoline mileage of fifteen to seventeen miles per gallon.

Tire mileage of seven thousand to nine thousand miles per set of tires is commonplace among Chandler owners.

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In the ownership of a Chandler Six you will possess a really great automobile—great not merely from the standpoint of economy of operation and maintenance, but, even more important, from the standpoint of mechanical excellence and daily performance.

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Bodies of most attractive design and of unusual comfort are mounted on the Chandler chassis.

*Seven-Passenger Touring Car, $1595*
*Four-Passenger Roadster, $1595*
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Choose Your Chandler Now

There are Chandler dealers in all principal cities and in hundreds of towns. Some one of them is in position to show you the newest Chandler models. Write us today for catalog and folder "How the Chandler Checks with High Priced Cars."

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Ryde's Milk Mash

Is the same as new milk for little chicks. No indigestion or bowel trouble when they are fed on this. Ryde's milk mash is the recognized standard.

25 lbs. $1.65 50 lbs. $3.10 100 lbs. $6.00

INLAND SEED CO. SPOKANE WN.



BERRY BOXES

Write at once, giving your requirements, of

BERRY HALLOCKS
BERRY CRATES
TIN TOPS

SPOKANE SEED CO.
First Ave. and Lincoln St., Spokane

# Seeding Is a Month Early

## Spring Work Not Hindered by Labor Conditions in Spokane County. Food Production Is an Accepted Duty




GARFIELD, Spokane County, Wash., May 5.—Judging from the efforts of the farmers to put into crop every available acre this spring, I would say all are patriotic. With a light crop last year and a very early spring this year, a heavy crop is expected and hoped for. Last year seeding started generally on May 9. This year by April 9th everybody was seeding and through by the first few days of May, over a month ahead of a year ago. Labor conditions have not hindered the spring work. There was plenty of help and plenty of machinery, although both were high. The outlook right now is very favorable for a bumper crop and we are going to get it.

ROY G. ADAMS.

### Cattle and Crops Look Well.

SOUTH BEND, Pacific County, Wash., May 1.—Generally speaking there is no lack of patriotism among the farmers. Raising food seemed to be the accepted duty and there are more gardens this year than last. The month of April was very favorable; four inches of rain and several really warm days with only very light frosts. Spring oats are up and winter rye is ready to cut. Price of milk and butter has dropped a little. This month the state veterinarian will return to test over four hundred head of stock for tuberculosis. This was instigated by the county agriculturist who held a public demonstration with the lungs of a tubercular animal. A couple of our younger farmers have added a tractor and a milking machine to their farm equipment. Pastures are in splendid condition and the cattle are sleek and well fed. Boys and girls are organizing for club work. Women are doing lots of farm work because there is such a great demand for labor in the spruce camps and ship yards.

MRS. WINNIFRED BUCKINGHAM.

### Plant Light Potato Acreage.

SHELTON, Mason County, Wash., April 27.—The ready response to the call of one year ago to speed up and employ every available acre in crop production is not quite as apparent now as then. Not that there will be less acreage devoted to gardening and general cultivation, but that less attention will be given to the production of potatoes. The result of the ardor of one year ago was an over production and a consequent lower price than was generally anticipated. Many counted on selling at $30 per ton, but were obliged to not sell or accept $22 to $25 at which contracts had been secured to supply a demand at Camp Lewis. Some fed potatoes to stock, cows especially, with fairly good results. Some estimate a return of $30 or more have in this way been realized. The second farm tractor has lately quietly entered Mason county and with a two-plow attachment been set to turning the soil. The first farm tractor to enter the county came some years ago. It was found to be too big and unwieldy for the service required so was driven to the shed and since has been inactive.

SCOTT HAYES.

### Country Needs Rain.

LA CROSSE, Whitman County, Wash., May 1.—Seeding has been finished for some time and most fields are up and have a good stand. Some of the last seeding, however, is badly in need of rain to make a profitable stand. Fall wheat wintered well and as a rule is a good stand. The dry cold weather has retarded the growth and weeds will be bad in some instances. Possibly this has been and still is the longest drouth on record for this season of the year. Scarcely any rain has fallen since March 13th, except a few snow flurries. The soil has been in fine condition for seeding. Plowing summer-fallow is well under way, but soil is drying so badly that it leaves the ground in poor condition. Pasture, and in fact everything, would be greatly benefited by a good rain. A number of frosty mornings cut fruit crops short.

M. E. SCHRECK.

### Show Patriotism by Planting.

PORT ORCHARD, Kitsap County, Wash., May 1.—Farmers are well awake to the situation that a tremendous task is ahead of them in supplying food for the coming season and are proving themselves patriotic by laying aside all disgruntled ideas and getting in and digging. Dissatisfaction with the U. S. department of agriculture can very safely be rated as minimum in this county. The weather this spring has been ideal for the planting of crops and the soil has worked up nicely. A little handicap has been felt in the scarcity of farm labor and shortage of teams. The outlook for crops is exceptionally good as reported by the farmers. Live stock are doing nicely. Poultrymen still continue to drop out of the business on account of prices, both received for their product and paid for feeds.

C. B. SPRAGUE.

### Crop Prospects Good.

COLFAX, Whitman County, Wash., April 15.—Farmers as a whole in this county are alive to the necessity of maximum production. I know of none who are intentionally failing to increase the production. The spring has been exceptionally favorable to the seeding of greater acreages than heretofore and farmers generally have taken advantage of it. While it is early to state with any degree of certainty I can say that prospects are very favorable for a heavy crop. Live stock generally are in poor flesh. This county is essentially a wheat producing one. I should say roughly that it will cost $20 per acre to produce and market a 30-bushel yield of wheat. I will cost almost as much to produce and market a 15-bushel yield.

F. L. KENNARD.

### In Need of Rain.

METHOW, Okanogan County, Wash., April 22.—Everyone is overlooking everything in the hardship line, and doing all they can to help win the war. I can not say the spring is favorable to seeding; it is too dry. Labor and the high price of machinery are more or less of a handicap. Work is more slighted than it would be if labor was more abundant. The outlook for crops is fairly good. The fall wheat needs rain badly as it was put in in the dust last fall. The fields are now too solid for the wheat to do well. This community raises a good many thousand bushels of wheat, but is no wheat country like the Bend or Palouse. As to what it will cost to raise it, all depends on the rainfall, two inches of rain in May and two inches in June is good for 20 bushels per acre; half an inch in May and June is good for five bushels. The outlook for stock is good as to price.

CHARLES GRANT.

### Planting Over; Need Rain.

CHIMACUM, Jefferson County, Wash., April 30.—Most of the farmers are working over time and Sundays to grow and produce food enough to meet the government's needs. At present we need rain as it is very dry, and most of the planting is well under headway. A large acreage of peas has been planted, and also other grains such as oats, barley, etc. Wheat has not been planted to a great extent here. The farmers are planting enough feed for their cows next winter so as to cut the buyers of high priced grain.

JOHN VAN TROJEN JR.

### Plant Larger Acreage.

COLVILLE, Stevens County, Wash., April 24.—There is a positive determination to grow the maximum crop of grain this season and this is already well under way. This county can not be rated as a heavy grain producing section, but conditions have been favorable for seeding and more than the usual acreage is undoubtedly going in.

E. E. ELLIOTT.

## SHEEP INDUSTRY

### Principal Changes Suggested.

The sheep industry in the United States must either adjust itself to the changed economic conditions or continue the decline which has been its portion in years past. Such is the conclusion reached in a report issued on the sheep and wool industry by the committee on statistics and standards by the Chamber of Commerce of the United States. The principal remedies suggested are, first, the use of sheep grazing of the agriculturally worthless and cheap cut-over timber lands of the north, northwest and south; second, the more general and systematic raising of sheep on farms, where sheep raising has been hitherto neglected largely because of frontier competition; and, third, continued use of the great ranges of the west to their full capacity. The cause of the decline in the number of sheep on the western ranges is ascribed to the growth of dry farming, and the consequent reduction in the grazing range. The industry has come to depend on that range, and it has not yet adjusted itself to the idea that it will now have to seek part of its range elsewhere, on cut-over land and on farms.


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**Nitrate of Soda**

It works while fruit buds are forming.

*Send post card for "Cultivation of Citrus Fruits"*

**DR. WM. S. MYERS**
*Chilean Nitrate Committee*
**P. O. Box 248, Berkeley, Cal.**



**SILAGE MUST PACK**

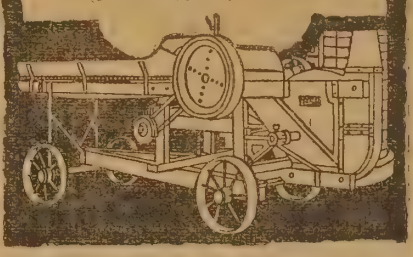


**Perfectly Cut, Thoroughly Packed.** That's the secret of good ensilage. Nels Skar, Rice Lake, Wis., says: "It's worth $100.00 to anybody to fill his silo with a Rowell, because the evenly cut ensilage packs and cures well, avoiding air pockets." Hundreds of similar letters praising the

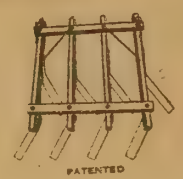
**ROWELL AUTOMATIC SILO FILLERS**

The labor-saving silo filler. No danger of accidents. Made in seven sizes. The Rowell Line built for Safety, Durability, Efficiency. Complete stock machines and parts carried at distributing points to insure quick delivery. Free illus. Catalog.

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**Help Is Scarce**

The Jones Weeder will save 50 per cent of labor; cultivate 30 to 40 acres of summer-fallow per day and do it better, instead of 10 to 20 by the usual method. Couples up like a harrow; use as many sections as wanted. For booklet, prices, etc., write

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**ICE FOR FARM AND DAIRY**

Make your own ice next winter with **Latham's Automatic Ice Molds.** Is the ice house ready? Write for descriptive folder to **Warren Latham, Spokane.**


In answering advertisements don't fail to mention this paper.




**You Can Rid a 160-Acre Farm of Gophers in One Day With This Machine**

Most effective method—is a quick, sure and economical way to everlastingly exterminate squirrels and gophers. Costs $12.50 and will pay for itself many times over the first season. A 10-year-old boy can operate it. Write for descriptive book and full particulars to

**QUINCY HILL, R. R. 4, Palouse, Wash.**



**A PROFITABLE SILO**

Send for Silo Book Today




If you raise stock or keep dairy cows here's a silo that will put dollars in your pocket every year.

It is built of thoroughly seasoned, selected staves, hooped with strong billet steel hoops, bound with malleable lugs—has an anchorage system that makes it staunch and firm even when not filled and hinge-rod doors that can't sag, swell or freeze into the frame. At least

**$20**

is saved you by reason of the fact that the Inter State is well painted when you get it.

Use the Coupon

**McGoldrick Lumber Co.**
Spokane, Wash.

TEAR OFF AND MAIL TO US
McGoldrick Lumber Co., Spokane, Wash.
Gentlemen: Please send me your 1918 catalog and oblige
Name .....
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# What Does It Mean?

## *Germany Wonders About Foch's Plans*

What are the plans of General Foch, the supreme allied commander?

This question is being asked not only by the folks at home in this country and her allies, but by the German war lords. For nearly three weeks there have been no heavy attacks by the Germans, who were stopped by the powerful defense of the British and French and Americans. With the vital ports on the English channel only 25 miles away, and with the capture of these ports the admitted object of the great drive of the Teutons, this delay means that the war leaders of Germany realize that they are not strong enough to force their way through without further preparation of some kind.

On the other hand, what does the silence of the allied leaders mean? Why is no counter blow struck? These questions are the subject of much speculation everywhere, but it seems evident that the same condition in the allied armies that existed when the German drive began is sufficient to explain it in part. The allies can not afford to make the sacrifice of men that would be required to carry on a great offensive. This does not mean necessarily that the allies are weaker than the enemy. It may as well mean, and does seem to mean, that it is better strategy to give up some territory for the time being to the invaders than to allow the allied strength to be reduced by heavy losses of men. This policy leaves it for the enemy to make the attacks, and to sustain the heavier losses that always are felt by the attacking army.

In the meantime, General Foch is apparently reorganizing his armies into one great army, something that has not heretofore been done. Up to the opening of this great campaign the English army has been a separate unit, the French a separate unit and the American a separate unit. Now they are being coordinated into one great, centrally directed force, with General Foch, the great French strategist, in supreme command.

During the lull in the fighting that has been noted for the past two or three weeks the allies have been strengthening their positions as much as possible, and preparing in all ways possible for the renewal of the drive that is expected. The Germans have been preparing to make that renewal or to defend themselves against an attack from the allies—just which is not certain, but the evidence seems to be that it is for the renewal of the drive. Germany can not wait. It is now or never. With successful warfare being waged against the submarines and with the American army daily growing stronger and more numerous on the battlefront, the allies will gain strength from this day until the war is won. That is why Germany launched the stupendous attack when she did, and that is why she must succeed with it now or not at all. Hence, it does not seem reasonable that her armies are now waiting for the allies to attack unless she is convinced that a great allied attack is being planned and must prepare for defense rather than for offense, as has been the case up to this time.

### Block Submarine Bases.

A second attempt, partially successful, has been made by the British navy to block the German submarine bases on the Belgian coast, Ostend and Zeebrugge. It appears probable that the Germans will be compelled to use home ports from which their sea piracy will be practiced in the future. It is also reported with seeming authenticity that the British have carried out a colossal scheme of mining the entire North sea against the submarines, so that their operation from the German ports will be extremely hazardous. The method of blocking the Belgian bases was the daring entrance of the harbors by British war ships, which were then sunk across the channel by their own crews. The ships used were out of date, only partially serviceable vessels, and they were loaded with concrete to make their sinking easy and their resting firm and secure after sinking.

### Many American Soldiers.

Secretary of War Baker, in a statement last week, made it clear that more than 500,000 American soldiers had been transported across the ocean to France since January 1 this year. He asked the newspaper men not to speculate as to how much the number exceeded 500,000, making the following simple and guarded statement:

"In January I told the senate committee that there was strong likelihood that early in the present year 500,000 American troops would be dispatched to France. I can not either now or perhaps later discuss the number of American troops in France, but I am glad to be able to say that the forecast I made in January has been surpassed."

### Raise Railroad Pay.

The federal railroad wage commission has recommended to Director General McAdoo, who controls the railroads for the government, that the pay of railway employes be materially increased. The increase would go only to those employes who were receiving during the last month of last year less than $250. If the recommendations were adopted it would be on the basis of January 1, 1918, and would give employes approximately $100,000,000 back pay since that date and would increase the pay roll for 1918 about $288,000,000 over that of 1917.

### May Raise Draft Age.

The possibility of raising the draft age from 31 years to 40 years is being discussed in military and congressional circles. Provost Marshal General Crowder in charge of the operation of the draft law and the military committee of the house of representatives have the matter under discussion. It is not probable that any action will be taken on the matter for some time to come, however.

### Probe Aircraft Work.

An official investigation of the activities of the aircraft board under the war department has been authorized at Washington, D. C. Serious charges of graft on the part of some of those in authority in connection with the construction of airships for war service have been made. Considerably more than a year ago congress appropriated $640,000,000 as a fund for the construction of war planes. Among the charges made against the board, in addition to those of graft, are those of inefficiency and needless delay in supplying the American army and its allies with sufficient airplanes on the battle front in Europe.


## BIG DEMAND FOR H-L-F SILO THIS YEAR

***Prices Going Up June 1st***

Demand for the H-L-F Silo, a widely popular, double-wall silo, has broken all records this year. More silos have been sold so far this year than during the whole of 1917.

"The silo surely gives satisfaction," said Willis Brindley, inventor of the H-L-F Silo, who has charge of silo business for Hewitt-Lea-Funck Co., the manufacturers. "Our biggest sales this year are in the neighborhoods where the H-L-F Silo has been in use for several years, and many owners of 1914 and 1915 models are buying the improved 1918 model to take care of increasing herds."



Hewitt-Lea-Funck Co. figured on an increase in business this year, and contracts for steel hoops and other hardware were made last fall; now, however, it is necessary to make new contracts to cover business received after June 1st, at big increase in cost of raw materials. Also, in line with government war orders, the company has increased wages and shortened the working day, thus greatly increasing factory expense.

The only possible result is an advance in the price of the silo, which was announced as effective June 1st. Customers who order in May will save $25.00 to $40.00.

"We regret very much the necessity of raising the price of the H-L-F Silo," said Mr. Brindley. "One thing that has made the H-L-F Silo so popular has been its low price. In spite of the advance effective June 1st, our price will still be very low, and remember that we are selling a double-wall silo. Of course, we are advising our friends to buy during May and save $25.00 to $40.00."

H-L-F Silos are sold direct to the farmer, at one profit over cost. The H-L-F Silo Book entitled, "All About Silos," will be sent upon request. It shows prices and terms in plain figures. Anyone needing a silo this year should send for the book at once, and order before June 1st. Farmers who already have H-L-F Silo prices are advised to order immediately.

**Hewitt-Lea-Funck Co.** 658 Funck St. Sumner, Wash.

P.S. Early orders are already delivered, or on the way. We hope to handle all business, but wise customers will place silo orders now, so as to be sure of getting a silo. H-L-F Co.



## All-Pacific Northwest Power Farming Demonstration

**Pullman, Wash., May 29, 30, 31.**

Under auspices State College of Washington, demonstrating all lines of labor-saving machinery.

**TRACTORS, ENGINE PLOWS HARVESTING AND TILLAGE MACHINERY, FARM TRUCKS, FARM POWER EQUIPMENT**

Arrange to attend—fare and a third round trip on all railroads—certificate plan—take a receipt from your ticket agent. Splendid camping facilities. For further information write Dept. Agricultural Engineering, State College of Washington, Pullman, Wash.

**KNOW POWER FARMING**



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**WOOL, PELTS, MOHAIR, CASCARA BARK**

We do the largest consignment business in the northwest. Equally fair treatment on all shipments, large or small. Returns at full market value mailed same day as goods are received. Trial shipments wanted and appreciated, but are handled as regular shipments and not at inflated values.

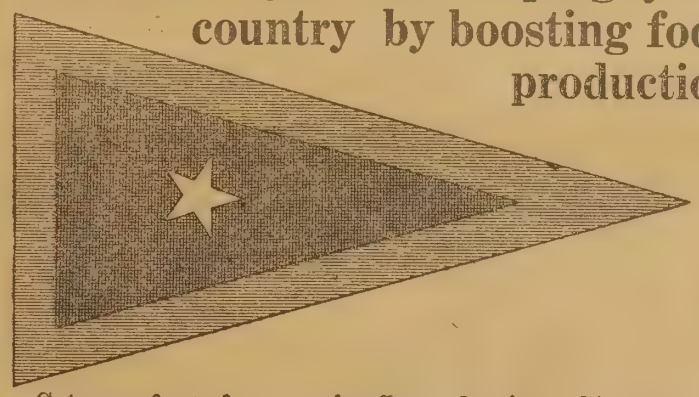
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## FARM SERVICE FLAG

**Display one of these pennants to show you are helping your country by boosting food production**



Get one of our farm service flags, showing a big star to represent your farm and smaller stars for each member of your family who is helping produce food. This is the big, new idea in service flags. It is distinct from the war service flag; as it applies exclusively to the farm. Described as "appropriate" and "attractive" by the department of agriculture. In securing your order state the number in your family who are aiding in food production and we will supply the correct number of stars without extra charge.

**AWARDED FOR SUBSCRIPTIONS**

Offer No. 1.

***Paper Pennant***

A pennant, 9x22 inches, printed on heavy enamel paper in full colors, will be postpaid to any one securing and sending in ONE NEW subscription to this paper. (One year 25c, three years 50c; 5 years $1.)

Offer No. 2.

***Felt Cloth Pennant***

A pennant, 9x22 inches, made of cotton bunting (just the thing for the auto, front porch or the flag pole), will be mailed postpaid to any one sending us THREE SUBSCRIPTIONS TO THIS PAPER. Secure three of your neighbors under our special bargain rates and receive a bunting "Farm Service War Flag."

**THE WASHINGTON FARMER**
**SPOKANE, WASHINGTON.**

# UNLUCKY LOOIE MEETS A FORTUNE-TELLER




# BOOT SENDS PUP AWAY TO MEXICO



# MUGGSY MISSES THE BULLSEYE, BUT MAKES A TEN-STRIKE


















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Address all communications concerning thrift or war savings stamps to the Washington Farmer, War Savings Department, Room 26 Review Building, Spokane, Wash.

Remittances may be in any form desired, including personal check

The Washington Farmer, War Savings Department, Room 26 Review Building, Spokane, Wash.

Gentlemen: I wish to invest in ..... U. S. government thrift stamps at 25 cents each. (number desired.)

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Amount enclosed $.....

Full Name .....

Town ..... State .....

R. F. D. No. .....

I have already bought.....Stamps and have a..... (kind of stamp) (card or certificate)

# Red Cross Week

(Continued from page one.)

hereby proclaim the week beginning May 20, 1918, as "Red Cross week," during which the people of the United States will be called upon again to give generously to the continuation of the important work of relieving distress, restoring the waste of war, and assisting in maintaining the morale of our own troops and the troops and peoples of our allies by this manifestation of effort and sacrifice on the part of those who, though not privileged to bear arms, are of one spirit, purpose and determination with our warriors."


**THE SELF-OILING WINDMILL**

has become so popular in its first three years that thousands have been called for to replace, on their old towers, other makes of mills, and to replace, at small cost, the gearing of the earlier Aermotors, making them self-oiling. Its enclosed motor keeps in the oil and keeps out dust and rain. The Splash Oiling System constantly floods every bearing with oil preventing wear and enabling the mill to pump in the lightest breeze. The oil supply is renewed once a year. Double Gears are used, each carrying half the load. We make Gasoline Engines, Pumps, Tanks, Water Supply Goods and Steel Frame Saws.



Write AERMOTOR CO., 2500 Twelfth St., Chicago



# 90 Bushels Per Acre

Mr. A. J. Woolen writes: "I arrived in Canada with practically nothing. Nevertheless I made good, and my first crop of oats went on an average 90 bushels to the acre."

Mr. Woolen is only one of thousands of farmers who have made good in Western Canada. Government statistics show the average yield of oats per acre is 53⅓ bushels; of wheat 30 bushels.

| | |
|---|---|
| Wheat | 30 bu. |
| Oats | 53⅓ bu. |
| Potatoes | 148 bu. |
| Barley | 37 bu. |
| Rye | 27¾ bu. |
| Flax | 13⅓ bu. |

This is the 1915 average per acre from Government statistics.

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CANADIAN NORTHERN

**Canadian Northern Railway**

A. R. Brostedt, D. F. & P. A., 605 Hastings St., Vancouver, B. C.


## THERE'S A DIFFERENCE. Ayer Tells What Farmer Is.

W. B. Ayer, state food administrator for Oregon, on his way to the national capital, attended a conference of state food administrators for Washington, Oregon, Idaho and Alaska, in Spokane. He is a profound admirer of Mr. Hoover, regarding him as "up to now the great man the war has brought forth."

Mr. Ayer gave his definition of the words "farmer" and "agriculturist." "The farmer," he says, "is the man who makes his money in the country and spends it in town, and the agriculturist is the man who makes it in town and spend it in the country." He added that he himself is an agriculturist.

B. F. Bicknell, state food administrator for Idaho, told of the potato flour mill recently built at Meridian, Idaho, the only plant of the kind in the Pacific northwest, and, according to the New York Journal of Commerce, the largest and possibly the only exclusive potato flour mill in the United States.

The mill, which was equipped at a cost of only $10,000, will have an output of 150,000 pounds of potato flour a day, or five carloads. It will run until all the surplus potatoes in the state have been used for flour production. Sound potatoes of all sizes will be used, small being as good for the purpose as large ones. By the evaporation process the bulk will be reduced about five times, or five pounds of potatoes will make one pound.

Potato butter is another product recommended by the British ministry of food as a cheap substitute for butter, being made in England at a cost of less than 10 cents per pound, as follows: "Peel the potatoes and boil until they fall to pieces and become floury. Then rub through a fine sieve into a warmed basin 14 ounces of potatoes and add two ounces of butter or margarine and smooth and then mold into rolls and keep in a cool place. To make the appearance approvable use butter coloring, and if intended to keep beyond a few days, a butter preservative should be added."


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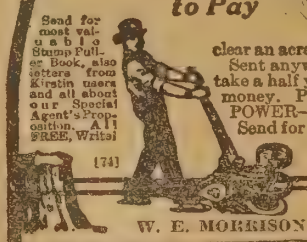
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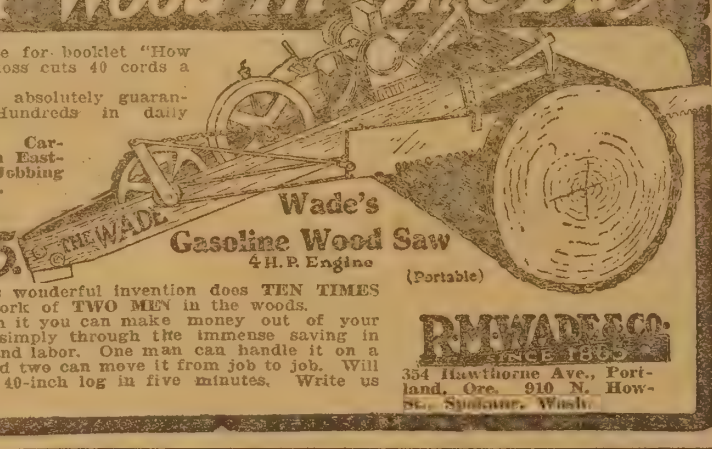


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# The Fighting Soul---A Tale From the Bunch Grass

By JOE L. ASHLOCK

You fellows won't believe me when I say I was sickly when young? All right; don't, then. But it's so, anyway. I was sickly till I met up with my first and greatest physical trainer—who was a horse, Nigger, they called him; and because he was an outlaw on the range, and a whale of a horse, they also called him Nigger the Great.

When I was the sickly boy I spoke of I wanted to be a cowboy—and that ambition of mine was a family joke. My legs were like clothespins, and I had arms like straws. My hands were a good deal like the claws of a chicken—yes, I looked a lot like a cowboy.

Dad used to let me ride Old Chub, a tame squaw pony, down to Tony Richard's stock ranch five miles south of our home, where I could see the boys rope wild horses and ride them. Sometimes I stayed at Tony's several days at a time so that I could get up at 4 in the morning and ride out in the hills after the saddle bunch that had been turned out to grass the night before.

One morning I met up with Nigger the Great. The black rascal headed a band of cayuses fully as wild as himself. During the night he and his bunch had mixed up with our saddle band, and the whole bunch stampeded when I waddled up on Old Chub. I could catch them about like a mouse.

Back at the ranch the lid blew off when I told my story. Tony swore that this thing had to stop, and so on. Jap Garland wanted to know how to stop it. Tony told Jap he might walk out in the hills and sprinkle salt on Nigger's tail and then lead him in and give him a good feed of hay. Everybody got mad, especially the boys when Tony remarked that this Nigger outlaw was a real horse and it took real punchers to run him in. The fellows were rather outspoken, and to cool matters down a bit Tony offered $10 to the first man to put a rope around Nigger's windpipe.

Well, our fellows borrowed some horses of the Triangle Dot ranch—and you should have heard the other punchers guy them. They offered Richards' boys tame cows, pigs, fat old squaw ponies, and so on, and wondered if they dared trust one of us with a live horse. The boys were so sore that by the time they had their own band corraled they were ready to shoot Nigger the Great on sight. They didn't do it for two reasons: first, it was hard to get within gunshot of him; second, each fellow wanted the $10 and had to take him alive to get it.

They got him, all right, and I and Old Chub were in on the finish. Six fellows riding in a half circle rose out of the bunchgrass one morning and went after the big black with their ropes. Nigger was a good field general. He saw right away that he could not break through the half circle of riders without getting tangled up in a lasso. So he straightened out his bunch and headed for the Grand Coulee wall where it was 800 feet straight down. That was the very thing the boys wanted him to do—they thought they could corner him on the wall land he wouldn't jump over.

That part of the plan I guess Nigger didn't see. He raced like the wind up to the very edge of the big gulf. Then he saw it and tried to stop. His hind feet slipped forward and he sat down on his haunches like a dog and slid right to the edge of the jumpoff. His head was hanging over it when he stopped. The fellows meant to get him or kill him, you see.

There he stood, swaying on the edge of the 800-foot drop—Valhalla on one side and six cowpunchers with ropes on the other. He could take his choice. Once I though he was going to make the Valhalla jump, for he bunched for a leap. Then he stepped back, and like a flash headed for the boys and their ropes.

If it hadn't been for Indian DeWitt the horse would have gotten away, for the other fellows threw wild. But the Indian closed in on him and centered the loop right over his head. The $10 was his.

I won't go into details. They are grewsome, and my sympathies were all with Nigger. It was not till many minutes later, when Indian DeWitt's horse had been dragged from its feet and the Indian unseated and the other fellows had gotten their ropes on the black fighter's legs and throat that he was brought to his knees.

The fight continued all the way to Tony's corrall. They got him there, though; but when they did I was crying my eyes out I was so sorry for him. Blood streamed from his nostrils, his windpipe had been strangled 20 times, and he was nearer dead than alive when they finally laid him in the dust with the rawhide sawing holes in his hide in a dozen places. Those fellows had no mercy, and they didn't see the great fighting soul of the horse at all—they saw nothing but an ornery black cayuse that had been stampeding their saddle band.

The whole thing was so bloodthirsty and cruel that it made me sick. I loved the big black for the fight that was in his heart; and I couldn't bear to see him tortured. So I went home the next day.

Having captured the outlaw, the boys began to plot against Tony. I have heard that they kept the fighter doped with chloroform when Tony was around. Others say they kept him partly paralyzed with whisky. Whatever they did, they finally got him fairly well broken, it seems, and right before Tony rode him single and double and drove him. All the while they kept talking about how gentle Nigger was getting. Tony was fooled.

He wanted to go to town one day, so Jap and Cal hitched Nigger to the buckboard, drove up and handed Tony the lines.

No one will ever know just what happened, for Tony won't tell. Nigger the Great was found 20 miles away on another range with 20 inches of one line still hanging to him. The buckboard was picked up a wheel here, a wheel there and a pile of splinters somewhere else. Tony, finding himself five miles from the ranch and 10 from town, walked back home, the maddest man you ever saw. The boys reckoned that Nigger was a real horse; and that it did take a real driver to handle him.

Tony got mad and swore he would fire every cowboy on the place. Cal Paddy got mad and told him to fire and be damned. Nothing more was said about the matter, and in a week or so after Nigger was recaptured. Tony sold him to a railroad contractor for $10.

The contractor got enough right away. He turned the big black out to grass, and by way of farewell threw a neckyoke at him. Once more Nigger was free on his native heath.

Gradually the black horse rounded up his outlaw bunch, and with other renegades was at large, an outlaw, a Robin Hood of the bunchgrass, so wild, so suspicious of all human beings that if you got within five miles of him on the level you had to start before sunup.

I suppose I might as well skip a few years while I was growing up and Nigger, loose and unclaimed on the range, was acquiring more cunning. He kept out of every one's way, and no one bothered him. To me he was a source of never-ending fascination and worship. Always I could see him, a heroic black figure swaying on the 800 feet height, weighing his chances. I imagined that he was the kind of a horse that the old Roman gods hitched to the chariots that they drove through the clouds. He appealed to every nerve that was in my body for all that was grand, heroic and desirable. I wanted to capture him. I had no more use for him than a pup for two tails or a fifth leg. But I simply wanted to make a conquest of this grand, heroic horse. My sickly body tingled from toes to hair when I thought of the day when I would be big enough, strong enough, sure enough in the saddle and quick enough with a rope to go after Nigger the Great and get him.

I laid my plans. Right away, I saw that I would have to do a lot of growing. I was shy a lot of muscle and bone and half the time had either the stomach-ache, the headache, or some other ailment.

I found somewhere, an old book that gave a lot of rules about eating and sleeping and exercise. I learned the rules by heart and lived by them day and night. I cut out pastry of all kinds, drank water between meals, scorned coffee and tea, drank lots of milk, ate eggs, went to bed on time and crawled out early, and took all manner of exercise. I lived by rule, day and night. Out in the hay-loft I fixed me up a little gymnasium, most of the things being home-made. I had ropes with rings in them to swing on so as to develop my wrists and arms and back. I started in to chinning myself on a pole. For a long time I could hardly lift myself off my feet with both hands. Finally I got so that I could raise myself to my chin. Now I can chin myself with one hand, which is going some.

I did these things because I knew it took a good wrist and arm to throw a rope. I did everything else I know of to develop muscle. I got up early in the morning and ran a mile or so, first at a dog trot, and later, at a swift gait. All the while I was growing, and will you believe it? I could fairly feel those aches and pains slip off of me and I began to take on muscle. Heavens, how I grew! Mother said I had a bigger appetite than our big, black hound, and that pleased me more than anything she could have said.

Of course I studied riding. I began riding well grown calves with a surcingle around their bodies for me to hang to while they pitched or ran. From calves I moved up to wild two-year-old steers, and from steers to young colts—that is, wild 2-year-olds. I practiced with a rope all the time. I swung the loop over my head by the hour, and threw it at posts in order to get distance in throwing. I threw it into the wind, with the wind, and sidewise on the wind. I threw it from the back of a horse standing, walking, trotting, galloping and running.

Every month or so I would ride down into the hills and take a look at Nigger the Great. Days and nights I stalked him, learning cunning from his cunning. In the night I often stole up to him, but never did I get closer than a hundred yards to him and his truant band, and two or three miles was the closest I could get on the level, in daylight. The wild horses seemed to have outposts and sentries all around. One horse would snort, and away they would go.

One morning I lay in wait by a trail that took Nigger and his wild band to water. My hiding place was back a little way in a small hollow screened by a clump of willows. I had noticed that on many mornings when it was hot and dry in the summer, Nigger and his band went that way for water. This habit of the wild herd fitted in with my plan.

By this time I was 18, and my years of diet and training with a single object in view had wrought a miracle. It had turned me from a sickly, pale-faced muscled fellow on the range; and I could ride with any and throw a rope with any, though no one realized it, for I had kept my training as a secret. The folks at home thought I had just outgrown my ill-health. They did not know that dream of mine about getting big and strong enough some day to go out and capture Nigger the Great.

While I watched by the trail that morning, I heard the pounding of hoofs; and just a little before the sun blazed out of the east the wild band galloped by in the cool morning light. This was the closest I had ever gotten to the outlaw bunch, and I was surprised. The wild black had no less than a hundred horses in his band, and I could see that many of them were in the 1400 class.

There was something grand about the way they rolled by with their hoofs pounding on the hard trail. I shook a little when I thought of the job I had cut out for myself. But I had been testing my strength and skill in various ways, and knew that I was ready to go at it.

I went down to Tony's and told him that I wanted to ride Boxcar out in the hills for a day or two. Tony was a bit puzzled, but said I could take the horse—the best trained saddle animal on the Richards ranch. He had about forgotten that Nigger existed, I suppose, considering that he owned him no more. I made no explanation.

The next morning I waited by the trail in the same place; and at about the same time, the wild band came by for water. I slid out a big loop in my rope, swung it a couple of times to make sure it wasn't kinked, and went after the band, right onto their heels.

All eyes ahead, the wild band did not see me at once. The rear horses saw me first, and they plunged forward, piling up on the front part of the band. This sudden jamming together from behind slowed up all the the horses, and in that brief second Boxcar moved like an express train. He shot right into the herd and wild horses surged away from him and climbed over each other to get out of the way.

Just for a second it was more of a pile-up than I had figured on getting into. I saw all about me the massed band with horses up to 1400 weight uprearing and climbing over the smaller ones. Some of them went down and were trampled. Boxcar went into the mixup like a snowplow, using his teeth and feet at the same time. Once the hard, bony sides of the range horses were squeezing my legs so tight that I though they would lbe pinched flat. In another instant I was in the clear, and right at the black outlaw's heels. In the general confusion, he had not seen at once what was happening.

I had been drilling myself for this fight for years. There was no reason why I should fail—I could rope and ride well enough, and Boxcar was no bungler. Just the same, when I saw the big black ahead of me with his mane beating the wind like a pirate's banner, there was a

(Continued on page twenty-three.)

## *"Only Don't Begin by Telling Us You Were a Sickly Kid"*

Quarterback Hardy extricated six feet of catlike brawn from the human pyramid which had engulfed him and stood waiting for the others to untangle. Twenty thousand Crimson rooters went limp. No gain! The Wolves had downed the ball in its tracks.

Again the tense battle lines were drawn up. "Signal!" muttered Halfback Jones, looking wonderingly at Hardy, whose gray eyes were fixed in a curious, fascinated way on the distant, sunlit clouds. And then again, "Signal, damit, signal!" hissed Jones.

Hardy's eyes came back to earth and in two short words he had snapped out the signal for a terrific off-tackle play. Chaos followed. Jones with the ball held tight slipped forward like a greyhound; a Wolf tackle came for him and was blocked off by Hardy; and then Jones was down at the bottom of the pile, digging his elbows into the ribs of a Wolf who was trying to pry the spheroid away from him. Twenty thousand people went still and tense while the official waded into the tangle and dug for the ball—which he found 10 inches over the chalk line, Jones, smiling happily, still curled around it.

The yell that went up from the tense thousands swept the field like a gale at sea, then died into utter silence as Hardy prepared for the goal kick. There was the thud of a cleated foot and the ball, rising like a bird, sailed between the uprights.

From grandstand, bleachers and sidelines came peal after peal of thunderous applause. Bands played. A sea of crimson pennants fluttered. Simultaneously a human tide poured down into the gridiron and the tired football players were caught up and borne away.

"Great luck you gave us!" yelled Jones to Hardy, as they rocked and swayed on the shoulders that bore them, "but what did you hold that signal for?"

Doc Bowles, head coach for the Crimson, repeated this question a few minutes later. "Fine playing, Hardy," beamed the coach, "but say—why the devil did you hold that last signal so long?"

Hardy evaded the crowd and was gone without answering, and the question thereby became magnified to the proportions of an enigma. Why had Hardy brought his team within 10 seconds of being beaten by delaying that signal?

Doc Rowles finally cut the Gordion knot. "Hardy," he said, "we've a right to be let into this weighty secret of yours—we had some interest in this game, you know. Why did you delay that signal?"

"You're right, I suppose," admitted Hardy. "It's a hard story to tell so that you'll understand, though—I'd have to start way back with the time when I was a sickly kid—and what's the use?"

"Lots of use," Doc assured him. "Only don't begin by telling us you were a sickly kid. You sickly—I smile!"

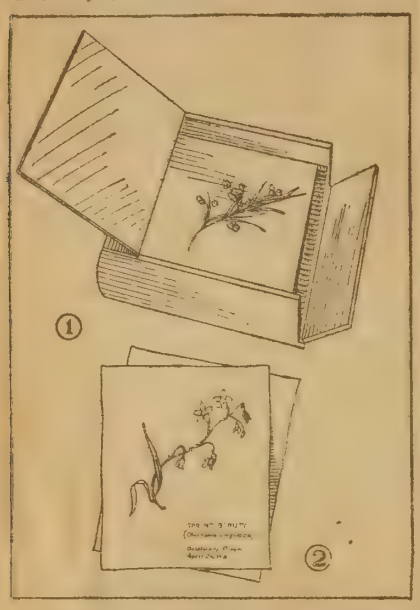
# Handicraft For Girls

By Dorothy Perkins

(Copyright by A. Neely Hall.)

## For a Herbarium.

You have all gathered wild flowers, but I wonder how many of you have a herbarium, or collection of varieties, with a record of both the common and botanical names, location where found, kind of soil, and other data. It is a splendid way to acquaint one's self with the flowers, plants and ferns discovered while tramping through the woods and across fields, and if you haven't yet started a collection, I hope




you will do so when the first opportunity affords. The work is fascinating, and your herbarium is something of which you will never tire and will always be proud to show to friends.

A 25-cent letter-file is better than a book to keep specimens in (Fig. 1), and the heavy, light yellow wrapping-paper used in butcher shops, cut up into sheets to fit the letter file is good material to mount specimens on. It is cheap and you can buy as much as you want, as you need it. By placing the sheets loose in the file, the specimens may be arranged according to their genus, and rearranged as new varieties are added.

In addition to the herbarium file, you must have a press. Don't use a pile of books. Make yourself a regular press, or ask brother or father to make one for you. Figs 3 and 4 show a practical press easy to construct, and Fig. 5 a working diagram. Make base board A 12 inches wide and 18 inches long, and nail the three cross strips B to the under side, one at each end and one in the center; and make the upper board C 12 inches square. Cut the hinge blocks D 6 inches long, three-fourths inch thick, and one and one-fourth inches wide, and bore a screw hole through each one-half inch from each end. By means of these blocks, hinge board C to A, being careful to locate all four blocks in exactly the same relative positions so they will work together.

Mount a flatiron upon board C. This can be done so it may be removed on ironing day, by driving nails into board B at the sides of the flatiron so the heads come down upon the base, as shown in Fig. 3, and providing a nail to drop into a hole at the flat end, as shown in Fig. 5. The flatiron can then be slipped between the nails, endwise, and locked in place by dropping the loose nail into the hole made for it. Double pieces of cardboard or tin beneath the nail heads, will hold the flatiron better than the heads alone (Fig. 3). The flatiron not only provides weight for pressing, but serves also as a handle for operating the

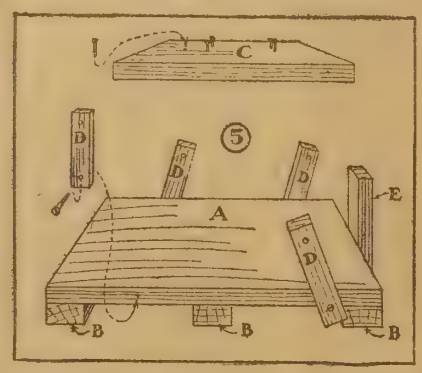



press. Nail block E (Fig. 5) to one end of board A as a stop for board C to strike against when the press is opened.

Newspapers are good for placing specimens between for pressing, as they are sufficiently porous, to absorb sap. A half-dozen or so sheets are none too many to place beneath and above each specimen. These should be replaced with fresh papers about once a day until the specimens have thoroughly dried and are ready for removal. Several sheets of specimens may be pressed at a time, one placed over another.

When ready to transfer from the drying papers to the herbarium sheets, daub glue here and there along the under side of each specimen; then lay the specimens upon the sheets in as natural positions as possible. Narrow strips of court-plaster lapped over the thick portions of stems will help hold them securely.

The name, place of finding, and other data, may be written or printed in the corner of each sheet, as indicated




in Fig. 2. Glue index tabs to the edges of your sheets, in the same way that letter-file indexes are put on, on which to letter the name of each genus, to simplify the finding of specimens.

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# Raise Own Potatoes

## Farmers Should Never Have to Buy

"It is a ridiculous proposition for a farmer to figure on buying potatoes, and for that matter he ought to raise a few to sell. But to raise potatoes on a commercial scale and expect to get more than $20 a ton is not good business."

This is a declaration of E. F. Benson, commissioner of agriculture for the state of Washington, in a letter written to a resident of Washington criticizing certain recommendations made by Commissioner Benson.

Mr. Benson warned the growers last spring against overproduction of potatoes, basing the warning upon the fact that as potato prices last spring were very high everybody would be inclined to plant as heavy an acreage as possible. Later he recommended that farmers sell their potatoes when they could get a reasonable price and not hold them for speculative purposes.

Relative to the government fixing a price on potatoes, Commissioner Benson told his critic: "It is not supposable that the government would fix a price on potatoes any more than it would on peaches, green corn, string beans or any other perishable crop. Such a system of state socialism would soon bankrupt the country and we might as well have kaiserism as a bankrupt country."

As to the price of $20 a ton, which Commissioner Benson considers a reasonable price, he says: "If a person can raise 10 to 15 tons to the acre, the price of $20 is amply sufficient. A person who can not raise potatoes and sell them at $20 had better raise something else which he knows more about or which his land is better adapted to produce. Be sure to understand me as talking about commercial crops. Everybody ought to raise the potatoes he needs for his own use, whether he can grow 10 tons or only five to the acre."

# Sidelights

### Wooden Leg.

"Well, after all," remarked Tommy, who had lost a leg at the war, "there's one advantage in 'aving a wooden leg."

"What's that?" asked his friend.

"You can hold up yer bloomin' sock with a tin-tack!" chuckled the hero.—Tit-Bits.

### Seeing Is Hearing.

Sergeant Major — Now, Private Smith, you know very well none but officers and noncommissioned officers are allowed to walk across the grass.

Private Smith—But, major, I've Captain Graham's oral order to——

Sergeant Major—None o' that, sir. Show me the captain's oral orders. Show 'em to me, sir.—Liverpool Post.

### Willie Was Up to Date.

"One beautiful autumn day," said the teacher, telling a story, "Little Red Riding Hood was walking along a path in the woods when she came to a sharp turn; and whom do you think she saw standing there, with a row of shining white teeth gleaming at her?"

Up went a little hand.

"Who was it, Willie?"

"Mister Roosevelt."

### Included All.

"An expert delivered an address yesterday on food conservation to several hundred fashionable women and a few men. He began by saying: 'Ladies and gentlemen, and—er—others.'"

"He must have intended a covert insult to somebody who was present."

"No. Several of the dames brought along their poodles."—Birmingham Age-Herald.

### Doing His Bit.

"I never hear you criticizing your neighbors."

"I haven't the heart to do it," answered Mr. Dubwaite.

"Most extraordinary."

"Not at all. The only neighbors I know well enough to criticize have two sons in France, and I feel it my patriotic duty to gloss over any little imperfections they may have."—Birmingham Age-Herald.

### What Mother Said.

"Nellie was entertaining Mr. Noble, and little Tommy was hanging about. At length Nellie told him it was time for him to retire.

"Oh, can't I stay up a little longer?" pleaded Tommy.

"What do you want to sit up for?" asked Nellie.

"Why, I want to see you and Mr. Noble play cards," answered Tommy.

"But we are not going to play cards," said Nellie.

"Why," said Tommy, "mother said you were. I heard her tell you that everything depended on the way you played your cards tonight.

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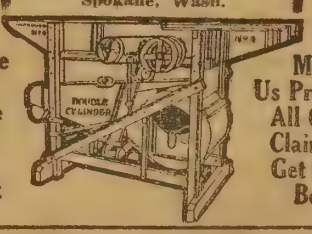
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# All the World's a Stage, and All the Men and Women Merely Players

## Filtered Air for Man and Beast



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The British gas masks have proved an able protection against the gas shells of the Germans, to the horses behind the lines as well as the men.

## Oh! What a Big Mouth




—Duluth Herald.

## Red Cross Chief.



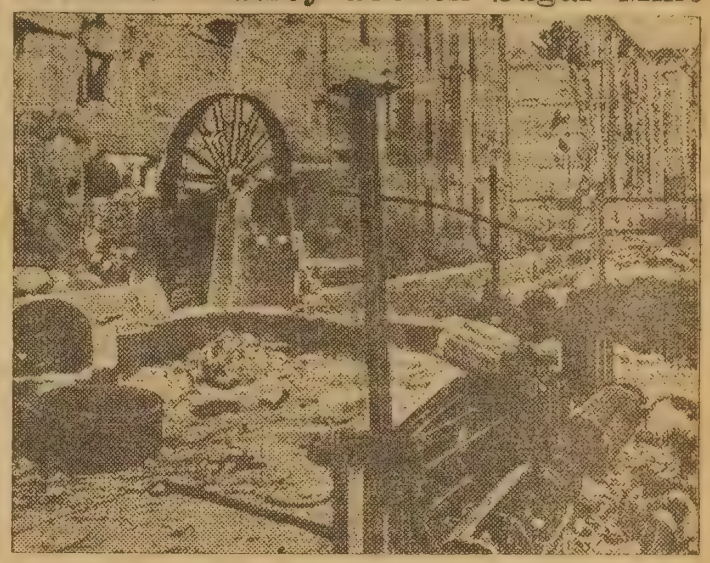
Dr. John H. Finley, president of New York State university, has been appointed head of the American Red Cross commission to the Holy Land, the object of which is to relieve the distress among the people of Palestine.

## Chaplain General.



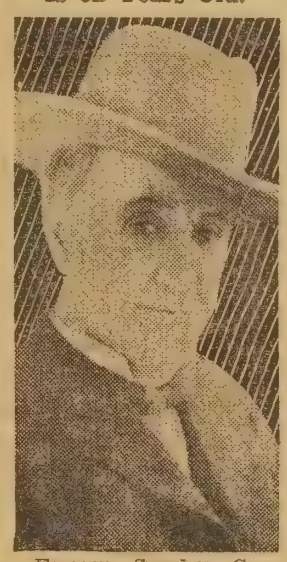
The above cut is of Bishop Patrick Hayes, who was recently appointed Catholic general of the United States army. The photograph was made from F. W. Wright's recent portrait of the bishop.

## Germans Destroy French Sugar Mills



Sugar production in France has fallen to less than 25 per cent of the pre-war output. This picture of a wrecked sugar mill shows one of the principal reasons for the decline. When German troops retreated from occupied portions of France they took pains to destroy virtually all of the sugar mills that would otherwise have assisted the French in maintaining their sugar stocks. That first wave of Teuton invasion was stopped in France after the Germans had established a battle line that cut off 203 of the 213 French sugar mills, as well as much land that had produced sugar beets. The official sugar production figures emphasize the French sugar needs which must be filled by American aid.

## Is 82 Years Old.



Former Speaker Cannon of Illinois was 82 years old May 7, and the occasion was made the subject for a demonstration by his colleagues. Representative Madden of Illinois, republican, called the attention of the house to the birthday anniversary.

## Will Eat No Wheat.



President S. B. L. Penrose of Whitman college, Walla Walla, has announced that he and his family have decided to have no more wheat flour in the house until after the next harvest. He has suggested the forming of an "informal but resolute" league for victory through saving wheat. The picture, taken some years ago, shows President Penrose and his twin sons.

## Writing the News Over There



Copyright—Committee on Public Information.

Sergeant Carl R. Detrich, who is publicity man for his regiment, now in France, is writing the news of the camp for the folks back home.

## Into the Jaws




—Fresno Herald.

# Trappers of the Ozarks

**The Adventures of Two Young Pioneers in the Wilds of Upper Louisiana. Now the State of Missouri.**

By LOUIS B. MILLER

Copyright, 1914, 1915, by Lewis B. Miller.

**Summary of Preceding Chapters.**

In September, 1811, two young men who lived near St. Louis, Ben Armstrong and Jodo Henderson, taking with them their two dogs and donkey Spunky, started on an all-winter's hunt in what was at that time an unsettled region, where Indians held full sway, in the wilds of upper Louisiana, now the state of Missouri. After a perilous trip over old Indian trails and dangerous streams, they reached their destination—a salt spring close to the river Big Niangua, which Ben had visited before and from which they expected to secure salt for sale with their furs when they returned to civilization the following spring. Here they erected a rough cabin for their winter quarters close to the mouth of a large cave that was full of water and bats, and started their salt making and hunting. After an exciting experience with a bear in a cave they find their first fresh sign of Indians—moccasin-tracks in the snow about their camp and the morning after they find moccasin-tracks in the snow about their camp. The Indians attempt to enter their barricaded cabin at night but are frightened away by a great earthquake. The boys are captured and taken to the Osage village. One day they are given one bullet and one charge of powder each and allowed to go hunting. They dare not attempt to escape for fear of starvation, but lose their way and are found the following day by the Indians who think they tried to escape and are taken to the camp under guard. Ben is tied to a stake and a fire built under him but it is only a ruse to induce him to take as his squaw Watermelon, for the time being an Indian widow, who cuts his bonds and proclaims herself his squaw. Ben declines. The boys make plans to escape by canoe. They accumulate some parched corn and dried meat, steal a canoe at night and paddling far up the river turn into a branch stream and hide in a cave. After two days and a night there they go back down the river, safely past the Indian village and turning into a branch find a cave high up in the rocky face of a cliff. Here they place all their belongings except the canoe, which they conceal. They are discovered by the Indians, and, retreating deep into the cave with their belongings, they find, over a mile from the opening through which they entered the cave, an exit, and start southwest, the Indians undoubtedly in pursuit. The second day a blizzard sets in and hungry wolves follow the boys. Toward dusk they reach a deserted settler's camp, the cabin burned but chimney standing. Here they build a fire and plan to stand off the wolves.

## CHAPTER XVI.

### In a Ring of Fire.

Soon big wolves could be seen on top of the piled-up logs, their shining eyes glaring down hungrily, fiercely at their intended victims. Back in the part of the enclosure shadowed by the chimney one would leap down inside every now and then, and only by the hurling of fire could he be driven out. And scarcely was one chased back when another would venture in. Indeed, the two hard-beset fugitives were kept so busy driving wolves out that they had no time to finish their supper ;and in spite of their roaring fire they were soon half-frozen.

"Jodo, most of our trouble is behind the chimney. "Let's start a fire to light up back there."

"Let's start three or four of 'em. Theres' plenty of wood. Maybe they'll warm things up a little. If the night keeps getting colder, it'll be nip and tuck with us whether we shall freeze first or be eaten alive."

"I'm wondering—I'm wondering—" The young trapper ran his eyes around the whole enclosure.

"Wandering what, Benoni?"

"If it wouldn't be wise to fire that brush-and-log fence and let it burn. If we set fire to it in several places, all of it would soon be ablaze. Then no wolf would be hungry enough or fierce enough to come over it."

"And this frightful cold, that's threatening to freeze us in spite of our fire here, couldn't come over it so well. The sooner we fire it the better, I say."

While Ben was still debating whether so big a fire would be prudent, yelping, snapping brutes bounded over the fence and down into the enclosure at the same time; and only by a furious pelting with firebrands could they be driven out.

"Ben, it's either fight those savage varmints hand to hand, or climb up and sit on top of our chimney, or—"

"Or fence ourselves in with fire."

"That's right. And I say fence ourselves in with fire. The quicker the better, too."

"It seems we've got to do that, Osages or no Osages. So let's get at it. We'll have ourselves in the center of a fiery ring."

"But do we dare fire it all around? S'pose we want to get out."

"But we shall not want to get out. We wouldn't dare venture outside. Those hungry varmints would be picking our bones before we could go 20 yards. This is the only place for us tonight, and until the weather changes and that hungry pack scatter away."

"That's a fact. This is the only place we can live tonight. So let's start our big fire before those noisy brutes take it into their heads to come over all together. Then we'd have a time of it."

But before the two could do anything several wolves rushed over the log-pile. Each man snatched up a blazing stick and started toward them. One wolf stood snarling and snapping defiantly, and Ben hurled his fire-brand. The brute dodged, and the blazing stick plunged into the snow and sizzled out. And scarcely was the fire gone when the fierce beast bounded forward and leaped at Ben's throat.

His rifle was in his hand, but he would shoot only as a last resort. Like a flash his tomahawk was out, and he struck with all his might! So intent was the wolf on reaching his victim's throat that he made no attempt to dodge, and the keen-edged blade split his head open. As the wolf fell, snapping fiercely, Ben sprang back.

"Hold to your fire, Jodo! If you don't they'll be on top of you! Wait till I get another chunk!"

Ben ran back to the fire-place. Putting down his rifle, he hurried out with a flaming stick of wood in each hand. They approached the fence.

"Now, Jodo, you start your fire and I'll keep them off of us! But be quick!"

With his hand Jodo dug away the snow till he found a mass of dry leaves that the wind had blown under the logs and brush. Those caught fire at once, and the flames quickly began to shoot up through a leafy, thick-brushed tree,top. In a few moments that dark and dangerous spot back of the chimney was well lighted up.

"Now move on a few yards and fire another place!" said Ben.

Jodo did so. And as soon as the leaves were blazing he advanced to still a third place. Soon all the enclosed ground was so brightly lighted that the howling pack outside, creatures of darkness, had not the boldness to venture over into it.

Now the two defenders kept moving around the fence, firing it in places 10 or 15 feet apart. In a few minutes flames were leaping up all around the big ring. And the higher the different fires leaped the closer they came together.

Ben drew a long breath, and kept running his eye around the big circle. "At last we've got the hungry pack safely shut out! They could climb over in a few places yet a while, but they won't dare. And pretty soon they'll have to wade fire to cross. Now we can go back and finish our supper in peace."

The two returned to their big fire-place, and were soon sitting on the buffalo-robe, devouring broiled venison and parched corn.

"Feels warmer in here already—don't you think so, Ben?"

"Yes, it does, though it's none too warm yet. It'll be warmer, though. All that ring of fire around us can't help raising the temperature inside of it, even this frightful weather. We shall be safe tonight, and warm enough to sleep, I've no doubt."

"But we shall not both dare sleep at once, shall we?"



The boys fight for their lives.

"No. One must remain awake. So the sooner the other gets to sleep the better. Which do you prefer? First watch or second watch?"

"I'll take the second, if it's just the same to you, Benoni."

"It's just the same to me. And you'd better get to bed as soon as you can and sleep as fast as you can."

"Do you s'pose we're in danger from the Osages?"

"Not tonight. We must have shaken them off 50 or 60 miles back. And even if we didn't, this weather will drive them down into some deep ravine to keep from freezing."

"I'm glad we hung onto both of our buffalo-robes." Jodo had made down their bed and was slipping into it.

Jodo was soon asleep. Ben sat down on the edge of the bed, before the fire. But he was warm now, and no further fear of the wolves, he soon began to nod. And he kept nodding for a good while. Finally he sprang up and stood with his back to the fire-place.

By this time the fires in the brush-and-log fence had all burned together, till they made a complete flaming ring. And the big ring kept crackling and popping and roaring till its noise filled all the air. Outside the ring the weather was doubtless growing colder as the night advanced; but inside it was certainly growing milder.

When he began his watch, Ben had expected to remain up till some time after midnight, and then stir out his partner. But after a long, hard, cold day of tramping he was too tired to stand or walk about; and every time he sat down he seemed about to fall asleep in spite of himself. For a good while he kept sitting down and getting up. But that, too, was tiresome. Finally he stood gazing around for a few minutes, and said:

"What's the use? Nothing can get to us—neither wolves nor redskins. And the fire can't spread for the snow. I'm off to bed!"

He stood for a few minutes longer, listening to the roaring and crackling of the flames, and to the howling of the wolves in the darkness beyond the fiery ring. They seemed well aware that there was good eating inside that ring, and even the great glare of firelight could not drive them far away. Their clamor, mingled with the noise of the encircling fire, made a ceaseless uproar.

While still standing in front of the big fire-place. Ben speculated a little as to who had lived in the house that had once stood here, and how anybody had come to build a house away out here in the wilds.

No answer came to these questions. And after running his eye around the flaming circle, to make sure that there was no place where a hungry wolf could break over, he put some more wood on the fire in the fire-place. Then he took off his boots and outer clothes and crept between the blankets and buffalo-robes. He drew a blanket up over his eyes, to shut out the great glare of light, and a minute or two later was sleeping as soundly as Jodo.

Several times during the night he was half aroused by the unaccustomed noises. And every time he rose to his elbow and gazed around. But after recalling where he was, and assuring himself that there was no new cause for alarm, he dropped down and was quickly asleep again.

It was the shining of the sun that finally awoke him. He sat up at once and blinked about. But everything was as it had been when he fell asleep. The hungry, blood-freezing clamor of the wolves had ceased; but the big ring of fire, almost as high as a man's head, was crackling and popping and roaring as loudly as ever. Inside of it the air was comparatively mild.

Soon Jodo also awoke and sat up. He gazed around drowsily, almost stupidly, trying to recall where he was and how he had come here. He had not waked before since falling asleep.

"Well, the wolves and the Osages haven't got us yet," he finally remarked, with a yawn.

"No. We're safe enough so far. Frightfully cold outside of this fire-circle, I'm guessing. It's a satisfaction to know we're not out there, and don't have to get out there."

"Isn't there danger that the Osages will see this big smoke and come to find out what it means?"

"Not for the present, I think. They won't be moving about such weather as this. If they didn't make back toward their village when the cold spell struck them, they're down in some deep hollow, huddled up over a little fire to keep from freezing."

"Then let's hope they'll stay huddled up there. I would hate to have to jump out of our comfortable pen and go to running away from 'em such weather as this."

"Not much danger of our having to run from Indians, I think. But there's something almost as bad that will stir us out of here before long."

"What, Benoni?"

"Why, starvation. Our deer-skin bag is getting light. We've been eating a lot since we escaped from that cave—that last cave."

"We've had to eat a lot, traveling the man-killing, horse-killing gait we've been traveling. We'd have dropped down on the way if we hadn't stuffed ourselves three times a day till we were fit to pop. How long do you think our supply of corn and venison will last us?"

"About three good meals more. And we can't afford to wait till we've come to the last mouthful before we rustle up a new supply. Hunting is too uncertain for that, especially when you've got only about two bullets."

"That's so. We mustn't run close to the ragged edge of starvation such weather as this. We can't afford—What was that thing?"

"Where? I don't see anything."

"It hopped behind that burn't stump yonder. Looked to me like a rabbit."

"It might be a rabbit. Let's see about that. There must have been several rabbits hiding under those logs and brush. And naturally they'd run inside from the fire instead of out among that howling wolf-pack. If it's a rabbit, we'll have him broiled for breakfast, and be thankful for small favors. It'll help us to economize on venison and Osage corn."

The thing behind the burn't stump was indeed a rabbit. And while they were running after that one with sticks to kill it, they scared up three more rabbits. And under a pile of poles they discovered two big, white, fat 'possums. All this game had been driven inside the fiery circle by the fire. But one rabbit did the young trappers kill for breakfast.

"These rabbits and 'possums are certainly a windfall to us," Ben remarked, while he and Jodo were sitting before the big fire-place, each broiling a half rabbit.

"That's what they are. They'll feed us while we're penned up here by the cold and the wolves and the fire. After that we ought to be well rested, and able to hunt down bigger game."

"Yes. And it must be bigger game when we go hunting with our rifles. Powder and lead are too everlastingly scarce for us to waste a shot on some animal only big enough to make a mess or two."

When their breakfast of rabbit was ended both were thirsty. There was no water here, though there must have been a spring not far away. But handfuls of snow, warmed to mush before the fire, served to quench their thirst.

The sun was still shining, but through a haze now, and its warmth could not be felt. So far as could be told from the inside, the weather beyond the fire-protected circle was little if any warmer than it had been the night before. Thankful for their comfortable shelter, the two trappers sat or lay before their big fireplace, luxuriating in this chance to rest after days of hard tramping through cold and snow. Sometimes they took a nap, to make up for sleep they had recently lost.

"Ben," the other remarked once, "s'pose we want to get out of this fire-pen. How could we go about it?"

"It wouldn't be as easy as sliding down hill. Maybe, though, we could work the thing somehow. But as we don't have to break out for a few days, and don't want to break out till the air warms up, let's not worry. I'm glad we stumbled onto such safe, comfortable quarters to weather this cold snap in."

For dinner another rabbit was killed and broiled. In the afternoon, knowing that the remaining animals must soon begin to suffer from hunger, Jodo and Ben killed them all, dressed them carefully and buried them in a mound of snow.

In spite of the fact that the big ring had been burning so long, the fire was not even beginning to die down. In fact, the air inside the ring was growing the least bit warmer all the time. This was due to

the increasing heat. For the weather outside was about the same.

Not long after nightfall the hungry, howling of wolves started up again in the surrounding forest. There were not so many as on the night before; but those that did assemble around the fire-girdled enclosure made the frozen night hideous with their clamor.

Before their fireplace sat the two shut-ins, watching a fat 'possum roast on a flat stone, close up to the fire. Feeling safe now, they did not shudder any longer at those fierce voices off in the forest.

"It does seem to break their savage hearts that they can't get to us to make a meal of us," Ben took occasion to remark.

Jodo answered: "And it delights my heart that they can't get to us to make a meal of us."

After resting all day, and sleeping not a little during the day, Ben and his companion sat before their houseless fireplace till a late hour, feasting on baked 'possum and listening to the roaring of the great log fire around them and to the outcry of the wolfpack in the darkness beyond. They themselves were well fed and comfortable enough.

For a time they speculated as to the people who had once lived here, and as to whether they had gone away or been murdered when their house was burnt. Later they talked of their friends at home, and wondered what each of them was doing. Naturally, much of Ben's talk was of Rachel Henderson, his partner's sister. Still later they discussed their plans—what they would do after making good their escape from the Osages.

"Our crying need just now is a supply of ammunition," Ben remarked. "An unarmed man is at a hopeless disadvantage out here. We're both taking our lives in our hands when we dare to travel through this savage wilderness with only two bullets apiece and two charges of powder. Hunting is always more or less uncertain; and besides the redskins there are too many hungry beasts of prey roaming around. Think what might have happened to us if we hadn't been lucky enough to stumble into this particular shelter. It would have been a hard choice between being devoured alive by wolves and climbing trees to be frozen as stiff as a poker."

"No chance for us to make any ammunition, is there?"

"Not here. If we were back on the Big Niangua and were left in peace for a few days we could turn out an ample supply. Here we have no sulphur and no saltpeter, and I doubt if we could pick up any lead ore. In fact I know we couldn't while the snow covers the ground. Our one hope in this part of the country is to find some hunter's cabin".

"But it's not at all sure that we could obtain any ammunition if we found a hunter. Those fellows don't usually have more than they need for their own use. And this late in the season they're apt to be running short. We didn't have overly much before the Indians robbed us."

"Yes, I know. But the hunters will have some powder and ball, and pretty nearly any of them will divide with us. The main thing is to find our hunter. The fact that there has been a house here would seem pretty good evidence that we're where the white hunters stay. By pushing on south for two or three days more, at the outside, we ought to see the smoke from some cabin. Even if we shouldn't find a hunter, the farther we travel in that direction the better will be our chance to elude the Osages."

"Then we ought to be up and off the very first minute the weather will let us. But those wolves howl so ferociously it makes my blood run cold to think of being caught out among 'em."

"The wolves won't be so troublesome, I'm pretty sure, after this cold spell passes. They're always fiercest during the bitterest weather. It was that way back in Kentucky—so all the old settlers declared."

(To be continued.)

# The Fighting Soul, a Bunch Grass Tale

(Continued from page nineteen.)

lump in my throat. I'm getting to the part of this story you're waiting for—it was the same lump that choked me in the game with the wolves, and I had to swallow the lump before I could give the signal.

I had to put that lump of yellow down before I could drop a loop over Nigger's outlaw head—and Boxcar made me swallow the lump. Nigger wheeled like a flash, and Boxcar wheeled with him. When his four feet hit the trail for the turn there was a whack and a yank that showed me some stars and every string in the saddle cracked like a whip. When I got those stars brushed away, Boxcar had straighted Nigger to the trail again, all by himself, and that lump of yellow had been jolted down my throat and on out at my shoes.

Nigger held back a little, not wanting to leave his band; and Boxcar crowded right up to his heels, going like a locomotive. When the instant seemed right I swung a wide loop at the outlaw's head and it went straight to his windpipe. I had him. I could have stirred the big horse to a fight with no trouble whatever; but I was careful not to do this. He reared a couple of times and I let out just enough of the rawhide to save his windpipe. The pinch of the loop brought back some bad memories of his former captivity, I suppose, and then I didn't nag him. He gave up without much of a scrap.

His surrender with pitiful. His fleeing band was widely scattered, many having passed over the prairie out of sight. All of a sudden the big black seemed to forget I was there. He raised his head, proud as any king, and whinneyed to his band. I guess it was his good-bye to the range. The morning sun was in his eyes when he said it—and the thoughts that were in his wild horse-mind I would like to know. Don't tell me that a horse hasn't a soul.

I wish now I had let Nigger loose to race to the sun with his band. Instead of doing so, I led him home where for days he had all the manner of a captured thief. By inches I got his confidence and friendship—maybe a little of the love in his wild, fighting soul. But for anybody but me he was all hoofs and teeth.

I tied him in a strange stall one night, and expected to put the saddle on him the next day. I never did. He or some of the other horses started a row in the night. When I went out in the morning Nigger had wrecked his stall and broken loose, and another horse had kicked him in the ribs. He was about all in when I found him. I coaxed and led him out into the pig pasture behind the barn. The irony of it all struck me—he, a king of the bunchgrass, put into a pen with the pigs! I felt like apologizing to him.

One of the tricks I had used to win the horse's friendship was to feed him little square lumps of sugar. I fed him about all the lumps of sugar mother had during his last days out in the pig pasture. But he got weaker right along, and one morning when I went out to see him with some sugar, he was dead.

Quarterback Hardy stopped speaking. When he resumed, his voice was low with emotion:

"I've never forgiven myself for taking the big black off the range as I did—though I guess my training for the job made a man of me. I've wished many times that the outlaw had taken the Valhalla jump from the Coulee Wall instead of turning back to captivity. Many a time when the game was going against us, or some fellow had slugged me down in the pile, I've thought of the black's fighting soul in that Valhalla place, and the thought of it brought me to my feet for the next play.

"In our last 10 seconds with the Wolves, when the score was 6-0 against us, I pulled myself out of the pile and figured out the next play with 20,000 people looked our way; and I seemed to feel each eye in the crowd, 40,000 you know, boring a hole in my back. I went yellow—the lump came up in my throat and I couldn't say the signal.

"In a flash I thought of the time when Boxcar jolted the yellow lump down through my shoes, and I wished that Doc or Jones or somebody would knock me down with a club so that I could swallow the lump again. In anothr flash I seemed to see the big black standing on the Coulee brink 800 feet high, weighing his chances; and, the flash raised my eyes up to that Valhalla place I've always imagined in the clouds. Sticking out from the edge of a black cloud was a queer looking shape of black formed almost like a horse's head and neck. Maybe I was a bit dopy; some one had slugged me when the official wasn't looking; but it came to me that up there was the fighting soul of Nigger the Great signalling to me. I seemed to leave the game for an instant; and then I heard Jones calling for the signal and gave it. The lump was gone."

---

Doc Bowles broke the long, thoughtful silence that followed Hardy's last words. He spoke slowly, musingly, partly to himself.

"I'm just wondering," he said—yes, I'm wondering how much we can skin the Wolves next year, on their home grounds, if each of you fellows look up in the game and see what Hardy saw."


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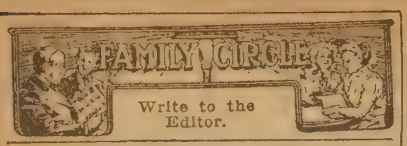
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## The Washington Farmer

617 Central Bldg., Seattle, Wash.

Review Building. Spokane, Wash.




ALICE W. BARLAND,
Editorial Contributor.

## FRESH VEGETABLES

### We Are Learning the Food Values.

Since the war began much has been written on the question of food values and many comparative tables have been published. The result has been that a vast amount of education has been received by American housewives and the homes today are being provided with a mort healthful food ration than ever before. Some of these articles have not been of much value, but on the whole the education has been exceedingly helpful.

The following is to my mind one of the best I have seen:

Vegetables are eaten in various plant parts. Potatoes are tubers, turnips are roots, onions and garlic are bulbs, asparagus and kale are stems, Brussells sprouts are leaf buds, lettuce and cabbage are leaves, cauliflower is a flower bud, artichokes are the flowers themselves, cucumbers are the green, unripe fruits of the plant, tomatoes and melons are the ripe fruits, corn and peas are the unripe seed, while beans and lentils are the ripened seeds. Ripened vegetables usually contain more starch than the unripened.

Vegetables are not wholly edible. Skins and seeds are not good pabulum, though they may have a mechanical value as a laxative.

In being prepared for the table much of some vegetables is lost. The pods of fresh beans and peas constitute on an average about 50 per cent of these two vegetables. The cob of corn is also more than 50 per cent of the weight. Peeling potatoes, carrots, sweet potatoes and parsnips removes some 20 per cent of the original weight of the vegetables.

According to Dr. E. W. Allen, sugar and starches are present in fresh vegetables in the following proportions:

| | Per Cent. |
|---|---|
| Fresh sweet potato | 26.1 |
| Fresh white potato | 18.0 |
| Fresh green corn | 19.2 |
| Fresh artichoke | 15.9 |
| Fresh green peas | 15.2 |
| Fresh sugar peas | 12.1 |
| Fresh parsnips | 11.0 |
| Fresh onions | 9.1 |
| Fresh beets | 8.8 |
| Fresh carrots | 8.2 |
| Fresh muskmelons | 7.2 |
| Fresh mushrooms | 6.0 |
| Fresh string beans | 3.5 |

For invalids or others who may eat vegetables with the least sugar and starch, asparagus, shelled beans, celery, cabbage, collards, cucumbers, egg plant, dandelions, leeks, lettuce, okra, pumpkin, rhubarb, spinach, tomato and watermelon are allowable. These are all under 4 per cent starch.

In proportion to bulk these are all "filling foods." Fats are for the most part coloring matters, and scarcely reach one-half per cent in any fresh or canned vegetables.

The "meaty" protein or albumins in vegetables seldom seem high. Cowpeas, peas and beans alone run to 9 per cent, most other vegetables are under 3 per cent of this flesh repair material.

It is the mineral matter in vegetables and vitamines or the life-giving principles which actually animate. These seem to ward off many human maladies such as pellagra, beri beri, rickets, scurvy, joint aches and pains, spontaenous bruises and like ailments of the human form.

Cooked vegetables have an altered content of water. Baked or fried they lose water; stewed or boiled they usually take up water. Of course, heat clots the albumins and breaks up the starches and sugars. When a cabbage is boiled the water extracts almost 50 per cent of the starch, which ordinarily is thrown away.

Potatoes peeled and soaked before boiling lose a huge part of their nutriment. With their skins on, much nourishment exudes. The substances lost are sugars, albumins and minerals. Nearly one pound of sugar in a bushel of carrots is lost in boiling.

After all, it is really the quantity of, more than the percentage of, starch present in vegetables eaten, which counts. Any one with intestinal, bile, liver or gall-bladder disturbances or with such tropical distemper as sprue, needs eat sapringly of sugar-starch foods." G. L.

### When the Family Is Late.

To keep baked potatoes flaky, when they have to stand, pierce them full of holes with a fork or crush them a little in a towel and pierce a small hole in the end of each. Put them where they will keep warm.

# SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

## Free Remedies the "Sure Cure" for "Spring Fever"



Dr. Hirshberg.

"Who becomes easily fatigued achieves not much," says an Italian proverb, which in the idiom of the street means, if you have "that tired feeling" or allow yourself to be beguiled easily by "spring fever," you will be about three-quarters of a real man or less.

To be tired is to be unwell—in a certain sense. Your vital fabric is diminished in its capacity to do even a fair share of its best work. Unless you feel the vim and tonic, the joy and pleasure of your efforts, your productiveness, industry, your creativeness, are below par.

The call of "the season which pricketh every gentle heart, and waketh him out of his sleep to start," makes each little indoor unpleasantness seem all the more noticeable. The "fever" to be outdoors, the call of the open, "when well appareled heel of limping winter treads," exaggerates the restlessness, the longing and little discomforts of desk, shop and bench.

**Rest, Sleep, Sunlight, Oxygen.**

When you are tired of several housed-up months there is a mental fatigue which yearns for a change. Intellectual fatigue is as real a thing as physical exhaustion. Examined by the standards of medical precision and the myriad of indirect senses called instruments it will be found that the victim's eyes and senses are less accurate, the muscles not precise, agility reduced, energy much fallen off, strength and force diminished and the capacity to work, to act, to create, to pay attention, to become interested, to enjoy, to do and to invent have all disappeared or become faulty.

Here you observe a combination of mental and physical signs which indicate that fatigue is sickness, though it lasts but a brief period. Just as the accumulated waste of worn or torn tissues age or sicken your anatomy, so the waste fluids after long hours of exertion or of days spent in carbonized, unoxidized air store up poisons.

Call these fatigue substances how you will, they are present and must be repeatedly and automatically removed by rest, sleep, sunlight and oxygen. It is these four manifestations which help to clear away the dishes, eliminate the crumbs, remove the soiled tablecloth of exhaustion and burn up the debris. Simultaneously, the tissues begin to replenish the lost and consumed substances.

Reparation and restoration then set in. You say, "I feel refreshed." You are invigorated and snort like a war horse. The quality and quantity of your work picks up; the oxygen of fresh air, the sunlight, sleep and rest put you on your mettle, and your discrimination and productiveness reach where tired nature fears to tread.

Let all this be as it may, you need not be necessarily tired because you feel that way. The sensation of fatigue is no reliable indication that there is true exhaustion of your flesh and bone. To determine whether there is real fatigue or only "spring fever," measurements are made by laboratory psychologists as to physical efficiency or reduction of mental efficiency.

**Ways to Test Yourself.**

Target practice, threading needles, bow and arrow tests, steadiness of the muscles, inserting a rod in a socket or tapping evenly a number of times upon a sounding board are only a few of the tests available.

The various senses, too, such as the powers of observation of the eye, the range through which it sweeps soon prove to the practical psychologist whether you are actually tired or have only convinced yourself that you are.

# Crochet and Tatting Designs

By Winnifred Worth.



**Child's Dress.**

The children are always thought of when any crocheting is to be done. Try this beautiful dress design.

Use No. 50 Cordoney.

**First Row**—2t., 2 ch., 2t., (shell) in 4 ch., from needle.

**Second Row**—5 ch., 1 t. in 1st t. of 2 ch., 1 shell 2 ch., 1 t. in last st. of 1st row.

**Third Row**—5 ch. 1 shell 3 m.

**Fourth Row**—5 ch. 4 m., 1 shell 1 m.

**Fifth to Ninth Row**—1 m. each row.

**Tenth Row**—Same as 1st row.

Finish neck, 4 dc. 1 t.

**Belt Strap**—2 m. each, finish with dc. and t., in colored thread, to match thread used for embroidery design.

**Belt**—Ch. 17, 15 dc.

**Buckle Strap** is made of rib st. 5dc. wide, sew on st. only, rp. until belt is desired length. Drop 1st. on each side until only 1 st. is left.

Buckle strap is made of rib st. 5 dc. wide, sew on with needle; make belt of colored thread.

Follow illustration for embroidery design or stamp dress any desirable pattern and embroider in color to match belt.

Use paper pattern for size of dress and crochet yoke to fit garment.

Crochet edge on bottom of dress to match that on sleeves and yoke.

A beautiful child's filet yoke is shown in instalment 50. It's the next one.

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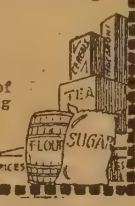
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Big War Map for Two Subscription Orders

A splendid four-page war map of the battle front in France, originally published in the Spokane (Wash.) Spokesman-Review, will be sent to any one who secures and mails us one new subscription to The Washington Farmer.

This map is printed in four sections and when pasted together, according to directions furnished, will give you a map 64 inches long and 21 inches wide; presenting the details of the great fighting territory in such a way that you will be able to follow every detail of the big battles which are now brewing.

Send orders for new subscription and war map to

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# Patterns

2483-2381—Lady's costume. Blouse 2483 cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 36 requires 4 1-4 yards of 44-inch material. Skirt 2381 is cut in six sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. It requires 2 3-8 yards of 44-inch material for a 24-inch size. The skirt measures about 2 1-8 yards at the foot. Two separate patterns, 10 cents for each pattern.

2460—Child's dress. Cut in four sizes: 2, 4, 6 and 8 years. Size 4 requires 2 1-4 yards of 36-inch material. Price, 10 cents.

2148-2157—A splendid combination for sports or outing. Blouse 2148 cut in seven sizes: 34, 36 ,38, 40, 42, 44 and 46 inches bust measure. Skirt 2157 cut in seven sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. The skirt requires three yards of 44-inch material and the blouse 3 1-4 yards of 44-inch material for a medium size. The skirt measures about 2 5-8 yards at the foot. Two separate patterns, 10 cents for each pattern.

2455—Girl's dress. Cut in four sizes: 8, 10, 12 and 14 years. Size 12 requires 2 1-2 yards of 27-inch material for the blouse, and 2 3-4 yards for the skirt. Price, 10 cents.

2151—Girl's dress. Cut in four sizes: 2, 4, 6 and 8 years. It requires 3 1-4 yards of 24-inch material for a 4-year size. Price, 10 cents.

2059—A charming negligee. Cut in 4 sizes: Small, medium, large and extra large. The medium size will require 6 1-2 yards of 36-inch material. Price 10 cents.

2108—Play or beach suit for small boys. Cut in 4 sizes: 2, 3, 4 and 5 years. It requires 2 1-4 yards of 36-inch material for a 3-year size. Price 10 cents.

2122—Ladies' one-piece dress. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 8 yards of 36-inch material for a 36-inch size. Price 10 cents.

2482—Ladies' shirt waist. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 2 3-4 yards of 36-inch material.

2013—Ladies' apron dress. Cut in 4 sizes: 34, 38, 42 and 46 inches bust measure. It requires 5 yards of 36-inch material for a 34-inch size. Price, 10 cents.

2474—Ladies' house dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 6 1-4 yards of 36-inch material. Price, 10 cents.

2464—Ladies' skirt. Cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. Size 24 will require 3 1-4 yards of 36-inch material, The skirt measures 2 yards at the foot. Price, 10 cents.




Please fill in this order and mail with remittance to:
PATTERN DEPT., PACIFIC NORTHWEST FARM TRIO, Spokane, Wash.

Enclosed find.....cents for which send me the following:

Pattern No.....Size..... Pattern No.....Size.....

Pattern No.....Size..... Pattern No.....Size.....

Name ..... .....

Postoffice ..... State .....

R. F. D. No.....Box No.....Street No.....
Be sure to give the pattern number and the correct size.

## How Sweet Is Syrup?

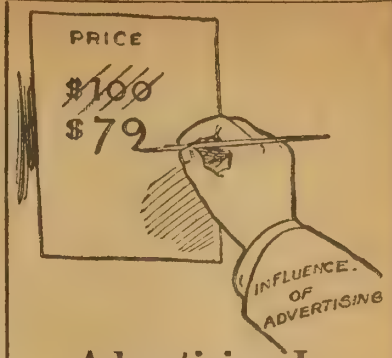
A cup of syrup is not as sweet as a cup of sugar but will frequently be found sweet enough. There is a tendency to over-sweeten foods. The table below gives the sweetening value of different amounts of corn syrup in terms of sugar and will be found useful in making sugar-saving substitutions in your recipes.

| Sugar. | Corn Syrup. |
|---|---|
| 1 cup equals | 1 3-4 cup |
| 3-4 cup equals | 1 1-5 cup |
| 1-2 cup equals | 4-5 cup |

Half syrup and half sugar give better results in cooking than all syrup. With one cup of syrup use one-fourth cup less liquid.

### Sterilize Bread Scraps.

While saving every ounce of bread, remember that the heat of the oven will sterilize scraps left on plates, and the shape of the bite makes no difference after the bread is rolled into crumbs.


## Advertising Is Beneficial

"Any manufacturer has two methods of procedure in marketing his product," says Collier's, the big national weekly. "He can attempt to reach thousands of dealers exclusively through a huge force of salesmen, or he can supplement his salesmen's efforts by intelligent advertising. By the first method he creates for the dealer a problem of getting the product into the consumer's hands; by advertising he acquaints the consumer with the product and influences him to buy from the dealer.

"Thus, creating a big market, he increases his production, lowers manufacturing costs, buys in quantities at lower prices, and can make a lower price to the consumer. Quantity buying, manufacturing and selling are not so easily achieved by the nonadvertiser.

"The nonadvertiser is generally the first to take advantage of any tendency to higher prices, says the advertisement. He has no good will with the consumer to maintain—his responsibility to the buying public is less. 'Higher prices are velvet for him.'"

**Kill All Flies!** They Spread Disease

Placed anywhere, Daisy Fly Killer attracts and kills all flies. Neat, clean, ornamental, convenient, and cheap. Lasts all season. Made of metal, can't spill or tip over; will not soil or injure anything. Guaranteed effective. Ask for




**Daisy Fly Killer**

Sold by dealers, or 6 sent by express, prepaid, $1.00.

HAROLD SOMERS, 160 DeKalb Ave., Brooklyn, N. Y.



COOK WITH PEARL OIL

The fuel administration authorizes the manufacturers of these stoves to say that it considers the use of oil cook stoves and oil heaters at this time a very important help in the necessary conservation of coal for war purposes.

## Kitchen Comfort

No matter how hot it is outside, your kitchen is always cool and comfortable when you use a New Perfection Oil Cook Stove.

Steady heat concentrated on the cooking. No smoke or odor; no dust or dirt. Lights at the touch of a match and heats in a jiffy. Bakes, broils, roasts, toasts—all the year round. Economical. All the convenience of gas.

In 1, 2, 3 and 4 burner sizes, with or without ovens or cabinets. Ask your dealer today.

STANDARD OIL COMPANY
(California)

NEW PERFECTION OIL COOK STOVE




**Likes the Corner Letters.**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I like to read the letters very, very much. This evening I saw the Farmer. I had a letter from my cousin in the navy. I wanted to read the letter first, but I hurried through it. I was afraid it would be supper time before I could get through reading the Children's corner. I am 9 years old the 2d day of November. If I have a twin I wish she would write to me. I will answer her letter. Aunt Nellie may I join the Children's Corner? If so will you please write to me and tell me? I am in the fifth grade. My brother went to work today at Bert Malone's. I will have to go to supper now.—Nettie Rurak, Pomeroy, Wash. (All the children who write to the Corner are cousins, Nettie. We are glad that you belong and are glad to recieve your letters.—Aunt Nellie.)

**Have a School Bands.**

Dear Aunt Nellie: I read the letters of the Corner and enjoy them very much. I have two brothers and one sister. Their names are Edward and Amos. My sister's name is Lillian. She is 6 days old. I have been wanting her for a long time. I am 11 years old and my birthday is September 17. I am in the seventh grade. Amos is 8 years old and in the fourth grade. Edward is 15 years old and in the ninth grade. We have a school band. It is the Liberty band. There are 15 pieces. My brother Edward plays a baritone, Amos plays an alto and I play a cornet. My teacher's name is J. Elmer Bovey. I have gone to him four years. I like school fine. I have been sick about all winter and have missed school a great deal. Have I a twin? If so I would like to hear from them.—Lucy Hule, Wheeler, Wash.

**Gets Along Fine at School.**

Dear Aunt Nellie: This is my first time to write to the Children's Corner. I am 11 years old and in the fourth grade. My teacher's name is Miss Wright. I like her. I have a pet pig and a pet pony. The pony is a month and a half old. My sister's name is May and my brother's name is Penn. I live in the country and we have not very much land. I am going to get a little automobile. Its name is the American Junior. I like the girls. I get along in school fine. There are 21 pupils in my room. My sister is in the sixth grade and my brother is in the third grade. I will tell some riddles: It is as round as an apple and deep as a cup and all the king's oxen can not pull it up? What is a thing with four eyes and can not see? It's black within and red without and has four corners round about. A man rode and yet he walked.—B. B. Port, Stanley, Wash.

**Have Formed a Home Reserve.**

Dear Aunt Nellie: I enjoy reading the letters very much. We have formed a Home Reserve down in our school to help the orphan children of France. We just have to give one penny a day and that will give the children a good living. We form a company of 10 and have a captain. Mildred Long is our captain. I think it would be nice if all the children would adopt one. We are going to give up our candy, nuts and gum to help the children of France, but what is that compared to what they have to stand. —Pearl Thomason, Wauconda, Wash.

**Clara Joins the Corner.**

Dear Aunt Nellie: My papa takes the Farmer. I have read the letters. I like them very much. May I join the Corner? This is the first time I have written. I was 10 years old February 5. Have I a twin? If so will they please write to me. I am in the last half of the fifth grade in school. I have gone three terms without being tardy or absent. We live two miles from school. I live in the country. I have four pets, two dogs and two cats. My dogs' names are Bob and Vic. The cats' names are Spot and Snowball. I am taking music lessons from my teacher. Her name is Miss Blanch Brown. With love to Aunt Nellie and the cousins I will close.—Clara Staley, R. R. 1, Colbert, Wash.

**Eleven Pupils in Her Room.**

Dear Aunt Nellie: I was 11 years old last December 5. My father takes the Farmer. I like to go to school and I am in the fifth grade. My teacher's name is Miss Willcutt. There are 11 pupils in our room. I have seven brothers and two sisters. Their names are Dennis, Henry, Clifford, Chester, Alfred, Ralph, Glen, Blanche and Anna. We have four cows, four calves, two horses, one colt, 13 sheep and six lambs, three rabbits, five little ones and lots of chickens. We all go to school but four.—Ellen Secrest, Neppel, Wash.

**A Vegetable and Flower Garden.**

Dear Aunt Nellie: This is the third time I have written to the Children's Corner. I am in the sixth grade at school. I am 12 years old and will be 13 September 29. My teacher's name is Mrs. Jacks. We have about five inches of snow here, but we have good weather. I am going to work out when school is out. I have knitted three wash cloths and am almost through with another one. I have been getting letters from two of the cousins in the Farmer. Us girls got up a little Red Cross meeting from house to house. We first have it at the schoolhouse. I am going to raise a little garden this year. Then I am going to get some pansies and many other flower seeds to plant.—Gertrude Ruchest, Box 3, Peola, Wash.

**A Red "E" on Her Report Card.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I enjoy reading the letters very much. I was going to write, but didn't know where to send a letter. So I am very glad Aunt Nellie has put her address in. I am 11 years old and in the fifth grade. My teacher's name is Miss Harris. Friday at school we cut feathers out of outing flannel to make pillows for the soldiers. We made about four. I live with my oldest sister. She has one baby. He is 18 months old and his name is Leonard. My other sister has a baby girl named Ruth. I live three miles from school. I ride in the bus. I always get 100 in spelling. I got a red "E" on my report card. Have I a twin? If so I would like to hear from her or any other cousin. I hope to see my letter in print.—Hilda Thompson, Box 65, Benton City, Wash.

**Crochets, Knits and Tats.**

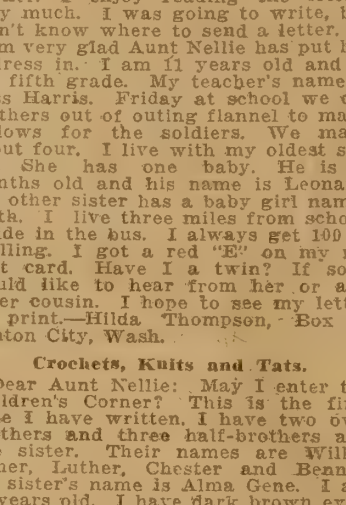
Dear Aunt Nellie: May I enter the Children's Corner? This is the first time I have written. I have two own brothers and three half-brothers and one sister. Their names are Willie, Elmer, Luther, Chester and Bennie. My sister's name is Alma Gene. I am 12 years old. I have dark brown eyes, brown hair and quite a light complexion. I am 5 feet 1 1-4 inches tall. Have I a twin? I can crochet, knit and tat. I enjoy doing such work. I hope the war will end soon. It is certainly serious. We have one dog and three cats. The dog's name is Shep. He is a good dog. The cats' names are Boots, Bibbs and Jet. I am in the sixth and seventh grades at school. There are 14 children going to school now—two girls and 12 boys. We didn't have school last Friday on account of our teacher having the Liberty measles. Her name is Miss Nillen.—Thelma Reynolds, Ellensburg, Wash.

**Our Duty Is to Hooverize.**

Dear Aunt Nellie: I select for my subject, Hooverizing, as we certainly are Hooverizing these days. I think that we all should Hooverize and economize in every way we can. The main drawback is that the substitutes that go with wheat flour are much higher in price. But, as I have two brothers now in the army, I feel it my duty to Hooverize. I also have other relations in the army. I will also help raise as much food as I can. My folks raised quite a lot of potatoes last season and now can hardly sell them at any price. But we are going to try it over again, in order to help win the war, as we can not help do the fighting. I think it is our duty to help in the way of raising food for our soldiers. The meatless days and wheatless days don't bother me much. I wrote to Sally, but she did not write to me. I am in the fifth grade at school. I am 12 years old. My birthday is December 19. My teacher's name is Miss MacDonald. I like her fine. We are making washrags, gun wipers and joke books at school. I have made two washrags and six gun wipers. My mother is knitting a washrag for my brothers in the army. I have a service pin with two stars on. The two stars stand for my two brothers in the army, Almon and Frank. Ruby Warren, Route No. 1, Box 2B, Elma, Wash.

## Shadow Pictures

Shadows may be thrown on a wall or screen so as to form pictures in various ways. The most common shadow



pictures are made by holding the two hands so that their shadows will resemble some animal or bird. To make



such pictures well requires considerable skill. The position of the hands in making two of them is here shown.

**A Chewing Gum Day.**

Dear Aunt Nellie: I am in the fourth grade. The school is going to give a patriotic program. I am 9 years old. I will be 10 July 6. Have I a twin? We have a team. Their names are Nellie and Colonel. We have a cow named Whitey. My sister's name is Florence and brother's name is Bertie. I belong to the Red Cross. Mamma is sewing for the Red Cross. I have a cousin in France and an uncle in the training camp in Mississippi. My uncle sent me a silk handkerchief for Christmas with pictures of soldiers on it. At school we have a chewing gum day. It is Wednesday. I am in a flag drill at the program. May I be a cousin? I like our teacher fine. Her name is Miss C. Spalding. We have a mile to go to school. I like school fine. We are going to sing "Oh, Columbia the Gem of the Ocean" at the program. I wish you could come to see us go through the flag drill. Please tell Gladys Mable McCully to write to me. I saw her letter in the Corner and thought it was very interesting. Thelma Smith, Tiger, Wash.

**Lucretia Knits Washcloths.**

Dear Aunt Nellie: I enjoy reading the Corner. I have one sister. Her name is Gertrude. She is 4 years old. I was 10 years old April 4. My name is Lucretia. We have a Junior Red Cross in our school. I have joined it. We have made one quilt. I have knit one washcloth and I have 7½ inches on another one. I am in the fourth grade. I go just a little ways to school. I go to school in town. The snow has all gone here. It is muddy and some water around. Here are some riddles: A riddle, a riddle, as I suppose, a hundred eyes and never a nose. Answer, cinder sifter. Patch upon patch, and a hole in the middle; if you guess this riddle I will give you a fiddle.—Lucretia Reynolds, Box 12, Fairfield, Idaho.

**From a Nova Scotia Girl.**

Dear Aunt Nellie: This is the first time I have ever written to the Children's Corner. I enjoy reading the letters very much. I am a Nova Scotia girl. I am 13 years old. I go to school. I am in the sixth grade at school. I have two brothers and three sisters. My papa is in the west and my mama is dead. My oldest brother is in the war. We take the Farmer. I like to read the stories in it, too. For pets I have two cats and a pretty horse. I call my horse Nellie. I have two miles and a half to walk to school. I live on a farm of 200 acres. I would be very glad to hear from each of the cousins or Aunt Nellie.—Georgena Baillie, River John, Nova Scotia.

**Bernice Lives in Utah.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I enjoy reading the letters. I would like very much to be a cousin. I am 11 years old. My birthday is the eighth of July. If I have a twin I should like them to write. I have one brother and one sister. Their names are Meda and James. I have no pets. I go to school. I have one mile to walk to school. My brother goes, too. He is in the fourth grade and I'm in the fifth grade. I shall write again.—Bernice Weddop, Tremonton, Utah. R. F. D. Route A.

**Dorothy Wants a Twin.**

Dear Aunt Nellie: I enjoy reading the Children's Corner. I earned my first money picking up potatoes. My papa gave me $2.50 and my little sister got $1.50. I have three brothers and three sisters and their names are Guy, Ulric and Harold. My sisters' names are Eva, Ila and Delphene. I live on a farm of 850 acres. We have seven cows and 18 horses. I am going to school. I am in the fourth grade. I was 11 years old November 16. Have I a twin?—Dorothy Shelhamer, R. F. D. No. 1. Box 50, Wilsall, Montana.

**Nine Boys and Five Girls at School.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 12 years old and will be 13 July 10. My father takes the Farmer. I live on a 40-acre farm. We have two horses, two cows and some chickens. I am going to school and am in the fifth grade. There are 14 pupils in my school, nine boys and five girls. May I join the Corner? Have I a twin? If I have I wish she would write to me.—Mabel Barr, Eatonville, Wash.

**Nellie Has a Turkey Hen.**

Dear Aunt Nellie: I am 11 years old. My birthday is June 8. I will be 12 years old then. I have two brothers and two sisters. My sisters' names are Hazel and Mabel and my brothers' names are Alva and Earl. Earl is my half-brother. His name is Earl Barton. Alva is working up at Osborn's. Alva is 14, Hazel is 10, Mabel is 8 and Earl is 4 years old. Earl is the baby. I have 20 little Rhode Island chickens. I have one turkey hen and she is sitting now. Mama has some little chickens and nine turkey hens. Papa has four horses and two colts. Their names are Pet, Nellie, Flossie and Dick. The colts' names are Jet and Beauty. We have one cow, one pig, two cats and one puppy. The cow's name is Spot and the puppy's name is Laddie. We walk one mile to school. I am in the sixth grade. Hazel and Mabel are in the fourth grade. We had two teachers this year. Our first teacher's name was Miss Gilmer. She was sick and had to stop teaching school and go to Seattle. Our other one is Miss Dills. I like her fine. I go to Lake View school, district No. 105. Papa takes the farmer.—Nellie Maley, Wheeler, Wash.

**Cutting Scraps for Pillows.**

Dear Aunt Nellie: We have been taking the Farmer for three months. I have been reading the letters so I thought I would write. This is my first letter to the Corner. I am 9 years old and in the fifth grade. I have brown eyes and natural curly hair. I also have three sisters and two brothers. I live on a 60-acre farm. We have three horses, two cows, one cat and one dog. We also have one pig. I walk a half a mile to school nearly every morning. My teacher's name is Miss Davidson. She is a nice teacher. I am very patriotic. I joined the Red Cross and am cutting scraps for pillows. Have I a twin? My birthday is February 7.—Maveria Green, age 9, Route 10, Hillyard, Wash.

**Fifteen Little Pigs Are All Red.**

Dear Aunt Nellie: I am the little girl who did not sign her name. My brother started to read the children's letters a few weeks ago and thought they were good. I have three sisters and one brother. My sisters' names are Bernice, Elvira and Mae. Bernice is 13 and in the seventh grade. Elvira is 11 years old and in the sixth grade. Mae is 8 and in the second grade. I am in the fourth grade. My birthday is August 20. We have two little kittens; their names are Toots and Snowball. They are about 6 months old. We have 15 little pigs, all of them are red. I guess I won't forget to sign my name this time. I would like to see Aunt Nellie.—Harriet Blyton, age 10, Bishop, Wash.

**Have a Good Time at Home.**

Dear Aunt Nellie: I was 12 years old March 2. I live in the country on a 160-acre farm. We are building a new house. We have one cow, two calves and seven horses. I have a pony named Stell, which I ride to school. I have one mile and a half to go to school. I am in the sixth grade. There are six children in our school. Our school joined the Junior Red Cross. We are very proud of our charter. I have six brothers and one sister. They are all home this winter. We certainly have a good time together. I am going to raise a garden this summer. I have two Black Minorca hens and one rooster. I hope my letter will be welcome to the Corner.—Bessie Cheyney, Route 2, Republic, Wash.

**Buttercups and Birds Are Here.**

Dear Aunt Nellie: I wish I could find a twin. I love to read the nice letters. Some of the cousins write big letters. My brother's name is Mervil. He got his arm broken yesterday. He was in a tree and he fell out and broke his arm. He was taken to the doctor. He just got back tonight. It is spring here now; the buttercups are in bloom and all the birds are here. When school is out I am going to have a garden. We have sent for the seed. We all ought to have a big garden. Food will win this war. I wish all the cousins would have a bik garden. We have a dog and a cat. The dog's name is Tip. She is a shepherd dog.—Wilma Little, Fruitland, Wash.

**Would Like to Have a Twin.**

Dear Aunt Nellie: This is the first time that I have written in the Children's Corner. I live in the country about two miles from town. I am 10 years old. My birthday is August 18. I would like to have a twin. If I have I would like for them to write me soon. I am in the fifth A grade. There are 44 in my room. I have no sister, but have one brother 13 years old. I have one dog and one cat. Their names are Tricks and Pussy. We have one cow and two calves. —Matie Burchett, Bellingham, Wash. R. F. D. No. 2, Box 303.

**Wants the Corner to Grow.**
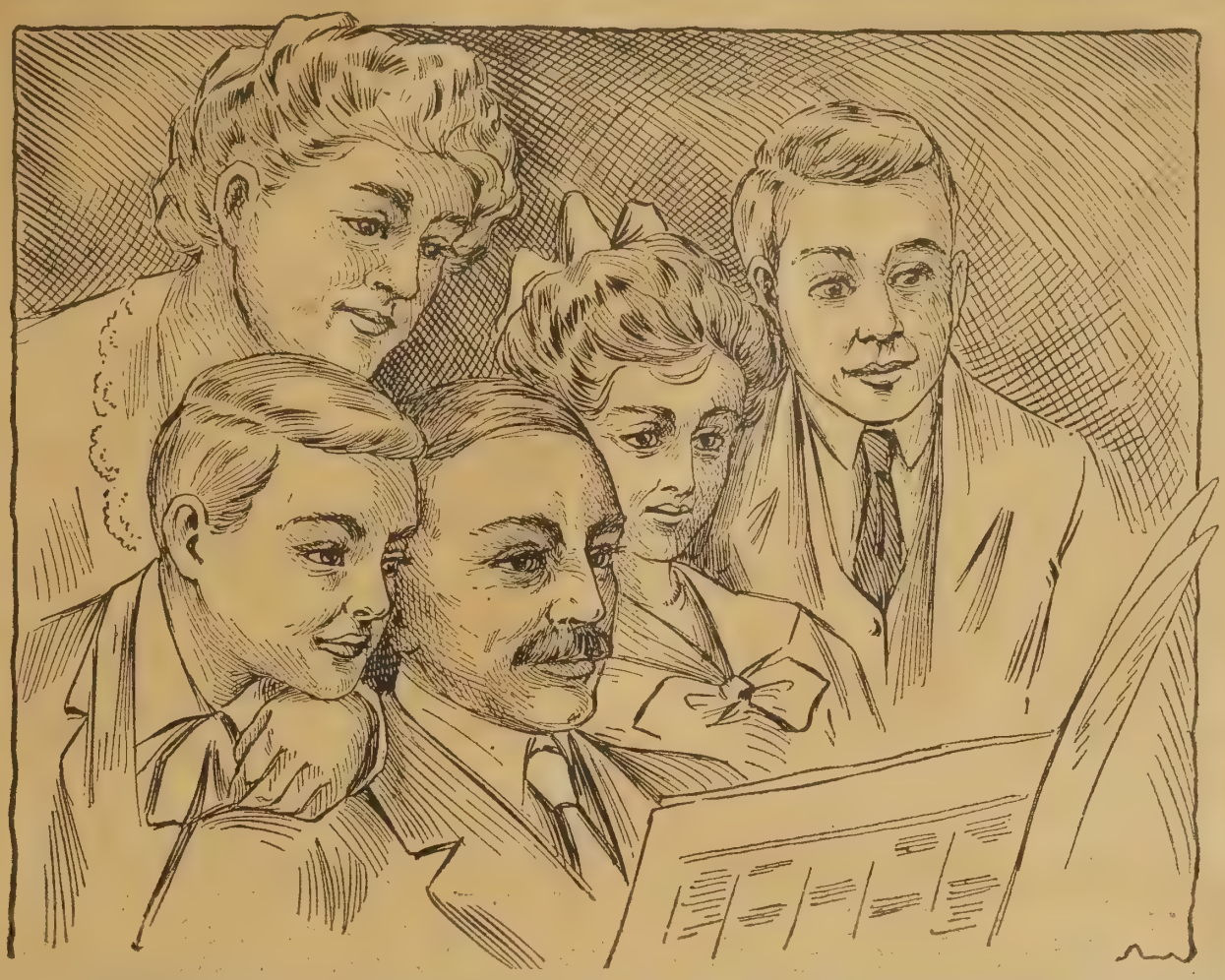
Dear Aunt Nellie: I am 12 years old and am in the sixth grade. My birthday is October 12. Have I a twin? If so, I wish she would write. I go to school on the stage. My teacher's name is Miss Sefrit. I like her fine. I am doing fine in school. I have two sisters. Their names are Jennie and Nellie. I want the Corner to grow. Jennie is going to write a letter.—Leta Lane, Box 294, R. F. D. 2, Bellingham, Wash.

**Pick Flowers in the Woods.**

Dear Aunt Nellie: I am 7 years old and am in the first grade. I like to go to school very much. My teacher's name is Miss DeValois. I have light brown hair and blue eyes. I have three sisters. Their names are Mathilda, Henrietta and Jacoba. I have one brother. His name is John Henry. We have a large woods back of the house. We go there to pick flowers in the summer. We also pick blackberries there.—Cornelia Muyskens, R. R. 1, Lynden, Wash.

Address all letters to Aunt Nellie, care of The Washington Farmer, Spokane, Wash.

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# NEWS FOR BREEDERS

## Mears Sells His Herd.

S. M. Mears Jr., who for some 20 years has been breding Poland China swine at Woodland, Wash., has sold his herd to Merrill & Ring of Seattle, and has accepted the position of supedintendent of the stock ranch of these gentlemen at Pysht, Wash. The Mears herd included the 1000-pound big type boar, Superba Jr., that Mr. Mears purchased from the Royston estate of Payette, Idaho, last fall. It is the intention to build up a herd that will be second to none in the west and with Mr. Mears in charge. The purchase of another greatly bred boar, this time from an eastern breeder, will probably soon be announced. It it also planned to run a herd of high grade Shorthorns, and in time breed purebred cattle.

Pyhst is away up toward the point of the Olympic peninsula, where lumbering is now the principal industry. It is a wonderful pasture country, when developed, and Mr. Mears is enthusiastic over its possibilities. H. A.

## Purebred Stock Shipments.

Carlton Sentinel: Foothills farm has shipped purebred stock as follows: A Guernsey bull to W. A. Taylor, Kalama, Wash.; a Shorthorn bull to W. A. Northcraft, Dillard, Ore.; Shorthorn bull to Jacob Jones, Roseburg, Ore. Recently the farm shipped a Yorkshire boar to Sacramento, Cal. Jacob Jones also bought one of Frank Brown's fine Hampshire sheep.

## Guernsey Breeders Organize.

Recently through the efforts of R. M. Turner, county agent of Island county, Washington, the Island County Breeders' association was formed, with a membership of 15 live Guernsey breeders. The officers elected at this first meeting were J. P. Frosted, president; P. A. Frosted, vice president, and W. P. Parker of Oak Harbor, secretary.

The object of this association, as stated by President J. P. Frosted, is to get in several carloads of good Guernsey heifers and a number of sires and in this way not only improve the herds of the members, but to make Island county, Washington, a Guernsey center, both for breding stock and for Guernsey milk as well.

## Live Stock Notes.

Colorado lambs in fleece have reached $22 on the Chicago market.

In 1880 the first herd of Longherds was trailed into eastern Montana from Texas.

During 1917 about $5,000,000,000 pounds of milk were produced in the United States.

At the Calgary, Alberta, sale of 778 bulls, the top price was made by a Hereford at $3200.

Three years ago there were 18,000 breeders of Shorthorns in the United States. Now there are 30,000.

A sale of 65,000 pounds of wool has been made by the Berg Sheep company of Idaho to a Philadelphia house at 55 cents.

During six important auctions of Herefords held in the south recently 115 bulls averaged $287 and 196 females $322.

E. Z. Russell, Omaha, Neb., has been appointed by the United States department of agriculture as a specialist in swine husbandry.

R. P. Heren of Miles City has been elected president and W. K. Floweree of Great Falls, secretary-treasurer of the Montana Stock Growers' association.

## Grand Champion Shorthorn Sells for $4500



Village Clipper, grand champion bull at the National Shorthorn congress. He sold for $4500 to the South Dakota Agricultural college, Brookings, S. D.


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# Breeders' Department


GUERNSEY AUCTION
53—Famous Gile Herd—53
Astoria, Ore., May 23, 1918

About 25 registered Guernseys, the balance high grades, consisting of cows in milk, bred heifers, young calves and a number of excellent young bulls. They represent some of the best blood lines of the breed, for both production and show type. The herd of Guernseys from this farm have done much to make the breed famous, both as producers and show winners.

For convenience of those coming by train the cattle will be taken from the farm at Chinook, Wash., to Astoria, Ore. They will be sold on the W. O. Reith farm near Young's bridge. Free transportation to and from trains on day of sale. Catalog gives full information. COME. Lunch at 12 o'clock, sale immediately following.

E. A. RHOTEN
Sales Manager, Salem, Ore.

A. L. GILE Owner, Chinook, Wash. | COL. J. W. HUGHES, Auctioneer, Forest Grove, Ore.



100—DISPERSAL SALE—100
Glen Tana Registered Jerseys
and
150—Grade Jerseys and Holsteins—150
At Glen Tana Ranch, 9 Miles North of Spokane, June 5 and 6.
Registered Stock Sale June 5
Grade Jerseys and Holsteins June 6

Among some of the cows that will be offered is:
Eminents Jimps Owl, daughter of Princess Jimps Eminent; Class AA; producing 359.15 fat, 8492.1 milk; 2 yrs. 11 mos.

First reentry. (Test started May 14, 1917, and up to May 1 has given 16,372.0# lbs. milk, which will easily go 4¼%, and is giving 25 to 30 lbs. milk now, April 10.) How is this for a 4-year-old?

We have many Jersey heifers and bulls from Register of Merit dams that will enable you to form an idea of the quality of stock offered in this sale.

KEEP THE DATE AND PLACE IN MIND. Write for Catalogue.

T. S. GRIFFITH 905 MAIN AVENUE SPOKANE, WASH.
PROP. GLEN TANA STOCK FARM


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Carnation Stock Farms

Over 300 in herd to select from. Herd has been under federal inspection for several years. Our herd sires are Matador Segis Walker, a grandson of King Segis, out of Matador Twisk Minette 4th, with record of 33.69 lbs. His first five two-year-old heifers, to freshen, have averaged nearly 22 lbs. in 7 days; King Segis 10th; Johanna McKinley Segis, the 40-lb. bull.

Write today your needs for a Holstein bull. Get them while they are young. Save money on cost price and on express charges. Careful attention given to mail orders.

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Visitors welcome. Correspondence solicited. Write for circular, Value of Pure Bred Sires.



365-DAY HOLSTEINS

24,667 lbs. milk—1026 lbs. butter—is the s. o. advance registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.

THE HERD WITH YEARLY RECORDS.

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The Most Profitable Cows

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Pure bred registered Holstein cattle. Herd sire Segis Pontiac Acme; average of three of nearest dams; butter, 1 year, 1080.82 lbs.; milk, 24,380.3.

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Young bulls, some of them ready for service, by a sire whose five nearest dams average 26.17 pounds butter, or another with 29.67-pound dam, and out of high-record A. R. O. dams. Priced to sell.

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My pen, 5 Barred Rocks, at Pullman laying contest laid in Nov. 88, Dec. 100, Jan. 104 eggs. Eggs from this winter-laying strain, $1.50 15; $8 per 100.

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Bull calf out of Lucy of P. V., full sister to St. Mawes Susie; 936 lbs. butter in a year; to St. Mawes Blossom 823 lbs., and to Susie's Twin Maiden, 642 lbs. Sire, Poppy's St. Mawes, son of St. Mawes Poppy, 1120 lbs.

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We are offering a choice bull calf by St. Mawes of Ashwood and out of a daughter of the great Holger. This youngster carries the best blood in Jerseydom and is fit to lead any herd. Price on application, but don't delay, as he will cost more after his dam completes her present register of merit test.

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Three register of merit cows, freshen in March, two in April. Baby bulls are sold so reasonably you can't afford to buy a bull of service age. Raise your own bull and save money. Prices, pedigrees, photos, etc., sent on request. Can spare a few good register of merit cows.

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Register of Merit Jerseys. Largest Jersey herd in the northwest. Young stock for sale.

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SEVERAL OF MY BEST OFFERINGS, from 3 months to a year and a half, all from high-producing dams. These fellows are bred right and they will be sold right.

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85 per cent BUTTER for 11 head. Sold six bull calves in the past 4 mos.; 3 of the last ones brought $250 each. These were sons of our herd bull, G. P. St. Mawes; just one bull calf left.

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### Herd Bulls

**Imported Doune Radiance No. 609412**
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### Hercules Shorthorns

We can supply you with choice, well grown bulls and females of breeding age. Your inspection of our herd is invited. Visitors always welcome.

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A few young stock for sale by such noted sires as Prime Prince, 421193, and Sultan Still, 493239.

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We offer a young herd bull (registered), ready for service in four months, and 7 yearling heifers, all of imported Scotch blood. Bull and heifers unrelated. Prices reasonable. Write us and come to the Union Stock Show.

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Registered bulls and heifers of breeding age for sale. Some from extra heavy milking dams.

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Breeders of top registered Shorthorn cattle.
Correspondence solicited.

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Young bulls and heifers, sired by Scotch bulls; liberal terms.

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In the famous valley of the Yakima there is located one of the best herds of Aberdeen Angus in America. Proof of this is evident by the many prizes won by this herd at all of the greatest shows of the northwest and central states, including the Chicago International.

Fifty extra good range bulls are now offered for sale. Also fancy herd headers and show cattle of both male and female. All prices very reasonable.

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### Aberdeen Angus Cattle

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**FOR SALE, IMPORTED GUERNSEY BULL.**

Hartfield, 43300, born June 18, 1916. Winner of 2d prize, yearling class, National Dairy Show, 1917. Sire—Hayes Kitchener, 2971E. Dam—Hartfield Rose of the Couture 8th, 67882. Now doing A. R. work.

**WRITE W. W. MARSH.**
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### ORCHARD HILL FARM

"Home of High-Class Guernseys."
Dr. Park Weed Willis, Owner.
**Redmond, Wash.**

### FAIRVIEW FARM

Breeders of high class registered and grade Guernseys.

**A. J. SINNES.**
Route 5. Mt. Vernon, Wash.

## DUROC-JERSEY SWINE

**DUROC SOWS FOR SALE.**

A few choice Duroc gilts, bred to farrow early next May, daughters of grand champion Richards Defender and bred to Junior Champion Richards Pathfinder. No better breeding east or west. Also a few good boars ready for service. Price very reasonable. We furnish pedigree and guarantee satisfaction, or will refund your money and pay express both ways.

**RICHARDS LIVE STOCK CO., Virginia, Ida.**
Home of the Champion Durocs.

### IOKA FARM DUROCS

HOME OF GOLDEN ROD.

Bred gilts and weanling pigs for sale.

**A. N. Doerfler, Mgr.** **Doerfler Bros., Silverton, Ore.**

### Chas. G. Sprong

BREEDER.

Registered Duroc-Jersey hogs. Weanling pigs for sale.

**GRANDVIEW,** **WASH.**

**ROOT & MASON,**

Breeders of early maturing, easily fed type. Some choice stock for sale. Defender and Overbrook strains.

**Hermiston,** **Oregon.**

**REGISTERED DUROC-JERSEY HOGS.**

Some good spring litters Richards Defender and Pathfinder breeding; big type. Send out nothing but high class stock. Guaranteed to please. Write me for prices on these pigs.

**ERIK W. OLSON,** **Virginia, Idaho.**

### Pure-Bred Duroc Jerseys

Descendants of the Famous GOLDEN ROD.

**B. B. DOERFLER, R. 3, Silverton, Ore.**

**DUROCS.**

Boars and open or bred gilts of excellent breeding.

E. E. PRICE, CABINET, IDAHO, OR
**JAMES N. PRICE.** **Yakima, Wash.**

**AVONDALE STOCK FARM.**

Registered Duroc-Jersey hogs. Inspection invited. Correspondence solicited.

**H. C. POLLY.** **Route 3, Burley, Idaho.**

**OTTO'S DUROC JERSEYS.**

Stock doing fine, splendid prospects for spring crop of pigs. For sale jr. yearling boar with a show record; very classy individual. **Filer, Idaho.**

## POLAND CHINA SWINE

### LOCUST HILL HERD

Big type and medium Poland-Chinas. Bred gilts and spring pigs of both strains, unrelated. Sixteen years a breeder of Poland-Chinas in Oregon.

**A. L. SWAGGART,** **Athena, Ore.**

### LOCUST LAWN HERD

Sold Out.

**W. F. HOWARD & SONS, Caldwell, Idaho.**
S. Kimble Ave.

**GREENLEAF STOCK RANCH.**

Big type Poland Chinas, either sex. for sale at all times.

**Wilson Bros., A. L. Wilson, Mgr.**
Greenleaf, Idaho.

**BIG TYPE POLAND CHINAS.**

Herd headed by Sammy (79833). Correspondence solicited.

**Fruitland Stock Farm, C. Royston, Mgr.**
Payette or Fruitland, Idaho.

**QUALITY HERD.**

If you want to improve your herd, try stock from my winners at the Oregon state fair.

**RAY J. FOX.** **Lyons, Ore.**

### PURE BRED POLANDS

A good herd boar for sale; also booking orders for spring farrowed pigs. Will ship C. O. D. subject to your approval.

**HERBERT WILLARD,** **Dayton, Ore.**

## BERKSHIRE SWINE

### Riverby Orchard Berkshires

Riverby Orchard Berkshires won 12 out of 15 first prizes at the Washington state fair, 1916, also many prizes, including grand champion sow at the Panama-Pacific world's fair. We offer for sale a few good boars and young sows.

**D. C. BUNN.** **Prosser, Wash.**

## CHESTER WHITE SWINE

### COVE STOCK FARM

Unrelated fall and spring Chester White pigs from prize winning stock.

**ARCHIE CONLEY.** **Cove, Ore.**

## TAMWORTH SWINE

**ROUND KNOLL RANCH NO. 3.**

Herd headed by Knoll Slope Colonel, assisted by Jolly Lad IV. Correspondence solicited.

**Bliss, Idaho.**

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, May 13.—Corn bulged in value today owing more or less to a good-sized decrease of the visible supply total. Prices closed strong at a shade to 2½c net higher, with May $1.27 5-8@1.27¾ and July $1.45⅛@$1.45 1-4. Oats advanced 1 5-8c to 2 1-4c. Provisions finished unchanged to 45 cents lower.

It became apparent almost from the outset that the corn market was in an oversold condition. Evidence that big commission houses were buying made shorts cover freely, and brought about a decided upturn in quotations soon after the opening

Demand, however, failed to last, and the market had undergone a material setback when toward the end of the session a falling off in the visible supply figures attracted notice. Fresh advances then followed and the close was at virtually the top figures of the day.

Oats were bullishly affected by abnormally cold weather northwest and by excessive rains elsewhere.

Weakness of the hog market carried down provisions and so, too, did disappointing exports. Grain strength, though, led afterward to rallies.

### Cash Quotations.

CHICAGO, May 13.—Corn—No. 2 yellow, $1.68@1.70; No. 3 yellow, $1.57@1.63; No. 4 yellow, $1.35@1.48. Oats, No. 3 white, 75@76 1-2c; standard, 75¾@76¾c. Rye—No. 2, $2.05@2.10. Barley—$1.30@1.50. Timothy—$5@8. Clover—$18@28. Pork, nominal; lard, $24.77@24.87; ribs, $22.75@23.37.

### Chicago Futures.

| | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| Corn— | | | | |
| May ..... | 1.27⅝ | 1.27⅝ | 1.27⅝ | 1.27⅝ |
| July ..... | 1.42½ | 1.45¼ | 1.42½ | 1.45⅛ |
| Oats— | | | | |
| May ..... | .72 | .75 | .72 | .74⅞ |
| July ..... | .64¾ | .66¾ | .64¾ | .66¾ |
| Pork— | | | | |
| May ..... | .... | 44.35 | 44.07 | 44.25 |
| July ..... | 44.75 | 45.00 | 44.60 | 44.85 |
| Lard— | | | | |
| July ..... | 25.00 | 25.25 | 25.00 | 25.25 |
| Sept. ..... | 25.40 | 25.52 | 25.32 | 25.52 |
| Ribs— | | | | |
| July ..... | 23.67 | 23.87 | 23.65 | 23.87 |
| Sept. ..... | 24.12 | 24.32 | 24.12 | 24.32 |

### Pacific Northwest Grain.

PORTLAND, Ore., May 13.—Grain 30-day options: Oats, No. 2, $61.50 bid. Eastern oats and corn in bulk, oats No. 3 white, $52; 38-pound clipped white, $53; corn No. 3 yellow, $61; corn No. 3 mixed, $60; oats No. 3, $52; clipped, $53; corn yellow, $61; corn mixed, $60.

SEATTLE, May 13.—Quotations on the Seattle grain exchange today are as follows: No. 2 feed barley, $60 per ton. No. 2 white feed oats, $58 per ton. Eastern clipped oats, $52 per ton. No. 3 corn, $60 per ton. Timothy hay, $31 per ton. Alfalfa hay, $20 per ton. Straw, $10.50 per ton.

### Minneapolis Grain.

MINNEAPOLIS, May 13. — Wheat—Receipts, 273 cars, compared with 394 cars a year ago. Corn—No. 3 yellow, $1.60@1.70. Oats—No. 3 white, 73@74c. Flax—$3.88@3.90. Flour—Unchanged; shipments, 71,439 barrels. Rye—$2.08@2.12. Barley—1.05@1.40. Bran—$28.14.

## Live Stock Quotations.

### At Omaha.

OMAHA, May 13.—Hogs—Receipts 9100. Market 25c to 35c lower. Heavy, $16.95@17; mixed, $16.95@17; light, $17@17.10; pigs, $12@16; bulk, $17.17.

Cattle—Receipts 5800. Market 5c to 10c higher. Native steers, $11.50@17.50; cows and heifers, $9@13.50; western steers, $9.50@14.50; Texas steers, $9@12.25; cows and heifers, $9@11.50; canners, $7.50@9; stockers and feeders, $8@13.25; calves, $10@12.75; bulls, stags, etc., $9@13.

Sheep—Receipts 5000. Market 25c lower. Wethers, $15@16.75; ewes, $14@16; lambs, $19@20; yearlings, $17.15@18.50.

### At Chicago.

CHICAGO, May 13.—Hogs—Receipts 54,000. Market slow, 10c to 15c under Saturday's average. Bulk, $17.35@17.70; light, $17.20@17.85; mixed, $17.15@17.85; heavy, $16.25@17.60; rough, $16.25@16.60; pigs, $14@17.25.

Cattle — Receipts 13,000. Market weak. Native steers, $10.15@17.50; stockers and feeders, $9@12.85; cows and heifers, $6.90@14.25; calves, $8@14.

Sheep—Receipts 18,000. Market weak. Sheep, $12.25@16.50; lambs, $15.25@20.50.

### At Portland.

PORTLAND, Ore., May 13.—Cattle—Market steady. Receipts 902. Prime steers, $15.25@15.50; good to choice steers, $14@15; medium to good steers, $12@13; fair to medium steers, $9.50@10.50; common to fair steers, $8@9; choice cows and heifers, $12@13; medium to good cows and heifers, $8@10; fair to medium cows and heifers, $5.50@7.50; canners, $3.50@5.50; bulls, $6.50@10.50; calves, $7.50@13; stockers and feeders, $8@10.

Hogs—Market higher. Receipts 807. Prime mixed, $17@17.25; medium mixed, $17.40@17.60; rough heavy, $16@16.25; pigs, $14.50@15.50; bulk of sales, $17.25@17.50.

Sheep—Market steady. Receipts 570. East of mountains lambs, $17.50@18.50; valley lambs, $17.50@18.50; valley lambs, $17@18; yearlings, $15.25@15.50; wethers, $13@13.50; ewes, $12@12.50.

Shorn sheep 2½c to 3c under quotation.

### Spokane Stockyards, Monday.

Hogs—Receipts 39. Market steady. Prime mixed, $17.15@17.35; medium mixed, $17@17.20; pigs, $15@16; stockers and feeders, $13.75@15.75; bulk of sales, $17.25.

Cattle—Receipts 151. Market slow and weak—Prime beef steers, $15.25@16; good to choice steers, $13.25@14.25; medium to good steers, $12@13; fair to medium steers, $9.50@10.50; common to fair steers, $7.75@8.75; choice cows and heifers, $11.75@12.75; good cows and heifers, $8.75@9.75; medium to good cows and heifers, $7.75@8.75; common to medium cows and heifers, $5.50@7.50; canners, $3.50@5.50; bulls, $6.50@10.50; calves, $8@12.75; stockers and feeders, $6.75@9.

Sheep—Receipts 63. Market steady. Prime lambs, $16.50@18; good lambs, $14.50@15.50; prime yearlings, $14@15; prime wethers, $12.50@13.25; best mutton ewes, $10@11.

## Seattle Market.

SEATTLE, May 11.—The apple season in Washington, regarded here as one of the most successful from the standpoint of profits and quality from grower to retailer, is now conceded to be a closed incident. Last quotations at Yakima, where practically all the unsold apples in the state are now held, are $2.50 f. o. b. for Winesaps of 225's and larger, eastern buyers being the source of the bids. There is little of this fruit to be had, cider and jumbles grades being all that is available. There are no unsold apples at Wenatchee.

### BUYING PRICES.

Unless otherwise stated the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots, f. o. b. Seattle:

Eggs—Local, 36@37c per dozen; eastern Washington, Oregon and Idaho, 34@35c.

Poultry—Broilers, 35@40c lb; live, old roosters, 17@20c lb; squabs, large, $3.50 dozen; geese, fat, live, 18@25c; ducks, live, fat, 27@30c.

Butterfat—16c lb; dairy butter, 30@35c.

Beef—Buying prices: Prime beef, steers, 16@17c; cows, fat, 15@16c lb; heifers, 16@17c.

Hogs—Light, 18@21c lb; heavy, 18@20c lb.

Veal—Fancy light, 17@19c lb; heavy, 16@17c lb.

Hides—Salted, 14c lb; flint-dry hides, 29c lb; salt kip, 16c lb; green hides, 11c lb; green calf, 23c lb; dry calf (under 6 pounds), 29c lb; bulls and dry salts, 4c lb. less; green bulls, 9c lb. Clean, long wool, western Washington flint dry pelts, 39c per lb; heavy to clean eastern Washington flint dry pelts, 30@35c lb.

Asparagus—Kennewick, 10@12½c lb; Oregon, 10@12½c; Granger, 10@15c.

Potatoes—Puget sound, $17@22 per ton; eastern Washington, $28@30 per ton; seed, 1¼@1½c per lb.

Feed—Bran, $34 per ton; shorts, $35.50; scratch feed, $79; all grain chop, $75; oats, $71; sprouting oats, $78; rolled oats, $73 ton; whole corn, $75; cracked corn, $77; rolled barley, $77; clipped barley, $78; alfalfa meal, $36; oil meal, $72; egg mash, 65.

Hay—Eastern Washington timothy, $36@37 per ton; do double compressed, $38@39; alfalfa, $26; Puget sound, $26@27; straw, $15.

## Spokane Market.

### WHOLESALE.

**Vegetables**—Cabbage, $4@5 cwt; carrots, $2@2.50 cwt; bunch carrots, 75@90c doz; bunch beets, 75@90c doz; beets, $3 cwt; rutabagas, $1.50 cwt; parsnips, $1.50 cwt; hothouse lettuce, 50c 5-lb box; head lettuce, 80@85c doz, $2.75@3 crate; turnips, $2.50 cwt; bunch turnips, 75@90c; California new turnips, $2 cwt; red bell peppers, $1.25 box; chilli peppers, 25c lb; green peppers, 11c lb; Florida tomatoes, $5.50 6-basket crate; Mexican tomatoes, $3.50 lug; celery, $6.50 crate; hothouse cucumbers, $2.25 doz; cauliflower, $2.25@2.50 crate; new garlic, 10@12½c lb; parsley, 40c doz bunches; horseradish root, 12½c lb; brussels sprouts, 12½c lb; radishes, 35@40c doz bunches; rhubarb, $1.25 box; spinach, 5c lb; Kennewick asparagus, $1.40@1.50 box; Walla Walla, $2@2.25 box; new peas, 8½c lb; artichokes, $1.25 doz; wax beans, 18c lb; green beans, 16c lb.

**Potatoes**—Washington potatoes, 90c@$1.30 cwt; California new potatoes, 8½c lb.

**Strawberries**—California strawberries, $3.25 crate; Kennewick, $5 crate.

**Onions**—Bermuda onions, $2.50 crate; California onions, $1.60 cwt; green onions, 35@40c doz bunches; wax onions, $2.50 crate.

**Tropical Fruits**—Bananas, 7c lb; lemons, $6.75@7.25 case; Valencia oranges, $6.25@6.50 case; Sunkist Valencias, $6.75@7 case; medium sweet oranges, $5.50@6; blood oranges, $3.25 half case; Florida grapefruit, $5@6.50.

### MEAT.

**Beef**—Beef steers, 19@23½c lb; cow beef, 17½@20c lb; heifers, 21½c lb; best loin, 32@34c lb; steer chucks, 19@20c lb; prime ribs, 24@26c lb; rump and round, 23½c lb.

**Mutton**—Breakers, 31c lb; wethers, 30c lb.

**Lambs**—Diamond T. C. lambs, 40c lb; lambs, 35c lb.

**Pork**—Packer dressed hogs, 26@27c lb; pork loins, 30@31c lb; legs, 30c lb; shoulders, 25c lb; leaf lard, 28c lb; tenderloins, frozen, 35c lb; spareribs, 19c lb; country dressed hogs, with head on, 20c lb to producer; country dressed veal 17c lb to producer.

**Smoked Meats**—Washington hams, 34c lb; T. C. hams, 35c lb; T. C. bacon, 46½c lb; Washington bacon, 40½@45½c lb; picnics, 24½c lb; Boston butts, 31½c lb; English bacon, 38½c lb.

**Star Brand**—Hams, 35c lb; Shield hams, 33@34c lb; picnics, 24½c lb; bacon backs, 33c lb; Star bacon, 46½@48½c lb; Shield bacon, 41@45½c lb; Simon Pure lard, $17.50 case; Shield lard, tierces, 27½c lb; White Cloud compound, tierces, 23¾c lb.

**Dry Salt Meats**—Clear bellies, 28c; lean backs, clear, 27½c lb; sides, 26c per lb.

**Lard**—Tierces, 27½c lb; $14.55@15.27 case; Diamond T. C. pureleaf lard, $16.25 case, $8.20 half case; Snowcap compound, tierces, 23¾c lb.

### POULTRY.

**Live Poultry**—Live hens, large 24c lb; small, 22@23c lb; roosters, 18c lb to producers, f. o. b. Spokane.

### GRAIN AND FEED.

**Rice**—Fancy head, $7.50@9.50 cwt.

**Flour**—Bluestem, $9.20; Blend, $9.20 Montana hard wheat, $10.20; graham, $8.60 bbl, 49-lb sacks; whole wheat, $8.80; eastern rye, $10.10; eastern rye meal, $10.30; oat flour, $12.85, 4 45-lb sacks.

**Oats**—$73 ton whole, $75 rolled, delivered in city.

**Corn**—$74 ton; cracked corn, $76 ton.

**Bran**—$30 ton; shorts, $32 ton; bran and shorts, $31 ton.

**Barley**—Rolled, $75 per ton.

**Oil Meal**—$78 per ton.

**Hay**—Timothy, $32 per ton, $31 ton by carload; alfalfa, $27 ton, $26 ton by carload.

### GASOLINE, LINSEED OIL, ETC.

**Gasoline**—Red Crown, bulk, 24½c gal, cases, 34½c gal; Shell, 24½c; refined oil (Pearl), bulk, 13c gal, cases, 23c gal; Eocene, 15½c gal in bulk, cases, 25½c gal; engine distillate, 15½c gal, bulk.

**Linseed Oil**—Raw, bbl, $1.68 gal, case, $1.85 gal; boiled, bbl, $1.70 gal, cases, $1.88 gal.

**Turpentine**—Bulk, 65c gal; cases, 85c gal.

**White Lead**—Strictly pure white lead in oil, ton lots, 11¾c lb; 50-lb lots, 12½c lb.

## Butter and Eggs.

PORTLAND, Ore., May 13.—Butter, prints extras 44@45c, cubes extras 39c; prime firsts, 38c; dairy, 31c. Butterfat, Portland delivery, No. 1 sour cream, 43c.

SAN FRANCISCO, May 13.—Butter, 40½@42c. Eggs, fresh extras, 39c; extra firsts, 39c; firsts, 38½c; fresh extra pullets, 38c; first pullets, 37½c. Cheese, new firsts, 20c.

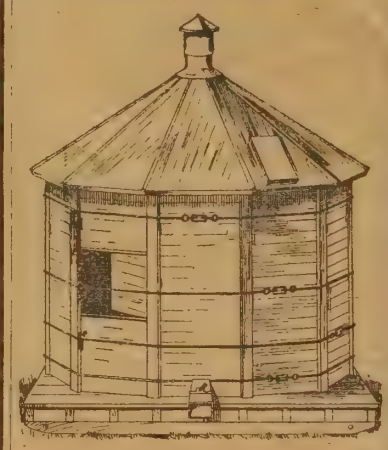
CHICAGO, May 13.—Butter, steady; creamery, 35@42c. Eggs, steady; receipts, 24,544 cases; firsts, 32½@33½c; ordinary firsts, 31½@32c; at mark, cases included, 31½@32½c.

# Washington Winter Wheat Acreage

The abandonment of winter wheat for the state of Washington this year is not in excess of that of the average and is materially below that of last year. This is the summary of the report made by E. T. Marchetti, field agent of the government bureau of crop estimate, under date of May 8. Mr. Marchetti finds that the abandonment of local fields here and there in the Palouse and Big Bend countries, while slightly greater than the average abandonment in those localities is substantially offset by the extremely small amount of resowing throughout Walla Walla and adjacent counties. There was practically no winter killing of north hill slopes. Indications point to a production of a little over 10,000,000 bushels of winter wheat in the state of Washington. Of the total of 422,000 acres in winter wheat this season seven counties—Asotin, Columbia, Garfield, Klickitat, Spokane, Walla Walla and Whitman—have 382,290 acres, as follows:

| County | Acreage Sown | Acreage Abandoned | Ac. Remaining to be Harvested | Condition |
|---|---|---|---|---|
| Asotin | 21,000 | 420 | 20,580 | 100 |
| Columbia | 40,040 | 400 | 39,640 | 95 |
| Garfield | 34,450 | 345 | 34,105 | 95 |
| Klickitat | 30,400 | 1,725 | 28,675 | 90 |
| Spokane | 28,050 | 2,144 | 25,906 | 80 |
| Walla Walla | 102,310 | 1,023 | 101,287 | 95 |
| Whitman | 126,040 | 12,080 | 113,960 | 80 |
| Totals | 382,290 | 18,137 | 364,153 | 90 |
| State Totals | 422,000 | 21,100 | 400,900 | 90 |


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is a blow at the kaiser, because it

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Think of the labor saved by bulking grain.

Think of the satisfaction and permanence of farm storage.

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No skilled labor is needed to erect the Weyerhaeuser Grain Tank, yet there is nothing cheap or temporary in its construction. Its special features permit of general use when empty of grain.

Our capacity for manufacture and shipment is already heavily taxed and late buyers will be disappointed. ORDER EARLY.

Weyerhaeuser Timber Co.

EVERETT, WASHINGTON.

THE VELIE TRUCK

*You Can Depend Upon a Velie Truck for Hauling Milk*

Because—

Velie Trucks are making trips in spite of all weather conditions. You can depend upon a Velie to get your milk to condensery and cheese factory at a low cost. The fact that dairymen are depending on the Velie accounts for their steady increase in use in the State of Washington.

Roesch Motor Car Co.

Pine Street and Boren Ave., Seattle, Wash.
Write today for catalogue.




WANTED--1000 tons of mixed country scrap iron

In carload lots of not less than 25 tons each. Write for prices if interested.

PACIFIC HIDE & FUR DEPOT.
Joseph Thiebes and C. T. Symmes.
1101-09 Railroad Ave., Spokane, Wash.

## CORN AND PUMPKINS.

### Farmers Do Not Plant Enough.

John Klingele of Yakima writes: "Nobody should experiment too heavy this time and not depend on hired help more than absolutely necessary. Be sure that, other things being equal, you have enough feed of your own to market your stock; don't raise young stuff that somebody else may not want to feed, for soon there will be more pigs than feed at the right price. People get weaned away from high-priced things and are hard to bring back again. We see that with potatoes this year, and it will take several years before people will eat as many potatoes as they have done, but that will not be the case with wheat flour, as it is cheaper now than most of the substitutes. If we had a general public market day twice or oftener a year, like in old Missouri, then we could get rid of most anything, but here everybody is for himself, and that often is hard skidding. I think people don't plant enough sweet corn and pumpkins. The wireworm does not bother pumpkin seed, and in a cornfield pumpkins will fill out the vacant places and perhaps make up for corn lost. My best money crop last year was a small patch of popcorn, although my field corn made over 100 bushels of corn to the acre. I have my seed corn yet, and it tests 100 per cent." Mr. Klingele adds that they always have a surplus of most things, but that gardens are not made in the same way they are on eastern farms. He says: "We have three kinds of berries and raise a lot of sweet corn, cabbage, tomatoes, carrots, etc."

## Put Forth Best Efforts.

**By C. C. Brown, Castle Rock.**

There is no lack of patriotism in Cowlitz county, that has been reported. Of course stories will get started and go the rounds, gathering a little as they go, and by the time the last person gets hold of it the story is out of all reason, and the farmers, as a rule, are doing all they can to make good in the crop supply. Of course there is criticism of the mistakes of the government departments, but it has not disgruntled to a apoint where they are failing to put forth their best efforts, willing to overlook hardship and do their utmost.

## Drying Potatoes for Stock.

W. A. Linklater, superintendent of the Western Washington experiment station, does not believe drying potatoes for stock feed will be a paying venture unless plenty of cull potatoes can be obtained at about $10.00 per ton. With beet pulp normally selling at $25 per ton and with the possibility of $40 or $50 corn next year, the building of drying plants at a time when machinery is abnormally high is a risk.

PLEASE send me The Twice-a-Week Spokesman-Review and The Washington Farmer under your combination offer, for which I am enclosing $1.00. I have also included five cents for one of your Farm Service War Flags.

JIM SANFORD.
Oroville, Wash.

# Want Ads

### HELP WANTED—FEMALE 1

SUMMER COURSE IN TELEGRAPHY opens June 10. Jenkins Institute of the Spokane Y. M. C. A.

### SITUATION WANTED—Male 21

MAN WITH SMALL FAMILY WANTS place on poultry ranch, to learn the business. Would run small ranch for absent owner, or would take place on stock ranch. Educated, reliable, experienced in general farm work. Permanent place wanted. Box 41, Fort Washakie, Wyo.

### EDUCATIONAL 43

EARN MORE, ENROLL ANY TIME, AT Behnke-Walker, Portland, northwest's biggest business college, because best. Graduates assured positions. Write for catalogue.

### TEACHERS' AGENCIES 46

TEACHERS REGISTER WITH B. F. WESTmore, Mgr. Hazard Teachers' Agcy. $1 registers you at three offices. 911 Old Nat'l Bank bldg., Spokane, Washington.

TEACHERS NEEDED FOR NEXT FALL. Write for information. Clark Teachers' Agcy. 412 Ch. of Com. Bldg., Spokane.

## Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and i t s associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

# Want Ads

Send for card giving lower rates for ads running one month or longer.

## How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

### HONEY, BEESWAX—Wanted. 58

SEND SAMPLES OF YOUR HONEY AND beeswax; state quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

### MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

Fly time is coming. We make screen windows and doors. Get our large illustrated catalog, No. 27, of sash, doors and building material. Sent free on request.

Screen doors, mortised, glued and covered with heavy, galvanized wire mesh, $1.75 and up.

Window and sash screens, at, per sq. ft., 15c.

Cottage glass doors, $2.85 and up.

Five cross-panel doors, $1.92 and up.

20x24, 2-light windows, $1.79.

Prepared roofing at $1.35, $1.70 and $2.10.

We sell any one, ship anywhere, and guarantee safe delivery. The largest factory in the west selling direct to the consumer.

O. B. WILLIAMS CO.
1943 First Ave. So., Seattle, Wn.

BUILDING MATERIALS AT WHOLESALE prices — Doors, windows, roofing paper, porch columns, plaster boards. All building materials shipped promptly. Send for our complete illustrated catalogue; gives you lowest net prices. P. A. ROVIG CO., 2229 First ave., So., Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

### JUNK SHOPS 90

CENTRAL HIDE AND JUNK CO. BUYERS HIDES, WOOL, METAL, RUBBER, SACKS, ETC. WRITE FOR PRICE LIST IF INTERESTED. QUICK RETURNS. W200 MAIN AVE., SPOKANE, WASH.

WE'LL BUY YOUR HIDES, PELTS, WOOL, furs, second-hand sacks and junk. Reliable, prompt. Nampa Hide & Junk House, Nampa, Ida.

### MACHINERY—FOR SALE 93

CUT YOUR OWN TIMBER
on a Wheland Portable Sawmill. You will save time and big money on your next lumber bill. With this sawmill you can supply the lumber needs of your neighbors also. The price is reasonable, and the profits will soon pay for the machine. Write for catalog and full details. Clyde Eqpt. Co., 18th and Upshur sts., Portland, Ore.

"WITTE" GASOLINE ENGINES
save labor, and are carried in stock by
HIGGINS MACHINERY COMPANY,
312 FIRST AVE. S., SEATTLE,
Write for Catalogue.

FOR SALE—NEW 12-H. P. R. & V. GASOline engine, heavy type, purchased by me last year and used only 10 days. On account of putting wind stacker on separator am compelled to get more power. Engine is in A1 condition and guaranteed. Address J. H. Kruse, Yoncalla, Oregon.

FOR SALE—HOLLEY HOLT HARVESTer, in good shape. Cut 1600 acres. Address O'Brien Bros., Wilbur, Wash.

### AUTOMOBILES 114

FORDS CAN BURN HALF COAL OIL, ALL distillate, or cheapest gasoline, using our 1918 Carburetor; 34 miles per gallon guaranteed; easy starting; great power increase; attach it yourself; big profit selling for us; 30 days' trial; money back guaranteed; styles to fit any automobile. Air-Friction Carburetor Company, 321 Madison st., Dayton, Ohio.

### STOVE & FURNACE REPAIRS 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

### PATENTS 150

WANTED — NEW IDEAS. WRITE FOR list of patent buyers and inventions wanted. $1,000,000 in prizes offered for inventions. Send sketch for free opinion of patentability. Our four books sent free. VICTOR L. EVANS & CO., Pat. Attys., 710 Ninth, Washington, D. C.

### POULTRY 174

BABY CHIX—WHITE LEGHORNS; NOT only bred to lay, but bred to live and thrive with the vigor and vitality necessary to make dividend payers bred into them by 15 years of breeding at the oldest established hatchery in the state; chix last half of May, $12; June, $11 per 100; delivery in good condition guaranteed. The Lakeside Poultry Farm, Roy, Wash.

HOGANIZED BABY CHICKS.

Fifth thousand May and June White Leghorn, $2 per doz., $13 per 100, $125 per 1000. Very limited number of June Rhode Island Reds and Barred Rock chicks at $18 per 100. Our chicks are hatched to live and to lay. Safe delivery guaranteed. Queen Hatchery, 89 Pike st., Seattle, Wash.

200,000 WHITE LEGHORN BABY CHICKS —Bred for eggs, vigor, size. Safe arrival in good condition guaranteed. Free catalog and book on "Raising the Chicks." Oak Heights Poultry Farm, Route 3, Box T 67, Tacoma, Wash.

BABY CHICKS, WHITE LEGHORNS. CUSTomers say they are "husky," "lively," "vigorous," "healthy," "strong," "hard to beat," "thrifty," "great layers." Write at once. Free catalogue. Freshlaid Farm, Colfax, Wash.

50,000 S. C. WHITE LEGHORN BABY chicks for May and June delivery. Real Kaiser Cultural Fighters. Our war measure. Price $12.50 per 100. I. D. Casey & Sons, R. 6, Waitsburg, Wn.

BARRED ROCK EGGS, $2 PER 15. W. D. Good, Mt. Vernon, Wash.

### POULTRY 174
Continued.



UNCLE SAM SAYS: "RAISE POULTRY; don't be a slacker." Eggs and chicks, Tancred strain; trap-nested for 13 years. Special prices for May and June. Bert Hands, Cottage Grove, Ore.

WHITE LEGHORN EGGS $1.50 PER SETting; $8 per hundred. Special mating Pen-A, eggs 50c each; Pen-B, eggs 25c each. Waikiki Farm, R. 7, Spokane, Wash.

SINGLE COMB WHITE LEGHORNS; THE world's greatest egg machines. Write for our "War Measure." Help Hoover win the war. Broadview Farm, Curlew, Wash.

S. C. WHITE LEGHORNS — PRESENT breeders averaged 15 doz. each last season. Mated to high-record males. Hatching eggs. Mary Jessup, Cooks, Wash.

S. C. RHODE ISLAND RED EGGS $2 PER setting; $10 per 100. Fertility guaranteed. Waikiki Farm, R. 7, Spokane, Wash.

BARRED ROCKS.

Nicely barred, and fine layers. Eggs, $1.50 per 15. Wm. Heimsoth, R. 2, Baker, Ore.

PARKS BRED-TO-LAY BARRED ROCKS, winter layers. Eggs, $1.50 for 15; $8 per 100. W. G. Neyland, Spokane Bridge, Wn.

S. C. R. I RED AND S. C. W. LEGHORN eggs, $1.50 to $5 per setting; $6 per hundred. Mrs. Rominger, Underwood, Wash.

### LIVE STOCK 177

ECLIPSE, NO. 122652, PERCHERON STALlion, sired by Videocq, a son of Calypso, No. 25017, he by Theudis, No. 25015, and Theudis by Besigue, No. 19602, a line of breeding unequaled by American-bred descendants for show-ring performance in Percheron history (for analysis see page 601). Eclipse is a beautiful dark bay, with black points; will be 3 years old June 20, 1918, at which time he bids fair to weigh a ton. He is perfect in form and action, and will be sold with permanent certificate of soundness at $750. We also have on hand twenty head of stallion colts, 1, 2 and 3 years old, to select from. Wm. Mulhall, Fenn, Idaho.

ORDERS BOOKED FOR WEANLING POland China pigs from prize-winning stock. Also a few boars old enough for service. Frank Needham, Eugene, Oregon.

FOR SALE—WEANLING BOARS FROM big type Poland Chinas. S. S. Mullen, R. 1, Bellingham, Wash.

### HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water. 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

GALAX HOTEL; NEW AND MODERN; 75C and $1. Main and Bernard, Spokane.

### RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

### PLUMBING, STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

### SEEDS 620



IF YOU HAVE ACCLIMATED SEED TO sell, it will pay you to advertise it in this classification. If you want to buy seed adapted to western soil and climate watch what is offered in this department.

FOR SALE — SEED BEANS; LITTLE White Navy and Lady Washington (large White Navy). J. E. Clemens, Mohler, Idaho.

### SEEDS 620
Continued.

SEEDS—THE KIND THAT GROW. You can't keep them in the ground. Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.,
Portland, Oregon.

UNION SEED & FUEL CO., BOISE, IDA. Send for catalog. Compare prices on tested Idaho acclimated field and garden seeds. Complete line of poultry supplies and stock foods.

WE SPECIALIZE IN TIMOTHY, ALFALfa, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Ida.

SUDAN GRASS SEED FOR SALE—MAKES excellent late green feed, 30c per lb. Wm. Neuenschwander, grower, Gaston, Ore.

IDAHO ACCLIMATED SEED CORN; WELL tested, desirable Yellow Dent. Write H. C. Baldridge, Parma, Idaho.

### FARM LANDS—FOR SALE 651

NO PAYMENT DOWN.

WE SUPPLY THE LAND AND ASK NO PAYMENT UNTIL YOU CAN MAKE SAME FROM CROPS. IT STANDS TO REASON WE MUST HAVE GOOD LAND TO OFFER YOU THESE TERMS. OUR LAND IS LEVEL, THE SOIL A SILT LOAM, NO BETTER LAND FOR ALFALFA, MILO MAIZE, FRUITS, NUTS, ETC. WATER FOR IRRIGATION IN ABUNDANCE WHENEVER NEEDED; GOOD DRAINAGE, CLIMATE AND TRANSPORTATION, SCHOOL ON TRACT; ON STATE HIGHWAY, WITHIN 3 MILES OF RED BLUFF, TEHAMA COUNTY (BANNER COUNTY OF CALIFORNIA). PRICE $150 PER ACRE. SEND FOR BOOKLET AND MAP.
F. D. BURR CO.
219 Montgomery street, San Francisco, Cal.

HELP.

We still need a few more settlers to finish our 6000 acres, which is being sold in 40-acre farms at $25 per acre. Ten yearly payments at 6 per cent interest.

By selecting your future home in this splendid tract at Bryant, Snohomish county, you are not alone buying a fertile and productive piece of land, but you are buying the best investment in the state today. Railways, paved roads, schools, churches, canneries, creameries and mills.

The best proposition on the market for the man who wants a farm. For further information address the owners, BROWNELL LAND CO., 904 Third ave., Seattle, Wash.

ALDER BOTTOM AND CLAY loam land, formerly owned by Isaac Stevens, Washington's first governor; selected by him when he had the pick of the whole country; 10 to 40 acre tracts, many crossed by running stream; rural mail delivery, bus service for school children; railroad station almost on the land; good roads; good neighbors; ideal climate. Price $75 an acre. Terms. Write us now.
A. H. REID & CO.
314 NEW YORK BLK.
SEATTLE, WASH.

MONTANA STOCK RANCH, 2300 ACRES; 1600 acres fine bottom land, with thousand inches water rights for irrigation; partly in crop; improvements good; adjoins live town in Great Falls territory. Excellent subdivision proposition. Price $27.50 per acre. Terms given. Many other snaps in farm lands. Equity Realty Co., 104 First ave. S., Great Falls, Montana.

NO. 1004—75 ACRES, ON RIVER; NEAR steamboat wharf; 1500 fruit trees, mostly young peach and apple; 8-room dwelling, front porch, 2 halls, attic, shade, well fenced; 15 acres of woodland, chestnut and oak; 7 acres in meadow; 6½ miles from county seat; barn and stable, new pig pens, 12x60; buildings worth $3500. Price only $3250. Russell Realty Co., Baltimore, Md.

682-A. IMPROVED WHEAT FARM; SEVEN miles south of Hartline, Wash.; on Sunset highway; good land; all in cultivation except 15 acres; 300 a. in summer fallow; all fenced; large house, fine barn, good outbuildings; plenty water. Only $45 per acre. $6000 cash will handle. A. L. Tucker, Coulee City, Wash.

FOR QUICK SALE—ONE-HALF SECTION farm, 4 miles from Moscow. Price right to sell, and liberal terms. The place is all in crop, one-third of which goes to the purchaser. Possession given Oct. 1, 1918. If interested, write P. O. Box 393, Moscow, Ida.

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BARGAIN — WILLAMETTE VALLEY stock or grain farm; bottom land, half clear; on main highway; good bldgs.; 525 a. $50 per a. F. L. Wood, Salem, Ore.

2600 ACRES LOGGED-OFF LAND, CLOSE to Astoria; finest of small fruit, vegetable and dairy land. Only $25 an acre. L. A. Larsen, Astoria, Ore.

WE ARE AGENTS FOR THE BEST LAND in South San Joaquin Irrigation district on the easiest terms. Address Ripon Nursery Co., Ripon, Cal.

GOVT. LAND, ORE., CALIF. BOOKLET. Joseph Clark, Sacramento, Calif.

### FARM LANDS—WANTED 654

WANTED — TO HEAR FROM OWNER OF farm or unimproved land for sale. O. K. Hawley, Baldwin, Wisconsin.

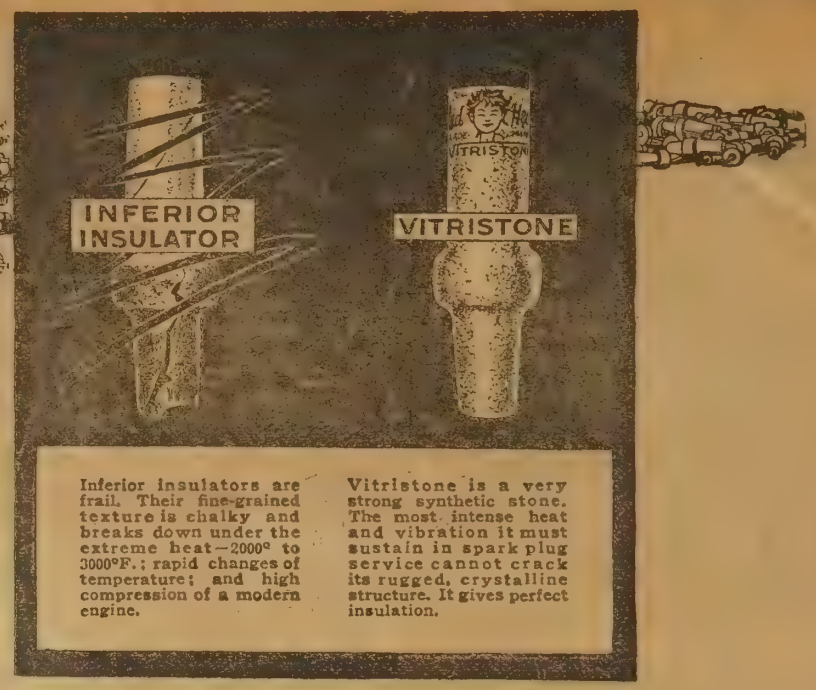
I WANT TO HEAR FROM OWNER OF farm or unimproved land for sale. Mrs. W. Booth, Pulaski, Iowa.

### CITY PROPERTY—FOR SALE 690

LOT, 50X100, AND BEAUTIFUL 8-ROOM house, with bath; E. Portland; 4 bedrooms, closet in each; built-in bookcases, buffet; gas heating; up-to-date electric fixtures; fireplace, full basement, stationary tubs; house screened; 2 porches; interior fine; painted outside last year; 5-yr. fruit trees, berries, grapes, roses, arbor; back yard fenced; fine view; restricted residence dist. $1400 cash; $25 mo. will handle. No agts. Write if in earnest. Owner, B-9, 411 Stock Ex. bldg., Portland, Ore.



More than 42,000,000 spark plugs were thrown away last year, largely due to the breakage of inferior insulators.




# 42,000,000 spark plugs junked in 1917

***This enormous waste, largely due to the breakage of inferior insulators, rendered needless by a new artificial stone***

EVERY motorist knows the constant trouble he has with faulty spark plugs.

This trouble is largely due to the use of inferior material in the insulators. They are frail and simply can not stand up under modern engine conditions. No one should expect them to.

Inferior insulators crack and break down quickly. They cannot withstand the intense heat of the present-day engine — 2000° to 3000°F.; the sudden temperature changes; high speeds; and rapidly recurring hammer-like blows of compression. They short-circuit, miss fire and are thrown away.

## The development of Vitristone

After eight years of experimentation in the Red Head potteries, spark plug experts perfected an insulating material that would not crack under the most severe engine conditions.

Practical tests prove this discovery to be the greatest advance made in spark plug construction in the past ten years.

Vitristone—the new insulator—is an artificial stone. Its rugged, crystalline structure is unaffected by rapid changes from extreme heat to extreme cold. It withstands the most intense vibration.

The difference between inferior insulators and Vitristone under the heat of the engine is the difference between a porcelain-ware dish and a stone-ware dish. If you suddenly pour cold liquid into a hot porcelain-ware dish, the chances are it will crack, but you can subject a stone-ware dish to the same test without damaging it.

## Built for years of service

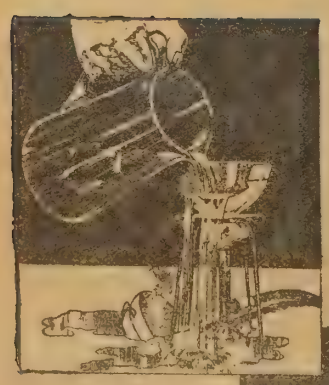
Red Head spark plugs are built for years of service. Rigid tests insure gas-tightness and insulator efficiency. If a Red Head misses, clean it and nine times out of ten it will fire 100% right. It is easy to clean.

Don't wait till your spark plugs crack and miss fire. *Put a full set of Red Head plugs in your engine today.* You will find that they stand up perfectly under the most severe working conditions.

There is a Red Head plug for every requirement.

Your dealer has Red Head plugs in stock or can get them for you. If he does not, write to us for the name of the nearest dealer who can supply you.

**Emil Grossman M'f'g Corp'n**
**Bush Terminal, Bldg. 20 Brooklyn, N. Y.**

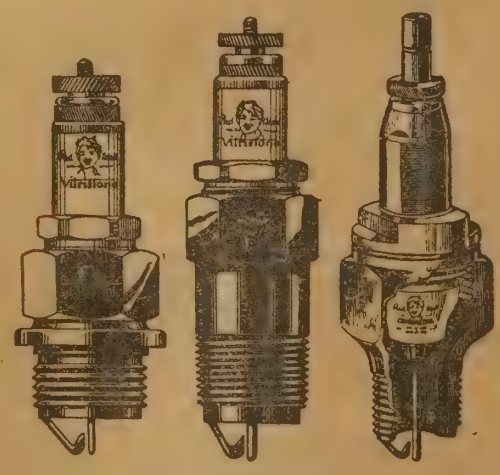


**Porcelain-ware.**
Many inferior insulators are made of the same material as a cheap porcelain-ware cup, which quickly cracks and breaks under sudden and extreme changes of temperature.



Stone-ware
*Stone-ware withstands extremes of heat and cold. That is why Vitristone insulators do not break*

Red Head Spark Plug
Vitristone Insulator



*Red Head Vitristone Standard ⅞"—18—an all-purpose trouble-proof plug. $1.00*

*Red Head Vitristone Special for Fords. Long body assures accessibility. $.75*

*Truck and Tractor ½" Vitristone cap protects mica core. $1.50*

# THE WASHINGTON FARMER

SUCCESSOR TO

THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

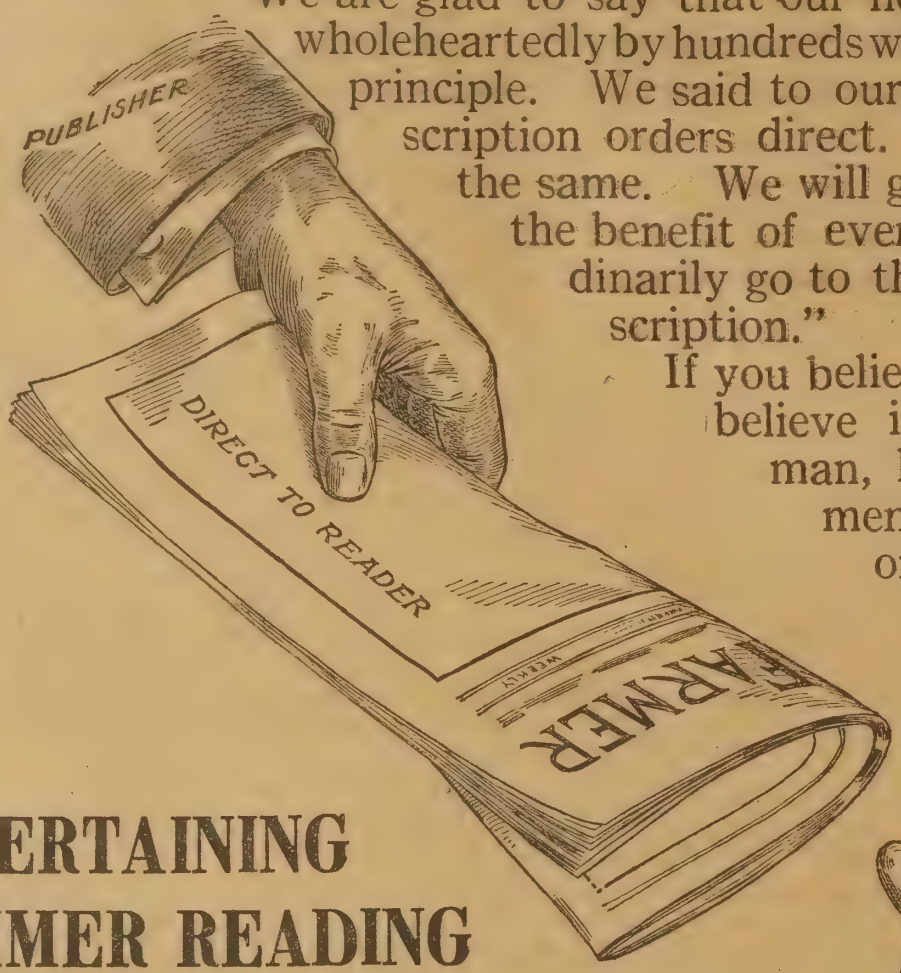
VOL. XLI. NO. 21. MAY 23, 1918. ** WEEKLY.




POWER FARMING BRINGS IN A NEW EPOCH

# DIRECT TO READERS

**That is the central idea in preparing this year's subscription plan of The Washington Farmer. It is the reason for our request that readers pass along copies of this paper to neighbors where the various issues have been read.**

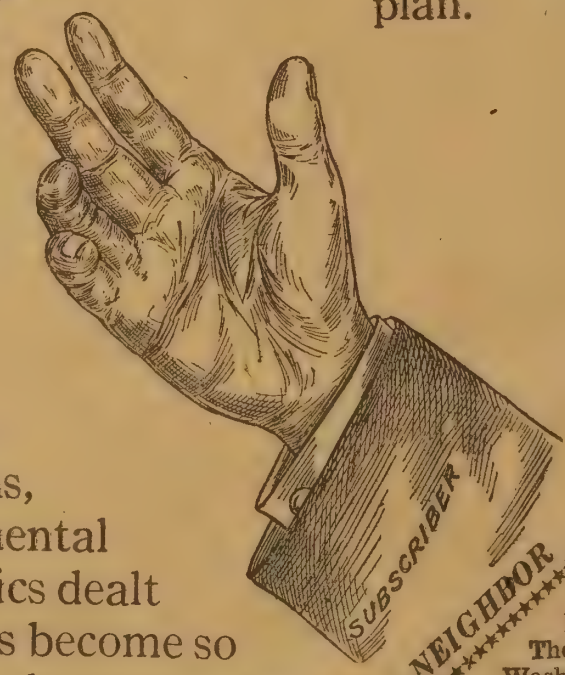



We are glad to say that our new plan is being supported wholeheartedly by hundreds who believe in the cooperative principle. We said to our friends—"Send your subscription orders direct. Get your neighbor to do the same. We will give you and your neighbor the benefit of every penny which would ordinarily go to the agent handling the subscription."

If you believe in cooperation, if you believe in eliminating the middleman, help us make our experiment a success. Send in your order if you haven't already done so, and let as many neighbors as possible know about our money-saving plan.

## ENTERTAINING SUMMER READING

The summer visits of this paper are sure to be welcome. Its exciting stories, its interesting articles, and its helpful departments will all be appreciated when you have a little spare time for the enjoyment of reading. Then you will want to know of crop conditions, of price tendencies for farm crops, of governmental action affecting the farmer, and many other topics dealt with by your state farm paper. The "Farmer" has become so much worth while that letters are being received constantly from readers who say they do not wish to miss a single copy.




## A Real Saving

*Following Rates Now in Effect for Subscriptions to The Washington Farmer*

*25c FOR ONE YEAR*

*50c FOR THREE YEARS*

*$1 FOR FIVE YEARS*

IF YOU'VE ANSWERED, PLEASE PASS TO A NEIGHBOR

May 23.

**The Washington Farmer,**
Review Bldg.,
Spokane, Wash

I desire to take advantage of your plan to deal direct with your readers in securing and renewing subscriptions, thus saving the middleman's cost and releasing men for productive labor.

**Enclosed is $..... for ..... years' subscription.**

In Canada add 1 cent per copy for extra postage.

If you are already paid in advance your subscription will be set forward from the date to which you are paid.

NAME .....

TOWN .....R. F. D. ....

STATE .....

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 21 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF May 23, 1918

## Mobilize Threshermen

### Much Wheat Lost by Carelessness

A project to mobilize America's threshermen to save millions of pounds of wheat now lost by inefficient threshing practices is announced by the U. S. food administration.

To do this, a special grain threshing division has been created as a part of the food administration grain corporation, with Captain Kenneth D. Hequembourg, U. S. R., at its head. Captain Hequembourg is actively engaged in wheat production in Oklahoma, and for some years has had first-hand experience in threshing operations. He was recently connected with the equipment department of the cantonment construction division of the army, and organized the equipment record branches at construction camps. The grain threshing division will have national headquarters at the office of the United States Food Administration Grain corporation at 42 Broadway, New York city.

It is estimated that from 1 to 10 per cent of the wheat crop is lost to the country by hurried and careless operation and inefficiency of threshing machines. In some sections, however, losses are materially greater than in others. Waste in threshing depends largely upon the condition of the machine as it enters the harvest field and the care with which it is operated. While it is believed that the majority of machines operate satisfactorily conservative estimates indicate that on an average:

One and one-half bushels in every hundred threshed can be saved by having all machines go into harvest (1) in excellent repair; (2) with ample power: (3) by providing that during harvest they are efficiently adjusted to meet varying conditions.

One bushel in every hundred threshed can be saved by having all machines in such repair that little or no grain leaks under and around them on the ground, and providing that what does leak out in this manner and otherwise scattered by the machine, is cleared up and threshed before the machine leaves the field.

Three-quarters of a bushel in every hundred threshed can be saved by careful handling of bundles from the shock to the machine or stack and by arranging the bundle wagons so that all grain which shatters in them is caught and saved.

Thus it is estimated that a total or three and one-quarter bushels in every hundred threshed may be saved. In Kansas alone this would amount to nearly 3,000,000 bushels.

With such facts in view, the threshing division will begin work immediately in the 11 southern wheat states—Texas, Oklahoma, Kansas, northwest Arkansas, Kentucky, Tennessee, northern George, South Carolina, North Carolina, Virginia and Maryland.

The division has secured a threshing machine demonstration plant centrally located in Indianapolis, Ind., where a corps of men to be known as "thresher-men's assistants," will be assembled, inspected, their qualifications determined and their work directed. The men engaged in this capacity are expected to be patriotic and earnestly interested in grain conservation as well as being experts in repairing threshing machines

These threshermen's assistants will be located in each state to cooperate with threshermen requiring expert help. The threshermen's assistants will be called upon by county threshing committees whenever needed. Their duty will be to advise in overhauling the machines, to assist in acquiring expert labor, to supervise repair jobs when the owner so desires and time permits. The county threshing committees will be composed of the county food administrator, the county agricultural agent, and a retired thresherman, representing the state or local council of national defense.

Each of these committees will open county headquarters accessible at all times to farmers and threshermen. One of the first duties of each committee will be to locate owners of threshers and find out what assistance can be given them.

The county threshing committees will

(Continued on page twenty-eight.)

## "What I Have Learned in Raising Rabbits"

Are you interested? Then you will be glad to know that next week's issue of the Farmer will contain the first of two articles on the above subject. This will be written by Joe L. Ashlock from personal experience during the past year.

So valuable has been this experience, especially along the line of what should not be done, that Mrs. Elizabeth Jones, boys' and girls' club leader for the state of Washington, recommends that her rabbit club children throughout the state carefully study these articles in the Farmer on rabbit raising.

Comparatively little has been written from first hand experience on the subject; in fact there is a general dearth of rabbit information. This is not a dry-as-dust scientific bulletin, although there is plenty of workable science in it to any one who wishes to raise rabbits.

We all know there is no such rapid method of supplying meat foods for families as the raising of rabbits, and of all lines of the production of war foods the rabbit is by no means to be ignored as a factor. There is no need of assuring you that you will be interested in this story written by the "Bunch Grass Boy" whether you raise rabbits or not.

"How I Raise Rabbits" will begin in next week's issue of the Farmer.

## May 30 a Day of Fasting and Prayer

BY THE PRESIDENT OF THE UNITED STATES.
A PROCLAMATION.

Whereas, the congress of the United States, on the second day of April last, passed the following resolution:

> Resolved by the senate (the house of representatives concurring). That, it being a duty peculiarly incumbent in a time of war humbly and devoutly to acknowledge our dependence on Almighty God and to implore his aid and protection, the president of the United States be, and he is hereby, respectfully requested to recommend a day of public humiliation, prayer and fasting, to be observed by the people of the United States with religious solemnity and the offering of fervent supplications to Almighty God for the safety and welfare of our cause, his blessings on our arms, and a speedy restoration of an honorable and lasting peace to the nations of the earth;

And whereas, it has always been the reverent habit of the people of the United States to turn in humble appeal to Almighty God for his guidance in the affairs of their common life;

Now, therefore, I, Woodrow Wilson, president of the United States of America, do hereby proclaim Thursday, the thirtieth day of May, a day already freighted with sacred and stimulating memories, a day of public humiliation, prayer and fasting, and do exhort my fellow citizens of all faiths and creeds to assemble on that day in their several places of worship, and there, as well as in their homes, to pray Almighty God that he may forgive our sins and shortcomings as a people and purify our hearts to see and love the truth, to accept and defend all things that are just and right, and to purpose only those righteous acts and judgments which are in conformity with his will; beseeching him that he will give victory to our armies as they fight for freedom, wisdom to those who take counsel on our behalf in these days of dark struggle and perplexity, and steadfastness to our people to make sacrifice to the utmost in support of what is just and true, bringing us at last the peace in which men's hearts can be at rest because it is founded upon mercy, justice and good will.

In witness whereof I have hereunto set my hand and caused the seal of the United States to be affixed.

Done in the District of Columbia this eleventh day of May, in the year of our Lord Nineteen hundred and eighteen and of the independence of the United States the One hundred and forty-second.

WOODROW WILSON.

By the President:
ROBERT LANSING,
Secretary of State.

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## Don't Hold Seed

### Wheat Desperately Needed as Food

So desperate is the need for wheat with which to provision the allied armies in Europe from now until the new crop begins to come in that the federal food administration is urging upon the farmers of the country to put all their wheat on the market, even to the supply of grain that is being held for fall seeding.

While it has been the practice in many communities for farmers to hold over wheat for seed the food administration regards it as unnecessary.

Never before has there been such urgent need for wheat. Every carload, every bushel and every grain that can possibly leave the farm may within the next few months play an important part in our war program. Throughout the country millions of people are cutting their consumption to the barest minimum, many of them going entirely without wheat. The release of thousands of bushels ordinarily held for seed would do much to relieve the present situation

At the present rate of consumption each bushel would provide bread for at least one soldier in Europe until the next harvest relieves the necessity

## There Is No Other Organization Like It

The American Red Cross stands the unchallenged queen of all humanitarian organizations. There is no other like it. In a world tortured by the inhumanities of war it marshals its forces of mercy to undo as best it can the awful wrongs that follow in the wake of the conflict.

Last Saturday afternoon I watched the Red Cross parade in Spokane. I saw 10,000 women and girls in white, with the little red emblem of their wonderful organization as their only decoration, save the United States flags and the service flags that they carried. Ten thousand women! It required almost two hours for them to pass a given point on the line of march.

I saw hundreds of them with their red and white flags bearing from one to five blue stars—mute testimony that sons or brothers or husbands had answered the call to army or navy service. I saw an automobile of special honor, a large, white automobile, in which rode six women whose service flags bore at least one golden star, silently telling of a son or brother or husband who had given his life for his country and his country's ideals of right.

I stood in reverence and wonder. Ten thousand women, their best efforts dedicated to Christlike service in the cause of humanity!

And then I remembered something that increased my reverence and wonder. In hundreds of cities and towns throughout the United States demonstrations like this one, some larger, were being given. It was not 10,000 women. It was 100 times 10,000. It was 500 times 10,000. Five million women in America were marching that afternoon.

And I remembered again that in this great land of ours, this land dedicated to liberty and human righteousness, this same Red Cross had a membership of 22,000,000. Twenty-two million women and men and children!

And again I remembered, this time that there are in this land, so blest with the blessings of freedom and peace, 100,000,000 people. As I turned to my work from the white line before me I said within myself: "This country will subscribe the $100,000,000 that these women are asking for the Red Cross work before Red Cross week is half over. This state will pass its quota; this city will go over the top."

I turned for one more look at that great line of workers who are giving a touch of heaven to the world's war-created hell, and I saw a banner that read: "We give our sons; they give their lives. What do you give?"

This is Red Cross week. America is giving its answer to the appeal of human kindness. You and I are giving our answer. How? F. W. C.

# The War Garden

## Better to Have a Little Sense

By GEORGE SEVERANCE.

One of the most patriotic things that the home folks can do in the great war is to live as largely as possible from our gardens, thus permitting the shipment of the greatest possible amount of staples, wheat, pork, beef, etc., to the allies. For those who do not realize what a large percentage of our food requirements may be supplied from the garden, yet provide a thoroughly wholesome diet, the extension service of the State College of Washington has prepared bulletins on the food requirements of the body, the value of various foods and various food combinations that will meet the needs of the body.

Much has been said about war gardens, and probably the majority are filled with the patriotic desire to grow a war garden and have already started them. Viewed from the standpoint of rendering the greatest public service certain points should be considered:

1. The majority of garden stuff is perishable, and nothing is gained by producing more than is needed by the home family, unless it is produced by the idle time of children and can be sold on the local market. Plant all that is needed, but do not overplant. It is a waste of seed, land and labor.

2. The production of small gardens with hand labor is uneconomical carried beyond the point of utilizing idle time of children or furnishing much needed exercise for men in sedentary occupations. Commercial requirements for garden products can be more economically supplied by regular market gardeners who are equipped with labor-saving implements and produce on a field scale. The man whose time is worth $1 to $3 per hour and who is not in need of the exercise had better buy his vegetables. If growing a war garden reduces his time and efficiency in a more valuable occupation his aggregate service to the country will be reduced by growing a war garden. Consider, then, whether this is the most profitable way to spend your time.

3. For wealthy people to hire regular labor to work a small garden is unpatriotic, since all such labor can accomplish very much more if employed on farms, market gardens or orchards, where production is a business, and where crops are produced on a fairly large scale and with labor-saving machinery. It is unpatriotic to divert labor from its most effective service. Don't play golf or tennis or burn valuable gasoline on pleasure jaunts while hired labor is caring for your war garden.

4. Much surplus may be saved for later consumption by simple methods of preservation described in bulletins issued by the extension service of the state college.

# Just Go Ahead

## Everybody Must Do His Level Best

In a letter relative to the labor situation, State Commissioner E. F. Benson of the department of agriculture, says, "We will get along fine in this country if every one will take an optimistic view of things and go ahead with a determination to get the very best results possible. We will get by in fine shape if everybody just sets his mind to it and determines to get along with his work in some way and uses his ingenuity and determination to accomplish that result. We must do things now that we have not been accustomed to doing."

Commissioner Benson is actively engaged in farming himself. As commissioner of agriculture he is still conducting his farms "at long range," as he puts it.

"I am running these farms with hired labor," he says. "On one of them they milk 20 cows and farm 180 acres of irrigated land, seven acres of orchard and the rest of it alfalfa, corn, etc. The managing farmer on one of these ranches was drafted last year and I had to rustle another one. Of course it is hard to get labor, but on both of these farms there are young ladies, one about 15 years of age and the other 16. The 16-year-old girl on the dairy ranch milks six cows every day. Both of the girls drive teams in the fields and we pay them the same rate of wages we do the men for the same kind of work. They enjoy their work, and are making good at it. At Prosser last year between 70 and 80 women, wives of merchants, lawyers, county officials, etc., put on overalls and went into the orchards and helped solve the orchard problem in that district. They earned from $3 to $6 a day, and many of them invested every dollar of it in Liberty bonds."

## DRYER THAN DRY.

### J. H. T. Smith Visits New Mexico.

There is evidently very good reason why the Washington Farmer has not seen or heard much from J. H. T. Smith of Pullman for some little time. Meeting him on the street in Spokane recently, it was learned that he has been spending the last seven months in New Mexico where his son, A. Z. Smith, has been teaching in the Agricultural college of that state. Young Mr. Smith, who graduated from the State college at Pullman four years ago, is about to accept a position as county agent in one of the leading counties of that state.

Speaking of the drouth conditions in New Mexico and panhandle of Texas, J. H. T. Smith gives as a sample of weather that at Carlsbad, N. M., there had been only three inches of rain since a year ago last October. It goes without saying that live stock, as well as crops show deplorable consequences of this prolonged drouth.

### Codling Moth Spray.

Spraying for the codling moth is in progress in the Walla Walla valley. "The time for applying this spray should be, under normal conditions, when 75 to 80 per cent of the blossom petals have fallen from the tree," says District Horticulturist H. L. Miller. "An accurate method to denote the proper date is to daily examine the calyx cups and apply the spray when they present the widest opening. Generally speaking, these cups will remain open for good spraying for a period of 10 days, after which they will grow together.

"The calyx is by far the most important of all codling moth sprays, for the reason that at least 75 per cent of all worms attempt to enter through this part of the fruit. The second and possible third brood are progeny from the worms which escape the first spray. Thus it is very apparent that the proper application of the calyx spray governs to a very large extent the amount of wormy fruit at the harvest."

### Better and Better.

I think the Washington Farmer grows better and better all the time. It sure is the best paper we have in the state.

E. G. GRINDROD.
Ellensburg, Wash.

### Will Make Experiments.

H. B. Carroll, county agent at Bellingham, has announced a plan for experimenting in the cultivation of various varieties of wheat, oats, kale and peas in Whatcom county this year. The farms of E. S. McCaw of Rome, Frank C. Johnson of Ferndale, O. Lagen of Lawrence, C. E. Flint of Blaine and Ed McAlpine of Wiser Lake, will be among those to try out various varieties of crops under the direction of the county agent.

### Dairy Organization.

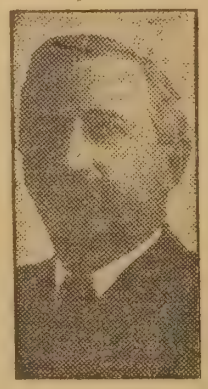
West Side dairymen, representing owners of 50,000 cows, met in Seattle May 7. After listening to various discussions on the cost of producing milk, the delegates decided to proceed vigorously with the work of organization, and to meet again in Seattle, June 1.

#### Hogs Worth More Than Wheat.

Walter G. McLellan of Sprague is soon to dispose of his third carload of hogs for the last season. He recently sold a car of 83 head that brought him approximately $3800, an average of more than $40 a head. He says that his hog crop was worth more to him than his wheat crop last year.

# Framed at Old Cambridge

By J. L. ASHLOCK.



E. A. Bryan.



W. J. Spillman.

A few years ago there hung on the wall of a room in the agricultural building of Cambridge University, England, a picture of some wheat heads. On the picture was a notice informing the public that the wheat heads were grown on the farm of the Washington State College, in Pullman, Washington, U. S. A.

While the wheat heads were there, Dr. E. A. Bryan, not yet succeeded by E. O. Holland as president of this American agricultural college, chanced to be a visitor at Cambridge university, and saw the framed picture.

"Why, that looks like Spillman's work," he exclaimed.

His guide promptly said: "That is Spillman's work."

The photographs had been taken in Pullman away back in the 90's, when the wheat-hybrid studies were beginning; and in Cambridge, hoary with age, representing the culture and statesmanship of a great world-empire, they were exhibited in evidence of a practical experiment begun years before on the Palouse hills back of Pullman, Wash., U. S. A.

It was Spillman, finally, who conceived the plan of crossing, or "hybridizing" different varieties of wheat, and creating a new variety of wheat in which would be combined the desirable characteristics of the parents and eliminated the undesirable.

Spillman accepted from Secretary of Agriculture, James Wilson, the appointment as chief of the national division of farm crops at Washington, D. C., before his plans in wheat-breeding had developed practical results so far as increasing the wheat-production of Washington wheat-fields was concerned. After him, the wheat-breeding work has been carried on with very definite results by C. W. Lawrence, Alex Carlisle and E. F. Gaines.

With all this inventive genius Professor Spillman could not satisfy himself with the purely practical question of producing a winter wheat that was beardless, stiff strawed, non-shattering, a good yielder, and of good milling qualities, but he wanted to know about the fundamental laws of heredity back of the results he was getting.

At about this point in his work, Professor Spillman went to Washington, D. C., as chief of the office of farm management, where he is today. In Washington, brother scientists, after the manner of their order, energetically attacked all his conclusions and results, and he as energetically defended his conclusions and results.

One day, a member of the scientific brotherhood dropped into Spillman's office and said in the course of conversation:

"By the way, Spillman, you were not the first to discover those principles of heredity about which you have been talking. I came across a pamphlet by a Hollander, who sets forth the same thing even more fully than you."

Not long afterward, it was discovered that an Englishman had published results similar to those of Spillman. Then the big truth came out. An Austrian monk 30 years before had conducted an elaborate experiment with garden peas and published a pamphlet pointing out these same principles of heredity.

This monk was named Mendel. The Hollander was named Tsermak, and the Englishman was named Bateson.

What happened was this: A Hollander, an Englishman, and an American, all working on a similar problem at about the same time, each on a separate continent, and unknown to the other, had stumbled upon and rediscovered the law, famous now throughout the scientific world as "Mendel's law."

It was the wheat-head signalizing Spillman's American rediscovery that Dr. Bryan found in a photograph on the walls of Cambridge university, in which world-famous university Bateson, the English rediscoverer of Mendel's law, was then a botanist and horticulturist.

# Small Fruits

## Juice to Take Place of Booze

It would take quite a chunk out of the history of Idaho if you should leave out the part played by Alex. McPherson in its agricultural development. It was with exceeding pleasure as well as considerable surprise that I again met him as he came into the Spokane office of The Washington Farmer. I had not seen him for eight or ten years and had heard of him as being largely engaged in developing irrigating enterprises in New Mexico and Arizona. He tells me he has also been in the same line of work in southern California.

Mr. McPherson was a pioneer in the line of obtaining first-hand and accurate information of the climate and soil conditions of the state upon which it bases better farming in Idaho. As the state agricultural inspector, as I remember it, he traveled over a good deal of Idaho on foot, swimming the rivers when no better means of crossing was offered. He was an early worker in Twin Falls district. He tells me there is a most enjoyable reunion every Christmas at Los Angeles at which are gathered over 100 of the Twin Falls people. Over half of these are farmers, and from lands at Twin Falls they have gained a competency sufficient to enable them to pass their winters in a summer climate. "Why, more wealth already has been taken out of the Twin Falls country than has come out of the Klondike," says Mr. McPherson. Speaking of the future of irrigating in the Pacific northwest, Mr. McPherson says that water storage and pumping will be the two great future systems of supply. Almost all gravity water is not used now. While pumping is costly, yet that cost has been reduced by cheap power, and the water is converted by underground piping. "You can save half the water by this method of underground piping and when you have saved half the water, you cut its cost down one-half."

Mr. McPherson is looking forward to a tremendous development of the small fruit industry, to furnish fruit juice to take the place of booze. The people generally will turn to fruit juices, in his opinion, as the national drink. He adds: "Cattle and sheep and poultry and wheat are in greater demand than there is supply today, and the same with dairy products, and there is every prospect of demand for years to come. Here are great opportunities for the American farmer."

#### World's Wool Supply.

Australia is reported to be the chief source of the world's wool supply, though it is said that South America and Australia have about the same number of sheep, approximately one hundred million.

### Farm Service War Flags.

The farm service war flag idea is one that appeals to the sense of fairness and justice of the city man. He is beginning to realize more and more the importance of the farmer both as a loyal citizen and as a producer of food supplies. Bankers have been in closer touch with the agricultural interests probably and have had a wider knowledge of agricultural progress of the country than almost any other class of business men, saving perhaps the farm implement business men. The Washington Farmer appreciates the following letter from W. D. Vincent, vice president of the Old National bank of Spokane.

To the Editor of The Washington Farmer: We thank you for sending us a copy of the Washington Farmer with the farm service flag. The idea is one that I hope will appeal to farmers throughout the country. It is certainly a splendid idea and one that will not be confused with a flag for any other purpose.

Congratulating you upon your originality and hoping that the flag will be found in every farm house in the country, I am

Yours truly,
W. D. VINCENT,
Vice President.

# Power Farming Will Be Demonstrated

## *Typical Palouse Farm Will Be Used to Show Work of Different Tractors*

By J. P. FAIRBANKS, W. S. C.

Tractor demonstrations are not new in the middle western states, where tractors have been used considerably longer than in the Pacific northwest. The demonstrations in the east and in the middle west have from the start been held in fields which are approximately level, and afford nearly ideal conditions for tractor operation.

The power farming demonstration to be held at Pullman May 29 to 31 under the auspices of the State College of Washington, which is one of the first large public demonstrations to be made in the Pacific northwest, differs in several respects from those held in various other parts of the United States.

In the Palouse country the farmers can rarely lay their fields off in rectangles, but must plow around the hills on "the contour line" instead of climbing directly over the hills. This necessitates dividing a large tillage field up into a number of irregular plats composed of hilly and flat areas. The flats are usually used as one land, and the hills or knobs used as another land or field. In level countries where the fields can be divided up into a number of rectangular lands they are plowed out by various systems of furrowing and plowing around, leaving head land at the end on which the tractor turns. These head lands are plowed out the last thing. But these fields in the Palouse country are not adapted to such a scheme of plowing. The tractor must go around the irregular fields as is done with the horse outfit. At the sharper triangular corners which may result the plows "cut the corner," but when the field is completed these corners are plowed up. Such conditions make tractor operations more difficult than do large, level fields; but since these conditions are typical of the Inland Empire and other parts of the Pacific northwest, the demonstration at Pullman will be of much real value to the agricultural and machinery interests of the west. Demonstrations which have been held under ideal conditions have received considerable criticism because they did not show average or adverse conditions. Those who attend this demonstration will see land plowed, harrowed and disked which varies from level to a grade of over 32 degrees. No spectacular performances will be approved by the tractor men, as their purpose is to show the public only the practical use of power farming machinery. They do not recommend hill-climbing contests, as in field work it is often impracticable to go directly over the hills. In fact, in many instances it may pay to leave the very hilly ground to be farmed by horses.

The general plowing demonstration will be held each afternoon when all the machines will be at work in one large field. After this demonstration in the afternoon the tractor companies are free to harrow the plowed ground or pull other tillage implements. During the forenoons private demonstrations will be made by tractor companies to those who are interested in their particular machine. At times other than during the general plowing demonstration belt-driving machinery will be operated by the tractors.

Tests will be conducted by the State College of Washington on various tractors to measure the power developed in the belt and on the draw-bar. Efficiency tests will also be made to determine the amount of fuel and oil consumed per acre on the different slopes and by the different types of tractors.

Another feature of importance is the motor-truck exhibit. Many makes of motor trucks adapted for farm use will be shown. The motor truck is now rapidly taking its place in the hauling job on the farms, and is properly classed as power-farming equipment.

The plow companies will have their complete line of engine plows on the ground, and will furnish these for use during the demonstration.

At the present time (May 15) there is assurance of a demonstration of 20 tractors, the exhibition of 10 and possibly 12 motor trucks, and the plow and implement line of three or four plow companies. Quite a number of firms handling farm gas engines, farm water supply systems, and farm lighting systems will exhibit in the accessories tent. There will also be an exhibit of accessories used by tractors and trucks, such as lubricating oils and greases, spark plugs, piston rings, and tools.

The greatest advance in agriculture is largely due to improved farm machinery. Increased food production with a minimum amount of hand labor is made possible by it. Power farming machinery is the latest development in farm equipment, so new that the broadness of its field can hardly be imagined. The public as a whole is unfamiliar with the present stage of development and uses of mechanical power for farm work. It is our duty to learn all we can of improved farming methods and the demonstration at Pullman May 29, 30 and 31 will give the public a chance to see many different farm power machines and to compare their work on a variety of conditions.

Many good automobile roads lead to Pullman, and the railroads are making a round-trip rate of one and one-third fare. In order to secure this reduction it is necessary to get a receipt at the time the ticket is purchased.

## GOOD POTATO CROP.

### Plows Deep Furrows in Planting.

By V. VAN-HOUTEN, South Bellingham, Wash.

"Potatoes are easy enough to raise and keep clean and I always have good crops," says A. M. Meigs, S. R. D., South Bellingham. "I plow good and deep in the latter part of May, then plow out my furrows, going twice in each furrow so as to throw the dirt both ways. Next I go to work and fill in the furrows about three inches deep with manure and drop the potatoes about 16 acres apart on top of the manure and cover them with a hoe.

"I want not less than two eyes to a piece, and sometimes plant the potatoes whole. I cover the potatoes three to four inches deep, according to when I plant, put early planting deeper than late planting.

"Then when the plants are six to eight inches tall, I turn to in the evening when the leaves raise up toward the vines, and plow the dirt toward them with an eight-inch stirring plow I keep just for that purpose, than sometimes I go through the patch with a hoe a few days later and kind of smooth the dirt down in the row. That is all the cultivation they ever get. At digging time the potatoes are all right on top of the manure, near the surface and come out nice and clean, never scabby, but that way won't work east of the mountains, they would just burn up over there, they grow there till about 8 or 10 inches high, then just dry up.

"I plant carrots and mangles the same way with the manure right under the seed, where they can get at it and get the good of it."

## Pullman Wants State Grange.

Pullman grangers have announced their intention of sending a strong delegation to Walla Walla next month to the state convention of the grange with an invitation from the state college town for the 1919 gathering.

## RED CROSS.

### Even Dead Horse Brings $25

Some time ago Ed Barben loaned a horse of uncertain value to E. F. Dunbar, says a Mt. Vernon, Wash., paper. While in the service of Mr. Dunbar the animal met a tractor in the road one day and fell dead, it is presumed of fright. After a while there was talk of litigation; but before the matter came into court Mr. Dunbar brought $25 to A. R. Hilen, who was attorney for Mr. Barben, as settlement for the horse. Mr. Hilen notified Mr. Barben of the payment and received in return instructions to present the money to the local Red Cross chapter. He said he wanted the animal to die in a good cause.

**Advocates Conscription of Women.**

Lady Bathurst, who is proprietress of the London Morning Post, is an advocate of conscription being applied to women for war service.

# Burbank Develops Community Life

## *Cooperative Spirit Will Play Big Part in the Future*

By STEPHEN B. L. PENROSE.

The Burbank grange took a forward step two months ago when it decided to organize a store for the benefit of the community. The first month of operation was financially successful, and the members were able to buy their household supplies and feed at reduced rates. Much enthusiasm prevails concerning the outlook. The grange is the most striking feature of the life at Burbank. Few places of the size in the United States have so large a grange membership, more than 125 now being enrolled and this including almost every one in the neighborhood. Grange meetings are well attended and constitute a center for the social and business life of the place. The neighborliness of Burbank also shows itself in the maintenance of an active literary society and a vigorous Red Cross society. Moreover the Community church provides Sunday school for the children and a church service for adults every Sunday. You will not often find a neighborhood where people are more alive to the need of organization and more keen in providing an efficient form of organization to meet their business, social and religious needs. Of course the educational activities are looked after by the state, but the schoolhouse has been doubled in capacity this winter and the affairs of the school district are skillfully managed by the board. All meetings of the grange and other organizations are held in the schoolhouse, except on Sunday, when Sunday school and church meet in the attractive church building which belongs to the community.

The community spirit and general friendliness which prevail at Burbank are in no small degree due to the personality of the genial manager of the Burbank company, F. J. Pingry. Two years ago he took charge of the project when a spirit of criticism was rife and factions were in danger of forming. By his fairness, strict justice, and kindliness, he has smoothed out the difficulties and has oiled the machinery so that now it is working without friction. An ero of good feeling has come about, and although now and then some one may have a kick, he knows that he will be treated fairly and also that his neighbors will befriend him in any time of need.

Personally my confidence in the Burbank project rests not so much upon its remarkable geographic conditions, its railroad advantages, its low altitude and its mild, early climate, as on the confidence I have in its water supply. An irrigated project which can not depend upon water is a dangerous place for investment or living. No matter how rich the soil, or how advantageous the climate, if the water fails at the critical moment the effort of years may be wasted. I could cite illustrations, but believe it is not necessary. More important than the fact that three transcontinental railroads are within a mile of Burbank, more important than the fact that the opening of the Columbia river for navigation has given it the assurance of low freight rates to the Coast, and more important even than its mild, equable winter climate, is the character of the firm who guarantee its water supply. For 12 years I have been interested in the project, have had many discouragements, and my hopes have been postponed of fulfillment, but I feel that an engineering firm of first-class professional standing and first-rate financial backing has become responsible for the success of the Burbank project and will see it through. In the next few years I expect to see a wonderful development at the junction of the Snake and Columbia rivers. Water on the so-called desert turns it into a garden. One of the largest centers of farming population in the northwest will develop. It will not surprise me if a great city springs up, combining, perhaps, Pasco and Kennewick and Burbank, but whether or not such a city arises, undoubtedly the region will support a dense farming population and in this future development the community spirit which Burbank has already shown will have a potent influence. Neighborliness and genuine friendliness are the primary needs of any civilization.

# Washington Boys in War Service

—From The Twice-a-Week Spokesman-Review.



**JOSEPH HICKMAN, Prosser, Wash.**—Enlisted in the United States navy in December, 1917, and is now at the naval training school at San Diego, Cal. His parents, Mr. and Mrs. T. M. Hickman, and four brothers, John, Charles, Russell and Albert, live at Prosser, Wash.



**CHRIS BIHLMAIER, Irvin, Wash.** — Entered the United States navy November 23, 1917, and is now serving his country at the United States submarine base, Coco Solo, canal zone. He is the son of the late Mr. and Mrs. Jacob Bihlmaier of Irvin, Wash. He has three brothers, John, Fred and William.



**ED E. EDGINGTON, Ritzville, Wash.** — Answered the call of duty and entered the service of the United States April 15, 1917. He is now serving with the 14th infantry, Company F, at Butte, Mont. His step-father, R. N. Thompson, resides near Ritzville, Wash.

# This Machine Does Many Things at One Time



**The photograph herewith shows a tractor doing a number of things at one time. It is converting the unplowed land into a seed bed at one operation, a thing that is being done successfully on land that lies well.**

## For Fair Play.

Editor Washington Farmer: We truly enjoy your paper as it stands by fair play. Editorials free from bias—advice in all departments, good and to the point.

AL S. BIGGS.

Port Stanley, Wash.

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## Share Profits With Farm Help?

A dispatch from Pierre, South Dakota, says a movement is under way in that state to pay farm help on the profit-sharing basis. The average scale for farm hands now runs around $55 a month, with board, room and laundry. In wheat-growing sections a sliding scale of $50 minimum, $55 for wheat of 10 bushels to the acre, $60 if it goes over 15 bushels to the acre, and $65 if it goes over 20 bushels is being considered.

The plan is worthy of serious consideration. Many of the great business and industrial concerns of the United States have found that the profit-sharing plan is beneficial all around, as it stimulates the workers to more intelligent and energetic effort and makes it possible for the employer to pay his help more generously and profit himself from the improvement that results.

We do not know that the plan would be applicable to the farm, but should like to see it tried out.

## Sweet Are the Uses of Adversity

War is unquestionably an adversity, but in its wake undoubtedly follow some valuable results. War has become an industry these days —the most strenuous industry known to mankind. Anything and everything that works against its successful operation must be eliminated. We must do things that we have never done before and we must cease to do things that we have habitually done. Regulations that our oftentimes mistaken sense of personal liberty has revolted against in normal times are drawn up and we must follow them implicitly.

Acknowledging these things to be true, we are quite naturally faced by the question: If all this is good for us in time of war, may it not likewise be good for us in time of peace?

If thrift and economy are essential to the conduct of a successful war, why are they not equally essential to the conduct of successful industries of peace? If the prohibition of intoxicants is necessary that the best service may be rendered by men engaged in the industry of war, why is their prohibition not equally necessary for best service in the industries of peace? If it is economically wise to do away with duplication and overlapping of effort in war, why is it not equally wise in peace? If it is sound business to convert our raw materials into finished products in the districts where they are grown, thereby preventing needless handling and transportation during the war period, why is it not sound business during periods of peace?

These are but suggestions of the war way of doing things. The world is slowly waking up to the fact that system and efficiency must take the place of haphazard and inefficient methods if any great success in any line is to be accomplished. Surely when this war is over the world will not relapse into its old foolish dream.

## Man Is Not a Power Machine

It has always been man's desire to speed up, and he has speeded up whatever he has undertaken by the method of employing machinery of some kind. He is himself a puny being when it comes to exerting purely physical power. In a test of muscular strength he takes a back seat to most of the dumb animals with which he deals. But in spite of that he is their master. His intellect controls them. He puts the mto work for him.

In like manner he goes further and puts powers of nature to work for him. He harnesses rivers; he reaches out into the invisible and seizes electrical energy; he invents and puts to work engines that convert the energy of coal or oil or gasoline into effective power. And with them all he speeds up industry.

There is probably no fairer example of this speeding up than in the agricultural world as affected by power machinery. Just as there were many who scoffed at the automobile till it compelled them to acknowledge its prominent place in the vehicle world, so there are those who yet look with misgiving upon the tractor as a source of power for the farm. But there is no gainsaying that the power-driven machine has become a permanent and a mightily effective part of modern farming, and there is little doubt that as time goes on it will become more and more effective. Though tractors are common throughout the farming sections today, the whole power farming movement is but in its infancy. Stimulated by great needs for increased production of foodstuffs, it is going forward with almost unbelievable rapidity. The place that engine power may yet create for itself in the agricultural life of the world is one of great possibility.

## "The Problem of the Farm"

This title, with some variations in form, but not in thought, is the subject for a great many long articles, most of them with some measure of truth in them, but nearly all of them futile.

And this is the case because each farm is a problem in itself. So is every business, we suppose.

That all the problems have not been solved is clear enough to one who travels about a little.

It does not need figures, either, to see that the soils in the New England states, with some exceptions, have been wasted and robbed. They do not bear very much nowadays. They have been exhausted. In other words, the original owners of those farms and some of the successors did not solve the problems of those farms very well.

Well, we can learn by the mistakes of others, if we are willing to do so.

## The Fruit of Hate

Those who sow hate will reap more than hate. Hate is a destructive thing, which has only lasting evil effects. Today, it is said, crime among the children of Germany has increased more than 40 per cent. Why? Are the children of Germany worse than any other children? Not at all.

Lack of police, less discipline at home, relaxation of school restraint, trashy literature, are some of the things which are said to have brought on a wave of youthful criminals; teaching hatred has done more than all these other things combined.

There is enough hatred in the world already without deliberately fostering it. And those who sow it shall surely reap it.

## Coming Events

May 26—Picnic, Horse Heaven grange, Horse Heaven, Wash.
May 27-28—Convention, war workers, Spokane, Wash.
May 29-31—Tractor demonstration, Pullman, Wash.
May 30—Smut lecture, H. H. Brown, Spokane, Wash.
June 4-7—Convention, Washington state grange, Walla Walla, Wash.
June 12-14—Convention, county school superintendents, Ellensburg, Wash.

**Fairs, Shows, Exhibits.**

September 2-7—Spokane Interstate fair, Spokane, Wash.
September 16-21—Washington state fair, Yakima, Wash.
October 1-6—Western Washington fair, Puyallup, Wash.

**Live Stock Sales.**

May 28, Holsteins, Moorhead & Hobson, Outlook, Wash.
June 5-6—Jerseys and Holsteins, T. S. Griffith, Spokane, Wash.
June 11, Jerseys, C. H. Cannon, Turner, Ore.
June 12, Jerseys, W. O. Morrow, Independence, Ore.
June 26, Guernseys, E. R. Brady, Satsop, Wash.

## Caveat Emptor

This phrase of law Latin means "let the buyer beware." It was a principle of law at one time that, in the case of property which was not stationary and to which title was hard to prove, anybody who bought it took a chance along with the stuff.

However, even in the days when this principle was in full force and effect, there were people who never took advantage of it, and who realized that a good name for honesty and squareness was more valuable than the gains which came from crooked dealing.

## Washington Gleanings

The Horse Heaven grange, at Kennewick, has announced May 26 as the date for their annual picnic.

Work has been started on the one-story brick building at Vancouver for the Washington School for Deaf, costing $40,000.

Twenty carloads of potatoes were recently shipped from Mt. Vernon to Vancouver, B. C., to be evaporated and sent to England.

The Cashmere Fruit Growers' union is to increase its warehouse facilities and equipment this summer at a cost of about $23,500.

The shearing of Columbia county sheep is in progress. It is estimated that the clip of the county will aggregate 250,000 pounds.

The first two crates of Kennewick's 1918 strawberry crop were sold at a Red Cross auction in Seattle, bringing $507, or $10.56 per pint cup.

The Island County Guernsey Breeders' association has been formed with John Frostad as president, W. R. Parker, secretary. The association is considering buying a carload of purebred Guernseys in the east.

Yakima has its first girl bootblacks. Two young women have taken charge of the public "shine" stand in the Yakima Trust company building and are proving experts.

The carpentry class of the Bellingham high school is building a portable schoolhouse, which is to be used this fall where congestion is the greatest. The building is built in sections, has one room and will seat about 40 pupils.

Grays Harbor county is equipping its road district with motor trucks, and the commissioners expect to effect a big saving in the cost of road repairs and construction. Six large trucks have been purchased by the county, and in addition, a tractor trailer.

Eighteen thousand acres of sugar beets have been planted in the Yakima valley this season, to supply the three factories at Yakima, Toppenish, and Sunnyside. Judging by past crops they are expected to yield a little over 10 tons to the acre, which, at $10 a ton, will make a $2,000,000 crop.

Mt. Muncaster is to be the name of a hitherto unnamed 6000-foot peak near Lake Quiniault, in the northern part of Grays Harbor county. The mountain is to be named after Roy Muncaster, an American soldier, who lost his life when the Tuscania was torpedoed and sunk. Muncaster was forest ranger for the Quiniault district before he enlisted.

High school credits towards graduation will be given for this summer's work to girls spending four hours, six days a week for six weeks at the canning center. Girls may be credited by specializing in canning and going to various homes demonstrating how to can properly, while others may earn credits in the commercial branch of the high school by taking care of the canning center books, doing managing and recording work.

H. C. Davis, president of the Central Bank and Trust company of Yakima, has been invited to judge Holsteins at the Minnesota State fair, the first week in September, and has accepted the invitation. Mr. Davis was for some years a successful breeder of Holsteins at Granger. He judged Holsteins at the Interstate fair at Spokane last fall, in a very satisfactory manner. His selection is a merited recognition of Holstein judging ability.

# Regulate Wool

## Government Controls 1918 Output

The following is an official statement by the war industries board at Washington, D. C., relative to the government's control of the wool industry covering the 1918 output:

"The government nas definitely fixed the price of wool, taking as a basis the accrued value in Boston on July 30, 1917. The arrangement was arrived at by conferences between the representatives of the growers, the dealers and the government. It is desired that the wool shall, as nearly as possible, follow its usual channels, and to this end the growers have agreed to deliver to the dealers the new clip, and the dealers have agreed to distribute it upon a definite basis of compensation, conforming to the government's direction as to its distribution.

"The government has not obligated itself to buy the clip, but does have first call upon any portion it requires, and it will allot the balance of the wool to the mills throughout the country, such balance to be made use of for civilian purposes. The Boston prices as of July 30, 1917, are net to the grower, except that he has to pay transportation charges to the Atlantic seaboard and interest on such advances as may be made to him at the time of shipment.

"The dealers are to be permitted to make a charge of 3 per cent of the selling price, if the wool is not graded, and 3 1-4 per cent if it is graded. This commission is to cover all storage, cartage and insurance. The commission charge is to be added to the price of the wool as it leaves the dealers' hands. The dealers are arranging to make a blanket advance to the grower at the time the wool is shipped, the balance of the price of the wool to be paid to the grower when the wool is sold and delivered by the dealer.

"Speculating or any form of buying, directly or indirectly, is to be prohibited. The dealers in wool will be licensed by the government, and no licensed dealer will be allowed to buy wool, nor will he be allowed to take on consignments more than can be stored and expeditiously graded and transferred to the mills. The dealers desiring to be licensed by the government to handle wool shall first make application stating their capacity for storing and grading. Application for license shall be made to the wool division of the war industries board.

"All shipments will be made in such manner as to effect the greatest economy in transportation. After the wool is in the hands of the dealers and graded, it will be valued by a government valuation committee. The woolgrowers, the wool dealers and woolen manufacturers will each be represented in a government committee which will take charge of the details of operation.

"A method of handling wool in the fleece in wool sections, and other sections where the clips are small, is now being worked out, which will probably allow selling in small lots. This plan will be made public as soon as it is definitely decided upon. The full schedule of prices will be distributed without delay by the wool trade associations, or can be obtained from the wool division of the war industries board.

"Naturally there are many details to be worked out, but the foregoing is the substance of what has been definitely thus far agreed upon. The war industries board has erected a new commodity division, entitled 'wool division.'

"Lewis Penwell of Helena, Mont., has been appointed chief of this division. All communications relative to the subject of wool should be addressed to 'Lewis Penwell, chief of wool division, war industries board, Council of National Defense building, Washington."

# Red Cross Dollar

## Market Value Has Been Increased

The American Red Cross issues the following:

The American Red Cross and the government dollar will stand side by side in the marts of trade hereafter.

One will be on the same footing as the other. Red Cross purchases are to be accorded the same prices and the same priority privileges as those of the government, according to a recent decision of the war industries board.

"From this time forward the Red Cross dollar will go as far as the government dollar, and will thus be more efficient than it has been in the past," says the New York Journal of Commerce, in discussing the ruling.

"The new rule will be a source of gratitfication to the many voluntary contributors to the Red Cross all over the country," it continues. "It assures them that every advantage will now be taken to secure the supplies that must be obtained through the charity of the country on a basis that will not add a seriously disturbing influence to general trade.

"It will also make contributors feel that their money is being well spent. To many men in the trade who have been larrge contributors to the Red Cross, both direct and indirect, it will give assurance that all manufacturers will be treated alike and fairly as to the proportion of merchandise they are required to furnish for war purposes."

The importance of the action taken by the war industries board may be best understood through the statement of an official of the American Red Cross bureau of purchases, who estimated that it saved $18,000 on a single order placed a few days ago.

**The Best Published.**

I think the Washington Farmer is the best farm paper and magazine that is published.

F. W. JUHNKE.

Colfax, Wash.


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The full series of high boiling points in "Red Crown" makes power and mileage *sure*. Look for the Red Crown sign.

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*The Gasoline of Quality*

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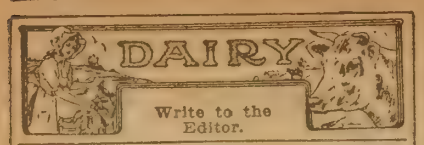
are pleased to announce that both of these lines will be demonstrated at the

"All-Pacific Northwest Power Farming Demonstration"

At Pullman, Wash., May 29, 30, 31

This will afford prospective tractor and truck owners ample opportunity to study and compare.

YOU ARE CORDIALLY INVITED




A. B. NYSTROM, Editorial Contributor

# Raise the Calf

## Two Advantages Are Possible

The question of what to do with the calf of dairy breeding has always been a question. It has always been known that the dairy animal is inferior from the standpoint of meat not only as to quantity, but as to quality, and there are many advocates of ruthless slaughter of the dairy calf.

With the present unprecedentedly high price of meat, this animal now finds himself fairly well protected for the early days of his life. With veal and baby beef at its present price it seems best to keep almost anything in the shape of beef for some little time at least, if there is any possible way of feeding him at a reasonable cost.

From the point of view of the dairy business alone the dairy calf should be studied with a view of improving the herd by raising or eliminating him. The male calves of good breeding and of a good line of producing ancestors may well, in many cases, be kept for breeding purposes later on and one excellent way of improving the dairy herd is to raise the heifer calves from the cows that have proved their worth as milk and butter fat producers.

Every dairyman should keep a careful and accurate record of all his cows, should use a purebred sire only and should constantly watch to eliminate from his herd every animal of inferior breeding or that has proved a poor producer.

When the price of butter-fat is taken into consideration it is readily seen that the cost of feeding a calf whole milk is high if not actually excessive. Many dairymen are using cream separators and raising their calves on the skim milk, believing that they can raise a calf that way much more cheaply than on whole milk and at the same time produce just as good a dairy cow.

One thing should not be forgotten by the dairyman, and that is that the calf must have plenty of fresh water regardless of the amount of milk that it consumes. Salt should be provided for it also, especially as soon as it begins to take other feeds than milk.

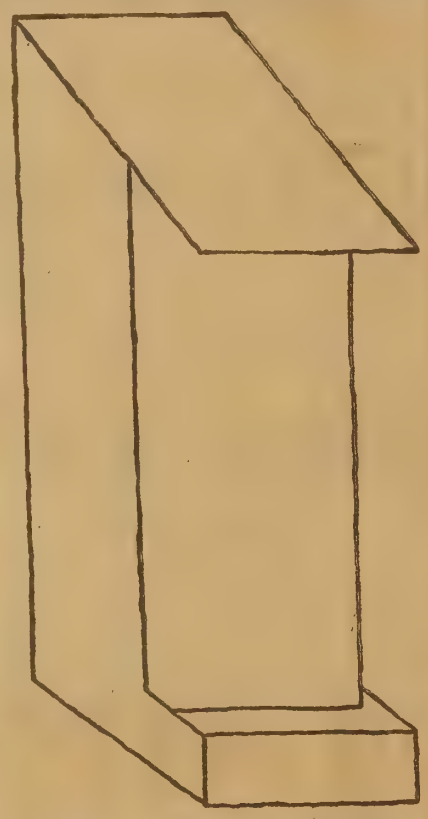
# Give Salt Uniformly

By E. D. ROSEMAN.

A uniform system of dairy salting, which approximates natural conditions by making it possible for cows to supply their needs in amounts and at times to suit their taste, has been put into operation on the Clarence Bowne farm in Marion county, Oregon.

The system consists of a series of salt hoppers, home-made, and nailed up conveniently around the barn and corral. Use of this arrangement in Mr. Bowne's herd has eliminated the digestive troubles which frequently result from the practice of irregular salting, and causes a tendency toward the maximum of production from the cows.

Using 1x12 lumber, Mr. Bowne has built the hoppers to hold 50 pounds of salt. They are about two and one-half feet long and 12 inches wide by eight deep. On one side at the lower end the bottom and adjacent sides of the hopper extend out slightly, making an opening through which stock can satisfy their wants. The top is cut on a slant and a hinged cover reaches out over the feed slot at the bottom, thus preventing undue dissolution of the salt in rainy weather.



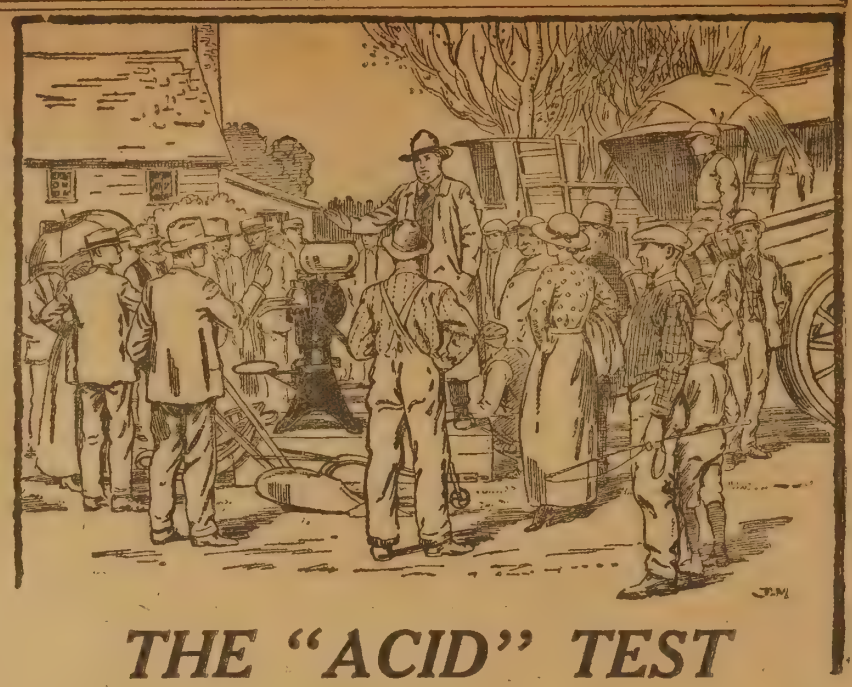
Hopper for Salting of Dairy Cattle.

Several of these containers are on the barn and posts in Mr. Bowne's corrals. His animals quickly learn to use the device and the only attention required of him is an occasional refilling. By this means he has eliminated a large proportion of time and trouble usually experienced with that work and at the same time provided a condition for his cows that is very necessary to the best results—a system of salting that makes the animal judge of its individual needs.

## Oregon Butter Scoring Contest.

The second scoring of the Oregon Agricultural college for the last month's contest was held on April 13, the butter being scored by L. B. Ziemer, Portland; P. S. Lucas, Corvallis, and V. D. Chappell, Corvallis. The April contest contained 18 entries. The butter was of fair quality, the highest scoring butter being entered by S. T. Coats, buttermaker for the Monmouth Cooperative creamery, with a score of 93.5; the lowest score being 88.5. The average for all entries being 91.23.

The following are the names of exhibitors scoring above 90: George Lee, Nashville, 91.5; H. A. Colt, St. Helens, 93; E. O. Post, Salem, 91.5; W. P. Coie, Albany, 92.5; N. Pederson, McMinnville, 91; S. T. Coates, Monmouth, 93.5; George Gauire, Ashland, 90; G. M. Barklow, Norway, 91.5; J. Thelkerson, Umapine, 92; M. J. Anderson, Pendleton, 92.5; H. C. Berg, Roseberg, 91.5; H. P. Belloni, Coquille, 90.5; L. S. Leach, Carlton, 93; C. W. Sly, Eugene, 90.5.

# THE "ACID" TEST OF VALUE

At an auction sale the buyer makes the price.

Auction prices are apt to be lower than the real value warrants, rather than higher.

In any case, auction prices represent the estimate of value placed on the article by the buyer and not the seller.

During the past few months, the cow owner's appreciation of the unusual values offered in De Laval Cream Separators has been demonstrated in a most remarkable way.

From one state after another have come reports of the sale of De Laval machines at farm auctions—machines which had been in steady use for several years—at prices, in most cases, only two or three dollars less than the sale price when new; sometimes at practically the same price at which the machine was sold when new, and, in several instances, at even more than the original list price.

In February, at a Missouri auction sale, a De Laval in use two years was sold for $1.25 above the original purchase price. In Kentucky a farmer paid for a De Laval $2.00 more than the original price, at an auction sale. Last January, in West Virginia, a second-hand De Laval sold at auction for $2.50 less than the original catalog price. On January 15th in Ohio, a De Laval machine in use a year was sold at auction for exactly the same price it brought when new, and at another point in Ohio a De Laval in use several months brought several dollars more at auction than the original list price. In the province of Ontario, early in April, a De Laval in use since 1916 brought at auction a price $5.00 higher than the owner paid for it when new.

In contrast with these prices paid for De Lavals at farm auctions, it is interesting to note that when other makes of cream separators are offered they are usually listed simply as a "cream separator," and not by name. Often there is no bid for such machines and their usual auction prices run from $10 to $15. We have never heard of one that sold at auction for half its original cost.

Perhaps you may not have had an opportunity to learn of the cleaner skimming, easier turning, the great durability and the splendid service given by the De Laval machines, but here is the strongest and best sort of evidence that those who do know cream separators appreciate that the man who buys a De Laval gets good and generous value for the purchase price. And further, that even after a De Laval has been several years in use, it is practically as good as new.

**If you are without a cream separator or in need of a new or better one, why not see the local De Laval agent immediately? If you don't know him, address the nearest De Laval office as below, for any desired particulars.**

## DE LAVAL DAIRY SUPPLY CO.

LARGEST DAIRY SUPPLY HOUSE ON THE PACIFIC COAST.
Alpha Gasoline and Distillate Engines, Ideal Green Feed Silos, Acme Ensilage Cutters and Blowers, Irrigation Equipment, Centrifugal and Deep Well Pumps and Alpha Spraying Outfits. Send for special catalog

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FARMERS NOT A POISON
POWERFUL DISINFECTANT

FOR CALF SCOURS

Breeders testify that B-K stops scours. It is powerful in killing germs, yet mild and healing. Relieves irritation, stops infection. Easy, simple and cheap treatment.

Write for evidence from users. Get our free book "Save Every Calf" from your dealer. B-K is on sale at drug and general stores. Dealers wanted in every town.

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Chr. Hansen's Preparations

Used by champions and experts everywhere, for cheese and butter making. Pure, concentrated, easy to use, always dependable.

Hansen's Rennet Tablets for cheese making; Cheese Color Tablets; Danish Butter Color and Junket brand Buttermilk Tablets.

At most drug and grocery stores, or direct, postpaid. Send for valuable free literature on cheese making.

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Raise Your Calves on
Blatchford's Calf Meal
and Sell the Milk

More calves have been raised on Blatchford's Calf Meal than on all other milk substitutes combined.

100 lbs. makes 100 gallons of milk substitute, costing only one-third as much as milk. Prevents scouring and insures the early maturity of sleek, handsome calves. It is steam-cooked and no trouble to prepare or use.

Write for Pamphlet "How to Raise Calves Cheaply and Successfully with Little or No Milk." At dealers, or Blatchford Calf Meal Co., Dept. 58 Waukegan, Ill.

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# Veterinary

Dr. S. B. Nelson

**Paralysis In Sow.**—I have a sow about 7 months old that has been out on pasture up to about three weeks ago, when she was taken with a sort of paralysis. She could not get up and had no control of her four legs at first, but in a few days she got all right in her front legs but could not get up behind and only the last few days she seems to be some better. She stands and walks a few steps, but her hind legs are crooked at the hock joint. Her appetite is good and has been and her eyes look bright. Would appreciate any information you can give me. R. C., Hamilton, Mont.

Give the sow two doses of sodium salicylate, a teaspoonful at a dose, 24 hours apart. Follow this with four to six doses of potassium iodine, 15 grains to a dose, one daily. Apply a little vaseline, carbolated is good, at the cracked places in the joints.

**White Warts on Neck:** I have three yearling calves that have something that looks like white warts growing on their neck and head and when they get about the size of a quarter they grow very fast, and then turn a kind of brownish color. Would be pleased to know what to do for it. G. G.
Danville, Wash.

The trouble affecting your calves is a malnutrition due either to a nervous condition or to the inability for them to use their food. I would recommend lessening the food to some extent, also give them each morning and evening one tablespoonful of Fowler's solution of arsenic on their feed. Do this for several days. Also apply castor oil or a saturated solution of magnesium sulfate to the warts daily.

**Cow Has Brain Trouble.**—I have a cow four years old which freshened last May and has been ailing now for months. At times she seems to suffer with pain in the head, just like a person with neuralgia. Sometimes she will go from four days to a week at a time seemingly perfectly well, eating good, and all the time gives a fairly good mess of milk. When the spells attack her they last two or three days and at that time she will not eat, holds her head down or to one side, or up against a post or wall. When she lies down she lays her head against her hind leg and slobbers drool from her mouth and water from her eyes, at times. The trouble seems to be just on one side of her head. She is in terrible agony, her nose and lips jerk and quiver. It is a fine cow and I dislike very much to part with her. She has kept up fairly well in flesh, but a little thin just now, as there are two or three days at a time that she does not eat. Her coat is in good condition. We keep her up in a box stall most of the time. A short time ago she went for over a week without having an attack. We thought she was well again, and turned her out with the rest of the herd. She came in that evening with the worst attack she had had. Have fed her corn silage and hay and shorts all winter. At present am feeding alfalfa hay and shorts. I had a veterinarian look at her when she was first taken sick and he thought it was some brain trouble.
MRS. L. P., Castle Rock, Wash.

I think the diagnosis your veterinarian made of brain trouble is correct. From the description you give I would judge it to be in the posterior part of the brain. I do not know if treatment will benefit her. You might try giving her one dram of potassium iodide in one pint of water night and morning for a few days.

**Let Horse Rest.**—I have an old horse about 18 years old. He has had a few queer spells lately which I can not diagnose. Here are his symptoms: When I turned him out to pasture one morning he grazed around a while, then stopped still and seemed to stiffen and tremble, then he started staggering around in a circle. I walked up to him, but he didn't seem to know I was there, nor did he pay any attention when I spoke to him. Can you kindly tell me what is the matter and is there anything I can do for him?
C. F. B.
Port Angeles, Wash.

It is very likely that the trouble affecting your horse is a nervous trouble. I would suggest that you give your horse one dram of potassium iodine night and morning for three or four days. Let him rest and repeat the treatment the following week.

**Trouble With Heifers**—I would like to know the cause of the trouble I had with two of my heifers this spring. All winter they had good care and feed, but this spring when time to calf one of the heifer calves came with little help, but its neck was quite stiff and turned to the left side some, while I lost the other heifer and calf, too, because its head was turned so far to the side I could not reach it to straighten it around. Could a manger a little too high cause such a thing? They were both tied at night to the same manger all winter. MRS. W. O. H.,
Benge, Wash.

I do not believe the tying of the cows to the manger had any effect upon the unfortunate condition occurring to the unborn calves. I do not know why the irregularity in the presentation of the young occur, especially when they are fully formed and well developed in every resepct.

**Mare Has Cough**—I have a nine-year-old mare that has had a cough for the last two or three months and she sometimes throws out phlegm and rattles around the head. This seems to be getting worse. I feed a good quality of timothy hay. B. M.
Mukilteo, Wash.

Try applying a light blister as large as your two hands to the mare's throat. Use one part of pampharides, one part of red iodide of mercury to 20 parts of lard, or to 16 parts of lard and four parts of beeswax. Just blister lightly. Two or three days afterwards begin giving the mare one ounce of Fowler's solution of arsenic once daily, either in her drinking water or mix it with her feed.

**Cut Does Not Heal**—I had a cow that bloated and in order to save her she was stuck in the left side high up by the hip joint. She gives her natural flow of milk and seems all right, but the cut is running puss. M. N. K.
Colville, Wash.

There is probably a little pocket containing offending foreign material at the wound. Consult your local veterinarian and let him open up the wound, and then with the treatment of a simple antiseptic it will without question heal for you. I do not believe you ought to let it go very long, because the puss may burrow and pass clear down around the abdomen and form a serious pocket just at the middle line of the abdomen in front of the udder. Therefore, you should have it attended to as early as possible.

**American Cream at Quebec.**

There were 399,816 gallons of cream, valued at $364,186, invoiced at the American consular agency at Beebe Junction, Quebec, Canada, for the United States during 1917, as compared with 471,896 gallons, valued at $414,283, for 1916.


Only $2 DOWN ONE YEAR TO PAY



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Save Time, Labor and Cost
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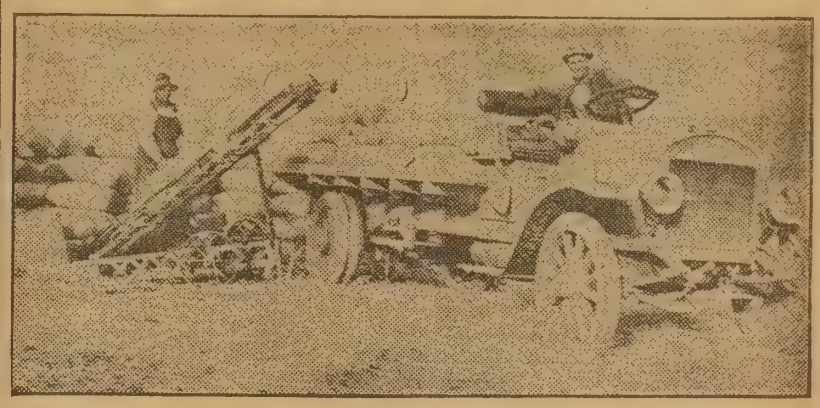


Figure time in dollars and cents. Make tremendous savings with the Velie truck.

Every step you can take to save money—increase crops—is helping the nation.

The Velie truck affords the farmer economy, convenience and certainty of transportation of his livestock and crops.

The Velie is taking the place of horses for hauling dairy and farm products to market in half the time and at less than one-fourth of the former cost. Write for catalogue.

*Begin Today and Increase Your Farm Profits*

The Velie truck will be demonstrated at the "All-Northwest Power Demonstration," to be held at Pullman, Washington, May 29th, 30th and 31st.

Interstate Auto Co.
1313 First Ave.
SPOKANE, WASH.

Roesch Motor Car Co.
Pine St. and Boren Ave.
SEATTLE, WASH.

Manufactured by the Velie Motors Corp., Moline, Ill.



BUHL SANITARY DAIRY SUPPLIES

"Buhl Quality" stands the racket! Buhl Milk Cans, Sanitary Milking Pails, Strainers, are standard with Northwest dairymen.

Buhl "Tiger" Pattern

*A postal brings the FREE circular on Buhl Sanitary Dairy Supplies or anything else in dairy, butter-making or cheese-making needs.*

New Buhl SANITARY Milk Pail

Address Desk B nearest house,

Monroe & Crisell Dairy Machinery Co.
91 Front St., Portland 607 Western Ave., Seattle

Buhl Sanitary Milk Strainer

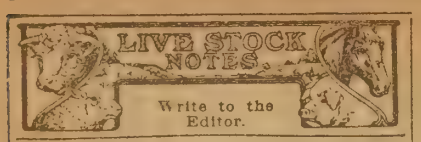


UPPER COLUMBIA LANDS

Cut-over lands in the upper Columbia valley offer a wonderful opportunity at this time. Excellent railroad facilities; good roads; schools; an abundant market right at home; diversified farming and stock raising bring wonderful results, and we can sell you a tract of practically any size at an extremely low price. Very easy terms. Write for descriptive booklet.

The Fred B. Grinnell Company
Spokane, Washington.

C. E. Allison, Local Agent. Northport, Washington.




E. J. IDDINGS, Editorial Contributor

## RAISING CALVES.

### With a Gruel Made of Calf Meal.

By V. VAN HOUTEN, South Bellingham, Wash.

The Pacific Stock farm, Alger, Wash., is meeting with splendid success raising calves with very little milk. Captain H. A. Reasoner, the general manager, says:

"We have a valuable bull, at the head of our herd, with an excellent milk record behind him, and are going to keep all our heifer calves and some of the others.

"I feed a calf five pounds of whole milk twice a day for about seven to 10 days after the mother's milk is good (we have no skim milk), then gradually change to gruel made from calf meal until the calf is about six weeks old, when it gets a pound of calf meal at a feed and no milk, then I gradually change the calf meal in the gruel to shorts.

"We feed the calves dry shorts as soon as they will eat it.

"No, we have no trouble with scours. Scours is caused by overfeeding. If there is any sign of scours, just let the calf miss a feed, and if that does not stop it, give four drops of formaline."

Those calves are a pretty bunch, all nice red fellows with white markings, full of vigor and excitement as they stand in their little stanchions at feeding time, then they come out with almost as much enthusiasm and trot off to the trough for the dry shorts.

## Bloat in Cows.

To the Editor: I saw in your paper of a few issues back an inquiry for the care of "bloat" in a cow. I will give an experience of mine:

A neighbor had a valuable cow which he was trotting around the lot with a stick in her mouth. Having read of the value of cold water poured upon the loin for such cases I told him of it. He brought the cow to our gate and we attached the hose to the hydrant, turning it upon the cow as stated. Within a few minutes the bloat was reduced. What relation to the bloat and cold water sustained I do not know, but I do know it was effective.

W. A. M'GHEE.

Leland, Idaho.

Dr. Nelson makes the following comments regarding the above:

Whenever bloat is caused by the loss of tone of the muscle wall of the stomach, then the treatment recommended of dashing or turning water from the hydrant over the loin on the side of the cow stimulates through the nerve endings of the smooth muscles of the walls of the stomach, and causes them to contract and cause the expansion of the gas and increases, in some cases, the digestive power. It does not prevent the reoccurrence of the bloat from the same cause. This has to be done by drugs which will prevent fermentation of food which the stomach may contain.

## British Wool Prices.

Notification comes that the British war office has agreed that the price for the British and Irish wool clip of 1918 has been fixed at 60 per cent above the average price of 1914. This decision is one that will be received by woolgrowers with considerable surprise, the advance being considered totally inadequate to recompense growers for the increased costs incurred by them in the production of the 1918 clip, says the London Live Stock Journal of April 5.

"We are authorized to state that, in view of this unsatisfactory response to the resolution passed by the National Sheep Breeders' association at its meeting held in February, 1918, the president of that association has called a special meeting of the association and other agricultural bodies for the afternoon of Monday next at the offices of the Royal Agricultural society, 16 Bedford square, for the purpose of considering the reply received from the government, and to take such steps as may be deemed advisable to endeavor to induce the government to reconsider the matter, with a view to giving to woolgrowers of the united kingdom an adequate price for their product and labors."

### Pennsylvania Coal Production.

Nearly half of all the coal produced in the United States is mined in Pennsylvania.

## Long Distance Test.

One way of eliminating poor cows from any locality is through the purchasing of bulls, not from show ring reputation, not from seven-day records, but for the kind of records that were made day in and day out, 365 days in the year. Some of the poorest cows of the different breeds make a high test and a large total amount of fat for a brief period after calving, but on the long-distance test are not there, says F. M. Colcord. Keep in mind that bulls purchased on long-distance records are worth many fold more to the average dairyman than all the "20" and "30" pound cows that were ever produced. Has your community looked into the bull club proposition? Do you know that it is possible to get the use of a bull for a very small figure, one that is bred right through cooperating with your neighbor and in time through this cooperation or bull club, as it is called, a bull association could be formed. With the shortage of labor there never was a better time to get together on the bull proposition than now.

If you want help in organizing a bull club or in getting a better bull, write to you dairy field agent at your state college of agriculture.

## Sheep for Summer Range.

By A. B. KEITH...

Thirty-five carloads of sheep which left Dillon April 29, from the Woods Live Stock company's ranches in the valley, made a total of 76 carloads shipped from Dillon the previous week to Spencer, Idaho, their summer range. The sheep have wintered on the ranges surrounding Dillon without hay the last winter, having been fed on cottonseed cake and what they could pick up on the hills. They are all in splendid condition, and the loss was under 2 per cent during the time they were ranged. This is a remarkably low figure, even for a mild winter.

For the most part they are 2-year-olds and will shear well, and are in prime condition for mutton.

Five hundred fat steers were shipped recently by Rife & Duff to the St. Joe market, and the Centennial Land and Cattle company shipped 400 prime steers to Portland.

## Kept Seven-Day Test.

To the Editor: I have been running some cows on a seven-days' test and am sending you the following report: One junior, 4 years old, Ann Lunde 4th, No. 220954, produced 557 pounds of milk and 22.07 pounds butter in 7 days. One junior 2-year-old, 14.97 pounds of butter; another, 14.44 pounds butter. The 4-year-old and one of the 2-year-olds, I expect to run on semi-official for a year. I have one cow that has over 800 pounds of butter to her credit for 348 days, and the 4-year-old is starting off better than she did.

NATHAN HAMILTON.

Chehalis, Wash.

### Pennsylvania Women in Business.

More than 100 firms, parnerships, and individuals doing business in Pennsylvania under assumed names have registered the real names of their owners, and in many cases it has been found that women were not only managers but owners of stores, factories and other industries.




**Stop the Gamble in Haying!**

YOUR mower lays the hay in even swaths down meadow and hayfield, exposed to whatever weather may come. Take no chances with that unprotected hay. **International Harvester** hay tools will put it under cover in prime condition, properly cured, four or five hours after cutting.

Every hay grower should become familiar with the new **International, Keystone** and **Osborne Combined Side Delivery Rake and Tedder.** This popular, economical machine has two duties in one—it can be instantly adjusted for rake or for tedder. It rakes clean, teds thoroughly, and handles hay gently. It is a left-hand-delivery rake, which means it can follow the mower closely and strike the heads first (not the stems). It does clean work, piling two swaths at once on the clean stubble (not on an unraked swath), which means proper curing. Quickly adjustable to any condition.

**International, Keystone** and **Osborne Windrow Loaders** are built to last. Pulled easily by two horses, they load uniformly, leave the field clean, lift hay over 10 feet, and do not thresh off blossoms and leaves.

These tools return their price, and more, to your pocket. The dealer can furnish you with proper size and types and special equipment. Act early this year and be certain. See the dealer—write the address below for folders.

**International Harvester Company of America**
(Incorporated)

Billings, Mont. Crawford, Neb. Denver, Colo. Helena, Mont.
Los Angeles, Cal. Portland, Ore. Salt Lake City, Utah
San Francisco, Cal. Spokane, Wash.



**Improved "Reliable" Gasoline Drag Saw**

Distinctly in a class by itself. Has features found in no other—standardized parts. All parts of engines and machines interchangeable.

**Automatic Safety Clutch**

Saw stopped and started without stopping engine. If saw should wedge or stick safety clutch will slip and cause no damage to saw or engine. Write for full particulars about the best drag saw on the market.

**Hofius Steel & Equipment Co.**
Spokane, Wash.




**Raise Your Hogs and Cattle at a Profit**
Assist Nature by Feeding
**ECONOMY STOCK POWDER**
A general conditioner, a worm expeller and a disease preventive.
Send for FREE SAMPLE and our BOOK on LIVE STOCK.
ECONOMY HOG & CATTLE POWDER CO.
SAVE YOUR HOGS Hearst Bldg. San Francisco, Cal.



*"Hep! Hep!" Ten miles more to hike—then camp and the comforts of a little chew of Real Gravely.*

**See That He Never Lacks a pouch of Real GRAVELY Chewing Plug**

**Your fighting man will go to almost any lengths to get good tobacco. Many a man has paid $5 for less good tobacco than you will send him in a pouch of Real Gravely Chewing Plug. Only costs you 10 cents.**

Give any man a chew of Real Gravely Plug, and he will tell you *that's* the kind to send. Send the best!

Ordinary plug is false economy. It cost less per week to chew Real Gravely, because a small chew of it lasts a long while.

If you smoke a pipe, slice Gravely with your knife and add a little to your smoking tobacco. It will give flavor—improve your smoke.

SEND YOUR FRIEND IN THE U. S. SERVICE A POUCH OF GRAVELY

Dealers all around here carry it in 10c. pouches. A 3c. stamp will put it into his hands in any Training Camp or Seaport of the U. S. A. Even "over there" a 3c stamp will take it to him. Your dealer will supply envelope and give you official directions how to address it.

**P. B. GRAVELY TOBACCO CO., Danville, Va.**

*The Patent Pouch keeps it Fresh and Clean and Good —It is not Real Gravely without this Protection Seal*

Established 1831

# Gasoline Engines---Their Care

By Joseph C. Herzner, Valley, Wash.

The gasoline engine which will work properly year after year without care and adjustment, has not yet been invented. Every gasoline engine, regardless of its make, size or design, requires attention. The expert engineer—whose engine always runs well—thoroughly understands the engine which is in his charge and gives it daily attention (as does the horseman give his horse) whereby his repairs are very few.

Each day before he starts the engine he oils each part where friction occurs with good gas engine oil, especially filling the oiler which oils the cylinder, and turns down all grease cups, which likewise he supplies with the best hard oil obtainable—he positively makes sure that every part gets as much oil as it needs. Then he wipes away the superfluous oil and dirt with a piece of cloth for cleanliness, meanwhile making an examination of the engine to be sure that nothing, such as bolts, flywheels and pullies, has worked loose, and whether there is any play in the crank shaft boxes or connecting rod; if any he tightens them so they will not knock and so they will still work freely. He always keeps the hopper or cooling tank filled with clear water; if there is a pump, he makes it do its work. Nor does he forget to drain the water in cold weather after stopping.

Likewise he examines the electrical apparatus ascertaining that there are no loose wires, broken wires, or short circuits, that the battery produces a good hot spark; or if there is a magneto, sees that it runs and works well. Frequently he investigates whether the spark is on time; if not he adjusts the ignitor trip so that its tripping will correspond with the mark on the flywheel. About every two weeks, oftener if necessary, he removes the ignitor and cleans the points with sandpaper.

If his engine does hard work continually he makes it a point to remove the cylinder head about every month so he can scrape the carbon from the cylinder walls, grind the valves—especially the exhaust—if they do not seat perfectly, and takes out the piston to examine the rings. Finally, after thoroughly cleansing cylinder, piston and valves with kerosene, he replaces the head, being careful that the gasket is not broken, which would, of course, cause leakage, and tightens all the nuts equally.

About every six months he takes the engine all apart, carefully examining each part as he does so. With a piece of cloth or waste and kerosene he thoroughly cleans the dirt and gummed oil from each part. Any part which is badly worn he replaces. In again putting it together he endeavors by all means to do the thing perfectly. Crank boxes, connecting rod, camrod, governor, gasoline supply, mixer, electrical aparatus, valves, piston and rings; in fact everything belonging to the engine gets careful, diligent attention. He makes it as near like new as he can.

### Suggestions by Mr. Fairbank.

Commenting on the above article, J. P. Fairbank of the agricultural engineering department of the state college at Pullman, says:

In the care of these machines the points made should be of value to the average farmer, who has gasoline engines. In the second paragraph, "where friction occurs with good oil," I would insert "with good gas engine oil." To my mind it is essential that we impress upon the gas engine owner that he should not put anything but gas engine cylinder oil into the device which lubricates the cylinder. For that reason we recommend that one kind of oil only be kept around the engine so that no mistake can be made. Down further in the paragraph he suggests that superfluous oil and dirt be wiped away with a cloth after the engine is lubricated. It might be well to suggest that this dirt should be wiped away from around the oil holes before the engine is lubricated, thus preventing dirt being washed down into the bearing by the oil.

I would suggest that the last sentence of the fourth paragraph read "about every two weeks, oftener if necessary, he removes the ignitor and carefully cleans the points with fine sandpaper," simply adding the two words, "carefully" and "fine."

## TRACTOR MEN.

### Pacific Northwest Association.

Organization of the Pacific Northwest Tractor and Power Farming Association has been completed in Spokane at the office of the Holt Manufacturing company by more than a score of machinery and implement dealers. Officers elected were:

President—M. W. Weeks, International Harvester company.

Vice president—H. A. Caldwell, Holt Manufacturing company.

Secretary—Otto Spannagel, Yuba Manufacturing company.

Treasurer—A. D. Taylor, John Deere Plow company.

Trustees—A. S. Fetterman, A. H. Averill Machinery company; Robert H. Sampson, Harlin & Orendorff company; M. W. Weeks, H. A. Caldwell, Otto Spannagel, A. D. Taylor, with P. E. Lattner of the Twin City Manufacturing company.

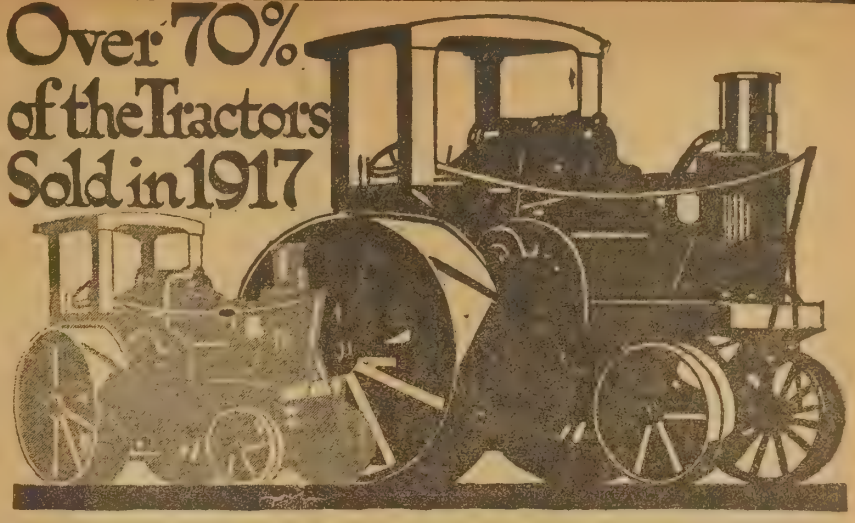
Vice presidents—For Washington, H. H. Harwood, Eldridge Buick company; for Oregon, Edward Newbegin, manager of R. M. Wade company. Portland; for Idaho, R. P. Fairbanks, manager Pocatello Engineering and Machinery company, Pocatello; for Utah, Henry Landes of H. Landes & Co., Salt Lake.

Plans were discussed for the tractor plow and test to be held May 29, 30 and 31 near Pullman, and it was decided that all should go there May 26 to pick out their allotments of land to be plowed in the demonstration work.

Demonstration will take place on six different fields. Three fields of practically level ground, grades not to exceed 20 per cent, and three fields of ridges or hilly ground, where the grade runs all the way from 15 to 40 per cent. This demonstration will be of especial benefit to the farmers from the fact that we are demonstrating on average farm land and using the methods necessary to farm the average ground.

## Buy Canada Tract.

F. W. Anderson of the F. W. Anderson Mortgage and Investment company has purchased 19,000 acres at Killian, Alberta, for $250,000. The property is an old estate in a portion of Alberta, popularly referred to as the "Palouse of Alberta."


This is the number that used K-W Magnetos as standard equipment—the list including 39 of the leading manufacturers.

This year already 40 of America's leading tractor manufacturers have specified K-W Magnetos as standard equipment on 83 models.

And why? Not because they are cheaper, because K-W Magnetos do cost tractor manufacturers *more* than any other make, but because these 40 manufacturers realize that the severe operating conditions common to tractor service *demand* K-W Magnetos. Their experience has proven that K-W Magnetos have the stamina to stand up under the most gruelling service.

TRADE K-W MARK **High Tension MAGNETOS**




give the hottest known spark—timed accurately. They fire leaner and poorer mixtures and develop maximum power out of every drop of fuel used. Their construction protects them against **water, dirt and oil.** Their use eliminates troublesome starters and batteries.

In buying your new tractor insist upon a K-W Magneto. Look for the K-W trade mark.

Write for list of K-W equipped tractors and literature describing K-W Magnetos.

THE TRADE K-W MARK IGNITION Co.
2891 Chester Ave. CLEVELAND, OHIO, U.S.A.






**Look!** Before You Buy a Tractor

## –See what Bean *TrackPULL* Tractor Does

Down Between the Rows and Around the Trees!

Note the practical turning feature of this remarkable tractor. Watch it *pull the tools* around turns just as easily as on the straight-away. See it go all around a tree, with the tools *sunk down deep* doing *valuable work*, plowing or cultivating right up to the trunk. Look at the circular diagram above. Do you know another tractor that will do that? Many tractors will *turn themselves* around all right but the tractor you need whether in *orchard, vineyard* or FIELD WORK must take *the tools* around too and keep them *at work* all the way around. This requires *full power* on the turns. A pivot-turn with *half* power isn't sufficient; and a pivot-turn with one wheel or track stationary and *full power thrown on one side* of the tractor is a *straining overload.*

That's where the great PATENTED SINGLE-TRACK FRONT-DRIVE principle of the *Bean TrackPULL Tractor* gets its immense value. It permits full power even when *turning inside a 10-foot circle* (5-foot radius). No pivoting, and no overload on *any part.* No other tractor *can be built* like the Bean, because basic patents protect it from imitation.

Don't buy a tractor that doesn't turn with full power. Your work calls for many turns and a tractor that will make them right will save you time and money.

Send right now for the Bean catalog with full details, learn the price of this remarkable tractor, and the name of the nearest agent who will give you a true demonstration of the TrackPULL doing the kind of work you have waiting for it *on your place.* Mail us this coupon now, before you forget it.

**Watch the Bean at Pullman demonstration, May 29, 30, 31.**

**Bean *TrackPULL* Tractor** (Patented Front-Drive)



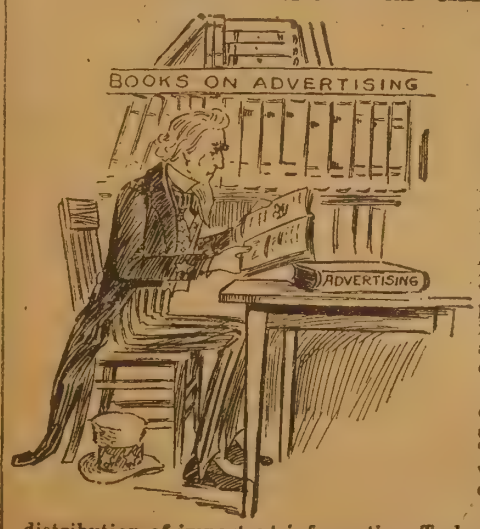
Bean Spray Pump Co., Dept. F5
231 W. Julian St., San Jose, Cal.

Please send Tractor Book with full information about the Bean TrackPULL Tractor.

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Street .....
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County ..... State .....
No. of acres ..... Kind of crops grown .....



## Uncle Sam Is an Advertiser



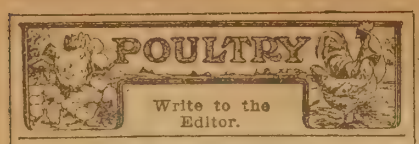

Advertising is such a universal force today that it is used by nations as well as individuals.

Kitchener advertised to raise England's first army of 4,000,000 men. The British government advertised to induce her people to invest in the huge war loans; and again advertised to influence the public to save food.

Similarly, the United States has utilized the power of advertising in the conduct of the war, persuading men to enlist, winning investors for the Liberty bonds and thrift stamps, and pointing out the need for more food.

Millions of stamps in our post-offices are canceled with a machine which prints the words, "Food will win the war; don't waste it." That is just one of Uncle Sam's methods of advertising.

Advertising means simply the distribution of important information. To keep well posted and up-to-date you should be a reader of the advertisements in this paper.




JAMES DRYDEN,
Editorial Contributor.

## THOSE WAR CHICKS.

### Feed Properly and Save Them.

Some millions of war chicks are now being hatched, and it is safe to say that some millions of chicks are lost every year due to improper feeding. Some of the important points, or the essentials, are some ground grain and some cracked or hard grain; a variety, or a balanced ration, so that there is sufficient of the flesh-forming foods as well as fat or heat-producing foods; some animal food; green food, and grit; water or milk to drink.

The important points in feeding; that is in method of giving the feed, are frequent feeding when chicks are small; and second, fed in such a way as to induce exercise.

As to the ration of feed, it is not always a question of what is the best feed, but what is the best feed that is available. In these war times it is not possible always to feed what we would like to feed. Wheat, which before the war was the principal feed for young chicks as well as old stock, is not available. The government says we shall not feed it, or virtually says so. There is a shortage of wheat, and we must save it or a large part of it for the soldiers. There may not be a law to punish the farmer for feeding wheat, but the patriotic appeal to save the wheat is or should be as good or better than a statute.

Other feeds, because of their price, are almost out of the question. Bran and shorts, another staple feed, is cheap and because of that fact is hard to get, the demand being so great. We had hoped to get corn cheaper and enough of it to replace wheat, but on account of the condition of the crop when harvested, due to rains and frost, and also lack of transportation, corn has not been forthcoming as yet at a price that was expected. The price is a little lower, however, at this writing, and there is more in the market.

As a starting food for chicks there is nothing any better than stale bread soaked in milk and squeezed dry. If the stale bread or milk is not available, eggs that have beein tested out of the incubator or from under the siting hen as infertile, make a good feed mixed with bran or meal. Hard boiled eggs are frequently fed, but hard boiling them renders them more indigestible and they will cause bowel trouble if fed liberally. The best way is to use them raw or soft-boiled and mix them with bran. Feed this two or three times a day for a week or as long as the eggs last. A dozen eggs to a gallon of bran is about right. It should be crumbly, not soft. Feed just as much as the chicks will clean up readily. Twice a day, give a feed of cracked grain, cracked corn will do. Chicken groats and cracked corn are good. Good wheat screenings will answer the purpose. A good grade of commercial chick feed will answer for the grain feed. Which one of these grain mixtures is fed the feeder can decide for himself on the basis of price and availability.

It is important in feeding the grain to scatter it in a litter of cut straw or chaff so as to make the chicks exercise in getting their feed. The whole business in life of the chick is to eat, and it does not have work to do between meals to give it exercise. Unless it gets exercise in its search for feed it will go without exercise, and exercise is as important to the chick as to the athlete. Chickens can not be successfully raised without exercise. That is an absolute fact. The hen with a brood of chicks that is running at liberty around the farm is giving the chicks all the necessary exercise in searching for food. With the hen-reared chicks on the farm there is not much danger of the chicks pining and dying from lack of exercise. But even then it is just as well to provide a small scratching place where the grain can be fed in the straw. For brooder chicks, however, confined in brooder houses and in small yards the exercise must be provided; they must be made to scratch; scratching is their exercise. Begin with the straw litter after the chicks are two days old. Cut straw an inch deep for the first two or three days; then two or three inches and five inches by the time they are 10 days old. They will dig down to the bottom of it for the kernels. Then give them just as much grain as they will clean up. If too much is given they will find it too easily.

After the stale bread or the egg mash is discontinued a mash of bran and shorts and ground corn should be fed. The question here is, shall this be fed dry or moist. It saves time of course to feed it dry in a hopper, filling the hopper once a week. If one has the time, however, to mix up a mash once a day with either water or milk, the chicks will, I believe, grow a little faster. But the difference in growth is not very great, and sometimes it is an advantage not to hasten the growth of the pullets too fast. Early-hatched pullets if forced fast are likely to lay early and then molt in the fall and stop laying. If moist mash is fed mix it with milk or buttermilk to a crumbly consistency. The mash may be composed of about 2 parts bran and one each of shorts and corn meal by weight. If corn meal is not available it may be omitted or ground oats or barley substituted.

Next, animal food is necessary. If milk can be had, either skim milk or buttermilk, there is nothing better. Give them this to drink all the time, and no water. They will drink more milk if they have no water. If no milk can be had, use meat scraps, mixing it in the mash at the rate of about 10 to 15 per cent of the weight of the ground grain. Some feed it in a hopper separately with success, keeping it before the chickens all the time. Meat scrap hastens growth.

Then, finally, remember the green food. This is absolutely necessary. Of course grit and charcoal should be furnished.

Don't starve the chicks, but they should be hungry at feeding time and should retire for the night with crops well filled.

J. D.

#### Place Carbons Horizontally.

A group of European electricians decided, after experimenting, that better results were obtained by placing the carbons in arc lamps horizontally and one slightly above the other.


## Attention Poultrymen

War times demand as many eggs as possible at the least possible cost. It is not only profitable, but patriotic, too.

## Cocoanut Oil Meal

It is a splendid feed for chickens, mixed in the mash wet or dry.

Try it out and you'll not be without it.

Ask your dealer or write direct.

**Kaola Company**
Manufacturers, Portland, Ore.
The Geo. Frost Co., Special Agts.
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## DR. HESS Instant Louse Killer Kills Lice on Poultry *and* Stock

Use it on your lousy hens and chicks—your lousy colts, horses and cattle. You'll get better chicks—bigger, better fowls—more eggs—better contented stock.

Chicks are apt to be lousy now. Give them a chance. Sprinkle Louse Killer into the feathers, about the coops, on roosts, in nests of laying and setting hens. Always keep Louse Killer in the dust bath. For lousy horses and cattle, colts and calves, stroke the hair the wrong way and sift in Louse Killer.

We authorize dealers to return your money if it does not do as claimed.

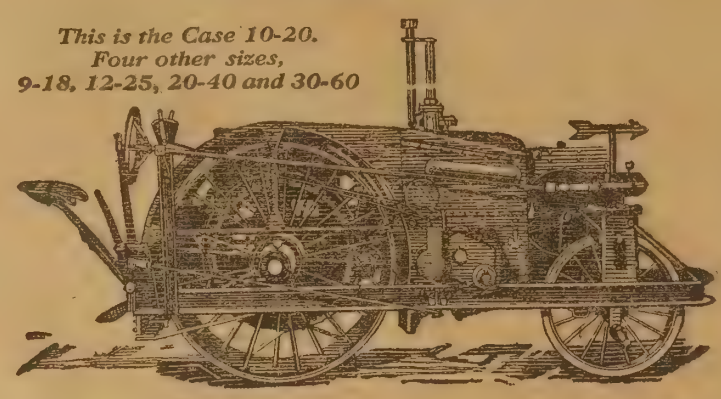
1 lb. 25c, 2½ lbs. 50c (*except in Canada*)

Dr. HESS & CLARK
Ashland, Ohio




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KEROSENE TRACTORS



*This is the Case 10-20.*
*Four other sizes,*
*9-18, 12-25, 20-40 and 30-60*

## Popular in Every State and Country

THIS is a picture of the famous Case 10-20 Kerosene Tractor, the model that has been purchased by thousands of successful satisfied farmers.

It pulls three 14-inch plows anywhere a team can continuously pull one plow. It is the most powerful tractor in the 5000 pound class. It delivers 14 7-10 per cent more drawbar horsepower than rated.

It embodies the latest and best engineering principles, being built by the J. I. Case Threshing Machine Company, famous among farmers for 76 years. So it is not an experimental type made by a concern unacquainted with farm needs.

It has a 4-cylinder Case valve-in-head motor and burns kerosene successfully and economically. An efficient air strainer prevents dust and grit entering cylinders.

In plowing, all wheels travel on unplowed ground. The combined tire width of drivers is 32 inches. There is absolutely no side draft and no soil packing.

Under belt, this Case 10-20 drives a 20 x 36 Case Thresher with all equipment; a Case No. 16 Silo Filler, and other machines requiring similar power.

You cannot afford to buy any tractor before you learn the advantages of this Case 10-20. Inquire of a Case dealer or write to us for a catalog.

**J. I. CASE THRESHING MACHINE CO., Inc.**
Founded 1842
1173 Erie Street, Racine, Wis.

(744)



## Ryde's Milk Mash

Is the same as new milk for little chicks. No indigestion or bowel trouble when they are fed on this. Ryde's milk mash is the recognized standard.

25 lbs. $1.65 50 lbs. $3.10 100 lbs. $6.00

**INLAND SEED CO. SPOKANE WN.**


**The Advertisements in This Issue Are Well Worth Reading.**

They are informative and cover a wide range of subjects. You can profit by reading them carefully.




GRANVILLE LOWTHER,
Editorial Contributor.

# Vegetables for Canneries

Canneries are being established in different parts of the country, mainly to care for the peaches, cherries, apricots, and a certain grade of apples that are not good commercial fruit. It often happens that this fruit for canning is as good as that shipped in extra fancy boxes, except that it is bruised, the skin is punctured, or that it has a little scale. This is not an injury for canning purposes, or at least the injury is very slight. Hundreds of tons of fruit can be saved by canning that otherwise would be wasted and the cannery should be a permanent adjunct to every fruitgrowing section. However, there are difficulties.

One of the difficulties in making a cannery profitable is to be able to employ the help for a large period of the year. The fruit season is comparatively short; the investment for machinery is as great if the plant is operated four months as if it were operated 12 months. This canning season can be greatly lengthened, if early vegetables are grown, so as to supplement for fruit. Suppose aspargus should be grown on a large scale for canning purposes; it would be ready for the cannery early in the season, and will bring a good profit per acre. Besides, it is a crop that requires only two years to bring the plants into profitable bearing, and then does not have to be renewed every year. It is estimated by some growers that asparagus will bear good returns for 15 or 20 years after planting. Rhubarb is an early crop and is canned by many companies who claim for it a good profit. Other vegetables could be grown to keep the cannery running until the early fruit is ripe. G. L.

## YOUNG TREES.

### Vary as to the Time of Bearing.

I have a letter from J. J. McElroy of Rupert, Idaho, who says: "I have a swell orchard of 50 trees that have never borne to amount to much. I prune regularly, and work the ground around them, but not deeply. They are thrifty, 8-year-old trees and have made good growth. I grow alfalfa between the trees, but not close to them. They have never bloomed but a little. What do you recommend to do? I irrigate, but not excessively.

It is difficult to diagnose a case correctly without having seen and studied all the conditions. Even then we sometimes make mistakes. It is a little like the old story of the doctor who found it necessary to amputate a patient's limb. The report read: "The operation was successful. The man died."

In a general way there are the following reasons why trees do not bear early:

1. The varieties vary greatly in the number of years required to bring them into bearing. The Spitzenburg, for instance, is a late bearer. I would not expect a Spitz to bear much before 8 years of age. The Delicious, Jonathan and Winesap are early bearers and will ordinarily bear as much at 6 as a Spitzenburg at 8.

2. If trees are planted on a rich soil, especially if it is rich in humus, they will make a heavy wood growth, but will not at an early age develop fruit spurs. However, this condition should result in a longer-lived tree and be to the ultimtae advantage of the grower.

3. If the orchard has been heavily manured it would tend to produce a heavy wood growth and light fruitbearing.

**The Remedy.**

I think you acted wisely in sowing alfalfa, and cultivating close to the trees. But now, that the trees have reached the bearing age, I would sow every square foot in alfalfa. That will hasten the bearing slightly by absorbing some of the plant food; but it will do more than that, it will nitrogenize the soil, cause the breeding of nitrogen gathering bacteria in the soil, break down the organic substances in the soil, as that when the water is turned on the food substances are dissolved and the rootlets can drink them in. This may at first tend to check wood growth a little, but in the future it insures a healthier and longer lived tree. The roots of the alfalfa will go to greater depth than the tree roots, will let the water down and the tree roots will tend to follow, thus developing a larger, healthier root system. After about four, five or six years, the alfalfa should be plowed up, the land cultivated for a couple of years, and then sowed to alfalfa again. But this means a large system of roots that have penetrated deeply into the soil, have been rotted, thus fertilizing, and aerating the soil to a greater depth than the tree roots will go. This advice is on the presumption that you have a volcanic ash soil, not a heavy humus soil, and that you have a substratum of some kind of volcanic ash formation, not a sandy or gravely subsoil. There is no difficulty in tree roots penertating sand and gravel; but the volcanic ash puddles under irrigation and clean cultivation, and prevents a proper aeration, besides it impedes and hinders root development.

I have known a number of cases, where the tree has been partly peeled to check wood growth and develop fruit spurs, thereby hastening the bearing period. They generally cut the bark in something of a diamond shape, but the slits are much longer up and down the tree than the width around the tree. In these cut spaces the tree is peeled, all the bark stripped off. The tree at once begins the work of repairing the damage and wood growth is checked. Generally about one-third of the bark at a given circumference is taken off. This lessens the power of the tree by one-third, to carry food to the top system, and many of the limbs develop fruit spurs. However, I do not believe that is a good plan. I have watched it with much interest, and in every case it worked injury in future years that I think is more than equal to the loss from late bearing. G. L.

**Woman Manages Big Chicago Store.**

One of Chicago's largest department stores is owned and managed by a woman.

## Sunshine Essential to Growth.

It is not an uncommon custom for gardens to be grown in the orchard or along fences or in other partially shaded places. It is, however, a serious mistake to think that any garden vegetable can be successfully produced where it is for any considerable part of the day in the shade. It sometimes appears at planting time to be an economy of space to plant close to the trees, using all the room possible, but those who have practiced this sort of economy have undoubtedly observed at harvest time that there was very little crop produced near the trees. This is due to two conditions, the fact that the trees robbed the vegetables of moisture and soil fertility and that they shut them off from the sunlight. The latter condition alone is sufficient in nearly all cases to account for the failure.

There are some vegetables that will stand more shade than others. Some of the plants grown for the use of the leaves only, such as greens and lettuce, can stand considerable shade, but to plant beans, peas, tomatoes, corn, turnips, carrots and the like where they will be shaded is in a majority of cases a vital blunder from the standpoint of garden success.

**Post Cards First Used in Austria.**

Post cards were first used in Austria. They became part of that country's postal service in 1869. They cost less than half a sent to send and the first were limited to 25 words. They were taken up by England a year later. The first picture postcard is said to have been sent in England in 1891. Some two or three years later, the first view cards made their appearance. Postcards came into use here in 1877.


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Clear your stump land cheaply—no digging, no expense for teams and powder. One man with a K can rip out any stump that can be pulled with the best inch steel cable.

Works by leverage—same principle as a jack. 100 pound pull on the lever gives a 48-ton pull on the stump. Made of the finest steel—guaranteed against breakage. Endorsed by U. S. Government experts.



Showing easy lever operation

HAND POWER
K Stump Puller

Write today for special offer and free booklet on Land Clearing.

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The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

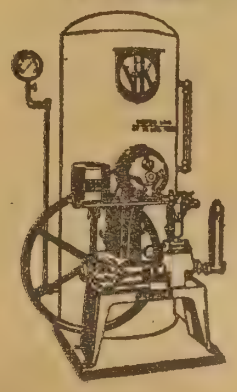




# Plenty of Water Everywhere on the Farm

A. V. & K. Water Supply System will save you hours of time and labor. It will enable you to hire and keep good help. It will increase production. It will promote your health and comfort and guard you against fire. It will make your wife happy and keep your children home. It will make everybody on your place prosperous and contented.

# VAILE-KIMES WATER SUPPLY SYSTEMS



Pump water from shallow wells, deep wells, lakes, cisterns, reservoirs, springs or running streams. Easily installed, self-starting, self-stopping, self-oiling and noiseless. Run by electricity, gasoline or water power. Cost little to operate.

**Send for this book "The Modern Way"**
This book tells you what V. & K. system will be best suited to your needs.




# See These Systems at the Power Farming Demonstration

## Pullman, Wash., May 29, 30, 31

Investigate their simplicity and economy of operation. Talk or write to us about your requirements. We will send you name of the nearest V. & K. dealer.

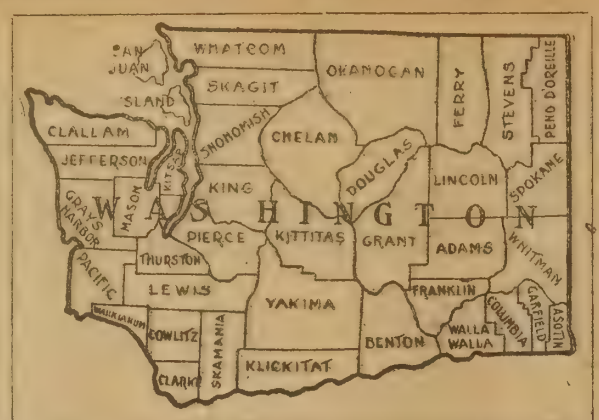
# CRANE COMPANY

Pacific Northwest Distributor

SPOKANE PORTLAND SEATTLE

# New Interest in Farming

## Many Retired Farmers Are Reported Back on Their Farms Doing Their Bit in the Fields—Cold Winds Hurt Apples




FAIRFIELD, Spokane County, Wash., May 10.—Spring work generally has been finished under very favorable conditions. A light rain fell the fore part of the week that freshened up the growing grain, but was not enough to be of much benefit to the late seeding, which will need a good rain before it comes up. In approaching a bunch of farmers who are standing around talking, you would be very apt to hear something about the several makes of tractors that have been used here on the hills this spring. Then, too, crop prospects are always a source of conversation. The war is most always mentioned, but it is avoided unless something momentous has just happened at the front or on the ocean. The war hasn't helped the community spirit, but rather has smothered it. Retired farmers are back on their farms this spring doing their bit in the fields. ROY G. ADAMS.

### Community Spirit Is Better.

MEAD, Spokane County, Wash., May 11.—It is too cold and dry for good growth of crops, a light rain the last week did a little good. Cold, high winds have interferred with pollenization of blossoms and will affect the apple crop. Red Cross work now engages the attention of the people to the exclusion of most all other subjects, now that the third Liberty loan drive is over. And this interest in the work of the Red Cross is doing a great deal to promote a more general community spirit. People will attend these meeting who have not been to a public meeting for years, and are giving evidence of a greater willingness to give their time and money every day. On the way to the town one meets retired farmers on their way out to their farms and the country much oftener than formerly, showing a new interest in the work on the farms. Some are able to help a part of the day. The farmer is only now beginning to grasp the full significance of the war and the country will find him up and coming when all others are tired and beginning to be discouraged. GEORGE HINGSTON.

### Have Big Acreage of Peas.

SPOKANE, Spokane County, Wash., May 11.—The crop and weather conditions in Spokane county are somewhat unfavorable this spring. All crops are in need of rain and this is especially true of winter wheat. The spring wheat is not beginning to show the need of rain as yet, but a good rain would be a benefit to this crop as well as to oats and barley. Where peas have been planted a sufficient length of time to be up, they are looking very fine indeed. The acreage of peas in the county this year is much larger than it has ever been before. The farm labor problem is beginning to be the topic of greatest consideration as the harvest season approaches. Different organizations are under way to handle the problem. Many of the boys who have gone to Camp Lewis are getting furloughs to assist in the harvesting and threshing of the crops we have this year. Retired farmers have not done much toward assisting in the handling of the problem up to the present time. We hope that from this source we may obtain additional help during the harvest season. J. R. SHINN.

### Crops Are Promising.

BICKLETON, Klickitat County, Wash., May 11.—We have just had one of the finest rains that has ever occurred here at this time of year. The 9th it rained all the afternoon and that night; the next morning the low hills north of Bickleton were covered with snow, which at the present writing is only half melted. It is an odd sight at this time of year, when fall grain is eight or ten inches high, and farmers are summer fallowing, to see part of the country covered with snow. I have never seen prospects better for a large crop and I believe there is a larger acreage than last year. The farmers here are trying to raise all they can, and are willing to abide by the government price and grading, but they do ask the government to step in and buy direct, and do away with the outrageous warehouse graft, which pockets one-foruth of this set price, which rightfully belongs to the man who raises the grain, and not to a lot of schemers who ought to have their fingers gripping a plow handle instead of having their hands in the farmers' pocket. The farmers in general are loyal here, and are freely buying Liberty bonds, and trying to rent all the land they can get hold of. There is a lot of land here in private hands that is yet unbroken and lying idle that would raise good crops. BERT F. FAULKNER.

### Fruit and Grain Look Fine.

STEVENSON, Skamania County, Wash., May 7.—Weather conditions in this section continue fine, but a little too cool nights. Crops of all kinds promise good at this time. Gardens are pretty well all planted and the disposition seems to be in the direction of increased acreage in garden stuff, but do not think there will be so many potatoes as last year. Apples, pears, cherries, plums, all bloomed heavily and are setting a good crop, and unless unfavorable weather sets in will yield heavily. Spring grain looks well, but nothing but oats is raised here, as this is not a grain-growing locality. Labor is very scarce and many will only do just what can be done by the family, as the call to the army and navy and the shipbuilding plants on the Coast has taken all the available help in our community and the prices for labor makes its employment prohibitive. Some are not able to spray their trees. Horsepower is very scarce and on account of the rugged condition of the country, situated in the heart of the Cascades, the employment of tractors is a dubious proposition at best. Horses are high and none on the market. There is plenty of machinery for all purposes that it can be used for here and none is being purchased this year. Meat animals are very scarce, with none on the market, and there will not be any until the grass fattened cattle come on. Stump land is the only pasture we have and is very good this season, as it has been an ideal season for grass and our native grass is highly nutritious and abundant. W. T. JACKSON.

### Labor Is Scarce.

GIG HARBOR, Pierce County, Wash., May 2.—Owing to the nearness of our farming district to the city of Tacoma and to the high wages there offered, we are, of course, losing much of our man-power on the land. The tremendous development of ship building makes a call for thousands of men to handle the rougher parts of the work. Many of them quickly acquire the necessary skill for classification among the expert workers. With wages ranging from $4 to $7 per day, is it any wonder that our ranches are more or less neglected? Other power on the farm is limited in this section. Horses are not plentiful on the ranches. This is not owing to the high prices of horses, but to the high cost of keeping them. The scarcity of man and horse power on the land of necessity curtails the amount of farm machinery operated. Most farmers are postponing the buying of implements with the hope of cessation of the war and a lowering of prices. The old implements are being patched up, with but little new being purchased. Nearly all meat animals are put onto the market from this section in the fall months. If the present dry spell—most extraordinary for April and May—keeps up, some stock will have to be disposed of in order to lighten up on the pastures. The farmers here are fully alive to the importance of the pasturage question, but find it difficult to extend the range and quality. Creek bottoms and springy side hills are of course the main and last dependence. Italian rye is proving very helpful to the pasture on some of the dry upper lands. W. D. BOYNTON.

### Alcohol as Source of Power.

Alexander Graham Bell recently remarked that the world will probably depend upon alcohol more and more as time goes on, and that a great field of usefulness is opening up for the engineer who will modify our machinery to enable alcohol to be used as the source of power.


Stewart's Little Giant
PORTABLE ELEVATOR

Made in lengths 12 to 24 feet. Capacity 300 to 400 bushels per hour. Weight, 300 to 400 pounds.

Can be run with any size engine.

Hundreds in successful use in the Pacific northwest.

These elevators manufactured under our positive guarantee to do the work or money refunded.

Prices: $100.00 to $135.00

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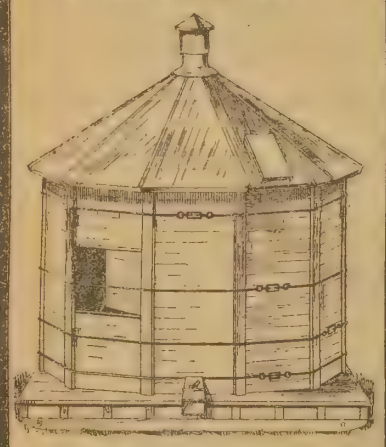
All in rapidly increasing demand. Are you content to remain in obscurity when the big business world has a place for you?

Ask for information of Spokane's Accredited Commercial School

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In answering advertisements don't fail to mention this paper.

Last Call!



Bulk It or Sack It?

It's time right now to decide "Yes" or "No." You should realize by this time if you are going to take a chance on sacks and on labor.

Weyerhaeuser Grain Tanks

eliminate all chance. They are the practical, sure thing for the grain harvest. Your bank account, your duty to your country are all wrapped up in the question of "Bulk it or sack it?" There is only one rational answer: "BULK IT!"

ORDER NOW—IT'S NEARING HARVEST

Weyerhaeuser Timber Company
Everett, Wash.

Best buy your SEED CORN NOW



The supply of all kinds of seed corn is decreasing every day. Some varieties are almost sold out. Others soon will be. Prices will not be any lower and for some varieties an increase seems certain. By all means buy your seed now.

¶ This year you are sure of high prices for Indian Corn and—you will get a good crop if you plant Morse's Stanford Yellow Dent or Morse's Hybrid Yellow Flint.

¶ Stanford Yellow Dent Corn was originally produced on the famous Vina Ranch. It is acclimated to California and under proper cultural conditions is a sure crop in the interior valleys of California. Last year it first was offered to the public. Scores of satisfied customers have written us their endorsements. Morse's Hybrid Yellow Flint yields heavy crops of fine, well filled ears. There is no corn better adapted for California.

*It will soon be time to plant forage and grain sorghums.* Morse's Dwarf White Milo and Fererita are two varieties that cannot be beat. Morse's Egyptian Corn is another good producer. All seed acclimated and recleaned. New Honey Sorghum is being planted extensively by farmers who want to make their own syrup.

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729 FRONT ST. SAN FRANCISCO

# Water System for Farm Home

## *Spells Difference Between Happiness and Drudgery*

Here are more letters in the contest among women and girls of the farm home on the advantages of the automobile, farm lighting system or farm water system.

### Means Health and Happiness.

To the Editor: Why wouldn't I do without water in the house? How could I do without water in the house? What would I get done if I had to run out and pump every bucket of water I needed, or even carry it? Mercy! It's hard enough to get the children to wash their faces now. If they had to carry the water to wash them with—and of course, they would put it off till the last minute—the energy I would waste every time, getting them to do it beforehand!

I have lived where the water was at the bottom of a long hill, long ago, but never again for me, I'm emancipated.

Do you like to wash dishes? I do. I use two big pans of water; one I set on the gack of the range to wash in, and the other on the hotter part and as I wash them I rinse them and stack in the drainer. Then they are clean and the work is short and pleasant.

Do you dread wash day? I love it. It never comes on Monday at our house. 'Cause why? I always soak the duds in a tub full of warm soap suds, the finest on top, next morning I ring out, boil and wash in one water. Why, it's easy. The boilers I fill with a hose attached to the water faucet. Think of having to run out in the yard and carry the water in by bucketfuls!

Did you ever have to leave off your Saturday night bath because you had worked from 4 o'clock until 9 and were just too dead tired to carry the water? But if the water were there and already hot, the bath itself would rest one so.

Say, when in the habit of having a cold sponge every morning, did you ever for some reason omit it? Don't it make one feel slouchy for the whole day?

Don't you love to care for a baby? Did you ever get him all ready for his bath and find not a drop of cold water in the house? Don't you love to wash his little clothes? It might not be any particular pleasure if you had to plan beforehand and carry in the water and heat it, if you had time. But if there is plenty of water already hot any time, don't you just love to?

Don't a baby make so much washing? But if it can be done easily every day or two instead of putting it into the weekly wash, it's all the difference between work and pleasure in doing it.

My! Don't the children get dirty these days? They can't work or play without it and so long as they are out in the sunshine who cares? With plenty of water and an engine to run the washer we can keep them clean and every day clothes don't have to be ironed.

But the hired man—isn't he a sight sometimes, and don't you hate to have him crawl into your clean beds? There is certainy some excuse for the custom of letting the hired man carry his blankets. But it's a poor custom just the same, and it could be abolished by having a bathroom and water handy and giving a man a choice between his bed or yours.

We live in a dusty country and the only successful combatant of dust is water, and we can't afford to not have the water on tap at all times and use it.

Just this one thing spells the difference between health and happiness and drudgery in farm life. Why wouldn't I be without water in the house? Ask me something hard. What would I do without it? MARILLA KIDWELL.
Garfield, Wash (Cora farm).

### Dollars Saved by Auto.

To the Editor: "Oh, yes," said mother with a tone of real pride in her voice, "both of our boys have been in the ——(small town) band for several years."

This came in answer to Ann Bennett's question as she in looking over various pictures and snapshots paused to study more closely a view of a 24-piece, fine appearing uniformed band. Ann had been a close friend of mother's in the early days of Oregon, when they had lived on adjoining homesteads. Now for the first time in many years, Ann, as we all called her, was visiting us. She and mother were having an altogether "homey" visit.

"But," remarked Ann, "this must take time and practice. How can they, who stop for nothing until work and chores are done, have time to get to town to practice and to play on various occasions?"

Mother smiled. "Our machine solved that difficulty." Then reminiscently, "They couldn't always have done so. There have been many years of struggle since the old homestead days. But now things are better, the boys have staid by us and I think, they are not now sorry that they have done so."

"I am sure they are not, for you and Jed have made it worth while. I have seen plenty evidences of that just since I have been here."

"But then," continued mother, "we get as much joy out of it all as do the boys. Surely it is refreshing to get in the machine in the evening, after a day of hard work, whir smoothly away to town and sit comfortably in our own 'house' while the boys—our own town and country boys—pour forth the spirit that thrills us through. Aside from this, there have been excursions to various places where the band has been asked to play. These trips have been enjoyed for the most part by the band boys and their families as well. They have carried us to places where we hadn't been for years, where we met new folks and visited with the old timers. This, of course, was all made possible by the machine. Also—but I must go 'tend to the chickens and gather the eggs."

Ann as of old, accompanied her. As the two old cronies started out, the last I heard was, "But jaunts of this kind do not express the beginning of the value and good we have derived from our automobile. Why, during the last three years, we have gained more time and——" But the voice and the footsteps were lost to my ears. However, the thought stuck in my mind, "How much have we gained from the possession of a five-passenger car?"

Briefly I recalled most pleasurable family, band and neighborhood picnics, fishing trips and even little journeys to grandma's, as the old story goes—practically all of which would have been out of the question had we not had the machine.

Even I, what had I individually gained by it? A knowledge of the surrounding country and towns and of the people who lived in them, a feeling that I was a part of the world outside our own big farm, where it is true I had previously passed the "almost all" of my time.

After this, more thoughtfully I recalled the necessary errands, endless in number, from the hasty trip to the blacksmith's shop to have a threshing machine or hay baler part repaired (while the whole crew waited) to the more usual, but none the less essential taking of products, such as cream and eggs to town. Think of the actual dollars and cents in time and labor alone, we had gained by it! Had we ever really paused to sum it up? After all the practical side, were there not many items that could not be reckoned in nickels and eagles?

So, I thought as I poked the kitchen fire, these were the reasons why we would not now be without an automobile.

(MRS.) ESTHER A. TRUNNELL.
Cottage Grove, Ore.

### More Than Pays for Its Keep.

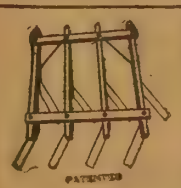
To the Editor: On the farm the auto is an absolute necessity. It more than pays for its upkeep. When repairs are needed for the broken machinery, it is the auto that makes the hurried trip to town, driven by father or some of the women folks, and the machinery quickly put in running order again. What is gained? First, time, which is precious to the farmer if he is paying high prices for labor. Second, horse power is saved. If not for the auto the poor, tired horses might have to be taken from the fields to make the trip to town.

Then, on Sunday morn the farmer can take his family and drive to town to church services, come home refreshed in body and mind, more ready to resume the tasks the following week.

The auto is a great inducement to keep the young folks on the farm, giving them more pleasure. The auto is here to stay on the farm.

These are the reasons we could not be without the auto on our farm.

MRS. HOWARD CONOVER.
Twin Falls, Idaho, R. R. No. 1.

**Help Is Scarce**

The Jones Weeder will save 50 per cent of labor; cultivate 30 to 40 acres of summer-fallow per day and do it better, instead of 10 to 20 by the usual method. Couples up like a harrow; use as many sections as wanted. For booklet, prices, etc., write

**C. E. Jones, Heppner, Ore.**





**Build a Silo**

Stop wasting 40 per cent of the corn crop. Make green pastures last through the winter.

A silo is a crop savings bank—a bank that you will own, and pay the profits from to yourself. Many silos have paid for themselves in one season. After that they return 100 per cent profit yearly.

**Build a Concrete Silo**

—because concrete is rotproof, ratproof, windproof, fireproof, permanent.

*Write for Bulletins Nos. 55 and 56. They are free for the asking.*

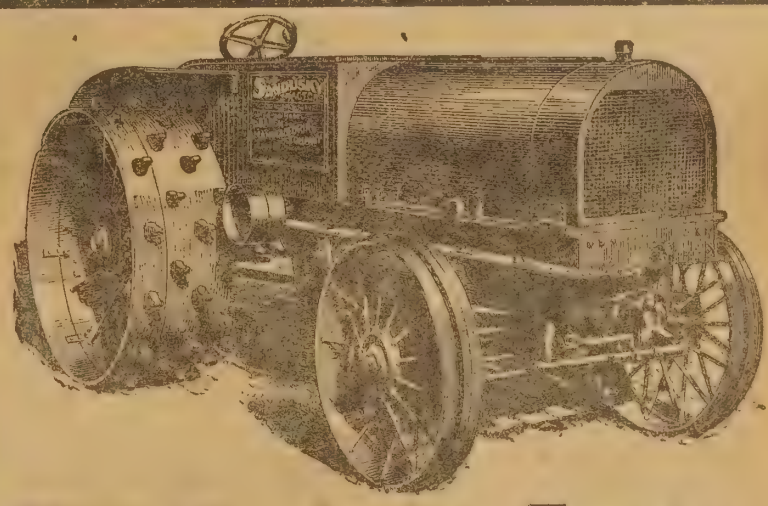
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**Concrete for Permanence**





**The Sandusky Tractor**

"The Little Fellow With the Big Pull."

**10-20 Model J--Burns Kerosene**

THE 10-20 Model J Sandusky Tractor was designed especially to fill the needs of the average farmer. This machine, with its small overall measurements, flexibility, short turning brakes and ease of handling can be used profitably on the small fenced-in fields of the average sized farms.

We have a stock of this model here in Spokane. Write for descriptive literature, or better still, come to Spokane and look it over.

**GALLAGHER & CO., Inc.**
Ash St. and Sinto Ave. Distributors. Spokane, Wash.

# Homesteading in the Grand Coulee

By IDA C. YOUNG.

It was along past 9 o'clock of a mild evening in April and I was sitting in my homestead shack, waiting for the coming of Sister Frances and her husband. Frances and I were living on our adjoining homesteads, making up the term of residence necessary to commute them. During this period Will, Frances' husband, worked in the general merchandise store at Hartline, coming down to bring up supplies and reading matter twice each week.

I waited and listened for some time, then growing somewehat chilly I blew out the light and went over to Frances' shack, which stood just across the line from mine. The stove was still warm when I entered, so I lighted the lamp, took a peep at Baby Ivan asleep in his dry goods box upon the trunk, and made myself comfortable with an old magazine.

The evening was so still that only the ticking of the alarm clock and an occasional contented sigh from the sleeping baby broke the quiet of my waiting. Outside the night was tremulous with the chiming of frogs.

Ten o'clock came, and still no sound of buggy wheels. There were other noise like a flock of sheep stampeding, ing back and forth overhead with a noise a-plenty—a wood rat was gallop- and I recognized him for one of a pair which had been bothering us for some time. One of the pair had been drowned in our water barrel and I had a trap set for this one now. Sometime along toward 11 I heard the snap of the trap and a great rattling and thumping of the chain by which it was made fast. I lighted the lantern, took up the poker, and went out to despatch the creature. After that there was another reign of quiet, broken suddenly by a tremendous whang against the stove pipe which projected through the roof and into the night. A prodigious sound of scratching and scrambling followed, then a vociferous "Whoo! Whoo! Whoo!" startled my straining ears. After that silence returned, and I knew that the owl had departed.

I was just getting ready to go to the door for the umpty-nth time when a thundering, blast-like roar shattered the stillness, and all the waterfowl which dwelt in thousands on the lake below set up a great confusion of protest and clamor. A portion of the 1500-foot cliff had been loosened by the winter's frost and had come crashing down to the very edge of the lake.

As 12 o'clock approached, Frances drove up alone, looking tired and worried. Unfortunately we had failed to have a definite understanding as to just where she was to meet Will, and she had gone first to the cut-off Junction, where he sometimes left the train and then, not finding him, had struck across through bunch grass and sage brush to the Coulee City road. Here she waited for some time without finding a trace of her husband.

Ivan woke up and greeted his mother with a one-toothed smile, and after he had gone to sleep again Frances went rattling off into the black night while I sat down to wait. I waited and waited until it seemed to me I couldn't possibly wait another moment, then went on waiting and waiting and waiting some more. At 1 o'clock Frances returned alone for the second time, tired out and white as a ghost.

After that we sat discussing the situation and peering into the night. When we could think of nothing to say, one of us would open the door and look out some more. The suspense finally became unendurable, and with the exclamation, "I can't stay here any longer—I've got to start out again!" Frances threw open the door. There, just beyond the threshold, stood Will, as ghastly white as Frances herself.

It was past 2 o'clock when we were through with our belated supper and the whys and wherefores of the evening adventure had been made clear. It was a comedy, almost a tragedy, of errors. The train had been late and Will had gone on to Coulee City, striking off from there with his heavy grip and expecting to meet one of us with the buggy on the road. In her anxiety to be in two places at once, Frances had missed him altogether.

"And where is the grip?" I asked suddenly, remembering that I had not yet seen it.

"About two miles this side of town," answered Will with a weary smile. "I've got to go back after it."

And go back he did. Frances insisted on accompanying him.

"I'm taking no more chances," she commented grimly, as she climbed into the buggy beside her husband.

## Larger Garden This Year.

Taking out the sweet corn and potatoes there is only one-half an acre left out of the 10 for the home garden, is the report of W. J. McDonald of Cheney, Wash. But on this space there is grown lettuce, radishes, onions, cabbage, carrots, beets, turnips, parsnips, spinach, peas, beans, tomatoes, cucumbers, squash, pumpkin and melons. Radishes, lettuce and peas are planted in succession. Mr. McDonald thinks that perhaps one-fourth of the living of the family is furnished by the garden, while he himself does most of the work. His son, Elwood, comes in next. He adds: "This year we have planned on raising considerably more of all kinds of grains, also our garden, including sweet corn and potatoes, will be larger.

### Over 400,000 Women Teachers.

More than 400,000 women are employed as teachers in the elementary schools of the United States.

## Farmers Patriotic

By E. E. Elliott.

I have been at some pains to ascertain the attitude as it relates to the government and its war policies, and believe it can be summarized without placing them in any other than a patriotic position. There has been some grumbling over the food administration's ruling, especially in the matter of cereal substitutes, but each new requirement is being agreed to and the grumbling is not very audible. As to the patriotism of the farmers, it is not easy to define it clearly. It must be admitted that during the last few years there has developed among this class a critical attitude toward governmental affairs. The bulk of the independent voting as well as the main support of what might be called the moderate socialist movement was to be found among the farmers. The principle of government control is something that is readily accepted by them but the fact that it has been adopted only partially to the flagrant neglect of many commodities and conditions, has caused much dissatisfaction. At heart the farmer is fully as patriotc as any other citizen, but he is certainly less effusive and demonstrative about it. It might be added that he is less inclined to sacrifice and is disposed to consider increased crop production rather than Liberty bond subscriptions as the measure of his patriotism. It is my impression that this attitude is a general one and not limited to this particular community. The patriotic work of The Farmer in pushing the Liberty loan campaign and its support of the government conservation policies should have an educative effect upon its readers, all of whom are to be found outside the cities. Given a good crop this year and there will be no question as to where the next loan will come from.



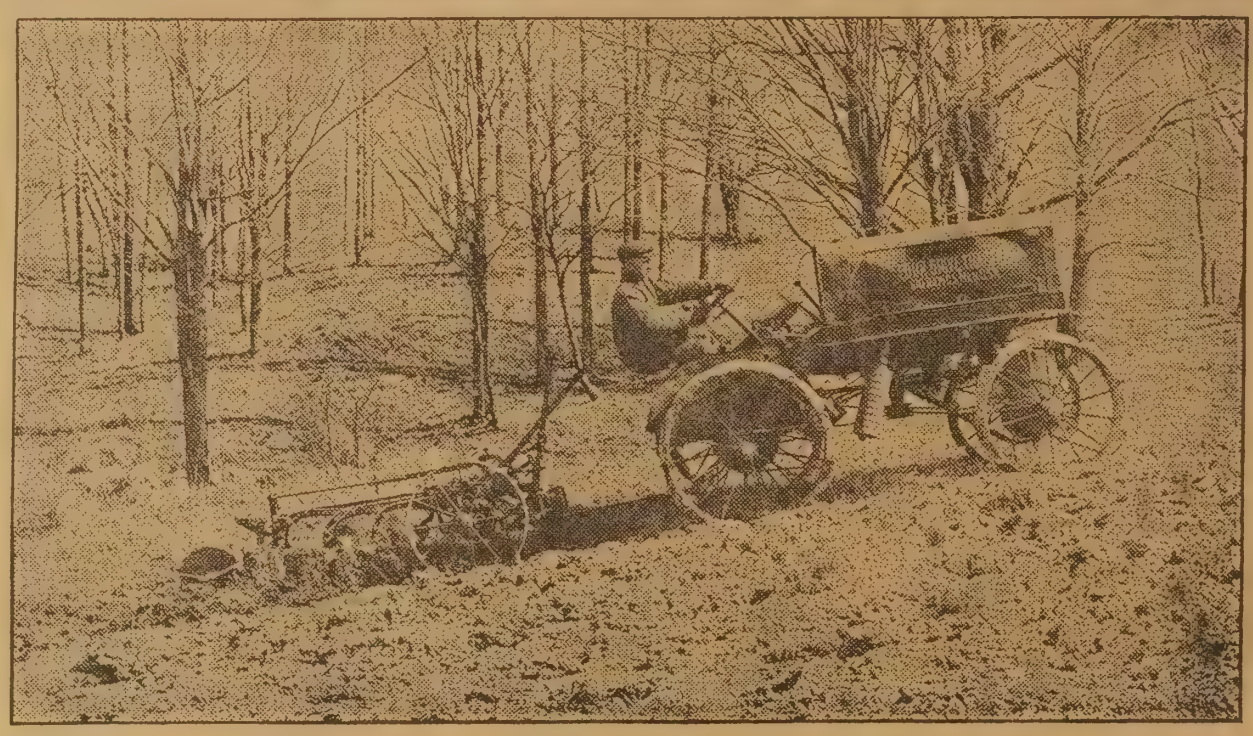

Blighty is the shirt with the Military touch — for outdoor wear. Stripe patterns on Khaki ground. A

HALLMARK SHIRT

with patented Hynge Cuffs — with Both Sides, Right Sides. The Quality is Kept Up in all Hallmark Shirts.—Ask your dealer.

HALL, HARTWELL & CO., Makers
TROY, N. Y.





# The Four Drive Tractor

has power on **all four wheels.** It **pulls** instead of burrowing and its turning radius is 4 feet 9 inches.

The **wise** farmer will decide **what** tractor will be the best investment for him only after he knows what the tractor will do under all working conditions existing on his farm.

**The Four Drive** has power to plow deeply, to disc sufficiently and to harrow without packing the seed bed.

Working days determine the value of a tractor to any farmer. The Four Drive is built to operate in weather that keeps horses in the barn. That's why it is delivering such paying results to its owners.

**The Four Drive stands up and works under the hardest conditions.** It is dust proof and has no exposed fragile parts. Will ford creeks 4 feet deep. Works on the average hill with ease, pulling three 14-inch bottoms.

## See the Four Drive at Pullman May 29-31

Talk to us about your soil conditions and requirements.

**The Snyder Motor Co.**
1201-1203 First Ave.

Pacific Northwest Distributors
SPOKANE, WASH.

# The Fish Pond as a Source of Revenue



By CARL J. MENZE.

If you should chance to travel on the Blaine-Ferndale road north of Ferndale, Whatcom county, Washington, you would no doubt be attracted by George Roessell's miniature lake.

The location of this lake is in a hollow basin, which was formerly a natural watering place the entire year. It was excavated during the spare time from the ordinary farm work. To add to its beauty a row of Douglas fir trees were planted on its banks. The bank was then seeded down with a good turf-forming grass.

This lake has not only been a thing of beauty, but has been a source of revenue. The lake is stocked with a variety of Columbia catfish. Mr. Roessell has sold to Whatcom county, for stocking a number of lakes, a considerable amount of fry. And whenever the Roessells want a mess of fish, they have only to go and catch them.

This lake has another feature. When it freezes hard enough to form a supply of ice, the Roessells always harvest a good supply for the summer months.

## Poisons Gophers

### Whole Carrot Better Than Part

To the Editor of The Washington Farmer: I see by a recent copy of The Farmer, J. W. Moore is troubled with gophers working in his alfalfa fields. I have had a great deal of trouble and experience with this most troublesome pest and I have always found they will not eat small pieces of vegetables, as poisoned raisins, where there is much vegetation, such as in an alfalfa field, berry patch, or garden, yet they would take great rows of parsnips, carrots and potatoes right beside an alfalfa field. So I concluded they like whole vegetables. I take carrots whole and about as large around as their runways in the small end of these carrots make three or four slits and with a toothpick insert one or two crystals of strychnine in each one of the small slits. I then dig down in the burrow until I find the runway and put one of the carrots in. If the carrot is large enough to fit snugly, so much the better and sometimes I find two runways, and I always put one of these carrots in each, then cover the burrow over smoothly and have always watched a day or two to see if the carrots are thrown out, but have never found one. I poisoned them in our alfalfa this way last spring, and never saw where there was a gopher working since, and I think if Mr. Moore will try this method he will soon exterminate the gophers on his ranch.

MRS. FRED KINCAID.
Sunnyside, Wash.


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With Dimmer .....$6.00

If you have a Ford car, write today for information telling just how you can have bright lights at all speeds. The Aske is the only patented device guaranteed to continue the operation of one light without increased voltage should one light burn out.



**The Aske Instrument Board**

complete with clock, dimmer and push and pull switches, which are standard with higher priced cars, decreases steering wheel vibration, eliminates all starting and lighting troubles, adds beauty and distinction to your car and gives a wonderfully efficient system. The Instrument Board complete with Regulator and Dimmer $18.00, without regulator $13.00, without regulator and clock $10.00. The Instrument Board without equipment $1.25. The Aske Dual Lighting Units are sold at most dealers, or will be sent direct to you upon receipt of price and dealer's name.

**Aske Regulator Co.**
Duluth, Minn.


## Food Production Inspectors.

Over 40 food production inspectors of the United States bureau of markets already have been stationed in the larger receiving markets to enforce the United States standard container act. All interstate shipments of fruits and vegetables in containers must be in packages that conform to the provisions in this act. The baskets, crates, hampers and boxes must be in sizes containing half pints, pints, quarts, or multiples of quarts, slight variations either over or under size may be allowed, provided the average for any shipment conforms to the standards. Climax baskets for grapes can be made only in 2, 4 and 12-quart sizes and of the dimensions specified in the act.

Although the law applies only to interstate shipments it is probable, according to the bureau, that shipments within the states will be generally made in United States standard containers, because many manufacturers have arranged to make no containers except those that comply with the federal size requirements. Even shippers whose products are usually consumed in their own state are said to favor packages complying with the United States standard container act, because they have no assurance that their produce will not be sent across state boundries before it is consumed.

## Bee-Keeping in New Zealand.

At the late annual meeting of the Waikato Beekeepers' association at Hamilton, an assistant director of the horticultural division of the department of agriculture stated that there were 4391 apiaries registered in New Zealand, representing 50,523 colonies of bees.

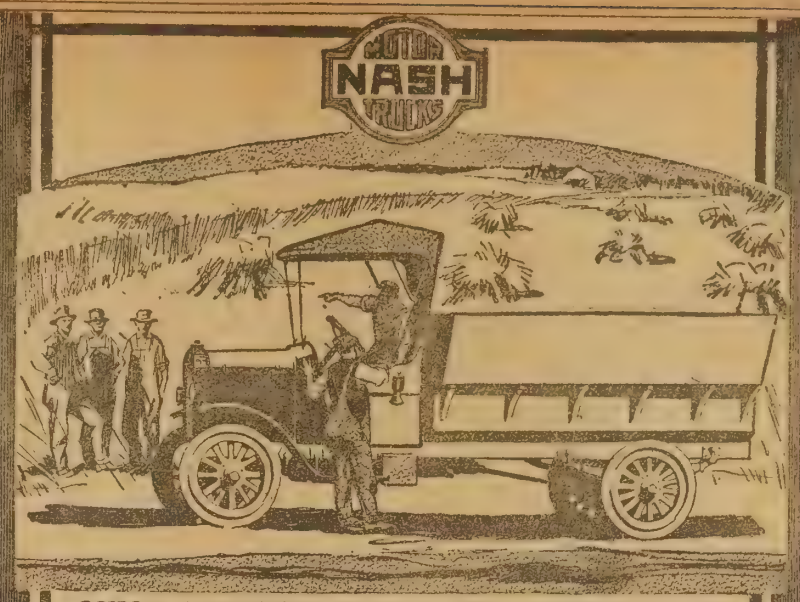
One beekeeper last year returned 30 tons of honey, which he sold at $487 per ton, while some was sold as high as $730 per ton, thus making it a very prosperous industry.

## Voting by Soldiers.

The war department decided that so far as soldiers are stationed within the borders of the United States their votes at either a primary or general election may be taken by the several state governments without serious interference with military operations. As to soldiers in France or in other foreign soil in the theater of war the department decides that their vote can not be taken without serious interference with the military efficiency.

### Nothing Like It.

We have been taking your paper ever since it originated and we think there is nothing like it in regard to farm news. GEORGE CLARK.
Bow, Wash.


QUICK AND ECONOMICAL TRANSPORTATION

# Nash Trucks Speed Up Hauling

Wheat, the life food of the world, must go from field to town in the shortest possible time. Nash trucks speed up wheat hauling and reduce its cost.

They carry bigger loads than the horse drawn vehicle and do not need rest between loads. Equipped with electric lights, they work night and day, if need be, in busy harvest time.

Many superior mechanical features fit Nash trucks unusually well for this service. All Nash trucks are equipped with M. & S. automatic locking differentials. The driving wheels cannot spin. This saves tires and fuel. It lets Nash trucks get through where other trucks without this important feature cannot go.

The unusually strong internal gear drive axles of Nash trucks are simpler and lighter than others. This type of axle also delivers more power to the truck's driving wheels, especially at low engine speeds.

Our transportation expert will be glad to tell you which Nash truck can serve you best.

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| One Ton Chassis | $1495 |
| Two Ton Chassis | 1875 |
| Nash Quad Chassis | 3250 |

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THE NASH MOTORS COMPANY
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*Manufacturers of Passenger Cars and Trucks Including the Famous Nash Quad*

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For Washington, Oregon, Northern Idaho, Western Montana and Alaska.

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VALUE CARS AT VOLUME PRICES (205)

# Conveniently Arranged Dairy Barn



The photo herewith shows the big, well built and conveniently arranged dairy barn of William Lund, near Cathlamet, Wash. The building is on a side hill. It is 130x44, with the basement, or lower story, shown, 130x14. The basement is used mainly for calves and young stock. The foundations are of concrete and so are some of the floors. The loft is thoroughly, tightly floored, with vents for pitching the hay down, thus making the smallest possible amount of dust. Alternate vents go to the basement and to the upper floor.

The most notable feature of the barn is the roof. As the picture indicates, it is a rounding roof and has absolutely no cross beams or braces to take up space in the loft. This fine barn in the little Locomon valley is believed to have been the first barn of this type built in western Washington, if not in the entire northwest. The rafters are 2x8, and by breaking the joints half way and nailing two joists together, Mr. Lund gets the curve in the roof and yet gets great strength. He gets the effect of 4x8 rafters braced, in the roof.

Mr. Lund has a few purebred Holsteins and a herd of good grades. His herd sire, Hollywood Lilith Loma, is richly bred along producing lines and is a good individual.

Pearl Peterman is another breeder of a few purebred Holsteins near Cathlamet. And West Brothers have five head of excellent registered Ayrshires, from Stockwell foundation stock. Dairying and the improvement of dairy stock are making slow but steady progress. H. A.

# Must Fly Flag

## Patriotism Required in Schools

One of the laws of this state reads as follows:

"Every board of directorrs of the several school districts of this state shall procure a United States flag, and shall display said flag upon or near each public school building during school hours, except in unsuitable weather, and at such other times as to said board may seem proper, and shall cause appropriate flag exercises to be held in every school at least once in each week at which exercises the pupils shall recite the folloking salute to the flog: 'I pledge allegiance to my flag and to the republic for which it stands. One nation indivisible with liberty and justice to all.'"



I have recently had occasion to pass a few rural school buildings during school hours and fair weather, but saw no United States flag flying. Recently, on a national holiday, I was in one of the school towns of the state where there is located a state school, a high school and a grade school. Not one of the buildings had the Stars and Stripes displayed on that day, though school was being held in all of them at least part of the day.

While the school authorities in a community should be the last wilfully or carelessly to fail to live up to the law, both in letter and spirit, it is possible that the neglect of this simple flag requirement is more to be regretted, where it occurs; because of its patriotic significance than because of the legal question involved. The flag, always sacred in the hearts of the American people, but just now more so than at any time since the civil war, should be constantly before the eyes of the people, especially of the children. The schoolhouse, the rightful center from which radiates community life, is the logical place for it to be ever afloat. It should be the pride of school directors and teachers everywhere to keep it flying—clean, bright and glorious, a challenge and a warning to the patriotic slacker and an inspiration to the loyal patriot. F. W. C.

# Dairy Needs Stated

Under the date of March 18, 1918, the United States Dairy association of Washington addressed to the Washington delegation in congress and to the public in general a letter outlining the position and demands of the dairymen represented.

Throwing responsibility for the present unsatisfactory condition of the milk industry largely on the shoulders of the condensery interests, the association letter takes up the milk farmer's present difficulties. Shortage of labor, forcing the farmer, his wife and children to work from 4 in the morning till strength gives out at night; $10 shoes, with the hide market down to the normal for average years; high taxes; and a lack of federal aid, are among the trouble items specified by the committee.

The following paragraphs will give our readers an idea of the claims of the association:

"The threat has been made by the condenseries that they will spend a million dollars before they will submit to the demands of the dairymen; it appears that they are bound to destroy or force the dairymen to the lowest possible level.

"The writer has seen this morning women following a three-horse plow that are not capable of handling a sewing machine, to say nothing of a three-horse team hitched to a plow.

"The depression throughout the country is greater than the average American citizen has any idea of; and if we must win this war, which we should, it appears that if the government does not stipulate a price for our products very soon, and not hamper us on the financial end, that when the bottoms of ships are built, there will be no cargoes for them to load."

This letter is signed by W. K. Knutzen, Ed Brown, John B. Lee and Fred Nelson, acting for the association.

## Yakima Fruit Crop.

At a recent meeting of the state horticultural association at Yakima experts placed the maximum apple crop of Yakima valley at 12,000 cars and the maximum soft fruit crop at 6000 cars, and under the favorable conditions now prevailing it is thought the crop for the coming year will approach these figures.


1905 1906 1907 1908
1904 1909
1903 1910
1902 1911
1901 1912
1900 1913
1899 1914
1898 1915
1916
1917

## Backed By Twenty Years of Experience

Every test made in the twenty years we have been building LAUSON farm engines helped to make the LAUSON Kerosene Tractor better. We looked to the future—five, ten years ahead, and worked slowly. The LAUSON reputation demanded a tractor of unquestioned reliability.

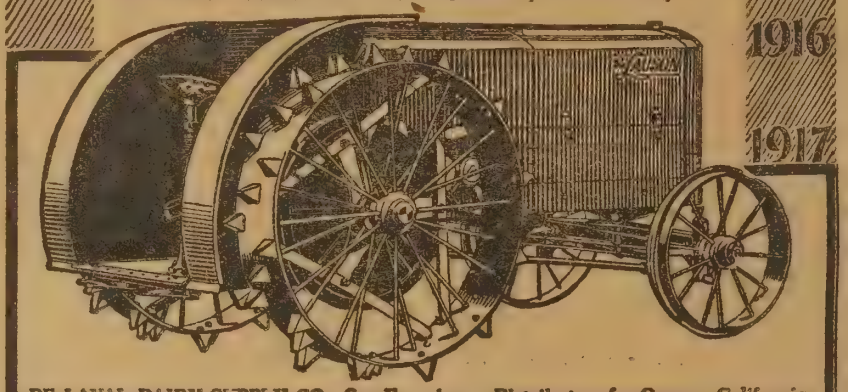
To those who know LAUSON engines, we say, "Here's a tractor that merits your confidence because it comes from the same plant as the engines you have found doubly serviceable." To others, we say, "Try it."

**The LAUSON 15-25 FULL JEWEL TRACTOR**

has a powerful *Heavy Duty Four-Cylinder Valve-in-Head Engine.* It is of medium weight, well distributed and built to meet the requirements of the average farm. Ample power for 3 to 4 plows, large ensilage cutter or 24 to 28-inch thresher. Burns kerosene, distillate or gasoline and operates economically. Note that all parts are enclosed from rain and dirt—a great advantage. It is a simple, thoroughly tested and practical machine for all farm tractor or belt work. Hyatt Roller Bearings throughout. Automatic type Steering Knuckles enables short turns and easy control. Driving gears enclosed, running in oil.

*Built up to a standard—not down to a price.*
*Write us or our distributor for name of Lauson dealer in your locality.* 31D

THE JOHN LAUSON MFG. CO. 258 Monroe St., New Holstein, Wis.

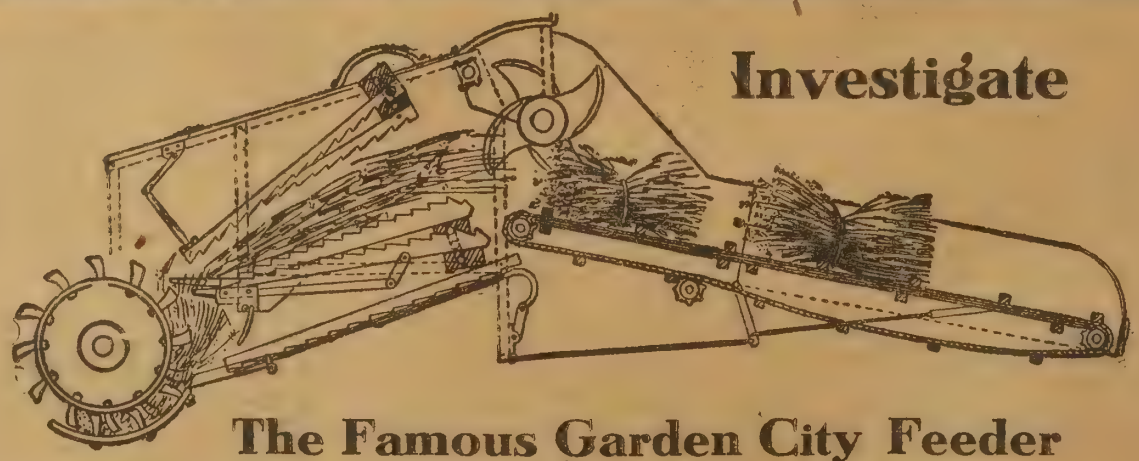


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**See the Lauson, All Enclosed Tractor at the big tractor farming demonstration, Pullman, Washington, from May 29th to 31st.**

# Turn It Into Cash

If you have something you want to sell, offer it to our big family of over 50,000 subscribers. A want ad is the cheapest way we know of to get in touch with buyers.



## Investigate

## The Famous Garden City Feeder

Never slugs, consequently saves the grain and insures the capacity of your thresher.

**THE IDEAL GRAIN WEIGHER, LOADER AND BAGGER**

Weighs in continuous stream; absolutely accurate; saves time and grain—increases profits.

Call, Phone or Write.

**M. M. PRESTON MACHINERY CO.**

MOSCOW DISTRIBUTORS. IDAHO

# What Is Next Move?

## *Renewal of Great Drive Is Expected*

The allied armies are waiting and working in the belief that very soon Germany will launch another great drive against the lines of the British, French, American and Belgians on the western front. All allied army headquarters say that the attack is awaited with perfect confidence and that it can not succeed. It is awaited patiently and calmly, with the same plan that has heretofore governed the allies since the great drive was launched nearly two months ago—to allow the Germans to do all the principal attacking, the allied armies saving their own men and equipment as much as possible and inflicting the greatest possible damage and losses on the invading enemy. With this policy successfully carried out, as it undoubtedly has been so far, it means the ultimate wearing out of the Germans, unless they yet prove strong enough to force their way through the allied lines by superior weight of men and arms.

It is generally calculated by the allied leaders that the Germans have about 2,000,000 men on the western front ready for the expected renewal of their drive. No statements are given out as to the number of the allied armies. Where the new attack is likely to be launched is wholly problematical, though it is generally expected that an attempt will be renewed to take Amiens, the railroad center that was the object of the violent attack of several weeks ago, when the Teutons reached within 10 or 12 miles of that city. It is predicted that, while undoubtedly the supreme effort will be made toward some one important objective, strong efforts will be made all along the line from the south to the English channel on the northern extreme.

### Germany Violates Russia.

The German invasion of Russia continues unchecked. The treaty of peace signed a few months ago continues to be but a "scrap of paper" to the outlaw nation. Thousands and thousands of square miles of Russia's best food producing territory has been overrun and placed under German control with a view to its permanent possession, it is believed. In none of Germany's so-called peace proposals has any withdrawal from Russia or restoration of the civil and the economic rights of that stricken country been mentioned. Germany has completely conquered the land cursed by the bolsheviki. Russia is helpless for all time unless the allies, whom she deserted when she fell into the hands of the blind and foolish bolsheviki and through them into the hands of the cunning and devilish Hun, secure her restoration from the latter when final peace is made. Will the allies do this? Can they afford to do less? Will humanity be vindicated until the vandal is driven out of the territory, east as well as west, that he has overrun? If Germany were allowed to maintain control of the great expanse of rich land now held in Russia the peace of the world would continue to be insecure, regardless of the terms that might be made in the west. Limitless supplies of all necessary kinds could be produced in that land, and a quarter of a century hence, were Germany allowed to pursue her own course after the present war, her fighting population could be so rebuilt and her munitions and ordnance so increased that another war as gigantic and inhuman as the present could be inflicted upon the world. Furthermore, this is a war for justice, and can not end until justice is secured for the helpless and unfortunate people of childlike Russia.

### Americans With British.

Official reports say that there is a strong reenforcement of Americans with the British in the north, where General Haig and his men so valiantly and successfully withstood the first great drive of the Germans during the late March and early April. If the attack comes in this region again, as it is expected, Americans will, undoubtedly, be thrown into the defense along with their British allies.

Last week a statement was made that the allies had found themselves in a condition so favorable that they had decided not to use the American army as originally planned, but to wait until such time as the Americans would be in France in sufficient numbers to operate as a separate unit. This statement was later denied. The Americans will be brigaded with the British and French, fighting side by side with them in divisions made up partly of men from all three countries.

The statement from allied headquarters says that some of the Americans will be under the command of British and French commanders, while in some instances British and French troops will be under command of American officers. Wherever the Americans predominate in any division American officers will be in command, and wherever French or British predominate French or British officers will be in command. This means that General Pershing will not be in command of a purely American army, but will have under him a united force of men from several nations in arms against Germany and her allies. It will be a great demonstration of the unity of purpose and the wiping out of nationality that marks the purpose of the enemies of Teuton frightfulness.

### China and Japan Unite.

Information has reached this country telling of the conclusion of an agreement between Japan and China for the protection of their common interests in the far east against German aggression. Although giving few details the reports to the department were said to make it clear that the agreement was only for the period of the war and was solely for protective purposes.

A joint defensive to counteract German aggression in Siberia is known to be contemplated, but information was lacking as to whether this would involve a movement into Siberia by Japanese and Chinese troops. As to the necessity for such action the state department is not informed, but it is assumed that because of their proximity to Siberia Japan and China, with a much keener interest in that country than any other powers, doubtless were in better position to know the extent of German influence there and the necessity of curbing it by military force.

### I. W. W. Would Fight U. S.

That there was a definite movement in the I. W. W. organization for a declaration of war on the United States in retaliation for this country's declaration of war on Germany is indicated by letters presented in evidence at the trial of the 112 indicted I. W. W. leaders now on in Chicago. One letter presented was written by one of the leaders to William D. Hayward, secretary of the national I. W. W. One paragraph of the letter read as follows:

"Like little brooks streaming into one channel our organization would swell into one grand river," Slovick wrote. "All in all, we could muster quite an army. There are in this country Germans, Austrians, Hungarians, Bulgarians and some Irish who for patriotic reasons, if you please, will be willing to fight this government."

## PORK EXPORTS.

### For March 308,000,000 Pounds.

Figures prove that the American people have been giving an intelligent response to the program mapped out by the food administration. During 1917 the consumption of pork dropped month by month, and reached the lowest point in March, 1918. It is interesting to know that when the consumption of pork hit the low point the export of pork reached the high mark. Pork exports for the month totaled 308,010,711 pounds. The exports of beef also hit the high mark in March and totaled 87,244,388 pounds.

The largest exportation of beef for any month in 1917 was in April, when it reached 51,974,963 pounds. In 1916, June was the highest month with a total of 53,328,930 pounds.

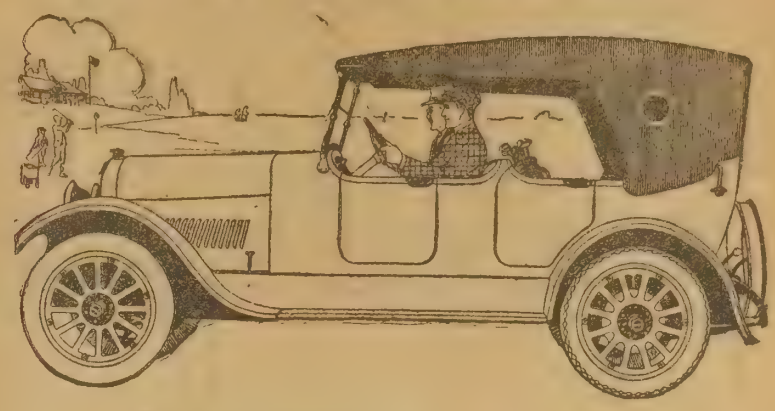
The largest exportation of pork for any month in 1917 was in January, when it reached a total of 199,505,465 pounds. In 1916, February was the highest month, with a total of 162,376,306 pounds.

Even with these large shipments the allies have found it necessary to reduce the consumption of all kinds of meats and poultry to a weekly average of about 1 1-4 pounds per person.

### Record Cow Is Listed.

Eminent Jimps Owl, one of the purebred Jersey cows to be sold at the Glen Tana sale next month, has made a record among Jerseys as a milk producer, placing her second in the United States as a 4-year-old, according to a report just made. From May 14, 1917, to May 1, 1918, she produced 16,372.08 pounds of milk. She is beaten by a narrow margin by Lass 66th of Hood farm, Lowell, Mass.


# STEPHENS *Salient Six*



PERMANENTLY IN VOGUE

With respect both to style and mechanical construction, the Stephens Salient Six is built not only to meet the exacting demands of today, but those of months and years to come.

Stephens body lines were created not merely to satisfy existing fashion, but to anticipate the trend of design during an entire series of styles changes. The Stephens will be as up-to-date a year from now as it is today, because it was built by men with vision and the ability to foretell style development.

Along the same line, the Stephens engine was especially designed to burn not only the lowest grade fuels of today, but the still lower grades to come. It develops its full fifty-seven horsepower, smoothly and without a spit or choke, on grades of gasoline that have not yet been forced onto the market by the increasing demand.

Throughout, Stephens cars are built to retain their freshness of appeal and distinctive charm over a long sweep of time. Coachwork of seasoned hardwoods, expertly fitted, and twelve coats of paint and varnish, hand rubbed, insure against depreciation.

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We do the largest consignment business in the northwest. Equally fair treatment on all shipments, large or small. Returns at full market value mailed same day as goods are received. Trial shipments wanted and appreciated, but are handled as regular shipments and not at inflated values.

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Grain can be stored in a good grain tank much more cheaply than it can be handled in expensive bags that last but one season.

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A Good Grain Tank Is a Permanent Investment

come to you complete and all ready to set up; floor, skids for moving, ventilator, spouts. There isn't a better grain tank made; very few as good. The Interstate tank is built for years of satisfactory service. You can not do better anywhere for so reasonable a figure.

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SEND COUPON TODAY
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Please send me full particulars regarding your grain tanks.
Name .....
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# MUGGSY TRIES TO DELIVER POTATOES AND LANDS A PICKPOCKET




# HAS THIS EVER HAPPENED TO YOU?



# UNLUCKY LOOIE DRAWS A FULL MONTH'S PAY


















# How to Remove Honey from Hive

## *Ingenius Appliance Aids by Clearing Supers of Bees*

Article 6. by GEORGE W. YORK.

I believe I have before stated that the surplus honey is usually produced in two forms—in the comb and the extracted, the latter being free from the comb. Of course, all honey is produced first in the comb. But when we speak of surplus comb honey we mean that the honey is in the commercial form of the usual frames or boxes, about 4 1-4x4 1-4 inches in size. The surplus extracted honey is the liquid honey that has been taken from the combs by the use of a centrifugal machine called a "honey extractor."



Bee-escape board.

We will suppose that there are several supers of honey in the one-pound boxes or sections ready to be removed from the hive. It is very annoying to the beekeeper and also very irritating to the bees to remove the honey while the bees are still working in the supers or are found in them. So a genius among beekeepers invented what he called a "bee-escape." This is a small metal arrangement, perhaps 3 inches long, 1 1-2 inches wide and possibly an inch thick. It is so constructed that within it are two very small, flat pieces of spring steel, two ends of which are fastened and the other two ends held so that they have but 1-4 inch of space between them.

The bee-escape is then put in the center of a board that covers the whole top of the brood chamber of the hive. This board, with the bee-escape is then inserted directly under the first super of honey, with the bee-space side of the board upward. If the bee-escape board is put on toward evening usually by the next morning or afternoon every bee will have gone down through the bee-escape into the brood chamber of the hive, and they can not return to the supers of comb honey, for while the two springs referred to permit the bees to go down and out of the super, they can not return through them. When all of the bees have passed out of the supers the latter can be removed from the hive to a room in the house



Centrifugal honey extractor.

and the boxes of honey taken out. New or empty boxes can be put in their places and the super or supers returned to the hive to be refilled.

If it is desired to let the bees out of the supers more rapidly, a bee-escape board can also be put on top of the top super of honey on the hive, when some of the bees will fly outside and return through the regular hive entrance. Of course, in putting the bee-escape board on top it must be reversed or with the bee space side down.

The bee-escape board may be used under extracting supers also. After the bees have left the supers they can be removed and the honey extracted with the use of a honey extractor, a picture of which is shown herewith.

The extracting combs are first uncapped on both sides with a honey knife (made specially for the purpose), and then inserted in the wire comb-baskets within the extractor can. By the use of gearing and a crank these comb-baskets are revolved very rapidly, which causes the honey to fly out of the comb through the wire comb-baskets, and run down the inside of the extractor can, when it may be drawn off through a faucet or honey gate at the bottom of the can and stored in any receptacle desired.

When the honey on one side of the combs is all out the combs are reversed by reversing the movable wire comb-baskets and the honey thrown out on the other side of the comb. After the combs are emptied they can be returned to the hive for refilling by the bees. By this process the bees are saved much labor in the building of storage comb, and the cell cappings that are removed before extracting may be drained of all honey and then melted into beeswax. All extracting combs of honey should be full and completely sealed over before removed and uncapped for extracting.

All bits of wax, old comb, etc., should be saved and rendered into beeswax. It can all be heated to the melting point, after putting all the wax into a pan or kettle with water in it. (Don't use an iron kettle, as it would darken the color of the beeswax.) When the water and wax are then cooled you will find that all the wax has formed into a cake on the top of the water, when it can be lifted out. This is the simplest method of rendering comb, cappings, etc., into marketable beeswax. If there is any sediment resulting from melting up old, dirty comb, such sediment will be found on the underside of the cake of beeswax, when it can be scraped off.

### Value of Bees as Pollenizers.

While the bees are of much importance on account of the honey they produce, probably their greatest value is in the pollenization of fruit and other blossoms, which results in larger crops. Some well-informed orchardists offer to pay a beekeeper for moving his bees near their orchards for the sole purpose of aiding in the more perfect pollenization of the blossoms. The manager of the 600-acre Kootenai orchards, located in Boundary county, Idaho, has just recently secured a number of colonies of bees so as to have them there when the over 4000 apple trees are in bloom. While the bees seldom store any surplus honey from fruit blossoms, still what nectar they do gather from them is a great help in feeding the thousands of young bees that are hatching out so rapidly about the time the fruit trees are in bloom. These bees will be the ones that will store the main honey harvest a little later on.

## Farm Labor Supplies.

B. A. Hunter, in charge of federal employment bureau in Spokane, reports sending out about 700 men this spring to farm work. He adds that the rush for farm help is about over for the present.


**I Am Interested**

and ask you to mail to me full information and

**FREE BOOKLET**

describing the possibilities of Stevens county logged-off lands.

Name .....

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CUT OUT THIS COUPON

and the booklet and information will be sent to you by return mail.

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Farm Dept.,
SPOKANE, WASHINGTON.



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**Farm Lighting Plant**

**Makes your farm home as bright and comfortable as the finest city home.**

It also furnishes power to run your pump, churn, cream separator, washing machine, carpet cleaner, flatiron, etc.

Eliminates the housewife's drudgery.

Reduces fire risk by doing away with lamps, lanterns and candles.

Costs only a few cents a day to operate.

**A Complete Lalley Plant**

Will be in operation at the

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Pullman, Wash., May 29, 30, 31.

SEE AND OPERATE IT YOURSELF.

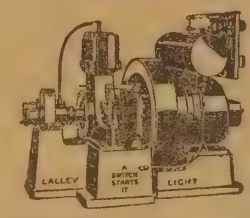
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Generating Plant is 27 inches long, 14 inches wide, 21 inches high. Storage battery is included in complete outfit.

Lalley Electro-Lighting Corporation, Detroit, Mich.





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Ask us to quote on your wants
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Ask us anything you want and if possible we will cheerfully answer you

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**Get under the Shower of Gold**

coming to farmers from the rich wheat fields of **Western Canada.** Where you can **buy good farm land at $15. to $30. per acre** and raise from **20 to 45 bushels of $2. wheat to the acre** it's easy to make money. Canada offers in her provinces of Manitoba, Saskatchewan and Alberta

**160 Acre Homesteads Free to Settlers**

and other land at very low prices. Thousands of farmers from the U.S. or their sons are yearly taking advantage of this great opportunity. Wonderful yields also of **Oats, Barley and Flax.**

**Mixed Farming** is fully as profitable an industry as grain raising. Good schools, markets convenient, climate excellent. Write for literature and particulars as to reduced railway rates to Supt. Immigration, Ottawa, Canada, or to

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Canadian Government Agent.

# Beets Reduce Potato Acreage

## *Summer Fallow Land Should Make Up Apparent Shortage*

There is a large increase in the sugar beet acreage in the Yakima valley this season. There is a large decrease in the potato acreage in the same district. These two facts are closely linked together, it being evident that many potato farmers are reducing their acreage of potatoes in order to produce beets at the contract price of $10 a ton, which is offered this season by the Utah-Idaho Sugar company. Their action is the result, not only of the guaranteed price, which is the highest general price yet paid for beets in the northwest, but of the unsatisfactory condition of the potato market during the last season and up to the present time.

Estimates of the reduction in the potato acreage vary from 20 per cent to 60 per cent, but it is generally agreed that the acreage will not exceed two-thirds or three-fourths that of last season. Y. C. Mansfield, formerly extensively engaged in wheat and sheep production in the Endicott, Whitman county, district, but now operating a quarter section of irrigated land near Sunnyside, believes that the potato acreage in the Yakima valley will not be more than a third what it was last year, and strongly urges upon the foothill and wheat farmers that they plant potatoes on a part of their summer fallow land instead of allowing it to lie wholly idle.

In reply to an inquiry from this paper, J. N. Price, county agricultural agent for Yakima county, estimates that the potato acreage this year will be from 25 to 30 per cent less than last year. His reply to the inquiry follows:

"Replying to your letter of May 10th regarding the potato and sugar beet situation in Yakima county, I wish to say that our farm survey has shown a decrease in the potato planting this year of approximately 20 per cent. This survey was completed before the farmers had become very greatly discouraged over the price of potatoes this spring and I feel sure, therefore, that we will find a greater decrease in the acreage than is shown by the farm survey. The decrease in the potato acreage this year has been placed all the way from 25 per cent to 50 per cent below last year's acreage. I think a safe estimate would be about 25 per cent to 30 per cent. The older potato growers will have fairly large acreages this year, but a good many of the people who planted for the first time last year or those who grow potatoes occasionally will not plant this year.

"The acreage of sugar beets is very greatly increased in the county this year on account of building two new factories. The present acreage of sugar beets contracted for the three factories will be close to 20,000 acres. The majority of this acreage will be in Yakima county. The planting of sugar beets has replaced potatoes to some extent all over the county and especially in the Sunnyside district. The sugar beets are looking well at this time and the work of cultivating and thinning is progressing nicely. The sugar beet labor is taken care of very well this year by bringing in large numbers of Russian families who have contracted with the farmers to take care of the beets for the season. I think we will have no trouble with the labor question with regard to this crop unless perhaps it might be at digging time. Although in cases where the contracts are entered into by the Russian families they contract to take care of the harvesting."

# Why Should Banks Become Interested in Sheep Clubs?

By R. A. BLANCHARD.

Why should a bank be interested in a sheep club? The club idea merely works with boys and girls. What is the benefit? Mr. Banker, the benefit is right here—the boys and girls are the men and women of tomorrow.

The best available statistics we have at present show that from 1910 to 1911 our wool consumption was roughly 450,805,000 pounds, while in the year 1915 it was 821,801,000, but on the other hand our production for the same period has dropped from 321,363,000 to 288,777,000 pounds, and with our population increased approximately 11,000,000 in that time.

The government tells us it costs $156 to clothe a soldier in the trenches in France, and of that amount $100 is spent for things made of wool. We have only 48,900,000 sheep in America, and our army and navy alone need 300,000,000 pounds of wool up to September of this year, and the total production for 1917 was only 291,000,000 pounds. In fact, the rapid progression of events have kept our statisticians in in a whirl. Uncle Sam tells that 20 sheep are necessary for every soldier.

This is the one reason, Mr. Banker, why the bank sheep club has come into existence so rapidly this year. It is a patriotic call in which every available acre that can be used for the production of sheep should be put to work. The banks of the country have a tremendous power in encouraging the farm flock idea. One bank in central Oregon purchased a band of 2000 sheep and distributed these in lots of 25, 50 and 100 on the wheat farms in that region, such that the waste could be taken care of, also fence corners, weeds and the by-products consumed.

The future of the sheep industry is bound to be that of the farm flock. The great ranges, while many will always remain intact, can not be relied upon for the volume they produced in the past.

A successful plan followed by banks in the northwest is as follows: Announcing to the public through the press, distributing pamphlets, literature of any kind that the bank will organize a sheep club to stimulate the interest in sheep production, and will offer to any boy sufficient funds at a reasonable rate of interest, say 6 per cent, with which to purchase his sheep, provided he brings in the contract which is provided, properly signed. The organization of the club is affected through the schools and country community centers, with the co-operation of the extension service of the state and government, who supply the club members with regular lessons and instructions on care, management, feeding, etc., requiring the boy to keep accurate cost, data and everything complete. At the end of the season the sheep can be displayed at local fairs, and in contests for prizes offered.

About 40 boys make a good club to begin with, one having a buck for breeding purposes. It is well to start with a lamb, although some clubs have been successful with the breeding ewe, securing the lamb during the season.

## British Shire Horse Show.

The holding at Newmarket of the 39th annual show of the Shire Horse society, "established to promote the Old English Breed of Cart Horse"—so the legend still runs on the cover of the catalogue—was fully justified, says the London Live Stock Journal. J. Forshaw & Sons had the felicity of again winning the stallion championship, after many years of trying, the last time being in 1906, when Present King II. gave them one "notch" on the society's seventh cup, which, however, fell in the end to the all-conquering Rothschild stud of that period. Their victory this year with Rickford Coming King is a worthy one. The horse was only beaten by a narrow margin by a really great champion in 1917—to wit, Sir Arthur Nicholson's Champion's Clansman.

A fine average was realized at the customary sales, E. C. Fairweather giving 1150 guineas, or about $5377, for Sussex Goalkeeper.

**Electricity From Sweden to Denmark.**

Sweden, which is rich in water power, sends electricity across the sound to Denmark, which is without any sources of power.


**Do You Want a Well Drilled?**

If so, we can very likely put you in touch with a competent driller in your section.

**FREE OF CHARGE**

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**KEYSTONE**

WELL DRILLING MACHINES

now operating in Pacific northwest. We will send you the name of driller nearest you free on request. Will there likely be other wells to drill in your neighborhood?

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Pacific Northwest Distributor for Keystone Driller Co., Beaver Falls, Pa.

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**Increases Farm Efficiency**

Fifty thousand Delco-Light plants in operation on American farms are saving, at the most conservative estimate, an hour a day each—or over 18,000,000 work hours a year.

***That is equal to an army of 60,000 men working ten hours a day for a full month.***

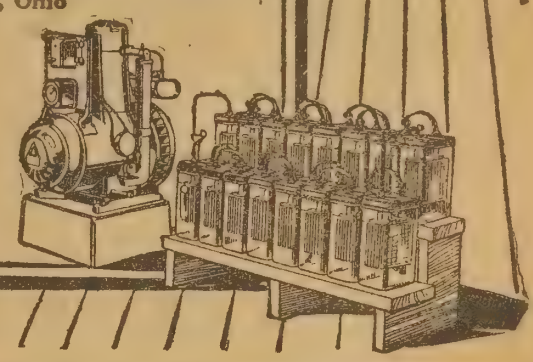
Delco-Light is a complete electric light and power plant for farms and suburban homes.

It furnishes an abundance of clean, safe, economical light, and operates pump, churn, cream separator, washing machine and other appliances.

*Ask us to show you how Delco-Light can save time and money on your farm*

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**We will have a Delco Plant in actual operation at the All Northwest Farm Power Demonstration, Pullman, Wash., May 29-30-31. You are cordially invited to come and see us. Whitman Electric Co., Colfax, Wash.**




**These overalls MAKE GOOD BECAUSE THEY'RE MADE GOOD, fit good, good material and sewed with thread so good that we'll give you a new pair FREE if they rip.**

**Your Dealer Has Them**

**When you write to advertisers, be sure to say that you saw their advertisement in this paper.**

# Flock and Flock Master Disappear

A case interesting throughout the sheep growing districts of the northwest and to persons not interested in sheep but in stories of daring has just been settled in the courts at Vale, Ore. Last winter a flock of 2400 sheep belonging to a land and live stock company, of which W. H. Gess of Nampa, Idaho, is manager, disappeared from the ranges of Oregon, where they were being grazed. Fortunately, Mr. Gess learned of their disappearance and started early pursuit. The man in charge of them on the range was also found to be missing.

Investigations revealed the fact that the sheep had been driven to a shipping point across the Nevada-Oregon line, and started on their way to the markets at Chicago. By wire and otherwise their owner traced the shipment until 1800 head of them were located at Omaha, to which point they had been redirected. The remaining 600 head, however, and their whereabouts are unknown to this day, according to latest reports. The man who had billed them for shipment was detected and arrested in Omaha, and a search for the lost flockmaster was successful in placing him and a third confederate under arrest elsewhere. All three men were placed on trial and found guilty of theft.

The attempted theft of the flock of sheep is one of the largest ventures of its kind known in recent years in the stock growing districts of the northwest. Had the three men succeeded in making good their attempt it is probable that the venture would have netted each of them somewhere around $10,000, bringing to the owners of the sheep a corresponding loss.

## Clip This Convenient Order Blank

Address all communications concerning thrift or war savings stamps to the Washington Farmer, War Savings Department, Room 26 Review Building, Spokane, Wash.

Remittances may be in any form desired, including personal check.

The Washington Farmer, War Savings Department, Room 26 Review Building, Spokane, Wash.

Gentlemen: I wish to invest in ..... U. S. government thrift stamps at 25 cents each. (number desired.)

I wish to invest in ..... U. S. war savings stamps at $4.16 each. (number desired.) (May figure.)

Amount enclosed $.....

Full Name .....

Town ..... State .....

R. F. D. No. .....

I have already bought.....Stamps and have a..... (kind of stamp) (card or certificate.)

## ALLIES NEED MEAT.

### California Man Sums Up Situation.

In an address before a recent meeting of the cattle growers in California, L. A. Nares, federal live stock commissioner for that state, declared that the home and European demands for meat required a production of 1,700,000,000 pounds annually. Speaking of the meat situation, he said:

"To show the extraordinary calls upon meat producers of the nation let us cite the fact that in the year ending 1914 exports of meats from the United States totaled 168,000,000 pounds In 1916 they rose to 437,000,000, and indications are 1918 will require 800,000,000 pounds. Of this beef is estimated at 275,000,000. By saving the wastes on the range and by cooperation we may cut down the cost of meat and at the same time help ourselves. I appeal to your patriotism to join in this endeavor to aid the people."

### Cutting Olive Trees Forbidden.

The felling of olive trees is forbidden by a decree published at Rome March 30, which prohibits also the cutting of the principal branches of such trees except when pruning. It is provided that the regulations may be extended to mulberry trees and fruit trees by ministerial decree. The present decree is effective from the day of its publication until the end of the agricultural year following that in which peace is established.

### Hay Shortage in France.

To the burden of war and the general shortage of food in France is added a serious decline in hay production. Official reports received by the United States food administration show that the 1917 French hay crop was nearly 7,000,000 tons less than production of the previous year, a drop of about one-seventh. This misfortune has seriously affected the live stock industry and supplies for the army.

**Women Form Life Guard.**

Ocean Beach, a seaside resort in southern California, has a life-saving guard of five women.

## MORE STOCK IN FORESTS.

### Government to Issue More Permits.

Figures issued by Chief Forester Graves indicate that there will this year be allowed on the ranges of the national forests a much larger number of live stock than have previously been grazed. They show that half a million more sheep and a quarter of a million more cattle will be allowed forest range this year than last year. Something like 9,000,000 sheep, 2,360,000 cattle and over 50,000 hogs will be pastured this season in the timber. While it is the announced policy of the forest service to increase the number of live stock in the forests wherever possible, it is found that Colorado and Wyoming stockmen are given the greatest assistarce this year.

### Liver Is Green.

To the Editor: Some little time ago we bought some Brown Leghorn chickens and some of them seemed droopy and their combs turn dark. They eat what they can pick up but won't work for it. I killed two of the worst ones and cut them open and found that their livers were green and one was just like small gravel. One also had pink meat in places around the neck. I have penned the sick ones by themselves and gave them kerosene and mash with red pepper in it. Please let me know what I should do.

MRS. G. N.

Brewster, Wash.

The information in regard to condition of the liver is not very clear. If the liver was gritty when touched with a knife or had yellowish gritty spots, that would be a pretty good symptom of tuberculosis. If this is not the case the trouble may be due to digestive disorders which could be corrected by proper feeding. Try epsom salts, one-half teaspoonful per bird. Dissolve the salts in warm water then mix a bran mash with it and feed when the fowls are hungry, being careful to see that all the fowls have access to it. If sour milk or buttermilk is available give them all they will drink. Feed plenty of green feed, all they will eat every day. Keep grit and charcoal before them all the time. Do not give them kerosene. If the above treatment does not remedy the trouble, make further post mortem examinations and report.


## All-Pacific Northwest Power Farming Demonstration

**Pullman, Wash., May 29, 30, 31.**

Under auspices State College of Washington, demonstrating all lines of labor-saving machinery.

**TRACTORS, ENGINE PLOWS HARVESTING AND TILLAGE MACHINERY, FARM TRUCKS, FARM POWER EQUIPMENT**

Arrange to attend—fare and a third round-trip on all railroads—certificate plan—take a receipt from your ticket agent. Splendid camping facilities. For further information write Dept. Agricultural Engineering, State College of Washington, Pullman, Wash.

**KNOW POWER FARMING**

## Rhodes Harvester Co.

**Manufacturers Combined Harvesters**
**R. F. D. No. 8, Spokane, Wash.**

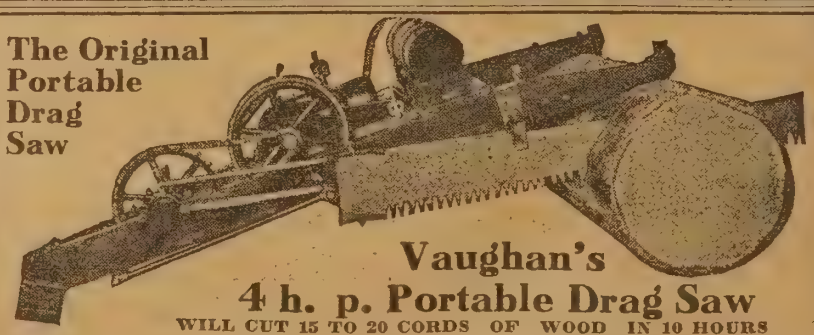


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**All steel, lightweight, always level, no hills too steep, no ground too rough, requires less horses than any other machine of same capacity.**

**Made in one size only—16 foot. A horse to the foot.**

**The Original Portable Drag Saw**



## Vaughan's 4 h. p. Portable Drag Saw

**WILL CUT 15 TO 20 CORDS OF WOOD IN 10 HOURS**

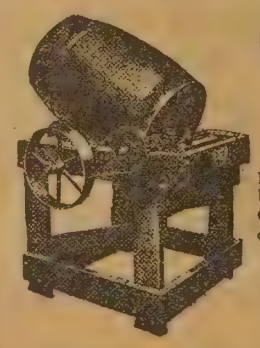
Can be operated by one man. Two men can carry complete machine. 4 H. P. gasoline motor mounted on frame. One gallon gasoline required to cut 8 to 12 cords of wood. Engine can be used for other work without removing from frame. No gears, cogs, belts or pulleys. Friction clutch prevents breakage if saw pinches. Saw makes about 125 strokes per minute. Will cut any size log up to 6 feet. Sprockets and cranks, etc., made of cast steel. All working parts guaranteed against defects in material and workmanship.

Net cash price for complete machine as shown in cut, $160 f. o. b. Spokane and common points.

**FOR SALE BY**

**Washington Machinery & Supply Company**

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## Cut Labor Cost of Concrete on Your Farm to a Minimum

This simple concrete mixer can be run by hand or by power. Will mix concrete more thoroughly than can be done on mixing board with one-fourth the labor. Capacity 15 to 25 yards per day. **Always ready.** Chain drive power tilting dump discharges direct into wheel barrow. Write for descriptive folder and price.

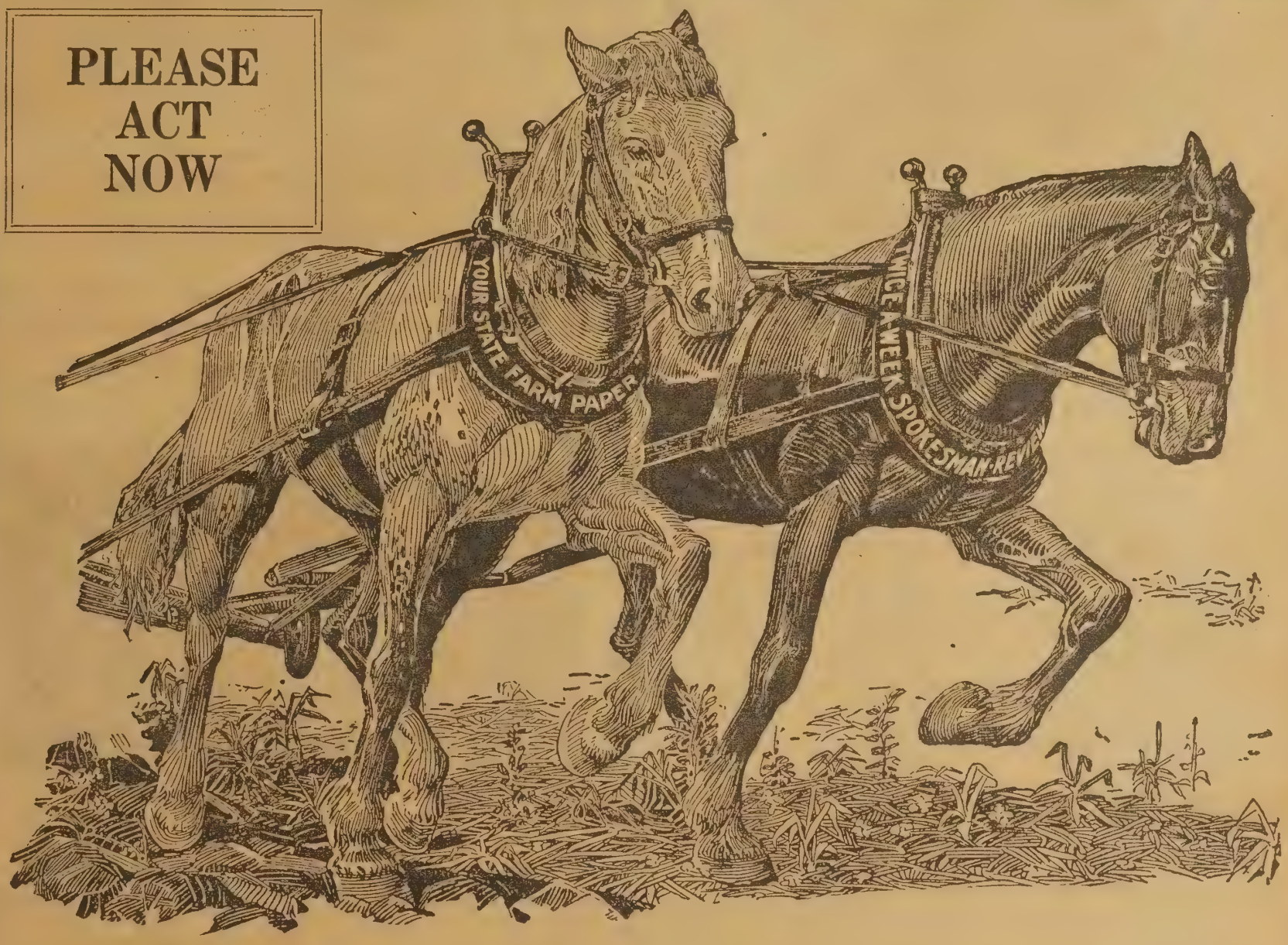
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**Spokane, Wash.**

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**The Washington Farmer, Spokane, Wash.**

May 9.

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# Mighty War Is Waging for Food Supplies

## *Fighters Are the Farmers and Weapons the Plow, Reaper and Thresher; Each Must Do His Best*

Daily it becomes increasingly apparent that the war will be won by the side whose food reserves last longest under the fearful stress of the conflict.

This thought should never be forgotten for a day. Farmers can render immensely valuable service to their country by preaching it constantly to their neighbors, to the members of their own family, and to their hired workers.

Take, for illustration, the critical case of our ally, Italy. The Italians are literally living from hand to mouth. A Rome correspondent writes that "the essential problem of Italian resistance in this war has been and continues to be, the problem of giving the people bread." To keep the price down to the point where the people can buy, the government buys wheat and sells it to the bakers at a loss of about 42 per cent. In other words, if the government pays $3 a bushel for American wheat, it sells the same wheat to the bakers for $1.74 and requires them to sell bread to the people at a certain government-fixed price.

The Italians are using every imaginable kind of substitute for bread mixtures—corn, lima beans, chestnuts, rice, nuts, dried figs, potatoes. Bread can be bought on government cards, and the law strictly forbids the buying or selling of fresh bread, which, being more palatable, would be consumed in greater quantities.

"This," says the correspondent, "is the essential fact in the Italian situation, to be considered especially by the United States. Even the grave question of coal falls into second line, except that it becomes of primary importance in relation to its effect on the problem of distribution of wheat at numberless points where it is needed."

The Italians must have wheat from the United States or they will be forced to make terms with the enemy, and if Italy should quit the war the allied cause would probably be lost, for approximately 2,000,000 Austrian and German soldiers who are now on the Italian front would be shifted to the French and Belgian front and give Hindenburg the needed forces to finish his western drive.

On the other hand, the food problem is even more desperate in Austria. A recent cablegram says that in parts of that country the situation is absolutely insupportable. Socialist deputies of Galicia have telegraphed the Austrian premier that the population there is dying of hunger and they demand the immediate importation of grain from Poland.

If Russia had not collapsed Germany and Austria would be suing now for peace, but the enemy is ransacking the conquered areas in Russia for grain and other food and stimulating the planting of large crops for the next harvest.

The situation then stands thus: England, France and Italy are depending on the United States and Canada, while the enemy is staking everything on Russian supplies. While the armies are waging a military war on the fighting lines, another mighty war is waging for food. In one case the weapons are cannon, rifles and bayonets; in the other, the plow, the reaper and the thresher.

With these truths in mind, every thoughtful, loyal American farm worker should spring to the support of the allied cause, working early and late, and putting into his toil the lofty spirit of unstinted service to his country.

# Farm Women Not Slackers

## *Appeal Is Made That Women of America Do Full Duty*

**"American women must quit being parasites and learn to give instead of always taking. An hour or two a few days a week is not enough for any woman to give her country. We must give a full business day, an eight-hour day every day of the week if we are to count for anything while the war lasts."**

The author of the foregoing words is Mrs. Frank A. Vanderlip of New York city, treasurer of the national women's Liberty loan committee, and wife of Frank A. Vanderlip, who has been conducting the thrift and war savings movement for the government. It is a part of her strong appeal to the women of America to assume their full responsibility in the necessary activities of the present war period.

Mrs. Vanderlip is right. Every woman should do her full duty. Every woman should, to the best of her ability, all conditions considered, give a full business day, an eight-hour day as she puts it, six days a week, to productive activity. Every woman who has been a parasite should "quit being a parasite." Every woman who has always been taking should "learn to give instead."

But let it be understood that Mrs. Vanderlip is talking to a class of women who do not live on the farms of the northwest. Where there is one woman on the farm not giving a full "business day" to productive work, there are a thousand who are giving 10 to 16 hours, six days a week, and seven hours thrown in on Sunday for good measure. Where there is one woman on the farm who is a parasite, always taking instead of giving, there are a thousand who are constantly giving more than they receive.

Messages like this are little needed by the farm women of America, though it may well be inspiring to them to know that their sisters in the city are being urged to do their full share of war work and in most instances are responding to the appeal. Mrs. Vanderlip's appeal to those in the city who are negligent of their duty and responsibility, when read with these thoughts in mind, stands out as a strong, loyal and patriotic message. Here are some of the paragraphs from it that deserve reading:

"There is but one standard for measuring a woman in this new day of war. That is dependability. The woman who can be depended upon is the one we want. The one who can not be counted upon is the one who will be dropped forever. A professional spirit is the need of American women, who have been parasitic for too long. We must stop taking and give. Eight hours a day is a short day for this great work we have before us. Two or three hours a day to the Red Cross is not enough for any woman to give as her war work.

"We must get as our personal point of view the realization that we can not have our cake and eat it too. We must ask ourselves, in this war of equipment rather than men, who must go without if we have the things we have been accustomed to. Business and pleasure can not go on as usual if we are successful to conduct this tremendous new business of war.

"We have forgotten, when we are buying new clothes and eating the wheat and sweets that we want and riding in our motor cars, that we are hampering the government. We are standing in the way of the government's business, which is war.

"When you want to spend a dollar for candy or unnecessary clothes (and we buy more clothes than we need because of pride) count that dollar as a traitor dollar. If you save that dollar and invest it with the government you are serving the government doubly, for you are aiding in financing the war and you are releasing the labor and materials needed for the unnecessaries which you have demanded formerly.

"We are fighting an enemy that is far from beaten. It has won everything it started out after. Its dream of Mittel Europa is realized now. Only a military victory can save democracy. We must sacrifice ourselves as we have sacrificed our men folks. We must learn to hate that we may effectively kill the evil thing that is ruining not only the bodies, but the souls of its people and threatens the rest of the world."

**An Allied Rhyme.**

What rhymes with German? Vermin.

# SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

## How the Blind "See" the Objects Their Fingers Touch



Dr. Hirshberg.

Modern psychologists say that psychology is a science which has to do with actions, deeds and behavior, since these alone are the only real and true standards of what is in a person's mind. In other words, the full knowledge of what is in your thoughts is evidenced mostly by your behavior from the cradle to the grave. The extent and perfection of such knowledge is directly dependent upon the minuteness and completeness of this knowledge.

Dr. C. F. Fraser of the American Association of Instructors of the Blind verifies this in his discoveries about the psychology of blind persons. He was forced to conclude from his experiments that persons born blind or those who acquired blindness at birth do not obtain visual impressions in the sense that those who see use the word. Therefore, these blind persons have no visual sense of form.

In order to determine whether what they call "seeing six sides of a block at once" was truly "seeing at once" many tests were made. In answers given, all the blind agreed that they saw the upper fact first and the lower visualized last. The other four sides were not so unanimously judged.

**Differences in Conceptions.**

Although the language of the blind is the language of persons with sight, the mental events which take place in the thoughts of a blind person are merely a rapid succession of tactual images realized intellectually as a cube.

A number of blind persons were tested as to their thoughts of an arm chair. The majority first thought of the right and then of the left arm, then of the seat, the back, and finally of the legs.

The tests with many other objects proved that the mental conception of the blind as to the appearance of things differ from those who see or once saw. These impressions are the difference of thought due to the entrance of reality through the eyes or through the muscles.

**The Limiting Factors.**

Sight is a sense which takes in objects, as a whole and in one impression. You first see objects as a whole and then take in the details afterward.

The pineasthetic and tactual senses—those of the muscles and the touch—are limited in scope of time and space and must take in details as they come in contact and in sequence with the fingers or other structures. The mind, therefore, is made up more gradually at first of individual perceptions.

Of course, as a matter of fact, so swift is this sequence of impressions that a person always blind soon learns instantaneously to anticipate what is coming, just as you do a half-completed tune or sentence.

# Sidelights

**In These Days.**

"No, I am going to marry Fred."

"Then you can give me no hope?"

"Well, of course, Algy, any marriage may turn out not to be a success."—Louisville Courier-Journal.

**Some Talker.**

Customer—And you guarantee that this parrot talks a lot.

Dealer—Talks? Why, his last mistress sold him because she couldn't get in a word edgeways.—Boston Transcript.

**Alas, Yes.**

"I have discovered a sad truth."

"What?"

"More men can sing 'Hail, Hail, the Gang's All Here,' than can sing 'The Star-Spangled Banner.'" — Florida Times-Union.

**Key-Whiz.**

Judge—Name?

Prisoner—Smith.

Judge—Occupation?

Prisoner—Locksmith.

Judge—Officer, lock Smith up.—Boy's Life.

**Mental Arithmetic.**

The teacher was hearing a class in mental arithmetic. It was the first lesson in fractions. "Now," said the teacher, "Mary had eight eggs. After using four for her cake, what part was left?" Lulu waved her hand frantically. "What is it, Lulu?" asked the teacher.

"Eggshells," she answered promptly.

**Community Shears.**

A South Dakota state senator tells this:

A customer entered the small town barber shop.

"How soon can you cut my hair?" he asked of the proprietor, who was seated in an easy chair, perusing the pages of a dime novel.

"Bill," said the barber, addressing his errand boy, "run over and tell the editor that I'd like my scissors, if he's got done editin' the paper. Gentleman waitin' for a hair cut."—Pittsburg Chronicle-Telegraph.

**Picnic Was Off.**

Baby's uncle met her in the street one day and asked her whether she was going with a picnic party from her school.

"No," replied the 8-year-old niece. "I ain't going!"

"My dear," said the uncle, "you must not say 'I ain't going.' You must say 'I am not going.'"

And he proceeded to give her a little lesson in grammar.

"You are not going. He is not going. We are not going. They are not going. Now, can you say all that?"

"Oh, yes!" responded Baby heartily. "There ain't nobody going!"—London Answers.

# All the World's a Stage, and All the Men and Women Merely Players

## Relieved of Command.



Admiral von Schroeder, commander of the German naval base at Zeebrugge, has been relieved of his command. His demotion was the result of the successful raid which was recently made by the French and British warships.

## Overloaded Burros in Mexico



One of the depressing sights in Mexico, says "Our Dumb Animals," is the brutal treatment to which the patient, plodding burro is subjected. The Mexican, generally, loves flowers and birds, and is kind to the small animals about the home, but no consideration whatever is shown when loading his flesh-and-blood freighter. Whether the load weighs 300 or 500 pounds it goes on, till often the poor little beast sinks beneath the burden ere many steps have been taken. It is wonderful, however, how great a load the patient, stout-hearted little burro can carry.

## James S. Ramage.



J. S. Ramage, Spokane, has been made an executive officer of the American Red Cross and will leave soon for France.

## Building a Corduroy Road in France



Copyright Committee on public information.

The above illustration shows a number of engineers from the United States. They are at work building a cerduroy road somewhere in France for supplying the front battle lines with equipment.

## What the Good German Sword Did




—Oakland Tribune.

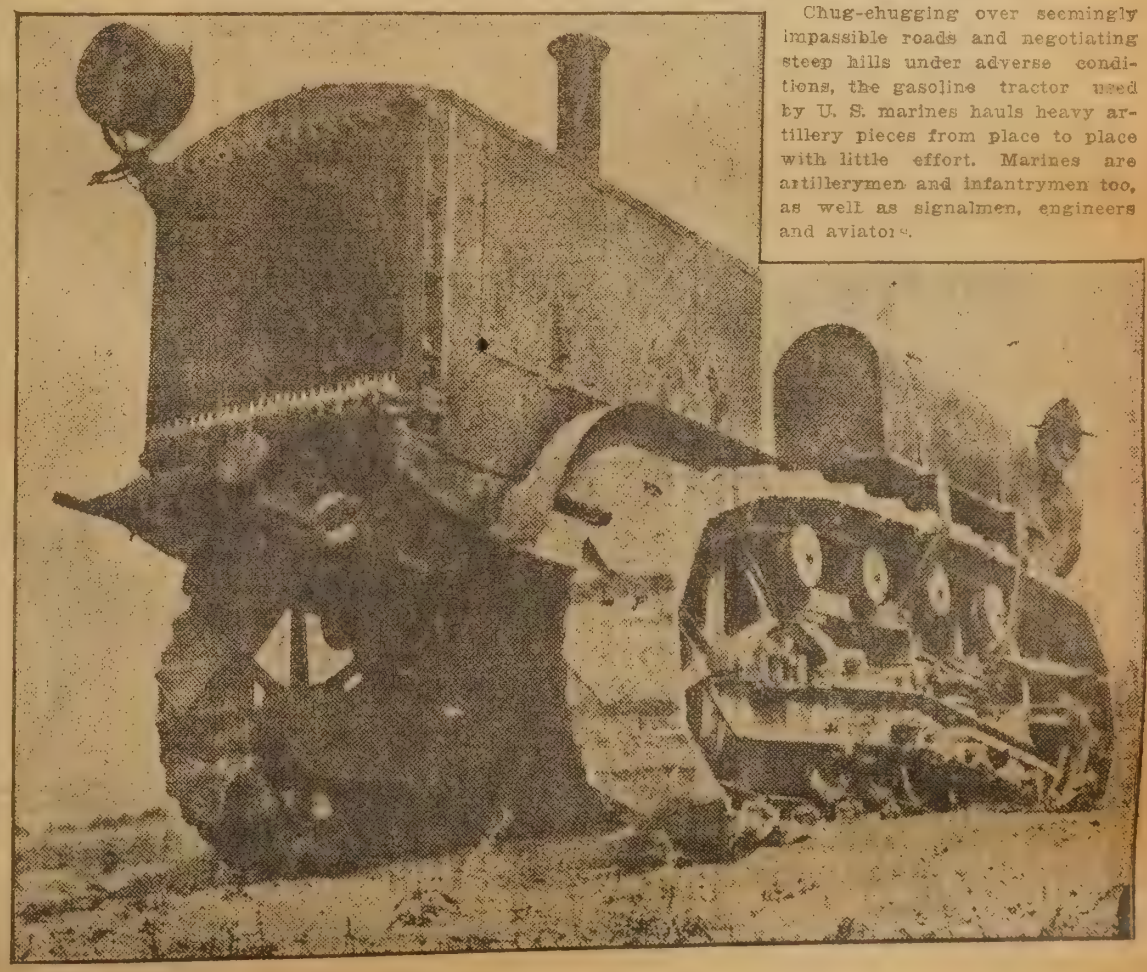
## Fashions Are Certainly Changing




—Kansas City Star.

## Giant Artillery Tractor Used by U. S. Marines

Chug-ehugging over seemingly impassible roads and negotiating steep hills under adverse conditions, the gasoline tractor used by U. S. marines hauls heavy artillery pieces from place to place with little effort. Marines are artillerymen and infantrymen too, as well as signalmen, engineers and aviators.



## Fix Farm Machinery Prices—Why Not?

Congressman Norton has introduced in the house a bill to authorize the president to fix the price of binders, reapers, headers, mowers, wagons and other farm machinery.

Why not? The government has directly fixed the price at which the farmer must sell his wheat and, indirectly, is fixing the price on other farm products.

By agreement with the producers of metals (in all probability the prices would have been fixed by law if the producers had refused to agree) the government has set the price on the steel and other metals used in the manufacture of farm machinery.

The manufacturers of farm machinery buy government price-fixed materials, and their workers eat government price-fixed bread. If it would be "socialistic" to fix the price of machinery, is it not equally "socialistic" for the government to fix prices in other lines?

## Prefers the Farm

The photo below is of a champion wrestler, but also of a farmer boy, Robert L. Taylor. Robert is a son of J. H. Taylor, Jersey breeder, of Montesano, Wash. He graduated from the Washington State college at Pullman, 1917. Robert was captain of the college wrestling team and champion of Washington and Montana. He has done official Jersey testing for the college, has been offered the position of tester for a cow testing association, has had offers of places as school teacher and has had plenty of opportunities along other lines. But he prefers to help his father on the farm and to work with the Jersey herd, especially during these times of labor scarcity. Robert is in the third class, subject to draft, and declares himself glad to answer his country's call whenever it wants him in the army rather than in the ranks of producers.



Robert L. Taylor.

Mr. Taylor has a herd of over 30 Jerseys, 16 of which are now in milk and 15 in the Register of Merit. They include Golden Massy Polo 3rd, 879 pounds of butter as a junior 4-year-old; Gertie's Lily, 845 pounds at 9 years old and 582 pounds at 15 years. All the records were made with only two milkings a day and the herd is practically composed of descendants of these two cows. Mr. Taylor is now using as a herd sire Jacoba Irene's Prince, a bull that is 75 per cent the blood of Jacoba Irene, for many years the world's greatest long distance producer.

The herd is a good producing herd throughout, and Robert shows the spirit of a true American and a real breeder in preferring the home farm to other lines of endeavor. H. A.

### Place 1000 Men a Day.

One branch of the United States employment service is placing more than 1000 men a day in shipyards alone—and there are nearly 300 other branches.


**Berry Boxes Crates**

Secure Your Supply Early.

Many spruce mills not producing slices for hallock making. A big crop of berries will mean a shortage of containers.

Let us quote you now.

**SPOKANE SEED CO.**

First Ave., Cor. Lincoln St.
Spokane.


## Mobilize Threshermen

(Continued from page three.)

pay particular attention to problems involving (1) repair of machines; (2) securing of necessary expert mechanical help in cooperation with the department of labor; (3) securing of a sufficient supply of steam coal in cooperation with the fuel administration; and (4) assistant in obtaining sufficient needed repair parts and supplies to last threshermen through the coming grain season.

Help will be extended threshermen and farmers to eliminate waste in harvesting and threshing operations. There are many ways in which this can be done. Chief among the sources of waste are:

(1) Threshing when grain is tough (damp and unripe).
(2) Carelessness in keeping the thresher's cylinders up to speed and in adjustment of blower, etc.
(3) Improper adjustment and dullness of teeth.
(4) Carelessness in feeding bundles or headed grain into the machine.
(5) Carelessness in allowing grain to leak on the ground around and under the thresher.
(6) Careless scooping of grain and bad order of wagon boxes.
(7) Carelessness in raking field and shock rows.

Efficiency in threshing operations is also promoted by the careful selection and instruction of men for certain duties. Men who pitch the bundles of grain into the thresher, for instance, can assist materially in clean threshing by discontinuing the rather common practice of overfeeding the machine in the effort to hasten the work. This is one cause of serious loss, especially when the bundles are large and damp.

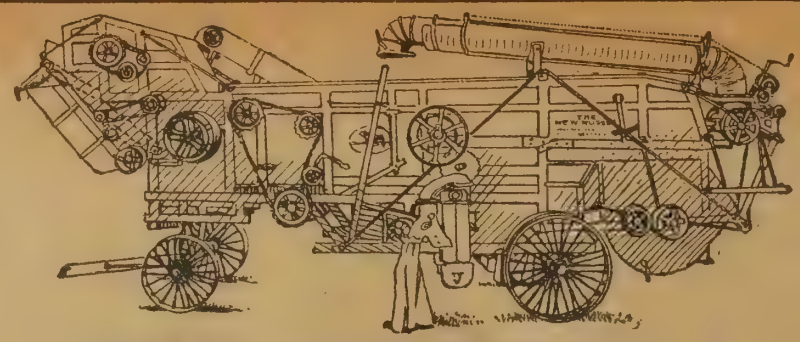
Every effort will be made to watch and stop these leaks. Sometimes farmers attempt to justify such waste on the ground that the stock will be benefited when turned in. This year, however, wheat is so greatly needed for human consumption that every grain possible must be saved.

A strong effort will be made to have all machines in the country inspected, and a close plain of cooperation between the threshermen and the county committees agreed upon. Owing to the large number of machines and the short time before the threshing season, it is expected that most of the work of inspection will be done through the hearty cooperation of the threshermen themselves or representatives of threshing machine manufacturers.

Every machine should be gone over to see that the engine has sufficient reserve power with proper pulleys and belting so as to keep the cylinders uniformly at the necessary speed under average conditions. Special efforts are also being made to secure cooperation of manufacturers in supplying repairs for "bad order" threshing machines and otherwise to put and keep all equipment in the best working trim.

The threshing division asks for the cooperation of all concerned in gathering information on the condition of threshing machinery and means for reducing waste. Reports and constructive suggestions should be sent direct to the office of the threshing division, U. S. food administration, grain corporation, 42 Broadway, New York city.

The paramount purpose of the work is to be of assistance and the general plan is the outgrowth of recommendations from various sources followed by a careful investigation of the situation. The National Implement and Vehicle association has already pledged its cooperation. With a hearty response by all, the activities outlined will, it is hoped, result in a large saving of food as well as a direct benefit to persons engaged in the growing and threshing of grain.

**THE RUSSELL**
**PEA AND BEAN THRESHER**
will be demonstrated at the Power Farming Demonstration, Pullman, Wash., May 29-31.

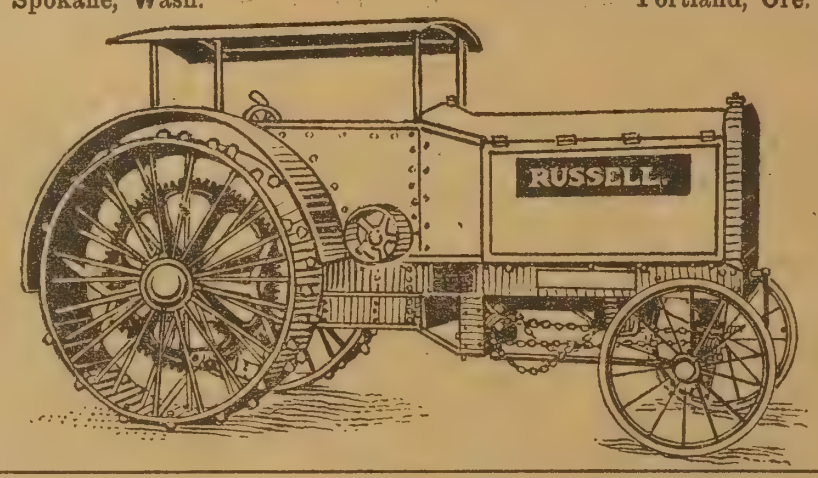
OPERATED BY A RUSSELL TRACTOR.

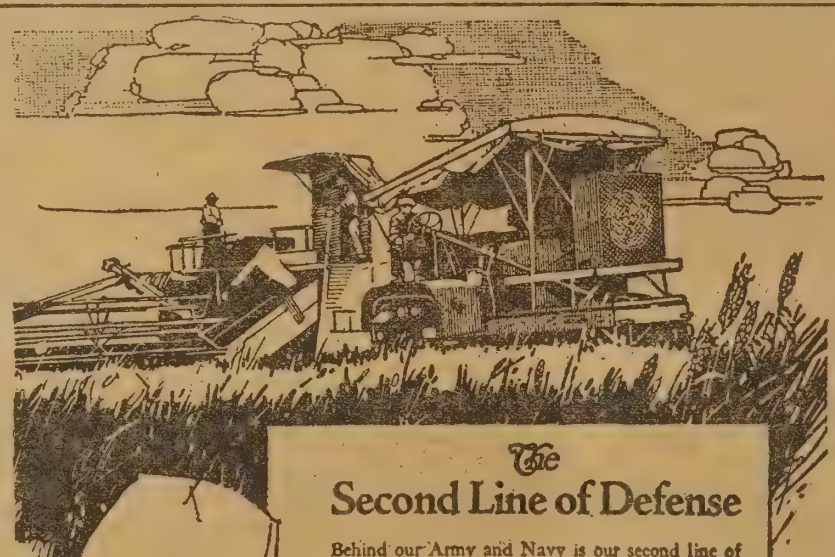
This thresher was specially designed on the Pacific Coast and is manufactured to meet the requirements of Pacific Coast bean and pea growers. No adjustments are necessary.

We also can make immediate deliveries of our **well known, time-tried Russell Grain Thresher,** either steel or wood, in all sizes.

**ORDER YOUR GAS TRACTOR NOW**
for fall plowing—5 sizes—one to suit every condition required.

**THE A. H. AVERILL MACHINERY CO.**
Spokane, Wash. Portland, Ore.



The
**Second Line of Defense**

Behind our Army and Navy is our second line of defense—the farms of this country—which must provide the food necessary at home and abroad. The "Caterpillar" Tractor's important share in this work is to cultivate and harvest the crops more cheaply and more efficiently, to economize in man power, to increase production.

Because it will stand up to continuous, severe service, because its cost for operation and upkeep is low, because it will work under any and all conditions, the "Caterpillar" Tractor stands supreme. Holt manufacturing experience of more than three decades and Holt high standards of design, materials and construction have established and maintained this supremacy.

What the "Caterpillar" Tractor has done for others in reducing costs and increasing profits it can also do for you. Write today for complete "Caterpillar" Tractor information.

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**CATERPILLAR**
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**Attend the Tractor Demonstration**

PULLMAN,
MAY 29, 30, 31.

**We Will Be There**

# Trappers of the Ozarks

**The Adventures of Two Young Pioneers in the Wilds of Upper Louisiana. Now the State of Missouri.**

By LOUIS B. MILLER

Copyright, 1914, 1915, by Lewis B. Miller.

**Summary of Preceding Chapters.**

In September, 1811, two young men who lived near St. Louis, Ben Armstrong and Jodo Henderson, taking with them their two dogs and donkey Spunky, started on an all-winter's hunt in what was at that time an unsettled region, where Indians held full sway, in the wilds of upper Louisiana, now the state of Missouri. After a perilous trip over old Indian trails and dangerous streams, they reached their destination—a salt spring close to the river Big Niangua, which Ben had visited before and from which they expected to secure salt for sale with their furs when they returned to civilization the following spring. Here they erected a rough cabin for their winter quarters close to the mouth of a large cave that was full of water and bats, and started their salt making and hunting. After an exciting experience with a bear in a cave they find their first fresh sign of Indians—moccasin-tracks in the snow about their camp and the morning after they find moccasin-tracks in the snow about their camp. The Indians attempt to enter their barricaded cabin at night but are frightened away by a great earthquake. The boys are captured and taken to the Osage village. One day they are given one bullet and one charge of powder each and allowed to go hunting. They dare not attempt to escape for fear of starvation, but lose their way and are found the following day by the Indians who think they tried to escape and are taken to the camp under guard. Ben is tied to a stake and a fire built under him but it is only a ruse to induce him to take as his squaw Watermelon, for the time being an Indian widow, who cuts his bonds and proclaims herself his squaw. Ben declines. The boys make plans to escape by canoe. They accumulate some parched corn and dried meat, steal a canoe at night and paddling far up the river turn into a branch stream and hide in a cave. After two days and a night there they go back down the river, safely past the Indian village and turning into a branch find a cave high up in the rocky face of a cliff. Here they place all their belongings except the canoe, which they conceal. They are discovered by the Indians, and, retreating deep into the cave with their belongings, they find, over a mile from the opening through which they entered the cave, an exit, and start southwest, the Indians undoubtedly in pursuit. The second day a blizzard sets in and hungry wolves follow the boys. Toward dusk they reach a deserted settler's camp, the cabin burned but chimney standing. Here they build a fire and plan to stand off the wolves. A long, hard fight with wolves and cold ensues.

## CHAPTER XVII.

**While the Snapping Turtle Slumbered.**

When at last, at a late hour, Ben and Jodo found themselves growing drowsy, they crawled into their bed and slept peacefully enough. Or at least they slept peacefully while they were asleep. With surroundings so unusual, they naturally awoke from time to time. More than once they got out of bed to put wood on their fire-place fire. All around them the log fire kept up its roaring, and glowed so redly that they had to cover their heads to shield their eyes from its glare.

Day had partly come when they rose and dressed. As yet they could not discover any change for the better in the weather. Indeed, it was now threatening to get worse before it improved. The sky was again overcast with clouds, and some snow was driving before a northwest wind.

Heretofore the smoke from the great burning ring had floated skyward so lightly that it had given the two shut-ins not the slightest inconvenience. But this morning, such was the condition of the air, some of it settled down now and then—enough to irritate both eyes and nose. However, the trouble was not serious.

The partners broiled another rabbit for breakfast, and prepared to spend another day resting. The burning logs were settling down by this time, but their fire, so far from dying out, seemed to be hotter than ever.

While walking along by the ring fire during the day the two came near stepping on a big rattlesnake. The reptile was not dangerous, however. Warmed to life and driven out of its winter quarters by the fire, it had crawled from under the log-heap and into the snow. There it had quickly become torpid again. They killed the loathsome thing, and later tossed it into the fire to be cremated.

Slowly the snow continued to fall during the day, and the weather was not noticeably milder. Ben and Jodo sometimes took a walk around the ring, following the ground where the fire had melted the snow off. But they spent most of the day before the big fire-place, resting from past exertions and for future exertions. As night was coming on, they dug the remaining 'possum out of the snowbank and put him on a flat stone, almost against the fire, to bake. Long before he was roasted brown, thick darkness had covered the earth, and the wolves had again begun their howling and snapping in the surrounding forest. But tonight there were only a few of them.

The 'possum, fat as a sucking pig, made, with a little of their parched corn, an excellent supper for a bitter cold night. There was some of him left.

The big ring was still crackling and roaring, and the wolves were still voicing their disappointment, when Ben and Jodo lay down before their fire to sleep. Having become somewhat accustomed to the glare and the noise surrounding them, they slept soundly, only waking when the fire-place needed more fuel.

At daylight they were up, and after melting some snow in a piece of an old pot they had found, they scrubbed their hands and faces as well as they could. Then they cooked the last of their game, a rabbit, and breakfasted on that. The air was still stingingly cold, but there was no wind, and the sun came up in a cloudless sky. Everything indicated that the weather would soon begin to moderate. The fire was now settling down noticeably, but there was still an unbroken ring of it.

After breakfast Ben said: "Well, the game that made it possible for us to linger here in peace and comfort so long is now almost eaten up. It's high time for us to be on the move. In fact, the longer we hang around here now, the greater becomes our risk of starving."

"I'm ready to pack up and travel whenever you say the word. But seems to me it would be well for us to wait till the sun gets high enough to thaw things out a little."

"All right, Jodo. No objection to that, I guess. But the first minute the weather turns warm enough for comfortable traveling, there's danger that the Osages may be out and on the hunt for us again. And this fire spouts smoke like a young volcano. They could see it fifty miles away, I'm thinking."

"Yes, no doubt they could. But how are we to break out of this fire-pen?"

"We'll manage that part all right when the time comes to start."

They waited till 10 or 11 o'clock before the weather seemed mild enough for comfortable traveling. By this time the snow inside the fiery ring was all beginning to melt. Having some of their roasted 'possum left from last night's supper, they decided to eat that before setting out. Then they could keep tramping, without a stop, till night overtook them. They had bundled up their things, and were sitting on their packs before the fire-place, gnawing the 'possum's bones, when they were startled by a familiar voice behind them:

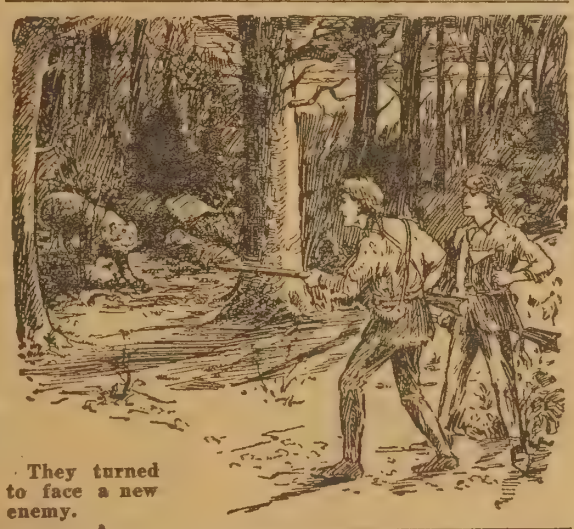
"Snappy Turkle, is that you again? Have you actually followed us all the way over here?"

"Yes, we foller, foller, foller. You and Dodo no run away from Osages nudder time. Yes, Strong Arm, we got you now!"

"Well, I've always heard that the Osages were pretty nice Indians. But if you haven't anything better to do than to tag around after two poor white fellows, that have a hard scrabble to keep from starving, it's all a mistake. You're a sorry lot!"

"What for you big fool run away, Strong Arm? What for you run away leave nice, fat squaw, Watermelon? Watermelon Snappy Turkle's squaw now. Now maybe so chop Strong Arm's head off, Dodo's head off. Maybe so roast um 'live!"

"Not if we can help ourselves you won't," muttered



They turned to face a new enemy.

Ben. But aloud he said: "What good would that do you, Snappy Turkle? You wouldn't want to eat us after you'd roasted us. You'd better let us alone and go and kill a deer. You can eat a deer and sell the skin. And that's more than you can do with us."

"You come out, Strong Arm, and Dodo. You go back by us at Osages' village."

"Yes, we'll come out, Snappy Turkle. But you'll have to wait till that fire dies down. We don't want to burn our feet off. That's fire's hot, I can tell you!"

"You come out now! You come out same way like you go in, Strong Arm."

"But that's just what we can't do. We came in here first, and then stuck fire to the logs and brush. You'll have to wait till they burn down, or come in here and carry up out."

The red men seemed to hold a consultation. After a minute or two, not a little to Ben's and Jodo's surprise, Snappy Turkle announced:

"All right, Strong Arm! We wait. You no can git away from us nudder time."

"The Osages are hard people to get away from," Jodo now called out. "Little good it does us to try to dodge you, chief. You're too sharp for us—too smart for us."

"Snappy Turkle heap big chief!" admitted that worthy, with much satisfaction.

The warriors stood by the fire for a few minutes. Then they sat down and drew their buffalo-robes around them.

Ben also sat down again, on his pack. "We've hung around here just a few hours too long. And this is the penalty we have to pay for our folly," he said, bitterly.

"Is there no help for it? Must we tramp back with 'em to their village and be captives again?"

"Well, that's to be seen. We must start back with them, I guess. They'd shoot us down, probably, if we attempted to get away or defy them. It's true we've got four bullets; but there are seven redskins. Sorry fight we could make. We're practically unarmed. And unarmed people have to do what armed people order them to do—out here at least. I'm hoping they'll give us a chance to slip off on the way back. I wouldn't relish any more of that burning-at-the-stake business.

"Now that Snappy Turkle has married your Pocahontas, there might not be any squaw to scatter the fire next time." Jodo spoke very soberly.

"No. And even being rescued by a squaw isn't the most delightful thing in the world." Ben made a wry face at his recollections.

"You never did appreciate what poor Watermelon did for you. For my part, I'd a thousand times rather be rescued by a squaw than not rescued at all."

"Oh, so would I, of course. What I don't like is having to be rescued. It was foolish of us to linger here so long, with all this smoke mounting skyward. But I didn't believe the red rascals had the hardihood to get out and brave the cold."

"They wouldn't have got out, I imagine, if they'd been even half as comfortable as we were. But it was probably as cold in camp for them as it was on the march—colder, maybe. So they just kept hoofing it, even if they did half freeze. Anyhow, it's too late to correct our mistake now. It's made and can't be unmade. They've run us down and we can't help ourselves."

"They've certainly run us down. Whether we can do anything to help ourselves remains to be seen."

"When they get hold of us again, they'll never let us have another gun in our hands. You can bet your Sunday breeches on that. True we haven't used our rifles since we got away from the redskins. But it has been a great satisfaction to have them with us, and to know that we could use them if we got in a tight scrape."

"Yes, I'd hate like everything to be roaming this country without any shooting-iron. The thing that puzzles me is: What can we do?"

Sitting on their packs before the fire, they discussed every plan they could think of to outwit their enemies. But not one could they name that held any hope of success. And the longer they talked the gloomier seemed the outlook. At length they became silent. Finally Ben sprang up, remarking as he did so:

"Believe I'll walk back and blarney old Snappy Turkle a while. I'd like to find out just what they really expect to do with us.

"Oh, it will just be: 'Maybe so chop head off, maybe so roast um 'live. Precious little consolation to us, in that!" Jodo did not rise, but sat with his chin almost on his knees. Despondency had the better of him.

Ben walked back to the fire-ring, near where the Osages had seated themselves. But he returned at once, stepping noiselessly.

"They've dropped down and gone to sleep—sound asleep—every mother's son of 'em!" he whispered. "That's what made them willing to wait till the fire burn't down. They haven't slept much the last few nights for the cold. An Indian seems never to learn how to make a rousing, roaring fire. And now they've got to our big log-heap and got warmed up, drowsiness and weariness have overcome them. They're half tired to death, and we're as fresh as a spring morning. Let's sneak out of here and make tracks while we can. They think we're safely fired in here, and they're not worrying about us. This is our one chance."

Jodo sprang up eagerly, delighted at the unexpected news. "I'm with you, Ben! Let's not lose a moment! But won't they hear us when we start to opening a way through the fire-ring?"

"We won't open a way. We'll bridge the fire."

Everything was ready. From the pile of poles and rails where they had found the 'possums, Ben caught up four poles in his arms. With these he approached the fire, at the place where the big chimney would be between them and the sleeping Indians. After leveling down the fire a little, he laid two poles across it. They reached about half-way over. Then, walking up the half-bridge, he laid the other poles down so as to complete the bridge. The fire was intensely hot, but he hurried on across. Jodo followed, carrying their rifles and packs, and holding his breath for the heat and smoke.

The fire safely passed, Ben received his own gun and bundle, and they made straight into the nearest woods. Both were stooping low, and they were still keeping the chimney between themselves and where the Indians lay. That was merely a precaution. The fire and smoke completely hid the Indians.

Soon the two fugitives were out of sight in the forest. They were now traveling north. But when safely out of sight and hearing they began to circle. And they kept circling till they were south of the big fire ring. Then they set their faces due south and were off at a trot.

The air out here was still sharply cold, but they little more than noticed it, so eager were they to escape. They knew they were leaving a plain trail in the snow. And they knew there was no telling at what moment the Osages would wake up, discover the trappers' flight and start in pursuit.

"But they're tired out, and we're well rested. If you can keep up with me, Jodo, we'll make 'em wear their legs off to the knees, and still not catch us!"

"I'll be with you as long as I can lift a foot. Anything's better than being dragged back to that Osage village, for nobody knows what."

On they hurried, over all sorts of country, with Ben in the lead and Jodo at his heels and stepping in his tracks. The snow-crust usually broke through, and the person in the rear had easier traveling.

All the rest of the day they tramped at their best gait. When the sun had set the air grew much colder. Pausing for a few moments, they took two blankets out of Ben's sack and fastened them around their shoulders. Also they put on their mittens. When night had come Ben got his bearings from the stars, then changed their course to due east.

"What's that for?" Jodo put the question to Ben's back.

"The Osages are likely to keep straight ahead when night overtakes them. They'll think they know our course, and can easily pick up our trail through the snow when daylight comes again. But we'll fool 'em—fool 'em nicely. The trail won't be where they expect to find it. And by the time they tramp back and pick up our trail we'll be 50 miles ahead and still going like a prairie fire."

"All right, Ben! I'm with you to keep out of their clutches! Of course it's safest to take it for granted that they're close behind and coming fast. But I'm hoping that they're still sleeping peacefully by our big fire."

"That might be, of course, but I doubt it. Indians don't sleep very long at a time, I think, especially when they've got something on their minds. They've waked before this time and missed us, it's pretty safe to say."

(Continued on the following page.)

# Trappers of the Ozarks

(Continued from the preceding page.)

Still the pair of fugitives kept their faces toward the east and hurried on, their heavy boots crunching through the frozen crust as they tramped. Seldom did they speak now, preferring to save their breath for the hard work before them. Some anxiety they felt concerning the wolves, which could be heard from time to time.

At length the fugitives' ears were startled by a loud, fierce scream. It seemed a good distance behind them, but sounded frightfully distinct in the stillness of the winter night. Both recognized the voice of a panther. But when, a few minutes later, the scream rang out again they noticed that it was still behind them, and seemed to be not a little nearer. And when it waked the forest echoes the third time it was certainly not far behind.

"Not much doubt about it, I guess, Jodo. That booger is tracking us!"

"Sounds like it. Do you reckon the creature would be bold enough to attack us?"

"No telling. If it's big enough and hungry enough it might do that very thing. But we've got four bullets for just such emergencies as this."

"These loads have been in our guns and pistols so long, and we've been out in such bad weather. What if they miss fire, Ben?"

"Then it's tomahawks and knives against teeth and claws. We're two to one, and I believe we can take care of ourselves. I'd rather have the varmint behind us, screaming like that, than somewhere ahead lying in wait in a treetop where we'll pass under."

The next scream was not more than a hundred yards behind. Looking back quickly, Ben and Jodo could make out nothing. But later, just after they had crossed a little prairie, they turned their heads and caught sight of the panther. And there coulld not be the slightest doubt that the brute was trailing them.

His method of advancing was peculiar. He would run forward several yards, then crouch down for a few moments. Later he would dart forward again.

"Nothing but a bullet will stop the varmint, I'm guessing," Ben remarked. "But we'll wait till he's almost upon us, so as to make sure of him. That is, unless the gun hangs fire."

The two hurried on, but kept looking over their shouldlers every few yards. Soon the beast rushed silently forward and again crouched to the snow, scarcely 20 steps behind them. His next rush would bring him within leaping distance.

But almost at the same moment there burst out on the midnight stillness a long, quavering howl! That, too, was behind. And something told the fugitives that a timber wolf had discovered their trail and that his howl was to summon assistance in the hunt for big game. Promptly several wolves answered him, some near and others far away.

"Two big varmints tracking us!" gasped Jodo.

"Yes. And the nearest one can climb after us when we try to climb out of the others' reach!"

(To be continued.)

## WASHINGTON GRANGE.

### State Session at Walla Walla.

As already announced the 30th annual session of the Washington State grange will be held at Walla Walla, opening at 9:30 a. m. Tuesday, June 4, and closing Friday night. Notice has been given to all delegates that the railroads will not allow one and one-third fare this year, but will charge one and one-half fare; or, in other words, one-half return fare will be charged instead of one-third as formerly. Consequently, when a delegate goes with auto he is allowed 4½ cents a mile for the shortest railroad distance instead of 4 cents as formerly. Tickets should be bought through to Walla Walla and may be purchased from May 30 to June 5. Certificates should be secured from the ticket agents. Return tickets must be purchased as early as June 11. Both the master and an overseer will be elected at this session.

Fraternal delegates expected are: E. P. Marsh, State Federation of Labor; Miss Lucy R. Case, Joint Legislative league; G. E. Elmon, Washington Farmers' union; Ray McKaig, master North Dakota state grange; C. E. Spence, master Oregon state grange; W. W. Deal, Idaho state grange.

### To Test Walla Walla Cattle.

A. W. Holland, assistant agricultural agent for Walla Walla county, reports that he has just received word that the state veterinary inspector, Dr. J. H. Martin, will be in Walla Walla county about June 10 for the purpose of testing cattle for tuberculosis. This work is carried on by the state free of charge to the owner. Send your name and address, with the number of cows you wish to have tested, to the county agent's office. Send your request early, so that arrangements may be made, and also tell your neighbor.

### Farm Lands Change Hands.

In the vicinity of Palouse the following deals have been closed: John Kamm of the Grinnell district, five miles north of Palouse, purchased 115 acres from B. J. Jones at $102.50 an acre; C. Lepouse bought 375 acres from W. W. Davis, west of Grinnell, for $33,600 and B. J. Jones, across the Idaho line, east of Palouse, paid $100 an acre for 160 acres purchased from C. Lepouse.


## A Wordless War Story

This is the war poster book which has been published by the navy department. It is a collection of twenty-four of the greatest war posters which have been drawn by American and foreign artists. It begins with a picture of the sufferings of noncombatants who are escaping on a life raft from a ship sunk by a U-boat. Then come pictures that sound the call to arms like a bugle note; pictures that tell of the need for men and women at home to back up the soldiers on the fighting line; pictures that convey a thrilling sense of the power of American arms on land and sea; pictures that indicate Prussian brutality; and pictures that flaunt the American ideal of unselfish service to humanity, like the battle flag of a charging regiment.

This book of war posters every American will want to own as a remembrance of the great days through which he is now living. As long as the supply lasts a copy will be sent free to all who use this coupon. Write your name and address plainly.

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FREREDIC J. HASKIN, Director,
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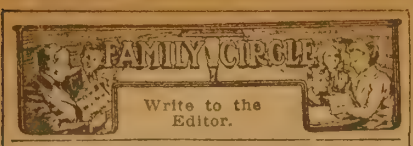
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ALICE W. BARLAND,
Editorial Contributor.

# Save the Ashes

By LISSIE C. FARMER.

It is well to remember, when disposing of the winter's accumulation of ashes from the extra fires, that there are many uses to which they may be put. First, there is their fertilizing value in soils that are heavy, clayey or lack potash. They also help to keep down slugs or other slimy pests which usually do not like to pass through ashes.

Another use for ashes is to make lye from them. This can be done by boring a few small holes in the bottom or a barrel, box or bin and setting it on bricks or blocks of wood over another vessel (not metal) into which the lye may run. Put about two inches of clean straw into the bottom of the barrel and above the straw two pounds of slacked lime. Then fill the barrel with ashes, leaving a funnel-shaped place in the center of the top. Pour boiling water into this hole sufficient to fill it, and when it has all disappeared, add more. In a day or two the lye will begin to run off at the bottom. This lye is useful for making soap, hominy, in certain kinds of dyeing and for various kinds of cleaning. Preparing an ash drain in this way in "the olden times" was called "setting the leach."

Another very practical use for ashes is to make walks about the house, barn and sheds. They can be thrown by bucketfuls in the center along the place where the walk is wanted so that they will naturally slope to the sides, or boards can be placed upright along the edges of the intended walk and the ashes leveled with them.

## Sugar for Home Canners.

The submarine has forced fighting Europe to a very strict sugar ration and compelled America to look the situation squarely in the face. There is only so much sugar, there are certain definite needs, and the problem before us is finding a practical plan of distribution. The food administration has adopted a certificate system to meet the household needs during the coming fruit season, and to guard against temporary shortages that may occur if more vessels are diverted from the Cuban trade.

The consumer is asked to estimate his needs and fill out a certificate which will be furnished him by his grocer. The dealer is required to forward this certificate to the federal food administrator within one week after it is turned in to him.

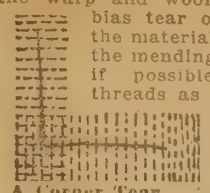
This plan puts the question up to the individual, and the food administration asks the assistance of every householder in bringing about a practical distribution. The success of the plan depends on the good sense and good will of the American citizen. Cooperation, prompt action, and a democratic sense of fair play will prevent a sugar shortage in America during the fruit season.

### Searchlights in War.

Searchlights are playing a very important part in the present warfare. In one instance the Germans on the heights of the Italian front were blinded by the rays of many lights while the Italian engineers were building bridges below, working in the dark.

# Mending a Tear

In mending tears one must consider the position of the tear in regard to the warp and woof. For example, a bias tear or corner tear. If the material is woolen or silk, the mending thread should be, if possible, of the same threads as the material. The running stitches which are used should always follow the weave of the material.


A Corner Tear.

### Name German Shells.

There are about 200 separate and distinct kinds of shells fired from German guns, and each and every one of them has been given at least one nickname by our Tommies. Some of them have been given several.

The biggest kind of high explosive shells, for instance, are known indifferently as "Dirty Dicks," "Jack Johnsons," "Coal Boxes," "Flower-Pots," "Crumps," "Black Peters," or "Whistling Willies."

The smaller kind are "Black Marias" or "Woolly Bears," according to whether the smoke they emit when bursting is black or white with a yellowish tinge.

High-explosive shrapnel and trench-mortar shells are respectively "whizz-bangs" and "pip-squeaks," from their habit of giving only these warnings of their approach. "Archibalds" are anti-aircraft shells.

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# Maltese Boudoir

By WINIFRED WORTH.



Maltese work is very interesting and the accompanying instructions will tell you just how to make the beautiful boudoir cap as illustrated.

Make four yards of Maltese crochet. Loop enough loops on hook to form a flat piece and join, taking 3 loops for lower edge, 2 for upper. Continue until desired size is made. Gather edge by chain until it measures 23 inches. Five rows of lacets and any fancy crochet flower completes cap. Line with silk of delicate shade.

**Maltese Candle Shade.**

Looks very pretty in light shade of pink or blue.

Use 1 ball No. 30 Cordonnet.

Make Maltese lace to required circle of candle shade to be used.

For fringe: 1 dc. into 2 loops of Maltese taken together. 1 ch. 1 dc into next 2 loops taken together, 5 ch.; repeat all along. The long fringe is now made by winding the thread around piece of cardboard about 3 inches wide. Cut threads once, thus producing six-inch lengths. Lay 10 of these together and fold in half. Put hood through hole made by 5 chain and draw through opening loop formed by folding the threads in half. With hook draw ends through loop just made by drawing them through chain. Pull knot up close to work. This completes one tassel of fringe. When tassels have all been put on the shade see that the knots are at even distance from shade proper, then cut entire fringe evenly.

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PERHAPS it's only a couple of friends who drop in for a little chat. Or—it may be a knitting party, an Aid Society meeting or what not. Or—who knows?—perhaps it's a big "party"—music and dancing and Japanese lanterns and all that.

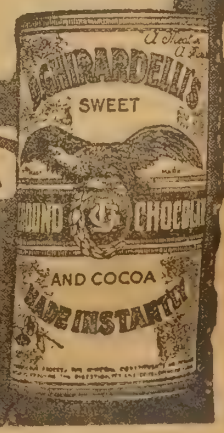
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# Patterns

2466—A smart bathing suit—Cut in four sizes: Small, 32-34; medium, 36-38; large, 40-42; and extra large, 44-46 inches bust measure. Size medium will require 4 1-8 yards of 36-inch material for the blouse and 2 5-8 yards for the under garment. Price, 10 cents.

2467—Girls' dress—Cut in four sizes: 6, 8, 10 and 12 years. Size 8 requires 3 1-4 yards of 44-inch material. Price, 10 cents.

2030—Boys' blouse suit with or without shield, and yoke facing. Cut in four sizes: 3, 4, 5 and 6 years. It requires 2 1-2 yards of 44-inch material for a 3-year size. Price, 10 cents.

2115—Ladies' "cover-all" apron—Cut in four sizes: Small, medium, large and extra large. Size medium will require 5 3-4 yards of 36-inch material. Price, 10 cents.

2320—Girls' dress, with or without jumper—Cut in five sizes: 4, 6, 8, 10 and 12 years. Size 10 requires 2 3-4 yards of 44-inch material for the dress, and 1 3-8 yards for the jumper. Price, 10 cents.

2093—Ladies' dress—Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 5 1-8 yards of 44-inch material for a 36-inch size. Skirt measures 3 yards at its lower edge. Price, 10 cents.

2456—A pretty junior dress. Cut in three sizes: 12, 14 and 16 years. Size 14 will require 5 yards of 36-inch material. Price, 10 cents.

2461—A splendid style for sports or outing. Cut in three sizes: 16, 18 and 20 years. Size 16 requires 6 1-4 yards of 44-inch material. The skirt measures a little over 1 1-2 yards at the foot. Price, 10 cents.

2190—Ladies' one-piece corset cover. Cut in six sizes: 22, 34, 36, 38, 40 and 42 inches bust measure. It requires 1 3-8 yards of 36-inch material for a medium size. Price, 10 cents.

2054—Ladies' house dress. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 5 3-4 yards of 44-inch material for a 36-inch size. The skirt measures about 2 3-4 yards at the foot. Price, 10 cents.

2037-2475—Ladies' suspender costume. Waist, 2037, cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 36 requires 3 yards of 44-inch material. Skirt, 2475, cut in seven sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. Size 26 requires 3 5-8 yards of 36-inch material. The skirt measures about two yards at its lower edge. Two separate patterns, 10 cents for each pattern.

2450—Sun bonnets for ladies and girls. Pattern including both styles is cut in one size—medium for ladies and girls. It requires for No. 1 1 1-2 yards; for No. 2, 1 3-4 yards of 32-inch material. Price, 10 cents.




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## German Potato Bugs.

"The way Germany prepared for a generation for this war was positively uncanny," said a congressman. "Yes, Germany's 40 years of minute war preparation are as uncanny as the story of the potato bugs.

"On an autumn evening a group of Minnesota farmers sat around the fire in the general store and complained of the potato bugs' ravages.

"'The pests ate my whole potato crop in two weeks,' said one farmer.

"'They ate my crop in two days,' said a second farmer, 'and then they roosted on the trees to see if I'd plant more.'

"A drummer for a seed house cleared his throat.

"'Gents,' he said, 'all that's very remarkable. Let me tell you, though, what I saw in our own store. I saw a couple of potato bugs examining the books about a week before planting time to see who had bought seed.'"—Washington Star.

SANITARY CANNING OUTFITS

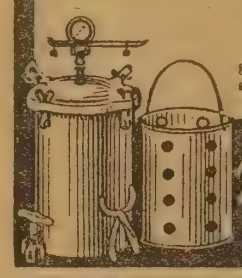
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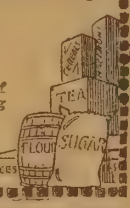
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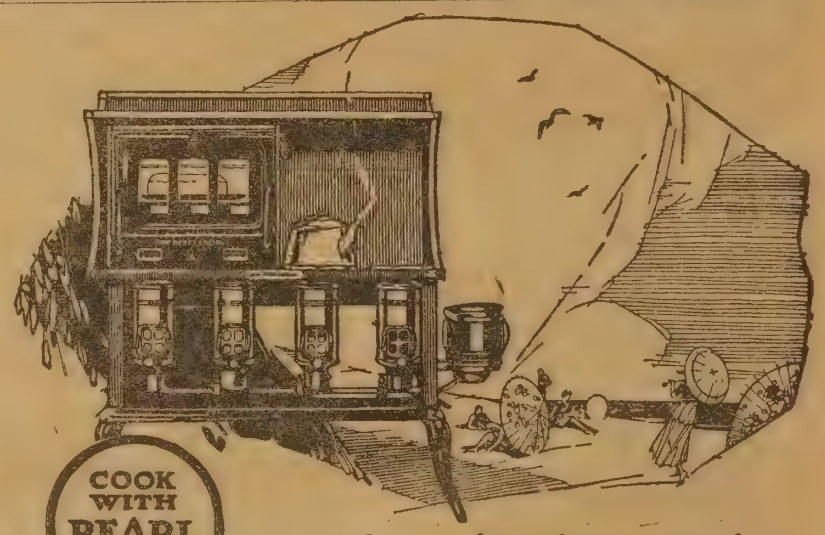
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STANDARD OIL COMPANY
(California)

NEW PERFECTION OIL COOK STOVE

# Handicraft For Boys

By A. Neely Hall

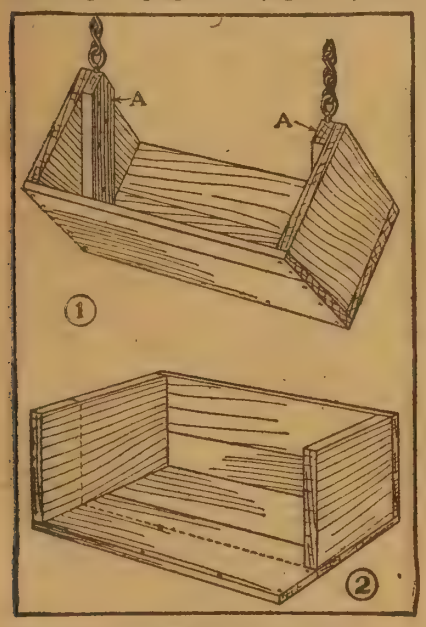
(Copyright by A. Neely Hall.)

## Porch and Window Flower Boxes.

Everybody wants flower boxes for porch and window gardens, and if you can make them neatly there is a splendid opportunity to earn spending money by manufacturing boxes for the neighbors. Demonstrate what you can do by first making a number of boxes for mother.

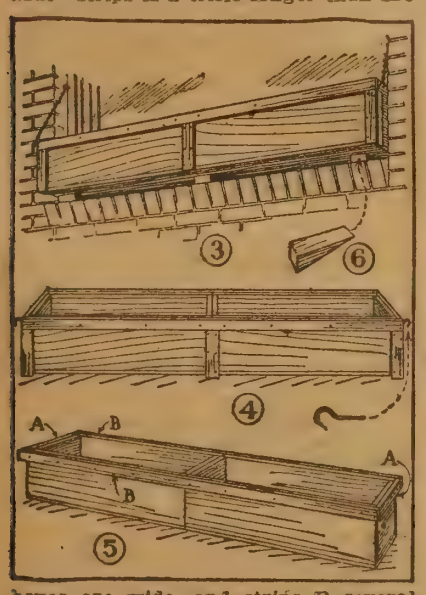
The illustrations show some practical plant receptacles made out of grocery boxes, working material every boy can get. Boxes of medium size will cost not over 10 cents, if your grocer charges you at all, and large ones for 15 cents. Ask the grocer for permission to make your own selection from the box pile, so you can pick out boxes without knotty or split boards.

The hanging box in figure 1 must be made of a box of equal width and depth; if you can not get one of these proportions, take a whole box and saw off enough to make the width and depth the same, as indicated in figure 2. Reenforce the nailing of all boards by driving in additional nails; then cut the hanger uprights A (figure 1) and



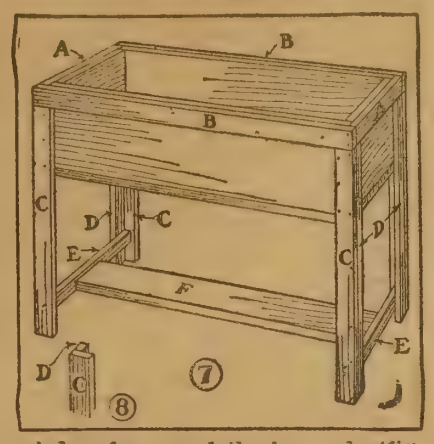

nail them diagonally across the end. The tops of these strips must be trimmed off even with the corners of the box ends. Screw a screw-eye into each upright and connect a 30-inch piece of iron jack-chain to it by which to hang up to box. Screw screwhooks into the porch ceiling to attach the chains to.

Figures 3 and 4 show how to join two grocery boxes end to end to make a long window box. These may be cut down in length so the combined boxes will exactly fit the window opening. Nail the boxes end to end. Then cut strips A and B (figure 5) 1½ inches wide—strips A a trifle longer than the




boxes are wide, and strips B several inches longer than the combined length. Nail strips A to the box ends, even with the top edge, and with a saw trim off their ends even with the box sides. Nail strips B to the sides of the boxes and saw off their ends even with the surfaces of strips A. The vertical strips shown in figures 3 and 4 are of the same widths as strips A and B. They finished off the corners and conceal the joint between the boxes.

If the window sill is wide, the flower box will not require fastening, but if narrow it will be necessory to support the box by chains fastened to screw-hooks screwed into both the




window frame and the box ends (figures 3 and 4). Wedge-shaped blocks will relieve the supporting chains of a considerable portion of the weight of the filled boxes (figures 3 and 6).

The plant stand in figure 7 is made similar to the window box in figure 4, with the corner strips extended for legs, and a shelf fastened between to brace them.

Nail strips A and B in place first, then cut and nail together each pair of corner strips C and D (figures 8), cutting D enough narrower than C to allow for the thickness of C when nailed to it. Twenty-six inches is a good length to make these legs. When you have nailed them to the box corners, fasten the cross strips E between, and cut and fasten the shelf board F between cross strips E.

If the plant box is to be used indoors it must have a metal liner so water will not drain on to the floor. A tinsmith will make a sheetiron box for between fifty and seventy-five cents, according to size.

Paint your flower boxes with at least two coats of paint. After the first coat has dried putty all cracks, joints and nail holes.

## LIMIT MACHINERY.

### Useless Types to be Eliminated.

The council of national defense has undertaken a careful study with a view to determining what varieties and types of agricultural machinery and implements may be eliminated from the markets without working a hardship on the farming industry of the country. The council is of the opinion that competition of various kinds has led to the manufacture of many machines that are not strictly necessary for maximum production and the object in view at the present time is not only to save the manufacturing facilities for vital war purposes, but to save the material that goes into the manufacture of the unnecessary farm machinery.

It is stated that implement manufacturers are cooperating with the council of defense in the movement. The plan is a part of a much larger plan including practically all of the big manufacturing lines such as cloth and clothing, leather, shoes, paint and the like, the idea beinig to eliminate every unnecessary bit of labor and conserve as much material as possible for war purposes.

## Stock on Ranges Increases.

District Forester George H. Cecil of Portland announces that the total number of cattle, horses, sheep and goats authorized to graze on the national forests of Oregon and Washington during the season of 1918 are 202,950 head of cattle and horses and 1,206,800 head of sheep and goats, an increase of 16,810 cattle and horses and 44,200 sheep and goats over the figures for 1917. This increase in cattle is due to increased carrying capacity of the range, while the increase in sheep is made possible by the discovery of new ranges and readjustment of boundaries on the old ranges. Because of war conditions and the heavy demand for meat and wool, extra stock was grazed last year to the extent of 19,478 head of cattle and 29,102 head of sheep over 1916. The increase in cattle authorizations for the last four years has been 70,000 head.

### Tropical Fruits in Venezuela.

All sorts of tropical fruits, such as oranges, limes, bananas, plantains, mangoes, pawpaw, etc., and all sorts of vegetables are grown in Venezuela in sufficient quantities for local market, where they are very cheap, but none is being exported from this district.

## Farm Service War Flag

Here are some of the requests for the farm service war flags:

J. A. HOOK, Clemson college, S. C.—Please sent farm service war flag to the South Carolina experiment station.

IDA M. DENNEY, Huntsville, Wash.—Enclosed find 30 cents for which send me The Washington Farmer one year, and one farm service war flag.

W. F. HILGERT, Huntsville, Wash.—Enclosed find 35 cents to pay for one year's subscription to The Washington Farmer and two war service flags.

M. MIKKELSEN, Waitsburg, Wash.—Enclosed find 55 cents to pay for three years' subscription to The Washington Farmer and one farm service war flag.

MRS. N. T. SNODGRASS, Waitsburg, Wash.—Enclosed find $1.05 for which please send me your combination offer, The Twice-a-Week Spokesman-Review, for one year, and The Washington Farmer for three years, and also send me one of your farm service war flags.

R. W. LEID, Waitsburg, Wash.—Enclosed find $3.05 to pay for a six-months' subscription to the Daily Spokesman-Review (without Sunday) and The Washington Farmer for three years. Please send me one of your farm service war flags, for which I have included five cents extra.

M. ABE, Zillah, Wash.—I enclose here five cents, for which please send me your farm service war flag.

MRS. DAVID FISHER, St. Andrews, Wash.—Enclosed find five cents, for which please send me one farm service war flag containing two stars, my husband and myself both doing our best at production.

MRS. AGNES L. RAITZ, Valley, Wash.—I am enclosing five cents in stamps, for which I would like to have one of your farm service war flags.

MRS. ALLEN M'NALL, Tonasket, Wash.—Enclosed find five cents in stamps, for which please send me farm service war flag.

ARTHUR LIAN, Milltown, Wash.—Enclosed find five cents in stamps, for which send me as per your offer one farm service war flag. There are six members in our family trying to do their bit on this farm.

## Rural Life Conference at Colfax.

A county rural life conference and meeting of all the school directors of Whitman county is to be held at the Colfax high school auditorium Saturday, May 18, under the direction of the state suerintendent of public instruction and the county superintendent of schools.

To the Editor of The Washington Farmer: We truly enjoy your paper, as it stands for fair play. Editorials free from bias—advice in all departments, good and to the point.

AL. S. BIGGS.
Justamere Farm, Port Stanley, Wash.

## Boys and Girls Form Club.

The boys and girls of Castle Rock are active in the formation of food production and conservation clubs this season. Patriotism is the keynote of the organization, as indicated by the names of two clubs that are already formed. One is known as Uncle Sam's Garden club and the other as the Stars and Stripes Stock club. A canning and preserving club is in the process of organization also. The following are the names of the officers of the two clubs just mentioned:

Uncle Sam's Garden club—Willie Bacon, president; Edgar Searls, vice president; Florence Edmunds, secretary; Gordon Dean, treasurer.

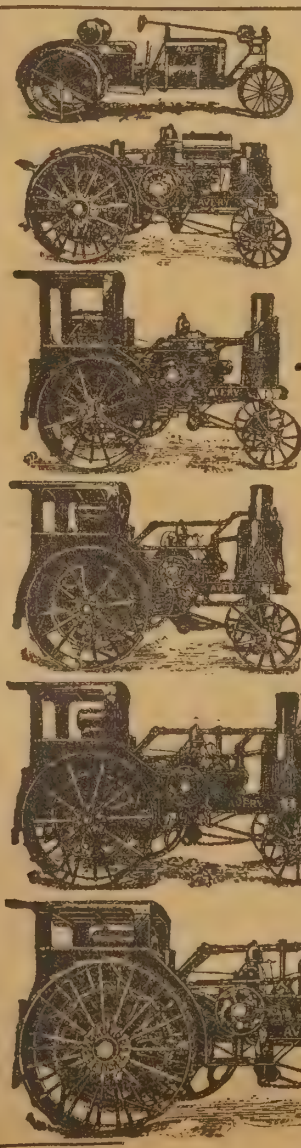
Stars and Stripes Stock club—Byard Mosher, president; vice president, Juanita Dykeman; secretary, Velta Leaming.

## Half of Food Supply.

H. E. Nicolai of Sunnyside, Wash., is growing garden truck for the market, and much of the family supply comes from it. Turnips and rutabagas follow early potatoes and late cabbage after radishes and lettuce. Nearly one-half of the year's supply of food, including beans and potatoes, are raised in the garden. This year Mr. Nicolai has 15 acres of cantaloupes, one-half acre of eggplants, one-half acre of peppers, one-half acre early cabbages for the Seattle and Yakima markets. Radishes, lettuce, peas and sweet corn are planted in succession.

## Chicks by Parcel Post.

The first parcel post shipment of young chicks has just been received at Wenatchee. They came all the way from California and the entire shipment, according to Postmaster Battles, was alive and thriving.

# Avery Tractors

5-10. 8-16. 12-25. 18-36. 25-50. 40-80

## A Size to Fit Every Size Farm

The world needs men. The world needs wheat and other farm products. The war's requirements in the army and ship building have drawn so heavily on laborers that farmers are left without sufficient help to produce the food crops necessary to feed our men in France, our allies and our people at home. What to do is the problem. There is but one solution—

## Use Tractors—Use Averys

No farm too small, none too large but there is an Avery to fit. Six different sizes, from the little 5-10, weighing 2250 pounds, to the big 40-80, weighing 22,000 pounds, which will pull eight to 10 plows.

The Avery uses less fuel and oil than any tractor of like power now on the market. It is the most dependable and easiest operated, and is always ready.

We carry all sizes in stock. Let us send you catalog illustrating and describing the full line, together with Threshers and Power Cultivators. See them at the Pullman demonstration.

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309-315 East Yamhill St.,
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BRANCHES
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3223 First Ave. South
Seattle, Wash.
1312 First Avenue, Spokane, Wash.




Dear Corner Cousins: Though we have all been busy working for our government, selling and buying thrift stamps, sewing for the soldiers, helping the Red Cross and getting busier and busier, yet there have never been so many letters as we have had during the last two months—the last contest—and there have never been so many good ones. It has been so hard for me to decide which were the best. After a great deal of time and study was spent, I have finally awarded the prizes. Imagine Aunt Nellie, at her desk with more than 1300 letters around her in waves and heaps. That has been my work and pleasure.

As I read each letter, how I wished I could know each one of you and talk with you and tell you interesting things to pass the dull moments away. But I do not suppose there are many dull moments on the farm, where many and most of our cousins are. There weren't many when I was a little girl on a farm; there was always something to do, and just when I wanted to go to my favorite spot by the brook, mother wanted me to turn the churn.

Such good letters and so many, and only three prize winners, that I have found it necessary to enlarge the honor roll. Several have asked what the honor roll means. Some letters are very good and yet not quite as good as the three prize winners. If your name appears three times in succession on the honor roll, you receive a special prize.

And what are the prizes, a good many have asked in their letters. I have given cups and saucers, books, beads, bats and balls and the last time I gave thrift stamps.

And will the prizes be given if the letters are written on the subjects I give? The subjects are to help you, but the best letters win, even though they are on some other subject than the one given.

How do I judge the letters? The winners must be well written, with evidences of care, properly spelled, punctuated aright, with good grammatical form and no bad mistakes. I take into consideration whether it is written on one side of the paper or both, whether with pen and ink of pencil, whether carlessly and hurriedly or carefully and with an effort to make it just as good as it can be. I consider the age of those who write; that is the reason why I ask you to put your ages and birthdays on every letter. If you have given it before, put it in again, just after your name.

And then, after I have done all that, I consider what you have said. Is it interesting and well told? Will it please others? That is the secret of good letter writing—to tell things that will interest the person to whom you are writing. And so, while we have fun in writing to our dear Corner, we can learn something in it, too.

When you find your letter printed there, look it over. "Is that the way I spelled those words?" you will say. Not always, for I correct a good many misspelled words. "Is that the way I said that?" "Did I say that?"

Which letter do you like best this week? Pick it out and decide why you like it best. Maybe that will help you write one like it.

And now, dear nieces and nephews, I must not write too much, myself, or I will crowd my little nestlings out, like the unnatural mother bird, and I wouldn't want to do that. Your loving,

AUNT NELLIE.

The new contest will conclude July 1 and the suggested subjects are:

**Helping My Country.**

**What I Saw Yesterday.**

**What I Want to Be.**

The prize winners for the contest just closed are:

**Gladys Mae Plemon, Burbank, Wash.**

**Elsa Mattson, R. 5, Mount Vernon, Wash.**

**Beulah Walker, Cliffs, Wash.**

Special—Ludwig Peterson, R. 3, Olympia, Wash.

**Roll of Honor.**

Emma Monroe, Spokane; Ellen Secrest, Neppell; Irene Clark, Grand Dalles; Ruby Warren, Elma; Wynona Tella, Rockford; Myrtle Lee, Mount Vernon; Helen Calkins, Sunnyside; Edna Peterson, Pomeroy; Selena Deno, Spokane; Hilma Anderson, Olympia; Clara Haida, Puyallup; Evis Erickson, Lynden; Maries Ganguin, Goldendale; Flora Reed, Olympia; Helen Monroe, Spokane; Anna Nymeyer, Lynden; Elva Green, Penawawa; Oscar Nelson, Tumwater; Enna Brune, Iverson Delma Guffin, Warden; Frankie Baldwin, Lacrosse; Ruty Hay, Shelton; Bessie McFarlane, La Center; Ruth Erwin, Prosser; Luella Meeks, Delbrio; Thelma Hilmen, Toledo; Juanita Matson, Pullman; Martha Flock, Hooper; Melvin Hadford, Spokane; Annie Phillips, Wellpinit; David LeRoy, Moose Creek, Ala.; Ellen Hay, Shelton; Virginia Gibson, East Sound.

**A Long Way to School.**

Dear Aunt Nellie: I like to write to the Children's Corner. I go to school, three and one-half miles. I am in the sixth grade. My teacher's name is Mr. Gurnsey. I like him very well. We don't go to school very often, becaues it is too far. Our schoolhouse is named Millcenter. I don't think I will pass into the seventh grade next year. If I do I won't know very much, because I haven't been going very much. There isn't any one writing from Addy, only my sister and I. I went up to Colville Wednesday. We went with our uncle, Lee Dearinger. We went in his automobile. I had a nice time. We live two miles southwest of Addy. We have a telephone. My two other sisters write to two soldiers. The soldiers' names are Jesse Miller, and he is my cousin, and the other one is Elgin Grant. We have been having the whooping cough. I hope the war will end soon. I like to read about it.—Nellie Salvage, Addy, Wash.

**Likes Stories of Adventure.**

Dear Aunt Nellie: As there are not many boys writing to the Corner, I will write and help increase their number. I wish more boys would write. I am 12 years old. My birthday is October 16.

## The Hitchinson Family

Four or more grotesque lifesize figures are painted on a canvas curtain, through which holes are cut where the faces of the figures should be. (See figure 1.) Into these holes the performers put their faces, from the rear



Figure No. 1.

of the curtain, making a comical effect from the front (figure 2). They may thus give any kind of concert or minstrel performance. Some of the figures may be made tall and others short, the persons behind the curtain standing on chairs, or kneeling on the floor, as the



Figure No. 2.

case may require. A showman may introduce the "family" to the audience, giving a comical history and description of each member.

The name "Hitchinson Family" is in imitation of the "Hitchinson Family," a popular band of singers who went around giving concerts from about 1840 to 1860.

I have light brown hair, and have a light complexion. I have been wearing glasses for the last six years, and I don't know how much longer I will have to wear them. I don't like to wear glasses. I went to Everett not long ago to get them changed. I have read quite a number of good books. Among the best are: Rover Boys in the Jungles, Rover Boys in Southern Waters, Rover Boys on the Plains, Deerslayer, Buffalo Bill and His Adventures on the Western Plains, The Jungle Book, Wild West, Peck's Bad Boy With the Circus, Uncle Tom's Cabin, and a number of others. I wonder if any of the Corner cousins have read any of these books. I am reading The Trappers of the Ozarks in the Farmer, now and so far it is very interesting. I like adventure stories best. I have six chickens and a garden. There are 11 pupils in our school. My teacher's name is Miss Hazen. I would like to correspond with Bernard La Pine. Have I a twin?—Victor Anderson, Box 225 Granite Falls, Wash.

**Will Loan Uncle Sam Every Cent.**

Dear Aunt Nellie: My uncle takes the Farmer and I like to read the stories. I have three cats, Kitty, Baby, Streak and Grayman, the cow, one calf named Butterfly, one pig, 80 chickens, 60 baby chicks. We have two horses. Their names are Mert and Dolly. I live a mile and a half away from school. My teacher's name is Miss Grace White. I like her very much. I have three baby bonds and eight thrift stamps. I am going to join the Junior Red Cross. I have three sisters—Clara, Norma and Dorothy. I am 10 years old. I am in the fonrth grade. I live on a four-acre ranch named drytop. I am going to sell papers and lend Uncle Same every cent. My calf is 12 months old. We stopped giving her milk when she was 11 months old. My rabbit's name is Bunny Long Ears.—Kenneth Wallace, R. F. D. No. 1, Zillah, Wash.

**Vacations on Uncle's Farm.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner and I hope it will not be the last. I live in Seattle, but spend my vacations on my uncle's farm near Fall City. I have lots of fun on the farm. I have a white calf and I call her Snowball. She has the same birthday as I have. My uncle has four horses. Their names are Dan, Dolly, Maggie and Bell. They have a car on the farm and we have some fine rides. In Seattle, I have rabbits for pets. We have 27. I have one called Donald and like him best. I have two brothers and one sister. My brothers' names are James and Rowland. James is 9 years old and is in the fourth grade. I am 8 years old and in the third grade. My sister is 4 years old. Her name is Catherine.—Hector Mae Kinnon Davies, 4241 Greenwood Avenue, Seattle, Wash.

**Vesta Writes to Two Cousins.**

My Dearest Aunt Nellie: I have been reading the letters in the Children's Corner and I thought I would like to join. May I? I have light brown hair and blue eyes. I am 4 feet 10 inches tall. I am 12 years old and am in the sixth grade at school. There are 17 pupils in our room. My teacher's name is Miss Louise Bischoff. My birthday is November 24. I live on a farm, four miles from Bickleton. I like the country fine. I have four sisters and one brother. We ride horseback to school. It is spring here now. There are many kinds of flowers. I am writing to two cousins. Their names are Eva Bond and Gertrude Ruchest. I like to write to them very much. If some of the cousins write to me I sure will answer. Well, I must close now, hoping some of the cousin will write to me.—Vesta Andersen, Bickleton, Wash.

**A Calf Named Liberty Bond.**

Dear Aunt Nellie: This is the first time I have written to the Childrens' Corner. I am 10 years old and my birthday is September 12. We have three pigs, 19 chickens, three horses, one colt and four dogs, and their names are Rags, Queen, Montie and Romie, and we have five pigeons, five kittens and a mother cat. I have one sister and one brother. My sister is 14 years old and her name is Beatrice, and my brother's name is Carmen Holland, and he is four years old. Our horses' names are Bill, Frank Holams and Nellie. We live on a 45-acre farm. My sister and I have one mile to go to school. We have a calf named Liberty Bond. We have a six-room house.—Viola Townsend, R. 1, Box 27, Medical Lake, Wash.

**Ponto Is a Pet Dog.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I will be 12 years old August 14. Have I a twin? If so, I wish they would write to me. I read the letters the first thing after I get home from school. I think they are fine. I have two brothers and two sisters. We have a pet dog named Ponto. There are two mills by our house; one is a shingle mill and the other is a sawmill. I am in the fifth grade at school and my teacher's name is Miss Violet Shellhammer. I had a different teacher, but she went away Christmas. Her name was Miss Paulsen. I have joined the Junior Red Cross. We have a cow and two calves; one calf is mine. We have 16 chickens. I will write again. —Eva West, Lyman, Wash.

**Who Is Edith's Twin?**

Dear Aunt Nellie: I am 11 years old. My birthday is July 30. My hair is brown and my eyes are blue, my complexion is fair. I have one white cat. His name is Snowball. I have one dog, his name is Bobby, and one little calf. It is red and white. I ride a horse to school. Her name is Star. I have three and one-half miles to go to school. I am in the fourth grade. My teacher's name is Miss Beaver. I like her. There are six children in our class. There are 28 in all the room. There are two rooms. Have I a twin? I have four sisters and no brothers. Theirs names are Sylvia, Goldie, Blanche, Ethel and myself.—Edith Mildren Tovis, Turk, Wash.

**Schoolhouse Is Near the River.**

Dear Aunt Nellie: This is the first time I have ever written to the Children's Corner. I walk about a mile and a half to school. Our school is by the river. There are 14 children going to our school. I am in the sixth grade. My teacher's name is Miss Mary Pettijohn. I have two brothers and two sisters. My sisters' names are Frankie and Emma, and my brothers names are John and Harold. We have 24 horses and 12 cows. We have 36 hogs. We have one dog and one cat. Our dog's name is Tango and our cat's name is Tab. I was 13 years old April 25. If I have any twin I would be very glad to hear from them.—Jennie Hoy, Prescott, Wash.

**Marie Likes to Knit.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner, and hope it will not be the last. I am 11 years old and in the fifth grade. I live on a 30-acre farm. My teacher's name is Miss Martha Hagen. She is a fine teacher. I belong to the Red Cross. I have two brothers. Their names are Roy and Lyle. Lyle is the oldest. My birthday is November 13. I have knitted four washcloths and now I am knitting socks. I like to knit. My mother has knitted eight pairs of socks. I have bought three war savings stamps.—Marie Christenson, R. F. D. 2, Anacortes, Wash.

**Charlotte's First Corner Letter.**

Dear Aunt Nellie: This is the first time I have ever written to the Children's Corner. I will be 11 years old the 2d of April. Have I a twin? If I have I would be glad to hear from her. I live on a farm five miles west of Prescott and 18 miles north of Walla Walla. There are 800 acres in our farm. I have four horses, one cow, one little calf, one dog and three cats. I walk a half mile to school. I am in the sixth grade. My teacher's name is Miss Mary Petijohn. There are 14 children in our school. Our schoolhouse is by the river.—Charlotte Utter, Prescott, Wash.

**Brother Is in the War.**

Dear Aunt Nellie: This is the first time I have written to the Children's corner. I was 11 August 22 and I am in the fifth grade. I have three sisters and five brothers. Their names are Emma, Gloretta and Dora, and my brothers' names are Elmer, Oscar, Harvey, Edmond and Marion. Two of my sisters are married. I have one brother in the war whose name is Elmer. I will give a few riddles for my cousins to guess: When is it easy to read in the woods? Why are the western prairies flat? Which is the largest room in the world? Have I a twin?—Emil White, Gertrude, Wash.

**Topsy Is Roberta's Pony.**

Dear Aunt Nellie: I am 8 years old and my birthday is February 5. I have brown hair and brown eyes. Have I a twin? I go to school at district 68 and have not missed a day nor been tardy this year. My teacher's name is Miss Nellie Brown and I am in the third grade. I have a kitten named Betty and a dog named Shep. My pony's name is Topsy. We have 150 chickens and get from 80 to 90 eggs a day. I have two sisters and one brother. My sisters' names are Myrtle and Mary and my brother's is Byron.—Roberta Keith, Colfax, Wash., Route 5.

**Iris Is Seven Years Old.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I like to read the letters very much. I am in the second grade. We have a mama pig and 14 little pigs. There are 31 children in my room. I have two brothers and one sister. My brother's names are Ralph and Acel. My sister's name is May. My sister was operated upon three weeks ago for appendicitis. I will write again. I am 7 years old.—Iris Bellingar, Ferndale, Wash.

**Two Sisters, Judith and Minnie.**

Dear Aunt Nellie: I am 11 years old. My birthday is on February 28. I am in the fourth grade in school. My teacher's name is Miss Anderson. I love to go to school. There are 38 pu-

DAISY FLY KILLER placed anywhere, attracts and kills all flies. Neat, clean, ornamental, convenient, cheap. Lasts all season. Made of metal, can't spill or tip over; will not soil or injure anything. Guaranteed effective. Sold by dealers, or 6 sent by express prepaid for $1.




HAROLD SOMERS, 150 DeKalb Ave., Brooklyn, N. Y.



Cuticura For Baby's Itchy Skin

All druggists; Soap 25, Ointment 25 and 50, Talcum 25. Sample each free of "Cuticura, Dept. F, Boston."

pils in our school. We have four cows. Their names are Bessie, Topsie, Beauty and Susie. We have three heifers. Their names are Daisy, Bell and Queen. I have two sisters. Their names are Judith and Minnie. Judith is 3 years old and Minnie is 9 years old. Have I a twin? If so, have them write to me. —Geziena Gelms, R. F. D. 2, Box 71, Blaine, Wash.

**Would Rather Climb Trees.**

Dearest Aunt Nellie: My father has taken the Farmer for a long time and I thought I would like to join the Corner. May I? I will now tell you what I look like. I have light brown hair and dark blue eyes. I have lots of freckles and I am sunburnt, for I am out in the sun very much. I am 5 feet 1 inch tall and I weigh about 83 pounds. I live on a farm and like it very much. I would not exchange with any city girl. I am 12 years old and am in the sixth grade. My birthday is March 16. Our school will end soon. I certainly am glad, for I hate to go to school. I would much rather stay out and wade in brooks or climb trees. I have three sisters and four brothers, so that makes quite a large family, doesn't it? I was writing to two cousins. Their names are Gertrude Ruchest and Mae Nightengale, but Gertrude did not answer my last letter. I do not know why she doesn't. I think they are very nice girls and I like to write to them. My nickname is Bobby, because I have bobbed hair. I think that is a cute nickname, don't you. I will write again. I wish some of the cousins would write to me, for I should certainly answer their letters. Good night, with a kiss for you and all of the cousins.—Elva J. Nelson, Bickleton, Wash.

**Brother's on a Big Battleship.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner and I enjoy reading the letters. Some of them are so interesting. I had a fine time Easter Sunday. I colored eggs and put rabbits on them. Have I a twin? If so I wish she would write. I was 13 years old April 2. I go to school in Gardena. I used to live in Marengo, Wash., before I came out here. I know a girl that writes to the Children's Corner and she goes to the Lantz school. Her name is Alice Clinesmith. I have five rabbits, and I have one sister and one brother. My sister's name is Maudest and my brother's name is Henry Priddy and my name is Eva Priddy. My brother is in the navyyard on the biggest battleship afloat. Its name is Leviathan. We have a five-acre farm, but papa is renting more land. I have three birds. Their names are Fannie, Sandie and Dickie. They sing all the time. I love birds, horses and rabbits.—Eva Priddy, Touchet, Wash, Route 2, Box 23.

**Live Up to Hoover's Rules.**

Dear Aunt Nellie: I am 10 years old and in the fourth grade. My teacher's name is Miss Bloomquist. We have about 26 scholars in our room. We like our teacher fine. We walk about a mile and a quarter to school. We have a Red Cross organized in school and we are trying hard to help our country by gathering moss, sewing and buying bonds. We all think by doing all we can for the U. S. A. soldiers it will soon help win the war. We also signed Mr. Hoover's pledge and think they are all right. I have two brothers and three sisters. My oldest brother's name is John. He is in the army down in Texas. My second brother, Harold, helps my father; and my sisters' names are Lillian, Gertrude and Harriet. We live on 20 acres. We have three cows, one horse, 30 chickens, a dog and three cats. Have I a twin? I was born on January 21.—George Earhart, Box 131, R. F. D. 1, Poulsbo, Wash.

**Band Expects New Uniforms.**

Dear Aunt Nellie: I have received my prize and your kind letter. I thank you for the prize. I also appreciate your kind invitation to write again, so I am going to tell you what the Liberty school band is doing since I wrote you before. We gave a program and box social for the benefit of the band. The proceeds netted $46.55. We have sent out an order and expect to have new uniforms soon. The other night the band gave a surprise serenade to Clarence Goden, an uncle of one of our band members. He left for the war. We all feel sorry for the sacrifice of our splendid men and hope the cruel war will soon be over. Our school will turn out in a body Saturday to do road work, our wages to be used to buy thrift stamps.—Leland Guffin, age 13, Warden, Wash.

**No Wry Faces About Rye Bread.**

Dear Aunt Nellie: Your little 11-year-old Sunshine is writing once again. I helped work the road yesterday and earned $2. I am going to spend it for thrift stamps, and that is the way I am going to help lick the kaiser. We are Hooverizing, too. Papa brought home some rye bread. He said we need not make wry faces about it; let the kaiser do that when he has to deal with our well-fed Sammies. We are making the cows, hens and the garden help us Hooverize. From the cows we use milk and cottage cheese; the hens furnish eggs, which we boil to save lard. We have green onions from our garden and will soon have asparagus and other garden stuff.—Delma Guffin, Warden, Wash.

**Many Sweaters Made in This Home.**

Dear Aunt Nellie: I hope this will not be the last time I write to the Corner. I am 12 years old and will be 13 April 3. I have knit four sweaters and three pairs of wristlets and have crocheted two yokes. Twenty-six sweaters have been knitted here at our home. My sister and I have a pony. She is a chestnut sorrel with a white face. She is the finest pony in the country. She threw me once, but it did not hurt me any. We have six mules and quite a number of cows and one dog named Jack. He sure is a nice dog. We live on a 320-acre farm. I am in the seventh grade this year. There are only five pupils, three girls and two boys. I like to read the letters very much. I hope all the cousins are well.—Mary Gustin, R. F. D. 1, box 12, Beebe, Wash.

**Milk the Cow for Grandfather.**

Dear Aunt Nellie: We take the Farmer and I always like to read the Children's Corner. This is my first letter. I am 10 years of age. My birthday is August 2. Is there any one of the children my age? If there is I would be glad to hear from them. I live on a farm and have four sisters and four brothers. My oldest brother is 15 and the baby is one year old. He is just starting to walk now. He is very pretty. We have three miles to go to school. The name of the school is Deer Creek. When the weather was bad we drove with a team of mules, but now when the roads are good we walk. The people around here have almost all their crop in. My sister and I have to milk a cow. It belongs to my grandfather. Each one of us milks her every week and we get 30 cents a week. His hands are all crippled up from rheumatism so he can't milk. We have two horses and two mules and four cows and one calf, about 40 chickens, one dog, three cats, two rabbits and one pigeon. A chicken hawk took the mate to this one. I will write some other time.—Freda Daubel, R. F. D. 1, Colbert, Wash.

**Has Knitted Seven Articles.**

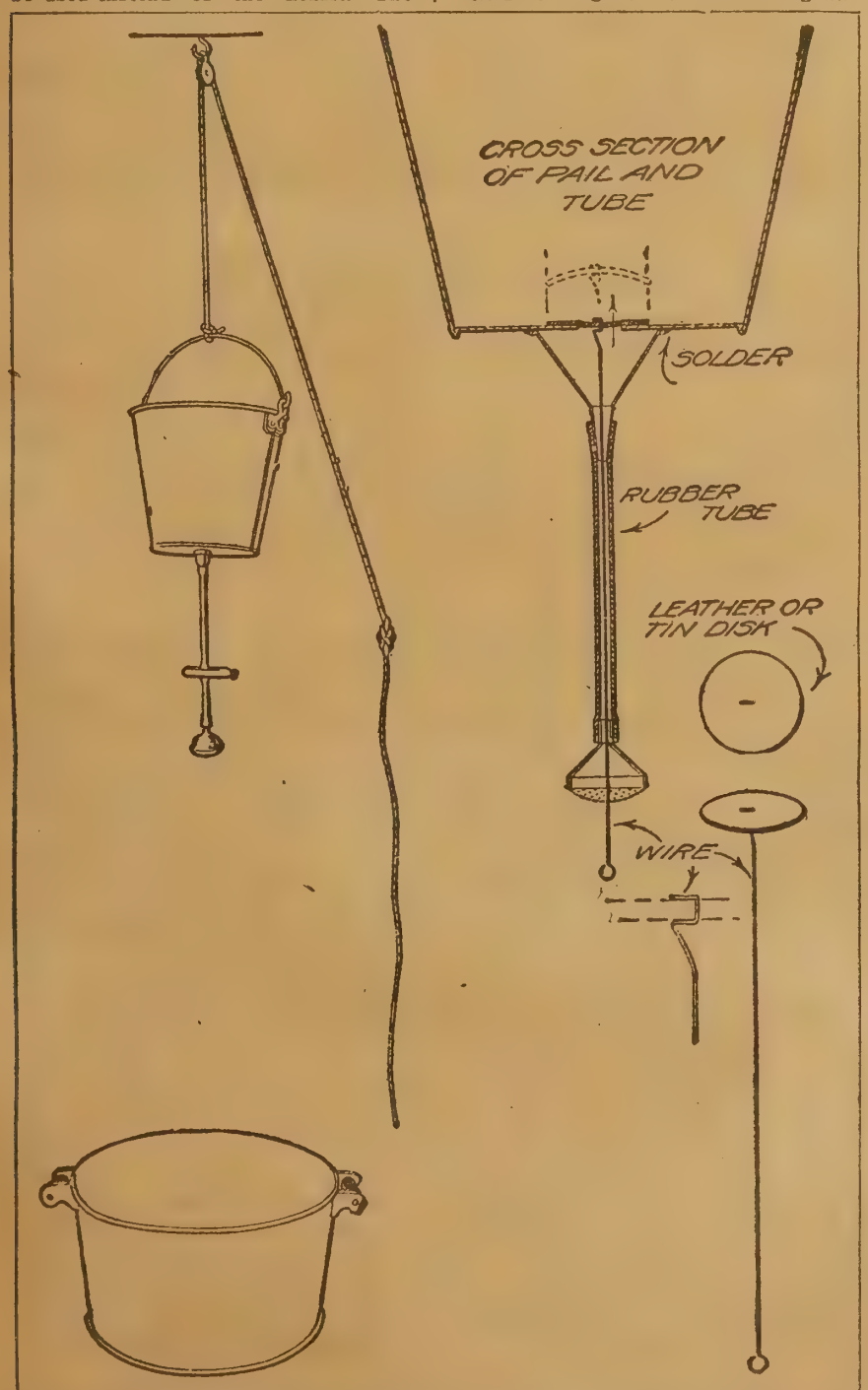
Dear Aunt Nellie: This is the first time I have written to the Corner. I am 11 years old and in the fifth grade. My birthday is March 30. Have I a twin? I have a very good teacher. Her name is Miss Irene Malone. I have had her twice for a teacher. I go to the Colby school. I have joined the Red Cross and have knitted seven things for the Red Cross, four pairs of socks and three pairs of wristlets. I have not missed one day of school this year. I have one brother and no sister. Brother's name is Seval. I am writing this in school. There are four girls writing to you. I have one war saving stamp and six thrift stamps. We have 400 little chickens. There are 21 children in my room. There are four rooms.—Sigen Eastgard, Colby, Wash.

Address all letters to Aunt Nellie, care of the Washington Farmer, Spokane, Wash.

# Here Is Device for Shower Bath

The shower bath is especially useful in homes where there are children, says Farmers' Bulletin No. 927.

A hole is cut in the bottom of a four-gallon bucket and a piece of pipe two inches long soldered in the opening. Rubber tubing four to six feet long is attached to the pipe and a nozzle is fitted on the end of the rubber tubing. A sprinkler from a watering can may be used instead of the nozzle. The tubing serves as a stopcock to cut off the water as desired. The shower can be better regulated by using a device such as is shown in the illustration. The end of a piece of No. 12 or 14 wire is fastened to a disk of leather or tin, or a cap of a tin can, by making a hole in the material used, running the wire through and looping the end. This disk is placed over the hole in the bottom of the bucket and the attached wire extends through the rubber tubing and




bucket can be raised or lowered to suit the convenience of the person taking the bath by a rope fastened to the handle of the bucket and run through a pulley which is fastened with a staple to a joist in the ceiling. The end of the rope is looped over a hook, which is driven securely into the window or door facing, or into the studding in the wall.

A clothespin closed over the rubber the nozzle. The shower can be regulated by the disk being raised and lowered by means of the wire. The weight of the water in the bucket on the disk will form a sufficient seal when no flow is desired.

A large tub is placed under the shower, in which the bather stands. The tub and bucket are more attractive if given two coats of white paint and one coat of white enamel.

# The Real Bo-Peep

Most of us can repeat the poem about Little Bo-Peep. It is one of our favorites. But how many of us know that there was once a real Little Bo-Peep? There was.

Little Bo-Peep had charge of a flock of several hundred sheep, and while she was tending them one day she grew very tired and fell soundly to sleep under a shady hawthorn bush. In the meantime, as is natural for sheep to do, they wandered off to a neighboring field. Now this very field into which they strayed was owned by an enemy of Bo-Peep's master and the shepherd there cruelly cut off each one of the sheep's tails.

Refreshed from her nap, Bo-Peep awoke and missed her flock. She went in search of them and soon spied them coming toward her. Rejoiced, she went to meet them when to her horror she saw they were minus their tails.

Now you know that every shepherd girl has a sweetheart, and Bo-Peep was no exception to this rule. She told him her troubles and he saw to it that the enemy gave her 40 sound and whole sheep for her maimed ones.

The story soon spread across the country, and some poet wrote the thing in the popular way it has come down to us. In those days fashionable ladies sung the words to the music of the spinet, and even now somewhat corrected, we sing them to the piano. Here is the poem:

Little Bo-Peep
Lost her sheep
And didn't know where to find them.
Let them alone
And they will come home,
Dragging their tails behind them.

So little Bo-Peep
A watch did keep,
Nor troubled herself to find them;
And they all came back,
But Alas, and alack!
They had left their tails behind them!

Then she sighed and wept,
And at last she slept,
And dreamt that she heard them a'bleating;
But when she awoke
She found it a joke—
For again they were a-fleeting.

Then her true love took
His staff and crook
And traveled abroad to find them;
And she saw them soon
By the light of the moon,
Dragging their tails behind them!


**100—DISPERSAL SALE—100**

**GLEN TANA REGISTERED JERSEYS**

and

**150—Grade Jerseys and Holsteins—150**

At Glen Tana Ranch, Adjoining Spokane Country Club, 9 Miles North of Spokane, June 5 and 6.

**Registered Stock Sale June 5**

**Grade Jerseys and Holsteins June 6**

Among some of the cows that will be offered is:

Eminents Jimps Owl, daughter of Princess Jimps Eminent; Class AA; producing 359.15 fat, 8492.1 milk; 2 yrs. 11 mos.

First reentry. (Test started May 14, 1917, and up to May 1 has given 16,372.08 lbs. milk, which will easily go 4¼%, and is giving 25 to 30 lbs. milk now, April 10.) How is this for a 4-year-old?

We have many Jersey heifers and bulls from Register of Merit dams that will enable you to form an idea of the quality of stock offered in this sale.

KEEP THE DATE AND PLACE IN MIND. Write for Catalogue.

**T. S. GRIFFITH, 905 Main Ave, Spokane, Wash.**

PROP. GLEN TANA STOCK FARM

# News for Breeders

## Pay for Themselves in a Year.

Last November at the Pacific International Holstein sale John Farr of Warren, Ore., purchased Senna J. 2nd's Paul De Kol, paying $525 for her. She was one of William Bishop's foundation cows and has two daughters that each have A. R. O. records of over 25 pounds of fat or over 31 pounds of 80 per cent butter in seven days. In the short month of February the cow produced 2325 pounds of milk testing 3.6 or 83.7 pounds of fat, equal to 104.6 pounds of 80 per cent butter. Oregon Darkness, purchased from P. A. Frakes at the same sale for $225, produced 1891 pounds of milk, testing 4.2 or 79.4 pounds of fat, equal to 99 pounds of butter. Mr. Farr has since bought from Mr. Frakes Oregon Wartina De Kol for $600. She is a daughter and the other Frakes cow a granddaughter of Mr. Frakes' once famous bull, Oregon Lundy de Kol. She produced 2170 pounds of milk, with a test of 4 per cent, making 86.8 pounds of fat, or 108.5 pounds of butter. These records are all made under the supervision of the Warren Cow Testing association.

The first cow referred to dropped a bull calf that Mr Farr sold for $200. The others have each dropped heifer calves for which he would not take $200. D. C. Howard, county agriculturist, who helped Mr. Farr select the cows, presents the figures in about this fashion: The cows averaged 83.3 pounds of fat for February, which was selling at 50 cents a pound, or $41.50 each. But they produced an average of 2100 pounds of milk, which was selling at $3 a hundred or $60 each. At this rate they will pay for themselves in a year. And what, asks Mr. Howard, would scrub cows do? H. A.

## Pure-Bred Sales.

Carnation Stock farms Holsteins are going into many northwestern communities. Recent reported sales include: Forward Prince Segis Lad No. 203036, sold to Thomas Steen of Hamilton, Wash.; Korndyke Segis Klaver No. 207365, sold to Lankhaar Brothers, Everson, Wash.; Verbelle Segis No. 205853, sold to C. D. Young, Chehalis; Governor Tsussie Colantha No. 208024, sold to Henry Anderson, Ferndale; Clothilde Palmyra Canary No. 216424, sold to Piet Bergsma, Ferndale; Mutual Clothide Boelyn Gem 2d No. 292544, sold to Piet Bergsma; Nora Mechthilde Canary No. 292549, sold to Piet Bergsma.

## College Secures Fine Bull.

Professor George Severance reports that the State College of Washington has secured the loan of a Holstein bull valued at $6000 for a period of three years. The animal is owned by J. H. Hulbert of Seattle, and on account of being unable to use him in his herd without inbreeding, he has loaned him to the college.

## Holstein Dispersal Sale.

The Moorehead and Hobson herd of Holsteins at Outlook, Wash., will be entirely dispersed on May 28. One cow has an official record of over 29 ponuds of butter in seven days, another over 28 pounds and heifers from these and other A. R. O. cows, as well as the cows themselves, are in the sale. The two herd bulls are richly bred, both having world's record ancestors. The farm is four miles from Granger, Wash., which is reached by early trains from Yakima, on both roads, and these will be met by autos that will take prospective buyers to the Moorehead farm. H. A.

## Berkshires to Canada.

As far as is known, the first shipment of registered Berkshires to go into British Columbia in recent years from the United States went out a short time ago from Winona ranch, Grants Pass, Oregon, to the University of British Columbia, Vancouver, B. C., Canada. It consisted of two fine daughters of Laurel Champion, one out of the English blood brood sow, Berryton Belle 31st, and the other out of Master's Lady Premier, senior champion sow of the 1914 Oregon State fair.

### Ornamental Trees.

As ornamental trees the Japanese and Chinese persimmons are entitled to high rank. When the trees are in full leaf they are handsome without other adornment. The trees loaded with orange and orange-red fruits are among the most striking objects in the garden. All thrive in California, and not elsewhere except in some southern states.

# Breeders' Department

## SHORTHORN CATTLE

### Firlawn Shorthorn Farm

UNION, ORE.

We offer a young herd bull (registered), ready for service in four months, and 7 yearling heifers, all of imported Scotch blood. Bull and heifers unrelated. Prices reasonable. Write us and come to the Union Stock Show.

SHERMAN & HUTCHINSON, Union, Ore.

### Shorthorn Cattle

Registered bulls and heifers of breeding age for sale. Some from extra heavy milking dams.

A. D. DUNN. Wapato, Wash.

### LELAND BROTHERS

Breeders of top registered Shorthorn cattle. Correspondence solicited.

WENDELL, Idaho.

REGISTERED SHORTHORN COWS.

Young bulls and heifers, sired by Scotch bulls; liberal terms.

CALDWELL CATTLE CO., Caldwell, Idaho.

## HEREFORD CATTLE

### Highland Stock Farm

offers for sale Hereford bulls, 1 or 2 years old. One or a carload.

PLATT BROS. Genesee, Idaho.

## HOLSTEIN CATTLE

### 365-DAY HOLSTEINS

24,667 lbs. milk—1026 lbs. butter—is the s. o. advance registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.

THE HERD WITH YEARLY RECORDS.

WESTERNWOLD RANCH, Prineville, Ore.

### REGISTERED HOLSTEINS

Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.

H. R. BOOMER, New Plymouth, Idaho.

### HOLSTEINS

Well-bred young bulls for sale.

THOS. CARMICHAEL, Gaston, Ore.

### ROSE CITY HERD

Yeksa, Gov. of the Chene, Sequel and May Rose strains. More prizes at Oregon state fair, 1916 and 1917, than any other exhibitor for number of cattle shown. A few choice animals of both sexes now offered.

W. A. GOODIN, Cornelius, Oregon.

### Registered Guernsey Bulls

From heavy producing cows, most of them with A. R. records, among them 402 lbs. fat (472 lbs. 85 per cent butter) and 392 lbs. fat (461 lbs. butter), both with first calf. Good type, well grown. Prices reasonable.

CHICONA FARM,

A. L. GILE, Prop. Chinook, Wash.

## AYRSHIRE CATTLE

### Edgewater Farm

Government accredited herd, headed by Peter Pan 63d. Bull calves available.

ELBERT M. CHANDLER, Burbank, Wash.

## POLAND CHINA SWINE

### LOCUST HILL HERD

Big type and medium Poland-Chinas. Bred gilts and spring pigs of both strains, unrelated. Sixteen years a breeder of Poland-Chinas in Oregon.

A. L. SWAGGART, Athena, Ore.

### Big Type Poland Chinas

Peter Mouw and John B. Lawson strains. Young boars and bred or open gilts. Good individuals.

CLIFFORD RIGGS, Touchet, Wash.

## DUROC-JERSEY SWINE

### IOKA FARM DUROCS

HOME OF GOLDEN ROD.

Bred gilts and weanling pigs for sale.

A. N. Doerfler, Mgr. Doerfler Bros., Silverton, Ore.

DUROCS.

Boars and open or bred gilts of excellent breeding.

E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE. Yakima, Wash.

## HAMPSHIRE SWINE

REGISTERED HAMPSHIRE HOGS.

Growthy and vigorous, great rustlers. Pigs from January and February litters, also other ages. Correspondence invited.

TUTTLE BROS., Asotin, Wash.

## POULTRY

### R. I. Reds and Whites—Both Combs

Eggs from all pens, in either variety, $2 per 15 eggs, $3 per 30 and $5 per 100 eggs. Mammoth Toulouse geese eggs, 50c each. Mammoth Bronze turkey egs, 10 for $2.75, 20 for $5. Belgian hares and Flemish Giant rabbits, $5 per pair.

Highland Fruit and Poultry Ranch,
J. Nonnenmacher, R. F. D. 3, Yakima, Wash.

## PERCHERON HORSES

### FOR SALE

Registered Percheron Stallions
Prize Winners

Two coming four years, five coming three years, eight coming two years and seven coming one year. Also some yearling fillies. Sire and dams are all imported prizewinners and weight over one ton. I am overstocked and will sell if price and terms will do it. Write or call

P. A. SORENSON,

Meridian, Idaho. Phone 10R1,

five miles south of Beatty station. Also some very choice registered Shorthorn yearling bulls, heifers and springers.



### White, Buff and Blue Orpingtons

(Capt. De Bathe Strain.)

Speckled Sussex and Anconas. All single comb. Aldrich strain Orpingtons, Sheppard Anconas. My birds took first prizes at all leading shows of Pacific Coast. Prices for stock, eggs and chicks reasonable. All from best laying birds. Finest lot of cockerels I've ever raised. A few White Holland and bronze turkey toms for sale.

IRA N. DELINE.

Olympia, Wash.

## MISSOURI and KENTUCKY JACKS

STOCKTON, CAL. P. O. Box 679.
JAMESPORT, Missouri.
LOS ANGELES, CAL. P. O. Box 1117.

SPOKANE, WASH.
W1723 Fourth Ave. Phone Main 1647.

### H. B. THORNBERRY

Dealer in

REGISTERED AND PEDIGREED JACKS, JENNETS, PERCHERON AND SHIRE STALLIONS AND GAITED KENTUCKY SADDLE HORSES

Largest Importer in the United States.

## COMPLETE DISPERSION SALE

### Registered Guernsey Cattle

### Wednesday, June 26, 1918

I will sell at public auction Wednesday, June 26, at my home near Satsop, Wash., my entire herd of Registered Guernsey cattle, together with my entire herd of grade Guernsey cows.

Expected military duty compels me to do this, and I desire to be ready when the call comes.

The sale will be made without reserve, as the entire holdings must go.

The blood lines of **KING OF THE MAY** and **GLENWOOD'S MAIN STAY** are the chief factors in this herd.

**50 HEAD OF REGISTERED FEMALES** will be in the offering and two herd bulls and three young bulls.

CATALOG READY ABOUT THE LAST WEEK IN MAY
Write for one to C. D. Minton, Sales Manager, Portland, Oregon,

702 Spalding Building

### E. R. BRADY, Owner

GEO. A. GUE, Auctioneer. C. D. MINTON, Sales Manager.

## SHORTHORN CATTLE

**Herd Bulls**

Imported Doune Radiance No. 609412
and
Gainford Perfection No. 442173.

**Hercules Shorthorns**

We can supply you with choice, well grown bulls and females of breeding age. Your inspection of our herd is invited. Visitors always welcome.

**Day & Rothrock Company**

205 Exchange Bank Bldg. Spokane, Wash.

## JERSEY CATTLE

# Working Jerseys

## Complete Dispersal Sale

**TUESDAY, JUNE 11, 1918.**

A herd that has made good at the pail and churn. Must be dispersed on account of my advancing years, ill health, and the present scarcity of labor. Rich in the blood of Golden Glow's Chief, Oregon Exile, St. Lambert, and other great producing strains.

The offering includes the entire herd of cows in milk, young stock of both sexes and herd bull. All registered Jerseys. 30 head, besides young calves that will be born before sales day.

The sale will be held on my farm, four miles south of Salem. Catalog will be issued; send request to E. A. Rhoten, Sales Manager, Salem, Ore., and one will be mailed.

## C. H. CANNON

*Turner, Oregon*

COL. J. W. HUGHES, COL. W. F. WRIGHT, Auctioneers.

In answering advertisements please mention this paper.

## HOLSTEIN CATTLE

## Complete Dispersal Sale

# MOORHEAD & HOBSON HOLSTEINS

## Tuesday, May 28, 11 A. M.

At the **Moorhead Farm,** 2½ miles north and west of Outlook and 4½ miles from Granger, Wash. N. P. train leaves Yakima at 8 a. m. and O.-W. train leaves at 9 a. m. Autos will meet both trains at Granger on morning of the sale.

This is a complete dispersal of one of the **Greatest Holstein Herds** in the west. **Seventy head of Registered Holsteins,** consisting of cows, calves and bulls, showing official records from 19 to 34 pounds of butter in seven days. They are in fine condition, show cattle of the highest merit and represent the best of breeding.

The herd was established six years ago from the best breeding of the H. C. Davis and E. B. Marks herds. The increase is from sires of world's record breeding.

**Model Annie Segis De Kol,** the senior herd sire, is a grandson of the great King Segis and by a sire out of a world's record cow. His two nearest dams average 31.30 pounds butter in seven days, both having produced over 30 pounds.

**Sir Chimacum Wayne Cornucopia,** the junior herd sire, is a son of the world's record milk cow, Lutske Vale Cornucopia, with over 33,000 pounds milk and 1000 pounds butter in a year. His sire's dam, Chimacum Wayne Boone, has a record of 33.69 pounds of butter in seven days, and his sire's second dam, Margie Newman, at one time held a world's milk record and has world record milk and butter daughters, sons and granddaughters.

**Vesa Duchess** has a record of 29.94 pounds of butter in seven days. She and two of her heifer calves will be sold. **Malteda Mercedes** has a junior 3-year-old record of 28.35 pounds. She and three daughters are in the sale. A 28-pound cow and daughters with official records are among the offerings in this remarkable sale.

These are the kind of cows that make the dairy one of the most profitable departments of the farm. It has taken years to obtain the best. Now the opportunity awaits you. Remember the high prices of grain and hay will not always prevail. They will go down and find the bottom mark. Good cattle are becoming scarce and both beef and dairy products must necessarily remain high. Don't miss this opportunity. Come to Yakima one night and take the early train to Granger, as stated above.

**Liberal Terms** will be given to responsible parties. Arrangements should be made in advance of the sale.

## Moorhead & Hobson

**Owners. Outlook, Wash.**

GEORGE A. GUE, Yakima, Wash. HARRY C. CRANKE, Nez Perce, Idaho
Auctioneers

### The Advertisements in This Issue Are Well Worth Reading

**They are informative and cover a wide range of subjects. You can profit by reading them carefully.**

# June 12, 1918, at La Creole Farm

Will be sold 40 head choice Jersey cattle. The offering will be a number of choice Register of Merit cows and young bulls from Register of Merit dams and sired by such sires as Golden Cicero, a Register of Merit sire, some of his test daughters, Cicero's Dorothy, 832.7 estimated butter; Cicero's Oxford's Extra, 578 pounds butter; La Creole's Saviour 3 yrs., 502 pounds butter; La Creole's St. Saviour, 3 yrs., 537 lbs. butter. These cows will be in the sale, also a son of Cicero's Dorothy, by Golden Cicero, he large, strong, masculine and vigorous for his age, 10 yrs. There is also a granddaughter and a grandson of Cicero's Dorothy out of La Creole's Dorothy, 553 lbs. butter, 3 yrs.; these two are sired by Oxford You'll Do Jr., a Register of Merit sire, with 2-year-old daughters' records of 458.5 pounds butter and daughters now on test and that will be in the sale. La Creole's Oxford Silky, 271 pounds butterfat in seven months 19 days; La Creole's Oxford's Pearl, 236 pounds butterfat in 8 months; La Creole's St. Saviour's Bell, 2 years old, 129 pounds butterfat in four months. Others I may mention are La Creole's Oxford's Select, 362 pounds butterfat in 7 months 7 days; La Creole's Amy's Queen, 414 pounds butterfat in 6 months 25 days; La Creole's Select Viola, 305 pounds butterfat in 8 months as a 3-year-old; Oxford's Extra Rosie, 121 pounds butterfat in 2 months as a 3-year-old; La Creole's Oxford's Millie, as a 2-year-old, 267 pounds butterfat in 6 months 18 days. He is proving a sire of profitable producers. Although they are young yet, they promise to equal any other blood-line in production with maturity and proper handling; they also have that nice, light, solid color, large, square udders, large, easy-milking teats, properly placed, and quiet, gentle disposition so much admired by all lovers of the Jersey. The sire of Oxford You'll Do Jr. Imp., Imported Oxford You'll Do 111860, has many large producing daughters as high as 1004 pounds butter at 4 years old; he stands at the front with any of the eastern bulls; his daughters are much sought after by those that know the Jersey breed and want the best; 33 of his daughters sold in T. S. Cooper & Sons' 1916 sale at Coopersburg, Pa., for an average of $1038, and 60 of his daughters sold from the same farm within a year's time for an average of $1015 each—one for $3000; he was the sire of many prize-ring winners in America and on the Island; his sire, Gamboge's Knight, is a proven sire of type and production, has daughters with records up to 833 pounds butter.

With this long line of producing ancestors, where could you expect to get better producers than from this farm?

When I started in for Jerseys, 15 years ago, I did not pick up and buy the cheap, inferior cows that are so common with the beginner. I bought the best to be had, regardless of price—the higher the price I had to pay, the better the cow. Morrow's Select was among the first cows I bought, with a record of 884 pounds butter; Cicero's Dorothy, 832 pounds butter, was the second lot I bought for $420; Cicero's Oxford Extra, $400. The prices did not discourage me, yet at that time I had to borrow money to buy them. They soon paid for themselves. My first herd bull, Amy's Chief, proved a wonderful sire of producers, with daughters up to 872 pounds butter; but, unfortunately, before his worth was known, he was sold for beef. The next sire, Sauce King, was bought at 2 months old for $200; he was a great-grandson of the wonderful old sire, Financial King, sire of Financial Countess, 994 pounds butter. My next purchase was Oxford You'll Do Jr., $859. Again, I had to borrow the price, but the herd soon paid the bill; he is still vigorous and good as ever. A number of his daughters are in this sale, also choice sons, including La Creole's Oxford's Dolly Boy, out of Morrow's Select, 884.6 pounds butter; this bull is 2½ years old and a grand animal; have been using him as one of the herd sires, to strengthen the herd. Three years ago I bought the old bull, Golden Cicero, then 9 years old, for $500. They have all proven good investments from both a money value and increased milk and butter production.

What I have done you can take of the same stock and continue to do, also improve and increase production, for I have reached the age where I must step aside and let a more active, younger man take up the work. The most of these cows are bred to freshen this fall, therefore you are the gainer again by soon having two for the price of one.

In the consignment by J. A. Wood you will find a choice lot of well-bred cows of the best blood-lines, all bred to the great sire, Halver, sired by Holger, with a number of daughters in the Register of Merit list, with good records. Halver's dam is La Creole's Select Rose, 811 pounds butter; she a daughter of Morrow's Select, 884 pounds butter. You will find the offering well worthy the place in any herd. Unfortunately, they have never been officially tested, as Mr. Wood has not been on the farm steady so as to give them the attention needed. He has concluded to dispose of the herd. What is his loss will be your gain.

The time is now ripe to buy, when the other fellow has to sell. We are offering you absolutely a clean, healthy, producing herd; no culls. The sire of the most of these cows is a son of the wonderful show bull, Noble Peer; he has 7 daughters in Register of Merit as 2-year-olds, with records of 468.7 pounds, 461.4 pounds, 475.1 pounds, 457.4 pounds, 447.1 pounds, 473.2 pounds, 515.9 pounds butter.

The consignment by McArthur & Stauff consists of six females—five heifers and one cow fresh April 21. The heifers are a typy lot, combining both production and type. Two of these heifers are sired by Noble Emperor, a son of Golden Fern's Noble, the great bull that sold for $25,000. Two are sired by Lucklamute's Eminent Prince, a son of Octavia's Duke; these two are also daughters of a cow sired by Octavia's Duke, making them double granddaughters of this valuable bull. The last heifer is a granddaughter of Rinda Lad, with 21 daughters in R. of M. Rinda Lad is a full brother of their senior herd bull, who has seven daughters in R. of M. and more to qualify—all with splendid records. This heifer is out of a R. of M. cow and a granddaughter of Dimple's Flower, R. of M., class AA, 741 pounds butter. The cow, Gilvie, that McArthur & Stauff are offering, is sired by the well-known bull, Eurybia's Prince, whose blood has proven itself in the line of production. This cow has a R. of M. record of 555 pounds butter; she is the half sister of Katie F. in R. of M., 797 pounds butter. Gilvie is now fresh and milking above 50 pounds milk per day. She is a good tester, her average being above 5 per cent. Indications are that she will make 800 pounds of butter on this test with proper handling. McArthur & Stauff have three of this cow's heifers in their herd and would not part with her, were it not for making room for their Holger heifers.

Complete catalog will be published, and mailed on request only.

# W. O. MORROW, Independence, Ore.

COL. J. W. HUGHES, COL. B. T. SUDTELL, Auctioneers; E. A. RHOTEN, Clerk of Sale.

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, May 20.—Fears of dangerous delays to planting did a good deal today to advance the value of corn. Prices closed strong at the same as Saturday's finish to 2 3-4c higher, with May $1.27 3-4@1.27 7-8 and July $1.43 1-2 to $1.43 5-8. Oats gained 1 3-8 @1 1-2c to 2 1-8 net. In provisions the outcome varied from 10c decline to 30c advance.

Unsettled weather adverse to planting tended decidedly to discourage selling of corn. Bullish sentiment was further augmented by the percentage of damaged corn in current arrivals and by doubts therefore as to whether a liberal amount of contract grade would be available for June and July delivery.

Gossip of a revival of export inquiry helped to lift the oats market.

Big exports of meats gave strength to provisions and so too did higher quotations on hogs. The consequent advance, however, brought out realizing and led to a reaction.

### Cash Quotations.

CHICAGO, May 20.—Corn—No. 2 yellow, $1.72; No. 2 yellow, $1,65@1.67; No. 4 yellow, $1.47.

Oats—No. 3 white, 78¼@79c; standard, 78¾@79c.

Rye—Nominal.

Barley, $1.30@1.70.

Timothy, $5@8.

Clover, $18@28.

Pork—Nominal.

Lard, $24.87@24.92.

Ribs, $22.15@22.75.

### Chicago Futures.

| Corn— | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| May ..... | 1.27⅝ | 1.27⅞ | 1.27⅛ | 1.27¾ |
| July ..... | 1.40¾ | 1.43⅝ | 1.40¾ | 1.43½ |
| Oats— | | | | |
| May ..... | .76½ | .78⅝ | .76¼ | .78 |
| July ..... | .66⅝ | .68⅛ | .66⅝ | .68 |
| Pork— | | | | |
| May ..... | ..... | ..... | ..... | 42.30 |
| July ..... | 42.97 | 42.97 | 42.45 | 42.65 |
| Lard— | | | | |
| July ..... | 25.00 | 25.07 | 24.75 | 24.92 |
| Sept. ..... | 25.30 | 25.40 | 25.07 | 25.22 |
| Ribs— | | | | |
| July ..... | 23.17 | 23.20 | 22.87 | 23.00 |
| Sept. ..... | 23.67 | 23.75 | 23.42 | 23.52 |

### Pacific Northwest Grain.

PORTLAND, Ore., May 20.—Grain: 30-day options: Oats—No. 2, $60 bid. Eastern oats and corn in bulk: Oats—No. 3 white, $52.25 bid; 38 pounds clipped, $54; corn, No. 3 yellow, $60; No. 3 mixed, $57; oats, No. 3, $52; clipped, $54; corn, yellow, $60; mixed, $57.

### Minneapolis Grain.

MINNEAPOLIS, May 20.—Corn—No. 3 yellow, $1.50@1.60. Oats—No. 3 white, 76½@77½c. Flax, $3.93@3.95. Rye, $1.98@2. Barley, $1.15@1.45. Bran, $28.25@33.25.

## Live Stock Quotations.

### At Omaha.

OMAHA, Neb., May 20.—Hogs—Receipts, 8600; market strong, 10c higher; heavy, $16.75@16.90; mixed, $16.75@17.10; light, $17.10@17.25; pigs, $12@16.

Cattle—Receipts, 7800, 10@15c lower. Native steers, $12@17.50; cows and heifers, $9@13.75; western steers, $9.50@14.50; Texas steers, $9@12.20; cows and heifers, $9@11.50; canners, $7.50@10; stockers and feeders, $8@13; calves, $10@12.75; bulls, stags, etc., $9@13.

Sheep—Receipts, 7000; steady. Wethers, $14.50@16.50; ewes, $10@13; lambs, $14.75@19.80; yearlings, $16@17.75.

### At Chicago.

CHICAGO, May 20.—Hogs—Receipts, 37,000; unsettled at Saturday's average to 5 cents higher. Bulk, $17.30@17.70; light, $17.30@17.85; mixed, $17.05@17.98; heavy, $16.35@17.65; rough, $16.35@16.75; pigs, $14.50@17.60.

Cattle—Receipts, 15,000; firm. Native steers, $10.75@17.80; stockers and feeders, $9.40@13.25; cows and heifers, $7.40@14.60; calves, $8@14.

Sheep—Receipts, 14,000; steady. Sheep, $12@16.10; lambs, $14.75@20.50.

### At Portland.

PORTLAND, Ore., May 20.—Cattle—Steady: receipts, 578. Prime steers, $14@14.50; good to choice steers, $13@14; medium to good steers, $11@12; fair to medium steers, $8.50@9.50; common to fair steers, $8@9; choice cows and heifers, $10.50@12; medium to good cows and heifers, $7.50@9; fair to medium cows and heifers, $5.50@7.50; canners, $3.50@5.50; bulls, $6.50@8.50; calves, $8.50@13; stockers and feeders steers, $8@10.

Hogs—Steady; receipts, 1118. Prime mixed, $17.40@17.60; medium mixed, $17@17.25; rough heavy, $16@16.25; pigs, $14.50@15.50; bulk of sales, $17.25@17.50.

Sheep—Steady. Receipts, 1961. East of mountain lambs, $16.50@17; valley lambs, $16@16.50; yearlings, $12.50@13; wethers, $11.50@12; ewes, $10@10.50.

### Spokane Stockyards, Monday.

Hogs—Receipts, 56; market, steady. Prime mixed, $17.25@17.35; medium mixed, $17@17.20; pigs, $15@16; stockers and feeders, $14@15.75; bulk of sales, $17.35.

Cattle—Receipts, 41; market, dull. Prime steers, $14@14.75; good to choice steers, $13@13.75; medium to good steers, $11.25@12.25; fair to medium steers, $8.50@9.50; common to fair steers, $7.50@8.75; choice cows and heifers, $11@12; good cows and heifers, $8.25@9.25; medium to good cows and heifers, $7.50@8.50; common to medium cows and heifers, $5.50@7.50; canners, $3.50@5.50; calves, $8@12.50; stockers and feeders, $6.75@9.

Sheep—Receipts, none; market, steady. Prime lambs, $16.25@17; good lambs, $14.25@15.25; prime yearlings, $12.50@13; prime wethers, $11.50@12; best mutton ewes, $9.50@10.50.

## Portland Market.

PORTLAND, Ore., May 18.—As it is probable that butter prices will not be further reduced, buying for storage account has become more active and this has strengthened the market. Speculators are willing to pay up to 39½ cents for cube extras. Eggs are also still going into storage, and as the buying keeps pace with receipts this is holding the market steady.

Larger poultry receipts were looked for, but have failed to materialize. Dressed meats have an easier undertone.

Oregon strawberries are becoming more plentiful and are bringing $4@5 a crate, according to quality. The first Kennewicks received were not as good as expected and sold at $3.50@4.50.

The potato market is steadily growing stronger as the end of the shipping season approaches. At loading points buyers are offering 75@90 cents and in the jobbing trade Burbanks are held at $1.10@1.25.

Butter—Cubes, extras, 39@39½c; prime firsts, 38c; prints, extras, 44c; cartons, 1c extra; butterfat, No. 1, 43c delivered.

Eggs—Oregon ranch, current receipts, 35c; candled, 36c; selects, 37c per dozen.

Cheese—Jobbers' buying prices, f. o. b. dock. Portland: Tillamook triplets, 23½c; Young Americas, 24½c per pound; Coos and Curry, f. o. b. Myrtle Point: Triplets, 23c; longhorn, 24c per pound; ¼c discount to Portland trade.

Poultry—Hens, 27½@28c; broilers, 40c; ducks, nominal; geese, nominal; turkeys, live, 27@28c; dressed, 37c per pound.

Veal—Fancy, 17@17½c per pound.

Potatoes—Oregon Burbanks, $1.10@1.25 per hundred; New California, 6@6½c per pound.

Hay—Buying prices, f. o. b. Portland: Eastern Oregon timothy, $29@30 per ton; valley timothy, $25@26; alfalfa, $24@24.50; valley, grain hay, $24@26; clover, $21; straw, $9@10.

## The Wool Market.

BOSTON, May 17.—The Commercial Bulletin will say tomorrow: "The wool trade is still waiting for the government to announce in final form its method of procedure for handling the domestic clip. The report of the special committee which went to Washington recently to confer with the government indicated no material change from the original announcement of the war industries board as to commissions and terms of handling. The final plans, however, are expected to be announced very soon."

Scoured basis—Texas, fine, 12 months, $1.72@1.75; fine, 8 months, $1.50@1.55. California, northern, $1.70@1.75; middle county, $1.55; southern, $1.45@1.50. Oregon, eastern No. 1, staple, $1.78@1.80; eastern clothing, $1.62@1.65; valley No. 1, $1.63@1.66. Territory—Fine staple, $1.80; half-blood combing, $1.63@1.68; three-eighths blood combing, $1.40@1.45; fine clothing, $1.65@1.70; fine medium clothing, $1.55@1.60. Pulled—Extra, $1.80@1.85; AA, $1.70@1.80; A supers, $1.60@1.65.

## Seattle Wheat.

SEATTLE, May 18.—Utter exhaustion of wheat and flour stocks is imminent as the result of orders from the local officials of the food administration grain corporation. Seattle millers were advised this week that as soon as they had completed their 110 per cent grind they will be unable to get any more wheat. They had expected another 10 per cent allotment and there is some hope that the order may yet be modified, as some of the large mills own wheat enough to permit of such alteration. In the event, however, that this order stands as read they will be compelled to turn their grain holdings over to the corporation for disbursement and distribution.

## Portland Wheat.

PORTLAND, Ore., May 18.—There was no interest shown in grain trading in the latter part of the week, and fluctuations on the local board followed these in the east. City trade in flour is quiet, but the mills are well occupied on government export orders. Drastic changes in the differentials on mill feed are soon to be announced. The larger mills are still behind on their current feed orders.

### LINSEED.

DULUTH, Minn., May 18.—Linseed, 3.91½@3.99½; arrive, 3.93½; May, 3.93½ asked; July, 3.97 asked; October, .99 asked.

## Spokane Market.

### WHOLESALE.

**Vegetables**—Cabbage, $3.50 cwt; carrots, $2@2.50 cwt; bunch carrots, 85c doz; bunch beets, 85c doz; beets, $3 cwt; rutabagas, $1.50 cwt; parsnips, $1.50 cwt; hothouse lettuce, $1.25 box; head lettuce, $1.25 doz, $4.50 crate; turnips, $3 cwt. bunch turnips, 85c; California new turnips, $2 cwt; red bell peppers, $1.25 box; chilli peppers, 25c lb; green peppers, 11c lb; Florida tomatoes, $5.50 6-basket crate; Mexican tomatoes, $3.50 lug; celery, $6.50 crate; hothouse cucumbers, $2 doz; cauliflower, $3.50 crate, $2 doz; new garlic, 12½c lb; parsley, 40c doz bunches; horseradish root, 12½c lb; radishes, 35@40c doz bunches; rhubarb, $1.25 box; spinach, 5c lb; Walla Walla asparagus, $2 box; Kennewick, $1.40@1,50 box; new peas, 8½c lb; artichokes, $1.25 doz; wax beans, 18c lb; green beans, 16c lb.

**Potatoes**—Washington potatoes, 90c@$1.30 cwt; California new potatoes, 8½c lb.

**Strawberries**—California strawberries, $3.50 crate; Kennewick, $4@5 crate.

**Onions**—Bermuda onions, $2.50 crate; Oregon dry onions, $1.50 cwt; green onions, 35@40c doz bunches; wax onions, $2.50 crate.

**Tropical Fruits**—Bananas, 7½c lb; lemons, $7@7.75 case; Valencias, $6.25@7.50 case; medium sweet oranges, $5.50@6; blood oranges, $3.25 half case; Florida grapefruit, $5@6.50.

### MEAT.

**Beef**—Beef steers, 17½@23½c lb; cow beef, 15½@20c lb; heifers, 21½c lb; best loin, 32@33c lb; steer chucks, 19½@21c lb; prime ribs, 24@26c lb; rump and round, 25c lb.

**Mutton**—Breakers, 28½c lb; wethers, 27½c lb.

**Lambs**—Diamond T. C. lambs, 40c lb; lambs, 35c lb.

**Pork**—Packer dressed hogs, 26@27c lb; pork loins, 30@31c lb; legs, 30c lb; shoulders, 25c lb; leaf lard, 28c lb; tenderloins, frozen, 35c lb; spareribs, 19c lb; country dressed hogs, with head on, 20c lb to producer; country dressed veal 17c lb to producer.

**Smoked Meats**—Washington hams, 34c lb; T. C. hams, 35c lb; T. C. bacon, 46½@48½c lb; Washington bacon, 40½@45½c lb; picnics, 23½c lb; Boston butts, 32½c lb; English bacon, 38½c lb.

**Star Brand**—Hams, 35c lb; Shield hams, 33@34c lb; picnics, 24½c lb; bacon backs, 33c lb; Star bacon, 46½@48½c lb; Shield bacon, 41@45½c lb; Simon Pure lard, $17.50 case; Shield lard, tierces, 27½c lb; White Cloud compound, tierces, 23¾c lb.

**Dry Salt Meats**—Clear bellies, 28c; lean backs, clear, 27½c lb; sides, 26c per lb.

**Lard**—Tierces, 27½c lb; $14.45@15.27 case; Diamond T. C. pureleaf lard, $16 case, $8.15 half case; Snowcap compound, tierces, 22½c lb.

### POULTRY.

**Live Poultry**—Live hens, large 24c lb; small, 22@23c lb; roosters, 18c lb to producers, f. o. b. Spokane.

### GRAIN AND FEED.

**Rice**—Fancy head, $7.50@9.50 cwt.

**Flour**—Bluestem, $9.40; Blend, $9.40; Montana hard wheat, $10.40; graham, $8.60 bbl, 49-lb sacks; whole wheat, $8.80; eastern rye, $10.10; eastern rye meal, $10.30; oat flour, $12.85, 4 45-lb sacks.

**Oats**—$73 ton whole, $76 rolled, delivered in city; steam rolled No. 2, $71 ton.

**Corn**—$75 ton; cracked corn, $77 ton.

**Bran**—$30 ton; shorts, $32 ton; bran and shorts, $31 ton.

**Barley**—Rolled, $76 per ton.

**Oil Meal**—$78 per ton.

**Hay**—Timothy, $32 per ton, $31 ton by carload; alfalfa, $27 ton, $26 ton by carload.

### GASOLINE, LINSEED OIL, ETC.

**Gasoline**—Red Crown, bulk, 24½c gal, cases, 34½c gal; Shell, 24½c; refined oil (Pearl), bulk, 13c gal, cases, 23c gal; Eocene, 15½c gal in bulk, cases, 25½c gal; engine distillate, 15½c gal, bulk.

**Linseed Oil**—Raw, bbl, $1.68 gal, case, $1.85 gal; boiled, bbl, $1.70 gal, cases, $1.88 gal.

**Turpentine**—Bulk, 65c gal; cases, 85c gal.

**White Lead**—Strictly pure white lead in oil, ton lots, 11¾c lb; 50-lb lots, 13½c lb.

## Seattle Market.

SEATTLE, May 18.—The weather all week has been unfavorable for the movement of strawberries, and jobbers have been bringing in light shipments from Kennewick for fear of losses. Quotations for the week-end cleanup today were $4.25.

### BUYING PRICES.

Unless otherwise stated the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots, f. o. b. Seattle:

Eggs—Local, 37@38c per dozen; eastern Washington, Oregon and Idaho, 35c@36c.

Poultry—Broilers, 30c lb.; spring roosters, live, fat, $3.50 dozen; geese, fat, live, 18@25c; ducks, live, fat, 27@30c.

Beef—Buying prices: Prime beef, steers, 17@18c; cows, fat, 16@18c lb.; heifers, 17@18c.

Hogs—Light, 18@21c lb.; heavy, 18@20c lb.

Veal—Fancy light, 18@19c lb.; heavy, 10@18c lb.

Hides—Salted, 14c lb.; flint-dry hides, 29c lb.; salt kip, 16c lb.; green hides, 11c lb. green calf, 23c lb.; dry calf (under 6 pounds), 29c lb.; bulls and dry salts, 4c lb. less; green bulls, 9c lb. Clean, long wool, western Washington flint dry pelts, 39c per lb.; heavy to clean eastern Washington flint dry pelts, 30@35c lb.

Asparagus—Kennewick, 10@12½c lb. Oregon, 10@12½c; Granger, 10@15c.

Apples—Winesaps, $2@3; jumble Winesaps, $1.25 box.

Potatoes—Puget sound, $17@22 per ton; eastern Washington, $28@30 per ton; seed, 1 1-4@1 1-2c per lb.

Feed—Bran, $34 per ton; shorts, $35.50; scratch feed, $79; all-grain chop, $74; oats, $71; sprouting oats, $78; rolled oats, $73; whole corn, $75; cracked corn, $77; rolled barley, $73; clipped barley, $77; alfalfa meal, $36; oil meal, $72; egg mash, $62.

Hay—Eastern Washington timothy, $36@37 per ton; do double compressed, $38@30; alfalfa, $26; Puget sound, $26@27; starw, $15.


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The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

## Pershing Follows Lord Kitchener.

General Pershing urges the war department to train soldiers in the art of musketry before sending them to France. In this he takes the stand that Lord Kitchener did when organizing his first army to whom he addressed his famous order: "Never mind how they drill or whether they know the right foot from the left. Teach them to shoot and do it quickly."

From time to time the value of marksmanship has been discussed in this column, and what has been said about it has been based on information given by a veteran musketry instructor formerly in the British army. Men who know how to use a military rifle learn quickly to handle any machine gun and most of them can be turned into good artillerymen. Every expert rifle shot knows how to aim any firearm from a pistol to a 16-inch gun. The principle is the same. Such marksmen do not waste ammunition. In spite of barrage fire and other changes in battle tactics, snipers play as important a part as they ever did, and they can do better work now because their rifles have an effective range equal to the distance that a man can be distinctly seen without the help of a spy glass and the powder is smokeless.—New York Commercial.

## The Victory of the "Flivver."

"If Ford runs we're sunk without warning." This is said to represent the feeling among veteran Michigan politicians over the suggestion that the automobile manufacturer make the race for the senate. The explanation is that the contest would be that of half a dozen nonentities against a well-known man. Some of the political workers are downright indignant over Ford's silence. He "owes" it, not to them, of course, but to the state of Michigan, to announce whether he will run or not. It isn't right, they argue, for him to allow the talk to go on until the last moment and then say that he doesn't want the office, never did want it, and will not be a candidate for it. It is easy to imagine how readily they would follow their own advice if they were in Ford's position. The situation is not less piquant for the uncertainty on which ticket his name might appear. He might even run as a nonpartizan and thus necessitate a drastic revision of all political strategy. Ford can hardly be considered ideal senatorial timber, but his lot is not cast in a forest of giants.—New York Evening Post.

## Motor on the Farm

The national council of defense is asking the various state councils of defense to encourage the establishment of auto truck express lines through the country wherever they are needed. The action is taken with a view of relieving railroad traffic as much as possible and at the same time facilitating the handling of country produce. The council cites three important advantages from the war point of view that would be obtained through the establishment of rural auto truck lines. These advantages are stated as follows:

1. Production is stimulated. Farmers invariably increase the variety and quantity of their production when regular marketing facilities are made available. In every section studied, a great increase in the variety and the amount of production followed the establishment of the rural express.

2. The farmers are relieved of their task of hauling their products to market, and the existing farm labor supply is thereby greatly conserved. The investigation shows that in some places the hauling done by five men with wagons can be done by a man with a truck at many times the speed. This leaves the farm laborers at work in the fields.

3. Additional food is made available by tapping the farm communities which have no other good shipping facilities. Much of this additional food is now either wasted or greatly deteriorated because of poor shipping facilities.

### Produce World's Speed Cruiser.

Our 35,000-ton cruiser, capable of 35 knots, will be the fastest in the world.

## Want Ads

### HELP WANTED—FEMALE 1

WANTED—ON RANCH, CLEAN ECONOMical Scandinavian middle-aged woman cook; must be able to make butter; must give references. Mrs. Jas. Perrine, 926 2d ave. E., Kalispell, Mont.

SUMMER COURSE IN TELEGRAPHY opens June 10. Jenkins Institute of the Spokane Y. M. C. A.

## Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and i t s associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

# Want Ads

Send for card giving lower rates for ads running one month or longer.

## How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

### EDUCATIONAL 43

EARN MORE. ENROLL ANY TIME, AT Behnke-Walker, Portland, northwest's biggest business college, because best. Graduates assured positions. Write for catalogue.

### TEACHERS' AGENCIES 46

TEACHERS REGISTER WITH B. F. WESTmore, Mgr. Hazard Teachers' Agcy. $1 registers you at three offices. 911 Old Nat'l Bank bldg., Spokane, Washington.

TEACHERS NEEDED FOR NEXT FALL. Write for information. Clark Teachers' Agcy, 412 Ch. of Com. Bldg., Spokane.

### HONEY, BEESWAX—Wanted. 58

SEND SAMPLES OF YOUR HONEY AND beeswax; state quantity, price. Oregon Farm Products Co., 330 Halsey st., Portland.

### MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

Fly time is coming. We make screen windows and doors. Get our large illustrated catalog, No. 27, of sash, doors and building material. Sent free on request.

Screen doors, mortised, glued and covered with heavy, galvanized wire mesh, $1.75 and up.

Window and sash screens, at, per sq. ft., 15c.

Cottage glass doors, $2.85 and up.

Five cross-panel doors, $1.92 and up.

20x24, 2-light windows, $1.79.

Prepared roofing at $1.35, $1.70 and $2.10.

We sell any one, ship anywhere, and guarantee safe delivery. The largest factory in the west selling direct to the consumer.

O. B. WILLIAMS CO.
1943 First Ave. So., Seattle, Wn.

BUILDING MATERIALS AT WHOLESALE prices — Doors, windows, roofing paper, porch columns, plaster boards. All building materials shipped promptly. Send for our complete illustrated catalogue; gives you lowest net prices. P. A. ROVIG CO., 2229 First ave., So., Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

PRINTED BUTTER WRAPPERS
1st hundred 75c, postpaid; 40 to 70 per cent less in larger amounts. Sample and prices free. Hughes' Print Shop, Colville, Wn.

### JUNK SHOPS 90

CENTRAL HIDE AND JUNK CO. BUYERS HIDES, WOOL, METAL, RUBBER, SACKS, ETC. WRITE FOR PRICE LIST IF INTERESTED. QUICK RETURNS. W200 MAIN AVE., SPOKANE, WASH.

### MACHINERY—FOR SALE 93

CUT YOUR OWN TIMBER on a Wheland Portable Sawmill. You will save time and big money on your next lumber bill. With this sawmill you can supply the lumber needs of your neighbors also. The price is reasonable, and the profits will soon pay for the machine. Write for catalog and full details. Clyde Eqpt. Co., 18th and Upshur sts., Portland, Ore.

FOR FARM LUMBERING USE "AMERICAN" PORTABLE SAWMILLS. Carried in Stock by HIGGINS MACHINERY COMPANY. 312 1st Ave. So., Seattle. Write for Catalog.

FOR SALE—HOLLEY HOLT HARVESTer, in good shape. Cut 1600 acres. Address O'Brien Bros., Wilbur, Wash.

### AUTOMOBILES 114

FORDS CAN BURN HALF COAL OIL, ALL distillate, or cheapest gasoline, using our 1918 Carburetor; 34 miles per gallon guaranteed; easy starting; great power increase; attach it yourself; big profit selling for us; 30 days' trial; money back guaranteed; styles to fit any automobile. Air-Friction Carburetor Company, 321 Madison st., Dayton, Ohio.

AUTOMOBILE OWNERS! ARE YOUR tops old and leaky? "Bestopseal" will make it like new, waterproof and weatherproof, Indelible black, guaranteed. Send $1.25 for quart. Postage paid. Harper Auto Specialty Co., 1023 E. Pike St., Seattle.

### STOVE & FURNACE REPAIRS 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

### HARES AND RABBITS 173

BELGIAN HARES OF QUALITY. BEFORE placing your order, send stamp for our prices and other literature. Northwest Rabbitry, 161 S, Sunnyside, Wash.

### POULTRY 174

HOGANIZED BABY CHICKS.

Fifth thousand May and June White Leghorn, $2 per doz., $13 per 100, $125 per 1000. Very limited number of June Rhode Island Reds and Barred Rock chicks at $1 per 100. Our chicks are hatched to live and to lay. Safe delivery guaranteed. Queen Hatchery, 89 Pike st., Seattle, Wash.

200,000 WHITE LEGHORN BABY CHICKS —Bred for eggs, vigor, size. Safe arrival in good condition guaranteed. Free catalog and book on "Raising the Chicks." Oak Heights Poultry Farm, Route 3, Box T 67, Tacoma, Wash.

BABY CHICKS, WHITE LEGHORNS, CUSTomers say they are "husky," "lively," "vigorous," "healthy," "strong," "hard to beat," "thrifty," "great layers." Write at once. Free catalogue. Freshlaid Farm, Colfax, Wash.

BARRED ROCK EGGS, $2 PER 15. W. D. Good, Mt. Vernon, Wash.

### POULTRY 174 Continued.



BABY CHIX—WHITE LEGHORNS; NOT only bred to lay, but bred to live and thrive with the vigor and vitality necessary to make dividend payers bred into them by 15 years of breeding at the oldest established hatchery in the state; chix last half of May, $12; June, $11 per 100; delivery in good condition guaranteed. The Lakeside Poultry Farm, Roy, Wash.

UNCLE SAM SAYS: "RAISE POULTRY; don't be a slacker." Eggs and chicks, Tancred strain; trap-nested for 13 years. Special prices for May and June. Bert Hands, Cottage Grove, Ore.

WHITE LEGHORN BABY CHICKS— Hatched from free range of large, vigorous, heavy-laying O. A. C. stock. Orders filled from March 30 to June 30 for $10 per 100. C. B. Chandler, Lebanon, Oregon, Rte. 4.

WHITE LEGHORN EGGS $1.50 PER SETting; $8 per hundred. Special mating Pen-A, eggs 50c each; Pen-B, eggs 25c each. Waikiki Farm, R. 7, Spokane, Wash.

SINGLE COMB WHITE LEGHORNS; THE world's greatest egg machines. Write for our "War Measure." Help Hoover win the war. Broadview Farm, Curlew, Wash.

S. C. RHODE ISLAND RED EGGS $2 PER setting; $10 per 100. Fertility guaranteed. Waikiki Farm, R. 7, Spokane, Wash.

BARRED ROCKS.

Nicely barred, and fine layers. Eggs, $1.50 per 15. Wm. Heimsoth, R. 2, Baker, Ore.

S. C. R. I RED AND S. C. W. LEGHORN eggs, $1.50 to $5 per setting; $6 per hundred. Mrs. Rominger, Underwood, Wash.

### LIVE STOCK 177

ORDERS BOOKED FOR WEANLING POland China pigs from prize-winning stock. Also a few boars old enough for service. Frank Needham, Eugene, Oregon.

PATHFINDER 2D 634615, ROAN, CALVED Jan. 2, 1917; a vigorous, growthy Shorthorn bull; for sale at $200. Crated, f. o. b. Fenn, Idaho. Wm. Mulhall.

FOR SALE—WEANLING BOARS FROM big type Poland Chinas. S. S. Mullen, R. 1, Bellingham, Wash.

REGISTERED O. I. C. BOAR PIGS, 3 TO 6 mos. old. C. I. Ballard, Rickreall, Oregon.

### HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water. 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

GALAX HOTEL; NEW AND MODERN; 75C and $1. Main and Bernard, Spokane.

### RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

### PLUMBING, STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

### SEEDS 620



IF YOU HAVE ACCLIMATED SEED TO sell, it will pay you to advertise it in this classification. If you want to buy seed adapted to western soil and climate watch what is offered in this department.

SEEDS—THE KIND THAT GROW. You can't keep them in the ground. Send for catalogue. BUTZER'S SEED STORE. 188-190 Front St., Portland, Oregon.

### SEEDS 620 Continued.

FOR SALE — SEED BEANS; LITTLE White Navy and Lady Washington (large White Navy). J. E. Clemens, Mohler, Idaho.

WE SPECIALIZE IN TIMOTHY, ALFALfa, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Ida.

SUDAN GRASS SEED FOR SALE—MAKES excellent late green feed, 30c per lb. Wm. Neuenschwander, grower, Gaston, Ore.

IDAHO ACCLIMATED SEED CORN; WELL tested, desirable Yellow Dent. Write H. C. Baldridge, Parma, Idaho.

### FARM LANDS—FOR SALE 651

HELP.

We still need a few more settlers to finish our 6000 acres, which is being sold in 40-acre farms at $25 per acre. Ten yearly payments at 6 per cent interest.

By selecting your future home in this splendid tract at Bryant, Snohomish county, you are not alone buying a fertile and productive piece of land, but you are buying the best investment in the state today. Railways, paved roads, schools, churches, canneries, creameries and mills.

The best proposition on the market for the man who wants a farm. For further information address the owners, BROWNELL LAND CO., 904 Third ave., Seattle, Wash.

AFTER THE WAR A FEW GOOD CROPS will restore our wheat surplus, but when will cattle be cheap again?

Here is a grand chance to get a stock ranch that will make you independent: 200 acres, within 1 mile of a town with 3 railroads; abundance of outside range adjoining; private irrigation system; one-half in cultivation and balance tillable; 8 acres bearing orchard; 20 acres timber; good buildings; mild climate. Nature never made a better place for stockraising. Price $35 per acre; one-half cash, and balance easy. Write us for particulars.

EMPIRE INVESTMENT CO.
301 Empire State Bldg., Spokane, Wash.

WRITE A. H. REID & CO.,
314 NEW YORK BLK.,
SEATTLE, WASH.,
for information about good alder bottom and clay loam land in prosperous Thurston county, Wash., where many progressive farmers are now settling; 10 to 40 acre tracts, $75 an acre, on terms. Fine roads, good schools, good train service, big crops, big markets near by. Arrange to see this land.

RANCH STOCKED COMPLETE.

480 a., 10 miles from Lyle, Wash.; 5 mi. Warwick; 5-room house, frame barn, 40x60; new granary, chicken house, other outbuildings, all in good repair; 60 a. wheat and oats; 35 a. summer fallow; 60 a. more sod to be broken; 80 a. fine bottom land; all fenced hog tight; 17 head cattle, 2 horses, chickens, hogs, machinery; school, church, ½ mi., mail route, telephone. Price $25 per acre, ½ cash, bal. own time at reasonable rate. I. E. Foss, owner, Lyle, Wash.

FOR SALE—FORTY-ACRE RANCH; ONE and one-half miles from Kent; 16 miles from Seattle; twenty acres under plow, balance logged-off; fenced and cross-fenced; eight-room modern house; barn accommodating 25 head; two good wells; hen houses and yard for 600 hens; also have ten acres logged-off land, same locality; good three-room house. Address Geo. S. Harper, 1023 E. Pike, Seattle, Wash.

MONTANA STOCK RANCH, 2300 ACRES; 1600 acres fine bottom land, with thousand inches water rights for irrigation; partly in crop; improvements good; adjoins live town in Great Falls territory. Excellent subdivision proposition. Price $27.50 per acre. Terms given. Many other snaps in farm lands. Equity Realty Co., 104 First ave. S., Great Falls, Montana.

NO. 1004—75 ACRES, ON RIVER; NEAR steamboat wharf; 1500 fruit trees, mostly young peach and apple; 8-room dwelling, front porch, 2 halls, attic, shade, well fenced; 15 acres of woodland, chestnut and oak; 7 acres in meadow; 6½ miles from county seat; barn and stable, new pig pens, 12x60; buildings worth $3500. Price only $3250. Russell Realty Co., Baltimore, Md.

662-A. IMPROVED WHEAT FARM; SEVEN miles south of Hartline, Wash.; on Sunset highway; good land; all in cultivation except 15 acres; 300 a. in summer fallow; all fenced; large house, fine barn, good outbuildings; plenty water. Only $45 per acre. $6000 cash will handle. A. L. Tucker, Coulee City, Wash.

FOR QUICK SALE—ONE-HALF SECTION farm, 4 miles from Moscow. Price right to sell; and liberal terms. The place is all in crop, one-third of which goes to the purchaser. Possession given Oct. 1, 1918. If interested, write P. O. Box 393, Moscow, Ida.

WHEAT RANCH, OKANOGAN CO.; 440 A. Lease on additional 80. 30 to 50 bu. wheat producer. 320 a. plow land; water, timber, range; good road, phone, rural delivery; crop on 170 a. if taken now. Price $16,000. Terms. J. W. Graham, Tonasket, Wn.

CALIFORNIA STOCK RANCH, SISKIYOU Co.; 320 a. (can be divided); 159 a. in cultivation; 290 a. tillable; open range; 6-room house, large barn, furniture, stock, tools included. No trade. S. E. Hummel, Tecnor, Cal.

BARGAIN — WILLAMETTE VALLEY stock or grain farm; bottom land, half clear; on main highway; good bldgs.; 525 a. $50 per a. F. L. Wood, Salem, Ore.

VERY CHEAP; WELL-IMPROVED 50-A. ranch; 20 a. bearing pears. Stock and crops go with place. Easy terms. F. B. Phillips, Cottage Grove, Ore.

2600 ACRES LOGGED-OFF LAND, CLOSE to Astoria; finest of small fruit, vegetable and dairy land. Only $25 an acre. L. A. Larsen, Astoria, Ore.

GOVT. LAND, ORE., CALIF. BOOKLET. Joseph Clark, Sacramento, Calif.

### FARM LANDS—WANTED 654

WANTED — TO HEAR FROM OWNER OF farm or unimproved land for sale. O. K. Hawley, Baldwin, Wisconsin.

I WANT TO HEAR FROM OWNER OF farm or unimproved land for sale. Mrs. W. Booth, Pulaski, Iowa.



# The Greatest Mother in the World

STRETCHING forth her hands to all in need; to Jew or Gentile, black or white; knowing no favorite, yet favoring all.

Ready and eager to comfort at a time when comfort is most needed. Helping the little home that's crushed beneath an iron hand, by showing mercy in a healthy, human way; rebuilding it, in fact, with stone on stone; replenishing empty bins and empty cupboards; bringing warmth to hearts and hearths too long neglected.

Seeing all things with a mother's seventh sense that's blind to jealousy and meanness; seeing men in their true light as naughty children—snatching, biting, bitter—but with a hidden side that's quickest touched by mercy.

Reaching out her hands across the sea to No Man's Land to cheer with warmer comforts thousands who must stand and wait in stenched and crawling holes and watersoaked entrenchments where cold and wet bite deeper, so they write, than Boche steel or lead.

She's warming thousands, feeding thousands, healing thousands, from her store; the Greatest Mother in the World—the Red Cross.

Your help is needed—give till the heart says stop.

***Every cent of every dollar received for the Red Cross War Fund goes for War Relief***

The American Red Cross is the largest and most efficient organization for the relief of suffering that the world has ever seen.

It is made up almost entirely of volunteer workers, the higher executives being without exception men accustomed to large affairs, who are in almost all cases giving their services without pay.

It is supported entirely by its membership fees and by voluntary contributions.

It is today bringing relief to suffering humanity, both military and civil, in every war-torn allied country.

It plans tomorrow to help in the work of restoration throughout the world.

It feeds and clothes entire populations in times of great calamity.

It is there to help your soldier boy in his time of need.

With its thousands of workers, its tremendous stores and smooth running transportation facilities it is serving as America's advance guard—and thus helping to win the war.

Congress authorizes it.

President Wilson heads it.

The war department audits its accounts.

Your army, your navy and your allies enthusiastically indorse it.

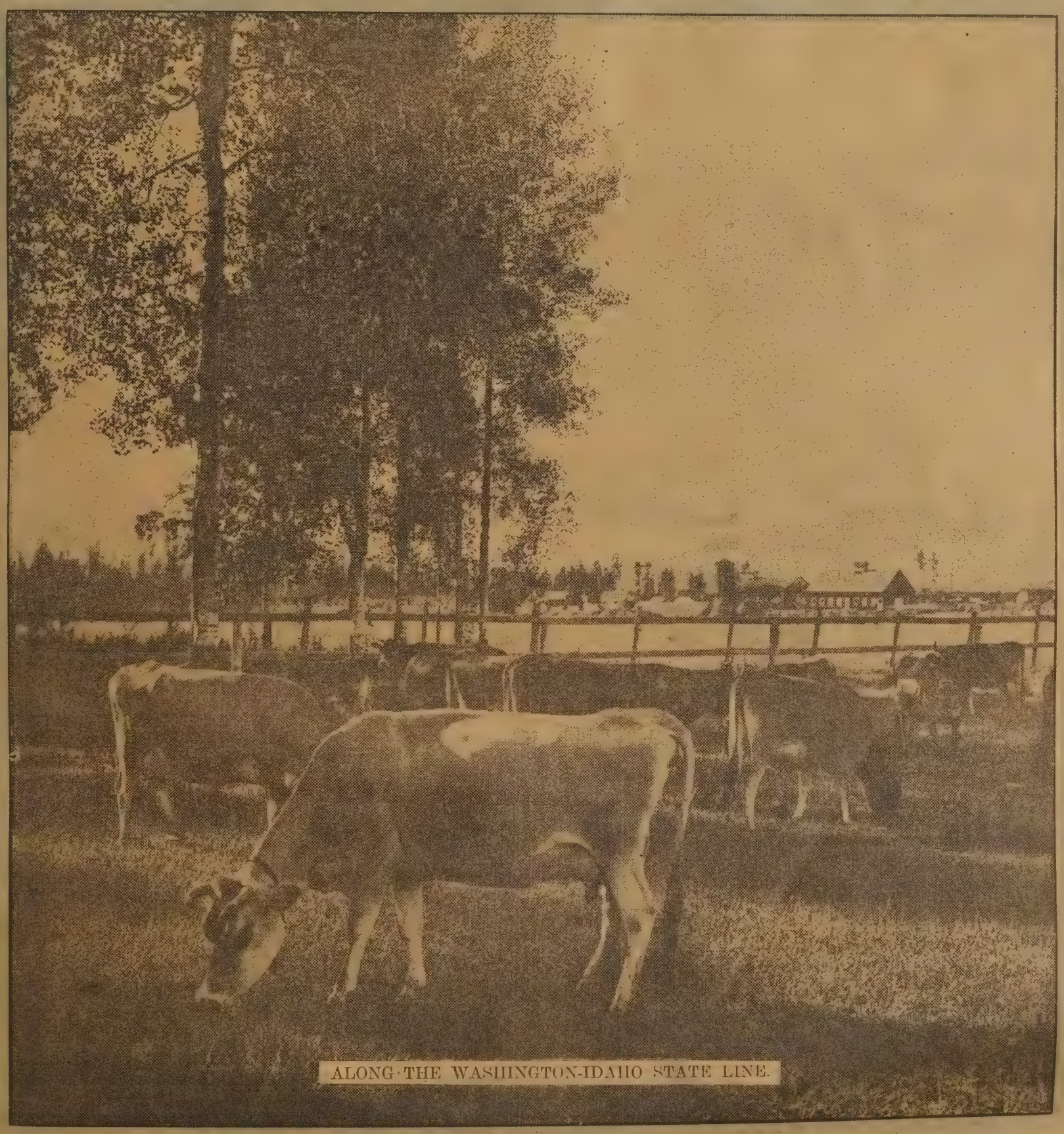
Twenty-two million Americans have joined it.

This advertisement gladly contributed to the Red Cross by
Col. Roland H. Hartley, Everett, Wash.

# THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HO[illegible]ND HOOF

VOL. XLI. NO. 22. MAY 30, 1918. ** [illegible]EEKLY.

ALONG THE WASHINGTON-IDAHO STATE LINE.

# ACT NOW

As a war measure, we introduced the "direct-to-the-consumer" idea in our subscription business. Our plan was ultimately to do away with the subscription agent and to secure new and renewal subscriptions by dealing with our readers direct. We are glad to report that the new system is working splendidly. Already, thousands of our friends have taken advantage of the big saving which our offer makes possible.

Much of this success is due to the efforts of our friends. They have aided us by telling their neighbors about our offer and by passing along copies of the paper to those who they feel will be interested in a high-grade family publication. If you are a supporter of the cooperative principle, we hope you will help us make the new subscription plan an even greater success. When convenient drop a word regarding it in your neighbor's hearing, or better still, pass along some of our many interesting issues when you are through reading them. We will appresiaciate this assistance very much and we feel sure that if your neighbor does not know about his state farm paper he will be glad to make its acquaintance. Your cooperation helps eliminate the middleman, with all the attendant expenses of the subscription agency system. The reader gets the benefit of every dollar saved, as you will note from the schedule of prices below.

"THE LOVE OF reading enables a man to exchange the wearisome hours of life which come to every one for hours of delight."

—MONTESQUIEU.



## SUMMER READING

***You and Your Family Will Enjoy This Paper This Summer as Well as Next Winter***

We want these friends to remember that the big cut in the subscription price only affects the method of distribution and not the quality of the paper itself. Our constant endeavor will be to give you a bigger, brighter, better home paper than ever. Among the hundreds of experiences which we print from others engaged in the same line of work as you are, you are almost certain to find suggestions which alone are worth several times the subscription price. And what other things can you buy today for less money than you have been accustomed to pay in the past?

## The Cost of Your Reading Matter Has Been Cut

*Following Rates Now in Effect for Subscriptions to The Washington Farmer*

**25c for one year**

**50c for three years**

**$1 for five years**

IF YOU'VE ANSWERED, PLEASE PASS TO A NEIGHBOR

May 30.

The Washington Farmer,
Review Bldg.,
Spokane, Wash.

I desire to take advantage of your plan to deal direct with your readers in securing and renewing subscriptions; thus saving the middleman's cost and releasing men for productive labor.

Enclosed is $..... for ..... years subscription. In Canada add 1 cent per copy for extra postage.

If you are already paid in advance your subscription will be set forward from the date to which you are paid.

NAME .....

.....

TOWN ..... R. F. D. .....

STATE .....

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 22 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF May 30, 1918

# Would Be Gross Injustice to the Producers of Northwest

FARMERS of the Pacific Northwest, your interests are in grave jeopardy. The government is considering a flat increase in freight rates of 25 per cent. This article proves, by figures quoted from the Wall Street Journal, that no such increase is needed by the railroads of the Pacific Northwest, and that at least three of the great transcontinental systems need no increase at all. There is not a day to lose. Every grange, every farmers' union, every nonpartizan league, every farm loan association, every fruit growers' organization, every live stock association should rush emphatic protests to the senators and representatives from the Pacific Northwest, by wiring and by writing to Washington, D. C.

Washington dispatches intimate that Secretary McAdoo, as director-general under government operation of railroads, contemplates a blanket advance in freight and passenger rates of 25 per cent. While some advance is needed to save the government from a deficit in its running of the railroads, the public should protest vigorously against an unjust and unscientific flat advance of 25 per cent.

Some roads need the increase, others do not. It is very doubtful whether the systems that serve the Pacific northwest, with the exception of the Chicago, Milwaukee & St. Paul, actually need any increase.

Northern Pacific and Great Northern, in particular, seem reasonably prosperous for war times. The Northern Pacific's annual report shows that it earned on its own lines last year nearly 10 per cent on its capital stock, after the payment of all operating expenses, interest on bonds, taxes, etc., and the Wall Street Journal says, "The Great Northern will show its dividend covered by about the same margin."

But both of these lines have other rich sources of income. They operate the Chicago, Burlington & Quincy under joint lease, guaranteeing the Burlington's stockholders 8 per cent dividends. The Burlington is the richest railroad in the United States. It earned a surplus last year of $29,406,032, and, while this was $3,500,000 less than in 1916, it was, nevertheless, sufficient to permit payment of the usual 8 per cent dividend, an extra dividend of 10 per cent, transfer of $1,397,030 to sinking funds and investment of more than $8,000,000 in additions and betterments, all without touching the accumulated surplus.

Discussing this remarkable record the Wall Street Journal says:

"Out of last year's surplus Burlington paid out $19,951,038 in dividends, 18 per cent on the $110,938,100 stock, and had left a balance of $9,454,994. Roughly speaking, half this belongs in equity to the Great Northern and half to the Northern Pacific. It means an additional 1.85 per cent on the stock of the former and 1.89 per cent on the stock of the latter. But there was more in Burlington's earnings for the controlling roads than that. The regular dividends of 8 per cent take care of the interest on the collateral trust bonds exchanged for the stock. The 10 per cent extra dividend, except that accruing to holders of the $3,226,000 minority stock, was clear additional income to the two Hill roads, amounting to $5,380,000 for each. Add this sum to half the undivided surplus and there is a total of a little more than $10,000,000 to represent the interest of each of the controlling roads in Burlington's income of 1917."

It would be an act of gross injustice to the producers of Montana, Idaho, Washington and Oregon for the government to increase freight rates and fares 25 per cent and swell to that enormous extent the earnings of the Burlington, the Northern Pacific and the Great Northern.

The Burlington, for example, earned gross in the year ended December 31, 1917, the studendous total of $122,342,706. These figures, it should be remembered, are the company's own report to the interstate commerce commission. A flat increase of 25 per cent would add $30,500,000 to the Burlington's net earnings and increase the profits under the lease accruing to the Northern Pacific and the Great Northern $15,000,000 each. In other words, each of these roads would cut a $25,000,000 slice from the Burlington "melon."

The proposed increase would come chiefly out of the pockets of the producers of this region, and very largely from the farmers. On wheat, for example, it would operate in this way: The government price is now fixed on the basis of the New York market, less the transportation charges from the farm to the Coast and the shipping rate from the Coast cities to New York. If the wheat rate should be advanced 25 per cent the increase will be deducted next year from the price that the farmer is paid for his grain.

Of course the same toll would be taken from every other staple product of the farm—all other cereals, hay, live stock, fruit, etc.

The burden would bear with especial weight on the orchard owners. To the increased cost of production would be added a 25 per cent advance in the freight rate—an alarming prospect to an industry that must seek distant markets in competition with the short haul on the orchard products of the east.

Secretary McAdoo is an over-worked man. His mind is not only burdened with the vast and difficult problem of financing the war, but he has also been made responsible for the operation of the great railway systems of the United States.

There is grave danger that he will make mistakes. There is imminent danger that his desire to find a short-cut solution of the railway financing problem may lead him upon a course that would mean injustice for millions of producers in the west and ruin for many.

The Farmer urges every farm organization in the Pacific northwest to take immediate steps to lodge a protest with its senators and representatives at Washington.

Fill out this coupon, and, together with the whole article, mail it to your senator or representative at Washington, D. C.:

To.....

Will you do all in your power to prevent the flat increase by the government of freight rates and passenger fares of 25 per cent, as this would be an act of gross injustice to the farmers, orchardists and other producers of Montana, Idaho, Washington and Oregon by swelling to that enormous extent the already profitable earnings of the Burlington, the Union Pacific, the Northern Pacific and the Great Northern Railroad systems?

Sign Name .....

Postoffice..... State.....

## Live Young Folks

### Pig Clubs, Canning, War Gardens

By WILL S. HORN, Spokane County Club Leader.

The boys and girls of Epokane county are doing their part toward the development of the live stock and agricultural industry of the county. One hundred twenty-five boys and two girls are raising pigs to help Spokane county fill Uncle Sam's pork barrel. Over 50 of these are raising purebred sows and litters. Some very good litters have been secured since the sows began to farrow. The purebred registered stock raised by the boys will be an effective means of introducing stock of good breeding into the various communities. One boy who has a purebred Poland-China sow has already received orders for all the possible pigs his sow may farrow, and illustrates the interest the grown-ups are taking in better live stock after seeeing the work of their boys.

The interest in war gardens is very marked; some 350 boys and girls of the rural schools of the county are engaged in gardening organized under the National Boys' and Girls' clubs. Some very excellent gardens have been planted, and in a few districts the school boards have secured plats of ground for children who were without garden plots. Much of the material raised in the gardens will be dried or canned by the Mother-Daughter Canning clubs and used in the homes this winter.

There are 670 boys and girls enrolled in the National Boys' and Girls' clubs in Spokane county and a lively interest is being shown

## Will License Machinery Makers

### *President Issues Proclamation Looking Toward Control*

The farm implement industry is to be put under license. President Wilson has issued a proclamation requiring all persons, firms and corporations engaged in the importation, manufacture, storage and distribution of tools, utensils, implements, machinery and certain other farm equipment, except those specifically exempted by the food control act, to secure federal licenses not later than June 20, 1918. Retailers who do a business of less than $100,000 a year are not required to take out licenses.

The fact had about faded from the public mind that the food control law passed last August authorized the president to put farm machinery under just as binding license regulations as food products. Now the president is acting under that authorization.

The secretary of agriculture is directed to carry out the provisions of the proclamation and the regulations thereunder. Licensees are required to furnish information regarding their businesses whenever it is thought necessary by representatives designated by the secretary, and must permit such representatives to inspect the property and records pertaining to their business. Information obtained in this manner is not to be disclosed without authority. Unjust profits, resales within the trade without reasonable justification, attempts to monopolize, unreasonable increase of prices or restriction of supplies, and wilful waste of farm equipment are prohibited. Also, licensees are forbidden to sell farm equipment to persons known to have violated the food control act.

Applications for licenses must be made to the law department, license division, United States food administration, Washington, D. C., upon forms prepared for that purpose.

To assist in the enforcement of the regulations, the secretary of agriculture has appointed Junius F. Cook of New York as assistant to the secretary.

The term "farm equipment," wherever mentioned in these regulations, shall be deemed to mean certain necessaries, including attachments and repair parts thereof, required for farm use in the actual production of foods and feeds, as follows: Binders, boilers, brooders, bunchers, carriers, carts, cleaners, covers, crushers, cultivators, diggers, distributors, drills, elevators, evaporators, fencing, forges, forks, fountains, gates, graders, grinders, grindstones, harrows, harvesters, headers, hillers, hitches, hullers, huskers, incubators, jacks, listers, loaders, markers, milkers, mills, mowers, pens, pickers, planters, plows, powers, presses, putters, pulleys, pulverizers, pumps, racks, rakes, rollers, scales, seeders, separators, shellers, shreders, silos, sleds, slings, sorters, sowers, sprayers, spreaders, stalls, stanchions, tanks, tedders, testers, threshers, towers, tractors, trailers, troughs, trucks, wagons, weeders, weighers, windmills and all other tools, utensils, implements and machinery required for farm use in the actual production of food and feeds.

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# What I Have Learned in Raising Rabbits

Article 1---By JOE L. ASHLOCK

I began raising rabbits a little over a year ago. Up to that time I had not cared much about rabbits. A little boy who lived near me once had two does. One of them made a nest for her young in his father's wood-house; and the little boy's mother said that for days thereafter when he went out to count his rabbits he would each time find more of them than he had counted the day before. Rabbits are very prolific. That is about all I knew about rabbits.

I had read, also, that rabbits were almost capturing the whole continent of Australia—another evidence of their ability to increase their numbers.

I now have on my place 10 mature rabbits, and 18 little ones. I have had since beginning to raise rabbits over a year ago, more than 100 rabbits. We have eaten two, sold four, and given away two. This leaves many rabbits unaccounted for. Cats caught them, or they died of disease or accident. This means that I have had some experience with rabbits, and from my experience I have learned a few things. These few things I propose to tell in my rabbit story.

One of the two does I bought over a year ago was bred, but we did not know it. These two does had for a nest to use jointly, an old tin tub turned upside down with a hole cut in the side. Rabbits are shy, and like to have a nest of this kind into which they can run when alarmed.

I noticed after a few days had passed that one or the other of the does was filling the hole in the tub full of straw at night. This was to me very annoying. I had put that old tin tub in there for them to use as a nest. Here they were filling up the opening. So I scratched the straw away, and then shoved one of the does in through the hole to acquaint her with the fact that here was a place to hide in when she was scared.

The next morning the does, one or the other, or both, had again filled up the hole, packing the straw in so tight I could scarcely pull it out. Such stupidity was inexcusable, even in a rabbit; but I cleaned the place out again.

That day I chanced to meet a man who knew a good deal about rabbits, and told him how stpuid my two does were. He laughed.

"One of the does has some baby rabbits under the tub," he said. "During the day rabbit mothers close up the opening to the den where their babies are. They open it only at night when they slip in to nurse them."

I was very much surprised, but found that what the man said was true. Cautiously slipping my hand into the nest I felt of the soft, warm fur piled up, and at my first touch the tiny rabbits kicked and squirmed about down in the fur, and uttered tiny, mouse-like squeals.

I should not have opened the nest during the day, of course; nor should I have put my hand into the nest when the rabbit babies were so young. It is best to leave the babies entirely in their mother's care for the first week or so, and even after that, one should disturb them as little as possible.

I now was greatly puzzled, for I did not know how to tell which was the mother of the babies. So, there was nothing for me to do but leave both does in the pen.

A few days afterward I threw some fresh cabbage into this pen, and the does ate it eagerly. This cabbage consisted of a head that had cracked open in the patch, and therefore was unfit for storage through the winter. All such material as this from the garden can be fed to rabbits.

But I should not have given my does this particular cabbage. The next day one of the rabbits was very sick, and in spite of all I could do for her, she died.

For the next day or so the remaining rabbit endeavored to care for the young ones. She closed the entrance each morning, and I hoped that she, not the dead doe, was the mother. But I hoped in vain. Examining the nest a few days later, I found that all the little ones were dead. They were very thin—meaning that they had starved. Their mother was dead.

I discovered, too, what killed the mother. The cabbage I had fed her had a few weeks earlier been treated with an arsenical powder for insects. The rabbit mother had gotten enough of the poison to kill her. She, hungry from nursing her young, had likely eaten more of the poisoned cabbage than the other which escaped without harm.

Since that experience I have been very careful in the matter of feeding my rabbits. I am told that they are quite sensitive to any improper thing in the food they eat, and one can not be too careful. They eat dry table scraps, lawn clippings, dandelions, all kinds of hay, grain and roots of all kinds usually produced in the garden or on the farm.

But what they eat must be clean and unspoiled. In nature rabbits and most of the wild animals, are very clean. Think of the cleanly surroundings of a bird with its nest in the leafy treetop—the clean, blue sky above and the pure air bathing the nest and the little birds! The wild things have all out-of-doors in which to live; so, when you start them to housekeeping in an apple-box you have to make up for this freedom by keeping their nest and pen very, very clean, and their food must be clean and unspoiled. If you do not do this they will sicken and die. It may be one disease, or another; but nine times in 10 some uncleanly condition in food or housing is responsible for their break in health.

I lost some rabbits from sickness before the last winter was over. The feed my rabbits had been eating consisted of alfalfa hay, turnips, ground oats, and bran and shorts mixed. My supply of alfalfa became low late in February, and the turnips were all gone. Presently, I noticed that my rabbits were wet about the mouth. This was true of two litters of young ones. The older ones were not troubled in that way. The trouble continued till I had lost all of two litters and part of another—about 20 rabbits in all.

This trouble is called "slobbers." It is liable to follow the giving of any improper feed to young rabbits. In this case it was due, apparently, to several bunches of mildewed alfalfa hay, which, unnoticed by me, had been taken from the bottom of the haystack. I made the nests very clean, kept the sick rabbits from the well ones, fed them dry feed that was absolutely clean and unspoiled, and the trouble ceased, though not till I had lost many rabbits. Had I fed them properly, they should not have had this trouble at all.

I noticed in the first days of March, when it was rainy and foggy much of the time, that several of my old rabbits had sore ears. There were scab-like scales far down in the ears, and when I tried to lift off a scab the rabbit flinched in pain, and bleeding followed the removal of the scab. These sore places came up out of the ears and eventually reached almost to the ear-tips.

This trouble I found was ear-mange, or canker. I cleaned out the ears very carefully, and then sprinkled powdered boracic acid in the ears. In a week or so the trouble disappeared. About this time the wet weather ceased, and I was able to let my rabbits run in a large, fenced-in pasture of green alfalfa and bunchgrass. I think the fresh, clean pasture had about as much to do with the cure as the boracic acid. I must confess that prior to the appearance of the ear trouble I had been less vigilant than usual in the matter of keeping the rabbit pens perfectly clean. My sick rabbits were the result of this carelessness.

You can not expect rabbits to thrive and keep healthy on a manure pile, and their pen quickly becomes just as filthy as an old manure pile if you do not keep it cleaned out.

While I was treating the rabbits for ear mange I received scratches on my wrists. The rabbits are quick and powerful with their hind feet, and unless you pick them up carefully by the loose skin just back of their foreshoulders they will kick upward and downward in such a way as to strike your wrist with the claws of their hind feet. Never pick them up by their ears.

These scratches on my wrist did not heal up as slight scratches usually heal. It was weeks before they healed. So be careful about these scratches, for this reason:

A rabbit cleans out its ears by turning its head sideways, laying its ear backward at the right angle and then very deftly inserting a hind foot in the ear. With a delicate touch it works its foot about in the ear; then gives its head a quick shake and the job is done.

These rabbits, I very seriously suspect, had been trying to clean out their ears, and the claws of their hind feet had become infected with whatever disease was present in their ears. I do not know what scientists would say about this, but I know the experience I had, and that experience makes me very positive that the scratches on my wrists were infected by the claws of the rabbits. Several times I have been scratched on the wrist by rabbits in perfect health and the scratches healed at once, with no sign of infection.

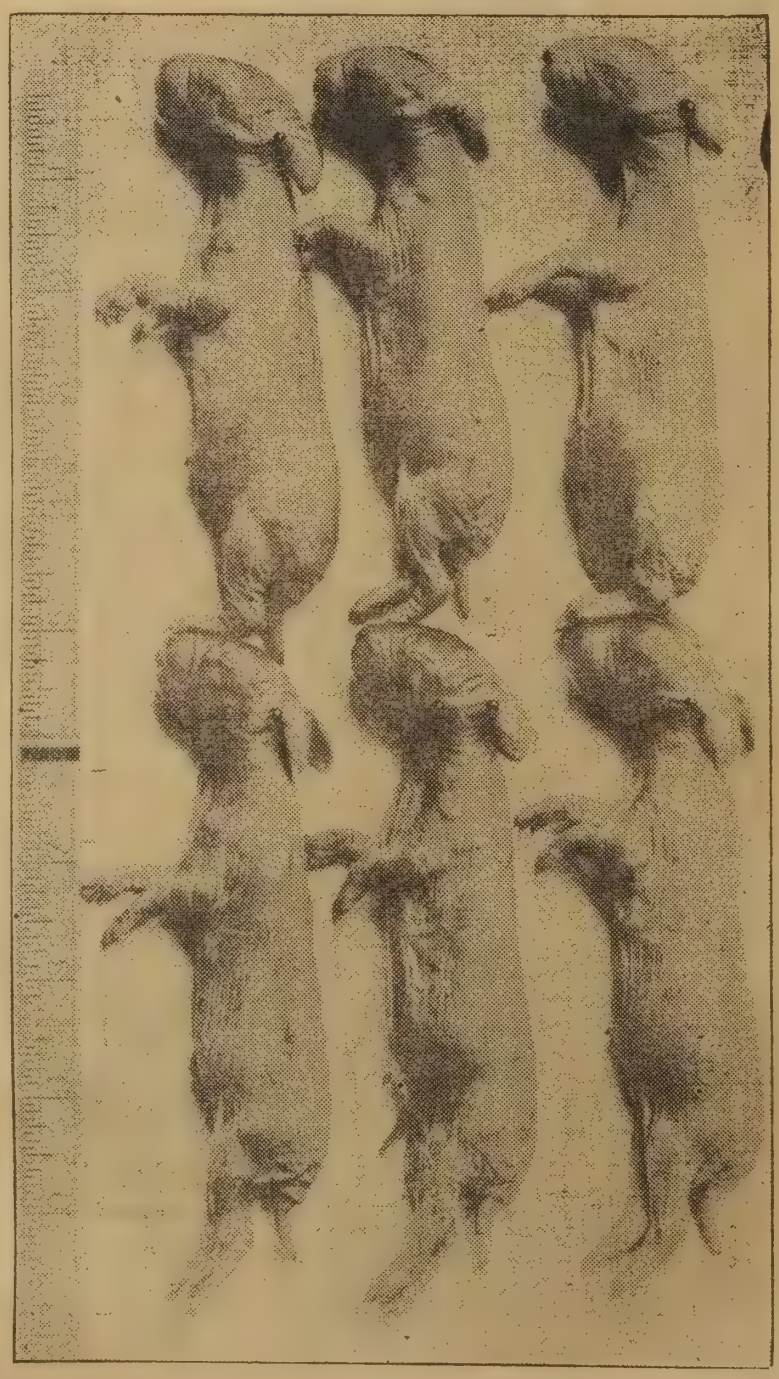
Another experience I had which cost me a litter of six baby rabbits taught me the unwisdom of negligence in providing a warm, protected nest for an expectant mother rabbit.

Let me explain that the rabbit mother prepares a nest to receive her young by pulling hair from her own body and putting it in the nest. I just now talked to a man who had raised rabbits but did not know this. The fur is very light and fluffy, and will blow all about if touched by the least bit of draft. The expectant doe should have, say, an apple box with a hole in one end. This nest box should be in an enclosed pen or building which itself offers fair protection from the weather. To make her nest the doe should have plenty of clean, dry straw or leaves. She will fill the nest box partly full of the litter, then make a nice, roundish nest in the litter she has carried in, and line the place with fur. When her babies are born she puts them in the fur-lined nest, puts more fur about them, and over the top of them lays another layer of fur, which, in winter, may be a couple of inches thick. She takes no chances. At birth the young rabbits are hairless, so she must wrap them in her own fur to keep them warm.

Understanding this, you can see at once what would happen if wind were blowing through a crack near where the expectant doe was preparing a nest to receive her young. The hair will blow all about the place. This is what happened. My rabbit mother did her best to save her babies. The quantity of fur which she took from her body in her desperation was amazing. It was as if some one had emptied a pillow case full of rabbit fur in her pen. But as fast as she wrapped her babies in fur the wind blew it away; so in the morning all the little rabbits were dead, and the mother was still trying to cover them with her fur.

From this experience I learned to be very sure that expectant rabbit mothers have a good, tight nest box in a protected place which is dry, in plenty of time.

**Here Is the Price of Carelessness.**



**The rabbit mother wraps her little ones when born in fur pulled from her own body and stows them away in the warm nest. In this case the wind blowing through a crack in the nest box blew the fur away and left the baby rabbits bare. In the morning all were dead.**

## "Father Is the Gardener."

Mervin McDonald of Waterville, Wash., has two acres in garden, the same as last year. One-half of the living of the family comes from the garden and "father is the gardener. Potatoes, carrots, parsnips, peas, beans, radishes, lettuce, onions, turnips, spinach and mustard. Successive plantings are made of lettuce, radishes and peas until July, when lack of moisture prevents the continuance of the practice. Have to depend on crops like potatoes, carrots and beans, which do not use excessive moisture to mature a crop. We raise some potatoes and carrots for stock feed if there is not a good market price for them."

## No Lack of Patriotism.

**By Charles Grant, Methow.**

No, I don't find any lack of patriotism in this community. As one of the committee on the third Liberty bond drive, I visited every family in this district and 99 per cent of them bought bonds or saving certificates. The one exception was a family who moved in here last fall and were not yet imbued with the Methow spirit of freely giving.

# Grow Corn and Victory Is Ours

## *Simple Rules Will Give Results in Northwestern States*

**By C. L. SMITH, Agriculturist, O.-W. R. & N. Company.**

If food will win the war, then our destiny is in the hands of the farmer. If each one will grow at least all the corn that he can feed, victory is ours.

For best results the following rules are generally good:

Get acclimated seed. Plow deep. Pulverize and pack the soil. Manure well. Harrow frequently until corn is six to eight inches high. Cultivate shallow. Plant with a lister if available moisture is light. If in doubt plant flint corn.

The time for planting corn will vary greatly with local conditions. In the irrigated valleys the large varieties, which yield around 100 bushels per acre, are planted any time after the first of April.

Where heavy frosts are experienced up to the middle of May, some of the smaller types of corn should be used. Here plantings are generally made between May the 5th and 25th. If frosts are frequent up to the 1st of June or later, the hardier varieties such as Minnesota King, Minnesota No. 23, and the flints may be planted up to the middle or last of June.

For silage purposes plantings are often made of the early maturing varieties as late as the 10th of July.

In the Columbia valley on irrigated land, flint corn planted as late as July the 12th made 6 to 10 tons of good silage last year.

The silo, to the fullest extent that it can be utilized, is the best place to store the corn crop.

Good corn silage fed to a dairy cow up to one-half the daily ration is the greatest known stimulant to milk production. It is equally valuable for brood sows, sheep and beef cattle.

Corn silage fed with alfalfa hay will decrease the consumption of hay by one-half and gives a finely balanced ration.

When growing corn for silage the same general rules are applied as when growing it for grain. As the corn is cut for silage before it is entirely mature a corn of somewhat larger type may be used.

However, as the feed value of silage and its keeping qualities depend largely on the amount of grain that it contains, do not attempt to grow a type that will not mature to glazing stage before fall frosts occur.

Neither should the corn be planted so thickly that only a small number of ears will develop.

In the wheat producing sections, sufficient corn may readily be grown on summer fallow land to feed all the stock that is kept. The objection to this has always been that the following wheat crop was reduced by 10 to 20 per cent. Even if this is true, at this time, when we must have the largest possible tonnage of grain, the loss of even 10 bushels of wheat per acre is many times offset by the crop of corn which yields from 25 to 70 bushels per acre.

The labor problem also affects the corn production, but the corn harvest comes after all other grains are out of the way, and the farmer who really wants to will find a way to handle it.

Where the conditions are unfavorable for corn those conditions may be largely overcome by the liberal use of manure, through preparation of the soil, early and frequent shallow cultivation and careful selection of seed. A top dressing of stable manure just before planting, or even after the corn is up, will stimulate to a more rapid growth.

The selection of seed may prove a serious problem to the beginner. Where seeds can be secured from a neighbor who has grown a successful crop for one or more years, such seed would prove far more valuable and will give surer returns than seed brought from a distance even through the latter be of a higher type.

At the higher elevations, or where the moisture supply is light or the season short, the flint varieties can be depended on to give good returns.

Corn has been the staple food of the fighting legions of America through every war in our history. The independence of our country was won and has has been maintained by soldiers who were fed largely upon corn. In the early history of America, when farms consisted mainly of small clearings in the woods and when harvesting machinery was lacking corn was the staple crop. Corn could be successfully grown on the new land often among the stumps. The harvesting and shelling could be done easily by hand and the crude mills available could readily convert it into meal. Through the civil war the "boys" were often lucky to find a few ears of corn which they could shell, crush between two stones and make into corn pone in a kettle over the camp fire. No other cereal is so easily converted into food. The great drawback to corn at the present time is that shipment over-seas is difficult, due to the tendency of corn to sweat and heat. This tendency is increased when the corn is placed in the hold of an ocean steamer. Here the air is damp, little circulation of air is possible and the corn will spoil very quickly. However, there is nothing to prevent our people eating the corn here at home and leaving the wheat to be sent "over there."

Not only should we eat all the corn possible as a substitute for wheat, but also produce and use more corn as food for live stock. Especially in the Pacific northwest, where it has been the general belief until very recently that corn could not be grown, much corn should be substituted for other cereals now being fed. Throughout Oregon, Washington and Idaho, a large amount of wheat is being fed to stock. The greater part of this is in the form of hay, but considerable wheat is used as grain, especially for hogs. Nearly all of this should be replaced by corn.

# Farm Service War Flag

## *Increasing Orders From All Over the State*

There is a rapidly growing demand for the farm service war flag throughout this state. This is seen in the increasing numbers of orders coming in daily. To give a little idea of this widespread demand we have taken an order from each of the counties represented below.

**L. H. RICHARDS,** Olympia, Thurston County, Wash.—Enclosed find 5 cents for which please send me a Farm Service Flag printed on enamel paper with one extra small star for my wife, as we are both working hard, raising all we can to help win the war. We have taken your paper for years and would not miss it for anything.

**WALTER GORMLEY,** Alstown, Douglas County, Wash.—I am enclosing 5 cents to pay for a Farm Service War Flag, and wish seven small stars, as we all work on the farm. I am 13 years old and helped put in the crop this spring.

**J. J. DEE,** Nordland, Jefferson County, Wash.—Kindly send me one Farm Service War Flag. We are doing all we can putting in crops and raising pork, beef and poultry.

**MRS. E. BANNING,** Kettle Falls, Stevens County, Wash.—Enclosed find 5 cents for which please send me a Farm Service War Flag, printed on enamel paper, with five extraa small stars for farm workers.

**GEORGE KNOX,** Harwood, Yakima County, Wash.—Enclosed find 5 cents for which please send me a Farm Service War Flag, printed on enamel paper, with two extra small stars for farm workers.

**MISS JENNIE NELSON,** Vancouver, Clarke County, Wash.—Enclosed find 5 cents for which please send me a Farm Service War Flag, printed on enamel paper, with five extra small stars for farm workers.

**MRS. J. R. ROBINSON,** Goldendale, Klickitat County, Wash.—Enclosed find 5 cents for which please send me a Farm Service War Flag, printed on enamel paper, with four extra small stars for farm workers.

**JAMES LARSON,** Belfair, Mason County, Wash.—Enclosed find 5 cents for which please send me a Farm Service War Flag, printed on enamel paper, with five extra small stars for farm workers.

**J. S. KINNAMAN,** Elma, Grays Harbor County, Wash.—Enclosed find five cents for which please send me a Farm Service Flag, printed on enamel paper, with five extra small stars for farm workers.

**A. B. GALLAGHER,** Curlew, Ferry County, Wash.—Enclosed find 5 cents for which please send me a Farm Service War Flag, printed on enamel paper, with five extra small stars for farm workers.

**M. C. HERROLD,** Waitsburg, Walla Walla County, Wash.—Enclosed find 5 cents for which please send me a farm service war flag, printed on enamel paper, with six extra small stars for farm workers.

**J. L. HARPER,** Mansfield, Douglas County, Wash.—Enclosed find 5 cents for which please send me a farm service war flag, printed on enamel paper, with six extra small stars for farm workers.

**L. L. KNUTSEN,** Snohomish, Snohomish County, Wash.—Enclosed find 5 cents for which please send me a farm service war flag, printed on enamel paper, with three extra small stars for farm workers.

**F. W. OSBORNE,** Bothell, King County, Wash.—Enclosed find 5 cents for which please send me a farm service war flag, printed on enamel paper, with three extra small stars for farm workers.

**HENRY M'LEAN,** Pomeroy, Garfield County, Wash.—Enclosed find 5 cents for which please send me a farm service war flag, printed on enamel paper, with eight extra small stars for farm workers.




**MRS. W. LITSCHKE,** Nahcotta, Pacific County, Wash.—Enclosed find 5 cents for which please send me a farm service war flag, printed on enamel paper, which two extra small stars for farm workers.

**A. J. SCHOLZ,** Penawawa, Whitman County, Wash.—Enclosed find 5 cents for which please send me a farm service war flag, printed on enamel paper, with two extra small stars for farm workers.

**W. G. BARLOW,** Colbert, Spokane County, Wash.—Enclosed find 5 cents for which please send me a farm service war flag, printed on enamel paper, with three extra small stars for farm workers.

**ARTHUR W. CAYS,** Dungeness, Clallam County, Wash.—Enclosed find 5 cents for which please send me a farm service war flag, printed on enamel paper.

**CHARLES E. HILL,** Snake River, Franklin County, Wash.—Please send me a farm service war flag for which I enclose 5 cents. Send four extra small stars for farm workers.

**ANNA HAYSE,** Wenatchee, Chelan County, Wash.—Enclosed find 5 cents for which please send me a farm service war flag, printed on enamel paper, with three extra small stars for farm workers.

**J. G. WAGNER,** Brownsville, Kitsap, County, Wash.—Enclosed find 5 cents for which please send me a farm service war flag, printed on enamel paper.

**MRS WILLIAM BULLARD,** Alpha, Lewis County, Wash.—Enclosed find 5 cents for which please send me a farm service war flag, printed on enamel paper, with seven extra small stars for farm workers.

**MRS. WILLIAM RICHTER,** Chesaw, Okanogan County, Wash.—Enclosed find 5 cents for which send me a farm service war flag with four extra small stars for farm workers.

**MRS. FRANK CASEY,** Burke, Grant County, Wash.—Enclosed find 5 cents for which please send me a farm service war flag, printed on enamel paper, with four extra small stars for farm workers.

**ROY ALLMAN,** Davenport, Lincoln County, Wash.—Please send me a farm service war flag, for which I enclose 5 cents. Please send three extra small stars for farm workers.

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# Growing Tomatoes

## Keep All Branches Slashed Back

**By W. D. BOYNTON, Gig Harbor, Wash.**

I have just finished planting out 1500 tomato hills. I am dedicating this crop to the purchase of Liberty bonds. It is about double the number of plants I usually put out, but I felt that I must make an extra effort however backaching and laborious, to enable me to do something like my share of carrying the great burden our country is now struggling under. I have a green-house, 16x32 feet, in which I grow plants for myself and neighbors; but these plants can also be grown in hot-beds or even in cold-frames in this locality.

It is not an exacting crop. That is, it makes no extraordinary demands upon the soil, or for water or labor. Land that will grow a good crop of corn will grow a good crop of tomatoes so far as the question of fertility goes. While it is a late maturing crop and can not therefore he made from the spring moisture, as an early potato crop can, it does not need any great application of water after the fruit is well set. I have a gravity water system on my place, with a plentiful supply at any time needed; but I make it a point to take the water away from my tomatoes at the last end of the season. If you keep up the moisture supply and the land is fairly rich you will get altogether too much vine growth and too much late setting fruit. If you can concentrate the strength of your plant on setting a dozen good tomatoes in close proximity to the main stem, you will find them of much greater value that three dozen sprawling out on the long vines and maturing much later than the central bunch. The Earliana and most other desirable varieties of tomatoes can be thus handled. Keep all limbs slashed back to within six or eight inches of the main stem. You will get bloom and fruit enough within that scope to produce best paying results.

If a rainy spell sets in just about the time the fruit is beginning to turn color, pick at once and spread out on the barn floor. They will ripen there in good shape, but will not be quite so highly colored as those ripening in the sun. If left on the vines through a wet spell three-fourths of all the fruit, both ripe and green, will crack open and be unmarketable. I have shipped hard, green tomatoes up in Alaska, just as green bananas are shipped to ripen on the road or soon after arrival.

Kept trimmed back as I have describ, the plants can be set quite closely. I am planting 2x3 feet this season. The tomato is not a gross feeder like the cabbage, and good, strong land will carry them set that distance apart.

# More Workers Sent Out

The regents of the state college at a recent meeting decided to add to its extension workers a specialist in gathering and distributing marketing information. The position has been filled by the election of Joseph Passonneau.

Among the members of the state college faculty tendering their resignation at the close of this school year is Mrs. Helen Dow Whitaker, who has been at the head of the department of poultry husbandry. Mrs. Whitaker has been in charge of all northwest egg-laying contests which have developed wide interest among the poultrymen of the northwest. The resignation of B. E. Smead as state pig club leader was announced and Enoch Torpen was chosen to fill the vacancy.

A large number of extension workers were appointed by the regents upon the recommendation of President E. O. Holland of the college. Among them were the following: Grant county agent, Harold R. Vercler; Jefferson county agent, W. W. Henry; Snohomish and King counties agent, A. B. Crane; assistant Whatcom county agent, A. Hall Smith; assistant Snohomish county agent, Robert J. Rodgers, assistant Whitman county agent, Charles E. Holen; state garden club leader, William J. Green; Grays Harbor canning club leader, Miss Eva B. Morey; King county canning club leader, Miss Mary Frazee; Pierce county canning club leader, Miss Lena F. Morris; Clarke county club leader, William E. Dudley; Whatcom county club leader, Fred D. Vander Mei; Yakima county girls' club leader, Miss May L. Mark; Yakima county club leader, William E. Weir; Klickitat county club leader, Curtis Kelly; Snohomish county canning club leader, Abigail Neikirk; Whitman county canning club leader, Blanche B. Henry; Benton county club leader, Melvin S. Lewis; Chelan and Douglas counties club leader, Edith L. Breenberg; Spokane community canning demenstrator, Mrs. Elizabeth Bell, and Lewis county club leader, Homer F. Aker.

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We guarantee every subscriber against loss through dishonesty or swindle by any advertiser in this publication; we do not attempt, however, to adjust trifling differences between subscribers and honest, responsible advertisers, nor will we pay the debts of honest bankrupts. Complaints must be sent us within 30 days from the date of the transaction and the subscriber must have mentioned The Washington Farmer when writing the advertiser. This guarantee applies to live stock, except that we will not be responsible for claims for damages on acconut of disease in stock sold through these columns.

## Fine Record of Federal Land Bank

As shown by an official report of the federal farm loan board the Spokane land bank stands second in volume of business transacted in the first year of operation, the St. Paul bank leading. This record is convincing proof of the wisdom of the farm loan board in forming the four northwestern states of Montana, Idaho, Washington and Oregon into one of the 12 districts.

When the board came to Spokane to conduct its hearing the committee that presented the Pacific northwest's claim was a little uneasy over the fact that these states fell short of a twelfth of the country's population, its total number of farms and other determining factors, and reinforced their arguments by pointing out that rapid growth would soon correct that apparent deficiency. But with all their faith in their case the members of the committee never expected that this district would make the remarkable record now credited to it by the federal board.

In large part that fine record is due to the superior cooperative spirit of the farmers of the Pacific northwest. Through various previous cooperative movements, more particularly in the irrigated districts, they had learned the knack of organization and the advantages of cooperation. When the land bank came along they took naturally to the organiaztion of farm loan associations, the basic unit of the great system. This fact, that the farmers of this region were experienced organizers, was also dwelt upon by the presenting committee, representing the grange, the farmers' union and the Spokane Chamber of Commerce, and made a deep impression on the board. The first year's record is a gratifying proof of the soundness of that argument.

## Ruined by Want of Restraint

Russia is the tragedy of our times, ruined by want of restraint. The revolution overthrew the oppressive government of the czar, and the dawn was rosy with fair promise of a better day. Then the accursed bolsheviki seized the reins of power and a sorry wreck they have made of it. They began by poisoning the minds of the soldiers and destroying military discipline everywhere. Then they deceived the workmen in the cities by telling them that they should have big wages for four hours' work a day. About the same time they said the peasants should have the land, and the soldiers, who were largely peasants, threw down their arms and hastened home to get their share of the soil.

Then the Germans marched in, split up the empire, and tricked the stupid bolsheviki into a deceptive peace. A once mighty empire of 180,000,000 people is demolished, ruined, enslaved by German domination.

Read elsewhere in this issue what a life insurance manager has to say of Russia's dreadful plight.

After that appalling record we may be confident that the bolshevik element in the United States will make no headway with their nefarious designs to Russianize the American people.

## Wheat Substitutes Cost Too Much

Herbert C. Hoover, national food administrator, has done remarkable work as head of the food administration. He has been struggling with one of the most difficult problems that ever confronted this country. The people should recognize the difficulty of the problems when they feel like wrongs are being done them. There are some things that the government can not do in a week or a month or a year. Regulation is a thing entirely new in this country, and something that the popular sentiment of the country has been opposed to to a great degree.

But be this as it may, it remains undisputed that the prices of corn meal, oat meal, barley flour, corn flour and other substitutes for wheat are too high. The conservation purpose of the food administration, and be it also said, the purpose of the American people, has been to considerable extent defeated because thousands of citizens have found themselves unable to buy these substitutes. It takes a mighty high grade of patriotism for a man with a small income and a large family to pay $2.15 for 24 pounds of substitutes when he can buy 24 pounds of good wheat flour, the thing he is used to and the thing he likes, for $1.35. Those are exact figures of a transaction that came within the notice of the writer, and they are typical of the price comparison in most localities.

The food administration, says a dispatch from Washington, tells the millers that corn and oats and barley in the form of meal or flour should be selling from 10 per cent to 20 per cent below wheat flour. There should be some pressure from some source of power to compel their distribution at that cheaper figure if the administration is right. The dispatch goes on to say that the administration is getting at the root of the trouble and promises reduction in the cost of the substitutes.

In the meantime let us be loyal even to the point of paying more than we should if we have to. Our country, our liberty, our sense of human righteousness for which the civilized world is fighting, are bigger than any failure on the part of anybody or any organization, and bigger than any temporary injustice that may be inflicted, be it intentional or inevitable injustice.

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There are still some genuine traitors at large in America—some without a drop of German blood in their veins. There are still thieves and robbers abroad, seeking whom they may rob and plunder. But the conscience and patriotism of this country as a whole were never before so aroused. Out of all the evil of war, good will ultimately come.

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This is the open season for politics. Campaigns are on in many states. While politics must not be allowed to interfere with the vigorous prosecution of war work, it is grossly unwise for any voter to neglect to study the political situation in his locality, state and country and cast his ballot for a well-understood purpose.

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It is never too early to begin to think of next year's work. It is never too early to plan. Make your plans now and from day to day revise them so they will be as flawless as possible when time comes to put them into effect.

## Learning a Lesson

A quarter now and then is not missed by the average citizen. Even children are able to lay aside their savings. The government needs vast quantities of money—more, perhaps, than we yet can realize. Thus these small investments in thrift stamps and war savings certificates are of use from the standpoint of patriotism.

And while we are doing our duty and helping our government, at the same time we are learning a lesson in thrift and saving money at a very good rate of interest.

## Coming Events

June 4-7—Convention, Washington state grange, Walla Walla, Wash.
June 12-14—Convention, county school superintendents, Ellensburg, Wash.

**Fairs, Shows, Exhibits.**

September 2-7—Spokane Interstate fair, Spokane, Wash.
September 16-21—Washington state fair, Yakima, Wash.
October 1-6—Western Washington fair, Puyallup, Wash.
Nov. 7-13—Northwest live stock show, Lewiston, Idaho.

**Live Stock Sales.**

June 5-6—Jerseys and Holsteins, T. S. Griffith, Spokane, Wash.
June 11, Jerseys, C. H. Cannon, Turner, Ore.
June 12, Jerseys, W. O. Morrow, Independence, Ore.
June 26, Guernseys, E. R. Brady, Satsop, Wash.

## Washington Gleanings

Over $50,000 had been invested by the children of the schools of Snohomish county up to May 1 in war stamps.

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Women in the Bunker sawmill at Chehalis are doing light work taking lumber away from the machines, and other employment for which they are suited.

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The Richland district war council has been organized with the following officers: President, F. J. O'Brien; vice president, S. M. Ross; secretary-treasurer, A. L. Nelson.

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The Cashmere Fruit Growers' union was recently organized with the following officers: President, H. J. Olive; vice president, W. S. Tallman; secretary and treasurer, J. W. Sussex.

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At a recent meeting of the Arcadia Valley Fruit Growers' assoviation at Deer Park, I. G. Page was elected president; C. B. DeCamp, vice president, and O. L. Olsen, secretary-treasurer.

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Clyde Hustead, a Ridgefield boy of 13 years, has been busy raising chickens this spring. Recently he set a hen on 15 eggs and hatched out 15 chickens and one had two heads and four legs.

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Plans under consideration by the Commercial club of Dayton comprehend an elaborate system of landscape architecture and the building of an amphitheater and a natatorium in the 40-acre city park.

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Horticulture inspector in the state department of agriculture since 1915, H. W. Samson has resigned to accept a position with the United States bureau of markets as investigator, with headquarters in New York city.

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The Prosser Sheep company suffered a considerable loss during a recent cold rain-storm, about 270 head of valuable ewes having snuccumbed to the cold. The animals had recently been sheared and were on the range in the Rattlesnakes.

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Several women have been working with the section gang at Castlerock, thus releasing men for the war. They receive the same pay as the men and they have so far proved successful. Their duties are mostly cutting weeds and grass and removing debris from along the track. The overall costume is adopted.

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Owing to unsatisfactory express service by rail in securing delivery of milk, the farmers' organization that has the milk concession to supply Camp Lewis with milk and cream products has established an automobile truck service. Some of the milk comes from the Chehalis valley, but it is reported that the trucks make the 53 miles in good time.

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Eight hundred boys, who are to pick berries on the Puyallup farms this summer are to camp on the order of a regular army camp, at the fair grounds at Puyallup. The boys will have two of the three Y. M. C. A. workers as supervisors. Then there will be leaders for each group of 20 boys. Buildings used for barracks, cook rooms and mess rooms are to be erected soon.

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With the completion about the middle of this summer of four miles of highway along the north bank of the Columbia river in Skamania county, between Collins and Cooks, and half a mile of road around a point at Wind Mountain, a long-needed automobile road (passable 12 months in the year), connecting western and eastern Washington will be provided. It will stretch from Vancouver to White Salmon, thence through Klickitat county to Goldendale, and on east, connecting with roads to Yakima, Walla Walla, Pasco and other points in the state.

# Memorial Day Becomes International

## *Observation of May 30 Will Be Noted by This Country's Foreign Allies*

TODAY is May 30, Memorial day, a day observed since shortly after the civil war in commemoration of those who, in the words of President Lincoln, "gave the last full measure of devotion" to their country. It will be observed today throughout America as it has always been observed, but with a vastly greater significance to the mass of the people of this country. Not only will it be observed in this country, but the thousands of Americans in Europe and many of their allies in the great struggle for humanity in which they are cooperatively engaged will join in the memorial features of the day. This international feature is sufficient to stamp the day as the most notable like occasion in the world's history perhaps, but there is yet another feature that will add to the solemnity of the day.

President Wilson has issued a proclamation calling upon the people of this country to meet today much in the manner of their meetings on Thanksgiving day, making the day a day of prayer for the welfare of those who are pledging their "lives, their fortunes and their sacred honor" to the cause of world-wide justice and human righteousness.

Today the people will do honor no less to the heroes of '61-5 because they include in their memory and in their prayers, spoken or unspoken, those who have during the last four terrible years, given their lives or offered them on the battlefields of Europe. Indeed the veterans of the civil war will today join with their countrymen, both young and old, in celebrating the heroism of the boys of the war of 1914. When they meet for their annual decoration day ceremony there will be included in it a new feature, one apart from their standing ritual, but one none the less real and heartfelt. Well may they look with pride upon the young men who are carrying toward a world-wide conquest the same principles that the boys in blue fought for under the leadership of the world-revered Lincoln.

One hundred and forty years ago the colonists in America were struggling to set up a government "of the people, by the people and for the people." Nearly 60 years ago America was struggling to learn whether "that nation or any nation so conceived and dedicated can long endure." Today the sons of America are carrying into a world war, supported by the best nations of earth, the grim determination "that government of the people, by the people and for the people shall not perish from the earth."

Today is the first international Memorial day. It is not a great stretch of the imagination to see in the not-distant future England, France, Italy, Belgium, Serbia, the United States and other nations whose people are dedicating their lives to the cause of humanity joining in a world-wide celebration and memorial observance of May 30—celebrating in the assurance that peace and liberty shall reign; solemn memorial in the reflection that it cost the lives of hundreds and hundreds of thousands of their best sons.

### "ALSO SAVE FOOD."

To the Editor of the Washington Farmer: I am sending you 25 cents in stamps for one new subscription to The Washington Farmer. And for my premium I would like paper pennant, 9x22, with one big star for the farm and three small stars. We are on a five-acre tract, and there are three of us, my wife, one child and myself. We are doing all we can to produce food, also save food.

CARL MEEK.

Harper, Wash.

## NORTHWEST SHOW.
### Secretary Reports Fine Outlook.

Acting Secretary O. P. Hendershot of the Northwest Live Stock show at Lewiston is greatly encouraged with the reception of a trip to the Coast. He says:

"I talked with stockmen, business men and politicians in two states who feel their states should make an appropriation to at least take care of the premiums won by breeders of their state, the maximum amount thus provided to be $5000. I believe such assistance will be secured from the legislatures at their next sessions.

"The record breeding associations have already subscribed in cash and trophies about $5000 for the 1918 show and we expect an additional $1000 from this source. We are waiting the national meeting to take action and for this reason the regular premium list is being held up. We will issue an advance sheet of the premium list and this will be in the mail next week. We expect the regular premium list to be ready for the mail by the latter part of June or very early in July.

"We have started out to have $30,000 on hand to handle the 1918 show and we hope to be able to eliminate personal subscriptions after this year. This show is a national institution, is of greater industrial value to the northwest than any other organization and should be permanently financed. Our premiums this year will be 300 per cent more than ever before offered."

## Ready for Grange
### Session Is Booked for Walla Walla

Indications point to a large and important session of the Washington State grange when it assembles at Walla Walla on the morning of June 4. The program includes the names of a number of prominent grangers and other prominent speakers. Among those on the program besides local people of Walla Walla, who will participate in entertaining the grange, are Ray McKay, George P. Hampton, President S. B. L. Penrose of Whitman college, President E. O. Holland of the state college, E. E. Faville, L. L. Snow and J. C. Lawrence of the grange. Professor W. S. Thornber of the extension department of the state college, will also be in attendance to take up matters of importance to the agricultural industry of the state. It is probable that many of the problems of the farm brought on by the war will be discussed and to some degree acted upon by the members of the grange in session. The election of officers will occur on Thursday, June 6, at which time a master will be elected to fill out the term of the late Master C. B. Kegley. The office of overseer, formerly held by William Bouck, who became acting master upon the death of Mr. Kegley, is also to be filled. Considerable interest in the election is expected to be manifested.

### Flour Hoards Are Seized.

Fifteen sacks of flour have been taken from the homes of hoarders in Gig Harbor, Pierce county, after investigation by Secret Service Agent Foster. The flour was found in all cases fairly well concealed. Some uncertainty as to the length of time the flour had been stored and other conditions led to a decision not to prosecute after the flour had been returned and promises of future obedience to the food laws had been given.

### Apportions Liberty Loan Money.

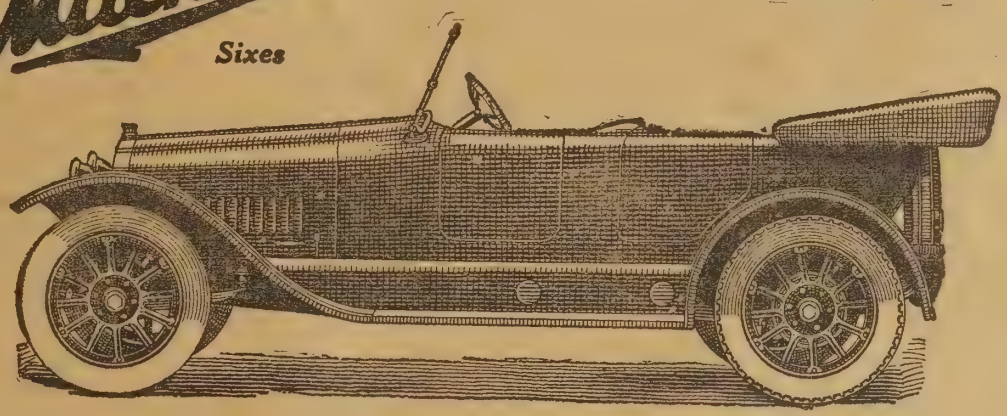
President Cadigan of the New World Life Insurance company announces that the company he represents, instead of making its Liberty loan subscription in one slump sum from its central office, spread it out in the various cities where local offices are maintained throughout the northwest. The idea was to distribute the loan in the communities from which the company's profits were derived.

### Form Testing Association.

Dairymen in the vicinity of Vancouver, Clarke county, are taking steps to organize a cow testing association. More than 350 cows are already signed up and the association will be doing business as soon as the number reaches 500. There are a little more than 10,000 dairy cows in Clarke county, a decrease of more than a thousand from last year's number.


Mitchell Sixes

$1250 and $1525
f. o. b. Racine



# The Greatest Six

## Which Now Sells at $1250

THIS new Mitchell Light Six has a 120-inch wheelbase. It has a 40-horsepower motor in our finest type of Six. It has distinction in its long, low lines. It has a new, enduring finish, shock-absorbing springs, extra-complete equipment and uncommon luxury. It is uniquely strong and sturdy and very economical. Yet it undersells any other car of this size, class and power.

### We Have Added Vast Endurance

These new Mitchells embody more improvements than we ever before made in one year. And most of them are strength improvements.

We now build these cars to meet export requirements, in countries with bad roads. There the strains are extreme. The cars must be reliable. Cars built to those standards should prove lifetime cars on the average American road.

To get this new endurance we have added many specialists to the Mitchell staff. They have studied every part. They have fixed new tests, new standards. In many a part the strength has been more than doubled. Yet Mitchells have for 14 years been famous for endurance.

We have also doubled our inspections to meet these new requirements. It is almost impossible for a Mitchell to go out with any little fault or flaw.

Never before, we believe, have cars at these prices been built to such radical standards.

### They Show Distinction

These new cars also look supreme. A famous body designer now gives his whole time to the Mitchell. Our new body plant is filled with expert craftsmen. There are no other Sixes so big and roomy, so handsome and luxurious, at Mitchell prices this year.

And note that these are Sixes—smooth-running, powerful, economical, up-to-date. Our engineering staff has spent many years in perfecting Sixes only.

Mitchell D-40, with 120-inch wheelbase, sells at $1250 at factory. Mitchell C-42, with 127-inch wheelbase and 48-horsepower motor, sells at $1525 for 7-passenger touring car. There are also 16 other new-type body styles.

Write for our new catalog and name of nearest dealer. Don't decide on a car until you see what this great factory offers you at prices which no other maker meets.

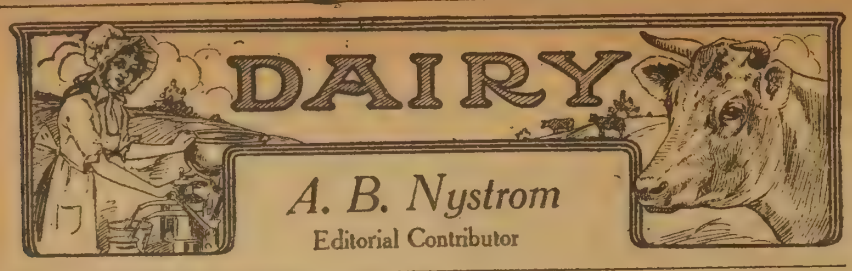
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(641)




*A. B. Nystrom*
Editorial Contributor

## FARM CHEESE MAKING.

### Good Milk Is the First Essential.

By A. B. NYSTROM.

Several requests have come in lately concerning the making of cheese in the home. This is a very important work to take up on the farm because cheese will take the place of meat that is now consumed, thereby releasing a product that is necessary for the winning of the war. A pound of cheese will supply twice as much protein as a pound of the very best meat. In Farmers' Bulletin No. 487 (U. S. department of agriculture), the following statement is housekeeper cheese is of importance because of its high nutritive value, particularly its high percentage of protein or muscle-forming materials, because of the ease with which it can be kept and prepared for the table and the great variety of ways in which it can be served."

#### Making American Cheese.

The first essential for good cheese is to have good milk; otherwise abnormal fermentations will develop which will impair the flavor and lower the nutritive value.

For equipment there is needed a vat or some other container such as a wash boiler, in which to set the milk; rennet tablets of extract, cheese cloth, a hoop or a mold in which to press the cheese, a curd knife and a thermometer. All of these supplies may be obtained from any of the dairy supply houses, but where small amounts of cheese are to be made for home consumption the necessary equipment may be improvised from articles found in the home. It is, of course, necessary to buy the rennet, cheese cloth and thermometer. A wash-boiler may be used for a vat and a cider press may be used for the press, or a simple lever press may be improvised.

#### Setting the Milk.

Use fresh, clean milk, cooled or heated to 86 degrees F. Dissolve one small rennet tablet in one-fourth pint of cold water. This quantity of solution is sufficient for about eight gallons of milk. Add the rennet to the milk and stir gently for two or three minutes until it is thoroughly mixed with the milk. Then cover with a cloth to maintain the temperature at 86 degrees F. Do not stir again until the curd is ready to cut. This should take about 20 minutes, but the exact time to cut may be determined by inserting the forefinger into the curd at a slight angle until the thumb nail touches the surface of the milk. A slight split is made in the curd with the thumb and the forefinger is slowly raised up through it. A curd that is firm enough for immediate cutting will part with a clean break leaving no particles of curd adhering to the finger or in the whey.

#### Cutting and Heating the Curd.

The curd is then cut into one-half-inch cubes by means of regular curd knives or a screen with one-half inch mesh. Sometimes a wire toaster may be used for this purpose. Care should be taken to see that the curd is cut and not crushed. After cutting allow the curd to remain undisturbed for about five minutes. Then begin stirring gently, using the hand, being careful not to break the curd, and at the same time raise the temperature slowly to 98 degrees F., at which temperature it should be held for 20 to 30 minutes, until the curd is well firmed. If the curd particles do not adhere closely when pressed together, but rather fall apart, the curd is firm enough and the whey should be drawn off.

#### Pressing the Curd.

Allow the curd to drain for a few minutes, then transfer it to the molds, which should be lined with cheese-cloth, and apply a pressure for about an hour. After pressing for an hour remove the cheese from the mold and dress off the irregular edges. Dip the cheese in warm water to soften the surface and return it to the mold and put back in the press, where it should be left under full pressure for 24 hours. After the pressing is completed the cheese may be salted by soaking in a strong brine solution for 2 days. Then transfer to the curing room which in most cases will be the cellar, where the temperature is fairly constant and cool. Turn the cheese every day for the first two weeks, and after that about three times a week. Should mold form on the outside of the cheese it should be washed off with a warm brine solution. After curing six or eight weeks the cheese is ready for use.

## Dairy Cattle Congress.

The ninth annual dairy cattle congress will be held September 30 to October 6, 1918, in its permanent home at Waterloo, Ia. This is one of the notable dairy gatherings of the year. In the first place, it brings the visitor face to face with the latest achievements for the dairy along the line of labor-saving machinery, and in the second place, the congress brings together high dairy authorities who will talk on subjects that are of vital importance.


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DIGESTER TANKAGE
Puts Profits in Porkers
Cuts down high feeding costs—saves costly grain—balances the hog ration.
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To make into beef, fats, hides.

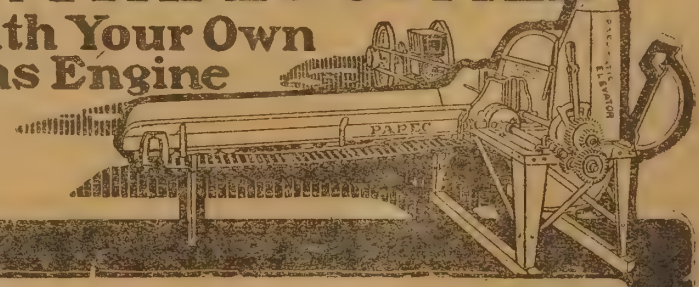



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It is not only a scientific, but it is common-sense food, endorsed by Pacific Northwest dairymen everywhere. Dealers sell it.

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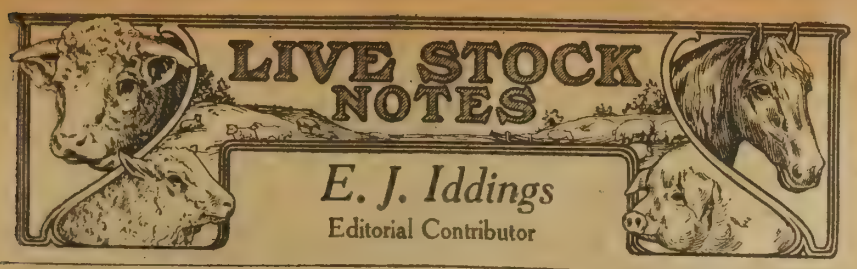
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## IMPROVE LIVE STOCK.
### Keep One Kind in Community.

Improving live stock succeeds best when done cooperatively, and it is the only way that the improvement can be kept up continuously. In England and Scotland where most all the important breeds of live stock were developed, whole communities raised the one kind of cattle, hogs, sheep or horses. So much so that these breeds were usually given the name of the county or shire, as they call it in England, as Shropshire sheep, Hereford (shire) cattle, Yorkshire hogs, etc. In this way they kept on improving the breeds and they are improving them yet.

Several communities in the United States have gone into the raising of one breed and the communities have become known all over the country for the stock they raise, as Northfield, Minn,. for its Holsteins; Waukesha county, Wis., for its Guernseys; Geauga county, Ohio, for its Holsteins; New Salem, N. D., for its Holsteins, and so on. Not only has a great deal of improvement been accomplished already in these communities, but the improvement will keep going on. It is like the snowball that has been started down hill, the further it goes the bigger it gets, says the North Dakota Agricultural college.


# Cutter's
*Germ Free*
# Blackleg Filtrate
*and*
# Blackleg Tissue Aggressin

*The New, Safe and Efficient Agents for Protecting Calves from Blackleg.*

**Cutter's Blackleg Filtrate positively protects** against Blackleg.

**Cutter's Blackleg Aggressin,** made directly from animal tissues, **affords even greater protection** and is recommended for Pure Breds.

**Neither the Filtrate nor the Aggressin can possibly produce Blackleg** in even the most susceptible animals, since **both are germ free.**

**Both have given 100% protection** wherever used.

**Prices—**

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|---|---|---|
| 10 | dose pkge. Filtrate | $2.00 |
| 50 | " " " | 8.00 |
| 100 | " " " | 15.00 |
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**N. B.**—Cutter's Filtrate (a "cultural product" aggressin) is full 5 c.c. to the dose, as we believe that smaller doses, whether concentrated or not, afford less protection.

**Write for booklet** telling what germ free vaccines are and wherein **"cultural product" Aggressins differ from Cutter's Aggressin** made from animal tissues.

**While these new "germ free vaccines" have advantages** that should be known to every stockraiser, we see no reason for a quick change to them by stockraisers who have had satisfactory results from the use of

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## BLACKLEG PILLS

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**Year in and Year Out** they have given better satisfaction than any other vaccine made, and as far as price and convenience of administration are concerned, they have all the advantage.

**Prices:**

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| 10 | dose pkge. Single pills | $1.00 |
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## Veterinary
Dr. S. B. Nelson

**Teat Swells and Breaks**—I have a mare that has something wrong with her teat, or one whole side of bag. This trouble began about 10 days ago. I noticed one teat was much swollen. It kept getting larger until it broke. Then broke again just back of the teat. For awhile I thought it would be all right, but the same thing happened again until it has broken the third time and is still swollen. She had a colt last year, weaned last October. She has good pasture and has not lost in flesh. Can you tell me the trouble and give me a remedy?—A Subscriber, Roy, Idaho.

Your mare is evidently affected with botryomycosis, and she may possibly yield to the following treatment: Open up the little abscesses thoroughly and then inject them very thoroughly with tincture of iodine daily. Put the mare onto an internal treatment of potassium iodine, one dram to one and one-half drams, morning and evening, the doses depending upon her size. If she is about a 1400 to 1500-pound mare, give her the large dose. If she is 1000 or 1200-pound mare, give her the smaller dose. Try this for two or three weeks. If she does not yield to this treatment, you will find it helpful, if you care to do so, to have her operated upon and have the bag removed surgically. This is an infected disease, and may yield to the first treatment, but sometimes the second treatment is also necessary.

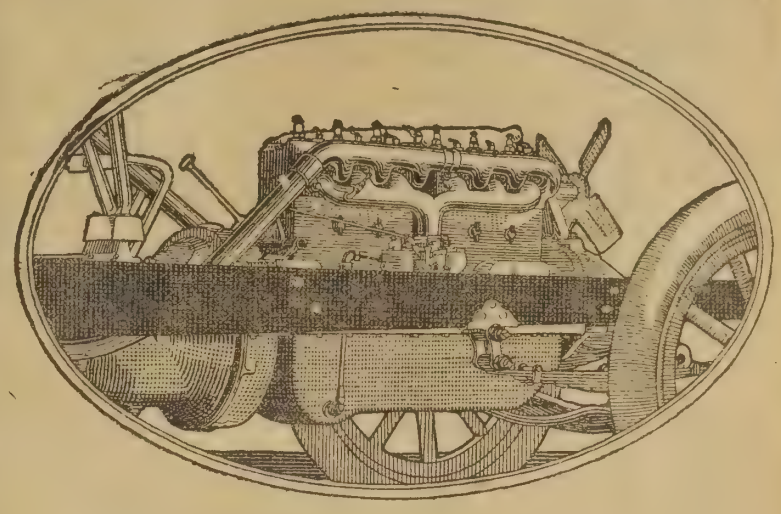
**Cow Holds Milk Up.**—We have one young cow that has lots of milk but won't let us milk it down. Is there some medicine that we can give?
J. P.
Malheur, Ore.

As the custom of a cow letting down her milk is one that is influenced by her nerve control, medicine given to the cow will not do any good. The only thing that will be of value is to cause the cow to forget about the milking, and consequently lose control over the udder and the milk may be readily milked out. For this purpose I suggest simply sitting down by the cow and washing the udder quite thoroughly for two minutes with hot water. Gently dry with a soft cloth, rubbing the udder with a gentle massage until the evidence of the dilation in the udder and teats is manifested. Then begin to milk gently. If this is kept up for a time the cow may be broken of holding up the milk.

**Inflammation of the Intestines**—I have a Holstein calf about three months old that took sick a few days ago. Her droppings are clotted with blood, that is, there comes blood clots with it. She eats and drinks fairly well, but not as good as before. She breathes about like a dog when it is very hot. Now it has an empty stomach, but before it was well filled up. Could you give me a cure for it?—S. S., Everson, Wash.

Your calf is very likely affected with inflammation of the intestines. This may be of a light or severe character. I am not able to diagnose that for you. I suggest that you might obtain fairly good results from administering to the calf a tablespoon as follows: Turpentine, one-half ounce; raw linseed oil, eight ounces. Give one tablespoonful morning, noon and night. A couple of raw eggs, beaten into a quart of milk and given as a drench, will also be good for her at this time.


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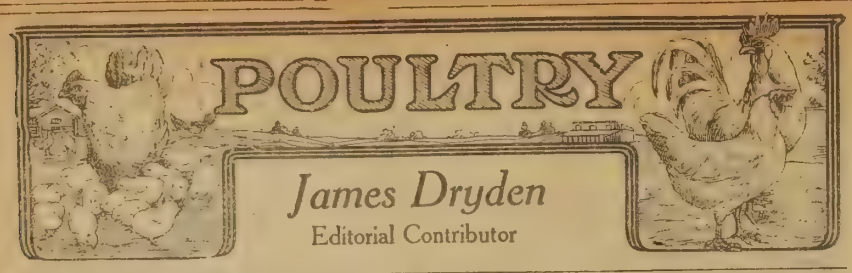
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## Hen-Killing Embargo

When rule 15 (miscalled 14) was issued by the United States food administration in February, ordering dealers not to buy or sell hens for market till April 30, many poultry keepers thought it a peculiar proceeding. Some protests were made. The reason given by the food administration was that large numbers of laying hens were being marketed and if continued there would soon be a large decrease in the egg yield. The policy was to increase poultry and egg production in order that the people might eat more poultry and eggs and release red meats for shipment to the soldiers of the allies.

The writer recently attended a convention of poultry producers and others interested in poultry production at Chicago, at which this rule 14 was thoroughly discussed. Mr. Priebe, a representative of the food administration from Washington, explained that this order was issued on consultation and approval of the department of agriculture, but it developed that the poultry division of that department knew nothing of the order until it was published, but another division of the department which was not concerned with production, but rather with storage and distribution, advised the embargo. No doubt unwittingly, the proper division had not been consulted.

It does not matter a great deal who was responsible for the order; the main question is, was it necessary. Mr. Priebe explained that the food administration was not interested primarily in production; that is the business of the department of agriculture; but their business was to get food to the soldiers and win the war. In a time of war like this, he said, it was inevitable that there would be some disturbance of business conditions, and some people and some special interests might have to suffer financial loss. Mr. Hoover insisted that the men in his department should think in terms of pounds of food, not of dollars and cents. So that the embargo meant more pounds of food, whether or not it meant more dollars and cents to the poultry-keepers. Mr. Priebe stated further that the administration was besieged with protests and delegations protesting against the order. He spoke of a delegation of commission men from New York calling on him to see if the order could not be modified. One after another insisted that it meant great financial loss. The purpose of the order was explained to them, and finally one dealer arose and said that "it will mean a direct loss of several thousand dollars to me; it may break me up in business, but, gentlemen, if it will help the government to win the war, I am satisified."

It seems fairly certain that the order was in the interest of food conservation and therefore was a help to winning the war. Whether those poultry-keepers who would otherwise have killed off many of their hens, suffered a financial loss by keeping them is doubtful, because during the months of March and April practically all hens are laying. Poor layers lay nearly as well during those months as good layers, and even at the high price of feed with the high production of those months there would be a profit in most flocks.

It has been charged that the order was made in the interest of the packers who had storage stocks to sell, or, whether made in their interest or not, the effect was, first, to raise the price of storage stocks, and, second, with a larger egg production, to enable the packers and storages to get eggs cheaper for storing. On the other hand, the poultry-keepers saw the price of stags and old roosters jump up to unheard of prices when the order went into effect, and they had the opportunity to sell off a great many surplus males at good prices when in ordinary years they are hardly worth shipping to market.

On the whole, it is questionable whether after all the order really prevented many hens being sold, because at that season of the year when practically all the hens are laying, farmers are not in the habit of selling the hens. Later on in the year when they begin to slacken up in laying they are sent to the block in large numbers. If that be the case, there was really no necessity for the order from the standpoint of maintaining a large egg production.

Since April 1st the order was lifted in California, Oregon and Washington; in other parts of the country it was lifted on April 20, ten days before the time set in the order. It is a noteworthy fact that in the coast cities at any rate there was no slump in the prices of hens, the prices being higher then they were ever known to be.

Probably the matter can be summed up this way: Rule 14 doubtless saved some hens from being marketed but not a great many, and to that extent increased the egg supply.

Let us give the benefit of the doubt to the food administration people who are straining every nerve to feed the soldiers who are fighting our battles over the seas. J. D.

## Oats a Good Feed

To the Editor: Not long ago we killed a hen who refused to eat and had acted sickly for some time. Upon opening her we found she was filled with a greenish water, at least a quart of it. Her liver was of a good color and her comb was not pale. Yesterday we killed a rooster which had acted the same way and he, too, was filled with water, but more of a yellowish color, but his liver was pale, although not spotted. Can you tell me what this disease is and what is a remedy? We have been giving the chickens boiled oats about three times a week for their morning feed. Do you think they might have caused a bowel trouble

F. R. N.

Darby, Mont.

So far as I can tell from the description the trouble may be dropsy, caused by a rupture of a blood vessel. However, I can not say positively what the trouble is. Would advise that you take the matter up with the poultry department of the state agricultural college, Bozeman, Mont., sending them one of the sick fowls.

Boiled oats fed in reasonable quantities are a good feed and will not cause bowel trouble. However, there is no particular advantage in boiling them, in fact the reverse. Chickens require some dry, hard grain for best results. J. D.

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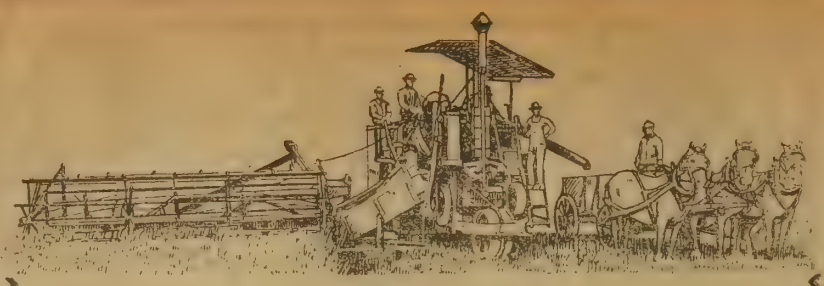
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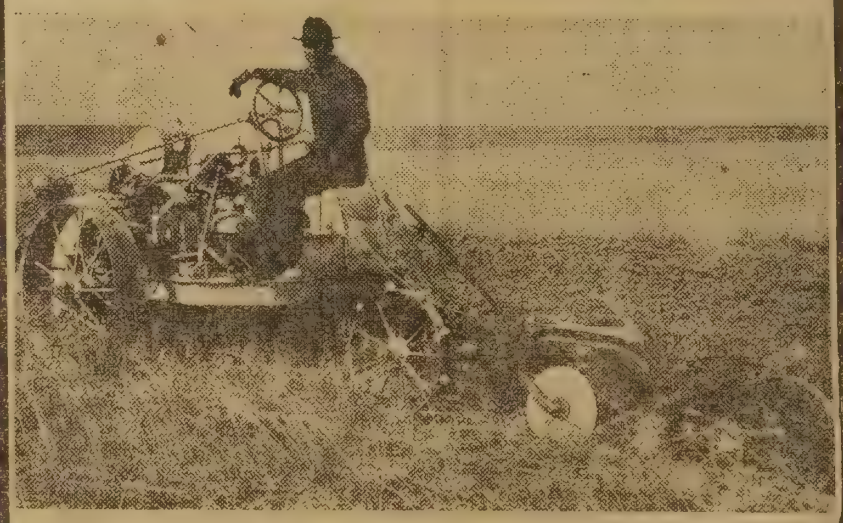
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Granville Lowther
Editorial Contributor

## Some Orchard Pests

There are many varieties of aphides, the most troublesome to orchards, especially to apples, is the "wooly aphis." This variety has a white colored wool-like substance, which is not really wool, but is a flocculent mass of wax, which exudes from the insect and resembles wool. They can not travel like the winged varieties, but are carried by ants to the wounded parts of the trees, where they obtain their food by sucking the sap, or to the tender growing parts of the top or roots, where with their sucking beaks they puncture the bark and suck the sap. The apparent reason why ants are so attentive, in providing them with food, is that the ants in turn feed upon the sweetish, honey-dew like substance which the aphis excrete. The injury done to trees is not only on account of the fact that the insects feed upon the sap, but on account of the fact that in puncturing the bark, the cells of the trees are so disturbed and disarranged, that small knots, or excrescences form and galls result. This is very often the cause of "root galls," by various names. It is recommended to spray with lime-sulphur, before the buds open, but this does no good for those on the roots. After the buds open kerosene emulsion is used, or tobacco leaf. The most difficult thing is to get at the roots, and some do this by placing tobacco leaves around the roots. However, this has not been uniformly successful.

**Formula for Tobacco Spray.**

Tobacco leaves one pound; water, four gallons. Simmer for one hour and strain. Two pounds of tobacco dust may be substituted for the one pound of tobacco leaves. There are manufactured tobacco preparations which may be used according to directions on the package.

**Kerosene Emulsion Formula.**

The kerosene emulsion formula is kerosene two gallons, whale oil soap one-half pound, and water, one gallon. Dissolve the soap in the water by boiling, and add the suds boiling hot to the kerosene, away from the fire. Be sure and keep the kerosene away from the fire, or you may kill something besides orchard pests. The mixture is then to be agitated violently until it begins to emulcify. This agitation is best done with a spray pump, and if it is done vigorously, it about five minutes the mixture becomes creamy. This forms what is called a "stock solution," which can be used, one gallon to 10 gallons of water.

The tobacco spray and the kerosene emulson spray, are the kinds mostly used, for all kinds of sucking insects, such as green aphis, black aphis, brown aphis, white aphis, etc. The time to spray is when the insects first appear. If it is neglected a few days, until the leaves curl, they are so protected by the curled leaf, that the spray does not reach them. Black leaf may be mixed with arsenate of lead, but soap and arsenate of lead should never be combined.

**Bordeaux.**

The bordeaux mixture may be used for grasshoppers, which affect garden and orchard plants, flea beetle, cutworms, black-spot, canker in apples, brown rot, plum, cherry and peach mold, potato blight, anthracnose, etc.

Formula for bordeaux:

Bluestone (copper sulphate), five pounds.

Lime (unslacked), five pounds.

Water, 50 gallons.

Dissolve the bluestone in 25 gallons of water. Slack the lime to an even paste and add 25 gallons of water. Mix well and strain into the spray tank.

**Spraying for Codling Moth.**

There are other broods of moth besides the first, and it takes careful observation to know just when, in any particular community, it is better to spray for the second or the third brood. For instance, in the lower valleys of the Yakima, Wash., the buds open a week or 10 days earlier than at Yakima and vicinity, and in the upper valleys, a week or 10 days later than at Yakima. The insects like the vegetation, develop with the advancing season. It is necessary then, in any particular locality, to watch carefully the growth of the moth, from the egg stage to the larva stage, from the larva stage to the pupa, and from the pupa to the moth. This watchfulness is much more efficient, if a cage of fine wire is prepared, the bottom covered with loose soil, eggs of the moth placed in the soil, and their development watched. When the moth begins to fly about in the cage, it is high time to spray. The next spraying need not be done with such force, as the aim is not to drive the spray into the calyx cup, but to cover the leaves and fruit, so that the moth will get enough arsenate of lead, to kill.

**Spray Formula.**

Arsenate of lead, from one to two pounds; water, 50 gallons. Some believe that one pound of arsenate is all that is necessary for 50 gallons of water, others use one and one-half pounds, and others still use two pounds. The formula sent out by the colleges, generally gives one pound for 50 gallons of water..

To use the bordeaux, or the lime sulphur during the growing season is likely to injure the fruit and the foliage, and in all spraying during this period this should be kept in mind. The time for using them, except with care not to injure the foliage, is after the leaves fall in autumn, and before the buds open in the spring.

G. L.

## Frost Is an Enemy

Everything in nature seems to have enemies. From the broader view of the evolution of life "all things may be working together for good," but every living thing feeds upon some other thing, and everything to live must struggle for existence. Certain insects feed upon the buds, or suck the sap of the tender branches and are called by the general term "orchard enemies." Forms of life too small to be seen with the naxed eye, but that are plainly visible by the aid of the microscope, get into the sap and multiply so rapidly as to devitalize the tree, or cause a ferment that chances the chemical composition and induces disease. These microscopic forms are called by the general name "bacteria."

The principal danger is from cold. The warm spring sunshine causes the sap to flow, the buds to open and the blossoms to appear; then the sudden changes; the strong winds swishing down the valleys from mountains of snow; the cold nights; freezing and frost will kill them. Thirty-two degrees Fahrenheit is freezing. Three degrees below freezing will kill at least one-fifth of the bloom, but eight below freezing, or 24 degrees of temperature, will kill all of them; or so nearly so that when the thermometer registers 24 we never expect a crop.

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# Late Frosts Damage Crops

## Alfalfa Short on Account of Cold Weather. Damage Also to Fruit Crop. Farmers Are Beginning to Depend More and More on Each Other




GRANDVIEW, Yakima County, Wash., May 20.—Alfalfa is short on account of cold weather, but on the hills the weather is fine for wheat. Farmers are talking mostly about the late spring and cold weather. I think farmers generally have to depend more on each other now than ever before, especially will this be true at harvest time. Fruit crop will be very short here on account of the late frost, and there are no peaches or cherries in this locality. Most of the retired farmers are working by the day. There are not as many hogs or dairy cows here as there were last year.

E. H. FAULKNER.

### Frost Gets Fruit.

PROSSER, Benton County, Wash., May 19.—The weather is cool for this time of the year. We had a good rain on the 7th and the 8th, which was badly needed. It is most too cold for alfalfa and corn. The frost killed most of our fruit this spring, but I think we will have about one-third of a crop of apples this year in this part of the valley. When one farmer meets another he will ask about the war, and how his wheat crop is coming, for the people "over there" need all there is to spare this year, and with one more good rain soon there will be a good crop of wheat. The retired farmer is not going back to the ranch in this part of the county. There are acres of good wheat ground in Benton county lying idle and should be planted to wheat. If the men that own this land had to pay $5 per acre war tax, or plant it to wheat, there would be more wheat for our boys "over there."

G. W. WILGUS.

### Frost Does Some Damage.

NEPPEL, Grant county, Wash., May 18.—The weather in Grant county is not so favorable this spring as usual, as a dry spell has retarded spring-sown grain, though rye is well headed out now. Our community went over the top with their share of the third Liberty loan, and while it is breaking the Sabbath day a good many of the farmers are seen working on Sunday and some all night, as well as irrigating their fields of alfalfa, as it is necessary to make every hour do its duty in production. As it is, the first cutting of alfalfa will be cut short in quantity, as frost hurt it to some extent, and then a few hot days turned the tops brown in some patches. The retired farmer is an unknown factor in Grant county, as the H. C. of L. has made good patriots out of a few so that they will help win the war, whether they want to or not, as every one must do his duty in earnest.

Most people here are beginning to fully realize the extent of effort necessary to win the war for liberty, and, generally speaking, most of us are doing our level best to produce the food in all forms in enlarged production. Still, there are the slackers here, as elsewhere, and I have had to read the riot act to a few regarding their lack of duty and patriotism and have noticed a good effect, for it has made them awake to the situation. The cool weather has caused a lack of proper pollenization of the fruit crop and in some localities the frost has cut down the early fruit to a small crop. Labor is scarce and some are not able to pay the high wages, and are sure to lose if they try it, and machinery is hard to get and with the raise in value is liable to upset increased production in some instances. Live stock, such as sheep and hogs, are on a good increase in number and a better grade of cattle is being introduced for beef, so the future market is favorable for the live stock production on a sound market basis. The cost of producing a bushel of wheat depends on the yield and facilities for handling, and it would be safe to say the cost has doubled in the last three years. The chances are a moderate yield only will be had of spring wheat this season.

MARTIN PENHALLICK.

### Help Is Short.

OMAK, Okanogan County, Wash., May 19.—We are having a very dry spring and farmers have been unusually busy in cultivating and preparing their land to conserve all the moisture and as this section depends upon irrigation there is much uneasiness as to whether there will be water enough to ripen the fruit and alfalfa. People are not planting many potatoes as there was no sale for the last year's crop, and it would take water needed for fruit. Help is very short and farmers are doing the most necessary work with what help they have. There is considerable increase in stock raising, but hay will be scarce unless we get a good supply of rain. J. O. WOODS.

### War Draws People Together.

OTHELLO, Adams County, Wash., May 10.—We had a fine rain the afternoon and night of the 8th inst. that certainly helped the grain prospect wonderfully. There has been an unusual amount of electric winds during April and this month the fields have blown badly and in some instances are materially damaged. The main topic among the farmers now is the high cost of, and inability to get, feed for their horses to finish their spring work on. There is, I thing, an undercurrent at work among people that will finally draw them closer together, because of some of the boys going to the front. One fine thought was expressed by a man who has no boy at the front when he said, they are "our boys," and I for one have a deep personal interest in each one of them. A. O. LEE.

### Farms Rapidly With Tractor.

G. D. Miles of Fairfield, Wash., one of the large wheat and pea raisers of that district, writes that with his tractor, three six-horse teams and three hired men, he and his daughter plowed and seeded 600 acres this spring between April 5 and May 13.

"With the tractor I have worked three eight-foot disks and a harrow at one time," says Mr. Miles. "In plowing I used seven 14-inch plows on land that was practically level, while in the hills I used five 14-inch plows. My tractor is a simple machine and very easy to manage."

### Scouring Western Wools.

Representative Sinnott of Oregon urges that all wool committees of the councils of national defense and car service commission to order scouring of all western wools before shipment to market. Such a plan, if followed generally, he pointed out, would save several thousand cars a year, as about two-thirds of the western wool as clipped is made up of grease and dirt. Mr. Sinnott suggested this plan at the instance of woolgrowers at The Dalles, Ore. The car service committee expressed keen interest in Mr. Sinnott's proposal and has taken the matter under advisement. Mr. Penwell of Montana, head of the wool committee, also seemed favorably disposed, but Mr. Eiseman, also of the wool committee, and Boston wool dealers objected, maintaining that wool should be scoured at eastern markets as in the past.

### Farmers Back Their Country.

"Having just completed a trip through the south and southwest during which I have visited many middle-sized cities and towns, I have been deeply impressed with the splendid work being performed by Liberty loan workers everywhere," says Secretary of the Treasury W. G. McAdoo.

"The farmers of the country and the people living in the less densely populated districts have supported the third Liberty loan with unusual effect, and their subscriptions in many of the agricultural states have not only been highly encouraging but show that the farmers of the United States are awakening to the gravity of the war and are determined to back their country to the limit in this great struggle for human liberty.

Secretary McAdoo adds:

"It is, indeed, a heartening thing to travel through the country now and observe the loyalty, the spirit of self-sacrifice, and the deetrmined purpose of the people generally. The soul of America is awake—awake with an intensity and a unity which spells the doom of military despotism and the triumph of world democracy."

### Shortage in Cattle Feeds.

Great Britain is confronted with a scarcity of dairy products, chiefly the result of shortage in cattle feeds. Permits to buy milk are issued for certain classes of the population, including children under five years, invalids and nursing mothers. Others are on their honor not to buy milk unless it is for these classes. The statement is made on excellent authority that "an adult can not buy in London a glass of milk, even if willing to pay $20 for it." Not only butter, but all kinds of fats are obtainable only in extremely small quantities. Some families are without any fats for nearly a week at a time. Ice cream disappeared from the market more than a year ago.

### Irrigation Water Supply.

Marvin Chase, state hydraulic engineer, is calling attention to the imperative need for conserving the available irrigation water supply. Small or moderate amounts of snow only have accumulated on the higher elevations of the watershed area controlling the water supply for this purpose throughout the state. With the exception of those in the Yakima valley, and two other small districts, who are fortunate enough to have stored waters, the irrigators of the state must employ the most economical methods of cultivation and irrigation to preserve the moisture contents of the soil and to produce the maximum crop.




**Help Is Scarce**

The Jones Weeder will save 50 per cent of labor; cultivate 30 to 40 acres of summer-fallow per day and do it better, instead of 10 to 20 by the usual method. Couples up like a harrow; use as many sections as wanted. For booklet, prices, etc., write

**C. E. Jones, Heppner, Ore.**

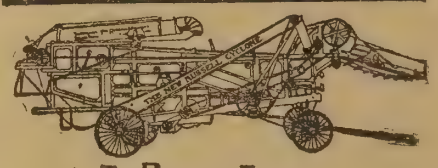
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*For Reliable Information Write*

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# Must Work or Fight

## *Useless Occupations Are Dealt Blow*

Provost Marshal General Crowder, at the head of the government army draft operation, together with officials of the war department, dealt a vigorous blow to non-essential occupations last week when he issued an order which requires every man of the 10,000,000 registered a year ago, but not yet called to the colors to secure a position beneficial to the country or immediately prepare to enter the army service. This regulation was not made alone to get rid of the professional idler, but to increase the efficiency of the nation during the war crisis by eliminating unnecessary activities and substituting in their place constructive work of some kind. The department has not made exact announcement as to what occupations shall be classed as nonuseful, but it is understood to include such occupations as gambling, bar tending, pool hall operation, professional baseball and other sports, elevator operation by men of draft age, ushering in theaters and other occupations which older men, women or boys might carry on as successfully. The order is effective immediately, all persons engaged in such activities being required to secure a different line of employment at once or appear before the exemption board to explain their attitude. Whether the ruling will deal a death blow to professional baseball throughout the country is not positively known yet, though it is known that many professional players are subject to the new regulation.

### New Drive Is Launched.

After a month's delay, Germany has launched her expected drive. It covers two fronts, one of nearly 100 miles' length in the southern part of the long battle line, and one much shorter, probably about 10 miles long, on the north. The fighting has not continued long enough at this writing to reveal the exact strategic purpose of the Germans or to indicate their possible success, though the first day did not result in any appreciable gains, according to reports. The new drive does not seem to have Amiens, the railroad center, as its objective, but for the time being any way, an advance on the British channel ports in the north and on Paris in the south.

### Would Stir Up Irish Revolt.

Seizing upon the opportunity afforded by the recent act of the British parliament conscripting the men of military age in Ireland for active service with the allies, German agents have undertaken to stir up a revolt against the British government in that country. As a result of discoveries made by the secret service department of the British and American governments a large number of leaders among those who opposed conscription in Ireland have been placed under arrest. It is understood that the negotiations between the Irish nationalists and the German propagandists went so far as to discuss the possibility of placing German soldiers in Ireland to assist in carrying out the revolt. It is evident that the German war leaders desired to bring the conflict in Ireland just at the moment of the renewal of the offensive on the western battle front, which seems imminent at the present time. Whether the Irish trouble will be successfully met by the British is somewhat problematic, but it is believed that the unionist element in that country is sufficiently strong to insure reasonable success of the working of the conscription act.

### Must Register June 5.

All young men in this country who have become 21 years old since the fifth day of June, 1917, must register under the recently enacted amendment to the draft act of a year ago. It is anticipated that between 750,000 and a million persons will register under this regulation. The war department has prepared a simple but comprehensive set of questions that will have to be answered by those who register when they go to the places of registration.

### May Remove Army Limit.

Secretary of War Baker, apparently with the approval of President Wilson, has recommended to congress that all limitation as to the number of men and the amount of equipment to be sent to Europe be eliminated, the number and amount to be determined only by the country's maximum capacity to get them to the battle front. If congress approves this recommendation it will mean that all men of draft age will be subject to the call of the war department at any time that the department finds itself in position to train, equip and transport them. Secretary Baker has also recommended that the age under which men may enlist in the service voluntarily be raised from 40 years, as it stands now, to 55 years. His object is to secure a considerable number of men up to that age who wish to enter the service, but are now excluded and whose presence in the army in noncombatant capacity would release a large number of younger men for active battle field service. Should this recommendation be approved the men so enlisting or probably most of them would be placed in the service back of the lines as railroad builders, repair men and supply men of all kinds.

### Railway Men Get Raise.

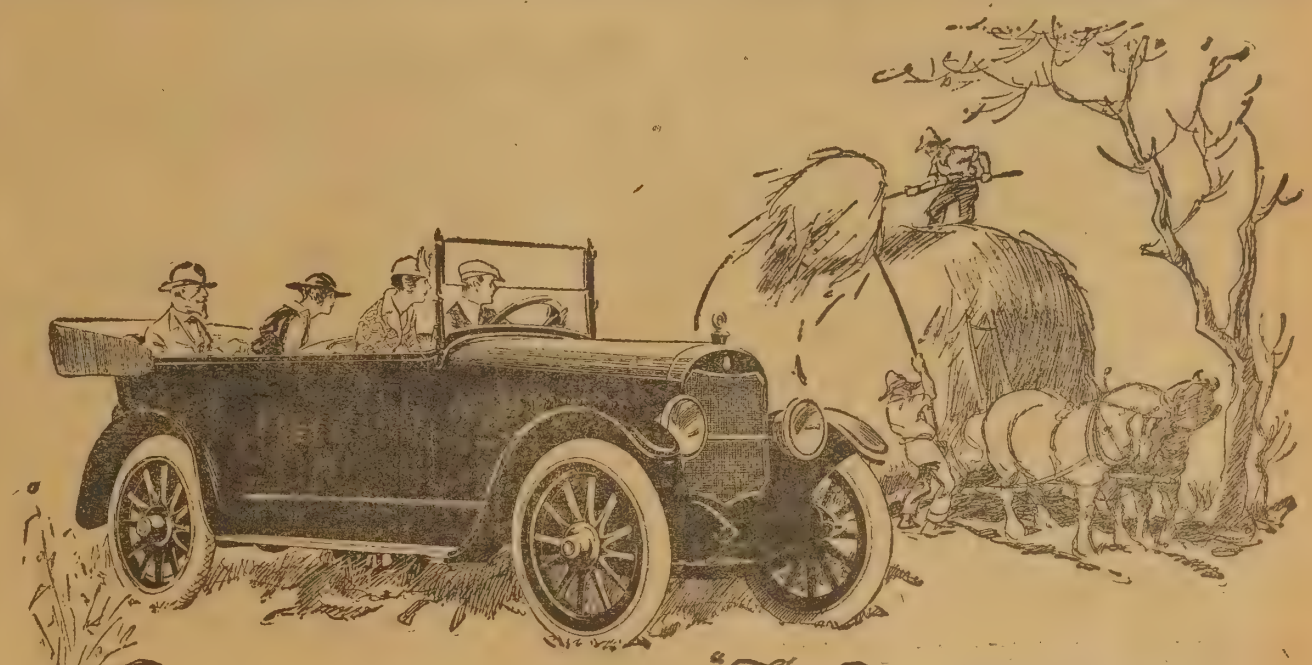
Director General McAdoo, handling the railroads for the government, has approved the plan whereby the pay of railway employes will be raised. They will receive back pay to the present time from January 1 of this year. Two million employes will receive the increase, which will approximate an addition of $300,000,000 to their wages, an average of something like $150 a year each.

### Oversubscribe for Red Cross.

The $100,000,000 asked by the Red Cross in its campaign of last week was oversubscribed by nearly 45 per cent, the total subscriptions reaching $144,000,000. Every state in the nation went over its quota with the exception of Illinois. Washington, which was asked to give $1,000,000, gave close to $2,000,000, according to latest available figures.

### Total Eclipse of Sun.

On Saturday, June 8, there will occur in the United States a total eclipse of the sun. The eclipse will be total along a strip 50 or 60 miles wide running from Grays Harbor, Wash., diagonally across the nation to Florida. Just outside that narrow belt the eclipse will be almost total, so that all parts of the northwest will see an eclipse ranging from 75 per cent total to complete darkness. Where total, all light will be shut off for something like two minutes.

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**It acts as "handsome" as it looks. Every farmer's wife or daughter can take pride and comfort in this fine car**

PRIDE of ownership, always a large factor in the selection of an automobile, is selling more Kings this year than ever before.

This pioneer Eight's wide range of performance has astonished many veteran drivers. The ease with which it goes from a crawl to a dash—Its conquering power on hills—A "quick on its feet" quality which gets it ahead in congested traffic and makes it so easy for women to handle—Its extraordinary economy of operation because of light weight and mechanical perfection—A freedom from the necessity of constant and expert repair. Reasons enough for pride in King ownership.

The King's beauty of line, elegance of finish, and riding comfort, are not easily described—but are quickly perceived. The Touring Car (shown above) is graceful, yet roomy. FOURSOME—is the "sport" model, seats four and outdoes all competition in the style and grace of its "destroyer" lines. A luxurious seven-passenger Sedan completes the line.

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# Don't Force Flock for Early Eggs

## *Rest Them for Later Production at Better Egg Prices*

Professor Helen Dow Whitaker, head of the poultry department of the State College of Washington, recommends that poultrymen do not force their flocks for laying early in the spring when production is generally comparatively heavy and the prices correspondingly reduced.

"Why force for the cheapest eggs of the year?" she asks. "Better to rest the birds when normally they will lay reasonably well anyway. Then with April and May increase in price of eggs and in growing green stuff, the experienced feeder bends his efforts to hold up the 50 to 60 per cent yield through the summer and well into October, knowing that July and August eggs are more to be desired than February and March eggs."

"Just so in the all northwest egg laying contest, we have used the corresponding months of March and April for a resting period and a conditioning time for all the birds. We have kept up good exercise, exterminated lice, looked over every bird individually as to condition and used the two months generally for putting the birds into the best possible shape we could for the home stretch in the race. Our records for March and April, we have kept up to normal.

"About April 20, however, we gave the signal to go and my May 1 the race was on. Judging from the results of the first 14 days, May records will be the highest ever made in the all-northwest contest.

"We are serving a salad course of dandelions fresh at 9 a. m. The semi-solid buttermilk proved so satisfactory I have ordered 500 pounds for contest use. In April 62 birds scratched for three-quarters of a ton of grain in a ton and a half of straw litter. They ate three-fifths of a ton of sprouted oats and almost a ton of mash. The mash consumption of the Leghorns was proportionately large.

"In singles, November 1 to May 1, S. C. White Leghorn hen No. 251, owned by C. F. Williams, bred by D. Tancred, is still leading with a total of 155 eggs in 181 days or an acverage of 25 5-6 eggs for six consecutive months. These eggs have sold for $6.13. The average White Leghorn in the contest has laid 73 eggs.

"In pens to date Rhode Island Whites, Enery No. 40, five birds owned and bred by Mr. Frederick, have a record of 659 eggs. This pen is still leading all contests in the United States and Canada for the year. Their eggs in six months have sold for $25.89.

"In pens during April the following breeds made the honor roll: Barred Rocks, Rhode Island Whites, White Leghorns, Rhode Island Reds, Buttercups, White Minorcas, Buff Orpingtons. It required a production of 62 per cent to make the honor roll. The winning pen, Barred Rocks from Oregon Agricultural college, laid 112 eggs or almost 75 per cent. The six birds including the alternate laid 137 eggs. The average pen in the contest laid 73 1-2 eggs or very close to 50 per cent.

"Average egg production for April for the leading breeds follows:

| | |
|---|---|
| Rhode Island Whites | 18.5 eggs |
| Minorcas | 17.63 eggs |
| Rhode Island Reds | 17.39 eggs |
| Barred Rocks | 16.14 eggs |
| White Rocks | 15.87 eggs |
| Orpingtons | 15.7 eggs |
| White Leghorns | 14.81 eggs |
| Miscellaneous | 14,68 eggs |

"It costs 26 1-3 cents to feed the average fowl and she returned 14 cents above actual cost of feed and litter. It should be noted this 14 cents is not "profit" but goes to pay for the production of the pullet to laying age, losses in the flock, egg cases, cartage, sprays, wear and tear on equipment, interest on investment and labor. It is obvious that the return is not adequate to meet these expenditures. I wish to reiterate what I said in my letter of last month. A poultry man can not break even on a 50 per cent egg yield with present prices of eggs and feed. Either feed must come down or eggs must go up or the commercial egg producers of the northwest will be forced out of business.

"It is because I am truly patriotic and because I wish to see the food administration's call for increased poultry production met that I am hammering home the fact that conditions must be changed to enable the commercial poultryman to do his part to win the war. I do not ask for him one penny of profit. I do ask 25 cents per hour for labor and that is less than other skilled laborers are receiving. I admit that the farm flock and some of the back-yard flocks can be maintained at a less cost than the commercial flock. The farmer and the back city lot can, in a limited way, produce poultry at a loss as a patriotic measure. But will the supply of poultry products be adequate without the strictly egg farmer? Shall he be sacrificed? We need a megaphone to get a message over from Washington state to Washington, D. C.

"The thoughtful student of the poultry situation is closely studying two problems:

"1. What percentage of chicks hatched will be grown on the war rations and how well grown for winter egg production will they be?

"2. If commercial poultrymen are put out of business who will do the trapnesting, the breeding and the hatching for the renewal of farm and back city lot flocks?

"Herein it seems to me lies the kernel of the nut the food administration has to crack. Something more than surface consideration is vital in the eyes of the food administration.

"If poultry products are not worth to the consumer the cost of production then it is better business and better patriotism to turn the money and labor into some line where production is so vital as to be paid for at cost.

"Meanwhile—just as the soldiers on the western front in France are holding their line so must the poultrymen of the northwest hold the line here. If poultry production is your part and mine, let us give to our utmost, strength and time and funds. Then whatever the justice of the conditions may or may not have been, we shall have played our part nobly."

## BILLION BUSHELS.

### World Hopes for Great Crop.

Last year the United States department of agriculture made a strong appeal to the farmers of the United States to do their utmost toward the production of one billion bushels of wheat during the season that is now on. Only once in the history of the United States has a crop this large been produced, but it is the hope of a hungry world that the record will be made again this season. Up to the present time no official estimate has been made by the department of the spring wheat production, but with a production of approximately 572,000,000 bushels of winter wheat as forecasted by the department, considerable hope is raised that the record for the country can be made to reach the billion mark.

Practically everything in this country now depends upon weather conditions. The farmers have done their part so far as the production of the 1918 crop is concerned, though there remains yet a large problem in the harvesting. Should the season be generally favorable with seasonable rains and cool weather during the filling period this country may make the wheat returns necessary to win the war.

# Wheat Substitutes

## True Remedy Lies With Congress

In all parts of the Union indignant protests are made by consumers against the high prices they are compelled to pay for wheat substitutes. As the law now stands the government compels every consumer to buy these substitutes, but leaves the buyer at the mercy of the profiteering miller and dealer.

Mr. Hoover is doing all he can to check the evil, but the true remedy lies with congress. In a signed statement to his state assistants the food administrator declares that substitute price are excessive and makes it plain that the farmers who grow oats, barley and corn are not to blame for the extortion. Mr. Hoover says:

"At present prices of corn, barley and oats the millers are or should be offering meals and flours from these grain at prices considerably below wheat flour; in fact, corn meal should be selling from the mill door at not over 25 per cent less than wheat flour, and oatmeal even less. White corn flour or barley flour should be selling at not more than 10 to 15 per cent below wheat flour. There is, therefore, absolutely no justification for present price levels in these substitutes.

"I would be glad if you would give wide publicity to these facts. Retailers should not take more than 16 to 20 per cent on the sale price for handling these products. The wholesale maximum margins have been fixed as per our bulletin of April 6 and not over 10 per cent in bulk; therefore, with these criteria to guide you, we would be glad to have you follow up any prices made at higher levels. Where dealers still have stocks bought at higher levels than these prices, every step in the chain of retailer, wholesaler and miller should be prepared to justify their prices as reasonable, and any failure to so justify should be recommended to us for summary action. The time has now come when the readjustment to the prices of these grains should have taken place.

"We are requiring the principal corn millers to report to this office by telegraph weekly the prices at which they purchase corn and the prices at which they are quoting products, and we are directing them to make duplicate reports to you. But without waiting for these reports you can take the above approximate levels as being indicative and instruct your county and city agents to make a drive on the reduction of prices to proper levels as the maintenance by millers and dealers of the price levels which were due to shortage in railway transport last winter, has now become, in many cases, simple extortion. Where dealers have paid more than present prices they run risks of spoilage in endeavoring to hold material for prices at old levels, and the first loss of reducing prices is the smallest loss.

"HERBERT HOOVER."

## Rabbit Pest in New Zealand.

As a fair illustration of the rabbit pest in certain portions of New Zealand, and especially in the drier sections of the South island, it is stated that on an estate lately taken over by the New Zealand government comprising 12,446 acres of freehold and a pastoral run of 19,250 acres there were killed or captured about 120,000 rabbits in order to clear up the property so as to make it suitable for the location of returned soldiers.

## Why It Pays to Buy Advertised Articles

In some restaurants you get an order of some favorite dish for a given price. Then you find that the bread, potatoes, the coffee and butter all cost extra. In another restaurant your order may be quoted at exactly the same amount on the menu card, but the side dishes, like potatoes and bread, are thrown in free. Restaurant number two is the one to patronize.

It is somewhat the same way with advertised merchandise. It is good merchandise to order, because it brings with it so many extra advantages without additional cost. The manufacturer stands back of the articles he advertises, and takes particular care to make sure that their quality is above criticism. More than that when you buy an article advertised in this paper, you know that our guarantee gives you an additional safeguard.




THE WAITER—"YOU GET THESE SIDE DISHES WITHOUT EXTRA CHARGE"

Remember these benefits when you read the advertisements in this issue.

## Clip This Convenient Order Blank

Address all communications concerning thrift or war savings stamps to the Washington Farmer, War Savings Department, Room 26 Review Building, Spokane, Wash.

Remittances may be in any form desired, including personal check.

The Washington Farmer, War Savings Department, Room 26 Review Building, Spokane, Wash.

Gentlemen: I wish to invest in ..... U. S. government thrift stamps at 25 cents each. (number desired.)

I wish to invest in ..... U. S. war savings stamps at $4.17 each. (number desired.) (June figure)

Amount enclosed $.....

Full Name .....

Town ..... State .....

R. F. D. No. .....

I have already bought.....Stamps and have a..... (kind of stamp) (card or certificate.)

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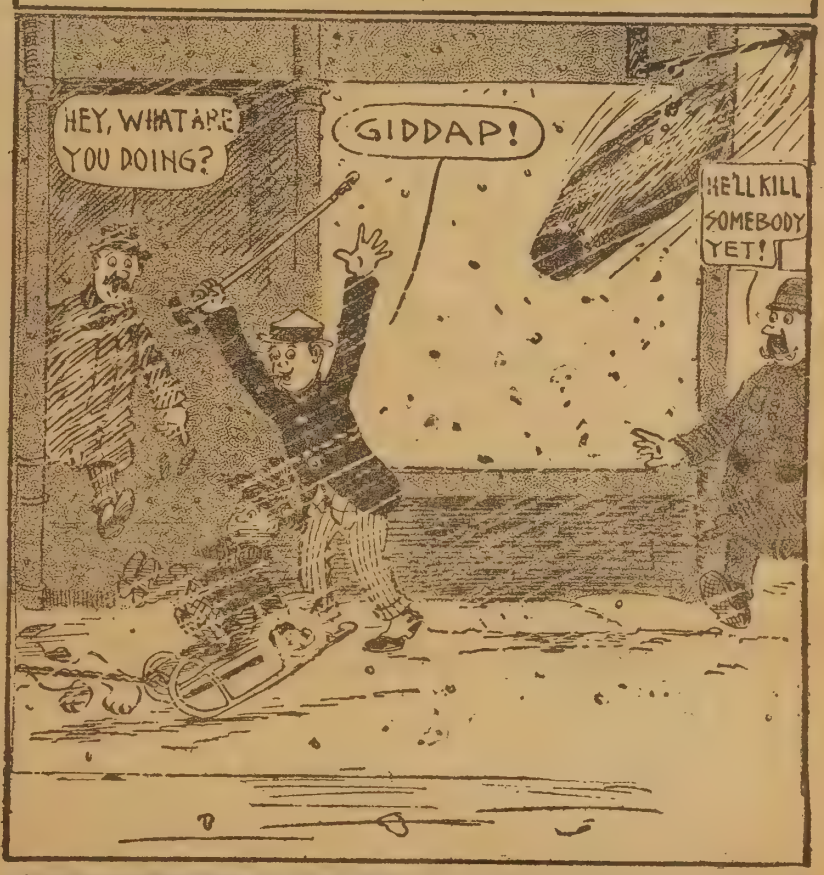
# MUGGSY SAVES LITTLE JIMMY'S LIFE AND THEREBY ANNEXES A FIVE-SPOT















# Magazine Department of The Washington Farmer

## Vital Matter of "Lighting"

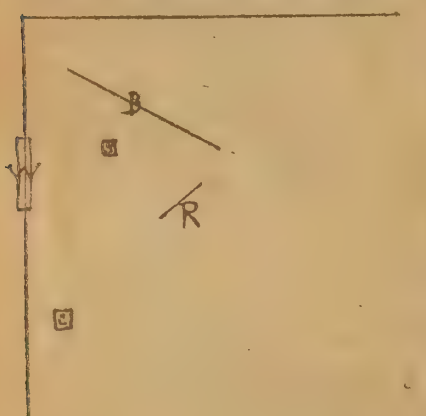
### *Two Opposite Dangers Confront Amateur Photographer*

By PAUL E. TRIEM.

Two opposite dangers confront the amateur photographer when he sets out to make a camera portrait—either he gets too much contrast in his "lighting" or he gets none at all. Either horn of the dilemma may be fatal to securing a real likeness.

When the professional photographer seats you under his skylight he is thinking first, last and all the time of this vital matter of "lighting." In other words, he moves you about until he secures a pleasing arrangement of light and shade, so distributed as to give roundness and character to your features. If you are going to succeed with the more formal kind of amateur portraits you will have to experiment with this same instrument, lighting, until you are able to approximate the effects secured in the photographer's gallery. A mastery of light, to the extent needed for this purpose, is not difficult to acquire.

The first thing to remember is that all of the light which falls on your subject should come from one source, usually a window. Suppose you begin by placing a chair about three feet from an ordinary window, through which no direct sunshine falls. Move the chair back until it is about even




with the back margin of the window. Now seat your victim in this chair and place your camera, on a tripod or other substantial support, close to the wall in the direction of the other margin of the window. The relative positions of window, subject and camera are indicated by the letters W, S and C in the accompanying diagram.

Standing just behind your camera and studying the lighting on the sitter's face you will probably notice that the light side of the face is very light in comparison with the shadow side. To correct this trouble, block out the lower half of the window with cheesecloth or white muslin. This will diffuse the light coming through below and will make the upper half of the window the principal source of illumination. The diffused light from below, falling on the face to be photographed, helps soften the lighting. To complete this part of the work, bring a high-backed chair, covered with white paper or a sheet, into the position marked "R" in the diagram. You will have to experiment a little with this improvised reflector to get it to throw enough reflected light over the junction of light and shade on the sitter's face to blend the one into the other, and also to light the shadow of the face just enough to make it look "natural" in the final print. Without this use of a reflector the side of the face farthest from the window probably would not show at all in the print.

"B" in the diagram is the background. If the color of the wall is sufficiently even and neutral to form an unobtrusive background you will need nothing else. Otherwise pin a dark blanket up behind the sitter. Obtrusive details in the background, bright patches of light, for instance, break up the harmony of your portrait.

Here, then, are the factors you will have to consider in making a successful indoor portrait: the source of light, usually a window; position of the sitter, which should be about even with the back margin of the window and removed from it as far as the window is wide—three feet from a three-foot window; reflector, to throw reflected light on the shadow side of the face; background, if you need one, and the position of your camera. By experimenting a little you will soon learn by direct observation more than a whole library on photography could teach you.

Even professional photographers are breaking away from conventional photographs. Home portraits and outdoor portraits are taking the place of pictures made in the gallery. The amateur has many advantages in this branch of portraiture, provided he will keep in mind a few principles not difficult to understand or remember.

First, in making an outdoor portrait, try to secure a lighting on the face that is neither flat nor too contrasty. If your subject faces the sun squarely, for instance, most of the face will be equally bright to your eyes or to the film. This is a flat lighting. If you turn him at right angles to the sun, shining full upon him, the shadow thrown by the nose and other features will show black, when contrasted with the lighter portions. Try the effect of diffused daylight, such as you find in the shadow of a building, and you will be able to secure more pleasing effects.

The background is the second important element in making outdoor portraits. This background should not be obtrusive or spotty. An even, almost neutral background, pleasing as far as it goes but not sufficiently "scenic" to call attention away from the real subject, is the ideal to be sought. Heavy masses of shrubbery usually are good, while the clapboarded side of a building with its tiresome monotony of parallel lines is about the worst background imaginable. Outdoor portraits with the sea or a large lake for a background are often wonderfully attractive.

## Sidelights

**In France.**

Sympathetic Hun—Now, Kind, ask Gott to look after your mother and father.

Petit Pierre—Ask him yourself, you big stiff; I can't speak German.—Harvard Lampoon.

**More War Economy.**

Husband—Why don't you wear your coat?

Wife—It's last winter's.

Husband—It's just as warm now as it was last winter

Wife—True; but I don't need it so much. When I see all my neighbors with new coats I feel hot enough without a coat!

**An Honored Arrival.**

St. Peter—What did you do down below to make you eligible for admittance?

Newcomer—Mister, I used to give up my seat on an Irvington car every evening to some woman after paying two fares to ride around the loop, an—"

St. Peter (calls to guardian angel)—Here, Angy, give this feller anything he wants.

## SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

## How to Plan Now to Solve the Summer's Heat Problem



Dr. Hirshberg.

The heat produced by the bodily structure in summer is neither more nor less than that produced at any other time during the year. The external heat of the air, however, makes the anatomy seem much warmer in summer time and adds to bodily discomfort.

The human mechanism can never create less than a definite minimum amount of heat, though much heat energy is added by a great deal of muscular exercise and by certain foods.

The muscles of the human structure are massive and naturally active, and therefore produce the greatest amount of heat energy of any part of the body. Any great increase of physical exercise for that reason is bound to create an excessive volume of energy, which is often manifested by the appearance of perspiration, a flushed skin and sometimes skin eruptions.

Diet consisting of much meat, fats and starches is conducive to the production of much heat within the bodily mechanism. This, in addition to the intense heat of summer air makes for much discomfort and often for much suffering. The elimination of as much as possible of these foods from the menus in summer time will lead to the reduction of the total amount of heat to be endured in the summer months.

Under conditions of quiet and repose the human mechanism usually takes care of its own heat dispositions without artificial assistance. Much heat is lost directly by the respiratory process. Heat is sent out of the bodily mechanism by means of the breath. The breath is nothing more than gaseous liquids, chiefly water. The air taken into the bodily structure is cooler than that which is already in it, and, consequently, some heat is lost when this outside air is brought up to the internal temperature of the anatomy.

**The Clothing Problem.**

The skin does much toward aiding to dispose of much of the animal heat produced. Through its millions of pores the skin brings to the body's surface surplus heat in the form of perspiration. When this water evaporates from the skin by contact with the surrounding air a cool sensation is felt, the result of the drying up of the water by the air.

The problem of summer clothing is always a perplexing one. Cotton garments are excellent conductors of heat, and allow the free passage of the surplus heat from the skin to the outside air.

In a climate of sudden and great variations in temperature the heat-conducting power of cotton permits the body to feel any change of temperature. Under such conditions, when the individual has perspired to a great extent and becomes suddenly exposed to a draft the evaporation of the perspiration takes place so rapidly that the skin is left suddenly cooled and hence becomes chilled. The result of such change is usually a "cold in the head," an inflamed throat or the inflammation of the entire respiratory tract, which sometimes leads to such serious conditions as that of pneumonia.

Although cotton clothing gives less discomfort for the time being it is, nevertheless, not to be exchanged for woolen garments if these can be endured. Wool is a poorer conductor of heat than cotton, and for this reason makes a splendid winter garment. It is not to be cast aside in summer time, however, for, although it functions quite differently in hot weather, its value is by no means decreased.

**Drinking Water and Baths.**

In winter wool prevents the heat of the body mechanism from escaping into the outside air. In summer, it prevents the rapid change from heat to cold and vice versa. Thus, if you wear a woolen undergarment and change your position suddenly from a place in a corner to one near an electric fan, the sudden change in the motion of air around you can not penetrate through to your skin and so cool it in a hurry.

It is well to drink plenty of pure water in warm weather, but not too cold. If the water is ice cold and you are hot, your tubes become cooled too quickly, and you are apt to suffer from internal disorders.

Baths in summer time should not be too cold, any more than drinking water. The water should be tepid, about 85 degrees F. If possible, it should be applied by means of a shower, followed by a brisk rub. Thus reaction takes place and normal bodily functions are resumed.

## Russia's Plight

### Demolished, Ruined, Enslaved

If you are not as thankful as you think you ought to be that your lot is cast in the "land of the free and the home of the brave," read the story of Russia's dreadful plight as told by Frederick M. Corse, general manager in Petrograd for the New York Life Insurance company, who has just returned from the afflicted land:

"The commercial outlook is nil, so long as the bolsheviki are in power. There is no chance for business. The banks have ceased to operate, credit has collapsed. So it will go on until despair and starvation seize the peasants, and that is coming this year. The Germans are not able to capitalize the lands they have seized and they fear to put their troops in, as they can't control the situation. The German troops begin to get under the influence of the bolshevik propaganda.

"There has been local resistance to the Germans, but no military resistance is possible at present because of the utter demoralization of the men.

"The great crisis will come some time this year at the hands of the peasantry. They are at each other's throats now over the division of land. The big estates are taken over and on the property there is very little sowing this spring and consequently there will not be much to harvest.

"When the peasants cry for relief they will probably ask for a monarch, so the question of promoting democracy in Russia has got to be devoted to promoting limited democracy. The problem that confronts the allies now is to see that the monarch is not named by Germany.

"Wholesale confiscation of private property, real and movable, is practiced at the present time. Life is safe nowhere in the country. When I left Petrograd the intelligent and property classes were openly soliciting Germany to come and establish order. The proximity of German troops to the town was far less disquieting than the growing anarchy within.

"There is everywhere in Russia a great labor upheaval. The maximum wage and minimum work is the order of the day. The destruction of capital is going on at such a rate under bolshevik management that if it continues during the current year, not only will the state be bankrupt, but years, perhaps a decade, must elapse before the country can repair the damage done."

**Always After Mary.**

They were having a lesson in history at a public school. The teacher was examining the pupils on the subject of British sovereigns.

"Who came after Henry VIII.?" asked the teacher.

"Edward VI.," answered a pupil.

"Right. And who succeeded Edward VI.?"

"Mary," answered the second little bright-eyes.

"Correct; and who came after Mary?"

There was a puzzled pause. Then a pupil who had heretofore not contributed much to the progress of learning, had an inspiration. He raised his hand, and, being called on, answered, triumphantly:

"The little lamb!"—People's Home Journal.

## Free Information

### Also Some Valuable Books

The service rendered by The Washington Information Bureau, at Washington in distribution of publications is designed to be continuous.

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# All the World's a Stage, and All the Men and Women Merely Players

## British Cavalry Horses



Three British cavalry horses, wounded by shrapnel, cured in hospital and ready for service again. Photograph taken from "Our Dumb Animals."

## First U. S. Officers "Over the Top"



Copyright International

Lieutenant Colman D. Burns, 165th infantry, A. E. F., one of the first American officers to go over the top, now in New York recuperating, is here shown with his two kiddies.

## Tommy "Waacs" Make Bread Behind Firing Lines



The Tommy "Waacs," as the members of the British Women's Army Auxiliary corps are called, are an important part of the British army, and are doing great work behind the firing lines on the western front in France. This British official photo shows a group of women bakers who make the bread the Tommies relish so much, and which gives them strength to beat back the Germans.

## Gutzon Borglum.



Not many know that Gutzon Borglum, who recently stepped into national limelight, identified with the airplane scandal investigations, was born in 1867, near Pocatello, Idaho.

## First Kennewick Strawberries




This is the first crate of strawberries shipped from Kennewick, Wash. This crate brought the grower $30, but was resold at auction for the benefit of the Red Cross and brought $365. The berries were shipped by the Kennewick-Richland Fruit Marketing union, which this year includes over 98 per cent of the growers included in the Kennewick, Richland and Pasco district. There are 225 acres in the Kennewick district, 60 in the Richland district and 40 in the Pasco district.

## It Woke Us Up.




—Brooklyn Eagle.

## Nothing Doing.




—New York Telegram.

# Trappers of the Ozarks

**The Adventures of Two Young Pioneers in the Wilds of Upper Louisiana. Now the State of Missouri.**

By LOUIS B. MILLER

Copyright, 1914, 1915, by Lewis B. Miller.

**Summary of Preceding Chapters.**

In September, 1811, two young men who lived near St. Louis, Ben Armstrong and Jodo Henderson, taking with them their two dogs and donkey Spunky, started on an all-winter's hunt in what was at that time an unsettled region, where Indians held full sway, in the wilds of upper Louisiana, now the state of Missouri. After a perilous trip over old Indian trails and dangerous streams, they reached their destination—a salt spring close to the river Big Niangua, which Ben had visited before and from which they expected to secure salt for sale with their furs when they returned to civilization the following spring. Here they erected a rough cabin for their winter quarters close to the mouth of a large cave that was full of water and bats, and started their salt making and hunting. After an exciting experience with a bear in a cave they find their first fresh sign of Indians—moccasin-tracks in the snow about their camp and the morning after they find moccasin-tracks in the snow about their camp. The Indians attempt to enter their barricaded cabin at night but are frightened away by a great earthquake. The boys are captured and taken to the Osage village. One day they are given one bullet and one charge of powder each and allowed to go hunting. They dare not attempt to escape for fear of starvation, but lose their way and are found the following day by the Indians who think they tried to escape and are taken to the camp under guard. Ben is tied to a stake and a fire built under him but it is only a ruse to induce him to take as his squaw Watermelon, for the time being an Indian widow, who cuts his bonds and proclaims herself his squaw. Ben declines. The boys make plans to escape by canoe. They accumulate some parched corn and dried meat, steal a canoe at night and paddling far up the river turn into a branch stream and hide in a cave. After two days and a night there they go back down the river, safely past the Indian village and turning into a branch find a cave high up in the rocky face of a cliff. Here they place all their belongings except the canoe, which they conceal. They are discovered by the Indians, and, retreating deep into the cave with their belongings, they find, over a mile from the opening through which they entered the cave, an exit, and start southwest, the Indians undoubtedly in pursuit. The second day a blizzard sets in and hungry wolves follow the boys. Toward dusk they reach a deserted settler's camp, the cabin burned but chimney standing. Here they build a fire and plan to stand off the wolves. A long, hard fight with wolves and cold ensues. This fight was hardly won when Snapping Turtle and his warrior band surround the boys, who later effect their escape unseen by their enemies.

## CHAPTER XVIII.

**At Bay in a Burning Tree-top.**

Soon the howling was heard again. This time it was somewhat closer, and there seemed to be two or three wolves together.

One thing the two fugitives, who were now going at a run, noticed as they kept flinging glances over their shoulders. As the first wolf-voice rang out, the panther stopped and gazed back, as if suspecting that he himself was being hunted. At the second howl he turned, snarlingly, and faced the other way. And his manner indicated that he was not a little excited—so much so that he seemed to have forgotten his intended prey ahead. And when wolf-voices were heard the third time, the panther turned aside and went bounding away through the woods, quickly disappearing from view.

Much relieved at having got rid of one enemy, the fugitives hurried on. The wolves were still a good distance behind, but gaining steadily.

"Hadn't we better climb a tree?" Jodo panted, after they had run several hundred yards—till it seemed evident that flight could not shake off their pursuers.

"Yes. But not till we've started a fire. A tree is a cold place tonight—cold a-plenty to freeze us stark."

"But how will a fire keep us from freezing after we climb a tree?"

"We'll kindle the fire against a tree, then climb up and sit over it. That's our only chance to be both warm and safe. Then if the wolves get too hungry to be afraid of the fire, they can't reach us anyhow."

"Good! That's the very idea, Ben! Why didn't we think of that sooner? And we'd better stop right away. The varmints may run onto us now before we can get our fire to burning."

"All right! We'll stop in a minute or two—just as soon as we can find a hollow log."

They were not long in finding one. The hollow was not large, but on feeling inside of it they found what they needed—some dry leaves which the wind had blown in there, and some dry, rotten wood. Near by was a big tree with many limbs, some of them hanging rather low.

While Ben was raking away the snow at the foot of the tree, Jodo brought dry leaves and pieces of dry wood and laid them against the trunk. Then, while Jodo was breaking off many twigs from the top of a fallen tree, Ben struck fire and quickly had the leaves blazing. A fire started, both began to break off limbs from the fallen tree and lay them on the blaze.

Frantically they worked, for by this time the nearest wolves were almost in sight.

"Take to the tree, Jodo, and be quick about it! I'll hand tup our things and then climb myself. Up you go! I'll boost you!"

Promptly Jodo clasped the tree-trunk, and his partner pushed him till he could grasp a limb. He quickly drew himself up, then crawled out along the limb till beyond the smoke. Ben reached up their rifles, which Jodo laid across two limbs. On the rifles he laid their packs.

Ben now began to throw more wood on the fire. But by the time he had piled a few snowy sticks on the dark, smoldering mass, several shadowy forms came rushing out of the forest. He sprang upon the smoking pile, mashing it down, leaped for a limb, grasped it, and had barely time to swing himself up when the whole snapping, snarling pack were swarming around the tree!

The fire was making plenty of smoke, but no light as yet. And the wolves, unscared by the little fire concealed under the snowy wood, crowded close around, and even leaped upon the wood, till the smoke drove them back.

"We didn't climb a minute too soon! Don't you think that fire's about to go out, Ben? It'll be hard on us if it does."

"No, it'll gradually eat its way through, I think. A lot of snow on some of that wood. And then I stepped on it and mashed the snowy wood down on the fire. We're in for a cold time of it if the fire does fail us. We'd better wrap our blankets closely around us, and protect ourselves as well as possible."

Each now found as comfortable a seat as he could, on a big limb, and got his mittened hands under his blanket and into his pockets.

"This smoke is about to strangle me!" Jodo soon complained.

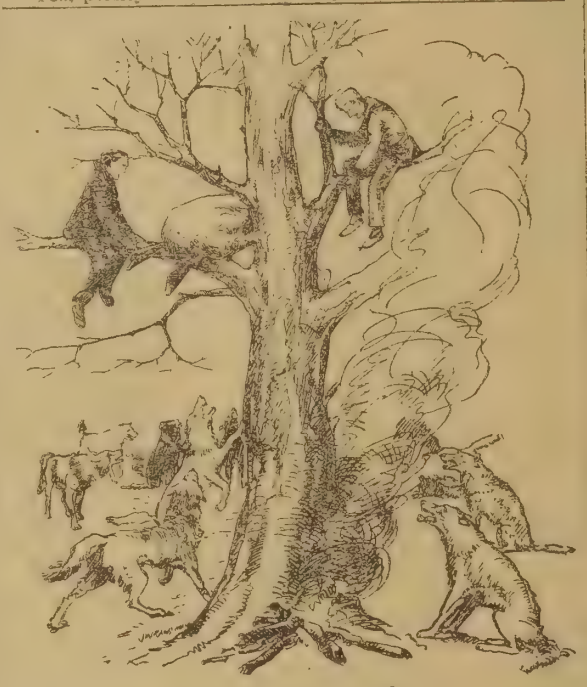
"That's good! Where there's plenty of smoke there's bound to be some fire. Move out on your limb. Or lie down on the limb with your head out and your body in the smoke. Then the smoke will warm you. But don't I wish we had plenty of powder and lead? We'd soon clean out these impudent rascals!"

The wolves were still swarming around the tree, snapping and snarling, and leaping upward toward their hoped-for victims. Indeed, a big brute would sometimes leap a yard or more from the ground.

The tree they were perched in had a hollow trunk. And at the ground was a small hole leading into the hollow. Dry leaves had blown in there, and rotten wood had fallen down, both of which had caught fire from the fire outside. The hollow, lined with dry, rotten wood, extended upward, and 15 or 20 feet from the ground was another hole. A draft got started through the hollow, and soon the whole inside of the big trunk was a roaring furnace, with flames from it shooting out at the upper opening.

"Plenty of fire there!" exclaimed Jodo. "No danger of our freezing up here now. When we get cold, we can hug the trunk, or we can climb up there and warm ourselves at that blazing hole. Just watch the fire shoot!"

"Yes, plenty of warmth in easy reach now. I'm a little afraid we've got more fire than we want; or at least that we've got fire where de don't want it."



Treed in freezing weather.

"How so, Ben? What objection have you to fire there?"

"None whatever to the fire itself. I didn't know it when we started a fire against this tree, but it's dead—dead and dry. It hasn't been dead long. Got all of its twigs on it. But it's dead just the same. You can tell by breaking a twig. And the trunk is so dry inside, and is burning so fast, the fire may soon have the tree tumbling down with us."

"It won't be apt to burn so fast after the rotten wood has burnt out."

That was true. But the fire in the trunk still kept roaring like a furnace, and flames still kept shooting from the upper hole.

"I only wish we had some snow up here. I'd climb up and stuff it down that hole. Then I'd feel surer that this tree will stand till we're ready to climb down."

"But, do you s'pose these wolves will keep us up here till daylight?"

"Ten chances to one they will—will do that very thing."

"And is it certain that they'll hunt their holes even then? Won't they be likely to keep us treed till the Osages come and find us roosting up here?"

"That's possible. But I hope not. And I don't believe they will. The wolf is a night-prowling varmint. He's bold in darkness. But as soon as daylight comes he likes to slip off and find a hiding-place. That is, if he's not too hungry. Hunger will keep him on the jump. I've seen plenty of them hunting in broad daylight."

Slowly the fire under the wood at the foot of the tree ate its way through, till there was a good fire outside the tree as well as inside. But that only increased the probability that the tree would burn down before morning. However, the air in the tree-top was much milder because of it, and the two found themselves fairly comfortable so far as the cold was concerned.

While the wolves had been under the tree, Ben had lain down on his limb, tomahawk in hand, in the hope of being able to split some of their skulls when they leaped upward. But they had been too wary. After the fires began to burn, so as to light up under and around the big tree, the wolves had retreated. But they were still very close, their teeth snapping hungrily, fiercely, and their eyes shining like live coals off in the surrounding darkness. Had either of the treed men climbed down or fallen from the tree, the wolves would have rushed upon him in spite of the light.

"Make yourself as comfortable as you can, Jodo, and rest as well as you can. I only wish we could sleep a little. There'll be no rest for us when these wolves go. We've got to travel and travel fast—travel for our very lives. We can't put this fire out, I think. The Osages will sight the smoke and know just where to come. I picked out the wrong tree to build our fire against. A green tree was what I wanted."

"Well, I don't see that it matters a great deal. Our trail in the snow would have guided the Osages anyhow. They can follow that as fast as they can travel. They can't see this light unless they happen to be right close by; and they won't be able to make out the smoke till morning. So I don't think the fire will do us much harm."

As the heat from the fire below increased, the two crawled outward and lay along their limbs, keeping their bodies in the heat and smoke, but their heads out of the smoke. They rested as well as they could, and ate something from their nearly empty provision-bag. After eating they got themselves in safe positions and both fell into a doze.

In time they were aroused by the screaming of a panther—the one that had trailed them or some other. The screams sounded as if only a few hundred yards away, but might have been farther. Again and again they rang out, startling, on the frozen stillness. At length they began to recede, each one sounding further away, till they died in the distance. Then the treed fugitives dozed again.

Finally, just as the faintest trace of dawn was beginning to streak the east, Ben roused himself. Soon he spoke:

"Wake up there, Jodo boy! This tree is about ready to topple over! We've got to get down from here before we take a tumble!"

Jodo sat up drowsily on his limb. He gazed around. Day's breaking. It won't fall till daylight, will it?"

"It's going to fall now in a very few minutes."

"Are the wolves hanging around?"

"Some of them are. The others got tired of waiting for us and set off in quest of other game. Plenty of fire down there now. I believe we can make them keep their distance till daylight comes. I'll let myself down and drop to the ground, and you can hand our guns and things down to me."

"Ben, can you make out which way the tree is going to fall?"

"I couldn't be sure, but it seems to me to lean a little—to be settling a little in the other direction."

"If it falls with this side up, we have only to cling to these limbs we're on. "They'll stand up high enough to keep us out of the wolves' reach."

"Yes, guess maybe they will. But we shall have to hang to our rifles and bundles, to keep them from falling."

Each had only time to get hold of his gun and pack, when they felt the tree going down with them. Fortunately, as Ben had foreseen, it fell toward the far side. They had barely time to clutch the limbs they were on, when the top struck the ground with a crash, followed by the breaking of the under limbs. The falling tree threatened to roll over, but stopped before rolling far. When it came to a settled position, Ben and Jodo felt frightfully jarred; but they were still clinging to their big limbs, and were still 8 or 10 feet up in the air. They climbed a yard or so higher, then fixed themselves as comfortable as they could to wait.

Soon after the tree fell, the wolves had rushed out of the darkness, hungry for prey. Disappointed, they snarled a little, then retreated. The fires made too much light for them, and they withdrew till only their dark forms could be dimly made out and their glowing eyes seen.

Slowly a bright, cold morning dawned. As the two had hoped, the wolves made off with the approach of day, skulking away into the forest, perhaps for a hungry sleep in their dens till darkness came again. And scarcely had the brutes gone when the young fellows perched in the tree-top slid down to the hot trunk—it was still burning inside—and then, with their things, got out of the brushy tree-top.

For a minute or two only they stood by the fire, while fastening their packs on their backs. Then they shouldered their rifles and tramped away over the crunching snow, through the forest. Now their faces were toward the south. The weather was still intensely cold.

Hour after hour the fugitives tramped, almost without pausing. When the sun was well up, they ate a breakfast of dried venison and parched corn while hurrying on. Not till a good while after noon-time did they stop for dinner, and then only about an hour. The sun was shining brightly, warmly, and the air was fast growing bild. Already the snow was thawing wherever the sunshine could strike it.

The fugitives spread their blankets in a dry, sunny place, and stretched themselves at full length on them, so as to rest to the best advantage even while eating. When the hour they had allowed themselves was up, they shouldered their guns and tramped on again.

Two or three times during the afternoon they halted to drink at little streams; but scarcely for a moment did they pause for anything else. Their powers of endurance were pretty well matched. For while Ben was the stronger of the two, Jodo was lighter and more wiry. Late in the day they both seemed barely able to life their feet, but not for a moment did they pause till dusk. They had promised themselves a good night's rest, but only on condition that they do no resting until night.

With the disappearance of the sun the air had grown cold again. But this night would not be so cold as the night before. The travelers stopped in a wild gorge, and camped under an overhanging rock.

Laying aside their things, they collected wood and piled it in a semi-circular pile, with the ends of the

(Continued on the following page.)

# Washington Boys in War Service

From the Twice-a-Week Spokesman-Review.



**BYRON O. VANCE, Prosser, Wash.**—Entered the naval service August 2, 1917, with a friend, Elmer Shedd, and is now on the U. S. S. Philadelphia, Puget Sound. He lived on a wheat ranch near Prosser, Wash., before enlisting in the navy, with his parents, Mr. and Mrs. B. H. Vance.



**CORPORAL J. A. KETCHUM, Winchester, Wash.**—Is now in training at Camp Kearney in the signal corps, 158th infantry. He entered the government service November 6, 1917. He is the only son of Mr. and Mrs. H. W. Ketchum, who live at Winchester.



**ALBERT VICTOR LOOK, Meyers Falls, Wash.**—Was called to service, November 5, 1917, and is now serving with the 420th squadron, A. S. S. C. Polson Logging company, Camp 7, at Hoquiam, Wash. He is the second son of Mr. and Mrs. V. R. Look of Meyers Falls, who live on a farm.

## State Fair Auditorium

The foundation for the $12,000 auditorium at the State fair grounds at Yakima Wash., has been laid and the building will be ready for this fall's exhibition. There will be a program every day and night. A sheep school will be held in connection with the sheep sale. Commissioner of Agriculture Benson has invited F. R. Marshall, chief of the U. S. Bureau of Animal Industry, Professor W. C. Coffey of the Illinois Agricultural college; W. T. Rich, sheep expert, who has been traveling in Australia, and F. S. King, breeder of Corriedale sheep at Cheyenne, Wyo., all of whom are expected to deliver addresses. The sheep sale, which was such a success last year, will be held again on Tuesday and Wednesday and a still greater sale is anticipated.

Secretary Meredith is planning much work and many exhibits along conservative lines. The state college at Pullman will present moving pictures as will the Child Welfare League and probably the Y. M. C. A., the latter of work with the army in France. A concert will be held every night in the auditorium. There will be a good amusement program as usual, including high class horse racing, with Monday, the opening day, devoted to auto racing. In spite of labor shortage, a good stock show is expected.

H. A.

## Trappers of the Ozarks

(Continued from the preceding page.)

semi-circle agains the rock. Then they fired the wood in various places, and sat down to eat their supper. And immediately after supper they made their bed and stretched themselves out to sleep. They were sleeping shut in between the fire and the rock.

"Well, if the Osages overtake us here, it will be because they're better men than we are," Ben said, wearily. "We've nearly tramped ourselves to death to leave them behind. And I believe we've left them behind—far behind, too."

"If I knew the whole Osage tribe would be here and around us by morning, I couldn't drag myself another mile tonight," Jodo had barely strength to answer, as he was falling asleep.

Both slept the sleep of exhaustion, and slept straight through till daylight. More than once they were dimly conscious of hearing wolves close by. But they had confidence that the fire would keep all animals of prey back, and they slept on.

The breaking of day found them up and eating their breakfast. They ate as heartily as they dared. And when their hunger was satisfied, but little of their venison and corn remained—not half enough for their dinner. For supper, if they had any supper, they would have to depend on their rifles. By the time daylight had fully come, they had extinguished their camp-fire, by raking the burning sticks out into the snaw.

On the first high point they came to they stopped and looked for smoke. And smoke they saw, though it was many miles away. But it was back toward the north, on the route they had been traveling, and there was little room to doubt that Indians had kindled it.

"We'll make old Snappy Turkle and his bunch mighty sick of this trip before they overhaul us," Ben remarked, grimly, when they were tramping on again.

The sun was shining through a haze, and the day was not so mild as the day before had been. About noon the travelers threw themselves down, on a bed of dry leaves, to rest and eat what little remained in their deer-skin bag.

"Now it's shoot straight or starve," Jodo remarked, as he ate the last grain of the corn Watermelon had parched for them.

"Yes. If we don't knock over some game between now and dark, there's nothing for us but to go to bed hungry."

"We ought not to have much trouble finding a turkey."

"But we can't afford to waste a whole precious bullet on a turkey. Nothing smaller than a deer dare we shoot at. One bullet must get us meat enough to last several days. The other bullet we want to save for emergencies, such as a hungry bear, or a greedy panther, or a blood-thirsty wolf."

**(To be continued.)**

### Alfalfa in New Zealand.

The raising of lucerne or alfalfa in New Zealand is receiving much attention of late, and the different varieties are being tested, with the result that there was cut during 1917 three crops of Turkestan lucerne with a total of 6 1-5 long tons per acre of the green lucerne, weighing shortly after cutting 11 1-2 tons of Peruvian per acre, 12 3-4 tons of Poitou, 11 1-4 tons of Russian, 12 tons of Spanish, 12 1-3 tons of Hungarian, 14 tons of Patagonian, and 14 1-4 tons of Marlborough lucerne. It is estimated that the Patagonian and Marlborough lucerne, when converted into hay would give an approximate yield of 3 1-2 tons each, which at $19.46 per ton gives a total value of $68 13 per acre.

### The Beaver in Norway.

The beaver is a very scarce animal in Norway, only living in small colonies at a few places in the country. It is absolutely forbidden to kill the animal. The farmers, however, claim that the beavers do great damage to their forests and have now asked the government for right to kill them off whenever it can be proved that they are doing damage. If not allowed to kill the animals the farmers will ask the government to reimburse them for the damage done to their property.

### Sucker Born Every Day.

Suckers are so common in this country that it has become necessary for the United States department of justice to warn people against an army of fortune tellers who claim to be able to tell the folks at home all about what the American soldiers in France are doing, will do, or will have done to them.

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Dayton, Wash.


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# It Rescues Horses

## Horse Hospitals Do a Noble Work

Until recent times a horse seriously injured on the battlefield or in war service anywhere was immediately shot. Practically no thought was given to the possibility of saving his life, the only thought being to relieve him of his suffering.

This has been changed, however. Not only are efforts made to relieve his suffering, but successful efforts are made to heal him of his injuries and enable him to continue his important part in the activities of war. Following the lead of the Royal Society for Prevention of Cruelty to Animals of England, this country has built up a strong organization, already familiar to many, known as the American Red Star Animal Relief. Dr. William O. Stillman, for many years president of the American Humane association, is director-general of the Red Star.

The Royal Society of England has hospitals behind the battle lines adequate to care for more than 12,000 horses at one time. Reports of its work say that it has succeeded in curing more than 80 per cent of the animals brought there for care. It is estimated that the work of this society has saved army horses worth $30,000,000 during the present war.

Similar work is being organized back of the lines by the American Red Star and will make a specialty of caring for horses that serve the American army, but which, like the Red Cross, will be no respector of persons when need of help is observed. It is estimated that there are between 4,000,000 and 5,000,000 horses on the battlefields of Europe at the present time, a majority of which are horses from this country.

# Two Salad Dressings

By LISSIE C. FARMER.

To make the following sour cream salad dressing, which is one of the most delicious imaginable, put a cup of good, thick sour cream in a bowl and set the latter in cold water, if the day is warm. Add one tablespoon of lemon juice, one-quarter teaspoon mustard, one-half teaspoon sugar, and a dash of cayenne. Mix, avoiding too rapid or too much stirring. Add more lemon juice or a little vinegar, if you like a more acid taste. This dressing can be used on any vegetable salad, or a very rich salad can be made by using it on meat, fish, or egg or cheese combinations. If used with fruit salad, add more sugar, less salt and cayenne, and omit the mustard.

Here is another dressing which is easily made and economical: Put a teaspoon of cornstarch in a bowl and add a dash of cayenne, teaspoon sugar, one-half teaspoon salt, and mix well. Break an egg into this mixture and stir till smooth and the egg thoroughly separated. Then add three teaspoons each of vinegar or lemon juice and olive oil, adding them alternately and stirring as you add. The mixture is now ready for cooking, and for this purpose the bowl may be set into the top of the teakettle. If the water in the kettle is boiling, it will cook the dressing in a short time. When well cooked allow to cool, then stir in enough sweet or sour cream to give the consistency you like.

If you want to use this dressing on vegetables, fish or meat, add one-half teaspoon mustard and stir well into the dressing. During the summer you can keep this dressing on hand by making in larger quantities and sealing while still hot, in glass jars or in jelly glasses, the latter covered with parafine. Do not add the cream to this reserve supply until you are ready to use a portion of it.

For the foundation of your salad, you can use lettuce, cress, nasturtium or very young dandelion leaves. Always crisp this portion of your salad by putting it one ice or in cold water before using. Almost any vegetables, fruit, fish or fowl, can be used cold in a salad; also, cottage cheese, well seasoned with salt and pepper.

# Some Canning Tips

"It is well to remember that sterilization is the most important thing in canning, says Farm and Fireside. All jars, covers and rubbers should be thoroughly washed and cleaned. When the open-kettle method is used, the rubbers, covers and jars should be washed and then put into a large pan on a rack or thick pad to prevent them from resting on the bottom of the pan. They should then be covered with cold water, which is brought slowly to the boiling point and allowed to boil 10 minutes.

Scalding and blanching is absolutely necessary in preparing vegetables and some fruits for the cold pack. It consists in immersing the prepared vegetable into boiling water or steam and leaving it there for a few minutes. This process shrinks the material.

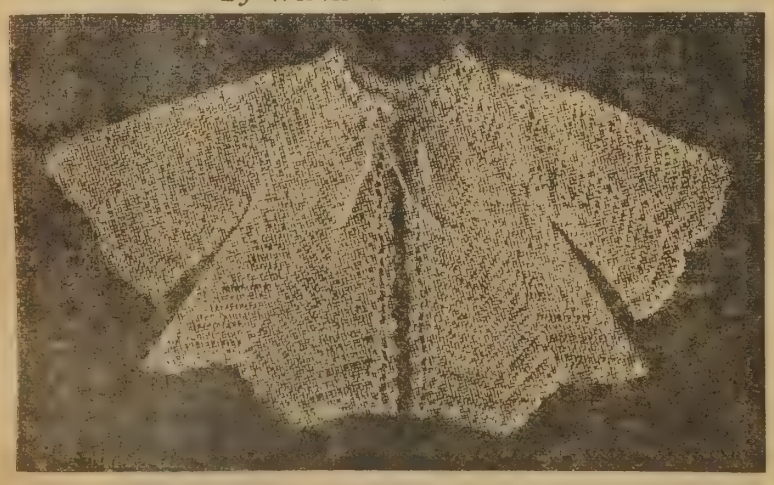
The cold-dip process should always immediately follow the scalding and blanching. It consists merely in dipping the blanched material into very cold water. If the sack containing the material to be blanched is fastened on the end of a stick there will be no danger of burrning the hands.

Syrups are usually added to fruits and brines to vegetables. When the jar is tightly packed with materials, the brine or syrup should be poured into the jar until it is completely full.

Canning syrups are prepared by mixing two cupfuls of sugar and three cupfuls of water and boiling for different lengths of time. Thin syrup is just brought to a boil, medium thin is boiled two or three minutes, medium thick is boiled six to eight minutes, and thick syrup is boiled eight to 12 minutes. With the present sugar shortage, corn syrup should take the place of at least part of the sugar.

# Crochet and Tatting Designs

By WINIFRED WORTH



**Infant's Sack.**

Ch. 150; 2 open s., 12 gores (6 rows before widening for sleeve). In each gore 1 dc. in 1 ch. twice, 3 dc. in 1 ch. twice, 1 dc. in 1 ch., sk. 2 ch. before beginning next gore. One row 3 in middle, next 5 to widen.

7th Row—Begin 2 new gores on 3d, 4th, 9th and 10th for sleeve, continue 7 rows, then join under arm; make 11 rows; put on border 2 rows colors and 2 plain white, if desired.

Scallop for edge 5 dc., join; widen sleeve 3 times and continue desired size.

# Ways to Use Potatoes

Suggestions for helping to make use of this country's big potato crop are contained in a menu issued by the dining car department of the Baltimore & Ohio railroad, which besides giving the method of preparing potatoes in 17 ways, quotes the prices at which these dishes will be served to patrons dining on the road.

"Thirty million bushels of potatoes may go to waste. Eat potatoes—save something else," the menu urges. This special potato menu card is printed in the form of a folding post card, so that it may be mailed by patrons of the dining cars to their friends.

The menu follows:

**Au Gratin Potatoes**—Raw potatoes cut in small dice, when cooked, mix with cream sauce, put in au gratin dish, sprinkle with grated cheese, bake in oven, 25 cents.

**Algerienne Potatoes**—Raw potatoes cut in large cubes, steam or boil, when cold, saute in butter, sprinkle with chopped parsley, 15 cents.

**Cottage Fried Potatoes**—Cold boiled potatoes cut in slices, saute in butter, 15 cents.

**Hashed Brown Potatoes**—Cooked potatoes, minced and fried in butter, 15 cents.

**Julienne Potatoes**—Raw potatoes cut in fine shreads lengthwise, fried in very hot fat, 15 cents.

**Lyonnaise Potatoes** — Cooked potatoes, either minced or thinly sliced, seasoned with salt and pepper, minced fried onion, chopped parsley, 15 cents.

**French Fried Potatoes**—Raw potatoes cut in strips, fried in hot fat till done, drain, sprinkle with salt, 20 cents.

**Hashed in Cream Potatoes**—Raw potatoes cut in very small dice; when cooked, drain, cover with cream sauce, simmer a few minutes, 15 cents.

**Barabant Potatoes**—Cold boiled potatoes cut in squares, saute with minced shallat and chopped parsley, 15 cents.

**Potato Croquettes**—Steamed potatoes, dry mashed, salt, butter, raw yolks egg added, form in cork shape, breaded and fried, 15 cents.

**Potatoes Maitre d'Hotel**—Raw potatoes peeled, cut in section like quartered orange, steam till barely done, simmer Veloute sauce, chopped parsley, lemon juice, 15 cents.

**Duchesse Potatoes**—Steam potatoes, mix with yolk egg, passed through pastry bag to a baking sheet, brushed with beaten eggs, and baked, 15 cents

**O'Brien Potatoes**—Hashed brown potatoes, mixed with chopped pimentoes, saute with butter, 15 cents.

**Potato Pancakes**—Raw potatoes, cook and mash while warm, add egg yolks and milk, whip the white egg firm, and stir in just before frying, 15 cents.

**Potatoes Natural**—Plain cooked potatoes, cut in any shape, 10 cents.

## Cottage Cheese Recipes.

The following are some new and excellent recipes using cottage cheese, sent out from the U. S. department of agriculture:

**Cream of Cottage Cheese Soup.**

Make a thin cottage cheese sauce from 1 cup milk, 1-2 teaspoonful shortening, 1-2 teaspoonful flour, 1-3 teaspoonful salt, a dash of pepper, and 1-4 cup cottage cheese, and 1-4 to 1-2 teaspoonful soda to neutralize the acid in the cheese. Season by reheating with the soup a slice of onion, a small slice of the yellow part of the lemon rind, and a blade of mace or a little nutmeg. No one of these flavors should predominate, and the seasoning should be very delicate. Serve croutons with this soup.

**Eggs with Cottage Cheese.**

Cut six hard cooked eggs into quarters and place about one-fourth of the amount in a greased baking dish. Cover this layer with a part of a cup of white sauce into which half a cup cottage cheese has been folded and sprinkle over it a layer of sliced green or red sweet pepper. Repeat until the dish is full. Sprinkle bread crumbs on top, dot with butter and brown in a hot oven.

**Cottage Cheese and Bread Loaf.**

Mix together 2 cupfuls cottage cheese, 1 cup chopped nuts, 1 cup cold leftover cereal, 1 cup dry bread crumbs (corn or Victory bread), 2 teaspoonfuls chopped onion, 1 teaspoonful fat, salt, pepper, 1-3 teaspoonful soda (or more to neutralize acid), poultry seasoning or mixed herbs. Bake in a greased pan in a hot oven till top and sides are well browned over. Turn out on a hot platter. Serve with a brown or tomato sauce if desired.

## War Thrift Sponge Cake.

Sponge cake without flour or sugar is as delicious as it is Hooveristic. Miss Edna E. Walker, assistant state leader of home demonstrations of the state college of Washington, recommends it as one of the best she has ever used. Following is the recipe:

Yolks of 4 eggs well beaten. Add 1 cup syrup and gradually beat in 1 cup rice flour with a pinch of salt and flavoring. Fold in the 4 egg whites which have been beaten stiff.

Here is one of Miss Walker's recipes for cocoanut macaroons, which can be eaten by the patriot without a feeling of guilt:

**Cocoanut Macaroons.**

Two eggs, well beaten, ½ cup brown sugar, 2 cups cornflakes, 1 cup shredded cocoanut. Drop by spoonfuls. Bake in moderate oven.

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# Patterns

2139—Child's set of short clothes—Cut in 5 sizes: 1, 2, 3, 4 and 5 years. The dress will require 2 1-4 yards of 36-inch material. The slip 1 1-2 yard, the drawers 1 1-4 yard, for a 4-year size. Price, 10 cents.

2085—Girls' dress—Cut in 4 sizes: 6, 8, 10 and 12 years. It requires two yards for the guimpe, and three yards for the dress, for a 6-year size, in 27-inch material. Price, 10 cents.

2470—Child's dress—Cut in 5 sizes: 2, 3, 4, 5 and 6 years. Size 4 requires 2 3-4 yards of 36-inch material. Price, 10 cents.

2473—Ladies' dress—Cut in 7 sizes: 35, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 6 1-4 yards of 44-inch material. Price, 10 cents.

2473—Dress for misses and small women—Cut in 3 sizes: 16, 18 and 20 years. Size 18 will require 5 3-4 yards of 36-inch material. The skirt measures two yards at the foot. Price, 10 cents.

2136—Ladies' house dress—Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires seven yards of 36-inch material for a 36-inch size. The skirt measures about 2 3-4 yards at the foot. Price, 10 cents.

2476—Boys' suit. Cut in four sizes: 3, 4, 5 and 6 years. Size 4 will require three and one-eighth yards of 44-inch material. Price, 10 cents.

2317-2313—Ladies' costume. Waist 2317 cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 2313 cut in seven sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. A medium size will require for skirt and waist five and five-eighths yards of 44-inch material. The skirt measures two and one-fourth yards at the foot, with plaits drawn out. Two separate patterns, 10 cents for each pattern.

2465—Child's play garment. Cut in five sizes: 1, 2, 3, 4 and 5 years. Size 4 will require two and five-eighths yards of 36-inch material. Price, 10 cents.

2457—Ladies' apron. Cut in four sizes: Small, 32-34; medium, 36-38; large, 40-42; and extra large, 44-46 inches bust measure. Size medium requires five and a half yards of 36-inch material. Price, 10 cents.

1645—Ladies' night dress. Cut in three sizes: Small, medium and large. It requires five and a half yards of 36-inch material for a medium size. Price, 10 cents.

2129—Girls' dress, with bolero. Cut in four sizes: 4, 6, 8 and 10 years. Size 8 requires one and three-fourths yard for the bolero and four and a quarter yards for the dress, of 27-inch material. Price, 10 cents.




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Be sure to give the pattern number and the correct size.

## The Soldier of the Soil.

Oh, he hears the bugles calling,
And the rolling of the drums.
And the steady tramp and rumble
Of the army as it comes,
And his eyes are bright and wistful
As he straightens from his toil.
But, behold! he is enlisted
As a soldier of the soil.

Though he dreams of distant trenches
And the glory to be won,
Where the Stars and Stripes are flying
Underneath an alien sun,
And the earth is sodden crimson
And the air a mad turmoil,
Those are not the fields of duty
For a soldier of the soil.

His the drill of seed and harvest,
For the soldiers must be fed,
And they look to him to furnish
Beef and beans and daily bread.
So beside the hero's saber
Hang the implements of toil,
For the power of the army
Is the soldier of the soil.

—Anonymous.

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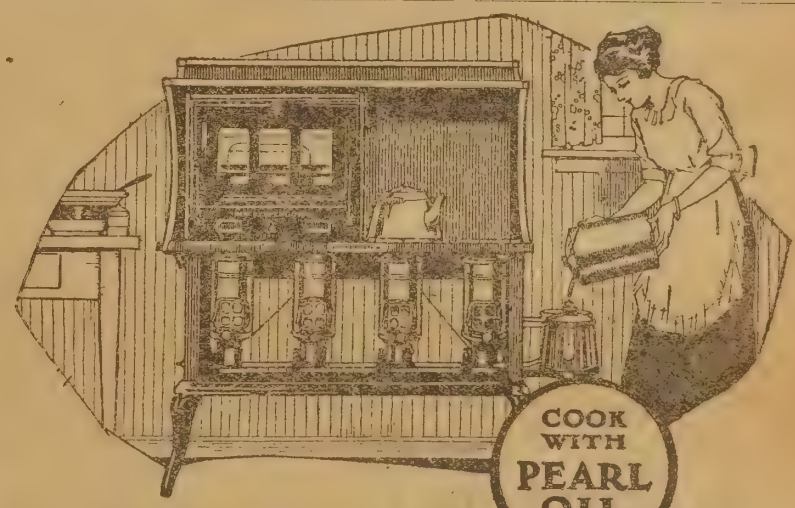


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# Is Your Name Here?

Aunt Nellie is glad that the girls and boys are taking such an interest in the Corner and that letters from new cousins and old ones, too, are coming in so fast. Some of you are, perhaps, getting discouraged and are wondering why your letters have not been published yet. They are going to be in the Corner, every single one of them, just as soon as room can be found. So just keep on watching and waiting for yours to appear. Letters from the following cousins are on hand and Aunt Nellie has enjoyed them all:

Laura Taylor, Delila Taylor, Cassie Taylor, Elzina Rogers, Margueritte Anderson, Bessie Violet Moser, Anna Apold, Grace Agnes Garner, Beulah Garner, Teresa Germont, Anna Aronin, Louise Hannah, James Prince, Doris Decker, Saloma Zier, Hattie Wade, Hazel Wade, Effie Lewis, Linda Anderson, Ida Irmer, Alice E. Johnson, Gladys May Plemon, Jennie Margaret Van Skiver, Marie Potter, Marguerite Selde, Edith Tiedo, Ivan Graham, Violet Gray, Pearl Mathis, Auretta Barnes, Willis Botsford, Carl Allison Tubb, Blanche Hamilton, Rosie Wietz, Gwen Baldsin, Jennie Hoy, Roy Seger, Royaline McMurry, Muriel Stein, Enna Brune, Ora Hayden, Elizabeth Vantrojen, Alice Watson, Vera Gustafson, Bertha Herdlick, Edwin Anderson, Gladys Strong, Mary Kochever, Ina Moller, Esther Schulenor, Alice Graham, Edrie Lois Colbert, Pearl Droullard, Ada Jennings, Agnes Westlund, Anna Thomson, Marie Houk, Lorena Thomson, Zelorna Tuttle, Reno V. Carmack, Charlie Franklin Divers, Ruth O. Toyn, Florence Crocker, Henry Besel, Freda West, Edner Sofdahle, Rea Mathews, Lola Ferrell, Fanny Osterberg, Freda Nelson, Bertha Nelson, Martha Weber, Esther Hellena Reimann, Luella Venneberg, Edith Marie Van Ausdle, Bonnie F. Coleman, Swanhild Frostenson, Myrtle Lee, Elva Green, Hazel Agnes Land, Georgia Lewis, Ethel Little, Mary Lewis, Jane Osborn, Anna Marie Mymeyer, Freda Felgenhauer, Clara Bacon, Elma Bacon, Ruby Price, Daisy Homad, Goldie Neher, Emily Homad, James Barr, Lucille Snodgrass, Theodosia Heckel, Edith Tavis, Marie Krom, Goldie Smith, Hazel Ethredge, Clarence Svinch, Edna Light, Constance McDonald, Marjorie McCoy, Martha Floch, Claire Beckwith, Josephine Law, Celia Reichel, Esther Peterson, Esther Lysell, Anna Erickson, Mary Bayer, Josephine Wagner, Florence Ferrell, Elsie Stock, Frances Lambert, Lester L. Thompson, Sarah Millenaar, Olga Mirosh, Reeta Bateman, Stella Sturmans, Lucile Almaden, Dorothy Kane, Ella Michael, Signa Nordquist, Juanita Maston, Mabel Schombron, Arthur C. Bernhardt, Nora May King, Orris May, Elvira Triebroasser, Clara Vivian Harrison, Hilda E. Smelcer, Bertha Wilke, Miriam Miller, Glyness Simenson, Stella Johnson, Vera I. McCord, Ruth Land, Florence Anderson, Gladys Geer, Eula Weagant, Annabel Schmidt, Lena Nowlen, Ethel Faye Kellogg, Evelyn Blye Kellogg, Hilda Knutson, Delphie Schmidt, Yuella Ray Meeks, Wilma Erickson, Clara Peterson, Martha Peterson, Letha Button, Irene Lindquist, Paul Hess, Minnie Wynona Tarbert, Harry Wegele, Vernon Estaline Heald, Anna Pearson, Vivian Miroshe, Helen Cochran, Raymond Lyons, Warren Lyons, Ellen Hay, Ruth Hay, Ruth Wilma Peterson, Elva Richards, Mabel Iverson, Ida Smalley, Nerna Ritter, Ethel Norman, Mary Davies, Ellen Nelson, Dorothy Mumford, Thelma Brazelton, Agnes H. Stoller, Minola Stoller, Agnes Celia Sophia Havlican, Emma Lucile Munroe, Elizabeth Anna Green, Junaita Owens, Thelma Heimen, Viola M. Tarbert, Ruth Cory, Mazel F. Reed, Helen Elizabeth Munroe, Ruth Westenberg, Aubrey Thomas, Virginia Ripperda, Edythe Strahl, Edith Christensen, Marie Kilgore, Cecil Barnett, Lois Peck, Ollie Cummins, May Sargent, Ellen Secrest, Margaret Thompsoon, Catherine Whalen, Cora Wilson, Genevieve Randall, Clyde Decker, Christina Grant, Marie Jeffries, Lena Jonsen, Ole Jonsen, Agnes Irwin, Leonard W. Olin, Selma Anderson, Vivian Davis, Inez Walsh, Ivy Ward, Oscar W. Nelson, Signe Westman, Mildred Heidegger, Harold Stringer, Garda Ekholm, Annie Phillips, Neah Peck, May Wiley, Florence Verna Markham.

## When Answering Riddles.

My Dear Corner Cousins: I have noticed that many of the cousins have repeated the riddle and then given their answer, just as they would do in school if their teacher asked them: "What is the largest body of fresh water in the world?" and you would say: "Lake Superior is the largest body of fresh water in the world," and not just "Lake Superior." Don't you think this would be a good way, and perhaps it might help some cousin who has not seen the riddle before? We have had so many riddles that I expect some of us are mixed up on them and there are so many good ones, too. You know, when so many are writing, and the Corner has over 1300 cousins, it would help Aunt Nellie, too. What do my cousins think about this? Your loving

AUNT NELLIE.

### Ruth Will Raise a Garden.

Dear Aunt Nellie: I enjoy the Corner letters very much. I wish to become a cousin. I was 13 years old April 10, and am in the seventh grade. I like to go to school. Have I twin? I have four brothers, Harold, age 21; Clifford, age 17; Maurice, age 14, and Floyd, age 2 years and 10 months. I live on a 160-acre ranch. We have five head of horses. Their names are Bessie, Babe, Queen, Bird and Topsy. we have about 15 hogs, 12 turkeys and 12 head of cattle. I live one mile from school. We have one dog named Sport. He is a shepherd dog. He is a very good cattle dog. This is not the last time I intend to write to the Corner. I joined the junior Red Cross and am going to learn to knit for the soldier boys. I have one uncle in the army. He is in Seaside, Ore. His name is Robert Palmer. I have one brother in the National Guards. He is in Tacoma. His name is Harold. I have blue eyes and dark hair. I am going to raise a garden this year. I am the only one in our family going to school. My teacher's name is Mr. Harader. I am going to buy thrift stamps to help the government. I live 37 miles from Chehalis.—Ruth Walsh, Mossy Rock, Wash.

### Pet Pig Is a Bother.

Dear Aunt Nellie: It has been a long time since I wrote to the Children's Corner. I am 11 years old on January 20. Have I a twin? If I have I wish they would write to me. I would surely be glad to write to any one, a boy or girl, it doesn't make any difference. The boys are just as nice as the girls sometimes. I have one brother and one sister. My brother's name is Clark and my sister's name is Fyrne. I have two cats. One is maltese and the other is white. The maltese is called Blue Bell and the white one's name is Fluffy. We have one dog. His name is Shep. He is a black and white Shepherd. He is very pretty. We have a pet pig also. We can make him lie down by scratching his stomach. He is very large. He is getting to be a bother now because every time we go outside he is there to meet us to be fed. He is a Poland China hog. I hope to hear from some of the cousins.—Helen Esther Schoenberg, Prosser, Wash.

### We Have Not Forgotten, Beulah.

Dear Aunt Nellie: I have not forgotten you yet and hope you have not forgotten me. I think our Corner has grown very much. I hope after a while it will grow to two pages. I like Aunt Nellies' letters and hope she likes my letters. I also like the cousins' letters. I have learned to knit and think every girl should knit. I am sure Aunt Nellie is knitting for our soldier boys in France. This has been a beautiful winter. I joined the junior Red Cross at school. My teacher said we might have to learn how to knit, but I know now. I am knitting a wash rag. Mamma is knitting a sweater. I know there is something every girl can do to help win the war. They can buy war saving stamps, and many other things. I gave some money to the Y. M. C. A. and joined the junior Red Cross. Some of the cousins write very good letters. I was 10 April 11.—Beulah Violet Shaw, Grandview, Wash.

### Papa Tends to the Crops.

Dear Aunt Nellie: I am writing to you for my first time. I am nine years old. My birthday comes the seventh of October. I am in the fourth grade. My teacher's name is Miss Nichols. I like her fine. I have three brothers and no sisters. My oldest brother's name is Winslow. My next brother's name is Thomas and the youngest is Kenneth. Have I a twin? If I have will they please write? I live on an 80-acre farm. We have four horses, one cow and calf. The horses' names are Minnie, Topsy, Tim and Dolly. The cow's name is Rosie and the calf's name is Lady Isabella. I love to live on a farm. We have a large orchard. In the spring mama cans the fruit and papa tends to the crops. I can crochet and tat. I started to knit a muffler for the Red Cross, but I had to take it out.—Mildred Marion Self, R. F. D. 4, Colfax, Wash.

### Cousin Leona Writes Again.

Dear Aunt Nellie: Thought I would write again. How are all the cousins and Aunt Nellie? We live on an 80-acre farm. We have some cattle and a few work horses. I haven't much to say so I will give you some riddles to guess. Eleven pears hanging on a tree, 11 men rode by, each man picked a pear and left 11 hanging there. I have a little sister; they call her peep, peep, peep; she wades in the water, deep, deep, deep; she climbs up the mountain high, high, high. My poor little sister has but one eye. Something that is always going only when you are dead. Papa's birthday was last Thursday. He was 47 years old.—Leona Ohms, White Swan, Wash.

### Goes Fishing Every Night.

Dear Aunt Nellie: My teacher's name is Miss Grace Thomas. I like her fine. I have brown hair and brown eyes. For pets, I have a kitty, a dog and some baby chicks. My sister's name is Bernadette. She is four years old. My brother's name is Donald. He is eight years old. I am the oldest. My birthday is March 5. Have I a twin? If I have I wish she would write to me. I am in the fourth grade at school. I got 48 valentines. I made 32. For Easter I got a little basket and 24 candy Easter eggs, one dollar, a chicken and six eggs. We are going to have a surprise party on our teacher some time. There are 32 scholars in our school. My brother is in the second grade. My sister goes not go to school. I like to gather wild flowers. About every night I go fishing. Last night I caught 12 fish. I am a member of the Red Cross. I have learned to knit and hope the other cousins know how to. The cherry and apple trees are in bloom. So are the pears, peaches, prunes and plums. I have read Emmy Lou, Polly and Dolly, the Brown Owl, Light Water and Black Beauty. I have eight thrift stamps and hope to get some more. I walk one mile to school. We have a Ford car. I wonder when the war is going to end? I have often wondered when Aunt Nellie's birthday is. I have tried the paper beads and they came out fine. I have an uncle in the war, but no brothers.—Margaret Lee, Pcnawawa, Wash.

### Drive a Pony to School.

Dear Aunt Nellie: We live 10 miles from town. I go to the Guyette school and I am in the fourth grade. We go to school in a cart and we drive a pony. There are three of us going to school. Our names are Lillian, Eunice and Dorothy. Dorothy is in the first grade and Lillian is in the seventh grade. We go to Sunday school sometimes at the schoolhouse. Mama teaches our class and our school teacher's name is Miss Carpenter. We have had three teachers this term. Next time I will write more.—Eunice Lork, Toppenish, Wash.

### In a Grade by Herself.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 11 years old. I will be 12 in June. There are 19 in our school. I am in the sixth grade. My teacher's name as Miss Hess. I'm in a grade by myself. I have a cow of my own. Her name is Spot. Then I have a calf. Its name is Cherry. We live on a 66-acre farm. I have a brother and sister. My brother's name is Clifford. My sister's name is Bernice. Clifford is 3 years old—Verna Anderson, Route 5, Tampico, Wash.

### Lots of Rain Where Grace Lives.

Dear Aunt Nellie: This is the second time that I have written to the Corner and I hope it isn't the last. I was 10 years old the second day of August. I am in the fifth grade. Have I a twin? If I have I wish she would write to me. We have had lots of rain. I will write you a few riddles. When the clock strikes 13 what time is it? Why is B like a bawling child? What is invariably blue? I think that I have written enough.—Grace Jones, Box 84, Vaughn, Wash.

### Three Miles to Go to School.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 7 years old. My birthday is July 19. Have I a twin? If I have I wish she would write to me. We have 320 acres of farm land. I have three miles to go to school. We have five horses—Prince, Chub, Flora, Dolly and Babe. I enjoy reading the letters very much. I hope I will see my letter in print soon. I will write again.—Helen Huster, R. F. D. 2, Cheney, Wash.

### Making a Quilt for the Soldiers.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I read the Children's Corner. I am in the third grade. I am 9 years old and my birthday is December 6. I have a bob-tailed cat. She is the prettiest cat in the world. I am making a quilt for the soldiers. We have four cows, one horse and one dog. The cow's names are Nellie, Dollie, Timie and Delia. The horse's name is Goldie. The dog is Bingo.—Connie May, North Bend, Wash.

### Fun to Watch the Rabbits Eat.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 9 years old and my birthday is January 16. We have 19 rabbits, 14 of them are small ones. It is lots of fun to watch them eat. My sister has a cat named Tommy. She dresses him up in doll clothes and wheels him in the doll buggy. I am trapping squirrels. I have a dog named George. He goes with me every day to the traps.—Melvin M. Hadford, R. F. D. 6, Spokane.

### A Little Colt Named Jack.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I enjoy reading the letters so I thought I would write. I am in the third grade. I am 8 years old. We have six horses and one colt. Their names are Pike, Dick, Charley, Betsy, Fannie and Baby and a little colt named Jack. I hope to see my letter in print.—Lena Bailey, R. F. D. 4, Box 171, Yakima, Wash.

### Ruth Has Become a Cousin.

Dear Aunt Nellie: This is my first letter to the Corner. I will be glad to become a cousin. I have one brother and two sisters. I have one sheep. My sheep is named Fannie. I am 9 years old. I go to school. I am in the second grade.—Ruth Bailey, Fruitland, Wash.

### Has a Garden Every Year.

Dear Aunt Nellie: I live way up in Skagit county in the country right on our farm. I can knit and have kitted three wash cloths and started a cap for the Belgian children, at school and at home I started a pair of socks for my brother. My brothers' names are Martin, John, Theron and Warren. I was 11 years old December 22. Have I a twin? My mother gets about nine dozen eggs a day from her hens. I have a garden every year. I would like to hear from a girl named Elvira Anderson, who lived in Ferndale up in Whatcom county.—Ellen Steen, Hamilton, Wash.

### There Are Two In Ora's Class.

Dear Aunt Nellie: I am 10 years old. My birthday is June 10. Have I a twin? We have a small farm and we have some rabbits, chickens, five horses and two cows; but the best of all is the car. It is a Ford. This is the first time I have ever written to the Farmer. I have one brother and no sister. I go to the Central school. I am in the fourth grade. There are two in my class.—Ora Lynch, R. F. D. 6, Spokane, Wash.

### A Cute Kiten Named Mopsy.

Dear Aunt Nellie: I live five miles from school and go in a big bus. My teacher's name is Miss Sargent. I like her fine. I am in the third grade. I like school very much. I was 8 years old September 23. Have I a twin? I have a little kitten. Her name is Mopsy. She is very cute. We have eight cows, two horses and 100 chickens and get 75 eggs a day.—Sylvia Richardson, Friday Harbor, Wash.

### Wrote a Story About Thrift.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I was 9 years old October 16. I have a sister who was 5 years old January 15. I thought I would tell you about my school. My teacher's name is Miss McKinnon. I think she is a good teacher. I wrote a story about thrift.—Brooks McCain, 720 Garfield Avenue, Mt. Vernon, Wash.

### Want 100 Per Cent of School to Join.

Dear Aunt Nellie: I have a light complexion and yellow hair. I will be 10 years old February 8, 1919. I am in the sixth grade. I love my teacher. Her name is Josephine Bennett. I have knitted two wash rags and made one trench pillow. I have joined the senior and junior Red Cross and pretty near all the school has. If 100 per cent of the school joins we can float a Red Cross flag with our American flag. I live by the Skagit river in the country. It is by the side of the river so they call it Riverside. I have three-fourths of a mile to go to school. We have the woods right behind the house. We have two heifers, two calves and five milch cows.

(Continued on page twenty-four.)

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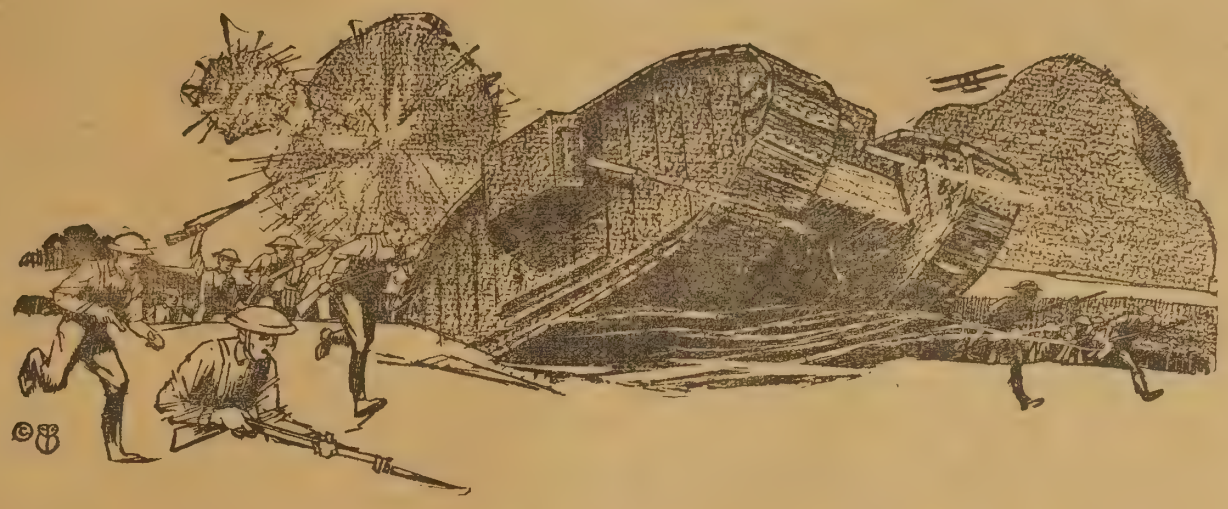
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# Children's Corner

Aunt Nellie

(Continued from page twenty-two.)

I have one big mother cat. Her name is Pussy. I will answer a riddle. Round as a biscuit, busy as a bee. Answer—clock. I will now give three myself. Flower of England, fruit of Spain, met together in a shower of rain, put in a bag tied round with a string. Tell me the answer and I'll give you a ring. Little Nancy Etticoat, in a white petticoat, with a red nose; the longer she stands the shorter she grows. A little yellow man lives and lives on a hill. I wish some one would write to me. I think the Children's Corner is very interesting. Have I a twin? If so would she please write to me. Give my best regards to all.—Sylvia Joslin, box 174, route 2, Riverside, Wash.

**Traps Set for Squirrels.**

Dear Aunt Nellie: I am 13 years old and am in the seventh grade. I will be 14 years old, August 24. Have I a twin I am tall and slender. I have blue eyes and brown hair. My brother and I belong to the Red Cross. The way he and I are helping win the war is: My brother drives five horses to a gang plow and I help my mother do the house work and tend the chickens. We have 13 traps set for squirrels and my papa gives us 5 cents for every squirrel we catch. We are going to use the money to buy thrift stamps. If I have a twin I wish they would write. I will answer their letters.—Margaret Simmons, Farmington, Wash.

**Helps Sister With the Work.**

Dear Aunt Nellie: How are you and the Corner cousins? This is the first I have written to the Corner. I am 8 years old and will be 9 July 11. Have I a twin? If so I wish she would write to me. I have two rabbits. Papa has seven horses and six milch cows and eight calves. My mama has a lot of chickens and three geese. I have one sister and no brothers. My sister's name is Hilda. My mama is sick in bed and has been sick since July. My sister has to do all the housework. I can milk cows and wash dishes, sweep floors and feed the chickens and my rabbits.—Jennie Gibbs, R. F. D. 5, Spokane, Wash.

**Edna's Brother Is in France.**

Dear Aunt Nellie: This is the first time I have written to the Corner. We have five horses, three cows, one dog, one cat and one pig. The horses' names are Jewel and Babe and Tracie and Tom and Fritz. The cows' names are Bessie and Jersey and Goldie. The dog's name is Rover, and the cat's name is Tommy. I have seven sisters and one brother. He is in France. Their names are Minola, Agnes, Elsie, Ruth, Laura, Emma, Leontina and Albert. I am seven years old and my birthday is December 19. Have I a twin? If I have I wish they would write to me. We have 22 little chickens. I have two little nieces. I am in the second grade. There are 22 pupils in my room. My father takes the Farmer. I like to hear the letters. We sell milk in the morning and in the evening. We had a little Tom Thumb wedding play at the school and I was in it.—Edna Lenora Stoller, Box 338, Quincy, Wash.

**Geanie Lives in Alaska.**

Dear Aunt Nellie: I am going to write and ask you if it would be all right to join the cousin's club. We do not live on a farm, but one of our friends takes the paper and they let us read it. I enjoy reading the letters of the boys and girls. I am trying to make some paper beads. I have made a few and they came out nice. If it would be all right for me to join the club, I would be much pleased. I used to live on a small farm in Illinois, but three years ago we moved to Alaska. Ketchican is the first port in southeastern Alaska. I am 12 years old and am in the sixth grade. Geanie Amundson, Ketchican, Alaska, P. O. Box 237.

(We are very glad, Geanie, that you want to be a cousin. Write and tell us of your home in Alaska.—Aunt Nellie.)

**Are Making Gun Wipers.**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner, and I hope it won't be the last. I am 8 years old and am in the fourth grade. My birthday is April 7. Have I a twin? There are 21 children in our school. I have two sisters and three brothers. Their names are Kathy, Blanche, Robert, Kenneth and Ralph. I have joined the Red Cross. We are making gun wipers. We have six horses and one colt. Its name is Dick. The others are Bessie, Topsy, Bird, Prince, Mollie and Kate. We also have three cows and three calves. Their names are Bell, Butter, Fly, Valentine, Rosy, Violet and Bopeep. We live on a farm of 160 acres. We have two pigs. Reta Cantrell, Box 101, R. F. D. No. 1, Winlock, Wash.

**Clara's Three Playmates.**

Dear Aunt Nellie: May I join the Children's Corner? This is the first time I have written to the Corner. I am 11 years old and in the sixth grade. I will be 12 years old November 16, 1918. Have I a twin? I have three playmates. Their names are Lillie Baker, Irma Moore and Dorothy Dickinson. My teacher's name is Miss Pepper. There are 29 pupils in our room. I have one dog and two cats. The dog's name is Shep and the cats' names are Minnie and Ted. I have a brother named Clarence. He is 9 years old.—Clara Larson, Box 133, Napavine, Wash.

**Esther Likes to Sew.**

Dear Aunt Nellie: This is the second time I have written and hope it will not be the last. I am 11 years old and my birthday is August 9. Have I a twin? I go to Lambert school. I am in the fifth grade. There are about 32 children going to school. Our school has only one room. I have one mile to go to school. I am a member of the Junior Red Cross. On Friday afternoon we work for the Red Cross. I have made one treasure bag and one handkerchief. I like to sew very well. I wish some of the cousins would write to me.—Esther Bergman, R. 2, Ridgefield, Wash.

**Farm Is All Cleared.**

Dear Aunt Nellie: I read the Children's Corner every week. This is the first time I have written to the Children's Corner and I hope to write again. We live on a 40-acre farm. It is all cleared. We have 12 cows and four calves. I am in the fifth grade at school. I will be 12 August 18. I have light brown hair and a light complexion. Have I a twin? If I have please write to me. I go to the McKrae school. Our teachers are Mrs. Wallace and Mrs. Bexterham.—Vera M. Coselman, Box 68, R. F. D. 2, Bow, Wash.

**What Ella Does on the Farm.**

Dear Aunt Nellie: I am going to tell you what I do and what I have and where I live. I live on a ranch. I am 10 years old and will be 11 October 3. I go to school with my two sisters. I am in the third grade and about to the fourth. I have a little gray pony. His name is Prince. I ride him to school and I have a little blue cat and little kitten. The kitten is gray. My papa bought a new Ford car from a man at Hunters, Wash. The man he bought it from was Mr. Sparling.—Ella Sophia Brown, Miles, Wash.

**Eula Likes Her Teacher.**

Dear Aunt Nellie: May I join the Children's Corner? I am nine years old and will be 10 years old November 22, 1918. I will ask if I have a twin? I will describe myself. I have a few freckles on my nose. My teacher's name is Miss Fleeta Kindor. I am in the fourth grade. I like my teacher fine. I have two brothers. Their names are Raymond and Robby. I have one sister named Jessie.—Eula Manis, Waitsburg, Wash.

**Likes to Live in the Hills.**

Dear Aunt Nellie: I would like to join the corner. I enjoy the cousins' letters very much. I am 12 years old. My birthday is November 8. Have I a twin? I am in the sixth grade. My teacher's name is Miss Fitzsimmons. I walk a mile to school. They have consolidated our school with two more schools. I will write again. I have two sisters. One is my twin sister. Her name is Winifred, and my other sister's name is Margarete. She is 15 years old. There are hills all around our school. I like to live in the hills. I have yellow hair and gray eyes. I am a blonde. My chum is a brunette; she has brown hair and brown eyes. I forgot to tell you my chum's name. It is Florence Anderson. I have chummed with her for five years. I would be very lonesome if she moved away. She is one year older and in one grade ahead of me. I wish Sally Garry would write to me. I have four cousins in the army and navy. Three are in France. I will write if some of the boys or girls will write to me.—Bessie Charlotte McFarlane, box 178, R. F. D. No. 1, La Center, Wash.

**Grandma Knits for Soldiers.**

Dear Aunt Nellie: This is my fourth letter to the Corner, but not the last one. I belong to the Junior Red Cross and hope all the other children do. For the Red Cross I have made a handkerchief, and next time am going to make a wash cloth. I am 12 years old and in the sixth grade. My subject is Red Cross work. My grandma knitted four pairs of wristlets, a wash rag and finished a sweater for the Red Cross. She has yarn for another pair of wristlets. I have made some paper beads and a very pretty way to string them is to make 34 beads and then string with beads between, 14 on a side, then between the two bottom beads, fasten them, put some small beads at bottom and draw thread through and it leaves a very pretty stand. For pets I have a dog named Shep and a pony named Bonny. She has two little colts, Dazey and Jack. Shall we always put our age just after our name? Hazel Saltmarsh, age 12, Coulee City, Wash. (Yes, Hazel, always give your age, because Aunt Nellie needs it when judging the letters.—Aunt Nellie.)

**Elvin Is Eight Years Old.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I go to school and I am in the fifth grade. There are 18 children in our school. I have a brother and two sisters. My brother's name is Chester, and my sisters' names are Rena and Ella. My brother is 16 years old. We have four horses and six cows and two calves. My age is 8. We have a Ford car. We got it last July.—Elvin Littlejohn, Tumwater, Wash.

**Ella Will Write Again.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I enjoy reading the letters very much. I go to the Independence school. I am in the second grade. I am six years old. My birthday is July 12. Have I a twin? I have two brothers and one sister. My teacher's name is Mrs. Craddock. There are 78 children in our school. I will write again. —Ella Littlejohn, Tumwater, Wash.

**Loves to Read the Corner.**

Dear Aunt Nellie: I am 8 years old. My birthday is June 12. Have I a twin? We have a cow named Eva. We have 14 chickens. We live in town. I have one brother named Frank. I am in the third grade. My teacher's name is Miss Pearson. She is very good. I love to read the Corner. My father takes the Farmer. I hope I can join. —Ruth Carlson, 1509 Pacific avenue, Aberdeen, Wash.

**Merle Loves Farm Life.**

Dear Aunt Nellie: I like to read the letters very much. I live on a 400-acre farm. I love farm life. I have one brother 6 years old. We go to No. 1 school. My teacher's name is Miss Circle. I am 12 years old and in the eighth grade. Brother is in the third grade. My birthday is June 5. Have I a twin? I have a pony and love to ride horseback. We ride to school.—Merle Holman, R. F. D. 1, Mondovi, Wash.

**Having Lovely Weather.**

Dear Aunt Nellie: I am in the fifth grade. My teacher's name is Miss Meyer. She is a good teacher. Papa is a school director. We are going to move in a little while. We will be farther away from school then. I am 10 years old. My birthday is October 26. Have I a twin? We are having lovely weather.—Elizabeth Bowen, R. F. D. 2, Oroville, Wash.

**Go to School on the Stage.**

Dear Aunt Nellie: I am in the fifth grade at school. My birthday is June 25. Have I a twin? If so, I wish she would write to me. I go to school on the school stage. My teacher's name is Miss Stewart. We have 40 cows, five horses, five dogs, one cat, and about 25 chickens.—Jennie Lane, Box 294, R. F. D. 2, Bellingham, Wash.

**Loves the Country the Best.**

Dear Aunt Nellie: This is my first letter to the Corner, but I hope it will not be my last. I am 12 years old and I am in the sixth grade. My birthday is March 1. I have one brother named Richard and two sisters Veronica and Loretta. I live on a large farm. I like the country much better than the city.—Catherine Whalen, No. 5, Box 37, Colfax, Wsh.

**Pet Cat Is White and Pretty.**

Dear Aunt Nellie: This is the second time I have written to the Corner. We have one mule that we call Betty and 13 horses and 12 cows and 25 pigs. I have one pet cat. It is white and it is very pretty. We have an incubator setting with 200 eggs in it. My pony's colt had blood poison and we had to kill it, poor thing. Its name was Trixie. The roads are getting good, so we can run our car. I planted carrots, cucumbers, lettuce, radishes and turnips. Is that not all right for my war garden? I planted potatoes, corn and onions, too. I take music lessons in the summer. I crochet and knit. I crochet yokes and laces of different kinds. I joined the Red Cross. My papa bought three liberty bonds. There are eight children in our school. There were 17, but most of them are out now; some passed the eighth grade examination. I like to play jump rope. I will give some riddles. As I went over London bridge I met my sister. I cut off her head and left her body standing. Round as an apple, busy as a bee, prettiest little thing you ever did see. Have I a twin? If I have I wish she or he would write to me. I am 11 years old. My birthday is December 1. I like to read the letters in the Corner very much. I hope there will be more join the Corner. I wish the cousins would write to me for I love to write to them. —Loretta Owens, R. R. 2, Oakesdale, Wash.

**Violet and Her Chum Have Fun.**

Dear Aunt Nellie: I am a little girl 8 years old. I will be 9 years old February 27. I have blue eyes and black hair. I am in the third grade. I have a chum. Her name is Eva. She has brown hair and brown eyes. We have lots of fun at school together. Our teacher will not let us sit together at school for we whisper too much. We have one cat. Her name is Lightfoot. My chum's mama has some gold fish. My sister is taking music lessons. I belong to the Red Cross. I am learning to knit. I will write again.—Violet Thomason, Wauconda, Wash.

**Has Mary a Twin Cousin?**

Dear Aunt Nellie: I was 8 the 2d of March. I am in the fifth grade. Have I a twin? There are six pupils in our school. My teacher's name is Miss Rhorer. May I join the Children's Corner? I have two brothers. Their names are Murray, age 5, and Warren, age 6. I have a cat. His name is Johnny. I have read Elsie Dinsmore, Jack and Jill and Five Little Peppers and How They Grow and heard Swiss Family Robinson and A Brownie.—Mary Kennett, Hover, Wash.

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# News for Breeders

## Thirty Registered Jerseys.

H. L. Weister of Swamokawa, Wash., has the largest number of purebred dairy cattle in that famous little dairy region. M. Weister has about 30 head of registered Jerseys, besides a good herd of grades. His first bull was purchased at the Ross Nelson sale and his offering were mostly heifer calves. One bull from J. C. Brown & Son, of Shedd, Ore., has several heifers now in milk and all heavy milkers. Mr. Weister purchased one very fine bull from Ed Cary, but had the misfortune to lose him; not, however, until 12 cows were bred to him. From them he is expecting still greater production.

Mr. Weister's dairy barn, 150 feet long, with one end round and with an arched roof, with no supports, is the pride of the valley and might well be the pride of any other region.

Another dairy breeder in the valley is P. C. Greengstad, who has 15 head of registered Ayrshires. A Robin Hood bull from the Clise farm heads his herd. Roselawn Queen, one of his cows, milked 55 pounds when fresh early in the spring and tests four per cent or better. H. A.

## Canadian Ayrshire.

At the annual meeting of the Canadian Ayrshire breeders in Toronto it was resolved that the R. O. P. test be changed to 300 days with a time limit for freshening of 290 days. L. J. Tart of Montreal was elected president and A. S. Turnet of Ryckman's Corners, secretary-treasurer. W. W. Ballantyne, in his presidential address, emphasized the injustice of paying for milk on weight basis. He asked that the breeders demand of the government that all records be published on the basis of butter fat—not butter, as at present.

## Reports Fine Horse Sales.

M. C. Metz of S. Metz and Sons, stallion dealers of Pendleton, Ore., returned to his home in Illinois, May 5, leaving that prince of hostlers, Jack McNeal, in charge of five young horses that will be fitted for the coming fall and winter shows. In common with most horse dealers and breeders, Mr. Metz reports fine sales the last season—the best in fact since the Pendleton barn was established. H. A.

## Live Stock Notes.

Fifty-three Shorthorn heifer calves have been distributed to the boys and girls by the First National bank of Galesburg, Ill. The plan was worked out by the Illinois Shorthorn Breeders' association.

The 80 head of bulls sold at Omaha, Neb., under the auspices of the American Aberdeen-Angus Breeders' association, averaged $231.

## Nice Little Problem.

Here is a nice little problem in arithmetic for those who have studied percentage, as well as those who are interested in breeding. A son of Gertie's Lad was bred to an unregistered cow and got a daughter; this heifer was bred back to her sire, and again a heifer was a result; this second heifer was bred to a double grandson of Gertie's Lad and the heifer which resulted was bred back to her sire. Heifer No. 4 belongs to A. A. Markannan of Yankton, Ore. The animal is typy, promising and coming along nicely. The problem is: How much blood of Gertie's Lad does the heifer carry? It sounds easy, but of three who have tried to solve it no two answers are alike. Try your hand at it. What do you think of it as an example of inbreeding?

## Scottish Ayrshires.

Alexander Cross of Knockdon has been relected president of the Ayrshire Cattle Herd Book society of Scotland. John Howie was reelected secretary-treasurer. The total entries in volume 40 of the herd book was 8036 (a decrease of 336 in the previous issue. However, these entries are much in excess of the average and ranks in point of numbers as fourth highest in the history of the society.

## Alternating Teams.

One farmer reports to the Percheron Society of America that he has just finished seeding 170 acres of oats in three and a half days' time with one drill and eight registered mares. One set of four mares started at daybreak and worked till noon, being replaced by the other four, which stuck to the job until dark.

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Eminents Jimps Owl, daughter of Princess Jimps Eminent; Class AA; producing 359.15 fat, 8492.1 milk; 2 yrs. 11 mos.

First reentry. Test started May 14, 1917, and up to May 14, this year, has given 16,718.01 lbs. milk and 845 lbs. butter. How is this for a 4-year-old?

We have many Jersey heifers and bulls from Register of Merit dams that will enable you to form an idea of the quality of stock offered in this sale.

**KEEP THE DATE AND PLACE IN MIND. Write for Catalogue.**

**T. S. GRIFFITH, 903 MAIN AVE., SPOKANE, WASH.**
**PROP. GLEN TANA STOCK FARM**

## Young Jersey Bulls

SEVERAL OF MY BEST OFFERINGS, from 3 months to a year and a half, all from high-producing dams. These fellows are bred right and they will be sold right.

Correspondence solicited.

**C. E. LONG. Buhl, Idaho.**


## HOLSTEIN CATTLE


## 365-DAY HOLSTEINS

24,667 lbs. milk—1026 lbs. butter—is the s. o. advance registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.

THE HERD WITH YEARLY RECORDS.

**WESTERNWOLD RANCH, Prineville, Ore.**

## REGISTERED HOLSTEINS

Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.

**H. R. BOOMER, New Plymouth, Idaho.**

## HOLSTEINS

Well-bred young bulls for sale.

**THOS. CARMICHAEL. Gaston, Ore.**

**REGISTERED HOLSTEINS.**

Bull calves for sale with good A. R. O. backing.

**BEEBE BROS., R. F. D. 2, Rupert, Idaho.**


## SHORTHORN CATTLE


## Firlawn Shorthorn Farm

UNION, ORE.

We offer a young herd bull (registered), ready for service in four months, and 7 yearling heifers, all of imported Scotch blood. Bull and heifers unrelated. Prices reasonable. Write us and come to the Union Stock Show.

**SHERMAN & HUTCHINSON,**
Union, Ore.

## Shorthorn Cattle

Registered bulls and heifers of breeding age for sale. Some from extra heavy milking dams.

**A. D. DUNN. Wapato, Wash.**

## LELAND BROTHERS

Breeders of top registered Shorthorn cattle. Correspondence solicited.

**WENDELL, Idaho.**

**REGISTERED SHORTHORN COWS.**

Young bulls and heifers, sired by Scotch bulls; liberal terms.

**CALDWELL CATTLE CO., Caldwell, Idaho.**


## GUERNSEY CATTLE


## Registered Guernsey Bulls

From heavy producing cows, most of them with A. R. records, among them 402 lbs. fat (472 lbs. 85 per cent butter) and 392 lbs. fat (461 lbs. butter), both with first calf. Good type, well grown. Prices reasonable.

**CHICONA FARM.**

**A. L. GILE, Prop. Chinook, Wash.**


## HEREFORD CATTLE


## Highland Stock Farm

offers for sale Hereford bulls, 1 or 2 years old. One or a carload.

**PLATT BROS. Genesee, Idaho.**


## ABERDEEN ANGUS


## Aberdeen Angus Cattle

**A. H. EAGLESON & SONS.**
Boise, Idaho.


## AYRSHIRE CATTLE


## Edgewater Farm

Government accredited herd, headed by Peter Pan 63d. Bull calves available.

**ELBERT M. CHANDLER, Burbank, Wash.**


## POLAND CHINA SWINE


## Big Type Poland Chinas

Peter Mouw and John B. Lawson strains. Young boars and bred or open gilts. Good individuals.

**CLIFFORD RIGGS, Touchet, Wash.**

**GREENLEAF STOCK RANCH.**

Big type Poland Chinas, either sex, for sale at all times.

**Wilson Bros., A. L. Wilson, Mgr.**
Greenleaf, Idaho.

**BIG TYPE POLAND CHINAS.**

Herd headed by Sammy (79833). Correspondence solicited.

**Fruitland Stock Farm, C. Royston, Mgr.**
Payette or Fruitland, Idaho.


## TAMWORTH SWINE


**ROUND KNOLL RANCH NO. 3.**

Herd headed by Knoll Slope Colonel, assisted by Jolly Lad IV. Correspondence solicited.

**Bliss, Idaho.**


**In writing advertisers, be sure to say that you saw their advertisement in this paper.**


## Herd Bulls

**Imported Doune Radiance No. 609412 and Gainford Perfection No. 442173.**

## Hercules Shorthorns

We can supply you with choice, well grown bulls and females of breeding age. Your inspection of our herd is invited. Visitors always welcome.

## Day & Rothrock Company

**205 Exchange Bank Bldg. Spokane, Wash.**

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, May 27.—Ideal conditions to make seed germinate and to promote growth brought about a material decline today in prices of corn. The finish was nervous, 1 3-4 to 2 1-4 net lower, with June $1.35 3-4 and July $1.37 1-2 to $1.37 5-8. Oats closed unchanged to 5-8 down. In provisions the outcome varied from 2 cents off to an advance of 12 cents.

Auspicious weather seemed to govern the corn trade to the exclusion of all other factors. Knowledge that to some extent rains were interfering with field work seemed to be generally ignored.

Oats sympathized with the weakness of corn. Besides, for the first time in months, the visible supply was in excess of last year's corresponding figures.

Announcement of big exports of lard and meats gave strength to provisions. Downturns in the value of hogs depressed the market at first, but had no lasting effect.

**Chicago Futures.**

| Corn— | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| June ..... | 1.37 | 1.37¼ | 1.35¾ | 1.35¾ |
| July ..... | 1.39⅜ | 1.39⅞ | 1.37¼ | 1.37½ |
| Oats— | | | | |
| May ..... | .75 | .75½ | .74⅛ | .74¾ |
| July ..... | .65⅝ | .68¼ | .65⅝ | .65¾ |
| Pork— | | | | |
| May ..... | | 40.50 | 40.47 | 40.47 |
| July .....40.15 | | 40.60 | 40.15 | 40.55 |
| Lard— | | | | |
| July .....23.95 | | 24.32 | 23.95 | 24.15 |
| Sept. .....24.35 | | 24.55 | 24.35 | 24.42 |
| Ribs— | | | | |
| July .....21.85 | | 22.05 | 21.85 | 21.97 |
| Sept. .....22.30 | | 22.52 | 22.30 | 22.45 |

**Cash Quotations.**

CHICAGO, May 27.—Corn, No. 2 yellow, $1.72@1.74; No. 3 yellow, $1.58@1.68; No. 4 yellow, $1.40. Oats, No. 3 white, 72@74½c; standard, 75¾@76⅜c. Rye, No. 2, nominal; No. 3, $1.90. Barley, $1.25@1.46. Timothy, $5@8; clover, $18@28. Pork, nominal; lard, $24.02; ribs, $21.30@21.92.

**Pacific Northwest Grain.**

PORTLAND, Ore., May 27.—Grain—30-day options: Oats, No. 2, $39 bid. Eastern oats and corn in bulk: Oats, No. 3 white, $50.50; 38 pounds clipped, $52; corn, No. 3 yellow, $60; No. 3 mixed, $57.50; oats, No. 3, $50.50; clipped, $52; corn, yellow, $59.50; mixed, $57.50.

**Minneapolis Grain.**

MINNEAPOLIS, May 27.—Wheat—Receipts, 213 cars, compared with 420 cars a year ago.

Corn—No. 3 yellow, $1.45@1.55.
Oats—No. 3 white, 72½@74½c.
Flax, $3.83@3.85.
Flour—Unchanged. Shipments, 43,954 barrels.
Rye, $1.90@1.92.
Barley, $1.08@1.38.
Bran, $28.25@33.25.

## Live Stock Quotations.

**At Omaha.**

OMAHA, Neb., May 27.—Hogs—Receipts, 6400; market 15@25c lower. Heavy, $16.50@16.55; mixed, $16.55@16.65; light, $16.65@17; pigs, $12@15; bulk, $16.55@16.70.

Cattle—Receipts, 2700; market lower, steady to lower. Native steers, $12.25@17.25; cows and heifers, $9.50@14; western steers, $9.50@14.50; Texas steers, $9@12.20; cows and heifers, $9@11.50; canners, $7.50@9.50; stockers and feeders, $8@12.55; calves, $10@12.25; bulls, $9@12.50.

Sheep — Receipts, 7000; market steady to stronger. Yearlings, $16@17.50; wethers, $14.50@16.50; ewes, $10@13; lambs, $17.50@19.80.

**At Chicago.**

CHICAGO, May 27.—Hogs—Receipts, 46,000; market slow. Bulk, $16.90@17.25; light, $16.90@17.30; mixed, $16.70@17.30; heavy, $15.85@17.10; rough, $15.85@16.30; pigs, $15@17.40.

Cattle—Receipts, 13,600; market firm. Native steers, $10.50@17.60; stockers and feeders, $9.25@13.65; cows and heifers, $7.25@14.90; calves, $8@14.60.

Sheep—Receipts, 13,000; market firm. Sheep, $9.75@14.85; lambs, $13.25@17.10; springs, $14@19.75.

**At Portland.**

PORTLAND, Ore., May 27.—Cattle higher; receipts, 577. Prime steers, $13.50@14.50; good to choice steers, $12@13; medium to good steers, $10.50@11.50; fair to medium steers, $10@11; common to fair steers, $8.50@9.50; choice cows and heifers, $10.50@11.50; medium to good cows and heifers, $7@8.50; fair to medium cows and heifers, $5.50@6.50; canners, $3.50@5.50; bulls, $6.50@10; calves, $8.50@12; stockers and feeders, $8@10.

Hogs higher; receipts, 1055. Prime mixed, $17.50@17.65; medium mixed, $17.35@17.50; rough heavies, $16@17.25; pigs, $14.50@15.50; bulk of sales, $17.25@17.50.

Sheep steady; receipts, 467. East of mountain lambs, $16.50@17; valley lambs, $16@16.50; yearlings, $12.50@13; wethers, $11.50@12; ewes, $10@10.50.

**Spokane Stockyards, Monday.**

Hogs—Receipts, 260; market 10@20c lower. Prime mixed, $17@17.15; medium mixed, $16.85@17; pigs, $15@16; stockers and feeders, $14@15.75; bulk of sales, $17.10@17.15.

Cattle—Receipts, 55; market strong to shade higher. Prime steers, $13.50@14.50; good to choice steers, $12@13; medium to good steers, $10.50@11.25; fair to medium steers, $8.50@9.50; common to fair steers, $7.50@8.50; choice cows and heifers, $10.25@11.25; good cows and heifers, $7.50@8.50; medium to good cows and heifers, $6.25@7.25; fair to medium cows and heifers, $5.25@6.25; canners, $3.25@5.25; bulls, $6.50@9; calves, $8@12; stockers and feeders, $6.50@9.

Sheep — Receipts, none; market steady. Prime lambs, $16.25@17; good lambs, $14.25@15.25; prime yearlings, $12.50@13; prime wethers, $11.50@12; best mutton ewes, $9.50@10.50.

## Spokane Market.

**WHOLESALE.**

**Vegetables**—Cabbage, $3.50 cwt; carrots, $2@2.50 cwt; bunch carrots, 85c doz; bunch beets, 85c doz; beets, $3 cwt; rutabagas, $1.50 cwt; parsnips, $1.50 cwt; hothouse lettuce, $1.25 box; head lettuce, $1.25 doz, $4.50 crate; turnips, $3 cwt; bunch turnips, 85c; red bell peppers, $1.25 box; chilli peppers, 25c lb; green peppers, 11c lb; Florida tomatoes, $5.50 6-basket crate; Mexican tomatoes, $3.50 lug; celery, $6.50 crate; hothouse cucumbers, $2 doz; cauliflower, $3.50 crate, $2 doz; new garlic, 12½c lb; parsley, 40c doz bunches; horseradish root, 12½c lb; radishes, 35@40c doz bunches, rhubarb, 3½c lb; spinach, 5c lb. Walla Walla asparagus, $2 crate; Kennewick, 12c lb; new peas, 10c lb; artichokes, $1.25 doz; wax beans, 18c lb; green beans, 16c lb.

**Potatoes**—Washington potatoes, $1.25@1.35 cwt; California new potatoes, 6@7c lb.

**Strawberries**—California strawberries, $2.50 crate; Kennewick, $2.50@3.25.

**Onions**—Bermuda onions, $2.50 crate; Oregon dry onions, $1.50 cwt; green onions, 35@40c doz bunches; wax onions, $2.50 crate.

**Tropical Fruits**—Bananas, 8c lb; lemons, $8@8.50 case; Valencias, $6.50@8 case; medium sweet oranges, $5@5.50 case.

**MEAT.**

**Beef**—Beef steers, 17½@23½c lb; cow beef, 17½@20c lb; heifers, 21½c lb; best loin, 32@34c lb; steer chucks, 19½@21c lb; prime ribs, 24@26c lb; rump and round, 23½c lb.

**Mutton**—Breakers, 28½c lb; wethers, 27½c lb.

**Lambs**—Diamond T. C. lambs, 40c lb; lambs, 35c lb.

**Pork**—Packer dressed hogs, 26@27c lb; pork loins, 30@31c lb; legs, 30c lb; shoulders, 25c lb; leaf lard, 28c lb; tenderloins, frozen, 35c lb; spareribs, 19c lb; country dressed hogs, with head on, 20c lb to producer; country dressed veal, 15c lb to producer.

**Smoked Meats**—Washington hams, 34c lb; T. C. hams, 35c lb; T. C. bacon, 46½@48½c lb; Washington bacon, 40½@45½c lb; picnics, 23½c lb; Boston butts, 31½c lb; English bacon, 38½c lb.

**Star Brand**—Hams, 35c lb; Shield hams, 33@34c lb; picnics, 23½c lb; bacon backs, 33c lb; Star bacon, 46½@48½c lb; Shield bacon, 41@45½c lb; Simon Pure lard, $17.50 case; Shield lard, tierces, 27½c lb; White Cloud compound, tierces, 22¾c lb.

**Dry Salt Meats**—Clear bellies, 28c; lean backs, clear, 27½c lb; sides, 26c per lb.

**Lard**—Tierces, 27½c lb; $14.45@15.27 case; Diamond T. C. pureleaf lard, $16 case, $8.15 half case; Snowcap compound, tierces, 22¼c lb.

**POULTRY.**

**Live Poultry**—Live hens, large 24c lb; small, 22@23c lb; roosters, 18c lb to producers, f. o. b. Spokane.

**GRAIN AND FEED.**

**Rice**—Fancy head, $7.50@9.50 cwt.

**Flour**—Bluestem, $9.40; Blend, $9.40; Montana hard wheat, $10.40; graham, $8.60 bbl, 49-lb sacks; whole wheat, $8.80; eastern rye, $10.10; eastern rye meal, $10.30; oat flour, $12.85, 4 45-lb sacks.

**Oats**—$73 ton whole, $76 rolled, delivered in city; steam rolled No. 2, $71 ton.

**Corn**—$75 ton; cracked corn, $77 ton.

**Bran**—$30 ton; shorts, $32 ton; bran and shorts, $31 ton.

**Barley**—Rolled, $76 per ton.

**Oil Meal**—$78 per ton.

**Hay**—Timothy, $32 per ton, $31 ton by carload; alfalfa, $27 ton, $26 ton by carload.

**GASOLINE, LINSEED OIL, ETC.**

**Gasoline**—Red Crown, bulk, 24½c gal, cases, 34½c gal; Shell, 24½c; refined oil (Pearl), bulk, 13c gal, cases, 23c gal; Eocene, 15½c gal in bulk, cases, 25½c gal; engine distillate, 15½c gal, bulk.

**Linseed Oil**—Raw, bbl, $1.68 gal, case, $1.85 gal; boiled, bbl, $1.70 gal, cases, $1.88 gal.

**Turpentine**—Bulk, 65c gal; cases, 85c gal.

**White Lead**—Strictly pure white lead in oil, ton lots, 11¾c lb; 50-lb lots, 12½c lb.

## The Wool Market.

BOSTON, Mass., May 24.—The Commercial Bulletin will say tomorrow: "The government's plan for handling the domestic wool clip has been completed so far as its essential details are concerned. Further modifications are likely from time to time. The new domestic clip is coming forward in small quantity, but with fair celerity."

Scoured basis: Texas, fine 12 months, $1.72@1.75; fine eight months, $1.50@1.55. California: Northern, $1.70@1.75; middle county, $1.55; southern, $1.45@1.50. Oregon: Eastern—No. 1 staple, $1.78@1.80; eastern clothing, $1.62@1.65; valley, No. 1, $1.63@1.66. Territory: Fine staple, $1.80; half-blood combing, $1.63@1.68; 3-8-blood combing, $1.40@1.45; fine clothing, $1.65@1.70; fine medium clothing, $1.55@1.60. Pulled: Extra, $1.80@1.85; AA, $1.70@1.80; A supers, $1.60@1.65.

**HOPS, HIDES, WOOL.**

NEW YORK, May 27.—Hops, steady; state, medium to choice, 1917, 35@43c; 1916, nominal; Pacific coast, 1917, 20@23c; 1916, 14@15c. Hides and wool unchanged.

## Seattle Market.

SEATTLE, May 25.—The outlook today is for carload lots of Washington strawberries next week and with the coming in large lots of Kennewicks, White Salmons, Hood Rivers, Olallas, and possibly Winslows the market is due to settle to a normal basis of lower prices.

Early black Wenatchee cherries in lug boxes were among the novelties of the week, 16-pound crates selling at $2. Seattle jobbers are offered a ton and a half of this fruit for immediate delivery.

Asparagus cleans up as fast as received. Buyers group about the curb with every wagon delivery. Going prices for fancy stock are 15@20c. Warm weather increasing production, it is expected, will force the market lower.

Spuds are dull and the market nominal. The sale of new California potatoes has been heavy, relegating the local holdovers for the week.

Two flat crates of hothouse tomatoes from Wenatchee, pronounced the finest eastern Washington hothouse stock ever seen on Western avenue, arrived today and are offered at $3 per crate.

Brokers and jobbers are watching the market for first Walla Walla yellow onions, due in July. No fancy prices are expected for onions this season and dealers are preparing to handle them on a normal basis.

The fresh ranch egg market moved up a cent today and is firm at 38@39c. There has been an unusually heavy demand. Storage for the season is practically completed and the market is left in a firm condition. Futures look higher.

The tone of the butter market is slightly easier without any indications of a decline. Operators feel that should the market fall the deflection would be only a cent or two and all surplus offered would be quickly cleaned up and prices tightened accordingly. There has been some storing, but little has gone into the coolers under 40c and the bulk has cost 41c to date. There is some hope that the market may decline with warm weather and the increased cream production to follow, but storage preparations generally are based on 40 cents or higher.

Poultry demand and supply is about evenly adjusted and buyers will pay this week's prices beginning Monday.

**BUYING PRICES.**

Unless otherwise stated the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots, f. o. b. Seattle:

Eggs—Local, 37@39c per dozen; eastern Washington, Oregon and Idaho, 35@36c.

Poultry—Broilers, 20@35c. lb.; spring roosters, live, fat, 26@27c. lb.; geese, fat, live, 18@25c.; ducks, live, fat, 27@30c.

Beef—Buying prices: Prime beef, steers, 14@15c; cows, fat, 13@14c lb.; heifers, 14@@15c.

Hogs—Light, 21c lb.; heavy, 19@20c lb.

Veal—Fancy light, 18@19c lb.; heavy, 15@18c lb.

Hides—Salted, 14c lb.; flint-dry hides, 29c lb.; salt kip, 16c lb.; green hides, 11c lb.; green calf, 23c lb.; dry calf (under 8 pounds), 29c lb.; bulls and dry salts, 4c lb. less; green, bulls, 9c lb. Clean, long wool, western Washington flint dry pelts, 39c per lb.; heavy to clean eastern Washington flint dry pelts, 30@35c lb.

Asparagus—Kennewick, 12½@15c lb.; Oregon, 15@20c; Granger, 15@20c.

Apples—Winesaps, $3.50; jumble Winesaps, $1.25 box.

Potatoes—Puget sound, $17@22 per ton; eastern Washington, $28@30 per ton; seed, 1¼@1½c per lb.

Feed—Bran, $34 per ton; shorts, $35.50; scratch feed, $78; all-grain chop, $74; oats, $72; sprouting oats, $73; rolled oats, $72; whole corn, $75; cracked corn, $77; rolled barley, $72; clipped barley, $77; alfalfa meal, $36; oil meal, $72; egg mash, $62.

Hay—Eastern Washington timothy, $36@37 per ton; do double compressed, $38@40; alfalfa, $26; Puget sound, $26@27; straw, $15.

Strawberries — Kennewick, $3.50; White Salmon, $4; Olallas, $3 per crate.

## Portland Wheat.

PORTLAND, Ore., May 25.—Grain dealers find their chief employment now in watching the crop situation. Local experts predict the wheat crop of the northwest will break all previous records with the large increase in acreage and the ideal growing weather, but the out turn of oats and barley will be below the average.

No trading was reported in the last week in the market and prices were generally steady. Sacked oats at the close were posted at $60 bid and eastern bulk oats at $50@52.50.

Substitutes have a declining tendency. A leading local mill has cut barley flour $1 to $11 a barrel and reduced cereal rolled oats 50 cents to $12 a barrel.

## Portland Market.

PORTLAND, Ore, May 25.—Press reports announce the appointment of a federal wool administrator for this point, but there has been no official confirmation of it yet, nor any word as to the formation of a classification committee. In the meantime much new clip wool is coming from eastern Oregon and consignments are also being made direct to the east, as it is optional with growers to ship to any designated classification point.

The potato shipping season is drawing to a close as new stock is cheaper in the south than Oregon potatoes can be put there for. To date shipments have been 1768 cars from Oregon, against a total of 3989 last season, 2527 from Washington against 3674 last year and 6793 from Idaho against 5896 last season. The local jobbing market is steady at $1@1.25 for Oregons and $1.35@1.50 for Washington Gems. In the country buyers are quoting 75@90 cents for Burbanks.

Strawberry receipts are still moderate and prices remain high, local selling at $3@3.50 and Californias at $2.25.

Egs are firmer with the decline in receipts, sales being made at 37 cents case count. Butter is steady and unchanged.

Potatoes are weak with very liberal arrivals and a large part of the supply was carried over at the close of the week. Country dressed meats are steady.

Butter—Cubes, extras, 39@39½c; prime firsts, 38c; prints, extras, 44c; cartons, 1c extra; butterfat, No. 1, 43c delivered.

Eggs—Oregon ranch, current receipts, 37c; candled, 38c; selects, 39c per dozen.

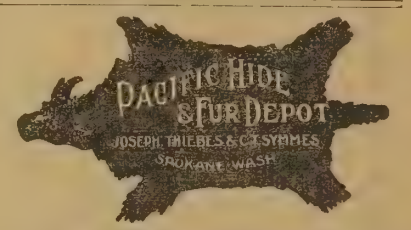
Cheese—Jobbers' buying prices, f. o. b. dock, Portland: Tillamook triplets, 23½c; Young Americas, 24½c per pound; Coos and Curry, f. o. b. Myrtle Point: Triplets, 23c; longhorn, 24c per pound; ¼c discount to Portland trade.

Poultry—Hens, 25@27c; broilers, 30@32c; ducks, nominal; geese, nominal; turkeys, live, 27@28c; dressed, 37c per pound.

Veal—Fancy, 17@17½c per pound.

Potatoes—Oregon Burbanks, $1@1.25 per hundred; New California, 5½@6c per pound.

Hay—Buying prices, f. o. b. Portland: Eastern Oregon timothy, $29@30 per ton; valley timothy, $25@26; alfalfa, $24@24.50; valley, grain hay, $24@26; clover, $24; straw, $9@10.


**WANTED--1000 tons of mixed country scrap iron**

in carload lots of not less than 25 tons each. Write for prices if interested.

PACIFIC HIDE & FUR DEPOT.
Joseph Thiebes and C. T. Symmes.
1101-09 Railroad Ave., Spokane, Wash.

**WOOL**

**Growers and Buyers**

Get full information regarding maximum prices on wool paid by the

**United States Government**

Highest prices paid **only** when wool is shipped to Central market.

In order to keep posted regarding the maximum price and other **necessary** information, your name must be on our mailing list.

**52 Years of Satisfying Shippers Is Our Record**

Write us today. Price lists, and shipping tags, etc., will be sent FREE. Just a postal will do.

**S. SILBERMAN & SONS**
*"World's Greatest Wool House"*
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**HIDES**

**WOOL, PELTS, MOHAIR, CASCARA BARK**

We do the largest consignment business in the northwest. Equally fair treatment on all shipments, large or small. Returns at full market value mailed same day as goods are received. Trial shipments wanted and appreciated, but are handled as regular shipments and not at inflated values.

**THE H. F. NORTON CO.**

53-55 No. Front St., PORTLAND, ORE.
206 3d Ave. So., SEATTLE, WASH.

# Handicraft For Girls

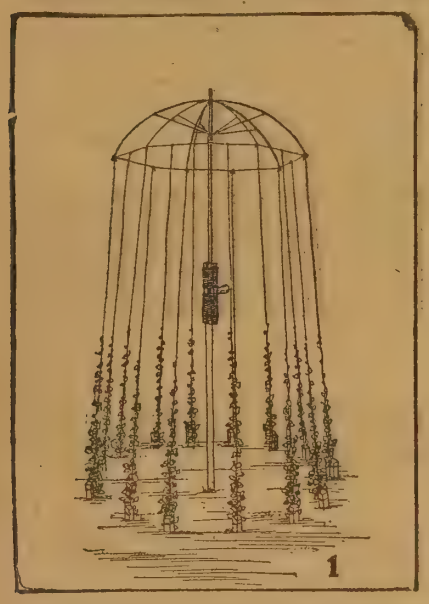
## By Dorothy Perkins

(Copyright by A. Neely Hall.)

### Trellises for Vines.

Every girl who owns a garden will need a few trellises over which to train her climbing vines, and by following the instructions and the drawings given below it will be a very easy matter for her to make these herself without having to call upon her father or brother to help.

The frame from an old umbrella is required for the top of the vine bower shown in Fig. 1. This is a splendid support for morning-glory and wild cucumber vines. If any of the ribs of the umbrella you use are broken, take pieces of heavy wire, and bind them to the broken parts; and if any of the connections between the ribs, braces,

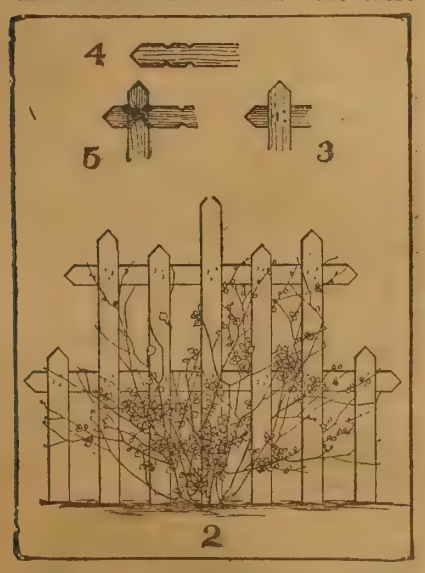


1

and handle are rusted through, wire these parts in place with fine wire.

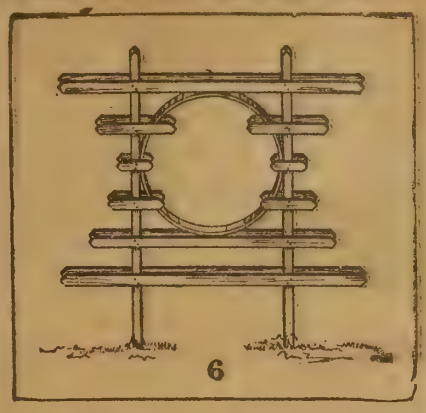
Use the handle from a broom, or a stick of about the same size, for the center support of the umbrella-bower, and by means of two strips of wood about 12 inches long splice the umbrella handle to the end of the broom-handle, binding the strip in place with heavy wrapping-twine as shown in Fig. 1.

Run a cord around the ends of the umbrella-ribs, slipping it through the eye of each rib, or sewing it to each eye if the cord is too thick to thread it through. Then bury the end of the broom-handle in the ground to a depth of 6 inches, and with it in position take more cord and tie a piece to the end of each rib, and a piece half-way between the ribs to the cord you have fastened around the ribs. Cut these




cords long enough to reach the ground, and drive a stake into the ground in the right position to fasten each cord to. Plant the vines you wish to have run over the frame, beside the stakes, and entwine the small tendrils around the strings to give the vines a start. Then by guiding the little fingers, as the vines grow, so the vines will spread over to the adjoining strings, the spaces may be completely interlaced, and by the time the top of the umbrella frame has been reached you will have a thickly covered bower.

The small trellis shown in Fig. 2 is made of laths. Any carpenter will furnish you with what you need for a few cents. The laths may be nailed together with brads as shown in Fig. 3; or the edges may be notched as indicated in Fig. 4 and the ends lashed together with cord as shown in Fig. 5.



6

Cut the ends of the lath strips pointed with a saw. The lower ends of the trellis should be driven several inches into the ground.

A trellis of a more elaborate design, though one that is quite as simple to make, is shown in Fig. 6. The center circular frame is a barrel-hoop, the upright pieces each side of this are sticks about 1 1-2 inches square, and the crosspieces are laths. It is easiest to build this trellis flat upon the ground, and then set it in position. First fasten the barrel-hoop between the uprights; then cut the lath crosspieces to the right length, and nail them to the uprights.

# Want Ads

### HELP WANTED—FEMALE 1

SUMMER COURSE IN TELEGRAPHY opens June 10. Jenkins Institute of the Spokane Y. M. C. A.

### EDUCATIONAL 43

EARN MORE. ENROLL ANY TIME, AT Behnke-Walker, Portland, northwest's biggest business college, because best. Graduates assured positions. Write for catalogue.

### TEACHERS' AGENCIES 46

TEACHERS REGISTER WITH B. F. WESTmore, Mgr. Hazard Teachers' Agcy. $1 registers you at three offices. 911 Old Nat'l Bank bldg., Spokane, Washington.

TEACHERS NEEDED FOR NEXT FALL. Write for information. Clark Teachers' Agcy, 412 Ch. of Com. Bldg., Spokane.

ALBERT TEACHERS' AGENCY; PEYTON bldg., Spokane. We need more teachers.

### HONEY, BEESWAX—Wanted. 58

SEND SAMPLES OF YOUR HONEY AND beeswax; state quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

### MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

Fly time is coming. We make screen windows and doors. Get our large illustrated catalog, No. 27, of sash, doors and building material. Sent free on request.

Screen doors, mortised, glued and covered with heavy, galvanized wire mesh, $1.75 and up.

Window and sash screens, at, per sq. ft., 15c.

Cottage glass doors, $2.85 and up.

Five cross-panel doors, $1.92 and up.

20x24, 2-light windows, $1.79.

Prepared roofing at $1.35, $1.70 and $2.10.

We sell any one, ship anywhere, and guarantee safe delivery. The largest factory in the west selling direct to the consumer.

O. B. WILLIAMS CO.
1943 First Ave, So., Seattle, Wn.

BUILDING MATERIALS AT WHOLESALE prices — Doors, windows, roofing paper, porch columns, plaster boards. All building materials shipped promptly. Send for our complete illustrated catalogue; gives you lowest net prices. P. A. ROVIG CO., 2229 First ave., So., Seattle, Wash.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

DAIRY AT PORTLAND—20 GOOD COWS; 200 choice customers; all equipment; monthly collections $850. A fine proposition for some one. Place for rent. Owner physically unable to continue. At 1430 Vancouver ave., Portland, Ore.

PRINTED BUTTER WRAPPERS

1st hundred 75c, postpaid; 40 to 70 per cent less in larger amounts. Sample and prices free. Hughes' Print Shop, Colville, Wn.

### JUNK SHOPS 90

CENTRAL HIDE AND JUNK CO. BUYERS HIDES, WOOL, METAL, RUBBER, SACKS, ETC. WRITE FOR PRICE LIST IF INTERESTED. QUICK RETURNS. W200 MAIN AVE., SPOKANE, WASH.

### MACHINERY—FOR SALE 93

CUT YOUR OWN TIMBER

on a Wheland Portable Sawmill. You will save time and big money on your next lumber bill. With this sawmill you can supply the lumber needs of your neighbors also. The price is reasonable, and the profits will soon pay for the machine. Write for catalog and full details. Clyde Eqpt. Co., 13th and Upshur sts., Portland, Ore.

I HAVE A BULL TRACTOR, GUARANteed as good as new; must sell. Write D 5, Washington Farmer, Spokane.

FOR SALE—HOLLEY HOLT HARVESTer; in good shape. Cut 1600 acres. Address O'Brien Bros., Wilbur, Wash.

## Want Ads Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and 1 t s associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

# Want Ads

Send for card giving lower rates for ads running one month or longer.

## How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

### MACHINERY FOR SALE. 93 Continued.

"WITTE" GASOLINE ENGINES save labor, and are carried in stock by HIGGINS MACHINERY COMPANY, 312 FIRST AVE. S., SEATTLE, Write for Catalogue.

### MACHINERY—WANTED 96

WANTED—2D-HAND ROWBOAT MOTOR, reasonable. H. F. Schafer, Davenport, Wash.

### AUTOMOBILES 114

FORDS CAN BURN HALF COAL OIL, ALL distillate, or cheapest gasoline, using our 1918 Carburetor; 34 miles per gallon guaranteed; easy starting; great power increase; attach it yourself; big profit selling for us; 30 days' trial; money back guaranteed; styles to fit any automobile. Air-Friction Carburetor Company, 321 Madison st., Dayton, Ohio.

AUTOMOBILE OWNERS! ARE YOUR tops old and leaky? "Bestopseal" will make it like new, waterproof and weatherproof, Indelible black, guaranteed. Send $1.24 for quart. Postage paid. Harper Auto Specialty Co., 1023 E. Pike St., Seattle.

### STOVE & FURNACE REPAIRS 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

### PETS—DOGS, BIRDS, ETC. 171

GUARANTEED NATURAL HEELER PUPS for sale. Male, $10; female, $7.50. Write C. A. Briggs, Hilgard, Ore.

### POULTRY 174



BABY CHIX—WHITE LEGHORNS; NOT only bred to lay, but bred to live and thrive with the vigor and vitality necessary to make dividend payers bred into them by 15 years of breeding at the oldest established hatchery in the state; chix last half of May, $12; June, $11 per 100; delivery in good condition guaranteed. The Lakeside Poultry Farm, Roy, Wash.

HOGANIZED BABY CHICKS.

Fifth thousand May and June White Leghorn, $2 per doz., $13 per 100, $125 per 1000. Very limited number of June Rhode Island Reds and Barred Rock chicks at $18 per 100. Our chicks are hatched to live and to lay. Safe delivery guaranteed. Queen Hatchery, 89 Pike st., Seattle, Wash.

200,000 WHITE LEGHORN BABY CHICKS —Bred for eggs, vigor, size. Safe arrival in good condition guaranteed. Free catalog and book on "Raising the Chicks." Oak Heights Poultry Farm, Route 3, Box T 67, Tacoma, Wash.

BABY CHICKS, WHITE LEGHORNS. CUSTomers say they are "husky," "lively," "vigorous," "healthy," "strong," "hard to beat," "thrifty," "great layers." Write at once. Free catalogue. Freshlaid Farm, Colfax, Wash.

WHITE LEGHORN BABY CHICKS— Hatched from free range of large, vigorous, heavy-laying O. A. C. stock. Orders filled from March 30 to June 30 for $10 per 100. C. B. Chandler, Lebanon, Oregon, Rte. 4.

WHITE LEGHORN EGGS $1.50 PER SETting; $8 per hundred. Special mating Pen-A, eggs 50c each; Pen-B, eggs 25c each. Waikiki Farm, R. 7, Spokane, Wash.

SINGLE COMB WHITE LEGHORNS; THE world's greatest egg machines. Write for our "War Measure." Help Hoover win the war. Broadview Farm, Curlew, Wash.

S. C. RHODE ISLAND RED EGGS $2 PER setting; $10 per 100. Fertility guaranteed. Waikiki Farm, R. 7, Spokane, Wash.

BARRED ROCKS.

Nicely barred, and fine layers. Eggs, $1.50 per 15. Wm. Heimsoth, R. 2, Baker, Ore.

S. C. R. I RED AND S. C. W. LEGHORN eggs, $1.50 to $5 per setting; $6 per hundred. Mrs. Rominger, Underwood, Wash.

### LIVE STOCK 177

ORDERS BOOKED FOR WEANLING POland China pigs from prize-winning stock. Also a few boars old enough for service. Frank Needham, Eugene, Oregon.

PATHFINDER 2D 634615, ROAN, CALVED Jan. 2, 1917; a vigorous, growthy Shorthorn bull; for sale at $200. Crated, f. o. b. Fenn, Idaho. Wm. Mulhall.

FOR SALE—WEANLING BOARS FROM big type Poland Chinas. S. S. Mullen, R. 1, Bellingham, Wash.

REGISTERED O. I. C. BOAR PIGS, 3 TO 6 mos. old. C. I. Ballard, Rickreall, Oregon.

### HOTELS 306

WHITES HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

GALAX HOTEL; NEW AND MODERN; 75C and $1. Main and Bernard, Spokane.

### RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

### PLUMBING, STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

### SEEDS 620

SEEDS—THE KIND THAT GROW. You can't keep them in the ground. Send for catalogue.
BUTZER'S SEED STORE,
188-190 Front St.,
Portland, Oregon.

FOR SALE — SEED BEANS; LITTLE White Navy and Lady Washington (large White Navy). J. E. Clemens, Mohler, Idaho.

WE SPECIALIZE IN TIMOTHY, ALFALfa, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Ida.

### FARM LANDS—FOR SALE 651

HELP.

We still need a few more settlers to finish our 6000 acres, which is being sold in 40-acre farms at $25 per acre. Ten yearly payments at 6 per cent interest.

By selecting your future home in this splendid tract at Bryant, Snohomish county, you are not alone buying a fertile and productive piece of land, but you are buying the best investment in the state today. Railways, paved roads, schools, churches, canneries, creameries and mills.

The best proposition on the market for the man who wants a farm. For further information address the owners, BROWNELL LAND CO., 904 Third ave., Seattle, Wash.

DIVERSIFIED FARM.

240 acres; 3 miles from city limits of Spokane; 100 acres cultivated; live stream and spring; family orchard; 5-room house; barn for about 8 head of stock; all fenced; about 4000 cords of wood. This is a very desirable place. Price $10,000. Will take Spokane residential property up to $4000.
HOUSE & LAND ASSOCIATION.
514 RIVERSIDE AVE. SPOKANE, WASH.

RANCH STOCKED COMPLETE.

480 a., 10 miles from Lyle, Wash.; 5 mi. Warwick; 5-room house, frame barn, 40x60; new granary; chicken house, other outbuildings, all in good repair; 60 a. wheat and oats; 35 a. summer fallow; 60 a. more sod to be broken; 80 a. fine bottom land; all fenced hog tight; 17 head cattle, 2 horses, chickens, hogs; machinery; school, church, ½ mi., mail route, telephone. Price $25 per acre, ½ cash, bal. own time at reasonable rate. I. E. Foss, owner, Lyle, Wash.

FOR SALE—FORTY-ACRE RANCH; ONE and one-half miles from Kent; 14 miles from Seattle; twenty acres under plow, balance logged-off; fenced and cross-fenced; eight-room modern house; barn accommodating 25 head; two good wells; hen houses and yard for 600 hens; also have ten acres logged-off land, same locality; good three-room house. Address Geo. S. Harper, 1023 E. Pike, Seattle, Wash.

CHOICE FARM FOR SALE—500-ACRE ranch, in choicest part of Palouse country; all good wheat land; two sets buildings; two family orchards; two never-failing springs and good well; 300 acres fall wheat and balance in oats. One of the best producing farms in Palouse country. Can be bought with or without crop. Price on application. L. E. Gilmore, owner, R. D. 2, Palouse, Wash.

DAIRY FARM FOR SALE—NOW GOING $250 to $300 cash business a month; 14 dairy cows and all equipment for handling milk route. Price $3700 cash or terms. Young stock and horses can also be bought reasonably. A good opportunity to raise cattle. Lots of free range. For particulars write A. Enstrom, Box 330, Ephrata, Wash.

GOOD SOIL, GOOD CROPS, GOOD ROADS, good schools, good neighbors, good transportation for the owners of Thurston county farms; 10 to 40 acre tracts of rich alder bottom and clay loam, now selling at $75 an acre; ideal climate, good district, settling up rapidly. Write us. A. H. Reid & Co., 314 New York blk., Seattle, Wash.

682-A. IMPROVED WHEAT FARM; SEVEN miles south of Hartline, Wash.; on Sunset highway; good land; all in cultivation except 15 acres; 300 a. in summer fallow; all fenced; large house, fine barn, good outbuildings; plenty water. Only $45 per acre. $6000 cash will handle. A. L. Tucker, Coulee City, Wash.

FOR QUICK SALE—ONE-HALF SECTION farm, 4 miles from Moscow. Price right to sell, and liberal terms. The place is all in crop, one-third of which goes to the purchaser. Possession given Oct. 1, 1918. If interested, write P. O. Box 393, Moscow, Ida.

MY 79 A. IS TOO MUCH FOR ME TO work; all good land with water; 9 mi. from Vale. If sold at once, crop and land $6000. $3000 cash. Write my agent, O. E. Carman, Vale, Ore.

FOR SALE—IN BITTER ROOT VALLEY, Mont.; 20 a.; 9 a. orchard; 10 a. barley; prospects bumper crop. $3000 takes it. W. S. Schraedl, Corvallis, Mont.

GOVT. LAND, ORE., CALIF. BOOKLET. Joseph Clark, Sacramento, Calif.

### FARM LANDS—WANTED 654

I WANT TO HEAR FROM OWNER OF farm or unimproved land for sale. Mrs. W. Booth, Pulaski, Iowa.



# True Tire Economy

'Chain' 'Usco'



The most economical tires you can buy are

First—Tires that will travel the greatest number of miles per dollar of cost.

Second—Tires that will give you the greatest use of your car.

United States Tires are long mileage tires. They reduce your tire expense by the mile and by the season.

United States Tires are sturdy tires. They are built for endurance. They will give you continuous, uninterrupted service enabling you to get the most out of your car.

Both factors are more than ever important in these times of war.

Economy is a national duty,

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Equip with United States Tires. There is a United States type and tread to suit every car, every road, every service.

The nearest United States Sales and Service Depot will be glad to help you in selecting right tires for your needs.

*For passenger cars—'Chain', 'Usco', 'Royal Cord', 'Nobby' and 'Plain'. Also tires for Motor Trucks, Motorcycles, Bicycles and Aëroplanes.*

*United States Tubes and Tire Accessories Have All the Sterling Worth and Wear that Make United States Tires Supreme.*

## United States Tires are Good Tires

# THE WASHINGTON FARMER

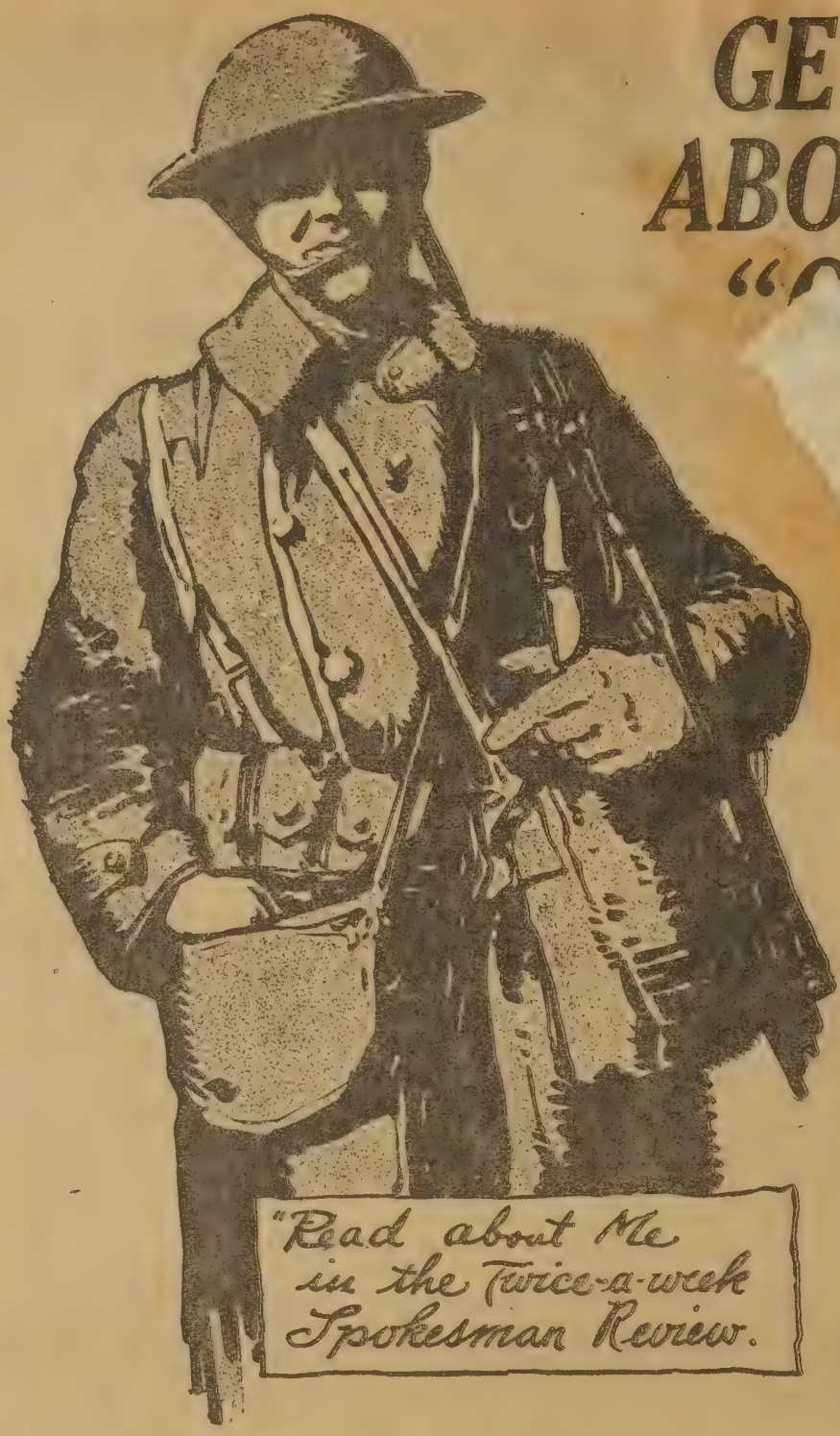
SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

JUNE 6, 1918. ** WEEKLY.


Thousands of Farmers Witness Power Farming Demonstration at Pullman.



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June 6.

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# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 23 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF June 6, 1918

# Tractor Plowing Draws Crowds of Farmers

## *Bring Their Wives and Daughters to Witness Power Farming on Palouse Summer Fallow*

**The biggest one thing in farm demonstration which has been put on in the Pacific northwest, and one that will stand out well as a national farm demonstration, was the power farming demonstration by the Washington State college near Pullman Wednesday, Thursday and Friday of last week. The State college had the efficient aid of the Pullman Chamber of Commerce in promoting this notable enterprise. There were far more exhibits of tractors, trucks and accessories than were at first expected, and the crowd was up to the fullest expectation. Over 2000 were present on Wednesday, and on Thursday at 1:30 I counted all the autos in the parking strip and found the number to be 528. A constant stream of autos were coming into the grounds as I was counting and other automobiles belonging to the exhibitors and managers were also on the ground. The road leading to the farm was lined with more machines, as well as portions of the fields beside the road. It would be safe to say that there were a thousand or twelve hundred autos at the demonstration on Thursday.**

From one of the heights on the 200-acre tract, the scene of the tractor demonstration at Pullman, one sees the Empire of the Palouse spread out before him—the growing green of the incoming grain, the patches of summer fallow brown, and in the midst of it all the town of Pullman nestling among its own hills. Could the Tempter find a more alluring promise of the kingdom of this world to offer? I thought of what the late B. T. Byrns of Moscow once told me. He was in the habit of visiting almost every year different farming sections of the entire country, had been in most, if not all, of the states of the Union. Said he: "Nowhere in all the country have I seen an equally tempting section of farming lands in one body than that of the Palouse country."

Certainly no one could ask for a fairer vision of Mother Earth than which can be picked out on the heights of the Pacific northwest—not confined by any means to the heights of the Palouse.

The demonstration was held on a 200-acre summer fallow tract on the Savage farm, about two miles west of Pullman the farm being under lease to Arthur Cole.

The round-wheel tractors and all others not desiring to work on the hills were given space in a field where the maximum grade was 19 per cent. Twenty-two machines entered this field. The machines of the track-laying type were assigned to the hilly ground south and east of the tract.

Four machines plowed around the steepest hill with a maximum grade of 57 per cent, these being the Holt "45," drawing six plows and turning over seven feet of soil; the Best "40," drawing four plows and turning over a five-foot furrow. The Trundaar—"20-35" pulling three 14-inch plows and the Yuba "20-35," pulling four 14-inch plows. The powerful Holt "75," which attracted wide attention Wednesday by its successful performances on steep hill sides, drawing nine plows and turning the soil for a width of 10 1-2 feet, met with an accident when the draw bar on the three bottom plows broke, putting the gigantic tractor out of the demonstration.

A feature of the big crowd was the prevailence of women, many of the farmers having brought their wives and daughters to witness the demonstration. Interest on the part of the women centered around the Russel tractor, operated by Mrs. Roy King of Portland, while large groups of them watched the power exhibits in the main tent, where methods of lightening the duties of the farmer's wife, from the power operated churn to the sewing machine and washing machine, were demonstrated by the companies exhibiting electrical and gas engine appliances for the farm and farm home. The farm lighting and the farm water system attracted special attention.

Hundreds of farmers eagerly followed the tractors that successfully wound around the steep Palouse hill. They came from all parts of the surrounding country, from more distant parts of Washington and Oregon and Idaho and even Montana. They wanted to know what the tractors would do in actual operation on a farm where the work needed to be done.

For example, there were such representative farmers present as J. F. Richardson, A. E. Shaw, Joe Coon, George Price, Homer Fitzsimmons, Matt Beal, Fred Hungate from the Big Bend district of Wilbur, Wash.

Among the representative farmers of the Nez Perce country of northern Idaho may be mentioned William McCormick, Owen Mounce, Lafe Mounce, J. W. Whitaker, E. M. Freese of the 21 ranch, George Rakes, Henry Herman of the Columbia ranches, Elmer Beaver, Fred Teel and the Madden brothers.

There were many men present who are the agricultural leaders of this section. For example, J. S. Klemgard and Henry J. Young of Pullman, the Miller brothers and the Comegys brothers of Thornton, J. L. Dumas of Dayton, John McGregor of Hooper, E. E. Flood, Sam Glasgow and Tom Wren of Spokane.

What especially interested me was to notice the eager interest of the progressive young farmers who are to be the leaders tomorrow in the great farm industry of the Pacific northwest. Such young men as Houston McCroskey of Garfield, Roy Peringer of Belmont, Roy Adams of Fairfield and Harry Goldsworthy of Rosalia.

The one big fact brought out at the tractor demonstration was the eagerness of the farmers themselves to learn something definite that might deeply affect their own farming operations by the introduction of more power farming on their own farms. The very air was charged with an undercurrent of sentiment that an epoch-making change was about coming over the methods of farming and that it was up to each farmer present to see to it that he investigated this subject thoroughly; that he should ascertain to what extent the tractors should take the place of horses on his own farm; how much land and of what character and of what kind of farming would warrant the introduction of the tractor, as well as which of the 20 kinds of tractors present would be best suited to his own needs.

One of the older farmers with whom I talked, who was farming 800 acres, still hesitated to enter upon tractor farming, thinking that it was for even larger farming operations than his own, while a younger man who was not farming as many acres declared his belief that during this year he would save nearly enough to pay for the tractor if he did not have to buy expensive feed for his horses; that one farmer told him that his plowing with a tractor cost 41 cents an acre, while with horses it could not be done for less than $1 an acre.

All sorts of opinions were expressed, but everybody wanted to know.

I was talking with one of the machinery men H. E. Caldwell of the Holt Manufacturing company. Mr. Caldwell was brought up in the farm implement business, his father being one of the pioneer implement men of Portland, Ore. He tells me that in the early days, not so very long ago, the Palouse hills were declared to be out of the question as farming land; that certain favored spots lying comparatively level were taken up as farms. Gradually the incoming settlers plowed the land higher and higher up, until pretty nearly all of the country is under the plow. A similar problem is now being carried out. It has been deemed that only level spots can be successfully cultivated by power machinery, and yet these machines are advancing upon steeper and steeper grades. However, Mr. Caldwell himself says he does not believe it practicable, while it is possible, to plow 55 per cent grade with even the Holt Caterpillar.

The following were the exhibits at the tractor demonstration:

**Tractors.**

Avey tractor and cultivator, Hodson Feenaughty company, Spokane.

Aultman & Taylor, Aultman & Taylor company, Spokane.

Moline Universal, Oregon Moline Plow company, Spokane.

C. L. Best, Farm Motors company, Pullman.

Case, J. I. Case Threshing Machine company, Spokane.

Cleveland tractor, McNeff Tractor company, Portland.

I. H. C.-Titan, International Harvester company, Spokane.

Waterloo Boy, Deere Plow company, Spokane.

Monarch Neverslip, Mitchell, Lewis & Staver company, Spokane.

Advance Rumley Oil Pull, Advance Rumley company, Spokane.

All-Work tractor, Freeman & Sons, Portland.

Lauson, T. G. Young, distributor, Spokane.

Trundaar, Larson Bros., Spokane.

Russell, A. H. Averill Machinery company, Spokane.

Holt caterpillar, Holt Manufacturing company, Spokane.

Samson Sieve Grip, Eldridge Buick company, Spokane.

Yuba, Yuba Manufacturing company, Spokane.

Twin City, Seiler Machinery company, Spokane.

Four-Drive, Snyder Motor company, Spokane.

Bean Track Pull tractor, Bean Spray Pump company, San Jose, Cal. Spokane.

Nilson tractor, Nilson Sales company, Portland.

**Auto Trucks.**

Duplex Four-Drive, Northwest Auto Supply company, Portland.

Garford, Western Motor Truck and Tractor company, Spokane.

Federal, Oldsmobile Auto company, Spokane.

Velie Grain Tank truck, Interstate Auto company, Spokane.

Maxwell, Floyd J. Logan, Spokane.

G. M. C., Eldridge Buick company, Spokane.

Packard, John Doran company, Spokane.

Republic, Auto Sales and Service company, Moscow, Idaho.

Nash, Fosdick Auto company, Spokane.

**Gang Plows.**

P. & O., Parlin & Orendorff, Spokane.

Oliver, Oliver Chilled Plow company, Spokane.

Deere, John Deere Plow company, Spokane.

Vulcan, Mitchell, Lewis & Staver company, Spokane.

Moline, Oregon Moline Plow company, Spokane.

**Gas Engines.**

Fairbanks-Morse, Fairbanks-Morse & Co., Spokane.

Fuller & Johnson, Hughes & Co., Spokane.

Novo, Hofius Steel and Equipment company, Spokane.

**Farm Lighting Systems.**

Edison, Nixon & Kimmel, Spokane.

Swartz, Swartz Electric company, Spokane.

Lalley, Garbe Motors company, Spokane.

Western Electric Power and Light plant, Western Electric company, Spokane.

Fairbanks-Morse, Fairbanks-Morse & Co., Spokane.

Delco, C. P. Michaelson, Pullman.

**Farm Water Systems.**

Leader, Hughes & Co., Spokane.

**Threshers.**

McCormick Combine, T. C. Martin, Pullman.

American Pea and Bean Thresher, T. C. Martin, Pullman.

Russell Pea and Bean Thresher, A. H. Averill Machinery company, Spokane.

**Other Exhibits.**

Garden City Feeder, M. M. Preston Machinery company, Moscow.

Smalley Ensilage Cutter, T. C. Martin, Pullman.

Rude Spreader, Parlin & Orendorff company, Spokane.

Western Land Roller, Freeman & Son, Portland.

Puritan Motor Oil, Pure Oil company, Spokane.

Monogram oils, Kilmer & Son company, Spokane.

Zerolene, Standard Oil company, Spokane.

Reliable Drag Saw, Hofius Steel and Equipment company, Spokane.

Sheldon Concrete Mixer, Hofius Steel and Equipment company, Spokane.

Colfax Wagon and Truck Loader, Colfax Manufacturing Co. Colfax.

Champion Spark Plugs, Chanslor & Lyon company, Spokane.

**J. B. Davidson, head of the department of agricultural engineering of the University of California, conducted dynamometer tests to ascertain the draw bar pull of the plows drawn by the different tractors on all types of land. Mr. Davidson was assisted by E. J. Stirnaman, recently from Iowa, and just added to the state college faculty. The tests were to show the draw bar pull of**

(Continued on page six.)



Real Palouse hills were plowed with the tractors.

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We guarantee every subscriber against loss through dishonesty or swindle by any advertiser in this publication; we do not attempt, however, to adjust trifling differences between subscribers and honest, responsible advertisers, nor will we pay the debts of honest bankrupts. Complaints must be sent us within 30 days from the date of the transaction and the subscriber must have mentioned The Washington Farmer when writing the advertiser. This guarantee applies to live stock, except that we will not be responsible for claims for damages on acconut of disease in stock sold through these columns.

## Only One Profit Allowed

The federal authorities have undertaken to eliminate what has been a grave evil in the feed situation in this country, namely, all dealers' profits except one. The food administration points out that last year, as an illustration, most of the mills had oversold their output, making it necessary that dealers should buy one from the other. In one case that is cited, several hundred tons of feed changed ownership seven times before it finally reached the farmers who wished to feed it to their stock. The farmers who bought it paid each one of the dealers a profit, making seven profits instead of one.

Under the regulations being put into effect by the food administration now only one wholesale and one retail profit are permitted. If feed passes through more than one wholesale and retail establishmen the profit, as limited by the administration, must be devided among them. Another point in the regulation is that where either the wholesaler or the retailer may be eliminated in a transaction, the particular profit that such dealer would have been allowed may not be claimed by the other dealer in addition to the one which he is legally allowed.

This is but an instance of the problems that confront the federal government as it faces the task of regulating the necessary industries of the country during the war. While there have no doubt been serious failures or only partial successes in some of the regulations that have been adopted, the sincerity and determination of the food administration can scarcely be questioned.

## Give the Past a Square Deal

The past is a guide if we know how to use it properly; if we do not use it properly it may be a stumbling block. For instance, suppose we say: "I made no money on potatoes last year, therefore I will never plant potatoes again." This is not giving the past a square deal.

We should examine the evidence of the years gone by very carefully before we form a judgment on them. We know of some men who are shrewd in this respect, for, following an overproduction, they plant the crop sown too lavishly the previous year, believing that so many will be discouraged by previous experience that there will be a shortage.

## Greater To Be American Farmer

An enthusiastic patriot exclaimed, "Oh, it's great to be an American." Then, looking at the recent government crop report, he added, "But it's greater to be an American farmer."

It is great to be a farmer in the United States—great in peace and greater in war. What finer or more inspiring thought could one have as he goes to his morning's work on the farm than the cheering knowledge that his production will help his country to win the war; that his grain may go into the army ovens in France to feed the heroic soldiers who are holding back the Huns; that food from his acres will drive hunger from many a door?

That inspiring thought should be given meditation by every farmer every day, and by every working member of his household. It will make a joy of toil and serve to dispel the weariness at evening time. N. W. D.

## Genuine American Foods

The western hemisphere has made a number of notable contributions to the world's foods and they deserve consideration.

Perhaps the best known is the American grain, corn. No more remarkable plant grows anywhere. Tropical by nature, it has been adapted to climates hot and climates cold, wet and dry, high and low, and it has few rivals as a feed or food. It bears heavily per acre and does not deplete the soil to the extent that some other grains do.

The potato, which some say is the mainstay of our great enemy, Germany, grew wild in both North and South America before Columbus made his discovery. Whole nations have been saved from starvation because of the productivity and nourishment of the potato, and probably there is no cheaper food grown nor one more generally satisfactory.

We do not want to start an old controversy raging again, so it does not make any difference whether the tomato is a fruit or a vegetable, but most people will admit its value from a dietetic point of view. Against prejudice it fought its way until today it stands high as a valuable addition to the table, not for a sauce, but as a food of value. Cooked or raw, fresh or canned, alone or combined with other foods, it is of fremendous value.

While few domesticated animals originated in this country, one fowl of great value was found wild in the Americas—the turkey. This fowl has not been developed as much as it deserves, but we have confidence that this will come.

With such valuable originals improved as greatly as they have been, would it not be a good thing if we turned our attention to them and used them both as a matter of pride and patriotism and also as a combined duty and pleasure?

---

"I CAN'T eat wheat; it chokes me!" was the response made by a woman to one of the war workers who spoke at the recent food conservation conference in Spokane. That woman caught the spirit behind the fact that the only way to make good our promise of wheat to the allies who are fighting our battles is to stop eating wheat ourselves until the next harvest.

WE are responding to the appeal. We have shipped 110,000,000 bushels of wheat to Europe, where normally we would have shipped only 30,000,000 bushels. But we must respond yet more. We must ship 50,000,000 bushels more between now and August, where, normally, we would ship none.

IT takes no longer to light a cave that has been dark a thousand years than to light a room that has been dark only five minutes. It takes no longer for truth to dispel an illusion that one has labored under for years than one of an hour's standing.

GET ready to celebrate July 4, but not in the usual wasteful, thoughtless, sport-loving manner. Reaffirm devotion to the principles of liberty. July 4 should be a day of sacrifice this year.

A SCHOOL girl writes that she has figured out exactly how many vegetables she will eat during the year, and is going to raise at least that many. That's real patriotism.

THE kaiser is just as much pleased when we Americans eat or waste wheat and meat as when one of his submarines sinks a cargo of them.

WE risk nothing when we eat wheatless meals, but the soldier who is fighting our battles risks everything.

## What Is This Urge?

What is that which causes the child to become dissatisfied with its crib, its bed, and the furniture in its room, since it is there that food, shelter, clothing and all physical wants are supplied?

Why does it tire of its toys, long to be out of doors and to become acquainted with grasses, shrubs, trees, animals and things?

At first it seemed a little animal with only sense desires. Later it seems an intelligent creature, longing to acquire, to know and to be.

It starts out to acquire and to become the possessor of things which have a money value and which are called wealth. But no amount of wealth satisfies and something urges it on to greater accumulations. What is this URGE?

Sometimes wealth is sacrificed for power; but the men who have reached the greatest heights of human power have not been satisfied, as the histories of Alexander, Caesar, Napoleon and others prove. What stimulated the desires of Caesar and Napoleon to become world rulers and Alexander to weep for other worlds to conquer? Had Alexander lived in this generation and been compelled to meet the conditions of modern warfare, with chemical appliances, explosives, mechanies, machine guns, aeroplanes, submarines and other scientific inventions, he probably would have had a task equal to his ambitions; but even then his ambitions would have been proportionately greater, for there is in man progressively enlarging ideals, insatiable longings, a desire to transcend all limitations to conquer the unconquerable; to know the unknowable and to create by putting into concrete form whatever his imagination conceives. What is it? G. L.

## War Argument Prevails

For more than a generation the liquor business has been gradually losing in the fight against prohibition. Since the war a new argument has been advanced that can not be met with any logic, facts or figures yet presented. This argument is that in the emergency of the war we can not afford to take one billion dollars' worth of food products per annum and manufacture them into liquors when millions of our allies in Europe are underfed and thousands of families starving. Some say a billion dollars is an overestimate; but others say it is an underestimate. No matter whether the figures are strictly correct or not, the fact remains that a large amount of food products each year in the past has been manufactured into alcoholic drinks of different kinds, and from the viewpoint of the prohibitionist worse than wasted, because it devitalizes and demoralizes the great army of workers as well as of fighters.

## Your Farm Service War Flag



Designed by The Washington Farmer in connection with The Oregon Farmer and The Idaho Farmer for the farm homes increasing food production to help win the war. The large star in the center is for the farm home. Small stars may be added for every farm worker in the family—man or woman, boy or girl.

**Convenient Order Blank.**

THE WASHINGTON FARMER, .....1918.
Review Building, Spokane, Wash.

Enclosed find Five Cents (5c), for which please send me a Farm Service War Flag (printed on enamel paper) with ..... extra small stars for farm workers.

Name .....

R. F. D..... Postoffice.....

Box ..... State .....

# Germany Makes Drive on Paris

## *Allies Stubbornly Resist Formidable Attacks of the Huns*

For the second time since fateful August, 1914, the Germans and Austrians are driving toward Paris, with the capture of that city, the French capital, as their evident purpose. The first drive was at the very opening of the war nearly four years ago, when Paris was saved by the heroic stand of the French on the River Marne. Again the battle is on the Marne. Can France and her allies again stop the oncoming horde of Teutons? That is the question that the whole world is seeking to answer.

At the present time indications are that the drive has been almost if not quite checked by the allies, who are making a stubborn resistance. Little ground has been gained anywhere since last Saturday.

Conditions are different now than when the first drive was made. Then Germany's aims were not so sweeping. She thought a quick drive on Paris would result in that city's capture and a general victory for the central powers. Now she is fighting the entire world, and the battlefront is something like 200 miles long. This is both an advantage and a disadvantage to both sides. Germany can not concentrate her whole efforts on Paris. The allies can not concentrate their whole effort in defending that city.

It is an admitted fact that Germany and Austria have the allies far outnumbered in fighting men now. It appears that General Foch, supreme allied commander, is calmly giving ground, declining to enter into mortal battle with the enemy while the scales are unevenly balanced. It appears that his purpose is to take the greatest possible toll from the enemy with the least possible loss to the allies, preferring to give even large territorial concessions rather than suffer an actual army defeat now. In the meantime, the allies can build up faster than the Germans. America is coming forward strong and rapidly. If the invaders can be kept from victory for a year there seems every evidence that the man power of the allies, with perhaps 2,000,000 or more Americans added by that time, can be made to equal that of the enemy. Then, but not until then, it would seem sound policy for the allies to make either a firm stand or begin a real offensive. If Germany can be kept out of Paris and out of the English channel ports until winter she is forever defeated. Next spring the allies will be in position to strike back.

In the meantime, however, there is the ever present possibility of a psychological breakdown somewhere—a breakdown of morale. Somewhere, possibly in France, possibly in England, possibly in Italy, Austria, Germany or even in the United States, the people may become panicky or lose their judgment, as did the people of Russia. This war may be won or lost in a day or a night. Let France lose self-control this week, with Germany at her doors pounding away for admission, and next week Germany will be ravaging that city. On the other hand, let Austria suffer the internal conflict that is threatening there and the central powers would be so greatly handicapped that further offensive might be impossible. It therefore becomes of utmost importance in every country that courage, nerve, grit and confidence be maintained.

During the drive of the last week the German and Austrian armies have advanced at some points nearly 20 miles nearer Paris. They are now within 45 miles of that city. The drive has been so terrific that some critics believe they will now or very soon dig in and rest for a while, during which they can rebuild and concentrate their powers for a renewal of the offensive. Others believe that no cessation will be permitted until Paris is reached or the invaders are defeated by the allies on the battlefield. By the time this writing reaches the readers something to clarify the situation may have occurred.

### Submarines Raid U. S. Coast.

At this writing it is known that eight vessels have been torpedoed and destroyed by German submarines within 200 miles or less of the Atlantic coast within the last few days. The shipping tonnage lost, and the number of lives lost in these sinkings is reported to be slight. Most of the vessels were small. Most of the crews were saved. No transports were sunk. The principal vessel destroyed was the Carolina, having on board 220 passengers and 130 crew members, and having a tonnage capacity of 8000.

It is believed that the submarines have been directed to the United States coast to try to break up the transportation of troops to France, but no troop ships have been attacked because of the special protection given them by the navy. Secretary Daniels of the navy says there is adequate protection, and that there need be no fear of any serious interference with even merchant shipping. It is reported at this time that one of the submarines has been captured, and the navy is making a campaign against the menace.

### Expenses of War Are Stupendous.

It will cost the United States approximately $23,000,000,000 to play its part in the war during the coming 12 months, according to the best estimates that officials are able to compile. During the last month about $1,500,000,000 have been expended, including the loans made to this country's allies. Approximately $11,000,000,000 will be required during the six months from July 1 to December 31, according to the estimates, and when President Wilson addressed congress recently on the raising of war revenue he indicated that the greater part of this amount would have to be raised by a fourth Liberty loan bond issue sometime during the coming fall. Congress begun legislation for the raising of this enormous war revenue by the passage last week in the house of representatives of the bill appropriating more than $12,000,000,000 for the financing of the army during the coming year. The measure has been presented to the senate, which is expected to take action upon it in the near future. It also carries a provision authorizing the present call into the service, under the draft regulations, all the men that he and the war department consider necessary for the prosecution of the war. It contemplates the raising as quickly as possible of an active army of at least 3,000,000 men.

President Wilson has made a special appeal to congress urging that body to take adequate action on revenue measures before adjournment for the summer vacation. The funds which he asks to be appropriated for military purposes are the greatest ever known

### National Thrift Day Is Named.

For the purpose of increasing the economic thrift of the people of the United States and at the same time make more efficient the government's war machinery, President Wilson has officially designated June 28 as national thrift day. In a message to the American people he urges them to cease purchasing things that are not essential to their welfare and to bend all their financial efforts toward the winning of the war. "This war is one of nations—not of armies," says the President's message, "and all of our 100,000,000 people must be economically and thoroughly adjusted to war conditions if this nation is to play its full part in the conflict."

### Shipbuilding Is Being Rushed.

Director Charles M. Schwab of the United State shipbuilding division, has announced that there are 700,000 men employed in the shipbuilding industry of this country. Half of these men are actually working on ships in the yards and the remaining half are working on accessories or the equipment of vessels. During the month of May the director's report says the United States built and put into commission new vessels having carrying capacity of 250,000 tons. Contracts let during one recent week for the building of ships totalled $250,000,000.

### Greater Sacrifice Is Urged.

Food Administrator Hoover has issued a special appeal to the American people urging greater sacrifice in food conservation during the coming year. He says that during the year 1917 consumption of the staple foods needed by the armies was reduced in this country about 7 per cent and he urges that it be reduced 15 per cent during the coming year, which he says can be done without harming any one. The food administrator says that as a result of the efforts made by the American people, the allied food situation is improving, while evidences that he has at hand indicate that the situation in Germany is becoming more serious.

### Workers Must Not Strike.

Director General McAdoo, in charge of the railroads under government control, issued a strong statement to railroad employes last week following the strike of a number of shop men at Alexandria, Va. Mr. McAdoo pointed out that the railroad workers are today employes of the government and that any strike by them is a strike against the government. "The government can not be coerced or intimidated by any of its employes," said Mr. McAdoo, and later in his statement he said, "While in the German drive now going on the sons of railroad men and the sons of Americans of every class are dying on the battlefields of France to save America and democracy in the world, shall there be found among us any man or set of men who are unwilling to sacrifice something of their personal views and individual desires to support America's heroes who are making the supreme sacrifice for us?"

The shop men at Alexandria struck because they were dissatisfied with the increase in wages announced recently by the director general of the railroads. The increase announced was such as to make a total to all the employes of the railroads of approximately $300,000,000, an average of something like $150 a year each.

# Protest Without Delay

## *Boosted Railroad Rates Unwarranted*

**Protest to your senators and representatives in congress! Protest to Secretary McAdoo! Protest to your state railway commission!**

As forecasted by The Farmer last week, Director-General McAdoo has issued an order raising freight rates 25 per cent. But Mr. McAdoo recognizes the right of appeal, apparently realizing that a general and undiscriminating order of this drastic nature will impose injustice on many interests and communities.

As pointed out last week, the producers of the Pacific coast, and particularly the farmers of the Pacific northwest, will suffer gross injustice unless this order is greatly modified.

The government has taken over the operation of the railroads under a plan that guarantees their owners reasonable profits. If the earnings are insufficient to meet the guarantee, the deficit will have to come out of the United States treasury. To make the railroads self-sustaining, Mr. McAdoo says he must raise rates 25 per cent. If that vast increase is needed to make the roads self-sustaining, the public will not object, for Mr. McAdoo's proposition that the government should not bear the burden of the deficit is sound.

But the burden of the increase should be equitably distributed, and it is not equitably distributed under this order. Regions that are already supporting their railroads will be unjustly required, under this crude, rule-of-thumb order, to help pay the freight rates of other regions where the railroads are not self-supporting.

The Pacific coast is supporting its railroads. If the roads of the country in general were earning as much as the roads that serve the Pacific coast, there would be no need whatever of any increase in freight rates and fares. With the exception of the Chicago, Milwaukee & St. Paul, all the transcontinental railroads are enjoying a high degree of prosperity. Last week this paper analyzed the 1917 earnings of the Northern Pacific, the Great Northern and the Burlington. The Union Pacific system is even more profitable.

As an example of the way in which the Pacific coast is supporting its railroads, we now have the record of

(Continued on page fifteen.)

## *Coming Events*

June 4-7—Convention, Washington state grange, Walla Walla, Wash.
June 12-14—Convention, county school superintendents, Ellensburg, Wash.
August 19-25, national encampment, G. A. R., Portland, Ore.

**Fairs, Shows, Exhibits.**

September 2-7—Spokane Interstate fair, Spokane, Wash.
September 16-21—Washington state fair, Yakima, Wash.
October 1-6—Western Washington fair, Puyallup, Wash.
Nov. 7-13—Northwest live stock show, Lewiston, Idaho.

**Live Stock Sales.**

June 11, Jerseys, C. H. Cannon, Turner, Ore.
June 12, Jerseys, W. O. Morrow, Independence, Ore.
June 26, Guernseys, E. R. Brady, Satsop, Wash.

## *Washington Gleanings*

The farmers' cooperative creamery at Centralia has employed R. W. McKie as buttermaker.

A new mill is to be built by the Northwestern Lumber company at Hoquiam in place of the one recently burned down.

Henry Steve, a successful Indian farmer of Marysville, has purchased a fine registered Guernsey bull for his herd.

William T. Tract, a stallion breeder of Kennewick, is improving his farm, and will have quite a wheat crop this year.

The Dewey postoffice has been discontinued, and residents of that section will hereafter be on the rural route from Anacortes.

The Skagit County Fair association is arranging for the holding of its farmers' annual picnic on the fairgrounds at Burlington, July 4.

Between 30 and 40 high school students of Bellingham will work in Alaska this summer for the Pacific-American fisheries at $70 per month and board.

D. G. Goodman of Yakima donated 40 acres of Naches valley land to the Red Cross, which was auctioned and the cash turned in to the Red Cross fund.

The Grays Harbor district is shipping better than 100 carloads of lumber daily to outside sections. Much of the stock moving is spruce for airplanes and fir for shipbuilding purposes.

When the steamer Franstand sets sail from Tacoma, June 9, six women oilers will be in the crew. The Franstand is a freighter plying between Hongkong, China, and Pacific ports, and will be gone six months.

J. T. Alexander, a well-known farmer of Chehalis district, has contracted to grow a considerable acreage of Boston marrow squash this season for a Seattle seed house. The yield of squash seed is said to run from 400 pounds up per acre.

E. E. Perry, district horticulturist, with headquarters at Chehalis, has been granted a leave of absence by the state to make a special investigation of the land settlement plan in force in California, wherein the state handles colonization plans.

Yakima Indians are ready and willing to go to war, according to returns made on questionnaires sent out by the exemption board and returned recently. Only a few unmarried ones claimed deferred classification, many saying "Want to serve right away."

After two years without a fair Walla Walla county, Washington, will again have an agricultural and live stock fair. Farmers are interested in the stock of the association to a greater extent than ever before, and it is believed a successful fair can be held.

C. W. McAllister, representative of the Portland Union Stock Yards company, says he thinks now is a good time to begin a movement to change our immigration laws. They have been too loose and carelessly constructed in the past and have not served the nation nor the immigrants themselves.

Last year Charles Hemmings of Puyallup planted his parking strip to potatoes. The parking strip measures 252x15 feet, and up to the time it was put into potatoes it was, of course, just so much waste land. The crop did splendidly throughout the season, and in the fall Mr. Hemmings sacked up one ton of fine potatoes, produced on this previously idle land.

A new department has been formed by the women's committee of the Whatcom county council of defense, to be known as the department of patriotic educational propaganda, and the object of the work will be to help mold public opinion in support of the government. The field of activity will be primarily that of women among women, though men speakers and mixed audiences will not be barred.

The idea that has been prevalent that the conservation of wheat after harvest would be less necessary than it has been heretofore is declared to be erroneous. The food administration is laying plans to conserve every kernel of wheat possible during the coming year as the success of the allies depends absolutely on the possibility of keeping the food rations of the armies adequate. Thousands of families throughout the United States are now living on a strictly wheatless ration.

Relative to the purchase of nonessentials, President Wilson says that "thoughtless expenditure of money for nonessentials uses up the labor of men, the products of the farms, mines, and factories and overburdens transportation, all of which must be used to their utmost and best for war purposes. I earnestly appeal to each man, woman and child to save constantly and buy as regularly as possible the securities of the government and do this as far as possible through membership in war savings societies.

# State Grange Is in Session

## *Big Problems Being Faced This Week at Walla Walla*

### Master Bouck's Address.

**On page 16 of this issue is a digest of the address of Master William Bouck before the state grange convention now in session at Walla Walla. As the Farmer goes to press the convention is dealing with important problems. Next week's issue will contain a comprehensive report written by a special representative of this paper, who is attending the session.**

For the thirtieth time the Washington state grange is in annual convention, and never before has it faced greater problems nor greater opportunities to be of service, not only to its own members and the agricultural interests as a whole, but to the United States and to the world. How best to serve in the present world crisis is the great question in the minds of the several hundred delegates at Walla Walla this week. One of the problems that is being threshed out, both in session and out, is how to effect the greatest speed in producing the food that the allied armies must have to win the war from mankind's enemies.

The program has several speakers of note, among them, in addition to Master William Bouck and other state grange representative, George P. Hampton, representative of the grange at the national capital; Roy McKaig, master of the North Dakota grange and active in the Nonpartizan league; President E. O. Holland of the state college of Washington, and President S. B. L. Penrose of Whitman college.

The election of officers is an important matter to be settled before adjournment, both a state master and a state overseer being up for election.

In interest perhaps only second to the demands of war in the considerations of the grange is the matter of its relation to the Nonpartizan league. Whether or not the convention will indorse the league is not known at this writing, but in view of sentiment expressed officially in both the Agricultural Grange News of this state and the National Grange Bulletin it is hardly considered probable that official indorsement will be given. Under the title of "The Grange and the Nonpartizan League," the Grange News in its last issue says editorially:

"While the grange has always been nonpartizan in its principles and has always stood for the idea that in nearly all of our elections parizan politics is not necessary, but is, rather, detrimental to the best interests of the voters, by placing party above principle, yet we have always been warned to be careful to keep political discussions out of the grange, so, while many farmers, including, in many instances, members of the grange, have combined themselves in the nonpartizan league, in order to more effectively carry out the principles of nonpartizanism, and they are apt to feel that the grange is a proper place for the boosting of the league. In this we believe they are wrong, for although many of us are strictly nonpartizan in our political leanings, yet we have in our midst many who are just as conscientious in their belief that party politics are essential to true government as the rest of us are that parties are unnecessary appendages, and as there are so many questions of vital importance on which we can all agree and unite it is hardly wisdom to risk inharmony in our grange and thus weaken our influence in the many questions on which we should all be united.

"We believe that it is unwise to bring the question of the nonpartizan league into the grange. We, as individuals, may be as active as we desire, in both organizations, but let us keep the two separate and distinct, even though we feel that in many ways their aims are the same."

Expressing the same sentiment, but more strongly, the National Grange Bulletin for April says:

"Some of the best friends of agriculture in the United States, who have proved by their works that their devotion to its welfare is sincere, are seriously disturbed over the spread of a movement in the northwest which bears every indication of containing a positive menace to the highest progress of the real farmers of the country, and which is destined to injure the very cause which it professes to espouse.

"Reference is made to the so-called farmers' nonpartizan league in several of the states in the northwest, which by whirlwind methods, by extravagant promises and by radical pronouncements has been gathering great momentum in some sections, while the movement is also gaining a foothold in some of the eastern states. The very nature of the new organization does not point in the direction of permanence, nor does it contain those elements of strength that assure any abiding service to the farm people in any state; while the unfortunate entanglements this organization has permitted with those whose purpose is clearly to undermine the American government to reduce its fighting efficiency and to give aid to the enemy is an indictment against the nonpartizan league from which it can never clear itself in the estimate of patriotic, red-blooded American citizens, farmers and otherwise.

"If the nonpartizan league has not actually surrendered itself to disloyal practices, it has at least trifled with its reputation to a degree sufficient to put it under suspicion in the eyes of every true American.

"But the chief purpose of this article is to make clear that the grange is not identified in any way with the nonpartizan league and that the grange stands sponsor in no way for its principles or its results. Efforts that have been made, in countless cases, to so entangle the grange should be repudiated at every point, for the grange and the nonpartizan league are moving from absolutely different viewpoints and have no common basis. The grange was here, doing valiant service for the farm people of the United States, long before this new movement of the northwest was ever dreamed of, and it may still be here after that movement has been forgotten.

"The grange is nonpartizan in the true, broad sense. Its service is unselfish and continuous for the farm interests of America. The grange seeks no class legislation or special favors for farmers, simply because they are farmers, but names as its supreme ideal 'The greatest good to the greatest number.' The grange is absolutely loyal to its goyernment and tolerates within its meetings and among its leaders no spark or even the suggestion of disloyalty. On these four decisive issues the grange and the nonpartizan league are as wide apart as if oceans separated them. Let this fact be here and now made clear to every one, that whatever may be the future of the nonpartizan league, no responsibility for that future rests upon the grange or upon the real leaders of the grange. As the two organizations go on, the fruits of each shall prove it, of what manner it be."

Preliminary reports from Walla Walla indicate one of the most valuable sessions in the grange's history in this state. The local grangers, assisted by the Walla Walla Commercial club and private citizens, have done everything to make the gathering successful and pleasant from the standpoint of entertainment and conveniences. Officers of the grange and committee heads arrived on the grounds early and had everything in readiness when the session opened Tuesday morning. As indicated in Master Bouck's address, as reviewed on another page of this issue, the statistical report shows notable activity on the part of the order during the last year

# Tractor Plowing Draws Crowds

(Continued from page three.)

the plows drawn on different slopes and on different kinds of soil, thus ascertaining the amount of power necessary to pull the plows under different soil conditions. The figures showing the draft of the plows follow:

Three 14-inch plows, 8½ inches deep, north slope, draft 1390 pounds, draft per plow 463 pounds.

Three 14-inch plows, 9 inches deep, south slope, draft 1465 pounds, draft per plow 488 pounds.

Two 14-inch plows, 9 inches deep, south slope, draft 1080 pounds, draft per plow 540 pounds.

Three 14-inch plows, 8 inches deep, south slope, clay soil, draft 1815 pounds, draft per plow 605 pounds.

On my way to the demonstration with a party of friends we drove out to the Miller ranch from Thornton and saw a 75 Holt Caterpillar with nine 16-inch bottom plows easily and successfully turning the summer fallow at the rate of 25 acres a day with two men on the machine. There was no display about it, there was no demonstration in it. This was simply doing farm work without horsepower and with a minimum of manpower. I think they said it would have taken 40 horses to do an equal amount of plowing. In fact, while on the way we noticed other farmers plowing with eight horses and having only two bottom plows.

Too much credit can not be given Professor J. P. Fairbanks of the farm engineering department of the State college, who was in charge of the details of the demonstration, nor for the foresight of President Holland of the State college, which permitted the inauguration of the enterprise, and for his hearty support, which made it possible. The tractor men themselves lent every assistance, and all were indebted to the experienced advice of A. E. Hilderbrand, manager of the national power farming demonstrations. This big association authorized this show and promised that no others will be held in the state this year under its auspices.

C. A. S.

### Grow Grain on Lowlands.

Reports from Cowlitz county in southwestern Washington indicate that some of the newly reclaimed lowlands of that district will this year produce excellent crops of wheat and oats. Near Kelso approximately 1000 acres have been added to the grain producing acreage through the formation of diking districts. The weather for the last several weeks has been ideal for the planting and growing of the crops and in some instances yields running well up towards those of the far-famed Skagit valley of northwestern Washington are anticipated.

### What to Produce Is Big Problem.

In view of the government restrictions on the use of wheat for poultry feed, as well as for feed for other live stock, Commissioner E. F. Benson of the state department of agriculture urges upon the people of the state the production everywhere possible of some wheat substitute for feed.

"Chicken feed should be grown wherever possible," he says. "Small tracts, strips along the fence rows or ditch banks will produce sunflowers, milo maize, sugar beets or some other feed for chickens or pigs that will relieve you of the necessity of buying for your own stock.

# Washington Boys In War Service

From The Twice-a-Week Spokesman-Review.



**ALLEN SMITH, Reardan, Wash.**— Enlisted in company C, 162d infantry, and is now helping to rid the earth of German militarism "somewhere in France." Private Smith was working on a ranch near Reardan before enlisting. His parents are Mr. and Mrs. J. J. Smith of Kiona, Wash.



**C. F. SAYLES, Dixie, Wash.** — Enlisted at Walla Walla, October 4, 1917, with the 146th field artillery, battery E. At present he is attending the army engineering school "somewhere in France." His parents, Mr. and Mrs. W. H. Sayles, reside near Dixie, Wash.



**ELMER M. SHEDD, Bryan, Wash.** — Entered the naval service August 2, 1917, and is now training on the receiving ship U. S. S. Philadelphia, Puget sound, Wash. He lived, before enlisting in the navy, with his parents, Mr. and Mrs. J. W. Shedd, on a wheat ranch near Prosser, Wash.

# Summer School

## Gives Six Weeks to Farm Studies

"Four-thirds of the American people depend on agriculture—one-third as producers and three-thirds as consumers," is the way that Frank O. Kreager puts it. Mr. Kreager has charge of the Puyallup summer session of the State College of Washington. With regard to the agricultural studies at the Puyallup summer school Mr. Kreager significantly adds: "Six weeks is only a beginning; but six years or six centuries without a beginning is nothing." Here is another paragraph:

The untrained farmer in the future will not be a farmer; he will be a day laborer. Only the trained man will have an earning power able to command the capital necessary to operate a farm. When land costs $500 an acre, only the trained man can pay interest on the investment. In the past every American, whatever his parentage or wherever his birth, was born owner of a farm. He had but to go west and settle on it. In the future only the trained—or the rich, can acquire land. Land owned by the rich and farmed by the poor is a national calamity. One-third of the coming generation must be trained, highly trained, for agriculture.

At the Puyallup summer school there will be courses in

Horticulture and gardening.
Soils, crops and farm management.
Live stock and dairying.
Poultry raising.
Agricultural economics.
Bee keeping and rabbit raising.

The class in gardening will be limited to 27 people. Twenty-seven small gardens have been plowed and planted. These gardns will be in midsummer growth June 25 when the summer session opens. A garden will be assigned each student to cultivate during the session. Another plat will be given each student to prepare, plant and cultivate the first six weeks of growth.

# Public Sale Best

## Shorthorn Breeder Try Experiment

**By R. A. BALCH, Assistant Sales Manager Day & Rothrock Company.**

The demand for purebred Shorthorn cattle this spring is the greatest the breeders of the northwest have ever experienced. Foundations are being laid for new purebred herds of both milking and beef type Shorthorns, and herds already existing are being enlarged.

One might suppose that the people demanding this grade of cattle would prefer to go to the breeders' farms and made their selections and that money could thus be saved. This is not the case, however. The average seeker of good purebred Shorthorns wants to purchase where he can compare one animal with another; where he can make the different breeders compete for his patronage, and where he can meet and talk with the different breeders and other authorities on Shorthorns so as to get as much advice and pick up as much gossip and information as possible before making his selections and backing his judgment with his money. So he wants to purchase at a public sale. The same observer might be led to think that when the demand is unusually good the breeders would prefer to sell privately. This is also untrue. The breeder, like every other business man, has his problems of marketing. Private, individual sales mean that much time must be consumed in showing each prospect the herd. Then he goes away to another breeder to make comparisons of animals and prices and then to another, and then back to the first breeder he saw, and finally buys something from some one that suits him and at a price which seems to him to be right. It will thus be seen that the feature of competition is not eliminated by the private sale, but that the breeders are bidding against each other, whereas, at public sales the purchasers do the bidding. This is due to the fact that at private sales the breeders compete with each other on price only, whereas at public sales they compete on the merit of their consignments. Some animals that would sell at private sales would never be consigned to public sale to compete with consignments of other breeders. The competition of bidders at public sale is offset by the fact that at the private sale the breeder can set his price, while at the public sale he can not. But the purchaser sets his own price at both public and private sale and thus is protected by his own judgment at all times. Reliable statistics show that it actually costs the breeder more money to sell at private than at public sale, and the breeder has the additional advantage in the public sale of cleaning up all of his salable animals at one time.

Then there is the good fellowship

(Continued on page twenty-eight.)

# What I Have Learned in Raising Rabbits

Article No. 2---By JOE L. ASHLOCK.

I suppose there are many ways of keeping rabbits clean, and any way is good if it keeps them clean. One must use his ingenuity, and the means at his disposal. I chanced to have an abundance of clean, dry, bright wheat straw, and plenty of dry earth that was well pulverized. So, twice a week I spread half an inch or an inch of the dry, pulverized earth on the wood floor of my pens; and over this I scattered two or three inches of clean, bright, dry wheat straw.

Along with this went clean food in good variety, clean water in clean drinking pans that are kept bright, protection from animals that would give them fright—and children and grown-ups also—and constant watchfulness for cats.

The cats got 20 of my young rabbits almost before I knew they were about at night. Mornings, I would find the uneaten feet, heads, and fur of the young ones. These cats all at once fairly swarmed over my place, and having eaten my rabbits, kept me awake with their unearthly yowlings.

So, I set out a saucer of milk in which had been dropped a piece of cyanide as large as a pea. Any cat that drank as much as two tablespoons of this milk at once ceased yowling and eating baby rabbits. Cyanide is a deadly poison, and fed in milk this is almost instant death. Be very careful in handling it. Do not put the poisoned milk where the rabbits can get it. They may mistake it for water and drink of it.

My first cat was a huge, white rascal, a most repulsive looking creature with ears partly chewed off in many fights, and indications of mange or a similar disease about its mouth and neck. It was an act of charity to rid the neighborhood of such a creature. A big black cat with vicious claws and long fangs was the next.

I took pieces of fresh meat, inserted small bits of cyanide. Taken this way the poison seems not to act as quickly as when dissolved in milk; but from what I know of the deadliness of cyanide, I have no doubt that the cats that ate the fresh meat in my rabbit yard died before they got far from my place. In a night or two, cats ceased to roam and yowl and slay young rabbits in my back yard.

I confess that I put the poisoned fresh meat in my rabbit yard with some qualms; but, to my knowledge, rabbits will not eat meat. Anyway, none of my rabbits ever have suffered from eating poisoned meat in their runways, though I have excellent evidence that outlaw cats have suffered abundantly from this bait. It is better to keep such poisoned meat out of the pens for the rabbits may nibble at it.

### Pens Four Feet Square.

I now have my does with young shut up in pens, each doe having a space about four feet square. This is more than they often are given, but not too much, I think. The bucks, young and old, are running in a pasture of alfalfa, bunchgrass and wild rose bushes 90 feet wide by 150 feet long. A situation of this kind is not available where rabbits are kept in city back lots, and, as a matter of fact, they get along very well in much less space. But when you have a large number of rabbits in a small space you have to clean out their pens, and the more you have in a pen, the oftener you have to clean it out. If they run at large in a pasture the problem of sanitation takes care of itself.

My small, half-grown bucks do not fight each other out in the open, though if they were penned together in a smaller space they likely would fight, especially those of different litters. The grown-up bucks fight if they meet each other in close quarters, but, apparently, by mutual consent, they have decided not to meet one another. The big New Zealand buck keeps in his preserve in the bunchgrass end of the pasture. The big Flemish Giant buck is often in the clump of wild rose bushes. Another buck, a cross of New Zealand and Flemish, stays about the buildings where the does are confined. The young bucks run at large through the preserves of the older ones. Now and then one of the old bucks grazes out into the ground held by one of the others, and they all come to a common watering-can; but, most of the time, each of the big bucks stays in his own camp.

I keep the rabbits in this pasture by a device which I think is a discovery of my own, and is one which, I think takes advantage of the psychology, or "thinking" of the rabbits; or, perhaps I should say the rabbit's lack of thinking. It is clear to me that rabbits do not think very much.

I have, first of all, a five-foot poultry wire fence with posts at intervals of one rod. This wire is not sunk in the ground to keep the rabbits from digging under it. Now, here is the trick: Another course of poultry netting 36 inches wide, is run inside the outer wire, 18 inches on the posts, and 18 inches on the ground. The part lying on the ground is weighted down with stones or heavy sticks.

### Digging Out.

Now, when the rabbit thinks of digging out, naturally it goes up close to the fence and tries to dig. At once it encounters the wire netting lying on top of the ground. They never think of moving 18 inches back from the fence and digging there, since they have at that point encountered no obstruction. It fools them every time. I have kept rabbits of different breeds and of all sizes in the pasture, and no one of them has ever solved the problem. They dig a few times, or try to, against the fence that stands upright, and then give up for good. Farther away from the fence they may dig all they wish, naturally, and never escape.

A summary of the things I have learned about rabbits in a year's study of them accompanied by many losses, each of which taught its lesson, should convey hints of value to boys and grownups who are without experience with this valuable meat-producing animal.

Housing quarters that are clean and dry, warm in winter, cool in summer, always well ventilated, but free from draughts, are a prime necessity. Feed that is clean, not spoiled, and in some variety, is necessary if the rabbits are to be kept growing and in health.

You may feed a rabbit alfalfa hay till it will eat no more, apparently having finished its meal. Throw it a turnip, a

(Continued on page thirty-one.)

## *Keep Rabbits Clean and Comfortable*

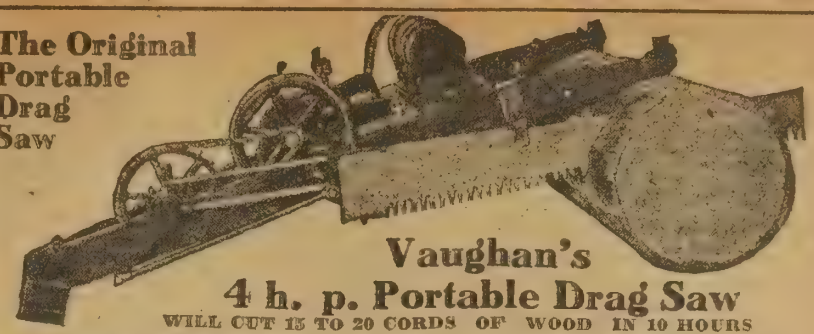
The time-honored saying: "Cleanliness is next to godliness," applies with force to rabbits. You may wish to know how this or that ailment of rabbits may be prevented. Answer: Keep them clean and comfortable.

In winter rabbits are comfortable when they are warm and dry in hutches or pens kept so clean that there is never the slightest odor in them. Along with this attention they should have the things a rabbit should eat which also should be clean; and the helpless little ones should be protected from cats.

A stray cat that sleeps under sidewalks during the day and forages at night when only thieves are abroad will scheme and plot for hours if there is the slightest chance to fasten its claws and fangs into a furry, fat, helpless little rabbit.

Have no mercy on cats. Not only will they kill your baby rabbits, but they will kill the birds. At all times, and certainly in time of war, rabbits and birds are more precious than stray cats and dogs. There simply is no excuse for allowing these thieving animals to prowl about your premises at night. If a cat or dog has a home and will not stay there at night, then it is no better than the outlaw animal that steals about in the dark and hides in brush piles, under sidewalks, or in deserted buildings during the day. Treat the runaway as you treat the outlaw.


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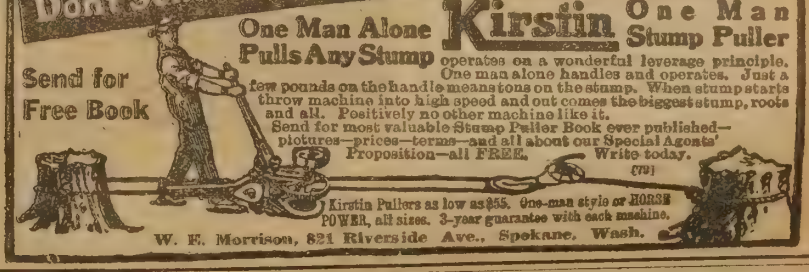
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A. B. NYSTROM, Editorial Contributor

## MILK PRODUCTS.
### Their Increased Use in Army.

At the conference of the National Dairy Industry, held in Chicago, April 12 and 13, 1918, two sets of resolutions were unanimously adopted. Under the first set, attention was directed to the erroneous, but widely accepted public belief in the necessity of saving milk and its products; to the curtailed market due to lack of export shipping facilities and to the activities of manufacturers of butter substitutes; and to the necessity of educating the public to the unique place of milk in the diet of human beings—a place which scietnific experiment has proven can not be filled by any substitute. Following this preamble, the conference went on record as favoring a public announcement by the food administration encouraging the wise and liberal use of milk and its products. After pledging producers, manufacturers and distributors of milk products to demand only the cost of operation plus a reasonable profit during the period of the war, the conference farther asked that steps be taken to insure the use of butter in the army, rather than oleomargerine, that cheese be placed in the army food ration; that the formation and operation of cooperative associations of farmers be encouraged; and that a bureau of dairying be created by the secretary of agriculture.

The second set of resolutions called attention to the basic difference between storing milk products and such nonperishables as wheat and other grains. Because of the greater cost of storing butter, cheese, etc., the conference went on record as favoring such regulations and restrictions of the creamery and cheese manufacturing business as will encourage capital to finance production and particularly storing of butter and cheese and during the summer season of heavy production. "In view of the present situation," concludes this resolution, "we believe our food administration should do all in its power to encourage the investment of capital in the coming butter and cheese crop, to the end that we may accumulate the reserve stocks necessary to the future."

### What About Mill Feed?

To the Editor: In a reply to a dairy question in a recent Farmer you say: "I would advise you to eliminate the shorts, as it does not add anything to your ration except a price." How is this to be understood? I thought that bran and shorts were fed to cows in order to assist them in producing milk. A few lines above the quoted words you say: "For a grain ration feed one pound of apples to each three and one-half to four pounds of milk produced." Apples is certainly a misprint and should read bran or, as I supposed, shorts or barley or something, and then you advise eliminating shorts. Please enlighten me on this. E. S.

Answer—The shorts we get these days seem to be little but a mixture of middlings and bran and is not the same as the standard wheat middlings or shorts we used to get. Still we pay as much for it. Why do we feed bran? There are three reasons why dairymen use bran. In the first place it is rich in digestible protein, and it may be used to balance a ration rich in carbohydrates. Secondly, it is bulky and is used to lighten heavy feeds such as corn, barley, oilmeal, etc. Lastly, it has a beneficial laxative effect due to a certain phosphorus compound. Shorts has but one of these properties, namely, that of furnishing protein, and from that standpoint alone, we would never consider either bran or shorts, because we can buy protein much cheaper in the form of linseed oil meal, soy bean meal or other high protein feeds. Why then pay $2 or $3 per ton more for a feed that will not produce as good results as bran?

One word of caution must here be given. When changing from shorts to bran be sure to feed as much by weight of the latter as you did of the former if a comparison is going to be made. Bran is much lighter than shorts. Apples should be fed at the rate of about three and one-half pounds to each 100 pounds of live weight of the animal. Grain is usually fed at the rate of one pound of grain for each three and one-half to four pounds of milk produced.

## Cow Nets $20 a Month

"King's Roberta," the 4-year-old purebred Jersey cow of S. E. Gearhart, a highly progressive farmer, residing on his highly developed farm between Meridian, Idaho, and Boise, is said to yield her owner a daily revenue of $1, or a net revenue of $20 a month. "King's Roberta" produces 42 pounds of milk a day or about two pounds of butter. Her average butter production has been 60 pounds a month and her test is 5.10 per cent. Mr. Gearhart estimates that the expense of feed amounts to about $10 per head for each cow of his herd of nine cows. For a number of years, he has been engaged in the dairy business with high-grade cows, but he is now embarking into dairying with purebred cows only, and for the leader of his herd he has purchased a son of the champion Jersey cow of Utah, a bull of "The Noble of Oakley" type. "King's Roberta" is of the St. Lambert type. Mr. Gearhart, who ranks as one of the leading dairymen of the Boise valley, takes a very optimistic view of the future of the industry. J. R. S.

### Regarding Milk Goats.

I would like to get some information regarding milk goats, how much they will give and quality as compared to cows' milk and what it costs.—E. T. H. Hillsboro, Ore.

A government bulletin states that a doe that produces three pints of milk a day is considered only a fajr milker, two quarts is good and three quarts is excellent if lactation period is from seven to 10 months. Goat milk is similar to cow milk in constituents. The same authority states fat percentage from a mixed herd at from 3.2 per cent to 4 per cent. The fat globules are finer in goat milk and harder to separate. The feeds suited to cows are suited to goats; six to eight goats may be supported on what one cow requires. Goats are browsers by nature and prefer twigs and leaves to grass. For good returns goats must be cared for properly.

If you expect to go into business, we suggest that you write for Farmers' Bulletin 920, Department of Agriculture, Washington, D. C. The bulletin goes into the care of goats fully and in detail.

I AM enclosing 25 cents for one year for a new subscription to The Washington Farmer. I see you are awarding pennants for subscriptions and I want offer No. 1, the paper pennant.

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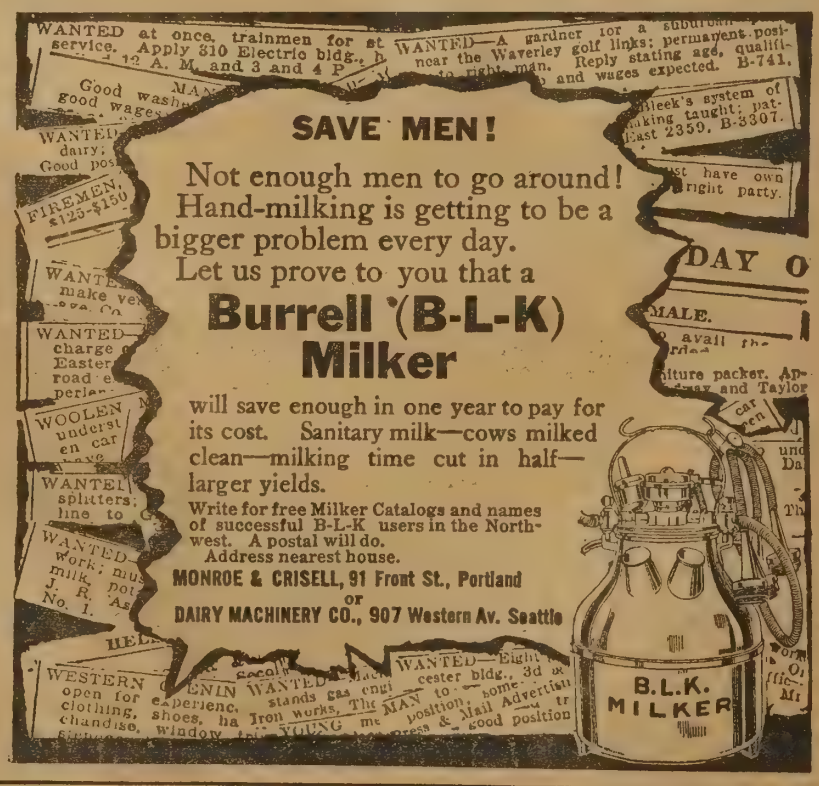
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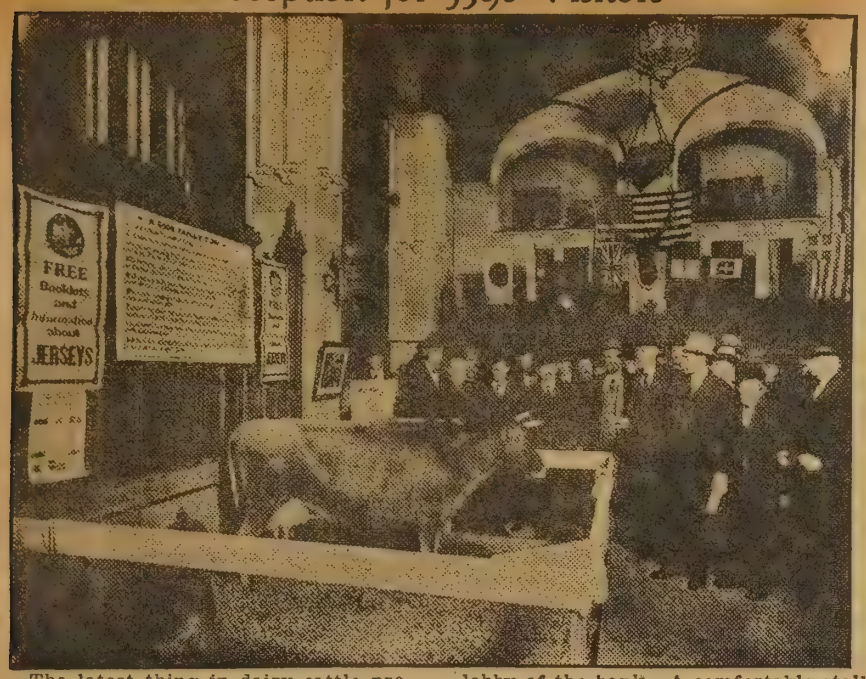
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## Reception for 3590 Visitors




The latest thing in dairy cattle promotion is a "family cow" campaign that was started by state dairy agents and some bank officials in Raleigh, N. C. Lady Ursine, a full-blooded Jersey, and her baby calf were pressed into service to add some real "cow interest" to the display that was held in the lobby of the bank. A comfortable stall with some bedding was set up on the floor in the main banking room and Mrs. Jersey Cow and daughter held a reception for the 3590 visitors who called. It was pointed out that one in every six families in the United States is cowless.

### IN EUROPE ALSO.

### Swiss Have Milk Price Trouble.

The dairy farmers and dairy products consumers of the United States are not the only people in trouble over the cost of milk. Word comes from Switzerland announcing considerable strife between the producers and consumers in that country. Milk is selling there in general at seven cents a quart, the report states, which the consumers consider exorbitantly high. The producers declare they can not make expenses at that price and are demanding an increase to nine cents a quart. The socialist organization of Switzerland is reported as declaring that if the price of milk is put at nine cents, whether the government assists in meeting the increase or whether the consumers have to pay it, it will call a general strike of business. The milk producers declare that unless the increase is allowed they will cease to produce milk. Under a government regulation the government itself has been paying the last increase in the milk price, the payment being something in the nature of a subsidy to the milk producing industry.

### Best Shorthorn He Ever Saw.

Giving some personal recollections in his charming manner before the National Shorthorn congress, Alvin H. Sanders of the Breeders' Gazette said: "My love for and interest in Shorthorn cattle was not simply acquired It was inherited. My ancestors all came from old Virginia, where in the valley of the south branch of the Potomac river the business of beef making from corn and bluegrass, with the aid of Shorthorn blood, first originated in this country soon after the close of the war of the revolution. It was Colonel Lewis Sanders who took over into Kentucky more than a century ago that high enthusiasm for good cattle that bore fruit in the first direct importation ever made from England into the Ohio valley states—the historic importation of 1817—and who founded in central Kentucky the first live stock show ever held west of the Allegheny mountains. My own father brought into the section of the state of Iowa in which I was born one of the first Shorthorn bulls—as well as the first Percheron horses—ever seen in that region. This must have been about the year 1868, and the impression made upon me as a barefoot boy in short trousers by that red yearling bull has never been eradicated. I think he cost $75, and in after years I knew he was a Bates-topped calf, bred by W. J. Neeley of Ottawa, Ill.—a distant relative of my father—who figures to some considerable extent as a patron of the American Shorthorn herd books of that period. You know there have never been any pies baked such as mother used to make, and so I am going to insist that this level, straight-quartered calf of 1868 was very much the best Shorthorn I have ever seen."

**Hold Up Your Head.**

A pig's nose is nearly always in the ground.

### *Clip This Order Blank*

Address all communications concerning thrift or war savings stamps to The Washington Farmer, War Savings Department, Room 26 Review Building, Spokane, Wash.

Remittances may be in any form desired, including personal check.

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Gentlemen: I wish to invest in ..... U. S. government thrift (number desired) stamps at 25 cents each.

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I have already bought ..... (kind of stamp)

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Any gift from the folks back home means a lot to the boy.

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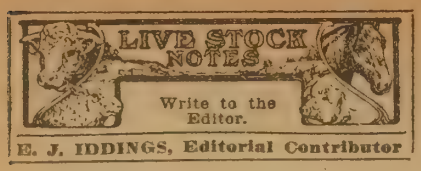
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Dealers all around here carry it in 10c pouches. A 3c stamp will put it into his hands in any Training Camp or Seaport of the U. S. A. Even "over there" a 3c stamp will take it to him.

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*The Patent Pouch keeps it Fresh and Clean and Good —It is not Real Gravely without this Protection Seal*

**Established 1831**




E. J. IDDINGS, Editorial Contributor

# "Walking Disease"

## Its Prevention and Its Cure

That the so-called "walking disease" which is more or less prevalent among horses in certain of the wheat growing districts of eastern Oregon and Washington is caused by an over-infestation of bots, is the conclusion arrived at by Dr. W. H. Lytle, state veterinarian for Oregon.

"In eastern Oregon from May until late in November the climatic conditions are such that the bot fly can live," says Dr. Lytle. "Inasmuch as the majority of eastern Oregon horses are allowed to inhabit pastures, it is thought that an unusual opportunity is thus afforded for a very long period of egg laying on the part of the botfly."

Whether this particular species of botfly carries a poisonous virus or whether the disease is due to poisonous byproducts thrown off during its life in the body of its host is not known. Mules apparently are immune to walking disease. If the number of infesting bots is kept below a certain point, the animal is able to resist their influence; beyond this point the victim is apparently overwhelmed by the products coming from the parasite.

"Prevention of the malady," continues Dr. Lytle, "hence depends upon getting rid of the parasites or at least the harmful number. This is best done by the administration of carbon-biulphide in two to three drachm doses, two hours apart, giving in all three doses, on an empty stomach. This drug can only be administered by means of capsules."

This treatment, which is to be followed 24 hours later by the administration of three drachms of tartar emetic in a pint of milk, should be given by a veterinarian. Where no vetreinarian is available, tablespoonful doses of flowers of sulphur, once or twice daily, followed by the tartar emetic treatment as above described can be safely administered, says Dr. Lytle. Certaain stock foods and tonics containing iron, arsenic, nux vomica, gentian, ginger, sulphur, foenugreek, resin, and nitrate of potash, when administered over a considerable length of time, seem greatly to aid in the expulsion of the bots and also in building up the resistance of the animal against the malady. When the disease has once manifested itself, however, the carbon bisulphide treatment or the flowers of sulphur treatment should be used at once.

Clipping or singeing the long hair from the legs, breast, and particularly from around the mouth and face, is helpful in preventing the laying of the eggs. Horses that are curried and kept in stables are quite free from attacks of walking disease.

SHIP your cattle where they will bring you the most money.
OUR northwestern customers have found Kansas City their best market. We specialize on Oregon, Washington and Idaho cattle.
WRITE or wire us for market information any time.
WITHERSPOON-M'MULLEN L. S. COM. CO.
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"Pig-a-Boo"
DIGESTER TANKAGE
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FREE BOOKLET
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A Dip that is standardized, of uniform strength and GUARANTEED. One gallon makes 70 gallons of dipping solution.
For Scab, Ticks and Skin Troubles
Dr. Hess Dip and Disinfectant cleans and makes the skin healthy. It is more than a Dip—it is also a Disinfectant. Use it freely about stables, hog pens and poultry houses to destroy disease germs and maintain good health conditions. Also for home use, in garbage cans, sinks, cesspools. Sold by 28,000 dealers on a money-back guarantee.
Dr. HESS & CLARK
Ashland Ohio

# Values of Hog Feed

By E. L. Potter.

The extremely high prices of feed make it necessary that we give most careful attention to the matter of actual values. Some feed prices have increased more than others, hence, feeds which were once the cheapest are now out of reach, while others which were once considered high are now relatively cheap. This condition leads us to offer the following table showing the relative values of the common feeds in per centages. These values are not absolute, but apply within the ordinary ranges of feeding. Since ground barley is the staple feed of the northwest it is taken as a basis and its value figured at 100. The figures for the other feeds indicate their value in relation to barley.

Here is a table showing the values of 100 pounds of various feeds in terms of finely ground barley:

| | |
|---|---|
| Fine ground barley | 100 |
| Whole barley | 88 |
| Whole corn, dry shelled | 100 |
| Dry cornmeal | 106 |
| Ground wheat | 100 |
| Ground oats (not over one-third of the ration) | 100 |
| Middlings (for suckling pigs | 105 |
| Middlings (for fattening) | 87 |
| Oil meal (when added to a ration already balanced) | 125 |
| Oil meal (when used to balance the ration) | 200 |
| Tankage (when added to a ration already balanced) | 150 |
| Tankage (when used to balance a ration) | 300 |
| Skim milk (when added to a ration already balanced) | 15 |
| Skim milk (when used to balance a ration) | 30 |
| Rutabagas or turnips | 15 |
| Cottonseed meal | Dangerous |
| Corn silage | Not recommended for hogs. |
| Bran (suitable only for maintaining breeding stock) | 77 |

A ration of grain may be balanced with clover or alfalfa or rape pasture, or with skim milk, oil meal, or tankage. Where pasture is not used, 6 pounds of tankage, 10 pounds of oil meal, or 200 pounds of skim milk will balance 100 pounds of corn, wheat, or barley. Where prices are favorable larger amounts may be used, but it is seldom advisable, regardless of price, to feed over 10 pounds of tankage, or 15 pounds of oil meal, or 600 pounds of skim milk with each 100 pounds of grain.

There probably never was a time when the use of supplements was more profitable than now. The price of most of the supplements have gone up about one-half, while the prices of grains and mill feeds have doubled, or more.

## College Herd Head Sold.

Montana Terono, head of the Jersey herd at the Montana State college has been sold to R. E. Logan of Stevensville, Mont., who owns one of the best Jersey herds in the state. This bull was bought from the Hood farm at Lowell, Mass., and has been used the last four years on the college herd with good results. He is sired by Pogis 99th of Hood farm, whose sire Hood Farm Pogis 9th has more daughters in the advanced registry than any other Jersey bull.

The creaking of a door may be stopped by rubbing the hingers with a piece of soap. This does not spoil the look of the paint as when oil is used.



Uncle Sam Wants an Army of Calves




To make into beef, fats, hides.
Raise calves on Lilly's Calf Meal. It takes the place of milk because it has all the necessary elements for calf nutrition.
It is not only a scientific, but it is common-sense food, endorsed by Pacific Northwest dairymen everywhere. Dealers sell it.
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Carley Mill No. 8 Rolls 40 to 50 bushels of oats or 60 bushels of wheat or barley per hour
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160 ACRE FARMS IN WESTERN CANADA FREE

# Veterinary

Dr. S. B. Nelson

**Bag Is Swollen.**—Can you please tell me what to do for my cow? One front quarter of her bag has swelled up very much and is quite hard. She eats well, but does not seem to take on flesh. Have been milking her over a year. The swelling started just recently. A. H. S., Picabo, Idaho.

I must suggest that the treatment, mammitis, is a serious matter and takes considerable time on the part of some one. It requires the frequent bathing of the udder with hot water in which has been dissolved a handful of common salt. This pailful of water should be as hot as possible without burning the animal. Wash the udder until the water is cool, then rub dry and apply a little of the following liniment: Fluid extract of belladonna, two ounces; fluid extract of phytolacca, two ounces. Then massage. The application of this medicine should not be severe. In bad cases it is advisable to give a teaspoonful to a tablespoonful of the fluid extract of phytolacca morning and evening. Sometimes it becomes necessary to poultice the udder. Take about five yards of 7-cent or 9 cent, unbleached muslin, tear the ends into strips and tie these over the loins, so that the udder is supported in the bandage. Cut four holes where the teats of the udder should come through. Now fill in the poultice made of dried hop leaves. The leaves should first be pulled apart, then soak with hot water in order to keep the poultice hot. I have found that a Chinese hand warmer is very fine. This is a small tin box, in which tinders made of charcoal, rags, etc., may be burned, and which, when wrapped up in a piece of cloth and placed in the poultice, so as not to burn the cow, will keep the poultice warm from two to three hours. Frequently it is advisable to give the animal, at the beginning of the treatment, one pound of epsom salts in about two quarts of water.

**Mare Has Paralysis**—I have a 9-year-old mare, which I will use during summer. She was in a poor pasture all winter, suckled a colt as well, and when I got her 30 days ago she was covered with ticks and lice, just a mere skeleton. I find the right side of the mouth seems to be paralyzed while the left side seems normal. As the one side hangs loose and the other normal, the mouth appears to be drawn to one side. When I took her over I started her off on a quart of bran and a handful of third cutting alfalfa. In a few days I gave a quart each of brand and rolled barley, kept on gradually increasing up to date. 30 days after beginning she has gained 125 pounds, shed the old hair and is as slick as a mole, but no change in the condition of her mouth. She picks up grass or grain with her teeth instead of gathering it up with the lips. Can anything be done to overcome this condition? A SUBSCRIBER.
Hermiston, Ore.

Your made has a partial face paralysis due to a possible injury to one of the facial nerves. Friction on the side toward which the lips lead might be of greater advantage. Also you might give the mare 15 grains of powdered nux vomica on her feed once daily. After a week increase it to twice daily for a week and then go down again to once daily, and then let her have a week's rest. The entire treatment covers a month. Then repeat the treatment if you see any benefit from it.

**Apply Mechanical Contrivance.**—What can one do for a cow that sucks herself? This is her first calf and she does not do it all the time. We have to keep her tied up at night. Please let us know what to do for her? E. T., Omak, Wash.

The only thing that you can do to keep the cow from sucking herself is to put some mechanical contrivance on her, which makes it impossible for her to reach around and get hold of her teat. This may be done by putting a strap around the body, putting a halter on her head and then attaching between the front legs to the strap around the body and to the halter a stick, which will not allow her to get her head near the udder, but still will allow her to feed and drink and lie down.

**Milk Is Bitter.**—Can you tell me what is wrong and what will right my cow's milk? The heifer freshened 25 days ago and the cow seems healthy enough, but the milk is bitter when set for cottage cheese. A pan full leaves only a small handful of curds, which looks and works like wet papers and tough, rubbery stuff. It does not cheese at all. The cream is sweet for one day and then it gets bitter, too. Is the milk dangerous to use? J. T., Grangeville, Idaho.

Wash the heifer's udder thoroughly several times before milking with a 2 per cent solution of lysol. Rub dry. Also give her one pound of epsom salts in about two to three quarts of water. If the bitterness continues after this treatment you might try heating the milk before setting it away. The buttermilk is sometimes caused by a bacterium, and when that is the case the milk has to be heated to destroy them, and other times it is due to the food which the cow may eat, or to a little trouble in digestion, and the other treatment ought to remedy that.

**To Rid Cattle of Lice.**—What is the most practical way of ridding cattle of lice? A Subscriber, Ferdinand, Idaho.

The best way of ridding cattle of lice is by using a solution of any of the coal tar creosote disinfectants. Use them in accordance with the instructions which go along with the package. If you have only a few animals they can be treated by using a small spray pump. If you have a large number, then they should be dipped in a dipping vat. In order to destroy the eggs, as well as the mature young lice, it is generally necessary to make two dippings about 15 to 16 days apart.

**Little Pigs Die**—I have a Poland China sow that has 13 little pigs. She raised 10 of them to be nine or 10 days old and then two would die at a time, and two again, till now they are nearly all gone. They have what is called the thumps. What is the cause of this? Is it overfeeding the sow? I cut her feed down and she is losing them just the same.—W. P., Stevensville, Mont.

I am not able to form an opinion regarding the trouble that might have affected the little pigs and caused their death. It is possible, however, that the cause originated with the sow. The thumps is a condition affecting the diaphragm and is generally caused by overfeeding and to the collection of too much fat about the heart. It is not always that fat hogs have this occur, but some do. I can offer no suggestions except the possible one of raising the pigs by hand. Otherwise, I can give you no advice.

**Hard Lump in Teat**—Have a three-year-old cow, fresh the second time one week ago. In right front teat is a hard lump which obstructs the flow of milk. It is not stationary, but can be pushed up. Can get but a few drops of milk from that teat, which is now almost dry. Can this obstruction be removed? She is a good cow and I do not wish to beef her.—A Reader, Loomis, Wash.

Yes, a lump of this kind can generally be removed surgically. There are instruments made by the various instrument houses which can be inserted into the teat and the tumor removed. This operation must always be performed under absolute aseptic conditions. It would be difficult for you to do it yourself, unless you could possibly arrange for a veterinarian to stop in some time he is in your neighborhood. I am quite sure he could operate for you with good results.

**Trouble With Pigs:** One of my brood sows farrowed the 15th of February eight healthy pigs and one dead one which was decomposed, and one that died in a few minutes. The navel cord was black. Also had a gilt that dropped her pigs three months and 11 days. What is the cause? We have good shelter and pasture, also feed cooked potatoes and shorts. The pasture is dandelion and ferns. J. G.
Elma, Wash.

I am not able to diagnose what the trouble was that the sowe had with the newly born litter of pigs; whether it simply was an accident or whether there was some specific cause for it I do not know. Your description is too limited for me to be able to form an opinion and offer advice.




# How the Armies' need for meat was answered

IN a fighting man's ration, meat is the important item. Twenty ounces of fresh beef, or its equivalent, is called for daily.

To supply the meat needs of an army that was suddenly expanded from 100,000 to 1,500,000 is a tremendous task. Added to the needs of the Allies, it is a staggering one.

The American stockman and the American packer may justly take pride in the way they have met these needs.

During 1917, stockmen sent to market nearly 2,000,000 more cattle than during 1916. Yet at the end of 1917, the Department of Agriculture reports more cattle remaining on American farms than at the beginning of the year. The production of hogs has also been increasing. All of this in spite of high feed prices, and scarcity of labor.

How the packers have done their part is shown by the fact that in one week, Swift & Company was called upon to supply the Allies and the American Armies abroad 24,000,000 pounds of meat and fat—enough to have fed America's peace-time army for more than six months.

An order of this size means the dressing of 13,000 cattle and 200,000 hogs.

To move the finished products, 800 freight cars were needed. Of these 650 were from the Swift refrigerator fleet.

Three days after the order was received by Swift & Company, shipments began, and the entire amount was rolling seaward within a week.

Since January 1, 1918, over 400 carloads of our products per week have been shipped abroad on war requirements.

The nation's meat supply machinery has stood the test.

Not once has there been a failure on the part of the American farmer or the American packer to supply the government's needs.

On their part, Swift & Company performs their service without governmental guarantee of profit and with a limit of 9% return on capital employed in the Meat Departments, which means about 2 cents on every dollar of sales.

Swift & Company, U.S.A.




**JAMES DRYDEN,**
**Editorial Contributor.**

The people of the northwest have had an opportunity to see and hear in the last few weeks the world's foremost authority on the poultry industry, Edward Brown, F. L. S. Mr. Brown has long been known to all students of poultry culture through his books and writings, and it has been an extreme pleasure for many of them to meet him in this country. The writer had a profitable conference with him 12 years ago in New York state, and has had a running correspondence with him ever since. His lectures, on his present trip, which is under the auspices of the United States government, are mainly concerned with the food situation of the allies, but he takes pleasure in talking to gatherings of poultrymen in every state, in addition to his regular food lectures. In addition to being an expert poultryman he is a broad, well-informed man and an eloquent speaker. His war talks have been said by many to be the best and most comprehensive that the necessities of the war situation have brought to the front. J. D.

**Not a Mortgage Lifter.**

Roosevelt, who has owned ranches at various times, was once asked to define a gentleman farmer. "A gentleman farmer," said T. R., "is a chap who never raises anything except his hat."

# The Northwest Egg-Laying Contest

The April report of the contest, which ends the first six months of the race, shows a pen of Rhode Island Whites, owned and bred by F. W. Frederick of Phoenix, B. C., in first place, the record of this pen being 659 eggs, five hens in a pen, an average of 132 eggs a hen. The report states that this is the highest record made this year at any of the several egg-laying contests in the United States or Canada. A pen of Barred Plymouth Rocks from the Oregon Agricultural college is second with 619 eggs. These are very good records. Records as high as these in the first six months of the hens' laying indicate a laying capacity of considerably over 200 eggs in 12 months. The highest pen record for April was made by the pen of Barred Rocks from the O. A. C., with 112 eggs, and the second by the pen entered by Frederick of British Columbia, 110 eggs. The highest individual hen record to date is 155 eggs by a White Leghorn hen entered by C. F. Williams of Salem, Oregon.

The average production of all the hens in the contest was 14.7 eggs, or 49 per cent yield, against 75 per cent for the highest pen. The feed cost per dozen eggs was 21.48 cents for all the hens. The return above feed cost for average hen was 14.11 cents, and 50.68 cents for best hen.

The 20 best pens for the six months are as follows, the figures indicating the number of eggs laid:

| | |
|---|---|
| F. W. Frederick, Phoenix, B. C., R. I. Whites | 659 |
| Oregon Agricultural college, Corvallis, B. Rocks | 619 |
| Paul B. Towne, Tekoa, Wash., W. Leghorns | 617 |
| H. Otto, Greenacres, Wash., W. Leghorns | 603 |
| Mrs. Monona Van Cise, St. Maries, Idaho, W. Leghorns | 587 |
| H. E. Caldwell, Canutillo, Texas., R. I. Whites | 586 |
| L. E. Harris, Missoula, Mont., W. Leghorns | 573 |
| H. J. Kingsbury, Twin Falls, Idaho, R. I. Whites | 580 |
| J. R. McRae, Milwaukie, Ore., R. I. Reds | 559 |
| Oregon Agricultural college, W. Leghorns | 555 |
| D. Tancred, Kent, Wash., W. Leghorns | 553 |
| Mrs. H. V. Rominger, Underwood, Wash., R. I. Reds | 553 |
| C. F. Williams, Salem, Ore., W. Leghorns | 548 |
| C. C. Coolidge, LaGrande, Ore., W. Leghorns | 541 |
| J. R. McRae, Milwaukie, Ore., W. Leghorns | 539 |
| C. H. Numsen, Centralia, Wash., W. Leghorns | 537 |
| B. O. Langsdorf, Lebanon, Ore., Minorcas | 527 |
| F. J. Wirtner, Mica, Wash., B. Rocks | 522 |
| S. C. Leghorn Club, W. Leghorns | 519 |
| F. E. Kneedler, St. Libory, Ill., White Rocks | 515 |

The above are the best pens out of 135 in the contest. J. D.


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# Make more Money Pull big stumps by hand



Clear your stump land cheaply—no digging, no expense for teams and powder. One man with a K can rip out any stump that can be pulled with the best inch steel cable.

Works by leverage—same principle as a jack. 100 pound pull on the lever gives a 48-ton pull on the stump. Made of the finest steel—guaranteed against breakage. Endorsed by U. S. Government experts.

Showing manner of operation

HAND POWER
**K Stump Puller**

Write today for special offer and free booklet on Land Clearing.

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San Francisco
California


## MUST CONSIDER MEAT.

### Egg-Laying One Qualification.

In selecting the kind of poultry to produce it is not enough to consider only the egg-laying qualities of the breed to be selected. Especially is this true in these times when meat production is a vital matter. It must be remembered that approximately half of the chickens raised will be males, valuable only from the meat point of view, and it must likewise be remembered that the laying hens must be disposed of for meat purposes after a comparatively few years' laying period. With this in mind it is seen that in at least this one respect the heavier birds, such as the Plymouth Rocks, have an advantage over the lighter breeds such as the Leghorns, though the Leghorns as a class may have demonstrated their superiority as egg producers.

On the other hand it must be remembered that the larger hen as a rule will consume more food than the smaller hen which is a point in favor of the strictly egg-laying type.

### Late Chickens.

It is getting too late now to be hatching chickens for winter layers. It is all right, however, to hatch them late for war purposes, as they will produce meat if not eggs. There will be little profit in it, however, unless one has cheap food. On the grain farms there is usually enough waste grain during the summer and fall to raise and fatten considerable numbers of chickens. Help to beat the Hun with the hen. J. D

### Tractor Plowing in Italy.

The number of tractor plows which are now employed in Italy is 600; 400 others are at present at Genoa and Naples, where they have been unloaded, and these are awaiting orders as to destination. In addition to the tractors already in Italy, there are 1000 additional machines on the way. All these tractors are of American manufacture.





# Ajax Shoulders of Strength

## More Rubber Where It Should Be

These bracing Shoulders of Strength—found only on Ajax tires—give to Ajax tires a greater resistance to wear. Because of these reinforcing shoulders, built in on both sides of the tread, Ajax tires have more rubber where it should be—more tread on the road.

With Ajax Shoulders of Strength, Ajax tires—**guaranteed in writing, 5000 miles**—roll up mileage records far beyond the guaranteed distance.

## 97% Owners' Choice

Ajax tires are 97% Owners' Choice. This huge percentage is chosen by individual owners to replace other tires that come on their cars. In 1917, Ajax tires won the title, "Dirt Track Champions of America." They swept the field in 237 dirt track races, at state fairs all over the nation.

MORE TREAD ON THE ROAD

Here's proof! **They win on roads you drive on.**

Investigate Ajax tires and inner tubes. Write for free books, "Ajax Shoulders of Strength" and "Ajax Wins Dirt Track Championships."

**AJAX RUBBER COMPANY, Inc.**
New York
Factories: Trenton, N. J. Branches in Leading Cities

MORE RUBBER WHERE IT SHOULD BE

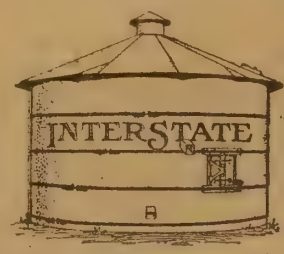
# AJAX TIRES



# THE DIFFERENCE IN DOLLARS

Grain can be stored in a good grain tank much more cheaply than it can be handled in expensive bags that last but one season.

## INTERSTATE GRAIN TANKS




A Good Grain Tank Is a Permanent Investment

come to you complete and all ready to set up; floor, skids for moving, ventilator, spouts. There isn't a better grain tank made; very few as good. The Interstate tank is built for years of satisfactory service. You can not do better anywhere for so reasonable a figure.

*Look Into the Matter Now While You Have Plenty of Time*

**McGoldrick Lumber Co.**
Spokane, Wash.

SEND COUPON TODAY
McGoldrick Lumber Co., Spokane, Wash.
Please send me full particulars regarding your grain tanks.
Name .....
Address .....
R. F. D. .....




GRANVILLE LOWTHER,
Editorial Contributor.

# Must Pollenize

## Nature Sometimes Requires Help

By GRANVILLE LOWTHER.

Pollen is the fine dust-like substance of the flower, the fecundating or male principle, and it is either carried by winds or by insects to the place of pollenation or fertilization. The varieties of flowers fertilized by the wind have very fine, light pollen grains, easily carried by the breezes, as in the case of oaks, willows, pines and most grasses. The pistils of these plants are long and feathery and to those who argue for "design in nature," they would seem specially formed to catch the pollen dust as it flies through the air. To those who do not believe in the "design" argument, it shows that through the long process of the evolution of life the tendency has been to the survival of the fittest, or best adapted, and the forms not adapting themselves by successive changes to their environments became extinct.

Cherry blossoms and those of other fruits are pollenated by insects and have showy colors, perfume, and a sweetish substance called nectar, to attract various forms of insect life, especially honey bees. As the bee reaches down for the nectar, which is near the bottom of the flower, it becomes dusted with the pollen; then when it visits another flower, some of this dust is almost sure to be brushed upon the stigmas awaiting to receive it. Does this seem a slow process for so small a fruit as the cherry? Well, it takes longer to describe it than to fertilize the flower. I have seen hundreds of bees at work in a single tree, and have soon a single bee visit more than 100 flowers in 40 minutes.

### Cross Fertilization.

Cross fertilization means the carrying of pollen from one tree to that of another variety. The Black Tertarian, Governor Wood, and other varieties, are sometimes crossed with Bings, Royal Anns and Lamberts. This is done for various reasons. The first is that it has been observed that almost universally cross fertilization gives greater vigor to the offspring. This is true in corn, wheat, oats and animals, so that it is recognized as a general law, with very few exceptions. Most trees have both the male and the female organs, yet it often occurs that a tree will not set fruit with its own pollen, and in such a case it is called "self sterile." If it sets fruit with its own pollen, it is called "self-fertile," but even then the fruit is more vigorous if the pollen is taken from a tree of another variety. In setting an orchard, it is well to observe this law, and set a few trees at least for pollenating purposes. In case the orchard is already set and this provision has not been made, then a few grafts of pollenating varieties may be inserted into each and every tree. Year before last A. H. Irish of Parker, in the Yakima valley, cut large bouquets from the Black Tartarian and Governor Wood varieties, placed them in picking buckets and hung them up in the trees he desired pollenated. The results were a very heavy crop.

# Potato Grading

## According to the U. S. Regulations

The "Potato King of the United States" has become famous and wealthy by a reputation for correctly grading potatoes. He is a Japanese merchant, and a millionaire. It has taken several years to build up a trade on that plan, but he has built it and accomplished more in a few years than most Americans accomplish in a lifetime.

At different times within the last few years I have written several articles on that subject, based on the analogy of apple grading, but now the theory is demonstrated by the success of one of the most successful men in the United States.

Furthermore, the government has undertaken recently to regulate the grading of potatoes and has sent out to the farmers in a very limited number certain printed regulations which make the following requirements:

U. S. grade No. 1 consists of potatoes of similar varietal characteristics, which are practically free from dirt or other foreign matter, frost injury, sunburn, second growth, cuts, scab, blight, dry rot and damage caused by disease, insects or mechanical means. The minimum diameter of potatoes of the rounded varieties must be one and seven-eighths inches, and the long varieties one and three-fourths inches.

U. S. grade No. 2 consists of potatoes of similar varietal characteristics, which are practically free from frost injury and decay and which are free from serious damage caused by dirt or other foreign matter, sunburn, second growth, cuts, scab, blight, dry rot or other disease, insects or mechanical means. The minimum diameter must be one and one-half inches. G. L.

### Diversity in Unity.

There is something of life in an atom;
There is something of love in a rose;
There is something of limitless power
In every wind that blows.
Out of measureless space comes matter;
Out of eternity, time;
And out of the discords of ages
Grow harmonies divine.
—Granville Lowther.

### Platinum in Spain.

Platinum deposits in the south of Spain, in a mountainous region known as the Serrania de Ronda, are reported to be extensive. The 12 or 14 rivers of the district may profitably be dredged for platinum gravel for some years to come.


# Hallocks

Pint Berry Hallocks, Berry Crates, and All Kinds of Fruit Boxes.

Inland Seed Co., Spokane, Wash.

# FRUIT BOX LABELS

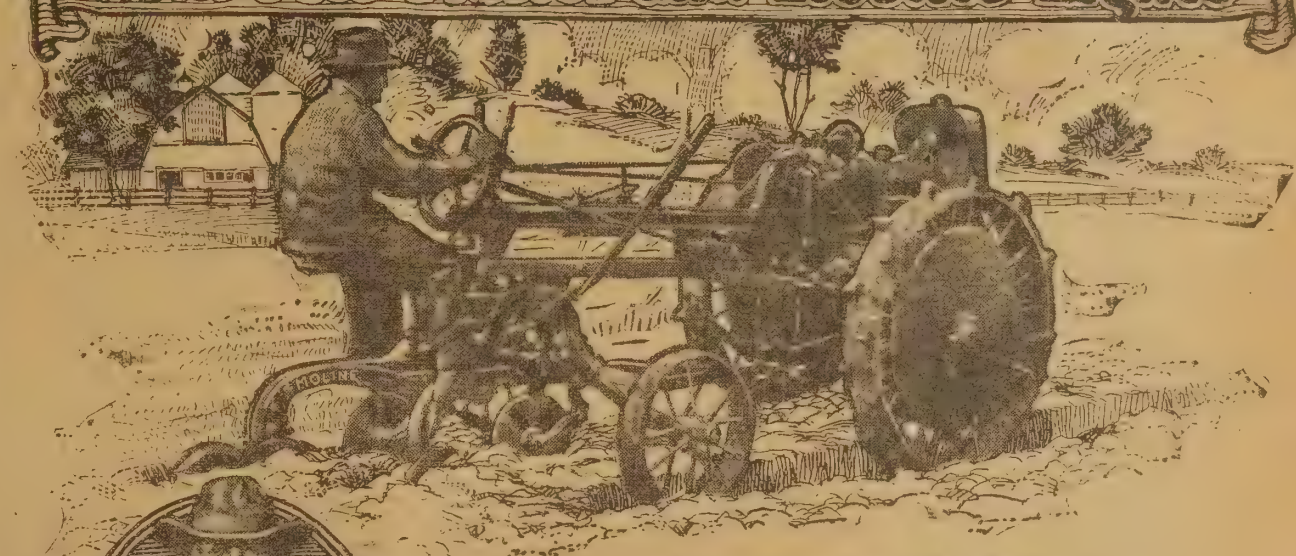
We manufacture a complete line of labels for all kinds of fruit boxes and cans.

Write for prices and full information.

TUCKER-HANFORD CO.
Seattle, Wash.

When you write to advertisers be sure to say that you saw their adverisement in this paper.

# With Self Starter and Electric Lights




Here's what one man and a Moline-Universal Tractor can do in one day of 10 hours:

Plow 7 to 9 acres.

Disc 27 acres with a 7-ft. tandem disc.

Disc 38 acres with a 10-ft. disc.

Harrow 76 acres with a 20-ft. peg tooth harrow.

Plant 22 acres with a two-row planter.

Plant 43 acres with a four-row planter.

Cultivate from 14 to 20 acres with a two-row cultivator.

Drill 35 acres with a 10-ft. grain drill.

Harvest 25 acres with an 8-ft. grain binder.

Harvest 10 acres with a corn binder.

Mow 25 acres with an 8-ft. mower.

Rake 40 acres with a 12-ft. rake.

Rake 25 acres with an 8-ft. side delivery rake.

Load 12 acres of hay.

In addition, it can be used on the belt for running threshers up to 24 inch capacity, silo fillers, corn shellers, feed grinders, wood saws, clover hullers, hay presses, pumps, lighting plants, etc.

There is no end of odd jobs that can be done with the Moline-Universal Tractor.

Announcing the New

# MOLINE UNIVERSAL TRACTOR

## Model D

BECAUSE of its ideal design, construction and performance, this new Moline-Universal Model D enables one man to farm more land and produce more food than ever before possible. It is the world's most dependable farm hand and solves the farm help problem.

### Most Advanced Construction

New features include self-starter, electric lights, electrical governor, perfected overhead valve, four-cylinder engine that is free from vibration; complete enclosure of all moving parts; differential lock which increases traction in soft ground.

Every part is designed on the basis of quality and service. Drop forgings, heat-treated parts, steel cut gears and unusually large bearings add extra years of endurance.

These new features, together with the well known Moline-Universal type—all the weight on two wheels, one-man control and ability to do all farm work including cultivating—make the Moline-Universal Model D the best tractor that money can buy.

### Phenomenal Pulling Power

Of its total weight of 3380 lbs., 98% is used for traction. That's why the Moline-Universal has phenomenal pulling power.

Conservatively rated at 9-18 horse-power, the Moline-Universal Tractor has more than ample power for heavy belt work. Its greater speed enables it to plow as much in a day with two plow bottoms as the ordinary three-plow tractor. Yet it is light enough for such work as cultivating, mowing, etc., which do not require as much power.

### One Man Operates Entire Outfit

The Moline-Universal attaches direct to the implement, forming one compact unit. It turns in a 16-foot circle and backs with the implement attached as readily as it goes forward. One man has complete control of the entire outfit from the seat of the implement and can thus do the same work that requires two men with other tractors. Operation of the Moline-Universal is so easy that a woman or boy can handle it.

In fact anyone who can drive an automobile can run a Moline-Universal Tractor.

### Moline Tractor Implements

The greatest care has been used in designing a full line of implements for use with the Moline-Universal. "Moline" trademark on a tractor or implement is a guarantee of dependable service.

Moline dealers are now accepting orders for Model D Tractors, and our new and modern plant—the world's largest exclusive tractor factory—is being crowded to the limit in an effort to build tractors fast enough to keep pace with the demand.

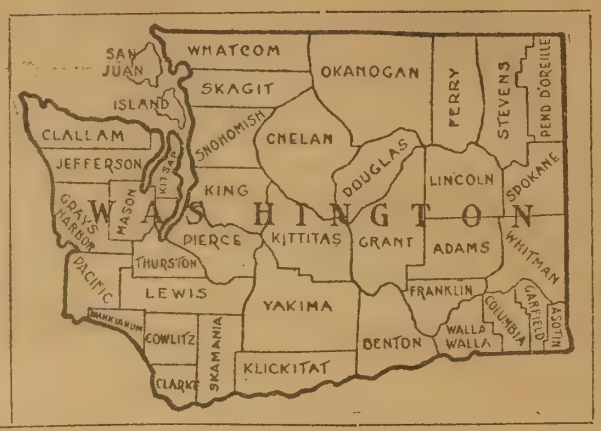
*On request we will be glad to send you our Tractor Catalog which completely describes the new Moline-Universal. Address Dept. 50.*

MOLINE PLOW CO., Moline, Ill.

*Manufacturers of Moline Quality Farm Implements since 1863*

# Rain Puts Life in Wheat

## Farmers Talk Elevator Because of high Price and Scarcity of Sacks—Alfalfa Will Make a Good Crop—Prospect of Fair Fruit Crop.




HARRINGTON, Snohomish County, Wash., May 20.—Spring planting is all done and most everything is up and looking well. We are having plenty of rain, but it is a little too cold. The farmers around here are aware that each man has to work a little harder and produce a little more to make up for those that are gone. Everybody has put in as much ground as possible. Less ground has been planted to potatoes, but more oats, peas and roots for the stock, as mill feed is so high that farmers will have to get a substitute in order to make a profit on his milch cows. There is a good prospect for a fair crop of fruit. There are still quite a few spuds left unsold as present price is about $1 per 100 pounds weight. Eggs are 40 cents per dozen and butterfat about 47 cents per pound. Stock is looking fairly good. Owing to the high wages farmers compelled to do their own work as much as possible.

A. B. NEIDERPRUM.

### Crops Look Good.

METHOW, Okanogan County, Wash., May 24.—The crop conditions are good right now. The rains and the cool weather is putting lots of life into the wheat. Alfalfa is growing right along and will make a good crop. The wheat farmers are mostly talking about building an elevator at Pateros owing to the high price and scarcity of sacks; the fruit farmers about the prospects for the prices on fruit this year; the dairymen on the butter prices, and all on the war. There are no retired farmers here to speak of, only heretofore the boys who are now in the service did most of the team work and the father the chores and now the latter has to do it all.

CHARLES GRANT.

### Seed Industry Is Growing.

MOUNT VERNON, Skagit County, Wash., May 24.—The rains of the last 10 days have put the crops in splendid condition. Pastures are in quite satisfactory shape and the oats are doing very well. Most of April and the first of May were almost without rain and crops were needing rain, but they are in good shape now. The milk price has dropped to $2.25 per hundred. In the face of the fact that official estimates put a price of $3.29 as the average cost of producing 100 pounds of milk during 1917, the farmers are not satisfied with returns from the dairy business. Quite a number of farmers have sold their entire herds and many have cut the herds down considerably. The seed industry is gaining here. There are between 500 and 600 acres of spinach for seed, probably about the same in cabbage seed and much in beet seed and peas. When grain prices become more nearly normal, the dairy business will again be more profitable. The average quality of the cows is being raised by culling out the inferior cows.

DR. C. S. PHILIPS.

### Spring Grain Looks Good.

CENTERVILLE, Klickitat County, Wash., May 20.—The grain crop development here in Klickitat county is in a very spotted condition. In a great many fields of winter wheat there is a very poor stand, being generally thought to be the poorest winter wheat in years, while the spring grain sown is in fine condition, probably offsetting to some extent the winter wheat condition. There is a small part of the winter wheat crop in extra good shape. The good rains in the last two weeks are making an extra good prospect for at least spring-sown grain, also the finishing of the summer fallowing, which is mostly through. It is also quite cool here, which is not very encouraging for gardens or the planting of corn. The farmers are mostly discussing how we will be able to get the harvest work done on the amount of help obtainable. With our sons going to the front all the time the boys on the streets are very conspicuous for their absence. We are getting nearer together as neighbors in that we are knowing more about our third Liberty loan, also Red Cross work, and that as a school district community everybody did their share. I know but very few retired farmers that are able to help but what are at it in some way or another. All the extra wheat that the farmers had stored in bins at home is being moved to the warehouses now. Not a great amount, but it will help a little. The fruit condition is rather frosty through this part of the valley, but is good along the Columbia river.

CLARENCE A. LESTER.

### Expect Heavy Yield.

COLVILLE, Stevens County, Wash., May 23.—Conditions in his county have improved greatly, with the continuous rainfall of the past week. Seeding is all done, and most of the grain is up and looking well. There is promise of a heavy crop, which will be a relief after two lean years. A bad frost following the rain nipped some of the early potatoes, but the main crop is not yet above ground and was uninjured. Sweet cherries are a failure, but all other kinds of fruit appear to be safe and promising a heavy yield. The labor situation is satisfactory. There is little complaint of shortage, and it does not appear that this section will have any trouble in taking care of all its farming operations. The farmers' minds are wholly on the season's work; the prospect for rain at the right time to insure the harvest; the possibility of early frost shortening the growing season; the importance of the crop in its relation to the needs of the government and the winning of the war; criticism of the inequalities in prices which farmers have to pay for supplies and machinery—all these are topics of conversation. Without doubt there is a deepening of patriotic interest in the outcome of the war. The Liberty loan went far into the back districts and the Red Cross drive found its heaviest support out in the country. Given a good crop year and the farmers will almost entirely take care of the next Liberty loan.

E. E. ELLIOTT.

### WHATCOM COUNTY.

#### The Season Is Ideal for Farmer.

Help shortage is felt in Whatcom county as in most places of the state. This spring has been ideal for farming, however, and we have had very little rain, which is unusual. Gardens are looking fine and oats and hay are coming right along. Milk is now selling at $2.35 a hundred and cream brings 40 cents a pound.

Dr. Pelton, state veterinarian, and Dr. Saperstein, a local man, have been very busily employed the last two weeks testing for tuberculosis in a great many dairy herds in the vicinity of Ferndale. A very small percentage of the herds tested reacted.

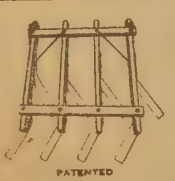
### Sheep and Hogs Increase.

W. S. Thornber, head of the extension department of the state college, is authority for the estimate that there are 20 to 25 per cent more sheep in this state this year than last year. His estimate on the hog increase is that there are in the state this year about six hogs where there were only five last year, an increase of something like 20 per cent. Dairy stock and other live stock, other than hogs and sheep, he believes to be about holding their own.

### Trouble With the Aphis.

In parts of western Washington there is considerable anxiety over the aphis. Some of the vetch fields are practically ruined by them. In some cases fields that were seeded last fall are being plowed up and seeded to spring grain because of the small chance of getting a crop of vetch. There apparently is no remedy.

A. B. M.


**Help Is Scarce**

The Jones Weeder will save 50 per cent of labor; cultivate 30 to 40 acres of summer-fallow per day and do it better, instead of 10 to 20 by the usual method. Couples up like a harrow; use as many sections as wanted. For booklet, prices, etc., write

**C. E. Jones, Heppner, Ore.**

**THE SELF-OILING WINDMILL**

has become so popular in its first three years that thousands have been called for to replace, on their old towers, other makes of mills, and to replace, at small cost, the gearing of the earlier Aermotors, making them self-oiling. Its enclosed motor keeps in the oil and keeps out dust and rain. The Splash Oiling System constantly floods every bearing with oil preventing wear and enabling the mill to pump in the lightest breeze. The oil supply is renewed once a year. Double Gears are used, each carrying half the load



We make Gasoline Engines, Pumps, Tanks, Water Supply Goods and Steel Frame Saws.

**Write AERMOTOR CO., 2500 Twelfth St., Chicago**

*I Am Interested*

and ask you to mail to me full information and

*FREE BOOKLET*

describing the possibilities of Stevens county logged-off lands.

Name .....

Address .....

CUT OUT THIS COUPON

and the booklet and information will be sent to you by return mail.

*Phoenix Lumber Co.*

Farm Dept.,
SPOKANE, WASHINGTON

**THE ROWELL AUTOMATIC SILO FILLER**

BEST OF ALL. Wm. Fenning, Bryant, Ind., says, "We filled four silos all 30 ft. high with ROWELL AUTOMATIC, and think it the best silo filler we ever saw work." Save your ensilage---buy

**The Rowell Automatic Silo Filler**

Is STRONG, EFFICIENT, DURABLE, cuts ensilage evenly and perfectly. No danger of accidents, light running, big capacity. Seven sizes. Made by a reliable firm of fifty years experience. Investigate the Rowell line before yu buy. *Free Illustrated Catalog*

**THE I. B. ROWELL CO.**
Waukesha, Wis.



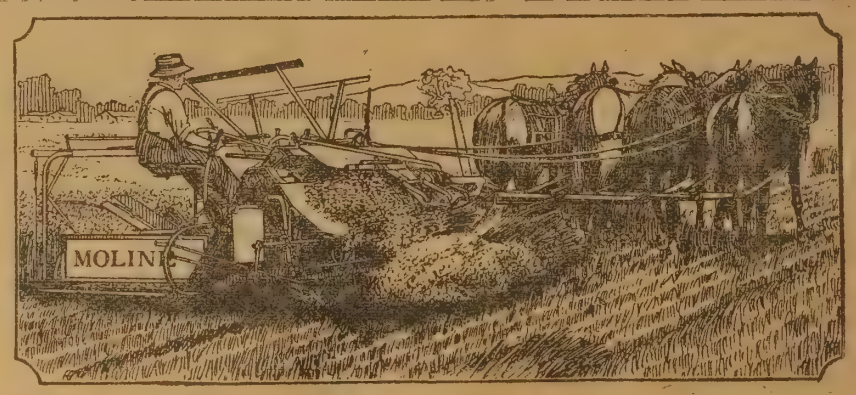


THE RUSSELL PEA AND BEAN THRESHER
BUILT IN ALL SIZES

**RUSSELL** ENGINES BOILERS SAW MILLS THRESHERS TRACTORS

BEAN AND PEA THRESHERS
— CLOVER HULLERS —
CALL OR WRITE FOR PARTICULARS

The A. H. AVERILL MACHINERY CO
SPOKANE — PORTLAND — SAN JOSE




**The Moline Grain Binder**

**The Best Work Under the Worst Conditions**

THE Moline Binder has a record of of over 50 years of good, honest service wherever grain is grown. In difficult work, in continuous running without stops or breakdowns—in short, in an emergency, Moline superiority is apparent.

The Moline Grain Binder is built from the ground up of the best materials by skilled workmen and has been gradually developed and improved until it is as near perfection as possible. It is built to do the best work even under the worst conditions. That's why a Moline Binder user is never satisfied with anything else.

When you buy a Moline Grain Binder you get the benefit of 50 years' service, the lightest draft, the greatest stability, the strongest construction and the greatest reliability in a grain binder—you get crop insurance.

A typical instance of Moline performance under unusual conditions is reported by Jerry Rivard of Boubonais, Ill., as follows:

The Moline 8-ft. Binder bought of you I used in cutting 110 acres of grain. I cut seven acres of new ground where I did not think it could do the work, being very trashy ground, and the men present insisted I was doing wrong to try to cut it with a binder, but the Moline Binder went through, cutting all. I never missed a bundle and never broke anything. I consider this remarkable, considering the condition under which the test was made.

We have many letters such as this on file, all equally enthusiastic over the work of the Moline Binder.

The frame of the Moline Binder is extra strong, making it particularly good for tractor use.

See your Moline Dealer about the Moline Binder now, or write us for full information.

Dept. 50.

MOLINE LINE

*Corn Planters. Cotton Planters. Cultivators. Corn Binders. Grain Binders. Grain Drills. Harrows. Hay Loaders, Hay Rakes. Lime Sowers. Listers. Manure Spreaders. Mowers. Plows (chilled and steel). Reapers. Scales. Seeders. Stalk Cutters. Tractors. Farm Trucks. Wagons and Stephens Salient Six Automobiles.*

**MOLINE PLOW CO. MOLINE, ILLINOIS**

MANUFACTURERS OF QUALITY FARM IMPLEMENTS SINCE 1865

## Protest at Once

### Railroad Rates Are Boosted High

(Continued from page five.)

the Atchison, Topeka & Santa Fe system. The figures quoted below are taken from the annual report of that railroad, as submitted by President Ripley at the annual meeting two weeks ago:

For the calendar year ended December 31 last, the Santa Fe earned $165,529,519. After the payment of operating expenses and taxes, a balance remained of $48,346,700. After payment of interest on bonds there remained nearly $32,000,000. After the payment of $16,486,402 in dividends on the common stock, equivalent to 7 1-2 per cent, there still remained a surplus of $15,490,460. In other words, the Santa Fe common stock actually earned nearly 15 per cent in 1917.

The Pacific coast industries are supporting their railroads handsomely. But in some other sections of the Union railroad earnings are in distress and the government is facing a large deficit under its guaranteed plan of operation.

To meet that deficit Director General McAdoo has ordered a sweeping increase in freight rates and fares of 25 per cent, to be applied indiscriminatingly to all the railroads of the country—to the roads that are earning enormous surpluses as well as the lines that do not pay.

If that unscientific and unjust plan should be permanently applied, it will mean that the people and the industries of the Pacific coast, in addition to supporting their own roads, will have to go deep down into their pockets to help support unprofitable roads in the south, New England and some parts of the central west.

It may be true, as Mr. McAdoo says, that the increases will not inure to private profit.

"If they turn out to be more than are needed to meet the grave public exigency," he says, "they will promptly be readjusted so as to prevent any unnecessary burden upon the public, but pending such readjustment, the excess, if any, will be for the benefit of the people of the United States as a whole and not for the benefit of private railroad owners or any of them."

But that dos not alter in the slightest the fact that the people and the industries of the Pacific northwest will suffer a grave injustice. They are to be excessively taxed for the relief of distant communities.

This is a big issue—none bigger now confronts the producers of Washington, Oregon, Idaho and Montana. How shall it be met?

By quick, emphatic protest.

Protest to your senators and representatives in congress.

Protest to Secretary McAdoo.

Protest to your state railway commission, for while Mr. McAdoo holds that state commissions have no authority to change the rates, he has telegraphed to the chairmen of the state commissions that he will welcome suggestions for readjustments and these will be referred to the interstate commerce commission for its consideration in passing on specific complaints. State commissions may also enter formal protests direct to the interstate commerce commission.

Every producers' organization should call immediately a special meeting to act upon this dangerous situation. Protests should roll in from granges, from farmers' unions, from farm loan associations, from fruit growers' organizations, live stock associations, and from the Nonpartizan league.

Don't delay a day. Protest now.

## Implement Retailers

### Must Not Make Too Much Profit

Retailers of farm equipment are not required to secure licenses, but they must not profiteer, says a statement issued by the United States department of agriculture explaining certain features of President Wilson's recent proclamation establishing a licensing system for the farm implement trade.

The provisions of the food control act of August 10, 1917, under which was issued the president's proclamation of May 14, 1918, bringing under license the manufacture, importation, distribution and storage of tools, implements, machinery and certain other farm equipment, expressly exempt retailers as such from the licensing requirements, and define a retailer as "a person, copartnership, firm, corporation or association not engaging in the wholesale business whose gross sales do not exceed $100,000 per annum." However, under the provisions of the food control act, retailers will not be allowed to profiteer; under the regulations issued with the president's proclamation retailers engaging in such practice will not be able to secure a supply of farm equipment.

The regulations provide that a licensee shall not, without the express sanction of the secretary of agriculture, sell any farm equipment to any person engaged in the business of selling or utilizing such equipment, if the licensee has knowledge that such person, after the regulations became effective, has violated the provisions of the food control act by making an unjust or unreasonable rate or charge in selling or otherwise handling or dealing in such equipment or by holding, contracting for or arranging for a quantity in excess of the reasonable requirements of his business for use or sale by him for a reasonable time.

## Uncle Sam Wants Hides.

Dealers in the west must give the government first chance at the hides that they have to sell, according to an announcement from the national capital. Before any hides are offered on the general market they must be offered to the government and it be given 48 hours to reject or accept the offer.

### Had No Terrors for Him.

Murphy, says the San Francisco Argonaut, was making his first trip across the Atlantic, and he felt unspeakably awful. He failed to connect the fact of his being on the briny ocean for the first time with his agony. The doctor came to him as he tossed about in his berth.

"Cheer up, man," he said heartily. "I know you're feeling rotten, but you're not going to die."

Murphy opened horrified eyes. "Not going to die?" he wailed. "Faith, doctor, I thought I was! That was the only thing that kept me alive."


# Berry Boxes Crates

LAY IN YOUR SUPPLY

So many spruce mills are producing no veneered goods—there is a possibility of a shortage of boxes. We are quoting subject to stock.

Write for prices.

Giving quantity and date of delivery required.

**Spokane Seed Co.**

First Ave., Cor. Lincoln St.
SPOKANE.



**OWENS** Double-Cylinder

Bean and Pea Threshers

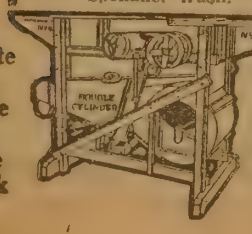
from the largest to the smallest size, embody the essential features necessary to **thresh all varieties of peas and beans** direct from the rankest vines without splitting any of the seed.

They have more separating space and capacity than any machine on the market.

If you need a pea or bean thresher at all, get an "Owens."

They are the standard the world over. Built in sizes to suit any size grower from the smallest to the largest, and there are none better at any price.

MITCHELL, LEWIS & STAVER CO.
Distributing Agents,
Spokane, Wash.



Write at Once for Free Book

Make Us Prove All Our Claims! Get the Book



# No Worry About Harvest



HAVE you noticed how discussion of the food supply situation seems to center around the number of acres it is possible to plant rather than around the harvesting of those planted acres?

It is an unconscious, but none the less wonderful, tribute to the genius of the inventors of the reaper and binder that the American public takes the harvesting of the greatest grain crop ever planted as a matter of course. The sole question now is, "How many acres can we plant?" The power and help required by the planting will be amply sufficient for the harvest where **Champion, Deering, McCormick, Milwaukee** or **Osborne** binders and binder twine are used.

And, where they are used, the harvest will be complete. No matter whether the grain be tall or short, heavy or light, standing or down, lodged and tangled, an International Harvester binder cuts and binds it all without waste.

It is an easy matter to be fully prepared for harvest. Buy the largest binder you can use. An 8-foot is better than a 7, and a 7 better than a 6 or 5 because the larger sizes conserve labor. Buy a new machine if there is any question about the efficiency of the old one. There is a limit, you know, to the dependability of repaired machines, while a new one is absolutely reliable.

Through our 90 branch houses and over 30,000 dealers, we furnish promptly either new machines or repairs for old ones. Do not hesitate to call on our organization for any help we can give in the harvesting of this year's grain crop—the most important crop ever raised. See the local dealer or write us direct.

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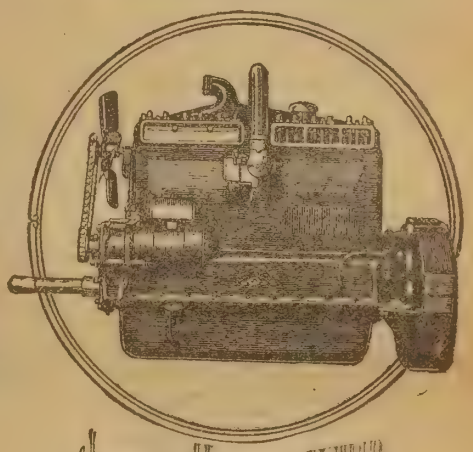
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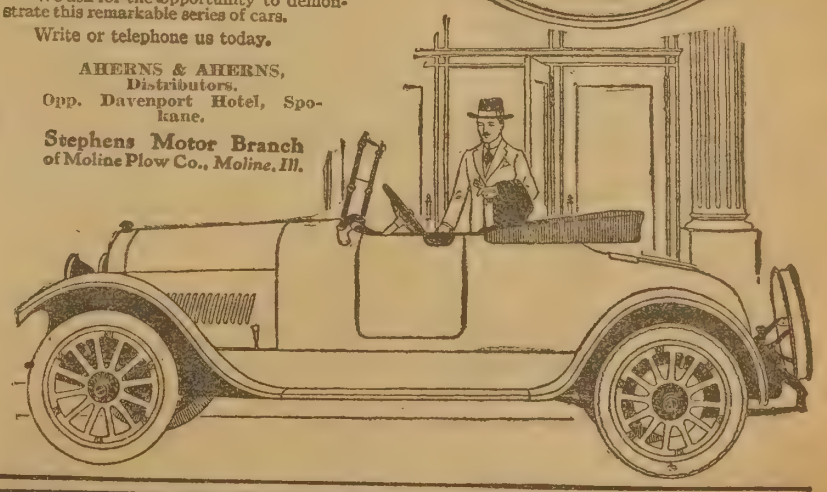
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# Grange Master Reviews the Year

## *State Organization Hears Recommendation for Its Future Endeavors*

The farmers must continue to feed the allied world; they must continue to stand loyally behind the government in the prosecution of the war to a successfull conclusion. This is the declaration made by Master William Bouck of the Washington State grange in his message to the state convention of the order at Walla Walla this week. His message covered a wide range of subjects. Among the points emphasized by him were the following:

The price of things the farmer has to buy should be regulated if the price of what he sells is regulated; that

The real farmers have not been adequately represented in governmental affairs; that

The war should be financed by taxes on excess profits, and not by bond issues; that

Government operation of the merchant marine and the railroads is desirable after the war as well as during it; that

The "infamous long and short haul proposition" as to freight rates should be wiped out of existence; that

The government should take over control of waterpower, mines, oil wells and phosphate rock deposits; that

Unfair dealing on the part of the large packing companies should be vigorously suppressed; that

Cooperative farm distilleries for the manufacture of denatured alcohol for power fuel purposes should be developed to utilize certain wastes of the farm; that

A federal law should be enacted providing a system of personal credit to farmers; that

A workable federal marketing law should be enacted and marketing facilities operated cooperatively; that

A standing committee of farmers be alert to work for the improvement and equitable administration of grain grades; that

The grange must work for national woman suffrage;

The legislature can be and should be controlled by the farmers and other producers; that

Commission government is preferable to the present form; that

The grange members should stand behind the initiative measures presented by the order's legislative committee; that

The general property tax should be superseded by a straight land value tax; that

Good roads are utility roads, and the grange stands for the utility policy; that

The grange is still strongly behind the prohibition movement; that

The grange favors improved educational systems and methods; that

The California system of free text books should be adopted by this state; that

The state college should receive the warm support of the grange; that

Genuine cooperation must be adopted and common cause made with the nonpartizan league and other farm organizations, and that

The spirit of the grange is nonpartizan, but that it sees good in all parties and must take an active part in politics for the general welfare.

**New Granges Organized.**

Speaking of the condition of the Washington grange, Master Bouck said: "During the period since the last state grange session there have been organized about 75 subordinate granges, as compared with about 40 the year previous, two pomonas, and one pomona has been reorganized. Without doubt the condition of the order in the state is as good as it has been for several years, and the statistical report of the secretary will show the largest number of members for several years. We have been hampered much by lack of workers, caused by older ones wearing out and passing away, and during this whole year we have had to break in new deputies. Nevertheless, we point to the fact that, due to the loyalty and willingness of the patrons of the state to work for the cause, instead of a slump, as some thought inevitable last year, we are showing a substantial gain.

"In this respect I must say that much depends upon the pomona master, and in counties where the pomona master visits his granges there is not much need of help from the state grange. I am more and more of the opinion that each pomona should establish a fund for traveling expenses of its master and then see that the master makes his regular visits to the different subordinate granges. Indeed, this seems to me to be the solution of 75 per cent of grange troubles.

"The strength of the order is the subordinate grange. Every effort and thought that can in any way aid in strengthening this, the vital part of our organization, should be put forth at this meeting. The great inspiration of a grange is work and service. When the burden of the farmer once impresses itself upon the body of a grange and the members all get a spirit of service there will be no stopping the growth and influence of that grange. One way to bring this condition about is to get a large number of working committees and their reports coming in, as they will, on the many subjects. This will go a long way to arouse and educate the members to the value of their organization. From this to getting under the farmers' burden, is a short step, and this and other steps can often be guarded by the Pomona master if he is watching the granges as he should be."

Relative to the relation of the grange to other farm organizations, the master said:

"I believe the time is at hand when the grange must make common cause with other farm organizations in this state. We can not be indifferent to the mob attacks on the nonpartizan league and its leaders; we can not stay divided in the face of the enemy profiteers, who will attack us as soon as this sister organization is ruined; this band of plunderers are whispering to some grangers: 'It is just disloyalty we are after.' It is the organized farmer they are after. Let no one be deceived. And, to be right with ourselves and the other farmer, we can not ignore this lawless attack on the nonpartizan league."

**Must Play Political Part.**

Concerning political activity, he declared that the grange has always been in politics and can not stay out. "Many well meaning farmers of the old school believed that it was right to stay out of politics," he said, "but when they viewed their tax receipts, or hefted the returns from their crops representing their year's labor, they found the other fellow was in politics for his benefit and their destruction, and that same fellow encouraged the farmers to stay at home and raise more crops and let him tend to the political game—which he did, to the farmers' undoing and ruin. This is becoming better understood by the farmer every day, and he is now taking up his political duties. In a democracy like ours, no one class of society can neglect civic duties or civic obligations without suffering the consequences. This is as immutable as the laws of the universe. The farmer has come to a realization that the 35 per cent he has been receiving for his products is a direct result of shrinking his duties as a citizen. If he is not ready to assume these, he had better change his residence to Germany or some other autocracy, where he will not have to think—some one else will do that for him.

"The grange is not a political party—we see good in all parties. The platform and spirit of our order is nonpartizanship, and in this light, and with this weapon, and with this spirit, we are going forth to win our principles. I believe all members and prospective members should study the declaration of purposes of the grange carefully."

The following statement as to the initiative measures was made by Master Bouck:

"Your joint legislative committee has prepared and now are circulating three peititons to be placed upon the ballot this year. They are all measures indorsed by the grange over and over again. They are:

(1) No. 31, a marketing and public ownership measure which, if adopted, will make each community economically independent, as recommended by Brother Kegley in his message last year. It will be the means of aiding the farmer to market his own goods in a manufactured form direct to the consumer.

(2) No. 32, an anti-injunction measure. If you will take the trouble to look up the history of the attempts of farmers to set a price on their own products you will at once see the need of this law in our state, where the farmer will soon be doing this if you adopt this previous measure, No. 31. This is also desired by the labor unions of the state.

(3) No. 33, the nonpartizan measure we tried to get on the ballot two years ago and failed. Before the farmer can control the legislature he must have a nonpartizan law on the statute books, for the farmer has not gotten to the same point as the business men of regarding politics as a business proposition and party as second to this.

"This proposed law will also stop any paper from taking money to influence elections and any paper publishing any advertisement must state who paid for it. This is one reason why so many of our papers and politicians are opposed to this law. I wish to introduce the figures on officials and measures of our last election. Study them carefully until you get the full significance of that vote and when you do so as a body, nothing will stop the farmer henceforth from getting his own measures through."

**Colored Comic Pictures.**

The comics, in which the little folks and lots of the older folks find so much pleasure, are omitted this week because they did not arrive in time. They will be in next week's issue, and they will be funnier than ever. Look for them June 13.

# Honey Marketing Should Be Studied

**Article 7, By GEORGE W. YORK.**

It is one thing to produce a crop of honey, and quite another thing to dispose of it profitably. Very few beekeepers are salesmen—or saleswomen. Many a crop of fine honey has been secured, and, because of ignorance as to the best way to put it up for market, or else ignorance of the proper prices or values, it has been sold for much less than its real value, or at a positive loss to the producer. Here is where a bee paper with honey market quotations is worth many times its yearly subscription price.

If the surplus honey crop is produced in the one-pound sections, and is to be sold to grocers, the best way is to put it in the usual 12 or 24 pound shipping cases; but first, of course, see that all bits of bee glue or comb are scraped off the outside of the wood sections. Some even go so far as to sandpaper the outside of the sections before placing them in the cases.

If the cases of comb honey are then to be sent to a distant market about eight of the cases should be put into a crate that is made to hold them snugly around the sides and deep enough so as to have several inches of straw or hay under the cases, to act as a cushion, which prevents the combs from breaking out of the sections when shipping by freight. It is also a wise precaution to have handles on these large crates, so that the freight handlers can get hold of them easily, and not turn them over.

But if the honey crop is in the liquid or extracted form, then it should be put into five or ten pound friction-top tin pails, with neat labels on them. This is perhaps the most convenient and economical form in which to put it up for sale. Quite a good deal of extracted honey is put up in glass packages, either the one or two pound sizes, but these are expensive and can not well be shipped without risk of breaking in transit.

There are few families but what can afford to buy at least five pounds of honey at one time, and as it keep indefinitely it is cheaper to get it in such quantities.

**Where to Keep Honey.**

Some who are unfamiliar with honey make a mistake in keeping it in a cold place, such as a refrigerator. Honey of any kind should be kept in a dry, warm temperature. The top pantry shelf is a fine place.

Most honey will granulate in time, and especially in cold weather. Some people prefer to eat it in that form. But if it is preferred in its original liquid form, then all that is necessary to reduce the granulated into liquid is to heat it, but care must be taken not to overheat it, as that would spoil its delicate flavor. It will stand as high as 160 degrees, Fahr., but only for a very short time. But it is not necessary to heat it to so high a temperature, for it will become sufficiently liquid at a lower degree of heat.

Since the war has required a saving of sugar, honey is very rapidly coming into its own as a staple sweet. For many years it has been considered as a luxury, which is indeed a big mistake. While its price has, for a long time been about twice that of sugar, its sweetening power is also about twice that of sugar. And besides, honey is so much more healthful than sugar, for honey is somewhat predigested, and thus is more readily assimilated by the human system. It is very strengthening and nourishing, and really should be used much more regularly on the tables of all than it is today.

Because of the great value of honey as a food, and also because it is so easily secured by all who live in the country, are two of the principal reasons I am urging every farmer to keep a few colonies of bees. Yes, I know some of the expert beekeepers are opposed to the general farmer keeping bees, on account of their carelessness in regard to bee diseases, but I do not advise any one to keep even a few colonies of bees unless he or she will get all the information possible on the subject and be determined to do the work in a proper manner. Most states now have good bee laws that are fairly well enforced, and surely any one who desires to produce honey even for home use will be glad to keep his bees free from disease, or at least cooperate with the legally constituted authorities to prevent the spread of any disease should it get started.

Later on I will write an article on wintering bees, for this is a very important subject, but before closing this one of the series I want to suggest that women consider the keeping of bees. More and more our women folks are entering fields of labor that some years ago were thought unsuitable for them. But beekeeping, like poultry keeping, dairying, etc., is well adapted to women, as they (the women) are usually careful, neat and well adapted to attending to details, and surely beekeeping is a business of details, and yet coming easily within the strength and ability of the ordinary woman.

I made an investigation some years ago and found that in a list of some 6000 beekeepers there were 300 women, or one in 20. I could name quite a few women in the United States who are today making a fine success with their bees. More of them could just as well follow their examples if they were determined so to do. One of the bee papers has a department exclusively for women, conducted by Miss Emma Wilson of Illinois, who has been very successful with bees for upward of 30 years.

**Serve Double Purpose.**

American Y. M. C. A. trucks and automobiles were placed at the disposal of the allied armies and used in transporting wounded men during the recent drive on the western front.

## Free Information

### Also Some Valuable Books

The service rendered by The Washington Information Bureau, at Washington in distribution of publications is designed to be continuous.

From time to time new books have been listed, but those previously announced are still available.

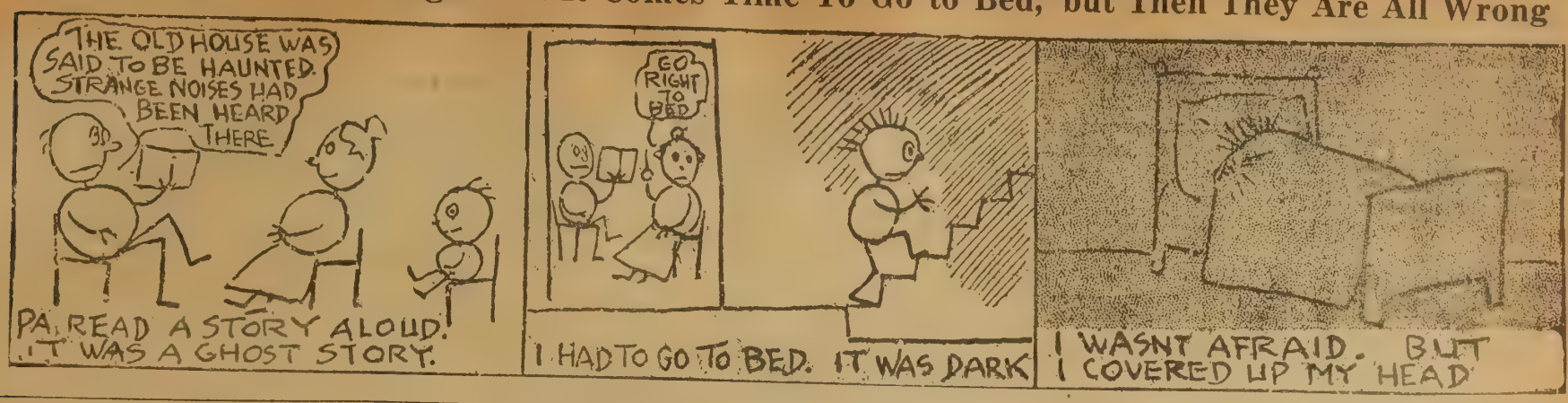
Either of the following may be obtained for a 2-cent stamp to cover cost of mailing. There is no charge of any kind.

Book on Canning.
"German War Practices."
Book on Colds.
Garden Book.
Book on Knitting.
War Cookbook.
Book on Navy.
Book on Drying Fruits.
Book of Recipes.
Bread Book.
"How War Came to America."

Write today and ask for free copy. Inclose a 2-cent stamp for return postage and be sure to write your name and address plainly. Direct your letter to The Washington Farmer Information Bureau, Washington, D. C.

P. S.—The information bureau at Washington will answer any question you may submit. Answer will be sent by letter. Just inclose a 3-cent stamp for return postage. Note carefully the address given above.

## Ghost Stories Are All Right Till It Comes Time To Go to Bed, but Then They Are All Wrong




F. Opper, in the Chicago Herald.

### Explained.

The solicitor had been away in the country calling upon a client, but on his returne there were signs of loafing and laziness on the part of the junior clerk.

"Thomas, that typewriter has not been touched today!' snapped the man of law.

"Oh, sir!" ejaculated the junior. "Why, I was using it only an hour ago!"

"Then," thundered the employer, "how comes it that there's a spider on the machine, and that he's woven a web over the keybyoard?"

"Sir," remarked the lad, 'I'll tell the truth." There was a fly in the works of that machine. Rather than waste my time in entrapping the insect, sir, I-er-introduced the spider, sir!"—Exchange.

### Pat Came Out Winner.

There was no doubt about it. Pat was in a bad state. His nose had assumed twice its normal dimensions, his left eye had gone in for art shades, and he badly wanted a new set of teeth.

"Shure, and it was that baste Maloon did it!" he remarked in reply to his wife's indignant question.

"Phwat? D'ye mean to say as ye were licked by a mean, grousy, little whippersnapper loike Maloon? Why, he——"

"Whist!" said Pat painfully. "Don't shpake evil av the dead!"

### Where They Belonged.

Whistler was once taken by a friend to the home of a newly rich millionaire who had been gathering a collection of dubious paintings supposedly by old masters. After Whistler viewed the collection his friend said:

"Now, Whistler, Mr. Blank wants to make provision in his will to bequeath these paintings, and he would like a suggestion from you as to which institution to give them."

Promptly came the answer: "The East End Institution for the Blind."—Grit.

### An Inconvenient Arrangement.

Little Betty, just initiated in the first teachings of Sunday school, has displayed especial interest in a future life.

"Mother, will I go to heaven when I die?"

"Yes, if you are good."

"Will my dog go, too?"

"No, because dogs have no souls."

A pause, then, eagerly, "Well, will our cow go?"

"No. Animals have no souls."

"Oh, then we'll have to go to hell for our milk."—Harper's Magazine.

### Time.

They were at the first gate in the moonlight and he had asked her to be his wife. With outstretched arms and a throbbing heart he awaited her answer.

"George," she said in a nervous whisper, "you must give me time—you must give me time."

"How long?" he hoarsely asked, "a day, a week, a month, a year"

"No—no, George," and she quickly scanned the sky, "only until the moon gets behind a cloud."—Portland (Me.) Journal.

### In Another Form.

Two British soldiers went into a restaurant at Saloniki and asked for Turkey with Greece. The waiter said:

"I'm sorry, gentlemen, but I can't Servia," whereupon the Tommies cried: "Fetch the Bosphorous!"

When that gentleman arrived and heard the complain, the manager said:

"Well, gentlemen, I don't want to Russia, but you can not Roumania."

And so the poor Tommies had to go away Hungary.—The Scottish-American.

### Real Generalship.

"Here, boy, take these flowers to Miss Fannie Honeysome, room 8."

"My, sir, you're the fifth gentleman wot's sent her flowers today."

"What's that, you grinning dub? What's that you say? W—who sent the others?"

"Oh, they didn't send any names. They all said: 'She'll know where they came from.'"

"Well, here, take my card and tell her these are from the same one who sent the other four boxes."—Anonymous.

### Next Best Thing.

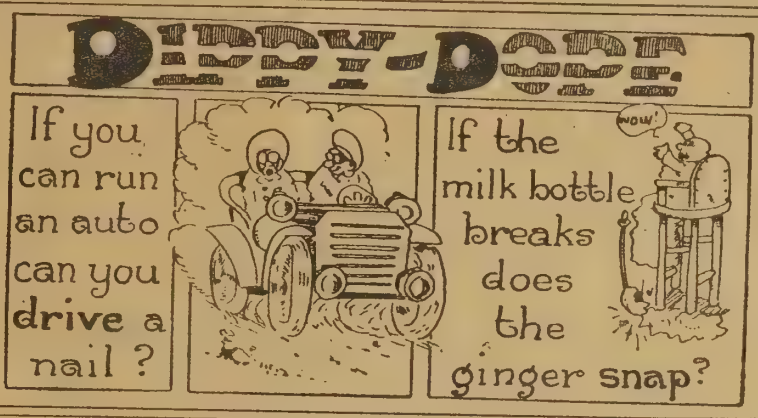
A very punctilious officer, who was a long way from the resources of civilization, sent one day for the sergeant, to ask him how long it was since the men changed their shirts.

"A month, sir," was the reply.

"But the regeulations say that the men must change their shirts once a week at least."

"They haven't any shirts to change into, sir."

"Then let them change shirts with one another."




## Great Spectacle Coming Saturday

Some of the people of Washington, Oregon and Idaho are to have the rare privilege day after tomorrow, Saturday, June 8, of seeing a total eclipse of the sun. All the rest of the people of the three states will be treated to a partial eclipse, ranging from the slightest bit of light to one with perhaps one-tenth of the surface of the sun exposed.

An eclipse of the sun is not something wonderful or supernatural. It is merely unusual, but quite natural. All the bodies in space, including the sun, moon and earth, are in motion traveling in regular orbits or routes about each other. The eclipse of the sun occurs when the moon comes exactly between the sun and the earth, shutting off the light from the sun.

The movements of the sun, moon and earth are so accurately known by astronomers that they can calculate exactly the time that an eclipse will occur and exactly the place that it will be seen at that time. The eclipse for June 8 occurs as follows:

It begins in this country on Willapa Harbor, Wash., traveling in a southeasterly direction from the Pacific ocean. It travels in the same direction across the United States, going out into the Atlantic ocean in Florida. It will be total at any given point along this path for about two minutes or a little less. The path in which it will be total will be about 70 miles wide. Outside this path the eclipse will be partial, the light becoming greater the farther one is away from the path.

The darkness that will be seen is nothing more or less than the shadow of the moon, like the shadow that a marble, if suspended in the air between an apple and a light, would cast on the apple. This shadow appears at or near South Bend, Wash., at 2:55 o'clock in the afternoon, standard time, or 3:55 by the advanced time of this country now. It will reach Baker City, Ore., at 3:05 standard time, or 4:05 by the advanced time. This shows it to be traveling along the earth surface at the rate of about 25 miles a minute. From this it can be calculated about when it will appear at any of the places along the path.

The eclipse will be total along a path including, among others, the following places:

**Washington**—South Bend, Raymond, Centralia, Chehalis, Toledo, Castle Rock, Mt. St. Helens, Goldendale and nearby points.

**Oregon**—Blalock, Ione, Heppner, Baker City, Durkee, Huntington and nearby points.

**Idaho**—Weiser, Payette, Idaho City, Hailey, Carey, American Falls, Pocatello, Soda Springs, Montpelier and nearby points.

South Bend and Goldendale in Washington, Baker City in Oregon, and Pocatello in Idaho are practically in the center of the path of the eclipse. It will be total for a short period of time at any point 30 to 35 miles distant from a line drawn between these cities on the map. At a distance of 100 miles 97 to 98 per cent of the surface of the sun will be hidden by the moon. At a distance of 200 miles from 94 to 95 per cent of the surface of the sun will be hidden. From this it appears that at no point in the states of the northwest will the eclipse fall much below nine-tenths dark.

## City Is So Different From the Country Anyway




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### It Always Pulled Him out.

A gentleman who was visiting his lawyer for the purpose of making his will, insisted that a final request be attached to the document. The request was that his Ford car be buried with him after he died. His lawyer tried to make him see how absurd this was, but failed, so he asked the gentleman's wife to use her influence with him. She did the best she could, but also had to admit failure.

'Well, John," she said finally, "tell me why you want your Ford car buried with you?"

"Because I have never gotten into a hole yet but what my Ford could pull me out," was the reply.—Everybody's.

### A Possible Reason.

Beanborough always looks on the bright side of things."

"Why?"

"Well, the other day I went with him to buy a pair of shoes. He didn't try them on at the store, and when he got home he found that a nail was sticking right up through the heel of one."

"Did he take them back?"

"Not much. He said that he supposed the nail was put there intentionally to keep the foot from sliding forward in the shoe."—Harper's Magazine.

# Women War-Workers



Women at work in a British shell-filling factory

A tractor being overhauled by British women mechanics

Women and girls doing rough work in British naval yard

British official estimates state that since the war began, some 1,400,000 women have directly replaced men, and some 600,000 are employed directly on munitions. The replacement of men by women has, comparatively, not been extensive in the United States as yet. But day by day we hear of new occupations entered, and old ones extended. Women are the reserve labor power of the nation, and, if the war goes on, will inevitably be called into industry in greater and greater numbers. Increasing demands will be made upon them, unwise sacrifices will without doubt be demanded, short-sighted attempts will be made to break down labor laws. But because, in the light of England's experience, and of our own best industrial practice, we know that exhausted workers mean decreased production—and because in the case of women workers, they mean, too, a deterioration of the race, the people of the country must be on guard with that "vigilance" demanded by its chief of ordnance "lest the safeguards with which the people of our country have sought to protect labor should be unwisely and unnecessarily broken down."

"In view of the urgent necessity for prompt increase in the volume of producion of nearly every article required for the conduct of the war, vigilance is demanded of all those in any way associated with industry lest the safeguards with which the people of this country have sought to protect labor should be unwisely and unnecessarily broken down."

This sentence sounds the keynote of the industrial policy of the two great divisions of the United States army—today placing numberless contracts of fabulous size and value—the ordnance department and the quartermaster's department.

In "General Orders No. 13," from which this sentence is quoted, issued not long ago by the ordnance department and later adopted by the quartermaster general, are set forth in some detail the principles of this policy, and in no uncertain words the reason for its existence. "It is a fair assumption," it goes on to say, "that for the most part these safeguards are the mechanisms of efficiency. Industrial history proves that reasonable hours, fair working conditions, and a proper wage scale are essential to high production," Enlightened patriotism, in other words, demands not that the workers shall work long hours at top speed for the least possible wages, but that for the sake of output they shall make a steady, reasonable expenditure of strength for reasonable length of time under proper conditions. We have long heard these things demanded for the good of the workers, but now a new partnership has been formed. Efficiency and humanity go hand in hand, is the burden of a statement just issued by the women of the National Defense council.

From the time of our entrance into the war, the importance of conserving labor standards has been emphasized and reemphasized by important officials in the government. The president himself, in welcoming at the White House the British labor commission which visited this country last spring, said that "nothing would be more deplorable" than "to set aside even temporarily the laws which have safeguarded the standards of labor and of life," when we are fighting in a cause which "means the lifting of the standards of life."

What are these standards, and why are standards for working women of such prime importance to the nation at this time? Proper conditions of women's labor have always been of peculiar importance to the state. In peace times the United States supreme court held that, for the sake of future generations, it was constitutional to limit the working hours of women to eight hours a day. Today in war time limitation of hours is important for an additional reason. Modern warfare is not fought in the trenches alone. The army at the front is helpless if the second line of defense, the army in factories, is not able to keep up production of supplies. In emphasizing the necessity of rigid enforcement of existing legal standards, and urging that "even where the law permits a nine or 10-hour day, efforts should be made to restrict the work of women to eight hours," the ordnance department has in mind primarily the output of munitions. In urging the prohibition of night work, they state that "English investigators have found that night work for women involves proportionately larger costs for supervision and protection." The human cost of night work has long been known to social investigators. A world war has brought out its pecuniary extravagance.

The Saturday half holiday—"an absolute essential for women under all conditions"—adequate meal and rest periods, and one day's rest in seven, also find place in this government list of industrial standards. Even with the best will in the world, and despite the most ardent spirit of sacrifice, human beings can not do continuous work without losing their efficiency.

Proper regulation of hours alone, however, will not solve the problem. The ordnance department knows that it will not help production to limit hours if the men and women who work these hours are not secured in the fundamental necessities of life—if they are hungry, poorly clothed and improperly housed. Therefore, it is urged that standards of wages "already established in the industry and in the locality should not be lowered," "that minimum wage rates bear a constant relation to increases in the cost of living," and that, in the case of replacement of men by women, there should be equal pay for equal work. In justice to our soldiers at the front, the standards of the jobs they have left behind must not be lowered by these new recruits, who will, in increasing numbers, take their places in the industrial army.

**WHAT ABOUT LIMITING THE HOURS OF LABOR OF THE WOMEN FOLKS ON THE FARM, AND IS THERE NO DANGER OF "A DETERIORATION OF THE RACE" IN THE RURAL SECTIONS WITH THE ADDED DEMAND MADE UPON THE FARM WOMEN IN SPEEDING UP FOOD PRODUCTION WHILE THE YOUNG MEN ARE AWAY AT WAR?**

## Refuses to Change Time.

The following item from California, if representing a situation which really exists in that state, probably likewise exposes a situation prevalent throughout this state as well:

"Old Bossie, the family cow, has declared the daylight saving law unconstitutional.

"Exertmely conservative and highly temperamental, Bossie refuses to take judicial notice of the fact that there is a war going on somewhere, and, withholds the milk supply when California milkmaids hustle out to do the chores an hour earlier than formerly. Hence high school girls in the rural districts have appealed to W. C. Wood, state high school commissioner, to have school time moved back to cow time.

"Educational authorities are considering the appeal, and Old Bossie, her back to the wall, is chewing her cud with deep determination."

## Win the War Wig.

A wig to help to win the war has been "invented" by an American cotton manufacturer. It is made of a fibrous material in two colors—green and reddish brown.

It fits down tight over the helmet and, while the soldiers are sneaking through the woodlands, blends into the forest so splendidly and naturally that 300 feet away nobody can tell that a company or a regiment of soldiers is on the move.

Then when out of the woods and back in the trenches all the soldier must needs do is to take off his wig and reverse it and he is topped with a reddish-brown top piece, invisible against the earthwork of the trenches.

# All the World's a Stage, and All the Men and Women Merely Players

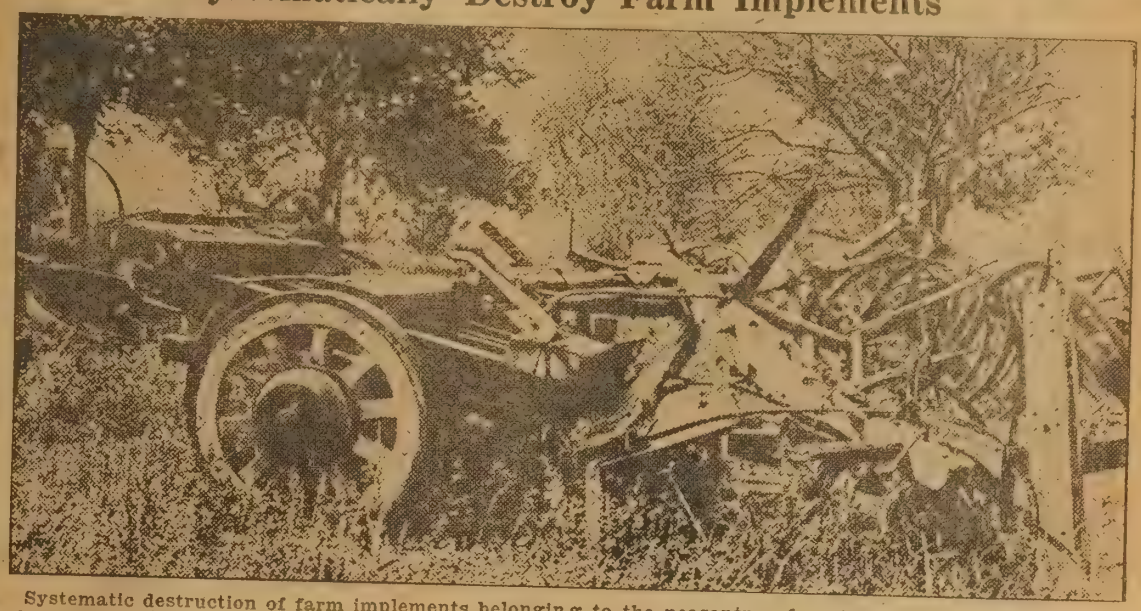
## Lady Mole Catchers Now



(Copyright, Underwood & Underwood.)

So that there will be plenty of mole skins for use in the making of good, warm coats for army men, and of course, some for civilian use, lady mole catchers are at work in Great Britain now. The above photograph was taken on the beautiful estate of Sir Gerald and Lady Sybil Codrington on the Cotswolds. In this photograph it will be noticed that the lady catcher has just got hold of a mole which will help to keep some soldier warm and comfortable.

## Systematically Destroy Farm Implements



Systematic destruction of farm implements belonging to the peasantry of northern France was a reature of the German retreat last year. The machinery was collected at designated stations where experts in destruction demolished similar vital parts in all machines. By such a scheme it was possible to render valueless the largest number of machines in the least possible time and with the least possible effort. While the French were equally systematic in having this damage repaired, the Germans were able seriously to hinder the carrying on of farm work in northern France. This official French photograph shows one of these collection stations where machinery was destroyed.

## "Dolling Up" for the French

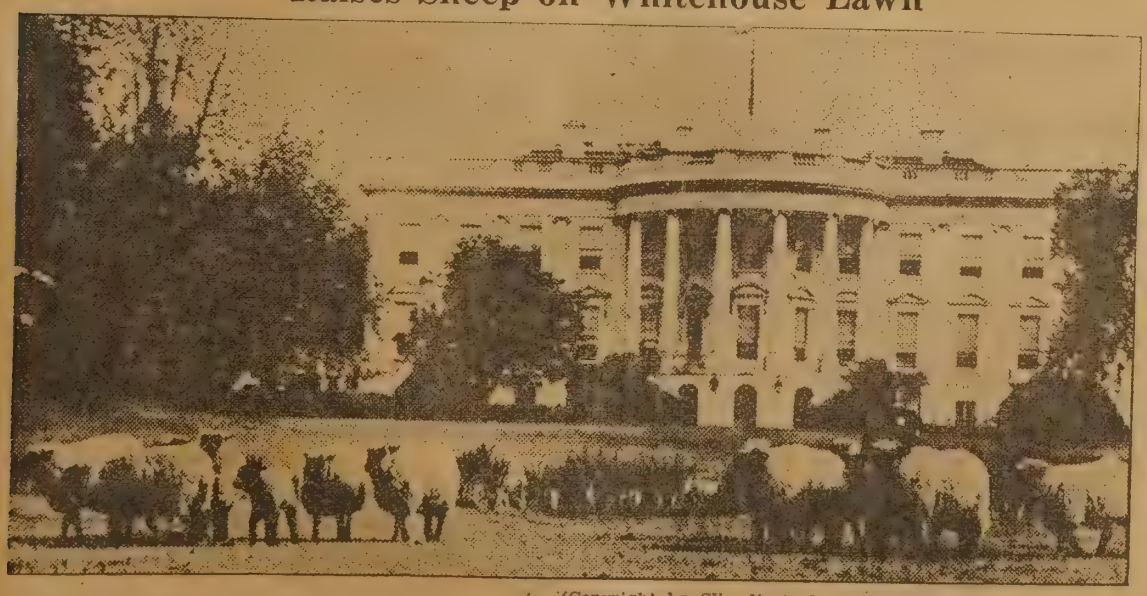


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The above illustration shows a few members of the United States marines "washing up" after detraining at their camp in France. These are the boys who are soldiers and sailors too. On board ship they work with the sailors, but they are always ready for "distant service" and their kits contain everything needful, even to tents with folding poles for protracted landing expeditions.




## Raises Sheep on Whitehouse Lawn



(Copyright by Clinedinst, from Underwood & Underwood.)

This photo shows President Wilson's sheep which were turned loose in the president's "backyard" which has long been known in Washington as the White Lot. Every one of the flock is a fine specimen of the Shropshire Downs breed. When this flock of sheep appeared on the greensward of the White House grounds a desire to "match the president" in helping to increase the country's mutton and wool supply was manifested by many whose responsibility covered big lawns, golf courses and city parks. Some of them began to ask questions of the department of agriculture. Flocks of sheep have been maintained in public parks in New York and Boston, and a flock once grazed around the Washington monument.

## Anything to Crow About




St. Paul Pioneer Press.

# Preserving Eggs in Water-Glass

The water glass method of preserving eggs was first made known about 21 years ago and ever since that time there has been an increasing demand for water glass for this one purpose. This method of preserving eggs has been found reliable and dependable, and there is no good reason why the method should not be continued, says Professor George A. Olson in Popular Bulletin No. 114 of the W. S. C. experiment station

The eggs should be collected daily from only clean nests and from healthy flocks. It is preferable to use infertile eggs and thereby eliminate the possibilities for embryonic development and subsequent spoiling. In no case should old, sun-baked, cracked or thin shelled eggs be used. Cracks are usually detected by gently tapping the egg or candling them.

Water glass or sodium silicate, sometimes called "egg keep," should contain approximately one part of sodium oxide to every two and seven-tenths parts of silicon dioxide and be of a consistency of about 38 per cent Beaume.

For preserving eggs the proportion of water glass to water required varies. The proportion to be used will depend largely upon the length of time desired to keep the eggs preserved. For the shorter periods perhaps the weaker solution will do, but it is safe to use a proportion of one part of water glass to 12 parts of water, but the best results have been obtained where the eggs have been preserved in a solution containing one pint of water glass to nine or 10 pints of water, although weaker solutions have been used more or less successfully.

It is advisable to boil the water used for diluting the water glass. The boiled water can be added to the water glass while hot or after the water has been allowed to cool. The latter method is preferred because no allowance for evaporation is necessary. Do not put the eggs in the prepared water glass liquid until it has cooled.

The question as to the use of water glass a second time has been frequently asked. Statements are made to the effect that by adding more water to the water glass liquid it can be used over again. While the statements may be correct we do not recommend the use of water glass liquid more than once.

Occasionally the water glass liquid changes from a liquid to a semi-liquid state. In that case the eggs will keep, although it is somewhat more difficult to remove them when the liquid has changed to the "gel" condition.

Generally glazed earthen jars, galvanized tubs or buckets, and wooden tubs or kegs are used. In case of wooden receptacles it is desirable to let them stand filled with water for several days, then empty and scald before using. The loss of liquid will be considerably reduced by keeping the eggs stored in cool, moist cellars.

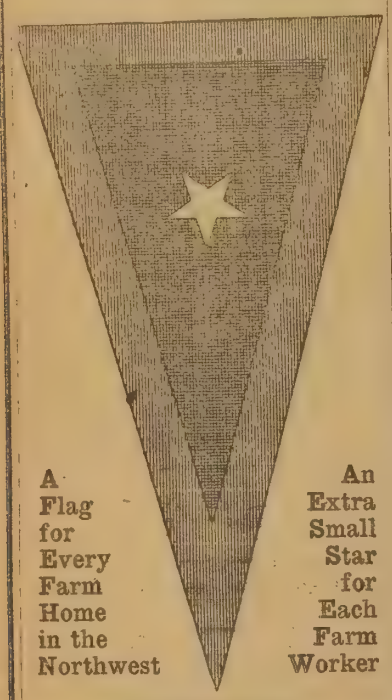
Eggs preserved in water glass are easily detected. The eggs should, therefore, be sold as "water-glass" or "preserved" eggs and not as fresh ones. According to the state law, eggs which have been preserved, regardless of the method employed, shall be branded with the word "Preserved" before offering them for sale.

| Size of container | Will hold | Water-glass | Required Water-glass Liquid |
|---|---|---|---|
| 1 gallon | 40 eggs | 5.8 ounces | 3 pints, 10 ounces |
| 2 gallons | 80 eggs | 11.8 ounces | 7 pints, 3 ounces |
| 3 gallons | 120 eggs | 17.4 ounces | 10 pints, 13 ounces |
| 4 gallons | 160 eggs | 23.2 ounces | 14 pints, 6 ounces |
| 5 gallons | 200 eggs | 29.0 ounces | 18 pints, 0 ounces |
| 10 gallons | 400 eggs | 58.0 ounces | 30 pints, 0 ounces |

In conclusion it should be stated that eggs preserved in water glass can be used for boiling, frying, scrambling, cooking, as well as other purposes. When the eggs are not preserved too long the whites can be used for meringues, icings and angel food cake. A slight breaking down of the whites (indicated by cloudiness) can be corrected by the addition of bicarbonate of soda (baking soda). About one-tenth of a teaspoonful of baking soda to the whites of three eggs has been found ample in most cases to overcome this cloudiness. Eggs treated with the baking soda do not give quite as good results as those obtained with fresh eggs.

Above is a table giving convenient size jars, the approximate number of eggs they will hold, together with the number of uonces of water glass that will be required to make the water glass liquid needed in each case to cover the eggs.


## FARM SERVICE WAR FLAG



A Flag for Every Farm Home in the Northwest

An Extra Small Star for Each Farm Worker

(Patent applied for.)

**Designed by The Washington Farmer in connection with The Oregon Farmer and The Idaho Farmer for the farm and farm home that is increasing food production in helping to win the war.**

OFFER NO. 1.

A farm service war flag, 9x22, printed on heavy enamel paper, in full colors, will be postpaid to any one securing and sending in ONE NEW subscription to this paper. (One year 25c, three years 50c, five years $1.00.)

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THE WASHINGTON FARMER
617 Central Bldg.,
Seattle, Wash.
Review Bldg.,
Spokane, Wash


## FARM SERVICE FLAG.
### Hopes for Its General Adoption.

To the Editor: I like your design for a farm service flag. I hope it will be generally adopted.
KENYON L. BUTTERFIELD,
President.
Agricultural College,
Amherst, Mass.

No man has taken a deeper interest in the improvement of rural conditions than Dr. Kenyon L. Butterfield, president of the Massachusetts college. He He is a whole-souled man firstly and president of a college secondly. At one time, while at the Michigan Agricultural college, he was editor of the Michigan Grange Visitor, and later editor of the grange department of the Michigan Farmer. He has also been superintendent of farmers' institutes. He was chosen by President Roosevelt as one of the members of the country life commission and also appointed by President Wilson a member of the commission to study European rural credits.

**Design Very Beautiful.**

To the Editor: Your letter and farm service war flag at hand. The design is very beautiful. W. H. CLEMMONS.
State superintendent of public instruction.
Lincoln, Neb.

The above indorsement of the farm service war flag is especially pleasing as it comes from the superintendent of the department of public instruction of Nebraska, which is one of the great farming states of the west.




**A Size for Every Engine and Motor**

Piston rings prevent escape of gas and power. They must fit exactly or there is compression leakage, excessive carbon, and power loss. The scientific construction of

McQUAY-NORRIS
LEAK-PROOF
PISTON RINGS

assures equal pressure all around the cylinder walls. They are made in all sizes to fit every model and type of engine, automobile, tractor, etc.—every size accurately gauged to fit the particular model of motor.

Your local dealer or garage has—or can get—our data book of piston ring sizes of practically every engine and motor made. This will tell exactly what rings you need. Complete size assortments are carried by more than 300 jobbing and supply houses all over the country from which you can be quickly supplied. Over 2,000 unusual sizes and oversizes—all widths and diameters—are kept constantly on hand at the factory ready for prompt shipment anywhere.

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A special ring for engines that pump oil. Used in top groove only of pistons to control excess oil, with McQuay-Norris LEAK-PROOF Rings in lower grooves to insure maximum compression and fuel economy.

SEND FOR FREE BOOKLET
"To Have and to Hold Power"—a simple, clear explanation of piston rings, their construction and operation.

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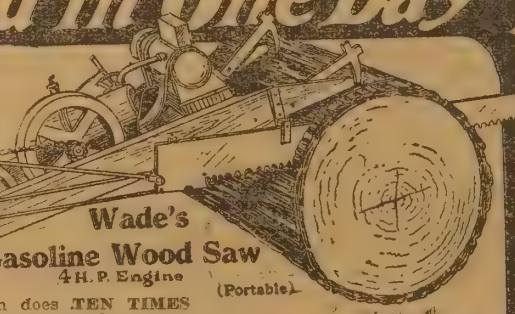


## This Saw Cuts 25 Cords of Wood in One Day

Write for booklet "How Dan Ross cuts 40 cords a day."

It is absolutely guaranteed—Hundreds in daily use.

Stocks Carried in Eastern Jobbing Points.



$165. THE WADE

Wade's Gasoline Wood Saw
4 H. P. Engine
(Portable)

This wonderful invention does TEN TIMES the work of TWO MEN in the woods.

With it you can make money out of your wood simply through the immense saving in time and labor. One man can handle it on a log and two can move it from job to job. Will cut a 40-inch log in five minutes. Write us today.

R. M. WADE & CO.
SINCE 1865
354 Hawthorne Ave., Portland, Ore. 910 N. Howard St., Spokane, Wash.



## Small Live Stock Ad Brings Steady Stream of Inquiries

A few weeks ago Leland Bros., of Wendell, Idaho, had some especially classy, highly bred Shorthorns for sale. They are now sold out. They write us under date of May 18, 1918—

We are perfectly satisfied that your papers can deliver the goods. It is impossible to answer all the letters that came from this small ad, and as we are sold out for this year will drop our ad at end of quarter, but will be with you next year strong.

To any breeder having good animals to sell we suggest an ad in this paper as the cheapest and quickest way to find buyers.

**The Washington Farmer, Spokane, Wash.**
Special live stock rate for Washington Farmer, Oregon Farmer and Idaho Farmer on application.
Over 80,000 circulation each issue guaranteed.


**When you write to advertisers, be sure to say that you saw their advertisement in this paper.**

# Trappers of the Ozarks

**The Adventures of Two Young Pioneers in the Wilds of Upper Louisiana. Now the State of Missouri.**

**By LOUIS B. MILLER**

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**Summary of Preceding Chapters.**

In September, 1811, two young men who lived near St. Louis, Ben Armstrong and Jodo Henderson, taking with them their two dogs and donkey Spunky, started on an all-winter's hunt in what was at that time an unsettled region, where Indians held full sway, in the wilds of upper Louisiana, now the state of Missouri. After a perilous trip over old Indian trails and dangerous streams, they reached their destination—a salt spring close to the river Big Niangua, which Ben had visited before and from which they expected to secure salt for sale with their furs when they returned to civilization the following spring. Here they erected a rough cabin for their winter quarters close to the mouth of a large cave that was full of water and bats, and started their salt making and hunting. After an exciting experience with a bear in a cave they find their first fresh sign of Indians—moccasin-tracks in the snow about their camp and the morning after they find moccasin-tracks in the snow about their camp. The Indians attempt to enter their barricaded cabin at night but are frightened away by a great earthquake. The boys are captured and taken to the Osage village. One day they are given one bullet and one charge of powder each and allowed to go hunting. They dare not attempt to escape for fear of starvation, but lose their way and are found the following day by the Indians who think they tried to escape and are taken to the camp under guard. Ben is tied to a stake and a fire built under him but it is only a ruse to induce him to take as his squaw Watermelon, for the time being an Indian widow, who cuts his bonds and proclaims herself his squaw. Ben declines. The boys make plans to escape by canoe. They accumulate some parched corn and dried meat, steal a canoe at night and paddling far up the river turn into a branch stream and hide in a cave. After two days and a night there they go back down the river, safely past the Indian village and turning into a branch find a cave high up in the rocky face of a cliff. Here they place all their belongings except the canoe, which they conceal. They are discovered by the Indians, and, retreating deep into the cave with their belongings, they find, over a mile from the opening through which they entered the cave, an exit, and start southwest, the Indians undoubtedly in pursuit. The second day a blizzard sets in and hungry wolves follow the boys. Toward dusk they reach a deserted settler's camp, the cabin burned but chimney standing. Here they build a fire and plan to stand off the wolves. A long, hard fight with wolves and cold ensues. This fight was hardly won when Snapping Turtle and his warrior band surround the boys, who later effect their escape unseen by their enemies, but only to renew their struggle with the cold and wild animals.

## CHAPTER XIX.

### A Blockhouse in the Wilderness.

After resting an hour, the travelers rose up and pushed ahead. They noticed some game and many tracks in the snow, but made no attempt to kill anything till about an hour before sunset. By this time their tramping on half-rations was beginning to be felt, and both admitted a certain peculiar weakness in the knees. Coming to where a little bunch of deer had crossed their course, they turned aside and followed the trail.

They were in some scattering woods—the best place for hunting that particular game. Now Ben, whose markesmanship was more to be depended upon that Jodo's, turned his pack over to his companion and went on ahead. Jodo followed, staying close enough to keep Ben in sight.

After following a mile or two, Ben discovered the game browsing at the edge of a ticket, a good distance away. Motioning for the man behind to halt, Ben put some trees between himself and the unsuspicious deer, then stole toward them. It was important that he get as close as possible before risking a shot.

When at length he found himself within easy shooting distance, the hunter steadied his rifle-barrel against a tree-trunk, then took a long and careful aim and pressed the trigger. But only a slight click followed.

Much disappointed, Ben turned and stole back as cautiously as he had crept forward. Jodo hurried to meet him. When the two were together, they exchanged guns silently. Then Ben stole toward the deer again. Both were anxious now. Suppose the other gun should fail to shoot! What was to keep them from starving? True their pistols were loaded; but they, too, might miss fire. And at the best they were accurate only at close range.

Again Ben reached the tree, again he steadied his rifle, and again, after careful sighting, he pressed the trigger. To his relief and delight, there was a flash from the pan, and then the gun cracked startlingly on the stillness.

When the hunter emerged from behind his tree and hurried forward, all but one deer were running away. And that one was lying on the ground. Now Ben turned and beckoned to his partner.

Jodo came running, so eager was he. "Is it all right? Did you drop 'im, Benoni?"

"No going to bed supperless for us tonight!"

Jodo looked well pleased as he caught sight of the deer. "There's good eating for a few days. As this fellow cost us our last rifle-bullet, we must make 'im feed us till we run onto somebody's cabin."

"Our pistols will be all right if we can get close enough to something. And possibly I can pick my flint and make my rifle shoot yet. It seems to me I've been as careful with my gun as you have with yours."

Ben now drew his hunting-knife, and after cutting the deer's throat, opened the animal and threw away all that could not be used for food. Then he shouldered the game and started on. Jodo followed, with both packs.

Not till too late for their smoke to be seen did they stop for the night. Down in a dry ravine, in a spot where the sun had melted the snow, they made their camp. After taking the precaution to kindle not one camp-fire, but five, all in a circle, they sat down in the midst of their fires and proceeded to skin the deer. The game was not fat, and there was not much meat.

They cut off all the meat they could get off, to be jerked, or barbecued, and carried with them. The bones they broiled and feated on. After gnawing all the meat from them, they roasted the larger bones, cracked them with their tomahawks and ate the marrow. Even a less hungry person would have found the meal well worth eating.

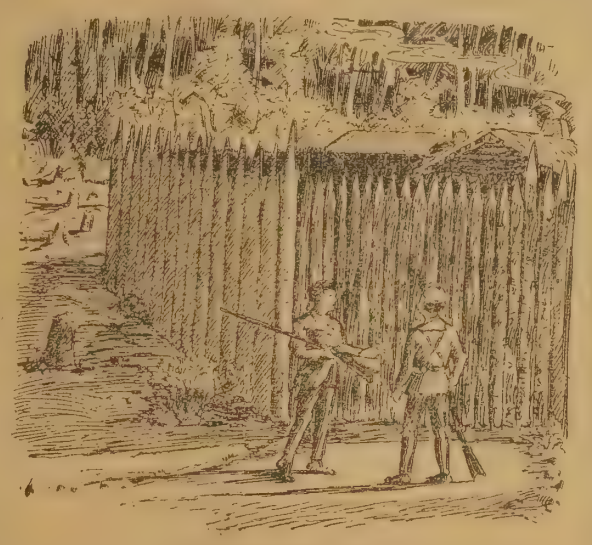
Up with the first faint light of morning, they made another meal, mostly from the unjerked parts of their venison. Then they put out their fires with snow, and by the time they could see were tramping toward the southeast.

Their commissary bag was not heavy—not half as heavy as they wished it had been. And they tramped the faster as they realized the necessity of reaching a human habitation before their venison gave out.

All day long the two pushed ahead, with only a brief halt at noontime to eat and rest. Having now nothing to eat but meat, what they ate reduced their supply alarmingly, so that they had to allowance themselves. Ben had picked his flint and dried the priming-powder, and he hoped that his gun would now shoot. However, there was no certainty of that.

The weather continued rather mild all day, but the sun did not shine and the snow did not melt. Not long before night, while tramping through some scattering woods, the two distinctly heard the report of a gun. The sound came from the east, and seemed to be a good distance away.

Instantly they halted, and for a little while they debated what the shot meant. Of course, as they knew,



They Seek Admission.

it was possible that there were Indians encamped somewhere in the vicinity. But far more probably the gun had been fired by some white hunter. If the latter, that was just what the fugitives were in search of. So they changed their course and walked rapidly toward where the report had sounded.

They listened for another shot, but failed to hear it. They had tramped more than a mile when Jodo stopped suddenly and pointed to the snow ahead. Ben first halted, then walked closer and examined some tracks.

"No doubt about it, Jodo. Somebody has passed along here since this snow fell. And that somebody was a white man. Unmistakable boot-tracks, these are."

"Must be either a camp or a cabin close by—don't you say so, Ben?"

"Not a doubt in the world of it. And the way to find that camp or cabin is to follow this fellow's trail."

So, without further delay, they set out, tracking the man as fast as they could walk. Soon they came to where the tracks suddenly changed their course, doubtless because the hunter had discovered some game. Still following, the two trailers saw where their man had stood by a tree, perhaps to take aim. Fifty yards farther on the trail led to where some animal, probably a deer, had fallen in the snow. And a reddish blotch in the white meant that the deer had died where it fell.

Without going to the trouble to disembowel the game, the hunter had thrown it over his shoulder and set off homeward. From here on an occasional blood-drop could be seen in the snow, near the hunter's tracks.

"He's killed a deer and set off for camp with it," Ben remarked, as the two hurried on. "Now all we've got to do is to stick to his trail. It's entirely possible that we can sleep under a roof this very night."

"Provided there is a roof."

"If he stops to rest a few times, we may come up with him."

At length they did come to where the hunter had thrown this game down to rest. But the foot-prints led on, and the man was not in sight.

Dusk was now at hand, but Ben and Jodo kept trailing the hunter as long as they could make out his tracks. And still they had sighted neither hunter nor cabin. Now they paused and began to consider what they should do.

"Jodo, it's one of two things. Either we shall have to camp here till morning; or we shall have to light a fire till we can get some kind of a torch to blazing. After that we can track the boots by torch-light."

"We would both sleep sounder in a cabin tonight."

"Yes. But of course we may not be able to find anything that would make a good torch, dark as it is now. And the cabin or camp may still be miles away. Hunters often have to tramp far in their search for game. We know that from experience. And besides that—"

"Besides that what, Ben?"

"Well, you know there are said to be some outlaws over here in this White River country."

"What kind of outlaws?"

"Why, all kinds of runaway criminals, fugitives from justice, desperate characters that have run away from the states to save their necks, and would as soon murder you as to look at you."

"But even if we did happen onto such a gang, they wouldn't be likely to hurt us, would they? They wouldn't murder us unless they wanted to rob us. And we've got nothing they'd care for, except maybe our rifles."

"That's true. Still, I'd a little rather approach the cabin or camp in daylight. Then we can form some opinion of the people and can decide whether it's safe to sleep under the same roof with them. If they look suspicious, we'll inquire how far it is to their nearest neighbor's, and travel on."

"But, Ben, we're in such desperate straits we can't afford to go by any place where white people live, no matter whether they're outlaws or honest hunters. Starvation is so close on our heels, we'd better take some little risk. Supper and breakfast will use up the last bite of our venison. And we've got to allowance ourselves to have any for breakfast. After that, what? Especially if your rifle misses fire again. Still, I'm willing to camp here till morning if you think that's safest."

"I rather believe it will be. We've traveled far enough already today to have earned a good night's rest. Tomorrow we'll track the hunter to his lair."

The two had soon swept a patch of ground clear of snow and kindled a fire on it. Not being much afraid of wolves now, they contented themselves with one big fire. Hoping soon to be able to obtain other provisions, they divided their remaining venison into three equal parts. Two of those they ate for supper. And even with that both could have eaten more.

They slept peacefully enough, and were up and ready to travel by daylight. The air was frosty, but not particularly cold, and everything seemed to indicate that the bitter weather was at an end, at least for a time. The travelers had fastened on their packs, shouldered their rifles, and set out on the deerslayer's trail before the sun was in sight.

For two or three miles they followed those plainly printed tracks.

"If he lives much farther away, the sun may have the snow thawed and his tracks melted out before we can follow him home," Jodo finally remarked.

"Tracks or what not, we'll find the right place now. Yonder is where he makes his headquarters. Don't you see the sign?"

They were now on rather high ground, and Ben was pointing to where a feathery wisp of bluish smoke could be seen mounting upward out of the forest. Apparently it was about a mile ahead. As the hunter's tracks were now leading straight toward the smoke, the two trailers had little reason to doubt that they would find him cooking some of his venison by that fire.

They kept on through the forest. Most of the time the smoke was still visible. At length they caught sight of a small opening, or clearing, and could see where the smoke came from.

"There's a house, all right, Ben! I can make out the chimney, with the smoke pouring out of its top."

"Yes, it's a cabin, and not a mere camp. But before we venture up close enough to pull the latch-string, let's watch the place and see what we can learn as to who lives there."

Jodo was gazing through the leafless forest. Soon he said

"One thing I've learned already. The house has a stockade around it. Or at least it's around part—around one side. Doesn't seem to be any stockade on this side, though."

"So we've happened upon a sort of blockhouse here in the wilderness, have we? That will be a decided advantage if the Osages are still on our trail, and we have to fight them."

"Another thing I can make out. There are two cabins—two cabins joined together, I should say."

"Yes, the roof shows that. And that means that our hunter is not living a hermit's life. Now, the question is, Who keeps him company?"

"Why, his family, I'm guessing."

"Perhaps—and perhaps not. I can't make out any kind of an opening on this side—door, window, or anything else."

"No. Naturally, Ben, all the doors and windows would be on the side that's protected by the stockade."

"That's probably right. So let's move round till we can get a clear view of the other side. We shall not be able to see the door for the stockade. But there must be a gate there. And if we watch the gate long enough we'll see somebody come out."

"Not much doubt of that."

So the two drew back farther into the forest, then made a circuit and approached the cabins on the opposite side. Soon they were near enough to make out the gate, which was in the south wall of the stockade. The gate was still shut, and Ben and Jodo concealed themselves behind trees, where they could get a clear view, and waited for somebody to come and open it.

Half an hour or more went by. Smoke was still boiling out of the chimney top, but the gate remained shut.

"Ben, if the people living there should discover us spying on 'em like this, they'd be apt to take at least a shot or two at us, just on suspicion."

"Yes, maybe they would. But that's why we're behind trees. We want to see them before they see us."

"Why should you say they built this blockhouse out here in the wild country, Benoni?"

"Well, that depends upon who they are. If they're honest hunters and trappers, they may have built it as a protection from the redskins. If they're fugitives from justice they probably built it as a place to defend in case officers of the law followed them out here; or maybe to protect themselves from both officers and Indians.

(Continued on the following page.)

# Could We Grow Two Crops at Once?

## *Unique Method Reported a Success in England*

"A great discovery in agriculture" is what the London Times calls the result of the experiment of raising wheat and hay in one crop in England. It is claimed that the scheme means double production, economy in labor and fertilizers and the saving of much seed. The method is the discovery of an English farmer, and was tried by him with success on a small scale the last year. The new method is as follows:

"In July, by the use of a specially devised drill, a winter cereal and an artificial fertilizer are simultaneously drilled through any grass land intended for haying the following year. By September or October the cereal will have made a top growth of from eight to ten inches. This is then grazed off with the grass by whatever live stock is turned out upon it, and the grain, normally an annual, is thus turned into a biennial by virtue of its yield of valuable grazing in the autumn preceding the year of the normal grain harvest. The autumn grazing encourages and strengthens the roots of the cereal.

"Owing to the protection from frost given to the roots of the cereal by the covering of turf, normal spring growth begins earlier, more heads are thrown up, development is more rapid, and the grain ripens at the same time as the hay, both being harvested together. The harvesting is done by means of an ordinary mowing machine fitted with an extra knife at the proper height above the grass to cut the heads of the grain. The lower knife cuts the hay as usual and the upper knife acts as a 'header.' A carrier behind the 'header' knife deposits the grain in a separate swath.

"The advantages claimed for this method are many, among them being the following:

"The productive capacity of the land is doubled.

"Old and valuable grass lands are not only not destroyed but are improved.

"Economy of labor throughout; plowing and harrowing are not needed, both crops are gathered together, planting and rolling are done at the same time, and the grain crop is gathered with ease and certainty, as there is no green growth with the grain needing to be stood in the sun to dry.

"Economy of fertilizers, owing to the deeper rooting cereal taking up any washes below the roots of the turf.

"A saving of about one-half of the seed usually needed, as there is more uniform distribution, a much higher percentage of germination, due to July planting, no loss from birds and seed washed away by heavy autumn rains.

"The autumn grazing is of a fresh, nitrogenous character, at a time when ordinary grazing has the least feeding value.

"The passage of the drills through the turf improves the surface drainage and the deeper rooting cereal loosens the ground and adds to the humus in the soil.

"The equal mixture of straw with the hay for fodder.

"The great convenience of July planting to the farmer, who, having assembled his labor for haying, can use it for planting if the weather is unfavorable.

"It is claimed that under this method no permanent pasture need be broken up—rather that the larger part of the arable land might be put down to permanent pasture, only enough being allowed to a four-year ley to alternate in the fifth with roots. The permanent pastures and leys are in hay and corn one year and grazed the next. In the spring of the grazing year seeds of annual legumes can be planted through the pastures with the same machine as is used to drill in the grain, not only on account of their feeding value but also to increase the nitrogen in the soil for the following cereal crop. Seed winter wheat can now be supplied by the government, as there is a large stock on hand bought last year at 82s a quarter that would be unprofitable to send to the mill.

"The attention of the food production department has been drawn to the results of the experiments in this method of corn and hay farming, and the whole question is now being considered. It is revolutionary in character, but no convincing reason has been advanced why it should not prove of immense value in a country like England, where the needed extension of wheat growing can only be had through the sacrifice of valuable live stock feeding and hay ground. The drilling of the seed through the turf is accomplished by a small knife-bladed foot that can be attached to any drill in the place of the disc.

"The government experts have been so much impressed with the possibilities of the method that priority certificates have been granted for the manufacture of the fittings or the import of any parts which may be necessary if they can not be obtained here in time for this season's planting.

"There is no doubt that oats and wheat can be profitable grown in this manner. It may be that the straw of barley would be too short above the hay for the header, but it is true also that any grain will grow a taller stalk through the grass than when it stands in the open. Farming experts, both official and private, have been discussing this new method for some weeks past, and the only points raised for solution have been of a minor character easily disposed of and none of them fatal to the success of the operation as a whole. Owing to the simplicity of the tools needed there would be no trouble in having the method tried on an extensive and profitable scale this year if the work of preparation was begun at once."

Insufficient moisture would probably bar the new plan from the dryer non-irrigated lands of the Inland Empire, but that obstacle would not apply to western Washington and Oregon, and double cropping might be successful in the regions in the interior that have more generous rainfall.

If the method proves successful in England it will open up wonderful possibilities for the irrigated lands of this country. It is certainly intensely interesting, and should be thoroughly investigated by the United States department of agriculture and the agricultural colleges of the various states.


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# Trappers of the Ozarks

(Continued from the preceding page.)

Another half-hour passed by, and still nobody had opened the gate. By this time both watchers were becoming impatient.

"If it wasn't for that smoke, I'd believe they're all away from home," Jodo remarked.

"It's altogether possible that they are away from home. They may have started out early, and left their fire burning. That would account for the smoke."

"If they're all out hunting, they must have left the gate unlocked. We could go in and have a little look around before they come home."

"They've either padlocked the gate, or left somebody at home on guard, I'd guess. It's not probable that they'd go off and leave their stronghold for somebody to go in and take possession of."

"Possibly they've left some fierce dogs in there to guard it."

"Dogs couldn't keep out Indians, or officers of the law either. The fact that we haven't seen anybody in so long a time would indicate that not many persons live there. So I'm thinking we'll go in and have a little chat with them, whoever they may be. If they won't do anything else, perhaps they'll sell us a few rounds of ammunition, and tell us how far it is to the next house."

"All right, Benoni. We're in such a tight fix we're just bound to do something. So I'm ready to have a talk with the bad men whenever you are."

They walked boldly up to the gate, only to find it fastened somehow on the inside. Ben shook it, and then called "Hello!"

For a little while there was no response, and Jodo lifted up his voice and called more loudly. Soon footsteps were heard approaching the gate.

"Who's there?" demanded a gruff voice, from inside the wooden wall.

"Two travelers that want to get in!" Ben called back.

"What you want in fur? What you doin' here, anyhow?"

"We've just recently escaped from the Osages. They've been keeping us on the jump, and we're out of"—Ben started to say ammunition, but thought it better not to admit that—"out of anything to eat. For goodness' sake open to us! We're not dangerous!"

For a little while the two outside felt rather than saw that an eye was scrutinizing them at a crevice between two gate-timbers. They must have looked harmless; for presently the gruff voice said:

"Wait a minute, and I'll let you in!"

(To be continued.)

# Nonpartizan League

By GRANVILLE LOWTHER.

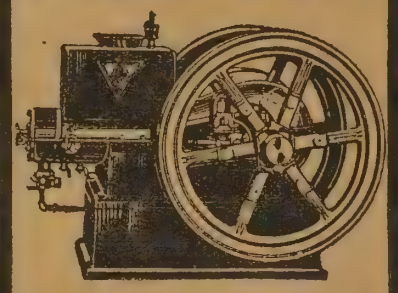
From several sources, I have had inquiries about the Nonpartizan league. "What is it?" "What is its purpose?" "Should I join it?" Many other questions are generally connected with the inquiry, most of which I do not feel sufficiently informed to try to answer. About six months ago, I was solicited by an organizer, to join the league. I had previously read something about it on both sides of the question; but had not reached a conclusion. The talk of the organizer was plausible, and in ordinary peace times, I have no doubt, I would have joined it. There is no question but they embody in their statement of principles, many things the people need and will some time be able to obtain. The question in my mind was, "How will these good things be interpreted and used by the leaders, in the great crisis through which we are now passing?"

There are many things that should be different and many wrongs that might be righted. However, we are now in the midst of the greatest war of history, a war for universal democracy as opposed to a world-wide autocracy. The one, great, all-absorbing issue is to win the war; and all minor questions, all political differences, all family quarrels should be held in check until the world is made safe for representative governments, and the protection of free peoples from international robbers and murderers. Interpretation and the application of principles are very important factors. For instance the Bible is a good book; but I could never respect its teachings as interpreted by some very good and devout religionists. I could not respect the principles of the Nonpartizan league as interpreted by I. W. W., pacifists, pro-Germans and Senator LaFollette, all of whom I am informed are operating through the league. This is not because I am in favor of war instead of peace; but because I know the only way to have peace is to compel the disturbers of the peace to respect the rights of others. This can not be done by writing essays, philosophising on social ethics or by making contracts that the disturbers regard as "scraps of paper," to be broken at will. In the hands and under the leadership of intelligent and loyal farmers or laborers, I would want to be counted in. In the hands of German pacifists, who are the most warlike nation on earth, except in countries they want Germany to conquer and rule, I want to be counted out. In the hands of the I. W. W., whose methods are impossible, count me out. In the hands of men of the views on the war expressed by La Follette, at a meeting of the league members, count me out. In the hands of real workers like the average farmer and wage workers, count me in. Because I was in doubt about its direction and the use of power by its leaders I did not join. However, my action is not intended to be a guide for others; it was only satisfactory to myself, with my present understanding of the subject.

### First War Insurance Paid.

The payment of government insurance for a soldier lost at sea has been made to George Moreno in Texas, whose son was drowned when the Tuscania was torpedoed. The son carried $5000 war insurance on his life. The father knew nothing about it until notified to make out the claim papers.


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FAMILY CIRCLE

Write to the Editor.

ALICE W. BARLAND,
Editorial Contributor.

# Knit Socks

## One Big Way for Women to Help

Knit socks! This is the cry of the knitting department of the Red Cross, and is one big way women can help at home during their few spare minutes. Here are the Red Cross directions:

**Medium Sized Man's Sock.**

4 steel needles No. 10, amber No. 3, or bamboo.

Set up 60 stitches, 20 on each of three needles. Knit 2, purl 2 for four and one-half inches. Knit 4 plain stitches, knit 2 together. Repeat this until the round is completed. There are now 50 stitches on the needle. Knit plain until leg measures 11 inches (6 1-2 inches of plain knitting). Take half the number of stitches (25) on first needle for the heel (leaving 12 and 13 stitches on the 2nd and 3rd needles for the instep), and on the 25 stitches knit one row and purl one row alternately for 26 times (or 3 inches), always slipping the first stitch. Begin to turn heel on the wrong side, slip 1, purl 13, purl 2 together, purl 1.



Turn work over, slip 1, knit 4, slip 1, knit 1, pass slipped stitch over knit stitch, knit 1, turn; slip 1, purl 5, purl 2 together, purl 1. Turn, slip 1, knit 6, slip 1, knit 1, pass slipped stitch over knit stitch, knit 1. Continue working toward the side of the heel in this manner, knitting one more stitch on every row, knitting stitches on either side of gap together until all stitches are on one needle. There should then be 15 stitches on the needle. Pick up and knit 13 stitches on side of heel. Now knit the 25 stitches on 2nd and 3rd needles on to the one needle, which becomes your second needle. With your third needle pick up and knit the 13 stitches on the other side of heel, and knit 7 stitches off your first needle, so that you will now have 21 stitches on the first needle, 25 stitches on the 2nd needle and 20 stitches on 3rd needle 1st needle (a) knit to within 3 stitches of end, knit 2 together, knit 1. 2nd needle (b) knit plain. 3rd needle (c) knit 1, slip 1, knit 1, pass slipped stitch over, knit plain to end of needle, knit one round plain (d).

Repeat a, b, c and d until you have 13 stitches on the 1st needle, 25 stitches on 2nd, 12 stitches on 3rd. Knit plain until sock measures 9 inches from back of heel. 1st needle (e) knit to within 3 stitches of end, knit 2 together, knit 1. 2nd needle (f) knit 1, slip 1, knit 1, pass slipped stitch over, knit to within 3 stitches of end. Knit 2 together, knit 1. 3rd needle (g) knit 1, slip 1, knit 1, pass slipped stitch over, knit to end of needle. Knit 2 rows plain (h).

Repeat e, f, g and h five times, then narrow every other row until you have five stitches on your first needle, nine stitches on your second needle and four stitches on your third needle. Knit the five stitches on your first needle on to your third needle. Your work is now all on two needles opposite each other. Break off yarn, leaving 12-inch end. Thread into worsted needle and proceed to weave the front and back together as follows, always keeping thread below needles and having thread coming from back needle.

Pass worsted needle through first stitch X of front knitting needle and slip stitch off. Pass through second stitch as if purling—leave stitch on, pull thread through first stitch of back needle as if purling. Slip stitch off, pass thread through second stitch of back needle as if knitting, leaving stitch on. Repeat from X until all the stitches are off the needle.

Sock when finished should measure:

Foot from tip of heel to tip of toe, 11 inches.

Leg from tip of heel to tip of leg, 14 inches.

Width of foot and leg, four inches or over.

Sock should be knitted loosely and elastic.

Tack socks together at top only, catching through one side of each sock.

**General Directions.**

Stitches should not be cast on too tightly.

Knitting should be done evenly and firmly and all holes should be avoided.

Joining should be done by splicing or by leaving two or three inches at each end of the yarn to be darned in carefully.

All knots, ridges or lumps should be most carefully avoided, especially in socks, as they are apt to blister the feet.

Wash and press socks, folding sides together.

Do not start any articles with wool left over, but return.

Please endeavor to finish and return in three weeks.

## Bakes in the Morning.

To the Editor: I do my baking in the morning before doing up my work thus saving fuel to heat up the oven and doing away with heating up the house in the summer. I make a soup of left-over vegetables. I put in any gravy I may have, as this helps to season it. MRS. E. H. ATHERTON.

Orofino, Idaho.

**An Addition.**

"Do you like songs without words?"

"Yes, and I would like them still more if they could be given by voiceless singers."—Baltimore American.


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# SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

## What Causes Boils and How They Should Be Treated



Dr. Hirshberg.

The difference between tweedledum and tweedledee is about all that exists between pimples, boiles, whiteheads and furuncles. When several of these fuse into one or one becomes a bit larger, more vicious or angry than some of its lesser brothers, you may call it a carbuncle. In any event, a boil by any of these names will be as bad.

A scratch, pin-prick, cut, turned-in hair or the other condition and circumstance, invites the ever-present infectious germs—staphylococcus or steptococcus—to begin their work of invading your skin.

It is ignorance and sheer nonsense, the traditions of yesterday's discarded medical knowledge, which makes many persons believe that their "blood is in good condition," if a cut or scratch heals quickly and cleanly, or it is "in bad condition" if festerings, boils or carbuncles appear. These abominations are the result of infectious material, hidden and invisible, but always abundant in the air, water and soil and on the hands and skin, though the latter may seem to be as clean as soap can make them.

**Aids to Healing.**

When first observed as a white speck, a sterilized needle dipped into liquid carbolic acid should be used to puncture the boil, after which a drop or two of the acid should be spread over the center of it. A few drops of alcohol will neutralize the external effects of this.

If the boil is hard and not pointed with a white head, all the skin over and around it for some distance must, if possible, be kept germ-free with liquid soaps, and ether. This prevents the origin of other furuncles. Hot, diluted glycerine and some powdery or sandy material to hold it and the heat should be applied to the boil to hasten its poining or "coming to a head." Wax, paraffin or antiseptic oils, such as wintergreen mixed with some porous clay or like material, when applied hot to these focal infections seem to aid the white blood corpuscles and other tissue elements to destroy the bacteria concerned in boil formations.

Bichloride of mercury applications, still the standby of many, have been discarded by those experienced in more modern methods. Such antiseptics are bad treatment. They irritate the skin beyond measure.

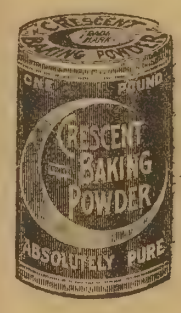
When, as in the case of boils on the back of the neck, there is much hair in the neighborhood of these infections, it should be shaved off and the iodine painted once around the dry skin to do away with the chance of boil and pimple bacteria penetrating hair follicles.

**Completing the Cure.**

When, however, it is feasible, the boil or carbuncle, pimple or whitehead should be opened by a sharp, quick incision. In this way there will be a good evacuation of the matter in it, and recovery will be hastened. The old flaxseed poultice way of heat and dirt mixed delayed this for a week or more. With prompt incision and the employment of ammoniated mercury ointment as a dressing to destroy microbes, soothe pain and quicken the life blood the worst should be over in two or three days.

Bandages and absorbent cotton or gauze are to be changed three times a day. Thus no pus or matter will accumulate and be forced further into the nearby tissues.

See to it that the bowels are properly regulated and enough exercise and fresh air obtained, and a thoroughly well mixed diet carried forth. Also take 10 grains of bicarbonate of soda every four hours, and sulphide of calcium, 1 grain, after meals.


You can make light, wholesome bakings from any substitute flour, with

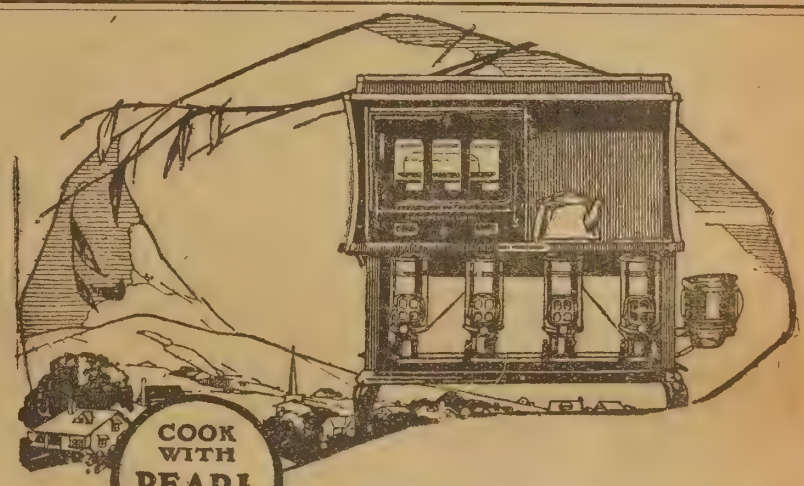
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2149—Girl's dress. Cut in 5 sizes: 4, 6, 8, 10 and 12 years. It requires for an 8-year size, 3 3-4 yards of 36-inch material. Price, 10 cents.

2154—A pretty summer dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 6 yards of 44-inch material for a 38-inch size. The skirt measures about 3 1-8 yards with plaits drawn out. Price, 10 cents.

2453-2462—An attractive costume. Blouse 2453 is cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 2462 is cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. For a medium size the costume will require 6 1-2 yards of 36-inch material. The skirt measures about 1 7-8 yards at the foot. Two separate patterns, 10 cents for each pattern.

2463—Girl's dress. Cut in 4 sizes: 6, 8, 10 and 12 years. Size 10 will require 3 yards of 44-inch material. Price, 10 cents.

2454—An attractive set of collars. The pattern includes all styles illustrated, and is cut in one size—medium. It requires for No. 1, 1-2 yard of 30-inch material; for No. 2, 5-8 yard of 36-inch material; for No. 3, 3-4 yard of 27-inch material; for No. 4, 1-2 yard of 30-inch material. Price, 10 cents.

2183—Girls' dress. Cut in 5 sizes: 2, 4, 6 and 8 years. It requires for a 6-year size, 1 1-2 yards for the guimpe and 2 1-2 yards for the dress, of 27-inch material. Price, 10 cents.

2009—Ladies' lounging robe. Cut in 4 sizes: 34, 38, 42 and 46 inches bust measure. It requires 6 5-8 yards of 44-inch material for a 34-inch size. Price, 10 cents.

2132—Ladies' "cover all' apron. Cut in 4 sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. It requires 4 7-8 yards of 36-inch material for a medium size. Price, 10 cents.

2477—Ladies' work dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 4 3-4 yards of 36-inch material. The dress measures about 2 1-8 yards at the foot. Price, 10 cents.

2032—Boys' blouse. Cut in 5 sizes: 8, 10, 12, 14 and 16 years. It requires 2 3-8 yards of 36-inch material for a 10-year size. Price, 10 cents.

2304—Dress for misses and small women. Cut in 3 sizes: 16, 18 and 20 years. Size 16 requires 4 3-4 yards of 44-inch material for the dress and 1 3-4 yard for jumper. The skirt measures about 2 7-8 yards at the foot, with plaits drawn out. Price, 10 cents.




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Be sure to give the pattern number and the correct size.

## Wheatless Shortcakes

Thousands of men and women have given up the weekly allowance of a pound and a half of flour, and are traveling a wheatless road to victory. Those housekeepers who make good use of this allowance in loaf bread and biscuit hesitate to turn even a dust of wheat flour into pie or shortcake and such extras. To these the recipes for shortcake worked out in the experiment kitchen of the food administration will be most acceptable.

**Barley Shortcake.**

1 cup liquid.
4 to 6 tablespoons fat.
1 tablespoon sugar.
1 teaspoon salt.
6 teaspoons baking powder.
4 cups barley.

**Corn Flour Shortcake.**

1 cup liquid.
6 to 8 tablespoons fat.
1 tablespoon sugar.
1 teaspoon salt.
6 teaspoons baking powder.
2 2-3 cups corn flour.

**Rice Flour Shortcake.**

Follow directions for corn flour, using 2 1-4 cups rice flour instead of corn flour.

**Barley-Corn Shortcake.**

1 cup liquid.
6 tablespoons fat.
1 tablespoon sugar.
1 teaspoon salt.
6 teaspoons baking powder.
2 cups barley flour.
1 1-3 cups corn flour.

**Barley-Oats Shortcake.**

Follow directions for barley-corn flour, using 1 1-2 cups rolled oats ground in food chopper instead of the corn flour.

**Corn-Oats Shortcake.**

1 cup liquid.
4 tablespoons fat.
1 tablespoon sugar.
1 teaspoon salt.
6 teaspoons baking powder.
1 1-3 cups corn flour.
1 1-2 cups ground rolled oats.

All measurements are level. Mix dry ingredients, cut in the fat and add the liquid. For individual servings, place dough on slightly floured board, pat to ¾-inch thickness and cut as for biscuit. If a large shortcake is wanted, place dough in well greased biscuit tin and pat to desired thickness.

An egg added to rice or corn flour makes a softer dough. The slightly acid taste of barley may be overcome by using a quarter teaspoon of soda dissolved in one cup of liquid.

Do not split these cakes, as they crumble easily. Pile strawberries or other fruit on shortcake. Add whipped cream, if desired, and serve. These shortcakes can be used instead of pie crust in a great variety of desserts.

**Family Reunion.**

Two brothers recently met in a Y. M. C. A. hut in London. They had not seen each other in two years. Subsequently in reading a newspaper they came across photographs of their mother, three other brothers, themselves and two cousins, all doing their "bit."

**Serving Front Lines.**

Horace Munger, an merican sailor, writing from France, says: "The Frenchmen call us 'Wild Americans' and the Germans call us 'brave fools.' The Y. M. C. A. is right up in the trenches. They carry the stuff right up in the front line for the boys that have to stay there."

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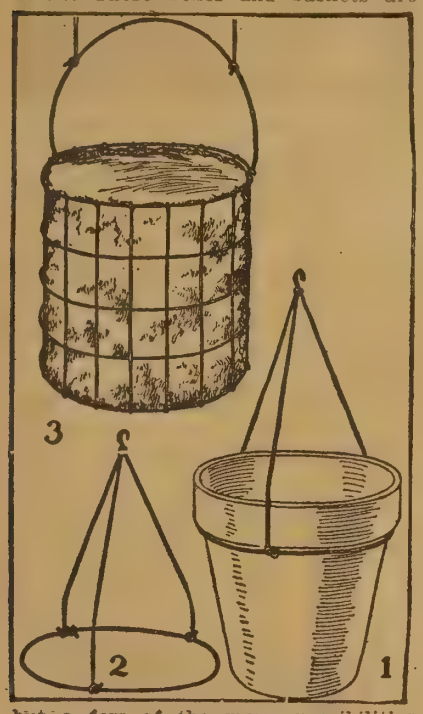
# Handicraft For Girls

**By Dorothy Perkins**

(Copyright by A. Neely Hall.)

## Hanging Flower Boxes and Baskets.

Pretty hanging boxes and baskets for plants and ferns may be made easily with materials picked up at home, as I am showing by the designs below. These boxes and baskets are



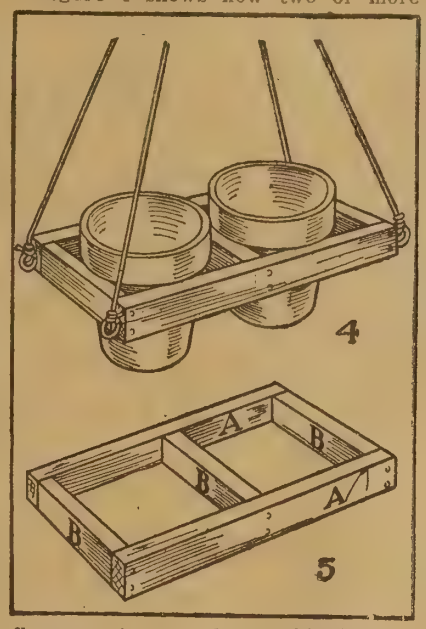

but a few of the many possibilities that may be discovered with a little thought.

The flower pot basket in Fig 1 is supported in a frame like that shown in Fig. 2, made out of lightweight wire. Stovepipe wire is a good kind to use, as it is easily bent and breaks with a few twists at the point desired, making a pair of wire cutters unnecessary.

First form the wire ring of the proper diameter to catch around the underside of the top flange of the flower pot, then attach the three wire sizes, but the one here shown is of the best proportions for a flower basket. All that is necessary to do is to line the inside of the basket with hangers to the ring, spacing them equidistantly, and join the upper ends in a hook as shown. If you can not find the wire for making the frame, you may use heavy wrapping twine for the purpose.

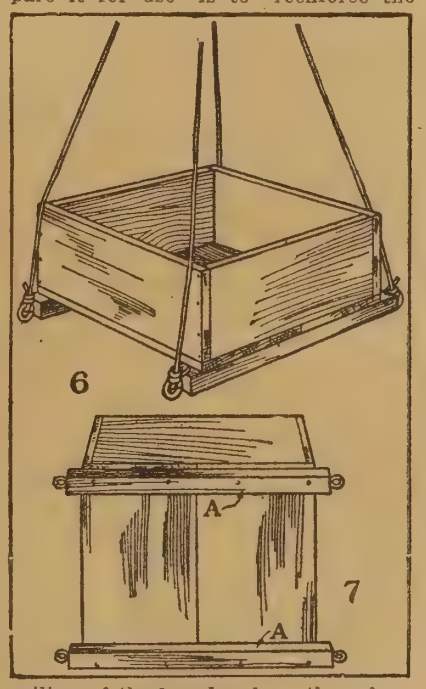
The basket shown in Fig. 3 is made from a wire egg basket. If you haven't an unused basket in the house, you can get a new one for 10 or 12 cents. They come in different shapes and moss, turning the mossy side out, so that the basket will retain earth, and then fasten two pieces of wire or cord to the handle for hangers.

Figure 4 shows how two or more




flower pots may be combined in a wooden frame for a hanging box, and Fig 5 shows how the frame strips are nailed together. Cross strips B should be of the length of the outside diameter of the flower pots, measured just beneath the top flange, and stripe A should be of the proper length to connect the cross pieces. After nailing the frame strips together, screw screw-eyes into the ends of strips A, to which to tie the suspending cords.

The hanging box shown in Fig. 6 may be made out of any shallow grocery box. All that is necessary to prepare it for use is to reenforce the




nailing of the boards where they show signs of loosening, and to provide it with hangers. The best manner of attaching the hangers is as shown in Fig. 7, which is a view of the box bottom. Strips A are several inches longer than the width of the box, and are nailed on crosswise with the bottom boards. The screw-eyes are fastened into the ends of the strips, and with the hangers tied to these the weight of the earth-filled box is borne by strips A instead of by the box bottom.

### Original Source.

Examiner—You are quite sure that this is a purely original composition you have handed in? I must say the wording sounds strangely familiar.

Plagiarist—Possibly you have run across some of the words in the dictionary."—Judge.

### The Rebuke Courteous.

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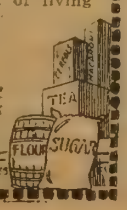
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Letters from the following Corner cousins have been received the last week and will be published just as soon as possible: Eva Priddy, Dorothy Kane, Eva Hickman, Bernadine Hatfield, Annabell Van Hoy, Virginia Brockmiller, Ruth Bailey, Marian Willey, Elizabeth Cook, Clara Pohle, Alice Watson, Lawrence Barraford, Hazel Lackey, Maude Lackey, Lahville Fountain, Gertrude Wittine, Minnie Warner, Carl Dahlstrom, Lucy Mizer, Anita Hughes, Jessie Willey, Elma Moem, Elizabeth Odell, Margaret Kane, Helen Peterson, Sibelle De Cheane, Dorothy Cain, Annie Anderson, Wilma McDowell, Viola Powell, Elsie McGlaughlin, Leona B. Jacks, Bessie Kincaid, Zella Wilson, Della Davis, Helen Christina McKeen, Selma Lilliquist, Mildred Heidegger.

### Moscow, Dinah and Bonnie.

Dear Aunt Nellie: I am going to write to the Children's Corner again. I have not written for a long time. This is the fourth letter I have written. I was 11 years old February 23. I am in the seventh grade. Have I a twin? If I have I should like for them to write to me. We own a 320-acre wheat ranch. We have 17 head of horses and four head of cattle. I have three pets. They are a horse, named Bonnie, a little black 2-year-old cow, named Dinah, and a little dog, named Moscow. It does not seem like winter here. We have not had much snow here this winter. We have 115 Barred Rock chickens. I have four white ducks. I think they are very pretty. We have a lake near the house and they swim in that. I have no sisters or brothers. I like to go to school. The name of the school I go to is Vorhees. We had a box social at our school. My teacher's name is Miss Wood. I like her fine. There are only four pupils going to our school. They are Almeda Green, Gordon Green, Howard Green and I. I like to help papa with the chores. I also like to help mama in the house. I like to crochet, embroider and hemstitch. After I get through with work I like to read. I have read eight books this winter. The names of them are: "Adrift in New York," "Only an Irish Boy," "Paul the Pedler," the Childs Bible and the "Campfire Girl" series. Why do so many girls and so few boys write to the Children's Corner?—Thelma Louis Green, Hartline, Wash.

### Can Soon Plant His Garden.

Dear Aunt Nellie: This is the first letter I have written to the Children's Corner and I hope it will not be my last. My birthday is December 10. Have I a twin? If so I wish he or she would write to me. I live on a 40-acre ranch in the upper Puget sound district. We have five hens and get three or four eggs a day. We have one cow, two heifers and two calves. I have two rabbits and my brother has four. We both belong to the rabbit club of Long Branch. My brother is the president of the potato club here. I go to school and am in the eighth grade. There are about 20 pupils in our school. It is only a small school. The name of it is Greenwood school. Our teacher's name is Miss Brown. It is too cold to plant any garden here yet, but I am going to plant a big one. I belong to the junior Red Cross and to the United States food administration. I am janitor of our schoolhouse and I get $3 a month. I am just getting over the measles. It has been getting warm here so I guess I can soon plant my garden. My oldest brother is in the navy.—Herbert L. Moore, age 13, Box 62, Long Branch, Wash.

### Raffle Her Bantam for Red Cross.

Dear Aunt Nellie: This is the fifth time I have written to the Corner. I will be in the seventh grade next year. Our school was out April 12. I was 11 years old May 9. I am going to Yakima to take music lessons this summer. I am going to stay with my sisters. I have two bantam hens and one rooster. One of them set and has eight bantam chicks and the other one is going to set. The community out here is raffling a pig off for the Red Cross. I am going to raffle my bantam off next fall. We have 15 pigs, 50 chickens and 12 horses. We are sending for 100 baby chicks. I will write a few puzzles, but I know that every one of the Corner children can guess them. It is fun, anyway. What goes to the watering trough, but never drinks? What is it that has a bed and never sleeps and has a mouth and never eats? I bought a pint of peas and planted them and got two pints of peas. How many peas (p's) were there in the two pints of peas?—Glyness Simenson, Corfu, Wash.

### Brother Won Four-Minute Contest.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. Papa takes the Farmer. I like to read the letters. I am 8 years old and my birthday is June 16. Have I a twin? If so I would like to hear from her. I am in the third grade. There are 22 pupils in our school. I have two sisters and their names are Minnie, age 10 years; she is in the fifth grade at school. My other sister's name is Hazel, aged 5. My brother's name is Arthur and he is 12 years old and in the seventh grade at school. He is secretary of the Lincoln Junior War Savings society and won the contest for the speaker of the four-minute men on the war saving stamps. I have three-fourths of a mile to go to school and four miles to town. At school we girls are making a quilt for the Red Cross. I made myself an apron at school. We live on a 40-acre farm. We have five cows, one horse, one calf, two cats and a few chickens.—Thelma Heimen, Toledo, Wash.

### Likes to Tend to the Lambs.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I live on a 240-acre ranch. We have two cows. Their names are Beauty and White Face. We have three pigs. Hazel, Floyd and I have a pig. We have 18 old chickens. Hazel has a hen. We have eight old sheep and nine lambs. I like to tend to the lambs. They jump about and have a good time. Last year the lambs would get on a stump and jump off. We have a black lamb and when we chase him he will jump about just like he was going some place. Hazel, Floyd, papa and I all go to school. My papa is the teacher at the Waterloo school. We have 31 in school now. We are in the Waterloo district. Papa and mama belong to the Red Cross. I have 50 cents worth of thrift stamps. I am 7 years old. I will be 8 June 18. I have light brown hair. I have brown eyes. Have I a twin? If I have I wish she or he would write to me.—Ruth Cory, R. F. D. 1, Box 51, Daisy, Wash.

### Hunts the Cows After School.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 9 years old. My birthday is November 10. I have a twin. I go to Alder Grove school. We have a man teacher. His name is Mr. Leber. I am in the third grade. There are five in the third grade. There are six grades. There are 14 pupils. I have three brothers and two sisters. My sisters' names are Irene and Edna and brothers' names are Oscar, Tommy and Andrew. My brother Oscar is in the seventh grade and my sister Edna is in the first grade. My sister Irene is going to high school. We joined the Red Cross at school. All of us at school joined except two. My mother takes the Farmer, and so I wrote to you. We live on an 80-acre farm. We have seven cows, five calves, one pig and two dozen chickens. Oscar helps mama milk the cows. We have to hunt the cows after school. The Corner has been growing larger.—Ellen Nelson, R. F. D. 1, box 108, Tumwater, Wash.

### Make Joke Books for the Soldiers.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I was 13 on May 12. I am in the seventh grade. My teacher's name is Miss Margaret Maccauley. There are only four scholars in my grade and we are all girls. I have two sisters and three brothers. My sisters' names are Bonnie and Louise. Bonnie is 2 years old and Louise is 15. My brothers' names are Joe, Grant and Donald. I have joined the Junior Red Cross and I have been sewing little waists for the babies in Belgium and making joke books for the soldiers. I am also learning to knit. My best friend is Hazel Hillerud. She wrote to the Children's Corner last year. I was very glad to see such a large Children's Corner this time and I hope it will keep growing larger. I am going to grow a garden this year and I have most all of the other years. If I have a twin I wish she would write to me and I will gladly answer her letters.—Ethel Little, Box 27, Lawrence, Wash.

### True American Citizens Now.

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. My father takes the Farmer and I enjoy reading the children's letters very much. Mother said that I could have all the roosters that I raised to buy Liberty bonds and help fight the mad dog of Europe, the kaiser. I have $150 in Liberty bonds and a War Saving Stamp started. I expect to finish it this month. Two of my great grandmothers and one great grandfather were born in Germany, but we are true American citizens now, doing all we can to help win the war. We went to Spokane a few days ago and went out to visit Fort Wright. There were lots of soldiers out there, too. We have a car and I enjoy taking trips in it very much. One time Mrs. Car got sick coming home from Medical Lake and we had to send for the doctor to come and doctor it us before we could get home.—Ina Miller, R. F. D. 1, Box 81, Davenport, Wash.

### Helps Mother Do All the Work.

Dear Aunt Nellie: This is the first time I have written to the Corner. I read the letters every week and they are very nice. They interest me very much. I am 12 years old. My birthday is November 18. Have I a twin? If so, I wish they would write to me. We have two cows, one calf, 12 hens and about 11 little chicks. We have two cats. Our cats' names are Molly and Mogons. Our cows' names are Jersey and Queen. We live in town but we want to sell this land we are living on and move out on our ranch. We have two and a half acres in town. It has a big house, a barn, chicken house, cellar, woodshed and a wash house. I have two sisters and one brother, but my sisters are married. My brother is 16 years old. I help my mother do all the work. I expect to write often. I will give you some riddles the next time I write.—Agnes Westlund, Ferndale, Wash.

### Has a Horse of Her Own.

Dear Aunt Nellie: This is the first time I have written to you and I hope it will not be the last. I was 11 years old December 11. I am in the fifth grade. My teacher's name is Miss Ella Faeber. I like her very much. I go to the Four Mile school. There are 20 scholars. Have I a twin? I have two sisters and two brothers. Their names are Della, Ralph, Charley and Mabel. They all are married. For pets, I have a cat named Bob, a dog named Jack and best of all I have seven little white rabbits and five old ones. We have three horses. Their names are Chub, Buster and Gip. Gip is my own.—Norma Oliver, route 4, Palouse, Wash.

### Baby David Is Full of Fun.

Dear Aunt Nellie: My father takes The Farmer and I have been reading the Corner letters and I am writing to the Children's Corner. I hope to see my letter in print. I go to school every day. I have but a short way to go. I am 10 years old and will be 11 next February 14. If I have a twin I hope she will write to me. I am going to a party today. There are seven scholars in the room. My teacher's name is Mrs. Nellie Hershey. I like her very much. We have two cows, two horses, three pigs and about 24 chickens. I have one sister and three brothers and I have one half-sister, and three half-brothers. My half sister is dead. I will tell you what their names are: Lee, Vest, Jay, Carl, Robert and David. David is the baby and is full of fun. I live on a 152-acre farm. I like to live on a farm better than in the city.—Jane Osborn, Ashford, Wash.

### Gather Up Clothes for Refugees.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner and I hope my letter is welcome. I am in the seventh grade and I am 11 years old. I weigh 115 pounds. My teacher's name is Miss Ritchie. She is the best teacher our school has ever had. I belong to the Red Cross and the War Savings society. I have knitted one pair of wristlets and have my second pair of socks nearly done. Some of the pupils' mothers have knitted two pairs of socks and a sweater. Our school, which is called the Cowlitz Bend school, gathered up a big boxful of clothes for the refugees of France. They are for the children except some socks for the men. We had a boxful of shoes too. The Corner was quite large this week. I hope my letter will help it to be larger next week.—Mary Lewis, Castle Rock, Wash.

### Hasn't Missed a Day of School.

Dear Aunt Nellie: This is the first time I have written to the Corner. I hope it won't be the last. I am 11 years old and in the fifth grade. My birthday is November 14. Have I a twin? If so I wish he or she would write to me. I have dark hair, blue eyes and dark eyebrows, and a dark complexion. We have two cows and one calf and one horse. I have knitted three napkins, one wash cloth and I am knitting a pair of wristlets. I haven't missed a day this year and I hope I don't. I have two war saving stamps. I have two brothers and four sisters. My teacher's name is Miss Irene Malone.—Violet J. Hamilton, Colby, Wash.

### Lives Three Miles From School.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I enjoy reading their letters. I am 13 years old and I am in the seventh grade. I live ona 640-acre farm. I live three miles from school. I have five sisters and four brothers. My sis-

## Busy and Loyal Little Cousins

Have you ever stopped to think how busy are the little cousins who are writing such fine letters to Aunt Nellie; how loyal they are to their country and in how many ways they are helping in Red Cross work and in buying thrift stamps? For example:

One cousin has joined the Red Cross and helps at home, too, by hunting the cows every night after school. Another tells about her brother, who is secretary of the Lincoln Junior War Savings society, and how he won the prize for a four-minute speech on war savings stamps. At school, she, herself, has helped to make a quilt for the Red Cross.

One little owner of thrift stamps says she likes to tend to the lambs and keep them out of mischief. Another cousin has a brother in the service. A pupil of a Mount Vernon school reports that they are doing Red Cross work, sewing quilt blocks. They have an agricultural club and a poultry club to which she belongs and is secretary.

A Corfu cousin is going to raffle off her pet bantam for the Red Cross next fall. The father of one of our girls has promised to buy her whole crop of potatoes at a cent a pound.

At a school near Lawrence the pupils are sewing little waists for Belgian babies and are making joke books to cheer the soldiers.

The Cowlitz Bend school has gathered up a big boxful of clothing and a boxful of shoes for the refugees of France.

A Davenport cousin's mother is going to give her all the roosters she raises to buy Liberty bonds and help fight the "mad dog of Europe," the kaiser. She already has $150 in Liberty bonds and a war saving book started. Two of her great grandmothers and one great-grandfather were born in Germany, but all are now true American citizens.

One girl is showing her patriotism in a different way, by helping mother do all the housework. Another cousin, who evidently didn't think much of Hoover's substitutes at first, declares she likes them all just fine now. This same girl sells milk to a neighbor and buys thrift stamps with the proceeds. She is also knitting quilts. The girls at Goldendale have formed a club and are sewing for the Armenian children.

One of our boys has a gun and likes to shoot gophers, incidentally ridding the farm of pests.

One cousin is backing up her brother in the army by saving money to buy thrift stamps.

Cousin Roy will work real hard in the garden this summer, but thinks he will try to snatch a little time off to go fishing now and then.

A Granite Falls girl has raised a large garden every year for a long time and this year has added chickens.

One ingenious little cousin, who eats six potatoes every day, which makes 2190 in a year, is going to raise just exactly that number, besiders a few cabbages, parsnips, peas and beans.


## Coat Lapel Button

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ters' names are Alda, Gladys, Ella, Anna and Elsie. My brothers' names are Robert, Clarence, Lewis and Lester. I will be 14 years old December 6. If I have a twin I would like very much to correspond with her or him. We have 13 mules, 10 horses and five colts. We have three cows and one calf. My father takes the Farmer and he thinks it a very interesting paper.—Grace Marie Bonwell, Box 24, Withrow, Wash.

**Likes the "Substitutes" Now.**

Dear Aunt Nellie: This is the second time I have written to the Farmer. The last time was about six months ago. I guess they all have forgotten what I told about, so will tell them again. I have one sister and one brother. His name is Elmer and sister's name is Cora. My brother is 2½ years old and my sister is 14 years old. I am going to write a little on Hooverizing. At first I didn't like the substitutes, but I like them fine now. I sell milk to one of our neighbors and that money I take for thrift stamps. I have a certificate now and am going to get more stamps. Mama is knitting for the Red Cross. She is making a sweater. My sister is going to soon. I am knitting quilts and am soon going to knit wash rags also. I am 9 years old and my birthday is February 21. I am in the fourth grade. My teacher's name is Miss Greene. If I pass this term I will be in the fifth grade. My sister will be in the eighth grade. Cora's teacher's name is Miss McCloud. If I have a twin I would like for her to write to me.—Marie Houk, White Bluffs, Wash.

**Will Go Fishing When Not Busy.**

Dear Aunt Nellie: I thought I would write again. This is the second time I have written. I do not think it will be the last time. I am going to write often for every time the Farmer comes the friends make me want to write. I am 9 years old and will be 10 January 30. I am in the third grade. Have I a twin? Our mother cat has five little kittens, four little white ones, and one little gray kitten. The mother is gray herself. I belong to the Red Cross. All the school children got a Red Cross pin. I got one besides an infantry pin. I have six little chickens. In summer I will work in the garden. While I am not working in the garden I will be fishing. There are lots of pretty flowers. There are yellow violets, blue violets, buttercups, candytuft, nightcaps, lady slippers, alakamas and wild bleeding hearts. Most of the children are getting the measles.—Roy Seger, Yelm, Wash.

**Brother Is in the Service.**

Dear Aunt Nellie: This is the first time I have written to the Corner. I am 8 years old. My birthday is July 18. I have a brother who enlisted in the service and is at Jefferson Barracks, St. Louis, Mo. I have four sisters and two brothers. My father and mother are living. I like to ride horseback. I like to live on a farm, where I can have dogs and cats. I like to drive cows. I forgot to tell you that I came from Missouri. When I lived there I had a little dog named Trippy and a cat named Pussy. I had a pony also. Her name was Pinto and we had another mare, Bess. Have I a twin? If I have please tell him or her to write a line or two.—Verna Estaline Heald, care of Mrs. J. W. Green, Govan, Wash.

**Father Will Buy Her Potatoes.**

Dear Aunt Nellie: As it is a long time since I wrote last I thought I would write again. I am 9 years old and am in the fourth grade. My birthday is June 11. I joined the Junior Red Cross and also did the school. I did not have time to sew for it yet. We have about 125 pupils in our school. I have two miles and a half to walk to school. It is not much fun to walk that ways every morning and evening. My teacher's name is Miss Haveman. Our school will close June 7. I have a little garden planted. I planted all potatoes and when they are grown up my father is going to buy them at a cent a pound.—Stell Sturmans, R. F. D. 1, Box 21, Lynden, Wash.

**Will Tell More Next Time.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I live on a 135-acre farm. I have a cat and a dog. My cat's name is Pinkie. My dog's name is Bruser. I have knit four squares for the Red Cross and I am going to knit a wash rag. I have two brothers. Their names are Nelson and Howard. I had better quit for the first time. I will write a longer letter next time. I am ready for the fourth grade. I will be 9 December 15.—Elsie M. Ashmore, Monse, Wash.

**Glad to Have Graham Write Again.**

Dear Aunt Nellie: It has been a long time since I wrote to the Corner. How are the cousins? I am 9 years old and will be 10 June 16. Have I a twin? I got to playing with the cider mill and crushed the end of my finger. It is getting a little better now. I hope none of the cousins do that. We have two kitties. They are Tim and Ready. We raised Ready from a kitten.—Graham Potter, R. F. D. 2, Mead, Wash.

**Wants Her Twin to Write.**

Dear Aunt Nellie: I have been reading the Children's Corner. I am going to be 10 years old April 6. I have two sisters and three brothers. Their names are Agnes and Sofie, Frank, Hans and Roy. Have I a twin? If so I wish she would write to me.—Sarah Jensen, Kittitas, Wash.

---

Address all letters to Aunt Nellie, care of the Washington Farmer, Spokane, Wash.


# Here Are Important Health Books That We Want Every Reader of The Washington Farmer to Have, Entirely Free

**SEND FOR THEM TODAY**

## Uncle Sam Cannot Afford to Lose One Single Life Our Country Needs Every Man, Woman and Child

Water vitally affects your health and life and the value of your property. If it is not pure it causes many apparently unaccountable troubles.

It is to aid you in guarding against the evils of impure water, to preserve the health of your family, that we say to you—GET THESE BOOKS. REMEMBER—they are FREE.

**People Are the Country's Most Valuable Asset**

Each year thousands of people waste their lives and those of their loved ones through typhoid fever and allied diseases. People are the country's most valuable asset and simple precaution can prevent their untimely death.

## This Great Public Menace Must Be Publicly Discussed

An impolite subject, politely brought to your attention.

The United States Public Health Service has provided these simple and concise books on the care and protection of your water supply. Every householder in the country, rural district or small town, where the purity of the water is "up to you," can profit by these books.

Does your privy, stable or hog pen pollute your water supply or that of your neighbor's?

You may think that it does not, when in reality it is a spot of contamination for a large area.

## Save Many Dollars

Simple methods of prevention will save you many dollars in doctor's bills and long, weary, dragging illness and possible death.

## You Are to Blame

If your children die of typhoid or malarial diseases—YOU ARE TO BLAME. If you are made inefficient through the ravages of these diseases, YOU ARE TO BLAME.

Nothing but your own care can overcome these dangers. LOOK TO YOUR WATER SUPPLY. BE SURE THAT IT IS PURE.

THESE FREE BOOKS WILL TELL YOU HOW, and we want every reader of The Washington Farmer to send for them—TODAY.

Enclose a two-cent stamp for return postage and we will send you these books on Good Water and Safe Disposal of Waste Matter.

Be sure to write your name and address plainly.

Direct your letter to

## THE WASHINGTON FARMER

**Washington, D. C.**

# News for Breeders

## Public Sale Best

(Continued from page six.)

feature. There is a feeling of good will amongst cattle men, large and small, and they seem to be imbued with the feeling that they should meet occasionally and get better acquainted and find out more about each others' requirements. And in that way the cattle men sort of make their own market and are always in touch with it and with each other.

In view of the fact that public sales are more satisfactory to both purchaser and seller than private sales, and that there appears to be a real demand for a public sale at this time, A. D. Dunn of Wapato, Day & Rothrock of Sprague and Joe Turner of Meyers Falls, Wash., will hold a public sale at the Spokane Union stockyards, June 20, 1918, to which they will consign everything they have for sale at the present time. The offering will be select, and both bulls and heifers of much individual merit can be obtained, starting or enlarging any type of purebred Shorthorn or grade cattle herds. The consignors realize that this sale comes at a busy season and that the attendance and prices may not hold up to the usual standard. However, a new feature, in the Inland Empire, is being introduced which should offset any possible poor attendance. Dean E. J. Iddings of the University of Idaho, or C. W. Hickman, associate professor of animal husbandry at the University of Idaho, both of whom can be addressed at Moscow, Idaho, and are known to be men of excellent judgment and ability in the Shorthorn world, have agreed to act as bidding agents for any one who can not be present and who desires to have them bid for him. The catalog will contain a blank on which one can list his first, second, third and fourth choice and set his maximum bid on each one. It can then be sealed and mailed to Dean Iddings of Professor Hickman, and one of them will attend the sale and buy as cheaply as possible, and in no case exceed the authorized limit. All authority given to these gentlemen will be treated strictly confidential and no animal will be bid higher by them than its merit justifies.

There will be approximately 26 bulls and 14 heifers to select from, all choice, well-grown, well-bred and valuable additions to established herds or good material for beginners.

## Guernseys Sell Well

The A. L. Giles sale of Guernseys, held on the W. O. Reith farm at the edge of Astoria, Ore., was a successful sale. No sensational prices were received, but a lot of good cattle were dispersed among both new and old breeders, who will "carry on" the popularity of the Guernsey breed. Mr. Giles' Chicona farm is across the river from Astoria, and local dairymen who know the herd, paid the tribute to the herd by being good buyers.

While this is true, there were a number of outside buyers from both Oregon and Washington. C. L. Jamison, agriculturist of the Farmers' Savings bank of Walla Walla, bought three head for $750. His bank supplies them to dairymen, mostly beginners, in purbred cattle, on time, and is performing valuable services. C. R. Vander Griend of Lynden, Wash., took five, including two King of Medfield heifer calves, which he got for $200 each. F. A. Coffin of Monmouth, Ore., got four good ones at a cost of $790. The Red Cross bull that Mr. Giles donated went to L. E. Wilson of Astoria for $90. All the bulls were bargains.

The following is a complete list of the purebred animals sold, buyers and prices paid:

**Females.**

Netius' Sunlight, born May 5, 1912; sold to John Reith, Astoria, Ore., $220.

Golden Girl of Chicona, born December 4, 1912; sold to F. A. Coffin, Monmouth, Ore., $205.

Rosamond of Chicona, born July 9, 1914; K. F. Johnson, Astoria, Ore., $160.

Lucy of Alfalfa farms, born January 29, 1906; M. K. Johnson, $200.

Honey Lass of Chicona, born June 14, 1916; P. A. Larson, Astoria, Ore., $150.

Hazel of White Water, born December 3, 1905; Mike Seppa, Astoria, $115.

Lily of Chicona, born January 30, 1916; F. A. Coffin, $300.

Lolita of Chicona, born July 14, 1917; B. C. Vander Griend, Lynden, Wash., $180.

Beatrice of Chicona, born June 13, 1913; C. L. Jamison, Walla Walla, Wash., $280.

Roy's La Verne, born January 10, 1909; R. E. Wilson, Astoria, Ore., $180.

Bonita of Chicona, born April 28, 1917; B. C. Vander Griend, $260.

Merle of Chicona, born June 25, 1916; F. A. Coffin, $285.

Rosaline of Chicona, born November 4, 1910; K. F. Johnson, $265.

Butter Queen of Willowbrook, born December 13, 1912; Mrs. W. O. Reith, Astoria, Ore., $300.

Viva of Chicona, born November 25, 1913; W. O. Reith, Astoria, Ore., $400.

Victoria of Chicona, born July 22, 1917; John Spies, Beaverton, Ore., $150.

Buttercup of Willowbrook, born August 23, 1912; C. L. Jamison, $325.

Rosemary of Chicona, born August 9, 1916; B. C. Vander Griend, $125.

Linneta of Chicona, born July 13, 1917; C. L. Jamison, $145.

Martha of Chicona, born September 17, 1917; B. C. Vander Griend, $200.

Muriel of Chicona, twin of above; B. C. Vander Griend, $200.

**Bulls.**

Chicona Hero, born April 20, 1917; Orchard Hill Farm, Redmond, Wash., $180.

Chicona Byron, born April, 1917; A. H. Sale, Astoria, Ore., $105.

Chicona Neponset, born May 6, 1917; M. K. Johnson, $80.

Chicona Jethro, born April 28, 1917; C. Sinner, Katama, Wash., $80.

Chicona Norman, born July 25, 1917; C. R. Baker, Ilwaco, Wash., $105.

Uncatalogued bull calf, M. K. Johnson, $115.

Bull calf sold for benefit of Red Cross, L. E. Wilson, $90.

Twenty-one females sold for $4645, average, $221.19.

Seven bulls sold for $755, average, $107.85.

Twenty-eight animals sold for $5400, average, $193.20.


# LAST CALL
# JERSEY AUCTION SALE

**CANNON FARM, JUNE 11, 1918.**

Your opportunity to secure Registered Jerseys of the best American families. Entire herd, cows, bulls and young stock. Don't wait for catalogue! COME! We have what will suit you.

Sale will be held on farm, 4 miles south of Salem. Inquire at Pacific Homestead office, 215 South Commercial St., for free transportation to sale.

**C. H. CANNON, Turner, Ore.**

# MISSOURI and KENTUCKY
# JACKS

**STOCKTON, CAL.** P. O. Box 679. | **JAMESPORT,** Missouri. | **LOS ANGELES, CAL.** P. O. Box 1117.

**SPOKANE, WASH.**
W1728 Fourth Ave. Phone Main 1447.

# H. B. THORNBERRY

**Dealer in**

**REGISTERED AND PEDIGREED JACKS, JENNETS, PERCHERON AND SHIRE STALLIONS AND GAITED KENTUCKY SADDLE HORSES**

**Largest Importer in the United States.**



# COMBINATION SALE OF REGISTERED SHORTHORN CATTLE

by

Day & Rothrock

A. D. Dunn — Joe Turner



***26 BULLS***

All Tuberculin Tested

Breeding Qualities

Guaranteed

**Choice, well grown, registered SHORTHORNS for rangemen, dairymen, farmers and breeders.**

***14 HEIFERS***

All Tuberculin Tested

Breeding Qualities

Guaranteed

## To Be Held at Union Stock Yards, Spokane, Wash. June 20, 1918, at 1 o'Clock P. M.

You can make selections here suitable for starting or enlarging your farm, beef or dairy herds of grade or PURE BRED CATTLE.

Get a catalog and if it is impossible for you to personally attend the sale, address authorization to bid for you on animals of your choice to Dean E. J. Iddings of the College of Agriculture or C. W. Hickman, Associate Professor of Animal Husbandry, University of Idaho, Moscow, Idaho.

OPPORTUNITY LIES AT YOUR DOOR. **Write today for Catalog to**

**F. M. Rothrock, 205 Exchange Bank Bldg., Spokane, Wash.**

# Breeders' Department

## JERSEY CATTLE

### Jersey Home Dairy

Young bulls, winners at Washington State Fair, make good herd sires. Attractive prices for quick sale.

**Erickson Bros. Prop.**

North Yakima, Wash.

### ASHBURN FARM

REGISTER OF MERIT JERSEYS.

In nearly 13 years we have yet to get our first poor heifer or dissatisfied customer. We have the best of the Golden Glow's Chief and St. Mawes strains, with the cross of our great Kentucky bull, Valentine's Ashburn Baronet.

**J. M. DICKSON & SON.** **Shedd, Ore.**

**GOLDEN GLOW HERD**

Winner of 1st and 2d prize in butter test, Oregon State Fair, 1917, (all breeds, 20 entries); breeder and owner of grand champion cow in show ring, 1916; breeder of grand champion cow, 1917. Breeder and owner of world's champion 3-year-old, with 1115 lbs. butter, 80 per cent fat. Every female a daughter, granddaughter or great granddaughter of Golden Glow's Chief, sire of 34; 14 over 700 lbs.; 32 over 600 lbs.

**PICKARD BROS., Marion, Ore.**

**GOLDEN GLOW'S CHIEF**

Has 35 Register of Merit daughters and 40 grand-daughters, 4 proven sons, and a WORLD RECORD JUNIOR 3-YEAR-OLD DAUGHTER, who is dam of ONE OF OUR HERD BULLS by the old bull himself. Our second sire is also a son of Golden Glow's Chief, out of a Gold Medal Hood Farm cow. Write us for a young bull calf.

D. Brooks Hogan, Mgr., Iron Mine Farm, Oswego, Oregon.

**W. M. LADD, Owner, Portland, Oregon.**

### All High Record Blood

Bull calf out of Lucy of P. V., full sister to St. Mawes Susie; 936 lbs. butter in a year; to St. Mawes Blossom 823 lbs., and to Susie's Twin Maiden, 642 lbs. Sire, Poppy's St. Mawes, son of St. Mawes Poppy, 1120 lbs.

**ED CARY,** **Carlton, Ore.**

Station, La Fayette, Ore.

### OAK RIDGE JERSEY FARM

Thirty years breeding Jersey cattle. Young bulls from Register of Merit dams. Also a few choice females.

**RILEY E. HULBURT, Albany, Ore.**

### Ashwood Farm Jerseys

Senior herd bull, Holger, whose daughters are qualifying for register of merit in six months. Junior herd bull, St. Mawes of Ashwood, a son of Poppy's St. Mawes. Write us about your wants or come and see our herd.

**M'ARTHUR & STAUFF,** **Rickreall, Ore.**

### LAST BULL SOLD

Three register of merit cows, freshen in March, two in April. Baby bulls are sold so reasonably you can't afford to buy a bull of service age. Raise your own bull and save money. Prices, pedigrees, photos, etc., sent on request. Can spare a few good register of merit cows.

**JOHN B. STUMP & SON, Monmouth, Ore.**

### WAIKIKI FARM

Register of Merit Jerseys. Largest Jersey herd in the northwest. Young stock for sale.

**IRA P. WHITNEY, Manager.**
Route 7, Spokane, Wash.

### JUST ONE CALF LEFT

on our farm, out of a daughter of Rosaire Olga Lad, with a record of 765 lbs. butter, and by Gerties Poppys St. Mawes. This calf has three crosses of Rosaire Olga Lad. He is a dandy. The last four bull calves brought us $250 each; all were from our herd bull G. P. St. Mawes. Our herd average now is 747 lbs. butter from the 11 head.

**DOERFLER FARMS,** **Silverton, Ore.**
F. A. Doerfler, Prop.

### ANOKA FARM JERSEY

We have for sale a bull calf dropped Oct. 25, from a register of merit cow. Solid color, good individual. His sire is a grandson of St. Mawes Poppy, with 1120-lb. record.

**R. B. SEELEY,** **Sherwood, Ore.**
R. R. Station, Wilsonville, on Oregon Elec.

## AYRSHIRE CATTLE

### Edgewater Farm

Government accredited herd, headed by Peter Pan 63d. Bull calves available.

**ELBERT M. CHANDLER, Burbank, Wash.**

**In writing advertisers, be sure to say that you saw their advertisement in this paper.**

## SHORTHORN CATTLE

### Herd Bulls

Imported Doune Radiance No. 609412
and
Gainford Perfection No. 442173.

### Hercules Shorthorns

We can supply you with choice, well grown bulls and females of breeding age. Your inspection of our herd is invited. Visitors always welcome.

**Day & Rothrock Company**

205 Exchange Bank Bldg. **Spokane, Wash.**

### SHORTHORNS

A few young stock for sale by such noted sires as Prime Prince, 421193, and Sultan Still, 493239.

**R. E. BOYCE.** **Baker, Ore.**

### Firlawn Shorthorn Farm

UNION, ORE.

We offer a young herd bull (registered), ready for service in four months, and 7 yearling heifers, all of imported Scotch blood. Bull and heifers unrelated. Prices reasonable. Write us and come to the Union Stock Show.

**SHERMAN & HUTCHINSON,**
Union, Ore.

### Shorthorn Cattle

Registered bulls and heifers of breeding age for sale. Some from extra heavy milking dams.

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### H. H. SCHILDMAN

breeder of registered Shorthorn cattle, Hampshire sheep and big-type Poland China hogs. **Filer, Idaho.**

### LELAND BROTHERS

Breeders of top registered Shorthorn cattle. Correspondence solicited.

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### MILKING SHORTHORNS

with world records behind them for milk production.

**A. R. O. HOLSTEINS**

A son of the King of the Pontiacs at head of herd.

Can make special prices on young bulls of each breed.

**A. V. Bradrick & Son**
Palouse, Wash.

**REGISTERED SHORTHORN COWS.**

Young bulls and heifers, sired by Scotch bulls; liberal terms.

**CALDWELL CATTLE CO., Caldwell, Idaho.**

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### Registered Guernsey Bulls

From heavy producing cows, most of them with A. R. records, among them 492 lbs. fat (472 lbs. 85 per cent butter) and 392 lbs. fat (461 lbs. butter), both with first calf. Good type, well grown. Prices reasonable.

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### ORCHARD HILL FARM

"Home of High-Class Guernseys."
Dr. Park Weed Willis, Owner.
**Redmond, Wash.**

### FAIRVIEW FARM

Breeders of high class registered and grade Guernseys.

**A. J. SINNES.**

Route 5. **Mt. Vernon, Wash.**

## HOLSTEIN CATTLE

### CARNATION HOLSTEINS

Carnation Stock Farms

FARM—CARNATION, WASH.
Offices — 2080 Stuart Bldg., Seattle.

Over 300 in herd to select from. Herd has been under federal inspection for several years. Our herd sires are Matador Segis Walker, a grandson of King Segis, out of Matador Twisk Minette 4th, with record of 33.69 lbs. His first five two-year-old heifers, to freshen, have averaged nearly 22 lbs. in 7 days; King Segis 10th; Johanna McKinley Segis, the 40-lb. bull.

Write today your needs for a Holstein bull. Get them while they are young. Save money on cost price and on express charges. Careful attention given to mail orders.

**Visitors welcome. Correspondence solicited. Write for circular, Value of Pure Bred Sires.**

### 365-DAY HOLSTEINS

24,667 lbs. milk—1026 lbs. butter—is the 5. o. advance registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.

THE HERD WITH YEARLY RECORDS.

**WESTERNWOLD RANCH, Prineville, Ore.**

### LaConnor Flats Stock Farm

Pure bred registered Holstein cattle. Herd sire Segis Pontiac Acme; average of three of nearest dams; butter, 1 year, 1080.82 lbs.; milk, 24,380.3.

**J. H. HULBERT.** **Mt. Vernon, Wash.**

### Bargains in Bull Calves

Sired by Segis Riverside Pontiac, that sold in Pacific international sale, 1914, for $1025, and whose dam has A. R. O. record of 31.47 lbs. butter in 7 days; 118.89 in 30 days, and big records all through his pedigree.

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### Highland Stock Farm

offers for sale Hereford bulls, 1 or 2 years old. One or a carload.

**PLATT BROS.** **Genesee, Idaho.**

### BULL RANCH

Hereford Cattle.
Berkshire Hogs.
Hampshire Sheep.

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## ABERDEEN ANGUS

### ANGUS CATTLE

In the famous valley of the Yakima there is located one of the best herds of Aberdeen Angus in America. Proof of this is evident by the many prizes won by this herd at all of the greatest shows of the northwest and central states, including the Chicago International.

Fifty extra good range bulls are now offered for sale. Also fancy herd headers and show cattle of both male and female. All prices very reasonable.

CONGDON & BATTLES.

**OTTO V. BATTLES, Manager.**
**Yakima, Washington.**

## BROWN SWISS CATTLE

### Brown Swiss Stock Farm

Breeders of Brown Swiss Cattle, the Farmer's Dairy Cow. Young stock for sale.

**THEO. BRUGGER, Route 3, Gresham, Ore.**

## YORKSHIRE SWINE

### Booking Orders for Weaned Pigs

Can furnish pairs or trios, best stock, $15, at eight weeks.

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## HAMPSHIRE SWINE

**REGISTERED HAMPSHIRE HOGS.**

Growthy and vigorous, great rustlers. Pigs from January and February litters, also other ages. Correspondence invited.

**TUTTLE BROS.,** **Asotin, Wash.**

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### Hunter Ranch Percherons

The Grand Champion KROUMIR at head of herd. Young stallions for sale at all times at breeders' prices.

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### Record Holsteins

Young bulls, some of them ready for service, by a sire whose five nearest dams average 26.17 pounds butter, or another with 29.67-pound dam, and out of high-record A. R. O. dams. Priced to sell.

**ERNEST WERNER, AURORA, ORE.**

### REGISTERED HOLSTEINS

Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.

**H. R. BOOMER,** **New Plymouth, Idaho.**

### HOLSTEINS

Well-bred young bulls for sale.

**THOS. CARMICHAEL.** **Gaston, Ore.**

**HOLSTEINS BRED FOR PRODUCTION**
and
Berkshires of Quality.
Stock of All Ages, Either Sex, for Sale.

**HUGH NISBET.** **Chimacum, Wash.**

## POLAND CHINA SWINE

### Big Type Poland Chinas

Peter Mouw and John B. Lawson strains. Young boars and bred or open gilts. Good individuals.

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### LOCUST HILL HERD

Big type and medium Poland-Chinas. Bred gilts and spring pigs of both strains, unrelated. Sixteen years a breeder of Poland-Chinas in Oregon.

**A. L. SWAGGART,** **Athena, Ore.**

### LOCUST LAWN HERD

Sold Out.

**W. F. HOWARD & SONS, Caldwell, Idaho.**
S. Kimble Ave.

**QUALITY HERD.**

If you want to improve your herd, try stock from my winners at the Oregon state fair.

**RAY J. FOX.** **Lyons, Ore.**

### PURE BRED POLANDS

A good herd boar for sale; also booking orders for spring farrowed pigs. Will ship C. O. D. subject to your approval.

**HERBERT WILLARD,** **Dayton, Ore.**

## CHESTER WHITE SWINE

### COVE STOCK FARM

Unrelated fall and spring Chester White pigs from prize winning stock.

**ARCHIE CONLEY.** **Cove, Ore.**

## DUROC-JERSEY SWINE

### Chas. G. Sprong

BREEDER.

Registered Duroc-Jersey hogs. Weanling pigs for sale.

**GRANDVIEW,** **WASH.**

**DUROCS.**

Boars and open or bred gilts of excellent breeding.

E. E. PRICE, CABINET, IDAHO, OR
**JAMES N. PRICE.** **Yakima, Wash.**

**This is the season of preparation on the farm. There's many a timely and practical suggestion on equipment, etc., to be gleaned from our advertisements these days. Read them.**

## POULTRY



### White, Buff and Blue Orpingtons

**(Capt. De Bathe Strain.)**

Speckled Sussex and Anconas. All single comb. Aldrich strain Orpingtons, Sheppard Anconas. My birds took first prizes at all leading shows of Pacific Coast. Prices for stock, eggs and chicks reasonable. All from best laying birds. Finest lot of cockerels I've ever raised. A few White Holland and bronze turkey toms for sale.

**IRA N. DELINE.** **Olympia, Wash.**

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, June 3.—Submarine activities off the American coast brought about a rush of selling in the corn market today and formed the chief factor in a material setback to the lowest price levels yet this season. The close was unsettled, 1⅞c to 2c net lower, with June $1.28⅝ and July $1.31½ to $1.31⅝.

Notwithstanding that bearish sentiment predominated prior to the receipt of news about U-boats, the corn market did not show serious losses. Big receipts, though, had put the bulls under considerable of a handicap. All other influences, however, were virtually forgotten after bulletins began to appear telling of submarine developments. Subsequent rallies were ascribed to covering by shorts.

Oats was relatively firm as a result of bidding from seaboard exporters.

Provisions advanced sharply with hogs, but later reacted somewhat, owing to revised figures on warehouse stocks.

**Cash Quotations.**

CHICAGO, June 3.—Corn, No. 2 yellow, $1.62; No. 3 yellow, $1.56@1.57; No. 4 yellow, $1.32@1.42. Oats, No. 3 white, 72@72¾c; standard, 72½@73¼c. Rye, No. 2, nominal; No. 3, nominal; No. 4, $1.53. Barley, $1@1.26. Timothy, $5@8. Clover, $18@28. Pork, nominal. Lard, $24.07. Ribs, $21.50@21.87.

**Chicago Futures.**

| | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| Corn— | | | | |
| June ..... | 1.31 | 1.31 | 1.27⅝ | 1.28⅝ |
| July ..... | 1.33½ | 1.33⅝ | 1.30⅝ | 1.31½ |
| Oats— | | | | |
| June ..... | .69⅞ | .70¾ | .69¼ | .70 |
| July ..... | .65½ | .66⅛ | .64⅞ | .65½ |
| Pork— | | | | |
| July ..... | 40.70 | 41.30 | 40.65 | 40.75 |
| Lard— | | | | |
| July ..... | 24.60 | 24.65 | 24.17 | 24.27 |
| Sept. ..... | 24.65 | 24.75 | 24.35 | 24.50 |
| Ribs— | | | | |
| July ..... | 22.22 | 22.27 | 21.92 | 22.00 |
| Sept. ..... | 22.55 | 22.72 | 22.40 | 22.45 |

**Pacific Northwest Grain.**

PORTLAND, Ore., June 3.—Grain, June delivery bids: Oats, No. 2 white feed, $57. Eastern oats and corn in bulk: Oats, No. 3 white, $49; 38-pound clipped white, $50; corn, No. 3 yellow, $57; No. 3 mixed, $55.

**Minneapolis Grain.**

MINNEAPOLIS, June 3.—Wheat receipts, 208 cars, compared with 297 cars a year ago. Corn, No. 3 yellow, $1.45@1.55. Oats, No. 3 white, 69½@70½c. Flax, $3.66@3.68. Flour unchanged; shipments, 40,676 barrels. Rye, $93@120. Bran, $28.25@33.25.

## Live Stock Quotations.

**At Omaha.**

OMAHA, June 3.—Hogs—Receipts, 4600; market mostly 10c higher. Heavy, $16.40@16.45; mixed, $16.45@16.55; light, $16.50@16.60; pigs, $12@16; bulk of sales, $16.45@16.55.

Cattle — Receipts, 4600; market steady. Native steers, $12.25@17.40; cows and heifers, $9.50@14; western steers, $9.50@14.25; cows and heifers, $7.50@9.50; canners, $7.50@9.50; stockers and feeders, $7.50@13; calves, $8@12.50; bulls, stags, etc., $8@12.50.

Sheep — Receipts, 4300; market strong. Lambs, $15.75@19.60; yearlings, $16@17.50; wethers, $14.50@16.50; ewes, $10@13.

**At Chicago.**

CHICAGO, June 3.—Hogs—Receipts, 18,000; higher. Heavy butchers, $16.40@16.60; light butchers, $16.60@16.80; prime heavy, $16.45@16.60; heavy packing, $16@16.35; rough heavy, $15.50@15.85; selected light, $16.75@16.90; medium and light mixed, $16.40@16.65; bulk, $16.50@16.70; pigs, $16.25@17.

Cattle—Receipts, 15,000; beef steers and butcher stock steady; calves active.

Sheep—Receipts, 12,000; weak. Western lambs bidding 10@25c lower. spring lamb receipts 6 double decks of spring lambs receipts 6 ouble decks of Californias and odd natives. Fairly good Californias, $19; prime natives quotable, $19.50; native ewes, few offers, best stock, $14.50@14.75; native yearlings and wethers market weak.

**At Portland.**

PORTLAND, Ore., June 3.—Cattle—Higher; receipts, 700. Prime steers, $14@15; good to choice steers, $12.50@13.50; medium to good steers, $11@12; fair to medium steers, $10.50@11.50; common to fair steers, $9@10; choice cows and heifers, $11@12; medium to good cows and heifers, $7.50@9; fair to medium cows and heifers, $6@7; canners, $4@6; bulls, $6.50@10; calves, $8.50@12; stockers and feeders, $8@10.

Hogs—Firm; receipts, 1571. Prime mixed, $17.50@17.65; medium mixed, $17.35@17.40; rough heavies, $16.35@16.40; pigs, $15@16; bulk of sales, $17.40@17.50.

Sheep—Firm; receipts, 947. East of mountain lambs, $16.50@17; valley lambs, $16@16.50; yearlings, $11.50@12; wethers, $10.50@11; ewes, $10@10.50.

**Spokane Stockyards, Monday.**

Hogs—Receipts, 90; market steady to strong. Prime mixed, $17.35@17.50; medium mixed, $17.10@17.30; rough heavy, $16.10@16.50; pigs, $15@16; stockers and feeders, $14.25@16; bulk of sales, $17.25.

Cattle—Receipts, 50; market steady, strong. Prime steers, $13.75@14.75; good to choice steers, $12.25@13.25; medium to good steers, $10.75@11.50; fair to medium steers, $9.75@10.75; common to fair steers, $8@9.50; choice cows and heifers, $10.50@11.50; good cows and heifers, $7.50@8.50; medium to good cows and heifers, $6.25@7.25; fair to medium cows and heifers, $5.25@6.25; canners, $3.50@5.50; bulls, $6.50@9; calves, $8@12; stockers and feeders, $6.50@9.

Sheep — Receipts, 2160; market steady. Prime lambs, $16.25@17; good lambs, $14.25@15.25; prime yearlings, $12.50@13; prime wethers, $11.50@12; best mutton ewes, $9.50@10.50.

## Spokane Market.

**WHOLESALE.**

**Vegetables**—Cabbage, $3.50 cwt; carrots, $2@2.50 cwt; bunch carrots, 85c doz; bunch beets, 85c doz; beets, $3 cwt; rutabagas, $1.50 cwt; parsnips, $1.50 cwt; hothouse lettuce, $1.25 box; head lettuce, $1.25 doz, $4.50 crate; turnips, $3 cwt; bunch turnips, 85c; red bell peppers, $1.25 box; chilli peppers, 25c lb; green peppers, 11c lb; California Imperial valley tomtaoes, 3.50 crate; Mexican tomatoes, $3.50 lug; celery, $6.50 crate; hothouse cucumbers, $2 doz; cauliflower, $3.50 crate, $2 doz; new garlic, 12½c lb; parsley, 40c doz bunches; horseradish root, 12½c lb; radishes, 35@40c doz bunches; rhubarb, 3½c lb; spinach, 5c lb; Walla Walla asparagus, $2@2.25 crate; Kennewick, 12c lb; new peas, 10@12c lb; artichokes, $1.25 doz; wax beans, 15c lb; green beans, 15c lb.

**Potatoes**—Washington potatoes, $1.25@1.35 cwt; California new potatoes, 5c lb.

**Strawberries**—Hood Rivers, $4.50 crate; Missouri strawberries, $6.25 crate 24 qts; Kennewicks, $2.50@3.25 crate.

**Onions**—Bermuda onions, $2.50 crate; Oregon dry onions, $1.50 cwt; green onions, 35@40c doz bunches; wax onions, $2.50 crate; California new old onions, $2.50 cwt.

**Tropical Fruits**—Bananas, 8c lb; lemons, $5@10 case; Valencias, $6.50@7.65; Sunkist $8 case. California grapefruit, $4.50 case.

**MEAT.**

**Beef**—Beef steers, 16½@22½c lb; cow beef, 14½@19c lb; heifers, 20½c lb; best loin, 32@34c lb; steer chucks, 19½@21c lb; prime ribs, 24@26c lb; rump and round, 25c lb.

**Mutton**—Breakers, 26c lb; wethers, 25c lb.

**Lambs**—Diamond T. C. lambs, 35c lb; lambs, 30c lb.

**Pork**—Packer dressed hogs, 26@27c lb; pork loins, 30@31c lb; legs, 30c lb; shoulders, 25c lb; leaf lard, 28c lb; tenderloins, frozen, 35c lb; spareribs, 19c lb; country dressed hogs, with head on, 20c lb to producer; country dressed veal, 15c lb to producer.

**Smoked Meats**—Washington hams, 33¾c lb; T. C. hams, 35c lb; T. C. bacon, 46½c@48½c lb; Washington bacon, 39½@43¾c lb; picnics, 23½c lb; Boston butts, none; English bacon, 35c lb.

**Star Brand**—Hams, 35c lb; Shield hams, 33@34c lb; picnics, 23½c lb; bacon backs, 33c lb; Star bacon, 46½@48½c lb; Shield bacon, 41@45½c lb; Simon Pure lard, $17.50 case; Shield lard, tierces, 27½c lb; White Cloud compound, tierces, 22¾c lb.

**Dry Salt Meats**—Clear bellies, 28c; lean backs, clear, 27½c lb; sides, 26c per lb.

**Lard**—Tierces, 27c lb, $14.45@15.27 case; Diamond T. C. pure leaf lard, $15.75 case, $8 half case; Snowcap compound, tierces, 22¼c lb.

**POULTRY.**

**Live Poultry**—Live hens, large, 22c lb; small, 20c lb; roosters, 12½c lb to producers, f. o. b. Spokane.

**GRAIN AND FEED.**

**Rice**—Fancy head, $7.50@9.50 cwt.

**Flour**—Bluestem, $9.40; Blend, $9.40; Montana hard wheat, $10.40; graham, $8.60 bbl, 49-lb sacks; whole wheat, $8.80; eastern rye, $10.10; eastern rye meal, $10.30; oat flour, $12.85, 4 45-lb sacks.

**Oats**—$73 ton whole, $76 rolled, delivered in city; steam rolled No. 2, $71 ton.

**Corn**—$75 ton; cracked corn, $77 ton.

**Bran**—$30 ton; shorts, $32 ton; bran and shorts, $31 ton.

**Barley**—Rolled, $76 per ton.

**Oil Meal**—$78 per ton.

**Hay**—Timothy, $32 per ton, $31 ton by carload; alfalfa, $27 ton, $26 ton by carload.

**GASOLINE, LINSEED OIL, ETC.**

**Gasoline**—Red Crown, bulk, 24½c gal, cases, 34½c gal; Shell, 24½c; refined oil (Pearl), bulk, 13c gal, cases, 23c gal; Eocene, 15½c gal in bulk, cases, 25½c gal; engine distillate, 15½c gal, bulk.

**Linseed Oil**—Raw, bbl, $1.68 gal, case, $1.85 gal; boiled, bbl, $1.70 gal, cases, $1.88 gal.

**Turpentine**—Bulk, 65c gal; cases, 85c gal.

**White Lead**—Strictly pure white lead in oil, ton lots, 12¼c lb; 50-lb lots, 13c.

## Butter and Eggs.

PORTLAND, June 3.—Butter—Prints extras, 44@45c; cubes extras, 40c; prime firsts, 39c; dairy, 32c. Butterfat, Portland delivery No. 1 sour cream, 43c.

SAN FRANCISCO, June 3.—Butter, 44@45½c. Eggs, extras, 40c; firsts, 39½c; fresh extra pullets, 37½c. Cheese, new firsts, 21½c; Young Americas, 24c.

**SUGAR.**

NEW YORK, June 3.—Raw sugar steady; centrifugal, 4.50c; refined steady; cut loaf, 8.95c; crushed, 8.70c; mould A, 7.95c; cubes, 8.20c; XXXX powdered, 7.65c; powdered, 7.60c; fine granulated and diamond A, 7.45c; confectioners' A, 7.35c; No. 1, 7.30c.

**HOPS, HIDES, WOOL.**

NEW YORK, June 3.—Hops quiet; state, medium to choice 1917, 35@43c; 1916, nominal; Pacific coast, 1917, 20@23c; 1916, 14@16c. Hides and wool unchanged.

## Seattle Market.

SEATTLE, June 2.—Last shipments of Kennewick strawberries will be received here early next week, the season for that district having come to a close. There was a total of nine carloads marketed in Seattle alone, the record for the fruit on this market. More than twice the volume of Kennewick berries were sold here than for any former year and at higher average prices. Very little of the fruit changed hands at less than $4 per crate. Final quotations for the week are $3.75 f. o. b. Kennewick.

**BUYING PRICES.**

Unless otherwise stated the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots, f. o. b. Seattle:

Eggs—Local, 40@41c per dozen; eastern Washington, Oregon and Idaho, 38c.

Poultry—Broilers, 30@35c lb.; spring roosters, live, fat, 26@27c lb.; geese, fat, live, 18@25c; ducks, live, fat, 27@30c.

Beef—Buying prices: Prime beef, steers, 14@15c; cows, fat, 13@14c lb.; heifers, 14@15c.

Hogs—Light, 21c lb.; heavy, 19@20c lb.

Veal—Fancy light, 18@19c lb.; heavy, 15@18c lb.

Hides—Salted, 14c lb.; flint-dry hides, 29c lb.; salt kip, 16c lb.; green hides, 11c lb.; green calf, 23c lb.; dry calf (under 8 pounds), 29c lb.; bulls and dry salts, 4c lb. less; green bulls, 9c lb. Clean, long wool, western Washington flint-dry pelts, 39c per lb.; heavy to clean eastern Washington flint-dry pelts, 30@35c lb.

Asparagus—Kennewick, 12½@15c lb.; Oregon, 15@20c; Granger, 15@20c.

Apples—Winesaps, $3.50; jumble Winesaps, $1.25 box.

Potatoes—Puget sound, $17@22 per ton; eastern Washington, $30@35 per ton.

Feed—Bran, $34 per ton; shorts, $35.50; scratch feed, $78; all-grain chop, $74; oats, $72; sprouting oats, $78; rolled oats, $72; whole corn, $75; cracked corn, $77; rolled barley, $72; clipped barley, $77; alfalfa meal, $36; oil meal, $72; egg mash, $62.

Hay—Eastern Washington timothy, $36@37 per ton; do. double compressed, $38@40; alfalfa, $26; Puget sound, $26@27; straw, $15.

Strawberries — Kennewick, $4.25@4.50; White Salmon, $4; Olallas, $4 per crate.

## Portland Market.

PORTLAND, Ore., June 1.—The butter market is holding firm. The season of flush production is about on, but the demand from speculators is strong enough to give prices, if anything, an upward tendency.

In the egg market the advance is due to the decline in receipts, which have fallen below current needs. There is not much buying of eggs for storage.

Local strawberries are in heavy supply and have the call in preference to outside fruit. Prices range from $2.50 to $3 for good stock and $1.50 and $2 for soft fruit.

Poultry prices are weakening, as farmers are marketing more of their flocks, now that the egg laying season is over. Country dressed meats are steady to firm.

There is no business passing in the coarse grain market and prices are nominal, though fluctuations are posted at the exchange in line with the course of eastern markets.

Butter—Cubes, extras, 40c; prime firsts, 39c; prints, extras, 44c; cartons, 1c extra; butterfat, No. 1, 43c, delivered.

Eggs—Oregon ranch current receipts, 38c; candled, 39c; selects, 40c per dozen.

Cheese—Jobbers' buying prices, f. o. b. dock, Portland: Tillamook triplets, 23½c; Young Americas, 24½c per pound; Coos and Curry, f. o. b. Myrtle Point; Triplets, 23c; longhorn, 24c per pound; ¼c discount to Portland trade.

Poultry—Hens, 23@24c; broilers, 28c; ducks, nominal; geese, nominal; turkeys, live, 27@28c; dressed, 37c per pound.

Veal—Fancy, 17@17½c per pound.

Potatoes—Oregon Burbank, $1@1.25 per hundred; New California, 4½@5½c per pound.

Hay—Buying prices, f. o. b. Portland; Eastern Oregon timothy, $29@30 per ton; valley timothy, $25@26; alfalfa, $24@24.50; valley, grain hay, $24@26; clover, $24; straw, $9@10.

## The Wool Market.

BOSTON, May 31.—The Commercial Bulletin will say tomorrow: "The government plan for handling the new domestic clip is being rounded into working order more and more fully, but there are not a few difficulties to be ironed out. It could hardly be expected to be otherwise, when the size of the scheme is considered. Manufacturers are anxious to get wool supplies, especially such as are chiefly needed for government fabrics, that is, the medium grades of wool."

Scoured basis: Texas fine 12 months, $1.72@1.75; fine eight months, $1.50@1.55. California: Northern, $1.70@1.75; middle county, $1.55; southern, $1.45@1.50. Oregon: Eastern No. 1 staple, $1.78@1.80; eastern clothing, $1.62@1.65; valley No. 1, $1.63@1.66. Territory: Fine staple, $1.80; half blood combing, $1.63@1.68; three-eighths blood combing, $1.40@1.45; fine clothing, $1.65@1.70; fine medium clothing, $1.55@1.60. Pulled: Extra, $1.80@1.85; AA, $1.70@1.80; A supers, $1.60@1.65.


**43½ Bu. Wheat Per Acre**

**Mr. W. Loat Writes:** "I had 203 acres of wheat that averaged 43.5 bushels an acre, 13 acres of oats that averaged 65 bushels, 25 acres of barley that averaged 50.5 bushels per acre."

Such remarkable reports are coming in every day from Western Canada. Farmcrops in Manitoba, Alberta and Saskatchewan are making records never before equaled.

| Bushels | |
|---|---|
| Wheat | 30 |
| Oats | 53½ |
| Potatoes | 148 |
| Barley | 37 |
| Rye | 27¾ |
| Flax | 13½ |

This is the 1915 average per acre from Government statistics.

**FREE!**

**128,000 Farms**

In this most fertile farming section you can get one of these 128,000 newly surveyed homesteads of 160 acres near the Canadian Northern—"The Road to Opportunity." You can get results as successful in grain growing, mixed farming or stock raising as did Mr. Loat.

**Best Farm Lands $15 to $25 Per Acre**

Rich, centrally located farms adjacent to the Canadian Northern can be purchased at from $15 to $25 per acre—easy cash payments, or part cash and part crop payments. Crops produced equal to crops on farms costing $150 to $200 per acre in more densely settled communities.

**Special Low Fares**

The Canadian Northern Railway, which takes you to all parts of this territory, provides special low fares to home-seekers and settlers.

**Send for FREE Book**

"Home-Seekers' and Settlers' Guide" contains valuable and interesting information based on government returns, and it tells you exactly how to make a home in Western Canada. Here is a home and wealth for you.

CANADIAN NORTHERN

**Canadian Northern Railway**
A. R. BROSTEDT,
D. F. & P. A.
605 Hastings St.,
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**WANTED--1000 tons of mixed country scrap iron**

In carload lots of not less than 25 tons each. Write for prices if interested.

**PACIFIC HIDE & FUR DEPOT.**
Joseph Thiebes and C. T. Symmes.
1101-09 Railroad Ave., Spokane, Wash.

**You Can Furnish Us FARM PRODUCE**
and we supply your GROCERIES
**At Wholesale Prices**

Twelve years in Spokane handling exclusively GROCERIES TO FARMERS, HOTELS and CAMPS.

Send us your want list for quotations.

Have you been able to buy

Superior, high-grade 40c coffee at..30c
5 pounds Dr. Price baking powder ..$2.00
2½ pounds Dr. Price baking powder $1.10
100 bars yellow laundry soap at ...$4.50

**IMPERIAL TRADING CO.**
Spokane, Wash.
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PUREBRED HOLSTEINS are not only the MOST PROFITABLE but also the MOST VIGOROUS BREED ON EARTH

They are less susceptible to disease, require less attention, can consume greater quantities of roughage and are more persistent producers than any other breed. Write for free information about the profitable breed.

**The Holstein-Friesian Association of America, Box 205, Brattleboro, Vt.**


**The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.**

# What I Have Learned in Raising Rabbits

(Continued from page seven.)

mangel, a beet or a carrot, and it will pounce upon the root with as much eagerness as if it had eaten nothing for hours. I have found it well, therefore, to provide a variety of roots and alfalfa for the rabbits. With the roots and hay they ought to have a little grain. Just now, owing to high prices of grain, wheat particularly, and the war need for cereals, I am feeding bran and shorts mixed, and they are doing fell on it. They ought to have a little salt about twice a week. A scant teaspoonful of salt mixed in a gallon of the bran-and-shorts feed answers, in my experience, the salt requirement. Does a few days before and after their young are born, will drink sweet milk, and, if it is available, milk added to their feed during this period will contribute much to the health of both the mother and her young.

**Regularity in Feeding.**

Regularity in feeding and cleaning out the pens, quietness during the daytime, the elimination of dogs and cats that prey on the rabbits or frighten them, all are necessary. Get rid of the mice. One mouse in a mother rabbit's pen may cause her to neglect her young. Don't let strangers spend unnecessary time in the rabbitry. It is particularly bad to haul tiny rabbits out of their warm nest for people to look at, merely to gratify their curiosity.

Don't be noisy in the rabbitry. Don't enter the rabbitry at midday, for the rabbits want to sleep then. Don't feed them heavily at noon, for the same reason. They eat at night, are most active then, and should have their main feed of the day in the evening. Another lighter feed in the morning when you clean out and water the pens does very well.

Don't let sick rabbits run with well ones. Don't expose the rabbits to any conditions involving dampness. Dry cold in winter does not hurt them half so much as dampness. Don't weaken the stock by permitting one doe to rear too many litters during the year.

Don't let rabbits live wholly on green food. Don't give green food to them when it is wet with rain or dew. Don't put poisoned bait about their yards. Rabbits do not eat fresh meat, as a rule, yet may nibble at it.

The gestation period of a rabbit is 31 days. For best results in maintaining the vigor of stock, she should have eight weeks at least to nourish and care for a litter. This means a litter every 11 or 12 weeks—about five in a year. She will rear more than this, but five litters per doe ought to be considered sufficient, as this means, for one rabbit mother, from 35 to 45 or even 50 young. My does have had all the way from 5 to 12 at a litter. Their average has been close to eight.

Don't stint the mothers. The better you feed them, the better they will do by their young, and the quicker you will have young rabbit to eat or to sell. Give them good variety and plenty of it.

**Rabbits as Food.**

Rabbits have been compared by some to chicken; by others to venison. It is likely that the flavor of the meat can be varied by the feed that is given them.

The first rabbit we dressed and served in our home was a large, fat buck under a year old. We roasted it. It came out of the oven nicely browned with the most appetizing odor one could desire. Curled up in the pan, the roasted rabbit looked every inch like a cat curled up on a door-mat. To my mind at once came the mental picture of myself stepping away from our back-door holding gingerly by the tail, a huge white cat that had lapped up some cyanide in milk during the night; the said cat having found the saucer of milk and cyanide on its journey through our back yard to my rabbitry wherein it had already made costly nocturnal raids.

Many people object to rabbits because of such imaginings as this. They say rabbits look too much like cats—and dislike to eat them. This is no laughing matter. I confess that it was only by the exercise of a certain amount of will-power that I was able to put the big white cat buried three feet deep out of my mind and ask for the second helping of rabbit.

But it is amazingly foolish and unpatriotic for us now to cling to our beef and pork when these meats are vitally needed by our own soldiers overseas. When these boys are ordered into the air to fight the Hun's airships away from the allied lines, or the cities and hospitals back of the lines, no sentimental imaginings of what may happen to them up in the air deter them from rising to meet the enemy. The same obtains when the signal comes for them to go over the top.

**From a Boy in France.**

I read a letter from a boy I know, now in France. I should say that he is a man, perhaps, because he is a cavalry captain in France. But he and I were boys together in college, and we still think of one another as boys. I am here raising rabbits, with some help from my 8-year-old son, and a little bit of help from his small sister, aged 3. My boy-friend, the cavalry captain, is fighting in France to save my small boy and baby girl from the bayonets of the Hun.

He said in his letter that he and his troopers were getting pretty nearly their three square meals a day. Evidently the submarines of the Hun were not getting quite all that Uncle Sam was sending to him and the men that followed him in battle.

But he wanted me to be mightly sure to keep the "eats" coming in that thin line of ships across the Atlantic that now is preyed upon by deep-sea monsters that slaughter and kill a thousand miles from their lair.

He and his troopers want pork and beef. I imagine, sometimes, that this soldier-friend of mine and his troopers, hungry from a day and night of bitter fighting, have just asked the army cook for something to eat. The cook tells them that the quartermaster is unable to get any more bacon and beef from the United States; the people there imagine that nicely roasted rabbits look like cats and refuse to eat them. They want the beef and bacon themselves.

Imagining this scene over in France I forget my vision of the big white cat I carried by the tail away from the saucer of milk poisoned with cyanide. I ask my 8-year-old son how many he counted in his last litter of Flemish Giants. Ten, he say, proud as any father. Also, "mother and babes are doing well."

I smile.

## Want Ads

### HELP WANTED—FEMALE 1

WANTED — BY FARMER, 38 YEARS, housekeeper, age 30 to 39 yrs., fond of ranch life. D 6, Washington Farmer, Spokane.

SUMMER COURSE IN TELEGRAPHY opens June 10. Jenkins Institute of the Spokane Y. M. C. A.

### AGENTS—WANTED 9

POWERINE IS EQUAL TO GASOLINE AT 5c a gallon; salesmen and agents wanted; exclusive territory granted; powerine is guaranteed to be harmless, to remove and prevent carbon, doubling the life of all gasoline motors, saving repairs, adding snap, speed and power; an amount equal to 20 gallons of gasoline will be sent to any address in the U. S., charges prepaid, for $1. W. Porter Barnes, Santa Rosa, Cal., Dept. 8K.

### EDUCATIONAL 45

EARN MORE. ENROLL ANY TIME, AT Behnke-Walker, Portland, northwest's biggest business college, because best. Graduates assured positions. Write for catalogue.

### TEACHERS' AGENCIES 46

TEACHERS REGISTER WITH B. F. WESTmore, Mgr. Hazard Teachers' Agcy. $1 registers you at three offices. 911 Old Nat'l Bank bldg., Spokane, Washington.

TEACHERS NEEDED FOR NEXT FALL. Write for information. Clark Teachers' Agcy., 412 Ch. of Com. bldg., Spokane.

ALBERT TEACHERS' AGENCY, PEYTON bldg., Spokane. We need more teachers.

### HONEY, BEESWAX—Wanted. 58

SEND SAMPLES OF YOUR HONEY AND beeswax; state quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

### MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

Fly time is coming. We make screen windows and doors. Get our large illustrated catalog, No. 27, of sash, doors and building material. Sent free on request.

Screen doors, mortised, glued and covered with heavy, galvanized wire mesh, $1.75 and up.

Window and sash screens, at, per sq. ft., 15c.

Cottage glass doors, $2.85 and up.

Five cross-panel doors, $1.92 and up.

20x24, 2-light windows, $1.79.

Prepared roofing at $1.35, $1.70 and $2.10.

We sell any one, ship anywhere, and guarantee safe delivery. The largest factory in the west selling direct to the consumer.

O. B. WILLIAMS CO.
1943 First Ave. So., Seattle, Wn.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

DAIRY AT PORTLAND—20 GOOD COWS; 200 choice customers; all equipment; monthly collections $850. A fine proposition for some one. Place for rent. Owner physically unable to continue. At 1430 Vancouver ave., Portland, Ore.

PRINTED BUTTER WRAPPERS

1st hundred 75c, postpaid; 40 to 70 per cent less in larger amounts. Sample and prices free. Hughes' Print Shop, Colville, Wn.

## Want Ads

**Want Ad Rates 30c Per Line**

Want ads are run at this rate in The Washington Farmer and i t s associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

**How to Figure Cost of Ads**

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

Send for card giving lower rates for ads running one month or longer.

### JUNK SHOPS 90

CENTRAL HIDE AND JUNK CO. BUYERS HIDES, WOOL, METAL, RUBBER, SACKS, ETC. WRITE FOR PRICE LIST IF INTERESTED. QUICK RETURNS. W200 MAIN AVE., SPOKANE, WASH.

### MACHINERY—FOR SALE 93

CUT YOUR OWN TIMBER on a Wheland Portable Sawmill. You will save time and big money on your next lumber bill. With this sawmill you can supply the lumber needs of your neighbors also. The price is reasonable, and the profits will soon pay for the machine. Write for catalog and full details. Clyde Eqpt. Co., 18th and Upshur sts., Portland, Ore.

FOR FARM LUMBERING USE "AMERICAN" PORTABLE SAWMILLS. Carried in Stock by HIGGINS MACHINERY COMPANY. 312 1st Ave. So., Seattle. Write for Catalog.

FOR SALE—HOLLEY HOLT HARVESTer, in good shape. Cut 1600 acres. Address O'Brien Bros., Wilbur, Wash.

### AUTOMOBILES 114

FORDS CAN BURN HALF COAL OIL, ALL distillate, or cheapest gasoline, using our 1918 Carburetor; 34 miles per gallon guaranteed; easy starting; great power increase; attach it yourself; big profit selling for us; 30 days' trial; money back guaranteed; styles to fit any automobile. Air-Friction Carburetor Company, 321 Madison st., Dayton, Ohio.

AUTOMOBILE OWNERS! ARE YOUR tops old and leaky? "Bestopseal" will make it like new, waterproof and weatherproof, Indelible black, guaranteed. Send $1.24 for quart. Postage paid. Harper Auto Specialty Co., 1023 E. Pike St., Seattle.

### STOVE & FURNACE REPAIRS 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

### HARES AND RABBITS 173

RABBITS, RABBITS, RABBITS.

Help save the meat shortage. Raise New Zealand Reds. Young and matured stock. Mrs. E. H. Kurtz, Prineville, Ore.

### POULTRY 174

HOGANIZED BABY CHICKS.

Fifth thousand May and June White Leghorn, $2 per doz., $13 per 100, $125 per 1000. Very limited number of June Rhode Island Reds and Barred Rock chicks at $18 per 100. Our chicks are hatched to live and to lay. Safe delivery guaranteed. Queen Hatchery, 89 Pike st., Seattle, Wash.

200,000 WHITE LEGHORN BABY CHICKS —Bred for eggs, vigor, size. Safe arrival in good condition guaranteed. Free catalog and book on "Raising the Chicks." Oak Heights Poultry Farm, Route 3, Box T 67, Tacoma, Wash.

BABY CHICKS, WHITE LEGHORNS, CUSTomers say they are "husky," "lively," "vigorous," healthy," "strong," "hard to beat," "thrifty," "great layers." Write at once. Free catalogue. Freshlaid Farm, Colfax, Wash.

WHITE LEGHORN EGGS $1.50 PER SETting; $8 per hundred. Special mating Pen-A, eggs 50c each; Pen-B, eggs 25c each. Waikiki Farm, R. 7, Spokane, Wash.

SINGLE COMB WHITE LEGHORNS; THE world's greatest egg machines. Write for our "War Measure." Help Hoover win the war. Broadview Farm, Curlew, Wash.

S. C. RHODE ISLAND RED EGGS $2 PER setting; $10 per 100. Fertility guaranteed. Waikiki Farm, R. 7, Spokane, Wash.

### LIVE STOCK 177

49 HEAD OF REGISTERED GUERNSEYS, 25 for sale; cows and heifers; May Rose breeding. We are selling all our show stuff that you have all seen at Washington State Fair and Spokane Interstate Fair. You have your pick out of the 45 head; all winners. Will mail you photos and pedigree on demand. Middledale Farms, Goshen, Ore.

MANFORD HERO 2D, 634613, ROAN, calved Mar. 19, 1917; a vigorous, growthy Shorthorn bull; for sale at $200, crated, f. o. b. Fenn, Idaho. Wm. Mulhall.

ORDERS BOOKED FOR WEANLING POland China pigs from prize-winning stock. Also a few boars old enough for service. Frank Needham, Eugene, Oregon.

FOR SALE—WEANLING BOARS FROM big type Poland Chinas. S. S. Mullen, R. 1, Bellingham, Wash.

REGISTERED POLAND CHINA PIGS; best money can buy. Harry Valliere, R. 2, Rickreall, Ore.

REGISTERED O. I. C. BOAR PIGS, 3 TO 6 mos. old. C. I. Ballard, Rickreall, Oregon.

### HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water. 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

GALAX HOTEL; NEW AND MODERN; 75C and $1. Main and Bernard, Spokane.

### RUBBER STAMPS and SEALS 394

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

### ARTIFICIAL LIMBS 424

SCHINDLER ARTIFICIAL LIMB CO., 8115 Wall st., Spokane, Wash.

### PLUMBING, STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

### SEEDS 620

SEEDS—THE KIND THAT GROW. You can't keep them in the ground. Send for catalogue.

BUTZER'S SEED STORE.
188-190 Front St.
Portland, Oregon.

FOR SALE — SEED BEANS; LITTLE White Navy and Lady Washington (large White Navy). J. E. Clemens, Mohler, Idaho.

WE SPECIALIZE IN TIMOTHY, ALFALfa, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Ida.

GOOD SUDAN GRASS SEED, 20C PER LB. Limited quantity. Order immediately. W. P. Muncy, Doyle, Calif.

### FARM LANDS—FOR SALE 651

SPECIAL.
THE FAMOUS BITTER ROOT STOCK FARM.

Estate of Marcus Daly, having completed the sale of their lands, now offer for sale their last division headquarters ranch, comprising 2600 acres, all under their private irrigation system; all fenced and in cultivation. Complete set of buildings, comprising house, bunkhouse, horse and cow barn, machine shed, blacksmith shop, hog department, in fact, everything one could possibly need. Buildings located 2½ miles from town of Hamilton, and N. P. Ry.

This ranch will grow enormous crops of anything that can be grown in Montana. Will put up better than 2000 tons hay or alfalfa. Surrounded by 1500 square miles of forest reserve. Available range this year for about 20,000 of sheep and large number of cattle.

Price $75 per acre, $30,000 cash, balance in 10 years at 6 per cent. Any one familiar with the Daly Stock ranch on which $3,000,000 was spent, further comment is unnecessary. Will divide this ranch in two lots of 800 and 1200 acres if desired.

W. P. Rice, sole representative, Hamilton, Mont.

HELP.

We still need a few more settlers to finish our 6000 acres, which is being sold in 40-acre farms at $25 per acre. Ten yearly payments at 6 per cent interest.

By selecting your future home in this splendid tract at Bryant, Snohomish county, you are not alone buying a fertile and productive piece of land, but you are buying the best investment in the state today. Railways, paved roads, schools, churches, canneries, creameries and mills.

The best proposition on the market for the man who wants a farm. For further information address the owners, BROWNELL LAND CO., 304 Third ave., Seattle, Wash.

DIVERSIFIED FARM.

240 acres; 3 miles from city limits of Spokane; 100 acres cultivated; live stream and spring; family orchard; 5-room house; barn for about 8 head of stock; all fenced; about 4000 cords of wood. This is a very desirable place. Price $10,000. Will take Spokane residential property up to $4000.

HOUSE & LAND ASSOCIATION.
514 RIVERSIDE AVE. SPOKANE, WASH.

1000 ACRES; WILLAMETTE VALLEY stock farm; in splendid farming district; 90 miles from Portland, 4½ miles from good town, 3 miles from railroad; good auto road; school across road; good soil; well fenced and watered; 300 rough, 700 tillable, 300 cultivated; some fine timber, lots of good pasture; very good buildings; stocked with sheep and cattle. $10,000 worth personal property. Price for all $60,000. Terms. Call or write Neal Brown, 207 Panama bldg., Portland, Ore.

DAIRY FARM FOR SALE—NOW DOING $250 to $300 cash business a month; 14 dairy cows and all equipment for handling milk route. Price $3700 cash or terms. Young stock and horses can also be bought reasonably. A good opportunity to raise cattle. Lots of free range. For particulars write A. Enstrom, Box 330, Ephrata, Wash.

682-A. IMPROVED WHEAT FARM; SEVEN miles south of Hartline, Wash.; on Sunset highway; good land; all in cultivation except 15 acres; 300 a. in summer fallow; all fenced; large house, fine barn, good outbuildings; plenty water. Only $45 per acre. $6000 cash will handle. A. L. Tucker, Coulee City, Wash.

FOR QUICK SALE—ONE-HALF SECTION farm, 4 miles from Moscow. Price right to sell, and liberal terms. The place is all in crop, one-third of which goes to the purchaser. Possession given Oct. 1, 1918. If interested, write P. O. Box 393, Moscow, Ida.

FOR SALE — ALFALFA, WHEAT AND stock farms. If you want good, well-improved, irrigated farms at a price that will pay for itself in two crops, write me. John Hardwick Realty Co., Vale, Ore.

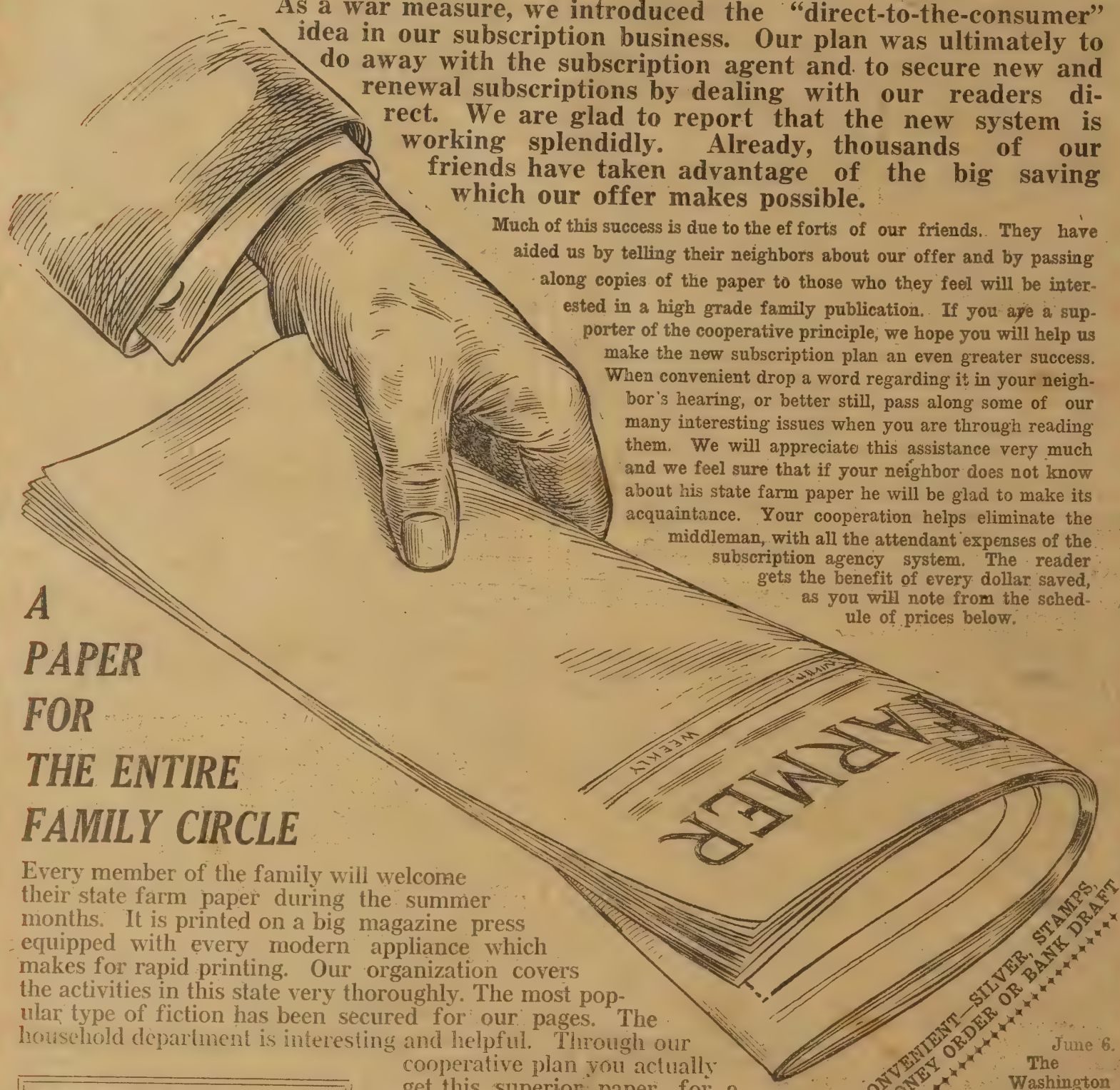
MY 79 A. IS TOO MUCH FOR ME TO work; all good land with water; 9 mi. from Vale. If sold at once, crop and land $6000, $3000 cash. Write my agent, O. E. Carman, Vale, Ore.

FOR SALE—IN BITTER ROOT VALLEY, Mont.; 20 a.; 8 a. orchard; 14 a. barley; prospects bumper crop. $3000 takes it. W. S. Schraedh, Corvallis, Mont.

GOVT. LAND, ORE., CALIF. BOOKLET. Joseph Clark, Sacramento, Calif.

# LET SOMEONE ELSE ENJOY IT

*SCORES OF OUR FRIENDS ACTED ON OUR SUGGESTION TO PASS THEIR PAPER ON TO A NEIGHBOR WHEN THROUGH READING IT. WE TRUST THAT MANY MORE WILL DO THE SAME WITH THIS ISSUE; AND CALL ATTENTION TO OUR MONEY-SAVING OFFER*




**As a war measure, we introduced the "direct-to-the-consumer" idea in our subscription business. Our plan was ultimately to do away with the subscription agent and to secure new and renewal subscriptions by dealing with our readers direct. We are glad to report that the new system is working splendidly. Already, thousands of our friends have taken advantage of the big saving which our offer makes possible.**

Much of this success is due to the ef forts of our friends. They have aided us by telling their neighbors about our offer and by passing along copies of the paper to those who they feel will be interested in a high grade family publication. If you are a supporter of the cooperative principle, we hope you will help us make the new subscription plan an even greater success. When convenient drop a word regarding it in your neighbor's hearing, or better still, pass along some of our many interesting issues when you are through reading them. We will appreciate this assistance very much and we feel sure that if your neighbor does not know about his state farm paper he will be glad to make its acquaintance. Your cooperation helps eliminate the middleman, with all the attendant expenses of the subscription agency system. The reader gets the benefit of every dollar saved, as you will note from the schedule of prices below.

## *A PAPER FOR THE ENTIRE FAMILY CIRCLE*

Every member of the family will welcome their state farm paper during the summer months. It is printed on a big magazine press equipped with every modern appliance which makes for rapid printing. Our organization covers the activities in this state very thoroughly. The most popular type of fiction has been secured for our pages. The household department is interesting and helpful. Through our cooperative plan you actually get this superior paper for a mere fraction of what it has cost in the past.

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*Following Rates Now in Effect for Subscription to The Washington Farmer*

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YOUR REMITTANCE MAY BE IN ANY FORM MOST CONVENIENT—SILVER, STAMPS, PERSONAL CHECK, POSTAL MONEY ORDER, EXPRESS MONEY ORDER OR BANK DRAFT.

June 6.

**The Washington Farmer,**
Review Bldg.,
Spokane, Wash.

I desire to take advantage of your plan to deal direct with your readers in securing and renewing subscriptions, thus saving the middleman's cost and releasing men for productive labor.

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# THE WASHINGTON FARMER

SUCCESSOR TO

THE RANCH | PACIFIC DAIRYMAN | HORN AND HOOF

VOL. XLI. NO. 24. JUNE 13, 1918. WEEKLY.




# Our Special Clubbing Offer

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This is a clubbing offer which is proving very popular.

If you subscribe for The Twice-a-Week in any other way it will cost you $1 per year. That is the regular established subscription price of this semi-weekly newspaper.

The Twice-a-Week Spokesman-Review is issued every Tuesday and Friday.

It brings you a complete, condensed and thoroughly reliable review of local, state, national and international news.

The Twice-a-Week Spokesman-Review has a big and efficient body of correspondents covering the entire Pacific Northwest. It also gives you the reports of the Associated Press, the greatest news gathering organization in the world.

The Twice-a-Week Spokesman-Review will keep you posted regarding the war.

If any of the young men you know are killed, injured, or taken prisoner on any of the battle fronts, you will be given the information in The Twice-a-Week Spokesman-Review as soon as it is issued by the military officials.

In times like these you surely need a complete and thoroughly reliable newspaper. The Twice-a-Week Spokesman-Review fills the bill.

Noteworthy events are taking place every week. Keep up with the march of events by sending in your dollar for the Twice-a-Week Spokesman-Review and your state farm paper.

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**THE WASHINGTON FARMER, Spokane, Washington.**

Gentlemen:

I desire to take advantage of your special clubbing offer. Enclosed is $1 in full payment for one year's subscription to The Twice-a-Week Spokesman-Review and three years' subscription to THE WASHINGTON FARMER.

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**The Washington Farmer**
**Spokane, Wash.**

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 24 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF June 13, 1918

## Why You Should Protest

### *Freight Rate Increase Means Higher Prices for What the Farmer Buys*

Here are extracts from Secretary McAdoo's order increasing freight rates:

Grain, wheat, 25 per cent, but not exceeding an increase of 6 cents per hundred pounds. Other grain, new wheat rates.

Flour and other mill products, 25 per cent, but not exceeding an increase of 6 cents per hundred pounds, and increases shall not be less than new rates on wheat.

Live stock, 25 per cent, but not exceeding an increase of 7 cents per hundred pounds, where rates are published per hundred pounds, or $15 per standard 36-foot car where rates are published per car.

Clifford Thorne, former chairman of the Iowa railroad commission, is protesting against the increased freight rates ordered by Director General McAdoo.

"The whole war increase of $300,000,000," declares Mr. Thorne, "could have been taken care of with a 5 per cent advance in freight rates and a 20 per cent increase in passenger fares."

Mr. Thorne declares that before the order was issued he wired Mr. McAdoo, "on behalf of organizations having a combined membership of over a million shippers, asking an opportunity to be heard. The request was ignored."

Mr. McAdoo says, however, that:

"The act of congress provides that the reasonableness and justness of such rates may be dealt with by the interstate commerce commission, so that no interests affected will be deprived of the opportunity for full hearing and consideration. In the nature of things, no such far-reaching step can accomplish ideal equalization as between the numerous interests necessarily affected, and doubtless the commission will find it proper to make readjustments to attain a nearer approach to such equalization. While, as far as practicable, the rates as initiated are designed to avoid unnecessary disturbance of relative rate bases, the director general will cooperate heartily with the commission in any readjustments needed to accomplish still further the object of avoiding undue preferences, which, nevertheless, may develop upon detailed consideration by the commission."

Mr. McAdoo, therefore, admits that his order is charged with inequalities, and acknowledges the patriotic right of citizens and interests that are unjustly dealt with to enter protests.

For reasons we have previously set forth, the order does a great injustice to the people of the Pacific coast. The sole and only justifiable basis of the order is to make the railroads self-supporting, so that the government will not have to pay a deficiency out of its treasury.

But if all sections of the Union were supporting their railroads as the Pacific coast is supporting its roads there would have been no deficit.

With a single exception, as we have shown by the records of the railroads and the interstate commerce commission, all the transcontinental railroads, from southern California to the Canadian border earned handsome profits in 1917, ranging from clear profits on the common stock of 9 per cent to 15 per cent.

It is a gross injustice to compel the shippers and consumers of the Pacific coast to pay yet heavier taxes to help the people of distant regions to support their roads.

Our producers should protest with vigor and determination. Remember that this enormous increase of 25 per cent applies not only to everything you produce, but also to everything you buy. It means higher prices for farm machinery, for fencing, for lumber, for food and clothing and for everything bought for the farm.

Protest to your senators, your representatives in congress, your state railroad commissions, to Secretary McAdoo and the interstate commerce commission. Protest through your grange, your farmers' union, your farm loan association, your nonpartizan league, your fruitgrowers' organization, your live stock associations.

### Fighting Root Maggots.

Late transplanting is one of the methods of fighting the root maggot pest, as the attacks of the maggot are less vigorous late in the season. Radishes for the family garden can be successfully guarded by raising them under netting. The use of cedar sawdust in the beds has apparently been helpful in some cases in western Washington, but it is too early to pronounce this method fully effective. The use of lye solution, one tablespoon of commercial lye to one gallon of water, and the use of kerosene emulsion, both of these remedies to be applied around the roots of affected plants, have been advised by some gardeners. Evidently the case of the Consuming Public vs. the Root Maggot is not yet closed.

### Stick Kills Cow.

Mrs. L. P., Castle Rock, Wash.: I see in the Washington Farmer that you are having trouble with a cow. I think the trouble is likely to be a stick in the ear. It may have got there by the cow striking at flies or in some manner running a stick in the ear and braking it off. I had the same trouble with a cow one time and she acted as you say your cow does. She was sick a year and then died. My husband skinned the cow, and when he cut off the ear he found the stick and the cause of her death. Since that I have saved a valuable cow from death from the same cause.

MRS. T. R. LUPTON.
Hillyard, Wash.

### Bull Brings Fabulous Price.

A report from Milwaukee, Wis., says that Champion Sylvia Johanna, 6-month-old blooded Holstein Friesian bull, auctioned there, brought the record price of $106,000, believed the biggest sum ever paid for an animal of that age The calf's mother, champion butter fat producer, once sold for $53,000.

### EIGHT IN ALL.

To the Editor of the Washington Farmer: Will you please find enclosed 5 cents in stamps, for which send me one of your home service flags. There are myself and wife and six children that help with the garden and potato and root crops, also the children help in the haying some. If they are counted as helpers please put the number of stars on the flag, which would be for eight helping to raise crops of different kinds.

R. B. BURNSIDE.
Alpha, Wash.

## Fathers' Day

### June 16, This Year, Set Aside

June 16, this year, is Fathers' day.

Mrs. John Bruce Dodd of Spokane, Wash., has the distinction of originating Fathers' day, and suggesting that a red rose be worn in honor of the fathers who are living and a white one in memory of those who have passed away. In 1909 Mrs. John Bruce Dodd crystallized her vision. In 1910 the Spokane Y. M. C. A. gave Fathers' day formal indorsement. Then followed the approval of Mayor N. S. Pratt and Governor M. E. Hay. In June the Spokane Ministers' alliance accepted the invitation of Mrs. Dodd, approving and adopting the plan, and on the third Sunday of June, 1910, many of the city pulpits observed the day. Probably the



Mrs. Dodd, who founded Fathers' Day.

first sermon on that occasion was entitled "The Knighthood That Never Retreats."

"We hear much and rightly of the mothers place in the home and in the training of the children, but the fathers strong hand is required quite as much as the gentle touch of the mother," says Leslie's Weekly. "The observance of Fathers' day could be made to mean much for the home, for religion and for patriotism. The proper place of the father as the head of the household, his part in the discipline and training of the children, especially the boys, who need the firmness of a man's guidance and the influence of masculine example, the safeguarding of the marriage tie and the protection of womanhood and childhood should all be emphasized."

## Get These Booklets

If you want to know how to make cookies or muffins or biscuits or any other of a number of delicious things out of potatoes, simply write to the information bureau of this paper at Washington, D. C., and ask for the booklet containing these potato recipes. Then if you want to know how to make 36 different delectable dishes out of cream cheese write the information bureau and ask for the cream cheese booklet.

On another page in this issue will be found a list of many booklets that can be secured from the information bureau at Washington. When writing for any one of them enclose a two-cent stamp for postage. If you are asking for personal information which will require a personal answer enclose a three-cent stamp. The information bureau at Washing will undertake to answer any reasonable question that you may ask.

### Wheat Substitute Mill.

A mill to manufacture potato flour, corn flour, rice flour, barley flour and other wheat substitutes with a capacity of 200 barrels output per day will begin operations shortly in Spokane.

## Farm Service War Flag

Here are a few more of the requests for the farm service war flags:

**MRS. MOLLIE M. RUGG, Lamont, Wash.**—Enclosed find 5 cents for which send me a farm service war flag, with five extra stars for farm workers.

**E. C. PIERCE, Silcott, Wash.**—Enclosed find 10 cents, for which please send me a farm service war flag, printed on enamel paper, with one extra small star for farm workers.

**E. H. DICKENS, Cheney, Wash.**—Enclosed find 5 cents for which please send me a farm service war flag, printed on enamel paper.

**OLEY MORRISON, Castle Rock, Wash.**—In renewing my subscription I overlooked your offer of a farm service war flag, so enclosed please find 5 cents in stamps to pay postage on same

**FRED G. BRUNNER, Winlock, Wash.**—Enclosed find 5 cents. Please send me a farm service war flag pennant.

## Washington Boys in War Service

From the Twice-a-Week Spokesman-Review.



**WILLIAM CLYDE WALLACE, Tenino, Wash.**—Enlisted in the navy August 13, 1917, and is now on board the U. S. S. El Captain, in transport service on the Atlantic ocean. His parents are Mr. and Mrs. Sidney Wallace.



**VERNIE SMITH, Malaga, Wash.** — Entered military service October 7, 1917, and is now stationed at Camp Kearney, near San Diego, Cal., in an infantry division. His parents are Mr. and Mrs. George Smith.



**ROBERT RAY CLARK, North Yakima, Wash.**—Has been in France since August, 1917, with the 5th field artillery, battery C. He enlisted April 20, 1917, when 19 years old. His parents, Mr. and Mrs. M. R. Clark, live on a farm in the Lower Naches valley.

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THE WASHINGTON FARMER

VOL. XLI. NO. 24.

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Entered as second-class matter, January 13, 1916, at the postoffice at Spokane, Washington, under the act of March 3, 1879.

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We guarantee every subscriber against loss through dishonesty or swindle by any advertiser in this publication; we do not attempt, however, to adjust trifling differences between subscribers and honest, responsible advertisers, nor will we pay the debts of honest bankrupts. Complaints must be sent us within 30 days from the date of the transaction and the subscriber must have mentioned The Washington Farmer when writing the advertiser. This guarantee applies to live stock, except that we will not be responsible for claims for damages on acconut of disease in stock sold through these columns.

## *Men Are Not Satisfied*

Men were born with eyes, but they were not satisfied, therefore they made microscopes that magnify 4000 diameters, and telescopes that multiply distance vision 8000 times.

The race has ears, but they made microphones which make the footfall of a fly sound like the tramp of a horse upon a pavement.

They have tongues and vocal organs, so that their voices can be heard into the next room, the next house, or a neighbor's field; but they have installed wireless telephony and talk to one another half way around the world.

The race has its sorrows, but those fit to survive rise above them. Civilization is strewn with the wrecks of fortunes, hopes and ambitions, but it rises out of the wreckage with higher ideals and greater wisdom.

Men find themselves in the midst of death, yet believe themselves to be immortal. They struggle continually against diseases and adverse conditions that tend to destroy them, and yet affirm that they will live forever. G. L.

## *How Much More*

It costs more to live now than it used to, but how much more? Uncle Sam, statistician, answers this question as follows, through his bureau of labor statistics:

"From February, 1913, to February, 1918, food as a whole shows an increase of 66 per cent. Every article shows an increase in price of 44 per cent or more. Corn meal increased 138 per cent; lard 113 per cent; potatoes 109 per cent, and flour 100 per cent."

It will be comforting to those with an appetite for the better things of life to know that sirloin steak, rib roast and butter have undergone the least price change, each of these being content with a rise of 40 per cent.

P. E. T.

## *Mustn't Compete With Uncle Sam*

One of the common errors of the day is the feeling that it doesn't make any difference what we spend our money for if we do not spend it for something that the government or this country's allies need. That is a grave error. Here is the truth about it: When we buy something that we do not need, we are employing labor in the manufacture of a nonessential and we are employing transportation facilities in the transportation of a nonessential. Suppose it were a new suit—one that we could get along without just as well as not. We have employed a man, or several men, in making it who could better be employed in producing food or building ships, perhaps; we have employed machinery that could better be employed making clothing for the armies; we have employed transportation facilities that could better be used in transporting wheat and munitions. Every time we buy something that we do not need we are placing a little handicap on our country in her war with Germany. It is a terrible price to pay for luxury.

## *Storage Is Vital This Year*

If there ever was a time when it was possible for a producer to market his products just whenever he wanted to, that time is past. He can not do it now. He must market them when he can, and he must be in a position to preserve them until such time as he can put them on the market.

That condition demands farm storage facilities of some kind in a majority of cases. Dampness and mice destroy grain that is not properly stored; heat and cold damage, if not ruin, root crops of some kinds, including that staple of war times, potatoes.

This is all aside from the question of the availability of sacks for handling products. Storage must be prepared somewhere. Unless there are adequate warehouse facilities known to exist within reach, it is the part of wisdom for every farmer to plan his own storage facilities. Whether he has to construct his own or not, he must, if he is to be sure of saving his crop, be sure that the facilities exist.

## *No Idler Should Be Fed*

The war department has ruled that every man of draft age must do one of two things: Serve in the army of workers, or serve in the army of fighters. That is an excellent ruling. It will be well for this country when a ruling like that can be applied to men of all ages. Every man who is able to work should be employed either by himself or by some other in constructive, productive industry. This is no time for a parasite. This is no time for a man to eat food and wear clothes and enjoy shelter provided for him by others. It makes no difference how much money he has. Money can win the war only when there is something for money to buy. What the allies need is not money, but food, clothing, munitions, railroad equipment, airplanes, ships. Money has no value in winning the war except as it contributes to secure such things as these, and the richest man, as well as the poorest, should have no other thought than to do his utmost to provide these essentials to victory.

HERE is a prediction: That the allies will conduct a successful defensive the remainder of this year, to be followed by an irresistible though not spectacular offensive one year from this spring that will mark the beginning of the end.

"BUT we are entitled to half a sack of flour," urged a protester. "We are not entitled to an ounce of anything that the army needs worse than we do," replied the patriot.

WE ourselves benefit from our giving only when we give till it hurts. Sacrifice does good both to the one who makes and the one for whom made.

DON'T forget the Red Star while you think of the Red Cross. The former is for horse; the latter is for man. Each is first, last and always humane.

MORAL courage at home is as necessary for the winning of the war as physical courage on the battle front.

NO individual can have a permanent interest that is not secondary to the interest of his country.

NECESSITY is the mother of conservation as well as invention.

COMING EVENTS.

August 19-25, national G. A. R., Portland, Ore.

**Fairs, Shows, Exhibits.**

September 2-7, Spokane Interstate fair, Spokane, Wash.
September 16-21, Washington State fair, Yakima, Wash.
October 1-6, Western Washington fair, Puyallup, Wash.
November 7-13, Northwest live stock show, Lewiston, Idaho.

**Live Stock Sales.**

June 20—Shorthorns, Day & Rothrock, A. D. Dunn, Joe Turner, Spokane, Wash.
June 26, Guernseys, E. R. Brady, Satsop, Wash.

## *What Does My Neighbor Do?*

Every one of us should be ashamed to ask the question, What is my neighbor doing? Every one of us should be proud to ask himself the question, What am I doing? if the answer can be given, I am doing my utmost. It is one of human nature's greatest weaknesses that we all want to measure ourselves by our neighbors, and our actions by theirs. Why are we content if we can attain just a common average? Why are we satisfied if our neighbor doesn't excel us?

Right now the question is not, Is my neighbor doing such and such to help win the war? It is rather, Am I doing my utmost? Am I overlooking any opportunity to help preserve and improve my community and my country? Am I neglecting any opportunity that I know lies before me? Am I as an individual, irrespective of the opinions of my fellowmen, doing everything, everything in my power to aid my country in this tremendous crisis through which we are passing?

## *Remember The Whirring Wheel*

One section of the great textile show that was held recently in New York would have delighted the grandmothers of America and been instructive and entertaining to the younger generation. It was the hand-weaving exhibit—an accurate reproduction of the spinning and weaving of wool as our grandparents knew the industry. Powerful modern automatic looms, running in another section, afforded a vivid contrast.

Many a man and woman now middle-aged has pleasant memories of the whirring wheel and its musical humming, heard, perhaps in the warmth and quiet of a long afternoon of summer as it was driven by the deft hand of an industrious mother or daughter of the household. Those of us possessing such memories have but to close our dimming eyes to hear again, in fancy, the rise and fall of the wheel's droning and the sounds of the spinner's footfall as she now advanced and now retreated. On winter nights how many millions of America's children have been lulled to sleep by that soothing sound floating upward into the homestead loft or attic.

Truly, "old times are changed, old manners gone," and we sometimes think that with the passing of all these olden customs something vanished that was fine and wholesome—something of ease of heart and peace of mind, and a nearer approach to contentment than ever will be known by this 20th century driven generation.

## *No Made-in-Germany Peace*

The people of this country are determined that one thing shall never bear the mark, "Made in Germany," and that is the terms of peace at the conclusion of this war. It is pointed out that Germany now has under her control in Russia a conquered territory embracing nearly twice the population of the United States, and that she is therefore ready to conclude peace on reasonable terms so far as the western allies are concerned. But no such terms can be countenanced, for it would mean a renewal of the world war a few years hence, when Germany would again seek world domination.

## *The Submarine.*

The submarine is a source of deadly peril. It is like some prehistoric monster, animated with a dull hate and uncontrollable because it operates in the dark. It is an assassin of the ocean, slipping up on its victims and destroying them.

The submarine in theory is a triumph of invention; in practice it bids fair to drive civilization back.

In the world democracy which we hope to see the submarines will have to be regulated in some way so that their menace may be removed and the possibilities for usefulness developed.

# Americans Help Hold Germans

## *U. S. Soldiers Throw Enemy Back on Front Before Paris*

Just where the several hundred thousand American troops are stationed along the battle front is unknown except to military authorities, but it is known that a part of them, maybe 100,000 and maybe half that many or twice that many, are entrusted with the holding of a few miles of the battle line directly in front of Paris, which Germany has just made such a strong attempt to take. Not only are they so entrusted, but they have proved themselves worthy of the trust by defeating the Germans before them and regaining a considerable portion of territory taken in the overwhelming drive of a week or ten days ago.

The portion of the line where the Americans, led by the marines, have given such excellent account of themselves lies just to the west of the Marne river, along which the Germans are seeking to drive to Paris. It is understood that they captured a considerable number of German soldiers and some equipment in their victorious counter-attacks. How extensive were the American losses is not made public.

The German drive on Paris practically ceased early last week. Reports seemed to indicate that the effort was stopped partially because of the strength of the allied resistance and partly for some sort of strategic reason on the part of the Germans and Austrians.

Early reports this week appear to indicate a resumption of the drive in the section to the northwest of the Marne river, the idea being apparently to straighten out the line before further direct efforts are made toward Paris. While the allies, including the Americans, have inflicted some reverses on the enemy during the last few days, it must not be understood that the Paris drive was stopped by superior force on the part of the French and Americans. It is more reasonable to accept the cessation as deliberately planned by the Germans to permit them to again fill up depleted ranks, bring up the base of supplies and otherwise organize for the resumption of the effort that is certain to be made. But the magnificent defensive retreat of the allies inflicted tremendous losses on the enemy hordes.

The outcome seems to depend, as the opinion has previously been expressed in these columns, upon the ability of the allies to keep the enemy out of the English channel ports and out of Paris until winter stops the fighting. The tide may be turned before then by the slaughter of Germans and the arrival of United States forces, but it is not wise to expect such good fortune before next spring. If, however, this country can be given some three months of winter in which to send troops but in which Germany can make no advances because of the impossibility of winter warfare, the chances for supremacy of the allied armies next spring are believed to be excellent.

### Submarines Continue Their Raids.

Though the wholesale activities of the German submarines that have invaded the waters just off the Atlantic coast subsided after the first series of attacks, it is apparent that there are still some of the divers at work. A total of 18 vessels, mostly small ones, have been destroyed up to this writing. It has not been discovered yet where the base from which the submarines operate is located, or if so it has not been revealed by the navy department.

It is a significant fact that the divers did not succeed in destroying any ships transporting soldiers to Europe, which was believed to be the original object of the expedition to American waters. The failure is taken to indicate the efficiency of the United States and allied navies in protecting the soldier ships from harm. It is also significant that none of the vessels destroyed were large freighters. Most of them were small boats, and several were merely engaged in coastwise traffic. While the raid was successful in springing a surprise on the American people in general, it was virtually a failure, and has served only to inspire this country to go into war-winning work of all kinds more enthusiastically and with greater determination.

### Young Men Register for War Duty.

On June 5, just one year from the date on which this country's first army draft registration was made, the second registration was held, and approximately 1,000,000 men who have reached 21 years of age since June 5, 1917, signed up with the government. It is the government's intention to call these young men only after those who registered last year are called, allowing them thereby to take their natural turn in going into the active service.

### Grind No More Wheat in Northwest.

The food administration appears determined to stand by its original ruling that no more wheat shall be ground into flour by northwestern mills until after harvest. The action is taken on the ground that the northwestern district has already ground more than its just proportion of the available grain of the country. Vigorous protests have been made by various interested parties, it being especially claimed that a great mill feed shortage is likely to result from the cessation of grinding. Grinding will be resumed immediately after harvest, under the terms of the administration's ruling.

### May Increase Taxes on Big Profits.

Secretary of the Treasury McAdoo has announced the desire of the administration to raise about one-third of the nearly $24,000,000,000 that must be raised by this government during the coming 12 months by increased income taxes and excess profit taxes, together with other forms of taxation.

### U. S. Manufactures Many Army Rifles.

The war department officially announces that during the last year there have been manufactured in this country nearly 1,250,000 rifles for the use of the army. The statement says that there were already some 600,000 rifles available, which brings the total now up to approximately 2,000,000.

### Alien Women Must Register.

The United States department of justice has issued an order requiring all German women in this country not citizens of this country to register. They must go to their postoffice, or to the chief of police if they live in a large city. Registration will begin Monday, June 17, and close Wednesday, June 26.

### Whisky Tax About to Disappear.

Whisky is disappearing from the market so rapidly as a result of the prohibition of its manufacture during the war that it promises to furnish a serious problem to congress in framing the new war tax program. Under existing law it is estimated the treasury department is collecting revenue from distilled spirits at the rate of more than $300,000,000 a year. Prediction is made by the treasury department experts that the entire supply of taxable whisky would be exhausted by the end of the next fiscal year. This means that congress must look about for new sources of revenue to make up the $300,000,000 or more deficit when the "hard liquor" is all consumed or cached safely against further taxation.

### Former Vice President Passes Away.

Former Vice President Charles W. Fairbanks died at his home in Indianapolis, Ind., the middle of last week.

## VICTORIOUS WHEAT CROP SEEN

### Official Estimate Is for Nearly a Billion.

A bumper wheat crop this year, which before harvest may develop into a production of 1,000,000,000 bushels, is forecast by the department of agriculture in its June crop report giving the first indication of the size of this year's spring wheat output.

Basing its estimate on June 1 conditions, the department forecast a total wheat production of 931,000,000 bushels, which would place this year's harvest as the second largest in the history of the country.

In June of 1915 a total wheat production of 950,000,000 bushels was forecast, and the quantity gradually crept upward until the final figures for the year showed the crop to be 1,025,800,000 bushels.

The acreage sown to spring wheat this year is larger by 2,000,000 acres than ever sown before, and 21.5 per cent larger than last year, aggregating 22,489,000 acres.

The condition of the crop on June 1 was 95.2 per cent of normal, or 1.5 per cent better than the 10-year average. A production of 344,000,000 bushels was forecast. That is 11,000,000 bushels more than harvested last year and only about 7,000,000 bushels less than the record spring wheat harvest of 1915.

Winter wheat, growing on the second largest acreage ever planted, showed a condition 3 per cent better than the 10-year average, with 83.8 per cent of a normal crop. A production of 587,000,000 bushels was forecast, which is 50,000,000 bushels more than forecast from conditions existing May 1. Such a crop would be the third in size grown in this country.

The oat crop also promises to be of record proportions. On an acreage 2.1 per cent larger than last year, when the record crop—1,587,000,000 bushels—was grown, June 1 conditions warrant a forecase of 1,500,000,000 bushels. Only last year's and the crop of 1915 exceeded that quantity.

Rye production will be a record, the forecast being 81,000,000 bushels.

## HOOVER PLANS MORE REGULATION

### Prices to the Consumers Must Not Be Too High.

Food Administrator Hoover has ordered a nation-wide movement to reduce the cost of food to the consumer, to compel dealers to observe the fair price list and to standardize methods, says a statement from Washington.

Lists will be published in every county, town and city, and consumers will be asked to cooperate with officials in forcing merchants to bring their prices to a uniform level.

In carrying out the new standardization plan the administration will establish price-interpreting committees composed of representatives of wholesalers, retailers and consumers.

The board will determine fair retail prices on basic commodities that comprise a large part of the nation's diet. The published lists will give the range of maximum selling prices, showing a reasonable price which will reflect the prices that should obtain in "cash and carry" stores and a higher price representing a fair price for the "credit and delivery" stores.

The local administrator for each locality will act as chairman of the price board. Each board will have detailed reports of actual wholesale prices and will ascertain fair margins of profit the retailer should be satisfied with.

Newspapers will be asked to cooperate by setting aside a particular porsition weekly for publication of the lists with footnotes on the food problem and the use of substitutes for the foods most needed abroad.

A close check will be kept on observance of the lists. Consumers will be expected to report to the local food administrator any store charging more than the established price for any commodity.

### Have Sold Enough Farm Loan Bonds.

A statement says that the federal farm loan board at Washington, D. C., has withdrawn all farm loan bonds from the market temporarily. No official statement of the reason is given, but it is understood that the sale of more bonds at this time is not necessary to carry on the business of the bank. The bonds are sold as a means of raising money to be loaned to the farmers by the farm loan bank.

## *Washington Gleanings*

Nine thousand more acres in additional reserve land in Yakima valley is sown with grain, of which most is wheat.

Mrs. Harriet Young, who died recently at Puyallup, left $35,000 cash for the erection of a Y. M. C. A. building.

O. J. Wingren, proprietor of a bulb farm on the Swinomish reservation, died a short time ago. He was well known throughout the northwest as an expert in flowers.

Washington had 39,093 men in the military and naval service of the United States on May 15, according to figures compiled by Captain L. I. Ziegaus, executive officer at Olympia.

One hundred and twenty-five registered delegates and 200 clubwomen attended the semi-annual meeting of the Yakima Valley Federation of Women's Clubs at Sunnyside recently.

Len Jackson of the Pataha farm, near Dayton, reports his clip of wool this spring about 35,000 pounds, or about 4000 pounds more than last year from the same number of sheep.

James Newton Rogers, one of the pioneer ranchers of Pend Oreille county, has sold his ranch adjoining Diamond lake, the 490 acres being disposed of at a valuation of $30,000 in exchange on a $50,000 Spokane property.

A Montesano girls' canning club was organized in the Montesano schools recently with 25 members. The officers are: Dorothy Quimby, president; Marie Hattabaugh, vice president, and Clarisse Wilcox, secretary-treasurer.

To be used as a home for boys and old people, the Right Rev. Augustin F. Schinner, Roman Catholic bishop of the diocese of Spokane, recently purchased the 480-acre ranch owned by Martin J. Kalez at the southeast end of Liberty lake.

In response to the government's call for Yakima beans to feed American soldiers and sailors in Europe Yakima growers have already shipped five large carloads to federal storage houses in New York. Shipments to date have brought Yakima farmers $38,400.

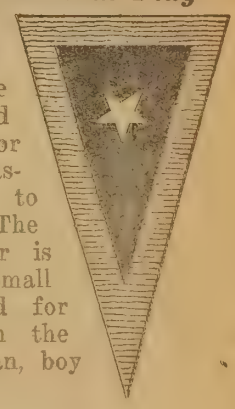
A fruit tree census of Yakima county has just been completed under the direction of H. E. Waterbury, former district horticultural inspector. The totals show Yakima has 2,050,181 apple trees, about three-fourths of which are in full bearing. The prevailing varieties are Winesaps and Jonathans.

"The Altar Stone," a monument to the memory of Klickitat county men who give their lives in the war, is being erected at Maryhill. Names of all Klickitat county soldiers and sailors who die in the world struggle, together with the dates of their birth and death, will be molded on a metal plate on the monument.

Mrs. J. S. McKee, representative of women on the Washington State Council of Defense, told the war workers in Spokane recently that it was necessary for us to keep right on talking the same old conservation principles, though they have already been uttered a thousand times. Conservation must not be allowed to slacken, she said, but must be increased.

The farmers of certain districts of the state are raising a protest to the food administration against the closing of the flour mills as is announced for the next several weeks. They declare that to close the mills will result in a shortage of mill feeds. A movement is being made to reach National Food Administrator Hoover if necessary to secure a continuation of the operation of the mills in the northwest.

## *Your Farm Service War Flag*



Designed by The Washington Farmer in connection with The Idaho Farmer and The Oregon Farmer for the farm homes increasing food production to help win the war. The large star in the center is for the farm home. Small stars may be added for every farm worker in the family—man or woman, boy or girl.

**Convenient Order Blank.**

THE WASHINGTON FARMER, . . . . 1918.
Review Building, Spokane, Wash.

Enclosed find Five Cents (5c), for which please send me a Farm Service War Flag (printed on enamel paper) with ..... extra small stars for farm workers.

Name .....

R. F. D..... Postoffice.....

Box ..... State .....

# State Grange Meets Handicap

## *Question of Political Alliance Policy Results in Unfortunate Situation*

"They are whole-heartedly back of the war, and are making every sacrifice to do their part. There is no complaining about the boys that are taken from the farm, and no kicking about the high cost of living." This is the conclusion expressed in a personal letter to the editor by our correspondent after mingling freely with the rank and file of the members of the state grange while in session at Walla Walla. It indicates the well-recognized fact that the steady and constructive loyalty of the farmers can not be shaken from its course, whatever troublesome and complex problems may arise.—Editor.

By PAUL E. TRIEM.

That the thirtieth annual session of the Washington state grange should have opened with a whole-hearted resolution, unanimously adopted, in support of President Wilson, the nation and the world in the fight for freedom, and that it should end almost in chaos, with the organization practically locked out by the city in which the session was held, is one of the ironies of these modern times. For better or for worse things were done during the four days which can never be undone.

The opening day, Tuesday, June 4, passed uneventfully. The resolution referred to was adopted and telegraphed to the president. State Master Bouck's address, a digest of which was printed in The Washington Farmer last week was delivered. An automobile ride into the country, a picnic lunch served by the commercial club, and a reception open to the public rounded out the social side of the occasion.

Wednesday afternoon memorial exercises were held, the most notable feature of which was the address delivered by George P. Hampton of Washington, D. C. Mr. Hampton is editor of the "Farmers' Open Forum," and was a friend of the late State Master Kegley during many years of the latter's active career. That the leader who is gone was more than a local celebrity, that he was indeed a man of national reputation was the text of the Washington man's eulogy.

**Nonpartizan Question Brought Up.**

Following the memorial exercises came probably the most momentous feature of the entire program, when Ray McKaig, past master of the North Dakota grange, spoke of the origin and growth of the nonpartizan league. He told of his first vague gropings toward grange affairs, inspired in large measure by the missionary efforts of Secretary Lewis of Tumwater, Washington, and of C. B. Kegley. He retold the now famous story of the North Dakota legislator who told a delegation of farmers, visiting the state house with a grievance, to go back to their farms and slop the hogs. And finally he told another story, also about hogs, which he said illustrated one big difference between the latter animals and their owners.

According to Mr. McKaig's story, a certain farmer had one smart hog which learned to get out of the pen and into the granary, returning to the pen after it had filled up. Eventually the farmer found out that the trick was done with the assistance of a hollow log, through which the hog made his way into the food room and back again. With the benevolent purpose of teaching the four-legged robber a trick, the farmer so changed the hollow log that both ends opened into the pen. When lunch time came, Mr. Hog entered the usual opening, ran through the log, and emerged —into the pen. Looking round him with some surprise, he turned and retraced his steps, landing again in the pen. Then he started to run, and for half an hour or so he sped through that hollow log, intent on catching up with the feed room, which he seemed persuaded was running away from him. At the end of a week, however, he had learned his lesson, and could not be induced to look at the hollow log.

"And that's just where he showed himself smarter than the farmer who raised him," shouted Mr. McKaig. "Farmers as a class have been running through the hollow log of politics year after year, voting first one ticket and then the other, but always finding themselves in the end with the same type of bosses over them. It has taken the farmer 30 years to learn what that hog learned in seven days!"

The nonpartizan league was born, said Mr. McKaig, to be a farmers' organization, with the frank purpose of dominating things political.

It was not until the following day that the logic of the McKaig address began to be argued among various groups of grangers, scattered about the streets. The verdict of these groups was almost unanimous, and doubtless would have been definitely formulated as the final decision of the convention had not developments made it impossible for the grange as a whole to act on the matter.

The verdict of the street groups was, "We are not called upon at this time to decide upon the merits of the nonpartizan league. We must simply decide whether or not an entangling alliance between two organizations, which differ radically in their basic principles and ultimate aims, is desirable at this time." I think it is safe to assert that if the meeting scheduled for Friday morning had not been prevented, the state grange would have gone on record as favoring absolute separation of the grange and the league.

This attitude found something of official expression in a statement made to the press by Secretary Lewis as follows:

"Many farmers who, including members of the grange who have combined themselves in the nonpartizan league in order more effectively to carry out the principles of nonpartizanship, are apt to feel that the grange is the proper place for boosting the league. We believe that it is unwise to bring the question of the nonpartizan league into the grange. We as individuals may be as active as we desire in both organizations, but let us keep the two separate and distinct, even though we feel that in many ways their aims are the same."

**Storm Breaks.**

Thursday evening the storm which had been gathering practically from the first day of the convention broke. The Walla Walla school board, which had granted to the grange the use of the high school building, rescinded this permission and gave the grange members 30 minutes in which to leave. This action was precipitated by a meeting of local business and professional men, who seem to have taken the attitude that the state grange had convicted itself of a doubtful patriotism by its attitude on the matter of the nonpartizan league. At any rate, the decision so reached was final, and after the first confusion, during which many of the grangers were unable to tell what was happening, the session was brought to a close.

Friday morning the confusion was increased, if anything. An attempt was made to resume the interrupted session in one of the churches, but this proved as futile as the meeting of the night before. Committee meetings were held throughout the day and a telegram was sent to Governor Lister, asking him to open the armory for the use of the grangers. No reply to this telegram had been received when it came time for many of the delegates to be leaving, and it seemed unlikely that anything farther could be accomplished. Throughout the storm there was little bitterness or anger manifested on the streets or in the hotel lobbies. Most of the grangers seemed to feel that their attitude and intentions had been misunderstood, and that if time had been given them to carry out their program in their own way, most of this misunderstanding would have been removed.

The next annual convention will be held in Port Angeles. Whether an adjourned meeting will be called for some other city than Walla Walla to complete the unfinished business of the 1918 session is not known at this time, though it is understood that the matter is being considered by leaders.

The report of Secretary Fred W. Lewis shows a total grange membership of 15,547, a gain over 1917 of 1316 members. King county leads, with 1357 members. Part of this gain Secretary Lewis ascribes to the cooperative buying movement, so prominent in King county. Lewis county runs second and Whatcom third.

## AS PEA RAISER.

### Spokane County Big Producer.

Figures are given from government reports showing that Spokane county is now producing about two-fifths of the seed peas sold in the United States. In four years the acreage has jumped from 500 to 40,000 and in addition the acreage of peas between Spokane county and the Snake river is increasing rapidly.

"Few people realize the importance and extent of the pea growing industry in Spokane county," said J. R. Shinn, county agriculturist. "The crop is proving of great benefit in more ways than for the value of the seed. The growing of peas is rapidly doing away with the summer fallow method of farming, giving farmers a crop every year. It has been often demonstrated that the crop of wheat following peas is as good and sometimes better than the summer fallow crop.

"The crop is valuable for feed as well as for seed, and will go far toward making this a pork producing country. Hogs in Washington can be fattened on peas as well and as cheaply as hogs in Iowa can be fattened on corn.

"In addition, the pea straw has a worthwhile value as a substitute for timothy and alfalfa as a feed for horses and cattle. A local dairy cut down the hay bill for its teams one-half by using three-quarters of pea straw to one-quarter of timothy hay."

## Here Are Resolutions Affecting Situation

Be it resolved, by Washington State grange, in thirtieth session, assembled in Walla Walla, Wash., this 4th day of June, 1918:

That we support President Wilson in his vigorous prosecution of the war, and we urge the putting in of the full force of our nation at the earliest possible moment, removing every restriction as to the size of the army, and, if necessary, increasing the draft age to include every man, taking into consideration the necessity of farm and other necessary labor, in order to properly care for our army and those of our allies.

To this cause we pledge the grange of the state of Washington.

WM. BOUCK, Master.
FRED W. LEWIS, Sec.

The following is a resolution adopted at a massmeeting of citizens of Walla Walla:

Whereas, The Farmers' union, the Patriotic League of Walla Walla county, and the patriotic people of this community have gone on record as being opposed to the Nonpartizan league, because of its disloyal teachings and utterances,

And, whereas, the grange of the state of Washington at its session in Walla Walla has permitted representatives of the nonpartizan league to have the freedom of its meetings and its floor, for the purpose of promulgating its doctrines and of expressing its open opposition to the methods of the administration in conducting the war and the war activities;

Therefore, be it resolved, that it is the sense of this meeting that while the state grange is affiliated and in cooperation with the nonpartizan league the grange is not welcome and that meetings of the league will not be tolerated in this city.

Be it further resolved, that we extend our warmest sympathy to that minority of the grange which has endeavored to keep it free from disloyal influences, and that we assure them that they, in common with all other loyal citizens, are at all times welcome in Walla Walla.

Be it further resolved, that we must heartily commend the prompt and patriotic action of the school board in refusing to permit the state grange to have further use of the school property for their meetings.

A. J. GILLIS,
J. H. MORROW,
HARRY TURNER,
Committee.

The following is the resolution adopted by the Walla Walla school board expelling the grange convention from the school building:

Whereas, the actions and public expressions of officers of the state grange, apparently approved by such grange, have been such as to make the loyalty of such organization at least doubtful, and whereas the said organization has expressed opinions in opposition to those of the county council of defense and the Walla Walla patriotic league, and we do not deem that the public property of this school district should be used for any purpose the loyalty of which is questioned by any considerable number of our patriotic citizens;

Therefore, the resolution authorizing the state grange to use the property of this district for any purpose is rescinded, and such organization notified to forthwith vacate the school property of this district.

A meeting of about 100 business men approved the school board's action by the following resolution:

Resolved, That those here assembled do hereby express their approval of the action of our school board in terminating the use of the school buildings and grounds by the Washington state grange.

The following resolution, adopted by a group of about 60 grange members, indicates the sentiment of a part of the membership on the political policy of the order:

Resolved, That the loyal members of the Washington State grange hereby protest against the action of some of our state grange officials in practically indorsing the nonpartizan league, believing some such action is in violation of grange law and policy. And we recommend that a copy of this resolution be sent to each subordinate master and to the state secretary and that this resolution be printed in the grange bulletin.

## FIX TWINE PRICE.

### Cost Higher Than Last Year.

According to a statement make by Charles J. Brand, chief of the bureau of markets in the United States department of agriculture, binder twine this year will cost the farmer probably 23 cents a pound, plus handling costs from the manufacturing plants to the local distributors and a reasonable profit to the local dealer. Chief Brand says that the food administration has arranged to purchase the necessary raw material to be delivered at tidewater at from 19 to 19 1-4 cents per pound. The price of twine on the cars at the manufacturing plants shall not exceed 23 cents per pound and it is estimated that one pound will average 500 feet of the twine.

### Want National Prohibition.

At a recent meeting of the Bee Hive grange at Wenatchee resolutions were adopted calling upon President Wilson to declare a national prohibition against the sale of intoxicating liquor during the war, asking the government to assume the control of prices upon what the farmers must buy, as well as what they produce, urging the county commissioners to renew the contract with the present county agricultural agent of Chelan county and asking congress to repeal the zone system law which fixes the postage on periodicals.

**Shell Kills Worker.**

A German four-inch shell penetrated a Y. M. C. A. dugout on the Flanders front and killed the secretary, Jack Lunsden.

## Free Information

### Also Some Valuable Books

The service rendered by The Washington Information Bureau, at Washington in distribution of publications is designed to be continuous.

From time to time new books have been listed, but those previously announced are still available.

Either of the following may be obtained for a 2-cent stamp to cover cost of mailing. There is no charge of any kind.

Book on Canning.
"German War Practices."
Book on Colds.
Garden Book.
Book on Knitting.
War Cookbook.
Book on Navy.
Book on Drying Fruits.
Book of Recipes.
Bread Book.
"How War Came to America."

Write today and ask for free copy. Inclose a 2-cent stamp for return postage and be sure to write your name and address plainly. Direct your letter to The Washington Farmer Information Bureau, Washington, D. C.

P. S.—The information bureau at Washington will answer any question you may submit. Answer will be sent by letter. Just inclose a 3-cent stamp for return postage. Note carefully the address given above.

## Wheat Farmer Purchases Purebred Jerseys



Here are shown some of the registered Jersey stock just purchased by George Cochran of Dixie. "The herd was raised in the Willamette valley, of well-known herds of this breed," says C. L. Jamison, agriculturist for the Farmers' Savings bank of Walla Walla. "It will be a start for better stock in the foothill country and it is hoped that other wheat farmers who are now running a few head of grades may do as Mr. Cochran and start with registered, high producing cows."

## Makes Grain Bags

### Penitentiary May Try Other Work

Asserting that no one can tell exactly how many grain bags will be used this season, because it has not been ascertained to what extent bulk handling will be followed, Warden Drum of the state penitentiary declared that in this year of shortage the million grain bags turned out by the penitentiary will be a great help to farmers, yet, under normal conditions, he questioned the value of penitentiary-made bags, either to regulate prices or help the supply. The penitentiary contracted in January, so Warden Drum informs me, to furnish 850,000 sacks. For a while it was impossible to secure jute to work the plant up to capacity, but now there is plenty of jute, and he expects 1,000,000 bags to be turned out. The contract price was 19 cents. The price for the surplus 150,000 sacks will be fixed by the state board of control. The price now quoted by dealers is about 30 cents, and may go even higher. The board will no doubt charge close to the current price.

The number of bulk elevators and grain bins going up is proof, says Warden Drum, that a large part of the crop will be delivered and moved in bulk, but no one seems yet to have expressed an opinion based on anything but a mere guess as to how much, or to what extent it will relieve the demand for sacks. It is known, however, that more second-hand sacks will be used than ever before.

The government allows 9 cents a bushel more for sacked grain than for that in bulk. As the sacks hold an average of two and one-fourth bushels, the grower should get an average return of 20 1-4 cents a sack, a little more than the penitentiary price, but decidedly less than the current price from dealers. Taking all considerations together, Mr. Drum expects a shortage, but thinks the farmers will manage to get along, with some inconveniences, whether the crop be short or normal.

The help the 1,000,000 sacks from the penitentiary will be this season is plainly apparent, and Warden Drum only wishes the number was greater. But he calls attention to the fact that in normal times it does not serve its purpose. A million sacks is about all the penitentiary can make. Dealers can wait until the penitentiary contracts are made and then charge what they please for the other sacks needed, says Warden Drum.

The making of sacks is simple work, easily done by women and children, and in India, where all labor is cheap, women and children are utilized and sacks can be produced more cheaply than by Washington's penitentiary convicts, who are capable of more useful and more complicated work. He favors the conversion of the machinery so that woolen and cotton goods can be manufactured. Some of the machinery is ready for that kind of work now. It would take only a very short part of the prison labor to make the clothes used by all the convicts. He would let the cotton thread be manufactured in the south and be woven into cloth here. The question of manufacturing farm machinery is worthy of consideration. Minnesota made a profit of $100,000 last year, after paying something to the inmates. Of course, the question of competition with free labor must not be overlooked. But Warden Drum is firmly committed to the proposition of the state paying the inmates for their tasks. It is both humane and a good business proposition, he believes, as it would increase the output sufficiently to pay the bonus.

Warden Drum has advocated a commission or legislative committee to investigate and report on some line of industrial enterprise that would be profitable to both state and inmates. He hopes by the time the war is over something of the kind may yet be done.

H. A.


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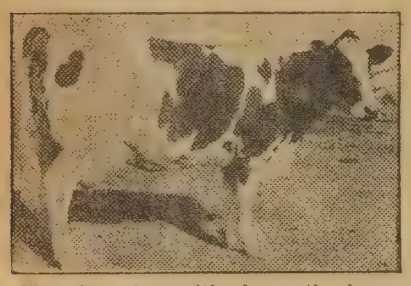
# Hupmobile

## DAIRY

Write to the Editor.

A. D. NYSTROM, Editorial Contributor

### Clothilde Nita Jessie.



The photo herewith shows the beautiful Holstein cow, Clothilde Nita Jessie, owned by Walla Walla college, College Place, Wash. She has an offici tl record of 31.25 pounds of 86 per cent butter in seven days, with best day's milk 102.4 pounds, made from March 6 to 12 inclusive. She was bred in New York state, but brought out while young and developed here. The college has a fine herd of Holsteins throughout, and has the highest cow and highest average in the Walla Walla Cow Testing association most of the time during the last year. They also have several other good A. R. O. records.

F. W. Peterson, business manager of the college, recently made a trip back east, during which he visited a number of the leading Holstein herds. He purchased from M. J. Smiley of South Dakota the young Holstein bull, Wescota Belle Mercedes, whose dam, Star Farm Belle Mercedes, has a record of 38.36 pounds of butter in seven days, and his sire's dam 35.38 pounds. He is a good individual, well marked, and should still further improve the herd.

The farm and dairy and Holstein herd are important college institutions. H. A.

### Pasteurization of Milk.

To the Editor: We will be much pleased if you find it convenient to publish the accompanying article on the pasteurization of milk as discussed by Dr. Ansel F. Hemenway, who is always remembered and valued here. We think the opinion of value. We take this opportunity to thank you for your valuable paper, which is always welcomed by a number of us and is safely placed on file after some months in our library reading room.

CAMILLA LEACH,
Assistant in Library.
University of Oregon, Eugene.

The following is the article referred to in the letter above:

Dr. Ansel F. Hemenway, native son of Lane county, Ore., and graduate of the University of Oregon and of Chicago, is now in charge of the department of biology at Transylvania college, Lexington, Ky. He has been asked by the city authorities of Lexington to give his opinion of required pasteurization of milk. He does not think it necessary when milk has to be transported a short distance, for milk unchanged in its natural qualities is best, especially as food for children. Milk heated to the boiling point, 212 degrees, is entirely change in its nature; pasteurization heats it from 151 degrees to 158 degrees and is an attempt to destroy the bacteria of milk without injury to its nourishing qualities. But these bacteria are mostly the lactic-acid bacteria that cause milk to sour, and good sour milk is known to be a healthful food, as lactic acid prevents the development of the bacteria which cause decay and old age.

Pasteurization is often a substitute for the eare necessary in handling milk, as, after pasteurization, it does not sour and may be kept too long.

Dr. Hemenway urges frequent inspection and strict enforcement of dairy laws from the herd to the consumer as necessary for safety.

### University Dairy Herd.

Within the last two months three new records have been made in the dairy herd of the Idaho State university at Moscow. In the full-aged class, the Holstein, Madison Anita, 179,297, produced 653.2 pounds of milk, 20.019 pounds of butterfat in seven days, replacing the recent milk record of Idaho Violet Porsch Ormsby, 337,275, of 593 pounds of milk, but the record of 22.05 pounds of butterfat of the latter cow, still remains the record. For the month of April this cow's milk production was 2632.8 pounds of milk.

In the senior 2-year-old class Idaho Favorite, 342,452, established a new seven-day record for this class by producing 482 pounds of milk and 14.444 pounds of butterfat or 18.05 pounds of butter.

In the junior 3-year-old class, a new seven-day record was made by Alaska Yukon Colantha 2d, 332,880, which produced 444.0 pounds of milk and 12,664 pounds of butterfat in seven days.

### Feeding Value of Buttermilk.

To the Editor: Will you kindly advise through the columns of the Farmer the feeding value of buttermilk taken from a creamery?

SUBSCRIBER.

Answer—Where no water has been added buttermilk is equal to skimmilk in feeding value. The water used in rinsing out the cream cans and vats makes creamery buttermilk slightly inferior to skimmilk. On the average it is safe to say that creamery buttermilk has about 85 per cent the feeding value of skimmilk. The value of skimmilk is usually rated at as many cents per hundred pounds as four times the value of live pork per pound; that is, when pork is 10 cents on foot, skimmilk is worth 40 cents a hundred. At the present time, and on this basis, skimmilk is worth about 65 cents a hundred when fed to hogs. This would make buttermilk worth around 55 cents a hundred. A. B. M.

#### Recites to Soldiers.

Mud splashed and hobnailed, E. H. Sothern, the eminent American actor, recently gave a selection from Hamlet before American soldiers in a Y. M. C. A. hut in France.




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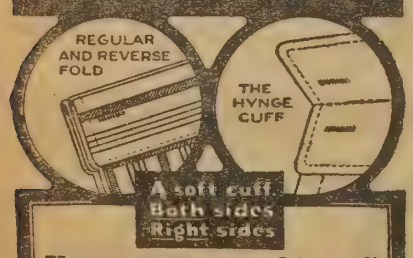
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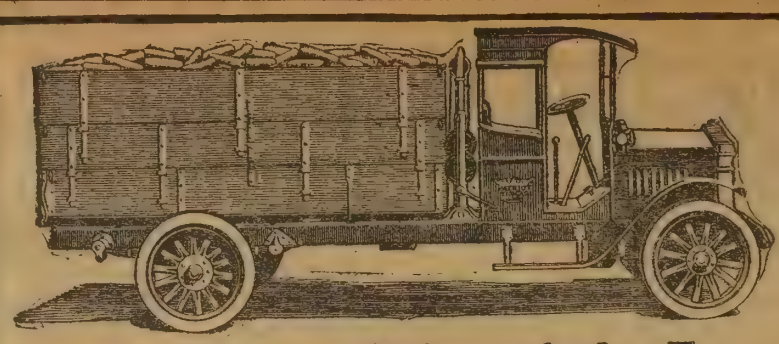



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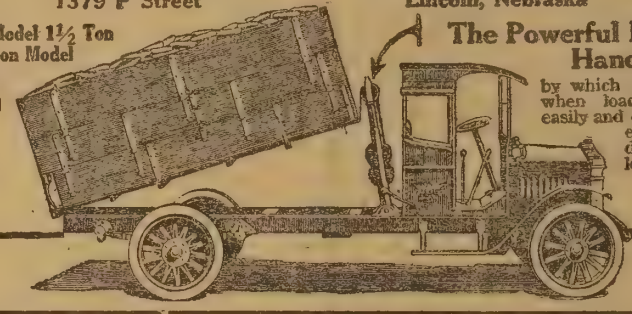
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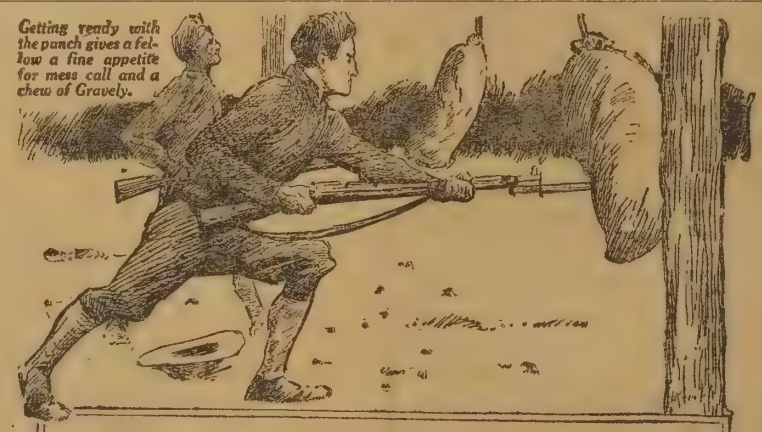
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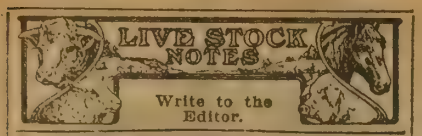
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E. J. IDDINGS, Editorial Contributor

# Values of Sheep Feeds

By E. L. Potter.

The rapidly fluctuating prices of feeds of all kinds, due to war conditions, has made it difficult to always know just what feed is the cheapest. Under normal conditions it was fairly safe to say that certain feeds were cheap feeds, while others were too expensive for general use. Now, however, prices have been so upset that the most expensive feed today may be the cheapest tomorrow. The table given herewith is an attempt to formulate a scale of values which will enable the feeder to quickly calculate the relative values of various feeds. The difficulty of such tables lies in the fact that feeds vary in their value according to the manner in which they are used. To meet this difficulty there has been put down opposite each value the way in which the feed is to be used and it must be distinctly understood that the values given will probably not apply when the feed is used in any other manner. All the ways in which the feed may be used are not enumerated, but only the more important ones and the ones in which one may be quite sure of results.

The following comparison is compiled with barley as the basis, barley being rated as 100 per cent. The figures given after each feed is its value in per cent on this basis:

Whole barley, 100; for fattening or not over 1-3 of the ration for growing stock.

Whole wheat, 100; same as barley. Must be fed with care.

Whole corn, 105; for fattening or not over 1-4 of the ration for growing stock.

Whole oats, 90; fed alone for fattening.

Whole oats, 100; 1-4 ration for fattening or 2-3 of the ration for growing stock.

Ground grain, same as whole grain but less palatable.

Bran, 76; for growing and for breeding stock. Not suitable for fattening.

Shorts or middlings, not recommended.

Oil meal or cottonseed meal, 200; in ration lacking protein.

Oil meal or cottonseed meal, 100; in a ration already balanced.

**Succulents.**

Small amounts of succulence added to a dry ration have a marked tonic effect and consequently a high value. Larger amounts are valuable only for the nutrients they contain, while amounts over seven pounds per day force the sheep to consume so much water that satisfactory gains will not be made. It is not usually advised to feed more than one succulent at a time.

Mangels or turnips, 14; not over 2 pounds a day added to a dry ration.

Mangels or turnips, 9.2; two to seven pounds a day.

Rutabagas, 17; not over two pounds a day added to a dry ration.

Rutabagas, 12; two to seven pounds a day.

Sugar beets, 25; not over two pounds a day added to a dry ration.

Sugar beets, 17.5; two to seven pounds a day.

Corn silage, 30; not over two pounds a day added to a dry ration.

Corn silage, 22; two to seven pounds a day.

Kale, 14; not over two pounds a day added to a dry ration.

Kale, 9; two to seven pounds a day.

**Roughage.**

Some roughage, either as hay, straw or grass, is required at all times and should be fed in about such quantities as the animals will clean up.

Legume hay (alfalfa, clover or vetch), 33; for stock on heavy feed.

Legume hay (alfalfa, clover or vetch), 42; for wintering or other light feed.

Timothy, cheat or other carbonaceous hays can not alone take the place of a legume hay, but require the addition of oil meal or similar feed to make a substitute for clover or other legume hay.

Eighty-two per cent timothy hay and 18 per cent oil meal, 33; for stock on heavy feed.

Eighty-seven per cent timothy hay and 13 per cent oil meal, 42; for wintering. The heads of timothy often cause irritation to the skin.

**Pasture.**

Good pasture has been found equivalent to a ration of one pound of grain and three pounds of hay. With tillable land renting at $5 an acre and grass land at $3 an acre the cost per day is $.006 per head. This is as cheap as would be grain at $6 a ton and hay at $2 a ton.


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**So, whether you use the old or the new kind,** insist on "Cutter's," for in either case you will be getting the best that can possibly be produced.

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# Veterinary

Dr. S. B. Nelson

**Tumor Near Eye**—I have a cow that has a lump by the side of the right eye. Has been there about three years and a half. The eye seems inflamed and waters, but she is not blind. It seems to itch, but the cow is perfectly well. The lump is getting a little larger the last month or so. The party that owned her said it started from a foxtail getting in the eye. Would like to know if you think it will be serious and what can be done for it.—E. H., Cache, Idaho.

It is quite likely that the cow has some kind of tumor growing near the eyes. Just what the specific type of tumor is I do not know, whether it is a simple tumor or whether it is malignant. If it starts to grow rapidly it is very liable to become serious. If it holds its own it will not, although many simple tumors at times become malignant and grow very rapidly and become serious. It is best to have things of this kind attended to while they are simple tumors. When you have opportunity you should have your local veterinarian see it.

**One Side of Udder Spoiled.**—Over a year ago our cow's udder on one side spoiled. Later it broke and run, and is now in a bad condition. The cow is due to have a calf soon. What would you advise me to do? E. R. B., Kooskia, Idaho.

There is only one thing that you can do with this cow at the present time and that is to allow the spoiled portion of the udder to dry up immediately after she calves. Allow the calf to suck the other side if you wish to or you could milk it and feed it to the calf, just as you wish. Then, when the cow is dry, there is only one thing to do, and that would be to have a veterinarian operate on the cow and remove the spoiled half of the udder, and that should be done after the cow is dry.

**Horse Has Lump on Shoulder.**—I have a 5-yearold horse with a lump on each side of his shoulder at the top about the size of a man's fist. This was done in the pasture last fall. I have worked him all spring, which does not make it any worse. The lump is soft. Can you please tell me what to do? B. M., Ukiah, Ore.

It is quite possible that the lump which you describe is an unbroken fistula. If, as you say, you have worked him and it makes it no worse, it may be the best thing to let it go this year, because a treatment would without doubt involve a surgical operation, opening the fistula and giving it drainage, and that might be a long, slow process. I would therefore recommend to you that you leave it alone until you can obtain the services of a veterinarian some time.

**To Stop Growth of Horns**—I have a heifer calf six weeks old on which I wish to stop the growth of horn. What shall I use?—J. I. J., Neppel, Wash.

The heifer is too old to stop the growth of the horn. That should be done about the time she was two to five days old. At that time the best thing to use is a stick of caustic potash. Apply a little grease around the horn knob and then dampen the stick of potash in a little water and apply thoroughly to the entire knob, being careful to not get it over the other tissues. When it is entirely black it will shrivel and not grow. If you do not get it thoroughly done and leave a small portion of the horn to grow, it will form a very irregular shaped horn. The thing for you to do now is to let the heifer go until she is about eight to ten months old and then clip off the horn with a pair of horn shears. Some people think it is better to do it at eight to 12 months old, because when it is done at that time the head gets somewhat sore and keeps the animal from bunting. The first time they bunt they get hurt and after that quit it, while if the horns are removed when they are calves they sometimes become vigorous bunters.


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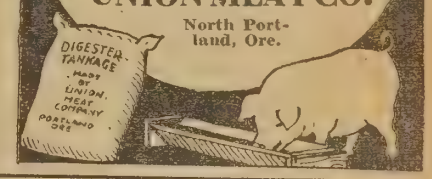
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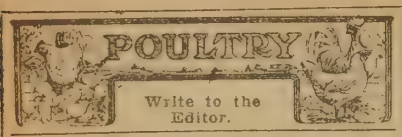
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JAMES DRYDEN,
Editorial Contributor.

## GREEN FOODS

### Attention to Protein Content.

George R. Shoup of the western Washington experiment station, calls attention to the usually ignored protein content of green foods for poultry.

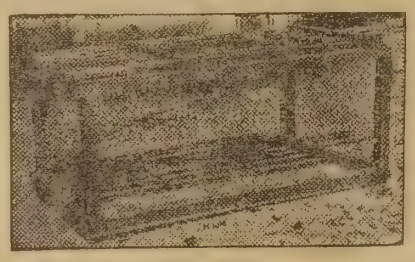
"Don't regard green food as valuable solely for its salts or its carbohydrates," warns the Puyallup expert. "The protein which it contains is highly valuable. Not all proteins are equally available physiologically, and those contained in such articles as clover, kale, mangels, etc., stand high when judged by this standard of availability.

"It is the ability of western Washington to produce cheap green foods almost the year through that makes it an ideal region for poultry raising," continues Mr. Shoup. "It is not very cold here in winter and not very hot in summer. Climatic conditions insure an abundance of green food. When you've said those things you've said a good deal, as far as poultry farming is concerned."

In connection with this matter of the superior availability of the protein contained in green foods, the following estimates of the percentage of protein found in some common green foods may prove interesting. This table is quoted by Professor J. L. Stahl from "Feeds and Feeding," by Henry and Morrison:

Kentucky blue grass, before heading, 5.3 per cent; white clover, 4.6 per cent, red clover (Rowen), 5.3 per cent; alfalfa, before bloom, 4.7 per cent; mangels, 1.4 per cent; kale, 2.4 per cent; rape, 2.9 per cent.

## Convenient Catching Coop.



**Catching coop used at the Puyallup (Wash.) experiment station for handling chickens during the day. The open end is placed against the gate of the run, while the trap door in the top makes it easy to handle the birds driven into the cage.**

## Eat More Eggs

One way to help win the war is to eat more eggs. Eggs will take the place of beef and pork to a large extent, and the more eggs that are eaten the more beef and pork can be shipped to the soldiers. Now is the time to eat them when they are cheap. A pound of egg costs about the same as a pound of beefsteak, or a little less at the present time. Why not eat the eggs and save the meat for the fighting men in France!

There would be double the number of eggs consumed on the farms were it not that eggs are a "legal tender for the groceries and other things purchased by the farmers' wives. They would be hard-pressed, many of them, for summer dresses, spring hats, shoes and hose, and socks and tobacco if they were to depend upon the "boss" turning over to them the cash he gets for the fat steer or hog or the load of spuds to pay for them. This is a question of household economy that needs correction, and will have to be corrected before many eggs are consumed on the farms.

When the war is on and while the red meats are needed by the soldiers let the farmer sell the red meats and from the money received pay for the groceries, the dresses, the hose and the socks and the tobacco. Then there will be fried eggs, poached eggs, boiled eggs, scrambled eggs at every meal, and if meat will win the war there will be meat enough.

Is it patriotic to compel the wife to pay the grocery and tobacco bills with the eggs and eat the meats that the soldiers in the trenches are calling for?

Correct this question of household economies and the consumption of eggs will be doubled, and the war will be won if meat will win it. J. D.

## Composition of the Egg

The usual analysis of eggs shows the following composition. The analysis of sirloin steak is also given.

| | Eggs per cent. | Sirloin steak per cent. |
|---|---|---|
| Refuse | 11.2 | 12.8 |
| Water | 65.5 | 54 |
| Protein | 11.9 | 16.5 |
| Fat | 9.3 | 16.1 |
| Ash | 0.9 | 0.9 |
| Calories | 635 | 985 |

This analysis gives the steak a little higher value than eggs, but there are other questions to be considered. Palatability must be considered in estimating the value of a food. It has been said that a mixture of wet leather and petroleum jelly will give the same result as meat by the ordinary food analysis, but such a mixture would not be very palatable. Then there is the question of digestibility. The stomach makes better use of one food than another, even though the composition may the the same.

But the egg contains a great many constituents other than those mentioned in the ordinary food analysis. There are different compounds of protein, and there are different kind of fat, and these vary in different kinds of food. So that to get the true value of the protein and the fat, etc., the chemist would have to analyze the protein and the fat. For instance, there are vitelline, lecithin, cholesterin, cerebrin, mineral salts, coloring matters, glucose, etc., in the yolk. What the function of all these things is the chemist and the food specialist have not yet told us. The egg has a high lecithine content. Laurie says: "Various preparations of lecithine are used in medicine, and even the value of fresh eggs as part of the diet in cases of nervous disorders is well recognized." Further, he says: "It is administered in cases of neurasthenia, various nervous diseases, diabetes, tuberculosis, tabes and general paralysis; also in all diseases producing a disturbance of nutrition, improves weight, augments blood corpuscles, etc." Further: "Cerebrin is present in the brain; its sugar is cerebrose. Extracts are made and administered in nervous diseases." The lesson is that if we would eat more fresh eggs this medical treatment might not be needed.

A good deal of this is Greek to us, but it is sufficient to show that if we wish to get a true value of the egg we must look further than the ordinary food analysis. J. D.

## Eggs Cheaper Than Salmon.

A farmer's wife took some eggs to market to sell at Corvallis, Ore. She was offered 28 cents a dozen for them. The storekeeper offered her a can of salmon for 25 cents, which weighed 7 3-4 ounces, about half a pound. She took the eggs home and ate them and didn't buy the salmon. She figured that 1 1-2 pounds of eggs were worth more than half a pound of salmon. The home economics department of the college gave her the following report on the values of the two:

"The dozen eggs contain 83.97 grams protein, 63.27 grams fat and yield 838.5 calories of heat energy. The can of salmon contains 44.22 grams protein, 17.01 grams fat and yields 335 calories of heat energy.

Eat the eggs and use the hogs and the steers for legal tender at the stores instead of eggs.


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for 38 years—not on the first cost of the mill. The Eclipse Wood Windmill has been sold for 50 years, always giving wonderful service. It is sensitive to light breezes—automatically turns in and out of wind—practically stormproof. Requires only occasional oiling—has direct stroke, no gears—but little friction—noiseless. Buy an Eclipse from your dealer and get your water

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Every telephone connection requires co-operation. The slightest inattention or indifference on the part of the person who calls, or the company that makes the connection, or the person who is called results in a corresponding deficiency in service. Each is equally responsible for the success of the service.

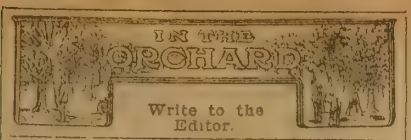
Not only is it to the advantage of the individual himself to use the telephone efficiently, but his conservation of the advantages of these national lines of speech benefits all telephone users.

Accuracy in calling, promptness in answering, clear and deliberate talking, courtesy and patience on the part of both user and operator are essentials of service, and must be mutual for good service.

Efficient telephone operation is vital to the war work of this country. The army, the navy and the myriad industries contributing supplies depend on the telephone. It must be ready for instant and universal use. The millions of telephone users are inseparable parts of the Bell System, and all should patriotically contribute to the success of the service.

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GRANVILLE LOWTHER,
Editorial Contributor.

# The Blooming Period

I was greatly surprised to discover upon my recent return from California, that the apples and pears as well as other diciduous fruits were as far advanced in the north as in the south. I went to California, about the 1st of January, reached Pasadena on the 10th. At the time I left Yakima, there was fear among fruit growers, lest the fruit would bloom in January. The weather had been warm, and the buds seemed swelling, and it seemed reasonable to suppose that if the warm weather continued, the buds would advance sufficiently so that a subsequent cold spell would injure them. I watched with intense interest all along the way. I got off the train at every station where there seemed sufficient time and examined every fruit tree I found near the station. When I reached California, I learned there had been no freezing weather. There was no freeze in southern California in the fruit sections, during the winter. At Pasadena and Los Angeles, where I spent most of the time, I think the mercury never dropped to the freezing point, and for most of the time it was warm and pleasant. Yet, the peaches, pears, apricots and apples did not bloom until April, and when I reached home on May 6, I found the trees had mostly dropped their petals, and the orchardists were spraying for codling moth. All along the line, I found similar conditions, Grant's Pass, Medford, and all down the Willamette, about the same.

I have known for a good many years, so long that I do not remember when I first learned it, that fruit trees tend to drop their leaves at a certain season of the year, and that the habit persists from generation to generation. I discovered when I was only 20 years old, that corn grown in Mississippi, and planted in Illinois, would not mature in the Illinois climate before frost came. It had been accustomed to a longer season in Mississippi and the habit of a longer season's growth, tended to persist. But we protected a few ears from frost, by wrapping them on cold evenings in a covering of gunnysacks, and in about three years, they became adapted to the new environment of Illinois, and the variety would mature in that northern climate before frost came.

I knew that there was a time for the falling of the petals after flowering, and the ripening and falling of fruit after maturity. But I supposed it depended mostly on stages of development, rather than on time. I presumed that these stages of development depended chiefly on whether the weather was warm enough to develop them, rather than upon any particular period of time called the dormant period. My former beliefs have not been entirely destroyed, but they have been pretty badly battered and bruised. It now seems that there is another law, that must work in harmony with those I have formerly trusted, and that is that there is a dormant period, for all deciduous trees, and that when these trees or their scions, are shipped into a southern climate and planted under conditions vastly different from those in which they formed their characteristics, the habits, or characteristics formed in the cold climate, tend to persist when they are transplanted into a semi-tropical climate. G. L.

## NO NEED TO WORRY

### Over Fruit Outcome and Markets.

The present prospects for apples and pears in the Pacific northwest is good. It is too early yet to determine the final results, and it will not be possible to do so until after the June drop. This "June drop," as the orchardists call it, is on account of a number of reasons. The principal reason is that the trees always put out more blossoms that become sufficiently fertile to germinate fruit in its early stages of development, than they are able to develop later and mature. On one fruit spur may be sometimes found six or seven small apples in the early stages of development, when the spur should only bring one to maturity. To allow more than one to remain on the spur is to diminish the size of the others, so that none of them are good commercial fruit. Then, too, there is the struggle for food that always results by overcrowding. In this case the strong survive and the weaker ones perish and fall off. This falling occurs mostly in June, and the extent of it depends on the amount of available food supply, the health of the trees, the weather and other conditions. Until after this period of the June drop no accurate guesses or estimates can be made.

**Peaches.**

It is reasonably certain that there will be a short crop of peaches. I have reportes from various sections of Oregon, Idaho and Washington that indicate less than half a normal crop. In the Yakima valley of Washington I do not believe we will have more than 25 to 40 per cent of a normal crop. In the Wenatchee valley M. L. Dean, state horticulturist, reports that they have escaped with but little damage. Professor Dean says further: "I do not think the cool weather has retarded the fruit as much as has the lack of moisture."

**Cherries.**

In the Yakima valley the cherries will be somewhat below normal, but will nevertheless be a fair crop, with good prices. The canneries are now offering to contract for 5 cents per pound, or $100 per ton. Cherry growers regard this a good living price, and if they could contract at that price for years ahead feel that they would have a stable industry that could be operated at a profit.

**The Market Prospects.**

There is everything to indicate a good market, except the factor of transportation. "Will we be able to get cars?" say the shippers. "We do not know." Well, neither do the fruit growers know. However, I have observed all through life that when people anticipated a calamity far enough ahead to provide against it it seldom occurs. This, I presume, will be true of the transportation situation. If it is not so, there is no need to worry, for worry will not prevent it. G. L.

**Playing Safe.**

Military Inspecting Officer—Now, sergeant, what precautions do you take against infected water?

Sergeant—Well, sir, first we boil it.

Officer—Good.

Sergeant—Then we filter it.

Officer—Excellent!

Sergeant—Then we drink beer!

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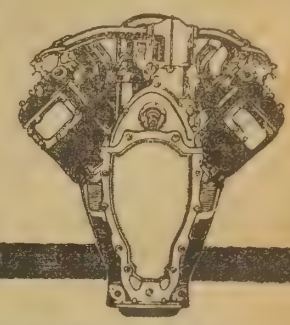
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Thousands of Uniformed Men will be present.
Five World-Famous Drivers

All races under auspices of the Automobile Club of Western Washington and the Automobile Chamber of Commerce of the State of Washington.

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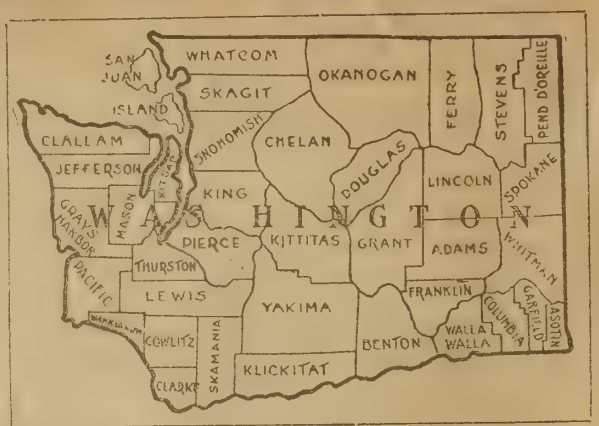
Tacoma Speedway Association
Tacoma, Washington

PROGRAM BEGINS AT 2 P. M.

FREE PARKING FOR AUTOMOBILES

# Dairymen Pool Their Milk

## Five Thousand, About Half of Cows of Lewis County, Are Signed Up—Board of Directors Is Appointed to Sell the Milk




CHEHALIS, Lewis County, Wash., June 2.—Crops are not doing as well as desired. This is due to the cold and rather damp weather, though no crop is suffering for lack of water. Rather the reverse is true in most localities. The aphis is doing considerable damage to vetch and fall grain. In some places farmers are plowing up the fall grain and planting corn in its place. Silos and milking machines are important topics of discussion just now. There will be many of both of these improvements installed this summer; the silo because it is a feed saver, and the milking machine because it is a labor saver. Another matter of considerable importance and interest is the Dairyman's association formed here during May. The dairymen have agreed to pool their milk and have a board of directors sell it for them. Five thousand cows have been signed up. This is about half of the cows in the county. A. B. NYSTROM.

### Give Thought to Labor Question.

CATHLAMET, Wahkiakum County, Wash., May 31.—Crop and weather conditions during the past three weeks have been very similar to last year if not worse. Cows are doing remarkably well when we consider that the pasture is not as plentiful as usually is the case. Crops are not as far advanced as is desirable, although no uneasiness seems to exist as to the crop outlook. Wahkiakum county farmers talk more about Liberty loan and Red Cross just now. The county subscription to the Liberty loans and donations to the Red Cross readily give us to understand how the above statement is possible. The matter of the hay harvest is possibly causing some of the farmers to give serious thought to farm labor during that period. Community spirit is being promoted in almost every way. Wahkiakum county farmers never retire. They are in the harness until the last call and always are doing their bit. Gray-haired men will drive mowing machines this summer as in past summers. A. T. FLAGG.

### Cold Weather Is Damaging.

LA CROSSE, Whitman County, Wash., June 1.—Weather conditions during the month of May were far from favorable. Lack of rain since March 12 with much windy weather and several frosty nights were detrimental to nearly all plant growth. It seems almost impossible to get a garden started, nearly all tender plants being severely frosted May 26 and 27, when temperature dropped to 24 above, finishing practically all of the fruit. Pasture is very scarce and many farmers are feeding their work stock as no pasture can be gotten. Plowing for summer fallow is pretty well finished. Winter wheat is excellent except for some weeds, and is starting to head. Spring wheat is better than in years, where seeded in good season. Some late seeding is very poor. The tractor demonstration at Pullman was the chief attraction this week, many attending, and all felt well paid for the trip.
M. E. SCHRECK.

### Dairymen Form Association.

SOUTH BEND, Pacific County, Wash., May 29.—The weather has been very cool with a few light frosts, however these did not injure the crops. The Deuson farm at Holcomb was recently sold to Joseph Dahinden for $12,000. The Deusons will move to King county. They have lived in our valley for many years. On May 7 a meeting of the dairymen was held at Menlo, the object that of a cooperative association among the dairymen for higher price for their output. Milk was up to $3.25 for 100 pounds this winter, but a drop of 50 cents induced the producers to organize. Ten day later a large number of our farmers attended a meeting at Chehalis, where an organization was perfected between Lewis county and Pacific county dairymen to market the milk together. Over 500 men were present. In Pacific county the milk from 700 cows has been promised. All of the dairymen are greatly interested. Two of our dairymen are purchasing three very fine registered sires for their herds. These sires come from the Carnation Cream company's farms. The labor problem has been facing us for over a year and this spring labor was needed to plant the crops, but by careful planning and cooperation the farmers have met the situation and the crops are in. A few of the farmers have taken up war tasks; for instance one farmer has a position in the ship yards, the oldest son has gone to Camp Lewis and the mother and two younger children are running the farm. W. A. Cooksey has leased the Alta Vista dairy in South Bend and has started a milk route. The town has been without a milk route for over one year.
MRS. WINNIFRED BUCKINGHAM.

### Feel Lack of Rain.

FORT ANGELES, Clallam County, Wash., May 25.—Clallam county is suffering from a drought and abnormal weather conditions for this time of the year. Rain showers are generally copious during spring, but somehow they are lacking, and crops and fodder will suffer in some measure from this, to what extent is as yet not apparent. From what the writer can learn our county is solving several of the problems brought about by the war conditions and which the farmer has got to face in a very satisfactory way. The shortage of labor, so acute in other counties of the state, is remedied by the employment of older people of both sexes, and there are practically no vacancies among rural teachers. The Liberty loan was patriotically supported by our farmers, and the state bulletin gives our county sixth place among the counties of the state for the thrift movement. J. P. CHRISTENSEN.

### Help Problem Is Serious.

STEVENSON, Skamania County, Wash., May 24.—The weather conditions have been very favorable to all kinds of crops except beans and tomatoes, it being rather too cool for them. Grass is doing fine and will be a good crop, and will be ready to cut in a week or more. There are no new questions before the community at this time other than the war and the shortage of help. Strawberries are a leading crop in the eastern end of the county, and growers are considerably exercised over the help problem. Every fellow is digging in as hard as he can, and doing all he can, and what he fails to accomplish goes undone.
W. T. JACKSON.

### Crop Outlook Is Good.

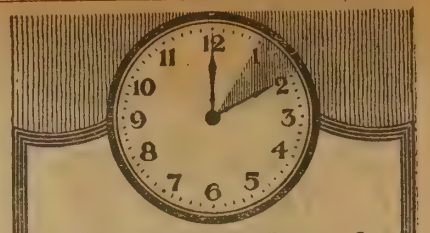
PORT ORCHARD, Kitsap County, Wash., May 24.—The general crop conditions are good. Fall sown grains are looking fine. Spring seeding is coming along very nicely. It was put in very good shape this season due to the excellent spell of weather we had through the month of April. Weather conditions at the present time are cool and rainy, making good prospects for a big crop of hay. The clovers are growing very rapidly. Meadows that have not been pastured off to hold them back are getting too far along, and the crop will be ready for cutting before the weather conditions are favorable for haymaking. The ever present topic of conversation is the war outlook and the crop conditions for the coming season. Labor and price conditions are ever in evidence. The farmers are all against the importation of coolie labor, and are willing to work out their own solution of the labor problem rather than have to resort to such for their help. Community spirit is being fostered by the frequent calling together of the people and talking over their obligations, and all feeling that he or she, whoever it may be, has a part in the winning of the great task as set before us. People are continuing to turn out well to all meetings called for the various purposes, such as Liberty loans, Red Cross, etc., and are lending their best aid to the causes.
C. B. SPRAGUE.

### War Promotes Community Spirit.

HUNTERS, Stevens County, Wash., May 23.—The dry weather was broken by rains on May 5, 7 and 8, and from May 14 to 20 there was considerable rain. We have thus had an abundance of moisture, but the weather has been cloudy and cold, so crops have made but average growth. At present the outlook for crops is good. The chief topic of conversation among the farmers at present is the administration's food regulations. The ruling that farmers had to sell their wheat by the 15th of May has stopped the feeding of wheat to hogs. This has been done to a large extent in this section as very little corn or barley is grown here. Wheat is generally the better crop in this section. The production of hogs is very much an the decrease due to the high price of feeds and because of the uncertainty as to whether the administration will permit the feeding of wheat to hogs after the new crop comes in. The war has certainly promoted community spirit here, and nearly every one has done his best in the third Liberty loan drive and in the Red Cross drive. This community had a Red Cross sale which netted $1000, this being the record sale in Stevens county. There have been very few retired farmers here, yet there are many farmers well along in years who are working hard in the fields because some have gone to war. ELIAS NELSON.

### Close to Front Lines.

Within 40 yards of the German trenches, a Y. M. C. A. dugout has been serving allied troops.

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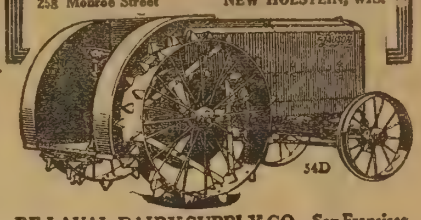
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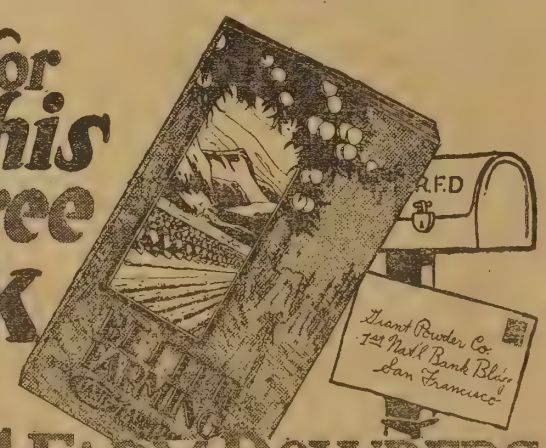
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# Handicraft For Boys

By A. Neely Hall

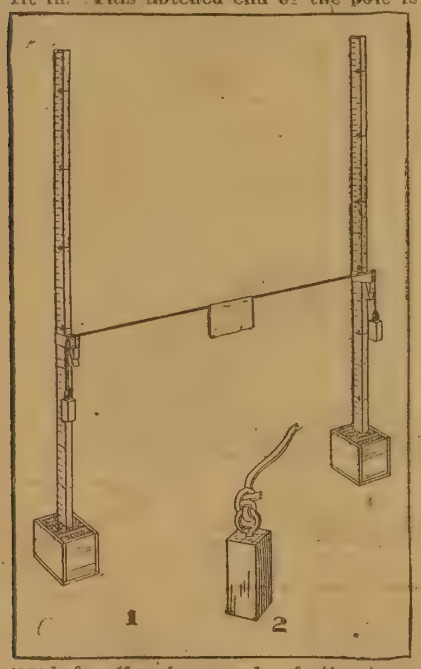
(Copyright by A. Neely Hall.)

## Jump Standards.

A pair of jump standards that will serve a boy's purpose just as well as the kind they use in gymnasiums may be made in a simple way, as will be seen by examining the drawings below.

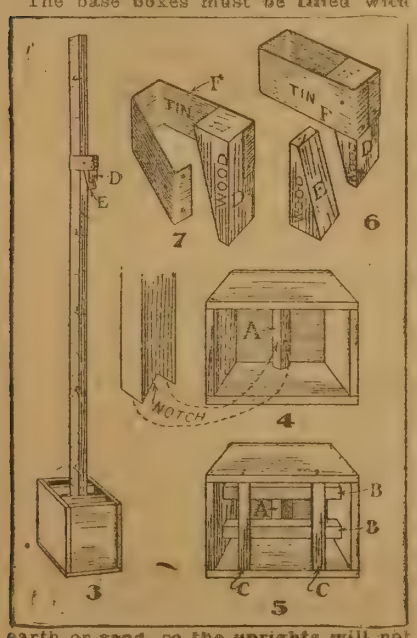
Two poles six or seven feet in length are necessary for the uprights. Clothes poles will do nicely, and likely you can borrow a pair, as they are not to be damaged in the least, and can be slipped out of their bases in an instant, for use on washday. Two small boxes are needed for the bases. Starch boxes are of about the right size, but, if you can not get these or other small boxes, you can take a larger box, cut it in half, and make two complete boxes.

Figure 3 shows one completed standard, and figures 4 and 5 how the inside of the box bases are prepared to support the uprights. The upper end of a clothespole has a right-angle notch cut in it for the clothesline to fit in. This notched end of the pole is




used for the base end of the jump standard, and fits over a cross strip, A (figure 4), fastened between the sides of the box, in the center of the bottom. Cut a pair of sticks to fit lengthwise between the ends of the box (B, figure 5), and fasten them just far enough apart to permit the clothespole to slip down between them. Then cut the pair of sticks, C, of the same length as stick A, cross them over the pair of sticks B, and fasten between the box sides with just enough space left between to allow for the width of the clothespole upright.

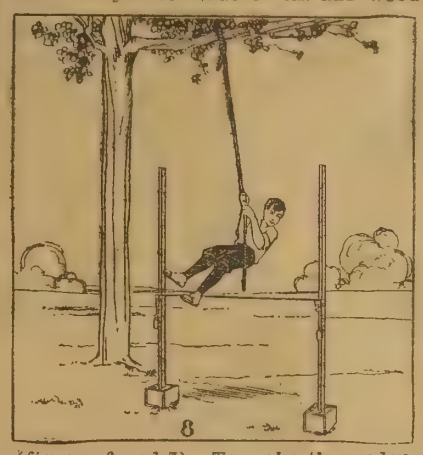
The base boxes must be filled with




earth or sand, so the uprights will not overturn them.

It is not necessary to mark the height measurements upon the uprights. You can have an additional pole so marked, for the purpose of adjusting the cross bar or rope to heights desired. Still, it simplifies matters to have the poles graduated. Rule the "foot" divisions across the face and edge, the "half-foot" divisions across the face, and the "inch" divisions half-way across the face. Mark the "foot" divisions "1," "2," "3," etc.

The adjustable supports for the cross bar or rope are made of tin and wood




(figures 6 and 7). To make the wedge-shaped blocks, D and E, first cut a block of wood about 3 inches long, 1 inch wide and 1 inch thick; then saw it in half diagonally. Cut a strip of tin about 1 1-2 inches wide from a tin can, for the sleeve F; tack one end of this to the straight face of block D, bend it around the pole, make the other end meet the first end, and tack to block D. Make the sleeves fit loosely, so they will slide up and down the poles easily. To fasten them at the desired point it is necessary to slip the wedge E between the pole and block D and push it up until the sleeve fits tight. Use a light-weight stick, or piece of clothesline with a weight attached to each end (figure 2) to hang across the uprights.

Figure 8 shows a boy rope-vaulting. If you have never tried this form of leaping you must do so, because it is lots of fun.


## A Written Guarantee Desirable




When one buys a bill of goods, he often likes to have a written guarantee that each article is satisfactory.

Did you ever stop to consider that advertised goods in reality have this very advantage? The written guarantee is the advertisement itself. The manufacturer does not print a statement in an advertisement until he is fully able to back it up.

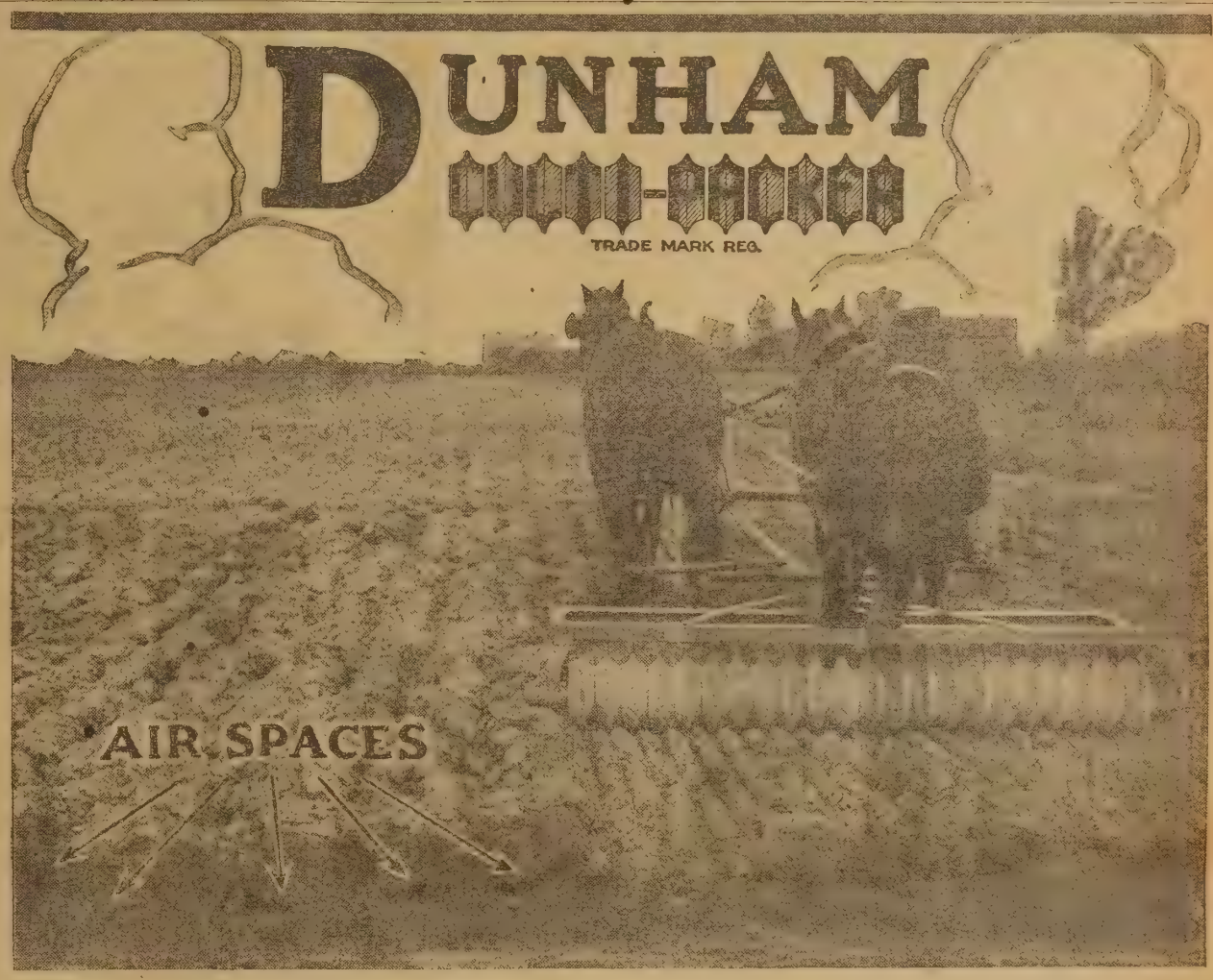
An oral promise may be forgotten; but a promise printed in black and white, as it is in the advertisement, gives the buyer something definite to go by. the manufacturer simply has to back it up.

This is one of the reasons why it will pay you to read the advertising columns of your state farm paper. You can depend upon the statements you find as being reliable. And remember, our guarantee makes you doubly sure of satisfaction in dealing with advertisers.



DUNHAM CULTI-PACKER

TRADE MARK REG.




Note where the Culti-Packer has passed over, that all lumps are crushed, all air spaces are firmed out and the surface is stirred and loosened just as a cultivator would do it.

# Culti-Pack Your Wheat

Without an hour of extra labor you can get the finest seed bed of firm, moist soil that wheat was ever drilled in.

The Dunham Culti-Packer does not add an extra operation—it helps your harrows and other tools to fit the seed bed quicker and better.

Use the Culti-Packer before and after seeding and it will give you quick sprouting, and a close, even stand of vigorous rooted plants to stand the winter. In the spring it will settle down any frost heaved plants, tuck the soil around the roots and prevent all loss from winter killing.

There is no guess work about what the Culti-Packer will do for wheat. It gives remarkable increases in yield, certified to by leading authorities on farming.

We have printed the facts in a 48-page book "Soil Sense", illustrated with 100 field photographs showing the Culti-Packer's work on wheat and every other crop.

Ask your dealer for "Soil Sense" or if he hasn't it write us direct. It will mean more wheat from every acre.

THE DUNHAM CO., CLEVELAND, OHIO

Factories at Berea, Ohio

# UNLUCKY LOOIE STAVES IT OFF AGAIN




# MUGGSY KEEPS MULLIGAN OUT OF THE MOVIES



# HAS THIS EVER HAPPENED TO YOU?




# SAMMY STAHL IS INVITED TO A TANGO PARTY



# My Road-House of the Birds

By JOE L. ASHLOCK.

The animal fleeing before me ceased to be there; like Enoch of old, "he was not."

I supposed that he would reappear on the far side of a gully but he didn't. When finally I discovered why my runaway steer had ceased to be, I slid over my cayuse's tail and did a grapevine twist to the rear. In this emergency I thought better of my own legs than those of Rover, though I knew his were first class.

It all happened because Chris Hartman, the butcher of our town in the days when the bunchgrass had commenced to follow Enoch into oblivion, had asked me to go up on the coulee wall and run a steer he knew of to his slaughter house north of town. I went after the steer, goaded on by thoughts of what I could do with the 50 cents he offered me for the job. The steer went the other way, because he loved liberty, maybe, and also his life. He found liberty, maybe, when he slipped 600 feet over the coulee wall; but not life, unless everlasting life counts in the hereafter for good steers.

This steer, by the way, was not a very good one. He was built rather on the lines of a racing automobile. Nature had started to make airplane wings of his horns, and had succeeded, so far as length was concerned. I suppose that there were a few pounds of edible beef on the critter, excluding the horns, though we used to say that Chris cut the horns into round steak and sold the hoofs for soupbones.

What the coyotes found at the foot of the coulee wall was some very well pulverized hamburger steak in which horns, bones, hair and hide mingled with the red meat. Chris used to make it the same way, the folks said. Really though, Chris was a fairly honest butcher, and nowadays if we could buy his steak at the price he sold it twenty years ago in Hartline we would think we had found it.

The Grand coulee of those days, just as it is now, and just as it was a million years ago and, maybe ten millions, ran through sixty miles of bunchgrass country in a deceptive way. It opened up at your feet, eight hundred feet deep, before you knew it was around. What you mistook for a hillock of bunchgrass with a gulch on the other side was a thousand-foot jump-off. This is the mistake the steer made, and he slid over. My cayuse happened to be a good safe distance in the rear, so he and I were able to profit by the steer's bad luck. The cayuse sat down on his tail like a dog and took a look at eternity. I saw a glimpse of the same by looking over the cayuse's ears; then, as already related, I slid over the horse's tail and went the other way.

Some people think that the grapevine twist is a modern dance. It isn't; at least I know that I danced it to order in getting away from the coulee brink with my knees knocking together at every step. It gave me a pretty good scare. Chris had warned me that that steer could run "like hell a-beatin' tanbark"; that my job of getting him cut out of his band up there on the coulee wall would be fully worth my 50 cents.

He was right, and I didn't get the 50 cents, though I cut the steer out of his bunch. Chris had to buy another steer, and economized by going after this one himself. So I got my scare for nothing.

I should like to tell you something about the Grand coulee, and would if I knew. Curiously enough, when I think of the coulee I think also of Kipling's poem, "The Story of Ung." Ung and the "Deep Sea Cables" are my choice among Kipling' poems, though I doubt if any one else in a million whom you might ask would pick these two at least Ung, as their choice. Here, I begin Kipling's "Story of Ung."

Once, on a glittering ice-field, ages and ages ago,
Ung, a maker of pictures, fashioned an image of snow.
Fashioned the form of a tribesman—gaily he whistled and sung,
Working the snow with his fingers. Read ye the story of Ung!

Pleased was his tribe with that image—came in their hundreds to scan—
Handled it, smelt it, and grunted: "Verily this is a man!
Thus do we carry our lances—thus is a war belt slung.
Ay, it is even as we are. Glory and honor to Ung!"

Later he pictured an aurochs—later he pictured a bear—
Pictured the sabre-toothed tiger dragging a man to his lair.
Pictured the mountainous mammoth, hairy, abhorrent, alone—
Out of the love that he bore them, scribing them clearly on bone.

Swift came the tribe to behold them, peering and pushing and still,
Men of the berg-battered beaches, men of the boulder-hatched hill,
Hunters and fishers and trappers—presently whispering low:
"Yea, they are like—and it may be * * * But how does the picture-man know?

"Ung—has he slept with the aurochs—watched where the mastodon roam?
Spoke on the ice with the bow-head—followed the sabre-tooth home?
Nay! These are toys of his fancy! If he have cheated us so,
How is there truth in his image—the man that he fashioned of snow?"

Leave Kipling for the present.

In Ung you see prehistoric ice-fields, prehistoric man, everything prehistoric. And that's what you see in the Grand coulee when you look at it right.

How old it is no man knoweth. There are some things about the foundations of the world that we do not know, and age is one of them. We say so many epochs, so many periods, so many eras. But a century or a thousand years are too short a second to count in the age of the world. That is why we retire in humility, in spite of all our wisdom, when we stand on the coulee brink and from its age-worn walls try to read the secret of its age. It is merely old.

In the shimmering ice-floes depicted in his poem of Ung Kipling has in mind "the ice age." Man seems to have rambled into view, prehistorically speaking, about this time. One of a fairly vivid imagination can easily see in his mind's eye prehistoric man clothed in hair, tiger teeth about his neck and swinging a stone club in pursuit of his game. I have lain on the brink of the coulee wall and seen these things over and over again in the ice age, when the coulee was made—maybe? We are not sure it was made then. It may belong to history removed by epochs, periods and eras from the ice age.

This ice cap, which according to the geologists at one time extended from the Arctic where it now is to northern parts of the United States, is given some responsibility in reference to the Grand coulee. The Columbia river was flowing before the ice age. It had existed for so many millions of years before the ice age that its present channel around the Big Bend and against the eastern slope of the Cascades was deeper than it is now. When the ice came it came across northern Washington, dammed up the prehistoric Columbia and threw the great stream out of its bed. Naturally, it had to go somewhere—and it went to the Grand coulee.

Whether the coulee was then as big and deep as it is now is a good deal of a mystery; but it is quite certain that the Columbia once flowed down the Grand coulee. The ice floes, Ung, the woolly elephants, the polar bears and the Arctic animals receded, eventually, leaving the Columbia stranded in the coulee. It resumed its bed around the Big Bend and against the Cascades.

All this happened yesterday, geologically speaking; for the river, mighty as it is, has not yet cleaned out of its channel all the debris thrown into it by the glaciers; which is to say that at points along its stream the Columbia has not worn down to the depth of the bed it made in the days before Ung roamed the ice fields of northern Washington.

When the Egyptian kings were building their pyramids along the Nile I expect that the coulee walls were just as high and old looking as they are now. Kings and pyramids and the mystic river Nile all pass in review before the coulee walls—rather, the kings and the pyramids do. Maybe the Nile and the coulee walls are on speaking terms, so far as antiquity goes.

It was interesting, in bunchgrass days, before moving pictures and railroads and the other things that have sent the bunchgrass after Enoch and the steer I chased over the coulee brink, to edge, inch at a time, up to the coulee precipice and peek over.

One saw many things. The birds always appealed to me. You could hunt through the dry bunchgrass for days and never see any bird of brilliant plumage. But hardly would you look over the coulee brink till you would see down its crumbling sides the flash of yellow, or crimson, or blue that told you of a nest down there.

One could not see the nest, of course. If ever any birds in the world were

(Continued on page twenty-three.)

# City Women Can Help

Assistant Secretary Clarence Ousley of the United States department of agriculture recently made an appeal to women in the cities to go to the farm this summer and offer their services in helping their country sisters in performing the heavier duties that devolve upon them during the rush of the harvest season.

"I can imagine no finer thing," said Mr. Ousley, "for a city woman to do in this war emergency than to go to the farm for the harvest or for some other period of labor strain to help her country sister bear the burdens of kitchen and farm."

Mr. Ousley says there is opportunity for the women of the city to help by assuming many positions in the city that are now occupied by men and thereby allowing or compelling the men to go to the farms and take up heavier manual toil. In this regard he says:

"There are thousands of men in the towns and cities doing things that women can do as well. There are men cooks, men waiters, men clerks, men bookkeepers, whose places might well be filled by women.

"I will despise American manhood if the great body of our men permit our women to be drafted for the hard tasks of agriculture until we have sent every able-bodied creature in breeches to the trenches or driven him to the fields, but women are to be encouraged, so far as their physical condition will permit or the circumstances surrounding them will advise, to engage in the lighter tasks of the farm, particularly in dairy work, in vegetable cultivation and in fruit harvesting."

Speaking of the work that the farm woman has done, Mr. Ousley says:

"I have seen them hoeing in the hot sun while their babies lay in the shade of nearby trees. They are truly, and to the limit of their strength and with marvelous patience, the helpmeets of their husbands."

# SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

## Baths and Recreation Reduce Danger in Hot Work



Dr. Hirshberg.

Heat has so striking an effect upon living tissues that women and men exposed too much to it in kitchens, furnace pits, stoke holes and the like have read faces, pimples and other eruptions upon the flesh.

Physical labor nowadays makes absurd the superficial claim of some that "modern life is much more strenuous and exciting than in former times." Without doubt, the average wage earner has his work so cut out for him now that it is lighter and easier to accomplish more with less effort than ever before.

While the muscles are less strained, however, the intellect has been compelled to be more alert. Men in the steel industry, which, thanks to the war, may be taken as typical of most concerns, do less actual physical work than ever. Of course, there are exceptions. Steel mill rollers work as hard today as they did a generation ago and under an added strain due to the more complex machinery and greater speed needed.

The noise in a steel mill has a tendency to cause deafness. The screeches and other noises seem to disturb the machinery of the ear and this in turn disturbs the emotional elements of the individual.

The abnormal heat of mills, according to Dr. J. A. Fitch of New York, leads to several maladies. Some of these are the result of the perspiration and the evaporation which follows; some are directly caused by the heat.

**Safeguards Against Sickness.**

No man with his work clothes on should venture out of a hot factory directly into the open air, even in summer. A cold shower and rub-down will increase the endurance of the worker and reduce his liability to disease.

A daily bath and a full change of underwear are more than worth the time consumed.

The heat from blast furnaces, the sparklets and other fiery particles assail the workers and keep their flesh fairly a-quiver. It is said that no man can stand before the furnace and perform this back-breaking toil continually. Even when working between frequent pauses and in short shifts, the man is often nearly "all in."

Accidents are very common in such industries. The worker, when tired or exhausted, overheated or otherwise unduly influenced by the strain imposed, has his attention distracted. It wanders from the important business on hand and an untoward accident occurs.

The list of accidents in iron and steel mills is therefore shockingly large. It is said to be due to the carelessness or negligence of the employe, but it is due to these little things, which have reduced the endurance and power of the human tissues.

**Making for Alertness.**

Negligence, after all, is a sign of ill-health. It means that the mental and physical balance of the individual is not all that it could or should be.

It is a rare wage-earner who can maintain equally all through his work an even and enduring alertness. An employe may justly be called "careless" when his attention lapses from the work in hand, yet the resultant accident or sickness is often due to unsatisfactory working conditions.

If proper hours of rest and relaxation, bathing and diversions are granted at frequent intervals, there will be less sickness and fewer accidents; endurance of the workers will be greater and their attention will be more sustained.

## WHY WORRY?

### The French Soldiers Guide.

They say the French soldiers have adopted the following as a guide in the troubles through which they are passing:

"One of two things is certain: either you are mobilized or you are not mobilized."

If you are not mobilized, there is no need to worry. If you are mobilized, one of two things is certain: either you are behind the lines or you are in front.

If you are behind the lines there is no need to worry, because you are in the safest possible place for a mobilized man.

If you are on the front one of two things is certain: either you are resting in a safe place or you are exposed to danger.

If you are resting in a safe place there is no need to worry. If you are exposed to danger one of two things is certain: either you are wounded or you are not wounded.

If you are not wounded there is no need to worry. If you are wounded one of two things is certain: either you are wounded seriously or slightly.

If you are wounded slightly there is no need to worry. If you are wounded seriously one of two things is certain: either you will recover or die.

If you recover there is no need to worry; if you die you can't worry.

It is a pretty safe proposition to do the best possible to avert a calamity and then meet the consequences with a smile.

# All the World's a Stage, and All the Men and Women Merely Players

## Arizona's Prize Boy Farmer



Harry G. Miller of McNeal is the prize boy farmer of Arizona. From a garden patch 40x50 feet he raised and sold vegetables worth $120.10, which is at the rate of $2642.20 per acre. Besides winning the first prize in the boys' state garden contest, he won a free trip to the Tuscon Agricultural college.

The garden spot selected by young Miller adjoins his father's truck garden in the McNeal basin and the water is secured for irrigation from a windmill and a burro pump. The water is shallow and when the wind will not keep the mill going the small Mexican burro has to keep the pump working by going round in a circle with a blind over his eyes so he can't tell he is going in a circle.

This is a primitive method of pumping water in Arizona and Mexico and is fast being supplanted by modern gas engines and centrifugal pumping plants. Mr. Miller will install a modern plant from his profits of this season.

Young Miller is 16 years of age and this year is in for a pig club. In his garden he raised beans, radishes, tomatoes and onions which were sold readily at the mining camp of Bisbee, 12 miles from his ranch.

## They're Selling Bones for Food in England




Over in England they are selling bones at the rate of five pounds for 1 shilling. Policemen regulate long lines of people patiently standing out on the sidewalks, waiting, not for their favorite matinee idol to pass, but for a chance to enter a food shop and buy a small quantity of food. It takes about three minutes for the shopkeepers to dress their windows over there, merely because there are, perhaps, but a few cans of condensed milk and a box or two of corned beef to be displayed.

Yet over here in America, bones, hay, even fats and precious scraps of meat are going into the garbage pails! Although in many cities there were long lines of people waiting last winter for supplies of coal, there has as yet been no pinched-faced mob pleading for food. True, there are frequently long lines of people on the street, but mostly they are buying tickets to shows! In the busy streets in towns and cities, shop keepers display elaborate arrangements of all kinds of delicacies in their show windows. They would scorn a "display" of corned beef and condensed milk.




These British photos were sent to the United States to teach us to prevent waste.

U. S. Food Administration.

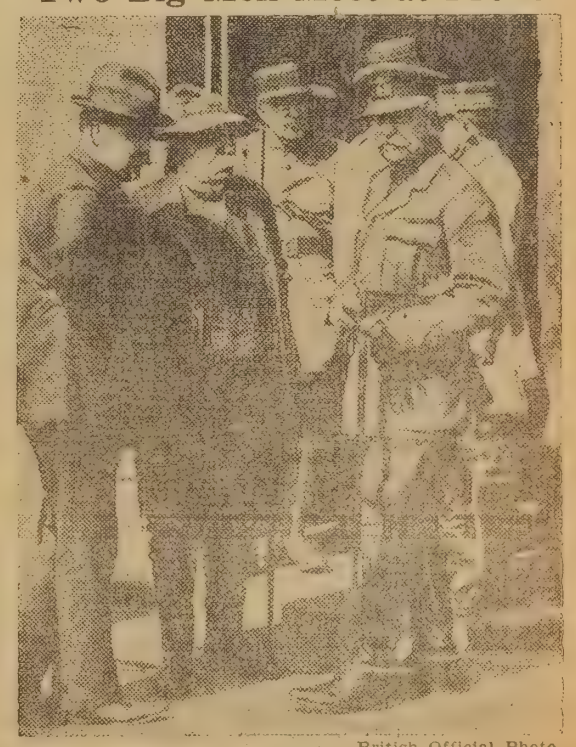
## Healing Hurts of Travel



Copyright Com. on P. I., sup. by I. N. S.

This picture, taken after a long hike of the American marines, somewhere in France, shows a marine of the Red Cross outfit helping a comrade fix up his blistered feet.

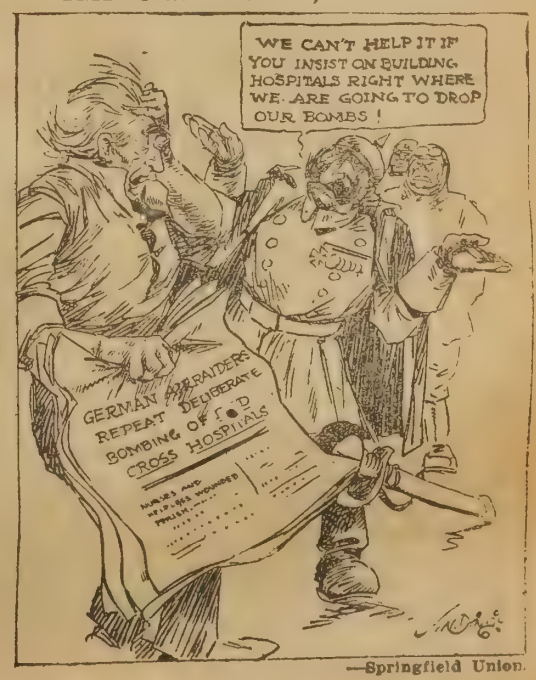
## Two Big Men Meet at Front



British Official Photo.

The meeting between Field Marshal Sir Douglas Haig, commander in chief of the British army in France and Premier Clemenceau of France during the latter's visit to the British front.

## All Our Fault, as Usual




—Springfield Union.

# Trappers of the Ozarks

**The Adventures of Two Young Pioneers in the Wilds of Upper Louisiana. Now the State of Missouri.**

By LOUIS B. MILLER

Copyright, 1914, 1915, by Lewis B. Miller

**Summary of Preceding Chapters.**

In September, 1811, two young men who lived near St. Louis, Ben Armstrong and Jodo Henderson, taking with them their two dogs and donkey Spunky, started on an all-winter's hunt in what was at that time an unsettled region, where Indians held full sway, in the wilds of upper Louisiana, now the state of Missouri. After a perilous trip over old Indian trails and dangerous streams, they reached their destination—a salt spring close to the river Big Niangua, which Ben had visited before and from which they expected to secure salt for sale with their furs when they returned to civilization the following spring. Here they erected a rough cabin for their winter quarters close to the mouth of a large cave that was full of water and bats, and started their salt making and hunting. After an exciting experience with a bear in a cave they find their first fresh sign of Indians—moccasin-tracks in the snow about their camp and the morning after they find moccasin-tracks in the snow about their camp. The Indians attempt to enter their barricaded cabin at night but are frightened away by a great earthquake. The boys are captured and taken to the Osage village. One day they are given one bullet and one charge of powder each and allowed to go hunting. They dare not attempt to escape for fear of starvation, but lose their way and are found the following day by the Indians who think they tried to escape and are taken to the camp under guard. Ben is tied to a stake and a fire built under him but it is only a ruse to induce him to take as his squaw Watermelon, for the time being an Indian widow, who cuts his bonds and proclaims herself his squaw. Ben declines. The boys make plans to escape by canoe. They accumulate some parched corn and dried meat, steal a canoe at night and paddling far up the river turn into a branch stream and hide in a cave. After two days and a night there they go back down the river, safely past the Indian village and turning into a branch find a cave high up in the rocky face of a cliff. Here they place all their belongings except the canoe, which they conceal. They are discovered by the Indians, and, retreating deep into the cave with their belongings, they find, over a mile from the opening through which they entered the cave, an exit, and start southwest, the Indians undoubtedly in pursuit. The second day a blizzard sets in and hungry wolves follow the boys. Toward dusk they reach a deserted settler's camp, the cabin burned but chimney standing. Here they build a fire and plan to stand off the wolves. A long, hard fight with wolves and cold ensues. This fight was hardly won when Snapping Turtle and his warrior band surround the boys, who later effect their escape unseen by their enemies, but only to renew their struggle with the cold and wild animals. Once again they made good their escape, at last reaching the stockade camp of other white hunters in the wilderness.

## CHAPTER XX.

### Three Wild and Woolly Hunters.

First there was a noise of bars being removed, and the gate opened a few inches. After a peep out, a wild-looking head—a pair of eyes set in a bushy tangle of hair and whiskers—thrust itself through the opening. When the eyes had looked first to the right and then to the left, to make sure that nobody else was nigh, the head was withdrawn and the gate swung wide.

"Come in!" the man inside invited.

But now it was the visitors' turn to hesitate. The hatless, shaggy figure, standing with a rifle in his hand, looked more like a wild man of the woods than he did like a civilized human being. Dressed in bear-skin clothes, he was as shaggy all over, except his booted feet, as was his head. Had they seen him while they were back in the woods, it is a little doubtful if they would have come to the gate at all. But now it was too late to retreat, and they stepped inside.

The space enclosed by the stockade was not large. The double cabin stood in the northwest corner, and its walls made part of the west end and most of the north side. The chimney was at the cabin's east end, and the doors were in the south side. In one door, which was open, stood a man, and near the door in the yard stood another man, both as shaggy and wild-looking as the figure who had opened the gate.

The man in the door wore a 'coon-skin cap. The man outside the door, like the one at the gate, was without a hat or a cap. The two without caps had their heads covered with great, tangled masses of hair, which looked as if they had known neither scissors nor comb for years. And all their faces were concealed in big, bushy beards.

"Three wild and woolly hunters," thought Ben.

"Three wild and woolly hunters," thought Jodo, in exactly the same words.

The hunters stared at their visitors. "Come on in!" the man in the doorway soon invited, as they stepped back into the cabin to leave the entrance clear.

Not without some misgivings, Ben entered, and was followed by Jodo. A fire was burning in a wide fireplace. The house had no floor but the ground; and its only furnishings were some bunks in the back corners, and some benches. The bunks were filled with blankets and furry skins. Two rifles rested on racks against the upper walls. Belts with knives and tomahawks in them, and also ammunition-pouches and powder-horns, were hanging on the same racks. On both the inside and outside walls furry skins were tacked up to dry.

"Step up to the fire and set down," invited he of the 'coon-skin cap, with a motion of his hand toward a bench.

Ben and Jodo stood their rifles in the nearest corner, but kept their blankets on as they seated themselves before the fire. The smell of frying venison, issuing from a pan on some live coals, made a pleasing sensation in their nostrils.

"Purty late for breakfast," apologized the man under the 'coon-skin. "But the fact is we all went out an hour or two before day to visit a turkey-roost we knowed of. And when we came in 'long about sun-up, we quiled down in our bunks for another little nap. I'd only just waked up ag'in when you fellers hollered."

The visitors told their story, and the hunters listened.

"And so you tracked me home, did you?" remarked the man with the 'coon-skin, whose name, as soon came out, was Jacks.

"Yes. And very glad we were to come upon a white man's trail," Ben assured him. "We should never have found your tracks, though, if we hadn't heard the report of your gun late yesterday afternoon."

"Do you reckon them low-down Osages is still on scent of you?" inquired Jacks.

"It's entirely possible that they are," Ben informed him. "Though you can be sure we've done everything in our power to shake them off."

"We're in awful pore shape to make much of a fight," put in the man who had opened the gate. His name was Murphy. "Mighty night plumb out of powder and lead, the whole caboodle of us air."

"That's unlucky for us," Ben told them. "We've got just three bullets between us."

Now Jacks said: "We're figgerin' on settin' out for a tradin'-post in a few days, to market our furs, and to lay in a new supply of powder and lead and breadstuff. We've got only a few balls and a little powder; and there ain't so much as a dustin' of flour or meal in our shanty. We have got a little corn left, for huminy and for parchin'. That's our best excuse for bread."

"Have you made a pretty good catch of furs this winter?" Jodo inquired.

"Not to brag on—nothin' to brag on." It was Murphy that answered. "We hain't got no steel-traps. We depend on deadfalls and on our rifles for what we take. Still, we hain't done so bad—no, we hain't done so almighty bad. We've got a right smart sprinklin' of good furs bundled up and stacked away in the loft of the other room thar."



A new friend

Breakfast, when ready, consisted of venison, fried in bear's fat, and hominy and honey. Two of these articles were now luxuries to Ben and Jodo, who had been subsisting wholly on meat, and recently not enough of that. Both were very hungry.

"Eat hearty, boys! Eat hearty—eat hearty!" urged Jacks. And the other hunters were equally hospitable in their invitations. "Eat every bite you can stuff down. Plenty more in the other room thar, whar this come frum."

Both visitors accepted the invitation. When the meal was ended, a highly satisfied feeling had taken the place of the hungry gnawing that had haunted their insides during the last few days. They had eaten on tin-plates held in their laps, with their fingers for forks and their hunting-knives to cut things. After the meal was ended, they and the hunters sat on the bench before the fire, swapping experiences.

"What kind of capers did you boys cut up that you had to come out here?" Jacks finally ventured.

Ben laughed good-naturedly. "Oh, none—none at all. We just came because we couldn't make much at home during the winter, and were not particularly needed there. And we believed we could earn something trapping and boiling down salt water."

"Then you can go back home whenever you feel like it. That's lucky—tarnation lucky! Thar's some older fellers that wish they could say as much."

The visitors looked at the speaker, but asked no questions. However, the third hunter, whose name was Wolf, explained:

"We hain't done nothin' our own selves to skeer us away from whar we used to live. But the snake-juice we poured down our fool throats done lots."

"And worst of all, our neighbors, they must hold us responsible for what their p'ison liquor done!" Murphy laughed slyly at his own joke.

Ben smiled. "Red liquor has made fools of millions, and will make fools of millions more," he observed. "When I was only a chunk of a boy, I went on a several weeks' hunt with old Daniel Boone, and he turned me against the stuff.

"Stay turned ag'in' it, young man! Stay turned ag'in' it! I only wish to the good Lord somebody's done as much for me when I was a chunk of a boy!" declared Jacks.

"For me, too," said Wolf. "I've larnt to love the p'ison stuff."

"Yes, and for me," put in Murphy. "A feller like us'n's, that gits his livin' by his rifle and his huntin'-knife, when liquor turns his head he's got a mighty hankerin' to use them same weepons on his feller-men."

Finally the hunters declared that they must get out and visit their dead-falls. Otherwise wolves would be sure to rob them during the night, if not sooner.

"Just make yourse'v's at home here, boys," urged Jacks, as they were taking down their rifles. "We won't be back till 'way 'long t'wards night, I reckon, gittin' such a late start. But when your stomachs begin to grumble at you, just step into that other room and he'p yourse'v's to whatsomever you find hangin' thar."

"And thar hangs the fryin'-pan if you want to fry it. And that sets the huminy-pot," suggested Murphy.

And Wolf added: "Don't feel noways bashful 'bout eatin' a plenty. Fellers that's been traipsin's their laigs off without enough to eat, is apt to have uncommon good appetites for a while."

"And it'll be well to keep the gate barred and keep an eye out for red-skins," suggested Jacks, as the three were starting out.

"We'll certainly do that—do that very thing," Ben was prompt to assure them. And he followed the shaggy three to the gate. Jodo came, too.

"Don't you ever wear hats or caps?" that young fellow inquired. For two of the hunters were starting off without any head-covering except their shocks of hair.

It was Murphy that answered: "Nobody but Jacks. And he's got a prairie on top of his head." He made a gesture toward the man with the 'coon-skin, who, as the visitors afterwards noticed when his cap was off, had a large bald spot around his crown.

The hunters scattered, each going to his own trapping-ground, and Ben and Jodo barred the stockade gate fast and went back in doors.

"Well, what do you think of our three friends?" They were again sitting on the bench before the fire.

"Three fugitives from justice, but pretty good sort of fellows for all that. As they say themselves, snake-juice brought them here. As long as they let that alone, they're nice, clever fellows. If officers came for them, they'd fight like catamounts, I imagine. But for trappers like ourselves they're harmless enough."

"Better than harmless. They're friends in time of need," declared Jodo.

"They certainly are. I'm glad we've stumbled upon them and their blockhouse."

"And what shall we do now?"

"Stay here for a few days, till we can rest up, and till we see what the Osages are going to do. After that, if our shaggy friends can spare us a few rounds of ammunition, I'm of the opinion we'd better strike a straight shoot for our camp on the Big Niangua."

"And when we get there?"

"First and foremost, we'll set to work and provide ourselves with plenty of powder and bullets. After that we'll go for our traps; or maybe we'd better pick them up on the way back. Then, if the weather is favorable, we'll do some more trapping and salt-cooking. That is, if the Osages will let us. Otherwise we'll load our canoes and set sail for home."

When dinner-time came, the two, as they had been told to do, pushed open a door of slabs and entered the adjoining room, that room was not quite so large as the room with a fire-place. Besides a door connecting it with the main room, it had another door opening into the stockade enclosure. Overhead was a lift, which seemed to be filled with bundles of furs. An abundance of cured meats—bear-meat, buffalo-meat and venison—was hanging from the joists that supported the loft.

In one corner of this room, they noticed, was a well. The well was covered with a large, flat stone with a not very large hole in it. The hole also had a stone cover, but that was now off. Near by lay an old pot, with only one leg, and with a buffalo-hide rope attached to its bail. The well was too dark to look into; but when Jodo led down the pot, it came up full of clear, cold water.

After broiling some of the hunters' meat, and making a hearty meal, Ben and his partner went back to the bunks and lay down. They slept till near sunset, and might have slept longer had not a shouted summons from the outside called them to the gate. They opened it and let in Jacks, carrying several bloody pelts.

Wolf came in a few minutes later, and Murphy just at sunset. All five of them now chopped and carried in a good supply of wood from the forest. After that they went in, shutting the door, and cooked and ate their supper.

The three hunters, as soon came out of their conversation, had been living in the vicinity for nearly three years, and in this particular house for a year and a half. Every spring they took their winter's catch of furs in canoes down a small river, which was only a mile or two away, to White river, and then down to the Mississippi, where was a trading-post. There they exchanged their furs for powder and lead, and for such other articles as they needed.

When the party first came here, each had brought a horse. But the horses had disappeared one night, supposedly driven off by Osages. The first cabin the hunters had built had been burnt down by Osages, one day while the hunters were absent. Naturally the three were bitter against Indians.

The homes they had run away from were all somewhere "yon side the old Mississip'," just where they did not say.

"Guess maybe we're better off here than we would be back in the settlements," Jacks remarked. "Thar everybody drinks, and we'd be shore to drink and cut up didoes. That's our weakness. Out here we don't even git to smell the infernal stuff. We're birds of a feather that's flocked together. That is the best place for us. But we all git lonesome sometimes, and I guess maybe, if the truth was told, a leetle mite homesick."

When bedtime came, two of the hunters, in spite of the visitors' protests, surrendered their bunks for Ben and Jodo to sleep in. All three seemed glad to have company.

After breakfast next morning, when the hunters were ready to start out to visit their deadfalls, Jacks invited the young men to accompany them. Both accepted promptly. But when the party was about to start, Jacks said:

"On second thought, I'm wonderin' if, after all, you two hadn't better kind of hang around here and look after the cabin today. If them tarnal Osage varmints is trailin' you boys, they ought to show up today or tomorr'."

"They might," Ben agreed. "But my partner and I will be almost helpless if they do come. It's not certain that we can fire a shot."

"Then we'll leave you some powder and a few bullets. I'd forgot you was so nigh out. The main thing, though, is to keep the gate barred fast. They won't be apt to try to climb over that high wall. But if they do, salivate 'em on the spot!"

When the hunters had gone, and the gate had been barred behind them, Ben and his companion went in and sat before the fire. As the day advanced and the sun climbed higher, the air warmed, and they noticed that the snow was melting fast, both in the sun and in the shade.

Not long before noon, being rather tired of resting, the two unbarred the gate, opened it, and stepped outside, intending to walk about a little. They had left their guns in the house, and had no thought of getting far from the stockade.

They had advanced about 50 yards from the gate, and were turning back, when several Indians sprang from behind trees, and with wild yells made a dash to cut them off. Both white men ran for their lives, reached the gate, pushed it open and sprang through. But several guns cracked loudly, and several bullets and more arrows struck the wooden walls and the gate as the two banged the gate shut. They got it barred only a few seconds before the savages began to shake it and push against it.

Now Ben and Jodo hurried into the cabin for their rifles. Jodo's was unloaded, and he made haste to load it. Ben's was loaded, and he only emptied out the priming-powder and refilled the pan with some that was fresh. They also reprimed their pistols.

"I'm sorry our three hunters went away," Ben said. "If they were all inside here, and we had powder and lead in plenty, we'd make those red rascals hide out."

"But powder and lead in plenty is just what we haven't got, Ben. And without that it's a feeble fight we could make."

"Just now I'm more concerned for the hunters than for ourselves. Wish we could give them warning somehow."

"Don't you s'pose they heard all those shots?"

"That depends upon how far away they were. If they heard, they'll be cautious enough to lie low till after dark, I imagine."

Soon the gate was heard rattling noisily. At length that stopped for a few moments, but started up again, louder than before.

Ben was standing in the door. "Stop that racket out there!" he yelled.

The noise ceased promptly. "I know you, Strong Arm!" a voice called. "You open quick! Let Osages come in!"

"What do you want, Snappy Turkle?"

"You open gate quick! That what I want!"

Ben walked out to the gate, followed by Jodo. "Chief," Ben now said, "if you want to come in by yourself, and unarmed, to talk, we'll let you in. But you'll have to send all your warriors back into the woods, and leave all your weapons outside. And after that, if you try any monkey-business on us, we'll shoot you!"

"No send warrior 'way. Warrior all come in same like chief. Now open quick!"

"No, we won't open quick. We won't open at all! If you've got anything to say, say it where you are! We can hear you well enough."

"I say you no open gate; us stick fire old house! You t'ink you mighty smart, Strong Arm, 'cause you fool big chief Snappy Turkle, run 'way while Snappy Turkle sleep. You no fool Snappy Turkle nudder time! Us got Strong Arm and Dodo now. You no run 'way us this day —no! Open gate mighty quick. No open gate, Osage burn gate down, burn house down! You bet!"

"Don't you dare try any fire-business around here, Snappy Turkle! For just as sure as you do, you or some of your troublesome gang will get shot! You're wearing our patience threadbare! The sensible thing for you to do is to turn round, the whole layout of you, and mosey back to your village and let us alone! We're not harming you—yet."

"Osage no go back till Strong Arm and Dodo go back 'long by us. Open gate! Open gate quick! Big Chief Snappy Turkle say you no open gate quick, Osage stick fire house!"

"Try burning this house if you dare!" yelled Ben, more defiantly than he felt. Then he added; "Jodo, bring that bench here!"

To keep anybody from shooting through, the joints between the stockade timbers had been covered with rived pieces of wood, which reached up to the cross timbers. But above the cross timbers one could see out between the upright timbers, and in place even thrust a rifle through. But it was necessary to stand upon a high bench to do that. When Jodo had brought the bench, Ben called out:

"Now, Snappy Turkle, you fellows had better streak it into the woods while you can! We'll give you just time to get out of sight! Then if you dare show your heads again, you're likely to get shot! Now run—run for dear life!"

As he spoke, both Ben and Jodo leaped upon the bench and thrust the muzzles of their rifles out. To their great relief, the Osages turned quickly and fled, scattering as they ran. Soon they had all disappeared. But some of them—there were more than a dozen—must have dodged behind trees, for rifles began to crack, and arrows and bullets began to strike the stockade.

Ben and Jodo jumped to the ground, lest a missile should come between the open stockade timbers. One arrow did pass through a few minutes later, and several arrows came over the stockade and struck the roof of the house.

(To be continued.)

## Poor Man's Cow

### Goat Furnishes Milk for Family

The goat has had a place in literature which is not enviable. In the Bible he was always on the left hand, and even modern slang places him low. Frank Welles, deputy state school superintendent of Oregon things this repute is not deserved, and that goats make better household pets than cats, lambs or canary birds. At least the lady goats —the goatesses.

Over a year ago Mr. Welles inquired about goats of the Farmer. He lives in Salem, Ore., and likes milk, but hasn't room to keep a cow. He was given the addresses of the nearest breeders, and after some correspondence, bought a grade doe, bearing the name of Lady Gray. A few weeks ago she presented her master with a doe kid, the sire being a purebred Toggenburg. This kid is a great pet with both Mr. and Mrs. Welles; it is playful, active affectionate and full of life and fun.

"Goats," said Mr. Welles, "are not going to take the place of cows, but for a



Frank Welles' doe goat, "Lady Gray," and her kid.

small family and limited space they solve the milk problem nicely. I haven't kept accounts on the expense, but it is comparatively light. I feed her about a quart of grain a day and some alfalfa hay. In addition we give her lawn clippings and table scraps.

A goat will relish any ordinary food. She is very gentle and intelligent, has no bad habits except a fondness for ornamental shrubbery if she gets out, is healthy, easily cared for and requires little space. Goats are extremely fond of leaves and twigs of trees and brush.

"At milking times Lady Gray jumps up on her box, puts her head in the stanchions I made and eats her grain. If she gets through first she chews her cud. She is giving a little less than four quarts of milk a day right now."

Mr. Welles says that the does are inoffensive, gentle and clean. There is no offensive odor. The milk has a characteristic taste, but no odor. The cream has no yellow color, it is white. The cream separates from the milk very slowly as the fat globules are very small. The cream "whips" very rapidly. They like the milk for drinking and cooking very much and are highly pleased with their bargain, and the kid furnishes endless amusement.

"Whenever I tell anybody about my goat and kid," said he, "they always want to see them and begin to ask where I got them, how much I paid and all the particulars. There are thousands of acres between here and Portland that are extremely well suited to goat raising. They are the poor man's cow."

H. H. B.


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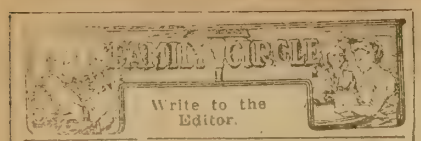
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ALICE W. BARLAND,
Editorial Contributor.

## RAISE SOMETHING.

### On Every Little Piece of Ground.

Dear Family Circle: In my early childhood no such thing as a hand corn planter was known, to say nothing of the horse planters with which farmers now put in their corn and potatoes.

Many a weary mile I have walked carrying a small basket and dropping five kernels in a hill, with my father or big brother close at my heels to cover the corn with a hoe. Oh, how long those days seemed, and how very hot the sun was, but I trudged on, proud that I could keep the man with the hoe busy behind me.

Cheer up, dear young folks, if farm life seems dully, dirty and lonesome. There is no school in all the world that will compare with the farm for teaching patience, thoroughness and self-reliance. A child drinks in world-old truths with the air he breathes.

The farmer boy learns without effort a multitude of things which will stand him well in hand as the years go by. I have had a recent opportunity to watch for three weeks the grand scramble for existence in one of the greatest cities in our country. I watched people rush to take street cars, rush to take buses, rush to their places of business, rush home again. I saw men with young faces and white hair settle wearily back into a seat in a street car, if they were fortunate enough to get one, or stand and hang to a strap for half or perhaps one whole hour. I saw tired girls and women doing the same things.

Then down in the very heart of that great city I made a part of the mass of human beings who jam and crowd and push each other; who must shout at the limit of their lungs to make themselves heard above the deafening rumble of the elevated cars and all the rest of the noise of a great city. I went directly from there into the country, and for 10 days I rode all over the southern part of Wisconsin in an automobile. I stopped a little while in every country village through which I passed. Everything was so quiet and peaceful. People had time to talk, had time to be civil, had time to take deep breaths of the sweet spring air, full of the odor of bursting buds and fresh turned soil. Farmers were busy sowing grain and planting corn and potatoes. There were many flocks of sheep, where little lambs frolicked about.

I compared all this beauty and peace with the dirt and turmoil of the great, heartless city. I said "Surely God never intended men and women to be crowded together so closely that they never see a bit of green grass and are deprived of the joy of seeing a world awaken and put on spring foliage." It is hard work, I know, to till the soil, to care for stock and to keep the whole machinery of a farm moving smoothly, but to one who loves nature, who can find satisfaction in planting seed and caring for crops, and, in short, being his own master and business manager, the farm is the place to find joy in work and satisfaction in life. This year, especially, every one who raises food must have more than common satisfaction in his work, for a whole hungry, suffering world is holding out pleading hands for food.

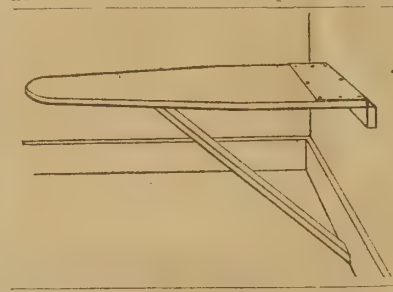
Farming has always been the most necessary business in the world, and farmers the most useful business men and women, but at the present time the fate of the world rests with the American farmers. Stand firm, raise all you can, and save, save, save!

Raise something on every little piece of ground. I know how many little strips and corners used to go uncultivated on our farm because it did not seem worth while to bother. Don't let good ground lie idle this year, but plant beans, popcorn, anything that will make food. A. W. B.

## Folding Ironing Board

The ironing board shown in the accompanying illustration can be fastened up against the wall and is out of the way when not in use, says Madge J. Reese in Farmers' Bulletin 927 of the U. S. department of agriculture. It should be made of well-seasoned 1 or 1 1-4 inch material. A board of convenient size can be made by the following dimensions: 4 feet 8 inches long, 15 inches wide at the attached end, and 8 inches at the free end. About two feet from the attached end the board begins to taper gradually. The free end is rounded.

A strip 1 1-4 by 4 by 15 inches is securely fastened by screws to the wall at a convenient height. The height at which the board is placed varies

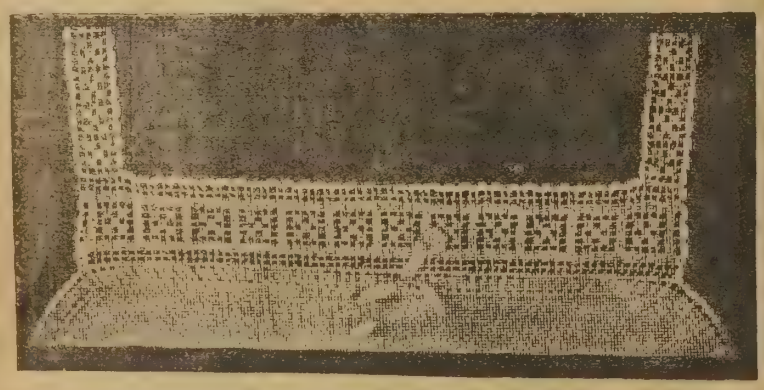


with the height of the user. For a woman of average height it should be 31 or 32 inches. The board is hinged to the wall strip with two No. 3 butt hinges.

The leg or brace, made of material 1-inch thick and 4 inches wide, is fastened with a No. 3 butt hinge to a board strip 1 by 4 by 8 inches. The board strip is screwed to the underside of the board 11 inches from the free end. The length of the brace depends upon the height of the board, and when the board is in position the brace rests against the baseboard of the wall. Skirts may be easily ironed without changing the position of the brace. A piece of galvanized iron may be tacked to the board, on which the hot iron may rest when not being used. The board is folded up against the wall.

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**3d Row**—Make 2 open m., 4 dc. 5 open m., 4 dc. 2 open m., ch. 5, tu, and t.

**4th Row**—2 open m., 4 dc. 1 open m., 4 dc. 1 open m., 4 dc. 1 open m., 4 dc. 2 open m., ch. 5 and tu.

**5th Row**—2 open m., 4 dc. 2 open m., 4 dc. 2 open m., 4 dc. 2 open m., ch. 5 and tu.

**6th Row**—2 open m., 4 dc. 1 open m., 4 dc. 1 open m.,4 dc. 1 open m., 4 dc. 2 open m., ch. 5 and tu.

**7th Row**—2 open m., 4 dc. 5 open m., 4 dc. 2 open m., ch. 5 and tu.

**8th Row**—2 open m., 4 dc. then 2 dc. in next 5 open m., 4 dc. 2 open m., ch. 5 and tu.





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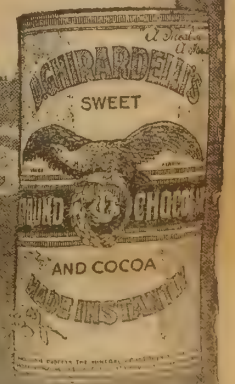
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During the last week Aunt Nellie has received letters from the following cousins: Mildred Heidegger, Velma Martin, Lois Hodges, Flora Reed, Elizabeth Van Trojen, Mildred Tormey, Beatrice Clay, Letha Peterson, Edna Hager, Eugene Cannon, Frances Cannon, Frances Duchert, Lucy Wittine, Helen Hakanson, Irene Clarke, Tilda Berntsen, Laurena Muth, Marguerite Weston, Bertha Gash, May Hanson, Doris King, Vesta Short, Lucille Reinbolt, Beryle Adair, Edith Christensen, Ella Mae Payton, Hazel Gleich, Florence Gleich, Grace Lemmon, Louise Kramer, Rose Kramer, Alice Moore, Virginia Gibson, Glenn Hiday, Beulah Hiday, Marjorie Lacy, Herman Abeling, Robert Austin, Anna Aronin, Sarah Aronin.

**All the Potatoes She Can Eat.**

Dear Aunt Nellie: I am 9 years old and in the fifth grade. My birthday is on July 5. Have I a twin? I am going to tell you about my war garden. This year I am going to have a war garden. I am going to raise all the potatoes that I can eat in a year. I eat about six medium sized potatoes a day. If I can eat that many in one day, in a year I will eat 365 times six, which equals 2190 potatoes. So that is the number I have to raise. I am also going to raise a few cabbages, parsnips, peas and beans. I think that will be enough for me to look after if I take good care of them. I hope all the cousins will raise war gardens.—Alice E. Johnson, Union, Wash.

**Marjorie Loves Music.**

Dear Aunt Nellie: As this is the first time I have written to the Corner I will give my description. I have dark hair, hazel eyes and am of medium weight. I have one sister, Marguerite, three brothers, Glen, Willis and Jack. I have joined the Red Cross and put $6 into stamps. I have a talent for music which I love. I am 15 years old and am in the eighth grade. My father has a car in which I like to ride. I will stop.—Marjorie Starcher, R. F. D. 1, Fairview, Yakima, Wash.

**The Secretary of Her Club.**

Dear Aunt Nellie: I thought I would write to the Corner again. This is the third time I have written. I am in the seventh grade. I was 13 years old April 27. There are 35 children in our school. We are doing Red Cross work at school. I am saving quilt blocks for a quilt now. We also have an agricultural club. I belong to the Poultry club. I am the secretary of our club. The club meets once in every two weeks. We certainly had a nice large Children's Corner the last time and I am very glad to see that. Our school closed May 24.—Mabel Iverson, R. F. D. 3, Box 105, Mount Vernon, Wash.

**Blanche Is Saving Money.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I enjoy reading the letters very much. I am 10 years old and am in the fifth grade. My birthday is June 29. I have one sister and two brothers. Their names are Edith, Frank and Thurman. One of my brothers is in the army. My brother and I walk one and a half miles to school. When it is nice weather we walk and when it is muddy and snowy we have a pony to ride. I am saving money. I have two thrift stamps. — Blanche Hamilton, Prosser, Wash.

**Rides a Pony to School.**

Dear Aunt Nellie: I am 10 years old and am in the sixth grade. I live one mile from school. There are 22 pupils going to my school. I ride a pony to school. I like my pony very much. His name is John. I have no brothers or sisters. I have a cousin in the war. Our teacher's name is Miss Lehan. She has a cottage right by the schoolhouse and she stays there all the time, but Saturdays and Sundays, and those two days she goes to some of the neighbors. I read the letters of the Children's Corner.—Ivan Graham, Washtucna, Wash.

**Likes to Shoot Gophers.**

Dear Aunt Nellie: This is my first letter to the Children's Corner. I was 10 years old October 18. Have you a twin for me? I am in the fourth grade. I have one horse. His name is Tip. I have three cows and two calves, and I have one hen. I have an air gun and I like to shoot gophers. I have one sister. She is 6 years old. Her name is Dorothy Evadna. We live on a 320-acre stock farm. My father has 97 head of cattle and seven head of horses.—Carl Allison Tubb, Corfu, Wash.

**Reads the Corner Letters.**

Dear Aunt Nellie: I was 9 years old April 16. I am in the fourth grade. We have 14 pupils in our school. We live on a farm. Papa will be home Friday and he is a well driller. Our teacher's name is Mr. Vinning. I have three brothers. Their names are Carl, Glen and John. They all go to school but Carl. Have I a twin? I have been reading the letters of the Children's Corner.—Lucile Reinbolt, Box 15, Grant Orchards, Wash.

**Goes to Sunday School.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I have two dogs and one cat. The cat's name is Kitty and the dogs' names are Lady and Watch. We have one cow and her name is Purrents. I live on a 10-acre farm. My birthday is April 11. I was 10 years old then. I have four brothers, but no sisters. I live one and one-fourth miles from the beach. I am in the third grade. My teacher's name is Miss Cecil Wallace. I go to Sunday school every Sunday. We have one pig. There are 25 children at school.—Emma Louis Mehus, Fragaria, Wash.

**Birds Sing and Flowers Bloom Now.**

Dear Aunt Nellie: This is my second letter to the Corner. It is a very long time since I wrote last. I have not found a twin yet but there is a girl that is 10 years old and her birthday is May 19 and mine is the 18th, so I think I could call her a twin. I am in the fifth grade and there are two girls, Gunhild and I. She has been sick so she had to stay home from school and then I was alone in the fifth grade. Are any of the cousins helping the boys over there to win the war and stamp out the kaiser? In our school we do Red Cross work every Tuesday and Thursday afternoons. I have learned to knit. Have any of the other cousins? In school we cut gun wipers and pick lint and some knit. There are seven boys who have learned to knit in our room and all the girls have learned. I have a thrift card and I have bought five stamps and I am going to buy four more stamps. I have joined the Junior Red Cross also. Everybody should help Uncle Sam win the war. I have also joined the poultry club, and I think it is going to be very much fun. Last year I did not join, but there were several other children who joined. This year there are not half so many. There are only two or three girls and three or four boys. I can always tell when spring comes because the birds sing so sweet and all the flowers bloom and all the fruit trees are in bloom. I think the Farmer is the best farm paper we get and I think every one should have it. I hope the cousins will write to me and I must not forget to thank Aunt Nellie for letting me join and be a cousin in the Corner. I hope we get more members who want to join. I will write again. —Violet Marion Johnson, R. F. D. 5, Box 33, Mt. Vernon, Wash.

**Ida Loves All the Flowers.**

Dear Aunt Nellie: I am 11 years old and my birthday is October 19. I am in the fifth grade at school. My teacher's name is Miss Spark. She is good to me. There are 18 pupils at our school. There were 19, but one of the boys died. I have four brothers and one sister. My brothers' names are Richard, 17 years of age; Arthur, 8 years of age; Fred, 7 years old; Walter, 19 months old, and my sister is Bertha Louise. Have I a twin? If I have I would like very much if they would write to me. I will gladly answer their letters. There are all kinds of flowers growing here; there are bluebells, yellowbells, pansies, birdheads, buttercups and some others that I don't know the names of. Pansies smell awfully nice and birdheads look so beautiful. I love flowers, don't you, Aunt Nellie? We have one dog named Prince, and four cats. We haven't named our cats. When we call them we say: Kitty, kitty, kitty, and all of them will come. We have about a dozen head of horses and about six colts. We live on a farm of 160 acres. Say, dear Aunt Nellie, may I join the Corner? The letters are very interesting. I like stories. I am reading "Trappers of the Ozarks," in the Farmer. Please put more stories in—Ida Irmer, Withrow, Wash. (Yes, Ida, you may join the Corner. Aunt Nellie loves the flowers, too.—Aunt Nellie.)

**Do Well With Their Garden.**

Dear Aunt Nellie: As I have not seen any letters from Granite Falls I thought I would write a few lines to you. I am 16 years old and I have been going to high school for about five months, but I gave it up. I live on a 40-acre farm three miles from Granite Falls. My brothers and I have quite a large garden this year. We have had the same garden for four years this summer, and have done well with it. This year we are also raising chickens. We have just six now and only two of these are laying eggs, as the others are setting. I am reading the serial story in the Farmer entitled "The Trappers of the Ozarks." I wonder if very many of the cousins are reading it. It is quite interesting. I do plenty of reading. Among the good books that I have read are: David Copperfield, The Scarlet Letter, Benjamin Franklin, Anne of Green Gables, When Knighthood Was in Flower, and a number of others. I saw a letter from Luella Venneberg. I would like to correspond with her, if she would write soon. I certainly would answer her, or I would be glad to hear from any of the cousins. It won't make any difference who they are, twins or no twins. Why don't more of the older girls write? I am sure we will enjoy their letters, too, as well as the others.—Linda Anderson, Granite Falls Wash. Box 225.

**Club Sews for Armenian Children.**

Dear Aunt Nellie: This is the first time I have wretten to the Children's Corner and I hope it will not be my last. Have I a twin? If I have I wish they would write to me. I have four sisters and one brother, and one brother-in-law. Their names are Jane, Mae, Murney and Bertha. My brother's name is Earl. We have two ponies and four work horses. We have three milch cows and three little calves. One of them is my pet calf. My uncle gave it to me. The pinies' names are Bud and Babe. The work horses' names are Hatty, Grace, Dory and Tiney. The cows' names are Reddy, Rose and Dine. My pet calf's name is Johnnie. We have nearly 100 old chickens and 28 little chickens. We have nine little pigs. We have a small dog named Skipper, and an old dog named Robert. We live on a 160-acre farm. I am 12 years old now and will be 13 August 9. I have a cousin named Lorena Thompson. Her birthday is August 14. My sister's birthday is August 24. I have my hair bobbed. I have a cousin named Ray. He is a soldier at American Lake. He is a blacksmith. At school all the girls joined the sewing club, so we girls are sewing for the little Armenian children.—Zelorna Tuttle, Goldendale, Wash.

**Must Do Her Bit at Home.**

Dear Aunt Nellie: Today as I was reading over the cousins' letters I decided to write. I am not going to school now, as my school was out about a month ago. I will be 13 on July 24, and would like to have a card shower on by birthday. I see that some of the cousins are buying thrift stamps. I am buying thrift stamps, and also bought a Liberty bond in the second drive. I have no brothers to go to war, and my father is too old, so we will have to do our bit by staying at home. I have a cousin fighting in France. I have only one sister, and she is attending state normal school at Monmouth this winter. I am a member of the Junior Red Cross and have knitted two washcloths and am going to knit a sweater soon. I live three miles from school and rode to school eight months. My pony's name is Lindo (meaning "pretty" in Spanish). My father is a stockmain. We live on a 680-acre farm and, like most of the cousins, I like the farm life fine. With love to Aunt Nellie and all the cousins.—Ruby Hayes, Lawen, Ore. (Yes, Ruby, many of the cousins, and, I believe, the greater part of them, have some thrift stamps, and many of them have war savings stamps and Liberty bonds It is such a pleasure to do our bit when we think that our boys are giving their lives. I have a poster near my desk with the picture of our first three boys who gave their lives, Hay, Enright and Gresham, and it reads: "The First Three! Give Till It Hurts—They Gave Till They Died." Write me again.—Aunt Nellie.)

**One Mile to Go to School.**

Dear Aunt Nellie: This is the first time I have written. I am 9 years old. My birthday is July 12. I am in the sec-

## A Well-Known Cousin and Three Friends

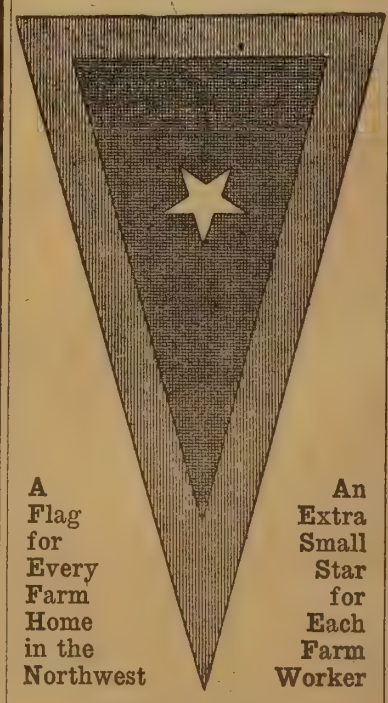


Dear Aunt Nellie: Here's one of our pictures which was taken at our Fourth of July ground. It was taken by our minister, the Rev. Gerard M. Van Pernis, who is away back in Michigan by this time. These other girls were my great, loving friends. Their names are Agnes Phillip, Margaret Phillip and Julia Flett. We were having a real nice time when we had this taken. I guess you can imagine which one is me—the third in the picture. I am doing my bit in helping about the farm work this spring. I help papa. I water his horses and do all I can for him. I have to do the milking every morning. I've got some of our garden in already. We are going to put in some potatoes, corn, beans, squash, cucumbers, pumpkins, radishes, beets, carrots, onions, turnips, cabbage, peas and parsnips, besides wheat and oats. Indeed I am getting to be a little farm girl now, don't you think so? I also got five of my hens setting now. They'll soon hatch. I bought an organ about two weeks ago. I pair $45, but I gave a cow for it. Now I have an organ and three phonographs, but I sold one to Mr. Alvah Sutton for six hens. I have two phonographs left. I have 60 records to one machine and 37 disc records.

I have a girl friend by the name of Miss Mildred Sutton. She wants to write to the Corner. Can she write, too Don't you think I am lucky? My cat, Blackeye, got four little kittens again. I don't know what to name them yet, but I will later on.—Sallie Salena Garry, Day School No. 1, Miles, Wash.

(Of course, your friend, Mildred, may write and we would be glad to have her, all of us. We love to get letter from you, Sallie, dear, and want you to write and tell us all about how the four little kittens are getting along and what you have decided to name them. I should say you were getting to be quite a little farm girl, planting that big garden. Lovingly—Aunt Nellie.)


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Review Bldg.,
Spokane, Wash.

ond grade. I go to Lambert school. I have one mile to go to school.—Dorothy Bickel, Ridgefield, Wash.

**Uncle Ben Is in France.**

Dear Aunt Nellie: This is the first time I have written to the Corner. I have one brother. His name is Alvin. He is 6 years old. I have one sister, dead. I am 10 years old. My birthday is August 11. I am in the third grade. We have two teachers in our school, Miss Allen and Miss Schrender. She is a good teacher. My uncle Ben is in France. Mama got a letter from him. He is well. It takes one month to get a letter. We have a dog. Her name is Ruby. I stay with my grandma and go to school. I have dark hair and blue eyes. My brother has light hair and blue eyes.—Ethel Norman, Tenino, Wash.

**Rides to School Every Morning.**

Dear Aunt Nellie: I thought I would write to the cousins. This is the second time I have written. My sister Nellie is writing too. I go three miles and a half to school. I ride every morning. My teacher's name is Mr. Guernsey. The name of the schoolhouse is Millcenter. I almost forgot to tell you what grade I am in and how old I am. I am in the fifth grade and I am 12 years old. I will be 13 the first of June. Have I a twin? I have got five sisters and one brother. My sister's names are Cora, Nellie, Ethel, Gertie and Mayme, and my brother's name is Victor. He will be 21 this fall and I suppose he will go to the training camp then, but I hope not. I will have to stop and go out to the barn and help feed the calves. I will write some more when I come back. I have come back now so I will finish my letter. I will say some riddles now. I know something that is round as a dollar and busy as a bee, the prettiest little think you ever did see. Round as an apple and deep as a cup and all the king's horses can't pull it up. Got a tongue and can't talk, four legs and can't walk. I would like to know how many cousins know the answers to the riddles.—Effie Salvage, R. R. 2, Addy, Wash.

**Not Far to Go to School.**

Dear Aunt Nellie: I am 11 years old and in the fifth grade. I have two sisters. Their names are Annie and Gladys. I have no brothers. My birthday is September 20. My father owns lots of land. He rented his place for three years and we are going away. I am going to see my aunt this summer. We have some chickens. We have three goats. We play with them. We have a shepherd dog. His name is Fox. We have two bloodhounds. Have I a twin? We have lots of fun at school. My teacher's name is Thelma Schrender. We all like her. We do not have very far to go to school. My oldest sister does not go to school. Gladys is in Miss Allen's room. We have two rooms in school.—Mary Davies, Tenino, Wash.

**Sorry When School Is Out.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I have two ponies. One is a Shetland and her name is Midget. The other one's name is Bob. I ride him three miles to school. Papa has two big horses and their names are Silver and Babe. We have one cat and one dog. Their names are Tom and Pat. We are milking two cows and their names are Cherry and Red. We have 11 head of range cattle. We have 24 chickens. I am in the fourth grade in reading and the third in arithmetic and spelling. I am 9 years old. I will be 10 November 3. My teacher's name is Mrs. Wallace. I like her very much. I am looking for company today. I hope they come. Mama got me a pretty pair of brown shoes. They are very pretty. I had a tooth pulled Tuesday. I had to stay out of school. I am sorry when school is out.—Genevieve Randall, R. F. D. 1, Meyers Falls, Wash.

**Live in the Wheat Country.**

Dear Aunt Nellie: I have been reading the letters of the other children in the Children's Corner and I decided to write to you. I go to school to my mother. She has been teacher for the last four years and I have gone to her all the time. I am in the seventh grade. For three years I was neither absent nor tardy, but this year I was out two weeks with the measles. I am 12 years old and my birthday is March 30. Have I a twin? I hope I have. I have a sister who is married, a little nephew 9 months old and a brother who will be in high school next year. We live out in a wheat country and the wind blows almost all the time. We have six pupils in our school. I will write again.—Dorothy Mumford, Touchet, Wash.

**Twin Mules Are the Cutest.**

Dear Aunt Nellie: My sister Hazel wrote to your Corner and told you where I live so I will tell you about my pets. I have lots of calves and colts for pets, also little ducks, but I think a span of twin mules, we have, the cutest. They are so little; one is brown and one is black. The black one is a mare. I want the cousins to send names for them. My papa bought a Liberty bond. We do all we can to help the soldiers. I haven't any brothers in the war. My birthday is October 21 and I am 10 years old and in the fifth grade at school. My teacher's name was Florence Shall. If I have a twin I wish they would write to me.—Edrie Lois Colbert, Tonasket, Wash.

**Took the State Examination.**

Dear Aunt Nellie: I am 12 years of age and my birthday is January 10. A girl wrote to the Corner, who is only one day older than I. Her name is Muriel Vetters. I am in the seventh grade at school. My teacher's name is Mr. Foulon. There are 18 pupils in my room. I took the state examinations in physiology and got 89. Three of my sisters and I go to school. Their names are Edna, Minola, Elsie and myself. Edna is 7 and is in the second grade. Minola is 9 and is in the fourth and Elsie is 14 and is in the 10th. I like to read the letters.—Agnes H. Stoller, Quincy, Wash.

**Alice Rides Horseback.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I have three sisters and one brother. My sisters' names are Mary, Margaret and Lula. My brother's name is Charlie. Our ages are 12, 16, 18 and 21. I go two miles to school. I am 12 years old and in the fifth grade except in arithmetic. My birthday is August 14. Have I a mate? We had 10 cats and two dogs. I ride horseback to school every day in the winter. I go after the cows now. The dogs' names are Buster and Brownie. — Alice Graham, Rocklyn, Wash.

**Thelma Has Two Guineas.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. Papa takes the Farmer. I am 9 years old, January 2. Have I a twin? I have two brothers, one died two years ago. He was 10 years old. My other brother is 2 years old. We have a 40-acre farm. We have three horses and one cow and we have 14 White Orpington chickens and 28 little chickens. I have a pair of guineas and we have two dogs. Their names are Puncie and Fido.—Thelma Brazelton, R. F. D. 2, Goldendale, Wash.

**Has a War Saving Stamp.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 9 years old. My birthday is August 4. If I have a twin I would like to hear from her. I am in the fourth grade. There are two girls and 10 boys. My teacher's name is Ida Easly. I have one war saving stamp. I know how to tat and how to knit, but I haven't knitted anything yet. I have a brother in France.—Minola Stroller, Box 338, Quincy, Wash.

**Are Milking Eight Cows.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 9 years old. I have one sister and one brother. Their names are Donald and Mary. I live on a 20-acre farm. We are milking eight cows and have three heifers and five calves. Their names are Sally, Martha, Jennie, Tiny Star, Daisy, Dot and Pansy.—Muriel Stein, Burley, Wash.

**Interested in the Letters.**

Dear Aunt Nellie: I am interested in reading those letters. I like to go to school. I wish some of the cousins would write to me. I have lots of fun but sometimes I get sick.—Esther Schulenor, Mead, Wash.

**Flowers That Bloom in the Spring.**

Dear Aunt Nellie: May I join the Children's Corner? I am 13 years old and will be 14, June 19, 1918. Have I a twin? I have blue eyes and light brown hair. I am about five feet tall. I am in the seventh grade at school. My teacher's name is Miss Fleeta Kinder. I have one brother named Carl. He is 15 years old. The buttercups and grass-widows are out. There are a few yellow-bells out. The bluebells and mountain lilies are just about out.—Edna Short, Route 1, Waitsburg, Wash.

**Flossie Likes to Ride.**

Dear Aunt Nellie: I am going to write to the Corner for the first time, but I haye been reading the letters all the time as mother takes the Farmer. I am 11 years old. My birthday is August 6. Have I a twin? If so I would like to hear from her. I am in the seventh grade. I have about a mile to go to school. I went a whole six-month term without being either tardy or absent. I have a large certificate. I live on a 560-acre farm, my brothers' farm, and raise hogs, cattle and horses. I have one horse. Her name is Lucy. I like to ride her very much. I have two cats. Their names are Tom and Blackie. I have a pup. His name is Sport and I think he will be a good stock dog.—Flossie Johnson, Almira, Wash.

**Went in Bathing Every Day.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner and it is not going to be the last I hope. I was 9 years old April 14. Have I a twin? If so I would like to have them write to me. We get the Farmer and I always turn to the Children's Corner first. I would like to correspond with some of the cousins. I have one brother, but no sister. My brother is 22 years old. He is going to war. He is in the ambulance corps. We have two cows and two calves. The cows' names are Francis and Margaret and the calves' names are Pansy and Betty. We have a little dog. Her name is Trixie. I have dark brown eyes and dark brown hair. Last summer I went down to Tenino to visit my cousins, Ruth and Laura. We went down to the river almost every day and we went in bathing.—Elizabeth Williams, Route 2, Box 3, Tumwater, Wash.

Address all letters to Aunt Nellie, care of The Washington Farmer, Spokane, Wash.

# My Road-House of the Birds

(Continued from page sixteen.)

safe from cats it was these winged cliffdwellers.

There were swallows, robins in early spring, hawks, curlews, eagles, crows, buzzards, everything in the winged and feathered creation that had found its way to the bunchgrass.

I fancy that these birds were attracted to the great brown and water-stained coulee precipices on account of the safety they offered as nesting places, the cool shade of them, the frequent seepages of water that came out and collected in crevices or in little hollowed out places in the benches down the side, making ideal bathing places. Wind never reached these retreats, for it blew the wrong way to strike the face of the precipices. So the birds were happy and safe.

I have seen a swallow dart from the blue sky, shoot like an arrow over the rocky brink, which it cleared by the width of your hand; down and down it would dart into the dizzy gulf, and then soar back light as a feather. Young hawks often were out trying their wings. I suppose that the larger birds preyed upon the smaller, though I never saw them doing this. I once saw a young hawk lose control of itself in the air, and it fluttered down in much the same manner that an airplane comes down, I suppose, when something goes wrong with the machinery. On the rocks below I could see the white little speck that was the hawk. The creature bravely essayed to fly upward, which it did, rising in a spiral circle toward me. It certainly had a tough time of it, but it made the grade, and finally landed in the nest about a hundred feet below where I was peering over.

Most charming of all, I think, was the incessant singing and twittering of the birds. Out in the bunchgrass they were usually silent and full of business. But on the coulee wall they gave themselves over to sport. It was a sort of birds' playground—one I envied them. All growing boys pass through the period when they want to fly. They usually stand on the railing of the porch, flap their hands in imitation of wings, and jump off.

Peering over the brink of the coulee, I often longed to fly; yet was never tempted to stand up as I once had on the porch rail, flap my hands and leap. The steer I spoke of a while ago went over, though was not actuated by any desire to fly—nor was I about that time.

The most I would ever do was to crawl up on my hands and knees and peek over, hanging to the grass or to a sagebrush all the while. Once I tied a rope to my waist and made the other end fast to a big sagebrush sixty feet back. Safety first was my policy.

Some of the other boys were bolder. One of the boys used to sit boldly on the brink and hang his bare legs over. To scare us who were more timid he would pretend to slide over, edging out as far as he could without losing his balance. Another of the boys, an expert in the matter of standing on his hands, used to walk on his hands up to the edge, look over, then run backward on his hands. Doug Fairbanks has nothing on these boys. They could have shown him tricks on the brink of the coulee that would have made his hair stand straight up.

But none of these boys, daring as they were, would ride a pony, no matter how surefooted he was, any closer to the brink than absolutely had to be. Fifty or a hundred feet was near enough.

Now and then queer looking traveler birds came through and stopped at the coulee wall for a chat and gossip with the stay-at-homes. I don't know enough about birds to tell their names, but remember how they looked. One of the feathered tourists was a plain but speedy looking creature that flew in with a businesslike air, and departed in the same manner without saying much to anybody. These, I think, were plovers stopping in on the way from Central America to the Arctic circle, whence they would jump the North American continent to Labrador, from which point their migratory course lay across the Atlantic via the Azores, and back down over the Caribbean sea to the land of the Moctezumas.

Great travelers, they, and not of our bunchgrass crowd. They shot down from their pathways among the clouds, rested a bit at the Coulee Road House of the birds, and then took the wing.

Then there arrived, now and then, immense white birds. Their arrival created great commotion among the swarms of swallows, blackbirds, jays, bluebirds and crows that most often were to be seen at the Road House of the Birds. They would not stay long, either. A seagull came in one day, oddly enough. How it got so far inland is a mystery. But I am sure it was a seagull, for it resembled exactly the seagulls I saw in later years on the Pacific ocean beach. It certainly had a "lost, strayed or stolen" look, and soon flapped away amid a chatter of gossip among the birds who ran the road house.

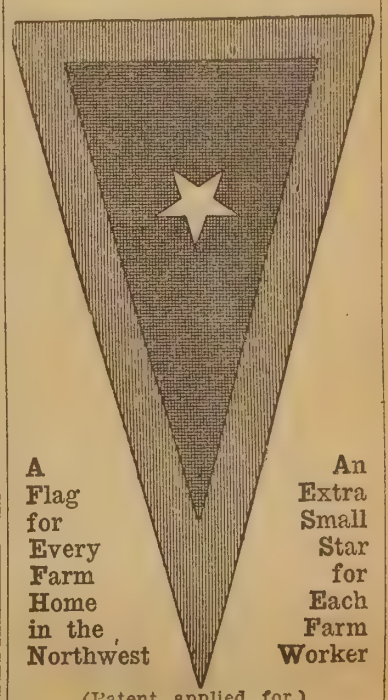
The sparrow hawks were the Apache birds of the road house. They had no friends there. They would dart in like a bolt from the sky to strike down the weaker birds. They darted at their victims in midair, and a cloud of feathers and a helpless shriek resulted from the collision. The weaker bird, when thus struck in the air, would flutter helplessly to the rocks hundreds of feet below, followed by the hawk in a sweeping spiral.

But many a time the hawk darted at an intended victim in midair and missed. Some of these battles on the wing were thrilling to see. The hawks would dart down from a great height, shooting straight at the face of the precipice. At the instant you expected them to crash against the solid rock they would shoot straight upward, or sideways, skimming the very face of the precipice with the speed of an arrow. They were robbers, holdups, highwaymen, killers, regular bandits of the wild were these sparrow hawks, and their skill on the wing was wonderful to behold. They lived to kill and by killing.

Maybe you have been in a throng some time when the big man of the day arrived. He may have been the president of the United States, a world-renowned statesman or orator, or scientist—one whose name had been for years known to you and your associates, who was held by you in respect and veneration, tempered by awe. Did you

(Continued on page twenty-seven.)


## FARM SERVICE WAR FLAG



A Flag for Every Farm Home in the Northwest

An Extra Small Star for Each Farm Worker

(Patent applied for.)

**Designed by the Washington Farmer in connection with The Oregon Farmer and The Idaho Farmer for the farm and farm home that is increasing food production in helping to win the war.**

OFFER NO. 2.

A farm service war flag, 9x22 inches, made of cotton felt (just the thing for the auto, front porch or the flag pole), will be mailed postpaid to any one sending us THREE SUBSCRIPTIONS TO THIS PAPER. Secure three of your neighbors under our special bargain rates and receive a bunting "Farm Service War Flag."

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**The Washington Farmer**
617 Central Bldg.,
Seattle, Wash.
Review Bldg.,
Spokane, Wash.

# Grain Condition Good

In an official survey of the grain situation in Washington under date of June 7, E. T. Marchetti, field agent of the United States department of agriculture with offices at Spokane, says that the crop generally is in a favorable condition except for occasional fields. The statement was issued before the heat wave of the past few days and is therefore subject to corrections where the heat may have done damage to certain crops. The following is the official statement:

Fall wheat, although retarded considerably by cool weather during May, has acquired a fairly favorable growth and has headed in many areas of the state. The crop generally is in a favorable condition, excepting in occasional fields through the Palouse country and in small acreages planted in the Big Bend counties where germination was spotted on account of an unusually dry fall and the wheat is more weedy than usual. Many fields normally sown to fall wheat in the Palouse, Walla Walla and adjacent counties were sown to spring wheat this year on account of an abnormally dry, unfavorable fall for wheat seeding, and the Big Bend counties were practically entirely sown to spring wheat for the same reason. Large acreages of alfalfa which were not producing normal yields have been plowed up and resown to spring wheat, especially in the Yakima and Kittitas valleys. Occasional fields throughout the Big Bend counties germinated spottedly on account of an unusually dry period immediately succeeding planting and the seeding of inferior quality wheat which had been injured by hot winds last year, and many fields of spring wheat throughout the Palouse counties, especially late sown, germinated spottedly and rains are required immediately to insure a normal stand in these fields.

The acreage of spring wheat and total wheat are the largest ever planted in this state. The condition of spring wheat has been adversely affected by a backward May, permitting considerable weed growth, and heavy winds during the month have dried out the soil materially. Although local areas throughout Columbia and Garfield counties indicate increases in barley acreage, these large barley producing counties as a whole planted less acreage to barley than a year ago. Considerable areas of abandoned wheat acreage which were rotted and frozen out were sown to barley last year in these large barley producing counties, whereas the desire to comply with the government's request to seed all available acreage to wheat and the early favorable spring for wheat seeding this year has resulted in a decrease of the unusually large barley acreage sown last year in this locality. Walla Walla, Asotin and Whitman counties have increased barley acreages this year, sown principally on land plowed in the late fall and early winter, and usually summer-fallowed, which did not interfere with the seeding of wheat acreage.

The barley acreage for the state as a whole has been increased slightly. The condition of barley has been unfavorably affected by lack of favorable growing weather. The acreage of oats has been increased in the large oat producing section of Skagit county on account of floods during the winter, which drowned out pasture and hay which land has been reseeded to oats. Smaller oat producing sections in the counties west of the Cascades increased acreages of oats considerably, in their desire to produce all foodstuffs possible. Throughout the large oat producing section of the Palouse country and including areas in Stevens county there is a tendency to decrease oat acreages. The decrease of oat acreage in this section was stimulated by the favorable early spring for wheat seeding, where as the adversely late spring of last year compelled the seeding of oats on account of the inability to plant wheat. The growth of oats has been retarded by unfavorable growing weather and rain is necessary to insure favorable results. The condition of hay is unfavorable on account of cool weather which retarded growth and encouraged cheat growth and aphides injury in alfalfa. Pastures have been injured by lack of rains and unfavorable growing weather. All crops are generally in need of imminent rains in practically all non-irrigated counties east of the Cascades.

SHIP your cattle where they will bring you the most money.

OUR northwestern customers have found Kansas City their best market. We specialise on Oregon, Washington and Idaho cattle.

WRITE or wire us for market information any time.

WITHERSPOON - M'MULLEN L. S. COM. CO.
Stockyards Station.
Kansas City, Missouri.




WOOL

We are now allowed to buy wool from growers. Returns will be made subject to government price, less our profit of 1½ cents per pound.

Market price paid for hides, metal and rubber. Write for prices if interested. Prompt returns guaranteed.

PACIFIC HIDE & FUR DEPOT.
Joseph Thiebes and C. T. Symmes.
1101-09 Railroad Ave., Spokane, Wash.

# Buyers Are Indifferent

Indifference on the part of the dairymen of eastern Washington caused a large share of the Glen Tana herd to be withdrawn from the sale held at Glen Tana farm near Spokane, last week, and allowed a few buyers to take home some unusual bargains in good dairy stock. Only one cow went as high as $300, that being Bonny Berry 249369, which was sold to J. P. Graves of the Waikiki dairy farm of Spokane at that figure. Six others sold as high as $200, one reaching $260. Eminent Jimps Owl, the record producer, was withdrawn from the sale because of the lack of interest on the part of the small crowd attending the dispersion.

T. S. Griffith, proprietor of Glen Tana, offered 100 head of purebred Jerseys and about 150 head of grade Jerseys and Holsteins. About half of the number sold, including a score or so of young stuff, six months to a year old.

Ira P. Whitney, bidding for J. P. Graves of Waikiki farm, was the principal purchaser, adding several head of good stock to the Waikiki herd at bargain prices.

Mr. Griffith is selling the cattle he held over at private sale.

The auction was conducted by George Gue, assisted by Harry Cranke.

The following are the sales of purebreds, showing price and purchaser:

Glen Tana Morocco 135432, A. M. Cannon, Bissel, Wash., $90.
Glen Tana's Pet King 143930, J. P. Graves, Spokane, Wash., $125.
Glen Tana of Athens, D. Rogers, Spokane, Wash., $40.
Airy's Poppy 295571, E. Sommers, Colfax, Wash., $80.
Golden Maid's Clarabelle 269568, J. P. Graves, $230.
Jolly Daffy Scott 290975, E. Sommers, $120.
Favourette 264179, J. P. Graves, $250.
Bonny Berry 249369, J. P. Graves, $300.
Brigadier's Duchess 272400, J. P. Graves, $215.
Glen Tana's Lily 295624, A. G. Woodward, Fairbanks, Wash., $250.
Glen Tana's Gertie 4th 293584, J. P. Graves, $105.
Maitland's Princely Legacy 266613, J. P. Graves, $225.
Glen Tana Gamboge's Lady 315545, J. P. Graves, $105.
Glen Tana Clarencia 326476, P. D. Tull, Spokane, Wash., $260.
Glen Tana Bessie Lee 340682, E. Sommers, $80.
Glen Tana Sunshine 337819, E. Sommers, $75.
Glen Tana Golden Berry 245188, Charles Waggoner, Post Falls, Idaho, $95.
Glen Tana Fern 349304, Glen Hamann, Buckeye, Wash., $75.
Glen Tana Victorious 359197, Fred Rolly, Addy, Wash., $60.
Glen Tana's Maid of Altamont 375217, J. P. Graves, $75.
Glen Tana Morocco Duchess 374381, J. P. Graves, $75.
Glen Tana Blue Berry 374382, J. P. Graves, $105.
Glen Tana Orange Lily 374383, J. P. Graves, $90.
Glen Tana Mabel 407342, Glen Hamann, $60.
Glen Tana Girl 376097, J. P. Graves, $50.
Glen Tana Morocco Bessie 375218, J. P. Graves, $75.
Glen Tana Pearl 407344, J. D. Williams, Reardan, Wash., $90.
Glen Tana Pioneer Beth, J. D. Williams, $75.
Glen Tana Lillian 415186, J. P. Graves, $90.
Glen Tana Nancy 413791, F. L. Dill, Hillyard, Wash., $45.
Glen Tana Elaine 415185, J. P. Graves, $80.
Glen Tana Quaker Dolly 314914, J. D. Williams, $50.
Glen Tana Juliet, 414917, F. M. Lothrop, Colbert, Wash., $50.
Glen Tana Golden Glow, J. D. Williams, $50.
Glen Tana Suzanne 414920, J. D. Williams, $35.
Glen Tana Favourette 414922, J. P. Graves, $75.

## ESTIMATES FRUIT

### Market Official Gathers Information.

Estimates of the fruit that will be produced this season in the various fruit districts of Washington have been compiled by R. M. Rutledge of the federal market department. While the figures are altogether unofficial, Mr. Rutledge is of the opinion that they are fairly reliable, having been obtained from what he considers well informed sources. The following is the estimate as compiled by him:

**Apples.**

Yakima district—Last year's crop reduced to carloads of 630 boxes each, amounted to 9256 cars. On the same basis it has been estimated that the yield of apples in 1918 will amount to 500 to 1000 cars less. However, most other estimates range higher and place the approximate yield from 10,000 to 11,000 cars in 1918. Powdery mildew is apparently worse than last year. Newtown, Spitzenburgs and Winesaps are in light blossom, but the size of apples may be larger and offset the apparent reduction in the crop. Considerable depends upon the spraying now in progress.

Wenatchee district—It is estimated that the crop in the Wenatchee section, including Chelan and Okanogan counties, etc., will amount to 6,250,000 bushels, which is well up to the average of the last five years. The Jonathan crop is about 40 per cent of normal. Nearly 50 per cent of the planting in this district is of two varieties, the Jonathan and the Winesap.

Spokane section—Estimated crop will be 1200 to 1400 cars, or about three times as much as was produced last year. Last year's crop was 472 cars, which was considerably below normal. However, it is hard to estimate because no one can tell the full effect of the June crop.

**Peaches.**

Yakima district—Estimated 1918, 500 to 650 cars, as against 1960 cars of last year, due mainly to frost damage.

**Pears.**

Yakima section—Estimated 60 per cent of normal crop, partially due to frost. Some districts hit this year escaped frosts in other years. The set is lighter, but the size will probably be larger.

Spokane section—Estimate on pears is that the 1918 crop will be 50 per cent of the 1917 crop.

**Cherries.**

Spokane section—Estimated 1918 crop will be 80 per cent of last year's crop.

## Clip This Order Blank

Address all communications concerning thrift or war savings stamps to The Washington Farmer, War Savings Department, Room 26 Review Building, Spokane, Wash.

Remittances may be in any form desired, including personal check.

The Washington Farmer, War Savings Department, Room 26 Review Building, Spokane, Wash.
Gentlemen: I wish to invest

in ..... U. S. government thrift (number desired) stamps at 25 cents each.

I wish to invest in .. .... U. S. (number desired) war savings stamps at $4.17 each. (June figure)

Amount enclosed $.....

Full Name .....

Town ..... State.....

R. F. D. No. .....

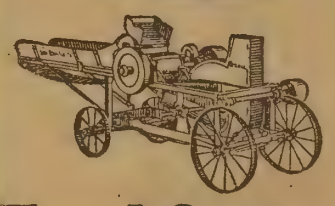
I have already bought ..... (kind of stamp)

stamps and have a..... (card or certificate.)

**Vacuum Teeth Cleaner.**

An electrically operated vacuum cleaner for the teeth has been patented.

ACME



Feed Cutter

FILLS THE SILO — MAKES ALFALFA MEAL — CUTS DRY FEED

The same Acme Cutter that fills your silo can be turned to your profit at all seasons of the year by cutting dry feed and making alfalfa meal.

Its special **Hay Feeding Attachment** gives it enormous capacity as a **Dry Feed Cutter.** Save $3 to $5 on every ton you feed this year by running it through an Acme—**Alfalfa Meal** can be produced on the same machine at a cost of less than half the cost of baling. Send for sample of the meal.

Catalog on request.

De Laval Dairy Supply Co.
61 Beale St., San Francisco.

Warehouse stocks carried at Portland and Seattle.

COMBINATION SALE OF
Registered Shorthorn Cattle
by
Day & Rothrock.

A. D. Dunn. Joe Turner.

Choice, well grown, registered SHORTHORNS for rangemen, dairymen, farmers and breeders.

26 BULLS
All Tuberculin Tested
Breeding Qualities
Guaranteed.

14 HEIFERS
All Tuberculin Tested
Breeding Qualities
Guaranteed.

To Be Held at Union Stock Yards
Spokane, Wash.
June 20, 1918, at 1 o'Clock P. M.

If it is impossible for you to personally attend the sale, address authorization to bid for you on animals of your choice to Dean E. J. Iddings of the College of Agriculture, Moscow, Idaho, or C. W. Hickman, Associate Professor of Animal Husbandry, University of Idaho, Moscow, Idaho.

OPPORTUNITY LIES AT YOUR DOOR.
Write today for Catalog to
F. M. Rothrock, 205 Exchange Bank Bldg., Spokane, Wash.
George A. Gue and Harry C. Cranke,
Auctioneers.

# NEWS FOR BREEDERS

## With Her Eight Young Duroc Jerseys



The photo herewith shows one of the good Duroc Jersey sows and her litter of eight pigs, owned by Root & Mason of Hermiston, Ore. The herd is headed by Gunn's Defender 186933, a grandson of Defender, bred by Key Bros. of Kentucky. He has a good head, good hams, plenty of bone and deep body. They have sows of Overbrook, Poston and W. R. White strains and have a very nice lot of young pigs. Gunn's Defender was champion at the Hermiston dairy and hog show in 1916 and last fall their sow, Queen of Butter Creek, then owned by C. P. Adams, was champion female. Mr. Mason, who is the principal hog man of the firm, expressed the opinion that an alfalfa country is the best place to raise hogs, though they must have some grain. Mr. Mason feeds mainly shorts and mill feed and begins almost as soon as a hog will eat. He fixes a creep so they can eat away from the sow. He likes a little oats at first and thinks there is nothing better for a growing pig. H. A.

## Senior Herd Bull



The accompanying is a photo of Holger, senior herd bull of the McArthur & Stauff Jersey herd of Rickreall, Ore. Holger is a son of Gertie's Lad and is one of the many Jersey bulls in the Willamette valley very strongly bred along producing lines. Believing he would prove to be a great sire these gentlemen have kept his daughters and now have a herd of practically all his offspring, and he seems to be justifying the faith in him. Six of his daughters have completed a year's official test, all outside of the McArthur & Stauff herd, none of them with any special preparation, and all have made excellent records. Thomas Williams and D. G. Lily of Forest Grove, Ore., have the following records to the credit of his daughters: Dina Dorf, as a 3-year-old, 622 pounds of 85 per cent butter; Olalla at 3 years, 767 pounds; Jersey Style, at 3 years, 676 pounds; Jersey Compass, at 2 years, 445 pounds, and Queen Badoura as a 2-year-old, 408 pounds. N. H. Smith of Oregon City, Ore., has a record of over 500 pounds, begun under 2 years old. Two or three more are soon to be reported and McArthur & Stauff have eight that will qualify, with good records.

For a junior herd sire these gentlemen are using a son of Gertie's, Fern Princess, that had a record of almost 800 pounds and was capable of doing considerably better. He is by Ed Cary's great bull, Rosaire Olga Lad. H. A.


## POLAND CHINA SWINE

### Big Type Poland Chinas

Peter Mouw and John B. Lawson strains. Young boars and bred or open gilts. Good individuals.

CLIFFORD RIGGS, Touchet, Wash.

GREENLEAF STOCK RANCH.
Big type Poland Chinas, either sex. for sale at all times.
Wilson Bros., A. L. Wilson, Mgr.
Greenleaf, Idaho.

BIG TYPE POLAND CHINAS.
Herd headed by Sammy (79833). Correspondence solicited.
Fruitland Stock Farm, C. Royston, Mgr.
Payette or Fruitland, Idaho.

## BERKSHIRE SWINE

### Riverby Orchard Berkshires

Riverby Orchard Berkshires won 12 out of 15 first prizes at the Washington state fair, 1916, also many prizes, including grand champion sow at the Panama-Pacific world's fair. We offer for sale a few good boars and young sows.

D. C. BUNN, Prosser, Wash.

## DUROC-JERSEY SWINE

DUROC SOWS FOR SALE.
A few choice Duroc gilts, bred to farrow early next May, daughters of grand champion Richards Defender and bred to Junior Champion Richards Pathfinder. No better breeding east or west. Also a few good boars ready for service. Price very reasonable. We furnish pedigree and guarantee satisfaction, or will refund your money and pay express both ways.
RICHARDS LIVE STOCK CO., Virginia, Ida.
Home of the Champion Durocs.

REGISTERED DUROC-JERSEY HOGS.
Some good spring litters Richards Defender and Pathfinder breeding; big type. Send out nothing but high class stock. Guaranteed to please. Write me for prices on these pigs.
ERIK W. OLSON, Virginia, Idaho.

OTTO'S DUROC JERSEYS.
Get in line for a real boar pig for Sept. delivery. Also gilts and sows bred and open. The kind that is up to date.
L. S. OTTO, Filer, Idaho.

AVONDALE STOCK FARM.
Registered Duroc-Jersey hogs. Inspection invited. Correspondence solicited.
H. C. POLLY. Route 3, Burley, Idaho.

DUROCS.
Boars and open or bred gilts of excellent breeding.
E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE. Yakima, Wash.

## TAMWORTH SWINE

ROUND KNOLL RANCH NO. 3.
Herd headed by Knoll Slope Colonel, assisted by Jolly Lad IV. Correspondence solicited.
Bliss, Idaho.

# MISSOURI and KENTUCKY JACKS

STOCKTON, CAL. P. O. Box 679.
JAMESPORT, Missouri.
LOS ANGELES, CAL. P. O. Box 1117.

SPOKANE, WASH.
W1728 Fourth Ave. Phone Main 1647.

## H. B. THORNBERRY

Dealer in

REGISTERED AND PEDIGREED JACKS, JENNETS, PERCHERON AND SHIRE STALLIONS AND GAITED KENTUCKY SADDLE HORSES
Largest Importer in the United States.


# Breeders' Department

## JERSEY CATTLE


### Foundation Herd of Jerseys

To reduce our herd to a size proportionate to the available labor supply we make the following offerings: First of all the great Tennessee cow.

**Moyane Moline,** 803 lbs. butter, 10,406 lbs. milk in one year. Also
**Creole Bess,** 684 lbs. butter, 12,363 lbs. milk.
**Stockwell's Dahlia,** 619 lbs. butter, 8890 lbs. milk.
**Lucy's Convent Lassie,** 484 lbs. butter, 7568 lbs. milk.
**Princess of the West,** 477 lbs. butter, 6996 lbs. milk in 341 days.
**Pearl of Riga,** 458 lbs. butter, 7489 lbs. milk in 297 days.
**Diamond of Fair Acres,** now on test, milking 59 lbs. a day, as junior 3-year-old.
**One heavy producing** untested cow and one 2-year-old heifer.
(All butter regular Jersey standard, 85 per cent.)

This includes all our American bred cows and three choice imported cows, including the many times grand champion, Stockwell's Dahlia.

Free from abortion and will furnish certificate of health from federal veterinarian.

Prices, pedigrees and photos on request.

**J. B. STUMP & SON, Monmouth, Ore.**

### Best of Breeding

Two bull calves, one by Comassie Lulu's Noble, full brother to 2 register of merit cows with good records. Dam was junior champion Pacific International stock show and has R. M. record of 365 lbs. butter, begun at 1 year, 10 months, class AA.

The other by Oxford Torono 2d, a Hood Farm bred bull. His dam has a heifer making private record, begun under two years of almost 500 lbs. butter. Both very cheap, in proportion to quality.

WM. BEHRMANN JR., Hillsboro, Ore.

### Young Jersey Bulls

SEVERAL OF MY BEST OFFERINGS. from 3 months to a year and a half, all from high-producing dams. These fellows are bred right and they will be sold right.

Correspondence solicited.

C. E. LONG. Buhl, Idaho.

### GWENDOLA OLGA LAD

Sire Beauty Lala Lad, he by Rosaire Olga Lad, sire of over 30 register of merit daughters, including St. Mawes Beauty, 934.9 lbs. butter as junior 3-year-old (all butter in this ad being computed on basis of 80 per cent fat.) Beauty Lola Lad's dam, Beauty Lola. R. M. record, 724 lbs. butter, milked twice a day, ordinary herd care.

GWENDOLA OLGA LAD'S dam, Gwendola Olga Chimes, R. M. record 1015.5 lbs. butter as junior 4-year-old. She is by Silver Chimes of S. B., sire of 9 other R. M. daughters, including Silver Chimes Rua, 988,78 lbs. butter. Her dam, Coffee's Gwendola, R. M. record 770.07 lbs. butter and she is a granddaughter of the great bull King Koffee's Count.

GWENDOLA OLGA LAD was dropped March 7, 1917. He is a well grown, good individual, fit to head and improve the best pure bred herds. Other young bulls of best breeding.

DEL PERKINS, Carton, Ore.


## SHORTHORN CATTLE


### Herd Bulls

Imported Donne Radiance No. 609412
and
Gainford Perfection No. 442173.

### Hercules Shorthorns

We can supply you with choice, well grown bulls and females of breeding age. Your inspection of our herd is invited. Visitors always welcome.

**Day & Rothrock Company**
205 Exchange Bank Bldg. Spokane, Wash.

### Shorthorn Cattle

Registered bulls and heifers of breeding age for sale. Some from extra heavy milking dams.

A. D. DUNN. Wapato, Wash.

REGISTERED SHORTHORN COWS.
Young bulls and heifers, sired by Scotch bulls; liberal terms.
CALDWELL CATTLE CO., Caldwell, Idaho.

### Firlawn Shorthorn Farm

UNION, ORE.
We offer a young herd bull (registered), ready for service in four months, and 7 yearling heifers, all of imported Scotch blood. Bull and heifers unrelated. Prices reasonable. Write us and come to the Union Stock Show.
SHERMAN & HUTCHINSON,
Union, Ore.

### LELAND BROTHERS

Breeders of top registered Shorthorn cattle. Correspondence solicited.

WENDELL, Idaho.


## HOLSTEIN CATTLE


### 365-DAY HOLSTEINS

24,667 lbs. milk—1026 lbs. butter—is the s. o. advance registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.

THE HERD WITH YEARLY RECORDS.
WESTERNWOLD RANCH, Prineville, Ore.

### REGISTERED HOLSTEINS

Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.
H. R. BOOMER. New Plymouth, Idaho.

### HOLSTEINS

Well-bred young bulls for sale.
THOS. CARMICHAEL. Gaston, Ore.

REGISTERED HOLSTEINS.
Bull calves for sale with good A. R. O. backing.
BEEBE BROS., R. F. D. 2, Rupert, Idaho.


## GUERNSEY CATTLE


### ROSE CITY HERD

Yeksa, Gov. of the Chene, Sequel and May Rose strains. More prizes at Oregon state fair, 1916 and 1917, than any other exhibitor for number of cattle shown. A few choice animals of both sexes now offered.

W. A. GOODIN, Cornelius, Oregon.

### TWO GUERNSEY BULLS

One fourteen months', the other twelve weeks old; well bred; will be sold cheap.
B. F. BAUGHMAN, Redmond, Ore.


## HEREFORD CATTLE


### Highland Stock Farm

offers for sale Hereford bulls, 1 or 2 years old. One or a carload.
PLATT BROS. Genesee, Idaho.


## AYRSHIRE CATTLE


### Edgewater Farm

Government accredited herd, headed by Peter Pan 63d. Bull calves available.
ELBERT M. CHANDLER, Burbank, Wash.


## ABERDEEN ANGUS


### Aberdeen Angus Cattle

A. H. EAGLESON & SONS.
Boise, Idaho

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, June 10.—Corn developed notable strength today owing largely to prospective curtailment of receipts. The market closed firm, 2 7-8c to 3 1-8c net higher, with July $1.39 7-8 to $1.40, and August $1.40 7-8. Oats gained 7-8c to 1 5-8c. The finish in provisions ranged from 30c decline to 5c advance.

Upturns in corn prices began soon after the opening and were first ascribed chiefly to unfavorable weather conditions, such as lack of warmth and excessive moisture. Predictions of generally fair skies and of higher temperatures for the next two or three days brought about a temporary bearish reaction, but the readiness with which offerings were absorbed soon led to a fresh advance.

Oats reflected the changes in corn. Cereal interests were good buyers and it was said export business amounted to 400,000 bushels.

Big exports of lard and meats made provisions average higher. However, realizing by longs set in and the finish was weak.

### Cash Quotations.

CHICAGO, June 10.—Corn, No. 2 yellow, $1.65@1.65; No. 3 yellow, $1.58@1.63; No. 4 yellow, $1.40@1.46. Oats, No. 3 white, 75¾@76½c; standard, 76@77c. Rye, No. 2 nominal. Barley, $1.12@1.50. Timothy, $5@8; clover, nominal. Pork, nominal. Lard, $23.95. Ribs, $21.72@22.40.

### Chicago Futures.

| | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| Corn— | | | | |
| July | 1.36¾ | 1.40 | 1.36⅝ | 1.39⅞ |
| Aug. | 1.37⅞ | 1.41¼ | 1.37¾ | 1.40⅞ |
| Oats— | | | | |
| July | .66¾ | .68¾ | .66¾ | .67⅞ |
| Aug. | .62 | .63⅜ | .62 | .63⅜ |
| Pork— | | | | |
| July | | | | 40.85 |
| Sept. | 41.25 | 41.50 | 41.25 | 41.30 |
| Lard— | | | | |
| July | 24.25 | 24.25 | 24.10 | 24.20 |
| Sept. | 24.50 | 24.52 | 24.32 | 24.40 |
| Ribs— | | | | |
| July | 22.35 | 22.35 | 22.15 | 22.22 |
| Sept. | 22.70 | 22.72 | 22.55 | 22.65 |

### Pacific Northwest Grain.

PORTLAND, Ore., June 10.—Grain, June delivery: Oats, No. 2 white feed, $58.50 bid. Eastern oats and corn in bulk: Oats, No. 3 white, $52; 38-pound clipped, white, $54.50; corn, No. 3 yellow, $59; No. 3 mixed, $57.

### Minneapolis Grain.

MINNEAPOLIS, June 10.—Corn—No. 3 yellow, $1.53@1.63. Oats—No. 3 white, 76@77c. Flax, $3.87@3.89. Flour unchanged. Shipments, 38,473 barrels. Rye, $1.95@1.98. Barley, $1@1.32. Bran, $28.25@33.25.

## Live Stock Quotations.

### At Omaha.

OMAHA, Neb., June 10.—Hogs—Receipts, 10,300; market 10c to 15c lower. Heavy, $16.50@16.60; mixed, $16.55@16.65; light, $16.65@16.70; pigs, $12@15; bulk of sales, $16.55@16.65.

Cattle — Receipts, 7300; market steady. Native steers, $12.50@17.75; cows and heifers, $9.75@14.50; western steers, $9@14.50; Texas steers, $9@12.50; cows and heifers, $7.50@10; canners, $7.75@9.75; stockers and feeders, $8@13; calves, $8@13.25; bulls, [illegible] $12.50.

Sheep — Receipts 1000; market 25c higher. Wethers, $14.50@17; [illegible], 10.50@13.85; lambs, $16@20.20

### At Portland.

PORTLAND, Ore., June 10.—Cattle—Strong; receipts, 1317. Prime steers, $14@15; good to choice steers, $12.50@13.50; medium to good steers, $11@12; fair to medium steers, $10.50@11.50; common to fair steers, $9@10; choice cows and heifers, $11@12; medium to good cows and heifers, $7.50@9; fair to medium cows and heifers, $6@7; canners, $4@6; bulls, $6.50@10; calves, $8.50@11.50; stockers and feeders, $8@10.

Hogs—Lower; receipts, 1266. Prime mixed, $16.75@16.85; medium mixed, $13.50@16.65; rough heavies, $15.75@15.85; pigs, $15.50@15.75; bulk, $16.75.

### At Chicago.

CHICAGO, June 10.—Hogs—Receipts, 34,000; steady to strong, compared with Saturday's close. Bulk of sales, $16.50@16.85; top, $16.95; heavy butchers, $16.55@16.65; medium and light butchers, $16.70@16.85; heavy packing, $16.15@16.45; medium and mixed packing, $16.45@16.60; rough, $15.50@15.85; light, $16.75@16.95; pigs, $13 [illegible] 16.90

Cattle—14,000; active and steady to strong. Butcher stock steady. Beef cattle, prime, $16.75@17.75; common and mixed, $12.25@16.25

### Spokane Stockyards, Monday.

Hogs — Receipts, 115; 25c lower. Prime mixed, $16.85@17; medium mixed, $16.50@16.75; rough heavy, $15.50@16; pigs, $15@15.75; stockers and feeders, $14.25@16.

Cattle—Receipts, 192; market firm. Prime steers, $13.75@14.75; good to choice steers, $12.25@13.25; medium to good steers, $10.75@11.75; fair to medium steers, $9.75@10.75; common to fair steers, $8.50@9.75; choice cows and heifers, $10.75@11.75; good cows and heifers, $7.75@9; medium to good cows and heifers, $6.50@7.50; fair to medium cows and heifers, $5.50@6.50; canners, $3.50@5.50; bulls, $6.50@9; calves, $8@12; stockers and feeders, $7@9.50.

Sheep — Receipts none; market steady. Prime lambs, $16@16.75; good lambs, $14@15; prime yearlings, $10@11; prime wethers, $9.75@10.50; best mutton ewes, $8@9.50.

## Portland Market.

PORTLAND, Ore., June 9.—Wool is arriving in liberal quantities and being stored here, pending the next steps by the government in its distribution. A valuation commitee is expected to be named in a few days, and as soon as the new clip is appraised, it will be allotted to the local mills. Orders are also awaited from Washington in regard to the distribution of the old wools, which have been already valued. Local dealers have word that shearing in the eastern counties may extend into July, owing to the scarcity of labor.

The cube butter market is firm and higher with 41 cents being paid for extras. The buying is for storage as the quality of the butter now is at its best.

Eastern fresh eggs are being offered freely at 37@38 cents and this has checked the advance in Oregon eggs.

Poultry prices are weak and would be still lower but for Seattle buying of hens and broilers. Hot weather has had a depressing effect on the dressed meat trade and caused some losses.

Good shipping strawberries are firm at $2.75, but there is much sun scalded fruit on the market and some of this went as low as $1 a crate. Unless rain occurs in a day or two the local berries season will come to a speedy close. Green vegetables of all sorts are scarce and firm. A large part of the crop was cut off by aphis.

Butter—Cubes, extras, 41c; prime firsts, 40c; prints, extras, 44c; cartons, 1c extra; butterfat, No. 1, 43c, delivered.

Eggs—Oregon ranch current receipts, 38c; candled, 40c; selected, 42c per dozen.

Cheese—Jobbers' buying prices, f. o. b. dock, Portland: Tillamook, triplets, 23½c; Young Americas, 24½c per pound; Coos and Curry, f. o. b. Myrtle Point; Triplets, 23c; longhorn, 24c per pound; ¼c discount to Portland trade.

Poultry—Hens, 22@23c; broilers, 23@25c; ducks, nominal; geese, nominal; turkeys, nominal

Veal—Fancy 17c per pound.

Potatoes—Oregon Burbank, $1@1.25 per hundred; New California, 4@5c per pound.

Hay—Buying prices, f. o. b. Portland; Eastern Oregon timothy, $29@30 per ton; valley timothy, $25@26; alfalfa, $4@24.50; valley, grain hay, $24@26; clover, $24; straw, $9@10.

## Spokane Market.

These are actual prices obtained by Spokane wholesalers in their sales to retailers, hotels, mining camps, etc.

Cherries—Arrivals, Washington, 10 crates, Oregon 50 crates. Market steady, supplies late. Washington, Milton district 24-pint crates, May Duke, condition fair, $1.50@2; 24-pint crates Black Cartarian, large size, $3; Snake river district, 10-pound crate, Black Cartarian, faced, $1.25; Hoover district, 10-pound crate Bings, condition fine, $1.50.

Strawberries—Express arrivals, Oregon, 125 crates; Washington, 125 crates. Market steady. Washington—Yakima district, 24-pint crates Glenn Mary, $3.75; Kennewick district, 24-pint crates Clark Seedlings, full ripe, $3.25@3.50, few overripe, $3; home growns, mixed varieties, condition good, 24-pint crates, $3.50@3.75. Oregon—Hood River district, 24-pint crates, Clark Seedlings, $4@4.25; Milton district ,24-pint crates Mortgage Lifters, condition poor, $2.50; Portland district, 24-pint crates, Dollar variety, condition fair, $3.25. Idaho—Lewiston section, 24-pint crates, condition poor, full ripe, $2.75.

Potatoes—Carlot arrivals Washington, 1, Old—Market stronger. Yakima district, 100-pound sacks, Netted Gems, $1.50@1.60. Home growns, 100-pound sacks White variety, condition fair, $1.40@1.50. New: Market weaker. California, 100-pound sacks, Garnets, condition generally good, $4.50@5, mostly $5.

### MEAT.

**Beef**—Beef steers, 16½@22½c lb; cow beef, 14½@20c lb; heifers, 20c lb; best loin, 32@34c lb; steer chucks, 19½@21c lb; prime ribs, 26c lb; rump and round, 25c lb.

**Mutton**—Breakers, 25c lb; wethers, 25c lb.

**Lambs**—Diamond T. C. lambs, 35c lb; lambs, 30c lb.

**Pork**—Packer dressed hogs, 26@27c lb; pork loins, 30@31c lb; legs, 30c lb; shoulders, 25c lb; leaf lard, 25c lb; tenderloins, frozen, 49c lb; spareribs, 19c lb; country dressed hogs, with head on, 20c lb to producer; country dressed veal, 15c lb to producer.

**Smoked Meats**—Washington hams, 33¾c lb; T. C. hams, 35c lb; T. C. bacon, 46½c@48½c lb; Washington bacon, 39½@43¾c lb; picnics, 23½c lb; Boston butts, none; English bacon, 36½c lb.

**Star Brand**—Hams, 35c lb; Shield hams, 33@34c lb; picnics, 23½c lb; bacon backs, 33c lb; Star bacon, 46½@48½c lb; Shield bacon, 41@45½c lb; Simon Pure lard, $17.50 case; Shield lard, tierces, 27½c lb; White Cloud compound, tierces, 22¾c lb.

**Dry Salt Meats**—Clear bellies, 28c; lean backs, clear, 27½c lb; sides, 26c per lb.

**Lard**—Tierces, 27c lb, $14.45@15.27 case; Diamond T. C. pure leaf lard, $15.75 case, $8 half case; Snowcap compound, tierces, 22¼c lb.

### POULTRY.

**Live Poultry**—Live hens, large, 22c lb; small, 29c lb; roosters, 12½c lb to producers, f. o. b. Spokane.

### GASOLINE, LINSEED OIL, ETC.

**Gasoline**—Red Crown, bulk, 24½c gal, cases, 34½c gal; Shell, 26½c; refined oil (Pearl), bulk, 13c gal, cases, 23c gal; Eocene, 15½c gal in bulk, cases, 25½c gal; engine distillate, 16½c gal, bulk.

### GRAIN AND FEED.

**Rice**—Fancy head, $7.50@9.50 cwt.

**Flour**—Bluestem, $9.40; Blend, $9.40; Montana hard wheat, $10.40; graham, $8.50 bbl, 49-lb sacks; whole wheat, $8.40; eastern rye, $10.10; eastern rye meal, $10.30; oat flour, $12.25, 4 45-lb sacks.

**Oats**—$73 ton whole, $76 rolled, delivered in city; steam rolled No. 2, $71 ton.

**Corn**—$75 ton; cracked corn, $77 ton.

**Bran**—$30 ton; shorts, $32 ton; bran and shorts, $31 ton.

**Barley**—Rolled, $76 per ton.

**Oil Meal**—$78 per ton.

**Hay**—Timothy, $36 per ton, $35 ton by carload alfalfa, $28 ton, $28 ton by carload.

## The Wool Market.

BOSTON, June 7.—The Commercial Bulletin tomorrow will say: Slowly, with some uncertainty, the wool clip of the country is moving eastward to the consuming centers, especially wherever the clip is subject to purchase, since the terms upon which it can be purchased under the government plan have not been clearly understood by many of the country dealers, who have on that account hesitated about putting their money into the staple upon an uncertain basis. Consignments from the territory sections are being accepted steadily. The government machinery for handling the wool in the centers of distribution is being augmented more or less steadily, as necessity requires.

Scoured basis: Texas—Fine, 12 months, $1.72@1.75; fine, eight months, $1.50@1.55. California — Northern, $1.70@1.75; middle county, $1.55; southern, $1.45@1.50. Oregon—Eastern, No. 1 staple, $1.78@1.80; eastern clothing, $1.62@1.65; valley, No. 1, $1.63@1.66. Territory—Fine staple, $1.80; half-blood, combing, $1.53@1.68; three-eighths blood combing, $1.40@1.45. Fine clothing, $1.65@1.70; fine medium clothing, $1.55@1.60. Pulled—Extra, $1.80@1.85; AA, $1.65@1.70; A supers, $1.60@1.65.

## Seattle Market.

SEATTLE, June 9.—The strawberry market is steady for the week-end.

The week concludes with a stronger tone in fresh ranch eggs, choice white shell locals bringing 45c at the selling and 40c at the buying end. There was a noticeable falling off in the receipts and a steady increase in the demand. There has been a strong demand for eastern eggs, several carloads having been cleaned up on the local high markets. This is the first time in the history of the trade here that it was necessary to draw on outside centers for eggs in May and June.

### BUYING PRICES.

Unless otherwise stated the following prices are fixed upon a jobbing basis and are average prices obtained in reports of transactions by jobbers.

The following prices are offered to the producer by the local dealers for delivery in round lots, f. o. b. Seattle:

Eggs—Local, 40@41c per dozen; eastern Washington, Oregon and Idaho, 37c.

Poultry—Broilers, 30@35c lb.; spring roosters, live, fat, 26@27c lb.; geese, fat, live, 18@25c; ducks, live, fat, 27@30c; hens, 24@26c lb.

Beef—Buying prices: Prime beef, steers, 14@15c; cows, fat, 13@14c lb.; heifers, 14@15c.

Hogs—Light, 21c lb.; heavy, 19@20c lb.

Veal—Fancy light, 18@19c lb.; 15@18c lb.

Hides—Salted, 13c lb.; flint-dry hides, 23c lb.; salt kip, 13c lb.; green hides, 11c lb.; green calf, 28c lb.; dry calf (under 6 pounds), 35c lb.; bulls and dry salts, 4c lb. less; green bulls, 8c lb. Clean, long wool, western Washington flint-dry pelts, 39c per lb.; heavy to clean eastern Washington flint-dry pelts, 30@35c lb.

Asparagus — Kennewick, 12½@15c lb.; Oregon, 15@20c; Granger, 15c.

Apples—Winesaps, $3.50@3.75.

Potatoes—Puget sound, $17@22 per ton; eastern Washington, $35 per ton.

Feed—Bran, $34 per ton; shorts, $35.50; scratch feed, $73; all-grain chop, $71; oats, $72; sprouting oats, $69; rolled oats, $73; whole corn, $76, cracked corn, $77; rolled barley, $67; clipped barley, $70; alfalfa meal, $36; oil meal, $70; egg mash, $62.

Hay—Eastern Washington timothy, $36@37 per tons; do. double compressed, $37@38; alfalfa, $26; Puget sound, $26@27; straw, $15.

Strawberries — Kennewick, $3.50@3.60; White Salmon, $4; Okallas, $4 per crate.

### LINSEED.

DULUTH, Minn., June 10.—Linseed, $3.89@3.92; arrive, $3.89@3.90; July, $3.92; October, $3.49.


HIDES

WOOL, PELTS, MOHAIR, CASCARA BARK

We do the largest consignment business in the northwest. Equally fair treatment on all shipments, large or small. Returns at full market value mailed same day as goods are received. Trial shipments wanted and appreciated, but are handled as regular shipments and not at inflated values.

THE H. F. NORTON CO.

53-55 No. Front St., PORTLAND, ORE.

206 Third Ave. So., SEATTLE, WASH.

RYDE'S CREAM CALF MEAL

takes the place of milk at less than half the cost; 100 pounds makes 100 gallons. A perfect substitute for milk. Put up in 25, 50 and 100 pound bags. Universally used and approved.

THE INLAND SEED CO., Spokane, Wn.

A PROFITABLE SILO

Send for Silo Book Today

If you raise stock or keep dairy cows here's a silo that will put dollars in your pocket every year.

It is built of thoroughly seasoned, selected staves, hooped with strong billet steel hoops, bound with malleable lugs—has an anchorage system that makes it staunch and firm even when not filled and hinge-rod doors that can't sag, swell or freeze into the frame. At least

$20

is saved you by reason of the fact that the Inter State is well painted when you get it.




Use the Coupon

McGoldrick Lumber Co.

Spokane, Wash.

TEAR OFF AND MAIL TO US

McGoldrick Lumber Co., Spokane, Wash.

Gentlemen: Please send me your 1918 catalog and oblige

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# Too Late Tomorrow



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Have YOU put it off "until tomorrow?" So far as real success is concerned "tomorrow" is the worst word in the dictionary.

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Order a "WEYERHAEUSER SILO" today and swing into line with those who have done their best to SAVE AND CONSERVE.

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will not fail you. The thorough structural features, the excellence of material, the experience back of it, the thousands in use, all speak in their favor.

Awaiting Your Orders.

## WEYERHAEUSER TIMBER CO.

Everett, Wash.



## SUNNYBROOK

THE FEED YOU NEED.

A new concentrated balanced feed that meets the present emergency of shortage of mill feeds and high price of all grains.

Analysis.

| | |
|---|---|
| Protein | 14.51% |
| Nitrogen, Free Extract | 46.55% |
| Crude Fat | 4.50% |
| Ash | 6.58% |
| Crude Fiber | 18.15% |
| Moisture | 8.47% |

UNION MEAT CO.

Sole Distributors. No. Portland, Or.





## POSTS

$228.00 Buys Carload of

2100 Genuine Red Cedar Fence Posts, 5 inches thick, 6½ feet long, f. o. b. Sumner, Wash. A Wonderful Bargain. They won't rot. Price List, All Sizes—Free. Bulletin Lumber Bargains Free Too.

Hewitt-Lea-Funck Co., 758 Funck St., Sumner, Wash.


# My Road-House of the Birds

(Continued from page twenty-three.)

ever notice the rustle of expectancy in the crowd when such a man arrives?

This is what happened birdwise when the American eagle arrived at the road house of the feathered people. The sparrow hawk ceased his depredations; the gossipy crows ceased their clamor; the blackbirds ceased to swarm and chatter; even the restless swallows quieted down. The whole bird crowd stood off to one side. Why, I should like to know, but never found out. I never saw an eagle attack the other birds, though very few of them came to the road house when I was looking down from my eerie perch in the peanut gallery. It may have been that the other birds instinctively recognized the power and dominant qualities of the eagle. These birds were always leisurely and calm in their behavior at the coulee roadhouse; but when they moved from perch to perch on the coulee precipice, and as they arrived or flew away, there was something in their motion which later I saw in a high-power racing auto moving slowly up to the race course. The very calmness and sureness of their actions suggested the immense reserves in strength, courage and action of the eagles. Among the feathered flock at the road house some chirping, some squalling, some chattering, all noisy and bustling, the great eagle was every inch a king, and the feathered people knew it.

My coulee playground of the birds is both modern and prehistoric. The handwriting of him who made the world and the living things thereon is large and plain upon its towering, water-stained precipices. Read between the lines of this writing and you will see, maybe, if you have understanding elevated by imagination, the world in the old jurassic days when crocodilian reptiles swam the seas and the rivers of the newborn earth, and the dinosaur balanced on two legs and his tail to browse on treetops sixty feet high.

I have not slept with the prehistoric auroch, nor watched the mastodon roam, nor talked to the bow-head, nor followed the sabre-tooth tiger to his den. Neither had Ung, who drew pictures of these things. Ung's tribesmen doubted the realness of his pictures. He stayed in his boulder-hatched studio and drew pictures of the animals while they fared forth and slew them.

"Wroth was that maker of pictures—
hotly he answered the call:
'Hunters and fishers and trappers, children and fools are ye all!
Looks at the beasts when ye hunt them!'
Swift from the tumult he broke,
Ran to the cave of his father, and told
him the shame that they spoke."

As follows, did Ung's father console him:

"'Thou hast not toiled at the fishing
when the sodden trammels freeze,
Nor worked the war-boats outward
through the rush of the rock-staked seas,
Yet they bring thee fish and plunder—
full meal and an easy bed—
And all for the sake of thy pictures.'
And Ung held down his head."

Here I leave Kipling. Look at my coulee playground of the birds when next you see it. As I said before, if you look with understanding elevated by imagination, you may see presently dart from yonder bench on the face of the old, water-stained precipice where sits a modern American eagle, not the eagle, but the eagle's prehistoric ancestor less removed from its reptilian ancestors by several million years than is the present-day eagle that decorates the gold coin of our republic. The bird that you see should be dog-tailed, without feathers, winged like a bat, beakless and fanged like a cat; and it should dart down into the waters of the prehistoric Columbia and bring forth a fish. The fish will not be your modern salmon-trout. It may have eyes set so closely together that they look like one, and such an armament of bony scales and plates that, were you to catch it, you might have to crack it open with a camp ax to get at the meat inside.

Ung had not arrived then. The world was made in the rough, and being sandpapered for the arrival of Ung and you and I. This coulee playground of the birds, prehistoric and modern, seems to have survived much of the sandpapering, and is about as prehistoric as ever. On the time-seamed precipices is the handwriting of him to whom a thousand years is as a day, and a day as a thousand years. This writing is paragraphed in eras, periods, epochs and ages.

## Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

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WANTED — BY FARMER, 38 YEARS, housekeeper, age 30 to 39 yrs., fond of ranch life. D 6, Washington Farmer, Spokane.

er, Spokane.

SUMMER COURSE IN TELEGRAPHY opens June 10. Jenkins Institute of the Spokane Y. M. C. A.

### EDUCATIONAL 45

EARN MORE. ENROLL ANY TIME, AT Behnke-Walker, Portland, northwest's biggest business college, because best. Graduates assured positions. Write for catalogue.

### TEACHERS' AGENCIES 46

TEACHERS REGISTER WITH B. F. WESTmore, Mgr. Hazard Teachers' Agcy. $1 registers you at three offices. 911 Old Nat'l Bank bldg., Spokane, Washington.

ALBERT TEACHERS' AGENCY, PEYTON bldg., Spokane. We need more teachers.

### HONEY, BEESWAX—Wanted. 58

SEND SAMPLES OF YOUR HONEY AND beeswax; state quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

### MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

Fly time is coming. We make screen windows and doors. Get our large illustrated catalog, No. 27, of sash, doors and building material. Sent free on request.

Screen doors, mortised, glued and covered with heavy, galvanized wire mesh, $1.75 and up.

Window and sash screens, at, per sq. ft., 15c.

Cottage glass doors, $2.85 and up.

Five cross-panel doors, $1.92 and up.

20x24, 2-light windows, $1.79.

Prepared roofing at $1.35, $1.70 and $2.10.

We sell any one, ship anywhere, and guarantee safe delivery. The largest factory in the west selling direct to the consumer.

O. B. WILLIAMS CO.
1943 First Ave. So., Seattle, Wn.

SECOND-HAND FARM IMPLEMENTS, wagons, harness, as well as household goods and all sorts of odds and ends, can be turned into cash by advertising in these columns. Write Pacific Northwest Farm Trio, Spokane, Wash.

DAIRY AT PORTLAND—20 GOOD COWS; 200 choice customers; all equipment; monthly collections $850. A fine proposition for some one. Place for rent. Owner physically unable to continue. At 1430 Vancouver ave., Portland, Ore.

PRINTED BUTTER WRAPPERS
1st hundred 75c, postpaid; 40 to 70 per cent less in larger amounts. Sample and prices free. Hughes' Print Shop, Colville, Wn.

### JUNK SHOPS 90

CENTRAL HIDE AND JUNK CO. BUYERS HIDES, WOOL, METAL, RUBBER, SACKS, ETC. WRITE FOR PRICE LIST IF INTERESTED. QUICK RETURNS. W200 MAIN AVE., SPOKANE, WASH.

### MACHINERY—FOR SALE 93

"WITTE" GASOLINE ENGINES
save labor, and are carried in stock by HIGGINS MACHINERY COMPANY, 312 FIRST AVE. S., SEATTLE. Write for Catalogue.

FOR SALE—HOLLEY HOLT HARVESTer, in good shape. Cut 1600 acres. Address O'Brien Bros., Wilbur, Wash.

### AUTOMOBILES 114

FORDS CAN BURN HALF COAL OIL, ALL distillate, or cheapest gasoline, using our 1918 Carburetor; 34 miles per gallon guaranteed; easy starting; great power increase; attach it yourself; big profit selling for us; 30 days' trial; money back guaranteed; styles to fit any automobile. Air-Friction Carburetor Company, 321 Madison st., Dayton, Ohio.

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WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

### HARES AND RABBITS 173

FINE, RICH, RACY, RUFUS RED BELgians; does, bred to registered buck, $5 each; breeding bucks, $4; young stock from $2 up. Order from this ad direct. Satisfaction guaranteed. Pedigreed stock. Cermer Rabbitry, Pasco, Wash.

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200,000 WHITE LEGHORN BABY CHICKS —Bred for eggs, vigor, size. Safe arrival in good condition guaranteed. Free catalog and book on "Raising the Chicks." Oak Heights Poultry Farm, Route 3, Box T 67, Tacoma, Wash.

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FOR SALE—SHORTHORN BULL, CRYStal Boy, age 7; weight 2000 lbs.; red; dehorned. Immediate sale, $200, at Pullman or Wawawai. A. S. Ford, Pullman, Wn.

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WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water. 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

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### FARM LANDS—FOR SALE 651

ATTENTION, LANDBUYERS!

Here's an excellent proposition:

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We also have some beautiful 10-acre waterfront tracts.

OPPORTUNITY knocks at every man's door ONCE, but, believe me, it does not continue to knock forever, nor does it pound the door down. For further information address the owners, BROWNELL LAND CO., 904 Third ave., Seattle, Wash.

200 ACRES; 150 GOOD FARM LAND, BALance pasture; 40-acre water right; 100 acres in fall-sown grain; will harvest about 1500 bushels. Good house, all necessary outbldgs.; some fruit and berries; ¾ mile to school and church, 10 to railroad town, 1½ to P. O. All farm tools needed, chickens, turkeys, furniture. Immediate possession at $25 per acre; terms on one-third. Owner, David Milburn, Lower Bridge, Oregon.

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62-A. IMPROVED WHEAT FARM; SEVEN miles south of Hartline, Wash.; on Sunset highway; good land; all in cultivation except 15 acres; 300 a. in summer fallow; all fenced; large house, fine barn, good outbuildings; plenty water. Only $45 per acre. $6000 cash will handle. A. L. Tucker, Coulee City, Wash.

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FOR SALE — ALFALFA, WHEAT AND stock farms. If you want good, well-improved, irrigated farms at a price that will pay for itself in two crops, write me. John Hardwick Realty Co., Vale, Ore.

FOR HAY, GRAIN OR STOCK RANCHES in famous Rosebud county, eighty acres to twenty thousand acres. Write Rosebud Realty Co., Rosebud, Mont.

### FARM LANDS—WANTED 654
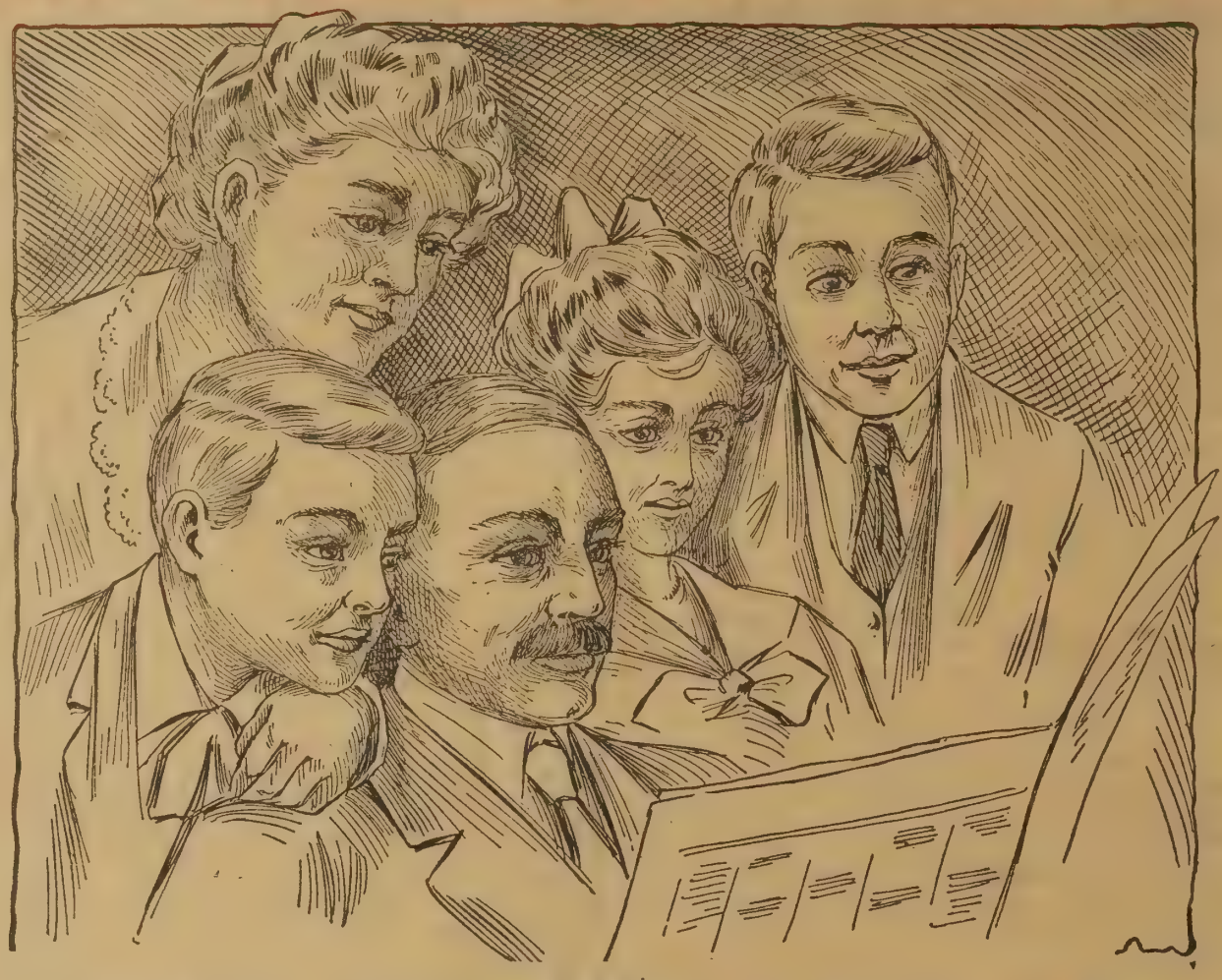
I WANT TO HEAR FROM OWNER OF farm or unimproved land for sale. Mrs. W. Booth, Pulaski, Iowa.

WANTED—TO HEAR FROM OWNER OF farm or unimproved land for sale. O. K. Hawley, Baldwin, Wis.

### FARM LANDS—Wanted to Rent 660

EXPERIENCED DAIRY MAN WANTS TO rent or work dairy ranch with stock, one to five years. Address Box 142, Deer Park, Wash.

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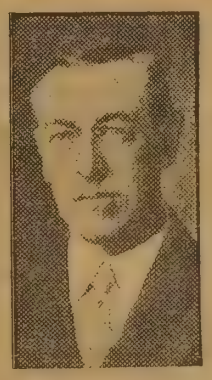
SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XLI. NO. 25. JUNE 20, 1918. ** WEEKLY.





THIS war is one of nations—not of armies, and all of our 100,000,000 people must be economically and industrially adjusted to war conditions if this nation is to play its full part in the conflict. The great results which we seek can be obtained only by the participation of all men of the nation, young and old, in a national concerted thrift movement. I therefore urge that our people everywhere pledge themselves as suggested by the secretary of the treasury to the practice of thrift; to serve the government to their utmost in increasing production in all fields necessary to the winning of the war; to conserve food and fuel and useful materials of every kind; to devote their labor only to the most necessary tasks, and to buy only those things which are essential to individual health and efficiency; and that the people, as evidence of their loyalty, invest all they can save in Liberty bonds and war savings stamps. With the desperate need of the civilized world today for materials and labor with which to end the war, the practice of individual thrift is a patriotic duty and a necessity. The man who buys government securities transfers the purchasing power of his money to the United States government until after this war and to that same degree does not buy in competition with the government. I earnestly appeal to every man, woman and child to pledge on or before the 28th day of June to save constantly and to buy as regularly as possible the securities of the government, and to do this as far as possible through membership in war savings societies. The 28th of June ends this special period of enlistment in the government volunteer army of production and saving here at home. May there be none unenlisted on that day.



Woodrow Wilson

# U. S. SOLDIERS ARE IN ACTION



The number of Americans who are playing a valiant part in the great war is steadily increasing. There will probably be a total of 2,000,000 American soldiers in Europe before the end of the present year.

You want news that is accurate, complete and up to date regarding these brave soldier boys who are fighting for you and your country.

You will get all the worth-while news of the war and those who are carrying it on by reading

## *The Twice-a-Week Spokesman-Review*

This is a splendid semi-weekly home newspaper which brings you every Tuesday and Friday a complete, accurate, condensed review of local, national and world events. It gives you a reliable narrative of history in the making. Being a member of the Associated Press, the important happenings are flashed to it instantly from every capital and village, and from every far-flung battle line.

We are very glad to be in a position to offer THE TWICE-A-WEEK SPOKESMAN-REVIEW at a big saving when taken in combination with THE WASHINGTON FARMER. It is a paper especially appropriate for our subscribers because it is a paper primarily designed for busy readers.

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June 20

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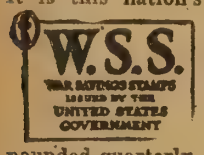
SUCCESSOR TO

Vol. 41. No. 25 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF June 20, 1918

# Let No One Be Unenlisted June 28

## *Greatest Saving Campaign in American History Is Now Being Waged*

A WAR savings stamp is as good as a five-dollar bill. It is backed by the whole resources of the greatest nation on earth just as is the greenback. It is this nation's promise to pay, a promissory note, a "baby bond," maturing January 1, 1923, and bearing until that time interest at the rate of 4 per cent compounded quarterly. It is more like cash than either a note or a bond, however, as it is always good for its purchase value with accrued interest up to whatever time the holder wants to turn it into the government and receive his cash. During the month of June the cost of the war savings stamp is $4.17. It increases one cent a month from now until January 1, 1923, when it will be worth $5.




Those, in brief, are the facts about the war savings stamp. Right now there is a campaign on in every state of the Union, in every county of every state and in every precinct of every county to sell the largest number possible of these government securities by June 28. That day is National Thrift day, so designated by President Wilson, who closes his appeal for this form of service to the country with the words: "May there be none unenlisted on that day."

The quota to be raised before January 1, 1919, is $2,000,000,000. Those who pledge themselves to purchase are allowed until that time to complete payment, paying part each month. The campaign for pledges, however, closes Friday, June 28.

During the next few days, if they have not already, active workers will call on every man and woman in the country for the purpose of receiving their subscriptions.

On this page is shown the form of the pledge to be signed, indicating the cost of a stamp if bought during any month of this year.

While the purchase of war savings stamps can be justified wholly from the standpoint of saving and investment (they are the best small investment in the world), the appeal is made upon a much higher plane, that of pure patriotism. There should be no other thought in the mind of any man or woman or boy or girl than this: How can I do most to help win the war? War is America's one business today. Nothing else counts. Till the war is won, no other activity can rest on a sound basis. If it is lost, business as America knows it is forever a thing of the past. Till it is won, honor and justice and liberty are in jeopardy. If it is lost, new generations will have to rise up and begin an age-long struggle for the reinstatement of these things which civilization has given us. This is the big reason for Liberty bonds and war stamps. The government needs our money and our producing strength as much as it needs our fighting strength on the field

When we purchase these war stamps we are merely transferring to the government the purchasing power of our money without doing ourselves the slightest injury. In fact, we are benefiting ourselves in many ways when we buy them.

While French and Belgian women and children are suffering inhumanities unprecedented even in the darkest ages, what hardship is it for us to save our dimes and dollars and lend them to help defeat their torturers? While British and French and our own American soldiers are facing peril and suffering and are actually dying by thousands, what hardship is it for us to give down to our last dollar, reserving enough to subsist on and no more, if necessary, to crush Mitteleuropean fiendishness?

Let no man and no woman and no boy or girl be unenlisted in humanity's cause when the sun goes down June 28. Let every one buy these stamps and thus help justice win. Buy them of your banker, your postmaster, your mail-carrier, through this paper—anywhere, but buy them!

| To the Secretary of the United States Treasury: | | Number | Maturity Value At $5 Each |
|---|---|---|---|
| I, whose signature appears above, now own ..... | | ..... | W.S.S.$ .....00 |
| I am already pledged to buy ..... | | ..... | W.S.S. .....00 |
| In addition to those now owned and pledged, I agree to buy War Savings Stamps as indicated. I will buy from | In JUNE (Cost $4.17 each) | ..... | W.S.S. .....00 |
| | JULY (Cost $4.18 each) | ..... | W.S.S. .....00 |
| ..... Name of Bank, Postoffice, Secretary of War Savings Society, or Selling Agent. | AUGUST (Cost $4.19 each) | ..... | W.S.S. .....00 |
| | SEPTEMBER (Cost $4.20 each) | ..... | W.S.S. .....00 |
| ..... Street and Number | OCTOBER (Cost $4.21 each) | ..... | W.S.S. .....00 |
| ..... Town. | NOVEMBER (Cost $4.22 each) | ..... | W.S.S. .....00 |
| I further pledge myself to save and economize, to help win the war. | DECEMBER (Cost $4.23 each) | ..... | W.S.S. .....00 |
| *Total War Savings Stamps Owned and Pledged*..... | | | W.S.S.$ .....00 |

**(Every member of your family should subscribe to the full limit of their ability—the legal limit being $1000 for each person.)**

# Mr. Hoover Has Been Misinformed

It seems beyond belief that Mr. Hoover, when advised of all the facts, could refuse to grant further flour milling privileges to the Pacific northwest.

For want of mill feeds the live stock industry is seriously endangered here, but when that situation was laid before the food administration at Washington, Mr. Hoover replied that he had information that there is an abundance of mill feed in the northwest. Mr. Hoover has been misinformed. The true situation is well stated by Dean O. L. Waller of the State College of Washington. In a report to the Spokane Chamber of Commerce Mr. Waller says:

"The mill feed situation is acute. Most of our wheat has been shipped east; there is very little oats at any time; there is virtually no corn, and a great deal of barley is being used for human consumption.

"The hog and poultry industries are facing a crisis. Farmers with hogs must reduce their herds and ship their stock east as feeders unless there is some immediate relief, and poultrymen must go out of business."

Mr. Hoover says that the mills of the Pacific northwest have already been allowed greater milling privileges than the mills of the middle west, and that if he now were still further to increase their allowance of wheat, it would be an act of injustice to mills further east.

But this is a problem that rises far above the selfish interests of the millers. The only question now is what is best for the nation. If national interests could be better advanced by milling all the wheat of the Pacific northwest in mills of the middle west, it should be milled there. If national interests call for continuous milling here, even though eastern mills should be closed, then that should be done.

**The plea for extended milling here, to provide feeds for stock, is backed up by national welfare at every point.**

For want of mill feeds the live stock industry is seriously endangered in the Pacific northwest. The nation can not afford that loss.

President Barnes of the grain corporation, says our stockmen can use corn; but this is not a corngrowing region, and to bring in corn would lay an added and unnecessary burden on the railroads when they are already overtaxed.

To haul corn from the Missouri river valley to the Pacific northwest, coal must be burned, and the country has no coal to waste.

The wheat in question must be milled somewhere. It was grown here, and all other factors balanced, it should be milled here. If milled here our stockmen will be tided over a trying hour, railroad congestion will be relieved to that extent and coal will be conserved. If shipped east in bulk, to be milled there the railroads will have to move a greater tonnage than if they carried only the flour, thus adding another waste of transportation and coal.

Against these weighty considerations the selfish interests of the eastern millers should not prevail.

Mr. Hoover has been wonderfully efficient and made few mistakes; but if he should hold to his mistaken ruling in this instance he would make a very grave blunder.

## APPLES, 20,000 CARS.

### Company Official Makes Estimate

The apple crop of Oregon, Washington, Montana and Idaho will approximate a little less than 20,000 cars this season, according to the estimate made by P. R. Parks, general manager of the Spokane Fruit Growers' company, which represents a considerable portion of the fruit growing industry of the four states.

Mr. Parks said that last year's apple crop approximated 23,000 cars. He says that evidences are that the crops in the Yakima valley, the Wenatchee valley, western Montana and western Oregon will be good. Southern Idaho, however, has been seriously damaged by frost and the crop will be correspondingly reduced. Certain isolated sections of eastern Washington are also reported to be frost damaged.

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### Must Keep It Up.

The following statement is issued by the United States food administration:

The May shipments of cereal foodstuffs to the allies from North America aggregate 700,278 tons as against 836,034 tons for April. They comprise:

| | Tons. |
|---|---|
| Corn and corn products | 67,276 |
| Oats and oat products | 155,961 |
| Rye and rye products | 8,684 |
| Barley and barley products | 87,642 |
| Wheat and wheat products | 371,253 |
| Rice, beans, peas, etc. | 9,462 |
| Total | 700,278 |

## Fix Wage Scale

### Farmers Meet and Make Schedule

At a meeting of the farmers representing eight counties of eastern Oregon and two of southeastern Washington, a general agreement was entered into at Pendleton June 10 covering the wages to be paid for various farm jobs this season. The schedule provides that common hay and grain harvest hands shall receive $3.50 a day; stackers and loaders in harvest $4; header and combine harvester drivers $5; sack sewers on standard machines $5; cooks $3. These wages include board as well.

The meeting did not attempt to fix a definite scale of wages for such skilled labor as separator tender, engineer, tractor operators and the like, it being considered that the demands in each position of this nature should regulate the wages paid in large measure.

Considerable discussion as to limiting the length of day for farm labor was entered into, but no agreement on this point was reached. A vote was taken on a proposal to make a day 10 hours, but the resolution failed.

There was manifest at the meeting the belief that labor shortage was over-estimated so far as farms in Oregon were concerned, although it was agreed that other fields of industry, such as shipbuilding and war work in general, was taking a great percentage of the ordinarily available farm labor. Many farmers who have been somewhat retired for the last few years expressed themselves as ready to undertake to do regular farm work this season if necessary.

Among those attending the convention aside from the 75 or so farmers present were: Dr. E. O. Wilson, farm specialist of the department of agriculture, and Farm Help Specialists Lyons of Wyoming, Thomas of Colorado, J. C. Scott of Washington, M. O. Evans, supervisor of work of 11 northwest states; George Thometz of Idaho, and Watson of Utah, and J. W. Brewer, farm help specialist for Oregon, who was in charge of the meeting.

The counties of Oregon represented were Baker, Union, Wallowa, Umatilla, Morrow, Gilliam, Sherman and Wasco. Garfield and Walla Walla counties of Washington were represented.

## Ship 1000 Cars of Vegetables.

Vegetables and truck farming is one of the big industries in Walla Walla county. About 1000 carloads are shipped out in a normal year. The Walla Walla Gardeners' association, of which William A. Ritz is manager, controls about 80 per cent of the acreage.

THE WASHINGTON FARMER

VOL. XLI. NO. 25.

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## *It Pays From Every Viewpoint*

Next week will mark the first observance of what ought to become a great day in America. Friday, June 28, is national thrift day, so proclaimed by President Wilson.

Amid all the horrors of this war there stand out a few things that will make the world better. One of them is the development of the spirit of thrift and saving. America needs that spirit, and it is slowly installing it in the place heretofore occupied by the spirit of carelessness and wastefulness. The people of America can well afford to eliminate 25 per cent of their spending. Even the most frugal can get yet closer to the simple life and better for it physically, mentally and morally—and financially!

It is good business for every one of us to save. Eliminate luxuries! Purchase only what is needed for efficiency in the conduct of business! Eat simple, wholesome foods! Dress comfortably and healthfully, but without costly and useless styles and nonessentials?

And let us put away the pennies and the dimes and the dollars that we can thereby save, investing them regularly in United States government securities—the thrift stamp, the war savings stamp or the Liberty bond. And let us not wait until national thrift day to begin. Begin now!

## *Inflated Prices Are Detrimental*

All over this land there is the declaration of dairymen that they can not afford to produce milk and cream for what they can get for it. There is the accompanying declaration on the part of the consuming public that it can not afford to pay even the present high prices. And now there comes a report that a 6-month-old dairy bull calf sold for $106,000 in the middle west the other day.

Can the dairy industry pay that price for any dairy animal that ever lived? What is $30 hay and $70 mill feed compared to prices like that for foundation breeding stock? What is $75-a-month labor, even inefficient labor, compared to that? What is the high cost of meals for the hired man and the family, compared to $106,000 bull calves that are not ready for service for several months yet?

Strictly good stock is essential to dairy success. No dairyman can afford to keep an ordinary cow now, much less an ordinary bull. But when it costs $100,000, or $50,000, or even $10,000, to get a strictly good sire, or the makings of one, the dairyman that needs the good stock to keep from going bankrupt can not afford to invest. He must necessarily accept the ordinary animal. If any prospective sire on earth is worth $100,000, the sire that can be purchased for $1000 is not worth having. He is a scrub, just plain scrub. There is no sire good enough to be worth 100 times as much as the sire that is good enough for the successful dairy of these turbulent days of the industry.

The question forces itself upon us: Are not the professional breeders or dealers who manipulate things to be able to give or to receive these inflated prices for individual animals doing the great dairy industry an injustice? The answer likewise forces itself upon us: They are.

## *Farm Labor Situation*

W. F. Calvert, in charge of the federal employment agency in Yakima, says that without being serious the present labor situation in his part of the country is what may be called "tight."

"There certainly is no surplus of farm hands," says Mr. Calvert. "Within the last 20 days we have found it difficult to supply all the requests for hands. The town jobs are not so hard to fill, but men and women do not seem to like country work. A compulsory labor law would be a big help."

Several Walla Walla county farmers report no difficulty in securing abundant help for haying. One man stated that he was paying $2.75 a day and had plenty of men. N. M. Williams says he is paying $3.00 for a 10-hour day, and has had more applicants for jobs than ever before.

"I would be perfectly willing to work my men eight hours if the others would do it," added Mr. Williams. "In the end the consumer would have to pay the extra cost of harvesting, however. He is the man who always pays in the end."

## *It Would Be a Wonderful Sight*

If the people of the northwest had an opportunity to see a great herd of hippopotamuses, a hundred head or more, corralled and up for inspection, what a scrambling there would be to get a view of them! Hippos are quite uncommon except for an occasional one in the circus menagerie.

But right here in our own state we have scenes just as wonderful. Suppose the people who live on Fifth avenue, or down in the slums of New York city, had an opportunity to see a hundred head of purebred Shorthorns or Holsteins or Herefords, or any other of the cattle breeds that are so common to this live stock growing northwest. It would be as wonderful to them as the wild animal show would be to us. It is hard to realize that there are hundreds and hundreds of people in the large cities of our own country who have never seen a cow, or at best have seen only one or two.

EVIDENTLY those philosophers who maintain that we are now entering the "woman's age," when women will hold the balance of power and will do pretty much as they please, are right. Women are everywhere taking up men's tasks. Women elevator operators are a commonplace. In Seattle women are going to work for the streetcar company as conductors. And at least one enterprising hotel, the Commercial, of Wenatchee, has replaced the ubiquitous bell boy with a bell girl. If the habit is well established by the time the war ends, possibly the men will take to doing the family mending, and to attending kensingtons.

NO man is so foolish as to think he can write checks against his indefinitely without bank account making an occasional deposit, but many of us think we can draw wheat and hay from the soil forever without giving anything in return.

LIVING and making a living are distinct aims in life; the satisfaction of living being largely the enjoyment of things you can not buy, while making a living gets you in the habit of enjoying only that which is bought with money.

WE'LL take a couple of dozen of those 6-months-old bull calves that are selling somewhere in Wisconsin at $106,000 each, as reported by recent dispatches.

ONE dime a day, put away in a cup in the pantry and invested in a war stamp each six weeks, would be nearly $20 in your Christmas stocking.

WHAT you have not done is of more importance to yourself than what you have done.

## *Solving the Farm Labor Problem*

The business men of Lowell, Ind., a town of 1800 people, will close their business houses two days a week during July and August, and the bulk of the merchants, clerks and professional men will help the surrounding farmers harvest their crops. Shortage of labor led to this decision.

This method of meeting labor shortage indicates a fine, patriotic spirit, but it would be a mistake to put too much dependence upon it. In emergencies it will be found much better, of course, than no labor, but the farmer would rather have the services of workers for a continuous or definite period, and nothing should be left undone to supply him with them.

In the state of Washington, the State Council of Defense is tackling this problem, we think, along wise lines. An appeal has been issued to city and town governments to pass ordinances that will discourage and even penalize loafing by able-bodied men. The pool halls are an enticement to idle labor in the cities and larger towns. They should be closed by ordinance during daylight hours.

More vigorous enforcement of the laws against vagrancy will also have a tendency to deter able-bodied men from loafing around the towns and of sending them out to hunt jobs in the harvest fields.

County commissioners and city and town governments can help solve the farm labor problem by suspending contract work that is not absolutely necessary. Road and bridge building, street improvements, etc., all draw labor from the harvest fields. Wherever possible public works should be carried over until after harvest, thus helping the cause of food conservation and distributing employment over a longer period for the benefit of the workers.

In the cities and the larger towns the Young Men's Christian association is organizing the United States Boys' Working Reserve, a splendid movement. It aims at the organization and direction of town and city boys between the ages of 16 and 20, inclusive, and holding them in reserve for calls from the farming regions.

We must not permit any food products to be lost anywhere for lack of labor. Full utilization should first be made of trained farm workers, and then if any gaps remain, they should be filled by drawing on such reserves as are best suited to the needs of the hour. If put to a pinch business should be suspended in country towns and the schools closed in the upper grades. But it will be better, before resorting to emergency methods, to work out ways for the fullest possible utilization of the idle and semi-idle men and youths of the country.

## *The Root System*

Several years ago, in my search for the causes of apple rosette, I made more than an ordinary study of the root system of apple trees. I dug around 600 trees in the Yakima and Wenatchee valleys, and studied the root systems of trees that had been dug up. In the Congdon orchards 150 trees or thereabouts had been dug out from places not adapted to orchard, and they revealed a close connection between certain root conditions and certain manifestations on the top. Lately we have dug out about 200 trees in our own orchard, most of them having grown to be so large that they crowded one another, and in order to grow better fruit we had to sacrifice some of the trees. My interest centered chiefly upon the relation existing between the top and the root systems, and certain conditions of the root as manifested in the top.

The principal offices of the root are to hold the tree in place and to gather food.

The fine feeding roots are the most abundant in a rich soil, being attracted by the amount of food distributed in the soil. The feeding surface of roots is near their ends. As roots become old and hard they serve only as channels for the conduct of food and as supports for the tree. Whatever injures the tender root hairs injures the feeding qualities of the root system.

G. L.

# Austria Tries Drive on Italy

## *May Be to Help Brace Up Morale of Austrian People*

After nearly nine months of comparative silence on the Italian front the battle has begun to rage there again, with Austrian troops trying a drive on practically the entire Italian battle line. At this writing it is hardly possible to estimate the magnitude of the fighting, but it is apparent that the Austrians have undertaken a major offensive against the Italians. Their first onslaughts, however, failed to do any serious damage to the latter, who were not surprised, They have, in fact, been surprised that the drive was not launched earlier. The opinion is freely expressed that the drive is primarily for the purpose of strengthening the public morale of the Austrians. It is reported that considerable discontent in that country is noticeable owing to the conditions brought about by the war, and by the desire of several of the Austrian dependencies for more liberal government. To what extent this will prove true is wholly problematical so far as the outside world is concerned, and should not be depended upon in the slightest degree in the calculations of the allies as a factor in the winning of the war.

There has been comparatively little fighting along the French front for several days. No advances of any consequence have been made by the Germans since their first great drive toward Paris more than two weeks ago ceased. The attempt to straighten out the line to the northwest of the River Marne was largely a failure because of the strong allied defense.

### Another Blow Is Sure to Come.

Where the next blow will be struck is not hinted with any degree of authority at this writing, though it may have been struck before this reaches the reader. But this fact is certain: Germany will strike again, and she will strike with her utmost power. The best that the allies have will be required to keep the Teutonic enemy from capturing Paris or the channel ports, either of which would be a disastrous loss, one that would require a million or more men additional at least from America to recompense for. The situation remains as it has for the past year—America must get the largest number of men possible and the greatest amount of military equipment possible to France in the shortest time possible. It is rapidly becoming recognized now that this country decided to enter the war at the latest hour when it was possible still to save the allied cause. England and France and Italy would have lost and the Hun hordes would have attempted an invasion of America. This can hardly be doubted by the most doubtful. Had Russia remained stable it is possible that the allies could have won without America's help, but not otherwise. To be pessimistic now is folly, but to be over-optimistic is criminal. Nothing but the most vigorous aid America can give, and that right now, can stave off defeat. Never was there a time when the word "now" meant so much. Strength to withstand the onslaught till after another winter is the great need. After that—well, after that remains to be seen, but this country can put something like 3,000,000 troops in France by next spring and equip them for the kind of combat that they are capable of. From then on, barring situations and developments that can not now be forecast in this rapidly changing world allied strength will increase until in time an overwhelming force will face Germany. But to falter during the next few weeks and months is to let all of Belgium's and France's and England's unspeakable sacrifice count for naught, to add ten years to the war or to actually kneel to German authority, the authority of inhumanity.

### American Army Losses Not Large.

The war department has issued an official statement showing that the total losses of the American army in France is now 8085, of which 3192 are deaths, 4547 wounded and 346 missing, the last figure including the prisoners in German hands. Of the deaths, 1172 were killed in action, 364 died of wounds and 1234 died of disease. It is shown that with 800,000 men transported from this country, only 291 have been lost at sea, they being on the two torpedoed ships, Tuscania and Moldavia. The loss of only 1234 from disease out of 800,000 indicates the excellent physical condition of the army and the care given them in camp, while the loss by wounds of only 364 out of a total of 4547 wounded indicates the rescue work that is being done by the Red Cross and other surgical and medical agencies.

### German Fleet May Come Into Open.

There is a growing belief that the German naval authorities are contemplating at no distant date the launching of a great naval offensive directed against the British navy and its allies. The most definite evidence of this comes through messages from Switzerland. Ever since the opening of the war the British fleet has kept the German naval forces with the exception of the submarines blocked up in German harbors. It is wholly problematiacal what course the naval offensive would take if launched, but there appears to be a strong sentiment of optimism among the naval authorities of Great Britain and America. Should such offensive be launched the American navy would throw its entire power, if necessary, into the combat, reserving only such portions as are necessary for home defense and operations against the submarines in local and allied waters.

### May Make U. S. Waters War Zone.

Reports from Berlin indicate that very soon Germany will issue a proclamation to neutral nations warning them against operations of their vessels in American waters, declaring the Atlantic coast of the United States a war zone where unrestricted warfare will be carried on in the same manner as it has been in the war zones of European waters. It seems hardly necessary, however, that such proclamation should be issued in view of the fact that many of the vessels that have been sunk by German submarines in American waters during the past two weeks have been neutral vessels. A formal proclamation could scarcely be a more effective warning than the launching of the unannounced submarine campaign.

### Sugar Limit Is Reduced Again.

In order to insure a plentiful supply of sugar during the fruit season for canning and preserving the national food administration has issued new orders reducing the amount of sugar that may be purchased for every day home use. No dealer may now sell more than two pounds of sugar at any one time to any customer who lives close to the point where the sugar must be purchased. Five pounds may be sold to a person living at a greater distance, such as a farmer living a few miles from the store at which he must trade. The former regulation permitting the purchase of 100 pounds of sugar per family for canning purposes is still in effect, however. Those making purchases for canning under this regulation must sign an agreement that the sugar will be used for canning purposes.

### Protest Increased Freight Rates.

The public service commissions of Oregon, Washington and Idaho have joined in a formal protest to Director McAdoo against the wholesale 25 per cent increase in freight rates made recently. They set forth that the agricultural industries of the northwest as well as the consuming public in general will be done a great injustice if the increased rates are allowed to stand. As has been previously pointed out practically all of the railroads operating in the northwestern territory have been making reasonable profits under the rates as they have heretofore existed. Justification for the increase is found, if at all, in the failure of the eastern roads to make a profit on their investments. The northwest makes its protest on the basis that its people should not be penalized for conditions that exist in other sections of the country.

### Unprecedented Harvest Wages.

The wheat harvest is now on in Oklahoma and Kansas and unprecedented wages are being paid. Six thousand workers are now in the Oklahoma harvest fields, and the going wage there is $3.50 to $4 a day, with board. In Kansas, where 30,000 workers will soon be needed, $4 to $5 is being offered.

### I. W. W. Trial at Chicago Continues.

The trial of more than 100 members of the I. W. W. charged with sedition and disloyalty is still in progress in Chicago, having continued already longer than it was believed would be required to complete the case when it opened. A great mass of evidence has been introduced and compiled for submission to the jury that is hearing the case. Much of the testimony has dealt with operations of the I. W. W. in the northwest, touching upon their alleged destruction of wheat fields, threshing machinery, lumber mills, logging camps and the like. No predictions is made as to when the trial will be completed.

### New Hemp Twine.

Professor R. A. Moore of the Wisconsin university, after completing a series of experiments to make twine from hemp, declares that these experiments are entirely satisfactory. The result of the new system of making twine will be to relieve the old sisal fiber situation which has carried prices sky high more than once. It is not improbable that all of the hemp states will report increased acreages. The estimates of hemp acreage for 1917 are: Wisconsin, 7000 acres; Kentucky, 18,000; California, 10,300; North and South Dakota, 7500; a total for the United States of 49,200 acres.

### Farmers Are Last.

A larger proportion of brokers than of any other occupational class reported incomes of more than $3000 in 1916 and farmers made proportionately the smallest number of returns, according to an analysis of income tax returns for 1916. One out of every five brokers made returns, but only one in 490 farmers. Nearly one-fifth of all lawyers and judges made returns.

### Another Liberty Loan Coming.

The U. S. treasury department has issued information indicating the coming in October of the fourth Liberty loan, which is unofficially announced to be a $6,000,000,000 issue.

### Get a Farm Service Flag.

The man, woman, boy or girl who stays at home and works hard to produce necessaries for the soldiers in Europe are entitled to real war service recognition. That is the idea back of the Washington Farmers' farm service war flag. It is pennant-shaped, made of the good old red, white and blue, and has a star representing the producing farm home. Small stars are added to represent each worker of that home.

.....

**Convenient Order Blank.**

THE WASHINGTON FARMER, ——————1918.

Review Building, Spokane, Wash.

Enclosed find five cents (5c), for which please send me a Farm War Service Flag (printed on enamel paper) with ..... extra small stars for farm workers.

Name .....

R. F. D. ..... Postoffice .....

Box ..... State .....

## *Washington Gleanings*

From all indications there will be at least 30 silos this season in Grays Harbor county.

A supply of 100,000 cutthroat trout fry has been promised for the streams of Grays Harbor county by State Game Warden Darwin.

County Agent L. S. Keyes of Cowlitz county reports that the newly organized Kelso Live Stock club is going in strong for poultry.

The Whitman county council of defense was recently organized at Colfax, with Dr. W. B. Palamountain as chairman of the new organization.

Keen interest in Dr. S. B. Nelson's talks an animal diseases in Clallam county during farmers' institute work is reported by County Agent M. R. Alleman of Clallam county.

The sheep school at the Washington State fair at Yakima will be held every morning between 10 and 12 o'clock. Among the lecturers will be Professor E. J. Iddings of the University of Idaho.

W. O. Freese, one of the pioneers of Lincoln county, has sold his ranch of 280 acres to Ben Jayne of Edwall, the price named being $95 per acre. Mr. Freese settled on part of this farm in 1882 as a homestead.

The stockholders of the Farmers' Union Mockonema Warehouse company held a meeting recently at Colfax, and a 40 per cent dividend was declared. Every one of the old officers was reelected for another year.

Reports from many sections indicate that there is greater tendency toward preparedness on the farms this season than ever before—preparedness in the way of early repair of farm machinery, early construction of silos and grain storage facilities, early laying in of fuel for winter.

Sunday picnickers from Bellingham are to be asked to hunt for sphagnum moss while spending the day in the woods. Whatcom county has been asked to supply 10,000 sphagnum moss dressings for the Red Cross, and the Bellingham chairman, George H. Bacon, has hit on this plan of facilitating the collection.

The agricultural class of the Castlerock schools, in their final list of shipments of moleskins, report more than $75 received by the school for pelts during the last winter and spring, not only representing a profit to the school children, but ridding farms of hundreds of pests. The money was invested in war and thrift stamps.

The school exhibit held recently at Doty was the largest of its kind in that part of the state. The work in manual training was unusually attractive. Otis Pendergraft, who is now in the army, had on display a buffet made of Honduras mahogany, valued at $600. A complete bedroom suite, valued at from $1100 to $2000, was also exhibited.

Fruit of many districts has again been hit hard by pestilence in the nature of frost. Many districts have escaped, but the losses merely go to show again that a farmer can not afford to have all his eggs in one basket. He must have two or more sources of income if he is to be successful year after year. No crop is certain every year, and neither is the price of every product adequate every year.

In spite of rumors that the potato acreage in all parts of the state had been reduced this year on account of unsatisfactory financial returns from last year's crop, conservative authorities in Yakima county now claim that premier potato district of the northwest has not decreased its acreage. It is estimated that there will be 12,000 acres in potatoes again this year. Last season's yield was about 2500 cars.

That the present attack of aphis on the alfalfa fields of Yakima county is one of the worst he has ever seen is the declaration of County Agent J. N. Price. The damage is worst on those fields which are being grown for seed, as these tracts are irrigated as little as possible. On the other hand, Yakima has not been visited by the green worms which are making the lot of the beet grower in Walla Walla county a hard one.

Twenty-four thousand acres of wheat are being grown in the Yakima country this year. This is a big increase over last season. A further indication of the same tendency is seen in the statement that out of 15,500 acres of new land put under cultivation this year, 7500 or nearly half, has gone into wheat. Part of the rest of this new land has gone into cereals, also 3000 acres being planted to barley and 1000 acres to oats.

Complaints are heard from many sources that, although there is real need for total abstinence from the use of wheat until after harvest, bakers are not required to put a totally wheatless bread on the market and the so-called Hoover recipes for war breads all, or nearly all, call for at least half wheat flour. Some one who will prepare a repipe for a "light bread" made entirely out of substitutes will do many loyal patriots a favor.

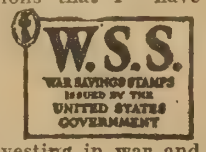
Employers of labor and students of the labor situation expect high wages in the harvest fields of the Pacific northwest. The Spokane agent of the United States employment bureau forecasts a $4 minimum for the grain fields of eastern Washington and northern Idaho. He bases this prediction on a study of wages in the harvest fields and lumber camps of this region for the past 12 years. In harvest time men come out of the lumber camps, and there has always been a close relation between the wages paid in the woods and the harvest fields. If lumber camp wages were $2 a day without board, he says, harvest wages were $2 a day and board, and as lumber camp wages are now $4 without board, he expects harvest hands will get $4 and board.

# Have Cake and Eat It, Too!

## *With W.S.S., Uncle Sam Makes This Possible*

The different departments of the Farmer are edited with special reference to those who are interested respectively in live interest to this issue, and we have stock or orchards or family circles, and so on. Here is an article that is of special value and taken the liberty of bringing it into the first part of the paper, although it is immediately addressed to the large number constituting the "family circle," who are always glad to hear from Mrs. Barland.

Dear people of the Family Circle: I have been so busy lately along active lines of war questions that I have scarcely had time for other thoughts, but between times I am wondering if my farm friends are alive to their privilege, not to speak of their duty, of investing in war and thrift stamps. Here is a case where we can have our cake and eat it, too; that is, we can buy thrift stamps from week to week, converting them into war stamps as the cards are filled, comfort ourselves with the knowledge that we are helping the government all the time, and by and by get back all we have loaned to Uncle Sam and take our compound interest. And this is the smallest part of the advantage of thrift stamp buying. Do you know, dear folks, that we people of the good old U. S. have been woeful spenders and very wasteful.




Our country is so great, so wonderful in providing everything we need in such abundance that we have forgotten what our forefathers endured and how they denied themselves to give us their country. We have forgotten all about brotherhood of man. We have declined to be interested much, in any one outside of ourselves and our own families. Worse than that some have not extended their interest to reach the needs of their very own mothers. To prove my statement I will tell you that I have visited an old lady in a county poor house in the state of Washington who has raised 13 children and she does not know the whereabouts of one of them. Can you imagine anything any more selfish than that?

That is extreme, I am sure, but I have known several cases almost as disgraceful. Are you wondering what all this has to do with thrift stamps and thrift generally? Well, the idea of the stamps or war savings is two fold: It furnishes money to the government to carry on the war and teaches the present generation to save. As I said before we have been a selfish and wasteful nation. We do not save methodically, we do not teach our children to save. Too many reach old age dependent on charity.

Go where you will, in town or city, and notice how the children clamor for pennies for candy and gum and nickels and dimes for the movies. It is interesting to me to watch children these days in families where the thrift stamp habit is being fostered. A case in point comes to my mind. The oldest girl won a prize in college for the highest scholarship. She immediately invested in two war stamps. The next younger received as a graduation gift $5. She immediately bought another war stamp. The youngest, a boy of 12 years, had a birthday and received $2.50 as a gift and he immediately added 10 thrift stamps to his collection. Now as I said before we have still another advantage in making this investment in W. S. S. (Everybody in the United States by this time should know that W. S. S. stands for war savings stamps). By and by, after we make a perfect job of licking the Germans and our boys come marching home, there must come a great readjustment of all commercial economic conditions. About all the money in the world is circulating now and every one can work if he wants to. But after the war is over and all the vast armies are once more back in civilian life then will come changes. There will be more people for jobs and wages will be less, without doubt, and especially prices for produce will be less. About this time our dear old Uncle Sam will put his hand down into those striped trousers of his and hand out good hard cash for these war stamps, which will come in mighty handy and will make of us a thrifty nation instead of being struck all of a heap with a hard times panic.

Another thing to consider is this: The purchasing power of a dollar now is very small. One can hardly see what can be bought for $1, because war-time prices are always inflated, but by and by when the war stamps come due prices will have been adjusted to somewhere near a proper proportion, and then, when we cash in our stamps we will be able to buy much more for a dollar than now, so we will have, in addition to what we have put into stamps, our compound interest and all the additional purchasing power of our money. But best of all we will have formed the habit of saving. We will have learned that nickels and quarters saved soon makes dollars and that we can go without a lot of things that do us no good.

And now, dear friends, let us be thrifty and sensible and buy these stamps week by week, all we possibly can. Let us make up our minds that we will do it and plan accordingly, for this is now our war for our freedom and for our country. Our government is just us, you and I and all of us, and we are simply helping ourselves when we aid the government.

ALICE BARLAND.

### Mike Horan's Purebreds.

In an article in The Washington Farmer on the notable progress of the Wenatchee valley, and mentioning the fact that live stock was more and more dividing the attention of formerly exclusive orchardists, it was incidentally mention: "Mike Horan, for instance, has a fine herd of grades with a sprinkling of purebred Ayreshires."

According to a letter received from Mr. Horan, he has a perfect right to take exception to this sentence. He says: "Of grades and Ayreshire cattle I have none. I have not a grade cow on the ranch, nor bull." The Washington Farmer will also take its earliest opportunity of accepting Mr. Horan's invitation to make a visit to his farm and "the largest herd of purebred white-and-black cattle in the Wenatchee valley."

### Hats Off to Garfield.

Garfield county claims the honor of first reaching its war savings stamp quota in the present campaign, so far as this state is concerned. With a quota of $88,060, the people of that county under the leadership of L. M. Knettle, had subscribed nearly $97,000 for stamps prior to June 1. The first state in the nation to go over the top was Nebraska. With a quota of $26,000,000, a total of more than $30,000,000, has been subscribed and the greater part of it already paid in.

### GREAT WHEAT LAND.

#### Walla Walla Makes Big Records.

When Mother Nature dealt out the supplies of plant food to various northwestern areas, she must have absentmindedly spooned out a double dose for the wheat lands of Walla Walla county. Consider, for instance, the case of the old Russell farm, on which in 1859 was planted wheat which may have been the first grain of the kind raised in Washington, and certainly was not far removed from the first. A few years ago this farm was owned by Frank Richmond, who reported a 64-bushel yield.

One of the foothill farms, owned by the Drumhellers—it was George Drumheller, whose $200,000 wheat check made everybody's eyes blink a few years back, you remember—has been farmed for 30 years, and during the entire three decades only two crops have averaged below 50 bushels to the acre.

And while we are on the subject, it might be added that Walla Walla, according to W. H. Reed, formerly state grain commissioner, is the first part of the state in which the now famous "Bluestem" was raised. The seed was brought to America from Australia, and soon established such a name for itself in Walla Walla, both because of its milling qualities and its ability to yield well in light soils, that it was sought for all over the country.

# A Western Washington Berry Farm



**Part of Charles Hemming's two-acre berry farm at Puyallup, Wash. Mr. Hemming finds that it keeps him busy seven days a week doing the work, indoors and out, on this small farm. The entire place is in applepie order, indicated by the corner shown in the photo.**

# Washington Boys in War Service

From the Twice-a-Week Spokesman-Review.



**EDWIN L. CALDWELL, Prosser, Wash.**—Is now in France, with the headquarters company of the 41st division. He enlisted August, 1917, with his brother, George Caldwell, who died in France March 4. His parents, Mr and Mrs. J. W. Caldwell, live on a farm near Prosser.



**JAMES E. WILLIS, Tekoa, Wash.**—Was called for service at Camp Lewis, October, 1917, where he now is a first class private, in the headquarters detachment, 216th engineers. Before entering the army he was engaged with his brother, J. H. Willis, in farming near Tekoa, Wash.



**RAY T. KERSHAW, Wenas, Wash.**—Entered military service October, 1917, and now is serving in the veterinary corps, Camp Kearney, Cal. Before entering the army, he was engaged in agricultural work in the Wenas valley. His parents are Mr. and Mrs. R. H. Kershaw, farmers, near Wenas.

# Wheat Minimum $2

## Julius Barnes Confirms Report in a Special Message to the Washington Farmer.

The grain buying corporation of the national food administration is working out a plan, which, if carried out, will guarantee to every farmer, no matter where located, at least $2 for his wheat. This ruling will not affect the northwest in any great degree, if at all, as $2 a bushel or more is now guaranteed under the present regulations, but if the proposed additional regulation is completed it will carry out what most people believe to have been the original intention of congress when it passed the $2 wheat price act a year or more ago.

Upon receiving an unconfirmed report that a flat rate of $2 a bushel was to be made to all growers everywhere, the Washington Farmer wired Julius H. Barner, head of the U. S. grain buying corporation at New York as follows:

"Dispatch from San Francisco June 16 quotes R. A. Levin saying grain corporation is planning $2 flat wheat price f. o. b. shipping point. Is this action contemplated, and if so, what territory will be affected?"

To this inquiry the following telegram was received from Mr. Barnes:

**"Referring to your message, we are trying to work out a plan by which $2 per bushel for No. 1 grades in store at public elevators, or, where no public elevators exist, free on board outgoing cars, should be MINIMUM price at any point in the United States least advantageously located as to freight rates in reaching terminal markets. We expect to succeed in working out such a plan and hope to have details prepared in the very near future."**

### GROWING TWO CROPS.

#### At Same Time On the Same Land.

By CARL J. MENZE.

I have read with interest the account of an English farmer who raised two crops on the same piece of land at the same time. Under certain conditions, I believe that this method would prove successful in localities west of the Cascade mountains, where there is plenty of moisture, if a few experiments were made to determine the exact time to plant the grain and what variety to plant, and if one had the right machinery.

A few years ago we had a small piece of ground which we seeded down with clover and timothy, with spring wheat as a nurse crop. As the wheat was seeded late and we were afraid it woludn't ripen that year, we cut it for hay. After the hay was off the ground and the grass was well rooted we grazed the piece for a short time. The following winter was mild and the wheat, not having produced seed, started to grow with the clover and timothy. We cut this combination for hay. A point that I can recall to mind in particular was that the heads of the wheat were above the tops of the clover and timothy and therefore could be cut separate if one had the right machine.

Another point was that the wheat was not fully matured for grain when the hay was cut. The difference between this method and the method of the English farmer was that he planted a winter cereal. However, the English farmer was experimenting with a definite end in view; we were merely following an established custom, and on reading the account I realized both methods had much in common. Just what variety of grain to plant so that it would ripen and could be cut with the clover and timothy, and when to plant are points that could only be determined by observations, experience and practice.

### Coming Events.

June 28-29—Convention Lincoln County Farmers' union, Odessa, Wash.
June 28-29—Dairy institute, Wenatchee, Wash.
August 19-25—Convention National G. A. R., Portland, Ore.

**Fairs, Shows, Exhibits.**

September 2-7—Spokane Interstate fair, Spokane, Wash.
September 16-21—Washington State fair, Yakima, Wash.
October 1-6—Western Washington fair, Puyallup, Wash.
November 7-13—Northwest live stock show, Lewiston, Idaho.

**Live Stock Sales.**

June 26—Guernseys, E. R. Brady, Satsop, Wash.

# Black Soil of the Ukraine

## *Maintain Production Without Artificial Fertilizers*

We find the name Ukraine mentioned often in the dispatches now in connection with Russia's woes. It is a vast, rich region of southern Russia, given largely to the growing of wheat and other grains, and since the kaiser's armies are in control the hungry German people have eager hopes that it will afford them bread.

The production of wheat from the black soil of the Ukraine has been maintained for centuries and yet the soil has never been artificially fertilized. It is said to be today as rich in the qualities which nourish and produce great crops as it was hundreds of years ago.

What is the secret of that inexhaustibility? Some observers say it is nothing more than simple dust, and that theory is now being tested out on a farm near Detroit, Mich.

In the course of the discussion an American who has gained high reputation in research work said that it would probably be found, if scientific investigation were made, that these black lands are plastic or soft, excepting in the very dry season. Then they become dry and crack and the surface, by this natural action of the elements, is covered with the finest kind of dust particles. This dust, by certain chemical attractions, draws from the atmosphere carbonic acid gas, absorbs it and in that way communicates it to the soil. There is no other explanation of which men of science have any knowledge of something that has been regarded as a mysterious phenomenon associated with the unimpaired fertility of Ukraine black lands.

It occurred to scientists, after the war began and the Ukraine began to bear such an important relation to it, and especially in view of the scarcity of fertilizers in the United States, that it might be worth while to make an experiment here. Some of the farm lands of Michigan are very rich and yet it has been found necessary, in order to secure the highest production, to fertilize them artificially. Would it be possible, scientists asked, to coax nature to furnish the ferfilizing quality that is necessary.

The experiment was made by converting ordinary clay into dust or the smallest particles possible and, having done that, by depositing a small quantity of this dust upon the soil. It was also necessary, in order to make comparison or to perfect the experiment, that a part of the farm should not be treated in this way. The dust was sifted over a portion of the farm and then in due time corn was planted. So, also, corn was planted in an adjacent lot which had not been treated in this monner. To the gratification of those who were making the experiment, the corn planted in the plot furnishing the test sprouted earlier, grew rapidly and gives promise of coming early to maturity and of being in a very healthy state.

Today the corn on that portion which was to furnish the test is considerably more than a foot high; the corn in the other portion is only two or three inches high. The experiment is regarded as giving excellent promise of furnishing a formula whereby farmers may in the future be able to rely upon inexhaustible natural resources for the fertilization of their farms.

This experiment is due to the experience of American scientists who visited Russia shortly before the European war began. They were entertained by scientific men of Russia. At one of the gatherings discussion was centered upon the wonderful black lands of the Ukraine district.

The theory is not entirely new to the Pacific northwest, for the thought has frequently been suggested that favored areas of the Inland Empire enjoy soil enrichment from action of the winds and dust. C. L. Smith, agriculturist of the O.-W. R. & N., has advanced that theory as possibly explanatory of the long-maintained fertility of the wheat lands sloping up toward the Blue mountains in Walla Walla and Garfield counties of Washington.

## ATTACK CATERPILLARS

### Should Lose No Time in Delaying.

The time to destroy what is known as the tent caterpillar is while he is "tenting," says a farm pest expert. While it is probably late for any warfare on this pest in most localities of the northwest, there are still some that can be destroyed. They are known as tent caterpillars because they make their temporary homes in little tent-like webs on the trees, rose bushes, berry bushes and the like. If they have developed a little they may be seen crawling about on the surface of their little tents and in a short time they do serious damage to the tree or shrub on which they live, being voracious eaters of leaves. At the time they first appear on their tents or just before, a match, assisted by a piece of paper on the end of a pole, if the pests are out of reach, is an excellent weapon of offense against them. The expert advises that everybody take care of his own trees and shrubs, thereby preventing the spread of the pest.

## Get Bulletin No. 942.

The United States department of agriculture is urging clover seed growers in the northwest to send in their names for copies of farmers' bulletin No 942, which deals with the clover flower midge, one of the most destructive clover seed pests known. While this pest may not be troublesome in many localities of the northwest, farmers who gro wclover are urged to watch carefully for it in order to begin a systematic campaign against it as soon as it is discovered. The pest originally appeared in eastern and central states, but of recent years has been discovered moving westward. The pest is found as a tiny maggot in the clover blossoms during the springtime. This maggot is the clover midge in the larva stage. The department of agriculture says that the clover blossoms infected are easily distinguished by their imperfections when inhabited by the pest. They have a ragged appearance where any considerable number of the little wrigglers are present. One of the methods of control advocated is the prevention by pasturing or otherwise of early spring blossoming of the clover.

## FEED DRY MASH.

### Would Regulate Poultry Feeding.

The federal food administration is doing its utmost to enable the poultryman to feed his flock without the use of as much grain as he has heretofore been accustomed to use. The administration recommends reducing the amount of whole or cracked grain feed and the substitution of an increased amount of mash made from the by-products of the coarser grains.

The present regulations prohibit feed dealers having on hand more than 60 days' supply of mill feeds. While this would permit the farmers to gradually lay in considerable of their winter supply, it is urged that no great effort be made to do this during the hot weather as there is danger of spoilage, but it is urged that as the cooler weather of fall comes on farmers undertake to lay in very liberal proportions of the winter requirements, especially of the coarse feeds and their byproducts. The administration makes no forecast as to the actual cost of poultry feeds during the coming year, but promises that they shall be more nearly in conformity to the price of the product from which they are made than has been the case heretofore.

### Actors to Do "Bit."

American actors are going to France to entertain American soldiers in American Y. M. C. A. sandbagged huts close to the front.


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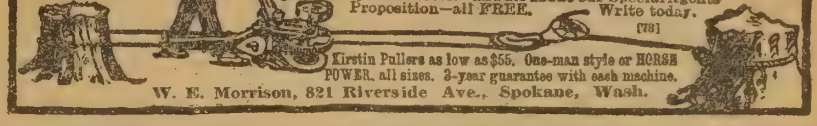
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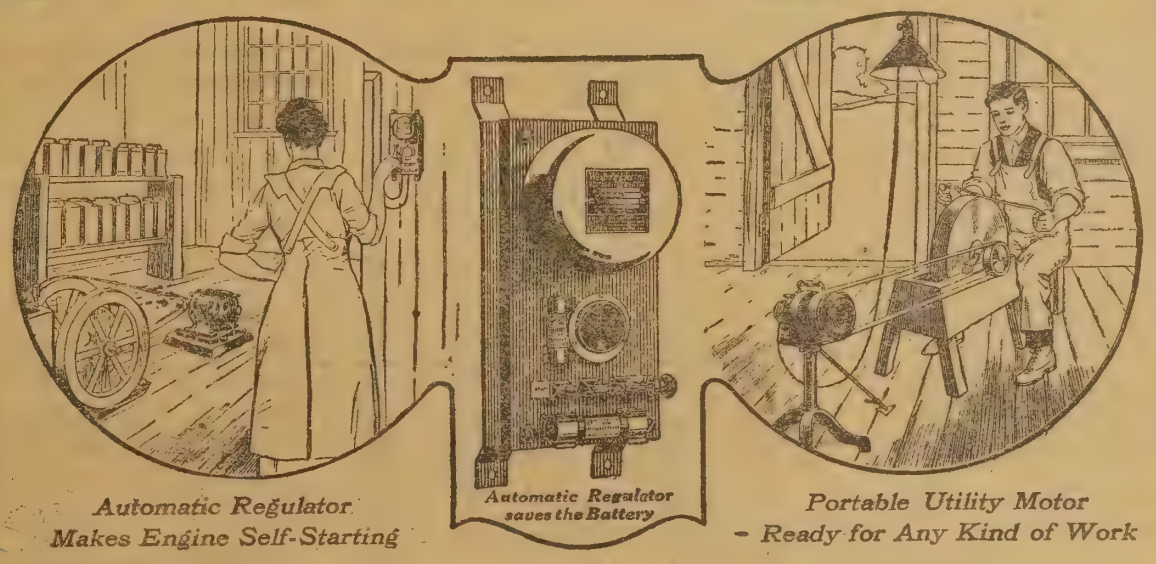


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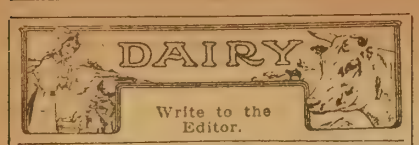
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A. B. NYSTROM, Editorial Contributor

## Community Bull Association.

The most practically organized and the most harmonious and successful community bull association in the United States is the Jersey Breeders' association of Hermiston, Ore. This assertion was made by Mr. Wyhkues of the United States department of agriculture, who has traveled extensively over the dairy regions of the country. The name adopted indicates the breed selected, as it is purely a community bull association. The members are divided into blocks, each member paying $5 a share and each share representing one cow. No bull is allowed to serve more than 65 cows and younger bulls are limited to a smaller number. A board of directors, consisting of one representative from each block, with the officers, is the governing body.

When the association was organized it had the good fortune as well as good judgment to secure two high-class bulls from Ed Cary. One more has since been purchased from Mr. Cary and one from D. C. Howard of Cary breeding. One has been purchased from D. Brooks Hogan of Ladd breeding—Golden Glows Chief strain. It is doubtful if five better bred bulls along producing lines can be found in any one community in the northwest. Each bull is used in one block two years, then changed, No. 5 going to No. 1's place, No. 1 to No. 2's place and so on around the circle.

The first heifer to freshen took first place in the show ring and first in the milking contest in her class at the dairy cattle show at Hermiston. It can be seen that there is enough line breeding to make most satisfactory crosses. There were no registered dairy cattle on the Hermiston project when the association was formed. There are only a few pure-bred Jersey females yet, but there has been a remarkable improvement in dairy cattle since the shows and the bull association were started. The constitution and by-laws of the association were drawn up by W. H. Kerli, U. S. field dairyman, to whom is due much credit for the association's success.

When the Hermiston irrigation project was opened, fruit growing was the paramount idea. But now there is great interest in dairying. A good creamery in Hermiston is supported almost entirely by the cows on the project.

There were about 6500 acres in cultivation on the Hermiston project last year. Of this 4049 was in alfalfa and more land is going into alfalfa every year. Over 1000 acres of alfalfa are in orchards and this, of course, is not solid alfalfa. Alfalfa grown last year amounted to 14,000 tons. There were 822 dairy cattle on the project, exclusive of calves, according to the census of the reclamation service.

The following are the directors of the Jersey Breeders' association: George Cressy, president; George Ellison, vice president; C. M. Jackson, secretary and treasurer; W. H. Starr, director block 1; F. P. Phipps, director block 2; C. E. Spencer, director block 3; P. P. Sullivan, director block 4; William Bensel, director block 5. H. A.

## To Put Jersey on Test.

A. Adolphson of Chehalis, Wash., is putting his good Jersey cow, Golden Lactea 3d, on official test. Last year when she freshened in January she produced 94 pounds of fat, or 110 pounds of butter, but inadvertently all of Mr. Adolphson's records were lost and his tests were all discontinued. Golden Lactea 3d is now 10 years old and, although not specially prepared, it is Mr. Adolphson's desire to see what she is capable of doing, before she is too far past her prime.

Mr. Adolphson now had 12 purebred Jerseys. One daughter of his herd bull, St. Mawes of Oak Springs, milked 34 pounds with her first calf. Besides the herd bull and one cow of Ed Cary breeding, Mr. Adolphson has a few of the Adam Stevens and Ladd Breeding and has a good producing herd.

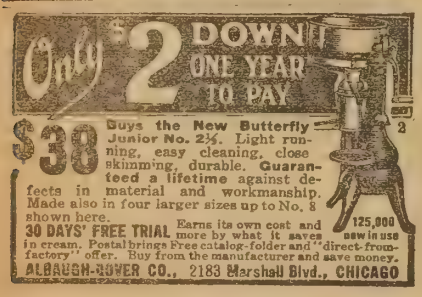
Mr. Adolphson is a strong advocate of silage as a cow feed. His corn matured well last year and he got better results from silage and alfalfa hay than with any grain or mill feed and good home grown hay. He says he can grow silage more cheaply than kale, besides it takes time in the winter to cut kale and the tramping injures the ground, to say nothing of the discomfort. Mr. Adolphson is inclined to believe that vetch and oats with silage will give as good results as alfalfa hay, if rightly cured. It is sometimes hard to get them cured just right in the Chehalis valley, but Mr. Adolphson expects to this summer. He uses a mechanical milker and finds it helps greatly in solving the labor problem. H. A.

## Tests 480 Cows During May.

During the month of May there were 480 cows tested in the Stillaquamish (Wash.) Cow Testing association, of which S. Shoultes is the official tester. The average pounds of milk per cow is 826.4 and the average pounds of butterfat per cow, 36.22. The average feed cost per cow was $5.41. One hundred forty cows produced over 40 pounds of butterfat, one of these producing over 70 pounds and 12 between 60 and 70 pounds.

Nine of the fifty cows were owned by W. G. Grimm; C. Olson, 7; Max Eitzenberger, 6; Hans Tompsen, 5; C. Tompsen, 5; Furness, 3; J. E. Wrage, 3; J. Knutson, 2; F. H. Neitfield, 2; Strotz, 2; Stubb, 2; Weerda, 1; Schloman, 1; Coe, 1.

The three highest herds for butterfat production are owned by Max Eitzenberger, Hans Tompsen and C. Tompsen.


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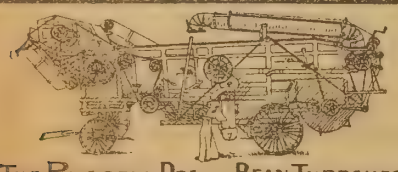
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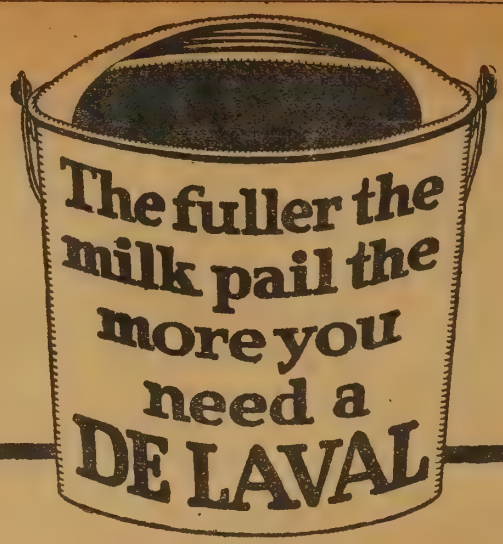
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LIVE STOCK NOTES

Write to the Editor.

E. J. IDDINGS, Editorial Contributor

# Sheep Good Investment

By J. R. STOTTS.

Will the correlation of sheep raising with agriculture pay? The farmers of the country immediately surrounding Meridian, Idaho, which has become noted throughout the Pacific northwest in recent years as one of the leading purebred sheep sections of Idaho, Oregon, Washington and Montana, say that it will. They are very generally engaging in it upon an extensive scale, but to such an extent as to make it commensurate with their agricultural operations. From 20 to 50 sheep are to be found upon the majority of the farms in the Meridian section, and the movement to rehabilitate the sheep raising industry is of constantly increasing proportions. The farmers engaged in this industry are finding sheep as good an investment as, if not better, than cattle, and they are more easily handled. Two crops are derived from them—meat and wool. Moreover, the industry promises to be of increasing remuneration.

It is the production of fine purebred sheep for men engaged in raising sheep on extensive lines that the farmers of this section are emphasizing. Among the farmers engaging in the industry are Colonel Elias Marsters, Leo Marsters, Daniel Barker, A. R. Stalker, George V. Leighton, A. R. Estes, J. R. Clark, Charles Cairns, Jay Brown, Charles Stephenson, George Nourse, Frank Nourse, Logan Grice, D. M. Beery and a Mr. Dunton. In June, 1916, Mr. Clark purchased five ewes, with lambs at their sides, paying for the flock $100. In April of the following year he bought five more ewes for $125, and in November of that year he sold the sheep, and for them and the wool he secured he received the sum of $725. The wool more than paid for the feed of the sheep during the time Mr. Clark kept them. He estimates that the cost of the feed for a sheep is about 2 cents a day, and it is commonly estimated that one acre of pasturage will support 10 sheep. In past years the problem of marketing the wool has been a great one, but through cooperative methods it has been very largely solved. Last year those engaged in the industry in the Boise valley organized what is known as the Baise valley Sheep Growers' association, and, through pooling their wool clips, they received 63 cents a pound, considerably more than the prevalent price. A pool has been formed again this year by the members of the association, of which the total amount is approximately 82,000 pounds, with pooling depots at Meridian, Nampa and Caldwell. The officers of the association are as follows: President, M. Sebern of Nampa; vice president, S. L. Kennedy of Nampa; secretary, C. H. Eagleson of Boise; treasurer, Charles Cairns of Meridian.

## Veterinary

Dr. S. B. Nelson

**Have to Use Milk Tube.**—I have a cow that we have had to take the milk out of one teat with a milk tube for about six weeks, ever since she has been fresh. It seems to be just in the end of the teat. Milk is as good as any milk. Is there any way of opening up the hole in teat so that we will not have to use the milk tube? W. T., Leavenworth, Wash.

Try dripping the teat in tincture of iodine. Then go to the jeweler and buy the largest violin string that you could possibly get. Tie a knot in one end; cut off three inches. Place this piece in a 10 per cent solution of carbolic acid and leave it there during the time that your are milking. Immediately after milking pick this up by the knot and dip it in boiled water, rinsing it. Then insert it in the teat after you have dipped the teat in tincture of iodine. Leave it there until the next milking period, and repeat. This may give you the relief desired for the cow.

**Cow Won't Get With Calf.**—I have a cow that won't get with calf. She is 7 years old and has had four calves. What could be done for her? F. S. S., Irby, Wash.

There are three or four things that would cause the trouble mentioned. Some of these can only be remedied by the services of a man especially trained to recognize them and to perform the operation necessary for the treatment. The others sometimes yield to medical tretament, and for that reason I am going to suggest two treatments for you to try. You can try one first and then the other if the first one fails: The first is the easiest treatment. Put a cake of yeast in a quart of water and place this on the back of a stove and allow it to ferment. Use this as a vaginal injection the first and second day prior to breeding. The second treatment is known as the sodium bicarbonate treatment. Put a teaspoonful of sodium bicarbonate into a quart of lukewarm water, or rather warmer than lukewarm, and wash out the vagina with this solution two or three days prior to breeding the animal.

**Blood In Milk**—I have a heifer two years and four months old that has a fine heifer calf seven months old. The last three weeks her milk has had just a little blood in it. She is with calf again five months. She has been chased quite a little. She is in the best of health. We feed her cooked potatoes with bran and shorts mash twice a day. She runs in the pasture during the day and we keep her up at night. It is the milk she gives in the evening that is so bad. The morning milk has scarcely any sediment. She slipped in the barn and fell down about four weeks or so ago. Would that cause such a condition?—A Subscriber, Worley, Idaho.

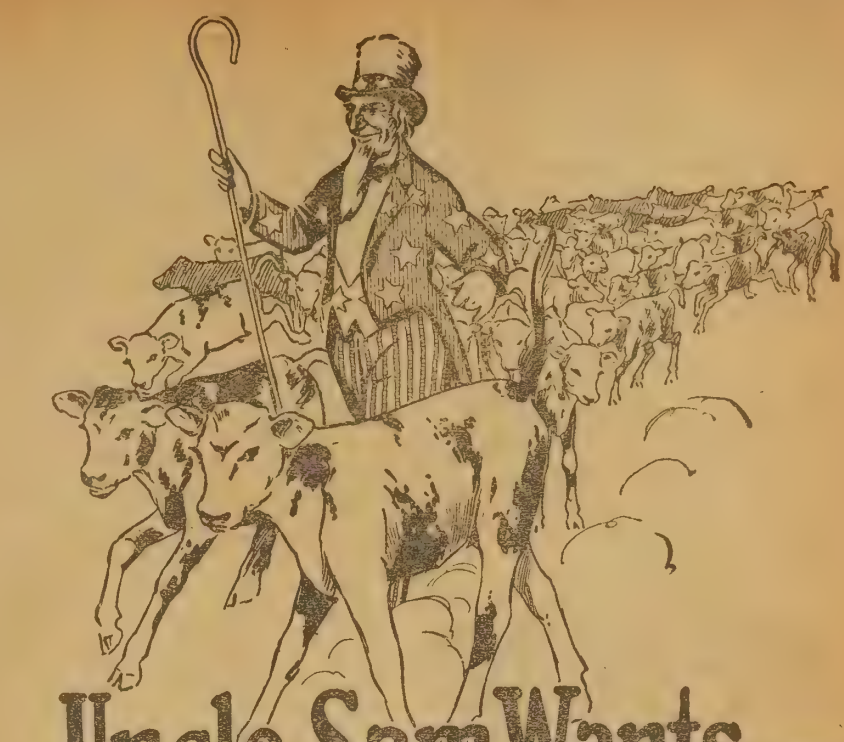
I would suggest that you give the heifer one pound of epsom salts in three quarts of water. Then, beginning the following day, give her one teaspoonful of sodium hyposulphite in a pint of water once daily for 10 days to two weeks. I hardly believe that the slipping in the barn had anything to do with the appearance of a little blood in the milk.

**Milk the Heifers.**—I would like to know what you advise in the following case: I have two 2-year-old cows, just calved. Would there be any difference by allowing the calves to run with them as to being good milkers another year, or would they be better milkers if the calves were taken away and raised by hand? O. B. M., Rosemont, Mont.

It makes all the diffenece in the world whether or not a young cow is allowed to nurse her calf or whether a young cow is milked. If you wish to make milkers out of the heifers take the calves away from them and milk the heifers as long as you possibly can, 10, 11 or 12 months if possible, the first year, having them, however, on very good feed during this time. You must, of course, carry over the breeding period in order that the milking period will be extended. Breed them so that the milking period will be lengthened. At the end of the milking period they should rest two months. That will mean that there should be possibly 15 months between the first and second calving.

**Blind Teeth**—I have a young sow and her pigs have teeth called blind teeth. They were born with them. Some said they should be pulled, others say not. Should they be pulled? When sow doesn't give enough milk should cow's milk be given when real small, 2 or 3 days old? W. G. H., Eagle, Idaho.

It is not necessary to pull the small milk teeth. They will be forced out at the proper age of the pig. If the sow does not give enough milk you will have to either change her feed to more milk-producing substances or you will have to try and raise the pigs by hand. This latter has often been done.

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# POULTRY

Write to the Editor.

JAMES DRYDEN,
Editorial Contributor.

Eggs have been "legal tender" long enough for groceries. Make something else legal tender now and eat the eggs, which will help win the war.

Eat, can or market the surplus roosters. They are eating food and fertilizing the eggs, and the fertile egg does not keep well in warm weather.

The business in frozen eggs is assuming large proportions. Millions of eggs are checked or broken when they reach the market in the cities, and large numbers of these are now frozen and sold to bakers and confectioners during the season of high prices. They are usually put in large cans holding 30 pounds minus the shells. In some cases the whites and yolks are canned separately. On the 1st of May there were some 10,000,000 pounds of such eggs in storage.

The warm weather and the broody hen together waste enormous quantities of good food—eggs. Prevent this wastage by gathering the eggs twice a day and put them in a cool cellar. Then shift the broody hen to another sector.

J. D.

## Table Fowl

### Edward Brown Urges Production

The lectures of Edward Brown, the renowned poultry authority of England, or rather of the world, were of great interest to all poultrymen and students of real poultry husbandry in the northwest. He spent a few days each in Idaho, Washington and Oregon, and then went on to California, and those who had the pleasure of meeting him and hearing his lectures regretted that his stay was so short.

This was Mr. Brown's first visit to the Pacific coast, but several years ago he had visited the eastern states and had made a report on the poultry industry in America to the British board of agriculture. This report and his reports on poultry conditions in various European nations before the war are of great value to students of poultry culture everywhere.

Mr. Brown is essentially fundamental in his poultry lectures. He is after permanent results. He gives no attention to fads, and he brushes aside methods and year-old notions that have not been put to the test of time. He places much importance on climate and soil, and said that the Coast country, with its humid, mild climate, was better fitted to the production of a superior chicken than the large middle west country and the prairie country. As I rode through the Willamette valley with him he was especially enthusiastic of the possibilities in the way of climatic and soil conditions for the production of high-class market poultry. This section, he said, resembled the famous poultry sections of England and France more than any other section of the United States.

The people of the United States, he said, do not know what a good table fowl is. Our attention here has been given all to egg production. We have bred up superior strains of egg producers, but we have given no attention to breeding or producing special strains or breeds of table fowls. This section, he said, might well become in the future as famous for fine table fowl as Sussex, England, and Malines, Belgium.

In all his lectures Professor Brown emphasizes the importance of avoiding soil contamination. He believes that overcrowding of the ground or intensification is altogether bad. He said he was amazed on a former visit to the United States that in this great big country many poultrymen crowded more chickens onto an acre of ground than they did in little England. He said there should be a proper balance of animal and vegetable life—so many crops grown for so many chickens.

Speaking about balancing things, he told of calling at a "farm" in Belgium before the war where there were 200 fowls of the excellent table kind, and on asking the wife why she did not keep more fowls she was doing so well with them, he received the answer, "I have only two cows." But what have the cows to do with it? he asked. She then said that if her husband would buy another cow she could keep another hundred chickens. They had been raising chickens in that way for generations, and the idea, handed down from generation to generation, that good table fowls could not be produced without buttermilk was so fixed with them that they could not imagine a chicken worth eating that had not been fed buttermilk made from milk produced by their own cows.

But the poultry industry in Belgium had been destroyed by the war, and in Mr. Brown's opinion it will take years to restore it. America must help restore it. After the war breeding stock must be secured from America to restock the farms, and the poultrymen on this side who have good productive strains will find a great demand for it from Belgium and other European nations.

J. D.

## Killing Hawks

### By Feeding Poison to Chicks

I have had several letters recently about the feeding of a small quantity of strychnine or other poison to the chicks as a method of getting rid of chicken hawks. The theory is that the chick can eat a certain amount of poison without injury, but the poison in the chick will kill the hawk that eats it. A reader at Eugene has sent us the following:

"About 12 years ago I raised a lot of chickens and I was troubled with the hawks and cats. A preacher told me to give my chicks poison. Now I don't always believe what others tell me, even if they are preachers. So as the saying goes I took it with a grain of salt. I shut up five chicks and put strychnine in both their water and feed, and they grew fat on it. So I gave it to all my chicks in their water, and soon I saw no more cats or hawks and lost no more chicks. Now the theory is that the poison goes to the crop, and there is a poison that kills any poison that the chick takes before it goes into the blood. A hawk or a cat eats all of a young chick, thereby is poisoned by the strychnine in the crop of the chick. I always give my young chicks a little strychnine to kill rats, cats, hawks, etc., but find it best to dissolve about a half teaspoonful of strychnine in a quart of water; then put about a tablespoonful of this into a quart of drinking water. I find this to do the work quite well and does not hurt the chick."

Whatever may be said of the theory advanced above, it is the actual trial or experiment that counts. This correspondent seems to have proved that strychnine can be fed to chicks without injury, but where are the hawks and the cats? He hasn't proved that the eating of the chicks caused the death of any hawk, so far as he states. He doesn't say how many chicks he gave the poisoned water to, but the dose was evidently a small one, so small that it would be doubtful if it would have any effect either on the hawk or the chick.

There is no experimental evidence bearing on this subject that I have knowledge of, except that I am informed that a gentleman at one of the eastern stations tried it without result. But it is an open subject so far as actual experiments have been reported. Meantime be careful with the poison. J. D.

**Biscuit Makers Save Wheat.**

The national food administration has commended the cracker and biscuit manufacturers for the patriotic manner in which they have reduced their use of wheat flour during the last year. The flour they used in March of this year totaled 171,000 barrels as against 335,000 barrels used in March a year ago. Not only this, they reduced their allotment over 60,000 barrels below that specified for their use by the government.

**Twelve Workers Killed.**

Twelve Y. M. C. A. war work secretaries have been killed while serving allied troops close to the front line in France. Two American women, canteen workers, have also been killed.


Warranted to Give Satisfaction.

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**Has Imitators But No Competitors.**

A Safe, Speedy and Positive Cure for Curb, Splint, Sweeny, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunches from Horses or Cattle.

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may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.


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FOR some years you men who grow the wealth of our country have been *putting money into* tires. Isn't it time to think about getting money *out of them?*

You buy your plows, reapers, threshing machines, and your wagons to get money out of them. You *measure* the money you get out of them by the *kind of service,* and the *length* of service they render you in the *business of farming.* Measure the money you get out of tires the same way. Count the *pleasure* you get from them *excess profit.*

Tires today are the common factor in the business of farming transportation. Let Goodrich Tires *make money out of tires* for you in your *hauling problems.*

They will, because Goodrich Tires are built to give the *maximum* of the kind of service which coins into money, as real as the money you get out of your farm implements.

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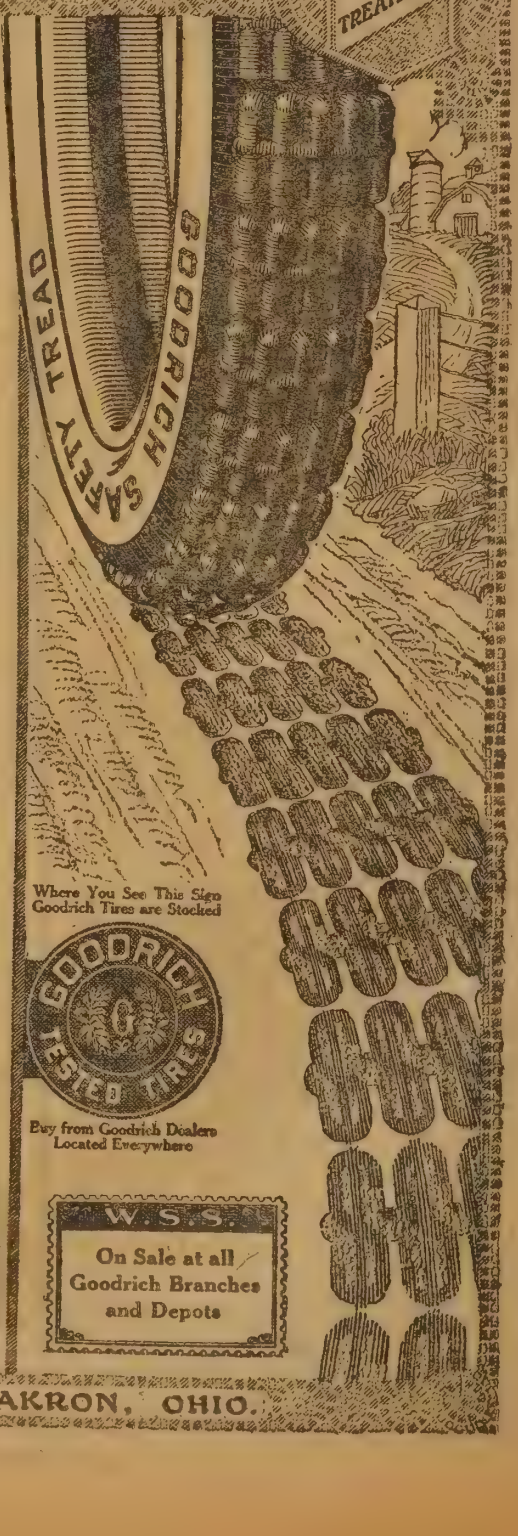
The Goodrich brand on a tire—and you men of the farm know the value of a trustworthy brand—is a guarantee of high service. Goodrich has stood for what is *best in rubber* for a half century. That half century of experience starts Goodrich Tires with tire bodies built right, and treads tough to stand the roughest going.

But Goodrich, to take the last risk out of its tires, sends them forth with its Test Car Fleets, and batters them over every kind of road in our country; *perhaps over the roads that pass your farm.* Their *strength* and *dependability* are sure because they are proved.

It makes no difference what kind of tires you need, pneumatic tires large or small, truck tires, motor cycle and bicycle tires, Goodrich has the tires which on the farm *coin themselves into money.*

The big, generously sized pneumatic tires roll up phenomenal mileage. The truck tires outwear steel under the heaviest loads. Get money out of tires by making sure you get Goodrich Tires.

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THE CITY OF GOODRICH · AKRON, OHIO.




GRANVILLE LOWTHER,
Editorial Contributor.

# Ants in the Orchard

I have had an inquiry as to how to kill ants in the orchard.

My answer is, I do not know. I have experimented and tried out a number of plans, but none seem to me satisfactory.

Ants love sweet substances. Knowing this to be true, I tried bread soaked in syrup made from sugar, and a strong mixture of arsenate of lead; but they seem to fatten on it.

I tried black leaf 40, same strength as that used for scale and other insect pests, or "One to 800." This did them no apparent harm, although it kills almost any other form of insect life. I then doubled the strength, making it one to 400. This seemed to affect them unfavorably, but did not kill them. I tried one to 200, and a few of the weaker ones died. I then tried one to 100, and about half the number, apparently the younger and weaker, died. This solution is too expensive to use in the killing of ants.

Cyanide of potassium, mixed with water and sugar, will kill them, but it is so deadly a poison that I do not like to have it about the premises, lest by some accident some member of the family might get it. I am still experimenting, and may find some solution to the question.

Ants dislike water, and they may be driven from place to place by irrigation. G. L.

## POWDERY MILDEW

### Causing Damage to the Fruit.

I have been in several sections of the fruit districts within the last few weeks and am convinced that in a majority of cases powdery mildew is causing more than ordinary damage.

Powdery mildew is a fungus, which develops mainly on the growing tender twigs and leaves, sending rootlets or feeding threads into the external cells. For this reason it causes damage to the cells, which retards the growth of the tree, hinders the gathering of plant food from the air and its manufacture into available form.

**Function of Leaves.**

Leaves make or manufacture materials for plant growth from carbon dioxide and water. They inhale and exhale, thus performing the functions performed by lungs in animals. They manufacture food materials into starch and then digest the starch, turning it into sugar by the action of a ferment, that it may be carried in soluble form to the various parts of the tree or plant for building purposes. They are to the tree both stomach and lungs. It will, therefore, be seen how important it is to keep the leaves in healthy condition for the growth of the tree and the production of its fruits.

**Mildew a Parasite.**

A plant which is dependent upon another living plant or animal is a parasite. Rusts and mildews are parasites. Vegetable parasites not possessing chlorophyl, or green coloring matter, can not use carbon dioxide taken from the air, and must take it from the cells of the plants upon which they feed. They are, therefore, equipped with suckers, or modified roots, which penetrate the cells and draw up the cell contents in much the same manner as the roots of a tree draw soluble food from the soil. These roots or threads, clog the breathing spaces of the leaf and plug up the stomata, which are the organs for the reception of food. They also appropriate and disorganize the cell fluids.

It will be seen from this description that mildew injures the tree, and that if it occurs in sufficient quantity it will prevent a proper development of its fruit. Not only so, but it attacks the fruit itself, and often is so conspicuous as to cause considerable quantities to be rejected as culls.

**The Remedy.**

Now that the season is past for a dormant spray, the best remedy is to use atomic sulphur with the arsenate of lead spray for codling moth. The proportions are one quart of atomic sulphur to every 25 gallons of arsenate of lead solution. In other words, if you will put eight quarts of atomic sulphur into a 200-gallon tank of arsenate of lead solution and apply the mixture you will check the codling moth and the powdery mildew with the same spraying. G. L.

# The Goodell Strawberry

Perhaps the best time to transplant strawberries is in July, after the berries are harvested and the vines have sent forth a new crop of "runners." For this reason I call attention to the fact that the period for propagation is approaching.

A further want to call attention to a new variety, which is being propagated by a Mr. Hanks in the Naches valley. Mr. Hanks as I understand, can not more than supply the home demand; but to give the scientific and practical fact, that the New Goodell is a cross between the old Goodell and the Clark's Seedling, and that it has some of the qualities of each variety from which it sprung, that in some particulars make it superior to either.

First, the Goodell was a very sweet berry, but a poor shipper. The Clark's Seedling was a good shipper, but was tart, rather too sour for the taste of most persons. The New Godell has a mild sub-acid flavor, is a fairly good shipper, not quite so good as the Clark's Seedling, but much better than the old Goodell, and is a beautiful deep red, that when on exhibition in the show windows or fruit stands, attracts attention.

In conversation with Mr. Hanks at Nanches City a few days ago, I learned that he was the originator of the new variety. G. L.

In London a munitions Y. M. C. A. has been established for the men and women in that line of war work.

## Kentucky Strawberry Center.

President J. Whit Potter of American National bank, of Bowling Green, Ky., in a recent friendly note to the writer, says that they are just finishing their strawberry crop in that locality. While the crop was short, still a good many of the berries sold as high as $5 per crate, but the latter part of the season the price was around $3.50 per crate. In the aggregate, the returns from that one county will amount to about $750,000. This illustrates the importance of the strawberry, as a commercial fruit in several of the southern states. Kentucky either leads now in acreage, or is close to the front, the industry having taken on a big movement there within the last few years. So the strawberry seems to hold a leading place, as it has in the past, and the writer on pomology appears to have been on safe ground when he declared that "the Lord might have made a better fruit than the strawberry, but He never did." A. E. G.

## Yakima Cannery Busy.

The big Libby, McNeil & Libby cannery in Yakima is now working on spinach. As soon as the small spinach crop has been cleaned out, however, between 300 and 400 men and women will be placed in charge of the big machines that will daily turn out approximately 50,000 cans or 30 tons of canned cherries, mostly for the allied armies in Europe.

Berry Boxes Crates

WRITE FOR PRICES

State quantities required.

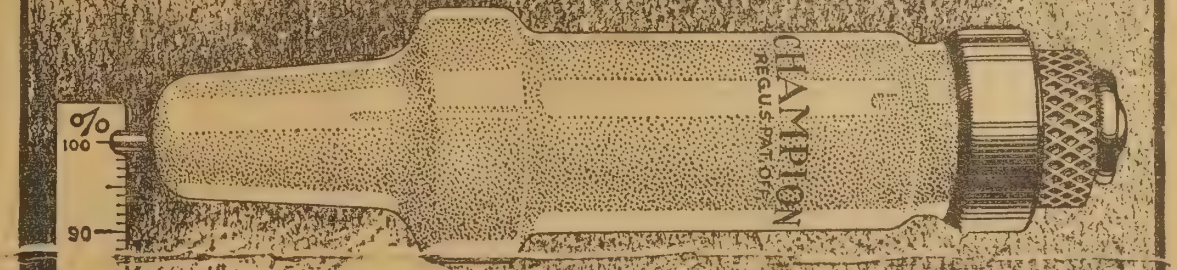
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So Champion Dependability takes on new meaning—for no spark plug can be more dependable than its insulator.

The Champion Spark Plug Company, Toledo, Ohio

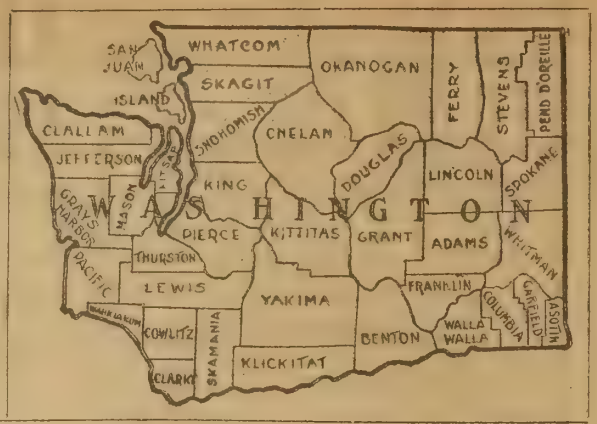
CHAMPION TRADE MARK

Champion

Dependable Spark Plugs

# Will Cooperate in Farm Work

## Many Would Make Use of Electricity if a Power Line Were Run Through Community. Good Rain Is Needed in Most Places




MEAD, Spokane County, Wash., June 15.—The principal crops of this vicinity are wheat and oats. As compared with a year ago wheat will not be so good, but oats will be better if we have favorable weather from now on. Market value of wheat will be higher and oats lower in all probability. Farmers here will go into harvest with a scarcity of men, and will cooperate in the work more than in the past. Machinery is generally adequate and most of it in good repair. There is a shortage of fruit boxes and sacks. Most all are provided with granaries and there are no bins used. Facilities for handling crops in the way of wagons and trucks are adequate. It would be difficult to say which one thing one could recommend as a general measure to improve conditions in this community as to crop production or community life. A good sized hall, owned by the township, furnishes a meeting place for any and all purposes. Many would take advantage of the opportunity to use electricity if the power line was extended across the community. GEORGE HINGSTON.

### Pastures Become Short.

TWISP, Okanogan County, Wash., June 10.—The labor shortage question hasn't been very serious in this section yet. Many men and boys have gone from this locality to the shipyards and other places to work where wages are better than are paid here. The high price of farm produce has stimulated such an activity thata notwithstanding the fact that many have been called to the colors and others gone to the shipyards and factories there has been a greater acreage planted than ever before in this valley. The farmers here are not using tractors for the reason that the farms are too small and rough. There seems to be plenty of workhorses here and at present there seems to be no demand for them. The price of farm machinery has advanced and most farmers are getting along with their old machinery. The drouth continues and the pastures are getting short and dry and the prospects for crops are not very flattering. As a rule stock is in good condition and farmers are prospering. A good rain within the next 10 days would come in time to make good crops. GEORGE LA RUE.

### Rain Is Badly Needed.

OTHELLO, Adams County, Wash., June 14.—Our wheat crop at present writing has a pretty good indication of a lighter crop by 20 per cent than last year, which was a very light yield. There are thousands of acres of grain land that will never be touched by a header as the wheat has blown out and the land is now a coat of thistles. Take these conditions into consideration together with the cost of production this year and the net profit to the farmers is practically nil. I think there will not be much difficulty to get men to harvest the crop. There will be no difficulty in getting bins to hold the grain. The price of sacks took a three-cent drop last week. What this community is suffering from more than anything else has been a lack of rain and excessively high winds. There will be no rye to harvest as it is nearly all dead on the stalk. The potato crop is gone as the leaves are dead, brown to the ground. Rain would improve conditions wonderfully. A. O. LEE.

### Labor Shortage Delays Work.

MONTESANO, Grays Harbor, Wash., May 27.—The weather has been somewhat cool with frosts in certain localities. I have talked to farmers about the amount of land being cropped this season as compared with 1917. They say that there will be practically as much land put into crop, but that the seeding is later than usual owing to labor shortage. This is more true on the larger farms where labor is employed. The one-man farm has not been hit so hard on the labor question. Much interest is being shown in regard to farm tractors, especially on the larger farms.

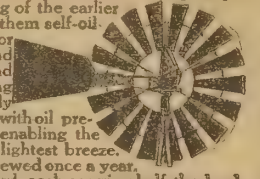
O. T. M'WHORTER.

### Need Warm Rains.

RAINIER, Thurston County, Wash., June 1.—May, as a whole, was cold, with frequent cold rains and frost up to the 20th. Then a few warm days which started the grass and grain to growing. Pastures are now good, but the meadows show the effect of the cold and backward spring. While some pieces of newly seeded clover will be good there will be many fields that will be light. Good warm rains are needed. We farmers are most too busy to be talking about anything, but when two or three farmers get together it is cows, and what are you making out of them, with milk way down and everything very high that we have to buy. L. F. DAVIS.


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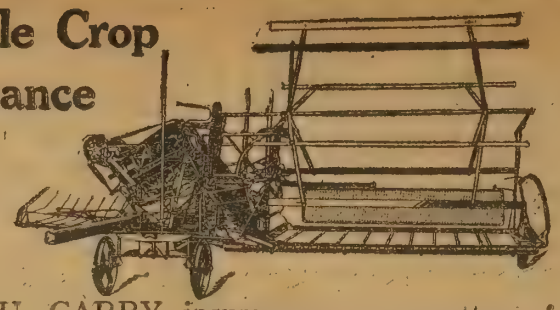
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**Champion, Deering, McCormick, Milwaukee** and **Osborne** harvesting machines and binder twine, always efficient, are better than ever this year when every bushel of grain is needed. Remember this when you come to buy your binder and twine for the season's work. Remember, too, that the larger sizes conserve labor. An 8-foot is better than a 7, and a 7 better than a 6 or 5. Buy the largest binder you can use, and buy a new machine if there is any question about the efficiency of the old one. A new International Harvester binder is absolutely reliable.

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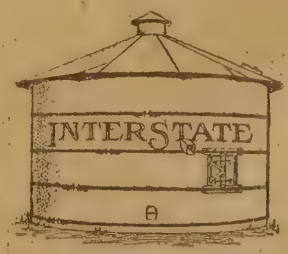
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Please send me full particulars, regarding your grain tanks.

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# Handicraft For Girls

**By Dorothy Perkins**

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## How to Copy Pictures

By means of the glass reflecting frame shown in Fig. 1, it is possible to make an exact drawing of any

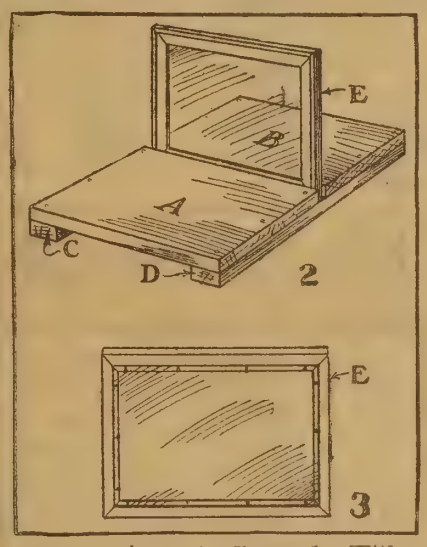


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picture that you may wish a copy of, and this unique piece of apparatus is very simple to make, as you will see by the detail drawing (Fig. 2).

All that you need for the construction are two boards (A and B), two crosspieces (C and D), and a small picture frame with the glass fastened securely in place (E, Figs. 2 and 3). Almost any small-sized picture frame will do, though one that has an opening about eight inches wide and 10 inches long is of the best size if you can get it. The boards A and B should be about one inch longer than the picture frame, and they should be square or nearly square. Place the pieces upon the pair of crosspieces C and D, with the edge of the picture frame slipped between them, as shown, and nail them tight up against the frame to hold it securely in an upright position. The copying apparatus will then be completed. To make a copy of a picture, place it upon the left-hand side of the frame, and a piece of drawing paper on the right-hand side. Then, standing so that you can look into the left-hand side of the glass of the frame, you will see the reflection of the picture to be copied, in the glass, and the piece of drawing paper on the other side of the frame will be seen as a background to the reflection of the picture. Keeping the same position, it will be but a simple matter to draw out on the piece of drawing paper each line that you see reflected in the glass. The copied picture will be the reverse of the original, as is indicated in Fig. 1.

A very simple and exact method of making a larger or smaller drawing of a picture is that known as "enlarging and reducing by squares." We will suppose that the picture of the rose in figure 4 is to be enlarged twice each

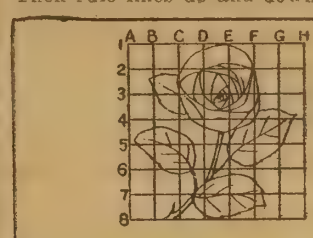



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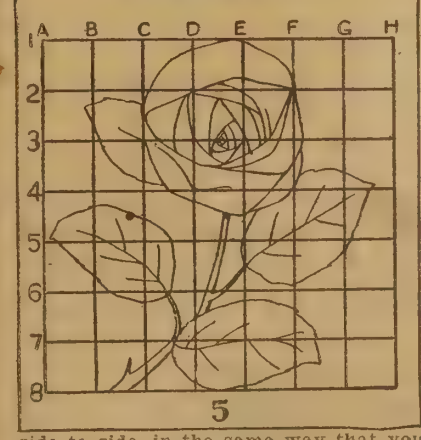



3

way, as shown in figure 5. With a ruler and pencil, measure off a series of points across the top of the picture, and another series along one side, spacing them exactly one-half inch apart. Then rule lines from the top to the bottom of the picture, and from side to side, starting each line from one of the points. When the picture has been squared off in this way, mark off a similar series of points along the top and down one side of a sheet of drawing paper, but, instead of one-half inch, space them one inch apart (figure 5). Then rule lines up and down and from




4




5

side to side, in the same way that you did across the original drawing. Letter the ends of the up-and-down lines and number the ends of the cross lines, so it will be easy to locate corresponding squares on both the small and the large drawings. To make the enlarged copy of the original drawing, it is but necessary to reproduce in each of the large squares exactly what you see included in corresponding small squares;


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Write for evidence from users and our Trial Offer. Ask your dealer for our FREE BOOK "Contagious Abortion." General Laboratories Madison, Wis. Dept 1622.

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Air pressure not only affects the duration of your tires, it also has a very direct bearing on how many miles per gallon your gasoline will give you.

Measure your air pressure with a

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and save not only your tires but your gas.

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OWENS Double-Cylinder Bean and Pea Threshers

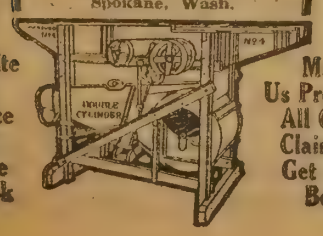
from the largest to the smallest size, embody the essential features necessary to **thresh all varieties of peas and beans** direct from the rankest vines without splitting any of the seed.

They have more separating space and capacity than any machine on the market.

If you need a pea or bean thresher at all, get an "Owens."

They are the standard the world over. Built in sizes to suit any size grower from the smallest to the largest, and there are none better at any price.

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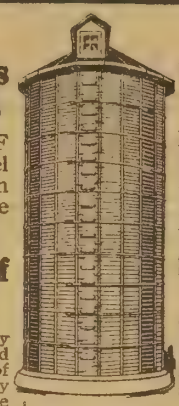
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Everybody wants an H-L-F Silo this year, and 1918 model is best yet. Factory can turn out only 200 more silos; please order yours right away.

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Extra crews are working all day and overtime, manufacturing and shipping H-L-F Silos. Plenty of cars now, but car shortage may come later. We strongly advise placing silo business quick—use the coupon today.



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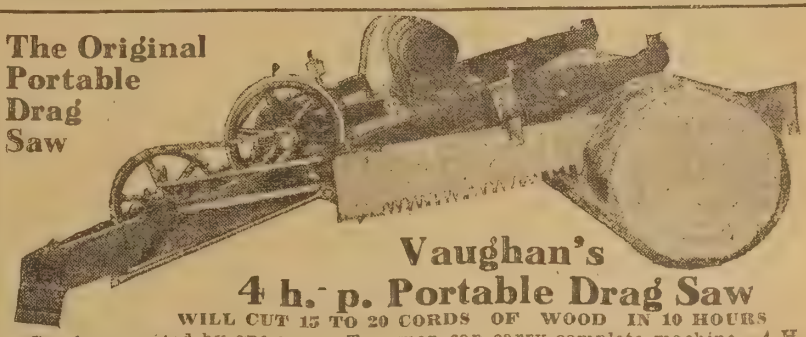
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The Original Portable Drag Saw



Vaughan's 4 h. p. Portable Drag Saw

WILL CUT 15 TO 20 CORDS OF WOOD IN 10 HOURS

Can be operated by one man. Two men can carry complete machine. 4 H. P. gasoline motor mounted on frame. One gallon gasoline required to cut 8 to 12 cords of wood. Engine can be used for other work without removing from frame. No gears, cogs, belts or pulleys. Friction clutch prevents breakage if saw pinches. Saw makes about 125 strokes per minute. Will cut any size log up to 6 feet. Sprockets and cranks, etc., made of cast steel. All working parts guaranteed against defects in material and workmanship.

Net cash price for complete machine as shown in cut, $160 f. o. b. Spokane and common points. FOR SALE BY

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Boiling Points

—are vaporizing points. In Red Crown gasoline they form a continuous, uniform chain—giving steady, dependable power. Look for the Red Crown sign.

STANDARD OIL COMPANY (California)

RED CROWN GASOLINE

The Gasoline of Quality


When you write to advertisers be sure to say that you saw their adverisement in this paper.

## What a Good Berry Patch Looks Like



The photo above shows the strawberry field of W. R. Boyd, close to Kennewick, Wash., just when the berries began to ripen. This field was planted and tended in a correct manner and shows what a good berry patch looks like in that wonderful strawberry region.





—that's what thousands of farmers say, who have gone from the U. S. to settle on homesteads or buy land in **Western Canada.** Canada's invitation to every industrious worker to settle in **Manitoba, Saskatchewan or Alberta** is especially attractive. She wants farmers to make money and happy, prosperous homes for themselves by helping her raise immense wheat crops to feed the world.

**You Can Get a Homestead of 160 Acres FREE**

or other lands at very low prices. Where you **can buy good farm land at $15. to $30. per acre** that will raise **20 to 45 bushels of $2. wheat to the acre**—it's easy to become prosperous. Canadian farmers also grow wonderful crops of **Oats, Barley and Flax. Mixed Farming** is fully as profitable an industry as grain raising. The excellent grasses, full of nutrition, are the only food required either for beef or dairy purposes. Good schools and churches, markets convenient, climate excellent. Write for literature and particulars as to reduced railway rates to Supt. Immigration, Ottawa, Can., or to

J. N. Grieve, Cor. First and Post Sts., Spokane, Wash.

Canadian Government Agent.

160 ACRE FARMS IN WESTERN CANADA FREE


## Farm Service War Flag

To give a further idea of the widespread demand for the farm service war flag in Washington we have taken an order from each of the additional counties not before named:

**Mrs. John Byers Jr.,** Ferndale, Whatcom County, Wash.—Please find enclosed the coupon and 5 cents in stamps, for which send me the farm service flag, on enamel paper.

**Fay Lowell,** Roy, Pierce County, Wash.—Enclosed find 5 cents, for which please send me a farm service war flag, printed on enamel paper, with five extra small stars for farm workers.

**Mrs. F. M. Martin,** Mount Vernon, Skagit County, Wash.—Enclosed find 5 cents, for which please send me a farm service war flag, printed on enamel paper, with two extra stars for farm workers.

**Mrs. J. W. Summers,** Wauconda, Okanogan County, Wash.—Enclosed please find 5 cents for one pennant with four small stars on it.

**Mrs. Dick DeWitt,** Oak Harbor, Island County, Wash.—Enclosed find 5 cents, for which please send me a farm service war flag, printed on enamel paper, with three extra small stars for farm workers.

**R. F. Parsons,** Cloverland, Asotin County, Wash.—Enclosed find $1, for which please enter my subscription to The Twice-a-Week Spokesman-Review for one year and The Washington Farmer for three years, and 5 cents for a farm pennant.

**Henry Weber,** Marcellus, Adams County, Wash.—Enclosed find 5 cents, for which please send me a farm service war flag, printed on enamel paper, with three extra small stars for farm workers.

### Cow-Testing Report.

During the month of April there were 432 cows tested in the Ferndale Cow Testing association. The average pounds of milk per cow were 762, average pounds of fat per cow, 31.8. Ninety-three cows produced 40 pounds of fat or more, 90 cows produced 1000 pounds of milk or more. The highest producing herd for the month is owned by Tom Alderson of Ferndale.

Cow testing associations are right now in a position to do more effective work than ever before, says Victor Morgan, the official tester. High prices of feed and labor have put the low-producing cow in a bad light, and has made the farmer eager for such information concerning his herd as only a testing association can supply him. The unprofitable cows in the Ferndale association that survive another winter are going to be few and far between.

**Happy Memories.**

Tired Tim—Of course, ye wouldn't think it, mum, but I rode in a carriage during my youthful days.

Old Lady—Poor man! Here's something for you. When was it your happy lot to ride in a carriage?

Tired Tim—'Bout 40 years ago, mum. Me mother pushed it.—Pearson's.

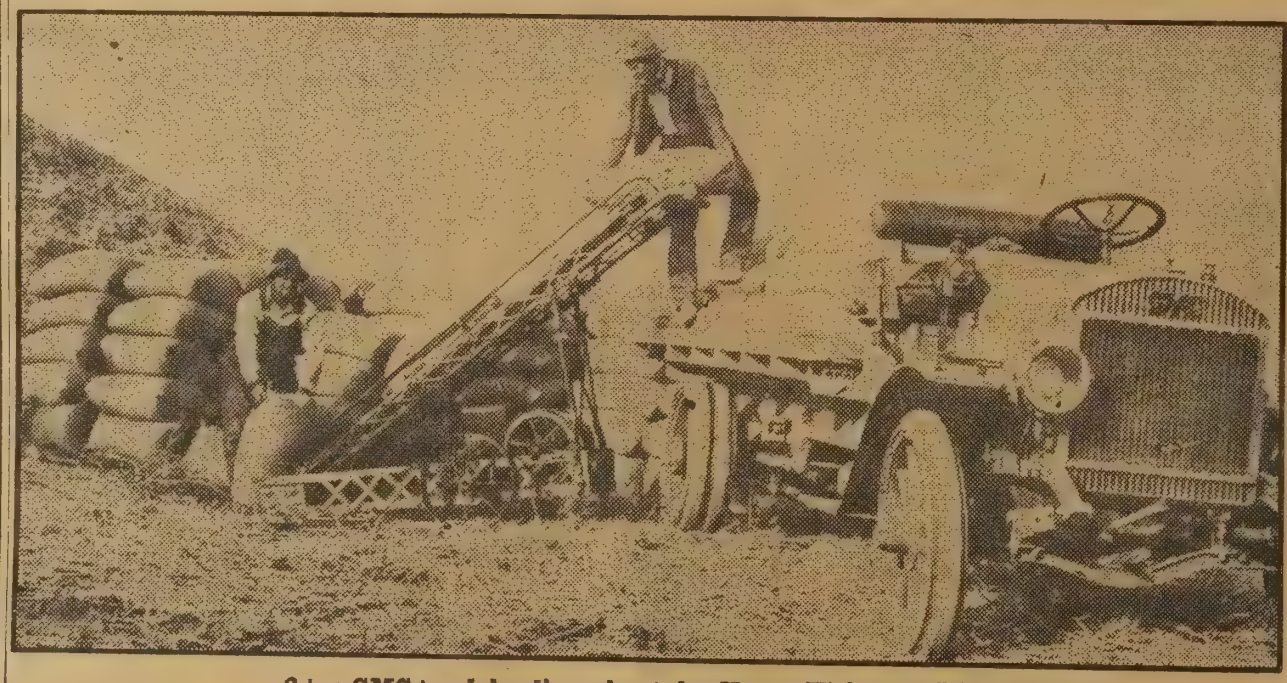
ENCLOSED please find five cents for the Farm Service War Flag and four small stars. I have moved from the ranch near Eatonville to one closer to Tacoma.

J. V. WEAKLY.
R. F. D.,
Tacoma, Wash.


GMC

TRUCK TALK

**Truck Hauls Heavy Load for Farmer**



**2-ton GMC truck hauling wheat for Henry Hickman, Colfax, Wash.**

Washington farmers have been quick to appreciate the advantages of motor trucks and today there are many farmers and ranchers who rely on gasoline to get their products to market. Among them is Matthew Beal of North Yakima, Wash., who owns a three and one-half ton GMC.

Mr. Beal's farm is thirteen and a half miles from town and he made three round trips, a total of eighty-one miles, in one day, hauling eighty-six sacks of barley to the trip, a total weight of 9500 pounds.

The trips were made during a blinding dust storm and over heavy grades, some averaging as steep as 18 per cent. Where these steep grades were encountered, it was necessary to drop to low gear, a severe test for the cooling system of any truck, but the water in the radiator didn't even steam. The next day 10,125 pounds of wheat and eleven men were taken over this same road on one load.

**What Mr. Beal Does You Can Do With a GMC**

ELDRIDGE COMPANY

VALVE-IN-HEAD Buick MOTOR CARS

SPOKANE. SEATTLE.

W.S.S. WAR SAVINGS STAMPS ISSUED BY THE UNITED STATES GOVERNMENT

# Must Be Farmer

## *Poultryman Must Grow Half Feed*

By PAUL E. TRIEM.

A little, gray, earnest man, gold spectacled, and singularly free from any touch of the melodramatic, held a mixed Seattle audience breathless for nearly two hours while he described war-time conditions in England. The man was Edward Brown of London, and the date was May 15.

Mr. Brown is recognized the world over as an authority on poultry matters. He is in this country to help the United States department of agriculture in its educational campaign to increase the production of poultry. He is typically a Briton in the restraint which he puts upon his feelings, and the effect produced upon his Seattle audience certainly lost nothing by the general perception that his attitude was thoroughly conservative, that he was overstating nothing.

Some of the facts detailed by the London speaker were new to most of his hearers. He described the coast defenses of England and told of the three futile attempts the Germans have made at invading the island. In describing the typical features of an air raid, through 30 of which he himself has been, he pointed out that the planes used at present are worse than the Zeps formerly employed for raiding operations.

"In spite of the imaginative descriptions in some American papers," Mr. Brown declared, "there is nothing to hanker after in an air raid. The spirit of this wanton destruction of civilian life and institutions is pure deviltry—I can find no better word for it. Nothing that Germany could have done would have been more effective in arousing British spirit," he added significantly.

"France, the nation that has been reborn," as the speaker characterized the great European republic, has lost a million and a quarter of her sons. Other millions of Englishmen and Italians are dead or hopelessly crippled, the bones of many of these who have given their lives as a blood ransom for civilization lying at the bottom of the sea.

"And today famine is stalking through Europe," commented Mr. Brown.

The whole difficulty in England and much in France and Italy has arisen from submarine activity. The island of Briton has become more and more dependent on the outside world for supplies of food, a dependence apparently harmless enough up to the opening of the sub campaign. Now conditions are changed, and the speaker from London added one brief and grim commentary on the present food situation.

"Always remember," said he, "that one week of starvation will break down the morale of any people!"

Turning to the question of the direct effects of the war on English poultrymen and the lessons which Americans can learn from these experiences across the sea, Mr. Brown declared that the first lesson was an old one, rendered imperative by present conditions:

"Poultrymen must be farmers," he explained. "They must grow at least 50 per cent of their feed. The proper balance between animal and plant life, as represented by poultry raising and gardening, for instance, is one of the big principles that have come out of war-time conditions in England.

In regard to poultry culture on a big scale, Mr. Brown has very definite ideas.—

"The development of the poultry industry will not be by building up great plants," he predicts. "Personally I would rather see 200 people each raising 100 chickens annually than to see one new plant with a capacity of 20,000 chickens created."

Speaking a good word for back-yard poultry raising, which he declared would not interfere with the sale of poultry from professional plants, the speaker called attention to the disadvantages, economically, of confining chickens to a too-limited range. In England, the stress of war time conditions has induced poultrymen to enlarge, rather than diminish, their range.

"In conclusion," said Mr. Brown, "I can sum up my message to you by saying that it is the same as the spirit of England during the present crisis: Hold on!"

### WOULD CONTROL FEED.

#### Government Tries to Regulate It.

Under a ruling of the food administration, bran should sell in carload lots, bulk price at the mill which manufactures it, at a figure not to exceed 38 per cent of the cost of the wheat out of which it is manufactured. Differentials have been established for other mill feeds based on this maximum price for bran, which in turn, it will be noted, is determined by the price of the whole wheat. Shorts or standard middlings must not exceed the price of bran by more than $2 per ton. Mixed feeds shall not exceed the price of bran by more than $4 per ton, while flour middlings and what is known to feed men as "red dog" shall not exceed the price of bran by more than $9 and $15 respectively per ton.

The same regulation provides that brokers in mill feeds that are made from wheat shall make no charge for their services greater than 25 cents per ton. Commission men who sell, deliver and collect for the feeds are allowed to charge not more than 50 cents per ton as their commission for making the transaction. There is no definite limit placed on wholesalers and jobbers, though the regulations provide that they shall be limited to a reasonable advance of the price of the feed at the mill.

The food administration has apparently struck a knotty snag in the matter of regulating the quality of feed placed on the market under these prices. The complaint is well nigh universal that the mill feeds purchased are in general of a highly adulterated character. Charges have been made that what is bought as shorts is actually composed of a small percentage of shorts mixed with a larger percentage of finely ground bran. It is likewise charged that all manner of foreign material is allowed to be ground up in the so-called feed which is placed on the market at the maximum price allowed by the food administration.

### Operate Large Orchard.

One of the largest orchards near Walla Walla is that owned by Baker & Langdon. There are about 600 acres under cultivation. Several commercial varieties are raised.

### *Clip This Order Blank*

Address all communications concerning thrift or war savings stamps to The Washington Farmer, War Savings Department, Room 26 Review Building, Spokane, Wash.

Remittances may be in any form desired, including personal check.

The Washington Farmer, War Savings Department, Room 26 Review Building, Spokane, Wash.

Gentlemen: I wish to invest

in ..... U. S. government thrift (number desired) stamps at 25 cents each.

I wish to invest in .. .... U. S. (number desired) war savings stamps at $4.17 each. (June figure)

Amount enclosed $.....

Full Name .....

Town ..... State.....

R. F. D. No. .....

I have already bought ..... (kind of stamp)

stamps and have a..... (card or certificate.)


# We've found it!




It took us nearly three years to find a line of stock feeds that was of sufficiently high grade to permit us to back it up with our broad guarantee.

We investigated a score of feed mills, examined hundreds of feed samples, and communicated with a great number of practical stock men, agricultural experimental stations and poultry raisers.

In our search we have found many excellent feeds, but none to equal these; for no feeds on the market show, in our opinion, such a uniformly high amount of valuable feed contents, and none of them can be depended upon to deliver a greater value for the money than

BLUE BAG BRAND

## Stock Feeds

For the

## POULTRYMAN

Silver Quill

**FEED for every POULTRY NEED**

THE Silver Quill brand on a sack of poultry feed is your guarantee of quality. It means that expert poultrymen have endorsed the formula. It means that the grains used are sweet, clean and wholesome—no weed seeds—no by-products. Let the Silver Quill label lead you safely through the multitude of impure feeds and "quack" remedies to a profitable poultry year.

**Send Today for our Special**

***Poultry and Stock Feed Catalog***

## SEARS, ROEBUCK & CO.

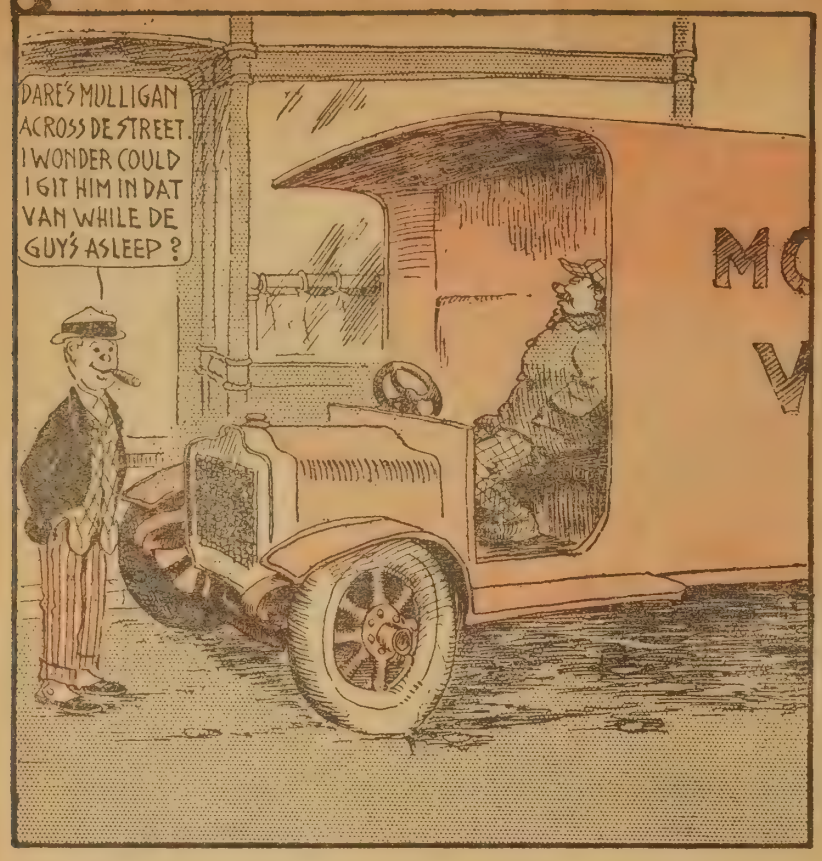
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Mail this Coupon Today

Sears, Roebuck and Co., Seattle.
Send me, without charge, my copy of your 1918 book, "Poultry and Stock Feeds."

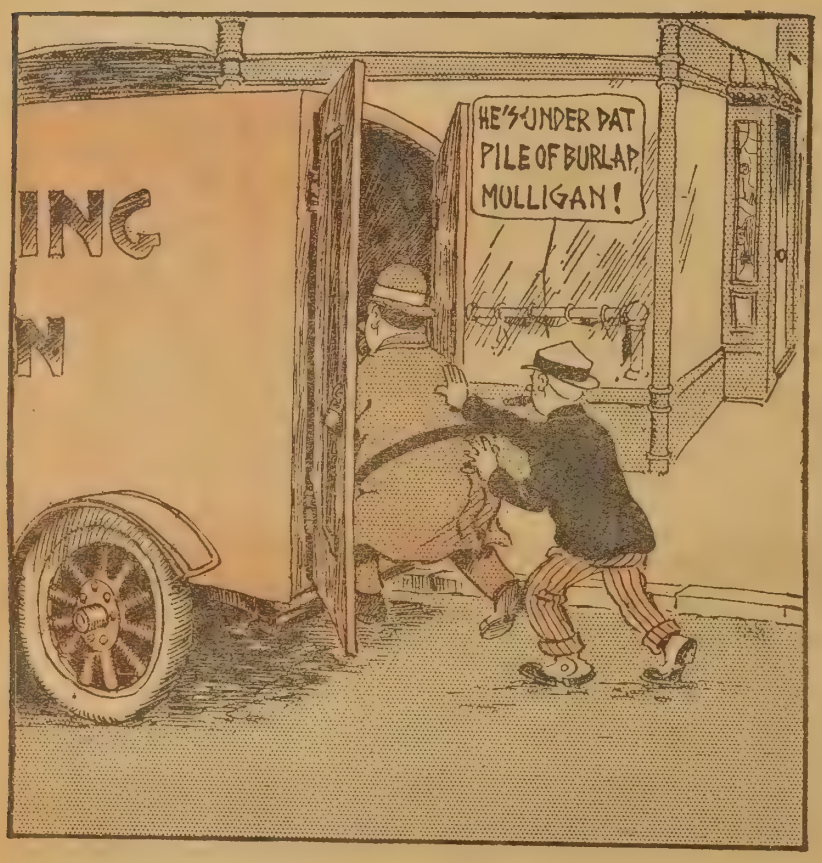
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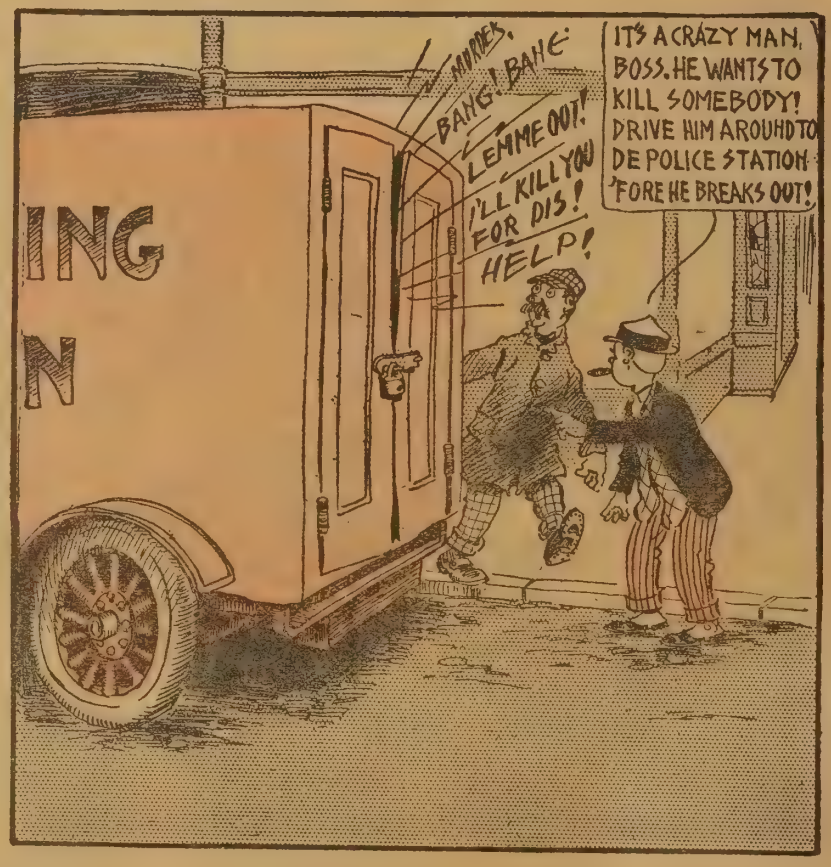
# MUGGSY DOESN'T MAKE A CENT, BUT HAS FUN WITH MULLIGAN

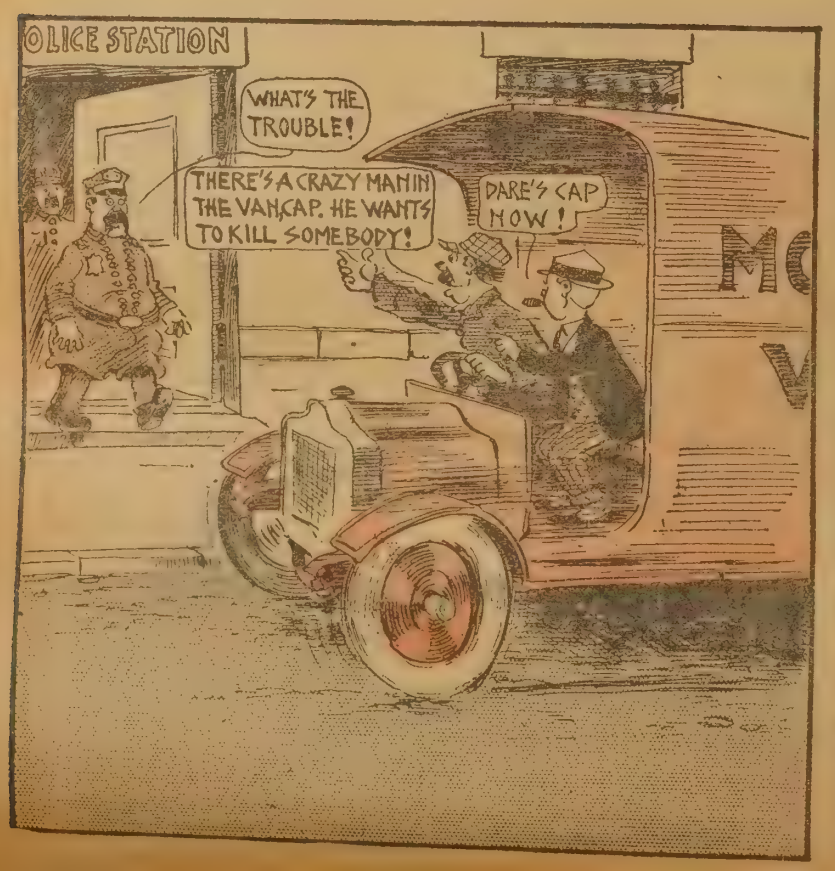






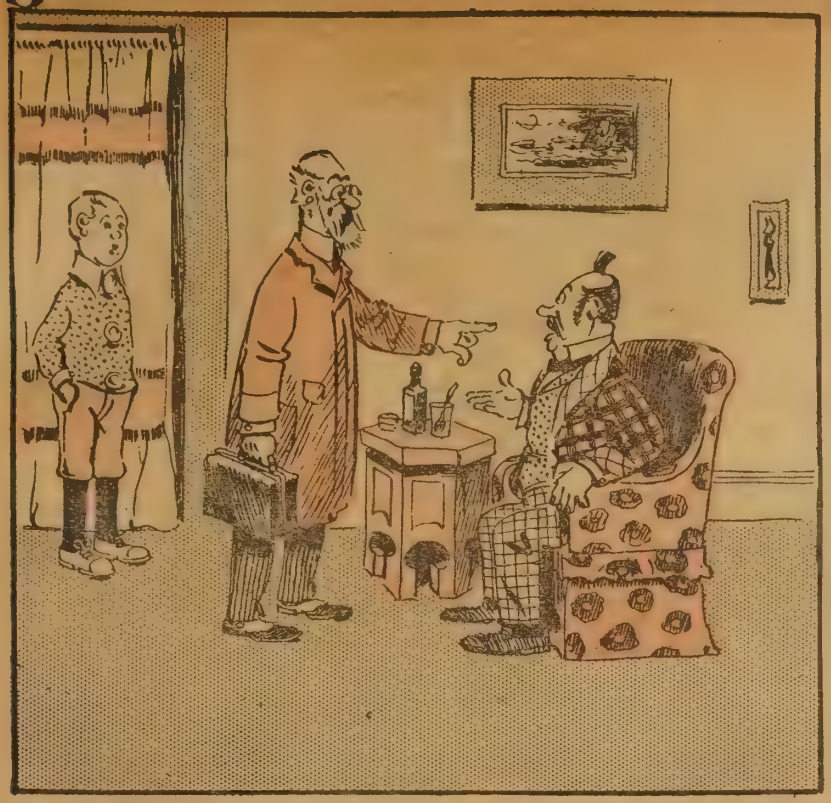


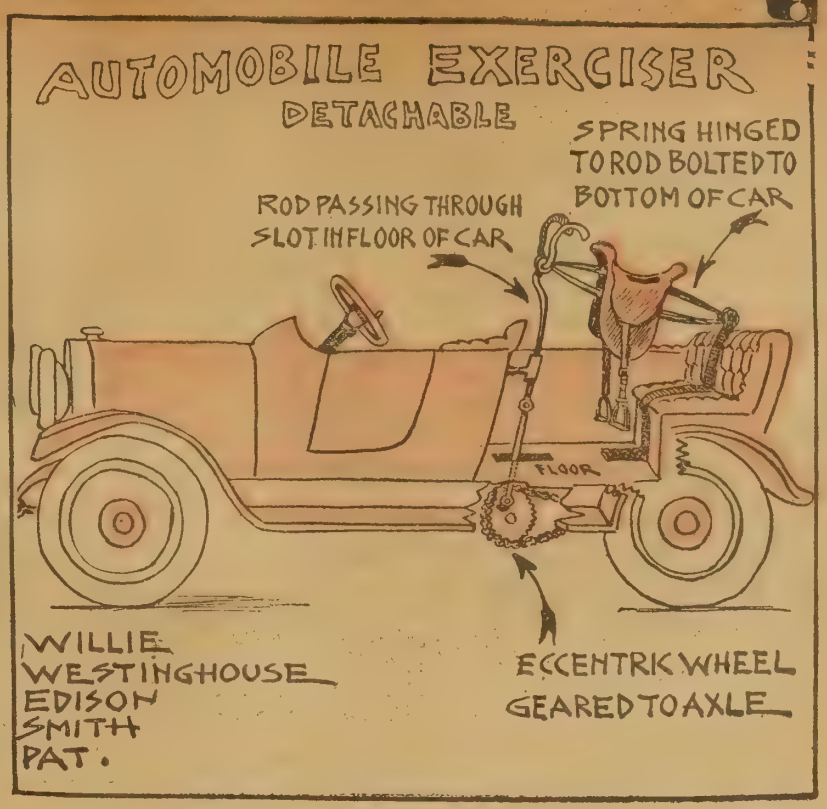



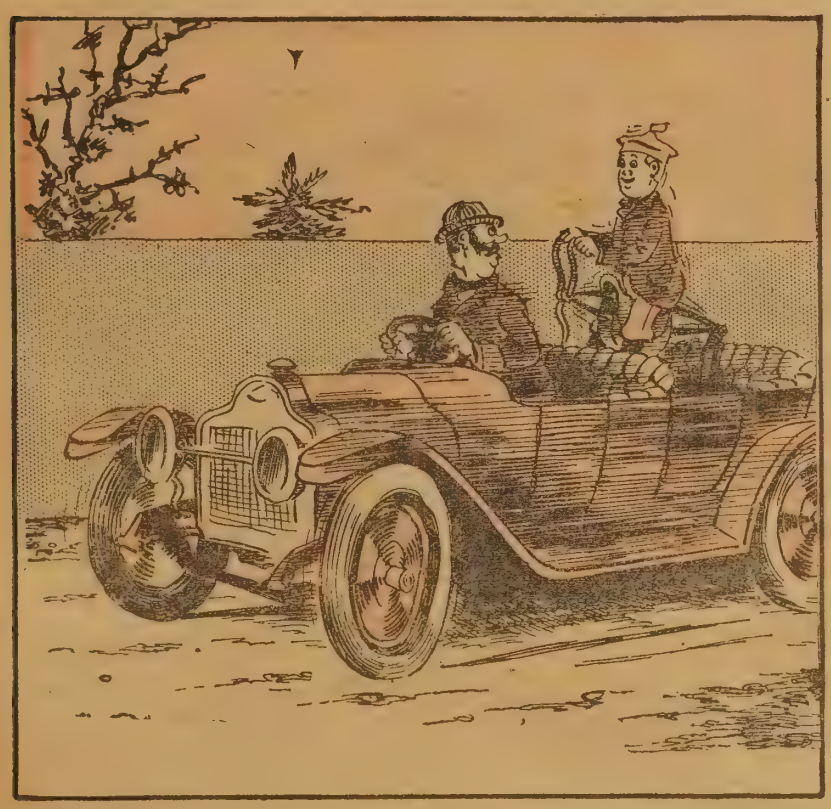



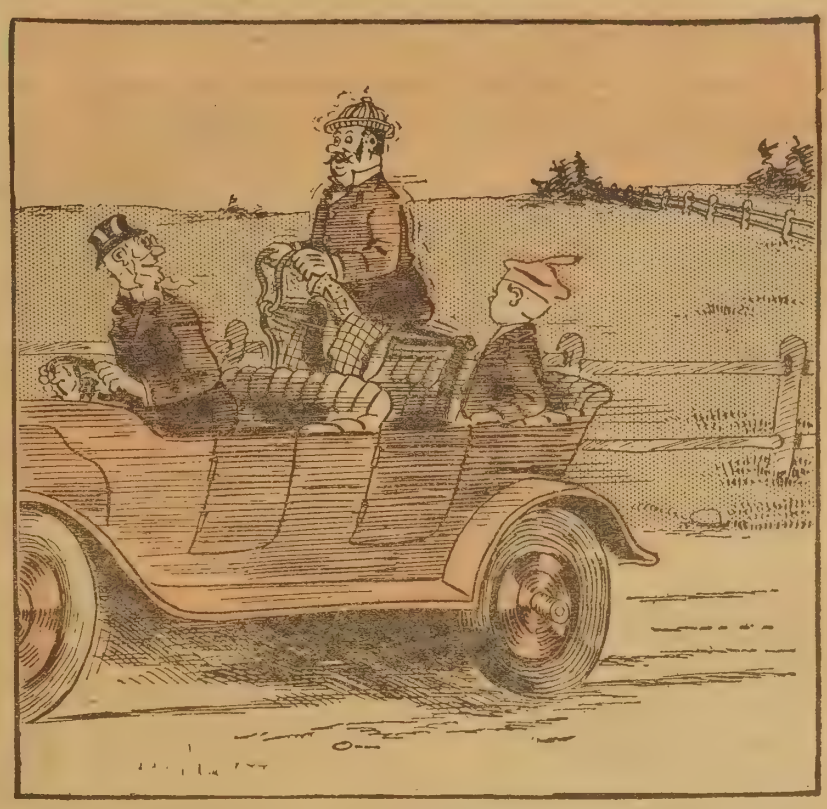


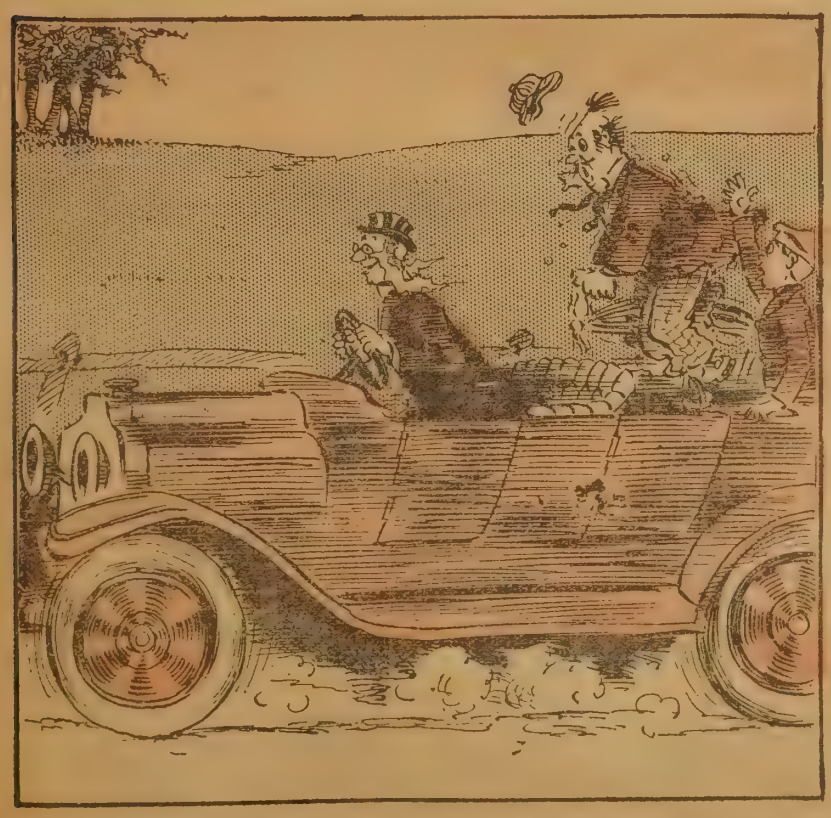

# WILLIE'S SADDLE HORSE DEVELOPS INTO A BUCKING BRONCO

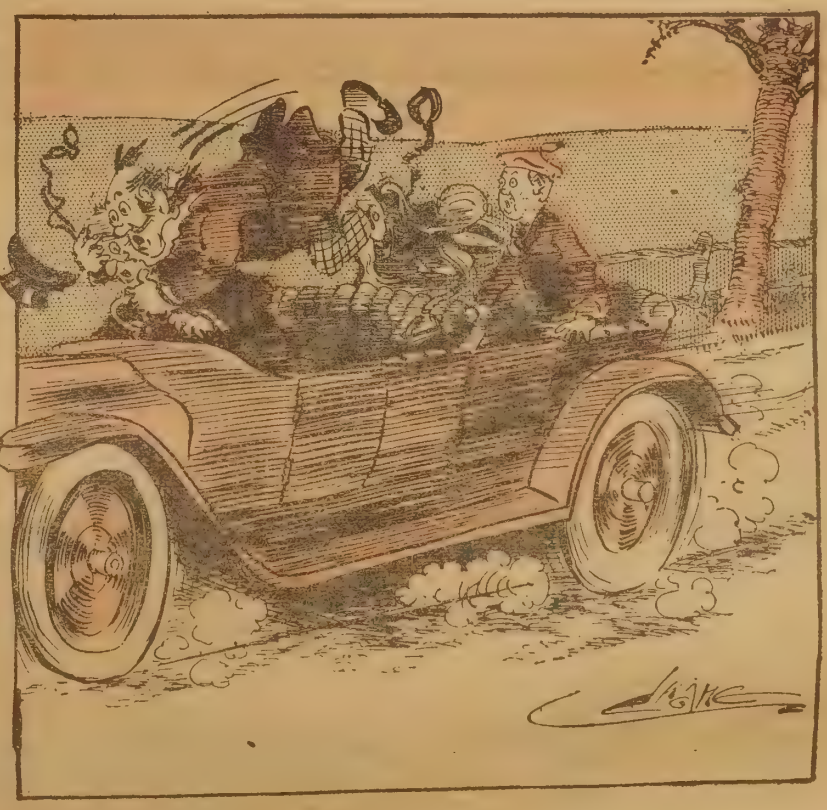










DEAR TOMMY: I invented this contraption after the doctor told Papa he must get a saddle horse and take a gallop every day. When we went out to try it we picked up the Minister, and he spoiled it all by scorching over a rough road and shaking Papa off the saddle. Now Papa is looking for a gentle saddle horse!

Yours, etc.,

# Fruit in Doubt

## Horticulturist Reviews Prospect

Under date of June 1 State Horticulturist M. L. Dean of the state department of agriculture issued the following statement relative to the fruit prospects in the various districts of the state:

Reports have been received, gathered by observations and consultations with growers, dealers and others interested in the fruit growing industry.

Generally speaking, there was a shortage of moisture in 1917 and some varieties, in fact all varieties in some sections, suffered to the extent that they failed to develop a normal setting of fruit buds. This was especially true in the nonirrigated sections and in orchards where the trees were carrying a heavy crop, unless the fruit was carefully thinned.

In some orchards the powdery mildew infection was serious last season and where it was not properly sprayed it prevented fruit bud formation. This injury is far-reaching and should be given closer attention by the growers.

Had it not been for frequent frosts in April we would have had a larger crop than in 1917, but present indications show a falling off of all tree fruits, except possibly prunes. The weather conditions at blossoming time were ideal for a heavy set of prunes, and, unless unforeseen conditions prevent it, we will have a heavy increase over last season's crop. It is impossible at this time to estimate the June drop. About July 1 another report will be issued.

### Yakima Valley.

April 3d in some parts of the lower Yakima valley the temperature dropped to 19 degrees. The peaches and cherries were about in full bloom and in the lower sections the damage was severe on all soft fruits. The early strawberries were seriously injured. Frost periods were quite frequent up to May 7th and of sufficient severity to reduce the crop of all fruits in Benton county at least 50 per cent of that of 1917

In the Parker Heights section some orchards promise as high as 90 per cent of a peach crop.

In the upper Yakima valley conditions are more promising and the total crop of apples will probably be about the same as the 1917 yield. Pears may exceed last year's crop, but peaches and other soft tree fruits will show a heavy shortage.

Winesaps promise at present to be the heavy yielders for this season; Romes, Arkansas Black, Newtown, Jonathan and Spitz following in the order named.

Considering the entire valley, present conditions point to a shrinkage of 1000 cars below the 1917 crop.

The dormant and calyx sprays have been very generally applied, although lack of water in some of the irrigation canals prevented early spraying.

### Wenatchee and North Central.

The Wenatchee district has escaped severe frost injury and, except where there was a shortage of moisture last season a slight increase of crop is promised. Based upon present conditions, peaches promise 85 per cent of 1917 crop; apples and pears 110 per cent. Jonathans and Spitz promise a light crop, but Winesaps and others are heavy.

The Okanogan county sections have a heavy setting of fruit and, with sufficient moisture, their crop will exceed that of 1917.

As a whole the crop promises about the same tonnage as last season.

### Spokane District.

This entire district had a very heavy bloom, but some portions of the territory have been visited by frosts so that it is difficult to estimate the crop. Early indications pointed to a heavy increase over the 1917 yield. Seventy-five to 90 per cent of the orchards were given the early sprays, followed by the application of the calyx spray.

### Western Washington.

In the White Salmon district the dry weather of 1917 seriously prevented the formation of fruit buds in some orchards, consequently the crop will be below normal. These conditions have encouraged growers to install irrigation systems, where pumping or reservoiring is feasible. The strawberry crop is promising; the first berries being marketed May 25.

In Clarke county the outlook is very promising for a heavy prune crop.

The berry sections around Puyallup, Sumner and the northern points promise good crops. Tree fruits will be about normal.

Orcas and Vashon islands promise good crops.

Over the state as a whole the potato acreage rates about 60 per cent as compared with 1917, yet with this decreased acreage, if weather conditions are favorable, it is possible to get a normal crop yield.

The acreage of oats and corn shows a large increase.

Beans and peas promise a larger crop than in 1917.

Wheat shows an increase of 25 per cent over last season's acreage, but the cold weather in some sections has prevented stooling, so that the stand may be thin.

### Walla Walla District.

Had it not been for the occurrence of April frosts the Walla Walla valley would have had a bumper crop this season. May 15 apples, prunes, cherries and berries promised from 40 to 60 per cent of a full crop, but recent frosts have reduced these figures so that it will be impossible to give any estimate until after the June drop, but the crop will fall much below the 1917 yield.

At Clarkston the red spider, mildew and drouth seriously affected the orchards last year, but they promise to have an average of better than 60 per cent crop of all fruits. There is a marked improvement in the care of the orchards of this section this season. More than 90 per cent were given the dormant spray, followed by thorough calyx sprays.

## Tries Out Sugar Beets.

If experiments now under way are a success, Walla Walla county will become one of the sugar beet producing communities of the northwest. About 700 acres are now under cultivation, and this acreage will be automatically increased if the crop does well.


**STOCK AND DIVERSIFIED FARM**

400 acres of fine land, with two sets of buildings, completely equipped for dairying, hog raising and chickens, with machinery and tools for working the place. About 250 acres in high state of cultivation, some in timothy and clover; 100 acres of timber, good soil when cleared; on fine roads and close to good town. This is one of the best located and most complete farms of this class that you could find. Fine 6-room plastered house with furnace, fireplace, etc.; good dairy buildings; 6 thoroughbred Jersey cows and 20 thoroughbred sows go with place; water under pressure to dairy buildings; excellent location. Price for good reasons, $33,000. Terms to right party.

**The Fred B. Grinnell Company**

Spokane, Washington.



**Turn stump land into Money**

Increase your acreage and thereby increase your income.

Clear your stump land cheaply. No expense for teams or powder.

HAND POWER **Stump Puller**

One man with a can outpull 16 horses. Works by leverage—same principle as a jack. 100 lbs. pull on the lever gives a 48-ton pull on the stump. Made of the finest steel—guaranteed against breakage. Endorsed by U. S. Government experts.

Write today for special offer and free booklet on Land Clearing

Works equally well on hillsides and marshes where horses cannot operate

WALTER J. FITZPATRICK

Box 638 182 Fifth St., San Francisco, Cal.

In answering advertisements please mention this paper.



Porcelain-ware

Inferior insulators, like cheap porcelain-ware cups, break under sudden changes of temperature



Stone-ware

Stone-ware withstands extremes of heat and cold. That is why Vitristone insulators do not break

**Why 92 out of 100 spark plugs fail**

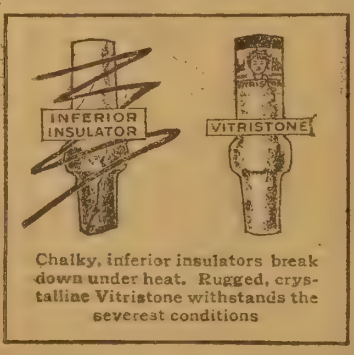
***Insulators of inferior material cannot withstand modern engine conditions***

OUT of 100 discarded spark plugs, taken at random, careful examination by experts showed that 92 were rendered useless by breakage of the insulators.

Both laboratory and road tests have proved this insulator breakage is due almost entirely to inferior material.

Inferior insulators cannot withstand the severity of modern engine conditions. In spark plug service they are subjected to intense heat —2000° to 3000° F.; rapid changes of temperature; high speeds; and hammer-like blows of compression. It is only natural that they should crack and break down.

Last year 42,000,000 plugs were thrown away, largely due to breakage of inferior insulating material.




Chalky, inferior insulators break down under heat. Rugged, crystalline Vitristone withstands the severest conditions

**The development of Vitristone**

After eight years of experiments in the Red Head potteries, spark plug experts perfected an insulating material that would not crack under the heat and vibration of the engine —the greatest advance made in spark plug construction in the past ten years.

Vitristone—the new insulator—is an artificial stone. Its rugged, crystalline structure is unaffected by rapid changes from extreme heat to extreme cold. It withstands the most intense vibration.

**Built for years of service**

Rigid tests insure gas-tightness and insulator efficiency in all Red Head plugs. If a Red Head misses, clean it, and nine times out of ten it will fire 100% right. It is easy to clean. Don't wait till your spark plugs crack and miss fire. Put a full set of Red Head plugs in your engine today. There is a Red Head plug for every requirement.

Your dealer has Red Head plugs in stock or can get them for you. If he does not, write to us for the name of the nearest dealer who can supply you.

**Emil Grossman M'f'g Corp'n**

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Red Head Vitristone Special for Fords

Long body construction assures accessibility . 75c



Red Head Vitristone Standard ⅞"-18—an all-purpose, trouble-proof plug . $1.00

Red Head Spark Plug Vitristone Insulator



Red Head Truck and Tractor plug. Mica protected by Vitristone cap . $1.50

W.S.S.
WAR SAVINGS STAMPS
ISSUED BY THE
UNITED STATES
GOVERNMENT

# Pests May Win

## *Must Make War Against Rodents*

The well-known American squirrel and his cousin, the American gopher, may win the war—for Germany. They are among the most pronounced pro-Germans in this country. They should be lined up and shot at sunrise, or any other time that one can be lined up with the sights of the rifle or shot gun. Or, better yet, they should be fed a sleeping potion with strychnine alkaloid as the sleep producing element.

Some may believe that these pests are not war winners for the Germans and Turks. But they are, and here is the way they work:

They destroy grain crops in this country every year estimated from the best figures obtainable at $100,000,000. Some estimates place the loss as high as $200,000,000.

Take the first figure, made when wheat was $1 a bushel. It means a loss of the equivalent of 100,000,000 bushels of wheat.

**While Squirrels Get Fat.**

Since last harvest the people of this country have been conserving wheat loyally to supply the allied armies. This conservation was and continues to be absolute necessary. Without it the allies absolutely can not win. If a real food shortage hits the armies of America and France and England, they are whipped.

As a result of food conservation America has been able to ship something like 125,000,000 bushels of wheat to Europe since last harvest, just one-fourth more than the amount destroyed by the rodent pests of this country. If these pests last year had not destroyed any grain, this country could have shipped nearly twice as much to the allies and the American soldiers as it was able to do. If the crop should be short this season for any cause, and the pests destroy their usual quota, it will mean insufficient grain for shipment and the possibility of the allied armies, including our own sons or brothers, being pushed back to defeat by the heartless Huns.

The same in a general way can be said of other things. If crops fail, the allies will fail; if shipping fails the allies will fail; if munition manufacture fails the allies will fail; if food conservation fails the allies will fail.

The point is, no one of these things can be allowed to fail, and the rodent pest is one of the vital factors in creating the possibility of crop or food failure.

**Cooperation Is Necessary.**

Says Walter P. Taylor, rodent expert of the United States biological survey, now completing a tour of the west including Washington, Oregon and Idaho, gathering information and working up sentiment against the pests: "On the proper solution of the rodent pest problem may depend the margin of food safety for America and the allies in this war. A given amount of money spent in systematic, thoroughly organized campaign work on a cooperative basis will probably go farther to increase food production than if spent in any other way.

**"The permanent solution of the rodent pest problem can only come through systematic, comprehensive campaigns on a cooperative basis, with the individual farmer as one cooperative unit, state officials, extension service, county agents, county commissioners and so on as a second cooperative unit, and the government through the bureau of biological survey as the third."**

There is the whole matter—cooperation. Cooperation everywhere. Individual farmers can not win alone. They can do much to protect their own crops, but complete success can not be obtained until the whole country is made a war zone against the pests.

Sentiment is crystalizing in favor of this cooperation. The government is rapidly getting ready. It is doing its part in some places now. The states are getting ready. They are enacting enabling legislation. The farmers must join in the movement as a whole.

**Feed Them Devil's Food.**

In the meantime, every farmer must fight his own personal battle on his own farm. While pests of the squirrel type can best be fought early in the spring, every one that is still alive should be exterminated now if possible, for a bushel of grain is a small estimate of what he will destroy yet this season. There are some "recipes" for squirrel and sage rat food as prepared and urged by the biological survey:

**For Columbian Ground Squirrels (the common red legged squirrel of the Palouse Country.**—Mix together dry, one ounce of powdered strychnine (alkaloid), one ounce of baking soda, one teaspoonful of saccharine and three tablespoons of flour. Add a little cold water and stir thoroughly to a smooth, creamy paste. Apply to 12 quarts of clean oats and mix thoroughly to distribute the poison evenly.

**For California, or Digger Squirrels.**—Mix thoroughly one ounce of powdered strychnine (alkaloid), and one ounce of common baking soda. Sift this into 3-4 pint of thin, hot starch paste and stir to a smooth, creamy paste. (The starch paste is made by dissolving one heaping tablespoonful of dry gloss starch in a little cold water which is then added to 3-4-pint of boiling water. Boil and stir constantly until a clear, thin paste is formed). Add 1-4-pint of heavy corn syrup and one tablespoonful of glycerine and stir thoroughly. Add 1-10 ounce of saccharine and stir thoroughly. Pour this mixture over 16 quarts of clean barley and mix well so that each grain is coated.

**For Sage Rats.**—Mix one tablespoonful of gloss starch in one-half teacup of cold water and stir into one-half pint of boiling water to make a thin, clear paste. Mix one ounce of powdered strychnine (alkaloid), with one ounce of baking soda (bicarbonate), and stir with the starch to a smooth, creamy mass, free from lumps. Stir in one-fourth pint of heavy corn syrup and one tablespoonful of saccharine. Four tablespoonfuls of table salt added to the boiling water before making the starch increases the effectiveness of the poison during crop growing season. Apply to 20 quarts of oats and mix thoroughly to coat each kernel.

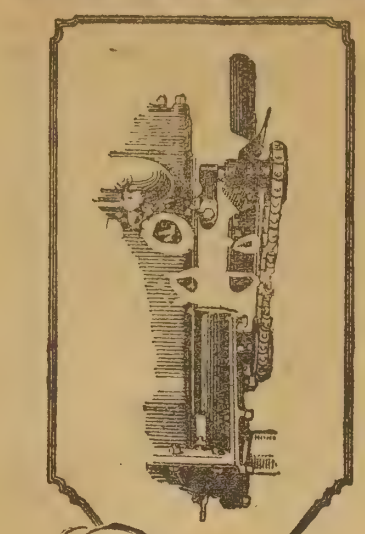
Each quart of poisoned grain is sufficient for 40 to 60 baits. This quantity, scattered one teaspoonful to a place, along squirrel trails or on clean, hard surfaces, near the holes, will not endanger stock.

Note—Strychnine in any form other than the commercial powdered alkaloid is not effective in the above formulas.

**Makes It Snappy.**

At Camp Lewis, a Y. M. C. A. secretary reports that a dog has been taught to salute officers.


STEPHENS *Salient Six*



THREE VISIBLE MOVING PARTS

The time was when overhead-valve engines were not as quiet as now. The valve operating mechanism was exposed, and the clicking of its action consequently was unmuffled.

*The only audible sound in the perfected overhead-valve engine of the Stephens Salient Six is the whir of the fan—practically noiseless.*

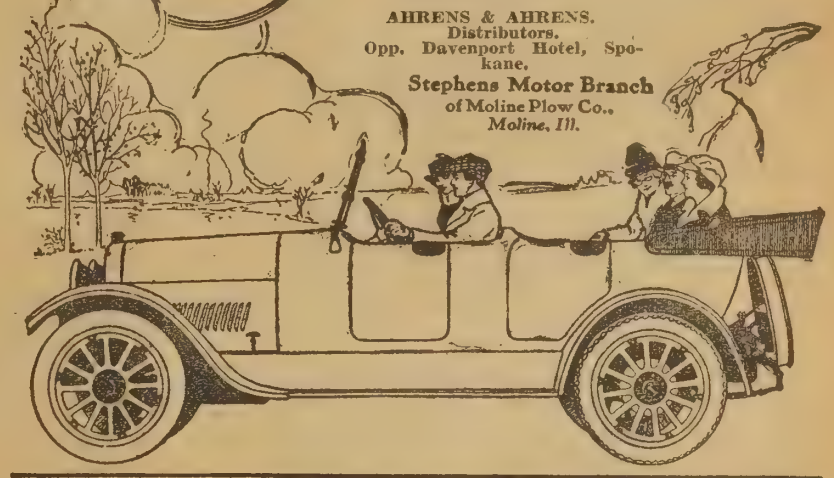
Quiet, powerful, especially constructed to burn the low grade fuels of today and the still lower grades to come, it takes front rank among the foremost gasoline engines of the day.

In body design, the Stephens Salient Six emphasizes the beauty, grace, and good taste of conservative individuality. Its comfort is the result of our master skill in coach building.

*May we have the pleasure of giving you a demonstration?*

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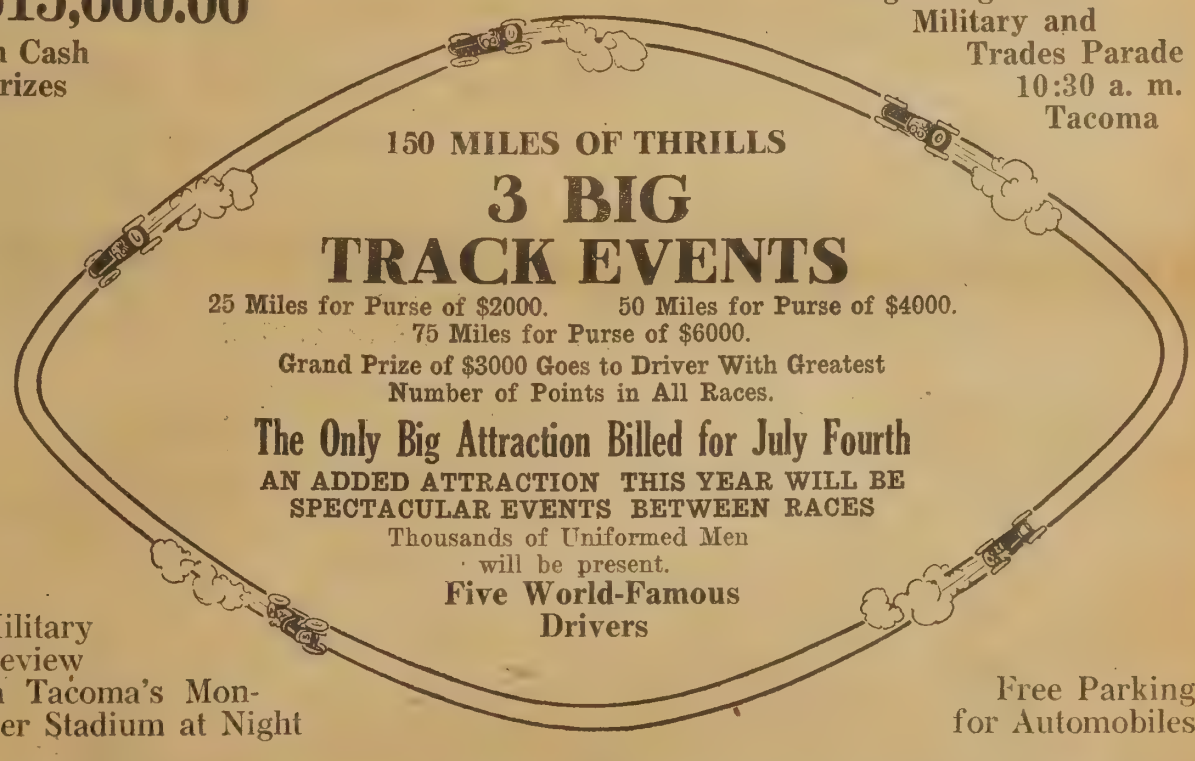


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150 MILES OF THRILLS

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The Only Big Attraction Billed for July Fourth

AN ADDED ATTRACTION THIS YEAR WILL BE SPECTACULAR EVENTS BETWEEN RACES

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Tacoma Speedway Association
TACOMA, WASH.

# Magazine Department of The Washington Farmer

## Farmer Boys Make Fine Fighting Men

The athletic director in camp looks to the boy from the farm for some of his best material, because the farmer boy's healthful, outdoor life has kept him physically fit, says Edward Frank Allen, in "Keeping Our Fighters Fit—For War and After" (Century company), written in cooperation with Raymond B. Fosdick, chairman of the commission on training camp activities of the war and navy departments. With the new draft, thousands of men are laying down their plows, or more modern farm tractors, to take up the gun. They, as well as their families and friends back home, will want to read all about how athletics is going to make them better soldiers. They will want to know more of the camp life generally and what has been provided for their leisure time. All this is interestingly told in the first full official statement of the mass singing, theatricals, social life and other forms of recreation in camp and adjacent community. Fathers and mothers will read with interest of the wide range of opportunities their sons are having.

Going into particulars about the athletics which appeals strongly to out of doors men, Mr. Allen says:

It is a big work, this organizing and directing the athletic activities of 40,000 men (in an average cantonment), and each of the divisional athletic officers has a man-sized job. But the reactions are remarkable. Football, baseball, basket ball, soccer, boxing, track and field athletics—in fact, nearly all the sports known to Americans—are indulged in by all the men in training. Never before in the history of this country has so large a number of men engaged in athletics; never before has its physical manhood received such a stimulus. Men are learning to get bumped and not mind it. The quality of persistence is being developed.

"The sports included in the camp curriculum," says Dr. Raycroft (director of athletics in the army camps), "such as boxing and football, and other personal contact games, have been selected primarily to prepare the men for the struggle to come and the value of this training they have received will be fully realized when they go 'over the top.'"

They play leap frog, too, prisoners' base and a dozen other games that their younger brothers have forgotten, and they enjoy them. There are plenty of games of this sort that besides promoting good feeling, develop self control, agility, mental alertness and initiative, all bases on which to build military efficiency.

Many of the boys from the farm are having their first opportunity to participate in organized sports with large numbers of other men. Many of them are for the first time enjoying club life furnished in all the Y. M. C. A. and Knights of Columbus buildings in camp, and in the Soldiers' and Sailors' clubs in nearby towns. In the educational work, in which already 100,000 men participate, in mass singing, in amateur shows, Mr. Allen's descriptions will show how they are comnig in close contact with other men from every walk of life, and learning to give and take in the finest sort of freemasonry.

President Wilson, in his special statement about the work, appearing in the book, says:

The federal government has pledged its word that as far as care and vigilance can accomplish the result, the men committed to its charge will be returned to the homes and communities that so generously gave them with no scars except those of honorable conflict.

And the federal government is doing this by making camp conditions not only clean and decent, but positively educational and inspiring as well. Furnishing the men with the things they have been accustomed to at home is a big part of the program. One feature which appeals especially to the boy from the farm is the post exchange.

Post exchanges are a series of stores dotting the grounds of the national army cantonments, where they may purchase any of the small articles from a button to a song book that contribute to their contentment and comfort. Goods are sold there at lower prices than obtain in cities, and the hundreds of thousands of dollars made by small trading on a vast scale are turned back into the soldiers' coffers, for Uncle Sam is storekeeper.

With its assortment of everything under the sun it recalls vividly the village emporium to the country recruit.

And indeed, from a social point of view, the post exchange is the counterpart of the good old cross-roads store, where good fellows gather round to pass the time of day together.

In the free atmosphere of the common store a fellow is always at ease with his new and often strange companions; what he buys is often a matter for much jest and jollification; if it is an edible he shares it with the others; and there is great sociability and good will. It is a natural ice-breaker. It gives rise to many friendships and constantly strengthens them with its encouragement of our social habit of dropping in at a convenient place for some light refreshment after physical exercise, a show, or what not.

## Hand Weaving

### Pioneer Methods on Exhibit

The hand-weaving exhibition at the great textile show just held in New York was not quite complete, as the wool used was carded in an old mill in Vermont and made into rolls for spinning. Many people now living can remember seeing their elders card wool by hand on the long nights of winter. It is interesteing to note, however, that the old mill in Vermont is run by water power and is in exactly the same condition as many years ago when carding by this method was the acme of perfection—a wonderful advance, it was considered then, over the old and tedious method of hand carding.

But in all other details the spinning and weaving in the New York exhibition was true to pioneer methods. The carded wool in rolls was spun on an ancient spinning wheel, run by hand. After the spinning it was reeled on an ancient clock reel, 165 years old.. The old familiar click, occurring when 40 turns of the wheel are made, could be heard as in the olden days and is still used as a gauge to measure the amount of yarn that has been reeled.

The old fashioned hand loom that was in operation at the show is worthy of special mention. All day long it was working, turning out cloth that had been ordered and as one order was finished another was started. The weaving is primitive, but it produces homespun that is really homespun and the ready sale for it testifies to the fact that it is in demand.

Suitings and overcoatings were made at the exhibit and a comparatively large variety of patterns made at that. The suitings range in price from $3.75 to $4.25, while the overcoatings on account of the larger quantity of wool that is necessary range in price from $5.50 to $6. One particular example of overcoating is on display that is attracting considerable attention. After being woven on the hand loom it was sent to a finishing plant where it was soaked in a vat of soft soap. This wsa afterward washed out and after a process of "fulling" the cloth was pressed with the result that the finished product is most attractive.

## Sidelights

**The Unconquerable Habit.**

"Believe in signs?"

"Everything but "fresh paint" signs. I always try them out to see if they're telling the truth."—Detroit Free Press.

**Two Bites of a Cherry.**

A breakfast question we expect soon to hear: "A little of the yolk or a little of the white, dear?"—From the London Opinion.

**In the Past.**

He—You used to say you would delight to obey me.

She—And you used to swear you were mine to command.—Baltimore American.

**A Great Misfortune.**

"If Germany is defeated, the kaiser will be deprived of one human excuse."

"What is that."

"He can't say it was all his wife's fault."—Exchange.

**Orders Is Orders.**

Orderly Sergeant—Lights out, there.

Voice from the hut—It's the moon, sergint.

Orderly Sergeant—I don't give a damn what it is. Put it out.—Punch.

**His View on the Subject.**

An Irvington mother told her young hopeful to tell the teacher she didn't wish him to study German any longer.

"Just tell your teacher I don't want you to study German, that's all. She'll understand," the mother said.

The youngster pondered several seconds, then turned to his mother and said:

"Well, mother, while I'm at it, I might as well cut out arithmetic, too."—Indianapolis News.

**Tommy Explains.**

A couple of Charlestown kiddies were celebrating Bunker Hill day by exploding a few torpedoes. Said Nellie: "I don't see how the Germans can blow up a big ship with one of these things."

"Oh, you girls can't expect to understand about such things," said Tommy, with a superior air. "Of course, the torpedoes they use are about a hundred times as big and they use a derrick to lift them and drop them on the ship."—Boston Transcript.

**Wonders of Cookery.**

A new pupil in the cooking school sat at the instructor's desk copying recipes from cards. She wrote busily for some time and then approached a fellow student and asked wonderingly:

"Do you have to have all these things to make fruit punch?"

Her card read:

"Fruit punch—Two pounds powdered sugar, 12 lemons, nutmegs, paprika, tarragon, vinegar, two heads of lettuce, raisins, buttermilk."

It appeared that she had copied the teacher's grocery memorandum for the next day.—Youth's Companion.

**The Truth at All Costs.**

He was a hard-working school teacher and had just told the class that wool comes off sheep and is made into blankets, clothing, etc. He proceeded to question little Willie, who had been rather inattentive during the lesson.

"Now, Willie," said the teacher, "where does wool come from?"

"Off the sheep's back, sir."

"And then?" queried the teacher. Willie could not answer.

"What are these made from?" asked the teacher, touching Willie's trousers with the cane.

"Uncle John's old ones."—Exchange.

## WATER WATCH.

### For Use in Irrigating Ditch.

A man in Los Angeles, Cal., has invented what he calls a "water watch." It is designed to measure the water in an irrigating ditch. I wonder why I was not the inventor of that machine. I have puzzled over the question of methods in the division of water and in its measurements until I have almost been lost in the mazes of confusion, because there has not been in the northwest or in any other place, so far as I know, a correct, a scientific, a universal standard of measurement. Almost every irrigating system has some unit of measurement, or some method of measurement that differs from every other, and it is impossible to reduce them to a unit of measurement that will apply everywhere, and give any correct idea of how much water is being received.

Water is the valuable thing in an irrigated country. Almost anywhere in the northwest where there is not rainfall enough to grow wheat we can buy sagebrush land for $1 to $5 per acre, provided water can not be obtained, but if water can be obtained the land is worth $100 to $200 per acre. It can be easily seen, therefore, that water is the thing of principal value, yet the land can be measured with accuracy and the water can not.

It is, therefore, a great pleasure to me to find that some one has invented a machine which stands encased in an open ditch, with its face above the water, to be read by all persons at all times, and that it gives a correct and complete record of all the water that passes through its gages. It contains a spiral wheel, similar to a ship's log and through which the water is directed. The wheel revolves by the action of the rushing water on its beveled surface. The speed of the spiral is governed by the flow of the water; therefore, if the canal is full the pressure on the vein is increased by the heavy flow. Its velocity must, of necessity, be increased, in proportion by the increased speed of the water and lessed by the diminished flow and pressure.

G. L.

## SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

## An Air or Water Pillow of Rubber a Sanitary Sleep Aid



Dr. Hirshberg.

Whether to sleep with or without a pillow—that is the question each individual has to decide for himself. One person needs must roost high, with his head well above the level of a bolster and two pillows, while another can not abide either and sleeps well only when the head is on the mattress itself.

Physiologically, the average person may prefer to visit Morpheus with the head a bit above the line of the body, but there are so many exceptionally healthy individuals who enter the land of nod in other ways that the "physiological pillow" idea of Dr. Sheldon Leavitt of Chicago may solve the problem. For three years he had discarded the old-fashioned pillow with most happy results.

Ordinarily the posture in which most persons sleep for many hours at a time, cramps the heart and blood stream, strains many chest and neck muscles and compresses important structures generally.

Sleepers are often seen with congested faces, snoring loudly, and as restless as a roasted popcorn on a red hot coal. Many of the postures assumed by sleepers as the direct upshot of the pillow they rest upon may well be productive of numb fingers, tingling arms and pine-and-needles sensations in the chest and legs.

**What the Pillow Is.**

The common garden variety of pillow pushes the head into unsymmetrical poses, squeezes nerves, veins and arteries and helps to cause bad dreams by the tension maintained in the neck and shoulders.

The ideal, sanitary and physiological pillow, according to the Chicago savant, is one that is not as soft as the ordinary pillow nor as hard as a cushion. It is as high as the outer edge of the shoulder and fits into the space by the side of the head, neck and protuding shoulder.

Dr. Leavett's pillow is made of rubber or some similar material, which can either be inflated like an automobile tire casing—not the inner tube—or filled with cold or hot water like a rubber bag or thermos bottle. In appearance and form it is not unlike a foot cushion, but is more resilient, and gives somewhat like putty to hold the shape of the head and shoulders of the sleeper.

**Habit the Factor.**

Dr. Leavett claims that this new physiological pillow can be made by almost any one capable of making a pin cushion. It does not contribute to that overindulgence so characteristic of many persons of giving them a bed of roses and too soft a pillow to lie upon.

The matter in question, whether high pillows or low pillows are preferable is not any more important than whether you sleep better on the right side or left side.

Some years ago I was convinced that I could sleep better without a pillow than with one; also that I could never sleep soundly on my left side. Determined to test both my will power, my ability to overcome a habit and my reasoning that there could be no physiological difference, very abruptly one night I made up my mind to sleep on two pillows and on my left side.

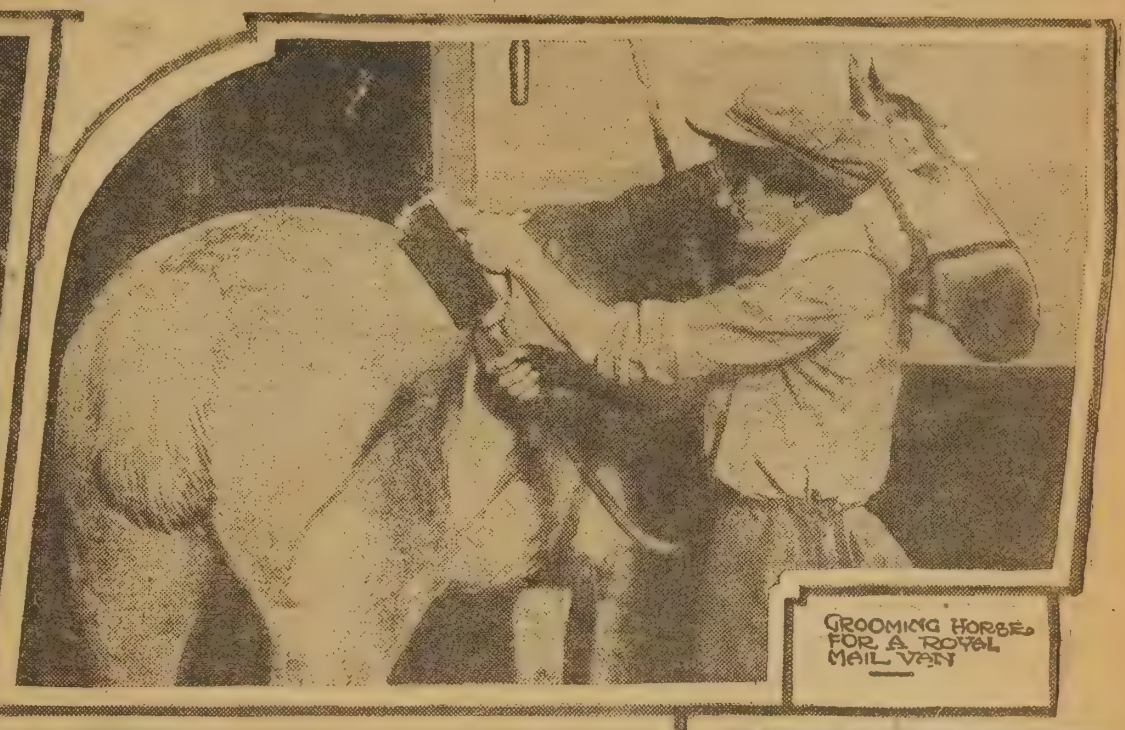
After a few hours wrestling with the broken habit of years I went to sleep and established the opposite hapit, which has not yet been disturbed or switched into the other one.

Obviously, the human fabric in health acquires a happy faculty by which it can change and adapt itself to an infinite variety of circumstances. A daffydown-dilly, or a feather pillow, hard-flint or a bolster, may each, as occasion offers, serve as pillows.

# All the World's a Stage, and All the Men and Women Merely Players

## War Work of English Women Covers Wide Field










U. S. Food Administration.

Thousands of able-bodied women have passed beyond the knitting-bandage-making stage over in Merrie England, leaving to children, cripples and the aged these earliest of war duties.

The war work of English women, translated in part, means grooming horses, doing forestry work, working on farms, making a business of not-house vegetable raising, pitching hay, and in general taking the places left vacant in the agricultural world by the absence of men workers who are at the front.

From almost every walk in life, these women who are physically able have taken their places in the fields.

Grooming horses isn't the pleasantest task in the world, but the women of England never hesitate. They know that to "carry on" means to do what one is best fitted for.

Clearing wooded land so that crops may be planted is harder than sweeping floors or serving tea.

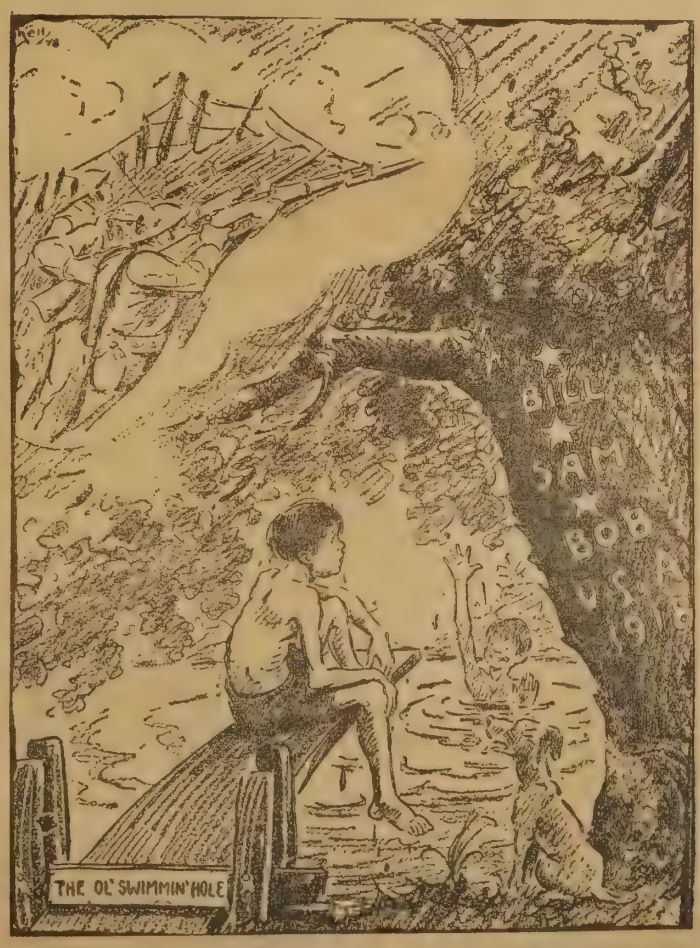
Not so strenuous, but quite as tiring and important, is the raising of fresh vegetables, under cloches, and in hot-houses, so that an early supply of green things may be assured.

### Rhondda a Vicount.



The British food controller has been elevated to be viscount by King George V. "for conspicuous public services as food controller." The king's birthday honor list, issued June 3, contained the announcement. Lord Rhondda's policy, broadly speaking, has been to fix prices of those articles of prime necessity over the supply of which he can obtain control at all stages, from producer down to the retailer. The purpose is to fix such prices on the principle of allowing a reasonable pre-war profit to those engaged in the production and distribution of the particular commodity.

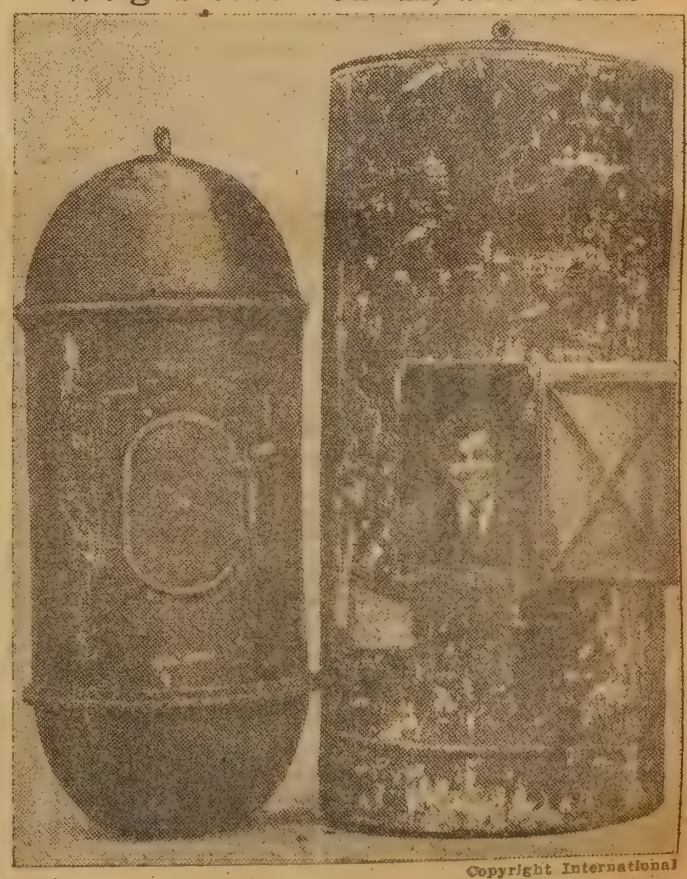
### The Ol' Swimmin' Hole




—Oakland Tribune.

"Gee, it's no fun any more without th' big fellers here t' duck y'u an' tie yer clothes in a knot."

### Weighs 6000 Pounds, but Floats



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To prove that his invention is unsinkable, Menotti Nannik, a Chicago inventor, locked himself into a 6000-pound safe, which was thrown overboard at Battery park, New York. After being submerged in 85 feet of water for more than a minute, the safe reappeared on the surface and the inventor was released. The safe was enclosed in a large steel cylinder, whose top automatically came off when it struck the water. The inrush of water forced the safe to the surface, where it bobbed about until recovered.

# Trappers of the Ozarks

**The Adventures of Two Young Pioneers in the Wilds of Upper Louisiana. Now the State of Missouri.**

By LOUIS B. MILLER

Copyright, 1914, 1915, by Lewis B. Miller.

**Summary of Preceding Chapters.**

In September, 1811, two young men who lived near St. Louis, Ben Armstrong and Jodo Henderson, taking with them their two dogs and donkey Spunky, started on an all-winter's hunt in what was at that time an unsettled region, where Indians held full sway, in the wilds of upper Louisiana, now the state of Missouri. After a perilous trip over old Indian trails and dangerous streams, they reached their destination—a salt spring close to the river Big Niangua, which Ben had visited before and from which they expected to secure salt for sale with their furs when they returned to civilization the following spring. Here they erected a rough cabin for their winter quarters close to the mouth of a large cave that was full of water and bats, and started their salt making and hunting. After an exciting experience with a bear in a cave they find their first fresh sign of Indians—moccasin-tracks in the snow about their camp and the morning after they find moccasin-tracks in the snow about their camp. The Indians attempt to enter their barricaded cabin at night but are frightened away by a great earthquake. The boys are captured and taken to the Osage village. One day they are given one bullet and one charge of powder each and allowed to go hunting. They dare not attempt to escape for fear of starvation, but lose their way and are found the following day by the Indians who think they tried to escape and are taken to the camp under guard. Ben is tied to a stake and a fire built under him but it is only a ruse to induce him to take as his squaw Watermelon, for the time being an Indian widow, who cuts his bonds and proclaims herself his squaw. Ben declines. The boys make plans to escape by canoe. They accumulate some parched corn and dried meat, steal a canoe at night and paddling far up the river turn into a branch stream and hide in a cave. After two days and a night there they go back down the river, safely past the Indian village and turning into a branch find a cave high up in the rocky face of a cliff. Here they place all their belongings except the canoe, which they conceal. They are discovered by the Indians, and, retreating deep into the cave with their belongings, they find, over a mile from the opening through which they entered the cave, an exit, and start southwest, the Indians undoubtedly in pursuit. The second day a blizzard sets in and hungry wolves follow the boys. Toward dusk they reach a deserted settler's camp, the cabin burned but chimney standing. Here they build a fire and plan to stand off the wolves. A long, hard fight with wolves and cold ensues. This fight was hardly won when Snapping Turtle and his warrior band surround the boys, who later effect their escape unseen by their enemies, but only to renew their struggle with the cold and wild animals. Once again they made good their escape, at last reaching the stockade camp of other white hunters in the wilderness. They are admitted and find rest and shelter with three older men, kindly, but fugitives from justice.

## CHAPTER XXI.

**Escaping by a Way Mysterious.**

"Let 'em shoot as much as they please," said Ben, calmly seating himself on the bench. "I only wish we had all the powder and bullets they're wasting. And I wish we had some way to give those hunters warning."

"Ben, yonder lies a long, slim pole. And one of their blankets is a bright red. Don't you think, if we elevated the blanket on the pole that they'd see it when they come home and understand what it meant?"

"I rather believe they would. At any rate, it's worth trying."

Soon they had the blanket on the pole, and the pole fastened against the upper part of the stick-and-mud chimney. The blanket waved in the south wind, like the big red flag of danger that it was. The two walked about in the yard. Sometimes they mounted a bench and peeped out between the stockade timbers to see if they could discover any Indians. But the Osages were prudently keeping out of sight.

The hours of the afternoon dragged by. Occasionally an Indian could be seen, out in the forest, and dodging from tree trunk to tree trunk. Besides watching for redskins, Ben and his companion kept a lookout for the absent hunters. But not one of them appeared.

When at length the sun was setting, the two guards knew that the owners of the house had either heard the shots or seen the flag and fled for safety; or they had encountered the Indians and been captured or killed. At any rate, it seemed a fact that Ben and Jodo must shift for themselves. And they wondered what the Osages would do or attempt to do when darkness came down. They tried to be hopeful, but feared the worst.

At dusk, after assuring himself that no Indians were near the stockade, Ben unbarred the gate and threw it wide open. If any of the hunters happened to be hiding close by, this would be their opportunity to make a dash and get inside. Then he called aloud:

"Mr. Jacks, streak it for home if you can! The way is clear!" And so he called each of the others.

But nobody came dashing out of the forest. Ben shut the gate and barred it again. But he stood by it, ready to open at a moment's call.

"Boys, anything the matter with that gate?"

Startled, both turned like a flash. And they could scarcely believe their senses.

There in the cabin door stood Jacks. And just outside, leaning against the cabin wall, were Murphy and Wolf.

Ben stared and Jodo stared. "Well, in the name of all that's reasonable, how did you get in here?" burst out Ben.

"Just what I'd like to know," declared Jodo.

The hunters grinned. "Didn't you see us open the gate and walk right in, bold as ever you please?" demanded Jacks.

"No, we didn't! And, what's more, you didn't come in through the gate!" Jodo insisted. "W've been watching this gate with hawk's eyes—watching it for hours."

Wolf stepped out and gazed up at the blanket on the pole. "What does that mean?" he wanted to know.

Jodo replied: "That's a danger signal."

"Danger of what?" Murphy asked.

"From redskins," Ben explained. "They're here, the Osages—nearly 20 of 'em. And they're keeping watchful eyes on this place. But you haven't told us how you got inside."

"Well, now, I'll tell you, boys," said Jacks. "We heard some shots, and when we got back clost enough and seed your red flag, we guessed somethin' must be wrong. As it wasn't safe to come in the usual way, we 'lowed we'd better slip in some unusual way. So we turned a trick, and here we air!"

And with this by no means enlightening explanation, Ben and Jodo had to be content. For the hunters began to talk of something else. But the matter had mystified the two visitors. After letting the blanket down, they even took a look around the stockade. But they could discover no other entrance.

Jacks and Wolf now went inside to prepare supper. But Murphy was standing on a bench looking between the stockade timbers and out into the darkening forest. His rifle was in his hand.

"I'm tryin' to ketch sight of a Osage," he explained when Ben approached. "Them's the very same red boogers that druv off all our horses and stuck fire to our first cabin. If I can git half a chanct I'll make one of the greasy varmints mighty tarnation sick of this clearin'."

"They'll be hard to see now," Ben answered, as he started toward the cabin door.

But just as he stepped through the door Murphy's rifle cracked, and a yelp in the woods followed promptly.

"Did you fetch one, Bill?" Wolf stepped to the door to inquire.

"Yep. I only teched 'im gentle, though. But he started for tall timber like a horet had lit on 'im, sharp end first."

"Unless we had ammunition enough to fight it out with them I doubt if it's good policy to shoot any of them," Ben remarked. "I've had chances to kill some since we talked with their chief, but I held my fire."

Murphy jumped to the ground and began to reload his rifle. "It's little they know how much powder and lead we've got. And unless we knock a few of the red rogues silly they'll hang around here as long as they please."

Night now settled down, and Murphy went indoors. Supper was prepared, and all ate together. After supper it was agreed that one should remain up and one guard and that the others should lie down and sleep until their turn came.

Murphy was taking the first watch, and the two visitors went to bed and to sleep. The guard sometimes sat before the fire, which was little needed, and sometimes he went out into the yard and walked around. Not a suspicious sound could be heard, and he half believed that the Osages had gone away.

Ben and Jodo would not come on guard duty till late in the night, and they slept soundly. But it was not yet midnight when Jacks shook them awake.

"Up with you boys!" he said, though very quietly. And when they had sat up drowsily he explained: "It's not for guard duty that I'm wakin' you. The red niggers have fired the cabins, and we've got to hustle out or be roasted alive!"

Ben started up in alarm. "Fired the cabins? How could they do that? And why didn't the guard prevent it?"

"Narry s'picion did he have of what they's up to, they worked so tarnal sly. We didn't make any loopholes in our cabin walls. That was our mistake. Instid, we tried to make 'em bullet-tight. The Osage boogers packed bresh and dry wood and piled it ag'in' the outside walls, and now they've up and set fire to it. Don't you hear it a-cracklin'? And if you'll take a peep out through this hole we've just made in the mud-dobbin' you can see what's coming' to pass."

Ben put his eye to the hole. All the ground near the cabin was brightly lighted. Jodo also looked out.

"Can't something be done to extinguish the fire?" Ben inquired.

"Not without exposin' ourselves. And the moment we stuck our heads outside the red creechers would open fire. That's just what they're waitin' fur."

"Then what can we do?" demanded Jodo. "We don't all expect to sit down here and fold our hands and wait till we're broiled alive, do we?

"No, we won't do that—not by a jugful!" answered Jacks. "Only one other thing we can do, though—git up and dust from here."

"But if the Osages are outside, ready to shoot us down, how can we git up and dust?" again demanded Jodo.

"That's the easy part—as easy as rollin' off a log."

Now Ben spoke up: "I don't see how that can be."

"You don't see yit, but you will see before long. Leave that part to us."

"Is it dangerous?"

Jacks shook his head. "As safe as safe can be."

Ben and Jodo were much puzzled. But they recalled the mysterious way these men had entered the stockade in spite of the Indians, and knew that they must be speaking the truth.

"There's no great hurry, I reckon," Jacks told them. "It ought to take a good while for the fire to burn through these logs. But it will burn through by daylight or not long after'ds. And night's a better time to escape than daylight would be. The sooner we git started the better. Every feller of us ought to be miles from here by daybreak. The question is, what do you boys want to do? Go with us down White river to our tradin' post or strike back t'wards your trappin' camp?"

"We'll be the gladdest kind to have you go with us if you feel like it," Murphy spoke up.

Ben weighed the matter. "If we just had a little ammunition I think we'd travel a bee-line for the Big Niangua," he soon announced. "But without powder and lead we shall have to go with you till we can find some. It would be foolhardy for us to try to make our way through this wild country without anything to shoot with."

"Well, we can't spare you much, boys—hain't got it ourse'v's," Jacks answered. "But we'll split up what little we've got. We'll do the best we can for you."

"How many bullets and charges of powder can you spare us, Mr. Jacks?"

The three hunters held their powder horns to the fire and looked through them. Then they counted the bullets in their ammunition pouches. Now Jacks said:

"You've got a load apiece in your rifles, hain't you? And we can let you have five more bullets apiece—ten in all—and the powder to push 'em and prime 'em. And that's more than we're savin' for ourse'v's."

Ben and Jodo talked together for a minute or two. Then Ben said:

"If you can let us have a chunk of meat, so that we shall not have to waste our ammunition hunting, but can save it for the Osages, we'll take the risk."

"He'p yourse'v's to all the meat you want, and welcome. Thar's bear bacon in thar, and elk hams and venison hams. Likewise some buffalo meat. Take all you feel like packin'. We cain't git off with a great sight of it, I guess. And what's left will soon be ashes."

"But you needn't worry much about the Osages," Wolf told them. "If we all git out cautious they won't know thar's any us to foller. They're not apt to find out but what we've been burnt up in this house."

Ben looked his surprise. "That so?" Then we'll certainly strike back for the Big Niangua. But what puzzles me is how we can escape from here without being seen by the Osages and without leaving any trail."

Jacks laughed. "Don't you fret about that part, young feller. We'll mighty soon show you how the trick's turned. But let's bundle up and be off."

The hunters now divided their powder and bullets with their visitors. Ben had a little money, and offered to pay them. But they waved the suggestion away. Then Ben and his partner stocked their provision bag with all the meat they expected to need. While they were doing this the three shaggy fellows were taking down their bales of furs from the loft.

Jodo watched them wonderingly. "Can you escape with all those?" he asked.

"Yessiree-bob! We can take out anything not too heavy for a man to tote," Jacks assured him.



Escape is effected through the indoor well of the stockade.

Soon all the furs were lying on the floor—the ground—and the hunters' tools, cooking vessels and other things had been bundled together, ready for carrying. By this time the fire outside was roaring loudly. And in spite of the mud-daubed walls smoke was beginning to find its way in. Now Jacks brought some pine knots and lighted one at the fireplace. Then he held it up and gazed around.

"Well, old cabin, you've been our home for a right smart while—the only home we could stay in. But now comes the end. We won't see you any more, ever, I reckon. So goodby to you, and peace to your ashes!"

He waved his torch, then turned and walked into the adjoining room, where all their things were. The others followed him.

"I'm still wondering how we're going to get out of here," Jodo remarked.

"Yes, I reckon you air—

I reckon you both air," chuckled Murphy. "But you won't have to wonder any longer. You see that hole in the ground, thar? That looks like a well, and it is a well. Thar's plenty of water in the bottom of it. But down close to the bottom a cave leads off. And that cave comes out of the ground nearly two miles from here and right close to a little river whar our canoes are hid."

"And so that's how!" exclaimed Jodo.

"Simple enough when you understand it," Ben remarked.

Jodo pointed to the well. "And that's how you got in here while we were watching the gate?"

"That's exackly how," Jacks assured him. "But we'd all better be on the go. Take us sever'l trips to tote our things through. Bill, you light another pine knot and go down first. Then the boys can go down with what they've got. After that me and Wolf will let down our furs and things."

Murphy lighted his torch. Then he reached down to a ladder that was standing upright against one side of the well and leaned it over against the other side. Now he lowered himself through the hole in the flat rock that covered the well and disappeared. Looking into the hole, Jodo and Ben saw him and his torch going down, down, down, till they stopped more than twenty feet below.

Presently Jacks said: "Now, boys, your turn to try the cellar route. "I'll hold the pine knot for you. You don't know the way as well as we do. Might miss your footing in the dark. I can let your rifles down with the well rope, like I'm goin' to do our'n if you think that's better."

Ben answer: "We'll take our rifles in our hands, but you may let our packs down to us if you will. We couldn't squeeze through this hole with them on our backs. You'd better wait till I'm all the way down, Jodo."

Ben lowered himself through the hole till his feet were on the ladder. Then he went down, the two flaming pine knots lighting his way. At the bottom he found himself on dry ground. But the ladder leaned over a deeper part of the well, which had water it the bottom of it. Jodo came down after him.

They and Murphy were now in a cave which was not much higher than their heads.

While Jodo held the torch Murphy and Ben moved the ladder aside. When the way was clear the men above let down, first, Ben's and Jodo's traveling packs and then bale after bale of furs. Murphy loosed the bales from the rope and Ben laid them back in the cave.

When all the furs were down Jacks lowered about two hundred pounds of their best and driest meat. Then came their bedding—blankets, buffalo robes and bearskins—followed by their tools and cooking vessels. Last of all their rifles were tied together and lowered, and after that the men themselves came down.

With a glance around Jacks said: "Now we'd better shoulder up what we can pack handy and hurry on to the cave's mouth, so that the boys can be on their way as soon as possible. As they're goin' by land, it's important that they git as long a start as they can by daylight. After we light them out we'll come back and pack our things out."

"No," spoke up Ben. "We'll help you carry your things out before we go. We appreciate what you've done for us; and that, too, after we've led the Osages here and got your house burnt."

"The red boogers would have burnt it anyhow, sooner or later. Guess maybe this is just as good a time as any," Jack said.

"At any rate," Ben went on, "it's no more important that we get far away by daylight than it is that you men get far away. This country is just as dangerous for you as it is for us. So we'll stay with you till all your things are carried out and loaded into your canoes."

"But we've got the advantage of you," Jacks explained. "We go by water and don't leave any trail. And the river's swift just now. We can paddle a whole lot faster than you boys can foot it."

Here Wolf spoke up. "I'll tell you sump'n', fellers. Why couldn't these young chaps ride with us a few miles till they're out of the dangerous neighborhood? The river runs southeast—purty nigh east—for a good long stretch—at least twenty miles, I 'low. They could ride till we're about to turn south, then land and strike out north or northwest."

Now Ben inquired: "How long will it take to run the twenty miles?"

"If we git started prompt we ought to make the run by daylight easy enough."

"Yes, easy enough," agreed Jacks. "And that's just what you boys had better do."

"All right, Mr. Jacks! We'll ride with you to the river bend, and thank you for the lift. And we're ready to shoulder loads whenever you men are."

Without further delay the party took up each what he could carry and they started. Jacks took the lead with one torch and Murphy brought up the rear with the other.

After following the narrow, winding passage for more than half a mile they put down their loads and went back for more. And after putting down their second loads all returned for the third, which would be the last.

Now it was seen that other pine-knots would be needed, and Jacks went up the ladder for more. As he came down, he covered the hole with the flat stone kept for that purpose.

"We didn't move out a minute too soon," he told the others. "The air's hot and thick with smoke up thar, and the roof's already blazin'. Little afeard it would fall in on me. As I came down I slid the rock over the hole. The rock will soon be buried under fire and ashes, and like as not the Osages will never find out thar's any hole here. They'll be gone before the fire goes out enough for 'em to scratch around. And even if they did happen to unkiver the hole, they'd see the water down here and take it for a well. We'll pack this ladder back a piece and try to hide it."

When the ladder had been let down and disposed of, the five men took up what remained of the stuff and were off. On coming to where they had left the other things, they did not stop, but went about as far again, to where a stream came out of a crack in the wall. From here on the floor of the cave would be covered with water.

Here they put down their loads and rested. Then they went back, twice, and carried up their other things.

"Here's whar we've got to pull off and wade," Jacks announced. "The water won't be so overly deep, but it's a leetle mite chilly. Likewise, the bottom's slick in places. Your feet's apt to slip from under you. So, to save accidents, we'd better walk slow and step cautious."

Down sat every man, and off came boots and socks. When their clothes had been rolled above their knees, the five took up what they could carry and went splashing on.

(To be continued.)


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**Resourceful Woman.**

"Seems a woman can't wear a gown more than three times with the same crowd. My wife is a splendid manager, though.

"Ignores that rule, does she?"

"No, but when the limit is reached she breaks off with that crowd and starts in with an entirely new set."—Exchange.

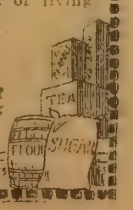

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FAMILY CIRCLE

Write to the Editor.

ALICE W. BARLAND,
Editorial Contributor.

# Lesson on Thrift

## War Teaches Us Art of Saving

By Margaret Palmer.

"Conservation had always been my lot—but we never seemed to have anything. We were ever in debt, and it was nothing but from hand to mouth for us.

"My, but what a difference in a year," remarked a woman who was waiting for a train to take her on a short trip to the city.

"Just what do you mean?" I asked her.

"Well, after we really began to feel this was our war and that we must not fail in doing our part, it taught us thrift. We managed somehow to buy a Liberty bond the first time. The second we took two, the third we took our quota. Why, even I myself could buy one the second time—just couldn't keep from it. It was a mighty hard struggle to get it paid for, but I did, and when the third one came I knew how to save and I just took one as easy as swallowing a glass of water. When the thrift stamps came I began to buy them, too. I have to do it just like the children do, but what of it? I feel happy in doing it.

"We were asked to conserve on cotton and woolens. Well, I know more now than I ever did about prolonging the usefulness of everything we possess or buy. I make over things that I used to think was a waste of time. I make all my kitchen aprons out of men's cast-off shirts or of wornout dresses. I often get a little apron or rompers or boy's suit out of the men's shirts for the children. One can learn a lot about making over things by going through the salvage department of the Red Cross.

"Last spring I read everything I could lay my hands on about conservation, and as a result I have not only helped my country but ourselves as well, for what we saved has gone for Liberty bonds and thrift stamps."

"Tell me more about this, it is very interesting," I remarked to her, as she seemed inclined to say no more.

"Well, first I went to the library and asked about food regulations and government bulletins, and in less than 10 minutes I had a whole bundle of information just for the asking, on food regulations, methods of conserving and on canning. Then I went to the Red Cross headquarters and got some yarn and directions for knitting, for I had made up my mind we must do all we could, and I knew how to knit, and that was my first step in the Red Cross work.

"I read those bulletins from cover to cover, when the farm papers came I did the same. I went to our agricultural college and saw a government expert demonstrate the cold pack method of canning vegetables and fruit, also his method of canning chickens and other meats and drying vegetables and fruits.

"After I felt I had 'absorbed' a little of this information I went to work. I did not wait for the garden to grow, but I began canning weeds for greens, such as pigweed, dandelions—even dried some. I kept right on until fall. I roamed the fields in search of wild fruits, and I canned everything I could lay my hands on. When winter was at hand my cellar was a sight fit for the gods. I had can upon can of vegetables, chicken, jelly, jam, sauce, pickles—enough to feed my family for a year. Happy?

"As I look back a year, I find that we have not only helped our country, but ourselves. The lesson of thrift has been learned or rather we have just begun to learn the first steps in it.

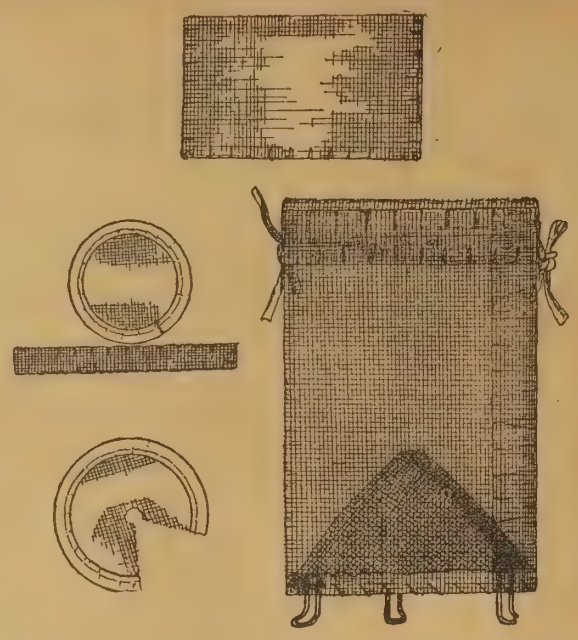
"Why, I have often asked myself the question did war have to teach us this lesson?

"Mothers whose sons are gone or soon to go are making great sacrifices. Talk to any of them and see. It is not only 50 per cent substitutes with them, but 100 per cent. They were the first to learn they could feed their family richly on corn, barley, rice, hominy, potatoes, vegetables, eggs, fruits, cheese, milk, fish, etc. Those mothers even deem it an honor to do anything the government asks of them even to donning overalls and working hard all day.

"If they can, why can't we? We can, and we are proving more and more that we can give up wheat, sugar, fats and meat and conserve our cotton, woolen and leather material to help win this war so that the world will be a safe place to live in."

# Place Fly Traps Around House and Stable

Fly control should begin at the breeding places. All refuse or other substances in which flies may breed should be disposed of immediately, says Farmers' Bulletin 927 of the United States department of agriculture. Fly traps should be placed around the house and stable in places frequented by flies, so as to catch them whenever they appear. It is necessary to use bait to attract the flies. After they are caught they may be destroyed by pouring hot water over the trap and then burning the flies.



Any woman, without hammer or saw, can easily make the kind of fly trap shown in the accompanying illustration. The dimensions will depend upon the size of trap desired. Nonrustable screen wire should be used. A straight rectangular piece of screen wire is used for the cylinder or body of the trap. This is blanket stitched with heavy thread to prevent the wire from raveling. The cone is made of a circular piece of screen wire from which a sector or V-shaped piece has been cut, and a small hole is cut at the center, which permits the entrance of the flies. A binding of heavy muslin or denim is sewed around the edge of the cone. The cone is slipped up into the cylinder. It must be large enough to fit tightly. It is made secure by the bound edge being sewed to the cylinder. The top of th etrap is made of a circular pierce of wire which exactly fits the top of the cylinder. On the edge of this piece is sewed a binding. On this edge is sewed a straight piece of wire two inches wide, which forms the rim of thetopofthe trap. This top fits on the cylinder snugly and is held in place by pieces of tape. The legs of the trap are made of bended wire.

The trap should be thoroughly scalded every few days. The following may be used f orbaits: Sour or skim milk, to which a little sugar has been added, meat or fish scraps, bread and milk to which sugar has been added, and sugar, vinegar and water.

# Rose Maltese Yoke

By WINIFRED WORTH.



You can crchet this attractive yoke very easily by following the concise instructions given here:

**First Row**—3 sc. in 3 L.

**Second Row**—Same only other one have 4 sc, with dc. in middle of oval, ch. 2 join top. ch. 4 1 dc.

**For Ribbon,** t. 1, ch. 3.

**Edge,** ch. 2, 1 dc. ch. 5 drawn around dc. 4 times, ch. 2 join, ch. 5 join.

**To Make Leaves**—Take up 2 L. ch. 5, 5 times, ch. 2 drawn thread through L, 6 ch. ch. to back, join, rp. 2 times, ch. 2, 2 dc. to back 3 times. Ch. 2 join to back twice. Lap braid until 4 s. and make one b longer for 2nd leaf.

**Rose**—Ch. 5. 5 dc. 6 s. of 2 ch. Petal 1 sc. 6 dc. 1 sc. in each s. ch. 4 and join in middle at back. 1 sc. 7 dc. 5 ch. 9 dc. in next. (Join with sewing needle.)

# Washing Knitted-Wear

By LISSIE C. FARMER.

To prevent their pulling out of shape when washed and dried, knitted garments require special treatment. All ordinary knitting and crocheting is based on the loop stitch and since the loop stitch is a curved line, its tendency under pulling or pressure is to straighten out. In handling such garments they should be pulled or wrenched as little as possible. Do not twist them in the rinse and when putting to dry, do not hang them on a line, but spread out flat on an even surface such as the top of a table or board and allow to dry slowly, keeping smooth and in shape whlie drying. If hung on the line the weight of the wet lower part of such garments pulls them out of shape and they dry in this distorted condition.

The whole secret of washing woolen knitted garments without shrinking is not to allow the temperature to be suddenly or greatly changed in them while wet. If washed in cold water they should also be rinsed in cold water and dried in a cold atmosphere, but since the atmosphere in which they are handled is apt to be of a moderate temperature the best plan usually is to wash and rinse them in tepid water and dry slowly in a moderate atmosphere.

# Ways to Aid Red Cross

All winter and spring women in different parts of the country have been aiding the Red Cross by sewing and making surgical dressings at Red Cross headquarters and knitting garments at their homes, as well as giving of their time and means.

"Now that the canning season is coming on," says Mrs. B. E. Kizer, herself an active worker in the Spokane, Wash., chapter of the Red Cross, "women, in the country especially, have an opportunity for still larger service and many of them are taking advantage of it and are canning more fruit than they need for the family and selling it for the benefit of the Red Cross. These sales can be made through the local grocers or at socials and Red Cross gatherings. Some women are also raising a few more chickens than usual, an extra pig or two or a sheep this year, for the benefit of the Red Cross."

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# Patterns

2506—Ladies' sports blouse. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 4 yards of 36-inch material. Price, 10 cents.

Coat 2491—Skirt 2462. A smart sports suit. Coat, 2491, cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 2 3-8 yards of 44-inch material. The skirt, 2462, is cut in seven sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. Size 24 requires 2 1-4 yards of 36-inch material. The skirt measures about 1 7-8 yards at the foot. Two separate patterns, 10 cents for each pattern.

1383—Shirt for boys and youths. Cut in five sizes: 8, 10, 12, 14 and 16 years. It requires 2 3-4 yards of 36-inch material for a 10-year size. Price, 10 cents.

2077—Boys' rompers. Cut in five sizes: 2, 3, 4, 5 and 6 years. It requires 2 5-8 yards of 36-inch material for a 4-year size. Price, 10 cents.

2099—Girls' play dress. Cut in four sizes: 2, 4, 6 and 8 years. It requires 1 7-8 yards of 27-inch material for a 6-year size. Price, 10 cents.

2512—Ladies' dress. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 6 yards of 40-inch material. The skirt measures about 2 yards at the foot. Price, 10 cents.

2502—Dress for misses and small women. Cut in 3 sizes: 16, 18 and 20 years. Size 18 will require 6 1-4 yards of 40-inch material. The skirt measures about 1 7-8 yards at the foot. Price, 10 cents.

2496—A pretty frock. Cut in four sizes: 4, 6, 8 and 10 years. Size 6 requires 3 1-4 yards of 36-inch material. Price, 10 cents.

Waist 2500—Skirt 2504. Ladies' costume. Waist, 2500, cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt, 2504, cut in seven sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. It will require 6 3-8 yards of 40-inch material for the entire dress in a 38-inch size. The skirt measures about 2 yards at the foot. Two separate patterns, 10 cents for each pattern.

2359—Ladies' house dress. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 6 yards of 36-inch material. The skirt measures about 2 3-8 yards at the foot. Price, 10 cents.

2333—Ladies' apron. Cut in four sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. Size medium requires 3 1-4 yards of 36-inch material. Price, 10 cents.

2487—Girls' dress. Cut in four sizes: 8, 10, 12 and 14 years. Size 10 requires 4 1-4 yards of 36-inch material. Price, 10 cents.




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**Only Cautionary.**

He wondered why his wife suddenly turned cold on him and remained so for several days. For all that he had said in remonstrance was:

"My dear, you'll never be able to drive that nail with a flat-iron. For heaven's sake, use your head."—Ladies' Home Journal.

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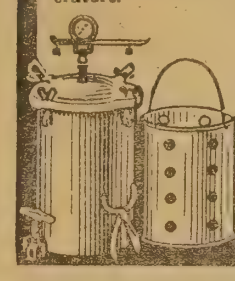
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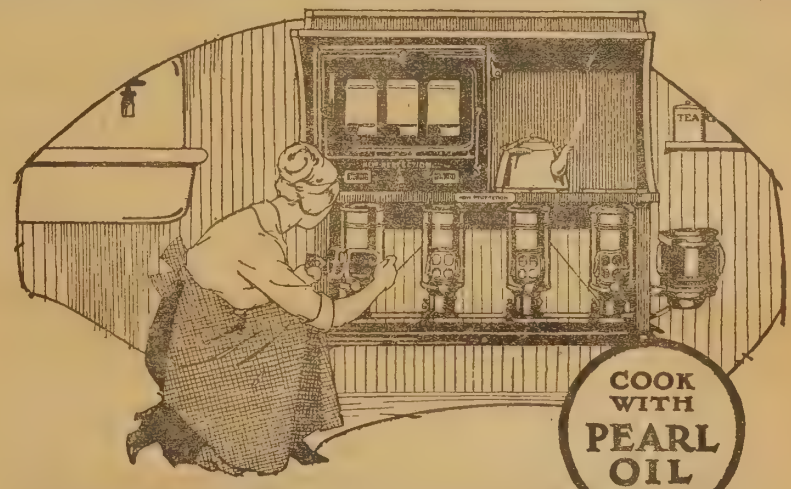
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(California)

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Aunt Nellie has received letters from the following cousins during the last week: Gwendolyn Baldwin, Herbert E. Nye, Helen Urquhart, Isobel Katherine Urquhart, Ruth Kayser, Fern Lewis, Fay Sheppard, Fannie Sheppard, Harold Vercoe, Helene Mastich, Grace Tupper, Christa Potter, Elizabeth Woodward, Hazel Carney, Nellie Lawrence, Fleeta Lantz, Verna Christensen, Maude Yates, Ruth Weaver, Nelda Killian, Edna Reinbold, Louise Locken, Bertha Guenther, Emma Brune, Minnie Brune, Blanche Bernard, Letha Waldrop, Hazel Lackey, Augusta Lewis, Gertie Bajema, Martha Hugh, Genevieve Halverson, Esther Hergert, Ruby Berthoff, Mollie Hergert, Marie and Mary Dallas, Florence Evans, Nettie Johnson, Elizabeth Gentry, Mildred Hooper, Freda McAtee, Ethel King, Carl Short, Margaret Drew, Clarence Otis, Ethel O'Rourke, Vera Williams, Fern Meyer, Hazel Crouch, Grace Brunink and Della Brunink.

**From Our Little Indian Cousin.**

Dear Aunt Nellie: This is my first letter to the Children's Corner. I am a little Indian girl. I am 7 years old. My birthday is April 21. Have I a twin. I would like to hear from them if there is any. I am in the second grade at school. Our teacher moved away this week so we don't have any school now. I know Sallie Garry, a Corner cousin. She lives about 15 miles from here. I enjoy reading the boys' and girls' letters in the Corner very much. I have three sisters and no brothers. My sisters' names are Agnes, Margaret and Emily. I am the youngest. I will tell one riddle and see if the cousins can answer it. Guess a riddle now you must, stone is fire, fire is dust; black is red, red is white; come and view the wondrous sight. I will tell you what it is in my next letter. I have one dog and his name is Snookums. I have one cat and we call her Kitty. I also have three kittens. I wish all the cousins and Aunt Nellie good luck.—Annie Phillips, Wellpinit, Wash. (And we wish you good luck, too, dear. We are so glad to have you for a cousin.—Aunt Nellie.)

**Gerda Has Two Little Nieces.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. My father takes the Farmer. I have brown eyes and red hair. I am 11 years old and am in the sixth grade. We live on an 80-acre farm and we have three horses and their names are Nellie, Kate and Fannie. We have four cows and three calves. The cows' names are Jennie, Blackey, Blenda and Pansy. The calves' names are Jersey, Reddy and Daisy. My birthday is May 11. Have I a twin? If so I wish they would write to me. I have three sisters and two are married and have two little babies. One of my sister's names is Bettie Nordstrom and her baby's name is Gladys and she is one year and five months old and my other sister's name is Lillie Dahlgren and her baby's name is Ruby and she is one year old. My other sister's name is Julie Ekholm. I go to the Mountain Valley school. My teacher's name is Miss Hazel Marie Peckham. I like her. —Gerda Ekholm, Rockford, Wash.

**Cat Catches Many Mice.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 12 years old and am in the seventh grade. The school teacher is my father. There are 19 children in school. I have a brother that is in the seventh grade. He is 13 years old and his name is Thomas. I have a gray and white cat. Her name is Dorfie. She catches many mice. I will give the cousins a few riddles: A horn ate a horn up a high oak tree. If you guess this riddle you may hang me. In came two legs, picked up three legs, knocked down four legs. We take the Farmer and like it very much. We are especially interested in "The Trappers of the Ozarks." We also enjoy the articles on agriculture and stock raising.—Harold Stringer, Pullman, Wash.

**Brownie Is a Saddle Horse.**

Dear Aunt Nellie: I am writing to you for the first time. I live on a prairie. We have 40 acres in orchard and 640 acres pasture. We have two miles to walk to school. We have five horses, Nellie, Maggie, Queen, Bob and Brownie. Brownie is the saddle horse. We have two cows, Cherrie and Isabella. We have a calf, too, named Jessie. We take the Farmer. I like to read the letters in the Children's Corner. I have two brothers and one sister. My brother's name is Harry and my sister's name is Lois. The baby's name is Elmo. I am 11 years old. My birthday comes April 10. Have I a twin? One of my brother's is 13 years old. The other is only 2.—Aubrey Thomas, Mae, Wash.

**Flossy and Mossy Are Cats.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 10 years old and I am in the fifth grade. My teacher's name is Mrs. Steele. My birthday is August 24. I go to the East Wenatchee school. There are about 75 pupils in our school. I have two cats and their names are Flossy and Mossy. I have a dog and his name is Rags. Our school was shut down on account of scarlet fever. I have one little sister and her name is Ethel. She is 2 years old. We live on a five-acre tract. We have two horses. I can only ride one of them. His name is Bob.—Ivy Ward, Wenatchee, Wash.

**Ride in an Auto Truck to School.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner, but hope it will not be the last. I am 12 years old and am in the sixth grade. I have light hair and blue eyes. We live on a 10-acre farm about six miles from Olympia. There are about 107 children in our school, but we have three rooms. There are about 33 in our room, 15 in my class. We ride in an auto truck two miles to school and two miles back, four miles altogether. I had three teachers this year. I have a brother in the army. We have not heard from him for a long time, so we do not know where he is. I saw a letter in The Farmer from a girl who was the same age as I am and in the same grade and whose first name was the same as mine. My birthday is November 11. Have I a twin? If so, will he or she write to me?—Mabel F. Reed, R. F. D. 3, Box 72 A, Olympia, Wash.

**Lives on Grandfather's Farm.**

Dear Aunt Nellie: I thought I would write a letter to the Children's Corner. I have read some of the other letters and enjoyed reading them. A friend of mine wrote a letter to you. Her name is Elve Hillstrom. She is a nice girl. I am 14 years old. I have five brothers, one older than I. He is 16 years old. My brothers' names are Gerald, Willard, Melvin, Oscar and Ralph. I am on the farm with my granddady and grandmother. The farm has 280 acres. My two brothers are here, too. My older brother and I are going to school. We have two horses and a big colt. Their names are Tom, Prince and Bird. I have 23 little pigs and five cows and six heifers. My birthday is September 23.—Marie Jeffries, Oakville, Wash.

**Has Crocheted Two Rugs.**

Dear Aunt Nellie: This is the first time I have written to the Corner. I am 11 years old. My birthday is February 9. If I have a twin I would like to hear from him. I live on a 160-acre farm. We have four horses. Their names are Nellie, Ned, Dollie and Billie. We have one cow and a calf. The cow's name is Cherrie and the calf's name is Buttercup. We have one dog. His name is Jack. We have three cats. Their names are Pussie, Whitie and Spot. I have an uncle and a cousin in the navy. I can crochet. I have crocheted two rag rugs. I have two brothers, Perry and Charles. I have three sisters. Their names are Sadie, Mildred and Grace.—Leonard W. Olin, Baird, Wash.

**Almost Found Her Corner Twin.**

Dear Aunt Nellie: This is the second time I have written to you, and I hope to write again. We have five calves and 40 pigs and 13 cows. Our school had a contest with the Greenwood school and we beat them. I had to speak, and I won 50 cents. We have two big orchards. We have 840 little chickens and 200 big chickens, so we have over 1000 in all. Aunt Nellie, I have almost found my twin. There is a girl whose birthday is April 3, but I don't remember her name, and there is a girl whose birthday is the 6th. Her name is Catherine Rempel. She lives in Oregon. She wrote to me and I answered her letter. I hope to write again.—Virginia Ripperda, R. R. 3, Everson, Wash.

**Go to the Swamp for Moss.**

Dear Aunt Nellie: I am 10 years old. I am in the fourth grade. My brother is going to write a letter now. This is the second time I have written to you. I enjoy reading the other children's letters very much. Two girls in Fragaria wrote to Aunt Nellie and when I get the Farmer I am going to find it and read it. I was very glad to get the Farmer because I love to read letters. About every Friday afternoon we go down in the swamp and hunt moss for the Red Cross and when we don't go and hunt it we knit wash rags. We have a garden club and a girl named Martha Peterson was president and I am secretary.—Lena Jonsen, Box 3, Colby, Wash.

**Goes to Deer Lake School.**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I am 11 years old and my birthday is October 27. Have I a twin? If so, please write to me. We have one horse. His name is Prince. We have four cows and one calf. I have two brothers. Their names are Alber and Russell. Alber is 12 years old. Russell is 8 years old. Alber, Russell and I go to the Deer Lake school. Our teacher's name is Miss Jacobsen. Russell's teacher's name is Miss Peterson. Russell is in the second grade. Alber is in the sixth grade and I am in the fifth grade.—Selma Anderson, Box 73A, Clinton, Wash.

**On the Prairie Close to a Wood.**

Dear Aunt Nellie: I will write to the Children's Corner again. This is my second letter to the Corner. I like to read the cousins' letters. They are interesting. There are lots of flowers in bloom. Our school was out May 17. I am going to take the state examinations in history and spelling. I live close to Wild Rose prairie. I go to the Edgewood school, which is on the western part of the prairie close to a wood. We have sewing and manual training in our school. I like to sew and I have made quite a few things by hand. I have found some girls to whom I write letters. I would like to hear from them again. I think they write nice letters. I will gladly answer anyone's letter who will write to me. I like to write letters and I don't get a chance very often. The girls' names that I have been writing to are Virginia Clark and Frances Lambert, both of Penawawa, Wash., and Irene Clarke of Grand Dalles, Wash.—Viola M. Tarbert, R. 1, Box 56, Deer Park, Wash.

**An Interesting Letter From Emma.**

Dear Aunt Nellie: I am 10 years old and am in the fifth grade. My birthday is January 30. Have I a twin? If I have, would they please write to me. I like to knit. Do you? I like to read, too. I have read "Little Men," "Little Women," "Under the Lilacs," "Jack and Jill," "Joe's Boys," "The Trail of the Lonesome Pine," "Sue Orcutt," "The Orcutt Girls," "Greyfriars Bobby," "Quincy Adams Sawyer," "Little Prudy's Cousin Grace," "Little Lord Fauntleroy," "Little Prudy's Dotty Dimple," "Ellen Leslie," "The Secret Garden," "Animal Heroes, "Wild Animals I Have Known," "The Real Fairy Folk," "The Biography of a Grizzly," "Polly and the Princess," "Miss Gibbie Gault," and many more. Here is a puzzle which I found in the Youth's Companion, but could not solve. If a cistern had contained twice as much water and if the water had only been used half as fast as it was used, the water would have lasted three and three-sevenths weeks. How long did the water last? I found it in the Classmate. Can any of the cousins solve it for me? Here is another, only it is a joke. A young mother and her pretty baby were passengers on a train. The infant attracted the attention of an elderly gentleman passenger who, stopping to admire it, said: "A fine youngster, that, madam. I hope you will bring him up to be an upright, conscientious man." "That," said the young mother, smiling, "will be a bit difficult." "Pshaw!" rejoined the elderly gentleman, "as the twig is bent so is the tree inclined." "I know," agreed the other, "but this twig is inclined to be a girl!" Well, I must stop now or I am afraid my letter will form an acquaintance with Mr. W. Basket.—Emma Lucile Munroe, R. F. D. 1, Hazelwood Farm, Spokane, Wash.

**Country Life Better Than City Life.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I read the Children's Corner every time the Farmer comes. I like to read the letters Sallie Garry writes. My birthday comes November 5. We made a basket of raffia at our school. There are 23 children at school. I think the Children's Corner was very long one time. There are 10 of us in the family, including father and mother, and we all joined the Red Cross but the baby, Romanice. She is only a month old. We have three horses, one mare, seven calves and about 13 chickens. We have 11 milch cows and we sell milk. My sister, Olga, and I are setting a hen. I think country life is better than city life. Last year my two sisters and I had to weed a garden and when we got through we went to town and had a good time. My favorite flower is a carnation. My sisters, Victoria and Olga, and I were the ones that went that time. Victoria had the umbrella in the buggy and the umbrella was lying by the brake of the buggy and as she tried to pull it it sounded so funny we girls laughed so hard the horse nearly ran into the fence.—Vivian Miroshe, Tono, Wash.

**Elizabeth Has a Croquet Set.**

Dear Aunt Nellie: This is the first time I have ever written to the Children's Corner, but I enjoy reading the letters. I am 14 years old. I am in the eighth grade. I have three brothers and they are younger than I am. We live on a ranch 12 miles north of Odessa. I am knitting for the Red Cross. I think it is doing a lot of good work for the soldiers. Do you knit for the Red Cross? My father has a new car. I have two playmates in school. Their names are Agnes and Anna Havlicak. My birthday is March 8. Have I a twin? A girl that goes to our school writes to the Children's Corner. Her name is Necia Hire. I saw her second letter in the paper. We have 25 pigs, 200 chickens, seven cows and two little calves. I have a croquet set.—Elizabeth Anna Green, R. F. D. No. 3, box 19, Odessa, Wash. (Yes, Aunt Nellie knits and is glad that all the cousins are working for our soldiers.—Aunt Nellie.

**Live on a Big Wheat Farm.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I hope it won't be the last. I enjoy reading the letters very much. There are 17 pupils in our room and 42 pupils in our school. My playmate is El Berta Cantwell. I think she will write. I joined the Junior Red Cross. We live on a big wheat farm three miles from town. We have about 33 horses, 12 cows and calves, three cats, one dog, about five dozen chickens and five sheep. Have I a twin? If so I wish they would write to me.—Edith Tiedo, Box 22, Hoover, Wash.

**Lyman and Roy Are Her Brothers.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I have two brothers and three sisters. My brothers' names are Lyman and Roy. My sisters' names are Lucinda, Elsie and Inez. I am 11 years old. My birthday is October 27. Have I a twin? If so I wish she would write to me. We have five horses, 16 rabbits, 14 pigs and 10 head of cattle.—Hilda L. Smelcer, General Delivery, Spokane, Wash.

**Wonders If He Has a Twin.**

Dear Aunt Nellie: This is the first letter I have written to the Children's Corner. I live in Pleasant Valley, on a homestead, 20 miles from town and the postoffice. I go two and a half miles to school. There are five scholars in our school. We have 25 head of cattle. I gather them in every evening after school off the range so papa can milk the cows. We have six horses, two pigs and one pet lamb. I am 10 years old and my birthday comes on March 5. I wonder if I have a twin in the Corner. Sometime I will send my picture on my favorite pony.—Arthur C. Bernhardt, Yakima, Wash. (We are looking for your picture, Arthur. If it is a good, clear one we will put it in the Corner so that all the cousins may see it, too.—Aunt Nellie.)

**Wishes Her Twin Would Write.**

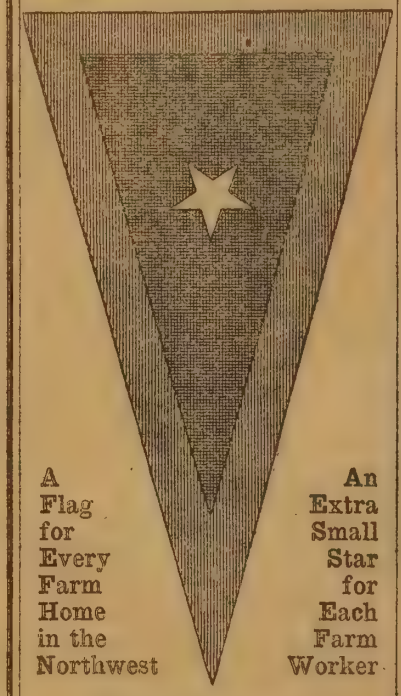
Dear Aunt Nellie: This is the second time I have written to you. I am 8 years old. My birthday was April 9, 1918. I passed the fourth reader. I have brown eyes and brown hair. My name is Mary Sofie. I have three sisters and three brothers. My two oldest brothers are married and my two oldest sisters are married. One lives in Seattle and her husband is expecting to go to war any time. My oldest brother lives in Los Angeles and the other in Elyn. Have I a twin? If I have I wish they would write to me.—Lucile Almaden, R. F. D. 2, Sequin, Wash.

**Likes Her New Teacher Fine.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I wish to be a cousin. I am 7 years old and I am in the first grade. My teacher's name was Mrs. Dere. I like her fine. I have one brother and sister. Their names are Bernard and Margaret. My birthday is December 19. Have I a twin? If I have will they please write me? I would answer them if they would.—Dorothy Kane, La Center, Wash.

Address all letters to Aunt Nellie, care of The Washington Farmer, Spokane, Wash.


FARM SERVICE WAR FLAG



A Flag for Every Farm Home in the Northwest

An Extra Small Star for Each Farm Worker

(Patent applied for.)

**Designed by The Washington Farmer in connection with The Oregon Farmer and The Idaho Farmer for the farm and farm home that is increasing food production in helping to win the war.**

OFFER NO. 1.

A farm service war flag, 9x22, printed on heavy enamel paper, in full colors, will be postpaid to any one securing and sending in ONE NEW subscription to this paper. (One year 25c, three years 50c, five years $1.00.)

Send your subscription to

THE WASHINGTON FARMER
617 Central Bldg.,
Seattle, Wash.
Review Bldg.,
Spokane, Wash.

W.S.S.
WAR SAVINGS STAMPS
ISSUED BY THE
UNITED STATES
GOVERNMENT

# Financing War

## *Money Filters Back to the People*

When the war started in the summer of 1914, American financial authorities were generally of the opinion that it could not be waged, on the gigantic scale in which it had been started by Germany, for more than a year. One side or the other, it was thought, would become financially exhausted.

But a small minority even then tried to point out that financial exhaustion would not be the determining factor; that so long as the fighting countries had resources of man power and economic resources there could, in reality, be no financial exhaustion, as the government could go on indefinitely issuing bonds or raising war funds by heavy taxation. And it turns out that they were much nearer the truth than were the advocates of the other point of view, for the war is nearing its fourth finished year, the fighting has grown constantly in intensity, and neither side yet gives any visible sign of financial exhaustion.

The question naturally rises, where does all the money come from to be loaned in such enormous sums to the various governments engaged in the war, and the answer to this question puzzles many minds. A Chicago banker says the answer, however, is simple enough:

The money does not come from anywhere. It is not a money transaction. It is a credit transaction. unfortunately the terms of credit are stated and measured by terms of money. We bankers constantly speak of loaning money to our customers, whereas we really loan them the bank's credit. For example: When a customer's note for $1000 is discounted by a bank, and the proceeds placed to the customer's credit, that bank's loans and that bank's deposits are immediately increased by $1000, but there is not a dollar more or less money in the bank than before the customer offered his note. The bank, without the use of any money whatever, has created a credit of $1000, which serves the purpose of money to the borrower. What the bank's customer does on a small scale, the government is doing on an enormous scale. The bank customer's note is only a scrap of paper, but it represents the property, the character and the honor of the maker. A government bond costs only the engraver's bill to produce, but it stands for all the taxable property, the character and the honor of the American people. But there was neither more nor less money in the country after the recent government loan had been floated than there was before.

The government borrows money from the people to spend for war needs, but in spending that money it filters back into the possession of the people. It builds great cantonments, buying labor and all kinds of materials from the people. It buys rifles, munitions and food supplies—from the people. And that endless chain will go on revolving so long as the government has credit, and even then, if its credit should become exhausted, the government could go on raising war funds by taxation.

That process has now been going on for nearly four years in Germany, and could go on indefinitely if Germany had sufficient economic resources and man power. It is upon wastage of the latter that we must build our expectations of victory.

### Auto Races Scheduled. . .

July 2, 3 and 4 are again to be the dates for the annual auto race schedule at the Tacoma speedway. The affair will be more than usually interesting this year because of the proximity to Camp Lewis, the latter being an added inducement for people to attend from considerable distances. Such drivers as Earl Cooper, with a Stutz, Eddie Pullen with a Mercer, Dave Lewis and Tommy Milton with Duesenbergs, and Cliff Durant with a Chevrolet are sceduled to take part. Durant's participation is especially interesting in view of the fact that he is heavily interested in the manufacture of the make of car that he drives.

### Nonpartizan League.

At a massmeeting of farmers held at Endicott, Wash., the following resolution was passed unanimously:

Resolved, That it is the wish of farmers and citizens of Whitman county that all nonpartizan league organizers keep out of Whitman county during the war and that they devote their time to a more useful occupation to help win the war.

John T. Chenoweth of St. John, who has been working in Whitman county as a nonpartizan league organizer, says he will abide by the wishes of the 300 farmers present and no longer carry on his organizing work in that county.


**YOU ARE CALLED**

Will you respond to the urgent need of business and the Civil Service?

**The Demand Is for**

STENOGRAPHERS
BOOKKEEPERS
OFFICE TRAINED WORKERS

Our course qualifies you for this work.

Ask for catalog and information.

**NORTHWESTERN BUSINESS COLLEGE**

Spokane's Accredited Commercial School.

M. M. HIGLEY, President.

8317 Howard St. Spokane, Wash.


### Develops New Wheat.

It is unofficially reported that Luther Burbank, the famous horticulturist who has developed so many varieties of agricultural plants, has developed a variety of wheat which contains approximately 14 per cent gluten. It is stated that the experiments resulting in the development of this wheat have covered a period of 11 years. In order to get a high grade of flour for breadmaking, it has been necessary in the past for millers to mix some of the lower grades with the higher grades in order to get the proper gluten content. If the new variety proves to be as high in the content of this element as reported it may render the manufacture of high-grade flour a simpler task.

### Coyote Hunter.

Government hunter W. B. Gunnoe has 84 coyotes and a wild cat to his credit as a result of his work this season in the Wenas, Yakima county, district. He has taken 36 old coyotes and 48 young ones. He says that practically all the coyotes taken by him show by their stomach condition that they have been eating sheep.


**"Pig-a-Boo"**
**DIGESTER TANKAGE**

*Puts Profits in Porkers*

Cuts down high feeding costs—saves costly grain—balances the hog ration.

**FREE BOOKLET**

contains valuable information to hog raisers. Write

**UNION MEAT CO.**

North Portland, Ore.





**The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.**


# GRAIN FIRES
# Burn Human Lives

LOOK at your heading wheat field, swept by the growing breezes of June; its beauty and its vastness suggest the billowing sea. Yet more—

## Human Lives Are in That Wheat Field!

If that grain gets to our starving allies children that are mere skeletons, gaunt and hungry men and women will live to see American soldiers smash the might that has trampled entire nations into the earth; if that grain gets to our own valiant fighters across the sea, it will provide the strength of muscle and will key the will of those soldiers the sooner to drive down to defeat the brutal power of a people gone mad.

You MUST save that grain from the kaiser's ally, FIRE!

To allow grain to burn this year, for lack of proper precaution, is to send more human lives to follow the ten million that the kaiser has already slaughtered.

A fire in the grain fields before this war meant only dollars burned—NOW it is HUMAN LIVES!

The Northwestern Mutual Fire Association offers its services to grain growers, whole-heartedly, in an earnest endeavor to keep grain losses at the lowest possible minimum.

This organization with the cooperation of its loyal host of policy holders has been a pioneer in the fight against fire—especially grain fire. We have sought to introduce the most up-to-date methods of eliminating all preventable causes of fires in the grain fields.

The Northwestern Mutual's corps of trained agents and inspectors is at your service, and will be glad to advise and consult with you as to the best means of protecting your crops and buildings, as well as protecting you against personal loss.

Thousands of Inland Empire farmers have availed themselves of this service. The cost is as low as sound insurance principles will permit; the service is exactly what you require.

Expenses have greatly increased and we are required to pay a war tax on every dollar of premiums collected, yet we are offering you our service on the same basis as last year.

We are only as far away as your telephone or mail box.

## NORTHWESTERN MUTUAL FIRE ASSOCIATION

Main Office, Central Building, Seattle.

Inland Empire Offices, Old National Bank Bldg., Spokane.

# News for Breeders

J. B. Kays of Mabton, Wash., one of the well known sheep men of that region, has about 6000 ewes this spring and saved a little over 100 per cent of lambs. This, Mr. Kays says, is not quite up to the average, as 100 per cent of lambs is considered rather small there. Mr. Kays sold his wool in April for 58 cents a pound. He sees no chance for much decrease in the price of sheep, though he does not expect any higher prices. He thinks, prices will keep up, even after the war. The Yakima valley has had a dry winter and spring, forcing the sheep to be sent to higher ranges earlier than usual.

Clifford Riggs of Touchet, Wash., breeder of big type Poland China swine, feeds brood sows on shorts and the leaves from alfalfa hay that are scattered when the hay is baled. Sometimes Mr. Riggs mixes them and he finds that the sows keep fully as fat as they should be allowed to get on that ration. When pigs are about a month old he fixes a creep so they can feed away from the sow. He can thus get a rapid growth on them. Mr. Riggs' foundation stock came here from John B. Lawson and Peter Mouw, the latter the old pioneer breeder of the big type in Iowa. His herd sire is Mouw's Prince, while his foundation sow was Iowa Express and to her he gives much of the credit for the quality of his herd. Giantess, a sow of his own breeding, weighs 800 pounds when fat. Mr. Riggs recently sold a young boar at auction in Walla Walla for the benefit of the Red Cross, the pig bringing $280.

St. Mawes' Susie, one of the cows in Ed Cary's Jersey herd, Carlton, Ore., finished a year's official test May 1. While official figures for the last month had not been received when this was written it is known that she has produced almost exactly 860 pounds of butter fat or 1012 pounds of 85 per cent butter—the old Jersey standard. This is Susie's third official record. Her first was 813 pounds of butter and the second 937. She began this test at 10 years and 7 months old and still looks like a young cow. She is the fourth Jersey cow in Oregon to produce over 1000 pounds of butter. St. Mawes' Susie Olga, a daughter of Susie, finished a year's test in January with 815 pounds of butter and St. Mawes' Blossom, a full sister to the old cow, has a record of over 815 pounds of butter.

Poppy's Maiden and Boise Queen, the former a daughter of St. Mawes' Poppy (1120 pounds of butter), and the latter a daughter of the great bull St. Mawes, each finished in April with well over 800 pounds of butter.

On Monday, June 3, a carload of steers shipped by Edward Coles of Haines, Ore., sold on the Portland market for $15 a hundred, thereby topping all former price records for regular sales in any open market in the northwest. Mr. Soles is the man who for several years past has won grand championship on carload of fat steers at the Pacific International stock show at North Portland. He knows how to fit steers at any season of the year, and finds that the steer really fitted brings the price. Most of Mr. Cole's steers are practically purebred Herefords. These were baby beef of a Shorthorn-Hereford cross. H. A.

## Lady Mary Fayne.



The above photograph shows Lady Mary Fayne, one of the Holstein cows owned by William Todd & Sons, Yakima, Wash. She has an A. R. O. record of 26.16 pounds of butter made as a 3-year-old. In addition she is, as her picture indicates, a great show cow. She will probably be exhibited at the Washington State fair this fall. She was just about ready to freshen when the Farmer camera snapped her in May, so will not be at her best when the fair is held. Lady Mary Fayne is a daughter of Sir Johanna Ruth Fayne, the bull that was at the head of the Todd herd for years and sired many heavy producers and good show animals. H. A.

## Staying By the Dairy.

Colonel George Gue of Yakima thinks the dairy and stock business generally is improving in tone. Feed prices are still high and labor is both high and scarce, but the men who have hung onto their cows until now are realizing that they have acted wisely. "And when things do turn," says Colonel Gue, "these men who have stayed with the business are going to cash in on their foresight. It's not going to be easy to buy good cattle when the war is over. The entire world is going to be buying or trying to buy, and prices are going up. The stickers will have all the best of it then."

## Great Guernsey Sale.

The greatest Guernsey sale in the history of the breed, so far as prices are concerned, was held in connection with the annual meeting of the American Guernsey Cattle club at Chicago, May 14. It was a consignment sale of the choicest animals from the leading herds of the country. The bull Don Diavolo of Linda Vista, sold for $10,000, the highest price ever received for a Guernsey bull. The cow Longwater Luxury topped the female prices at $5300 and the total received for the 67 head was $102,925, an average of $1536.

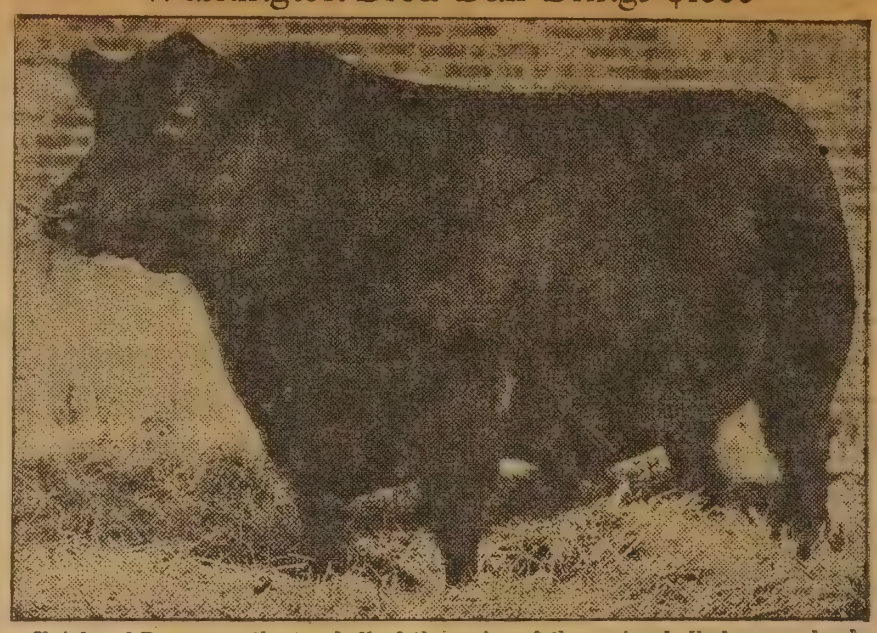
## Sunset Farm for $24,000.

Miss Florence N. Kent has sold to Frank H. Leonard of Chicago 240 acres of land, 12 miles west of Spokane, for a reported consideration of $24,000. Miss Kent took in exchange 15 acres of highly improved orchard land at Dishman valued at $15,000.

### Holstein Bull Brings $625.

The Moorehead and Hobson Holstein sale at Outlaak, Wash., May 28, resulted in good fair values, though no sensational prices were received. Top price was for a bull, Sir Chimacum Wayne Boon, that went for $625. Top price for female was $505 for Model Duchess Girl, and the average for the nearly 60 head was $278. The young stock went proportionately higher than the mature animals, as is so often the case at auction sales of purebred stock. H. A.

## Washington-Bred Bull Brings $1000



Knight of Rosemere, the top bull of the series of the spring bull shows and sales held under the auspices of the American Aberdeen-Angus Breeders' association at Chicago, Sioux City, Omaha and St. Joseph. This bull sold for $1000 to an Iowa breeder and was bred and shown by Congdon & Battles of Yakima, Wash.

## Sells the Calf; Buys Back.

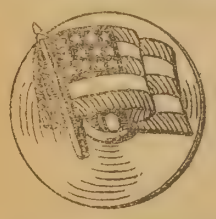
J. T. Compton of Wenatchee has recently purchased a three-year-old heifer out of Suza Kleiterp Pontiac. The singular thing about the transaction is that both mother and daughter were originally the property of Mr. Compton. The older animal he kept, while the calf was sold. That the young Holstein comes back into the herd of her original owner is a pretty clear indication of the value he puts upon both mother and daughter.

## Registered Guernsey Bull.

A registered Guernsey bull has been bought by Fred Sarasien for the Clinton Breeders' association of Island county, Wash., and is now in service to about 74 cows. This bull was selected by County Agent R. M. Turner.


## Coat Lapel Button

for securing two subscription orders to the Washington Farmer



Just like illustration, only smaller. The perfect size for your coat lapel. A dandy American flag in red, white, blue.

One of these flags will be given free to any one sending two one-year subscription orders to The Washington Farmer.

Your own subscription counts for one.

Send 50 cents and two subscriptions to

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617 Central Bldg.
Seattle, Wash.

# MISSOURI and KENTUCKY JACKS

STOCKTON, CAL. P. O. Box 679. | JAMESPORT, Missouri. | LOS ANGELES, CAL. P. O. Box 1117.

SPOKANE, WASH.
W1728 Fourth Ave. Phone Main 1647.

## H. B. THORNBERRY

Dealer in

REGISTERED AND PEDIGREED JACKS, JENNETS, PERCHERON AND SHIRE STALLIONS AND GAITED KENTUCKY SADDLE HORSES

Largest Importer in the United States.

## POLAND CHINA SWINE

### Big Type Poland Chinas

Peter Mouw and John B. Lawson strains. Young boars and bred or open gilts. Good individuals.

CLIFFORD RIGGS. Touchet, Wash.

## LOCUST HILL HERD

Big type and medium Poland-Chinas. Bred gilts and spring pigs of both strains, unrelated. Sixteen years a breeder of Poland-Chinas in Oregon.

A. L. SWAGGART, Athena, Ore.

## LOCUST LAWN HERD

Sold Out.

W. F. HOWARD & SONS, Caldwell, Idaho.
S. Kimble Ave.

QUALITY HERD.

If you want to improve your herd, try stock from my winners at the Oregon state fair.

RAY J. FOX. Lyons, Ore.

PURE-BRED POLANDS.

A good herd boar for sale; also booking orders for spring farrowed pigs. Will ship C. O. D. subject to your approval.

HERBERT WILLARD, Dayton, Ore.

## CHESTER WHITE SWINE

## COVE STOCK FARM

Unrelated fall and spring Chester White pigs from prize winning stock.

ARCHIE CONLEY. Cove, Ore.

## CRESCENT STOCK FARM

## DUROC-JERSEYS

SPRING PIGS BY THE GREAT BOAR, KING OF ORIONS 2D, THAT SOLD AS A PIG FOR $1500.

Also by our own great boar, Burke's Cherry King. He has great size, bone and quality, and will make a 1000-lb. hog. All sows bred to him have big litters, running from 10 to 15 pigs. They are all of the same cherry color, very smooth, have the finest of heads and backs, extra heavy bones and best of feet.

Our brood sows include the grand champion sow and the first prize gilt at the Spokane Interstate fair last fall. These pigs can not be beaten for quality nor breeding. We guarantee to deliver the goods or refund the money.

C. M. BECKET and G. O. SWALES
Johnson, Wash.

## Chas. G. Sprong

BREEDER.

Registered Duroc-Jersey hogs. Weanling pigs for sale.

GRANDVIEW, WASH.

DUROCS.

Boars and open or bred gilts of excellent breeding.

E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE. Yakima, Wash.

In answering advertisements don't fail to mention this paper.

# Breeders' Department

## SHORTHORN CATTLE

### Herds Bulls

Imported Doune Radiance No. 609412
and
Gainford Perfection No. 442173.

### Hercules Shorthorns

We can supply you with choice, well grown bulls and females of breeding age. Your inspection of our herd is invited. Visitors always welcome.

**Day & Rothrock Company**
205 Exchange Bank Bldg. Spokane, Wash.

### SHORTHORNS

A few young stock for sale by such noted sires as Prime Prince, 421193, and Sultan Still, 493239.

R. E. BOYCE, Baker, Ore.

### Firlawn Shorthorn Farm

UNION, ORE.

We offer a young herd bull (registered), ready for service in four months, and 7 yearling heifers, all of imported Scotch blood. Bull and heifers unrelated. Prices reasonable. Write us and come to the Union Stock Show.

SHERMAN & HUTCHINSON,
Union, Ore.

### LELAND BROTHERS

Breeders of top registered Shorthorn cattle. Correspondence solicited.

WENDELL, Idaho.

## HEREFORD CATTLE

### Highland Stock Farm

offers for sale Hereford bulls, 1 or 2 years old. One or a carload.

PLATT BROS. Genesee, Idaho.

### BULL RANCH

Hereford Cattle.
Berkshire Hogs.
Hampshire Sheep.

CHAS. BULL, Mabton, Wash.

## ABERDEEN ANGUS

### ANGUS CATTLE

In the famous valley of the Yakima there is located one of the best herds of Aberdeen Angus in America. Proof of this is evident by the many prizes won by this herd at all of the greatest shows of the northwest and central states, including the Chicago International.

Fifty extra good range bulls are now offered for sale. Also fancy herd headers and show cattle of both male and female. All prices very reasonable.

CONGDON & BATTLES.
OTTO V. BATTLES, Manager.
Yakima, Washington.

## BROWN SWISS CATTLE

### Brown Swiss Stock Farm

Breeders of Brown Swiss Cattle, the Farmer's Dairy Cow. Young stock for sale.

THEO. BRUGGER, Route 3, Gresham, Ore.

## AYRSHIRE CATTLE

### Edgewater Farm

Government accredited herd, headed by Peter Pan 63d. Bull calves available.

ELBERT M. CHANDLER, Burbank, Wash.

## PERCHERON HORSES

### Hunter Ranch Percherons

The Grand Champion KROUMIR at head of herd. Young stallions for sale at all times at breeders' prices.

A. B. HUNTER, Island City, Ore.

## HAMPSHIRE SWINE

REGISTERED HAMPSHIRE HOGS.

Growthy and vigorous, great rustlers. Pigs from January and February litters, also other ages. Correspondence invited.

TUTTLE BROS., Asotin, Wash.

## YORKSHIRE SWINE

### Booking Orders, Weaned Pigs

Can furnish pairs or trios, best stock, $15, at eight weeks. Also a few choice sows.

WM. NEUENSCHWANDER, Gaston, Ore.

## MILKING SHORTHORNS

with world records behind them for milk production.

### A. R. O. HOLSTEINS

A son of the King of the Pontiacs at head of herd.
Can make special prices on young bulls of each breed.

A. V. Bradrick & Son
Palouse, Wash.

REGISTERED SHORTHORN COWS.

Young bulls and heifers, sired by Scotch bulls; liberal terms.

CALDWELL CATTLE CO., Caldwell, Idaho.

### H. H. SCHILDMAN

breeder of registered Shorthorn cattle, Hampshire sheep and big-type Poland China hogs. Filer, Idaho.

## GUERNSEY CATTLE

### Your Call My Call

THE CALL OF THE GUERNSEY

I have been called to the colors

### My Fine Guernsey Herd Must Go

You have been called to attend this great AUCTION SALE on

### JUNE 26, 1918

at my farm, one-half mile from Brady station. The descendants of the world's greatest producers are in this sale. Many of them have 40-lb. records or better of milk per day. Also a fine lot of grade Guernseys will be offered.

Everything goes without reserve. If you do not have a catalog write for one to C. D. Minton, Sales Manager, Portland, Ore.

BUT COME TO THE SALE

**E. R. BRADY**
Owner
Satsop, Washington

GEO. GUE, North Yakima, Wash., Auctioneer.

THIS AD WILL NOT APPEAR AGAIN

### Registered Guernsey Bulls

From heavy producing cows, most of them with A. R. records, among them 402 lbs. fat (472 lbs. 85 per cent butter) and 392 lbs. fat (461 lbs. butter), both with first calf. Good type, well grown. Prices reasonable.

CHICONA FARM.
A. L. GILE, Prop. Chinook, Wash.

### ORCHARD HILL FARM

"Home of High-Class Guernseys."
Dr. Park Weed Willis, Owner.
Redmond, Wash.

### FAIRVIEW FARM

Breeders of high class registered and grade Guernseys.

A. J. SINNES.
Route 5. Mt. Vernon, Wash.

### TWO GUERNSEY BULLS

One fourteen months', the other twelve weeks old; well bred; will be sold cheap.

B. F. BAUGHMAN, Redmond, Ore.

**In writing advertisers, be sure to say that you saw their advertisement in this paper.**

## JERSEY CATTLE

### Foundation Herd of Jerseys

To reduce our herd to a size proportionate to the available labor supply we make the following offerings: First of all the great Tennessee cow.

**Moyane Monine,** 803 lbs. butter, 10,406 lbs. milk in one year. Also
**Creole Bess,** 684 lbs. butter, 12,363 lbs. milk.
**Stockwell's Dahlia,** 619 lbs. butter, 8890 lbs. milk.
**Lucy's Convent Lassie,** 484 lbs. butter, 7568 lbs. milk.
**Princess of the West,** 477 lbs. butter, 6996 lbs. milk in 341 days.
**Pearl of Riga,** 458 lbs. butter, 7489 lbs. milk in 297 days.
**Diamond of Fair Acres,** now on test, milking 59 lbs. a day, as junior 3-year-old.
**One heavy producing** untested cow and one 2-year-old heifer.
(All butter regular Jersey standard, 85 per cent.)

This includes all our American bred cows and three choice imported cows, including the many times grand champion, Stockwell's Dahlia.

Free from abortion and will furnish certificate of health from federal veterinarian.

Prices, pedigrees and photos on request.

**J. B. STUMP & SON, Monmouth, Ore.**

### Best of Breeding

Two bull calves, one by Comassie Lulu's Noble, full brother to 2 register of merit cows with good records. Dam was junior champion Pacific International stock show and has R. M. record of 365 lbs. butter, begun at 1 year, 10 months, class AA.

The other by Oxford Torono 2d, a Hood Farm bred bull. His dam has a heifer making private record, begun under two years, of almost 500 lbs. butter. Both very cheap, in proportion to quality.

WM. BEHRMANN JR., Hillsboro, Ore.

### ASHBURN FARM

REGISTER OF MERIT JERSEYS.

In nearly 13 years we have yet to get our first poor heifer or dissatisfied customer. We have the best of the Golden Glow's Chief and St. Mawes strains, with the cross of our great Kentucky bull, Valentine's Ashburn Baronet.

J. M. DICKSON & SON. Shedd, Ore.

GOLDEN GLOW HERD.

Winner of 1st and 2d prize in butter test, Oregon State Fair, 1917 (all breeds, 20 entries); breeder and owner of grand champion cow in show ring, 1916; breeder of grand champion cow, 1917. Breeder and owner of world's champion 3-year-old, with 1115 lbs. butter, 80 per cent fat. Every female a daughter, granddaughter or great-granddaughter of Golden Glow's Chief, sire of 34; 14 over 700 lbs.; 32 over 600 lbs.

PICKARD BROS., Marion, Ore.

GOLDEN GLOW'S CHIEF

has 35 Register of Merit daughters and 40 grand-daughters, 4 proven sons, and a WORLD RECORD JUNIOR 3-YEAR-OLD DAUGHTER, who is dam of ONE OF OUR HERD BULLS by the old bull himself. Our second sire is also a son of Golden Glow's Chief, out of a Gold Medal Hood Farm cow. Write us for a young bull calf.

D. Brooks Hogan, Mgr., Iron Mine Farm, Oswego, Oregon.

W. M. LADD, Owner, Portland, Oregon.

### All High Record Blood

Bull calf out of Lucy of P. V., full sister to St. Mawes Susie; 936 lbs. butter in a year; to St. Mawes Blossom 823 lbs., and to Susie's Twin Maiden, 642 lbs. Sire, Poppy's St. Mawes, son of St. Mawes Poppy, 1120 lbs.

ED CARY, Carlton, Ore.
Station, La Fayette, Ore.

### OAK RIDGE JERSEY FARM

Thirty years breeding Jersey cattle. Young bulls from Register of Merit dams. Also a few choice females.

RILEY E. HULBURT, Albany, Ore.

### GWENDOLA OLGA LAD

Sire Beauty Lala Lad, he by Rosaire Olga Lad, sire of over 30 register of merit daughters, including St. Mawes Beauty, 934.9 lbs. butter as junior 3-year-old (all butter in this ad being computed on basis of 80 per cent fat.) Beauty Lola Lad's dam, Beauty Lola, R. M. record, 724 lbs. butter, milked twice a day, ordinary herd care.

GWENDOLA OLGA LAD'S dam, Gwendola Olga Chimes, R. M. record 1035.5 lbs. butter as junior 4-year-old. She is by Silver Chimes of S. B., sire of 9 other R. M. daughters, including Silver Chimes Rue, 983.78 lbs. butter. Her dam, Coffee's Gwendola, R. M. record 770.07 lbs. butter and she is a granddaughter of the great bull King Koffee's Count.

GWENDOLA OLGA LAD was dropped March 7, 1917. He is a well grown, good individual, fit to head and improve the best pure bred herds. Other young bulls of best breeding.

DEL PERKINS, Carton, Ore.

### Jersey Home Dairy

Young bulls, winners at Washington State Fair, make good herd sires. Attractive prices for quick sale.

**Erickson Bros. Prop.**
North Yakima, Wash.

### WAIKIKI FARM

Register of Merit Jerseys. Largest Jersey herd in the northwest. Young stock for sale.

IRA P. WHITNEY, Manager.
Route 7, Spokane, Wash.

### JUST ONE CALF LEFT

on our farm, out of a daughter of Rosaire Olga Lad, with a record of 765 lbs. butter, and by Gerties Poppys St. Mawes. This calf has three crosses of Rosaire Olga Lad. He is a dandy. The last four bull calves brought us $250 each; all were from our herd bull G. P. St. Mawes. Our herd average now is 747 lbs. butter from the 11 head.

DOERFLER FARMS, Silverton, Ore.
F. A. Doerfler, Prop.

## HOLSTEIN CATTLE

### CARNATION HOLSTEINS

Carnation Stock Farms

Over 300 in herd to select from. Herd has been under federal inspection for several years. Our herd sires are Matador Segis Walker, a grandson of King Segis, out of Matador Twisk Minette 4th, with record of 33.69 lbs. His first five two-year-old heifers, to freshen, have averaged nearly 22 lbs. in 7 days; King Segis 10th; Johanna McKinley Segis, the 40-lb. bull.

Write today your needs for a Holstein bull. Get them while they are young. Save money on cost price and on express charges. Careful attention given to mail orders.

FARM—CARNATION, WASH.
Offices — 2080 Stuart Bldg., Seattle.

Visitors welcome. Correspondence solicited. Write for circular, Value of Pure Bred Sires.

### 365-DAY HOLSTEINS

24,667 lbs. milk—1026 lbs. butter—is the S. O. advance registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.

THE HERD WITH YEARLY RECORDS.
WESTERNWOLD RANCH, Prineville, Ore.

### LaConnor Flats Stock Farm

Pure bred registered Holstein cattle. Herd sire Segis Pontiac Acme; average of three of nearest dams; butter, 1 year, 1089.82 lbs.; milk, 24,380.3.

J. H. HULBERT. Mt. Vernon, Wash.

### Bargains in Bull Calves

Sired by Segis Riverside Pontiac, that sold in Pacific international sale, 1914, for $1025, and whose dam has A. R. O. record of 31.47 lbs. butter in 7 days; 118.89 in 30 days, and big records all through his pedigree.

ERNEST JOHNSON, Scappoose, Ore.

### Record Holsteins

Young bulls, some of them ready for service, by a sire whose five nearest dams average 26.17 pounds butter, or another with 29.67-pound dam, and out of high-record A. R. O. dams. Priced to sell.

ERNEST WERNER, AURORA, ORE.

### Registered Holsteins

Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.

H. R. BOOMER. New Plymouth, Idaho.

### HOLSTEINS

Well-bred young bulls for sale.

THOS. CARMICHAEL. Gaston, Ore.

HOLSTEINS BRED FOR PRODUCTION
and
Berkshires of Quality.
Stock of All Ages, Either Sex, for Sale.

HUGH NISBET. Chimacum, Wash.

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, June 17.—Corn prices went soaring again today impelled by record-breaking heat in the west. Advances, however, were not well maintained. The market closed nervous, ½ to 1 cent net higher, with July $1.45¾ to $1.45 7-8, and August $1.47 7-8. Oats finished ½ to 1½c up. Provisions rose 25 cents to $1.

Absence of any intimation that actual damage had resulted from the intense heat tended to unsettle sentiment in the later dealings.

Fears of crop damage in the southwest counted as a factor from the bull side of the oats market.

Provisions ascended with grain and hogs.

**Chicago Futures.**

| | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| Corn— | | | | |
| July ..... | 1.45¼ | 1.47⅛ | 1.45¼ | 1.45¾ |
| August ... | 1.48½ | 1.49⅛ | 1.47⅜ | 1.47⅞ |
| Oats— | | | | |
| July ..... | .71 | .72½ | .71 | .71¾ |
| August .... | .66 | .67½ | .66 | .67 |
| Port— | | | | |
| July ..... | ..... | ..... | ..... | 42.70 |
| Sept. ..... | ..... | 43.10 | 42.85 | 43.10 |
| Lard— | | | | |
| July .....24.65 | | 24.90 | 24.57 | 24.90 |
| Sept. .....24.90 | | 25.20 | 24.85 | 25.17 |
| Ribs— | | | | |
| July .....22.87 | | 23.10 | 22.85 | 23.05 |
| Sept. .....23.32 | | 23.60 | 23.32 | 23.55 |

**Cash Quotations.**

CHICAGO, June 17.—Corn, No. 2 yellow, $1.70@1.71; No. 3 yellow, $1.62@1.67; No. 4 yellow, $1.50@1.55. Oats, No. 3 white, 77@78 1-4c; standard, 77¾@78 1-4c. Rye, No. 2, $1.96@1.98. Barley, $1@1.35. Timothy, $5@8. Clover, nominal. Pork, nominal. Lard, $24.65. Ribs, $22.37@22.87.

**Pacific Northwest Grain.**

PORTLAND, Ore., June 17.—Grain—June delivery bids: Oats—No. 2, $60; eastern oats and corn in bulk. Oats—No. 3 white, $54; 38-pound clipped white, $55; corn No. 3 yellow, $62; No. 3 mixed, $60; oats, No. 3, $54; clipped, $55; corn yellow, $62; mixedo, $60.

**Minneapolis Grain.**

MINNEAPOLIS, June 17.—Wheat, receipts 384 cars, compared with 261 cars a year ago. Corn, No. 3 yellow, $1.55@1.65. Oats, No. 3 white, 75½@77½c. Flax, $3.88@3.90. Flour, unchanged. Shipments, 56,897 barrels. Rye, $1.98@2. Barley, 92c@$1.24. Bran, $28.25@33.25.

## Live Stock Quotations.

**At Omaha.**

OMAHA, Neb., June 17.—Hogs—Receipts, 11,000; market strong to 5c higher. Heavy, $16.40@16.45; mixed, $16.45@16.55; light, $16.50@16.60; pigs, $12@16; bulk of sales, $16.45@16.50.

Cattle—Receipts, 7200; market 10c to 25c lower. Native steers, $12.50@17.55; cows and heifers, $9.75@15; western steers, $9.75@14.75; Texas steers, $9@12.25; cows and heifers, $7.75@9.75; canners, $7.25@10; stockers and feeders, $8@12.75; calves, $8@13.25; bulls, stags, etc., $8@13.

Sheep—Receipts, 5000; market steady. Wethers, $13.50@14.50; ewes, $11.05@13.60; lambs, $16@20.25.

**At Chicago.**

CHICAGO, June 17.—Hogs—Receipts, 33,000; mostly 10c above Saturday's average. Bulk, $16.45@16.85; butchers, $16.50@16.85; packing, $16@16.45; light, $16.75@16.90; rough, $15.50@15.95; pigs, $16.25@16.75.

Cattle — Receipts, 24,000; market steady to slow; good to choice corn-fed, steady; others unevenly lower; quality poorer.

Sheep—Receipts, 17,000; market 50c lower on both sheep and lambs.

**At Portland.**

PORTLAND, Ore., June 17.—Cattle $1 lower; receipts, 2275. Prime steers, $12.50@13.10; good to choice steers, $11.50@12.50; medium to good steers, $9.50@10.50; fair to medium steers, $9@10; common to fair steers, $8@9; choice cows and heifers, $9.50@10.50; medium to good cows and heifers, $6.50@8; fair to medium cows and heifers, $5@6; canners, $3.50@5; bulls, $7@8; calves, $8@11; stockers and feeders, $7@9.

Hogs 10c higher; receipts, 1096. Prime mixed, $16.60@16.75; medium mixed, $16.45@16.60; rough heavies, $15.60@15.75; pigs, $15.50@15.75; bulk, $16.60.

Sheep steady to lower; receipts, 1366. East of mountain lambs, $15@15.50; valley lambs, $14.50@15; yearlings, $9@10; wethers, $8@9; ewes, $5@8.50.

**Spokane Stockyards, Monday.**

Hogs—Receipts, none; market steady to strong. Prime mixed, $16.35@16.50; medium mixed, $16.20@16.35; rough heavy, $15.20@15.50; pigs, $15.25@15.60; stockers and feeders, $14.25@15.50.

Cattle—Receipts, 225; quality poor; market weak and 25c lower. Prime steers, $13.50@14.50; good to choice steers, $12@13; medium to good steers, $10@10.75; fair to medium steers, $9@9.75; common to fair steers, $7.25@8.25; choice cows and heifers, $10@11; good cows and heifers, $7.75@8.75; medium to good cows and heifers, $6.25@7.25; fair to medium cows and heifers, $5.50@6.25; canners, $3@5; bulls, $6.50@9; calves, $7.50@11; stockers and feeders, $7@9.50.

Sheep—Receipts, none; prospects lower. Prime lambs, $15.50@16; good lambs, $13.25@14.25; prime yearlings, $9@10; prime wethers, $8.50@9; best mutton ewes, $5@8.

## Seattle Market.

SEATTLE, Wash., June 15.—Potato acreage in Washington is now believed by experienced jobbers and distributors, based on searching investigations covering a period of a month, to be reduced from normal by 35 to 40 per cent. The famous Mount Vernon flats, the largest potato district of western Washington, has been given over largely to peas and grain.

It is estimated that fully 35 per cent of the potato acreage of 1916 in this district will be lost to spuds. Encouraged by the prospective high prices of oats and other grains, and disheartened by the losses of this season, Mount Vernon growers have diversified and will look for better results in other food commodities.

There is a difference of opinion as to the reduction of spud acreage in the Yakima valley Gems. Considerable acreage has gone into sugar beets, stimulated by the new sugar plant and the eagerness of its management to contract for the entire output of raw material at what farmers regard as good prices. Estimates of the reductions of spud acreage there are from 20 to 40 per cent.

New potatoes are dull, a large number of buyers seeking the old stock.

**Prices Paid Producers.**

Prices paid by wholesalers to producers:

Eggs—Select ranch, 40@41c per dozen; Oregon, eastern Washington and Idaho, 37c per dozen.

Butter—Fresh dairy, 30@32c per lb.; butterfat, 46c per lb.; baking, 30@35c per lb.; raw milk, $2.15 per cwt.

Poultry—Broilers, live, 1918, 30c per lb.; hens, 24@26c per lb.; spring roosters, live, fat, 2½ to 5 lbs., 27c per lb.; old roosters, 17@20c per lb.; ducks, live, fat, 25c per lb.; squabs, large, $3.50 per dozen; geese, fat, live, 23c per lb.; Belgian hares, 19c per lb.; guineas, $7 per dozen; turkeys, young toms and hens, dry picked, 10 lbs. and up, 30@33c per lb.; smaller birds, 24@30c per lb.

**City Prices.**

Hay and feed quotations, city prices, truckload delivery, are as follows:

Feed—Bran, $34 per ton; shorts, $35.50; scratch feed, $77; all-grain chop, $71; oats, $68; sprouting oats, $78; rolled oats, $69; whole corn, $75; cracked corn, $77; rolled barley, $67; clipped barley, $69; alfalfa meal, $36; oil meal, $70; egg mash, $62.

Hay—Eastern Washington timothy, $34 per ton; do. double compressed, $37@38; alfalfa, $26; Puget sound, $26@27; straw, $15.

## Spokane Market.

**MEAT.**

**Beef**—Beef steers, 16@21½c lb; cow beef, 14@17c lb; heifers, 18c lb; best loin, 33c lb; steer chucks, 16½@17½c lb; prime ribs, 25c lb; rump and round, 23c lb.

**Mutton**—Breakers, 30c lb; wethers, 23c lb.

**Lambs**—Diamond T. C. lambs, 30c lb; lambs, 28c.

**Pork**—Packer dressed hogs, 26@27c lb; pork loins, 30@31c lb; legs, 30c lb; shoulders, 25c lb; leaf lard, 28c lb; tenderloins, frozen, 40c lb; spareribs, 19c lb; country dressed hogs, with head on, 20c lb to producer; country dressed veal, 14c lb to producer.

**Smoked Meats**—Washington hams, 33¾c lb; T. C. hams, 35c lb; T. C. bacon, 46½@48½c lb; Washington bacon, 39½@43¼c lb; picnics, 23½c lb; English bacon, 35c lb.

**Star Brand**—Hams, 35c lb; Shield hams, 33@34c lb; picnics, 23½c lb; bacon backs, 33c lb; Star bacon, 46½@48½c lb; Shield bacon, 41@45½c lb; Simon Pure lard, $17.50 case; Shield lard, tierces, 27½c lb; White Cloud compound, tierces, 22¾c lb.

**Dry Salt Meats**—Clear bellies, 27c; lean backs, clear, 26½c lb; sides, 26c per lb.

**Lard**—Tierces, 26½c lb, $13.99@14.74 case; Diamond T. C. pure leaf lard, $15.50 case; $8 half case; Snowcap compound, tierces, 22¼c lb.

**POULTRY.**

**Live Poultry**—Live hens, 20c lb; roosters, 12½c lb to producers, f. o. b. Spokane.

**GASOLINE, LINSEED OIL, ETC.**

**Gasoline**—Red Crown, bulk, 24½c gal, cases, 34½c gal; Shell, 24½c; refined oil (Pearl), bulk, 13c gal, cases, 23c gal; Eocene, 15½c gal in bulk, cases 25½c gal; engine distillate, 16½c gal, bulk.

**Linseed Oil**—Raw, bbl, $1.68 gal, case $1.85 gal; boiled, bbl, $1.70 gal, cases $1.88 gal.

**Turpentine**—Bulk, 76c gal; cases, 96c gal.

**White Lead**—Strictly pure white lead in oil, ton lots, 12¼c lb; 50-lb lots, 13c.

**GRAIN AND FEED.**

**Rice**—Fancy head, $7.50@9.50 cwt.

**Flour**—Bluestem, $9.40; Blend, $9.40; Montana hard wheat, $10.40; graham, $8.60 bbl, 49-lb sacks; whole wheat, $8.80; eastern rye, $10.10; eastern rye meal, $10.30; oat flour, $12.85, 4 45-lb. sacks.

**Oats**—$73 ton whole, $76 rolled, delivered in city; steam rolled No. 2, $71 ton.

**Corn**—$75 ton; cracked corn, $77 ton.

**Bran**—$30 ton; shorts, $32 ton; bran and shorts, $31 ton.

**Barley**—Rolled, $76 per ton.

**Oil Meal**—$78 per ton.

**Hay**—Timothy, $36 per ton, $35 ton by carload; alfalfa, $29 ton, $28 ton by carload.

**METALS.**

NEW YORK, June 15.—Bar silver, 99½c.

## Portland Market.

PORTLAND, Ore., June 15.—Official announcement from Lewis Penwell, chief of the wool division of the war industries board, that the Portland wool district has been extended to include Idaho wools as far east and including Pocatello assures to northwestern manufacturers an adequate supply of three-eighths and quarter-blood wools to fill all government contracts.

New wool is coming in fast, and as soon as the full appraisal committee of four is named the grading of 1918 wools in Portland warehouses will begin. Two members of the committee chosen are Charles H. Green of this city and Harry Wagner of The Dalles. In the meantime Mr. Green, who has charge of the distribution of wool, has allotted 150,000 pounds of the 1917 clip to mills in this territory.

Shearing is progressing in the eastern Oregon counties as rapidly as the shortage of wool shearers will permit.

Grain men are greatly encouraged over the brighter crop prospects east of the Cascades, where rain came in the nick of time to save wheat, which was suffering from the prolonged dry spell and hot winds. Valley crops were also benefited by showers. The construction of a new 1500 barrel flour mill is announced to begin in this city immediately.

There has been another half cent advance in cube butter prices as a result of the strong demand from speculators and city creameries. Print prices are unchanged.

Enlarged receipts of ranch eggs and freer offerings of poor grade easterns have weakened the Oregon market.

Poultry is firm, with a strong demand from the sound, particularly for broilers. The demand for country dressed meats, which relaxed during the hot spell, has not revived and pork and veal are both weak. Prices are further depressed by lower prices at the yards.

The early strawberry crop is finished and as the late crop is slow in coming on prices have stiffened, with $3.50 again quoted on the best shipping stock. Local cherries are more plentiful and range in price from 7 to 21 cents, according to quality.

Four grades of onions have been established by the public service commission, to be known as Nos. 1 and 2, Oregon boilers and culls. An order was issued placing the handling, weighing, inspecting and grading under control of the commission. The order is effective July 1.

Butter—Cubes, extra, 41 1-2c; prime firsts, 40 1-2c; prints, extras, 44c; cartons, 1c extra; butterfat, No. 1, 43c, delivered.

Eggs—Oregon ranch current receipts, 38c; candled, 40c; selects, 42c per dozen.

Cheese—Jobbers' buying prices, f. o. b. dock, Portland; Tillamook, triplets, 23 1-2c; Young Americas, 24 1-2c per pound; Coos and Curry, f. o. b. Myrtle Point; Triplets, 23c; longhorn, 24c per pound; 1-4c discount to Portland trade.

Poultry—Hens, 23@24c; broilers, 26@30c; ducks, nominal; geese nominal; turkeys nominal.

Veal—Fancy, 16@17c per pound.

Potatoes—Oregon Burbank, $1@1.25 per hundred; new California, 3@3 1-2c per pound.

Hay—Buying prices, f. o. b. Portland; eastern Oregon timothy, $32@33 per ton; valley timothy, $27@28; alfalfa, $24@24.50; valley, grain hay, $24@26; clover, $21; straw, $9@10.

## Butter and Eggs.

PORTLAND, Ore., June 17.—Butter—Prints extras, 44@45c; cubes extras, 41 1-2c; prime firsts, 40 1-2c; dairy, 32c. Butter fat—Portland delivery, No. 1 sour cream, 43c.

CHICAGO, June 17.—Butter steady; creamery, 38@42 1-2. Eggs steady; receipts, 1389 cases; firsts, 30 1-2@32 3-4; ordinary firsts, 26 1-2@30 1-2c; at mark cases, included, 29@32c.

SAN FRANCISCO, June 17.—Butter, 44 1-2@48 1-2c. Eggs—Fresh extras, 44c; firsts, 40c; fresh extra pullets, 40c; extra pullets, 38c. Cheese—New firsts, 23c; young Americas, 25c.

## Import Vegetable Oils.

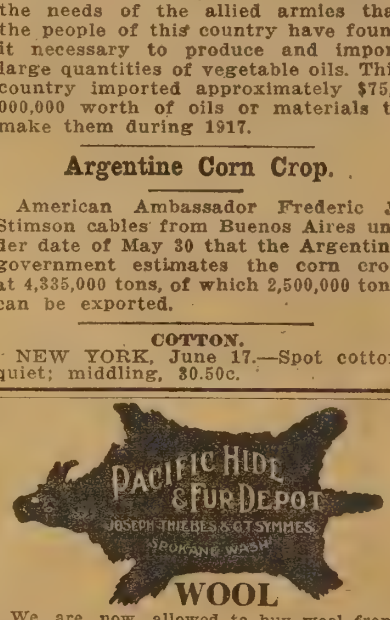
So much animal fat has been exported during the last year or two to meet the needs of the allied armies that the people of this country have found it necessary to produce and import large quantities of vegetable oils. This country imported approximately $75,000,000 worth of oils or materials to make them during 1917.

## Argentine Corn Crop.

American Ambassador Frederic J. Stimson cables from Buenos Aires under date of May 30 that the Argentine government estimates the corn crop at 4,335,000 tons, of which 2,500,000 tons can be exported.

**COTTON.**

NEW YORK, June 17.—Spot cotton quiet; middling, 30.50c.


**WOOL**

We are now allowed to buy wool from growers. Returns will be made subject to government price, less our profit of 1½ cents per pound.

Market price paid for hides, metal and rubber. Write for prices if interested. Prompt returns guaranteed.

**PACIFIC HIDE & FUR DEPOT.**

Joseph Thiebes and C. T. Symmes.
1101-09 Railroad Ave., Spokane, Wash.



# ECONOMY

Long-sighted judgment, disregarding first cost, looks for quality in a tractor, for permanence, for lowest cost per working hour, through continual operation and freedom from repairs. That is economy—that is the Caterpillar.

Over thirty years' experience in tractor-building has shown us how to build into the Caterpillar the strongest and longest-lived construction—how to transmit power from the motor to drawbar with least frictional loss.

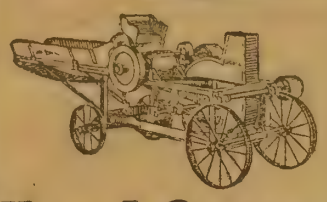
We have arranged for a limited allotment of 75s for harvest and can make quick delivery from Spokane or Stockton.

The Holt Manufacturing Co.
SPOKANE.

CATERPILLAR

Reg. U.S. Pat. Off.

ACME



Feed Cutter

FILLS THE SILO | MAKES ALFALFA MEAL | CUTS DRY FEED

The same Acme Cutter that fills your silo can be turned to your profit at all seasons of the year by cutting dry feed and making alfalfa meal.

Its special **Hay Feeding Attachment** gives it enormous capacity as a **Dry Feed Cutter.** Save $3 to $5 on every ton you feed this year by running it through an Acme—Alfalfa Meal can be produced on the same machine at a cost of less than half the cost of baling. Send for sample of the meal.

Catalog on request.

De Laval Dairy Supply Co.

61 Beale St., San Francisco.

Warehouse stocks carried at Portland and Seattle.



90 Bushels Per Acre

Mr. A. J. Woolen writes: "I arrived in Canada with practically nothing. Nevertheless I made good, and my first crop of oats went on an average 90 bushels to the acre."

Mr. Woolen is only one of thousands of farmers who have made good in Western Canada. Government statistics show the average yield of oats per acre is 53⅓ bushels; of wheat 30 bushels.

| | |
|---|---|
| Wheat | 30 bu. |
| Oats | 53⅓ bu. |
| Potatoes | 148 bu. |
| Barley | 37 bu. |
| Rye | 27¾ bu. |
| Flax | 13⅓ bu. |

This is the 1915 average per acre from Government statistics.

128,000 FREE FARMS!

Whether you have capital to buy land or not, there is a farm for you in Canada. You can get one of the recently surveyed 160-acre fertile homesteads along the Canadian Northern Railway. Here you have the same opportunity to succeed as did Mr. Woolen. First comers get choicest locations.

Best Farm Lands $15 to $25 Per Acre

Thousands of acres of specially selected centrally located land, *close to the railway,* can be purchased on easy cash payments, or part cash and part crop payments. Here are modern free schools, good transportation, telephones and automobile roads. Crops produced can only be equaled on farms costing $150 to $200 per acre in more densely settled communities.

**Special Low Fares**—The Canadian Northern Railway, which takes you to all parts of this territory, provides special low fares to home-seekers and settlers.

Send for FREE Book

Write today for your free copies of the "Home-Seekers' and Settlers' Guide" and government literature. The Guide is full of interesting and valuable information based on government returns and it tells you exactly how to make a home in Western Canada. Here is a home and wealth for you.

CANADIAN NORTHERN

Canadian Northern Railway

A. R. Brostedt, D. F. & P. A., 605 Hastings St., Vancouver, B. C.



SHIP your cattle where they will bring you the most money.

OUR northwestern customers have found Kansas City their best market. We specialize on Oregon, Washington and Idaho cattle.

WRITE or wire us for market information any time.

WITHERSPOON-M'MULLEN L. S. COM. CO.

Stockyards Station, Kansas City, Missouri.


# Frenzied Finance!

## German Manufacturer of Credit

Nearly four years ago the military party in Germany hurried the country into war on a promise that it would bring a quick and decisive victory and all the cost would be more than defrayed by an indemnity of $7,000,000,000 that was to be taken from the French. The deceived German people are sadder and wiser now.

Interest charges on the German debt are now 30 times greater than before the war, and the government is borrowing money to pay interest on sums already borrowed.

**GERMANY'S TOTAL ANNUAL REVENUES BEFORE THE WAR WERE $850,000,000. IF THE WAR WERE ENDED NOW THE NATION WOULD HAVE TO FACE AN ANNUAL EXPENDITURE OF $3,250,000,000, OR NEARLY $50 FOR EVERY MAN, WOMAN AND CHILD IN THE COUNTRY, AND THAT WOULD COVER ONLY NATIONAL, NOT LOCAL TAXES.**

Frenzied finance! The real meaning of the word was never known before. Germany has manufactured credits wholesale. Bond issue after bond issue has been put out until war flotations are now estimated at $25,000,000,000, or $357 for every inhabitant.

Austrian financial conditions are even worse, and as for Turkey, the kaiser's Mohammedan ally, it was bankrupt before the war began.

Undoubtedly there is dire financial and economic distress in all the countries that the kaiser drew into this wicked war, but it would be a mistake for the American people to depend on their financial collapse.

**WE LEARNED IN OUR CIVIL WAR THAT ARMIES WILL FIGHT HARD LONG AFTER THEIR COUNTRY IS BANKRUPT. OUR ONLY SAFE COURSE IS TO CARRY ON OUR WAR PREPARATIONS WITH NO THOUGHT OF GEMANY'S FINANCIAL COLLAPSE.**

If the collapse should come, so much the better, but a thoroughly beaten German army is the only dependable foundation on which to build an enduring peace.

## FOOD IN NORWAY.

### Production Must be Speeded Up.

The annual military training exercises in Norway will this summer be postponed till times when they will not interfere with the increased food production now planned throughout the country. Protests and resolutions poured into the national assembly from all over the country to the effect, that all available horse and man power this summer must be used on the farms. A large increase in the production of potatoes and grain is planned for this summer and much new land will be put under the plow. Men and horses will be drafted, misused or badly used land can be seized by the government and factories can be stopped to release men for the farms. The government has appropriated much money for the financing of this important undertaking. The country has secured enough food for this year and is now preparing to meet the demand of the next winter.

# Want Ads

## EDUCATIONAL 45

EARN MORE. ENROLL ANY TIME, AT Behnke-Walker, Portland, northwest's biggest business college, because best. Graduates assured positions. Write for catalogue.

## TEACHERS' AGENCIES 46

TEACHERS REGISTER WITH B. F. WESTmore, Mgr. Hazard Teachers' Agcy. $1 registers you at three offices. 911 Old Nat'l Bank bldg., Spokane, Washington.

ALBERT TEACHERS' AGENCY, PEYTON bldg., Spokane. We need more teachers.

## HONEY, BEESWAX—Wanted. 58

SEND SAMPLES OF YOUR HONEY AND beeswax; state quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

## EGGS and BUTTER WANTED 59

WE ARE ALWAYS IN THE MARKET for good eggs and dairy butter. Send us your next shipment.
OREGON FARM PRODUCTS CO.
386 HALSEY ST., PORTLAND, ORE.

## MISCELLANEOUS—FOR SALE 60

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We make screen doors and sash covered with heavy 28-gauge galvanized wire.
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Odd size screen doors, 20c per square foot.
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We sell any one. Ship anywhere, and guarantee safe delivery.
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1943 FIRST AVE. SO. SEATTLE.

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Write for prices and shipping tags.
BUYERS OF ALL KINDS OF JUNK.
CENTRAL HIDE & JUNK CO., SPOKANE.

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"WITTE" GASOLINE ENGINES
save labor, and are carried in stock by
HIGGINS MACHINERY COMPANY,
312 FIRST AVE. S., SEATTLE.
Write for Catalogue.

CORN HARVESTER; ONE MAN, ONE horse, one row; self gathering; equal to a corn binder; sold direct to farmers for 23 years; only $25 with fodder binder. Free catalogue showing picture of harvester. Process Corn Harvester Mfg. Co., Salina, Kan.

FOR SALE—HOLLEY HOLT HARVESTer, in good shape. Cut 1600 acres. Address O'Brien Bros., Wilbur, Wash.

## AUTOMOBILES 114

INLAND EMPIRE HEADQUARTERS FOR used cars, trucks, delivery cars, trailers, and tractors. Write us particulars of what you want to buy or sell of any late make or model of motor vehicle. Our latest list of used cars, trucks, etc., mailed on request. Headquarters for transients. Fireproof garage. Open day and night.
SPOKANE AUTO MARKET.
313-15-17 W. SPRAGUE AVE,
SPOKANE, WASH.

FORDS CAN BURN HALF COAL OIL, ALL distillate, or cheapest gasoline, using our 1918 Carburetor; 34 miles per gallon guaranteed; easy starting; great power increase; attach it yourself; big profit selling for us; 30 days' trial; money back guaranteed; styles to fit any automobile. Air-Friction Carburetor Company, 321 Madison st., Dayton, Ohio.

## STOVE & FURNACE REPAIRS 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

## HARES AND RABBITS 173

FINE, RICH, RACY, RUFUS RED BELgians; does, bred to registered buck, $5 each; breeding bucks, $4; young stock from $2 up. Order from this ad direct. Satisfaction guaranteed. Pedigreed stock. Cermer Rabbitry, Pasco, Wash.

## POULTRY 174

BABY CHICKS, WHITE LEGHORNS, CUStomers say they are "husky," "lively," "vigorous," healthy," "strong," "hard to beat," "thrifty," "great layers." Write at once. Free catalogue. Freshlaid Farm, Colfax, Wash.

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WANTED—CAN HANDLE SIX HEAD OF high producing registered Holstein cows for ½ of increase and will buy the cows at the end of two years if suited. Address V. T., Washington Farmer, Spokane.

FOR SALE—SHORTHORN BULL, CRYStal Boy, age 7; weight 2000 lbs.; red; dehorned. Immediate sale, $200, at Pullman or Wawawai. A. S. Ford, Pullman, Wn.

MANFORD HERO 2D, 634613, ROAN, calved Mar. 19, 1917; a vigorous, growthy Shorthorn bull; for sale at $200, crated, f. o. b. Fenn, Idaho. Wm. Mulhall..

ORDERS BOOKED FOR WEANLING POland China pigs from prize-winning stock. Also a few boars old enough for service. Frank Needham, Eugene, Oregon.

EIGHT SERVICEABLE SHORTHORN bulls for sale; some carry large per cent of Sultan blood. H. J. Cortner, Hagerman, Idaho.

REGISTERED POLAND CHINA PIGS; best money can buy. Harry Valliere, R. 2, Rickreall, Ore.

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WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water. 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

GALAX HOTEL; NEW AND MODERN; 75C and $1. Main and Bernard, Spokane.

## RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

## ARTIFICIAL LIMBS 424

SCHINDLER ARTIFICIAL LIMB CO., S115 Wall st., Spokane, Wash.

## PLUMBING, STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

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**Want Ad Rates 30c Per Line**

Want ads are run at this rate in The Washington Farmer and i t s associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

**Send for card giving lower rates for ads running one month or longer.**

**How to Figure Cost of Ads**

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

## INVESTMENTS 513

OWN 3840 ACRES TIMBER lands on Arrow Lakes, which I located 12 years ago. Will deed an interest to party who will pay two years' assessments. Address D 7, Washington Farmer, Spokane, Wash.

## SEEDS 620

SEEDS—THE KIND THAT GROW.
You can't keep them in the ground.
Send for catalogue.
BUTZER'S SEED STORE.
188-190 Front St.
Portland, Oregon.

WE SPECIALIZE IN TIMOTHY, ALFALfa, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Ida.

GOOD SUDAN GRASS SEED, 20C PER LB. Limited quantity. Order immediately. W. P. Muncy, Doyle, Calif.

## FARM LANDS—FOR SALE 651

MR. FARMER AND INVESTOR, INVESTIGATE THIS PROPERTY.
2350-acre farm for sale; in the wheat belt of Alberta; at a sacrifice to close an estate.
Seven hundred acres wheat.
Nine hundred acres oats.
One hundred and fifty acres barley.
One hundred acres timothy.
Four hundred acres summer fallow.
Balance pasture.
Buildings valued at $8000; fifteen miles wire fence; two wells and running water; schoolhouse on property; three and half miles from two stations; twenty-four miles from Calgary, Alberta. Splendid neighborhood. Price fifty-five dollars per acre, including the crop, which is valued at fifty thousand dollars net. Terms, $35,000 cash, balance arranged 6 per cent. Arrangements might be made to use the machinery. Write or wire W. M. Gilfoy, 713 Herald building, Calgary, Alta., Canada.

ATTENTION, LANDBUYERS!
Here's an excellent proposition:
40-acre farms, selling for $15 to $25 per acre; long-time payments, 6 per cent interest; in the best agricultural part of Snohomish county, where you have all the modern conveniences—paved roads, railways, schools, churches, mills and factories. This district has proven its worth by the many successful farmers now located there.
We also have some beautiful 10-acre waterfront tracts.
OPPORTUNITY knocks at every man's door ONCE, but, believe me, it does not continue to knock forever, nor does it pound the door down. For further information address the owners, BROWNELL LAND CO., 904 Third ave., Seattle, Wash.

LAND BARGAIN.

1280 acres, 11 miles south of Wilson Creek, Grant county, Washington, near Lincoln county line; 30 per cent tillable; good, rich soil; lots of water; balance bunchgrass pasture; all fenced; no buildings. Price $7 per acre. Will take up to 50 per cent in trade, balance easy terms. Would make a fine diversified farm.
HOUSE AND LAND ASSOCIATION.
514 RIVERSIDE AVE.
PHONE MAIN 3979.
SPOKANE, WASH.

DAIRY FARM FOR SALE—NOW DOING $250 to $300 cash business a month; 14 dairy cows and all equipment for handling milk route. Price $3700 cash or terms. Young stock and horses can also be bought reasonably. A good opportunity to raise cattle. Lots of free range. For particulars write A. Enstrom, Box 330, Ephrata, Wash.

682-A. IMPROVED WHEAT FARM; SEVEN miles south of Hartline, Wash.; on Sunset highway; good land; all in cultivation except 15 acres; 300 a. in summer fallow; all fenced; large house, fine barn, good outbuildings; plenty water. Only $45 per acre. $6000 cash will handle. A. L. Tucker, Coulee City, Wash.

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MY 60 ACRES FOR SALE.
Farm located 2 mi. from Sublimity; fine black loam ground; 50 a. in cultivation. Building and fences good. Here is a bargain. Price on application. F. X. Hottinger, Scio, Ore.

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WHEAT AND STOCK FARM, ALL EQUIPped; good buildings, plenty water; $50,000, clear. Lee Richardson, Wahkiacus, Wash.

## FARM LANDS—WANTED 654

I WANT TO HEAR FROM OWNER OF farm or unimproved land for sale. Mrs. W. Booth, Pulaski, Iowa.

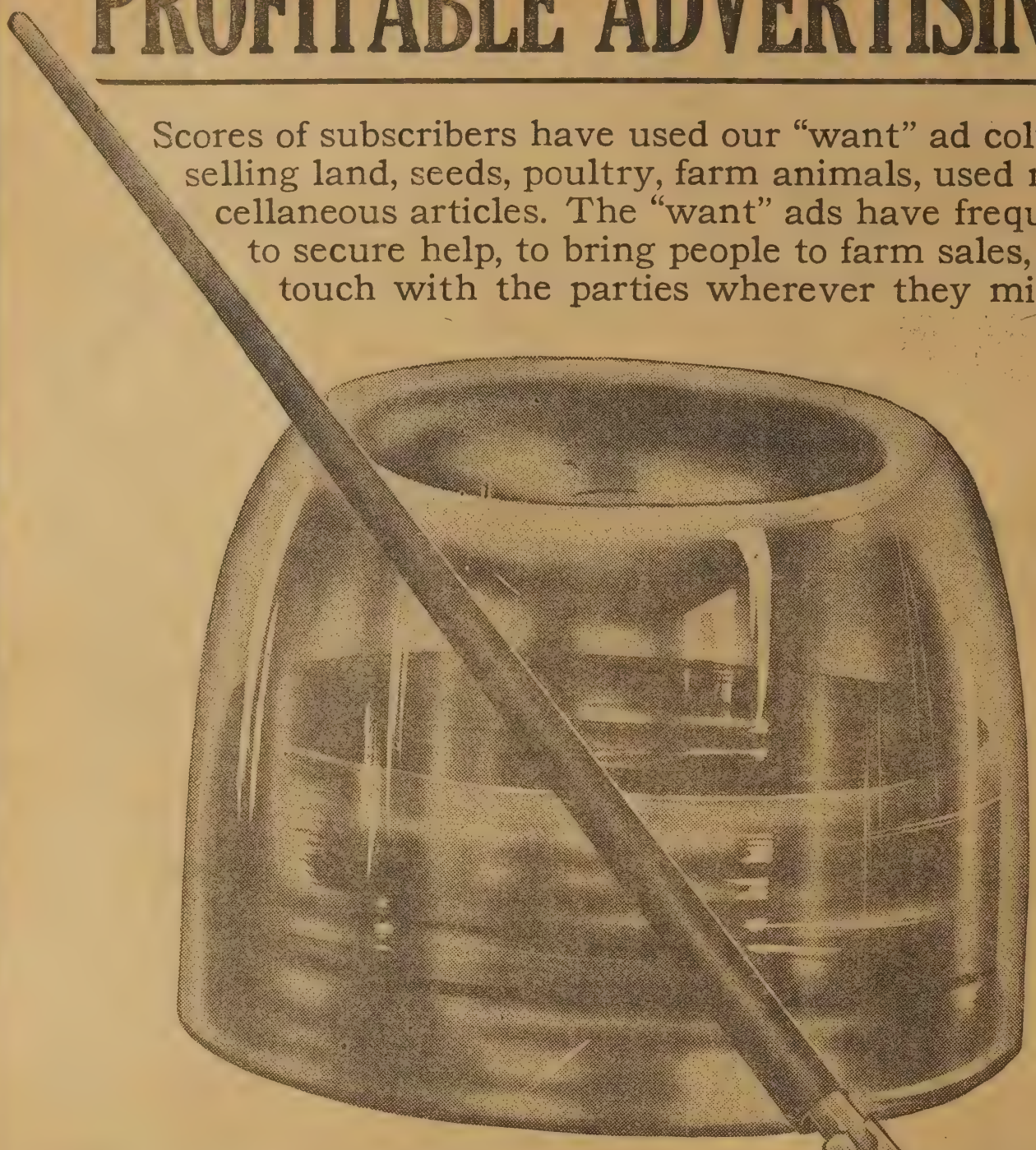
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EXPERIENCED DAIRY MAN WANTS TO rent or work dairy ranch with stock, one to five years. Address Box 142, Deer Park, Wash.

WANT TO RENT IMPROVED FARM ON good roads. Near school. G. A. Aronsan, Otis, Ore.

# PROFITABLE ADVERTISING for YOU

Scores of subscribers have used our "want" ad colums to advantage in selling land, seeds, poultry, farm animals, used machinery, and miscellaneous articles. The "want" ads have frequently enabled them to secure help, to bring people to farm sales, and in fact to get in touch with the parties wherever they might be located with whom profitable transactions could be arranged.



Our "want" ads are printed in the three state papers, The Washington Farmer, The Idaho Farmer and The Oregon Farmer. You get a low combination rate, and through three state farm weeklies, which form the Pacific Northwest Farm Trio, you reach the farm homes in every nook and corner of three great states.

*A drop of ink may be worth many dollars to you if used to write a "Want" ad for The Pacific Northwest Farm Trio*

## RATES

Include 3 State Papers

| ONE TIME | |
|---|---|
| 2 lines | $0.60 |
| 3 lines | .90 |
| 4 lines | 1.20 |
| 5 lines | 1.50 |
| **THREE TIMES** | |
| 2 lines | $1.80 |
| 3 lines | 2.70 |
| 4 lines | 3.60 |
| 5 lines | 4.50 |
| **TWO TIMES** | |
| 2 lines | $1.20 |
| 3 lines | 1.80 |
| 4 lines | 2.40 |
| 5 lines | 3.00 |
| **FOUR TIMES** | |
| 2 lines | $2.28 |
| 3 lines | 3.42 |
| 4 lines | 4.56 |
| 5 lines | 5.70 |

**Count four average words as the first line of your ad and 6 average words for each line thereafter.**

Address: **The Washington Farmer,** Review Bldg., Spokane, Wn.
or 617 Central Bldg., Seattle, Wash.

SEE PAGE 3 FOR GRAIN CROP CONDITIONS THROUGHOUT TH


# THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XLI. NO. 26. JUNE 27, 1918. ** WEEKLY.




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FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 26 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF June 27, 1918

# What Is Condition of Northwest Grain?

## *This Paper Gathers Telegraphic Information From Reliable Sources Throughout Inland Empire*

This page is devoted to three sides of the most important single subject in the northwest today—WHEAT. The first is the general condition as influenced by the drouth and heat; the second is the probable effect of the rain and cooler weather on that condition; the third is the price situation as affected by the recent 25 per cent increase in freight rates. Desiring to compile actual facts on this threefold subject, this paper telegraphed reliable authorities in all of the big producing sections, asking their estimates; gathered also reliable reports on the scope of the rain that began falling Saturday and Sunday, and secured from J. M. Lownsdale of Portland, Ore., one of the best informed market authorities in the west, a special telegraphic statement of the price situation.

**GRAIN CONDITION PRIOR TO RAIN.**

The telegrams received by The Farmer give local conditions. In some districts the prospects prior to the rain were for not more than a quarter of a normal crop. In some they were for as high as three-quarters normal. Summarized, they indicated probably half a crop for the northwest as a whole. The following are the telegrams:

**Prospects Are Normal.**

POMEROY, Wash., June 22—(Special to The Farmer).—Garfield county crops are three weeks earlier than last year. There is a record acreage. The heat damage is slight. Fall sown wheat acreage is slightly less than normal, condition good. Spring wheat acreage 100 per cent increase, condition fair. Barley acreage 50 per cent increase, condition bad on account of late frost and green aphis. A good rain by July 1 will give this county more than a normal crop.—L. M. NETTLE.

**Prospects Are Fair.**

WATERVILLE, Wash., June 22—(Specail to The Farmer).—Winter wheat acreage is very small, with prospects of 50 per cent normal yield. Spring seeding its holding its own on heavy soil. Wheat in large section in the vicinity of Mansfield, Withrow and northern parts of Douglas county is heading out, with prospects of a very light yield; can make 15 bushels with rain by July 4. Prospects are fair in the vicinity of Waterville, La Moine, St. Andrews, Mold, Barry and Baird. There is less moisture than last year at the same date, but the grain is further advanced. Without rain the average yield will be less than 1917. There is a slightly increased acreage throughout the county. Farmers will sow 100,000 acres to wheat in the fall if conditions are favorable.—V. H. VENTNER, County Agriculturist.

**Too Late for Rain?**

PASCO, Wash., June 22—(Special to The Farmer).—The wheat crop in this section will be light; too far gone for rain to do much good. In places the wheat will never be cut; also about 1 per cent of the wheat has blown out completely. The moisture shortage is the worst ever. Cool nights and days would increase the yield several bushels. The fall wheat has been hit as hard as the spring wheat. Early Baart is standing up under the dry conditions better than the rest. All the wheat is drying around the base of the plant, and Bluestem has begun to burn in the head. Wheat is filling; will cut earliest about the Fourth of July. The yield probably will be cut from a third to a half.—T. S. BROWN, County Agricultural Agent.

**Damage Not Yet Irreparable.**

COLFAX, Wash., June 22.—(Special to The Farmer.)—Wheat in Whitman county has not yet been damaged seriously. However, the situation is critical. If good rains come between now and July 1 there will be a good crop. If it does not rain would place the average yield for Whitman county this year at 10 bushels per acre. Early Baart and Marquis wheat are standing the hot weather magnificently and do not appear to be damaged yet. Bluestem is not standing the heat so well. Early winter Turkey Red is showing signs of injury, and all wheat on clay points has been burned to a degree. This, however, is such a small portion of the total acreage as to be insignificant. Wheat in the vicinity of Hay, Hooper and La Crosse promises a fair yield under any circumstances, and in the vicinity of Tekoa is not yet suffering for want of rain. Early winter wheat crop in the southern and western portions of Whitman county is now ripening. Harvesting at Hay station will start about July 10 on winter wheat. Twenty-five per cent of the normal winter wheat acreage is in winter wheat this year. Estimate our yield for Whitman county this year if we have rain in 10 days at 12,000,000 bushels, owing to the large acreage; at 6,000,000 bushels if we have no further rain.—C. L. MACKENZIE.

**Hooray! Bumper Crop!**

GRANGEVILLE, Idaho, June 23—(Special to The Farmer).—Crop conditions on prairie very good. Rainfall last 24 hours has insured us a bumper crop of grain on Camas prairie.—JOHN D. LONG.

**Irrigated Grain Good.**

REDMOND, Ore., June 22—(Special to The Farmer).—Dry land grain is beginning to suffer for rain. The spring grain is recovering nicely from frost. Irrigated grain is good. Aphis is attacking wheat and oats in some localities. The yield prospects in irrigated sections are good; in dry land section fair.—R. A. WARD, County Agent.

**Fall Wheat Is Made.**

WALLA WALLA, Wash., June 22—(Special to The Farmer).—Weather conditions have been against a proper yield of wheat here this year. It has been very dry all this spring and lately very warm with hot winds; fall wheat is pretty well made; rain would not help it much. Wheat hay has been cut in the valley for about a week or so, and just beginning to be cut in the foothills. The probable yield of fall wheat is 80 per cent normal. Most of the spring grain has suffered with drouth and heat, and if present conditions continue will be a very short crop. A good rain very soon would increase the yield of spring grain.—B. F. BREWER.

**Summer Fallow Crop Good.**

CHENEY, Wash., June 22—(Special to The Farmer).—Grain is being damaged more by the hot weather than by the lack of moisture. All grain has been damaged by weather conditions. On fall and spring plowing there will not be over half a crop. On summer fallowed ground wheat will yield 25 to 30 bushels if rain comes soon. Early sown wheat will be heading out soon; the straw will be short and the damage probably greater than on later sown. There is practically no win-

(Continued on page twenty-eight.)

**RAIN FALLS THROUGHOUT INLAND EMPIRE.**

As indicated in some of our special telegrams of Saturday, a warm, and more or less steady, rain fell throughout the Inland Empire Saturday night and Sunday morning, with good prospects of further moisture. Overnight cheeriness takes the place of despondency, and already old-time grain growers of the Palouse country are comparing conditions this season with those of 1897, when, after a severe dry spell, copious rains resulted in a big crop. News from points as far apart as Douglas, Yakima, Stevens, Whitman, Spokane, Columbia counties in Washington, and from Boundary to Latah, Nez Perce, Idaho counties in Idaho, and down into eastern Oregon give evidence of the widespread rainfall.

# Who Will Pay the Increased Freight?

President Wilson, with the advice of Food Administrator Hoover, has issued a formal executive order that will permit the grain buying corporation to increase the price of wheat as previously fixed if deemed necessary or advisable after the series of conferences now being held. The object of the order appears to be the counteracting of the increased freight on wheat under the recent order of Director General McAdoo of the railroads.

On June 25 the new freight rates went into effect, increasing the old rates 25 per cent. What effect will this increase have on the price to be received by the wheat growers of the northwest for their product? That is a big question. Assuming that the three states produce this year 45,000,000 bushels, which would be a considerable reduction from earlier prospects, and assuming further that 15,000,000 bushels of that were kept locally for milling, seed and the like, there would be left 30,000,000 bushels to be shipped to the coast terminals. The average freight rate from Inland Empire shipping points to the coast before the advance was not less than about 15 cents a hundred, or 9 cents a bushel. The 25 per cent increase would therefore be about 2 1-4 cents a bushel, or $675,000. Will the government increase the guaranteed price of wheat to meet that increase in freight, or will the wheat producer of the three states have to bear it? That's the question. Indications appear to be that the government probably will increase the price to meet it. Here is what J. M. Lownsdale, probably the best informed market man of the northwest, says about the situation:

PORTLAND, Ore., June 22.—(Special to the Farmer.)—The wheat price situation as it affects farmers in the Pacific northwest will be complicated by the advance in freight rates that goes into effect June 25, but to what extent grain men here do not know.

The necessity for a modification of the prices as named in the presidential proclamation is apparent, as those prices were based upon freight rates then existing. The matter is being considered at the present time by the grain corporation in the series of meetings it is holding in New York in conference with the millers and representatives of the grain trade. The traffic representatives of the interested markets met in New York today to discuss the freight relations and on June 24 the commercial representatives of the leading markets, who hold membership on the advisory board of the grain corporation, will meet to determine if the freight relations can be reflected into the commercial relations of those markets. The matter will then be passed on to the executive committee of the grain corporation, which, at its final meeting on June 29 will make announcement of prices and regulations that will govern trading in the 1918 crop. These findings will be subject to the approval of the president and the presidential proclamation is expected to be made immediately thereafter, as the new grain season will begin on July 1. J. M. LOWNSDALE.

# Rain Is General Over the Northwest

The intense drouth that has visited nearly all of the wheat producing sections appears definitely broken at this writing. Rain that began in most cases Saturday relieved the situation in nearly every district. Indications are that several millions of bushels have been added to the yield of the three states by the rain and the accompanying cooler weather. The following is a summary of the reports compiled by the Farmer on the rainfall:

**Moscow, Idaho**—Half an inch of rain had fallen up to Sunday night, coming in time to save the crops in that territory.

**Grangeville, Idaho**—Nearly an inch of rain fell Sunday, seeming practically to insure a good crop.

**Lewiston, Idaho**—Good rain fell Saturday night and part of Sunday. Grain greatly benefited and fruit reported uninjured.

**Genesee, Idaho**—Steady rain fell throughout part of Saturday night and Sunday.

**Dayton, Wash.**—Good rain has fallen, saving spring grain and barley from almost total failure and seeming to insure fair crops.

**Pomeroy, Wash.**—Thunder showers brought in a soaking rain estimated by some to amount to a total fall of an inch.

**Mansfield, Wash.**—Sunday's rain is reported to have wet the ground four to six inches deep.

**Yakima, Wash.**—Light rain fell here, with more in the Horse Heaven country, where it was badly needed. Irrigation water is short in many parts of the valley.

**Pasco, Wash.**—Light rain has fallen here. Crops in many cases too badly injured to benefit much, though much acreage will make increased yield.

**Ritzville, Wash.**—Light showers Saturday night, followed by another shower Sunday.

**Spokane, Wash.**—A little less than half an inch of rain fell Saturday night and Sunday. Surrounding points similarly visited.

**Odessa, Wash.**—Rain officially quoted as nearly half an inch has fallen.

**Wilbur, Wash.**—Heavy showers fell Sunday.

**Montana**—Several points in Montana report the drouth broken by rain.

**Pendleton, Ore.**—Showers fell Sunday, insufficient, but enough to help the crops.

**Wallowa, Ore.**—The Wallowa valley is reported to have rain.

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# WASHINGTON FARMER

VOL. XLI. NO. 26.

Trade Mark Registered U. S. Patent Office.

PUBLISHED WEEKLY ON THURSDAY.
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444 Yates Bldg., BOISE, IDAHO.
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617 Central Bldg., SEATTLE, WASH.

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We guarantee every subscriber against loss through dishonesty or swindle by any advertiser in this publication; we do not attempt, however, to adjust trifling differences between subscribers and honest, responsible advertisers, nor will we pay the debts of honest bankrupts. Complaints must be sent us within 30 days from the date of the transaction and the subscriber must have mentioned The Washington Farmer when writing the advertiser. This guarantee applies to live stock, except that we will not be responsible for claims for damages on account of disease in stock sold through these columns.


## *Pledge to Your Utmost*

Tomorrow, June 28, ends the great war savings campaign. It will be today with most of the readers of this paper, perhaps. If it is, and you haven't made a liberal pledge to purchase war savings stamps, make a rush to do it right now. Don't let the campaign end without your having pledged to your utmost limit. Remember that when you buy these stamps, you are not giving money away. You are investing it, you are depositing it with your government, you are merely transferring its purchasing power to Uncle Sam as your representative to spend it where it will do most to help win the war. And when the war is over, or even before if you need it, it will be returned to you with interest. Be patriotic! Be thrifty and economical! And do it all at one operation by the purchase of your utmost limit of war savings stamps.

## *Not More Stock, but Better*

In the present emergency every one is crying for more live stock of all kinds, and every one realizes the imperative need for the largest possible quantities of meat, wool and other animal products. The only question at issue is that of how this end is to be attained, and it is with this in view that we have prefaced this comment with the words, "Not more stock, but better." The bulk of the live stock of the northwest is raised on hay and grass. Every possible means is being used to increase to a maximum the available amount of hay and grass, but there is a limit beyond which we can not pass. Our live stock in turn may be increased up to the point where they are consuming all our hay and grass, and beyond that point they can not pass without serious losses.

We have already reached the point where our hay and grass are being all consumed, and in fact hay was very short during the last two winters, and at the best can not be plentiful in the coming season. A few localities can increase the number of their live stock, while a few others had better cut down a little. Taken as a whole the northwest is well stocked with animals of the various kinds, and any considered increase in mere numbers could not result other than disastrously since we would not have the feed to take care of them.

Since our feed is limited it therefore behooves us to make the maximum use of that feed, and that can be done only through the medium of good stock. While the live stock of the northwest has been improving with leaps and bounds, there is yet great room for improvement. Cattle that only weigh 1000 pounds at three years old, and have thin backs and eat hams, are not giving adequate returns for the precious feed they eat. Boarder cows that produce worthless calves are pro-Germans of the insidious and damaging kind. Ewes that shear six pounds and produce peewee lambs are robbing the children of France of food and clothing. The pig that eats five and a half pounds of feed for every pound of gain he makes is not only a profiteer, but an alien enemy comparable only with the sneaks who go around burning warehouses and destroying factories.

Seriously, the problem is most important. The future of civilization and the lives of millions are depending upon our making the maximum use of every resource. In times of peace our liberal American spirit has permitted every one to do as he pleased, and if he wanted to waste good feed on poor stock it was "his feed." Now it is NOT his feed, and the scrub animal can not be permitted to go on wasting our precious resources. The scrub must go the way of the profiteer, the slacker and the enemy spy.

E. L. P.

## *Rivals Japanese Gardening*

There is at least one man in Kittitas county, Washington, who can beat the Japanese at their own game of intensive gardening. G. W. D. Glenn, whose main crop is potatoes, raises cukes, squashes, onions and cabbage between the rows, and also has several hives of bees which forage over the garden, collecting honey and pollinating the various crops. In order to keep so many crops doing well on the same ground, Mr. Glenn practices almost continuous cultivation. His potatoes are cultivated before the tops show, and from that time on the soil is stirred steadily till the crop is ready for harvest. The effect of this persistent work is not confined to releasing plant food and conserving moisture, in this gardener's opinion, for he ascribes his comparative freedom from insect pests to the fact that steady cultivation crushes many insect enemies and induces some of the others to change their camping place.

"You have no idea until you have observed closely how many insects a thorough harrowing will kill," comments Mr. Glenn. "I once got the best of a bad lot of potato bugs back east by taking a couple of brushes and giving the vines a regular switching. Some of the bugs were killed by being crushed and part of them were killed by dust, and apparently the rest moved out."

P. E. T.

THE more you try the more mistakes you will make, but the biggest mistake is not to try.

NOW is no time to haggle about details. Attend to details, to be sure, but don't let them interfere with big things.

WHEN you know you are right, don't hesitate to go ahead, but don't wait too long trying to prove that you are right.

NOTHING that would make winter feed for the chickens, the cows, the pigs or the horses should be allowed to go to waste.

HOW about a goat or two for that brush land pasture? They will pay their way in clearing the brush away, if not in meat or milk or mohair.

STANDARD virtues can not be acquired once for all; cultivate the virtues as you would cultivate your garden if you would have a good crop every year.

EVERY one should do all in his power to support every flag that is opposing Prussianism. Unstinted support to Old Glory is support to them all.

HE is a poor man who can not see the other fellow's point of view. He must before he can disagree with it. He can not take exception to what he knows nothing about.

ONE of America's greatest tragedies was a battle in the revolutionary war when the defenders of liberty ran out of supplies. God forbid that the defenders of liberty in France ever face similar disaster!

BUY every thrift stamp that you can. It is 25 cents better than put away in the bank. Buy every war savings stamp that you can. It is the makings of $5 laid away, but yet at work helping to win the war.

## *Mr. Hoover Gets Somewhere*

Mr. Hoover was appointed national food administrator a little more than a year ago. Here are some of the results of his labors:

Wheat that had sold for $1.80 a bushel in February, 1917, sold for $3.40 on May 17, and the speculators were cleaning up fortunes. At the time Mr. Hoover was appointed, May 15, 1917, the price of flour per barrel at Minneapolis was $16.75, while on May 4, 1918, it was $9.80, a decrease of 41 per cent.

On the former date the difference between what the farmer got for his wheat and the wholesale price of flour was equivalent to $5.68 a barrel, while on the latter date the difference amounted to only 64 cents.

From July 1, 1917, to March 31, 1918, we exported to our allies 80,000,000 bushels of wheat and flour, or 124 per cent of the amount available for export on July 1, while a year ago, during the same period, we exported to the allies only 51 per cent of the amount available for export on July 1.

Exports of pork products for March, 1918, were over 50 per cent larger than for any previous month in the past seven years, and almost three times as great as the highest amount exported in any month in the four years before 1915.

Exports of beef products for March, this year, were over 20 per cent larger than for any previous month in the past seven years, and more than twice as great as the highest amount exported in any month in the four years before 1915.

It is mere conjecture to guess what might have happened if a different course had been pursued. Some well-informed persons say that if the government had not acted on food control the price of flour would have gone to $20 a barrel or more and there would have been bread riots in some of the great cities of the country. But it is not guesswork to say that if control had not been exercised through Mr. Hoover, or some other equally able administrator, the American people would have eaten up all the wheat in the United States this year, we should have shipped little or no wheat or flour to our allies, and the home barrel would have been empty several months ago.

## *Country's Greatest Crop*

Some of us who have reached the middle age of life realize, when we break away from the old moorings of friends and relatives and transplant ourselves into new territory, that if we were considering ourselves alone it is not worth the trouble. But we are not choosing for ourselves; we are choosing for those who come after us, our children and children's children.

We are looking for a land of opportunity, where with youth and hope and vigor they may take hold of the forces of a new country and push their way to wealth and honor. However, many a man with this in view has, on coming to a new and growing country, turned his face to the future instead of to the past; has taken on a new lease of life as a consequence, and prolonged his period of usefulness five, ten or twenty years. Yet, the primary object was not himself, but his loved ones.

We, and not our children, are responsible for where they shall be born, educated and settled. Where shall it be? The child can not determine; the parents must determine.

After all is said about this or that occupation, the profits in this or that business, the great object is not dollars, but life. It may in some places cost more to live than in others, but it is worth more, for it leads to a fuller, better life. Some men spray for scale and codling moth to save their crops; but vote to license breeding places of vice to tempt their children.

The greatest crop any country can produce is a high grade of boys and girls. They are better than purebred horses, cattle or hogs. The farmer who raises premium stock and scrub children must confess that there is something bad in the hereditary tendencies or in his methods.

G. L.

# Does Austria Face a Famine?

## *Food Shortage May Strike a Telling Blow for the Allies*

Reports continue to come, with ever increasing apparent reliability, that Austria is suffering from a serious food shortage. While the reports from that country and her allies are strictly censored to keep the outside world from learning the truth, many reports come from neutral countries declaring that Austria can not escape a disastrous famine from this time until the harvesting of the grain crop, something like two months hence. Here is a statement issued by the state department of the United States at Washington: "We are convinced that the reports of food shortage in that harassed country are true. It is believed that the Austrians can not hope for any relief of consequence from this condition until the crops come on in August or September of this year, and from all accounts the people can not escape famine until then.

The report says that Austria, Hungary and Bulgaria are all feeling a growing lack of confidence in Germany, and are making demonstrations against that country, claiming that she should help relieve the situation. It is stated that formal appeals for help have been made to Quartermaster General Ludendorff of Germany, who replied that he was unable to lend any assistance because of the food troubles through which Germany is passing. It is charged that Germany has diverted foodstuffs from the Ukraine, a province taken from Russia, to Germany after they had been specifically promised to Austria. If any of the reports are true concerning Austria it indicates serious conditions in Germany as well, for the latter country would make any possible sacrifice rather than allow her principal ally, Austria, to fall into a state of revolution that would be sure to result from a famine.

The reports, many of which emanate from Switzerland, the only neutral country touching upon Austria, declare that food riots have already occurred in Austrian cities, and that in many places workers in government plants, including munitions plants, have gone on strike.

### Austrians Are Routed by Italians.

What appears to be a serious defeat to the Austrians is reported from Rome. The official statement says that more than 40,000 Austrians have been captured by the Italians, who are pressing a vigorous offensive as the Austrians, all but defeated, retreat almost in disorder. All of the ground captured by the Austrians in the beginning of their offensive has been retaken at this writing, and the Italians are apparently determined to follow up the retreat as strongly as possible.

### Germany Expected to Strike Again.

The allied military authorities are expecting another big strike by Germany at a point yet undetermined. Some authorities believe that it will be made in a line with Paris, probably along the Soissons-Rheims front and along the Marne river again. How capable the allies will be to resist any blow that may be struck is conjectural. The fortunes of war depend largely, even in this unprecedented type of warfare, upon the one side in keeping the other in the dark as to its driving power and its resisting, though the aircraft development has done much to make surprises impossible.

### American Army Increases Rapidly.

Official statement by General March, chief of staff at Washington, says that another 100,000 American soldiers have reached French soil, bringing the total now there to 900,000. The department continues to promise 1,000,000 there by July 1, with the movement continuing with precision and rapidity throughout the remainder of the year and thereafter as long as it is necessary to put enough men on the battle-front to win the war by sheer force of men and arms.

### May Declare War on Turkey.

As a result of a recent attack by Turkish troops on the American official headquarters in Pabriz, Persia, this country may within a short time consider it necessary to declare war on Turkey. Although the United States has been at war with both Germany and Austria, which are allies of Turkey, no official declaration of war has been made between that country and this. There has been, however, a strong pressure brought to bear by a number of prominent persons in official circles urging the formal breaking off with both Turkey and Bulgaria in order to assist the department of justice in dealing with alien enemies in this country. The attack on the American headquarters in Pabriz included, according to reports, the sacking of an American hospital at that place.

### Wilson Pardons Sentinels Who Slept.

President Wilson last week granted unconditional pardon to the two young soldiers who, under military rules, were sentenced to death for having slept while on duty as sentinels with the American forces in France. Both young men were ordered to return to their companies for further service. In granting the pardon, President Wilson said that he found no reason to suspect either soldier of disloyalty or conscious disregard of duty. In a statement that he made in connection with the pardons, the president, however, laid emphasis on the necessity of rigid regulations in the army for the safety and discipline of the men who form it, as well as for the safety of the country that they represent.

### Charge Graft On Public Work.

Investigations are being made throughout the country, principally at the national capital, designed to show whether or not there has been a widespread plot on the part of agents for government contracts to defraud the government out of hundreds of thousands and even millions of dollars. Evidence is being collected which appears to indicate that some of the charges are well founded. In several instances government officers and army men, some in comparatively high positions, are involved in the charges of graft. One alleged result of the plot was the prevention by these illegally operating agents of competitive bidding by contractors on government work. The investigation promises to develop into one of the most important in this country since the war began.

### New Taxation Scheme Broached.

Joseph N. Klein, an expert accountant who has been associated with the council of national defense at Washington, has submitted to the ways and means committee of the national house of representatives a proposal for a sweeping taxation bill that would, if adopted, raise something like a billion dollars revenue. Among the features of the proposal made by Mr. Klein are the following: A flat tax of 10 cents on every legal document not now taxed; a flat tax of either two or three cents on each bank check drawn, a one-cent tax on every streetcar fare, either city or interurban, a tax of an unspecified amount on public officials and public school teachers, a graduated tax on all salaries of $20 a week or more (the tax to increase with the amount of the salary), and numerous taxes on mercantile transactions of all kinds.

### May Extend Draft Age Limits.

While no definite action has yet been taken by congress on the matter, there appears to be growing a strong sentiment in favor of extending the army draft age to include all men between the ages of 18 and 45 years. Secretary of War Baker has formally withdrawn his objections previously stated to the plan and many other officials in Washington are known to be in favor of it. Provost Marshal General Crowder has begun the preparation of figures to show the effects of thus extending the draft age. They indicate that such extension would increase the number of men in class 1, which is the class first called into service, by at least a quarter million. United States Senator France of Maryland has prepared a bill, which, if adopted by both houses of congress, would extend the age as indicated.

### Will License All Stock Yards.

With a view to more effective regulations of the meat-producing and distributing industry, President Wilson has issued a proclamation requiring all stockyards throughout the country to secure licenses to operate. The license must be obtained from the food administration on or before July 25. The president's proclamation was based on the following statement made by a committee appointed to investigate the stockyards industry: "The stock yards should be placed under license and regulation by the department of justice, which should also establish a government system of animal grading under suitable regulations and methods of price reporting of actual transactions. Daily reports should be made on distribution in destinations of live stock, meats and other products from the principal packing points."

### May Fly Across the Ocean.

A plan is being worked out looking toward the crossing of the Atlantic by airplane, the object being to develop the possibility until the air fleet from this country can make the trip to Europe that way without necessitating the use of vessels for transportation.

### May Increase Paris Bombardment.

With the German army only 45 or 50 miles from Paris at the nearest point it is a growing possibility that a considerable number of cannon with that range will be put into action in a more effective bombardment of that city.

### Non-Partizan Candidate Is Defeated.

Charles A. Lindbergh, candidate of the Nonpartizan league for the nomination for governor of Minnesota, was defeated in the recent primary election in that state by a majority of more than 50,000 votes by his opponent, Governor Burnquist, who is running for reelection on the republican ticket.

### Get a Farm Service Flag.

The man, woman, boy or girl who stays at home and works hard to produce necessaries for the soldiers in Europe are entitled to real war service recognition. That is the idea back of the Washington Farmer's farm service war flag. It is pennant-shaped, made of the good old red, white and blue, and has a star representing the producing farm home. Small stars are added to represent each worker of that home.

.....

**Convenient Order Blank.**

THE WASHINGTON FARMER, ——————1918.

Review Building, Spokane, Wash.

Enclosed find five cents (5c), for which please send me a Farm War Service Flag (printed on enamel paper) with ..... extra small stars for farm workers.

Name .....

R. F. D. ..... Postoffice .....

Box ..... State .....

## *Washington Gleanings*

A new bridge is to be built across the Cowlitz river at Riffe. The contract price is $21,000.

Lewis county pure-stock breeders have voted to join the farmers in their annual picnic, which will be held July 27.

The Island county farm bureau was recently formed, with John Kinneth president, J. D. Capaan vice president and R. M. Turner secretary.

Big catches of Quinault salmon are being made on Grays Harbor, and although the run has been late in starting a big catch is expected for the year.

W. H. Woodhouse of Garfield has purchased 500 acres of Montana land located within two miles of Wibaux. The place is now in crop. The reported price is $45 per acre.

Walter Hooper of Hooper and Charles Bruihl of Benge have purchased 3000 acres of land located six miles northwest of La Crosse, and expect to enter the sheep business on a large scale, already having 6000 head.

Most of the men working in the car barns of the North Coast Power company of Vancouver are leaving within a short time to take up various lines of war work. Women are being trained to take their places. Among the only men to remain at the barns will be the blacksmith.

John Henley of Pomeroy is making preparations to plow up half of a 140-acre field of barley ruined by the aphis. Bert Green also has barley thus destroyed, and many others in that community report serious damage.

Skykomish lookout station, on the summit of Cleveland mountain, in the Snoqualmie national forest, is to be manned by a woman this summer, Miss Mabel McBain, a school teacher and a member of the Mountaineers' club of Everett, according to S. G. Smith, forest supervisor of the Snoqualmie forest.

Twelve high school boys are acting as testers in the Snohomish valley under the Snohomish High School Cow Testing association, which has been formed by students taking that work. The testing is done in the same manner as adopted by the government associations, and the same set of books as being used.

A large number of threshermen, in session at Colfax, Whitman county, have appointed a committee of 10 from among their number to determine the wages that shall be paid on threshing crews this season for the various kinds of labor. The committee will report just before harvest begins. It is hoped to unify the wage scale.

The four lambs donated to the Olympia Red Cross chapter by Commissioner of Agriculture Benson and placed on the state capitol lawn in two pens gained 66 pounds in 33 days. One lamb gained from 13 to 35 pounds, another from 11 to 29 pounds, and in the second pen the gains were from 9 1-2 to 22 1-2 pounds and from 10 to 25 pounds.

This year came near being another disastrous one for the pea crop, though it is reported that the recent rains have done much to rescue them from the drouth. Last year the crop was nearly a failure, and many beginners were discouraged. Had the crop failed this year it would have set the pea-production industry back several years in its development.

The reports received from various parts of the wheat producing districts of the northwest indicate clearly the benefit to be derived from good care of the soil. The reports in many cases speak of the better condition in which the grain on well-tilled land is found than that on the poorly farmed soil. It is again demonstrated that big yields rest as much with the farmer as with the soil.

G. E. Bennett of Ellensburg has 101 acres in hay and pasture, with enough cows on the place to enable him to market his product on the hoof. A live stream crossing the pasture land makes the situation ideal for stock farming. Just at present Mr. Bennett has one particularly fine Holstein bull calf—a big-boned, straight-backed youngster which should develop into something worth owning later on.

The United States department of the interior is undertaking to reclassify lands heretofore designated as mineral lands and therefore withheld from appropriation as agricultural land. Among the reclassifications planned for an early date is that of certain so-called mineral lands in the Colville reservation. It is hoped that there will result a considerable increase in the available agricultural land of the district.

E. J. Becker of Ellensburg is one of the Kittitas county farmers who report a poor stand of potatoes from home-raised seed. Some of those who bought their seed were inclined to lay the blame for poor germinating qualities on the other fellow, but Mr. Becker knows that in his case the tubers have been properly chosen and taken care of. Wheat and hay are doing well, according to the Kittitas county man, with aphis more than usually abundant but apparently doing little harm locally.

Aphis are doing unprecedented damage in the fields of the state this season, according to reports from many sections. Especially is this true in the barley fields. Reports from Walla Walla and Columbia counties indicate serious damage to barley, so serious in some cases that fields are being plowed up. The ladybug, the red and black spotted beetle, so common but not numerous enough, is the natural enemy of aphis, and is reported in some districts to be lending loyal assistance in combatting the pest.

# Accurate Live Stock Figures Needed

## *Even Unpleasant Truth Is More Desirable Than Over-Optimistic Fiction*

By E. J. IDDINGS

There is today in the minds of a great many live stock men considerable question as to the exact status of the industry. The only data that we have that seems at all reliable is that contained in the statistical reports of the United States department of agriculture. Those reports indicate a favorable standing of the industry so far as the number of live stock is concerned, and many of our more experienced live stock men have little or no confidence in the correctness of this point of view.

No phase of agriculture demands such forward-looking plans as does live stock production. Numbers of animals fluctuate from time to time, but on the whole there is stability, and in normal times approximately the same world totals are found from year to year. Should by any mishap any considerable portion of the world's live stock be destroyed, years would be required, particularly with the larger animals, to restore the desired balance between supply and demand.

Should the entire wheat of the world be destroyed, except a reasonable seed stock, a single favorable year could be made to restore the normal condition. The same is true with the other cereals, with many of the forage products, and in fact with nearly all the crops of the farm. Fruit growing is ordinarily considered a business requiring many years of preparation. Nevertheless, trees of many varieties may be planted and grow to such size that they bear fruit in no longer a period than is required to grow a brood mare from foal to maturity, and secure from her a husky young work animal. Hence the assertion of need of foresight in providing for the future live stock needs of mankind.

Unfortunately, disaster has come to the live stock of many lands. Invading armies have ruthlessly destroyed farm animals of all kinds. The abnormal war demands for meat, for motive power and for other animal products has made deep inroad into the supplies of many countries, and in some nations lack of fodder for feeding live stock has necessitated the slaughter of large numbers of animals that might otherwise have remained to form a part of the world's supply today. This destruction and abnormal usage has resulted in a loss of live stock, variously estimated at from 100,000,000 to 140,000,000 head.

During the war period we in America are interested in but one phase of live stock supply, viz., in supplying our own needs and the requirements of our allies. We naturally figure as sources of supply such great live stock producing lands as America, Canada, Australia, New Zealand, the Argentine, and South Africa. The shipping situation is such, however, that if America's man power and food supplies are to be a deciding factor in the world war, ships of all kinds and sizes must be concentrated on the Atlantic, to form a veritable bridge between America and France. Hence, ships in the greatest possible numbers will carry supplies of all kinds, including live stock, to England and France, and will ply only from North American ports. The live stock burden of the war, therefore, is unquestionably on the United States and Canada.

Many careful-thinking and experienced live stock men have for more than a year been regarding the American live stock situation with deep concern, and have urged measures both for conserving supplies and for looking forward to increased production to meet the demands of the future. Many of these men have expressed a well-defined lack of confidence in the optimistic live stock reports of the United States department of agriculture. These reports for January 1, 1918, indicated an increase in America of all kinds of live stock as compared with the year before. The writer confesses to having a lack of confidence in the federal estimates for reasons that appear later.

This is a matter of the very greatest importance. If federal reports are too optimistic, it means a false feeling of confidence in the adequacy of supplies, and tends toward encouraging a relaxation of effort, rather than an impetus for stimulation of production. This matter of live stock supply, therefore, is, in the judgment of many, the real outstanding live stock problem of the day.

The federal reports mentioned above indicated an increase during 1917 of 1,857,000 head of beef cattle. At the same time, the accurate tabulations of 52 of the leading markets of America show an increased slaughter, as compared with the previous year, of 3,700,000 head. These figures lead one to believe, therefore, that there has been an increase in beef cattle alone of more than 5,000,000 head in a single year, a condition that on the face of it does not seem probable. Furthermore, it must be remembered that this supposed increase took place in a year not regarded as a favorable one for beef cattle production. Twelve western states, having over 7,000,000 head of cattle, experienced one of the severest winters in the memory of the western people. This meant that female stock came out on to spring pastures in low condition, and the calf crop was unquestionably quite a bit below normal. In addition, four states of the southwest, having over 8,000,000 head of cattle, suffered an extremely severe drouth, resulting in unfavorable conditions for production. The 16 states mentioned contained ap-

(Continued on page nine.)

## BEANS FOR CANNERY.

### Interests Wenatchee Farmers.

W. H. Paulhamus of the Puyallup and Sumner Cannery company, has been in the Wenatchee district. He offers for green beans $50 per ton, f. o. b. shipping point, and is meeting with good responses. One man is preparing to put in 25 acres, another five acres. H. B. Ellison, chairman of the County School Garden club, is anxious that as many school children in the county as possible may take advantage of this opportunity to help themselves by raising green beans for the cannery as well as to help out the food program.

## Fair Programs Are Out.

The 10th annual premium list of the Southwest Washington fair is now being distributed. The fair will be held at the grounds half way between Chehalis and Centralia, in Lewis county, August 26 to 30, inclusive.

F. B. Hubbard, of Centralia, who was the first president of the fair commission, still occupies that position; George R. Walker, of Chehalis, is secretary, and J. T. Bivin, of Randle, by virtue of his position as county commissioner, is treasurer. Other members of the fair commission are R. R. Somerville, of Centralia, county commissioner from the first district, and Ed S. Orr, of Chehalis, commissioner from the second district.

### Clarke County Wants Prune Price.

The federal food commissioner for California has announced 8 1-2 cents as the price for prunes for the 1918 crop. This is taken to mean average price on average product. Clarke county, Washington, growers have decided to ask for this base price for their prunes also.

# State Grange at Walla Walla

By GEORGE J. CANNON, Buckeye, Wash.

To the Editor of The Washington Farmer: I have been reluctant about making a statement relative to the grange affair at Walla Walla because I felt that the less said the better, but there has been so much said by Mr. Bouck and his followers that I feel bound to give the farmers of Washington the other side of the story, as I saw it.

The Washington state grange called delegates from all parts of the state to meet in the city of Walla Walla for a four days' annual session. Some weeks prior to the date set for the meeting reports were current to the effect that the national nonpartizan league was preparing to monopolize the grange convention and to put on foot a campaign similar to the one waged two years ago in North Dakota. Many of the farmers of the state of Washington, myself being one of them, felt that, regardless of the merits of the nonpartizan league, it would be a terrible mistake to allow this to happen. First, because the grange during all its 52 years of existence and faithful service to the farmers of the country has been strictly and absolutely a nonpartizan and nonsectarian organization, political discussion being absolutely prohibited in grange meetings by its constitution and bylaws and because we realized that if such political agitation were allowed the membership of the grange would be divided and a continuation of its harmonious workings would be prevented, and, secondly, because we believe that this particular time, when our nation is at war and the best efforts of every man, woman and child in the United States should be devoted to the winning of the war and the saving of free government from destruction, that no agitation, of whatsoever nature, should be permitted amongst our people and no time spent by us in wrangling over petty grievances between ourselves on questions of mere profit and loss in dollars. We felt that the first duty resting upon each one of us was, and is, to do all in his or her power to aid in carrying on the war and to leave our personal troubles for adjustment at a later date. We therefore looked with suspicion and fear upon any move which seemed to threaten the disruption of the grange or the harmonious working of the people of Washington in support of the war.

When the convention opened on Tuesday I was extremely busy with potato planting and had given up my intention of attending the convention, but word came to me that the situation in Walla Walla was critical and I left my work to go down and see if I could aid in preventing so disastrous an alliance as the farmers' grange and the nonpartizan league. I reached Walla Walla on Wednesday morning and was dismayed to find that the nonpartizan league and a federation of labor organizations were holding a sort of camp meeting in the city of Walla Walla, camouflaged as a state grange convention. Everything seemed to be in the hands of 10 or 12 leaders, who spent most of their time behind closed doors, where, I believe, they were also taking orders from other leaders who did not even appear on the streets. Everywhere about the hotels, on the streets and in the public school buildings, where the session was being held, one could see a group of disheveled, uncouth, suspicious-looking chaps who would flutter around from one group to another and take in tow any delegate who might seem to be lost or in want of information as to why he was there. None of these individuals showed any disposition to discuss matters with me, but some of them were busy canvassing the crowd and telling others that I was there to make trouble and that my actions should be closely watched. Many of the delegates had never attended a state meeting before and evidently had not learned the tricks of political bosses, or perhaps they were too confident of the good intentions of their leaders; at all events they seemed not to suspect what was going on and seemed unwilling to make any statements more than that they were told to vote for Mr. Bouck and everything else would be O. K.

The forenoon on Wednesday was given to rambling discussion of everything but the war and real grange work. Promptly after the noon recess the worthy master introduced Ray McKaig of North Dakota as the hero of the emancipation of the North Dakota farmers and Mr. McKaig engaged the audience from that time until three minutes after 6 o'clock, although his address seemed to have been completed shortly after 5, at which time I attempted to get the floor for the purpose of pointing out to the grangers that this campaigning for the nonpartizan league was illegal and improper in a grange meeting and entirely inopportune in any meeting during the present war. When Mr. McKaig finaly abandoned the floor after 6 o'clock I was denied the privilege of the same, was then denied the privilege of a hearing at the evening session and again at the opening of the next morning session. This morning session was supposed to be given to the election of officers and it was therefore considered important from the standpoint of the element which I represented that we be granted a hearing before said election, but that did not seem to fall in with the plans of the nonpartizan advocators and was therefore denied. Now it is a law of the grange that no political campaigning for office be allowed and that no nominations be permitted, but in spite of this fact the floor was granted to Mr. Chamberlain who delivered what I consider one of the best campaign speeches ever made at any convention for the reelection of Mr. Bouck. During the delivery of this speech I will confess that I and many others of the old-time grangers blushed with shame and buried much of old-time reverence for grange elections.

The votes were counted and Mr. Bouck received an easy majority. It is my opinion that at least 50 of the votes were bagged by the Chamberlain speech. After the election the privilege of the floor was accorded me for 10 minutes during which time I was supposed to answer an argument that lasted the entire afternoon of the day before and which, of course, it was useless to answer at all after the election had been held. Following this we were treated to more labor speeches together with several eulogies of the late State Master C. B. Kegley and an assurance from many mouths that President Wilson is really a pretty good fellow and that our state grange leaders propose to guarantee his future success by giving him their support.

I want to say here that few, if any, of the grangers present there esteemed Brother Kegley more in his lifetime, or hold his memory more dear than I do. But why shout about the virtues of a departed brother while in the act of heaping disgrace upon the organization he so creditably built up and led? Why sing the praises of President Wilson while trying to rob him of the united support he so badly needs from the people of this state?

Up to this time there had not been any work done or any consideration of legitimate grange questions or war work, and yet the session was supposed to close on the following day. It was even given out boldly that the morning session of Friday, the last day of the convention, was to be given to an address by Mrs. Ina Williams of Yakima, who stated in my presence that it was her intention to plead for the nonpartizan league. Now, during all this time the people of Walla Walla were lending the unlimited use of their high school buildings to the state grange for grange work. Is it any wonder then that they became disgusted and decided to expel from said school buildings a bunch of agitators who, under the cloak of the state grange, were following the same tactics at Walla Walla that were followed by the bolsheviki in Russia?

The Walla Walla people, in my judgment at least, acted cooly, fairly and wisely, and I believe I am voicing the sentiments of most Washington grangers when I say that they owe us no apology. It is true that there was at Walla Walla and has since been a great deal of extravagant, blustering talk about a national investigation and a just punishment to the people of Walla Walla. I shall be anxious to watch the outcome of such an investigation and to see whether some of the leaders there are so important in the national administration as their remarks would lead us to believe. I do not believe it necessary for said leaders to devote their time canvassing the country, declaring that they are 100 per cent American and absolutely loyal to the administration. I consider it the duty of the Washington farmer now to do all in his power to produce food for our armies and our allies regardless of whether he profit thereby; to allow his actions to speak for his patriotism and to build for himself such a record of patriotic duty well performed that when the proper time for readjustment comes the great tribunal of the American people will decide in his favor and see that justice is granted to him.

## THIS WAR GARDEN.

### Stirs Whole Family's Patriotism.

The war garden on the Louis Noble place, near Ellensburg, Wash., is the center around which the activities of the entire family revolve. An extra acreage has been put in, particularly of beans and potatoes. The latter will be used to take the place of wheat, as far as possible, while most of the surplus products of the garden will be canned. Last year's canning, which included even such unusual vegetables as summer squash, was absolutely satisfactory. The cold pack method was used, government directions being followed to the letter. Particular care is taken to provide new rubbers, and to keep jars and tops clean, when not in use. Missouri Wonder Pole Beans proved the most satisfactory of all those tried out, being big yielders and particularly good for dry shelled beans to use during the winter.

## SMITHSON'S RANCH.

### Hay, Cattle, Horses and Sheep.

The J. H. Smithson place, near Ellensburg, Wash., is one which comes near to fulfilling the eastern idea of a real "ranch." Mr. Smithson has 500 acres in hay, while the live stock end of the place consists of 500 head of black polled cattle, 100 head of horses and 5000 sheep. In addition to the horses, Mr. Smithson uses a tractor for much of his heavy farm work.

# National War Savings Day

## June 28

The day we all sign up.

The day we tell Uncle Sam just how hard we want to win this war. That's the day our government has officially set for us to purchase War Savings Stamps.

On June 28th every man, woman and child in the United States will be called upon to pledge his or her full quota of War Savings Stamp purchases for 1918.

You will be expected to pledge the full amount that you can afford —no more—but by the same token, no less.

In every County, City, Town and Village in this State the War Savings Committees are preparing for this big patriotic rally of June 28th. Unless you have already bought War Savings Stamps to the $1000 limit, get busy with paper and pencil and figure out the utmost you can do.

Remember this. You take no chances when you go the limit on War Savings Stamps. They are the best and safest investment in the world. They pay you 4 per cent interest compounded quarterly. **They can't go below par.** You can get back every dollar you put into War Savings Stamps any time you need it. You can turn them in at the Postoffice any time for their full value plus interest.

Uncle Sam is asking hundreds of thousands of men to give their lives to their country. He is asking you only to lend your money.

What are you lending?

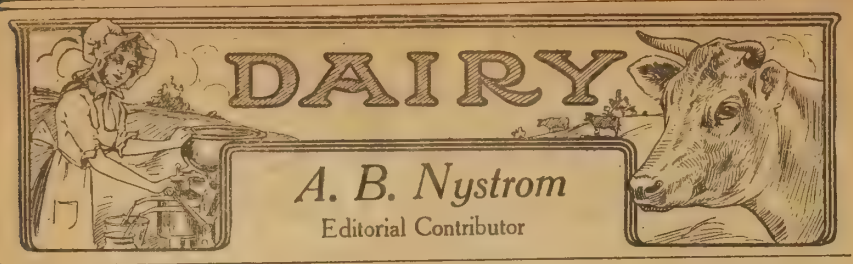
## War Savings Committee for Washington

Daniel Kelleher, Seattle,
State Director.

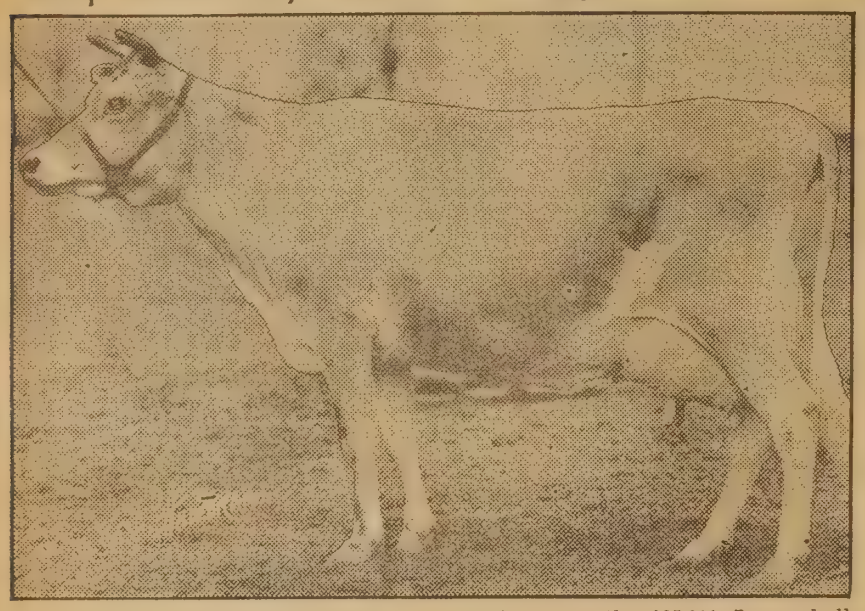
D. W. Twohy, Spokane,
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# Top Price of $10,000 For Jersey Cow



William Ross Procter of Barryville, N. Y., pushed the price of Jersey cows up another notch when, after a few moments of spirited bidding, he offered $10,000 for the Jersey cow Oxford's Briar Flower at Edmond Butler's sale of imported Jerseys at Mount Kisco, N. Y., some time ago.

Oxford's Briar Flower was bid up to $8000 in the space of a few moments and Mr. Proctor, who also owns Golden Fern's Noble, the $25,000 Jersey bull, clinched his hold on the bid by making it an even $10,000.

The greatest price ever paid for a Jersey cow previous to the Butler sale was paid at the time that Lady Viola sold at public auction for $7000 in 1911.

The 60 head averaged over $1000. The best previous average at a Jersey sale was $952, made at the T. S. Cooper sale in 1883.

The price leader is a daughter of the bull Oxford Majesty, made famous by achievements of his progeny in the show ring and at the milk pail. This cow, Oxford's Briar Flower, has many notable Island of Jersey records as a butter producer and show winner.

Discussing "Speculative Prices for Purebred Cattle," The Farmer of St. Paul hits the nail on the head when it says:

The breeders of purebred stock should always remember that the ultimate market for all purebred stock is the farm trade. The bulk of the purebred stock raised must be sold to farmers. There are, of course, always a few fancy strains that are worth more than the prices which the farm trade can afford to pay, but these animals should be used for breeding stock in the hands of breeders. When a purebred stock business gets on the basis where farmers can not afford to buy a well-bred sire at a reasonable figure, the purebred stock business is on the downhill grade. There has never been a time when purebred stock was in such great demand as at the present time. Every breeder should remember that it is good business and a wise policy to keep prices on a strictly legitimate basis.

The campaign must be continued "to keep prices on a strictly legitimate basis." The stock industry of the Pacific northwest depends upon it. However necesary it may be and however commendable it may be for those having means to invest the same in purebred stock enterprises yet the stock industry of this part of the country depends upon the introduction of better animals generally among the farmers of these four states and the purebred stock farmers themselves can not be supported upon peak prices only. There must be a stabilized industry built up on good profit paying prices for good stock.

## CHARLES M. WINSLOW.

### Death of Noted Ayrshire Breeder.

The name of Charles M. Winslow has passed into history. Full of years and accomplishments, his presence will no longer be felt at the Ayrshire Breeders' association, of which he was the secretary for many years.

His death occurred at Brandon, Vt., June 8. He was born February 10, 1841, and is survived by his wife and an only son, Charles G. Winslow, who is electrical engineer for the National Central railroad.

He was a charter member of the National Ayrshire Breeders' association, organized in 1875, only one of whom survives today, namely, H. R. C. Watson of Brandon, Vt. Mr. Winslow was responsible for the incorporation of the association in 1886. He was elected secretary-treasurer of the National Ayrshire Breeders' association in 1882, and has been annually reelected since. For 35 years he has steered this association through stormy times until today it is out in the clear and headed forward. Mr. Winslow was a keen breeder and his exhibits at St. Louis and other national expositions were always to be reckoned with.

Mr. Winslow for many years was president of the New England Agricultural society. He was a member of the Vermont legislature in 1894-5 and secretary of the state board of agriculture. He was for many years president of the New England Ayrshire club and the Vermont Ayrshire club, and prominent in town affairs.

## Walla Walla Cows' Records.

According to the last monthly report of the Walla Walla Valley Cow Testing association, there are at this time 465 cows in the association, 70 of which are dry. During the month of May the average pounds of milk per cow, including dry cows, was 634; the average test in the association, 4.1; average pounds of butter at per cow, including dry cows, 26.2, and the average cost of feed per cow, $5.57. The average profit above feed cost was $5.96.

Ninety-three cows in the association averaged more than 900 pounds of milk per cow; 65 cows produced 40 pounds or more of butterfat.

J. S. Bixby is the official tester.

### Cane for President Wilson.

Lieutenant Colonel W. G. MacKendrick of the British army recently presented to President Wilson a cane made from the door of the celebrated Cloth hall of Ypres, Belgium. Similar canes have been given King George of England, King Albert of Belgium, President Poincare of France, Premier Lloyd George of England, General Haig and General Petain.

### Aircraft Canteen.

A large canteen has been opened by the Y. M. C. A. national aircraft factory near London.


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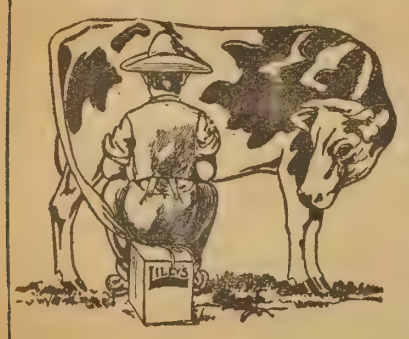
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For Calf Scours
B-K treatment is saving many calves. Scouring calves indicate a germ infection that is likely to run through your entire herd with serious losses.
The loss of one calf is bad enough, but nothing compared to your loss when the infection spreads—as it will unless checked. Then your year's work in building up your herd is wasted—your profits lost.
Leading breeders testify that B-K stops scours. It is powerful in killing germs. When used internally B-K kills the germs in the mouth, throat and digestive tract, heals inflamed membranes, relieves irritation. B-K may be given freely in drinking water.
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Easy Fitting Do Not Rip
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## MILK QUESTIONS.

### Food Administration Answers.

**Does the food administration ask us to decrease our consumption of milk?**

No; nor attempt to substitute other foods for it. Use all the milk. Children need plenty of whole milk. Use sour and skim milk in cooking and making cottage cheese.

**If I can not afford whole milk, shall I get skim milk?**

Yes, skim milk is an excellent food. Try to make up for the lack of fat in some other way. But remember that children should have whole milk.

**Is milk a cheap food compared to its food value?**

Yes. Even at 12 cents a quart one gets protein as cheaply as in meat at 25 cents a pound, eggs at 35 cents a dozen, or fresh cod at 20 cents a pound.

**How can we avoid wasting any milk?**

By using all remnants of sour milk, cream and buttermilk in cooking and for homemade cottage cheese.

**How much milk does a child need each day?**

At least a quart up to the age of 6 years; after that at least a pint up to the age of 12.

**Does an adult need milk?**

Under normal conditions it is not absolutely necessary as it is for children, but it is nevertheless a desirable food for adults.

**What is the nourishment in skim milk?**

It contains all the protein of whole milk, contains lime, phosphorus, milk sugar.

**What is the food value of milk?**

One pint of skim milk furnishes 170 calories; 1 pint of whole milk furnishes 310 calories.

**Why is milk so important a food?**

Because it is the most complete and well balanced of any single food and is a vital food need for babies and children.

**How much milk does the United States produce annually?**

About 33,000,000,000 quarts annually.

**How is this milk usually distributed?**

4.3 per cent goes to feed calves.

6.6 per cent goes into production of ice cream and condensed milk.

89.1 per cent is used in butter and cheese making and for fluid use.

## Need Accurate Figures

(Continued from page six.)

proximately 36 per cent of all the beef cattle in America. With conditions highly unfavorable in more than one-third of the beef producing area, a decided increase is hardly probable or possible. The homesteading of large areas of land during the last five years, and the increased development of lands through the dry farming system, has resulted in a great shift in the western flocks of sheep, and in many sections the tendency has been distinctly toward reduction. Furthermore, there does not seem to be any marked evidence of increased popularity of sheep, at least prior to this year, in the corn belt and far eastern states. In spite of these facts, however, and in spite of the same severe winter conditions and dry summer, which affected both beef cattle and sheep, the federal figures show an increase during 1917 of 1,284,000 head of sheep.

The cost of feeds and of other supplies for the dairyman made milk production unprofitable in many sections of America, and resulted in the reduction of herds. The federal figures, however, indicate an actual increase in dairy cattle in America of 390,000 head.

There is also found in the same statistical reports as quoted above an increased showing for both horses and mules. This is possible, but not highly probable, in view of the great drain that the European demand has made on the supplies of horse stock of America.

It is in relation to swine where one is most disposed to doubt the accuracy of the Washington statisticians. Feed prices have been extremely high, and unquestionably there has been an American-wide tendency among certain classes of farmers to sell wheat and other grains for cash and to dispose of swine. The federal reports show, however, a gain in swine during 1917, of 3,871,000 head, and indicate since 1914 a gain in American supplies of swine of 11,441,000 head, or approximately 20 per cent.

One can analyze these figures in a more satisfactory way by reverting to certain districts where we feel reasonably sure of conditions. In the state of Washington there is credited in 1915 a total of 327,000 head of swine, and in 1918 283,000 head. In other words, a reduction in the three years of only 14 per cent. One can feel reasonably safe in saying, if he has had any experience in meeting with the live stock men in Washington, and in traveling over that state, that a 14 per cent loss of swine in three years does not adequately represent the situation. In the state of Idaho we are credited with 219,000 head of swine in January, 1918, as compared with 528,000 in 1915, or a decrease of 34 per cent. In some sections of Idaho we have accurate figures. In one well-known irrigated district there was only one hog in January as compared with three on the same date in 1917. In another district there were on the same respective dates 42, as compared with 100, and only 23 as compared with 100 in January, 1916. In another section of Idaho professional buyers of swine and other experienced and conservative men estimated during the winter that there was no more than one single hog as compared with 10 only three or four years ago. There can be little question that either the figures for swine are entirely too optimistic for the state of Idaho or the census of three to five years ago did not represent anything like the real number of swine in the state.

We do not need, however, to rely entirely on western figures. The same federal sources of information credit Iowa in January of this year with 10,307,000 head of swine, as compared with 9,370,000 in 1917, and 8,720,000 in 1915. Wallace's Farmer is authority for a compilation of assessors' reports. In this compilation, one-third of the counties had already reported, and on the basis of these reports Iowa had in January of this year only a little more than 6,000,000 head of swine, or approximately three-fifths of the number estimated by the United States department of agriculture.

On account of the lack of sources of information, it is impossible to present the live stock situation in a comprehensive way, using figures that we feel certain are reasonably accurate. The above general discussion of the situation and figures from such sources as seem reliable seem to indicate that one of the crying needs of today is a really accurate and reliable means of securing live stock statistics. Few will agree that the present system is adequate. Items pointed out seem to indicate that the latest reports are entirely too hopeful. If the live stock industry is to be organized to meet the real needs of both the war and after the war period, we want first of all to know the truth, and then to act promptly in the light of this knowledge.

### Free Information for All.

**Each reader of The Washington Farmer is offered the free and unlimited use of the largest information bureau in the world.**

**This service bureau is located in the national capital, where it is in immediate touch with all the great resouces of the United States government.**

**It can answer practically any question you want to ask, but—it can not give advice, nor make exhaustive research.**

**The Washington Farmer pays for this splendid service in order that every one of its readers may take free advantage of it.**

**Write your request briefly, sign your name and address plainly, enclose a 3-cent stamp for return postage, and address.**

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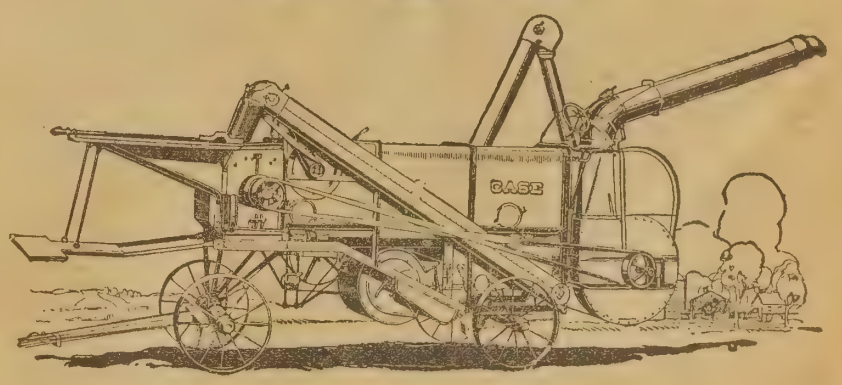
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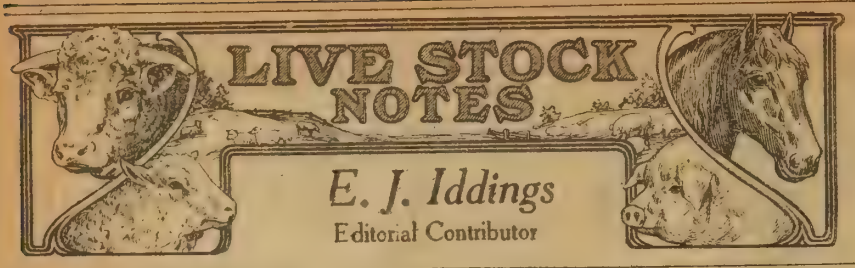
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## Prof. Evvard's Self-Feeder Suggestions

In his official capacity with the Iowa State Agricultural experiment station Professor John M. Evvard has made numerous experiments which have enabled him to obtain far-reaching and positive conclusions as to the merit of the various methods of feeding hogs. His experiments have been both practical and scientific and probably there is no man in this country or abroad better able to speak authoritatively on the subject of feeding hogs. Professor Evvard's conclusions have been set forth in a booklet called "Feeding Hogs for Profit," published by Morris & Co., Union stock yards, Chicago, Ill. Here is a most excellent summary of self-feeding suggestions by Professor Evvard taken from this book:

1. An efficient method for full feeding of hogs is to self-feed.
2. If you wish to "grow your pigs along slowly" do not self-feed.
3. The hog does not like hash any better than you do.
4. The self-feeder will not save all of the work, only part of it.
5. Better have a little too much self-feeder trough space than too little.
6. The self-feeder works excellently with swine; but that is not saying that the same is true of horses, cattle, sheep, poultry and goats.
7. To self-feed pregnant sows mix bulky feeds with the grain, such as alfalfa. Regulate the gains by increasing or decreasing the hay meal.
8. The hog is a physiologist not an economist; he eats to suit himself, and corn at 3 cents and corn at $3 looks all the same to him. In other words, "the hog looks out for himself, not you."
9. Human ingenuity must be exercised in learning what and which feed to place before swine in separate self-feeders to secure optimum results. In case of doubt use corn meal and meat meal tankage.
10. The hog can not always economically balance his ration; much depends upon the opportunities that you afford him. Choose the right feeds.
11. The self-feeder in the summer had best be in the shade, and in the winter away from the cold winds, preferably under warm shelter—well floored.
12. —Rats, chickens, birds and other animals enjoy the self-feeder as do the hogs; govern your operations accordingly.
13. The careless, unreliable human feeder can be displaced with the self-feeder to great advantage ofttimes in the full feeding of swine.
14. Self-watering is a part of the Iowa self-feeding system, therefore keep plenty of drinking water before the hogs always. Self-icing is not self-watering.
15. —Self-fed pigs are liable to eat most any hour of the day or night, hence it is well to have the self-feeders easily accessible all of the time.
16. It is well not to "rush" the hog when he is eating; the self-feeder allows him plenty of time to eat without creating that impulse to hurry for fear that the other hogs get all of the feed (as in the hand-feeding scheme).
17. Do not neglect those fall pigs; give them a few self-feeders in which are corn, meat tankage products, middlings and salt. Try the scheme; enjoy the results, and tell your neighbors.
18. —There are scarcely any runts to cause down-heartedness in the Free-Choice system fed bunches because they get all they want to eat and of whatever feed; and it is the lack of scuitable feed (and shelter) mostly that produces the "winter runts."
19. Lest we forget: The suckling pig that follows his "mammy" is self-fed all of the time; why not continue the practice after he is weaned.
20. Do not mix slop if you can do better. Save the time and the labor; use the self-feeder when full feeding.
21. Self-feeding according to the Free-Choice scheme or system is the natural way of full feeding.
22. The self-feeder is not a panacea for all feeding troubles.

## Hog House With 22 Pens



The accompanying photo shows the very convenient hog house of William A. Steen, near Milton, Ore. It has 22 pens six feet square. Each pen has an outside runway 26 feet long. A small wooden watering trough goes the entire length of the house at the outer end of the runways, and has an enlarged place in each pen for the pigs to drink from. A slide is opened to let the little pigs out and in, and Mr. Steen finds that while the little fellows will run outside considerable they nearly always return to their own pen, and there is very little trouble about robbing one another. An alley runs through the hog house for feeding, the feed being mixed in a vat that can be heated if desired and has a float for supplying water. On each farrowing pen is a card showing the date of breeding and farrowing and condition of the sow and pigs. A card shows also the feed each day to fattening pigs, the weight in and out and the number of hogs.

Feed is put into the bins at the end of the house, with hoppers. The ground outside is as high as the top of the bins, and each bin holds a wagon load.

Mr. Steen's conveniences do not stop at his hog house. A turbine water wheel in his blacksmith shop furnishes power for his electric motor, for lights in his house, barns and elevator and for power for the elevator, the latter being transmitted by cable 150 feet long across the creek. A road above the elevator (which is on a side hill) allows a spout to receive grain from a wagon. It is ground and carried by gravity to any one of five bins and from them drawn off, still by gravity, as it is desired to be fed.

In the winter hogs are kept in fattening pens right under the elevator. Two self-feeders are supplied by flexible spouts so that once grain is delivered to the elevator a minimum of labor is used in grinding and feeding.

H. A.

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W. F. YOUNG, P. D. F., 371 Temple St., Springfield, Mass.

## Draft Horse

### Is Preferred for Shorter Hauls

To the Editor: Does the draft horse still occupy an important place in the world's commerce? Will he ever cease to be an important factor in the city traffic?

These questions are continually being raised, especially by farmers who are in doubt as to whether they can dispose of their horses in the future.

They can well be answered by a little survey of the commercial traffic in the larger cities. According to statistics, we find that heavy drafters have not been displaced by trucks to any great extent in the traffic of large cities, especially for short hauls.

In the city of Chicago all vehicles are licensed. The records there show the following number licensed on April 30, 1916, and on the same date in 1917:

In 1916, 35,690 one-horse vehicles were licensed, and in 1917, 32,759, or a reduction of approximately 3000. There were 13,774 two-horse vehicles in use on April 30, 1916, and 13,488 on the same date the following year, or a decrease of 326. Most of this reduction, however, has been in carriages, which shows that no noticeable decrease took place with heavy draft teams on two-horse wagons.

In 1916 there were 207 three-horse wagons in use, while in 1917 there were 212, or an increase of five. Both years showed 11 four-horse wagons. The records show that the number of automobile delivery wagons and automobile trucks have increased; but, on the other hand, persons well familiar with that city's traffic conditions testify that the automobiles and trucks are used almost exclusively for the long-distance hauls —that is, for five miles or more—and that the horses are still used on the shorter hauls.

It is of interest also to note that some of the department stores in Chicago have gone back to draft horses, and are using them on their short-haul work, having found that the trucks were too costly for this traffic.

What applies to one of the most important of our cities is safe to say should be significant of the commerce of the other cities as well. This gives reason to believe that the horse will always be an important factor in the city traffic. And as long as horses perform an essential part of the commercial traffic we must infer from the law of supply and demand that this demand will always afford an important market for good draft horses.

D. E. RICHARDS,
Secretary Oregon Stallion Registration Board.

## San Francisco Livestock Show.

San Francisco is to have a live stock show this fall, the intention being to make it a great and permanent live stock exposition. The San Francisco Chamber of Commerce will finance the show this year; the grounds are already secured and are located in the heart of the city with ample loading and unloading facilities for stock across the street. The dates have been set for November 2-10, one week preceding the Portland show. The premium list, when issued, will carry prizes of $25,000 or more. A night horse show will be a feature of special attractiveness. The situation of San Francisco, in the heart of a great state, where live stock breeding is steadily on the increase, seems to assure the success of the show.

H. A.

## Livestock in Queensland.

Published statistics indicate that the total number of horses in Queensland, Australia, are 659,162, being a decrease of 38,353 as compared with 1916; cattle, 4,653,455, a decrease of 112,202; sheep, 15,812,425, an increase of 228,132; and pigs, 160,196, an increase of 30,463.

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# Veterinary

Dr. S. B. Nelson

**Horse Has Heaves**—Can you tell me what will cure the heaves? One of my horses has them and I would like to know what to do for her.

C. H. W., Lava Hot Springs, Idaho.

There is no positive cure for heaves in horses. Lessen the coarse feed, such as hay, one half. Dampen the hay when fed. Then give, on the grain, one-half ounce of Fowler's solution of arsenic, morning and evening. This may help. If the animal is quite bad, in addition to the above treatment, you may give one dram of potassium iodide at noon on the feed.

**Cow Has Indigestion** — Will you please prescribe some remedy for a cow I have? I think she has indigestion. She does not seem to be sick very much, but does not eat very much, has a bad breath and the milk is so strong that it can not be used. She breathes rather hard. She does not seem to need a physic. Has been this way about a week. She has been on good pasture, and think she has been eating too much. Have not been feeding anything aside from the grass. She was bloated once a few days before she got this way.

H. I. M., Tuscar, Mont.

I am of the opinion that your cow is suffering from a digestive disturbance, probably of the fourth stomach. It may be farther forward than that. I am going to suggest to you that you give her one pound of epsom salts, one-fourth pound of common salt and one pint of coarse molasses, in three quarts of water. A day or two later begin giving her a half ounce of compound tincture of gential in a half pint of water, morning and evening.

**Chronic Mammitis.**—My cow came fresh April 14. She seems well and in good condition. The left front teat was spoiled when I bought her a little over two and a half years ago. They said that they trusted to the calf getting the milk from that teat, but it didn't, and the teat went bad. I have not been able to get milk from that quarter since I got her. Since the calf came we have noticed quite frequently clots of blood coming from the left hind teat. Sometimes there is a clot half as large as a pea, other times there is just a little string, fine as a hair. Sometimes a week passes when we don't notice anything. Then sometimes there are small bits of mushy, white substance. I can tell when they come, while milking, by the feel of the teat. Can you tell me what is the matter with the cow and what to do for her? Is the milk from the other teats fit to use?

A. L. E., Murtaugh, Ida ho.

Your cow is affected with a chronic mammitis or garget. I do not believe that she would yield to treatment. She might raise you two or three calves this year, but I think it would be advisable if she is the type of cow that can be used as such, to fatten her for the block and dispose of her.

**Cow Has Cough.**—I have a cow that has had a cough all winter and does not seem to be getting any better. She is 6 years old and will freshen in September and has been in extra good condition all winter. I do not like the cough and would be glad if you would prescribe something for it. She has been kept warm and fed clean oat hay, with shorts and bran (dry). Have been careful to put cows in in wet or cold weather.—W. H. G. W., Port Blakely, Wash.

The cough is only a symptom of disease. I could not tell what causes it. I would suggest that you have the nearest local veterinarian make an examination of her and he can find out what causes the cough and prescribe.

**Would Spay Pups**—Our collie has pups, mostly female, and I would spay a couple if I knew how. Is it possible for you to tell me how and at the right age, etc.? Am located in rather an isolated place where I can get no one to come and spay them without quite an expense.—J. J. D., Nordland, Wash.

It is hardly possible for me to describe the operation of spaying in these columns, as it would take too much space. But I would suggest to you that if you are anywhere near the railway that you might send a couple of the puppies when they are from three to seven months old to the Veterinary Department of the State College of Washington, billing them to Professor E. E. Wegner, and then writing him a letter, and he will be very glad to spay them for you and send them back. The cost during the school year, which is between October 1 and June 1 is 25 cents a day for their feed. No charge is made for their operation.

**Sheep Have Sore Eyes**—We have some sheep that are afflicted with sore eyes, the eyes becoming inflamed and in about 10 days the eye bursts and they are permanently blind. Would like to know name of disease and a preventive.—J. H. W., White Bluffs, Wash.

The disease is possibly an infectious keratitis. Would advise separating the diseased from the well sheep and placing the diseased sheep in darkened quarters. Drop into the eyes morning and evening a few drops of a two per cent solution of Argyrol.

**Potatoes for Dairy Cows.**—What feeding value is there is cooked potatoes for dairy cows? I have been feeding my two cows a few each day and they have increased in their milk. If I stop for a day or two the cows will decrease. P. K., Mabton, Wash.

Potatoes furnish carbohydrate, one of the three important food subdivisions. Carbohydrates are composed of either starch or sugar and in the case of potatoes, of starch. This starch is converted into some form of sugar and furnishes to the cow an important energy producer. Part of the sugar is also converted into fat, so by feeding potatoes you are balancing up the nitrogenous ration that you may be feeding.

**Lamb Loses Control of Legs**—I have a lamb that started to lose control of its legs a few days ago. Will you kindly let me know what to do for a case of this kind? It eats plenty and seems to be O. K. in every other way. —L. K., Walla Walla, Wash.

Without knowing what is the cause of the loss of control of the lamb's legs, it is difficult to give a remedy. There are a number of things which might cause this, either injury to the nervous system or possibly digestive trouble, and for that reason I can not give you specific advice on the care of the lamb. I am going to suggest to you, however, that you add to its milk once daily a teaspoonful of castor oil. Warm oil a little and shake it up with the milk so that the lamb will drink it.

**Horse Jerks His Head.**—I have a horse that has occasional spells of jerking his head in short, backward jerks, and he also rubs his nose. These spells come after drinking and while working. He seems to be in good health otherwise and eats well. Can you give me any information as to treatment? R. A. B., Spokane, Wash.

From the very limited description that you give it is most difficult to make a diagnosis. I am hardly able to determine whether this might be due to a nervous trouble or to an indigestion or to the fact that she might be infested with parasites. You really need the services of a veterinarian to make a personal examination and to give you advice. I regret I can not be of service to you through the paper.




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# POULTRY

James Dryden
Editorial Contributor

## Earthworms Put "Pep" Into Chicks

By J. L. Ashlock.

If one has a small flock of young chicks in a coop in the backyard and finds that they are getting droopy and lack the "pep" which it takes to make a broiler in eight weeks, he can spade out a few earthworms every morning, feed them to the chicks and enjoy the sprints, tugs of war and tandem sprints, four chicks to the worm, that follow. Right away his chicks will begin to take an interest in life and grow.

If the hens are falling off in egg production, and losing their appetite on beef scrap and so on, let the city-lot poultryman spade up a 10 or 20 foot square of rich earth, doing a little of it each night or morning, with his hens at his feet. About the third night after he does this the egg production will go up anywhere from 25 to 50 per cent.

The cry of nations for more food and the resulting activity on the part of many patriotic citizens who the last spring and summer have been busy in the backyard and adjacent town lots with spade and hoe, has brought to the acquaintanceship of humans in greater number than ever before the lowly earthworm.

It is the notion of the average city farmer—and many other farmers as well—that the earthworm is not good for very much. Indeed, the earthworm is often suspected of eating garden produce and of being of no particular use. Some think that it is rained out of the sky. All three suppositions are wrong. The earthworm does not eat garden produce, it is never rained from the sky in a thunder storm, and it is of so much importance in the soil that it is one of the great facts of biological creation.

The man who spades earthworms as large around as his little finger and six inches long from the rich soil of his backyard garden should let a few hens follow his spade. A hen will devour an earthworm in preference to almost any other food. There are few foods that accelerate egg production more than earthworms. If you watch the hen that races excitedly about your feet while you dig and see how many big, fat earthworms she takes in, you will presently notice that before her crop sticks out hard as a baseball and she wanders away at peace with the world she will have engulfed from two to three yards of earthworms laid end to end. With this length of nutritious worm-cable coiled up in her capacious maw she is ready for egg production, and by her song will tell you so as she ambles nestward.

Professor A. L. Melander, zoologist at the state college, discusses the earthworm in cold blood. He says there is no "biological" reason why we human beings should not eat earthworms. It is largely a matter of habit what we eat. Not long ago we were in the habit of eating oysters fattened in beds at the mouths of sewers; and even when we found that such oysters started epidemics of typhoid we persisted in consuming sewer-fattened oysters until by stringent laws in almost every state we were prohibited from doing so.

We relish clams and the shellfish tribe generally, including lobsters, crabs, and shrimps—scavengers all! Vastly less cleanly are they in habits and dietary preferences than are the earthworm which we spurn underfoot. In the western part of the state there are tons of shelless snails—slugs, they are called—as long as lead pencils and of fat proportions. They eat nothing but weeds and leaves. Most cleanly and fastidious creatures they are, even though looks are against them! Of course we back up at the thought of them as food; though in France they have become sufficiently modern to consider one variety of the slug as quite a delicacy.

In this respect we are much less modern than the Piute Indians of California and Nevada, who relish a stew of caterpillars. Blackened, dried and stewed, these worms resemble nothing so much as stewed prunes. They possess toughness, insipidity in the absence of salt—and the Piutes eat them unsalted—and over the worm stew floats a yellowish grease which possesses the tang of linseed oil. The Indians smudge these worms in great quantities from the pine trees, kill them, dry them, and call such food "papaia."

(Continued on page thirty-one.)

## General Purpose Types

To the Editor: Could you please tell me what kind of chicken is best for all-round farm use? For setting, marketing and laying, is a mixed bunch best, or one certain breed?—E. J. J.

Monse, Wash.

The best all around farm fowl should be found among the following breeds: Plymouth Rocks, Rhode Island Reds, Wyandottes. These are American breeds and are more nearly of general purpose type than other breeds. They are of fair size, good setters, and fair layers. Some others might be classed as general purpose breeds, such as the Orpingtons. The Orpingtons, however, are larger and are more of a meat type. They have white skin and legs, while the American demand is for yellow color of legs and skin. The black Orpingtons have dark legs and that is more objectionable.

Which of the above is selected is not very material. It is more important to select a strain that have good laying qualities as well as good meat qualities. While heavy egg laying is not characteristic of fowls of fine meat qualities, yet they may be fair layers, and should be fair layers to make a good general purpose fowl. There are good and poor layers in every breed, and one should be very careful of the strain he buys, more so than of the breed. Strain of breeding counts for more than breed. That is the foundation rock on which to build a profitable flock. The way to select them is not from their looks as from their egg records. If you know some one who keeps egg records and who has been breeding up his flock each year by selecting the best layers, you should go to him for stock.

It is better to keep one distinct breed than two breeds or a mixed flock.

J. D.

**Palm Sugar.**

Sugar is extracted from 16 varieties of palms that grow in Ceylon.

## BRIGHTER OUTLOOK.

### With Oats and Corn Prices Down.

During the last few weeks the prices of oats and corn have shown a little patriotism and come down to near the level of wheat. Every little helps, and the poultryman would be glad to see the prices recede some more. With prospects of a fair crop the prospects are that prices will in the fall be lower than last year by natural causes, or failing that, by legislation along the lines of the McNary bill.

Then with higher prices of eggs also in prospect, there should be better times ahead for the poultry-keeper. Egg prices are higher now by some 7 cents a dozen than a year ago at this season. The present prices are probably higher than they have ever been at this season of the year. At the same time there is no profiteering in egg production nor is there likely to be till after the war is over. The chances are the profits will be satisfactory then.

Meantime there should be no complaint from consumers as to prices. The actual facts are that the eggs are being sold below the cost of production, taking the total production of the United States. The average hen of the United States is not paying for her feed if the feed were all paid for at market prices, the average hen laying less than 100 eggs a year. Only the heavy laying flocks are able to show a profit for the owners. Were all the average and poor layers killed off there would be an egg famine, and anything that will precipitate an egg famine is pro-German, because with a reduction in the egg output there will be more meat eaten in this country and less to send to the soldiers.

Rather than complain at the prices, let us eat more eggs at home and send more meat to the allies, and by eating more eggs we help the poultry-keeper to continue in the business. Happily there is no indication of any egg boycott this year.

J. D.

1905 1906 1907 1908
1904 1909
1903 1910
1902 1911
1901 1912
1900 1913
1899 1914
1898 1915
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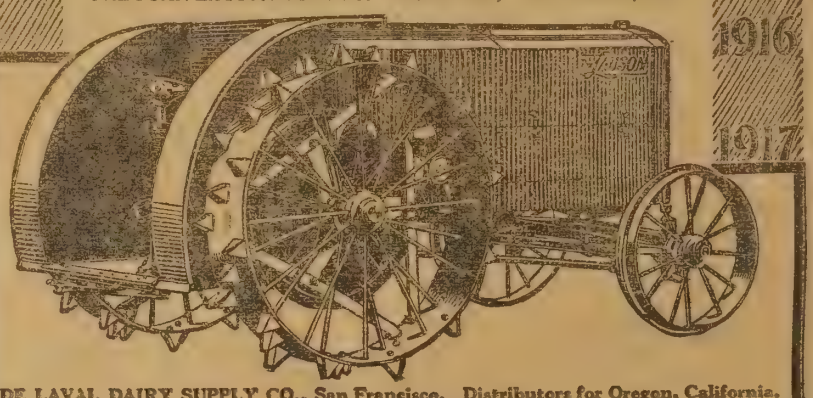
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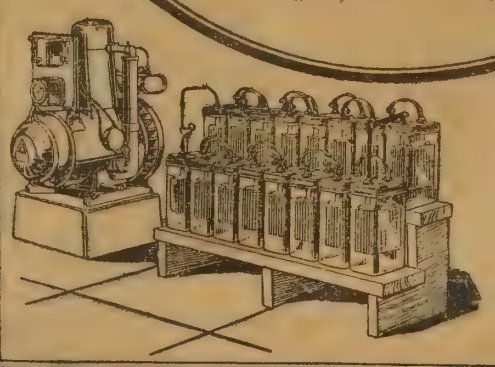
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## Remove the Cause

### Health, Not Disease, Is Natural

By GRANVILLE LOWTHER.

It is easy to cure diseases anywhere in any form of life if we know the causes and can remove them. This grows out of the fact that the normal condition of life is health. This proposition needs no proof for it is common observation that the tendency of all forms of life is in the direction of repair and growth. For instance a crop of alfalfa has reached its normal stage of growth and is cut down. Immediately the process of repair begins and in the course of time a new crop almost as large as the other stands upon the same ground, grown by the same roots. If the bark of a tree is broken, new bark is formed to cover the wound, provided there is no obstruction to the healing process Cut your flesh and the wound will heal provided the obstructions to the healing process are removed. These illustrations may be multiplied indefinitely. Disease is abnormal and grows out of one of two general causes.

First: The conditions of the organism.

Second: The nature of the environment as related to the needs of the organism.

To illustrate the conditions in the organism we will refer to a fact with which most people are familiar, and that fact is that a flesh wound will heal much more readily if there are few poisonous toxins in the blood, such as alcohol, nicotine, uric acid, etc. So there may be enzymatic conditions in the sap of a tree that either tend to affect or hinder a return from normal conditions of health.

Conditions of environment may be illustrated by removing a plant having large porous leaves capable of evaporating a large amount of water and therefore adapted to a humid climate, into an arid region, or by transplanting a cactus or sagebrush into the muck and mire of the valleys where lilys and flags naturally grow. It would be folly to attempt to grow apples in the cranberry bogs or to grow cranberries under the conditions where apples are best grown. The trees would very soon show signs of disease and would soon die.

**Question of Causes.**

While it is easy to see that the general propositions already named are true, there are specific causes that are not easily determined and that often cause much controversy.

Perhaps no disease in the northwest has been a subject of more discussion than that among apple trees called apple rosette. It has been assigned to at least 20 different causes by many intelligent and observing persons. My belief is that all of these observations are right in part, and that the men who have claimed all these different causes for apple rosette are right in what they affirm, but when they deny what others with equal intelligence claim they are probably wrong. It is generally true that when two or more intelligent persons differ on a question about which they both claim to be familiar that there is a larger truth which includes them both, that it can not be said that both are wholly right or wholly wrong These men have formed opinions growing out of their observations and experience, and now the question is in apple rosette is there a larger cause which includes the causes these men have observed? One man found rosette where the trees had been damaged by gophers. He killed the gophers and the trees recovered. He concluded, therefore, that gophers are the cause of rosette. Another found rosette where there was lack of water. He put on more water and the trees recovered. He concludes that lack of water is the cause of rosette. Another found that his trees were rosetted where there was too much water. He put in drains that carried away the seepage and the trees recovered. Another found a few of his trees rosetting near an old hen house where there was an extra supply of hen manure. He removed it, scattered it over other parts of the orchard, hauled in fresh dirt and the trees recovered. Rosette has been frequently observed where land is strong in alkali, and where the alkali could be removed, there was a tendency to recover although this seemed much more difficult than any other form. Another found that where there was woolly aphis on the roots, the trees were rosetted. He dug away the soil, applied a solution of black leaf tobacco in about the proportions of one to 800, and where he could reach the insects on the roots, claims that the trees recovered. Perhaps the most general cure is alfalfa. More orchards have been cured of rosette by the sowing of alfalfa among the trees than by any other or perhaps than all other methods combined. This doubtless grows out of the fact that in this northwest country the soil tends to puddle under the process of irrigation The roots of the alfalfa penetrate the puddled section, letting the water down to a greater depth than the roots of the trees had penetrated, thus areating the soil, giving it water to a greater depth, allowing the roots to open up a new stratum from which to extract food and at the same time furnishing nitrogen, a constituent which our volcanic ash soil in the arid regions very much needs.

**Primary and Contributory Causes.**

All of the causes named are contributory, while back of them all is a primary cause, to which the others point. A primary cause is one which includes all the others. I think I am right. therefore, when I say that there is a larger cause which includes all the others, and I think so for the reason that I have examined more than 600 trees, the roots of which were all diseased or injured, and the tops of which were rosetted. I think so furthermore, because of the nature of the organism. The nature of the tree is such that the root system has millions of little stomata too small to be seen with the naked eye, and that suck the food from the soil, and supply the top system. They are similar to the stomata of the human stomach that suck the chemical substances from the food we eat, and enable the organism to appropriate it in building a body, repairing waste, and manufacturing energy. Now suppose something destroys these organs, what is the result? The result must be lack of food; that means lack of growth and energy, that is just what has occurred in case of a tree that has apple rosette. The tree is starving because its organs for extracting food from the soil are injured or destroyed. This may happen from any one of a number of causes, from lack of water, from too much water, from any other injury to the root system. Now the only reason that I have written at length on this subject is that a great many people are still inquiring what to do to cure their orchards of apple rosette. My answer is that the best general cure is alfalfa, but there are causes that alfalfa will not reach, and we have to study local conditions, contributory causes, and remove them if we can.

## Which?

### Orcharding or Wheat Growing?

By Granville Lowther.

I was subjected to a little friendly criticism recently because of an article I had written entitled "Stay With the Apple Business." My critic said, "Do you not know that wheat growing pays better profits than apple growing?" My answer is "Yes, I know it." But I would ask my critic further: "Do you not know that on account of the war, which we hope will not last long, the wheat business is overstimulated?" Before the war wheat sold for less than half the present price fixed by the government. When the war is ended there will be a reaction from the overstimulation, and some persons will be hurt as a result.

Furthermore, the critic in question has an orchard, paid for, with machinery adapted to the orchard business, packing house and everything necessary for a successful care of the crop. If he should go into the wheat business his spraying outfit, his fruit grading machine and a few other things would be of no value as aids to wheat production. His packing house might be of value, but its greatest value is in being used for the purposes to which it was first adapted.

Another consideration is that it takes time to make a change from a business already learned to one with which we are not so familiar. Whoever makes this change from fruit to wheat during the war will probably buy all his new machinery at very high prices, and by the time he becomes familiar with the work the war will be over and prices will have changed.

However, I want every one to do what seems to him best, and it may be that his judgment will prove to be better than mine.

## The Spray Gun

The spray gun is not a German machine for projecting poisonous gases or liquid fire, but a simple device for use in spraying the orchards.

We bought one recently, and it saves one man in the spraying process. Whereas, we used two men formerly, one man with the gun will do the same work with the same effort that required two by the old process. There are several types of manufacture, so I am told, all with the same essential parts and qualities.

There is another feature that commends it, and that is that it is not expensive.

It is never safe to judge the value of a machine nor of a man's work by the number of trees he can spray in a given time, but I timed our man in spraying 23 year-old apple trees, and he sprayed 10 trees in 15 minutes. I think he would average in a day one tree for every two minutes, not counting the time it would take to fill the tank. It took him 40 minutes to empty a 200-gallon tank, and he did his work well. This is one of the cheap, simple, efficient labor-saving devices that releases man power for other work, and makes the expense of production less than it would otherwise be.

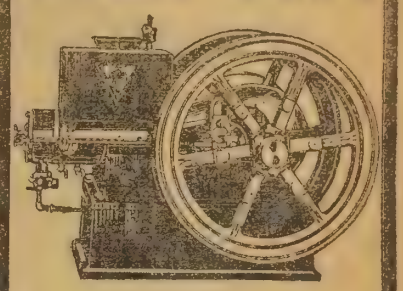
As there are several types gotten out by different companies this is not an advertisement for any particular firm, but for something to save labor.

G. L.

**Taken by Enemy.**

Five Y. M. C. A. foyer du soldat buildings recently turned over to the British Y. M. C. A. are now in the hands of the Germans.

ALPHA



Gasoline Engines

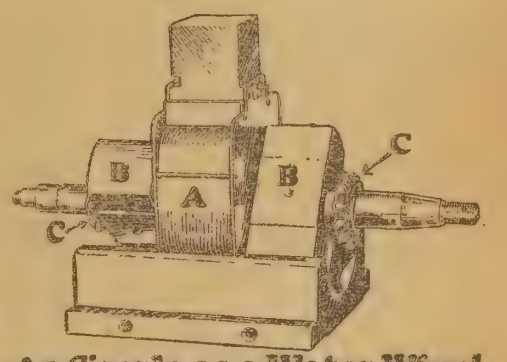
1½ to 28 H. P.

For operating grain elevators, cutting feed, filling the silo, pumping water, sawing wood, or wherever DEPENDABLE power is wanted. Put a reliable, smooth-runing ALPHA at work for you. It will run right along day after day and not get out of order. It's an engine you never have to "fuss" with. It's always ready. Operates economically on gasoline or distillate. Full details on request.

De Laval Dairy Supply Co.

61 Bebie St., San Francisco. Warehouse Stocks Seattle and Portland.






As Simple as a Water Wheel

The simplest form of power generation is the water wheel which consists of a series of paddles mounted on a shaft, running in simple bearings and requiring only an occasional oiling.

Like the water wheel, the K-W Magneto owes its reliability to this same, simple construction. The windings (A) are stationary, while the paddle-like rotor (BB) revolves in ball bearings (CC) and generates the current. Like the water wheel the internal parts of K-W Magnetos need absolutely no attention except for an occasional oiling.

There are *no* moving wires, revolving windings, troublesome commutators and brushes, current collector rings, etc., in this patented K-W construction. We thereby eliminate all internal sparking and trouble due to sliding contacts and poor connections. In K-W construction all internal connections are *permanent*.

Don't put up with inefficient, troublesome ignition. Insist upon a



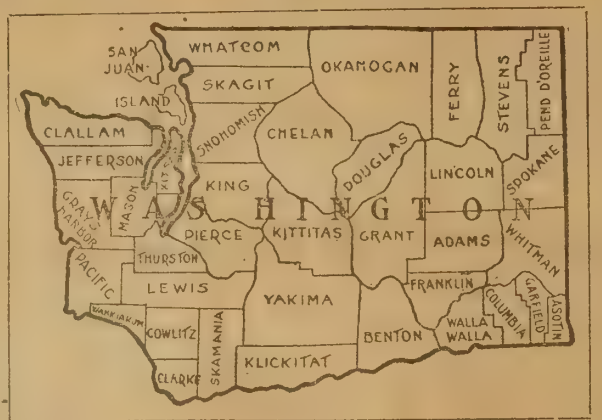

K-W High Tension MAGNETO

which requires no more attention than a water wheel—a magneto that is as efficient as it is reliable. There is a type for *your* tractor. Tell us the make of your tractor and we can show you how a K-W will allow you to get full power out of the cheaper grades of fuel. Write for a list of K-W equipped tractors—there are 83 models made by 40 manufacturers.

THE K-W IGNITION Co.
2491 CHESTER AVE. CLEVELAND, OHIO. U.S.A.

# Yakima Hay Crop Light

## Small Grains Look Well—Acreage Is Largest in History of Valley. Peach Crop Light. Apples Are Better than Usual.




TOPPENISH, Yakima County, Wash., June 15.—The hay crop of the Yakima valley is but little over half the usual tonnage, owing to a light crop and a large acreage being plowed up for other crops. The beet crop is not up to the usual standard owing to poor stands caused by the unusual dry windy weather. Corn is a much better stand than usual and is looking very well. Small grain is looking extremely well, and the acreage is the largest in the history of the valley. Melons are not looking well owing to the extremely cool spring. Onions are exceptionally good, but the acreage is small. Potatoes have not the usual acreage, and the early planted potatoes are not looking well while the later planting is doing fine. The peach crop is very light and has not done well owing to aphis. Sweet cherries are a pretty good crop and of fine quality. Apricots very light; pears up to the usual, both in quantity and quality, while apples are rather above the usual in yield, and are at the beginning of the thinning season looking well. The strawberry and other berry crops are looking better than usual, but the acreage is very light. It has been the windiest spring for many years and extremely cold and frosty. The snow supply in the hills is the lightest for five years, but the reclamation service report all storage filled to capacity. The ditches and flumes were badly damaged by the floods of last winter, which caused a delay in the delivery of water this spring. Crops of all kinds have shown a great improvement since the warm weather began. The crops on land that grow sugar beets last year is producing as well as any other land except newly plowed alfalfa. The work on the sugar factory is well under way. The company expects to begin making sugar about September 20. Bees wintered well, and the honey producing plants are plentiful, but it is too early to predict as to the honey flow, as that is dependent on the moisture and warmth. Pastures are rather poorer than usual, and feed is scarce at the present time. The first cutting of alfalfa is in full swing. Labor is a little scarce, but not serious as the harvest will be shorter than usual.

C. A. WYCKOFF.

### Getting Ready for Harvest.

COLFAX, Whitman County, Wash., June 15.—Wheat is the principal crop in this county. Winter wheat generally does not look very good. I should say about 60 per cent of normal. Spring wheat seeded in season is very good; late seeded is spotted. Farmers in general are preparing now for harvest. They do not anticipate any great labor shortage. F. L. KENNARD.

### Potatoes Look Good.

DARRINGTON, Snohomish County, Wash., June 14.—Crop and weather conditions have been favorable all this month, still crops are not as far advanced as they should be owing to the cold and wet during May. Potatoes are looking well, but timothy and clover don't seem to do as well as they should. Oats is looking fairly good in most places. Every farmer in this section is certainly doing his bit. They are in the harness from sunup till sundown and helping the Red Cross and everything else that comes up pertaining to the winning of the war to the very best of their ability and means. By all appearances the hay crop will be about normal on most places in this section. The war has promoted the community spirit to a great extent, and at frequent meetings held people will talk over their obligations, and feeling that everybody has a part in the winning of the task set before us. Cows are doing quite well, pasture is good, considering. Cream is shipped from this section, most of it going to our cooperative creamery at Arlington. At present we receive 47 cents per pound for butter fat. A couple of our biggest dairy farms sell their milk to the logging camps—say they are doing better than shipping the cream.

C. D. NEDIERPRUM.

## Team Work Needed

To the Editor: Please talk for an honest price on potatoes this fall. Many farmers paid $100 a ton for seed potatoes last year and planted heavy. West of the Cascades potatoes have sold at less than they were worth to feed to hogs. Try to get people to consume more. Thousands of acres of ground are idle here on the harbor, and that is the finest potato and vegetable ground in the country, while it is in too small tracts to be suitable for grain ranches. So you see potatoes have been cheap and farmers are working out at days' wages. If there was a little team work the man with a good grain ranch could raise grain and not potatoes, and the man with a vegetable ranch could raise vegetables, and in that way there wouldn't be millions of bushels of surplus potatoes and the grain rancher could get a good, reasonable price for his grain, and the potato rancher could get a reasonable price for his stuff, and all the tillable ground in the country would be tilled. That would mean a great deal at this critical time. I would like to see every square 20x20 of ground in the United States in some good, useful crop, and I believe if the man with a big grain ranch would not plant heavy to vegetables—just plant what he needs, say for his own use, and let the man with a small ranch raise vegetables for the market, all the ground in the country could be tilled at a living profit and the farmer here west of the Cascades wouldn't be working out and his farm growing in a forest of weeds.

If the ground west of the Cascades lies idle a while it has to be almost cleared again, and this is lost energy. Let us see the whole of America a producer till the war is over at least, and all hungry stomachs filled in the civilized world. O. R. MARRS.

Cosmopolis, Wash.

### Spring Has Been Backward.

H. Vosberg of Newport, Washington, reports a cold, slow spring in his part of the state.

"There are some things we don't attempt to raise even the best of years," he adds. "Corn and alfalfa need more warm weather than we can give them, so that our dairymen and stockmen, of whom there are a few, must depend upon clover, oats, timothy, etc. Lately some of these live stock farmers have been building silos, and that makes it possible for them to get by where otherwise they must go under.

"I don't think there are any tractors used for agricultural purposes near us, but they are used very successfully in getting out logs. Lumbering is one of the big industries just at present."

### Klickitat Wheat Good.

A. J. Dingmon, of Goldendale, who attended the state grange meeting at Walla Walla, reports a large acreage of wheat sown in his part of Klickitat county. Contrary to conditions in some other sections, where spring sown grain has been held back by unseasonably cold weather, spring wheat in Mr. Dingmon's neighborhood is looking better than that sown last fall.

### Dry-Land Apple Superior?

G. A. Freeman of Lyle, Washington, is convinced that dry land apples can not be beaten for quality by those raised under any other type of orchard culture. Lyle is the dividing point, approximately, between the part of Klickitat county which raises fruit and that which raises wheat. In the fruit districts, the Spitzenburg and the Newtown Pippin are the favorite commercial varieties, although in some of the older orchards more of a mixture is found. Mr. Freeman's 25-acre farm contains some of this old orchard land, set to several varieties, but he explains that successful marketing depends upon having enough of one or two varieties to handle to advantage.


Berry Boxes
Crates

LAY IN YOUR SUPPLY

So many spruce mills are producing no veneered goods—there is a possibility of a shortage of boxes. We are quoting subject to stock.

Write for Prices.

Giving quantity and date of delivery required.

Spokane Seed Co.

First Ave., Cor. Lincoln St.
SPOKANE.



HERE WE ARE ALL READY FOR TACOMA'S GREAT

JULY 4 CELEBRATION

The Day's Program

MORNING
10:30 o'clock. Magnificent pageant featuring Military and Industrial procession.

AFTERNOON
At the Speedway
1 o'clock. Concert by Johnson's 35-piece band. Unfurling of the Stars and Stripes, Daylight Fireworks.

AND THEN A GREAT TUG OF WAR
Between teams representing the Boiler makers' Unions of Seattle and Tacoma for $500 prize.

Five World Famous Drivers in

Cliff Durant in his special Chevrolet, Earl Cooper in a Stutz Special, Eddie Pullen in a special Mercer, Eddie Hearne and Dave Lewis, each driving new Duesenbergs.

3 Great Track Events Featuring

CASH PRIZES WILL TOTAL $15,000.00

25 miles for $2000.
50 miles for $4000.
75 miles for $6000.
Grand prize of $3000.

Tacoma Speedway Association

FREE PARKING FOR AUTOS THIS YEAR.

TACOMA, WASHINGTON.

Gorgeous Military Review in Stadium, Night of July 4th.

# Special Patriotic Number of Twice-a-Week Spokesman-Review



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THE JULY 2d ISSUE of The Twice-a-Week Spokesman-Review will be of special interest to every patriotic family in the Pacific Northwest.

A special spread of two pages will be devoted to pictures of the young men of this section who are now in their country's war service, at home or abroad, together with letters from camp and trench, giving intimate sidelights on the war's events.

This same issue will contain The Twice-a-Week's regular Red Cross department, filled with interesting news of Red Cross activities.

In addition to these special patriotic features, this number of The Twice-a-Week Spokesman-Review will contain the class of matter which has won its deserved popularity in all parts of the Pacific Northwest.

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I desire to take advantage of your special clubbing offer. Enclosed is $1 in full payment for one year's subscription to The Twice-a-Week Spokesman-Review and three years' subscription to THE WASHINGTON FARMER.

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**The Washington Farmer**
**Spokane, Wash.**

# UNLUCKY LOOIE FORTUNATE AT LAST




# WILLIE'S SCOOTER RAN AWAY WITH UNCLE JIM

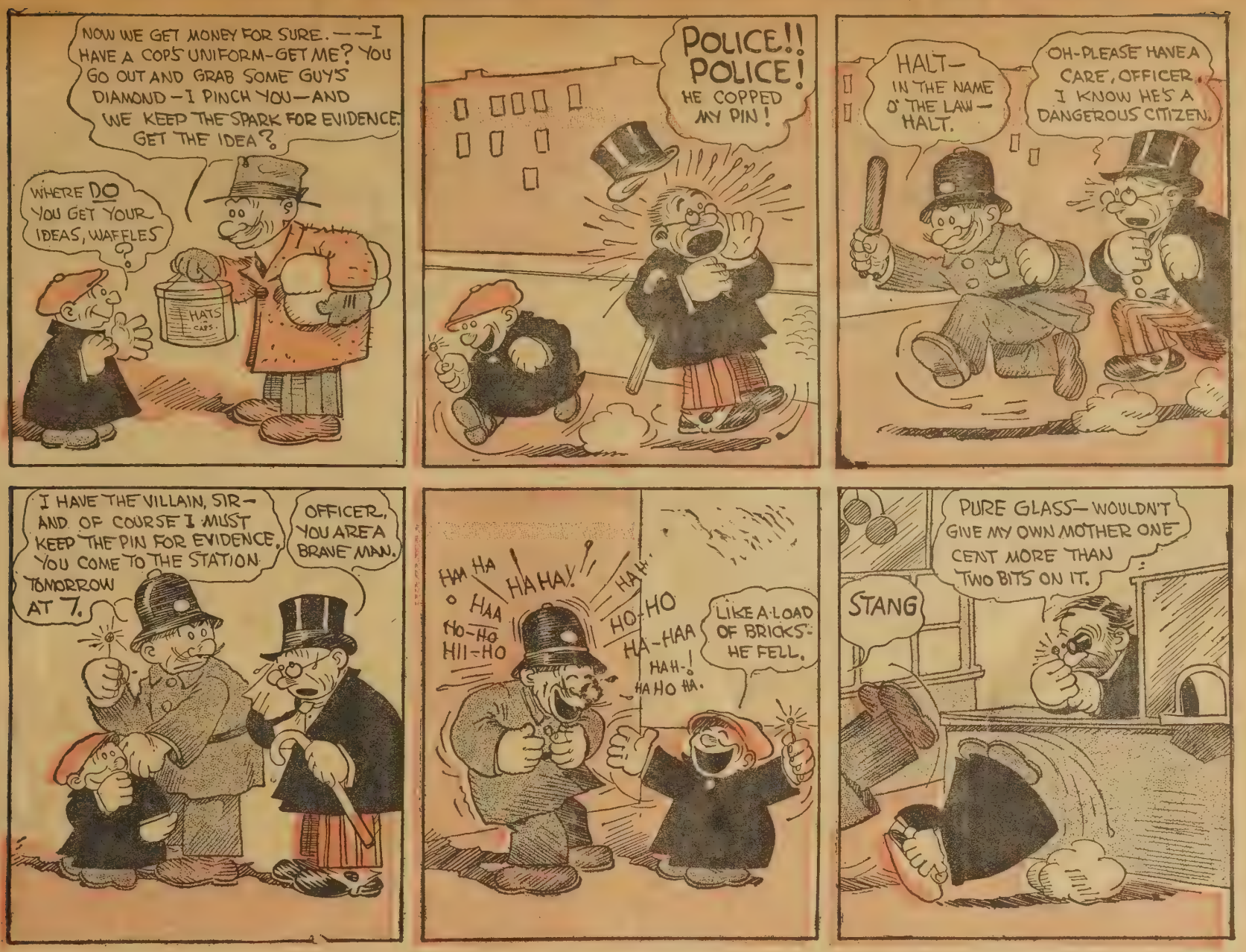



DEAR TOMMY: It's easy to make a scooter like this diagram and have lots of fun. I was running mine on the pond, when Uncle Jim wanted to try it. He made it go like lightning, but didn't catch the idea of steering it and ran into an airhole. Gracious! but wasn't he angry!

Yours, etc.,
WILLIE.



# WAFFLES, THE AMATEUR HOLD-UP MAN, IS STUNG




# BOOT RECEIVES A PRESENT OF A PUP



# You Can Live Without Wheat

You can live without wheat, according to the judgment of 10 noted scientists who have rendered the following opinion for the United States food administration:

"It is the scientific opinion of the committee that in a mixed diet wheat may be entirely replaced, without harm, by other available cereals, namely, rice, barley, oats, and corn. However, we should not recommend this except as an emergency measure."

The 10 scientists were:

Dr. R. H. Chittendon, professor of physiological chemistry and dean of Sheffield Scientific school, Yale.

Dr. Graham Lusk, professor of physiology, Cornell university.

Dr. E. V. McCollum, professor of biochemistry, Johns Hopkins university.

Dr. L. B. Mendel, professor of physiological chemistry, Yale university.

C. L. Alsberg, chief of the bureau of chemistry, United States department of agriculture.

Dr. F. C. Langworthy, chief home economics division, state extension service, United States department of agriculture.

Dr. Alonzo E. Taylor, professor of physiological chemistry, University of Pennsylvania.

Professor Vernon Kellogg, Stanford university.

Dr. Raymond Pearl, school of hygiene, Johns Hopkins university.

Dr. Ray Lyman Wilbur, formerly dean of the Stanford university medical school, now president of Stanford university.

"The emergency is here. If you can do without wheat, do it now for your country," says the federal food bureau.

The fact that Mr. Hoover has found it necessary to secure the foregoing statement indicates that the notion that wheat is an indispensable article of diet is widespread among the American people. In point of fact many of the most virile nations in world history have developed to a high degree of physical vigor without wheat.

An Englishman once tried to taunt a Scotchman with the fact that the Scotch had little or no wheat and subsisted largely on oats. "In my country," said the Englishman, "we feed oats to horses." "Aye," retorted the Scot, "but whaur will ye find finer horses than in England or finer men than in Scotland?"

Until comparatively recent times the races of northern Europe had no wheat and the greater part of the Japanese people are without it.

When Europeans discovered America they found the Indians along the Atlantic and gulf coasts subsisting largely upon maize, or Indian corn, and before the Indians were contaminated by contact with the vices of civilization they were splendid specimens physically.

The Ohio and Mississippi valleys, as well as a great part of the south, were settled by hardy pioneers who lived chiefly on corn bread or hominy.

Wheat is undoubtedly a superior cereal, and wheat bread more palatable than breads made from other grains, but the notion that it is essential to health and physical perfection is not borne out by present-day facts or recorded history.

## Until Next Harvest

The wheat situation is the most serious in the food supply of the world.

Our harvest was less than estimated.

Needs of the allies are greater than we calculated.

Losses by sea and battle have been heavier than were anticipated.

Tenser demands on shipping space restrict ships more than ever to the shortest haul and the tightest bulk.

We have fallen behind in our program. We have eaten further into our stock of wheat than we should.

There is no margin anywhere.

The allies' stocks of wheat are down to the danger point. We dare not stop the flow of wheat over seas. That would be greater disaster than the defeat of an army.

We must send wheat and more wheat. To redeem our obligations to those who fight for us, and whom we have sent, we must go on a wheatless basis.

Going without wheat is an inconvenience—nothing worse. It is no hardship, no danger.

Food will win the war! Food today means first of all wheat.

Perhaps this is the largest contribution we can make.

Against Germany's lust for domination, America's aim is healing, her ideal service.

Going without wheat adds directly to our forces in France.

Germany's war of starvation is a challenge most of all to America.

We can hope to contribute most to the common cause by supplying needed food.

Now is the hour of our testing. Wheat is the test.

Will you who "tarry by the stuff" do your best? Your all?

UNITED STATES FOOD ADMINISTRATION.

# Provide Farmers Short Time Credit

A subject of deep importance to the farmers of the United States is under consideration by Secretary McAdoo and David Lubin, delegate of the United States to the International Institute of Agriculture at Rome, Italy.

Mr. Lubin is urging the government to extend the federal farm loan system so as to provide farmers with short time credit at commercial banks. In a letter to the secretary of the treasury he outlined the proposed more of procedure as follows:

"The farmer, on obtaining from the federal land bank his 'certificate' entitling him to a fixed limit of credit, would deposit the same with a commercial bank willing to accept his account. He would then draw against the account by check and pay interest annually on the amounts drawn.

"This would be the transaction in its simplest form, but in course of time it could be amended so as to convert the static farmer's certificate into what may be designated as the 'check note' form. That is, checks for certain fixed denominations, drawn against the farmer's certificate, would become notes, and these 'check notes' would become a mobile, gilt-edged security, passing freely from hand to hand. This would secure to the farmer not only the credit facilities enjoyed by the merchant, but it would do more; it would open up to him the primary money market at its lowest ruling rates of interest."

Regarding the feasibility of Mr. Lubin's plan for farm credits on open accounts, it was shown that the federal land bank's guarantee would apply both to the validity of the "farmer's certificate" and to payment.

With relation to the "farmer's certificate" it was shown that the guarantee would be evidence that the certificate had been made out in accordance with fact and in duce process of law. Regarding payment, it was maintained by Mr. Lubin that the guarantee would be evidence of indorsement by the federal land bank guaranteeing payment.

In answer to Mr. McAdoo's assertion that this system would be likely to affect the credit standing to the federal land banks because "no corporation can incur contingent liabilities on any large scale without correspondingly affecting its credit," Mr. Lubin pointed out that the proposed system of farm credits on open account would afford an exception to the rule; the risk of guaranteeing payment could be safely assumed, for the character of the security would render any contingent liability so remote as to make the risk a negligible quantity.

In the event that this proposed government contingency fund is objected to, Mr. Lubin suggested that the "farmers' certificates" with the guarantee of validity from the federal land banks be indorsed by certain responsible trust companies insuring payment. This indorsement, in view of the remoteness of the risk, could no doubt be had for reasonable fees.

In answer to the question as to whether the loan should be limited in all cases to approximately one-seventh of the value of the security, Mr. Lubin stated that in his opinion it should "at least until the proposal has been well tried out, and until experience has demonstrated that the amount of the loans could be increased without detracting from the gilt-edged character of the security. The best means toward the desired end is gilt-edged security. Such security in the financial world finds its way to gilt-edged quarters and on gilt-edged terms and conditions. Any deflection must throw such security out of the gilt-edged market."

"We see," said Mr. Lubin, "that but one-third of the farms are mortgaged, so there are 2,538,596 farms out of 3,948,722 to which the proposed system could be applied. Long-time mortgage loans are made either for enlarging the farm or for making farm improvements, or for paying off old debts; whereas the proposed system of farm credits on open account would be for the purpose of placing the farmer on a cash paying basis. The first places the farmer on a credit basis; the second places him on a cash basis."

Mr. Lubin says in the matter of credit and payment of high interest charges the American farmer stands today where the American merchant stood 40 years ago. Under old-time conditions the retailer had to go to the jobber who had access to the bank. It thus came to pass that the jobber was the toll gatherer, gathering toll from the manufacturer on the one hand and from the retailer on the other, and to the limit of 'all that the traffic could bear.' As a result, our goods were then the poorest and, at the same time, the highest priced in all the world.

This has since been done away with. The jobber is now practically out of business. Improved methods of reporting on the merchant's standing by the mercantile agencies have done much to enable the retailer to obtain banking facilities, and he now buys direct of the manufacturer. As a result, our goods now hold their own for quality and price on the markets of the world.

All this was not accomplished without a struggle, but the victory was worth the struggle, for this change from a credit to a cash basis has effected beneficial economic changes in every direction, increasing profits on the one hand, and reducing prices to the consumer on the other. This is what has been accomplished in the field of commerce; but the farmer is still living under the stupid and costly policy of the merchant of 40 years ago.

## Sidelights

**Women's Rights.**

The suffragettes of the barnyard held a great meeting. Mme. White Wyandotte presided, and there was great expectation when she rose to make her speech.

"The purpose of this meeting," cackled Mme. W. W., "is to protest against the practice of roosters who crow every time we lay an egg!"

Whereupon the discussion became general.—Exchange.

**Considerate Treatment.**

"Bobby, if you don't quit making so much noise I shall have to deal severely with you."

"What'll you do, ma?" asked the youngster, who had been reading newspapers.

"Why—er—I'll intern you."

"All right, ma. Let's play I'm a German spy and you feed me on cake and jam."—Birmingham Age-Herald.

**The Office Boy's Query.**

The office boy watched with keen interest the proprietor, who was hastily buttoning up his coat one afternoon a while ago.

"If any one asks for me I shall be back in one hour," the great man said, as he was leaving the office.

"Yes, sir; and how long will you be gone if no one asks for you?" rejoined the boy, quickly.—Exchange.

**Got a Line on Them.**

Two English laborers who were on the road to Birmingham to get work happened to meet an old Irishman breaking stones on the roadside. They inquired of Pat how long it would take to get there. Pat simply looked at them and made no reply. Thinking he was deaf they walked on. When they had gone about 300 yards he called after them, so they came back.

"Ye asked me how long it would take to go to Birmingham?"

"Yes," they said.

"Well," said Pat, "it will take ye four hours."

"Why didn't you tell us that before?" they asked.

"Well, now," said Pat; "how could I tell ye until I saw how fast ye could walk first?"—Pittsburg Chronicle-Telegraph.

## SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

## Calm Forethought the Key to a "Good Night's Sleep"

IF you ever stop to define sleep theoretically you would probably stumble. There have been many definitions of sleep in years gone by, all the way from suspended consciousness to another kind of living. Whatever sleep is, however, does not concern you aside from the fact that it is a blessing.

It is not what goes on in the remote parts of the universe that tests the soundness of the individual's sleep, but the little noises of creaky floors, squeaky doors, rattling windows, whistling winds and roaring thunders. If, in the morning, you can say you heard nothing at all last night, and are surprised to hear the tales told you, you can be sure you slept soundly. The sound sleep is the real sleep and only that can marvelously change you from a hard-worked, worn-out human being to a transformed, vigorous, hearty, jolly fellow. Sleep, however, is not always genuine. It happens at times that you actually experience a strong muscle tension in your dreams. Sometimes you feel as though you were in a fight, and the muscles of your arms and legs are just as strongly at work as if you were engaged in some very hard manual labor. When in this state, you are not asleep, nor are you awake. You are thus in a queer state of "in between."



Dr. Hirshberg.

One reason for your disturbed rest is probably due to your uncomfortable bed. Your mattress or pillows may be too hard, and maybe your covers are too heavy and rest pressingly upon you so as to interfere with your respiratory apparatus. A light and downy comfort is much better than a heavy one, because it keeps the warmth under cover more effectively and does not hamper the work of your respiratory machine.

**Getting Fresh Air.**

Another reason for a disturbed sleep may be due to poor ventilation. Always have your windows open and see that the transom also is open so as to allow the air to move quickly and freely across the room. Try to see to it, furthermore, that your sleeping room is in an upper story of the house, for the air near the ground is, as a rule, filled with poisonous gases and soot which are too heavy to rise and so hover just above the ground. The air above, on the contrary, is rarer and clearer, and hence purer and more fit to take into your vitals.

A badly made bed and poor air have indeed an infinite amount of danger for the maintenance of a calm, quiet night's rest. It may be also that the reason you do not get your proper rest lies within your own bodily mechanism. Perhaps you have been worried all day about some vital question or your nerve fibers have been poisoned by errors in your diet. When you are at fault in this way you need not even hope for rest at night, for your nerve fibers are sufficiently fortified against the sleep which you intend to impose upon them.

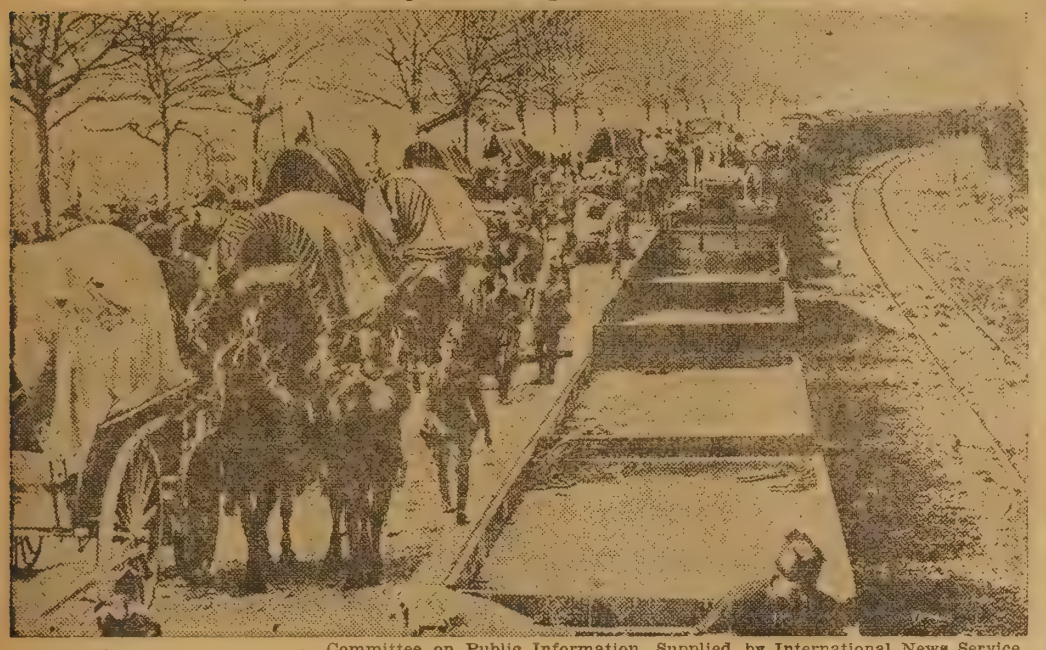
**Preparing for Sleep.**

You should indulge in a light diet before bedtime, such as cereals. Never use meat, bread or hard-boiled eggs at night, for these contain excessive protein and tend to produce poison in the mechanism and disturb your rest. Just before you retire drink a cup of hot milk, if you fear you won't be able to sleep through the night. This helps to draw the blood from the brain to the stomach and so helps bring mental rest.

Just as important as is the regulation of your diet for securing sound sleep is the acquiring of good mental habits. Never read exciting stories just before bedtime. These leave the nerves tense and makes it hard for them as well as for the muscles to relax. Read poetry or prose of the reflective kind, the kind that will make you reflect upon the mystery, beauty and wonder of life. These, in addition to some regular evening exercise, will help put you in a reflective state of mind, and it will not be long before you will have happy thoughts to blend with the mystic silence of the night and you are soon off to the realm of sleep to gain renewed strength with which to cope with the perplexities of the morrow.

# All the World's a Stage, and All the Men and Women Merely Players

## On the Way to Stop the Germans



Committee on Public Information, Supplied by International News Service.

The above picture from the committee on public information shows an American battalion in France getting ready to entrain for the fighting front.

## Infantry Aided by Dismounted Cavalry



Copyright International News Service.

A remarkable action photograph, showing a party of British cavalrymen dismounting and rushing to the aid of a hard-pressed infantry regiment. The German offensive in Picardy afforded the first real opportunity the British cavalry had of getting into action in force.

## Red Cross Shoes for Italian Feet



One of the first things the American Red Cross workers did in Italy was to establish a shoe factory. It was the most pressing need of the vast refugee population. A call was issued among the homeless ones for cobblers and shoemakers and there was a quick responses. All kinds of footwear are being made—the low shoes and slippers with wooden soles and heels and a boot originally intended for mountain wear that has a sole of coiled rope to afford a sure foothold on rocky mountain paths. All these are manufactured from the leather, cloth and ropes supplied by the American Red Cross. The picture shows a distribution of shoes among Venetian refugees at Rimini. The women with their black shawls, which show them to be women of Venice, are keenly enjoying the new fashions in footwear. No shopper on Fifth avenue could show a more fastidious and yet appreciative attitude on questions of fit and style than these wanderers who have been swept out of their homes by war. The American Red Cross has done its share in restoring a normal living condition among them as far as possible.

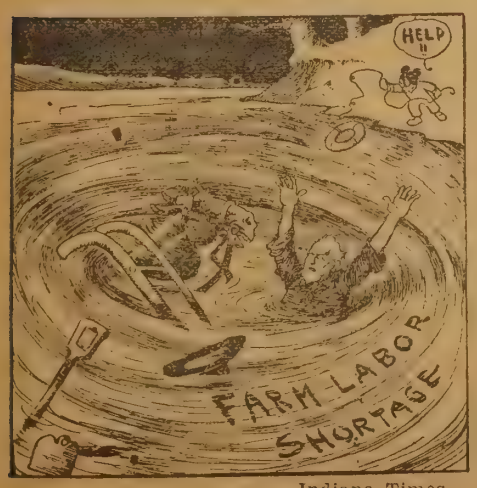



## The Big Push Will Turn




Duluth Herald.

## In the Whirlpool




Indiana Times.



## Farmerettes Answer Call of Uncle Sam

In the opinion of Uncle Sam the raising of pigs is an important war task, so important in fact that he has called upon 200,000 girls and boys to raise porkers for the market. The appeal has been heeded by the farmerettes, who are joyfully tackling the job of providing more than their share of the pork products, that we must ship to our fighters and the allies in Europe.

This farmerette is having a jolly good time taking care of this litter of eight cute little black pigs. Caring for the pigs is but one part of the work these girls do down at their Huntington, Long Island, farm. They are showing that girls can be capable farm hands at all sorts of chores. Besides raising pigs they care for the cattle and till the farm better than many men.

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# Large Profits

## Milling the Flour at 25 Cents

When the food administration allowed the mills of this country a profit of 25 cents per barrel, it seemed a moderate allowance, and for small mills was moderate, but, as the recent report of the federal trade commission showed, 25 cents a barrel meant very large profits for the big milling concerns.

The Canadian government has the same problem and has been looking into flour milling profiteering. Mrs. George Hambleton, till recently chief of staff to the Canadian cost of living commissioner, has filed an interesting and revealing report. It has a direct bearing on the milling question in the United States, because the profit allowance is the same in both countries—25 cents a barrel.

Increased profits, the report indicates, are due to increased production and increase in turn-over, which, in 1917, was two or three times that of the pre-war year, although in most cases there was some increase in the profit per barrel of flour.

"The increased profits," the report continues, "have been disposed in various ways. In come cases, as with the Maple Leaf Milling company, dividends have been paid on common stock for the first time. In other cases already substantial dividends have been increased, as in the case of the Ogilvie Flour Mills company. The regular dividends on common stock of this company up to 1916 were 8 per cent. In 1916 they were increased to 12 per cent and in 1917 to 25 per cent.

"The surplus profits account has been greatly increased. In 1913 the surplus profits account of the Maple Leaf Milling company was about $250,000. In 1917 it was over $1,760,000. The surplus profits account of the Western Canada Flour Mills company was approximately $445,000 in 1913. In 1917 it was $845,000. The latter is in addition to a sinking fund."

The surplus profits account of the St. Lawrence Flour Mills company, the report proceeds, increased from a debit of $62,000 in 1913 to a credit of $138,000 in 1917, in addition to a sinking fund. The surplus profits account of the Robin Hood Mills in 1913 was $257,000. In 1917 it was $317,000, in addition to an accumulated reserve for war tax of $163,000, and very substantial dividends during the period.

The surplus profits account of the Ogilvie Flour Mills company in 1913 was approximately $473,000, in 1917 it had increased to $2,690,000, in addition to the immense reserves of $280,000 for war in 1916 and of $750,000 for war tax in 1917.

The surplus profits account of the Lake of the Woods Milling company in 1913 was $853,000, in 1917 it was $831,000 plus $392,000 at the credit of the surplus profits account of the Keewatin Flour Mills company, which the Lake of the Woods entirely owns. This is in addition to the redemption of Keewatin bonds to the extent of $350,000 in 1916 and the redemption of bonds of the Lake of the Woods company to the extent of $200,000 in 1917, and redemption of good will account, $250,000. Eight per cent dividends on common stock were paid throughout, as well as the regular 7 per cent on preferred shares.

"It is clear," the report concludes, "that the only way to reach the profits of the milling companies is to increase the tax on the net profits on total investment for the year."


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# Big Changes Wrought

To the Editor: One of the greatest benefits that the present war has brought to the American farmer and his family is the conservation and utilization of their resources. We are now beginning to realize, as never before, that we have been a wasteful people; that what we have been considering as feed, fit only for live stock, is in reality even more wholesome and nutritious than was the exceedingly white "high patent" flour from which we made practically all our bread.

Before the present war, carload after carload of kiln-dried corn meal, put up in nine-pound bags, was shipped here from Nebraska and Iowa, which retailed at from five to six cents per pound when we were raising excellent milling corn which we were selling for hog feed at from one to two cents per pound.

It is very difficult to get the millmen to grind our home-grown corn into meal. They said, "We are not equipped for it"; "We would have to readjust our whole mill machinery," or "There isn't enough to bother with." Now one who travels over the country will frequently find on the farms, small hand-power corn grinders; grinders whose power is obtained from gasoline engines; and even the engines of automobiles are frequently utilized in converting corn into nutritious meal—a product that is far better than the kiln-dried stuff that is shipped from the Mississippi and Missouri river valleys.

In the Clearwater river valley and in the bench lands surrounding it there will be an increase of corn acreage of more than 100 per cent this season—and much of this will be converted into breadstuff.

Not only are more beans being grown in this country than ever before, but more beans are being consumed by the American people here and by our soldiers and allies abroad than ever before—and with much benefit, too. Now, when a football or baseball team is referred to as the "bean-eaters," their antagonists beware of them.

More eggs are being preserved by the water glass solution than ever before by farmers' wives. Thus eggs that are worth but 30 cents per dozen in the spring and early summer are kept till fresh eggs would cost 60 cents per dozen—thus making a saving of practically 100 per cent.

Many housewives are canning large quantities of rhubarb or pieplant by the cold water process without using sugar in putting it up.

Some years ago the writer read a story concerning an Englishman and Scotchman who were breakfasting together in a cafe. The Scot called for a bowl of rolled oats. The Englishman sneeringly remarked, "Hengland feeds hoats to 'er 'orses only, while Scotland feeds them to her men!" "Just so," replied the canny Scot, "and just see what horses you have and what men we have, will ye?"

Since the war we have learned to eat barley flour, rice flour, corn flour, and even potato flour.

We used to think that hog fat or lard was the only substance that could be used for shortening except butter. Now we find that cottolene, crisco, mazola and many other vegetable oils are found to be not only a splendid substitute, but in many instances decidedly preferable to hog lard.

Much land that was formerly unused is now being broken up and growing crops.

People who are not in position to raise poultry are now raising rabbits and feeding them horseradish leaves that were formerly thrown away.

Knitting had well-nigh become a lost art among our American women. Now not only nearly all the women and girls, but thousands of men and boys have learned this useful handiwork.

The conservation of our resources will become habits so fixed in the minds of our people that they will not go with the ending of the war, but will continue for years thereafter.

T. O. GREENE.

Juliaetta, Idaho.

### German Women Fight, Too.

Women war workers as substitutes for men in Berlin have given satisfaction in most lines of work, but have made an unsatisfactory showing as street car conductors, according to a Berlin judge who presided at the trial of a woman who had given a female conductor a box on the ear.

### To Remove Wagon Tar.

To the Editor: These are some of the things I have been learning about housekeeping:

Wagon tar may be removed from anything washable by rubbing the spots before drying with lard and rolling up for a short time, then washing between the hands in hot soap suds. This has made sightly many suits of little boys' clothes otherwise ruined.

To make hot water molasses cake with no eggs cream together one-half cup lard and one-half cup brown sugar. Add one cup molasses, two and one-half cups flour sifted with two scant teaspoonfuls of soda and one-fourth teaspoon salt, two teaspoons vanilla, one-half teaspoonful of each nutmeg, cinnamon, cloves and allspice, one pound of seeded raisins plumped in hot water and floured. Add last one cup of boiling water or strong coffee. For ginger cake two teaspoons of ginger may be used in stead of the other spices.

MRS. E. KNIFFEN.

Walla Walla, Wash.

### Four Principal Angels.

According to the Koran, the four principal angels are: Gabriel, the angel of revelation; Michael, the friend and protector of the Jews; Azrael, the angel of death; Israfel, whose office it will be to sound the trumpet on the last day.


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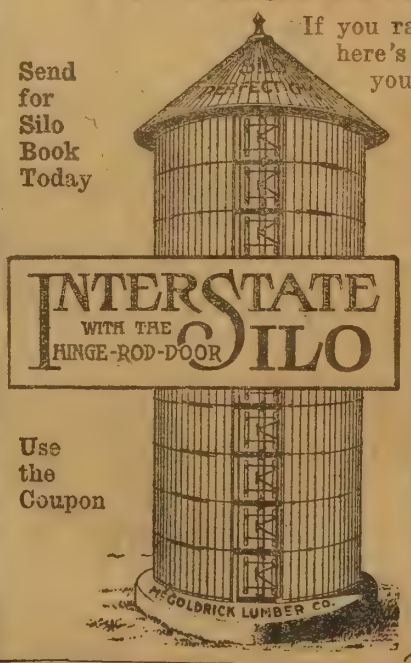
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# Trappers of the Ozarks

**The Adventures of Two Young Pioneers in the Wilds of Upper Louisiana. Now the State of Missouri.**

**By LOUIS B. MILLER**

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## CHAPTER XXII.

### Back on the Big Niangua.

The water was cold, but at the deepest place it came scarcely up to their knees. When they emerged from the cave into the starlight, they were under a high cliff. Their torches had been left inside. Still wading, they followed the shallow stream for about 50 yards, when they came to a small river.

From the melting of the snow the river was bankful. They could hear its dull roar even before they had got out of the cave.

Just where the little stream entered the river, the hunters had two canoes concealed under an overhanging bank. The canoes were brought to shallow water and tied, and the party put down their loads in them. Then they made two more wading trips into the cave for their other things. Most of the snow was now gone, but they took pains not to step out of the water, lest they should leave a visible foot-print somewhere.

When the last of their things had been deposited in the canoes, Jacks and the two young men stepped into one, and Wolf and Murphy into the other.

First they all dried their feet and put on their socks and boots. Then Jacks took up one paddle and Ben another, and together they urged the canoe out into the river. The other canoe followed.

Once out in mid-current, the canoes rushed along so fast and bobbed up and down so violently that Jodo thought they were rushing to destruction. But Jacks steered with skill, and the canoe rode safely on.

Seeing that they were not in danger, Jodo gazed around. Soon he tapped Ben on the shoulder and pointed to a bright place in the sky to the north. "I'm glad we're not in that," he said.

"So am I," Ben answered. "And I'm glad, too, that the Osages think we are. May they keep on thinking so!"

When the canoe had been running for a good while, Ben said to the hunter who was steering it:

"How did you happen to discover that underground way out of your house? Did you dig into it when you were digging your well?"

"No. We put our house thar just because the cave was thar. Our first house was built on the river-bank, a good many miles above here. After the Osages burn't that'n down, we intended to build close to the river down here. But while we's camped thar close to the mouth of the cave, the place whar we uns come out, I's out huntin' one day and found a hole in the ground. It wasn't much of a hole, but I could see water down thar. A piece of the cave's roof had drapped in. I guessed that the cave had its outlet close to our camp; and right away it popped into my noggin that if we had a house with a secret outlet, comin' to light a mile or two away, it would prove most almighty handy if we run up ag'in' more redskins than we could wrastle with. So, after we'd explored the cave, and found things just as I'd 'lowed they'd be, we built our house up thar in the woods, like you seed. Happened to be a little spring running' acrosst the cave under the hole, and that made the water question easy."

"Are you expecting to come back to this country?" questioned Jodo.

"That I don't know. It's mighty doubtful now. But if we do come, it's dollars to dimes that we'll build right on that same, identical spot. But we'll build a two-story house, with one story hangin' over t'other. Then if any redskin tries to fire it, we can shoot down on 'im, and pour water down on the fire."

Now Ben said: "If that cave outlet hadn't opened to us, we should have been finished by this time—shot to death or burnt to death. It was a lucky chance, or providence, that you built over that hole in the ground."

"Luckiest that ever was!" declared Jodo.

"Luckier than we guessed when we pegged down thar," admitted the shaggy man.

On the two canoes hurried, hour after hour, down the narrow river, swept along by the swift current and propelled by the paddles. At length Jacks spoke out, breaking a lengthy silence:

"Well, we've come a-kitin'. Didn't take us long to gallop them 20 miles or so. Now we'll purty soon be whar the river bends south. If you boys feel like travelin' on with us, we'll be the gladdest kind of your company. But if you're still bent on strikin' back to your trappin'-camp, right ahead yander will be the best place for you to take to dry land.

"We're many times obliged for the invitation, Mr. Jacks," Ben answered, "and also for all you've done to help us out of our troubles. But we still think we'd better travel north from here."

"So be it; so mought it be! You two are the jedges," answered the hunter, as he headed the canoe toward the north bank. The other canoe followed. Day was still not visible in the east.

Soon Ben and Jodo were standing on the bank with their rifles and packs, saying good-bye to the three hunters, thanking them again and again, and shaking hands with them.

"If any of you men ever get up the river as high as St. Louis, be sure to come about 15 miles west and see us," invited Ben.

Jacks answered: "We might git up thar some day—who knows? And if we do we'll come out and pull your latch-string. We shorely will!"

After a little more talk, the hunters paddled out into the river again. The two on shore watched till the canoes were lost to sight. The last seen of them, Jacks was waving his "coon-skin." Then they fastened on their packs, shouldered their rifles, and with their eyes on the north star set off at a brisk gait.

The snow was nearly all gone by this time, and the few inches left were still thawing. There was much mud in places, which interfered somewhat with their progress. But they tramped vigorously on.

Just before daylight they stopped, kindled a little fire and broiled some meat from their provision-bag and ate it. Before the smoke could be seen they threw water on the fire, then marched ahead. And they kept going, with only a noontime halt to rest, till night made it safe to kindle another fire. By that time they were tired enough to rest and sleep.

And so they pushed on, day after day. They kept a ceaseless watch for Indians and signs of Indians, but saw none. There was plenty of game, but they fired not a shot. They had all the meat they wanted, and it was wiser to save their small stock of ammunition for urgent needs.

After some days of traveling north, without finding any country that Ben could recognize, they shifted their course to northwest. At length, late one afternoon, they arrived at a good-sized river and camped for night on its bank.

"Do you think this is the Big Niangua, Ben?"

"I can't be sure of that. We'd better travel down it a day or so, and see if we come to any familiar ground. We may be farther east than we think, and this may turn out to be the upper Gasconade."

"If it's the Gasconade, we've got to cross it. But how?"

"Just what I've been wondering. Not easy to make a raft of any size without an ax. Of course we've got our lariat still. We could make a little raft that would carry our few things, and swim behind it. But that wafer is colder than is pleasant to swim in. And with a little raft I'm mortally afraid of getting our precious powder wet."

"That would certainly be a calamity for us. If the river were lower, we could pull off our clothes and wade it."

"Maybe we can think of some safe way. Of course if this proves to be the Niangua, we shall not have to cross."

Next morning they continued their journey, but followed down the east bank of the river. The scenery was striking, but the country so rough that they made sorry progress. Not long before sunset, while traveling along the top of a limestone cliff, two or three hundred feet above the river, they caught sight of a canoe that was being paddled down stream.

At first, thinking that the travelers must be Indians, Ben and his companion hastily concealed themselves among some bushes, but where they could look down upon the river. As the canoe came along near the base of the cliff, the men in it were seen to be white men. Ben now sprang up and stood on the edge of the cliff.

"Hello down there!" he called.

The canoemen raised their heads and gazed upward. "Hello up there!" one of them called back.

"Where do you hail from?"

"From Loutre island!"

That, as Ben and Jodo knew, was the name of a settlement on the Missouri river, opposite the mouth of the Gasconade.

"What stream is this?"

"The Gasconade!"

"Are you going to camp soon?"

"As soon as we can pick out a campin'-place! Come and camp with us!"

"That's just what we want to do! Can you find a camping-place on this side?"

"I don't see any. If you men can git down to the water, we'll ferry you across. That is, if you hain't got any canoe of your own."

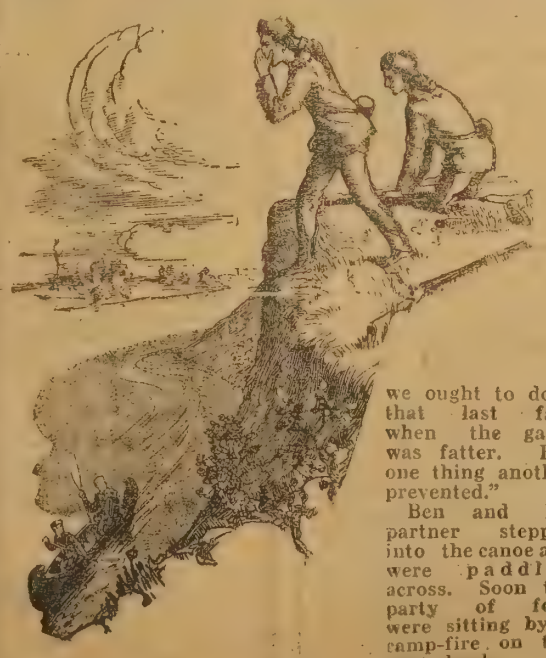
"All right! We're traveling by land just now. I think we can soon find a sloping place. We want to cross the river anyhow. Lucky for us you happened along."

Hurrying on a few hundred yards, Ben and Jodo came to where the cliff changed to a steep, gravelly hill-side. There, by clinging to bushes, they had soon slid down, down, down, till they were at the water's edge. The canoemen were already there, waiting.

The two land-travelers shook hands with the two water-travelers. One of the strangers, it soon appeared, was a Frenchman named Cartier, who know but a few words of English—not enough to converse. The other was an American, Robinson by name, who spoke French as well as English, and had married the Frenchman's daughter.

"Been up the river on a hunting-trip, I suppose," Ben remarked, noticing some skins and some dried meat in the canoe.

Robinson nodded. "Yes. We wanted to lay in a little supply of meat before cold weather is past. Of course we ought to done that last fall, when the game was fatter. But one thing another prevented."



Other white friends are found by the trapper boys.

Ben and his partner stepped into the canoe and were paddled across. Soon the party of four were sitting by a camp-fire on the west bank.

"Seems to me like I've seen you before, some'r's or some'r's else," Robinson soon remarked to Ben. "But for the life of me I can't quite recollect where it was."

Ben looked at the American. "And I've had the same impression as to you. "Yes, and now I know where it was that we met. Last spring my partner, a Frenchman, and I, after wintering on the Piney Fork of the Gasconade—a good distance east of here—had floated down into the Missouri. Twenty-odd miles below the Loutre island settlement we camped on an island in the river. And you, with a lot of others from Loutre island and Coate sans Dessein—"

"Oh yes, I know! I recollect well enough now. Sever'l of us from up the river had been down to St. Louis. And we was on our way back when we stopped and camped with you two trappers on that island. And so we meet ag'in, on another river!"

Having been for nearly half a year in the wilds, Ben and his partner were hungry for news. And they soon learned that Robinson, before starting on this hunting-trip, had just returned from a canoe-trip to St. Louis.

"Did they have an earthquake there some time in December?" Jodo inquired, eagerly.

"Yes. But it didn't do any damage to speak of there—not much more than it did up where I live. Shook things up right peert, though, they say. But where it busted things to pieces was down below St. Louis, in the New Madrid country. There it sunk great trac's of land, till they're turnin' to out-and-out lakes. In fact, the whole New Madrid settlement is mighty nigh clean wiped out. That' where the shake-up was worst."

After the party had talked long of the earthquake, till the subject was exhausted, Robinson said:

"I commonly paddle up and do my huntin' along the Osage river. But there's a big layout of Sacs and Foxes camped up there, not a great ways from the river. And we 'lowed we'd just a leetle ruther do our huntin' in some other neck of the woods this year."

"But why? The Sacs and Foxes are still friendly to the whites, aren't they?"

"Well, not any too friendly—not friendly to hurt. I wouldn't like for the red boogers to ketch me out where nobody would ever know what happened. Stand a downright pore chance to see that black-eyed French girl and the baby ag'in, I would."

"Why, what's the matter?" inquired Jodo.

"Matter enough! These here United States of Amerikey is on the verge of war with Great Britain. Looks mighty like we's goin' to have to shed our coats and role up our sleeves and spit on our hands, and whale the mother country ag'in. Everybody seems about dead-certain that congress will declare war ag'in the British, and that before so very long. In fact, hostilities has purty nigh begun in places, and preparations for hostilities has worse than begun."

"How—what?" asked Ben.

"Why, it's well known that British agents are bein' sent to all the tribes along our frontier to stir up the redskins ag'in the whiteskins. In fact they've already armed sever'l of the tribes with guns and powder and ball, and little bands of warriors is raidin' the settlements from time to time. They hadn't broke out bad, any of 'em, when we left home; but no tellin'—no tellin' what has come to pass before now. Everybody believes this country is on the eve of another long and bloody war with England. And if that's what, all our frontier settlements, and especially them west of the Mississippi, is dog-gone shore to have a long and bloody war with the Indian tribes. They don't love us Americans any too well anyhow, the redskins don't. It kind of gits their dander up to see us settlers crowdin' fu'ther and fu'ther into their happy huntin'-grounds. And the Britishers, with their arms and ammunition and double tongues, knows just how to sick the bloody boogers onto us."

"Well, now, that's interesting news," Ben remarked. "How soon is war likely to break out, do people think?"

"Hard to say just when. But from the way things looked when I paddled out of St. Louis, you boys needn't be su'prised to come back to the settlements and find the redskins trottin' the war-path."

"That may be what makes the Osages so mean just now," Jodo said to Ben.

"Yes; though I didn't see any evidence that British agents had visited the village we were in."

"Safe to say the British are eggin' the Osages on to meanness, as well as the Sacs and Foxes and Pottawatomies and other tribes," Robinson answered. "Was you boys in the Osage village?"

"You bet we were!" Jodo assured him. "And we came in half an inch of being there again, in spite of all we could do to keep out."

"How came that?"

Ben and Jodo now related their recent experiences, which proved so interesting to Robinson that he stopped them from time to time and interpreted to his French-speaking father-in-law. Till a late hour the party sat around their camp-fire, talking of their experience in the wilds.

When morning came, and the two parties were about to separate, both Ben and Jodo got some leaves of a pocket note-book from Robinson, and wrote brief notes to their friends at home. Robinson expected to make another canoe-trip to St. Louis soon after his return to Loutre island; and he promised to deliver the notes to friends of the Hendersons and Armstrong families there.

The canoemen then paddled away down stream, while Ben and Jodo tramped off toward the Big Niangua; but not before the latter two had been given some additional powder and a few more bullets for their rifles.

In time Ben and his companion came to the same Indian trail they had traveled the fall before. After that they had no trouble finding their way. They kept a careful watch, from every high point, for smoke, but could discover none, nor any other evidence that Indians were in this part of the country.

It was late one afternoon when the two entered a familiar, rock-walled valley, or cove, and looked for their cabin under the cliff. Somewhat to their surprise, it was still standing, apparently just as they had left it. And scarcely had they entered the valley when an animal grazing there fled, braying lustily, toward the cliff. Nor did he stop till he had disappeared into the Cave of the Bats.

"Why, it's little old Spunky!" exclaimed Jodo.

(Continued on the following page.)

# Trappers of the Ozarks

(Continued from the preceding page.)

"Spunky it is! And he's gone wild! Reminds we of the wild asses that we read about in the Bible. I supposed that when he ran away from the Osage villags he would make a bee-line for St. Louis. But it seems he's lingered by the way."

"My guess is that, with so much snow on the ground, he had to stop here to keep from starving. Pretty safe to say he broke down the fence and got in to his hay-pile."

That, as they soon found out, was true. The mule had broken in to the hay and had already eaten most of it. They went to the mouth of the cave, and by much calling and coaxing got him to come to them. Soon he was out in the valley, grazing again.

After making sure that their cabin was just as they had left it, the returned wanderers looked about for Bose and Tinker. Pieces of rabbit-skins and tufts of hair, together with the bones of small animals, were found in the cabin and near it. This indicated that the dogs were here, or had been recently, and showed how they had lived. But when called they failed to come.

"Maybe they're off hunting," suggested Jodo.

"That's possible. If they are, they'll be coming back about dusk, I suppose."

The first thing the trappers did was to find a rope they had hid away in the big cave, tie it to their hair-lariat, knot sticks in part of it to make a sort of rope-ladder, and, after hanging the ladder from the top of the cliff, to climb it. Everything in the little cave was found just as they had left it. They brought down their flour and meal and their two big pots; likewise their cooking-vessels and some honey. And that night they ate a heartier meal than they had for many days—since leaving here.

They half expected that the dogs would return some time during the night. But when morning came without bringing them, there was but one conclusion. Ben utter that:

"They've either got tired of living here by themselves and set off for home, or they've been killed by wild animals—wolves most likely."

"Yes, that could easily have happened," Jodo agreed. "During that coldest weather, while we were having such a hard time to keep that wolf-pack from picking our bones, the wolves here may have got so hungry that they devoured poor Bose and Tinker."

"Let's hope that they didn't—till we learn better. But they're gone, the dogs, and not till we get home can we find out for certain whether they're gone down wolves' throats."

(To be continued.)

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## Life What You Make It

By C. C. Gott.

Life in the cuntry is what the individual makes it, the grandest or the most miserable. A city man finds time for amusements and the farmer can, too, if he only will. Too many get the habit of wasting minutes. My grandfather used to say, "It is not the getting up early, but the way you manage after you get up." So many work hard all day and accomplish nothing, and then they say they have no time for pleasure. Keep your work in your mind while at it, and forget it when done with it. Don't walk half a mile down in the pasture to fix the fence, just to find you have forgotten to take the hammer; just as well have stayed at the house and help your wife wash the dishes.

**Keep Foods Cold and Screened.**

Food should be kept as cold as possible and carefully screened against flies, mice and other marauders is a warning being sent out by the children's bureau at Washington. When there is danger that foods will not keep until the meal for which they are needed they should be cooked, scalded or sterilized, and then cooked as quickly as possible, even if they must be warmed before being eaten.

**Mourning Substitute.**

President Woodrow Wilson indorses the idea of those in mourning for deaths of relatives in the service of their country of wearing a black band on the arm with a gilt star for each member of the family lost.

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# Coating Method of Preserving Eggs

The well-known method of coating eggs with lard has been modified in many ways, says Prof. George A. Olson, head of the chemistry department of the Washington state experiment station, in a bulletin recently issued. Generally, it may be said that the nature of the components used for coating eggs is some combination of fats, oils or closely related chemical substances. Occasionally rubber, paraffin, gelatin, or juices of plants in combination with fats, etc., is used. A number of the preparations sold on the market contain some form of preservative, usually not more than one per cent of the entire mixture. These preparations have either been patented or patents have been applied for, and are extensively sold as specified brands of egg preserver. These preservatives may properly be called greases or smears and are used as coverings or coatings on the eggs.

The principle involved in the coating of the eggs with the various forms of greases is to check air movement and lower the evaporation of water contained in the egg. The bacterial or chemical decomposition that would take place under normal conditions is also reduced, if not entirely eliminated, by this principle. The inclusion of a preservative in the greases serves the two-fold purpose of checking the bacterial activities and preventing the decomposition of the grease.

Precautions in using only clean, sterile eggs are important where the smearing method is employed.

While we have not attempted to test out the various brands of egg preservatives, we have, nevertheless, tried out a number, some of which were prepared in the experiment station laboratory. Based upon the results obtained, we are satisfied that there are reliable preparations on the market. The use of lard or a compound lard with beeswax, or spermaceti, or paraffin mixed with one-half per cent of salicylic acid, or benzoic acid, or thymol, when melted, together, will make a good grease for preserving eggs. The important thing is to have a combination which may readily be applied and yet not be too soft.

Each egg must be treated separately. The preservative is applied by hand and all parts of the shell must be covered, otherwise unsatisfactory results are sure to follow. Where a few eggs are put up the time element is negligible. However, where there are a large number of eggs to be treated, the method which will work out expeditiously is the one worth considering.

After the eggs have been covered thoroughly with the grease preparation, they are next wrapped in paper, as a precautionary means. The eggs are then packed in cases or cartons with the small end pointed vertically downward. An occasional shifting of the eggs in the cases is employed and apparently with good results.

The directions contained in this part of the bulletin are very important and should be carefully noted. A cool, dry place is best for storing eggs coated with the grease preparations. It is preferable to use a warm, dry place than one which is cool and damp. Generally speaking, the use of filthy or cracked or fertile eggs or storage in damp places have been the chief contributing causes for the spoiling of eggs preserved by this method.

The stored greased eggs can be used in place of fresh ones for all purposes for which the fresh eggs are used. The greased eggs appear to be of a decidedly better quality and with less of the undesirable foreign properties which are usually found in the average cold storage product.

In our experiments with eggs of known sterility and taken from clean nests, we have been very successful with the grease method of preserving eggs. We know that some chemical changes in the eggs have occurred. The extent of such changes, however, has been small when compared with those noted in the eggs kept in water-glass liquid for a similar length of time. The period of our investigations has been ten months. Perhaps when the eggs are kept for a longer period of time more notable changes may occur.

The average daily loss in weight of eggs ranged from 0.002 to 0.017 grams. The maximum daily loss in weight of egg ranged from 0.011 to 0.045 grams. The minimum daily loss of egg ranged fro 0.001 to 0.0035 grams. These results were obtained with four different preparations. Two of the preparations were made in the station laboratory and the other two were commercial products.

We would suggest to those who have not tried the grease method for preserving eggs that they prepare only a few eggs in this manner. We would further advise that the method which has been satisfactorily used in the past be continued until satisfied that the grease method will prove equally successful.

Eggs which have been preserved by means of greases or smears should not be sold without the word "Preserved" stamped on each egg. The chemist can detect eggs preserved with the various kinds of greases.

## Oatmeal Soap.

One cupful of cold cooked porridge, one cupful of milk, two cupfuls of rice stock, one treaspoonful grated onion, seasoning. Add the oatmeal to the milk and rice stock. The rice stock is made by boiling one ounce of rice in a pint and a half of water till the rice is cooked to a pulp. Then add the grated onion and seasoning. Boil up, well mixing it all smoothly and serve very hot.

# Jams and Jellies

## That's What the Soldiers Want

By ANNA BUCHANAN.

There's an average of 4000 men in the hospital at Camp Lewis all the time, and how these men long for home-made jams and jellies is told by Mrs. B. H. Kizer, a member of the Spokane chapter of the American Red Cross. Mrs. Kizer has just returned to Spokane from a visit to the camp and tells of some of the things women, especially those living on the farms, can do without very much extra effort, to help make the boys happy.

"Jams and jellies are better than canned fruits because they carry better," says Mrs. Kizer. Paraffine containers, of the pint size, are easier and cheaper to ship, however this is a matter which the women sending goods can decide for themselves. If fruit jars or jelly glasses are sent, they are (after being emptied) taken to Seattle and sold, the money going to the Red Cross. Of course jars and jelly glasses are expensive now and many women who would like to send fruit do not feel that they can buy jars to send it in, so Mrs. Kizer suggests the use of old bottles.

Just take a piece of twine, dip it into kerosene, tie it tightly around the bottle, where you want it to break, set a match to the string and after the bottle gets hot, plunge it, neck first, into a vessel of cold water, up to where the string is tied. The bottle will break where the string is tied, and you will have a jar good enough for jams and jellies.

Another thing greatly needed at Camp Lewis is dish towels. These may be made of flour sacks, cotton cloth or linen, and would be greatly appreciated by the boys in the camp.

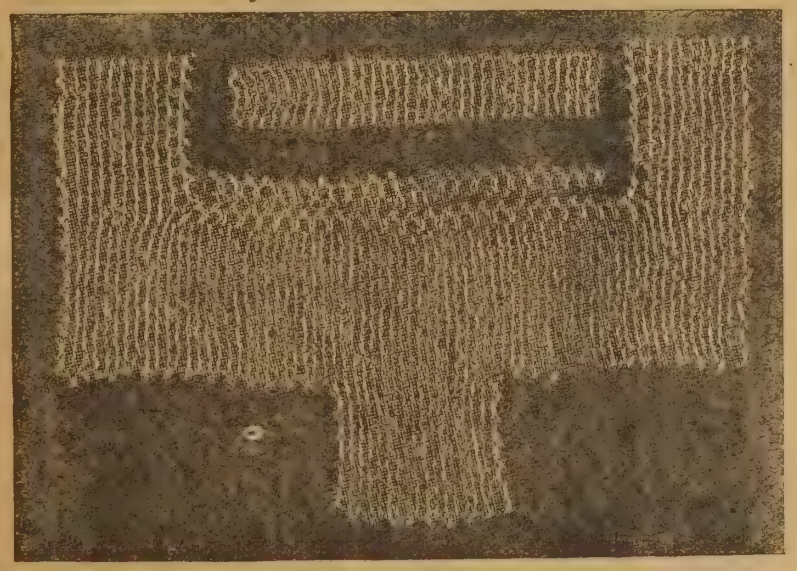
These things should be sent to W. R. Van Valen, assistant field director, military relief, northwestern division, American Red Cross, Camp Lewis, Wash. Sign your name clearly and that of the Red Cross chapter through which you are sending it, if you are sending it through the Red Cross, but the things can be sent individually if preferred. It might be a good plan for a number of neighbors to get together and make up a box between them, packing the same carefully, especially if the fruit is done up in glass.

Mrs. Kizer was much interested in the bakery at the camp, where 35,000 loaves of bread are made daily, the baking going on from 7 in the morning till midnight. There are hundreds of ovens, each one of which will hold 600 loaves of bread, and it keeps three men busy at an oven all the time, putting in the loaves, taking them out and placing the finished produce where it belongs. They have learned to do the work so rapidly that they can handle this hot bread with their bare hands without getting burned. Mrs. Kizer described the kneading troughs as being of metal and looking something like bath tubs, only that they are much longer. She says they are kept spotless.

"The men are splendidly fed," said Mrs. Kizer, "as is shown by their improved health after being at camp a while. Men who go there underweight invariably gain from 5 to 20 pounds in three months' time, and those who are overweight lose in the same proportion. This, of course, is due to the perfect rations and to the exercise the men get at the camp."

# Child's Filet Yoke

By WINIFRED WORTH



You who are mothers will enjoy crocheting this novel pattern. It's very easy to do.

Use No. 50 Cordonet.

This yoke and band for sleeves makes a very pretty yoke for a child's dress. The band also can be used for an insertion in the waist line or above the hem for a trimming. Follow illustration for yoke. The following is full detail how to make filet crochet: Make chain desired length, turn, thread over hook and put hook in 6th st. of chain from hook, thread over and draw through 2 st. and then 2, chain 2, skip 2 on ch. 1 t. in 3 st. of chain from last treble, repeat for desired number of meshes. A block (or solid mesh) is made by making 4 t. in 1 open m. If there are two blocks (or solid meshes) there must be 7 t. 10 for 3, etc. To estimate the length of chain in any pattern, count mesh and multiply by 3, plus 6. For instance, a pattern of 61 m. would be 3 times 61, plus 6, or 189 ch.

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2339—Ladies' dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 7 1-4 yards of 36-inch material. The skirt measures about 3 yards at the foot, with plaits drawn out. Price, 10 cents.

Waist 2511—Skirt 2510. Ladies' costume. Waist 2511 cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Skirt 2510 cut in 6 sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. It will require 8 yards of 36-inch material for the entire dress for a 38-inch size. The skirt measures 2 yards at the lower edge. Two separate patterns, 10 cents for each pattern.

2499—Girls' dress. Cut in 5 sizes: 2, 3, 4, 5 and 6 years. Size 4 will require 2 1-2 yards of 36-inch material. Price, 10 cents.

2486—Boys' suit. Cut in 4 sizes: 3, 4, 5 and 6 years. Size 4 requires 2 1-8 yards of 40-inch material. Price, 10 cents.

2207—Ladies' house dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires for a medium size, 6 3-4 yards of 44-inch material. The skirt measures 2 2-3 yards at the foot, with plaits drawn out. Price, 10 cents.

2497—Girls' dress. Cut in 4 sizes: 8, 10, 12 and 14 years. Size 10 requires 3 3-8 yards of 44-inch material. Price, 10 cents.

2083—Ladies' brassiere and drawers. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 3 1-2 yards of 36-inch material for a 36-inch size. Price, 10 cents.

2220—Girls' dress. Cut in 4 sizes: 6, 8, 10 and 12 years. Size 10 years requires 3 1-4 yards of 44-inch material. Price, 10 cents.

2137—Girls' dress. Cut in 4 sizes: 4, 6, 8 and 10 years. It requires 3 3-4 yards of 36-inch material for an 8-year size. Price, 10 cents.

2505—Ladies' apron. Cut in 4 sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. Size medium requires 5 3-4 yards of 36-inch material. Price, 10 cents.




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## Patriotic and Tasty

The following recipes, by Mrs. Grace Coulter Scott, district home demonstrator for Pullman, will be found as appetizing as they are patriotic:

**Chocolate Cake.**

3 eggs, ¾ c milk, 1 t salt, 6 t baking powder, 1 t cinnamon, 2 sqs chocolate, 1 t vanila, 2-3 c sugar, ½ c fat, 1 c syrup.

For flour use any of the following combinations:

1 2-3 c buckwheat and ½ c ground oats, or 1 c rice flour and 2 c barley, or 1 c corn flour and 2 c barley.

**Pie Crust.**

5 t fat, ½ t salt, cold water (¾ to 1 c).

For flour use any of the following:

2 c barley flour, 2 c ground rolled oats, 1 c corn and 1 c barley.

Combine fat, salt, and flour. Blend thoroughly. Mix with cold water to a rather soft dough. Pat and roll out. Handle the dough as little as possible or it will become sticky. The crust may have to be patted into shape on the pie pan.

**Wheatless Loaf Bread.**

1 c liquid, 4 t fat, 4 t syrup, 2 eggs, 6 t baking powder, 1 t salt.

For flour use any of the following:

1 c rice and 2 c barley.

1 1-3 c corn and 1 c buckwheat.

2 c barley and 1 c ground rolled oats.

1 1-3 c corn and 1 c ground rolled oats.

Combine liquid ingredients, sift dry ingredients and combine mixtures. Bake as a loaf in a moderately hot oven 1 hour.

## England's Potato Acreage.

The British food controller announces that preliminary returns have now been obtained and tabulated from all persons farming one acre of land and upwards in Great Britain, which indicate that the potato acreage of 1918 will exceed that of 1917 by about 25 per cent. When allotments and cottage gardens, which are not included in the return, are taken into account, it appears that the total acreage of 1918 will approximate 900,000 acres.

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**Honor the Boys Who Have Gone.**

Dear Aunt Nellie: This is the fourth time I have written but it won't be the last. I am a little girl 12 years old. My birthday is February 22. I have found a twin. Her name is Libbie Latimer. She lives at Plaza, Wash. We write letters to each other. Another girl is my twin, too. Her name is Violet Vivian Vase, but she did not give her address when she wrote. Elva Green, the answers to your riddles are: A potato has eyes and can't see; corn has ears and can't hear; a wagon has a tongue and can't talk; water in a brook never stops running. Lucile Turnley, the answers to your riddles are: Sun, broom, Andrew. Now I'll ask some riddles: Why is a man who has no children invisible? What letter would have made Noah's ark noisy? Why is a pig in the parlor like a fire in the house? Why is the letter A like 12 o'clock? We have two cats, both black and white. Their names are Millie and Etta Would-Be. Etta is a kitten and is very playful. I like to tease her with a straw. We have a dog named Ponto that can do all sorts of tricks. I am in the seventh grade at school and have three teachers—Mrs. Olson, Miss Strecker and Mr. Fager. I go on a truck to school. We live about two miles from school. There are about 175 pupils. The seventh and eighth grades are in my room. The desks face north. The teacher's desk is in front of our room. On the north wall are two big pictures of Washington and Lincoln. We have six or seven pictures in all. The 11th and 12th grades have a big service flag. There are 26 red stars in a field of white. They stand for the boys who have gone to our school and who went when their country called. One star is going to be changed to a gold star to represent one of our boys who was killed when the Tuscania went down. We have an American flag, too, and salute it every Monday morning.—Evis Erickson, R. F. D. 2, Box 108, Lynden, Wash.

**Plants Garden in the Spring.**

Dear Aunt Nellie: This is the second time I have written to the Childrens' Corner and I hope it will not be the last. Have I a twin? If I have I hope she will write to me. I am in the seventh grade. I will be 14 June 30. I have a sister and a brother dead. Their names are Ora Thelma and William Lyman Walker. I have two sisters alive; their names are Hazel and Mildred. Hazel is 15 and Mildred is 15 months old. Mildred is awful cute. She talks a little, but she does not walk yet. We have two cows, one calf, six horses, two sheep, one cat, and I have a buggy. We have lots of fun in the summer. I help my mama plant garden in the spring. I help her can fruit and vegetables in the summer. My teacher's name is C. M. Ryman. We have nine pupils in our school. We all joined the Red Cross. I am going to learn to knit. I think I would like it. I have two cousins and two uncles in the war. I don't know but what one of my cousins is killed already. I can crochet and I am going to learn to tat. I have two rabbits. One is white and brown spotted and the other is brown. They run out of doors all the time. We have a Sunday school at Cliffs. I go every Sunday I can. We live within a half mile from Sunday school. I like spelling, geography and arithmetic best of all my studies. I wonder how many of the cousins like them best.—Beulah Maud Walker, Cliffs, Wash.

**Brother Serves Uncle Sam.**

Dear Aunt Nellie: I am writing to you for the first time. I like to read the letters very well. I am 13 years old and will be 14 October 19. Have I a twin? If so I would like for her to write to me. I live on a 160-acre farm and we rent 360 acres. I have three sisters and four brothers; my oldest brother is serving Uncle Sam. His name is Stephen E. Kendall. I go to school. There are 12 children in our school. My teacher's name is Miss Della Barclay. I like her fine. She is going to teach again next year. I have a brother and sister going to school. The rest of my brothers and sisters are working. We have two cars. I am going to learn how to run one of them. I am the oldest one at home now and I have to do most all of the work. I have got five hens sitting.—Fay Kendall, Oakesdale, Wash.

**Harry Will Raise Potatoes.**

Dear Aunt Nellie: It has been a long time since I have written to you last. This is my third letter to you. I wish a lot of boys would write. My little sister Margret and I bought a war savings stamp together. Our school is closed. We have one little colt. Its name is Joe. My sister and I planted some potatoes so we can get money and buy another war savings stamp. Last year I planted some potatoes, but they did not grow. We have fives calves—Bessie, Reuben, Tony, Rosey and Flossy.—Harry Wegele, Wilson Creek, Wash. (Aunt Nellie also wishes that more boys would write. Every time you write you will encourage some other boy to become a cousin. We like your letters.—Aunt Nellie.)

**Guesses the Cousins' Riddles.**

Dear Aunt Nellie: I am a Corner cousin and have written to the Corner twice. I am 11 years old and my birthday is April 17. Have I a twin? I have three sisters and one brother. We live on a 440-acre fruit farm. I think all of the cousins write real nice letters to the Corner. Now I will answer some riddles: Elva Green's (1) a potato, (2) corn, (3) a wagon, (4) a river. Sally Garry's (6) a chimney. Mildred Tormey's (3) a newspaper that has been read, (4) a sponge. Lucile Turnley's (1) the wind. I couldn't answer the rest of them. Now I will give some: What is the difference between an old penny and a new dime? What is it which you break if you even name it? What is it that we value more than life, fear more than death, the rich man wants it, the poor man has it, the miser spends it, the spendthrift keeps it and when we die we take it with us? What is it that a man, no matter how smart he is, overlooks? How many soft boiled eggs can a man eat on an empty stomach? I will give the answers to these riddles the next time I write. It was my sister Harriet that wrote to you and didn't sign her name. She is going to write again soon. We go to the Bishop school, district No. 149. Our teacher's name is Hazel Howell. We like her real well. There are nine children go to our school. I am in the sixth grade. We have 14 little baby pigs and 12 little chicks.—Elvira Blyton, Bishop, Wash.

**Hazel Cooks for Brother.**

Dear Aunt Nellie: I have been reading the letters in the Children's Corner and thought I would write. I am 12 years old. My birthday is August 22. I go to school at the Sacred Heart convent, Ward, Wash. My school closed because of a smallpox scare. I am in the sixth grade and I also take music lessons. My father owns a wheat farm in the Big Bend near Wilbur. My mother owns 120 acres near Fruitland. I also own 155 acres near Lincoln. My father is in the hospital having his eyes treated. I have one brother and two sisters. Their names are Henry, Josephine and Bertha. Bertha is married and has two children. My sister Josephine and I are going to cook for my brother while he is seeding. He has my father's place leased. I have one colt and one dog and two cats. The colt's name is Chance. My grandmother and grandfather live near us. Grandfather was born in 1833 at Fort Okanogan. He is very spry for his age, rides a horse as well as a young man. He does all of his own work yet. Grandma isn't so strong, for she has rheumatism, but does her own work and makes a great many quilts and rag rugs. There are a great many flowers here in the spring. I can crochet and tat. I can do a little embroidering. I got a gold watch for Christmas, and also many other nice presents. Papa has a touring car.—Hazel Defreece, Fruitland, Wash., age 12.

**Brother's Name Is Leonard.**

Dear Aunt Nellie: I am 12 years old and in the fifth grade. My teacher's name is Miss Walker. I enjoy reading the Children's Corner's and so I thought I would write. I go to the Dixie school. We have been living in Dixie, but we moved to Walla Walla. I have a twin. Her name is Esther Olstrich. We are the same age only she is in the sixth grade. I have one brother and no sisters. Brother's name is Leonard. I will write again.—Helen Cochran, Dixie, Wash.

**Orris Has Two Uncles.**

Dear Aunt Nellie: This is my second letter to the Children's Corner and I enjoy reading the letters. I am 8 year old. I go to school. Helen Cochran stays at grandmother's and I stay there, too. I have two uncles. Their names are Ed and Charley. I have one brother named Lee. Have I a twin? I like to stay with grandmother.—Orris May, Dixie, Wash.

**Beautiful Scenery of Alaska.**

Dear Aunt Nellie: This is my first letter to the Children's Corner. I was 8 years old February 1, and I enjoy the letters in the Children's Corner very much and wish there were more; especially would I like to hear from my school friends of the Olympic View school, Satsop, Wash., where I went to school. I now live in Alaska. This place is called the Matanuska valley. It is famous for mining and farming. The coldest here this winter where I live was 30 below zero, but only for a few days. At times it is 10 below in the morning and 30 above by noon. There is about 20 inches of snow on the level, the most we have had at any time this winter. I like it here fine. I have lots of fun skating on the ice and I enjoy watching the teams bringing their sleigh loads of coal from the mine down Moose creek to the railroad here. I have a nice dog and cat. I have a nice Yukon sled and my dog can haul the sled. There are no boys or girls to play with. I am in the third grade and I hope I will pass. I am going to have a garden of my own and help raise food for our soldiers. I wish I could tell the cousins how beautiful the scenery is here. The very high hills across the Matanuska river, all covered with snow and the timber in the ridges between is like a great picture. I will write again.—David LeRoy, Moose Creek, Alaska.

**Will Learn to Knit.**

Dear Aunt Nellie:: I am 11 years old and am in the fifth grade at school. My teacher's name is Miss Skeffington. I like her fine. My birthday is September 26. Have I a twin If so I would like for them to write to me. There is one girl that just lacks a day of being a year older than I am. I will write to her anyway. I live on a 16-acre farm way out of town. We have three horses and nine cows and seven calves. We did have eight, but one died. We have two cats, two dogs and about 1000 chickens. Mother has got the incubators set. There are about seven incubators, two big ones and five little ones. We have an automobile and it is a truck. At school we are working on Red Cross work. I don't know how to knit, but I am going to learn. Mama knows how to knit. I am going to learn from her.—El Berta Cantwell, Hover, Wash.

**Reads the Children's Letters.**

Dear Aunt Nellie: This is the first time I have written to the Corner. I have been reading the letters of the children. I am 11 years old and will be 12 September 15. I have dark hair and brown eyes. I am in the fifth grade at school. There are five pupils in my class. There are 28 children in the school. I have two sisters and four brothers. Their names are Viola and Julia. Julia is 5 years old and Viola is 13. My brothers' names are Oliver, Roger, Bruce and Walter. Oliver is 9 years old, Roger is 7, Bruce is 4 and Walter is 7 months old. We have one dog named Ring. We call her Ring because she has a white ring around her neck. We live on an 80-acre farm. We have two horses, two colts, two cows and three calves. I would like to correspond with some boy or girl of my age.—Minnie Wynona Tarbet, R. F. D. 1, Deer Park, Wash.

**Help Our Boys Over There.**

Dear Aunt Nellie: I am going to write a letter to the Children's Corner. My father takes the Farmer and I enjoy reading the Children's Corner very much. I live on a 45-acre farm and we have 18 cows in all and two horses. I have two sisters and two brothers. My sisters and one brother are older than I am. There are two big rooms in our school and I am in the fourth grade. My teacher's name is Miss Martson. I like her very much. The boys and girls at school joined the Junior Red Cross. We are going to do all we can to help our boys "over there." I am 10 years old. Have I a twin? If so I wish he or she would correspond with me.—Irene Lindquist, Route 1, Box 62, Arlington, Wash.

**Elvira Is Staying With Grandma.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I enjoy reading the letters. I am 11 years old. I will be 12 September 4. I am in the fifth grade. My teacher's name is Elsie Bond. I have two sisters and one brother. Their names are Evelyn, Esther and Freddie. I am staying with my grandma. My mother died two years ago. Have I a twin? If I have I wish they would write to me. My brother is 9 years old. He will be 10 August 4. He is in the fourth grade. We have three old bantams and 10 little ones. We have 63 little chicks and three little ducks. May I be a cousin?—Elvira Triebroasser, R. F. D. 2, Box 19, Odessa, Wash. (The cousins and Aunt Nellie welcome you to the Corner, Elvira, and will watch for your next letter. Aunt Nellie.)

**Brother Is in Alaska.**

Dear Aunt Nellie: I enjoy reading the letters very much. I am 10 years old and am in the fourth grade. Have I a twin? My teacher's name is Miss St. John. I like her very much. I live on a 10-acre ranch. We have two cows. We have two cats and one puppy. It's name is Jack. We also have five rabbits. There are nine children in our family, six boys and three girls. The boys' names are Claude, Clare, Clifford, Freddie, Francis and Harold. The oldest is 23 years of age. The youngest is three years old. Claude is up in Alaska. The last time we heard from him he had just received his questionnaire and thinks he will be in Class 1. My oldest sister is 19 years old and is married. My youngest sister is 8 years old. Her name is Bernice.—Clara Harrison, R. F. D. 2, Snohomish, Wash.

**Have One Lamb.**

Dear Aunt Nellie: I like to read the letters in the Children's Corner. I am 9 years old. I am in the fourth grade. We have two cows and three horses. I have five brothers. Their names are Forrest, James, Francis, Charles and Jack. I live on a 10-acre ranch. We have one lamb. Our school all joined the Red Cross. Our teachers' names were Miss Young and Miss Cone.—Paul Hess, Two Rivers, Wash.

**Teacher Plays Games With Them.**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I would like to correspond with any cousin my age and in the fourth grade. When we get the Farmer I always read the letters and enjoy them very much. I can not knit, but would like very much to learn. I can crochet a little. I can not tat,

(Continued on the following page.)

# James Does Business With Uncle Sam

James was 10 years old, and like most boys, and girls as well, he liked to do things worth while. So he undertook to save all the pennies and nickels that he could get hold of and buy thrift stamps with them. He ran all manner of errands and sold vegetables from his garden and hoed for his mother and did lots and lots of things to earn money, and every few days he counted up and found he had 25 or more cents, enough to buy a thrift stamp. It was a proud day when he bought his first one, and a still prouder day when he bought the last one that he needed to fill up his first thrift stamp card. Pretty soon he had enough extra pennies to add to the stamps in the card to trade for a real five-dollar war savings stamp.

All the time his father and mother were helping him, telling him just what he must do and helping him to do it, just as every other boy's father and mother would be glad to do if their boy wanted to help his country that way.

"Now do you understand what you've done?" asked James' mother when he proudly showed her the five-dollar war savings stamp he had bought. "You have loaned your money to the government to help win this war from the wicked nation that has destroyed so many boys' and girls' homes 'way across the ocean, and that threatened to come over here and destroy homes in this country. And the government of your own country has promised to pay you five dollars for this stamp, which cost you only $4.17. You see, it pays you 83 cents for the use of the money. That is about a cent a month."

"I understand," answered James. "I've saved my pennies and nickels and let my country have them to use to buy things that the soldiers will need. And some day I'll get it back, won't I?"

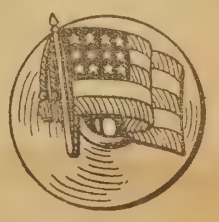
"Some day, when the war is over, you will get it back, and you will know that you helped win the war," said his mother. "If every boy and girl in the whole United States would earn and save and lend their money to the government, it would help a lot.

"And, Mother, it is just like daddy does, isn't it? Just like he does when he earns money and puts it in the bank or lends it to somebody that needs it."

"Yes, James, it is just like daddy does. You are a business man when you buy thrift stamps. You are doing business with your country, the best country on earth. And when you do this kind of business you are helping make it a still better country, and helping to make the whole world a better world for boys and girls to live in."


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# Children's Corner

Aunt Nellie

(Continued from the preceding page.)

but would like to learn. In our school there are only 13 pupils. They have only four classes, first, second, third and fourth. I like my teacher very much. She eats with us at noon and plays games, too. I haven't found my twin yet, but I hope I will. I shall write to her or him.—Clara Vivian Harrison, R. F. D. 2, Snohomish, Wash. I am 10 years old.

**Get a Red Cross Pennant.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner, but hope it will not be the last time. I am in the sixth grade and am 11 years old. I will be 12 October 9. I wonder if I have a twin. If I have, will she please write to me, for I would like to correspond with her. I live on a 40-acre farm. We have 13 head of cattle, 30 chickens, one hog and three horses. The horses' names are Jerry, Tom and Nell. The land here is quite hilly, and there are quite a few trees. There are 24 children in our room and our teacher's name is Hattie Vander Linden. All of the children like her and hope she will teach here next year. We organized a junior Red Cross, and I joined. I can knit real well. We have our pin, too, and get a pennant for almost all of the school joining. We had a program and made $27.30 for the new piano that we bought last year. I guess I had better close, with love to you and all the cousins. May I be a cousin, as I might write again?—Agnes Irwin, Blaine, Wash. (You surely may be a cousin and write again, Agnes. We hope this won't be your last letter.—Aunt Nellie.)

**Spring Brings Pleasant Weather.**

Dear Aunt Nellie: This is my first Corner letter. I would have written to you before but I have not known your address. I read the many interesting letters every time the Farmer comes. I am a girl of 11 and my name is Signe Westman. My birthday is September 17. Have I a twin? I hope so. I have four brothers and two sisters. Their names are Harold, Ragnar, Teddy, Verner, Nancy and Edith. Harold is 15 years old, Ragnar is 13, Teddy is 9, Verner is 4, Nancy is 7 and Edith is 2. We live on a 40-acre farm. We have six cows, two horses and 50 chickens. The horses' names are Dixie and Queen. We also have a dog named Felix. I can tat and I am going to learn how to crochet and knit. I am in the fifth grade. My teacher's name is W. W. Pettit. We have had three different teachers this school term. We have not had much snow here this winter but much rain. But spring is here now and will bring nicer weather. My playmates at school are Laila Haquist and Ellen Nybeck. If I have a twin please write to me for I will gladly answer your letters.—Signe Westman, Independence, Wash.

**Buys Thrift Stamps With His Money.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 13 years old and my birthday is August 27. I am in the seventh grade at school. I go to the Aldergrove school, and my teacher's name is Mr. Leber, and I like him very much. There are 14 pupils in my school. We organized a war savings society last Saturday. I have been trapping this winter and I bought thrift stamps with the money that I got for my furs. I caught one mink and two racoon, one civet cat and a brown weasel, and I caught a coyote, to. I live on an 80-acre farm, and we have seven cows, five calves and one pig, and about 25 chickens. I milk two cows, both morning and night. Last Saturday I helped some people get a cow out of the swamp. She was in the mud by the river and we got some help and pulled her out, and when we got her out she got stuck in another hole and we had to pull her out of there, too.—Oscar W. Nelson, Tumwater, Wash.

**Helps to Lick the Kaiser.**

Dear Aunt Nellie: I am learning to knit. I hope I can help lick the kaiser. I have 26 goats, 17 sheep, two cows and one colt. The nine little goats are as white as snow. The two little sheep are not quite so white. The little goats all line up behind a stump, then one jumps up and another bunts him off and they keep it up for quite a while. I had a very nice dog called Carlo, he was poisoned and now I have a dog called Collie. I am as well pleased with Collie as I was with Carlo. I am 11 years old my next birthday, the 2d of October. Have I a twin?—Ina M. Stewart, Chewelah, Wash.

**Takes Piano and Violin Lessons.**

Dear Aunt Nellie: I was looking through the Farmer this evening and I saw the numerous lettters written by girls from all over the Union, so I thought I would write. I wrote a letter to the Children's club in the Minneapolis Tribune. If there is a letter absolutely correct it is put in the paper on the children's page. Only one of them was put in the paper. I have seven war savings stamps, $35 worth. I have four sisters. The oldest one is 13 years old and her name is Eileen. She has eight war saving stamps. I come next. I was 11 November 24. My sister Mary is 7 years old. Her birthday is September 21. She has $30, six war saving stamps. The twins, age 4 September 29, each have a $50 third Liberty bond. Their names are Agnes and Anna. There are about 1750 people in the town of Republic, where I live. My father's profession is banking. He owns the Ferry County State bank. I am in the sixth grade at school. My teacher's name is Miss Farquhar. I take piano lessons from June Ritter and violin lessons from Mrs. Ritter's mother. Our Liberty bond quota was $2300. We exceeded it on the first few days. I have three cousins in the service of Uncle Sam. Clarence Trumo is an aviator and is in France. The other cousins are in the army. I will close, hoping I have a twin who will write.—Inez Walsh, box 279, Republic, Wash.

**Raymond Will Come Again.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I hope it will not be the last time. I like to read the letters in the Children's Corner. I am 11 years old and my birthday is March 27. I am in the fourth grade. My teacher is Miss Sullivan. There are 16 pupils in our room. There are 12 grades in the school. I live two miles from school. I walk all the way to school. I have five rabbits. I have three white rabbits and two gray rabbits. Altogether, we have 20 rabbits. My brothers are Rollie and Warren. Rollie has 14 rabbits. Warren has none.—Raymond Lyons, Spangle, Wash.

**Wild Ducks Nest in the Lake.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 8 years old and in the second grade. My birthday is October 2. We have five horses, seven cows, four calves, 40 chickens, six turkeys and 20 rabbits. I have two brothers, Rollie and Raymond. We have a lake across the road from our house. The wild ducks nest there every year. If I have a twin I wish they would write to me. We put up three bird houses and the bluebirds are making nests in them. My brother and I knitted enough squares for an afghan.—Warren Lyons, Spangle, Wash.

**Knits for the Red Cross.**

Dear Aunt Nellie: This is the first time I have written to the Corner. I hope it will not be the last time. I have three sisters and two brothers. Their names are Elna, Elvira, Nina, Edwin and Sigfrid. We live on a 20-acre farm. We have two horses, one colt, five cows, four calves, one pig, two cats and one dog. I am 11 years old. There were 19 pupils in my room and five grades. I am a Red Cross member. I have knitted a wash rag for the Red Cross. My birthday is February 21. Have I a twin? If so I wish they would write.—Signa Nordquist, Winlock, Wash.

**A Red Cross Member.**

Dear Aunt Nellie: I like to read the children's letters, for they are very interesting. My sister is going to write a letter, too. She is 12 years old. I have two sisters. My biggest sister is Hazel and my little sister is Mary. She is 2 years old. I have red hair and brown eyes. I am four feet and three inches tall. I joined the Red Cross. I would send you my picture, but I haven't it just now, only in a big frame. I will send it to you after a while.—Myrtle Webster, R. F. D. 1, Box 62, Olalla, Wash. (Aunt Nellie will be watching for the picture, Myrtle. Write to me again.—Aunt Nellie.)

**Knitting Blocks for Afghans.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 10 years old and will be 11 September 11. I read the Farmer and like it, too. The best of all is the Children's Corner. I have three brothers and one sister. My brothers' names are Albert, Raymond and Howard and my sister's name is Ruth. I am knitting blocks for afghans. We have three afghans over at our schoolhouse every two weeks. We work on the afghans. I have two miles and one-half to walk.—Mildred Heidegger, Box 72, Rice, Wash.

**Snowbird Is May's Little Pony.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I like to read the other children's letters in the Corner so I thought I would write. Have I a twin? If so I wish she would write to me. My birthday is the second of December. I am 10 years old and in the fifth and sixth grades. I have two brothers and one sister. My brothers' names are Dale and Robert. My sister's name is Pearl. We have some horses and cattle. I have a little pony named Snowbird.—May Wiley, Boyd, Wash.

**In the Seventh Grade at School.**

Dear Aunt Nellie: I have never written to the Farmer before. My papa takes the Farmer and I like to read the letters of the cousins. I have been going to school in Pasco, but I came home now. I have started to school here now, with my sister and brother. I like my teacher fine. Her name is Mrs. Shaw. I am in the seventh grade at school. I will be 12 years old July 27, 1918. I will close now. With best wishes for Aunt Nellie and all the cousins.—Neah Peck, Age 11, Box 457, Lind, Wash.

**With the Marines in France.**

Dear Aunt Nellie: I have written two letters to you and have seen them both in print so I will try my third one. I have never found a twin yet and I have read every letter in the Corner. My birthday is July 4. I will be 12 years old my next birthday. I see quite a few birthdays in the Corner but none on the date of mine. I would like to correspond with Alice Case, Tokeland, Wash. Our school was closed three weeks ago on account of our teacher being sick and when she got well measles began to spread and we haven't any school since then. We had the measles, too. My brother took down first, then my little brother and I, then my big brother and my mother. We got over them all right, but we are still under quarantine. My oldest brother is in the war. He enlisted in the marines and is now in France. The next brother tried to get in three times, but they wouldn't take him. I go to a country school by the name of Happy Home. There are 13 children going to my school. I would like very much for some of the cousins to write to me as I am always looking for a letter. I will try and write often and I wish our Corner would grow to be the most important part of the paper. —Edythe Strahl, R. R. 1, Centerville, Wash.

**Papa Planted a Big Garden.**

Dear Aunt Nellie: I read your letters in the Farmer and I like them very much. I want to be a cousin. My papa has 30 acres of land. We have three cows, three calves, one horse and 21 chickens. I will be 10 years old next October 9. I am in the second grade at school. I have one mile to go to school. I have three brothers and three sisters. Two of my sisters go to school. Their names are Antonia, Annie, Evis, Joe, Christina and the baby we haven't named yet. Antonia is in the second grade and Annie is in the first. My teacher's name is Mrs. Threlcold. Our school will be out in three weeks. I will be glad when school is out. I can wash dishes and sweep the floors. I can milk cows already. There are lots of flowers in the woods now and I like to go and pick them almost every night. This is the first time I have written to the Children's Corner. I am the oldest in our family. I go to Hobart school. I have two cousins to go to school. They are in the same grade. There are 30 in our room. My cousins' names are Julia and Rudolph. My papa planted a big garden. He planted potatoes, beans, lettuce and cucumbers, onions, carrots, beets and radishes. —Mary Kochever, Hobart, Wash.

**Trouble Is Vivian's Dog.**

Dear Aunt Nellie: I have been reading the Children's Corner letters and I like them very much. This is the first time I have written to the Children's Corner. I am 13 years old. I have brown hair and brown eyes. My weight is 57 pounds. I have a dog and his name is Trouble. We have 15 chickens and a pig. I have one brother and one sister. May I be a cousin?—Vivian Davis, Box 24, Edwall, Wash.

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Address all letters to Aunt Nellie, care of the Washington Farmer, Spokane, Wash.

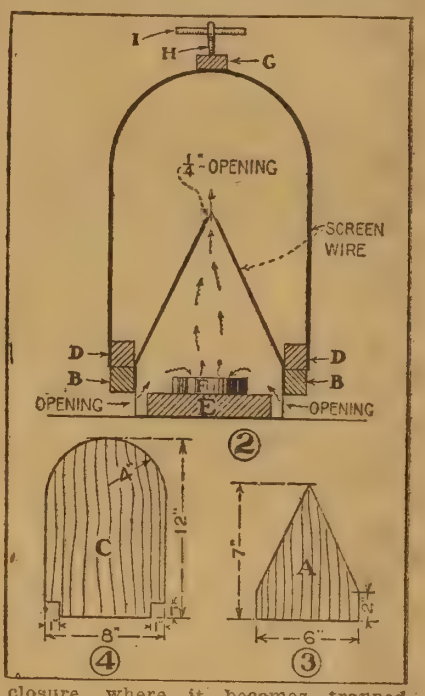
# Handicraft For Boys

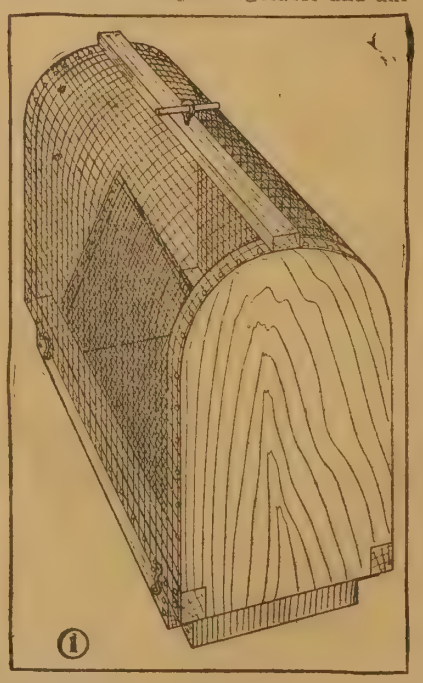
By A. Neely Hall

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## A Homemade Fly Trap.

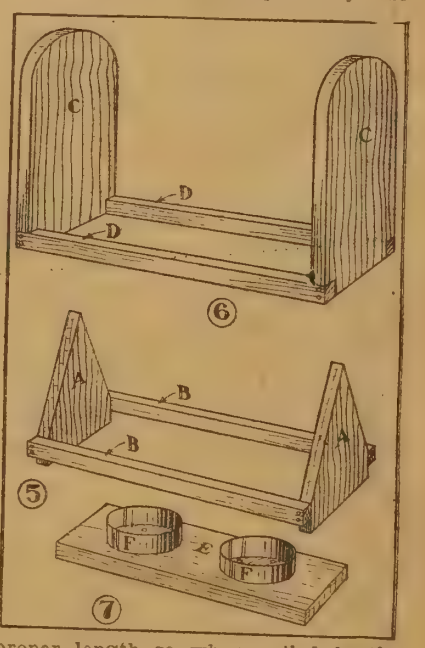
Have you ever realized that flies are really a safety guard, in so far as they warn us of unsanitary conditions? I don't mean to infer that we are lucky to have them around, but, because flies breed in filth—garbage, stable refuse and decayed vegetable and animal matter, strewn about alleys and lots, or left exposed in uncovered receptacles, their very existence points to neglected cleanup work which should be given our immediate attention to prevent the spread of disease germs. Remove these possibilities for breeding, and then, by swatting and trapping, the flies in a neighborhood can be reduced to a minimum. You boys can help in a big way. See to the removal or covering of breeding material, and then swat! swat! swat! indoors and out, and make and set several fly traps like that shown in figure 1—a most excellent form of trap easily made. Figure 2 shows by arrows how the fly, attracted by the bait, enters one of the side bottom openings, and reaches the bait pan F; then how after leaving the bait pan it rises in the wedge-shaped inner wire enclosure, and passes through a quarter-inch opening into the larger enclosure, where it becomes trapped. Once in, there is little likelihood of its finding the way out. The flies are killed by immersing the trap in hot water; then the inner part is separated from the outer enclosure, for cleaning.




First prepare the two end pieces of the inner enclosure (A, figures 3 and 5); then cut the side strips B one inch square by 16 inches long, and nail to ends A at the point where the edges start to slant. Tack a piece of screen wire to each side of the frame, with the edges at the peak exactly one-quarter inch apart.

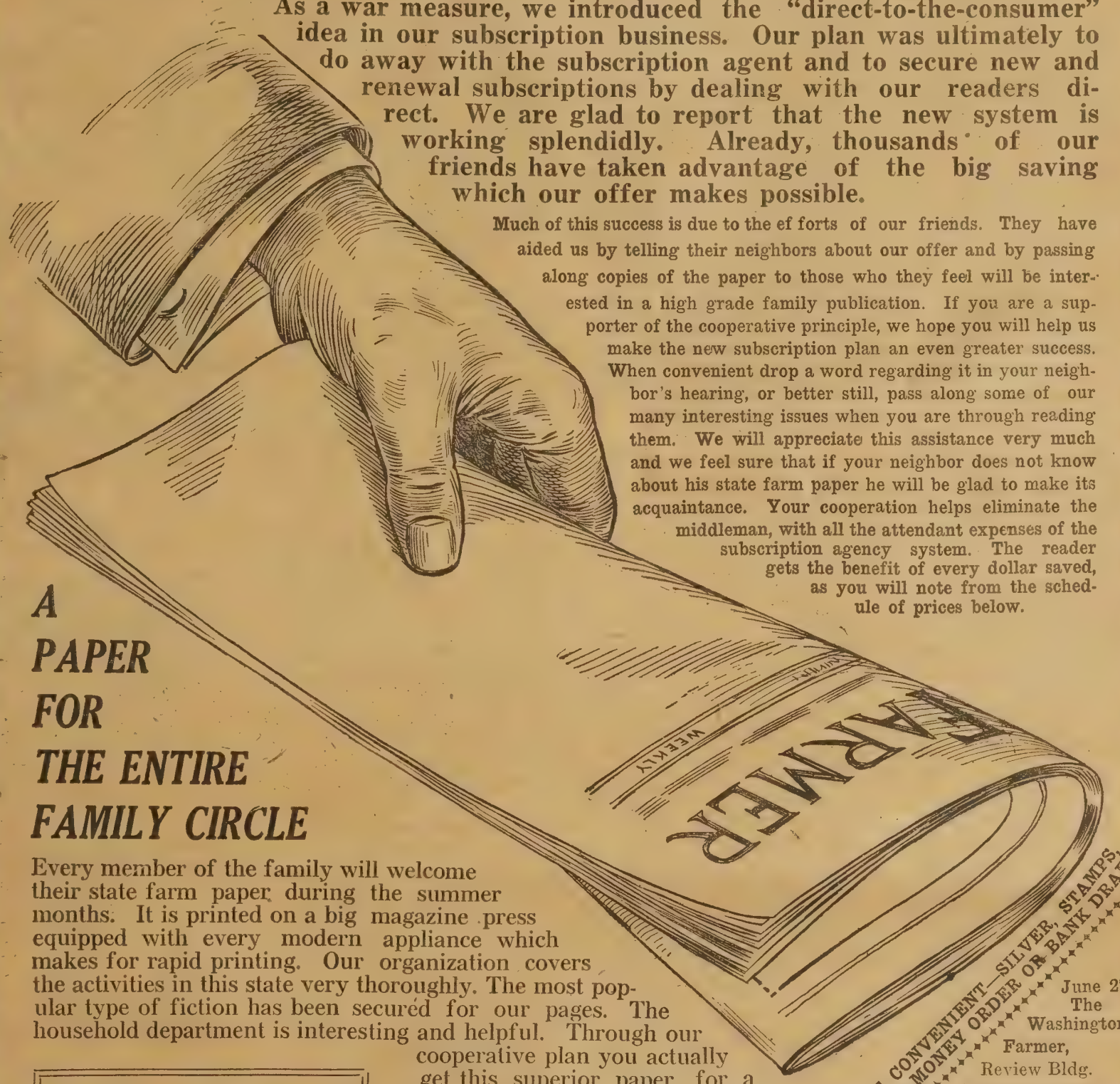
The outer enclosure requires two end pieces (C, figures 4 and 6), two side strips (D) one inch square by the proper length so when nailed in the notches in end pieces C there will be just enough space between ends C for the inner part of the trap to slip between. Cover the sides and top with screen wire. The baitpan base (E, figures 2 and 7) should be five inches wide and just long enough to fit between ends A. Tack two can covers to the center for bait pans. Figure 2 shows how the baitpan base should be placed so there will not be more than a half-inch opening between its side edges and the edges of side strips B, for the flies to enter through. The base need not be fastened to the upper part, but the two enclosures should hook together so they will not separate when removed for killing the flies. Figure 1 shows how to attach small hooks.




Nail a crosspiece (G, figure 2) across the tops of ends C to brace them and keep the screen wire taut, and make a handle of a screweye (H) with a peg (I) run through it.

# LET SOMEONE ELSE ENJOY IT

*SCORES OF OUR FRIENDS ACTED ON OUR SUGGESTION TO PASS THEIR PAPER ON TO A NEIGHBOR WHEN THROUGH READING IT. WE TRUST THAT MANY MORE WILL DO THE SAME WITH THIS ISSUE; AND CALL ATTENTION TO OUR MONEY-SAVING OFFER*




**As a war measure, we introduced the "direct-to-the-consumer" idea in our subscription business. Our plan was ultimately to do away with the subscription agent and to secure new and renewal subscriptions by dealing with our readers direct. We are glad to report that the new system is working splendidly. Already, thousands of our friends have taken advantage of the big saving which our offer makes possible.**

Much of this success is due to the ef forts of our friends. They have aided us by telling their neighbors about our offer and by passing along copies of the paper to those who they feel will be interested in a high grade family publication. If you are a supporter of the cooperative principle, we hope you will help us make the new subscription plan an even greater success. When convenient drop a word regarding it in your neighbor's hearing, or better still, pass along some of our many interesting issues when you are through reading them. We will appreciate this assistance very much and we feel sure that if your neighbor does not know about his state farm paper he will be glad to make its acquaintance. Your cooperation helps eliminate the middleman, with all the attendant expenses of the subscription agency system. The reader gets the benefit of every dollar saved, as you will note from the schedule of prices below.

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June 27.

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Review Bldg.
Spokane, Wash.

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# What Is Northwest Grain Condition?

(Continued from page three.)

ter wheat in this section; it is heading out; the stand is poor, and 15 to 20 bushels yield is the most that could be expected.—W. J. SUTTON.

**Frosts Have Done Damage.**

ENTERPRISE, Ore., June 23.—(Special to The Farmer.)—Fall grain is burning badly in sections in all our county. On deep soil on northern slopes prospects are good for 18 bushels without rain; grain on shallow soil will be a failure unless rain falls immediately. Prospects now indicate that over half of normal crops will be produced over the county with no rain. Fall grain is three weeks earlier than last year, and is now heading. Spring grain is somewhat backward and is not badly hurt by drouth yet, but has been delayed and injured by frost and cold weather, the stand being poor. Rain is falling over sections of the county this morning. Aphis is doing damage in few sections. —MAC HOKE, County Agent.

**Will Need Federal Aid.**

WATERVILLE, Wash. June 22.—(Special to The Farmer.)—Douglas county has about 190,000 acres in spring wheat and about 5000 acres of winter wheat and 20,000 acres of oats and barley. In central parts and on east side of the county spring wheat will make from two to 10 bushels. Along the breaks of the Columbia river and inland 10 miles the prospect is for 12 to 20 bushels. Barley and oats are light crops. All the straw is very short. Rain within five days may help these figures. Without rain they will be reduced. Many dry farming districts will need federal or state aid for seed and feed.—A. L. ROGERS.

**Two-thirds of a Crop.**

PENDLETON, Ore., June 23.—(Special to The Farmer.)—Crop yield difficult to estimate. Local showers Saturday did some good. Early spring prospects were excellent. Then followed extremely long dry spell through April, May and two-thirds of June. Crops have suffered greatly. Some fields too far gone to be benefited by yesterday's shower. I would estimate county as a whole about two-thirds of a normal crop. Harvest will be a little earlier than normal on account of the drouth.—M. S. SCHROCK, County Agent.

**Spring Wheat Almost Fails.**

WALLA WALLA, Wash., June 22.—(Special to The Farmer.)—The wheat harvest will start next week around Lowden, Touchet, Prescott and some parts of Eureka flat; the bulk of the harvest will start the following week. Present indications point to a 50 per cent wheat crop and a 10 per cent oats and barley crop. The damage in barley and oats is due to aphis and drouth. Fall wheat in general looks good. Spring wheat without a rain will be a practical failure in some localities.—H. H. BOONE, County Agriculturist.

**Grain Well Advanced.**

LA CROSSE, Wash., June 22.—(Special to The Farmer.)—The weather up to noon today has been severe, and the damage to grain considerable. Tonight prospects are for rain and considerably cooler. If rain comes and favorable weather follows about 65 per cent of a normal crop should be harvested. If severe weather continues only about 30 per cent to 35 per cent of a normal crop can be expected. The acreage is large, and most of the fields are well advanced.—IRA M. CAMP.

**Aphis Does Damage.**

DAYTON, Wash., June 22.—(Special to The Farmer.)—Barley on summer fallow land will be half a crop; on stubble an absolute failure. Fall wheat is very good on light lands. On heavy lands nearer the mountains the green aphis has hurt the grain badly, especially spring sowing. Rain will greatly improve conditions of the wheat crop, but can not help the barley or oats. Conservative estimates put the barley crop at 30 per cent of last year and wheat as good as last year. All signs indicate rain tonight.—J. L. DUMAS.

**Late Wheat Badly Hurt.**

COLFAX, Wash., June 22.—(Special to The Farmer.)—Winter wheat today stands at about 60 per cent normal. Early seeded spring wheat is not injured materially, and with rain occurring within the week will yield 80 per cent of normal. The late seeded wheat, oats and barley have been injured approximately 50 per cent. Aphis has done some damage in these latter, but the ladybug is gaining control. Peas are fair, and indications are that the yield will be good.—F. L. KENNARD.

**Poorer Than Last Year.**

DAVENPORT, Wash., June 22—(Special to The Farmer).—Drouth continues. Winter wheat heads little shown. Spring wheat in boot. Hundreds of acres will not be cut without rain. With rain in 10 days spring grain should make from 10 to 15 bushels. Poorer prospects than this time last year.—ALMER McCURTAIN.

**Yields Are Doubtful.**

EPHRATA, Wash., June 22—(Special to The Farmer).—Very poor crop. Will be very light unless rain soon. In southern part of county large percentage will not pay to harvest under present conditions. Rain would cause grain to fill, but would not increase height. In northern part rain would double yield. Probable yields are from nothing to 15 bushels—H. R. VERCLER.

**Depends on Future Weather.**

RITZVILLE, Wash., June 22—(Special to The Farmer).—Early Baart wheat is headed out and very short, less than knee high. Heads are short, but setting three kernels to the mesh. With reasonable weather will make a possible half crop. Bluestem 10 days later and not as good as Early Baart. All spring wheat in this section, and better than 75 per cent of acreage of Early Baart, straw being short, will make a light hay crop. Grain is well rooted, but suffering from lack of rain and hot weather. Quality of grain depends on future weather. Light shower of rain this evening.—D. A. SCOTT.

**Three-Fourths Normal.**

PENDLETON, Ore., June 22.—(Special to The Farmer).—Have just returned from a meeting of the stockholders of the Tri-State Terminal company in Seattle, and am convinced that the crop outlook indicates three-fourths of normal. Reports show that the damage is from drouth and frost. The outlook is worse than at this time last year. New acreage is nil because crop on this land is failure from drouth. There were 100 out of 2800 stockholders from the three states present at the terminal company meeting. Dividends were paid in war savings stamps. Consumers and producers should both oppose resumption of speculation in wheat during the war, a tentative promise being given for resumption if sufficient wheat for allies and home consumption is produced. The consumer is the chief sufferer as the producer is guaranteed a fixed price.—W. W. HARRAH.

**Small Acreage in Winter Wheat.**

BELMONT, Wash., June 22.—(Special to The Farmer.)—There is the smallest acreage of winter wheat in this vicinity in years. Twelve hundred acres will yield about 20 bushels per acre. Conditions of spring wheat is 60 per cent normal; oats 50 per cent; barley complete failure. Rain in 10 days may increase spring wheat somewhat. With no rain spring grain will be almost a total failure, as it is beginning to head three to five inches in height. Peas are standing the hot weather in good shape.—ROBERT THOM.

**Frosts Have Done Damage.**

ENTERPRISE, Ore., June 23—(Special to The Farmer).—Fall grain is burning badly in sections in all our county. On deep soil on northern slope prospects are good for 18 bushels without rain; grain on shallow soil will be a failure unless rain falls immediately. Prospects now indicate that over half of normal crops will be produced over the county with no rain. Fall grain is three weeks earlier than last year and is now heading. Spring grain is somewhat backward and is not badly hurt by drouth yet, but has been delayed and injured by frost and cold weather, the stand being poor. Rain is falling over sections of the county this morning. Aphis is doing damage in few sections.—MAC HOKE, County Agent.

**Cool Weather Has Helped.**

LEWISTOWN, Mont., June 22—(Special to The Farmer).—There was rain early in the week practically over the entire county, and the cooler weather has improved crop conditions materially. With more rain during the next 10 days spring crops will be normal and better in southern half of the county. With copious rains the north side should show up well. Winter wheat on fallow or well prepared land is showing up well. Stubble grain needs rain. The rye crop is excellent. Condition of corn is about normal. In general the season is advanced three weeks. Alfalfa is on in the eastern districts. Farmers are well up with their work, and the labor supply is ample for the present.—CARL H. PETERSON, County Agent.






## Save! Invest!

### War Stamps Afford Opportunity

One of two things must come about: American thrift or German victory.

Thrift and saving is a big thing for the American people to learn in a day. Germany has been learning it always. If Germany had been a wasteful, luxury loving nation like America, she would have been defeated months ago. Her thrift and saving and frugality alone have enabled her to all but conquer the world. Practice of the same virtues, though hastily acquired, alone can, even now, save the world from her domination.

Tomorrow, June 28, ends the great, nation-wide savings campaign in which the people of the country have been asked to pledge to buy $2,000,000,000 worth of war savings stamps during the present year. Reports from many districts representative of the nation indicate that the campaign has been successful.

Buying savings stamps is not like contributing money to a purpose. It is not giving something away, though the cause is one worthy of the utmost giving. It is, rather, the investing of money in the best security of the best nation in the world. One stamp bought in June costs $4.17. On January 1, 1923, it will return to the owner an even $5. That means interest at the rate of 4 per cent compounded quarterly. The cost and the value of a war savings stamp increases one cent a month.

While it is desirable that those who can hold their stamps for the full five-year period, there is the other commendable feature that if the time comes when the money is needed it may be withdrawn, with interest at 3 per cent from the date of investment.

In the words of President Wilson, let no one be unenlisted in the country's service through war stamp saving when the sun sets June 28. But if there are those so unenlisted, let not another sun descend until the regular purchase of war savings stamps is pledged.

## Stock Brings Half Price

The Shorthorn sale held at Spokane last week by Day & Rothrock of Sprague, Wash., Joe Turner of Meyers Falls, Wash., and A. D. Dunn of Wapato, Wash., was not a success from all points of view. The consignors stated after the sale that the animals brought in a general way about half what animals of like breeding and quality have been selling for at the ranches this season at private sale. R. A. Balch, assistant sales manager of Day & Rothrock, said that there was at least one good feature of the sale in addition to the distribution of a number of good breeding stock among the farmers and smaller breeders, and that was that the sale proved that the Shorthorn breeders meant it when they said their sales would be open and above board and that the stock would sell exactly as advertised.

Of the 34 animals sold the top price of the sale was received for Tressa 38905, a cow consigned by Joe Turner. She brought $345 with a six-months old calf at foot. She was purchased by F. M. Rothrock for George Harding of Springdale, Wash. A few head sold for $100, but this was the lowest figure of the sale. Other prices ranged from $100 to a little over $200.

Johnson-Lemmon of Garfield, Wash., purchased 10 young bulls and E. W. Haag of Sandpoint, Idaho, purchased five head.

### Coming Events.

June 28-29—Convention Lincoln County Farmers' union, Odessa, Wash.
June 28-29—Dairy institute, Wenatchee, Wash.
August 19-25—Convention National G. A. R., Portland, Ore.

**Fairs, Shows, Exhibits.**

September 2-7—Spokane Interstate fair, Spokane, Wash.
September 16-21—Washington State fair, Yakima, Wash.
September 19-21—Roundup, Pendleton, Ore.
October 1-6—Western Washington fair, Puyallup, Wash.
November 7-13—Northwest live stock show, Lewiston, Idaho.






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An Extra Small Star for Each Farm Worker

(Patent applied for.)

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617 Central Bldg.,
Seattle, Wash.
Review Bldg.,
Spokane, Wash.

# NEWS FOR BREEDERS

## Makes Friends With the Live Stock



The young lady shown in the accompanying photograph is the little daughter of Charles Bull of Mabton, Wash. The Herefords show are registered yearling bulls bred and raised by Mr. Bull, who has an excellent herd of his favorite breed. They are perfectly gentle and the little girls find it much sport to ride them in the lot.

Mr. Bull's herd sire, Menlo 465841, is a grandsire of Disturber on the sire's side, through Distinction, with Bean Brummel on the dam's side. Anxiety 4th, Don Carlos and other great bulls appear in the pedigree also. Mr. Bull now has a herd of about 70 registered Herefords. Among recent sales are one to Thomas E. Jones of Ellensburg, Wash., two to J. B. Hosfelt of Bickleton, Wash., and one to Charles Tallman of Slipps. Mr. Bull also has a few good Berkshires. His herd boar, Kintyre's Fashion, goes back to old Premier Longfellow.

H. A.

### Duroc-Jersey Association.

Volume 55 of the National Duroc-Jersey Swine Record association contains the pedigrees of males from No. 227501 to No. 235999, inclusive, and of females from No. 572000 to No. 591998. It also contains minutes of the meetings of the board of directors during the year 1917, as well as the meetings of the stockholders. In 1916 the association erected a building of its own in Peoria, Ill., which, with the lot, cost $55,000, not taking into account office furniture and fixtures and the equipment of the assembly room on the third floor. At the beginning of the year 1917, the board of directors decided to extend their breed promotion work by employing a field secretary, who has devoted his time to acquainting farmers and hog growers with the facts concerning the Duroc-Jerseys. The secretary reports that the calls made upon this field secretary for information have been enormous. This association is now declared to be the largest swine record association in the world, having over 6600 members.

### Horses May Be Drafted.

Here is a suggestion by Wayne Dinsmore, secretary of the Percheron Society of America:

It must also be remembered that the government has power to draft horses into service, as they have already drafted men, and there is no question but that, if the need arises, all horses of suitable ages and types will be commandeered as they were in Great Britain and France, leaving for farm work only the young, the old and the unfit. When that time comes, and it may be nearer than many imagine, the man with mares and young stock coming on will suffer but little, while the man who says, "I can buy them cheaper than I can raise them," and who has only geldings and mules of full working age on hand will find himself stripped of work animals and forced to buy such makeshifts as he can.

Among the notable Jersey sales this year is that of T. S. Cooper & Sons' "Linden Grove sale" May 30. The Cooper Decoration day sale is an annual event and more high priced, imported Jerseys have passed through the sale ring there than anywhere else in this country. This year, while prices were not quite up to the sensational values received at the Butler & Hood farm sales, the average was $632, with top price of $2700 paid for Pretty Jersey Belle by White Horse farms, so it will be seen that values ran consistently high. Five Texas breeders bought cattle, but there were none from the Pacific northwest.

F. M. Svinth, proprietor of Shady Grove farm, Chehalis, Wash., reports that his Holstein heifer, Lorinda Palmyra of Shady Grove, was recently put on a seven days' official test and produced 14,313 pounds of fat or 17.76 pounds of butter from 406.4 pounds of milk. There was some delay in securing a tester or an even better record would have been made. This is the second heifer by Mr. Svinth's herd bull, Hollywood Receba Palmyra, that has freshened and he is much pleased with the showing made. She was two years, six months and 19 days old when the test was started. Her dam, Queen Lorinda, at five years and six months, produced 19.97 pounds of butter from 507.1 pounds of milk, and in 365 days 639.15 pounds of butter and 15,539 pounds of milk. Mr. Svinth has other cows with good seven-day and full year records and will in time have the entire herd officially tested.

D. C. Bunn, proprietor of Riverly Farm Berkshires, Prosser, Wash., recently sold the young boar, Beauty's Prince 9th to Z. L. Williams of Columbia, S. C., so that Mr. Bunn is now in the ranks of western breeders who have supplied breeding stock to the east. Mr. Bunn will not show this season, both on account of shortage of help and because the older classifications are eliminated. But he reports the finest lot of pigs he has ever had.

## DUROC-JERSEY SWINE

**DUROC SOWS FOR SALE.**
A few choice Durec gilts, bred to farrow early next May, daughters of grand champion Richards Defender and bred to Junior Champion Richards Pathfinder. No better breeding east or west. Also a few good boars ready for service. Price very reasonable. We furnish pedigree and guarantee satisfaction, or will refund your money and pay express both ways.
**RICHARDS LIVE STOCK CO., Virginia, Ida.**
Home of the Champion Durocs.

**REGISTERED DUROC-JERSEY HOGS.**
Some good spring litters Richards Defender and Pathfinder breeding; big type. Send out nothing but high class stock. Guaranteed to please. Write me for prices on these pigs.
**ERIK W. OLSON, Virginia, Idaho.**

**OTTO'S DUROC JERSEYS.**
Get in line for a real boar pig for Sept. delivery. Also gilts and sows bred and open. The kind that is up to date.
**L. S. OTTO, Filer, Idaho.**

**AVONDALE STOCK FARM.**
Registered Duroc-Jersey hogs. Inspection invited. Correspondence solicited.
**H. C. POLLY. Route 2, Burley, Idaho.**

**DUROCS.**
Boars and open or bred gilts of excellent breeding.
E. E. PRICE, CABINET, IDAHO, OR
**JAMES N. PRICE. Yakima, Wash.**

## POLAND CHINA SWINE

### Big Type Poland Chinas

Peter Mouw and John B. Lawsen strains. Young boars and bred or open gilts. Good individuals.

**CLIFFORD RIGGS. Touchet, Wash.**

**GREENLEAF STOCK RANCH.**
Big type Poland China, either sex, for sale at all times.
**Wilson Bros., A. L. Wilson, Mgr.**
Greenleaf, Idaho.

**BIG TYPE POLAND CHINAS.**
Herd headed by Sammy (79833).
Correspondence Solicited.
**Fruitland Stock Farm, C. Royston, Mgr.**
Payette or Fruitland, Idaho.

## TAMWORTH SWINE

**ROUND KNOLL RANCH NO. 3.**
Herd headed by Knoll Slope Colonel, assisted by Jolly Lad IV. Correspondence solicited.
**Bliss, Idaho.**

## SHROPSHIRE SHEEP

### Shropshire and Hampshire Rams

Registered stock. Spring lambs and yearlings. No ewes for sale.
**GRANT B. DIMMICK, Oregon City, Ore.**

# Breeders' Department

## JERSEY CATTLE

### Foundation Herd of Jerseys

To reduce our herd to a size proportionate to the available labor supply we make the following offerings: First of all the great Tennessee cow,

**Moyane Monine,** 803 lbs. butter, 10,406 lbs. milk in one year. Also
**Creole Bess,** 684 lbs. butter, 12,363 lbs. milk.
**Stockwell's Dahlia,** 619 lbs. butter, 8890 lbs. milk.
**Lucy's Convent Lassie,** 484 lbs. butter, 7568 lbs. milk.
**Princess of the West,** 477 lbs. butter, 6996 lbs. milk in 341 days.
**Pearl of Riga,** 458 lbs. butter, 7489 lbs. milk in 297 days.
**Diamond of Fair Acres,** now on test, milking 59 lbs. a day, as junior 3-year-old.
**One heavy producing** untested cow and one 2-year-old heifer.
(All butter regular Jersey standard, 85 per cent.)

This includes all our American bred cows and three choice imported cows, including the many times grand champion, Stockwell's Dahlia.

Free from abortion and will furnish certificate of health from federal veterinarian.

Prices, pedigrees and photos on request.

**J. B. STUMP & SON, Monmouth, Ore.**

### High Producing Jersey Stock

**Golden Maid's Prince,** sire of three Register of Merit daughters. One, beginning at 1 year 10 months, produced 341.27 pounds 85 per cent butter in one year; two junior yearlings, 480.40 and 450.08 pounds. Five more, over six months on test, will average over 600 pounds. He was grand champion Oregon State fair, 1913.

**Monmouth Noble**—4 Register of Merit daughters. Three 2-year-olds produced 482.10, 401.30 and 377.07 pounds butter, and one, beginning at 1 year 10 months, 427 pounds.

**ABOUT 25 HEIFERS**

From 8 months to 2 years old. Several to freshen this fall. All daughters of above bulls and nearly all out of Register of Merit cows. Heifers are well grown, typy, best of udders and some are extra fine show animals. Write for full particulars or call and see them. Will be sold very reasonably.

**WM. SCHULMERICK, Hillsboro, Ore.**

## SHORTHORN CATTLE

### Herds Bulls

**Imported Doune Radiance No. 609412**
and
**Gainford Perfection No. 442173.**

### Hercules Shorthorns

We can supply you with choice, well grown bulls and females of breeding age. Your inspection of our herd is invited. Visitors always welcome.

**Day & Rothrock Company**
**205 Exchange Bank Bldg. Spokane, Wash.**

### LELAND BROTHERS

Breeders of top registered Shorthorn cattle. Correspondence solicited.
**WENDELL, Idaho.**

**REGISTERED SHORTHORN COWS.**
Young bulls and heifers, sired by Scotch bulls; liberal terms.
**CALDWELL CATTLE CO., Caldwell, Idaho.**

### Firlawn Shorthorn Farm

UNION, ORE.
We offer a young herd bull (registered), ready for service in four months, and 7 yearling heifers, all of imported Scotch blood. Bull and heifers unrelated. Prices reasonable. Write us and come to the Union Stock Show.
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Union, Ore.

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### ROSE CITY HERD

Yeksa, Gov. of the Chene, Sequel and May Rose strains. More prizes at Oregon state fair, 1916 and 1917, than any other exhibitor for number of cattle shown. A few choice animals of both sexes now offered.

**W. A. GOODIN, Cornelius, Oregon.**

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### 365-DAY HOLSTEINS

24,667 lbs. milk—1026 lbs. butter—is the S. O. advance registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.

THE HERD WITH YEARLY RECORDS.
**WESTERNWOLD RANCH, Prineville, Ore.**

### Registered Holsteins

Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.
**H. R. BOOMER. New Plymouth, Idaho.**

### HOLSTEINS

Well-bred young bulls for sale.
**THOS. CARMICHAEL. Gaston, Ore.**

**REGISTERED HOLSTEINS.**
Bull calves for sale, with good A. R. O. backing.
**BEEBE BROS., R. F. D. 2, Rupert, Idaho.**

## ABERDEEN ANGUS

### Aberdeen Angus Cattle

**A. H. EAGLESON & SONS.**
Boise, Idaho.

## BERKSHIRE SWINE

### Riverby Orchard Berkshires

Riverby Orchard Berkshires won 12 out of 15 first prizes at the Washington state fair, 1916, also many prizes, including grand champion sow at the Panama-Pacific world's fair. We offer for sale a few good boars and young sows.

**D. C. BUNN, Prosser, Wash.**

## HAMPSHIRE SWINE

**REGISTERED HAMPSHIRE HOGS.**
Growthy and vigorous; great rustlers. Pigs from January and February litters, also other ages. Correspondence invited.
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offers for sale Hereford bulls, 1 or 2 years old. One or a carload.
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Government accredited herd, headed by Peter Pan 63d. Bull calves available.
**ELBERT M. CHANDLER, Burbank, Wash.**

**In writing advertisers, be sure to say that you saw their advertisement in this paper.**

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, June 22.—Corn prices averaged lower today, influenced by excellent crop conditions and the effectual breaking of the hot wave. The market, however, closed unsettled, $1.44 to $1.44 1-8 July and $1.46 1-2 August—1-4c off to 3-8c up compared with 24 hours before. Oats finished 1-8c to 1c down, and provisions varying from 2c decline to 7c advance.

Week-end adjustment of trades rallied the corn market sharply in the last hour, but otherwise the bears seemed to possess almost entire control. The market was eased by news that rain had fallen where most desired. Would-be purchasers were rendered still more cautious by anxiety to avoid any infraction of the latest government rulings against unlicensed holdings.

Short sales weakened oats. Besides crop and weather conditions were favorable and exporters were out of the market.

Provisions declined with grain and hogs, but later rallied, owing to covering by shorts. Trade was light, and in pork had next to no volume.

**Cash Quotations.**

CHICAGO, June 22.—Corn, No. 2 yellow, nominal; No. 3 yellow, nominal; No. 4 yellow, $1.45@1.52. Oats, No. 3 white, 78¼@79c; standard, 78¼@79½c. Rye, nominal. Barley, $1@1.25. Timothy, $5@7.50. Clover, nominal. Pork, nominal; lard, $24.97; ribs, $22.25@23.

**Chicago Futures.**

| Corn— | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| July ..... | 1.43⅝ | 1.45 | 1.42½ | 1.44 |
| Aug. ..... | 1.46⅝ | 1.47⅝ | 1.45⅝ | 1.46½ |
| Oats— | | | | |
| July ..... | .72⅝ | .72¾ | .71⅝ | .72⅜ |
| Aug. ..... | .69¼ | .69⅝ | .67⅞ | .68⅛ |
| Pork— | | | | |
| July ..... | .... | .... | .... | 42.45 |
| Sept. ..... | .... | .... | .... | 42.80 |
| Lard— | | | | |
| July ..... | 25.00 | 25.20 | 25.00 | 25.17 |
| Sept. ..... | 25.20 | 25.35 | 25.20 | 25.35 |
| Ribs— | | | | |
| July ..... | 22.85 | 22.87 | 22.80 | 22.87 |
| Sept ..... | 23.30 | 23.40 | 23.30 | 23.35 |

**Pacific Northwest Grain.**

PORTLAND, Ore., June 22.—Grain, 30-day options: Oats, No. 2, $59.50 bid; barley, feed, $50; brewing, $52. Eastern oats and corn in bulk: Oats, No. 3 white, $54; 38 pounds clipped, white, $54.50; corn, No. 3 yellow, $63.50; No. 3 mixed, $61; oats, white, $54; clipped, $54.50; corn, yellow, $63.50; corn, mixed, $61.

**Minneapolis Grain.**

MINNEAPOLIS, June 22.—Flour—Unchanged; shipments, 58,601 barrels. Rye, $1.96@1.98; barley, $1@1.32; bran, $33.15. Wheat receipts, 261 cars, compared with 166 a year ago. Corn, No. 3 yellow, $1.55@1.65; oats, No. 3 white, 75 3-4@77 3-8c; flax, $3.96 1-2@3.99 1-2.

**Car Receipts at Coast Points.**

Receipts of grain and hay in car lots at Coast points for the fiscal year beginning July 1, up to Saturday night, for 1917-18 and 1916-17 were as follows:

| Seattle— | Wheat. | Oats. | Barley. | Hay. |
|---|---|---|---|---|
| 1917-18 ..... | 5080 | 1121 | 533 | 3166 |
| 1916-17 ..... | 5591 | 1444 | 371 | 4093 |
| Portland— | | | | |
| 1917-18 ..... | 3817 | 1570 | 523 | 2641 |
| 1916-17 ..... | 6484 | 2334 | 268 | 2607 |
| Total— | | | | |
| 1917-18 ..... | 8897 | 2691 | 1056 | 5807 |
| 1916-17 ..... | 12,975 | 3778 | 639 | 6700 |

## Live Stock Quotations.

**At Omaha.**

OMAHA, Neb., June 22.—Hogs—Receipts, 7400; market, 5c to 10c higher; heavy, $16@16.10; mixed, $16.10@16.20; light, $16.20@16.30; pigs, $12@13; bulk of sales, $16.10@16.20.

Cattle—Receipts, 500; steady; native steers, $12.50@17.60; cows and heifers, $8.50@14; stockers and feeders, $7.50@12.50; calves, $7.50@13.25; bulls, stags, etc., $7.50@13.

Sheep—Receipts, 100; market, steady; wethers, $12@13.50; ewes, $11@13; lambs, $15.75@19.25; yearlings, $10@13.

**At Chicago.**

CHICAGO, June 22.—(Bureau of Markets.)—Hogs—Receipts, 12,000; market about 10c lower than yesterday's average. Bulk, $16.20@16.35; butchers, $16.25@16.35; packing, $15.65@16.20; light, $16.35@16.40; rough, $15.40@15.60; pigs, $16.25@16.40.

Cattle—Receipts, 1000; market steady as compared with a week ago and shows irregular decline measuring from 10@25c choice and prime beef steers up to $1.50@2 per hundred weight on rank and file medium and common graders; medium yearlings suffered most; stockers and feeders unevenly lower; veal steady with week ago.

Sheep—Receipts, 11,000; practically all direct, compared with a week ago shorn lambs 75c to $1.10 lower; springs, $1.25 to $1.50 lower; sheep, $1.50 to $2 lower; ewes, declining most.

**At St. Paul.**

SOUTH ST. PAUL, Minn., June 22.—Hogs—Receipts, 700; 10c lower, 10c for week; range, $15.90@16; bulk, $15.90@16.

Cattle—Receipts, 200; killers, steady, 75c to $1 lower for week; steers, $7.50@17; cows and heifers, $8@14; veal calves, steady, 50 cents higher for week, $7@14.75; stockers and feeders, slow and weak, $1 to $1.50 lower for week, $6.50@12.

Sheep—Receipts, none; steady, $1 lower for week; lambs, $10@18; wethers, $7@13.50; ewes, $5@13.

**At Portland.**

PORTLAND, Ore., June 22.—Cattle—Good stuff, steady; off grades down 50c to $1. Receipts 68. Steers—Prime, $12@13; good to choice, $11@12; medium to good, $9@10; fair to medium, $8@9; common to fair, $6@8; cows and heifers, choice, $8.50@9; medium to good, $6@7.50; fair to medium, $4.50@5.50; canners, $3@4.50; bulls, $6@8; calves, $8.50@11.50; stockers and feeders, $7@9.

Hogs—Steady—Receipts, 185. Prime mixed, $16.60@16.75; medium, mixed, $16.40@16.60; rough heavies, $15.60@16.75; pigs, $15.50@16.75; bulk of sales, $16.50@16.60.

Sheep—50c to $1 lower—Receipts, 142. East of mountain lambs, $14@14.50; valley lambs, $12.50@13; yearlings, $7.50@8; wethers, $7@7.50; ewes, $5@7.

**Spokane Stock Yards Saturday.**

HOGS—Receipts none, market steady. Prime light, $16.35@16.50; prime heavy, $16.20@16.35; Rough heavy, $15.20@15.50; pigs, $15.25@15.60; stockers and feeders, $14.25@15.50.

CATTLE—Receipts 38, market steady. Prime steers, $12.50@13.25; good to choice steers, $11@12; medium to good steers, $9.50@10.25; fair to medium steers, $8.50@9.50; common to fair steers, $6.25@8.25; choice cows and heifers, $9.25@10.25; good cows and heifers, $7.50@8.50; medium to good cows and heifers, $6.25@7.25; fair to medium cows and heifers, $5.50@6.25; canners, $3@5; bulls, $6@9; calves, $7.50@10.50; stockers and feeders, $6.50@9.

SHEEP—Receipts none, market unsettled. Prime lambs, $14@14.50; good lambs, $12.50@13; prime yearlings, $7.75@8.25; prime wethers, $7.25@7.75; best mutton ewes, $5@8.

## Portland Market.

PORTLAND, Ore., June 22.—A stronger demand for cube butter for storing, a decrease in production owing to the drying up of pastures and higher markets in the south, lead to an all around advance in the local market. Cube extras sold at 44 1-2 cents and prime firsts at 43 1-2 cents. Print prices were advanced 4 cents to 48@49 cents. The buying price of butter fat was also raised 4 cents.

Half a dozen cars of eastern eggs arrived in the last week and that unsettled the market for Oregon ranch.

Poultry has been in small supply for a week and prices are on a stronger basis. Trade in dressed meats is of light volume.

The strawberry season is nearly ended locally. The demand is still good and prices range from $3 to $3.25. Cherries are very plentiful and cheaper at 4@15 cents, according to variety.

New clip wool is coming in in large volume. The valuation and distribution of the clip will begin about July 1.

Butter—Cubes, extra, 44 1-2c; prime firsts, 43 1-2c; prints, extras, 48c; cartons, 1c extra; butterfat, No. 1, 47c delivered.

Eggs—Oregon ranch current receipts, 38c; candled, 50c; selects, 42c per dozen.

Cheese—Jobbers' buying prices, f. o. b. dock, Portland; Tillamook, triplets, 23 1-2c; Young Americas, 24 1-2c per pound; Coos and Curry, f. o. b. Myrtle Point; Triplets, 23c; longhorn, 24c per pound; 1-4c discount to Portland trade.

Poultry—Hens, 24@25c; broilers, 30@32c; ducks nominal; geese nominal; turkeys nominal.

Veal—Fancy, 15 1-2c per pound.

Potatoes—Oregon, Burbank, $1.25@1.50 per hundred; new California, 3@3 1-2c per pound.

Hay—Buying prices, f. o. b. Portland; eastern Oregon timothy, $32@33 per ton; valley timothy, $27@28; alfalfa, $21@24.50; valley, grain hay, $24@26; clover, $21; straw, $9@10.

## Seattle Market.

SEATTLE, June 22.—Surprised by the increase in production of cherries over their former estimates, Western avenue jobbers began cutting prices on cherries today to 15@20c for Wenatchee Bings and 12 1-2c for pie stock. Damage from frost and cold at Wenatchee is not as heavy as reported, and wholesalers asserted that to base a strong market on that report any longer would interfere with the movement and the daily cleanup requisite for so perishable a commodity. Royal Anns are moving close to the Bing market. A small shipment of early Lamberts from eastern Washington was cleaned up at 22 1-2c.

With a stronger market for strawberries and gradual decrease in production, consignments have fallen off and activity of canners in the field has compelled jobbers to get into the patches and bid $2.75 cash for the fruit. A brisk demand from consumers for domestic canning has sprung up, but all who buy now will pay 50@75c higher than prevailed a week ago. Clark Seedlings are very scarce and are moving at $3@3.25. Marshalls easily bring $3, so that buyers are not so particular as formerly as to the durability of the berry they take over.

There has been a slight increase in the demand for old potatoes. Yakima Gems in storage sell "as is" at $20@26, but reconditioning, with shrinkage off and costs of new bags runs up the sack basis wholesale to $30@32. First Kennewick new spuds will be due about July 1, according to crop reports received here. If opening prices exceed 2@3c per pound here, jobbers declare, the business will go to Californias. More brokers are handling spuds this year than ever before, their number exceeding the commission houses on the street.

Eastern Washington and Idaho eggs are arriving with heavy shrinkage and rot spots and jobbers are bidding the market down to 37c, against 40@42c for locals, in order to check the flow. Buyers will not look at them at 39c despite the high levels of fresh hennery stock of 47c.

The advance for the midweek of 4c in butter did not, as hoped, produce any increase in the offerings from country creameries or outside markets and there was no visible evidence further than a sharp lift in the demand, that ordinary pressure which make for increased arrivals had been exerted.

Prices paid by wholesalers to producers:

Eggs—Select ranch, 40@42c per dozen; Oregon, eastern Washington and Idaho, 30c per dozen.

Butter—Fresh dairy, 30c per lb; butterfat, 50c per lb; raw milk, $2.15 per cwt.

Poultry—Broilers, live, 1918, 30c per lb; hens, 24@26c per lb; spring roosters, live, fat, 2½ to 5 lbs., 27c per lb; old roosters, 17@20c per lb; ducks, live, fat, 25c per lb; squabs, large, $3.50 per dozen; geese, fat, live, 23c per lb; Belgian hares, 19c per lb; guineas, $7 per dozen; turkeys, young toms and hens, dry picked, 10 lbs; and up, 30@33c per lb; smaller birds, 24@30c per lb.

**City Prices.**

Hay and feed quotations, city prices, truckload delivery, are as follows:

Feed—Bran, $34 per ton; shorts, $35.50; scratch feed, $77; all-grain chop, $71; oats, $68; sprouting oats, $78; rolled oats, $69; whole corn, $75; cracked corn, $77; rolled barley, $67; clipped barley, $69; alfalfa meal, $36; oil meal, $70; egg mash, $62.

Hay—Eastern Washington timothy, $34 per ton; do double compressed, $37@38; alfalfa, $26; Puget sound, $26@27; straw, $15.

## Portland Wheat.

PORTLAND, Ore., June 22.—The coarse grain markets closed generally steady and very quiet. A little business was reported in barley in the open market, but there was no interest in oats or corn. At the exchange $52 was bid for brewing and $50 for feed barley. Sacked oats held at $59.50 and eastern bulk oats at $54@54.50. Bulk corn bids were $61 on mixed and $63.50 on yellow.

## Butter and Eggs.

PORTLAND, Ore., June 22.—Butter—Prints, extras, 48@49c; cubes, extras, 44 1-2c; prime firsts, 48 1-2c; dairy, 33 1-2c. Butterfat, Portland delivery—No. 1 sour cream, 47c.

SAN FRANCISCO, June 22.—Eggs—Fresh extras, 44 1-2c; friers, 40@45c. Egg plant, 6@7c; lima beans, 10@12c.

## Spokane Market.

**MEAT.**

**Beef**—Beef steers, 16@21½c lb; cow beef, 14@17c lb; heifers, 18c lb; best loin, 33c lb; steer chucks, 16½@17½c lb; prime ribs, 25c lb; rump and round, 23c lb.

**Mutton**—Breakers, 30c lb; wethers, 23c lb.

**Lambs**—Diamond T. C. lambs, 30c lb; lambs, 28c.

**Pork**—Packer dressed hogs, 26@27c lb; pork loins, 30@31c lb; legs, 30c lb; shoulders, 25c lb; leaf lard, 28c lb; tenderloins, frozen, 40c lb; spareribs, 19c lb; country dressed hogs, with head on, 20c lb to producer; country dressed veal, 14c lb to producer.

**Smoked Meats**—Washington hams, 33¾c lb; T. C. hams, 35c lb; T. C. bacon, 46½@48½c lb; Washington bacon, 39½@43½c lb; picnics, 23½c lb; English bacon, 35c lb.

**Star Brand**—Hams, 35c lb; Shield hams, 33@34c lb; picnics, 23½c lb; bacon backs, 33c lb; Star bacon, 46½@48½c lb; Shield bacon, 41@45½c lb; Simon Pure lard, $17.50 case; Shield lard, tierces, 27½c lb; White Cloud compound, tierces, 22¾c lb.

**Dry Salt Meats**—Clear bellies, 27c; lean backs, clear, 26½c lb; sides, 26c per lb.

**Lard**—Tierces, 26½c lb, $13.99@14.74 case; Diamond T. C. pure leaf lard, $15.50 case; $8 half case; Snowcap compound, tierces, 22¼c lb.

**POULTRY.**

**Live Poultry**—Live hens, 20c lb; roosters, 12½c lb to producers, f. o. b. Spokane.

**GASOLINE, LINSEED OIL, ETC.**

**Gasoline**—Red Crown, bulk, 24½c gal, cases, 34½c gal; Shell, 24½c; refined oil (Pearl), bulk, 13c gal, cases, 23c gal; Eocene, 15½c gal in bulk, cases 25½c gal; engine distillate, 16½c gal, bulk.

**Linseed Oil**—Raw, bbl, $1.68 gal, case $1.85 gal; boiled, bbl, $1.70 gal, cases $1.88 gal.

**Turpentine**—Bulk, 79c gal; cases, 99c gal.

**White Lead**—Strictly pure white lead in oil, ton lots, 12¾c lb; 50-lb lots, 13½c.

**GRAIN AND FEED.**

**Rice**—Fancy head, $7.50@9.50 cwt.

**Flour**—Bluestem, $9.40; Blend, $9.40; Montana hard wheat, $10.40; graham, $8.50 bbl, 49-lb sacks; whole wheat, $8.80; eastern rye, $10.10; eastern rye meal, $10.30; oat flour, $12.85, 4 45-lb. sacks.

**Oats**—$73 ton whole, $76 rolled, delivered in city; steam rolled No. 2, $71 ton.

**Corn**—$75 ton; cracked corn, $77 ton.

**Bran**—$30 ton; shorts, $32 ton; bran and shorts, $31 ton.

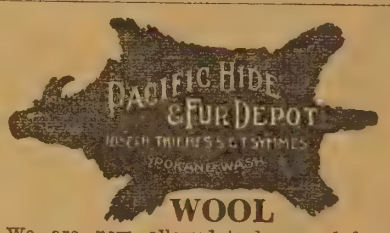
**Barley**—Rolled, $76 per ton.

**Oil Meal**—$78 per ton.

**Hay**—Timothy, $36 per ton, $35 ton by carload; alfalfa, $29 ton, $28 ton by carload.

**COTTON.**

NEW YORK, June 22.—Spot cotton, quiet; middling, 30.40c.


**WOOL**

We are now allowed to buy wool from growers. Returns will be made subject to government price, less our profit of .1⅓ cents per pound.

Market price paid for hides, metal and rubber. Write for prices if interested. Prompt returns guaranteed.

**PACIFIC HIDE & FUR DEPOT.**

Joseph Thiebes and C. T. Symmes,
1101-09 Railroad Ave., Spokane, Wash.

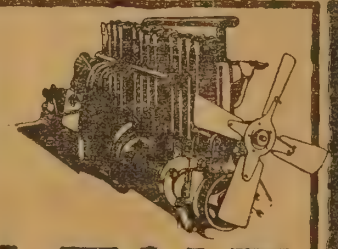
**HIDES** **WOOL, PELTS, MOHAIR, CASCARA BARK**

We do the largest consignment business in the northwest. Equally fair treatment on all shipments, large or small. Returns at full market value mailed same day as goods are received. Trial shipments wanted and appreciated, but are handled as regular shipments and not at inflated values.

**THE H. F. NORTON CO.**

53-55 No. Front St., PORTLAND, ORE.
206 Third Ave. So., SEATTLE, WASH.

The Valve-in-head-type engine illustrated here, like all *internal combustion engines*, requires an oil that holds its lubricating qualities at cylinder heat, burns clean in the combustion chambers and goes out with exhaust. Zerolene fills these requirements perfectly, *because it is correctly refined from selected California asphalt-base crude.*



**ZEROLENE**

***The Standard Oil for Motor Cars***

**It Keeps the Engine Young!**

Zerolene keeps the engine young—full-powered, smooth-running, and economical in fuel and oil consumption—because it is correctly refined from selected California asphalt-base crude. Gives better lubrication with less carbon. Made in several consistencies. Get our Correct Lubrication Chart covering your car.

*At dealers everywhere and Standard Oil Service Stations.*

**STANDARD OIL COMPANY**
(California)

# Fix Own Prices

## Farmer Must Look Out for Self

A. W. Davis, master of the Stevens county Pomona grange for more than 20 years, has been interested in many of the activities for which the grange stands most prominently. Something more than two decades ago Mr. Davis was a cattle feeder back in Iowa. He went through the days of adversity when dozens of small banks failed because they held too much "cattle paper," and afterward he had the experience of having his feed bills at the stock yards almost eat up his returns. These things taught him that there was something wrong with the producer's end of the live stock business and with this idea in mind he began to study ways and means. His solution lies in the direction of farmers' commission companies and warehouses. Not until the farmer puts himself in a position to make his own prices, declared Mr. Davis, will he be able to break even financially.

"Farmers are the best meaning people in the world," continues the Stevens county man. "Look at what they are doing now to try to produce more food—the farmer has always worked long hours, and now he is trying to do twice as much as he has been doing. In the north half of my county where wheat has not been grown to amount to much until now, small patches—enough at least to supply the producer and so to free that much more for export—are being put in everywhere. We have no threshing machines in our community, but by harvest time that will be attended to. No, the farmer is no shirker, and in spite of his reputation as a kicker, he doesn't do much of that. For instance, have you ever heard him kick about the high price of seed wheat, or of the hay and grain he must feed his horses and cattle? He has said so little about it that many people do not realize that the farmer is one of the principal consumers of his own products, and that they cost him as much as they cost anybody."

### Some Stump Blasting Costs.

Owners of cut-over timber land are somewhat at sea when it comes to figuring land clearing costs. Old figures are not at all reliable under existing conditions because both dynamite and labor are much higher now than was the case a few years, or even a few months, ago.

As I do considerable clearing for land owners I wanted to know whether it is cheaper to blast stumps or to pull them with a stump puller, writes a man from Michigan.

I used in my test 500 pounds of 40 per cent dynamite, 1000 blasting caps, 3000 feet of fuse and a standard make of stump puller.

My explosives and the labor necessary in handling it cost me $213.19. This expenditure enabled me to remove 1017 stumps. Average cost per stump, 21 cents.

To operate the stump puller I was obliged to employ a team and crew of two men. Figuring a team and man at $4.50 per day and two assistants at $1.50 per day made my cost per stump 25 cents. This crew was able to average about 30 stumps per day. I found it necessary to use dynamite on a number of stumps that were pulled out with the puller in order to split them up to sizes that would enable us to dispose of them and in order to get the clay off the roots. In cases where this was necessary the cost of pulling the stumps was practically double the cost of blasting them.

It is my conclusion that, in spite of the abnormally high cost of explosives temporarily, due to war conditions, blasting is still the cheaper method of stump disposal.


# Big War Map for Two Subscription Orders

A splendid four-page war map of the battle front in France, originally published in the Spokane (Wash.) Spokesman-Review, will be sent to any one who secures and mails us two new subscriptions to The Washington Farmer.

This map is printed in four sections and when pasted together, according to directions furnished, will give you a map 64 inches long and 21 inches wide; presenting the details of the great fighting territory in such a way that you will be able to follow every detail of the big battles which are now brewing.

Send orders for new subscriptions and war map to

**The Washington Farmer**

Review Bldg., Spokane, Wn.
617 Central Bldg., Seattle, Wash.


# Earthworms Put "Pep" Into Chicks

(Continued from page twelve.)

The earthworm is an eater of soil. It eats soil in such quantities that as you look upon a fertile countryside you will not see an inch of soil anywhere which has not in all probability many times passed through the bodies of earthworms. Passing the soil through their bodies, the earthworms extract therefrom the bacteria, protozoans and humus on which they feed; and, at night usually, they come to the surface and void the residue soil in small accumulations which an observant eye readily sees. This excreted soil is brought up in such quantities that 10 tons per acre, annually, is in many localities a low estimate.

All the while the earthworms are doing this an interesting thing is happening: They are bringing to the surface finely pulverized soil, and by this action causing a subsidence of stones into the soil. They have even buried several feet below the ground the ruins of Roman villas in England, some of the most interesting of which have been discovered in English fields after generations of plowmen have passed over the ruins without suspecting that they were there. They are perpetually active. They have come to us from the prehistoric past, when the horse was three-toed and rabbit-like, and man had not yet appeared upon the earth; and by their humble work in the soil throughout all ages they have done much toward making the earth inhabitable by man.

### Promising Prospects for Fair.

Those interested in the Grays Harbor county fair at Elma, Wash., say that at this early date prospects look very promising for a successful fair this fall if they can only have fair weather. Farmers and stock breeders are evincing more interest than before. Granges also promise to take more interest and good exhibits all along the line are looked for. The racing prizes have been doubled and a high-class racing program is also promised.

# Want Ads

### EDUCATIONAL 45

EARN MORE. ENROLL ANY TIME, AT Behnke-Walker, Portland, northwest's biggest business college, because best. Graduates assured positions. Write for catalogue.

### TEACHERS' AGENCIES 46

TEACHERS REGISTER WITH B. F. WESTmore, Mgr. Hazard Teachers' Agcy. $1 registers you at three offices, 911 Old Nat'l Bank bldg., Spokane, Washington.

ALBERT TEACHERS' AGENCY, PEYTON bldg., Spokane. We need more teachers.

### MISCELLANEOUS 57

FOR THE BENEFIT OF OUR SCHOOL I will give any healthy, able-bodied family, with at least 4 children of school age, free use of 40 a. land for 10 years. For further information enclose $1. Amt. will be refunded to family accepted. Lorenzo E. Dole, Heceta, Ore.

### HONEY, BEESWAX—Wanted. 58

SEND SAMPLES OF YOUR HONEY AND beeswax; state quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

### EGGS and BUTTER WANTED 59

WE ARE ALWAYS IN THE MARKET for good eggs and dairy butter. Send us your next shipment. Oregon Farm Products Co., 38 Halsey st., Portland, Ore.

# Want Ads

**Want Ad Rates 30c Per Line**

Want ads are run at this rate in The Washington Farmer and 1 t s associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

**How to Figure Cost of Ads**

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

**Send for card giving lower rates for ads running one month or longer.**

### MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.
Let us mail you one of our large illustrated catalogues No. 27 of sash, doors, frames, building paper, prepared roofing, plaster board, paints, etc.
We make screen doors and sash covered with heavy 28-gauge galvanized wire.
Stock size screen doors, $2 and up.
Odd size screen doors, 20c per square foot. Screen windows and sash, 15c per square foot.
We sell any one. Ship anywhere, and guarantee safe delivery.
Direct from our factory to you.
O. B. WILLIAMS CO.
1943 FIRST AVE. SO. SEATTLE.

SILOS—BARGAIN.
Four new 18x30 highest grade, hinged-rod-door, 150 ton silos, complete except staves, at 25 per cent below market; can include staves at cost; will sell one or all. Here is your chance to get that silo cheap. N. Ferwerda, 801 Old National Bank bldg., Spokane.

PRINTED BUTTER WRAPPERS
1st hundred 75c, postpaid; 40 to 70 per cent less in larger amounts. Sample and prices free. Hughes' Print Shop, Colville, Wn.

### JUNK SHOPS 90

HIDES HIDES HIDES
Write for prices and shipping tags.
BUYERS OF ALL KINDS OF JUNK.
CENTRAL HIDE & JUNK CO., SPOKANE.

### MACHINERY—FOR SALE 93

FOR FARM LUMBERING USE "AMERICAN" PORTABLE SAWMILLS. Carried in Stock by HIGGINS MACHINERY COMPANY, 312 1st ave. So., Seattle. Write for catalog.

FOR SALE—HOLLEY HOLT HARVESter, in good shape. Cut 1600 acres. Address O'Brien Bros., Wilbur, Wash.

### AUTOMOBILES 114

INLAND EMPIRE HEADQUARTERS FOR used cars, trucks, delivery cars, trailers, and tractors. Write us particulars of what you want to buy or sell of any late make or model of motor vehicle. Our latest list of used cars, trucks, etc., mailed on request. Headquarters for transients. Fireproof garage. Open day and night.
SPOKANE AUTO MARKET,
313-15-17 W. SPRAGUE AVE,
SPOKANE, WASH.

FORDS CAN BURN HALF COAL OIL, ALL distillate, or cheapest gasoline, using our 1918 Carburetor; 34 miles per gallon guaranteed; easy starting; great power increase; attach it yourself; big profit selling for us; 30 days' trial; money back guaranteed; styles to fit any automobile. Air-Friction Carburetor Company, 321 Madison st., Dayton, Ohio.

### STOVE & FURNACE REPAIRS 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

### HARES AND RABBITS 173

"A FORTUNE IN RABBITS"—HAVE raised the price. We will pay to $8 per pair. Want you to raise them for us. Send stamp for particulars. H. E. Gibson Co., Arcadia, Calif.

### POULTRY 174

BABY CHICKS, WHITE LEGHORNS, CUSTomers say they are "husky," "lively," "vigorous," healthy," "strong," "hard to beat," "thrifty," "great layers." Write at once. Free catalogue. Freshlaid Farm, Colfax, Wash.

### LIVE STOCK 177

BERKSHIRE SPRING PIGS OF CHAMpionship breeding for sale at reasonable prices. Send for circular giving description and price. R. W. King, Sweetwater, Idaho.

FOR SALE—SHORTHORN BULL, CRYStal Boy, age 7; weight 2000 lbs.; red; dehorned. Immediate sale, $200, at Pullman or Wawawai. A. S. Ford, Pullman, Wn.

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EIGHT SERVICEABLE SHORTHORN bulls for sale; some carry large per cent of Sultan blood. H. J. Cortner, Hagerman, Idaho.

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PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

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### FARM LANDS—FOR SALE 651

MR. FARMER AND INVESTOR, INVESTIGATE THIS PROPERTY.
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Nine hundred acres oats.
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One hundred acres timothy.
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Buildings valued at $3000; fifteen miles wire fence; two wells and running water; schoolhouse on property; three and half miles from two stations; twenty-four miles from Calgary, Alberta. Splendid neighborhood. Price fifty-five dollars per acre, including the crop, which is valued at fifty thousand dollars net. Terms, $35,000 cash, balance arranged 6 per cent. Arrangements might be made to use the machinery. Write or wire W. M. Gilfoy, 713 Herald building, Calgary, Alta., Canada.

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Here's an excellent proposition:
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1280 acres, 11 miles south of Wilson Creek, Grant county, Washington, near Lincoln county line; 30 per cent tillable; good, rich soil; lots of water; balance bunchgrass pasture; all fenced; no buildings. Price $7 per acre. Will take up to 50 per cent in trade, balance easy terms. Would make a fine diversified farm.
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FOR SALE — ALFALFA, WHEAT AND stock farms. If you want good, well-improved, irrigated farms at a price that will pay for itself in two crops, write me. John Hardwick Realty Co., Vale, Ore.

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FOR HAY, GRAIN OR STOCK RANCHES in famous Rosebud county, eighty acres to twenty thousand acres. Write Rosebud Realty Co., Rosebud, Mont.

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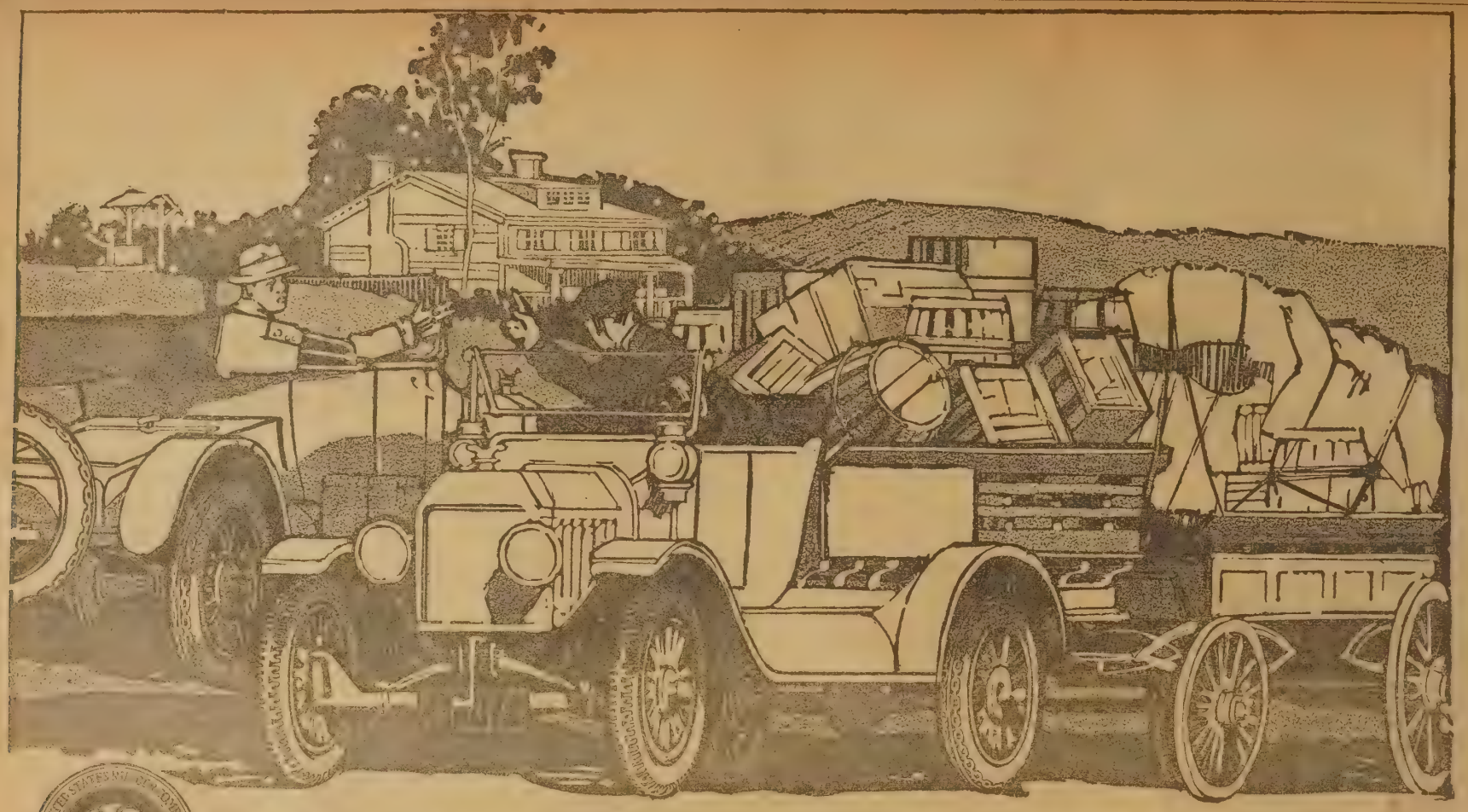
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Profitable farming has found a wonderful aid in motor transportation.

Power-driven vehicles on rubber tires have greatly widened the possible market that can be reached from any given point.

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There is a United States Tire scientifically built to meet every condition of service.

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# THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOC

VOL. XLI. NO. 27. JULY 4, 1918. ** WEEKLY.




**July 4, 1776**
For American Independence
**July 4, 1918**
For World-Wide Freedom

# Heavy Crop of Alfalfa

## Yield About Five to Eight Tons Per Acre in the Moses Lake District—Saving Factor to Dry Land Farmer




NEPPEL, Grant County, Wash., June 25.—Our principal crop here this year is alfalfa, and while a backward spring delayed [illegible] now being ha[illegible]e. This is a sa[illegible] farmer wh[illegible] wheat and is a [illegible] stock. [illegible] wheat farmers must depend on the alfalfa producers as never before to help carry them through this year, and is proving a great boon to them. While alfalfa is selling at $18, loose, it is costing $9 per acre or better to water it, and taxes and labor, $6 per acre. The yield will be about five to eight tons per acre. To this must be added the cost of handling crop, at whatever wages are paid, usually $3.50 and board is paid help in haying this season. With a scarcity of help at present, the short wheat crop may turn more help to the hay fields a little later. Practically all alfalfa produced will be consumed by Big Bend wheat farmers this season and none will be shipped to Coast points as formerly. It is hard to get machinery and supplies, but quite a number of combines have been set up ready for harvest recently, and this will save labor that is scarce, for that purpose. The fruit situation is not worrying the local producer as there is a very light crop and but few fruit boxes will be needed, as local people throughout the Big Bend are sure to consume the entire crop. The condition of the immediate community is showing the result of increased alfalfa planting and is a sure source of revenue, in a variety of ways.

MARTIN PENHALLICK.

### Crop Yield Light.

SPOKANE, Spokane County, Wash., June 19.—It looks as if the crops would be as short or shorter than last year. However, the chances are that rain may save all the later-planted crops of peas and make a better crop than some of those harvested last year. Because of the prospects of a small crop, farmers are not much aroused over the harvesting problem. Plans are under way whereby a sufficient number of men may be found to handle the crop even though it turn out far better than is at present indicated, by bringing in men from the timber who ordinarily take part in the harvest and by securing men from the various public works wherever it is possible, and by using high school boys wherever they are fitted to work in the harvest fields. There is an adequate supply of machinery and plenty of equipment to handle the crop during threshing and harvesting time. Several of the dairy producers who experienced a short crop last season were influenced to erect a silo and where these were erected and filled much praise has been received from the men as a result of their first experience with this kind of feed. Plans have been worked out now for the building of an all-wood silo, including the continuous wooden hoops instead of those of iron. Such silos would cost at retail prices: 8x24 feet, $98.25; 10x30 feet, $137.71; 12x30 feet, $161.01.

Men in the deferred classes have signified their intention to do their share on the farms in helping to raise more pork by agreeing to get additional brood sows during the late summer and fall. As a result of the campaign put on for this purpose there are already calls for 75 brood sows and there is an equal demand for help in conserving the feed for the greatest production from young men who are handling from five to 20 head of cattle. The method that will be used in helping the latter class will be that of encouraging them to build silos.

J. R. SHINN.

### Crops Will Be Lighter.

OMAK, Okanogan County, Wash., June 22.—The principal crop of this section is apples. Compared with last year the yield will be much lighter. It is estimated that the market value will be above that of last year. The cost of production will be nearly the same as last year. There will not be much wheat harvested in this section on account of drouth. Most all crops on the uplands will be a failure. The hay crop will be very short, not enough to winter the stock. There is not much shortage in help so far. There is no shortage in machinery or supplies for handling the coming crop. Our greatest handicap this season is shortage of water and the project managers are doing everything possible in the way of pumping to make up for lack of natural gravity water.

J. O. WOODS.

### Count on Apples and Alfalfa.

PROSSER, Benton County, Wash., June 23.—The weather is dry and hot. The wheat is burning badly. The principal crops in this community are fruit and alfalfa in the valley and wheat on the hills. Apples are all we can count on in the fruit line, as most all of the other fruit froze last spring. The first crop of alfalfa was light and most all in the stack. The second crop is coming along in good shape, and this hot weather makes it jump. The farmers are offered $16 loose and $20 baled. It costs $3 per ton to bale it and from $1 to $2 to get it to town. Wages for haying is $4 and board included, and $8 per day for man and team. Rye harvest begins the 24th of June and wheat harvest will begin about two weeks later. I think there will be enough men and machinery in this community to handle all crops in good shape. I would recommend as a general measure to improve conditions in this community to have all idle lands farmed either in wheat or corn.

G. W. WILGUS.

### Cutting in Progress.

CENTERVILLE, Klickitat County, Wash., June 24.—Our principal crop here is winter wheat and now this year it is spring wheat on account of the loss of so much of the winter wheat. Present indications point to not more than half the usual crop. In some places the hay cutting is in progress, some fields being very good and some very poor, with the average condition a good deal better in the last week. The spring grain is looking

(Continued on page twelve.)





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To make into beef, fats, hides.

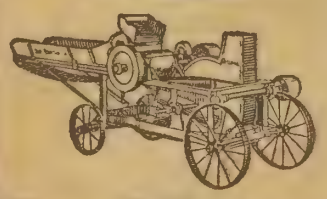
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# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 27 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF July 4, 1918

# Profiteering on Tremendous Scale

## *Meat Packers and Flour Millers Stand Foremost in Big Profit Grab*

**According to an Associated Press dispatch from Washington profiteering on a tremendous scale in virtually all the commodities of life was reported to the senate Saturday, June 29, by the Federal Trade Commission as the result of an exhaustive investigation. "Inordinate greed and barefaced fraud," as well as "war pressure for heavy production," the commission reported as the causes.**

**FEDERAL TRADE COMMISSION**

**The federal trade commission is composed of five commissioners appointed by the president. Not more than three of the commissioners can be members of the same political party. The principal office of the commission is in Washington, D. C., but it may meet and exercise all its powers at any other place. The commission may, by one or more of its members, or by such examiners as it may designate, prosecute any inquiry necessary to its duties in any part of the United States. Section 5 provides: "That unfair methods of competition in commerce are declared unlawful. The commission is empowered and directed to prevent persons, partnerships or corporations, except banks and common carriers subject to the acts to regulate commerce, from using unfair methods of competition in commerce." The federal trade commission is composed of William J. Harris, chairman; Joseph E. Davis, William B. Colver, John Franklin Fort and Victor Murdock. Leonidas L. Bracken is secretary.**

The federal trade commission further reports that the reappraisements of properties were made by great concerns when it became evident that the government was about to fix prices on a basis of return on investment, and salaries, allowances and expenses were in many instances padded to show increased costs of conducting business.

The outstanding feature of its investigation, the commission reported, was the evidence of a tendency to increase and maintain prices against the forces of competition.

Of all the big profits disclosed by the investigation the report said the profits of the meat packers and those allied with them and by the flour millers, stand foremost, despite the fixing of prices by the government.

**Allege Packers Disregard Law.**

Manipulations of the market by the five great packers—Armour, Swift, Morris, Wilson and Cudahy—the commission asserts, "embrace every device that is useful to them without regard to law."

The report charges that the five concerns have monopolistic control of the meat industry and "are reaching for like domination in other products."

During 1915, 1916 and 1917, the report said, these companies "pocketed" $140,000,000.

"The experience with steel, flour and coal," says the report, referring to price fixing, shows that a high stimulating fixed price, while stabilizing an ascending market, produces an economic situation which is fraught with hardship to the consuming public and with ultimate peril to the high cost companies through increasing power of their low cost competitors."

Where the government has fixed prices on the basis of fair return on net investment, the report hints at padded depreciations, increased salaries of officials, new construction charged off as repairs, fictitious values on raw materials and manipulated inventories.

Illustrating high remunerations charged off to expense accounts the report cites the following payments shown to officials of the American Metal company of New York, which deals chiefly in zinc:

B. Hochschild, chairman of the board, $179,663.

C. M. Loeb, president, $364,326.

Otto Sussman, vice president, $221,596.

J. Loeb, vice president, $147,930.

Sol Roos, manager, St. Louis, $148,530.

M. Schott, manager, Denver, $136,533.

In the steel industry, the report says, profits increased from 4.7 per cent in 1912, to more than 24 per cent in 1917. One of the smaller mills showed a profit of more than 300 per cent.

In the meat industry, the report says, Morris & Co. realized more than 263 per cent on $3,000,000 of capital stock outstanding and during 1916 Armour & Co., raised their capital stock from $20,000,000 to $100,000,000, "without receiving a dollar more in cash."

Independent packers meanwhile, in 1914, 1915 and 1916, earned a higher rate of profit than the large concerns.

In the leather industry the profits of one concern jumped from $655,000 in 1914 to $3,576,000 in 1917. The shoe business, meanwhile, showed large profits and the report says "it appears the retailer has profited more in proportion than the wholesaler."

To show the manner in which it is charged big concerns reappraised their assets when the government price-fixing appeared imminent, the commission included in its report a copy of a letter in which it was proposed by Swift & Co. to reappraise six tanning companies in which it owns 50 per cent.

"I approve if done quietly and promptly," was the memorandum Edward T. Swift placed upon the recommendation.

In the flour industry, the report says, the millers of 1917 will show a profit of 52 cents a barrel, or nearly 38 per cent, on the investment. One mill shows a profit of $2 a barrel. Despite the fact that the food administration succeeded in reducing profits, they still were twice as high in 1917 as in previous years.

The report covers many principal basic industries and makes much the same charges as to each.

The senate directed the commission to make the investigation and report so it could consider legislation to reach the practices disclosed.

The commission also found that large margins of profit had been made in the mining industries despite government price fixing. In the oil country large profits are now being made in the fuel oil and gasoline, the industry being one where the law of supply and demand still operates. Trade practices contributing, in addition to profits, to higher prices to consumers are noted, as failure to ship goods on a rising market or refusal to accept goods on a falling market, commercial bribery and the tendency of manufacturers to maintain a resale price.

**Retort by Packers.**

Sharp retorts were made at Chicago by representatives of Armour & Co., Morris & Co., and Swift & Co., denying charges of profiteering made in the report of the federal trade commission.

Flour millers who made excess profits during the last fiscal year, as charged by the federal trade commission, must return the amount of such profits to the government in the form of milled flour, under regulations issued by Food Administrator Herbert Hoover.

The federal trade commission charged that the millers had made a profit of 45 cents a barrel on flour, despite the food administration's regulations limiting the differential to 25 cents. It develops that the commission's report was anticipated, as the administration's regulations were sent out last June 17. Millers whose profits at the close of the fiscal year, June 30, are in excess of the maximum permitted are required to credit the amount of the excess to the food administration to be liquidated by flour to be sold to the army, navy, marine corps and the food administration's grain corporation in New York $1 a barrel.

# Northwest Wheat Stays at $2.20

M. H. Houser, representing the grain buying corporation of the national food administration in the northwest, announces the receipt of information from New York that the price of $2.20 a bushel for wheat at such northwest terminals as Portland, Tacoma and Seattle will remain in effect. This price was agreed upon some time ago, before the recent increase in freight rates. This rate increase amounts to 25 per cent above the former rate where the total increase will not exceed 6 cents per 100 pounds. On wheat from inland points to northwest coast terminals the increase averages something like 2 1-2 cents a bushel.

In commenting upon the information from New York Mr. Houser said:

"With the establishment of the $2.20 basis for the Pacific coast the farmers are given all and a little more than they had asked for and been promised.

"Figuring the last spring basic price at $2.30 at New York and $3.50 per ton freight and the loading charges here and the unoading on the Atlantic coast would leave a net price of $2.17 per bushel.

"On account of the submarine activity and other unforeseen obstacles that have arisen it is more than likely the shipping board will be compelled to readjust their wheat rate of $3.50 per ton. Under these war conditions, it goes without saying that it is difficult to anticipate changed conditions. With our speeded-up shipbuilding program here in the northwest the larger part of our surplus should be afloat the first of the year."

While Mr. Houser's statements are accurate there remains the question, as suggested in last week's issue of this paper, whether or not, if middle western and eastern prices are increased to meet the increased freight rate, a corresponding increase should not be made in the northwest. Whether the $3.50 a ton rate by ship to the Atlantic coast is readjusted or not, it is evident that the rate of something like 9 1-2 cents a bushel on an average by rail from inland northwestern shipping points to the northwest terminals has been readjusted to the extent of about 2 1-2 cents upward per bushel.

It is hardly believed by producers and dealers in the northwest that the matter is finally settled. It does appear certain, however, that the farmers will receive at least $2.20 a bushel for their first grade wheat at Coast terminals.

The Associated Press, in a dispatch from New York, makes the following statement concerning the wheat price decision:

New wheat prices, necessitated by advanced freight rates, were announced in New York Sunday night by the food administration grain corporation. It was stated that a minimum

(Continued on page twenty-eight.)

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# Need a Standard

## Potato Marketing Requires It

When a farmer calls on a potato dealer, either by phone or in person, and enquires concerning the sale of potatoes, the first question the dealer asks is "What kind of potatoes have you?" Under the present lack of potato standards the farmer will necessarily be compelled to answer, "Good potatoes" or "medium potatoes" or some other more or less indefinite class of potatoes.

George J. Cannon, widely known potato grower of the Spokane, district, though he himself grows potatoes only for seed, is an earnest advocate of a national potato standardization law which would enable the grower of potatoes to reply to the dealer by telling him, "I have so many sacks of No. 1, so many sacks of No. 2," and so on. Mr. Cannon argues that under the present system it is not only a difficult matter for local dealers to purchase from local producers, but that it is almost impossible to deal satisfactorily between more widely separated points. A potato grower who wishes to ship to any point somewhat distant must ship in a majority of cases subject to inspection upon arrival and he, therefore, does not know what his potatoes are going to bring him until they are practically beyond his control.

If, however, there were a recognized legal potato standard, prices could be quoted upon potatoes the same as upon wheat and the dealer could make a specific offer without having seen the potatoes. The farmer, knowing the exact grade of his product, could accept or reject the offer before shipment.

Mr. Cannon says that marked progress in the standards of potato grades has been made as a result of the efforts of the American Potato association. The United States department of agriculture's bureau of markets has recommended a system of potato grading for use throughout the entire country and while a number of states have informally approved the system there is yet a lack of legality and national coordination. Mr. Cannon believes that the standardization law should be a national one, built up in a general way as is the national grain standards act now being put into effect throughout the United States.

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THE WASHINGTON FARMER

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## Germany's Hopes Go Glimmering

Thanks to the American farmer's response to his country's call and the increasing throttling of the U-boat campaign, Germany's hopes of starving England have gone glimmering.

At least one hog out of four raised in America this summer is being sent to the allies.

Shipments of meat are going to the allies and to our soldiers in France at the rate of 15,000 pounds a minute during the 10-hour day at eastern ports. That means 9,000,000 pounds a day.

Last month the British government ordered 250,000,000 pounds of meat to be delivered in three weeks. The final shipments have just been made—well within the time limit.

As a result of this activity in America, the British food ministry has increased the ham and bacon ration, and the London Times, commenting on the increased allowance, declares that the increase was made possible by large shipments of bacon and hams from the United States.

"It may be added," says the Times, "that the present excellent position of our frozen meat supplies is due almost entirely to the self-sacrifice shown by the people of the United States in responding to the appeals for voluntary meatless days and releasing meat for export to this country."

As the conflict progresses we see increasing proofs of the soundness of Mr. Hoover's early-day assertion that "food will win the war." The consumers are deserving of full credit for their patriotic denials, but don't overlook the fact that it is the American farmer who is delivering the product, and working early and late, with his patriotic wife and children, to do it.

## Optimism Is Dangerous

The allies, including those of us who are at home in America, have a right to feel thrills of joy and confidence when the enemy assaults are checked or victories over them won. But there is a grave danger that confidence may take the form of overoptimism.

It would be a serious blow to the allied cause for the people at home to relax for one day their efforts to support the armies on the front. It is as essential that the allied power both at home and on the battlefield maintain its maximum power every day and hour that the enemy is weakening as when the enemy is at his strongest. To be able to strike with force when the opponent is least prepared to defend himself is a great art of battle.

Let no one of us relax. Let us work and save and think for victory every hour until the unspeakable Huns are driven back onto their own soil and are stripped of all their power for further plundering of the world.

## The Spirit of 1776

When, in the course of human events, it becomes necessary for a peaceful and liberty-loving people to turn aside from their usual pursuits and take up arms against a foreign foe it is fitting that a statement be made of the causes that impelled them to this action.

The history of the present Emperor of Germany is a history of despotic usurpations of the minds of his people, all having in direct object the establishment of an absolute tyranny over the nations of the world. The enemy of America is the enemy of mankind.

He has ruled his own people with a rod of iron and through years of educational misdirection has robbed them of their sense of honor and right.

He has plotted the destruction of peoples and all things that stand in the way of his own unparalleled ambition.

He has forced an unspeakably terrible war upon peaceful and unwilling peoples to gratify his own lust for power.

He has ravaged inoffensive Belgium and Serbia, and dragged their people into slavery.

He has violated northern France and pillaged Russia.

He has ravished women, maimed helpless children and crucified husbands and fathers.

He has starved and tortured his prisoners of war and wantonly spread hideous diseases among the peoples of his enemies.

He has plundered the seas.

He has sent to their deaths without warning and without trace thousands of non-combatants and neutrals engaged in their rightful occupations and travel at sea.

He has disregarded as a scrap of paper all law, both of man and God, and has blasphemously linked himself with the Maker of men and the Ruler of their destinies as His chosen representative on earth.

He has, with no purpose other than the satiating of his own fiendish passions, brought to the world more sorrow and agony and set at work more machinery of evil to run through centuries to come than all the despots and tyrants of previous ages.

Therefore, remembering the holy purposes that actuated our forebears when, one hundred and forty-four years ago, they pledged their all to the maintenance of justice and liberty in America, do we, their children, one hundred million strong, setting aside all selfish purpose and appealing to the Supreme Judge of the world for the rectitude of our intentions and acts, pledge our lives, our fortunes and our sacred honor to the task of conquering this arch-enemy of humanity and establishing justice and liberty and peace throughout the stricken world.

## Beneficial Use of Land and Water

England is being forced to say to its owners of large estates, "You can not hold the land out of use for hunting grounds, parks and pastures for fancy herds of stock when we need it to grow food for our soldiers and to keep millions of our citizens from starving."

Thus the law of necessity takes precedence over the law of private ownership, and profitable use over a man's right to hold a thing of value to the public, out of use.

We have the same questions in the irrigable sections of the northwest on the question of water rights. Whether under the old "riparian rights law" a man can hold water out of use, when thousands of people would be benefited by its use, has been a perplexing question in the courts, and a subject of excitement for the legislatures of Washington, Oregon and Idaho and other states. Oregon and Idaho have decided the question in favor of the people, and against the riparian owners. The case was appealed from Oregon, and the supreme court confirmed the decision against the monopolizers of water, and in favor of the law of the "beneficial use of water."

The last legislature of the state of Washington modified its former laws, but they are not yet satisfactory to the irrigators, at the same time they cause considerable irritation to the "riparian rights owners."

The time is coming when the demands of those who claim "special privileges" will give place to the "greatest good to the greatest number" of toiling food producers. G. L.

## Mercy and Discipline

Two boys, sons of American mothers, serving their country and the civilized world behind the battle lines in France, fell asleep while on sentry duty. Military regulations required that they be sentenced to death. Their case was taken to the president. He pardoned them. But with his pardon he issued a statement emphasizing the necessity of rigorous discipline in the army, pointing out that the safety of the army and of the country that they represent rests in the hands of its sentinels and guards when on duty. Discipline did not suffer with the pardoning of the two boys. They are now back in their companies serving their country loyally. Their comrades will be no less loyal, because discipline in the American army is elastic enough to permit of the doing of justice.

## The Master Man

A master man is not one who drives other men with whip and lash, or with guns and bayonets, or any other physical force.

He is a man who is master of his own powers, a master builder of character. He looks out upon the earth with its plants, animals and human beings, and sees the places they were designed to fill, and probably relates himself to them. He studies the laws that control, and so orders his life to harmonize with them. He sees the relations of things to one another, and the relations they all sustain to the universal. He sees life, intelligence and matter in their true relations, interdependent, interactive, coeternal. Nothing that has bounds satisfies him, and he believes he has all eternity to pursue the work necessary to his development and completed manhood.

## We Killed a Pig

The pig squealed.

The sow and twelve other hogs came to the scene, boo-hooing with wide-open mouths as if they would devour us.

The pig quit squealing, died, and we gave the hogs some slop as a peace offering.

As soon as their attention was diverted from the dead pig toward the slop, they seemed to have forgotten their dead comrade. They ate the slop, and by this time we had the carcass of the dead animal carted away into a shed where we had prepared to scald him. The other hogs sucked the blood of the dead pig, and went away as quietly as if nothing had occurred.

All fines, license fees, or taxes, paid by destructive industries, for the privilege of conducting a business that demoralizes, impoverishes or kills human beings, is like slop given to hogs to get them to keep quiet, while others of the social group are being murdered.

WHILE there are undoubtedly many curiosity seekers who haunt the bulletin boards in public employment offices, the fact should be kept in mind that not every man in overalls who inspects the board and who refuses repeated offers of work is really a slacker. Some of these people are farmers, who are themselves looking for help.

WITH our modern discoveries in utilizing ocean products, and our modern methods of navigation, we will be able to add marvelously from these sources to the world's food supply.

IN normal times it may be a good idea sometimes to agree to disagree, but in war times there is only one thing for everybody to do, and that is to agree TO AGREE.

CASH superiority has its limitations; the more you ignore those limitations the bigger the hold they have upon you.

FOR the land's sake, don't think that you can keep on forever taking wheat and corn and one thing and another out of it without putting anything back.

JOB himself had nothing on the setting hen for patience. The only time she becomes impatient is when some one becomes impatient with her patience.

"CAN that stuff" may be slang, but it is mighty good advice just the same when applied to peas and beans and corn and fruit and the like.

FAILURE to conserve wheat in America is equivalent to adding regiments of soldiers to the ranks of Germany.

THERE never was a time when simple efficiency in every act was more vital than it is now.

# Big German Offensive Coming?

## *Uncertainty of Operations Marks Situation on Front*

At this writing uncertainty seems to be the outstanding feature of the war news. What is coming next is the uppermost question. It appears from the reports from Europe that a resumption of the offensive by the Germans is the most probable event for the near future, but this is largely conjectural. It has now been nearly a month since the last big drive was checked. It is not safe to believe that the defensive power of the allied armies was the only or perhaps the principal factor in checking it. It is safer to figure that, though strongly opposed by the French, British and American forces, the German war lords have delayed with a view to putting their forces in the best possible shape for a resumption of the offensive at the most appropriate time.

In the meantime, the allies have not been idle. They have been making local attacks and defending themselves against local attacks by the Germans. In many instances the reports indicate that the allies have greatly improved their positions and strengthened themselves for whatever offensive the enemy may launch. It is doubtful if any British, French or American troops have been sent to Italy since the cessation of the last German drive. It is certain, as officially announced, that the American forces on the French front have been increased. Allied leaders, while not deprecating the power of the German arms, express growing optimism. General March, American chief of staff in Washington, D. C., says that the position of the allies is the most satisfactory it has been in recent months.

### Every Day of Delay Aids the Allies.

Every day that passes without a gain by the enemy increases the certainty of allied victory. It is but a question of time, unless defeat comes before sufficient time passes, until the allied armies will be sufficiently reenforced by U. S. soldiers to make an overwhelming force against Germany. Germany can maintain her present strength possibly for a long time, barring internal troubles such as might arise out of food shortage or breakdown of morale. But she can not build up a much greater, if any greater, fighting force than she has now. She has no place to go to get it. On the other hand, the allies have America, with 100,000,000 people. America is in to win. America will send every man that is needed, even though that number be 10,000,000 or, if the war lasts several years, twice that many. Give America time to mobilize her men and resources and she alone could defeat Germany. To give her time is just what the French and British and Italians and Belgians are striving to do. They are standing up before the most tremendous odds, giving ground where necessary to conserve man power, sacrificing their lives and their homes and everything but the barest necessities of civil life—doing all this while over here we prepare. It has been a death struggle. Germany almost won. If America had been a few months later Germany would have won! She can do awful damage yet. She still menaces Paris and the English channel ports. She still has it in her power to wreak horrible devastation in France, and we may be sure she will wreak every iota of it. It is reasonable to expect the greatest offensive of which Germany is capable. Nobody realizes better than the world-hated kaiser and his war counselors that it is this summer or never for their boasted world conquest. But if she loses her 1918 offensives she will stil retain defensive powers which, if used to the utmost before peace terms are agreed upon, will enable her to withstand the allies, America included, for a long time, possibly a few years. This country must convert all her energy into war activities. Every delay is a delay in the ending of the war. Every delay in this country costs a thousand lives in Europe, or even tens of thousands of lives, and many of them will be American boys.

### American Force in France Increases.

At the rate of speed in which U. S. soldiers are being sent to France, it is calculated by the war department that there will be 1,450,000 trained men from this country on European soil some time in August. Official statements indicate that there are approximately a million men there at the present time, and that they are being transported at the rate of something like 100,000 a week. Legislation in the national capitol continues to take form looking toward the building up of the greatest national army possible to be placed in Europe at the earliest date possible, supported by the maximum supplies and military equipment that it is possible for the industry of America to produce and transport.

### American Soldiers Are in Italy.

General March, chief of staff of the war department, has announced that American troops have been landed in Italy. They are not troops sent from France by General Pershing, as has been rumored, but are soldiers transported directly from the United States to Italy to begin training there for cooperation with the Italian forces against the Austrians. General March has made no announcement as to the number of the troops sent to Italy, nor has he specifically stated what lines of activities they will follow. It is understood, however, that they come under the head of special organizations.

### Wilson Favors Universal Training.

Reports from Washington indicate that President Wilson is working on a plan for the universal military training of the able-bodied men of the country following the conclusion of the present war. The reports say that he is convinced that military training is necessary to have the nation ready for the disturbed conditions that are expected to follow the end of the war. This development is interesting in view of the opinion that the president has heretofore held, an opinion which enabled him to stand out against the military preparedness element in the nation for the first three years of the war before becoming convinced that this country must prepare to take an active part in the conflict. Some of the commentators in Washington express the opinion that it is the working out of the broader plan of universal military service that is causing the president to withhold his indorsement of the proposed extension of the ages under the present military draft law.

### Austria May Be Out Indefinitely.

The continuance in Austria of revolutionary actions on the part of the working men and even on the part of the soldiers themselves has led some commentators to express the opinion that Austria is out of the war so far as field activity is concerned for several months at the least. One of the latest reports tell of a mutiny among one division of the army resulting in the sentencing to death of 2000 Austrian soldiers. Food riots are aso reported from many sections, and it is reported that German troops have been imported for the purpose of enforcing order. So far as the outside world is able to know the facts the actual food situation in Austria remains conjectural, though it is certain that the condition is grave.

It is not reasonable, however, to suppose that Austria is out of the fight for even a few months. The Italians are expecting a resumption of the offensive by the Austrians, probably this time in the mountainous region rather than along the river Piave.

### France Will Celebrate July 4.

With approximately a million American men on the soil of Europe the observation of this country's birthday is an international affair this year. In fact, French officials have virtually declared July 4 a national holiday in order that the people of that country may cooperate with the Americans in its observation. The French chamber of deputies, which corresponds in a way to the house of representatives in congress in this country, has gone informally on record in favor of the observation of the day. One of the leaders of that body expressed the sentiments of the French people in the following words in an address before the house of deputies:

"It is the duty of France to tell her American friends: 'You celebrate your independence day on July the Fourth. Henceforth we shall likewise celebrate that date as a token of our fraternal and indissoluble friendship.'"

### Ten Thousand American Casualties.

Casualties in the American expeditionary forces thus far reported total 10,383. Of this number 9131 were in the army and 1252 in the marine corps.

Army casualties are summarized as follows:

| | |
|---|---|
| Killed in action (including 291 lost at sea) | 1491 |
| Died of wounds | 479 |
| Died of disease | 1287 |
| Died of accident and other causes | 465 |
| Wounded in action | 5024 |
| Missing in action (including prisoners) | 385 |

The summary of casualties among the marines follows:

Deaths, 407; wounded, 842; in hands of the enemy, 1; missing, 2.

### Younger Draft Men Are Numbered.

Nearly 800,000 men who have reached the age of 21 years since June 5, 1917, were formally added to the national draft army last Thursday when they registered in their home precincts throughout the entire nation. The numbering was done and the numbers drawn in the same manner as was done a year ago, when the men from the age of 21 to 31 were registered and numbered. No definite information is available as to the actual number of men in this drawing who will be acceptable for service in the army, but it is assumed that there will be between a quarter of a million and half a million men called and accepted.

### Compulsory Production in Switzerland.

A recent Swiss decree provides for compulsory crop production by all land owners up to the 1914 acreage as a minimum. All grain growers who fail to deliver the required amount into the hands of the authorities must pay fourfold the maximum price as indemnity for their deficiency. The fact that Switzerland is a republic makes this decree of unusual interest.

### Get a Farm Service Flag.

The man, woman, boy or girl who stays at home and works hard to produce necessaries for the soldiers in Europe are entitled to real war service recognition. That is the idea back of the Washington Farmers farm service war flag. It is pennant-shaped, made of the good old red, white and blue, and has a star representing the producing farm home. Small stars are added to represent each worker of that home.

.....

**Convenient Order Blank.**

THE WASHINGTON FARMER, ————1918.

Review Building, Spokane, Wash.

Enclosed find five cents (5c), for which please send me a Farm War Service Flag (printed on enamel paper) with ..... extra small stars for farm workers.

Name .....

R. F. D. ..... Postoffice .....

Box ..... State .....

## *Washington Gleanings*

The Farmers' Mutual Creamery at Tonasket recently suffered $1000 damage from fire.

A. Alexander & Co. of Wilbur have bought the flour mill at Hartline for a consideration of $87,000.

The Whatcom county Old Settlers' association has set August 8-10 as the days for their annual picnic at Ferndale.

W. J. Olwell, for 27 years manager of the Big Bend Milling company, at Davenport, will be succeeded August 1 by Scott V. Davis.

The Chehalis city commissioners have passed an ordinance forbidding the dogs from running at large at any time or place in the city.

The Fisher grange, east of Vancouver, Wash., has gone on record as opposed to affiliating with any political league or party, whatsoever.

The Sprague council has passed a resolution forbidding the sale or explosion of fireworks in the city limits during the duration of the war.

Kit Ward of Centralia has purchased the Rush farm, located six miles south of Chehalis, for $11,000. Mr. Ward will conduct a modern dairy ranch.

A sheep-killing cougar measuring six and one-half feet in length was killed recently near Montesano, by A. B. Currie, who hunted the cougar down with dogs.

Clarence Davis has sold 200 acres from his Spring Valley stock farm at Goldendale to W. R. and J. T. Lamb for $8000. The Lamb brothers expect to raise registered brown Swiss cattle and Duroc-Jersey swine.

Effective June 15, the banks of the Spokane clearing house association voluntarily cut the charge of handling out-of-town checks from a flat charge of five cents per item to a minimum charge of three cents.

The great value of the dikes which protect 5000 acres of land in the vicinity of Kelso from overflow, has been proved during the recent freshet. Without the dikes the farmers would have lost thousands of dollars in crops.

Twenty employees men and women, of the First National bank of Yakima headed by W. L. Steinweg, president, went into the hayfield of E. Stott in the Moxee recently and shocked 27 acres of alfalfa in two and a half hours.

George E. Day, proprietor of the Spring Brook farm, at Toledo, is using green ferns to supplement the regular ration for his hogs. He discovered that hogs he kept in pens eat ravenously of green ferns and appear to thrive well on it.

Five valuable milch cows belonging to John Anderson, a pioneer farmer of the Kennedy Ford district, six miles east of Palouse City, were run over and killed by the eastbound passenger train on the Washington, Idaho & Montana railway.

The new $51,000-packing plant of the Peshastin Fruit Growers' association is rapidly nearing completion. The plant is modern in every way, and will be capable of packing 4000 boxes of apples per days, employing a force of 80 men during the busy season.

Lincoln county Chairman James S. Freece, assisted by J. R. Ward, has been organizing Boy Scout organizations at Almira, Wilbur, Sprague, Edwall, Davenport and Creston. A drive for funds will begin July 8 for the purpose of financing the county organization sufficiently to employ a scout commissioner.

Fire recently destroyed a large portion of the business district of Brewster. By strenuous work on the part of citizens the flames were checked with a loss of 10 buildings, aggregating nearly $100,000, with insurance amounting to about $20,000. This makes the fourth disastrous fire that has swept Brewster.

The dairy situation throughout the country is a vital one, and demands the consideration of the best minds in this industry. The price of milk and cream, the cost of feed and labor and other conditions threaten to reduce the milking herds of the country. Every effort should be made to prevent any decrease in first-class dairy stock. The war has reduced the herds of Europe, and this country will undoubtedly be called upon after the war to furnish much of the foundation stock for their rebuilding.

Threshermen throughout the entire grain-producing sections of the country are this season being organized as never before to eliminate waste of grain. It has been estimated that hundreds of thousands of bushels of grain have been wasted annually by various bits of negligence on the part of threshermen and the growers themselves. The cracking of grain is not only a loss to the farmer through reduction in price, but is an actual food loss to the world.

The milling division of the United States food administration has announced what it terms a fair price schedule governing flour and mixed feeds. The prices scheduled go into effect immediately at the mills throughout the entire country. The new rates, it is understood, are to be in effect until a permanent plan now being considered is formulated to regulate the milling of wheat of the 1918 crop. The schedule includes six districts, three on the eastern and three on the western coast. The following is the schedule as announced:

| | Flour Per Barrel. | Mixed Feed Per Ton. |
|---|---|---|
| Boston | $10.83 | $26.88 |
| New York | 10.77 | 26.59 |
| Philadelphia | 10.73 | 26.59 |
| San Francisco | 9.95 | 24.44 |
| Portland, Ore. | 9.95 | 24.44 |
| Seattle | 9.95 | 24.44 |

# For Our Returned Soldiers

## *To Provide Refuse Land Is Not the Thing*

By PAUL E. TRIEM.

"With the disappearance of free lands, which offered the only free road to financial independence in the country, the United States entered a new era," declared Dr. Elwood Mead, international authority on land settlement, speaking before the Washington state land settlement conference. The conference was held in Seattle, June 20 and 21, and was fortunate in securing for itself the leadership of men directly connected with various phases of community development and land settlement.

Among these leaders of thought and action Dr. Mead probably stood first, as his command of data on land settlement problems is derived from experience and study in many parts of the world. Not long ago many of the ideas he advanced would have been looked upon as radical, if not revolutionary. "The national menace of tenantry," as he phrased the present system of farm renting, and the evils of absentee ownership of large tracts of agricultural land were elements in the present unsatisfactory system directly attacked by the California expert. Speaking of one of the purposes of the conference, the providing of ways and means of putting returned soldiers on the land, he said:

"Refuse land is not what we want for our returned soldiers. We must buy land now in use, and in some way must strike at the national menace of tenantry. More than that, we must devise plans national in scope if we are to hope to secure federal assistance."

Credit beyond ordinary commercial credit, credit on character rather than on tangible securities, is one of the needs in solving this national problem, in Dr. Mead's opinion. In Australia, in New Zealand and in California some advance has been made toward a solution. In both of the two former governments the commonwealth as a whole stands back of a national policy, while in California the state has entered upon the role of country community builder. In every instance an effort has been made to secure the right sort of men for the farms, and the right sort of farms for the men. When to this selective activity is added the stabilizing of finance for the individual by the state, the main features of Dr. Mead's program have been covered.

Gordon C. Corbaley of the Seattle Chamber of Commerce and Commercial club brought vividly before the conference some of the less familiar conditions of the present industrial situation, and on the basis of these data made some startling predictions in regard to after-the-war business.

"After the war the governments of the world will have to continue to be in control of the industries of the world," declared Mr. Corbaley. "This great war machine can not be knocked to pieces overnight. I do not believe we are going back to pre-war conditions in your lifetime or in mine, and remember that when I speak of these vast problems which lie before the government I do not refer to any one in Washington—you and I are part of the government. A time has come when we will have to deal with our problems collectively."

The informal address delivered by Captain E. Jackson of Wenatchee was one of the unadvertised but impressive features of the program. Captain Jackson is connected with the Imperial Association for Disabled Officers, and, speaking from the standpoint of a direct knowledge of his subject, he told the delegates of the difficulties they would have to master in working out a practical plan for putting returned and disabled soldiers on the land. Declaring that "Germany has thought her problems out and knows just how she is going to face the terrific burdens which will come after the war," Captain Jackson paid his respects to the modern pension system.

"The world has got beyond the stage of pensions," the speaker declared. "It is all right to put them on paper, but when it comes to paying, the resources of the world will not suffice to do it."

Captain Jackson's substitute for pensions has already been tried out to a certain extent by England. Intensive training in more than 40 trades is available for returned British soldiers. Others are being put upon farms, this latter branch of the work up to this time being conducted largely by private enterprise. Two years' pensions will suffice to accomplish this practical purpose in the case of the average returned soldier, according to the speaker, and the supreme economic and personal wrong of pensioning a man for the remainder of his day is avoided.

Under the efficient direction of Commissioner E. F. Benson, the conference was divided into three groups, making it possible for the distinctive problems involved in the settlement of arid, swamp and logged-over lands to be considered without waste of time. The recommendations of these three sub-councils were taken in hand by a general resolutions committee, whose final report was adopted practically as presented. The resolutions placed the conference on record as favoring federal aid and direction in the matter of land settlement; a campaign of education, to be carried out through the publicity committee, designed to awaken the public to the need of a state and national land policy; and the preparation by the legislative committee of a legislative program for state and nation, these recommendations to be reported to the executive committee not later than December 1, 1918.

The personnel of the committees is as follows:

Resolutions: George W. Dilling, Seattle, chairman; Dr. O. L. Waller, Pullman; S. V. Mortland, Yakima; T. L. Greer, Sandpoint; Dr. Elwood Mead.

Publicity: Charles P. Norton, Seattle, chairman; T. B. Hill, Yakima; William H. Crawford, Poraland; C. A. Short, Bellingham; A. F. Marsh, Chehalis.

Legislation: Colonel Howard A. Hanson, Seattle, chairman; Clark V. Savidge, Olympia; R. Ensinger, Spokane; R. B. Williamson, Yakima; John A. Rea, Tacoma; John T. Condon, Seattle.

E. F. Benson was elected president; R. K. Tiffany, first vice president, in charge of the arid land section; W. A. Linklater, second vice president, in charge of the logged-off land section; F. W. Rader, third vice president, in charge of the swamp land section. Colonel Howard A. Hanson was chosen for secretary and treasurer.

The time and location of the next meeting will be announced later.

## May Float Irrigation Bonds.

A movement is under way in Lewis county looking toward the irrigation of what is known as Ford's Prairie and Waunch's Prairie with a system of ditches leading from the Skookumchuck river. A petition asking for a vote on the issuance of bonds for this purpose was circulated last year and the county commissioners are now being asked to call an election on the issuance of the bonds. It is estimated that the project would cost about $33 an acre and under present proposals the annual payment during the first 10 years would be fixed at about $1.80 per acre.

**Increase Wheat Acreage.**

In spite of scarcity of implements and shortage of farm labor, England, Scotland and Wales have all increased their acreage of wheat.

## To Sign Up 4000 Cows

Lewis county is rapidly forging to the head as one of the foremost dairy counties in the state. The newly organized county association is working, under the plan outlined by Asher Hobson, to sign up 4000 cows, at which time the organization will be completed so as to handle all the sales of its members. J. A. Scollard is chairman of the association and C. A. Giblin secretary.

The Chehalis District Cow Testing association must also be reckoned an important factor in the dairy development of the county. The officers are: J. C. Bush, president; H. Bouchard, vice president; F. M. Svinth, secretary-treasurer, and A. Adolphson and N. Hamilton, additional directors.

An additional indication of the increased interest in live stock matters taken by Lewis county farmers is seen in the number of fine cattle recently purchased. J. A. Scollard has a $2500 Aberdeen Angus bull and 10 purebred cows brought in from North Yakima. Bert Furrer and J. T. Alexander are going in for dual purpose Shorthorns, and have bought Foothills Archer, No. 609878, from the Ayers farm of Carleton, Ore., to head their herd. This bull is sired by Imperial Lad, who weighs over 4300 pounds, and has an unsurpassed producing record behind him on both sides.

M. P. Frame joined the better live stock movement in Lewis county by purchasing three Carnation Stock farms Holsteins—Segis Ormsby Fancy, No. 266384; Milk and Butter Belle, No. 282299, and Ollie Alexander Clothilde 2nd, No. 273882. These are all fine cows, Segis Ormsby in particular, a grand daughter of King Segis, being one of the finest heifers ever brought into the county.

P. E. T.

## Grain Saving

### Certificates for Threshermen

In recognition of pledges by patriotic threshermen to assist in preventing waste of grain during harvest and threshing operations, the U. S. food administration is now issuing membership certificates to those enrolled in this important conservation measure. Under this plan every thresherman will have an opportunity to take his place alongside other patriotic men who have put their business on an efficient war basis and are thus supporting the efforts of the government and the boys at the front to speedily win the war.

To secure one of these certificates, which is attractively printed in two colors and is suitable for posting on a threshing machine or for framing, a thresherman signs this pledge:

**"In order to be of service to my country in this time of need, particularly in its effort to avoid unnecessary waste of grain during harvest operations, I hereby accept membership in the United States food administration, pledging myself and such of my help as can be influenced in so far as my circumstances permit, to operate my threshing machine, so as to reduce the wastage of grain, and will go to my county grain threshing committee for assistance in the difficulties I may experience before permitting unnecessary wastage to occur."**

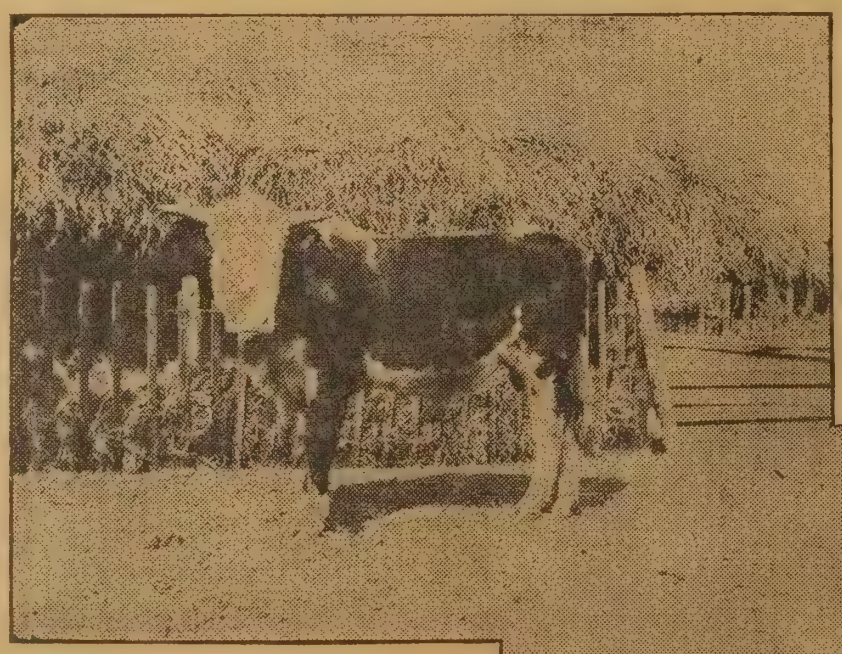
Any threshing machine operator who has not received a blank grain thresherman's pledge card is expected to apply for one immediately to the federal food administrator of his state either direct or through his county food administrator.

With the certificate goes the friendly desire of the food administration to aid in every possible way this work of conservation at its source. Such assistance has already taken the form of information on international food conditions, offers of mechanical aid by experts and arranging through other branches of the government for fuel, labor and other essentials.

**Wheat and Flour From Australia.**

Moderate shipments of wheat and flour are being made from Australia to the Pacific coast of the United States.

# Woman Turns Homestead Into Improved Stock Ranch





THESE two pictures were taken on the improved stock ranch of Mrs. R. E. Davie, near Bailey, in the Quincy Valley of Washington. The calf is a yearling Hereford and the two-year-old horses in the lower picture took the blue ribbon for the best matched team at a recent community fair.

Mrs. Davie took this land as a homestead in 1913 and now has made final proof. The land is nearly all in pasture. Mrs. Davie, with the help of her son, has been raising grade Herefords, but is gradually working into purebreds. She makes butter and sells some milk and cream.

The world war presents a most serious personal problem to Mrs. Davie. Her son is her hight-hand man in conducting the ranch. He is of draft age, and should he enter the military service of his country Mrs. Davie does not see how she could continue the operation of her farm, and says she sees no way but that of selling the place.

# Regulating the Flour Mills

## *Entirely Different Method Adopted for Coming Year*

The food administration's grain corporation has adopted an entirely different method of regulating the flour mills of the United States for the coming year.

Mills are now allowed to take a profit of 25 cents a barrel on flour sales, and also 50 cents a ton on feed sales, equivalent to about one and seven tenths cents per barrel of flour additional, or a total profit per barrel of 26.7 cents.

But some mills can grind flour much more economically than others, so under the present system there can be no close standardization of prices to consumers. A recent report of the federal trade commission pointed out that the present regulation of milers' profits at a fixed margin above cost has the inherent weakness of not encouraging efficiency in production and of affording unpatriotic millers temptation to dishonesty in cost accounting, difficult to detect or prevent.

The report added that consideration was then being given by the food administration to the improvement of the preesnt regulation of millers' profits in the light of experience already gained, and said it was the opinion of the federal trade commission that maximum prices of flour might be established which would cover the cost of wheat and all manufacturing, selling and general expenses, and in addition would give the miller a reasonable profit.

The food administration has adopted that recommendation and now announces that the 1918 wheat crop will be handled on a differential basis, effective July 1. One dolla rand 10 cents maximum differential a barrel between the price of wheat and the finished product will be allowed millers. No speculation in wheat or flour will be permitted.

This $1.10 differential will therefore cover all costs of manufacturing and selling and the miller's profit also. This is a considerable reduction as indicated by the federal trade commission's findings as to the average cost of flour milling in the United States in the season of 1916-17. According to that report cost items were as follows:

| | |
|---|---|
| Packages | 30 cents |
| Operating and repairs | 24 cents |
| General expenses | 13 cents |
| Selling expenses | 27 cents |
| Depreciation | 3 cents |
| Total cost | 97 cents |

Add to that the present profit allowance of 26.7 cents per barrel and a differential of $1.23.7 would be indicated, as against the $1.10 that the food administration now allows.

## WINS THRIFT STAMPS.

### Effie Lewis Wins in Contest.

Miss Effie Lewis of Colville has been awarded the one-dollar prize in thrift stamps for her letter entered in the recent historical contest of the Washington Farmer. She is a pupil of Miss Verle Hanna of school district No. 99.

The contest was for the best description in 200 words of any one of the historic incidents pictured in the frieze around the dome of the capitol in Washington. All the letters entered were so good it was hard to make a first choice, the following deserving special mention: Winnie Irene Thurman, Othello; Clifford Zimmerman, Leland, and Eugene Pollastrin, Pasco.

The prize letter was on "The Discovery of Gold in California." and follows:

**Discovery of Gold in California.**

In 1848 a mechanic was digging a mill race, in digging it he came upon some yellow particles in the sand, which he took to the owner of the mill, Mr. Sutter, who decided it was gold. This mill race was 100 miles northeast of San Francisco.

As the news spread, the "gold fever" raged, the men giving up their slow ways of making money, such as farming, clerking, herding, lumbering and milling, and went to digging gold. Even the soldiers deserted their posts of duty, vessels lost their crew before they had their cargo unloaded.

Within four months, 4000 people had gathered along the Sacramento river, digging gold with all sorts of implements, from a knife to a pick.

As the news of the discovery of gold spread, the rush to the gold fields was such as America had never seen before. Some of the people came around Cape Horn. Others crossed the mountains, while others crossed Panama. By the fall of 1849, California had a hardy population of 100,000 people who needed an orderly government as badly as they wanted gold. The slave states, which were so deeply interested in California's fate, had not sent many emigrants, and a constitution prohibiting slavery was adopted by an overwhelming majority. EFFIE LEWIS.

ENCLOSED please find three subscriptions for The Washington Farmer, for which please send me a Farm Service War Flag, 9x22, made of cotton felt, with six extra small stars, as we all work on the farm.

R. H. BARTLINE.
Kirkland, Wash.

## Farm Papers Are Praised.

G. A. Grist and Mrs. Grist of Yakima, who attended the state grange meeting at Walla Walla, are both believers in all the educational mediums which effect the farmer.

"The agricultural colleges are doing a big work, in discovering principles and working out methods along agricultural lines," declares Mr. Grist. "Much of this information would be locked up, however, were it not for the farm papers and the grange lecturers."

"And the grange women," added Mrs. Grist with a smile. "The men are the greatest hangers-back in the world—they think they can never take part in anything. If it weren't for the women, many of these social institutions wouldn't accomplish much. Yes, indeed, I believe in the farm papers. They are accomplishing a big work now, and I think they are getting better right along."

### Birmingham Gets Slot Machines

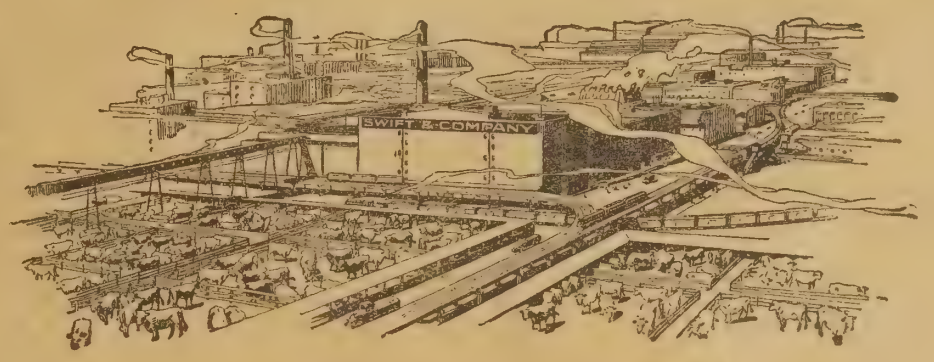
Nearly 90,000 penny-in-the-slot gas meters are used in the English city of Birmingham

## Children in Hop Fields.

S. N. Hill of Yakima, Wash., reports his 27 acres of sugar beets doing very well, the principle difficulty he has experienced being to get a good stand. Mr. Hill is also sticking with the hop crop. He has about 21 acres planted this year and states that aside from some difficulty in securing competent help, the prospects are good. Much of the work in the hop fields can be done by children, however, and this will make it possible, in all probability, to market the crop in good shape.

## Yakima Fruit Tree Census.

A Yakima county fruit tree census, recently completed by the county horticultural department, shows that the county now has 2,050,181 apple trees, 494,118 pear trees, 304,315 peach trees, 72,291 plum and prune trees, 38,103 cherry trees, 9026 apricots and 7378 miscellaneous trees, the grand total being 2,975,411. Winesaps are the favorite apple, there being 750,311 of those trees to 490,317 Jonahathans, the nearest competitor.


# A business that is as big as its job

KEEPING a nation of over 100 million people regularly supplied with meat and meat products is a big and complex job.

And a still bigger job when to it is added the needs of the American soldier here and in Europe and of the Allies as well.

It is a job of converting the live stock of the West into meat and meat products and distributing them in perfect condition over long distances to the consuming centers—the North, South, East, West and abroad.

A job of supplying with *unfailing regularity* products that in the main are perishable, in the exact qualities and quantities needed, to the smallest out-of-the-way village as well as to complex and congested metropolitan centers.

Only organizations like that of Swift & Company, with its highly-specialized methods of meat-dressing, its hundreds of branch-distributing houses, and its thousands of refrigerator cars, could have handled such a job efficiently and at a minimum of expense in the present war emergency.

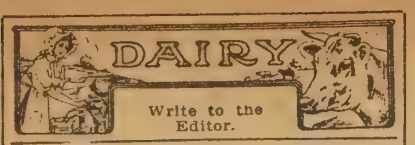
Today American meat and meat products are the recognized standard of the world.

And the economy with which these products are produced is indicated by the fact that today the meat of a steer, dressed, is sold for less than the cost of the steer on the hoof! The proceeds of by-products, made out of what once was waste, have made this possible.

The size of the job has dictated the size of America's packing industry. And America's packing industry has proved itself to be equal to its job.

## Swift & Company, U. S. A.

A nation-wide organization with more than 20,000 stockholders




A. B. NYSTROM, Editorial Contributor

## Question of Type.

In his address as president of the Holstein-Friesian Association of America at the 33d annual meeting, just held recently at Milwaukee, Wis., D. D. Aitken said:

There has been more or less discussion on the question of type during the last few years, some breeders taking the position that it was the record that the cow made rather than the type of individual that fixed the selling price, and that all the breeders could consider was the price and not the characteristics of the animal as to type. I do not agree with that position, nor do I believe that the Holstein-Freisian association can afford to. I am thoroughly convinced that type is one of the most important principles that must be adhered to. I am satisfied that 80 per cent of all the high-record cows are reasonably true to type, proving beyond all preadventure that type and high production can be attained. No breeder should presume to use a sire whose offspring has sloping rumps and bad udders, no matter what the record of his dam may have been.

The fact that animals do not breed true to type is evidence itself that we have neglected type to a greater or less extent in the past.

I believe, in awarding premiums, that large production should stand for a certain number of points. On the other hand I do not believe that premiums should be awarded at all to an animal that is not a credit to the breed, regardless of whether or not there was any competition in the ring. I have visited fairs and seen shows of live stock, not only those of the Holstein-Friesian breed, but of others, where there was absolutely no excuse for giving them a premium; where they were not a credit to the breed, but rather a discredit, but because of no competition they were awarded prizes. This, it seems to me, is absolutely wrong, and I believe that in awarding premiums at fairs we should have some rule laid down clearly defining the requisites necessary to entitle animals to prize money.


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## The Short Cut to Greater Dairy Profits

in these days of high feed prices is better cows. The quickest way to get better cows is to

**OWN A PURE BRED HOLSTEIN BULL**

In a recent test daughters of a purebred Holstein bull increased milk yield 95 per cent; granddaughters 245 per cent over scrub dams.

Write for free information about this profitable breed. No obligation—we have nothing to sell.



The Holstein-Friesian Association of America, Box 205, Brattleboro, Vt.



# SUNNYBROOK

"THE FEED YOU NEED."

A new concentrated balanced feed that meets the present emergency of shortage of mill feeds and high price of all grains.

Analysis.

| | |
|---|---|
| Protein | 14.51% |
| Nitrogen, Free Extract | 46.55% |
| Crude Fat | 4.50% |
| Ash | 6.58% |
| Crude Fiber | 18.15% |
| Moisture | 8.47% |

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Sole Distributors. No. Portland, Or.




# Feed for Winter

## Conservation by Means of Silo

By A. B. NYSTROM.

There will be thousands of silos erected in Washington this season. This comes as a result of the desire on the part of the dairymen and stockmen to conserve the greatest possible amount of feed for next winter's use. Dry hay can no longer be counted on as the sole roughage for the dairy cow. We can not do without the hay entirely, but we must supplement it with the proper succulent feed to get the best results at the pail.

Scientists estimate that from 25 per cent to 40 per cent of the feeding value of a growing crop is lost when it is made into hay or dry fodder, whereas, in making silage only about 5 to 10 per cent is lost. Since this is the case and in view of our present feed shortage, isn't it absolutely necessary that we save the extra 20 to 30 per cent? It is our patriotic duty to save it.

Dairymen who have put up silos tell us that their silos paid for themselves the first year they used them. It is easy to see how this can be done. If a field of mixed grain and legume would have a feeding value worth $1200 as it stood in the field, and there was a loss of 30 per cent or $360 when made into hay, and only a loss of 8 per cent or $100 when made into silage, there would be a clear saving of $260 if the crop is used for silage instead of for hay. This would be sufficient to build a fairly good silo. On the farm the returns are not calculated in this way, to be sure, but rather by a comparison in the milk flow, yet we do not doubt that many dairymen have increased the production sufficiently the first year to pay for the silo.

Silage not only increases the milk flow at the time it is eaten, but it also keeps the cow in the best of physical condition. It helps her to maintain a heavy production throughout the year. It also saves on the grain bill. While silage and grain are two distinct parts of a ration, and both should be found in every ration, still we know that from one-third to one-half less grain needs to be fed when the cows get a normal amount of silage. This is another direct saving.

In most parts of the northwest the hay crop will be short, due to the dry weather and the aphis. In view of this it is imperative that we get as much feeding value as possible out of every crop that is raised. Putting the corn into the silo will do this. Put one up this year and let the cows pay for it.

# Wooden Hoop Silo

## Cost of Material Figured Out

By A. B. NYSTROM,

The following is a bill of material of a wooden hoop silo erected by E. M. Moses of Chehalis, Wash. Size 8x24.

| | |
|---|---|
| 1116 ft. 1x6-24 @ $26 M (staves) | $29.01 |
| 1200 lin. ft. ⅝x2½ hoop material @ 60c per 100 | 7.20 |
| 96 ft. 2x4x24 (uprights at door) | 1.20 |
| 140 ft. flooring and shiplap. for doors | 3.08 |
| 4 anchor irons | 1.00 |
| 4 anchor bolts with washers | .30 |
| 25 3x7-in. gal. iron strips for hoop joints | .50 |
| 10 lbs. 5d cement nails | 1.00 |
| 15 lbs. 8d cement nails | 1.50 |
| 18 ⅝x7-in. bolts for door locks | .90 |
| 2 days' labor making doors and painting | 6.00 |
| 1 coat of paint | 2.50 |
| Total paid for silo | $54.19 |
| Allowing for donated labor—making the hoops and erecting: 3 men, 14 hours, each, or 42 hours @ 60c | 25.20 |
| Total cost | $79.39 |

These figures do not include the foundation nor the roof. The silo is standing beside a patent stave silo built three years ago. It will be interesting to note the comparison in the silage produced in these two silos and also the length of time they will preserve good silage.

## Six Pounds of Butter a Day.

More than 43 pounds of butter in seven days, or over six pounds of butter a day, is the remarkable record of the Holstein cow Tietje Queen De Kol 2d, No. 228996, bred by W. L. Keyes, of Deerfield, New York, and is now owned by A. C. Howe of New Hartford, New York. Tietje finished a seven day official test with a production of 639.3 pounds of milk, yielding 43.29 pounds of butter to her credit. She freshened at the age of 4 years 10 months 26 days. She is the 32d purebred Holstein cow to enter the charmed circle of cows that have produced more than 40 pounds of butter in a week.




This is a 750-pound latest style

# DE LAVAL

## CREAM SEPARATOR

**Acknowledged by cow owners the world over to be the closest skimming, the easiest running and the longest wearing separator.**

360 pounds of butter would have been needed to buy this machine in 1914.

255 pounds of butter will buy it now.

96 bushels of wheat would have been needed to buy this machine in 1914.

55 bushels of wheat will buy it now.

139 bushels of corn would have been needed to buy this machine in 1914.

87 bushels of corn will buy it now.

There never has been a time when you needed a De Laval so much. There never was a time when you could so well afford to buy it. Don't waste food and money and time trying to get along without a cream separator, or with a half-worn-out or inferior machine. Order your De Laval NOW when you need it most.

**Why not see the nearest De Laval agent at once? If you do not know him, write to the nearest office for new catalog or any desired information.**

## DE LAVAL DAIRY SUPPLY CO.

LARGEST DAIRY SUPPLY HOUSE ON THE PACIFIC COAST.

**Alpha Gasoline and Distillate Engines, Ideal Green Feed Silos, Acme Ensilage Cutters and Blowers, Irrigation Equipment, Centrifugal and Deep Well Pumps and Alpha Spraying Outfits. Catalogs of any of our lines mailed upon request.**

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B-K keeps rubber tubes and teat cups sweet and clean. It penetrates milk solids and makes milker parts easier to clean—kills the bacteria that spoil the milk.

B-K leaves no taint or taste of itself—makes rubber parts last longer—does not injure metal—is the cheapest in actual use. Sold under absolute guarantee.

### Recommended by All Milking Machine Manufacturers

B-K has been used by thousands of milking machine owners, including certified milk producers, with complete satisfaction for over six years. It is the original purifier.

Get B-K today—end cleaning troubles and sour milk losses. If your dealer does not have B-K, send us his name with your order. We have a dealer near you.

Send for information—"trial offer"—and dairy farm bulletins.

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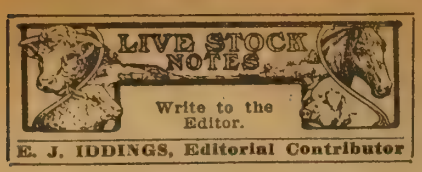


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E. J. IDDINGS, Editorial Contributor

## HEALTH CERTIFICATE

### Required for Auction Animals.

At the joint meeting of the Washington and Oregon Veterinary Medical society, recently held in Portland, the following resolution was adopted:

Whereas, The state of Oregon has a law requiring a tuberculin test and certificate of health when dairy or breeding cattle are sold at public auction, and

Whereas, said law is working to the entire satisfaction of the live stock industry of the state,

Therefore, be it resolved, That we favor the enactment of similar laws in the states of Washington, Montana and Idaho and in adition require the inspection and tuberculin testing of all dairy and breeding cattle and other cattle coming in contact with any dairy or breeding cattle, and that we believe that this can best be done under the supervision of a live stock sanitary board, or similar organization, and through a county or district dairy herd inspector, who is a graduate veterinarian, and this inspection conducted in a similar manner to that now being carried on in Tillamook county, Oregon.

Another resolutions favors, for the time being, as a war measure, the handling and treatment of live stock diseases and their prevention by county agents, but that in the future we favor that the secretary of agriculture direct that the control and educational work in veterinary science be conducted by the United States bureau of animal industry and the state live stock sanitary boards and similar organizations, and that the states relation service and extension departments direct their educational work to lines embodying purely agricultural and horticultural subjects, and the live stock sanitary activities of county agents be confined to live stock disease survey work and the reporting of diseases.

## Live Stock Rations in England.

Extreme scarcity of concentrated animal feed in England has resulted in the establishment of live stock rations, which are now in effect on the following basis:

Horses for farm work and transportation may have 10 pounds per head daily.

Milch cows not on grass may have a daily ration of four pounds of feed per head, which is to be reduced to two pounds after August 1.

No concentrated feed may be used for feeding sheep, pigs or cattle other than milch cows. This class of stock is expected to live on roots, grass, hay and similar products.

## Veterinary

Dr. S. B. Nelson

**Stringy Milk.**—Can you tell me what to do for a cow that gives stringy or lumpy milk, especially from one teat? The cow seems to be in good health otherwise. Mrs. T. N., Kalama, Wash.

Try applying the following to the affected quarter after each milking: Soap liniment, six ounces; tincture of iodine, two ounces. Also give the cow one pound of Epsom salts in three quarts of water. The following day begin giving one tablespoonful of fluid extract of pokeroot in one pint of water morning and evening for a few days.

**Give Bloody Milk.**—We have all young cows, two with first calf and one with second, and the other about the fourth. They seem healthy and look fat and nice, but for some reason we get bloody milk (they are all Jersey stock). I noticed it in washing the separator, the substance that collects in the bowl is pinkish in color and some times even red. The man who milks says there is no soreness in any, save one, the oldest, whose teats are at times with a lump near the udder, then we kept her milk out separate and the three young cows' milk still shows some pinkish color. We feed clover hay and potatoes, but cut the latter out, thinking it might cause the trouble. They have good pasture (grass) and look fine. Have stock salt at their use all the time. A. C., Vida, Ore.

I am going to suggest to you that you give your cows each from one to one and a half pounds of epsom salts in three quarts of water. The next day giving to each animal affected, one teaspoonful of hypo-sulphite of soda daily, this for 10 to 14 days if necessary.

**Sow Is Lame.**—I have a Poland China sow that seemed lame in one of her front feet most of the latter part of the winter. She had five little pigs, one dead, the others did well until about five weeks old, when one little one became lame and could not get around at all. I put it in the barn and fed it well. It eats and is no worse but does not get much better. Another little one got lame the same way, lived one day only. One hog raiser pronounced it rheumatism, but I would not think that would be contagious, and this seems to be. They have plenty of room to exercise and are not overfed. Can you tell me what to do for them? C. W. P., Fairfield, Wash.

I would suggest that you give the little pigs from one to two ounces of castor oil. The following day begin giving them 10 grains of potassium iodine in their feed. The feed should be nearly liquid for a few days. Be sure that they have sleeping quarters where there is no draft over them. I would also suggest that you place at a convenient place for them the sulphur, salt, charcoal and wood ash combination given above.

**Hard to Get With Calf.**—I have a cow that for the last three or four years has been very hard to get with calf. She comes in heat regularly but don't catch and the last time she did she lost it at about six months. I examined her and found around the mouth of the womb a tumorous growth like a bunch of small mushrooms from the size of a pea to as large as the end of your thumb, and hard, and the mouth is turned slightly down. She is getting old. What would be your advice for me to do with her? She is still milking for the last 15 months without stopping. The tuberculosis test had no effect on her. I. S. T., Centralia, Wash.

I would suggest that you consult your local veterinarian and have him make a very careful examination of your cow. It is possible that a slight surgical operation may be of value.

**Cut Doesn't Draw Together.**—I have a colt that was cut a foot long across the point of shoulder and it gaped open six inches. It is healing nicely, but doesn't seem to draw together very much and there is a lump on the point of the shoulder where the flesh dropped down. Would you kindly advise me what to do? Also, I have a 3-year-old that I worked through spring work. I noticed that he had lumps the size of your fist on both shoulders. I put costic balsam on them and they seem to be going down now and on the wire cut I use Security Healer. A. C. M., Canfield, Idaho.

Regarding the colt, the wound will gradually draw together. In the size wound you describe this will take a long time. The lump you mention is probably the end of the severed muscle. You can not do anything more for that than you are doing. For the 3-year-old, the lumps contain small pockets of pus, probably the size of a hazelnut, the body is trying to separate them from the other tissue, hence the lumps. These swellings should be opened and the hard, fibrous tissue taken out. Frequently the dressing with tincture of iodine daily is of value. Of course, the incisions must be made away from any point upon which the collar will bear.

**Calves Are Blind.**—I have two calves six months old that have been blind about two months. When in the pasture they bump into fences or anything in their way. Their eyes look wild and have a sort of purple color. Otherwise they are in good condition. What is the trouble and can it be cured?—G. H., Oak Harbor, Wash.

I am of the opinion that the blindness is due to a trouble with the optic nerve. I do not believe that there is any rmedy that would be of valus in this case. I am, of course, taking it for granted from your letter that there is no scum covering the eyes, but that the eyes are perfectly clear and have a purplish cast to them.

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OUR northwestern customers have found Kansas City their best market. We specialize on Oregon Washington and Idaho cattle.
WRITE or wire us for market information any time.
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In nine soils out of ten, you will then be ready for seeding without further work. The Culti-Packer crushes all lumps, firms out the air spaces, and stirs the surface soil, leaving a mellow mulched bed for the drill.

Put the Culti-Packer right back of the drill and you will firm the soil around the seed, hasten sprouting and get the most even, sturdy stand of wheat you ever had.

The Culti-Packer has paid for itself on wheat alone for thousands of farmers, and it is just as good on every other crop you raise—corn, oats, alfalfa, beets, potatoes, rice, cotton, sugar cane.

Fifteen minutes work in the field will prove these claims and show you how to get more wheat with less labor.

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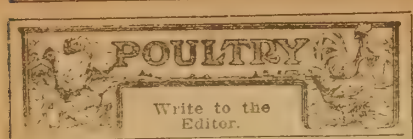
## The Culti-Packer

A sturdy simple farm tool. Just two rows of semi-steel wheels, mounted on 1 3-4-inch axle and fitted with dust-proof roller bearings. Wheels quick detachable for straddling corn.

## Soil Sense

A 48-page book on soils with over 100 field photos. Ask your John Deere dealer or write direct.

**The Dunham Co., Cleveland, Ohio** Factories at Berea, Ohio




JAMES DRYDEN,
Editorial Contributor.

A reminder—As green food gets scarce the eggs will get scarce. Clover or alfalfa leaves, lawn clippings, vetch, cabbage leaves, kale, rape, boiled potatoes, sprouted oats, will fill the bill, either one. Don't forget the green food.
J. D.

## Late-Hatched Chickens

Late-hatched chicks are not as profitable as early hatched chicks. There are several reasons for this. It is the experience of practical poultry-keepers that eggs incubated in March and April hatch better on the average than eggs incubated in June and July. The early chicks are also thriftier than the late chicks; they make a thriftier growth and show lower mortality. This may not be inevitable, but it is the fact that the early chicks as we find them do better than the late hatched ones.

Another reason against late hatching is that the late hatched chicks will not be ready to lay in the fall when prices are high. The early pullet will begin to lay before the first of November and continue to lay during the season of high prices. An early hatched pullet of a good laying strain will come near paying for her feed for a year before the first of February, or say in the first four months of laying, which a late hatched poor laying pullet will not pay for her feed in a year.

There may be conditions under which late hatching may give satisfactory results. On the general farm where the conditions are favorable for the production of good hatchable eggs, and where the range is good and feed reasonably cheap, a few late hatched chicks may bring a profit and at the same time help in the food supply with chicken meat if not with eggs. But the chicks that have been hatched early should not be neglected for the late ones. Better have a few good chicks than a lot of poor ones. J. D.

## Flaxseed for Poultry

To the Editor: Can you please advise me if flax seed is a proper feed for laying hens during summer. It is impossible to obtain wheat, and I had a large amount of flax seed on hand. If it is not suitable what would you advise me to obtain in the place of wheat. I have about 200 hens and would like to get some good results this summer. Thanking you in advance for the favor. J. B.

Salmon, Idaho.

Like many other good things, flax seed is good only in moderation for poultry. A glance at its composition plainly indicates the necessity for light feeding. Here it is: Water, 9.2; ash, 4.3; protein, 22.6; fiber, 7.1; nitrogen-free extract, 23.2; fat, 33.7. When it is remembered that wheat has only 2 per cent fat and 11.9 protein, it is seen that flaxseed is a very rich, concentrated feed.

It may be fed to advantage in small amount, at the rate of about 10 pounds in 100 of the grain fed. It is especially valuable during the molting period.

Prices of flaxseed are usually too high to permit of its general use as a poultry food. It will pay to sell the seed and buy the oil cake meal, which is a reasonably cheap feed. The fat or oil is extracted for other purposes, but the protein and other ingredients are left, and this makes it a rich protein feed, so rich that it can not be heavily fed. It is fed in mashes at the rate of 10 to 20 per cent.

Corn, oats and barley will take the place of wheat. If corn can be purchased for less than $80 a ton and oats for less than $70, or in that proportion, the ration may be made of half of each. If the price of one of the two is out of reach in any locality and barley is cheaper, use barley in its place. Feed also liberally on bran and shorts, and if linseed oil meal is available use it as indicated above. Cocoanut oil meal is also a good feed, and it may be fed in place of linseed oil meal. It is not, however, as rich in protein as linseed oil meal and may be fed in larger amount.

Then don't forget the green food, meat scrap or buttermilk, grit, shell and charcoal. J. D.

### Bugs Put to Use.

Uruguay has appointed a commission to investigate the feasibility of a scheme to turn the locust pest into a blessing by using these insects in the manufacture of fertilizer, soap and lubricants and stock food.

## Vent Gleet

To the Editor: My white Leghorn hens have a white discharge from the vent which has a bad odor. The vent seems to turn inside out and protrudes in some cases a half inch. The feathers drop off around the vent. The droppings seem to be all right until the ailment has advanced quite well and the vent gets closed from swelling. The hens have a good appetite and are lively until they get thin and run down from the discharge. Have fed scratch food and shorts and milk made into a crumbly mash. Hens have free range. Do you think it is contagious, and what can I do for them?
C. D. B.

Alder, Wash.

The symptoms you give indicate a case of vent gleet. This disease is infectious and may be spread from one hen to another by the male. It would be well therefore, to examine the male and separate him from the hens if he shows any signs of the disease. The infected hens should also be isolated and given treatment, or killed. Give epsom salts to the flock, half a teaspoonful per fowl, dissolved in water and mixed in a mash and feed when the fowls are hungry. Feed light for a few days with plenty of green food, charcoal and grit. If the sick fowls do not recover in two weeks they had better be killed. One authority, Wright, prescribes as follows for this disease: "Give 30 grains epsom salts and twice a day inject first a 4 per cent solution of cocaine and immediately afterwards a solution of nitrate of silver, four grains to the ounce. The fifth day commence giving a small copaiba capsule daily and inject acetate of lead one dram to the pint." J. D.

## FEEDING PEPPER

### Bad for Hens in the Long Run.

To the Editor: I am a reader of the Farmer and could you give me a little advice on hens? I bought some last year for a good laying strain, Barred Rocks, and raised pullets but they have not yet been laying well this year, but I feed them red pepper in mash all cold days in winter. Do you think this a good plan? They have had a good run on grass and wild ferns, good water with grit and shell and mixed grain as good as can be got and meal mixed. They all look in good condition and from their noise you would think they were all laying. S. B.

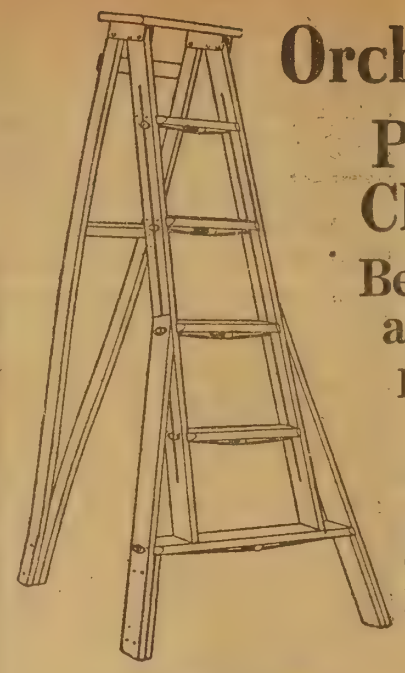
Clear Lake, Wash.

It is not necessary to feed pepper to make hens lay well. Some poultrymen practice feeding pepper in order to stimulate the egg organs. It may affect the yield for a time, but in the long run it is bad. If the fowls are kept in good condition by good feed and care, they will lay just as well without such stimulation. For breeding fowls especially it is bad, but we advise letting it alone all the time.

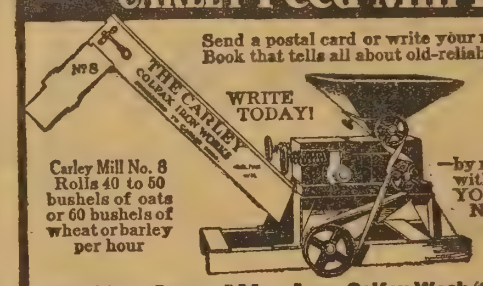
From the way this correspondent describes his method of feeding, there is one lack in the ration. Nothing is said about animal food. A good egg yield cannot be expected without some kind of animal food, meat scrap, fish scrap, or milk. With meat scrap or milk and plenty of the other foods mentioned and plenty of exercise, the fowls should lay well, if they are of a good laying kind. J. D.

### Clever Physician.

By building a concrete tank with a window in one side a Scotch physician succeeded in getting motion pictures of otters and other water animals.

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IN THE ORCHARD

Write to the Editor.

GRANVILLE LOWTHER,
Editorial Contributor.

# Chewing Insects

## Eat Holes in Vegetable Leaves

I have a letter from Mrs. G. O. Cleveland, Gooding, Idaho, reading in substance as follows: "I want to ask a few questions concerning my garden. The radishes, turnips and cabbage leaves are eaten full of holes. I would like to know of something that would kill the insects that do the damage. Will the radishes grow and be as thrifty any way?"

Without having seen the insect that is doing the damage I am presuming that it is "thrips" which in spring run in great numbers about the petals of plants and attack the tender shoots of many varieties.

I think the best method is to spray for them.

There are three kinds of sprays, viz: Contact sprays, poison sprays and repellent sprays.

The repellent sprays do not kill, but applied to plants or soils, drive the insects away.

The contact sprays are for piercing and sucking insects that can not be controlled by poison sprays. Among that class are scale, aphids and any others whose bills penetrate the bark or leaf and suck the juices of the plant. The poison sprays are generally used for insects that bite or chew and are capable of taking the poison internally.

I am guessing that arsenate of lead, used about as orchardists use it, or perhaps a little stronger, will kill your garden pests. If you have no spray outfit you can use a hand sprinkler. The orchard formula is arsenate of lead poison, one pound, water 50 gallans. Twice as strong will not hurt the plants and some use it one pound to 25 gallons of water.

You could kill them with contact spray, like lime sulphur, but would be in danger of burning the foliage of your plants.

You could also kill them with a tobacco preparation called Black Leaf 40, and this will not hurt the plants, but it is more expensive than arsenate of lead.

Your radishes will not grow as well with the leaves injured as if they were uninjured. Leaves are stomachs and lungs to a plant and you know what a diseased stomach and diseased lungs will do for an animal. G. L.

# Sprays for Cabbage

To the Editor: I should like to know if coal oil is a satisfactory spray material for young cabbage plants at this time of the year E. L. K.
Grangeville, Idaho.

**The Answer.**

A. L. Melander, head of the division of entomology and zoology at the Washington State college, answers the above as follows:

Coal oil is not very frequently used in spraying cabbage plants because it is apt to leave a bad taste on the plant. Kerosene emulsion is sometimes used when the plants are young, but it is almost entirely replaced by the use of tobacco spray. You can purchase through any seed store a very concentrated extract of tobacco, known as nicotine sulphate. This is so strong that one part of it will make up about 1000 parts of the spray. To this nicotine spray, especially when used on cabbage plants, a large amount of soap is advisable, say in the proportion of four or five pounds of soap to every 100 gallons of the diluted spray. Ordinary laundry soap or the fish-oil soap used for spraying may be used for this purpose. The soap should first be sliced into hot water until it is dissolved. For this use one gallon of water to every two pounds of soap. When cool this will make a soft soap which will readily work up with nicotine spray.

For the green cabbage worms the nicotine is not particularly useful. It is better to spray the cabbages with arsenate of lead, using one pound of powdered arsenate to about 40 gallons of water and adding the soap as before. Some growers prefer to dust the arsenate dry, in which case it should be mixed at the rate of one pound of the powder with about 40 pounds of shorts. This may be lightly dusted on the growing plants. If either of the arsenicals is applied early it will be particularly valuable in checking the green worms, but the cabbage can be treated lightly with the arsenical, even up to the time of harvesting. If they are treated with the poison very late in the season it is advisable to pull off the outer leaves and not use them for stock food.

# ALFALFA IN ORCHARDS.

## Paves the Way for Tree Roots.

I have received a letter from D. E. Sweeny, S219 Browne street, Spokane, Wash., which reads as follows:

Dear Sir—In an article of yours, in the Farmer dated March 25, you recommend alfalfa in orchards provided the soil has not a gravelly subsoil. Do you mean the alfalfa is of particular value in helping the tree roots penetrate deeply, but is not necessary on gravelly subsoil, or do you mean that alfalfa should not be grown in any event on a soil with gravelly subsoil, as is ours in the Spokane valley? Take a specific case where an orchard is eight years old, has made a good growth and is in fine fruiting condition; would you recommend clean cultivation or a corn crop? If the latter and if not alfalfa, what legume would you recommend?

In reply would say that what I had in mind was, that alfalfa, on account of its large and strong root system is of special benefit in opening up a close, compact, hard or puddled soil, which the apple tree roots are not strong enough to penetrate, but which they can penetrate after the alfalfa has prepared the way for them. It is equivalent to opening up a new area of food supply. This is not necessary on that account in a gravelly soil, because the tree roots easily penetrate sand and gravel.

I do not think alfalfa injurious in a gravelly soil. On the contrary, I think if the roots are allowed to develop for three or four years, then the alfalfa plowed up, the decaying root system would fertilize the soil. This would not be necessary in a soil rich in humus, but would be helpful in most sand and gravel. I would think alfalfa might be injurious, where there is not enough water to develop both the orchard and the alfalfa. Alfalfa might also be injurious where the soil is so rich in plant food as to have enough nitrogen without it, but such a condition is rare, except where there has been years of deposit by the wash from the hillsides, or very heavy manureing. As a fertilizer in sand and gravel, I think alfalfa beneficial, but not necessary as a soil aerator nor to allow the water to penetrate to a depth sufficient to feed the roots of trees.

G. L.

# HARD FOR YOU?

## What About the Boy Over There?

Do you feel at times that this war has made your life pretty hard? Read what an American correspondent writes about one of our boys who had been doing his duty:

"In a little field hospital west of Montdidied I stopped at the bedside of an American boy, one of those victims of the German mustard gas, with which the Huns are making all their present gains. His eyes were matted with yellow pus and he coulld not see. His face was terribly burned. His lips were swollen and purple. His whole body had been turned the color of an Indian, and portions of it looked like melted flesh, as though it had been liquefied.

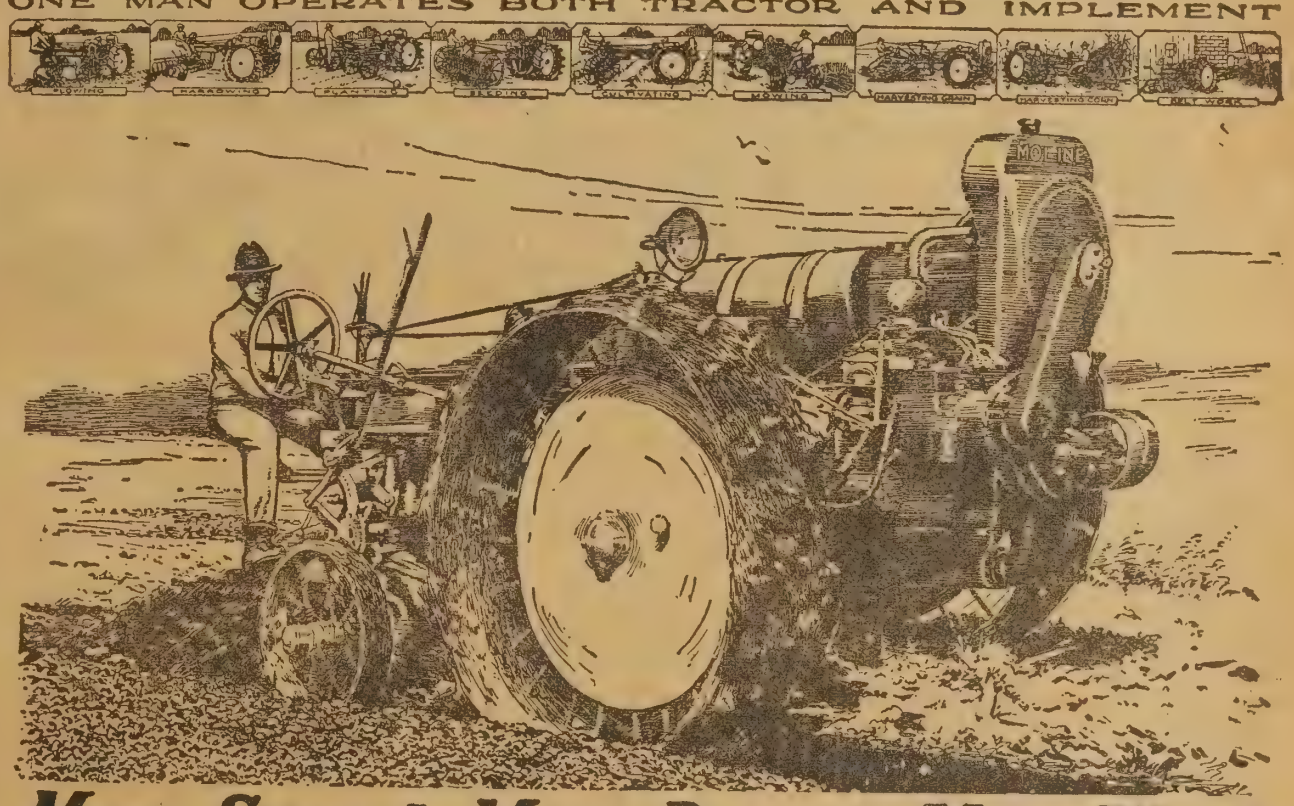
"The fighting had been renewed all along the American lines, and German wounded had begun coming into our hospital. I said to this soldier:

"'The boys are getting their revenge for you fellows tonight.' He smiled through his seared lips, and in a voice so faint that I had to bend down to listen, he gasped, 'God! I wish I was back there with 'em!'"

Do you think your life a hard one?

Help support that boy and the hundreds of thousands of others doing their duty. Buy war savings stamps to the limit of your capacity.


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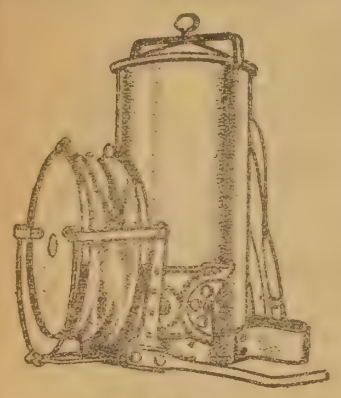
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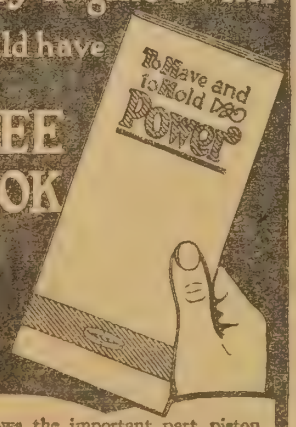
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# World Record Calf Is Brought to Coast

The highest price ever paid for a Holstein of either sex or any age and of any dairy animal of any breed ever sold anywhere in the world was paid by E. A. Stuart of Carnation Stock Farms, Seattle, for the richly bred 6-months-old bull calf, Champion Sylvia Johanna, at the sale in connection with the annual meeting of the Holstein-Freisian association, at Milwaukee, Wis., June 6-8. The price paid was $106,000, and Mr. Stuart secured him only after most spirited bidding by Joy Morton, a wealthy salt manufacturer of Chicago, who was the only other contender after $27,000 was reached.

The calf is a son of the great cow, May Echo Sylvia, and his sire is King Echo Sylvia Johanna.

The top price for cow of $13,000 was paid for the 42-pound 4-year-old, Idealize Pontiac Lass, by W. A. Green of Middlefield, Ohio, while Het Loo Pietertje, the world's record 2-year-old for seven, 30 and 60 days, and by the same sire as the $106,000 calf, went to Lisle Farms company, Lisle, Ill., for $12,500. The 176 head brought the unheard-of total of $427,680, an average of $2430 each. While Wisconsin took the largest number, buyers came from 12 states and Canada, ranging from Massachusetts to Washington. H. A.



Here is a picture of the calf bought by Mr. Stuart of Carnation farm. Mr. Stuart is standing at the animal's head.

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Champion Sylvia Johanna has been rechristened "Carnation King Sylvia," it is announced, insured for $100,000, and shipped in a private express car on a fast passenger train to Seattle, "attended by a corps of valets" in the words of the Chicago Herald Examiner.

Referring to the sale of the Holstein bull calf for $106,000 at Milwaukee, the Pacific Dairy Review says:

It is needless to say why this calf brought this fabulous price. In fact, the breeding fraternity has for several years been prepared for the $100,000-dairy animal, and when May Echo Sylvia turned out 152 pounds of milk in one day and 12,899 pounds in 100 days, with a matchless pedigree and records behind her, students of Holstein values predicted a record price for her son. The message that the wires flashed presents to the dairy world and breeding fraternity two angles. One is that there is confidence among the big breeding interests in the stability of the business, both in progeny and in milk. Millionaires do not mount the ladder of success by rounds of mistakes. On the other hand, and coming probably from the pessimists, is the question whether the leaders are not running ahead of the ranks and getting on dangerous ground.

Will the sale of a hundred-thousand dollar bull help the sale of the thousands that are offered at $50? It should; but are there not many who will look to the top of the lengthening ladder to fame as a breeder or owner of breeding stock and who will say "What's the use?" Taking care of the ranks in the breeding fraternity, helping out the little fellow, is something that the boom in our breeding business must look out for. While looking after the $100,000 bull, the unsold $50 bulls need attention.

The Farmer repeats what it has already said with reference to this sale: "Strictly good stock is essential to dairy success. No dairyman can afford to keep an ordinary cow now, much less an ordinary bull. But when it costs $100,000, or $50,000, or even $10,000, to get a strictly good sire, or the makings of one, the dairyman that needs the good stock to keep from going bankrupt can not afford to invest. He must necessarily accept the ordinary animal."

# Heavy Crop of Alfalfa

(Continued from page two.)

good, considering the severe dry weather. There was some rain over a portion of the wheat belt in the last week, with a hopeful outlook for grain. The grain market is unchanged here as yet, but we are hopeful for better conditions for the oncoming crop. The net value of grain, after deducting costs, will be less if present prices of grain and wages are maintained. Hay hands are receiving from $3 on up, so, of course, harvest hands will receive that much or more. Everybody needing harvest help is planning to change work with each other, and there are quite a number of small combines to be used this year which will cut down the labor bill to some extent. The machinery and repair work has been looked after for some time back. The average farm road has been made as good as is possible under the war conditions. Fruit boxes will be a little more costly than formerly. A great many in the grain business are preparing bins. C. A. LESTER.


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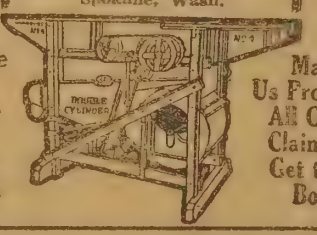
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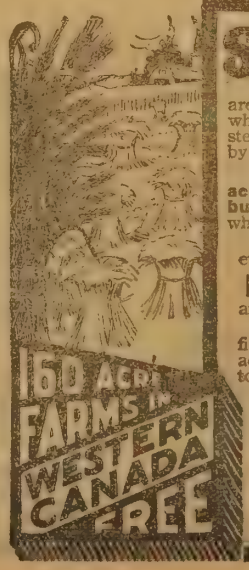
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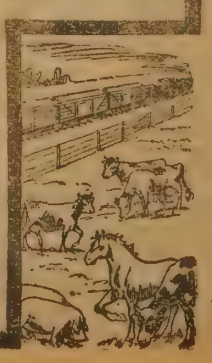
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Canadian Government Agent.



# Let Your Silage Crop Mature; Put Plenty Water in the Silo

The clovers and vetches mixed with the cereals and grasses are now being put in the silos. It is well to make sure that there is plenty of water going in with the crop. Water helps to make the silage settle and drives out the air. In most cases it is better that there is too much water than not enough. In the first case there will be some loss of feeding value pass out in the juice through the drain, but this loss will be slight as compared with that from mouldy silage all through the silo if the crop is put in too dry.

Immature green feed makes very poor silage. There is a steady increase in the amount of nutrients in the crop as it matures. To get the most out of it, no attempt should be made to cut it until it is fairly ripe. The grains should be in the soft dough stage or just past the milk stage. The legumes will not be as far along as would be desired, but if the crop is not cut until the legumes are ready the small grains will be too mature, the straw practically dry and the resulting silage will not be palatable. In case the legumes are seeded alone, however, it is well to wait until the seed in the pods are well formed, or in case of the clover, until the heads are beginning to brown.

Too much water is as bad as not enough water if it is allowed to fill up the bottom of the silo. If it were possible to determine exactly the amount of water the silage will take up, it would not be necessary to have a drain, but unfortunately this is not possible. There is certain to be some excess water to drain away, and unless there is no floor in the silo, the juices will ooze out under the stave or out of the cracks, making the premises decidedly unsanitary. Where the ground is porous and there is no flour in the silo, the juice often finds its way to the well and polutes the water.

In case the silo is absolutely watertight at the bottom so that it will hold water like a barrel, you can count on having spoiled, sour silage in that portion filled with the water. The amount spoiled will vary from a foot to several feet, depending upon how much free water there is present.

These difficulties due to excess water can be overcome by installing a drain at the lowest point of the silo floor. There should be a trap in the line to keep out the air. This may be either of the "U" shape or the "Bell" type. The latter is more easily cleaned and therefore preferred. The outlet of the drain should be 50 feet or more from the barn and away from the well.

## Pure-Bred Dairy Sires.

A. T. Flagg, county agriculturist of Waikiakum county, Wash., finds a practically universal desire on the part of the dairymen to improve their herds. There are more pure bred bulls in the county than ever before, a large per cent of the dairy herds now being headed by pure bred sires. Practically every farm in the county is a dairy farm. Mr. Flagg has boys' and girls' club work and some community work with granges and even with fishermen, who are very appreciative of garden and food conservation hints and lectures. Last year Mr. and Mrs. Flagg visited every community in the county on canning and drying work. They will probably make much the same series of visits this year, although Miss Troy, a graduate of the W. S. C., has been lecturing and demonstrating over the county on these subjects. On April 1 the county commissioners increased Mr. Flagg's salary $10 a month, which indicates the appreciation of his work.

## SUGAR BEET SUCCESS.

### Soil Preparation Is Essential.

John Henkel, who is one of the contract beet workers in the Yakima sugar beet fields this season, thinks that eastern Washington farmers do not realize the necessity for thorough preparation of the soil for this crop.

"With the soil and water they have here they should easily raise 25 tons to the acre right along," says Mr. Henkel. "I have worked at this business 17 years, principally in the Colorado fields, and I know what it means. Some of the trouble in getting a good stand here this spring was due to too deep seeding. There's a chance to lose money in beets as well as make it if you don't know the business."

### Tax Wealth After War.

The Berlin Tagliche Rundschau says the finance ministers of all the federated German states have agreed to levy a 10 per cent tax on wealth, beginning one year after the war and to remain in force for 15 following years.


THE DIFFERENCE IN DOLLARS

Grain can be stored in a good grain tank much more cheaply than it can be handled in expensive bags that last but one season.

INTERSTATE GRAIN TANKS




A Good Grain Tank Is a Permanent Investment

come to you complete and all ready to set up; floor, skids for moving, ventilator, spouts. There isn't a better grain tank made; very few as good. The Interstate tank is built for years of satisfactory service. You can not do better anywhere for so reasonable a figure.

*Look Into the Matter Now While You Have Plenty of Time*

McGoldrick Lumber Co.
Spokane, Wash.

SEND COUPON TODAY
McGoldrick Lumber Co., Spokane, Wash.
Please send me full particulars regarding your grain tanks.
Name .....
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In writing advertisers, be sure to say you saw their advertisement in this paper.

Assured Quality Engines

GENERATIONS know that the name-plate "Fairbanks-Morse" on any product assures quality.

This is the famous "Z" engine — all sizes with more than rated power — that over 150,000 farmers have backed with $10,000,000—to do their work best. No farm engine ever before has made such a record.

Cuts fuel costs in two — the 3 and 6 H. P. engines giving more than rated power on *kerosene* at *half* gasoline war-time prices.

You Also Get This Local Dealer Service
Go to the Fairbanks-Morse Dealer. He is in position to render you prompt and personal service. He has exactly the "Z" for your need in stock and can make quick delivery. See it in operation on his floor.

The 3 and 6 H. P. sizes are built to use kerosene, distillate, stove oil, tops or gasoline. The 1½ H. P. size uses gasoline only.




FAIRBANKS, MORSE & CO.
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Air is Cheap
Use Plenty of It

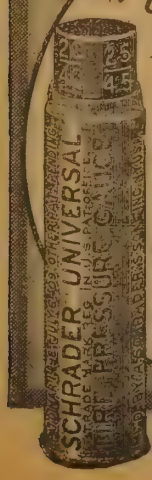
Air pressure not only affects the duration of your tires, it also has a very direct bearing on how many miles per gallon your gasoline will give you.

Measure your air pressure with a

Schrader UNIVERSAL
Tire Pressure Gauge

and save not only your tires but your gas.
When your tires are underinflated it takes more gasoline to drag them along the road—sometimes as much as 25% more.

$1.25




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793-803 Atlantic Ave., Brooklyn, N. Y.

# Gouging Methods Unnecessary in Driving Grain to Market

The Wall Street Journal sensibly says that "just because we are at war with Germany is no reason why the poorer farmers of a district should be called on this year to pay the elevator man a bonus equal to the salary of a brigadier general."

This comment was called out by the introduction in congress by Representative Elliott, of Indiana, of a bill to fix the wheat price at $2 and storage charges at 2 cents per month per bushel. The Journal adds that "an elevatorless farmer, even in Indiana, should not be driven to pay $100 per month for storing 5000 bushels of grain in an old building which at no stage of its existence was worth $5000."

The reputed purpose of the charge is to drive grain to market, but the experience of the last year is proof that no such gouging method is necessary. Mr. Hoover has succeeded very well, largely by patriotic appeal, in getting the wheat, and if more drastic means should be needed the coming year, the government is already vested with power to seize every bushel in the country, leaving the question of just compensation to judicial inquiry afterward. Here is the law:

Section 10. The president is authorized from time to time to requisition foods, feeds, and other supplies necessary to the support of the army or the maintenance of the navy, or any other public use connected with the common defense, and to requisition or otherwise provide storage facilities for such supplies; and he shall ascertain and pay a just compensation therefor. If the compensation so determined be not satisfactory to the person entitled to receive the same, such person shall be paid 75 per centum of the amount so determined by the president, and shall be entitled to sue the United States to recover such further sum as, added to said 75 per centum, will make up such amount as will be just compensation for such necessaries or storage space.

That authority would be ample to bring out hoarded wheat, if wheat should be hoarded, but, as said before, there has been little hoarding of grain by the farmers this year, and it is not likely there will be in future,.

## APPLE FARMING.

### Forget Patch of Rocky Land.

"If you have a patch of rocky land on your farm, one which won't raise anything else that you can think of don't make the usual mistake of planting it to apple trees," says William Plunkett of Ellensburg, Wash. "Some people think that apples will do well anywhere. The truth, as I have found it, is that they need both reasonably good soil and very good care."

Mr. Plunkett reports his potatoes as germinating well, but says that after being frosted back to the ground twice many of them decided to give up the struggle.

### W. S. S. or Pigs for Prizes.

War savings stamps or pigs will be the prizes for all pig club champions at local, county and state fairs, according to L. J. Allen, state pig club leader.

### County Agent for Whitman.

Charles Ficke was recently appointed county agent for Whitman county.

### Cold Storage Holdings Decrease.

A report just issued by the Office of Farm Markets at Pullman, Washington, cooperating with the U. S. department of agriculture, shows that the farms which reported on June 1 last year and on June 1 this year have decreased their cold storage holdings in the state of Washington in all products except cured beef, dried salt pork, butter, cheese and eggs, and that the decrease in frozen beef, frozen pork, sweet pickled pork and poultry have been considerable.

Only in dried salt pork and eggs have there been appreciable increases. The total holdings of all products to June 1 last year, were 14,055,539 pounds, and for June 1 this year, there were 13,186,374 pounds, showing a decrease this year of about 1,000,000 pounds.

### Cooperative Selling.

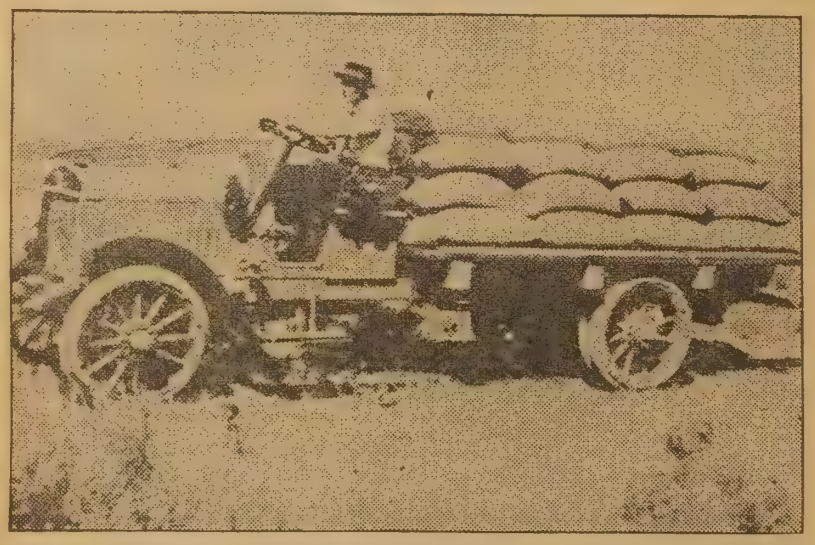
One thousand cases of eggs sold weekly; monthly poultry feed sales averaging $6000; 700 individual members and four associations holding membership. This is the record of the Washington Cooperative Egg and Poultry association at the present time, as reported by Manager J. H. Guffey.

### Register at O. A. C. Summer School.

One hundred and seventeen students registered at the O. A. C. summer school at Corvallis the opening day.


# A Few Cents Drop in the Wheat Market Will Pay for a GMC Truck

THE NEW WAY



This 2-ton GMC truck hauled 522 bushels of wheat a distance of 29 miles, round trip, making five trips in 13 hours at a cost of 2 1-3 cents per bushel, figuring depreciation, tires, gasoline, lubricants and driver.

THE OLD WAY



It would cost 6 cents per bushel for the above horses to haul the same amount the same distance and it would require 75 hours in which to do it.

# It Will Pay You to Get Your Wheat to Market

**in the shortest possible time and at the lowest cost per bushel. While you are hauling your wheat with a motor truck you can use your horses for other necessary farm work.**

It's just as easy to be a business farmer as it is to be just a farmer—and you make more money at it.

GMC Trucks are built to meet the demands of the farmer under all conditions, at less expense. Cost of operation and upkeep extremely low.

There must be a reason for the ever-increasing demand for GMC trucks.

**Good Service** Complete stock of parts.

We Believe in Keeping Our Owners Satisfied

# ELDRIDGE BUICK CO.

## NORTHWEST DISTRIBUTORS

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Eldridge Buick Co.
Seattle, Spokane:
Please send me information relative to CMG trucks.

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# Problem of Making a Living

## *When Grandmother's Early Holstein Training Helped*

By Ida C. Young

When we set up our tent beside the spring in Douglas county, Washington, on that June day in 1883 our whole worldly possessions consisted of the wagon, some bedding, clothes, cooking utensils, furniture and one team of mules and one of horses, together with a little cash. During the first summer our possessions increased. A mower, hayrake and plow were brought in, also two "gentle" milch cows. One of the latter, named "Betsy," long before she arrived, was so given to spectacular exhibitions on her hind legs that a chute had to be built for her, wherein her head was tied up, her feet tied down and a stout pole thrust behind her to prevent her backing out. The other cow immediately took after brother Ed and chased him round and round the corral until he was rescued by one of our uncles.

Betsy never outgrew the chute habit, and it was as much as life was worth to try to milk her in the ordinary way. After the first summer, when the men were away and mother had learned to manage the cow, Betsy would march sedately into the chute all by herself when she saw mother approaching with the milk pail. However, let the tying of her foot be forgotten, Betsy immediately reverted to her original depravity. She was a bad cow and she knew it.

Many of the long summer days were spent in Northrup's canyon, where the men hewed pine logs for cabins subsequently to be built. Such lumber as was needed had to be hauled from a mill on Hawk creek, north of where Davenport now stands. On one occasion a raft was made up of the timber to be hauled, and the services of an Indian who knew the Columbia were solicited. The Indian shook his head, exclaiming warily, "Halo! Nika mem a loose!" ("Not so! I die!") So the three men in charge cast off and came down the stream into the Columbia and through Hell Gate. They landed at a point 12 miles north of us, and from there the lumber was hauled home. Frame houses were built that summer by John O'Flaherty, F. H. Bosworth and Frank Rusho. It was in the latter dwelling that Nellie was born the following winter. She was the first white child born in Douglas county, and, if I am not mistaken, is at present living at Coulee City, within 10 miles of her birthplace.

The matter of feed for our live stock for the coming winter was an important one. There was an abundance of bunch grass, if the winter should chance to be an open one, but we hesitated to take the chances which the big stockmen took. As it was too late to put in grain the tall, coarse rye grass, tules and tule grass were made into hay and stacked. The tules made the least desirable hay, as the long, leathery stalks were not relished by the stock.

In addition to this haying and to the breaking, which was done with the breaking plows, other work in the canyon was taken up, and by fall every one was ready to build. Mother was much concerned over the great gaps between the logs of our cabin, and even when she learned that these were to be filled with wooden strips and plastered over with mud she was not really enthusiastic. By the time we were settled inside, however, she had regained her accustomed cheerfulness. Potatoes and other vegetables had already been brought in from near where Davenport now stands. And so after two years of tent life we at last found ourselves sheltered by a roof and four solid walls.

One more trip to the railroad brought us a few slabs of bacon, beans, sugar, dried apples and prunes. I distinctly remember the sugar, probably 15 pounds of white and half as much brown, hanging from the upstairs rafters. There was a small hole in the sack that held the brown sugar, and when I could steal away from the other two I gave myself a treat by poking my finger through, getting it nicely crusted with brown sugar and licking it off. After a time both white and brown sugar disappeared, and I wisely asked no questions.

As through some mistake there was only half enough building paper with which to cover the inside walls of the cabin, the east and the south walls threatened for a time to remain bare. Mother filled in this gap in our equipment by bringing out the new brown rag carpet, which was hung on the bare east side. The stairway and window took up most of the south end, and so everything was lovely again.

I remember the house as pleasant, homelike and cozy. There was a second best piece of rag carpet on half the floor, and this half contained the organ, bureau and a big bedstead which father made that winter. The two windows were always hung with something white, and altogether we were very comfortable and happy in our new home.

Perhaps I should limit that statement to the downstairs portion of the house; overhead was not quite so good. The board roof sometimes let the howling blizzard in during that long, cold, snowy winter, and there were many mornings when we children hopped out of bed and left barefoot tracks in the snow as we hurried down to dress by the stove. More than once sifting snow on our faces woke us up.

The following summer the house was moved from its first location on the 160-acre preemption to the homestead adjoining. Legal residence on the homestead was established by taking to the tent again—the same old tent that had sheltered us in our travels. One night a heavy thunder shower came up, and the roar of the storm, the cataract of rain on the tent and the water streaming through all over everything forced us to make a hurried exit. Mother hung pieces of bedding around us and shoved us outside. Father, with sister Frances in his arms, went ahead and was swallowed up in the storm. "Don't step into that post hole by the gate!" shouted mother in our ears, as Ed and I followed after, splashing ankle deep in the water rushing along the footpath. The only thing visible in all that furious din and confusion was the gleam of Ed's bare legs just before me as they blinked faintly back and forth below his folded blanket. Of course, in all the space of 320 acres it was inevitable that we should hit the post hole. Ed, being ahead, was the victim. Down he went, with a hysterical gasp, and I halted and stood shivering until he had climbed out and was splashing onward. Next moment we were following father into the house.

My pen picture of rainfall might lead one to forget that Douglas county is part of the great dry farm region of central Washington. Occasionally in this region rains were frequent and plentiful enough to bring to fruitage abundant crops. During the second summer father sowed and successfully grew a good crop of rye hay, enough wheat for the chickens and a good garden. The country had made good with us, and with the scablands to the west and north of us for pasture and rye hay for winter we felt that we could ask for nothing more.

This problem of making a living, even when helped out by the sale of butter and eggs to the railroad two or three times a year, was not always plain sailing. There were times when the Spokane, Sprague and Cheney markets were overstocked with butter, and when the milk had to be emptied into the pig troughs. In the long run, however, grandmother's early Holstein training in expert butter making won out, and the following winter mother's packed butter went over the stage line to the east and to the west to the tune of about $250.

The ground squirrel, puite squirrel or sage rat became a real menace to the settlers. One week the farmer walked over his fields of green, thrifty rye, oats or wheat; the next morning, perhaps, he went over the same ground to witness partial or even utter ruin. I have seen great fields of grain just starting to head with every stalk bitten through at the joint and left to lop over criss-cross, a whole field desolate.

To the Editor of the Washington Farmer: Please find enclosed a 50-cent subscription to the Washington Farmer. Please send me a farm service war flag.

MRS. B. F. SMALLWOOD.
Grandview, Wash.

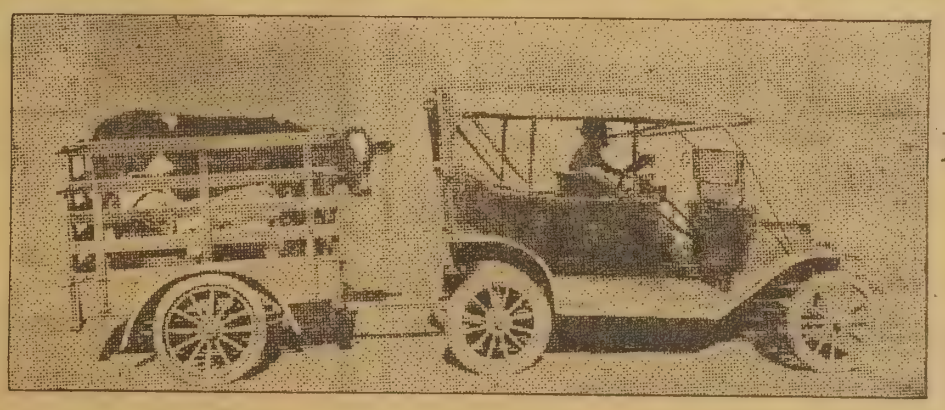
The work of poisoning the squirrels fell mostly to the children. How we disliked it! Every other day when the fight was in full swing, father cooked a big iron pot full of wheat and mixed in the strychnine. Each of us children took a panful and a little paddle and started out. The half cent apiece which we were allowed for each squirrel we killed was the silver lining to our clouds, and many a mail order catalogue was torn to shreds by mere fingering in our efforts to decide what we wanted most for our money. We probably learned more English from these catalogues than we did from our school books.

Outside of these pests, which after a few years were driven out by farming or by some disease which attacked them, there was no enemy to farming other than occasional drouth. Nine years later the Central Washington railroad was built through Paradise valley, and after selling our bunch of about 80 head of stock, horses and cattle, we moved to Hartline, where the bunch grass boy takes up the story and carries it on to date.

**Flannel and Cloth for British.**

The British war office has purchased as many miles of cloth and flannel as would extend six or seven times around the earth at the equator.


# WARNER TRAILERS



**This Trailer Might Well Be Termed a Combination Utility Trailer**

While they are particularly designed for hauling steers, cows, calves, swine, as a matter of fact, any kind of livestock, the little body can be removed and then used for general delivery purposes.

This type of trailer has found an exceedingly ready market among breeders of fancy stock as it affords comfort to animals when transported at high speed over considerable distance.

The illustration above shows how live stock may be taken to market and unloaded while the farmer is on his way with his car, attending to other business matters in the city.

The particular cow and calf shown weighed 1200 lbs. and rode comfortably under high speed.

***We also have heavy duty trailers—two wheel type—for logs and poles; four wheel for grain, dairy, milk and other purposes***

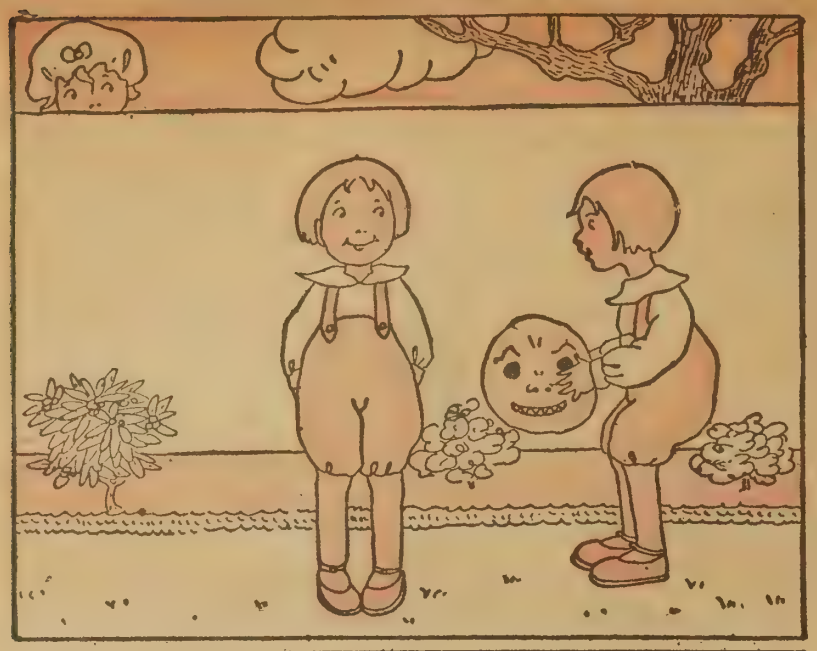
**Eldridge Buick Co.**

**Northwest Distributors**

**Seattle** **Spokane**

ELDRIDGE BUICK,
Seattle-Spokane.
Please send me Trailer catalogue.
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Address .....

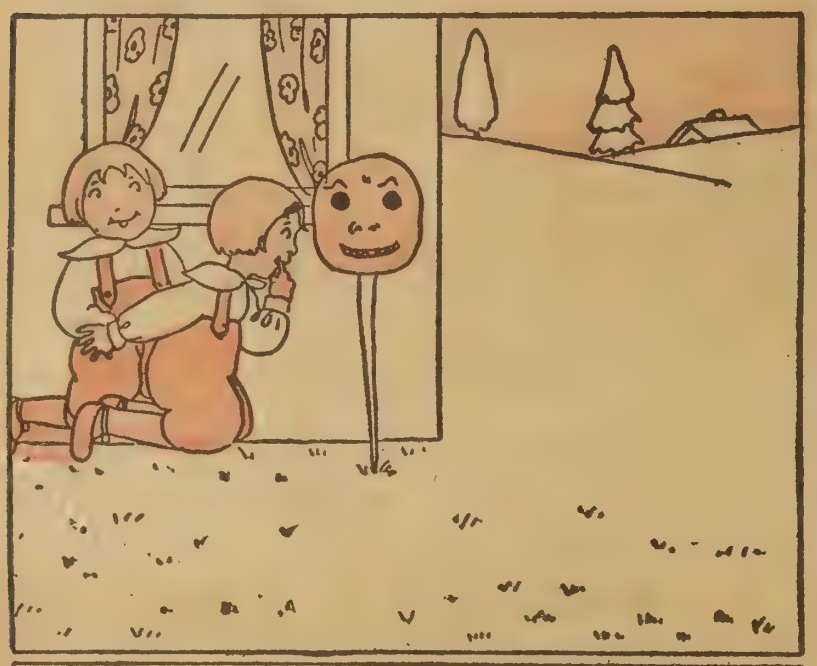
# SUSIE TURNS THE JOKE ON SNOOKS AND SNICKS



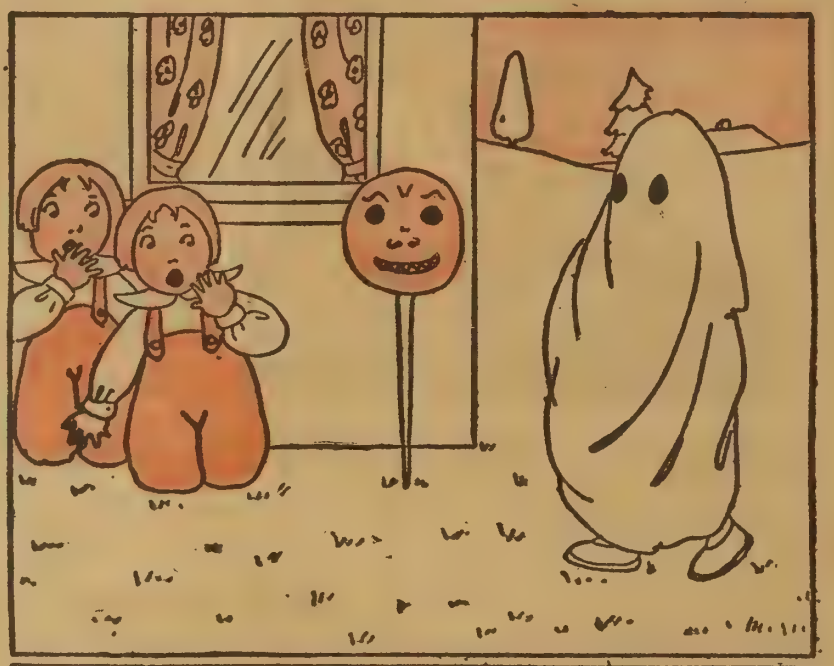
Said Snicks to Snooks, "See this queer face?
We'll have a little fun—
Let's hold it up to frighten Sue
And see how she will run!"



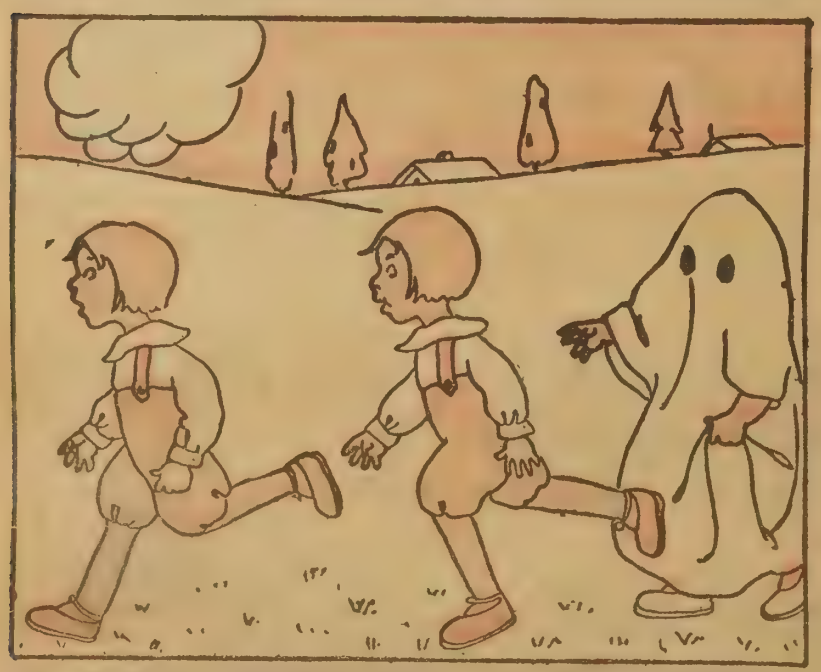
But Susie heard just what they said—
She hid behind the wall.
Said she, "Now I will scare the boys—
They won't scare me at all!"



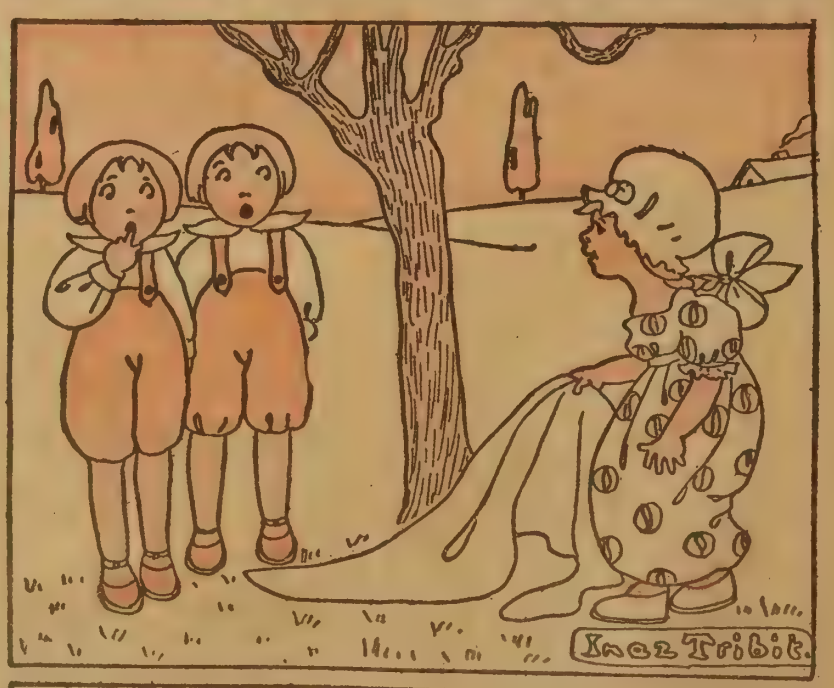
The bad boys hid behind the house
When it was almost night.
They had the ugly face fixed up
To give poor Sue a fright.



"Hark! Here she comes," said Snicks to Snooks.
"Now see how scared she'll be."
But what is this? A fearful ghost
Before their eyes they see!



With beating hearts so full of fear,
They quickly run away.
And after them with quick steps comes
The ghost without delay.

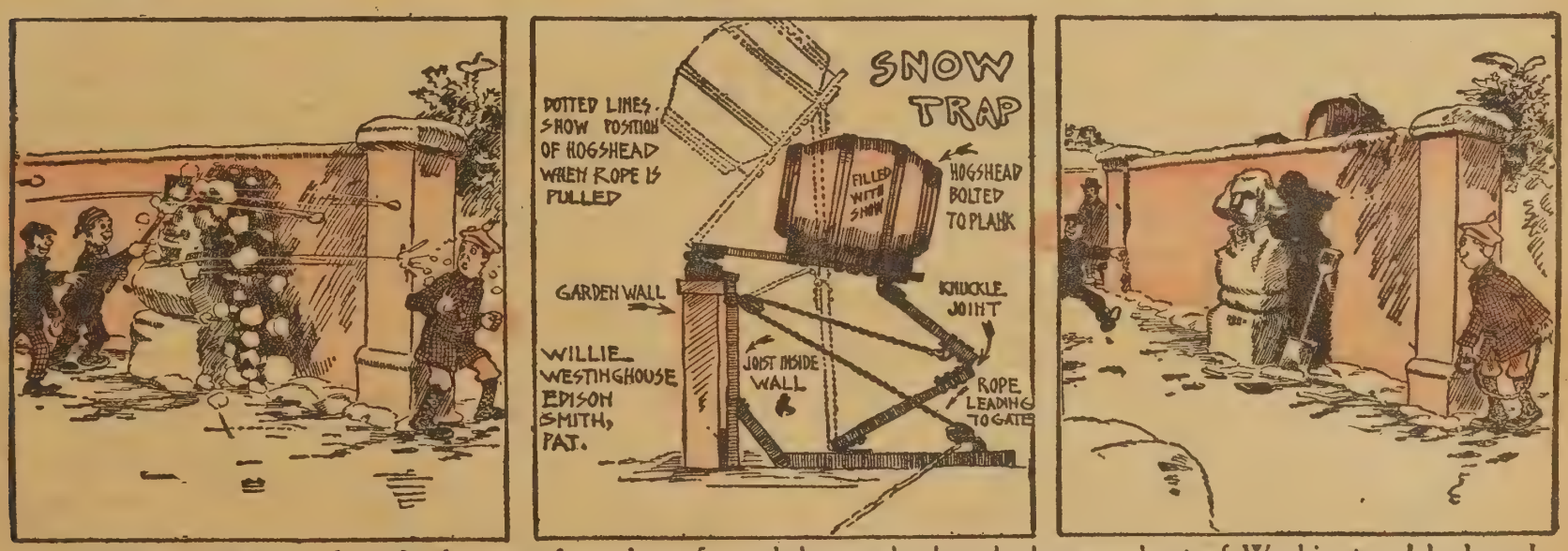



At last they stopped, quite out of breath—
And found 'twas little Sue!
"Ha! ha!" cried she. "I was not scared.
This time the joke's on you!"

# HAS THIS EVER HAPPENED TO YOU?

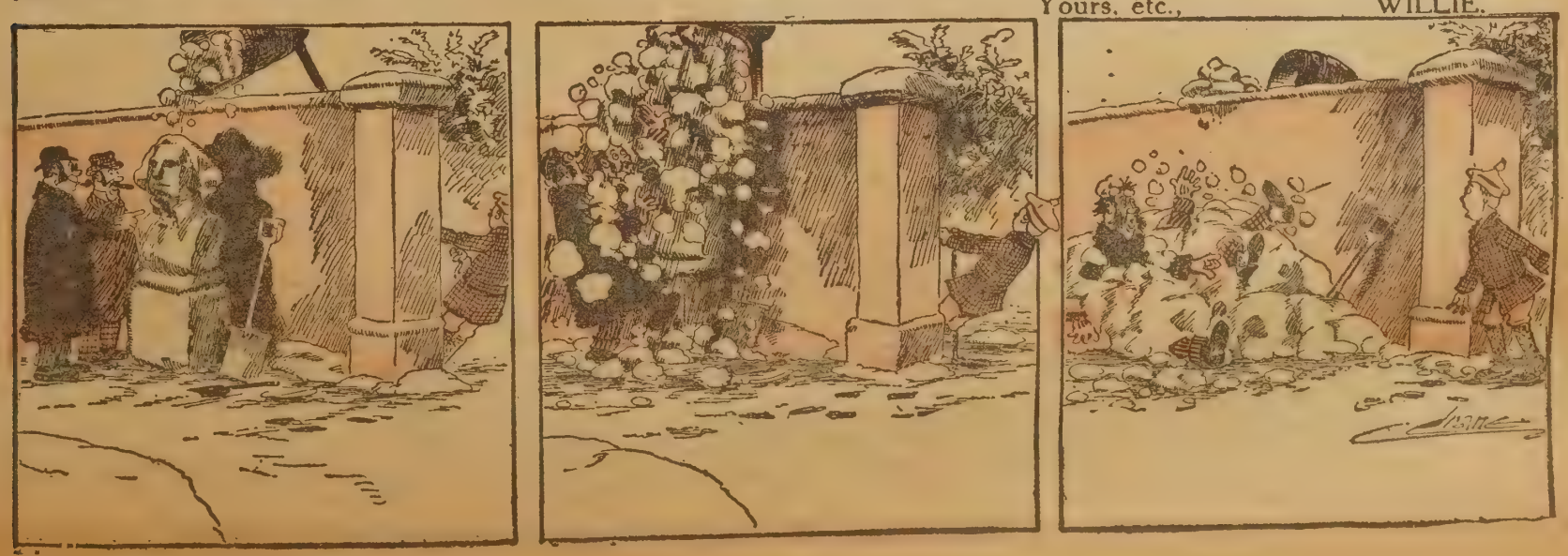



# WILLIE'S TRAP WORKS FINE, BUT CATCHES THE WRONG GAME




DEAR TOMMY: I made this trap for a lot of tough boys who knocked over a bust of Washington I had made out of snow. When I got the trap set up I made another snow figure and waited for the gang. I thought I had them just right, but Papa and Uncle Jim came along and scared them away just in time to get under the avalanche of snow!

Yours, etc., WILLIE.



# Women's Contest

## Mrs. Knoph Writes Prize Letter

The letter written by Mrs. John Knoph of Dungeness, Wash., took the first prize in The Washington Farmer contest. The contest was for the best article on the advantages of the automobile, a farm lighting system or a farm water system. Mrs. Knoph's letter was published in the issue of May 9.

The second prize was won by Mrs. Marilla Kidwell, Garfield, Wash., and her letter follows:

**Car a Necessity.**

To the Editor: Two years ago I thought an auto a luxury. After a year's use of one I not only think a car a necessity to the farmer; I almost feel that the man who needs and can afford a car and has none should be classed as a slacker. Now, with all the world clamoring for food, we must not only produce all the food we can, but we must save it. Every bit of horse feed saved is just that much more for human consumption. Tractors should replace horses for farm work as fast as proven practicable. The light auto already has been proven practical on most any road.

All the ground used to produce horse feed and all the time and energy spent on the roads by horses and driver is just that much diverted from cultivating crops. There was a time when feed and farm labor were plentiful, when the farmer could do without an auto, but that time is past, it is no longer a question of expenses, but of food production. And it is a saving of expense. We really must save gasoline when it is needed at the front, but a Ford takes little gas and it gets us there.

A short time ago my husband caught his hand in the belt of the engine (another farm necessity) while fanning grain. Suppose the few doctors we have left had all been busy or suppose it had been beyond the skill of an ordinary surgeon, the only feasible plan would have been to take him to where he could have expert medical attention. As it is, while the hand has been saved all except one finger, for two weeks (and no knowing how much longer) a 20-mile trip has been necessary three or four times a week to have it dressed. The car saves taking a team from the field and in the first stages the ride in the buggy would have been too hard for him.

The right use of the car promotes sociability. We can run over to see a sick neighbor two or three miles at noon while the horses rest. We can visit friends 20 miles away after church or Sunday school and go oftener to make up for the shortness of the visit, where formerly it was necessary to give up the services and we were all tired out, and so were the horses.

We can get our butter, etc., into town in good condition and afford to take it twice a week more easily than once a week with the team; and while we are going we can take many farm products to town folks that are not worth a trip, specially, and yet help them to save other food; things which would otherwise go to waste, sour milk, for instance, which is so necessary to make good corn bread.

The car has done away with the isolation of farm life. We work too hard to enjoy a long trip to town with a team, but when it only takes a short time, we can attend lectures, class plays, graduations, special church services, when we have none at home, and even the movies occasionally.

We farm women want to help with Red Cross work, but in the busy season the team is needed more to put in the crops. But a car can take one load and go for more.

I wouldn't like to be without a car and I think it will be nearer the millennium when all farm work that can be done by machinery is done that way and one man can handle twice the acreage where he does not have to waste time caring for horses and we can have our homes to ourselves and not be giving time to caring for the hired men that we want to give to our families and with fewer men to cook for we can raise more chickens and garden.

MARILLA KIDWELL,
Garfield, Wash., Cora farm.

# Prison Has Stock Farm

The Washington state penitentiary keeps a herd of high-grade Holsteins and purebred Hampshire swine, and Warden Drum, who is a fancier of each breed, finds that each is a profitable line of activity for the institution, besides furnishing the right kind of work for some of the inmates. The Holstein herd is headed by two registered bulls, one from the E. B. Marks, the other from the H. C. Davis herd. Both are grandsons of King Segis, out of the high-producing dams. The best of the heifer calves are saved. A few grade Shorthorns and Jerseys are still retained from the state's old herd, and Warden Drum occasionally saves a heifer from that herd. The dairy barn has no loft, and drop windows light it far in excess of legal requirements. A thoroughly modern creamery has recently been put in, and the state will manufacture its own butter. But Warden Drum will not allow the use of milk to be checked. He finds it one of the most useful and economical foods. The hogs are from foundation stock from the J. M. Fruits Hampshire herd, and are a fine lot of Hampshires. Not many hog herds have a well kept lawn for a center setting, but those that furnish meat for the Washington state convicts have, and Warden Drum takes considerable pride in it. Every spear of clippings is fed to the hogs, and he considers the space well used. Although a small field of alfalfa adjoins the pens, green feed has been scarce on account of lack of space. This, it is hoped, will soon be remedied, however, and good sized alfalfa runs be made available. The brood sows are each given a separate farrowing pen with a dirt floor, and they are producing big litters of strong pigs. All the other hogs are kept on concrete or brick flooring, so built as to be easily flushed and the water carried off. The young pigs are kept in one pen, or set of pens, the older ones in another, and the fattening hogs are finally moved up to the finishing pens, the whole arranged in a most convenient manner for feeding, for sanitation and for appearance.

H. A.

# Convicts Build Evaporating Plant

Last fall Warden Drum of the state penitentiary at Walla Walla had an evaporating plant erected by convict labor on the grounds owned by the state. The plant cost about $10,000. The machinery and all material were furnished by the fruitgrowers, who still own it, the labor only being furnished by the state. About 300 tons of fruit were handled and cider, jelly and fruit syrup were made from the cores and offal. The fruit used would practically all have been wasted but for the plant.

The state may purchase the plant when the next legislature meets, but it will be operated in the same manner this year as last, the work being done by the convicts on a toll basis.

H. A.


# Dry Season Doubles Fire Danger

## Governor Lister Calls Upon State to Protect Its Grain in This Time of Crisis

IN the midst of one of the driest seasons the Inland Empire and other grain-growing districts of the Northwest have seen in years, Governor Lister of Washington calls upon the grain growers, as their loyal, patriotic duty, to bend every effort toward the protection of their crop from fire.

"Everything human beings can do should be done to prevent the terrible and general fire disaster this dry season invites," declares Governor Lister in a ringing appeal.

State Council of Defense, State Fire Marshal's office and many other agencies are joining hands to help the grain districts fight down fire wherever it shows its menacing head. To burn grain now, they feel, is to burn human lives, for starving men, women and children will die without the sustenance America MUST send.

How splendidly effective is this cooperation between grain growers and fire prevention workers was demonstrated last year, when, despite the most unfavorable conditions, fire losses were brought down to a minimum by a team work that received congratulations far and wide.

Cooperation—organization; they will win against the demon Fire!

Of course you have insurance—you are protected from personal loss. But with the whole world on a food-rationed basis, Uncle Sam's breadbasket here in the Northwest must deliver every grain of wheat that the fields can produce.

The Northwestern Mutual Fire Association, with its corps of trained specialists in fire prevention, is at your service to render you all the assistance possible in reducing your fire danger. Prepare to stamp out the little fire, and you will never be troubled with the big fire.

Despite increased expenses and a war tax on every dollar of premiums collected, we are offering you insurance on the same favorable basis as last year.

Reach us through your telephone or mail box.

# Northwestern Mutual Fire Association

**Main Offices, Central Building, Seattle.**

**Inland Empire Department, Old National Bank Building, Spokane.**

# National Nonpartizan League

To the Editor: Granville Lowther writes in the Farmer of June 6, that he has investigated the nonpartizan league from several sources and that he must reject it as a result of his investigations.

Mr. Lowther has investigated the league from every source of information except the North Dakota farmer. This great body of progressive men, who are pointing the way to farmers of other states, Lowther directly insults by refusing their testimony and swallowing whole the words of their enemies.

The business and political elements in North Dakota have had hard sledding. They fought the Equity exchange by slandering its leaders and by breaking up its meetings with mob violence. But the Equity grew in spite of them.

When the nonpartizan league appeared the same sort of tactics were used against it. Mr. Townley was attacked on all sides and painted as a monster. If the Equity had frightened the politicians the league threw them into a terror. But they had shot their wad during Equity days and their assaults and slanders fell harmless in North Dakota. The farmers replied to them by a vote of 87,000 to 22,000, leaving no doubt that in this state the minority would no longer swing the majority, and that the former would not be able any longer to use the power of government to exploit the latter.

Then the war came on and this discredited minority seized on the loyalty issue in the hope of rehabilitating themselves. If any farmer in Washington wants to believe that all of the farmers of North Dakota are disloyal and only the money sharks, the corrupt politicians and the get-rich-quick artists in that state are loyal, that is his privilege, but he is doing it at the behest of the gang that wants to keep on exploiting him. So long as the farmers let the other fellows do the thinking for them we will have laws giving the farmers the worst of it.

So long as the unorganized farmers allow the organized business men to dictate not only their political actions, but their belief, we will have politics run in the interest of the organized business men.

Mr. Lowther doesn't think the people should be divided during the war. His idea of unity is for the farmers to take all of the insults and mob violence of the profiteers and pretend that they like it. But wouldn't the better way be for the business men, being in the minority, to go with the farmers in patriotic endeavor? Then after the war was over and it didn't matter so much, the business men could resume their rotten egg tactics.

If the bankers had a successful organization in North Dakota would the bankers of Washington go to the farmers of North Dakota to find out about it?

NATIONAL NONPARTIZAN LEAGUE.
By W. W. Liggett, Publicity Agent.
St. Paul, June 21.

The article on the nonpartizan league by Granville Lowther, published in the Farmer of June 6, to which W. W. Liggett refers, follows:

From several sources, I have had inquiries about the nonpartizan league. "What is it?" "What is its purpose?" "Should I join it?" Many other questions are generally connected with the inquiry, most of which I do not feel sufficiently informed to try to answer. About six months ago, I was solicited by an organizer to join the league. I had previously read something about it on both sides of the question; but had not reached a conclusion. The talk of the organizer was plausible, and in ordinary peace time, I have no doubt, I would have joined it. There is no question but they embody in their statement of principles many things the people need and will some time be able to obtain. The question in my mind was, "How will these good things be interpreted and used by the leaders, in the great crisis through which we are now passing?"

There are many things that should be different and many wrongs that might be righted. However, we are now in the midst of the greatest war of history, a war for universal democracy as opposed to a world-wide autocracy. The one, great, all-absorbing issue is to win the war; and all minor questions, all political differences, all family quarrels should be held in check until the world is made safe for representative governments, and the protection of free peoples from international robbers and murderers. Interpretation and the application of principles are very important factors. For instance the Bible is a good book; but I could never respect its teachings as interpreted by some very good and devout religionists. I could not respect the principles of the nonpartizan league as interpreted by I. W. W., pacifists, pro-Germans and Senator LaFollette, all of whom I am informed are operating through the league. This is not because I am in favor of war instead of peace; but because I know the only way to have peace is to compel the disturbers of the peace to respect the rights of others. This can not be done by writing essays, philosophising on social ethics or by making contracts that the disturbers regard as "scraps of paper," to be broken at will. In the hands and under the leadership of intelligent and loyal farmers or laborers, I would want to be counted in. In the hands of German pacifists, who are the most warlike nation on earth, except in countries they want Germany to conquer and rule, I want to be counted out. In the hands of the I. W. W., whose methods are impossible, count me out. In the hands of men of the views on the war expressed by LaFollette, at a meeting of the league members, count me out. In the hands of real workers like the average farmer and wage worker, count me in. Because I was in doubt about its direction and the use of power by its leaders I did not join. However, my action is not intended to be a guide for others; it was only satisfactory to myself, with my present understanding of the subject.

TO the Editor of The Washington Farmer: Enclosed you will find a three-year subscription to The Washington Farmer, which in return I would like for you to send me a farm service war flag with three extra small stars.

MRS. J. C. ROSS.
Port Orchard, Wash.

## Mormons Empty Granaries.

More than a quarter of a million bushels of wheat have been turned over to the food administration from the Mormon wheat storehouses in Utah, which are now being swept clean for the first time in more than 30 years.

This represents the enormous reserve supply built up under the tithing practice to protect the people against any emergency. After each harvest the church members who are farmers contribute one-tenth of their production to provide seed for future crops and as insurance against famine.

## Potato Acreage in Britain.

In response to appeals by Premier Lloyd George early in the spring, asking British farmers to increase their potato acreage, every county in England, Scotland and Wales shows an increase in potato planting over the 1917 area. Arrangements are already being made to turn a good part of the surplus crop into potato flour. The government factory in Edinburgh has already started work.


# Feeding for Eggs and Profit

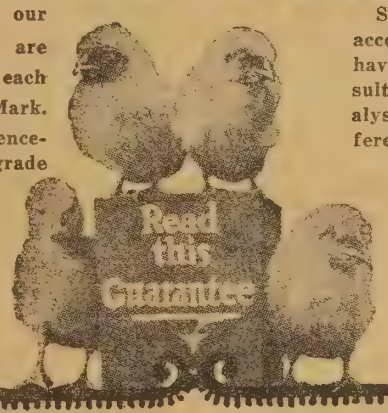


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Order a supply with your next shipment of goods and try these feeds at our risk.

Read our broad guarantee—we take all the risk. Can you afford NOT to try Silver Quill Poultry Feeds?

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They are guaranteed to be true to analyses and to contain at all times each ingredient mentioned. They are also guaranteed to contain only sweet, clean food products and to be truthfully and accurately described in this catalog.

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# Bay-Island Producers' Market

## *Unique, Having No Fees, Dues Nor Capital Stock*

By ALVARA P. WILLIAMS

After repeated efforts on the part of producers near Tacoma to establish a direct trade with the city dweller, and consequent failures from several causes, it has fallen to an association known as the Bay-Island Producers' Market to start a system which promises to be successful.

The association is unique in that it has no fees, no dues, no capital stock. It works on the farmers' money without his actually investing any cash. It is so loosely organized that any producer, anywhere, can belong to it, provided he can ship his produce to Tacoma. It has the distinction of having a manager at the city end, who is under bonds, and who draws his salary from almost invisible sources: it has the record of never failing to dispose of goods shipped; of catering to both wholesale and retail trade. On a Saturday only a few weeks after it started operation it did a business of over $1100; it has an average bank balance of $6000, in spite of this being constantly drawn on for checks as fast as the bookkeeping will allow.

What kind of creature is this, that it is not slaughtered by city trade? Let us suppose that John Jones of Gig Harbor, a district largely represented in the association, wants to join. He notifies Otto Jahn, the manager in Tacoma, just what he has to ship, when, and to what dock. This completes his part of the transaction, except for his duty to grade, pack and label his products carefully.

The Tacoma end, upon receiving this request, assigns to John Jones his number, which may be 136. When his shipments arrive in Tacoma they are taken from the dock to the stall in the new sanitary public market. This stall, by the way, is rent free on the condidition that it does not undersell its competitors. The number assigned is stamped on each container sent by Mr. Jones, the whole shipment entered in the books to Mr. Jones' credit, with number, date and quantity.

If it is possible, the shipment—a case of eggs, let us say—is sold at retail from the stall; if there is a surplus of eggs, they are readily sold wholesale. At present there are nowhere near enough eggs to meet the demand. Perhaps half the crate is retailed at 47 cents a dozen, and the rest, to be sold while strictly fresh, wholesale at 44 cents. Credit is given to No. 136 for half a crate at 47 cents, half a crate at 44 cents, and the standard deduction, 35 cents a crate, is made, netting John Jones $13.30, a check for which is sent the same week his shipment is received.

This standard deduction needs explanation. It covers freight to Tacoma, wharfage at the dock, transportation to the market, handling, loss of any kind, wrapping for retail trade, delivery of large retail orders, advertising, and salaries of the workers at the city stall, including that of the manager, assistant, and two bookkeepers. Thirty-five cents charge on a crate of 30 dozen eggs, 28 cents on a crate of strawberries, begins to seem modest in view of these expenses, when we consider that the producer always pays several of the items when he ships to wholesale or commission houses.

Does the bookkeeping end at first seem out of proportion? It is unusual in dealing with a farmer, but this is what it does for him: He obtains the exact amount due him for his shipment, without danger of confusion with somebody else's inferior stuff. No shipments are without records, and in case of dissatisfaction there is a permanent dated record to refer to. There is no guesswork about the price received, as the records show to whom each consignment is sold, and at what price. No produce is ever unsold. The clear record, kept in numerical order, enables each producer to receive his checks promptly, and thus keep in touch with market conditions, and to know whether he is the gainer or the loser by managing his own business.

Mr. Jahn says that at first there was a disposition among some of the city stores to boycott the Bay-Island Producers' Market, because he sold both wholesale and retail. "But it wouldn't work; they had to have the produce, and we had it to sell them." If the market surmounts all obstables in this calm fashion, there is every prospect that the long-looked-for "farmers' market" has come to stay.

If organized backing can help, there is no doubt of the permanent success of the market. It is indorsed, and more than that, enthusiastically so, by the labor unions of Tacoma. In the territory of the producers, it is backed by the Farmers' union and the grange. This does not mean financial backing in any sense, since that is not necessary. But it means the encouragement of these organizations for their members to deal with an association which is doing its best to give a square deal to both ends of the trade, without any recriminations for the missing quantity, the middleman.

# Let's Get Acquainted

By C. L. JAMISON.

They never liked the valley very well, somehow the children always seemed to be sickly, the road to school was muddy and bad in the winter, and the little farm never made more than a bare living. The task of clearing new fields and pastures seemed endless. One day a notice in the paper offering to trade a stock ranch for a farm in the lower valley was seen by the father of the family. He wrote and asked about it. An exchange of visits resulted, the stockman, tired of living in isolation and wanting a change of scenery, traded for the little farm and our friends moved to new scenes.

Their new home was in Lost Valley, for it nestled in the hills, surrounded on all sides by steep slopes of grass and tree-covered mountains. Beautiful green meadows covered the valley floor, and several white ranch houses were clustered along the edge of the timber. The children thought that this was a fairyland, cattle grazed in the pastures and a band of sheep looked like tufts of cotton blown against a rounded hillside. But there was plenty to do on the ranch, stock to be cared for, fences to be built and buildings to be repaired, so every one was busy. Just when things seemed to be working smoothly, an accident took away the father, and the home sustained its greatest loss.

It took considerable courage to stay on the ranch and not return to the old home, but somehow they liked the country, and it was hard to find a buyer who would pay them enough for the property. So the children started to school while the mother planned the work. There was plenty of this to do, but it was lonesome; the neighbors lived some distance away and seldom came over. The whole section felt this isolation, and for years it had been a drawback to the entire community.

It was hard to tell who first started the petition, but every one signed it, for a postoffice would save that 15-mile trip, and they might have a twice-a-week mail service. This seemed a beginning, for it was only a little while until some one began to talk about a grange, and, as enough wished to join, a day was set for the grand event. Of course, it rained, but who cared. Several drove 10 miles to be there, and a row of saddle horses filled the schoolhouse fence from end to end. It was surprising what interesting neighbors folks discovered around them, and how often the same problem that bothered one was making several scratch their heads. Every one went home feeling as though a good day's work had been done, and that they were not going to stop there, for a hall was next in view, and they were going to have more neighborhood parties at the various ranches.

A new spirit seems to have visited the community and brushed away the isolation, suspicion and distrust. As our little girl friend said: "I guess we just got acquainted."

# Sidelights

**Strategy.**

"Let us cut across the street."

"What's the matter?"

"I see an acquaintance coming who was in London during a Zeppelin raid. I haven't time this morning to hear him tell about it."

"Leave him to me. I'll introduce him to a man who was on board a neutral steamer when it was torpedoed by a submarine."—Kennebec Journal.

**A Forethought.**

Pat and Mike were obliged to halt their cart and make way for a funeral procession. While looking at it, Pat suddenly remarked: "I'd give $500 to know the place where I was going to die."

"Well, and what good would it do yez if you did know?"

"Lots," said Pat. "Shure, I'd never go near the place."—Boys' Life.

**Beats a Centipede.**

"Pop," inquired little Clarence Lily-white, "what am a millennium?"

"Sho," said his parent, "doan' yo' know what a millennium am, child? It's jes' about de same as a centennial, on'y it's got mo' laigs."—Exchange.

**No Plumbing There.**

The Plumber—I believe that we'll all follow the same vocations in the next world as we do in this.

The Janitor—Nonsense! What use will there be for men of your vocation where there isn't any water.—Boston Transcript.

**Ignorance Is Bliss.**

A small boy taking an examination in American history, handed in the following composition:

"General Braddock was killed in the Revolutionary war. He had three horses shot under him and a fourth went through his clothes."—Boys' Life.

**She Didn't Give It.**

"What!" exclaimed the summer boarder, "did that cow give all that milk?" pointing to the old farmer's pail.

"'Give' that milk, nawthin'!" growled the old farmer. "Sa-ay I tuck it frum 'er with a crowbar!"—Farm Life.

**Filial Support.**

"See here, daughter, I saw young Smith kissing you last night, and instead of rebuking his conduct you kissed him back."

"I was very angry with him, pa, but you know how you have been declaring that you believe in a strict policy of reprisals."—Baltimore American.

**Out of Luck.**

Tenderfoot—Mother says can she borrow some eggs and some sugar; she wants to make a sponge cake.

Tenderfoot to mother upon returning home—Mrs. Jones said that if you wanted to make a sponge cake you'd have to sponge off someone else."—Boys' Life.

**Against It.**

The city-bred boy's parents had just moved into the country and arrangements were being made for him to attend the public schools. One day he saw electricians at work there.

"What are those fellows doing?" he asked his father.

"Putting in an electric switch," was the reply.

"Well, I'm going back to town at once," was the boy's astonishing comment. "I won't stand a school where they do their licking by electricity."—New York Times.

**Thought He Was Mushy.**

In an Ohio town they tell of a Mr. Peet, a very diffident man, who was unable to prevent himself from being introduced one evening to a fascinating young woman, who, not catching his name, constantly addressed him as Mr. Peters, much to the gentleman's distress. Finally, summoning up the courage, he earnestly remonstrated: "Oh, don't call me Peters. Call me Peet."

"Oh, but I don't know you well enough, Mr. Peters," said the young woman, blushing.—Exchange.

# SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

## What You Ought to Do When You Have the Earache



Dr. Hirshberg.

Human nature, like water, tends to run down hill. It takes the lines of least resistance. You would rather have a thing told you, made for you or done by others than find out for yourself the drawbacks and errors associated with it.

These thoughts were emphasized to me when I happened upon two instances of "raw beef as a cure" for black eyes, and raw bacon for a nail in the foot. As absurd and illogical as these practices are, they have been in use since the time when the memory of man runneth not to the contrary.

Lockjaw germs are not injured or done away with by slabs of bacon. On the contrary, when well-intentioned persons advise you to use a piece of bacon or an onion over the foot into which you have run a nail they sometimes help to sign your death warrant. They cause a delay which postpones the use of lockjaw antitoxin and other scientific measures to ward off the mischief. In short, the tetanis baccilli are thus encouraged to thrive and cause serious trouble.

**Oils Inadvisable.**

Much of the same thing is true of the fallacious use of sweet oil and other fats for earache. Because grandmothers, old nurses and other ancients wag their fossil heads owlishly and describe how many times they think they have "cured" earache with oil, does not mean that it is true and good for the ear. Not a bit of it.

Earache must be fought with intelligence. A brisk purgative, such as Epsom salt, a hot water bag below or upon the ear, a nasal douche of hot salt water or the alkaline antiseptic fluid diluted, all contribute toward some relief.

Skilful aurists say that the dropping of oily solutions into the auditory canal for the purpose of the relief of pain is usually unwise and should seldom, if ever, be resorted to. The oil possesses little or no healing value, and only serves to obscure the parts for examination. Sweet oil and laudanum, so often used by many well-intentioned persons, have done much serious damage to the hearing.

What misled them was the apparent relief from the earache. This virtue, however, is not due to the oil but to the heat, which it—like the old-time flaxseed poultice—holds firmly for some little time.

**Have Special Attention.**

If a little warm glycerine with a drop of carbolic acide in the ear canal does not relieve, if the other applications do not stop the earache within a few hours, and there is some fever, the ear specialist must throw his spotlight upon the ear drum to detect the psychological moment for an incision of the ear drum membrane.

Deafness, ear noises and various auditory affections of middle life can occasionally be traced to the effects of "home" treatment. Such a misfortune could have been avoided by examination and treatment by a doctor who can tell the exact difference between the 57 varieties of earache.

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**Write your request briefly, sign your name and address plainly, enclose a 3-cent stamp for return postage, and address.**

**THE WASHINGTON FARMER INFORMATION BUREAU, Washington, D. C.**

# All the World's a Stage, and All the Men and Women Merely Players

Lieutenant Pat O'Brien.



Lieutenant Pat O'Brien recently fell nearly 2000 feet in an airplane in Texas, but was only slightly injured.

## Girl Scouts Will Do Work in War Gardens



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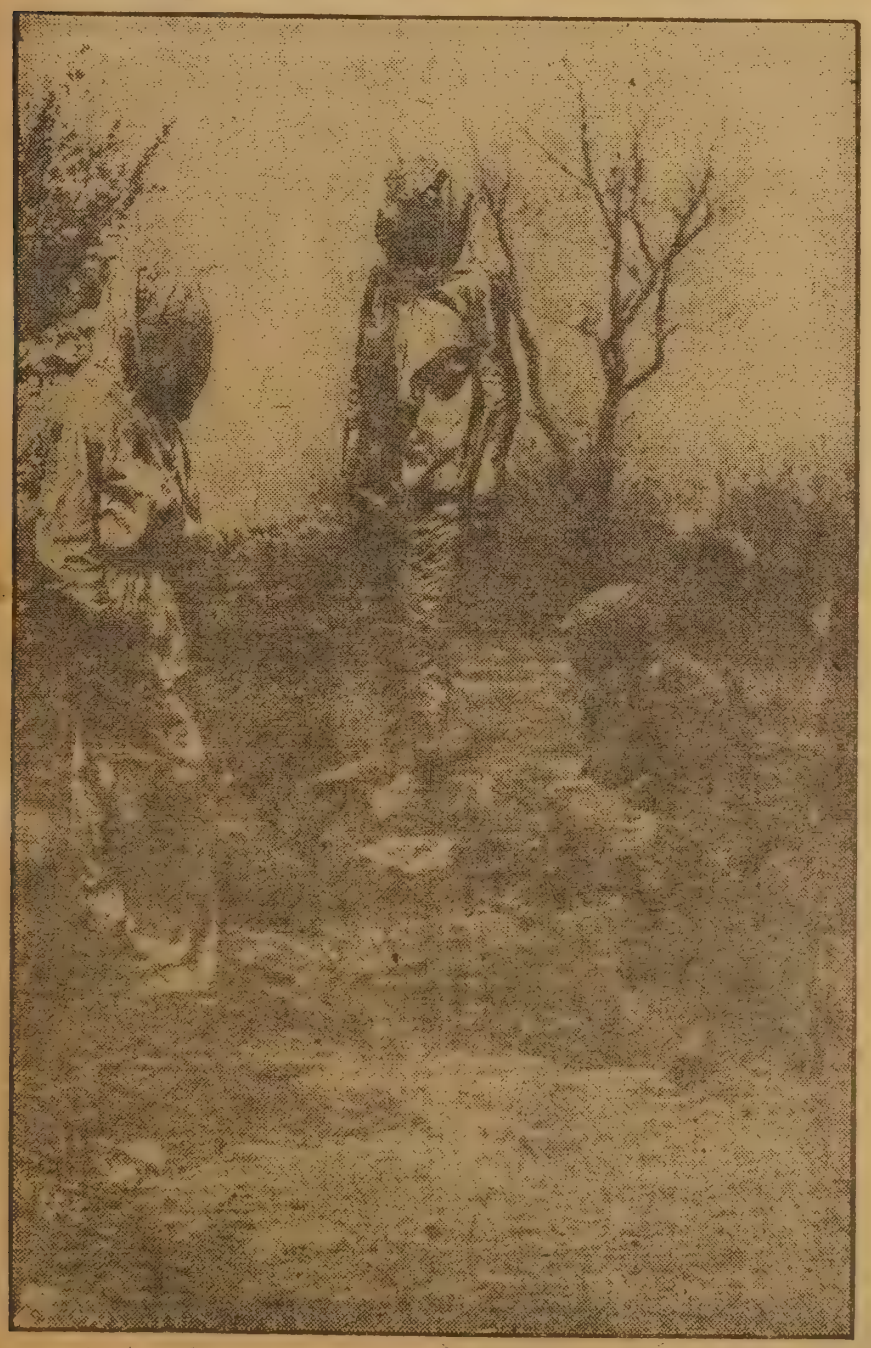
Girl scouts throughout the whole United States have been urged this summer to plant and care for war gardens by Helen Tew, a girl scout of Washington, D. C., who last year won Check No. 1 for $5 and a National Certificate of Merit awarded by the National Emergency Good Garden commission for the best canned vegetables grown in a war garden. The commission has set aside $5000 purposely for the furtherance of this work and now announces that it will cooperate with Girl Scout organizations all over the country by sending them war garden primers. In the above photograph are shown Miss Tew and the members of her Scout troop.

Hun Murder Weapon.



The Italians recently captured more than 32,000 of these pronged clubs, used by the Huns to kill enemy wounded.

## Adding Last Touches to the Costume



Copyright, Underwood & Underwood, N. Y.

This girl is adding the last touches to the camouflage costume that she wears in the class of the Woman's Reserve Camouflage corps of the National League of Woman's Service.

## Girl Volunteers Learn the Art of Camouflage



Copyright, Underwood & Underwood, N. Y.

Posing as a dead tree to show how well she remembers what she has learned as a member of the Camouflage class of the Women's Reserve Camouflage corps of the National League for Woman's service.

# Trappers of the Ozarks

**The Adventures of Two Young Pioneers in the Wilds of Upper Louisiana. Now the State of Missouri.**

By LOUIS B. MILLER

Copyright, 1914, 1915, by Lewis B. Miller.

## CHAPTER XXIII.

### Attacked by Pottawatomies

Next morning after returning to their trapping-camp, Ben and Jodo, leading and driving Spunky, set out for the place, more than a day's travel distant, where they had left their traps. And immediately after coming back they filled their big pots with salt water and put them on the fire again. The little spring appeared bolder than it had been, perhaps because of the melting of much snow, and the water did not taste quite so salty.

"Do you s'pose this will always be a salt spring, Ben?"

"No telling. The stream may in time wash out all the salt it passes through, and then this little spring will flow fresh."

The weather was very mild, and the two were not long deciding that it would be best for them to get ready and start for home as soon as they could. So they went to work, a mile or two up the creek, and dug out another canoe. This they brought down the creek and tied, near the mouth of Cave Branch. But the next morning after the canoe had been finished, the weather turned cold again, with driving sleet and biting winds. So the partners set their traps and dead-falls and went on with their salt-making. Their limited stock of ammunition made it impossible as yet for them to do much hunting.

"Now for a better supply of powder and lead," Ben said one dreary morning, after they had returned from their traps, and had tacked up their furs against the cabin-walls to dry. Their trapping was fully as good as it had been during the winter.

"Are you sure we can make gun-powder, Ben? I never saw anybody make any."

"Well, I have, as I told you. It was when I was down at Potosi, working for Mr. Austin. I watched the process carefully, because I knew I might want to make some some day. And when we started out here, I bought that three-pound bag of sulphur because I knew there was saltpeter here. And when you have saltpeter and sulphur, powder-making comes easy. I'm told the settlers make their own powder up in the Boone's Lick county. And now we've got not only the opportunity to make it, but the necessity of making it. So here goes."

"In what proportions do you mix the ingredients?"

"The formula, by weight, is 10 parts of sulphur, 15 of charcoal, and 75 of saltpeter."

During the next few days the two were busy preparing saltpeter, which they obtained from the cliff-cave, and in burning and beating up charcoal. They had some trouble getting the proper quantities of each. But by making a rule balance, and using their three-pound bag of sulphur for a weight, they succeeded in weighing out the proper quantities. Then the three ingredients were stirred together in their big pots, and the mixture wet and thoroughly stirred again. That done, the contents of the pots were spread out on flat stones in the sun.

When the mixture was very dry, Ben took a little of it away, laid it on a stone and applied a coal of fire to it. The result was a prompt flash.

"Good for us, Jodo boy! We've got plenty of powder now—30 pounds of good gun-powder. Now for some bullets!"

First they went to where they had killed a buffalo, got the horns, and after boiling them soft and scraping them thin, they made them a powder-horn apiece, to take the place of those they had been robbed of by the Osages. They had already emptied their powder into deer-skin bags; and those bags, excepting enough to fill their horns, they now put away for safe-keeping up in the cliff-cave.

After that they went hunting—hunting both for game and for other things. When they came back they were carrying a heavy bag with several pieces of peculiar-looking rock it it, known to miners as blossom of lead, or sulphuret of lead. By digging a hole in the ground, and there burning the mineral all day long, till the sulphur was driven out of it, they succeeded in getting a good-sized chunk of pure lead. Afterwards they obtained more by the same process.

Having brought all their lead, on coming out here, in the form of bullets, they had brought no bullet-molds. But they made some, of clay, and in two pieces, and after burning the clay hard, they went to work and molded for themselves a hundred bullets apiece.

"Now I feel like a man again, and like a hunter again!" Ben exclaimed. "No more begging or borrowing powder and bullets for us!"

"And now we can have fresh meat whenever we want it, and we needn't be in such mortal dread of the Osages."

"No, not quite. Still, we've got to be forever on our guard against those red rogues. They're too many for us to fight. Snappy Turkle has doubtless gone back home and reported that we were burnt to death. But a party of Osage hunters may come over here to hunt any day, and when they do come they'll mighty soon find out that we're not half as dead as they think."

To offset this constant danger, the young trappers agreed upon a plan of action. As far as possible they would keep everything concealed in the cliff-cave Then, if Indians came, the two would grab up the few things not hid and slip into the big cave with them. There at the mouth of the cave, if the redskins were not too numerous, they would defend themselves. But their canoe was still back at the edge of the lake, tied where they had left it. If they had to retreat, they could get into that and paddle away on the underground lake, and wait there till the Indians were gone.

Both trappers understood how risky it was to remain in this country. But they had known that when they came out here. And they did not care to go away till mild weather made the furs of little value. Also, it would be very unpleasant to travel the long water-trip of 600 or 700 miles, on five streams, in cold weather, or even in chilly weather.

Day after day winter cold continued, with sleet and ice and a heavy fall of snow. So the trapping and salt-boiling and hunting went on. As fast as dried their furs and skins, and even their salt, were concealed in the little upstairs cave.

But at last, six weeks or more after Ben and Jodo had returned here—it was now well on in April—the air grew mild and springlike, and the snow quickly disappeared. At once the trappers began preparations for their voyage homeward.

But they had to wait a few days longer for the green grass to spring up. Otherwise, little Spunky would be in danger of starving when they started him home. His hay-pile was already eaten up, and they were having to chop down trees for him to browse on the twigs. While waiting they busied themselves with making their third canoe. When it was finished, they concealed it down at the mouth of Cave Branch, near the canoe already there.

With the coming of mild weather and the melting of the snow, spots of bluegrass quickly began to start up. Soon many such spots appeared. Then, one morning. Ben and his partner shouldered their guns and, with Spunky between them, set out toward St. Louis, following the way they had first come. After going several miles, they stopped and tied a small bottle, with a note in it, on the mule's neck. Then they took off his rope, and each with a switch, started him galloping and braying toward his distant home.

He soon disappeared over a hill. They sat down and waited an hour, but he failed to come back. Now they felt practically sure that he had gone on.

"He ought to arrive there a few days before we do—long enough for that bottled note to announce our coming," Ben remarked.

"Yes, if some brush doesn't rake that bottled note off," his companion answered.

Soon they rose up and returned to their cabin. Then they began at once preparations to travel in the same general direction Spunky had gone, but in a different way.

First, in a canoe they followed down the creek to the Niangua, to make sure that there was water enough in the shoal places for a loaded canoe to pass. Having convinced themselves by actually measuring, that the stream was deep enough, they paddled back and tied the canoe to the bank, ready for loading. Then they walked up toward the cliff, intending to load their salt that afternoon.

But just as they were about to pass under the cliff, a rifle cracked overhead, and a bullet fanned the air by Ben's face!

Raising their eyes, they saw three Indians on top of the cliff. Two of them put arrows to their bowstrings and let fly at the white men. But the white men dashed under the cliff and ran into their cabin.

"Now," said Ben, "the question is: Shall we bar up and try to defend ourselves here?"

"If there are only three redskins we can."

"But there are more than three close by. You can be sure of that. I believe we'd better take refuge in the cave. They can't stick fire to that like they did—" He thinking of that other cabin they had tried to defend, far to the south, and of how near they had come to having it burnt down on their heads.

"No, the cave won't burn. If there are only a few Indians, we can fight 'em at the cave's mouth. But if they're too many for us, we can take to the water."

"Yes. And let's get into the cave as soon as possible. And we'd better take everything with us. Nothing but ashes here when we come out, I guess."

Hastily they gathered up the few things they had in the cabin. Having foreseen something of this kind, they had kept as little as possible down here. Knowing that they might need to light a torch, Ben filled their little camp-pot nearly full of coals, then covered the coals with ashes. As they passed out with their things, and around the inner end of the cabin, Jodo grabbed up three of the pine-knots lying there. They would be likely to need those. Thus loaded, they hurried on to the cave.

Not far inside the cave they put their things down, while they with their rifles, walked out to the entrance and stood ready to defend it. Not seeing any Indians, they hurried back and got their pots, the only things left in the cabin. Those they hid away in a dark corner at the side of the cave. They then returned to the cave's mouth.

And the first thing they saw, over at the east side of the valley, near the salt spring, was a band of about 20 Indians, coming at a trot!

"They're too many for us, Jodo. We could make it pretty hot for them if we had to, I guess. But that canoe back yonder is the safest place for us. And the sooner we get to it the better!"

So they hastily lighted a pine-knot at the kettle of coals, then caught up their things and ran back through the cave till they came to the underground lake. Here they deposited their things in the canoe. Then they stepped in, and after putting out their torch, paddled back a hundred yards or so into the darkness. There they sat still and waited to see what would happen.

"Do you s'pose the Osages will venture into the cave, Ben?"

"As to that I can't say. They know we're in here, for they saw us come in. They may try to follow us, or they may sit down at the cave's mouth and wait for us to come out. But I doubt if those Indians are Osages."

"Why so, Ben?"

"Well, we got so used to the Osages and to their dress and general appearance, that I believe I'd know them anywhere. But these Indians look different to me. And then old Snappy Turkle is not there, and I couldn't recognize a single face. My guess is that they're Pottawatomies. Those Indians are hostile to the Osages, and they like to come down here to hunt and to annoy their enemies. So Pottawatomies they must be."

"Do they know anything about this cave, would you guess?"

"I doubt if they've ever been inside of it. But, of course, I don't know."

From where the two were sitting they could see the mouth of the cave—a bright spot in the distance. While watching the spot, they noticed figures coming through it. A little later, however, the figures could be seen passing out again.

"I didn't think they'd come far, in the dark," was Jodo's remark.

But soon the figures could be seen coming through the cave's mouth again. And this time they were carrying a torch.

Now Ben said: "They've lighted one of our pine-knots."

"Why didn't we think to bring all those pine-knots with us? Then they couldn't have followed us."

"They'd found something else, it's safe to say. Here they come, right straight this way!"

"Hadn't we better paddle on a piece further?"

"I don't believe they can see us here. In fact, I know they can't. These dark walls will quickly absorb all the held his torch high while they tried to gaze into the light that one poor little pine-knot can give out."

For a good while they stood there, talking. Then they turned, and the torch could be seen glimmering on its way back to the cave's mouth. At last it passed out.

Again Ben and his partner sat in their canoe and waited. An hour or more went by. Then a torch came through the bright spot again, and close behind it followed several figures, carrying something.

"Looks to me like a log, Ben."

"And so it does to me. But it's a hollow log—that canoe of ours we took out of hiding to load."

"Guess that must—Yes, that's just what they're carrying—our canoe! And that means they're going to follow us!" Jodo was much alarmed.

"It certainly does!"

But that canoe had no paddles.

"Risk a redskin to know how to make paddles. They've made several, I'll be bound! And they'll soon be paddling after us!"

"Hadn't we better move back out of bow-shot, then light a pine-knot and run for it?"

Ben watched the Indians. They came straight on, carrying the canoe instead of trying to flot it on the shallow stream. Plainly they were coming to the lake.

"Now we've got to do something, Jodo! We're in a tight place—no denying that. If we run from 'em, they'll be sure to overtake us—at the back end of the cave, if not sooner."

"Maybe there is no back end. Maybe this cave is open at both ends, like the one where the redskins thought they had us bottled up."

"Dangerous to count on that. Not many caves are open at both ends. I believe—I believe—"

"What is it you believe, Benoni?"

"They're carrying only one torch. And I have a suspicion that I could knock that out of that Pottawatomi's hand with a bullet."

"Wouldn't it be easier to hit the Indian himself?"

"Yes. But I'm not quite sure I want to hit the Indian himself—not just yet. If we get them started to revenge a dead warrior, no telling how long they'd stay around here. But if I only put their light out maybe they'll get discouraged and leave the cave."

"But what if we missed, Ben?"

"That would be troublesome, with them so close. But we'd better be moving back. You hold your paddle out at that end and feel for the wall. I'll do the paddling. They'll soon come up with us; and when they get close enough I'll try a shot. If nothing else, I'll make the boogers cautious about crowding us in the dark."

The two now moved on into the cave, Ben paddling and Jodo feeling the way. But they kept glancing over their shoulders.

There were five Indians in the canoe. Four were down on their knees, paddling, but the fifth was erect in the prow, holding the blazing pine-knot aloft. Fast they gained upon the whites. Soon Ben laid down his paddle and took up his rifle. Waiting till the Indians were within easy rifle-shot, he pulled back the hammer and set his triggers.

Presently there was a flash in the darkness, followed by a thunderous roar. The confined noise made the rifle-shot sound like a cannon-shot. And almost at the same instant the torch flew from the warrior's hand, fell sizzling into the water, and left the whole cave in the blackness of darkness!

For a few moments whoops of rage could be heard, above the noisy fluttering of the bats overhead. Afterwards came silence.

"That was a center-shot, Ben!" whispered Jodo, in much elation.

Ben was hastily reloading his rifle. "I couldn't afford to miss," was all he said.

"What will they do next, do you think?"

"Listen, and we'll soon find out.

For several minutes no sound broke the restored stillness. Perhaps the Pottawatomies were also listening, to learn what the invisible rifleman was doing. But the whites were careful to make no noise.

At length the cautious dipping of paddles began to be heard. Soon it became evident that the Indians were trying to make their way back toward the cave's mouth. Later their canoe was heard to grate against the ground. After that the whites moved in the same direction, paddling noiselessly and cautiously. When in sight of the light spot they stopped and watched.

And they had not long to wait. Soon a figure was seen to pass out at the opening. A little later three figures came in, two of them carrying lighted pine-knots.

"Now it's high time for us to be paddling from here!" whispered Ben. "You feel the way and I'll push."

For a few minutes they groped along through pitchy darkness, moving as fast as they dared. When at length those glimmering torches were hid by the windings of the cavern, Jodo hastily opened the pot of coals and lighted a pine-knot. This he fixed in the prow, in the place they had made for it while exploring the case. Then he also took up a paddle, and they paddled on into the cave as fast as they could drive their canoe.

And as they paddled their eyes wandered everywhere, searching the dark, slimy walls in quest of a hiding place.

(To be continued.)

# Washington Men ir War Service

(From The Twice-a-Week Spokesman-Review.)



**FRED J. BLAIR, Kahlotus, Wash.**—Enlisted in the army, May 4, 1917, in the 19th aero squadron, and is now in France. His parents, Mr. and Mrs. C. Blair, have a wheat farm near Kahlotus.



**ELMER EVERT SCOTT, Tum Tum, Wash.**—Entered Camp Lewis, September 6, 1917, and is drilling with the 346th field artillery. His parents are Mr. and Mrs. Scott of Tum Tum, Wash.



**GUST A. PETERSON, Camden, Wash.**—Is in training at Camp Lewis and now serving with the 346th field artillery, supply company. He is the son of C. P. Peterson of Camden, Wash.

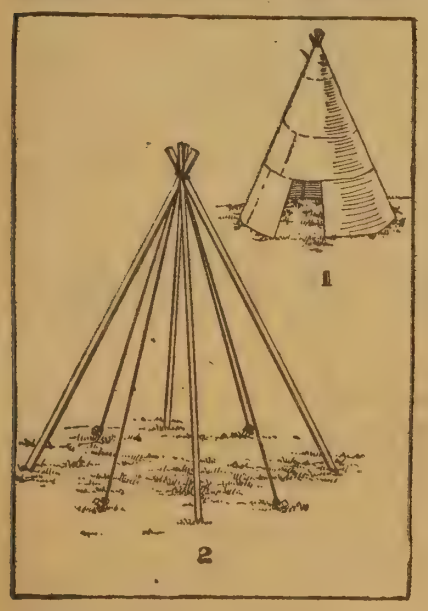
# Handicraft For Boys

**By A. Neely Hall**

(Copyright by A. Neely Hall.)

## For Back-Yard Camping.

We can not all go camping in the woods this summer, but there is opportunity for every one of you boys to



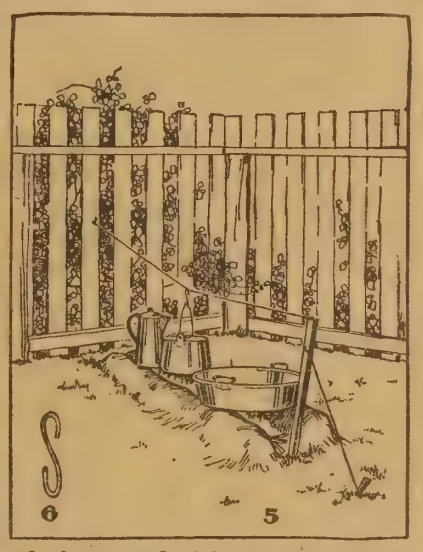

buildy a camp in the back yard or a near-by lot, and the fun to be derived from such a camp is more than you would think possible before trying it. You can be just as far away on your camping trip as your imagination will carry you, with mountains, streams and forests all around, and you can have adventures just as exciting as that imagination can conjure up.

Best of all, the near-to-home camp requires no equipment other than what you can prepare with materials that can be picked up around home. There is the tepee shown in Fig. 1, for example, made of clothes poles, clothes line and old pieces of cloth. You can likely borrow four clothes poles for the purpose, as you will in no way destroy them. Stand these poles on the ground with their lower ends spread five or six feet apart, and their upper ends crossed as shown in Fig. 2. Then, taking pieces of clothes line, or any other heavy rope, tie them to the upper crossed ends of the poles, and run them down and tie to stakes driven into the ground half way between the poles, as shown in Fig. 2. Figure 1 shows the framework covered with odd-sized pieces of cloth. These may be pinned in place.

Make a doorway just large enough to crawl through, and provide a cloth flap for closing the opening.

The torpedo-shaped shelter tent shown in Fig. 3 is a new form that I have devised for you boys. Four barrel hoops and eight two-foot stakes are needed for its framework, and enough cloth to cover this.




Open the barrel hoops where their ends are joined, and nail each end of each hoop to one of the stakes. Then drive into the ground the other end of each stake of the frames thus formed, placing the frames in line with one another and about 18 inches apart. The covering material must be made long enough to extend sufficiently beyond the framework to enclose it in the manner shown in Fig. 3. Drive a stake into the ground about 18 inches away from each end of the framework, to fasten the covering to.

A small campfire can be built with safety in the back yard if you make a fireplace like that shown in Fig. 5, with earth banked up on each side to keep the fire within a confined area. Bank up the earth in the form of two ridges, with four or five inches between the ridges at one end and about 12 inches between at the other end. A coffee pot and other small utensils can be stood over the fire at the narrow end. Pots may be hung over the fire by fastening a wire above it in the manner shown, and bending pothooks similar to that shown in Fig. 6, out of wire, by which to suspend the pots.

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Only 58 emigrants left Ireland in February.




# WAR NEWS

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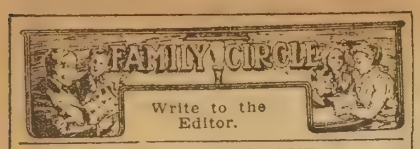
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ALICE W. BARLAND,
Editorial Contributor.

# Corn Syrup

## For Preserves, Jellies, Etc.

Just how best to use corn syrup in preserving and jelly making is a question frequently asked. Herein is the reason for its use, as well as the best way to use it—always in combination with sugar.

Its use makes the product, whether preserves, jelly, marmalade or oldfashioned jam, much finer and smoother in texture, of far fruitier and richer flavor, as well as serving to prevent the hardening of the fruit and the crystallization of the sugar. In other words, corn syrup gives a better product, with better keeping qualities.

Here, then, is a distinct addition to our preserving methods. It has been practiced in Great Britain for many years, and England and Scotland produce the finest preserves, use large quantities and serve them in many ways.

The secret of their success lies in the blending of corn syrup with sugar—equal weight of each is used—to make up a three-fourths syrup.

Some fruits make better jelly than other fruits, this because of the pectin in them.

Currants, sour apples, crabapples, raspberries, blackberries, blueberries, partly ripened grapes and quinces make good jelly; but peaches, pears, strawberries and cherries are deficient in certain substances necessary to produce a jelly of good consistency and flavor. This deficiency may be overcome, however, by combining these juices with those that make good jelly.

A fruit juice that is good for making jelly is one that contains pectin, the essential jelly-making substance. Juices extracted by cooking are apparently far richer in this substance than juices extracted from the raw fruit. To determine whether a juice contains pectin, one or two tablespoonfuls of the hot juice should be mixed thoroughly with an equal volume of grain alcohol (90 to 95 per cent) and the mixture should be cooled. If pectin is present a gelatine mass which can be gathered on a spoon will appear in the liquid.

### Homemaking Requires Brains.

To the Editor: One of the ways women can save is by not cooking too much at a time. There is no good reason for leftover food in family management if the housewife makes a business of her profession.

I save all crumbs made by slicing bread and put with any old bread, dry in oven, roll fine and use in place of cracker crumbs. Study the value of different foods.

Every backyard, no matter how small, should contain parsley, radishes, lettuce and as much of more of the standard vegetables as space will permit.

Use every scrap of food, do not throw away even a teaspoonful of anything that has food value. Bring the same thought and efficiency to the problem of homemaking that the business world demands and waste will be eliminated.

When going to use the range for some time, for instance on wash day, plan to cook food that requires long slow heat thus utilizing heat which would otherwise be wasted. Above all things teach women that homemaking and housekeeping is a job, profession, business and requires as much brains as banking, railroading or bridge building. When men come to realize just how important women's work in the home is women will take more interest in that work. Heretofore the supposition has been that any failure could be a wife and mother. Teach boys and girls differently.

MRS. JAMES NELSON.

Cheney, Wash.

# Sponge Cakes

## Recipes Call for No Wheat

The following recipes were prepared by the United States food administration and will be welcomed by those who are trying to get along without using wheat flour until the next harvest:

**Barley Sponge Cake.**

Barley flour, one and one-third cups, three and one-half ounces; sugar, one cup, seven ounces; eggs, four, seven ounces; lemon juice, one tablespoon; salt, one-eighth teaspoon.

**Corn (Flour) Sponge Cake.**

Corn flour, one cup, three and one-half ounces; sugar, one cup, seven ounces; eggs, four, 7 ounces; lemon, two tablespoons; salt, one-eighth teaspoon.

**Oat Sponge Cake.**

Oat flour, half cup, two and two-third ounces; corn flour, one-third cup, one ounce; sugar, one cup, seven ounces; eggs, 4, seven ounces; lemon juice, one tablespoon; salt, one-eighth teaspoon.

**Results of Sponge Cakes.**

1. These cakes are all very nice and light, texture and color good—barley has characteristic flavor—corn cake is especially tender and all are good textured. The extra lemon juice in rice and corn is to cover up the tendency toward a starchy taste.

Note—The larger amount of lemon juice seems necessary with corn and rice flours to improve the flavor.

**Methods of Mixing Sponge Cakes.**

1. Separate whites and yolks. Beat the yolks until thick and light lemon color. Beat sugar into the stiffened yolks and add the lemon juice. Fold in alternately the stiffly beaten whites and flour. Bake in an ungreased pan for 35 to 40 minutes. Start in a moderate oven (185 degrees C. or 365 degrees F.), and when about half done raise the temperature to that of a hot oven (205 degrees C or 400 degrees F.),

**Rice Sponge Cake.**

Rice flour, three-fourth cup, three and one-half ounces; sugar, one cup, seven ounces; Eggs, four, seven ounces; lemon juice, two tablespoons; salt, one-eighth teaspoon.

# Signal Corps Uniform



The war department has officially recognized the above uniform for women of the telephone unit of the United States signal corps. These girls wear blue uniforms with Norfolk style coats, blue "trench caps" for every day and sailor shapes of blue felt for "dress." On the collar are crossed flags, the insignia of the signal corps, and on the sleeve a band with a telephone mouthpiece embroidered in blue.

# Save the Bones

By LISSIE C. FARMER.

Do not throw away any bones from the meat of any kind that you have been eating until you have extracted their full value for your larder and garden. There is considerable nutritive value in the marrow inside bones as well as in the hard muscles and tendons about the joints which are seldom eaten with with rest of the meat, because they require so much more boiling. Put your leavings of bones and gristle in a kettle, set on the back of the stove so that they may be pushed to the front and be boiling at any time when there is a vacant space and extra heat. If the marrow of the bone is not exposed, break the bone so that the marrow can the boiled out; it makes one of the best soup foundations conceivable. When you have extracted all food value from the bones, put them in the cookstove and burn them up and use the ashes for fertilizer..

**Observation on German U-Boat.**

A German submarine without a periscope carries on its observation by means of lenses at either side and other lenses and mirrors properly arranged. The submarine this equipped is obliged to travel nearer the surface than is necessary in the case of the older model.




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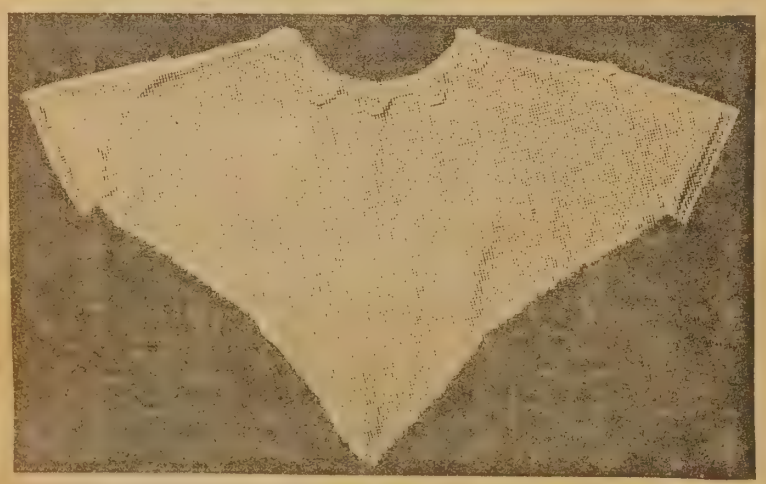
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# Maltese Negligee

By VINIFRED WORTH.



Here is the very boudoir negligee that you have been looking for. It is very easy to make, too.

This garment is made from a square piece of 45-inch lingerie batiste. Fold back two corners at opposite sides, as shown in illustration, to form sleeves.

Use three balls No. 40 Cordonnet.

Six yards of Maltese crochet lace is required for the yoke. After making lace, take 2 loops, ch. 2, 2 more loops, ch. 2, until 14 spaces have been made, 8 loops, 1 ch., 2 loops, 1 ch. sl. st. to other side of 8 loop, 1 ch., repeat until 7 loops have been joined. This makes 1 point. Repeat until required number of points have been made to finish pattern.

Twenty inches of Maltese crochet, with picot border, is required for each sleeve, and they are caught back with small crocheted roses.


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# Patterns

2342—Girls' dress. Cut in four sizes: 6, 8, 10 and 12 years. Size 8 requires 4 yards of 36-inch material. Price, 10 cents.

2513—Child's short clothes set. Cut in five sizes: 1, 2, 3, 4 and 5 years. Size 4 requires for the dress 2 3-8 yards. For the petticoat 1 5-8 yards. For the combination 1 1-2 yards of 36-inch material. Price, 10 cents.

2507—Girls' dress. Cut in four sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. Size medium requires 5 1-2 yards of 36-inch material. Price, 10 cents.

2384-2381—Ladies' costume. Waist 2384 cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Skirt 2381 cut in six sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. A dress for a medium size, as illustrated will require 5 7-8 yards of 36-inch material. The skirt measures about 2 1-8 yards at the foot. Two separate patterns, 10 cents for each pattern.

2509—Ladies' dress. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 38 requires 7 5-8 yards of 44-inch material. The skirt measures about 2 pards at the foot. Price, 10 cents.

2368—Ladies' apron. Cut in four sizes. Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. Size medium requires 6 1-4 yards of 36-inch material. Price, 10 cents.

2345—Dress for misses and small women. Cut in three sizes: 16, 18 and 20 years. Size 18 requires 7 1-4 yards of 36-inch material. The skirt measures about 2 1-4 yards at the foot. Price, 10 cents.

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2178—Girls' dress. Cut in four sizes: 4, 6, 8 and 10 years. It requires 3 3-4 yards of 36-inch material for an 8-year size. Price, 10 cents.

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## LOGANBERRY JUICE.

### Berries Must Be Dead Ripe.

To the Editor: Several of your readers here wish you will publish some information how to make loganberry juice.—Julius Steineke, Brookings, Ore.

**Answer.**

For juice purposes berries should be allowed to hang on the vines until dead ripe, which is not the case when picking for drying. It is advisable to let the berries stand for some time after picking, before pressing them. For home making a small press of almost any kind will do; a cider press has served. Some heat the berries before pressing, and it is claimed that a freer flow of juice is secured by heating. Not too much heat should be used, however. The juice may be bottled, and care should be taken to cork securely so no air can enter. It is advisable to bottle without sugar at present. For beverage purposes, the juice is diluted and sugar added to taste. The Oregon Agricultural college experiment station, Corvallis, Ore., has issued a bulletin entitled, "Loganberry Byproducts," which they will be glad to send you on application.

SANITARY CANNING OUTFITS

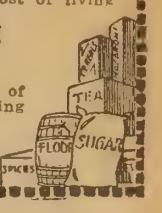
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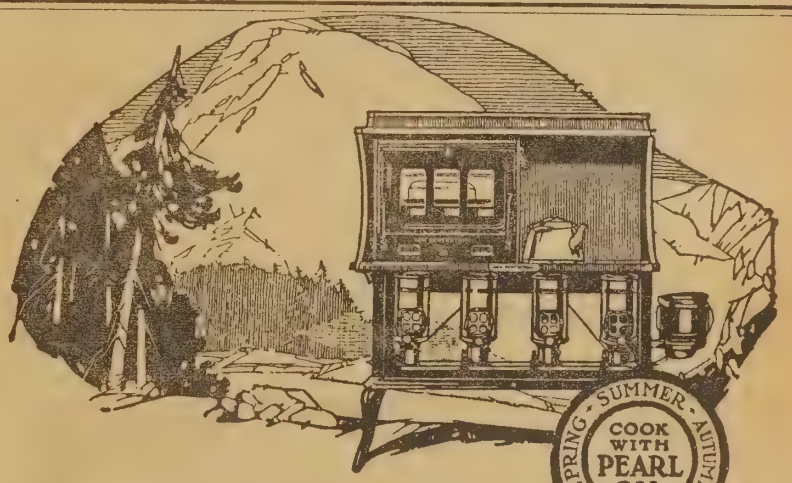
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# Preserving Small Fruits With Corn Syrup

Last week the Farmer published an article from Claudia Z. Murphy, consultant in home economics in New York city, on preserving small fruits with corn syrup, in order to save the much-needed sugar. Here is the second part, telling of the materials required and giving the rules for making jams, jellies and marmalades:

**Materials Required.**

**The fruit**—Sorted, washed and ready for putting up.

**Corn syrup**—An ample supply for the season's requirements. It keeps perfectly, does not crystallize; handy to have on hand.

Sugar—Sufficient for your needs or the allowance that is allotted to you. For some purposes brown sugar can be substituted for granulated, but the latter is preferable.

Utensils required—Preserving kettle, enameled preferred, but lacking this aluminum or tin can be substituted; wooden spoons—for stirring the mixture; cotton bag for straining jelly; jars—glass, plain or screw-top, or stone jars—suitable size; covers and rubbers for screw-top glass jars; parafine and heavy paper for covering either plain glass or stone jars; labels—to indicate kind of fruit in the jar and date of putting up.

All utensils must be perfectly clean. Jars must be freshly cleaned and scalded. Jelly bags sterilized.

It is a controversial point if the jam, jelly, marmalade or preserves should be covered while hot or left to become cold. Both courses are recommended by experts. In days gone by an excellent product was made and left until cold, then covered with tissue paper dipped in brandy, and a tightly tied-down cover of white paper dipped in white of egg. It must always be stored in a cool, dry place.

**Jams, Jellies or Marmalades.**

1. Observe the strictest cleanliness.
2. Use fresh, ripe and dry fruit, a bit under ripe is preferable.
3. Allow generally 3-4 pound of sweetening to each pound of fruit.
4. Have a steady, but bright fire. Boil continuously and fast, and skim and stir frequently.
5. Do not fill the preserving kettle too full.
6. A good test to ascertain if it is cooked sufficiently is to allow some juice to drop from the spoon, and when it sheets off—or sets—it is cooked enough.

The following table as to the amount of water to add is reliable, but it must be borne in mind that if the season is wet less water should be added; so more syrup is needed and longer cooking than in a dry season.

As a rule, the procedure is as follows, though in special recipes other methods may be advised:

Place the prepared fruit in a kettle and simmer for a few minutes. Add the sugar and cook gently until it has dissolved. This is important, for if allowed to boil before it is dissolved the jam will be thin. When the sugar has dissolved, add the corn syrup—equal weight, pound for pound to the sugar—then boil fast. This again is important, as otherwise the product, whether jam, jelly or marmalade, will not be of good color.

Stir well and skim with a silver spoon. When sugar of good quality and clean fruit is used there should not be very much scum.

**Time.**

The length of time for boiling will depend on the kind of fruit used, as well as its condition, whether wet, ripe or unripe. Roughly, 40 minutes is the time from when the fruit begins to boil, but after about 25 minutes it is wise to test by placing a very little in a saucer. If it sets, it is done; if you think it is done, put it on a cool part of the stove while you rest. Otherwise it may become overcooked.

**Preserving in Syrup.**

Another method, and many jam-makers prefer this, is to first make a blended syrup and then cook the fruit in it. For example: Equal weight of sugar and corn syrup; add half a pint of water, and dissolve it by gentle heat. Then boil for half an hour, add the fruit and boil quickly until the jam jellies, allowing three-fourths pound of blended syrup to each pound of fruit.

A number of special recipes for doing up the small fruits will be published in the next issue of the Farmer.

**Amount of Water Allowed to Each Pound of Fruit.**

| Fruit. | Proportion of Water. | Fruit. | Proportion of Water. |
|---|---|---|---|
| Apple | 1 gill to 1 lb. | Greengage | None |
| Apricot | 1 gill to 1 lb. | Gooseberry | 1 gill to 1 lb. |
| Blackberry | None | Plum | None |
| Cherry | 1 gill red currant juice to each lb. | Quince and apple | Water enough to cover bottom of pan. |
| Carrot | Enough to cover carrot | Raspberry | None |
| Currant, red | None—mash a bit. | Strawberry | None |
| Currant, black | ½ gill to 1 lb. | Rhubarb | ½ gill to 1 lb. |
| Damson | None | Marrow | ½ pint to each 3 lbs. of fruit. |
| Grape (unripe) | None | | |

## Australian Wheat Surplus.

The exportable surplus of this season's Australian wheat harvest is estimated at 80,000,000 bushels, to which must be added the quantity available at the beginning of the shipping season on November 1, making the total amount available for export at this time 200,000,000 bushels. Since December 1 shipments from the four provinces have amounted to only 6,691,000 bushels of wheat against 27,812,000 the previous season, although the amount of flour exported increased from 56,711 short tons in 1916-17 to 128,913 tons the current season since December 1 to May 15.

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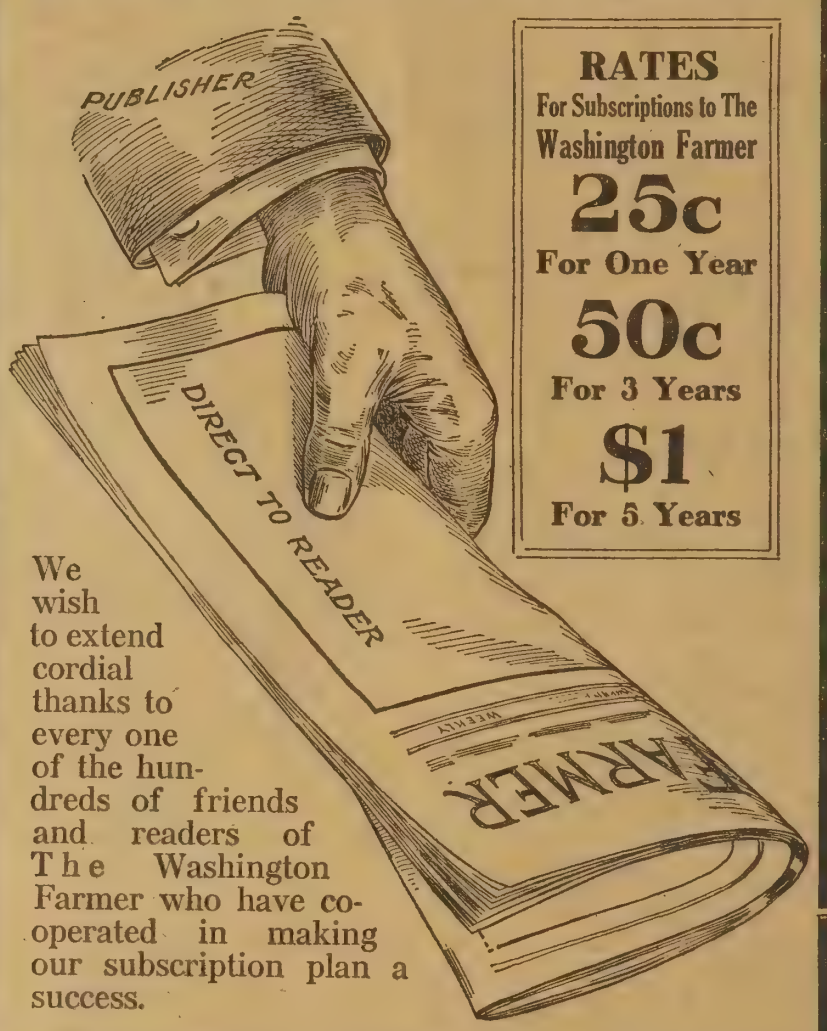
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So many of our girls and boys ask if they may be admitted to the Corner, if they may be a cousin, if it costs anything to join and how often they are supposed to write. And so Aunt Nellie is going to answer each one of these questions right here. To be a cousin, all you have to do is to write a letter to Aunt Nellie, you may write once, or regularly as many do. It takes no money to join, and one cousin is just as welcome as another. Just remember that if you have written you are counted among the cousins and your letter will be printed in its turn as all are published.

**Sunshine All the Time Now.**

Dear Aunt Nellie: I thought I would write to you for the first time. I enjoy reading the Children's Corner. I am in the eighth grade and my birthday comes July 19. We live on a farm and have 10 cows, three horses, one colt and a few calves. We have a family of 10, including mama and papa. There are five girls and three boys. I am going to plant a large garden this year and buy a Liberty Bond to help win the war. I see lots of soldiers over here and even know some of them. My teacher's husband is a soldier also. We all joined the Red Cross except the baby who is a month old. We had a Junior Red Cross at our school. Have any of the cousins read Uncle Tom's Cabin? It is surely a good book. It tells about how they treated poor Tom. Our teacher read it to us at school. We had only a few days of snow, but had lots of rain. There is sunshine all the time now and it surely is grand. All the trees and flowers are blooming. This year was lucky for me as I liked it fine. I guess I'll have to learn to knit better and knit for the Red Cross. My favorite flowers are carnations or sweetpeas. We used to have a colt named Queen and I liked her very much. One day she jumped over the fence and got in the oatfield so papa put something on her so she couldn't jump any more. One time I happened to be going through the field when I saw her lying down and the flies all around her. She was tangled up. I untangled her. She did this so much that we sold her. We have a cow and her name is Hattie. She is my cow. She is red polled and is like a pet. I am not gong to ask for a twin because I have some over here. I like a country home the best of all. You can have your own fruit, vegetables and your own milk which cost so much in town. You can romp around and have all the fun you want. In summer I help on the hay wagon and help shock up oats and other grain. —Olga Mirosh, age 13, Tono, Wash.

**Ruth Graduated Last Spring.**

Dear Aunt Nellie: This is my first letter to the Children's Corner, and I hope it will not be the last. I enjoy reading the letters very much. I was 13 years old last April 5,; am 5 feet 9½ inches tall and weigh 133 pounds. I have brown hair and gray eyes. Have I a twin? I have two brothers and no sisters. Roy is 11 and Marvin is 7. I graduated from school last spring. We have four cows, Topsy, Daisy, Heart and Spot; four heifers, Rose, Cutey, Red and Beauty, and three little calves, Cary, Bird and Ike; one little dog, two cats, four kittens, and two horses, Pet and Dolly. Dolly, the boys ride to school on. It is three miles to school. I will write again if I may join the Corner. May I?—Ruth Wastenberg, R. 1, Eatonville, Wash. (Every one who writes to the Corner is a cousin, Ruth, dear, and so we are glad that you write. Come again.—Aunt Nellie.)

**Make Pine Needle Baskets,**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner and it has been a long time since I wrote to the Corner. I have light brown hair and blue eyes. I am 13 years old. My birthday is January 23. I weigh 105 pounds. My chum is Pearl Martin. She is 11 years old. I got a piano for my birthday. We have a new piano at the schoolhouse. We have a globe and an outline map in our schoolhouse. We have had a traveling library in our school ever since Christmas. We have made pine-needle baskets this year. They are made of dry pine needles and sewed with raffia. They make pretty work baskets, trays and mats. Our school let out May 17. Our whole school belongs to the Junior Red Cross. We made several outing flannel petticoats for the French children. Our schoolhouse is made of logs, but it is sealed inside so you couldn't tell the difference after you got inside. We have pine trees all around our schoolhouse. At school we play house, baseball, pump-pull-away, anti-over, marbles, jump rope, hot potato, three-deep, hide-and-seek, run sheep run, drop the handkerchief, last couple out, fox and geese, throw the stick and some other games. The different kinds of birds here are robins, blue birds, orioles, quails, blackbirds, snow birds, magpies, sparrows, hawks, eagles, owls, crossbills, grouse, wrens, and meadow lark. The wild flowers out here are buttercups, yellow bells, violets, birds bills, Johnnie-jump-ups, Mayflowers, cowslips, Easter lilies, lady slippers, Indian moccasins, wake-robins, wild tulip, shooting stars, baby faces, wild flags, roses and some other flowers. I made a flower garden. I put in sweet peas, pinks and asters. I have a pony, his name is Prince. I have a dog. His name is Jip. I taught him to pull me. He will pull me in my wagon and I have a little black and white kitten and a big gray one. I like cats and I like to play with them. If I can join the Corner I will write more letters to the Corner, so please let me know. I will be glad to join the Children's Corner.—Josephine Wagner, Tekoa, Wash. (Welcome, Cousin Josephine; your letter is so interesting that we are all going to watch for another one soon. Aunt Nellie.)

**Run a Ferryboat.**

Dear Aunt Nellie: This is my first letter to the Corner and I hope that it will be printed. May I join the cousins? I am 4 feet 11 inches tall, with brown hair and brown eyes. Our school closed and I passed into the seventh grade. I am 12 years old and my birthday is October 16. Have I a twin? If so I wish she would write to me. Jennie Loreen's birthday is on the same day as mine, but she is a year older than I am. I wish she or some of the other cousins would write to me. I have two brothers, Albert and George. Albert is 8 and George is 6. We live on a 640-acre farm at Page, on the Snake river. We have a store. My mother is postmistress here. We also run a ferryboat. We have three work horses, one colt and my saddle pony, Dolly. I just love to ride. We have three lambs, 25 rabbits, 16 cows, six calves and 25 big chickens and 30 little ones. We have a dog named Rover and a cat named Tommie. I joined the Red Cross and knitted wash rags and a pair of wristlets. I will write again.—Mary Bayer, Page, Wash.

**Goldie Has a Playmate.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I joined the Red Cross and the poultry club and the garden club. There were 17 pupils in our room and there are two rooms in our schoolhouse. I am 10 years old and in the fourth grade. I have four sisters and three brothers. My brothers' names are Galen, Kenneth and Earl, and my sisters' names are Verna, Orpha, Edith and Ruth. We have one dog and one cat. The dog's name is Ted and the cat's name is Pussy. My brother Galen is 7 and Kenneth is 2, Earl is 1 year old. Verna is 11 and Edith is 5. Ruth is 4. I have a playmate and her name is Treva Edna Rohrs. My birthday is June 24. I have a sister. Her birthday is December 25.—Goldie Neher, Garlam, Wash.

**Great Fun on a Farm.**

Dear Aunt Nellie: This is the first time I have ever written to the Children's Corner. I read the letters all the time and enjoy them very much. I am in the third grade and am nine years old. I go to Paradise school. My teacher's name is Mrs. Fowler. I have four brothers and three sisters. My brothers' names are Henry, Edward, Arthur and Fred. My sisters' names are Anna, Hilda and Dorothy. We have a pet pony which is very gentle. His name is Button. Our dog's name is Bob. We have eight rabbits, four big ones and four little ones. We live by the Nooksack river on a large farm. There is lots of fun on a farm.—Ruth O. Toyn, Ferndale, Wash.

**School Is Right Across the Road.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I have no dogs or cats for pets. I have six sisters and four brothers. I have three married sisters and two married brothers. I have four nephews. I am 8 years old. My birthday is January 10. I like to read the letters in the Children's Corner, as they are very interesting. I go to Big Flat school and only have to go across the road. I go home for dinner every day. We had a social and our teacher bought us each a Red Cross membership.—Daisy Homad, R. F. D. 1, Waverly, Wash.

**Lion, the Dog, Ran Away.**

Dear Aunt Nellie: This is the second time I have written to the Corner, but I hope it will not be the last. I have had a birthday since I wrote the last time. I am now 8 years old. My birthday is April 6. Have I a twin? If I have I wish they would write to me. My sister has found a twin, but she forgot her name. We did have a dog named Lion, but he ran away. We are going to try and find him. I got to the Alpowa school. I will be in the third grade next year.—Lola Ferrell, Alpowa, Wash.

**Anna Enjoys the Letters.**

Dear Aunt Nellie: This is my first letter to you. I have been going to write to you for a long time but just have got around to do it. I certainly enjoy reading the letters written by the other children and would like very much if some of the girls would write to me. I am 12 years old.—Anna Erickson, R. F. D. 3, Box 163, Mt. Vernon, Wash.

**Rather Live on a Farm.**

Dear Aunt Nellie: I have read most of the letters in the Children's Corner and think they are interesting, so I am going to write this time about living on a farm. I am only 10 years old. I have three sisters and two brothers. My oldest sister is in the eighth grade and my youngest sister is 3 years old and I love her the best. Her name is Agnes. Every morning and every night I milk three cows. Their names are Dolly, Pat and Nippy. We have seven cows, two calves, three pigs, two horses and about 30 chickens. My oldest sister, Annie, and I have joined the bean club. My garden is only one rod square, but Annie's is 66 feet square. I am going to work hard and try to raise more than she does. I like to live on a farm and work on it in the summer time and go to school in the winter. My teacher's name is Miss Wilson. I think she is nice to me. I have also joined the Red Cross. The way I earn money is by milking; when the milk check comes my father gets the dollars and I get the cents. That is about all I have to tell about what I do every day or how I work on the farm. But I would rather live on a farm than in a city because the city children have nothing to do and nothing interesting to work on like we have on a farm.—Edner Sofdahle, Ferndale, Wash.

**Makes Sister's Doll Clothes.**

Dear Aunt Nellie: This is my first letter to the Children's Corner and I would like to join. I am 12 years old and am in the seventh grade. I go to school at Big Flat. There are seven children in our school. My teacher's name is Miss West. My birthday is January 3. I like to read the children's letter and the stories in the Farmer, as they are verw interesting. I can crochet, embroider, sew and cross stitch. I make all my little sister's doll clothes and also my own. I don't know how to knit, but would like to learn so I could knit for the soldiers. I have no pets, but would like to have some. I would like to correspond with some of the girls in the Children's Corner. I will write again.—Emily Homad, Route 1, Waverly, Wash.

**Wilma Broke Her Arm.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I like to read the letters. On April 22 I broke both bones in my left arm. Mama and papa took me to town right away and I am still carrying it in the sling. I am 10 years old and my birthday is October 26. There has been an awful fire around here. It was quiet in the morning, but in the afternoon it turned to be windy. All week there have been fires around here. The peas and lettuce are up and the early potatoes are, too.—Wilma Erickson, R. R. 2, box 108, Lynden, Wash. (We hope by this time your arm is entirely well and that you won't need a sling any more. Come again, dear.—Aunt Nellie).

**Can Play the Snare Drum.**

Dear Aunt Nellie: May I join the Children's Corner? I have been reading the letters and enjoy them very much. I am eight years' old and in the third grade at school. My birthday is January 24. Have I a twin? If so I wish he or she would write to me. I have one sister, but have no brothers. My sister's name is Ethel. I am taking music lessons now from Miss Binkley and I can play the snare drum also. I live about eight miles west of Goldendale. I hope all the cousins are well. —Charlie Franklin Divers, Blockhouse, Wash. (Glad to have you join the Corner, Charlie. Come again soon, won't you? Aunt Nellie.)

**Bathing In the Creek.**

Dear Aunt Nellie: I have never written to the Corner before, so I thought I would write. I read most of the letters. I missed last week's paper so I didn't get to read the letters. I am reading the story in the paper. I like it very much. We live on a ranch. We have two ranches, one is up on a hill, the other is in a canyon by a creek. We go bathing in the creek in the summer. I have a sister and a brother. My sister wrote to the Corner once, but she has never written again. I am 12 years old. My birthday is November 14. I hope every little girl and boy will like my letter. —Florence Ferrell, Alpowa, Wash.

**A Red Cross Worker.**

Dear Aunt Nellie: May I become a member of the Corner? I am 11 years old. I am in the fourth grade. I have light hair and dark blue eyes. My birthday is March 12. Have I a twin? I have one brother and two sisters. My brother is 12 and in the sixth grade. My youngest sister is in the second grade. My little sister does not go to school. I enjoy reading the letters very much. I would like to see my letter in print. I joined the Junior Red Cross. We work every Friday afternoon for the soldiers in France. We make gun wipers, pillows, napkins and tray cloths.—Rea Mathes, R. F. D. 2, Prosser, Wash.

**Planted All the Seeds.**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner and I hope it won't be the last. I have a war savings stamp. Our school closed May 17. We have a selfplayer piano. I am taking music lessons. We have two canary birds. Our teacher gave us some seeds to plant. I planted all of mine. I like to go to school.—Henry Besel, Farmer, Wash.

**Will Be Ten in October.**

Dear Aunt Nellie: I am nine years old and am in the third grade at school. My birthday is October 2 and I will be 10 then. I have two brothers and one sister. We have six cats and one dog. One of our cats is named Beauty. We have two ducks and two little calves. My brothers' names are Bobby and Richard.—Luella Ray Meeks, Delrio, Wash.

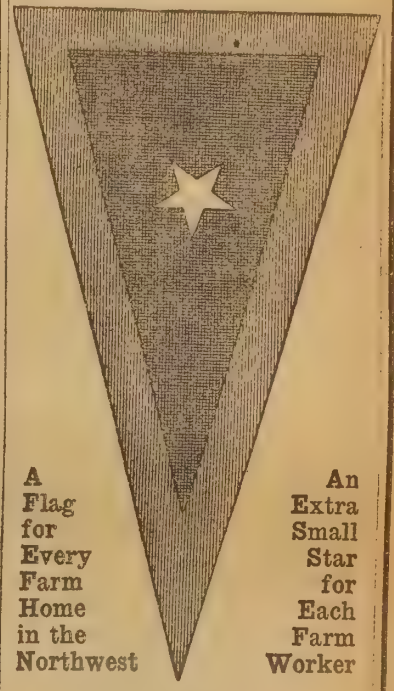
**Has Marjorie a Twin?**

Dear Aunt Nellie: I live on a 1320-acre farm. We have 40 head of cattle, seven little calves, 37 head of horses and 17 hogs. I have two dogs and two cats. The cats' names are Roughy and Ready and the dogs' names are Rastus and Shep. I have one brother and no sisters. My brother's name is Donald. He has a pony and its name is Jimmie. He is a chestnut sorrel. I have a pony and her name is Babe. She is a white one. I have a mile and one-eighth to go to school. Our trail is very pretty all the way to school. Have I a twin? If so I wish she or he would write to me soon. I have light hair and light eyes and I am 5 feet 2 inches tall and rather slim. I am 12 years old and I will be 13, July 12.—Marjorie McCoy, Hartland, Wash.

During the last two weeks Aunt Nellie has received letters from the following cousins: Emma Brune, Johnnie Neiderprum, Genevieve Williams, Leonard Johnson, Ada Stichnoth, Irene Overdorff, Edna Cordill, Naima Kukka, Amy Bonney, Marie Runolfson, Mary Jean Shelton, Bertha Aldrich, Frankie Baldwin, Alice Clinesmith, Ethel Strom, Jennie Lane, Leta Lane, John Kelly, Muriel Vetters, Emma LaPine, Clara Staley, Esther Chalenor, Lena Duncan, Alice Duncan, Elna Mattson, Helen Berry, George Berry, Esther Anderson, Florence Burr, Vera Allen, Elizabeth Drenkhahn, Arnold A. Menger, Jewel Howard, Matie Burchett, Alta Kruse, Evelyn McKinney, Violet Howell, Lenore Fox, Elsa Mattson, Ella Sophie Brown, Alice Clifford, Mabel Stevens, Clara Hawkins, Erma Broyles, Derla McManamon, Margaret Ottmer, Evelyn Engstrom, Alice Larson, Ruth Potter, Graham Potter, Reva Lamb, Grace Hicks, Dortha Hicks, Verna Tittle, Charlotte Shepard, Victoria Thaden, Hazel May Nelson, Gladys Plemon, Effie Luddington, ——— Miller, Florence Scott, Evelyn Jolly, Cloe Jolly, Ellen Nybedk, Marvel Parriott, Edwidge La Fond, Bertha Wahl, Josephine Holland, Clara Baskette, Lita Forslund, Edwin Johnson, Fern Carlisle, Eugene E. Field, Verna Flower, Beulah Buckley, Dorothy Harris, Marian Halmer, Alma Hansen, Margaret Silver, Mabel Calvin.

Address all letters to Aunt Nellie, care of The Washington Farmer, Spokane, Wash.


FARM SERVICE WAR FLAG



A Flag for Every Farm Home in the Northwest

An Extra Small Star for Each Farm Worker

(Patent applied for.)

**Designed by The Washington Farmer in connection with The Oregon Farmer and The Idaho Farmer for the farm and farm home that is increasing food production in helping to win the war.**

OFFER NO. 1.

A farm service war flag, 9x22, printed on heavy enamel paper, in full colors, will be postpaid to any one securing and sending in ONE NEW subscription to this paper. (One year 25c, three years 50c, five years $1.00.)

Send your subscription to

THE WASHINGTON FARMER
617 Central Bldg.,
Seattle, Wash.
Review Bldg.,
Spokane, Wash.

## News for Breeders

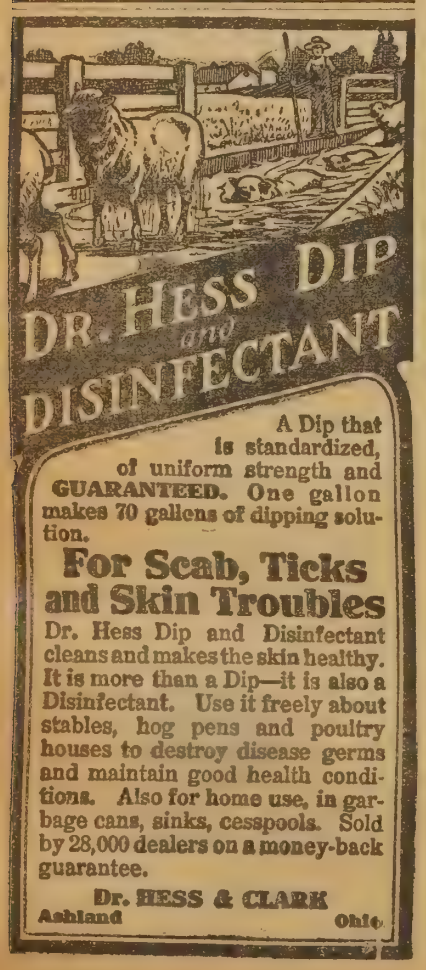
John Kirtman of Colfax, Wash., who has purchased the farm home of William Behrman Jr., near Cornelius, Ore., took with the ranch Mr. Behrman's fine Jersey herd. He also got the young Jersey bull, Fissy Fern's Noble 16th. This bull is out of Harry West's great imported cow, Onota, that won the gold medal in the public butter test on the Island of Jersey by producing three pounds, six ounces of butter at two years old, 29 days after calving. His sire, Fussy Fern's Noble, is by Imp. Golden Fern's Noble, that sold for $25,000 and is sire of 28 Register of Merit daughters, as well as a great show bull.

G. O. Swales of Crescent stock farm, Johnson, Wash., writes that the litter of pigs from the sow he bought in the east, bred to King of Orions 2d, are so good that he feels he was well justified in the price he paid. The sire is the great boar that sold for $1300 as a pig. There are eleven pigs in the litter. Crescent stock farm's own herd board, Burke's Cherry King, is siring big litters of pigs with fine Cherry color good heads and backs, heavy bone and good feet. Their grand champion sow at Spokane last fall farrowed ten and the first prize gilt at Salem in 1915 farrowed 15. Mr. Swales reports farm work well in hand, crops looking well and prospects good for ready sales of pigs. They expect to show a young herd at Lewiston this winter and possibly at Spokane this fall.

Francis T. Underhill of Santa Barbara, Cal., recently purchased from J. M. Fruitts of Enterprise, Ore., a junior yearling Hampshire sow to add to his show herd for exhibition at the fairs this fall as well as for breeding purposes. Mr. Underhill also got a March sow pig at the same time for $35 and has since ordered a couple of October gilts at $50 each. Mr. Fruitts is a breeder of Shorthorn cattle as well as Hampshire swine and at the Union Stock show purchased the senior bull calf that stood first in a class of 11 from J. M. Green & Sons, who owned and showed the calf.

The highest average of prices ever received at a Hereford sale were made at the great sale of Colonel E. H. Taylor, Frankfort, Ky., June 7, when 62 Herefords went through the ring for $186,850, an average of $3013 each. In fact, but one cattle sale in all history has ever surpassed this average. That was in 1873 when at New York Mills 100 Shorthorns averaged $3504. While Colonel Taylor paid the record price of $12,500 for the bull Woodford last fall, the high prices in his sale were all for females. Clive Iris 3d, a 4-year-old cow that has been champion in both England and America, topped the sale, going to W. A. Pickering of Kansas City, Mo., for a record price of $13,850. Seven other cows went $5000 or over. The Taylor sale was not the only sensational Hereford auction during the month of June, for at the O. Harris & Sons sale at Harris, Mo., June 4, the bull King Repeater brought $12,000, and 101 head averaged $1068. And the T. B. Bartlett Herefords at Green Castle, Mo., 62 head averaged $954, with a top price of $5500.

H. A.


B-K Bacillus for Calf Scours

Write for evidence from users and our Trial Offer. Ask your dealer for our FREE BOOK "Save Every Calf." General Laboratories Madison, Wis. Dept. 3624.


## Wheat Stays at $2.20

(Continued from page three.)

price of $2 a bushel for No. 1 wheat aboard cars in the intermountain territory will be made effective. Details of the plan will be made public soon.

**Prices for No. 1 Wheat.**

The corporation's announcement said No. 1 wheat of the northern spring, hard winter, red winter, durum and red and white grades will be sold in the various markets at the following prices:

| | |
|---|---|
| New York | $2.39½ |
| Philadelphia | 2.39 |
| Baltimore and Newport News | 2.38¾ |
| Duluth and Minneapolis | 2.21½ |
| Chicago | 2.26 |
| St. Louis | 2.24 |
| Kansas City and Omaha | 2.18 |
| New Orleans and Galveston | 2.23 |
| Tacoma, Seattle, Portland, Ore., Astoria, San Francisco and Los Angeles | 2.20 |

The price basis for No. 2 wheat will be three cents below No. 1 and for No. 3 four cents below No. 2. Grades below No. 3 will be dealt in on sample.

**Schedule for Special Classes.**

Special classes of wheat, the commission said, will be sold on the following schedule:

Dark hard winter, two cents above hard winter.

Dark northern spring, two cents above northern spring.

Amber durum, two cents above durum.

Yellow ard winter, two cents under hard winter.

Red spring, five cents under northern spring.

Red Walla, seven cents under red winter.

Red durum, seven cents under durum.

Soft white, two cents under hard white.

White club, four cents under hard white.

Changes in federal grading standards previously filed with the trade, it was declared, are expected to result in production of more high grade wheat than in 1917.

## Frazier Is Nominated

Lynn Frazier, nonpartizan governor of North Dakota, was renominated for the governorship in the primary election in that state last week over John Steen. His majority was more than 14,000. Congressman J. M. Baer, nonpartizan representative in congress, was renominated by a small majority over H. G. Vick. The nominations for congress in the other two congressional districts were likewise won by nonpartizans. These candidates will be opposed in the final election by democratic candidates, the nonpartizan nominees being candidates in the republican primaries indorsed by the nonpartizan league.

### Coming Events.

July 15-17, convention poultry instructors and investigators, Moscow, Idaho.

August 19-25—Convention National G. A. R., Portland, Ore.

**Fairs, Shows, Exhibits.**

August 26-30, Southwest Washington fair, Centralia-Chehalis.

September 2-7—Spokane Interstate fair, Spokane, Wash.

September 16-21—Washington State fair, Yakima, Wash.

September 19-21—Roundup, Pendleton, Ore.

October 1-6—Western Washington fair, Puyallup, Wash.

November 7-13—Northwest live stock show, Lewiston, Idaho.

**Y. M. C. A. Men Killed.**

Three Canadian Y. M. C. A. war work secretaries, working in dugouts close to the front line trenches, were killed recently by shell fire.

# Breeders' Department

## SHORTHORN CATTLE


**Herds Bulls**

Imported Doune Radiance No. 609412 and Gainford Perfection No. 442173.

**Hercules Shorthorns**

We can supply you with choice, well grown bulls and females of breeding age. Your inspection of our herd is invited. Visitors always welcome.

**Day & Rothrock Company**

205 Exchange Bank Bldg. Spokane, Wash.

**SHORTHORNS**

A few young stock for sale by such noted sires as Prime Prince, 421193, and Sultan Still, 493239.

R. E. BOYCE, Baker, Ore.

**LELAND BROTHERS**

Breeders of top registered Shorthorn cattle. Correspondence solicited.

WENDELL, Idaho.

**MILKING SHORTHORNS**

with world records behind them for milk production.

**A. R. O. HOLSTEINS**

A son of the King of the Pontiacs at head of herd.

Can make special prices on young bulls of each breed.

A. V. Bradrick & Son
Palouse, Wash.

**SHORTHORN BULLS**

from the FORK BRANCH HERD.

I have a few Shorthorn bulls of excellent breeding at a variety of prices. Have a lame bull at half price, guaranteed serviceable.

A. CHALMERS, Forest Grove, Ore.

**H. H. SCHILDMAN**

breeder of registered Shorthorn cattle, Hampshire sheep and big-type Poland China hogs. Filer, Idaho.

**REGISTERED SHORTHORN COWS.**

Young bulls and heifers, sired by Scotch bulls; liberal terms.

CALDWELL CATTLE CO., Caldwell, Idaho.


## ABERDEEN ANGUS


**ANGUS CATTLE**

In the famous valley of the Yakima there is located one of the best herds of Aberdeen Angus in America. Proof of this is evident by the many prizes won by this herd at all of the greatest shows of the northwest and central states, including the Chicago International.

Fifty extra good range bulls are now offered for sale. Also fancy herd headers and show cattle of both male and female. All prices very reasonable.

CONGDON & BATTLES.
OTTO V. BATTLES, Manager.
Yakima, Washington.


## BROWN SWISS CATTLE


**Brown Swiss Stock Farm**

Breeders of Brown Swiss Cattle, the Farmer's Dairy Cow. Young stock for sale.

THEO. BRUGGER, Route 3, Gresham, Ore.


## DUROC-JERSEY SWINE


**Crescent Stock Farm Durocs**

Spring pigs by the great $1300 boar, King of Orions 2d, and by our own great boar, Burke's Cherry King, out of prize sows. Uniform cherry color, finest of heads and backs, heavy bone and best of feet.

G. M. BECKETT & G. O. SWALES,
Johnson, Wash.

**Chas. G. Sprong**

BREEDER.

Registered Duroc-Jersey hogs. Weanling pigs for sale.

GRANDVIEW, WASH.

**Registered Duroc Jersey Pigs**

My herd contains the blood of old "Defenders," "Pathfinder," "Illustrator," and Burl's Good E. Nuff. Big type prize winning sows. Guaranteed to please.

V. R. FISHER, Oxford, Idaho.

**Growthy March Pigs**

Good breeding, good individuality, satisfaction guaranteed. Write for description and prices.

GEORGE DEBOK, Oregon City, Ore.

**DUROCS.**

Boars and open or bred gilts of excellent breeding.

E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE. Yakima, Wash.


## CHESTER WHITE SWINE


**Blue Ribbon Stock Farm**

Chester White Hogs. Hampshire and Rambouillet sheep. Swine of both sexes and a choice lot of ram lambs.

ED SCHOEL, Suver, Ore.

**COVE STOCK FARM**

Unrelated fall and spring Chester White pigs from prize winning stock.

ARCHIE CONLEY. Cove, Ore.


**The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.**

## GUERNSEY CATTLE


**Registered Guernsey Bulls**

From heavy producing cows, most of them with A. R. records, among them 402 lbs. fat (472 lbs. 85 per cent butter) and 392 lbs. fat (461 lbs. butter), both with first calf. Good type, well grown. Prices reasonable.

CHICONA FARM.
A. L. GILE, Prop. Chinook, Wash.

**ORCHARD HILL FARM**

"Home of High-Class Guernseys."
Dr. Park Weed Willis, Owner.
Redmond, Wash.

**FAIRVIEW FARM**

Breeders of high class registered and grade Guernseys.

A. J. SINNES.
Route 5. Mt. Vernon, Wash.


## POLAND CHINA SWINE


**Big Type Poland Chinas**

Peter Mouw and John B. Lawson strains. Young boars and bred or open gilts. Good individuals.

CLIFFORD RIGGS. Touchet, Wash.

**LOCUST HILL HERD**

Big type and medium Poland-Chinas. Bred gilts and spring pigs of both strains, unrelated. Sixteen years a breeder of Poland-Chinas in Oregon.

A. L. SWAGGART, Athena, Ore.

**LOCUST LAWN HERD**

Breeder of Big type Poland China swine. Some very choice spring pigs for sale.

W. F. HOWARD & SONS, Caldwell, Idaho.

**QUALITY AND UTILITY**

our hobby. Poland Chinas, our breed. Weanling pigs, both sexes, also a few service boars. Satisfaction assured.

FRANK NEEDHAM, Eugene, Ore.

**QUALITY HERD.**

If you want to improve your herd, try stock from my winners at the Oregon state fair.

RAY J. FOX. Lyons, Ore.

**PURE-BRED POLANDS.**

A good herd boar for sale; also booking orders for spring farrowed pigs. Will ship C. O. D. subject to your approval.

HERBERT WILLARD, Dayton, Ore.


## HAMPSHIRE SWINE


**REGISTERED HAMPSHIRE HOGS.**

Growthy and vigorous, great rustlers. Pigs from January and February litters, also other ages. Correspondence invited.

TUTTLE BROS., Asotin, Wash.

### Sow of Quality.



The above photo shows the Duroc Jersey sow, Lucile 315766, owned by the Oregon Agricultural college and bred by J. W. Fruit of Brooks, Ore. She weighs 800 pounds and has all the quality her picture shows and more. She is by Orion Col., and out of Lucy Wonder 2d, by Chief's Col. H. A.

### Builds Shorthorn Herd.

A. J. Day of Ammon, Idaho, is building up a splendid herd of Shorthorns. He now has 27 purebred Shorthorns and is acquiring more. Mr. Day is one of the men in the Idaho Falls section who are doing things in a large way. He has several farms and is operating them in a thorough, systematic manner.

### Don't Shoot Pigeons.

The United States department of agricultre urges hunters not to shoot pigeons in air, for they may be homing pigeons being trained in many sections by the signal corps of the United States army to carry messages across battlefields.


**Our Country Needs Livestock and Poultry**



**Kreso Dip No. 1**

for

**FARM SANITATION**

will keep Livestock and Poultry healthy.

**KRESO DIP No. 1**

EASY TO USE.
EFFICIENT. ECONOMICAL.

Kills Sheep Ticks, Lice and Mites; Helps Heal Cuts, Scratches, and Common Skin Diseases.

PREVENTS HOG CHOLERA.

WRITE FOR FREE BOOKLETS ON POULTRY AND LIVESTOCK.

Animal Industry Department of

**PARKE, DAVIS & CO.**

DETROIT, MICH.



**"Pig-a-Boo"**

**DIGESTER TANKAGE**

*Puts Profits in Porkers*

Cuts down high feeding costs—saves costly grain—balances the hog ration.

**FREE BOOKLET**

contains valuable information to hog raisers. Write

**UNION MEAT CO.**

North Portland, Ore.





## It Saves Wheat

To the Editor: I am enclosing a good recipe for war ginger bread which I have tried and find satisfactory. Would you please print it in your column that other people may also be help-d?

**Wheatless Ginger Bread.**

One cup sugar, 1 cup sour milk, 1 cup molasses, 1-2 cup fat, 1 cup rolled oats, 1 1-2 cups barley flour. 1 cup raisins, 1 teaspoon each ginger and cinnamon, 2 eggs, pinch salt, 1 level tablespoon soda.

Cream the fat and sugar, add molasses and sour milk in which soda has been dissolved, then add rolled oats, stirring well that it may all be moistened, add beaten eggs and raisins. Mix flour, spices and salt and sift into the batter. Fold in lightly. Bake in a moderate oven for 45 minutes. This will stay moist for days.

MRS. F. F. WAYMIRE.
Wilcox, Wash.

### SOLDIERS' DIET.
### Needs More Food Than Civilian.

A soldier needs more food than the ordinary civilian because his life is more strenuous. Moreover, his whole diet must be made practically from wheat, fats, sugar, condensed milk and coffee, for excepting a few varieties of canned vegetables, these are the only foods that it is possible to ship to him from a distance.

Furthermore, Uncle Sam must lay up vast reserve stores of these foods to meet emergencies—such as food lost during a battle, food sunk by submarines, food spoiled in transportation, and bad crops next year.

Just how well fed the American soldiers are and just how well Uncle Sam is able to meet one or all of these emergencies depends on how thriftily American men and women save wheat, meat, sugar and fats.

**Portugal to Improve Agriculture.**

In a recent address before farmers, the Portuguese minister of agriculture discussed plans for development in the nation's agricultural methods and activities. Better agricultural instruction and the training of women for farm work were advised. Portugal depends absolutely on the products of her farms, and at least for the duration of the war most of the work must be done by women.

## SHEEP


**SHEEP FOR SALE**

Registered Shropshire, Oxfords, Lincoln, Hampshire and Cotswold rams; 50 head registered Shropshire ewes; 3000 stock ewes, Lincoln, Cotswold and Shropshire breeds; 500 ewes, lambs, Cotswold and Lincoln ram lambs. Write for prices.

EARL WOOD. Silverton, Oregon.


## BERKSHIRE SWINE


**Berkshire Hogs for Sale**

Have a number of sows, 18 months old; will farrow second litter this fall. Also young gilts and boars of all ages; all from prize winners. Write for prices.

EARL WOOD. Silverton, Oregon.


## YORKSHIRE SWINE


**Weaned Pigs of Quality**

Can furnish pairs or trios, best stock, $15 at eight weeks.

WM. NEUENSCHWANDER, Gaston, Ore.


## PERCHERON HORSES


**Hunter Ranch Percherons**

The Grand Champion KROUMIR at head of herd. Young stallions for sale at all times at breeders' prices.

A. R. HUNTER, Island City, Ore.


## HEREFORD CATTLE


**Highland Stock Farm**

offers for sale Hereford bulls, 1 or 2 years old. One or a carload.

PLATT BROS. Genesee, Idaho.

**BULL RANCH**

Hereford Cattle.
Berkshire Hogs.
Hampshire Sheep.

CHAS. BULL, Mabton, Wash.


## JERSEY CATTLE


**Foundation Herd of Jerseys**

To reduce our herd to a size proportionate to the available labor supply we make the following offerings: First of all the great Tennessee cow.

**Moyane Monine,** 803 lbs. butter. 10,406 lbs. milk in one year. Also
**Creole Bess,** 684 lbs. butter, 12,363 lbs. milk.
**Stockwell's Dahlia,** 619 lbs. butter, 8890 lbs. milk.
**Lucy's Convent Lassie,** 484 lbs. butter, 7568 lbs. milk.
**Princess of the West,** 477 lbs. butter, 6996 lbs. milk in 341 days.
**Pearl of Riga,** 458 lbs. butter, 7489 lbs. milk in 297 days.
**Diamond of Fair Acres,** now on test, milking 59 lbs. a day, as junior 3-year-old.

**One heavy producing** untested cow and one 2-year-old heifer.
(All butter regular Jersey standard, 85 per cent.)

This includes all our American bred cows and three choice imported cows, including the many times grand champion, Stockwell's Dahlia.

Free from abortion and will furnish certificate of health from federal veterinarian.

Prices, pedigrees and photos on request.

**J. B. STUMP & SON, Monmouth, Ore.**



**ASHBURN FARM**

REGISTER OF MERIT JERSEYS.

In nearly 13 years we have yet to get our first poor heifer or dissatisfied customer. We have the best of the Golden Glow's Chief and St. Mawes strains, with the cross of our great Kentucky bull, Valentine's Ashburn Baronet.

J. M. DICKSON & SON. Shedd, Ore.

**GOLDEN GLOW HERD.**

Winner of 1st and 2d prize in butter test, Oregon State Fair, 1917 (all breeds, 20 entries); breeder and owner of grand champion cow in show ring, 1916; breeder of grand champion cow, 1917. Breeder and owner of world's champion 3-year-old, with 1115 lbs. butter, 80 per cent fat. Every female a daughter, granddaughter or great-granddaughter of Golden Glow's Chief, sire of 34; 14 over 700 lbs.; 32 over 600 lbs.

PICKARD BROS., Marion, Ore.

**GOLDEN GLOW'S CHIEF**

has 35 Register of Merit daughters and 40 grand-daughters, 4 proven sons, and a WORLD RECORD JUNIOR 3-YEAR-OLD DAUGHTER, who is dam of ONE OF OUR HERD BULLS by the old bull himself. Our second sire is also a son of Golden Glow's Chief, out of a Gold Medal Hood Farm cow. Write us for a young bull calf.

D. Brooks Hogan, Mgr., Iron Mine Farm, Oswego, Oregon.

W. M. LADD, Owner, Portland, Oregon.



**All High Record Blood**

Bull calf out of Lucy of P. V., full sister to St. Mawes Susie; 936 lbs. butter in a year; to St. Mawes Blossom, 823 lbs., and to Susie's Twin Maiden, 642 lbs. Sire, Poppy's St. Mawes, son of St. Mawes Poppy, 1120 lbs.

ED CARY, Carlton, Ore.
Station, La Fayette, Ore.



**Jersey Bull for Sale**

Hermit's Duke 160472, dropped Dec. 18, 1916; dam Fanny Glow 2d, 241910, by Sunny Bill, by Golden Glow's Chief. Sire Hermit's Majesty, from imported parentage. Also full brother to above, dropped Feb. 14, 1918. Photo and records on application.

E. F. MARYATT, Grandview, Wash.



**Just What You Want**

may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.



**Jersey Home Dairy**

Young bulls, winners at Washington State Fair, make good herd sires. Attractive prices for quick sale.

**Erickson Bros. Prop.**

North Yakima, Wash.



**WAIKIKI FARM**

Register of Merit Jerseys. Largest Jersey herd in the northwest. Young stock for sale.

IRA P. WHITNEY, Manager.
Route 7, Spokane, Wash.



**JUST ONE CALF LEFT**

on our farm, out of a daughter of Rosaire Olga Lad, with a record of 765 lbs. butter, and by Gerties Poppys St. Mawes. This calf has three crosses of Rosaire Olga Lad. He is a dandy. The last four bull calves brought us $250 each; all were from our herd bull G. P. St. Mawes. Our herd average now is 747 lbs. butter from the 11 head.

DOERFLER FARMS, Silverton, Ore.
F. A. Doerfler, Prop.



**Ashwood Farm Jerseys**

Senior herd bull, Holger, whose daughters are qualifying for register of merit in six months. Junior herd bull, St. Mawes of Ashwood, a son of Poppy's St. Mawes. Write us about your wants or come and see our herd.

M'ARTHUR & STAUFF, Rickreall, Ore.



**ANOKA FARM JERSEY**

We have for sale a bull calf dropped Oct. 25, from a register of merit cow. Solid color, good individual. His sire is a grandson of St. Mawes Poppy, with 1120-lb. record.

R. B. SEELEY, Sherwood, Ore.
R. R. Station, Wilsonville, on Oregon Elec.


## AYRSHIRE CATTLE


**Edgewater Farm**

Government accredited herd, headed by Peter Pan 63d. Bull calves available.

ELBERT M. CHANDLER, Burbank, Wash.


## HOLSTEIN CATTLE


**CARNATION HOLSTEINS**

Carnation Stock Farms

Over 300 in herd to select from. Herd has been under federal inspection for several years. Our herd sires are Matador Segis Walker, a grandson of King Segis, out of Matador Twisk Minette 4th, with record of 33.69 lbs. His first five two-year-old heifers, to freshen, have averaged nearly 22 lbs. in 7 days; King Segis 10th; Johanna McKinley Segis, the 40-lb. bull.

Write today your needs for a Holstein bull. Get them while they are young. Save money on cost price and on express charges. Careful attention given to mail orders.

FARM—CARNATION, WASH.
Offices — 2080 Stuart Bldg., Seattle.

Visitors welcome. Correspondence solicited. Write for circular, Value of Pure Bred Sires.



**365-DAY HOLSTEINS**

24,667 lbs. milk—1026 lbs. butter—is the S. O. advance registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.

THE HERD WITH YEARLY RECORDS.

WESTERNWOLD RANCH, Prineville, Ore.



**LaConnor Flats Stock Farm**

Pure bred registered Holstein cattle. Herd sire Segis Pontiac Acme; average of three of nearest dams; butter, 1 year, 1080.82 lbs.; milk, 24,380.3.

J. H. HULBERT. Mt. Vernon, Wash.



**Bargains in Bull Calves**

Sired by Segis Riverside Pontiac, that sold in Pacific international sale, 1914, for $1025, and whose dam has A. R. O. record of 31.47 lbs. butter in 7 days; 118.39 in 30 days, and big records all through his pedigree.

ERNEST JOHNSON, Scappoose, Ore.



**Record Holsteins**

Young bulls, some of them ready for service, by a sire whose five nearest dams average 26.17 pounds butter, or another with 29.67-pound dam, and out of high-record A. R. O. dams. Priced to sell.

ERNEST WERNER, AURORA, ORE.



**Registered Holsteins**

Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.

H. R. BOOMER. New Plymouth, Idaho.



**HOLSTEINS**

Well-bred young bulls for sale.

THOS. CARMICHAEL. Gaston, Ore.



HOLSTEINS BRED FOR PRODUCTION
and
Berkshires of Quality.
Stock of All Ages, Either Sex, for Sale.

HUGH NISBET. Chimacum, Wash.

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, July 1.—Bearish crop reports and favorable weather had a weakening influence today on the corn market. Prices closed unsettled, 1-4c to 5-8c net lower, with July $1.47 1-2 to $1.47 5-8 and September $1.51 3-8. Oats lost 3-8c to 1c. In provisions the outcome varied from 20c decline to 27c advance.

An estimate by a leading authority that the condition of the whole corn crop was 85.4 against 81.1 a year ago did much to handicap the bulls in the last half of the day. Besides highly beneficial rains were reported in many sections, especially parts of Kansas and Nebraska. Heavy receipts here tended also to depress prices. During the first half of the session, though, values averaged higher, owing largely to scantiness of stocks available for July delivery, and as a result of assertions that from now on the enlargement of wheat shipments would curtail the rural movement of corn.

Oats were under more uniform selling pressure than corn was. The chief bearish factor aside from the ideal weather was the lack of export inquiry.

Lard showed notable strength, owing to the fact that deliveries which were made today on a big scale had passed into strong hands. Ribs held steady, but pork was dull and weak.

**Chicago Futures.**

| | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| Corn— | | | | |
| July ..... | 1.47⅞ | 1.48⅝ | 1.46½ | 1.47½ |
| Sept. ..... | 1.52½ | 1.52¾ | 1.50½ | 1.51⅝ |
| Oats— | | | | |
| July ..... | .72¾ | .72⅞ | .71⅝ | .72 |
| Aug. ..... | .68⅜ | .68⅝ | .67⅝ | .68 |
| Pork— | | | | |
| July ..... | .... | ..... | ..... | 43.60 |
| Sept. ..... | .... | ..... | ..... | 43.75 |
| Lard— | | | | |
| July ..... | 25.60 | 25.97 | 25.60 | 25.77 |
| Sept. ..... | 25.77 | 25.97 | 25.77 | 25.99 |
| Ribs— | | | | |
| July ..... | 23.35 | 23.50 | 23.35 | 23.40 |
| Sept. ..... | 23.92 | 24.07 | 23.92 | 24.09 |

**Cash Quotations.**

CHICAGO, July 1.—Corn—No. 2 yellow, nominal; No. 3 yellow, $1.66@1.70; No. 4 yellow, $1.60@1.62. Oats—No. 3 white, old, 78@78¾c; new, 77½@78c; standard, old, 78½@78¾c; new, 77¾@78¼c. Rye—No. 2, $1.74@1.75. Barley, $1@1.25. Timothy, $5@7.50. Clover, nominal. Pork, nominal. Lard, $25.67. Ribs, $22.87@23.50.

**Pacific Northwest Grain.**

PORTLAND, Ore., July 1.—Grain, July delivery; Oats No. 2 white feed, $59 bid; barley standard feed, $51; barley "A" brewing, $32; eastern oats and corn in bulk; oats No. 3 white, $55; 38-pound clipped white, $55.50; corn No. 3 yellow, $65; corn No. 3 mixed, $63.50.

**Minneapolis Grain.**

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MINNEAPOLIS, July 1.—Wheat—Receipts, 285 cars, compared with 286 cars a year ago.

Corn—No. 3 yellow, $1.55@1.65.
Oats—No. 3 white, 72½@74½c.
Flax—$3.86@3.89.
Flour—Unchanged. Shipments, 55,196 barrels.
Rye—$1.73@1.76½.
Barley—90c@1.18.
Bran—$31.15.

## Live Stock Quotations.

**At Omaha.**

OMAHA, Neb., July 1.—Hogs—Receipts, 9800; market, 5 to 10c lower; heavy, $16.10@16.30; mixed, $16.15@16.25; light, $16.20@16.35; pigs, $11@15; bulk, $16.15@16.25.

Cattle—Receipts, 6000; steady; native steers, $11.50@18.30; cows and heifers, $8.50@16.50; western steers, $9.50@14.75; Texas steers, $8@12; cows and heifers, $8@11; canners, $7@8; stockers and feeders, $8.50@12.50; calves, $10@13.25; bulls, stags, etc., $8@12.50.

Sheep—Receipts, 12,300; steady to lower; yearlings, $13@14; wethers, $11.50@13; ewes, $10@12; lambs, $16@18.

**At Chicago.**

CHICAGO, July 1.—(United States bureau of markets.)—Hogs—Receipts, 45,000; good hogs mostly steady at Saturday's average. Best demand for good lights; common packing grades slow. Butchers, $16.65@17.10; light, $16.80@17.10; packing, $16.05@16.65; rough, $15.75@16; bulk of sales, $16.45@17.05; pigs, $16.40@16.85.

Cattle—Receipts, 19,000; good beef steers, fairly steady; others, slow to lower; quality, poor; calves, steady.

Sheep—Receipts, 17,000; strong to higher. Best western lambs selling at $18; natives at $18.50.

**At Portland.**

PORTLAND, Ore., July 1.—Cattle—Steady to strong; receipts, 1630. Steers, prime, $12@13; good to choice, $11@12; medium to good steers, $9@10; fair to medium, $8@9; common to fair, $5@8; cows and heifers, choice, $8.50@9; medium to good, $6@7.50; fair to medium, $4.50@5.50; canners, $3@4.50; bulls, $6@8; calves, $8.50@11.50; stockers and feeders, $7@9.

Hogs, 10@15c higher; receipts, 1490. Prime mixed, $16.70@16.90; medium mixed, $16.50@16.70; rough heavy, $15.70@15.90; pigs, $15.50@16; bulk of sales, $16.60@16.65.

Sheep—Steady; receipts, 118. East of mountain lambs, $14@14.50; valley lambs, $12.50@13; yearlings, $7.50@8; wethers, $7@7.50; ewes, $5@7.

**Spokane Stockyards, Monday.**

Hogs—Receipts, 145; market, steady to strong. Quality poor. Prime light, $16.40@16.50; prime heavy, $16.25@16.40; rough heavy, $15.25@15.50; pigs, $15.25@15.60; stockers and feeders, $14.25@15.50; bulk of sales, $16.25.

Cattle—Receipts, 352; market, steady. Prime steers, $12.50@13.25; good to choice steers, $11@12; medium to good steers, $9.25@10; fair to medium steers, $8.25@9.25; common to fair steers, $6.25@8; choice cows and heifers, $8.50@9.50; good cows and heifers, $7.25@8.25; medium to good cows and heifers, $6.25@7.25; fair to medium cows and heifers, $5.50@6.25; canners, $3@5; bulls, $6@9; calves, $7.50@10.50; stockers and feeders, $6.50@8.50.

Sheep—Receipts, none; market, steady. Prime lambs, $14@14.50; good lambs, $12.50@13; prime yearlings, $8.25@9.25; prime wethers, $7.25@8; best mutton ewes, $5@8.

## Seattle Market.

SEATTLE, June 29.—One more big week will finish the Washington cherry market so far as a dominating feature is concerned, and the singular part of the season is that consumers for three days have been able to buy the fruit at satisfactory prices and growers are well pleased with returns. The market closes weak.

With high grade fruit only as the equation, Bings have been moving freely at 10@12½c, and Royal Anns at 8@10c.

Strawberries are firm and very scarce. Clark seedlings are practically higher at $3.25@3.50, as all arrivals are small. Marshalls are moving at $2.50@2.75, with occasional sales at $3. The wind up of this fruit is near.

Kennewick new potatoes are due to start moving next week. Seattle jobbers are not much interested, and have turned down quotations of 2½c per pound, the basis on which some contracts have been made, declaring that California new stock will move to much better advantage and that there would be better profit in them.

**Jobbers' Purchasing Prices.**

Eggs—Select ranch, 40@42c per dozen; Oregon, eastern Washington and Idaho, 37c per dozen.

Butter—Fresh dairy, 30c per pound; butter fat, 50c per pound; baking, 30@35c per pound; raw milk, $2.15 per cwt.

Poultry—Broilers, live, 1918, 30c per pound; hens, 25@27c per pound; old roosters, 17@18c per pound; ducks, live, fat, 25c per pound; squabs, large, $3.50 per dozen; geese, fat, live, 23c per pound; Belgian hares, 19c per pound; guineas, $7 per dozen; turkeys, young toms and hens, dry picked, 10 pounds and up, 30@33c per pound; smaller birds, 25@30c per pound.

Hogs—Light, 21c per pound; do heavy, 19@20c per pound.

Beef—Steers, fat, 14@15c per pound; heifers, fat, 14@15c per pound; cows and bulls, 13@14c per pound.

Veal—Fancy light, 18c per pound; do heavy, 15@18c per pound.

Mutton—Fat, 22c per pound; spring lamb, fat, dressed, 25c per pound.

Hides—Salted, 13@14c per pound; flint-dry hides, 28c per pound; salt kip, 14c per pound; green hides, 11c per pound; green calf, 28c per pound; dry calf, six pounds and under, 35c per pound; bulls and dry salts, 4c per pound less than dry hides; green bulls, 9c per pound; salt bulls, 10c per pound; salted horse hides, $1.50@4 each; clean long wool, western Washington, flint-dry pelts, 39c per pound; heavy to clean, eastern Washington, flint-dry pelts, 30@35c per pound.

Wool—Puget sound, clean, 50@55c per pound.

Tallow—No. 1, 12 1-2c per pound; No. 2, 6@8c per pound.

**Jobbing Prices to Dealers.**

Artichokes—50@60c per dozen.

Asparagus—Eastern Washington, 10@12 1-2c per pound; Prosser, 10c per pound; western Washington, 15c per pound.

Potatoes—Puget Sound, $17@22 per ton; western Washington, $30 per ton; California, new garnets, 3 3-4c per pound; do whites, 3 1-2@4c per pound; Los Angeles, 4 1-2c per pound.

Raspberries—Local, $3.25@3.50 per crate.

Strawberries—Olallas, $2.50@2.75 per crate; Bellevues, $2.50 per crate; Winslows, $2.50 per crate; Lake Washington Marshalls, $2.75@3 per crate; Clark Seedlings, $3@3.25 per crate.

Walnuts—23@24c per pound.

Watermelons—3 3-4@4c per pound.

Apricots—Local, $2.25 per crate.

Cherries—Bings, 10@12 1-2c per pound; local Black Tartarians, 6c per pound; pie, 5@6c per pound; Royal Anns, 8@10c per pound.

Currants—Local, $2 per crate.

Feed—Bran, $34 per ton; shorts, $35.50; scratch feed, $79; all-grade chop, $72; oats, $69; spouting oats, $80; rolled oats, $71; whole corn, $76; cracked corn, $78; rolled barley, $67; clipped barley, $70; alfalfa meal, $36; oil meal, $70; egg mash, $62.

Hay—Eastern Washington timothy, $34 per ton; do double compressed, $37@38; alfalfa, $26; Puget Sound, $26@27; straw, $15.

## Portland Market.

PORTLAND, Ore., June 29.—There was a sharp advance in the valley mohair market when 61 cents was paid for the pool at Lebanon. Eastern orders of limited amount are coming in and this has stirred up competition among the country dealers. Allotment of new clip wool will begin this week. Receipts are heavy.

The hide dealers of the three states, at a meeting here, organized the Northwest Hide Dealers' association with C. H. Hibbard of Seattle president and Joseph Thiebes of Spokane, one of the directors. The purpose of the association is to cooperate with the government in its control of the hide and leather industry.

The cube butter market is very firm with extras selling readily at 45 cents. Prints are unchanged.

The demand for eggs has decreased with the warm weather and with eastern in large supply. The market for Oregons is easier.

Poultry is firm with good shipping orders for hens and broilers. Veal is also firmer.

Butter—Cubes, extra, 45c; prime firsts, 44c; prints, extras, 48c; cartons, 1c extra; butterfat, No. 1, 47c delivered.

Eggs—Oregon ranch current receipts, 37c; candled, 40c; selects, 42½c per dozen.

Cheese—Jobbers' buying prices, f. o. b. dock, Portland; Tillamook, triplets, 23½c; Young Americas, 24½c per pound; Coos and Curry, f. o. b. Myrtle Point; triplets, 23c; longhorns, 34c per pound; ¼c discount to Portland trade.

Poultry—Hens, 27c; broilers, 30@32c; ducks, nominal; geese, nominal; turkeys, nominal.

Veal—Fancy, 17@17½c per pound.

Potatoes—Oregon, Burbank, $1.35@1.50 per hundred; new California, 3@3½c per pound.

Hay—Buying prices, f. o. b. Portland; eastern Oregon timothy, $32@33 per ton; valley timothy, $27@28; alfalfa, $21@24.50; valley, grain hay, $24@26; clover, $21; straw, $9@10.

## Spokane Market.

**MEAT.**

**Beef**—Beef steers, 15@20c lb; cow beef, 13@16c lb; heifers, 17c lb; best loin, 28@33c lb; steer chucks, 12½c lb; prime ribs, 20@24c lb; rump and round, 22c lb.

**Mutton**—Breakers, 24c lb; wethers, 23c lb.

**Lambs**—Diamond T. C. lambs, 30c lb; lambs, 28c.

**Pork**—Packer dressed hogs, 26@27c lb; pork loins, 31@32c lb; legs, 30c lb; shoulders, 25c lb; leaf lard, 28c lb; tenderloins, frozen, 40c lb; spareribs, 20c lb; country dressed hogs, with head on, 21c lb to producer; country dressed veal, 14c lb to producer.

**Smoked Meats**—Washington hams, 33¾c lb; T. C. hams, 35c lb; T. C. bacon, 46¼@48½c lb; Washington bacon, 39½@43¼c lb; picnics, 23½c lb; English bacon, 35c lb.

**Star Brand**—Hams, 35c lb; Shield hams, 33@34c lb; picnics, 24c lb; bacon backs, 25@34c lb; Star bacon, 46½@48½c lb; Shield bacon, 40@43½c lb; Simon Pure lard, $17.50 case; Shield lard, tierces, 26½c lb; White Cloud compound, tierces, 26½c lb.

**Dry Salt Meats**—Clear bellies, 25½@26½c lean backs, clear, 27¼c lb; sides, 26c per lb.

**Lard**—Tierces, 26¼c lb, $13.99@14.74 case; Diamond T. C. pure leaf lard, $15.50 case; $8 half case; Snowcap compound, tierces, 22¼c lb.

**POULTRY.**

**Live Poultry**—Live hens, 18@20c lb; spring chickens, 28@30c lb; roosters, 12½c lb to producers, f. o. b. Spokane.

**GASOLINE, LINSEED OIL, ETC.**

**Gasoline**—Red Crown, bulk, 24½c gal, cases, 34½c gal; Shell, 24½c; refined oil (Pearl), bulk, 13c gal, cases, 23c gal; Eocene, 15½c gal in bulk, cases 25½c gal; engine distillate, 16½c gal, bulk.

**Linseed Oil**—Raw, bbl, $1.73 gal, case, $1.91 gal; boiled, bbl, $1.75 gal, cases, $1.93 gal.

**Turpentine**—Bulk, 79c gal; cases, 99c gal.

**White Lead**—Strictly pure white lead in oil, ton lots, 12¾c lb; 50-lb lots, 13½c.

**GRAIN AND FEED.**

**Rice**—Fancy head, $7.50@9.50 cwt.

**Flour**—Bluestem, $9.40; Blend, $9.40; Montana hard wheat, $10.40; graham, $8.60 bbl, 49-lb sacks; whole wheat, $8.80; eastern rye, $10.10; eastern rye meal, $10.30; oat flour, $12.85, 4 45-lb. sacks.

**Oats**—$73 ton whole, $76 rolled, delivered in city; steam rolled No. 2, $71 ton.

**Corn**—$75 ton; cracked corn, $77 ton.

**Bran**—$30 ton; shorts, $32 ton; bran and shorts, $31 ton.

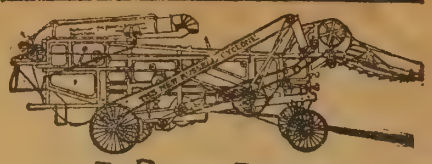
**Barley**—Rolled, $76 per ton.

**Oil Meal**—$78 per ton.

## Portland Wheat.

PORTLAND, Ore., June 29.—The price of $2.20 a bushel for 1918 wheat at north Pacific ports, just fixed by the food administration, is an advance of 15 cents over the 1917 price. Allowing for the 25 per cent rise in freight rates it means a gain of 12 1-2 cents a bushel net to the farmers. M. H. Houser, the agent here for the grain corporation, estimates the new price will average to the producers $2 a bushel on the farms, making the value of the crop, which he puts at 55,000,000 bushels for the three states, exclusive of southern Idaho, which section does not ordinarily ship to the north coast, $110,000,000. Last year's crop of 45,000,000 bushels netted to the farmers about $85,000,000. The government price is what the trade anticipated, and it is believed it will be satisfactory to the growers.

The new flour price has also been fixed at $9.95 bulk, which is equivalent to about $10.65 sacked, against $10 the old terminal price. The advance is in line with the higher price set for wheat. Mixed feed is set at $24.44 bulk, or about the present price in sacks. Millers after June 30 will be allowed to purchase wheat from any of the available sources.

THE RUSSELL THRESHER
BUILT IN ALL SIZES
RUSSELL ENGINES BOILERS SAW MILLS THRESHERS TRACTORS
BEAN AND PEA THRESHERS
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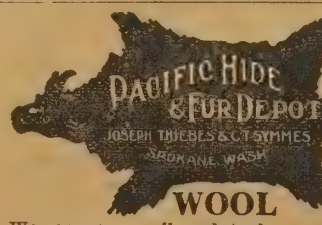
Our prices are based on our purchases several months ago when the market was lower. Prices will be higher soon, when the 1918 crop is offered.

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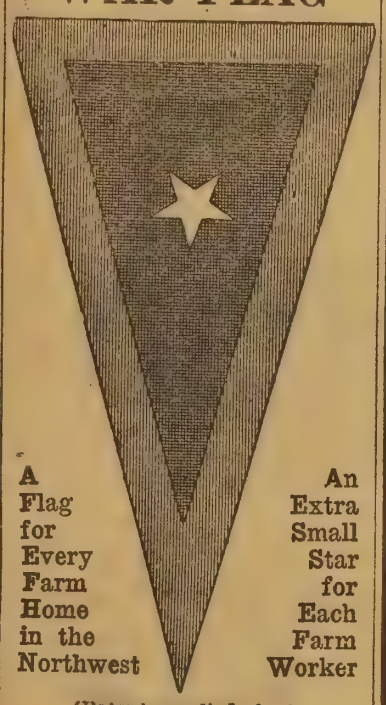
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The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

## To Test Seed Corn

To the Editor: What is the best time to break salt grass? I should like to know how and when to plow, and how deep. Can a crop be grown this season, and what kind of crop would do best the first year? What is the best and simplest way to test seed corn? R. H. MOWSLEY.

E. G. Schafer, agronomist at the Washington State college, answers the above question as follows:

I am uncertain what grass you mean when you say saltgrass. I have seen a grass which is commonly known as salt grass growing in low flats containing a high proportion of alkali. This grass seems to be fairly resistant. However, it is not of great value. It is very often on land which is too alkaline to produce useful plants.

Sweet clover is perhaps more resistant to alkali than other legumes, and barley more resistant than other cereals.

In testing seed corn six representative kernels are removed from different parts of each car to be tested. A common practice is to remove two from near the butt of the ear, two from the center and two from near the tip. These kernels may be placed between moist cloths, blotting paper or sand. If the entire six kernels germinate in from five to seven days the ear may be used for seed. If only five germinate it is questionable whether the corn should be used for seed or not.

## To Estimate Alfalfa Hay.

To the Editor: Will you kindly publish the number of cubic feet of alfalfa hay at the various times of the year that it takes to make one ton. L. GRAEHL.

The above question was answered as follows by E. G. Schafer, agronomist at the Washington State college:

A common rule used in estimating the number of tons of hay in a stack is as follows: Width plus over, divided by four and squared, then multiplied by the length and divided by 512. If the hay is settled slightly more perhaps 500 would be a better figure than 512. I do not know of any data giving the variation in weight per volume by the month. No doubt this would depend upon the character of the hay influenced by such factors as time of maturity when cut, proportion of leaves, size of stack and so on.

## State Fair Judges.

Judges of live stock for the Washington state fair at Yakima have been lined up by Frank Meredith, secretary. W. A. Kerrow will judge dairy cattle Mr. Kerrow is state leader of live stock and dairy extension work at the University of Minnesota, and has acted as a judge at the Illinois state fair, the National Dairy Show and the Dairy Cattle Congress, both at Columbus and Waterloo, Iowa. W. T. McDonald, now acting deputy minister of the British Columbia department of agriculture, will judge beef cattle and draft horses. Professor C. E. Howell of the state college at Pullman will judge the swine; William Coates, the well-known poultry expert of Vancouver, B. C., will be judge of poultry.

# Want Ads

### HELP WANTED—MALE 3

MARRIED MAN FOR FARM WORK; steady job for good teamster. Address A. C. Solle, Wilbur, Ore.

### EDUCATIONAL 45

EARN MORE. ENROLL ANY TIME, AT Behnke-Walker, Portland, northwest's biggest business college, because best. Graduates assured positions. Write for catalogue.

### TEACHERS' AGENCIES 46

TEACHERS REGISTER WITH B. F. WESTmore, Mgr. Hazard Teachers' Agcy. $1 registers you at three offices. 911 Old Nat'l Bank bldg., Spokane, Washington.

ALBERT TEACHERS' AGENCY, PEYTON bldg., Spokane. We need more teachers.

### HONEY, BEESWAX—Wanted. 58

SEND SAMPLES OF YOUR HONEY AND beeswax; state quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

### EGGS and BUTTER WANTED 59

WE ARE ALWAYS IN THE MARKET for good eggs and dairy butter. Send us your next shipment. Oregon Farm Products Co., 38 Halsey st., Portland, Ore.

### MISCELLANEOUS—FOR SALE 60

SILOS—BARGAIN.

Four new 18x30 highest grade, hinged-rod-door, 150 ton silos, complete except staves, at 25 per cent below market; can include staves at cost; will sell one or all. Here is your chance to get that silo cheap. N. Ferwerda, 801 Old National Bank bldg., Spokane.

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Stock size screen doors, $2 and up.

Odd size screen doors, 20c per square foot. Screen windows and sash, 15c per square foot.

We sell any one. Ship anywhere, and guarantee safe delivery.

Direct from our factory to you.

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### PLUMBING, STEAM FITTING 594

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### JUNK SHOPS 90

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### MACHINERY—FOR SALE 93

"WITTE" GASOLINE ENGINES save labor, and are carried in stock by HIGGINS MACHINERY COMPANY, 312 FIRST AVE. S., SEATTLE. Write for Catalogue.

FOR SALE—HOLLEY HOLT HARVESTer, in good shape. Cut 1600 acres. Address O'Brien Bros., Wilbur, Wash.

### AUTOMOBILES 114

FORDS CAN BURN HALF COAL OIL, ALL distillate, or cheapest gasoline, using our 1918 Carburetor; 34 miles per gallon guaranteed; easy starting; great power increase; attach it yourself; big profit selling for us; 30 days' trial; money back guaranteed; styles to fit any automobile. Air-Friction Carburetor Company, 321 Madison st., Dayton, Ohio.

### STOVE & FURNACE REPAIRS 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

### HARES AND RABBITS 173

"A FORTUNE IN RABBITS"—HAVE raised the price. We will pay to $8 per pair. Want you to raise them for us. Send stamp for particulars. H. E. Gibson Co., Arcadia, Calif.

### POULTRY 174

PURE BRED M. B. TURKEYS, PEARL guineas, also 12 female canaries for sale. Mrs. J. I. Welborn, Warren, Ore.

### LIVE STOCK 177

BERKSHIRE SPRING PIGS OF CHAMpionship breeding for sale at reasonable prices. Send for circular giving description and price. R. W. King, Sweetwater, Idaho.

FOR SALE—SHORTHORN BULL, CRYStal Boy, age 7; weight 2000 lbs.; red; dehorned. Immediate sale, $200, at Pullman or Wawawai. A. S. Ford, Pullman, Wn.

MANFORD HERO 2D, 634613, ROAN, calved Mar. 19, 1917; a vigorous, growthy Shorthorn bull; for sale at $200, crated, f. o. b. Fenn, Idaho. Wm. Mulhall.

EIGHT SERVICEABLE SHORTHORN bulls for sale; some carry large per cent of Sultan blood. H. J. Cortner, Hagerman, Idaho.

FOR SALE—80 HEAD HIGH GRADE Shropshire ewes and lambs. Seymour Shoultes, Marysville, Wash.

REGISTERED O. I. C. SWINE; BREEDING stock for sale. C. I. Ballard, Rickreal, Ore.

SHETLAND PONIES; BARGAIN PRICES. Write for list, N. C. Sorenson, Onalaska, Wn

### HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water. 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

GALAX HOTEL; NEW AND MODERN; 75C and $1. Main and Bernard, Spokane.

### FAIR PREMIUM LISTS 370

SOUTHWEST WASHINGTON FAIR, AUG. 26 to 30, 1918. Premium list now ready. Write G. R. Walker, Secy., Chehalis, Wash.

SPOKANE INTERSTATE FAIR AND LIVE Stock Show, Spokane, Sept. 2-7. Premium list now ready. Write W. L. Tennant, Secy., Spokane.

### RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

### ARTIFICIAL LIMBS 424

SCHINDLER ARTIFICIAL LIMB CO., 8115 Wall st., Spokane, Wash.

### BUSINESS OPPORTUNITIES 516

SPLENDID OPPORTUNITY TO ENTER retail automobile accessory business; good location and cheap rent; business established. D 9, Farm Trio, Spokane.

### SEEDS 620

WE SPECIALIZE IN TIMOTHY, ALFALfa, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Ida.

### FARM LANDS—FOR SALE 651

ATTENTION, LANDBUYERS!

Here's an excellent proposition:

40-acre farms, selling for $15 to $25 per acre; long-time payments, 6 per cent interest; in the best agricultural part of Snohomish county, where you have all the modern conveniences—paved roads, railways, schools, churches, mills and factories. This district has proven its worth by the many successful farmers now located there.

We also have some beautiful 10-acre water-front tracts.

OPPORTUNITY knocks at every man's door ONCE, but, believe me, it does not continue to knock forever, nor does it pound the door down. For further information address the owners, BROWNELL LAND CO., 904 Third ave., Seattle, Wash.

EASY TO PAY FOR GOOD LAND AT $40, ON TERMS OF
$1 CASH PER ACRE.
50C PER ACRE MONTHLY.

Interest on deferred payments 6 per cent. BUY 20 acres or more at $40 an acre on the above terms, in LEWIS COUNTY, south of CHEHALIS, on the main double track line between Seattle and Portland, the N. P., the G. N. and the O.-W., the best transportation in the state.

FINE, LEVEL LAND, SILTY CLAY SOIL, NO ROCK, NO GRAVEL, CLOSE TO RAILROAD AND PACIFIC HIGHWAY, LEWIS COUNTY, SOUTHWEST WASHINGTON. FREE CIRCULAR. Write to
DAVID P. EASTMAN,
1024 THIRD AVE., SEATTLE.

LAND BARGAIN.

1144 acres, all in cultivation; tractor land; 50 per cent of it summer fallowed, balance to be fall-plowed; ready for crop in the spring. Fair buildings. All fenced and cross-fenced. Price $25 per acre. Will take ¼ of value in trade. 16 miles from Walla Walla. Absolutely the best buy in the Walla Walla district. Owner is retiring. For further particulars write or call
HOUSE AND LAND ASSOCIATION,
514 RIVERSIDE.
MAIN 3079.
SPOKANE, WASH.

DESIRABLE DAIRY RANCH. 200 ACRES; 80 a. best river bottom; well improved; 28 well-graded dairy cows (has honor cow and honor herd in all cow-testing associations in Oregon in March); 18 yearlings and calves, good Jersey sire, 3 good horses, 20 shoats, 2 good brood sows, 60 hens, etc.; 12-room house, in good repair; outbuildings; good fences; income tax reports show $4000 gross income, 1917; $20,000; $8000 down, balance 10 years, 6 per cent. C. E. Ricker, Reedsport, Ore.

480 ACRES IN SHIELDS RIVER VALLEY, wheat and hay farm; good water right; 98 per cent tillable; 300 acres broken; running water; large barn, 3 granaries, chicken house, hoghouse, garage, frame house; schoolhouse on same section; telephone, mail route; 8 mi. from R. R. town. Price $50 per acre. Easy terms. Write owner, Guy T. McBane, Wilsall, Mont.

MR. RENTER—OWN A FARM.

New section of British Columbia just opened to transportation.

GOOD SOIL--LOW PRICE--EASY TERMS
Raise WHEAT-BARLEY-OATS-CORN.
ACT QUICK-GOING EAST. Join next party going up. Special low rates.
P. O. Box 2054, Spokane, Wash.

FOR SALE—DAIRY FARM WITH MILK route paying $750 per month; 160 acres land; about 100 acres in alfalfa; good water right; ½ mile to town; 35 cows and all equipment for running dairy business. For particulars write L. J. Mott, Shoshone, Idaho.

IDEAL SHEEP OR STOCK RANCH.

80 acres; in Nevada; with excellent outside range; fine location and good improvements; a bargain worth investigating. Address Dr. W. F. Boylan, owner, Amos, Nev.

FOR SALE—50-A. WILLAMETTE VALley farm; all cultivated but 9 a. pasture; good buildings; ½ bottom soil; running water. Price $4500. A. T. Austin, R. D. 1, Monroe, Oregon.

FOR SALE—363-ACRE STOCK RANCH; 250 a. cultivated; 6-room plastered house and other buildings; ½ mile from school; $35 per acre. Write owner, J. A. Sipe, Midvale, Idaho.

FINE DAIRY FARM AND EQUIPMENT, located 1 mile from Market. Will be sold cheap. Owner wishes to retire. Dufur Valley Realty Co., Dufur, Ore.

FOR HAY, GRAIN OR STOCK RANCHES in famous Rosebud county, eighty acres to twenty thousand acres. Write Rosebud Realty Co., Rosebud, Mont.

### FARM LANDS—WANTED 654

I WANT TO HEAR FROM OWNER OF farm or unimproved land for sale. Mrs. W. Booth, Pulaski, Iowa.

### FOR SALE OR EXCHANGE 702

FOR SALE—160 A. MONTANA WHEAT land. Would exchange for logged-off land of equal value near Spokane. A. B. Gaylord, owner, Roundup, Montana. No agents.

### TO EXCHANGE—REAL EST. 703

RHEUMATICS, HERE'S YOUR CHANCE. Change to dry climate, get well. 160 acres, diversified; part irrigated; Douglas county, Washington; valuation $2500; trade for land west of mountains. For particulars write Mrs. F. Brandt, Leahy, Wash.

# The Answer to the Farm Labor Shortage




THE farm labor situation is serious. And little relief is in sight. The new draft will take more men. More horses and mules must go. But, in the face of these handicaps *production must be increased*—and it can be if you adopt the right means.

The Cleveland Tractor has shown the way on thousands of farms. It has successfully replaced muscle with machinery. It has proved itself the modern "Man-of-all-Work."

The Cleveland Tractor plows as much ground as *three* good 3-horse teams and three men—eight to ten acres a day.

It actually does the work *better*. And it harrows. It plants. It reaps. It cuts ensilage, fills silos, turns saws, hauls manure spreaders and road machinery, drags logs, and does the hundred and one chores that mechanical power can do about the farm. It delivers 12 horsepower at the drawbar and 20 horsepower at the pulley. But it weighs less than 3200 pounds. The

## Cleveland Tractor

*travels on its own tracks, like the giant "tanks" on the battlefields of Europe, and will go practically anywhere.* With 600 square inches of traction surface constantly on the ground, it goes through mud, sand, clay and gumbo without miring, floundering or packing the soil.

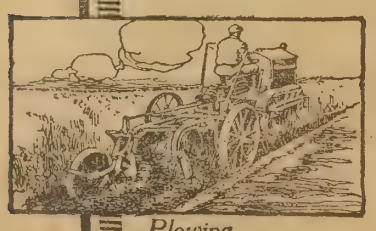
It steers easily—by the power of its own engine,—and will turn in a twelve-foot circle. It is so small that it can readily be operated under and among small fruit trees. It requires less housing space than a horse.

Rollin H. White, the well-known engineer, designed the Cleveland Tractor. It is built under his supervision—from the best materials. Gears and tracks are protected from dirt and mud, and are specially built for long service.

Let this modern "Man-of-all-Work" fill the gaps on *your* farm. Let it help you produce larger crops, with less help—and incidentally make greater profits for you. Write us now for detailed information and the name of the nearest Cleveland dealer.

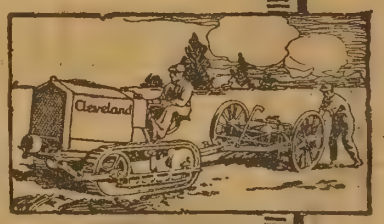
THE CLEVELAND TRACTOR COMPANY
19087 Euclid Ave., Cleveland, O., U. S. A.

*The largest producer of crawler type tractors in the world.*


*Plowing*


*Sawing*


*Harrowing*



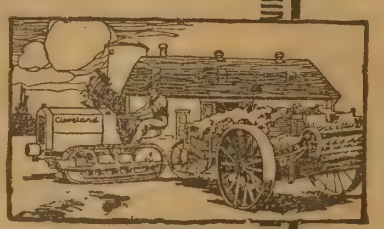
*Grading*


*Planting*



*Orchard Work*


*Reaping*



*Hauling*

# THE WASHINGTON FARMER

SUCCESSOR TO

THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XLI. NO. 28. JULY 11, 1918. ** WEEKLY.



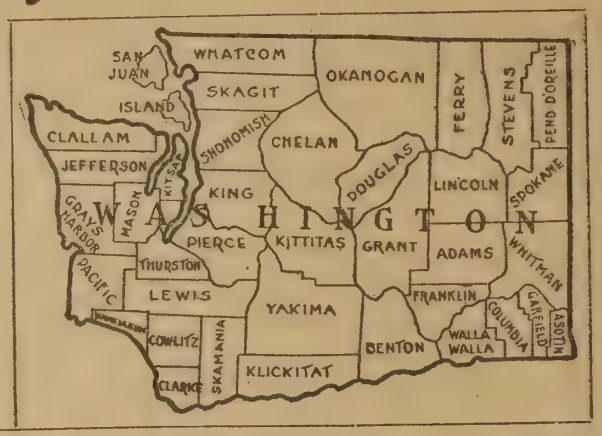

Drawn for the Red Cross Magazine by Charles Dana Gibson.

## COLUMBIA'S GREATER TASK.

The Cross—a small, neat stain where blood has been.
The Cross—that whispers hope to fighting men.
The Red, Red Cross—that bears its simple grace
In colors of the heart, within a firm embrace!

# Timothy Harvest Begins

## Alfalfa Is Becoming More and More Important in Stevens County—Is Held Back Only by the High Price of Seed




COLVILLE, Stevens County, Wash., June 27.—There has been no change in the variety of crops in this section this year unless it may be an increase in the seeding of spring grain, in particular oats. Hay is a staple, timothy taking the lead, but alfalfa becoming more and more a dependence. The extension of this crop is only held back by the high price of seed. The prospect for this season is for a short yield. Hay will make about 50 per cent, winter wheat, 60, and spring grain yet an uncertain matter, as the drouth previous to the fine rain of June 23 was most serious. 8he prospect at this writing is for great improvement. Prices have been steadily climbing, but the farmers will not realize any reasonable profit on account of the short yields. Alfalfa is being cut. Timothy harvest begins soon after July 10, but grain harvest will be later than usual, except on the Columbia river hills. There will be no trouble to secure ample help, as the work on the farms of this county is spread over the season and there is little congestion. Dealers report few sales of farm machinery and even the blacksmith and repair shops do not seem to be more than ordinarily busy. The farmer is economizing. So far as my observation goes I believe the best improvement that could be suggested for this region would be the extension of alfalfa acreage and the building of silos. The silo would call for the growing of silage crops, corn, peas, clover, and the alfalfa would solve the forage problem. E. E. ELLIOTT.

### Yield Light Crop of Peas.

FAIRFIELD, Spokane County, Wash., June 26.—The crop which the farmers have been pinning their faith on here is peas, but the hot weather last week just about cooked them, so there will be a light crop this year, but the price is better, so the returns will not be a loss as last year. It is a little early yet to predict how the harvest help will be, but as the pea harvest is not heavy work, here should be no shortage in help, at least for the cutting. As the principal harvesting machine is the mower for peas, it does not take long to haul out a mower and look it over before going into the field. The mowers, however, are being repaired and will be in first-class shape before the peas are ready to cut.. Pea harvest should be on by July 10 to 15 if no more rain comes. However, we need the rain and will gladly delay harvest for it.
ROY G. ADAMS.

### Aphis Does Damage.

STEVENSON, Skamania County, Wash., July 1.—Weather conditions are not of the best here as it has been very dry for over a month, and unless it rains very soon, crops will be cut short. The spring grain, especially oats and vetch, has been greatly damaged by the aphis, which is spreading to the garden stuff. Peas, prsnips and beans are being literally eaten up by them and some say that is the only crop we will have this year. Yesterday was exceedingly warm, being 94 in the shade, but today is cooler. The help question is in a bad situation, as there is not enough to meet the requirements. This community is threatened with a fuel shortage, as thehe has been no wood cut to supply the demand and the number of teams being greatly lessened, there is no one to haul, and in winter, when the rainy season sets in, hauling can not be done.
W. T. JACKSON.

### Lowland Crops Look Good.

CHIMACUM, Jefferson County, Wash., June 29.—A good many peas have been planted this year, but on account of the extreme dry weather the highland crop looks like a failure this summer, but the lowlands look fairly well. Pastures are drying up and milk and cream supply is rapidly falling off. Hay crops in most parts of this county are not more than half a crop and there will be machinery and men to handle what there will be. Very little or no root crops have been planted this year for the stock on account of the scarcity of help. Late oats and peas have been planted the last of this month, but if we do not have rain soon the crop will be small.
JOHN VAN TROJEN JR.

### Strawberry Crop Profitable.

GIG HARBOR, Pierce county, Wash., July 1.—Oat hay, vetch, peas and the grass crops are undoubtedly in the lead in local importance. The vetch and peas have had rather a hard time of it this season; first the early and prolonged drouth, which is still on; then the most savage attack of aphis that this country has ever experienced about finished such crops. Some of the ranchers harvested these crops a little early and secured a little feed from them. Others plowed the ruined crop under. This loss, together with the short hay crop in other lines, is going to make it very difficult and expensive to carry the cows and other live stock through the coming winter. Those who have good crops of early strawberries have made a good thing from them. Those picked during the first 10 days of the run must have netted the owners something over $2 per crate. The later pickings have probably netted them something under $1. Pickers have been hard to get, even at a greatly increased price over former years. It will be still harder to secure enough help to gather in the raspberry, loganberry, and blackberry crops. Prices of crates are also very high and somewhat difficult to get in sufficient quantity. We, on this side of the water, are trying hard to secure a ferry across to the Tacoma side. The larger Gig Harbor ferry was secured last season, but the boat is still engaged in carrying workmen from the Tacoma waterfront to the shipyards on the far side of the tide flats. When the two ferries get to running across on their proper routes we think we shall have secured the connecting links that will bring greater development and community prosperity to this heretofore somewhat isolated section. A remodeled local traffic boat has been secured for this second ferry and is ready to commence its run as soon as the slips have been located and constructed. W. B. BOYNTON.

### Apple Crop Is Fair.

METHOW, Okanogan County, Wash., June 22.—The principal crop in this community is apples, and it will be 25 per cent less than the 1917 crop. It is hard to tell the set value. The farmers are ready to go into harvest and there are enough men, as the community feeling is so that no crop will suffer. There are enough facilities for handling it, the most worry being whether the crop will be an average or not. The one thing above all others that would improve conditions here would be the organizing of a farmers' club where every farmer and his family could meet Saturday afternoon and talk over their affairs and have a general visit, but so many clubs have lived for a short time and died that no one seems to encourage them any more.
CHAS. GRANT.

### Irrigated Wheat Looks Fine.

GRANDVIEW, Yakima County, Wash., June 21.—Alfalfa and apples are the main crops in this locality. Alfalfa is about the same as last year, but most of it is in better shape as there has been no rain. There are two or three fields of barley that are fine and some splendid corn. Most of the corn was planted late on account of the cold spring, but weather is good and hot and there is plenty of water for irrigation. I think prices of hay will start about the same as last year. We change work in stacking our hay so have plenty of help. The prospect for wheat on the dry land is reported very poor, but the wheat on irrigated land is fine. I think there should be a small flock of sheep on every home place, even if the place is only 10 acres and there should be more getting together, to plan and talk over crop and stock conditions.
E. H. FAULKNER.

### Will Save Okanogan Orchards.

Announcement has been made of the appropriation by congress of the sum of $125,000 to be used by government engineers to pump water into the Okanogan irrigation reservoir. The special appropriation was urged by the reclamation service because of the unusual shortage of water on the Okanogan irrigation project which threatened to result in the loss of many fruit trees in the newly developed orchards of that region. The water will be pumped either from the Okanogan river, Salmon lake or Green lake.

### Hay Rather Than Orchard.

"There have been wormy apples in and around Ellensburg, Wash., for 20 years, declares E. G. Grindrod of that city. "That old slogan, 'The home of the wormless apple, always was misleading. Orchardists around here discovered long ago that the same precautions in regard to pests were necessary here as elsewhere."

Even with this proviso, Mr. Grindrod does not think much of apple farming. Most of his own orchard has been taken out and the land seeded to hay.

### Use Bees In Greenhouse.

One of the most complete greenhouse plants in the northwest is operated by the Walla Walla Hot House company. About two acres are under glass and the equipment in regard to irrigation, ventilation, etc., is up to the minute. Bees are kept in the greenhouse to pollenate the growing crops, so that that limiting factor in greenhouse work is removed.


## Advertising Protects the Buyer




When a manufacturer gets to the point of advertising his produce in the farm papers, you can be sure that he has brought his goods to a high state of perfection.

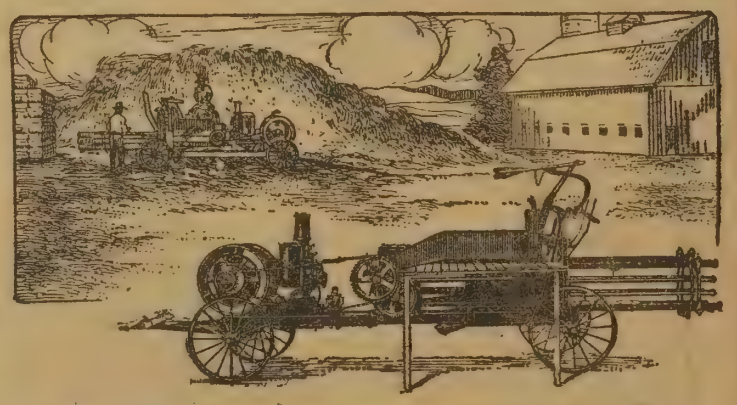
Otherwise, he would be merely breeding trouble and dissatisfaction; and his announcements would not be admitted to reputable farm papers.

Advertising protects you from poor quality of goods and from inferior workmanship.

It also protects you from high prices, because the tendency of advertising is to cut down manufacturing and selling expense, and to lower prices to the consumer.

Moreover, when you buy goods advertised in this paper you get the protection given by our iron-clad guarantee. Are you in the market for advertised merchandise? Read the ads in this issue and see!

## Use an International Press



EXTRA hay profit is to be found in the line of **International Hay Presses.** Hay, in the smooth, uniform bales turned out by an **International** baler, brings market prices enough higher to allow a good profit on the work of baling. Baled hay can be shipped quickly to points where prices are highest. Baled hay takes up little storage space and is easily handled.

In the **International** line there are one-horse and two-horse presses for farmers who have no other power; motor presses for those who want the work done in a hurry, and have other uses for a high-grade portable engine; belt power presses for baling large crops or for doing custom work. The **International** hay press line is complete. Bale chamber sizes are standard, 14 x 18, 16 x 18, and 17 x 22. The capacity of the different styles ranges from 6 to 35 tons of baled hay per day.

It's no trouble to find out all about this handy, clean working line of hay presses, nor does it cost more than the price of a postage stamp. Drop us a line asking for information on **International** hay presses, and we'll send it without delay.

**International Harvester Company of America**
(Incorporated)

Billings, Mont. Crawford, Neb. Denver, Colo. Helena, Mont.
Los Angeles, Cal. Portland, Ore. Salt Lake City, Utah
San Francisco, Cal. Spokane, Wash.

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 28 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF July 11, 1918

## Grain Must Not Be Wasted

### *Effort Will Be Made to Prevent Harvest Loss*

Thorough organization of the threshermen of the wheat growing districts of Washington is being effected by the national food administration. Richard J. Stephens of Spokane has been appointed superintendent of 25 counties in the state to direct the organization with a view to preventing grain losses during the threshing season. Under the system that is being worked out, the county food administrator in each county is chairman of the county committee having in charge the county organization. The chairman of the county council of defense is a member of the committee and appoints one representative of the threshing industry, who, with the county agricultural agent makes up the committee for the county.

"Just as much care should be taken in cleaning up all the unthreshed grain that accumulates around a machine as is taken with the rest of the job," says Mr. Stephens. "Even with the best of care a considerable amount of unthreshed grain will accumulate about the feeder in the course of a few hours. If the straw is very dry, a considerable amount of grain will shatter from the heads as it is being pitched from the wagons or stacks to the feeder. The machine should not be stopped at the end of the job until every bit of this is pitched back into the cylinder and carefully rethreshed.

Mr. Stephens estimates that careful threshing will result in saving at least three and one-half bushels in every hundred threshed. He suggests as means to effect this saving the following: That horses should not be fed from the header wagons or bundle wagons; that drivers should be careful not to tramp upon the unthreshed straw; that all loose grain be shoveled into sacks; that bundles should always to pitched so as to fall completely in the wagon or the feeder, not striking against the sides at any time; that horses be not permitted to eat from the grain stacks or shocks; that feeding should be so regulated as to prevent cracking of grain, and the machinery properly adjusted as to cylinder and concave teeth and speed, and that grain be never threshed too green or too wet following a rain.

Threshermen are being given cards of food administration membership upon their joining actively in the work of grain saving as outlined by the food administration. Ready loyalty is being manifested from every quarter, it is stated.

"Under the membership plan, every thresherman is being given an opportunity to take his place alongside other patriotic men who have put their business upon an efficient war basis and are thus supporting the efforts of the government and the boys at the front," says Mr. Stephens.

### Lowlands Are Flooded.

Reports from Clarke county tell of the flooding of considerable lowland along the Columbia river in southwestern Washington during the recent high water period of that river. Considerable damage is reported to have been done to some of the dairy farms on the river banks. It is believed that general improvement will be noted from now on until the river reaches its normal stage.

### STATE GOOD ROADS.
### Will Hold Convention in Pasco.

Officers of the Washington State Good Roads association are preparing for their annual convention to be held in Pasco Thursday and Friday, November 14 and 15 next.

The old members and others who are interested in good roads of the state are being asked to forward their dollar memberships to F. L. Crowe, membership secretary, 201 Empire State building, Spokane, Wash.

The good roads boosters of the state are being asked to transmit these memberships to Mr. Crowe at this time in order to do away with the confusion and multiplicity of work which is necessitated at the convention when all these registrations are made after the arrival of the delegates.

Continuing its announcement of the Pasco meeting, the officers say:

In addition to this saving of clerical work, it is the desire of President Arthur D. Jones and Chairman of the Executive Committee John P. Hartman that a somewhat larger fund be provided in order that nationally well-known road builders may be secured through the payment of their expenses as advisers to us of Washington in formulating our future actions and policies.

Every public-spirited citizen who desires to save the state of Washington in tax expenditures by saving in experimental construction work and types of roads which do not prove permanent should be willing to at once contribute a membership to the Washington State Good Roads association to help them in securing these experts for the convention and to provide a legislative fund for use in the next session of the legislature to incorporate sane policies into the road code of the state.

These public-spirited citizens should send in their memberships at once, whether they fully intend to be present at Pasco or not.

One of the well-known speakers who will be present is ("Good Roads") Horatio S. Earle of Detroit, Mich. Many residents of this state have heard Mr Earle and want to hear him again, and as often as they can.

### RED CROSS PICTURE PAGE.

**The open country and the rural towns have responded freely to the calls of the Red Cross. Nowhere have the women folks, or the men folks for that matter, been more anxious to help out in this work. In fact there has been no more popular method of raising money for the Red Cross than the repeated sale at auction of a farm animal or some other farm product. We are sure you will be much interested in our picture page this week where you will find the portraits of the men and women who are directing the Red Cross work of Washington, Oregon, Idaho and Alaska.**

### Coming Events.

July 15-17, convention poultry instructors and investigators, Moscow, Idaho.

August 19-25—Convention National G. A. R., Portland, Ore.

November 14-15, Good Roads convention, Pasco, Wash.

**Fairs, Shows, Exhibits.**

August 26-30, Southwest Washington fair, Centralia-Chehalis.

September 2-7—Spokane Interstate fair, Spokane, Wash.

September 16-21—Washington State fair, Yakima, Wash.

September 19-21—Roundup, Pendleton, Ore.

October 1-6—Western Washington fair, Puyallup, Wash.

November 7-13—Northwest live stock show, Lewiston, Idaho.

## Farm Service War Flag

### *Why Not Adopt This as a National Emblem?*

**The following letters largely explain themselves. It may be added, however, that while the farm service war flag was designed primarily for use in the Pacific northwest, yet there is nothing in the design, or in the motive which prompted the design, which would not lend itself for use among farm folks all over the country. Before its publication a copy of the proposed flag, in colors, was forwarded to President Wilson, preceded by a telegram saying:**

**"We believe in using every incentive which shall encourage each member of a farm family in food production. To this end we have devised a farm service war flag, distinct from wartime service flag, on which every farmer, every farmer's wife and every farm boy or girl who is actively speeding up food production, shall be represented by a star."**

**The same telegram indicated a desire to dedicate the flag to the entire nation as a patriotic farm emblem.**

To the Editor: Please accept my thanks for your letter enclosing sample of your farm service war flag. I enclose herewith copy of a letter which I am sending to C. B. Smith of the states relations service, Washington, D. C. I think your idea of a service flag is a most excellent one, and since the flag has already been adopted in four states of the Pacific northwest, it might very properly be used as a national emblem, provided it meets the approval of the Washington authorities.

A. J. MEYER, Director.
University of Missouri.

The following is the copy of the letter sent by Director Meyer to the United States department of agriculture:

Mr. C. B. Smith, States Relations Service, Washington, D. C.: I enclose herewith the farm service war flag originally suggested by the Cowles Publishing company, Spokane, Wash., publishers of the Oregon Farmer, the Idaho Farmer and the Washington Farmer. From information at hand, this flag is being adopted quite generally in four states of the Pacific northwest. If the idea is a good one, if the flag is satisfactory, and if there are no strings tied to its use, why would it not be well to adopt this as a national emblem? This would be taking advantage of the fact that it is already in use in four states in the Union, and would create no disturbance elsewhere unless there are similar emblems being used in other states. A. J. MEYER, Director.

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## Fix Prune Price

### Conference Is Held at Portland

Following a conference in Portland, Ore., between representatives of the federal food administration and a large number of prune growers of the northwest the maximum prices to be paid growers for the 1918 prune crop was announced. The prices range from 4 cents a pound for 120s up to 11 7-8 cents a pound for 30s and 35s. These prices are for Italian prunes. For the Petite variety the prices range from 4 cents to 12 cents per pound. The maximum prices agreed upon for Italian prunes are as follows:

| | Grader Test, Lb. | Sack Test, Lb |
|---|---|---|
| 30-35s | $0.11⅞ | $0.11⅞ |
| 35-40s | .11⅝ | .11⅝ |
| 40-45s | .10⅞ | .10⅞ |
| 45-50s | .10⅝ | .10⅝ |
| 50-55s | .09½ | .09⅝ |
| 55-60s | .09¼ | .09¼ |
| 60-65s | .09 | .09 |
| 65-70s | .08⅝ | .08¼ |
| 70-75s | .08¾ | .08⅜ |
| 75-80s | .08⅛ | .08⅛ |
| 80-85s | .07½ | .07⅛ |
| 85-90s | .07¼ | .07 |
| 90-95s | .07 | .06⅞ |
| 95-100s | .06¾ | .06⅝ |
| 100-120s | .04½ | .04¼ |
| 120 up | .04 | .04 |

The prices agreed upon for Petite prunes varies somewhat as indicated by the following schedule as adopted:

| | Grader Test, Lb. | Sack Test, Lb |
|---|---|---|
| 35-40s | $0.12 | $0.12 |
| 40-45s | .11¼ | .11¼ |
| 45-50s | .11 | .11 |
| 50-55s | .09¾ | .10¼ |
| 55-60s | .09½ | .09¼ |
| 60-65s | .09¼ | .09¼ |
| 65-70s | .09 | .09 |
| 70-75s | .08¾ | .08¾ |
| 75-80s | .08½ | .08¼ |
| 80-85s | .07¾ | .07⅜ |
| 85-90s | .07⅜ | .07⅛ |
| 90-95s | .07⅛ | .06⅞ |
| 95-100s | .07 | .06 |
| 100-120s | .04½ | .04½ |
| 120 up | .04 | .04 |

Several food administration authorities of the northwest were in attendance at the conference, including Administrator W. D. Ayer of Oregon and Administrator Charles Hebberd of Washington. E. N. Richardson was present from Washington, D. C., as personal representative of the national food administrator. Explaining the purpose and result of the conference Mr. Richardson said, following the adoption of the schedule of prices:

"The schedule agreed upon by the Oregon and Washington growers are from one-fourth to three-eighths of a cent lower, according to grade, than those adopted by the California growers. This difference is due to the fact that the California prune absorbs a much greater quantity of moisture in the process of packing than does the prune of northwest sections, this moisture content adding substantially to the weight of the prunes after they reach the packer and before they are passed on to the consumer. As the packer sells the prune by weight it will be seen that the Oregon and Washington packers who handle prunes that do not absorb so much moisture would be at a disadvantage if they had to pay as high a figure for their fruit as does the California packer. For this reason the lower price was adopted in the northwest. Oregon and Washington Petite prunes are the same price as in California.

"The margin of profit made by the Oregon and Washington packers which under the food administration regulations must not exceed 5 per cent on the turnover of the pack, will be the same as that made by the California packer selling at the same price. These prices, it should be understood, are the maximum prices at which prunes are to be sold by the growers, and have been voluntarily agreed upon and adopted as the selling basis for the new northwest crop. The schedule has been sent to Washington and will be indorsed by the food administration within the next few days."

One of the requirements made by the food administration to the prune growers was that the average profit on the production of prunes this season should not exceed 5 per cent above expenses. It was stated that any greater profit than this would subject the grower to charges of profiteering.

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## *Don't Give Up the Poor Crop*

A common error on the part of farmers everywhere is shown in their failure to take first class care of the crop that promises an inferior yield. If there is any crop that should receive special care it is the crop that, for one reason or another, shows indications of shortage or possible failure. To allow a beet field, or corn field, or potato field to go uncultivated because of a poor stand or because weather conditions threaten it, is poor policy. It is poor policy not only from the standpoint of the yield that might be obtained, but from the standpoint as well of the preparation of the soil for a crop the succeeding year. Cultivation is seldom wasted even though it has little effect on the crop already in the ground. Furthermore, food products are too badly needed this season to permit of anything going to waste or failing to yield when a reasonable amount of effort would save it.

## *The Farmer's Automobile.*

Judge William H. Wadhams of the New York court of general sessions, recently returned from a three months' visit to France, told the grand jury in his court that upon landing in New York it gave him a distinct shock to see the streets crowded with expensive automobiles being used for the mere pleasure of the owners, and men spending money as lavishly as in the days before the war.

"There is not a private motor car driven in Great Britain today," continued Judge Wadhams. "They have been turned over to the government for war uses, and every great country house in England is being used for government purposes."

Undoubtedly pleasure automobiling is interfering with our vigorous conduct of the war. Hundreds of thousands of people would have more money to put into Liberty bonds, war savings stamps and the Red Cross if they were not burning up so much of their income in joy riding. Heavy consumption of gasoline runs up the price and costs the government just that much more for its own requirements.

It is difficult, however, in this country, to draw the line between utility and pleasure use of the automobile. Thousands of farmers use their cars chiefly for farm service, and pleasure riding with them is only incidental. They find it a wonderful time saver and real aid to increase food production.

Another point is not to be disregarded. The automobile makes farm life more attractive to the young people, and holds young men on the farm against the growing enticements of town and city life.

Any regulatory or prohibitive action by our government must therefore be carefully considered. It is possible that as the war goes on we may have to come more and more to the British and French methods, but we are to remember that this country differs from Europe. The United States is a land of magnificent distances, and farm life does not center here around the villages as in France and England, with the opportunities there presented for quick and easy access to trading points. Many American farmers living several miles from town would have to waste a good many half days every season if they should be thrown back on the old ways of going to town.

Undoubtedly it is these considerations that cause our government to hesitate before interfering with the established uses of the automobile.

## *Lessons of a Century*

It is a terrible thing to sacrifice life, but after all, would it not have been a calamity had America been spared participation in the present war? Her grasp of industrial life and even of spiritual life would have been a century out of date at the close of the war, for the lessons of the past four years have been as the lessons of a century.

## *Universal Inter-Relations*

In our social evolution we are following the law of physical evolution. The first social units were self centered. The first forms of life were unicellular. In that form of life the individual cell was the highest expression of life. These forms multiply by division, and the yeast plant is an example. The multicellular forms are those that are composed of more than one cell. There are generally many cells, and sometimes many million cells. The cells become organized so as to perform different functions, as in the roots of a tree, its trunk and leaves. In such an organism all the parts are inter-related, and each and every part necessary to every other part, and to the whole. In sociology we have not yet learned the lesson of universal inter-relations, and we are struggling, seriously struggling with the questions now. We can not fix the price of one commodity, and not at the same time fix the prices of other commodities to which it is related. We can not fix the prices of commodities without at the same time fixing the prices of labor producing these commodities. We can not fix the prices of labor producing commodities, and of the commodities themselves without fixing the profits or the commissions that shall be received by distributors, merchants and others conveying them to the people. One thing logically follows another, because every thing is related to every other thing.

I am not finding fault with our legislative and executive bodies for not doing every thing in a short period of time, it is of necessity an evolution of thought, and in the meantime millions of people must suffer injustice. G. L.

## *Cooperative Creamery a Success*

That cooperative creameries can be made a success, and that the dairymen will stay with them and show executive ability in their management, is indicated by the Skamokawa cooperative creamery at Skamokawa, Wash. This creamery has been in existence over 20 years. Skamokawa has no railroad nor highway, its only outlet being by boat on the Columbia river. But this creamery's output has steadily grown as more land comes into cultivation in the little valley. Last year's output was 176,000 pounds. The butter has a high reputation, and is sought for in Portland, where the largest sales are made, in Seattle and in smaller markets. The plant is thoroughly modern and sanitary, with concrete floor and plastered walls. Only butter is made; there is no ice cream or byproducts, and the reputation and success is built entirely on the butter.

## *Making Excessive Profit*

The stunning report on profiteering by the federal trade commission confirms the belief repeatedly expressed by the farmer that in spite of all of Mr. Hoover's restraining efforts the flour mills have been making excessive profits.

The great packers and other profiteers also come in for scathing condemnation from this high national commission for their unpatriotic conduct at a time when every consideration of loyalty demanded that they hold down their profits.

These are not the findings of an irresponsible muck-raking body. They are the carefully delved facts of an able government commission that seems to have gone at its work with a spirit of zeal and thoroughness, and which has laid before the country proofs gathered from the books and records of the investigated companies.

Some of the practices uncovered by the commission, such as padded depreciations, increased salaries of officials, new construction charged off as repairs, fictitious values on raw materials and manipulated inventories, now call for vigorous prosecution by the United States department of justice. The country will demand vigorous action by the government, to the end that lawless profiteers shall be exposed and punished, and just creedit be given to those patriotic business men who have not taken advantage of the nation's war necessities to pile up ill-gotten gains extorted from the consuming public and drained from the national treasury at a time when every patriotic impulse is for the speedy winning of the war with the minimum of loss of life and treasure.

## *Men Who Do Real Things*

How petty is the pride of the average one of us who does something, or thinks he does! How small-minded to complain of our troubles! Look at the men who do real things, and our pride will turn to a blush of shame. Look at Foch, Haig, Pershing. Look at real trouble and suffering, and our complaint will turn to compassion. Look at Belgium and northern France, Serbia and Armenia.

## *Fancy and Utility*

Professor Edward Brown of England informed us in his talks that the fancy poultry business has been destroyed in Great Britain by the war, and that practically all the poultry shows had been discontinued. The commercial poultry farms had also been injured, but there was some increase in poultry keeping on the general farms and on the backyards.

Everything must serve a utility end in these war days, and the experience of poultry keepers in England should serve a valuable lesson to our own poultry keepers. The fancy poultry that has been bred mainly for winning prizes in the shows has been found wanting, and has given way to utility strains. The same thing will happen in this country if the war goes on, and even if it doesn't, and it is well to be forewarned. J. D.

IT has well been asked why the country church should not be made a community center, why farmers should not meet there for business meetings and picnics as well as for religious purposes, and why the church property should not be kept comfortable and attractive and equipped with conveniences.

NOW is the time to demonstrate whether success is possible to us as individuals. One of the most successful men of America, the late James J. Hill, said: "Unless you can save money you can not succeed in business."

IF you do not have to go; if your son doesn't have to go; if your husband or brother doesn't have to go, you ought to be ashamed to utter one syllable of complaint, let come what will at home.

FOUR dollars and eighteen cents invested in a war savings stamp is just that much more than most of us would have a year from now if we didn't buy the stamp.

DID you ever turn on the light to see whether or not the room was dark? Try it sometime and you will get an inkling of one of the profoundest principles of life.

AS a rule, failure is due to lack of attention to details. The little thing is the biggest thing in the world.

# Increase in Wheat Price Fails

## *Congress Agrees on $2.40 Price; President Promises Veto*

Although congress has been wrestling for months with the proposition to increase the price of wheat the announcement last Saturday that both houses had agreed to increase the price to $2.40 a bushel came as a sensation to the people of the country, producers and consumers alike. Hardly had the news spread, however, until it was announced that President Wilson had stated that he would veto the measure on the ground that the increased price of wheat would increase the cost of bread to the consumers out of proportion to the benefit derived by the farmer from the increased price. The measure to increase the price was in the form of a "rider" on the agricultural appropriation bill. Should the president veto the measure it would not seriously handicap the work of the department of agriculture, as congress recently passed a measure continuing the old appropriation act until the new measure becomes effective.

### Farmers May Appeal to the President.

It is possible that the farmers of the country will make formal appeal to the president not to veto the measure. Following the announcement of the passage of the measure by congress and the statement that the president would veto it, A. A. Elmore, president of the Farmers' Union of Washington and Northern Idaho, said that officers of the union were getting in touch with each other with a view to taking the matter up with the president. In a formal interview President Elmore said:

"The union is standing behind the president in the prosecution of the war, and we probably will appeal to him to consider the $2.40 a bushel as fair to the farmers, all things considered. There are thousands of acres of wheat in the Pacific northwest that will not be cut this year. There are tens of thousands of acres that will not produce more than five or six bushels an acre.

"The farmer will not make any money this year at the $2.40 minimum. Of course, in some favored sections they will make money, but the farmer as a class will not. Everything the farmer uses has advanced tremendously in price. The feed for his stock to raise the crop costs $50 to $70 a ton. Farm machinery has gone out of sight. We will appeal to the president to consider these things before vetoing the bill.

"Let us consider what $2.40 wheat means. It is the cheapest food one can eat at that price. It takes four and one-half bushels of wheat to make a barrel of flour. That makes the wheat cost $10.80 for a barrel. Add $1 for cost of milling and $1 for cost of distribution, and the cost to the consumer should be $12.80. There are approximately 300 loaves of bread in a barrel of flour. On this basis the flour in a loaf of bread costs 4.2 cents. Half a loaf a day is sufficient for any person, which makes the wheat cost in a day's bread supply 2.1 cents. Suppose you invested 2.1 cents in meat, you would not get enough for a taste.

"The average wheat crop is 600,000,000 bushels. Adding 20 cents a bushel to the crop we would have an additional $120,000,000. Let us now look at the situation from another angle. The railroads were granted an increase in rates amounting to $900,000,000. The railroad employes were granted a raise amounting to $600,000,000 a year. This increase would pay the farmer $1 a bushel additional for his entire wheat crop.

"The railroads which were taken over by the government have been guaranteed a dividend equal to that made by them for three years previous to the government's plan of action. Those years were the most prosperous in the history of railroading in this country. The shipbuilders and the cantonment builders have been guaranteed cost plus 10 per cent on their operations. The millers have had a prosperous year, so much so that the government has declared they were profiteering. The farmers will be perfectly willing to go on a basis of cost plus 10 per cent if the government will make the same requirements of other lines of industry.

"We appeal to the president not to overlook us while he is doing so well by the railroads and others whose activity is necessary for the welfare of the nation, because our products certainly are essential."

### What to Expect on Battlefront Is Puzzle.

The uncertainty that has existed for the last few weeks on the situation at the battlefront continues. At this writing there is no positive evidence of what is in store, though before this reaches the readers stupendous events may have occurred. Great drives are launched in this war with a suddenness that sometimes completely staggers the noncombatant world.

It would seem that two possibilities are worthy of consideration: First, Germany may renew her offensive on a scale even greater than that of the drives that have occurred during the last few months; second, she may wait and change her policy to one of defense rather than offense. Military critics, as a rule, look for a resumption of the supreme effort to win by sheer force of arms this summer, but there is an undercurrent of feeling that the Kaiser knows he can not win that way, and is planning an organization of his forces and resources to withstand the offensive that the allies are sure to launch in due time.

While the war lords of the central empires undoubtedly had dreams of world domination when they started the war, and while those dreams have not been realized, it remains a fact that up to the present time Germany and her allies are the victors. They possess at this time territorial gains that it seems safe to say double their antebellum resources. Russia, with all her fertile lands, is in Teutonic possession. Belgium, millions of acres of northern France and Serbia and Rumania are occupied by the Germans and the Austrians. Through her alliance with Turkey the Germans have access to the Mediterranean through the Dardanelles.

Give the Kaiser a little time to organize this stupendous aggregate of resources and provide for its defense with modern and complete fortification and equipment he could withstand for years anything but an irresistible force from the allies. Is this what he plans? Does he believe that England and France and America would make peace rather than undertake the great task of invading his increased empire?

The next few days, or the next few weeks may reveal what may be expected in the future. The fortunes of war hinge on many things. So tense is every nerve on the one great event that a little thing might start a break that would wreck the hopes of either side. It is not impossible that a psychological breakdown somewhere will put a new face on the situation. Some one nation may fail and turn the tide one way or the other. The greatest problem before each side is to prevent such a catastrophe—to keep popular morale perfect and to guard every possibility of international events that might add power to the enemy. It is a fact that must be recognized that the winning side draws friends. The world loves a winner, and, besides, it is safer to be with the victor when the final adjustment takes place. For this, if for no other reason, it behooves America to bend her utmost effort to become immediately the winner. The whole world must be convinced—and nothing but irresistible force of arms can convince—that America and her allies will ultimately win.

### Quarter Million Americans at Battlefront.

Official announcement has been made that of the American forces now in France a full quarter of a million are on the front battle line. This means that at least three-quarters of a million men are in active service in France, as not to exceed one man in three is available for actual fighting in the trenches. At least two-thirds of the men actively engaged in war operation devote their time to duties back of the line, such as railroad building, transportation of munitions and food supplies and the like. President Wilson on July 1 made formal announcement that the number of Americans in France had been placed at the one million mark, and that there are approximately two million men under arms in this country or already abroad.

### Allies Take Many Prisoners.

It is officially reported that the French, British and American armies on the western battle front took more than 5000 German prisoners in the fighting during the last week. While there were no major offensives launched during the week by either the allies or the Germans, a considerable number of minor operations, covering distances from one to three or four miles and penetrating from a few rods to one or two miles in depth were successfully carried out by the allies. So far as gaining of ground, capture of troops and the general improvement of positions are concerned the last week may be credited as one of victory for the allies.

### British Casualties Continue Heavy.

The tremendous casualties on the battlefront are indicated somewhat by the report that expresses satisfaction that the British losses were only 17,336 during the past week. This is a decrease from the previous week, when the losses were something like twice that many. It must be remembered that these last weeks have been weeks of comparative quiet. Only local fighting has occurred. No big battles have been fought. Of last week's losses nearly 3000 were deaths, the remaining 14,000 being wounded. Multiply this number of casualties by six (America, England, France, Italy, Germany and Austria, the major nations at war) and it would indicate a possible loss of more than 100,000 a week to all the combatant nations. This, of course, is assuming that the losses to each nation average those reported for the British, which may or may not be true.

### Excess Profits Pay Heavy Taxes.

The official records show that for the year ended June 30 taxes on incomes and excess profits in this country totaled over $2,821,000,000. The government's total revenue, collected from all sources, totaled approximately $3,672,000,000. New York state led in the payment of these revenues with a total of $689,917,000. Pennsylvania was second, with $496,087,000.

### Get a Farm Service Flag.

The man, woman, boy or girl who stays at home and works hard to produce necessaries for the soldiers in Europe are entitled to real war service recognition. That is the idea back of the Washington Farmers farm service war flag. It is pennant-shaped, made of the good old red, white and blue, and has a star representing the producing farm home. Small stars are added to represent each worker of that home.

.....

Convenient Order Blank.

THE WASHINGTON FARMER, ————1918.

Review Building, Spokane, Wash.

Enclosed find five cents (5c), for which please send me a Farm War Service Flag (priuted on enamel paper) with ..... extra small stars for farm workers.

Name .....

R. F. D. ..... Postoffice .....

Box ..... State .....

## *Washington Gleanings*

The fruit crop in the Big Bottom valley, near Morton, is the best in years, according to farmers there.

J. C. Peterson of Ferndale has become the owner of the Captain Butts farm of 64 acres. The consideration was $9500 cash.

M. Riddle of Tacoma has presented Camp Lewis with the largest flag in the world. The flag was run to the top of a 325-foot pole.

Daniel C. Corbin, multi-millionaire, railroad builder, died at Spokane of pneumonia, which developed after an operation. He was 83 years old.

S. B. Helmick of Pe Ell recently found a gold nugget weighing seven and four-tenths grains in the crop of a fowl which he had killed for dinner.

The Girls' Canning club has been organized at Castlerock, with Vera Hubert as president, Gladys Wheeler vice president, Mrs. O. K. Wolf, leader.

The Snohomish County Fruit Growers' association recently shipped a carload of potatoes to British Columbia to be manufactured into potato flour.

At a recent meeting of the Pacific county commissioners the Peninsula highway, from Nahcotta to Oysterville, was declared a county road and public highway.

More than 6000 barrels of flour in this state have been returned to the channels of trade since June 10, and this amount is now available for export to France.

The Lincoln county rural letter carriers have reorganized and elected Captain Alitzer, Wilbur, president; G. Schatz, Odessa, vice president; Harvey C. Sprinkle, Reardan, secretary-treasurer.

Merchants at Vancouver, Wash., have agreed that they will not sell flour to strangers, and the people purchasing flour must show that they are residents of Vancouver or Clarke county.

With a view to preventing the importation of weevil-infected hay the state of Montana has placed a quarantine on hay from several districts of Idaho, Utah and Wyoming, where the pest is known to exist.

The farmers of Snohomish, Clallam and Lewis counties are to make an excursion to the experimental station at Puyallup July 22, and the farmers from Whatcom, San Juan and Skagit counties on July 24.

A big farmers' elevator is to be erected in Toppenish for this season's business at an approximated cost of $16,000, the necessary stock being subscribed within a few hours. The elevators will handle 1500 bushels per hour and will be modern in every respect.

Fir lumber manufacturers of Oregon and Washington have pledged themselves to furnish at least 600 cars of airplane fir per month to the government cut-up plant at Vancouver, and to speed solid trainloads of cantonment stock to eastern destinations in record time.

The seventh and last car of beans gathered at Yakima in response to the call of the government for supplies for the army overseas is ready for shipment. These bean consignments averaged 80,000 pounds to the car, which at 8 cents returned $44,800 to the growers.

There is a general feeling that the I. W. W. is whipped in the northwest. Possibly he is. Let it be hoped so. But too much optimism is a bad policy. A constant watch should be kept and every one should be ready to take part in the suppression of destructive efforts from any source.

The farmers of Whatcom county are fearing a shortage of berry pickers this summer, as the Canadian growers are making a strong bid for the available pickers. The Canadian growers are receiving a higher price for their berries, and thus are able to offer the pickers a better wage.

One of the latest additions to the general note of unrest in the dairy industry of the northwest comes from Tacoma, Wash., where the dairy association has called a meeting for July 15 for the purpose of seeing what can be done to improve conditions. Movements like this are reported from all over the four northwestern states.

Peter Munson has a patch of vetch growing on his farm near Ferndale which has stalks that measure seven feet eight inches in length. The land on which it was raised is ordinary upland, which had no special preparation aside from a light coating of barnyard manure. The vetch was sown last fall, with a little wheat added to hold up the stalk.

While an occasional case is still reported of hoarding of food the federal authorities report a general observance of the rules. Since the food administration asked the people to return all the flour that they could spare from their home supplies, large quantities have been brought in, thereby increasing the amount available for exportation to the armies.

Another beneficial influence of the war is felt in the development among farmers of the uniform wage system. One of the evils of the labor situation in the past has been bidding against each other of the farmers of even the same locality for help. There is a general sentiment throughout the country now favoring the payment of a uniform wage, with punishment being meted out to any laborer who refuses to work for the wage agreed upon by the farmers.

# Idaho Nonpartizan League Nominates

The nonpartizan league of Idaho met at Boise in state convention July 2, 3 and 4, drawing up a platform and indorsing candidates for the state, senatorial and congressional elections this fall. H. F. Samuels, a retired mine operator, now farming some 2000 acres of stump land in northern Idaho, was nominated for Governor. Mr. Samuels will file as candidate at the primaries on the democratic ticket. Until a few weeks ago he was chairman of the republican central committee of the county in which he lives. For the United States senate the league indorsed both present senators, William E. Borah, republican, and J. F. Nugent, democrat. For congress, L. J. Purcell of Weiser, Idaho, and C. R. Jeppesen of Arco, Idaho were nominated. A full state ticket was indorsed, though the league, it is understood, will take no direct part in the nomination of county officers. It was announced at the convention that all of the candidates indorsed by the league with the exception of present office holders who are members of the republican party, will file for nomination as democrats.

The platform as adopted urges the immediate amendment to the constitution permitting the enfranchisement of women. One of the statements of principles declares the chief qualification for office is loyalty—100 per cent Americanism. State-owned packing plants, elevators, flour mills and sugar factories are urged, as well as state-owned warehouses and storage plants for farm products. Rural credit banks operated at cost are demanded as well as state ownership and distribution of water power. Candidates are pledged to the carrying out of legislation for labor laws to protect labor and the just demands of organized labor, the taxation of idle property at a higher rate in order to force such property to more largely assist in the financing of the war, and a workable initiative, referendum and recall law.

While the attendance at the convention was not as large as had been predicted by nonpartizan workers, it is estimated that at one time 1000 persons were in attendance, though what proportion of them were members of the league was not known.

President A. C. Townley of the league did not appear at the convention, owing to the action of the defense league of the county in which Boise is located in ruling that he should not be allowed to speak owing to the suspicion under which he was held as a result of the case brought against him in Minnesota on the charge of discouraging enlistments.

Organized labor played a part in framing the platform of the league as adopted at Boise. Several planks in the platform are wholly foreign to agriculture and rural life matters. The following are a number of the principal planks of the platform:

One-man operation of streetcars in any city is dangerous to public safety.

An eight-hour day with a minimum pay of $15 per week for women and girl workers.

Amendment of the lien law giving collection of wages preference over all other claims.

Protection of American barbers from Asiatic competition by regulating hours for opening and closing of all barber shops.

Compulsory state fund insurance under the workmen's compensation law, with larger minimum weekly payments.

Demanding of congress that it accede to the request of the president and grant further authority for regulating the prices of farm products and other commodities in which there is excessive profit-making.

Petitioning the federal government so to shape its plans that it will not reliquish control of the grain markets after the war, but keep them open and free from the oppressive practices of monopoly.

Indorsing the taking over by the federal government of all railroads.

Recommending government seizure and operation of all war supply factories where excessive profit-taking takes place.

Recommending government seizure and operation of all factories in which industrial disputes do not yield to mediation.

Recommending government operation of all mines and all shipyards on government work. Direct contracts between the workers on government supplies and work, through their organizations.

Recommending short-time loans to the farmers by the government on crop security, whether owned or rented land.

Recommending government control of the prices of the commodities necessary for the farmers' use.

The convention pledged its loyalty and support to the government in the world war and in a lengthy preamble indorsed President Wilson and his policies and denounced profiteers "who place above patriotism dollars and blood-drenched dividends."

**One Day's Gain.**

A Chase county (Kan.) steer, which had just come in off pasture, gained 45 pounds in 24 hours the first day it was put on feed on the farm of Henry Starkey. This is considered to be a record.

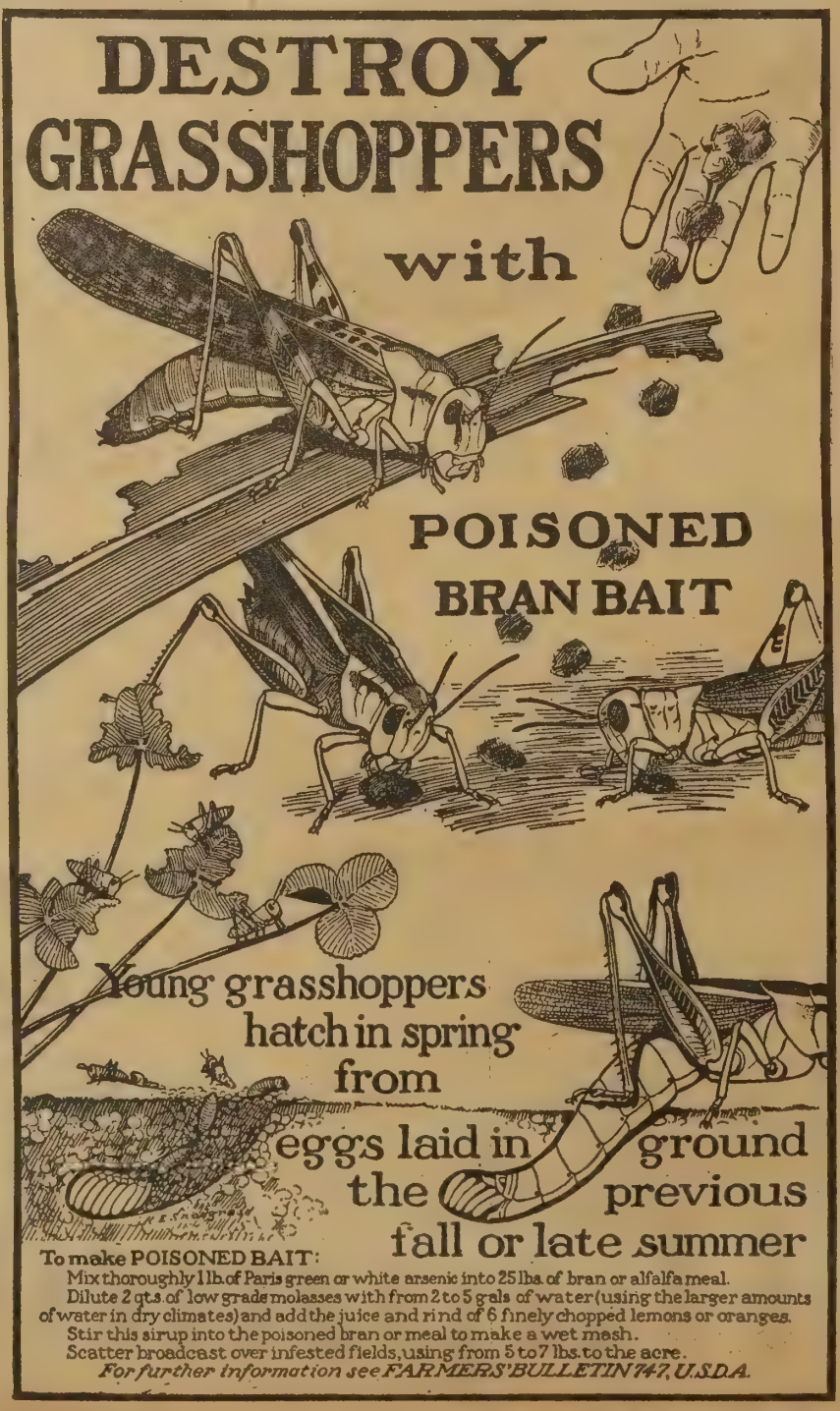
## Minnesota Court Frees A. C. Townley

Under date of July 5, a dispatch from St. Paul, Minn., says:

The Minnesota supreme court held today that A. C. Townley, president of the nonpartizan league, and Joseph Gilbert, league organizer, did not violate any state law by circulating certain literature which referred to the war. The men were indicted in Martin county on charges of attempting to discourage enlistments.

The court, referring to the circulation of nonpartizan league resolutions, said:

"These resolutions, taken as a whole, appear to be nothing more serious than a somewhat flamboyant platform upon which a certain class of citizens are solicited to join an organization whose avowed purpose is the amelioration of alleged evils of present economic conditions. The pursuit of this object does not violate the statute in question. It is perhaps not out of place to say that the resolutions have not yet attracted the attention of the federal authorities."




U. S. Food Administration.

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# Harvest Labor

## Be Ready to Meet an Emergency

It was with much satisfaction that the Farmer learned from J. C. Scott of the active interest taken in the towns throughout the Inland Empire in the movement to furnish harvest help. Mr. Scott has been organizing committees under the auspices of the department of agriculture and in cooperation with the county and town councils of defense. Committees have been appointed and the business men of the towns assure Mr. Scott that they will not only spare men from their employment in the harvest field, but will go to the extent of closing their places of business now and then to allow the men employed by them to help out the farmers. The three phases of this labor question which are prominently coming to the front, Mr. Scott says, are: First, the enforcement of the vagrancy law of the state of Washington; second, the postponement of public and private work wherever possible, and, third, the registering of city men for farm labor.

Perhaps the very nature of the word "vagrant" has tended to confuse the public mind with regard to the state law on vagrancy. There is nothing definite about a vagrant. He is simply without definiteness in his character. As a rule he is a person supposed to have no particular business, undesirous of employment, eking out an existence by odd jobs or by petty thefts, if not induced to graver crimes. The more the state law on vagrancy is investigated the more sweeping is its character. Especially is this paragraph pertinent to the present situation with regard to labor needed in the harvest fields: "Every person having no visible means of support, who does not seek employment nor work when employment is offered to him." If a man is found loafing around town who has no visible means of support, who is not out looking for work nor accepting work offered to him, he is simply a subject for the authorities. If a man is willing to work, is looking for work, is waiting for a position, he has nothing to fear from the vagrant law. It is simply for those who do not care for work and will not work. Here is the vagrancy law on the statute books in the state of Washington:

**VAGRANCY—EVERY—**

1. Person who asks or receives any compensation, gratuity or reward for practicing fortune telling, palmistry or clairvoyance, or

2. Person who keeps a place where lost or stolen property is concealed.

3. Person practicing, or soliciting, prostitution, or keeping a house of prostitution, or

4. Common drunkards found in any place where intoxicating liquors are sold or kept for sale, or in an intoxicated condition.

5. Common gambler found in any place where gambling is conducted, or where gambling paraphernalia, or devices are kept.

6. A healthy person who solicits alms.

7. Lewd, disorderly or dissolute persons, or

8. Persons who wander about the streets at late or unusual hours of the night without any visible or lawful business, or

9. Person who lodges in any barn, shed, outhouse, vessel, car, saloon or other place not kept for lodging purposes, without the permission of the owner or person entitled to the possession thereof, or

10. Person who lives, or works, in a house of prostitution, or solicits for any prostitute, or house of prostitution, or

11. Person who solicits business for any attorney around any court, jail, morgue, or hospital, or elsewhere, or

12. Habitual use of opium, morphine, alkaloid, cocaine, or alpha, or beta eucaine or any derivation or mixture, or preparation of any of them, or

13. Person having no visible means of support, who does not seek employment, nor work when employment is offered to him, or

14. Person who, by his own confession thereto, or prior conviction thereof, is known to have been guilty of larceny, burglary, robbery, or any crime of which fraud, or intent to defraud, is any element, who shall be found in any drinking saloon, or cellar, or any public dance hall, or music hall, where intoxicating liquors are sold, or be found intoxicated, or who except upon lawful business, shall go about any dark street or alley or any residence section, of any city or town in the night time, or loiter about any steamboat landing, passenger depot, banking institution, or crowded street, shop or thoroughfare, or any public meeting or gathering, or place where people gather in crowds,

is a vagrant, and shall be punished by imprisonment in the county jail for not more than six months or by a fine of not more than five hundred dollars.

**Forbid Child Labor.**

Children under 16 are forbidden to work in factories in Mexico.

# It Must Be Settled Now, Once for All

In an address delivered on July 4, President Wilson again stated clearly the objects and aims of America in the present war and pledged this country to continue without relaxation until the great question at stake is settled once for all. His address follows:

"Gentlemen of the Diplomatic Corps and My Fellow Citizens: I am happy to draw apart with you to this quiet place of old counsel in order to speak a little of the meaning of this day of our nation's independence. The place seems very still and remote. It is as serene and untouched by the hurry of the world as it was in those great days long ago when George Washington was here and held leisurely conference with the men who were to be associated with him in the creation of a nation. From these gentle slopes they looked out upon the world and saw it whole; saw it with the light of the future upon it; saw it with modern eyes that turned away from a past which men of liberated spirits could no longer endure.

"It is for that reason that we can not feel, even here, in the immediate presence of this sacred tomb, that this is a place of death. It was a place of achievement. A great promise that was meant for all mankind was here given plan and reality. The associations by which we are here surrounded are the inspiring associations of that noble death which is only a glorious consummation. From this green hillside we also ought to be able to see with comprehending eyes the world that lies about us and should conceive anew the purposes that must set men free.

**Acted for All Mankind.**

"It is significant—significant of their own character and purpose and of the influences they were setting afoot—that Washington and his associates, like the barons of Runnymede, spoke and acted, not as a class, but for a people. It has been left for us to see to it that it shall be understood that they spoke and acted, not for a single people only, but for all mankind. They were thinking, not of themselves and of the material interests which centered in the little groups of landholders and merchants and men of affairs with whom they were accustomed to act, in Virginia and the colonies to the north and south of her, but of a people which wished to be done with classes and special interests and the authority of men whom they had not themselves chosen to rule over them. They entertained no private purpose, desired no peculiar privilege. They were consciously planning that men of every class should be free and America a place to which men out of every nation might resort who wished to share with them the rights and privileges of free men. And we take our cue from them—do we not? We intend what they intended.

**Insure Liberty for All Nations.**

We here in America believe our participation in this present war to be only the fruitage of what they planted. Our case differs from theirs only in this, that it is our inestimable privilege to consort with men out of every nation what shall make not only the liberties of America secure, but the liberties of every other people as well. We are happy in the thought that we are permitted to do what they would have done had they been in our place. There must now be settled once for all what was settled for America in the great age upon whose inspiration we draw today. This is surely a fitting place from which calmly to look out upon our work, that we may fortify our spirits for its accomplishment. And this is the appropriate place from which to avow, alike to the friends who look on and to the friends with whom we have the happiness to be associated in action, the faith and purpose with which we act.

**Past and Present Grapple.**

"This, then, is our conception of the great struggle in which we are engaged. The plot is written plain upon every scene and every act of the supreme tragedy. On the one hand stand the peopes of the world—not only the peoples actually engaged, but many others also who suffer under mastery but can not act; peoples of many races and in every part of the world—the people of stricken Russia still among the rest, although they are for the moment unorganized and helpless. Opposed to them, masters of many armies, stand an isolated, friendless group of governments who speak no common purpose, but only selfish ambitions of their own by which none can profit but themselves and whose peoples are fuel in their hands; governments which fear their people and yet are for the time their sovereign lords, making every choice for them and disposing of their lives and fortunes as they will, as well as of the lives and fortunes of every people who fall under their power; governments clothed with the strange trappings and the primitive authority of an age that is altogether alien and hostile to our own. The past and the present are in deadly grapple and the peoples of the world are being done to death between them.

**No Half-Way Decision.**

"There can be but one issue. The settlement must be final. There can be no compromise. No half-way decision would be tolerable. No half-way decision is conceivable. These are ends for which the associated peoples of the world are fighting and which must be conceded them before there can be peace:

"1. The destruction of every arbitrary power anywhere that can separately, secretly and of its single choice disturb the peace of the world; or, if it can not be presently destroyed, at the least its reduction to virtual impotence.

"2. The settlement of every question, whether of territory, of sovereignty, of economic arrangement, or of political relationship upon the basis of the free acceptance of that settlement by the people immediately concerned and not upon the basis of the material interest or advantages of any other nation or people which may desire a different settlement for the sake of its own exterior influence or mastery.

"3. The consent of all nations to be governed in their conduct toward each other by the same principles of honor and of respect for the common law of civilized society that govern the individual citizens of all modern states in their relations with one another; to the end that all promises and covenants may be sacredly observed, no private plots or conspiracies hatched, no selfish injuries wrought with impunity and a mutual trust established upon the handsome foundation of a mutual respect for right.

**Make Peace, Justice Secure.**

"4. The establishment of an organization of peace which shall make it certain that the combined power of free nations will check every invasion of right and serve to make peace and justice the more secure by affording a definite tribunal of opinion to which all must submit and by which every international readjustment that can not be amicably agreed upon by the peoples directly concerned shall be sanctioned.

"These great objects can be put into a single sentence. What we seek is the reign of law based on the consent of the governed and sustained by the organized opinion of mankind.

"These great ends can not be achieved by debating and seeking to reconcile and accommodate what statesmen may wish, with their projects for balances of power and of national opportunity. They can be realized only by the determination of what the thinking peoples of the world desire with their longing nope for justice and for social freedom and opportunity.

**Air Carries Such Principles.**

"I can say that the air of this place carries the accents of such principles with a peculiar kindness. Here were started forces which the great nation against which they were primarily directed at first regarded as a revolt against its rightful authority, but which it has long since seen to have been a step in the liberation of its own people as well as of the people of the United States; and I stand here now to speak, to speak proudly and with confident hope of the spread of this revolt, this liberation, to the great stage of the world itself! The blinded rulers of Prussia have roused forces they knew little of, forces which once roused can never be crushed to earth again; for they have at their heart an inspiration and a purpose which are deathless and of the very stuff of triumph."

**A Fine Home Paper.**

We could not do without the Washington Farmer. It is a fine home paper. We always look forward to its coming every week.

C. H. WIDENER.
Peach, Wash.




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OWNERS of earlier Hupmobiles are so well satisfied that they can scarcely believe that the new Hupmobile is more comfortable and more efficient than their cars—*until they have taken a ride in the new Car.*

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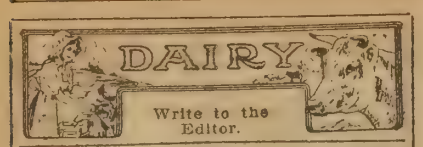
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E. W. Mooney Auto Co., Pocatello, Idaho.

**Hupmobile**




A. B. NYSTROM, Editorial Contributor

## MILK AND CREAM.

### Their Proper Care on the Farm.

By F. R. CAMMACK, Field Dairyman, University of Idaho.

At this season of the year it is especially important that we give particular attention to the care of milk and cream from which an excellent quality of cheese and butter can be produced with very little extra care and small expense. The important factors in this are:

First—A little extra care in keeping cows, and especially their udders clean. This can be accomplished by a curry comb and brush and a damp cloth in a few moments. It is quite customary to curry the horses, but very little time has been given to such work with dairy cattle, regardless of the fact that they produce human food.

Second—Clean utensils. This is important because of the rapidity with which bacteria grow in milk. The easiest way of keeping utensils clean is by the use of hot water, a good cleaning powder and plenty of elbow grease, and then rinsed with hot water or steamed out. This is of vital importance and a little attention to this detail will add to the quality of the milk and eventually to the value of the product made from it.

Third—Small top pail. This to prevent the entrance of so much dirt to the milk while milking. These pails cost very little more and are readily worth the extra price paid.

Fourth—The temperature at which the milk and cream are kept is perhaps the most crucial point in the production of dairy products. At a temperature a little above 50 degrees F., there is a decided change in the growth of the bacteria, which tends to spoil or sour the milk or cream. By cooking them soon after milking to a temperature of about 50 degrees F. or lower the growth of undesirable bacteria is reduced to a minimum. This is best accomplished by placing the milk container (an ordinary 5 or 10 gallon milk can, or so-called "shotgun" can) in as cold water as possible. This may be an ordinary irrigation ditch or a place especially prepared. It is more quickly cooled by the use of an "agitator" or long handled spoon or dipper.

Fifth—Keeping flies, dirt or any other foreign material out of the milk will, of course, be essential to produce the best results. It has been found that one fly left in milk can produce, in a very short time, over a million bacteria.

The equipment necessary to produce a better quality of milk and cream need not cost over 10 or 20 dollars. A bulletin published by the department of agriculture describing the necessary apparatus can be secured by writing to the field dairyman, University of Idaho, extension division, Boise, and do not forget that every bit of milk or cream spoiled, or its human food value reduced is giving assistance to the kaiser.

## Central Oregon Cow Tests.

During the month of May 209 cows were tested in the Central Oregon Cow Testing association. The average pounds of milk per cow was 670.2. The average fat per cow was 28.02, and the average cost of feed per cow was $5.29. Forty-nine cows produced over 40 pounds of butterfat for the 31 days. Henry McCall of Prineville had the honor purebred for the month, eight Holsteins and Jerseys averaging 396 pounds of milk and 39.1 pounds of butterfat. S. M. Wood's purebred Jerseys averaged 511.1 pounds of milk and 25.8 pounds of fat.

Henry McCall also had the honor purebred cow for the month. Pearl, a purebred Holstein, produced 1745 pounds of milk and 62.8 pounds of fat.

The three highest grade herds of more than 10 cows were:

H. A. Helmholtz's 17 grade Holsteins averaged 1021.6 pounds of milk and 43.7 pounds of butterfat.

John Kemmling's 16 Jerseys averaged 755.4 pounds of milk and 37.5 pounds of fat.

Mrs. F. C. Collin's 17 Jerseys averaged 645 pounds of milk and 32.6 pounds of fat.

The honor grade cow for the month was owned by Olaf Anderson of Deschutes. Sofia, a 7-year-old grade Jersey, produced 1271 pounds of milk and 61 pounds of fat. The second highest grade cow was owned by H. A. Helmholtz of Redmond. A 7-year-old Guernsey produced 1240 pounds of milk and 60.8 pounds of fat.

The three highest grade herds of under 10 cows were S. L. Reynolds of Prineville, 6 Jerseys averaging 907 pounds of milk and 44.5 pounds of fat. Olaf Anderson of Deschutes was second, his four Jerseys averaging 670.5 pounds of milk and 43.8 pounds of fat. Bert Torkelson was third, his four Jerseys averaging 767.5 pounds of milk and 40 pounds of fat.

## In Nine Months, 10,139 Pounds.

Priscilla, a grade Holstein owned by P. C. Burt of Bend, Ore., has produced in the nine months she has been under test, 10,139 pounds of milk and 397.7 pounds of butterfat, showing her owner a profit of $80.58 above cost of feed on her butterfat alone. Giving the skim milk a value of $1 per 100 will bring her total profit in the nine months up to $166.76.

Before Mr. Burt entered this cow on test he had kept a daily record of her milk and she produced in the first three months she was fresh 4838 pounds of milk, giving her for the year 14,977 pounds of milk.

**Sponge Growth in Mediterranean.**

The best sponges come from the Lavant, in the eastern Mediterranean, and are obtained by diving. The Levantin sponge divers often cut pieces from large sponges, replant the pieces, and tie them to stakes to keep them from being swept away by the current. They soon grow at an enormous rate.

## Pioneer Cow Testing Report.

In the first half of this fiscal year 444 cows, owned by members of the Pioneer Cow Testing association of Idaho, have produced 1,887,573 pounds of milk containing 74,027.7 pounds butter fat. This is an average of 166.7 pounds fat per cow. Figured at the present market price for butter fat plus the feeding value of the skim milk this amounts to the enormous sum of $37,013.90.

Mr. Irwin's Brownie is now in the lead for first place for butter fat production this year, with 350.7 pounds of fat to her credit. Owners of herds averaging 50 pounds of butter fat or more per cow per months follows:

Irwin brothers, Twin Falls, 13 cows; S. H. Kayler, Twin Falls, nine cows; George Childs, Buhl, seven cows; Karl Reding, Buhl, six cows; Gustav Kunze, Buhl, three cows.

**Facts About the Bloodhound.**

Bloodhounds were first known as sleuthhounds, owing to their ability to track the deer, wild boar or the wolf. When the wounded game broke away and was lost, these good-nosed dogs were used in trailing the quarry by the blood trail, and hence they were finally called bloodhounds.

# Cost of Market Milk Production

Here are some diagrams which will be of special interest to our farm dairy producers. They are from a bulletin of the Michigan state experiment station, on the cost of market milk production. It will continue in the future as it has been proved out repeatedly in the past, that the profitable cow is at the basis of profitable dairying, and the profitable cow comes from good blood, good feeding and good care.

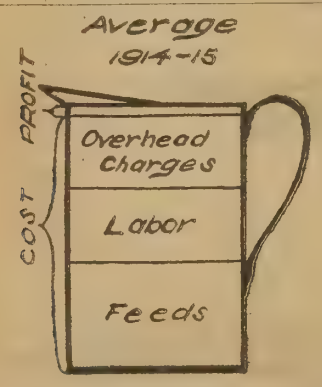



Diagram showing the relative proportions of the three classes of costs & the profit in the average gallon of milk which represents the entire output of all the farms for the two years.

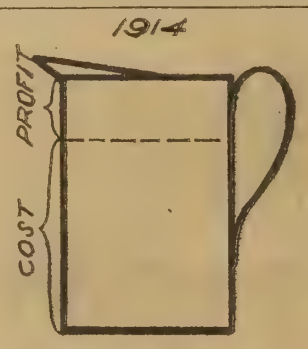



Diagram showing relative proportions of cost & profit for one gallon of milk in most profitable dairy

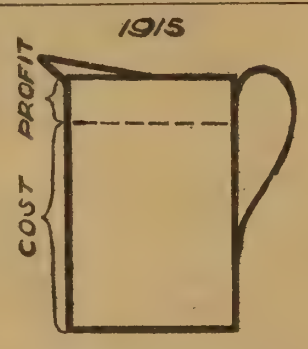



Diagram showing relative proportions of cost & profit for one gallon of milk in most profitable dairy

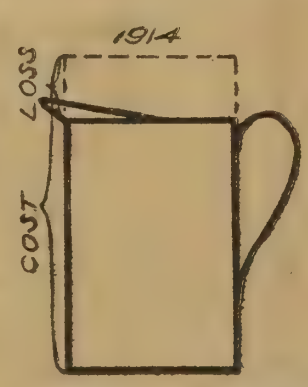



Diagram showing relative proportions of cost and loss for one gallon of milk in most unprofitable dairy

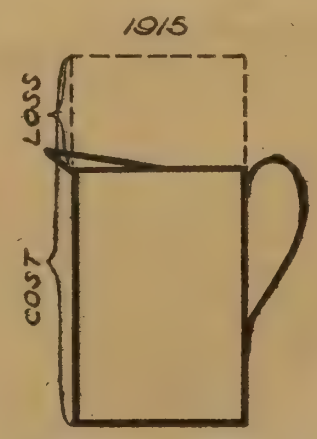



Diagram showing relative proportions of cost and loss for one gallon of milk in most unprofitable dairy




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| Crude Fat | 4.50% |
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| Crude Fiber | 18.15% |
| Moisture | 9.47% |

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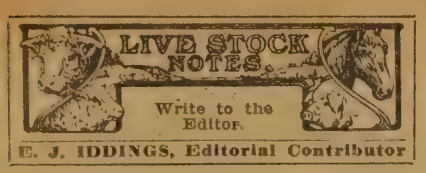
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$38 Buys the New Butterfly Junior No. 2¼. Light running, easy cleaning, close skimming, durable. Guaranteed a lifetime against defects in material and workmanship. Made also in four larger sizes up to No. 8 shown here.

30 DAYS' FREE TRIAL Earns its own cost and more by what it saves in cream. Postal brings Free catalog-folder and "direct-from-factory" offer. Buy from the manufacturer and save money.

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ALBAUGH-DOVER CO., 2163 Marshall Blvd., CHICAGO




E. J. IDDINGS, Editorial Contributor

# Save Dollars in Bestowing Mercy

By J. L. ASHLOCK.

A lamb received by the First National bank of Pullman, along with others, for distribution to boys and girls of the adjacent countryside, was panting and weak—to all appearances about ready to die. Those who saw it believed it had eaten a poison weed and that the $7.50 invested in the lamb would go to the red side of the ledger.

Dr. Wegner, one of the veterinarians teaching at the state college, took a look at the lamb. Its temperature was above 109. But it didn't look like a a case of poisoning. After examining the suffering creature Wegner asked for a tub of cold water and into the tub he soused the lamb and held it there.

Its temperature went down to 102. In the morning it was frisky and tricky and now is owned and worshiped by a little boy. Some day it will be a big sheep and later will contribute some mutton to the relief of a rising meat market.

This lamb was saved, but in the history of the sheep industry of the northwest thousands have not been saved when a little timely aid could have saved the mutton. When one passes from sheep to other farm animals—horses, cattle, swine and poultry—and makes an understanding guess at the appalling losses of the past and the vast total of unspoken suffering among the dumb creatures at our feet and on the farm and range he is staggered.

It is a fact that dumb animals can suffer, be sick and die, much the same as humans, and likewise can they be saved from suffering, sickness and death. This is a fairly recent idea. The recent idea has given rise to a recent profession—that of the veterinarian.

It is the business of today's veterinarian to relieve animal suffering. In one sense his mission is that of the Red Cross applied to the dumb who can not speak for themselves but serve, suffer and die silently.

Any one raised on a farm can recall seeing work horses turn the head to one side while drinking cold water or eating. A sensitive tooth was the cause. Perhaps the horse worked all day with the jumping toothache. After awhile, one may recall, the horse refused to eat and presently died.

It was the horse's teeth. One or several of them were in such condition that eating or drinking was agony—and preferred slow starvation to this agony. Thousands of farm horses have died in that very way.

Some horses eat anyway, however. With teeth that tear their mouths to pieces they lunge into their oats or hay and chew just the same. Others are so sensitive that a single tooth with a sharp edge cutting into the fleshy part of the mouth will cause them to quit eating and starve slowly to death. Oftentimes these "tooth troubles" are simply a question of a few minutes' work by a competent veterinarian.

# Work the Sires Constantly

## *To Get Better, Stronger, More Virile Type of Animal*

By S. B. NELSON

Efficiency is the watchword of today. Work or fight. In other words, be able to do the best that is demanded. This is absolutely necessary now.

For that reason I have been urging that animals kept for breeding purposes be worked steadily, especially outside of the breeding season, when they should have light work.

If it is desired to get from a stallion his best and strongest colts, he should not be confined in a corral. The same applies to the bull, which also should be required to do some physical work.

I have often said that I believe the Hazlewood Holstein breed of cattle have such great vitality because in the early days especially, the bulls did physical work. In the harness or between the shafts of the manure cart they got abundant exercise.

Mr. Caspar L. Redfield of Chicago, Ill., in a recent article in The Northwestern Medicine, under date of March, 1918, states, from the results of his investigations into the virility of animals that the first 180 trotters to reach a speed limit of 2:10 were produced at the rate of seven generations to the century—or, at an age when the sires were 14.62 years of age. Out of that group of 2860 sires, of which these are examples, were horses that were used principally for road work, and only occasionally for breeding purposes. He says further that "of these sires the horses which were raced first and bred afterwards got their best progeny immediately after retiring from the track. Those gotten earlier or later were inferior, the amount of inferiority being determined by the length of time from the date of retirement from the track."

These are facts which any one can verify for himself by going into pedigrees and horse history.

Therefore, if we want animals that are strong and able to withstand the ravages of disease, animals that are virile and able to procreate strong offspring, work the sires constantly, and occasionally hard. Work the sires the same as the dams are often worked. If this is done we will get a better, stronger and more virile type of animal, less subject to many forms of disease.

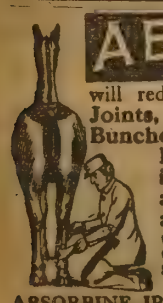
### Another Tractor Meet in 1919.

The Pacific northwest is to have its second important tractor and power farming demonstration and exhibition in May, 1919. Such was the sentiment expressed by a unanimous vote of the Pacific Tractor and Power Farming association which held a meeting in Spokane recently. No definite place has been selected for next year's demonstration, although the consensus of opinion among those present at the meeting was that it should be at some point near Spokane, where suitable land is available.

The Washington State college, it is thought, will take a leading part in making the 1919 demonstration an even more important event than that held at Pullman, Wash., this year, when the college put on the first event of the kind in the northwest.

### Egyptians Raise Pigeons.

Certain Egyptians carry on to a remarkable degree the business of raising pigeons. On one estate are 14 pigeon towers, each composed of about 1200 clay jars, set one upon another. Each jar forms a comfortable house for the family of pigeons occupying it.

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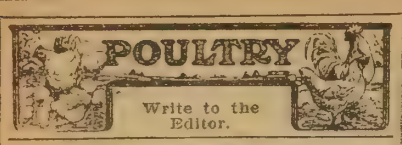
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JAMES DRYDEN,
Editorial Contributor.

# Laying Contest

## May Report of All Northwest

The May report of the all-northwest egg laying contest at Pullman, Wash., has been received from the director, Helen Dow Whitaker. This report covers the first seven months of the contest, and the records are very satisfactory for the full period as well as for the month. The average production for the month was 9.416 eggs per hen. The April production was 14.7 eggs.

The Barred Rock pen from the Oregon Agricultural college was again first for the month, having been first in April. This pen produced in May 132 eggs, an average of 26 2-5 egg a hen, a yield of 88 per cent of a possible egg per day per hen. The second was a pen of White Leghorns owned by C. C. Lamb of Kirkland, Wash., which made a record of 131 eggs.

For the full period of seven months there has been no change in the standing of the first pen. The first three pens are running a close race. The O. A. C. Rocks gained 33 eggs on the first pen during the month and is now only seven eggs behind the B. C. pen. The prospect now is for some phenomenal pen averages for the year. Hens that lay 150 eggs in seven months, as the first two pens have, have the capacity to lay considerably over 200 eggs in a year.

The high record hens for the month were the following: Ill-A-Hee Co., Grants Pass, 29 eggs; Oregon Agricultural college, J. R. McRae, F. C. Park, C. O. Engel, C. Daniels, C. F. Williams, each 28 eggs.

Other data in the report include the feed cost per dozen eggs, 19.2 cents; return above feed cost for average fowl, 22.31 cents; return above feed cost for best fowl, 38.5 cents. The Leghorn on the average made the best showing financially for the month, averaging return above feed cost for average fowl 27 cents. The best pen returned for the month $3.63, and the best hen 79 cents, both Barred Rocks. The best pen for the seven months has made $28.59.

Between 22.31 cents return above feed cost for the average fowl in the contest and 79 cents for the best fowl, there is a wide range which indicates clearly the necessity for careful selection of breeding stock. —J. D.

## CORRECT ERRORS

### By Experimenting With Poultry.

By HORACE ADDIS.

Setting a hen in an incubator and, by means of a bulb among the eggs, keeping an exact record of the temperature of the eggs from the time she starts to set until the eggs hatch is one of the experiments being carried on at the O. A. C. poultry plant.

This and many other very instructive as well as interesting matters connected with the working of the plant were shown the county agriculturists touring Benton county with State Leader Maris. The indicator showed a slightly higher temperature in summer, but it also showed the hen will stay off the nest longer in summer than winter, though a hen with plenty of feed and water close by will attend to business more closely than one that comes out in a yard with other chickens and has to hustle for what she gets. The experiments are expected to make it possible to correct some errors commonly made in the temperature of incubators.

Professor Dryden distributed a chart showing the average number of eggs laid by a certain number of hens for 12 months beginning with December, 1915. The feed cost for that year was $1.80 per hen, while for the following year it was $2.97 per hen, or a profit of 42 cents per hen, 1915-16, and a loss of 9 cents per hen, 1916-17, at the prevailing prices and allowing 85 eggs laid per hen. In other words, it took only 77 eggs to balance feed cost the first named period, while it took 97 eggs the second period.

The hen houses, the yards and runways, the growing chicks, the famous "Oregons" and other breeds, were visited. The college has several living hens that have laid over 1000 eggs each and one white Leghorn hen laid 1187 before her death.

All the members of the party expressed themselves as having gained much useful information that might be passed on to farmers and others raising poultry.

## CHICKS IN SUMMER.

### Grow Slowly in Warm Weather.

Now is the hardest time of the year for the growing chicks. It is common experience that the early chicks grow well, while the late chicks grow very slowly and often lack thrift during the warm weather.

The trouble is not altogether one of heat or temperature, but other conditions are not as favorable usually in the summer as in the early spring. A little earnest study of the conditions will well pay the poultryman. One of the conditions that is radically different in the early spring and summer, especially in western Oregon and Washington, is a difference in soil and vegetation. In the early spring the whole country is covered with tender green vegetation. The tender grasses and clovers are everywhere and the chicks have a choice of many kinds, and a large proportion of their diet is made up of this vegetation. Now, in midsummer, especially in seasons like the present, the ground is dry and the vegetation is dried up, and the chicks are suddenly deprived of their supply of natural forage. This is one reason, probably the main reason, why the summer chicks often lack in thrift.

But the green food can be grown artificially. Kale and rape planted early in the season will take the place of the natural forage, and if one wants to keep his chickens growing in the summer in this country there must be a supply of green stuff before the natural grasses have withered.

Another condition that is unfavorable for the summer care of chicks is hard soil. The mechanical condition of the soil has a bearing on the growth of the chicks. Many of our soils bake hard in the summer, so hard that the natural propensity of the chicken to scratch in the earth is defeated. If they are confined to such soil during the summer they will pine because they can not get their toes into mother earth. It is impossible to raise good chicks on wooden floors and it is just as bad on baked yards. They will do better in a swamp, where they can wet their feet and scratch in loose earth. The chicken scratches for something to eat and it finds a great deal of food in the ground under natural conditions, and in scratching for the food it gets exercise. There are two reasons, therefore, in favor of the moist soil in summer: First, it furnishes natural food for the chick, and, second, the chicken gets exercise in scratching for the food.

If the poultryman can locate his poultry where they can have loose soil, preferably somewhat moist, in summer he will be able to raise more and better chicks. The hard, bare baked yard is an abomination and spells ruin in the raising of chickens. J. D.

## Mrs. Whitaker Resigns.

The resignation of Professor Helen Dow Whitaker as head of the poultry department of the Washington State college has been announced. This action will be regretted by a wide circle of poultry keepers of the northwest. With rare energy and enthusiam, Mrs. Whitaker, since she took charge of the poultry department of the state college a few years ago, has sought to create a deeper interest in a better and more productive poultry industry in her state. Her helpful hand and good counsel were indicated in many ways, and it is hoped that her counsel will not be lost to the poultry keepers of the state, though she has severed her connection with the college. J. D.

## FRANK N. MEYER.

### Death of Noted Plant Explorer.

Richard Hamilton Byrd.

Word has come to Washington that Frank N. Meyer, one of the leading explorers of the department of agriculture, and the man who gave to the western world many new plants of the orient, is dead in China. He disappeared June 2 from a steamer between Hankow and Nanking, and a week later his body was found in the Yangste river 30 miles from Wu Hu, with which he was connected.

Mr. Meyer had traveled as an agricultural explorer through China, Siberia and Turkestan for nearly 10 years. There are now growing in this country hundreds of species and varieties of plants he discovered and successfully introduced. He also won distinction as a botanist through the discovery of the existence in China of a true species of hickory.

Meyer had the rare experience of living to see large numbers of fruit trees of some of his introductions in bearing, and of standing under the shade of trees grown from seeds and cuttings which he himself had gathered in the wilds of China and Turkestan.




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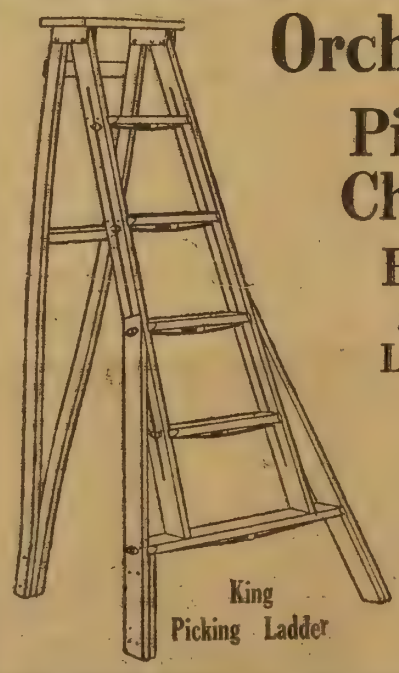
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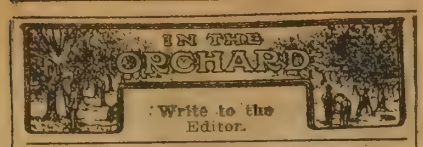
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GRANVILLE LOWTHER,
Editorial Contributor.

# Useful Birds

## Help the Farmer and Orchardist

Perhaps there should be no distinction in this connection between the farmer and the orchardist, because orcharding is a branch of farming, but generally we make distinctions.

Several lists have been published, giving the names of birds useful as insect destroyers. When it is remembered that in the United States every year, insects cause a loss to the farmers of $700,000,000 the subject of what will destroy the insects is worth whole. The following is a list of common birds with their relative importance as insect destroyers. The figures denote the percentage of foods used that are classed as insects, or small animals such as mice, young rats, gophers and the like that are more or less injurious to the farmer. It should he noted that the larger birds feed largely on small animals rather than upon insects, and yet these small animals are many of them injurious. Among the most injurious small animals are gophers and ground squirrels.

Blue bird, 68 per cent of its food insects. Robin, 42; chickadee, 70, white breasted nut thrasher, 50; brown creeper, 100; wren, estimated by various authorities at 80 to 98; brown thrasher, 65; cat bird, 50; mocking bird, 25 (lives mostly on fruit); myrtle warbler, 78 (lives mostly on aphids and scale insects); loggerhead shrike, 90; barn swallow, 100 (mostly flies); purple martin, 95; rose-breasted grosbeak (mostly on insects, chief of which is the potato beetle); song sparrow, 25 (most of the rest is composed of the seeds of noxious weeds); chipping sparrow, 42; white crowned sparrow 10 (most of the remainder, weed seeds); English sparrow, mostly on weed seeds, fruits and insects. (Upon the whole the English sparrow would not be bad, were it not for its habit of attacking in numbers, and driving out more useful birds. It is especially fond of the alfalfa weevil); crow blackbirds go in flocks and feed on insects, fruits, vegetables and the nestlings of small birds. Bullock's oriole, 80 (mostly scale insects and caterpillars); meadow lark, 76; red winged black bird, 27; bobolink, mostly seeds (this bird is the especial enemy of the rice growers of the south).

Common crow pulls up sprouting corn, eats eggs and insects; California jay, eats eggs, young birds, chicks, fruits and seeds; blue jay, similar in habits to the California jay; horned lark, 20; Arkansas king bird, 87; king bird, 85; night hawk, 95; flicker, 60 (mostly ants); yellow bellied sapsucker, 50 (the other 50 being mostly the cambium of the tree, which it sometimes kills); downy woodpecker, 76 (mostly beetles and insects that burrow in the wood); yellow bellied cuckoo, 90 (mostly caterpillars); screech owl, 95 (including mice, gophers, birds, reptiles, fish, craw-fish, etc); barn owl, mice, young rats, gophers, frogs, etc.; sparrow hawk, includes the small mammals; red tailed hawk, small mammals, insects, birds, frogs, snakes, young rabbits, etc.; coopers hawk, birds, chickens, etc. The mourning dove is strictly vegetarian, feeding on seeds, grasses and other vegetable matter; ruffled grouse, fruits, nuts, vegetables and seeds. Bobwhite, mostly on grain, seeds and wild fruits; killdeer, 100; upland plover, 97; wren, 98; phebe, 90; chimney swift, 100.

Some authors place the meadow lark at 100, but this is doubtful. The reason why it is so difficult to tell is that birds, like human beings, have their preferences, and if they can not get what they like most, will eat something else.

The black-headed grosbeak eats mostly fruits.

Among the many hundreds of species and thousands of varieties, it is impractical to give a full list of useful or injurious birds to farm and orchard. The list already given will show that most birds are useful. Even where they seem not to be so. They often are of greater benefit than injury.

As I write this, I am looking out into some of our cherry trees, and seeing the birds devour the fruit. But I would not molest them because I know that these same birds devour aphids, scale, codling moth and other orchard pests.

G. L.

### Those Dear Girls.

Mabel—I let Jack kiss me on condition that he wouldn't mention it.

Marie—I suppose you wanted to break the news yourself.—Boston Transcript.

## MUST POISON PEST.

### Specialist Gives Three Remedies.

How to destroy the currant worm, the leaf hopper and the tent caterpillar is told by Arthur Frank of the Western Washington experiment station at Puyallup, Wash., in an article on combating garden pests. The three formulas given are as follows:

**Currant worms**—For worms eating the foliage of currant and gooseberry plants, spray the leaves with lead arsenate, one pound to 50 gallons of water, being careful to cover the entire leaf surface. If they bother before the fruit is picked use one pound of helebore to 25 gallons of water.

**Leaf hoppers**—These are small insects that feed on the under side of leaves and give the foliage of roses, blackberries and other plants a whitish appearance. Spray the insects while they are in a numphal state (that is, before they develop wings), using black leaf 40 at the rate of one-third of a pint to 50 gallons of water. After they develop wings the hoppers fly away when disturbed and it is difficult to touch them with a spray.

**Tent caterpillars**—Burn off the "tents" when the caterpillars are inside or spray the foliage of trees with lead arsenate (one pound to 50 gallons of water). Watch for them early in the season and get them at the start. They lay their eggs in black masses encircling the twigs of a tree. Find them and prune them off before they hatch in the spring.

## New Zealand Apple Show.

New Zealand's third national apple show was held at Auckland May 1 and continued for four days. The show is declared to have been a marked success. There were 45 entries for one variety, the Sturmer desert apple, while there were others that ranged from 25 up. Conferences were held during the day and lectures given at night by expert growers and government officials. For the season of 1916-17, according to consular reports, there were 856,979 bearing apple trees in New Zealland, the production of 618,625 bushels being marketed at an average price of $1.23 per bushel.

At several of the conferences and lectures much was said about the large surplus of apples in New Zealand at this time, which was reported to include 250,000 cases in cold storage, and many urged that some action be taken to prevent the importation of American apples that might interfere with the consumption of the New Zealand supply while others considered that the New Zealand apple would not keep until late in the season and retain its flavor because of the moist, even climate here, and concluded that there would be a fair opening here for American apples from October 1 until the middle or last of December.

## Trend of Fur Prices.

At the spring sale of furs in London, taking place in May, as compared with the spring sale in 1917, black bear rose 30 per cent and brown and white, 50 per cent; mink advanced 25 per cent, while beaver advanced 100 per cent. Red fox advanced 70 per cent; squirrel, 60 per cent; mole, 20 per cent; skunk, 50 per cent raccoon, 25 per cent; American opossum, 35 per cent; spring musquash, 60 per cent, and winter musquash, 80 per cent. The prices do not reach those obtained at the winter sale. In the number of skins sold musquash included nearly 300,000, skunk and American opossum each over 200,000, and moles and Australian opossum each over 100,000.

### Typewriters for British.

Some 30,000 or 35,000 typewriting machines have been supplied to the British government departments at home and abroad.

# Will Walnuts Pay?

We have had wrong ideas of the value of the walnut industry in California. The impression has prevailed that it was one of the best paying crops of the state. To my mind the figures do not prove it, and this is important in deciding whether or not the walnut industry will pay in this state.

There are in the state of California 65,000 acres planted to walnuts. Of this acreage 45,000 are in bearing. The value of the crop is $65,000,000 per annum. This is equal to $144.44 per acre.

Now suppose the land is valued at $2000 per acre, as is true with many of the walnut orchards of California, and suppose the interest is counted at 8 per cent, the interest on investment for land is $160 per acre, or $15.56 more than the value of the fruit. If the interest is 7 per cent, it is $4.44 less than the fruit, but this is less than the cost of water for irrigation.

If the land is estimated at $1000 per acre, and the interest is 7 per cent, there is $74.44 per acre, for water, taxes, equipment labor and profits.

I see no reason why the walnut industry in this country should pay better than in California. If it does not pay better, than I would not consider it equal to the average farm crop. Of course every one may want a few trees to furnish nuts for the family, and in some cases they may be used as shade trees or wind brakes and the nuts be gathered and sold at a profit.

As an orchard proposition it looks to me like we can do better with something else.

G. L.

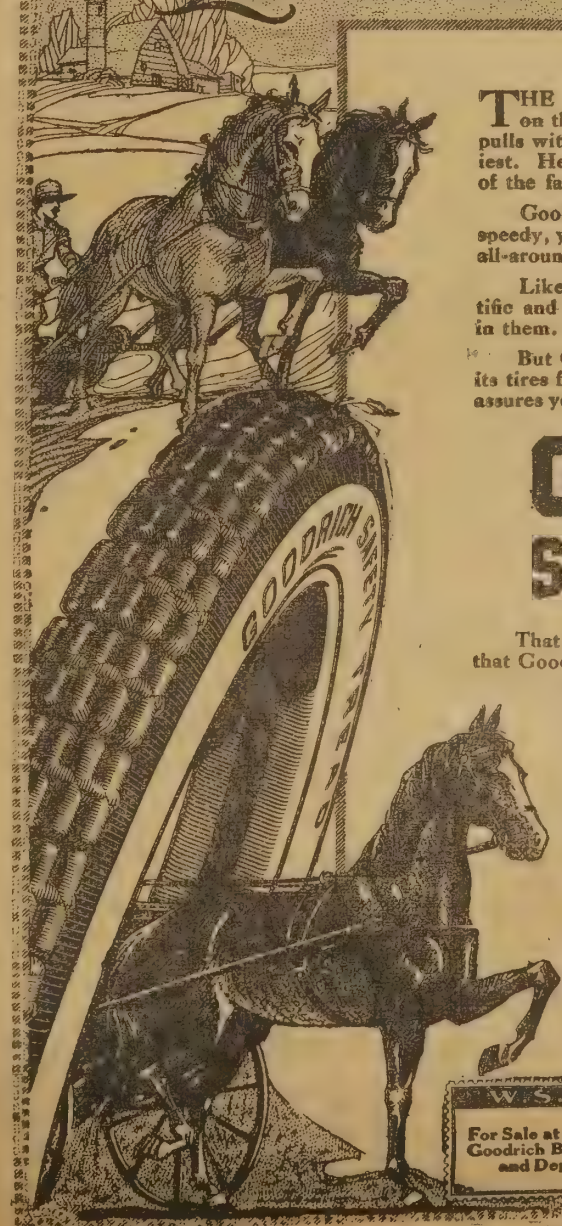
### Sea Erosion Reduces Helgoland.

Helgoland, the present German naval base in the North sea, was five times its present size two centuries ago. The erosion of the sea claimed the greater part of its land, but htis has now been stopped by the use of concrete.


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Goodrich Tires are the Hambletonians of tires. Fine lookers, speedy, yet husky workers for heavy loads and rough going, they fit all-around service of the farm as no other tires.

Like the Hambletonian Horse, they have pedigree. The scientific and workmanship skill of the oldest and largest rubber factory is in them. Like the name Hambletonian, Goodrich stands for prestige.

But Goodrich does not ask you to buy on blind faith. It proves its tires for you as an assayer proves gold, or a chemist food, before it assures you the tested service of—

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That word, *tested*, is the last word in tires for the farmer. It means that Goodrich Test Car Fleets, six of them, throughout the year 1917, battled Goodrich Tires from state to state, mauling them over sand, gravel and rock roads through mud, snow and frozen slush; and the tires proved their durability in mileage that ran to 4,178,744 tire miles.

Think of it, more than 4,000,000 miles of mileage vouch for the sure service of Goodrich Tires. The roads of every region of our country—perhaps the roads that run by your own farm—vouch for their strength.

These tires coin themselves into real money for you, the same as your ploughs and your reapers.

Whatever tires you need; for an automobile large or small, for your truck, bicycle, or motor cycle, the Goodrich brand is your guide to sure service. You know it of old from the service of the Goodrich Hipress Boot.

The husky, generous size of Goodrich Pneumatic Tires tell you their strength at a glance. Actual working tests show Goodrich Truck Tires outwear steel.

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# Veterinary

Dr. S. B. Nelson

**Sheep Was Bloated**—We have a sheep that was bloated late last fall and we stuck him and he got along all right, but it has never healed up. The flies bother it. We can kill the eggs, but would like to know how to heal the cut up. Can you tell me what to do for it? Mrs. J. C. G.
Sterling, Idaho.

Clean up the wound, clipping the wool very close to the skin. Then scrape the edges of the wound. Paint around it with tincture of iodine. Then sew up the wound in the stomach, turning the edges inward. After this, take the necessary number of stitches in the skin on the outside. Paint again with tincture of iodine very thinly. Dust with boracic acid and cover with a litle cotton, dipped in collodium. Leave for a few days. Choke off, and cleanse the field, taking out the stitches. The inside stitches in the stomach should be taken with catgut.

**Ox Warble Stock Fly Attacks Cows.**—Will you kindly advise me as to what causes my cows, when in the pasture, to lift their tails straight up and run as if they were stung? What is the cause and what can I do to stop it or help them. J. W.
Helena, Mont.

The condition that you mention affecting your cattle is due to their fright from the attack of the ox warble stock fly. I would suggest to you that you paint the cows around the head and throat and neck and front legs, especially, with a preparation of fish oil and a litle tar mixed in it. Others add to this a little whale oil soap, but any oily preparation, especially fish oil with a little tar, aids in keeping the flies away from the cows. These are the flies which, after they have laid their eggs and their eggs pass through the animal, in the spring-time you find the lumps in the skin on the backs of the cows. Upon opening these lumps they contain pus and a larva which burrows in the ground, pupates and later comes out as the fly. You can help in exterminating these flies by destroying the larvae in the backs of the cows during the early spring months.

**Potatoes for Milch Cows**—I would like some information regarding the feeding of small potatoes to milch cows. Some tell me they will dry cows up and others say they are a milk producer. At present I am feeding five pounds of shorts, five pounds of bran mixed with about that amount of beet pulp twice a day. Would five pounds of potatoes once a day be a good thing? I have a good many small potatoes and I would like to feed to the best advantage. Would it be better to stop feeding beet pulp and feed more potatoes? —A Reader, Bay View, Wash.

Potatoes when fed as roots as you are doing is a good feed for milch cows. If you are feeding good hay and grass, as it may be, as far as the grain is concerned you can figure that pretty close to three to three and a half pounds of grain per gallon of milk which the cow gives per day is the proper amount of grain for her. That is what she can use well, and with potatoes, whatever you can feed and feed well in reasonable quantities, which five to 10 pounds are, simply aid that much in bulk. Be sure to cut up the potatoes so that she will not choke on them, even if they are small potatoes.

**Breeding to Sire.**—Can a young heifer, 18 months old, be bred to the male which was her father? If so, what results, and if not, give reasons. I am feeding this heifer one and a half pounds of bran and one pound of shorts with an alternating handful of whole oats and rolled barley. She has pasture and also plenty of hay, alfalfa and clover. She is well matured now at 11 months. Mrs. F. M. R., Seattle, Wash.

A daughter can be bred to her sire, if that is the thing that the owner wishes to do. This is known as inbreeding and is used to stick certain strong characteristics that the heifer has inherited from the sire. It is not generally used, except in very high-bred animals, for the purpose above named. If animals that are not so highly bred or are not registered, or are not strong in points of build or vitality, it may be that poorer results will be gotten from in-breeding than from cross-breeding. You are feeding the heifer well and she ought to grow rapidly with the grain that you are giving her in addition to the hay and pasture.

**To Hold Horse's Mouth Open**—How can I hold a horse's mouth open while I examine his molars? A. E. W.
Rebel Creek, Nev.

To examine the left molars, take the tongue in the left hand, closing firmly but gently. Turn the hand and place it in the space between the front and the back teeth; raise up your thumb into the space above, holding the mouth open. Grasp the left cheek, pulling it out, raising the horse's head so that you can look at the teeth. To see the molars on the right side, reverse, using the right hand and pulling the tongue to the left side. There are also instruments known as speculums which may be attached to a horse's mouth which will hold the mouth open. If you want to examine the horse's teeth with your hands, you had better have a speculum. Until you become accustomed to it, you are liable to get a pinched finger, although a person with experience can examine a horse's mouth without speculum without any injury to himself.

**Red Water in Cows.**—Will you please give me a remedy for red water in cows? Also, what is the direct cause for same. Have an old red cow coming fresh July 25 which is affected with same. Just noticed it a few days ago. J. F. A., Mount Vernon, Wash.

Write to Professor J. W. Kalkus, Experiment Station Veterinarian, Pullman, Wash. He has made a deep study of red water in cattle. He can give you the latest information with regard to this disease.


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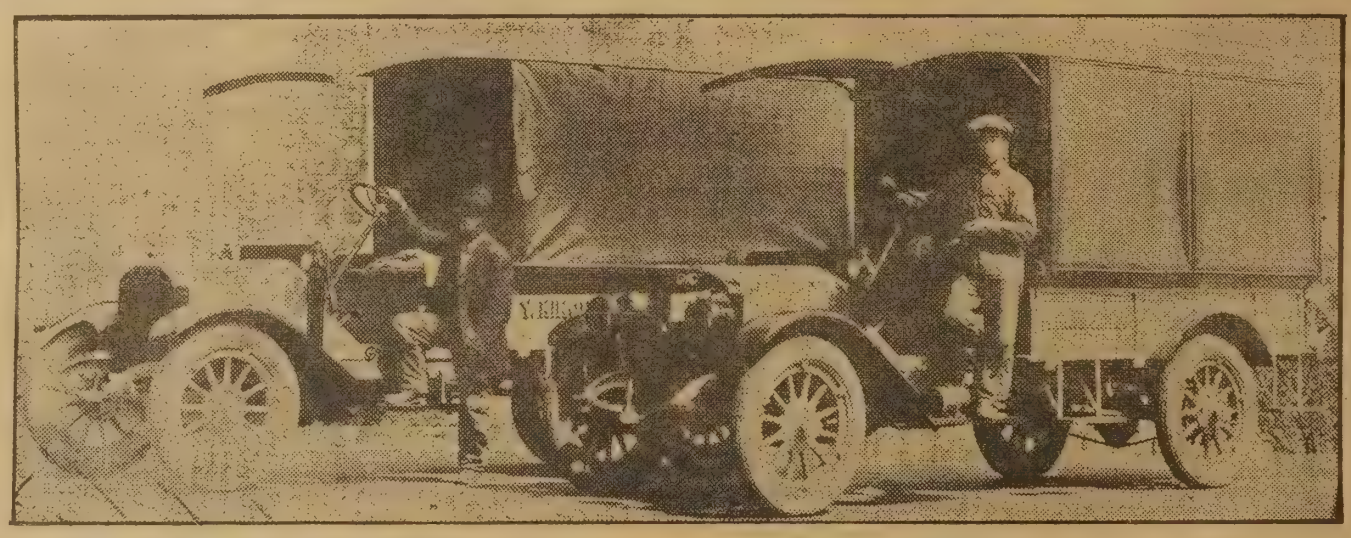
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# Economical Production of Hay

By C. L. JAMISON.

Economical production of hay is of prime importance to every man who has either an alfalfa or wild hay meadow and methods used by others often give one an idea that may save money.

The following hay was put up on three level fields containing in all about 50 acres. The mowers were followed in about two hours by a side delivery rake and the hay allowed to cure slightly in the windrow. The windrows were then bundled with an ordinary hay rake with very little hand labor. After curing, the hay was loaded by a revolving loader and hauled to the stack.

The cutting and raking costs were about as usual while the bunching was done very economically. The loader picked the hay from the cocks and made a very clean job of the work. Very few leaves were shaken off and in an adjoining field a crew of hand-loaders left more leaves and loose hay than did the mechanical loader. Two men were used to load and one to drive. It was found that when the load was taken from cocks the hay came up in bunches and two men were required to handle the load. The work was hard on horses as the haul averaged more than a quarter of a mile.

The hay was unloaded by slings made of chains. Each sling was made of two chains a little longer than the rack. Rings were placed on the ends of the chain and a cable fastened in them at the stack. A team then unloaded half the load at each pull.

The cost of handling this hay reduced to simplest terms was as follows:

| | |
|---|---|
| Cutting—Man and team—6 days at $7 per day | $ 42.00 |
| Raking—Man and team—five days at $7 per day | 35.00 |
| Hauling—Man and team—8 days at 7 per day | 56.00 |
| Derrick—Man and team—4 days at 7 per day | 28.00 |
| Labor—Man—48 days at $3 per day | 144.00 |
| Board—Man—71 days, at $1 per day | 71.00 |
| Total | $376.00 |

Eighty tons of hay were placed in the stack and this gives a total cost of $4.70 a ton.

# Need Cooperation

## To Exterminate the Gopher Pest

To the Editor: The gopher problem, I believe, is as serious as represented in an article in your paper of June 20. We came to this ranch in January, 1916. In that year we had a surprise of an amazing character and magnitude concerning gophers on the farm. They came from holes in the ground everywhere, for the place was veritably honeycombed. It was a great task to handle irrigating water. The water would flow into and follow gopher holes in the orchard, fields, garden and pastures. Efficient use of water was greatly reduced and difficulties of irrigating greatly increased.

Then came the positive damage in destruction of grains grown on the ranch, which was the most serious and appalling on the non-irrigated fields. We set some traps and caught 19 gophers at the nearest hole. The ranch had thousands of holes and traps could not catch them fast enough. We started out with a pound package of squirrel poison, but it was only a starter. We saw a formula for poisoning on a larger scale and made our gopher bait by the bushel. By the diligent use of the poison we slaughtered them by thousands, but our fields being surrounded on three sides by sage brush pastures, it seemed there was an inexhaustible base of supply.

The second year was a great improvement in the orchard garden and nearby fields, but in the grain fields we had the same experience, using poison by the bushel and in that way feel sure we saved grain by the hundred bushels.

This year we are trying to raise all the wheat and barley possible, doing our best to help win the war. We have used over 7000 poison baits already and are going to use more this year. We shall save a lot of grain and will help a little—yes, a lot—on next year's extermination campaign. Now we welcome the cooperative idea in your very valuable article. It would be comparatively easy if the neighbors on three sides would cooperate. Then the whole neighborhood and the farmers of the entire county would join in the work.

County agents and county commissioners could help greatly by publishing and circulating formulas for preparing poison and advising activity in the using of it. I think the Government could cooperate through the food administration by using cards, pledging the signers to help exterminate the gophers as a patriotic aid to conserve food by increasing the crop yield. There should be action by the county commissioners to secure the ingredients used in preparing the poison as cheaply as possible. Strychnine and saccharine have gone to a very high figure. I paid $2.25 per ounce for the strychnine sulphate. I hope your management will in some way enlist the food administration in the campaign for exterminating the greatest enemy of the grain growers of the state.

GEORGE F. RICHARDSON.
Ellensburg, Wash.

## Make War on Squirrels.

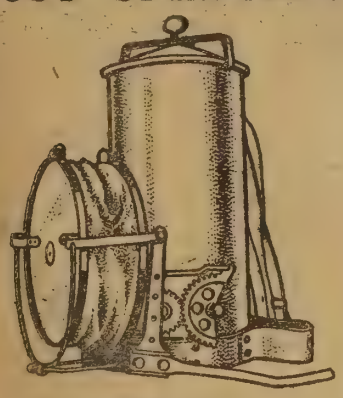
The gray digger squirrel has led the farmers of Linn county to a declaration of war and a ruthless campaign of extermination. Led by their agricultural agent and two representative farmers, Oren Stratton and Charles Holloway, grain growers have served out enough poisoned grain to account for 25,000 rodents, if reasonably taken.





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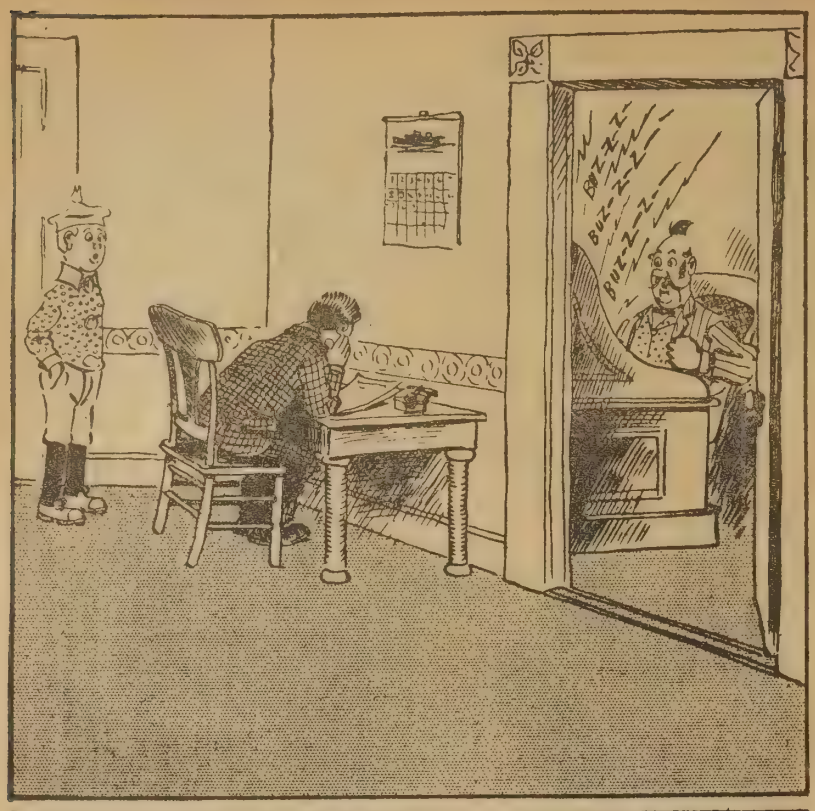
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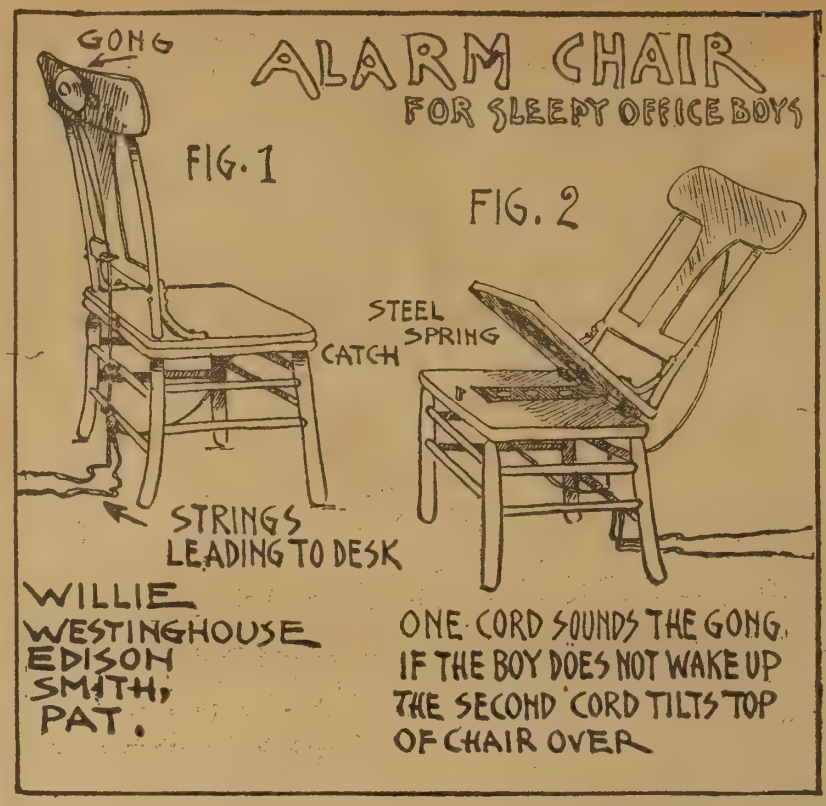
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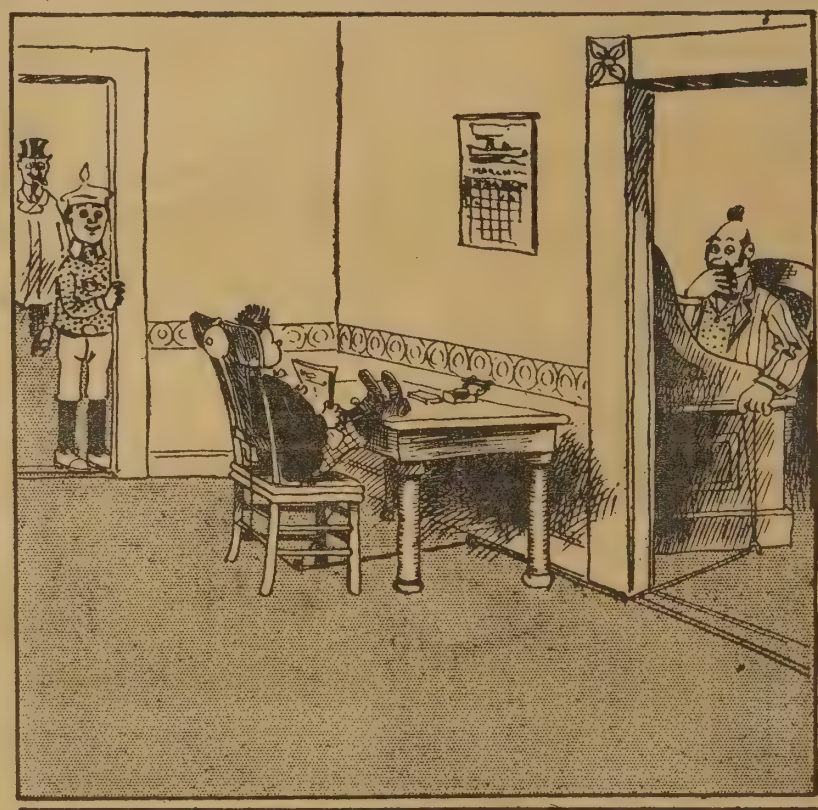
# WILLIE GIVES ONE OF PAPA'S CUSTOMERS A SURPRISE

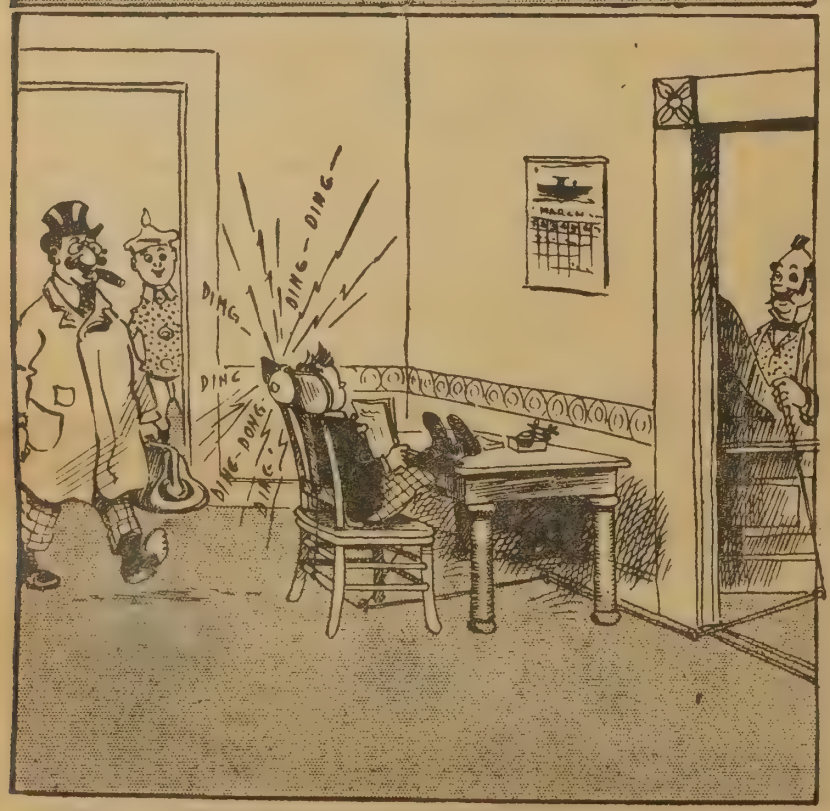


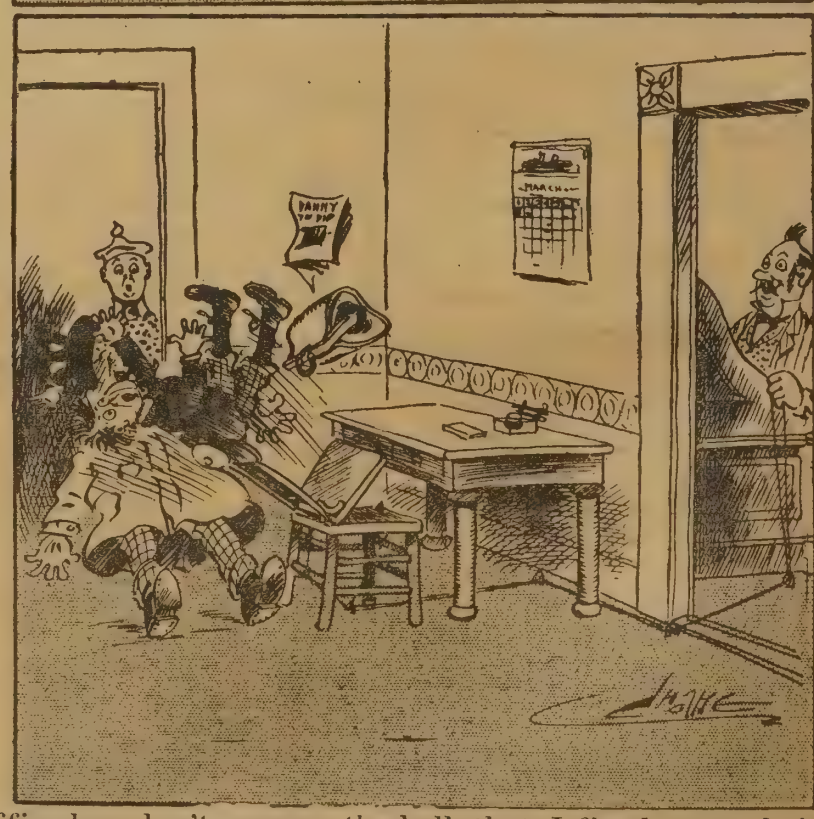












DEAR TOMMY: It annoys Papa so much when his office boy don't answer the bell that I fixed up a chair like this to shake him up. I fixed the spring for a big office boy, but Papa fired him and got a smaller one. Then, when we tried the chair, the spring was too strong and catapulted him right on top of one of our western customers who happened in!

Yours, etc.

WILLIE.

# Sidelights

**The Situation.**

Clerk—I would like more salary, sir, as I am going to get married.

Employer—Sorry, but I'll have to reduce it. I am going to get married myself.—Boston Transcript.

**News From the Front.**

Messenger—Madame, I am sorry to tell you that your brother has just had his arm shot off in battle.

Loving Sister—Now, isn't that a shame—and I had just bought the dear boy a pair of gloves for a birthday present.—Tiger.

**A Toast.**

At a stag party the following toast was given:

Woman—the morning star of infancy, the day star of manhood and the evening star of old age. Bless our stars—and may they always be kept at a telescopic distance.—Boston Transcript.

**All She Had.**

Marian Alice, aged 4 years, visited a neighbor with her right shoe on her left foot and the left shoe on the right foot. The neighbor noticed the trouble and suggested that she had her shoes on the wrong feet.

"But," answered Marian Alice, ruefully, "these are all the feet I have."—Indianapolis News.

**Feathered.**

Two drummers having a few hours in a small town decided to dine at the village hotel.

One of them turned to the pretty waitress and asked:

"How's the chicken?"

"Oh, I'm all right," she blushed. "How are you?"—Exchange.

**At a Pink Tea, Maybe.**

It happened on a crowded street car. Feminine knitters were on every hand, working on sweaters and socks in various stages of completion. One woman, however, was engaged with a piece of dainty white embroidery.

After the conductor punched her ticket he stood watching the progress of the work. Finally curiosity got the better of him, and he queried innocently:

"Madam, where does a soldier wear that?"—Indianapolis News.

**Hen Stuff.**

They were having an argument as to whether it was correct to say of a hen she is "setting" or "sitting," and not being able to arrive at a satisfactory conclusion, they decided to submit the problem to Farmer Giles.

"My friends," said he, "that don't interest me at all. What I wants to know when I hear a hen cackle is whether she is laying or lying."

**Boiling It Down.**

Tom Callahan got a job on the section working for a railroad. The superintendent told him to go along the line looking for washouts.

"And don't be as long-winded in your next reports as you have been in the past," said the superintendent; "just report the condition of the roadbed as you find it, and don't use a lot of needless words that are not to the point. Write like a business letter, not like a love letter."

Tom, as related by Everybody's, proceeded on his tour of inspection, and when he reached the river he wrote his report to the superintendent:

"Sir: Where the railroad was, the river is."

## HANDLING HORSES.

### Typical Western Ranch Method.

"The purpose of handling horses on a typical western horse ranch," says C. L. Jamison of Walla Walla, "is to teach them what they are supposed to do; there is none of the old-fashioned 'breaking,' where the horse is manhandled until its disposition is ruined."

"The Ball ranch in central Oregon is a good example of efficient horse business," continued Mr. Jamison. "The mares and colts run on the rocky hills of the range surrounding the ranch, and with a little feeding in winter the stock is kept in a thriving condition. The 2-year-old stock is halter broken early in the spring, but the real education begins when the 3 to 4 year-old is bridled and side reined to teach him to respond to the reins. After a little of this preliminary work the youngsters are matched into teams and are started carefully in a large level field that allows them plenty of room if they want to run. After a few trips in the breaking wagon they are driven into town and around the neighboring roads, and are ready to turn over to a buyer. From start to finish great care is used to be gentle and quiet around the horses, and to prevent their forming bad habits. If the team starts to run when hitched to the wagon they are held to the road and kept running, even after they want to stop and rest.

"In dealing with horses bought right off the open range, many of which have never had a rope on more than twice and are as wild as deer, the bunch is worked from a large corral into successively smaller ones until an individual horse is caught between the two sides of a small pen called a 'squeezer.' Here he is rubbed down, clipped and bridled and side reined. After more or less fighting against the inevitable the horse learns to respond to the bit, and is ready to be halter broken. Weighting, measuring for height, and matching into teams follows, and after a few days' more work the team is ready for the market.

"The various market classifications are well understood, and the horse is placed where he will bring the most money. Carload lots are handled and the buyer is enabled to fill a load of uniform kind that is clean of blemishing, and of good color, and of the right size.

"It may seem from this description that with the coming of system most of the excitement and romance have departed from ranch life, but even with improved methods there is action enough to suit almost any one."

## FLOUR IS RETURNED.

### Farmers Prove Their Patriotism.

Garfield county, Washington, is strictly a farming county and for this reason its record in returning flour as requested some time ago by the food administration is especially interesting. The county council of defense reports that since the food administration's request was made the people of that county have returned the equivalent of 800 sacks of flour to local dealers, who have thereby been able to continue their flour selling business with considerably reduced orders from the mills. The reports show that many households returned flour in less than sack lots, which indicates that the people are living up to the letter as well as the spirit of the administration's regulation. Owing to the fact that many farmers lay in a supply of flour to do them several months or even a year, some of the amounts returned by individuals when the request was made amounted to as high as 30 sacks.

## BEETS HAVE SUFFERED.

### Will Reduce Northwest Sugar

That there will be a considerable shortage in the beet sugar production in the northwest this season, is the statement made by Mark Austin, agriculturist for the Utah-Idaho Sugar company. Mr. Austin recently made a trip into several of the beet growing districts and reports finding a considerable reduction in the crop prospects owing to the cold spring which was followed by unusual drouth and heat for this time of year. Mr. Austin says that there has been nearly twice the acreage of last year planted this season, but that it is not likely the production will exceed last year's. He reports the same general condition existing in the Idaho, Utah and Washington beet growing districts.

Mr. Austin says there is a possibility that only one factory will be operated in the Yakima valley of Washington this season, though it had been expected to have three in operation. This will be true, if at all, because of inability to get the two new factories equipped as well as because of the shortage in the beet yield.


# To The People of Washington:

★

TO CLEAR up any confusion that may exist in the minds of housewives concerning food conservation, the following definite program of food saving is issued with the explanation that frequent changes are made necessary according to the needs of the allies and our own people.

1. All kinds of staple foods, especially wheat, meats, fats and sugar should be most economically used. Use substitutes for these four commodities.

2. No food should be hoarded. Hoarding is the holding, contracting or arranging for food by any person in excess of his reasonable requirements for use or consumption by himself and dependents for a reasonable time. This does not refer to stocks of home-grown vegetables and home-canned or preserved fruits.

3. All householders who can entirely eliminate the use of wheat until the next harvest, about September 1, should do so.

4. Householders who are obliged to use wheat should not use more than a total of 1 1-2 pounds of wheat flour or prepared wheat, in any form, per person per week, including the wheat flour in victory bread, and including the wheat flour or prepared wheat in crackers, pastry, macaroni, breakfast and other foods.

5. Victory bread is bread manufactured by bakers under the rules of the United States food administration. In estimating flour consumption, 1 3-4 pounds of victory bread may be considered equal to one pound of wheat flour.

6. In buying wheat flour an equal weight of other cereals as substitutes for wheat flour must be bought pound for pound. This is the 50-50 rule. In buying mixed flours, the substitutes in them may be counted so that a smaller proportion of substitutes may be bought with these flours than with white flour. In buying graham and whole wheat flours (containing not less than 95 per cent of the entire wheat) 6-10 pound of substitutes shall be purchased with every pound of such flours.

7. Wheat flour substitutes are hominy, corn, grits, cornmeal, corn flour, edible cornstarch, barley flour, rolled oats, oatmeal, rice, rice flour, buckwheat flour, potato flour, sweet potato flour, soya bean flour and feterita flour and meals and milo maize flour and meal.

8. Householders in towns and cities may not buy more than 1-4 of a barrel of flour or 2 pounds of sugar at any one time. Householders in rural districts may not buy more than 1-4 of a barrel of flour or 5 pounds of sugar at any one time. In no event shall any purchaser have more than 30 days' supply of flour on hand.

9. Householders should not use more than 3 pounds of sugar per person per month.

10. In addition to the above, however, 25 pounds of sugar may be used for home canning, and will be available to the householder for that purpose upon signing a certificate that such sugar is desired and will be used for that purpose only. Additional amounts for canning and preserving may be purchased only by special permission of county food administrator.

11. No wheat flour, or prepared wheat in any form, should be used for any purpose other than human consumption.

12. Meats of all kinds should be most economically used, eliminating all waste.

13. Fresh milk and milk in evaporated and condensed form and cheese may be liberally used.

14. Butter may be used for normal consumption.

15. To save transportation local supplies should be grown and used.

## U. S. FOOD ADMINISTRATION FOR WASHINGTON

June 26, 1918.

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# "Undoing the Almighty's Job"

By ALVARA P. WILLIAMS



Stumps Ready to burn.

Once upon a time there was a back-to-the-lander who started with a grim determination to clean 10 acres of logged-off land (deluding title). Many others have done the same, and accomplished their results, but I doubt if they did it with his tools. First he started with a jack knife and an old cross-cut saw. This was not so bad, inasmuch as it savored of the Yankee's pastime of whittling. The cross-cut saw had a habit of running on the bias, so that if you started a cut on a log the proper length for stovewood, you ended it up suitably carved for the fireplace.

But even at the alarming rate the wife used stovewood, it seemed that disposing of 10 acres full of three to six foot logs in this way, would leave much to his heirs. Fortunately for this man, his jack knife only lasted his vacation out, and then he began to put his brains as well as muscle to work. Muscle is all right, but brains work nearly as well when focused on a stump six feet in diameter.

Being intelligent and up-to-date, he then supplied himself with many government bulletins and experiment station reports on clearing land. He learned, much to his delight, several little helpful details, such as that a mattock is a convenient tool for peeling bark from roots and logs. He had already bought one and used it to peel the bark from his forehead, but he was rapidly learning to avoid obstructions with it.

He also found many excellent suggestions regarding methods of burning, and the use of donkey engines. This latter was said to be as cheap as any way. A donkey rents at $10 a day, according to the experts, and then you hire a crew of five or six men, set up your gin-pole, whatever that may be, in the middle of a 10-acre field, and fall to, with a resultant expense of $100 or maybe less per acre. But what if you haven't the thousand dollars, and only want, perhaps, a garden space and an acre of spuds a year?

Of the suggestions received in his free education, blasting, and burning the refuse, seemed to be the easiest way with limited capital. Twenty-five dollars' worth of powder at before-the-war prices put some undesirable hardpan and most of half an acre of stumps above ground. About $50 worth of lame back and sore muscles put these where they would burn. Time was too valuable to count at all, unless you were going to hold your land at city prices of so much per square foot. After a few months, the ground was cleared so that by grubbing every foot with a mattock, burning three successive layers of rubbish, raking up a fourth layer and burning; plowing, harrowing, burning some more, he could then plaster the ground with starfish and raise some spuds. These were irregular in shape because the ground was not yet in proper condition, etc., etc. More combings the second year helped some. At that rate, in order to get the acre of spuds a year on new ground, he would have had to start two years before.

Burning the stumps out as they stood was a splendid theory, as put forth in the bulletins, and he and the wife went at it. They had a spell of frantic zeal, in which they tried every method described, and a few more. They bored holes one way, and a neighbor showed them how to do it a different way, so they tried that, too. Then the wife dropped kindling in the holes, and wasted matches and coal oil. The directions must have been given for some part of the state where the wind wasn't always in the southwest. They banked stumps and left airholes according to specifications, and packed kindling around a half acre of stumps; they went out morning, noon and night to keep the fires going, and it was only when some stump got away from them and burned of its own free will, that the desired result was accomplished. All those directions must have been for partly decayed stumps on sandy soil, because these were green stumps on a shot-clay soil, and they would not burn. The mattock, then, to the rescue. The man pried and pulled, and the wife blocked and sat on the lever, till the roots were above ground and could be piled.

Then there appeared a one-man-power home-made stump puller, which was excellent but slow. It needed another man as dentist's assistant to work with the stump. Unfortunately, there was only one man in the family, and the wife couldn't run a stump puller.

A man with a team of horses cleared an easy patch of canine teeth, and this paid for itself the first year. But the spaces where the molars were, was beyond such treatment.

By this time things looked desperate. The man had acquired another 10 acres, and of the whole 20, less than four were cleared, after four years. Fortune, as it were, threw a donkey engine in his way, and as he could finance about two acres of such work, he and the owner of the donkey started in. There was only one favorable condition to this experiment, as was later proved. The work was done before the fall rains started, when the ground was dry, but by using $30 worth of powder on the two acres, the stumps were split so as to be taken out more easily. The mere process of dragging the stumps about shook off most of the dirt, and very little of the hardpan had been brought to the surface. There were several adverse conditions—the donkey was not in good repair; in order to be near the water supply it was not in sight of the work; there was no practicable method of piling the stumps, as no gin pole had been left, and none could be erected; the crew of two lost fully 50 per cent of their time in unnecessary running back and forth. Even so, the work was done at about $80 per acre, but with more than $20 per acre still to be spent in getting the ground ready for the first crop.

From all these experiences, the experimenter has drawn up, by finding out how not to do it, a set of first principles of land clearing, which by the grace of God and the federal farm loan act, he may try sometime.

Foremost of these—the ideal way to clear land, by a donkey with a crew of at least five; the donkey to be in sight of the work, a natural gin pole to have been left, in the shape of a large tree, in the center of the space to be cleared, as by this means the line can be kept up out of the way of rubbish, and the stumps pulled in from all directions with little loss of time in changing rigging. The most economical area to clear is 10 acres or more; a smaller tract would hardly pay for importing a donkey. The greatest loss, outside of possible breakage, is in wasted time on the part of a crew. The greatest advantage is not in getting the stumps out in the first place, but in disposing of them after they are out, if there are many too large to be handled easily.



Result of a shot where most of surface soil had been washed away.

Failing this method, the next best is the combined use of powder, stump puller, and burning. Just enough powder to loosen and split the stump, without actually littering the landscape with it; a stump puller with power and speed enough to pull the remnants together, piling them as well as possible for the future burning. Some very large ones may have to be blasted again in order to handle them. Occasionally one meets an old-timer too large to dispose of in any way, and has to resort to the method of a neighbor who dug under one until he could completely bury it below plow level.

Without the use of at least powder and stump puller, the process of undoing the Almighty's little job may be discouragingly slow, and painfully accomplished if at all. The result of much effort is to clutter up the would-be garden worse than it was before, with only a vision of man's numbered days here as encouragement.

## SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

## What You Ought to Eat to Turn Weakness Into Strength



Dr. Hirshberg

While it seems to be true that meat, fish and eggs are great supports to those who needs must do heavy muscular labor as well as strenuous athletics, nevertheless, persons whose diet is predominantly of vegetables and fruits do not grow fatigued as readily as those of an abundant meat diet.

It has been observed over and over again by American, French and English physicians that there is extraordinary improvement in muscle-weariness, especially in those ill with diabetes, when such persons are given vegetables and fruits to eat with no meats.

Perhaps this improvement is due to the sugar and starches present in a vegetarian diet, perhaps to the salts in them. However that may be, the fact remains that there is something in friuts and vegetables which enhances muscular activity. At all events, this has been the explanation put forth for the almost unbelievable capacity of the French and Russian pesant for muscular work without fatigue. Their food consists only of vegetables with black bread and a little cheese.

### Salts That Aid.

Rats and fowl kept upon an abundant variety and quantity of victuals with ample albumin, from which, nevertheless, all potash was chemically extracted, succumbed to paralysis, hemorrhages, scurvy, emaciation and other symptoms of the so-called "food deficiency diseases."

This proves the importance of potassium salts in vegetables. Unless it is present in plentiful amounts, nerve degenerations occur, and "neuritis," "rheumatism" and "gout" result. Fresh vegetables with potash in them will effect a quick cure. If potash in foods, drinks or medicine is fed to the sufferer, health, strength and usually recuperation follow.

The living fabric of a sound human creature, particularly his muscle and nerve tissues, demand potash. This mineral is indispensable to your well being.

The heart is scarcely anything more than an automatic, pulsating muscle. It, too, contains a modicum of potash, lime and other minerals. To promote regularity and strength of its pulsations these chemicals are needed.

Muscular fatigue is a pronounced symptom in diabetes, goitre, high blood pressure and various other maladies. If under such conditions a well mixed vegetarian diet of cereals, vegetables and fruits is adopted the helpful, necessary potash and phosphates are brought into action and the heart, and muscles are restored nearly or completely to health.

### For Weak Heart.

The instinctive longing for bread and potatoes is perhaps traceable to the presence of such minerals in them, not to the starches and sugars in them. Similarly, it gives a hint of why these articles of the table are so much missed.

When the heart is weak no greater mistake can be made than to ignore the elements of the diet. Such intangible elements as "calories" anl "nitrogen contents" are less essential than the potash, lime and phsophoric acid. An unbalanced diet which ignores these minerals may result disastrously.

All of this is emphatically true for those who have diabetes or sugar disease, or who put themselves on an anti-fat diet. Similarly those who are beyond 40 or who appear to have the gout must be closely watched as to their diet. Their heart action must be constantly supervised. Any undernourishment of the above mentioned disease may have much more serious results than the advocates of the starvation diets realize.

Elderly persons should not be allowed to fast for any length of time for any purpose, nor should a person with a weak heart go long without food.

The dependence of the heart action on the intake of nourishment is shown by the fact that the heart beat is less vigorous when a stomach fasts. In fatal diseases the heart gives out entirely, that is to say, death occurs in the early morning hours when the stomach has long been empty.

## INDIANA FARM MEDALS

### For Exceptional Yields of Corn.

Indiana farmers who produce exceptional yields of corn this year will be given war medals by the state. The average corn production of Indiana is 40 bushels. Farmers who produce 100 bushels this year will be awarded a gold medal; and those producing 75 bushels a bronze medal. The yield must be maintained on a tract of at least five acres.

This plan was proposed by G. I. Christie, director of agricultural extension work in Indiana, and now directing the farm-labor work of the United States department of agriculture under Assistant Secretary Clarence Ousley. The medals will be paid for by the state, and the awards determined by representatives of the United States department of agriculture and the State Agricultural college. Already 45 counties of Indiana have been organized for the contest. Organization will continue until August 1, and every farmer who intends to compete must notify his county agent and conform to certain requirements. No field will be examined by the judges or considered in the contest, no matter what its yield may be, unless the farmer has been properly enrolled. Through the county agents, the United States department of agriculture and the Indiana extension service will disseminate information regarding the cultural methods calculated to bring about increased corn production.

# All the World's a Stage, and All the Men and Women Merely Players

## Eight Hundred Thousand Men and Women Are Working in Pacific Northwest Red Cross Division




Photos by Curtis Studio, Seattle.

The northwest division of the American Red Cross, comprising states of Washington, Oregon and Idaho, and the territory of Alaska, has 800,000 members and is doing an annual business of more than $5,000,000. The officers, whose photos appear above, are:

1. Charles Stimson, manager.
2. Mrs. Helena E. Cline, director, bureau of information.
3. Robert Max Garrett, director of junior membership.
4. Mrs. Lucy Hilton, associate manager.
5. Harry M. Clark, director of bureau of accounting. Mr. Clark or his assistants visit the chapters and branches, check up their accounts, systematize their office work and audit their expenditures.
6. Earl Kilpatrick, director of bureau of development. This bureau organizes the chapters and branches and supervises the work done by the chapters and their subsidiaries.
7. Mrs. Margaret G. Hulbert, associate director development bureau.
8. Arthur B. Grindell, director of publicity, who is responsible for the news service for the division.
9. Miss May S. Loomis, director division of nursing. Up to the middle of May 450 nurses in the northwest have enlisted for foreign or cantonment service.
10. J. H. Ballinger, counselor.
11. F. P. Foisie, director bureau of civilian relief. During the month of April 2142 families of soldiers or sailors in the division were assisted, either by information service or through the visitors dealing with family problems.
12. A. A. Hilton, director of supplies. From 15 to 20 carloads of raw material, including gauze, yarn and goods for the making of hospital garments, bed linen, etc., are received each month and distributed to the various chapters in the northwest.
13. Leslie K. Getchell, director bureau of military relief.
14. Dr. Casper W. Sharples, director first aid.

Division headquarters are in the White Building, Seattle, being entirely separate from the Seattle chapter. There are under the direction of this office 39 chapters in Idaho, 24 in Oregon, 35 in Washington and 15 in Alaska, making 113 in all. These chapters have more than 500 branches, and the branches have more than 2100 auxiliaries.

In the first three months of this year the northwest division shipped 268,343 hospital garments, 220,884 articles billed as hospital supplies, 190,191 miscellaneous articles, including 101,790 pairs of socks and 2,644,228 surgical dressings.

# Trappers of the Ozarks

**The Adventures of Two Young Trappers in the Wilds of Upper Louisiana, Now the State of Missouri.**

By LEWIS B. MILLER

Copyright, 1914, 1915, by Lewis B. Miller.

## CHAPTER XXIV.

### Bottled Up in the Big Cave.

To the white fugitives' relief, they soon began to see, not one hiding-place, but many. Numerous smaller caves branched off from the big one.

"Hadn't we better hide, Ben?"

"Yes. But we'll push on a little farther first."

A few minutes later Jodo said: "There's a small cave leading off. Why not slip into that?"

"Let's take a look into it."

The branch-cave proved to be low—not much above their heads. They paddled into it, a rather narrow passage-way, expecting that it would lead upward till the bottom rose above water. But it did not. And after following its windings for a hundred yards or more, they were surprised to find themselves out in the big cave again.

"The very place we're looking for, Jodo. I don't like the idea of getting bottled up in a blind hole, and that can't happen here. If the reds come in at one end, out we dodge at the other! So here's where we do our hiding."

Paddling back several yards into the branch-cave, they smothered out their torch in the ashes, then sat still and waited.

A few minutes later they began to detect a faint light shining against the far wall of the big cave. Now they knew that the Pottawatomies could not be far away. Soon, also, the dipping of paddles could be heard.

"Here they come!" whispered Ben. "If they start in toward us, we must either move faster than they move, or stop them with lead. Think you can hit a torch?"

"Hard telling. I'm pretty nervous just now. But I could hit a canoe-load of Indians."

"We may have to shoot some of 'em later. They're bent on getting us. But— There they are now!"

The canoe and the Pottawatomies were emerging into view. One warrior was standing in the prow, holding a torch, five were on their knees, using paddles, and the seventh was sitting in the stern, holding another torch. All carried either guns or bows and arrows.

Every Indian seemed to be peering straight ahead. The canoe moved swiftly on before the five paddles, and had soon passed beyond where the two watchers could see it. For a few minutes the noise of paddles could be heard and a faint light seen. But soon both had passed, and only the splashing and gurgling of waves against the rock walls remained.

"Jodo, if all the Pottawatomies had been in that canoe, now would be a good time for us to make for the mouth of the cave and slip out of here."

"I feel safer in the cave than out. And we wouldn't dare try to escape."

"No. A dozen or 15 Indians out there somewhere. We're all right for the present. I'm hoping we can keep on giving the Pottawatomies the dodge. But the trouble is, when they don't find us they'll guard the entrance. We can't stay in here a great while; and when we do want to get out, we're pretty sure to find ourselves bottled up cork-tight."

"But if these Indians are Pottawatomies, they won't be likely to hang around in the hunting-grounds of the Osages very long, will they?"

"Longer than we can stay in this awful darkness. I should be crazy—as crazy as a loon—if I had to inhabit this black place very long. The blackness would soak into my brain!"

"I can stand a lot of darkness better than I can stand being in the hands of these savages. And we can light up now and then, to give our eyes a change. We could light a pine-knot now if we wanted to."

"Yes. But we don't want to—not until that canoe goes back by."

For perhaps an hour longer the two sat in the dark, listening for paddles and watching for a light. At last the paddles began to be heard, and then the light of the torches flashing against the far wall became visible. But several minutes passed, and the torches themselves were not yet in sight. Now it seemed evident that the Indians were searching the cave as they went back.

"Ben, my guess is that they've been to the other end of the cave without finding us, and now they're trying to poke into every nook and corner as they go out."

"That's right, I think. And it sounds to me like—" Ben listened a few moments. "Yes, that's just what they're doing! They're paddling into this branch-cave to learn what's here."

Both listened intently, to make sure. Then they whispered together and, with their hands on the rock wall, began to move their canoe toward the big cave. Soon they had emerged into it.

With their hands on the slimy wall, they moved up toward the other entrance to the branch-cave which the light from the Indians' torches still made dimly visible. But the light quickly vanished, and they had to grope their way.

Just as they reached the other end of the side-cave, the light from the Pottawatomies' torches began to shine out of the end the whites had come out of. It seemed to the fugitive pair that they would never get their canoe turned into the hiding-place. And even as they pushed it in they half suspected that the torch-bearer in the prow of the Indians' canoe might have caught a glimpse of them. But he was doubtless too far away; for the Pottawatomies were heard paddling on.

As soon as it was safe to do so, Ben and his companion pushed their canoe out into the main cave, where they could watch the Indians. When the lighted canoe was about to disappear, Ben said:

"Let's follow. I've a mind that they'll go on out, and we want to see whether they do or not."

With only the light from the Indians' torches to guide them, the whites kept following, as fast as they could without making a noise with their paddles. And they had no trouble keeping the lights in sight, because the Indians appeared to be examining every nook and corner in their search for the white men.

"Those red fellows must have been in here before," Ben remarked. "They know the cave pretty well. That's plain."

Long time the Pottawatomies continued to search the cave, moving gradually toward the entrance. And the whites, with the glimmering torches to guide them, followed with cautious paddles. At last the warriors found themselves where the lake ended. There they all got out and after dragging their canoe well upon dry land, they started toward the cave's mouth.

Having counted the Indians, to make sure that all seven were going out, Ben and Jodo paddled to the place and promptly took possession of the abandoned canoe.

"Now, Jodo boy, we'll see to it that they don't lay hands on this canoe again. Unless they drag our other canoe out of hiding, they'll have no show in this round world to capture us."

"I don't think they'll be apt to discover the other canoe, Ben. But what's gone with the cave's mouth?

"Night outside now. The mouth doesn't show. I'm wondering if the Pottawatomies will come back. We mustn't let them surprise us if they do."

Towing the other canoe, they paddled back to a safe distance. There they wrapped their blankets around them, fixed themselves as comfortable as they could, and fell asleep. But they did not sleep soundly, and were awake from time to time.

"Day's coming. You can see the mouth of the cave now," Jodo remarked once, when both happened to be awake.

Ben sat up and looked. "I didn't think it was so late. Jodo, that light's too red for daylight. The Pottawatomies have kindled a fire near the cave's mouth. No question now that they're guarding the cave. They've bottled us up."

"Yes. I can make out Indians there now. So that's how they expect to capture us—by squatting in the entrance and waiting for us to come out."

"My word for it, Jodo boy, they'll get mighty tired of waiting before we walk out and let 'em nab us."

Both soon fell asleep again. When they awoke, the reddish spot had turned to white, and they knew that daylight had come. After gazing at the cave's mouth till they caught glimpses of several Indians, they found some dried venison and some cold corn-bread among their things, and of those they made their breakfast.

After that they leaned back and watched the cave's entrance. And before they had watched long, several Indians came through that bright spot, two of them bearing torches.

"Ben, they think they're going to rummage through this cave for us again."

"If they do they'll have to swim. And they may find it chilly swimming."

"Hadn't we better move back?"

"Not a glimpse can they catch of us here, I think. I want to stay close enough to see what they do."

When the Pottawatomies came to where they had left the canoe, they seemed not a little excited to find it gone. They stood and jabbered at one another, as they tried to peer into the thick darkness. So long they stood there that more than once Ben raised his rifle and took aim at a warrior. But, like every sensible person, he had an aversion to shedding human blood, even when it happened to be the blood of a savage. He thought of sending a bullet over their heads to scatter them, but did not do even that.

Finally the warriors turned and went back. After all had passed out, the white men sat and watched the bright spot. They felt not a little anxious lest the Pottawatomies should discover the canoe hid under the creek bank, and come carrying that in.

Hour after hour passed. Ben and Jodo took turns at watching and sleeping during the day. Finally the bright spot changed from white to red. That meant that day had gone and night had come, and that the Indians were still guarding the cave.

All through the night the two took turns at sleeping and keeping watch. And though they wrapped themselves well in their blankets and buffalo-robes, the damp and chill of the watery cave seemed to be soaking into them. When at length the whitening of that bright spot indicated that day was dawning, both were in the humor to do something—desperate enough to do almost anything, for a change. After they had eaten their breakfast, and made certain that the Pottawatomies were not gone, Ben said:

"I've got about enough of this and I'm wondering if it would be possible to discover a back door to this cave."

"Whether we find it or not, I'm for trying. Anything's better than sitting here till we're mildewed."

"All right, Jodo boy! Here goes for an exploring trip, to see what's to be seen and to find what's to be found. Maybe it would be better to get out of sight of that bright spot before we light up."

When they had groped their way for a good distance through the blackness, they stopped and dug into their little pot. All the coals had gone out under the ashes but one, and they had hard work to light their pine-knot from that.

After fixing the torch in the place for it, they paddled on till they found a knob of rock projecting from the wall. To this they tied the canoe they were towing. Then they moved ahead, deeper and deeper into the great subterranean vault.

At length they came to the branch-cave where they had eluded the savages the night before. And still they kept on.

In time they began to hear a faint roar. It grew most distinct as they advanced, and they paused to listen.

"What can it be, Ben?"

"A water-fall is my guess. But we'll soon know for certain."

They paddled ahead. Louder and louder swelled the roar, till it seemed to fill all the cave.

"Do you s'pose it's dangerous?" Jodo had almost to shout to make himself heard.

"Not if the water is running this way. It it's running the other way it might be. We can tell before we get there."

So they kept paddling. The roar from the fall almost deafened them. At length they came to where the water seemed to be moving slightly. But the motion was away from the fall, and they knew there was no danger.

At last they were in sight of the fall itself. A thin sheet of water 15 or 20 feet wide was falling from a ledge of rock at least 20 feet high. It dropped into deep water, and that fact combined with the confinement of the noise, made this underground water-fall roar like another Niagara.

The canoemen approached to within a few yards of the fall, where they stood up, held their torch aloft, and gazed around. Ben had to put his mouth close to Jodo's ear to make himself heard:

"The cave goes on, you see, at the higher level. If we could get up there we could follow it no telling how much farther."

"Yes. But we can't get up there. If we could, though, we'd find the cave dry from here on. Don't you see? This falling water comes from between two ledges."

"So it does. Once up there, we could walk the rest of the way dry-shod. And we might easily find another outlet if we followed far enough. But it seems impossible to get up there without a ladder. So we're no better off than if we hadn't come."

"But neither are we any worse off. How deep is this water, I wonder." Jodo thrust his paddle down full length, but failed to touch bottom.

A few moments later Ben punched Jodo, then pointed to the ledge above the fall. On the very edge of the ledge stood a panther, gazing down at the men in the canoe. His mouth was open and his teeth displayed; and while they could hear no sound, they knew from his actions that he was snarling and growling down at them.

Quickly Ben dropped his paddle, caught up his rifle, and took aim.

But when he pressed the trigger the hammer fell noiselessly, without any result.

And scarcely had Ben's gun missed fire when Jodo made an attempt to shoot. But there was another failure.

"We've been in this soggy place too long. Our priming-powder is damp," Ben said, as he emptied the pan of his rifle and put in fresh powder from his horn.

Jodo did the same. While doing this, both kept glancing upward, half fearful that the beast would leap down on them. But probably the panther had no thought of plunging into so much water.

Just before the men had finished priming their rifles, the panther turned and walked back as he had come, disappearing into the darkness. For several minutes the two stood watching, but he failed to return.

"Oh, well, no matter!" exclaimed Ben. "As long as we can't get up there and go farther, it's all the same whether the varmint is alive or dead."

For a good while the two stood in their canoe, watching the water pour down, and trying to think what they ought to do next. While they were still undecided, their first pine-knot burned out and they had to light another. Now Ben said:

"I don't see what we can do but tough it out in here till the Pottawatomies get tired and go their way."

"How long will that be, do you think?"

"A week or two, maybe. They can make their headquarters here, and while a few guard the cave all the others can go hunting. So they won't find their waiting as tiresome as we find ours."

"I'd hate mightily to think we have to stay in here a week or two longer. It would be simply frightful."

"Yes. But we'd better be paddling back while we've got light. That pine-knot won't burn forever."

So, after a last look at the waterfall, they turned their canoe and started back as they had come. When, after much paddling, they arrived near the outer end of the lake, they stopped, smothered out their torch, and ate some dinner. It was now probably the middle of the afternoon.

Dinner ended, they sat and waited till the bright spot faded out. The fact that it had faded out instead of changing color meant that the Indians had started no camp-fire. But while the two were still wondering if the Pottawatomies were gone, a light began to appear. And it kept growing brighter till they knew that a big fire must be burning near the cave's mouth.

After watching it a good while, they became curious. Soon they paddled over to dry ground, and both got out. After tying their canoe to the boulder there, they began to steal toward the bright spot. The noise of the shallow stream flowing over its stony bed, guided them and drowned their footfalls as they advanced cautiously through the darkness.

But even before they had reached the cave's mouth, the roaring and crackling of flames told them—what they had suspected from the first—that their cabin was burning. Now they were hopeful that the Pottawatomies might be gone, having fired the cabin before starting. No Indian was in sight. But when, stealing up to the cave's mouth, the two came to where they could look at the fire, they saw numerous Indians around it. Some lay far back, asleep, while others seemed to be broiling meat and eating.

After watching a minute or two, the white men withdrew a short distance.

"How do you s'pose they came to fire the cabin this time of night, Ben?"

"From what I could see, I'd guess that they just kindled their camp-fire against the east wall."

"You think they didn't intend to fire it?"

"Oh, they didn't care what happened."

"Do you think they'll be likely to go away now, when morning comes?"

"They may. I certainly hope they will. I'm weary unto death of life in a dungeon."

"So am I. Not so weary, though, as I would be of life in captivity."

"I know. But if the Pottawatomies— What under the heavens is the matter now?"

Both listened for a few minutes, then moved toward the cave's mouth. Fierce war-whoops were ringing outside, as a big band of savages were rushing into battle!

(To be continued.)

# Washington Boys in War Service

From The Twice-a-Week Spokesman-Review.



**CHARLES W. KALLMAN, Almira, Wash.**—Enlisted in the navy June, 1917, and was trained at Mare Island, Cal. He is now on the U. S. S. Ryndham out of New York. His brother Arthur is in the navy, working out of Honolulu. His parents are Mr. and Mrs. F. A. Kallman of Almira, Wash.



**ELMER LEE DUTTON, Columbia River, Wash.**—Enlisted in the navy December 4, 1917, at Wenatchee, Wash., and is on the U. S. S. Missouri, Fortress Monroe, Va., doing transport service. His parents, Mr. and Mrs. Dutton, and three younger brothers and a sister live at Columbia River, Wash.



**ROBERT H. KECK, Aeneas, Wash.**—Was in training at Mt. Clemens, Mich., until February 16, when he was transferred to France. He is now at a rest camp in England, with the 157th aero squadron. Private Keck has spent the greater part of his life on his father's stock ranch.

## WORLD WAR
## Will Not Be Won by a Miracle.

**By DAVID FRANKLIN HOUSTON, Secretary of Agriculture.**

This war will not be won by a miracle or by enchantment. There can be no turning back, no faltering, no hesitation. We are determined to teach the lesson that law must rule among nations as among individuals and to establish guarantees for future peace and the prevention of a recurrence of such a calamity as this.

Farmers planted 23,000,000 acres more in leading food crops in 1917 than in 1916. They greatly increased the numbers of live stock in spite of exportations. They increased the number of milch cows by 390,000, of other cattle by nearly two million, the number of sheep, for the first time in a generation and a half, by 1,300,000, and of swine by nearly 4,000,000. In spite of exportations of horses and mules they increased the number by 454,000. The indications are that they will do better even this year. We shall not fail to win the war because of food shortage.

These statements mean another thing. They mean difficulties of harvesting. It is a matter of patriotism and business to omit no effort to help in the matter of labor supply.

We fight a nation that knows no law, except its own law of necessity, made in Prussia, exclusively interpreted by her, and to be changed by her at will. From this power the orders came to us in February, 1917. What answer was there except one? Life is precious, but not at the sacrifice of everything that makes it worth while. National peace is desirable, but not at the cost of everything that makes a nation worth saving. We have discovered the truth in Jefferson's assertion that the tree of liberty is a tender plant; and that as it grows from more to more it has to be watered by the blood of patriots. We shall not fail. We are aligned with the free forces of the world, and have back of us the conscience of civilization.

## WHAT IS EMBARGO?
## Food Administration Answers.

What is an embargo?
An authoritative stopping of any special trade.

What is the value of an embargo?
It keeps a check on all supplies coming in or going out of the country.

What object can we obtain by it?
We can keep neutral countries from delivering to Germany food ostensibly wanted by the neutral country itself.

What significant example is there of this?
Fats. Fats sufficient to supply the fat requirement of 7,700,000 soldiers entered Germany in 1916. A large percentage of those fats came from this country. The embargo stops such leaks as that.

## No Lack of Patriotism.

**By J. P. CHRISTENSEN.**

You will find no lack in the performance of their patriotic duty and loyalty among the farmers of Clallam county and they have a large share of the substantial proofs recorded by our county in the oversubscription to the Liberty loan and the war savings campaign. Our farmers have been doing exceedingly well and they have opened their purse strings.

## County Agent at Large.

Aside from the individual county agents, Washington has a county agent at large—A. B. Crane, who has charge of farm engineering and drainage projects throughout the state.

# Protest of Farm Producers

When you have a just cause it pays to protest against injustice. The Farmer had that thought in mind when it urged the farm producers of the Pacific northwest to send remonstrances to Washington against the 25 per cent flat increase in freight rates. The increase will probably stand, but as a result of intelligent objection from the farmers, the food administration has decided to increase wheat prices and thus make the product absorb the increase instead of taking it from the pockets of the growers.

A Washington dispatch says this is the first time deviation from the fixed $2.20 basic wheat price has received serious consideration from the food administration, and that the decision to allow slightly higher wheat prices "follows protests from farmers, who say they face losses of from one to five or six cents a bushel on wheat because of the 25 per cent increase in freight rates, which will affect the entire wheat belt."

The farmer is entirely justified in launching reasonable, intelligent protests against laws and acts of government officials that lay an injustice upon him. The remonstrance against excessive freight rates is a case in point, and the protest last year against the government's failure to give the wheat growers of the northwest a basic market was another.


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It is gratifying to know that the new cooperative system has had the heartiest kind of backing; and that it has been put on a successful basis. We could not have got along without the assistance of well wishers who have told their neighbors about the plan and passed along copies of the paper.

There are many things of value which your state farm paper can bring you and your neighbors during the summer months. The various departments will be full of helpful hints, instructive articles and entertainment. Send in the orders!

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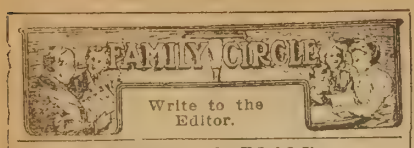
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ALICE W. BARLAND,
Editorial Contributor.

# Time for Music

By C. C. GOTT.

How often one hears a farmer say, "Oh, I haven't time for music, games or dancing; no time to go anywhere"; or "Hard work makes my fingers too stiff to play."

To all of which I say, "Nonsense." A farmer is too apt to get into a rut, so easy for the careless ones to do.

No place on earth is music needed so much as in the farm home. I have a 200-acre farm, with 100 acres under cultivation, and with the exception of harvest time I do all my own work, milking, churning and housework, and all the chores, and my home is always ready to receive visitors, and still I find time for music, dancing and recreation. I play the violin and piano, and do not find that hard work stiffens my fingers one bit. I have a neighbor who is a fine cornet player; we exchange work at times, and, after a hard day's work, supper over and the dishes washed, we take our instruments and tear off some of the latest hits from Broadway, and they are none too hard for us. We forget today's work, as well as tomorrow, our brain as well as our muscles is resting. After a couple of hours of good, lively music we roll in and sleep. In the morning we forget music and think of work.

How nice for a father and mother son and daughter to have a little orchestra at home on the farm, especially during the long winter evenings. How few girls can play the the violin or cornet and how many find useless novels. How few boys can play the violin or cornet and hoy many find time for playing cards and billiards. It is true, some can not learn music, but how many could learn, want to learn and could make good at it if only given a chance to learn.

# A Garden Hint

By Elizabeth Quaker.

Did you know that green beans, especially the Black Wax variety, are like pansies in that "the more you pick them, the more is sure to grow?"

If you wish to let some ripen for seed, select and reserve some good vigorous hills for that purpose. Keep them well picked from the rest of the patch. In this way the bearing will be prolonged until the frosts come. When the pods are allowed to ripen the strength of the vine goes into the ripening pod and it stops sending out new blossoms and young pods.

# War-Time Meals for the Harvester

By MISS A. GRACE JOHNSON, Professor House Administration, School of Home Economics, O. A. C.

The feeding of the harvester has always been looked upon with dread and now when the food situation is so serious it will no doubt have added terrors for the average person, whether that person be a cook for a threshing crew or the housewife. This article will not serve as a cure for all the ills of the harvest meal, but it will give general suggestions which, if followed, will serve to simplify the problem to some extent.

Since proper nourishment and conservation, taken together, form the keynote of all meal planning at the present time, we must consider the following points in planning harvest menus:

1. Proper nourishment of body. This involves kind, quality and quality of foods.
2. The observance of conservation rules of food administration.
3. Waste of food.
4. Waste of time and energy.
5. Cost of food, fuel, etc.

The harvest-time meal has developed largely through tradition or from a spirit of rivalry rather than from a knowledge of the needs of the worker. A false idea of what this meal should be has led to some of the following customs, all of which are bad:

1—Too much variety in one meal.
2—Too many desserts at one meal.
3—Duplication of foods of same kind. Such as rice and potatoes.
4—Serving of more than one kind of meat at a meal.
5—Serving of too many fried or very fat foods.
6—Serving too many beverages at one meal.

All of these mistakes in planning meals have done much to develop a very bad harvest time eating habit—that of "gobbling" the foods. They have been the cause of an enormous waste of foods as well as of time and energy of the persons who prepare the meals. If the men could have less interruption from the passing of numerous unnecessary dishes they would have more time for conversation and thus be less liable to "bolt" the food. The food would be enjoyed more, and less would be left on the plate. The persons who do the preparing would be saved an enormous amount of work, not only in preparation, but also in care of dishes, the problem of the use of left-overs would be reduced and much fuel would be saved.

How shall we solve the problem? No one can wave the magic wand and solve the entire problem.

At the present time when there is a scarcity of foods in the world we should all realize that each person, and especially the housewife, should begin to study the feeding of the family just as conscientiously as the farmer has studied the feeding of his hogs or the selection of labor saving devices.

The food which men eat in harvest time will have a direct bearing upon their efficiency in the field just as surely as the food fed the farm animals will determine their economic value.

A wholesome and yet economical day's diet for an average working man may be built upon the following plan:

14 ounces of cereal food.
1 pint of milk.
2 to 4 ounces of meat or a good meat substitute.
2 ounces of fat.
3 ounces of sugar or other sweetening.
At least one kind of fruit.
One kind of vegetables besides potatoes (more when one has a garden).

As a part of war-time patriotism those feeding the harvester would do well to make use of the following suggestion: 1. Reduce the amount of meat usually served. 2. Reduce the amount of sugar used. 3. Use less fat. 4. Use only 45 per cent substitute yeast breads and 100 per cent substitute quick breads when possible. The foregoing skeleton is much more limited than the average harvest menu.

There is a perverted idea that large amounts of meat are necessary to the man who works hard. While it is true that the man who does hard muscular work out of doors requires more food than the sedentary man and he can with comfort take care of larger servings of rich foods it is not true that the extra food need be meat. Meat is a good fuel for the human machine if used in moderate amounts along with other foods, but meat is no better fuel than other foods.

When meat is high in price and is so much needed by our allies, as it is at present, is a good time for us to begin to limit the amount in the diet of the harvester as well as in that of other people. By so doing we will improve the health of the nation, for many ills of old age are encouraged by a diet rich in meat.

Meat should be used more for flavor and the large place it has taken may well be filled by dried beans, peas, cheese, milk, eggs, etc. More green vegetables are most welcome to the harvester and are very good from a dietetic standpoint.

Since sugar is quickly converted into heat and energy it is a valuable form of food, but its use is often abused. By far the largest amount of the sugar in the harvest diet should come through the use of large amounts of fruits. Dried fruits such as raisins, prunes, etc., if properly soaked and cooked, require no extra sugar. Much of the sugar used in coffee goes into the dishwater. Sweetening the coffee in the kitchen might reduce this waste. Milk is a splendid hot weather beverage and a greater use of it will do much to conserve sugar. Sirups may be used in cooking and thus a greater reduction made in the amount of sugar purchased.

It is true that there is a physiological reason for fried foods, due to the length of time they remain in the stomach before digestion, which gives a feeling of fullness and satisfaction a longer time than the more easily digested food does. But even so it is wise especially in war time to conserve fat by doing less frying. The puddings which make use of cereals and dried fruits, as well as the fresh fruit sauces served with conservation cookies will also save large amounts of fat, wheat flour and sugar to say nothing of saving no end of time and energy spent in making the time honored harvest time dessert—PIE.

It will be difficult to greatly reduce the amount of bread served in harvest time but if quick breads, using no wheat flour, are served for breakfast, and yeast breads using 45 or 50 per cent of substitutes are used at dinner and cornbread is eaten for supper, there will be no difficulty concerning the use of too much wheat flour. Corn, oat or rice flour, or cornstarch can be used for thickening gravies. Substitute flours should be used in all cakes and only very plain ones should be made. Icings should not be used, in fact they are needed only to cover a poor product.

The potato and corn products should take more prominent places in the harvester's diet during the coming summer. The former can be served three times a day if care is taken to serve it so as to give variety. Hominy or brown rice served with a cheese sauce may well take the place of a meat dish at the evening meal.

Avoid the use of macaroni and spaghetti.

Use more breakfast cereals. Serve more of the green vegetable and salad plants from the garden and less canned goods.

Use a liberal amount of milk.

Serve coffee for breakfast only.

Serve only foods which are properly cooked and well flavored, thus making it possible for the men to observe the "gospel of the clean plate."

The following menus are merely suggestive:

Breakfast—Fruit, oatmeal, eggs, creamed potatoes, barley muffins, butter, coffee.

Dinner—Pot roast, gravy, browned potatoes, creamed corn, sliced tomatoes, war bread, stewed apples, war cookies, milk.

Supper—Cold sliced beef, chili sauce, browned potatoes heated in gravy, stewed tomatoes, corn bread, corn syrup, baked custard, tea, milk.

Breakfast—Fruit, cornmeal mush, hash, potato cakes, oat muffins, jelly, butter, coffee.

Dinner—New England boiled dinner, horse radish, lettuce salad, corn bread, honey, tapioca pudding with fruit, milk.

Supper—Baked beans, potato salad, buttered beets, pickles, war bread, stewed fruit, war cake, milk.

# Clover Yoke in Tatting Designs

By WINIFRED WORTH



Every one likes pretty yokes. Here's one that probably strikes your fancy.

**1st Row**—This yoke is begun by making the row of flowers, first ch. 12, double tu back into 4 ch. from needle. Ch. 4, double tu back into 1st stitch of 4 ch., 3 times. This 1st stitch of 4 ch. is used as the center. Ch. 4, put needle through center and pull thread through. Ch. 4, and tu 3 times ch. 4 rp. until there are 5 petals, then ch. 4, and tu 2 times to complete 1st petal, join to the 1st ch. made where the first part of 1st petal was begun.

**2d Row**—Ch. 12 and rp. until the 1st 2 t. of second petal is made, then take hook out of work and insert in 2d petal of first flower, pull thread through, connect next petal same way, at corner leave two outer petals loose and connect as shown to form corner. Rp. flowers until yoke is large enough, then ch. on open side of flowers with 8 ch. between, use ch. already formed for outside and new ch. for inside, cover ch. with 4 groups of 4 dc. and 3 p., then at corner miss one 8 ch. The next row on either side is formed by a t. in each p. with a 2 ch. between.

**4th Row**—The next row by 4 t. over a 2 ch. ch. 2 over next 2 ch. rp. on each side. Then there is a row of spaces on either side formed by a t. in first t. of 4 t. a 2 ch. all the way on each side. The bottom of the front is finished with a row of solid t.

Leaves and part of the first one remaining unfinished, finish this by a 3 ch. 2 t., connect to first 3 ch. and t. made like the flower in the center the first stitch of the first 3 ch. is used as center, now ch. 3 slip stitch to a t. ch. 6 and rp. clover leaf, connecting second petal. The underneath arm is made from making a ch. the required length then t. over this and finish with clover edge.

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2545—Dress and Slip for an Infant—The pattern is vut in one size. The dress requires 3 3-4 yards of 36-inch material. The slip 2 1-4 yards. Price 10 cents.

2541-2462—Ladies' Costume—Blouse 2541 cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. The skirt 2462 cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. For a medium size it will require about 7 yards of 36-inch material for the entire dress. The skirt measures about 1 7-8 yards at the foot. Two separate patterns, 10 cents for each pattern.

2399-2411—A Stylish Gown—Waist 2399 cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Skirt 2411 cut in 6 sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. For a medium size, the dress will require 7 yards of 36-inch material. The skirt measures about 2 yards at the foot. Two separate patterns, 10 cents for each pattern.




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2530—Boudoir Set—Cut in 4 sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. Size medium requires 4 1-8 yards of 36-inch material for the gown. The cap requires 7-8 yard. Price, 10 cents.

2537—Ladies' Skirt—Cut in 7 sizes: 22, 24, 26, 28, 30 32 and 34 inches waist measure. Size 24 requires 4 3-4 yards of 40-inch material. The skirt measures about 2 yards at the foot. Price, 10 cents.

## Hints About Canning.

Ordinary intelligence and individuality are as important in canning as in anything else. There are times when you can follow no rule, and you must rely on your own judgment.

All fruits, vegetables, juices, meats and foodstuffs must be completely sterilized and kept in air-tight containers. Sterilize and cleanse all containers, vegetables and fruit before proceeding with your work.

Use only fresh fruit and vegetables, and always can fruit the same day it is picked.

Be sure you have good rubber rings before sealing. A good rubber should stand being pulled, and should return to its original shape.

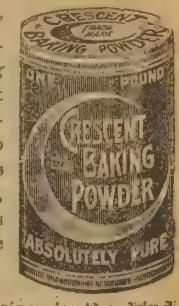
Foodstuffs must be sealed absolutely air-tight to insure preservation.

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# Handicraft For Girls

## By Dorothy Perkins

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### Jack-Sticks and Ring-Toss.

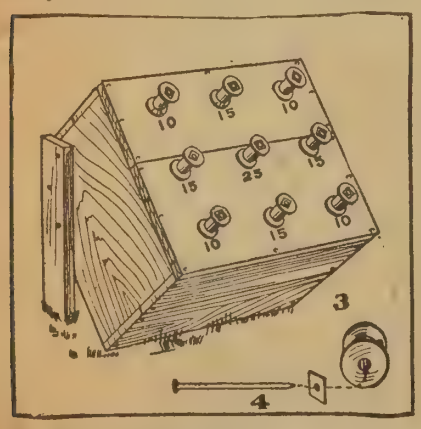
Here are two unique games that are just right for a summer afternoon too warm to permit of much exertion, because they require no jumping or running about and may be played in the shade.

No doubt you are familiar with the game of jack-straws, in which a pile of tiny sticks in the forms of hammers, saws, shovels, picks, etc., are placed in the center of a table, and then, in turn, each player tries to remove, by means of a small, hooked stick, as many of the "straws" as possible, without disturbing any other "straws" in the pile.



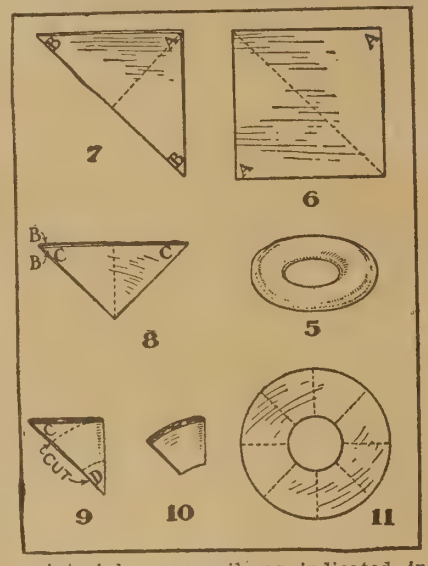

The only difference between the "straw" game and our "stick" game is in the substitution of real hammers, saws, etc., for the small ones. Figure 1 shows the large assortment of articles that may be used — brooms, umbrellas, coat hangers, pans, pot covers, pails, dustpans, etc. Throw these articles in a heap, crossed and recrossed as in the illustration. For the hooked stick for removing the articles from the pile, take a broom handle and drive a long nail into it near one end, as shown in figure 2.

Two or more may play the game of jack-sticks. Taking turns, each player should try to remove, one at a time, as many "sticks" from the pile as she can without disturbing anything else. The turn passes to the next player the instant she disturbs other than the article she is trying to remove. The player securing the largest number of articles is winner.




The game of ring-toss requires an easily made target (figure 3). The target requires a grocery box, two stick uprights to support the box, nine thread spools for pins, and nine nails, one-half inch longer than the spools, with which to fasten them to the box.

The spool pins should be placed four or four and a half inches apart. The heads of the nails for fastening them will likely be smaller than the holes in the spools, and in that case, in order to make the nails hold, it will be necessary to cut small squares of cardboard and run these over the nails as far as the heads (figures 3 and 4). After nailing the spools in their proper positions, number them with black paint, ink or pencil, as indicated in figure 3. Each number represents the score of the spool pin above it.




The tossing rings have a hole through their centers, and are filled with beans, like beanbags (figure 5). Cut two pieces of cloth eight or nine inches square for each (figure 6). Fold each piece in half diagonally, so as to bring corners A together (figures 6 and 7); then fold corner B over on to corner B (figures 7 and 8), and fold corner C over on to corner C (figures 8 and 9). Cut off corners C and D, as indicated by dotted lines in figure 9 (figure 10), and, unfolded, the piece will have the form shown in figure 11. Sew the pair of cloth rings together, both around the outer and inner edges, leaving but a small opening between the outer edges. Fill the bag solid with beans, through the opening, then sew up the opening.

There should be three rings, so each player may have three tosses each turn. The distance from which the rings are tossed may be 10, 15 or 20 feet away from the target. The score is counted by adding up the numbers beneath the spool pins over which the rings are thrown.

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While a group of mothers were talking one day one chanced to remark, as one of her children was crawling on the grass, that all her children were hard on their stockings, and in particular on the knees of them.

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Spokane, Washington

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**School Is Out Now.**

Dear Aunt Nellie: I have found a twin, or rother one found me, and I found the other. The one that found me was Alice Ruth Ralston, Goldendale, Wash. The one I found was Alice Kuper, Mohler, Wash. I am going to write to Alice Kuper when I get some stamps. I have written to Alice Ralston, but she has not answered yet. I have two thrift stamps and I have learned to knit since the last time I wrote. I have about half a wash rag done already. School is out now. I passed into the eighth grade. All of the school passed one grade ahead. I am glad they did, too. I hope all the cousins pass into the next grade. My grandma went to Walla Walla this morning to be operated on for gallstones. I hope that she will be better when she comes back. I will put my age in again, so I may find another twin. I give my love to Aunt Nellie and all the cousins.—Edna Light, Pomeroy, Wash. (Aunt Nellie hopes that by this time grandma is well again. I am always glad when the cousins get along well at school.—Aunt Nellie.)

**Reading Is Her Favorite Study.**

Dear Aunt Nellie: This is the first time I have written to the Corner and I hope to see my letter in print. I have a twin sister who is writing you a letter too. I just have one brother, and he is in the army. He is 20 years old and is an engineer. He is in Maryland now at Camp Meade. My two uncles are in the army, too, one is in San Francisco and the other is in Fremont, Cal. I am 11 years old and am in the sixth grade. My studies are arithmetic, spelling, geography, reading and language. Reading is my favorite study. My teacher's name is Miss Ritchie and I like her very much. We have a Junior Red Cross and a war saving society at our school and I belong to both. We have about 20 head of cattle and two horses. Papa has a car and I will be glad when I get old enough to run it. We have a large farm and a big red barn, a potato house and a granary. The name of our farm is River View, and it is written on a big sign upon the top of the barn I must close, as it is dinner time.—Georgia Lewis, Castle Rock, Wash.

**A Day at Jane's School.**

Dear Aunt Nellie: My subject is about what I do at school. I first go to school, then I take my reader and read, then my speller, and teacher hears me spell. After recess I take my grammar. After noon I take arithmetic and geography, then school is out. I come home and change my dress. Then I go and put in the cows and feed them. I come back and help get supper. We eat supper and I wash the dishes for mama. When we got up this morning I got dressed quick and sat down to write to you. I hope my letter is interesting. I am writing so as to make the Corner grow bigger. —Jane Osborn, Ashford, Wash. (Your letter is interesting, Jane dear, and Aunt Nellie is glad that you are writing to the Corner. You are a busy little girl. Write again soon.—Aunt Nellie.)

**White Kitty Named Snowball.**

Dear Aunt Nellie: This is my second time I have written to the Corner. One of the girls in the Corner wrote to me. I have got two letters from her. Her name is Clara Lybeck. I have joined the Junior Red Cross. I am going to knit a sweater for the Junior Red Cross. The children in our school sold candy one night and we made $5.15. We had a program. Our school let out May 29. I am going to get a white kitty and its name is Snowball. We have two dozen chickens. One of my girl friends wrote a letter to the Corner. I hope that I will see her letter in print. I enjoy reading the letters in the Corner and I hope that the Corner will grow. I go to Sunday school every Sunday. My Sunday school teacher's name is Mr. Carter.—Hazel Elsie Stock, R. F. D. 1, Box 10, Castle Rock, Wash.

**Live on Uncle's Place.**

Dear Aunt Nellie: I am writing to the Corner for the first time. I am 14 years old. I will be 15 December 29. I have brown hair, blue eyes and a light complexion. Have I a twin? If so, please write to me. Our school was built in 1916. We have joined the Junior Red Cross. I also belong to the big Red Cross. I have two brothers, Clifford and Clarence. Clifford is 10 years old and Clarence is 5 years old. They both go to school. I have no sisters. We live on my uncle's place. We came from Seattle two years ago, March 20, 1918. I like to read the letters in the Corner very much and I hope it will grow larger.—Frances Lambert, Penawawa, Wash.

**Take Many Different Magazines.**

Dear Aunt Nellie: So many are writing to the Corner that I thought I would write, too. I am 14 years of age and am in the eighth grade. My birthday is March 8. Have I a twin? If so, I would like to have her write to me. My teacher is Miss Ice nad I like her very much. I have three brothers and five sisters. The girls are: **Helen,** Mabel, Marguerite, Louise and Esther. The boys are Harold, Gordon and Arthur. We have five cows, 26 horses, four calves, about 65 chickens, two geese and four pigs. My two oldest sisters helped can the kaiser by helping papa put in the crop. Papa farms 700 acres of land. He has two threshing machines. I like to read and have read about all the books at home and in the library at school. We take many different magazines. Papa has a $100 Liberty bond. I have no brother old enough to go to war. The oldest being 7 years old.—Freda Felgenhauer, R. F. D. 1, Waverly, Wash.

**Elma's Uncle Has a Store.**

Dear Aunt Nellie: I wonder if there is any more room for one more girl to be a cousin of the Corner. I go to school and I am in the fourth grade. I am 9 years of age. My birthday is January 19. I have two brothers and four sisters. My brothers' names are John, 14 years old; Willie, 17 years old; Clara, 11, Ruth, 19; Bertha, 4 years old, and Mary, 22 years old. Mary and Ruth are married. Mary has a little baby. We live with our uncle and he has a store. We have to walk a mile to school. I will send my name and address so some of you will write.—Elma Bacon, Wawanal, Wash. (Yes, dear, there is plenty of room for one more cousin, but you have to wait awhile for your letters to be printed, you know. Come again.—Aunt Nellie.)

**Named the Calf Cherry.**

Dear Aunt Nellie: How are you and all the cousins? I thought I would write you a few lines today. This makes the second time that I have written to the Corner. Our old cat has four kittens now. I am going to have one for my pet. It is white and it has a few little black spots on it. We have a little calf. We named it Cherry. I have a twin. Her name is Margaret MacLaren. Her birthday is March 24 and mine is March 27. Our school let out May 24. We get the Farmer. I am 12 years old. I wish I could help make the Farmer larger. I love to read the letters. I have two sisters that are married. They both live at Lincoln. I am going down there and stay with them a while. May I be a cousin?—Vera I. McCord, Box 30, Fruitland, Wash.

**Stella Will Write Again.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 11 years old. My birthday is January 10. Have I a twin? If so I would like to hear from her. I live on a 40-acre farm. We have three horses and one cow. We also have four pigs, two dozen chickens and two ducks. We have 22 little chickens. My father takes the Farmer. I enjoy reading the other letters. I have three miles to go to school. I am in the fourth grade. My teacher's name is Clara Nelson. We have 22 pupils at our school. We drive in a one-horse buggy. I have two sisters and two brothers. I will write again.—Stella Johnson, Box 57, Fruitland, Wash.

**Humming Bird Sips the Honey Dew.**

Dear Aunt Nellie: I have not found a twin yet. I was 9 years old April 28, 1918. There are two logging trains past our house. We have 70 little Easter chickens. We are close to a logging camp where my papa works. We live five miles from school. There are 18 scholars in my room. My teacher's name is Miss Bunker. We just moved to Washington this spring. I have three sisters and one brother. Our baby, Lois, is 2 years old. Pearl is 4 years old and Ruth is 7. My brother, Glen, is 6 years old. Glen is in the first grade at school. There is a humming bird that gets honey dew from our flowers.—Ellen Hay, Shelton, Wash.

**Sister's Name Is Helen.**

Dear Aunt Nellie: May I join the Children's Corner? This is my first letter, but I hope it won't be the last one. Have I a twin? One cousin said her birthday was September 20. Her name was Laurella Tarthung. I thought, maybe she was 13. I am 13 and my birthday is September 20. I will be 14 then. We have two horses and one cow. I am in the sixth grade. The horses' names are Tony and Snip. The cow's name is Blackie. Tony is my pet horse. I have three brothers. Their names are George, Raymond and Ralph. I have one sister. Her name is Helen. Ruth Land, Winthrop, Wash.

**Play Many Games at School.**

Dear Aunt Nellie: I would like to write to the Children's Corner. I am 6 years old. I went to school all this year. This was my first year of school and I went through two books and a half. I had 10 playmates at school. We play games at school. We play wring the dishrag and New Orleans. The names of the children are Dale, Ruby, Biillie, Velta, Ruth and Ruby, Edna, Elva, Alice, Erma. Ruth and Ruby are twins.—Constance McDonald, Wash.

**Ruth Is Now a Cousin.**

Dear Aunt Nellie: May I join the Children's Corner? I had meningitis last spring and could not talk or move, but I kept getting better, so I talked some and crawled around in the summer. By October I could walk, but fell down lots. I started to school in November and went when papa could take me.—Ruth Hay, Shelton, Wash.

**Win the War by Saving.**

Dear Aunt Nellie: I have been so busy that I haven't had time to write to the Corner for a long time. I am 11 years old. The last time I wrote I was 10 years old. We are having quite a time with the Germans, but the only way we will win the war is to save. I

> TO the Children's Corner: Children I love to read your Corner and the editor is a good man to let you have it. So be good children and obey your parents and attend Sunday school. When you grow up be brave men and women and help in this time of trouble all you can. I have no twin. I am 64 years old. I live alone and take the Farmer.
>
> E. C. HADLEY.
> Box 14, Entiat, Wash.

am saving and eating less. We have graham bread half of the time. My father has bought three bonds. Six of us have bought thrift stamps. I received the samples of The Farmer and will try to get some new subscribers. I hope every one is doing their best toward saving food. I am in th fifth grade. My teacher' name is Miss MacDonald. I have dark brown eyes and dark brown hair. Have I a twin?—Reeta Bateman, West Jordan, Wash.

**Work Easier in Overalls.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner and I hope it will not be the last time. I am 14 years old. My birthday was December 17. I have dark hair, dark brown eyes and a light complexion, when I am not all tanned up. I am 5 feet 5 inches tall. I go to the Pleasant Hill school. My teacher's name is Miss Feterson. I go to the same school that Hazel Stock goes to. I go to school with her nearly every morning. I live on a 40-acre farm about three and one-half miles from the town of Castle Rock. We have five cows, two horses and one dog. Our cows' names are Jersey, Mabel, Daisy, Flossy and Star. Our horses' names are Pet and Topsy. We have six old rabbits and about 30 little ones. My little brother and I go fishing in our creek. There aren't very big fish but it is fun to catch them. In the summer time I wear overalls. You can work so much easier in them. I surely hope the Children's Corner stays large because I like to read the letters. I would gladly correspond with any of the cousins if they wish.—Elva Richards, R. F. D. 1, Castle Rock, Wash.

**Uncle Floyd Writes Often.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 10 years old. My birthday is January 20. We have two horses. Their names are Doll and Bird. We have three colts, Dick, May and Cleve. We have two cows, Judy and Goldy, and two heifers, Susia and Silver; a dog named King and a cat, Veley. I have three sisters. Their names are Verda, 8 years old; Emma, 6 years old; Lola, 3 years old, and two brothers, Kenneth, 11 years old, and Baby Roy, 1 year and 6 months old. I have two uncles in the army. Uncle Frank is in France and Uncle Floyd is in New Jersey. He is a cook. He cooks for the headquarters company. We hear from him nearly every day. He likes us children. My teacher's name is Miss Thelma Schrender. There are 22 children in our school. I am in the third grade and my brother Kenneth is in the third grade and Verda is in the first. We do not have very far to go to school. My papa has seven and one-half acres of land. We have 24 chickens. Have I a twin?—Nerna Ritter, Tenino, Wash.

**Soon Have Little Chickens.**

Dear Aunt Nellie: Have I a twin? This is the first time I have written to the Children's Corner. I live in a town three blocks from school. I am in the fourth grade. I would like to live on a farm like some of the cousins do. My father has two horses. Their names are Topsy and Kate. Their color is red. We have nine chickens; one of the hens is setting. We will soon have some little chickens. We set her on 15 eggs. I hope they will all hatch. There are 33 pupils in my room. I belong to the Red Cross. I am 11 years old. My birthday is February 13. I will be 12 years old my next birthday. There are 12 pupils in my class. The fourth and fifth grades are in the same room. My teacher's name is Miss Hinshaw. I like her. I think that she is the best teacher I ever had. My hair is dark brown and my eyes are dark brown.—Ida Smalley, age 11, White Salmon, Wash.

**Catch Their Wood in the River.**

Dear Aunt Nellie: This is the third time I have written to the Children's Corner. I am in the sixth and seventh grades at school. We live right along the Snake river. It is up pretty high now. We catch our wood in the river when the water is high. My papa rows the boat and my sister or my mama catches the wood. Sometimes I go to hold the boat for them. One time when the river was high we were going along the river and my sister saw a rubber ball. She threw some sticks in and tried to bring it to the shore, then our old dog saw her throwing and he went in after the sticks and brought the ball out on his tail. When I was up there holding the boat for the folks I was standing on a steep bank and just as I went to sit down I saw a rattlesnake, right by me, lying in a hole. Then my papa killed and threw it in the river. My mama belongs to the Red Cross. My mama and sister Olive and I are going to make a quilt for the Red Cross. I have got two letters from Margaret Kane and one from Sallie Garry. Margaret sent me her picture and I was surely glad to get it.—Elva Green, Penawawa, Wash.

**To Raise a Garden of Their Own.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner and I would like to join. I am 10 years old and in the sixth grade. We have four milk cows, four calves, eight head of wild cattle, 11 horses, three sows and seven pigs. I bought a thrift stamp and this summer I am going to save money for some more. I have two brothers and one sister. Their names are Robert, Sten and Anna. She is the baby. I set two hens now. Mama and papa set the incubator with 140 eggs in it. I have a pony and his name is Kino. We live one mile from school. We drive our pony to school. In the summer we drive the buggy and in the winter we drive the sleigh. I've got a new saddle horse, and sometimes we ride to school. My brothers and I are raising a garden of our own. I will write again.—Swanhild Frostenson, Fairfield, Idaho.

**Hazel Found a Twin Cousin.**

Dear Aunt Nellie: I have not written to the Corner for a long time, so I thought that I would write again. Can I still be a cousin? I found a twin sister the other time when I wrote. Her name was Hazel Dowell. She lives at Burbank, Wash. I belong to the Junior Red Cross. I will tell you some riddles. As I was going over London bridge, I met a cart full of fingers and thumbs. What comes around the house and throws a white glove in the window? Higher than a house and higher than a tree, oh, whatever can that be?—Hazel Ethredge, age 12, Mohler, Wash. (I know the cousins will be glad to hear from you again, Hazel, for we have missed you. Aunt Nellie.)

**Sarah Writes Again.**

Dear Aunt Nellie: This is the second time I have written to the Corner. I am 11 years old and will be 12 October 12. I wish somebody would write to me, either a twin or not a twin. We had lots of fun playing at school. We played Pump Pump Pull Away, Statue and Rotten Egg. I have four sisters and three brothers. There are 10 in our family, but I think my oldest brother will join the army pretty soon. —Sarah Millenaar, Oak Harbor, Wash.

**Belongs to a Garden Club.**

Dear Aunt Nellie: This is my first letter to the Children's Corner. I am 10 years old and in the fifth grade. My birthday is May 16. My teacher's name is Miss Snider. I enjoy reading the letters. I have two brothers and two sisters. Their names are Hazel, Stanley, Nellie and Kenneth. I have a pet cat. She is a little kitten now. I am buying Thrift stamps. I belong to the Garden club and the War Savings society.—Ruby Price, Yelm, Wash.

**Likes Wild Flowers.**

Dear Aunt Nellie: I am 9 years old. I like to go to school. I go five miles to town school in a car. I have two brothers and their names are Edgar and Levi. We live on a 160-acre farm. I like the wild flowers. We go flower-picking nearly every day. We all like the Farmer. This is the first letter I have written to the Children's Corner. —Lester L. Thompson, R. R. 1, Box 4, Goldendale, Wash.

Address all letters to Aunt Nellie, care of The Washington Farmer, Spokane, Wash.

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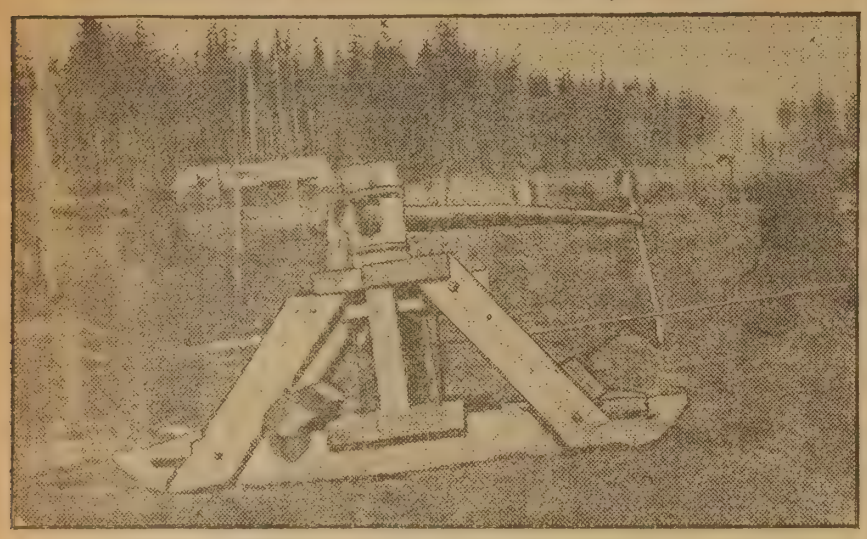
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# Here Is a Home-Made Stump Puller



By CARL J. MENZE.

Clearing timber land is not a difficult proposition providing one has the necessary capital. But those who have no capital to speak of, and there are many in this position, must act accordingly; they face a condition and not a theory. Therefore, the accompanying illustration of a home-made stump puller, from the field of experience, will be found a great help.

It is operated by hand-power. Two sweeps are used—a long one for a heavy pull, and a short one for a light pull. Blocks may be used on a heavy pull, if necessary.

The whole frame is securely bolted together. Four long bolts pass through the frame from top to bottom. These bolts are essential to keep the top from being pulled off.

The drum is made from a maple log. Where it passes through the top and bottom planks it is notched in and made narrower. On the top of the drum two iron bands are fitted on to prevent it from being twisted off. The main cable is fastened onto the drum by means of a large staple which is driven into the drum.

The complete stump-puller can be constructed by any one who is handy with tools.

## ALL-STAR CHAMPIONS.

### They Will Go to Washington, D. C.

Six youthful members of the boys' and girls' clubs throughout the state of Washington are wearing the badge of the all-star champions, and will go to Washington, D. C., when the next conference is called by O. H. Benson, who has charge of boys' and girls' club work for the northern and western states.

A member from each branch of club work was chosen—those whose reports showed the greatest profit for the year being the successful candidates. Following are the winners and their net profits for the year of 1917:

Ivan Anderson of Toppenish, champion of potato clubs, with a profit of $323.85.

Benjamin Franklin of Mt. Vernon, champion of garden clubs, with a profit of $249.50.

Ellen Hummel of Wapato, champion of garden clubs, with a profit of $143.46. Miss Hummel canned 775 quarts of produce during the year.

Roy Stroh of Snohomish, poultry club champion, who made a profit of $151 from 63 chickens.

Hershall May of Toppenish. This pig club champion was the raiser of 1470 pounds of pork and won several prizes.

Earl Cheldelin of Toppenish, champion of corn clubs, with a net profit of $208.55.

## Clip This Order Blank

Address all communications concerning thrift or war savings stamps to The Washington Farmer, War Savings Department, Room 26 Review Building, Spokane, Wash.

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## STATE FAIR.

### Increased Offerings for 1918.

The superintendents of the Washington State fair, to be held at Yakima September 16-21, are as follows: Dr. R. J. Donohue, horses, cattle, sheep and swine; William Hislop, sheep; M. L. Dean, agriculture, horticulture and bees and apiary; Mrs. Granville Ross Pike, bird conservation; Miss Mary Remy, floriculture, culinary, arts and crafts; William H. Adams, pure foods; S. W. Ness, children's industrial and agricultural department; Miss Mary Gupe, child welfare; Frank Meredith, mines, minerals, amusements, attractions and concessions; Harry H. Collier, poultry; A. D. Fish, dairy and milch cow test.

The premium list shows increased offerings in both the live stock and agricultural departments.

In the county exhibits which are to be made a special feature again this year the counties scoring 666 points out of a possible 1000 are to be given an additional $50 for their achievements. This is in addition to the $100 prize for each county exhibiting, the $100 prizes to be pooled and prorated according to the scores, and $25 for the most attractive, the best decorated and the best arranged exhibit.

The scheme of awarding prizes looks to bringing out exhibits which will be of such a character that they will command the attention and admiration of all spectators.

The offerings on fat cattle have been increased from $12.50, $7.50 and $5 to $20, $15 and $10 and the champion fat animal which drew only a ribbon in the past will call for a $10 bill this year.

Again looking toward quality exhibits, the management has seen fit to increase the size of the prize offered for the best pen of poultry from $5, $3 and $2 to $10, $5 and $3.

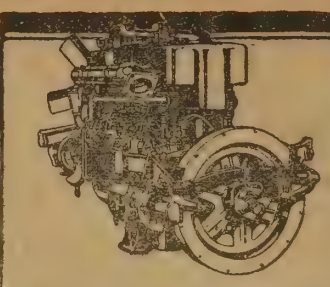
Some increases are also noted in the draft horse department and for Shetland ponies.

Responding to a demand, Romney sheep have been added to the sheep division. The interest in sheep last year, and especially in the sheep sale, has made the department one of the most popular with exhibitors and those having stock for sale in all sections of the northwest.

Other increases in prizes are for wheat, corn, potatoes and fruit.

A site has been arranged adjacent to the live stock headquarters where exhibitors of live stock, their families and attendants may camp, under the rules of the state fair. The location is described as pleasant and the stock men are invited to take advantage of the accommodation. Parties desiring to camp should notify the secretary as early as possible, as the camp lots will be assigned in the order in which they are received. Full information is given in the premium list on all matters pertaining to the fair and which, as long as they last, may be obtained from the secretary, Frank Meredith, Yakima, Wash.


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## News for Breeders

George DeBok, the Oregon City, Ore., Duroc Jersey breeder, will show in the Oregon futurity for the first time this year. He has two early March litters by Chief Oregon 2d, a grandson of Golden Rod. Mr. DeBok lets his pigs run in a two-acre orchard, as he believes growing pigs need exercise and says Durocs will take the exercise if given the room, no matter how well they are fed.

Last year Judge Grant B. Dimick of Oregon City, Ore., kept over 26 registered Shropshire ram lambs. This year the wool from the yearlings averaged $7.05 each. It is true that they were well sheltered and cared for and this, with the high price, explains the immense wool yield. The fleece from one of Judge Dimick's Cotswold rams sold this year for $10.50 and last year for $10.

O. P. Bjornsgard is the only breeder of registered Berkshire swine in the Skamokawa valley, Washington. He has a good herd with a grandson of Laurel Champion, from F. R. Steele, as herd boar. Mr. Bjornsgard has good foundation sows from Hudson and Talmadge. He has been breeding for four years and has found ready sale for his pigs. He uses skim milk and buttermilk as feed and uses very little grain, though he says there must be some grain combined with the milk to get good results. Mr. Bjornsgard says every farmer should have one brood sow, if no more, and is glad that nearly all the farms in Wahkiakum county fatten a few pigs each year, whether they keep a sow or not.

At the E. R. Brady dispersal sale of Guernseys June 26, 39 head were sold for $6435, an average of $165. Several baby calves were included, and as the cattle were not all in first-class sale condition and feed prospects and labor conditions are bad, it must be considered a fairly good sale. The Pilchuck Ranch company of Pilchuck, Wash., topped the sale, paying $415 for the show cow, Annie Truth of Coventry Lake, with a good A. R. record. They were the heaviest buyers, taking seven head for $1730. None of the cattle went outside of the state and most of the offerings stayed in the big dairy regions of western Washington, though a few purchasers were from the eastern part of the state. H. A.

## Baby Calves on Fair Acres Farm

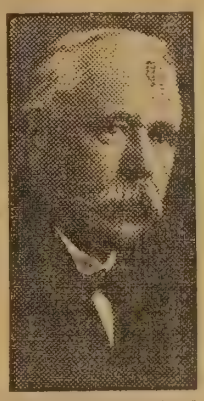


The above photo shows some of the baby Jersey calves on Fair Acres Farm of J. B. Stump & Son, Monmouth, Ore. These gentlemen have recently put 11 head of Jerseys on official test and have several large records in prospect. Diamond of Fair Acres began her test at 3 years and 2 months old. At her first month she milked 1580 pounds. Her dam was a very persistent milker and she has shown persistency in her previous lactation. If she comes up to her present promise she will make a world's record for Jersey milk production for age. One mature cow is milking 63 pounds a day. The Stump Jerseys will be pastured on rape this summer. H. A.

### GIVES TO RED CROSS.

### Sharples Donates Pure Breds.

P. N. Sharples, president of the Sharples Separator company of West Chester, Pa., announces that he will donate to the American Red Cross four pure-bred dairy cows, outstanding representatives of the four dairy breeds of cattle—the Jersey, Guernsey, Holstein and Ayrshire. Mr. Sharples' offer has been indorsed by the National Red Cross society and details of the plan are now being perfected by the dairy council, and a committee representing the four breed associations. Sixty cities will be visited. The plan is to feature the cattle in every city visited during a Red Cross dairy day, when they will be sold at public auction to the people of each city. Every bid will be accepted, thus realizing a large sum—all money so bid and subscribed to go to the Red Cross through the local Red Cross organization in charge of the auction sale. It is also suggested that the cows be so routed that they be in Waterloo, Iowa, the last week in September at the dairy cattle congress and at Columbus, Ohio, the week commencing October 10 for the national dairy show. Mr. Sharples also suggests that at the last-named show these cows be finally donated by the people of the United States through the American Red Cross to the government of France as a foundation of four breeding herds of dairy cattle. The support and assistance of Children's Welfare organizations are also asked to the extent that speakers may talk in each city where the cows are sold concerning the unequaled value of dairy products as economical food and especially the need of milk for growing children.




## BERKSHIRE SWINE

### Berkshire Hogs for Sale

Have a number of sows, 18 months old; will farrow second litter this fall. Also young gilts and boars of all ages; all from prize winners. Write for prices.

EARL WOOD. Silverton, Oregon.

### Riverby Orchard Berkshires

Riverby Orchard Berkshires won 12 out of 15 first prizes at the Washington state fair, 1916, also many prizes, including grand champion sow at the Panama-Pacific world's fair. We offer for sale a few good boars and young sows.

D. C. BUNN, Prosser, Wash.

## SHEEP

### SHEEP FOR SALE

Registered Shropshire, Oxfords, Lincoln, Hampshire and Cotswold rams; 50 head registered Shropshire ewes; 3000 stock ewes, Lincoln, Cotswold and Shropshire breeds; 500 ewes, lambs, Cotswold and Lincoln ram lambs. Write for prices.

EARL WOOD. Silverton, Oregon.

## SHROPSHIRE SHEEP

### Shropshire and Hampshire Rams

Registered stock. Spring lambs and yearlings. No ewes for sale.

GRANT B. DIMMICK, Oregon City, Ore.

## CHESTER WHITE SWINE

REGISTERED O. I. C. SWINE

A few good gilts also choice young pigs. Write me. Ringgold Farm, J. H. West, Prop., Centralia, Wash., R. 1, Box. 157.


# Breeders' Department

## JERSEY CATTLE

### High Producing Jersey Stock

**Golden Maid's Prince,** sire of three Register of Merit daughters. One, beginning at 1 year 10 months, produced 341.27 pounds 85 per cent butter in one year; two junior yearlings, 480.40 and 450.08 pounds. Five more, over six months on test, will average over 600 pounds. He was grand champion Oregon State fair, 1913.

**Monmouth Noble**—4 Register of Merit daughters. Three 2-year-olds produced 482.10, 401.30 and 377.07 pounds butter, and one, beginning at 1 year 10 months, 427 pounds.

ABOUT 25 HEIFERS

From 8 months to 2 years old. Several to freshen this fall. All daughters of above bulls and nearly all out of Register of Merit cows. Heifers are well grown, typy, best of udders and some are extra fine show animals. Write for full particulars or call and see them. Will be sold very reasonably.

WM. SCHULMERICK, Hillsboro, Ore.

## SHORTHORN CATTLE

### HERD BULLS

Imported Donne Radiance No. 609412 and Gainford Perfection No. 442173.

### Hercules Shorthorns

Our surplus stock has been sold. No orders can be taken until later in season. Your inspection of our herd is invited. Visitors always welcome.

DAY & ROTHROCK COMPANY, 205 Exchange Bank Building
SPOKANE, WASH.

### LELAND BROTHERS

Breeders of top registered Shorthorn cattle. Correspondence solicited.

WENDELL, Idaho.

REGISTERED SHORTHORN COWS.
Young bulls and heifers, sired by Scotch bulls; liberal terms.
CALDWELL CATTLE CO., Caldwell, Idaho.

## DUROC-JERSEY SWINE

OVER 150 SPRING PIGS.

Sired by our grand champion Richards Defender, Richards Pathfinder and Cherry King Orion Jr., and out of our big type prize winning sows.

In the last three years at the Utah and Idaho state fairs our hogs won 76 champion and first prizes.

Can furnish unrelated pairs. Satisfaction guaranteed or money refunded. Priced very reasonable.

Richards Live Stock Company, Virginia, Ida.

### Registered Duroc Jersey Pigs

My herd contains the blood of old "Defenders," "Pathfinder," "Illustrator," and Burl's Good E. Nuff. Big type prize winning sows. Guaranteed to please.

V. R. FISHER, Oxford, Idaho.

REGISTERED DUROC-JERSEY HOGS.
Some good spring litters Richards Defender and Pathfinder breeding; big type. Send out nothing but high class stock. Guaranteed to please. Write me for prices on these pigs.
ERIK W. OLSON, Virginia, Idaho.

OTTO'S DUROC JERSEYS.
Get in line for a real boar pig for Sept. delivery. Also gilts and sows bred and open. The kind that is up to date.
L. S. OTTO, Filer, Idaho.

AVONDALE STOCK FARM.
Registered Duroc-Jersey hogs. Inspection invited. Correspondence solicited.
H. C. POLLY. Route 3, Burley, Idaho.

DUROCS.
Boars and open or bred gilts ...ellent breeding.
E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE. Yakima, Wash.

## POLAND CHINA SWINE

### Big Type Poland Chinas

Peter Mouw and John B. Lawson strains. Young boars and bred or open gilts. Good individuals.

CLIFFORD RIGGS. Touchet, Wash.

GREENLEAF STOCK RANCH.
Big type Poland China, either sex, for sale at all times.
Wilson Bros., A. L. Wilson, Mgr.
Greenleaf, Idaho.

BIG TYPE POLAND CHINAS.
Herd headed by Sammy (79833). Correspondence Solicited.
Fruitland Stock Farm, C. Royston, Mgr.
Payette or Fruitland, Idaho.

## TAMWORTH SWINE

ROUND KNOLL RANCH NO. 3.
Herd headed by Knoll Slope Colonel, assisted by Jolly Lad IV. Correspondence solicited.
Bliss, Idaho.

In answering advertisements don't fail to mention this paper.

## HOLSTEIN CATTLE

### 365-DAY HOLSTEINS

24,667 lbs. milk—1026 lbs. butter—is the S. O. advance registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.

THE HERD WITH YEARLY RECORDS.
WESTERNWOLD RANCH, Prineville, Ore.

### Registered Holsteins

Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.

H. R. BOOMER. New Plymouth, Idaho.

### HOLSTEINS

Well-bred young bulls for sale.

THOS. CARMICHAEL. Gaston, Ore.

REGISTERED HOLSTEINS.
Bull calves for sale, with good A. R. O. backing.
BEEBE BROS., R. F. D. 2, Rupert, Idaho.

## GUERNSEY CATTLE

### ROSE CITY HERD

Yeksa. Gov. of the Chene, Sequel and May Rose strains. More prizes at Oregon state fair, 1916 and 1917, than any other exhibitor for number of cattle shown. A few choice animals of both sexes now offered.

W. A. GOODIN, Cornelius, Oregon.

## HEREFORD CATTLE

### Highland Stock Farm

offers for sale Hereford bulls, 1 or 2 years old. One or a carload.

PLATT BROS. Genesee, Idaho.

## AYRSHIRE CATTLE

EDGEWATER FARM
Only one bull left, calved Dec. 14, 1917, with high producing dam; grand dam and great grand dam both world's record cows.
ELBERT M. CHANDLER, Burbank, Wash.

## ABERDEEN ANGUS

### Aberdeen Angus Cattle

A. H. EAGLESON & SONS.
Boise, Idaho.

## HAMPSHIRE SWINE

REGISTERED HAMPSHIRE HOGS.
Growthy and vigorous, great rustlers. Pigs from January and February litters, also other ages. Correspondence invited.
TUTTLE BROS., Asotin, Wash.

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, July 8.—Action of congress looking to higher prices on wheat stimulated an advance in the value of corn today, notwithstanding the announcement of a veto forthcoming from President Wilson. The market, however, closed unsettled, 1-4c net lower to 1 1-4c up, with August at $1.54 1-4 to $1.54 3-8 and September at $1.55 1-4. Oats finished 5-8c off to 1-8c advance, and provisions varied from 25c down to a rise of 20c.

Commission house buying of corn was strongly in evidence throughout the day except just before the close, when sales to realize profits became the rule. Bulls contended that even aside from the action of congress corn was worth more money on the basis of current premiums paid for new wheat.

Oats were inclined to advance with wheat, but encountered hedging sales. Rains in western Canada operated as an element of depression

Provisions averaged higher owing to a falling off in receipts of hogs and because of large exports. Most of the demand, though, came from shorts.

**Cash Quotations.**

CHICAGO, July 8.—Wheat, No. 1 red, $2.32; No. 2 red, $2.20. Corn, No. 2 yellow, $1.77; No. 3 yellow, $1.70@1.72; No. 4 yellow, $1.57@1.63. Oats, No. 3 white, 77¾ @78¾c; standard, 78@79c. Rye, No. 2, nominal. Barley, $1@1.20. Timothy, $5@7.50. Clover, nominal. Pork, nominal. Lard, $25.95. Ribs, $23.50@24.25.

**Chicago Futures.**

| Corn— | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| Aug. ..... | 1.54 | 1.55½ | 1.54 | 1.54¼ |
| Sept. ..... | 1.55¾ | 1.56¼ | 1.55¼ | 1.55¼ |
| Oats— | | | | |
| Aug. ..... | .70⅜ | .71¼ | .70 | .70 |
| Sept. ..... | .69⅞ | .70½ | .69½ | .69½ |
| Pork— | | | | |
| July ..... | .... | 45.45 | 44.10 | 44.20 |
| Sept. ..... | .... | 45.80 | 44.80 | 45.00 |
| Lard— | | | | |
| July ..... | .... | 26.27 | 26.05 | 25.10 |
| Ribs— | | | | |
| July ..... | .... | 24.17 | 24.05 | 24.05 |
| Sept. ..... | 24.65 | 24.75 | 24.57 | 24.60 |

**Pacific Northwest Grain.**

PORTLAND, Ore., July 8.—Grain: July delivery bids: Oats, No. 2 white, $60; barley, standard feed, $52; A brewing, $54. Oats, No. 2, $60; barley, feed, $52; brewing, $54. Eastern oats and corn in bulk: Oats, No. 3, $55.50; 38-pound clipped, $56.50; corn, No. 3 yellow, $66.50; No. 3 mixed, $65; oats, No. 3, $55.50; clipped, $56.50; corn, yellow, $66.50; mixed, $65.

**Minneapolis Grain.**

MINNEAPOLIS, July 8.—Wheat—Receipts today were 127 cars, compared with 199 cars a year ago

Corn—No. 3 yellow, $1.60@1.70.
Oats—No. 3 white, 74¾ @75¾c.
Flax, $4.09@4.12.
Flour—Unchanged. Shipments, 45,390 barrels.
Barley, $1@1.20
Rye, $1.70@1.85.
Bran, $23.90.

## Live Stock Quotations.

**At Omaha.**

OMAHA, Neb., July 8.—Hogs—Receipts, 11,500; market, 5 to 10c higher; heavy, $16.45@16.60; mixed, $16.50@16.70; light, $16.50@16.80; pigs, $12@16; bulk of sales, $16.50@16.70.

Cattle—Receipts, 5200; market slow and about steady; native steers, $12@18.25; cows and heifers, $8.50@13; western steers, $9.50@14.75; Texas steers, $9@12.50; cows and heifers, $7.50@8.50; canners, $7@8.25; stockers and feeders, $8@12.50; calves, $8@13.25; bulls, stags, etc., $8@10.

Sheep—Receipts, 5900; market steady to stronger; ewes, $10@13.25; lambs, $14.50@17; yearlings, $12.75@13.50.

**At Chicago.**

CHICAGO, July 8.—(United States Bureau of Markets)—Hogs—Receipts, 33,000, unevenly higher, mostly 15c to 25c up; bulk of sales, $16.80@17.30; butchers, $16.95@16.70; packing, $16.30@17; light, $17@17.50; rough, $15.75@16.25; pigs, $16.25@16.60.

Cattle—Receipts, 16,000; best beef steers fully steady; cows, bulls and calves steady; heifers dull; packers and feeders dull. Beef cattle—Good, choice and prime, $16.50@18; common and medium, $11.75@16.50. Butcher stock: Cows and heifers, $7.85@14.50; canners and cutters, $6.85@7.85; stockers and feeders: Good, choice and fancy, $10.40@13; common and medium, $8@10.40. Veal calves, $10@18; choice, $16@16.75.

Sheep—Receipts, 15,000; strong to 25c higher. Idaho lambs sold at $18.75, very lightly sorted.

**At Portland.**

PORTLAND, Ore., July 8.—Cattle strong; receipts, 1779. Steers—Prime, $12@13; good to choice, $11@12; medium to good, $9@10; fair to medium, $8@9; common to fair, $5@8; cows and heifers, choice, $8.50@9; medium to good cows and heifers, $6@7.50; fair to medium, $4.40@5.50; canners, $3@4.50; bulls, $6@8; calves, $8.50@11.50; stockers and feeders, $7@9.

Hogs, 50c higher; receipts, 1068. Prime mixed, $17@17.50; medium mixed, $16.75@17.25; rough heavies, $16.25@16.50; pigs, $15.75@16.25; bulk of sales, $16.85@17.

Sheep dragging; receipts, 3107. East of mountain lambs, $13@13.50; valley lambs, $12@12.75; yearlings, $8@9.50; wethers, $7.50@8.50; ewes, $5@7.50.

**Spokane Stockyards, Monday.**

Hogs—Receipts 17, market steady to stronger. Prime light, $16.50@16.75; prime heavy, $16.35@16.50; rough heavy, $15.35@15.75; pigs, $15@15.75.

Cattle—Receipts 184, market steady. Prime steers, $12.50@13.25; good to choice steers, $11@12; medium to good steers, $9.25@10; fair to medium steers, $8.25@9.25; common to fair steers, $6.25@8; choice cows and heifers, $8.25@9; good cows and heifers, $6.25@7.25; common to medium cows and heifers, $5@6.25; canners, $3@5; bulls, $6@9; calves, $7.50@10.50; stockers and feeders, $6.50@8.50.

Sheep—Receipts none, market steady. Prime lambs, $14@14.50; good lambs, $12.50@13; prime yearlings, $8.25@9.25; prime wethers, $7.25@8; best mutton ewes, $5@8.

## Portland Market.

PORTLAND, Ore., July 8.—Wool receipts at the Portland warehouses were very large in the last week. All preparations are complete to begin valuing and distributing this week. Mohair prices have dropped back to 55 cents since competition between country merchants ceased. Growers are less disposed to sell at the present price.

The coarse grain markets were very quiet in the last week. At the close all prices were steady with sacked oats quoted at $60, bulk oats at $55.50@56.50, bulk corn at $64.50@66, brewing barley at $54 and feed barley at $52. The milling division of the food administration has issued notice to millers that after this month it will cease to exist.

The demand for cube butter has slowed down, but the market is fairly steady at 45 cents. Print prices are still being shaded by city creamery men.

There is the usual summer dulness in the egg market. Receipts are not large, but are sufficient for all purposes. The ruling quotation on current receipts is 37 cents. Poultry and dressed meats continue scarce and firm.

Oregon peaches are coming in more plentifully and the best Alexanders from The Dalles are selling at $1.25, while half-ripe stock drags at 75 cents. Local potatoes are in fair supply, but are rather small and immature.

Butter—Cubes, extra, 45 cents; prime firsts, 44c; prints, extras, 48c; cartons, 1c extra; butterfat, No. 1, 47c delivered.

Eggs—Oregon ranch current receipts, 37c; candled, 40c; selects, 42½c per dozen.

Cheese—Jobbers' buying prices, f. o. b. dock, Portland; Tillamook, triplets, 23½c; Young Americas, 24½c per pound; Coos and Curry, f. o. b. Myrtle Point; triplets, 23c; longhorns, 34c per pound; ¼c discount to Portland trade.

Poultry—Hens, 27c; broilers, 30@32c; ducks, nominal; geese, nominal; turkeys, nominal.

Veal—Fancy, 17@17½c per pound.

Potatoes—Oregon, Burbank, $1.50 per hundred; new California, 3½c per pound.

Hay—Buying prices, f. o. b. Portland; eastern Oregon timothy, $32@33 per ton; valley timothy, $27@28; alfalfa, $21@24.50; valley, grain hay, $24@26; clover, $21; straw, $9@10.

## Seattle Market.

SEATTLE, July 6.—In the produce markets there has been little change during the week. Prices have remained firm and shipments have been good, notwithstanding a car shortage in some sections.

More apples have arrived and are now selling at $1@1.50. This is a reduction of 25c on former quoted prices. Peaches are getting more plentiful, although the crop is not what was expected earlier in the season.

Butter will advance 1c per pound Monday.

**Purchasing Prices.**

Eggs—Select ranch, 40@42c per doz; Oregon, eastern Washington and Idaho, 37c per doz.

Butter—Fresh dairy, 30c per lb; butter fat, 50c per lb; baking, 30@35c per lb; raw milk, $2.25 per cwt.

## Butter and Eggs.

PORTLAND, Ore., July 8.—Butter—Prints, extras, 48@49c; cubes, extras, 45c; prime firsts, 44c; dairy, 34c. Butterfat, Portland delivery, No. 1 sour cream, 49@51c.

SAN FRANCISCO, July 8.—Butter—46½ @50c. Eggs—Fresh, extras, 48c; firsts, 41s; fresh, extra pullets, 46½c. Cheese—New firsts, 24½c; Young Americas, 25c.

CHICAGO, July 8.—Butter—Unsettled. Creamery, 38@42½c. Eggs—Hibher. Receipts, 10,230 cases; firsts, 36@37c; ordinary firsts, 34@35c; at mark, cases included, 33@36c.

## Spokane Market.

The fruit and produce market is beginning to feel the 25 per cent increase in freight rates. Bananas have jumped wholesale from 7 3-4 to 8 cents up to 8 1-4 to 8 1-2 cents. As a result dealers will have to pay 35 cents extra, including war tax, per hundredweight for freight, which amounts to $68 to $70 a car on bananas.

The next car of lemons will cost an extra $75 a car, which will be immediately reflected in the increased wholesale and retail prices.

Both the Standard Oil and Shell companies have raised the price of gasoline here to 25 cents, an increase of half a cent, as the result of the June freight rate, which has increased the cost of shipping gasoline products. Pearl oil, which formerly sold at 13 cents a gallon, now sells at 14 cents. Distillate has advanced half a cent a gallon.

**Beef**—Beef steers, 14½ @20c lb; cow beef, 12½15c lb; heifers, 16½ @17c lb; best loin, 25@33c lb; steer chucks, 11½ @12½c lb; prime ribs, 20@24c lb; rump and round, 19c lb.

**Mutton**—Breakers, 21c lb; wethers, 20c lb; **Lambs**—Diamond T. C. lambs, 28c lb; lambs, 27c lb.

**Pork**—Packer dressed hogs, 26@27c lb; pork loins, 30@32c lb; legs, 30c lb; shoulders, 25c lb; leaf lard, 28c lb; tenderloins, frozen, 40c lb; spareribs, 15c lb; country dressed hogs, with head on, 21c lb to producer; country dressed veal, 14c lb to producer.

**Smoked Meats**—Washington hams, 34c lb; T. C. hams, 35c lb; T. C. bacon, 46½ @48½c lb; Washington bacon, 39½ @43¼c lb; picnics, 24c lb; English bacon, 35c lb.

**Star Brand**—Hams, 35c lb; Shield hams, 33@34c lb; picnics, 24c lb; bacon backs, 25@34c lb; Star bacon, 46½ @48½c lb; Shield bacon, 40@43½c lb; Simon Pure lard, $17.50 case; Shield lard, tierces, 26½c lb; White Cloud compound, tierces, 26½c lb.

**Dry Salt Meats**—Clear bellies, 25½ @26c; lean backs, clear, 26½c lb; sides, 26c lb.

**Lard**—Tierces, 26¼c lb, $13.99@14.74 case; Diamond T. C. pure leaf lard, $15.50 case, $8 half case; Snowcap compound, tierces, 23c lb.

**POULTRY.**

**Live Poultry**—Live hens, 18@20c lb; spring chickens, 28@30c lb; roosters, 12½c lb to producers, f. o. b. Spokane.

**GASOLINE, LINSEED OIL, ETC.**

**Gasoline**—Red Crown, bulk, 25c gal, cases 35c gal; Shell, 25c gal; refined oil (Pearl), bulk, 14c gal, cases 23c gal; Eocene, 15½c gal in bulk, cases 26½c gal; engine distillate, 17c gal, bulk.

**Linseed Oil**—Raw, bbl, $1.73 gal, cases $1.91 gal; boiled, bbl, $1.75 gal, cases $1.93 gal.

**Turpentine**—Bulk, 79c gal, cases 99c gal.

**White Lead**—Strictly pure white lead in oil, ton lots, 12⅜c lb; 50-lb lots, 13½c.

**GRAIN AND FEED.**

**Rice**—Fancy head, $7.50@9.50 cwt.

**Flour**—Bluestem, $9.40; Blend, $9.40; graham, $8.65 bbl., 49-lb sacks; whole wheat, $8.85; eastern rye, $9.90; eastern rye meal, $10.30; oat flour, $12.15, 4 45-lb sacks.

**Oats**—$67 ton whole, $70 rolled, delivered in city; steam rolled No. 2, $65 ton.

**Corn**—$72 ton; cracked corn, $74 ton.

**Barley**—Rolled, $70 per ton.

**Oil Meal**—$75 per ton.

**Spokane Quotations on Hides.**

Green cows and steers, 25 lbs. and up, 11c; salted cured, 16c; green bulls and stags, 9c; salted cured, 13c; calf skins, up to 15 lbs., 25c; kip, 15 to 25 lbs., 17c; dry flint hides, 26c; dry salted hides, 2½c; dry calf skins, up to 7 lbs., 30c; dry sheep pelts, 30@40c; dry shearlings, each, 10c to $1; dry horse hides, each $1 to $2.50; green horse hides, each, $4@4.50.

## Hay Growers May Unite.

A movement is understood to be on foot in the hay-growing districts of central Washington looking toward the coordination of the efforts of the producers on both sides of the mountains. It is stated that a representative of the East Side producers will soon make a trip onto the West Side to consult with the growers there. There is also talk of devising some plan whereby the growers may, through cooperative efforts, get in direct touch with the consumers and thereby save much handling charges and middle men's profit. It is considered that the requirements of the army will considerably influence the hay marketing situation this year.

**San Francisco Produce Market.**

SAN FRANCISCO, July 6.—Butter, 46½ @50c.

Eggs—Fresh extras, 47½c; firsts, 41c; fresh extra pullets, 46c per dozen.

Cheese—New firsts, 23½c; Young Americas, 25c.

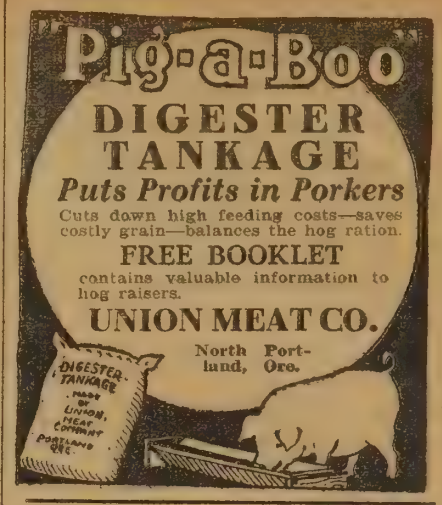
Poultry—Large hens, 29@31c; young roosters, 45@48c; broilers, 1 to 1½ lbs., 35c; broilers, 35@36c; pigeons, $2.50; squabs, 40@43c; geese, 21@25c; turkeys, live, 25@28c.

Vegetables—Green peas, 6½ @7½c; asparagus, 5@5½c; Summer squash, 75@85c; tomatoes, $1.15@1.25; lettuce, 15@20c; celery, $1.50@2; potatoes, new white, $1.75; sweet, 6@7c; onions, red, $1.25; yellow, $1.75; cauliflower, 40@50c; beets, $1.50@1.65; carrots, 90@$1; turnips, new, 65@75c; rhubarb, $1.75@2; cabbage, 1@1¼c; corn, $2.50@2.75; beans, wax, 4@5c; string, 5@7c; lima, 10@12c; okra, 12½ @15c.

Fruit—Cantaloups, standard, $2.50@3.50; watermelons, 2@2¾c; apples, $4@5; strawberries, $8@9; cherries, Bings, 8@12c; Royal Anns, 7@10c; blackberries, $7@9; raspberries, $8@10; peaches, 90c@1.15; gooseberries, red, 5@6c; black, 5@6c; apricots, 4@5c; pears, 75c crate; figs, black, $1@1.25; white, 75@90c; plums, 60@75c; grapes, $1.75@2.

**LINSEED.**

DULUTH, July 6.—Linseed—$4.13@4.14, July, $4.13; September, $4.19 asked; October, $4.14; November, $4.06.





WOOL

We are now allowed to buy wool from growers. Returns will be made subject to government price, less our profit of 1½ cents per pound.

Market price paid for hides, metal and rubber. Write for prices if interested. Prompt returns guaranteed.

PACIFIC HIDE & FUR DEPOT.
Joseph Thiebes and C. T. Symmes.
1191-09 Railroad Ave., Spokane, Wash.

FARM SERVICE WAR FLAG



A Flag for Every Farm Home in the Northwest

An Extra Small Star for Each Farm Worker

(Patent applied for.)

**Designed by the Washington Farmer in connection with The Oregon Farmer and The Idaho Farmer for the farm and farm home that is increasing food production in helping to win the war.**

OFFER NO. 2.

A farm service war flag, 9x22 inches, made of cotton felt (just the thing for the auto, front porch or the flag pole), will be mailed postpaid to any one sending us TWO SUBSCRIPTIONS TO THIS PAPER. Secure two of your neighbors under our special bargain rates and receive a bunting "Farm Service War Flag."

Send your subscriptions to

The Washington Farmer
617 Central Bldg.,
Seattle, Wash.
Review Bldg.,
Spokane, Wash.

## CORN IN ARGENTINA.

### Price Continues to Decrease.

The market for maize (corn) in Rosario is in an anomalous position and it is predicted that if the price continues to decrease corn will be burned as fuel in northern Argentina, is the report of Consul W. L. Bonney of Rosario. The ocean shipping situation is responsible both for the low price of corn and the high price of fuel. With the new crop of corn now coming on, and with no prospect of ready exportation, maize is selling for the equivalent of 54 cents per bushel at Rosario, and for correspondingly less in the remote interior districts. Hogs are not raised to any great extent in northern Argentina, and corn is not popular in any form for human food. The crop therefore is raised for exportation, and at present both wheat and linseed are preferred cargoes for outgoing boats, leaving the corn producer with an abundant new crop and without much probability of being able to export in quantities for many months to come. The lack of storage facilities and bags adds to the embarrassment of the situation. At the same time the price of hard coal, ton for ton, is more than double the price of corn, and the price of the best burning wood is but little less, ton for ton, than the price of corn. It is therefore entirely possible that in the country districts corn will be burned for steaming purposes the coming winter.

suggest that two things, good roads, and communicating system, would improve rural conditions greatly.

C. M. YEARRINGTON.

## Farm Labor Situation.

Colonel Clarence Ousley, assistant secretary of agriculture, in a recent address put the need for farm labor squarely up to the cities. "We have got to strip for war as England, France, Italy and Belgium have stripped," he said. "We can not win the war and maintain peace-time habits and conveniences. We can not win it by depending upon the men, women and children who are now on the farms and who are working from daylight to black dark.

"Last year in many agricultural regions where ordinary farm labor was not available on call the people of the towns and cities closed their stores and shops and offices for a day at a time or for such time as was necessary, and saved the crops. By concert this can be done anywhere without material loss to any business or any industry."

## Adds to Acreage.

W. W. Davis, who recently bought the Frock farm of 280 acres south of Palouse, has purchased an additional 80 from George N. Lamphere, paying $85 an acre. The land was isolated from Mr. Lamphere's other holdings, but joined Mr. Davis' farm, giving him 360 acres in a body.

**SHIP** your cattle where they will bring you the most money.

OUR northwestern customers have found Kansas City their best market. We specialize on Oregon, Washington and Idaho cattle.

WRITE or wire us for market information any time.

**WITHERSPOON-M'MULLEN L. S. COM. CO.**

**Stockyards Station.**
**Kansas City, Missouri.**

## The Farmers Record and Account Book

**Viewed from the most immediately pressing angle, The Farmers Record and Account Book furnishes an adequate and accurate basis for making complete income tax return to the government. Get one of these useful record and account books and keep the information and figures that you will need at the end of the year.**

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**The Washington Farmer**

**617 Central Building, Seattle, Wash. Review Building, Spokane, Wash.**

## CACTUS GROWING.

### Not a Success in Washington.

"From experiments made on cactus in various southern states, it has been found that it is not hardy where the winter temperature drops very low," says E. G. Schafer, professor of farm crops at Pullman.

Because of this limiting factor, Professor Schafer believes the cactus is not suited for Washington, although such use is periodically suggested by farmers and students of agricultural conditions. In confirmation of his opinion as to the climatic limitation on cactus growing, the Pullman man quotes Luther Foster of the New Mexico experiment station, who says: "The Burbank spineless cactus will not live through the winter here, although we seldom have it lower than 12 degrees and the ground is never frozen enough to interfere with plowing." T. Francis Hunt of the California station says: "Spineless cactus will stand a light frost, but when we have a rather cold winter, which is probably a medium winter in your state, the cactus is usually badly nipped by these frosts. If the thermometer gets down to 15 or 16 degrees many times during the winter, or even 20 or 21 degrees, I think it would be out of the question to think of attempting to grow this crop."

The Arizona station has come to the conclusion that alfalfa is a better forage crop for Arizona conditions than cactus, as the latter is made up largely of water and is deficient in protein.

After reviewing these findings in other states, Professor Schafer sums up the case for the cactus as a forage crop in Washington:

"The cactus has not been a dependable forage crop in southwestern United States, where conditions are fairly well suited for its production. In critical times and during a shortage of other foods it has been used to a certain extent with a fair degree of success. Investigations conducted and observations made in these states show quite clearly the limitations of the crop, and it would not seem at all likely that any of the numerous forms would be of value in the state of Washington."

**Recruits Get 60 Days' Leave.**

Sixty days' leave for farm work is being granted United States naval recruits at Providence, R I.

## Want Ads

### HELP WANTED—MALE 3

MARRIED MAN FOR FARM WORK; steady job for good teamster. Address A. C. Solle, Wilbur, Ore.

### EDUCATIONAL 45

EARN MORE. ENROLL ANY TIME, AT Behnke-Walker, Portland, northwest's biggest business college, because best. Graduates assured positions. Write for catalogue.

### TEACHERS' AGENCIES 46

TEACHERS REGISTER WITH B. F. WESTmore, Mgr. Hazard Teachers' Agcy. $1 registers you at three offices. 911 Old Nat'l Bank bldg., Spokane, Washington.

ALBERT TEACHERS' AGENCY, PEYTON bldg., Spokane. We need more teachers.

### HONEY, BEESWAX—Wanted. 58

SEND SAMPLES OF YOUR HONEY AND beeswax; state quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

### EGGS and BUTTER WANTED 59

WE ARE ALWAYS IN THE MARKET for good eggs and dairy butter. Send us your next shipment. Oregon Farm Products Co., 38 Halsey st., Portland, Ore.

### MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

Let us mail you one of our large illustrated catalogues No. 27 of sash, doors, frames, building paper, prepared roofing, plaster board, paints, etc.

We make screen doors and sash covered with heavy 28-gauge galvanized wire.

Stock size screen doors, $2 and up.

Odd size screen doors, 20c per square foot. Screen windows and sash, 15c per square foot.

We sell any one. Ship anywhere, and guarantee safe delivery.

Direct from our factory to you.

O. B. WILLIAMS CO.

1943 FIRST AVE. SO. SEATTLE.

SILOS—BARGAIN.

Four new 18x30 highest grade, hinged-rod-door, 150 ton silos, complete except staves, at 25 per cent below market; can include staves at cost; will sell one or all. Here is your chance to get that silo cheap. N. Ferwerda, 801 Old National Bank bldg., Spokane.

PRINTED BUTTER WRAPPERS

1st hundred 75c, postpaid; 40 to 70 per cent less in larger amounts. Sample and prices free. Hughes' Print Shop, Colville, Wn.

### MISCELLANEOUS WANTED 63

CASH FOR OLD FALSE TEETH—WE CAN pay as high as $21.50 per set (broken or not.) Send at once—package held five to fifteen days, subject to owner's approval of our offer. Highest prices paid for old gold jewelry, crowns, bridges, platinum, etc. United States Smelting Works, [illegible] Goldsmith bldg., Milwaukee, Wis.

## Want Ads

**Want Ad Rates 30c Per Line**

Want ads are run at this rate in The Washington Farmer and its associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

**Send for card giving lower rates for ads running one month or longer.**

**How to Figure Cost of Ads**

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

### MIS.—FOR SALE OR TRADE 66

WAR SACRIFICE SALE.

Clean general merchandise stock; on state highway; 35 miles Yellowstone Park; 20 miles railroad; good cash business; failure impossible. Write Clerk, Room 202, city and county bldg., Salt Lake City.

### JUNK SHOPS 90

HIDES HIDES HIDES

Write for prices and shipping tags.

BUYERS OF ALL KINDS OF JUNK.

CENTRAL HIDE & JUNK CO., SPOKANE.

### MACHINERY—FOR SALE 93

ATTENTION, RANCHERS.

If you could buy a new portable gas engine that develops 24 h. p. on the belt and 12 h. p. on the drawbar, and one with which you could do practically all your farm work for less money than you could buy a 15 h. p. stationary engine, would you be interested? If so, address G. A. Purdy, 802 E. Pike st., Seattle, Wash.

FOR FARM LUMBERING USE
"AMERICAN" PORTABLE SAWMILLS.
Carried in stock by
HIGGINS MACHINERY COMPANY.
312 1st ave. So., Seattle. Write for catalog.

### AUTOMOBILES 114

FORDS CAN BURN HALF COAL OIL, ALL distillate, or cheapest gasoline, using our 1918 Carburetor; 34 miles per gallon guaranteed; easy starting; great power increase; attach it yourself; big profit selling for us; 30 days' trial; money back guaranteed; styles to fit any automobile. Air-Friction Carburetor Company, 321 Madison st., Dayton, Ohio.

### STOVE & FURNACE REPAIRS 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

### HARES AND RABBITS 173

"A FORTUNE IN RABBITS"—HAVE raised the price. We will pay to $8 per pair. Want you to raise them for us. Send stamp for particulars. H. E. Gibson Co., Arcadia, Calif.

PURE BRED BELGIANS—DOES AND bucks, $3 each; pair, $5. Younger stock, 75c up. G. L. Green, Auburn, Wn., R. 1, B. 31.

RABBITS, MEAT PRODUCERS; HEALTHY. Several six months' old bucks. The Walter Ralee company, Riddle, Ore.

### LIVE STOCK 177

FOR SALE—FINE DAIRY HERD OF 60 extra good cows; mostly all high grade Holsteins; some full blood, but not registered; carefully graded up and bred to reg. bulls for the last 12 years. Also 1 reg. bull, 4 horses. Cueni & Gasser, Ridgefield, Wash.

FOR SALE—REGISTERED 3-YEAR-OLD Jersey bull. He will make a fine sire for your herd and is a bargain for the price asked. Crated and delivered to depot for $125. Write or send your check to O. H. Warner, Boardman, Ore.

BERKSHIRE SPRING PIGS OF CHAMpionship breeding for sale at reasonable prices. Send for circular giving description and price. R. W. King, Sweetwater, Idaho.

MANFORD HERO 2D, 634613, ROAN, calved Mar. 19, 1917; a vigorous, growthy Shorthorn bull; for sale at $200, crated, f. o. b. Fenn, Idaho. Wm. Mulhall.

EIGHT SERVICEABLE SHORTHORN bulls for sale; some carry large per cent of Sultan blood. H. J. Cortner, Hagerman, Idaho.

FOR SALE—TEN HOLSTEIN, SEVEN mixed Jersey cows; some fresh soon. Also nine heifers. Nick Johnson, Stanfield, Ore.

FOR SALE—80 HEAD HIGH GRADE Shropshire ewes and lambs. Seymour Shoultes, Marysville, Wash.

REGISTERED O. I. C. SWINE; BREEDING stock for sale. C. I. Ballard, Rickreal, Ore.

SHETLAND PONIES; BARGAIN PRICES. Write for list. N. C. Sorenson, Onalaska, Wn

### HAY FOR SALE 200

STOCKMEN! CAN FURNISH 500 OR MORE tons good hay in stack; Kootenai valley, Idaho; well-sheltered feeding grounds; plenty water; splendid range for grazing during summer near. Correspondence solicited. A. S. Nichols, Copeland, Ida.

### HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water. 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

GALAX HOTEL; NEW AND MODERN; 75C and $1. Main and Bernard, Spokane.

### FAIR PREMIUM LISTS 370

SOUTHWEST WASHINGTON FAIR, AUG. 26 to 30, 1918. Premium list now ready. Write G. R. Walker, Secy., Chehalis, Wash.

SPOKANE INTERSTATE FAIR AND LIVE Stock Show, Spokane, Sept. 2-7. Premium list now ready. Write W. L. Tennant, Secy., Spokane.

WASHINGTON STATE FAIR, SEPT. 16-21. Premium list now ready. Write Frank Meredith, Sec'y, Yakima, Wash.

TWIN FALLS COUNTY FAIR, OCT. 1-4. Premium list now ready. Write J. M. Markel, sec'y, Filer, Idaho.

### RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

### ARTIFICIAL LIMBS 424

SCHINDLER ARTIFICIAL LIMB CO., 8115 Wall st., Spokane, Wash.

### BUSINESS OPPORTUNITIES 516

SPLENDID OPPORTUNITY TO ENTER retail automobile accessory business; good location and cheap rent; business established. D 9, Farm Trio, Spokane.

### PLUMBING, STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

### SEEDS 620

WE SPECIALIZE IN TIMOTHY, ALFALfa, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Ida.

### FARM LANDS—FOR SALE 651

ATTENTION, LANDBUYERS!

Here's an excellent proposition:

40-acre farms, selling for $25 to $35 per acre; long-time payments, 6 per cent interest; in the best agricultural part of Snohomish county, where you have all the modern conveniences—paved roads, railways, schools, churches, mills and factories. This district has proven its worth by the many successful farmers now located there.

We also have some beautiful 10-acre water-front tracts.

OPPORTUNITY knocks at every man's door ONCE, but, believe me, it does not continue to knock forever, nor does it pound the door down. For further information address the owners, BROWNELL LAND CO., 904 Third ave., Seattle, Wash.

EASY TO PAY FOR GOOD LAND AT $40, ON TERMS OF
$1 CASH PER ACRE.
50C PER ACRE MONTHLY.

Interest on deferred payments 6 per cent. BUY 20 acres or more at $40 an acre on the above terms, in LEWIS COUNTY, south of CHEHALIS, on the main double track line between Seattle and Portland, the N. P., the G. N. and the O.-W., the best transportation in the state.

FINE, LEVEL LAND, SILTY CLAY SOIL, NO ROCK, NO GRAVEL, CLOSE TO RAILROAD AND PACIFIC HIGHWAY, LEWIS COUNTY, SOUTHWEST WASHINGTON. FREE CIRCULAR. Write to
DAVID P. EASTMAN,
1024 THIRD AVE., SEATTLE.

9 MILES FROM CENTER OF SPOKANE. 70 acres; on paved Appleway, Spokane valley; 30 minutes' ride on electric R. R.; station on place; finest black loam soil; private well for irrigation; 50 acres cultivated, balance natural sod; road on all sides; no buildings. Price $12,000. Will take $5000, other real estate. Your own terms on balance, 6 per cent. Absolutely in choicest district. Best located tract in Spokane valley. If you see this, you will want it. Don't delay.

HOUSE AND LAND ASSOCIATION.
514 RIVERSIDE. MAIN 3079.
SPOKANE, WASH.

160 ACRES; STEVENS COUNTY; 45 UNDER cultivation, in crop; 30 acres slashed; all fenced; family orchard set out this spring; 7 miles from Colville, 3 to ry., on mail route. 20 rods school; running water and well; 1 good young team, harness, wagon, sleds, harrows, plow, blacksmith outfit and tools; 5 No. 1 milch cows, 3 calves, pigs, turkeys, chickens. Price $6500, or will trade for small, well-improved place in western Wash. up to $4500, balance cash. An ideal place to raise stock; lots of open range. Write to owner, John F. Matheson, R. 1, Box 7, Orin, Wash.

DESIRABLE DAIRY RANCH, 200 ACRES; 80 a. best river bottom; well improved; 28 well-graded dairy cows (has honor cow and honor herd in all cow-testing associations in Oregon in March); 13 yearlings and calves, good Jersey sire, 3 good horses, 20 shoats, 2 good brood sows, 60 hens, etc.; 12-room house, in good repair; outbuildings; good fences; income tax reports show $4000 gross income, 1917; $20,000; $8000 down, balance 10 years, 6 per cent. C. E. Ricker, Reedsport, Ore.

480 ACRES IN SHIELDS RIVER VALLEY, wheat and hay farm; good water right; 98 per cent tillable; 300 acres broken; running water; large barn, 3 granaries, chicken house, hoghouse, garage, frame house; schoolhouse on same section; telephone, mail route; 8 mi. from R. R. town. Price $50 per acre. Easy terms. Write owner, Guy T. McBane, Wilsall, Mont.

IDEAL SHEEP OR STOCK RANCH.

80 acres; in Nevada; with excellent outside range; fine location and good improvements; a bargain worth investigating. Address Dr. W. F. Boylan, owner, Amos, Nev.

FOR SALE—363-ACRE STOCK RANCH; 250 a. cultivated; 6-room plastered house and other buildings; ½ mile from school; $35 per acre. Write owner, J. A. Sipe, Midvale, Idaho.

### FARM LANDS—WANTED 654

I WANT TO HEAR FROM OWNER OF farm or unimproved land for sale. Mrs. W. Booth, Pulaski, Iowa.

WANTED—TO HEAR FROM OWNER OF farm or unimproved land for sale. K. Hawley, Baldwin, Wis.

### FOR SALE OR EXCHANGE 702

FOR SALE—160 A. MONTANA WHEAT land. Would exchange for logged-off land of equal value near Spokane. A. B. Gaylord, owner, Roundup, Montana. No agents.

**In answering advertisements don't fail to mention this paper.**



Jordon valley is famous as a sheep feeding section.



Cutting native hay on the William Skinner ranch, Jordon valley. This land has never been plowed nor seeded.

*A new country with an "even break" for all.*

# Jordon Valley, Oregon

## *"The Heart of the Range"*

*Land of proven worth at attractive prices.*

### *The Cry for Food*

The world is calling for food. Our country is organized as never before to help you produce it and sell it at a fair profit. The appeal is insistent, earnest and direct to you. Stock raising and farming offer an opportunity both for patriotic service and personal gain. Can you ignore it?

### *Jordon Valley Awaits You*

The Jordon Valley Project embraces approximately 38,000 acres of fine agricultural land situated in the center of one of the most extensive grazing and free range sections in the northwest. The land is now being placed under irrigation through the construction of a reservoir, main canal lines, etc., which are being built under the general direction of the state engineer of Oregon by a construction company that is bonded to the amount of $100,000 as a guarantee to the state and to the settlers that the irrigation works will be properly built within a specified time, and the entire completed system turned over to the land owners, ready for operation. Jordon valley is situated in the east central part of Malheur county, Oregon, and extends for a distance of about 30 miles in a westerly direction from the extreme eastern boundary of Oregon, following the general course of the Jordon river, which is one of the main tributaries of the Owyhee river.

### *Many Natural Advantages*

From the standpoint of general farming and stock raising there are few locations that offer the many natural advantages to be found in Jordon valley. Surrounded as it is by a very large free range for stock grazing, with a long growing season and climate and soil especially adapted to raising grain and hay, with mild winters and an abundant water supply both for irrigation and domestic use, the valley presents unusual inducements to the homeseeker and farmer wishing to engage in general farming and stock raising, and also offers ONE OF THE REMAINING OPPPORTUNITIES FOR ACQUIRING GOOD FARMING LAND AT A LOW PRICE, direct from the government or the state, or from railroad grants which have heretofore been held in large ownership without development.

### *The Irrigation System*

The irrigation system, which is already partially constructed, is being built under the general direction of the state engineer of Oregon and the work is in direct charge of one of the leading irrigation engineers of the northwest—a man who demonstrated his ability as chief engineer of both the north and south side tracts of the great Twin Falls (Idaho) country. The interests of prospective settlers are being carefully guarded by the laws of the state of Oregon and every effort is being made to secure an irrigation system for these lands that will be the most efficient and will render the best service to the farmers that can possibly be obtained. A reservoir with capacity of storing 127,000 acre feet of water, or sufficient to water 40,000 acres, is one of the features of the system. Large feeder canals, a system of main canals, headgates, diversion works—everything to insure a safe and efficient system—is being constructed. We will mail you descriptive matter concerning the project and the irrigation system in detail, if you will make your desire known.

### *Rich, Virgin Soil*

The Jordon valley is an extensive winter feeding ground for cattle, sheep and horses, and the numbers fed there in the past will be largely increased by the development of the Jordon valley farms. Nature has blended soil and climate and put water within easy reach of Jordon valley. The engineers are leading the water from the natural beds to the lands we are now offering for sale. These lands, under our development, will begin to do what an All-Wise Providence intended they should do—produce food for man and beast, and produce it in abundance. The land can be bought now, not only at a low price, but on easy terms. Now it is in sagebrush—it is virgin soil—well stored with nitrogen, potash, phosphorous, lime and other essentials for plant food, and unlike most sagebrush lands, the soil is already supplied with considerable humus, due to the fact that there is a good growth of grass in the sagebrush which not only supplies humus to the soil, but makes splendid spring pasture for stock. Cattle, horses and sheep are always fat in Jordon valley—and it necessarily follows that stock men are always prosperous there. But the most prosperous of all will be the farmer who raises his own grain and hay to supplement the grazing that is all around him. During the winter months is when the hay will have the most value to the farmer-stockman for feeding his own stock and to be sold in condensed form.

### *We Want You to Investigate*

We want you to investigate Jordon valley, then see it. Our automobiles leave Boise, Idaho, twice weekly and they are at your disposal. If you want to get into a new country where land is cheap, water plentiful and climate favorable, this is the place to go. We desire to continue our policy of colonizing this land with earnest, industrious people who will make dependable, permanent settlers. If you are interested, drop us a postal card right now and we will send you detailed descriptive matter. Address all communications to

# JORDON VALLEY FARMS

**524 Idaho Building**

**P. O. Box 1214**
**BOISE, IDAHO**

**Harley J. Hooker**
**Sales Manager**

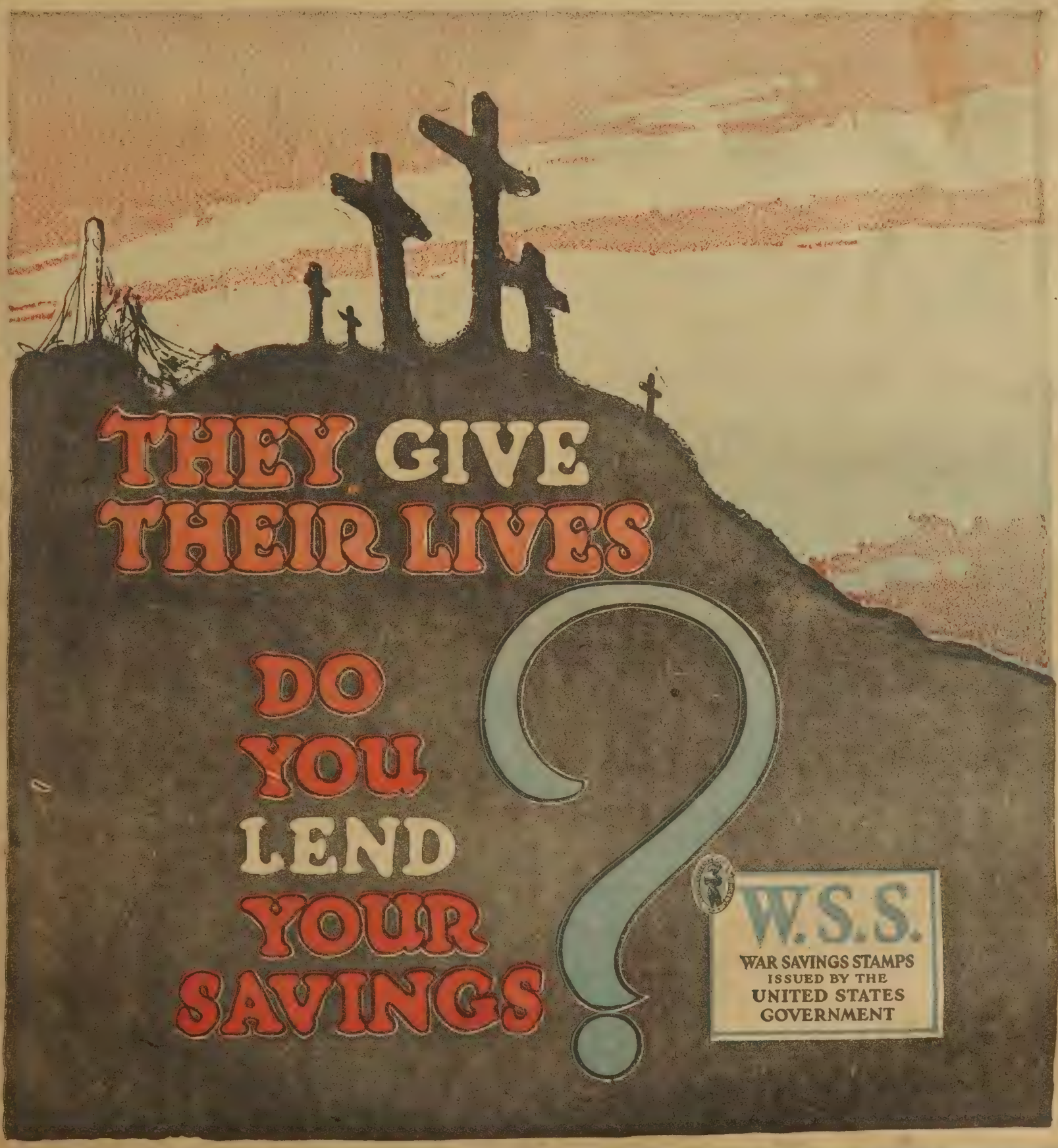
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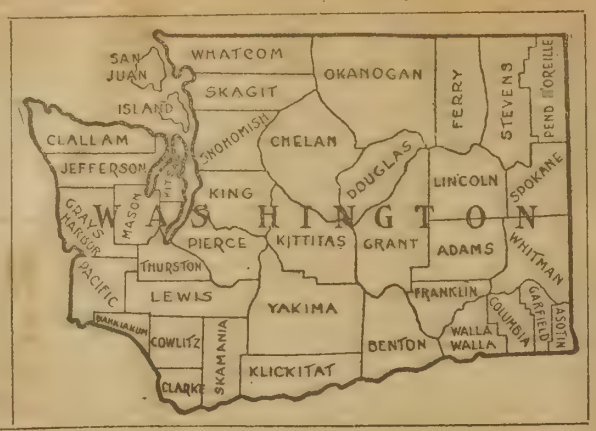
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XLI. NO. 29. JULY 18, 1918. ** WEEKLY.



# Whitman Fall Wheat Ripe

## Spring Grain Is Not Far Behind—Crops Smaller but of a Better Quality Than a Year Ago—Pastures Poor; Must Feed Stock




LA CROSSE, Whitman County, Wash., July 7.—Wheat is the principal crop here. While it is a little too early to estimate, would judge the quantity may be slightly less, but the quality better than a year ago. There are some exceptionally good fields of wheat, but the drouth and heat has done considerable damage. When it is considered, however, that there has been a rainfall of less than 10 inches from July 1, 1917, to date, it is really a wonder that we have any crop at all. The most serious consideration right now is pasture, which has been poor all spring, and now it is a case of feeding stock until fields are harvested. Fall wheat is ripe and spring wheat is not far behind. Harvest will start next week and by the 15th to the 20th it ought to be general. There seems to be plenty of machinery, but am afraid the help problem will be more serious than expected. M. E. SCHRECK.

### Have Had but Little Rain.

SOUTH BEND, Pacific County, Wash., July 8.—The principal products in this county are dairy products. The shortage in labor is partially overcome by the use of machinery. Five milking machines are in use in the valley. Tideland pasture is nice and green, but the upland pastures are drying up. We need rain badly. Since the 1st of June we have had only .17 of an inch and the average rainfall for June is 2.50. The gardens are almost at a standstill and the fruit seems to be small—that is, the berries of later varieties. The dry weather was excellent for hay and for the strawberry crop. A trebling is expected from the cranberry crop this fall. The prices are higher than ever. The growers will market their product through an exchange. Last year this plan was tried and it proved so satisfactory that the cranberry growers, association agreed to try it again this year. An interesting experiment in the use of fertilizers has been tried by some of our market gardeners. They find that a small portion of commercial fertilizer mixed with barnyard manure helps the garden crops to mature from one to two weeks earlier than those simply fertilized with the barnyard fertilizer. The main crop of potatoes will be light, also later vegetables if we do not have a good rain soon. Our community life could be helped greatly by small fairs this fall. A little diversity like this would be welcomed, for every one is working hard and vacations and pleasure trips seem to belong to a different age.
MRS. WINNIFRED BUCKINGHAM.

### All Pulling Together.

CASTLE ROCK, Cowlitz County, Wash., July 9.—Farmers of this community are nearly finished with their hay crop and have started in to gather the remainder of grain oats, barley and in some cases wheat, the latter being a good crop considering the dry season, which goes to prove that no amount of research will make an exact science out of farming. There seems to be enough help such as it is to do the work on the farms. Women are putting on the coveralls, working in the fields and leaving their kitchen work for a later hour and sometimes for the next day. It is a noticeable fact that all rule and regulation has been lost in the shuffle for the general pull together for gathering the crops, harvesting the berries and giving the available men a chance to work in the shipyards. Machinery, however, has entered into prominence and takes the place of men and horses. The prune crop promises to be a banner one this year at good prices. Orchard men are cleaning out the dryers, fixing up the boxes, getting ready for picking. Help is bound to be scarce this fall during the prune season, but with the boys and girls that will take jobs, it will loosen up the stringency. Roads are in first class condition. The dry weather has cut the feed in the pastures down to a small part of the necessary feed. Butterfat has raised to 50 cents. Eggs are 50 cents and not enough to supply the local demand. The corn for silo filling is small, but has time to develop before winter sets in. Farmers are organizing community clubs for testing out the different methods for handling the crop, combating with insect pests, especially the aphis and black rot in the potato, and with these branches cow testing has taken a prominent part. Hay is selling from the field for $25 per ton. Old potatoes are $1.50 per cwt., owing to the stringency of feeds for stock. Farmers are disposing of the hogs and surplus cows. C. C. BROWN.

### Grain Crops About Half.

COLVILLE, Stevens County, Wash., July 5.—The principal crops of this county are as follows: Wheat, oats, barley, alfalfa, timothy, mixed grasses, apples, pears and cherries. I think from what I have seen of the crops that the cereals will produce from one-third to one-half of the normal crop this year on about two-thirds of the acreage that was planted. Part of the crop will be cut for hay and a part of the acreage will not get far enough along to make hay. The alfalfa is making from one-third to one-half of a crop on the acreage that is not irrigated, and that is most of the acreage that is in. The dry weather last fall and the cold, dry spring kept the alfalfa back until the moisture that was in the ground was lost. The timothy crop in a large part of the county has been almost a total failure because of the dry weather, and also on account of the attacks of a new pest that has been especially bad because of the dry weather. The mixed grasses are producing about a half crop. In the fruit-growing districts the apple and pear crop seem to be good. The cherry crop will be short. The market value and the net value for most of the crops are going to be high because of the great crop shortage in the county. There is going to be plenty of men and other essentials for the same reason. The thing that I would recommend for the county would be that every farmer plan on raising everything that he needs for the home and everything that he needs in the way of feed for his live stock and then keep enough live stock of good grade to use all of the feed that he raises. Some years he will have extra feed and some years he will have to buy feed or sell live stock in order to have things even up; but on the whole this system will save a great deal of expense to the farmer.
E. C. DURDLE.

### Field Peas Yield Well.

PORT ANGELES, Clallam County, Wash., July 2.—The principal crop here is field peas and the yield will be about 50 per cent more, owing to increased acreage. The market value probably will be about 20 per cent higher owing to increased cost of production. The harvest of the hay crop has commenced and we think there are enough men to handle it, also we think we have enough harvesting machinery and it is in good repair. Our roads in Clallam county are of high standard. As to the most popular thing recommendable for improvement of conditions and welfare, I should say the organization of granges and cooperative districts with the object in view of purchasing and owning of traction plows would be most essential, for this is absolutely necessary for the development and consequent prosperity of rural life.
J. P. CHRISTENSEN.

#### Dogs Must Have Fish.

The connection between fish, dogs and mail in Alaska is shown in a letter recently received at the postoffice department in Washington from a mail carrier in Alaska. "The whole trouble is on account of my dogs," he writes in explanation of late mail. "I was and am still unable to get fish for them. The dogs I use are wolf dogs that have worked on fish all their lives and it is almost impossible to change their diet and work them."

#### Increased in Beet Sugar Production.

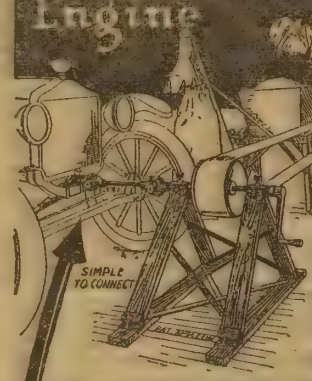
A large number of Belgian sugar workers are now residing in Canada, and beet production is increasing

#### Irish Clerks Strike for Bonus.

Mayo county (Ireland) council clerks have been on a strike for a war bonus of $1.25 a week.


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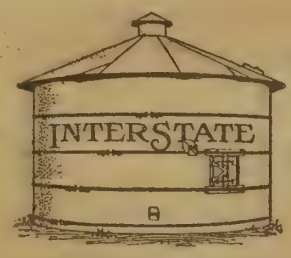
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Address .....
R. F. D. .....

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and ask you to mail to me full information and
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describing the possibilities of Stevens county logged-off lands.

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Address .....

CUT OUT THIS COUPON
and the booklet and information will be sent to you by return mail.

**Phoenix Lumber Co.**
Farm Dept.,
SPOKANE, WASHINGTON

ENCLOSED please find coupon and five cents for Farm Service Flag. We have rented a ranch and are trying to do our bit with ducks, fowls, cow and pigs. My husband is a L. L. L. L. member, working in a saw mill. We are longing for "victory with honor." The zeps passed over my mother's home in Suffolk, England, three times in one week. We are eagerly awaiting the flag.
MRS. F. N. VAN SCOYOE.
Napavine, Wash.

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 29 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF July 18, 1918

## President Vetoes $2.40 Wheat

### *Says Neither Principle Nor Expediency Warrant It*

Efforts on the part of wheat producers, their senators and representatives in congress and western commercial organizations, failed to induce President Wilson to sign the bill passed a week ago increasing the price of wheat from a $2.20 minimum to a $2.40 minimum. Statements from the national capital say that western senators and congressment will endeavor to pass the agricultural appropriation bill, which included the $2.40 wheat price, over the president's veto, but there appears no possibilities that the measure could be so enacted without striking from it the wheat price feature.

Following the statements from Washington that the president would not sign the measure, farmers' unions and other organizations appealed both to President Wilson and Secretary Houston of the department of Agriculture, urging the signing of the measure. The president, however, vetoed the measure on July 12. The following is his veto message in which he states his objections to the increased wheat price:

"I regret to return without my signature so important a measure as H. R. 9054, entitled an act making appropriations for the department of agriculture for the fiscal year ending June 30, 1919,' but I feel constrained to do so because of my earnest dissent from the point of view of principle as well as wise expediency from the provisions of that part of section 14 which prescribes a uniform minimum price for No. 2 northern spring wheat of $2.40 a bushel.

"I dissent upon principle because I believe that such inelastic legislative price provisions are insusceptible of being administered in a way that would be advantageous either to the producer or to the consumer, establishing, as they do, arbitrary levels which are quite independent of the normal market conditions, and because I believe that the present method of regulation by conference with all concerned has resulted in the most satisfactory manner, considering the complexity and variety of the subject matter dealt with.

"It is evident that the present method of determining the price to be paid for wheat has had the most stimulating effect upon production, the estimated crop of spring wheat for this year exceeding all high records in a very remarkable and gratifying way. By an overwhelming majority of the farmers of the United States the price administratively fixed has been regarded as fair and liberal and objections to it have come only from those sections of the country where, unfortunately, it has in recent years proved impossible to rely upon climatic conditions to produce a full crop of wheat, and where, therefore, many disappointments to the farmer have proven to be unavoidable.

"Personally, I do not believe that the farmers of the country depend upon the stimulation of price to do their utmost to serve the nation and the world at this time of crisis by exerting themselves to an extraordinary degree to produce the largest and best crops possible. Their patriotic spirit in this matter has been worthy of all praise, and has shown them playing a most admirable and gratifying part in the full mobilization of the resources of the country. To a very greatly increased production of wheat they have added an increased production of almost every other important grain, so that our granaries are likely to overflow, and the anxiety of the nations arrayed against Germany with regard to their food supplies has been relieved.

"The administrative method of agreeing upon a fair price has this very great advantage which any element of rigidity would in large part destroy, namely, the advantage of flexibility, of rendering possible at every stage and in the view of every change of experience a readjustment which will be fair to producer and consumer.

**Raise Price of Flour.**

"A fixed minimum price of $2.40 per bushel would, it is estimated, add $2 per barrel to the price of flour; in other words, raise the price of flour from the present price of $10.50 to $12.50 at the mill, and inasmuch as we are anticipating a crop of about 900,000,000 bushels of wheat this increase would be equivalent to the immense sum of $387,000,000.

"Such an increase of the price of wheat in the United States would force a corresponding increase in the price of Canadian wheat. The allied governments would, of course, be obliged to make all of their purchases at the increased figure, and the whole scale of their financial operations in this country, in which the government of the United States is directly assisting, would be thereby correspondingly enlarged. The increase would also add very materially to the cost of living, and there would inevitably ensue an increase in the wages paid in practically every industry in the country. These added financial and economic difficulties, affecting practically the whole world, can not, I assume, have been in contemplation by the congress in passing this legislation.

"WOODROW WILSON."

President Wilson's objection to $2.40 wheat springs in part from a belief that the increased price would entail a proportionate increase in the price of bread; but as former State Senator R. C. McCroskey of Garfield, Wash., points out, that fear was unfounded:

**The main cost of the loaf is the labor and material that enter into the composition outside of the flour. These will not be increased by an advance in the price of flour. The increase in the price of the loaf of bread will be only raising the price of wheat from $2.20 a bushel to $2.40 a bushesl. It costs no more for labor and material outside of flour to manufacture a loaf of bread out of high-priced flour than it does out of low-priced flour.**

A great deal of nonsense has been heard about the American farmer "rolling in wealth" on the profits of $2 wheat, but the hard truth is that the business of producing $2 wheat in the Pacific northwest since the United States entered the war is more precarious than was the growing of 60-cent wheat here 20 years ago. Production costs of all kinds have about trebled in 20 years, and the yields are not quite as abundant as they were on the newer soil.

Some farmers in the more favored sections have done well on $2 wheat, but many others have found scant profits at the end of the year, and a considerable number have actually gone "in the red."

Another important point ought to be kept in mind at Washington. The American nation and our allies must look to the western United States for wheat to be exported to the allied armies and nations. Production can not be greatly stimulated in the eastern states of the Union. Heavy wheat production lies west of the Mississippi; heavy consumption east. If it were not for wheat grown west of that river, the populous states east of it would have to turn to foreign sources for a great part of their supply, for they do not grow enough for their own needs.

The force of that fact comes home to us when we consider the United States department of agriculture records of wheat production in 1917. Of the total wheat crop in 1917, states west of the Mississippi grew 417,617,000 bushels, and states east of that river grew but 233,211,000 bushels. Here is the western record by states in bushels:

| | |
|---|---|
| Minnesota | 57,965,000 |
| North Dakota | 56,000,000 |
| South Dakota | 52,024,000 |
| Kansas | 45,934,000 |
| Oklahoma | 35,650,000 |
| Washington | 29,218,000 |
| Missouri | 27,540,000 |
| Montana | 17,963,000 |
| Texas | 16,200,000 |
| Idaho | 13,830,000 |
| Nebraska | 13,764,000 |
| Colorado | 13,536,000 |
| Oregon | 12,811,000 |
| California | 7,425,000 |
| Utah | 5,650,000 |
| Wyoming | 4,206,000 |
| Arkansas | 3,360,000 |
| New Mexico | 2,582,000 |
| Nevada | 1,140,000 |
| Arizona | 825,000 |

A study of these figures shows that it is sound public policy to let the western farmers take a generous price for their wheat. To them the government must look for all its exports, and also for wheat to feed the people living east of the Mississippi. But the western areas from which this wheat must come have had now two unfortunate years of light yields. In many districts crops failed in 1917, and again in 1918. Farmers are becoming discouraged and will need encouragement next year.

With these conditions confronting the nation, it is poor judgment for the government to deny the producers and the greatest stimulus possible for maximum production.

## Harvest Wages Create Problem

With harvest beginning in several sections of the state, and the grain in other parts rapidly ripening, the harvest wage scale is prominent in the discussions of threshermen and farmers.

Meetings have been held in several, if not all, of the grain growing counties and wage scales worked out. In general they vary only a little and it is probable that the scale adopted by southern Spokane county threshermen and farmers will be about the general wage paid. The scale adopted for Spokane county is as follows: Common hay hands and pea shockers, 10-hour day, $3; boys, 14 to 16 years old, 10-hour day, $2.50; shockers of bundle grain, 10-hour day, $3.50; common harvest labor, 12-hour day, $4; harvest field cooks, $3.50; sack sewers, 12-hour day, $5.50; man, team and wagon, $6; team and wagon alone, $2.

Some of the counties have adopted a wage based on the 10-hour day with time-and-a-half for overtime. While the daily wages for the 10-hour day appear to be lower than the wage paid where 10 hours was not used as a basis, additional wage for overtime makes the total about the same.

B. A. Hunter, federal labor representative with headquarters at Spokane, says that harvest wages during the last years have been regulated largely by the wages paid in the woods for timber work. The harvest wage, he indicated, is usually the same with board free, whereas in the timber camps the workmen are charged for their board. The wage in the woods this year for common labor, he says, is in general $4.

Under the leadership of the county agents and others directly interested a system is being worked out in the grain growing counties of the state whereby there will be in each locality one man designated to cooperate with the county agent and with the 140 or so labor bureaus throughout the state in placing the men available where they are needed. It is urged that farmers or threshermen needing help anticipate their needs a day or two ahead and send in their applications one or two days before the men are actually needed.

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## Can Get Sugar

### The System Worked Out Is Simple

The widespread feeling that it is a difficult thing for farmers to secure more than 25 pounds of sugar for canning purposes is not justified by the facts, say food administration officials. Reports indicate that many farmers are under the impression that they have to present a lot of technical proof that they have used their first or second 25-pound lots of sugar economically in canning and preserving before they will be allowed to get an additional 25 pounds.

While it is absolutely true that the sugar obtained for canning purposes must be used for those purposes only, the written statement of any one that he needs an additional 25 pounds and will use it for canning purposes is all that is required to secure the additional allowance.

There is no absolute rule allowing a family just 100 pounds of sugar and no more, though it is a general policy that that is about an adequate supply. Members of the food administration point out that small families do not need that much sugar, while there are perhaps cases where large families need more than that amount for the season's fruit conservation.

The general policy throughout the state is that the county food administrator appoints one person in each small locality throughout his county to whom the local people may apply for their sugar permits. These local representatives are authorized to grant the permit, which can be taken to the local dealer, who will, upon its presentation, fill the order. While there is no set form for application for sugar, one something like the following would be sufficient where it is necessary to write to the local representative of the food administration instead of going in person to make the application:

I hereby state that I have, up to this time, secured ..... pounds of sugar for canning purposes and that I have used or am using it for that purpose only. My canning needs require that I have 25 pounds additional. There are ..... members in my family. I therefore apply for a permit to purchase 25 pounds more sugar for canning purposes only.

The permit will be granted in the form of a card which reads something as follows:

**Repurchase Permit.**

Upon the representation that the sugar heretofore purchased by the person hereinafter named for the purposes of canning and preserving has been actually used, and that an additional supply of sugar is needed to meet the requirements of said person for canning and preserving, this season, ..... of ....., Washington, is hereby authorized to purchase not to exceed 25 pounds more of sugar for the purpose of canning or preserving only, and subject to all the limitations and conditions under which the original purchase was authorized.

Date .....1918.

COUNTY FOOD ADMINISTRATOR.

### THRESHING IS HIGH.

### Crop Condition Is Big Influence.

With harvest already on in some districts and the grain rapidly ripening in others the question of the price for threshing is taking attention. Owing to the great difference in the quality of crops, no general price seems to prevail. A report from Waterville says that the price there will be about 15 cents a bushel straight. Farmers and threshermen at a meeting at Waverly recently agreed upon a price of 15 cents a bushel for grain threshed in bulk and 35 cents a sack for grain sacked.

### Flax Needs Rain.

A report from Gifford, Wash., says that if a little rain were received soon the flax in that district would yield reasonably well, some of it producing as much as 20 bushels to the acre.

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## *Our Mistakes in Marketing*

It is not strange that we have made mistakes in the marketing of our products, there have been so many problems entering into the question and so many systems in conflict with one another. But it would seem that we had paid enough and learned enough not to consign our fruit to representatives of unknown, or irresponsible firms when there are buyers and commission houses with whom we are acquainted, and on whom we can with reasonable safety rely. "If a man fools me once, that is his fault. If he fools me twice, that is my fault."

IT would not be a bad idea to dedicate a calf or a colt or a part of the grain field to the purchase of war savings stamps.

## *Strength of the Moral Order.*

Justice is the only right for beings with a moral sense.

Below the moral order are plants, beasts and fishes, where might is right.

We are now testing the strength of the moral order as developed in human nature. If man on this earth is sufficiently evolved Prussianism will be defeated. If not, then the race will require another period of evolution before right becomes dominant.

Let no one deceive himself by thinking God will fight the battles for those who represent the highest ideals. God expresses through human agencies, and can only give such expression as men are sufficiently evolved to manifest.

G. L.

WHEN we sing "Three Cheers for the Red, White and Blue," we are singing for the Union Jack of Great Britain and the tri-color of France, as well as our own Old Glory. Hence, we can sing it three times as lustily as heretofore.

## *Yakima Agricultural History*

The remarkable development of the Yakima valley is broadly sketched by a staff correspondent of the Farmer. From the time, in 1860, that F. Mortimer Thorp, bringing in a herd of 250 fine Durhams and becoming the first settler of the valley, to 1917, when 1545 cars of live stock were sold for $4,000,000, there is included a great story of agricultural progress.

Looking back to the past from the vantage ground of the present, it is evident that practically every branch of agricultural activity which today contributes its share to the payroll of Yakima valley, had its beginnings, humble and unpretentious enough in most instances, back in the late '60s and early '70s. What men are doing on a big scale and with the assurance of success now, was done in smaller measure and tentatively then. And if the physical presence of these sturdy pioneers has passed on, their spirit is as potent in these strenuous days of 1918 as it ever was—for Yakima valley is typically American, and is doing its share to supply both men and food for men in the great war against darkness and the forces of evil.

THE building of American ships as a war measure will, after the war, place us in position to take first rank in ocean production and transportation.

## *Universal Social Justice*

It is a long road from savagery, where might made right, to universal social justice. We have come politically through gens, tribes, monarchies, republics and democracies. We have come economically through individualism, barter, trusts, combines, and are now trying out the collective or government management of railroads and other industries.

We are learning as a result of the war some of the most important lessons of human history. We are learning how all things are inter-related, inter-active and inter-dependent. We are learning one of Newton's mathematical laws, that "everything affects every other thing, according to the size, and inversely according to the square of the distance." We are learning Herbert Spencer's law of the "persistence of relations among forces." We are learning what moralists would teach us, that "mankind must be considered as a whole, not as an aggregate of individual units, each and every one working for himself." We are learning what Theologians would teach us, "the universal fatherhood of God, and the universal brotherhod of man."

AFTER all, the great mass of the people are sane and steady. Only a few at each extreme are making the troublesome noise.

## *The Menace of the Weeds*

How to deal with the problem of the weeds, and the weed seed nuisance, is just as pressing as ever, and seems little, if any, nearer of solution.

Not only are the highways, streets, sidewalks and public places, all too frequently lined with unsightly and menacing weeds, but farms, private lots, parking and lawns are far from being exempt.

The condition is too often aggravated by the use of irrigation water, so much so, in fact, that a nice lawn is almost out of the question where ditch water is used for irrigation. Noxious seeds are almost certain to be distributed through the main canals and laterals, and there seems to be no way to avoid this, excepting by a state-wide campaign, and united effort.

Civic pride should, and will, appeal to some people, and they can always be relied on to assist in such a movement, but there are far too many who appear to be indifferent to it. Local laws providing for weed control, or extermination, are in the right direction, but are so limited in their scope as to be only partially successful. Some plan must be thought out that will deal with the noxious weed as a public nuisance and an economic menace, and hence put under the ban the individual, association, or organization, no matter what the name, or title, that is in any way responsible for its growth.

The discussion of this subject is suggested and provoked at this particular time of the year, when weeds are seen nearly everywhere, as one passes along the streets and public highways and the farms, as well as town lots. They are maturing a crop of seeds to be carried far and wide. The situation in many localities is almost distressing, and yet is too often taken lightly, if thought of at all. Such weeds take heavy toll both from the soil and the crops, and any theory or movement regarding soil and crop conservation, or economic production, that leaves out of the question the weed problem, is falling short, by a good deal, of getting at the bottom of the subject.

THE war has aroused a sleeping world to the possibilities of accomplishment. We never before knew how to attack problems.

## *Must Prevent Waste of Grain*

One of the most commendable of many things that the food administration is undertaking is that of stimulating farmers and harvesting crews in the prevention of loss of grain through various forms of waste. While much of the effort is being directed to the thresherman, it is not to be overlooked that the farmer himself is often the cause of waste at threshing time even though he thinks he is working to his own interests. It is seldom the case that the owner of a field of grain does not hurry the threshing of it, his object being to get the threshing crew with their horses and men off of his place as soon as possible. One of the results is that grain is fed into the machine more rapidly than it can be properly threshed, some of it is cracked in the cylinder and some of it is blown over into the straw. The cracked wheat causes a lower grade at marketing time and a less valuable product for the manufacture of flour. The grain blown into the stack is a total loss except as live stock may salvage it.

One of the most noteworthy causes of loss of grain is found in the open grain rack or the header box or hauling tank that is not absolutely grain proof. It doesn't take a great while for a trickle of grain, one kernel at a time, through a hole or over the edge to aggregate a number of bushels. A similar trickle in each of a thousand or a hundred thousand grain fields multiplies the loss by a thousand or a hundred thousand.

## *Graining Pure Bred Calves*

The high cost of grain and mill feed of all kinds makes the question of how much grain to give our pure-bred calves very acute. The best grades of stock have reached price levels that make even present feed prices of no material significance, but price of range bulls and similar stock has not increased in due ratio to the price of feed. A bull calf fed all he will eat until he is 20 months old will consume at present prices $200 worth of feed, and range bulls do not bring enough money to pay this bill, although herd headers that bring $500 and upwards will show a good profit.

The breeder of range bulls is therefore up against the proposition of feeding less, or selling younger, and it is our judgment in the matter that the latter is the better course. A yearling bull, or a bull of any other age for that matter, that has been on light feed will lack size and form. He will tend to be long in the legs and thin in the body. When such a bull is offered for sale it is impossible for the buyer to know how much of this small size and inferior form is due to lack of breeding. Even if he knows positively that the bull has been poorly fed he has no way of telling if the bull had breeding enough to develop into anything if he had had the feed. This condition is aggravated by the well known fact that most breeders of inferior stock maintain, and perhaps even conscientiously, that the only difference between their small-long-legged bulls and the prize winner is the matter of a little feed.

The finger of suspicion always, therefore, points to the undeveloped bull. There are, however, many range men who want first class bulls that are not fed too heavily.

It is therefore our judgment that when the breeder feels that the feed bill is getting a little too heavy he had better sell a little younger rather than to grow his stuff on lighter feed. As stated, however, the question of the amount of feed depends upon the quality of the stock. Second rate range bulls will not pay for a full grain ration until they are of breeding age. The best range bulls and herd headers will pay for all they will eat, while any bull that promises to make a show bull or to sell for over $500, will pay for all the feed he can eat even at present feed prices, and with a nurse cow.

E. L. P.

# Germans Start New Paris Drive

## *Violent Battle Is Launched Along a Fifty-Mile Front*

As this paper goes to press word is received of the launching of another great drive by the Germans. Only preliminary reports are available, but it is evident that the struggle is to be a violent one. The drive is directed straight toward Paris, which is distant from the battle line about 45 miles. The drive is being made along the Marne river, from Chateau Thierry, the nearest point to Paris, to and past Rheims. Early reports say that the enemy has crossed the Marne at a few points. The Americans are holding part of the line attacked, being especially in evidence at the left flank, near which they launched a counter attack that is reported at this writing to have received a measure of success.

The magnitude and the success or failure of the drive may have been well determined before this writing reaches the readers. It is not to be expected, however; that the allied lines will hold so solidly that some German advance will not be made. This does not mean that the French and Americans along the attacked front are not ready. It is stated that their preparations are good and that they are not surprised at the new drive. It is probable, however, that the allied lines will bend before the attack as they have previously done, rather than sacrifice men while the German blow is at its height. It may be expected, however, that no great advance will be permitted unless the enemy is overwhelming, as any considerable shortening of the distance to Paris would be a serious menace to that city. It is reported that German shells of 10 and 12 inches diameter have been falling in towns and villages 25 miles behind the allied lines.

### Hindenburg Is Reported Dead.

The report still continues to be circulated that General von Hindenburg, the famous German war leader, is dead. At this writing no official denial of it has been made. The latest report says that the general, who has for a long time been the German field marshal, had a violent quarrel with the kaiser on May 16, following which he suffered a stroke of apoplexy from which he later died. Before this reaches the readers the report may be confirmed or denied, as official information is not available. It is recalled that a marked change in the German activity on the western front was noted about the time the report indicates the general died, which adds some credence to the report. The death of Hindenburg, even if confirmed, is a matter of curious interest rather than one affecting the war situation. It may have caused a delay in the resumption of the drive in the west, but that is probably the greatest effect it will have. There are other German leaders almost as prominent. The loss of no one man, with the possible exception of the kaiser, can greatly influence the course of the war. It is doubtful if even the death of the kaiser would result in any radical change in the situation.

### Allies More Than Hold Their Own.

During the last week the various elements of the allied armies have continued to improve their positions at several points along the battlefront. At nearly all points along the line they have been on the offensive, though in no case has an offensive of major proportions been undertaken. The activities of the allies has been sufficient, however, to recover a considerable number of strategic points taken by the Germans since March and is believed to be sufficient in addition to prevent the German leaders from organizing their forces as they would like to for a resumption of the drive on either Paris or the English channel ports. The allied activities have been such as to require that German and Austrian forces be scattered well along the greater part of the battle line, thus preventing their concentration on any given point for a resumption of the drive. The last drive of the French was over a three-mile front southeast of the railroad town of Amiens. It resulted in the capture of a number of villages and surrounding areas a mile or more into the territory held by the Germans. French activities have also been noted with corresponding improvements of positions and recapture of territory on the front directly before Paris. The British have also been active in the northern section. Reports from the Italian front indicate a continuation of successful operations by the Italians and the French against the Bulgarians and Austrians. In a few instances local attacks were made at various points along the fronts by the Germans as well as the Austrian troops, but in no instance are they reported to compare with the improvements affected by the allies.

### Blow Delivered Against Spy System.

The arrest some days ago of Dr. E. A. Rumely and the seizure of the New York Evening Mail as alien property are believed to mark a final step in the penetration of the inner circle of the German spy movement in this country. Evidences indicate that the Evening Mail was purchased with German money to be conducted by Dr. Rumely and his assistants in the furthering of German propaganda in this country. The United States secret service is said to have in its possession evidence showing that the offices of the newspaper were used as a general center for the carrying on of German spy and propaganda work.

### Germany Says She Is Insulted.

A report of an address delivered in the German reichstag by Imperial Chancelelor von Hertling says that the chancellor expressed a willingness on behalf of the German people to discuss peace at any time that the allied governments would make an honorable offer. Referring to addresses by President Wilson and Secretary Balfour of the British department of state, the chancellor said that they "must really drive the flush of anger to the cheeks of every German. We feel for the honor of our fatherland and we can not allow ourselves to be constantly and openly insulted in this manner. Behind these insults is the desire for our destruction. As long as this desire for our destruction exists we must endure. As long as the desire for our destruction exists we must hold out and we will hold out with confidence in our troops, in our army administration and our magnificent nation which bears so wonderfully these difficult times with their great privations and continuous sacrifices."

Reports indicate that German officials are at least convinced that complete victory can not be won by force of arms. Bernhard Dernberg, former German minister of colonial affairs, said recently that a peace was never concluded on the battlefield alone, but that diplomacy must cooperate. He said that if Germany was to maintain her leading position she must make and continue to make moral conquests, and he added that he was rather doubtful whether she had succeeded in this respect.

### Turks Murder German Officers.

A report coming through Greece says that in a number of instances Turkish soldiers have mutinied against their German officers. In some cases the officers have been slain, it is stated. Mutinies in the Austrian army are also reported.

### Bolsheviki Government Is Waning.

Indications are that the bolsheviki government in Russia is tottering, and when it falls it will be a blow to Germany and an aid to the cause of the allies, it is believed. The new government in Siberia, which is anti-bolsheviki, is expected to support the allies. It is reported that a detachment of British troops are in Siberia with a view to operating with the loyalists against the element of Russians that are favorable to the German invasion. Whether the presence of these troops is due to an agreement with the other allied nations, including this country, or whether it is due to the independent action of England, is not officially announced. It is stated that American, British and Japanese marines are on shore at Vladivostok for the purpose of guarding stores there.

### Rumanian People Feel Food Shortage.

It is officially reported that the people of Rumania are suffering greatly from lack of food. It is stated that crops this season are virtually a failure and that foodstuffs in the country have been appropriated for the use of the German and Austrian armies. Rumania fell into the hands of the Germans and Austrians when Russia collapsed, leaving the little nation isolated, with enemies on all sides.

### World Honors French Holiday.

July 14 was the great national holiday of France, amounting to its July 4. The celebration marks the anniversary of the fall of the Bastile, the turninig point in the transformatiton of France into a republican form of government. American officials sent many messages to the officers of France on that day and President Wilson caused the French flag to fly over the White House at Washington, D. C.

### Government Takes Over Telegraph Wires.

Congress has granted President Wilson authority to exercise federal control over the telegraph and telephone systems of the country. The provision includes ocean cable systems and wireless systems also. It is the intention of the government to operate these communication systems in like manner as it is now operating the railroads, the idea being to increase their efficiency for service during the war.

### British Aviators Control the Air.

An official British report says that the aviation department of that country has brought down a total of more than 3800 German or Austrian aeroplanes in one year. This has been done, it is stated, with a loss of a little more than 1100 British machines, less than one-third the number of those of the enemy destroyed.

### Rainy Weather Interferes With War.

While the people of the northwestern part of the United States are hoping for rain, northern France, where the great struggle between the allies and Germany is being waged, is soaked with rain. It is probable that this has delayed the expected resumption of the German drive.

### Get a Farm Service Flag.

The man, woman, boy or girl who stays at home and works hard to produce necessaries for the soldiers in Europe are entitled to real war service recognition. That is the idea back of the Washington Farmer's farm service war flag. It is pennant-shaped, made of the good old red, white and blue, and has a star representing the producing farm home. Small stars are added to represent each worker of that home.

.....

**Convenient Order Blank.**

THE WASHINGTON FARMER, ————1918.

Review Building, Spokane, Wash.

Enclosed find five cents (5c), for which please send me a Farm War Service Flag (printed on enamel paper) with ..... extra small stars for farm workers.

Name .....

R. F. D. ..... Postoffice .....

Box ..... State .....

## *Washington Gleanings*

The Molson district oversubscribed its war saving stamp quota $2460.

The Washington Good Roads association will meet in Pasco November 14-15.

The Adams county fair will be held at the fair grounds near Ritzville September 26, 27, 28.

Harvey Thompson has been appointed superintendent of the Federal condenser in Mount Vernon, to succeed Charles Harvey, resigned.

More than 500,000 feet of standing timber destroyed and 1000 acres of land burned over is the toll taken by a forest fire north of Sedro-Woolley.

The Hunters council of defense has been organized with the following officers: J. M. Glasgow, president; F. R. Anderson, secretary-treasurer.

Yakima county has spent $297,000 in hard surfaced roads this year and built five concrete bridges, and in addition is spending $27,000 monthly in keeping graveled roads in repair.

L. Vogel, a farmer in diking district No. 2 near Kelso, has sold his entire crop of cabbage to Camp Lewis. He will have about 400 crates of first-class cabbage on four acres of ground.

Poles are being set for the extension of the Okanogan Valley Power company's line from Riverside north to Tonasket, and it is expected to be able to give service in Tonasket not later than the middle of September.

Preparations for opening several hundred million feet of spruce owned by the state in Clallam county have been authorized by the state capitol commission in the event the timber is needed for airplane construction.

At a recent meeting of the Touchet Valley Stock association a committee of Robert Lee of Starbuck, Grant Law, Harry Rainwater of Dayton, was appointed to arrange for an exhibit of range beef for the Walla Walla fair.

The first consignment of game birds from the state game farm at Walla Walla is being divided among the western counties. Pierce, Thurston, King, Grays Harbor, Whatcom and Snohomish counties are to receive 50 Chinese pheasants each.

To Klickitat county attaches the distinction of being the first community in the northwest to consecrate a memorial to its sons who have met death while in the nation's service in the existing war. The memorial was erected at Maryhill.

Many farmers near Sunnyside, who plowed up their sugar beet fields with the intention of sowing other crops, have decided to give the beets another trial. The Utah-Idaho Sugar company, which is building a factory there, will provide free seed and labor.

Reports indicate that a large number of men are being called out to fight forest fires. In some instances these men are being given permission to return to the harvest fields if they desire, but many of them are signing up for the entire forest fire season.

A report to the state agricultural department gives an estimate of the apple tonnage for Cashmere this year at 1450 cars. The figures are from a survey made by the district horticulturist. Last week marked the close of the cherry harvest. About 20 carloads were sent out.

The Kennewick high school canning team, whose members are Ruth Dickinson, Gladys Motter and Winnifred Huntington, has been selected by the state club leader to represent Washington in an interstate canning competition at the Spokane Interstate fair in September.

On the farm of Grant Farmer on Fords prairie, west of Centralia, is a cherry tree that was planted 84 years ago when General U. S. Grant was a lieutenant stationed at Fort Vancouver. The tree still bears fruit. It has a spread of 65 feet and its trunk is 10 feet 11 inches in circumference.

Girls of the canning club at Yakima have contracted with the county commissioners to put up all fruit and vegetables the poor farm may need during the coming year; and in addition to can all fruit and vegetables grown on the farm and sell their product to the county at the usual commercial rate for canned fruit.

The wide difference between the yields of various kinds of grain this year has added greatly to the question of price for threshing. In some sections the price will be as high as 18 cents a bushel. Some combines are cutting and threshing at $4 an acre. Grain threshed in bulk also adds a problem, especially as there are few districts where all the growers use the bulk system.

There is not only a lack of recognition among farmers of the value of lime in soil fertilization, but there is a lack of lime at prices that warrant its widespread use. There are great possibilities in the development of the liming custom and every farmer should study the question with a view to learning if lime might not be a good thing for his farm or part of it.

The pea crop is a sufferer from the hot and dry weather of the last several weeks. In some of the peagrowing sections of the northwest the crop will be about half normal, it is estimated. In others a fair crop will be harvested. In the Fairfield district of Washington some of the Alaska peas are already cut, having ripened somewhat early owing to the drouth.

# Life-Giving Eggs and Milk

## *Away With Calories and Talk More Vitamines*

By JAMES DRYDEN.

**IMPORTANT DISCOVERY IN FOOD VALUES.**

Vitamines are necessary to satisfactory bodily growth, and are found in sufficient abundance only in eggs and milk. These vitamines are concentrated from the feed of the cow and placed in the milk, and by the hen and placed in the egg; and why?—that the young of both may be properly nourished. These vitamines are not placed in any quantity in the meat of the cow and the hen. These are conserved only for the calf and the chick, or for purposes of reproduction. Children, therefore, to obtain these necessary vitamines for growth and development must use milk or eggs, or both.

Eggs have been spoken of as very nutritious since the days they were first discovered and eaten, just a little more nutritious possibly than any other food, and we ate them without any misgivings. But when we tried to find out what their real food value was; when we sought for a real measure of their value compared with other foods, the chemists came along and said they contained so much protein, so much fat, ash and so many calories, and from the showing it did not appear that the egg had any special claims to superiority. They, the chemists and dieticians, judged food values by protein and calories.

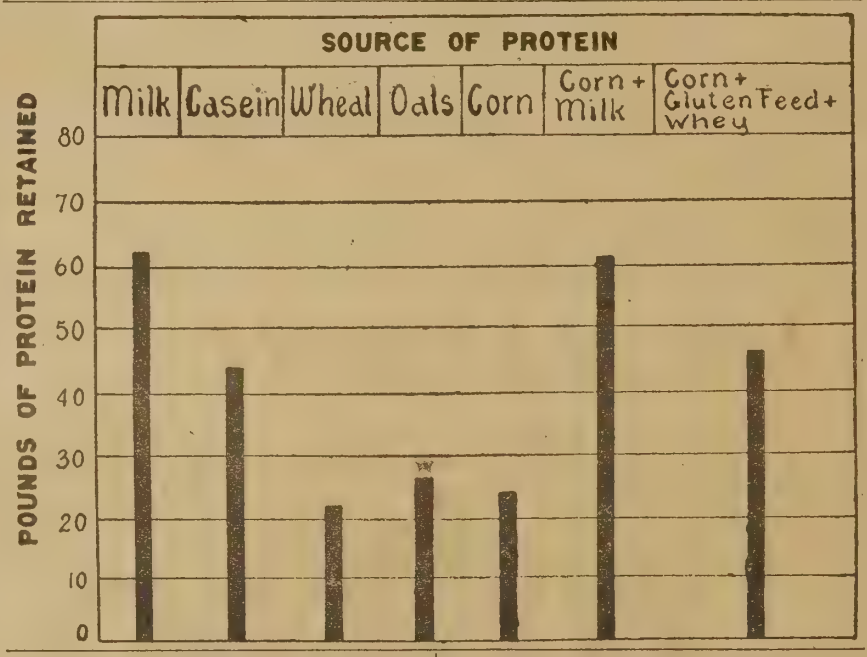
But chemical analysis did not always check up with actual results of feeding experiments with animals, nor did they explain why the protein of milk gave better results in the feeding of children than the protein of other foods.

The chemists, however, have been pursuing their investigation of the subject with the result that some most significant discoveries have recently been made which explain the high nutritive value of eggs and milk. No longer will there be any doubt as to the superiority of these foods.

In experiments at the Wisconsin station by Hart and Steenbock it was found that proteins had different values, depending upon their source. Milk had an efficiency of about 65 per cent. That is, 65 per cent of the protein was retained by the animal and 35 per cent wasted. Wheat, oats and corn proteins showed an efficiency of about 25 per cent, a waste of 75 per cent. The protein content therefore was not a very good measure of value of those foods.

But the results were startling when a little milk was added to the corn. The addition of the milk raised the efficiency of the protein of the corn to practically the same percentage as for milk. That is, the combined protein of corn and milk in the ration practically equaled the efficiency of milk alone. There is a good protein and poor protein, and a little of the good mixed with the poor leavens the whole, makes it all good.

These experiments were made with pigs, but the experimenters say that "most of our medical knowledge has been obtained from experiments with animals. Most of the principles have first been established by carefully controlled experiments with animals." Illustrations are given of pigs that refused to grow on a ration of corn meal, oats, middlings and oil meal. Both received the same ration, but one of them received in addition a small quantity of milk. The one without milk weighed 100 pounds; the one with milk 200 pounds. This difference was made with one per cent of milk solids added to the ration. Another experiment was made with whey, fed at the rate of only four pounds a day with corn meal and gluten feed. With this small amount of whey the protein of the mixed feed was raised in efficiency from 30 per cent to 47 per cent.




What is the explanation of these marvelous results? There seem to be two reasons. First, the abundance of mineral constitutents in milk make rapid bone growth; and second, the vitamines in the milk. What are vitamines? The experimenters say that they "are as yet unidentified chemical substances in food, and are aboslutely necessary for growth and reproduction. They are abundant in milk and eggs and in the leafy portion of plants. One class which can be dissolved in water is abundant in seeds, while another class dissolved in fat is apparently not so abundant in seeds. Both classes are abundant in whole milk."

These experiments were made primarily in the interest of dairy husbandry, but the experimenters declare that eggs are the only substitute for milk when it comes to vitamines.

The discovery of vitamines in milk was made by Dr. Hopkins of Cambridge, England. Dr. McCollum of the Wisconsin station separated the vitamines into two classes. Hopkins fed young animals on a ration of highly purified proteins, fats, carbohydrates and minerals, and the animals not only did not grow, but did not live over two months. When into such a ration a small quantity of egg yolk was mixed, say an ounce of egg yolk to a pound of the ration, growth was induced. The same result was obtained with an ounce of evaporated milk instead of egg yolk.

Let us quote Hart and Steenbock further: "Suppose next we take all the fat out of this satisfactory ration by extracting it with something that dissolves fats. It will be found that though the ration will be able to maintain young rats without any increase in weight for a month it will not longer be able to induce growth. Only on restoring the extracted fats to the ration will growth be made. A similar result could have been obtained by adding butterfat or fats obtained from certain animal organs; but other fats, such as lard, almond oil and cottonseed oil would not have brought about the same result." Again they say: "Milk, eggs and alfalfa leaves are a very good source of this unknown constituent, although there is every reason to suppose that forage plants in general are a better source of this class of vitamines than the grains." Some of these vitamines are apparently present in skim milk and whey as well as in fat.

The second class of vitamines are called water soluble vitamines. If the fat in the egg yolk has been removed, and with it the fat soluble vitamines, and then a water extract of the remaining egg yolk is made the water soluble vitamines will be obtained. Both are necessary to satisfactory growth, and both are found in sufficient abundance only in eggs and milk.

These substances, it is stated, are concentrated from the feed by the cow and placed in the milk, and by the hen and placed in the egg. And why? That the young of both may be properly nourished. It is not placed in any quantity in the meat of the cow or the hen; it is conserved only for the calf and the chick or for purposes of reproduction. Growing children, therefore, to obtain these necessary vitamines for growth and development must use milk or eggs or both.

These are the facts that we have been looking for to back up argument for a greater use of eggs. Away with calories and talk more vitamines.

All this means a greater use of eggs and a greater poultry industry, and, above all, it means better children and a better race of men and women.

## Death of Otto Spannagel.

With the recent death of Otto Spannagel, Spokane manager of the Yuba Manufacturing company, after only 10 days' illness from tonsilitis, the farm machinery fraternity of the Pacific northwest lost one of its most esteemed and active members.

Among his business associates as well as among hosts of farmers throughout Washington, Oregon and Idaho, Mr. Spannagel will long be remembered for his buoyant and abundant enthusiasm and his generous, manly likableness.

Mr. Spannagel was born, apparently, with a love for machinery. It is hard to conceive of his ever being satisfied with any line of work in which machinery did not play the prominent part; and knowing this it is easy to account for his success in his chosen calling.

When the Washington State college last spring decided to hold a tractor and power farming demonstration at Pullman, Mr. Spannagel was one of the first to give his enthusiastic cooperation and support. Much of the success in quickly organizing the Pacific Tractor and Power Farming association was due to his active interest and personal hard work. His loss will be keenly felt, not alone by his associates and acquaintances in the city, but by farmers throughout the northwest.

## Express Rules Hinder Shipment.

Fruit dealers say that the recent rules of the federal government consolidating several of the express companies has resulted in considerable delay in the loading and unloading of fruits.

## Store Water for Stock

During the present grazing season the flock masters are going to have brought to their attention in a more forcible way than ever before the need of stock water on the ranges. The failure of springs and small streams on the privately controlled range as well as the forest reserve will be very pronounced.

I wish, therefore, through the cooperation of the Washington Farmer, to call the attention of all stockmen and range officials to the absolute need of a thorough investigation of sources of water supply, looking to the storage of same for stock purposes. In many depressions inexpensive impounding dams may be constructed that will retain sufficient flood water to last during the grazing season for a range area which can not at this time be used because of the remoteness of stock water. Where streams go dry in the early season checks or cheap dams may be thrown across in a number of places which will retain sufficient water behind same or in the ground to materially prolong the flow in the streams.

This is a very important subject which has not as yet been taken up by stock interests of Washington, and is of vital importance to economical development of our range area.

MARVIN CHASE,
State Hydraulic Engineer.
Olympia, Wash.

## Probe Grange Case

### Defense Council to Investigate

Governor Ernest Lister of the state of Washington has announced that on Tuesday, July 23, the Washington state council of defense will take up the matter of the state grange convention at Walla Walla when the members of the grange were denied a meeting place to finish their session because of charges of disloyalty on the part of certain grange officials. The Walla Walla trouble arose over the activity at the grange convention of representatives of the nonpartizan league and of the support given the league by State Master William Bouck and other grange officials. The convention was refused the use of the high school building for the completion of its session the last night of the gathering and on the following morning was denied the privilege of meeting at a number of other points in the city. A resolution was adopted later by the executive committee and other officers of the grange urging the government to make an official investigation of the action of the grange leaders and the citizens of Walla Walla who refused them a meeting place. In response to the request President Wilson replied to Master Bouck: "I will certainly do what I can to look into the situation which the telegram presents."

The Agricultural Grange News, the official organ of the grange in this state, in its first issue following the convention, published the following statement to the granges:

To the Granges of Washington:

The following resolution was agreed upon by the advance guard of the grange, before the session convened. It was acted upon favorably by the committee on legislation, and had we been permitted to complete our session it would undoubtedly have been adopted by the grange.

As the executive committee are obliged to complete the work of the session, we adopted it as the sentiment of the grange.

Fraternally yours,
FRED W. LEWIS,
Sec. Washington State Grange.

**Resolution.**

Whereas, Various resolutions have been presented in regard to the national nonpartizan league, some of which falsely state that said league has been indorsed by the executive and legislative committees; now, therefore, be it

Resolved, by the Washington state grange, in regular session assembled at Walla Walla, Washington, this 7th day of June, 1918, that we stand firmly as ever for the principle of nonpartizanship as set forth in our original declaration of purposes over 50 years ago, but we have not in the past, by the act of the entire state grange or any of its executive or legislative committees, indorsed the national nonpartizan league, nor do we now, but we leave entirely to our members the right of choice of principles in regard to politics, religion or any other subject.

Recommended for adoption.
FRED J. CHAMBERLAIN,
Chairman Committee on Legislation.

Adopted by Washington state grange, by its executive committee.
FRED W. LEWIS, Sec.

The Grange News also contained the following:

"The following resolution was written by Earl G. Rice of Smamamish valley grange, and referred by him to the members of the resolutions committee, who were on the train leaving Walla Walla. It was adopted by them and referred to the executive committee, which also adopted it.

"Be it resolved, That we declare these to be grange principles, upon which we will stand:

"First—It is a personal right of every patron to belong to any other organization which we may elect, social, religious, educational, political or otherwise.

"Second—No other organization has the right to demand that the grange either approve or condemn any other organization, whatever the character may be.

Third—The grange will not tolerate interference or influence from outside the membership in determining any policy or choice of any officer in our order.

Signed by resolutions committee.
JACOB VERCLER,
Earl G. RICE,
ALICE YARNELL,
A. G. WEST,
A. H. WEEKS,
CHAS. S. LEWIS.

Approved by executive committee.
WM. BOUCK, Master.
HERMAN NELSEN,
J. T. COMPTON.
U. S. CASE.

**Teaching Disease Prevention.**

At a cost of about $90 a month the North Carolina state board of health spreads its propaganda on disease prevention throughout its country districts. The equipment consists of an auto truck, an extra gasoline engine for supplying current to a motion picture projector, and a camping outfit for two.

# Shorthorn Breeders Aid Red Cross

## *Fifty Purebred Bulls Bring $70,000 at Donation Sale at Birmingham, Alabama*

**Written especially for the Farmer By W. J. BOLES, Birmingham, Ala.**

Birmingham's first bull sale and the first sale of bulls for the benefit of the Red Cross ever held anywhere took place July 2, when 57 sales aggregated $70,000, an average of $1228. The sale was worked up by Frank I. Derby of Ward, Alabama, a successful breeder of Shorthorn cattle, and for 20 years one of the most successful and best known buyers and sellers of Shorthorns in the country.

The bulls were all donated by members of the American Shorthorn Breeders' association and the proceeds of the sale went to the American Red Cross, each purchaser, except of the grand champion, designating the chapter to which the money should be paid. The grand champion had been donated to the Birmingham chapter of the Red Cross and regardless of the residence of the purchaser this chapter was entitled to the money paid for him. As it happened a committee of Birmingham men bought him.

Prior to the sale, under an arrangement with the Red Cross bull sale committee, President Woodrow Wilson purchased the grand champion bull, paying therefore $1, and then donated the bull to the Birmingham Red Cross chapter. The check was forwarded to the committee two days before the sale, and auctioned off at the sale for $1000.

Frank I. Derby of Sumter county, Alabama, who originated the idea of the sale and secured all the bulls for it through donations, will take the grand champion to Washington in a few days with the hope that President Wilson will consent to have himself photographed with it on the White House lawn.

Prior to the sale Dr. C. F. Curtis, dean of the Iowa State college, located at Ames, Iowa, judged the bulls, selecting the best of the lot as grand champion and a junior champion. Lavender's Lord 500408, red, calved July 19, 1915, bred by Charles E. Leonard & Son, Bunceton, Mo., got by Wood Dale Stamp 354,220, was adjudged grand champion.

Royal Heir 593,875, roan, calved March 25, 1917, bred by C. T. Nelson, Blandinsville, Ill., got by Royal Memory 442,168, was awarded junior prize.

The National Live Stock Commission company of National Stock Yards, Ill., donated two bulls to the sale and bought another, Royal Heir. The total sum received from the three bulls amounted to $7350, all of which was turned over to the Birmingham chapter of the Red Cross.

On order of the National Live Stock Commission company, Royal Heir was put up at auction again on July 4, and sold to the Red Cross Bull Sale committee of Birmingham for $4500, just $3000 more than he brought at the sale two days previous.

Colonel P. M. Gross of Kansas City, Colonel Carey Jones of Chicago, Colonel H. G. Igleheart of Elizabethtown, Ky., and W. T. Parker of Birmingham were the auctioneers, with Frank I. Derby of Sumter county, Alabama, as sales manager.

A local committee of 20 representative business men was formed about six weeks ago to arrange local details of the sale. Erskine Ramsey was chairman, J. Merced Barnett, vice chairman; Miss Margaret M. Grogan, secretary, and Paschal G. Shook acting chairman the last two weeks.

About 8000 people gathered in Capitol park, where a pavilion and amphitheater, built for band concerts and community sings, gave them ample seating capacity.

Every bull except one sold at the auction was bid in by a citizen of Alabama, either an individual, a corporation or a committee formed for that specific purpose. The only animal going out of Alabama is the junior champion, bought by the National Live Stock Commission company. The fol-

(Continued on page twenty-four.)

### Indians Are Woodchoppers.

So keen has become the competition for wood choppers in Porterville, N. D., and so large the wages paid that the Tule Indians, who have a monopoly on this work at the present time, are waxing affluent.

## Southwest Washington Fair.

The Southwest Washington fair has issued its 10th annual premium list, which may be obtained, as far as the supply will permit, by addressing the secretary, G. R. Walker, Chehalis, Wash. This year the fair opens Monday morning, the 26th of August, and closes Friday night. There will be no Saturday fair. Heretofore the live stock exhibitors and others always wanted to get away on Saturday in order to be present at the next fair. This causes much discontent in trying to hold them. The management will make provision for farmers and stockmen who care to camp on the ground during the fair. There will be no charge for this privilege, provided such parties have stock entered for exhibition. The following are the superintendents of the departments:

General superintendent of live stock—H. W. A. Tramm, R. F. D. No. 1, Chehalis; assistant, A. B. Nystrom, county agriculturist.

Superintendent of fruit, vegetables and grain—F. A. Degeler, Centralia; assistant, A. P. Perry, state horticulturist.

Superintendent of culinary—Mrs. W. A. Waring-Smith, Centralia.

Superintendent of flowers and plants—Mrs. J. A. Long, Chehalis, Wash.

Superintendent of art—Mrs. Oscar Nelson, Centralia, Wash.

Superintendent of textiles and needlework—Miss Mary Lang, Centralia, Wash.

Superintendent educational department—Professor A. C. Canterbury, Chehalis, Wash.

Superintendent of bees, honey and apairy products—J. O. Wallace, R. F. D. No. 1, Chehalis, Wash.

Superintendent babies' department—Mrs. Dr. J. M. Sleicher, Chehalis, Wash.

## Aphids Attack Peas.

B. F. Brewer of Walla Walla is trying out both peas and sugar beets on his summer fallow land. It is too early to determine the outcome of the experiment, and the issue will be somewhat clouded in any case by the unusual activity of aphids, which are attacking field peas in some parts of the Walla Walla country in unheard of numbers.

TO the Editor of the Washington Farmer: Please find two order blanks and 10 cents to pay for a farm service war flag.

Crops in this neighborhood all looking fine; all small farms, but every one has planted a little more this spring than usual and are cultivating better and doing all they can to grow something to help feed the boys at the front. Every farmer has a bunch of cows and chickens and are raising lots of pigs.

Every farmer should read the Washington Farmer.

J. M. MOORE.

Rochester, Wash.

## Jerseys Make New State Record

Twenty Jersey cows have established new state records within the last few weeks, most conspicuous among these is that of "The Owl's Golden Queen," in the state of Washington, is the information sent by the American Jersey Cattle club.



The Owl's Golden Queen 275736.

Washington can be proud of three new records, one of which was broken twice within two months. The name of Genesta's Duchess is also added to the list to give deserved prominence to the great quintette of cows that have just finished yearly records for a total production of 4164 pounds of fat, or an average of 832 pounds of fat. This average for five cows is credited with exceeding anything that has ever been recorded from one state within a similar period of time.

Included in the list of 20 Jerseys are Eminent's Foxy Bell, 304982, owned by J. P. Graves, producing 14,920.6 pounds of milk and 816.65 pounds of fat, aged 3 years 11 months; Brooketta 294025, owned by Glendale Creamery company, producing 14,139.5 pounds of milk and 705.01 pounds fat, aged 4 years three months; Meysie's Fern Lassie, 290819, owned by J. P. Graves, producing 15,606.3 pounds of milk and 803.06 pounds fat, aged 4 years 5 months. Montana has two cows in the list—Maud's Fairy Princess 362083, owned by R. E. Logan, producing 5737.4 pounds milk and 355.06 pounds fat, age 1 year 8 months, and Mona's Lina 364597, owned by R E. Logan, producing 4614.1 pounds milk and 296.09 pounds fat, aged 2 years 6 months.

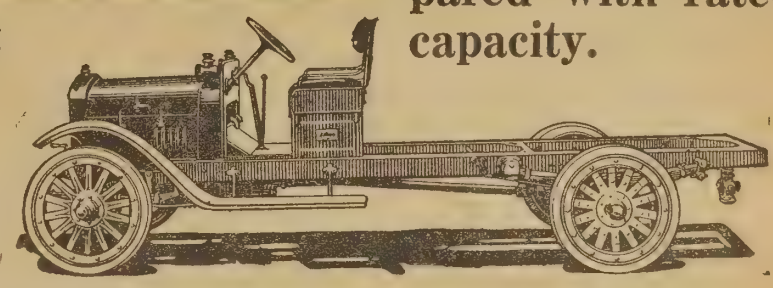

# MR. FARMER

**Either you need a truck now or will soon. You need only consider the automobile, the tractor and other power equipment to realize that the truck, if not already secured, is the next thing on the list. What you want is a**

JUMBO

**Not necessarily Jumbo in name but JUMBO in strength, compared with rated capacity.**

## JUMBO Trucks Meet Every Haulage Requirement



Every unit is selected for proven strength and quality. We haven't space here to give detailed specifications but just note these points:

MOTOR—"Buda" model H-U, four cycle cast en-bloc, bore 4 1-4, stroke 5 1-2.

While the Jumbo is rated 2 1-2 ton you will find this same motor used in other trucks of 3 1-2 ton rating. Thus we have mighty power for every emergency with sufficient surplus energy to avoid stress on motor and driving parts; over-strength in construction wherever severe strains are imposed; and highest possible quality throughout, three Jumbo characteristics that ensure long life, endurance and low operating cost.

In severe service under heavy loads Jumbo trucks give best evidence of the BRUTE STRENGTH that is an in-built quality. No truck of its size could possibly be better built, regardless of price. It is a truck that will stand up under conditions that would quickly wear out a weaker assembly. A full year guaranteed is evidence of our confidence in Jumbo strength and quality.

$2500.00 for Chassis and Seat.
$2550.00 with Cab.
$2700.00 with Cab and Stake Bed.

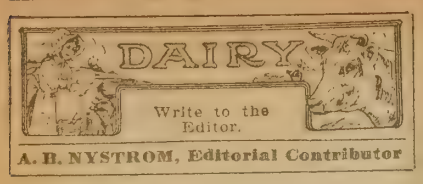
Mitchell Motor Cars

SPOKANE. PORTLAND.

Send catalogue of Jumbo truck. I'm interested.

Name .....

P. O. .....




A. B. NYSTROM, Editorial Contributor

# Educate Consumers

## Give Milk Systematic Publicity

By A. B. NYSTROM

Pure milk is the best food that nature has given to us. It contains all the elements necessary for the maintenance of life. The various products made from milk are of the highest value as food. The three important food nutrients, namely, protein, carbohydrates and fats, can be purchased in dairy products at less than in almost any other food. Recently, investigators have found milk and its products to contain an additional substance most vital to growth and life, which very few foods contain.

All of these facts, if made known to the public, would increase the consumption of dairy products. To be sure, the public will say that if you decrease the cost of the product consumption will increase. That may be true, but recent investigations show that now, especially on the coast, milk is being produced at a loss. It probably has been produced at a loss for the last 50 years. And the cost seems to be going up. Certainly, dairymen can not long do business at a loss. The inevitable must be that the consumer must pay more for it.

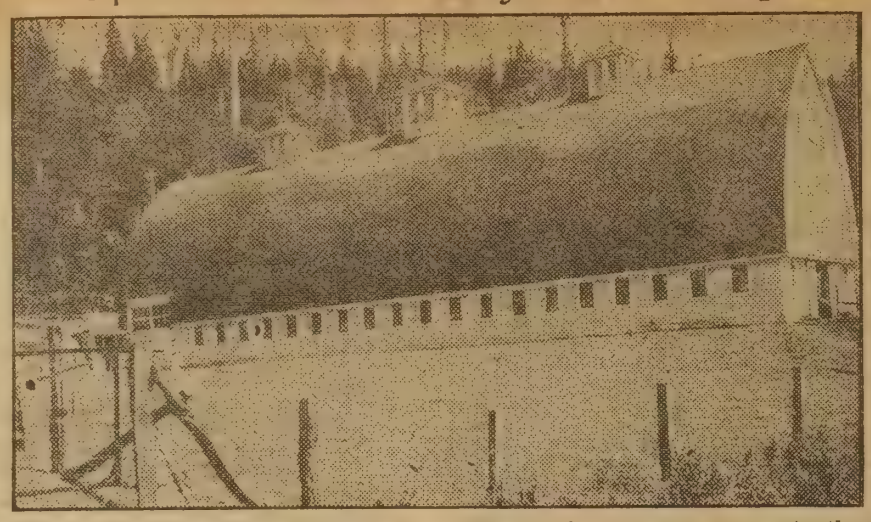
The thing for the dairymen to do is to advertise. We can see advertisements of all kinds of soft drinks, teas, coffees and their substitutes in any magazine we pick up, but how many advertisements of dairy products do we see? Only a very few.

It is estimated that we have 25,000,000 dairy cows in the United States, worth approximately $1,500,000,000. Even without including the value of dairy equipment, and of creameries, cheese factories, and condenseries, which must surely equal the above figure, we have a business able to pay a good sized advertising bill. At the rate of one cent per cow per year we would have $250,000 a year for advertising purposes and this would go a long way toward increasing the consumption.

When a business representing probably only one-tenth of the investments of the dairy industry can advertise a commodity which has little or no food value, such as our soft drinks, until the consumers beg for it, does it not seem reasonable to expect that by proper advertising, the public would consume twice the amount of milk and other dairy products it now consumes, when the products to begin with are recognized as a necessity and not a luxury?

The dairymen must cooperate to do advertising if for nothing else. If proper and continued publicity were given all our dairy products the consumption would be sure to increase, and even in spite of the increasing cost.

# Up-to-Date Barn in Gray's River Valley



The barn shown herewith is that of W. N. Meserve, Gray's River, Wash. Mr. Meserve is the merchant of the "city," which is in the heart of one of the greatest little dairy valleys in the west—a community of good, progressive dairymen. There are a number of fine barns, but Mr. Meserve's barn has few equals anywhere. It is 150x38 feet. The perfectly tight ceiling is about eight and a half feet high and the loft 32 feet, with arched roof and no supports, and holding 150 tons or more of hay. The floor is of concrete and the barn is fitted with stanchions and automatic drinking fountains. There are 66 cow stalls and a wide driveway across the barn with conveniences for drawing hay up to the loft. Across the driveway is the concrete root house and alongside that the milk house discernible at the far end of the barn. It has running hot and cold water and steam. Electric lights are used throughout. A liquid manure tank, 28x12 feet and 10 feet deep, on the far side of the barn, receives the liquid manure and washings. It holds 1500 gallons. This can be drawn by gravity into a wagon bed on the road, less than 200 feet from the tank, as the barn stands on an elevation well above the road. Mr. Meserve's herd is of high grade Jerseys, with a good purebred sire, and he contemplates buying purebred Jersey females soon. H. A.

## Provide Farm Bins for Wheat.

Farmers in sections where the acreage of wheat is unusually large are urged by the department of agriculture to provide enough bins on the farm to take care of their wheat when threshed. This is said to be necessary to save the wheat that will probably be piled up in certain localities, because the large crop is likely to put a heavy strain on storage elevators and transportation systems. The wheat should be stored in bins on the farm, according to the bureau of markets, which has issued a circular containing plans and drawings for a portable bin that can be quickly built. Copies of this circular have been distributed to county agents throughout the large wheat-producing sections.

### Great Junker Leader Dies.

Germans newspapers announce the death of Dr. Diedrich Hahn of Hamburg. Dr. Hahn was one of the leaders of the junker party in the reichtag and a violent militarist. For many years he wielded great political influence as the head of the so-called farmers' alliance.

### Farm Girls Are Blacksmiths.

The English farm girl is now working as farrier and blacksmith. A Herefordshire farmer applied recently for some one to shoe horses and make and repair farm implements, and the women's organization was equal to the occasion.

## Jersey Prizes Awarded.

According to an announcement recently made by the American Jersey Cattle club, the cash prizes of $50 and $25 offered by McArthur & Stuff of Rickreall, Ore., for the best and second best Register of Merit records made by daughters of their Jersey bull, Holger, before April 1, 1918, have both been won by Thomas Williams of Forest Grove, Ore. First prize is awarded on the performance of the junior 3-year-old Olalla, whose record of 654 pounds fat exceeds the minimum requirement for her age by 350.60 pounds. Second prize is awarded on the record of the senior 3-year-old Jersey Style, she having produced 574.61 pounds of fat, or 261.31 pounds over her minimum requirement. The junior 3-year-old Dina Dorf, also owned by Mr. Williams, scored third place, for which no prize was offered. She made 528.80 pounds fat. Fawn of Cedar Hill, a senior yearling in the herd of N. H. Smith of Oregon City, Ore., made a remarkable showing, with 456.81 pounds fat to her credit. The average of the six head which figures in the awards was as follows: Milk, 9094.53 pounds; fat, 490.36 pounds; test, 5.40 per cent; age, 2 years 8 months. Four out of the six head qualified for Class AA.

## Men Teach Home Canning.

In addition to the 600 men leaders of boys' and girls' club work in the north and west, there are as many county agricultural agents who have learned to demonstrate canning effectively throughout their counties. Many of these have become expert canners. In several instances county agents have been offered positions in commercial food concerns to supervise and direct the work of food conservation.

### White Miners Scarce in Africa.

Of 317,000 miners in the mines of South Africa only 32,000 are white.


Write for evidence from users and our Trial Offer. Ask your dealer for our FREE Cow Book, "Bulletin 52."

B-K Bacilli for Barrenness

General Laboratories Madison, Wis. Dept. 3626

SHIP your cattle where they will bring you the most money.

OUR northwestern customers have found Kansas City their best market. We specialize on Oregon, Washington and Idaho cattle.

WRITE or wire us for market information any time.

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Stockyards Station. Kansas City, Missouri.



The more you study cows the more firmly convinced you will become of the truth that

PURE BRED HOLSTEINS

Are the Most Profitable Cows on Earth.

They yield the largest quantities of milk, butterfat and profits. They are persistent milkers and thrive on the coarsest feed.

Let us show you. We have nothing to sell—all information free.

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Do You Want a Well Drilled?

If so, we can very likely put you in touch with a competent driller in your section.

EXPERT ADVICE FREE OF CHARGE

Upwards of a Thousand

KEYSTONE

WELL DRILLING MACHINES

now operating in Pacific northwest. We will send you the name of driller nearest you free on request. Will there likely be other wells to drill in your neighborhood?

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Pacific Northwest Distributor for Keystone Driller Co., Beaver Falls, Pa.

It Is a Patriotic Duty to Prevent Loss of Cattle.



PROTECT THEM FROM BLACKLEG

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Blacklegoids

Double and Single Vaccinations in pill form.

ACCURATE. EASY TO USE. EFFICIENT.

Each Blacklegoid is a dose of blackleg vaccine ready to inject under the skin of the animal.

NO DOSE TO MEASURE.
NO LIQUID TO SPILL.
NO STRING TO ROT.

WRITE FOR FREE BOOKLET ON BLACKLEG.

Animal Industry Department of

PARKE, DAVIS & CO.

DETROIT, MICH.

SUNNYBROOK

THE FEED YOU NEED

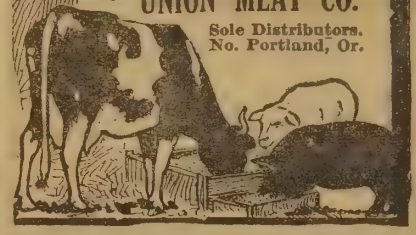
A new concentrated balanced feed that meets the present emergency of shortage of mill feeds and high price of all grains.

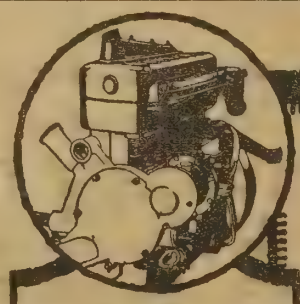
Analysis.

Protein ..... 14.51%
Nitrogen, Free Extract ..... 46.55%
Crude Fat ..... 4.50%
Ash ..... 6.58%
Crude Fiber ..... 18.15%
Moisture ..... 8.47%

UNION MEAT CO.

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Correct Lubrication for the "L"-Head Type Engine

This, the "L"-Head type of automobile engine, like all *internal combustion engines*, requires an oil that holds its lubricating qualities at cylinder heat, burns clean in the combustion chambers and goes out with exhaust. ZEROLENE fills these requirements perfectly, *because it is correctly refined from selected California asphalt-base crude*

"Proven Entirely Satifactory"

Only perfect satisfaction can account for the use of ZEROLENE by the majority of automobile owners.

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They know from the records of their service departments—and we know from exhaustive tests—that Zerolene, correctly refined from selected California asphalt-base crude, gives perfect lubrication with least carbon deposit. Get our lubrication chart showing the correct consistency for your car.

*At dealers everywhere and Standard Oil Service Stations.*

STANDARD OIL COMPANY (California)

ZEROLENE

*The Standard Oil for Motor Cars*

LIVE STOCK NOTES

Write to the Editor.

E. J. IDDINGS, Editorial Contributor

# Measure Hay in Stack

To the Editor: I should like to know how to measure hay in the hay stack that has been loaded and tramped—that is, hay that has not had the ordinary 30 days to settle. JOHN CACKA.

The above question was answered as follows by E. G. Schafer, agronomist at the Washington State college:

**The Answer.**

Estimating the number of tons of hay in a stack by measuring is sometimes resorted to when it is impractical to weigh it. I believe, however, that a person should not rely upon any such rule, wholly. The stacks vary greatly in shape, and also in size. Both of these factors have a direct bearing upon the weight of the hay in a certain volume. Perhaps the reason for greater variance, however, would be due to the length of time that the hay would have to settle.

Another factor of importance would be the stage of maturity and amount of moisture the hay contained when stacked. It seems as though alfalfa cut at a later stage of maturity would not settle quite as firmly as alfalfa cut at a slightly earlier stage. The proportion of leaves might have some influence.

The following rule is commonly used: "Width plus over, divided by four and squared, then multiplied by the length and divided by 512." You should consider this only approximately correct.

## Veterinary

Dr. S. B. Nelson

**Mare Has Skin Disease**—I have a young mare which I purchased a year ago last fall and which had a skin disease at the time and has been bothered ever since. It seems to bother her more in summer. She rubs the hide off her body in large spots. Can you tell me what to do for her?—V. D., Tillamook, Ore.

Try applying daily a one-fourth of 1 per cent of picric acid in water. This is a quite poisonous drug and you must keep it away from children.

**Blood in Bowel Movements.**—I would appreciate it very much if you could tell me what is the trouble with my cow. She is coming 2 years old this summer and due to freshen in August. For about two weeks I have noticed considerable blood in the bowel movements generally immediately after drinking. The cow is a Jersey, fat and in fine shape, eats well and jumps and plays and seems to feel fine. Is the trouble anything to be alarmed about? C. W. K., Prosser, Wash.

Considering that your Jersey cow is in fine shape and fat, eats well and jumps and plays and seems to feel fine, I would hardly think that there is anything to worry about in the condition in which she is in. It may, of course, be some slight local trouble in the posterior part of the bowels. Just what that might be I do not know. I would hardly think it advisable to do anything to her while she is so heavy with calf.

**Filley Is Stifled**—Have a three-year-old filley which is stifled in both stifles. This was first noticed in January. Do not know how it happened. She weighs 1300 pounds, has good appetite and is in good shape. The lameness bothers most when she goes down hill. Her eyes look glassy. What can be done for her and would it be safe to breed her?—M. B. W., Neppel, Wash.

When you say the filley is stifled in both stifles, I wonder if the papella or stifle bone slips out of place. If it does this, it indicates that the ligaments are not sufficiently strong to hold the bone in place and if this should be the case, frequently the applying of a blister to the stifle causes the strengthening of the ligaments so that they will hold. The blister should be applied on one leg one week and to the other stifle the next week. The best blister to use is red iodide of mercury, one part; cantharides, one part; lard, seven parts, and beeswax, one part. Have your druggist mix it well and rub it over the stifle thoroughly. Then spread it on in sufficient quantity, about as thick as the depth of your knife blade. Tie the mare up so that she can not get at it with her mouth. When the mare gets older she will probably get over this trouble to a certain extent, but the slipping out of the bones constantly will cause an irritation of the cartilege which may cause trouble later on. Therefore, she should be treated.

**Operate Upon Teat**—We have a cow which had one teat nearly half cut off while she was dry. When we milk her since freshening the milk comes out of the side of the teat as much as it does through the end. When she is dry again could the teat be sewed up and thus restore the teat?—T. S. J., Wash.

When the cow is dry again, you can have her operated upon and the teat can be restored to usefulness again.

**As to Feed for Cows.**—We feed each one of our cows three quarts of bran and one quart of shorts and was advised to get some oil meal, as that was good to make the milk more rich, as it tested higher after feeding the oil meal. Is that right, and how much oil meal should one feed to each cow with the above amount of feed per cow? They have good pasture to graze on, so we feed no hay now. A Reader, Elma, Wash.

Regarding the feeding of your cows, the general rule is to feed one pound of concentrate or grains for every three or four pounds of milk given per day. You will find linseed cakes quite highly nitrogenous food. They also contain a little fat and it is fed in half-pound quantities or less per day, depending upon the other grain feeds. Each cow should be fed according to her milk production.

**Is Hard to Milk.**—We have a heifer that has been fresh about four weeks. She is very hard to milk. The milk comes down all right, only the opening in the teat seems to be too small. V. R., Lacrosse, Wash.

I would suggest that you go to your musical instrument house and purchase the largest catgut string that they carry. Tie a knot in one end of it and cut off about two inches above the knot. Place this in a 10 per cent solution of carbolic acid, leave it there for a few minutes. In the meantime dip the end of the eat that is so hard to milk in tincture of iodine, then take the catgut out of the carbolic acide solution and swish it so as to rinze it in boiled water. Now insert this into the teat and leave it until the next milking. Naturally, you must do this immeditaely after you have finished milking her. Repeat for some time and see if that will be of value.

**Cow Lame in Leg.**—I have a cow 4 years old in good health every way except for a lameness in left hind leg. Noticed it in November last, just a little. There was not any cut or wound that I could see. She got gradually worse and about the first of January there was a lump formed on the leg about four inches below the stifel joint. This lump is now the size of a saucer.—B. J. L., Elk, Wash.

I can not make a positive diagnosis of the trouble causing the lameness of your cow. As an alleviative measure I would suggest that you apply a blister over the affected part. Use: Red iodide of mercury, one part; cantharides, one part; lard, seven parts; beeswax, one part. Rub in well for a few minutes and then apply a layer about a sixteenth to an eighth of an inch thick. Wash off in two or three days when the blistering has been completed.




Uncle Sam Wants an Army of Calves




To make into beef, fats, hides.

Raise calves on Lilly Calf Meal. It takes the place of milk because it has all the necessary elements for calf nutrition.

It is not only a scientific, but it is common-sense food, endorsed by Pacific Northwest dairymen everywhere. Dealers sell it.

*Calf book free on request*

Write Lilly Seattle




SAVE YOUR HOGS

Raise Your Hogs and Cattle at a Profit

Assist Nature by Feeding

ECONOMY STOCK POWDER

A general conditioner, a worm expeller and a disease preventive.

Send for FREE SAMPLE and our BOOK on LIVE STOCK.

ECONOMY HOG & CATTLE POWDER CO.
Hearst Bldg. San Francisco, Cal.



*"Hep! Hep!" Ten miles more to hike—then camp and the comforts of a little chew of Real Gravely.*

See That He Never Lacks a pouch of Real GRAVELY Chewing Plug

Your fighting man will go to almost any lengths to get good tobacco. Many a man has paid $5 for less good tobacco than you will send him in a pouch of Real Gravely Chewing Plug. Only costs you 10 cents.

Give any man a chew of Real Gravely Plug, and he will tell you *that's* the kind to send. Send the best!

Ordinary plug is false economy. It cost less per week to chew Real Gravely, because a small chew of it lasts a long while.

If you smoke a pipe, slice Gravely with your knife and add a little to your smoking tobacco. It will give flavor—improve your smoke.

SEND YOUR FRIEND IN THE U. S. SERVICE A POUCH OF GRAVELY

Dealers all around here carry it in 10c. pouches. A 3c. stamp will put it into his hands in any Training Camp or Seaport of the U. S. A. Even "over there" a 3c stamp will take it to him. Your dealer will supply envelope and give you official directions how to address it.

P. B. GRAVELY TOBACCO CO., Danville, Va.

*The Patent Pouch keeps it Fresh and Clean and Good —It is not Real Gravely without this Protection Seal*

Established 1831

## POULTRY

Write to the Editor.

JAMES DRYDEN,
Editorial Contributor.

# Counteract Heat

## Poultry Suffers From Heat

The summer months are hard ones on poultry. The hen can stand lots of cold weather, though too much of anything is too much, but the hot days of summer cause her not only physical suffering, but actual physical depreciation.

Great care should be taken to keep the fowls as comfortable as possible. Plenty of shade should be provided, and above all, plenty of fresh water. To set out a pan or trough of water in the morning of a hot day and count it enough for the day is a serious blunder. Even though there is more of it than the chickens will drink, it should be replaced by cool water frequently. A cool drink cools the hen and fortifies her against the next hour of heat.

Another way to assist her ladyship to get through the summer is not to let her get too fat. Fat is a great heat producer and acts also like a cooling jacket on an engine. The engine boiler is equipped with a covering of wood or paper or some other material to prevent the radiation of heat. A thick layer of fat like some hens of the heavy breeds carry when given fat and heat producing foods, acts in the same way.

Hot nights are sometimes as hard on the flock as the days. They should be provided with a roosting place where plenty of air can pass through, and sprinkling or any other artificial means of reducing the temperature of summer evenings or days will pay well.

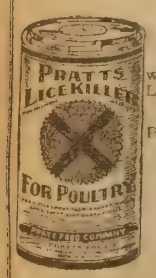
## Washington Pen Wins First Place During Week at Storrs

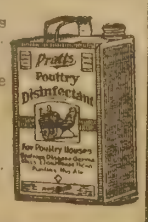
In the thirty-fourth week of the laying contest at Storrs the total production of all pens amounted to 3994 eggs, or a yield of 57 per cent. First place for the week was won by a pen of White Leghorns from Hollywood, Wash., with a production of 59 eggs. J. O. LeFevre's White Leghorns, from Paltz, N. Y., were second with 55 eggs, and Archis R. Colburn's Rhode Island Reds from Hollis, N. H., were third with 54 eggs. Fourth place was hotly contested, there being five pens that each laid 53 eggs for the week. These comprised Barred Rocks from New York, White Leghorns from New York, New Jersey and Pennsylvania, and Oregons from the agricultural college, at Corvallis, Ore.

In reporting the thirty-second week of the contest attention was called to the fact that the Oregons just mentioned were giving the leading pen a run for its money. During the last three weeks this pen has gained a total of 22 eggs on the leaders, which is practically an egg a day.

## Performed Operation.

A little bit of poultry surgery came under the notice of the writer recently. A woman in the city with a backyard chicken lot discovered one of her little chicks, about 3 weeks old, drooping. It continued to grow worse. After a day or so she examined it and found what she believed to be something in the nature of indigestion. The crop was full, still containing grain feed that had been given a day or two previously. She took the chick to the porch, got the scissors, opened the crop and removed the offending food. She then inserted a little dose of castor oil, sewed up the cut and turned little Mr. Rooster loose to make the struggle for life alone. He won. He is doing as well now as the others of the brood. He is a little smaller, but otherwise apparently none the worse for his experience.

THE LICE SEASON
is here.
Fight Them


with Pratt's Lice Powder. 1 lb. 30c.
Pratt's Lice Liquid.
Qts. 40c.
½-gal. 70c.
1-gal. $1.25.
f. o. b. Spokane.


SPOKANE SEED CO.
Distributors Pratt Food Co.'s Line.
Spokane, Wash.

## Government Wants More Poultry.

With a view to stimulating the production of poultry in the United States to supplement the country's food production, the United States department of agriculture is sending out a number of poultry specialists. These specialists are taking up with poultrymen and farmers the possibility of increased production. Their recommendations summarized are as follows:

Keep better poultry; select healthy, vigorous breeders, hatch early, preserve eggs, except for hatching; cull the flocks; keep small flocks to supply the family table; grow as much poultry feed as possible; eat more poultry and eggs and thus conserve the meat supply.

## Bought the Boy, Not the Calf.



The news of the sale of the $106,000 bull calf at Milwaukee, Wis., has already been given in the Farmer. Now comes a story in the Kansas City Star of the 15-year-old Canadian boy, Arthur Hay, who raised the calf:

Tears trickling down the cheeks of a 15-year-old Canadian boy helped to sell a 6-months-old Holstein bull calf for $106,000—the highest price ever paid in the world's history for a member of the bovine family. It is now disclosed that the boy who raised this prize calf will be given a chance to go to college and secure an education. His tears for the pet calf touched a woman's heart. Hence the open sesame for his ambition to be realized.

The bidding started at $5000. Arthur Hay was the farm boy who had raised the calf for its owner, A. C. Hardy, a lawyer, who has a farm as a side line at Brockville, Ontario, Canada. As the bidding became spirited, Arthur cried as he stood holding the animal. The frenzied bidders surged about the boy and the calf. Arthur's tears were "catching." Before the sale was completed one of the woman clerks was in tears, and one of the auctioneers sobbed aloud. Hysteria seemed to grip the crowd. Men and women threw hats and handkerchiefs in the air and shouted with pitched voices. Those present declared it the most remarkable spectacle they had ever witnessed at an auction.

The Hay boy and his tears had something to do with the big price realized for Champion, it is said. The love of the lad for the pretty black and white spotted calf seemed to affect the bidders. E. A. Stuart, the buyer, said: "I didn't buy the bull; I bought the boy, and they threw the bull in."

A woman, touched by the Hay boy's tears, made a plea to Mr. Hardy in his behalf, and the boy will be sent to college.

## Three-fourths Acre Garden.

Robert Locke of Quinault, Wash., reports that his garden of three-fourths of an acre is just about the same in size as last year. They raise the year's supply of potatoes and other vegetables, consisting mostly of corn, beans, onions, carrots, peas, lettuce, beets, cabbage, celery, tomatoes, parsnips, turnips and rutabagas.

## Artesian Well Floods Ranch.

While boring in an old well for a bigger supply of water on his farm three miles east of Harrington, Wash., J. E. Russell suddenly struck an artesian well. Before the sudden rush of water could be stopped it had flooded 100 acres. The well is a five-foot hole 110 feet deep, has a pressure of three to five pounds and supplies 4000 gallons of water an hour.

### If It Were Only Here.

Nebraska man, after 11 years of experiments, has invented a device that enables a user of a party telephone line to identify any other subscriber who may be listening to his conversation.



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The Washington Farmer

Spokane, Washington

July 18

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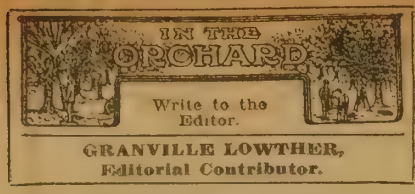
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GRANVILLE LOWTHER,
Editorial Contributor.

# Freight Rates

## As They Affect the Fruit Grower

Personally I would rather pay the freight rates on fruits proposed by the government in the general schedule, in order that it may meet its running expenses in the management of the roads, than to feel that we were asking, as fruit growers, for special privileges. The only difficulty is "Can we do it and live?" Last year we could not have done it, considering the prices we received. This year, the outlook for prices is better, but the question is still speculative and uncertain.

If we could fix the prices on our products, as do most manufacturers of the materials we buy, we could pay any price they asked us and still make money. The manufacturers of box materials do not ask us what we will pay for boxes, they tell us what they will take and we pay it. I am not charging that they ask too much, but they, and not the buyers of boxes, fix the prices. We do not fix the price of paper, the paper manufacturers fix it and we pay it. I am of the opinion that their prices to us are extortionate, because it has been a matter of news that they have agreed with the publishers of magazines, newspapers, etc., to furnish them paper for three cents per pound. The paper used in wrapping fruit is not a more expensive quality, and we pay eight cents in carload lots. The retail price is higher, and the average orchardist will buy in retail lots. At this point I think there are extortionate charges and excessive profiteering.

The prices of spray materials have advanced to almost double what they were formerly, yet in the United States there is an inexhaustible supply of raw materials. Take sulphur as an illustration. There is a mountain of sulphur in Louisiana, a deposit so nearly pure as to require very little refining to make it a marketable commodity. In fact it has been claimed, and I believe it to be true, that they put it on the market without any refining whatever, because it is a matter of record that the deposit, at "Sulphur," near Lake Charles, Louisiana, is 99 per cent pure. This particular deposit is several hundred feet below the surface, and is dissolved and brought to the surface by hydraulic pressure. The Standard Oil company owns this deposit, and since no company on earth can compete with them, they can put prices where they please. Two years ago the excuses for the high prices of spray materials, were that we had to ship from Japan. This may be true, but I do not believe it. I am presuming that if I owned the Louisiana deposit, I would meet the Japanese with prices that would keep their supply out of the country. I think the prices paid by fruit men for lime and sulphur are results of excessive profiteering. No matter about that, they can fix the prices and we must pay what they ask.

Ever since the government fixed the prices of certain food commodities, I have seen that to be either logical or equitable, the prices of all commodities related, or that could be used as substitutes, would have to be fixed. It seems like a big program, and it is; but if we have to pay higher freight rates, higher for all materials, and higher for labor there should be some assurance of higher prices for fruits. G. L.




# June Report on Apples

The government apple report is at hand. It shows that the following states are above the 10-year average in apple production: New York, New Jersey, Pennsylvania, Delaware, South Carolina, Georgia, Ohio, Michigan, Wisconsin, South Dakota, Kansas, Tennessee, Alabama, Mississippi, Louisiana, Texas, Oklahoma, Wyoming, Colorado, Arizona, Utah, Nevada.

The states of Washington and West Virginia are equal to the 10-year average.

The following states are below the 10-year average: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, Maryland, Virginia, North Carolina, Indiana, Illinois, Minnesota, Iowa, Missouri, North Dakota, Nebraska, Kentucky, Arkansas, Montana, New Mexico, Idaho, Oregon and California.

The total is 69.8 as compared with 68.2 for the 10-year average.

The prospective peach crop, according to that report, is 52 as compared with 61.4, the 10-year average.

The pear crop is 62.7 as compared with 67.3 for the 10-year average.

Blackberries are 80.5 as compared with 87.4, 10-year average.

It must be noted that this report does not include the period in which occurs the "June drop," and which so greatly affects the final output as to render these figures somewhat unreliable; but they are nevertheless a basis for guessing.

Observation leads to the conclusion, that except in those sections with a large percentage of young trees coming into bearing, the crop in the northwest will be less than last year. G. L.

## TO KILL ANTS.

### Found Tartar Emetic Effective.

There has been considerable inquiry lately and discussion as to how to kill ants.

I have a letter from a lady who says she has succeeded, who is too modest to have her name published, but who wants to "help some one." She says: "Six years ago, we moved into this house, an old one, and the ants were here, black ones, that seemed to live under the house in the underpinning. I tried everything I could think of or hear of, and sent to the department of agriculture at Washington, D. C., for literature; yet nothing proved to be of any benefit. The ants increased, went everywhere, and meddled with everything not securely protected. I put a little sugar syrup in individual butter plates, add added a little tartar emetic, placing it where they could get it. They feasted and went away. The next morning, two or three came, but seemed to avoid the bait. I caught them and put them in it and they scampered away—without eating of it. For about a week I saw one, occasionally, then no more until the next year. As soon as they began coming I used the same remedy. Since then I probably see one or two during the season.

**Tartar emetic is a poison, and great care should be used to prevent children getting it."**

The practical thing in this letter is, that the writer got rid of the ants. What the scientist would like to know is, how the ants communicated with one another so as to prevent those that did not eat from eating as the others had done. Other animals often do the same thing. G. L.

## Yellow Newtown Apples.

The commercial production of Yellow Newtown or Albermarle pippin is located almost exclusively in four states. California leads with a production of about 1,000,000 boxes of one bushel each. Oregon is second, with Newtown the leading variety for the state, and produced in Hood and Rogue River valleys. Washington is third with 537 cars of Newtowns from Yakima valley alone in 1917. Virginia is fourth with the production centering in the Piedmont district. A full crop of Albemarle pippins for Virginia is about 170,000 barrels.

## New York Apple Crop.

The normal commercial production of the New England Baldwin belt, comprising the states of Maine, New Hampshire, and Massachusetts, is 1,630,000 barrels. In 1917 with a 46 per cent crop this district produced 745,000 barrels or 402,000 barrels of Baldwin, which makes up 45 per cent of the Maine crop, 71 per cent of the New Hampshire crop, and 60 per cent of the Massachusetts crop. Fifty-four per cent of the production of these three states is Baldwin.




# Why Is It?

That practically every tractor manufacturer (and there are 40) using K-W magnetos as standard equipment, include them in their specifications or catalogue?

They do so because the record which the K-W magneto has made for itself—by actual field operation—during the last ten years—has given it a reputation that *tractors built for quality* demand.

These 40 manufacturers pay more for K-W Magnetos but it is their assurance to the tractor buyer that he is being provided with the most reliable ignition system, guaranteeing to him a "No Trouble" service day in and day out.




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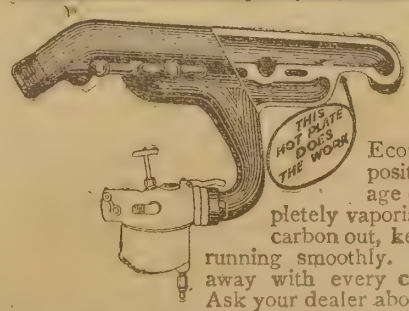
are *true* High Tension types. No Batteries and *no* Starting Coils are needed. The K-W Magneto starts any size motor *easily* and *quickly*. It gives the hottest known spark—fires any kind of fuel equally well—is timed accurately; and last but not least, its construction protects it against dirt, water and oil.

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Wilmo Manifold

# Peacetime Use of Devilish War Contrivances

## We kill weevil in the grain bin by the use of carbon disulphide gas. Why not discover the death sentence for a plague of grasshoppers or crickets and catch them without their masks on?

By E. E. ELLIOTT.

One of the results that will come out of the war will be the peacetime use of many of the devilish contrivances and inventions which have been brought into service by both sides engaged in the great conflict. Just as many of the developments of the industries and arts have been taken over and improved to the highest degree for military purposes, passing in their capacity for evil the utmost beneficient dreams of their originator, so we may confidently expect that in time we may see a reversal of the conditions.

One of the things we may look for in the future is the adaptation of gas toward the destruction of undesirable and injurious forms of life. One can not read the many articles descriptive of the use and action of these different gases which have been concocted with such debased scientific ingenuity, nor of the wealth of treasure poured out in their manufacture, without facing the inevitable question—why might not such a terrible weapon have long ago been placed in the hand of man for his benefit instead of his injury.

The use of poisonous gases for the destruction of certain forms of life is not a new or novel application of science. Especially is this true of the contest waged on the lower microscopic forms, which prey on the human race and other animals. Poison is always poison, whether as a solid substance of mineral or vegetable origin, as a liquid derivative or as a volatile gas. In all of these forms it has in a limited way been used to combat disease, to subdue insect pests and otherwise hold in check those forces of nature which are constantly contending to limit man's happiness and experience. At no time, however, has there been attempted a widespread and extended application of poisons especially adapted and designed to root out and destroy some particular foe of mankind.

In a recent magazine article a writer describes the differing effects of some combinations which have been used by the Germans. Certain gases affected the mucous surfaces of the body, particularly the throat and lungs. Others attacked the eyes, causing a profusion of tears, as a raw onion would do. There was a gas causing intense itching and still another producing nausea. The effect upon the minor animals, rodents, birds, insects, as well as that upon vegetation was particularly described and it was remarkable that certain animals and plants showed immunity while at the same time others were totally destroyed. As an illustration, one gas attack was noted which absolutely destroyed all garden growth, even to root crops like turnips and potatoes, while the cereals and certain trees were exempt. One of the beneficial results was the slaughter of the trench rats. It will be understood that these attacks are often made over a wide area and the effect often penetrates to a distance of nine or 10 miles.

In face of these facts it would not be impossible to imagine the development of compounds which would have a deadly effect on certain plant diseases or insect pests while at the same time causing no injury to the vegetation they may be preying upon. The spores of wheat smut are well known to be easily destroyed by certain chemicals, while the grain of the wheat is uninjured by the treatment.

Is it visionary to suggest the concoction of a gas deadly to the fungus in its active growing stage and at the same time leave the grain uninjured. We kill weevil in the grain bin by the use of carbon disulphide gas, why not discover the death sentence for a plague of grasshoppers or crickets, and catch them without their masks on. Our only way to kill the aphis is to spray him with some poisonous substance on his tender skin; why not gas him and get him in the hiding places where the spray can not reach?

The greenhouse man closes up his propagating plant, fires some tobacco or other poison in a pan and destroys myriads of his enemies, and some years ago experimentation was carried out with a tent apparatus dropped over fruit trees to hold the gasses generated for a similar purpose.

The Germans have demonstrated that it would be possible to do this on an extensive scale and it is certainly applicable to large areas of orchard. If it can be done under the cloud of war at a countless expenditure of scientific ingenuity and treasure in order to destroy human life or make it unbearable why can it not be done under the sunshine of peace for the purpose of making life better provided for and happier. It would cost a lot, but it would be repaid many fold and in many ways.

## Motor on the Farm

Some of the reasons why there should be an automobile on the farm are given in the following letters which were entered in a recent contest of the Farmer:

### Firmer Grip on Life.

To the Editor: I am a farmer's wife and the mother of four small children. A couple of years ago we had to decide between a hack and an automobile. We chose the latter and we have never been sorry, for when there were supplies needed or errands to run in a hurry, the car was always ready and quick to do the work. Then think of the pleasure for us all, when at the close of a hard trialsome day, we go for a spin and our troubles are entirely forgotten when riding over God's beautiful country; and isn't it wonderful how soon we can be so far away. We see many, many things that we never dreamed of being able to see. It gives us a new, firmer grip on life in this world of trouble. I, for one, would never get a chance to go anywhere were it not for our car. It sure is a blessing to the farmer, his wife, and family. MRS. B. B. JAYNE.

R. No. 2, Davenport, Wash.

### As a Time Saver.

To the Editor: I would not be without an automobile on a farm for anything. It comes in so handy so many times. Suppose one of the family should become seriously ill in a short time, or should meet with some misfortune, we would not have to wait so long for a doctor or any other kind of help. Also, it is good to use the exhaust to rid the gophers in the field which destroy so many of our crops. Then, too, we have a very easy and convenient way of hauling the milk to the factory. You can do it in half the time you can with a team. The automobile is also used for plowing the ground or hauling the plow for the farmer. Then, most of all, we have the car for pleasure. We can go twice as far in a day as we used to, and have a nice visit with our friends. When you want any provisions from the store, there in the garage is your automobile, ready for travel and you only need a half of a day for the trip to the store and back, whereas it used to take a whole day of long, hard driving. LUCY DANIEL.

Mohler, Ore.

### Three Good Reasons.

To the Editor: We are farmers and have an automobile and I wish to give the reasons we wouldn't be without a car.

When my husband had an accident we were able to summon the doctor fully twice as quick and thus save him pain. (In an emergency.)

We can make a trip to town and back in two or three hours where formerly it took us all day. (As a time saver.)

When we go to town with the car it leaves us and the horse rested and we can put the rest of the day in on the farm. (More labor on the farm.)

And last, when we want a vacation it only takes us a day to go to the mountains and we aren't tired when we get through. (For pleasure.)

MRS. G. O. CLEVELAND.

Gooding, Idaho.

### Grain Acreage Increased.

Director W. S. Thornber of the extension department of the state college issued figures recently to show that the wheat acreage in this state is 1,800,000 acres, against 1,400,000 acres last year; that the barley acreage is 119,000 acres as against 102,000 last year, and that the oat acreage is 356,000 acres against 293,000 last year.

**Footlights for Japan.**

Before the advent of footlights in Japan it was customary for each actor to have a boy with a candle illuminate his face during the whole performance.


The Real Test

—of gasoline is in its boiling points. In "Red Crown" they form a continuous, uniform chain,—giving easy starting, quick acceleration, power and mileage. Look for the Red Crown sign.

STANDARD OIL COMPANY (California)

RED CROWN GASOLINE

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That is the cost per year, figured on a basis of 38 years of service. Eclipse Windmills erected 38 years ago are still pumping water *today—with no repair bills!*

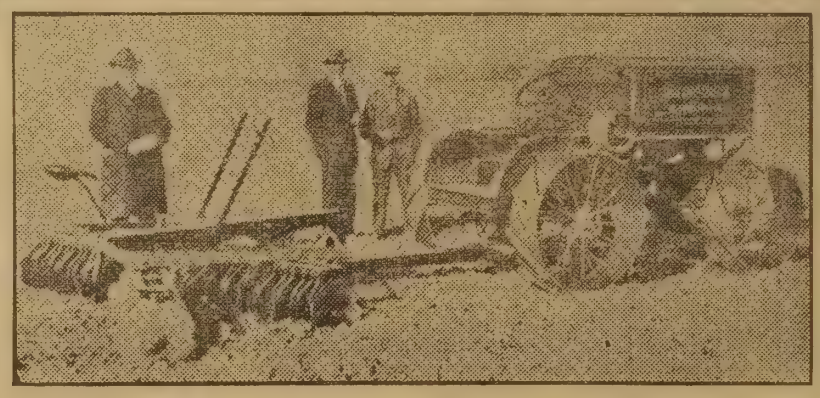
The Eclipse Wood Windmill has been used for 50 years, always giving wonderful service. Its strong, simple construction makes it the one mill to buy.

Powerful—Weather-proof

It's a mighty still day when the Eclipse doesn't pump some water into your tank. Automatically turns in and out of wind—requires but occasional oiling—direct stroke—no gears—but little friction—noiseless. Buy the Eclipse Windmill—it's the cheapest in the long run. Figure its cost by its service for years, without repairs—not the first investment. Now go to your dealer—who'll prove these claims.

ECLIPSE

FAIRBANKS, MORSE & CO.
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The Fitch 4-Drive Tractor Drives and Pulls on All Four Wheels Instead of Two

This positively eliminates every trouble in turning corners on soft or plowed ground.

In addition every wearing and working part runs in a dust-proof oil-tight housing which insures longer life and minimum of upkeep expense.

The 4-drive is equipped throughout with Timkin bearings, David Brown Timkin worm drive and Brown Lipe differentials and gears and Waukesha heavy-duty motor—equipment found only in the more expensive high-grade motor trucks.

The 4-drive pulled a three 14-inch bottom gang throughout the entire Pullman demonstration, negotiating grades as high as 35 per cent, plowing seven inches deep.

Considering the high grade units and performance of the Fitch 4-drive at **$2250 f. o. b. Spokane,** will it not pay you, Mr. Farmer, to carefully investigate every detail of this machine before purchasing a tractor? We can make immediate deliveries.

If unable to come to Spokane write us for descriptive literature.

Snyder Motor Co.

FACTORY DISTRIBUTORS.

1201-1203 FIRST AVE. SPOKANE.

In answering advertisements please mention this paper.

# More Than 10,000 Tractors

## *Great Britain May Yet Produce Its Own Foodstuffs*

As the result of U-boat destructiveness, Great Britain may be producing enough breadstuffs in 1919 to feed its people. More than 4,000,000 acres of grass lands have been plowed under and cropped to grain in England, Wales, Scotland and Ireland, and American-made tractors are being imported by the thousands. Eighty-one hundred motor tractors have so far been imported and orders are outstanding for 5500 more.

Before the war Great Britain produced only about one-third of the breadstuffs needed to feed its people, but present indications are that this year's harvest will supply breadstuffs sufficient for 40 weeks.

This remarkable increase is made in the face of the fact, as stated by the British ministry of food census, that in England and Wales alone there are more than 200,000 fewer male laborers on the land today than in the year before the war, after crediting all military and prisoner labor furnished by the government.

"Reckoned in tonnage, the net saving in shipping resulting from the increased production of grain and potatoes in England and Wales alone should amount in the coming year to 1,500,000 tons.

"The foregoing figures relate only to holdings of one acre and upward; and take no account of the increased produce from allotments and gardens. These, however, contribute very largely to the supply of home-grown food. The increase in the number of allotments alone since 1916 is not less than 800,000 in England and Wales, or 140 per cent. The additional weight of foodstuffs produced by this expansion may be reckoned at not less than 800,000 tons above the normal.

It is a question of interest and importance to the American farmer whether this increased British production of breadstuffs will continue after the war, and the question particularly concerns the wheat growers of the Pacific northwest, who have long turned to the British isles as their chief export market.

### Boys and Girls Specialize.

It is reported that there are approximately 10,000 boys and girls doing specialized agricultural work in the state this year, principally under the leadership of the boys' and girls' clubs. Of these, something like 800 are specializing in pig raising, with possibly something like 4000 animals, including the pigs and their mothers; 700, or thereabouts, are specializing in poultry, 200 in sheep, and at least 300 in rabbits.

### It Is a Pretty Spot.

C. S. Rood, who attended the state grange meeting at Walla Walla as a delegate from Clark county, says that the Garden City has changed somewhat since his last visit, in 1881.

"It's a wonderful town," comments Mr. Rood. "I don't think there is a prettier spot in the entire northwest—and I thought just the same thing back there in '81, when I landed from a long trip across the country to find everything green and beautiful. My interest in the scenery, in fact, almost cost me my life, for I stood in the middle of the street staring around me till I heard some one yell, and I just jumped in time to keep from being run over by a milk wagon. I sometimes wish," he concluded, "that I had staid right in Walla Walla. It's a wonderful town."

### Would Reclaim Overflow Lands.

With a view to reclaiming large areas of bottom lands along the Columbia river a new diking district has been formed in Cowlitz county. Henry Lamb and A. L. Lewes have been elected commissioners for the district. It is the purpose of those back of the movement to construct the dike as early as possible to prevent the overflow of the lands by the river next season.

### DORSETT FARM.

### Raises Fruit, Alfalfa and Hops.

The O. J. Dorsett farm of Yakima is a good example of both intensive and diversified farming. Mr. Dorsett has seven acres in orchard, nearly five acres in alfalfa, and 12 acres in hops. Alfalfa is raised also between the rows of fruit trees, this crop usually yielding about one and one-half tons to the acre; in addition to furnishing pasture for a few hogs. Alfalfa is chosen for this orchard land rather than clover or some of the forage grasses because of its deep rooting qualities, which enable it to break up the subsoil and add organic matter far below the surface.

Speaking of various tracts of alkali land near his farm, Mr. Dorsett was reminded of the condition of these same partially useless tracts some 27 years ago, when he first came to Yakima.

"They were just as free from alkali then as any land," he states.

"It is the seepage from irrigation on higher tracts that has brought the alkali to the surface here. Sometimes it can be washed out of the soil by flooding, and then of course there are some crops which do fairly well on alkali land."

#### Hair Ribbons for Shoe Laces.

Girl workers in the danger buildings at Woolwich arsenal, London, are not allowed to wear jewelry, so they indulge their love of personal adornment by wearing bright-colored ribbons as shoe laces.




Today the whole northwest is talking about GMC trucks. No farmer doubts the ability of the GMC to deliver the goods.

**GMC TRUCK——Hauls 15 TONS Wheat--522 Bushels--**

**in 13 HOURS, Over Country Roads, Used 20 Gallons of Gasoline and 3 Quarts of Oil. We Call That Economy.**

A horse eats 12,000 pounds of feed a year; he eats the whole output of five acres; yet his efficiency is only 2 per cent. He must be taken care of 365 days of the year, yet he averages only three and one-half hours' work per day, and tires in six

Land and labor are both too high to stand this expense.

With a GMC truck one man can haul in ten hours from your setting in the field 1000 bushels of wheat a distance of ten miles, loading and unloading same, at a total cost of less than 1-2c per sack per mile.

Remember, GMC TRUCKS do not eat when they do not work.

Mail attached coupon for information of GMC performance last summer on the farms of the northwest. Let us tell you what they will do for you.

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# MUGGSY HELPS ALONG THE SUNDAY CLOSING LAW




# SAMMY STAHL MAKES A BREAK INTO SOCIETY



# Poisoning by Water Hemlock

To the Editor: The poison Hemlock is getting bad around this valley and I have mentioned the danger of same to quite a number on whose place it grows, and they did not even know what it was, to say less of the danger of same, so I would ask you to print an article in regard to it in The Farmer, stating the danger of same and the urging people on whose place it grows to get rid of same. There has been considerable stock poisoned by it. W. E. SMUCKAL.
Freewater, Ore.

Many deaths, both of human beings and domestic animals, are caused every year by cicuta, or water hemlock, a poisonous plant. It is the most violently poisonous of temperate region plants, yet it is not generally recognized. Learn to know it and look out for it, is the warning contained in a bulletin issued by the U. S. department of agriculture.

Cicuta is widely distributed. Unfortunately, it resembles a number of harmless plants and is not easily recognizable. It belongs to the same family as carrots and parsnips. It has a number of popular names, of which the most common is "cowbane," or "water hemlock." In the mountain regions of the west it is frequently called "parsnip" or "wild parsnip." Other names, less common, are "snakeroot," "snakeweed," "beaver poison," "muskrat weed," "spotted hemlock" and "spotted parsley."

Regarding poisoning by water hemlock Dr. S. B. Nelson, head of the veterinary science department, State College of Washington, says:

When green feed is scarce as it is now, the bright green leaves and stocks become quite attractive to grazing stock and they eat them freely. They even eat into the crown of the root of the plant, which contains the larger quantity of the poison cicutoxin, and when the animal obtains this plant it nearly always proves fatal, because the plant material has an opportunity of being absorbed and causing the poisoning before the owner knows anything about it.



**Beaver poison, water hemlock, musquash root—a rather slender, stiff, open-topped perennial, having fleshy roots; leaves compound, the segments serrate; flowers white, fruit borne in compound umbels. A native; abundant on low, moist land. Very poisonous.**

The owner only finds out about it by noticing the sickness of the animal and then, as before stated, results of treatment are not always satisfactory.

The symptors are a severe pain, a peculiar trembling across the shouldlers and in the tissues back of the shouldlers. These tremblings later develop into more or less severe muscular spasms. The eyes have a staring look, increased by the dilation of the pupils. The pulse is weak, wiry and sometimes intermittent; that is, it misses a beat. The breathing is irregular, sometimes heaving and at other times regular, being influenced to a considerable degree by the muscular spasms. There are no regular symptoms regarding the bowels, though at times there will be small passages of manure at short, irregular intervals.

Remedial measures are not of much value, unless they can be administered very soon after the animal has partaken of the plant. Probably one of the best remedies to use is potassium, permanganate, the dose of which is from 10 to 50 grains for cattle, depending upon the age and size of the animal. The drug should be dissolved in from two to four quarts of water. The more mater used within reason, the more apt the liquid is to come into contact with the poisonous plant material. Be sure that the drug is completely dissolved before the solution is given to the sick animal.

Water hemlock frequently grows in smaller or larger groups, so that as a preventive measure, it may be either fenced away from the pasture land or removed by digging.

In many cases the plant could be entirely exterminated at a small cost for the labor necessary. It is to be remembered that every time a plant is dug up and destroyed the chances for the poisoning of stock are lessened.

In the later spring and summer months, hemlock grows two to five feet high. The stem is hollow and carries an umbrella cluster of small white flowers. At this time of year it is much more readily recognized, so that it may be dug out.

# Washington Boys in War Service

From The Twice-a-Week Spokesman-Review.



**ALLEN SUTHERLAND, Wenatchee, Wash. — Enlisted in the quartermaster corps December, 1917, and is at present driving a truck for the United States between Detroit and Baltimore. His parents are Mr. and Mrs. J. B. Sutherland of Wenatchee Heights, Wash.**



**BUDD W. COOK, Ellensburg, Wash. — Entered military service October, 1917, and is now with the 188th aero squadron "somewhere in France." He has a brother, Norman L., who is at Camp Lewis, and a sister, Mrs, Frank Huss, who lives at Ellensburg, Wash.**



**ARTHUR L. HOLCOMB, Kettle Falls, Wash.—Enlisted in the navy January, 1915, is now serving as first-class electrician on the U. S. S. Roanoke, "somewhere in European waters." He is the only son of Mr. and Mrs. F. H. Holcomb of Kettle Falls, Wash.**


# SUBSCRIPTION PLAN SAVES YOU MONEY




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It is gratifying to know that the new cooperative system has had the heartiest kind of backing; and that it has been put on a successful basis. We could not have got along without the assistance of well wishers who have told their neighbors about the plan and passed along copies of the paper.

There are many things of value which your state farm paper can bring you and your neighbors during the summer months. The various departments will be full of helpful hints, instructive articles and entertainment. Send in the orders!

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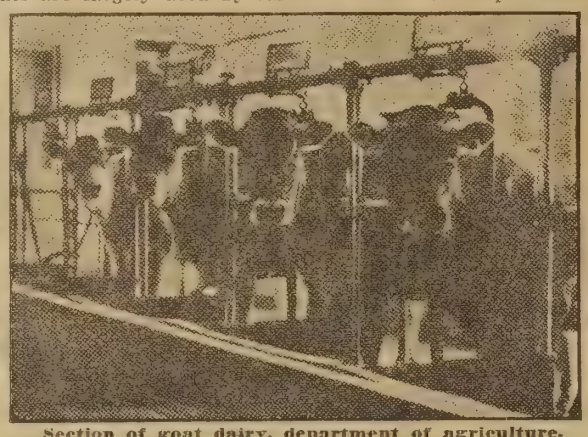
TOWN ..... R. F. D.....

STATE .....

# Milk Goats Produce From Three Pints to Three Quarts Per Day

With the department of agriculture trying to foster backyard gardening and backyard poultry raising, it would not be surprising if it did not come out in favor of backyard goat raising, except for the fact that the ordinary city yard is not quite large enough in which to keep a goat.

Over in Europe milk goats are largely used by families unable to keep a cow. In Switzerland, according to F. S. Peer, a well-known American importer of live stock, the goat is the Swiss peasant's cow and Swiss baby's foster mother, a blessing to the sanitariums for invalids and a godsend to the poor.



Section of goat dairy, department of agriculture.

In England and in many other parts of Europe people who leave the cities during the summer months, either for their country homes or for travel, often take a milk goat with them, so that the infant or other members of the family may have a good supply of milk of uniform quality. Similar instances have been recorded in this country. No other animal is so well adapted for such a purpose, and there is probably no other country where goats are so much needed for such a purpose as in the United States.

The industry in the past, says Edward L. Shaw, a specialist of the department of agriculture, has been greatly handicapped, owing to the scarcity of good goats for foundation herds. Only a few goats have been imported, and importations can not be made at the present time from most of the countries where desirable goats are produced. But the goats that have been imported have been quite widely distributed and most of them seem to have done well under their new environment.

The milk goat is adapted to this country, and the industry is likely to become of greater importance every year. The goat is especially useful to those who desire a small quantity of milk and do not have the room, or can not afford to keep a cow. In fact, a goat can be kept where it would be impossible to keep a cow, and it will consume considerable feed that otherwise would be wasted. The fact that goats are rarely affected with tuberculosis is another point in their favor. The demand for good goats appears to be far greater than the supply.

About the first question that most people ask concerning goats is, "How much milk will they produce?" This is, of course, a very important consideration, as the value of a doe is estimated largely by her milk production. Even if a doe is pure bred she is of little value from the utility standpoint unless she is capable of giving a good quantity of milk. Many persons in purchasing pure-bred or even grade goats have been disappointed to find that the milk could be measured in pints and not quarts or gallons as expected.

A doe that produces three pints a day is considered only a fair milker, while the production of two quarts is good and the production of three quarts is considered excellent, provided the lactation is maintained from seven to nine months. There is probably no better way to treat this matter than to state that good does should produce from eight to 15 times their weight in milk in a lactation period. It is stated by German writers that many goats yield 10 times their body weight of milk annually, and exceptional animals as much as 18 times their weight

The price to be obtained for goats' milk depends upon a number of conditions. In the past the price has ranged from 10 to 50 cents a quart, and the highest prices have been obtained when the milk has been supplied for the use of infants and invalids.

Owing to the excellent demand and limited supply of milk goats, breeders are naturally asking good prices for stock. Pure-bred bucks of any of the leading breeds cost from $25 to $100, depending, of course, upon breed, age, conformation and breeding. The prices for does range from $25 to $150 for purebreds, while grade or crossbreds range from $5 to $50. Persons who wish to procure a milking doe to furnish milk for an infant or an invalid are only too glad, as a rule, to pay a fair price, and do not care so much about the breeding of the goat. It is largely milk production in the doe that establishes her value. In some herds, where breeders do not care to raise all the kids and desire to dispose of them as soon as possible after birth, the prices range from a few dollars up to $10 a head.

# A Big Problem

## That of Education on Frontier

By Ida C. Young.

The educational problem, so serious and complex in all frontier communities, was one which mother attacked during the first long winter in our new log house. Every day Brother Ed and I had our sums to do. We progressed with more or less backsliding through multiplication, struggled on through short division, and finished up toward spring with easy fractions. Our reading, as I have stated before, took care of itself, and mother wisely reasoned that he who could read would absorb more or less of other subjects. Sister Frances was still too young for this line of activity, but we older ones kept at it for several years, in this way managing to splice out the three or four months school each year which we would otherwise have been limited to.

We also received much encouragement in our school work from Miss Kate Williams, whose ability to pass along lofty ideals gave her a wonderful influence over her classes. I count the fervent eloquence of Miss Williams as a distinct factor in helping us forward along the road which stretched into the future, toward the fulfilment of our desires.

It was at some point in this period that the first definite steps were taken toward new pastures in learning. At one time, for instance, preparations were all made to send Ed and me to Spokane, where we were to do light housekeeping and attend school. Because of our youth and inexperience this plan was not carried out. Then, the following spring came a report that a Presbyterian academy had been established and was in successful operation within 30 miles of us. Father mounted Queen, our black mule, and loped off over the hills toward Sherman postoffice, 10 miles north of Wilbur and 30 miles east of us. He came back the next day full of enthusiasm. He reported that he had found A. B. Cort, a Presbyterian minister, at the head of the institution, in which all the grammar grades and some higher subjects were taught.

With the coming of fall we loaded up our wagon with all the housekeeping articles mother could spare, and early one sunny morning in September Ed and I kissed mother and Frances "goodby," climbed up beside father on the load, and next moment were off on our road into the big, friendly world. I am glad to add that I have never had occasion to change my opinion of its character.

I have always considered that that log cabin school, with the two devoted people in charge of it, was sent at this time in our lives as an especial dispensation from the source of the all-wise to help us. There were two instructors that winter beside Mr. Cort—his sister, Miss Maggie Cort, and E. M. Bogart, the latter in charge of mathematics and the business department. The students came from the surrounding territory of Lincoln and Douglas counties. There were the Brownfields, Joel, Robert and Mary; also Fred Teter, from near Waterville, and the Hardenbrooks from our own community; Frank Reed, from near where Wilson Creek now stands, and Minnie Sandford and George Peterson, from our part of Douglas county. I suppose there were 60 or 70 pupils altogether.

Father proceeded immediately upon our arrival to haul rough lumber and in a week Ed and I were installed in a two-room shack, which was our home during the portions of the following two years which we spent at school. It was during our second year that we had our first and last Indian scare. Reports of excitement among the Indians across the Columbia river kept drifting in, but it was impossible to find out anything definite. Then one evening about 9 o'clock, after I had just fallen asleep, Ed came quietly in.

"I guess they've come, Ida," he announced in a matter of fact voice.

I was almost too sleepy to answer, but finally I forced myself to do so. "Who's come?" I asked.

"The Indians," he replied, without about as much apparent excitement as if he had been talking about the cows coming home. "They've got a big fire up on the hill back of us, and they're shooting up the whole country," he went on. "You'd better get up and go down to Beardens."

I immediately got up and took my best dress from its hooks and put it on. I intended to save my clothes, come what might. Then I slipped my bare feet into my shoes, gathered up the rest of my clothing, and made my way into the night, bringing up at Bearden's house soon after. The house was crowded and the night which followed was a confused one, but the following morning the excitement subsided. The "Indians" had been merely a party of mischievous young fellows on their way home from Wilbur.

After that period at Cortland Ed finished his education at Pullman, while Frances and I polished off at the Ellensburg normal. So far none of us has his name in variegated streaks across the sky of fame, but who knows what time may yet bring forth?

## WASHINGTON FRUIT.

### Weather and Crop Prospects.

The weather conditions for the months of May and June were not favorable for the best growth and development of the fruit crops. The frequent spring frosts followed by unusually dry weather have decreased the output; yet at the present time, where sufficient moisture was available from irrigation or other sources, apples and pears are of much better size than they were at this time in 1917, says M. L. Dean, chief division of horticulture for Washington, in a recent report.

The June drop was very heavy and some of the fruit that did not drop shows severe frost markings.

Both the green and rosy aphis have been very active this spring and where thorough spraying for their control has been neglected, serious damage will be manifest in the form of dwarfed and illshapen fruits.

The apple powdery mildew infection has been very prevalent and many apples will be lowered in grade because of the russeting of the fruit. More thorough spraying should be done to prevent this injury, because it not only injures the fruit of the present crop, but prevents the setting of buds for the next year's crop.

Growers are endeavoring to hold the wormies down to the minimum, but the weather conditions in the early part of the season were such that the moths came out exceptionally early, thereby prolonging their active periods. The lack of help, together with the high cost of materials, tended to discourage some growers in their spraying activities: yet most growers are putting up an active fight against them.

The spring frosts, followed by prolonged dry, hot weather, curtailed the strawberry crop at least 50 per cent.

The crop of bush fruits, based upon present indications, will far exceed that of last season.

The probable yield of the Yakima valley district, including Yakima, Kittitas and Benton counties, will fall some short of the 1917 output. There has been a steady shrinkage of the probable crop since the blooming period due to the June drop and weather conditions.

Mr. Dean makes an estimate of the crop as it now appears, as follows, the figures representing carload shipments:

In Yakima and Kittitas counties: Apples, 670; peaches, eight; pears, 119; prunes and plums, 16; sweet cherries, nine; sour cherries, three; grapes, 40; gooseberries, one; black raspberries, one; strawberries, 69.

The Wenatchee district comprises Chelan, Okanogan, Douglas and Grant counties. The carload estimates are as follows:

Chelan county: Apples, 6216; Okanogan county, apples, 550; Douglas and Grant counties, apples, 525. The other fruits in Wenatchee district, including 590 carloads, are divided as follows: Peaches, 71; pears, 361; apricots, 53; plums and prunes, 27; sweet cherries, 70; sour cherries, five; grapes, three.

Spokane district reports a large increase over last season's crop, the present carload estimates for apples being 1067.

The Walla Walla district was visited by severe frosts and the present indications are that the shipments of apples will amount to 205 carloads. The outlook in the Clarkston district is much brighter than in 1917. The cherry crop was good and prospects of average peach, prune and apple crops are noted.

Clarke county has a prospect for the largest prune crop in the history of the county. If the dry weather does not cause an abnormal drop of the fruit, the output should be at least 6000 tons of dried fruit. A shortage of evaporators is now facing the growers, and many are constructing new ones, while others are enlarging the old plants.

Pacific and Grays Harbor counties will probably produce about 7000 barrels of cranberries this season.

The berry crop in the other western counties is very promising and should produce at least 1000 carloads of fruit, providing seasonable rains occur, but if the present drouth continues the crop will be reduced one-half. The tree fruits promise about a normal crop, cherries and pears taking the lead.


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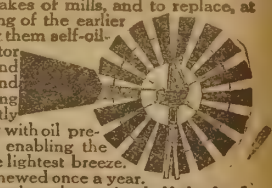
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# From Yakima City to the Columbia

By PAUL E. TRIEM.

When the Longmire party passed through Yakima valley in 1853, its members purchased potatoes from the Indians. Six years later William Murphy, John Nelson and Fred Allen drove their cattle upon the Yakima range and the following year F. Mortimer Thorp became the first permanent settler. Mr. Thorp brought with him a herd of 250 fine Durhams, which he turned out upon the bottom lands, covered in those early days with a growth of bunch grass and rye grass, the latter often standing 12 feet high. One of the first orchards was set out by Alfred Henson in 1866, while N. T. Goodwin extended the agricultural experiments of the white men by harvesting a wheat crop which averaged 40 bushels to the acre. Encouraged by these successful beginnings, work was begun on an irrigating ditch in 1868.

Consider now the result of this pioneering: Last year's fruit crop totaled nearly 14,000 cars, and brought in over eleven and one-half million dollars. Fifteen hundred and fifty-one cars of live stock were sold, for $4,000,000 plus. Other little items are beet sugar and beet pulp, fruit and vegetable products, grain, dairy products, wool and hay, each of which brought in $1,000,000 or more.

Such developments, very naturally, have not come without many a day and month and year of strenuous effort on the part of pioneers and home-builders of the valley. Delays seemingly interminable halted development. In 1870 the Northern Pacific railway filed a map of preliminary location which showed Yakima adjoining its proposed right of way, but the railroad itself did not come until 1884. Misunderstandings between the railroad people and the town people arose, and the little city in the sage brush found itself four miles from those glistening rails which spelled the magic word, transportation. The remedy was obvious: The mountain had not come to Mahomet—not quite; so Mahomet must go to the mountain. Fifty or 60 buildings, including the courthouse, First National bank, and several hotels were moved down the road to a site beside the railroad, and the foundations of the present city of Yakima, at that time called North Yakima to distinguish it from the shell it had left behind, were laid.

Whatever may have been the rights and the wrongs of that early misunderstanding, the entire Yakima valley owes much to the Northern Pacific railway. It was this company which stood back of the first big irrigation canal, the Sunnyside ditch, which was begun in 1890. There had been other smaller ventures—a ditch 18 feet wide, having a fall of one-fourth inch to the rod, and carrying water 18 inches deep, was completed in 1875. There had been several other small projects. But the big ditch backed by the Northern Pacific, which with its branches and laterals was capable of watering 40,000 acres, was the first real step toward the irrigation systems of today. In 1905 the Sunnyside canal and all the important water rights affiliated with it were purchased by the reclamation service, which in this way was enabled to administer the entire system to the best advantage of the community as a whole. Since the consummation of this purchase, development work by the reclamation service has gone steadily forward. At the present time it is estimated that there are 240,000 acres of land under irrigation and intensive farming between the city of Yakima and the Columbia river, while probably 550,000 acres can eventually be irrigated within the county limits.

## Pastes for Wall Paper

To the Editor: I want to hang some felt paper, also some wallpaper, but owing to the scarcity of flour do not like to use it. Could a satisfactory paste be made without white flour? If so, how?

Also, please give a recipe for making paste with wheat flour. F. W. Dalkena, Wash.

**The Answer.**

George A. Olson, chemist at the Washington State experiment stations, answers the above question as follows:

Use a cheap grade of rye flour, mix thoroughly with cold water to about the consistency of dough, being careful to remove all lumps. Stir in a tablespoonful of powdered alum to a quart of flour, then pour in boiling water, stirring rapidly until the flour is thoroughly cooked. Let this cool before using, and thin it with cold water.

**Strong Adhesive Paste**—Four pounds of rye flour, one-half gallon of cold water, one gallon of boiling water, two ounces of pulverized rosin. Make the rye flour and the half gallon of cold water into a batter free from lumps. Then pour this into the gallon of boiling water. Boil, if necessary, and, while hot, stir in the pulverized rosin a little at a time. This paste is exceedingly strong and will stick heavy wall paper or thin leather. If the paste is too thick, thin with a little hot water.

**Wheat Flour Paste**—Two pounds wheat flour, one quart of cold water, one ounce of alum, one quart of hot water, one-half gallon of boiling water.

Make the wheat flour into a batter free from lumps with the quart of cold water. Dissolve the alum. Stir the wheat flour and cold water mixture into half a gallon of boiling water, and, if necessary, continue boiling until the paste thickens into a semi-transparent mucilage. Then stir in the alum solution. This makes a very fine paste, but, of course, should not be used so long as economies in the use of wheat flour are so absolutely necessary.

In the formulae that call for rye flour I believe barley flour could be used.

**FLAG WITH FOUR STARS.**

To the Editor of the Washington Farmer: Enclosed please find 30 cents in stamps for The Washington Farmer for one year, also one farm service flag, with six stars. The new subscription will entitle me to one flag with four stars. GUY ARMSTRONG.
Mt. Vernon, Wash.

## Plan Big Honey Production.

A report from San Francisco tells of an organization in California whose purpose will be the building up of a string of bee farms along the California coast from San Diego to Santa Cruz. It is stated that contracts have already been let for 15,000 hives of bees. Most of the stockholders in the new company are experienced bee men and are making the enlarged venture with a view to supplying more honey during the war period when its use as a sugar substitute is most necessary.

**Invent Typewriter Attachment**

An eraser that is operated by a key is a new typewriter attachment

## Sugar Beets for Stock

To the Editor: I would like to know how to plant and care for the half sugar mangel for stock on nonirrigated soil. State what soil it should be and whether it should be in low, moist soil, or in upper well drained soil.

CARROLL S. JONES.

E. G. Schaffer, agronomist at the Washington State college, answers the above question as follows:

The sugar beet for its best development requires an abundant supply of moisture, and a very rich soil. The soil used for the production of this crop should be well drained. If irrigation is not possible it may be that a soil located in a valley will give better results than a place higher on the hillside. Land somewhat lower is likely to be richer in plant food and may furnish a better supply of moisture in the season.

**Sells Thrift Stamps.**

Frank L. (Lucky 13) Wright, Springfield (Ill.), carrier on city mail route No. 13, recently announced he had completed his campaign to sell war thrift stamps to every one of the 2300 persons on his route. Among the number were 800 pupils in a junior high school.


# Feeding for Eggs, and Profit

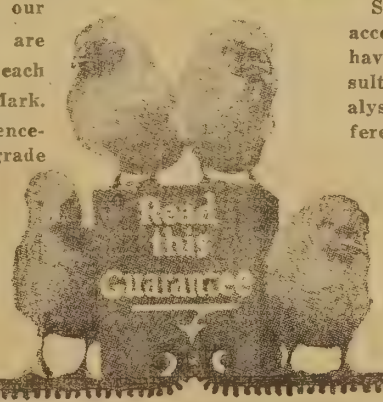


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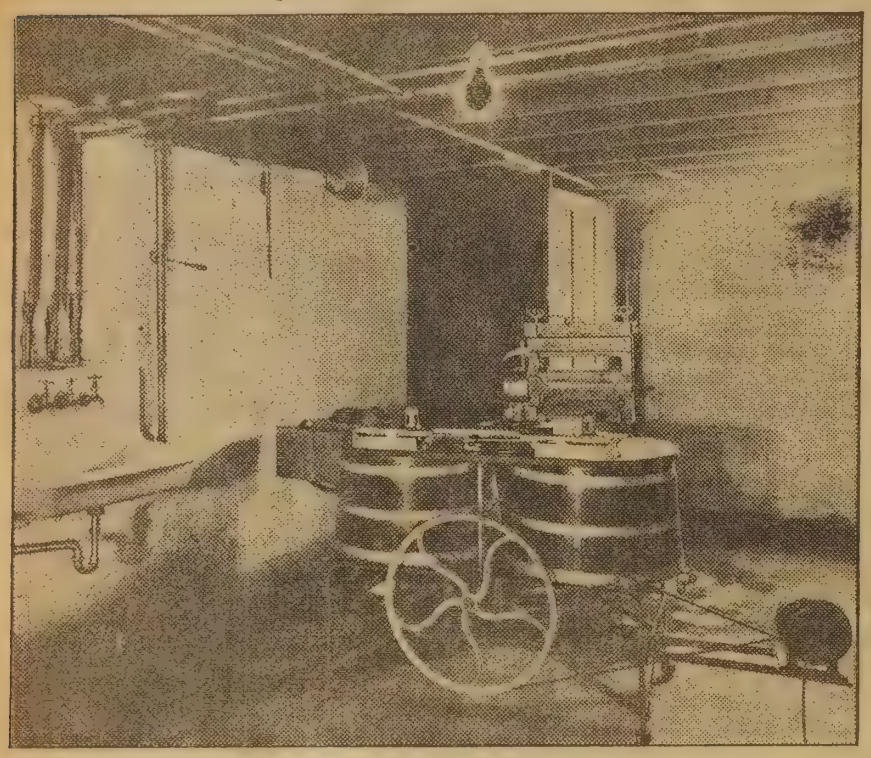
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# What Little Wires Do

## *Farm Woman's Work Is Lightened by Electricity*

By MRS. ISAAC MOATS



I would like for every woman whose lot it is to live and work on a farm this summer to have electricity to help her out as it is helping me.

It seems strange to think that a few little wires strung around the place, all leading from the electric plant in the basement, could make such a difference in one's life, but you don't wonder about it once you have electricity to use. You just go ahead and enjoy it.

There must be 60 or more electric lights altogether around here, in the house, on the porches, in the barnyard and the barn. Of course, we don't have them all turned on at once, but they are placed just so they will throw the light where it will be needed, and it is a big satisfaction to light up any place in an instant without striking a match or carrying a lamp or lantern.

We feel that these lights are perfectly safe, and it is fine to be free from all the cleaning and messing around with the coaloil lamps as we used to do.

But there are other advantages that electricity brings us which are greatly worth while. One of the features we enjoy is the pressure water system which is run automatically by means of a little electric motor. This system stores the water in a tank at about 50 pounds pressure. The water is forced from a faucet or hose whenever we want to turn it on, and when the pressure gets below a certain point the pump is started automatically.

We have hot and cold water for bathroom, kitchen and laundry, and water for the stock at the barn, all without any pumping or hard work of carrying it in buckets.

It is likely that our water system saves us two hours a day when we consider the watering of the stock, the water carried on washday the way we used to do, and all the rest of the work that calls for water about the farm home.

We are great for flowers here and it is a satisfaction to be able to sprinkle the flower beds with a hose instead of lugging around a bucket and sprinkling can. It takes less work to have all the flowers we want and to keep the kitchen garden growing, for we can turn the hose on it, too.

My washing machine is run with an electric motor, and do you know, with electric power to do the washing and with running water handy, so that I don't have to carry it, I feel that I have finally got the best of washday.

There are other ways in which electricity helps out about our home and every one is worth while. We can run an electric fan in the kitchen, dining room or bedroom when the weather is hot; I can use an electric iron on ironing day, without heating up the kitchen.

In fact it seems that we find some new way every little while in which we can make electricity help out, saving time and work for somebody, and, as I said before, I wish that every woman who lives on a farm could have electricity to help her out as it is helping me.

### *Clip This Order Blank*

Address all communications concerning thrift or war savings stamps to The Washington Farmer, War Savings Department, Room 26 Review Building, Spokane, Wash.

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## Like Geese

### When Perplexing Problems Arise

I would feel insulted if any one should call me a goose, yet I do things habitually that are done so much like geese would do when they are confronted with circumstances that perplex them, that I wonder if I have traveled the long, long path of evolution from the lower forms of life, or if it just happens that I do that way.

Every one who has raised geese knows that they are social animals; that they go in flocks and follow a leader. They know, too, that a goose is a biped and that what brains it has, is supposed to be located in its head. In these respects they are somewhat like men. Put a flock of geese into a pasture, and before long they will want to get out. The gate is open, but the leader will start along the fence in the direction in which he wants to go, and will stick his head in the first hole in the fence that is large enough to receive it, and then pass on to another, another and still another until he has tried every hole in the fence, unless he finds one big enough or comes to the gate. In the meantime every goose has been following the leader, and every particular goose has stuck its head into every particular crack in that fence until they find one through which they can pass.

In monarchies, the people follow their kings everywhere and anywhere. In aristocracies, every one tries to imitate the aristocrat. Even in democracies we are so engaged with local and private matters that we have not time to keep informed on the larger problems that affect the whole people. We must in the nature of things submit to leadership. But just why in reform movements like the abolition of the liquor business, for instance, we must try every inadequate, incompetent and insufficient thing, before we try the right one, national prohibition, is incomprehensible unless it be that we have not sufficiently evolved from the goose period.

The idea that working men can not or will not turn out as many ships or aeroplanes or as much of anything else unless tanked up with whisky and beer, is goose feed, and the "statesmen" who are lending themselves to this sentiment are sticking their heads in the fence cracks where any one with more than goose sense would know they could not get through. G. L.

## SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

## You May Be Sure You're "Fit" If Marines Take You



Dr. Hirshberg.

Most of us remember the comic ditty of too many years back about Captain Jinks of the horse marines. Well, that ballad is no longer a joke. Our marines, considered all the world over as perhaps the finest organization of fighting men in the world, fight on land as well as on sea and actually have horses for some of the officers and men.

Nor are they any more the gullible, innocent, unsophisticated sailor-soldiers they were once supposed to be. You can not "tell it to the marines" any more and "get away with it." They are now usually the brightest, healthiest, "niftiest" lot of brave, patriotic, virile men you can possibly meet in any walk in life.

Any man or boy who applies for enlistment in the United States marine corps and succeeds in passing the physical tests—he must be at least 5 feet 4 in his skin—may well be proud of the success. It is a testimonial to his fitness and a certificate of first-class health.

One of the camps to which marines in the making are dispatched, in order to make them superior even to the supreme excellence of their present condition, offers the men, who acquire slight disorders after their enlistment, the chance "to be made over," so to speak. There has been established a "rehabilitation unit" for the physical reclamation of as many men as can be saved.

**What Is Done.**

The surgeons of this new unit correct the foot troubles of a great number of men, fix the teeth of others, perform necessary operations, and by every means try to improve as many as possible. Men for service receive especial attention, and are put in a class by themselves. Men who have impediments, such as flat feet, also are given separate attention. Then come men classed as fit for domestic service only, aliens and illiterates, and finally men listed for absolute rejection.

The officers and non-commissioned officers who are members of the staff are selected because of special qualifications. They are required to be sympathetic, of sunny disposition and thoroughly understand the importance of their work. The doctors are selected from the highly capable corps attached to a base hospital, and from a group of surgeons assigned to independent units. The course of treatment lasts about 31 days. By that time the men who are being aided are expected to respond to the expert attention. Already 400 men are assigned to the unit for reclamation physically.

**No Time Lost.**

Every command in camp now knows about the operation of the rehabilitation unit, and officials of all organizations are invited to send men for treatment who appear to have a chance of being made over. Special diagnosis is given in every case that comes to the attention of the surgeons. Where foot troubles are to be treated, special shoes are given, and also orthopedic treatment. While the men are being given surgical attention they still pursue military drill and study in a measure, so that when they are discharged from the unit as fit for service they will have lost no knowledge or practice.

It has been found that by proper and separate attention many men can be made fit for duty at home or "over there." With this end in view all commands are on the lookout for subjects of this special treatment.

## Sidelights

**Like a Ball Costume.**

The 6-year-old was very observing and had frequently seen her mother dressed for fashionable functions. One day she was watching the maid preparing a chicken for the oven.

"Oh, mama!" the little one exclaimed, "Norah is takin' all the feathers off the chicken!"

"Yes, dear," replied the parent. "She is dressing it."

"Why, mama, the chicken isn't goin' to a ball, is it?"—Pittsburg Chronicle-Telegraph.

**He Wanted Help.**

Danny and Bobbie had been left in the care of their big sister while their mother went out. At bedtime they wanted to "stay up for mother," but their sister relentlessly put them to bed. Danny maintained a stolid indifference, but Bobbie cried lustily. Their sister listened at the foot of the stairs, hoping they would soon be quiet. At last Bobbie stopped and the listener heard him say:

"You cry a bit, Danny; I'm tired."—Tit-Bits.

**Breaking It Gently.**

He had been on the western front and received a wound which necessitated the amputation of one of his legs. Writing home to his family he very naturally wished to break the news of his loss to them as gently as possible before they saw him. After fully describing the battle, and the injuries to his limb, he finished by saying:

"On arrival at the hospital I interviewed the surgeon. Henceforward I shall require only one boot."—Exchange.

**Nourishment.**

An old South Carolina darkey was sent to the hospital of St. Xavier in Charleston. One of the gentle, black-robed sisters put a thermometer in his mouth to take his temperature. Presently, when the doctor made his rounds, he said:

"Well, Nathan, how do you feel?"

"I feel right tol-ble, boss."

"Have you had any nourishment?"

"Yassir."

"What did you have?"

"A lady done gimme a piece of glass ter suck, boss."—Lippincott's.

**Why She Couldn't Spell.**

Old Mrs. Donahoe managed to get along in the world in spite of her educational deficiencies. One day she was called upon by a lawyer to sign a rather important paper.

"You sign it yourself, young man, an' I'll make me mark," said the old woman. "Since me eyes gave out I'm not able to write a wurrd."

"How do you spell it?" he asked, his pen poised above the proper place.

"Spell it whativer way ye plaze," said Mrs. Donahoe promptly. "Since I lost me teeth there's not a wurrd I can spell."—Boston Transcript.

# All the World's a Stage, and All the Men and Women Merely Players

## Treatment in Trenches for Wounded



Copyright Committee on Public Information.

A wounded American soldier receiving first aid in the trenches.

## To Work in France.



Thomas Corkery of Spokane has accepted duty with the Red Cross abroad. This removes him as a possible candidate for congress.

## How Can We Help?




U. S. Food Administration.

## Pets for the War Nurses



(Underwood & Underwood.)

At a New Zealanders' war hospital, rabbit culture on an extensive scale is carried on. Poultry is also kept. This line of industry means food for the patients and pets for the war nurses. The above photograph shows one of the soldiers and a war nurse with some of her little pets. The photograph is copyrighted by Underwood & Underwood of New York city.




## The Tired Man




"This manner of resistance is awful on the part of those allies. I call it barbarism."—Esquella, Barcelona.

## Safeguarding French Citizens of the Future



Taken in a French nursery where the Red Cross and other agencies are trying to save 50,000 babies.

# Trappers of the Ozarks

The Adventures of Two Young Trappers in the Wilds of Upper Louisiana, Now the State of Missouri.

By LEWIS B. MILLER

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## CHAPTER XXV.

### Pottawatomies and Osages.

Mingled with the war-whoops, just outside the cave's mouth could be heard the cracking and roaring of fire-arms. Soon the startled white men saw an Indian dash by the mouth of the cave, while another Indian pursued with a tomahawk in his hand.

"The Osages have come! The Osages are attacking the Pottawatomies!" exclaimed Ben, though very cautiously.

"That must be what it is!"

But the yelling and the shouts and the wild tumult outside quickly ceased. All the Pottawatomies not killed had doubtless escaped into the surrounding darkness.

Long Jodo and Ben stood there in the dark waiting and listening. At last they stole toward the mouth of the cave to see what they could learn.

If they had hoped to find the valley deserted, they were disappointed. The burning cabin was still surrounded by Indians—40 or 50 of them. Among them the white men could recognize several faces, the most noticeable being that of their old-time fat enemy, Snapping Turtle.

"Is it a change for the worse or a change for the better?" whispered Jodo.

"Not much difference, I'd say, so far as the redskins themselves are concerned. There's one advantage to us, though. The Pottawatomies knew we are in here, and they were hanging around to capture us. But the Osages are supposed to be still thinking that we're dead—that we were burnt to death in the hunters' block-house. If they don't find out better, they'll be likely to go away pretty soon."

"Let's hope so. They're all bad people for us."

The Osages, it was noticed, were engaged in eating. Perhaps they had been on a hard march and had not had time to eat. Ben and Jodo withdrew a hundred yards or so, as a matter of prudence.

When the red firelight outside had begun to give place to the gray light of day, Indians could be seen passing till a long string of them had filed by. When the last one had disappeared, the two watchers stood for a good while, speculating as to what it meant.

At length they got up courage to approach the cave's mouth and peep out. Not an Indian was to be seen anywhere.

"I wonder if they've gone back to their village."

"More likely they've gone in pursuit of the Pottawatomies, Jodo. But there may be some left behind. We shall not dare show ourselves till we can make sure."

The pair soon returned to their canoe, and there they remained for a few hours. Then they stole out again for another look. They saw nobody, but they went back and waited till late in the day before venturing outside.

The ruins of their cabin were still smoldering, and the cliff that had roofed it was black from the flames and smoke. Since the trappers had entered the cave the weather had turned raw, till there were now indications that the night would bring frost. They remained out of hiding only a few minutes. But after nightfall, being weary of the damp and gloom of the cavern, they took their blankets and buffalo-robes and went down the valley toward the creek, where they slept in a thicket. They were up at the first signs of day, and hiding in the mouth of the cave again. But no Indians appeared, and the two decided that it would be safe to take it for granted that all of them had gone for good.

Now Ben and Jodo went out and took a good look around. Many signs they saw that Indians had been here, the most striking being the bodies of several Pottawatomie warriors whom the Osages had killed and scalped. The bodies were all out in the valley, the victims having run for their lives before being struck down.

"Grewsome sight!" remarked Ben. "But I'd rather it was they than I. If we had time and something to dig with, we'd bury them. But I don't see how we can. Our first business is to load our canoes and get out of such a dangerous neighborhood before we're in the same fix."

After climbing the hill behind the cliff for a look around, they came back and began to get ready.

The canoe in the creek, they were glad to find, was still under the bank where they had concealed it. They got it out, wiped all the dust out of it, and tied it to the bank at a place most convenient for loading. Then they hung their rope ladder across the little cave, and Jodo climbed up and began to let salt down in bags. Ben shouldered a bag, which contained two bushels or more, carried it down to the creek and emptied it into the canoe. They worked fast and soon had all the salt loaded. There was not enough to fill the canoe, but as much as they could safely put in. Afterwards, to keep rain out, they covered the canoe with elk-skins, tacking them to the sides with the little nails used in tacking furs up to dry.

Then Jodo came down the rope ladder, and the two lighted a torch, went into the big cave and brought out their canoes, towing them along the shallow stream and down to the creek. Now Jodo went up to the little cave again, and let down all the furs and their two bags of powder; also their tools, their flour and meal, their cured meat and other things.

While the younger trapper was still up in the cliff, Ben found their big pots and had them drawn up. He, too, now went up the ladder and, the weather being too cool for the bees to offer much resistance, they took honey enough out of the hole in the rock to fill both pots. Then Ben climbed down, and Jodo attached the rope to the pots, one at a time, and let them down. While Jodo was climbing to the ground Ben was tying deer-skins over the pots. And while Jodo was gone round and up to the top of the cliff to drop the rope-ladder, Ben was carrying furs down to the creek.

When Jodo came back they ate a dinner of buffalo-meat, broiled over the ruins of their cabin, with honey in the comb for bread.

After eating, they carried the rest of their furs down; and they soon had one canoe full and piled up with furs. This, too, was covered with elk-hides and a buffalo-hide, to keep the furs dry in rainy weather.

Some of their meat they put on top of the salt. But the rest of it, together with their pots of honey and all their other things, they placed in the middle of the third canoe—the one that they themselves expected to ride in. This was the longest canoe, and they left a vacant space at each end to sit or stand in while paddling, and also long enough to lie down in when they wanted to sleep. The two parts of their tent, pieced out with a buffalo-robe in the middle, would cover this canoe in bad weather.

By this time it was past the middle of the afternoon. "Now we're ready to travel! And the sooner we get started the better," Ben said. "Those Osages may come back by here when they get through chasing the Pottawatomies. And we don't want to be here when they come."

"And I'd rather not spend another night in the vicinity of these unburied Pottawatomies. Hard as they tried to kill us, I wish we could bury them."

"We could somehow, I suppose, but we don't dare take the time."

They now fastened the two freight-canoes to the stern of the canoe they were to ride in. Then they went up on the bank for a last look around.

"Well, little valley," Ben said, "we've had some pretty good times here, and some pretty exciting times. It'll be many a long day, I'm thinking, before we see you again. Goodby!"

They now went down, untied their canoe, stepped in and took up their paddles. Soon they had the three canoes moving down stream.

There were numerous shoal places in the creek; and at a few of those they had some trouble. More than once they had to pull off their boots, roll up their pantaloons, and step out into the cold water to lift up on the canoes.

The sun was setting when they arrived at the Niangua river. There they stopped to eat their supper, and they waited in the mouth of the creek till night had come on. Then they paddled out into the larger stream. At last they were on their way home.

The river seemed to be somewhat swollen, and the current swept them along at a lively rate. There was a few-days-old moon, which gave them some light—more than the voyagers wanted. Silently the three canoes glided on, keeping in mid-river. The two paddlers worked cautiously, and it was seldom that a stroke of their paddles could be heard.

"With war-bands from two Indian tribes in the country, both unfriendly to white people, it stands us in hand to be cautious, especially till moondown," Ben said, scarcely above a whisper.

About midnight, being a little weary, both ceased paddling and allowed the canoes to drift with the current while they ate some dried buffalo-meat. But soon they had rested and were using their paddles again.

Hour after hour passed, and still the two paddles were going. But when at last a brighter light than that of the stars began to break the east, the canoemen watched the river-bank for a hiding-place. Soon, discovering a small creek, they turned and paddled into it.

A hundred yards up the creek they could not be seen from the river and they were also well shut in by thick woods and brush along the banks. Here they tied up and ate their breakfast. And here, feeling safe, they lay down, each in his end of the canoe, and fell asleep.

Most of the day they slept. But by sunset they were up, had eaten another meal, and were ready to travel. While waiting for night, Ben climbed the creek-bank and went scouting. From the top of a near-by hill he swept the country for camp-fires. But no smoke could he discover. He returned, and the two paddled back into the Niangua and on down stream. The moon, which would have been brighter tonight, was concealed by some clouds, and they felt safer.

All night long, with only a brief rest about midnight, they kept paddling, paddling, paddling to aid the current. An hour before dawn they entered another creek for a hiding-place. On a lower bank they kindled a fire; and by the fire they baked the last of their meal, boiled some beans in their little pot, and broiled some meat. By daylight they had finished their cooking and drowned out the fire. But it was broad day when they sat down to eat their breakfast. Again they spent the day sleeping.

Late in the afternoon the two awoke, and after walking about through the woods a little, they made another hearty meal of what they had cooked for breakfast. Soon after nightfall they were paddling down the river again. And an hour after commencing the night's voyage they discovered a camp-fire on the river-bank, some distance ahead.

At once they ceased to paddle. For they had a strong suspicion that the camp-fire had been kindled by Indians. And as they drifted nearer they could actually make out Indian warriors squatting around it. Now the canoemen put their paddles against the bottom and came to a sudden stop. The moon was shining, and they pushed over into the shadow of some trees on the west bank.

"My, but there's a big gang of 'em!" whispered Jodo.

"I'm guessing they're Osages—the same band that went in pursuit of the Pottawatomies. If it is, they must be on the way back to their village."

"Can we ever get by? Won't we have to hide somewhere till they're gone?"

"We can drift by after moondown, I think, and after they're all asleep. Too much light on the water now."

"Yes. We don't want to get old Snappy Turkle on our trail again. He's too infernally hard to shake off."

The travelers held their canoes, and watched the moon and the camp-fire. The Indians must have camped late, for the moon had set before they had finished their supper and lain down to sleep. The canoemen were afraid that at least one warrior would remain awake, on sentinel-duty. But the Osages seemed to have no fear of attack, and the last one of them was soon lying asleep near their camp-fire.

Thinking it well to be on the safe side, the voyagers waited another half-hour. Then they pushed out to midstream and allowed their canoes to drift on. But not till they had thrown themselves down so low that only with one eye could they peep over the side of the canoe.

As the river was rather narrow here, and they must drift by not far from the camp, both were very anxious. There was still light enough on the water for the canoes to be detected if any of the Osages chanced to look in that direction.

While the canoes were nearest, one of the Indians—and they were almost sure it was Snapping Turtle—sat up and gazed about. But he looked only toward the land-side of their camp. Soon he lay down again, without having glanced toward the river. It was no small relief to the canoemen when they had drifted by the savage camp. Not till the camp-fire was out of sight did the two dare use their paddles again.

"I'm wondering if they overtook the Pottawatomies."

"No telling, Jodo. And we neglected to ask them as we came by. But even if they didn't they probably gave them such a scare that the Pots won't stop running till they get back home."

"Well, I hope they've run so far that they won't bother us as we drift along down. Will it be safe for us to travel in the daytime hereafter?"

"I'm a little afraid to risk it yet. Don't know what we may do after we get down into the Osage. For the present this is both safer and more comfortable. It would make a fellow feel creepy to be paddling along in daylight and not know at what minute a bullet from some cliff might take him straight through the heart.

"That wouldn't be nice. But the Pottawatomies on the run, and the Osages traveling toward their village, there oughtn't to be much danger of a bullet."

"No. But you recollect what those canoemen on the Gasconade told us—Robinson and the Frenchman? It may be even worse by this time. If the redskins are all sulking at the whites, we may have to be on our guard all the way down. When we reach Cote sans Dessein, at the mouth of the Osage, we can find out from the settlers what the situation is. If the tribes have actually taken the war-path, we shall have to do all our traveling by night. But I certainly hope that won't be necessary on the Missouri. That's a dangerous stream to navigate, even when you can see."

"There'll be one advantage on the Missouri, Ben."

"What's that?"

"Why, we can track the middle and keep out of bow-shot or rifle-shot of either bank."

"Yes. That will be an important advantage. Then the only Indians we shall need to fear will be those with canoes. And we'll hope that not many of them will have canoes."

Some time during the night the voyagers passed out of the Niangua into the wider Osage. The weather was pleasant by this time, the air being so mild that the leaves were coming out fast. Elms and other early trees were already green.

The scenery, too, was very fine, limestone cliffs and bluffs and wooded hills rising hundreds of feet above the water. But for the danger, the canoemen would have enjoyed traveling in the daytime far better.

And so they drifted on down the crooked Osage. One morning, between dark and daylight, they hid themselves and remained there till late in the day. A little before sunset Ben took Jodo up a high hill from their camp and across half a mile or so of rough country, to where they could look down upon the river again.

"Where you see the Osage now is 50 miles below our camp."

"Fifty miles below!"

"That's what I said—about 50 miles. From here on we have to swing round a circle. By hard paddling we may be able to reach this point here by daylight tomorrow morning. Fifty miles of traveling to get half a mile nearer home!"

"Oh yes! I recollect now. This is the place you told me about. Pity we can't carry everything across."

"But we can't—not over this hill. Nothing for us but to ride around."

They returned to camp and were soon on the river. Daylight came and found them still not where they had hoped to be. So they took the risk and kept paddling. When the sun was an hour high, they hid their canoes and campel. And after sleeping most of the day, they walked across to where they had camped the night before.

While returning to their latest camp, they stopped on the hill-top and swept all the surrounding country for camp-fires. Smoke could be seen rising from various points—all many miles away, however. And while there seemed no immediate danger, prudence, they soon decided, required that they keep on traveling by night and resting and sleeping in daylight. And so they did, day after day.

One night, just as they were about to push out of a creek into the river, they were startled to see three canoes coming up stream, each with several Indians in it. The moon was shining, and had the whites started out a few seconds earlier, the red canoemen must have discovered them. Such a narrow escape gave them a fright; and it was not till a good while later that they felt brave enough to proceed on their way.

"Who were they, Ben, do you think—of what tribe?"

"That's what I'm wondering. Robinson told us, you recollect, that several hundred Sacs and Foxes had their camp near the Osage, a good distance above its mouth. Those canoemen may be from that village. It's likely that they're on their way up to visit the Osages."

"Have they ever been on the war-path against the settlements—the Sacs and Foxes?"

"Not that I've heard of. But you know what Robinson told us. The British agents may have them armed and ammunitioned by this time, and egged on to the fighting-point. At any rate, we'd better take it for granted that they have."

The two travelers had been on the river an hour, and were still moving down stream as noiselessly as possible, when something very unexpected happened.

(Continued on page twenty-seven.)

FAMILY CIRCLE

Write to the Editor.

ALICE W. BARLAND,
Editorial Contributor.

# Red Cross Labels

## How to Place Them on Garments

The French commission advises that it is essential that all garments produced by chapters be distinctly and permanently marked as donated by the American Red Cross. Restrictions imposed by the Geneva convention permit the use of the Red Cross emblem only on articles intended for use of military sick and wounded and those actually engaged in the care of such persons.

The Red Cross has therefore decided on a standard form of label for use on all garments. These are now on order and may be procured from the division bureau of supplies by chapters that do not already have them.

The label provides a blank space in which each chapter may stamp its name with indelible ink. Rubber stamps for this purpose can, of course, be secured locally by the chapter without difficulty. Instructions for the placing of these chapter labels on garments and other articles are as follows:

**Hospital Garments and Supplies.**

Bandaged foot sock—On hem around top—Inside center back.
Bed jacket A.—Inside collar band.
Bed jacket B.—Inside pocket at top center.
Bed sock—Inside on hem around top of leg, center back.
Comfort bags—On hem inside edge of bag.
Convalescent robes—Inside collar band.
Convalescent suits, American (factory made)—Inside collar band.
Convalescent suits, French—Inside, back of collar band.
Handkerchiefs—On the hem—In one corner.
Helpless case shirt A.—Inside pocket at top center.
Helpless case shirt B.—Inside pocket at top center.
Hospital bed shirt—Inside back of neck, either side.
Hot water bottle covers—On hem, inside.
Operating caps—Inside band.
Operating gowns—Collar band.
Operating leggins—On hem around top of leg—Inside, back.
Operating masks—Along edge, or on corner.
Pajama—Inside collar band of coat.
Trousers—Waistband, center back.
Shirts—Inside of collar band, back.
Slippers—Inside on edge.
Trench foot slipper—Anywhere on inside edge.
Underdrawers—Inside on "waist band" in front.
Undershirt—Inside back of neck.

**Bedding and Towels.**

Bedspreads—Upper left-hand corner, on hem.
Blankets—Upper left-hand corner, on hem.
Pillow slips—Inside hem in one corner.
Sheets—Upper left-hand corner, on hem.
Towels—All sorts—In one corner.
Wash cloths—In one corner.

**Refugee Garments.**

Apron for women—Inside waistband, center front.
Blouse suit, boys'—Inside collar band.
Capes, children's and adults'—Inside collar band.
Chemise, women's and girls'—Inside back of neck.
Drawers, women's and girls'—Inside waistband, center front.
Dress, girls' and children's—Inside collar band or neck; center, front or back.
House gown, women's —Inside back of collar band.
Jersey suits, children—Inside neckband, center back.
Kerchief, women's—One corner, on hem.
Morning blouse, women's and girls' —Inside neckband, center back.
Nightgowns—Inside neckband, center back.
Petticoat, women's and girls'—Inside waistband, center front.
Petticoat with waist—Inside neck, center front.
Pinafore, boys' and girls'—Inside neck, center front.
Shirt, men's and boys'—Inside collar band, back.
Shoulder shawl, women's—Anywhere on inside edge.
Skirt, women's and girls'—Inside waistband, center front.
Stocking and socks—Inside on upper edge, center back.
Suits, men's and boys' (factory made) —Inside collar band.
Trousers, men's and boys'—Inside waistband, center back.
Vests and undershirts, children's—Inside neckband, center back.

**Layettes.**

Bag of sundries—Inside hem.
Bonnet—Inside lower edge, center back.
Cape—Inside collar band, center back.
Dresses—Center of hem at back opening.
Swaddling cloth—One corner.
Diaper—Corner of the diaper in which the bundle is wrapped, and which will be visible when package is complete.

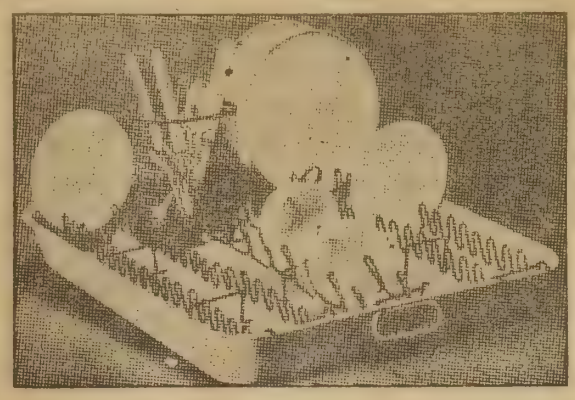
**Knitted Articles.**

Helmets—Anywhere on an inside edge.
Mufflers—One corner.
Socks—Upper edge, center back. May be put on as standing loop, one end inside the other out.
Wristlets—Upper edge, inside.
Sweaters—Inside back of neck.
Comfort kits—Inside of bag below hem.

# Saves Time and Is More Sanitary

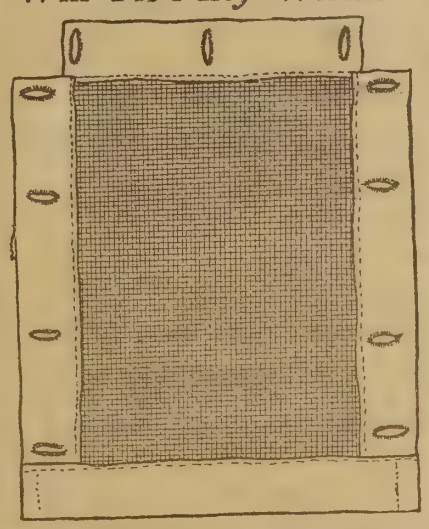
Perhaps no time spent in housework is more begrudged by the housekeeper than that spent in washing and wiping dishes. A dish drainer not only saves time and labor, but it does away with the too-often unsanitary dish towel, says Madge J. Reese in a bulletin of the department of agriculture.

A most satisfactory dish drainer, as shown in the illustration, can be made by using an ordinary bread or biscuit pan and racks made of soft No. 12 or 14 wire. By using a pair of pliers the wire can be bent into the proper shape for forming racks. The racks fit into the pan and hold the dishes out of the water. The compartment for silver is made of poultry netting. This compartment could be made of screen wire or a tin can with holes in the bottom might be used.



After the dishes are washed they are stacked in the racks and scalded with hot rinsing water. The pan catches the drip, and the dishes upon standing dry clean and lintless. If the drainer is used on the drain board of a sink a small hole can be made in the pan and the drip drained immediately into the sink. The wire racks can easily be removed so that the pan can be used for other purposes.

# Will Fit Any Window



All outside doors and windows should be screened. It will be economy to buy the screen doors. For both doors and windows use nonrustable screen wire, says Madege J. Reese in a bulletin.

A cheap, convenient and easily made window screen is shown here. Any woman can make this screen fit any window. Often in old houses window frames have warped and it is hard to make screen frames fit the windows.

Heavy denim or jeans, or any other heavy material of dark color is cut into strips four inches wide. This is sewed around the edge for the screen, leaving about two inches of the doubled material as stripes for eyelets. Eyelets are worked across the top and down the side strips. Small tacks are driven in the lower casing of the top window and down the sides of the window frames. The eyelets in the window screen are fastened over the heads of the tacks and thus the screen is held in place. This screen can only be used when upper windows can not be lowered and it can be removed easily when not needed.

## Hooverizing Sweet Corn.

To the Editor: Here is how I Hooverize sweet corn. I cut stalks for fodder as soon as blooming season is past. All corn that we do not need for table use is dried or canned. Cobs are boiled, using the same water for several boilings of cobs in succession, then boiled to a syrup with but little sugar and it is very rich with a flavor all its own. Husks are dried and used to fill some home-made ticks for beds.

MRS. G. W. DOUGLAS.

South Prairie, Wash.

**Whipped Cream Substitute.**

Add a sliced banana to the white of one egg and beat until very stiff. This is a delicious substitute. The banama will entirely dissolve.

## Chocolate Cake Without Wheat.

The following recipe for a chocolate cake requires no wheat flour and is recommended by the United States food administration:

1-2 cup fat.
2-3 cup sugar (4 3-4 ounces).
1 cup sirup (11 1-2 ounces).
3 eggs.
3-4 cup milk.
1 teaspoon salt.
1 2-3 cups buckwheat flour (8 ounces).
1-2 cup ground rolled oats (2 ounces).
6 teaspoons baking powder.
1 teaspoon cinnamon.
2 squares chocolate.
1 teaspoon vanilla.

Cream the fat, sugar and egg yolk. Add the sirup and mix well. Add alternately the liquid and the dry ingredients sifted together. Add flavoring and melted chocolate. Fold in well-beaten egg whites. Bake about one hour starting in a moderate oven (350 F—177 C.) After 20 minutes raise to (400 F—205 C.

**Indian Society in Berlin.**

A German Indian society has been organized in Berlin, according to the Cologne Gazette. A dispatch says Germany's relations with the east after the war will be greatly expanded for political as well as commercial reasons.


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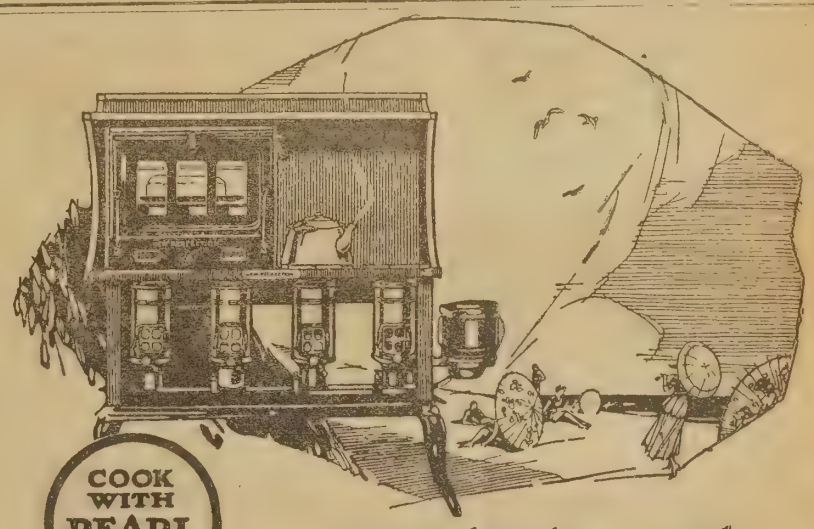


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2528—Lady's dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 6 yards of 36-inch material. The skirt measures about 2 yards at the foot. Price, 10 cents.

2518—Boy's suit. Cut in 4 sizes: 3, 4, 5 and 6 years. Size 4 requires 3 yards of 36-inch material. Price, 10 cents.

2398—Girl's dress. Cut in 4 sizes: 2, 4, 6 and 8 years. Size 4 requires 2 1-2 yards of 36-inch material. Price, 10 cents.

2256—Lady's dress. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 36 requires 7 1-4 yards of 36-inch material. The dress measures about 2 1-2 yards at the foot. Price, 10 cents.

2538—Girl's dress. Cut in 5 sizes: 6, 8, 10, 12 and 14 years. Size 12 requires 4 7-8 yards of 36-inch material. Price, 10 cents.

2542—Girl's dress. Cut in 4 sizes: 6, 8, 10 and 12 years. Size 10 requires 3 7-8 yards of 44-inch material. Price, 10 cents.

2325—Lady's shirt waist. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 38 requires 3 1-4 yards of 36-inch material. Price, 10 cents.

2279—Ladies' apron. Cut in four sizes: Small, 32-34; medium, 36-38; large, 40-42; and extra large, 44-46 inches bust measure. Size medium will require 2½ yards of 36-inch material. Price, 10 cents.

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2221—An ideal under garment. Cut in four sizes: Small, 32-34 iniches bust measure; medium, 36-38; large, 40-42, and extra large, 44-46. Size medium requires 3 3-8 yards of 36-inch material. Price, 10 cents.

2547—Girls' drawers. Cut in five sizes: 4, 6, 8, 10 and 12 years. Size 10 will require 1 1-8 yard of 36-inch material, for either style. Price, 10 cents.

2517—Ladies' house dress. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 5½ yards of 36-inch material. The dress measures about 2½ yards at the foot. Price, 10 cents.




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# Handicraft For Boys

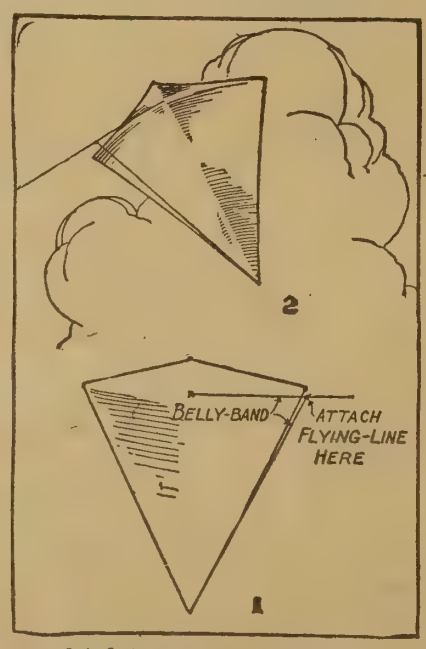
## By A. Neely Hall

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### A Malay or Tailless Kite.

The Malay is probably the most practical boys' kite ever invented. It will fly in a wind that the tail variety of kite could not withstand, and it will fly in a breeze too light to carry up most other forms of kites. It is also a strong pulling kite, and may be used for sending aloft lanterns and flags on the string. For the purpose of lifting, the pulling strength may be increased two-fold by flying two Malays in tandem.

Figure 1 shows the completed Malay, figure 2 the kite in flight, figure 3 its




completed framework, and figures 4, 5 and 6 the details for preparing the frame sticks.

The kite has a vertical stick and a bow-stick, each of which should be 40 inches in length, about three-quarters inch wide and three-eighths of an inch thick, for a medium-sized kite.

In the cutting of the sticks lays half the secret of making a kite that will fly successfully. If you live anywhere near a mill it will cost but a few cents to have sticks cut to the sizes wanted; if not, you will find that the best way of preparing them yourself is to cut them out roughly with your knife first and then dress them down to the right dimensions with a plane.

Drive a small nail or large tack into each end of the two sticks, to fasten the framing-string to (figures 4 and 5), and notch the side edges of the bow-stick near each end for the attachment of the bow-string (figure 6).

The amount to bend the bow-stick is important. For a kite with a bow 40 inches long the distance between the string and stick should be 6 inches (figure 5). Use a strong twine for the bow-string, and tie it securely to the notched ends.

Fasten the bow-stick at its exact center to the vertical stick, placing it exactly 4 inches down from the top of the vertical stick, as indicated in

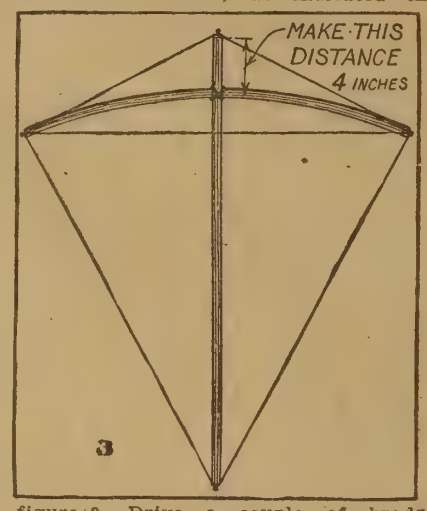
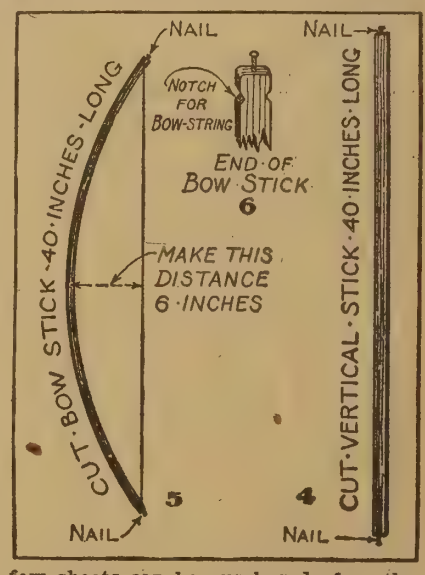



figure 3. Drive a couple of brads through the two sticks, to hold them together, and then reenforce the connection by wrapping the joint with strong linen thread, crossing it in the manner shown.

With the two sticks properly joined, connect their ends with the framing string, stretching it tightly between the sticks and tying to the end nails.

The strong light-weight brown paper now so generally used for wrapping paper makes an excellent covering. A




few sheets can be purchased for the purpose at a near-by store. You will likely have to paste together two or more sheets to make one large enough for your kite framework.

Attach a belly-band at the intersection of the bow-stick and vertical stick (figure 1), and make it of the right length so when held to one side it will reach to the end of the bow, as indicated in figure 1. Tie the flying line securely at this point, and the kite will be ready for its maiden flight.


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**Conquering Villa.**

Dear Aunt Nellie: I am 12 years old and am in the eighth grade. My brother, George, is 10 years old. We are living with Mr. and Mrs. Roberts. I want to tell you how I helped to conquer Villa last summer. He had given us a lot of trouble, destroying our crops and breaking our fences. One day Mr. Roberts caught him and put a rope around his neck, then we tied his feet and Mr. Roberts strapped him up to a post and put a rope on his jaw, and Mrs. Roberts pulled back on the rope and I took a board and put his head between the board as a pry and brother George held back the rope on his legs. Mr. Roberts took some heavy wire and pincers and put the wire through his nose and twisted it into a ring. I tell you he kicked and squealed, but we had him fast. After Mr. Roberts got him fixed we turned him loose. He ran for the woods and hid away and sulked for several days. He kept his nose out of our business for some time afterward. I suppose it will be hard for you to believe that Villa was captured; you will believe me when I tell you that Villa was Mr. Roberts' Duroc boar hog. I think he was properly named because he was always causing trouble. I enjoy reading the children's letters and Joe Ashlock's stories. Mrs. Roberts says she can tell some bigger stories of frontier life that he can. She and her brothers took a homestead on the Nezperce Indian reservation in Idaho. Her name was Mary Finney before she was married. She said if I would send this to the Farmer there would likely be lots of people read it who know her. Give my love to Joe Ashlock.—Herbert E. Nye, Westport, Wash.

**Takes Gymnastum and Swimming.**

Dear Aunt Nellie: May I be admitted as one of the cousins? I enjoy reading the letters very much. I am 12 years old and my birthday is July 12. Have I a twin? If I have please write to me. I live where the Cheney State Normal school is and I go to the training school, which is where the students teach and some have their first tryouts as teachers. We take gymnasium and swimming in the Normal. I have two sisters who have gone to this Normal. I have three sisters and no brothers. My sisters' names are Georgia, Oleita and Effie. I am not a farm girl, although I like the farm better than I do the city. We have one dog whose name is Tiny, and he is 11 years old. He is not much bigger than a cat. He can play ball and he eats candy, ice cream and peanuts. I am knitting a quilt. It is made out of six-inch blocks and it takes 54 blocks to make it. I have 13 blocks done. My teacher's name is Miss Sadie Garrett. She is the supervisor. I am in the 7A grade and I have passed in the state examination of physiology. I got 90 in it. I have bought $7.25 worth of thrift stamps and I intend to buy more. We have one cow and one calf. Their names are Bossy and Bessie. I can not write a very interesting letter, but I am doing the best I can. —Hazel Agnes Land, Cheney, Wash. (Your letter was very well written, Agnes. We are going to watch for another one from you.—Aunt Nellie.)

**Helps Father With the Garden.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner, and I hope it will not be the last. I am 9 years old. My birthday is June 13. Have I a twin? I have one sister and one brother. My sister's name is Vivian and my brother's name is Woodrow. We have just one cow. Her name is Daisy. She is a Jersey. We do not live in the country, but my father takes the Farmer. I like the Children's Corner very much. I have joined the Junior Red Cross. My father bought me a Liberty bond. I have joined the Garden club, too. My garden is up. I am going to help my father with the garden all I can this year in order to help win the war. I think it is dreadful. I go to Sunday school most every Sunday. I have been sick for the last few Sundays. I like to go to Sunday school. Most every child in our school joined the Garden club. Very few joined the Rabbit club.—Letha Button, Box 111, La Center, Wash.

**Glad When She Can Go Wading.**

Dear Aunt Nellie: It has been a long time since I wrote last. I hope the cousins are all fine. We have a big garden this year. I like to take care of a garden. I have one of my own. I weed lots in it. We have lots of berries in the summer, we have blackberries, loganberries, raspberries, gooseberries and strawberries. I like strawberries the best. We just have a little patch, but we get lots of berries off it. Our flowers are coming out nice. Mama is making a nice yoke. It is very pretty; I think so anyway. School is out. I am glad. We had a picnic the last day of school. We had lots to eat and we had a good time. Papa has gone to Alaska. I think he will be back this week, and I hope so anyway. Our cow has a little calf. Its name is Virgie. It is red and cute. I fed him the other day. He can drink out of a bucket pretty good. I have been having the headache badly the last two weeks. I hope none of the other girls get it. It is a bad thing to have. My little brother, Edward, has been sick all day long. He had a bad fever. I guess Verna is looking for a letter from me. I haven't answered her letter yet. My birthday is June 13. I am 11 years old. I am glad when summer comes so I can go in wading. With love to Aunt Nellie and all the cousins.—Pearl Droullard, Prevost, Wash.

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**Red Cross Helps Our Soldiers.**

Dear Aunt Nellie: It has been such a long time since I wrote to you. My subject is the Red Cross. I think the Red Cross is all right. If it were not for the Red Cross our soldier boys would die. We have a Red Cross meeting at our school every Friday afternoon. April 5 we made 1300 gun wipes, April 19 we made 900 gunwipes. We make ambulance pillows, quilt blocks, washrags and aprons for the Belgian children. We have 20 scholars. Their names are: Eva Martin, age 6; Nellie Hayden, aged 6; Ruth Miller, aged 7; Pearl Martin, aged 7; John Hayden, aged 8; Leola Helmer, aged 8; Bessie Martin, aged 9; Lester Hayden, aged 9; Kathleen McClain, aged 8; Gwendoline McClain, aged 11; Ora Hayden, aged 11; Gleneve McClain, aged 12; Mabel Harms, aged 12; Maggie Martin, aged 13; Gladys Harms, aged 14; Cecil Helmer, aged 9; Audra Miller, aged 8; Bruce Beaton, aged 10; Everett Miller, aged 10; Thomas Martin, aged 12; Virl Helmer, aged 11; Angus Beaton, aged 15. That is all of the school children. We have four pups. We have 28 little chickens. It is very warm today. We used to go horseback to school. We rode two ponies named Fly and May, but now we go in the single buggy and drive a horse named Dan. —Ora Hayden, age 11, Mold, Wash.

**Brother Is a Sailor Boy.**

Dear Aunt Nellie: Please may I be a member of the Children's Corner? I am a member of the Red Cross. I am going to join the Achievement club. Our school's society's name is The Philidorian Literary society. I am the secretary-treasurer. I am going to ask some riddles. Why is a school room like an automobile? Why is an egg like a colt? If you saw somebody riding on a donkey what pear would you think of? I live on an 80-acre farm. I have five brothers and five sisters. Their names are Dosie, Lilly, Mary, Frances and Alice. My brothers are Bill, Fred, Ed, Bob and Arthur. My brother Fred enlisted in the navy and is in Norfolk, Va. He is only 18 years old. I am 13 years old and my birthday is February 20. Have I a twin? I have looked through every paper to see if I have a twin. Well, good-bye and a kiss and good luck to all my cousins.—May Sargant, Nahcotta, Wash.

**A Dog Named Fritz.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner and I hope it will not be the last. I have two sisters and one brother. My sisters' names are Gertrude and Inez. My brother's name is Edgar. We have one cow and one calf. We had two cows, but we sold one. We have one dog. His name is Fritz. We have a cat. Her name is Pussy. We have only four acres and a half of land. I have a little garden. I'm going to raise peas, lettuce, onions, turnips and rhubarb. I go to school and I am in the fifth grade. My teacher's name is Miss Teresa Gordon. The name of my school is South Side school. I am 10 years old and will be 11 July 25, 1918. Have I a twin? If I have, I wish she would write to me.—Fanny Osterberg, Box 14, Route 1, Shelton, Wash.

**Champion Spellers of the District.**

Dear Aunt Nellie: I have not written for a long time and as I had a little spare time I thought I would write now. We are the champion spellers of our district and we have to spell with one more school and then we are the champions of the county. We have one pennant of last year and we hope to win it again this year. If I get my diploma this year I will go to the Nooksack high schol, if we still live in Everson.—Emma Brune, age 15, Everson, Wash.

**Wants Her Twin to Write.**

Dear Aunt Nellie: I am 9 years old. My birthday is August 24. I live on a farm and we have 11 horses, three colts, five cows, four calves, six hogs, 37 chickens and two ducks. Have I a twin? If so, I would like to hear from her. I like to read the letters of the Children's Corner very much. My teacher's name is Maud Wilson and I am in the third grade.—Eula Weagant, Mansfield, Wash.

**Annabell Has a Real Twin.**

Dear Aunt Nellie: I like to write to the Children's Corner. I go to school one mile. I am in the fourth grade. My teachers' name is Miss Bankie. I like her very well. I am 9 years old and my birthday is November 8. Our school is named Bethany. My sister is a twin to me. I have dark brown hair and dark brown eyes. I have a brother in the navy. I have three brothers. Their names are Teddie, Hamilton and William. I have three sisters. Their names are Velinda, Myrtle and Maybell. We live on a 20-acre farm. We have two kittens. Their names are Nig and Tige. I can cook cookies and some other things. I hope the war will end soon and the Yankee kids can kill the kaiser. I have read "Trappers of the Ozarks" in the Farmer.—Annabell Van Hoy, R. F. D. 1, Box 139, Grandview, Wash.

**Found the Little Lost Lamb.**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I like to read the letters very much. I live on a 160-acre farm. We have nine horses. Their names are Molly, Queen, Prince, Babe, Billy, Bill, Fannie, Paul and Ned. We have one dog and seven cats. The dog's name is Fannie. One of the cats is mine. Its name is Daisy. It is black and white. We have four little lambs. One of my little lambs was lost and I found it. We have a little canary bird. The wind has been blowing for a long time.—Edith Christensen, age 10, Cottonwood Farm, R. F. D. 3, Box 143, Ellensburg, Wash.

**Cecil Writes for the First Time.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 11 years old. My birthday is November 13. I have three sisters. Their names are Dora, May and Letha. I have five brothers, Lloyd, Floyd, Martin, Orvil and Freddie. Papa has three cows and one calf. We have five working horses, and one saddle horse. His name is Dick. My brother has a car and a buggy team. Mama has 100 chickens. Papa has been and Lloyd and Floyd are working out. I go to school and am in the fourth and fifth grades. We live on a 160-acre farm. Have I a twin?—Cecil Barnett, Penawawa, Wash.

**Will Start a Sweater Soon.**

Dear Aunt Nellie: This is my first letter to the Corner. I am going to tell you what I look like. I have dark brown curly hair, gray eyes and a clear complexion, and am about five feet nine inches tall. So now you know what I look like. My teachers' names are Miss Lila Runner and Miss Mary Martin. I am in the eighth grade. I can knit. I have knitted a pair of wristlets and am going to start a sweater soon. My birthday is December 23. I am 14 years old. Have I a twin? I would like to join the cousins. I would be glad to hear from any of the cousins.—Marie Kilgore, Deep Creek, Wash.

**Has a Twin in Her Neighborhood.**

Dear Aunt Nellie: Will you admit another one to the Children's Corner? This is the first time I have written to the Corner. Well, as everybody is asking if they have a twin, I am lucky enough to have one. She lives in the same neighborhood that I do. Have I a triplet? If I have please write? I was 15 June 6, and have blue eyes and brown hair. I am in the freshman class at school. I have five teachers. I have made an apron at school and now I am making a dress. I got a wrist watch for Christmas.—Ollie Cummins, Touchet, Wash.

**Have Water Pumped in Their House.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 11 years old and in the fifth grade. Have I a twin? If so, I wish they would write to me. Papa gets the Farmer. We have water in the house. It run in March 21, 1918. We pump it in with a pump. We live with our Uncle John. I have four sisters and two brothers. Their names are Mary, Ruth, Willie, John, Elma and Bertha. Bertha is the baby. I had two teachers this year.—Clara Bacon, Wawawai, Wash.

**Lois Likes Chrysanthemums, Too.**

Dear Aunt Nellie: I am 7 years old and in the fourth grade. My teacher's name is Mrs. Shaw. My big sister is 11 years old. My big brother has two cats and one dog. I have two brothers and five sisters. Their names are Neah, Edna, Stella, Edith, Mary and Fred and John. I like to read the Children's Corner. I like chrysanthemums, too. I will give you a riddle: Why is it dangerous to put a clock at the head of the stairs? I belong to the Red Cross.—Lois Peck, age 7, Box 457, Lind, Wash.

**Has Cousin James a Twin?**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. My father takes the Farmer. I always read the girls' and boys' letters. I am 11 years old and will be 12 November 21, 1918. I am in the fifth grade in school. There are four pupils in our class. We live on a 40-acre farm. I have two sisters and one brother. Their names are Mabel, Avaline and Clarence. We have two horses, two cows and one calf. Have I a twin? If I have I wish he would write to me. —James Barr, Eatonville, Wash.

**Gladys' First Corner Letter.**

Dear Aunt Nellie. I was 12 on May 26. I am in the sixth grade. I am staying with my grandmother and grandfather. They take the Farmer. I read the Children's Corner and like it very much. This is my first letter to the Corner.—Gladys Geer, South Bend, Wash.

**Father Manages a Store.**

Dear Aunt Nellie: My father is manager of a store. We live over the store. I am 9 years old May 9. I am in the third grade. Have I a twin? This is the first time I have written to the Children's Corner. I hope to see my letter in print.—Theodosia Heckel, Hobart, Wash.

**Teacher Has Gone to War.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I live an a 320-acre farm. I have four horses. Their names are Rouday, Dolly, Babe and Boss. We have two cows and one calf. The cows' names are Nellie and Jersey; the calf's name is Daisy. We have 36 chickens and one pig. The squirrels are thick here. I have one brother named Orlie. I am 10 years old June 1. Have I a twin? If I have I hope he or she will write to me. We have no school now because the teacher had to go to war. I like him very much. His name is Mr. Leach.—Clyde Decker, Leahy, Wash.

**Two Cousins Are Serving Uncle Sam.**

Dear Aunt Nellie: This is my first letter to the Corner. I hope to see my letter in print. My father takes the Farmer and I read the letters every time it comes. I am 10 years old and in the fifth grade. My birthday is March 20. I have dark brown hair and brown eyes. Have I a twin? If I have I wish they would write to me. I have two cousins serving Uncle Sam. I have learned how to knit. I am going to knit for the soldiers soon.—Lucille Snodgrass, Waverly, Wash.

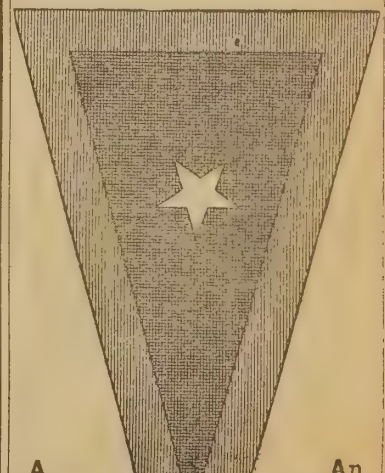
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Lucile Wanless, Wilma Izett, Evalena Crouch, J. Wright Baylor, Edith Callaway, Helen Callaway, Irma Joyner, Myrtle Garrett, Eva Van Syke, Cecile Schlee, Anna Entel, Martha Entel, Maudie Shincke, Henry Yoss, Alice Fredrickson, Hazel Arnold, Earline Phillips, Lela Thorpe, Lila Warner, Ada Warner, Thelma Auvil, Tilda Berntsen, Clyde Walton, Blanche Hamilton, Mary Kupfer, Dick Engle, Grace Esch, Arthur Heathers, Ida Richert, Lavina Hanford, Lucelia Sellman, Mary King, Geanie Amudson, Hazel Hale, Ruth Thompson, Leah Lemmon, Georgia Young, Bessie Janney, Ferne Danels, Gladys Strong, Trina Westendorf, Lillian Edwall, Viola Dingerson, Dorothy Canary, Hester Eslick.

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# News for Breeders

Ed Schoel, the Chester White breeder of Suver, Ore., has a sow that has farrowed 88 pigs in five litters. Her last litter consisted of 24 pigs. Mr. Schoel announces that he will not make the fair circuit this fall. As he has been exhibiting for many years and always makes an attractive display, he will be much missed by both fair managers and public. He may possibly decide to show a few young stock at the Oregon State fair, as he has a very fine lot of pigs coming on.

Two of the cows in the O. W. Tarr Jersey sale at Gresham, Ore., June 28, brought $300 each; the nine head of mature cows and heifers brought a total of $1615, and the three baby calves $100, so the average, with baby calves included, was $142.92, and for the 12 older animals $179.44. Joseph Pfister of Oregon City, Ore., secured the beautiful little show cow, Togo Lad's Blanche, at top price and three others, for a total of $720. M. F. Henderson of Portand was the high bidder on Jane Irene of St. Lambert, the other $300 cow.

# Shorthorn Breeders Aid the Red Cross

(Continued from page seven.)

lowing list of sales indicate each animal's breeding:

Lavender's Lord, 500408, red, calved July 19, 1915, bred by Charles E. Leonard & Son, Bunceton, Mo., got by Wood Dale Stamp 354220, donated by Albert Marty estate, Kansas City, Mo. (grand champion) ..... $10,000

Royal Heir, 593815, roan, calved March 25, 1917, bred by C. T. Nelson, Blandinsville, Ill., got by Royal Memory 422168, donated by Illinois Shorthorn Breeders' association (Junior champion) ..... 1,500

Red Americus, 652458, red, calved May 20, 1917, bred by Charles E. Leonard & Son, Bunceton, Mo., got by Ringmaster's Heir 461585, donated by Charles E. Leonard & Son, Bunceton, Mo. ..... 1,000

Alabama 670686, roan, calved June 13, 1917, bred by S. E. Colby, Fairview, Okla., got by Duchess' Searchlight 348529, donated by H. T. Blake, Duncan, Okla. ..... 600

Double Diamond 583,598, red, little white, calved October 29, 1916, bred by J. E. Robbins, Horace, Ind., got by Fair Diamond 410476, donated by Eding Bros., Morrisville, Mo..... 1,650

Humanity Bond, red with a little white, calved June 22, 1917, bred by F. S. Tuggle, Gallatin, Mo., donated by F. S. Tuggle, Gallatin, Mo. ..... 650

Snow Ball Goods 574360, white, calved May 7, 1916, bred by V. E. Russell, Osgood, Mo., got by Roan Goods 388056, donated by V. E. Russell, Osgood, Mo. ..... 750

Cumberland Victor 620022, red; calved October 25, 1916, bred by Joseph Miller & Sons, Granger, Mo., got by Hopeful Cumberland 392004, donated by Joseph Miller & Sons, Granger, Mo. ..... 1,600

Secret Lad 648649, red, calved May 28, 1916, bred by Henry Hunkel estate, Peck, Kas., got by Nonpareil Victor 394141, donated by H. M. Hill, Lafontaine, Kas. ..... 1,100

Grateful King 667101, white, calved November 1, 1917, bred by Harry T. Forbes, Topeka, Kas., got by Secret King 505254, donated by Harry T. Forbes, Topeka, Kas. ..... 1,000

Cumberland Royal 648542, red, calved January 21, 1917, bred by Purdy Bros., Harris, Mo., got by Orange Cumberland 353428, donated by Purdy Bros., Harris, Mo. ..... 1,000

Diamond Baron 608413, red, calved May 25, 1917, bred by L. W. Bigley, Fairfax, Mo., got by Baron Butterfly 423972, donated by F. C. Barber & Sons, Skidmore, Mo. ..... 1,250

King Emir (no number), roan, calved January 6, 1917, bred by J. & P. Maurer, Graham, Mo., got by King 339307, donated by J. & P. Maurer, Graham, Mo. ..... 1,000

Prince Jr., 572751, red; calved October 22, 1916; bred by H. H. Holmes, Topeka, Kan.; got by Prince Valentine 342179; donated by H. H. Holmes, Topeka, Kan. ..... 1,000

Orange Lad 631429, roan, calved September 21, 1917; bred by A. L. & D. Harris, Osage City, Kan.; got by Sir Edelweiss 380693; donated by A. L. & D. Harris, Osage City, Kan. .... 950

Prince Victor 2d 649565, roan; calved July 23, 1917; bred by S. D. Mitchell, Allen, Kan.; got by Victoria's Choice 414-174; donated by S. D. Mitchell, Allen, Kan. ..... 600

Prince Avondale 658351, roan, calved June 24, 1917; bred by J. R. Whisler, Watonga, Okla.; got by Baron Avondale 391-324; donated by J. R. Whisler, Watonga, Okla ..... 1,000

Rose Stamp 634452, white, calved October 15, 1917; bred by John T. Kramer, Tulsa, Okla.; got by Premier Stamp 627386; donated by John T. Kramer, Tulsa, Okla. ..... 500

John S. 638825, red, calved July 29, 1917; bred by Kelly Bros., Gardner, Kan.; got by Scotch Monarch 423243; donated by Kelly Bros., Gardner, Kan. .. 625

Allan's Stamp 676841, roan, calved July 31, 1917; bred by G. A. Betteridge, Bunceton, Mo.; got by Viscount's Stamp 499671; donated by G. A. Betteridge, Bunceton, Mo. ..... 1,125

Graceful 657581, red; calved March 1, 1917; bred by D. Ballantyne & Son, Herrington, Kan.; got by Choice Orange 420042; donated by D. Ballantyne & Son ..... 300

Victor Prince (number missing), red, little white; calved April 27, 1917; bred by Lespedeza Farm, Hickory Valley, Tenn.; got by Roan Victor 289689; donated by Lespedeza Farm, Hickory Valley, Tenn. 1,150

Dale Cumberland 557537, roan, calved September 12, 1915; bred by J. W. McDermott, Kahoka, Mo.; got by Cumberland Marshal 412384; donated by J. W. McDermott, Kahoka, Mo. 1,000

Bridesman 664486, roan, calved April 15, 1917; bred by Robert Russell, Muscotah, Kan.; got by Sultan Viscount 416126; donated by Barrett & Land, Overbrook, Kansas ..... 750

Robbie 643631, red, calved January 20, 1917; bred by W. J. Reevo, Blanchard, Iowa; got by Polled Susan's Duke 454-819, donated by L. L. Hart, Clearmont, Mo. ..... 1,050

Greenwood Duke 623804, red, calved November 8, 1916; bred by W. J. Reeve, Blanchard, Iowa; got by Polled Susan's Duke 454819, donated by J. A. Spear, Burlington Junction, Mo. ..... 1,550

Red Cumberland 659945, red, calved June 27, 1917; bred by Purdy Bros., Harris, Mo.; got by Cumberland Viscount 467704, donated by Locust Grove Shorthorn Co., Trenton, Mo. ..... 325

Butterfly Sultan 4th 637853, roan, calved April 28, 1917; bred by John A. Rankin, Jr., Tarkio, Mo.; got by Butterfly Sultan 408643, donated by John A. Rankin Jr., Tarkio, Mo.... 1,000

Defender (number missing) roan, calved June 24, 1917; bred by Sims Bros., Wakarusa, Kan.; got by Kansas Collynie 440810; donated by Tomson Bros., Carbondale, Kan. .... 1,050

Red K (number missing), red, calved July 9, 1917; bred by Chris Brown, Hamburg, Iowa; got by Thistleton 448907; donated by Chris Brown, Hamburg, Kan. ..... 300

Choice Prince (number missing), red, calved March 26, 1917; bred by Thomas A. Lauer, Westboro, Mo.; got by Maid's Choice 452994, donated By Thomas A. Lauer, Westboro, Mo. ..... 550

Red Aconite 660092, red, calved September 5, 1917; bred by S. W. Herring, Fulton, Mo.; got by Marengo's Aconite 421045; donated by Harriman Bros., Pilot Grove, Mo. ..... 1,000

March Warden 537335, red, calved April 7, 1916; bred by T. J. Sands, Robinson, Kan.; got by Clansman 395415; donated by L. C. Polson, Fredonia, Kan. ..... 600

Twin Goods 678674, red, calved June 14, 1917; bred by S. H. Andes, Mound City, Mo.; got by King Abbott 379593; donated by J. H. Christ, Skidmore, Mo. ..... 850

Correct Count 474478, white, calved July 22, 1915, bred by D. A. Jay, Blakesburg, Iowa, got by Good Count 338610, donated by A. S. Loveland, Mt. Pleasant, Iowa ..... 1,200

O. K. Chief 689647, red, calved September 30, 1917, bred by O. K. 437588, donated by R. C. Forbes, Henry Ill. ..... 1,000

Type's Chief 595573, roan, calved March 10, 1917, bred by C. A. Saunders & Sons, Manilla, Iowa, got by Cumberland's Type 388132, donated by C. A. Saunders & Sons. ..... 1,150

Snowman 635125, white, calved September 23, 1916, bred by J. A. Kilgour, Sterling, Ill., got by Champion Goods 410385, donated by American Shorthorn Breeders' association ..... 1,400

Impudence (number missing) roan, calved October 5, 1917, bred by Halligan Bros., Prophetstown, Ill., got by White Rock 454824, donated by Sugar Valley Farm, Athens, Ala..... 1,100

Moonbeams (number missing), roan, calved September 8, 1917, bred by Halligan Bros., Prophetstown, Ill., got by White Rock 454824, donated by Jo Daviess County Shorthorn Breeders' association, Galena, Ill. ..... 600

Diamond Villager 535950, red, white marks, calved December 12, 1916, bred by F. C. Barber & Sons, Skidmore, Mo., got by Villager Jr. 399558, donated by Park E. Salter, Wichita, Kas. 1,500

Pine's Secret 689359, roan, calved April 25, 1917, bred by James Brown, Dundee, Ill., got by King's Secret 369111, donated by American Shorthorn Breeders' association ..... 1,200

Augusta's Rex 451568, red, calved October 10, 1914, bred by J. G. Westrope, Harlan, Iowa, got by Royal Rex 3d 341710, donated by H. C. Lookabaugh, Watonga, Okla..... 2,000

Jennie (cow, number missing), roan, calved September 2, 1917, bred by D. W. Bronaugh, Nashua, Mo., got by Clara's Choice 349759, donated by D. W. Bronaugh, Nashua, Mo.... 425

Glenview Dale 4th (number missing), roan, calved July, 1917; bred by E. Ogden & Son, Maryville, Mo.; got by Glenview Dale, 3d 385371; donated by E. Ogden & Son..... 1,000

Col. Barton (number missing) red, calved August 1, 1917; got by Violet's Gold 421069; donated by D. A. Jay, Blakesburg, Iowa ..... 650

Maxwalton Gladiator 496410, roan, calved February 21, 1916; bred by Carpenter & Ross, Mansfield, Ohio; got by Revolution 383359; donated by Carpenter & Ross, Mansfield, Ohio ..... 1,750

Jack Frost 573259, white, calved March 4, 1916; bred by Thomas A. Mack, Viola, Ill.; got by Prince Glenview 364660; donated by F. S. Wheeler, Mt. Pleasant, Tenn. ..... 1,000

Peerless Dale 2d 566521, roan, calved June 16, 1916; bred by Loveland Stock farms, Mt. Pleasant, Iowa; got Kelvindale 2d 391425; donated by F. I. Derby, Ward, Ala. ..... 1,150

Thaxton's Record 641701, white; calved January 15, 1917; bred by Jim Brown ..... 1300

Dairylike's Premier 158086 registered Jersey bull, sire Imp. Combination's Premier 150715; donated by J. K. Newman, New Orleans, La. ..... 1,300

Red Victor, donated by Howell Reese & Sons, Pilger, Neb. (pedigree not furnished)..... 1,000

Red Gay Goods, donated by Howell Reese & Sons, Pilger, Neb. (pedigree not furnished) 900

Stamps' Excelsior 556514, roan; calved September 6, 1916, bred by W. H. Miner, Chazy, N. Y., got by Right Stamp 412396, donated by (name of donor missing) ..... 1,050

Bard 680487, red, calved July 13, 1917, bred by H. O. Ritchie, Kincardineshire, Scotland .... 1,800

Prince Selection 680467, roan, calved August 12, 1917, bred by G. H. George, Monticello, Iowa, got by Selection's Knight 478826, donated by American Shorthorn Breeders' association ..... 1,500

Red bull (name, pedigree and donor not given)..... 2,600

# Prevent Fires

## Unusual Care Required This Year

With the approach of the harvest season the attention of people everywhere is being called to the necessity of great care in the prevention of fires. In normal times when a wheat field or a grain stack burns the individual farmer is felt to be the only loser. This is not the case this year, however, as the entire civilized world is asking for the maximum possible production of wheat. Carelessness anywhere that may result in the loss of grain this harvest is nothing short of criminal.

So vital do some consider the prevention of fires that one county organization of farmers in the northwest is advocating the use of a chemical fire extinguisher by all threshing crews. "An expenditure of $100 for a chemical outfit might easily save $1000 worth of wheat in one fire," says a representative of the organization.

Whether the idea of a chemical fire extinguisher for threshers is practical or not, the fact remains that there are many practical devices that should be at all times ready during the harvest season. No threshing crew, especially the one where a steam engine is used, should be without thorough preparation for combating fires. Every threshing outfit should have a vehicle of some kind, preferably, perhaps, an automobile, in which a small quantity of water and a large number of wet sacks could always be ready upon a moment's notice.

In addition to equipment for extinguishing fires, every member of a threshing crew should feel inspired to use the utmost precaution against setting fires and be always alert to extinguish any blaze or possible source of a blaze the instant it is discovered.

## DOGS KILL SHEEP.

### May Put Useless Dogs Under Ban.

Sheep killing dogs have again invaded the University of Idaho experiment farm at Moscow, Idaho, five more valuable purebred animals having been lost and others injured. A few months ago a dozen or more of the purebred sheep at the university were lost in a like manner. Dean E. J. Iddings of the university college of agriculture estimates the total loss from dogs during the last year at $1200.

The depredations of dogs has put sheepmen on the warpath, especially in the vicinity of Idaho, and is proving a stimulous in the movement to do away with the useless dog. Dean Iddings has taken the matter up with the chamber of commerce of Moscow, urging upon them some action to rid the community of dogs that serve no useful purpose.


Warranted to Give Satisfaction.

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Caustic Balsam



Has Imitators But No Competitors.

A Safe, Speedy and Positive Cure for Curb, Splint, Sweeny, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunches from Horses or Cattle.

As a Human Remedy for Rheumatism, Sprains, Sore Throat, etc., it is invaluable. Every bottle of Caustic Balsam sold is Warranted to give satisfaction. Price $1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address

The Lawrence-Williams Co., Cleveland, O.

"Pig-a-Boo"

DIGESTER TANKAGE

Puts Profits in Porkers

Cuts down high feeding costs—saves costly grain—balances the hog ration.

FREE BOOKLET

contains valuable information to hog raisers.

UNION MEAT CO.

North Portland, Ore.




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# Breeders' Department

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### MILKING SHORTHORNS

with world records behind them for milk production.

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A son of the King of the Pontiacs at head of herd.

Can make special prices on young bulls of each breed.

**A. V. Bradrick & Son**
Palouse, Wash.

### SHORTHORNS

A few young stock for sale by such noted sires as Prime Prince, 421193, and Sultan Still, 493239.

**R. E. BOYCE,** Baker, Ore.

### LELAND BROTHERS

Breeders of top registered Shorthorn cattle. Correspondence solicited.

**WENDELL,** Idaho.

### H. H. SCHILDMAN

breeder of registered Shorthorn cattle, Hampshire sheep and bigtype Poland China hogs. Filer Idaho.

REGISTERED SHORTHORN COWS.

Young bulls and heifers, sired by Scotch bulls; liberal terms.

**CALDWELL CATTLE CO., Caldwell, Idaho.**

## GUERNSEY CATTLE

### Registered Guernsey Bulls

From heavy producing cows, most of them with A. R. records, among them 402 lbs. fat (472 lbs. 85 per cent butter) and 392 lbs. fat (461 lbs. butter), both with first calf. Good type, well grown. Prices reasonable.

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A. L. GILE, Prop. Chinook, Wash.

### Yearling Guernsey Bull

GOLD FINDER'S TITAN, out of imported dam; splendid milker. A sturdy, vigorous young bull, with strong individuality and splendid breed type.

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"Home of High-Class Guernseys."
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### FAIRVIEW FARM

Breeders of high class registered and grade Guernseys.
A. J. SINNES,
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### Highland Stock Farm

offers for sale Hereford bulls, 1 or 2 years old. One or a carload.

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### BULL RANCH

Hereford Cattle.
Berkshire Hogs.
Hampshire Sheep.

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EDGEWATER FARM

Only one bull left, calved Dec. 14, 1917, with high producing dam; grand dam and great grand dam both world's record cows.

**ELBERT M. CHANDLER, Burbank, Wash.**

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### Brown Swiss Stock Farm

Breeders of Brown Swiss Cattle, the Farmer's Dairy Cow. Young stock for sale.
**THEO. BRUGGER, Route 3, Gresham, Ore.**

## PERCHERON HORSES

### Hunter Ranch Percherons

The Grand Champion KROUMIR at head of herd. Young stallions for sale at all times at breeders' prices.

**A. R. HUNTER,** Island City, Ore.

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### Weaned Pigs of Quality

Can furnish pairs or trios, best stock, $15 at eight weeks.

**WM. NEUENSCHWANDER,** Gaston, Ore.

## JERSEY CATTLE

### WORLD'S RECORD BULL CALF

**Dropped May 19, 1918.**

Dam Zamolia Nutwood, who at 13 years 9 months, made official record of 484 lbs. fat, 8788 lbs. milk; at 15 years 48 days, 577 lbs. fat (678.82 lbs. 85% butter) and 10,212 lbs. milk, a world's record for milk and second for fat for cows over 15 years and she was handicapped by being seriously stifled.

After two weeks rest she is again on test at 16 years 3 months, milking 37 to 41 lbs., and promises to break her last record.

Calf's sire, **Gertie's Poppy's St. Mawes,** has so far sired 20 calves and not one broken colored. He is 25% blood of St. Mawes Poppy, 1120 lbs. butter; 25% Gertie's Fern Princess, 711 lbs. (sold at auction for $820), and 50% Rosaire Olga Lad.

The calf we recently advertised has been sold, making five at $250 each. We have just the one left. For further information write

**DOERFLER FARMS, Silverton, Ore.**
F. A. DOERFLER, Proprietor.

### Jersey Home Dairy

Young bulls, winners at Washington State Fair, make good herd sires. Attractive prices for quick sale.

**Erickson Bros. Prop.**
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### WAIKIKI FARM

Register of Merit Jerseys. Largest Jersey herd in the northwest. Young stock for sale.

IRA P. WHITNEY, Manager.
Route 7, Spokane, Wash.

### LAST BULL SOLD

Three register of merit cows, freshen in March, two in April. Baby bulls are sold so reasonably you can't afford to buy a bull of service age. Raise your own bull and save money. Prices, pedigrees, photos, etc., sent on request. Can spare a few good register of merit cows.

**JOHN B. STUMP & SON, Monmouth, Ore.**

### ANOKA FARM JERSEY

We have for sale a bull calf dropped Oct. 25, from a register of merit cow. Solid color, good individual. His sire is a grandson of St. Mawes Poppy, with 1120-lb. record.

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REGISTER OF MERIT JERSEYS.

In nearly 13 years we have yet to get our first poor heifer or dissatisfied customer. We have the best of the Golden Glow's Chief and St. Mawes strains, with the cross of our great Kentucky bull, Valentine's Ashburn Baronet.

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### GOLDEN GLOW HERD

Young bull sired by a son of Golden Glows Chief, out of a daughter of Golden Glows Chief, sire of 37 R. of M. cows; 14 over 700 lbs; 32 over 600, one a world's record. Young bull's dam's official record 407.34 lbs. fat (509.17 lbs., 80 per cent butter) at 1 year, 11 mo. This is the blood to increase production in these times of high priced feed. Price reasonable.

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GOLDEN GLOW'S CHIEF

has 35 Register of Merit daughters and 40 grand-daughters, 4 proven sons, and a WORLD RECORD JUNIOR 3-YEAR-OLD DAUGHTER, who is dam of ONE OF OUR HERD BULLS by the old bull himself. Our second sire is also a son of Golden Glow's Chief, out of a Gold Medal Hood Farm cow. Write us for a young bull calf.

D. Brooks Hogan, Mgr., Iron Mine Farm, Oswego, Oregon.
**W. M. LADD, Owner, Portland, Oregon.**

### All High Record Blood

Bull calf out of Lucy of P. V., full sister to St. Mawes Susie; 936 lbs. butter in a year; to St. Mawes Blossom 823 lbs., and to Susie's Twin Maiden, 642 lbs. Sire, Poppy's St. Mawes, son of St. Mawes Poppy, 1120 lbs.

**ED CARY,** Carlton, Ore.
Station, La Fayette, Ore.

## HOLSTEIN CATTLE

### CARNATION HOLSTEINS

Carnation Stock Farms

Over 300 in herd to select from. Herd has been under federal inspection for several years.

Our herd sires are Matador Segis Walker, a grandson of King Segis, out of Matador Twisk Minette 4th, with record of 33.69 lbs. His first five two-year-old heifers, to freshen, have averaged nearly 22 lbs. in 7 days; King Segis 10th; Johanna McKinley Segis, the 40-lb. bull.

Write today your needs for a Holstein bull. Get them while they are young. Save money on cost price and on express charges. Careful attention given to mail orders.

FARM—CARNATION, WASH.
Offices — 2080 Stuart Bldg., Seattle.

**Visitors welcome. Correspondence solicited. Write for circular, Value of Pure Bred Sires.**

### 365-DAY HOLSTEINS

24,667 lbs. milk—1026 lbs. butter—is the S. O. advance registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.

THE HERD WITH YEARLY RECORDS.
**WESTERNWOLD RANCH, Prineville, Ore.**

### HOLSTEINS

Steno Farm is now offering a few high class reg. Holstein bull calves. Out of ARO cows and sired by one of the finest bulls in the west. Priced right.

**STENO FARM,** C. F. Williams, Mgr.
Mead, Wash., R. No. 2.

### LaConnor Flats Stock Farm

Pure bred registered Holstein cattle. Herd sire Segis Pontiac Acme; average of three of nearest dams; butter, 1 year, 1080.82 lbs.; milk, 24,380.3.

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### Record Holsteins

Young bulls, some of them ready for service, by a sire whose five nearest dams average 26.17 pounds butter, or another with 29.67-pound dam, and out of high-record A. R. O. dams. Priced to sell.

**ERNEST WERNER, AURORA, ORE.**

### Registered Holsteins

Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.

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Well-bred young bulls for sale.

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HOLSTEINS BRED FOR PRODUCTION
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Stock of All Ages, Either Sex, for Sale.

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In the famous valley of the Yakima there is located one of the best herds of Aberdeen Angus in America. Proof of this is evident by the many prizes won by this herd at all of the greatest shows of the northwest and central states, including the Chicago international.

Fifty extra good range bulls are now offered for sale. Also fancy herd headers and show cattle of both male and female. All prices very reasonable.

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SHROPSHIRE SHEEP.
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Choice yearling and lamb rams. A few high class young bulls.

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### Big Type Poland Chinas

Peter Mouw and John B. Lawson strains. Young boars and bred or open gilts. Good individuals.

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Big type and medium Poland China. Bred gilts and spring pigs of both strains, unrelated. Sixteen years a breeder of Poland Chinas in Oregon.

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Breeder of big type Poland China swine. Some very choice spring pigs for sale. 1918 pigs sired either by famous boar, "Sammy," undefeated grand champion of northwest, or by his son.

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QUALITY AND UTILITY

our hobby. Poland Chinas, our breed. Weanling pigs, both sexes, also a few service boars. Satisfaction assured.

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If you want to improve your herd, try stock from my winners at the Oregon state fair.

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PURE-BRED POLANDS.

A good herd boar for sale; also booking orders for spring farrowed pigs. Will ship C. O. D. subject to your approval.

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EXTRA GOOD POLAND CHINA BOAR.

1 year old, $35. Also pigs, $10 to $20, good ones.

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### Crescent Stock Farm Durocs

Spring pigs by the great $1300 boar, King of Orions 2d, and by our own great boar, Burke's Cherry King, out of prize sows. Uniform cherry color, finest of heads and backs, heavy bone and best of feet.

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### Chas. G. Sprong

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Registered Duroc-Jersey hogs. Weanling pigs for sale.

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### Registered Duroc Jersey Pigs

My herd contains the blood of old "Defenders," "Pathfinder," "Illustrator," and Burl's Good E. Nuff. Big type prize winning sows. Guaranteed to please.

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Boars and open or bred gilts of excellent breeding.

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### SWINE

A few good gilts also choice young pigs. Write me. Ringgold Farm, J. H. West, Prop., Centralia, Wash., R. 1, Box. 157.

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Chester White Hogs. Hampshire and Rambouillet sheep. Swine of both sexes and a choice lot of ram lambs.

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Unrelated fall and spring Chester White pigs from prize winning stock.

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Have a number of sows, 18 months old; will farrow second litter this fall. Also young gilts and boars of all ages; all from prize winners. Write for prices.

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# Grain and Produce Markets

## Chicago Grain.

CHICAGO, July 15.—Assertions that the number of cars in many sections was not plentiful had a bullish effect today on corn and so, too, did a good-sized reduction of the visible supply total. The finish was unsettled, 2 3-8 to 3 1-8c net higher, with August $1.63 1-2 to 5-8 and September, $1.63 1-4 to 1-2. Oats gained 5-8c to 1 3-4c. Provisions closed unchanged to 30c higher.

Upturns in the value of corn followed an early decline due to favorable weather and big receipts. It soon became apparent, however, that the market was in a heavily oversold condition. Aggressive buying on the part of strong commission houses ensued, and during the last half of the session bears were fighting among themselves to get grain back.

Oats paralleled the action of corn. Exporters were asking for offers and it was said that 500,000 bushels was loaded here today for Georgian bay. Strength of hogs and grain imparted firmness to provisions. Besides, weekly exports were large

**Chicago Futures.**

| | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| Corn— | | | | |
| Aug. .... | 1.59⅞ | 1.64 | 1.59⅝ | 1.63½ |
| Sept. .... | 1.59½ | 1.64¼ | 1.59⅜ | 1.63¼ |
| Oats— | | | | |
| Aug. .... | .71 | 73⅜ | .70⅝ | .73⅛ |
| Sept. .... | .70 | 71⅛ | .69⅜ | .71¼ |
| Pork— | | | | |
| July .... | .... | .... | .... | 44.70 |
| Lard— | | | | |
| July .... | .... | 45.50 | 45.45 | 45.50 |
| July .... | .... | .... | .... | 26.60 |
| Sept. .... | .... | 26.25 | 26.15 | 26.25 |
| Ribs— | | | | |
| July .... | .... | 24.37 | 24.30 | 24.37 |
| Sept. .... | 24.67 | 24.75 | 24.65 | 25.75 |

**Cash Quotations.**

CHICAGO, July 15.—Wheat—No. 1 red, $2.27 1-2@2.29; No. 2 red, $2.20@2.26; No. 1 hard, $2.31@2.31 1-2. Corn—No. 2 yellow, $1.80@1.82; No. 3 yellow, $1.70@1.75; No. 4 yellow, $1.60@1.67. No. 3 white oats, 77 3-4c; standard, 77 1-4@78 1-4. Rye—No. 2, $1.81. Barley, $1.10@1.25. Timothy, $5@7.50; clover nominal. Pork nominal Lard, $26.05. Ribs, $24@24.50.

**Pacific Northwest Grain.**

PORTLAND, Ore., July 15.—Grain—Oats, No. 2 white feed, $62b; barley, standard feed, $52; "A" brewing, $55; oats, No. 2, 30 days, $62b; barley, feed, $42; brewing, $54. Eastern oats and corn, in bulk: Oats, No. 3 white, $59; 58-pound clipped white, $60; corn, No. 3 yellow, $71; No. 3 mixed, $69; oats No. 3, $59; clipped, $60; corn, yellow, $71; mixed, $69.

**Minneapolis Grain.**

MINNEAPOLIS, July 15.—Wheat—Receipts, 102 cars, compared with 147 a year ago. Corn, No. 3 yellow $1.60@1.70. Oats, No. 3 white, 76@77c. Flax, $4.57@4.60. Flour, unchanged. Shipments, 46,641 barrels. Rye, $1.90@1.93. Barley, $1.20@1.25.

## Live Stock Quotations.

**At Omaha.**

OMAHA, Neb., July 15.—Hogs—Receipts, 10,500; market, steady to 5c lower. Heavy, $16.90@17.30; mixed, $17@17.20; light, $17@17.45; pigs, $11@13; bulk of sales, $17@17.20.

Cattle—Receipts, 7800. Market steady to 15@25c lower. Native steers, $12.25@18.25; cows and heifers, $8@18.50; western steers, $9.50@15.25; Texas steers, $9@12; cows and heifers, $7.50@11.50; canners, $7@8; stockers and feeders, $8@13; calves, $10@13.50.

Sheep—Receipts, 10,300; market, steady. Wethers, $10@12.50; ewes, $10@12.25; lambs, $17@18.50; yearlings, $13@14.

**At Chicago.**

CHICAGO, July 15.—(United States bureau of markets.)—Hog receipts, 42,000 head. Market strong and mostly 10c higher. Choice light and light butchers, $18.15; one load prime heavy, $18.05; bulk of sales, $17.25@18.10, butchers, $17.75@18.15; packing, $17@17.75; light, $18.85@18.15; rough, $16.40@16.90; pigs, $16.75@17.25.

Cattle—Receipts, 20,000 head. Good to best corn-fed steers steady, others and butchers, slow and lower. Beef cattle—Good and choice, $16.75@18.60, common and medium, $11.75@16.75. Butcher stock—Cows and heifers, $8.25@14.75; canners and cutters, $7.25@8.25. Stockers and feeders—Good to choice and fancy, $10.50@13; common and medium, $8.25@10.50. Veal calves—Good and choice, $16@16.75.

Sheep—Receipts, 24,000 head. Heavy sheep and heavy yearlings, steady. Choice Washington wethers, $14; lambs and light yearlings, unevenly lower; medium kind, sharply down; one load choice Washington to outsiders at $18.75.

**At Portland.**

PORTLAND, Ore., July 15.—Cattle—Slow; receipts, 2371. Steers, prime, $12@13; good to choice, $11@12; medium to good, $9@10; fair to medium, $8@9; common to fair, $5@8; cows and heifers, choice, $8.50@9; medium to good, $6@7.50; fair to medium, $4.50@5.50; canners, $3@4.50; bulls, $6@8; calves, $8.50@11.50; stockers and feeders, $7@9.

Hogs—Steady; receipts, 780. Prime mixed, $17@17.50; medium mixed, $16.75@17.25; rough heavy, $16@16.50; pigs, $15.75@16.25; bulk of sales, $16.85@17.

Sheep—Steady; receipts, 2709. East of mountain lambs, $13.50@14; valley lambs, $13@13.50; yearlings, $9@10; wethers, $8@9; ewes, $5.50@8.

**Spokane Stockyards, Monday.**

Hogs—Receipts, 81; market, steady. Prime mixed, $17@17.25; medium mixed, $16.75@17; rough heavy, $15.75@16.25; pigs, $15.75@16.25; stockers and feeders, $14@16; bulk of sales, $16.85.

Cattle—Receipts, 263; market, steady. Prime steers, $12.50@13.25; good to choice steers, $11@12; medium to good steers, $9.50@10.25; fair to medium steers, $8.40@9.40; common to fair steers, $6.25@8.25 choice cows and heifers, $8.25@9; good cows and heifers, $6.50@7.50; common to medium cows and heifers, $5@6.50; canners, $3@5; bulls, $6@9; calves, $7.50@10.50; stockers and feeders, $6.50@8.50.

Sheep—Receipts, none; market, steady. Prime lambs, $14@14.50; good lambs, $12.50@13; prime yearlings, $8.50@9.50; prime wethers, $7.25@8; best mutton ewes, $5@8.

**At North Salt Lake.**

NORTH SALT LAKE, Utah, July 11.—Cattle—Receipts, 62; market steady. Choice heavy grain-fed steers, $11.50@12.50; choice heavy grass-fed steers, $10@11.50; fair steers, $8.50@9.50; feeder steers, $7.75@8.50; choice cows and heavy heifers, $8@9; fair to good cows and heifers, $7@8; cutters, $5.75@6.25; canners, $4.50@5.50; fat bulls, $6@8; bologna bulls, $5@6; veal calves, $10@12.

Hogs—Market steady. Choice fat hogs, $16.

Sheep—Market steady. Choice spring lambs, $15.25@16; choice shorn lambs, $13.@13.50; wethers, $9@10.50; fat ewes, $8.50@9.50.

## Portland Market.

PORTLAND, Ore., July 15.—New flour prices were announced by millers at the close of the week, based on the assumption that the $2.20 wheat price will be definite and that the president's veto of the $2.40 wheat bill will be sustained by congress.

The new flour quotation is put at $10.75 for 100 per cent straights. Grahams will sell at $9.90 and whole wheat flour at $10.30.

While the government wheat price of $2.20 will apply in general only to 1918 wheat the food administration grain corporation has invoiced to the mills at this price a limited amount of old wheat that was taken in at $2.05. This is the stock that was on hand in mills and elevators when the last cereal year ended. The only method feasible for handling this small surplus was found to be to invoice it at the new base price and allow the grain corporation to absorb the difference. With this stock available for grinding, the mills therefore, put out the new flour quotations. There may be a little old flour still on hand made from wheat that cost $2.05, and if so it must be sold at the old price of $10 to $10.05.

The mills have not yet made new mill feed prices, but it is likely bran will sell at $31 and shorts and middlings at $33, sacked f. o. b. mills.

It is pointed out by millers that unless the government steps in and buys a very large quantity of flour this year, so the northwestern mills can run full time, there will be a shortage of mill feed for stockmen's use, and oats and barley prices will be prohibitive. The northern mills will be shut out of the California market, owing to the presence of Australian wheat there, and the flour rationing to domestic users will mean a very small grind, and consequently a mill feed shortage, unless the government comes to the rescue and buys as much or more flour than last year.

The butter market is strong, with prospects of an advance of 1 or 2 cents in print prices within the next day or so. Cubes are holding steady at 45 cents.

Cheese prices were advaced 1½ cents by Tillamook and Coos bay factories in the latter part of the week.

Eggs are gradually advancing as receipts of Oregons diminish. The poultry and dressed meat markets continue firm.

Eastern Oregon peaches are in liberal supply and selling fairly well at 75c@$1 a box.

Butter—Cubes, extra, 45 cents; prime firsts, 44c; prints, extras, 48c; cartons, 1@2c extra; butterfat, No. 1, 51c delivered.

Cheese—Jobbers' buying prices, f. o. b. dock, Portland: Tillamook, triplets, 25c; Young Americas, 26c per pound; Coos and Curry, f. o. b. Myrtle Point; triplets, 24½c; longhorns, 25½c per pound; ¼c discount to Portland trade.

Poultry—Hens, 26@27c; broilers, 30@32c; ducks, young, 30c; geese, nominal; turkeys, nominal.

Veal—Fancy, 19c per pound.

Potatoes—Oregon, Burbank, $1.50@1.85 per hundred; new California, 3¼@3½c per pound.

Hay—Buying prices, f. o. b. Portland; eastern Oregon timothy, $31 per ton; valley timothy, $29; alfalfa, $25@25.50; valley, grain hay, $24@26; clover, $24; straw, $9@10.

## Spokane Market.

These are the actual prices obtained Monday by Spokane wholesalers in their sales to retailers, hotels, mining camps, etc., in Spokane and tributary territory. This information was given by the wholesalers and retailers to the FEDERAL BUREAU OF MARKETS in Spokane.

**Cherries**—Express arrivals, Washington, 193 crates. Market steady. Washington, all districts, all types crates, Bings, 10@11c per pound; Lamberts, best, 11c; poorer, 8@9c per pound; Royal Anns, 8@9c per pound; 24-pint crates Royal Anns, $1.75.

**Cantaloups**—Express arrivals, one crate Washington; good stock; supplies light. Market steady. California green meats, unwrapped, pony crates, 54s, $4; flats, 12s and 15s, $1.50.

**Peaches**—Express arrivals, approximately 160 crates Washington. Market steady. Washington, Snake River district, western boxes Alexanders, $1.25; Triumphs, $1; Early Elbertas, $1.25. Oregon, The Dalles district, western boxes Arp Beauty, $1.25.

**Bananas**—Freight arrivals, California, three crates. Market steady; 8 1-4@8½c, mostly 8½c per pound.

**Oranges**—No rail arrivals. Market steady. Californias, 96-100s, $7@7.50; 26s, $7.50@8; 150-200s, $8.

**Grapefruit**—No rail arrivals. Market steady. Californias, 64-80s, $4.50, few 64s $5.

**Apricots**—Express arrivals, Washington, 219 crates. Market, slightly weaker. Snake river district, 4 basket crates, $1.50; few, $1.75. Peach box, $1. Wenatchee district, Moorparks, 4-basket crates, condition, firm, $1.35; 30-pound lugs, $1.75.

**Loganberries**—Express arrivals, Washington, 47 crates. Oregon, 25 crates. Washington-Seattle district, 24-pint crates, condition sound, $3; poorer, very soft, leaky, $1.50. Market, steady.

**Apples**—Express arrivals, 11 crates Washington. Market steady. Washington, all districts, Yellow Transparents, peach box, 75c@$1; full box, $2@2.50.

**Raspberries**—Express arrivals, Washington, 415 crates. Market steady. Washington-Puyallup district, 24-pint crates, best, $3; Idaho, quality fair, $2.75.

**Watermelons**—No rail arrivals. Market steady. Californias, all varieties, per pound, 3½c.

**Tomatoes**—Express arrivals, Washington, 21 crates California. Homegrown, hothouse, 10-pound box, $2.25; Texas, 4-basket crates, $2. Washington-Yakima district, field grown, 20-pound box No. 1s, $2@2.25; No. 2s, $1.50.

**Blackberries**—Rail arrivals unreported. Homegrowns, 24-pint crates, $2.75@3.

**Potatoes**—Freight arrivals, California, 1 car. Market stronger; 100-pound sacks white varieties, $3.75.

**Beets**—Express arrivals: Washington 10 crates. Market steady. Washington—Walla Walla district: 50-lb. box, $2.25; sacks, $2.50 cwt. Homegrowns, per dozen bunches, 25@50c, mostly 25c.

**Carrots**—Express arrivals: Washington, 10 crates. Market steady. Washington—Walla Walla district: 50-lb. box, $1.50@2.25; few 100-lb. sacks, $2.50. Homegrowns, per dozen bunches, 25@50c, mostly 25c.

**Turnips**—Rail arrivals unreported. Market steady. Washington—Walla Walla district, no early sales. Homegrowns, per dozen bunches, 25@50c, mostly 25c.

**Onions**—No rail arrivals reported. Market steady. California, 100-lb. sacks, yellow varieties, $2.50@2.75, mostly $2.50; 100-lb. sacks red varieties, $2.50. Washington—Walla Walla district, 100-lb. sacks, Yellow Danvers, $2.50.

**Radishes**—No rail arrivals. Market steady. Homegrowns, per dozen bunches, 20@40c, mostly 20@25c.

**Rhubarb**—No railarrivals. Market steady. Supplies light. Washington—Walla Walla district, 50-lb. box, $1.25. Homegrown, per lb., best, few sales, 5c, poorer, 2c.

**Peas**—No fresh rail arrivals. Supplies light, market steady. Home growns, per pound, Gems, best, 12c; Telephone, fair quality, 9c per pound.

**Lettuce**—No rail arrivals. Market steady. Home growns, per dozen heads, excellent quality and condition, very few sales 90c. Good-sized heads, 60@85c, few $1. Medium size to small, 12 1-2@14c.

**Green Onions**—No rail arrivals. Market steady. Home growns from seed, 20@35c, mostly 20c, few 40c.

**Cucumbers** — Express arrivals, Washington, 13 crates. Market steady. Home growns, hothouse, fancy $1.75, choice $1.50, standards, $1, poorer 75c per dozen, Washington; outdoor stock, peach boxes $1.25.

**Other Express Arrivals.**

Currants, 10 crates Washington; pears, 10 crates Washington; corn, five crates Washington; plums, 32 crates Washington.

**Car Lots Expected Tuesday.**

Potatoes, two cars from California; tomatoes, one car from California.

**Shipments En Route.**

Potatoes, one car from California, shipped July 12; watermelons, one car from California, shipped July 13.

**HOPS.**

NEW YORK, July 15.—Hops, quiet; state medium to choice, 1917, 35@43c; 1916, nominal; Pacific coast, 1917, 20@23c; 1916, 14@16c.

## Seattle Market.

SEATTLE, Wash., July 14,—Butter and eggs were firm yesterday. During the week butter went up 1 cent per pound and eggs 1 cent per dozen. Unless the prediction of market men is based upon guesses, butter and eggs will see another jump by the end of next week.

Cream has also been hard to get. While the price has advanced a trifle, owing to the advance of butter, the supply has not increased. Although creamery men feel that they will always be able to get cream, they would like to see a larger supply and a more steady market.

The egg problem is the same. In the war kitchen and in the literature of the food administration, housewives and cooks in hotels and camps are told how to bake eggless cake and other eggless food, yet there is no surplus of fresh eggs. Many people, on the other hand, are using eggs instead of meat, it is said, as they can get the same nourishment at a little less cost.

Green corn arrived in the markets yesterday from the Yakima valley. The run is good, according to produce dealers, and it is selling at 75 cents per dozen ears. While it is small, most of the ears are well filled out. There was a steady sale of corn during the day. Larger shipments are expected the first of the week.

Local celery can now be found along commission row. That shipped in is of the White Plume variety and is said to be of good quality. It is bringing $1.25@1.50 per dozen bunches. Onions are also arriving in large shipments from eastern Washington farms and the market yesterday was firm, with the prices at $2.25@2.50 per cwt.

Better grades of the new potatoes have been received. During the week a carload was condemned, owing to the presence of tuber moth, but the late shipments have been inspected and found to be in good condition. The demand has been good.

Strawberries and cherries are practically gone. There are a few to be had, but many of them are soft and of poor quality. California plums continue to bring good prices, and the expected crop of this state will command a strong market, it is said.

## Butter and Eggs.

PORTLAND, Ore., July 15.—Butter prints, extras, 48@50c; cubes, extras, 45c; prime firsts, 44c; dairy 34c. Butterfat, Portland delivery, No. 1 sour cream, 51c.

CHICAGO, July 15.—Butter higher, creamery, 38@43½c. Eggs steady; receipts, 19,373 cases; firsts, 37½@39c; ordinary firsts, 35@37c; at mark, cases included, 35@38c.

SAN FRANCISCO, July 15.—Butter, 47@52½c. Eggs, fresh extras, 47½c; fresh extra pullets, 44c. Cheese, Young Americas, not quoted; new firsts, 24½c.

**TURPENTINE AND ROSIN.**

SAVANNAH, Ga., July 15.—Turpentine steady; 61 1-4c; sales, 102; receipts, none; shipments, 219; stock, 23,593. Rosin, firm; sales, 738; receipts 163; shipments, 1225; stock, 78,562. Quote: B, D, 9.80c; E, F, 9.85c; G H, 9.90c; I, 10.15c; K, 10.95c;

**METALS.**

NEW YORK, July 15.—Metal exchange quotes lead quiet; spot, $8.05. Spelter dull; East St. Louis delivery spot, $8.50@8.60. Bar silver unchanged.

LONDON, July 15.—Bar silver, 48 13-16d.

**SUGAR.**

NEW YORK, July 15.—Raw sugar steady; centrifugal, 6.055c; refined steady; cut loaf, 9c; crushed, 8.75c; mold A, 8c; cubes, 8.20c; XXXX powdered, 7.70c;; powdered, 7.65c; fine granulated and diamond A, 7.50c; confectioners A, 7.40c; No. 1, 7.35c.

**LINSEED.**

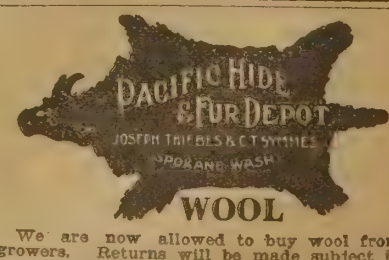
DULUTH, July 13.—Linseed $4.35@4.36; to arrive, $4.30@4.35.

**COTTON.**

NEW YORK, July 15.—Spot cotton quiet; middling, 52.95c.

## Much Livestock Handled.

The Spokane Union stockyards announced that on July 12 a total of 52 cars of cattle and sheep were received at the yards. Forty-two cars of this number were sheep, numbering nearly 5000 head.


**WOOL**

We are now allowed to buy wool from growers. Returns will be made subject to government price, less our profit of 1½ cents per pound.

Market price paid for hides, metal and rubber. Write for prices if interested. Prompt returns guaranteed.

**PACIFIC HIDE & FUR DEPOT.**

Joseph Thiebes and C. T. Symmes.
1101-09 Railroad Ave., Spokane, Wash.

## Can't Get Rid of Pests

To the Editor of the Washington Farmer: Seeing several talks in the Farmer on the squirrel question, would like to say a few words. We live on the edge of the farm lands of the Palouse and near the timber and lived here nearly 11 years. The first three or four years we had fine crops of grain, but the squirrels are so bad now that we have given up planting grain at all. We are surrounded by pasture land and the wheat farmers do not pretend to fight the squirrels there at all. We spend our time and money and kill them all out on our place and in a few days they are as thick as ever, coming in from all around us. You say they average five squirrels to the acre. If you said 50 to the acre in the wheat land and 500 in the pastures you would get nearer the truth. Other states have passed a law compelling all land owners to fight them on all the land they own and if the owners do not do this some one is appointed to do it and the owner has to pay the charges. If that was done here early in the spring we would soon get rid of them. Why should our good state of Washington be behind other states in this matter? All of us who live near the timber are in the same boat. We need the grain and hay, but all we can raise is rye and red top for hay, as the squirrels do not bother that so badly. Won't you try and help us out on this question?

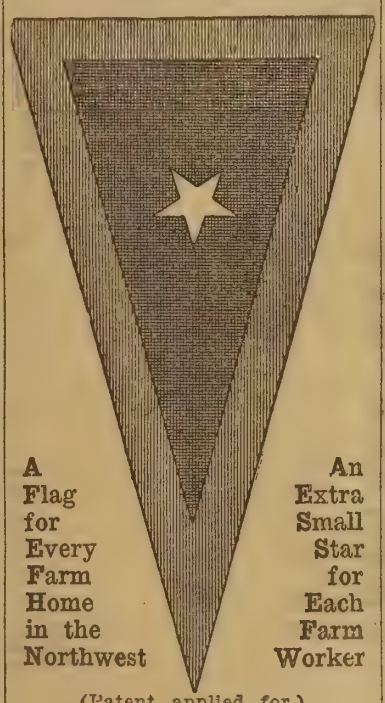
MRS. E. H. DICKENS.

Cheney, Wash.

**Underground Summer Homes.**

Not far from Fresno, Cal., a summer home has been constructed underground.


## FARM SERVICE WAR FLAG



A Flag for Every Farm Home in the Northwest

An Extra Small Star for Each Farm Worker

(Patent applied for.)

**Designed by the Washington Farmer in connection with The Oregon Farmer and The Idaho Farmer for the farm and farm home that is increasing food production in helping to win the war.**

**OFFER NO. 2.**

A farm service war flag, 9x22 inches, made of cotton felt (just the thing for the auto, front porch or the flag pole), will be mailed postpaid to any one sending us TWO SUBSCRIPTIONS TO THIS PAPER. Secure two of your neighbors under our special bargain rates and receive a bunting "Farm Service War Flag."

Send your subscriptions to

**The Washington Farmer**
617 Central Bldg.,
Seattle, Wash.
Review Bldg.,
Spokane, Wash.


### Manufacturers Use Much Wool.

More wool was used by manufacturers in May than in any other month of this year, according to the monthly wool consumption report just issued by the bureau of markets. May consumption was 74,600,000 pounds, grease equivalent, compared to 70,700,000 pounds in April, 71,900,000 in March, 62,700,000 in February, and 65,100,000 pounds in January.

Stock of wool consumed in May by classes, in pounds, were: Grease wool, 43,597,175; scoured, 13,557,733, and pulled, 2,969,638.

### Storage for Future Need.

It will be remembered that famine in ancient Egypt was prevented by a little governmental foresight, and it does not require any illuminating dream to anticipate that so long as the war lasts, with its increasing drafts of soldiers or ammunition workers, the world will steadily produce less and less food. If this year's harvests prove abundant, it will be the first duty of American people to place every grain they can save into storage for future need.

### Should Cease Unnecessary Work.

J. R. Shinn, county agent for Spokane county, says that he has been getting in touch with employers of labor throughout his territory urging them to release all of the men possible at harvest time. He urges that all public work that can be postponed be allowed to go until the crops are harvested. He reports a general sentiment in favor of this move among all classes of industry.

### Michigan Hit by Frost.

Dispatches from the state of Michigan tell of serious damage to crops in various parts of that state during the latter part of June. The lowest temperature in 20 years for this time of year was reported from Grand Rapids. Such crops as potatoes, corn, beans, tomatoes, cucumbers, berries, melons, hemp and the like are reported to have been heavily damaged.

## Trappers of the Ozarks

(Continued from page twenty.)

They allowed their canoes to drift with the main current, and that had carried them into the shadow of some lofty forest-trees along the right bank, which at their particular place happened to be the west bank. The travelers had been drifting in the shadow for a few minutes, when a figure appeared on the moonlight cliff that rose 50 or 75 feet from the east bank The moonlight was not very bright, but bright enough to reveal that the figure was a white man. The astonished canoemen stopped paddling and watched him.

The man halted on the very brink of the cliff, and looked down at the water. Then he turned and gazed backward, fearfully as it seemed to the two watchers. Again he looked at the water below, as if trying to measure the distance to it, or its depth. When he glanced barkward again, he saw something that frightened him; and he turned and fled swiftly along the edge of the cliff. Suddenly two Indian warriors emerged into view, in swift pursuit of him.

On the fugitive dashed, with the Indians close behind. When almost opposite the drifting canoes, the man, seeing that the warriors must soon overtake him, suddenly turned and leaped from the cliff, as far as he could out over the river, many feet below!

(to be continued.)

## Want Ads

### AGENTS—WANTED 9

FARMERS, FRUIT GROWERS, AND OTHers seeking profitable employment as local agents to sell our high-grade nursery stock, will please write for terms to agents. Good pay, exclusive territory and steady employment to honest, reliable men. Albany Nurseries, Albany, Ore.

### EDUCATIONAL 45

EARN MORE. ENROLL ANY TIME, AT Behnke-Walker, Portland, northwest's biggest business college, because best. Graduates assured positions. Write for catalogue.

### TEACHERS' AGENCIES 46

TEACHERS REGISTER WITH B. F. WESTmore, Mgr. Hazard Teachers' Agcy. $1 registers you at three offices. 911 Old Nat'l Bank bldg., Spokane, Washington.

ALBERT TEACHERS' AGENCY, PEYTON bldg., Spokane. We need more teachers.

## Want Ads

**Want Ad Rates 30c Per Line**

Want ads are run at this rate in The Washington Farmer and its associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

**Send for card giving lower rates for ads running one month or longer.**

**How to Figure Cost of Ads**

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

### HONEY, BEESWAX—Wanted. 58

SEND SAMPLES OF YOUR HONEY AND beeswax; state quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

### EGGS and BUTTER WANTED 59

WE ARE ALWAYS IN THE MARKET for good eggs and dairy butter. Send us your next shipment. Oregon Farm Products Co., 38 Halsey st., Portland, Ore.

### MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

Let us mail you one of our large illustrated catalogues No. 27 of sash, doors, frames, building paper, prepared roofing, plaster board, paints, etc.

We make screen doors and sash covered with heavy 28-gauge galvanized wire.

Stock size screen doors, $2 and up.

Odd size screen doors, 20c per square foot. Screen windows and sash, 15c per square foot.

We sell any one. Ship anywhere, and guarantee safe delivery.

Direct from our factory to you.

O. B. WILLIAMS CO.
1943 FIRST AVE. SO. SEATTLE.

SILOS—BARGAIN.

Four new 18x30 highest grade, hinged-rod-door, 150 ton silos, complete except staves, at 25 per cent below market; can include staves at cost; will sell one or all. Here is your chance to get that silo cheap. N. Ferwerda, 801 Old National Bank bldg., Spokane.

### JUNK SHOPS 90

HIDES HIDES HIDES

Write for prices and shipping tags.

BUYERS OF ALL KINDS OF JUNK.

CENTRAL HIDE & JUNK CO., SPOKANE.

### MACHINERY—FOR SALE 93

ATTENTION, RANCHERS.

If you could buy a new portable gas engine that develops 24 h. p. on the belt and 12 h. p. on the drawbar, and one with which you could do practically all your farm work for less money than you could buy a 15 h. p. stationary engine, would you be interested? If so, address G. A. Purdy, 802 E. Pike st., Seattle, Wash.

"WITTE" GASOLINE ENGINES
save labor, and are carried in stock by
HIGGINS MACHINERY COMPANY,
312 FIRST AVE., S., SEATTLE.
Write for Catalogue.

### AUTOMOBILES 114

FORDS CAN BURN HALF COAL OIL, ALL distillate, or cheapest gasoline, using our 1918 Carburetor; 34 miles per gallon guaranteed; easy starting; great power increase; attach it yourself; big profit selling for us; 30 days' trial; money back guaranteed; styles to fit any automobile. Air-Friction Carburetor Company, 321 Madison st., Dayton, Ohio.

### STOVE & FURNACE REPAIRS 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

### HARES AND RABBITS 173

"A FORTUNE IN RABBITS"—HAVE raised the price. We will pay to $8 per pair. Want you to raise them for us. Send stamp for particulars. H. E. Gibson Co., Arcadia, Calif.

PURE BRED BELGIANS—DOES AND bucks, $3 each; pair, $5. Younger stock, 75c up. G. L. Green, Auburn, Wn., R. 1, B. 31.

### LIVE STOCK 177

BERKSHIRE SPRING PIGS OF CHAMpionship breeding for sale at reasonable prices. Send for circular giving description and price. R. W. King, Sweetwater, Idaho.

MANFORD HERO 2D, 634613, ROAN, calved Mar. 19, 1917; a vigorous, growthy Shorthorn bull; for sale at $200, crated, f. o. b. Fenn, Idaho. Wm. Mulhall..

FOR SALE—TEN HOLSTEIN, SEVEN mixed Jersey cows; some fresh soon. Also nine heifers. Nick Johnson, Stanfield, Ore.

REGISTERED O. I. C. SWINE; BREEDING stock for sale. C. I. Ballard, Rickreall, Ore.

SHETLAND PONIES; BARGAIN PRICES. Write for list. N. C. Sorenson, Onalaska, Wn

### HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water. 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

GALAX HOTEL; NEW AND MODERN; 75C and $1. Main and Bernard, Spokane.

### FAIR PREMIUM LISTS 370

SOUTHWEST WASHINGTON FAIR, AUG. 26 to 30, 1918. Premium list now ready. Write G. R. Walker, Secy., Chehalis, Wash.

SPOKANE INTERSTATE FAIR AND LIVE Stock Show, Spokane, Sept. 2-7. Premium list now ready. Write W. L. Tennant, Secy., Spokane.

WASHINGTON STATE FAIR, SEPT. 16-21. Premium list now ready. Write Frank Meredith, Sec'y, Yakima, Wash.

TWIN FALLS COUNTY FAIR, OCT. 1-4. Premium list now ready. Write J. M. Markel, sec'y, Filer, Idaho.

### RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

### ARTIFICIAL LIMBS 424

SCHINDLER ARTIFICIAL LIMB CO., 8115 Wall st., Spokane, Wash.

### FURRIERS 429

ALL KINDS RAW FURS—MOLESKINS, rabbit skins, goat skins; hides and skins bought and sold. Lipshitz, 774 Grove st., San Francsico, Cal.

### BUSINESS OPPORTUNITIES 516

SPLENDID OPPORTUNITY TO ENTER retail automobile accessory business; good location and cheap rent; business established. D 9, Farm Trio, Spokane.

### PLUMBING, STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

### SEEDS 620

WE SPECIALIZE IN TIMOTHY, ALFALfa, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Ida.

### FARM LANDS—FOR SALE 651

ATTENTION, LANDBUYERS!

Here's an excellent proposition:

40-acre farms, selling for $25 to $25 per acre; long-time payments, 6 per cent interest; in the best agricultural part of Snohomish county, where you have all the modern conveniences—paved roads, railways, schools, churches, mills and factories. This district has proven its worth by the many successful farmers now located there.

We also have some beautiful 10-acre water-front tracts.

OPPORTUNITY knocks at every man's door ONCE, but, believe me, it does not continue to knock forever, nor does it pound the door down. For further information address the owners, BROWNELL LAND CO., 904 Third ave., Seattle, Wash.

EASY TO PAY FOR GOOD LAND AT $40, ON TERMS OF
$1 CASH PER ACRE.
50C PER ACRE MONTHLY.

Interest on deferred payments 6 per cent. BUY 20 acres or more at $40 an acre on the above terms, in LEWIS COUNTY, south of CHEHALIS, on the main double track line between Seattle and Portland, the N. P., the G. N. and the O.-W., the best transportation in the state.

FINE, LEVEL LAND, SILTY CLAY SOIL, NO ROCK, NO GRAVEL, CLOSE TO RAILROAD AND PACIFIC HIGHWAY, LEWIS COUNTY, SOUTHWEST WASHINGTON. FREE CIRCULAR. Write to
DAVID P. EASTMAN,
1024 THIRD AVE., SEATTLE.

9 MILES FROM CENTER OF SPOKANE, 70 acres; on paved Appleway, Spokane valley; 30 minutes' ride on electric R. R.; station on place; finest black loam soil; private well for irrigation; 50 acres cultivated, balance natural sod; road on all sides; no buildings. Price $12,000. Will take $5000, other real estate. Your own terms on balance, 6 per cent. Absolutely in choicest district. Best located tract in Spokane valley. If you see this, you will want it. Don't delay.

HOUSE AND LAND ASSOCIATION.
514 RIVERSIDE. MAIN 3079.
SPOKANE, WASH.

DESIRABLE DAIRY RANCH, 200 ACRES; 80 a. best river bottom; well improved; 28 well-graded dairy cows (has honor cow and honor herd in all cow-testing associations in Oregon in March); 18 yearlings and calves, good Jersey sire, 3 good horses, 20 shoats, 2 good brood sows, 60 hens, etc.; 12-room house, in good repair; outbuildings; good fences; income tax reports show $4000 gross income, 1917; $20,000; $8000 down, balance 10 years, 6 per cent. C. E. Ricker, Reedsport, Ore.

480 ACRES IN SHIELDS RIVER VALLEY, wheat and hay farm; good water right; 98 per cent tillable; 300 acres broken; running water; large barn, 3 granaries, chicken house, hoghouse, garage, frame house; schoolhouse on same section; telephone, mail route; 8 mi. from R. R. town. Price $50 per acre. Easy terms. Write owner, Guy T. McBane, Wilsall, Mont.

320-A. MONT. FARM CHEAP; FINE CHOColate loam; 30 a. in wheat; 6¼ mi. from live town; centralized school; good house, reservoir, stock well and bank barn. Price $7500; ½ cash, bal. easy terms. P. O. Box 167, Galata, Mont.

IDEAL SHEEP OR STOCK RANCH.

80 acres; in Nevada; with excellent outside range; fine location and good improvements; a bargain worth investigating. Address Dr. W. F. Boylan, owner, Amos, Nev.

FOR SALE—363-ACRE STOCK RANCH; 250 a. cultivated; 6-room plastered house and other buildings; ½ mile from school; $35 per acre. Write owner, J. A. Sipe, Midvale, Idaho.

ONE OF THE CHOICEST RANCHES ON Coquille river; 130 acres bottom; 375 acres of hill. Dairying or stock. Address the owners, Sweet Bros., Lampa, Ore.

FOR SALE—160-ACRE IMPROVED FARM; 35 acres tillable; bargain. Route 1, Box 19, Brewster, Wash.

### FARM LANDS—WANTED 654

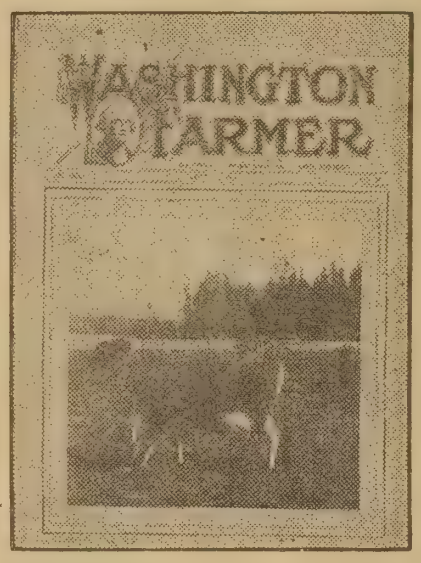
I WANT TO HEAR FROM OWNER OF farm or unimproved land for sale. Mrs. W. Booth, Pulaski, Iowa.

WANTED—TO HEAR FROM OWNER OF farm or unimproved land for sale. K. Hawley, Baldwin, Wis.

### FOR SALE OR EXCHANGE 702

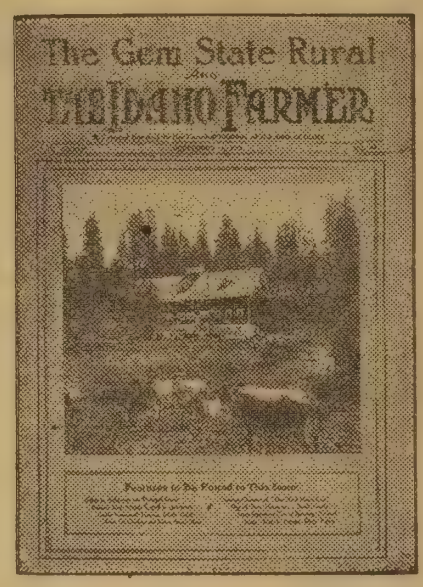
FOR SALE—160 A. MONTANA WHEAT land. Would exchange for logged-off land of equal value near Spokane. A. B. Gaylord, owner, Roundup, Montana. No agents.

# "Want" Ads in These Papers Are Economical and Effective










## Take Advantage of the Low Combination Rate for Insertion of "Want" Ads in These State Farm Papers

The "want" ad is a method of communication which will prove helpful at various times to all of our farm folks.

Do you desire to get in touch with a reliable, experienced hired man? The "want" ad brings your need to the attention of competent workers throughout three states.

Do you wish to turn used machinery into cash? The "want" ad reaches farmers in other districts who have use for your discarded implements, and who will probably be glad to make the saving you will be able to offer them.

Have you farm products to sell, such as live stock, poultry, seeds or dried fruits? Once more, the "want" ad in the three state farm papers offers a solution for the difficulty. It reaches the very class of homes where there is a constant demand for these things.

Have you a piece of land for which you are eager to find a buyer? The "want" ad in The Washington Farmer, The Oregon Farmer and The Idaho Farmer affords a splendid method for making a sale; inasmuch as these three papers are read by tens of thousands of farm owners and farm renters, a goodly proportion of whom are considering the purchase of farms or orchards in other sections.

To sum up, our "want" ads enable you to reach the people who have what you want or who want what you have. They are easy to insert. They are low in cost. Even if there is nothing you care to advertise at this time, you will always find interesting, profitable reading in our "want" ad columns.

Rates are printed at the top of these columns in every issue. Don't miss the "want" ad page today!

**Send Orders and Inquiries Regarding "Want" Ads to The Washington Farmer, 617 Central Bldg., Seattle, Wash.**

NOTICE TO READERS: When you finish reading this paper, place a U. S. 1-cent stamp on this notice, mail the paper and it will be placed in the hands of our soldiers or sailors destined to proceed overseas. NO WRAPPER, NO ADDRESS. A. S. Burleson, Postmaster General.

# THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XLI. NO. 30 JULY 25, 1918. ** WEEKLY.



**"OUR YOUNG MEN HAVE GONE TO THE OTHER SIDE, very many of them to give up their joyous prime, all the glory and all the beauty of life, for the prize of death in battle for a lofty ideal. Now, while they are defending us, can't we men and women at home make up our minds to try to insist in public and private on a loftier idealism here at home? I am asking for an idealism which shall find expression beside the hearthstone and in the family and in the councils of state and nation.**

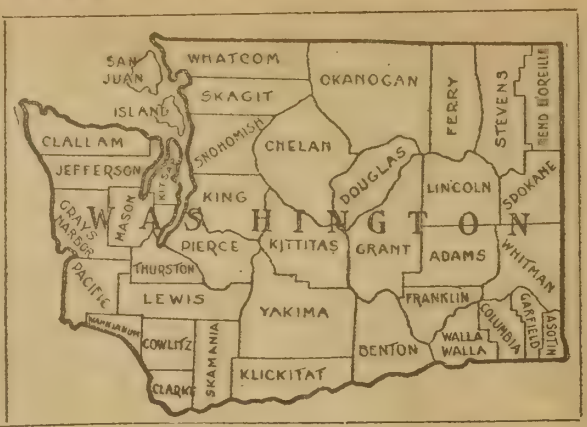
**"And I ask you to see that when those who have gone abroad to endure every species of hardship, to risk their lives, to give their lives—when those men who live come home that they shall come home to a nation which we by our actions have made a nation they can be proud to have fought for and to have died for."**

*—From an address by Theodore Roosevelt, at Saratoga Springs, N. Y., the day following the fall of his son Quentin in an airplane within the German lines.*



# Hay Harvest in Full Swing

## Nearly Normal Crop Where Meadows Were Not Pastured. Skagit County Oat Yield Is Light. Driest Season for Years.




MT. VERNON, Skagit County, Wash., July 15.—The hay harvest is just well started here now. The crop in general is short. Where meadows were not pastured, nearly a normal crop is being harvested, but the dry weather cut the pasture very short and the later hay and pasture was also short. We had a good rain on the 10th, but more is needed. The oat crop generally is light, probably two-thirds to three-fourths of a crop. We have had the driest season in many years. There seems to be a reasonable supply of help for haying and farmers are paying them $4 a day. Farm hands are getting $70 to $75 a month and board for ordinary farm work. There is a feeling among the dairymen that they would be as well off to sell their cows and their feed and save the labor of converting feed into milk; that they could make as much or more by selling the feed they raise, rather than producing the milk. Hay is selling at from $20 to $25 a ton in the field. Silos will be very largely used again. It is more and more apparent that wherever dairying is followed the silo is useful in preserving cheap feed.

C. S. PHILLIPS.

### All Crops Are Short.

RAINIER, Thurston County, Wash., July 13.—Principal crops are clover, grain hay and some grain. All these crops are short this year. This has been the dryest season on record, combined with the green aphis, which practically destroyed peas and greatly damaged vetch and oats, and from present prospects we will not have an overabundance of potatoes. Field corn is holding its own. If we can get good rains within the next two weeks, corn and late potatoes will make a fair crop. No complaint here about shortage of help. I would recommend more fall and early winter seeding of grain in this section. The day before Thanksgiving of November, 1917, I sowed some rye and vetch and it was extra good July 1, 1918, while spring sown grain was short and some pieces were not cut.

L. F. DAVIS.

# Houser Gives Grain Schedule

## *Prices Are Shown for Different Varieties and Grades*

M. H. Houser, northwestern representative of the federal grain buying corporation, has issued a statement showing the basis on which the grain corporation will purchase wheat of the 1918 crop in the northwest. The prices quoted are those that will apply at the terminal points on the Pacific northwest coast. The prices given in the Houser statement, together with other information on the wheat buying business, are as follows:

"Dark hard winter, $2.22; hard winter (basic), $2.20; yellow hard winter, $2.18; dark northern spring, $2.22; northern spring (basic), $2.20; red spring, $2.15; red winter (basic), $2.20; red Walla, $2.13; amber durum, $2.22; durum (basic), $2.20; red durum, $2.13; hard white (basic), $2.20; soft white, $2.18; white club, $2.16.

"No 2 white will be bought by the grain corporation at 3c under No. 1; No. 3 wheat at 7c under No. 1.

"Mixed wheat and wheat grading lower than No. 3 will be bought by sample at its value.

"We will issue a bulletin giving the approximate value of wheat grading lower than No. 3 on account of test weight, mixed wheat and smutty wheat.

"The above prices are for bulk wheat. a premium of 9c per bushel will be paid for sacked wheat, basis good order sacks.

"We expect the grain trade to operate on a fair price basis as we do not wish to solicit consignments which we are prepared to handle on a 1 per cent commission basis.

"Under the new arrangement for the coming year the food administration grain corporation relinquishes definite direction of wheat shipments. We will therefore discontinue the car permit system, in order to return the trade to the widest range of individual opportunity possible. Nevertheless, we intend to keep in close touch with all shippers and assist them as much as possible in securing cars for the movement of wheat."

For the purpose of assisting the farmers to understand the application of the foregoing prices and the table of standards given below to the common varieties of wheat grown in the northwest, the following explanation has been prepared by this paper:

The wheat classed hard red spring is Marquis wheat; hard red winter is Turkey red; common white is blue stem, fortyfold, baart and gold corn; white club is little club, Jenkins club, Sonora, red chaff, early Wilbur, and the white hybrids; red winter is Jones' fife; red Walla is red Russian, red club, Coppei red and the red hybrids.

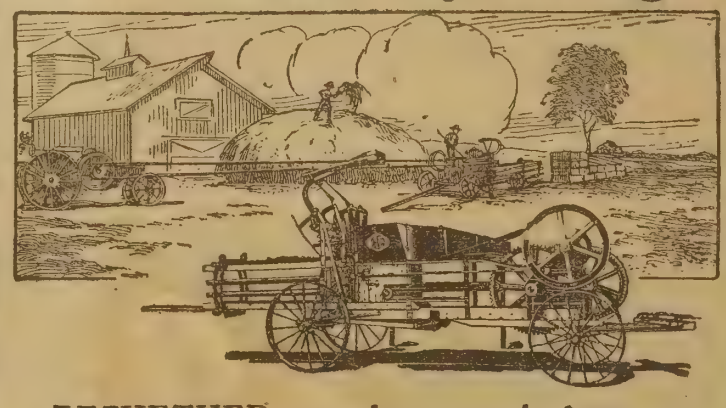
The following table shows the test weight per bushel of the different classes of wheat for any grade for No. 1 to No. 5, the amount of damaged kernels that any grade may contain, the foreign matter other than dockage that any grade may contain, and the percentage of wheat of another class which any grade of any variety may contain. Growers of any variety of wheat in the northwest should substitute the name of the variety or varieties that they grow in this table as indicated by the foregoing explanation:

| Grade No. | Minimum limits of—Test weight per bushel: Class Hard Red Spring | Minimum limits of—Test weight per bushel: Classes Durum, Hard Red Winter, Common White, and White Club, and subclass Red Winter | Minimum limits of—Test weight per bushel: Subclass Red Walla | Maximum limits of—Damaged kernels: Total | Maximum limits of—Damaged kernels: Heat damaged | Maximum limits of—Foreign material other than dockage: Total | Maximum limits of—Foreign material other than dockage: Matter other than cereal grains | Maximum limits of—Wheat of other classes: Total |
|---|---|---|---|---|---|---|---|---|
| | Pounds | Pounds | Pounds | Per Ct. | Per Ct. | Per Ct. | Per Ct. | Per Ct. |
| 1 | 58 | 60 | 58 | 2 | 0.1 | 1 | 0.5 | 5 |
| 2 | 57 | 58 | 56 | 4 | 0.2 | 2 | 1.0 | 10 |
| 3 | 55 | 56 | 54 | 7 | 0.5 | 3 | 2.0 | 10 |
| 4 | 53 | 54 | 52 | 10 | 1.0 | 5 | 3.0 | 10 |
| 5 | 50 | 51 | 49 | 15 | 3.0 | 7 | 5.0 | 10 |

Wheat of the appropriate subclass which does not come within the requirements of any of the grades from No. 1 to No. 5, inclusive, or which has any commercially objectionable foreign

(Continued on page sixteen.)


## Successful Hay Baling



WHETHER your hay crop is large or small, it pays to bale it with an **International Hay Press.** That means profitable marketing, easy and rapid handling and saving in storage space. A one-horse press with a 14 x 18 bale chamber turns out a daily average of 6 to 10 tons of baled hay. A two-horse press gives you 8 to 15 tons in bales. The motor press averages up to 20 tons, and the belt power press up to 30 tons—smooth, well-tied, marketable bales. The bale chamber sizes are uniform and standard, 14 x 18, 16 x 18, and 17 x 22.

Some of the popular features of **International** hay presses—the low bale chamber that saves time and labor in the tying of bales, the spring roller tucker that makes the bales smooth, the block setters, the end delivery of bales, the low step-over of the horse presses, the power economy of all the **International** presses—these are features you should know about before you buy a hay press.

A card to us asking for **International** hay press information will bring you a complete illustrated description of every press in the line, and bring it promptly. Write us now while you think of it.

**International Harvester Company of America**
(Incorporated)

Billings, Mont. Crawford, Neb. Denver, Colo. Helena, Mont.
Los Angeles, Cal. Portland, Ore. Salt Lake City, Utah
San Francisco, Cal. Spokane, Wash.





FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 30 — THE RANCH PACIFIC DAIRYMAN HORN AND HOOF — July 25, 1918

# Northwest Faces Feed Problem

## *Where to Get Grain Feed for Hogs Puzzles County Agricultural Agents*

How to get grain feed to tide the hogs of the Inland Empire over the season between pasture and the gleaning of the grain fields is a question that consumed much of the time of the conference between the county agents of eastern Washington and northern Idaho in Spokane last week. W. B. Kjosness, assistant county agent for northern Idaho, brought up the subject when he declared that the hog men of his territory believed themselves unable to secure the grain necessary to carry their hogs over in good growing condition until the pea fields and wheat fields of northern Idaho are ready for the hogs to be turned into. A general sentiment among the agricultural agents present seemed to be in agreement with his statement. There was also agreement among the agents that hogs must have a grain ration while on pasture in order to get the growth necessary for good finishing when the grain fields become availabue. Uniform complaint was also made relative to the mill feed that has been available, but which is now practically impossible to get in most of the agricultural sections of the west. It was stated a number of times and denied by no one that the mill feed was composed of so much trash and waste matter as to be almost valueless as hog feed, and it was repeatedly asserted that even this quality of feed could not be obtained.

This situation brought up the question of whether or not corn or barley was available, and if so at what figures. R. J. Stevens of Spokane a grain dealer and active in the agricultural interests of the northwest, was called upon to give what information he could. He stated that corn could be obtained but that it was "out of sight" in the matter of price. He cited the possibility of securing what he called a good grade of corn for hog feed at about $69 a ton at Inland Empire points. He referred to the purchasing of oats in bulk at from $60 to $62.50 a ton, and sacked barley at $58 to $60 a ton.

Mr. Stevens expressed the belief that there was a considerable amount of barley now being held at various points throughout the northwest—some in warehouses, other lots still on the farm. He told of the company which he represents having recently bought barley in the vicinity of Pullman, Wash., and another lot in the vicinity of Moscow, Idaho.

This brought from Mr. Kjosness the declaration that he believed some plan should be worked out whereby a definite record could be kept of the feed of any kind available in the northwest, just as last spring provision was made to handle seed grain. Among others who approved the idea of a central bureau was J. N. Price, county agent of Yakima county, Washington, who said he felt that every person having feed should be required to file a report of it with some central agency.

It was suggested that the county agents might well make their offices clearing house for this information, those having feed reporting it to them and they, in turn, reporting it to those desiring to purchase the feed. While definite action in the matter was not taken, it is expected that before long some practical method of bringing the feed and the farmer who wants it together will be devised and put into operation.

### Must Not Sacrifice Stock.

The philosophy that man can not live by bread alone was strongly approved by the county agents, who appeared practically unanimous in their opinion that to sacrifice live stock as a means of increasing wheat production and conservation was of doubtful wisdom. It is claimed that many farmers are tempted to curtail their live stock feeding with a view to producing the wheat that the national food administration has urged. Though loyally behind the administration in its move for a large wheat production, the agents went informally on record in favor of the production of some barley, oats, rye and the like for stock feed as a first essential in the production of the meat production of the meat supplies needed to go along with the wheat.

### A Sow on Every Farm.

It was the unanimous opinion of those attending the conference that it was a grave mistake for any farmer to undertake the growing of live stock without first knowing where the necessary feed was coming from. With the same idea it was agreed that the campaign for increased hog production, which was the main purpose back of the conference, should not take the form of a campaign to induce farmers to go into hogs on a large scale, but rather a campaign for hogs enough to utilize all the waste feed matter on the farms with whatever additional feed a farmer could be assured of having without jeopardizing the success of the undertaking.

The question of peas as hog feed occupied much attention of the conference. Agent J. R. Shinn of Spokane county was perhaps the strongest advocate of peas for hog feed, though he was ably backed in his contention by others present, among them being J. M. Van Kleek, manager of Armour & Co., of Spokane, who said that hogs finished on peas made first-class pork for packing. Mr. Shinn's principal argument was for hogs to glean the pea and wheat fields after harvest. He said that each three pounds of peas on the ground should produce one pound of pork, and that the average pea field would care for one pig to the acre.

Referring to the method that has been carried out in his county for the return of brood sows to the farms after they had been consigned to market, Mr. Shinn said that 800 sows had been returned to the farms in Spokane county during the last season. He said that he had made a special effort to get young men on the farms who have been placed in deferred classifications under the army draft to do their patriotic part by buying one brood sow and raising her pigs. He reported that he had received applications for 120 sows from these young men. Mr. Shinn emphasized the point that the taking of a sow from the stockyard by a farmer was not always a successful venture though in a majority of cases the reports that

(Continued on page twenty-four.)

## VOCATIONAL MONEY.

### State Gets Government Aid.

Announcement has been received from the national capital of the allotment of $27,614 for use in the state of Washington, out of the fund for vocational education in the United States. This amount is available for use during the fiscal year beginning July 1 and ending June 30, 1919. It is specified in the allotment that $8153 shall be expended in teaching agriculture; that $10,738 shall be used in teaching home economics, and useful trades, and that the balance of $8723 shall be used in training teachers in these subjects. The fund for agriculture will be apportioned between the state college at Pullman and several high schools. The amount available for home economics will go to the university at Seattle, the state college at Pullman and the high schools at Everett, Snohomish and Bellingham. The allotment for training teachers will go to the same institutions as that for home economics instruction.

# Would Prevent Smut Explosions

## *Static Electricity Probable Cause of Much Grain Loss*

**Just exactly as the battery in a gas engine explodes the gas, so does static electricity in a threshing machine explode smut dust.**

This is the belief of many who have been making investigations of the causes of harvest losses in the northwest during the last several years by threshing machine explosions. At the present time the government has men in the field cooperating with the State College of Washington and other institutions attempting to prevent losses this year by wiring separators so as to conduct the electricity that is generated into the ground, thereby freeing the machine of the danger of smut ignition.

W. J. Gilmore, representing the government in the work this season, is authority for the statement that the static electricity on any one of four or five of the principal belts of a threshing machine often amounts to as much as 50,000 to 70,000 volts. This has been determined by the use of electrometers.

To illustrate the possibility of explosion from this source the following facts may be taken into consideration: An electric charge of 50,000 volts is capable of throwing a spark between two conductors one and a half inches apart; the cylinder of a threshing machine and other metal parts of the machine, especially the beater immediately behind the cylinder, are so arranged that as the cylinder revolves the teeth pass within an inch and a half or less of some of these metal parts; immediately behind the cylinder is the point where the smut dust is probably most suitably mixed with the air for maximum explosiveness.

Just as the spark made by the battery in a gas engine is passed through the gas by means of the spark plugs, so the spark of static electricity from the threshing machine's cylinder may be passed through the smut dust or gas by means of metal parts that pass close together. Just as the explosion occurs in the gas engine, so may the explosion occur in the threshing machine.

It is for the purpose of preventing these explosions that practically all of the threshing machine companies are cooperating with the authorities in wiring their machines to conduct the electricity into the ground.

The method of wiring is simple. It may be successfully done by means of only one main wire, thoroughly grounded. The idea is to connect the wire to the cylinder, and run it back along the machine, with branch wires connecting each principal part of the machine, such as the grain pan, shaker or grain apron, the fan shaft, the grain belt and the blower shaft in cases where wind stackers are used. It is considered advisable also to have the connection include also the principal shaft operating the feeder. While a wire may be attached to a shaft in any manner so that connection is made for the electricity to run off along the wire, it is recommended that, especially on the cylinder shaft, the connection be made by something in the nature of a brush held onto the shaft by means of a spring. The idea of this is to prevent the possibility of an insulation by oil from the bearings that would prevent the electricity passing off on the wire.

After every part of the machine which is liable to generate or accumulate electricity has been connected to the main wire running from the front to the rear of the machine the main wire must then be well grounded. Moisture in the soil is one of the prime essentials in making the grounding, as the electricity is poorly conducted by dry soil.

One of the best methods of grounding tried by those who have experimented is as follows: Take a large pipe one and a half inches or more in diameter and two to four feet long. Hammer one end to a point, allowing sufficient opening at the bottom, either through the end or through holes especially made at the side of the point so that water may gradually run through and thoroughly moisten the soil. Use this pipe as a stake, drive it well into the ground, attach the end of the main wire and fill the pipe with water.

This is a general description of the plan being tried out and urged upon threshermen for use everywhere that smut is prevalent this year. Threshermen who have never before grounded their separators and wish more detailed information should get in touch at once with the company that handles their particular make of machine. Most of these companies are making an effort to get their machines wired everywhere, and are ready and anxious to cooperate with the owners in protecting them in this manner.

It is a well-known fact that threshing machines and practically all other machinery where belts are used, generate electricity. This is done not only through the slipping of belts, but through the constant separation of the belt from the pulley surface as the belt moves. Experiments are being made in the use of insulated pulleys to learn whether or not it would be possible to prevent the accumulation of static electricity in this way. One machine company is this season watching the operation of two machines, one of which is equipped with a modern cylinder pulley and the other with an iron pulley, to see whether or not there is any difference in the amount of electricity accumulated.

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## Berries Are Money

### High Prices Assured This Year

Loganberries, blackberries and raspberries are going to cost real money this year if present conditions are any criterion. There has been a good average crop of logans in western Washington, with perhaps something of a shortage in Oregon. With the abundant rains of middle July the berries which still had some time to go to maturity after that time should fill out well and be of good quality. In fact, the whole small fruit shortage, with the exception of strawberries, which were short in quantity, is due to the unusual demand. The canneries are active bidders in the market, and this has insured a high level of prices. It may be well to call attention to the fact, however, that at least part of this cannery product will be sold direct to the government for use in France and at the American camps, and will not help out the supply for domestic consumption. The chances are that while fresh fruit is selling and will sell at unusually high prices, the canned product will be much higher in proportion.

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## Should Ship Cooperatively

Shipment of live stock or other farm produce cooperatively is the modern way for the small farmer or the stockman who has less than a carload. It helps him avoid the buyer who goes about the country purchasing at less than market value; it costs less than if he tries to ship alone without the full car. The local buyer who ships out does what the farmers themselves should do. He gathers together the stock of a few farmers, puts them into one shipment and sends them to market at carload rates where they will receive the consideration that large shipments take over the small shipment. The farmers who raise stock could do nothing better than organize for community shipping, thus securing these advantages for themselves.

## Keep Up the Milk Flow

As pastures get short the cows begin to drop in the milk flow unless some extra feed is given. A serious loss is certain to follow if the cows drop off now. No matter how good the winter feed may be you can never get the flow back up to where it would be if the drop had never come. It, therefore, makes it a necessity to see that the proper supplement is made to the scant pasture and thus keep up the flow. Those who have a summer silo have the problem solved. Others must rely on soiling crops such as green clover, alfalfa and the grass. Where corn is far enough along it makes an excellent pasture supplement. If green feed is not available some grain must be fed. Bran and shorts will do very well for this. Other concentrates are too expensive. Do not forget that a little grain fed now may not increase production at once, but it will do much toward keeping the production from falling off and will pay in the long run.

A. B. N.

## Profit and Loss of the War

This war will be worth all it will cost if it does three things:

1. If it abolishes the principal amount of the needless and unproductive toil, such as the manufacture and sale of intoxicating liquors as a beverage, and some other needless industries.

2. If it abolishes special privileges, so that land, water and other natural resources can only be held for beneficial use.

3. If it sets an army of parasites and idlers to work, so that they earn what they consume, instead of living on the product of the labor of others.

I doubt whether America's loss in man power will be equal to the loss sustained in civil life before the war by our indolent, luxurious and self-indulgent modes of living. I have visited several cantonments, and the boys are almost universally improved in health by exercise and better methods of living than they formerly observed.

I doubt whether the cost of the war in excess of its profits will be greater than the cost of the liquor business, and the cost of maintaining an army of nonworkers or parasites who believed that productive labor was dishonorable, and whose aim was to live without labor on the labor of others.

My reading of history leads me to conclude that in the long run of the evolution of human life nothing that is worth saving is ever permanently destroyed. In this, as in other forms of life, it is a law of the survival of the fit to live. Old systems, like encrustations of rocks and shells, have to be broken up by new energy and life.

G. L.

## Furloughs for Farmer Soldiers

The government has adopted the wise plan of granting furloughs to the farmer soldier boys who are in the training camps, and in other locations where such furloughs would be feasible. Already some of the boys are back on the farm, and are materially assisting in farm and orchard work. This will be a considerable help, and the soldiers, themselves, will, doubtless, be correspondingly benefited.

While the campaign to assist the farmers in the matter of securing help to plant and harvest their crops is to be commended, it is not to be expected that the new hands will be as capable as those trained on the farms, and, for that reason, the government should continue to grant furloughs, so far as possible, to those who are trained and skilled in the work of the farm. This is essential to the largest efficiency in crop production. It is now a question of service in the very real sense of the term.

## Drift Toward Public Ownership

Dr. Maffeo Pantaleoni, an Italian who is considered an authority on systems of government, thinks he sees impending trouble from the increased drift toward public ownership that has set in with the war. Government ownership of railroads, he says, "is only one of the many afflictions sure to be imposed upon this poor old Europe after the war. With the war the government has become almighty with us. The government now does everything and after the war its encroachments will be appalling and bring us near to ruin."

Dr. Pantaleoni advances a new objection to government ownership. One argument for it, he says, is that it would build up a large army of government employes who, having steady and assured incomes, would be a stabilizing factor in the national life, and he argues that such a condition would be particularly unjust to the farmers. The whole world, he says, is ruled by chance. "The greatest wealth of the world, its crops, depend on the weather. If you give a class of people in the nation a sure thing, remove their chances of money loss, you do so at the expense of the other people, of the farmers, for instance, who must take great chances. In other words, you increase the risks of the majority for the benefit of the minority."

The same authority thinks that there also will be a clamor for increased public ownership in America, but that after the war the United States will shake off such "parasitic ideas."

Some observers even now think they discern a reaction in the American public mind against control of the individual. Russia's hard lessons under the bolsheviki, they say, should be a profound warning against socialistic tendencies, and have not been lost upon the minds of the people of the United States. The American people, they say, are willing to curtail their individual freedom in order that Germany may be defeated, but the pendulum has swung far to that side of the clock and will swing back again with the war's ending.

Thomas Jefferson maintained that the best government was one that least interfered with the lives of its people, and the Italian authority just quoted says he is convinced that "the less government a nation has the better it is for the prosperity of its people."

In all probability this question after the war will be the paramount issue before the people of the United States, and we are almost certain to see a great realigning of parties upon it.

## Bacillus Botulinus

It is unfortunate that the American public did not become practically acquainted with bacillus botulinus before the extensive fruit and vegetable canning campaign of last season. Many householders, reading of deaths from botulism, and never having heard the word before, seem to have decided that canning has taken a new turn and has become a good deal such a gamble as fooling with dynamite or taking patent medicine. The truth is that B. Botulinus has always been in our midst, and that he has annually claimed his victims.

Botulinus toxin may be produced in meat, vegetables or fruit. It is a byproduct thrown off by the botulinus bacillus, and is far more deadly in its effects than in the toxin responsible for ptomain poisoning.

The remedy is prevention, and there need be no doubt as to whether or not this remedy has been successfully applied.

There are just two things to be considered in this matter of application: First, can your food strictly according to the directions issued by the federal government, or by any of the state colleges. When you are told that a certain vegetable must be sterilized 120 minutes by the hot water bath method, for instance, it is distinctly up to you to see that the water in the bath is boiling all that time. If the fire dies down part of the time and allows the contents of the cans to cool, you are not following directions.

The second preventive is to boil canned vegetables 10 minutes after removing them from the cans, and before serving. This will not hurt a perfectly innocent canned product, and although it will not remove the possibility of the lesser evil, ptomain poisoning, it will do away with the possibility of botulism.

By attending to these two details the likelihood of any trouble with home canned products is about as imminent as a war with Mars.

P. E. T.

## Let's Not Be Too Proud

The newspapers the other day carried a dispatch from England telling how David Lloyd George, British premier, reviewed a detachment of American troops en route for France and remarked to their commanding officer: "I am glad they are on our side and not on the other side."

So are all of us glad that they are on the side of England and France. We are several times prouder of this country's rapidly increasing soldiery than Lloyd George or any other citizen of Great Britain or of France. They are a organization worthy of pride. They have made good and will continue to make good. They are the stuff that victory is made of.

But let us distinguish between pride and egotism. Pride is a constructive element; egotism is destructive. When the American soldiers cross the German border line, as they will in due time, we must remember that for nearly four years the soldiers of France and England and Belgium stood as loyally and as fearlessly in front of the ruthless Huns as any American soldier can possibly do. Well may we be thrilled with pride when we look upon the work of General Pershing and his men, but let us look with equal pride and with genuine gratitude to the men who have stood so nobly under the Red, White and Blue of England and the Tri-Color of France.

# Allies Start Big Offensive

## *Some Military Critics Think Tide of War Has Been Turned*

After fighting a defensive war for three years, the allies have started an offensive against the Germans and Austrians that some critics look upon as the beginning of the end. At the outset it is well to say that it may be the beginning of the end, but that the end is yet a long way off. Since America began pouring men and materials into Europe there has been no doubt of the ultimate end of the war. The only question has been: "How long will it take to conquer Prussianism?"

The scene of the great struggle now is the V-shaped line between Soissons and Rheims. Roughly speaking, these cities are each about 75 miles from Paris and about 40 miles apart. The last great German drive advanced between these two points in a wedge that reached Chateau Thierry, a point southwest of Rheims and southeast of Soissons and about 45 miles from Paris. Chateau Thierry is on the Marne river, which runs southwesterly from the Rheims direction to Paris. The Germans reached the Marne and controlled it for a distance of some 10 miles. They built railroads from Soissons to the territory gained in the drive, to be used to carry men and supplies. That is the way things stood when Germany resumed the offensive 10 days ago. The drive was renewed along the entire line from Chateau Thierry to and a little east of Rheims, it being apparent that the ultimate objective was another great advance on Paris which would bring that city within range of the enemy siege guns.

### But the Effort Was a Failure.

Approximately three quarters of a million fighting men were thrown into the effort by Germany. A supreme effort was made to take Rheims. The attack along the Marne river near Chateau Thierry resulted in the crossing of that river and the occupation of its southern banks for a distance of about 10 miles. But the French and Americans on that sector held tenaciously and suddenly sprang a surprise on the enemy on the other side of the V. It was the greatest single success since General Byng of the British army drove the enemy back on the northern front two years ago.

Without a moment's warning the French and Americans sprang into a terrific offensive on the 25-mile front from Chateau Thierry to and beyond Soissons. Germany was not able to rush reserves into the fray fast enough to check the drive, and at this writing it has netted the allies a gain of an average of seven or eight miles over a front of 22 miles.

With the success of the allies on the western half of the V, their defensive operations on the eastern side was changed to one of offense, and successes are there being gained. The Germans have been compelled to retreat from the southern bank of the Marne. Latest reports show that the Americans and French have broken through the German lines northwest of Chateau Thierry, which further greatly menaces the Germans further south.

### Important Captures Already Made.

An official report from General Pershing says that up to Saturday morning the Americans alone had captured over 17,000 Germans and 560 big guns. Much of the heaviest fighting has been done since then, and this number is probably greatly increased. No official report of captures by the French has been received. It is considered not improbable that the Germans have lost, in killed and captured, 100,000 since they began their futile drive 10 days ago. Reports indicate that, as usual, the allies have been able to hold their losses down far below those of the enemy. It is officially reported that the total casualties to date of Americans including all battles in which Americans have participated were 12,716. Of this number, between 4000 and 5000 wer deaths and the balance wounded or captured.

### Germany Must Vacate or Be Captured.

If the allies continue to hold Rheims at the east end of the big V and if they can capture Soissons and the railroads leading from Soissons to supply the German troops down at the point of the V, the Germans must retreat from the entire V line or be captured. The probability of their being able to retreat successfully enough to escape capture anyway is problematic. It depends upon the speed with which the allies can keep up their advance. If the allied power of drive holds out only a few days it would seem almost certain that large numbers of the enemy, with their guns and supplies, would be captured. Before this reaches the readers the facts may be known. The Germans may have retreated; they may have been captured, or they may have been able to stop the allied advance and, for the present at least, stave off the disaster that is at this hour threatening them.

### The Americans Play a Big Part.

That the boys from this country have played a leading part in the great allied offensive is evidenced. Their dash and daring have been the inspiration of the French and British, who have so long stood up against such heavy odds. Their fearlessness and ability have put new courage into their comrades of the other allied nations, which has been in itself a great advantage. Further than this, their number is enough to turn the balance in favor of the allies on the particular front involved in the present struggle. It seems certain that the time for which General Foch, supreme allied commander, has been patiently waiting has arrived—the time when the number of the Americans has become great enough to turn the balance of power so that the allies would no longer be hopelessly outnumbered. The following from a statement made by General March, chief of staff, at Washington, D. C., shows the number of Americans engaged with the French in the offensive:

"At least 196,000 American fighting troops are in the battle, and probably the total force is nearer 300,000 than 200,000. Each division has a fighting strength of 27,000 men, and each of the two detached negro regiments a strength of 3600. The full strength of each division, with auxiliary units, is 45.000 men."

### Germans Slow to Admit Reverses.

That the German leaders are making a desperate effort to conceal from the German people the fact that they have been seriously reversed is indicated by published reports in German papers. Here is an example of the kind of reports being published in Germany: "As has happened on other occasions, for instance on the Somme, we must concede the loss of prisoners and of guns. But even so, the enemy's leading idea, a breach through, has not been attained, despite great exertions. We have been able to hold up the counter-offensive before it attained a strategic advantage worth mentioning. Continuous changes in position are logically the outcome of the open warfare now in progress."

Another German writer says: "False hopes were perhaps pinned at home to the launching of this new offensive. It can not be the aim of every single war operation to attain definite objectives in all circumstances."

### Conditions Favorable in Other Sections.

It is believed that Germany had planned another big drive for the northern part of the line, where the British troops under General Haig are defending the allied cause. The failure of the attempt on the south apparently has delayed it. It seems probable that no big offensive will be started on the north until the outcome of the battle before Paris is known for a certainty. It may be that the success of the allied armies before Paris will be great enough to draw German reenforcements from the north, in which case General Haig would probably be in a position to start a drive in the north.

Italy still controls things on her own front. Austria has been unable to recover her balance sufficiently to prevent further Italian advances. While nothing in the nature of a major offensive has been reported from the Italian front recently, the Italian army is active and is constantly bettering its positions of battle line. The situation on the French front would seem to guarantee that no important reenforcements for the Austrians could be sent to help withstand the fighting of the Italians.

### Where Is General von Hindenburg?

In one German report of war activities General Ludendorff is referred to as field marshal. This is the title belonging heretofore to Von Hindenburg. The question arises: Where is Hindenburg? Is he dead, as previously reported? Is he physically or mentally unable to continue in the leadership? Or has he been deposed by the kaiser? Something apparently has happened to Hindenburg, though reports still talk of battle plans as those of the great Prussian leader. It is significant that no denial of his death has come from any source.

### Quentin Roosevelt Killed in Air Battle.

At this writing it seems practically certain that Quentin Roosevelt, youngest son of Colonel Theodore Roosevelt, lost his life in an air battle behind the German lines last week. He is known to have been killed or to have been taken prisoner, as his machine is known to have fallen behind the German lines. He was a lieutenant in the air service.

### U. S. Cruiser Sunk by Unknown Cause.

The United States armored cruiser San Diego was sunk last week just off the New York coast. The cause of the sinking has not been definitely learned, but it is presumed to have been a German submarine torpedo or a mine laid by a submarine. There were 1255 men aboard, of which 1183 are known to have been rescued. No submarine was seen.

### American Army Is Going Over Speedily.

It is officially announced by the war department that there are now in France or on their way more than 1,200,000 Americans. The speed with which they are being transported is increasing with the increase of ships to carry them.

### Get a Farm Service Flag.

The man, woman, boy or girl who stays at home and works hard to produce necessaries for the soldiers in Europe are entitled to real war service recognition. That is the idea back of the Washington Farmer's farm service war flag. It is pennant, shaped, made of the good old red, white and blue, and has a star representing the producing farm home. Small stars are added to represent each worker of that home.

.....

**Convenient Order Blank.**

THE WASHINGTON FARMER, .....1918.

Review Building, Spokane, Wash.

Enclosed, find five cents (5c), for which please send me a Farm War Service Flag (printed on enamel paper) with ..... extra small stars for farm workers.

Name .....

R. F. D. ..... Postoffice .....

Box ..... State .....

## *Washington Gleanings*

E. A. Cooke has been appointed state fire warden for the Yelm district.

Westport, Grays Harbor county, had its first electrical storm in three years July 15.

The fifteenth annual picnic of the Whatcom County Grocers' association was held near Ferndale July 24.

Fifty-four allotments on the Yakima Indian reservation are to be sold August 12 to the highest bidder.

The first carload of apricots to be shipped from the Omak Warehouse and Storage company left Omak July 11.

A large pea warehouse and drier are to be built at Fairfield for the Everett B. Clark Seed company of Milford, Conn.

M. G. Morrison of Garfield has traded his ranch of 350 acres on Cedar creek, valued at $22,000, for 1440 acres near Roundup, Mont.

Work has commenced on a new cable ferry at Entiat, and it is expected that it will be ready for use by September 1. C. M. Dixon will operate the new ferry.

William Kludt, a well-known Newaukum valley farmer south of Chehalis, lost four fine heifers during a recent storm, the animals being struck by lightning.

In two days more than 50 Vancouver children under 16 years of age applied to the juvenile court for permission to be employed in the fruit cannery or other industries of the city.

The Snohomish County Fruit Growers' association has contracted for 1500 tons of Yakima hay at a flat price of $22 per ton f. o. b., Yakima. The hay is to be shipped as soon as baled.

J. H. Forrest has sold his place of 122 acres at Bremer, seven miles west of Morton, to F. E. Pierce for $5500. Forty acres of the place are cleared, 22 in pasture and 60 acres in timber.

In order to meet the increasing demands upon the current expense fund the Skagit county commissioners have decided to raise the assessed valuations for 1918 of all classes of property by 30 per cent.

To meet the need of camping places the Hoquiam Commercial Club has provided sites with water and wood conveniences at the beach resorts and at Lake Quinault, as well as in the vicinity of Hoquiam.

At a joint meeting of the Whitman County Tax league and Whitman County Good Roads association it was learned that contracts had been let for nearly $1,000,000 worth of new roads in the county.

Tacoma is to honor her soldiers who fall in battle with a living monument by planting a tree for each soldier from the city who dies in the service. Each tree will be appropriately marked with a brass plate.

O. P. Dosland of Grays River has the distinction of owning two Jersey cows, Eurybia's Zaza, No. 269170, and Mayflower's Pauline, No. 335685, that are entered in the Registry of Merit of the American Jersey Cattle club.

Mrs. J. W. Phillips of Chinook recently filled 3720 half-pound flat cans, containing 1860 pounds of salmon, in six hours. This is piece work, paid for at the rate of $1.50 per 1000 filled, and is a record for filling at the cannery.

L. H. Palmer recently delivered a load of club wheat to the warehouse at Eltopia, Franklin county, that tested 55 pounds. This was the first wheat of the season, and the yield will probably be between five and ten bushels an acre.

The Silver Lake Railway and Logging company is building a combined dredge and pile-driver for use in deepening and improving the Cowlitz river channel for logging operations between the company's boom at Kelso and its rollway, two miles below Castle Rock.

The salvage department of the Seattle Red Cross chapter turned in $3500 for the month of June. This money has been realized from the sale of articles usually considered common waste and a large assortment of discards of absolutely no value to the donors.

Work has been started by the Lamb Machine company on construction of a steel manufacturing plant in Hoquiam, the first in southwest Washington. The new steel plant will employ about 150 men and will have a capacity of about 10 tons of manufactured steel per day.

A network of railroads is to cover the Olympic peninsula to exploit the spruce resources of the peninsula. The peninsula west of Lake Crescent is to be closed to traffic, except that necessary for the handling of spruce, and the highway between Joyce and Piedmont is also to be closed.

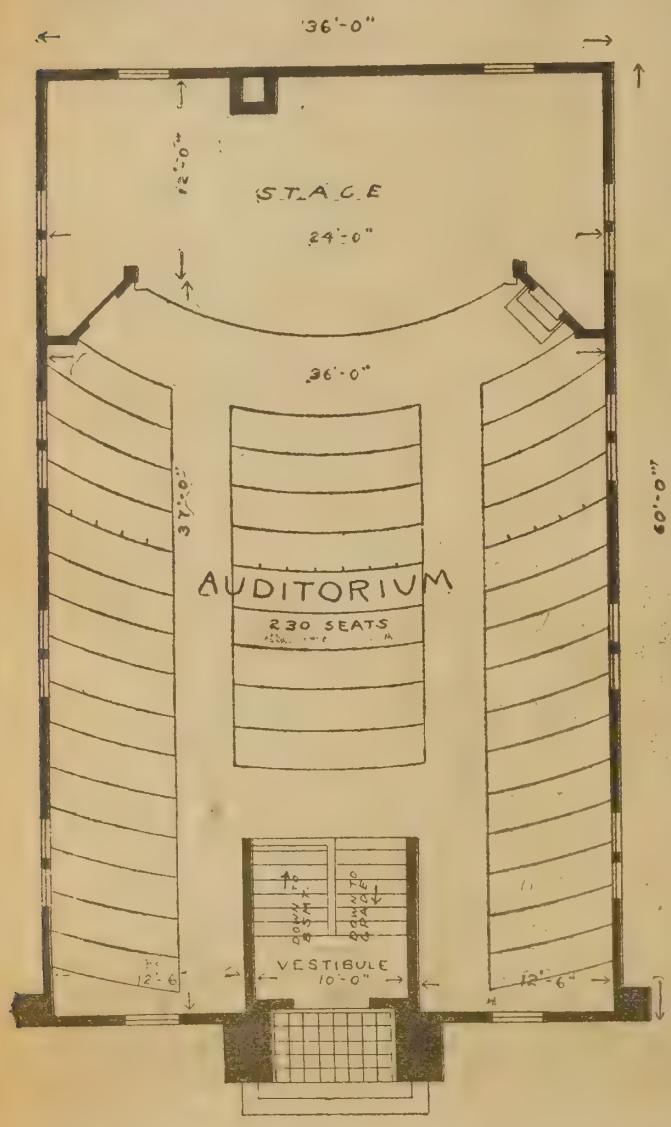
Government officials are making a survey of the homestead lands in the northwest for the purpose of having on hand available data as to the amount and quality of land still open to homestead entry. It is reported that detailed information is being compiled to show the character of each open tract.

It is said that one way to combat the aphis that are so damaging this year is to harrow them into a dust mulch wherever possible. This can be done somewhat successfully where the crop is hay. Immediately after cutting the stubble can be dragged with the result that many of the pests would be destroyed. The method is but a partial remedy at best, however, and could be applied only in a limited number of cases.

# Residents Get Together; Build $4500 Community Hall

A good example of what can be done when the people of a community are willing to cooperate for the good of that community is seen at Orchard Avenue, a rural district, several miles east of Spokane. The latest achievement of this community is the completion of a $4500 hall, which was dedicated July 17, at which time Dr. Sherman L. Divine of Spokane gave his well-known lecture, "Around the World in 80 Minutes." The hall will be used for all community purposes, and the plans will be of interest to other communities which are thinking of building a hall. The plans were made by Ellis & Wells of Spokane.

Orchard Avenue consists of about 105 families, and practically every family is represented in the membership of a club known as the Orchard Avenue Community club, it having over 100 members, limited to men. The club was organized in March, 1917, for the purpose of general community fellowship and industrial interest, and for community improvements, and a great improvement in the community spirit has been noted since the organization of the club. It has brought the people together in a way that seemed impossible before they were organized, and there has been a big increase in the number of home owners since the club was organized. The club meets every first and third Monday evening of the month. The officers are: O. E. Bosworth, president; A. H. Syverson, vice president; W. A. Brazeau, treasurer; C. O. Gordon, secretary, and A. P. Myers, corresponding secretary.




First floor plan—Will have a 14-foot ceiling. The entire floor will be devoted to an auditorium with a stage and dressing rooms. The seating capacity will be 300.

By ANNA BUCHANAN.

This spring the club set out 81 maple trees along the avenue, and since its organization other improvements include the grading of roads, enlargement of the high school at Millwood and the taking over by public purchase of the water and light plants, all of which has gone to attract home owners. Eighty per cent of the residents at Orchard Avenue now own their own homes.

The need was felt for a community hall last fall, as all the public gatherings had to be held in the high school building at Millwood, which was too far away for some of the residents to attend. So the Community club got together, appointed a soliciting committee and in a short time raised $2000 in cash and pledges, for the people saw the need and everybody was glad to have a share in it. Two lots were given to the organization by the Orchard Avenue Irrigation company and the building was begun last November.

The work on the building, which has amounted to about $1000, was nearly all donated by the members, who, after their day's work was done, spent many evenings during the winter and spring at the hall with their hammers and saws. Sometimes as many as 25 men would be found working in the evening or on a holiday.

The grounds surrounding the building will be graded, set out to shrubbery and improved with cement walks.

In spite of the efforts put forth to build and pay for the hall, the community has oversubscribed its quota on each one of the war drives. The third Liberty loan went nearly four times its quota, the Y. M. C. A. drive went better than three times, the Red Cross, four times and $12,000 was subscribed for war saving stamps, the quota being $10,000.

Another factor that will add to the community spirit of the district is the organization recently of a community church at Millwood, with 50 members. The community Sunday school has an enrolment of 160.

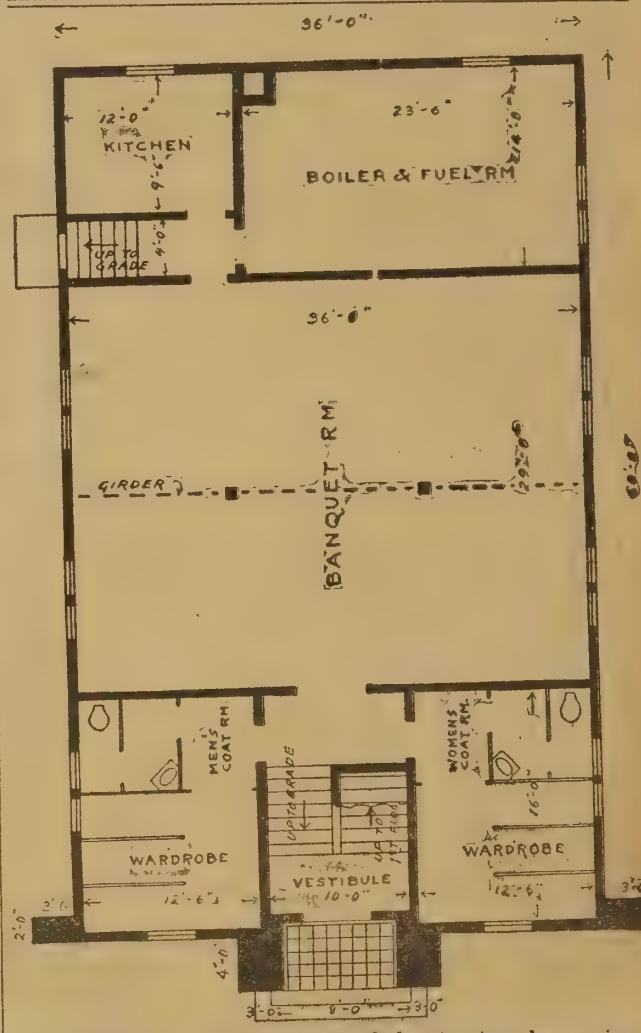
Orchard Park district can also boast of an active Red Cross auxiliary, which was organized last November with 64 members. This branch includes the women of Millwood, Orchard Avenue and Subway. The officers are: Chairman, Mrs. Harry Wilson; vice chairman, Mrs. W. G. Smith; secretary, Mrs. A. D. Scammel; treasurer, Mrs. L. R. Newman.

There were no meetings during the month of July, the branch having finished its quota and having to wait for more supplies, but the work will again be taken up next month. Up till the 1st of July, all-day meetings were held every Thursday in the high school building, the domestic science room, containing seven sewing machines, having been turned over to the use of the Red Cross.

As some of the members have a mile or two to go to these meetings, the women who have automobiles always take a load with them, sometimes making several trips.

About 450 garments have been made by this branch since it was organized, besides a large amount of knitted garments which the women did at home. All the cutting is done by the Spokane chapter. The month of June was devoted to the making of clothes for the refugees. The Help Band of the Advent church recently turned in 50 refugee garments.

Between $50 and $70 was raised for the Red Cross during the winter by giving entertainments. Some of the members pay a certain sum regularly, perhaps a dollar a month, and the branch now has $100 in the treasury.




Basement plan—The basement of the structure has a nine-foot ceiling, and four feet of it is below ground. In the basement will be the heating plant, kitchen, and a 30x36-foot banquet hall.

## Convention Called

### Production Conference Is Coming

With the purpose of studying the great question of how best to promote the maximum production of foodstuffs next year, the federal board of farm organizations has called a nation-wide conference of farmers or their representatives for Washington, D. C., August 27, 28 and 29. The call is signed by officials of the various farm organizations of national character in addition to Charles A. Lyman, secretary of the federal board. Among them are C. S. Barrett, president of the national farmers' union; J. H. Kimble, president of the farmers' national congress; W. T. Creasy, president of the national dairy union; Milo D. Campbell, president of the national milk producers' federation; Gifford Pinchot, president of the Pennsylvania Rural Progress league, and others of state and national scope. The official call is as follows:

To the Farmers of America: Victory must come from the soil. Food and men will win the war. The soil supplies both.

The men who till the soil are wholeheartedly behind the government to win the war. None have shown themselves more ready to do their utmost. The volunteers they have supplied, the money they have given and the wonderful crops they have produced—crops greater in proportion to the number of farm workers than the world has ever seen before—prove that beyond dispute. None are more determined to leave nothing undone that will help to bring victory. With them the great question is how they can serve best. Without doubt their first duty is to supply the food without which victory is impossible.

With this fact in mind the federal board of farm organizations hereby calls upon the farmers of the United States to assemble in person or by their representatives in the city of Washington, August 27, 28 and 29, 1918, there to consider, decide upon and take such action as will best promote the production of farm crops in 1919: Sufficient, first, to supply our own people, our allies and the neutrals who depend upon us, and, second, to replenish our national reserves of grain, live stock and dairy products, now depleted to a point where a single short crop will threaten us with famine.

America's acres can and must win the war.

### Potato Shortage Is Felt.

Partially as a result of the manufacture of large quantities of potatoes into flour as a substitute for wheat and partially as a result of transportation difficulties, the city of Spokane reports a temporary shortage, approximating a famine. That the shortage is only temporary is the opinion of State Food Administrator Charles Hebberd, who issued the following statement relative to the present situation in Spokane and forecasts for the potato crop for the entire country this year:

"The public need not worry about the potato situation. A temporary delay of a few carloads may inconvenience the housewives, but it is only a minor dislocation of war-time and is putting no serious burdens on any one. Notwithstanding the bumper crop of last year, which gave the potato growers and the food administration much cause for worry, and which would ordinarily be followed by a light planting of the staple, the government forecast for the white potato crop of the country is 406,000,000 bushels as compared with a five-year period, when the average production was 362,000,000. The production forecast by the United States department of agriculture is less than 10 per cent below the bumper crop of last year."

### Coming Events.

August 19-25—Convention National G. A. R., Portland, Ore.

August 27-29—National Farmers' conference, Washington, D. C.

**Fairs, Shows, Exhibits.**

August 26-30—Southwest Washington fair, Centralia-Chehalis.

September 2-7—Spokane Interstate fair, Spokane, Wash.

September 16-21—Washington state fair, Yakima, Wash.

September 19-21—Roundup, Pendleton, Ore.

October 1-6—Western Washington fair, Puyallup, Wash.

November 7-13—Northwest live stock show, Lewiston, Idaho.

### Potato Evaporating Completed.

A report from Yakima says that the potato evaporators in the valley have closed their season owing to the exhaustion of the potato supply. It is estimated that 6000 tons of potatoes have been processed and it is estimated that the value to the producers has been about $75,000. It is stated that the 6000 tons of potatoes have made about 1000 tons of the dry material.

## Stockmen Organize

### Community Shipping Gets Impetus

At a meeting of more than 60 stockmen of Grant county recently the Grant County Cattle Raisers' association was organized. The organization is the result of the efforts of County Agent H. Vercler and Bruce Lampson, assistant county agent, who have worked in the interest of cooperative activity among the stockmen of that district. Among those attending the meeting at which the stockmen organized were J. H. Roberts of the Spokane union stockyards and C. M. McAllister of the Portland union stockyards.

One of the principal objects of the association is the development of the community shipping plan. Under this plan farmers and stockmen having less than a carload of stock may unite in making up a full car or more for shipment, thus securing the better rates to market and the better consideration which the larger shipment secures, as a rule, over the smaller shipment.

One of the serious handicaps that the small stockman has worked under throughout the northwest is the necessity of accepting the offer made him by local buyers representing packers or butchers elsewhere or of undertaking to ship his small number of animals himself. Instances are on record where local buyers have taken advantage of the situation and have bought stock for as little as half of their actual value on the market. Benefit is also derived from the cooperative shipping of salt by the stockmen, as well as of feed, where feed must be shipped into a community.

# Our Seattle Letter

## City's Call on Farms

*Crowded Streets and Crowded Houses*

When the Seattle of today gets out the family album and looks at its own photograph, taken a few short months ago, it is forced to shake its head incredulously and say, "Could I ever have looked like that? I can't believe that I ever was so under-nourished!"

The truth is that Seattle has grown amazingly with the changing demands and opportunities of war time, and this growth has come so swiftly that the city is almost as uncomfortable as a large boy in a small suit of clothes. How shall the incoming multitudes be housed? How shall they be fed? How shall they be moved from place to place—from hotel or apartment house to shipyard or boiler works? These are the questions the Seattle of today, looking at its photograph of yesterday in the family album, is asking.

There are other questions connected with this growth of Seattle and of the other northwestern seaboard cities which are of interest to every citizen of this part of the country, and particularly to the men and women on the farms. What effect will the rapid growth of this city, taken as a type, have upon the supply of labor available for farm work? What effect will it have in drawing into the constantly growing industrial maelstrom the farm boys and girls, and how will it safeguard these young people if they do respond to the lure of high wages in the city? These and other phases of Seattle's growth as a war time city will be considered in the following series of Seattle letters.

It is around the labor problem that many of these other problems cluster. Most of the city's increase in population consists of working men, laborers, skilled and unskilled, drawn to the Sound by the shipyards and allied industries. The first effect of this growth of population is the congestion in living accommodations already hinted at. The apartment houses are full, there are few private houses for rent, and houseboats and camps are at a premium.

A second effect is perhaps even more apparent to the man on the street and the man on the streetcar; transportation, the circulatory system of the city, is so congested during the rush hours that the efficiency of the city as a whole is being somewhat impaired. Again it is a case of the boy growing too rapidly for his clothing, for Seattle has outgrown her streetcar systems and is already forced to call upon her steam lines and ferry boats to help move the industrial army. Not only is the "rolling stock" and physical equipment of the electric railroads overburdened by the demands of today, but it is impossible to get men enough to man the cars. Like a great lodestone, the shipyards are drawing the very nails and bolts, the workmen and even the work women, out of the other industries in the same community.

The final effect on transportation of all these complicated influences may be summed up in the one word, "congestion." During the rush hours, morning and evening, there is standing room only, and none too much of that. The saving element of the whole situation is that the crowds, packed like sardines into electric cars and steam cars, are American crowds. Good humor leavens the mass of uncomfortable humanity, and grinning philosophers who habitually spend hours a day hanging to straps, on their way to and from work, exchange jests with each other, with the train crews, and with other citizens of the hive-like city. The car feels its way with clanging gong into a small army of ship workers, some of whom are still grimy with the soot and filings of a long shift. The men clamber aboard, surging up through both entrance and exit gates and even through the windows and end openings. A few of them find seats, while the big majority pack themselves in shoulder to shoulder to stand, half an hour, an hour, perhaps a couple of hours.

They are good Americans, these men of the forges and the lathes. Liberty loan buttons and Red Cross badges are pinned upon coats and caps, and the man who wishes to "roast the government" would do well to choose a different audience than these men who are fighting the sub 6000 miles from the front. And not only are they good Americans, but they are typical Americans—typical of the multitudinous interests and resources of this vast country. There are old-time ship workers in the crowd—many of them; but there are also clerks and salesmen, school teachers, professional men and farmers. The lodestone of the yards has drawn these and many others from the peaceful pursuits of a year or two back, and has mixed them into one vast, seething crowd of humanity. Probably the world has never seen a greater mixing of classes, creeds and conditions, and nowhere but in America, I heartily believe, could this mixing take place with so little froth or disturbance.

Almost as typical of war-time conditions as the ship workers are the other occupants of the crowded cars. On one of the long end seats a flaxen-haired, blue eyed matron of 35 or thereabouts sits knitting for the soldiers, while four diminutive reproductions of herself, ranging in age from 4 to perhaps 11 or 12, sit beside her, also knitting. It would require no expert in racial characteristics to decide that the ancestors of these industrious knitters came from the Scandinavian peninsula, but now they are 100 per cent Americans.

Ship workers, machinists, women and children knitting, and added to all these is a final component of the crowd; young men and women, with a scattering of the older ones, studying to fit themselves for various activities connected with the one business before all civilized nations. Some of the men are studying books on gas engines, airplanes and allied subjects. Many of the girls and women are studying stenography and office subjects, while still others are reading manuals on Red Cross work and nursing. "Easy reading," the lurid fiction magazines and armchair novels of yesterday, are certainly in the background for the time being. If the Seattle streetcar crowds are typical of other war time crowds, the best sellers of the immediate future will be practical books, dealing with some phase of the real world's activity.

As the writer rereads the somewhat vague statements of the foregoing letter, he is tempted to ask himself a question which most of his readers will already have asked: What is the meaning of it all? What bearing has the crowd in a Seattle streetcar upon the problems and upon the welfare of the farming communities of the northwest?

There is a direct connection, for the labor problem and the transportation problem and the food problem and all the other problems which the Seattle of today, Seattle on a war time basis, has to solve, are in reality community problems, toward whose solution every man, woman and child in the northwest will have to contribute something. And it is partially for this reason that this series of Seattle letters has been undertaken. In these letters the writer will endeavor to put before the readsrs of the Washington Farmer some of the changes which war is working in a typical city of the state of Washington, and will describe as far as may be the solutions which have already been worked out in dealing with these community problems.

P. E. T.

Seattle, Wash.

## Potatoes That Came From England



The "Up-to-Date" potato, which is a favorite in many parts of western Washington, was introduced into this country from England a good many years ago. The Puyallup experiment station has been growing this variety 10 years or longer. It is a big yielder, having on at least one occasion far out-yielded all other varieties on the farm of that potato specialist, H. W. Sparks of Clark county. The eyes are few and shallow, and the potato is a good baker. For boiling, it should be left with the jackets on, to overcome a tendency to boil to pieces. In western Washington it is sometimes hard to get Up to Date to ripen, and with this end in view the vines are sometimes mowed in the fall.





Wetproof Steel Lined Shot Shells

A WET day is indeed a good day for ducks to the hunter who has the *right* shotshells in his pockets. Remington UMC Smokeless "Arrow" and "Nitro Club" Wetproof Shotshells do not require fair weather to keep in good condition and work *right* through the gun. They may be exposed to wet for hours but will not soak through—the water can not get in, can not swell them, soften the turned-over end or bulge the top wad. Mauling them around in the wettest coat pocket can not scuff them. Remington UMC makes them *right*.

This is something every farmer who loves duck hunting will learn with profit—it will make those idle wet days in the Fall welcome ones.

Remington UMC for Shooting Right

These are the first *completely* wetproof shotshells—an exclusive feature of the Remington UMC "Arrow" and "Nitro Club" brands for shooting *right*.

It took three years to perfect this waterproofing process. Special paper had to be produced for the shell bodies, a special formula discovered for compounding the *right* combinations of waxes and oils, new machinery developed for applying the waterproofing so as to work it *into* the shell as a part of it, positively sealing it against hours of wet, and new methods devised for giving the shell the same *right* finish as before.

The result is virtually a new type of shell, embodying the most important improvement in shotshell manufacture in over a decade.

You just buy the same old favorite Remington UMC "Arrow" or "Nitro Club" Steel Lined Speed Shells, at the regular price, and you get the new Wetproof feature thrown in besides. A shell that is sure fire, gives top speed, best pattern and most penetration, and has in addition the wonderful quality of staying dry as dust inside and hard and smooth as glass outside even when subjected to the wettest weather conditions.

In *black powder*, buy the old reliable "New Club," now Wetproof sealed at turnover and top wad.



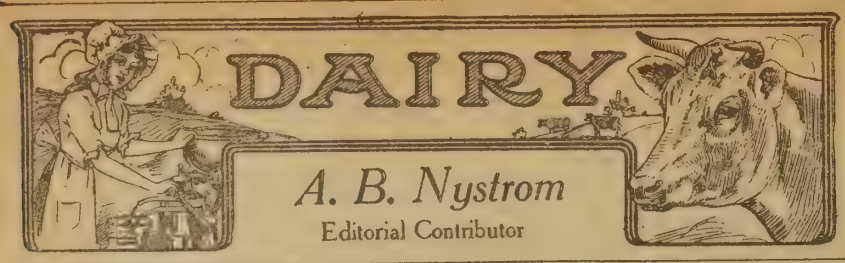

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WOOLWORTH BUILDING NEW YORK CITY




# Rich Clover and Mixed Pastures Are Supplemented With Silage

In Columbia county, Oregon, which is largely devoted to dairying, the Tarbell family have proved that beef cattle can be raised at a good profit. All the Tarbells are Shorthorn enthusiasts and are breeding at least a few purebred animals.



The picture shows a few of the good cows owned by Ray Tarbell at Yankton. Mr. Tarbell's foundation stock was from the Richard Scott herd of milking Shorthorns, and to that he attributes the fact that his cows are all excellent mothers. Mr. Tarbell's present herd bull was purchased from J. B. Cornett and is by Clifton King. One of the young heifers I noticed at pasture could show in the strongest competition this fall and be sure of a high place.

The second photo shows the great Shorthorn cow, Sweet As Ever, purchased by G. L. Tarbell Jr., from A. D. Dunn at the Pacific International last fall. She stood second in the show ring by an exceedingly close decision that kept her from first place. She is by Imperial Victor and the wonderfully classy calf by her side is by imported Cup Bearer. Mr. Tarbell's farm adjoins that of his brother, mentioned above, and his original foundation stock was from the same source. G. L. Tarbell Sr. is also interested in the herd.



One of the most richly bred young Shorthorn bulls ever brought west is Village Sultan 2d, shown in the lower picture. He was purchased by A. H. Tarbell of Warren, Ore., from Barber & Sons of Missouri. He is by Villager Jr., one of the great sons of Old Villager, and his dam, Roan Rose, is by Sultan and he by old Whitehall Sulton, thus combining two of the greatest Shorthorn strains. He is one of the smoothest young Shorthorn bulls, and about as near perfect type as I ever saw. Mr. Tarbell purchased Golden Peggy by Golden Goods, with calf at foot, from W. O. Minor, for $625. The calf has grown into a very sturdy young bull with much masculinity, and Mr. Tarbell feels that he got a bargain.

All these men pasture on the rich clover and mixed pastures so easily grown in that region, but all use silage and consider it essential. Columbia county's Shorthorns are in line to come to the front.

H. A.

## ONE WAY TO SAVE.
### Don't Let Milk Stand in Pails.

"Conservation" is our watchword these days. It will spell "victory" for our armies if we really save and use the savings to help win the war.

The extremely hot weather all over the northwest the last months has caused a large loss through sour milk, most of which could have been saved if proper methods had been employed. If all the sour milk that was dumped or sent back for hog feed from the milk depots and condenseries during the last two months, could have been sold for a war fund I have no doubt there would have been sufficient funds to buy supplies for a whole division of troops for a week or more. There is no way of ascertaining the exact amount that sours, but if the truth were known we would find appalling figures.

Milk sours because it has dirt in it. It sours faster if it is kept warm. If all the dirt were kept out it would never sour. But unfortunately it is not possible under average conditions to produce milk without some contamination. In view of this fact it becomes necessary to cool the milk as quickly as possible after milking and to keep it cold until it is used for food.

Milk that is to be used should not be allowed to stand in the milk pail or cans until after it is cooled to 55 degrees F. or lower. The practice of allowing the warm milk to stand in a can back of the cows until the can is full should be discarded. At the temperature that the milk comes from the cow the organisms grow most rapidly and in a very few minutes they get such a start that often subsequent cooling does not prevent the milk from souring. The milk should be cooled at once. The milk from each cow should be poured in the cooler just as soon as the milking is finished.

Setting cans in cold water will help in cooling the milk, but the water should be flowing and the milk stirred if quick cooling is to be effected by this means. A thermometer is practically a necessity in this connection, for without one we can only guess at what the temperature is and often one's guess is wrong.

Cows are usually very clean during the summer. There is no excuse for having much dirt in the milk. If proper cooling were practiced the loss from sour milk would be brought to the minimum and the saving would help us win the war.

A. B. N.

## Range Cattle Move Earlier.

Cattle will move earlier to the markets this year on account of the drouth on the ranges, according to prominent cattle buyers of Klamath Falls. The range cattle are declared to be in good condition at this time, but the ranges will not keep them up until the customary market season. Some have already been sold, bringing unusually high prices. Luke Walker purchased 26 head of steers from W. C. Dalton, which averaged $135 per animal, and a similar number from W. E. Nicholson of Fort Klamath, which averaged $126. Walker shipped six carloads from Alturas.

### Burns Oyster Shells Instead of Coal.

Peter Klein, proprietor of a Reading (Pa.) hotel, won't stock up with coal even if the prices are dropping. "I will continue to burn oyster shells," he said. Klein says a 60-40 mixture of oyster shell and coal makes a fine fire and his bills are greatly reduced. The ashes make good fertilizer.

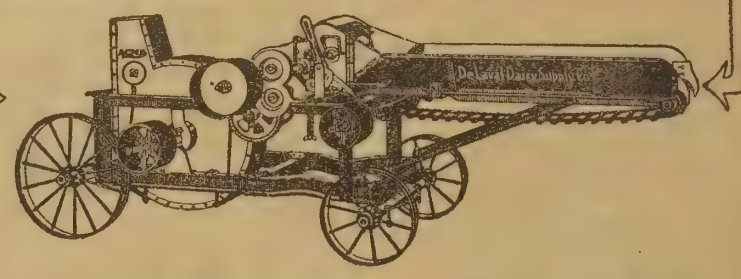
### "Rome—City of the Seven Hills."

The phrase "City of the Seven Hills" is generally understood as referring to ancient Rome, though it would fit Constantinople, which also stood on seven hills.

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*The Patent Pouch keeps it Fresh and Clean and Good —It is not Real Gravely without this Protection Seal*
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# Square of Live Stock Industry

## *Breeding, Rearing, Feedstuffs, Health Conservation*

By S. B. NELSON.

A few months ago the bureau of animal industry of the United States department of agriculture released thousands of acres of southern farm land from quarantine against the cattle tick.

The cattle tick is a small, inoffensive looking thing which has caused millions of dollars of loss to the live stock industry of the nation. Its ravages have set the live stock industry of the south back a century.

The live stock industry in certain parts of the south was practically ruined until the United States government, acting through the bureau of animal industry, took charge of a sweeping campaign to eradicate the tick. The first steps in this work were taken some 20 years ago. Since then, thousands of square miles of territory in the south have been freed from this destructive pest. It is only a matter of a few years, now, until the entire south should be tick-free, and the southern states will then have the place in the live stock industry of the country to which they are entitled.

This is only one of the many great, constructive pieces of work in the conservation of live stock which have been successfully carried forward by the veterinarians of the country. Many equally constructive pieces of work remain yet to be done—and all this constructive work is additional to the great work of saving the lives and alleviating the suffering, from disease or injury, of animals in the live stock herds of the country. Viewed from any angle, here is a field of service worthy of any young man who is competent to perform it.

Veterinary science is the fourth line of the square of the live stock industry The breeding is one, rearing, feeding and fattening is the second, raising the feedstuffs for animal consumption is the third—and the conservation of the animals from disease and injury after they have been bred and while being reared is the fourth. Without the fourth all the others may be of no avail, and it is with the fourth that the trained veterinarian is concerned.

Staring the live stock industry in the face at the present time is a rapidly approaching scarcity of trained veterinarians. This is a threatening condition, for if it comes upon us, it may mean a repetition of the animal plagues that have swept the country, fever tick and all.

My assertion that there will be a scarcity of veterinarians is based upon figures. There are, or were, approximately 4500 veterinarians in the United States. About a thousand of this number are employed in the bureau of animal industry. Other branches of the government have absorbed nearly 1500.

Last year, that is, 1917-18, there were 1200 less young men preparing themselves for this profession than in 1915-16, or two years ago. On top of this decline in the number of young men going into this profession, comes the war-time need for veterinarians, which has practically drained the country of every available man who is properly trained.

One may think that when the war is over the war-veterinarians will be released. Many will be released; but it must be borne in mind the live stock industry has suffered by this war in a way that has no precedent in previous history. Throughout Europe the live stock industry will have to be rejuvenated, built anew, after the war. There never has been a time in history when animal welfare has been so vital to human beings as will be true during reconstruction after the war. Reduced to practical terms, this means a need for trained veterinarians.

At this time, it behooves any man who has an interest in the future of the live stock industry to point out to young men the facts of the present situation, and encourage them to prepare for this service.

### New Insulator.

A Danish scientist has invented an electrical insulating material made from fish offal.

# A Skamokawa Dairy Barn



The picture here shown is the dairy barn of H. L. Weister of Skamokawa, Wash. For the month of May Mr. Weister had 19 cows in milk and their average was over 41 pounds of fat. Of these 12 were daughters of his bull Skamokawa Chief, purchased from J. C. Brown & Sons of Shedd, Ore., all with first calf. They averaged 39 pounds of fat, only two pounds less than the old cows. H. A.

## Walla Walla Cow Test.

According to the June report of J. S. Bixby, tester for the Walla Walla Cow Testing association, the number of cows in the association were 455; 45 of these cows are dry; the average pounds of milk per cow (including dry cows) were 635; the average test in the association was 4.1; the average pounds of butter fat per cow (including dry cows) was 25.8; the average cost of feed per cow amounted to $5.37; while the average profit above the feed cost amounted to $6.12. The following have cows which produced 50 pounds or over: Washington State penitentiary, Claude Markham, John Ankeny, V. E. Brown, and the Burbank company.

## Good Crop of Cherries.

Cherries are one crop that was benefited by the dry weather in western Oregon this spring and summer. Instead of being cracked by rain, as so often occurs, the crop has all been gathered in the best of condition and is large and of the highest quality. Prices received are generally higher than ever before.

### A Patriotic Store.

At noon every day all the patrons and employes in a big San Francisco store stand at attention for three minutes while the flag is unfurled from a balcony. The store's band of 36 pieces and a chorus of 60 voices lead in the "Star-Spangled Banner."


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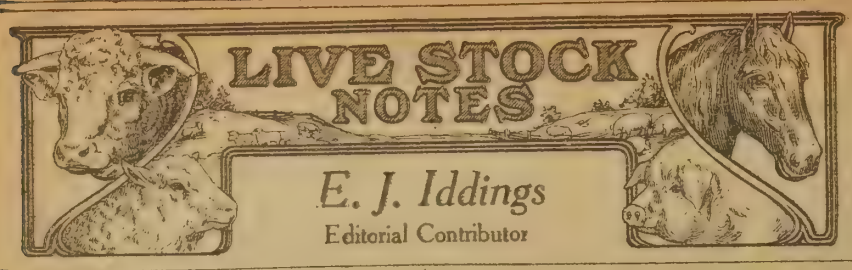
G. M. C. trucks will save your time. They will do as much work as several teams in about one-fourth the time.

Many farmers acknowledge that they need a motor truck, but say they can't afford to buy it. Did you ever stop to consider that if your business needs a motor truck you are going to pay for it, whether you get it or not? Think it over.

Let us show you how much time you can save with a G. M. C. truck. Our "Help the Farmers" Department is just aching for farm questions that they can't answer. Write us today.

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## Skimmed Milk

### Good Feed if Mixed With Grain

"I consider skimmed milk fed to hogs almost worthless unless combined with a little grain; then it becomes a very valuable feed," said C. C. Cannon, superintendent of the W. N. Jones farm on Tennes Illihee island. This island is in the Columbia river opposite Clifton, Ore., and on the Oregon side. The farm has a dairy of 100 cows, Holstein and Jersey grades, with a few good milkers that show Shorthorn blood. Much of the milk is sold to logging and mill camps, though most of the Jersey milk is separated and the cream sold. This is the milk the hogs receive and Mr. Cannon would hardly know how to "keep farm" without it.

Tennes Illihee island, like all the low lying islands in the lower Columbia, is subject to overflow and the entire farm as well as some other land on the island is dyked. The soil is mainly a rich loam and is very productive. The land is slashed in the spring, burned over and seeded in September and the next year furnishes great pasture. The mixture used is generally alsike, timothy, a little red top and some English rye grass. The latter grass does not grow tough like it does in some other places, but is always tender. Should there be a summer drouth, as is seldom the case, Mr. Cannon has the tide gates held partly open and the tide water sub-irrigates the entire place. This gives it a great advantage for both grass and other crops.

About 100 beef steers were on the place when I was there. Mr. Cannon assured me they had run out all winter and had kept in fair condition. They were rapidly fattening in June and would be ready to turn off in July. He expected to buy and pasture others during the summer. Hay made on the farm is not quite as good as Mr. Cannon would like, but he feeds a little hay to calves. He gives them skim milk, good pasture and a little grain. He prefers oats for calves, or any growing animal, but they are too high at present and he feeds bran, shorts and just a little oil meal, but always hay, and the calves eat it.

Last year 60 sows were bred and every one was allowed to go out and make her own nest for farrowing. He believes his success with pigs is as great as that of any one who goes to the extra labor of confining the sows. Mr. Cannon feeds the sows well while suckling their pigs, but the balance of the time they have absolutely nothing but good pasture. Hogs are kept on pasture at all times, except a very few weeks while fattening is being finished. The young hogs pick over the clover a little, but the old sows eat everything. Purebred sires are kept and the hogs yield good profit.

That all kinds of vegetables grow immense crops has been proved. Last year Leo Decondico, an Italian gardener, rented considerable land and this year still larger gardening operations are being carried on. The farm furnishes teams, seed and other equipment and gets half the income. Mr. Decondico, in turn, employs his laborers on a share basis and there are no labor troubles in the garden. Mr. Cannon wishes he could employ the same system in the dairy. All necessary fencing and ditching is done by the garden renters. Most of the products are already contracted. Rutabagas bring $14 a ton and yield 50 to 75 tons per acre; cabbage, $15 to $18 a ton, 25 tons per acre. Beans, cucumbers and celery are other crops that will be raised and all yield enormously.

The Jones farm consists of 1600 acres, 300 of which is in meadow. All the balance except the gardens, is seeded to tame grass and furnishes rich pasture.

H. A.

### Has Good Live Stock.

B. S. Thurston & Son of Jefferson, Ore., have several Poland China sows by Big A Price that combine size with quality, good feet and strong backs. The sows now have pigs by A. Price, a son of Big Smooth Price of the famous Peter Mouw stock.

Mr. Thurston's Holstein bull, a son of the great Johanna Ruth Fayne and out of a cow with an official record of 23.93 pounds of butter when 10 years old, is doing good service. His only heifer to freshen is a heavy milker. Mr. Thurston's hay crop is light, but he has a fine corn prospect, and is coming to look on the Willamette valley as a real corn country.

## Veterinary

Dr. S. B. Nelson

**Sow Gets Poor.**—I have a sow which seems to have a good appetite, but gets poorer all the time. She has good pasture, runs on wheat pasture and has clean water to drink. I feed her chopped wheat and raw potatoes. She has salt just the same as the rest. The rest of my hogs are fat. She is a young sow. I lost one just like this one. W. B. P.

Mayville, Ore.

You do not give very definite symptoms and the ration which you are feeding shoud keep your animal in good growing condition. I have just one suggestion to make to you and that is it might be possible that the sow is affected with tuberculosis. I can not make a definite diagnosis, however. I notice that you are feeding chopped wheat. Is it not possible, until at least after harvest, for you to replace the chopped wheat with rolled or chopped oats or barley or peas? Any one of these three would replace the wheat so that it might be used for flour for overseas.

---

**Cow Has Sick Spells.**—I have a cow that has sick spells every three to five weeks. She groans every three to five weeks. She groans and grunts and seems to be in great pain, gets stiff like founder and puffs up and gets very tender in right flank, just in front of hip bone. She passed the tuberculin test last fall and is to be fresh in a few days. We bought her with the understanding she would be fresh April 25. She was running with the bull so, of course, there is a chance for a miscount. Her udder seems to fill for a few days and then is not so full for a few days, also other indications of calving at times. What is the trouble and what is the cure?—H. L. B., Clayton, Wash.

I am not able to diagnose the trouble with your cow from the very limited description of the symptoms which you give.

---

**Cow Is Sick**—I am writing for information about a sick cow. She is a good milk cow with a two-months'-old calf which is still sucking her. She will eat hay and oats, but no grass. She lies around the barn and moans. Her flesh seems to be tender and is red, especially her bag. She has been sick about a week and seems slowly growing worse.—H. W. L., Coulee City, Wash.

Give your cow one-half pound of epsom salts and one tablespoonful of common salt, in two quarts of water, night and morning for two days. Then, if necessary, give her the same once a day or every other day for some days. After the second day, begin giving her one tablespoonful of compound tincture of gentian in a pint of water, night and morning.

---

**Pig Does Not Grow.**—What can I do for a little pig, weaned at five weeks and is now ten weeks, remaining about the same size. Have been feeding it boiled potatoes, mashed with bran and thinned with skim milk. It seems to be irritated and scratches a great deal; it also has three black teeth. S. C. L., North Yakima, Wash.

I would suggest that you add approximately three ounces or a very small handful of linseed meal to the ration that you are already feeding; also give it the following preparation where it can obtain it contsantly: One part of sulphur, two of salt, three of charcoal and two parts of wood ashes. Look it over carefully to see if it is affected with vermin. If so, wash it in a 2 per cent solution of any of the coal tar disinfectants.

---

**Decay of Tin.**

The most remarkable example of allotropic disintegration of metals is perhaps that of tin. The investigation has shown that the disease can only occur in a temperature not exceeding 64.5 degrees Fahrenheit. Tin decay is, therefore most prevalent in cold climates.

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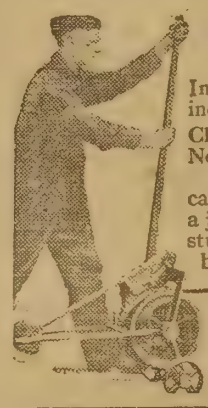
If you are a producer of less than carload lots of live stock, get your neighbors to join you in a community shipment to us.

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# Difficult Agricultural Problem

## *Before the World to Find Sufficient Supply of Meats*

Addressing the Washington State Editorial association, in Spokane, President Holland of Washington State college, at Pullman, said the big and difficult agricultural problem before the world today is to find a sufficient supply of meats and that problem, he thought, would continue long after the ending of the war. Australia and Argentina, he added, would probably provide a measurably quick solution of the world's wheat supply, but the live stock outlook was far more discouraging.

This subject is engaging the thought of many observers and authorities. It is ably discussed in a carefully prepared article by the Latin-American division of the bureau of foreign and domestic commerce at Washington. For nearly a decade, says that article, the number of cattle in the world has not been increasing in proportion to the demands of the growing population. Russia, which before the war had 50,000,000 head of cattle and two-thirds as many sheep as Australia, has ceased to be a factor in the European trade. The herds of western Europe, small before the war in comparison to the demands of the increasing population, are now greatly depleted, and can not be replaced for many years after the war. The situation in the United States is giving growing concern. Within the last 10 years the population has increased about 18 per cent, while the herds have decreased 20 per cent. The United States exported 80,522 tons of beef, mutton and lamb in 1916, and by extraordinary efforts of the food administration we are still able to spare a part of our scanty supplies to our allies; but it is obvious that if something is not done in a big and constructive way to build up the live stock interests of this country, the day is drawing near when the American people may also have to turn to foreign sources of supply.

The bureau of foreign and domestic commerce thinks that the big hope of the world for its future meat supply lies in South America. Argentina alone, in 1916, exported 436,405 tons of beef, mutton and lamb—more than five times as much as was exported from the United States. In the same year New Zealand exported 158,123 tons, Australia, 104,053; Uruguay, 43,895; Brazil, 33,571; Canada, 21,723; Patagonia, 11,986; South Africa, 7928; other countries, 17,441.

Argentina is today the most important meat producing country of the world. Brazil is beginning to appreciate its position, while Paraguay, Colombia and Venezuela are receiving careful consideration from far-sighted American and English packers.

These are interesting facts, but they throw no light on the problem as it concerns the live stock industry in the United States. Armour and Swift are already in the South American field with large plants, and can enlarge their holdings there from time to time; but that does not foster the live stock industry here.

### Needs Dairy Products.

A cablegram from the British ministry of food emphasizes the necessity for building up a food reserve and urges that there be no slackening of effort on this side of the Atlantic. "Supplies of butter and cheese," the cable states in part, "are still inadequate to meet the requirements, but it is hoped that imports from America will remove anxiety as regards our position in these commodities."

### They'll Have to Speed.

Two Orange county (Cal.) men due to entrain for cantonments recently pledged themselves to get a Hun for each letter in their names. One is T. Lambracapoulos. The other is N. B. Pappageorgogolos.

### Rubber Tree Seed for Oil.

A preliminary inquiry into the possibility of the commercial utilization of the seed of the rubber tree for oil production has been undertaken by the agricultural authorities in the federated Malay states.

### Arbor Day Compulsory in Spain.

By royal order, the celebration of Arbor day has been made obligatory in every township and municipality in Spain, and tree-planting is to be carried on upon a more extensive scale than heretofore.

### *Clip This Order Blank*

Address all communications concerning thrift or war savings stamps to The Washington Farmer, War Savings Department, Room 26 Review Building, Spokane, Wash.

Remittances may be in any form desired, including personal check.

The Washington Farmer, War Savings Department, Room 26 Review Building, Spokane, Wash.

Gentlemen: I wish to invest in

.... U. S. government thrift stamps (number desired) at 25 cents each.

I wish to invest in ..... U. S. stamps (number desired) war savings stamps at $4.18 each. (July figure)

Amount enclosed $.....

Full name .....

Town ..... State.....

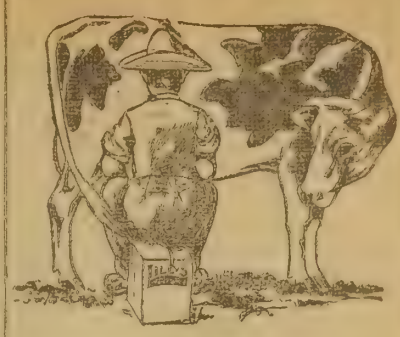
R. F. D. No. .....

I have already bought..... (kind of stamp)

stamps and have a..... (card or certificate)

I DESIRE to take advantage of your special clubbing offer. Enclosed is $1 in full payment for one year's subscription to The Twice-a-Week Spokesman - Review and three years' subscription to The Washington Farmer. You will find an additional 5 cents for the farm service war flag.

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**Just What You Want** may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.

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# An Empire in the Making

## Jordan Valley, Malheur County, Oregon

### *"THE HEART OF THE RANGE"*

THIRTY-EIGHT thousand acres of standard grain, grass and alfalfa land, under an irrigation system now in construction that, when completed, will possess every feature of a first-class system, namely, plenty of water, reliably constructed canals, dams and waterways; a capable and experienced management, who **understand** that the **success** and **prosperity** of the **settlers** is the **success** of the **land** and **water company.**

### *The Irrigation System*

The irrigation system, which is already partially constructed, is being built under the general direction of the state engineer of Oregon and the work is in direct charge of one of the leading irrigation engineers of the northwest—a man who demonstrated his ability as chief engineer of both the north and south side tracts of the great Twin Falls (Idaho) country. The interests of prospective settlers are being carefully guarded by the laws of the state of Oregon and every effort is being made to secure an irrigation system for these lands that will be the most efficient and will render the best service to the farmers that can possibly be obtained. A reservoir with capacity of storing 127,000 acre feet of water, or sufficient to water 40,000 acres, is one of the features of the system. Large feeder canals, a system of main canals, headgates, diversion works—everything to insure a safe and efficient system—is being constructed.




### State Supervision

The construction company, a strong financial concern, is bonded to the state of Oregon for $100,000, and an experienced engineer, representing the state, is on the works in full charge of construction.

If you are looking for a location to engage in growing **Live Stock, Jordan Valley will suit you.** The mighty surrounding free ranges will furnish your stock spring, summer and fall feed, and the products of your farm will support them in winter, which means fat stock the year round.

### *We Want You to Investigate*

We want you to investigate Jordan Valley, then see it. Our automobiles leave Boise, Idaho, twice weekly and they are at your disposal. If you want to get into a new country where land is cheap, water plentiful and climate favorable, this is the place to go. We desire to continue our policy of colonizing this land with earnest, industrious people who will make dependable, permanent settlers. If you are interested, drop us a postal card right now and we will send you detailed descriptive matter. Address all communications to

# Jordan Valley Farms

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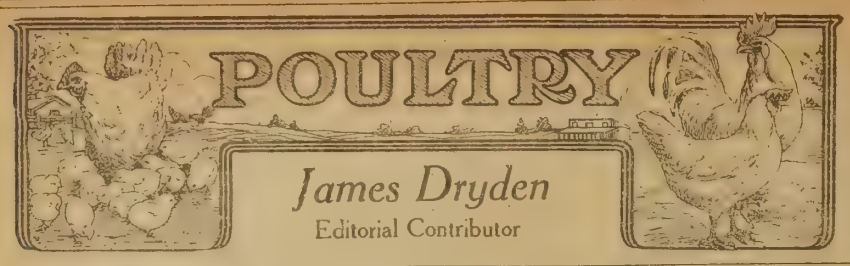
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Eat eggs and sell a load of alfalfa to pay the grocery and tobacco bills. Or, better, feed the alfalfa to cattle and sell the fat steers for shipment to the allies. In any event eat more eggs and save the red meats for the soldiers. Eggs are for eating rather than to be used as legal tender at the grocery. J. D.

## Cost of a Dozen Eggs

The U. S. department of agriculture has published a statement giving the cost of feed per dozen eggs for a number of pens of fowls for the period from November 1, 1917, to April 17, 1918. The cost ran as follows for the different pens, with the egg yield per pen:

| | Egg Yield | Cost per Doz. |
|---|---|---|
| Crosses | 63 | 18.7 |
| Reds | 59.5 | 23 |
| Leghorns | 53.4 | 20.5 |
| Crosses | 50.7 | 23.8 |
| Barred Rocks | 47.7 | 26 |
| Leghorns | 45.8 | 32 |
| Reds | 44.4 | 25.4 |
| Crosses | 44 | 33 |
| Leghorns | 42.3 | 22.3 |
| B. Orpingtons | 37.3 | 36.8 |
| Reds | 36.2 | 32.5 |

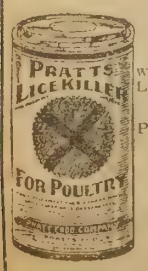
These pens were fed different rations, which accounts for the great variation in cost. The difference in the breed also influenced the cost. It could be no breed test, however, for the same reason that the rations were different. As the egg yield was comparatively low it would indicate that the cost averaged high or higher than would have been the case with a higher production. J. D.

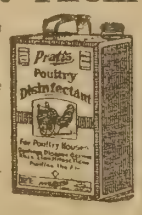
### Mite Exterminator.

"Concentrated lye (one 13-ounce can to 3 gallons water) is the cheapest effectual solution used at the western Washington state experiment station for exterminating mites. Use an old brush or broom and make a thorough application, giving special attention to cracks that are scarcely noticeable, hidden joints of wood and rough surfaces," says Mrs. George R. Shoup of Puyallup, Wash.

**Other Exterminators.**

Crude carbolic acid mixed with kerosene, 1 to 3, makes a good paint for the roosts and nests for mites. Carbolineum is also good. Kreso dip and Cooper's dip, mixed with kerosene, 1 to 3, are also effective as a paint. Crude oil is effective, but it will discolor white chickens. Straight kerosene will kill the mites, but is not as effective as other preparations. If used often enough, however, it will keep the mites in check. The mites are now hatching by the millions. Don't let them rob the egg basket. J. D.

THE LICE SEASON
is here.
Fight Them


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Pratt's Lice Liquid, Qts. 40c.
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NORTHWESTERN BUSINESS COLLEGE
Spokane's Accredited Commercial School.
M. M. RIGLEY, President.
S047 Howard St. Spokane, Wash.

## A Cheap Dry Mash

At present prices of feed stuffs the following will make a satisfactory mash mixture. It may be fed either dry or moistened, and the price is reasonable:

Bran, 10 pounds; shorts or middlings, 5 pounds; cocoanut oil meal, 3 pounds; meat scrap or fish scrap, 2 pounds.

Mix a little fine dairy salt with it at the rate of one-half pound to 100 pounds of the mixture. Feed in a hopper and never let the hopper get empty. Let the chickens eat it at will. This mixture will do for both growing chicks and laying hens.

Linseed oil meal may be used in place of cocoanut meal if price is about the same. If neither is available at a fair price, the mixture will give good results without it.

If milk is available, either skim milk or buttermilk, the mash may be mixed with it and less meat or fish scrap used. Milk takes the place of animal food. If plenty of buttermilk is available, use it also as a drink and give no water, Then cut out the scrap altogether.

Once a day feed whole grain at the rate of about two ounces per hen, or a pound to eight hens. Feed this preferably in the evening. This may be a scratch food of the commercial kind, or a good quality of screenings. Oats and corn, fifty-fifty, will answer the purpose. It is better to feed it in a deep litter of straw, to make the fowls exercise.

But the main part of the ration has not been mentioned; at any rate the one that is often under-estimated, and that is green food. This is a dry summer, and we are losing great quantities of eggs for lack or neglect of this food. J. D.

### THE HEN TO EAT.

### A Good Time to Begin Culling.

When the farmer is asked by his wife to kill a hen for dinner, he need not kill the laying hen. There are always a few hens in a flock that are not laying, and those that are not laying now are poor layers on the average. If the hens are of a yellow-leg breed a glance at the legs will tell pretty accurately whether the hen is laying or not. A heavy laying hen lays the yellow out of her legs; her legs will be pale, while the non-layer will have nice yellow legs.

The same happens to the yellow color in the beak.

So kill the hen with the nice yellow legs and beak, and the chances are you will kill a non-layer, and she will be better eating than the heavy layer.

This rule, however, will not work with breeds that have not yellow legs and beak. But with Plymouth Rocks, Wyandottes, Rhode Island Reds, Leghorns, and others that naturally have yellow legs, it works well.

The poultry-keeper is likely to have the hen with the nice yellow legs; she looks better, and it is the yellow in the legs that helps to win prizes in the show. Then why kill off the hen that looks best and has the show qualities at this season? Just because she is the poor layer.

When the hen stops laying the yellow reappears in the legs and beak, and it has been pretty thoroughly demonstrated that the hen that stops laying early in the season is a poor layer, while the one that continues to lay till late fall is a good layer.

It is a good time now to begin the culling of the flock and the making of chicken pie, and in culling use the color test in the absence of trapnests. J. D.

### Has Highest Pen.

The Oregon Agricultural college has the distinction of having the highest pen at the end of eight months in three egg-laying contests, namely, British Columbia, all northwest, Pullman, Wash., and the international at Storrs, Conn. At the British Columbia contest the O. A. C. pen of Barred Plymouth Rocks has been first for most of the year. At Pullman another pen of O. A. C. Barred Rocks moved from second place to first, and at Storrs, a pen of Oregons moved up to first place from second. Some wag is likely to say that it pays to give the hens a college education. J. D.

## All-Northwest Contest

The report of the director of the all-northwest contest for June shows continued good laying. The following are the 20 leading pens on June 30, and number of eggs laid for the first eight months of the contest:

Oregon Agricultural college, Corvallis, Barred Rocks, 869 eggs; Paul E. Towne, Tekoa, Wash, White Leghorns, 861 eggs; F. W. Frederick, Phoenix, B. C., R. I. Whites, 858 eggs; H. Otto, Greenacres, Wash., W. Leghorns, 841 eggs; H. J. Kingsbury, Twin Falls, Idaho, R. I. Whites, 803 eggs; Mrs. Monona Van Cise, St. Marics, Idaho, W. Leghorns, 799 eggs; L. F. Harris & Co., Missoula, Mont., W. L., 793 eggs; D. Tancred, Kent, Wash., W. Leghorns, 788 eggs; Oregon Agricultural college, W. Leghorns, 782 eggs; C. H. Numsen, Centralia, Wash., W. Leghorns, 781 eggs; J. R. McRae, Milwaukee, Ore., W. Leghorns, 771 eggs; J. R. McRae, Milwaukee, Ore., R. I. Reds, 771 eggs; S. C. W. Leghorn club, 759 eggs; H. E. Caldwell, Canutillo, Texas, W. Leghorns, 758 eggs; C. F. Williams, Salem, Ore., W. Leghorns, 758 eggs; Hollywood farm, Hollywood, Wash., W. Leghorns, 749 eggs; C. D. Coolidge, La Grande, Ore., W. Leghorns, 741 eggs; C. C. Lamb, Kirkland, Wash., W. Leghorns, 740 eggs; B. O. Longsdorf, Lebanon, Ore., W. Minorcas, 738 eggs; La Vista P. F., Baker, Ore., W. Leghorns, 735 eggs.

The contest is very close between the first four pens, all of them having made excellent records. The O. A. C. pen of Barred Rocks has averaged 173.8 eggs per hen, or 21.7 eggs a hen per month. With a record like that for 8 months, before the end of 12 months this pen is likely to break some records at laying contests. In fact all of the 20 best pens should average over 200 eggs per hen in 12 months.

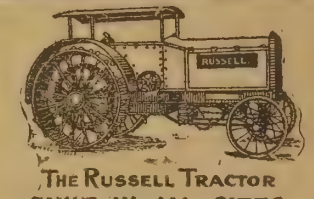
The best pen for June was the pen of Hollywood W. Leghorns, which laid 128 eggs. C. C. Lamb's W. Leghorns, second, with 122, and Paul E. Towne's Leghorns, third, with 121 eggs. The highest individual hen to date is the C. F. William's W. Leghorn, with record of 210 eggs. H. J. Kingsbury's R. I. Red hen was second with 195 eggs, and J. R. McRae W. Leghorn hen with 192 eggs. J. D.

**Meat for Meatless Day.**

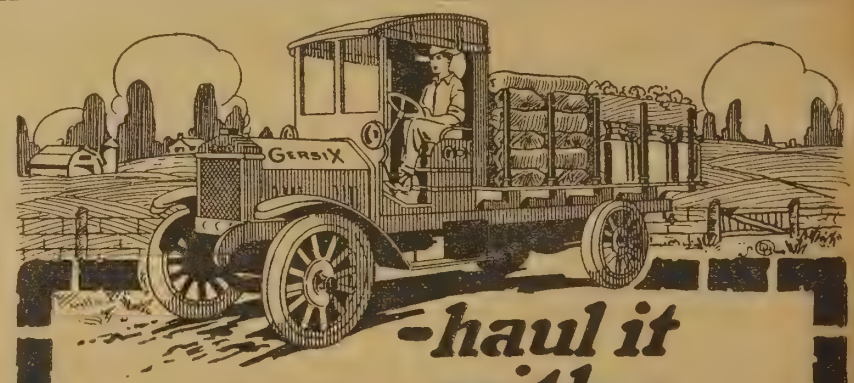
One Cadillac (Mich.) restaurant solved the meatless day edict by serving bear meat to its patrons. The bear was killed near that city and weighed 200 pounds. There was no federal ban on meat obtained outside the usual sources of supply.

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## KNOWLEDGE USELESS

### If Possessor Does Not Apply It.

By GRANVILLE LOWTHER.

There are thousands of men who do not know how to irrigate and lose hundreds of dollars annually because that part of the work is not done in a proper manner. James Anderson knew; but he did not do the work as he knew he should because it required more labor than the way he did it. In other words, he followed the lines of least resistance.

I was walking down the road one day, and, passing Anderson's field, I saw that some young trees he had set last spring were dying. I said, "Anderson, what is the matter with those trees you set last spring?"

"Well," said Anderson, "to tell you the truth, I guess they need water.

"Have you not had your regular quantity of water this year?' I said.

"Yes, I guess I have, but I made the ditches for the big trees, and the roots of the little trees did not reach far enough out to get the water."

Now, the fact is that Anderson knew the water was not reaching his small trees. He knew, furthermore, that he was sustaining a loss in the time and labor required to set the young trees that were dying. He knew, furthermore, that these trees cost money and that either he would have to replace them the next year, or lose the space in the orchard these trees were expected to occupy. I did not tell him all this, because he knew it just as well as I, but he did not do the best he knew.

I said, "Anderson, I like to examine orchards and learn what I can about the orchard business; would you take a walk with me across your orchard and see if there are any peculiar conditions that might give me some information?"

"Certainly," said he, "I would be glad to do so."

We went diagonally across the field and found that he had made the ditches about three to four feet apart, except the sections in which the tree rows stood, and there the ditches were six to eight feet apart. In those sections a strip of land from two to six feet wide near each and every tree row had not been wet this year, and perhaps not for several years. The result was that all the ants, all the gophers and field mice that infest orchards had gathered on this dry land, in order to avoid the wet sections between the trees. I would say that at least one-fifth of his land was not irrigated, and that this part of the orchard was a rendezvous and breeding place for orchard pests.

I did not feel called upon to lecture Anderson, it was his business, not mine; but I said: "What do you think, Anderson, is the best way to get rid of ants and gophers?"

"Oh, I guess the best way is to irrigate their nests and make it so wet they won't stay around there."

I thought so, too, but I did not say so; because Anderson already knew and there was nothing gained to either of us if I told him. But why did Anderson not do the best he knew?

He was also sustaining a loss in the fact that plants take their food in solution, and the tree roots could draw no food from the dry section. Anderson doubtless knew that, too, but he did not use his knowledge.

## CODLING MOTH BUSY.

### Wenatchee District Is Victim.

A report by P. S. Darlington, district horticultural inspector for the Wenatchee section, says that a vigorous fight must be put up against the codling moth to avert serious damage to this fall's apple crop. In his report Mr. Darlington says.

"Last winter was a very mild one and the mortality of the overwintering larvae was extremely light. Another factor that caused trouble was the coming of the first brood moths this year at the earliest time known here. However, peculiar weather conditions in May split up this brood so that a portion came unusually early, with the rest coming after June 1. This scatters the first brood worms out over a long period and also gives the second brood an early start. The worms of the late moths will be coming strong during the next two or three weeks.

"Wherever a lack or water makes it impossible to spray at this time a great deal of good can be done by picking off all the wormy apples and destroying them before the worms leave the apples. To do this thoroughly may require a good deal of work and time, but if proper thinning is done it can be handled rather easily.

"Spraying at this time will keep the newly hatched worms from entering the apples, but can do nothing with those already in, so that the removal of infected fruit is very important.

"The worms which have already entered the apples, unless destroyed, will get their growth, leave the apples, turn to moths, and each female will lay from 40 to 100 eggs, and the little worms from these will be ready to enter the apples in August or later."

## Must Use Boys

### Youngsters Will Help Harvest

Indications are that boys from 12 to 16 years of age will play a much greater part in harvesting this season than they ever have before. This is due not only to the need for their services, owing to a more or less acute labor shortage, but to the fact that the boys have been stimulated to undertake farm work as a patriotic duty. It is also noticeable that farmers are taking much more kindly to the boy movement than they have in the past. Many who refused to accept the services of inexperienced boys a year ago are willing to try them out this year, and many who tried them out last year are ready to take on more this season.

James Hayes of Waverly, Wash., is a believer in boy laber, though he agrees that their possibilities are limited and that much of the work and direction must be done by older persons. Mr. Hayes told a meeting of farmers recently of five boys 12 to 14 years old, who, after finishing work thinning apples in a nearby orchard, applied to him for work shocking peas. He said the boys looked mighty small to him and that it was with some misgiving that he gave them a trial. He took them into the fields and spent an hour or two showing them how to handle their pitchforks and how to shock the peas. The result was that they became valuable hands to him.

"I believe that those boys did almost as much work as the average laborer that you pick up at this time of year," said Mr. Hayes. "Of course I have seen the time when I did as much work as three of them, but you must remember that boys are boys and that you have to deal with all kinds of labor when you are hiring men." F. L. Kennard, county agent for Whitman county, Washington, heard Mr. Hayes' story and vigorously commended the method that he had used with the boys. "Too many of the failures with boy workers have been due to the way they have been handled," he said. "Too often a farmer says to an inexperienced boy, 'Here's your pitchfork,' or 'here's your team, now got to it,' and sends him off into the field to do something that he doesn't know how to do. You have to show the boys, you have to teach them, and if you do and use a little patience and judgment, you will get value received for the wages you pay them."

B. A. Hunter of the federal labor department said that it was not only a patriotic duty for farmers to employ boys where they had work that they could do, but that it was a wise thing to do with next year's work in view. He said that there was a greater possibility of labor shortage next spring and summer than this harvest, and recommended that boys be trained this season for that shortage if it occurs.

The Y. M. C. A.s throughout the country have been listing boys who are willing to go to the fields this season. In most instances they have turned these lists over to the state or federal labor bureaus where applications can be made for their services.

**Another Move for Peace.**

"I compel my daughter to practice four hours a day."

"Heavens, man! You'll make her hate music so that she will never want to go near a piano."

"That's what I'm hoping."



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Spokane, Washington

July 25

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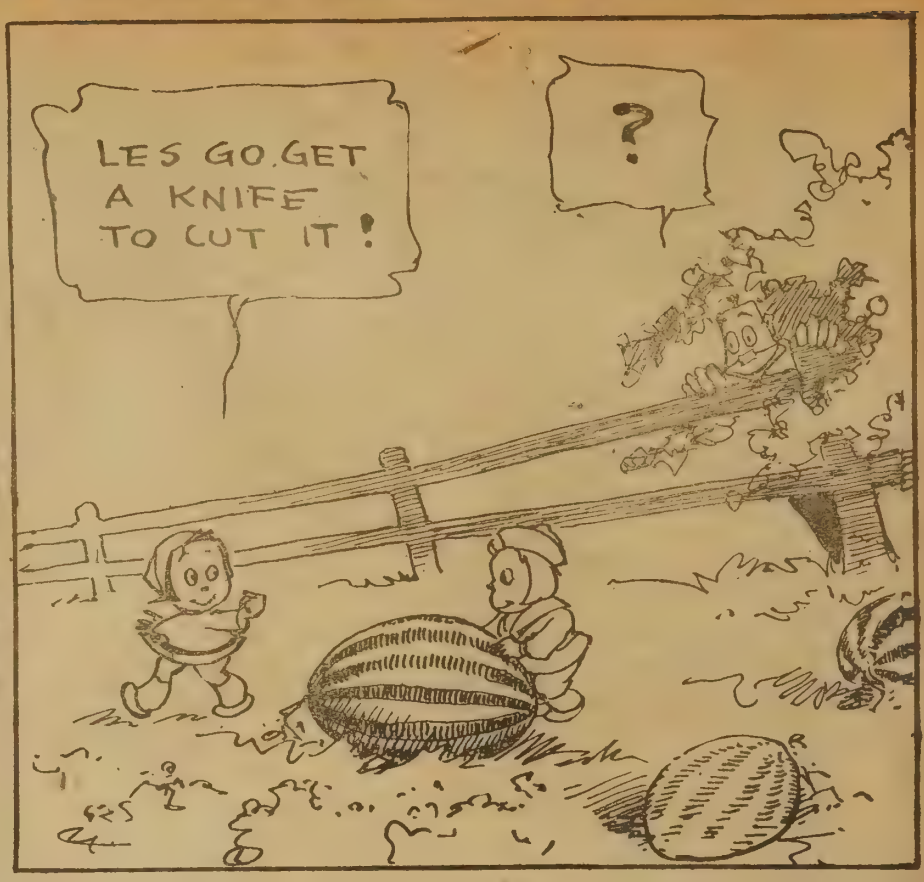
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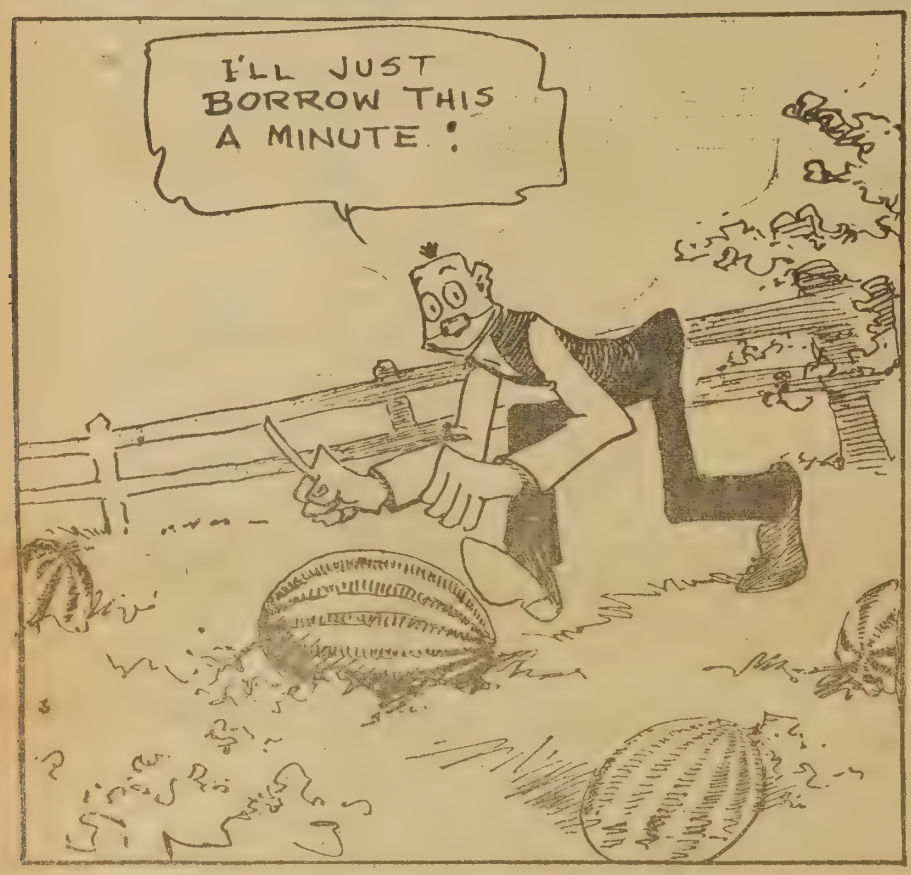
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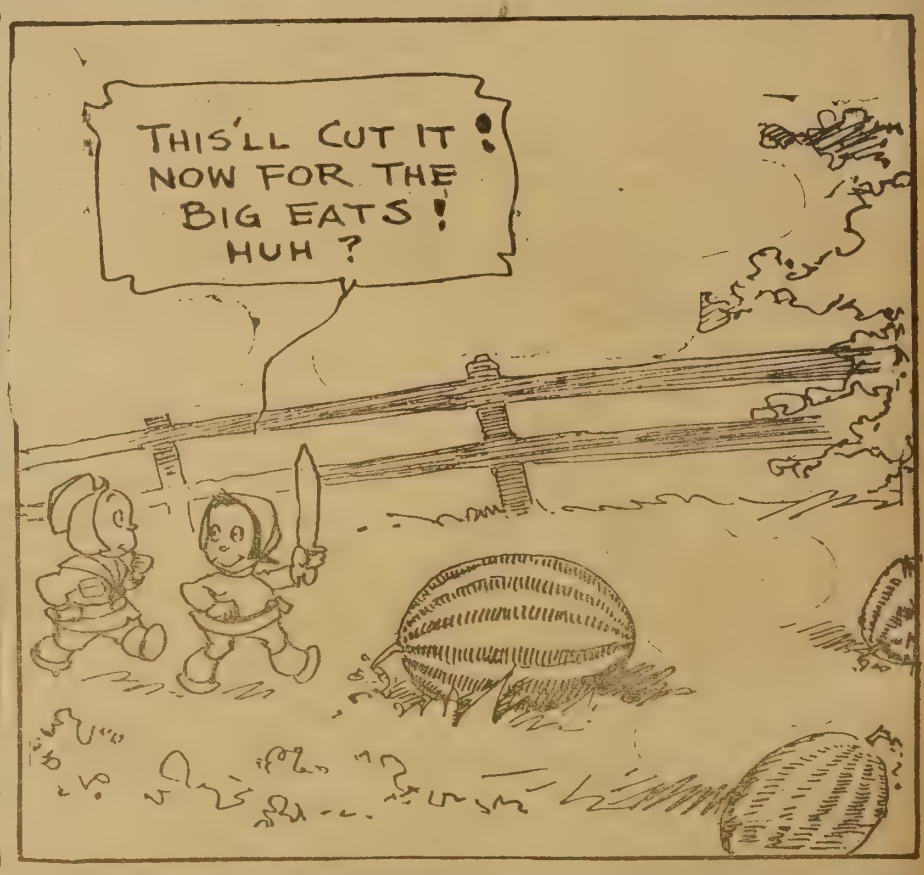
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# RUFF AND READY DO A WATERMELON TRICK



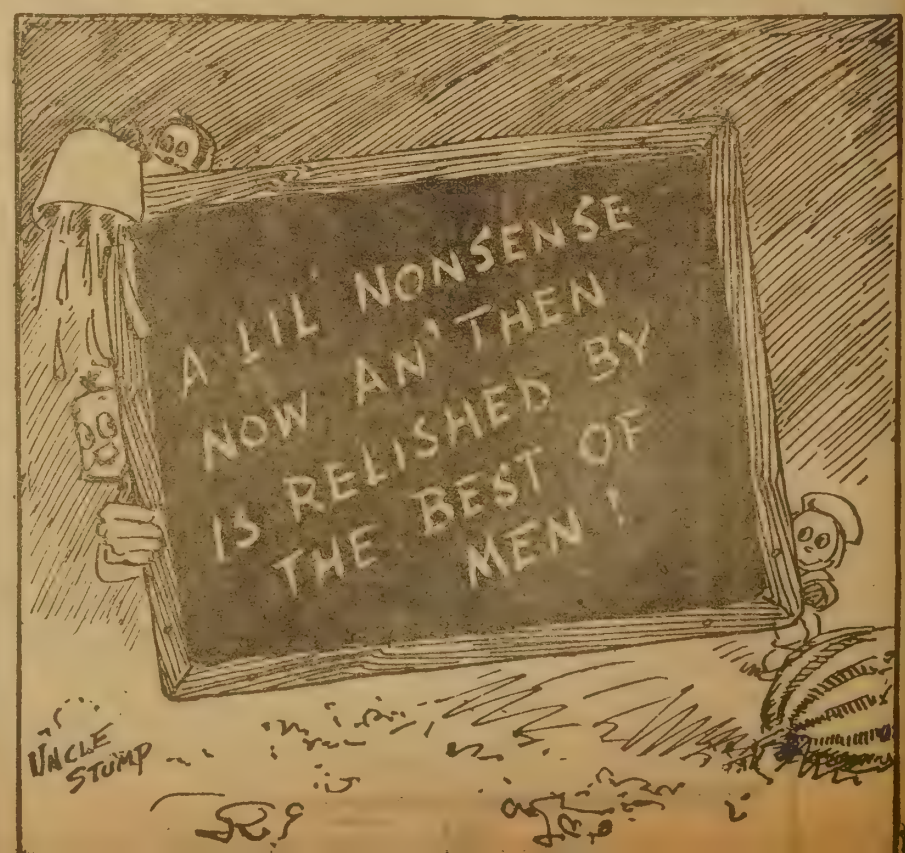





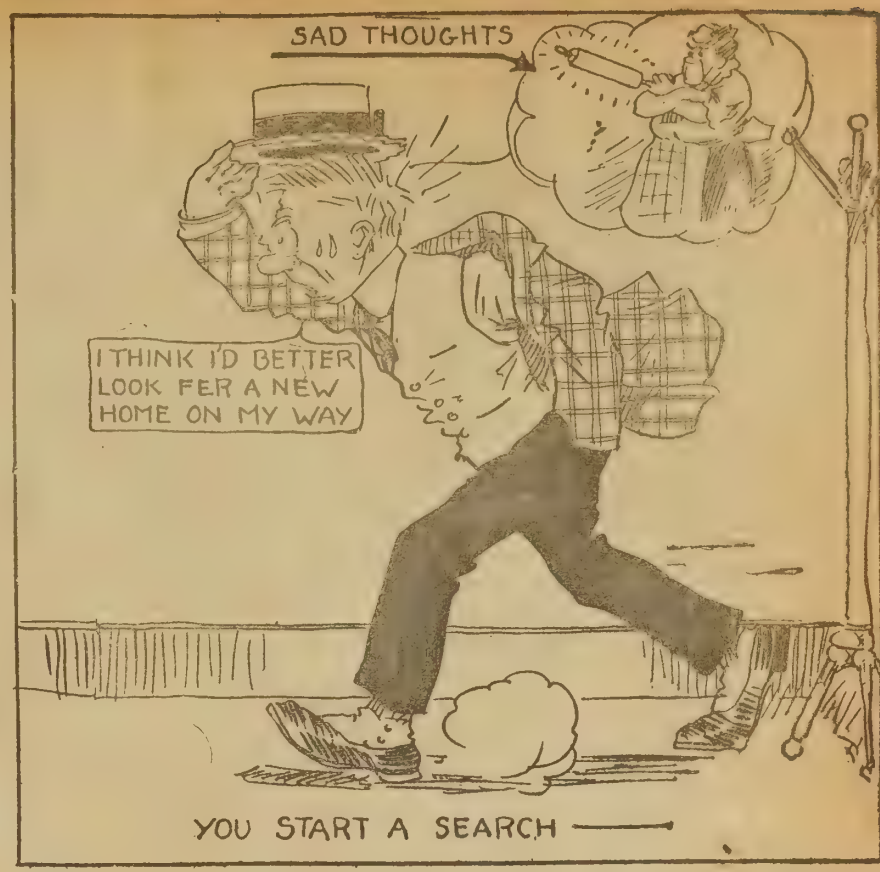




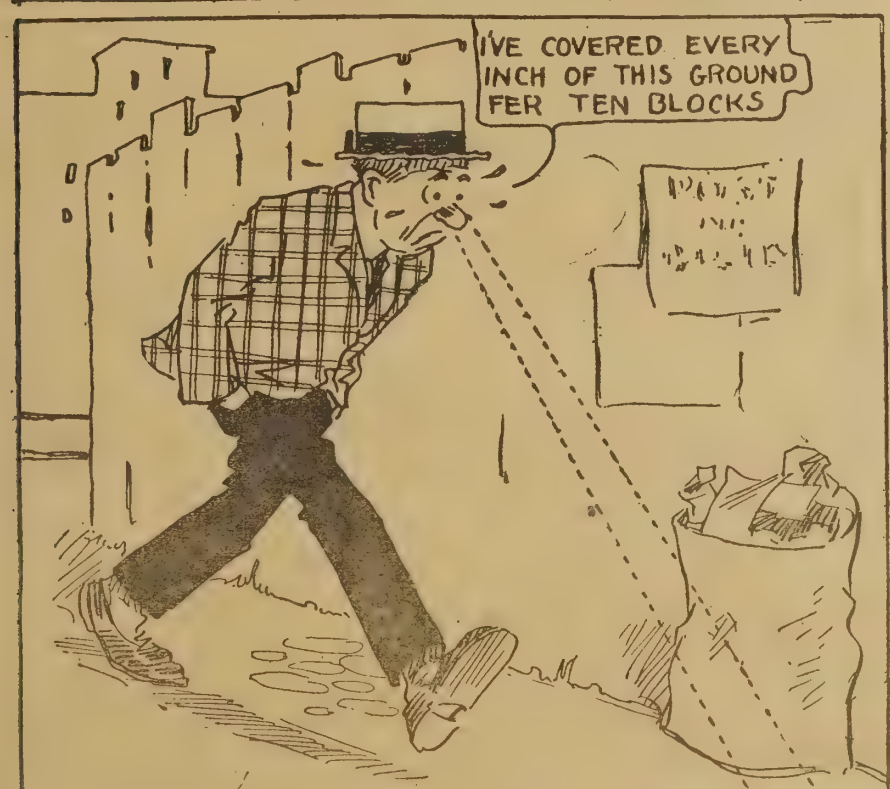
# SAY, HAS THIS EVER HAPPENED TO YOU?



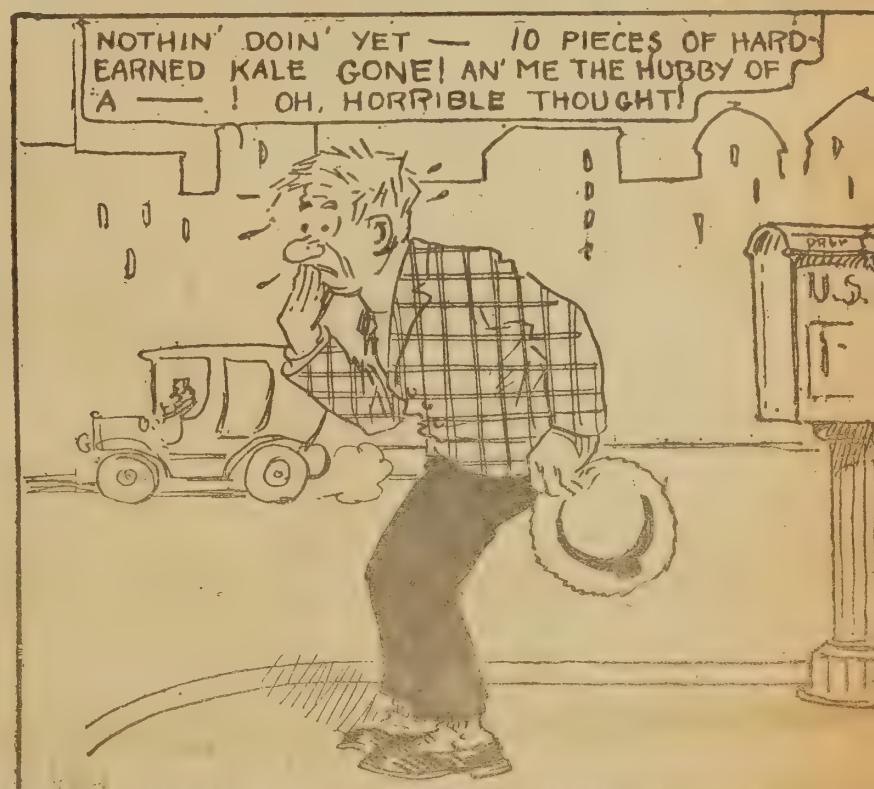

YOU LOSE YOUR WALLET



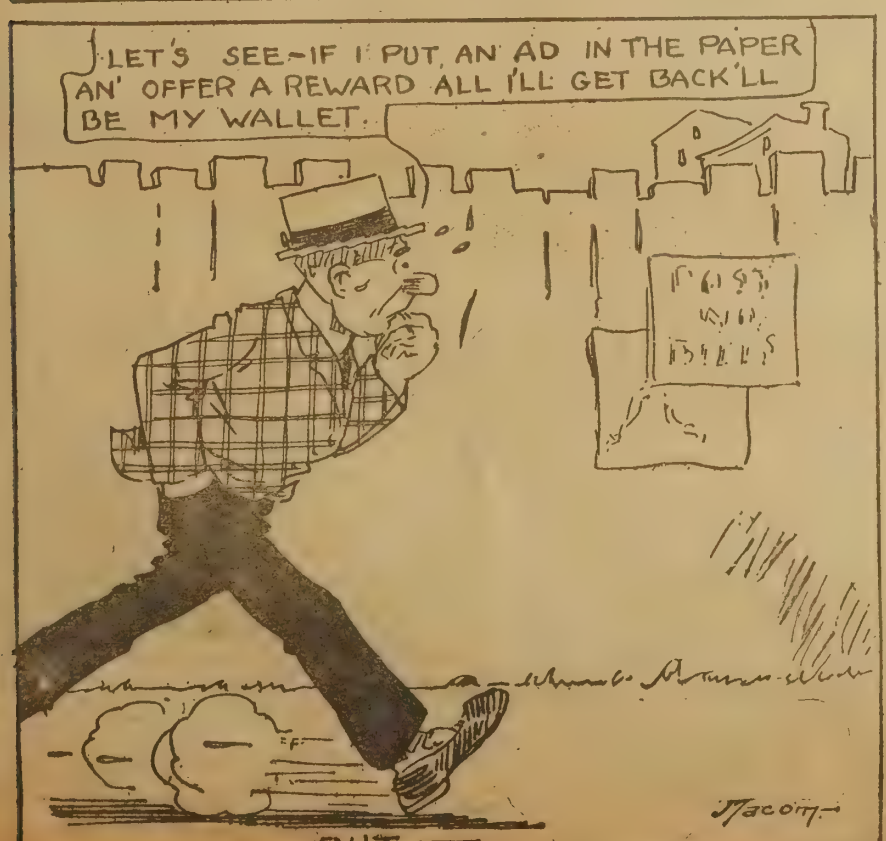

YOU START A SEARCH ——




RETRACE YOUR STEPS




DITTO —— TEN MORE BLOCKS.




BUT —




HAS THIS EVER HAPPENED TO YOU?

# Washington Boys in War Service

From The Twice-a-Week Spokesman-Review.



**THOMAS L. LINEHAM, Camas, Wash.**—Enlisted January 8, 1918, at Seattle in the hydroplane division of the navy. He is at present at Balboa park, San Diego, Cal., at the naval training station. He is 21 years of age, a Canadian by birth, and only son of Mr. and Mrs. James Lineham of Camas, Wash.



**SERGEANT HARVEY J. BOYERS, Lamont, Wash.**—Entered military service December 14, 1917. He is now serving at Camp Taylor, Ky., in the 342d machine shop truck unit. His parents are Mr. and Mrs. A. J. Boyers of Amherst, Neb., but his wife and daughter live at Lamont, Wash.



**ARTHUR A. KALLMAN, Almira, Wash.**—Enlisted in the U. S. navy June, 1917, and was sent to Mare Island, Cal. He is now on the U. S. S. Monterey at Honolulu. His parents are Mr. and Mrs. F. A. Kallman of Almira. He is a brother of Charles Kallman, who is also in the navy.

# Down With Dogs!

## County Agents Want Them Taxed

The dog question is up again. If the county agents of eastern Washington and northern Idaho carry out the object of a resolution adopted at their conference in Spokane last week, the useless dog that roams around the country will have to have a strong lobby in the next legislative sessions of Washington and Idaho or submit to taxation. It all came to a head because marauding canines again entered the pasture of the University of Idaho stock farm recently and destroyed several head of valuable sheep.

W. B. Kjosness, assistant county agent leader for northern Idaho, suggested that the conference should consider the dog question. Dean E. J. Iddings of the university, who feels deeply the loss of $1200 worth of purebred sheep in less than a year, offered a resolution that the conference go on record as favoring the enactment of a law taxing dogs, the proceeds from the taxation going to compensate owners of live stock destroyed by dogs. Ira P. Whitney, manager of the Waikiki dairy farm, near Spokane, was chairman of the meeting, being an active member of the agricultural bureau of the Spokane Chamber of Commerce. He put the question before the conference with a vim, remembering how dogs infected with rabies destroyed a large number of the farm's choice dairy cows only a few years ago. The agents present to the number of about 25 voted without dissenting voice in favor of the resolution.

Dean Iddings said that he objected to the purposeless dog on two counts: First, that he was destructive to live stock, and, second, that he consumed food that is needed to help win the war.

It is probable that the anti-dog sentiment will crystallize into a definite effort to enact legislation that will guarantee the stockmen protection.

# Gives Grain Schedule

(Continued from page two.)

odor, except of smut, garlic or wild onions, or is very sour, or is heating, hot, infested with live weevils or other insects injurious to stored grain, or is otherwise of distinctly low quality, or contains small, inseparable stones or cinders, is to be known as sample grade.

The following special requirements are published by the government:

The wheat in grade No. 1 dark northern spring and grade No. 1 northern spring may contain not more than 5 per centum of the hard red spring wheat variety Humpback.

The wheat in grade No. 1 shall be bright.

The wheat in grades Nos. 1 to 4, inclusive, shall be cool and sweet.

The wheat in grade No. 5 shall be cool, but may be musty or slightly sour.

For each of the subclasses of the classes hard red spring and hard red winter, grade No. 1 and grade No. 2, may contain not more than 2 per centum and 5 per centum, respectively, of common white, white club, and durum wheat, either singly or in any combination.

For each of the subclasses of the class Durum, grade No. 1 and grade No. 2, may contain not more than 2 per centum and 5 per centum, respectively, of soft red winter, common white, and white club wheat, either singly or in any combination.

For each of the subclasses of the classes soft red winter, common white, and white club, grade No. 1 and grade No. 2, may contain not more than 2 per centum and 3 per centum, respectively, of durum wheat.

PLEASE find enclosed $1 for one year's subscription to The Twice-a-Week Spokesman-Review and The Washington Farmer for three years. Please send me a farm service war flag, there are four of us.

HY VAN COLLIE.
Outlook, Wash.

## Cricket Control.

The coulee crickets are practically under control for the season, says H. R. Vercler, Grant county agricultural agent. A few are still alive, but are surrounded by cricket fence in a scab land area. A large number of the crickets were destroyed before the egg-laying season. It was hoped that all might be handled in this manner. However, the task proved too large. I believe that enough of the crickets have been destroyed to materially reduce the work next year. Fencing, trapping, then burning has proved to be the only effective method of control. Poisons proved expensive of application and gave very poor results.

## Sows Returned to the Farms.

Summarized report of the number of sows returned to Spokane county farms which were intended to be slaughtered shows that all cooperating agencies have actual record on 782, says J. R. Shinn, county agriculturist. An estimate of the number kept on farms which would have been shipped in to slaughter had not this campaign been launched adds 400 to 500 to this list. Work has been started to secure a recalling of order made by the food administration to the effect that no more wheat is to be ground in the northwest until after harvest.

## Carlton's War Activities.

To the Editor of The Washington Farmer: During the first Red Cross drive Carlton, Wash., raised $326 in one hour; $529 in the second Red Cross drive; $5100 in third Liberty loan bonds. We are 25 miles from the railroad and have just a small place, but the people in this community are all patriotic. In this last war stamp drive we have sold $1800 war stamps, and that is going some for Carlton. Our quota for the last Liberty bond drive was $2300. C. I. LEWIS.
Carlton, Wash.

**Support for Invalids.**

An Alabama inventor's device to support invalids in bed closely resembles the back arms of a chair.





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We can now send you your local home paper and your state family farm paper for one year each at the special clubbing rates as quoted below:

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They are informative and cover a wide range of subjects. You can profit by reading them carefully.

# Wheat and Alfalfa Grow Together

## *Poor Alfalfa Plot Is Producing Light Crop of Grain*

Instead of plowing up a two-acre plot of alfalfa last fall, W. H. Willins of Latah, Wash., disked the ground and sowed wheat on it. There is now a light crop of wheat and a light crop of alfalfa waiting for harvest together. The wheat is of good quality and both Mr. Willins and John H. Dow, who is operating the farm for Mr. Willins, believe that the alfalfa is probably as good as it would have been had the land not been sown to wheat.

Here are the facts as nearly as could be gathered by a representative of the Farmer who visited the farm to see the result of the double cropping of the land:

**The Land and Locality**—Latah lies in the northern extreme of the Palouse country. The Willins place nestles in a foothill cove, protected from the east and south and southwest. The soil is of a general clay character, being medium heavy and medium fertile. Owing to the mountains about it the rainfall is probably in excess of the open country. The land on which the experiment of growing wheat and alfalfa is being tried faces to the west, with a gentle slope. There is no surface irrigation of any character. There is a tendency to slight sub-irrigation, there being a little evidence of natural springs coming near the surface in the vicinity.

**The Alfalfa**—It was sown in May, 1917. Owing to weather conditions it did not set as well as desired, being probably not more than half a stand. It suffered greatly from the hot, dry summer of 1917, as a result making little progress. It is now somewhat spotted, some small areas being from a quarter to half a stand and others being a full stand. It is about two feet tall, and when observed on July 10 was a little past the stage for cutting.

The plot is in the form of a strip running across a narrow wheat field. With the grain ripening, little difference could be noted from half a mile away except that the strip showed a little greener. It is impossible to estimate accurately the amount of hay that the alfalfa would make if it were possible to cut it separately from the wheat, but it probably would cut something like a ton to the acre, a little less rather than more.

**The Wheat**—Following the disking of the alfalfa land it was seeded to Gold Coin wheat in September, 1917. The seeding was done before any rain had fallen, and the grain lay in the ground unsprouted for several weeks, barely getting up to cover the ground by winter. It now stands four to six inches taller than the alfalfa or about two and one-half feet tall. It is maturing well, though the dry weather and the heat have reduced the size of the heads and the number of grains to the mesh. It is a reasonably good stand on the ground, and will yield probably 15 to 20 bushels if the weather is fairly favorable until harvest time. There appears little difference between the quality of the grain where the alfalfa is thinnest and that where it is thickest. The number of heads is considerably greater where the alfalfa is thin, however, and there are more kernels to the head. In the spots where the alfalfa would make the best yield, the wheat probably would yield at the rate of four to eight bushels to the acre. At the time observed all the grain promised to be of No. 1 quality. There is comparatively little difference between the quality or quantity of grain on the alfalfa ground and on the ground along side, which was not cropped last year, except where the alfalfa is thick enough to crowd the grain.

**The Harvest Question**—It would appear difficult to harvest a twofold crop like this one. The wheat heads do not stand high enough above the alfalfa to permit harvesting separately without taking off the top of the latter. Except for hay, they could not be harvested together until after the alfalfa had passed the usual cutting stage. If cut together with one sickle at the time the wheat was ready for grain, the alfalfa would be too ripe for good hay and probably yet green enough to interfere with the curing of the grain in the shock. To cut them separately at one operation would require a two sickle machine, the one part heading the grain and the other cutting alfalfa and wheat straw together. If cut together and threshed together the alfalfa would undoubtedly make the straw excellent winter stock feed.

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In its issue of June 6 the Farmer published an article touching upon a custom more or less successfully practiced in parts of England of growing a grain crop on meadow pasture or hay land, thus getting two crops instead of one. With a view to learning the opinion of agricultural authorities on the possibilities of such method in the northwest, a letter was written asking for a discussion of the subject. The following are some of the expressions of opinion:

**GEORGE R. HYSLOP,** Oregon Agricultural College—Mr. Hyslop does not think the plan feasible for dry lands anywhere in the northwest, owing to lack of moisture and plant food in the soil. He also considers the difficulty of securing a grain crop that would ripen at the time the forage crop was ready for hay a serious one. He says: "I believe that possibly the best method is to thicken up stands of clover or alfalfa or meadow by sowing in some grain. This will help to keep down the weeds in thin spots and to improve the tonnage. For the most part, I thing this sowing of barley or other crops in the fall is more valuable for hay and for silage purposes than for grain."

**E. F. BENSON,** Washington state commissioner of agriculture—Mr. Benson thinks the plan of very doubtful value. He thinks it would be difficult to get machinery to do the double harvesting, even if the crops could be grown successfully together. He urges that the farmers stick to proved methods of production until the war is over in order that the food production may be the greatest possible.

**GEORGE SEVERANCE,** Washington State college—Mr. Severance considers the plan impracticable except where there is considerable rainfall during the summer months, and is not certain that it would be practicable even there. Irrigation also offers a possibility, he suggests. Even the Coast sections, he says would not have enough moisture in the meadows in the summer to bring up a crop of grain and give it a start.

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### Rural Motor Express.

The highway transport committee of the national council of defense urges the establishment of the rural motor express, saying: Heretofore the farmer has done his own hauling to market, but adoption of the rural motor express will enable him to delegate his hauling and to devote his own time to farm operations. An enormous waste of time and labor of both men and teams can be prevented by consolidating the small loads from a number of farms into a single load to be carried by a motor truck.

The same circular adds that the development of this system of transportation has been particularly rapid in Maryland. A detailed survey was made of 23 routes, leading from agricultural sections into Baltimore, Md., and Washington, D. C. On these records 30 trucks were found in operation; the total capacity of these trucks was 73 tons; the mileage traversd daily was 1574 miles; the average length of the routes was about 50 miles for the round trip. Most of these routes are operated by truck owners living at the outer terminal, making daily round trips into the marketing center. Many of these routes are operated by farmers who first learned the advantages of motor truck transportation by using trucks for their individual needs.

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### Athletics in the Navy.

All forms of athletics are encouraged in the navy. All of the larger ships and all stations have complete athletic equipment, as well as a regularly appointed athletic officer and instructor. The navy is a service of high ideals and requires the highest standard of physical fitness. To define the social status of the navy man today is unnecessary. A man in navy uniform is welcome everywhere. The navy's blue shirt is a badge of courage and distinction.—Boston Globe.

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I AM sending you one year's subscription for Mrs. Caskey in response to your offer No. 1. Please put in seven small stars as there are eight of us on this farm working for the cause. Enclosed find money for subscription and farm service war flag for Mrs. Caskey.

MRS. J. W. BROWN.
Sequim, Wash.


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# Magazine Department of The Washington Farmer

## Farmers Deserved Higher Wheat

### *Congress Was Right When It Passed the $2.40 Measure*

Congress was right in its bill for $2.40 wheat and should have stood its ground against the presidential veto. It was unfortunate that when the issue came on the veto nearly half the members of the house were absent. Uneasiness over their own political fences had the same effect on nearly 200 congressmen that the peace negotiations with the Germans had on the soldiers of the Russian armies. They got uneasy and restless and bolted for home.

The president's veto message shows that his action sprang from a misunderstanding of the facts. This is not to be wondered at, and the president is not to be blamed, for his intentions were undoubtedly good; but he has to weigh and pass upon so many difficult problems that he finds it a physical impossibility to get to the heart of all of them.

For example, the president is manifestly in error when he says that "a fixed minimum price of $2.40 would . . . add $2 per barrel to the price of flour; in other words, raised the price of flour from $10.50 to $12.50 at the mill."

Why should a 9 per cent increase in the price of wheat lead to a 19 per cent increase in the price of flour? The cost of milling would not increase, nor the cost of the bag, nor the expense of selling the product. The proposed increase of 20 cents a bushel for wheat could not by any possibility justify an increase in flour price of more than $1 per barrel.

It now takes 264 pounds of wheat under the regulations of the food administration, to make a barrel of flour. The proposed increase in the price of wheat, which congress passed, and the president vetoed, would have added only 20 cents a bushel, or one-third of a cent a pound, and a third of 264, the number of pounds of wheat in a barrel of flour, gives exactly 88 cents. A little more capital would be needed to buy and carry the wheat, but reasonable allowance for that could not exceed a few cents per barrel.

"I dissent upon principle," says the president, "because I believe that such inelastic legislative price provisions are insusceptible of being administered in a way that would be advantageous either to the producer of the consumer, establishing, as they do, arbitrary levels which are quite independent of the normal market conditions."

But that objection applies with equal force to the present price-fixing standard. The present wheat price is an arbitrary level "quite independent of normal market conditions." Of necessity there can not be at the same time government price-fixing and normal market conditions, for government price-fixing sets aside the normal law of supply and demand.

As a matter of fact, there need be no greater rigidity in a congressional price of $2.40 than in a food administration price of $2.20. In either case the price is set for the current year's crop, and the fact that the president has vetoed the increase measure indicates a purpose to keep the present government price rigid for this season.

The president's belief that "the present method for determining the price of wheat has had the most stimulating effect upon production" is open to question. The department of agriculture's preliminary estimate of this year's acreage for harvest gives a total for spring and winter wheat of 58,872,000 acres. Many observers believe that Secretary Houston is unduly optimistic in his estimates and that his figures exceed the real acreage. But accepting them as reliable, the fact remains that while they are higher than the five-year average, they fall short of the acreage that was harvested in 1915, when the American farmers were growing wheat under the normal law of supply and demand and there was no patriotic appeal to them to speed up production as an outstanding national duty.

From the beginning of this problem of wheat price fixing the growers and their advocates have had to fight an uphill battle against heavy odds. When the government grain corporation last year announced plans and prices that left our northwestern growers without a basic coast market, and deducted from the Chicago base price the burdensome freight rate from this region to Chicago, it seemed an almost hopeless task to persuade the food administration to reconsider its action. But organizations and individuals that had at heart the welfare of the farmers took a courageous stand notwithstanding and won out against seemingly insurmountable obstacles. They won in the end because they were right.

They were right again in their stand for $2.40 wheat, and might have defeated the veto Saturday if a full vote could have been had in the house. Unfortunately too many representatives had left their post of duty and gone home to stump their districts for reelection.

The farmers of the Pacific northwest feel that they have not had intelligent and just treatment in the government's food laws and regulations. Wheat, their chief product, was singled out for price-fixing, and a price set that is undoubtedly below the price that wheat would have brought in open market if it had been left to the law of supply and demand as was the case with corn, cotton, oats, tobacco and many other farm products.

As a result the wheat grower of the northwest has had to sell his product at controlled prices and to buy feed for the live stock at uncurbed prices.

These handicaps, coming upon him at this time, with short crops in 1917 and again in 1918, should have had more sympathetic consideration at Washington.

Yet, notwithstanding this unfortunate situation, the farmers of the Pacific northwest will not waver one jot in their loyalty. They will protest against obvious mistakes and injustices, in a hope that the mistakes will yet be rectified, and go on doing their utmost to help their government win the war.

**Chance for Organization.**

Messengers in India are only paid about 9 cents a day.

## A Poem for Today

To the Editor: Enclosed you will find a copy of a poem which has been in my scrap book for nearly 18 years and I am sending it to you in the hope that you will have it printed in our paper, as the sentiment seems to me so fine and so particularly suited to the present time. MAY H. WILCOX.
Burley, Wash.

### Prayer of the Republic.

Oh! thou God that holdest nations in the hollow of thy hand,
We implore anew thy blessing on our loved, our native land.

Far and wide our flag is waving over peoples old and new—
Men who scarcely knew its symbols, red and white and starry blue.

On the field of strife and carnage, strewn with wounded and with dead,
Bathed in blood of dying heroes, waved a banner, flaming red.

Tears of children, wives and mothers, waiting, watching day and night,
Washed upon the flag of battle, stripes of peace in virgin white.

Steadfast hearts for God and country made a field of truest blue,
And to guide a nation's footsteps stars of light came shining through.

Red for courage, honor, glory, white for justice, peace and love;
Blue for faith and loyal virtue, stars for light from God above.

In this sign we've lived and conquered mountain, plain and trackless sea;
Peaceful gains and warlike triumphs, all, O God, we owe to thee!

From a weak and struggling people thou hast raised us up to might.
Oh! thou God of hosts, we pray thee, make our strength a shield of right.

Thou hast built this great republic, outflung over land and sea;
Hold it ever in thy keeping, sacred refuge of the free!

—Russell M. Seeds.

## SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

## "Rough Stuff" in Wheat and Other Cereals Really Vital

Perhaps Luther Burbank's announced discovery of a wheat 18 per cent rich in gluten arrived in the nick of time. The clock struck 12 on too refined a wheat flour long before Mr. Hoover commandeered 40 per cent of wheat and stopped the pernicious practice, namely, of robbing wheat of its nutritious and necessary "rough stuff."



Dr. Hirshberg.

When our troops across the seas are separated from fresh foods, especially lots of good, coarse, whole wheat in the form of bread and cakes, when a large measure of their rations are more or less canned goods and other supplies far from rich in those necessary food elements —vitamines—because sterilization, pasteurization and other methods of preservation have deprived them of it, there is danger of beri-beri, scurvy, pellagra and other evil laming ailments.

**Avoid Overrefined Flour.**

The presence of lameness and leg troubles, independent of trench-foot and similar maladies, makes the alert army surgeon particularly watch out for beri-beri and scurvy. When the diet consisted of canned foods and white bread or biscuits made of wheat, it was found that these properly called "food deficiency" diseases were often responsible.

In spite of a large variety and plenty of food, the vitamines of whole wheat, unpolished rice and unrefined flours were so quickly missed by living tissues that one or more of these various disorders arose.

By various well-considered experiments Drs. Harriette Chick and Margaret Hume brought to light some of the nutritive properties of the common cereals. They proved, apparently, that in the wheat as well as the rice grain the vitamines so much needed by mankind to ward off and to cure joint and limb symptoms is concentrated especially in the whole grain, the fruit or embryo of the cereal. A small quantity is also present in the bran. Both of these are omitted in white, refined wheat flour.

Obviously, unless bread, biscuits, cake, crackers and other products of the bakery are made of whole cereal, with its bran and germ stuff, the human fabric will, so to speak, have "dropped a stitch" by loss of vitamines.

To prevent beri-beri, polyneuritis, scurvy and similar ailments, rough, unmilled flour is to be added to the diet. This maintains the weight, health and vitality of those who eat it, whereas polished wheat or rice inaugurate the various swellings, aches, pains, bruises and troubles of beri-beri and scurvy.

The vitamines in the different fresh foodstuffs, their absence or deficiency depend upon dryness, heat, moisture, sterilization and freshness.

Exposure of the whole wheat germ to boiling temperatures for two hours does not seem to injure the vitamines very much. If, therefore, it is included in the flour of the bread, it can be relied upon to prevent these diseases after it is baked.

If yeast, which contains 35 per cent of solids, is heated even for an hour at boiling temperature there is some loss of vitamines.

Ten grammes of dried peas will cure beri-beri or scurvy. Most seeds of plants and the eggs of animals are opulent in vitamines, but they are most abundant in fresh cereals.

In the early stages of siege of Kut-el-Amara beri-beri was common among the troops. They were eating a ration of whole wheat flour. After the first two months one-third to one-half of the wheat bread was barley flour and coarse milled wheat. Scurvy and beri-beri then disappeared as if by magic.

### How to Succeed.

Fix the goal of your ambition
Far beyond the common vision.
Struggle upward; keep on going;
Feed the mind; continue growing.
If you reach your heart's desire,
Keep advancing, higher! HIGHER!
On! and on FOREVER.
—Granville Lowther.

## Sidelights

**The Education Controversy.**

Teacher—Now, Patsy, would it be proper to say. 'You can't learn me nothing"?

Patsy—Yis'm.

Teacher—Why?

Patsy—'Cause yer can't.

**Vain Imaginings.**

"What's de meanin' of dese workless days?" asked Meandering Mike.

"I dunno," replied Plodding Pete. "I'm kind o' hopeful dat mebbe we've got de government back of us at last."—Washington Star.

**Unappreciated.**

'I'm in a fix," declared the manager of Plunkville's Op'ryhouse. "How's that?" "Got a big feminine star signed up for a week." "Well?" "And here comes the same star in a film drama and gets all the business."—Louisville Courier-Journal.

**Sensibilities.**

"Aren't you slightly mixed on your European geography?"

"I'm afraid so," replied the highly elegant person. "I try to study the maps, but the color scheme gets on my nerves terribly."—Washington Star.

**His Delusion.**

She—What an atrocious necktie! I wouldn't trust you to select anything, you have so little taste.

He (chuckling)—You forget that I selected you, dear.

She—You think you did, but you didn't really.—Boston Transcript.

**No Offense Whatever.**

Counsel—Come, sir, do you mean to tell me you didn't see the complainant's cow on the land? How near should you be to a beast to recognize it?

Witness—About the distance I am from you.—Everybody's Magazine.

**Convincing Proof.**

"Is it true that women lack a sense of humor?"

"Certainly not."

"Why are you so positive?"

"I escorted a young woman of my acquaintance to see a motion picture comedy the other day."

"Yes?"

"And when the fat comedian sat down in a tub of water I assure you she laughed as heartily as I did."—Birmingham Age-Herald.

**Theory and Practice.**

The pupils were being examined on the subject of personal hygiene. A boy was asked: "What have you to do in order to keep your teeth sound and white?"

"Clean them," was the prompt reply.

"When ought you to clean them?"

"Morning, noon and night."

"What are they to be cleaned with?"

"With a toothbrush."

"Very good! Have you a toothbrush?"

"No, sir."

"Has your mother a toothbrush?"

"No, sir."

"Then how do you know about the use of toothbrushes?"

"We sell them, sir."—Harper's Magazine.

**His Preference.**

A young lady sat next to a distinguished bishop at a church dinner. Awed by the bishop's presence she hesitated to speak to him, waiting for what she considered a favorable opportunity. Finally, seeing some bananas passed, she turned to him and said:

"I beg your pardon, but are you fond of bananas?"

The bishop was slightly deaf, and leaning forward, replied:

"What did you say?"

"Are you fond of bananas?" repeated the young lady, blushing.

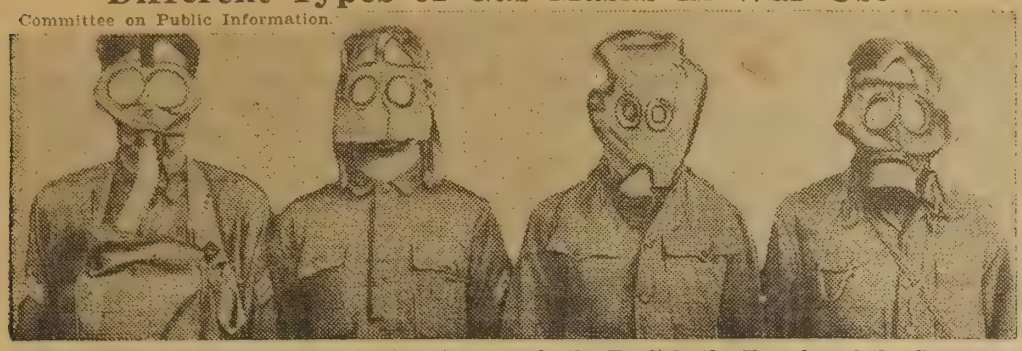
The bishop thought for a moment and then said:

"If you want my honest opinion I have always preferred the old-fashioned night shirt."—Exchange.

# All the World's a Stage, and All the Men and Women Merely Players

## Different Types of Gas Masks in War Use

Committee on Public Information.



From left to right are shown the American mask, the English, the French and the German.

## Apples for French Orphans



Distributing apples to French orphans of the Toul refuge by the American Red Cross. The children were taken from invaded areas.

## Lead Our First Army Corps




Major General Liggett, leader of the first American army corps recently formed on the fighting front in France, and his aides.

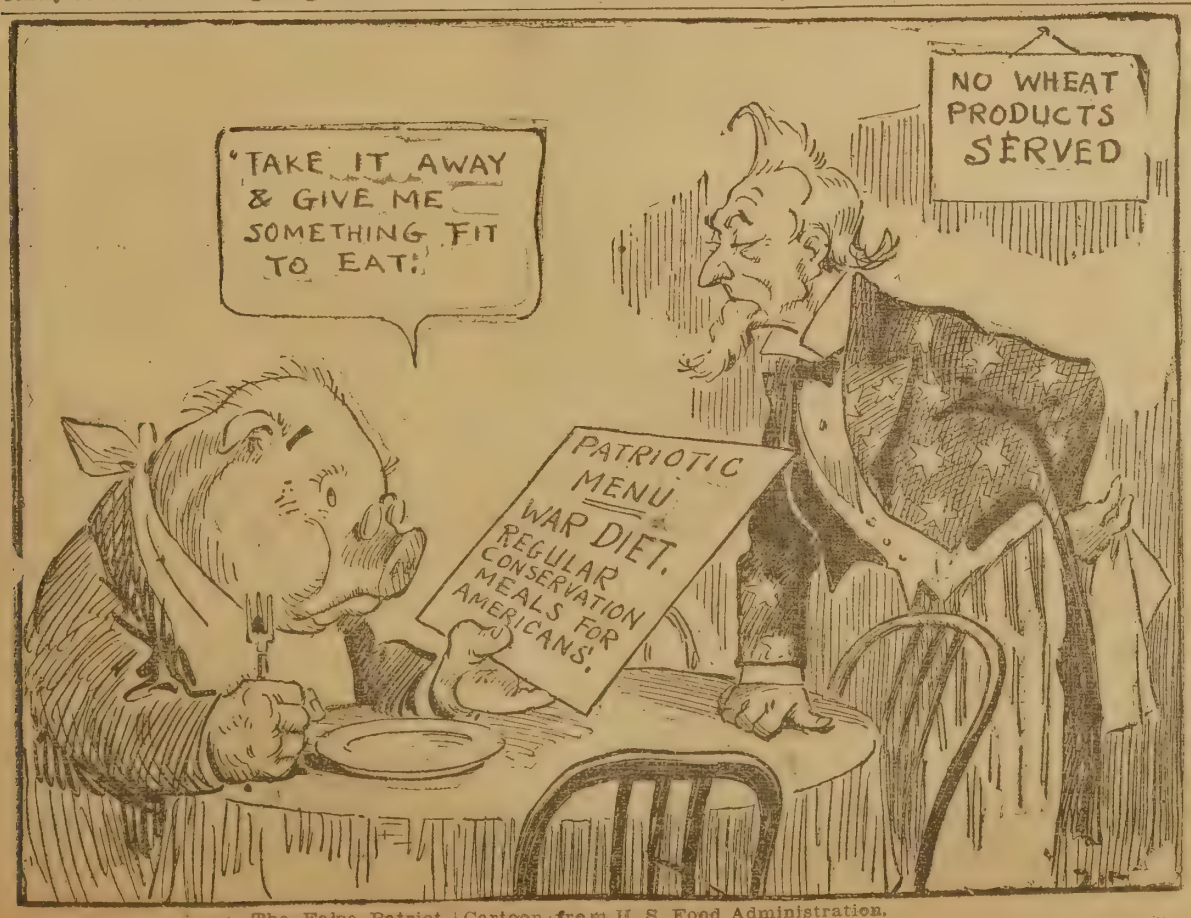
## Women in National Naval Service School



Committee on Public Information.

National Service school of the Woman's Naval Service at Conduit and Little Falls Roads, Washington, D. C. The uniforms of the women in this school are practically the same as those of the Girl Scouts of America, except for the insignia, which in case of the Girl Scouts is a pin with a clover and an eagle above it, whereas the girls in the National Service school wear the letters U. S. S. on the hat. The uniform is a khaki skirt, stout boots, a brown flannel shirt and a service hat. The uniforms vary a good deal in both these organizations.

Twenty uniforms for women in war work are officially recognized in the United States at the present time. The women wearing them are munition workers, telephone and radio operators, yeomen, employes of the shipping board and the food administration, Red Cross workers and the Y. W. C. A. workers abroad, Woman's Motor corps of New York, Girl Scouts and students in the National Service school of the Woman's Naval service.




The False Patriot—Cartoon from U. S. Food Administration.

## A Pair of Real Farmerettes



Beatrice Hulbert, aged 14, on the right, and Gladys Williams, 13, on the left. Both girls live on dairy farms near Albany, Ore., and are doing their best to win the war.

# Trappers of the Ozarks

**The Adventures of Two Young Trappers in the Wilds of Upper Louisiana. Now the State of Missouri.**

By LEWIS B. MILLER

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## CHAPTER XXVI.

### By a War-Dancing Village.

As the fugitive dropped downward, the young voyagers sprang to their feet in their excitement. The warriors, stopping at the cliff's edge, stood with drawn bows, waiting for him to strike the water.

Ben and Jodo, too, were waiting breathlessly. The man's life depended largely upon the depth of the river. If it was shallow over there, he would be crippled, and doubtless killed. But if the river was deep—

A booming sound, as the figure drove down into it, meant that the stream was very deep there. Several seconds passed—perhaps as much as a minute before the man came to the surface. He had been swimming under water, and was now 40 or 50 yards out in the river.

Scarcely had the two Indians caught sight of the swimmer when they yelled and drew their bows far back. Ben had foreseen that, and now threw up his rifle and fired!

The arrows struck the water, but not the swimmer. He kept coming. The crack of the unexpected rifle may have startled the bowmen and spoiled their aim. And when Jodo, taking a more deliberate aim, sent a bullet at the Indians, they suddenly turned and disappeared.

After a few seconds on the surface, the swimmer had dived again. Ben and Jodo were reloading their rifles as fast as they could.

"Come this way—swim this way!" Ben called, as soon as the swimmer's head had appeared the second time. And the swimmer heard and changed his course. Soon he had reached the shallowed water.

Seeing that the Indians were no longer in sight, Ben put down his rifle and paddled to meet the man in the water. The three heavily laden canoes could not be driven fast, but the swimmer, plainly much at home in the water, was coming hand over hand.

"Keep loading, Jodo!" ordered Ben, realizing that both their rifles were empty. He himself stood ready to reach a helping hand to the fugitive.

When the man was close enough, Ben got hold of him. After no little trouble, the two in the canoe had half dragged the drenched, streaming stranger into it. The man was exhausted, kept gasping for breath, and could not utter a word. Ben and Jodo likewise said nothing. The two Indians had reappeared on the cliff, bows in their hands, and it was important that the white men get their rifles loaded quickly.

When his priming-powder had been poured into the pan, Ben dropped down, rested his elbow on the edge of the canoe, and tried to take careful aim, but the light was not good, and before he could shoot the current had swept the canoes out of rifle-shot. Now the voyagers turned their attention to the wet stranger.

"Who are you? and how do you come to be running from the redskins?" demanded Jodo.

"They'd captured me, but I'd got away from 'em. When I'd nearly run my laigs off, they caught sight of me ag'in. Then there was another race till the cliff stopped me. After that it was jump or be nabbed, and I took the big jump. Of course I didn't know how the water was, or what would become of me. Lucky you fellers was down here. Don't know whether I could have clumb out of the river or not, I was that near used up. How do you come to be here?"

"We've been up on the Big Niangua, trapping, and are on our way back to St. Louis," Jodo explained.

"I live down at Cote sans Dessein, on the Missouri. The redskins over in this country, I'd heard tell, was rather soured on the whites; but I crossed over to the south side of the Missouri to hunt. Game wasn't any too plenty along the Missouri, or leastways I didn't find much. So I got my canoe and kept paddlin' up the Osage. I stopped above where you folks seen me jump. There I lands, ties my canoe, and strikes off through the woods on track of game. When I'd tramped three or four miles, without findin' anything worth wastin' lead on, two sneakin' red varmints pops out of the bushes behind me and grabs my arms and that before I could fire a shot or git a holt of my knife. But I watches my chance, and before long I breaks away from 'em. I'm counted a bully-good runner, but they give me the race of my life."

"What tribe did the two Indians belong to?" questioned Jodo.

"The Sacs and Foxes. They told me that much. One of 'em could talk a little of our talk."

Now Ben asked: "Did they tell you what they expected to do with you?"

"Not exacly. The one that could talk hinted that they might make short work of me when they got me some'r's—to their village I guess it was. I didn't wait to find out."

"How far is it to the mouth of the Osage?" Jodo inquired.

"Just guessin', 50 miles as the river runs."

By this time the canoes were about to drift out of the shadow that darkened the west bank. Ben steered them back into the shadow.

"What now, Ben?" demanded Jodo.

"We'd better tie up and wait a while. With at least two blood-thirsty redskins patrolling the banks, it's safer for us to lie by till the moon hides itself."

They approached the bank and made fast to a bush. Martin—that was the settler's name—soon got chilly, and had to slip off his outer clothes and wrap himself in blankets. When the moon had set, the canoes moved on down the river again, and he was glad to use Jodo's paddle to warm himself. Jodo sat, rifle in hand, watching the banks, and especially the left bank, as closely as he could in the dim light.

The paddlers paddled hard, but with as little noise as possible. They hoped that the two Indians, being already weary from chasing their escaped prisoner, would, if they tried to keep up with the canoes, be left far behind before morning.

While day was dawning, Ben and Jodo paddled the canoes up into the mouth of a little stream. Martin was dry and asleep by this time. But he awoke while they were kindling a fire. On this they broiled meat enough for both breakfast and supper. And they were very careful to put out the last spark of their fire before the smoke could be seen.

The three took turns at sleeping and watching during the day, one being on guard while the others slept. They expected to remain in hiding, not only till night, but till the moon had set. But late in the day the sky became overcast with clouds, and as night came down a slow drizzle set in. And in that drizzle the three men paddled out into the Osage and began to drift and paddle down stream.

All the canoes were now covered to shed the rain. And the men themselves wore blankets as they drove the canoes forward. A third paddle had been made during the day, and Martin was using it.

Silently the three plied their paddles, while the slow rain kept pattering on the water around them. As long as the moon was still shining, behind the clouds, there was light enough to make near objects dimly visible. But after moondown it was impossible to see one's hand before his face. But for the fact that there were known to be hostile Indians in the country, the canoemen would have tied up till a more favorable time. Now they paddled on, relieved rather than otherwise to be invisible.

But they were afraid to travel fast; and sometimes they ceased paddling and allowed the canoes to drift. At length Ben told Martin to crawl under the folded tent that covered their canoe and go to sleep. They would wake him later.

It was believed to be past midnight when Jodo stooped and woke the sleeper. Ben had ceased to paddle and was gazing ahead.

The settler sat up drowsily. "What's wanted, boys?"

It was Ben who answered: "We see lights and hear strange noises ahead, and don't know what to make of them. You've been along here recently, and we thought maybe you would know."

Martin stared at the lights and listened. "It's too much for me. Wasn't anything of the kind here when I come up. Seems to be some sort of a to-do on the river-bank. I'm wonderin' what."

The noise was mostly a sort of singing, though of a very rude kind. Soon the canoes had drifted near enough for the light—big fires—to be visible. Now numerous wigwams could be distinguished, scattered about in a thinly wooded valley.

"It's an Indian village," Martin said. "But they've camped here since I went by, three days ago. I wonder what on earth they're up to."

"They're dancing and singing. My guess is that it's a war-dance," Ben remarked.

"That's just what it is: I'd bet my socks on it!" the settler declared. "They've moved over here from some'r's, and now they're workin' their dander up, so's to be ready to start out after white scalps."

And that was just what the strange spectacle appeared to be. Around a big fire as a center a large number of warriors were dancing furiously, while they kept up a kind of weird, wild chant. And very fierce and blood-thirsty that war-song sounded to the white listeners.

On all sides except on the dangers were surrounded by a crowd of spectators—mostly squaws and children. The open side was the river-bank, and the canoemen had a good view of the wild scene while drifting by.

As the canoes passed, numerous dogs, either seeing or scenting the white men, swarmed along the river-bank and barked clamorously. But such was the wild tumult and the frenzied excitement among the dancers that nobody noticed the dogs. From very prudence the canoemen sank down as low as they could.

One thing the white men noticed, though not till they were past the dancing circle. At one side, and looking on, stood a little group of men who wore hats or caps, and seemed to be dressed in civilian garb.

"They may happen to be traders," Martin said. "But they're 10 times more likely to be some Britishers or Frenchies, representin' Great Britain."

And Ben remarked: "If that's who they are, they're here to supply the redskins with guns and powder and lead. And maybe they're dosing them with fire-water to get them chuck full of fight. Nice way for civilized people to act!"

Soon the Indian village, with its dancing, its wild, fierce chanting, its lights and its wigwams, and its barking dogs, was left behind. Now the voyagers were in thick darkness again. The rain grew harder, but, being anxious to get as far as possible from the dangerous locality, they sat under their blankets and kept all their paddles going.

When at last daylight had dawned, the rain had ceased and the clouds were breaking away. The canoes were now drifting along between wooded hills, which looked fresh and green after night-long watering. Ben stopped paddling and said to Martin:

"How far would you guess we are from the Missouri now?"

The settler studied all the surrounding landmarks. "Between 10 and 15 miles, would be my guess.

"Now the question is: Shall we go into hiding till night comes again? Or shall we push right on, danger or no danger, till we reach the Missouri and the French settlement?"

"It would be safer, of course, to wait for dark. But I believe we can run the rest of the way without any great sight of risk. If the varmints show up on one bank, why, we can crowd over ag'in' the other bank, and git purty night out of bow-shot."

"But the danger is that they won't show up," spoke out Jodo. "More likely we won't catch sight of 'em at all. We'll hear a crack, and see a smoke, and feel a bullet. That's what we've got to look out for if we drift along down in broad daylight."

Martin answered: "Still, I don't feel that there's any great danger of that. Nobody lives up here to be comin' down; and the red boogers won't think to lay in ambush for us on the banks. The biggest risk, as I foresee it, is that we may meet some of 'em in canoes, or that some of their canoes may overtake us."

"I think we can paddle so fast that their canoes won't be very likely to overtake us," Jodo suggested. "If we meet a lot of redskins on the river—"

"If we meet a lot of redskins on the river, there's nothing for it but a fight," Ben said.

The settler sighed regretfully. "But don't I wish to my soul I had my old rifle back? She was a mighty old weepon, but she al'ays shot mighty true when I kep' her clean. Unlucky hunt for me, that was. Be many a long day before I own another gun as good, I reckon." He sighed again.

"I'd feel safer if we had three guns instead of two," Ben admitted. "But unless we meet a British agent, with guns to give away, not much chance for us to find the third gun. So we shall have to do the best we can with the weapons we have. Do we all agree, then, to take the risk and paddle right on?"

"That suits me all right," Jodo answered. "I don't believe we're likely to have any trouble. Of course, there's some risk. But then, for that matter, there's some risk that the red boogers may smell us out if we hide ourselves."

"I'd like mighty well to reach home before the old woman and the young uns miss me and begin to worry," the settler told them. "So, risk or no risk, redskins or no redskins, I'm ready to run the gantlet if you boys air."

Jodo said: "I'd feel braver if I wasn't quite so hollow. Can't we have a bite to eat as we drift along down? Rowing all night whets a fellow's appetite."

"Of course we can eat something if we want to," Ben answered. "But I was thinking we'd make a swift run and get to the village in time for a civilized breakfast. I'd like to try some French cooking."

"And try some French cookin' you shall!" declared the settler. "I spliced up with a Frenchman's daughter. And if I do say it myself, she certainly does know what to do with a skillet and a fryin' pan. And she'll do herself proud for you boys when I tell her what a nasty scrape you helped her old man out of."

"Oh, that'll be fine," declared Jodo. "But let's try a snack of hunters' cooking first. I'll work up another big appetite by the time we've paddled another 15 or 20 miles."

Ben and Martin agreed to this. And they allowed the canoes to drift while they ate some dried meat and some honey in the comb. And while eating they watched both banks closely. It would be no fault of theirs if Indians surprised them.

Once they noticed some deer on the bank; and Martin declared that he could always find plenty of game when he didn't dare shoot it. Later they saw several elk emerging from the stream, and might have killed one. But prudence forbade them to make the attempt.

"The thing for us to do just now is to try to take ourselves out of this Indian country," Ben remarked. "That done, we can do all the hunting we want to do somewhere where we won't be hunted."

"You're right as to that," Martin agreed. "Foolhardy to risk our scalps for the sake of a little lean meat. Game hain't had time to fatten up yit since cold weather knocked off."

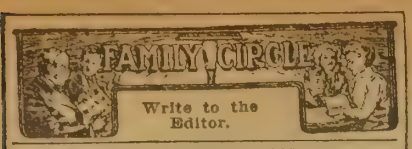
Their breakfast ended, the voyagers fell to paddling again. The river was swollen enough to have a brisk current; and heavily laden though they were, the canoes were soon traveling rapidly.

But for the dangers that threatened them, the travelers would have delighted in the scenery. On both sides were lofty hills already grown beautiful with their green forest covering. The river wound back and forth between, sometimes washing the base of one line of hills and sometimes of the other.

At length the current swept the canoes in close to a great rock, which rose out of the water. The rock was the point of an abrupt bend. The current fended off, and went rushing and rocking on. And scarcely could the canoemen turn their attention down stream, when they made a discovery that startled them very much.

Fifty yards below a party of Indian warriors, numbering more than a dozen, were in the act of fording the river. They were out in midstream—the river had widened here—and in water nearly up to their chins. And each was holding his gun and powder horn above his head.

(To be continued.)




ALICE W. BARLAND,
Editorial Contributor.

## Iceless Refrigerator

A companion convenience to the fireless cooker for the hot summer days is the iceless refrigerator, or milk cooler, says the weekly news letter of the United States department of agriculture. This consists of a wooden frame, covered with canton flannel or some similar material. It is desirable that the frame be screened, although this is not absolutely necessary. Wicks made of the same material as the covering rest in a pan of water on top of the refrigerator, allowing the water to seep down the sides. When evaporation takes place the heat is taken from the inside, with a consequent lowering of the temperature. On dry, hot days a temperature of 50 degree can be obtained in this refrigerator. The following description will aid in the construction of this device:

Make a screened case three and one-half feet high, with the other dimensions 12x15 inches. If a solid top is used, simply place the water pan on this. Otherwise fit the pan closely into the opening of the top frame and support it by one-inch cleats fastened to the inside of the frame. Place two movable shelves in the frame, 12 to 15



Iceless Refrigerator.

inches apart. Use a biscuit pan 12 inches square at the top to hold the water, and where the refrigerator is to be used have the whole thing standing in a large pan to catch any drip. The pans and case may be painted white, allowed to dry, and then enameled. A covering of white canton flannel should be made to fit the frame. Have the smooth side out and button the covering on the frame with buggy or automobile curtain hooks and eyes, arranged so that the door may be opened without unfastening these hooks. This can easily be done by putting one row of hooks on the edge of the door near the latch and the other just opposite the opening with the hem on each side extended far enough to cover the crack at the edge of the door, so as to keep out the warm, outside air and retain the cooled air. This dress or covering will have to be hooked around the top edge also. Two double strips one-half the width of each side should be sewed on the top of each side and allowed to extend over about two and one-half or three inches in the pan of water. The bottom of the covering should extend to the lower edge of the case.

## To Encourage Use of Cottage Cheese



The picture shows most of the 47 women who are being sent by the United States department of agriculture, into 47 states to encourage the use as well as the production of cottage cheese. Their work is to be part of the national campaign undertaken by the department of agriculture to encourage the use of cottage cheese, which, experiments by the department have shown, is approximately equal in food value to meat.

The women cottage-cheese agents are to cooperate with federal and state extension forces. They are to demonstrate better ways of making cottage cheese, and also are to show many new and attractive dishes, using cottage cheese as a basis, which have been developed in Uncle Sam's food laboratories in Washington.

These are the first women ever used as field workers by the bureau of animal industry of the department.

## PRESERVING RECIPES.

### Use Corn Syrup and Sage Sugar.

Two articles by Claudia Q. Murphy, consultant in home economics in New York, on preserving with the use of corn syrup in order to save sugar, have already been published in The Farmer. Here are some recipes which Miss Murphy also sends:

**Rhubarb Jam.**

Six pounds of rhubarb, 6 pounds of syrup (3 pounds corn syrup to 3 pounds sugar), 2 ounces of root ginger.

Peel the rhubarb and weigh after peeling. Cut into pieces about two inches long, and put it into a preserving kettle with the syrup and the ginger, which must be bruised and tied in a muslin bag. Leave this for three days, stirring it gently each day to help the sugar dissolve. Strain the liquor from the fruit the third day, boil and pour the syrup over fruit while hot. Let it stand again for three days without stirring, then pour all into a preserving kettle, taking the ginger bag out, and boil from half to three-quarters of an hour after it comes to the boil. Pour into clean, dry jars and cover. Root ginger bruised and tied in muslin or ground ginger, is generally used for jams.

**Grape Jam.**

To each pound of grapes allow three-quarters pound of syrup (equal weight corn syrup and sugar). Stalk and wash the fruit, and put in a preserving kettle over very gentle heat till the juice begins to come from the grapes, then add the syrup and stir till it melts, then bring to the boil and boil fast until a little will jelly when put on a plate and allowed to get cold. Put into clean, dry, warm jars and cover. This should be made of unripe grapes.

**Gooseberry Cheese.**

Wash and pick six pounds of gooseberries. Put them in a large pan with about a teacupful of water, just enough to keep them from sticking, stir occasionally and cook till quite soft. Rub through a sieve, measure and weigh the pulp, replace in a clean pan with three-quarters pound of syrup (equal weight corn syrup and sugar) to each pound of pulp. Boil for about 40 minutes until a little tried in a saucer will set quite firmly; put into small pots and cover. Conserves, in which skin and seeds are rejected, are most wholesome for children as a spread.

**Spiced Apples.**

Peel the apples thinly and core. Have ready a boiling syrup made of equal weight of corn syrup and sugar; add 1-2 ounce each of ground cinnamon, ground allspice or cloves. Put the apples in the boiling syrup and cook gently until soft. Place in a jar and pour the syrup over and cover down at once.

**Apple Jam.**

Take four pounds of apples, peel, core and cut into slices. Place in a preserving kettle with equal weight of sugar and corn syrup, the rind and juice of two lemons, 3-4 ounce of ground ginger and six cloves. Boil from one and a half to two hours. Five minutes before taking off add a large wineglassful of whisky or brandy. Put in stone jar and cover down. The spirit is not necessary unless the jam is needed for long keeping.

**Jam of Apple and Lemon.**

The expensive item now is, of course, sugar, but even so, this jam is worth making on the score of economy. To every pound of peeled and cored apples add 3-4 pound of syrup (equal weight corn syrup and sugar), and the rind (grated) and the juice of one lemon. First, stew the apples until they become a pulp, then add the syrup, lemon rind and juice. Cook gently for 45 minutes. The apples must be good cookers.

**Apple Jam.**

For every pound of apples peeled and cored add 3-4 pound of syrup (equal weight corn syrup and sugar), the juice and grated peel of one lemon. Place the apples in a jar standing in a saucepan of water and stew until the apples are tender. Put the mash in a stewpan, adding sugar and lemon peel, and boil gently until thick, then add the lemon juice and boil up again. Put the jam into jars in the usual manner.

## Make a Fireless Cooker.

A fireless cooker may be simply and economically made by any one with a sense of the "fitness" of things.

The materials consist of any good-sized box or bucket with a tight cover; packing material such as soft hay, excelsior, or sawdust; a metal or enamel bucket and sheet asbestos to cover it; the cooking vessel, which means any vessel with a tight lid, which will fit into the nest lining; cardboard to make the collar; a cushion made of denim or muslin; two separate discs—purchasable at a hardware store.

The food to be cooked needs only to be heated to the boiling point, packed away in the fireless, and left to cook. Cereals, meats, including roasts, soup, and dried fruit and vegetables will be more tender and will better retain their flavor and juices when cooked by the fireless method.

Complete directions for making and using the cooker, some precautions in using it, and recipes for dishes easily cooked in the fireless cooker are taken up in U. S. Food Leaflet No. 13, which may be obtained by writing Extension Service, State College of Washington, Pullman.

## Cheerfulness Counts.

To the Editor: There are so many things that happen every day that are really a benefit that I am at a loss to know what is the most helpful thing I have learned in my housekeeping during the last year. I think trying to be cheerful through my most difficult problems has helped me more than anything else. Then, too, I try to get through with my work as soon as possible so I will have time to read or do fancy work without something bothering me.

Here is a new way I have learned to cook potatoes: Pile on a serving dish or casserole six cups of well-seasoned mashed potatoes, beat one-half cup of heavy cream until stiff, add one cup of grated cheese and season with salt and pepper. Spread over potatoes, place in a hot oven and bake until cheese has melted and the cream is a nice brown.

MRS. VIRGIL GEREN.
Carmen, Idaho.

**Canning Conveniences.**

A clock for timing cooking processes.

Scales, graduated from one ounce to 24 pounds.

A record book in which to keep records of club member or housewife.

Plenty of clean wiping cloths.

A sharp paring knife for each person working.

Plenty of table room, pans and containers, buckets, etc.

**Apple Pancakes.**

Three well-beaten eggs, two cupfuls milk, one-half teaspoonful salt, two tablespoonfuls water, two teaspoonfuls baking powder, two tablespoonfuls melted shortening, flour to make a thick drop batter, two cupfuls finely chopped apples.

Mix the batter for the cakes and add the apples last. Serve with plenty of butter and spiced sugar or with syrup.

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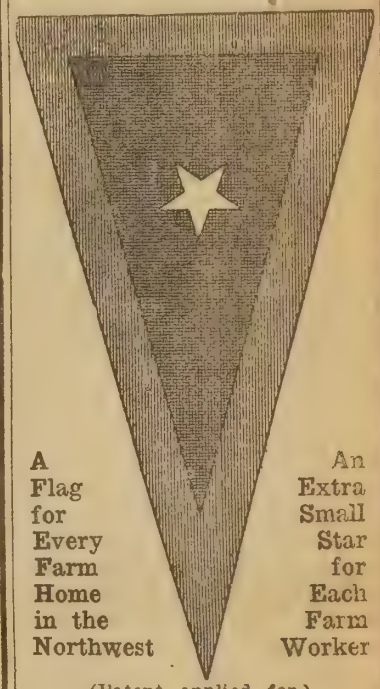
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## FARM SERVICE WAR FLAG




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A farm service war flag, 9x22 inches, made of cotton felt (just the thing for the auto, front porch or the flag pole), will be mailed postpaid to any one sending us TWO SUBSCRIPTIONS TO THIS PAPER. Secure two of your neighbors under our special bargain rates and receive a bunting "Farm Service War Flag."

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**Just What You Want**
may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.

# Patterns

2529—Dress for misses and small women. Cut in three sizes: 16, 18 and 20 years. Size 18 requires 5 3-8 yards of 36-inch material. The skirt measures about 1 7-8 yards at the foot. Price, 10 cents.

2367—Girl's dress. Cut in four sizes. Size 14 will require 4 3-4 yards of 36-inch material. Price, 10 cents.

2544-2534—Ladies' Costume. Waist 254 cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 will require 2 1-8 yards of 36-inch material. The skirt 2534 cut in seven sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. Size 24 requires 3 3-4 yards of 44-inch material. The skirt measures 2 1-4 yards at the foot. Two separate patterns, 10 cents for each pattern.

2525—Girl's dress with bloomers. Cut in five sizes: 4, 6, 8, 10 and 12 years. Size 10 requires three yards of 36-inch material for the dress, and 1 3-4 yards for the bloomers. Price, 10 cents.

2306—Girl's dress. Cut in four sizes: 8, 10, 12 and 14 years. Size 12 requires six yards of 36-inch material. Price, 10 cents.

2523—Ladies' combination. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 will require 4 7-8 yards of 36-inch material. Price, 10 cents.

2033—Play dress, with lower edge arranged for romper style. Cut in four sizes: 1, 2, 3 and 4 years. Size 4 will require 2 3-8 yards of 36-inch material. Price, 10 cents.

2526—Ladies' apron dress. Cut in four sizes: Small, 32-34; medium, 36-38; large, 40-42; and extra large, 44-46 inches bust measure. It requires 4 7-8 yards of 36-inch material for a medium size. Price, 10 cents.

2338—Girls' dress. Cut in four sizes: 2, 4, 6 and 8 years. Size 6 requires three yards of 36-inch material. Price, 10 cents.

2162—Ladies' two-piece house dress. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires for a 38-inch size 5 3-8 yards of 36-inch material. The skirt measures about 2 5-8 yards at the foot. Price, 10 cents.

2296—Ladies' dress. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 38 requires 6 1-4 yards of 36-inch material for the dress and 1 1-2 yards for the jumper. The skirt measures a little over two yards at the foot. Price, 10 cents.

2522—Girl's dress. Cut in four sizes: 4, 6, 8 and 10 years. Size 6 requires 2 1-2 yards of 36-inch material. Price, 10 cents.




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## Canning Terms Defined.

The following list of canning terms has been prepared by the United States department of canning experts to aid the beginner in recognizing the ordinary terms used.

**Scalding**—To dip in boiling hot water in order to remove the skin.

**Blanching**—To boil quickly in water by placing the vegetables in a cloth bag, which is to be lowered entirely under water. This is done in order to eliminate acids and bitter substances from the fruit or vegetables.

**Exhausting**—(Sometimes called parboiling). To boil fruit or vegetables for a few minutes in order to drive out of the fruit and container all gasses and surplus air and permit expansion before sealing the venthole. Exhausting is not practiced by all canners, but is important, especially when using the hot water bath outfit.

**Processing**—Means the same as sterilization, cooking or boiling. This is to completely destroy all bacteria, spores, germs, etc., in hermetically sealed cans and packages by hot water, steam, or steam pressure.




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My Dear Corner Children: The contest is ended and the names of the winners are given below, with the roll of honor. The roll of honor, you will notice, has grown, but with so many good letters it was hardly fair to have it so small. You have no idea how hard it is to decide between letters. I find a splendid letter, written by a girl of 14, and another not so good, of course, but very good for the age, written by a little one of six. I find a letter beautifully written, without a misspelled word or a fault of grammar, but it does not say very much, and another that is written with a lead pencil, scrawled hurriedly, full of mistakes, and still it is very interesting. So pity Aunt Nellie when judging letters is to be done.

Would you like to know what things count most of all in my judgment? While we learn a good many things in our Corner, still it isn't a school. I fear if it were a school, we should not have nearly as large an attendance. But it isn't a school and so, while good writing, neatness, correct spelling, good grammar and such things are considered, I think that for our Corner letters, other things come first. Evidences of great care in preparing a letter counts for a good deal with me; I like to see that my nieces and nephews try to improve; the letter that talks interestingly to us is the kind that I like, too; the letter that shows thoughfulness for others we all love; the letter that breathes patriotism (and nearly all of them do) is one that I read over again, and I know we all do.

I wished for about 30 of you to help me read and judge the letters. Nearly nine hundred of them, and every one must be read and graded carefully and always, after I have picked the prize winners out and the roll of honor letters, I find that instead of three prize winners I have eight or nine and about a hundred roll of honor letters. How I do hate to go over them and take them out! Sometimes I can hardly decide. But it has to be done. There is not one of you who may not win a prize, if you are willing to pay the price, not in money, but in taking care and writing from your heart.

What shall we have for subjects next time? How will these do? But if you think of better ones or ones that suit you better, you do not have to take these:

The most interesting thing in the world.
The hardest thing I have to do.
Which of the five senses is best?
The county agent.

And now, dear girls and boys, I have been here, being Auntie to you for a year and not deserting my post once. Tonight I am going to put on my hat and coat and take my suitcase and bag and bundles of all sorts and sizes and shapes, and I am going down to the train and away I'll go for a whole long week on my vacation. I'm going home. Some day I think you will know how I feel about it; now you are at home all the time and a vacation would be to get away and go somewhere else. But I haven't been home for a long, long time, and I think I shall have a lovely time. I do not know what I shall do all the time or just where I shall go, but you may be sure I shall not forget you—I wish you could all go with me. What a racket we would make, and think of buying 900 tickets and giving them all to one poor conductor. Maybe I shall go to the beach for a day or so, but I am not sure. There would be plenty of room for you all there on the sand.

But at the end of my week I'll be back again at my desk, reading your letters, and glad to get back. I hope you have a lovely time this summer, with work and play. Whatever we do, let us do it cheerfully and happily and just as well as we know how. With lots of love to you all.

AUNT NELLIE.

**PRIZE WINNERS.**

**Alice Clinesmith, Marengo.**

**Robert Austin, Walla Walla.**

**Margaret M. Kane, La Center.**

**SPECIAL.**

**Esther Peterson, Mead.**

**ROLL OF HONOR.**

Petro Johnson, Fragaria; Lawrence Barraford, Ferndale; Eugene Cannon, Dayton; Johnnie Neiderprum, Darrington; Graham Potter, Mead; Herman Abeling, Goldendale; Claire Beckwith, Elma; Marian Willey, Ferndale; Frances Cannon, Dayton; Leona B. Jacks, Raymond; Beryl Enid Adair, Monroe; Nettie Johnson, Friday Harbor; Hattie Wade, Nahcotta; Sallie Salena Garry, Miles; Leonard Theodore Johnson, Plum; Roy Seger, Yelm; Mabel Proctor, Wenatchee; Mollie Hergert, Penawawa; Marie and Mary Dallas, Seattle; Edwidge LaFond, Tumwater; Arnold A. Menger, Davenport; Nelda Killian, Birmingham; Marie Krom, Penawawa; Irene Alma Clark, Grand Dalles; Stella B. Erwin, Mead; Muriel Elaine Yetters, Bangor; Winnie E. Jones, Auburn; Dorothy Butz, Menlo; Helen Anderson, Olympia; Grace Tupper, May View; Phyllis ————, Keller.

**"Little Sunshine's" Story.**

Dear Aunt Nellie: I am writing on the subject "Sunshine." I have written to you several times and have subscribed for the Farmer for three years, so you may expect to hear from me again. I am 14 years old and my birthday is May 30. Our Corner is certainly growing. The sun was setting in a sky tinted with beautiful colors of light blue, pink and orange. The little sunbeam folks were all meeting to tell of their day's adventures. Ray, who was the first one there, said he had had the finest time. But before he had time to say anything more, little Sunshine came running up and every one always listened to her. She had big blue eyes and golden curls. "Oh," she began, "I've had the loveliest time today. The first thing I did this morning was to peep through the leaves of the trees and awaken all of the little birds. Then I called to the flowers and they began nodding their pretty heads. I crept to the windows of the farm houses next and awakened the little children. They were soon up and scrambling for their clothes. I went on and soon I came to a lone little cottage and looked through the open doorway. A little baby sat there all alone and tried to amuse herself with a cup and spoon. She was very happy when she saw me and I played with her until her mother came home. I hastened from there to the forest and seeking out the dark places cheered all the pale little flowers and ferns that grew there. Beyond the forest I came to a small building with only one window in it. Across this window were iron bars. I looked in and saw a middle-aged man sitting on a cot in one corner, with his head in his hands. He came to the window and looked out and it cheered him to see what a beautiful day it was. When I left he was still standing there. The last place I visited was a large, well-lighted room with rows of white beds in it. Whenever the little children there see me the roses appear in their cheeks and they are happier than they would be if the day was cloudy and I could not come. I am so glad I can help them." "And the little children are just as glad for you to help them," said the sun as she finished, " but come, it is time for those children to go to bed and they will not until we leave." So they all slipped quietly away behind the hills and the sky was beautiful as the bright colors slowly faded away.—Gladys May Plemon, Brubank, Wash.

**Makes Pretty Paper Flowers.**

Dear Aunt Nellie: I will try to help a little to make the Corner larger. I certainly wish it was larger, but hope it will grow and think it will. I have so much to write I don't know for sure if I can get it in one letter, but will try. It is very windy today. We live on a ranch of 320 acres. I love to live on a ranch. I would not trade places with a city girl for anything. I prefer the ranch. We get from 15 to 30 eggs a day. I have written to the Corner once before. I will describe myself: I am a little over five feet tall, have dark hair, gray eyes and a light complexion. I was 13 years old last February. I was born and raised to the age of 8 in Ohio, then came out to Washington. I like to typewrite and hope to get a typewriter soon. My mother is very small. She is not much taller than I. I am going to raise a garden this year. I can make paper flowers, such as roses, carnations, sweet peas, and can tat, crochet, knit and sew. Last night I made my big doll an apron. I had a fine time on April 1, which was April fool. I fooled many people and got fooled myself. I am in the sixth grade at school. My teacher's name is Miss Florence Foltz. I hope she will teach school next year. I go to Woldale school, district 13. We had a good time at school on St. Valentine's day—Margaret Thompson, box 71, R. F. D. 4, Ellensburg, Wash.

**Flower and Vegetable Gardens.**

Dear Aunt Nellie: This is the first time I have ever written to the Corner. I will be 13 years old November 3. Have I a twin? Is so I wish he or she would write to me. I can crochet, embroider and knit. I have one sister and her name is Ida. She wrote to Doris Miller, who is her twin. My brother is in Montana. His name is August. I have a dog. His name is Rover. We have a flower garden which we water by hand. We also have a vegetabble garden. We planted muskmelons, pumpkins, onions, radishes, lettuce, pink beans, white beans, string beans, and lima beans. Everything has come up nicely except the lima beans. We have 10 horses, three cows and four calves. The horses' names are Bell, Jack, Charley, Rock, Duke, Snip, Flash, Star, Ben, Dick and a little colt. The cows and calves have no names. I am in the sixth grade. Papa takes the Farmer and we like it fine. I wish some of the cousins would write to me. I will close for this time and if Aunt Nellie wishes I will write again.—Florence Crocker, Centerville, Wash. (We will expect another letter from our new Cousin Florence, so don't disappoint us, will you?—Aunt Nellie.)

**Two Uncles at War.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I hope it will not be the last time. I am 10 years old and my birthday is June 27. I was born in Tacoma in 1908. Have I a twin? I have blue eyes and brown hair. I live on an 80-acre farm and we rented 30 acres across the road. The name of our farm is Shady Grove farm. I have three brothers and one sister. My sister's name is Anna. She is 7 years old. My brothers' names are Jens, Oliver and Philip. Jens is 14 and Oliver is 13 and Philip is 2 1-2 years old. Three of us go to school. My biggest brothers work on the farm. I have two uncles at war now. I have joined the Junior Red Cross. I bought four war savings stamps for $16.56. We have five horses and seven cows. Our cows' names are Queen, Lady, Buttercup and Starlight, Rocelia, Midnight and Lorindia. Our horses' names are Prince, Nellie, Dick and Queen and Dolly. We have one cat and four kittens. We used to have one dog. His name was Jack, but he died. We have about 16 chickens and we have a lot of wheat this year, and oats and fruit. I will tell the Corner children some riddles: What has ears and can't hear? What has eyes and can't see? What is as black as an engine and has a tail on it? Low at both ends and high at the middle? What state is that? Our school let out May 17. We are only going to have two months' vacation. I have one-half of a mile to go to school. We live two and one-half miles from town. We have manual training every Friday for an hour and a half. I like the children's letters. I wish you would write some more letters.—Clarence Svinch, Route 2, Chehalis, Wash.

**What Ellen Does All Day Long.**

Dear Aunt Nellie: The subject of my letetr is what I do. I get up in the morning, dress, make lunches for six, eat my breakfast and sometimes help with the dishes. Then I put on my hat and coat, get my lunch and books, get in the stage and go to school. When I get there I take off my coat and hat, put my books in my desk, go out and play till the bell rings. Then I come in and we have singing. Then we have our reading and arithmetic. Then it is recess. In 15 minutes the bell rings and we go in and have geography and have just time to study our spelling before noon. I eat, then go to the post-office, then I play for about 15 minutes when the bell rings. We go in, have some singing, spelling and language. The recess bell rings and we go out and play. When the bell rings we go in and have our history. Then teacher reads out of book called The King and His Wonderful Castle. Then we are let out. I get my coat and hat on, get in the stage and go home. I sweep the floors, help get supper, eat, then my sister and I do the dishes. I study my lessons and then I go to bed. This is all that I do.—Ellen Secrest, Neppel, Wash.

**Has a Soldier Boy Doll.**

Dear Aunt Nellie: I am 7 years old and am in the third grade. Our school was out April 9. I have a pet hen that is setting. She will follow me all around until I feed her all she wants to eat, then she will go to her nest again. I have two dolls and a soldier boy doll that I like very much. I have two cats, Tom is 6 years old and Max is just a kitten. Tom catches mice and gophers and brings them to Max, who enjoys eating them very much. We have six horses, two colts, four calves, two cows, eight hogs, 75 hens and 145 little chickens. I have three sisters and two brothers. Trinna is the oldest and she is in Cheney normal. Edna is going to high school. Carolyn is cooking for papa and the boys, Curtis is 16 and is driving the drill. Allen is 10 and is driving the disk. Papa is building a fence. I help mamma work and read stories to her while she sews. I love to read the Children's Corner very much. Nora May King, Bonita, Wash.

**Sent Some Bottles Down Stream.**

Dear Aunt Nellie: Aunt Nellie, this is my first time to write. I live on the farm and I have a good time. I go to school. I am in the seventh grade. My teacher's name is Miss Alma Kitely. She is a good teacher. I am 13 years old and my birthday is November 24. I have seven brothers. Their names are Joe, Thomas, Frank, Henry, Willie and Louis. I have two sisters, Mary and Anna. I had another sister, but she died. I am knitting for the Red Cross and my sister is, too. My sister knitted a sweater. My father has a car. I have one horse. His name is Dock. One winter my chums and I sent some bottles down the stream, but I don't know whether anybody got them or not. I went coasting and skating this winter. I know a girl, Necia Hire, who said she wrote to the Corner. We have about 52 chickens and about 24 horses and five colts.—Agnes Celia Sophia Havlican, R. F. D. 3, box 16, Odessa, Wash.

**Hair and Eyes Are Brown.**

Dear Aunt Nellie: This is the first time I have written to the Corner. I am 8 years old. I was born March 3, 1910. I am the only child in the family, and I get awfully lonesome, sometimes. I go to school and I am in the second grade. My teacher's name is Miss Tinker. We have 16 pupils in our school. I belong to the Junior Red Cross. I can crochet and want to learn to knit. We have nine months of school. We have 22 horses and colts. We have five cows and two little calves and we have about 100 chickens and two geese, one dog, Jip, and two cats, Snowball and Tiger. We have two big pigs and five little ones. My hair and eyes are brown. Have I a twin?—Juanita Maston, Pullman, Wash.

**Peacock Struts Past the Window.**

Dear Aunt Nellie: I have been writing to my brother who is in the army at Camp Lewis, Tacoma, and now I am writing to you. I have another little niece named Leola Irene Venneberg. I should have told you in my other letter that we have a peacock and two guineas on our farm, too. Whenever the peacock gets hungry he will come up by the window and then we will have to feed him bread because he won't eat anything but that. He sometimes struts by the window. How many of the Corner cousins have seen a peacock strut? We get from 18 to 20 eggs a day. Mama is going to put them down in water glass to keep them for winter. It is very pretty in this valley where I live. There is a mill up above our place. They just ran it not very long ago. There was a mill up here before this one. It got on fire and we didn't know how it happened. We are going to work pretty hard this summer. Isn't this war awful? Can I still be a Corner cousin? I can tat and crochet but I can not knit yet. I crocheted a yoke for myself and I took it to the fair and got the second prize on it last fall. We have three cats and their names are Tabby, Tom and Skinny. Skinny is a little cat and is very cute. She does a lot of tricks, too, such as standing on her hind legs and fighting with Tabby. We have 10 calves to feed every morning and night. We have been shooting with my uncle's gun and I shot at the target that my brother George made, about four inches from the center, and all of the boys shot the rest. If I have a twin I wish they would write to me. How do you like my letter?—Luella Venneberg, Manson, Wash. (We are surely glad to hear from Cousin Luella. Come again soon. Aunt Nellie.)

**"Life by the Ocean Waves."**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I live on the peninsula with the ocean on the west and Shoalwater bay on the east. Whenever we get hungry for some mud clams we put on boots, take a shovel and bucket and go about six or seven hundred feet and begin digging. The clams have a black, hard, thick shell. The ocean is about two and one-half miles from our farm. When we want to go razor clamming on the beach we get up early, take the shovel and buckets and get in the car and start off so you can get there before the tide is coming in. The beach is covered with logs and boxes out to the hard sand and there are jelly fish, sea cookies and other things that come in with the tide. Every once in a while a whale comes in. I am in the seventh grade and am 12 years old. My birthday is March 22. Have I a twin?—Hazel Wade, Nahcotta, Wash.

**Knitted 20 Blocks for a Quilt.**

Dear Aunt Nellie: I have been reading the Children's Corner and enjoy the letters very much. I am going to describe myself so you will know who I look like. I was 13 last September 1, 5 feet one inch tall, red curly hair, brown eyes and fair complexion. I weigh 86 pounds. If I have a twin I wish she or he would write to me. I have five brothers and four sisters. Their names are Dortha, Velma, Grace, Gladys, Roscoe, Loyd, Cecil, Lester and Marvin. I have been going to school at Pleasant Valley, district 32, but our school is out now. Our school organized a Junior Red Cross last fall and worked all winter. I knitted 20 blocks for a quilt and all of us knitted five quilts.—Beulah Garner, R. R. 1, Rice, Wash.

**A Quilt for the Red Cross.**

Dear Aunt Nellie: This is my first letter to the Corner and I would like to join it. I am 8 years old and will be 9 years old August 23. I have one brother and two sisters. My brother's name is George. Have I a twin? If I have I would like to hear from her or him. I enjoy reading the Corner letters. We have an incubator and a brooder. We have a cow and one calf. We have seven pigs and one cat and 18 horses. My brother and I have a Shetland pony. His name is Captain. My school closed April 25. I live on 508 acres of land. We made a quilt at our school for the Red Cross. We had a Junior Red Cross at our school. I hope the Corner will grow.—Saloma Zier, Box 241, Odessa, Wash.

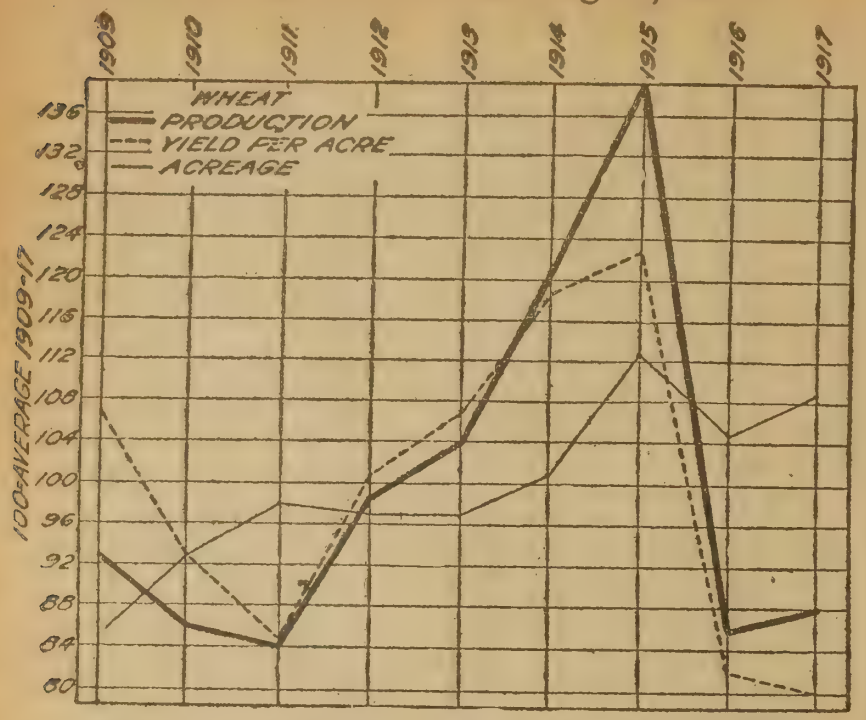
**Annie Writes to Us Again.**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I enjoy reading the letters. My letter was in print the first time. Every week I look for the Farmer. We have nine cows. Their names are Rosey, Goldey, Fanny, Minna, Lillie, Brownie, Beauty and Star. The heifer's name is Babe. We have four calves: Midgy, Bessie, Nancy and Buster. We have 24 little chickens and about 150 hens. Our cats' names are Snake and Frank. The dog's name is Bessie. I have blue eyes and brown hair and a light complexion. Have I a twin?—Anna Pearson, R. F. D. 3, Ferndale, Wash.

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During the past week Aunt Nellie has received letters from the following cousins: Agnes Boman, Zennie Stauffer, Agneta Brulin, Esther Phinney, Dorothy Phinney, Bertha Schoepke, Gladys Faulkner, Beatrice Smith, Jane Osborn, Mary Strand, Mary Teagarden, Philinda Frisk, Alice Watson, Lillian Litzenberger, Gladys Leak, Stella Lambert, Velma Johnson, Alice Knapp, Nellie Ruark, Anna Sanwick, Olive Cummins, Elizabeth Brown, Alma Fender, Bertha M. Lundberg, Lois Manchester, Hilda Thompson, Dornie Nowlen, Lena Nowlen, Malvina Benner, Evelyn Olsen, Pearl Olsen, ——— Chalenor, Bessie Ross, Sophie Havlicak, Alice Gronewald, Esther Jensen, Eunice Martin, Ruth Zwaschka, Orleana Easterling, Adeline Thompson, Ruby Brown, Irene Pearson, Anna Blanche Chambers, Violet Dingerson.

# Yield Per Acre Is Dominating Influence




The valuation in total production of a crop in one year as compared with another is due to change of acreage or to change of yield per acre. Of these two factors the yield per acre is the more important, says the Monthly Crop report of the department of agriculture in considering the yearly fluctuations in production in the United States.

This fact is shown graphically in the accompanying chart, not only for wheat production, but for other leading crops, such as hay, oats, cotton and so on.

## Write for Information.

The readers of this paper are again reminded that a great information bureau is maintained for them at Washington, D. C., the national capital, and that it will serve them free of all charge except postage. It is maintained as one of the means this paper takes of serving its subscribers. If there is any question upon which you desire information, simply write to the address given below. If you want a personal letter in reply, enclose a 3-cent postage stamp but no other money. No pay is asked or accepted for the service. If you want any one of the bulletins or pamphlets that the bureau has on hand enclose a 2-cent stamp but no other money. Here are some of the booklets that you may receive:

Book on Canning.
"German War Practices."
Book on Colds.
Garden Book.
Book on Knitting.
War Cookbook.
Book on Navy.
Book on Drying Fruits.
Book of Recipes.
Bread Book.
"How War Came to America."
Book on Household Pests.

Don't address your inquiry to the state office of The Farmer, but be sure to address it as follows:

**THE WASHINGTON FARMER INFORMATION BUREAU, Washington, D. C.**

# To Have Heros' Corner

Through the bureau of navigation the navy department is now collecting photographs of all men of the service who have lost their lives in service against the enemy. To perpetuate the memory of these men who have made the sacrifice their pictures are to be preserved in the various training stations of the country. Secretary Daniels has requested that these photographs be sent to the department by the next of kin.

As rapidly as these pictures are received copies are made and the originals returned to the owners. A photograph of each man is then forwarded to the training station where he began his career in the service. There, a memorial gallery of honor or a hero's corner is formed so that for all time the faces of the men of the navy who have made the supreme sacrifice may be honored by the youths of the future sent to the station for training.

Relatives of men who have been lost in the present war who have not received requests for pictures are asked to mail them to the department for this memorial. All pictures should be securely wrapped after they have been marked with the name, branch of service and training station the young man entered after enlistment. These should be addressed to the Recruiting Division, Bureau of Navigation, Navy Department, Washington, D. C. When copied, the photograph will be returned to the sender with one of the copies.

## Depths and Areas of Oceans.

| Names | Greatest Depth in Feet | Area Sq. Miles. |
|---|---|---|
| Atlantic | 27,366 | 24,536,000 |
| Pacific | 30,000 | 50,309,000 |
| Indian | 18,582 | 17,084,000 |
| Southern | 28,200 | 30,592,000 |
| Arctic | 9,000 | 4,781,000 |

# Faces Feed Problem

(Continued from page three.)

he had been able to receive indicated satisfactory results, with a corresponding increase in the pork production in these districts.

W. S. Thornber of the Washington State college extension department urged upon hog producers that they feed only those things not valuable for human food; that they never try to raise hogs without pasture to carry them until finishing time, and that every effort be made to grow and fatten them on the cheapest food possible, even though it required a longer time.

Professor Thornber urged that the county agents prepare shows where the boys in pig clubs may compete with each other for honors. He also urged that the agents cooperate with the boys in marketing their pigs and that they instill the idea of community cooperation by assisting them in shipping cooperatively to market.

He presented figures showing that 1127 boys in the state of Washington were known to be raising pigs under the supervision of the state college extension department. Each of these boys has at least one brood sow and several of them have as high as three to five. Yakima county leads the number that have reported, with 116. The following is the way the pig club boys are distributed throughout the state by counties: Pend Oreille, 18; Spokane, 109; Asotin, 3; Garfield, none; Columbia, 6; Walla Walla, 34; Whitman, 52; Adams, 7; Lincoln, 3; Stevens, 66; Ferry, 2; Okanogan, 23; Douglas, none; Grant, 10; Franklin, 18; Benton, 89; Klickitat, 28; Yakima, 116; Kittitas, 2; Chelan, 42; Whatcom, 55; Skagit, 60; Snohomish, 48; King, 42; Pierce, 86; San Juan, 3; Island, 19; Kitsap, 6; Clallam, 4; Jefferson, none; Grays Harbor, 55; Mason, 3; Thurston, 22; Pacific, 19; Lewis, 53; Wahkiakum, 11; Cowlitz, 18; Clark, none; Skamania 5.

### Raise Hogs Here, Says Iddings.

Dean E. J. Iddings of the college of agriculture of the University of Idaho told the county agents that it was a mistake for the farmers of the Inland Empire to feel that hog production should be left to the corn belt of the middle west or that hogs should be grown in the west and finished in the middle west. He said that the Inland Empire has the natural advantages for the complete and successful production of pork, and urged that the industry be stimulated widely though conservatively. He urged that those beginning the hog business on a small scale should be urged to begin it along the best lines possible. Strictly first-class animals should be used as foundation stock, and the best known methods of handling and feeding should be followed. He expressed doubt as to the advisability of raising fall pigs, feeling that fall pigs required grain or other concentrated feed at a period in their lives when their growth should be made on pasture.

R. B. Bean, representing the United States reclamation service on the Tieton irrigated project of the Yakima valley, told of successful hog production in that section by the use of alfalfa pasture and a small grain ration. Mr. Bean urged upon all raisers of hogs that they provide clean quarters, with clean water and plenty of shade. A relentless war, he said, should be waged against vermin of all kinds, and he especially urged the necessity of feeding regularly and properly balanced rations.

E. F. Rinehart, field animal husbandman for the University of Idaho, told of conditions affecting the hog industry in southern Idaho, where much of his work is done. He expressed the conviction that farmers should always raise a little grain to supplement pasture. He especially recommended barley for this purpose. He also urged that a small ration of grain feed of some kind be given while the hogs were on pasture, and cited figures to show how a little grain increased the value of forage.

As a result of the conference of county agents, which was held under the auspices of the Spokane Chamber of Commerce, it is probable that the agents of the Inland Empire, including eastern Washington and northern Idaho, will at an early date form an Inland Empire county agents' association. The meeting at Spokane was of much value to the agents, as it enabled them to discuss numerous problems together and approach solutions for them. A resolution was adopted thanking the Spokane Chamber of Commerce for making possible the conference. The agents were the guests of the chamber at a noonday luncheon on Friday, following which the discussions of the morning session were continued.

## New Dairymen's Association.

As a result of a dairymen's meeting called some time ago by the Grays Harbor county agricultural council, a dairy organization to be known as the Grays Harbor Dairymen's association, has been organized at Satsop, Wash. This association was formed on invitation from the United Dairy association of Washington, which has for its purpose the upbuilding of the dairy industry in this state. It has 150 members. Directors have been elected as follows: W. F. Darby, Montesano; W. J. Wharton, Satsop; Ransom Minkler, Elma; Lee Foster, Satsop; David Dey, Porter; E. E. Sweitzer, Oakville; J. Porter, Porter; O. M. Gordon, Summit, and John Murphy, Montesano.

Mr. Ashur Hobson, state director of farm markets, assisted the organization, by request from the farmers.

## System and Order Count.

To the Editor: I have learned that order and system count most in housekeeping. Also that when each member does his share toward keeping house, labor is lessened.

MRS. G. H. FULLER.
Caldwell, Idaho.

### Food on Transports.

Two hundred and ten thousand meals were served on a United States transport on a recent voyage. One hundred and eighty varieties of food were used in making up the menus, and this ship carried 750,000 pounds—3750 tons—of food. Flour, potatoes and beef were the three big features on the menu.




**SELDOM SEE** a big knee like this, but your horse may have a bunch or bruise on his ankle, hock, stifle, knee or throat.

ABSORBINE
TRADE MARK REG. U.S. PAT. OFF.

will clean it off without laying up the horse. **No blister, no hair gone.** Concentrated—only a few drops required at an application. $2.50 per bottle delivered. Describe your case for special instructions, and Book 8 R free. ABSORBINE, JR., the antiseptic liniment for mankind, reduces Painful Swellings, Enlarged Glands, Wens, Bruises, Varicose Veins; allays Pain and Inflammation. Price $1.25 a bottle at druggists or delivered. Liberal trial bottle postpaid for 10c.
W. F. YOUNG, P. D. F., 371 Temple St., Springfield, Mass.

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Cuts down high feeding costs—saves costly grain—balances the hog ration.
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contains valuable information to hog raisers.
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An economical, palatable concentrate increases the dairy's profits and makes profits.
**Cocoanut Oil Meal**
is a concentrate to be used as other concentrates. The animals like it and it does them and you good.
Ask your dealer or write direct.
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## News for Breeders

It is said that the community cattle breeding associations in Washington and Oregon numbered more than 100 in 1917. They are claimed to represent more than 100,000 head of cattle.

Joseph P. Cotton, head of the live stock department of the national food administration, has announced that hereafter the government will accept beef carcasses for army use weighing as low as 400 pounds. A movement is being made to get the British government to take like action. The food administration says that hereafter the condition of the animals offered will be first consideration. One in prime condition weighing 400 pounds would be preferable to one weighing more, but in less satisfactory condition.

George J. Cannon, who resides 14 miles north of Spokane, Wash., is a believer in good stock, though his principal business is not stock-raising. He has a small herd of good Berkshires, and has placed an order for a purebred boar with a New York breeder to head his herd. Mr. Cannon's idea of the utility cow for the average farm is reflected in his own stock. They are the kind that produce both meat and milk. When he has a calf that he does not wish to keep for either milking or breeding purposes, he can develop it for meat marketing. Another thing about Mr. Cannon is his policy of making friends with his stock. He goes up to them anywhere and they seem to enjoy a little chat with him.

The Breeders' Gazette says that the horse shortage is a reality, not a fiction. It says that there is a tendency for farmers to buy rather than raise their horses, and then argues that "one farmer can not buy a horse unless some other farmer bred a mare four or five years before and raised the colt." It is also pointed out that the only thing that delays large exportation of horses to the European battlefields is lack of ship space. Give us shipping space, says the Gazette, and farmers will have to compete against the allied governments when buying horses. It adds: "The breeder will profit by this condition."

## Herd Pasturing on Clover



The photograph above shows the Jersey herd of E. Jernstedt, near Carlton, Ore. Mr. Jernstedt purchased his foundation stock at the Bert Pease sale a few years ago. These cattle were of Ed Cary breeding and Mr. Jernstedt has used a Cary bred bull, a son of Rosaire Olga Lad, for a herd sire on both his purebred and grade cattle. He will soon eliminate all his grades and will then have a very high class Jersey herd. As soon as practical he will do official testing. Mr. Jernstedt pastures on clover until June. Then he turns the cattle in the orchard, which at that time furnishes fine pasture for about 15 days. He then cuts green vetch and oats until they are ripe enough for silage. Mr. Jernstedt feeds summer silage when pastures are dry. He gets better results than with poor pasture but not as good as with good pasture. For winter silage, however, Mr. Jernstedt says there is nothing so good as corn and he is depicting a good crop this year. H. A.

### Will Show Guernseys.

C. L. Hawley & Son of McCoy, Ore., will show Guernseys for the first time this year. It must be remembered that the son in this firm is still only a boy, but he is quite a dairyman and will be the principal showman. Mr. Hawley's hay crop is short and his rape crop is short, but his hay is of excellent quality and he expects to have his stock in good show condition, as every calf from his old herd sire, Gold Finder, is a show animal. Mr. Hawley will also exhibit a few Lincolns this fall and has a choice lot to pick from. H. A.

### Willamette Valley Jerseys.

Mr. and Mrs. George Connor of Albany, Ore., have 14 Jerseys on official test. All but two will go away over the requirement for the register of merit and they have a good chance to qualify, though the dry weather has a deterrent effect. All the Connor Jerseys are milked only twice a day and are stalled in rigid stanchions. Silage was fed until in June. Unfortunately the pastures are at their worst where the silage is gone. Mr. Connor has recently purchased a young bull, a son of Zamolia Nutwood, that has made a world's record for milk at 15 years old.

### Hundred Pounds Fat in Month.

To the Editor: I note in your recent issue an article entitled "Olson Has Honor Cow"—a native bred with the production of 96 pounds of fat. This is certainly wonderful for a native-bred animal, but it is not the highest in the state for April, as Goldie'e Nehalem Beauty, according to the reports of the American Jersey Cattle club, made over 100 pounds in April. CLIFFORD F. REID.
Portland, Ore.

**Cattle Killed by Road.**

A notice posted along the route of a certain southern railroad states that during 12 months 2792 head of cattle, horses and sheep were killed by the trains. This is the equivalent of one million pounds of food, and would be sufficient to feed 70,000 soldiers for 30 days.


## SHEEP

### SHEEP FOR SALE

Registered Shropshire, Oxfords, Lincoln, Hampshire and Cotswold rams; 50 head registered Shropshire ewes; 3000 stock ewes, Lincoln, Cotswold and Shropshire breeds; 500 ewes, lambs, Cotswold and Lincoln ram lambs. Write for prices.

**EARL WOOD.** **Silverton, Oregon.**

### SHROPSHIRE SHEEP

**Shropshire and Hampshire Rams**

Registered stock. Spring lambs and yearlings. No ewes for sale.
**GRANT B. DIMMICK, Oregon City, Ore.**

**SHROPSHIRE SHEEP.**
SHORTHORN CATTLE.

Choice yearling and lamb rams. A few high class young bulls.
**FELZER BROS.,** **Tangent, Ore.**

### CHESTER WHITE SWINE

REGISTERED
O. I. C.
**SWINE**

A few good gilts also choice young pigs. Write me. Ringgold Farm, J. H. West, Prop., Centralia, Wash., R. 1, Box 157.

### RED POLLED CATTLE

**Red Polled Cows**

Registered stock. A few head now offered for quick sale. Best for beef and milk.
**F. H. PORTER,** **Halsey, Ore.**

### HEREFORD CATTLE

**Highland Stock Farm**

offers for sale Hereford bulls, 1 or 2 years old. One or a carload.
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# Breeders' Department

## JERSEY CATTLE

### High Producing Jersey Stock

**Golden Maid's Prince,** sire of three Register of Merit daughters. One, beginning at 1 year 10 months, produced 341.27 pounds 85 per cent butter in one year; two junior yearlings, 480.40 and 450.08 pounds. Five more, over six months on test, will average over 600 pounds. He was grand champion Oregon State fair, 1913.

**Monmouth Noble**—4 Register of Merit daughters. Three 2-year-olds produced 482.10, 401.30 and 377.07 pounds butter, and one, beginning at 1 year 10 months, 427 pounds.

**ABOUT 25 HEIFERS**

From 8 months to 2 years old. Several to freshen this fall. All daughters of above bulls and nearly all out of Register of Merit cows. Heifers are well grown, typy, best of udders and some are extra fine show animals. Write for full particulars or call and see them. Will be sold very reasonably.
**WM. SCHULMERICK,** **Hillsboro, Ore.**

### From High-Producing Ancestry

Registered Jersey bull, eight months old, light fawn, from register of merit dam. Sire St. Mawes Noble. Good straight type. Price very reasonable.

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### DUROC-JERSEY SWINE

**OVER 150 SPRING PIGS.**

Sired by our grand champion Richards Defender, Richards Pathfinder and Cherry King Orion Jr., and out of our big type prize winning sows.

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Can furnish unrelated pairs. Satisfaction guaranteed or money refunded. Priced very reasonable.
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My herd contains the blood of old "Defenders," "Pathfinder," "Illustrator," and Burl's Good E. Nuff. Big type prize winning sows. Guaranteed to please.

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Some good spring litters Richards Defender and Pathfinder breeding; big type. Send out nothing but high class stock. Guaranteed to please. Write me for prices on these pigs.
**ERIK W. OLSON,** **Virginia, Idaho.**

**OTTO'S DUROC JERSEYS.**

Get in line for a real boar pig for Sept. delivery. Also gilts and sows bred and open. The kind that is up to date.
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**AVONDALE STOCK FARM.**

Registered Duroc-Jersey hogs. Inspection invited. Correspondence solicited.

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Boars and open or bred gilts of excellent breeding.
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Big type Poland China, either sex, for sale at all times.
**Wilson Bros., A. L. Wilson, Mgr.**
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Herd headed by Sammy (79833). Correspondence Solicited.
**Fruitland Stock Farm, C. Royston, Mgr.**
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**ROUND KNOLL RANCH NO. 3.**
Herd headed by Knoll Slope Colonel, assisted by Jolly Lad IV. Correspondence solicited.
**Bliss, Idaho.**

### BERKSHIRE SWINE

**Berkshire Hogs for Sale**

Have a number of sows, 18 months old; will farrow second litter this fall. Also young gilts and boars of all ages; all from prize winners. Write for prices.

**EARL WOOD.** **Silverton, Oregon.**

**Riverby Orchard Berkshires**

Riverby Orchard Berkshires won 12 out of 15 first prizes at the Washington state fair, 1916, also many prizes, including grand champion sow at the Panama-Pacific world's fair. We offer for sale a few good boars and young sows.
**D. C. BUNN,** **Prosser, Wash.**

**FOR SALE VERY REASONABLY**
or exchange, registered Jersey bull, Jonquil of Lebanon, 134649, dropped April 18, 1915. Also a yearling, Taurus of Lebanon, 155275, dropped Feb. 2, 1917. Both of these have good pedigrees.
**V. K. FROULA, R. F. D. 3, Lebanon, Oregon.**

## HOLSTEIN CATTLE

### 365-DAY HOLSTEINS

23,667 lbs. milk—1026 lbs. butter—is the 8 O. advance registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.

THE HERD WITH YEARLY RECORDS.
**WESTERNWOLD RANCH, Prineville, Ore.**

### HOLSTEINS

Steno Farm is now offering a few high class reg. Holstein bull calves. Out of ARO cows and sired by one of the finest bulls in the west. Priced right.

**STENO FARM,** **C. F. Williams, Mgr.**
Mead, Wash., R. No. 2.

**Registered Holsteins**

Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.
**H. R. BOOMER.** **New Plymouth, Idaho.**

### HOLSTEINS

Well-bred young bulls for sale.
**THOS. CARMICHAEL.** **Gaston, Ore.**

**REGISTERED HOLSTEINS.**

Bull calves for sale, with good A. R. O. backing.
**BEEBE BROS., R. F. D. 2, Rupert, Idaho.**

## GUERNSEY CATTLE

### ROSE CITY HERD

Yeksa, Gov. of the Chene, Sequel and May Rose strains. More prizes at Oregon state fair, 1916 and 1917, than any other exhibitor for number of cattle shown. A few choice animals of both sexes now offered.

**W. A. GOODIN,** **Cornelius, Oregon.**

**Yearling Guernsey Bull**

GOLD FINDER'S TITAN, out of imported dam; splendid milker. A sturdy, vigorous young bull, with strong individuality and splendid breed type.

**HAWLEY & SON, McCOY, Ore.**

## SHORTHORN CATTLE

### LELAND BROTHERS

Breeders of top registered Shorthorn cattle. Correspondence solicited.

**WENDELL,** **Idaho.**

**REGISTERED SHORTHORN COWS.**

Young bulls and heifers, sired by Scotch bulls; liberal terms.
**CALDWELL CATTLE CO., Caldwell, Idaho.**

## AYRSHIRE CATTLE

**EDGEWATER FARM**

Only one bull left, calved Dec. 14, 1917, with high producing dam; grand dam and great grand dam both world's record cows.
**ELBERT M. CHANDLER, Burbank, Wash.**

## ABERDEEN ANGUS

**Aberdeen Angus Cattle**

**A. H. EAGLESON & SONS.**
Boise, Idaho.

**In writing advertisers, be sure to say that you saw their advertisement in this paper.**

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, July 22.—Pronounced weakness developed in the corn market today owing principally to bearish crop reports and to big receipts. The close was unsettled, 1 7-8c to 2 5-8c net lower, with August $1.48 1-4 to $1.48 1-2, and September $1.49 3-4 to $1.50. Oats finished 7-8c to 2 1-8c off. In provisions the outcome ranged from 2c decline to 10c advance.

Field conditions for corn were almost ideal and arrivals of about 625 carloads here were far above the average for this part of the season. The market accordingly began to decline at the outset, but an unexpected scarcity of selling orders made shorts uneasy and led to covering, which lasted until mid-session and brought about material upturns. After the demand from shorts had become exhausted, however, the market weakened rapidly.

Oats reflected the action of corn. Rural offerings were larger and threshing advices favorable

Announcement of the placing of big orders from the government gave firmness to provisions and so, too, did higher prices on hogs

**Chicago Futures.**

| | Open. | High. | Low. | Close |
|---|---|---|---|---|
| Aug. .... | 1.50⅝ | 1.52⅝ | 1.47¾ | 1.48¼ |
| Sept. .... | 1.51⅝ | 1.53¾ | 1.49 | 1.49¾ |
| Oats— | | | | |
| Aug. .... | .69½ | .70⅝ | .67⅜ | .67⅞ |
| Sept. .... | .68⅜ | .69¾ | .67⅝ | .67⅝ |
| Pork— | | | | |
| July .... | .... | .... | .... | 45.50 |
| Sept .... | 45.00 | 45.00 | 45.50 | 45.50 |
| Lard— | | | | |
| July .... | 26.20 | .... | .... | 26.30 |
| Sept. .... | 26.25 | 26.30 | 26.20 | 26.70 |
| Ribs— | | | | |
| July .... | .... | .... | .... | 24.42 |
| Sept. .... | 24.75 | 24 85 | 24.72 | 24.72 |

**Cash Quotations.**

CHICAGO, July 22.—Corn No. 2 yellow, $1.70; No. 3 yellow, $1.60@$1.70; No. 4 yellow, $1.51@1.54. Oats, No. 3 white 77½@77¾; standard 77¾@78 1-4. Rye No. 2, $1.70. Barley $1.00@1.15. Timothy $5@8. Clover, nominal. Pork, nominal. Lard, $26.10@26.15; ribs, $23.90@24.50.

**Pacific Northwest Grain.**

PORTLAND, Ore., July 22.—Grain—July delivery: Oats, No. 2 white feed, $61 bid. Barley, standard feed, $53 bid. Barley "A" brewing, $54.50 bid. Thirty days: Oats, No. 2, $61 bid. Barley, feed, $53.50 bid. Barley, brewing, $54 bid. Eastern oats and corn in bulk: Oats, No. 3 white, $56 bid. Oats, 38-pound clipped white, $58 bid. Corn, No. 3 yellow, $68 bid. Corn, No. 3 mixed, $66 bid. Oats, No. 3, $56 bid. Oats, clipped, $57.75 bid. Corn, yellow, $68 bid. Corn, No. 3 mixed, $66 bid.

**Minneapolis Grain.**

MINNEAPOLIS, July 22.—Flour, unchanged. Shipments, 52,008 barrels. Rye, $1.84@1.86. Barley, $1.20@1.25. Bran, $24.45. Wheat—Receipts, 53 cars, compared with 166 cars a year ago. Corn, No. 3 yellow, $1.55@1.62. Oats, No. 3 white, 71 1-4@72 1-4c. Flax, $4.53@4.56.

## Live Stock Quotations.

**At Omaha.**

OMAHA, July 22.—Hogs—Receipts, 7500, 20c to 30c higher. Heavy, $18@18.40; mixed, $12.10@13.30; light, $18.10@18.50; pigs, $12@16.30; bulk of sales, $18@18.35

Cattle—Receipts, 9000; steady, 10@15c lower. Native steers, $12.25@13; cows and heifers, $12@13; western steers, $9.50@15.50; Texas steers, $9@12; cows and heifers, $7.50@11.50; canners, $7@8; stockers and feeders, $8@13; calves, $10@13.50.

Sheep—Receipts, 10,500; steady to lower; wethers, $12@13; ewes, $11@12.50; lambs, $17.25@18.50; yearlings, $13@14.

**At Chicago.**

CHICAGO, July 22.—(United States bureau of markets).—Hogs—Receipts, 33,000; good hogs mostly 10c to 20c higher than Saturday's average; others slow, 10@15c higher. Butchers, $18.45@18.90; light, $18.05@19; packing, $17.50@18.35; rough, $17.15@17.40; bulk, $17.90@18.85; pigs, good and choice, $17.25@18.

Cattle—Receipts, 22,000; good steers steady, very scarce, others and butcher cattle slow to lower; calves, 25c lower; beef cattle, choice and prime, $17@18.30; common and medium, $11@17; butchers' stock, cows and heifers, $7.75@14.50; canners and cutters, $6.75@7.55; stockers and feeders, choice, $10.50@13; inferior common and medium, $8.25@10.50; calves good, $16.25@17.

Sheep—Receipts, 15,000. Sheep and native lambs steady. Shorn range lambs higher; top natives, $18.25c; choice Idahos bid above, $18.50.

**At Portland.**

PORTLAND, Ore., July 22.—Cattle steady; receipts, 1300; steers, prime, $11.75@12.25; good to choice, $10.75@11.75; medium to good, $9.50@9.75; fair to medium, $8.50@9.50; common to fair, $5.50@8.50; cows and heifers, choice, $8@8.50; medium to good, $6@7.50; fair to medium, $5@6; canners, $3@5; bulls, $5.50@7.50; calves, $8.50@11.50; stockers and feeders, $6@8.

Hogs higher; receipts, 1150; prime mixed, $17.85@18; medium mixed, $17.65@17.85; rough heavies, $16.85@17; pigs, $15.75@16.25; bulk of sales, $17.75@17.85.

Sheep steady; receipts, 1600; east of mountain lambs, $13.75@14.25; valley lambs, $13.50@14; yearlings, $9.50@10; wethers, $8.50@9.50; ewes, $6@8.

**Spokane Stockyards, Monday.**

Hogs—Receipts 210, market strong to higher. Prime mixed, $17.40@17.60; medium mixed, $17.15@17.40; rough heavy, $16.15@16.60; pigs, $16@16.75; stockers and feeders, $14@16; bulk of sales, $17.50.

Cattle—Receipts 294, market weak, 25c to 75c lower. Prime steers, $11.75@12.25; good to choice steers, $11@11.75; medium to good steers, $9.25@10; fair to medium steers, $8@9; common to fair steers, $5.50@8; choice cows and heifers, $8@8.50; good cows and heifers, $6@7; common to medium cows and heifers, $4.75@6; canners, $3@4.75; bulls, $5.50@8; calves, $7.50@10.50; stockers and feeders, $6@8.

Sheep—Receipts 3300, market steady. Prime lambs, $14@14.50; good lambs, $12.50@13; prime yearlings, $8.50@9.50; prime wethers, $7.25@8; best mutton ewes, $5@8.

## Seattle Wheat.

SEATTLE, July 20.—The primary Coast terminal price of $2.20 against $2.26 at Chicago, fixed by the grain corporation, is causing a readjustment of conditions which will govern the wheat trade of Washington this year, according to statements of millers and grain dealers today. Millers state that it will be practically impossible for them to grind Washington wheat and sell their flour in competition with eastern manufacturers in the southeastern territory, which they invaded three years ago with telling effect.

It is expected that some Washington wheat flour will be sold in the southeast this year because of its preference for pastry, but no big volume of the past will be moved. California's terminal rate being the same as at Seattle, competition there will be difficult. Wheat in that state will be exhausted before the middle of the season and California millers will be compelled to buy either wheat or flour here. This will ease the problem of finding an outlet for Puget sound flour.

The government will buy on the open market, purchasing from the lowest bidder. Millers do not expect that as much flour will be needed for the allied armies as last year, and the government's purchases then were less than 50 per cent of the total output. There remains to the Coast millers only the markets of Alaska, Honolulu and the Philippines, and the oriental markets are being well taken care of by the Japanese.

There is a well-defined feeling among dealers that the government, en being assured that the wheat crop will be near to normal, will remove all substitute restrictions and open the flour and wheat distribution to commercial avenues entire.

It is expected that not only the wheat crop of Washington and Idaho, but 30 per cent of the Montana yield will enter through this port because of its superior loading and shipping facilities. Crop reports this week, as based on reliable field estimates by millers' agents, are more encouraging. It is estimated that this state will produce 45,000,000 bushels, with 55,000,000 for the three states. Not to exceed 10,000,000 bushels above 1917 is the expected yield for the three states. No blight or rust has yet appeared.

## Portland Market.

PORTLAND, Ore., July 22.—Two leading city creameries are in a butterfat fight and are paying as high as 53 cents at country points; where the competition is not so keen, the old price of 51 cents prevails. The local market on prints is unchanged. Cubes drag and the undertone of the market is weaker.

Egg receipts are falling off steadily and the market is moving up. As high as 47 cents is being quoted on selects With the laying season over poultry is coming in in large quantities and the market on hens is very weak. Veal receipts are also liberal and prices are weak with 16½ cents the top. Pork is steady at 23½ cents.

Oregon peach receipts are increasing, but the demand is good and prices hold up, ranging from 85 cents to $1.50, according to quality. New potatoes are in moderate supply and moving at 3½ cents

There was no valuing of wool the last week owing to the absence in California of Administrator Green, but small lots were distributed to the mills.

Eggs—Oregon ranch, current receipts, 41c; candled, 44c; selects, 47c per dozen.

Poultry—Hens, 23@25c; broilers, 26c; ducks, young, 30c; geese, nominal; turkeys, nominal.

Veal—Fancy, 16@16½c per pound.

Potatoes—New, 3½c per pound.

## Spokane Market.

With the arrival of two carloads of new potatoes from California Monday, wholesaling at $4.25 per hundred pounds, and the announcement that three more carloads are on the way, the threatened shortage of tubers in Spokane is being relieved.

"At this time it is usual for the Spokane market to depend largely for its potato supply on Walla Walla," said R. M. Rutledge, assistant in market surveys.

"This year that district has been unable to supply its own home demand, hence, the dislocation of the Spokane market."

**Peaches**—Rail arrivals unreported. Washington-Snake river district, boxes, Triumph, some unwrapped, $1.25; App Beauty, $1.25; Oregon, Freewater district, boxes, Triumph, few sales at $1.50.

**Apricots**—Arrivals unreported. Market steady. Washington-Snake river district, 4-basket crates, $1.75; small size, $1; peach boxes, medium size, $1.25. Wenatchee district, 4-basket crates, $1.75, few at $1.90.

**Cantaloupes**—No fresh arrivals reported. Market strong. California, green meat, unwrapped standard 45s, $5; pony 54s, $4.75; flats, 12s and 15s, $2.

**Blackcaps**—No fresh rail arrivals. Market steady. Home growns, 24-pint crates, $3.50.

**Radishes**—No fresh rail arrivals. Market steady. Home-grown, 25@35c per dozen bunches. Mostly 25c, few 40c.

**Raspberries**—Express arrivals, 21 crates, Idaho. Washington arrivals unreported. Market steady. Washington, Puyallup district, 24-pint crates, quality and condition good, $3.

**Dewberries**—No fresh arrivals. Market steady. Home growns, 24-pint crates, $2.50.

**Pears**—Rail arrivals unreported; market steady. Wash-Hoover district, Bartletts, $2.50.

**Plums**—Express arrivals, nine crates Washington; market steady. California: Four-basket crates, all varieties, $2.25. Oregon-Dalles district: Four-basket crates peach plums, quality and condition good, $2.00. Washington-Snake river district: Four-basket crates peach plums, $1.50.

**Tomatoes**—Express arrivals, 60 crates, Oregon; market steady. Oregon-Dalles district; Moving slow, 20-pound box No. 1, $3.00; No. 2, $2.50. California: Four-basket crates, repacked, $1.75. Washington-Yakima district: Twenty-pound box, $2.00. Freewater district: Twenty-pound box, $2.50.

**Peppers**—Rail arrivals unreported. California: Few sales; per pound, 15c. Washington-Snake river district: Quality and condition good; peach box, $1.00, $1.50.

**Wholesale Meats.**

**Beef**—Beef steers, 13½@20c lb; cow beef, 11½@15½c lb; heifers, 16½c lb; best loin, 25@30c lb; steer chucks, 11½@12½c; prime ribs, 22c lb; rump and round, 19c lb. round, 19c lb.

**Mutton**—Breakers, 21c lb; wethers, 20c lb.

**Lambs**—Diamond T. C. lambs, 28c lb; lambs, 27c.

**Pork**—Packer dressed hogs, 26@27c lb; pork loins, 31@32c lb; legs, 30c lb; shoulders, 25c lb; leaf lard, 28c lb; tenderloins, frozen, 40c lb; spareribs, 15c lb; country dressed hogs, with head on, 21c lb to producer; country dressed veal, 14c lb to producer.

**Smoked Meats**—Washington hams, 34c lb; T. C. hams, 35c lb; T. C. bacon, 48½c lb; Washington bacon, 39½@43½c lb; picnics, 24c lb; English bacon, 35c lb.

**Star Brand**—Hams, 35c lb; Shield hams, 33@34c lb; picnics, 24c lb; bacon backs, 25@34c lb; Star bacon, 46½@48½c lb; Shield bacon, 49@43½c lb; Simon Pure lard, $17.50 case; Shield lard, tierces, 26½c lb; White Cloud compound, tierces, 26½c lb.

**Dry Salt Meats**—Clear bellies, 26½@27½c lb; loin backs, clear, 27½c lb.

**Lard**—Tierces, 26½c lb; $13.99@14.74 case; Diamond T. C. pure leaf lard, $15.50 case, $7.90 half case; Snowcap compound, tierces, 23c lb.

**POULTRY.**

**Live Poultry**—Live hens, 18@20c lb; spring chickens, 28@30c lb; roosters, 12½c lb to producers, f. o. b. Spokane.

**GASOLINE, LINSEED OIL, ETC.**

**Gasoline**—Red Crown, bulk, 25c gal, cases, 35c gal; Shell, 25c gal; refined oil (Pearl), bulk, 14c gal, cases, 23c gal; Eocene, 15½c gal in bulk, cases 26½c gal; engine distillate, 17c gal, bulk.

**Linseed Oil**—Raw, bbl, $1.95 gal, cases $2.11 gal; boiled, bbl, $1.93 gal, cases $2.13 gal.

**Turpentine**—Bulk, 79c gal, cases 99c gal.

**White Lead**—Strictly pure white lead in oil, ton lots, 12¾c lb; 50-lb lots, 13¼c.

**Rice**—Fancy head, $7.50@9.50 cwt.

**Flour**—Bluestem, $9.40; Blend, $9.40; graham, $8.65 bbl., 49-lb. sacks; whole wheat, $8.85; eastern rye, $9.90; eastern rye meal, $10.30; oat flour, $12.15, 4 45-lb. sacks.

**Oats**—$67 ton whole, $70 rolled, delivered in city; steam rolled No. 2, $65 ton.

**GRAIN AND FEED.**

**Corn**—$72 ton; cracked corn, $74 ton.
**Barley**—Rolled, $70 per ton.
**Oil Meal**—$75 per ton.
**Hay**—Timothy, delivered, $37 by carlad; alfalfa, $30 per ton delivered, $29 by carload.

## Portland Wheat.

PORTLAND, Ore., July 22.—Millers are preparing to place mixed feed, or mill run, on the market in place of the bran, shorts and middlings heretofore sold. This mill run will contain all the above products and will sell at the fixed government price of $24.44 bulk net at mills in carlots. The sacked price will be about $31.25 or $31.50 at mill doors. The present best price on bran is $31 and on middlings and shorts $33.

Several cars of new crop wheat have been received. The mills are working on a small quantity of old wheat to supply local flour requirments.

The coarse grain markets are weak in sympathy with the declines east. At the local exchange, $61 was bid for sacked oats $56@58.50 for bulk oats; $66@68 for bulk corn; $53 for feed barley and $55 for brewing barley.

## Butter and Eggs.

PORTLAND, Ore., July 22.—Butter: prints extra 49@50; cubes extras 45½; prime first 44; dairy 33. Butterfat, Portland delivery: No. 1 sour cream 51.

SAN FRANCISCO, July 22.—Butter, 47@52. Eggs, fresh extras 48; fresh extra pullets, 45c. Cheese—young American not quoted; new firsts 24½.

CHICAGO, July 22.—Butter steady; creamery 38½@43½. Eggs, higher; receipts 13,913 cases, firsts 38@38½; ordinary firsts, 35½@36½; at mark cases included 35½@38.

**HOPS.**

NEW YORK, July 22.—Hops, quiet; state medium to choice, 1917, 35@43c; 1916, nominal; Pacific coast, 1917, 20@23c; 1916, 14@16c.

**COTTON.**

NEW YORK, July 22.—Spot cotton, quiet; middling, 33.15c.

**LINSEED.**

DULUTH, July 2.—Linseed, spot, 456; arrived, 440.


**CORN HARVESTER** Self Gathering for cutting Corn, Cane and Kaffir Corn. Cuts and throws in piles on harvester. Man and horse cuts and shocks equal to a Corn Binder. Sold in every state. Price only $25 with fodder binder. The only self gathering corn harvester on the market that is giving universal satisfaction.—Dexter L. Woodward, Sandy Creek, N. Y. writes: "3 years ago I purchased your Corn Harvester. Would not take 4 times the price of the machine if I could not get another one." Clarence F. Huggins, Speermore, Okla. "Works 5 times better than I expected. Saved $40 in labor this fall." Roy Apple, Farmersville, Ohio: "I have used a corn shocker, corn binder and 2 rowed machines, but your machine beats them all and takes less twine of any machine I have ever used." John F. Haag, Mayfield, Oklahoma. "Your harvester gave good satisfaction while using filling our Silo." K. F. Ruegnitz, Otis, Colo. "Just received a letter from my father saying he received the corn binder and he is cutting corn and cane now. Says it works fine and that I can sell lots of them next year." Write for free catalog showing picture of harvester at work and testimonials.
**PROCESS MFG. CO.,** Salina, Kansas.

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# Profits for the Farmer

## Will Check the Drift to Cities

There is a profound significance in the rise and fall of rural life. It was a dream of certain of the ancient Greeks that they could keep their citizens poor and compel them to live the simple life and thus retain that high courage, strong physique and simple virtue which would insure the stable and endless state. But they, too, like all the rest, bowed their stubborn necks to the sword of the conqueror and perished as an independent state.

The young life, the pioneer life of any people, is without much doubt the wholesomest and best. It is in truth "The Golden Age" of any race, which, just as in the traditions, is always in the past.

We are apt to err in trying to compare the small, isolated state of an earlier day with the great world-wide nationalities of today, with their minute divisions of labor and their complex civilizations. Man "does not live by bread alone," and the meeting of his wants, and his needs, too, requires functions which seem to preclude the simple organization, political and economic, which once may have sufficed.

Nevertheless, the maintenance of a large rural population is now and always will be of the highest importance to the stability and longevity of the state. Although "not by bread alone" is a wise dictum, yet nothing will create social and political unrest so quickly and so radically as the lack of bread.

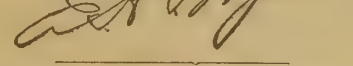
**Man, hungry, without the means of a supply, becomes a savage beast, and all social and political forms give way to his fury.**

The story of the rapid and dangerous movement from country to town, in America, belongs chiefly to the last 50 years. The census tells the story. Our census uses the terms "urban" and "rural," classifying as rural all those living in the open country, also those living in towns of 2500 population or less, and as urban those living in cities and towns of over 2500 inhabitants. This division, therefore, does not classify the farmer and all others, for in the village and small town, the merchant, the skilled artisan class, and the professions of law, medicine, the ministry and teaching are well represented in the smaller towns, and are in the class of consumers of agricultural products and are not producers.

The "urban" population has increased since our first census as follows: 1790, 3.35 per cent; 1800, 3.97; 1810, 4.93; 1820, 4.93; 1830, 6.72; 1840, 8.52; 1850, 12.49; 1860, 16.13; 1870, 20.93; 1880, 29.5; 1890, 36.1; 1900, 40.5; 1910, 46.3. In the hundred years constituting the 19th century, our urban population thus increased more than 1000 per cent, and our rural population decreased almost 500 per cent of the whole population. If one applies the correction to ascertain the truly agricultural population he is startled to ascertain that it is but barely over 40 per cent. And the conditions of life and the alluring profits which have led men from the country to the town, from farming to anything else, are still in full force and effect and the end is not yet. I am no prophet of evil and not a pessimist by nature or practice, but I say that unless this movement is checked, it spells disaster to our country.

The one positive check is profits. "What, not profits when the cost of all food stuffs is already so high?" "Yes, more profits to the farmer. Similis similia curantur. 'Like cures like,' as the homeopaths say." It is the only cure, and it will be effective if properly applied.

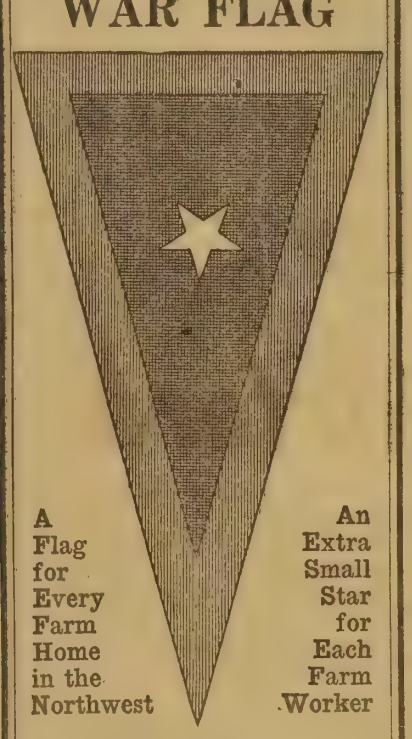
A square deal is what the farmer needs and is what he has not had. Will he get it? If he doesn't, we must send a few more lawyers to congress to get it for him.



**43 Bill Granted Rhode Island.**

The smallest bill against the state of Rhode Island to appear in the house was passed recently, the measure being a resolution for the payment of sundry accounts to a company amounting to 43 cents.


## FARM SERVICE WAR FLAG



A Flag for Every Farm Home in the Northwest

An Extra Small Star for Each Farm Worker

(Patent applied for.)

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**TEACHERS' AGENCIES 46**

TEACHERS REGISTER WITH B. F. WESTmore, Mgr. Hazard Teachers' Agcy. $1 registers you at three offices. 911 Old Nat'l Bank bldg., Spokane, Washington.

ALBERT TEACHERS' AGENCY, PEYTON bldg., Spokane. We need more teachers.

**HONEY, BEESWAX—Wanted. 58**

SEND SAMPLES OF YOUR HONEY AND beeswax; state quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

**EGGS and BUTTER WANTED 59**

WE ARE ALWAYS IN THE MARKET for good eggs and dairy butter. Send us your next shipment. Oregon Farm Products Co., 38 Halsey st., Portland, Ore.

**MISCELLANEOUS—FOR SALE 60**

SASH AND DOORS.

Let us mail you one of our large illustrated catalogues No. 27 of sash, doors, frames, building paper, prepared roofing, plaster board, paints, etc.

We make screen doors and sash covered with heavy 28-gauge galvanized wire.

Stock size screen doors, $2 and up.

Odd size screen doors, 20c per square foot. Screen windows and sash, 15c per square foot.

We sell any one. Ship anywhere, and guarantee safe delivery.

Direct from our factory to you.

O. B. WILLIAMS CO.
1943 FIRST AVE. SO. SEATTLE.

**MISCELLANEOUS WANTED 63**

CASH FOR OLD FALSE TEETH—WE CAN pay as high as $21.50 per set (broken or not.) Send at once—package held five to fifteen days, subject to owner's approval of our offer. Highest prices paid for old gold jewelry, crowns, bridges, platinum, silver. United States Smelting Works, Inc., 331 Goldsmith bldg., Milwaukee, Wis.

## Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

# Want Ads

**Send for card giving lower rates for ads running one month or longer.**

## How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

**JUNK SHOPS 90**

HIDES HIDES HIDES
Write for prices and shipping tags.
BUYERS OF ALL KINDS OF JUNK.
CENTRAL HIDE & JUNK CO., SPOKANE.

**MACHINERY—FOR SALE 93**

FOR FARM LUMBERING USE
"AMERICAN" PORTABLE SAWMILLS.
Carried in stock by
HIGGINS MACHINERY COMPANY,
312 1st ave., So., Seattle. Write for catalog.

**AUTOMOBILES 114**

FORDS CAN BURN HALF COAL OIL, ALL distillate, or cheapest gasoline, using our 1918 Carburetor; 34 miles per gallon guaranteed; easy starting; great power increase; attach it yourself; big profit selling for us; 30 days' trial; money back guaranteed; styles to fit any automobile. Air-Friction Carburetor Company, 321 Madison st., Dayton, Ohio.

**STOVE & FURNACE REPAIRS 126**

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

**HARES AND RABBITS 173**

"A FORTUNE IN RABBITS"—HAVE raised the price. We will pay to $8 per pair. Want you to raise them for us. Send stamp for particulars. H. E. Gibson Co., Arcadia, Calif.

RABBITS, RABBITS, RABBITS.
Help save the meat shortage. Raise New Zealand Reds. Young and matured stock. Mrs. E. H. Kurtz, Prineville, Ore.

**POULTRY 174**

YOUNG WHITE LEGHORN C'KLS FOR sale. $1.50. L. B. Lonquist, R. 1, Athol, Ida.

**LIVE STOCK 177**

THIRTY REGISTERED GUERNSEYS.
Owing to the unsatisfactory labor conditions, we have decided to sell 30 head of our Guernseys. This consignment consists of a few good aged cows in calf, 12 heifers, two years past, now on test, average production for May 1078.5 pounds milk. These heifers are bred true to type, nicely marked fawn and white and show splendid udder development; most all safe in calf and are from high producing dams. They are sired by LANGWATER EMIGRANT 14076. His dam has A. R. record of 13,352 lbs. milk, 625 lbs. butter fat. They are also granddaughters of imported KING OF THE MAY 9001. There are six heifers coming two, bred, six bull calves and several heifer calves, six months or under; also one bull of serviceable age, whose four nearest dams average 13,934 lbs. milk, 677 lbs. butter fat. These Guernseys are of the GREAT MAY ROSE FAMILY, are direct descendants of imported May Rose King and Dolly Bloom. This is the banner show herd of the northwest, having won first prize in get of sire, produce of dam and breeder's herd at the various fairs of Oregon and Washington, 1916 and 1917. These Guernseys are good specimens of the breed and are priced to sell. For further description and prices write
MIDDLEDALE FARMS, GOSHEN, ORE.

REGISTERED HOLSTEIN BULL FOR sale. Price $150. Dam, Janie Baroness, sire, Buffalo Duke Doede, a half brother of Dutchess Skylark Ormsby; will be 3 years old Oct. 7; a sure breeder and a good disposition. Bernard Allhands, Gilmore, Ida.

BERKSHIRE SPRING PIGS OF CHAMpionship breeding for sale at reasonable prices. Send for circular giving description and price. R. W. King, Sweetwater, Idaho.

REGISTERED O. I. C. SWINE; BREEDING stock for sale. C. I. Ballard, Rickreall, Ore.

1 HAMPSHIRE BOAR OF SERVICE AGE Weanling pigs. Tuttle Bros., Asotin, Wash.

SHETLAND PONIES; BARGAIN PRICES. Write for list. N. C. Sorenson, Onalaska, Wn

**HOTELS 306**

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water. 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

GALAX HOTEL; NEW AND MODERN; 75C and $1. Main and Bernard, Spokane.

**FAIR PREMIUM LISTS 370**

SOUTHWEST WASHINGTON FAIR, AUG. 26 to 30, 1918. Premium list now ready. Write G. R. Walker, Secy., Chehalis, Wash.

SPOKANE INTERSTATE FAIR AND LIVE Stock Show, Spokane, Sept. 2-7. Premium list now ready. Write W. L. Tennant, Secy., Spokane.

WASHINGTON STATE FAIR, SEPT. 16-21. Premium list now ready. Write Frank Meredith, Sec'y, Yakima, Wash.

TWIN FALLS COUNTY FAIR, OCT. 1-4. Premium list now ready. Write J. M. Markel, sec'y, Filer, Idaho.

**RUBBER STAMPS and SEALS 384**

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

**ARTIFICIAL LIMBS 424**

SCHINDLER ARTIFICIAL LIMB CO., 8115 Wall st., Spokane, Wash.

**FURRIERS 429**

ALL KINDS RAW FURS—MOLESKINS, rabbit skins, goat skins; hides and skins bought and sold. Lipshitz, 774 Grove st., San Francsico, Cal.

**BUSINESS OPPORTUNITIES 510**

SPLENDID OPPORTUNITY TO ENTER retail automobile accessory business; good location and cheap rent; business established. D 9, Farm Trio, Spokane.

**PLUMBING, STEAM FITTING 594**

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 272 3d st., Portland, Ore.

**SEEDS 620**

WE SPECIALIZE IN TIMOTHY, ALFALfa, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Ida.

**FARM LANDS—FOR SALE 651**

A BIG LAND OPENING.
COWS, HOGS, AND A BANK BOOK.
Your dream of life, of ease, comfort and independence await you at
BIRMINGHAM,
On Port Susan Bay, Snohomish County; 6000 acres of the best land that lies out doors; a 2 hours' ride from Seattle places your feet on the richest, most productive soil in the whole state of Washington; rail and water transportation; near paved roads, schools, churches, cannery and condensery; 3½ miles of waterfront and finest beach on Puget Sound; 20 miles of beautiful lake shore, surrounding 8 picturesque lakes; these lakes teem with trout Get in on the first choice for $35 per acre and up; 10 yearly payments, 6 per cent interest.
This is but the beginning of the story of Birmingham. Send to the owners for illustrated literature. BROWNELL LAND CO., 904 Third ave., Seattle, Wash.

EASY TO PAY FOR GOOD LAND AT $40, ON TERMS OF
$1 CASH PER ACRE.
50C PER ACRE MONTHLY.
Interest on deferred payments 6 per cent. BUY 20 acres or more at $40 an acre on the above terms, in LEWIS COUNTY, south of CHEHALIS, on the main double track line between Seattle and Portland, the N. P., the G. N. and the O.-W., the best transportation in the state.
FINE, LEVEL LAND, SILTY CLAY SOIL, NO ROCK, NO GRAVEL, CLOSE TO RAILROAD AND PACIFIC HIGHWAY, LEWIS COUNTY, SOUTHWEST WASHINGTON. FREE CIRCULAR. Write to
DAVID P. EASTMAN,
1024 THIRD AVE., SEATTLE.

9 MILES FROM CENTER OF SPOKANE. 70 acres; on paved Appleway, Spokane valley; 30 minutes' ride on electric R. R.; station on place; finest black loam soil; private well for irrigation; 50 acres cultivated, balance natural sod; road on all sides; no buildings. Price $12,000. Will take $5000, other real estate. Your own terms on balance, 6 per cent. Absolutely in choicest district. Best located tract in Spokane valley. If you see this, you will want it. Don't delay.
HOUSE AND LAND ASSOCIATION.
514 RIVERSIDE. MAIN 3079.
SPOKANE, WASH.

480 ACRES IN SHIELDS RIVER VALLEY, wheat and hay farm; good water right; 98 per cent tillable; 300 acres broken; running water; large barn, 3 granaries, chicken house, hoghouse, garage, frame house; schoolhouse on same section; telephone, mail route; 8 mi. from R. R. town. Price $50 per acre. Easy terms. Write owner, Guy T. McBane, Wilsall, Mont.

155 ACRES; SIX MILES N. W. MT. HOPE, Wn.; 17 miles Spokane; 115 a. cultivated; 130 tillable, balance timber; orchard, 7-room house, fair barn, good water; I am going into service, will sell for $10,000, $3000 cash, balance time. Write me quick. This is a snap. Place adjoining sold for $100 per acre recently. Owner, Box 42, R. 2, Fairfield, Wn.

SON HAS JOINED THE COLORS; MUST sell my 280-acre Pend Oreille valley farm; 100 acres timothy and clover meadow, balance in crop; no rocks, no stumps; 3 miles to town; splendid new set of buildings; new and full complement of implements, horses, hogs and cattle. Write A. Schumacher, 2901 Trent ave., Spokane, Wash.

CALIFORNIA.
Buy a farm in sunny, prosperous California. All about land, soil, market, crops, dairy ranges. Send 25c for one year's subscription to Farm and Irrigation (illustrated) Magazine, Dept. F-18, Mysell bldg., San Francisco.

IDEAL SHEEP OR STOCK RANCH.
80 acres; in Nevada; with excellent outside range; fine location and good improvements; a bargain worth investigating. Address Dr. W. F. Boyman, owner, Amos, Nev.

ONE OF THE CHOICEST RANCHES ON Coquille river; 130 acres bottom; 375 acres of hill. Dairying or stock. Address the owners, Sweet Bros., Lampa, Ore.

190-ACRE TRACT 3½ MILES WEST OF Monmouth; good stock ranch. For particulars write Mrs. E. Clarke, Monmouth, Oregon.

240-ACRE DAIRY OR STOCK FARM; 2½ miles from Blodgett, Benton county. Mrs. E. Clarke, Monmouth, Ore.

FOR SALE—160-ACRE IMPROVED FARM; 35 acres tillable; bargain. Route 1, Box 19, Brewster, Wash.

**FARM LANDS—WANTED 654**

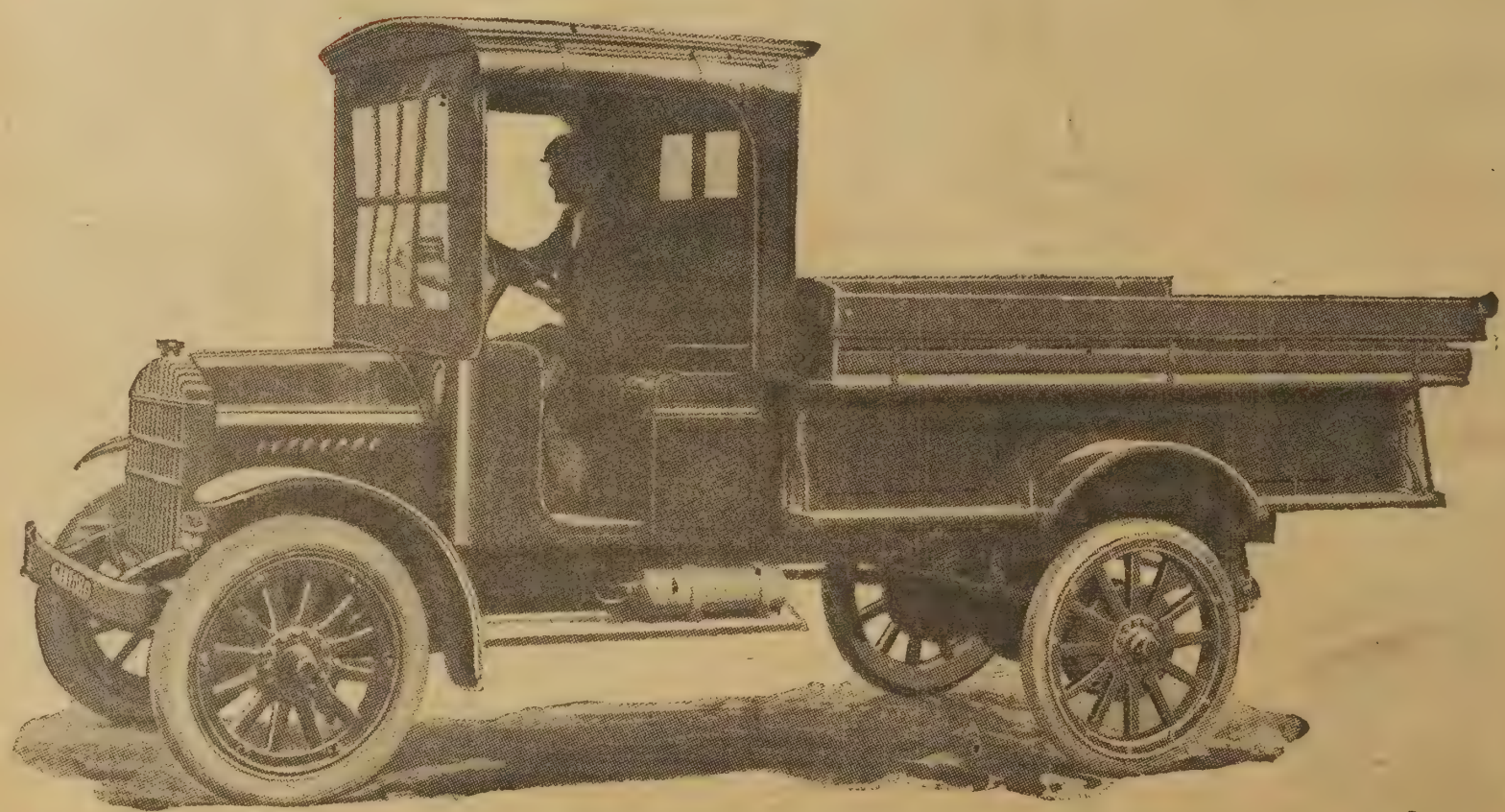
I WANT TO HEAR FROM OWNER OF farm or unimproved land for sale. Mrs. W. Booth, Pulaski, Iowa.

**FOR SALE OR EXCHANGE 702**

FOR SALE—160 A. MONTANA WHEAT land. Would exchange for logged-off land of equal value near Spokane. A. B. Gaylord, owner, Roundup, Montana. No agents.

**In writing advertisers, be sure to say that you saw their advertisement in this paper.**

# Garford MOTOR TRUCKS



## A Farmer Recommends Garford

The Garford Motor Truck Company, Lima, Ohio.

Gentlemen: We are glad to recommend the Garford Motor Truck. We have been a user of this motor truck for nearly a year and have had no expense whatever, except for oil and gasoline.

We use it to haul farm products to Baltimore. In busy season it is on the road every day. It is a ton truck and I have hauled 60 bushels of potatoes in one load, going to the city in less than an hour. We live 16 miles from the city.

I am glad to know that you take an interest in the motor trucks after they are in the hands of the user.

We are well satisfied with our Garford, and it has given us satisfaction in every respect. It is well built and runs nice and smooth as a touring car.

The Garford Motor Truck is just what the manufacturers claim it to be, a good "Motor Truck."

PETER ROHDE.
Farm Products. Millersville, Ind.

**GARFORD MOTOR TRUCK CO., Inc.**
1701-1711 Broadway, Seattle

**WESTERN TRUCK & TRACTOR CO.**
1201 Sprague, Corner Jefferson, Spokane

*Washington Distributors*

*There Is a Garford to Fit YOUR Need—Write Us*
*Address Dept. 703*

## The Garford Motor Truck Company, Lima, Ohio

Manufacturers of Motor Trucks of 1, 1 1-2, 2, 3 1-2, 5 and 6 Ton Capacity. 4 1-2, 7 and 10 Ton Tractors. The Garford Road Builder.

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Kansas City, Boise, Canton, Portland, San Francisco, Columbus, Cincinnati, Chattanooga,
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NOTICE TO READERS: When you finish reading this paper, place a U. S. 1-cent stamp on this notice, mail the paper and it will be placed in the hands of our soldiers or sailors destined to proceed overseas. NO WRAPPER. NO ADDRESS. A. S. Burleson, Postmaster General.


# THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

VOL. XLI. NO. 31. AUGUST 1, 1918. ** WEEKLY.




# Harvest Is On

## Northwest Yields Vary Widely

Harvest is rapidly getting into full swing throughout the northwest and the results are about as predicted. Some sections are reported to be yielding fair crops while others are almost failures. For the northwest as a whole the yield is probably about half normal. Probably the best report comes from the Lewiston, Idaho, section, which draws its wheat principally from the Grangeville and partially from the Moscow and Genesee districts. The yield in those districts is claimed to be almost up to normal and the increased acreage over previous years is believed to be bringing the total output to even above normal. The showers of the last few days have served about Moscow, Genesee and Grangeville to add considerably to the yield of the late grains.

Reports from Walla Walla, Wash., indicate fair yields, some fields going as high as 25 to 30 bushels to the acre. In the foothill districts of the mountains some yields are going as high as 40 bushels to the acre, but yields are low in the lighter lands.

Reports from the Winona and La-Crosse section of Washington indicate wheat running something like 10 to 15 bushels to the acre, though some fields yield higher than this and others lower.

Ritzville, Wash., reports wide variance in the yields, some fields being hardly worth harvesting and others producing from 15 to 25 bushels to the acre. A report from Colfax indicated that the yield of the Palouse country may average somewhere around 18 bushels, though it is a little early as yet to give definite figures on that section.

The Big Bend country is reporting wide differences in yields. Many crops are considered scarcely worth harvesting, while others yield 15 to 20 bushels.

# Crop Yield Very Light

OTHELLO, Adams county, Wash., July 20.—Looking at the crops in this vicinity, one would feel as though it was a total failure. The spuds failed to materialize and none will be dug. Combines are cutting some fields and the yield is from one and one-half to three bushels per acre, and the combines in use are mostly of the two men size. It is rumored that there will be no threshing machine start here as the fields that are being cut and put in stacks have without exception only one stack in a field.

When a man puts 320 acres in one stack it is going pretty near the raw edge of nothing. There is plenty of labor to care for all the work, and farmers are exchanging work. There is going to be a great shortage of feed here if snow comes early and the stock will have to rustle their


**Kill the Lice**

Lee's Lice Killer.
Lee's Louse Powder.
Will Do It.

Write for Lee Booklet.

**Spokane Seed Company**
Poultry Supply Dept.
Spokane, Wash.



***I Am Interested***

and ask you to mail to me full information and

***FREE BOOKLET***

describing the possibilities of Stevens county logged-off lands.

Name ..... ..... .....

Address ..... ..... .....

CUT OUT THIS COUPON

and the booklet and information will be sent to you by return mail.

***Phoenix Lumber Co.***
Farm Dept.,
SPOKANE, WASHINGTON


IN my letter to you this morning which contained 50 cents for three years' subscription to The Washington Farmer, I overlooked the offer of the farm service war flag. I would like one very much. Would you please send one to me?

J. B. CASE.
White Salmon, Wash.

living amoung the thistles. Some are talking of putting up thistle hay during August, and a ton of it is far better than a snow bank.

A. O. LEE.

## BEETS A HALF CROP.

### Yakima Fields Not Total Failure.

Contrary to reports that were recently sent abroad the sugar beet crop of the Yakima valley will produce a yield well worth caring for this season. Owing to the unusual drouth and hot weather, it appeared for a time that the beets were so seriously damaged as to render many fields worth no further cultivation and irrigation. But later reports indicate that they have revived to considerable extent and it is now predicted by C. B. Wood, county horticulturist, that an average yield of 12 tons to the acre will be harvested throughout the valley. This is only about half a first class crop. Some of the crops that were sown early will be approximately as good as last year, it is stated.

## PEA CROP SHORT.

### Seed Should Be Saved This Year.

The shortest garden pea crop in years is apt to be the net result of this year's activities. Lack of sufficient soil moisture at the critical growing time, together with aphis infection probably not equaled in 15 years, accounts for the shortage. Two practical conclusions suggest themselves to the farm family fortunte enough to have anything like a normal crop: First, can or dry all the peas possible for this winter's use; and second, save seed from the best producing vines for next year's planting.

## Australia Has Much Wheat.

The national food administration has received information showing that nearly 300,000,000 bushels of wheat are stored in Australia at the present time. The total guaranteed price to the farmer in Australia is 95 cents a bushel, it is stated. The Argentina guaranteed price is $1.44. With the increase in shipping, due to the tremendous efforts made by this government and the other allies, it will be possible for much of the Australian wheat to be transported where needed by the allied army, but at the present time comparatively little of it is being transported, because of inadequate transportation.

## *Clip This Order Blank*

Address all communications concerning thrift or war savings stamps to The Washington Farmer, War Savings Department, Room 26 Review Building, Spokane, Wash.

Remittances may be in any form desired, including personal check.

The Washington Farmer, War Savings Department, Room 26 Review Building, Spokane, Wash.

Gentlemen: I wish to invest in

.... U. S. government thrift stamps (number desired) at 25 cents each.

I wish to invest in ..... U. S. (number desired) war savings stamps at $4.19 each. (August figure)

Amount enclosed $.....

Full name .....

Town ..... State.....

R. F. D. No. .....

I have already bought..... (kind of stamp)

stamps and have a..... (card or certificate)

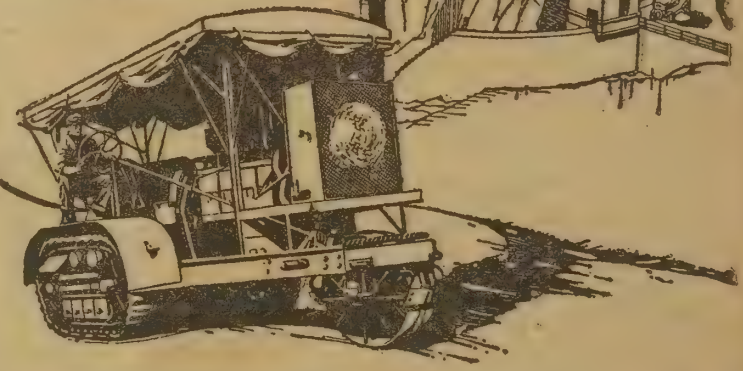

**Builders of Prosperity**

The great irrigation project adds to the country's wealth by making arid land fruitful. The "Caterpillar" Tractor achieves a similar result by providing cheaper, more efficient power for cultivation. Both are builders of prosperity.

Cheaper, more efficient power means bigger profits, less work, less worry. The "Caterpillar" Tractor excels in this respect because of correct design, correct construction, correct choice of materials, backed by thirty-five years' manufacturing experience. These make the "Caterpillar" Tractor a most profitable investment.

The Holt Manufacturing Co. Inc.
SPOKANE

CATERPILLAR
Reg. U.S. Pat. Off.

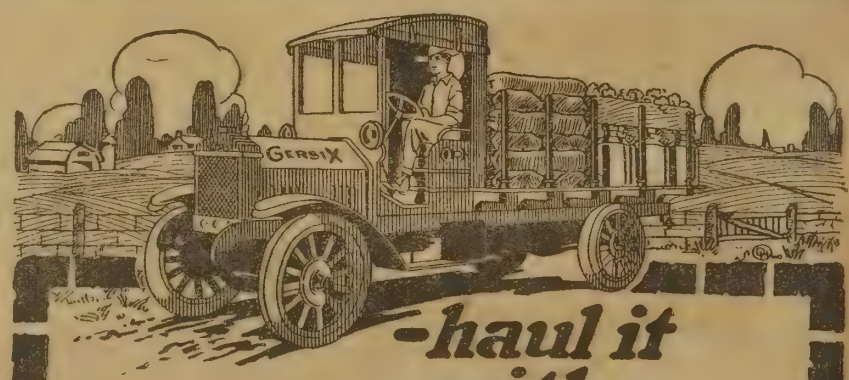




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"Gersix" stands for SERVICE INSURANCE. You can depend upon the sturdy Gersix for Strength, Economy, Ease of Operation and Durability. All parts are standardized—Colla Transmission, Six Cylinder Buda Motor, Ross steering gear, Willard batteries, and Westinghouse electric starting and lighting system.

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Sold on convenient terms to meet each individual requirement.

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Gersix Manufacturing Company, 2626 Fifth Ave., Seattle.
Gentlemen—Please send me Free Folder of Description.

Signed .....

Address .....

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 31 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF August 1, 1918

## Increase Fall Wheat Acreage

### *Maximum Production Is Urged by Government*

The farmers of the United States are asked by the government to sow 45,000,000 acres of fall wheat this year. This is an increase of about 7 per cent over last year's acreage, when the fall wheat sown was 42,170,000 acres.

Northwestern farmers are asked to increase last year's fall acreage as follows: Washington from 422,000 to 754.000 acres, an increase of 80 per cent; Idaho from 302,000 to 377,000, an increase of 25 per cent, and Oregon from 562,000 to 590,000, an increase of 5 per cent. Montana is asked to duplicate last year's acreage of 775,000 acres without increase. These acreages are the least that are required, and the government is anxious that they be increased in all cases possible. The increase asked of the state of Washington is the largest percentage of any state. Iowa is next with a requested increase of 31 per cent. While the minimum acreage urged for the entire nation is 45,000,000, it is hoped by the department of agriculture that this will be increased to 47,500,000 when actual planting is done.

From the smaller acreage a harvest of 636,000,000 bushels might be expected, it is estimated, and from the larger acreage 667,000,000, based upon an average yield of 15.7 bushels an acre and an abandonment of 10 per cent of the area sown on account of winter kill. The plan fixes definite acreages by states, and in a campaign to be launched immediately by the department, the state agricultural colleges, farm organizations and leading farmers throughout the country, growers will be asked to make good their state quotas. The recommendations regarding the planting of spring wheat and other spring crops and regarding live stock will follow later.

In announcing its wheat production program the department considers the growing needs of this country and its allies for this essential food. The last crop report forecasted a 1918 harvest of 890,930,000 bushels of winter and spring wheat.

Although this forecast is gratifying, it is pointed out that the reserve supply or carry-over of wheat this year is practically exhausted and is the smallest on record. The need of building up reserves of wheat is evident. It is pointed out that although this country produced a small wheat crop in 1917, the total exports of wheat in excess of imports, including flour in terms of wheat, amounted to approximately 100,000,000 bushels for the year ending June 30, 1918. This is in comparison with 178,000,000 bushels exported in 1917, 236,000,000 bushels in 1916, and 331,000,000 bushels in 1915. It was only possible for the United States to export wheat in large quantities in 1915 and 1916, because of the large wheat crops of 1912-13-14-15, which gave this country an accumulation of stocks of this grain. The 1916 and 1917 crops both were smaller than any crops since 1911.

Moreover, it must be borne in mind, says the department, that the carry-over in all the 10 importing countries of Europe was practically exhausted this year before the new harvest; that the normal consumption requirements of the exporting countries are increasing with the growth of population instead of diminishing, that some losses in storage and transit may be expected to continue, and that it is highly desirable that a surplus should be accumulated as insurance against partial crop failure next year. To provide for these additional requirements it is, therefore, extremely desirable that the maximum acreage of winter wheat recommended be planted by the farmers in the United States this fall.

### Smut Bulletin Is Issued.

Professor G. E. Thornton of the department of engineering at the State College of Washington has prepared a new bulletin entitled "Prevention and Protection From Smut Dust Explosions and Fires in Grain Separators." This bulletin is now ready for distribution and should be secured by all farmers and threshermen who have any smutty grain to thresh this season. The bulletin is illustrated so that the devices for carrying away smut and preventing electric igintion may readily be understood by those who study it.

### Makes No Investigation.

The state council of defense at its recent meeting did not begin the investigation of the situation that arose at the convention of the state grange at Walla Walla in June, as had been planned. Owing to the fact that the matter had been called directly to the attention of the federal government, the state council decided that it would leave the investigation to the federal authorities if one were to be made.

### Selling Mole Skins.

The Castle Rock high school class reports that the members have sold $75 worth of moleskins, says L. S. Keyes, Cowlitz county agriculturist.

**THE BALANCED RATION** includes something besides corn and silage and hay. It includes a moral element, an element of peace and contentment. A frightened or angry animal can not extract the nutriment from silage nor assimilate it even when extracted. The farmer who produces tons of feed, but fails to give it with a liberal portion of peace to every forkful has missed one of the first principles of successful feeding.

### PASTURES ARE SHORT.

### Milk Production Is Cut Down.

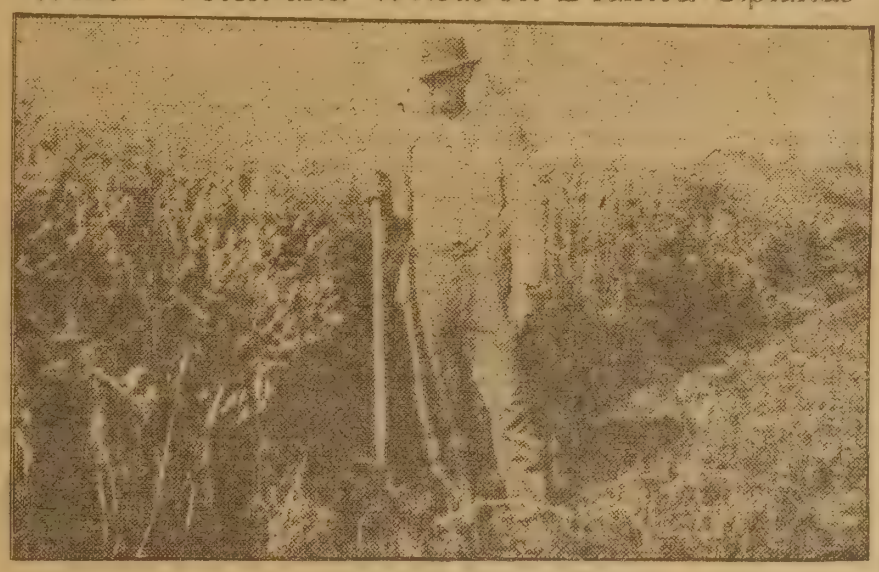
Deputy State Dairy Commissioner Van Houten has been investigating milk marketing conditions in Seattle, and as a result of his activities half a dozen or more dairy stores have been formally charged with selling milk without a license.

Dairy conditions throughout western Washington reflect weather and labor conditions, the former forcing dairy farmers to begin feeding silage and hay to splice out pasture shortage in what is usually the best pasture season, and the latter forcing some of the producers to cut down their herds for want of milkers. Several city retailers report considerable difficulty in securing enough milk for their trade.

### Special Articles Begin in Orchard Department

Every orchardist and every farmer who has a few fruit trees should begin reading the series of articles by Dr. Granville Lowther in the orchard department of this paper. The series deals with the diseases and pests of orchards and their remedies. The first instalment will be found in this issue. They will run regularly for several weeks. It would be well for those readers who do not keep a permanent file of The Farmer to clip these articles as they are published and paste them in a scrap book for reference as needs arise.

## Winter Vetch and Wheat on Drained Uplands



"This fall I am going to plant all my drained upland to winter vetch and wheat," is what Pete Munson of Ferndale says. "I believe more farmers in this locality could grow this crop to an advantage. Last year I planted my winter vetch and wheat in the month of October. In the spring, when hay is scarce and pasture is short, I feed it direct from the field to my milch cows. This spring I fed it to my horses. What I don't use as a green feed I make into hay or let ripen for seed. I seed it at the rate of 80 pounds each to an acre. I don't believe it would produce a large yield on bottom land that is not drained. It is likely to drown out during a wet winter. However, if one can not grow the winter variety, why one can raise spring vetch."

The accompanying photograph of Mr. Munson's field of winter vetch and wheat shows what a heavy yield he obtains on his farm. Some of the vetch plants measure eight feet in length, but do not grow strictly perpendicular.

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## To Aid Farmers

### Federal Loans for Those in Need

Word comes from Washington, D. C., that the government is setting aside $5,000,000 to aid farmers who have suffered unduly from the drouths of this season and last. Details of the conditions under which the loans will be made are lacking at this writing, but it is understood that no loan will be made where a farmer has security that would enable him to get money from private sources. The object of the action is to tide needy farmers over their present stress and thereby overcome any tendency there might be for some of them to leave their farms.

### PEARS IN DEMAND.

### Season Opens With Good Prices.

The pear market promises satisfactory returns to the producer this year, according to reports that have already been received. The first carload of Bartlett pears from the Yakima valley, Wash., will go at $1.80 per box, according to a statement from Yakima. Reports from Wenatchee, Wash., indicate that there are many buyers in the field at the opening of the season and that competition has boosted the price materially. It is reported that there is a strong tendency to buy pears in bulk this season, owing to the difficulty of securing containers. Indications are that there will be a comparatively heavy crop throughout the northwest, though some districts have suffered a shortage as in other fruit crops.

### Coming Events.

August 19-25—Convention National G. A. R., Portland, Ore.

August 27-29—National Farmers' conference, Washington, D. C.

Fairs, Shows, Exhibits.

August 26-30—Southwest Washington fair, Centralia-Chehalis.

September 2-7—Spokane Interstate fair, Spokane, Wash.

September 16-21—Washington state fair, Yakima, Wash.

September 19-21—Roundup, Pendleton, Ore.

October 1-6—Western Washington fair, Puyallup, Wash.

November 7-13—Northwest live stock show, Lewiston, Idaho.

### Ridgefield Farm Makes Good.

Prunes and strawberries, together with other products of a diversified farm, have made the farm of A. P. Sutton of Ridgefield, in Clark county, a paying proposition, according to figures. He expects this year to harvest an excellent crop of prunes from his orchard and has already made a net profit of over $680 from his strawberry patch.

### Lindbergh Case Is Dismissed.

Following the action of the Minnesota state supreme court in dismissing the cases against A. C. Townley, president of the National Nonpartizan league, and Joseph Gulbert, a league organizer, the case against Charles A. Lindbergh has likewise been dismissed. Lindbergh was charged with the spread of unpatriotic sentiment, as were also Townley and Gulbert.

### Will Ship Many Sheep.

It is reported that the Yakima valley probably will ship 100 carloads of mutton sheep to the markets of the middle west during the month of August.

### Iron Ore in China.

Iron ore is found in almost every Chinese province, but it is mined extensively in only a few.

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## *No Sacrifice Is Too Great*

We sometimes want to complain about regulations that we have to live up to during this war period. Sometimes we want cheaper things to eat; sometimes we want more pork than we are allowed; sometimes we think the food administration is too drastic in its sugar regulations. But these regulations require no sacrifice at all compared to what hundreds of thousands of people in Europe are daily and hourly making. No sacrifice we can possibly make is too great if it will help to hurry men and powder and steel to the battle front to blow Prussianism to the inferno prepared for the devil and his angels from the foundation of the world.

The fair season is coming on. Prepare to learn something of value from the exhibits and demonstrations.

## *The World Record Mistake*

Who holds the world record for mistake making? William Hohenzollern, emperor of Germany. He made the most colossal mistake of all history when he undertook to compel the civilized world to submit to inhuman brute force; when he undertook to terrorize France and England and Belgium and Italy and America into submission; when he cast aside all laws of God and man and slaughtered and maimed and outraged on every hand without cause and without reason. He is now beginning to pay the penalty for his error. Defeat, utter and humiliating defeat, awaits him. Had he been half human instead of 100 per cent fiendish in his methods of warfare, he would not have had the whole world arrayed against him, and the evidence indicates that mastery of Europe would have been his.

Cowless milk is the latest. It's made from rice and beans. We'll use the cream from it on our wheatless mush and our sugarless fruit.

## *Are Serving Nation at Home*

There are several occupations at home that afford those engaged in them opportunity to do more for the cause of world democracy than they could do on the battle front. One of these occupations is that of the county agricultural agent. As a rule the county agent is a young man, strong of physique and mind. He must be so if he is to be a successful agent. Some of them are eligible in every particular for service in France Many of them would actually prefer to be over there. But their duty is here. Their duty is to inspire greater food production on the farms and to assist the farmers in living up to the inspiration to the highest possible degree. Though the struggle in Europe may call them, and though they may long to heed the call, they are loyally serving when they stick by their posts of duty at home and help send wheat and meat to those equally fitted for service there but less fitted for this vital service here.

Before long the fourth Liberty loan campaign will be with us. It is now time to plan our investment. We must make it as large as possible.

## *Do Enough, but Not Too Much*

Now is not the time for enthusiasts to undertake to do big things in the line of food production. It is rather the time for hundreds of thousands to do little things. Comparatively few people are fitted either by training or circumstances to do things on a big scale, but nearly every one is fitted to do something and do it well. It would be a stupendous accomplishment for 10,000,000 families in the United States to produce a war garden, each sufficient to supply half of the vegetables the home requires. It would be a great thing for 50,000 farmers who have not been producing pork to raise the pigs from one brood sow. It would be immense for 100,000,000 people to save one ounce of food daily that would otherwise go to waste.

No man or woman should fail to have a legal will made and filed. We know neither the day nor the hour when we will find ourselves unable to attend to even this little bit of business.

## *Must Grow Both Wheat and Meat*

The county agents are right in their contention that the nation's thought must not become so concentrated on wheat production that the production of live stock will be seriously reduced. Every effort should be made to produce the maximum of both, for both are absolutely necessary for the feeding of the people of this country and those dependent upon us. Man can not live by bread alone.

It becomes a problem for deep study how to maintain the live stock industry on the best possible basis without interfering with the production of wheat. In the first place, every kernel of grain of any kind that might ordinarily go to waste must be saved, as must every straw of hay or forage. Every piece of land unsuited to the production of wheat, but upon which some feed crop can be grown, should be cultivated to the feed crop. Every effort should be made to stimulate pastures and meadows. Methods of fertilization should be studied. And then, when all this is done, every farmer should coldly calculate just to what extent he should sacrifice wheat land to the production of further feed for his stock. He should sacrifice as little of it as possible, but he should not lose sight of the crying need for the maintenance of the live stock industry on as efficient a plane as possible. Looking beyond the needs of the present war time it is not difficult to see a shortage of stock that it will take several decades to overcome.

If the boys of this country can give up their business life just as they are entering it and go to work for Uncle Sam on the battle front for $30 a month, surely those of us who stay at home need not complain if we have to pay taxes and buy Liberty bonds.

## *Away With German Peace!*

Germany is again offering to make peace, and the unfortunate fact is that there are many people in the war-tired world that are anxious to consider anything that looks like possible terms. Two features of Germany's so-called peace offer should make the allied world continue the struggle without a moment's relaxation, but with redoubled determination. Here are those two features: The disposition of Belgium shall remain a question to be settled at the conference of the warring nations, and the peace treaties now existing between Russia and Germany and Rumania and Germany shall remain intact.

Heaven forbid that any man or woman of any of the allied nations should give one iota of consideration to such diabolical suggestions! Allow Belgium, that little nation of heroes and heroines who stood between Paris and German vandalism while France rallied to the defense of civilization in the terrible days of August, 1914, to be a trader's pawn at the conference of nations? Not while God is in heaven! Allow Rumania, that faithful little ally who gave in only when her only friend at hand, Russia, fell a victim of treason and fanaticism, to remain the helpless slave of Teuton and Turk? Allow Germany to entrench herself in the vast and rich domain stolen from the disorganized people of Russia and thus insure the world in a few decades another epoch of agony such as that through which we are now passing? Not while the high sense of justice that brought England and America and France to arms endures! Germany fails to include the one all-essential condition of peace among her proposals: the utter abandonment of the Prussian system of government.

How many folks have looked up at the clouds that came with the cool weather and predicted a wet harvest?

## *There Will Be a Reaction*

There was never a time when there was so much money in the United States as at this time. It is a period of stimulation, caused by war activities. Then, should we not save in order to tide us over a period of reaction and hard times that is bound to come?

Is there any saving so safe as the government's promise to pay?

Did you ever know an action unless it were followed by reverse action, as in the case of a pendulum of a clock swinging to and fro, the bouncing of a ball when hitting a hard substance, the bending of the treetops in the wind? Did you ever overstimulate the emotions without a depression followed? Did you ever spend a night in carousing without "the morning after?" Did you know that the incoming tides always go out again? Do you know that calm always follows storm? Did you know that revolution is always followed by reaction, and that the tendency is toward counter-revolutions? This is what the allies are hoping for in Russia.

Of course you know all of these things, or at any rate, a considerable number of them. Then, if you do, you know that there will be a reaction following the overstimulation caused by the war, and you know it is the part of wisdom to prepare for it.

If the boys in France are to bring home the bacon, figuratively speaking, we must first ship it over to them. Therefore, "A sow on every farm" should be our motto.

## *We Must See the Unseen*

There are few farmers who grub their soil only for the living they may make. There are other motives behind their activities. What do we feel as we look at our fields well tilled, our full granaries, our clean, well equipped barns, our neat gardens, our sleek, productive stock? Our first and strongest feeling is one of pride. We have justified our choice of an occupation. We have made good.

The farmer looks at a stubblefield and he can see it, first, turned over by the plow, then worked up under disc and harrow; then in its first greenery; then in its harvest season. He sees in his imagination the grain that it will yield being ground into flour, and even the soldiers of our land and those of our allies eating the bread and pronouncing it good.

We do not mean that the farmer or anybody else should forget material values. A good living and a decent profit is what everybody should have; it is right. But let us not forget the other values beyond the physical, for without them there would be no progress. The man who realizes spiritual as well as material values in those things with which he works is worth most to the world and to himself.

If the slacker's conscience doesn't hurt him now he is probably too dead spiritually to fear to face the boys who come back from the front.

The difference between the allies and the Germans is that the allies are fighting to make the world safe for democracy while the Germans are fighting to make the world safe for Hohenzollernism.

# Four Years Ago the War Began

## *Events to Date Are Stupefying in Number and Complexity*

Four years ago this week the world was being plunged into war—a war the magnitude and horror of which was inconceivable to even the most prophetic statesmen at that time. Never in the world's history were so many staggering events crowded into one brief space of time.

On July 28, 1914, Austria-Hungary declared war on Serbia, ostensibly because that little country would not humiliate itself by an ignoble apology for the murder, supposedly by a Serbian subject, of an Austrian noble. Germany's lust for world dominion was the power back of that declaration, and Germany leaped at the chance it offered of bringing on the war. Events followed with startling rapidity.

Russia rallied to defend her sister people, the Serbians. On August 1 Germany declared war on Russia. On August 2 Germany sent an ultimatum to Belgium demanding free passage for her armies for an advance on France. Belgium refused to grant it. On August 3 Germany declared war on France and ordered her troops to march through Belgium. On August 4 England sent an ultimatum to Germany demanding that the neutrality of Belgium be respected. Germany refused to respect it, and on the same day England formally declared war on Germany. The same day President Wilson issued a proclamation declaring the neutrality of the United States. On August 6 Austria declared war on Russia.

Thus declaration followed declaration until France, England, Bussia, Italy, Serbia, Turkey, Rumania, Bulgaria and Belgium were engaged in a death struggle.

On September 6, three days more than a month after Germany's declaration of war on France, her armies had ravaged Belgium and northern France and had reached a point on the Marne river almost within siege-gun range of Paris. And there the heroic French proved their heroism by stopping the drive in a battle that will go down through all history as one of the world's greatest, the first battle of the Marne.

### The Second Battle of the Marne Is On.

That was almost four years ago. Then France stood alone on the Marne, defending not only herself but the civilization of the world. Today British, Italian, French and American soldiers are fighting side by side for civilization only a short distance from where that first great battle of the Marne was fought. And as France won then, the combined forces of human justice are winning today.

The eyes of the world are eagerly watching the struggle on the Marne salient of the 300-mile battle front. There the Germans are receiving their most staggering repulse of the war. They are fighting desperately not only to stave off this repulse, but to prevent the loss by capture of many thousands of their troops in the pocket between Soissons and Rheims. Reports seem to indicate that the allies have captured no less than 30,000 Germans since the beginning of the allied counter attack nearly three weeks ago, and upon the turn of the events of any day depends the possibility of the capture of large numbers more or of their escape through a successful retreat. The German losses in killed, wounded and captured since July 20 on the Soissons-Rheims line are estimated all the way from 100,000 to twice that number, though no official figures are available. It is estimated by military authorities that Germany has had her man power reduced by approximately 1,000,000 men since she launched her first great drive against the British the latter part of last March. In the meantime the allies have lost heavily. But the allied man power is gaining, not losing, for the Americans are sending troops across the sea at a marvelous rate. American forces in France now total approximately 1,300,000 men.

### Great Results Accomplished in a Year.

A year ago the number of American troops going to Europe had not begun to assume large proportions. A few regulars and some national guardsmen had been sent to France, but most of the big military training camps were still being built and the men selected as the first contingent to be called to the colors were still in citizens' clothes. Until the first day of August, 1917, the total number of American soldiers taken overseas was 26,967.

Soon after that date the movement of troops was accelerated. Thousands were dispatched across the Atlantic during the winter months, but it was not until the great German offensive was started late in March that the movement began to assume really noteworthy proportions. The figures for the months from August 1, 1917, to July 1, 1918, follow:

August, 18,323; September, 32,523; October, 38,259; November, 23,016; December, 48,840; January, 46,776; February, 48,027; March, 83,811; April, 117,212; May, 244,345; June, 276,382.

Official figures for July have not been announced, but the increase was even greater than that shown in previous months.

### Fighting Continues to Be Satisfactory.

During the last week the results of the fighting in the Marne sector have been satisfactory to the allies. No overwhelming gains have been made, but progress has been made consistently. The Germans have been unsuccessful in their counter attacks in more than checking the speed of the Americans, French and British. While most of the gains have been made on the Soissons side of the salient, the enemy has been compelled to retreat from the southern point of the pocket until all the gains made by his drive of three weeks ago have been lost again, and territory taken by the allies in addition north of the Marne. Vigorous blows have been struck by General Foch and his armies on both sides, threatening to cut the Germans off and result in the capture of all in the pocket. Just enough fighting has been directed at the point of the pocket to make it impossible for the Germans to retreat rapidly, thus aiding in the attempt to capture a large portion of them.

### Germany Offers Preposterous Peace Terms.

Unofficial reports say that Germany has sent suggestions for a peace conference to Spain to be delivered to the allied governments. The terms as reported are preposterous, and undoubtedly will receive no serious consideration at the hands of the allies. They leave the real terms to be agreed upon at the conference, though some of the requirements set down by the German government are wholly impossible of acceptance by the allies. The terms as reported are as follows:

First—Germany wants no annexations or indemnities in the west.

Second—The peace treaties with Russia and Rumania may not be questioned.

Third—The principle of self-determination of peoples has not been discussed, but may be settled at the peace conference, where the fate of Belgium also is to be settled.

Fourth—The Balkan question is to be settled around the conference table.

Fifth—The freedom of the seas, the dismantling of Gibraltar and the Suez canal and the right of Germany to use coaling stations.

Sixth—The colonial question is to be settled on the basis of the status quo.

### What Will German Strategists Do?

Some military experts are predicting that the Germans will strike a blow somewhere as soon as possible to divert the allies from their drive in the south. Some believe that this strike will be made against the British in Flanders or Picardy, in the north. Others believe that the Germans are not in position to make this strike, but that they have concentrated all their efforts on the drive toward Paris. It is claimed that approximately one-fourth of the entire German forces is engaged in the battle on the Soissons-Rheims front. It is known that as many as 52 divisions are engaged on this front.

### Americans Join the Italian Army.

It is officially reported that American troops have reached the battle front where the Italians are fighting the Austrians. There have been American aviators on this front for some weeks, but this is the first official report of American troops in any other department reaching the aid of the Italians. The last week has been one of gain for the Italians, though no spectacular advances have been made. Most of the fighting has been what might be called of minor importance, but it has served to improve the positions of the allied forces on that front.

### Herbert Hoover Takes Trip to Europe.

National Food Administrator Herbert Hoover is now on a trip to European capitals, conferring with allied authorities on the food situation. While he emphasizes the gravity of the food situation and urges the utmost effort on the part of producers and consumers alike to keep the available supply for the soldiers at the maximum possible, Administrator Hoover says that the efforts already made have averted the crisis. A continuation of the efforts toward both production and consumption will ultimately win the war, he declared in London last week.

### Strikers Must Go to Work or Fight.

Munitions workers to a number approximating 300,000 have been threatening to strike recently in England. The government has taken hold of the matter with an iron hand, declaring that every man of military age who strikes will be drafted into the army immediately.

### May Increase Excess Profit Taxes.

Steps are being taken by congressmen to make up the shortage of about $1,600,000,000 in excess profits taxes. It may be that the taxes on profits will be increased to make it up. It was the original intention that these taxes should raise $6.000,000,000, but they are falling far short of this amount.

### Get a Farm Service Flag.

The man, woman, boy or girl who stays at home and works hard to produce necessaries for the soldiers in Europe are entitled to real war service recognition. That is the idea back of the Washington Farmer's farm service war flag. It is pennant, shaped, made of the good old red, white and blue, and has a star representing the producing farm home. Small stars are added to represent each worker of that home.

.....

**Convenient Order Blank.**

THE WASHINGTON FARMER, ..... 1918.

Review Building, Spokane, Wash.

Enclosed, find five cents (5c), for which please send me a Farm War Service Flag (printed on enamel paper) with ..... extra small stars for farm workers.

Name .....

R. F. D. ..... Postoffice .....

Box ..... State .....

## *Washington Gleanings*

Fifty ornamental trees and shrubs have been donated for Palouse's new park by individuals.

The Weavers' club of Kettle Falls recently presented the city with an elegant wool bunting flag, 9x15 feet.

Dr. Robert Prior of Yakima has been notified of his appointment as chief of the United States wool bureau in this state.

A canning club has been formed at Eatonville, with Mrs. Norwood, leader; Ida Hedborg, president, and Norine Norwood, secretary.

Grays Harbor County Game Warden L. J. Esses is now engaged in the distribution of 100,000 trout fry in the streams of the county.

The Lynden cannery paid out more than $7500 during the month of June for cherries, at the rate of four and five and a half cents a pound.

Centralia is endeavoring to raise a war chest fund of $60,000, from which the Red Cross chapter and all the various war charities will be supported.

The need of something sweet to substitute for sugar has already aroused unusual interest in bees, sugar beets for home sugar and syrup making and the like.

F. M. Audrain, emergency secretary in state club work, who has just finished inspecting the garden and pig clubs of Skagit county, reports splendid progress in the work.

Military drill will be a part of the high school curriculum in the second semester of the coming school year at Yakima, if plans outlined by the school authorities are carried out.

The Hoquiam Commercial club has undertaken the task of repainting all the signboards on the Olympic highway between Olympia and Hoquiam and to the beaches and Lake Quiniault.

The Grangers' Warehouse company at Ferndale has been organized with a capital stock of $3000. The incorporators are C. B. Legoe, C. C. Ireland, W. U. King, Fred M. Randall, Enos Strode, C. E. Flint and R. C. Bartruff.

In the river and harbor bill, which President Wilson has signed, is included an appropriation of $250,000 for the improvement of the lower Columbia, $18,000 for the Lewis river, $6000 for the Cowlitz river and $500 for Grays river.

Cooperation is receiving a boost from the necessities arising out of the labor situation. Reports are more common than ever before of communities cooperating in providing their own labor to meet the needs of the rush seasons.

The first car of Bartlett pears this season was shipped out of Grandview July 26. The price paid for the shipment was $45 a ton, cash to the grower. There is a large crop of pears and a considerable number of growers are contracting at $40 a ton for the crop.

Public schools in Vancouver are to open late this fall, September 16, in order that the students may assist in harvesting the fall crops, particularly the prune crop. Many of the Clarke county country schools are opening early in August with the expectation of closing again during the prune harvest.

With the quality as fine as the valley has ever produced, but the yield showing a decrease compared with last year, peaches are coming to Wenatchee shippers from the orchards in and around Wenatchee. The prevailing price seems to be 75 cents. During the season last year 233 cars were shipped from the valley.

Pend Oreille county farmers have organized a live stock association for the purpose of community shipping and buying of feed. The officers of the new association are P. J. Sullivan of Cusick, president; Olaf Lamon, Deer Valley, vice president; E. J. Bachelor, Newport, secretary-treasurer. These with D. M. Edens of Spring valley, and P. D. Tulles of Deer valley, constitute the board of directors.

"Every bushel of grain in this vicinity will be harvested whether the labor situation improves or not," is the answer of business men of Pullman to the request of the Whitman county farmers for assistance in solving the labor problem. Papers circulated by the agricultural committee of the chamber of commerce seeking pledges for farm work in case of emergency by the business men of Pullman are being largely signed.

The war department has sent Engineer Baker to examine the mouth of the Nooksack river, where a log and snag jam exists. This action is in response to a request that something be done to lower the level of the river so as to lessen liability of damage from overflow water. Engineer Baker says that a snagboat will soon remove the obstruction. It is estimated that the removal will lower the river's level about three or four feet.

Twenty-six millers and grain buyers of Lincoln county organized the "Big Bend Millers and Grain Dealers' association," with A. M. Applegate of Harrington as president, Charles Huffman of Mohler, as secretary. Basing their prices on federal rates it was decided to pay $2 per bushel for No. 1 hard white bulk grain, and $2.09 for sacked grain. Grain that grades No. 2 will be 3 cents less, and No. 3 will bring 7 cents less than for first grade wheat. This provides for a charge of 20 cents a bushel and of this amount 13 cents represents freight charges to the Coast.

# Must Combat Soil Washing

## *Losses From This Cause Severe in Many Districts*

While there are hundreds of farms throughout the northwest that have suffered severely from soil washing and where, therefore, remedial measures alone must first be resorted to, the fact remains that in general the elimination of the cause of washing should be the first consideration.

It would appear that washing occurs primarily because the soil lacks power to absorb water. If it were able to absorb and hold a large amount of water without the latter running readily through it the soil elements so vital to the production of vegetation would not be lost. Therefore, one of the big questions to ask is how can the soil be made to hold a large quantity of moisture?

While there is no absolute and certain remedy for all cases, the foregoing question can be answered in a general way as follows: See that there is a large amount of organic matter in the soil, see that it is plowed deep, see that furrows or implement marks run around the hills rather than up and down them, and see that the soil does not lie exposed and unprotected during the rainy season.

The rotation of crops in such a way as to keep a well rooted crop on land that is likely to wash is considered one of the best preventive measures against washing. This idea in a large number of cases can well be carried out during the fall and winter months by the planting of some crop that will get a start in the fall and serve as a protection to the land during the fall, winter and early spring. In some districts rye has been found successful for this purpose and in addition has proved of value as a forage crop during a portion of that time. Any crop adapted to the conditions of a given district might be used to serve the same purpose in a greater or less degree. Organic matter which is of the utmost value to the production of crops aside from the question of soil washing may be placed in the soil by a number of methods. No straw should be wasted on a farm where washing occurs. It should be worked into the soil and allowed to be transformed into humus, assisting in binding the soil together during the rotting process and greatly increasing the soil's absorbing power both then and later. Cover crops may frequently be turned under with the double result of increasing fertility and reducing the loss through washing. This is true especially of clover, alfalfa, rye or the like.

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THOSE of us who stay at home and follow our usual easy going ways will take a Back seat when those who are winning the war come back. They are learning lessons of efficiency that will fit them for leadership. It will take some of us a generation to catch up with them.

# Dry Fruits and Vegetables This Year

The following are directions prepared by experts in the United States department of agriculture for drying peas, beans and berries:

**Berries.**

Berries for drying should be allowed to become fully ripe, but must not be permitted to become soft enough to crush in picking. They should be picked in the early morning hours, before they have become heated by the sun, and should be picked directly in the vessels in which they are to be taken to the drier, in order to avoid pouring from one vessel to another and the unavoidable crushing which this treatment produces. As rapidly as the vessels are filled they should be at once placed in the shade, as ripe berries quickly soften and mat together when heated by the sun or when allowed to stand in deep containers. For this reason berries should be taken to the drier and the drying process begun with as little delay as possible after picking.

To spread on the trays, hold the vessels of berries with one hand and slowly pour the fruit from it upon the tray, using the fingers of the free hand to spread them in a close, uniform layer one or two berries deep. Avoid unnecessary handling and rough treatment, which results in crushing and injury to the appearance of the product.

No attempt should be made to wash berries intended for drying, as the wet berries will soften and mat together in the drier. Nor should one attempt to pick out mature berries, bits of stem, leaves or other debris, as the berries will be crushed by such efforts. Such foreign material may easily be removed after the berries have become partially or wholly dry.

As rapidly as the trays can be spread place them in full sunlight if sun-drying, or in the warm evaporator if artificial that is employed. Start the drying at a temperature not greater than 130 degrees in the case of red raspberries or loganberries; for other berries the beginning temperature may be 140 degrees, and, in either case the starting temperature may be gradually increased by 10 or 15 degrees as the fruit becomes half or two-thirds dry. When the fruit is sufficiently dry to be stirred without crushing any thick masses of berries which are not drying properly should be opened up and spread out with the fingers.

Berries are sufficiently dry when they no longer show moisture when vigorously crushed between the thumb and fingers, but are still slightly elastic and rubber-like to the touch. Prepare a large wooden or pasteboard box by lining it with clean paper, place it in a warm, darkened room, and provide a cover of tightly woven muslin to exclude insects. Pour the warm berries directly into this box as they come from the drier, and stir the whole mass thoroughly together every time a new lot is added and at intervals of a day or two for 10 days after the drying is finished, meanwhile leaving the box open to the air of the room but protected from insects by a muslin covering. The berries will at first "sweat," becoming quite moist, but will then gradually lose moisture and become dry and hard to the touch, after which they may be permanently stored. Return them to the drier and heat up to 130 degrees for two or three minutes to destroy any eggs of insects which may possibly be present, and place in the permanent containers before the products have cooled.

**Peas and Beans.**

Pick garden peas for drying when the pods have attained their full size, but have not begun to turn yellow. Give the shelled peas a short dip into boiling water—one minute is sufficient for most varieties, and the time should never exceed two minutes—allow them to drain for a moment, then spread on trays as uniformly as possible to a depth of about three-fourths inch. When artificial heat is used start the drying at 115 to 120 degrees and increase this to 135 to 140 degrees as the peas become almost dry.

Don't make the mistake of thinking that peas or beans can be dried in a few hours; the thick outer covering of the seed allows water to escape slowly, and many hours are required to bring the interior of the seed down to such a degree of dryness as will insure keeping. Properly dried peas or beans will be uniformly hard and dry throughout, showing no moisture when crushed to bits with a hammer.

Lima beans should be picked when full grown but before the pods have begun to dry out, shelled and blanched three minutes in boiling water, stirring them thoroughly meanwhile. Spread three-fourths inch deep on trays and dry like peas with the difference that the temperature employed may be 10 to 15 degrees higher. Be sure that the beans are bone dry before you remove them from the drier, not merely dried superficially with a wet zone at center. String or snap beans intended for drying should be allowed to become at least two-thirds grown; to pick them earlier is simply to lose very materially in the food value of the product. After picking, prepare them at once for the drier, as they deteriorate rapidly on standing. String, break into pieces as you would for the table, and blanch for five to seven minutes in boiling water which has had two tablespoonfuls of baking soda added to each gallon. The use of soda in the water preserves the natural color of the pods, which is otherwise largely lost. Spread one inch deep on the trays and dry at 130 degrees, stirring occasionally and increasing the temperature to 140 to 145 degrees when nearly dry. Dry until pieces crushed to bits with a hammer show no moist central portion.

Peas and beans which are thoroughly dried can be placed in permanent storage containers directly from the drier. Such containers should be preferably closely woven muslin bags, which should be tied tightly at the neck and placed several together in a similar but larger bag, which is in turn tightly tied.

# Don't Put Off Seed Selection

By PAUL E. TRIEM

If you have not already begun to select your seed for next year's vegetable garden, don't wait another day before doing so. This does not mean that you are to go out into the garden now and pick the ripened seed. Nature has something to say about this matter of maturity, and you can't hurry nature. But now, during the time of vigorous growth, and particularly during the harvest time soon to come, you should, without fail, select the individual plants which you desire next year's crop to resemble.

In selecting seed it is well to keep in mind the distinction between cross-fertilized and close-fertilized plants. In most cases the structure of the plant provides and insures at least some cross-fertilization. Corn, for instance, must be cross-fertilized or the strain will rapidly deteriorate. Cucumbers, squash, all of the melons, corn, tomatoes, etc., are regularly cross-fertilized, and because of this fact the progeny of this year's crop will not necessarily resemble the plants from which seed was secured. The pollen which fertilized the flower contributed half of the biological elements found in the matured seed, and this pollen may have come from an inferior specimen. Unfortunately there is no way of entirely eliminating this possibility, but by rooting out distinctly inferior plants before flowering time comes something can be accomplished.

Close fertilized vegetables and grains, such as peas, beans and wheat, are probably more easily "bred up" than are those which must be cross-fertilized. This is the principle followed at the experiment station in Sweden where such remarkable results in cereal breeding have been obtained. Most of these improved grains are the progeny, each, of a single plant.

The theory back of this one-plant selection is that so fully worked out during recent years by DeVries and christened by him the "mutation" method of evolution. According to the mutation theory, improvement in a species does not take place by slight forward steps, but rather by leaps. Out of a thousand specimens of a given flower or plant, the vast majority will develop true to type. Nine hundred and ninety-nine may do so. The one thousandth, however, may prove to be a mutant—may have made a leap forward, and in that one leap acquired a new and valuable characteristic. If, now, this mutant belongs to the close-fertilized class of plants, all that is necessary, according to the theory of DeVries and the practice of many successful plant breeders, is to isolate the strain. If in a field of wheat, for instance, one plant is found which is markedly superior to its fellows in any characteristic, the seed from this one plant should be preserved by itself until the following season, when it should be sowed in a row or patch definitely marked off from its neighbors. This second season will do much to tell whether the superior plant was a true mutant, or whether its superiority was due to accidental favoring conditions.

Volumes have been written on this subject of plant breeding and seed selection, but the gist of the matter is easily arrived at:

Save your own seed and select for seed bearing plants only such as have unmistakably the characteristics which you consider ideal or "typical." In cross fertilized varieties, eliminate early all inferior specimens. In close fertilizing plants keep the seed from each superior specimen separate and test it out during the following growing season. By devoting a little time, observation and study to this matter of selecting seed it is possible in a reasonable time to breed up valuable strains.

# Hunger, the Last Extremity of Nations

An outstanding feature at a farmers' day gathering at Moscow, Idaho, last week, was an address by President W. J. Kerr of Oregon Agricultural college.

President Kerr's address was based on illuminating facts regarding the food situation of the allies the first of April. He gave life to facts often heard of the lamentable shortage of wheat supplies, of how the American people have been urged for a year to save wheat by posters, by circulars, by talks, by newspaper articles, and yet did not seem to grasp the situation; how the government had to take the initiative, and upon the crying appeal of Lord Rhonda for 75,000,000 bushels of wheat, and to the pleas coming from France and Italy, shipped 90,000,000 bushels at once, followed shortly by 40,000,000 bushels more; thus virtually telling the American people that it was up to them to save wheat or simply go without until the harvest.

That hunger is the last extremity of nations was profoundly impressed upon the audience. I never saw more hard listening to an address. There was no attempted oratory, and scarcely any cheering; the facts were too absorbingly serious to be interrupted by any demonstrations. President Kerr, with an earnestness backed by stupendous facts of the shortage of food, made it exceedingly plain that the overthrow of the Russian government was simply due to the famine-stricken populace; that the demoralizing repulse of the Italians by the Austro-Hungarian armies was due to the same fatal condition, the Italian soldiers being reduced to one meal a day. "You can not fight on one meal a day," was the significant utterance of the speaker.

Hunger riots were beginning in France, and had not the government summarily shipped those 130,000,000 bushels of wheat during April and the following weeks, the peril of Italy subjugated and France overrun by the Huns was by no means improbable.

In a great war like that now in progress there are so many unforeseen contingencies that the situation is mighty serious until final victory. This is why trust must be placed in the hands of those who are at the head of affairs. When high government officials make an appeal it is for the people to respond without asking explanations, for these explanations may reveal facts which will sustain and heighten the morale of the enemy.

President Kerr, who has been actively engaged in war work, making frequent trips to the national capital and campaigning tours over the country, declared that there had been a marvelous change in public sentiment during the last four months. The war has entered into the hearts of the people, and while American optimism remains a great factor in the final winning of the war, yet that optimism must not hide the tremendous seriousness of the situation.

The speaker declared that 1,300,000 Americans were in Europe today, and repeated the facts showing the present astonishing output of munitions and supplies. As I understood him, and making a note of the fact, nearly 75 ships now are landing cargoes of supplies on the French coast every 24 hours. While men must be shipped, and more men, yet food and other supplies remain equally important.

Let me repeat, that it has never been my privilege to witness a more profound impression made upon men and women by a speaker than did President Kerr, standing in an automobile and talking with the moral earnestness of a man who must tell great facts in a great way.

E.A.S.

## PATRIOTISM PROVED.
### Much Flour Returned to Markets.

The people of the state of Washington have returned to the markets the equivalent of 29 carloads of flour, or more than 7000 barrels, or more than 28,000 fifty-pound sacks since the food administration called upon them to return unnecessary supplies a few months ago. The following are reports compiled covering 25 of the 39 counties of the state, and showing the number of barrels returned to markets by the people of each county:

Yakima, 332 barrels.
Whitman, 789 barrels.
Skagit, 256 barrels.
Okanogan, 475 barrels.
Lewis, 200 barrels.
Pierce, 211 barrels.
Thurston, 20 barrels.
Ellensburg, 410 barrels.
Douglas, 163 barrels.
Pend Oreille, 30 barrels.
Puyallup, 265 barrels.
Pacific, 43 barrels.
Walla Walla, 61 barrels.
Lewis, 50 barrels.
King, 376 barrels.
Snohomish, 73 barrels.
Spokane, 137 barrels.
Chelan, 2 barrels.
Benton, 6 barrels.
Ferry, 4 barrels.
Franklin, 45 barrels.
Chehalis, 140 barrels.
Garfield, 843 barrels.
Mason, 50 barrels.
Grant, 22 barrels.

# Cleveland Tractor




## A Tractor That Does The Things You Want a Tractor To Do

The Cleveland Tractor is not confined to a narrow field of service. It does the things you want a tractor to do.

It plows, it harrows, it plants, it reaps. Its great power and small size enable it to work satisfactorily in difficult, awkward places. It works efficiently under and among small trees, close up to fence corners, around boulders, on hillsides, over ditches, gullies and rough ground.

With 600 square inches of traction surface, it goes through sand, gravel, gumbo, mud and even wet clay without packing the soil.

The Cleveland Tractor lays down its own tracks, crawls on them, and picks them up again as it goes along—just like the famous war "tanks."

It does *faster* and *better* work than was possible before. It plows 3½ miles an hour—eight to ten acres a day—equal to the work of *three* good men with *three* 3-horse teams under favorable conditions.

But the Cleveland is *far more than just a tractor.* With pulley and belt, it will saw, cut ensilage, pump—and do the things you demand of a stationary engine.

In addition it can be used for hauling the manure spreader, for grading, dragging logs and pulling road machinery.

It develops 12 horsepower at the drawbar and 20 horsepower at the pulley. Yet with all this power the complete machine weighs less than 3200 pounds, and can be housed in less space than is required for a single horse.

Rollin H. White, the well-known engineer, designed the Cleveland Tractor. It is built under his personal supervision, and is constructed for long service. The track sections are joined with hardened steel pins which have their bearings in hardened steel bushings. Gears are protected by dirt proof cases and are of the same high quality as those of the best trucks. The finest materials are used throughout.

Farming today demands the most comprehensive machinery obtainable—machinery that is useful in doing *many* different things—machinery that is adaptable to widely varying conditions.

Thousands of farmers are looking to the Cleveland Tractor in the present crisis. And the Cleveland is meeting the demands—severe as they are—and is *making more money* for its owners.

It is truly the tractor that does the things you want a tractor to do.

Nearly every farm can use one or more Clevelands to speed up production and cut down costs. Write *today* for complete information and the name of the nearest Cleveland dealer.

## The Cleveland Tractor Co.

**19087 Euclid Ave.** **Cleveland, Ohio, U. S. A.**






A. B. NYSTROM, Editorial Contributor

## Care of Separator

Poor cream is very often caused by negligence in the care of the separator. The many crevices and holes in a separator bowl make it difficult to clean. The careless separator agent will tell you that all you need to do is to rinse out with warm water, then with hot, but he is interested, particularly, in selling his separator. It is absolutely necessary to use a brush that will enable you to get into the "hard-to-get-at" places. At first use warm water with plenty of nonsoapy washing powder. Then rinse in boiling hot water, leaving the parts in the water for a few minutes. When taken out shake off the water and let them hang in a clean, airy place. Do not dry the parts of a separator bowl with a towel. The supply can covers may be kept bright by rubbing with a cloth, but to be strictly sanitary no utensil used for milk should ever be dried with a cloth. There should be enough heat left in the metal from the scalding water to enable the part to dry completely by evaporation.

The practice of washing the separator only once a day, merely rinsing water through the bowl the other time, is sure to have its effect on the cream. Good cream can not be produced by such a method. A. B. M.

## GIVE CALVES MILK.

### No Real Substitute Yet Known.

For the best result a calf must have real milk as a considerable part of its feed ration. There has not yet been discovered a substitute that will actually take the place of milk, though it is possible to prepare a supplement that may in some cases reduce the cost of feeding and at the same time produce fairly good growing results. The following preparation and directions for using have been recommended:

Fifty pounds of linseed oil meal, 33 1-3 pounds whole flaxseed meal, and 16 2-3 pounds low grade flour, making a total of 100 pounds for convenience. This may be made into a milky liquid by using about 2 1-2 pounds to each two gallons of water. First scald the mixture with boiling water. Afterwards add enough water to make the entire two gallons. It is recommended that a little salt and sugar be added and that the calf be gradually accustomed to the change from real milk to this substitute by mixing a little bit of the substitute with the whole milk at first, gradually increasing the amount from day to day until the whole milk is no longer used. The substitution, however, should not be begun until the calf is at least two weeks old.

Another mixture that may help in solving the calf feed situation is as follows: Twenty-two pounds ground oatmeal, 10 pounds flaxseed meal, 11 pounds well ground corn meal, six pounds flour middlings, one and one-half pounds of salt. This mixture should be used in the ratio of three or four ounces to a quart of water, first mixing with a little cold water to remove all lumps and then adding a quart of boiling water. This should be stirred and allowed to stand until only lukewarm. The calf should be accustomed to its use gradually and in the same manner as the mixture above outlined.

## COOL MILK AT ONCE.

### A Little Delay Means Loss.

State Dairy and Food Commissioner J. B. Mickle of Oregon issues a warning to dairymen when he says that milk and cream which does not reach the factory, or market elsewhere, in first class condition, has a baneful effect on the entire market, as well as upon the marketing of that particular lot of milk. He urges upon dairymen that they arrange some method of cooling the milk immediately after it is taken from the cow. Fresh milk is just the right temperature to develop the bacteria that are the cause of spoiling. The cooling process should be rapid and should be started as soon as possible—not more than a few minutes at most after milking. Mr. Mickle says that one common mistake made by dairymen is the mixing of the night milk and the morning milk, placing the latter in the same containers with the former, before the morning milk has been cooled. This, he says, has a tendency to influence the development of the bacteria in the entire quantity.

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Write for evidence from users and our Trial Offer. Ask your dealer for our FREE Cow Book, "Bulletin 52."
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## On the Editor's Desk.

Lippincott's farm manuals are pretty well known as well printed, thorough and authoritative books on various subjects. The latest is "Injurious Insects and Useful Birds," and is by Professor F. L. Washburn of the University of Minnesota. It is a book for the gardener, orchardist, nurseryman and farmer. It is very elaborate, covering almost every phase of the subject with great thoroughness. Pests are becoming more and more a matter of concern to the man who grows food, for the losses annually in the United States alone from insects are estimated in millions of dollars. The codling moth is said to cost us $12,000,000 every year. Preventive methods are of great value, therefore, and Professor Washburn's book is a readable and practical one. The price is given as $2 net. It is issued by the J. B. Lippincott company of Philadelphia.

### Germany Has 22 Enemies.

The office of provost marshal general has issued a formal statement to the exemption boards throughout the country showing what aliens are liable to army draft in this country. The statement shows twenty-one nations besides the United States now formal enemies of Germany and her allies. The following is a list of the nations now at war with Germany and Austria: The United States, Belgium, Brazil, China, Costa Rica, Cuba, France, Great Britain, Greece, Guatemala, Italy, Japan, Liberia, Monaco, Montenegro, Panama, Portugal, Rumania, Russia, San Marino, Serbia, Siam.

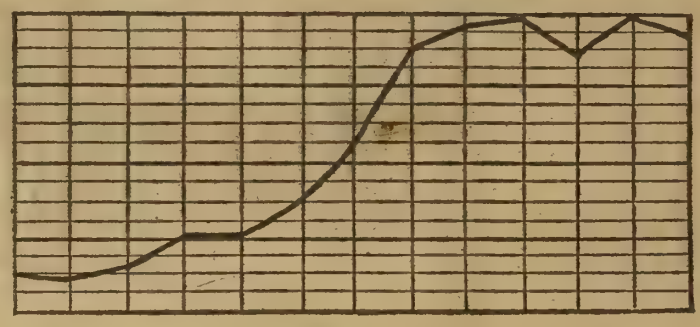
### Study Milk Production Cost.

Surveys were made recently on dairy farms in western Washington to show milk production costs. The average for 79 farms in western Washington was shown to be $3.29 per hundred pounds.

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A new concentrated balanced feed that meets the present emergency of shortage of mill feeds and high price of all grains.
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# Why live stock prices go up and down

WHEN there is more dressed meat on the market than there is consumer demand for it, meat and live stock prices go down.

But when the consumer demand for meat is greater than the supply, meat and live stock prices go up.

This is the law of supply and demand. It is the law that determines the prices the producer gets for his cattle.

* * * *

Between the producer of live stock on one hand and the consumer of dressed meat on the other hand is the service of the packer.

The packer turns the live stock into dressed meat and by-products and then distributes them to the retailer.

Out of every dollar the packer receives for this meat and by-products he pays 90 cents, approximately, for the cattle.

The remaining 10 cents on the dollar must pay for dressing, freight to market, operation of distributing houses, and in most cases delivery to the retailer.

Out of what is left must come the packer's profit. For Swift & Company during 1917 this amounted to a net profit of ¼ of a cent per pound of beef. On *all* products, it was only a little over half a cent per pound.

A reasonable profit margin is necessary to enable the packer to operate without endangering the efficiency of the business and its value to the producer as a marketing agency for live stock. Complete elimination of these profits would have practically no effect on the farm prices of live stock nor the retail prices of meat.

Swift & Company will gladly co-operate in the carrying out of any national policy that will tend to steady the prices of live stock and meat.

## Swift & Company, U. S. A.

A nation-wide organization with more than 20,000 stockholders

LIVE STOCK NOTES.

Write to the Editor.

E. J. IDDINGS, Editorial Contributor

## FEEDS NO SILAGE.

### Grain a Doubtful Cow Ration?

"A cow that must have a heavy grain feed every day in order to produce well is not a farmer's cow," says B. J. Gross of Yakima, Wash. "I once sold a cow which I had raised from a calf, and the man who bought her had considerable trouble in teaching her to eat grain. I am feeding hay and pasture now, and am selling about 320 pounds of milk from eight cows. No, I do not feed silage. Putting up a silo would mean a considerable investment, and it would necessitate my hiring help part of the time. Now I am independent—I farm my 20 acres practically without any assistance."

Aside from the reason quoted, Mr. Gross has another tentative objection to feeding silage. He is not convinced as yet that it is not in part a forcing feed, which by driving a cow at the top of her producing capacity for a time shortens her career as a milker. This possible objection is entirely obviated by the alfalfa and pasture ration and as he is careful never to crowd a pasture beyond its feeding possibilities, he finds no need for ensilage.

Before going to Yakima the Gross family farmed over on Puget Sound.

"One of our big crops there was field peas," Mr. Gross comments. "We could raise a tremendous tonnage, and for feeding hogs they can't be beat. I remember taking in one hog which actually puzzled the butcher who bought it. He looked at the scales and looked at the hog and shook his head. 'Something is wrong,' he said. 'That hog can't weigh that much.' When I told him that the hog had been finished off on peas, he understood."

### Fatten on Wheat Straw.

Last winter J. B. Cornett of Shedd, Ore., cut wheat straw with his silo cutter, wet it down with molasses and fed it with a little oil meal and only a little chopped oats to his cattle. Mr. Cornett, who breeds pure bred Shorthorns, had several young bulls he wanted to get a good growth on, and keep in condition. They grew and fattened on the straw. This year Mr. Cornett cut all his hay and blew it into the barn with his cutter. He has long believed in cutting hay, but this is the first year he has done so. He cuts the hay short and expects to use the same kind of molasses on the hay, which is cheat that had vetch sown with it. But the aphis ate all but the skeleton of the vetch.

Mr. Cornett has a nice lot of young bulls coming on. He will have at least two in the Portland sale this winter. Golden Minority looks well and his calves are all good. H. A.

## Veterinary

Dr. S. B. Nelson

**Infectious Mammitis**—Will you please tell me what ails my cow. She is six years' old, Holstein-Jersey. Four months before freshening time she began to give thick yellow matter from one teat. I bathed her bag in hot water; that one got well; then another started; then the third. I dried her up. Then another cow bruised her bag and the bruised quarter is doing the same way. Please tell me (1) is it a disease; (2), is it contagious, (3) is it hereditary; (4), what can I do for it if it is curable? C. S.
Warren, Ore.

The trouble that you mention affecting your cows has all of the earmarks of an infectious mammitis or garget. This is different from the common garget because it will spread from animal to animal. I would recommend to you, because of its seriousness, that if you possibly can you segregate these two animals from the rest of your cows if you have more. Also disinfect your stables very thoroughly by first a one to one-thousand parts of corrosive sublimate in water. Three or four days later go over the stable thoroughly with a pasturated solution of bluestone in hot water. Then, three or four days later go over the stable thoroughly with whitewash, the entire barn, where the rest of your cows are. This would tend to lessen the opportunity for it to spread among your cows. If you can possibly avoid it, do not allow the person who milks your healthy cows to milk the diseased ones; but if one person has to do that, then use a 2 per cent solution of lysol on your healthy cows, and milk them first. Wash the udder and the teats thoroughly before milking, and then when you milk the diseased ones, wash the udder both before and after, and be sure and wash the hands thoroughly after the milking, or after each time the cows are handled. The treatment is not very satisfactory. Possibly as good a treatment as you might be able to use yourself would be to inject into the udder a 2 per cent solution of boracic acid. This solution should be made with sterile or boiled water. Dip the ends of the teats in tincture of iodine, and then insert your solution into the udder. Paint the affected part of the udder with the following solution: Tincture of iodine—two parts; soap liniment—six parts. Do this morning and evening after milking.

**Gives Bloody Milk**—I have a cow with her first calf, now six weeks' old. When it was three weeks' old she was badly bloated on new alfalfa hay, since then she has been giving bloody milk, just the very last "strippings" being bloody. Now she gives bloody clots at first. She seems to be in good condition, eats hearty and there does not seem to be any soreness in either udder or teats. All four teats are affected. She is on very short pasture and has a good feed of alfalfa hay morning and night. I. G. J.
White Swan, Wash.

Try giving the heifer a purge You can use a pound to a pound and a quarter of epsom salts with either a half a cup of common salt mixed with it, or better yet, a pint of heavy molasses, mixed with three quarts of water. Two days later, begin giving a teaspoonful of hyposulphite of soda in a pint of water night and morning for a few days.

**Soy Bean Meal**—Please tell me how to use soy bean meal for stock or poultry. G. W. D.
South Bend, Wash.

Write to Professor Woodward, head of the department of dairying, at the State College of Washington, Pullman, Wash. He will tell you in detail how to use soy bean meal for stock.

**Dry Cow Up**—Please inform me what to use to prevent a cow from sucking herself. I am now using a surcingle and a halter with a stick between her front legs, one end snapped on halter and one on surcingle. It is only partial—not a complete preventative. What is the best way to dry her up? C. R
Elma, Wash.

Try putting what is known as a crate on the neck of the cow. This is made of a series of pieces of wood, the length of from the neck to the shoulders, and approximately three-quarters of an inch square, and is made into a neck crate by putting these pieces about four inches apart, and fastening them together by means of leather straps. This is fastened around the neck and prevents the cow from throwing the head to one side. That sometimes is better than the surcingle stick which you mentioned. After you prevent the cow from sucking herself, go at it and dry her the same as you would any other cow, by milking her not quite dry and only once a day, and then after a little time every second day, etc., until she is dried. Cut down on the milk-producing feeds and give her only dry feed.

**Girls Have Seats.**

Hereafter girl elevator operators of Kansas City, Mo., will have seats in their elevators.


# Save the Calves and the Milk



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**The United States Government Experiment Stations and the Best Breeders in the country recommend calf meal in place of whole milk. It is pronounced to be the only profitable modern way in which to raise strong, healthy calves.**

**Just because the price of whole milk soars is no good reason for killing the calf to obtain an immediate turnover for the price of its hide. Sell your milk at the top price. BLUE BAG Calf Meal gives you this double opportunity to save the milk and save the calf. It is a complete substitute for whole milk. Made of locust bean meal, unpressed flax seed, wheat flour, blood flour, barley meal, ground peas and beans, rice polish, old process oil meal, hulled oats, cocoanut meal recleaned cottonseed meal, fenugreek, sugar, anise seed and salt, put together in such proportions as to make a well balanced ration.**

ANALYSIS:
Protein..24 to 26%
Fiber.....5 to 6%
Fat.....5%
Carbohydrates..
.....51 to 56%



The Ideal Food for the baby Calf.

**Many farmers have in the past adopted the Mallet on the Head idea of disposing of their calves. BLUE BAG Calf Meal gives the farmer the opportunity of raising not only all the heifers, but the bull calves as well, at a mere fraction of the cost of whole milk. Think of the high prices now prevailing on beef and veal and think of what the animal will be worth after a year or so. Raise every calf you are able to, for the cost of raising is small compared with the profits.**

**Think of it. One hundred pounds of BLUE BAG Calf Meal makes one hundred gallons of very nourishing gruel and at a very reasonable cost.**

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## POULTRY

Write to the Editor.

JAMES DRYDEN,
Editorial Contributor.

# More About Strychnine

William H. Wheeler of Eugene, Ore., sends me the following letter recounting his experience with strychnine and chickens. We have had several communications on the subject of poisoning hawks and cats by feeding strychnine to chicks, the poison not affecting the chicks, it was said, but killing the hawks or cats eating the chick. These communications have reported success. There is little or no actual experimental data proving or disproving this theory, but here are a number of letters written in good faith asserting that the theory is a demonstrated truth. It is a theory apparently easy of demonstration, and it may be worth while to experiment, but I would repeat what was said before: Be careful with the poison. J. D.

I saw your remarks about chickens and strychnine in the Farmer and want to tell you my experience. I had heard that strychnine would not kill a hen, but doubted. I had a field of peas just coming out of the ground. Chipmunks commenced work on them and seemed likely to take them all. I dissolved strychnine in hot vinegar and added water and soaked a pint of peas in the solution. One or two peas contained enough poison to kill a chipmunk. I have seen one eat a pea or two and then go into convulsions and fall dead. I strewed that pint of peas along the edge of the field where the chipmunks came in. I did not know that my chickens ever went there, but I found two of them there that day. They had followed along the edge of the field and eaten nearly half of the peas. I never expected to see them alive again, but when I counted the flock in the morning, as was my wont, there was not a bird missing. I would not be afraid to put strychnine bait where hens would be likely to get it.

WILLIAM H. WHEELER.


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# How to Can Chicken

**Time table for canning chicken:**
**Water bath, 3½ hours.**
**Five-pound pressure cooker, 2½ hours.**
**Ten-pound pressure cooker, 1 hour.**

Here is how a great many people are canning chicken or are getting ready to can them during the season when the young cockerels are at their best for table use:

Draw the fowl soon after it is killed, wash carefully and cook, then cut into convenient sections. Can by either of these methods:

1—Place meat in wire basket or cheesecloth and boil until meat readily parts from the bone; lift from boiling liquid and remove meat from bones; pack closely into sterilized jars; fill with hot liquid after it has been concentrated one-half, add level teaspoon salt per quart of meat; put rubber and cap in place lightly; sterilize as per time table.

2—Sear meat in hot oven or hot fat in frying pan, and steam or simmer until it can be torn apart. Pack meat in jars, fill the space with stock and add a teaspoon of salt to each quart of meat. Sterilize according to time table.

3—Free meat from bone and cut into pieces to go into jar easily; pack raw meat into tested clean glass jars to within 3-4 inch of top; add teaspoon salt to each quart of meat, but no water. Celery leaves, onion, pepper or other seasoning may be added. Sterilize according to time table.

A fowl weighing two pounds dressed should make a pint jar of solid meat and a pint of stock thick enough to jell.

Canning surplus cockerels saves feed, provides substitutes for meatless meals next winter, and makes a convenient food for unexpected visitors.

# Get Lame and Die

To the Editor: Could you inform me as to what disease our chickens have? At first they become crippled. We opened one which was crippled and her eggs had hardened in her and had become a purplish color like streaks of blood in them. There were small, hard growths on her intestines. They get so they can not walk, then they die. This happens mostly in the winter and spring.—W. S., Wauconda, Wash.

The hens are evidently afflicted with some disease of the ovaries. It may be bacillus pullorum, a germ disease that causes the so-called white diarrhoea in chicks. The growths on the intestines would indicate tuberculosis, though the description is not complete enough to say positively. When this is the case the intestines usually show many tubercles, varying in size from a pinhead to the size of a pea, and when touched with a knife are gritty. The liver is usually also affected. It shows small yellowish spots, which are also gritty to the touch of the knife.

There is no known cure for either of the diseases mentioned. It would be well to take the matter up with your state college experiment station poultry department, giving a more complete description of the trouble. J. D.

## Oregons Over the Top.

The report for the thirty-fifth week of the egg-laying contest at the Connecticut Agricultural college at Storrs gives the Oregons first place. The first place had been held by a pen of Wyandottes owned by O. G. Knight of Rhode Island for 23 weeks, but were finally forced to yield to the Oregons entered by the Oregon Agricultural college. The Oregons also led all other pens for the week, their record being 63 eggs, a 90 per cent yield. The contest has 17 weeks to run yet, and it bids fair to be an exciting race. J. D.

**Don't Want Negroes From U. S.**

A protest was sent to the Canadian minister of labor by Vanvouver trades and labor council against the bringing of negroes from the United States by the Canadian Pacific railroad for service in its dining cars.




**The Engine Selected by over 150,000 Farmers**

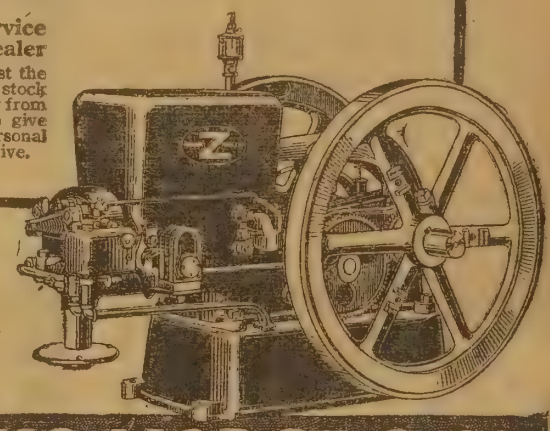
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IN THE ORCHARD

Write to the Editor.

GRANVILLE LOWTHER, Editorial Contributor.

# Orchard Troubles

## Diseases, Pests and the Remedies

By Granville Lowther.

I have been asked for information on diseases, pests and treatment of fruit. I am disposed to give the subject careful treatment, because I know how important it is to the fruit industry of the country. It is not possible to even catalogue in one brief article the names of all the diseases that affect the different species and varieties of fruits in this country.

I will begin in the alphabetical order of the names of fruit diseases, and give in this issue and the next those that I consider of most importance, together with the remedy. I will treat of the pests in issues to follow.

### Apple Diseases.

Alternaria Decay—A disease of apples caused by a fungus that generally enters the blossom end and produces a cobweb growth around the core and seeds. The remedy is to spray in the beginning of the disease, before it enters the core, with Bordeaux mixture. This is a spray composed of lime, bluestone, or copper sulphate, in the following proportions: Unslacked lime, 4 pounds, copper sulphate, 4 pounds; water, 50 gallons.

Anthracnose—This is a fungus disease that affects a number of varieties of fruits. In apples it is manifest by the formation of a dark, sunken, cankerous appearance in the bark of the younger branches, but is sometimes found in the older branches and on the fruit. Various specias of anthracnose attack the following plants, namely, alfalfa, apple, avacado, beans, blackberry, glue grass, butternut, cantaloup, chestnut, citrus fruits, clover, cotton, cranberry, cucumber, currant, eggplant, gooseberry, grape, lettuce, loquat, mango, maple, muskmelon, oak, orange, peach, pear, raspberry, rose, rye, sorghum, spinach, squash, timothy, tomato, watermelon, wheat and various other farm crops and plants. Remedy: Spray with lime sulphur or Bordeaux.

Bitter Rot—This disease is so called on account of its bitter taste. It attacks apples, peaches, pears, grapes, eggplant and various other fruits and vegetables. Remedy: Spray with Bordeaux 25 per cent stronger than the ordinary mixture.

Black Rot—This disease is due to a fungus that destroys the skin, dries up and mummifies the fruit. Remedy: Spray with Bordeaux or with lime sulphur. In all of these fungus diseases my preference would be the use of Bordeaux if it were not for the fact that we use the lime sulphur for scale insects, and the same spraying is often sufficient for fungus diseases as well.

Black Spot Canker—This disease is so similar to anthracnose that it has been difficult to determine any difference between them. The same remedies will apply in both cases.

Blight—This disease is variously called fire blight, pear blight, twig blight and blight. The technical name is bacillus amylovorus. It is a bacterium that gets into the sap generally through the blossom, some puncture in the bark or some injury that exposes the sap, and it is generally carried by insects from one part of the tree to another. Bees are perhaps the most frequent distributors of this disease, because the disease exudate oozing from the broken bark has a sweetish taste and is carrired to the blossoms of adjoining trees as the bees visit them in order to get the nectar. This is probably one of the most difficult diseases to control that we have in our orchards, because it often is carried down onto the roots by ants that carry the aphis down and deposit them on the roots, where they puncture the bark and infect the roots of the trees. Remedy: The only remedy that we know at present as being efficient is to cut it out and burn it. If it is on the roots, or if it affects the bark of the trunk, which is sometimes true, then the remedy is to cut out the diseased portion and paint it over with a strong solution of lime sulphur or some other good disinfectant.

Blotch—This is a fungus disease that lives parasitically on the fruit twigs and leaves of the apple. A parasite is a fungus bacterium animalcula or perhaps an insect that lives on the growing substances of the tree or fruit. The difference between a parasite and saprophite is that saprophite lives on the dead and decaying substances, while the parasite lives on the growing substances. Remedy: Spray with Bordeaux.

Blue Mold Decay—This disease is the same as that found on the jellies, jams and preserved fruits. It is a saprophite. It therefore attacks ripe fruit rather than growing fruit, and fruit in storage more frequently than in other places. Remedy: Avoid in so far as possible all cuts, bruises or punctures of the skin that would admit the air and cause fermentation to begin.

Cankers—Cankers are of several varieties, such as sphaeropis canker, bitter rot canker, myxosporium canker, coryneum and phoma cankers, cytospora cankers, pear blight cankers, etc. These cankers are almost always the result of various forms of fungi, and can be killed if the diseased portion can be reached by fungicides like Bordeaux or lime sulphur.

Collar Blight—Is a form of pear blight attacking the apple tree at the thickened portion of the trunk just above and below the ground; some forms of collar diseases are the result of winter injury, generally such terms as blossom blight, twig blight, body blight, collar rot, root blight, fire blight, etc., mean the same thing. This is not always true, but bacillus amylovorus is the technical name for a bacterium attacking different parts of the tree. Cut out the diseased bark, paint the wound, and if necessary to the health of the tree, bridge graft. Bridge grafting is done by setting a graft into the healthier root below the diseased portion and the upper end of the graft into the healthy bark above the wound. This insures circulation and compensates in part at least for the loss of the cambium in cutting out the diseased portion.

(To be continued next week.)

## Peach Crop at The Dalles.

"Our peach yield this season is not as large as it was last year, but the quality is better," said Mrs. M. J. Pippin of the Pippin fruit ranch at The Dalles, Ore. "It is the same all through the fruit district about The Dalles. In the low places the frost caught the fruit, but on higher ground the crop is a fair one in quantity and very fine in quality. The early peaches run larger in size and the flavor is better than usual. I think the same is true of prunes, and it was with cherries."

Mrs. Pippin took fresh fruit to Portland to sell in quantity six years ago, and had some difficulty in getting connections for selling. "Everybody was suspicious. They thought the samples were fine, and wondered if what they ordered would be as good" she says. "One of the railroad men saw my cherries and wanted to buy the whole lot to ship east. I wouldn't sell then, because the fruit was dead ripe and wouldn't hold up, and finally he ordered some. When it was delivered he was so pleased he wanted a big order, and it was too late in the season, so he placed an order right then for the next year. We ship now to over 20 states of the Union regularly."

Mrs. Pippin says she does not know about apples this year save by hearsay, but understands The Dalles crop is medium in quantity and high in quality, as with all other fruit.

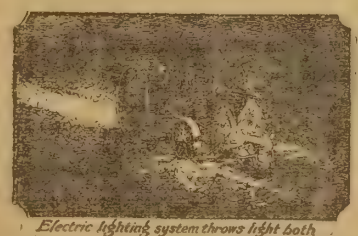
### Superstition of the Sword.

In the east superstituous reverence is still paid to the sword. The daimios of Japan, when they voluntarily surrendered their rank, kept, as a rule, the wonderful blades which had been handed down from generation to generation, in some cases for more than 1000 years, and which had absorbed, as they believed, some of the character and life of the men that had owned them.

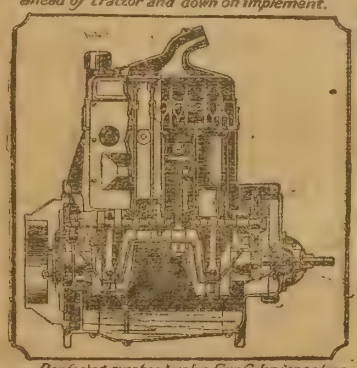
### Lack of Water Keenly Felt.

Florida contains about 4,000,000 acres of land waiting to be reclaimed by drainage.


# No Other Tractor Has So Many Good Mechanical Features=



Electric lighting system throws light both ahead of tractor and down on implement.



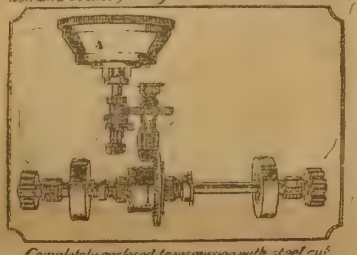
Perfected overhead-valve Four-Cylinder engine, with force-feed oiling system under 35 lbs. pressure.



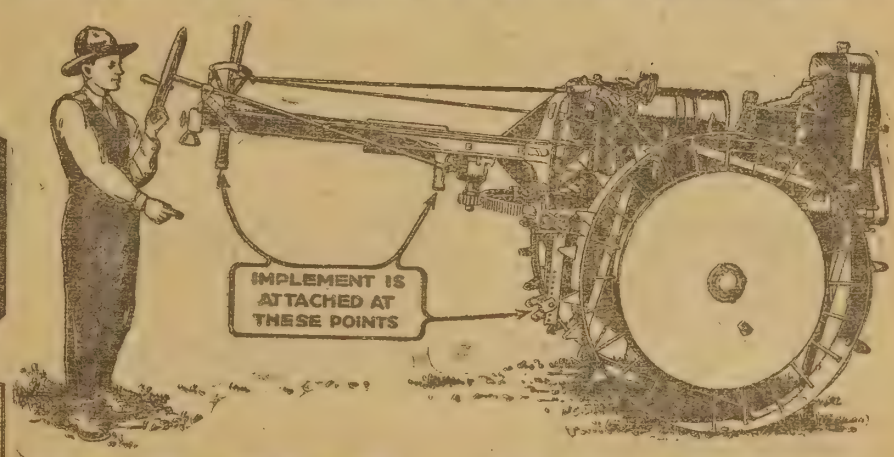
Diameter of connecting rod bearings 2¼ in. compared to piston diameter of 3½ in. insuring long life.



Valves placed in perfect adjustment by turning down ball and socket joint of rocker arm with screwdriver.



Completely enclosed transmission with steel cut gears, Hyatt bearings, differential lock, and brakes




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EVERYONE who knows what a tractor should do, agrees that the Moline-Universal has three distinct advantages over all other tractors: lighter weight; greater economy and ease of operation; ability to do all farm work, including cultivating; and ONE-MAN control of both tractor and implement from the seat of the implement, where you have always sat, and where you must sit in order to do good work.

Aside from these distinct advantages which the two-wheel construction gives, the Moline-Universal Tractor, Model D, is still the best tractor on the market. In every detail it has been refined and perfected to the utmost limit of modern engineering knowledge.

### *Self Starter—Electric Lights*

The Moline-Universal is the only tractor regularly equipped with a complete electrical starting, lighting, governing and ignition system. The starter saves many hours of productive work, besides eliminating back-breaking labor. Electric lights enable the tractor to be worked at night during rush seasons.

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### *Perfected Four-Cylinder Engine*

The perfected four-cylinder engine is the latest development in overhead-valve construction. With a bore of only 3½ inches a 2½-inch crankshaft is used. The strength and thickness of the crankshaft eliminates all vibration. Oil is forced through hollow crankshaft to all the main and connecting rod bearings under a pressure of 35 pounds to the square inch. The bearings float on a film of oil, so their surfaces never touch.

Double valve springs give unusually quick action with soft seating. Rocket arms are swiveled on ball and socket joints that may be turned down with a screw driver, placing the valve mechanism in perfect adjustment at all times. This engine develops unusual power and is very economical in operation.

### *Steel Cut and Hardened Gears*

The transmission is completely enclosed, with drop forged, hardened, and cut steel gears running in oil that reduce power loss to a minimum. All gears are mounted on heavy duty Hyatt roller bearings, with high grade ball bearings fitted with adjustable collars to take up end thrust. Fifteen Hyatt roller and five ball bearings are used in the Moline tractor. Seven splined shafts are used in locking gears to shafts. This is the strongest construction known, and has the additional advantage that it makes the transmission easy to take apart.

For pulling in soft ground, the two drive wheels can be made to revolve as one by means of a differential lock, doubling their pulling power.

### *Complete Enclosure of All Parts*

The final drive is completely enclosed in dust tight shields, the edges of which are sealed by heavy grease used to lubricate the gears. Every part of the Moline-Universal tractor is protected against friction and wear.

All working parts are accessible. All the weight is so well balanced on two wheels that the rear end of the tractor can be supported with one hand.

The Moline-Universal Model D will give you longer and better service at less expense than any other tractor. It is built for positive reliability.

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## Live Stock Is Moving

The week ended July 20 is given as the record week at the Spokane Union Stockyards for the number of live stock handled. The report shows that 131 carloads were received during the week, of which 1000 head were cattle, 13,000 head sheep, 100 head calves, and 50 head horses.

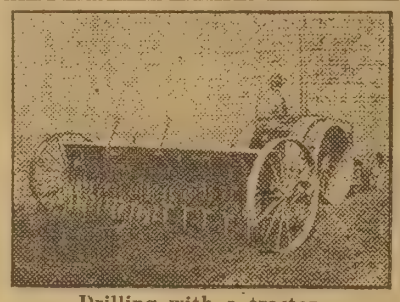
It is reported that William Hislop of Spokane recently paid to Archie Prior of Yakima, Wash., $15 per 100 pounds for eight carloads of spring lambs on board the cars at Spokane. This is believed to be the highest price ever paid for as large a shipment of lambs as this in any market of the west or middle west.

## Gathers Tractor Data

During the present year the United States department of agriculture determined to ascertain whether the tractor as an investment justified itself in the performance it had given and might be expected to give over a period of years. A questionnaire was sent out to owners of tractors, and reports came back to the number of 600.

Nine out of every ten owners consider their investment in a tractor a profitable one, which is good proof that the tractor is 90 per cent reliable. In the light of this fact, and considering the improvements that are being made, it is safe to conclude that we are rapidly approaching a day when the tractor will be as efficient as any machine.

A very large majority of those reporting to the department of agriculture laid stress on the tractor's ability to perform heavy work and to do it quickly, thus covering the desired acreage within the proper season. It was shown also in these reports that the tractor unquestionably affected a saving in man power and that through its use a larger acreage could be handled than could possibly be undertaken with horses. Then, again, a third and equally



Drilling with a tractor

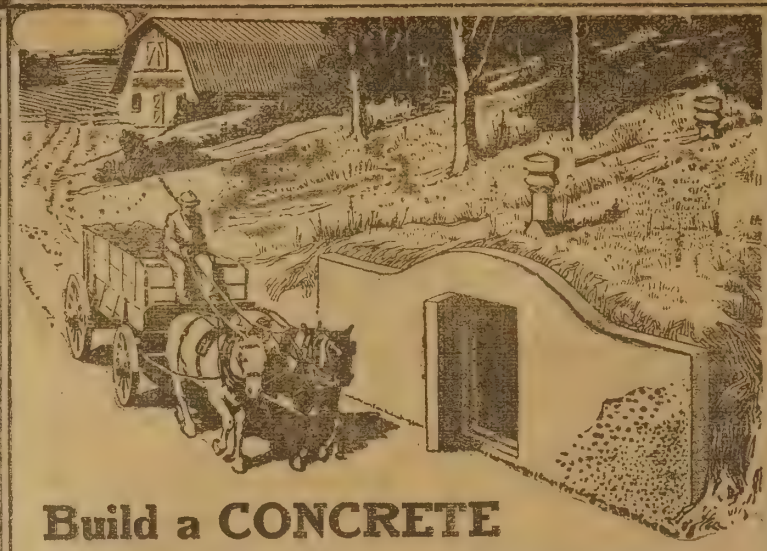
important advantage referred to by these tractor owners related to the depth of plowing.

When plowing is done with horses, particularly in the fall, there is a strong tendency to skim the surface at a depth of three or four inches. By reason of this shallow plowing year after year the lower soil becomes hard, making penetration by plant roots very difficult. With only a shallow root system it is easy to understand that even short periods of drouth will injure a crop much more severely than if the roots could penetrate their normal depth. The tractor, offering as it does the power to plow deeply even in very dry weather, will certainly be the means of introducing the deeper tillage which, on most soils, will result in greater production than shallow tillage.

While the report of the department of agriculture indicated that the average tractor was used only 45 days during the year on an average, we question whether this includes its service at belt work. In any number of ways—such as in the grinding of grain, filling of silos, sawing of wood and pulling of stumps—the tractor can be used to a great advantage, thereby spreading its period of usefulness over a much greater part of each year.

A splendid record of increased production has been made this year. Yet the government is asking for an increase in the state of Washington alone of 300,000 acres for 1918, and in other states correspondingly. Some neighborhoods have contributed large numbers of horses to the army; and with this reduction of power at a time when greater production is called for, tractors on farms in the Pacific northwest will play an important part in helping to carry out our successful war program.

It may be worth suggesting to those who may be contemplating the purchase of a tractor for fall plowing that the demand is much in advance of the supply. One tractor distributor in Washington reports that he received, just a few days ago, the last carload of machines called for in an order placed with his factory early last spring and that no definite promise will be made to ship from now on except as limited factory output will permit.

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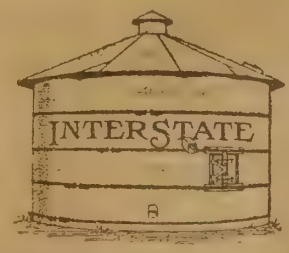
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Please send me full particulars regarding your grain tanks.
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# Can Fruit in Spite of Sugar Shortage

Owing to the action of the national food administration in again reducing the amount of sugar that may be secured by any family for canning purposes, it is feared by some that much fruit will be allowed to go to waste that would otherwise be canned or preserved. This should not be. Every pint possible should be canned without the use of sugar if the supply is not sufficient to can as usual.

Under the new sugar regulations only one 25-pound lot of sugar is allowed to each family. If a family has already purchased one 25-pound allotment no permit will be granted for the purchase of a second, but where the first purchase of this amount has not yet been made the family is entitled to one 25-pound purchase. This amount is for canning only. None of it is allowed for jellies and jams. Three pounds a month per person is allowed for general use, but it is urged by the food administration that every person reduce this amount as much as possible. The regulations are due to shortage of the sugar crops in some producing countries and to the shortage of shipping for importing it.

In a bulletin on "Canning Without Sugar" J. S. Caldwell, government by-products specialist, says that sugar is not essential for the preservation of fruits, but that they can be canned as successfully without as with it. The following extracts from the bulletin describe the methods of canning, which are in the main applicable alike to canning with or without sugar:

"Many housewives are apparently unaware that practically all fruits may be successfully canned without the use of sugar. Such fruit preserves more of the natural appearance and flavor than does fruit put up in heavy sugar syrup, is fully as palatable and much more easily digested, is in better condition for use in cooking, and is available for all purposes for which fruit canned in syrup could be used. A heavy sugar syrup aids in a slight degree in preventing the growth of the yeasts and bacteria which cause spoilage, but perfect sterilization makes its use unnecessary.

"Fruits may be canned without the use of sugar by any method which the housewife is accustomed to use, but in every case the following rules should be observed:

1. Fruit to be used for canning should be firm, not overripe, and free from decay. Vegetables should be young and tender. To attempt to use very dirty, overripe or decayed fruit, or old, tough vegetables is to invite failure, since it is very difficult to sterilize such materials.

2. Jars should be tested by partially filling with water, adjusting rubbers, tightening covers, inverting and shaking.

3. Jars, covers, rubbers, spoons, cups, funnel and all utensils which are used in canning must be placed in a pan of cold water deep enough to cover them, placed on the stove and boiled for 20 minutes. Allow them to remain in the hot water until needed for use. This will prevent subsequent breakage and will insure perfect sterilization.

4. Rubbers should never be used a second time.

5. The neck of the jar should never be wiped off before sealing, as the cloth will almost certainly leave bacteria or yeasts in the jar.

**The Cold Pack Method.**

"The cold pack method has rapidly come into general favor, since it preserves more of the natural color, appearance and flavor of the fruit, and also saves the time, energy and labor of the operator. It requires no special equipment other than a wash boiler, lard can or other deep vessel with flat bottom and tightly fitting cover. Make a false bottom of wire netting or light wooden slats nailed to cross pieces and cut to fit in the bottom of the vessel used. If an oil or gasoline stove is available, increase the comfort of the operator by moving the entire outfit into a shady spot outside the house. Place the pan of boiling water containing jars, covers and utensils on the stove and keep hot. Put the false bottom in place in the wash boiler, fill the boiler about one-fourth full of warm—not hot—water, and you are ready to begin work.

"Transfer a jar from the boiling water to the wash boiler, fill it immediately with cold, raw fruit, packing it down firmly. Add enough cold water to fill the jar within one-half inch of top, using a knife or spoon to displace air bubbles. Take a rubber from the boiling water and fit it on, then set the cover loosely in place. Continue the process until the boiler is filled with jars. Now fill the boiler with cold water to within one and one-half inches of the tops of the jars, fit the boiler cover tightly on, place the boiler on the stove and heat to boiling. In the case of quart jars the following time table may be used as a guide:

"For strawberries, blackberries, loganberries, continue boiling vigorously 8 to 12 minutes. For acid fruits, such as cherries, currants or gooseberries, boil vigorously for 5 to 8 minutes. For apples, peaches or pears boil vigorously for 20 to 35 minutes, the time depending upon the variety and degree of ripeness of the fruit.

"When the fruit has boiled for the specified time remove the jars from the boiler and immediately screw the covers tightly on. Wipe dry and place on a shelf out of drafts to cool, inverting the jars in order that leaks may be detected at once.

**The Open Kettle Method.**

"The open kettle method differs from the cold pack method in that the fruit is placed in a porcelain lined or other suitable vessel with enough cold water to cover it and cooked for the necessary time before transferring to the jars. Jars, rubbers, covers and utensils are sterilized in boiling water as described above. When the fruit is sufficiently cooked a jar is transferred from the boiling water to a plate or dish, packed with the fruit and filled to overflowing with the boiling juice, a rubber and a cover are taken from the hot water and fitted on, and the cover is screwed tightly down. Do not delay a moment in closing the jar tightly, and never attempt to wipe off the overflowing juice before putting the cover on, as you will almost surely introduce organisms which will cause spoiling of the fruit.

"While this method is a favorite one with many canners, it is wasteful of fuel and of time, since the amount of fruit which can be prepared at one time is small; the operator must stir the fruit continually to prevent sticking and scorching, consequently is exposed to the full heat of the stove, and the fruit loses much in appearance and flavor. For these reasons, those who have given the cold-pack method a fair trial usually adopt it.

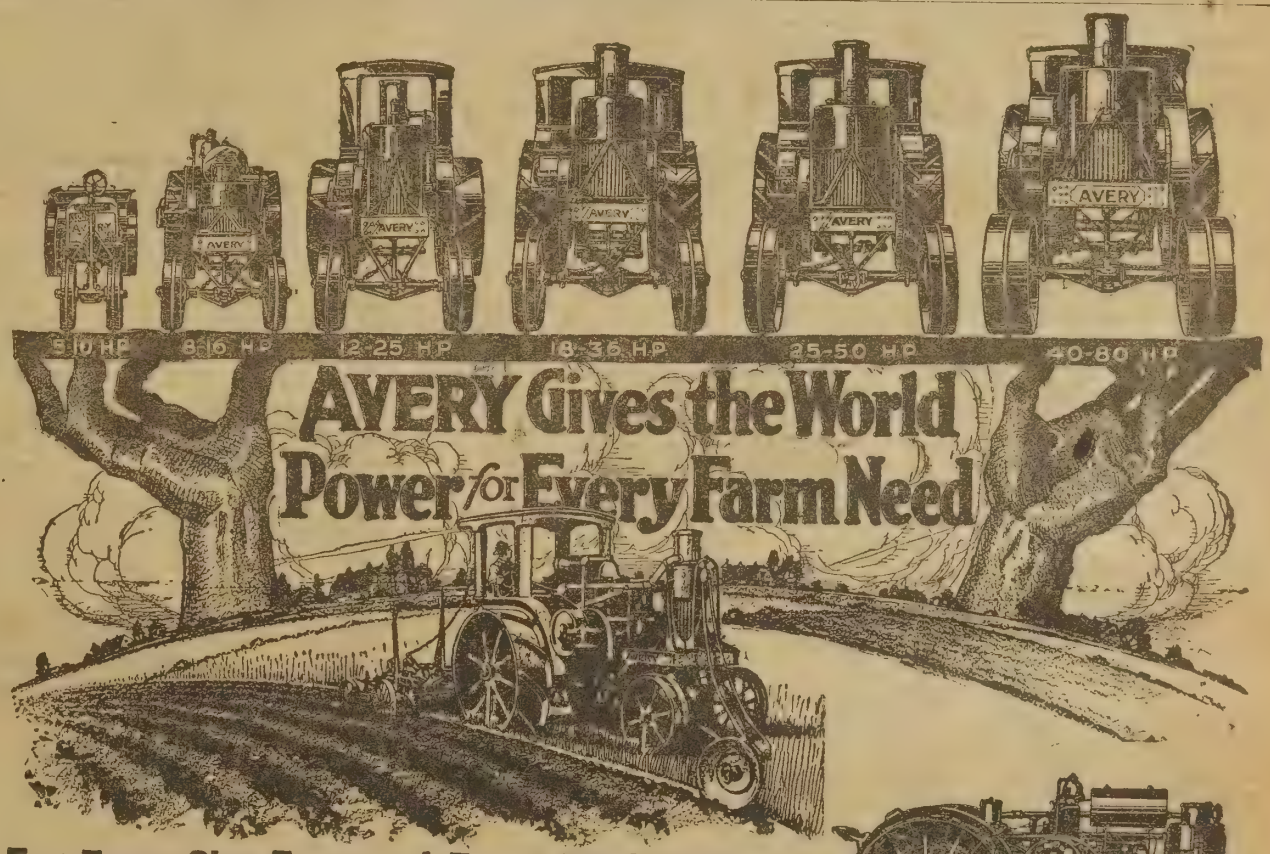
"If fruits are allowed to boil for the full times stated above and are sealed without allowing anything which has not been thoroughly sterilized by boiling to come into contact with the fruit or cover, they should keep indefinitely. If the operator is working at high altitudes, the method of double sterilization should be employed. Proceed by either of the methods just described, but after 24 hours return the jars to the wash boiler, fill it to the shoulder of the jars with cold water, place on the stove and bring to boiling. When the water begins to boil—not before—loosen the covers sufficiently to permit the steam to escape, and continue boiling, with the cover of the boiler in place, for eight to 10 minutes in the case of the softer fruits, 12 to 15 minutes in others. Now remove the jars from the boiler and tighten the covers while fruit is still actually boiling in the jars. This method should always be employed when tomatoes, peas, beans, or vegetables low in acid content are being canned."

## Center of Production.

The center of agricultural production of the United States, according to the value of crop and animal products for 1917, is in west central Illinois, as shown by a diagram just issued by the department of agriculture. The states of greatest production are: Iowa, $1,330,000,000; Illinois, $1,255,000,000; Texas, $1,045,000,000; Missouri, $947,000,000; Ohio, $851,000,000 Nebraska, $774,000,000; Indiana, $766,000,000; Kansas, 735,000,000; New York, $700,000,000; Minnesota, $646,000,000; Pennsylvania, $636,000,000; Georgia, $605,000,000; Wisconsin, $598,000,000; California, $575,000,000; Michigan, $534,000,000, and Kentucky, $529,000,000.

## Much Beef Is Exported.

The government food authorities have announced that during the month of May nearly 100,000,000 pounds of beef was shipped to Europe. Most of this went to this country's allies. This is said to be the largest shipment for any one month in the history of this country.


## For Every Size Farm and Every Kind of Work

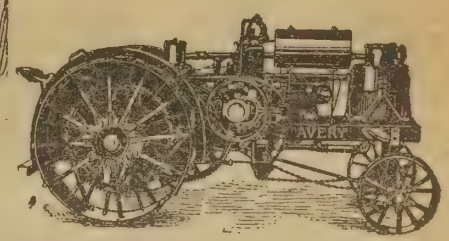
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Avery Tractors are entirely built in our own big factories and every part of an Avery Tractor (motor, radiator, transmission, etc.) is built **especially** for tractor work and **only** for the Avery Tractor. The Avery Company are builders—not assemblers. They specialize in motor farming machinery. Don't confuse the Avery Tractor and other Avery machinery with the ordinary assembled machine.

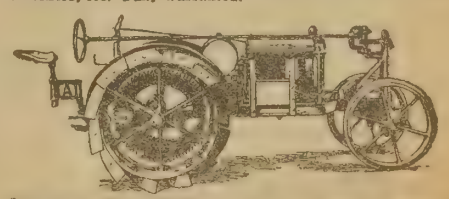
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Avery Tractors are the only make with a Duplex Gasifier. It does the trick—turns kerosene or distillate into gas. The Avery motor is low speed. Main bearings are adjustable from the outside. Patented inner cylinder walls are removable. All parts are accessible and every part renewable.

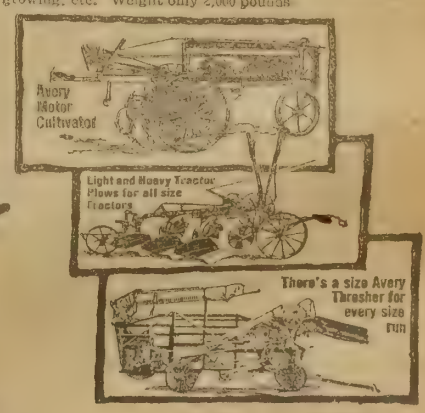
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**Avery 8-16 Tractor** pulls 2 or 3 plows and drives 19-inch threshers, etc. Fully warranted.



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**Motor Farming, Threshing and Road Building Machinery**

# UNCLE LOOIE MAKES A BIG STRIKE IN OIL

YOUNG MAN, DO YOU KNOW THAR IS OIL ON YOUR FARM?

WOT?

I AIN'T GOT TIME TO BOTHER WITH IT, SO I'LL SELL THE MAP FER FIVE BONES!

I GOT YOUSE, MISTER!

HUH! UNDER THE OLD SYCAMORE, HEY?

AND I GUARANTEE YOU'LL FIND OIL THAR, MY FRIEND!

ROCK

GOSH! WON'T WIDDER BE SURPRISED!

COAL OIL JOHNNIE D. WON'T HAVE NOTHIN' ON US NOW!

MAP

OGOSH OGOSH! STINGED LIKE A BEE!

IT'S OIL, ALL O.K.

HERE'S THE OIL!

WELL, ANYWAY THIS'LL SAVE ME A TRIP TO THE GROCERY FER KEROSENE!

TAYLOR

# JERRY MACJUNK LEARNS THE STREETS OF ROME

HA - IF IT ISN'T OUR OLD SHIPMATE, MOLLIE DEMER - WELL, WELL - CAN'T WE START SOMETHING THIS EVE? - TELL ME WHERE YOU LIVE AN' I'LL BLOW 'ROUND AND WE'LL GO OUT - EH?

WHY, HOW DO YOU DO, MR. MACJUNK?

WELL, I'M AT THE ALBERGO D'ITALIE ON THE VIA QUATRO FONTANE - TAKE A BUS ON THE CORSO UMBERTO AND GET OFF AT THE PIAZZA BARBIERI. THEN TURN TO YOUR RIGHT ON THE VIA NATIONALE -

WE'LL GO TO THE UPRA AN' THEN TO A REAL CAFE

CROSS THE STRADA DI CHIASA AND WALK STRAIGHT UP THE CORSO VITTORIO EMANUELLO. THEN TURN TO THE LEFT AND TAKE A CAR ON THE VIA D'ESPANIA -

AN' WE'LL HAVE ZABIONES TILL WE BUST.

AFTER YOU LEAVE THE CAR AT THE VIA SONAMBULO, GO RIGHT PAST THE FOUNTAIN AND TRAVEL SOUTH ON THE VIA WIRELESS. THEN YOU WILL SEE A SIGN - "E VIETATO FUMARE" AND NEXT TO THAT IS MY HOTEL - YOU CAN'T MISS IT.

SOME PARTY - WE'LL HAVE.

I'LL LOOK FOR YOU ABOUT EIGHT - AND DON'T FORGET WHAT I TOLD YOU ABOUT HOW TO GET THERE.

I'LL BE THERE WITH MY HAIR IN A PLAIT.

PIAZZA BINGO

STRADA SALVATORE

CORSO FROMAGO

VIA DELLA BIRRA

VIA CINQUE

12.30 P.M.

# Magazine Department of The Washington Farmer

## A Great Race Is Being Run

### *Will Food Production Maintain Lead Over Consumption?*

The republication in 1916 by the late Lord Rhondda, British food controller, of an address on the food problem delivered 18 years before by Sir William Crookes, emphasizes certain phases of this momentous world puzzle usually overlooked. We are too apt to assume that the present food shortage is due solely to the war, and that as soon as the black cloud has passed conditions will swing back to normal. But what is "normal?" Have we any right to assume that because the world has up to this time been able to increase its food supply to correspond with its increase in population, it will always be able to keep up this balanced increase?

Sir William Crookes is not optimistic on this point. His main thesis is, "England and all civilized nations stand in deadly peril of not having enough to eat. As mouths multiply, food resources dwindle." And in support of this thesis he calls attention to the fact that the population of the world is increasing by geometrical progression — something after the manner of compound interest —while food production is being increased by arithmetical progression, or like simple interest. Morover, the per capita consumption of the big staple of the white race, wheat, is increasing. Not only are there constantly more mouths to feed, but each individual mouth demands more.

Finally, after touching upon the point that wheat is the cereal food par excellence and that upon it depends at least some of the superiority of the white race in matters of enterprise, organization and endurance, the famous English scientist suggests the one possible remedy: The laboratories of the world must come to the assistance of the grain fields. There is a definite limit to the world's wheat lands, and although we may not yet have approached that limit even distantly, eventually we shall do so. After that the necessary increase in wheat production must come from greater yields per acre rather than from increasing acreage. Nitrogen is the magic word which promises to make this increase possible, for nitrogen is the dominant manure for the wheat crop. And only the research work of the laboratories can make available the greatly increased quantities of nitrogen necessary for this feeding of the soil.

## Rats, Wheat and Fines

America and the allies today form a family group and all food supplies belong to the family table. No one has a right to waste food, whether it is food he has bought or food he has grown. In a wide sense, no man can do as he pleases with his own property, if such action is detrimental to others. America recognizes this in a moral sense, and calls waste a sin; England pronounces it a crime and imposes a penalty.

Rats, they declare, are expensive guests and a farmer must not entertain them, even unaware. England not only swats the rat but swats the farmer who allows rats in his ricks.

John Andrews of Charlton Cross farm was fined £60 (about $250) because he permitted five or six bushels of wheat to be destroyed by rats. About 100 rats were believed to have been in the stack, and acccording to the English idea a farmer should keep ahead of the rat game better than that. Wasted wheat cost this farmer nearly $50 a bushel. Food wasted is food lost and no money can replace it.

### Love of the Home.

The man who kindles the fire on the hearthstone of an honest and righteous home burns the best income to liberty. He does not love mankind less who loves his neighbor most. The germ of the best patriotism is in the love a man has for the home he inhabits, for the soil he toils, for the trees that give him shade, and the hills that stand in his pathway.

The love of home, deep-rooted and abiding; that blurs the eyes of the dying soldier with the vision of the old homestead amid green fields and clustering trees; that follows the busy man through the clamoring world, persistent to put cares aside, and at last draws his tired feet from the highway and leads him through the shady lanes and well-remembered paths, until, amid the scenes of his boyhood, he gathers up the broken threads of his life and owns the soil his conqueror—this—this lodged in the heart of the citizen is the savin principle of our government.—Henry W. Grady.

## SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

## Exercise Before Bedtime and Keep Cool All Night



Dr. Hirshberg.

'Tis a hard job to make yourself fall asleep during some of these hot summer evenings. The room is stuffy and not a breeze stirs. Even your bed is very hot and produces a scorching sensation when you lie down upon it.

The sun is strongest from noon to about 4 in the afternoon and if you permit the rays to pour in during these hours it will take a very long time to cool off your room when you enter it at night. Your windows should remain open only until noon, and the shutters closed or shades drawn until 4. After this hour throw the windows wide open again and allow whatever breeze there is to stir the atmosphere of your sleeping quarters. When you come into your room at night do not allow the fatigue of the day to overcome you and think that your foremost and only task is to undress and throw yourself upon the bed. Such action will neither help you keep cool nor make your strong for the next day's work.

If you merely go to sleep with no exercise beforehand you are apt to feel dizzy the next morning and perhaps you will attribute your condition to the heat. The heat, to be sure, has much to do with lowering your vitality, but you can minimize this by taking the proper kind of exercise.

**Some Helpful Movements.**

The proper exercise in summer time has a strengthening and cooling effect. A cool shower or plunge into a tubful of cold water is the first refreshing move for the evening's rest. Use a Turkish towel and dry yourself with as little bodily friction as possible so as to produce the least possible amount of heat.

After your shower or plunge put on your evening garments. Do not leave off your underwear, for even in the very hottest times undermost garments are necessary in order to absorb the ever-present and profuse perspiration. If you remove your undergarments you run the risk of letting the moisture on your skin evaporate too fast and an obnoxious "cold" can easily result.

Before you are ready to retire take some light exercise. Begin with turning the head slowly sidewise and backward. Your arm movements should follow next. Stretch hard, forward, sidewise, upward and downward, so that you feel the strain of the movements to the very tips of your fingers.

Do your regular trunk movements after this, turning slowly forward, sidewise and backward. Be careful not to strain any part of the body.

After the trunk movement proceed with your leg movements, using the same movements as for the arm exercise. In order to exercise the muscles of the calf of the leg, stand erect, stretch your arms upward, and without bending the knees try to touch the floor with your finger tips. At first you will not be able to do this, but as you repeat the exercise from time to time you will be able to do it without any trouble.

**Perspire to Be Cool.**

A good movement for the joints of the knee is to stand erect, rise on the tips of your toes and sink slowly down, knees outward for balance until you assume a sitting position. While in this attitude throw out your chest and place your arms on shoulder level with fingers touching the back of the neck, and bend the head backward slowly, thus giving your spine a good exercise. Rise slowly on the balls of your feet, stretch your arms and sink slowly. Repeat this exercise two or three times.

Your final exercise should be the breathing movements. Throw your shoulders back, hold the chin in and breathe first of all in your stomach. Let your stomach come forward in the process, and be sure that you have taken as deep a breath as is in your capacity. As time goes on you will find that you can deepen your breath with continued exercise. Breathe thus on seven counts four times, then let your ribs swell out and repeat this breath exercise in the same manner as you did the other. Finally, take your chest breathing exercise as you rise slowly on your toes and raise your arms.

You will find that after these movements you will perspire, but that is necessary in order to feel cooler. The more perspiration escapes from your internal self the cooler you are left inwardly. The perspiration evaporates, and then your skin is left cool.

After you have exercised you can wipe away the perspiration and sponge yourself with alcohol. This evaporates rapidly and helps leave your skin cooler.

Now you are prepared for a good night's rest. With the pillow thrown aside and with just as little covering as is convenient you are quite apt to sleep the night through and rise in the morning thoroughly fortified against the day's heat.

## NEED WINDBREAKS.

### Are Valuable Addition to Farm.

By B. R. STURM.

The average western farmer does not yet realize the importance of planting a windbreak or a "shelter belt" around his farm yard, buildings and orchard to protect his family, live stock and orchard from the ravaging effect of the cold winds of winter and the strong winds of summer or fall, which we experience in every section of the country. A windbreak has long since been recognized as an important part of the farm equipment in the prairie states east of the Rocky mountains, and its value can not be longer overlooked by western farmers.

It will pay for itself many times over in the actual saving of fuel for the house and feed for the stock. It is well known that stock will keep fat on less feed in cold weather if not exposed to the wind, than if constantly exposed. The importance of a windbreak from an economic standpoint should not be disregarded. Some farmers give up to the fatalistic idea that trees can not be grown in their neighborhood. Yet every region where farming can be carried on, no matter how poor, will grow trees, probably not as high as in more favorable localities, but large enough to be an important factor.

The most practical windbreak is made of trees and shrubs. A single row of trees will often do the trick, though in an exposed section or where the wind is very severe and the winters very rigorous, a shelter belt composed of three or four rows of trees and shrubs planted alternately is most effective. These should be planted rather thickly, say eight or ten feet apart. The old park superintendent's rule—"plant thick, thin quick"—works admirably in this case. While the trees and shrubs are young, they will protect one another, but later on when they crowd they should be promptly thinned out.

The best trees for this purpose are Canadian poplar, Carolina poplar, Lombardy poplar, box elder, black locust, as they are quick growing and hardy. Of course they should be cut back severely when planted so they will throw out plenty of side branches low down, which should not be trimmed. The Canadian poplar is the hardiest of these. As its name indicates it is a native of Canada and thrives on the cold, bleak plains of Alberta and Manitoba. Its bushy habit of growth makes it especially valuable for windbreak purposes. For the outside and inside row of shrubs, any thick-growing bushes, such as lilac, tamarix, syringa, etc., are desirable.

## Sidelights

**Swore, in Fact.**

"Did Jim speak in high terms of the doctor who treated him?"

"No; in low terms on account of his high terms."

**Not Quite.**

"Does the new soprano's voice fill the church?"

"No; I noticed some vacant seats up in the gallery."

**God's Service Flag.**

The other night a dear little 5-year-old, gazing up into the sky dotted with a million stars, said: "Oh, mother, what an awful lot of God's men have gone to war."

**Easy.**

Wife—Your aunt Maria is coming to visit us, but really I don't see how I can find time to entertain her.

Hub—Invite your Aunt Eliza and they will entertain each other telling about their diseases.

**A Mere Trifle.**

President Hazard of Wellesley told the following at a banquet:

"A girl graduate, in taking leave of her dean, said, 'Good-by, professor, I shall not forget you. I am indebted to you for all I know.'

"'Oh, I beg of you,' replied the professor, 'don't mention such a trifle.'"—Miss E. Hopkins, Oregon.

**Exact Dope.**

Old Farmer (to soldier son just returned from the front)—Well, Dick, what be these tanks like that there's so much talk about?

Son—Why, they're just wobbling thingamabobs, full o' what-you-may-call-'ems, and they blaze away like billyo!

Old Farmer—Aye I heard they was wonderful things, but I never could get any details afore.—Tit-Bits.

**Not a Best Seller.**

"Have you any good books in here?" asked the superior person.

"We have thousands of volumes, sir," the clerk replied. "I'm sure there is something in our stock to suit the most exacting taste. What do you require?"

"I want a book of synonyms."

"Just a moment, sir, until I speak to the boss. I don't believe we have any of—er—Synonym's works."—Birmingham Age-Herald.

**Why the Four Servants.**

"Why are you leaving us, Mary? Haven't I treated you right?"

"Oh, yes, ma'am. I have been treated beautifully. But you only keep two servants."

"Well, what of that? You don't find the work hard, do you?"

"Oh, no, ma'am. But, you see, I've always lived where there were four servants. And that suits me better on account of my fondness for auction bridge, ma'am."—Philadelphia Star.

### OLD GLORY.

Here's to the red of it—
There's not a thread of it,
No, not a shred of it
In all the spread of it
From foot to head,
But heroes bled for it,
Precious blood shed for it,
Bathing in red.

Here's to the white of it—
Thrilled by the sight of it,
Who knows the right of it
But feels the might of it
Through day and night.
Womanhood's care for it
Made manhood dare for it
Keep it so white.

Here's to the blue of it—
Heavenly view of it,
Star-spangled hue of it
Honesty's due of it,
Constant and true.

Here's to the whole of it—
Stars, stripes and pole of it,
Here's to the soul of it—
Red, white and blue.
—James B. Davis, Shelley, Idaho.

# All the World's a Stage, and All the Men and Women Merely Players

## Section of Red Cross Motor Corps



—Committee on Public Information.

Mrs. J. Borden Harriman, who is colonel of the District of Columbia Red Cross motor corps, is intensely interested in the problem of women in industry, particularly in connection with the war. She is the only woman member of the federal industrial relations commission and is chairman of the committee on women in industry of the advisory commission of the council of national defense. The uniform of the women's motor corps of New York is almost identical with that of the woman's radio corps except for the insignia.

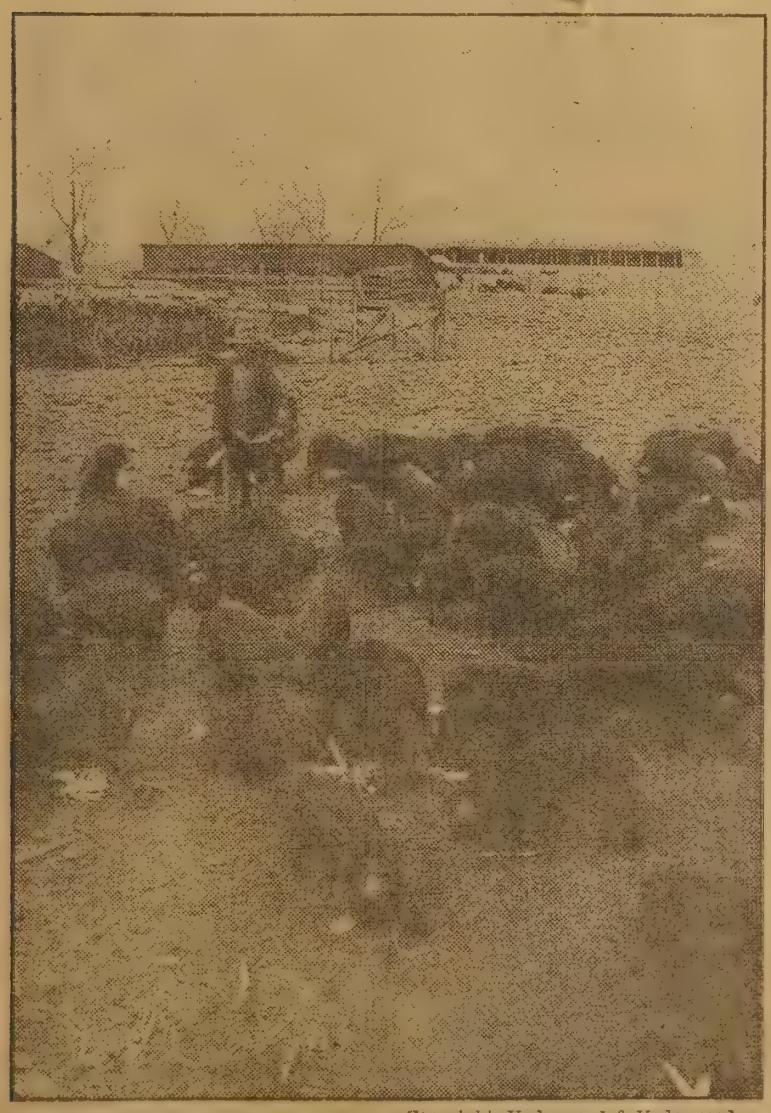
## Gas Victim at Field Hospital



—Committee on Public Information.

An American soldier a victim of German gas arriving at a field hospital for treatment after the attack.

## Increasing U. S. Hog Production



—Copyright, Underwood & Underwood.

The management of ranch 1733, near Kearney, Neb., has the right idea about increasing hog production. This ranch is saving all its best young sows for breeding purposes. When the photographer took this picture, the ranch had 125 fine young sows. If these sows have an average of eight pigs apiece, there will be 1000 more hogs for wartime meat. Last year the increase in the United States was 3,871,000 head, and in all probability the increase this year will be more than double that of last year.

## Mule Power Fights Against Hun



—Committee on Public Information.

Americans transporting food on a narrow gage railway, car hauled by mule to the trenches under cover of a dense woods.

### With the Honor Goes the Burden.




—Baltimore American.

### Come on In, the Water's Fine.




—Knoxville Sentinel

# Trappers of the Ozarks

**The Adventures of Two Young Trappers in the Wilds of Upper Louisiana, Now the State of Missouri.**

By LEWIS B. MILLER

Copyright, 1914, 1915, by Lewis B. Miller.

## CHAPTER XXVII.

### At the Hill Without Design.

Astounded at the unexpected sight of so many Indians in the river, Ben sat still for a few moments, staring in consternation. Recovering his presence of mind, he dropped his paddle, seized his rifle and leaped to his feet. Jodo also snatched up his rifle.

It was because the stream was wide here and comparatively shallow, that the red-skinned band, who had neither horses nor canoes, had chosen this for a fording-place. And even here the water was as deep as they could wade.

All the time the current was sweeping the three canoes straight toward the wading Indians. As they drew near, Ben and Jodo, bethinking themselves that their positions were too much exposed, dropped down and crouched as low in the canoe as they could. Their guns were still cocked, and still held in readiness to shoot. Martin was crouching low, and Jodo had handed him his pistol.

The Indians seemed fully as much astounded at the unexpected appearance of the white men as were the whites themselves. They stared at the canoes in a half-stupid, half-frightened way. All were in water so deep that it was as much as they could do to keep the current from sweeping them off their feet. If they put their hands down either to swim or to shoot, both their guns and their powder would instantly become useless. And anybody who ever tried to wade very deep water knows how impossible it is to hurry through it. Eager though the warriors doubtless were to attack the whites, they were utterly helpless to do so.

Very soon the canoes had drifted down almost against the Indians. The waders parted to make room for them, some pushing their way on and the others retreating. They looked as if they fully expected the whites to open fire. But Ben said, as he rose to his feet:

"Don't shoot, boys, unless you see one trying to shoot us. You watch that side and I'll watch this. But I don't believe they can use their guns if they try. We've caught them helpless."

So Ben stood eyeing the savages on the right, while Jodo and Martin, one with a rifle and the other with a pistol, sat watching those on the left. Soon the current had swept the canoes through the parted line and on down stream. As the warriors were passed, the whites kept turning so as to watch them. Not till the canoes were beyond shooting distance from the Indians did the canoemen put down their weapons and take up the paddles.

"Well, we got through all right," remarked Ben. "But such a thing won't happen again in a hundred years, I'm safe to say."

"Yes, we've got through 'em, but not through with 'em," Martin answered. "They'll soon be after us hot and heavy, every redskin of 'em. And we've got to split water fast if we don't want 'em to overtake us."

"The foremost warriors are just now getting out of the water," Jodo announced, after a glance behind. "And they're stepping livelier than they were when we passed 'em."

"You keep casting an eye up stream, Jodo, and see if any of the rascals are following us." Ben was paddling too fast to look back.

The canoes were now a quarter of a mile from the Indians, and another bend in the river soon hid the red men from view. Realizing that there was a race for life before them, the three white men were standing, dipping their paddles as fast as they could.

"If we had only one canoe, we'd make 'em run their fool selves to death before they caught us!" declared Ben, without missing a strike. "But with three canoes together, and all loaded deep—"

"Maybe, we'd better cut loose from the other two," the settler suggested.

"Never!" declared the trapper. "They've cost us too much. We'll hang to 'em and fight for 'em as long as we've got a bullet left to fight with!"

"All right! Just as you think best, boys! I'm with you, whatever comes!" answered the settler. "We'll give the red rogues a race anyhow!"

"Country's pretty rough along the west bank." Jodo had just glanced in that direction. "They won't be able to get over ground very fast there."

"You keep glancing behind, Jodo, and see if you can catch sight of any of them coming!" called Ben from the prow. Jodo was farthest back.

"Yes, I'll keep a lookout," was the answer. And the three paddles kept driving the canoes onward.

"Did they all get across, Jodo?" Ben soon thought to inquire. "All the Indians, I mean. Did they all cross to the west bank?"

"I think they did. The hindermost were nearly across, and were hurrying to get out of the water, when we rounded the bend."

"Good! I'm glad they're all together. Though, of course, some may cross back. If they all stay on the west bank, they can't attack us from both banks at the same time. That's what I'm afraid of."

"That would be bad—for 'em to split up," Martin agreed. "If they attack us only from the west side, we can make t'wards the east bank and git purty nigh out of rifle-shot. But if they take us between two fires—"

"We're likely to have a hot time of it," completed Ben.

On rushed the three canoes, as fast as the three paddles and the current could drive them. At length Jodo cried out:

"Yonder's one! I see one!"

The others held their paddles long enough to look back. With his paddle Jodo pointed to a lone Indian standing on the river-bank, several hundred yards up stream. But even as they watched him, that Indian was joined by another Indian, and the two by a third.

"They're right after us, every red varmint of 'em!" Narry bit of doubt of that!" panted the settler, as he began to dip his paddle again.

Soon the three warriors disappeared from the top of the rock they were on. But it was not long till they or others were seen again, this time only about half as far behind. Still the white men drove their canoes down stream, laboring with their paddles till the sweat dripped from their faces.

At length a warrior burst out of the woods on the left bank, scarcely a hundred yards fro mthe canoes, threw up his gun and fired at the white men. The bullet struck the water and glanced over their heads. Another Indian quickly appeared on the same bank. But before he could shoot, Ben grabbed his own rifle, threw it to his shouldler and was about to fire when the savages dodged back into the brush. While Ben was trying to see something to shoot at there was acrack and a puff of smoke, and a bullet came ping-winging from the woods. It passed between Martin and Ben, and scarcely a foot above the canoe.

Laying down his empty rifle, Ben took up his paddle and began to steer toward the east bank. "Maybe we can get out of range before they can load," he said.

He was right. For the next bullet that came out of the woods fell short, sending up a splash several yards from the canoe. Ben quickly reloaded his own gun. Telling the others to keep on paddling, he took a shot at every puff of smoke that the Indians' guns sent up. And the red marksmen kept firing at the canoes. The savages remained invisible, and all the white men were crouching as low as they could.

For a good while the battle was kept up. But it proved harmless to the whites, and probably to the Indians also, because of the long range.

"Looky yander, boys! Just looky down yander!"

It was Martin that utter that shout. He pointed down stream, to where a wide sheet of water was opening to view.

"The Missouri at last!" exclaimed Bene, after turning his eyes from the left bank long enough to glance ahead.

"We'll be all right when we onct git out onto that!" the settler shouted, to encourage the others.

The larger stream was still a good distance ahead, however; and those pursuing savages—Sacs and Foxes and Pottawatomies or whoever they were—had no intention of letting the canoemen escape if they could prevent it. Martin and Jodo were still using their paddles as hard as they could, and Ben was still sending an occasional shot at a puff of smoke, when he happened to glance behind him and saw two Indians coming down the open east bank at a run. They were still too far away to be dangerous. But they kept running, and when they were getting close the trapper faced the other bank and three up his rifle.

But the Indians quickly turned aside and dodged into some brush. The canoes were now so close to the east bank that a bullet from there would be very dangerous.

"Martin," said Ben, "you crawl over the things and get to this end with your paddle. You can steer better here than back there. Steer for the middle of the river! Jodo, keep an eye on the west bank as you work, and if you catch a glimpse of a redskin grab your gun and send a bullet at him! But don't stop paddling long. We'll soon be out of danger. I must watch the east bank."

Martin was quickly over in the prow, and the canoes were making for mid-stream. Another bullet soon came from the west bank, and buried itself in the side of their canoe. But the Indian that fired it was not to be seen. Ben kept watching; for one of them suddenly appeared in a little opening near the bank and raised his gun for a shot.

But Ben was too quick. A bullet from his rifle sped toward the warrior. The shot was too hasty to be deadly, but it seemed to take effect. The bullet from the Indian's gun went off through the air, and the Indian turned and dived into the woods, quickly disappearing.

A few minutes later another shot was fired from the west bank. The bullet passed so close to Jodo that it made him shudder. He caught up his rifle and fired at the smoke.

The canoes were now passing out into the Missouri. Both rifles were empty, but Ben was reloading his as fast as he could. Before it was loaded, two bullets, one from the east bank and the other from the west, and fired scarcely a second apart, came toward the white men. One buried itself in the side of the canoe. The other came straight toward Ben, but struck his rifle-barrel glancing off and cut a hole through his sleeve.

"The closest yet!" he exclaimed. "Down with you, boys! Down flat in the canoes!"

He himself dropped down till out of sight, and the others quickly did the same. The current was fast sweeping them out into the Missouri. The wisdom of their sheltering themselves was soon evident; for several more bullets were fired at the canoes before they could drift out of range. Some struck the canoes, some struck the water, and others went singing through the air just above the canoes.

When at last the white men had drifted out of range, and the shots had ceased, Ben stood up and finished loading his rifle.

"All over now, boys! Those red boogers are certainly greedy for scalps! But for our furs and things, I'd have been in favor of abandoning the river and taking to the woods ourselves. Risky business, that fighting in the open while your enemy is under cover."

"But how I did wish for my old rifle!" exclaimed Martin, as he stood up and gazed back toward the stream they had just come out of. Several Indians were standing on the river-bank, in plain sight. "But ain't that impydent of the boogers?"

The canoes were now drifting down the middle of the Missouri river and were out of rifle-shot or bow-shot of either bank. Martin and Ben after watching till the Indians had disappeared seated themselves and took up their paddles. After reloading his rifle Jodo, too, went to paddling.

"Wasn't it most uncommon strange, though, the way we ketched that gang of red boogers in the river?" remarked the settler. "They couldn't hurt us, and I guess we could have turned loose and killed most of 'em. It would have served 'em right, too, if we'd done that very thing. That's what they tried to do to us, just as soon as they could."

"Did either of you notice anything peculiar about their guns as they held them up?"

"No, I didn't. What was it, Ben?" questioned Jodo.

"Why, in the first place every Indian of them was armed with a gun, which is very uncommon. Usually some of them are carrying bows and arrows. And then every gun had a new look, as if it had never been used before. Even their powder-horns had a newish look to me."

"Seems to me like I noticed somethin' of the kind, now that you've mentioned it," said the settler. "And that's easy enough accounted for. Them redskins had been down below some'r's, where the Britishers is passin' out free guns and ammunition to all that wants 'em. That's how the boogers come to be newly armed. Oh, us settlers is likely to have a time of it before this trouble blows over!"

"I thought that French village was opposite the mouth of the Osage," Jodo soon remarked.

"Not right at the mouth. The Hill Without Design stands about two miles below where the Osage comes in," Ben explained.

"The Hill Without Design! What's that?" demanded Jodo.

"That's what those Frenchmen call their village. That's what Cote Sans Dessein means."

"How did they ever come to give their village such a name as that?"

Here Martin explained: "Over on the north side of the Missouri, and not a great way from our village, is a hill standin' out by itself. Looks kind of out of place there. Fact is, it looks just for all the world like it had been broke off from the hills south of the river and then shouldered up and packed across to the north side. The French call all such hills as that cotes sans dessein—hills without design. That's how our village got its name."

"Odd kind of a name to me," laughed Jodo. "But I can see the smoke from the village now. Looks rather good, too, after eight long months in the wilderness."

"It certainly does look good," agreed Ben. "When we catch sight of the village itself, I shall feel like we're almost in sight of home."

Not a great while later the canoes had been made fast to the north bank and the three men were walking across the valley toward a little cluster of log houses.

And scarcely had they entered the village when a number of the French people gathered around them, all eager for news and all talking volubly in their own tongue. Martin spoke French, and so did Ben, though not so well. But Jodo understood scarcely a word, and it was all meaningless chatter to him.

Martin had been expected home the day before it seemed, and all were well pleased at his safe return. There was much excitement in the village when it became known that the party had been engaged in a running fight with the savages.

When the excitement had subsided, the young trappers were taken to Martin's house, where Martin's French wife gave them an excellent breakfast, with eggs and other things which they had not tasted since leaving home. The village was only a collection of farming people, the men going out daily to tend their little farms. Unlike the Americans, the French settlers chose to live all together. But, like everybody else in this part of the country, they depended more on hunting and trapping for a livelihood than they did on farming and stock-raising.

The young trappers were urged to remain several days in the village. And, though they were both eager to get home, they decided not to go on till the following morning.

All the talk among these people was now of the prospective war between the United States and England, and of the expected hostilties of the Indian tribes against the frontier settlements. In fact, though the neighboring Indians had not yet attacked this settlement, or any other so far as was known, they had already murdered several men whom they had chanced to come upon out in the woods, farther up the Missouri. As a matter of fact, this village was destined to be fiercely attacked and heroically defended during the next two or three years.

Partly in honor of their young visitors, and partly as a preparation for the foreseen Indian war, a shooting-match was held at the outer edge of the village during the afternoon, with all the men and big boys taking part, and all the women and children looking on. Ben and Jodo both tried their rifles, and both shot so well that they received many admiring glances and many friendly smiles from those black-eyed French girls. The swarthy Benoni, with a picture in his mind of a pair of blue eyes that he was hoping soon to see, was not much impressed. Jodo, on the other hand, was wonderfully impressed. But as he knew no French, and the girls spoke little or no English, nothing came of it.

A party from Cote Sans Dessein had intended to set out in canoes for St. Louis within the next few days, to obtain a supply of ammunition. But on learning that the young trappers had nearly 30 pounds of gunpowder and 50 pounds of lead to sell, they promptly bought both powder and lead at the highest market price, paying for them in furs. Knowing that they were likely to have further trouble with the Indians before arriving at the main settlements, the trappers were very careful to save plenty of ammunition for their own use.

When night came, being unable to take their canoes to the village, Ben and Jodo thought it prudent to go to the river and sleep. There was danger that some of the Indians might cross somehow, and steal the canoes. To make sure of there being a sufficient guard, Martin and several French boys went and slept on the river bank with the trappers. Nobody sat up, but several of the village dogs were with the boys and would not fail to sound an alarm if an Indian approached.

When morning dawned, Ben and Jodo went back to Martin's for breakfast. It was well on in the forenoon when they returned to the river, entered their canoes

(Continued on page twenty-seven.)

# Handicraft For Boys

By A. Neely Hall

(Copyright by A. Neely Hall.)

## Knots and Hitches.

Any boy can tie a knot, but there are safe knots and unsafe knots, and if he doesn't know the correct method of tying, nine times out of 10 he will tie the knot incorrectly.

Below are a few knots and "hitches" that every boy should know. Get two pieces of light rope and work out each as I describe its formation.

A rope has three parts—the "bight" or loop (L, figure 1), the "standing part" or long end (S, figure 1), and the "end," usually the short end used in forming the knot or hitch (in figure 1).

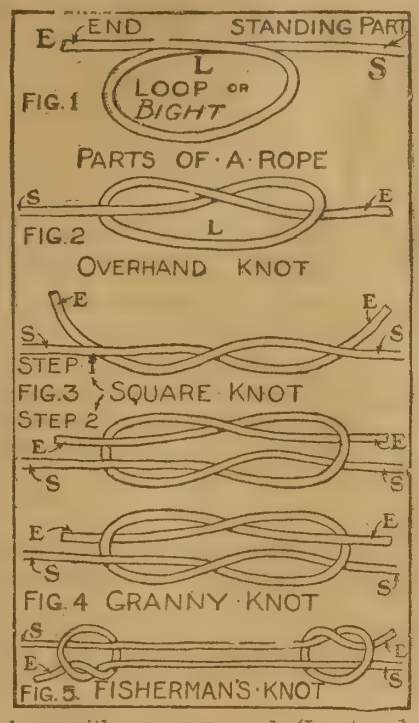
To begin with the simple overhand knot (figure 2), make a loop (L) and pass the end (E) through the loop.

In joining two pieces of rope with a square knot (figure 3), first twist the ends (E, E) as shown in step 1, and then form an overhand knot on top as shown in step 2. Notice the difference between the positions of the rope ends in this knot and in the granny knot shown in figure 4. In the former, the ends and standing parts pass out on the same side of the loops; in the granny knot they pass on opposite sides. The square knot will hold; the granny knot will slip.

The fisherman's knot (figure 5) is a secure knot and one easily loosed. In joining two ropes, tie an overhand knot in each rope end (E), forming it over the standing part (S) of the other rope, then pull the knots together. They can be loosed by pulling on the ends (E).

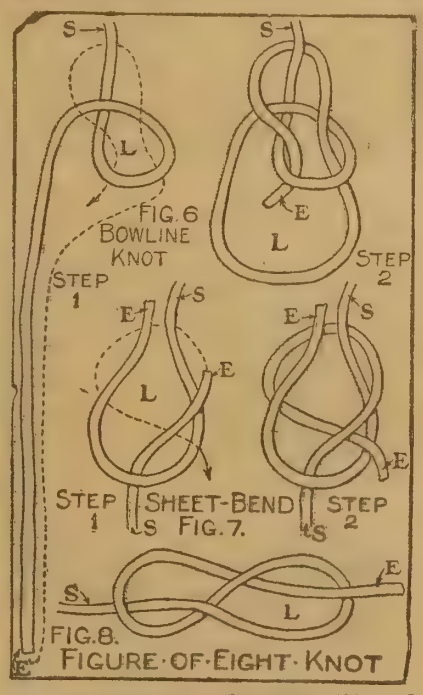
The bowline knot (figure 6) will neither slip nor draw tight. First form a small loop in the rope (L, step 1, figure 6), then bring the end (E) up through the loop, around the standing part (S), and down through the loop (step 2, figure 6).

The sheet bend (figure 7). Make a




loop with one rope end (L, step 1, figure 7), then pass the end of the other rope through the loop, around both the standing part and end of loop, and out through the loop between the loop and itself (step 2, figure 7).

Figure of eight knot (figure 8). Make a loop (L), then pass the end

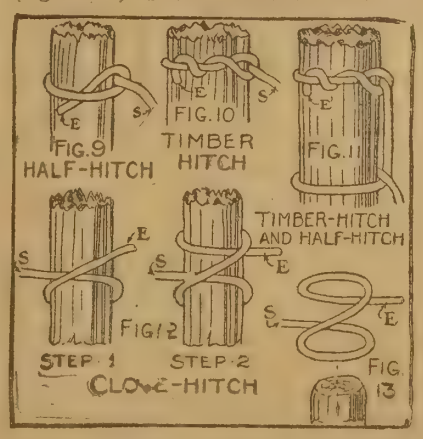



(E) around the standing part (S), and out through the loop.

The half-hitch (figure 9) is a secure method of attaching a rope to a timber when the pull on the standing part will be steady.

In the timber-hitch (figure 10), the end (E) tucked in several times.

The timber-hitch and half-hitch (figure 11) is a combination used for




fastening rope to timbers for hoisting.

The clove-hitch (figures 12 and 13) is secure under every condition. Pass the rope around the pole or post, with the end (E) crossing the standing part (S, step 1, figure 12); then pass the end around a second time and slip it under this last turn (step 2, figure 12). In making a clove-hitch near the top of a post, the two loops may be thrown over the top, as indicated in figure 13.


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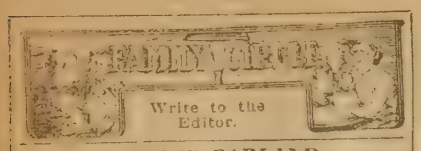
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ALICE W. BARLAND,
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# If War Bread Fails

## Don't Just Sit Down and Grumble

Dear Family Circle: These are times when all of us are discovering we can do a lot of things we did not know we could do, and get along without many things that we have been used to using. I run across some new recipe for something or other about every week, and when it is especially good I secure it for future use.

**Raisin Bread.**

Here is a fine recipe for raisin bread: One cup of white flour, one cup barley flour, one cup graham flour or if you have no graham flour use one and a half cups of corn flour and one-half cup more of barley flour, one-half cup sugar, one teaspoonful of salt, one cup of raisins or chopped nuts may be used. Five level teaspoons of baking powder, thoroughly sifted through the flour, one teaspoon of cinnamon and one and one-half cups of sweet milk.

To make you mix all these ingredients together except the milk, then stir in the milk and bake slowly for one hour. If you make this raisin bread once you will keep making it often.

**Steamed Brown Bread.**

Here is another kind of bread that I like—steamed brown bread. One cup of rolled oats, one cup of corn meal, one cup wheat flour, one-half cup barley flour, one-half cup rye flour, one teaspoon salt, one teaspoon, heaping, baking powder, one level teaspoon soda, three tablespoons molasses, three tablespoons sugar, four cups hot water.

To make: Mix molasses, sugar, soda and two cups of hot water with the rolled oats and corn meal. Sift the wheat, barley and rye flour with the baking powder, and to this add the other two cups of hot water and mix with the first mixture. Butter a deep basin, put the whole in it and steam one and one-half hours. Sometimes it is a little heavy, according to the flours used. In that case the next time you make it leave out some part of the heavier flours and use white flour in its place. Instead of steaming it in a basin I prefer to divide the batter in two or even three parts and steam it in baking powder cans, greasing thoroughly first. The cans should not be more than one-half full.

Many women have made a few efforts to bake bread with the war flour and the substitutes, and after making a failure have given up and settled down to grumble. Government experts are advising women to make their bread just as they always have done, only use the war flours. Perhaps your bread won't be so very good the first time, but, if that is the case, think it over, and put in less or more of one kind or another.

Whatever result you have keep cheerful and sweet about it. It is much better than if you had mixed 50 per cent sawdust with it anyway, and that is what is being done in some of the war-cursed countries.

I heard yesterday that large flocks of sheep are being shipped into northern Michigan from Idaho and other places, where free range is granted. This is a movement in the right direction. I wish this had been done last year. If it had been we need not now be keeping our hands idle about one-half the time when we want to knit, waiting for a mixture of fiber and cat's hair or something which resembles it, mixed with wool enough to hold it together. There is enough good grass going to waste in northern Michigan right now to feed sheep and goats sufficient to furnish our entire army with woolen garments such as are knitted. I am sure I have seen enough today, having ridden over 200 miles by auto, to furnish splendid range for millions of sheep.

When things are more equally divided, as they are getting to be, through the tutorship of this awful war, no one in this great, marvelous land need go hungry or cold. A. W. B.

# Cakes With No Wheat

The following recipes are submitted by Mrs. W. F. Stecher of Pullman, Wash., and require no wheat:

**Sponge Cakes.**

Yolks of three eggs beaten light, beat in gradually one-half cup sugar, the flour with a pinch of salt, one and one-half tablespoons water or fruit juice, the flavoring and the stiffly beaten whites of the eggs. Bake in a moderate oven. This cake will serve six or eight persons. The following is the right quantity of the various flour substitutes to use for a three-egg sponge cake: Two-thirds cup corn starch or three-fourths cup rice flour, or one cup oat flour or three-fourths cup corn flour or one-half cup each of corn starch and soy bean flour mixed. This last makes the lightest cake, corn starch alone comes next. The other flours make a somewhat heavier cake, but it is more moist.

**Angel Nut Loaf.**

Whites of six eggs beaten stiff with a pinch of salt. Beat in gradually one scant cup sugar, one-fourth teaspoon cream of tartar, a few drops any desired flavoring extract, one cup corn starch, one-half cup soy bean flour, two-thirds cup finely chopped nuts or cocoanut. Bake in a rather deep, well oiled and floured mold, keeping it covered for 40 minutes or longer if you use a round, deep mold. The secret of success lies in beating the eggs and sugar till you can no longer taste a grain of the sugar, and leaving the cover on till your cake is done. Two ordinary loaf pans of the same size, one turned over on top of the other for a lid is fine. If you take this cover off too soon your cake is apt to fall. The oven should be very moderate, as this cake burns very easily. Frost with chocolate frosting. This makes dainty little cakes baked in gem pans, sprinkled with cocoanut or chopped nuts.

**Codfish Cutlets.**

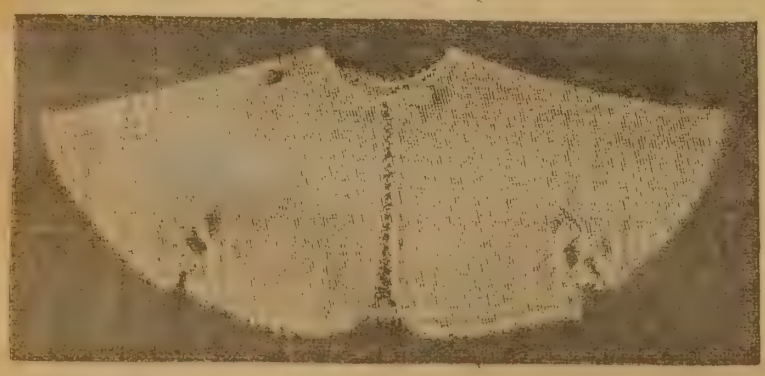
Soak picked-up codfish for a short time in cold water; then drain. Beat in one egg, a little chopped parsley and grated onion and moisten with a little milk. Mold into flat cutlets, dip in egg and crumbs and fry in deep fat. Serve with a border of parsley and sliced lemon.

**Baked Squash.**

Pare and remove the seeds of two medium-sized squashes; cut into thin slices. Brush a casserole with bacon drippings or butter, and put into it the squash, a little salt, pepper and half a cupful of water. Bake in a slow oven until tender. Before serving mix with a fork or an egg whip.

# Infant's Sack

By WINIFRED WORTH.



The illustration will help you to fashion and crochet this useful sack for the little one.

Cut flannel desired size and double crochet all around, chain back with picot. Chain 1, join. Place ribbon as shown in illustration to tie together.


# If You Want an "Inexpensive" Piano Don't Buy a "Cheap" One

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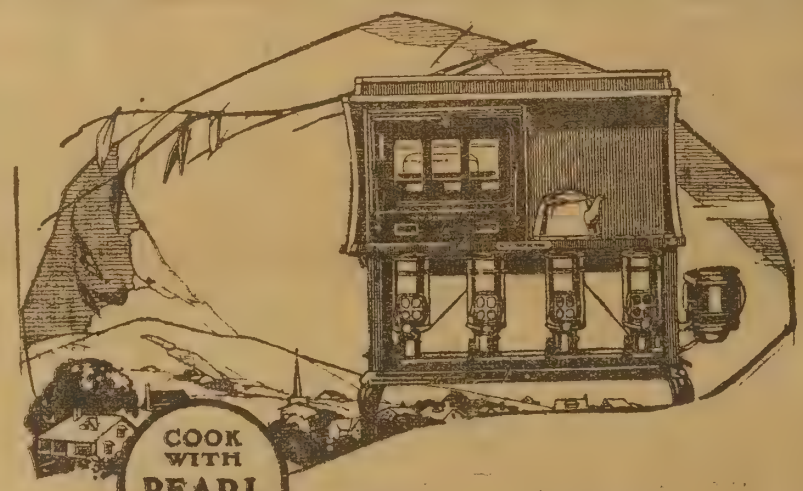
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2519—Lady's kimono. Cut in 4 sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. Size medium will require 5 3-4 yards for full length, and 1 1-2 yards less for sack length, of 36-inch material. Price, 10 cents.

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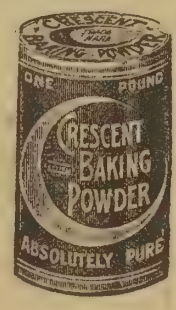
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# Washington Boys in War Service

From the Twice-a-Week Spokesman-Review.



**W. F. LATHROP, Craige, Wash.**—Is now with the 146th machine gun company in France, enlisting April 6, 1917. A brother, Sergeant Emory Lathrop, is also in France with the 116th engineers. His parents are Mr. and Mrs. E. C. Lathrop of Craige.



**HAROLD H. AMES, Park Rapids, Wash.**—Enlisted February, 1918, in the 23rd engineers, at Fort Wright, and is now "somewhere in France." He is a son of Mr. and Mrs. E. J. Ames of Park Rapids, who have charge of the postoffice at that place.



**EARL L. FAIRBANKS, Sunnyside, Wash.** — Enlisted in June, 1917, with the 147th machine gun company, but was transferred to the 5th provisional company casualty detachment, Newport News, Va. He was a student in the Cheney normal when he enlisted.

# Harvest Cooking

## Forethought Will Save Labor

By Margaret Palmer.

The meals to be served to the men during threshing should be substantial and wholesome and served in good, plain style. Much of the work, as well planning the meals, can be done before the arrival of the threshers. By doing so it will not tax one's strength so much, for even with the best of planning it always makes an extra demand on the strength and nervous system of the one who has the full responsibility of the affair. At best, one will be tired after the threshers are gone, but one can avoid having that wornout feeling by planning and then doing some of the cooking early in the morning.

In planning the meals try to vary them as much as possible. Serve the hot things hot, on warm plates, so they will stay hot, and the cold things thoroughly chilled. The threshers work hard, and as it is dusty work they will appreciate some cool, refreshing drink—if the weather is warm—to cut the dust in their mouth and throat. Then, on the other hand, it will put new life into them as nothing else will. There is nothing as good or so cool and refreshing as the drinks made from fruit juices. If one does not have ice it can be chilled and kept cool until the men come in by setting it on the cellar floor after it has been prepared.

The shells to the one-crust pies can be made two or three days ahead of time and they will keep fresh in a dry place. It takes only a short time to make the fillings for them, and by having them ready it will be found a great time and step saver in the rush. War cookies and cakes which keep fresh for a few days can be prepared ahead of time, as well as rusks for serving at breakfast.

The vegetables for salads, as lettuce, cucumbers, tomatoes, etc., will keep fresh for two days at a time after they have been washed and placed in an air-tight bucket with what water will cling to the leaves. The bucket should then be placed on the floor of a cool cellar. Tying them in a cloth wrung out of cold water before shutting them up in the bucket is also good to keep them fresh.

The noon meal is essentially hearty. The meat should be well cooked and tender, with plenty of nice, brown gravy. Potatoes with one hot vegetable, together with one cold vegetable served as a salad, pickles of some kind, bread and butter, and occasionally the men like gelatin which has been thoroughly chilled with fresh fruit and nuts in it, as it goes well with a hot dinner. This can be made the evening before. With a good dessert and something to drink, as coffee, and tea or cocoa, this makes a good wholesome and nourishing meal for them.

For the evening meal one can serve to good advantage plain or jellied sliced cold meats, baked or browned potatoes, creamed or baked macaroni, sliced tomatoes with or without onions, a fruit or vegetable salad, cake, cookies, bread or muffins and butter, sauce and something to drink. A meal of this kind is easily and quickly prepared, and is always acceptable. Hot biscuits or corn bread are good to eke out a scanty meal or make the bread hold out.

Some of the breakfast can be prepared in the fireless cooker, as baked beans or the breakfast food. Eggs and ham or fried fresh fish are all good to serve at this meal, though we must conserve the hog meats as much as possible.

As far as possible, plan to cook many of the hot dishes to be served at the evening meal in the oven, as baked or scalloped potatoes and other scalloped dishes, macaroni and cheese, a custard pudding, hot ginger bread, etc. This will save standing over the hot stove for one meal, and is also a time and step saver, as it does not take as long to prepare the meal, as many of the dishes can be prepared in the morning, ready to be placed in the oven, with but very little extra labor. This will give the housewife a chance to rest an hour of two in the afternoon.

Aim always to serve plenty of everything, and never scanty, for one must always remember that the men work hard and therefore will eat heartily.

The coffee can be ground ahead of time and kept in sealed cans. It is well to have the emergency shelf well supplied at this time, so it can be drawn on if need be.

This all takes a little forethought and planning, but it is well worth the while, as one will not be worn and tired out by doing so, and then if the threshers should come a day earlier it will not make so much difference with so many preparations made ahead of them. The new recipes for war rations fit well into meals for threshing days.

### Currant Cake

Rub four tablespoonfuls of butter and one cupful of sugar to a cream. Add nutmeg and cinnamon to taste and two eggs, beaten lightly. Then add two scant cupfuls of flour sifted twice with a teaspoonful of baking powder. Finally put in one cupful of chopped currants. Roll out lightly and quickly. Then sut into shapes and bake in rather hot oven.


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My dear Corner Cousins: One of the girls asked for a recipe of honey cookies and I wonder if the following will suit her taste; I am sure they are good.

Take one-half cupful of sugar, one cupful of strained honey, three tablespoonfuls butter, one egg, one cupful sour cream, one teaspoonful soda, and flour. Cream the honey, sugar and butter; add the well beaten egg, then the soda dissolved in the sour cream and mix in the other ingredients, adding flour enough to roll. Knead carefully to make the cookies soft, but not too firm. Cut out and bake in a moderate oven. Now, doesn't that sound good?

AUNT NELLIE.

**From Our Grown-Up Cousin, Esther.**

Dear Aunt Nellie: Will you admit a cousin that has just grown up big, but is still little when with children? I have read all the little cousins' letters and certainly think they are nice. We certainly had a nice, big and itneresting Corner a couple or three numbers back, didn't we? Let's every one write and keep the corner big! We all admire Aunt Nellie for helping us keep up the Corner, don't we? I think she is doing a splendid work! I should think Aunt Nellie would have a time judging all those splendid letters. Can any one guess this puzzle:? A lady counts her geese and finds she has two before, two and two behind two and two between two, how many has she? Now, some of you are wondering who I am, and I am going to tell you, but then I shall have to run. I am a big girl 5 feet and 5 inches tall, have brown eyes and wear "specs," I also have brown, curly hair. I am nearly 20 years old. Is there any one whose birthday is April 15? If there is I would like to know. I hope this escapes the waste basket. I must close now, with lots of love to Aunt Nellie and all the cousins.—Esther E. Erickson, box 108, Route 2, Lynden, Wash.

**All Kinds of Fun in the Country.**

Dear Aunt Nellie: My papa has taken the Farmer for two years, so I have been reading the letters every week and enjoy them very much. I am 9 years old and am in the fourth grade in school. We have always been living in Seattle until two years ago we moved on our farm. We live on a 40-acre farm. We have three cows, three heifers, one little calf that is all black, one pig and 25 chickens, and the nicest black and white cat. He seems to understand everything. I am so glad that papa and mama moved out in the country here, we have so many kinds of fun that we could not have in the city. I am so glad when the berry time comes. We have so many berry bushes and fruit trees. I think it is the most fun to pick berries and fruit. Now, Aunt Nellie, I am going to tell you how many sisters and brothers I have. I have one sister, named Agnes, and she is 11 years old. I have two brothers, Henry, age 6, and Roy, 3 years old. My teacher's name is Miss Hemingsen and I like her awfully well.—Nina Anderson, R. F. D. 2, box 112, East Stanwood, Wash.

**Live 18 Miles From Town.**

Dear Aunt Nellie: I think the cousins write nice letters. May I be a cousin? I am 12 years old. I will be 13 November 11. Have I a twin? If so I would like to hear from him or her. I go to school. Our teacher's name is Miss Polk. I like her fine. I am in the eighth grade with five other children. I go to Central school, distrit No. 49. I have three brothers, whose names are: Maynard, Frederick and Leonard. I also have one sister, whose name is Mary. We have five head of horses, 14 head of cows and calves. I have one calf and two rabbits. I have a dog, too. His name is Teddy. He plays with my brother, Leonard. I have a pony. I like her very well. Her name is Daisy. I herd cattle. We have two cats. We have a Ford car, and that is best of all. I have one war saving stamp. My brother Leonard and father and mother have one also, besides donations to the Red Cross. I live 18 miles from town.—Charles McReynolds, R. F. D. 6, Spokane, Wash. (Of course you may be a cousin, Charles. We want to hear from you often.—Aunt Nellie.)

**Shep Is a Faithful Dog.**

Dear Aunt Nellie: I am 10 years old and in the fifth grade. My birthday is March 1. Have I a twin? I have one apple tree. It had three boxes of apples on it and I got $3 for them. My sister's name is Blanch. She had a tree with 10 boxes of apples on it. She got $5 for them. Blanch is in the seventh grade. Our teacher's name is Miss Sharpe. She is very nice. We live on a 20-acre farm. Now I will tell you about our pets. We have two rabbits and one kitten, two dogs, seven cows, and four horses. The kitten's name is Polly. We like her very much. The dog's names are Queen and Shep. We like Shep because he is so faithful and we like Queen because she will catch the pheasants for us. I never saw a farm until we moved out here from Seattle one year ago. It seemed strange at first not to have the street cars, but my sister and I have learned to drive our old bay horse, Bob. We take the Farmer. I am always looking for the Children's Corner, so I shall be watching for my letter.—Ruth Erwin, R. F. D. 1, Box 54, Prosser, Wash.

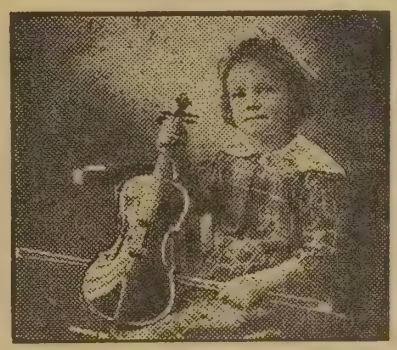
**Live on a Fruit Ranch at Peach.**

Dear Aunt Nellie: This is my first letter to the Children's Corner. I like to read the letters very much. I think the Farmer is a very interesting paper. My teacher's name is Miss Verna Welford. I like her very much. I am 11 years old and will be 12 March 28. Have I a twin? If so, I would like to correspond with her. I am in the sixth grade at school. I can knit and crochet. I have made two Red Cross handkerchiefs. We have a Junior Red Cross and a sewing and cooking club. I have four sisters and five brothers. One of my brothers is in the navy. I have a cousin in the navy also. The Columbia river flows through here. Peach was named for all the peaches we grow. We have a fruit ranch of about eight acres, and lots of chickens, geese, turkeys, pigeons and guineas. We have rabbits also.—Clara Nelson, Peach, Wash.

**Three Miles From the Nearest Town.**

Dear Aunt Nellie: I have dark brown hair and dark brown eyes. I am in the fourth grade. My birthday is January 3. Have I a twin? We are now living on the Double Ditch road, but are soon going to move to North Wood. There is a creek going through our land so we can go fishing this summer. There are two rooms in our school. The teachers' names are Miss Zweegman Miss DeValois of the smaller room. the teacher of the higher room and Miss DeVlaois of the smaller room. There are 26 children in the smaller room, and 21 in the higher room. We live three miles from the closest town. My brother goes to high school. I go to the Ebenezer Christian school. Stanley Albers was the teacher of the higher room, but he had to go to war.—Jacoba Muyskens, Route 1, Lynden, Wash.

**Little Cousin Letha.**



Dear Aunt Nellie: My papa takes the Farmer and I read the letters. We have three horses and one colt and its name is May Dodge. For a pet I have a cat and its name is Flossie. I am sending you my picture. I am 7 years old—Letha Burford, Cove, Ore. (I am sure the cousins will enjoy the dear little picture and I thank you so much, Letha, for it. You wrote your letter so nicely for such a little girl and you must not forget me but write often.—Aunt Nellie.)

**Home Is in the Valley.**

Dear Aunt Nellie: I would like to be a member of the Children's Corner. I enjoy reading the cousins' letters. I live on a 160-acre farm. I have nine brothers and three sisters. I am 13 years old. My birthday is September 8. Have I a twin? I go to Oak Dale school and walk one mile to school every morning. We have a two-room schoolhouse. My teacher is Miss Fitzsimmons. I am in the seventh grade. My chum is going to write, too. Her name is Bessie McFarland. She is in the sixth grade and is 12 years old. My home is in a valley. I have seven cousins and one brother in the army. Five cousins are in France now. Our school is 100 per cent Red Cross. We have been knitting at school. I will write again. I would like to correspond with the boys and girls of the Corner.—Florence Anderson, box 6, La Center, Wash.

**Hopes to Graduate in May.**

Dear Aunt Nellie: I am 12 years old and will be 13 June 21. I am in the eighth grade at school and hope to pass the examinations in May. I go to Central school. I have two brothers who go with me. Our teacher's name is Miss Polk. There are about 20 pupils in our school. My three oldest brothers go to North Central high school in Spokane. I like to crochet and tat. We have five horses and three cows. I may take music lessons in the summer. I saw a twin in one of the papers, but I forget her address. Her name was Dorothy Curtis. I wish she would write to me.—Gladys Cauvel, Age 12, R. F. D. 6, Box 64, Spokane, Wash.

**Would Like to Find a Twin.**

Dear Aunt Nellie. This is the first time I have written to the Children's Corner. I would like to find a twin. I am 9 years old and my birthday is November 14. I have three sisters and two brothers. Their names are Gordon, Stuart, Pauline, Frances and Hazel. We live 12 miles from town and two from the store. We have five pigs. I am in the third grade at school. We have 15 children in school. We have 25 horses and two cows and five calves. There were two more children came to school last Monday. We have 40 hens and four roosters. We have three dogs and four kittys and the dogs' names are Prince, Bob and Scout and the cats' names are Fannie, Ruth, Jessie and Topsy. I have light hair and hazel blue eyes and a light complexion. I go to school at district 36.—Virginia Mae Rouse, Mold, Wash.

**Favorite Sport Is Horseback Riding.**

Dear Aunt Nellie: This is the first time I have written to you. I am 13 years old and will be 14 December 9. I go to school every day. Our school has not had an absence mark this year. My teacher's name is M. B. Jaques. I have blue eyes, light hair and a light complexion. Have I a twin? If so I wish they would write. Necia Hire, I am going to answer a riddle that you sent Aunt Nellie. It is a needle. My favorite sport is horseback riding. I like all kinds of flowers, but I believe the deep red rose is the prettiest. We live on 436 acres of land. The soil is sandy and dry. May I become a member?—Bessie Ross, box 3, Hooper, Wash. (Yes, Bessie, all the boys and girls who write to Aunt Nellie are cousins. We can not have too many.—Aunt Nellie.)

**Has Good Times at Home.**

Dear Aunt Nellie: My father has taken the Farmer for a long time, so I thought I would write to you and all the cousins who are writing. I want to know if I could be a cousin. May I? If so, I will write again. I will first describe myself. I have light hair and hazel eyes. My hair is curly. I am about 4 feet 10 inches high. Our school ended March 24, and I am very glad of it, too, for I do not like school. I have lots of fun at home, but not at school. I am 11 years old and in the sixth grade in school. My father lives on a big farm. There are five girls and one boy in our family besides me. I would like to have some of the cousins write to me. I will close, leaving a kiss for you and the cousins.—Irene M. Larsen, Bickleton, Wash.

**Dick Has a Horse Named "Bob."**

Dear Aunt Nellie: This is my first letter to the Children's Corner. I like to read the cousins letters. I am 11 years old. My birthday is on July 11. Have I a twin? I am in the sixth grade at school. There are eight pupils in my room. My schoolhouse is a two-roomed building in the country. I have six brothers. Their names and ages are: Forest, 10; Ray, 8; Roy, 6; Horace, 4; Don, 2, and Earl, two months. We have 42 horses, colts and all. We have one dog and his name is Towser. We have two cows and one calf. I have one horse and his name is Bob. I clean out the barn and harrow after I get home from school. I disked today.—Dick Engle, Krupp, Wash.

**Making a Blanket for Soldiers.**

Dear Aunt Nellie: This is the first time I have ever written to the Children's Corner, but I read them every time we get a Farmer. I am in the fourth grade. My teacher's name is Miss Sherman. I have a bob-tailed cat. At our school we are knitting for the soldiers. We are making a blanket. I have six squares on my row. We have two horses. Their names are Nig and Bill. We have two cows, Lucy and Spot; and four heifers. I am 10 years old. My birthday is June 15. I will be 11 years old.—Fatima O. Lowght, North Bend, Wash.

**Hunts Agates on the Beach.**

My Dear Aunt Nellie: I have now written to the Corner twice. I hope that my letter will help me be on the roll of honor as I don't think I can win a prize. I am going to tell you this time what I do in the summer. I ride my horse down to the beach, go in swimming, and go fishing. Also, sometimes I hunt agates. I can row and swim a little. I have had nice rides since last time I wrote, and played with my dog. With love to all the cousins, hoping they are well.—Virginia Gibson, East Sound, Wash.

**Bernice Is a Cousin Now.**

Dear Aunt Nellie: May I be a cousin? I am 13 years old. My birthday is October 4. Have I a twin? I am in the seventh grade. I like school fine. My school chum is Hilda Hansen. She is 12 years old. Her birthday is December 27. My teacher's name is Mr. Sensibaugh. I like him fine. This will make the seventh term he has taught our school. I have one brother and no sisters. My brother's name is Lester. He is just 14 years old and goes to high school. He is 5 feet 8 inches tall. I belong to the Junior Red Cross.—Bernice Large, Kalama, Wash.

**A Contest at Kirby School.**

Dear Aunt Nellie: How are you and all the cousins? I hope you are all well. This is the third time I have written to the Children's Corner. I was 13 years old March 29. We are going to have a contest at the Kirby schoolhouse. I would like to correspond with Edna Requa. She is about my age. She is just from May to March older than I am. Ellen Elsensohn and Mildred Riley go to the same school as I do. It is the Kirby school.—Hattie Malone, R. F. D. 2, Pomeroy, Wash.

**Our New Cousin, Dorothy.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am in the fifth grade and I am 11 years old. I live in Prosser, Wash., on a 20-acre farm. We have three horses, one pony, and two colts. We have two cows and two calves. I have two sisters and three brothers. We have a lot of pigs. I have hazel colored eyes and light hair. My birthday is March 7.—Dorothy Furgeson, Prosser, Wash.

**School Is Out Now.**

Dear Aunt Nellie: I will write to the Children's Corner again. I got one letter from one of our cousins. Her name is Alice Case. I saw my letter in print and I sent it to my grandpa and he sent one back to match it. How many of the cousins can say Black Bugs Blood five times without stopping? I was out picking flowers today. My sister went with me. She is only 3 years old. She has long, curly hair and blue eyes and a light complexion. I have long hair and light blue eyes and I have a light complexion. I am 12 years old and in the sixth grade now. Our school is out. I wish we had school yet. The flowers are all in bloom that I like, but it is awful hot. The last time I was weighed I weighed 109 pounds. We have a horse and I call him mine. He is sorrel with a white face and a light mane and tail. He is a nice horse and his name is Stogans. All of us children rode him to school this winter. Just before school was out there were four new children came. There was one girl and three boys. I was the only girl in our school all winter and it was lonesome, too. I am making a quilt now for myself and after I get it made I am going to make some for the Red Cross.—Stella Davis, Fruitland, Wash.

**Lives in Pleasant Valley.**

Dear Aunt Nellie: I have a brother and a sister. Their names are Johnnie and Lorena. I am 9 years old and will be 10 November 5. Have I a twin? I live on a 600-acre farm in Pleasant Valley. I have to go one and one-half miles to school. I ride horseback. We have two cows. My pony's name is Tip. We have six horses. My brother is sweet as a strawberry. My sister is 11 years old and she will be 12 in August. My father takes the Farmer. We have two orchards and raise fruit. I read the letters in the Farmer. I wish the Corner would grow. My brother is not old enough to go to school. I am in the third grade. My teachers' names are Miss Houpt and Miss Argyle. We had a new schoolhouse in Pleasant Valley. It has two rooms. I am in the third grade arithmetic, spelling and language and geography. I have joined the Red Cross.—Anna Thomson, Goldendale, Wash.

**What Elsie Does in School.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I enjoy reading the letters very much and hope to see mine in print. I am 8 years old and in the third grade. My teacher's name is Miss Johnson. Miss Bourg used to be my teacher, but she went away to rest. I am four feet two and one-half inches tall. My hair is light brown. I am rather fat. My brothers and sisters tease me because I am so fat. I almost forgot to tell you what we do in school. We have reading, spelling, arithmetic, geography and history. There are five children in the third grade, five children in the fourth grade, six children in the second grade and seven children in the first grade. I think I will close and do something else for my arm is getting tired.—Elsie Hoglund, R. F. D. 222, Port Orchard, Wash.

**Patriotic Pictures in Schoolhouse.**

Dear Aunt Nellie: Our school is working for the Red Cross. We made over 500 gun wipers last Friday. I made 68 that day and 55 today. We have lots of patriotic pictures in our schoolroom. One has a picture of Lincoln on it. Below the picture it says: "The government of the people, by the people and for the people shall not perish." The pictures are advertising the third Liberty loan. Our whole school joined the Junior Red Cross. We took some money that we made from a basket social. My mother has knit three sweaters and my sister, one. We play basket ball at school every nice day and have lots of fun.—Lenore Fox, Washougal, Wash. Box 35.

**"Dutch" Is a True Americans.**

Dear Aunt Nellie: I live on a farm now. I like it much better than in town. I have a dog named Dutch, but he is a true American. He likes to play ball with me and will jump through a hoop. When he comes in the house he sits in a chair. I like to read the letters very much. I live a mile from Colbert and school. I am in the third grade. I like my teacher very much. She gives me music lessons on the piano. I was 8 years old October 13, 1917. Have I a twin?—Harold Skinner, Colbert, Wash.

Address all letters to Aunt Nellie, Care of The Washington Farmer, Spokane, Wash.

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# News for Breeders

Felzer Bros. of Tangent, Ore., who breed both Shropshires and Shorthorns, sheared their rams early this year and yet had an average of 10 pounds of wool. They have sheared as high as 18 pounds from a Shrop ram. Barrington Gold, by Golden Goods, is still good as a herd sire and they will have a few young bulls in the Portland sale this winter.

W. H. Willins has approximately 90 head of stock on his half section farm just east of Latah, Wash. Twenty are cattle, seven horses and the balance, nearly 50, hogs. Mr. Willins raises good stock, but has not gone in for purebreds very heavily as yet. He raises his own feed, including field peas for his hogs. While he superintends the activities of the farm to considerable extent himself, Mr. Willins employs John H. Dow and family the year 'round to look after the many needs of the live stock and crops.

Jacob Fox of Silverton, Ore., who won grand championship on Jersey cow at last year's Oregon state fair, now has seven Jerseys on official test, besides two that have just lately finished. These two are 2-year-old heifers, one by Foxhall's Fern Lad, the other by Sugar's Golden Chief. Complete returns have not been received from the A. J. C. C., but they have produced about 300 and 330 pounds of fat, or 377 and 412 pounds of 80 per cent butter. Mr. Fox is only milking twice a day, but will have a herd average of 550 pounds of 80 per cent butter, with two over 700, and four over 600 pounds. Like most farmers in the Willamette valley, Mr. Fox is short of hay and help. He will probably not exhibit at this fall's state fair.—H. A.

Leslie P. Trigg of Norway, Coos county, Ore., recently purchased three register of merit Jersey cows and a heifer calf, out of one of them, from J. M. Dickson & Son of Shedd, Ore. Mr. Dickson reports a number of sales to Coos county dairymen, among them a son of Foosty's Gladys (510 pounds of fat), and by St. Mawes of Ashburn, to George S. Davis of Coquille; a son of Countess of Ashburn 2d (a full sister to Star of Ashburn, that holds the Oregon junior 4-year-old record), to R. A. Davenport of Myrtle Point; a son of Ruth Viola (543 pounds of fat), to M. M. Weiland of Myrtle Point, and a son of Foosty of Ashburn (468 pounds of fat as a 3-year-old), to A. B. Herman of Broadbent. This young bull is a full brother to the one that heads the University of Idaho herd. H. A.

## Five Jerseys on Test.

N. H. Smith of Oregon City, Ore., who first became famous as a Jersey breeder when Kadia F. broke the Oregon milk record for Jerseys, and came well up toward a world's record, now has five on test. Mr. Smith, however, is short of both help and pasture and does not expect as good records as those already furnished. Although he may be compelled to sell his herd he believes the Jersey cow and the dairymen will "come into their own" again as soon as the war ends. The following records made by Mr. Smith's Jersey, have been authenticated by the A. J. C. C.:

Minetta of Ashwood, begun at two years—566.32 pounds of butter fat, or 707.9 pounds of 80 per cent butter, and 11,478.9 pounds of milk.

Pride of Cedar Hill, begun at one year 11 months, 517.11 pounds of fat, and 10,204.2 pounds of milk.

Fawn of Cedar Hill, a daughter of Kadia F., began at one year, 11 months, 436.31 pounds of fat, and 9471.5 pounds of milk.

Picalo, reentry, at nine years, three months, 698.33 pounds of fat, and 12,742.0 pounds of milk.

Ella of Cedar Hill, at one year, 11 months, 395.25 pounds of fat, and 8022 pounds of milk.

Brown Bessie's Alphena Gem, at eight years, 11 months, 708.62 pounds of fat (gold medal), and 14,673 pounds of milk. H. A.

## Nine Jerseys on Test.

R. L. Buckhart, proprietor of Maple Lawn Place, Albany, Ore., has at present nine Jerseys on official test. Five of them are daughters of his bull, Karnak's Noble 4th, that is of pure Island breeding. Beside Karnak of Maple Lawn Place, the first daughter of Karnok to finish her year's test, July 31, produced a little over 510 pounds of fat; over 600 pounds of 85 per cent butter or 637 pounds of 80 per cent butter—as it is now frequently estimated. She is a high tester, she never produced less than 40 pounds of fat, and made 46 pounds her tenth month. Her first month she stood 50 in her class in all the United States. Noble's Dorothy Poge's of Maple Lawn Place, another of Mr. Burkhart's good heifers, was fifth in class under two years, with the exception of a short time at the beginning of the test. All Mr. Burkhart's cows have been milked only twice a day. Labor shortage precludes any other way of milking.

Mr. Burkhart, like most Willamette valley farmers, has a short hay crop, but when I was there his corn gave promise of a good yield.

## Pure Breeders Meet.

A new plan of holding meetings is being tried out by the Lewis County (Wash.) Pure Breeders' association. Each month the members visit one or more of the breeders, look over his stock and examine equipment. A short talk is given by some one familiar with the particular breed represented and general discussion follows. This plan should meet with success in many ways. It encourages the members to keep their stock and premises in the best of shape and at the same time it advertises the farm.

The July meeting was held at the Shady Grove farm, owned by F. M. Svinth, breeder of purebred Holsteins. The August meeting will be held at the farm of J. A. Scollard, who has a herd of purebred Angus and also a large dairy herd. A. B. N.

**Proceed With Work at Gold Hill.**

It is announced that the state line board will proceed with the work at Gold Hill, which will be finished about the first of August. What money is needed will be borrowed on the credit of the members of the board until either the state emergency board or the next legislature can act. The plant will be operated without bunkers.


## FARM SERVICE WAR FLAG



A Flag for Every Farm Home in the Northwest

An Extra Small Star for Each Farm Worker

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**THE JORDAN VALLEY FARMS COMPANY** are now offering to farmers and stock growers a very attractive combination of land and water rights.

There are several very necessary qualifications to a successful irrigation project.

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Fifth—The Jordan Valley Farms company is offering the public an opportunity to purchase a farm under a project that possesses all of the above features, "and then some."

Sixth—The state of Oregon is, by virtue of the fact that two-thirds of the land under the system is under the Carey Act, an interested party, and all construction work is in direct charge of an experienced reclamation engineer on behalf of the state and land and water company jointly. The state of Oregon is requiring a bond of $100,000 for the faithful performance of all construction contracts.

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# Breeders' Department

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### MILKING SHORTHORNS

with world records behind them for milk production.

### A. R. O. HOLSTEINS

A son of the King of the Pontiacs at head of herd.
Can make special prices on young bulls of each breed.

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### SHORTHORNS

A few young stock for sale by such noted sires as Prime Prince, 421193, and Sultan Still, 493239.

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Breeders of top registered Shorthorn cattle. Correspondence solicited.

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breeder of registered Shorthorn cattle, Hampshire sheep and bigtype Poland China hogs. Filer Idaho.

**REGISTERED SHORTHORN COWS.**
Young bulls and heifers, sired by Scotch bulls; liberal terms.
**CALDWELL CATTLE CO., Caldwell, Idaho.**

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### Registered Guernsey Bulls

From heavy producing cows, most of them with A. R. records, among them 402 lbs. fat (472 lbs. 85 per cent butter) and 392 lbs. fat (461 lbs. butter), both with first calf. Good type, well grown. Prices reasonable.

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### Yearling Guernsey Bull

GOLD FINDER'S TITAN, out of imported dam; splendid milker. A sturdy, vigorous young bull, with strong individuality and splendid breed type.

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"Home of High-Class Guernseys."
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Breeders of high class registered and grade Guernseys.
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### 365-DAY HOLSTEINS

24,667 lbs. milk—1026 lbs. butter—is the R. O. advance registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.

THE HERD WITH YEARLY RECORDS.
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### HOLSTEINS

Steno Farm is now offering a few high class reg. Holstein bull calves. Out of ARO cows and sired by one of the finest bulls in the west. Priced right.

**STENO FARM,** C. F. Williams, Mgr.
Mead, Wash., R. No. 2.

### LaConnor Flats Stock Farm

Pure bred registered Holstein cattle. Herd sire Segis Pontiac Acme; average of three of nearest dams; butter, 1 year, 1030.32 lbs.; milk, 24,380.3.

**J. H. HULBERT.** Mt. Vernon, Wash.

### Dairymen, Attention

Pure bred Holstein bull calves for sale at farmers' prices. Great grandsons of Colantha Johanna Lad and King of the Pontiacs; dams heavy producers.

**JAS. C. CHAMBERLIN,** Ceres, Wash.

### Registered Holsteins

Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.

**H. R. BOOMER.** New Plymouth, Idaho.

### HOLSTEINS

Well-bred young bulls for sale.

**THOS. CARMICHAEL.** Gaston, Ore.

### Holsteins and Berkshires

FOR SALE.

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### Big Type Poland Chinas

Peter Mouw and John B. Lawson strains. Young boars and bred or open gilts. Good individuals.

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Big type and medium Poland China. Bred gilts and spring pigs of both strains, unrelated. Sixteen years a breeder of Poland Chinas in Oregon.

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Strictly big type spring pigs of both sexes. Well grown, good individuals, sired by A. Price. A few choice young bulls.

**B. S. THURSTON & SON.** Jefferson, Ore.

### Oaksdale Farm

Poland Chinas and Holsteins. Two fall boars at bargain prices for quick sale. A fine lot of early spring pigs. Best of breeding. A few well bred young bulls at very reasonable prices.

**C. R. EVANS.** Halsey, Ore.

**LOCUST LAWN HERD.**
Breeder of big type Poland China swine. Some very choice spring pigs for sale.
1918 pigs sired either by famous boar, "Sammy," undefeated grand champion of northwest, or by his son.
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**QUALITY AND UTILITY**
our hobby. Poland Chinas, our breed. Weanling pigs, both sexes, also a few service boars. Satisfaction assured.
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If you want to improve your herd, try stock from my winners at the Oregon state fair.
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**PURE-BRED POLANDS.**
A good herd boar for sale; also booking orders for spring farrowed pigs. Will ship C. O. D. subject to your approval.
**HERBERT WILLARD,** Dayton, Ore.

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### REGISTERED O. I. C. SWINE

A few good gilts also choice young pigs. Write me. Ringgold Farm, J. H. West, Prop., Centralia, Wash., R. 1, Box. 157.

### Blue Ribbon Stock Farm

Chester White Hogs. Hampshire and Rambouillet sheep. Swine of both sexes and a choice lot of ram lambs.

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Unrelated fall and spring Chester White pigs from prize winning stock.

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Fifty extra good range bulls are now offered for sale. Also fancy herd headers and show cattle of both male and female. All prices very reasonable.
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Hereford Cattle.
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Spring pigs by the great $1300 boar, King of Orions 2d, and by our own great boar, Burke's Cherry King, out of prize sows. Uniform cherry color, finest of heads and backs, heavy bone and best of feet.

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One excellent boar at breeding age. Bred gilts and weanling pigs of either sex.

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Good breeding, good individuality, satisfaction guaranteed. Write for description and prices.
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Boars and open or bred gilts of excellent breeding.
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### Berkshire Hogs for Sale

Have a number of sows, 18 months old; will farrow second litter this fall. Also young gilts and boars of all ages; all from prize winners. Write for prices.

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### Weaned Pigs of Quality

Can furnish pairs or trios, best stock, $15 at eight weeks.

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have won every feeding contest entered since 1914. We are booking orders for weanling pigs. Our blood lines can not be beat.
Trios our specialty.
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Registered Shropshire, Oxfords, Lincoln, Hampshire and Cotswold rams; 50 head registered Shropshire ewes; 3000 stock ewes, Lincoln, Cotswold and Shropshire breeds; 500 ewes, lambs, Cotswold and Lincoln ram lambs. Write for prices.

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**SHORTHORN CATTLE.**
Choice yearling and lamb rams. A few high class young bulls.
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The Grand Champion KROUMIR at head of herd. Young stallions for sale at all times at breeders' prices.

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**EDGEWATER FARM**
Only one bull left, calved Dec. 14, 1917, with high producing dam; grand dam and great grand dam both world's record cows.
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Breeders of Brown Swiss Cattle, the Farmer's Dairy Cow. Young stock for sale.
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Young bulls, winners at Washington State Fair, make good herd sires. Attractive prices for quick sale.

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Young bull sired by a son of Golden Glows Chief, out of a daughter of Golden Glows Chief, sire of 37 R. of M. cows; 14 over 700 lbs; 32 over 600, one a world's record. Young bull's dam's official record 407.34 lbs. fat (509.17 lbs., 80 per cent butter) at 1 year, 11 mo. This is the blood to increase production in these times of high priced feed. Price reasonable.
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### All High Record Blood

Bull calf out of Lucy of P. V., full sister to St. Mawes Susie; 936 lbs. butter in a year; to St. Mawes Blossom 823 lbs., and to Susie's Twin Maiden, 642 lbs. Sire, Poppy's St. Mawes, son of St. Mawes Poppy, 1120 lbs.

**ED CARY,** Carlton, Ore.
Station, La Fayette, Ore.

### Doerfler farm Jerseys

Have a herd average of over 740 lbs. of butter for the entire herd of 11 head. It is our motto to stand back of our customers and to do an honest business. Just one bull calf left, from world's record cow. Our stock is government tested. Insurance, policy goes with stock.

**DOERFLER FARM.** Silverton, Ore.
F. A. DOERFLER, Proprietor.

**GOLDEN GLOW'S CHIEF.**
Bred by estate of W. S. Ladd, has 37 daughters, 41 granddaughters and 5 proven sons in the register of merit, and a WORLD RECORD JUNIOR 3-YEAR-OLD DAUGHTER, who is dam of ONE OF OUR HERD BULLS by the old bull himself. Our second sire is also a son of Golden Glow's Chief, out of a Gold Medal Hood Farm cow. Write us for a young bull calf.
D. Brooks Hogan, Mgr., Iron Mine Farm, Oswego, Oregon.
**W. M. LADD, Owner.** Portland, Oregon.

### Ashwood Farm Jerseys

Senior herd bull, Holger, whose daughters are qualifying for register of merit in six months. Junior herd bull, St. Mawes of Ashwood, a son of Poppy's St. Mawes. Write us about your wants or come and see our herd.

**M'ARTHUR & STAUFF,** Rickreall, Ore.

### ASHBURN FARM

REGISTER OF MERIT JERSEYS.
St. Mawes-Golden Glow's Chief-Baronet. To breeders interested in any of these leading strains we can furnish a line bred calf with the best possible outcross. More big records back of it than any other herd in the west.
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### WAIKIKI FARM

Register of Merit Jerseys. Largest Jersey herd in the northwest. Young stock for sale.

**IRA P. WHITNEY, Manager.**
Route 7, Spokane, Wash.

**824 POUNDS 85% BUTTER**
is the average of the dam, sire's dam and sire's granddam of bull calf dropped May 28, 1918.
DAM MOYANE MONINE, 803 lbs. butter, 10,406 lbs. milk in 1 year.
SIRE DOMINUS, sire of 5 now on test and making big records (all heifers with 1st calf). His dam produced 817 lbs. butter, 12,928 lbs. milk 1 year, and his sire's dam 853 lbs. butter, 12,636 lbs. milk in 1 year. Price $250. Write.
**JOHN B. STUMP & SON.** Monmouth, Ore.

### ANOKA FARM JERSEY

We have for sale a bull calf dropped Oct. 25, from a register of merit cow. Solid color, good individual. His sire is a grandson of St. Mawes Poppy, with 1120-lb. record.
**R. B. SEELEY,** Sherwood, Ore.
R. R. Station, Wilsonville, on Oregon Elec.

### Ready for Service

Young bulls of Golden Glow's Chief, and King Melia Ann strains, out of register of merit dams. Priced to meet the unfavorable conditions. Write for full particulars and pedigrees.

**HENRY STEWART,** Albany, Ore.

**FOR SALE VERY REASONABLY**
or exchange, registered Jersey bull, Jonquil of Lebanon, 134649, dropped April 18, 1915. Also a yearling, Taurus of Lebanon, 155275, dropped Feb. 2, 1917. Both of these have good pedigrees.
**V. K. FROULA, R. F. D. 3, Lebanon, Oregon.**

### Jersey Farm Dairy

Peter Mouw's Poland China hogs, Cotswold sheep, White Leghorn and Buff Orpington poultry, carefully bred, great foundation stock.
**E. S. PELOT, R. F. D. 5,** Idaho Falls, Ida.

In writing advertisers, be sure to say that you saw their advertisement in this paper.

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, July 29.—Welcome rains and the breaking up of the hot wave in the southwest had a decided bearish effect today on corn. Largely as a result, prices although steady at the close were 2 1-8 to 2 3-4c net lower, with August $1.52 3-8 and September $1.53 7-8 to $1.54. Oats finished 1c to 1 1-2c down. In provisions, the outcome ranged from 20c decline to 22c advance.

Corn traders devoted chief attention to the fact that moisture had been supplied to every state in the belt, and that the amount exceeded a full inch at many places. Cheering war news and continued liberal receipts added to the force of bearish sentiment.

Oats weakened with corn. Receipts from the new crop were larger.

Hog market strength lifted provisions, but subsequently was more or less offset by the weakness of grain.

**Chicago Futures.**

| | Open. | High. | Low. | Close |
|---|---|---|---|---|
| Corn— | | | | |
| Aug. | 1.54½ | 1.55 | 1.52½ | 1.52⅝ |
| Sept. | 1.55⅛ | 1.56 | 1.53⅞ | 1.53⅞ |
| Oats— | | | | |
| Aug. | .70¼ | .70⅜ | .69¼ | .69½ |
| Sept. | .69¼ | .69½ | .68½ | .68⅝ |
| Pork— | | | | |
| July | | | | 42.25 |
| Sept. | 45.30 | 45.25 | 45.25 | 45.25 |
| Lard— | | | | |
| July | 26.75 | 26.70 | 26.72 | |
| Sept. | 26.45 | 26.50 | 26.42 | 26.47 |
| Ribs— | | | | |
| July | 24.65 | 24.50 | 24.50 | |
| Sept. | 24.90 | 24.90 | 24.75 | 24.75 |

**Cash Quotations.**

CHICAGO, July 29.—Corn—No. 2 yellow, $1.80@1.84; No. 3 yellow, $1.66@1.71; No. 4 yellow, $1.55@1.60. Oats, No. 2 white, 75½@76½c; standard, 74½@77c. Rye, No. 2, $1.62@1.63½. Barley, $1@1.11. Timothy, $5@8. Clover, nominal. Pork, nominal. Lard, $26.47@26.72. Ribs, $24@24.75.

**Pacific Northwest Grain.**

PORTLAND, July 29.—Grain, 30-day options: Oats—No. 2, August, $61 bid. September oats—No. 2, $59. Barley feed—August, $55; September barley feed, $53.50; barley A, August, $55.50; September A barley, $54.50; August oats—No. 3, $54.50; September oats—No. 3, $54; August oats clipped, $55; September oats clipped, $54; August corn yellow, $66; September corn yellow, $66; August corn mixed, $64; September corn mixed, $64. Eastern oats and corn in bulk. Oats—No. 2 white, $55.50; 38-pound clipped white, $56.50; corn No. 3 yellow, $66.50; corn No. 3 mixed, $64.50.

**Minneapolis Grain.**

MINNEAPOLIS, July 29.—Flour—Unchanged. Shipments, 33,915 barrels. Barley, 85c@$1.05. Rye, $1.80@1.82. Bran, $24.15. Wheat—Receipts, 190 cars, compared with 191 cars a year ago. Corn, No. 3 yellow, $1.60@1.65. Oats, No. 3 white, 71@72c. Flax, $4.62½@4.65.

## Live Stock Quotations.

**At Chicago.**

CHICAGO, July 29.—(United States Bureau of Markets.)—Hogs — Receipts, 35,000. Strong, mostly 10c higher, big packers slow to take hold; butchers, $18.60@19.80; light, $18.75@19.05; packing, $17.40@18.50; rough, $17@17.35; bulk of sales, $17.90@18.95; pigs, good and choice, $17.25@18.25.

Cattle—Receipts, 15,000. Generally steady to higher on beef and butcher stock; calves steady at Friday's close. Beef cattle: Good, choice and prime, $17.25@18.50; common and medium, $10.50@17.25. Butcher stock: Cows and heifers, $7.25@14.25; canners and cutters, $6.25@7.25; stockers and feeders, good, choice and medium, $10@13; inferior, common and medium, $7.75@10; veal calves, good choice, $16.25@16.75.

Sheep—Receipts, 21,000; lambs slow, 50c lower on killing classes; Washington wethers, $14.40.

**At Portland.**

PORTLAND, Ore., July 29.—Cattle Steady. Receipts, 1775. Steers, prime, $11.75@12.25; good to choice, $11.75@11.75; medium to good, $9.50@10.75; fair to medium, $8.50@9.50; common to fair, $5.50@8.50; cows and heifers, choice, $8@8.50; medium to good, $6@7.50; fair to medium, $5@6; canners, $3@5; bulls, $5.50@7.50; calves, $8.50@11.50, stockers and feeders, $6@8.

Hogs—15c@25c higher. Receipts, 1500. Mixed, $18.35; medium mixed, $18.10@18.10; rough heavies, $16.60@17.10; pigs, $16@16.50, bulk of sales, $16.10.

Sheep — Steady. Receipts, 800 head of mountain lambs, $13.75@14; valley lambs, $13.50@14; yearlings, $9.50@10; wethers, $8.50@9.50; ewes, $7@8.

**Spokane Stockyards, Monday.**

Cattle—Receipts, 58. Market 15c lower. Prime mixed, $17.90@18.10; good mixed, $17.55@17.85; rough steers, $16@17.10; pigs, $16.50@17; stockers and feeders, $15@16; bulk of sales, $18.

Hogs—Receipts, 381. Market, firm to 10c lower. Prime steers, $11.75@12.25, good to choice steers, $11@11.75; medium to good steers, $9.25@10; fair to medium, steers, $8@9; common to fair steers, $5.50@8; choice cows and heifers, $8@8.50; good cows and heifers, $6@7; common to medium cows and heifers, $4.75@6; canners, $3@4.75; bulls, $5@7.50; calves, $7@10.50; stockers and feeders, $6@8.

Sheep—Receipts, 1281. Market steady. Prime lambs, $14@14.50, good lambs, $12.50@13; prime yearlings, $8.75@10; prime wethers, $7.75@9; best mutton ewes, $5@8.

## Portland Market.

PORTLAND, Ore., July 27.—The butter market is in a complicated condition, with cubes advancing and some of the creameries cutting the price on prints. The general print quotation now is 50 cents in paper wrappers and 51 cents in cartons. Cube extras have moved up to 47 cents.

Eggs are scarce and firm on the basis of 46 cents for ordinary candled.

There was a firmer tone to the poultry market at the close, as receipts were not so heavy as a short time ago. Dressed meats were also stronger.

The peach market is heavily supplied with Oregon fruit, but the demand is good and prices steady at $1@1.35.

The tomato market is glutted, as the Oregon crop has come on earlier than expected, and dealers were loaded up with Californias. Prices range from 75c@$1.25 for local stock.

Butter—Cubes, extra, 47c; seconds, 45c; prime prints, extras, 50c; cartons, 1c extra; butterfat, No. 1, 51c delivered.

Eggs—Oregon ranch current receipts, 43c; candled, 46c; selects, 48c per dozen.

Cheese—Jobbers' buying prices, f. o. b. dock, Portland; Tillamook, triplets, 23 1-2c; Young Americas, 24 1-2c per pound; Coos and Curry, f. o. b. Myrtle Point, triplets, 23c; longhorns, 24c per pound; 1-4c discount to Portland trade.

Poultry—Hens, 24@25c; broilers, 28c; ducks, nominal; geese nominal; turkeys nominal.

Veal—Fancy, 19c per pound.

Potatoes—New, 3 3-4@4c per lb.

Hay—Buying prices, f. o. b. Portland; eastern Oregon timothy, $32@33 per ton; valley timothy, $27@28; alfalfa, $21@24.50; valley, grain hay, $24@26; clover, $21; straw, $9@10.

## Portland Wheat.

PORTLAND, Ore., July 29.—The merchants' exchange has adopted a resolution that changes the methods of doing business on the board in several important particulars. Hereafter all transactions in eastern oats, corn and other cereals will be at prices based on shipment during a specified month and not on the delivery bases, as heretofore. Much confusion and generally unsatisfactory results were experienced last season on sales for a specified delivery date, owing to the uncertainties of transportation. All deals in home products, barley, sacked oats and the like will be at prices delivered as in the past. An extra month of trading is also provided for in the amended rules. For the past year two months' options were posted and in the future three months will be traded in.

The oats market was firm at the close of the week, with $61.50 bid for sacked and $56@57.50 for bulk. Barley was firm at $56 offered for standard brewing and $55 for feed grade. Corn bulk was unchanged at $65@67.

## San Francisco Produce.

SAN FRANCISCO, July 27.—Butter, cubes, 52c.

Eggs—Fresh extras, 49½c; fresh extra pullets, 47½c.

Cheese—Young Americas not quoted; new firsts, 24½c.

Poultry—Large hens, 29@31c; roosters, young, 40@43c; fryers, 38c; broilers, 38c; pigeons, $2.50; squabs, $2.50; geese, 21@25c; turkeys, live, 25@28c.

Vegetables—Green peas, 7@9c; asparagus, 5@5½c; summer squash, 75c@$1; eggplant, $1.40@1.60; peppers, bell, $1.50; chile, $1.40; tomatoes, 75c@$1.25; lettuce, 85c@$1; celery, $1.50@2; potatoes, white, $2.85@3; sweet potatoes, 8@10c; onions, red, $1.75@2; yellow, $2.15@2.25; garlic, 15c; beets, $1.50@1.65; carrots, 90c@$1; turnips, 65@75c; rhubarb, $1.75@$2; cabbage, 1@1¼c; artichokes, $2.50@4; cucumbers, 75c@$1; string beans, 3½@4c; lima beans, 6@7c; okra, 12½@15c; corn, 3½@4c.

Fruit—Cantaloups, standards, $3@3.25; watermelons, 1¾@2c; casabas, 2½c; lemons, choice, $5@6; grapefruit, $2@2.50; oranges, $3@6; bananas, Hawaiian, 5@7c; pineapples, $2.50@6; apples, $2@2.50; strawberries, $8@10; cherries, black Tartarians, nominal; blackberries, 6@8c; raspberries, 7@10c; peaches, 90c@$1.25; gooseberries, 5@9c; currants, $8@9; loganberries, 5@9c; apricots, $1@2; pears, Bartletts, $1.75@2; figs, double layer, $1@1.25; white, 75@90c; plums, $1@1.25.

Receipts—Flour, 12,904 quarter sacks; barley, 24,782 centals; beans, 966 sacks; potatoes, 5159 sacks; onions, 364 sacks; hay, 530 tons; hides, 720; wine, 39,000 gallons.

**METALS.**

LONDON, July 27.—Bar silver, 48 13-16d.

## Spokane Market.

While mutton remains at unchanged prices, beef shows a downward tendency. A few alterations have been made in the list, which is compiled from those furnished by the Armour and Carsten packing houses.

Ham and bacon have advanced 1 cent a pound, as has also fresh pork. This is usual at the beginning of the harvest season.

Compound substitutes for lard have declined.

**Wholesale Meats.**

**Beef**—Beef steers, 12½@20c lb; cow beef, 11@15c lb; heifers, 15@16c lb; best loin, 25@31c lb; steer chucks, 11c lb; square chucks, 12c lb; prime ribs, 30@24c lb; rump and round, 19@20c lb.

**Mutton**—Breakers, 21c lb; wethers, 20c lb.

**Lambs**—Diamond T. C. lambs, 28c lb; lambs, 26@27c lb.

**Pork**—Packer dressed hogs, 27@28c lb; pork loins, 32@33c lb; legs, 31c lb; shoulders, 25c lb; leaf lard, 28c lb; tenderloins, frozen, 40c lb; spareribs, 31c lb; country dressed hogs, with head on, 21c lb to producer; country dressed veal, 14c lb to producer.

**Smoked Meats**—Washington hams, 35½c lb; T. C. hams, 36½c lb; T. C. bacon, 50c lb; Washington bacon, 40@44½c lb; picnics, 24c lb; lean backs, 33@34c lb.

**Star Brand**—Hams, 36½c lb; Shield hams, 34½@35½c lb; picnics, 24c lb; bacon backs, 34c lb; Star bacon, 47@51c lb; Shield bacon, 40@44½c lb; Simon Pure lard, $17.50 case; Shield lard, tierces, 27c lb; White Cloud compound, tierces, 23¾c per lb.

**Dry Salt Meats**—Clear bellies, 28¾c lb; loin backs, clear, 31c lb.

**Lard**—Tierces, 26½c lb; $13.99@14.74 case; Diamond T. C. pure leaf lard, $15.50 case, $7.90 half case; Snowcap compound, tierces, 23c lb.

**Apples**—Express arrivals, 11 crates, Washington; market weaker. Washington: Various varieties, standard boxes, according to grade, $1.50, $2.00. Few boxes jumble packed, $1.00. Transparent, wrapped, $2.00.

**Potatoes**—Freight arrivals, 7 cars, California; 1 car, Washington, 12 sacks, Washington; market slightly weaker. California: 100-pound sacks, white variety, $4.00, $4.25, mostly $4.00. Homegrowns, 100-pound sacks, white varieties, $4.00.

**Onions**—Freight arrivals, one mixed car, Walla Walla, containing onions. Market steady. California, 100-pound sacks, red and yellow varieties, $2.50@2.75, mostly $2.50, some red varieties, slightly off grade, $2.25; Washington, Walla Walla district, 100-pound sacks, Yellow Danvers, $2.50.

**POULTRY.**

**Live Poultry**—Live hens, 18@20c lb; spring chickens, 28@30c lb; roosters, 12½c lb to producers, f. o. b. Spokane.

**GASOLINE, LINSEED OIL, ETC.**

**Gasoline**—Red Crown, bulk, 25c gal, cases, 36c gal; Shell, 25c gal; refined oil (Pearl), bulk, 14c gal, cases, 23c gal; Eocene, 15½c gal in bulk, cases 26½c gal; engine distillate, 17c gal, bulk.

**Linseed Oil**—Raw, bbl, $1.97 gal, cases $2.15 gal; boiled, bbl, $1.99 gal, cases $2.17 gal.

**Turpentine**—Bulk, 79c gal, cases 99c gal.

**White Lead**—Strictly pure white lead in oil, ton lots, 13¼c lb; 50-lb lots, 14c.

**Rice**—Fancy head, $7.50@9.50 cwt.

**Flour**—Bluestem, $9.40; Blend, $9.40; graham, $8.65 bbl., 49-lb. sacks; whole wheat, $8.85; eastern rye, $9.90; eastern rye meal, $10.30; oat flour, $12.15, 4 45-lb. sacks.

**Oats**—$67 ton whole, $70 rolled, delivered in city; steam rolled No. 2, $66 ton.

**GRAIN AND FEED.**

**Corn**—$72 ton; cracked corn, $74 ton.

**Barley**—Rolled, $70 per ton.

**Oil Meal**—$75 per ton.

**Hay**—Timothy, $38 per ton delivered, $37 by carload; alfalfa, $30 per ton delivered, $29 by carload.

## Butter and Eggs.

PORTLAND, Ore., July 29.—Butter—Prints extras, 50@51c; cubes extras, 47 1-2c; seconds, 44 1-2; dairy, 34 1-2c. Butterfat, Portland delivery, No. 1 sour cream, 51c.

SAN FRANCISCO, July 27.—Butter, 52c; solid cubes. Eggs—Fresh extras, 49 1-2; fresh extras, pullets, 47 1-2c.


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RUBBER METAL SACKS

We pay full market value, correct weight and assortment, prompt returns. Write for prices. We want your business.

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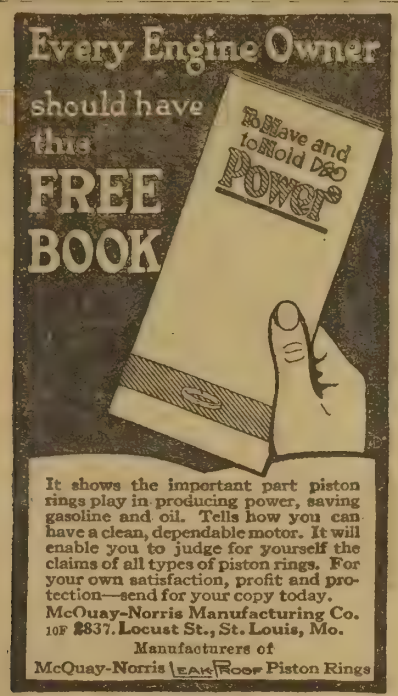
The Story of Carley Roller Feed Mills

## Use More Poultry Products.

A nation-wide movement is under way urging the people to use more eggs and poultry as substitutes for meat.

### Kansas Yield Is Heavy.

The Kansas state board of agriculture estimated this year's wheat crop in that state at 102,000,000 bushels.

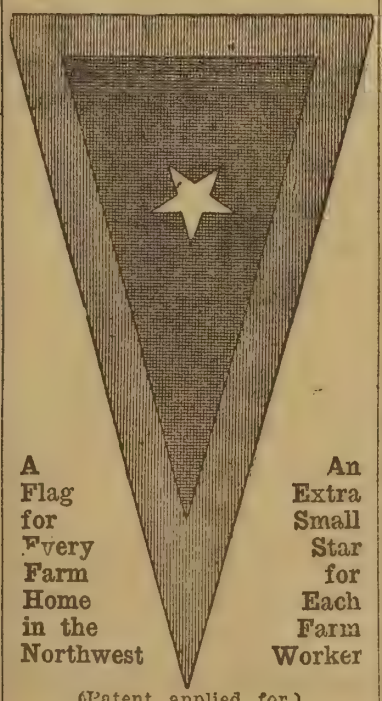




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## Trappers of the Ozarks

(Continued from page eighteen.)

and paddled away. The whole village was on the river bank to see them off, and a number of boys, in their own canoes, accompanied the voyagers for at least a mile.

After so long a time spent in the wilderness, Ben, and even Jodo, had enjoyed the stay in the lively, French-chattering village very much. And when the attending canoes had turned back, both spoke of feeling rather lonely. However, they were now looking forward to seeing their friends at home.

But there was still much wild, dangerous country to pass through before they could arrive at home. From here on to Loutre island, which they expected to reach some time the next day, not a settlers' cabin would be seen.

"I'm almost sorry we sold those people our powder and lead," Jodo remarked as they were paddling along. "But for that we'd have company, and a livelier trip."

"Yes. It seems good to be with civilized people again, even though they are foreigners. We shall not soon forget our visit at Hill Without Design."

The weather was now both clear and mild—so mild that the sun grew almost uncomfortably warm at midday. The voyagers did not land for dinner, but ate while their canoes were drifting with the current. After a short rest they went to paddling again.

The Missouri was rather low as yet, but just as swift, apparently, and certainly just as muddy, as if it had been much higher. There were many snags in the stream, which would make traveling after dark very dangerous, if that should be necessary. There were also occasional small islands.

More than once during the afternoon the travelers noticed little flocks of deer on sand bars. And once they watched a bear trotting across a stretch of sand between the water's edge and the wooded bank. But no human being did they catch a glimpse of till about an hour before sunset.

Then a lone man was seen standing on the river bank, a good distance down stream. On coming nearer the canoemen could make out that he was an Indian. And he was watching them as intently as they were watching him.

He soon disappeared, but a little later, happening to glance into an opening that led from the river bank back into the woods, they saw five Indians cross the opening, one after another, and all going at a trot.

"They're after us! Don't you see they are? They're keeping right along with us!" exclaimde Jodo, in no little dismay at the discovery.

"Yes, I see," answered his fellow-voyager. "Looks for all the world as if we're in for some more trouble."

(To be contoinned.)

### Are Rounding Up Idlers.

The authorities all over the country are endeavoring to make idlers go to work or go to war.

### Write for Information.

The readers of this paper are again reminded that a great information bureau is maintained for them at Washington, D. C., the national capital, and that it will serve them free of all charge except postage. It is maintained as one of the means this paper takes of serving its subscribers. If there is any question upon which you desire information, simply write to the address given below. If you want a personal letter in reply, enclose a 3-cent postage stamp but no other money. No pay is asked or accepted for the service. If you want any one of the bulletins or pamphlets that the bureau has on hand enclose a 2-cent stamp but no other money. Here are some of the booklets that you may receive:

Book on Canning.
"German War Practices."
Book on Colds.
Garden Book.
Book on Knitting.
War Cookbook.
Book on Navy.
Book on Drying Fruits.
Book of Recipes.
Bread Book.
"How War Came to America."
Book on Household Pests.

Don't address your inquiry to the state office of The Farmer, but be sure to address it as follows:

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INFORMATION BUREAU,
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HERDSMAN, MARRIED, TO MILK AND take full charge of small herd of registered Holsteins on western Washington farm; wages $90 per month, modern unfurnished house and fuel. Address, Farmer, postoffice Box 503, Seattle, Wash., stating age, nationality and references.

### EDUCATIONAL 45

EARN MORE. ENROLL ANY TIME AT Behnke-Walker, Portland, northwest's biggest business college, because best. Graduates assured positions. Write for catalogue.

### TEACHERS' AGENCIES 46

TEACHERS REGISTER WITH B. F. WESTmore, Mgr. Hazard Teachers' Agcy. $1 registers you at three offices: 911 Old Nat'l Bank bldg., Spokane, Washington.

ALBERT TEACHERS' AGENCY, PEYTON bldg., Spokane. We need more teachers.

### HONEY, BEESWAX—Wanted. 58

SEND SAMPLES OF YOUR HONEY AND beeswax; state quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

### EGGS and BUTTER WANTED 59

WE ARE ALWAYS IN THE MARKET for good eggs and dairy butter. Send us your next shipment. Oregon Farm Products Co., 38 Halsey st., Portland, Ore.

### MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

Let us mail you one of our large illustrated catalogues No. 27 of sash, doors, frames, building paper, prepared roofing, plaster board, paints, etc.

We make screen doors and sash covered with heavy 28-gauge galvanized wire.

Stock size screen doors, $2 and up.

Odd size screen doors, 20c per square foot. Screen windows and sash, 15c per square foot.

We sell any one. Ship anywhere, and guarantee safe delivery.

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O. B. WILLIAMS CO.
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HIDES HIDES HIDES
Write for prices and shipping tags.
BUYERS OF ALL KINDS OF JUNK.
CENTRAL HIDE & JUNK CO., SPOKANE.

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PLOW TYPE RUMLEY STEAM TRACTOR, 25-HORSEPOWER, DOUBLE CYLINDER, PRACTICALLY NEW. FOR SALE AT A BARGAIN.

39x106 high-pressure boiler. Cylinders 7 inches in diameter, with a 12-inch stroke. Belt wheel 41 inches in diameter, with a 12-inch face. Rear wheels 74 inches in diameter. Width of tire, 30 inches. Extreme width of engine 122 inches, length 254 inches. Subject to inspection at Seattle, Wash. Ask us for prices.

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FORDS CAN BURN HALF COAL OIL, ALL distillate, or cheapest gasoline, using our 1918 Carburetor; 34 miles per gallon guaranteed; easy starting; great power increase; attach it yourself; big profit selling for us; 30 days' trial; money back guaranteed; styles to fit any automobile. Air-Friction Carburetor Company, 321 Madison st., Dayton, Ohio.

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WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

### HARES AND RABBITS 173

"A FORTUNE IN RABBITS"—HAVE raised the price. We will pay to $8 per pair. Want you to raise them for us. Send stamp for particulars. H. E. Gibson Co., Arcadia, Calif.

PURE BRED BELGIANS—DOES AND bucks, $3 each; pair, $5. Younger stock, 75c up. G. L. Green, Auburn, Wn., R. 1, B. 31.

BELGIAN HARES! SEND STAMP FOR BIG folder 12. Northwest Rabbitry, Sunnyside, Wash.

### LIVE STOCK 177

REGISTERED HOLSTEIN BULL FOR sale. Price $150. Dam, Janie Baroness, sire, Buffalo Duke Doede, a half brother of Dutchess Skylark Ormsby; will be 3 years old Oct. 7; a sure breeder and a good disposition. Bernard Allhands, Gilmore, Ida.

BERKSHIRE SPRING PIGS OF CHAMpionship breeding for sale at reasonable prices. Send for circular giving description and price. R. W. King, Sweetwater, Idaho.

REGISTERED O. I. C. SWINE; BREEDING stock for sale. C. J. Ballard, Rickreall, Ore.

1 HAMPSHIRE BOAR OF SERVICE AGE. Weanling pigs. Tuttle Bros., Asotin, Wash.

SHETLAND PONIES; BARGAIN PRICES. Write for list. N. C. Sorenson, Onalaska, Wn.

### HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

HOTEL TOURAINE, OPPOSITE REVIEW building. Rates, 50 cents and up. Wm. Snow, Prop., Spokane, Wash.

GALAX HOTEL; NEW AND MODERN; 75c and $1. Main and Bernard, Spokane.

### FAIR PREMIUM LISTS 370

SOUTHWEST WASHINGTON FAIR, AUG. 26 to 30, 1918. Premium list now ready. Write G. R. Walker, Secy., Chehalis, Wash.

SPOKANE INTERSTATE FAIR AND LIVE Stock Show, Spokane, Sept. 2-7. Premium list now ready. Write W. L. Tennant, Secy., Spokane.

WASHINGTON STATE FAIR, SEPT. 16-21. Premium list now ready. Write Frank Meredith, Sec'y, Yakima, Wash.

TWIN FALLS COUNTY FAIR, OCT. 1-4. Premium list now ready. Write J. M. Markel, sec'y, Filer, Idaho.

### RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

### ARTIFICIAL LIMBS 424

SCHINDLER ARTIFICIAL LIMB CO., 8115 Wall st., Spokane, Wash.

### PLUMBING, STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE, Stark-Davis Co., 212 3d st., Portland, Ore.

### SEEDS 620

WE SPECIALIZE IN TIMOTHY, ALFALfa, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Ida.

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COWS, HOGS, AND A BANK BOOK.
Your dream of life, of ease, comfort and independence await you at
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On Port Susan Bay, Snohomish County; 6000 acres of the best land that lies out doors; a 2 hours' ride from Seattle places your feet on the richest, most productive soil in the whole state of Washington; rail and water transportation; near paved roads, schools, churches, cannery and condensery; 3½ miles of waterfront and finest beach on Puget Sound; 20 miles of beautiful lake shore, surrounding 8 picturesque lakes; these lakes teem with trout. Get in on the first choice for $35 per acre and up; 10 yearly payments, 6 per cent interest.
This is but the beginning of the story of Birmingham. Send to the owners for illustrated literature. BROWNELL LAND CO., 904 Third ave., Seattle, Wash.

155 ACRES; SIX MILES N. W. MT. HOPE, Wn.; 17 miles Spokane; 115 a. cultivated; 130 tillable, balance timber; orchard, 7-room house, fair barn, good water; I am going into service, will sell for $10,000, $3000 cash, balance time. Write me quick. This is a snap. Place adjoining sold for $100 per acre recently. Owner, Box 42, R. 2, Fairfield, Wn.

SON HAS JOINED THE COLORS; MUST sell my 280-acre Pend Oreille valley farm; 100 acres timothy and clover meadow, balance in crop; no rocks, no stumps; 3 miles to town; splendid new set of buildings; new and full complement of implements, horses, hogs and cattle. Write A. Schumacher, 2901 Trent ave., Spokane, Wash.

FARM FOR SALE—BY OWNER.
640-a. Montana farm cheap; fine chocolate loam; 240 a. under cultivation; 160 a. ready for next year; good improvements; fine well; 5 head horses, 7 head cattle, all implements; 8 miles from live town. $25 per a. if taken at once. P. O. Box 53, Devon, Mont.

FOR SALE—EIGHTY ACRES.
Dairy ranch; twenty acres irrigated; new buildings; good location; four miles from town; free range; all personal property included. A. C. Hoxie, Alsea, Ore.

MONTANA—600 ACRES IN BROADWATER county; 520 a. tillable; 440 a. now in cultivation; good terms. $35 an acre. Write Chas. H. Hunt, owner, Toston, Mont.

ONE OF THE CHOICEST RANCHES ON Coquille river; 130 acres bottom; 375 acres of hill. Dairying or stock. Address the owners, Sweet Bros., Lampa, Ore.

190-ACRE TRACT 3½ MILES WEST OF Monmouth; good stock ranch. For particulars write Mrs. E. Clarke, Monmouth, Oregon.

240-ACRE DAIRY OR STOCK FARM; 2½ miles from Blodgett, Benton county. Mrs. E. Clarke, Monmouth, Ore.

FOR SALE—160 ACRES ADJOINING THE town of Melba, Idaho. Write S. Ludlow, Melba, Idaho.

### FARM LANDS—WANTED 654

I WANT TO HEAR FROM OWNER OF farm or unimproved land for sale. Mrs. W. Booth, Pulaski, Iowa.

### FARM LANDS—Wanted to Rent 666

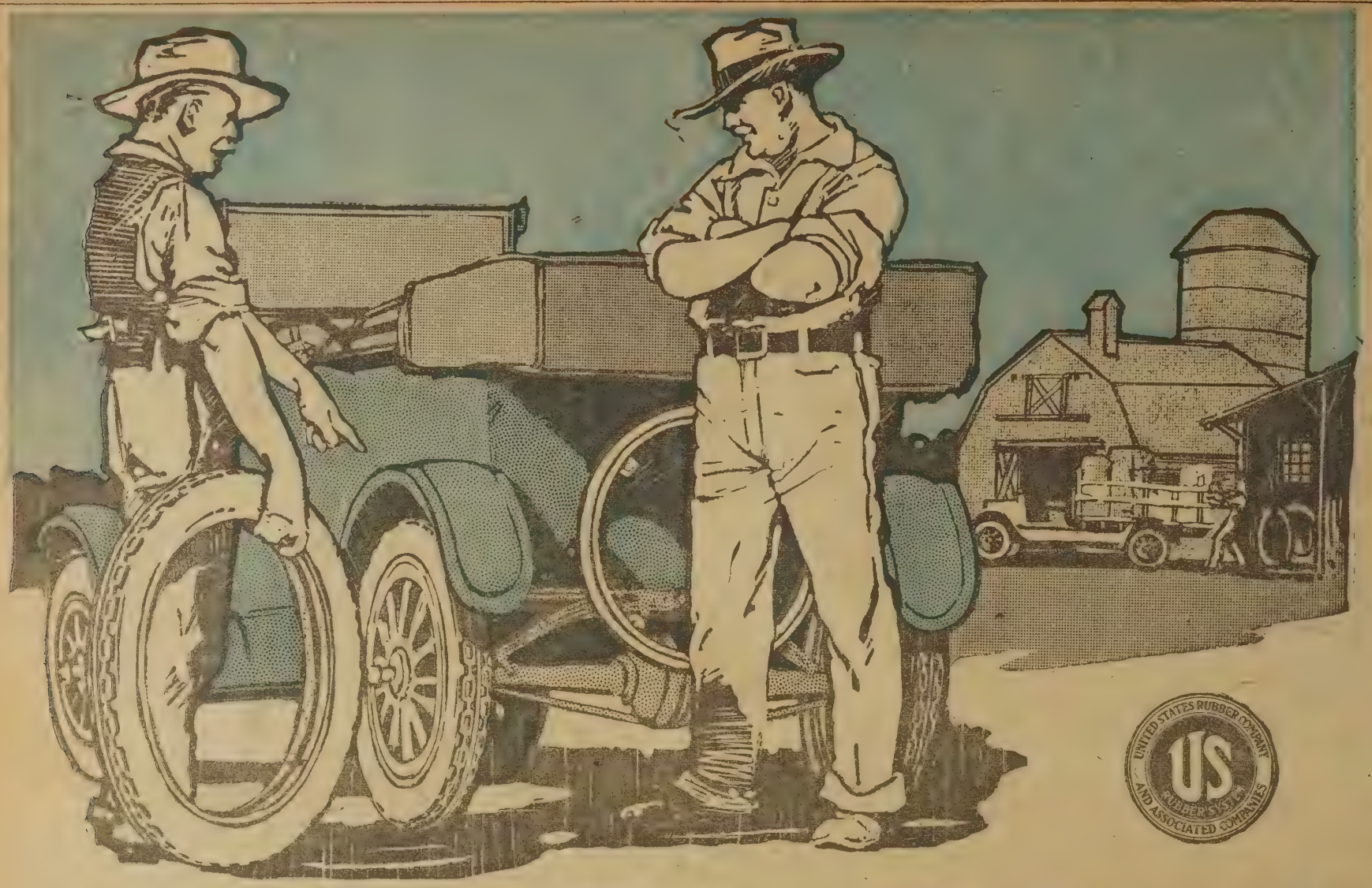
WISH TO RENT A FARM.
Have had 25 years' experience. R. F. D. 1, Box 63, Buckeye, Wash.

### FOR SALE OR EXCHANGE 702

TURKEY RANCH—160 A.; RIVER RUNS through; outrange. P 16, Oregon Farmer, Spokane, Wash.

## Just What You Want

may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.



# Facts vs. Guess-work

## United States Tires are Good Tires

"This car is as much a part of my farm as the barn is. It's working every day. It's a business proposition. So I'm going to make her upkeep strictly business.

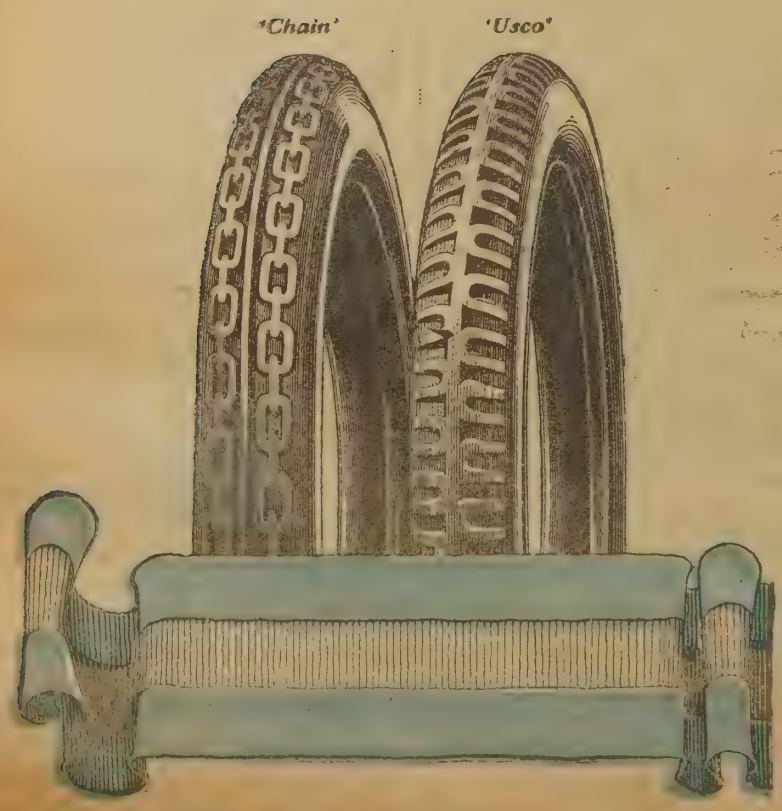
"These United States Tires are a beginning. I've been investigating and gathering evidence all over the country. I'll bet I've talked to a hundred farmers who drive cars. The majority vote is United States Tires for long wear and economy. It was unanimous with the fellows who are keeping books on their cars and finding out what it costs them to ride a mile or a hundred.

"You see I'm starting on the idea that quality pays in the long run. I'm fitting the car out right to begin with. That's the way to shove down the little old-cost-per-mile at the end of the year."

Any sound investigation of tire costs among experienced motorists will lead you to United States Tires as business-economy equipment.

There are treads and types for every purpose—all United States quality.

Any United States Sales and Service Depot dealer will cheerfully aid you in selecting the right tire for your car and your roads.






AUGUST 8, 1918.

NOTICE TO READERS: When you finish reading this paper, place a U. S. 1-cent stamp on this notice, mail the paper and it will be placed in the hands of our soldiers or sailors destined to proceed overseas. NO WRAPPER. NO ADDRESS. A. S. Burleson, Postmaster Gen.

PUBLISHED WEEKLY.

# THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF


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## You can help your Uncle Sam Win the War

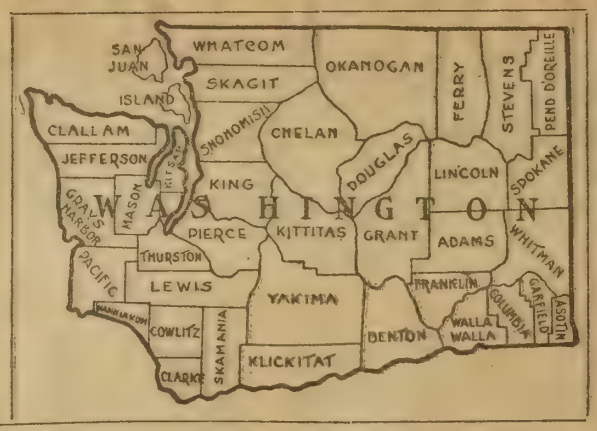



## Save your Quarters

## Buy War Savings Stamps

# Yakima Grain Yield Large

## Crops Are Reported Fine on Irrigated Lands; Fair Potato Crop Is Expected; Conditions Are Improved Over Last Few Weeks.




YAKIMA, Yakima County, Wash., July 26.—Crop conditions in Yakima county are in general quite satisfactory this year. While the first cutting of alfalfa was not a normal crop, the yield was practically as good as last year, and farmers are just beginning the harvesting of the second crop of alfalfa, which is giving an excellent yield of high grade hay. In general, the yield of alfalfa per acre will be about the same as last year, but the total acreage in the county has been considerably reduced on account of the plowing up of old fields.

Grain harvest is well under way in the county and while we have received no reports on the yield of threshed grain, the general appearance of the grain crop indicates that we will secure perhaps the largest yield of grain in the history of the county. This is especially true of the irrigated sections. During the early part of the season the prospects for the potato crop were very poor. Conditions, however, have improved during the last few weeks so that in most sections we will have a fair crop, though not a normal yield.

Up to the present time we have been supplied with sufficient labor to carry on farm operations and are not expecting any shortage until the apple harvest begins. Arrangements have already been made to provide the extra help needed during the fruit harvest and we do not anticipate any serious shortage at that time. The greatest difficulty in the labor situation in this county is not so much a shortage in the number of farm laborers as in the inefficiency of much of the help that is available this year. J. N. PRICE.

### Grain Looks Some Better.

HUNTERS, Stevens County, Wash., July 29.—The crop outlook during June and early July was discouraging. The hay crop was very light and it seemed that there would be but half a crop of wheat and oats. Since July 9 we have had showers off and on amounting to 1.52 inches precipitation. As a result of this the grain is filling real well and the yield will be much better than expected. The rains came too late to benefit the second crop of alfalfa materially. Hay will be at a premium here this fall and it is already worth $20 per ton. Potatoes and garden stuff has been much benefited by the rain and corn is looking well. Apples are a light crop here, due to insufficient bloom and an unusually heavy June drop. Indications are for a good quality of fruit.

ELIAS NELSON.

### Wheat Yield Varies.

CENTERVILLE, Klickitat County, Wash., July 29.—Our harvest has been on the move for about a week, but on account of the light rains in this county, the fore part of last week work was somewhat hindered. The report of grain turned out in the Horseshoe Bend district is, so far, rather lighter than expected. There must have been a dozen of the small combines delivered in this part of the county this year, all at work and most of them have proved satisfactory. The day of the large threshing outfit is getting shorter, though it was possible for the headers to work when the combine couldn't. We apparently have plenty of harvest help, as we hear no complaint. In a week the largest part of the harvest will be over and steam threshing begun. The combined wheat is already moving to market here with a prospect for a better cash deal on wheat this year. Our garden products are bringing good prices. Potatoes are still 4 and 5 cents a pound, with a fair supply of peaches, apricots and apples at good prices. Everything in the growing line was hurt badly by a few hours of extremely hot wind, which may cause a shrinkage in the turn out of wheat.

CLARENCE A. LESTER.

### Grain Below Normal.

MEAD, Spokane County, Wash., July 27.—The cutting of winter wheat is finished and threshing will begin in a few days. While the yield will be below normal it will be better than expected a month ago. The present cool weather and light rains will help late spring wheat and oats, though too late to be of very great value. Both will be below normal in yield. No marked shortage of labor as yet. Because of the low yields of all crops and high price of all things we must buy, the farmer will not make much this year; some will go behind. Some would increase their stock of cattle, but the very low figures offered by the packers and the scarcity and high price of feed makes it impossible. Pastures and second crops of alfalfa will be improved by present rain. Potato crops will be uneven, some plots being poor and others a good average. Notwithstanding the drawback of the season, all are in good spirits and more than ever determined to do all they can to meet the government requirements.

GEORGE HINGSTON.

### Hay Will Be Scarce.

NEPPEL, Grant County, Wash., July 28.—What wheat there was has been harvested and yielded but a small return to the producer, and leaves the farmer without any hay and but little stock feed to face the coming winter. Stock buyers are busy buying up stock that people just have to let go, and there are some good cows among them, too, for which they are paying their own price, usually about 3 cents a pound. Crop conditions have been benefited by rain, alfalfa especially, and is yielding well when watered and taken care of. But help is not to be had and weeds are taking quite a number of food producing gardens. In the near future this locality will probably have an irrigation district and the Moses Lake Water Users association will help things along for the advancement of the community and will safeguard our water rights from the irresponsible promoter who only seeks a profit from the work and labor of others and usually acts the dog in the manger. However, Moses lake district, with a heavy production of hay and food stuff and short of help, has shown what the patriotic spirit of the people here could do to help win the war for democracy. So let us roll the wheat a little faster, as the boys in France are going over the top every day and will need our food and help as never before.

MARTIN PENHALLICK.

### Crops Are Below Normal.

COLFAX, Whitman County, Wash., July 26.—Crop conditions here are poor. Oats are practically a failure. Some fields of winter wheat promise a fair yield but the majority are very poor, and spring wheat is badly burned. It is showering today, which is hard on the hay in the field and not of much benefit to the dried up crops. Harvesting is beginning and labor is scarce. The yield promises to be about 50 per cent of normal. This holding down the price of wheat is going to prove a calamity for both the farmer and government. Farmers will plant more oats and barley in an effort to make up their losses on wheat. A heavy crop of these cereals will result in lower prices, which will prove a loss to the farmer and the government will lose the wheat that might have been grown.

E. C. HUNTON.

### Whatcom Drouth Broken.

FERNDALE, Whatcom County, Wash., July 24.—The drouth has been broken by a heavy rain, which has been a great help to all crops and the pastures. The rain cracked a great number of ripe cherries. Some cherries were lost through the inability of the cannery to handle them. String beans are now arriving at the cannery. The usual high prices paid this year for all kinds of berries and fruit have led every one to pick every marketable pound of fruit, and consequently the cannery has worked at full capacity to handle it. The labor shortage is not critical here, as the farms are small and the farmers help each other through the busy season.

CARL J. MENZ.

### Irrigated Crops Good.

GRANDVIEW, Yakima County, Wash., July 26.—There is some splendid wheat in this community and also barley and some of the crop is harvested. There is some of the best corn I have seen for years, but no large fields. Potatoes are fair. Labor is scarce, but by exchanging work the hay crop has been put up in good shape, and it is a fair crop. Crops are pretty good in the irrigated sections, but reports from dry land farmers are not so good. Beets are nearly a failure on account of blight and gardens are the poorest we have ever had. The market for hay has started pretty good, but apples won't be a third of a crop.

E. H. FAULKNER.

**Risky Variation.**

"A wise man may change his opinion."

"Yes," replied Senator Sorghum; "but he takes an awful chance if he changes it more than once or twice during the same campaign."—Washington Star.





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**Fill Your Silo Yourself with an International Ensilage Cutter**

TAKE NO CHANCES this year on getting your ensilage into the silo at the right time.

The following table shows the sizes and capacities of the five types of **International** ensilage cutters. There is, you see, a size for every farm. The smaller sizes will easily fill a 30-ft. silo. The largest are used to fill the highest silos in the country.

| Type | Feed Throat Sizes | Capacity Tons per Hour | Power Needed | Length of Cut | Speed |
|---|---|---|---|---|---|
| A | 16" x 6⅛" | 16—25 | 20-25 H.P. | ⅜" to 1 3/16" | 500—700 R. P. M. |
| B | 14" x 5½" | 12—16 | 15-20 " | ⅜" " 1 3/16" | 700—800 " |
| E | 11" x 4½" | 10—12 | 10-15 " | ⅜" " ⅞" | 800—900 " |
| G | 11" x 5 " | 8—10 | 8-10 " | 3/16" " 1 " | 800—900 " |
| F | 9" x 3 " | 3— 6 | 4—6 " | 3/16" " 1 " | 800-1000 " |

All **International** cutters are of the knife on blower type—simplest and requiring least power. All are equipped with a corn chute for feeding from the wagon. Steady power feed insures even cutting, silage packs properly and keeps. The low speed at which they run, and the safety devices on the machines insure the safety of the operator. The machines are complete, there are no extra sprockets or gears.

A post card will bring you prices and full information on any of the cutters listed above. Send for it to this address.

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# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 32 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF August 8, 1918

# Agree on Grain Price Deductions

## *Millers and Buyers Will Double Charges To Cover Handling, Commission and the Like*

Desiring to make a reliable comparison between the proposed charges for handling, commission, storage and the like this year, with that of previous years, this paper has made inquiry of some of the best known wheat growers of the Inland Empire. Here is what D. A. Scott of Ritzville, prominent as a wheat producer and as well informed as any man in the state on subjects of this kind, telegraphs: "Buyers here are deducting seven and three-tenths cents per bushel; 1917 they deducted four and one-half cents per bushel; previous years two and one-fourth cents per bushel." W. J. Sutton of Cheney, no less prominent as a producer, and no less conversant with wheat marketing than Mr. Scott, corroborates the testimony of the latter in the following telegram: "Farmers here last year received for wheat, price fixed by government, less four cents per bushel and freight; warehouse company made good profit. Previous to war the deduction was three cents per bushel and freight. Any fair minded person will have to admit proposed charge of eight cents a bushel by northwest dealers is excessive."

The following are two vitally important matters for the consideration of the wheat producers of the northwest:

(1) The federal grain buying corporation, in a set of rules recently issued governing the buying of wheat this season, gives the following rules applying to handling charges and insurance: "Country elevators and buyers are entitled to receive fair compensation for their services in the handling and marketing of wheat, and the charges for such services are necessarily a deduction from the terminal price of wheat. These charges, or margins, are well established by custom and vary in different sections of the country according to local conditions.

"Insurance: The government carries no insurance on the property which it owns. It does, however, require that the elevator operators shall exercise due diligence in protecting grain stored in their warehouses or elevators from ordinary hazards. Owners of grain stored in warehouses or elevators should therefore protect their grain so stored which has not been delivered to or paid for by the food administration grain corporation."

(2) The North Pacific Millers' association and the Northwestern Grain Dealers' association, at a meeting in Seattle shortly after the issuance of the above rulings, announced the following agreement as to charges on these points as reported by the Seattle correspondent of the Northwestern Miller: That mills and grain dealers in buying wheat from growers should deduct 7 cents a bushel for storage and handling charges, these charges to include 3 cents for 30 days' storage, 2 2-10 cents for commission, 1 cent for interest, 4-10 of a cent for insurance and 4-10 of a cent for inspection, weighing and allowance for bad order sacks. In addition to this, it was agreed that a handling charge be made in purchases by mills and exporters from Coast and country dealers of 1-2 of 1 per cent (about 1 cent a bushel), that interest on drafts be at the rate of 7 per cent, and that interest be charged until three days after arrival of wheat on track at coast terminals.

It is evident that this means that the producer is to receive as the price for his wheat the Coast basic price less the freight to the Coast terminal less eight cents for storage, handling, insurance, interest, commission, inspection and the like. In other words, if the government's basic wheat price is such as to make the price of a given crop of wheat at a given Inland Empire point $2.05, it will be worth to the farmer $1.97 instead.

The point at issue is: Is eight cents a reasonable charge for the services rendered by the country warehouse or elevator and the buyer?

From the figures given in the telegram from Mr. Scott, quoted at the opening of this article, it is seen that at Ritzville, which is a representative wheat growing and shipping point of the northwest, the charges covering the items in question (storage, handling, commission, insurance, interest and the like) are increased two and eight-tenths cents this year over last year, and a little more than five cents over two years ago. This is an increase this year of about 62 per cent over one year ago and more than 200 per cent over previous years.

The figures quoted for the Cheney district by Mr. Sutton show that the proposed deductions this year would be nearly double those of last year, and at least two and one-half times those of years before the war.

These figures are sufficient to warrant the most searching investigation by growers and representatives of the federal food administration, which guaranteed the producer a minimum of $2.20 a bushel at Pacific coast terminals this year.

Here is where farm organizations like the grange, the farmers' union and the nonpartizan league can render valuable service to the producers. If growers feel that these intermediate charges are excessive, they can protest through their organizations to the national food administration. Farmers' organizations can clear away obstructions in the road to the terminals and make it easy for their members to ship to the grain corporation. Instead of letting their members deal individually through commission men in Seattle, Tacoma and Portland, they can locate their own agents at the terminals.

Another valuable service can be performed by the farmers' organizations—the securing of cars for wheat to be shipped to the government markets. The official announcement of the food administration says: "the government does not discriminate between shippers in matters of transportation," and undoubtedly that is the intent of the food administration; but the mills and other private buyers will know the ropes and thus have an advantage over the average individual grower who may want cars to ship his produce to the government markets.

Justice to the grower and the public welfare require that the wheat grower shall receive, down to the last mill, the full measure of the price that was allowed him under the food control law of congress. It is especially essential that no unjust and unreasonable intermediate charges be imposed upon him this year of short yields and at this critical stage of the great war, when every possible effort must be made to foster and stimulate the growing of a great wheat crop in 1919.

The following is a composite table compiled from separate tables issued by the federal food administration showing the revision in the basic prices of wheat at various terminals throughout the country resulting from the recent increase in freight rates.

| | Old Price | New Price. | Increase. |
|---|---|---|---|
| New York | $2.28 | $2.39½ | .11½ |
| Philadelphia | 2.27 | 2.39 | .12 |
| Baltimore | 2.27 | 2.38¾ | .11¾ |
| Newport News | 2.27 | 2.38¾ | .11¾ |
| Chicago | 2.20 | 2.26 | .06 |
| New Orleans | 2.20 | 2.28 | .08 |
| Galveston | 2.20 | 2.28 | .08 |
| St. Louis | 2.18 | 2.24 | .06 |
| Duluth | 2.17 | 2.22½ | .05½ |
| Minneapolis | 2.17 | 2.21½ | .04½ |
| Kansas City | 2.15 | 2.18 | .03 |
| Omaha | 2.15 | 2.18 | .03 |
| San Francisco | 2.10 | 2.20 | .10 |
| Portland | 2.05 | 2.20 | .15 |
| Seattle | 2.05 | 2.20 | .15 |
| Tacoma | 2.05 | 2.20 | .15 |

The statement issued by the food administration contains the following relative to the so-called premium and discount wheats:

"The 'premium' wheats are as follows:

| | Premium. |
|---|---|
| No. 1 dark hard winter | 2 cents |
| No. 1 dark Northern spring | 2 cents |
| No. 1 amber durum | 2 cents |

"The 'discount' wheats are as follows:

| | Discount |
|---|---|
| No. 1 yellow hard winter | 2 cents |
| No. 1 red spring | 5 cents |
| No. 1 red walla | 7 cents |
| No. 1 red durum | 7 cents |
| No. 1 soft white | 2 cents |
| No. 1 white club | 4 cents |

"Discounts for other grades than No. 1: No. 2 wheat, 3c under No. 1; No. 3 wheat, 7c under No. 1. Grade below No. 3 will be dealt in on sample on merit.

Other portions of the statement issued by the administration concerning the purchase of wheat are as follows:

"The Food Administration Grain Corporation will buy warehouse receipts in approved elevators at the principal primary markets as named above. In the intermountain territory, where there are no public storage facilities available, an adjustment will be made to make effective the $2 minimum for the No. 1 grade f. o. b. outgoing car, available for transportation to a public terminal elevator. The intermountain region comprises southern Idaho, western Montana, western Wyoming, Nevada, Utah, western Colorado, New Mexico and Arizona. Further details can be obtained at grain corporation offices.

"At all these principal primary markets there is an open market where all classes of buyers are well represented, and the producer and the consumer will be amply protected through the competitive activities of the several interests, the Food Administration Grain corporation being prepared to buy and protect the 'fair price' basis.

"As the miller is restricted to a 'fair price' basis for his flour, he can not pay more for wheat than the expense of milling and a reasonable profit will allow.

"The farmer can protect himself by the study of the primary prices, deducting intermediate charges, or he can ship to the Food Administration Grain Corporation, or he may ship to a commission merchant at a terminal market and through him secure the benefit of competitive buying.

"There is nothing in the '1918 plan' which prevents a buyer at point of origin from placing his own grade upon the wheat which he purchases. If, by the buyer's act, the grade is raised, it is equivalent to an increase in the price. If the buyer lowers the grade the producer or dealer's protection is to ship to the Food Administration Grain Corporation.

Producers or dealers have the right to bill cars of wheat direct to the Food Administration Grain corporation at any of the principal primary markets named above. When the wheat is unloaded in the elevator, and weight and grade returns are made to the Food Administration Grain corporation, remittance will be made on the basis of weight and grades so reported and on the basis of the government price, less 1 per cent administration charge for the service.

"The government does not discriminate between shippers in matters of transportation.

"The food administration maintains a traffic bureau for the purpose of assisting shippers of grain and flour in securing their car supply and also in expediting the movement of shipments to destination. Application for assistance can be made to Food Administration Grain corporation offices in each primary market.

"Charges for handling: Country elevators and buyers are entitled to receive fair compensation for their services in the handling and marketing of

(Continued on page fourteen.)

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## *In Unity There Is Strength*

The report of rural church workers that there is a growing tendency toward church unity in small communities is gratifying. It is a travesty on the great church movement that one little village of 500 souls should have four to six churches struggling along in a discouraged way. Five hundred people trying to pay the salaries of four ministers, which, needless to say, means salaries on which the ministers can not decently support families! Five hundred people paying insurance, repairs, mortgages, fuel and the like to maintain four separate church buildings! And all because of insignificant differences in beliefs. In unity there is strength, and it is a hopeful sign to see small churches uniting in the liberal support of one good minister and one live cooperative church organization.

There are, as Shakespeare said, sermons in stones, books in running brooks and good in everything—including war.

## *The Call Has Been Sounded*

Speaking through the United States department of agriculture, a hungry world is calling upon the farmers of the United States to increase their acreage of fall wheat this year. Of the four northwestern states all are asked to seed an increased acreage except Montana. That state is asked to seed the same acreage as last year; Washington is asked to increase its acreage 80 per cent; Idaho is asked for 25 per cent increase, and Oregon for five per cent.

That is the task before the wheat growers. It means that those who have been raising wheat will plant more, and that many who have not been wheat producers will this year make a new venture for the good of the one great cause—winning the war. Prices in all respects are not just as every one would like them, but every producer knows that when he takes a bushel of good grain to market he will receive not less than $2 for it. Heretofore he has been taking two gambling chances, one with the productivity of the season and one with the price. He must again risk the weather, but he knows that a reasonable price will be paid him for whatever he produces. Without doubt the farmers of the northwest will rally royally to the call and thereby do their utmost to prevent the possibility of a serious food shortage a year from now.

## *Produce Something Needed*

These are times when every one should be producing something of a very real nature. It is not enough to be engaged in an occupation that has heretofore been considered essential. Dealing in commodities that are not necessary for the maximum fighting efficiency of the nation should be reduced to the lowest point possible. If one walks up the street of almost any city he will observe on all hands forms of employment that might well be dispensed with during these strenuous times. For "business as usual" they may all be considered essential, for they all cater to some demand of the people or of part of the people. The responsibility, therefore, after all, reverts to the people as a whole. The way to eliminate these nonessentials is to cease patronizing them, remembering that every time one purchases anything that is not absolutely necessary for his well-being he is employing some one in a non-essential line of business and thereby keeping that some one out of a real war-winning activity.

There is talk of strikes in some of the war industries of this and other allied countries. What if the army in Europe should strike?

## *There Is Too Much Free Counsel*

Some one has extracted from the writings of the Roman author Livy another proof that human nature today is pretty much the same as human nature of 2000 years ago. In the year 168 before Christ Rome decided to carry on a war against the Macedonians, and selected the Roman general Lucius Aemilius Paulus to lead its army. Instantly the general was assailed with a flood of confusing counsel, coming chiefly from persons who were in nowise qualified to give it. After he was half-distracted by public clamor, General Paulus went out from the senate chamber one day and thus addressed the Roman populace:

"In every circle, and, truly, at every table, there are people who lead armies into Macedonia; who know where the camp ought to be placed; what posts ought to be occupied by troops; when and through what pass Macedonia should be entered; where magazines should be formed; how provisions should be conveyed by land and sea, and when it is proper to engage the enemy, when to lie quiet.

"And they not only determine what is best to be done, but if anything is done in any other manner than what they have pointed out they arraign the consul as if he were on his trial. These are great impediments to those who have the management of affairs.

"I am not one of those who think that commanders ought never to receive advise; on the contrary, I should deem that man more proud than wise who did everything of his own single judgment.

"What, then, is my opinion? That commanders should be counseled chiefly by persons of known talent; by those, especially, who are skilled in the art of war and who have been taught by experience; and next, by those who are present at the scene of action, who see the country, who see the enemy, who see the advantages that occasions offer, and who, embarked as it were on the same ship, are sharers of the danger.

"If, therefore, any one thinks himself qualified to give advice respecting the war which I am to conduct, which may prove advantageous to the public, let him not refuse his assistance to the state, but let him come with me into Macedonia.. He shall be furnished by me with a ship, a horse, a tent; and even with his traveling charges. But if he thinks this too much trouble and prefers the repose of a city life to the toils of war, let him not, on land, assume the office of a pilot.

"The city, in itself, furnishes abundance of topics for conversation; let it confine its passion for talking, and rest assured that we shall be content with such councils as shall be framed within our camp."—Livy, Book XLIV, Chapter 22.

Throughout the length and breadth of the United States today, just as it was in Rome 2086 years ago, town and village oracles who think they know it all, but in reality know next to nothing, are free with their protests against the manner in which the allied armies are fighting the Huns and to shout suggestions on the way to win the war.

Fortunately for the United States and the allied cause, no one in high command or authority pays any heed to these protestations. War is expert business, and as old Paulus told the Roman people, commanders should be counseled by those who are skilled in the art of fighting.

Let's not get gloomy. The first necessity may be soldiers at the front, but the second is soldiers at home, and the same degree of bravery and optimism should be manifested here as over there.

## *The Fair Is a School*

Most of us are just like we were when we were boys. We go to school to have fun, not to learn. That is the way we attend the fair as a rule, but it is a mighty poor way, for there is valuable information at every fair that should be carried away and put to practical use. Agricultural exhibits themselves are educational, and in most cases the exhibitors are able and willing to explain methods of production that it would prove profitable to follow out. But there is another line of education there—machinery, farm construction, modern equipment of every kind. There are engines, stump pullers, wood saws, tractors, motor cars and trucks, grain bins, silos, cream separators, cider mills, light plants, water systems, fencing, and a score of other things of interest to modern farm developers. There are men demonstrating all these things and giving out descriptive literature. It is the logical opportunity of the whole year for the farmer who is interested in any of the modern implements and devices of farming to get first-hand information. Listen to the demonstrators and take their literature. Then, in the quiet of the farm after all the fun and entertainment of the fair is over, weigh both talk and literature in the light of your needs.

It was a liberal-minded preacher who said: "I would join with Satan himself in prayer for allied victory if he would but pray with me." This indeed a time for cooperative effort to the exclusion of personalities.

## *The Fourth Liberty Loan*

Three Liberty loans have been floated since the war began. A fourth is soon to come. Now is the time to plan to meet it. The American people must finance America's part in the war. There is no other way, and no real American hesitates to go down into his pockets as deeply as possible to do his full part. While the war continues the people of this country will again and again be called upon to meet special war demands—bond issues, increased taxes, food conservation and the like. These things are as indispensable to the successful prosecution of the war as are soldiers. They must be met fearlessly, wholeheartedly and with the same determination that has marked the sacrifices made by the peoples of Belgium and France. Come what will, America will never be called upon to make one-tenth the sacrifices that these peoples have already made. Therefore, let us look ahead to the coming of the fourth Liberty loan the last of September. Let us plan from this very day what we can invest in its bonds, and make the amount as great as possible, remembering always that it is a sound business investment, and not a gift or contribution, though it serves the purposes of both.

A thought is the most powerful thing in the world either for good or bad.

## *Where Women Can Serve*

When we read of the American soldier going over the top with shells bursting and bayonet fixed for the rout of the enemy, we must not forget that back of the trenches are the Red Cross hospitals waiting, ready to receive him if he comes back wounded. While we are sounding the praises of the soldier boy, great as his glory may be, let us not fail to cheer for the soldier girls back there, many of them within the range of enemy guns, daring death as bravely as the hero of the trench. And let us not forget another heroine, the young woman who, responding to the tremendously real need, has enlisted for service in the home guards of health, the one who takes up duty as a home nurse to release her trained sister for the battle front. Right now there is a great need for these home guards. The demand for trained nurses on the battle fields is greater than the supply. The government is appealing for enlistment of young women for training, some of them actually to go to the front if the war lasts till their training can be completed, and some to remain at home taking the places of those already gone. It is a wonderful opportunity, and one that will touch the heroic heart of the women of the land.

# Will Change Draft Age Limits

## *Both Younger and Older Men Will Be Subject to Call*

Secretary of War Baker, following long conferences with other government leaders, has announced that the war department will urge upon congress the enactment of a bill changing the draft ages from 21 to 31 years, as at present, to 18 to 45 years. This sweeping change is proposed, says Secretary Baker, because the war department is convinced that it is necessary to secure the number of men that are needed to whip Germany. How many men these age limits would provide is not openly estimated by the authorities, nor the number that will be required to win the war. It is openly asserted, however, that the government is determined to send men and munitions to Europe as rapidly as possible, increasing the number of fighting men on the battle fronts to the greatest possible number in the shortest possible time, with a view to overwhelming the enemy. The war department has the new proposals ready to present to the committees of both houses of congress this week. These committees, which are in session during the summer vacation of congress, will thresh them over until congress reassembles late in this month, by which time it is hoped to have the provisions of the bill so drawn and so approved that they will be quickly adopted by both houses and become effective.

### Would Call Men by Age Classification.

Under the provisions being worked out by the war department the men drafted under the new age limits would not all be subject to immediate call, but they would be divided into classes, according to age. While nothing definite has been announced on this particular point, it is understood that it is proposed to call the older men who are qualified, rather than the men under 21 years. Training of the younger men would begin early, however, so that they would be ready to go to the fighting front as soon as they arrive at the age of 21.

There has been much opposition expressed to the drafting of men under 21 years, and some objection to drafting men as high as 45 years. It is possible that a compromise may be agreed upon, possibly 19 to 40 or 19 to 36 years. It is believed more probable that the original plans of the war department will be adopted, however, thus placing nearly all the manpower of the nation subject to the call of the government at any time needed.

### Allies Continue to Win Successes.

The French and Americans have continued their successes on the Marne front until at this writing the line between Soissons and Rheims is practically straightened out instead of being the pocket-shaped line of a month ago. The advances of the allies were exceptionally rapid the last of the week, their capture of two or three important points from the Germans throwing the latter into a predicament requiring their rapid withdrawal nearly all along this 25-mile front. The fall of Soissons occurred Friday, and this was followed up by the advance of the Americans and French to the Aisne river, which has since been crossed and advances made on its northern banks. It is considered likely by military authorities that the enemy will soon make a determined stand, probably only a short distance north of the Aisne river. The shortening of the Soissons-Rheims line, while it gives the allied forces a shorter line to concentrate their attack on, also gives the Germans a shorter line to defend. No official report of the number of the enemy captured has been made. It is declared that the amount of guns and ammunition taken by the allies is large.

### England May Strike in the North.

Whether or not the British forces are preparing for a drive in the north is but conjecture, but it does not seem improbable that they are. Two facts at least point to it: (1) The French and Americans must have a breathing spell on the south in which to bring up their bases to the advanced line, and (2) it is known that considerable portions of the German army in the north before the British positions have been taken south to help withstand the France-American assault. The British forces have been comparatively silent since the drive began on the Marne front, which might be taken as an indication that they were not only giving the Germans an opportunity to withdraw some of their forces, but that they were preparing to launch a drive of their own at the psychological moment.

### Object of Army Is to Kill Men.

In a statement issued at Washington, D. C., General March, President Wilson's chief of staff, says that whatever the original objectives of either side to the war had been up to this time, it was now to kill as many men as possible. This policy was indicated some time ago when a high officer of the allied forces probably estimated the duration of the war on the basis of how long the German army could maintain its forces while the allies were killing the number of German soldiers that they were then. General March says that where the battle has been raging for the last month, between Soissons and Rheims, all other objects have been swept aside but the development of the fighting into the one object of destroying as many men as possible in the opposing forces.

### American Army Is a Great Unit.

General March at Washington has announced that General Pershing has under his immediate control now 1,000,000 Americans. This shows something of a change from the situation several weeks ago, when American divisions were being distributed here and there to fill up weak places in the entire allied line for the purpose of tiding over a critical period. In itself this announcement indicates the increasing power of the allies.

There are eight divisions of Americans, or in the vicinity of 300,000 men, now in the fighting zone where the great battle is going forward, and General March pointed out that General Liggett had set his headquarters in the center of the line, where his six divisions are assembled, together with two additional divisions. General Liggett is the first American officer to command a wide section of the front, and to his lot has fallen the advance that has broken the back of the German effort.

### Costs of War Are Stupendous.

Official figures show that during the month of July the expenditures of this government were approximately $48,000,000 a day, of which more than three-fourths was for the regular expenses of the army, navy and other war activities. Loans to the other allies averaged $10,000,000 a day. Even these enormous figures are below those of May and June. In May the total expenditure was $1,508,000,000; in June, $1,512,000,000, and in July $1,482,000,000. Figures given out by the British authorities show that the war is costing the people of England approximately $35,000,000 a day. England's national debt has increased from about $3,225,000,000 to nearly $40,000,000,000.

### Liberty Loan Campaign Begins September 28.

Secretary McAdoo of the United States treasury has announced that the campaign for the sale of the fourth Liberty loan bonds will begin on Saturday, September 28, and end on October 19. No official announcement has been made as to the amount of bonds to be sold, but it is predicted that the issue will be one of $6,000,000,000, and that the rate of interest will be 4 1-2 per cent. Government officials have announced that special appeals will be made to the farmers of the country to subscribe for the bonds of this new loan.

### Germany In Trouble With Turkey.

Reports of serious controversies between Turkey and Germany have been circulated during the last several days. At one time it was predicted that these two allies were about to break off diplomatic relations. The immediate cause of the trouble, it was stated, was that Germany had appropriated one of Turkey's warships to take the place of a German ship that had been lost while loaned to Turkey. Another source of trouble was the division of Rumanian territory between Turkey and Bulgaria, following the fall of that country at the time of the collapse of Russia.

### No Casualty List Has Been Received.

At this writing no casualty list nor estimate of the probable American losses in the last great drive has been received by the war department. There was a rumor abroad that it had been reported that the American losses totaled 12,000, but the government has denied that this report had any foundation. General Pershing has promised an official report as soon as reliable information can be compiled.

### President Wilson May Make Western Tour.

It is announced that President Wilson will make a speaking tour in behalf of the fourth Liberty loan bond issue, which will be put on the market beginning September 28. The president may include the northwest in his trip, according to advices from the national capital. The tour would be made some time between September 28 and October 19.

### Three Hundred Thousand Go Over in July.

It is officially announced that there were 300,000 American soldiers sent to France in July, the largest number for any month. This brings the total force there to more than 1,300,000, and at the rate they are now being transported there will be 2,000,000 there by early in October.

### Would Insure Maximum Production.

Herbert Witherspoon, a banker of Spokane, Wash., has been appointed by the war industry board as regional adviser for the three states of the northwest. His headquarters will be in Seattle. The object of his effort will be coordination of manufacture and distribution of war contracts on a basis that will insure the greatest possible production. The three states are divided into several smaller districts, each of which will be under the supervision of a district chairman and a general committee, Mr. Witherspoon being the adviser for all the offices of these districts.

### Get a Farm Service Flag.

The man, woman, boy or girl who stays at home and works hard to produce necessaries for the soldiers in Europe are entitled to real war service recognition. That is the idea back of the Washington Farmer's farm service war flag. It is pennant, shaped, made of the good old red, white and blue, and has a star representing the producing farm home. Small stars are added to represent each worker of that home.

.....

**Convenient Order Blank.**

THE WASHINGTON FARMER, .....1918.

Review Building, Spokane, Wash.

Enclosed, find five cents (5c), for which please send me a Farm War Service Flag (printed on enamel paper) with ..... extra small stars for farm workers.

Name .....

R. F. D. ..... Postoffice .....

Box ..... State .....

## *Washington Gleanings*

About 40 Pend Oreille county farmers have organized a live stock association for the purpose of community shipping and buying of feed.

Abram Heidegger, who lives south of Kettle Falls, has just finished shipping the last of his cherry crop of 2000 boxes, which brought him an average of $1 a box.

The various election boards of Skagit county will be composed this year entirely of married women, according to the plan of Commissioner S. M. Butler of Mt. Vernon.

The board of trustees of the Bellingham normal school have adopted a resolution requiring all students to take an oath of allegiance to the government before receiving their certificates.

All counties of southwest Washington with the exception of Wahkiakum were represented this year in the student body of the Centralia summer normal school, which has closed a successful session.

A new farmers' elevator has been built at Gravelles, Lincoln county, with a capacity of 46,000 bushels. The elevator is 42x50 feet, and from the ground to the peak is 96 feet. C. N. Peck is the manager.

Charles H. Swigart, for many years connected with the reclamation service in the Yakima valley, has left to become supervising engineer of the Columbia River irrigation district, including 13,000 acres on the Columbia river, near Kennewick.

J. H. Lawson of Farmington has purchased a half section of land from B. C. Leonard for $100 an acre. The land had been owned and farmed by Mr. Leonard since 1893. Mr. Lawson recently sold 300 acres four miles west of Farmington for $30,000.

Carroll Goods, a thoroughbred registered Shorthorn bull calf, valued at $300, has been donated by E. W. Downen, Pullman Shorthorn breeder, in the interests of the Red Cross, Y. M. C. A. and Knights of Columbus war organizations, and is to be sold on October 1.

One of the finest carloads of beef cattle ever shipped from the Reardan section was recently shipped to Welch's market, Spokane, by W. F. Runkle. Besides other stock in the car were 25 head of yearlings, one of which weighed 864 pounds. The lot brought $2520.

The grape producers of Detroit and Pickering Passage, Mason county, have formed an organization with the view of bettering their produce and marketing conditions. The following officers were chosen: Adam Eckert, president; Edward Suiter, vice president, and A. P. Huston, secretary.

Orville Billings, president of the Pacific Building and Loan association, at Tacoma, is converting his three-story mansion into an up-to-date apartment house, as he believes that it is neither right nor practical to occupy a great big house when so many other persons are finding it difficult to get a place to live in.

The 40-acre crop of pears on the Keck ranch, near Zillah, belonging to Frank Hill, J. T. Brunton, J. P. Woodall and the Keck estate, has been sold to E. E. Sampson of Yakima, the purchase price being $1.40 a box. The tonnage is estimated at 30 cars, and the approximate amount to be received by the growers is $30,000.

With the first alfalfa cut up in the Kittitas valley it is estimated that about 10,000 tons have so far been contracted for by hay dealers. Prices started unusually high, alfalfa going at from $25 to $28 and timothy at $27 and $28. Hay acreage over the valley is much smaller than usual, but the crop is reported of good quality.

An automobile trailer, fully equipped with chemical tanks and other fire-fighting apparatus, is to be maintained by the Pullman Chamber of Commerce during the harvest season for fighting grain and farm fires in Whitman county. A volunteer fire department of 15 men is to be organized by the city council of defense, and the two organizations will cooperate.

Forty-two convicts confined in the state penitentiary have been paroled by the state board of control to join the allied armies. The list included Americans, Greeks, Scandinavians, Italians, British and French. As soon as they enlist they will be given their final releases and restored to citizenship, but in the meantime they can be taken back if their violate any laws.

Estimates as to the size of this year's crop in the apple district of north central Washington are steadily being revised upward. District Horticulturist Darlington's estimate for this year is 7200 cars on the same scale of loading as last year, 825 boxes to the car. The apples this year are of good size, as owing to the early season they had a good start and a long growing season.

Colonel William Duling, extensive rancher, of Garfield, has by practical demonstration shown that business men in town can be well utilized to help in handling the labor problem by work in the harvest fields after business hours. Recently he took four Garfield business men into the Duling and Bishop ranch, where they labored in the hay field for two hours, being paid the usual wages of 35 cents an hour.

The Island County Guernsey Breeders' association has sent J. M. Pratt of Oak Harbor to Wisconsin to select a carload of pure-bred Guernsey heifers for the members of the association. The following citizens have ordered one or more head of stock through the association: H. Riksen, Arthur Case, Charles Nienhuis, Joe Flannigan, J. P. Frostad, N. M. Bos, Fred Morgan, F. R. Morgan, J. M. Pratt, Walter James and Ralph Engle.

# Dry Fruit and Vegetables

## *Simple Equipment Is All That Is Needed for Success*

There has been considerable demand for a medium sized evaporator for prunes and other fruit. Professor Barss of the Oregon Agricultural college has designed one, shown in the photograph herewith. This dryer can be modified in size to suit the needs of the grower. It is easily built and convenient for handling. It stands about 10 feet high. This evaporator is built for a capacity of six bushels of prunes at a filling. It is simple to operate anad on test did excellent work.

The cannon stove is 12x24 feet and was made of black iron and riveted by a local tinsmith. It stands four inches off the ground. It was made at a cost of $4.50. There is a collar at the flue end to take standard five-inch pipe. A pipe damper and slide in the door regulate the fire. About two inches of ashes should be left in the bottom to prevent burning.

The cabinet is standard 31 1-2x37 1-2 feet. The trays are of double spruce frame with galvanized tray cloth between, though wood trays may be used. The ventilator is a foot wide and three feet high, with wings to prevent choking of draft.

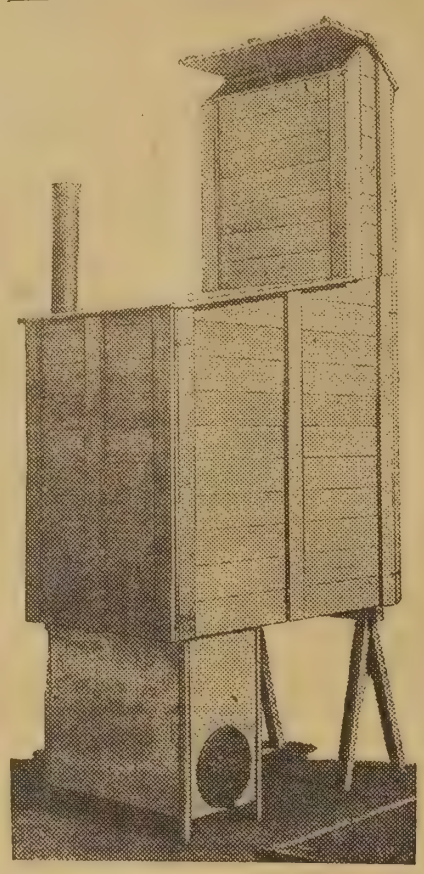
Many American housewives are hesitating to try the drying process of conserving food products for one of two reasons: First, they are afraid the equipment necessary will prove too costly or cumbersome; and second, they do not know just how they and their families will like dried fruits and vegetables.

The only answer to these possible objections is the demonstration of experience. A handy man or boy around the house, or even the cook herself, can easily construct a dryer which will serve all practical purposes. There are two types of home-made dryer, one using the heat of the sun to remove the surplus water from the article to be dried, the other utilizing artificial heat. The advantage of sun-heat dryers is that they need less attention and are not so liable to over-dry or to burn the product. Their disadvantage is that cloudy or rainy weather places them practically out of business. Artificial heat is more dependable in this respect, but requires more careful watching. The advantages and disadvantages are about even, and either type will do good work with a little care.

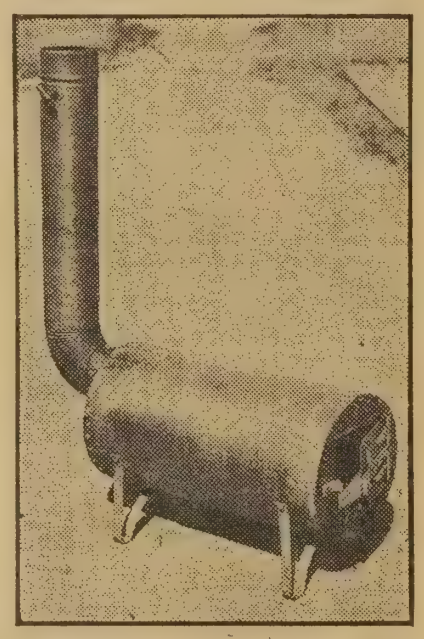
One of the best sun-heat dryers is that devised by C. R. Campbell of Bellevue, Wash. The sides are made of boards about 12 inches high, and are provided with ventilators—slots covered with wire gauze. The bottom is made of tin, to serve as a reflector, and the top of glass. Trays with wire gauze bottoms hold the fruit to be dried, while the entire dryer is mounted on a base provided with a universal joint, permitting the fruit to be kept pointed directly into the sun's rays throughout the day.

A simple and satisfactory dryer to use with artificial heat can be made by constructing a frame of 12-inch boards, no top or bottom, and nailing two sets of cleats along the inside to hold the two wire bottomed trays upon which the fruit is to be placed. The frame is constructed just large enough to fit the top of the kitchen range, and is placed in position whenever needed.

A little careful experiment with either or both of these dryers will teach the home canner more than reading volumes of directions, though it is highly advisable that all the advice obtainable should be carefully studied. The state colleges and the United States department of agriculture will gladly send bulletins with complete instructions.



**The small drier recommended by the Agricultural college of Oregon.**



**Stove used in the O. A. C. drier.**

# Recruit Students

## Should Not Quit School for War

It is a significant fact that the war department is taking the lead in a nation-wide campaign designed to keep the young men and young women of the country in school this year rather than have them withdraw and take up army or other war work. President William T. Foster of Reid college, Portland, has been appointed by the war department as a northwest representative in the nation-wide "go to college" campaign. Emphasizing the need of special training before entering war service, President Foster says:

"To add a million untrained men to the army, the government has only to draft them. But to add a thousand trained men, in any specific field is impossible until they have first been trained. That is why the government is eager to have as many men as possible go on to college, for a few recent high school graduates have the maturnity of special preparation which makes them immediately valuable for national defense."

Under the new plan of the war department, high school students over 18 years of age, may enlist in the United States army and although subject to the call of the president of the United States, will be given reasonable assurance that they may pursue their studies until 21 years old, at the same time receiving military training under officers of the army. The war department provides uniform, equipment and instruction.

## Poison Potato Beetles.

Arsenate of lead is recommended for the destruction of potato beetles in preference to paris green, not only because it is cheaper this season, but because it has the following additional advantages:

(1) It contains less soluble arsenic; (2) it is less harmful to young growing plants, and when applied properly does not scorch them; (3) it adheres more strongly to the foliage; and (4) it is of greater value than other arsenicals (except zinc arsenite) in that it leaves a white coating on the foliage, so that its presence can be determined readily after spraying.

Use arsenate of lead in proportion of two pounds of powdered form to 50 gallons of water. Mix first with small quantity of water and then stir thoroughly into the full amount. Apply with a good pump throwing a fine mist. Cover the foliage completely.

**"IF CHILDREN WERE AS HEALTHY AS THE** dogs, cats, rabbits, calves, lambs and colts they love to play with, the condition of childhood as affected by sickness would be marvelously different from what now obtains." So says Dr. S. B. Nelson, head of the department of veterinary science of the State College of Washington. Dr. Nelson begins a series of articles in next week's Farmer on the relation of the pet to childhood.

## CLIP APPLE TREES.

### Method of Controlling Aphis.

Clipping badly infested twigs and tips from his apple trees is the method of aphis control practised by Richard N. Pemberton of Seattle, Wash., in his Kittitas county, Washington, orchard. Mr. Pemberton found that many of these tips were so badly infested with aphis that spraying was rarely effective in getting all of the stem mothers and their progeny. Even when these new growths were dipped into a strong solution of nicotine not all of the pests were killed. For this reason he resorted to the heroic remedy of amputation, and the results were better than he had hoped for.

"There is another place where amputation is advisable in the orchard," continues Mr. Pemberton. "When you find a limb carrying a heavy load of fine apples, first thin these out to a reasonable number and then clip off the tip of the limb, to throw the energy of the tree into fruit production. By following these two plans for controlling aphis and checking excessive development of wood at the expense of fruit formation, I secured some of the finest apples raised in my neighborhood. Of course I followed out all the other modern cultural methods—sprayed five times, pruned, cultivated, etc. And the results obtained justified the work, for my apples were purchased two successive years by one of the railways for display purposes."

## CAN GET $3 AN ACRE.

### Seed Loan Regulations Announced.

Official announcement has been made that under the provisions by which the government is to furnish the farmers of drouth-stricken areas $5,000,000 for the purchase of seed wheat, $3 an acre is the maximum that will be allowed and the greatest amount that any one farmer can secure is $300. The $5,000,000 fund, which was recently set aside by the president, will be administered jointly by the United States department of agriculture and the United States treasury.

Loans will be made only to those farmers whose credit and resources already are exhausted and who consequently can get no money from private banks. The loans will bear 6 per cent interest, payable on October 1, 1919, in the southern districts and on November 1, 1919, in the northern district, which latter includes the northwest. The loans in the northwest will be made and the interest and principal collected when due by the Spokane branch of the federal farm loan bank. Applications for loans should therefore be made to the bank at Spokane.

Applicants must agree to use seed and methods of farming approved by the department of agriculture. No part of the loan will be made until the seeding is completed, a certificate being given by the government on which temporary credit may be secured locally. Each borrower will be required to agree that if his wheat yields seven bushels or more to the acre he will pay 25 per cent of his loan into a guarantee fund to cover possible losses to the government through the administration of the fund.

**Did Not Need a Press Agent.**

At Columbus, Ind., a newspaper editor roasted the telephone service. The next day he called a number and the operator rang in his ear, sweetly informing him that she was demonstrating the bad service "so we can get another writeup in the paper." This was one instance where she did not need a press agent to get prominent mention.

### Worth More.

Editor, Washington Farmer: I am pleased to renew my subscription to your valuable paper. I consider it worth a great deal more than is charged.

JOHN FELLOWS.
Long Beach, Wash.

# Tax Profits

## Stupendous Sum Would Be Raised

Secretary McAdoo thinks congress ought to raise $8,000,000,000 the coming year by taxation, leaving about an equal amount to be raised by the sale of Liberty bonds and war savings stamps. The house committee on ways and means is now working out the problem.

The farmers' national committee on war finance, which has opened offices in Washington, wants higher levies upon incomes and profits, and says $12,000,000,000 should be raised by taxation. A signed statement by Benjamin C. Marsh, executive secretary of the organization, says:

"The report on statistics of income for 1916, just published by the commissioner of internal revenue, and figures compiled by him for 1917 make it clear that $12,000,000,000 can be raised by current taxation during the fiscal year 1919. In 1916 the gross income of corporations reporting a net return was over $32,500,000,000, their net income nearly $8,800,000,000. In 1916 the income of the 437,036 persons or married couples making returns was about $8,350,000,000; total over $17,000,000,000.

"The total income from personal service and business was, in 1916, $4,490,000,000; from property, $3,860,000,000. Those in receipt of incomes of $40,000 or less derived the major part of their income from personal service and business, but over 60 per cent of the incomes of those receiving over $40,000 was derived from property—that is, from secure investment. It is obvious that a very heavy tax was must be levied upon these incomes, as on the incomes derived from corporations. All these are lazy incomes and do not represent any exertion on the part of the recipient.

"About one-tenth of 1 per cent of the American people received in 1916 nearly $2,500,000,000 of unearned income.

"Less than one-quarter of 1 per cent of the farmers of the country received in 1916 a taxable income of over $3000, the proportion of brokers was 80 times as large, of manufacturers over 40 times, of mine owners and operators 32 times as large.

"The average income of farmers, including big land owners who merely collected rent, was $8998. The average income of stock and bond brokers was $41,009, of mine owners and operators $45,317; 14,407 farmers received only $129,642,000, while 2544 mine owners and operators received a total of over $115,000,000; 2839 stock and bond brokers received $116,425,000.

"The total national income for 1917 was about $60,000,000,000. For 1918 it will doubtless approximate $70,000,000,000.

"There are hundreds of thousands of people in the United States today, and have been since we entered the war, too rich to ask Uncle Sam to pay them interest for saving all their property. He should be too honest to borrow. He should take all he needs in taxes for arms, as he takes all he needs in men under arms."

## Coming Events.

August 19-25—Convention National G. A. R., Portland, Ore.

August 27-29—National Farmers' conference, Washington, D. C.

**Fairs, Shows, Exhibits.**

August 26-30—Southwest Washington fair, Centralia-Chehalis.

September 2-7—Spokane Interstate fair, Spokane, Wash.

September 16-21—Washington state fair, Yakima, Wash.

September 19-21—Roundup, Pendleton, Ore.

October 1-6—Western Washington fair, Puyallup, Wash.

November 7-13—Northwest live stock show, Lewiston, Idaho.

**Talking Politics.**

"I don't hear you talking politics very much."

"No," replied Senator Sorghum. "Talking politics is all right in time of peace, But I'm willing to fight for the future privilege of talking my politics strictly in my native language."

# Give Hens "Liberty of Action"

## *Best to Let Them Balance Ration for Themselves*

By JAMES DRYDEN.

**As it is quite difficult to balance a wheatless ration for chickens, it would help a great deal if you would publish a table showing the amount of protein, carbohydrates and fats required, also the proportions of these nutrients found in the various substitutes."**

**D. B., Loon Lake, Wash.**

A knowledge of the composition of feeds lies at the foundation of successful feeding, and yet the chemical composition does not tell us everything. Proteins vary in efficiency, depending upon their source. A pound of protein in meat and in wheat, for example, have not the same value, otherwise fowls could do without animal feed. The protein of milk has double the efficiency of the protein of corn and wheat as demonstrated in experiments at the Wisconsin station, a subject which was discussed in a previous article. At the same time the protein is a measure of value which can not be set aside.

The composition of wheat does not vary greatly from other grains such as corn or barley. The variation may not be a factor worth considering in practical poultry feeding. If only one food were fed and that were either corn or wheat, there would be a difference. The fowls would probably do better on wheat, but they would not live long on either, if they had nothing else.

As to the nutrients required by the hen, the ration that we have fed at the Oregon experiment station has the following composition, not including green feed and shell:

The weights given are for one laying hen for a year.

| | Pounds. |
|---|---|
| Water in the food | 8.12 |
| Ash | 2.14 |
| Protein | 13.32 |
| Carbohydrates | 48.33 |
| Fat | 3.09 |
| Total | 75.00 |

Ratio of protein to carbohydrates and fat 1:4.14.

The following table gives the percentage composition of the principal poultry feeds:

| | Water. | Ash. | Protein | Fiber. | N-Free Ext. | Fat. |
|---|---|---|---|---|---|---|
| Wheat | 10.5 | 1.8 | 11.9 | 1.8 | 71.9 | 2.1 |
| Corn | 10.9 | 1.5 | 10.5 | 2.1 | 69.6 | 5.4 |
| Kaffir corn | 9.3 | 1.5 | 9.9 | 1.4 | 74.9 | 3.0 |
| Oats | 11.0 | 3.0 | 11.8 | 9.5 | 59.7 | 5.0 |
| Peas | 10.5 | 2.6 | 20.2 | 14.4 | 51.5 | 1.2 |
| Barley | 10.9 | 2.4 | 12.4 | 2.7 | 69.8 | 1.8 |
| Wheat bran | 11.7 | 5.2 | 14.0 | 8.1 | 57.3 | 3.6 |
| Middlings | 11.7 | 2.8 | 15.2 | 4.9 | 60.8 | 4.5 |
| Shorts | 11.8 | 4.6 | 14.9 | 7.4 | 56.8 | 4.5 |
| Linseed oil meal | 9.9 | 5.6 | 35.9 | 8.8 | 36.8 | 3.0 |
| Soy bean meal | 10.8 | 4.5 | 36.7 | 4.5 | 27.3 | 16.2 |
| Skim milk | 90.6 | .7 | 3.3 | ... | 5.3 | .1 |
| Meat scrap, high grade | 10.7 | 4.1 | 71.2 | ... | .3 | 13.7 |

The nitrogen-free extract and fiber made the carbohydrates.

The above will give the feeder some idea as to how to balance the ration, but the first difficulty he will encounter is that the protein of one food may have a different value from the protein of another. We find that the hen when she has the liberty of balancing her own ration eats about 75 pounds of cereal foods and six to eight pounds of meat scraps or 50 to 70 pounds buttermilk, besides green food, grit and shell. Corn, oats or barley will take the place of wheat, but bran and shorts should be fed, and at present prices the mill feeds should be heavily fed to reduce the cost of the ration. The more cheap mill feeds that are fed the less high priced grain will be eaten.

A satisfactory way to feed is to let the hen do the balancing of the ration herself. This can be done by feeding the meat scrap in a hopper and allowing the hens to eat what they want and when they want it. If the scrap is kept before them all the time each hen will eat what she needs and no more. If the hopper, however, is allowed to get empty and the fowls get no scrap for several days, when it is filled again they will eat too much. We have practiced this method for a number of years. A moist mash is fed once a day. When dry mash is fed the practice is to put the meat or fish scrap in the mash. If this is not done the hens will eat too sparingly of the mash. The addition of the meat scrap or fish scrap makes it more palatable and more of the mash is eaten. This method also throws on the hen the burden of balancing her ration. The mash is richer in protein than the grains and the more mash the hen eats the narrower the ration will be; that it, there will be less difference between the amount of protein and the amount of carbohydrates.

Few if any practical poultry feeders actually balance the ration for the hen. It is hardly practicable. If all the feeds were mixed together in one mass it would be possible then to know just the ratio of the food the hen ate. But when we feed one kind of food at one time of the day and another at another, sometimes as many as three feeds a day, foods differing in compositipn, we don't know what the hen is eating. One hen may eat more of one kind of food than another hen, and the ratio will be different with different hens.

It is a good plan to give the hens "liberty of action" when it comes to balancing the ration, because their needs vary. The hen that is laying heavily requires a different ration than one that is not laying or laying little, and the important thing for the poultryman is to see that they have all the necessary foods.

**Watch for the Comics.**

Owing to mail difficulties, which are undoubtedly due to the use of the railroads for rushing war shipments, the comic pictures did not arrive in time for this issue. They will be here for next week, however, and we hope that they will be on time always thereafter, as we know with what interest the boys and girls turn to look for them each week.

## ESTIMATES WHEAT.

### Forecasts 30,000,000 for State.

P. J. Sweeny, state grain inspector, in an estimate recently issued, forecasts the wheat crop of the state of Washington at 30,000,000 bushels. This is 3,000,000 more than last season's yield. Inspector Sweeny reports estimates for Oregon and Idaho at 18,000,000 and 8,000,000 bushels respectively. Together these yields would make a total for the three states of 56,000,000, which would be nearly 15,000,000 bushels more than the three states produced last year.

Inspector Sweeny says that there has been a falling off in the hay production of the northwest this season, owing to the unusual drouth and heat.

## MUST REPORT WORK.

### Threshermen Must Keep Records.

Under the direction of the federal bureau of markets, the government is this year requiring that every thresherman keep a detailed record of the work that he does and file it with the county agent in his county or with the bureau of markets itself. To facilitate the making of reports, the bureau has prepared record books and blanks which the county agents are required to distribute among the threshermen. It is required that each thresherman make a report on each field threshed, showing the number of acres, the owner, and the number of bushels or sacks of grain threshed.

### Some Sections Need Assistance.

In a communication to Senator Poindexter at Washington, D. C., R. Insinger, chairman of the agricultural bureau of the Spokane Chamber of Commerce, has urged the senator to do all he can toward having the government authorities assist county banks in certain of the drouth-stricken wheat-growing sections of Washington, in making loans to farmers for the purchase of seed grain. Mr. Insinger says that the farmers in some of the dry counties of the Inland Empire will have to buy winter wheat for seeding this fall, if they join in increasing the acreage requested by the department of agriculture, and that both their fall and spring crops are practically failures, so that they will lack funds with which to buy seed. He says that local banks will need all the assistance they can secure from the government in meeting the farmers' needs.

# Uses Gypsum

## Alfalfa Yield Greatly Increased

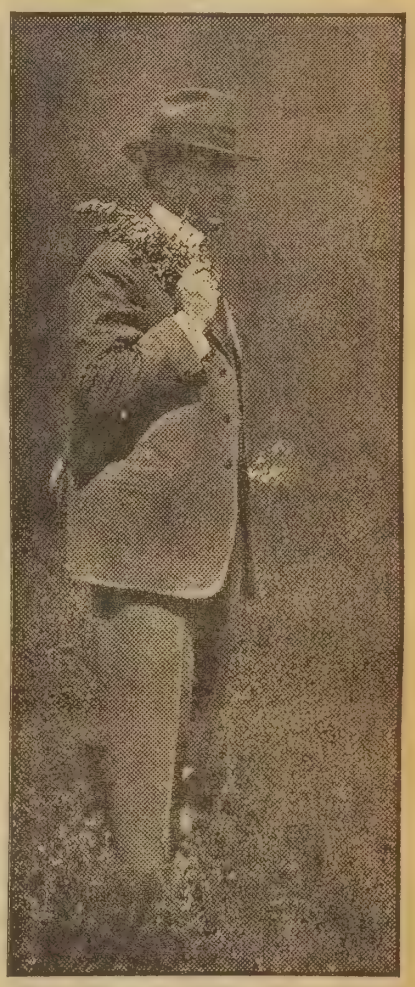
By Joe L. Ashlock.

The use of 200 pounds of gypsum per acre on the less fertile clay points of the farm of H. H. Curtis, near Pullman, Wash., produced the stand of alfalfa shown in the first picture herewith. The gypsum was put on with a gypsum



spreader a year ago last spring, after the rains, unfortunately, so that the gypsum was not carried down into the soil until the opening of the growing season of 1918. The yield was at the rate of 3.54 tons per acre for one cutting.

The alfalfa in the second picture, hardly above the shoe-tops, is in the same alfalfa field on the Curtis farm. The soil here is naturally rich, but was not treated with gypsum. The yield was at the rate of 1.22 tons per acre.



The man in the picture is Professor Olson of the Washington State college chemistry department.

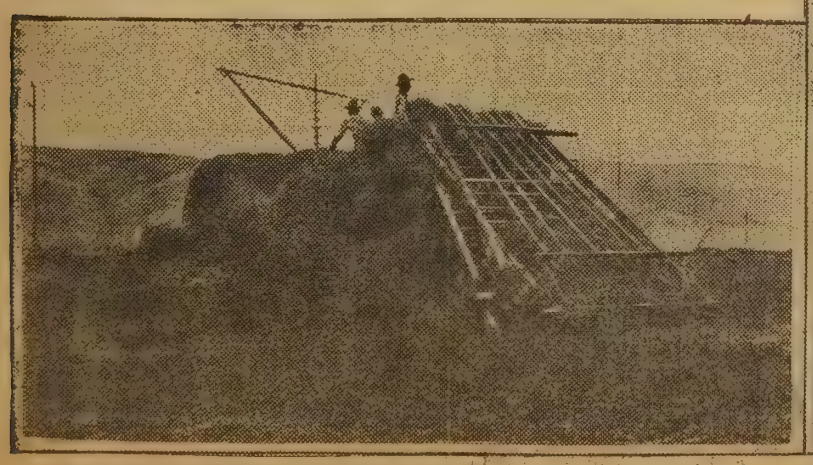
The gypsum cost Mr. Curtis $12.50 a ton, to which should be added the costs of application and of cutting the extra yield, these costs being slight in comparison with the returns, and variable, likely, on different farms.

The gypsum experiments began several years ago on the state college farm at Pullman, Wash., and more recently have been carried on in a practical way on many farms in the Palouse country adjacent to Pullman. Many farmers note a tendency in alfalfa to reach its maximum production the second year, and decline from that point, by the fourth year often reaching the point of unprofitable returns.

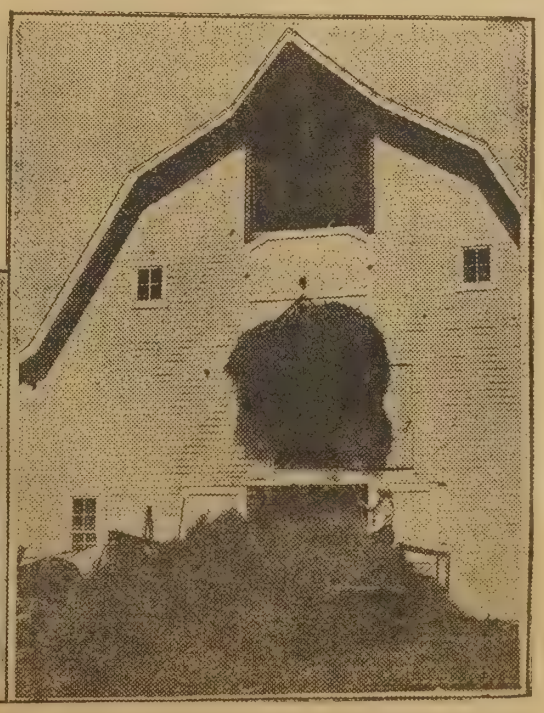
A great many farmers have expressed a desire to use more alfalfa in conjunction with their wheat farming, if the fields could be made to remain longer in profitable production. Results now obtained indicate that by the use of gypsum every second year the alfalfa fields can be kept in heavy production many years, if not indefinitely.

# Believes in Using Machinery to Save Human Labor

N. M. Williams of Walla Walla county believes in using machinery wherever such use will save human labor and add to human efficiency. County Agent H. H. Boone states that Mr. Williams' labor income is probably the highest in the county. The accompanying photographs bring out one phase of this subject—the use of up-to-date equipment in caring for the alfalfa crop. The land on which his alfalfa crop of approximately six tons to the acre per annum was raised was once "alkali land," and was reclaimed by flooding.



Hay loader on the N. M. Williams ranch, Walla Walla, Wash.



W. E. Gross of Walla Walla stowing away alfalfa.

## DAIRY

Write to the Editor.

A. B. NYSTROM, Editorial Contributor

### FEED LEGUME HAY.

**Figures Prove Its Feeding Value.**

An unusually interesting report of four years' records in cow testing has been compiled by the United States department of agriculture, one of the outstanding features of which is the evidence of the value of legume hay and corn silage. The report says that the tests seemed to prove that larger production can be obtained by making these feeds a large part of the ration than by other feeding methods. It is also shown that this production is more economical than where other feeds are used largely. The report covers the records of more than 5500 cows tested during the four-year period. Discussing the feeding of dairy cows, the report of the department continues:

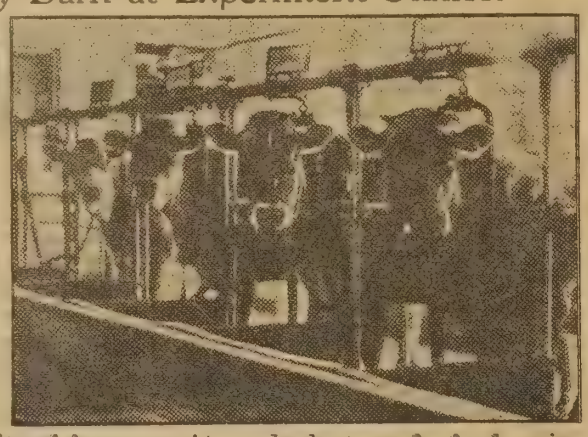
The feeding of concentrates to dairy cows should be based on known production. Farmers who are too busy to test their own cows may now have the work done for them at nominal cost by joining a cow testing association. As ordinarily conducted, a cow testing association is an organization of about 26 dairy farmers who cooperatively employ a man to test their cows for economical production. The tester not only weighs the milk and the feed, but he tests the milk for butter fat and assists the farmers in feeding their cows according to production.

Before the formation of a cow testing association in a certain dairy district few farmers fed grain to their dry cows, and none fed a balanced ration to any of their cows; prepared feeds of unknown merit were largely used; and some farmers dished up the grain with a scoop shovel and fed all their cows alike, regardless of production.

Through the active cooperation of all the members of the association those conditions were rapidly changed. Better feeding of dry cows increased the milk flow during the next lactation period; the use of a well-balanced ration brought about more economical feeding, and abandoning the scoop-shovel method and feeding concentrates according to production greatly reduced the cost of feed. However, the elimination of low producers that did not respond to better feed and care effected the greatest saving of all. In some herds these changes more than doubled the income over cost of feed. The dairymen belonging to that association demonstrated that it pays to keep good cows and to feed them well.

The cow testing association records clearly show that the most practical, far-reaching and vitally important facts connected with the economical production of milk may be grouped logically under these three heads: Selection, breeding, feeding. Careful and intelligent feeding, care, and management lift the dairy business to a certain level, but the highest level can be reached only when to these are added a careful selection and intelligent breeding.

## Model Dairy Barn at Experiment Station



One of the centers of interest at the western Washington experiment station at Puyallup, Washington, is the model dairy barn and the herd of Jerseys which it houses. The barn is built with a roofed in and walled in exercise enclosure, in which, during the stormy winter months, the cattle get the benefits of free exercise and plenty of fresh air, without being subjected to the rains. The accompanying photograph shows part of the sanitary equipment of the barn.

### Home Made Fly Spray.

When you drain the old oil from the crank case of your car do not throw it out. It makes a good spray for flies by mixing as follows: Half gallon old cylinder oil, half gallon coal oil and one quart crude carbolic acid. Spray this on the cows when they come in to be milked and you will not be bothered by flies. It does not injure the coat and is very effective. This spray has been used successfully by A. A. Osborne of Centralia, Wash.

### *Clip This Order Blank*

Address all communications concerning thrift or war savings stamps to The Washington Farmer, War Savings Department, Room 26 Review Building, Spokane, Wash.

Remittances may be in any form desired, including personal check.

The Washington Farmer, War Savings Department, Room 26 Review Building, Spokane, Wash.

Gentlemen: I wish to invest in

.... U. S. government thrift stamps (number desired) at 25 cents each.

I wish to invest in ..... U. S. (number desired) war savings stamps at $4.19 each. (August figure)

Amount enclosed $.....

Full name .....

Town ..... State.....

R. F. D. No. .....

I have already bought..... (kind of stamp)

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Fourth—A management who **realize** and **know** that the **success** of the **settlers** is the **success** of the **enterprise.**

Fifth—The Jordan Valley Farms company is offering the public an opportunity to purchase a farm under a project that possesses all of the above features, "and then some."

Sixth—The state of Oregon is, by virtue of the fact that two-thirds of the land under the system is under the Carey Act, an interested party, and all construction work is in direct charge of an experienced reclamation engineer on behalf of the state and land and water company jointly. The state of Oregon is requiring a bond of $100,000 for the faithful performance of all construction contracts.

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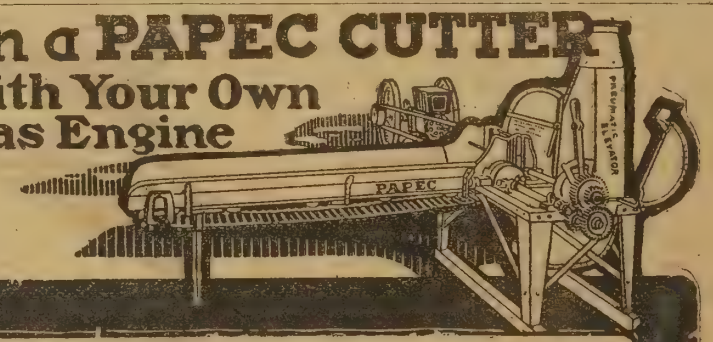
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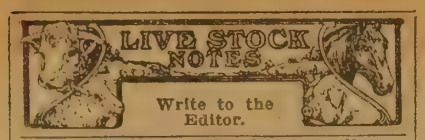
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A REMINDER

To write my name and address on the margin below, and mail for the Papec catalog and owners' letters. No obligation on my part.




E. J. IDDINGS, Editorial Contributor

## RUSH FATTENING.

### Short Fed Cattle Most Profitable

There is a tendency at the present time toward the concentration of effort on the production of short-fed cattle rather than on the so-called long-fed, or highly finished animals. It is argued by many beef men that for the last several years cattle feeders have been putting more finish upon animals than economy would justify.

This idea was evidently in the minds of the advisory committee of agricultural and live stock producers appointed by the department of agriculture and the food administration when that committee recently made the following recommendation:

"We feel that cattle marketed at the present time in class 4 (longfed or export and highly finished cattle), and known as 'exports,' owing to the high costs of labor and feed, are not an economical product, and their production should not be encouraged."

Not only has the advisory committee thus warned against the heavy feeding of cattle, and it is also understood that the government officials directing the buying policies of the government will not consider themselves responsible for the prices of very fat cattle.

Recent experiments by various state experiment stations have borne out the fact that good beef can be produced by using a relatively small amount of grain, or with nitrogenous concentrates in connection with silage and some other cheap roughage in the form of hay.

The principle that should be followed in future feeding operations, according to the advice of the department of agriculture, is to reduce to a minimum the amount of high priced feed and to make judicious use of cheap roughages. In other words, instead of feeding from 50 to 60 bushels of dry corn per steer in a long feeding period, as was the custom in the past, the quantity may be reduced to 15 to 20 bushels in a shorter feeding period, or the dry corn grain can be eliminated altogether, as the liberal use of good quality silage will furnish an excellent ration.

The use of cottonseed meal, linseed meal, or other protein rich feed, even though high in price, is to be highly recommended, because the higher other feeds are the more profitable becomes the use of a protein supplement. Expensive hay may be completely eliminated in the ration by the use of a cheaper dry roughage, such as corn stover, coarse hay or straw.

The department believes that by avoiding too heavy feeding and too high finish, and by following the suggestions given above, feeders should be able to feed cattle at a profit in spite of the high prices of feed and labor. The recent statement of the United States food administrator and the available reports from foreign countries indicate that there may be a great increase in the demand for beef, which is encouraging to the cattle feeders of this country and especially those who suffered losses during the last feeding season.

## Veterinary

Dr. S. B. Nelson

**Horse Has Lampers**—Can you tell me if there is any cure for a horse that has what they call lampers? He rubs his tail and flanks so the hair and skin is off on both sides of the tail. The horse has been on pasture all spring, so he is otherwise in fairly good condition. G. E. E., Hillsboro, Ore.

The lampers is an irritation of the gums surrounding the teeth and is due either to an irritation from teething or is due to a disturbance of digestion, which shows itself in the same way. I would advise you to call your local veterinarian and have him determine just what is causing this trouble, and he can easily remedy it for you.

**Dog Is Sick.**—Will you please prescribe some remedy for our sick dog? I will try to describe the symptoms the best I can. First, we noticed he laid around the house and acted as though he was lazy and he lost his appetite. Then we noticed his legs got stiff, espe-cially his front legs and seemed worse in the mornings. Some mornings he could hardly walk. He has been sick for about three weeks now and has hardly eaten anything for the last two weeks. There seems to be something wrong with his stomach. It acts at times like he has cramps in it, as it jerks and twitches so it seems to draw his body together. We haven't seen him vomit. He ate some decayed meat and this may be what started the sickness. A neighbor said he thinks it is what they call the "Salmon sickness."

M. F., Castle Rock, Wash.

I am not able to make a definite diagnosis of the disease affecting your dog, and therefore can not prescribe a particular treatment. I can make the following suggestion, however, and that is that you give the dog, depending on its size, from half to an ounce of castor oil, and then the next day or two, begin giving it five grains of potassium iodine and 10 grains of sodium salicylate in a capsule morning and evening for two or three days.

**Cowpox**—Could you describe what the cowpox is and also what to do for it? Is it contagious?

A. J. B., Tenino, Wash.

Cowpox is an infectous disease which shows itself by small pimples running into blisters, and then into little pustules containing pus, which appear on the udder. These pustules later break and become covered with a scab. The disease runs about three weeks and runs in crops; that is, blisters will come day after day for a few days, and then gradually disappear so at times you will see both the pimples and the blisters and the pustules and the scabs in some cases. The best thing to do is to wash the udder and the teats with a disinfectant, using any of the standard coal tar disinfectants, in about a 2 per cent solution. Lysol is also good in the same strength. This washing should be done both before and after milking and then when it is dry after milking, apply a little zinc oxide ointment to the scabs. Whenever this appears in a herd, the affected cows should always be milked last; in every case; the milker should wash the udder of all cows with a disinfectant solution prior to his milking them.







## POULTRY

Write to the Editor.

JAMES DRYDEN,
Editorial Contributor.

# The Mite Offensive

The mite offensive is pro-Hun because it destroys every year great quantities of food, it is a Hun offensive because it is mite against right. It is a midsummer offensive. Vast hordes of these enemies are brought into action by the warm days of the summer. They have been getting in their work by drawing the life blood from the chickens, and their sabres reek with the blood of their victims.

The mite is a blood-sucking insect and there are billions of them now plying their trade on millions of hens and chickens.

It is time to order a counter offensive. A gas attack will not get the mites. They seem to have gas masks; at any rate gas and fumes do not affect them, so far as they have been tried. They need a liquid attack, something that will burn into them. Coal oil will kill them, but crude carbolic acid is better. Kreso dip and Zenoleum, diluted 1 part to three of coal oil are effective. Sheep dip is also good, diluted in the same way. Carbolineum is good. Apply with a brush to the perches and nests, or wherever the mites are found. Rub it well in, to all sides of the perches and nests.

If this is done early in the season, before the mites begin to hatch, or in the nature of an early spring drive or offensive, there will be no need of counter-offensives later. But wherever there are signs of mites apply the liquid.

J. D.

## PRESERVING EGGS.

### Different Methods Put to Test.

The Arkansas experiment station has published the results of an experiment in testing different methods of preserving eggs, and they should be given publicity. Incidentally the effect of washing eggs on their keeping quality was tested, and the results showed that there was no difference in the washed and unwashed eggs at the end of the stored period, the eggs being preserved in water glass. This result of course would not apply to eggs put in cold storage.

A test was made of the relative merits of water glass and lime water. The lime water was prepared in the following way: Three pounds of quick lime were placed in an earthern jar and enough water added to thoroughly slack it. The milk of lime was then added to five gallons of clean, boiled water. The solution was well mixed and allowed to settle. The clear liquid was then drawn off and, when cool, poured into earthern jars. The eggs were placed into this saturated solution as soon as gathered. The jars were covered to prevent evaporation. A new solution was added once during the summer. The jars were set in a cool, dry basement room.

The water glass was used in the following proportions: One of commercial water glass solution to nine of water that had been boiled and allowed to cool. The following was the conclusion arrived at: "Water glass and lime water gave about equal results for preserving eggs for winter use. Lime water is the cheapest preservative, according to results obtained."

The following commercial preservatives were also tried: Fleming's Egg Preservative, Yankee Egg Preservative, dry salt, E-Z Egg Prescrvative, Vaseline. The following are the conclusions as given in the bulletin:

Eggs preserved in water glass and lime water are as good as fresh eggs for all purposes except poaching.

Eggs preserved in salt were salty, and when used in custards had a peculiar alkaline flavor. They also evaporated badly, as shown by the large air space.

The E-Z egg preservative was superior to any of the other patent preservatives or the vaseline. None of them, however, gave really satisfactory results.

The color of the shell does not seem to have any influence on the keeping qualities of eggs in the preservatives tested.

Infertile eggs were slightly superior to fertile eggs, especially with the patent preservatives. Had the eggs not been preserved as soon as gathered, the difference would no doubt have been much greater.

Soiled eggs can be washed and preserved with reasonable success in water glass, provided they are fresh.

It is a very practical and economical plan to preserve at home eggs laid in the spring and summer for fall and winter use with either water glass or lime water. J. D.

# Candling the Eggs

The Food Administration is issuing regulations requiring the candling of eggs by shippers. This is done for a double purpose, first to conserve food by discouraging methods that are responsible for bad eggs, and second to conserve shipping space by preventing the shipping of eggs that are rotten or unfit for consumption. It will be the duty of the country merchant or first buyer of eggs to candle them and stamp the egg cases with a certificate that they were candled.

When this ruling becomes effective the producer will remember that he will be paid only for good eggs, not for bad eggs, and that it will be to his interest to take good care of the eggs from the time they are laid in the nest till marketed. It is a simple business, merely a matter of care.

The way to prevent bad eggs is to gather them twice a day in summer; break up the broody hens as soon as possible; furnish plenty of nests; keep the eggs in a cool cellar, and market them twice a week.

If these things are attended to there need be no loss from bad eggs. J. D.

## DRY ALFALFA LEAVES.

### Sack Them Up for the Chickens.

Alfalfa leaves contain the vitamines which make growth in animals and fowls. Moreover, the fowls need the green feed or roughage. In certain sections there is a dearth of green feed on account of the dry summer. Feed the green alfalfa or clover now and save the dry leaves for winter use. Poultry keepers must make a desperate effort to keep the hens supplied with green feed of some kind. Buy alfalfa meal if necessary to supply it. When the eggs drop off in summer it is not always because it is natural for the hen to decrease her output, but the decrease is very often due more to a lack of green stuff in summer. Feed green food and more green food. J. D.


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# Farmers Get $18,000,000 From Land Bank

In a statement just issued by the Spokane branch of the Federal Farm Loan bank it is shown that the farmers of the northwest have received a total of more than $18,000,000 in loans on their farms. In addition to this amount, many loans are now in the process of being made, some of them being ready for the mails at the time the statement was issued. It is shown that the total amount of loans approved up to this time by the Spokane bank has reached $25,798,000, all of which will have been placed in the hands of farmers within a short time.

The statement shows that up to August 1, the Spokane bank had received applications for 20,702 farm loans, totaling $53,046,000. Of the applications 18,606 had been passed on and the loans allowed on 11,384. Applications either withdrawn or rejected by the bank for various reasons totaled 6722, aggregating more than $16,000,000. The number of loans actually approved and the money sent to the farmers totaled 7780.

President O'Shea of the Spokane bank says that the capital stock of the bank has been increased from the original $750,000 with which it started, to $1,660,000. He says that there is still a misunderstanding on the part of many people as to how a farm loan bank is actually financed; that many of them believe that it is lending government money. Instead of doing this it is run in almost the same manner as a private banking institution.

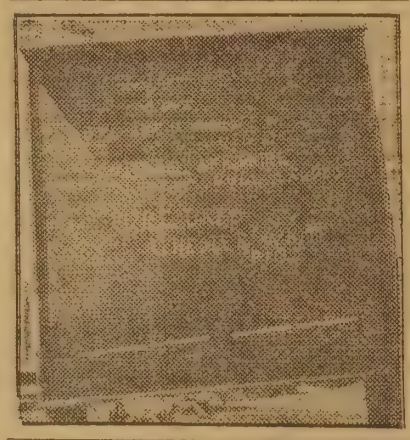
The government created the land bank system by lending to each of the 12 district banks, of which Spokane is one, $750,000 with which to start business. Each bank loaned this $750,000 to the farmers of the district, taking first mortgages on their farms to secure the loans. These first mortgages were then used as collateral to secure land bank bonds which were issued and sold to investors. The money secured from the sale of these bonds was then used to be loaned to other farmers, who in turn gave mortgages that were again used to secure other land bank bonds. These bonds were then sold to other investors and the money used for other farm loans and so on. In addition to this source of revenue, the land bank act requires that each borrower shall purchase stock in the bank equal to 5 per cent of the loan that he secures.

It is required by the land bank act that each district bank shall pay back to the government the original $750,000 with which it started business, as soon as the money from the sale of its bonds and the 5 per cent investments by borrowers shall have reached a sufficient total to enable a bank to continue to do business. Thus it is seen that the land bank is not lending government money, but that it is self-sustaining and that, viewed from the broadest angle, it is a gigantic farmers' cooperative concern, supervised, directed and managed by the federal government.

# Farm Bulletin Board

By CARL J. MENZE.

Whenever merchants have certain merchandise which they desire to move fast they either advertise in the daily papers and magazines or else place a card in the window or some conspicuous place calling the attention of the public to the articles on sale. Some farmers also advertise certain products in the daily papers or else in some farm magazines. The merchant and farmer use the different methods according to the demand, quality and quantity of the things they have to sell. For the farmer who has a small amount of produce which he believes his own neighbors in his locality are desirous of purchasing will find a bulletin board such as the illustration herewith a handy thing to list his sales and wants. If



he lived on a main road where there is a great amount of traffic he can reach a large number of people. Immediately after he has sold his produce he can erase it off the board. This advertising costs him practically nothing. Furthermore, the bulletin board can not only be used by farmers to make sales, but can be used to acquaint other farmers with their wants. Suppose a farmer wanted a certain number of sacks for threshing. He would only have to advertise it on the bulletin board, and it would be only a short time before someone offered to sell him some, because there is almost always some one who has sacks to sell in every neighborhood. It is merely a case of bringing the buyer and seller together.

## Government Employment Agency

A government employment agency was opened at Eugene, Ore., June 22. Frank Armstrong, who is in charge, states that he already has furnished help to farms, mills and especially those lines of labor of most use to the war. He has already been of considerable service and expects to do more as people become familiar with the working of the office.

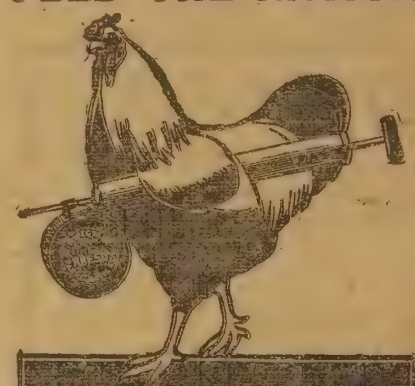
He has sent many to the ship yards on Coos Bay; has had applications for work from children and has furnished berry pickers and men and children for other farm work. The papers, Mr. Armstrong says, have co-operated and publicity has secured workers for the cannery, for pickers for fruit, for shipping and for other work.

### Thinking Is Such a Bore.

"Do you suppose Reggie ever thinks of marrying?"

"Oh, I fancy he has his man attend to all that."—Boston Transcript.


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GRANVILLE LOWTHER,
Editorial Contributor.

# Orchard Troubles

## Diseases, Pests and the Remedies

By GRANVILLE LOWTHER.

This is the second instalment of a catalogue of fruit diseases and their remedies under the above head. In the following issue I will continue the cataloging of fruit diseases, and will then begin a discussion of fruit pests as distinguished from diseases.

**Crown Gall:** This is a very common disease in all the orchards I have ever visited, and attacks apples, peaches, pears, prunes, cherries, raspberries, blackberries, loganberries, grapes, chestnuts, willow and many other trees of the orchards and the forests. It is designated by a tumorous warty-like enlargement of some part of the tree, and doubtless received its name from the fact that it is so frequently found on the crown of the tree, where the trunk and the roots adjoin. However, it may be found on any part of the tree, on branches, on branch roots or on the tiny rootlets that sometimes become matted together and are designated by hairy roots. It has been likened to cancers and tumors in the human organism because the germ technically known as bacterium tumefaciens gets in generally by means of some puncture of the bark, and then multiplies by dividing the cells and forming warty excrescenses. The remedy is difficult to apply because the disease is so frequently on the roots. Valuable trees may be saved, however, by bridge grafting, setting the lower end of the graft down below the gall and the upper end in the healthy bark of the trunk.

**Fruit Pit:** This disease is characterized by sunken areas on the surface of the apple, the skin normally is clear, but later it turns brown because the tissue under the skin is diseased and brown. It is very common at times in the orchards of the northwest, but authorities do not agree as to the causes, and in so far as I know have suggested no remedy.

**Fruit Rot:** This disease and fruit spot are similar in appearance, but technically one is caused by the fungus coniothyriose, the other by phoma pomi Remedy: Spray with Bordeaux or lime sulphur.

**Jonathan Fruit Spot:** The spots are dark brown in color and more or less circular in outline, varying from one-eighth to three-quarters in in diameter. It is wholly on the surface of the fruit, and does not seriously affect its nutritive values but does affect its commercial value. It occurs nearly always on maturer fruit, and generally develops after the fruit is picked. Early picking and cold storage have been recommended as a remedy, but I have not seen a really effective remedy.

**Mushroom Rot:** This is technically known as Armillaria mellea. This disease generally attacks the trunk and roots at or near the crown. It attacks many forest trees as well as apples, plums, cherries, peaches, olives, bush fruits, citrus fruits and grapes. It is very much the same in appearance as blight when that disease is on the crown of the tree. Treatment: Cut out the diseased parts and destroy them the same as in blight.

**Powdery Mildew:** This is a fungus disease very common in the northwest, and very destructive. It develops mainly on the surface of the growing twig and leaves, sending feeding rootlets into the cells of the tender parts. It very much resembles a mold. It is a fungus, and the remedy is to spray with lime sulphur, a little stronger than is generally used for scale and that is supposed to destroy the fungus that has lived during the winter in the branches, then, after the foliage is out and after the first blossom spray for codling moth, spray with Bordeaux.

**Rosette:** Rosette is generally called apple rosette, but I have found it on willows, maples, elms, pears, cherries and many other fruits and forest trees. The popular opinion is that it is confined to the Rocky mountain and Pacific coast states. I am sure that it appears in these states in a worse form than in most places where I have seen it, but I have studied it for nine years and under a good many different conditions in Kansas, Oklahoma, Texas, Arkansas, Missouri, Illinois, Indiana, Kentucky, West Virginia, Pennsylvania, New York, Michigan, and I am sure that in all of these states the disease is manifest and is so clear to one who has given the subject careful study as to place it beyond controversy. We might describe the disease by saying that the leaves are not well developed, they are below the normal size and bunched together in such a way as to give it the name rosette. The wood of a current year's growth has not reached its normal length at a time when it should be two feet in length—for instance, it may be one or two inches. The wood of the previous year's growth has not enlarged as it would normally do, and often presents a shrunken appearance.

The cause is a subject of dispute. I have an opinion based on a good many hundred cases studied in different parts of the country, and while I would not hold myself bound at any future time to agree with my present or past statements on the subject, provided I had information that justified a change, nevertheless my present belief is that the cause of the disease is starvation. In other words, the tree is not getting sufficient food. The difficulty is generally on the roots, which contain the organs for extracting and conveying the food substances from the earth into the branches of the tree. The undeveloped and diseased conditions on the branches are symptoms of a condition on the roots, and the tree is starving. If it be asked what are the causes of the tree not getting sufficient food, I would answer it is sometimes root injury; perhaps gophers have eaten the tender rootlets, woolly aphis may have punctured the bark in many places and galls have been formed, alkali may have destroyed the little root hairs which extract the chemical food substances from the earth. In the case of the orchards around Salt lake, in Utah, salt water has evidently injured the roots; too much water will affect them and sometimes destroy them, and the results are manifest on the top of the tree; not enough water will bring about the same results in a different way, for it requires water to dissolve the chemical substances in the soil so that the roots can drink them up. Sometimes hardpan near the surface, or a rock formation, or adobe soil, or scab soil will produce the same results. Sometimes it seems that an unbalanced ration of food substances will affect the tender rootlets, as in the case of too much hen manure or barnyard manure, where trees are situated near the buildings. The remedy: Remove whatever causes seem to be abnormal, and give the tree plenty of food and in the proper proportions.


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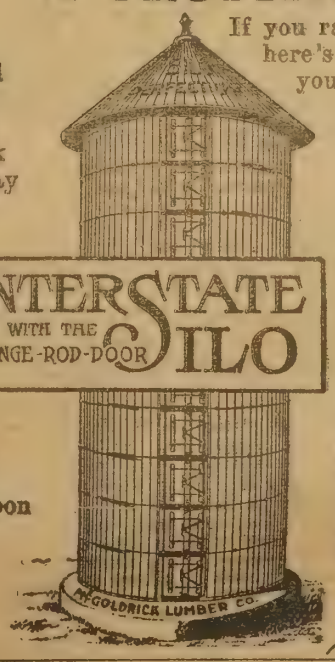
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# Value of Poultry Products Ranks High

The three days' poultry meeting that was held at Moscow, Idaho, a few weeks ago was not a poultry show, but a meeting of the instructors and investigators of poultry of the Pacific slope. There were representatives present from as far south as New Mexico and as far north as Canada, there being three representatives of the Canadian government's poultry division, which is regarded as one of the important divisions of the war work.

That the government considers poultry raising as one of the greatest assets of the United States, and of special importance during the war, was shown by Professor Thompson of New Mexico, who is looking after the poultry industry for the government in that state. Professor Thompson said he wanted to enter the army, and people asked him why he did not become a soldier. He asked permission from the department of agriculture to enter the army, but was told: "You can do more good for your country where you are. Stay with the poultry business and help feed the nation and the soldiers. Your work is more important than carrying a gun."

Professor E. H. Upton, provincial poultry instructor for the province of British Columbia, told how his government regards poultry raising as a great government asset and one of vital importance during the war. He told of government assistance and supervision of the poultry industry, which has resulted not only in increased production of poultry but of eggs per bird since the war began.

Forenoon, afternoon and night sessions of the convention were held. Professor James Dryden, chief of the division of poultry husbandry at the Oregon Agricultural college, read a paper on "War Time Feeding of Poultry in the Northwest." Professor E. J. Dougherty of the poultry department of the University of California was not able to be present, but sent a paper on "The Future of the Commercial Poultry Farm," which was read by the secretary.

Mrs. George R. Shoup, poultry specialist for the western Washington experiment station at Puyallup, read a paper on "War Time Poultry Feeding."

The visiting delegates were guests of the Moscow Chamber of Commerce at luncheon at noon, and a number of them delivered brief talks, which were given close attention by the business men. Mrs. Helen Dow Whittaker, until recently head of the poultry department of Washington State college, made a strong plea to the merchants to fix 40 cents as the minimum price for eggs and to maintain that as the minimum for the entire year. She said that with the present high price of feed it requires 40 cents to give any profit for eggs during the war time.

President Lindley of the university, Dean Iddings, head of the agricultural college, and Pren Moore, head of the poultry department of the university, with their wives, entertained the visitors at a five-course dinner at the Hotel Moscow. Dean Iddings presided as toastmaster, and toasts were responded to by a number of those present.

The convention brought out many facts of interest to poultry raisers. It was shown by government reports that the poultry industry in 1917 brought in a total of $725,000,000, and that prior to the war poultry was second in value of products of the United States, being exceeded only by corn. Since the war the price of wheat has advanced, and the same is true of cotton, until these two commodities, with corn, exceed in value the annual production of poultry.

Among the poultry specialists in attendance at the convention were A. A. Peters of Los Angeles, a government man in charge of poultry husbandman division No. 6; N. E. Luce of the same department, in division No. 5; A. G. Lunn of British Columbia, Charles S. Brewster of the Oregon Agricultural college and W. K. Whittaker of Pullman, in addition to those previously mentioned, and all of these took part in the program.

Pren Moore, head of the poultry department of the University of Idaho, was elected president, and Mrs. Helen Dow Whittaker of Pullman was elected secretary of the association.

# Who Pays for Thirty-Cent Cotton?

## *Consumers Should Make Protest Against Big Advance*

Cotton, the great agricultural staple of the south, is free from government control and prices have shot upward amazingly, to the enrichment of the planters and the burden of the consumers. When the world war started in 1914 cotton brought less than 7 cents a pound at the farm. According to the United States Year Book of Agriculture, the farm price in 1917 was nearly 28 cents. In three years the price quadrupled.

If the wheat grower had enjoyed a like advance, he would now be receiving about $4 a bushel for his product, for the same government authority reports that the average farm price of wheat in 1914 was nearly 99 cents.

This seeming discrimination has led to frequent accusations that sectional and partizan influences swayed congress when it passed the law to hold down the price of wheat and left cotton to run its course under the law of supply and demand. It has been pointed out that if cotton had had the same treatment as wheat, the price would have been limited to about 14 cents a pound and cotton would not now be selling around 30 cents.

Every farmer's wife knows the meaning of 30-cent cotton. It means that the prices of all kinds of cotton goods have gone up 400 or 500 per cent. The writer was discussing these advances the other day with an Idaho drygoods merchant.

"Before the war," he said, "I bought prints at less than four cents a yard. For the same quality of prints I now have to pay 22 cents wholesale. A similar advance has taken place in ginghams, sheetings, etc., and the wholesalers are the most independent people I have ever known.

"A Spokane merchant was telling me of some of his experiences in buying the other day. A traveling salesman had quoted his prices and the Spokane man said he would think it over and decide upon his order the next morning. 'But these prices I have just quoted will not hold over-night,' the salesman said. 'When I go out of that door all offers will be off.'"

There is an old saying, "Beware of the Greeks when they come bearing gifts," and that spirit of caution will be felt by many people now that the southern cotton growers are proposing government price-fixing for their product. The fear will rise in northern minds that they want the government to hold prices around the present high level.

A press dispatch from Washington says that a scheme of price-fixing on raw cotton, suggested to Bernard M. Baruch, chairman of the war industries board, by the cotton delegation which has just closed its conferences at the national capital, has been laid before President Wilson by Representative Lever, chairman of the house agricultural committee. After accomplishing their object, that of getting their plans before the chief executive, the cotton growers have left the capital, "confident that their proposal will meet with fair treatment by the government."

Apparently the cotton growing interests fear a slump in price, for the price-fixing plan was advocated by a delegation of cotton bankers who were in Washington at the same time.

When the scheme of price-fixing on cotton is proposed, it is not likely to follow out the scheme of price-fixing on wheat, or iron and steel, or any of the other commodities upon which the government has fixed a price. The proposal which seems to have the greatest support was to have a maximum and a minimum price. The minimum price would be the price at which the government would buy the cotton. For instance, whenever the price of the commodity went to the minimum and threatened to go below the government's cotton corporation would be directed to step in and take the cotton. The maximum price, it was suggested, would be five cents a pound higher. Whenever cotton threatened to go over the maximum price the government would commandeer the cotton.

The full meaning of 30 cent cotton, with all it implies of extraordinary prosperity for the southern growers and correspondingly high prices for the consumers, is better grasped when one glances at the range of prices for the last 40 years. Through the 80's prices were uniformly around 8 and 9 cents. Through the 90's they ranged from 5 to 9. From 1901 to 1910 they ranged from 7 to 14 cents.

The price was below 7 cents when the war started in 1914, and shot upward to 20 cents in 1916. The average for 30 years before the war was close to 8 cents.

Cotton goods are a necessity and high prices are just as burdensome to the public as high prices for flour. There should be government control of one as well as the other, and the basis of price-fixing should be the same for both. That is, the government should take the average prices of wheat and cotton over a range of 10 or 20 years before the war, and allow the same percentage of increase for both staples. The west and the north should protest emphatically against 25 or 30 cent cotton.

TO the Editor of The Washington Farmer: Enclosed please find three subscriptions for The Washington Farmer, for which you will please send me the farm service war flag and three extra stars.

MISS OPAL REGENVETTER.
Vernon, Wash.


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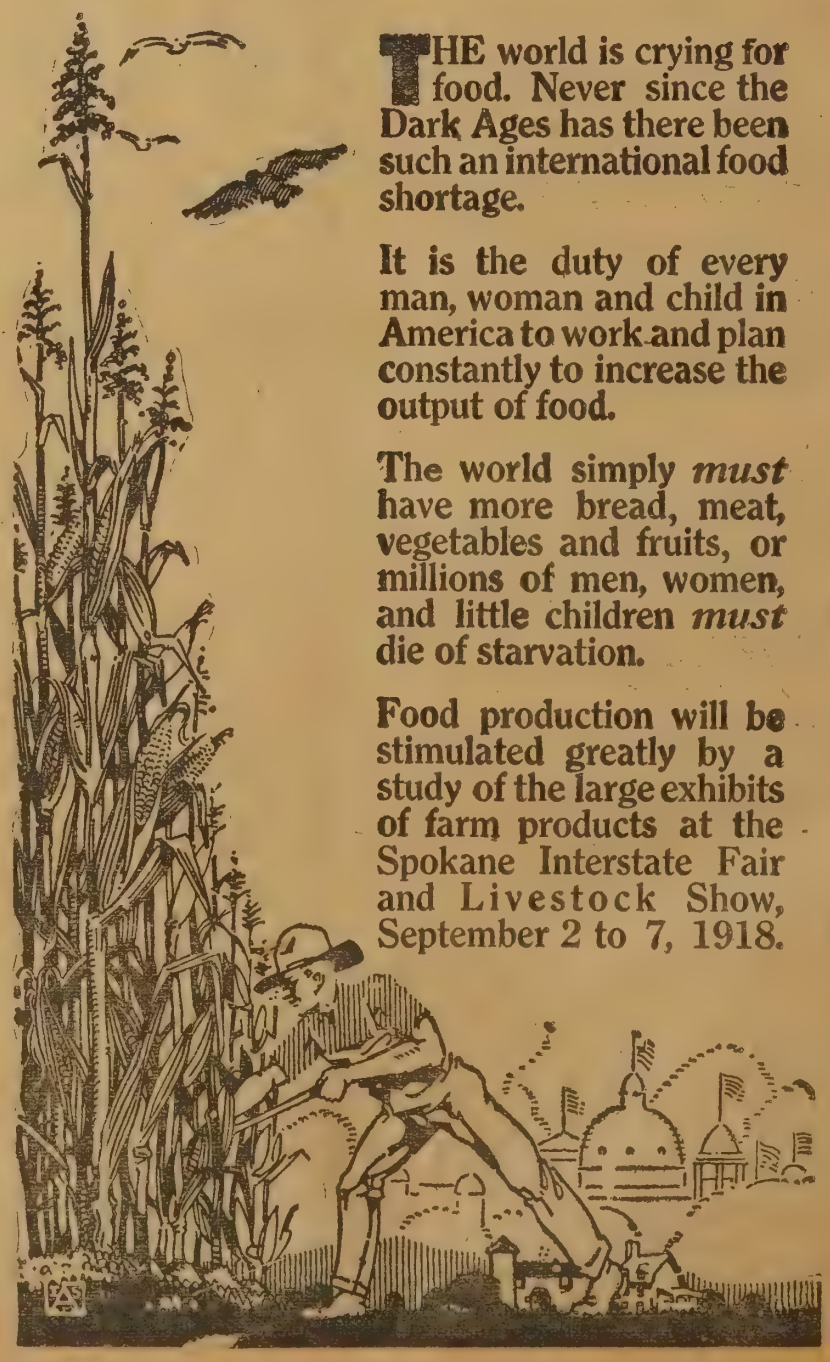
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**It is the duty of every man, woman and child in America to work and plan constantly to increase the output of food.**

**The world simply *must* have more bread, meat, vegetables and fruits, or millions of men, women, and little children *must* die of starvation.**

**Food production will be stimulated greatly by a study of the large exhibits of farm products at the Spokane Interstate Fair and Livestock Show, September 2 to 7, 1918.**

# What Are Fruit Price Prospects?

## *Supply and People's Purchasing Power Will Decide It*

By GRANVILLE LOWTHER.

Almost every one now knows what percentage of a normal fruit crop he will have. The reports from the government, the states and the local commission houses and buyers, who keep pretty close tab on the crops, have reports and a consensus of opinion is being formed as to probable prices.

My belief is that the prices will be better than we have had in the last 10 years. This is not a prophecy, for I have no means of knowing except as I calculate probable results growing out of causes that are now apparent.

What are the causes? What are the existing conditions likely to affect fruit prices?

A general answer would be, that they will be stimulated by the same influences that have affected the prices of all other commodities. Everything that people buy is higher in price than formerly. In general, the present generation has never seen prices like those of this period. Naturally, fruit prices will be affected by the general stimulation, or overstimulation, or whatever it may be.

A law that more than any other has influenced the prices of commodities is the law of supply and demand. The oldest students of political economy or of sociology have recognized this as primary in its influences, and as fundamental. For instance, in China are 400,000,000 of people. Since they raise no apples of consequence, we ought to be able to send them at least 40,000,000 boxes per annum. But we send them nothing of consequence. A few of the wealthy classes of Chinese buy our apples at high prices, but not one in a hundred of the inhabitants ever saw one. A few years ago H. M. Gilbert visited China, in hopes to open up a market for apples. He found Ben Davises selling from six to eight dollars per box. Now since the masses of Chinese live on less than 10 cents a day each, it can be seen that there is no demand in China among the masses for apples that would retail at 10 cents apiece.

There are 200,000,000 of people in India, as poor as the masses in China, with the exception of a few who belong to the aristocracy, and a few others who have been brought to better conditions by Great Britain.

It is safe to say that one-half the population of the globe, on account of their extreme poverty, not only can not buy our apples, but they can buy nothing the world produces, above the bare necessities, and in so far as the world's markets are concerned they might just as well not exist. They furnish no demand for anything that the higher civilization produces. This is an economic reason why the higher civilizations should pursue a policy in reference to the lower that would give them a place among the progressive nations of the world, and cause them to want things the existence of which they never knew.

No matter about the supply of fruits in the United States, or in any other country, if the masses have no purchasing power, or because of extreme poverty have never been able to see our products in their markets, there will be no demand.

This illustrates the law of demand. Then if the conditions are such that the producer can put them on the market and sell them at a fair profit, this insures a sufficient supply. Thus there comes to be a kind of equilibrium, between the supply and the demand. Weather conditions, such as frosts, freezes, drouth, etc., may temporarily affect the supply, but this year there is in the Pacific northwest something approaching a normal crop.

Washington will average about the same as last year. Spokane will be ahead of last year, Walla Walla, lighter, while Wenatchee and Yakima will be about the same as last year. In Hood river valley, Oregon, the crop is heavier than last year, in Rogue river it is light. The average will probably be about the same as last year. Idaho was badly injured by frost, so the crop is far below the normal, except for the number of young trees coming into larger bearing, which will bring the output up to probably 3500 cars.

Taking the United States as a whole, the supply of apples will probably be slightly above that of last year, but the lesser supply of soft fruits will probably equalize that, so that the supply in general will be about the same as last year.

**Other Factors Affecting Prices.**

First—Good prices for labor. When the laboring masses have plenty of money, they are lavish buyers. There never was a time when labor was so well paid as it is now.

Second—General demand for labor. When everybody is employed or can be employed at good wages, everybody has purchasing power.

Third—Stability of labor. When the conditions are uncertain in reference to strikes and lock-outs, they tend to unsettle prices. At this time it is more difficult to declare a strike or a lock-out than at any time in the history of the organization of trusts or of labor unions.

Fourth—Stability of business. There has never been a time in this generation when there was such insistent demand for all kinds of manufactured products as now.

Fifth—The money conditions. There was never so much money in the United States as now, and the banks are inclined to take an optimistic outlook and to grant reasonable loans. In other words, there is no reason for retrenchment.

Sixth—Everybody is optimistic about the near future in all lines of business.

**The Other Side.**

It is true, that on account of the war, some of our markets are restricted. But that is not as large a factor as might at first seem. We produced last year twice as many apples in the Yakima valley as Germany ever imported from all the world any one year before the war. Austria never imported even as many as Germany. Turkey is so much like India and China that their inhabitants had no purchasing power.

England and France will take less of our green fruits, but more dried fruits, so that the differences will not be very great. Yet I am forced to believe that the balance will be slightly against us in exports on account of the war. However, the fact that we are using more substitute foods in order to save wheat, sugar, meats, etc., for war purposes, means that more than the average amount of fruit substitutes will be used.

The principal thing to cause a feeling of caution, if not unrest, is the high price of labor as compared with the prices of fruits. Our government did a splendid thing in fixing the prices of certain commodities. Now, unless they also fix the prices of others related to them, and the prices of the wages that produce them, there are bound to be inequities or injustice somewhere. Now it looks like it might fall heavily upon the fruit men. However, we will hope that the high prices we are almost sure to get for fruit will enable us to pay the high prices we must pay for labor, and leave us a profit.

**New Flowers Shown.**

The feature of this year's exhibition of the British Horticultural society is a new orchid, with mauve petals and rich purple tip, which has been named the General Pershing.—London Correspondence of New York Tribune.

**Liked Bee Articles.**

Editor of Washington Farmer: We enjoy your paper very much and find many helpful things in it, especially the articles on bees. The only trouble with them was that there was not enough of them.

MRS. E. H. GORSCUH.
Fairfield, Idaho.

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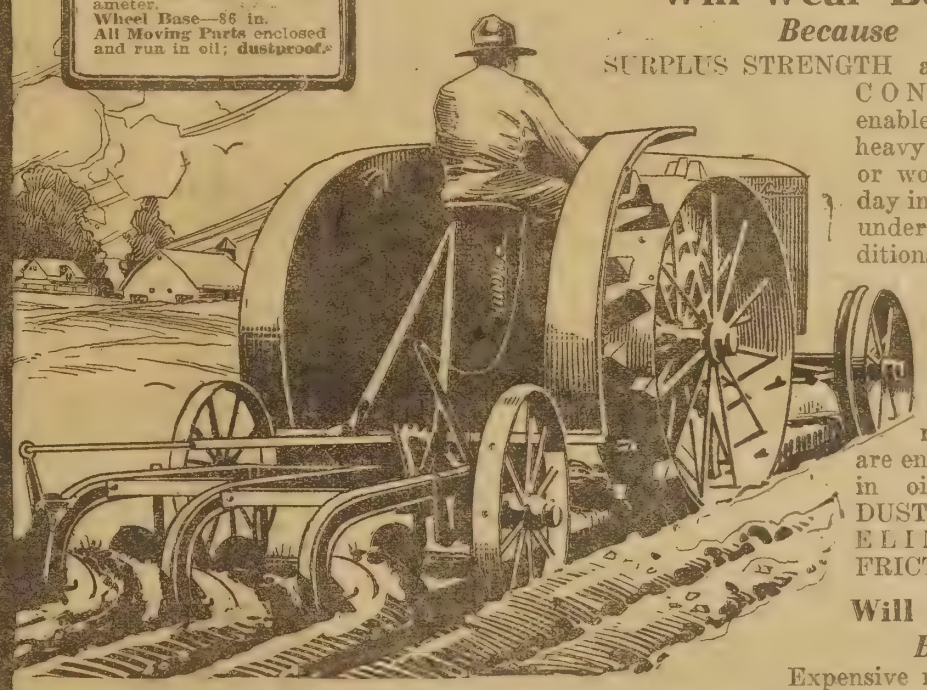
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SPECIFICATIONS.
Engine — Lauson-Beaver, 4-cylinder valve in head; 4½x6-in.
Rating—Drawbar h. p. 15, belt 25.
Lubrication — Splash and force feed.
Ignition—Dixie Magneto with Sumpter Impulse Starter.
Belt Pulley — 18x7¾ in., 475 R. P. M.
Transmission — Lauson selective type sliding gear.
Speed—Low 1¾; plowing 2½.
Drive Wheels—54 in. diameter.
Guide Wheels—32-in. diameter.
Wheel Base—86 in.
All Moving Parts enclosed and run in oil; dustproof.

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If you have a farm of 100 acres or more we can show you where it will pay you to purchase a LAUSON 15-25. If you are interested we will be glad to make a demonstration of the tractor on your farm. Fill in the coupon below for full particulars and prices.

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# Favors National Farm Insurance

## *Farm Loan Bank President Suggests New Legislation*

President D. G. O'Shea of the Spokane branch of the federal farm loan bank believes that the time has come when something in the form of national insurance against farm crop failures might wisely be considered. He says that it does not seem reasonable to expect the farmer to take all the chances when he is contending with elements over which he has no control, but that the people as a whole should be willing to cooperate with him in taking these chances.

President O'Shea's statement was inspired by the serious losses suffered by the farmers of many parts of the northwest last year, and this year from drouth and heat. In this connection he says:

"The farmer has ever had to contend with the elements to secure his crop in the first place, and thereafter, in the past, if he did secure the crop, he had to sell his product in a market he could not regulate or control. It should be an established policy to encourage men to stay with the farm and on the farm; the world needs at this time the products of the farm more than it ever has at any period. There are calls for labor from shipyards and other industries where the returns for service and short hours are liberal and definite. The production of wheat is as essential as the building of the bottoms to convey it. The man who produces wheat lives remote and with social disadvantages as compared to workers near manufacturing centers. The production of wheat should not be wholly a speculative business. The elements can not be controlled by man, and he who has to contest with the elements in doing something essential and necessary should be assured in some way of a small return at least for his time, labor and effort.

"It does not seem reasonable to expect the farmer, under the conditions as recited herein, to continue to take all the chances. It is not suggested that he should receive something for nothing, but that a method should properly be devised for affording him a reasonable protection for the chances he necessarily has to take when contending with the elements, over which no control can be exercised. In past years grain crops in Montana were seriously menaced by hail. Hail insurance companies were in business charging exorbitant rates and at times defaulting in payments. There is now in effect a state hail insurance law, which is operating successfully, economically and dependably and affording protection to the farmers who elect to become subject to it, so that in the event of the destruction of a field of grain by hail, they will receive at least more than they have invested in the crop. Some such method should be devised to protect the farmer against other failure. It is not to give him charity or a gift, but to furnish him with insurance to the end that he will be sure to receive at least what it has cost him to plant the crop plus a small remuneration for his labor in the event that there be an absolute failure caused by weather conditions over which he could exercise no control. Such insurance should be national. If adopted at once it would bring hope and inspiration to those who are now seriously discouraged and keep on the farm many men who otherwise would answer the call of the manufacturing centers, where life may be more alluring and rewards are definite and assured.

"A scheme of insurance can readily be worked out under the operations of which no unworthy person could receive a benefit; the cost may be borne by the farmers themselves or the national government may contribute to the fund; the fund should be administered by the government. Provision may be made to prevent the application of the law to areas not cultivated in the past until after same would have been examined and reported upon by representatives of the department of agriculture to the effect that such localities are reasonably adapted to agricultural pursuits. Reasonable provision can easily be devised for determining losses which may be limited to a stated maximum figure sufficient only to cover the cost incurred and a small margin for labor and living expenses.

"There seems to be a specific need at this time for this form of legislation; the operation of the Federal Land banks can be better assured and extended if such insurance be provided; and many men who naturally will become discouraged at repeated failures may be kept on the farms and inspired to make renewed efforts for the coming season if a means be provided to insure them a small return for their labor even though the elements be against them."

### Have Good Cranberry Crop.

A survey of the cranberry marshes of the north Pacific coast indicates that the 1918 yield will be at least twice that of 1917. Some dealers and growers predict that the yield will be three times that of last year. This is especially significant in view of reports from other cranberry districts indicating a reduced yield this year.

The marshes on both sides of the Columbia river are counted on now to produce more than 10,000 barrels against a 5,000-barrel yield last season, while the scattered yield will bring this up to about 14,000 barrels for a total. It is said that no chance remains for any damage to the crop now, as the danger period is past when the plant has sent out its bloom.

The principal matter troubling the growers at present time would seem to be the labor supply, which is liable to be tied up in other lines at the time when the cranberry bogs needed attention. The growers say they expect to start picking about September 1 this year, two weeks ahead of the regular time. This is mainly due to their desire to get the crop into the warehouses before the start of the fall rains.

### Milk Price Advances.

An increase of 25 cents per hundred has been allowed to milk producers serving the city of Seattle, according to advices received by Food Administrator Charles Hebberd. This makes milk in Seattle $3.15 per 100 pounds on a 3.6 butter fat basis. The price to the consumer is 14 cents a quart, delivered.

Milk is retailing in Spokane at 14 cents a quart, also, but a move is under way by the Inland Empire Dairymen's association looking toward an increase in the price to the producers which will apparently, if allowed by the distributors, cause an increase of probably a cent a quart to the consumer.

### Missed One Copy.

We missed getting our last week's paper and as there is so much valuable information in every one we do not like to miss a copy.

MRS. J. W. HORTON.
Meyers Falls, Wash.

## Running Water System

To the Editor: I would not be without a running water system on the farm, because it is more beneficial to the health, cleanliness and comfort than any other improvement. We have had our running water system on the farm for seven years, and have found it convenient in case of fire, sickness and irrigation. It also takes a load of work off the housework problem and watering the stock.

It is beneficial to the health because on farms where there is no running water system the women must pump and carry thousands of pounds of water daily, which is responsible for backaches and many other similar ills.

Cleanliness, which is one of the main necessities of life, can be had by the running water system. Since we have had our running water we can take a real bath in a real bathtub, and have hot or cold water in the kitchen at almost any time, which makes dishwashing a pleasure instead of hard work. There are many other minor reasons why I would not like to be without the water system.

MISS ANNA BERGER.
Route No. 1, Spanaway, Wash.

### A War Kitchen.

The food administration of Pierce county, cooperating with the State college and the United States department of agriculture, maintains a war kitchen in Tacoma, where demonstrations in food conservation are given. The kitchen is in the Central market on Market street between Eleventh and Twelfth streets, and is open Wednesday and Saturday afternoons. The demonstrations are given under the direction of Miss Georgia E. Meek, city home demonstration agent, and Miss Elmina White, county home demonstration agent. Demonstrations in canning and drying, the use of wheat substitutes and cottage cheese have been given.

These demonstrations have been very practical, and have been well attended by the women of the county.

### The Third Leg.

All business stands on three legs, capital, labor and management. The third leg is vital. Capital and labor can't stand on two legs. One languishes and the other starves if there is no management. All business is therefore a three-legged stool, whether a peanut stand or a sawmill.

## Mill at Home

### Should Keep Feed in Northwest

As a result of activity on the part of the agricultural bureau of the Spokane Chamber of Commerce a conference may be held soon between representatives of the food administration, the U. S. grain buying corporation, and farmers and business men interested in the feed situation in the northwest.

The problem involved is set forth strongly in a statement made by R. Insinger, chairman of the Spokane agricultural bureau, to Charles Hebberd, food administrator for the state of Washington, last week. While he was referring particularly to the situation as existing in Washington, the conditions which he described and the possible solution which he suggests, appear to be generally applicable over the entire northwest. The following are extracts from Mr. Insinger's statement:

"As you are well aware, a large part of this territory has to ship in feed for horses, cattle, pigs and chickens at an enormous expense. The mill feed, which formerly used to be used only for cows and pigs, now has to be used also for horses, as in many parts of the country no other feed is available.

"The farmers of eastern Washington have had two light crops; they have had to import hay at an enormous expense, and many of them can not afford to continue farming next year unless the administration will show a desire to assist them where it can in retaining the feed that is in the country for the use of the farmers. I respectfully request that you urge the food administration to allow the millers of the Inland Empire and also on the west coast to mill wheat to full capacity, and that the food administration retain in our country sufficient wheat for that purpose. Unless something of this kind is done the damage to the agricultural interests of eastern Washington will be enormous. Immediate action is necessary.

"We have found in former experience on the question of stock feed that some members in the east connected with the food administration have no realization of the condition in this part of the country; and we are glad to depend upon your hearty cooperation in seeing that we are assisted, not by charity, but by the use of proper business methods, in handling our wheat crop.

"The matter is so urgent that I would request the favor of a meeting of the agricultural committee with yourself and any representative of the farmers' organizations, grain dealers, millers and other experts as may be desired. It would be highly desirable if at such a meeting we could have the presence of the grain corporations in this territory."

### Limitation on Choice of Names.

France curbs the desire of parents to christen their children with extraordinary names by limiting their choice of names to the 13,000 saints in the calendar.

## There Are Not Enough Fields Like This Now



**Where corn will grow successfully the feed problem need give little trouble. Corn silage is the king of all succulent feeds in the minds of many.**

## Agree on Grain Price Deductions

(Continued from page three.)

wheat, and the charges for such service are necessarily a deduction from the terminal price of wheat. These charges, or margins, are well established by custom and vary in different sections of the country according to local conditions.

"Insurance: The government carries no insurance on the property which it owns. It does, however, require that the elevator operators shall exercise due diligence in protecting grain stored in their warehouses or elevators from ordinary hazards. Owners of grain stored in warehouses or elevators should therefore protect their grain so stored which has not been delivered to or paid for by the Food Administration Grain corporation.

"Inspection: Shippers to any of the principal primary markets should insist that their grain be inspected and graded by inspectors licensed by the secretary of agriculture.

"Producers and dealers, in shipping grain to said primary markets, should advise their commission man to see that their grain is correctly inspected and graded, and that, if in his judgment, the grain has been improperly graded, an appeal should be taken to the federal supervisor.

"It is the policy of the food administration and of its agents and representatives to work in entire harmony with the department of agriculture in maintaining the integrity of grades named and defined by them under the grain standards act, in order that the producer, the consumer and all interests handling grain may be properly protected.

"The producer or dealer should always keep in mind that if he is not satisfied with the prices paid by individual buyers, or with the grading of wheat, his protection lies in his being able to ship to the Food Administration Grain corporation at the various terminal markets named above."

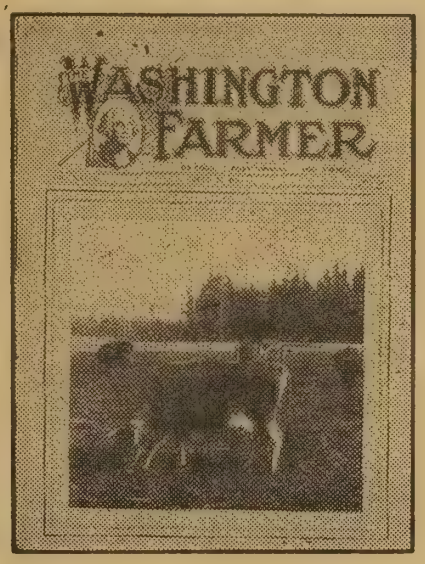
## Lawn Dies Out

To the Editor: My lawn has been planted about four years, on cleared forest land, and has had every ordinary care. This year it is gradually dying out, owing to a covering of moss about a fourth of an inch thick, which no doubt causes the trouble. I will be obliged for information as to the cause. W. W. C.

The following answer is given by Professor O. M. Morris, head of the horticultural department, State College of Washington:

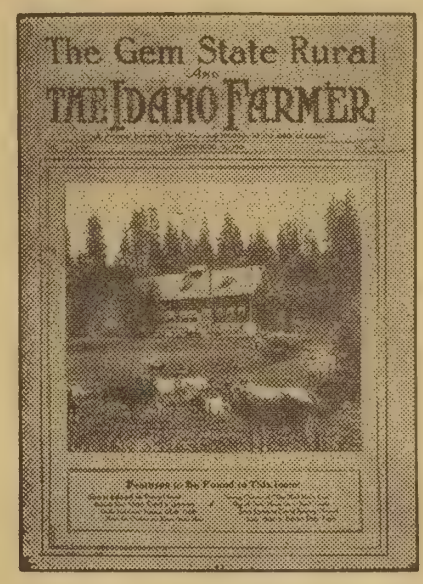
"The moss undoubtedly developed in your lawn through the opportunity given by a considerable amount of shade. Moss ordinarily will not grow in direct sunlight. If you can not clear the overhead so as to give direct sunlight to your lawn, the next best thing for you to do would be to spray the ground thoroughly with a strong solution of common lime-sulphur spray. Use about one gallon to seven or eight gallons of water. This is a very strong mixture, and may injure your grass somewhat. But the grass will grow out of the injury, while the moss will be killed."

# "Want" Ads in These Papers Are Economical and Effective










## Take Advantage of the Low Combination Rate for Insertion of "Want" Ads in These State Farm Papers

The "want" ad is a method of communication which will prove helpful at various times to all of our farm folks.

Do you desire to get in touch with a reliable, experienced hired man? The "want" ad brings your need to the attention of competent workers throughout three states.

Do you wish to turn used machinery into cash? The "want" ad reaches farmers in other districts who have use for your discarded implements, and who will probably be glad to make the saving you will be able to offer them.

Have you farm products to sell, such as live stock, poultry, seeds or dried fruits? Once more, the "want" ad in the three state farm papers offers a solution for the difficulty. It reaches the very class of homes where there is a constant demand for these things.

Have you a piece of land for which you are eager to find a buyer? The "want" ad in The Washington Farmer, The Oregon Farmer and The Idaho Farmer affords a splendid method for making a sale; inasmuch as these three papers are read by tens of thousands of farm owners and farm renters, a goodly proportion of whom are considering the purchase of farms or orchards in other sections.

To sum up, our "want" ads enable you to reach the people who have what you want or who want what you have. They are easy to insert. They are low in cost. Even if there is nothing you care to advertise at this time, you will always find interesting, profitable reading in our "want" ad columns.

Rates are printed at the top of these columns in every issue. Don't miss the "want" ad page today!

**Send Orders and Inquiries Regarding "Want" Ads to The Washington Farmer, 617 Central Bldg., Seattle, Wash.**

# Must Save Grain

## Careful Threshing Being Urged

R. J. Stephens, chairman for this state of the grain threshing division of the food administration, is urging upon every thresherman and farmer who does his own threshing to make every effort possible to prevent loss of grain during threshing this season. He has issued the following statement on the subject:

"A year ago the farmers of the United States were asked to increase the acreage of winter wheat. They responded and the records show that they planted the second largest acreage of winter wheat in the history of the United States. The farmers in Washington, because of the lack of sufficient moisture to germinate the seed, did not plant their normal acreage of winter wheat. They, however, did plant the largest acreage of spring wheat in the history of the state. During the growing season conditions were not ideal for spring sown grain. The result is that our crop of wheat will only be about 32,000,000 bushels, as against 29,000,000 in 1917, 37,000,000 bushels in 1916 and 51,000,000 in 1915. As food will win the war, we are asking our farmers to harvest their crops so as to save every kernel of grain possible.

"The grain threshing division of the food administration is working closely with our state college at Pullman, and with the agricultural department at Washington along the lines of better threshing. The local managers of the stationary threshers and combined harvester companies are assisting us in seeing that extras are furnished promptly and that their machines are put in the field in the best possible condition to thresh every kernel of grain out of the straw and to clean it properly. There has been some delay in making delivery of new machines and harvesting in some sections has been delayed on this account; but we understand that all deliveries will be made within the next 10 days.

"The farmer is discounted for cracked grain, cobs, seeds and trash of any kind that is left in his grain, and unless the grain is cleaned either at his local shipping point or by the interior mills, this dockage will be shipped out and will be a loss from a feeding standpoint as far as the farmer is concerned.

"Eighty-two per cent of the total dockage placed on our 1917 crop of wheat consisted of cracked grain, seeds and trash, all of which could have been eliminated if better threshing methods had been used. Our state grain inspection department shows a dockage of 8,532,896 pounds for foul matter, not including smut, on about 15,000,000 bushels inspected. Figuring our crop last year at about 29,000,000 bushels and that the percentage of dockage would be the same, we would have a total dockage of about 16,000,000 pounds or about 265,000 bushels. The farmer paid about 10 cents per bushel to thresh this 265,000 bushels of dockage at a cost of $26,500. He used about 12,000 sacks at 12 cents each, or $1440. The cost of hauling to market would be about 5 cents per bushel or $13,250. The average freight rate to the Coast is about 10 cents per bushel or $26,500; warehouse charges 2 cents per bushel or $5300, making a total cost of $72,940 to the farmer on this dockage. The feeding value would easily be worth $20 per ton, or $160,000.

"We believe that the farmer who operates his own threshing outfit can eliminate the cracking of grain by properly feeding headed or bound grain to his machine and that the seeds and trash can be separated from the grain and kept at home, if just a little more care is exercised in the operation of his machine. Threshing machine and combined harvester owners who make it a business to cut and thresh for others, will make a special effort this year to do better and cleaner threshing than ever before and they are asking the cooperation of the farmer. We believe that this working together of the threshing machine men and farmers will save thousands of bushels of grain which would be charged a total loss, and that the discounts for cracked grain, trash and cobs will be less the coming season than ever before. Our boys in England, France, Italy, or wherever they may be, must have wheat bread, and it is up to us to see that they get it, so that when victory crowns the flags of the allies and our boys bring back again the Stars and Stripes from its conquest for democracy in Europe, we can salute that flag and cheer the return of those heroes as men who have honestly done our part in helping to win the war.

"It has been arranged that farmers needing seed wheat can secure it without a permit and every effort should be made to increase the crop acreage this fall."

# Motor on the Farm

The United States department of agriculture is endeavoring to impress upon the farmers of the United States the necessity of applying the work-or-fight policy to machinery as well as to men. It is urged that farmers cooperate as much as possible in keeping machinery actively employed during as lengthy seasons as possible, with a view to relieving as much man power as possible for various war activities, including the production and harvest-

We have just received the 1918 revised and enlarged edition of "The Model T Ford Car, Truck and Tractor." The book is practical and improved over past issues. It retails at $1.00. It is issued by the Norman W. Henley Publishing company, Putnam building, New York city.

"Tractor Farming" is a booklet issued by The Farm Engineering Society of America, Chicago, Ill. There are 145 pages. It is illustrated, and seems adequate, treating of both the use of the tractor and also of the care of the machine, with quite a bit on tractor troubles and how to cure them.

The government wishes to find out what proportion of the automobiles in use are really giving business service and what proportion are purely "pleasure cars." This paper has been asked to help secure such information, and therefore wants to hear from our subscribers on this topic. The information given may have a great deal to do with the ability of auto owners to get tires and other auto supplies hereafter. If you are a car-owner please let us hear from you at once. We believe that the farmer's auto is a business rather than a pleasure car, but we want to know. Will you write us your own experience at once, please?

## ORDER LIME NOW.

### Delay May Mean No Fertilizer.

The United States department of agriculture is urging farmers who need lime for their soils this year to place their orders with the company supplying agricultural lime at the earliest possible date. The department says that with transportation difficulties, shortage of labor in their own plants and difficulties of obtaining fuel for lime burning in the companies can not make last-minute deliveries. Furthermore, the needs of increased crop production have increased the demand for lime products, and this also has added to the difficulties fo supply.

For all these reasons the department urges that the fall lime be ordered as soon as possible and that the spring needs be anticipated also. Dealers and manufacturers should have advance information as to farmers' needs, so that orders can be combined and car space used to best advantage. Delays in ordering may result in failure to obtain supplies until too late.

**Employer Must Insure Workmen.**

The New York state industrial commission, through William S. Coffey, secretary, has announced that under the 1918 amendments to the workmen's compensation law, which became effective on May 12, it is imperative for all employers of four or more workmen or operatives regularly engaged to take out compensation insurance on these employes. Employers who neglect to take out compensation insurance are liable to both civil and criminal prosecution.

## FIX ONION GRADES.

### Four Standards Are Established.

With a view to more stable conditions in the onion market, the National Onion association has adopted four standard grades for the coming season. The grades are not official in so far as the government is concerned, but are an agreement that will be respected as much as possible by the onion growers and buyers throughout the country this year. The four grades agreed upon are as follows:

Standard fancy—Perfect onions of similar varietal characteristics with a minimum diameter of 1 3-8 inches. Five per cent of these may be undersized and 4 per cent need not meet the perfection requirements as regards disease, dirt and other injury.

Standard No. 1—Same grade as above, except that high color is not required and 6 per cent may fail to meet the perfection requirements.

Standard boilers—Condition requirements are the same as for No. 1 stock, but the size may vary from a 3-4-inch diameter to 1 1-2 inches for a maximum. Five per cent by weight may vary from the prescribed grades.

Standard No. 2—Onions in this grade must have similar varietal characteristics, be free from splits or scullions and practically free from dirt. Seven per cent by weight need not meet grade requirements and 5 per cent may be of different varieties.

**Talking Movies.**

A French inventor, Eugene Lauste, who was largely responsible for the perfection of our motion pictures, is planning to bring them to a still higher standard. His latest "movie" stunt is to make his pictures talk. "This is done by making a sound record directly on the moving picture film, so that the actor's voice and movements can not help agreeing."




# Should Increase Honey Crop

## *Nationwide Movement Is Being Urged by Government*

With the necessity of sugar rationing comes the companion necessity of developing sugar substitutes and the greatest of these substitutes is honey. It is a well recognized fact that hundreds of thousands of pounds of honey go to waste annually in this country for lack of bees to harvest the nectar of flowers. It is equally well known that hundreds of thousands of pounds more could be added to the yield by a little effort on the part of farmers in handling bees and in growing nectar-producing crops.

About 250,000,000 pounds of honey are produced annually in the United States, California being the leading state in the production of this sweet. Honey production in this country could be increased largely—10 to 20 times the present yield—without an appreciable increase in the cost of production, for the raw material—the nectar in flowers—is at certain times practically unlimited. To produce more honey more colonies of bees properly managed are needed.

With a view to assisting in developing the honey industry, the U. S. department of agriculture is putting on emergency extension work in many sections of the United States for the purpose of educating leaders and demonstration workers in the essentials of honey production and the handling of bees.

Losses of bees by diseases, principally foulbrood, range during the summer from nothing to 10 per cent. Winter losses of bees range from 10 to 15 per cent, and in some states the loss was almost 50 per cent during the winter of 1916-17. Winter losses may be greatly reduced by more careful attention. The honey production business, commercially, is getting more and more in the hands of specialists, because disease and winter losses discourage many who are untrained and unable to prevent these losses by proper treatment, but there is no reason why farmers should not succeed in honey production on a small scale, and it is to the small farms that the country must look for its aggregate increase.

Honey became established some years ago as a seasonal product rather than a staple food for use throughout the year. The bulk of the honey was produced by farmers as a side line, the bees were given little attention and the honey was produced at little expense. The crop was marketed at low price during the autumn, and stocks were usually exhausted during the winter. There was little demand and practically no supply during the spring and summer. But honey is now handled in a large way as a staple food product through the influence of commercial beekeeping, which has had a rapid development in recent years.

Honey is produced in three forms: Comb honey, in 1-pound sections as commonly retailed; extracted or liquid honey, which has been removed from the comb; bulk or "chunk" honey, in which the comb is more or less mixed with the liquid honey. From 1914 to 1917 the production of liquid honey has increased in proportion to the commercial output of comb and chunk honey. The bees are able to produce a larger quantity of honey if they are not compelled to build comb for it, and when the comb is emptied and replaced in the hive the bees are able, in periods of heavy nectar secretion, to proceed immediately to the storage of more honey.

The department of agriculture has issued a new bulletin, No. 685, on "Honey Bees and Honey Production." This and other bee literature can be had by any one who will address the department of agriculture at Washington, D. C.

### Write for Information.

The readers of this paper are again reminded that a great information bureau is maintained for them at Washington, D. C., the national capital, and that it will serve them free of all charge except postage. It is maintained as one of the means this paper takes of serving its subscribers. If there is any question upon which you desire information, simply write to the address given below. If you want a personal letter in reply, enclose a 3-cent postage stamp but no other money. No pay is asked or accepted for the service. If you want any one of the bulletins or pamphlets that the bureau has on hand enclose a 2-cent stamp but no other money. Here are some of the booklets that you may receive:

Book on Canning.
"German War Practices."
Book on Colds.
Garden Book.
Book on Knitting.
War Cookbook.
Book on Navy.
Book on Drying Fruits.
Book of Recipes.
Bread Book.
"How War Came to America."
Book on Household Pests.

Don't address your inquiry to the state office of The Farmer, but be sure to address it as follows:

**THE WASHINGTON FARMER INFORMATION BUREAU, Washington, D. C.**

### A Good Thing.

Editor, Washington Farmer: Please find enclosed my check for $1 to apply on your valuable paper for 5 years' subscription. I believe I am paid in advance at present, but can not miss a good thing like this.

A. L. WILLHITE.
Stanwood, Wash.

## APPLE CROP SHORT.

### Idaho Damage Reduces Yield.

Although the apple crop for the entire United States is estimated to be about 3,500,000 barrels more than last year, figures given out by the federal agricultural bureau indicate that there will be something like 5000 cars fewer apples in the west this year than last year. The serious loss to the apple crop of Idaho through weather damage is one of the principal factors in reducing the western crop this year. The unusually heavy crop in western New York is largely responsible for the increase for the nation as a whole. Referring to the northwest, the report of the agricultural bureau reads as follows:

"Approximately 17,000 cars of apples are forecast for Washington this year as compared with 18,500 last year, a decrease of 1500 cars. Wenatchee has prospects for a splendid crop of apples, although its production may fall a little short of last year's 6,250,000 boxes on account of the June drop and shortage of water for irrigation in the upper valley.

"Conditions in the Yakima valley are somewhat uncertain. Estimates vary from 2000 cars less to 1000 cars in excess of last year's 8500 cars. Conservative reports place the crop at about 1000 cars less than 1917. The Winesap crop is good at both Wenatchee and Yakima, while Jonathans generally are light. The season in both Wenatchee and Yakima is well advanced and the size and quality are reported good.

"The Spokane district, which shows a decline over last month, is still estimated at 1000 cars, as compared with 400 last year. This increase will about offset a very marked decrease reported for the Walla Walla section.

"The Hood River production, which amounted to approximately 1300 cars in 1917, is estimated at about 1500 cars for 1918, and is almost exclusively Newtowns and Spitzenburgs.

"The Idaho crop will probably not exceed 700 cars, as compared with 3500 last year. This light production will greatly reduce the output of northwest Jonathans, since the latter is the principal variety for Idaho. Lewiston is reported with 175 cars and Twin Falls with 2000 cars. The Payette district from Weiser to New Plymouth, which last year produced 1500 cars, will not have a hundred cars this year."

## MUST REPORT WORK.

### Threshermen Must Keep Records.

Under the direction of the federal bureau of markets, the government is this year requiring that every thresherman keep a detailed record of the work that he does and file it with the county agent in his county or with the bureau of markets itself. To facilitate the making of reports, the bureau has prepared record books and blanks which the county agents are required to distribute among the threshermen. It is required that each thresherman make a report on each field threshed, showing the number of acres, the owner, and the number of bushels or sacks of grain threshed,


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It is gratifying to know that the new cooperative system has had the heartiest kind of backing; and that it has been put on a successful basis. We could not have got along without the assistance of well wishers who have told their neighbors about the plan and passed along copies of the paper.

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# Nurses Wanted

## War Conditions Increase Demands

The war has created an unprecedented demand for trained nurses, and as a result the United States government is calling for 25,000 young women to enroll themselves in the United States student nurse reserve and place themselves in readiness to take the required course in training.

Only trained nurses are accepted for service with the armies in France. As a result thousands have been taken from the hospitals in this country, and their absence is now becoming keenly felt. The call of the government is in part for the purpose of filling the places of those that have gone and partly to increase the enrolment of those available for service abroad.

Women are accepted for this kind of service between the ages of 19 and 35 years. While high school or college educations are valuable to those taking the course, neither is an absolute requirement. Reasonable education, good health and a sense of responsibility are the three principal requirements for those enrolling.

There are three ways in which a young woman may enroll for the training, as follows:

1. As engaging to hold themselves in readiness until April 1, 1919, to accept assignments to nurses' training schools. These women will be sent to the schools as fast as vacancies occur. Those of superior qualifications will be given preference, and it is, of course, possible that not every one who enrolls will be accepted.

2. As desiring to become candidates for the army nursing training school recently established by authority of the war department, with branch schools in selected military hospitals.

3. As engaging to hold themselves in readiness until April 1, 1919, to accept assignments to either a civilian training school or the army nursing school. Those who so enroll will be called where the first need arises. The government hopes that a majority of those who enroll will thus put down their names for both.

The term of training varies from two to three years, according to the requirements of the particular school to which the student nurse may be sent. No course takes less than two years nor more than three.

At present every woman who completes satisfactorily her training in any accredited school is eligible for service as an army nurse at the front and stands a chance of being assigned to duty abroad. At the same time she will be qualified to earn her living in one of the noblest professions open to women. It should be remembered, furthermore, that her usefulness will begin not when she graduates from the training school, but as soon as she enters it. Practical nursing work is a part of the work of every training school, and the student nurse is not only learning to serve but serving her country from the outset.

The student nurse gets her board, lodging and tuition free at practically every training school, and in most cases receives a small remuneration to cover the cost of books and uniforms. After graduation she has an earning capacity of $100 a month or more.

Enrolment may be made at the nearest recruiting station established by the women's committee of the council of national defense. Persons desiring more definite information on how to locate the place of enrolment can secure the needed information from their own county council of defense.

### No Halfway Measures.

Under a "sketchy little thing" exhibited by Jones there hangs a printed card which bears the words:

"Do not touch with canes or umbrellas."

An appreciative small boy added the following postscript:

"Take an ax."—Christian Register.

# SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

## Why Blue Affects You Pleasantly—Other Effects



Dr. Hirshberg.

The sense of color is a great, divine gift. Colors that are gay and attractive give zest to the spirit, force to the muscles and keen action to the emotions. Most colors are pleasant and the loveliest border on true happiness. The purest and most thoughtful minds can scarcely resist a love of color. Indeed, the poet-artist Ruskin spoke as well for physiology as he did for color when he sang that color is, in brief, a type of inner feeling akin to love. It is especially connected with the blossoming of the earth, with its fruits and flowers and with morning and evening.

Psychologists have a multitude of instruments and tests whereby you may be tested as to the influence of colors upon your affections, feelings and sentiments. The transition of the average person through the stages of student, are devotee, or to artist and genius, can be traced in this way by instruments of the experimental laboratory

### From Scarlet to Gold.

The color-blind man, to be sure, by a trick of heredity which skipped his mother and all women, confuses reds and greens. He, of course, is worse off than you and I. Yet white means the good, the true and the pure to him as it does to you. Black bespeaks evil, unpleasantness, gloom, depression and mischief.

Scarlets and reds, however, appeal to those who are not color blind as something stirring; pleasant excitement, effervescent action such as that of the blood in happy motion; patriotism and the fighting spirit are associated perhaps from the childhood ideas of flags, flames, blood, pictures and the brilliancy of red itself.

Similarly, gold and yellow both arouse the emotions started by the days bright with glorious sunshine. The exaltation of the spirit produced by yellow, orange and gold is strictly physiological. As the sun energizes and makes life, motion and helpful emotions, the colors associated with it to a similar degree do likewise.

The actinic or chemical vibrations and particles of all light are also present in various strengths in the different colors. Sunburn and tan are the result of such radiations of mixed white and yellow light.

Blue and violet light are also rich in these chemical rays, but green is a calming, comforting color, because the sharpest, cutting chemical rays are diminished to a minimum. Foliage, grass, trees and vegetation generally recall so many happy summers that the associations so pleasantly mixed with green can not be separated from the soothing powers of the color itself. While the popular notion that "green rests the eyes" is not altogether correct, it has at least a modicum of truth in it, because the sharp, intensive rays are largely absent from it.

The blues of marine colors, the vast expanse of the heavens and the tints of so many eyes strike the human ego as a sweet, tender, divine spark. Blue has a pleasantly insidious influence and power over man. There is something physiological and psychological all combined in blue. Pale blues, sky blues, marine blues and Napoleon blues all impress the spirit with a vast, divine significance.

Purples, violets, deep blues and their close kin of the melancholy end of the spectrum seem to depress, frighten and subdue the vital activities both of man and many microscopic plants and animals. Just as sunshine and sorrow are linked in the human emotions, happiness and shadow are coupled verbally. As the evening shadows fall purples and violets pass before the eyes. There is in them something more melancholy than the mere onset of twilight and veiled purples.

# Handicraft For Girls

## By Dorothy Perkins

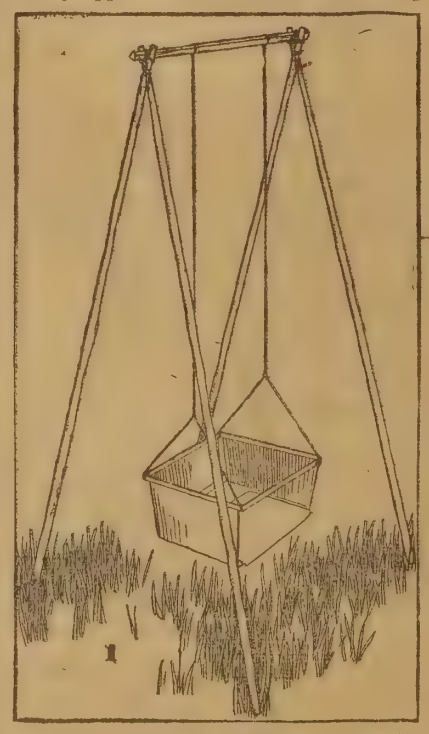
(Copyright by A. Neely Hall.)

### Doll Swing and Hammock.

A swing for your jointed dollie, and a hammock for your dollie that is not jointed are two easily-made toys that you can quickly set up in the back yard.

For the doll swing (Fig. 1), you need four sticks about 24 inches long for the supports, a piece 10 inches long for the top crosspiece, a pint-size fruit box—the kind cherries are packed in—for the seat, and some string for suspending the seat.

If you can get four straight pieces of tree branches they will do nicely for the supports. Drive the lower ends of each pair into the ground, 8 inches apart, and bend over the tops to lap as shown and bind together with string. Place the supports 9 inches apart directly opposite one another. Set the top

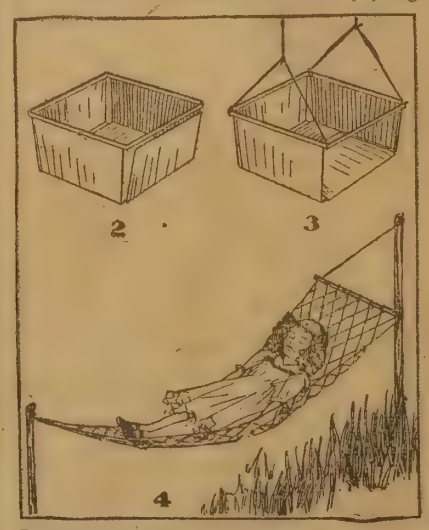


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crosspiece in the crotches formed by the crossed ends and bind in place with string.

Figures 2 and 3 show how the cherry box is converted into the swing seat. Slip the top edge of one side of the box from the tin binding by which the box is held together (Fig. 2), fold the side over on to the inside of the box bottom, and glue or sew it to the bottom (Fig. 3). Tie the suspension threads to the corners of the box, as shown in Fig. 3.

The doll hammock (Fig. 4) is made of string. You will need a board 24 inches long and 12 inches wide on which to form the hammock network. (A, Fig.

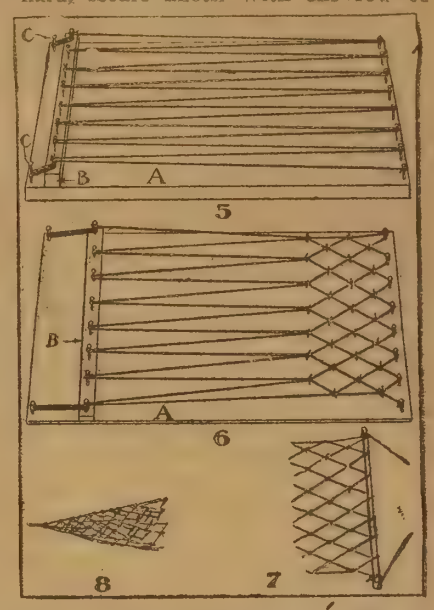


2 3 4

5). Drive a row of nails into the board, close to one end, about one inch apart, then take a stick and drive a row of nails into it at the same distances apart (B, Fig. 5). Stick B is held to board A, by means of a pair of heavy rubber-bands looped over a pair of nails C driven into board A, and over the end nails in strip B.

With board A and strip B thus prepared, take the string, tie one end to one end nail in strip B, and loop it back and forth from one row of nails to the other, as shown in Fig. 5.

Cut up 100 or more very short pieces of string. Then, beginning about one inch from the row of nails in board A, catch the strands together, two by two, and tie with the pieces of string. Tie hard, secure knots. With one row of




knots tied, make a second row one inch away from the first, picking the pairs of strands that will make the knots come halfway between those of the first row. Then make a third row one inch from the second row, with the knots in line with those of the first row, a fourth row one inch from the third row in line with the second, and so on until stick B is reached. As the strands are tied they will become shorter, and this shortening will be taken care of by the rubber-bands, which will allow stick B to slide along board A, as shown in Fig. 6. With the strands knotted, remove the loops from one row of nails and slip them over a short stick (Fig. 7). Then tie together the opposite loops, as shown in Fig. 8. Suspend the hammock between two stakes, as indicated in Fig. 4.

# Sidelights

### Too Much Repetition.

"Bobby, have you said your prayers?"

"Oh, ma! God knows what I want. Why must I go over the same old ground night after night?"—Life.

### His Reason.

Flatbush—You don't go to church, Bensonhurst—No, I don't.

"But why are you so prejudiced against the church?"

"Why? Say, wasn't I married in one?"—Exchange.

### Crushed Possibilities.

Jones, the cub reporter, looked melancholy when he entered the city editor's office.

"Why was my story killed?" he asked gloomily.

"An act of mercy," said the editor. "You fell down on it first."—Exchange.

### An Impossible Amount.

Some negroes were discussing the death of a small darky.

The cause of the disaster was clear enough to one of the men.

"De po' chile died frum eating too much watah-million," he explained.

One of the others looked his doubts.

"Huh," he grunted scornfully, "dar ain't no sech thing as too much watah-million."

"Well, den," remarked the first, "dar wasn't enuff boy!"—Life.

### Well Pasteurized.

There is a certain dear old lady who owns a little farm and takes a few boarders in summer.

Recently an anxious young mother, who had been industriously delving into medical literature of late, inquired of the old lady whether or not the milk that was served at her table was Pasteurized.

"Of course" was the old lady's indignant reply. "Don't we keep all the cows we've got in the pasture all summer long?"—Exchange.

# All the World's a Stage, and All the Men and Women Merely Players

## Dressing Wounds of Fallen Soldier



This photograph shows members of the American army medical corps dressing the wounds of a soldier fallen in battle. The wounded man is bearing the pain with stoic calm, while his attendant renders him expert treatment. A camouflage in the background conceals their position from German snipers. The relief workers are near at hand in any forward movement.

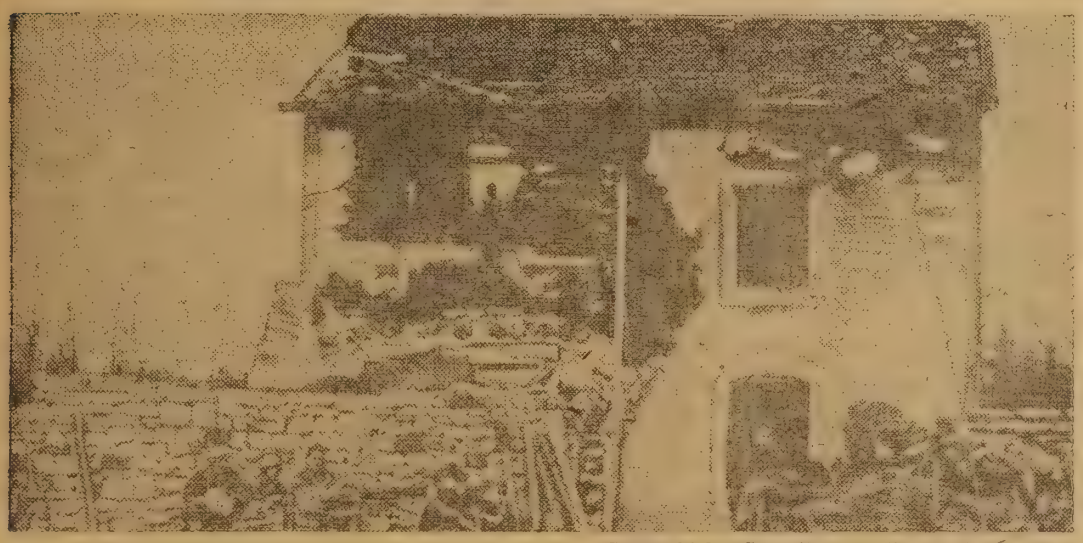
## At Home With Any Brave Men



Committee on Public Information.

One of the common scenes "over there" is that of an American officer, as shown in the above photograph, fraternizing with French colonial troops in one of the villages near the battle front.

## Ruined by Shells From German Guns



Copyright by Committee on Public Information

The above photograph shows some of the American troops, resting and chatting amid the ruins of one of the French villages which the Germans have destroyed by heavy shell fire.

## Baseball "Usherettes"



Copyright Underwood & Underwood.

The war has brought about conductorettes, farmerettes and a lot of other ettes, but the latest is female baseball ushers.

## The Star Gazer



"Beholding heaven and feeling hell."—John Bull, London.



"Don't worry about Jim 'over there,' something might happen any time to any of us right here at home."—Cleveland Plain Dealer.

## Fire at Clay Pigeons.



Underwood & Underwood.

To become perfectly accustomed to firing from a height, either at or from aircraft, hillsides or mountains, these American soldiers, mounted in a tower, are firing at clay pigeons to attain accuracy on moving targets.

## Changed to Gold



# Trappers of the Ozarks

**The Adventures of Two Young Trappers in the Wilds of Upper Louisiana, Now the State of Missouri.**

By LEWIS B. MILLER

Copyright, 1914, 1915, by Lewis B. Miller.

## CHAPTER XXVIII.

### The Loutre Island Settlement.

"What do you s'pose they want, Ben—those Indians?"

"Well, pretty safe to say they're not trotting along there just for the pleasure of our company. If it's not our scalps they're after, it's our furs; and if it's not our furs, it's our scalps."

"Don't you think they may have a canoe down the river somewhere, and may be running to get it?"

"No telling. It could easily be that way."

"What could we do if they came out in a canoe to meet us?"

"Motion them back. And if they didn't go, we'd flatten ourselves down in our canoe and fling lead at them. That's what we carry guns for, and ammunition."

The two voyagers paddled on steadily. Every few minutes they would catch a glimpse of their five Indians, trotting across open places in the woods along the south bank. The red runners were crouching low as they ran—good evidence that they were out for some evil purpose.

Once Ben remarked: "They see three canoes, and they suspect they're all loaded with furs. And furs—furs all ready for market—are what the lazy rascals are greedy for. Furs mean rifles and powder and lead and trinkets and blankets from the traders."

"And while they're taking the furs they can strip off two nice scalps—a variety of scalps—a brunette scalp and a blond one."

"Yes. And the average redskin is never quite so happy as when he's lifting a scalp—a white man's scalp or an Indian's scalp—a white man's preferred."

"What had we better do, Benoni?"

"If we were on any other stream but the Missouri, I'd say camp about sunset, stay camped till moondown, and then travel all the rest of the night. It's a risky thing to do. But we may have to take the risk—or a worse risk."

"If we struck a snag in the dark, our canoes would upset, wouldn't they?"

"They'd stand a good chance to. This has the name of being a dangerous stream."

"Those red fellows must be trotting along over there to keep us in sight till they see where we camp. Then they can fall upon us while we're asleep."

"That may be their plan. If we knew they were the only ones, we could dodge them by camping on the other side of the river."

"But we don't know they're the only ones. May be others on the north side. And those we see could swim across, or raft themselves across, if they have no canoe."

"Well, no great matter. We'll look out for ourselves. Do you see that island we're coming to? There we're going to camp."

The island, when they came close, proved to be about a hundred yards wide and a quarter of a mile long. Willows fringed most of its outer edge, but large timbers covered its interior.

At the lower end, where the ground sloped down to meet the water, the travelers landed and tied their canoes to a bush. Then, a little distance up in the woods they boldly kindled a big fire and cooked their supper. From their camp they had a good view of both banks. And a constant watch was kept up in both directions. Though they could see no Indians, they had little doubt that Indians were close by, especially on the south bank. Indeed, every time one of the campers stepped out to where he could be seen from that bank, he could almost feel savage eyes upon him.

By far the greater part of the water was between the island and the south bank. Though the travelers had seen no Indians on the north side of the river, they were careful not to expose themselves on the north side of the island, lest a bullet should come across from the mainland.

When night settled down, with its moonlight, they still kept their fire burning brightly. But they themselves took their stations, one on each side of the island, where they could watch the water. As soon as the moon had set, they put more wood on their fire, then stole down to the water's edge, untied their canoes, stepped in and crouched down, and pushed off.

At first they paddled noiselessly. But when once out in the main current, they sat still and let that sweep them along. Indeed, it carried them fully as fast as they cared to travel in the dark on such a treacherous stream. Now they gazed ahead for snags.

After drifting half an hour, they began to watch for another island, which Ben remembered. It was small, and on coming to it they passed it by, as they did a second small island not far below it. But at a third island they landed, tied their canoes under some brush, and were soon asleep on the ground near them.

They slept not very soundly, it must be admitted, and both were awake from time to time during the night. And every time they sat up and listened for suspicious sounds. But the night passed without any disturbance.

While the dawn was still dim, they ate their breakfast, cooked the night before, then got into their canoe and paddled away down stream.

Again, while they dipped their paddles, the two voyagers watched both banks for danger-signs. And scarcely had an hour passed before they caught glimpses of several Indians. As before, the warriors were hurring along through the woods, evidently for the purpose of keeping the canoes in sight. But this time they were on the north bank.

"Hot after us again, the red boogers are!" Jodo exclaimed impatiently, the moment he caught sight of the hurrying figures.

"Yes. They've no intention of letting all these furs and two white scalps go to waste. They put me in mind of that hungry wolf-pack that trailed us through the snow that frightful afternoon."

"I wonder what they did last night, those redskins."

"They must have swum across to our island, and from there on to the north bank."

"And they must have been woefully disappointed, after all their trouble, to find only an abandoned camp."

"You can be sure of that. And they probably tried another island or two before they gave up the search. That was what I guessed they'd do and that was why we passed by island number two and island number three, and stopped on island number four. After searching two or three islands without finding us, they would naturally conclude that we'd gone on down the river."

"How far do you s'pose they'll follow?"

"Till they get possession of these furs, or till we reach the Loutre Island settlement, I'd say."

"We ought to reach the settlement by noon, oughtn't we?"

Ben nodded. "By noon at the latest. And we'll spend the rest of the day there, and the night, I'm thinking just now."

"Hadn't we better camp there for two or three days, till the redskins get tired of watching for us?"

"We'll see when we arrive there. Maybe we shall have news awaiting us. If everything is all right at home, I wouldn't mind resting a day or two. But the trouble is, Jodo, things are 10 times more likely to grow worse out here than they are to grow better. If the Sacs and Foxes and other tribes break out openly, they'll be ever so much fiercer than they are now. And that's exactly what the people at Hill Without Design are expecting them to do before many days. So I'm guessing we'd better slide toward St. Louis as fast as we can paddle."

"Well, maybe we had. And we can expect to be in danger every foot of the way. Loutre island must be bigger than most of the islands in the Missouri, if it has a whole settlement on it. Or is the settlement so called because it's close to the island?"

"The settlement is on Loutre island. Yes, it's many times as large as any other island I know of in the Missouri. Loutre Slough, a fair-sized river, makes off from the north side, and doesn't come back to the main stream till seven or eight miles below. While the slough is separated from the main Missouri, Loutre river flows into the slough from the north. The slough and the river and the island were named in the olden days, all of them, by French trappers and traders. Loutre, you know, is the French word for otter. About five years ago somebody started a settlement on Loutre island, I suppose because it's not far below the mouth of the Gasconade. And a rather numerous settlement it has come to be."

It was not quite noon when the voyagers arrived at the upper end of the island. A little later, a settler's cabin appeared. They passed by the first cabin, and also by the second; but they went ashore near the third, which stood not far back from the river-bank. It was here that Robinson lived—the man they had seen on the Gasconade, and who had promised to carry a note to St. Louis for them.

Three fierce bear-dogs charged out to meet the voyagers as they approached the cabin; and both lowered their guns, half expecting to have to use them in self-defense. But Robinson, who had just come from plowing, ran out, drove the dogs back, and greeted the visitors warmly. He and they were soon sitting in the cabin, talking.

"Yes, sir, boys, I handed over them notes of yo'r'n to your kinfolks," the settler soon informed them, in reply to their eager questions. "Paddled away for St. Louis, me and some others, just a few days after I got home from that hunt. While I was there, in St. Louis I mean, I kep' inquirin' for somebody that lived neighbors to you all. And on the second day who should come drivin' into town but Mr. Henderson and his wife and daughter. So up I walked, introdooced myself, and passed over you boys' notes.

"And they was the gladdest kind to git news, I can tell you. Your two dogs had come home not many days before, both lookin' mighty thin and hungry-like, and your folks didn't know what to make of it. They just 'lowed them dogs wouldn't have come off and left you boys unless you'd happened to some powerful bad luck. I hadn't expected to tell your folks all your ups and downs with them there redskins; but I just had to, so's they'd understand how your dogs come to desert you. All your folks was well, I'm glad to tell you."

"Well, I'm certainly glad you saw Jodo's people and talked with them," Ben made answer. "Of course we'd a little rather our friends hadn't learned of our adventures with the Osages till we got home. But under the circumstances that could hardly be helped."

"We are glad everybody at home was well; and we're glad, too, that Bose and Tinker made it home all right," Jodo now said. "We hoped they'd gone home, but we didn't know but what they'd been devoured by wolves."

The two visitors asked many questions concerning their friends at home, and Robinson answered them as well as he could.

"You see, it's nearly eight months now since we set out on our trapping-trip," Ben explained, "and the news you bring us is the first word that's reached us—the very first word that's reached us from home. I'm glad you bring us only good news."

"Oh, yes!" Robinson jumped out of his chair, hurried back to a shelf and returned, handing a paper to Ben. "The young lady, Mr. Henderson's daughter, saw me later in the day, and handed me a letter for Benoni Armstrong. You see, I'd told 'em you boys had promised to stop at this settlement on your way home; and I reckon she thought you'd like to glance at some of her hand-write while you's restin'."

Ben received the letter eagerly, and after breaking the sealing-wax, read it through at once. His brown face flushed, and for a good while he left the conversation to others.

"Your pa just begged me to go out home with 'em and stay a few days," Robinson remarked to Jodo. "Said he'd haul me back to town. But my party was in a right smart hurry to git started home, and I couldn't well ask 'em to wait. Feller don't much like to travel by hisself these troublesome times."

"Better to have company if you can. Ben and I know about that. We've tramped and paddled at least a thousand miles since we left home—all by ourselves except a few miles. And we're not at home yet."

Robinson's wife now announced that dinner was ready, and they all sat down to the table.

"You boys struck this settlement just in time," the man of the house soon informed his visitors. "Sever'l of our fellers is goin' to start for St. Louis in a few days, and some of the Boone's Lick folks is comin' to go with 'em—quite a canoe-party. You two can wait and have company."

"When are they expecting to start?" Ben wanted to know.

"'Twon't be long, I don't guess. Our folks is ready whenever the Boone's Lickers shows up. They want to travel in a good-sized party, for safety."

"Shall we wait for 'em, Ben?" inquired Jodo.

Ben glanced at the letter lying near his plate. "Don't know about that. We'd like to have company. But most of these frontiersmen take their own good time for things. And besides, they'll be running empty or light, and we're loaded deep. They'd soon leave us behind. So I'm thinking we'd better push on. If they start soon they'll overtake us."

"Better wait and have company," urged the settler. "Mighty long stretch of lonesome country before you strike the next settlement. Used to be two or three families scattered along—but they've got alarmed and moved back down the river."

And soon he added, jovially, to Ben: "No need to worry about that young lady. If you fail to reach home when she thinks you ought to, she can mighty easy find some feller to take your place."

Ben laughed and his face flushed. "Yes, I know she could. And that's one reason that makes me want to get home as soon as possible."

"Well, she could find somebody else—not much doubt of that. But jedgin' from the number of questions she ast about you, I don't much 'low she's got anything of the kind in mind. So guess maybe you can rest easy."

This settlement, the travelers soon learned, was much stirred up over the expected outbreak of the Sacs and Foxes and other tribes. There was to be a meeting of the settlers this very afternoon, to discuss plans for defending themselves. The meeting-place was about a mile down the island, and the visitors were invited to attend.

Robinson and they walked down together. A good number of settlers had assembled at a farm-house. Some came on foot, some on horseback, and others in wagons with their families. And when it became known, as it very soon did, that Ben and Jodo were just out of the Indian country, and had been engaged in actual hostilities with at least three different tribes, they and what they had to tell at once became the center of interest in this armed gathering.

After much informal talk, the meeting was called to order by a leading settler. Then, when several had expressed their views as to how to meet the coming danger, Ben was called upon.

"I've never lived where redskins were troublesome since I can recollect. But my father and mother did, back in old Kentucky, and so did my partner's father, Mr. Henderson. I'd heard them talk over those troublesome times again and again. And I've heard others tell about those same times, and especially that old pioneer, Mr. Boone—Daniel Boone. From all I've gathered, I'd say that your best defense would be a block-house fort. By that I mean a stockaded square with at least two blockhouses, at opposite corners. One at each corner would be better, And don't fail to make the corner houses sure-enough blockhouses—two stories, with the upper stories overhanging the lower."

"Do you think that part is really necessary?" interrupted the chairman.

"I certainly do. I can speak from experience there, and so can my partner. We were recently in a sort of a blockhouse a long way south of here, that was attacked by Indians and burnt down. We were helpless to keep them from firing it; and we should every one have been roasted or shot to death if the place hadn't had an underground outlet, through a cave."

Numerous questions were now put to the speaker. One of them was:

"How much ground do you think we ought to enclose with the stockade?"

"That depends. The enclosure ought to be more than large enough for all your cattle and horses to be penned up in it when Indians are raiding the country. And for that purpose, and also for your own use, of course, you should have a well inside the stockade."

"We could mighty soon dig one if we needed it," spoke up a settler. "Not fur to water, here so close to the river."

"And, of course, you want to have houses enough to shelter all your people in all kinds of weather," Ben told them, in conclusion.

"That's my idy how to work the thing—my idy to a T," a settler now rose to say. And one after another stood up to indorse what Ben had suggested, or to ask questions.

When the kind of fort to build had been agreed upon, there followed a discussion as to where the fort should be located. The decision arrived at was that where the present crowd had come together would be the easiest place for all to reach. And it was here, they agreed, that the fort should be constructed.

"Men," the chairman said, just before the meeting adjourned, "there's going to be war all along the frontier. And a bloody war it will prove. You can bet your next fall's bear bacon on that. And the sooner we set about preparing for it the fewer scalps we'll lose. The other war with Great Britain lasted eight years. This one may last fully as long, or even longer. And the red skins will be on the warpath as long as the British are egging them on to fight us."

After the formal meeting, the young trappers talked with nearly everybody in the settlement. They were told of the canoe party that Robinson had mentioned, and were urged to wait for it. Ben declined, on the

(Continued on page twenty-four.)

FAMILY CIRCLE

Write to the Editor.

ALICE W. BARLAND,
Editorial Contributor.

## Some Canning Recipes

To the Editor: If these recipes will help out any you are welcome to them for your paper. They are all good, as I have used them all many times in my own home. I never had very good success in canning corn. I have tried different recipes with about the same success. To dry corn you must have nice weather to insure it drying well.

To can green peas: Pick and shell your peas. Have ready the jars. Scald both jars and caps, fill jars full of peas, add one level tablespoonful of salt to each part of peas, fill jar full of cold water, put on caps, have your wash boiler with enough cold water to almost cover jars, cook them steady for three and one-half hours. When cool remove to a cool place. They will keep well if the jar covers fit. If water runs from the jars when they are turned top down the cap does not fit. String beans can be canned the same way.

To can tomatoes: Scald them and remove the skin. Put into a preserving kettle, add salt the same as for table use, cook slowly one-half hour. Can them while hot. Have both caps and jars hot when tomatoes are put in. Keep in a cool place. I have kept them when put up this way for one year.

To dry sweet corn: Pick corn when ready for cooking. Cut it from the cob, then scald it in a large granite dishpan. Do not add water, but stir to insure it being thoroughly scalded. Turn it onto clean cloths on a table in the sun to dry. It takes several days to thoroughly dry. Put it in a cloth sack. Keep it in a dry place. When needed to cook, soak in cold water a short time before cooking, season when cooking the same as canned corn. When drying the corn should be covered with mosquito netting to keep insects off.

MRS. HATTIE M'CLURE.
St. Maries, Idaho.

## Learning to Save

"We are learning to save every penny nowadays. We have to make the farm pay," said Mrs. C. E. Stone. The Stones live a mile and a half northeast of Newberg and have one of those regular Yamhill county farms where they raise almost everything. The cherries bore heavily this year and the market was fair, but labor was a problem which has not been solved yet. The children sent out, or at least many of them, did not know how to pick fruit, and many a fruit spur was stripped off the trees, which doesn't affect the market this year, but will reduce the yield next season.

"We have a fine cannery at Newberg," said Mrs. Stone, "and it takes our surplus vegetables and has trouble getting enough. They have a corn machine and we have been afraid they would take it out for there is not much corn this year around Newberg."

Mrs. Stone has an extensive poultry farm, using Leghorns and Plymouth Rocks chiefly. She has been trying to secure some White Minorca stock, but has not been able to find what she wants so far.

"White Minorcas dress well and sell well dressed," she said, "and they lay an extra large egg that markets better than any other."

She is trying some Rhode Island Reds this year. They make the finest mothers of any breed she has ever tried; as to their laying qualities she has not had time enough yet to make comparisons.

## PREPARING RABBIT.

### How to Make It a Popular Dish.

By MARIELLA LADD.

When we were asked to save beef I found that rabbit was nearer to beef in food value than chicken. According to Professor Andrews, the values are as follows:

| | Heat and Energy. | Flesh and Bone Material. |
|---|---|---|
| Beef ..... | 9 per cent | 19 per cent |
| Chicken .... | 6 per cent | 20 per cent |
| Rabbit .....12 | per cent | 15 per cent |

I found, however, that nobody seemed to like the substitute very much and, as Uncle Sam declares that foods must be attractive as well as patriotic, I felt I must either give up rabbits or find some better way to cook them than I had had.

The recipe that follows was very successful:

Joint the rabbit and lay the pieces in salted water for about an hour. Wipe the pieces and roll them in a mixture of flour, salt and pepper. Peel a large onion and stick into it a dozen cloves. Cut some very thin slices of salt work and arrange them to cover the sides and bottom of a stewpan with a tight-fitting cover. Place the onion in the center of the dish and arrange pieces of rabbit around it. Lay pieces of pork over this and place more pieces of rabbit over it. Then more pork and so on, putting a layer of pork last.

Pour over the whole a teacup of rich meat stock, in the jelly form, preferably.

Cover tightly and bake in a fairly hot oven for three hours. The oven should be cooler during the two hours before the dish is removed.

The flavor is still better if force meat balls are mixed with the joints of rabbit. The balls are made as follows:

Mix a teacupful of fine bread crumbs wtih a little shortening and a teaspoonful of dried herbs or fresh parsley. Moisten with a little onion juice and the white of an egg, not beaten. Shape into balls about an inch in diameter.

On porkless days I braized the rabbit and finished it off in the oven as above, leaving out the pork. More liquid was necessary in this case and I poured the braizing liquor over the joints.

When serving I remove the bones, which fall out naturally. They will stand further boiling in the stock pot.

The gravy of a braized rabbit also makes a good foundation for a curry. To make the curry take out the meat and arrange it in the center of a large flat dish. Around the rim of the dish make a bank of well-boiled rice or of mashed potato, if preferred. Then mix a minced apple, a minced onion and a tablespoonful of minced parsley with a heaping teaspoonful of curry powder. Mix these together and stir in the gravy. Strain gravy over meat. Garnish with thin slices of lemon or tomato.

## Filet Yoke

By WINIFRED WORTH.



Yokes may come and yokes may go, but the good old filet motifs are always in demand.

Small size filet block. Follow pattern.

Edge. 3 ch. fasten, 6 t. then 3 ch. fasten between each t. tu. 2 ch. t. to other side of half ring, tu. c., p. c. back to finish rings. To finish other edge of yoke, crochet with p. between alternate space and finish with similar rings at opposite ends of block.




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July 25

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# Patterns

1978—Child's dress. Cut in 4 sizes: 2, 4, 6 and 8 years. It requires 2 1-2 yards of 36-inch material for a 4-year size. Price, 10 cents.

2371-2370—Lady's costume. Waist 2371 cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 will require 3 1-4 yards of 36-inch material. The skirt requires 3 1-2 yards of 45-inch material for a 24-inch size. It is cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. The skirt measures about 2 1-8 yards at the foot. Two separate patterns, 10 cents for each pattern.

2557—Lady's one-piece dress. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 38 requires 5 1-4 yards of 40-inch material. The dress measures about 2 1-8 yards at the foot. Price, 10 cents.

1415—Boy's blouse suit with straight trousers. Cut in 4 sizes: 3, 4, 5 and 6 years. It requires 2 yards for the blouse and 1 1-8 yards of 27-inch material for the trousers for a 3-year size. Price, 10 cents.




1710—Girl's apron. Cut in 5 sizes: 2, 4, 6, 8 and 10 years. It requires 2 1-4 yards of 36-inch material for a 6-year size. Price, 10 cents.

2568—Girl's dress. Cut in 4 sizes: 6, 8, 10 and 12 years. Size 8 will require 3 3-8 yards of 36-inch material. Price, 10 cents.

1615—Lady's camisole in kimono style. Cut in 3 sizes: Small, medium and large. It requires 1 1-4 yards of 36-inch material for a medium size. Price, 10 cents.

2204—Girl's dress. Cut in 5 sizes: 4, 6, 8, 10 and 12 years. Size 8 will require 3 1-2 yards of 44-inch material. Price, 10 cents.

2567—Girls' dress. Cut in 4 sizes: 10, 12, 14 and 16 years. Size 12 will require 3 yards of 36-inch material for the foundation. The overblouse will require 2 1-4 yards. Price, 10 cents.

2409—Lady's apron. Cut in 4 sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. Size medium requires 3 3-4 yards of 36-inch material. Price, 10 cents.

2516—Lady's cape coat. Cut in 4 sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. Size medium will require 5 1-2 yards of 54-inch material. Price, 10 cents.

2560—Lady's dress. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 38 will require 7 yards of 36-inch material. The skirt measures about 2 yards at the foot. Price, 10 cents.

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Be sure to give the pattern number and the correct size.

# Can Without Sugar

"Keep canning, sugar or no sugar," say specialists of the United States department of agriculture. If you can't get enough sugar for home canning put up your fruit without it. The products will keep perfectly until a time when more sugar is available, or until a sugar substitute program has been worked out. Fruits put up in this way are excellent for pie-filling and salads and may be used in desserts, puddings, ices and punches.

In canning fruit without sugar, can the product the day it is picked. Cull, stem, seed and clean the fruit. Pack the product carefully in hot glass jars or tin cans until full. Use a tablespoon, wooden ladle or table knife for packing purposes. Pour boiling hot water over the product in the hot jar. Place rubbers and caps in position, not tight. If using tin cans, seal completely. Place in the sterilizer vat, or canner, and sterilize for the length of time given below, according to the particular type of outfit used:

| | Minutes. |
|---|---|
| Hot-water bath, home-made or commercial | 30 |
| Water seal, 214 degrees | 20 |
| 5 pounds steam pressure | 12 |
| 10 pounds steam pressure | 10 |

After sterilizing remove the filled containers. Seal jars; invert to cool and test the joints. Wrap in paper to prevent bleaching and store in a dry, cool place. If tin cans are used it will be found advantageous to plunge them into cold water immediately after sterilization to cool them quickly.

## Corn Syrup for Canning.

Corn syrup may be used in canning and in making jellies, jams and marmalades and fruit butters, according to specialists of the United States department of agriculture. Varying amounts of corn syrup are used with sugar. The syrup gives a modified flavor to products, so it should be tried out in small quantities at first to suit the family taste. It combines most satisfactorily with strong-flavored fruits such as pineapple and cherries. The amount used must be determined by the kind of fruit and the strength of the syrup.

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**A Squirrel Eats His Breakfast.**

Dear Aunt Nellie: I told you about our country last time I wrote, and I wrote about our school, also. Now I will write about something else. One day I was on my way to school and I was stopped by hearing a queer cracking noise, as if some one was trying to crack a nut. I looked about, but could not see anything, and I suddenly discovered it was something in some bushes covered with both black and red berries. The black berries were getting old. The berries were from some wild roses. A cunning little squirrel was eating its breakfast. It looked so cheerful. I think it was happy because it was such a fine morning and he could eat his breakfast in peace. You see there are a lot of cats sneaking around to catch them. It was up very early, I suppose, gathering the berries for its young ones. It ran up the bush and gnawed a black berry. I always watched him and he always went after the black berries. I wonder why he liked the black berries best. I have seen that many cousins can knit. I like to knit. I think everybody likes to knit. Can you knit, Aunt Nellie? I am sure you know how.—Myrtle Lee, R. F. D. No. 5, Box 40, Mt. Vernon, Wash. (Yes, Myrtle, Aunt Nellie can knit and thinks it is nice to beable to do that much to help the boys who fight for us.—Aunt Nellie.)

**Hopes to Write Again.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. My father takes the Farmer and I like to read the letters. I was 11 years old April 20. Have I a twin? We live on a 160-acre farm, about one and one-half miles from Ford. We have one cow and one calf. We have one dog named Rex. He is a little puppy. We have three horses and their names are Minnie, Daisy and Nell. We have three hens setting. I hope this will not be the last time I write to the Corner. I have two sisters and four brothers. Both of my sisters are married and only one of my brothers. I think the letters are interesting. I will be in the sixth grade next year. We have about 10 acres of wheat. I know how to knit and crochet. My brother can knit and tat, but I can't tat. I can embroider. If I have a twin I will answer all letters. I hope the cousins are all well.—Edith Simons, Ford, Wash.

**Helping the Red Cross.**

Dear Aunt Nellie: This is the second time I have written to the Corner. My subject is helping the Red Cross. We organized a Junior Red Cross at our school and we have made about 3000 gunwipes, about 60 joke books for the soldiers, and about 16 little petticoats for the Belgian children. Last time I wrote I was going to Pleasant Hill school. Now I go to Cedarhome school, for we have a consolidated district. A truck comes and gets us in the morning. Our school is out, but I do not know if I passed, because I have not received my report card yet. I have one brother and two sisters. My brother's name is Richard. He is 15 years old. My sisters' names are Verna and Avis. Verna wrote to the Corner. Have I a twin? I was 13 years old last May 12.—Goldie Christensen, East Stanwood, Wash.

**Got Her Diploma This Year.**

Dear Aunt Nellie: May I enter into your Corner again, if it has been a long time since I wrote to you? I am 14 years old and have brown hair and blue eyes. I am about five feet tall. I got my diploma from the eighth grade this year. I got 100 in arithmetic and 92 in spelling. I haven't heard what I got in the other things yet. I expect most of the boys and girls that write have some relatives or brothers in the war. My brother, who is 18 years old, left a month ago last Monday. He was at Fort Lawton, Seattle, a week and then shipped across to Baltimore. He and four other boys from here joined the quartermaster corps. They are all together at Baltimore. I hope this war will soon end. My father has $50 in Liberty bonds.—Mary Weaver, Wapato, Wash. (Welcome back to the Corner, Mary. We have not forgotten you.—Aunt Nellie.)

**Delia Lives on a Fruit Ranch.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I enjoy reading the Children's Corner. I am 8 years old. I have one sister and she is 11 years old. We have three horses. Their names are Jennie, Maud and Chub. We have four pigs. I live on an 80-acre farm or fruit ranch. I like to pick fruit. My complexion is light. I have one old hen and 11 little chickens.—Delia Taylor, Almota, Wash.

**Edith Loves the Letters.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 11 years old and will be 12 July 30. Have I a twin? I have four sisters and no brother. Their names are Ethel, Blanche, Goldie and Sylvia. I enjoy reading the letters very much. Papa takes the Farmer. I am reading the Little Women now. We have three calves. Their names are Beauty, Spot and Browny. We have three cows. I have two pet pigeons, one is blue and the other is blue and white. We have two dogs. They are Bobby and Mittens. I am in the fourth grade. I have a twin. Her birthday is July 31. Her name is Christina Jasperson, St. Andrews, Wash. I will write to her tonight. I ride to school some times on my pony, named Star. I walk, too. I have one cat, three dolls, one buggy, one bed and one chair. I have three and one-half miles to go to school. I will give you a riddle to guess. As I went through the garden gate who should I meet but Dick Red Cap, a stick in his hand, a stone in his throat. If you guess this riddle I will give you a goat. It was a cherry. I have a girl friend. Her name is Vera Mccord. She wrote and got two twins, and she told me about it. If I have a twin I wish he or she would write to me. I wish you would find me a twin. I will tell some other children to write to make the Corner bigger. I love the letters.—Edith Tavis, Fruitland, Wash.

**Read the Corner at School.**

Dear Aunt Nellie: I was very glad to see my letter in print, so I thought I would write again. I like The Farmer and every time it comes I want it first of our family. Our teacher takes it, too, and she used to let the children read it when it came. So I read the Children's Corner at school a good many times. I hope the Corner will grow bigger. I have about three-fourths of a mile to go to school and our school is not very far from the schools Virginia Clark and Ethel Broyles go to. I know Virginia Clark real well. I take music lessons from her mother at Dusty every Tuesday evening and I enjoy taking them from her very much. Good old vacation is here again. Then come the good times. Don't you think so, Aunt Nellie, and all the cousins? That's the time for fun, ha, ha!—Marie Krom, Penawawa, Wash.

**Evergreen Grove on Their Farm.**

Dear Aunt Nellie: I am 9 years old. I have one sister that is 15 years old and one brother who is 12 years old. I have three uncles. One is Tom, one is Jim and one is Frank. We have an evergreen grove. We have 50 hens and 52 little chickens. We also have one dog and three cats. We have two buggies and a wagon, but don't use the buggies much, as we have a seven-passenger car. We also have two pigs and three sheep. One of our sheep had 13 pounds of wood on it this year. —James Prince, Sunset, Wash.

**Almost Found a Twin.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner, but I hope it will not be the last time. I am 10 years old and my birthday is November 25. I have four sisters. Their names are Amy, Anna, Gertrude and Margaret. I have two brothers. Their names are John and Melvin. I have almost found a twin. Her name is Effie Luddington. She is 10 years old and her birthday is November 24. I wish she would write to me.—Celia Reichel, Yelm, Wash.

**Has So Many Cousins.**

Dear Aunt Nellie: I enjoy reading the Children's Corner and I wonder how many there are in the Corner. This is the first time I have written to the Corner. May I be a cousin, too? I have a sister and three brothers. My sister's name is Ruth and my brothers' names are Raymond, Howard and Albert. Not very long ago, Cricket, our pony, died. She had the distemper. One of our little ponies has it, and I have a pony named Tricksy that has just gotten over it. I am 10 years old September 11. Have I a twin? If so I wish he or she would write to me. Will you please see how many there are in our Corner?—Mildred Heidegger, Box 72, R. F. D. 1, Rice, Wash. (Aunt Nellie doesn't know just how many cousins there are, Mildred, because so many new ones arrive every day. We surely have a lot now, haven't we, and Aunt Nellie is glad; aren't you? Aunt Nellie.)

**Cassie Enjoys the Corner.**

Dear Aunt Nellie: This is my first time to write to the Corner. I am 11 years old. My birthday is November 13. Have I a twin? I am in the sixth grade. I have one sister and no brother. I live on an 80-acre fruit ranch. We have three horses. Their names are Chub, Jennie and Maud. I have one old hen and six little chickens. We live in a large house. I enjoy reading the Corner. I am reading the story in the Farmer. I like it fine. I read it to my sister. I would have written sooner, but I did not know where to write. My teacher's name is Miss Mary Dougherty. She lives at Cheney, Wash. I can play music by note. My sister wants me to give her lessons and I think I will. I have light complexion, my hair is brown and my eyes are grayish brown. May I be a member of the Corner? Cassie Taylor, Almota, Wash.

**Nickname Is "Peggy."**

Dear Aunt Nellie: This is the second time I wrote to the Children's Corner. Have I a twin? I am 13 years old and my birthday is November 24. My school was out May 24, and I had a good time. We had a picnic. I was promoted to the eighth grade in condition in spelling so I will have to work hard. I have a pet cat and she has four kittens, and I have a pet dog, too. My chum and I are writing to the Children's Corner. I live in Washington. It is near Odessa. I am knitting for the Red Cross. I gave $1 to the Red Cross. I have seven brothers and two sisters. I would write them down, but they would take all the room up in the Children's Corner. My nickname is Peggie. I own a Liberty bond. I joined the Red Cross.—Sophia Havlicak, R. F. D. 3, Box 16, Odessa, Wash.

**The Warden School Board.**

Dear Aunt Nellie: This is the first time that I have written to the Children's Corner and I hope it is not the last time. I was 14 years old June 15. I am four feet 11 inches tall and weigh 105 pounds. I am in the eighth grade. We have a band at our school. We call it the Warden School band. There are nine players and instruments. We have one cornet, one clarinet, one saxophone, four altos, one bass and one baritone, Professor G. F. Beck is our bandmaster. He plays the baritone. I play the clarinet. I enjoy reading the letters in the Children's Corner. I have found many letters from cousins that I knew. I live on a farm two miles east and one mile south of Warden. May I be a cousin?—Ernest Suko, Warden, Wash.

**Farm Beats the City.**

Dear Aunt Nelie: I am writing for the first time to the Children's Corner. I enjoy reading the letters of the Corner very much and I am anxious to see my letter in print. On my last birthday I was 12 years old. My birthday is March 1. Have I twin? If I have I wish her to write to me. We live on a large farm. I like the farm much better than the city. If I see my letter in print I will write often.—Catherine Whalen, R. 4, Box 37, Colfax, Wash.

**Wants to Hear From the Cousins.**

Dear Aunt Nellie: How are you and all the cousins? Mother and we children are all alone. My father went to Kansas because his mother died. He is not back yet. We are looking for him any day. Higher than a house, higher than a tree, whatever can it be? Answer—star. Something that has an eye but can't see. Answer—a button. I should like to hear from some of the cousins.—Bonnie F. Coleman, Dixon, Mont.

**Fun Climbing the Hills.**

Dear Aunt Nellie: I am very interested in the children's letters. This is my second letter. There is a ditch running by our house. It is great fun climbing the hills. I have joined the garden club. Our school let out the last of May. My grandma lives a half mile from our home. This summer I will go to grandma's and eat strawberries. I will say goodby to everybody.—Esther Hellena Reimann, Box 25, Dryden, Wash.

**Reads the Letters All the Time.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. We are new subscribers to the Farmer, but I read the cousins' letters all of the time and think they are very interesting. I am 14 years old and will be 15 October 20. Have I a twin? If so I wish he or she would write to me. Love to all of the cousins and to you.—Effie Lewis, R. F. D. 1, Box 113, Colville, Wash.

**Making a Quilt at School.**

Dear Aunt Nellie: This is the second time I have written to the Corner. I hope the Corner will increase. What does it mean when they ask to join the Corner? Does it take money to join the Corner? My brother is fine and he is riding horseback tonight. My cousins and uncle and aunt are at our place tonight. I have a cousin named Ray Tuttle. He is in the army at Camp Lewis. He has been there a long time. My cousin is writing to the Corner. We are making a quilt at school and I would rather make a quilt and sew them up than to play. I told you in my other letter that I was going to join the Junior Red Cross. I have joined now.—Lorena Thomson, Goldendale, Wash. (No, dear, you do not have to send money to join the Corner. Just write a letter and then you are a cousin.—Aunt Nellie.)

**Stay in Town in Winter.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner, and I hope I will see my letter in print. I am 12 years old. My birthday is July 13. Have I a twin? We have two cats. Their names are Ted and Pap. I live on a 160-acre farm. We have five horses, Dick, Eagle, Charlie, Monty and Black Dick. We live two and one-half miles from Methow. Our teacher's name is Miss M. E. Scoville. I like her fine. I have a brother. He is in the first grade. I am in the sixth. I have two cousins in the war. Aunty has four service pins and one service flag. We have a house in town that we live in in winter. I hope my twin, if I have one, will write to me.—Christina Grant, Box 28, Methow, Wash.

**Hopes to Get a Certificate.**

Dear Aunt Nellie: I have light brown hair. I have blue eyes. I am 9 years old and am in the fourth grade. My birthday is May 21. Have I a twin? Could I join the Children's Corner? I enjoy reading the letters and stories when they are in. I have six brothers and they all have blue eyes. They all have dark hair but the youngest boy. Their names are Ira, the oldest; Harry, the next; Clyde, Wesley, Charles and Elmer. Ira is 26 years old, Harry is 24, Clyde is 21, Wesley 19, Charles is 17, and Elmer is 15. I am 9. This is the first time I have written to the Children's Corner. I haven't missed any days nor I haven't been tardy, so I hope I get a certificate.—Cora Wilson, Box 7, Route 1, Centerville, Wash.

**Earned $250 Picking Cranberries.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I live on a farm near the bay. We can get mud clams and razor clams. We get razor clams on the beach and mud clams on the bay. I have two brothers and one sister. My sister's name is Hazel May. My brothers' names are Darrell William and Alvin Robert. I am 10 years old and in the fifth grade. My birthday is June 7. Every summer we go in bathing. This country is good for cranberries. There are hundreds of acres of cranberries on this peninsula. We got $250 picking them last year. We have four birds. Their names are Nellie, Clay, Dick and Pete.—Hattie Wade, Nahcotta, Wash.

**School Is Out Now.**

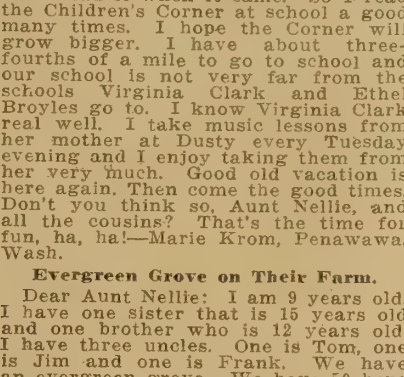
Dear Aunt Nellie: This is the first time I have written to the Corner. School is out now and I thought I would write. May I join the Corner? I have a light complexion. I have dark blue eyes and light brown hair, and my birthday is October 25, 1918. I am 10 years old. Have I a twin? If so, I wish she would write. Before school was out I was in the fourth grade. My teacher's name was Miss Stella Robinson.—Ada Jennings, Galvin, Wash.

**Sells Rabbits—Buys War Stamps.**

Dear Aunt Nellie: I wrote to the Children's Corner once before and got my letter in print, so I thought I would write again. I have a lamb and 15 rabbits. I have two war savings stamps and I am going to get another one when I sell some more rabbits. I believe it pays to raise rabbits when you have a good place to keep them. I would be very glad if some of the cousins would write to me.—Ora J. Baird, Sunnyside, Wash.

## Ouri Likes Riddles.

Dear Aunt Nellie: I am sending you a picture of my brother, Olin, and me. I have joined the Junior Red Cross. I have one war saving stamp and four thrift stamps. I know one of Leon Wood's riddles. It is an egg. I am sending some riddles: There was a little green house and in the little green house there was a little brown house and in the little brown house there was a little yellow house and in the little yellow house there was a little white house and in the little white house



Ouri and Olin Myers.

there was a heart. What was it? In marble walls as white as milk, lined with a skin as soft as silk, within a fountain crystal clear, a golden apple doth appear, no doors there are to this stronghold, yet thieves break in and steal the gold. What is it? As I was going over Westminster bridge I met a Westminster scholar. He pulled off his cap and drew off his gloves and wished me a very good morrow. What is his name? I will give the answers the next time I write.—Ouri Myers, Nampa, Idaho.

## Letters Received.

Letters from the following cousins have been received during the last two weeks, and will be published in their turn:

Walborg Brandt, Florence Swegle, Edith Templin, Irene Templin, Elizabeth Green, Lowell Eden, Ida Irmer, Eleanor Jones, Howard Quick, Signe Westman, Gunhild Sather, Thelma Green, Myrtle England, Laura O'Shaughnessy, Edna Hodges, Meldon Belknap, Melba Hughes, Mildred Gagle, Cecil Pave, Elsie Butts, Maybelle Jackson, Florence Whitney, Beulah Shaw, Velma Stark, Lucille Feenan, Mildred Heidegger, Eugene Jaques, Iva Day, Erma Broyles, Opal Cavanaugh, Margaret Vining, Edna Vining, Tessie Duffy, Agnes Jensen, Bertha Keck, Mary Brooks, Harold Ray, Ethel Copp, Pauline Roesli, Alice Graham, Hattie Hayden, Pearl Pierson, Arnold Taylor, Signe West, Frances Stewart, Elzina Rogers, Irene Powell, Goldie Miller, Ethel Strausbaugh, Clark Tyrrell, Lillian Hadford, Melvin Hadford, Hazel Land, Sophia Havlicak, Helen Mehl, Lynne Neal, Thomas Jones, Alice Gregor, Beatrice Giles, Harry Koppernan, Lena Bailey, George F. Barraford, Gerda Ekholm, Ethel Shot, Clyde Braden, Essie Nallman, Sadie L. Olin, Julia Winter, Fern Lyle, Josephine Perkins, Matilda Hilger, Alice Fredrickson, Emma La Yambe.

# Trappers of the Ozarks

(Continued from page twenty.)

ground that they, with their heavily laden canoes, could not keep up with the party.

"Don't worry about that," a settler told them. "Two or three of us that'll be running light will toss you a rope. What you cain't paddle we'll pull. We'll tow your three canoes right along."

"That would be kind of you," answered Ben. "But on our part it would be imposing on good nature. However, we'll think about the matter tonight, and we may decide to impose on you."

On their way back to Robinson's, the three walked up the south side of the island, along the bank of the main river. When near Robinson's house they noticed a man on the far bank and he was beckoning to them frantically.

Hurrying up to where their canoes were tied, they got into Robinson's canoe, with their rifles, and all paddled across to the south side, to see who the man was and what he wanted.

They found him very glad to see them. Taking him in, they were soon paddling back with him to the north bank. His home was at the lower end of the island.

Early that morning, he informed them, he had crossed over to the south side to hunt. After wandering about over the hills till a good while past noon, he had returned to the river, but only to find his canoe gone, and moccasin tracks to indicate who had taken it. Then all he could do was to wander along on the river-bank till he saw somebody on the island, and could make that somebody see him.

While moving along cautiously through the woods, he had caught sight of a skulking Indian—the one that had stolen his canoe, or some other. Fortunately the Indian did not see him. So the white man had stolen out of the dangerous vicinity and hurried on up the river. The three men who had gone to his rescue were the first people he had seen.

On being landed on the north bank, he shouldered his rifle and hurried away toward home.

"Now that the red boogers over there have got one canoe, they'll paddle across and try to carry off all our canoes," Robinson remarked. "Think I'll sleep by mine the next few nights."

"We expect to sleep close to ours," answered Jodo. "What we've got in 'em cost too much for us to let 'em get stolen."

"We can guard your canoe tonight," Ben told Robinson.

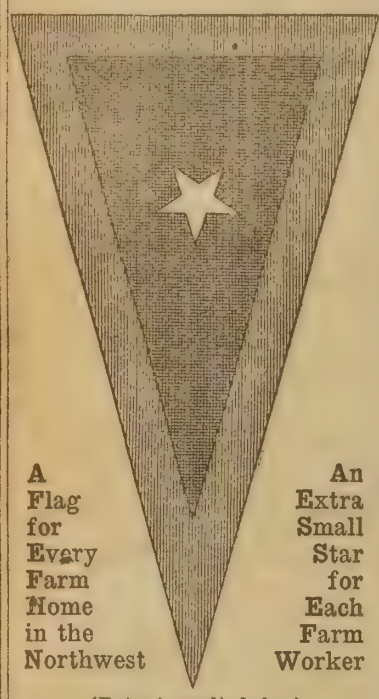
"Oh, I'll sleep down there with you—me and one of the dogs. I'll leave the other dogs at the house to guard that."

The three men slept on the grassy river-bank near the canoes, with a fierce bear-dog lying near them. After the moon had set, the dog kept barking out across the water, till it became evident that he saw or heard or smelt somebody out there. Robinson went down to the water's edge where, on a level with the water, he could see better. Soon he thought he could distinguish a canoe out there, with somebody in it. He sent a bullet in that direction, and the canoe was gone when the smoke cleared. After that the dog ceased to bark.

When morning came, Ben and Jodo returned to the house with Robinson for thier breakfast. By this time they had decided to delay no longer. So, after breakfast, in spite of many invitations and urgings to stay, they took leave of their hospitable friends and were soon out in mid-river, paddling away toward home.

(To be continued.)


## FARM SERVICE WAR FLAG



A Flag for Every Farm Home in the Northwest

An Extra Small Star for Each Farm Worker

(Patent applied for.)

**Designed by The Washington Farmer in connection with The Oregon Farmer and The Idaho Farmer for the farm and farm home that is increasing food production in helping to win the war.**

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A farm service war flag, 9x22, printed on heavy enamel paper, in full colors, will be postpaid to any one securing and sending in ONE NEW subscription to this paper. (One year 25c, three years 50c, five years $1.00.)

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# Need Quota System

The Washington state council of defense decided recently that this state's quota of war funds should not exceed 1 per cent of the total to be raised in the United States. For example, if the Red Cross asked for $100,000,000 from the American people Washington's share would be $1,000,000.

No protest has been heard against that part of the state council's quota plan, but growing objection is noted to its scheme for dividing the 1 per cent between the various counties. The Spokane county council of defense adopted a resolution asking the state council to reopen the whole quota question, and the state council, at its meeting in Seattle on July 23, appointed a committee of five to weigh protests.

The state council's formula for determining what share of the war fund should be contributed by each county takes the three factors of equalized assessed valuation, school population and bank deposits. Objection is made that under this plan King and Pierce counties (including Seattle and Tacoma) will not contribute in proportion to their wartime benefits growing out of shipbuilding and other government manufacturing and the distribution of great sums of money at Camp Lewis.

It is pointed out that the statistics of equalized assessed valuation apply to pre-war values; that the war has added enormously to real estate values in Seattle and Tacoma, while land values in many of the other counties have been lowered by the war.

It is further pointed out that the school census is also an unjust factor for determining quotas, as schools are a liability, not an asset; that the smaller counties, in particular, have been drained of men who have taken jobs in the shipbuilding plants and other war industry factories.

The minutes of the meeting of the state council at which the county quotas were apportioned show that only six members were present and that four of the six were residents of Seattle. The farming counties had no representation.

The committee of five appointed by the state council to hear protests has not yet named a date for the hearing, but one member, A. L. Rogers, of Waterville, suggests that the hearing be held at some central point like Wenatchee.

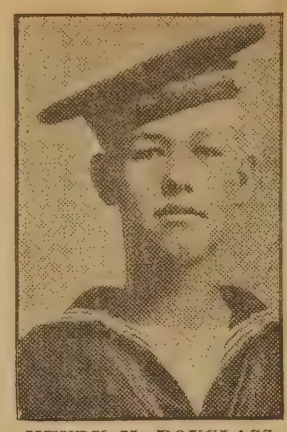
**Values It Highly.**

I herewith enclose $.50 to renew and extend my subscription to the Washington Farmer, which I value highly, the war pictures and news especially, but all is good.

MRS. G. W. DOUGLASS.
South Prairie, Wash.

# Washington Boys in War Service

From the Twice-a-Week Spokesman-Review.



**HENRY M. DOUGLASS, Hartline, Wash.**—Enlisted in the navy August 19, 1915. He was discharged by purchase on December 15, 1915. He then reenlisted in the North Dakota National guard on June 22, 1916, and served on the border to December 22, 1916. He is now stationed at Manila, P. I.



**ALMIRON ARMSTRONG, North Yakima, Wash.**—As a member of Company E, first replacement regiment of engineers, Washington Barracks, Washington, D. C., he has received the badge which is awarded to marksmen, and expects to sail very soon for France. He is the son of Mr. and Mrs. J. H. Armstrong.



**CAPT. G. A. ROSS, Naches Valley, Wash.**—In 1912 joined the national guard, Company E, of North Yakima. He served with Company E in Calexico. Later, he tried for a commission in the regulars. He is now commander of the waterfront guard, pier 58, in New York city. His parents live in Naches Valley, Wash.

## Pastures Cut Milk Supply.

Reports from a number of districts throughout the state indicate that the extremely dry weather of the past several weeks has so cut down pastures as to reduce the milk output seriously. The reduction in pasturage has proved one of the greatest problems of the dairymen, as he has been compelled to resort to other feeds to maintain his industry. The shortage and the unusually high prices of these other feeds have made it extremely difficult for him to operate without loss. One result of this condition has been the feeling of a real milk shortage in many localities.

**Invents Folding Life Raft.**

A folding life raft that automatically opens itself when thrown into the water is an Englishman's invention.

**Cash Business for China.**

Chinese business men of late years have been conducting their affairs more and more upon a cash basis.





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More today than ever keep your hogs well and strong by using
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*Peyton Brand*
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10c a pouch—*and worth it*

*Gravely lasts so much longer it costs no more to chew than ordinary plug*

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Danville, Virginia

# News for Breeders

A record of over 510 pounds of fat (600 pounds of 85 per cent butter, or 637.5 pounds if figured on an 80 per cent basis), has been made by Poppy's Grace, a Jersey heifer with first calf, owned by F. E. Lynn, Perrydale, Ore. The heifer is the first daughter of Mr. Lynn's new bull, St. Mawes' Golden Poppy, to freshen. This bull is a son of St. Mawes Poppy, that holds the Jersey butter record west of the Mississippi river. Mr. Lynn has three more of his daughters on test, and is satisfied at the fine showing they are making. Nashville Susie, grand champion at the P. P. I. E. stock show, is well along on an official test, and making a fine record.

F. A. Doerfler of Silverton, Ore., has a 15-year-old Jersey cow that has recently made a world's record for milk. Zamolia Nutwood, the cow referred to, made an official record, begun at 13 years, nine months, of 482 pounds of fat and 8788 pounds of milk. She was put on test again at 15 years 48 days. She finished in May with 578 pounds of fat, equal to 680 pounds of butter of the 85 per cent standard, or 722.5 pounds, figured on the 8 per cent basis. Her milk for the year was 10,212 pounds. This is a world's record for milk and second for fat for Jersey cows 12 years old or over. Mr. Doerfler also claims the Oregon record for butter production for senior three-year-old. Foxhall's Amelia Nancy V. made the record, with 698.4 pounds of fat. She is by Mr. Doerfler's former herd bull, now owned by his brother, Jacob Fox. Mr. Doerfler now has five Jerseys on official test. He reports a good demand for breeding stock, in spite of short crops and labor scarcity.

## SHEEP INCREASE.
### Producers See Profitable Year.

D. W. Tomlinson, secretary of the American National Live Stock association, predicts the greatest net return to sheep producers this year in the history of the industry in the United States. He says that the lamb crop, taking the country as a whole, has been unusually good and expresses the opinion that the number of sheep will soon approximate the greatest number on record in the country's history.

He points out that on January 1, 1903, there were nearly 64,000,000 head of sheep in the United States, and that on January 1, 1918, there were approximately 49,000,000. He thinks that the figures for January 1, 1919, will show a big increase over those of the present year, though it is doubtful in his mind if the number will reach the total of 1903.

Speaking of the sheep industry, Mr. Tomlinson says that even at the present high prices, sheep men are not making more than reasonable profits. "There is no profiteering in the business such as it has been charged there has been in other commodities, since the war began," he says. "The raising of sheep is precarious. A good example was shown in 1916, when there were great losses during the hard winter. That winter, because of severe weather and the lack of feed on the ranges, the sheep men had to buy at high prices. Hay or straw cost them on an average $22.50 a ton and in some instances as high as $50 a ton if the haul was long. Such things as the price of labor, herders and shearers also must be taken into consideration. Herders now demand as high as $75 a month and shearers more than $30 a day."

## Poland China Futurity.

Clymer, R. W. Hogg's Poland China senior herd boar, near Salem, Ore., will be eight years old this fall. Clymer was once grand champion at the Oregon state fair, and second at the Panama-Pacific stock show at San Francisco. Mr. Hogg has a very nice lot of spring pigs and will show in the Oregon Poland China futurity, which is assured and will be a great show at this fall's fair. H. A.

## Light Hogs Are Popular.

To acquaint hog growers of the United States with new conditions brought about by foreign demand, the food administration has outlined the present situation and possible developments. Last fall, owing to the large amount of soft corn, there was a general heavy feeding of hogs, with a consequent large increase in their weight when they arrived at market. Foreign orders were filled with fatter and heavier hogs than the European population had been accustomed to, and foreign buying agencies now request a return to the customary weights.

From the present outlook, swine producers may anticipate preference for lighter weights of hogs. This country is not likely to have to repeat any request for heavy feeding.

## Secretary Ayrshire Association.

At a meeting of the board of directors of the Ayrshire Breeders' association, held at the Manhattan hotel, New York, July 8, 1918, James G. Watson, in charge of the extension activities of the association, was elected secretary and treasurer, as successor to the late C. M. Winslow.

## British Cow's Record.

Eske Hetty, a Friesian cow, claimed to be giving 10 gallons of milk daily, was sold recently for $18,375 at Heybridge. Essex, it is reported. Eske holds the British record of 2410 gallons of milk in a year. The sum for which she was sold is the highest price ever paid for a Friesian cow. Milk in London now is selling at 14 cents a quart.

## DUROC-JERSEY SWINE

**OVER 150 SPRING PIGS.**
Sired by our grand champion Richards Defender, Richards Pathfinder and Cherry King Orion Jr., and out of our big type prize winning sows.
In the last three years at the Utah and Idaho state fairs our hogs won 76 champion and first prizes.
Can furnish unrelated pairs. Satisfaction guaranteed or money refunded. Priced very reasonable.
**Richards Live Stock Company, Virginia, Ida.**

### Ioka Farm Durocs

One excellent boar at breeding age. Bred gilts and weanling pigs of either sex.

**DOERFLER BROS.** Silverton, Oregon.
A. N. DOERFLER, Mgr.

**REGISTERED DUROC-JERSEY HOGS.**
Some good spring litters Richards Defender and Pathfinder breeding; big type. Send out nothing but high class stock. Guaranteed to please. Write me for prices on these pigs.
**ERIK W. OLSON,** Virginia, Idaho.

**OTTO'S DUROC JERSEYS.**
Get in line for a real boar pig for Sept. delivery. Also gilts and sows bred and open. The kind that is up to date.
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Registered Duroc-Jersey hogs. Inspection invited. Correspondence solicited.
**H. C. POLLY.** Route 3, Burley, Idaho.

**DUROCS.**
Boars and open or bred gilts of excellent breeding.
**E. E. PRICE, CABINET, IDAHO, OR**
**JAMES N. PRICE.** Yakima, Wash.

## POLAND CHINA SWINE

### Big Type Poland Chinas

Peter Mouw and John B. Lawson strains. Young boars and bred or open gilts. Good individuals.

**CLIFFORD RIGGS,** Touchet, Wash.

**GREENLEAF STOCK RANCH.**
Big type Poland China, either sex, for sale at all times.
**Wilson Bros., A. L. Wilson, Mgr.**
Greenleaf, Idaho.

**BIG TYPE POLAND CHINAS.**
Herd headed by Sammy (79833).
Correspondence Solicited.
**Fruitland Stock Farm, C. Royston, Mgr.**
Payette or Fruitland, Idaho.

## BERKSHIRE SWINE

### Berkshire Hogs for Sale

Have a number of sows, 18 months old; will farrow second litter this fall. Also young gilts and boars of all ages; all from prize winners. Write for prices.

**EARL WOOD.** Silverton, Oregon.

### Kintyre Farm Berkshires

Weanling pigs, bred sows, service boars.

**CLARK BROS.** Yakima, Wash.

### Riverby Orchard Berkshires

Riverby Orchard Berkshires won 12 out of 15 first prizes at the Washington state fair, 1916, also many prizes, including grand champion sow at the Panama-Pacific world's fair. We offer for sale a few good boars and young sows.
**D. C. BUNN,** Prosser, Wash.

# Breeders' Department

## JERSEY CATTLE

### High Producing Jersey Stock

**Golden Maid's Prince,** sire of three Register of Merit daughters. One, beginning at 1 year 10 months, produced 341.27 pounds 85 per cent butter in one year; two junior yearlings, 480.40 and 450.08 pounds. Five more, over six months on test, will average over 600 pounds. He was grand champion Oregon State fair, 1913.

**Monmouth Noble**—4 Register of Merit daughters. Three 2-year-olds produced 482.10, 401.30 and 377.07 pounds butter, and one, beginning at 1 year 10 months, 427 pounds.

**ABOUT 25 HEIFERS**
From 8 months to 2 years old. Several to freshen this fall. All daughters of above bulls and nearly all out of Register of Merit cows. Heifers are well grown, typy, best of udders and some are extra fine show animals. Write for full particulars or call and see them. Will be sold very reasonably.
**WM. SCHULMERICK,** Hillsboro, Ore.

### TWO RICHLY BRED JERSEY BULLS

Dropped August 22 and November 28, 1917, both sired by a son of St. Mawes Susie, whose official record at 10 years old is 1012 pounds 85 per cent butter in a year. One dam is out of St. Mawes Mabel (660 lbs. butter), and she by Rosaire Olga Lad, sire of over 20 register of merit daughters, including St. Mawes Beauty, 870 lbs. butter as a junior 3-year-old. The other dam is by Poppy's St. Mawes, son of St. Mawes Poppy, 1120 lbs. butter.
Both solid color, cows were bred when I bought them and they have all the productions back of them that made the Ed. Cary herd famous. Will be sold far below their value.

**R. McCormack, Florence, Ore.**

### Rose Lawn Jerseys

The Island bull (Rosy's Jolly Golden Fine 135028) at head of herd. Bulls for sale out of Register of Merit and high-testing dams. Bred right, of right type; priced right.

**S. H. KAYLER**
Twin Falls, Idaho.

## SHEEP

### SHEEP FOR SALE

Registered Shropshire, Oxfords, Lincoln, Hampshire and Cotswold rams; 50 head registered Shropshire ewes; 3000 stock ewes, Lincoln, Cotswold and Shropshire breeds; 500 ewes, lambs, Cotswold and Lincoln ram lambs. Write for prices.

**EARL WOOD.** Silverton, Oregon.

## SHROPSHIRE SHEEP

### Shropshire and Hampshire Rams

Registered stock. Spring lambs and yearlings. No ewes for sale.
**GRANT B. DIMICK, Oregon City, Ore.**

**SHROPSHIRE SHEEP.**
**SHORTHORN CATTLE.**
Choice yearling and lamb rams. A few high class young bulls.
**FELZER BROS.,** Tangent, Ore.

## HEREFORD CATTLE

### Highland Stock Farm

offers for sale Hereford bulls, 1 or 2 years old. One or a carload.
**PLATT BROS.** Genesee, Idaho.

## SHORTHORN CATTLE

**REGISTERED SHORTHORN COWS.**
Young bulls and heifers, sired by Scotch bulls; liberal terms.
**CALDWELL CATTLE CO., Caldwell, Idaho.**

## ABERDEEN ANGUS

### Aberdeen Angus Cattle

**A. H. EAGLESON & SONS.**
Boise, Idaho.

## HAMPSHIRE SWINE

### Hampshire Hogs

have won every feeding contest entered since 1914. We are booking orders for weanling pigs. Our blood lines can not be beat.
Trios our specialty.
**TUTTLE BROS.** Asotin, Wash.

## TAMWORTH SWINE

**ROUND KNOLL RANCH NO. 3.**
Herd headed by Knoll Slope Colonel, assisted by Jolly Lad IV. Correspondence solicited.
Bliss, Idaho.

### From High-Producing Ancestry

Registered Jersey bull, eight months old, light fawn, from register of merit dam. Sire St. Mawes Noble. Good straight type. Price very reasonable.
**J. C. BROWN & SONS,** Shedd, Ore.

**FOR SALE VERY REASONABLY**
or exchange, registered Jersey bull, Jonquil of Lebanon, 134649, dropped April 18, 1915. Also a yearling, Taurus of Lebanon, 155275, dropped Feb. 2, 1917. Both of these have good pedigrees.
**V. K. FROULA, R. F. D. 3, Lebanon, Oregon.**

## HOLSTEIN CATTLE

### 365-DAY HOLSTEINS

24,667 lbs. milk—1026 lbs. butter—is the S. O. advance registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.

THE HERD WITH YEARLY RECORDS.
**WESTERNWOLD RANCH, Prineville, Ore.**

### HOLSTEINS

Steno Farm is now offering a few high class reg. Holstein bull calves. Out of ARO cows and sired by one of the finest bulls in the west. Priced right.
**STENO FARM,** C. F. Williams, Mgr.
Mead, Wash., R. No. 2.

### Registered Holsteins

Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.
**H. R. BOOMER.** New Plymouth, Idaho.

### HOLSTEINS

Well-bred young bulls for sale.
**THOS. CARMICHAEL.** Gaston, Ore.

**REGISTERED HOLSTEINS.**
Bull calves for sale, with good A. R. O. backing.
**BEEBE BROS., R. F. D. 2, Rupert, Idaho.**

## AYRSHIRE CATTLE

### Elbow Ayrshire Dairy

Young bulls out of heavy-producing dams, sired by Willowmoor Sentinel 16th, a bull with big A. R. records on both sides.
**J. R. MABEN, Reedsport, Ore.**

**EDGEWATER FARM**
Only one bull left, calved Dec. 14, 1917, with high producing dam; grand dam and great grand dam both world's record cows.
**ELBERT M. CHANDLER, Burbank, Wash.**

## GUERNSEY CATTLE

### Yearling Guernsey Bull

GOLD FINDER'S TITAN, out of imported dam; splendid milker. A sturdy, vigorous young bull, with strong individuality and splendid breed type.

**HAWLEY & SON, McCOY, Ore.**

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, Aug. 5. —Corn shot skyward today impelled by fear of crop damage due to widespread record breaking heat and to failure of expected rains. The market closed strong at the topmost level, 4 1-4c to 4 3-8c net higher, with September $1.62 3-4 to $1.63, and October $1.62. Oats gained 1-5-8c, to 2 1-8c. The outcome in provisions varied from 10c decline to a rise of 7 cents.

Excited buying rushes hoisted the corn market at the opening. Reports of scorching winds and lack of moisture were augmented by forecasts that indicated that no immediate relief was in prospect. All other price making factors were temporarily ignored, including even the war news. Brief transactions caused by profit taking took place at intervals during the session, but as soon as the market showed a fresh scarcity of offerings the quotations soared again without a check until the gong cleared the pit

Oats caught the buying fever from corn

Provisions were listless. Lard responded a little to the bullish influence of corn, but pork and ribs were weakened by the nearness of the government maximums

Chicago Futures

| | Open. | High. | Low. | Close |
|---|---|---|---|---|
| Corn— | | | | |
| Sept. | 1.59 | 1.63 | 1.59 | 1.62¾ |
| Oct. | 1.59 | 1.63 | 1.59 | 1.63 |
| Oats— | | | | |
| Sept. | .67 | .67¾ | .67 | .68¾ |
| Oct. | .68 | 69½ | .68 | .69½ |
| Pork— | | | | |
| Sept. | | | | 44.85 |
| Lard— | | | | |
| Sept. | | 26.75 | 26.70 | 26.70 |
| Ribs— | | | | |
| Sept. | 24.95 | 24.95 | 24.85 | 24.87 |

Cash Quotations.

CHICAGO, Aug. 5.—Corn, No. 2 yellow, $1.76@1.77; No. 3 yellow, $1.67@1.70; No. 4 yellow, $1.60@1.61. Oats, No. 3 white, 68@69 1-4c; standard, 69@69½c. Rye, No. 2, $1.58. Barley, 99c@1. Timothy, $6@8.50. Clover, nominal. Lard, $26.65. Ribs, $24.25@25.

Pacific Northwest Grain.

PORTLAND, Ore., Aug. 5.—Grain, August delivery—Oats, No. 2 white feed, $59 bid. Barley, standard feed, $54 bid; barley A, $55 bid. September delivery: Oats, No. 2, $58.50 bid. Barley, feed, $53 bid; Barley A, $54.50 bid. Oats, No. 3, $52 bid. Oats, clipped, $52 bid. Corn, yellow, $68 bid. Corn, mixed, $65 bid; eastern oats and corn in bulk. Oats, No. 3 white, $52 bid. Oats, 38-pound clipped, $52.50 bid Corn, No. 3 yellow, $68 bid. Corn, No. 3 mixed, $65 bid

Minnesota Grain.

MINNEAPOLIS, Aug. 5.—Wheat—Receipts, 427 cars; compared with 170 cars a year ago. Cash No. 1 northern, old, $2.34. Corn, No. 3 yellow, $1.62@1.66. Oats, No. 3 white, 69@70c. Flax, $4.46@4.49. Clour, unchanged. Shipments, 55,590 barrels. Barley, 92c@$1.10. Rye, $1.82@1.84. Bran, $29.31

## Live Stock Quotations.

At Omaha.

OMAHA, Neb., Aug. 5.—Hogs—Receipts, 6000; market steady to 10c higher. Heavy, $18.10@18.90; mixed, $18.55@18.65; light, $18.40@19.40; pigs, $15@18; bulk of sales, $18.25@18.70.

Cattle—Receipts, 16,500; market slow to steady, 15c to 25c lower; native steers, $12.40@18.40; cows and heifers, $8.245@13.25; western steers, $10.50@16.50; Texas steers, $9.50@12.50; range cows and heifers, $8@11.50; canners, $7@8; stockers and feeders, $7.50@12.50; calves, $10@13.50; bulls, stags, etc., $7@11.50.

Sheep—Receipts, 7700; market steady to strong; wethers, $12.50@13.50, ewes, $10.50@13; lambs, $16@17.25; yearlings, $13@14.50.

At Chicago.

CHICAGO, Aug. 5.—(United States bureau of markets)—Hogs—Receipts, 33,000; strong at Saturday's best on good hogs; best slow and lower; butchers, $19.10@19.70; light [illegible] rough, $17.50@17.90; bulk of sales, $18.10@19.65; pigs, good and choice [illegible]

Cattle—Receipts, 20,000; good to better steady; others slow and lower. Calves steady to 25c lower. Beef cattle good, choice and prime, $17.50@18.75; common and medium, $10.50@18.75; common and medium, $10.50 heifers, $7.25@14.25. Canners and cutters, $6.25@7.25; stockers and feeders, good choice and fancy, $10@13; inferior common and medium, $7.75@10; veal calves good and choice, $16@16.55.

Sheep—Receipts, 17,000; native lambs weak; western lambs held higher; bidding steady

At Portland.

PORTLAND, Aug. 5.—Cattle higher—Receipts, 1250. Steers—Prime, $11.75@12.75; good to choice, $10.75@11.75; medium to good, $9.50@10.75; fair to medium, $8.50@9.50, common to fair, $5.50@8.50; cows and heifers choice, $6@8.50; medium to good, $6@7.50; fair to medium, $5@6; canners, $3@5; bulls, $5.50@7.50; calves, $8.50@11.50; stockers and feeders, $6@8.

Hogs highest on record; receipts, 1150. Prime mixed, $18.85@19.15; medium mixed, $18.65@18.85; rough heavies, $17.35@17.65; pigs, $16@16.50; bulk of sales, $18.65@18.75.

Sheep steady. Receipts, 1300. East of mountain lambs, $13@14; valley lambs, $12.50@13; yearlings, $9.50@10; wethers, $8.50@9.50; ewes, $6@8.

## Open New Stock Field

SPOKANE LIVE STOCK RUN.

| | Cattle | Calves | Hogs | Sheep |
|---|---|---|---|---|
| Saturday, August 3. | 90 | 5 | 156 | ... |
| Friday | 9 | .. | 49 | 37 |
| Thursday | 188 | 29 | 127 | 29 |
| Wednesday | 581 | 38 | 126 | 283 |
| Tuesday | 227 | 5 | 145 | ... |
| Monday | 307 | 51 | 79 | ... |
| Week ago | 12 | 1 | 198 | ... |
| Year ago | 82 | 1 | 11 | ... |
| Two years ago | .. | .. | .. | ... |

SPOKANE, Wash., Aug. 3, 1918.—Receipts of live stock at this market for the week ended August 3 were 1371 cattle, 126 calves, 505 hogs, 1630 sheep and 31 horses and mules, totaling 70 carloads.

New Fields Opened.

Contrary to the belief of many the present run of cattle at this market is not altogether due to dry pastures and drouth. Should a falling off in the supply be affected at this time the demand here would be found wanting. We have opened new fields and are getting cattle from these districts that are new to Spokane, where good grass and abundant crops flourish, says a statement by the stock yards. In order to keep the supply here at the present degree and greater we are forced to expand our energies into territories where competition by a western market seemed impossible heretofore. Further proof of the consistency of this market is the steady prices that are invariably maintained. Were we overburdened or flooded with cattle prices would no doubt decline, but, unlike other markets, we have never met with a radical decline, and when we were forced to lower levels we stubbornly submitted to same from effect of sharp reverses on other markets.

Prices on Hogs Advance.

With a fair run of hogs on the market today prices were advanced 25 cents, reaching a new top for this time of year of $18.35. Quality fair, no strictly choice on the market. Quite a demand for feeder hogs, a goodly number selling today at $16.50. As compared with a week ago prices show an advance of 50 to 60 cents.

General hog range:

| | |
|---|---|
| Prime mixed | $18.35@18.60 |
| Medium mixed | 18.10@18.35 |
| Rough heavies | 17.00@17.40 |
| Pigs | 16.50@17.25 |
| Stockers and feeders | 14.50@16.50 |
| Bulk of sales | 18.35 |

Receipts of Cattle Light.

Cattle receipts today were light both in numbers and weight, the bulk of the arrivals being yearling steers and heifers, the thin, half-fat kinds. The market was generally steady. There has been no change in prices as compared with a week ago. The top in the steer line for the week was $13.50 for one steer weighing 1700 pounds, several loads of the good to best kinds going at $10, $11 and $12.

Range of prices:

| | |
|---|---|
| Fat steers, prime | $11.75@12.25 |
| Fat steers, good to choice | 11.00@11.75 |
| Medium to good steers | 9.25@10.00 |
| Fair to medium steers | 8.00@ 9.00 |
| Common to fair steers | 5.50@ 8.00 |
| Choice cows and heifers | 8.00@ 8.50 |
| Good cows and heifers | 6.00@ 7.00 |
| Common to medium | 4.75@ 6.00 |
| Canners | 3.00@ 4.75 |
| Bulls | 5.00@ 7.50 |
| Calves | 7.00@10.50 |
| Stockers and feeders | 6.00@ 8.00 |

Sheep Steady.

No sheep arrivals today. The market is steady at the following:

| | |
|---|---|
| Prime lambs | $14.00@14.50 |
| Good lambs | 12.50@13.00 |
| Prime yearlings | 8.75@10.00 |
| Prime wethers | 7.75 9.00 |
| Best mutton ewes | 5.00@ 8.00 |

Saturday's shippers:

Hogs—E. Oppenheimer, Arden, Wash., 1 load; W. Jain, Genesee, Idaho, 1 load

Cattle—W. T. Honeyfinger, Palkena, Wash., 2 loads.

Mixed stuff—E. Bain, Colville, Wash., cattle, calves and hogs, 1 load.

Small lots—Doust, Stradley, W. C. Powell

Representative Sales.

STEERS

| No. | Ave. lbs. | Price. |
|---|---|---|
| 1 | 940 | $7.50 |
| 12 | 750 | 7.25 |
| 6 | 901 | 7.00 |
| 3 | 647 | 6.00 |
| 2 | 910 | 5.75 |
| 19 | 896 | 5.25 |

COWS.

| No. | Ave. lbs. | Price. |
|---|---|---|
| 1 | 1135 | $6.50 |
| 4 | 1045 | 6.00 |
| 19 | 934 | 5.60 |
| 4 | 1026 | 5.50 |
| 6 | 964 | 5.00 |
| 1 | 840 | 3.00 |

HEIFERS.

| No. | Ave. lbs. | Price. |
|---|---|---|
| 20 | 470 | $5.00 |

CALVES

| No. | Ave. lbs. | Price. |
|---|---|---|
| 3 | 170 | $8.50 |
| 2 | 235 | 4.75 |

HOGS

| No. | Ave. lbs | Price. |
|---|---|---|
| 64 | 219 | $18.35 |
| 16 | 191 | 18.10 |
| 21 | 163 | 17.50 |
| 17 | 338 | 17.35 |
| 37 | 116 | 16.50 |

## Spokane Market.

Wholesale Meats.

**Beef**—Beef steers, 12½@20c lb; cow beef, 11@15c lb; heifers, 15@16c lb; best loin, 25@31c lb; steer chucks, 11c lb; square chucks, 13c lb; prime ribs, 22c lb; rump and round, 19@20c lb.

**Mutton**—Breakers, 21c lb; wethers, 20c lb.

**Lambs**—Diamond T. C. lambs, 27c lb; lambs, 26@27c lb.

**Pork**—Packer dressed hogs, 27@28c lb; pork loins, 33@34c lb; legs, 31c lb; shoulders, 25@26c lb; leaf lard, 25c lb; tenderloins, frozen, 49c lb; spareribs, 15c lb; country dressed hogs, with head on, 22c lb to producer; country dressed veal, 13c lb to producer.

**Smoked Meats**—Washington hams, 35½c lb; T. C. hams, 36½c lb; T. C. bacon, 50c lb; Washington bacon, 40@44½c lb; picnics, 24c lb; lean backs, 33@34c lb.

**Star Brand**—Hams, 36½c lb; Shield hams, 34½@35½c lb; picnics, 24c lb; bacon backs, 34c lb; Star bacon, 47@51c lb; Shield bacon, 40@44½c lb; Simon Pure lard, $17.50 case; Shield lard, tierces, 27c lb; White Cloud compound, tierces, 23¾c per lb.

**Dry Salt Meats**—Clear bellies, 28¾c lb; loin backs, clear, 31c lb.

**Lard**—Tierces, 27c lb; $13.87@15 case; Diamond T. C. pure leaf lard, $16 case, $8.15 half case; Snowcap compound, tierces, 23c lb.

POULTRY.

**Live Poultry**—Live hens, 20c lb; spring chickens, 22c lb; roosters, 10c; ducks, 20c lb to producers, f. o. b. Spokane.

GASOLINE, LINSEED OIL, ETC.

**Gasoline**—Red Crown, bulk, 25c gal, cases, 35c gal; Shell, 25c gal; refined oil (Pearl), bulk, 14c gal, cases, 23c gal; Eocene, 15½c gal in bulk, cases 26½c gal; engine distillate, 17c gal, bulk.

**Linseed Oil**—Raw, bbl, $2.02 gal, cases $2.20 gal; boiled, bbl, $2.04 gal, cases $2.22 gal.

**Turpentine**—Bulk, 79c gal, cases 99c gal.

**White Lead**—Strictly pure white lead in oil, ton lots, 13¼c lb; 50-lb lots, 14c.

**Rice**—Fancy head, $7.50@9.50 cwt.

**Flour**—Bluestem, $9.40; Blend, $9.40; graham, $8.65 bbl., 49-lb. sacks; whole wheat, $8.85; eastern rye, $9.90; eastern rye meal, $10.30; oat flour, $12.15, 4 45-lb. sacks.

**Oats**—$67 ton whole, $70 rolled, delivered in city; steam rolled No. 2, $65 ton.

GRAIN AND FEED.

**Corn**—$72 ton; cracked corn, $74 ton.
**Barley**—Rolled, $70 per ton.
**Oil Meal**—$75 per ton.
**Hay**—Timothy, $38 per ton delivered, $37 by carload; alfalfa, $30 per ton delivered, $29 by carload.

## Seattle Market.

SEATTLE, Aug. 4.—The pear crop of Washington will be about normal, but the quality is over that of the five-year average and is selling here at $2.50@2.75, due to fears of price cutting in California fruit and possible oversupply. It is expected that this market will absorb about two carloads a day from now on.

The forces in the potato trade are endeavoring to extricate themselves from the mass of confusion that hangs over current and fall trade and to place themselves in a firm position to operate. It is everywhere conceded that spuds will bring $25 to $30 at digging time. Dealers do not express their real feelings when speaking of anything higher, hoping to be able to buy for less. In view of past experiences of growers, however, wholesalers again repeat that if digging time finds a $25 and $30 market holders should sell rather than to take chances of a doubtful future.

The fresh ranch egg market is firm, with an occasional undertone of advance. While receipts are fair, shrinkage due to hot weather and long holding in the country is running 10 per cent. Jobbers have been compelled to bring in California stock to maintain their trade orders.

Purchasing Prices.

Eggs—Select ranch, 47@48c per doz; Oregon, eastern Washington and Idaho, 37@40c per doz.

Butter—Fresh dairy, 30c per lb; butter fat, 56c per lb; baking, 30@35c per lb; raw milk, $2.75 per cwt.

Poultry—Broilers, live, 1918, 30c per lb; hens, 3½ to 4 lbs and up, 27c per lb; under 3½ lbs, 25c per lb; old roosters, 17@18c per lb; ducks, live, fat, 25c per lb; squabs, large, $3.50 per doz; geese, fat, live, 23c per lb; Belgian hares, 19c per lb; guineas, $7 per doz; turkeys, young toms and hens, dry picked, 10 lbs and up, 30@33c per lb; smaller birds, 25@30c per lb.

Hogs—Light, 21c per lb; heavy, 19@20c per lb.

Beef—Steers, fat, 14@15c per lb; heifers, fat, 14@15c per lb; cows and bulls, 13@14c per lb.

Veal—Fancy light, 19c per lb; do heavy, 13@18c per lb.

Mutton—Fat, 22c per lb; spring lamb, fat, dressed, 25c per lb.

Hides—Salted, 14@15c per lb; flint-dry hides, 28c per lb; salt kip, 15c per lb; green hides, 12c per lb; green calf, 30c per lb; dry calf, 6 lbs and under, 35c per lb; bulls and dry salts, 4c per lb less than dry hides; green bulls, 9c per lb; salt bulls, 11c per lb; salted horsehides, $1.50@4 each; clean, long wool western Washington flint-dry pelts, 42c per lb; heavy to clean, eastern Washington flint-dry pelts, 35@40c per lb.

Wool—Puget sound, clean, 50@55c per lb.

Tallow—No. 1, 12½c per lb; No. 2, 6@8c per lb.

Jobbing Prices to Dealers.

Apples—Washington, $2@2.75 per 40-lb box.
Apricots—$1.75@1.85 per crate.
Pears—Washington, $2.75 box.
Peaches—Oregon, $1.35 crate.
Potatoes—Puget sound, $45 per ton; eastern Washington, $60 per ton; local, new, 2 3-4@3c lb.

Hay and feed quotations, city prices, truckload delivery, are as follows:

Feed—Mill run, mill door basis, $35.60@36.60 ton; scratch feed, $82; all-grain chop, $75; oats, $72; sprouting oats, $77; rolled oats, $74; whole corn, $80; cracked corn, $82; rolled barley, $67; clipped barley, $70; alfalfa meal, $41; oil meal, $72; egg mash, $66.

Hay—Eastern Washington timothy, $37 per ton; do double compressed, $38@39; alfalfa, $32; straw, $16.

## Butter and Eggs.

PORTLAND, Ore., Aug. 5.—Butter—Prints extras, 52c; cubes extras, 48c. Butterfat, Portland delivery, No. 1 sour cream, 55c.

SAN FRANCISCO, Aug. 3.—Butter—Solid cubes, 52c. Eggs and cheese, unchanged.

HOPS.

NEW YORK, Aug. 5.—Hops, dull. State, medium to choice, 1917, 35@43c; 1916, nominal; Pacific coast, 1917, 20@23c; 1916, 14@16c.

HIDES WOOL FUR




RUBBER METAL SACKS

We pay full market value, correct weight and assortment, prompt returns. Write for prices. We want your business.

PACIFIC HIDE & FUR DEPOT

Joseph Thiebes and C. T. Symmes,
1101-09 Railroad Ave., Spokane, Wash.

Help Save the Canadian Crops

When Our Own Harvest Requirements are Completed

United States Help Badly Needed Harvest Hands Wanted

Military demands from a limited population have made such a scarcity of farm help in Canada that the appeal of the Canadian government to the United States government for

Help to Harvest the Canadian Grain Crop of 1918

meets with a request for all available sssistance to go forward as soon as our own crop is secured.

The allied armies must be fed and therefore it is necessary to save every bit of the crop of the continent—American and Canadian. Those who respond to this appeal will get a

Warm Welcome, Good Wages, Good Board and Fine, Comfortable Homes.

A card entitling the holder to a rate of 1 cent per mile from Canadian boundary points to destination and return will be given to all harvest applicants. Every facility will be afforded for admission into Canada and return to the United States. Information as to wages, railway rates and routes, may be had from the

UNITED STATES EMPLOYMENT SERVICE

Branches at Aberdeen, Bellingham, Everett, Seattle, Spokane, Tacoma, Walla Walla, Wenatchee or Yakima

## Farmers Use Automobiles.

In a report recently issued by M. O. Wilkins, registrar of automobiles for Washington and Oregon, he shows that there are 106,890 motor cars in Washington. It is estimated that 65 per cent of these cars are owned and operated by the farmers of this state. This would mean that 69,478 cars are largely used in carrying on the agricultural work of Washington, since practically all farmers' cars are purchased for use in a "service" rather than a "pleasure" capacity.

An investigation made by the Washington Farmer a short time ago shows that not only is the average farmer's car used primarily for business purposes, but that a majority of such cars are used every day in transporting farm products to market, in supervising the work of the farm or in bringing supplies from market to farm. In the evenings and on Sundays the car affords opportunity for restful diversion and relaxation which certainly has a value in the added efficiency given to the farmer and his family, a factor the economic value of which can not be denied.

## Dairy Association Formed.

With a membership of about 135 dairymen, who own approximately 2500 cows, the Grays Harbor Dairymen's association has been organized. The board of trustees is as follows: John Murphy, Satsop valley; W. J. Wharton, Satsop valley; Ransom Hinkler, Upper Satsop valley; Lee Foster, Chehalis valley; David Day, Porter; E. E. Sweitzer, Oakville; J. Porter, Porter; O. M. Gordon, Malone, and W. F. Darby, Montesano.

### Speed in Wireless Signals.

It takes but one-twentieth of a second for a wireless signal to pass from Washington to San Francisco.

**Want Ad Rates 30c Per Line**

Want ads are run at this rate in The Washington Farmer and i t s associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

# Want Ads

Send for card giving lower rates for ads running one month or longer.

**How to Figure Cost of Ads**

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

### EDUCATIONAL 45

EARN MORE. ENROLL ANY TIME, AT Behnke-Walker, Portland, northwest's biggest business college, because best. Graduates assured positions. Write for catalogue.

### TEACHERS' AGENCIES 46

TEACHERS REGISTER WITH B. F. WESTmore, Mgr. Hazard Teachers' Agcy. $1 registers you at three offices. 911 Old Nat'l Bank bldg., Spokane, Washington.

ALBERT TEACHERS' AGENCY, PEYTON bldg., Spokane. We need more teachers.

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AUGUST 15, 1918

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Use Less than Two Pounds per Month per Person.

United States Food Administration

# Rain Saved Skagit County Oats

## Increase in Milk Price Encourages Dairymen on Puget Sound; Pasture Is Poor on the Eastern Side.




MT. VERNON, Skagit County, Wash., Aug. 5.—The hay harvest is progressing well, in fact most of the hay is in the barns. There was very little damage done hay from the recent rains, but other crops benefited immensely. The oat crop was greatly improved, I might say saved, by the rains. The straw is short, but there has been sufficient moisture recently to cause the heads to fill well. Pastures are now freshened up and prospects for after feed on the hay meadows are good. Another encouraging thing is a raise of 35 cents a hundred in the price of milk. It now sells at $2.75, which is considered good for this season of the year even with the prospects of high feed prices next winter. The aphis were causing much damage to most field crops, but the rains destroyed most of these insects. On the whole conditions are much better than a month ago. C. S. PHILLIPS.

### Crop Yield Is Satisfactory.

LA CROSSE, Whitman County, Wash., Aug. 4.—Harvest is well under way and crops are more satisfactory than was expected. While there are fields that are disappointing, most fields are giving satisfactory returns both as to yield and quality. Reports of yields are coming in from 10 to 40 bushels per acre, probably averaging 15 to 20 bushels. The quality is far in excess of 1917, grain testing 55 to over 60 pounds to the bushel. Barley is a light crop and oats almost a failure. Pasture is the poorest in years, and garden and potato crops are both light. Hot weather of early harvest is giving way to cooler weather, and another two weeks of favorable weather will see most of crops safely harvested. Labor, while scarce, has not handicapped the harvesting operations. M. E. SCHRECK.

### Hay Comes Up to Average.

DARRINGTON, Snohomish County, Wash., July 27.—The hay harvest is about over on most farms. The crop in general in this section is about up to normal. We have had electric storms and a generous amount of rain the last 10 days and a few of the farmers who did not rush haying in the fore part of the month got damaged hay. People got along fairly well with what help they could get, but less damaged hay could have been made if help had been more plentiful. The oat crop generally is somewhat light as to straw and grain; also perhaps 75 per cent crop. On some farms it won't make over one-half crop. Spring wheat is looking good, and so are roots of all kinds. Pastures are fairly good now, but they have been short most of the year. The green aphis have not done much damage in this section except on the field peas. They won't make over 25 per cent crop, maybe less. C. B. NEIDERPRUM.

### Crops Average Light.

TWISP, Okanogan County, Wash., July 26.—This section has been hard hit by the drouth this year, the hardest hit that white people have ever known, and all crops are light. Farmers that couldn't irrigate have suffered most; but some that irrigate from creeks have murmured and complained and almost lost control of their upper lip at times. More grain was sown last spring than usual; but most of it will be cut for hay. The price of hay is about 100 per cent higher than at this date last year. Grain is ready to harvest and some that has been irrigated has made a fair yield. Farmers are receiving a good price for their produce and while we are getting a set-back this year, we are not ready to be counted down and out, but will try to get some profit from our experience and use some different farming tactics next year. Fruit is small and the crop away below normal. The labor question hasn't been very serious yet. The price is about 50 per cent higher than last year. A number of young men have been called within the last 10 days, and it is likely that it will affect the labor question for the remainder of the season.
GEORGE LA RUE.

### Grain Crop Is Good.

BICKLETON, Klickitat County, Wash., Aug. 4.—Harvest operations are in full swing here at present, and grain is turning out very well, in spite of the hot winds of a few weeks ago. Fortyfold is going from 20 to 28 bushels per acre. Barley is yielding 20 to 35 bushels. This is combine reports, no stationary threshing has been done yet. I have just finished with my combine and my fall wheat went 23 bushels, and barley 30 bushels. Labor is rather scarce, but by helping each other, and buying harvesters which only require two men to operate them, the farmers are managing very well. Wages for hired help are the highest ever known here, box drivers getting $4 to $5 per day, head punchers $7 to $10, sewers on combines $6. Many small farmers whose grain is affected by hot winds are unable to pay the wages and are getting along the best they can with no help but their families. The above wages include board of course, which the average hired man does not seem to consider, and they are not in proportion to the price the wheat grower gets for his grain. Besides these abnormal wages the price of grain bags here is 28 cents, threshing 30 cents per sack, and hauling wheat to market 30 cents a sack. It costs $40 this year to buy a platform dropper for a header which used to cost $18, and yet some city people say the farmer is getting rich on $2 wheat, when the grain buyer, after slicing off for trash, smut, shrinkage, his 10 per cent margin and a few other things, left us last year $1.50 and $1.60 per bushel. The fruit situation is the poorest in years. Frosts killed nearly everything. What fruit is to be seen here is a few berries shipped in from Vancouver and Yakima. There will be very little fruit for canning and no sugar to can with, so I guess it is up to the housewives to dry what they can and drink their tea and coffee unsweetened.
BERT H. FAULKNER.

### Rain Improves Crops.

VANCOUVER, Clarke County, Wash., Aug. 6.—The crop conditions in the valleys and along the streams are looking considerably better than they did a month ago before the long prayed for shower came, and still there is a decided shortage, especially in the grain line. The early grains have been cut and shocked and in some instances threshed. Plenty of help was available to gather the crops which was done by the farmers changing work. It is a fact that this labor shortage has created a brotherly feeling among the farmers that did not exist before the war. This is a pleasant feature even though we are in the midst of an inhuman and cruel war. Early potatoes are nearly all dug and have proven to be a larger yield than was expected about a month ago. Late potato vines are green and promise to be a fair crop; in places some claim that the average will come up to past years. Threshing machines are in the fields and grain is turning out better than was expected a month ago. The aphis played havoc with the early grain and started in on the late grain, but the rain seemed to put a damper on them. The pea crop was almost a total failure. Green corn has started in to market at 50 cents per dozen and hard to get at that price; and new potatoes are selling at 4 cents per pound. Our food administrator has set a price of one-half cent per pound to be paid by the consumer above the price paid the producer. If there was something of this kind done on all vegetables it might stimulate the gardener. In the nearby sections there are good sized fields of carrots that can not be sold for more than one cent per pound. Beets are scarce, with eggs 55 cents per dozen, and butter 7 cents per pound. There is an indication of a raise in price in the prune belt. There is considerable stir getting the buildings ready for drying in town. Tin shops are turning out tanks, drums and piping and they are talking three cents per pound at the dryer, which will mean a good figure for the finished product. Through the country district there is a tendency to dry not only prunes but vegetables as well.
C. C. BROWN.

### Had Alligator Dinner.

To prove statements made in recent articles written by him that reptiles are good for food, Professor A. M. Reese of West Virginia university, gave an alligator dinner to 24 of his friends here. The dish received the warm indorsement of his guests, among whom were several professors of the university.





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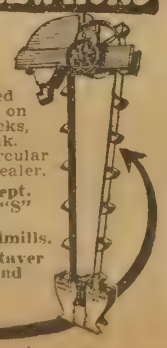
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# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 33 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF August 15, 1918

## Farmers Need Fall Seed Wheat

### *Efforts Are Made To Secure Aid From the Government*

There is great need of seed wheat for fall sowing in the Inland Empire if the increased acreage sought by the government is put in, and a strong effort is being made by leading farmers, farm organizations and commercial organizations looking toward the securing of this seed.

At a meeting of agricultural interests with the agricultural bureau of the Spokane Chamber of Commerce this week the sentiment of the farming interests of the state was expressed in the following telegram to M. H. Houser, northwestern representative of the federal grain buying corporation in the northwest:

"We urgently request your personal assistance to keep fall seed wheat in the country, and not to allow it to be milled or shipped till such time as needs of seed wheat are fully supplied. At our seed wheat meeting today 18 warehouse men expressed their willingness to assist to their entire capacity."

This telegram was signed by T. S. Lane, president Spokane Chamber of Commerce; R. Insinger, chairman agricultural bureau; E. G. Schafer, secretary Washington seed committee; A. D. Cross, state secretary farmers' union, and John C. Lawrence, overseer Washington state grange.

The following telegram, similarly signed, was sent to Senators Miles Poindexter and Wesley L. Jones in Washington, D. C.:

"At a largely attended meeting today of Washington seed committee, agricultural bureau, farmers' union and grange, farmers and country bankers and interior warehouse men, we are instructed to wire you as follows:

"Immediate and liberal assistance needed to supply fall seed wheat to both farmers with credit and farmers without means in parts of Adams, Grant, Franklin, Benton, Lincoln, Douglas and Spokane counties.

"We need binding promise from the United States grain corporation that they will not ship out seed wheat of either last year's or this year's crop until after October 15, because notwithstanding they have been warned that there is not nearly enough fall seed wheat of the necessary kinds for planting, several cars have been shipped to mills and ground. There is imminent danger of profiteering in seed wheat and we urge that grain corporation take matter in hand and buy and store necessary fall and seed wheat.

"We need permission from the railroad administration to ship less than capacity carloads of seed wheat at once to several farmers in western Adams and parts of Franklin and Grant and other counties. A maximum of $300 for a farmer allowed by the department of agriculture and administered by federal land banks is absolutely insufficient, because the farmer with only 160 acres of summer fallow will need at least $750 for seed and feed as there is no feed in that part of the country, and 160 acres in summer fallow is an exceptionally small farm.

"The district mentioned had a light crop last year and partly a failure this year, without feed of any kind, statements of the grain corporation to the contrary notwithstanding. Wherever there is moisture farmers should sow now. The department of agriculture and food administration grain corporation has paid no attention to repeated warning and need of wakening up to the emergency. The farmers of affected districts are unable to present their case in Washington and through us they depend on your well known desire and ability to get relief."

**Farmers Should Get Together.**

It is urged by those active in the movement that farmers discover their needs for seed wheat at once and let the seed wheat committee, of which E. G. Schafer of Pullman, is secretary, know their needs at once. It is almost equally important that those having fall wheat seed for sale let this committee know, so that it may be planted where most needed.

Some aid will likely be received from the government's appropriation of $5,000,000 for the purchase of seed wheat by creditless farmers, but this will serve at best only where the seed can be bought. The big question is how to find the seed needed.

The plans for distributing the government's $5,000,000 appropriation are being worked out at Helena, Mont., by a committee in session there at this writing. For the northwest the loans will be handled through the federal farm loan bank at Spokane. Secretary George C. Jewett of the farm loan bank explains the plan in general as incompletely worked out as follows:

**For Emergency Only.**

"The money has been appropriated by the president from the emergency war fund. It is purely a charity fund and is limited in amount. Districts should take local pride in getting along without it as far as possible as it is intended only for relief in the most aggravated cases. In lending this money, the government is departing from usual loan procedure. In fact, it is doing the opposite to usual banking practice—it is only lending to the man who has no unencumbered real estate, no personal property and no credit at his local bank. If he can possibly get along without this aid, he will not receive any government assistance.

"Applications must be made to Mr. Christie, through our regularly appointed agents, which will doubtless be the national farm loan associations and the commercial banks. The county agents will investigate each application, the nature of the soil and the ability of the farmer to make good his loan. If Mr. Christie approves the loan, it comes to the land bank. If the land bank approves it, a certificate of approval is sent to Mr. Christie and to the farmer. When his ground is planted, and the note is secured by a chattel mortgage or a crop lien, he gets his money. He can secure his seed on the credit afforded by the certificate of approval.

"Loans will be made on the basis of a maximum of $3 per acre, with a maximum to one man of $300. These loans will run until October 1, 1919, with interest at 6 per cent per annum. The land bank must collect. If the farmer's 1919 crop is above seven bushels to the acre he must pay into a guarantee fund to take up possible losses elsewhere a sum of 15 cents per acre."

## Protest Rates

### Would Reduce Freight on Fruits

Representing the public service commissions of Washington, Oregon and Idaho, O. O. Calderhead, rate expert for the Washington commission, has filed a complaint with the interstate commerce commission at Washington, D. C., against the recent 25 per cent advance in freight rates as it affects the freight on fruits and vegetables. The complaint charges that the advance is unjust, unreasonable and discriminatory.

Mr. Calderhead has compiled figures showing that the increase in the freight on fruits increases the cost of shipping from the northwest $2,500,000 a year. He declares that the increased rate places the fruit-growing industry of the northwest in a serious condition. He will soon file a similar complaint covering the 10 per cent advance in the express rate on carload lots of berries, fruit and fish from the northwest.

## WANT $2.46 FOR WHEAT.

### President May Be Considering It.

An unofficial dispatch from Washington, D. C., says that the food administration's advisory committee, dealing with fair prices of grains, flour, feed and other staples, has recommended that President Wilson fix the price of next season's wheat crop at $2.46 a bushel. The same unofficial report says it is understood that Food Administrator Hoover has expressed to the president opposition to the increased price. It is probable that President Wilson will before long issue a proclamation indicating the price to be paid for the 1919 crop. This likely will come early in order to influence the planting of a large acreage this fall.

## Crop Is Good

### Much Food Has Been Produced

Although the July crop report of the U. S. department of agriculture estimates the total wheat production of the U. S. this year at 13,000,000 bushels less than the estimate covering June conditions, the report taken as a whole shows a great production of the foodstuffs of the country. Notwithstanding this, the dry weather and heat combined to cause serious losses to the producer.

In round figures the loss to farmers of this prospective production is roughly estimated at almost $750,000,000, more than $450,000,000 in the principal grain and food crops and $250,000,000 in cotton.

Corn, the country's greatest crop, was the heaviest sufferer from the dry and hot weather of July, losing 171,000,000 bushels in prospective production since the first production forecast was made from June conditions. The monetary loss to corn growers is around $275,000,000. From most every part of the country there came reports that corn this year is from two to three weeks ahead of its average condition, indicating that practically all of the crop will mature before the dates of first frost. That condition should assure the minimum injury from frost damage.

Wheat, the harvesting of which is nearing completion, suffered a loss of 13,000,000 bushels, yet the crop will be much larger than last year's and also bigger than the average of the five years before that.

Drouth and heat made inroads on potatoes, causing a loss of 15,000,000 bushels in the prospective crop, and sweet potato production loss was estimated at half that quantity. A notable exception in the forecasts was that of tobacco, which showed an increase of 41,000,000 pounds in the prospective crop over the forecast made in July.

Production of winter wheat this year was announced today in its preliminary estimate at 556,000,000 bushels.

Spring wheat production was forecast at 322,000,000 bushels from August 1 conditions.

Production of all wheat was estimated at 878,000,000 bushels.

Corn production was forecast at 2,989,000,000 bushels from August 1 conditions.

Other forecasts of production, based on the August 1 canvass, were announced as follows:

Oats, 1,428,000,000 bushels; barley, 232,000,000; rye, 76,700,000 preliminary estimate). White potatoes, 391,000,000; flax, 14,800,000; rice, 41,600,000; hay, 99,300,000; sugar beets, 6,360,000 tons; apples, 199,000,000 bushels; peaches, 40,900,000 bushels.

## Milk Goes Up

### Distributors Get Nearly Half

Following a conference with the state food administrator last week, the Inland Empire Dairy association and the milk distributors of Spokane, Wash., announced an increase in the price of milk delivered in bottles from 14 cents to 15 cents a quart. The new schedule provides that where two quarts or more are delivered daily it shall be 14 cents a quart, but where only one is delivered, 15 cents. Restaurants will be required to pay 42 cents a gallon for milk in bulk.

One of the significant calculations made in connection with the charge is that where milk is delivered in quart bottles for a total of 60 cents per gallon almost half of this amount goes to the distributor. To be exact, the distributor gets 29.47 cents and the producer of the milk 30.53 cents of the 60.

The price to be paid to the producer by the distributors is $3.55 per 100 pounds for milk testing 3.6 butter fat, with a premium of 5 cents per point for milk testing above 3.6 and a deduction of 5 cents per point for milk below that test. The prices are f. o. b Spokane. The price previously paid was $3.32 per hundred for milk testing 4 per cent, or an equivalent of $3.12 per hundred for 3.6 per cent milk. This makes a total increase to the producer of about 43 cents per 100 pounds. The greater share of the increase goes to the producer, who receives 3.7 cents out of the 4 cents increase per gallon.

In connection with the announcement of the increase in milk price the state food administrator issued a statement urging the people to continue to consume milk freely, declaring that even at the advanced prices of the present time it is a cheap food compared to the other necessities.

## Fix Feed Prices

### Mill Feed and Flour Scheduled

The federal food administration has announced a revised fair-price schedule covering flour and mill feeds. The table herewith shows these prices at representative points throughout the United States, with special reference to the northwestern milling points. The prices are for carload lots in bulk. They will be higher when purchased in bags or packages, depending upon the size and character of the bags or packages. Three other factors affect the price to the consumer as follows: (1) The freight from the milling point to consumer, (2) a charge jobbers may make under certain federal limitations (50 cents maximum per barrel for flour), and (3) a charge retailers may make to cover profit and cost of handling ($1.20 maximum per barrel for flour). The charges the jobber and the retailer may make on the mill feeds corresponds to the charges allowed on flour.

The following are prices fixed at several representative milling points, and are for flour per barrel and feed per ton, in bulk, in carload lots:

| | Flour. | Bran. | Middlings, Shorts Mixed and Red Feed. | Dog. |
|---|---|---|---|---|
| New York | $10.61 | $30.26 | $31.51 | $32.26 |
| Louisville, Ky. | 10.30 | 26.86 | 28.11 | 28.86 |
| Galveston, Texas | 10.23 | 29.76 | 21.01 | 31.76 |
| Buffalo, N. Y. | 10.33 | 28.16 | 29.41 | 30.19 |
| Cleveland, Ohio | 10.33 | 27.76 | 20.01 | 29.76 |
| Duluth, Minn. | 10.05 | 23.36 | 24.61 | 25.36 |
| Minneapolis, Minn. | 10.01 | 23.36 | 24.61 | 25.36 |
| Grand Forks, N D. | 9.77 | 20.82 | 22.07 | 22 82 |
| Great Falls, Mont. | 9.33 | 16.67 | 17.92 | 18.67 |
| Aberdeen, S. D. | 9.65 | 19.95 | 21.20 | 21.95 |
| Wichita, Kan. | 9.58 | 19.41 | 20.66 | 21.41 |
| Ft. Worth, Texas | 10.12 | 28.66 | 29.91 | 30.66 |
| El Paso, Texas | 10.36 | 31.16 | 32.41 | 33.16 |
| Omaha, Neb. | 9.89 | 22.26 | 23.51 | 24.26 |
| Kansas City, Mo | 9.85 | 22.26 | 23.51 | 24.26 |
| Pocatello, Idaho | 9.02 | 24.63 | 25.88 | 26 63 |
| Moscow, Idaho | 9.52 | 19.11 | 20.36 | 21 11 |
| Colfax, Wash. | 9.52 | 19.11 | 20.36 | 21.11 |
| Odessa, Wash. | 9.57 | 19.57 | 20.82 | 21.57 |
| Kennewick, Wash. | 9.62 | 20.04 | 21.29 | 22 04 |
| Seattle, Wash. | 9.95 | 23.19 | 24.44 | 25.19 |
| Portland, Ore. | 9.96 | 23.19 | 24.44 | 25 19 |
| Pendleton, Ore. | 9.61 | 19.95 | 21.20 | 21 95 |
| The Dalles, Ore. | 9.76 | 21.37 | 22.62 | 23.37 |
| Eugene, Ore. | 9.65 | 20.33 | 21.58 | 22 33 |
| Baker, Ore. | 9.48 | 18.73 | 19.98 | 20.73 |

**Milk 18 Cents Per Quart.**

The maximum price for milk in Rome has been fixed at 18 cents per quart. In 1914 the price was from 6 to 8 cents per quart.

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## U. S. Bonds or Wildcats, Which?

As strange as it may appear, there are many American people trading their Liberty bonds for stock in all manner of unproved corporations. The treasury department has found it necessary to issue a warning against it. It appears a patriotic thing for a dealer in the stock of some concern to place a big colored sign in the window of his place of business: "Liberty Bonds as Good as Cash."

To be sure Liberty bonds are as good as cash. That is why the man who has worthless or doubtful stocks to sell is willing to accept them, and that is one reason why the owner should keep them. They are Uncle Sam's promise to pay, and the promise is guaranteed by all the resources of 100,000,000 people and 48 broad states. It is not amiss to repeat the old, old warning: Make sure what you are getting before you invest money or government bonds in the stocks of any company, and require double proof before you invest in those of a concern that promises exceptional returns.

Just because you are allowed to is no sign you should. Do better than is required of you. Anybody can do what he has to do.

## Drainage, Rotation, Live Stock

The ability of the soil to withstand an extreme drouth or an unusually wet season can be developed to a great extent by proper farm management, according to observations made in Whatcom county. These essential factors are good drainage, proper rotation, and the keeping of a number of live stock and conserving the manure.

Good drainage opens up the soil to a greater depth and thus liberates more plant food. The roots will consequently go deeper where there is a reserve of moisture which they can draw from during a drouth. Good drainage will drain quickly all surplus water which ordinarily stagnates during the wet seasons of the year. On the other hand, it aids capillary attraction during a drouth. It breaks up the large clods which are found on poorly drained bottom lands. These clods are sometimes impregnable to the roots of plants.

Proper rotation in Whatcom county includes a hay crop—usually clover, timothy or rye grass—a cultivated crop, including potatoes, stock roots or corn, and a light grain crop, either cut for hay or grain and sometimes planted as a nurse crop when planting the grass seed. Meadows are generally left too long in grass rather than too short time before they are plowed up. When the meadow lies too long in grass, weeds and foreign grass take possession, killing out the tame grass. Meadows produce the best yields if not left in grass over three years. It is not good farm management to plow up a meadow and then seed it down to grass again immediately. If it is left open for two years and cultivated for at least one year, the sod will have a chance to become broken up and the soil will be in a better mechanical condition.

Manure is just as valuable a product on every farm as certain products which are sold on the market for cash. However, the farmer who cares for it and returns it to the land with discretion reaps the benefit indirectly through the sale of his product. No soil can go on indefinitely producing crops without receiving something in return. C. J. M.

We must let no vegetation lie unused this year. If it is not good for feed, rot it and put it back into the soil.

## Packages Come High

When we buy flour, or substitutes for it, in sacks containing only a few pounds, a big percentage of the cost is to cover the sacks. When we buy corn meal or other meal in pound or two-pound paper packages with colored designs on the outside wrapper, from 10 to 25 per cent of the cost of the goods is to cover the package. The smaller the contents of the package the greater percentage of cost is to pay for the latter. It costs money to put things up in cotton or glazed paper, and it probably costs the purchaser twice as much as it does anybody else connected with the transaction. And one thing is as certain as a casualty list: As long as we demand or accept our purchases in fancy form, we will have to pay the price.

The boy or girl who learns to do today's job this very hour has learned a lesson that will bring success.

## Another Form of Reclamation

The United States reclamation service has succeeded in its great undertaking of redeeming large areas of arid land through irrigation. There yet remains much land to be put under water and thereby made productive, but the practicability of the undertaking has been demonstrated many times over.

There is another great field for reclamation work, namely, the stump land of the nation. Is there not in this logged-off land an opportunity scarcely second to that afforded by the one-time deserts? As barren wastes have been made productive by water, can not equally useless cut-over lands be made productive by clearing under government leadership? The problem is worth studying. The time is at hand when more people must turn to the soil for their home-making, and any movement that will convert lands now useless into productive farms and cause to be built thereon successful homes is worthy of the deepest consideration of the nation's statesmen. A beginning is about to be made in a small way. Congress has appropriated $100,000 for preliminary investigation of the logged-off land question, together with that of drainage. The work should be followed with interest by the people of the northwestern states.

What agony the ambition of a few men have brought to the world in four short years! What a terrible lesson to the ambitious!

## Nonessentials Should Pay

Wherever it is possible the luxury should bear the war tax and the necessity be relieved as greatly as possible. It is not always possible to make this division, however. One ease at point is that of the automobile. When the government places a tax on gasoline it is comparatively impossible to make the nonessential use of it pay a greater proportion of that tax than the essential use of it. If it were the gasoline for most farm automobiles it would be exempt from taxation, for by far the greater use of the farmer's machine is for business rather than for pleasure. Even when used for pleasure the auto on the farm is in fact a business asset. Too long the world has assumed that the producer requires no recreation. The evening's spin for the family or a trip to the fair isn't a luxury to the farmer's family and to himself; it is a necessary part of their efficient life. It is too bad that the taxes can not all be placed upon the motoring that is pleasure for pleasure's sake only.

Before we undertake anything let's ask ourselves: "Will it help win the war?"

## Communities Can Cooperatively

The three words in this heading may be interpreted more ways than one. Communities throughout the country have united in the conduct of canning plants for the purpose of conserving all the fruit and vegetables possible. And they have succeeded. They can can fruit by the cooperative method, and they can do almost anything else cooperatively that they set their minds to. Cooperation is this decade's big word. Civilization is relying today upon the cooperation of more than twenty nations in their warfare against a great enemy. Never was the possibility of united effort so wonderfully and irrefutably demonstrated at home and abroad. The civilized world is cooperating. The people of America are cooperating. Communities are cooperating. And communities can cooperatively do anything that should be done.

Do not figure on getting something for nothing. Something for nothing is the most costly transaction a person can make.

## Should Mill Grain in Northwest

On the grounds set forth by the bureau of agriculture of the Spokane Chamber of Commerce—namely, the disaster that will befall the live stock and dairy interests if intelligent provision is not made for feedstuffs—the national food administration should allow the mills of the Pacific northwest to grind wheat to capacity. That action would not reduce by a single barrel the quantity of flour going from this region to our armies and allies in Europe. It would simply keep here, where it is badly needed, the bran and other by-products of the milling industry.

But there is another consideration that should sway the government to favorable action. Existing conditions lay a wasteful burden on the railroads now operated by the government. When the roads carry whole wheat to the mills of the middle west they carry the bran, shorts and middlings that are in the wheat, and take them to a region that has abundant feedstuffs. Deprived of the feedstuffs from their own wheat, the farmers of the Pacific northwest are forced to bring in corn, hay and other provender for their horses, cattle and poultry.

That means a waste of railroad service at a time when the government needs every locomotive, every car, every hour of labor and every possible ton of coal for the operation of

There are people right here in the United States who, though they shout and parade and declare their patriotism, should be taken before a firing squad at sunrise.

## Get Ready to Be Brave

Already many American homes are saddened, and yet rejoiced, because of a little cable message from France. A few thousand of these messages have come telling of the fall of America's sons, young men who have won, in the words of Theodore Roosevelt, "the prize of death for a lofty ideal." Soon these messages will be coming faster. They will come by thousands, even by tens of thousands. And when they do America must be brave. When one man falls we must send a score to take his place. When one gives his life we must double our efforts to send food and munitions to save the life of his fellows. We must make every loss a gain; we must make every blow struck by the enemy of mankind rebound in double force against the striker. Come what may, let no American falter. But rather let the coming of the casulty lists, as come they must, inspire us all to greater effort, greater determination and greater dedication of our every power to the cause for which the fallen have died.

# Allies Still Make Advance

## *Marne Success Is Followed by Drive in the Somme Sector*

The week just closed has seen an advance by the allies on the northern front almost if not quite equal to that of the previous two weeks on the Marne front before Paris. Both successes are important from several points of view. The battle line between Rheims and Soissons is practically straightened out, increasing the distance of the nearest German force to Paris to at least 60 miles. Following the successful drive on that front, the British, French and Americans launched a similar drive on the front directly before Amiens, which is the strategic railroad center of the northern front so greatly menaced by the Germans last April. At this writing this drive has resulted in the driving of a wedge straight into the German lines some 15 miles, bringing the capture of the town of Chaulnes, the key point to the present German strength in that sector. This leaves a pocket to the south of this latest drive, with Montdidier near its deepest point to westward. Montdidier has fallen into the hands of the allies. Allied guns are able to command all parts of this pocket, and it appears at this time that the supplies to the Germans in this pocket are practically shut off. The capture of Chaulnes leaves them no satisfactory railroad connections by which to effect their retreat, and indications are good for the capture of a considerable portion of those still in that locality.

It is estimated that the allies have captured at least 36,000 Germans on this Amiens front in the last week. The Marne drive resulted in the capture of nearly 30,000. Reports indicate that the facts in the case are still unknown so far as accurate figures are concerned. No estimates at all are made of the casualties on either side, but it is believed that they are less heavy than those resulting from the German drives of the last several months.

It is reported that the Germans are rushing reenforcements in about Noyon, which lies about midway between Montdidier and Soissons. This is directly before the pocket in which the German troops are all but trapped. It is probable that the enemy is planning to resist as strongly as possible at this point, with a view of preventing the closing of the pocket until those near the bottom of it can work their way out.

### May Be Getting Ready for Spring.

Whatever may be the meaning of the developments on the battle fronts during the last month, it is considered probable, if not certain, that the allied leaders are preparing for a gigantic offensive against the Germans and Austrians next spring, with a view to bringing the war to a close before the winter of 1919. The certain enactment of the bill extending the draft age limits in this country seems to be in accordance with this supposition. It is expected that the American army in France will total at least 3,000,000 thoroughly trained men by the time the spring offensive could be opened, and that back of this big force would be 2,000,000 men ready to move forward as rapidly as transportation would permit and the need required. The decision of the war department to call for the extension of the draft age to include all men from 18 to 45 years of age for the purpose of rapidly increasing the size of the United States army appears to have come following the conference between allied leaders in Paris, which is another point seeming to indicate the united plan for an overwhelming campaign next spring.

### No Immediate End of the War.

Unless the recent reverses of the German armies mean that there has been a psychological breakdown somewhere within the German lines, the gains of the allies should be looked upon as of only temporary significance, though even then of much importance. It would be a great error to assume that the present drive indicates any effort on the part of the allies to end the war this year. It seems more probable that the efforts have been for the purpose of wiping out the immediate menace to Paris and the channel ports and at the same time dealing a death blow to German confidence. Reverses of this nature will render it exceedingly difficult for German leaders to maintain a fighting spirit at home and to utilize the winter months successfully preparing for the spring campaign. On the other hand, the allied successes, coupled with the rapid growth of the American forces in France, give the allied peoples courage and confidence and enable them to use the winter season for the building up not only of war material, but war spirit as well.

### American Casualties Come in Slowly.

There are no figures available to show the number of men killed, wounded or captured in the Marne drive, much less the Amiens drive. So far the total number of American casualties reported since the entrance of this country into the war is about 20,000. Of this number about 7800 are deaths, about 9800 wounded and the remainder missing or captured. Of the deaths a little less than half resulted in action, the other half being from disease or wounds. Those missing, including prisoners, total a little more than 1500. What percentage of these are prisoners in the hands of Germany is not known.

### Registration Will Be September 5.

Under the plans of the war department the men included in the provisions of the new draft act will be registered on the 5th of September. Congress is expected to take up the questions of the measure as soon as it reconvenes after its summer vacation on August 26. The committees having charge of the measure in both houses will have it in form for immediate action at that time, and it is considered probable that it will be adopted in the exact form recommended by the war department, with practically no delay. Secretary Baker has indicated that it is the desire of the war department to call the new registrants between the ages of 19 and 21 and the unmarried men between 31 and 45 as rapidly as possible if the measure becomes effective. It is planned to remove from the registered men the necessity of applying for exemption, but rather to have them give complete information concerning the points that might entitle them to exemption or deferred classification, allowing the exemption boards to exempt or defer those whom it desired to. The secretary says that he leans to the belief that married men should be placed in deferred classifications.

### Voluntary Enlistments Are Stopped.

In order to prevent disturbance of business conditions the war department, including the navy as well as the army, has stopped all voluntary enlistments until after the enactment of the new draft act. Immediately upon the announcement that the act was being planned to extend the draft ages to include boys from 19 to 21 years and men from 31 to 45 recruiting offices were flooded by those affected, who sought to enlist voluntarily in chosen branches of the service.

### Many Ships Are Put Afloat.

So far this year the United States has constructed and launched ships having a carrying capacity of 1,719,000 tons. There were 123 new ships launched in July, with a total tonnage of 631,000. Forty-one other vessels, with more than a quarter million tonnage, were completed in July but not yet launched. The total tonnage by months this year is as follows:

January, 88,507; February, 123,625; March, 172,611; April, 160,286; May, 259,241; June, 283,322; July, 631,944.

### McAdoo Would Curb Profiteers.

Secretary McAdoo of the United States treasury has declared himself in favor of the flat tax of 80 per cent on excess profits. In regard to this matter he said: "The adoption of an 80 per cent war profits tax should render unnecessary, and I believe undesirable, an increase in the existing profits tax rate."

### Persident Will Pay Big Income Tax.

If the measure being drawn up by the ways and means committee of the house of representatives in congress is enacted in full President Wilson will be required to pay an income tax of $24,000 on his $75,000 salary. Each member of the supreme court of the United States will have to pay $1000 on his $12,500 salary. It is possible that this feature of the measure will be declared unconstitutional, however, as there is a constitutional provision which may prohibit the taxing of the salaries of public officials.

### England Wants Flour, Not Wheat.

Reports that the British government desired the cessation of the shipment of flour in milled form from America to England, but wanted the unmilled wheat instead, have been vigorously denied by London. The continuance of the shipment of all flour that can be spared by this country is urged.

### Stockyards Under Government Control.

The government has taken over the control of all stockyards throughout the country. The object is to guarantee their efficient operation and prevent unfair dealings with the producers of live stock. The yards are required to take out licenses, which may be revoked in case of their failure to live up to the requirements of the regulations.

### Food Conservation Must Continue.

The food administration representatives of the allied nations, who have been in conference in London and Paris recently, urge upon the people of America the continuance of the campaign for increased food production and conservation. The conference at London adopted the following resolution:

"Resolved, That while the increased production of the United States renders it possible to relax some of the restrictions which have borne with peculiar hardship upon all our peoples, yet it is absolutely necessary that rigid economy and elimination of waste in the consumption and handling of all foodstuffs, as well as increased production, should be maintained throughout the European allied countries and in North America.

"It is only by such economy and elimination of waste that the transportation of the necessary men and supplies from North America to the European front can be accomplished, and that stocks of foodstuffs can be built up in North America as an insurance against the ever-present danger of harvest failure and the possible necessity for large and emergency drafts to Europe. We can not administer the food problem on the basis of one year's war. We must prepare for its long continuance if we are to insure absolute victory."

### Free Information Bureau.

The Washington Farmer has established an INFORMATION BUREAU at the NATIONAL CAPITAL, which is at the service of its readers and which they are asked to use freely. It is intended to be a clearing house of governmental information. Address inquiries (includingg 3-cent stamp) to THE WASHINGTON FARMER INFORMATION BUREAU,
Washington, D. C.

## *Washington Gleanings*

There were several hundred in attendance at the annual picnic of Skagit county pioneers held at Weaverling Point August 1.

Sell Ray, a former rancher near Satsop, has bought nearly 1000 acres of land at Ceres, Lewis county, which he expects to develop into a sheep ranch.

Women teamsters have made their appearance at Vancouver, Wash. A coal company and an oil company have employed women to drive their teams, and report the work satisfactory.

E. J. Crane, drainage specialist of the Washington State college, is to help the Clarke county farmers to increase the acreage under cultivation by proper drainage of soggy or marsh lands.

Frank Durrah, a dairy farmer of Wahkiakum county, has completed the building of a thousand-dollar concrete milk house. It is equipped with hot and cold water and other features designed to insure convenience and proper sanitation.

It is officially stated that the military quarters at Camp Lewis at American Lake will be increased to accommodate 75,000 or more men in the near future. Heretofore accommodations have been available for approximately 50,000 men.

A report from Vancouver, Wash., says that plans are under way for the establishment of a public market designed not only to serve the people of the city, but to afford the farmers of Clarke county a market for a portion of their produce.

Announcement is made that 41 carloads of dressed and kiln-dried spruce for airplane production have recently been shipped from Vancouver, Wash. The shipments totalled about 900,000 feet, calculated to be sufficient for 900 ordinary airplanes.

Reports from Okanogan county indicate that grasshoppers are doing considerable damage in some parts of that section. The shortage of green stuff on the hills has driven many of them to the cultivated lands in the river valley, it is believed.

Dairymen of Clarke county have recently purchased some 400 tons of alfalfa hay in the Wenatchee district for shipment to the dairy farms near Vancouver. It is reported that the price was around $25 a ton for first class hay f. o. b. shipping point.

The big 97x117-foot two-story factory and warehouse building erected by the Lewis County Canning association at Chehalis is nearing completion. An addition of 25,000 square feet of floor space is provided to the original 11,000 square feet built three years ago.

The women of Aberdeen have organized themselves into an auxiliary army corps similar to the Tommywaacs of England. The immediate aim of the corps is to develop discipline, provide a trained organization for any war service and to raise standards of womanhood.

Elaborate plans are being made for the dedication of the Riffe bridge, Lewis county, which is to be held on its completion, some time in September. Some of the speakers will be Senator Ralph Metcalf, Senator A. E. Judd, Senator Herbert Weatherspoon and Lawrence Wood of the United States employment service.

From a payroll point of view the airplane spruce operations in the Pacific northwest have suddenly leaped into the same class as the shipbuilding industry. There are 25,000 workmen in the shipyards of Oregon and southwestern Washington, and nearly that same number of soldiers and civilians getting out airplane spruce.

A report from Whatcom county tells of the installation by five farmers in the Lynden district of electric plants for various uses about their farms. Some of them will use the plants to light their poultry houses during the fall and winter, with a view to giving the hens more "daylight" in which to scratch, eat and produce eggs.

Island county, Washington, still claims the world record wheat production. The record for that county as recorded by the department of agriculture, which is convinced as to its accuracy, is 117.2 bushels per acre on a field of 18 acres. The wheat was planted on land that had been used for several years as a cattle and sheep pasture.

The women's service league of Snohomish has been gathering berries and converting them into bottled juices to be used as beverages at the base hospitals. Berry farm owners of the county have been generous in giving part of their crops to the league, and the women have succeeded in bottling more than 100 quarts of the juice.

It has been estimated that at least one slice of bread is wasted each day by the average American family. If this is true it means that about 1,500,000 barrels of flour are wasted in this manner each year in America. Since it takes four and one-half bushels wheat or thereabouts to make a barrel of flour, this means a wastage of some 7,000,000 bushels of wheat, which, at an average yield per acre, means wastage of 670,000 acres of wheat land.

It is reported that under the supervision of the state meat inspection department at Seattle horse meat is being tried out as a substitute for beef and pork needed by the allied armies. Those backing the experiment believe that this will afford not only a means of increasing the meat supply, but will also give a real value to the scrub horses found in a number of localities throughout the state.

# Terrific Indictment

## *Packers Charged With Practices Criminal in Time of Peace and All but Treasonable in Time of War.*

The five great packing concerns of the United States are put under terrific indictment in a report to President Wilson by the federal trade commission. The findings are so sensational, the remedy recommended to the president so drastic, that we give the commission's report extended space on page 15.

In brief, the commission charges that the packing interests, aided and abetted by powerful banking interests, have conspired to—

**Manipulate live stock markets.**

**Restrict interstate and international supplies of food.**

**Control the prices of dressed meats and other foods.**

**Defraud both the producers of food and the consumers.**

**Crush effective competition.**

**Secure special privileges from railroads, stockyards companies and municipalities, and**

**Profiteer.**

The high character of the commission that makes these findings will estop the packers from putting up the old plea that they are victims of "muckraking." The federal trade commission is composed of five eminent commissioners, appointed by the president and confirmed by the senate, paid $10,000 a year each, and prohibited from engaging in any other business, occupation or employment.

The report is not made on hasty or superficial inquiry, and was not given to the public until the president had carefully weighed his action. It was submitted to President Wilson on July 5, and given out from the White House August 8, with no further comment than that it had not been made public sooner because the president desired first to get full information.

Undoubtedly the government will follow up these revelations with vigor, and the American people, consumers as well as producers, will await with profound interest further developments. The gravity of the offense, if the charges are true, could hardly be exaggerated. In a perilous hour of world danger, when the nation has been admonished over and over again that food will win the war, and the most insistent appeals are made to farmers to make extraordinary effort to increase production, the United States trade commission charges the packers and their financial backers with a conspiracy that could only have the certain effect of restricting production by laying intolerable burdens upon the producers.

The practices here charged against these great interests would be criminal in time of peace. If the accusations are true, the offense would be all but treasonable in time of war.

**It Helps Out.**

I would not be without the Washington Farmer, as it helps out in lots of ways.

P. E. BALL.

Daisy, Wash.

### Get Special Rate to Fairs.

The railway administration has announced that special rates will be made to all of the state fairs and a number of the other important fairs of the northwest this season. The rates will be one and one-half the present one-way fare.

# Security League Cites Record of Congressmen on Big War Measures

The National Security league, with headquarters in New York, has been digging into votes on war measures, and has issued a chart giving the votes of members of congress on eight measures. The measures are selected, it is said, because of President Wilson's opposition to the candidacy for reelection of Congressman Slayden of Texas because he opposed these measures. Congressman Slayden withdrew because of that opposition. Mr. Slayden voted for the conscription bill and the declaration of war, "but had been a consistent opponent of preparedness," the announcement says.

Two northwestern congressmen, La Follette and Dill, both of Washington, are included among those covered by the report of the Security league, and the people of their districts are wondering what attitude the president will take toward them.

The eight measures used by the security league's committee in the compilation of the chart are:

No. 1—McLemore resolution; March 7, 1916. This resolution was to the effect that American citizens should forego their natural, legal and constitutional rights to travel on the high seas.

No. 2—Kahn amendment to the Hay army bill; March 23, 1916. This amendment sought to increase the regular army to 178,000, or more nearly approaching the recommendations of the general staff of the army.

No. 3—Brandegee amendment to the Hay-Chamberlain army bill; April 18, 1916. This amendment provided for an army of 250,000 as against 140,000.

No. 4—"Section 56" providing for a volunteer reserve army wholly under federal control; April 18, 1916.

No. 5—Motion to recommit naval appropriation bill; June 2, 1916. This motion was designed to secure an increase in the navy beyond what was provided in the original bill.

No. 6—Cooper amendment; March 1, 1917. This amendment was designed to prohibit to American ships their legal right to carry arms or ammunition in their cargoes.

No. 7—Declaration of war against Germany; April 5, 1917.

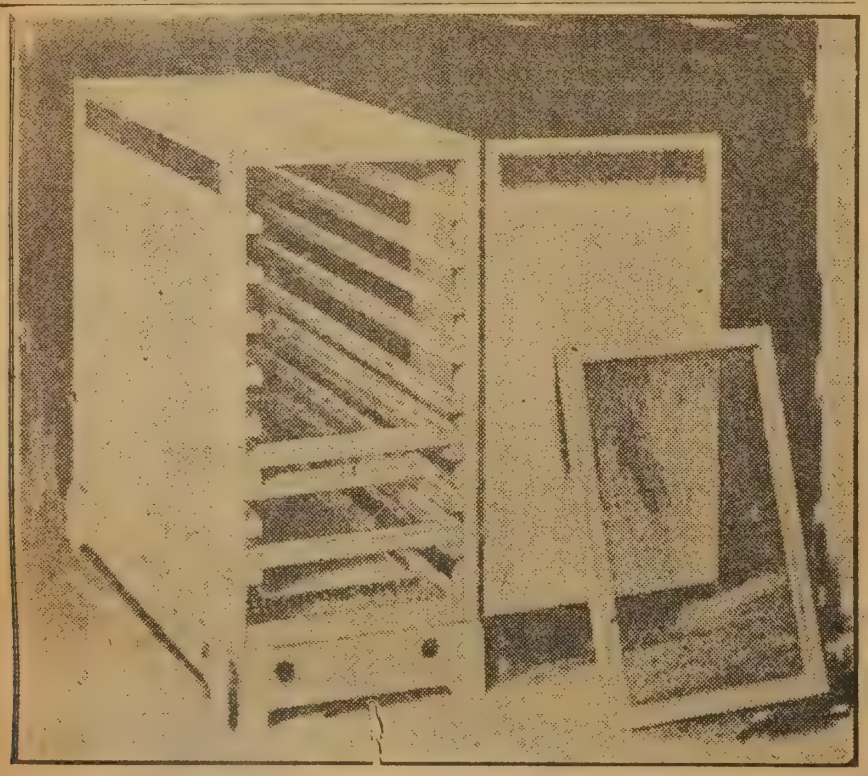
No. 8—Kahn amendment to conscription act; April 23, 1917. This provided for the raising by conscription of the necessary army to give effect to the declaration of war.

"The seven congressmen who voted wrong on all eight measures are: Church of California, Hilliard of Colorado, Keating of Colorado, London of New York, McLemore of Texas, Nelson of Wisconsin, Van Dyke of Minnesota," says the league's report.

"The 22 who voted wrong on seven of the measures are: Browne of Wisconsin, Cramton of Michigan, Davis of Minnesota, Decker of Missouri, Dill of Washington, Dillon of South Dakota, Haugen of Iowa, Helgesen of North Dakota, Hensley of Missouri, Hollingsworth of Ohio, Hull of Iowa, Igoe of Missouri, La Follette of Washington, Lobeck of Nebraska, McCulloch of Ohio, Randall of California, Ramseyer of Iowa, Shackleford of Missouri, Slayden of Texas, Sloan of Nebraska, Sherwood of Ohio and Woods of Iowa."

# This Year Demands Much Drying of Foodstuffs

The United States department of agriculture recently issued a new bulletin entitled, "Farm and Home Drying of Fruits and Vegetables." It covers more than 60 pages, and is full of information that people everywhere who have any vegetables or fruits to save should possess. While any one can secure a copy of the bulletin from the department of agriculture at Washington, D. C., or through many of the county agents and chambers of commerce, the suggestions given warrant the publication of this digest of the methods given in it for some of the commonest products of the northwest.



One type of drier to be used over common stove.

A satisfactory solar drier may be made from an ordinary window sash and a packing box having a length two inches less than that of the sash, a breadth three to four inches less, and a depth of 18 to 24 inches. Remove the boards from the longer sides of the box, leaving the ends and bottom fastened together. The ends must be cut off so as to give the top the desired inclination. Measure off 10 inches from the bottom of the box along the edges of the end pieces at one side; upon the opposite side measure off 20 inches; draw a line between these points and saw off the ends along these lines. This gives a frame for a box 20 inches in height at the higher side or back and 10 inches high at the front. Select from the boards removed from the sides two straight-edged pieces, each about four inches wide; nail one of these to the two end pieces at the back, with its upper edge exactly flush with the upper edge of the end pieces. Now lay the sash in place and nail the second long strip in place at the top of the front of the box, taking care that the sash makes close contact at all points with both sides and ends. At the back of the box measure off six inches from the lower edge of the top board; leave this space open to serve as a ventilator and board up the remaining distance solidly. There is a similar six-inch open space at the front between the top board and the floor of the box which is also to serve as a ventilator. Cover both ventilating openings with close-meshed wire cloth, such as one of the better grades of mosquito-proof netting, turning in the free edges so as to give a smooth surface which will not catch the clothing of the operator. Attach the window sash by two light hinges to the strip forming the top of the back of the drier, so that it may be easily raised and lowered to get at the contents. With a plane, go over all surfaces upon which the sash rests, smoothing them down so that the sash fits closely, to exclude insects, and the drier is complete. For convenience in handling the material a tray fitting into the bottom of the box may be made, or the products to be dried may be spread upon papers or canvas placed upon the bottom boards.

Owing to the uncertainty of the sun's shining just when it is needed, it is often advisable to use artificial heat. In last week's issue of the Farmer a dryer designed by the Oregon Agricultural college was described. Something in the nature of it might be utilized by those needing to conserve large quantities of fruit and vegetables, but for the average household a smaller dryer for use in connection with the kitchen stove is advisable. There are any number of possibilities along this line, the illustration on this page being but one of many that might be utilized.

The process of blanching with hot water or steam generally employed with vegetables can not be applied to apples, pears, apricots and peaches. These fruits are valuable primarily for the sugars they contain; these are present in soluble form and are in part lost by diffusion into the water in which the blanching is done, and in considerably greater amounts escape later in the dripping of juice which follows the application of heat to the scalded or steamed fruit. For this reason such fruits are treated with the fumes of sulphur for a short time before drying begins. In fruits so treated, chemical changes are arrested, discoloration and blackening due to the oxidation of tannin does not occur, and the dried product has practically the color of the freshly exposed flesh of the fruit from which it was made. While sulphuring is sometimes called bleaching, the use of this term is misleading, since sulphur fumes do not bleach or whiten the fruit, but merely prevent darkening after the treatment. As the purchasing pub-

(Continued on page twelve.)

### PEA YIELD FAIR.

### Nearly One-Half Million Bushels.

O. E. Moss of Fairfield, in southern Spokane county, estimates the yield of peas in the Fairfield district between 400,000 and 500,000 bushels this season. Notwithstanding the fact that the drouth and hot weather have greatly reduced the output, the acreage in that vicitnity, which is the leading pea district in the state, is nearly 30,000 acres this year. Mr. Moss says that the yield will average 20 bushels to the acre, with some fields going as high as 40 bushels. He says there are 21 threshing machines in that section threshing peas alone.

The growers are receiving from four to six cents a pound for their peas, delivered to the warehouses. Most of them are contracted to seed companies before being planted. The companies furnishing the seed and the sacks in which to store the crop. Some of these seed companies have established, or are establishing warehouses at shipping points in the vicity of Fairfield.

### Walla Walla Has Good Crop.

County Agent H. H. Boone of Walla Walla estimates the wheat crop of that county this year at 4,000,000 bushels. He believes that about one-fourth of this yield will be handled by the bulk method.

# Plan Club Fair

## Clarke County Workers Succeed

By HORACE ADDIS.

The Industrial club workers and members of Clarke county, are rejoicing because the county commissioners have appropriated $500 for premiums for their county school fair, which is all the money they asked.

W. E. Dudley, county school superintendent, is emergency county club leader—for he has them designated emergency clubs. He has paid club leaders and has the most comprehensive plan of club work I have met with. He seems to have originated the plan of paid workers and the U. S. department at Washington has written for details of the plan.

Mr. Dudley has Clarke county divided into eight community districts, each composed of from two to four school districts. Each community district has a paid club leader. Minutes are kept of each club meeting, no matter how small, and every month the leaders make a summarized report to Mr. Dudley, enabling him to keep in the closest touch with the work being done. No matter how small the district, each one holds a fair. Premiums are given for garden and domestic science work and all the usual industrial club activities. Following this comes the community fair, at which only those who exhibited at the district fair are permitted to make an exhibit, and the identity of the exhibit of every boys' and girls' exhibit is retained. Then comes the county school fair, at which only pupils who made exhibits at the district or community fairs may be represented. Again each child's exhibit is displayed as a unit in the district's exhibit, each district exhibit as a unit in the community exhibit as a unit in the county exhibit.

Last year every dollar for the fairs was raised by voluntary contributions and La Center, where the county fair was held, financed it. This year, after meeting with Professor Dudley and with County Agriculturist Newhouse, on Auguse 5, the commissioners granted the $500 asked for. The success of the county school fair is thus assured in advance and those who have worked so hard for it heretofore will see that a display worthy of Clarke county and her schools is made, even in this dry year.

# Girl Harvesters

## Do the Work of Drafted Brothers

By J. E. NESSLY.

How two California girls, Grace and Anna Anderson, cut several hundred acres with a "two-man" combined harvester, Grace driving 12 horses and Anna sewing sacks, is an interesting story brought to Moscow by M. C. Priddy, a traveling salesman, who has been in California since early last spring. The two girls are daughters of John Anderson, an extensive farmer in the Sacramento valley. Their two brothers were called by the draft and harvest help was hard to obtain. Mr. Anderson did not know what to do about saving his grain crop.

the two girls, who had just finished school and had helped with horses on the farm before their brothers went to war, offered to harvest the crop. At first Mr. Anderson hesitated, but the girls insisted and they took the machine, hitched 12 horses to it and cut several hundred acres of wheat which yielded well. Anna sewed the sacks and did as good a job as any professional. After the grain was harvested the girls took teams and gathered up several thousand bushels of wheat and are now engaged in hauling it to market.

Mr. Priddy says the wheat crop was fairly good in California, probably averaging from 60 to 75 per cent of a normal crop for the entire state. In the southern part much of the grain was damaged by hot, dry weather, but in the Sacramento and San Joaquin valleys the yield was good.

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Remittances may be in any form desired, including personal check.

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I have already bought..... (kind of stamp)

stamps and have a..... (card or certificate)

## BETWEEN MEALS.

### Grange Bans Needless Feeds.

The proverbial "groaning tables" at farmers' gatherings for between-meal eating are to be outlawed as unpatriotic, judging from sentiment recorded in the recent resolutions of Mallet Creek grange in Medina county, Ohio. This grange has resolved that, "Whereas, each and every housewife is commanded to conserve all foodstuffs:

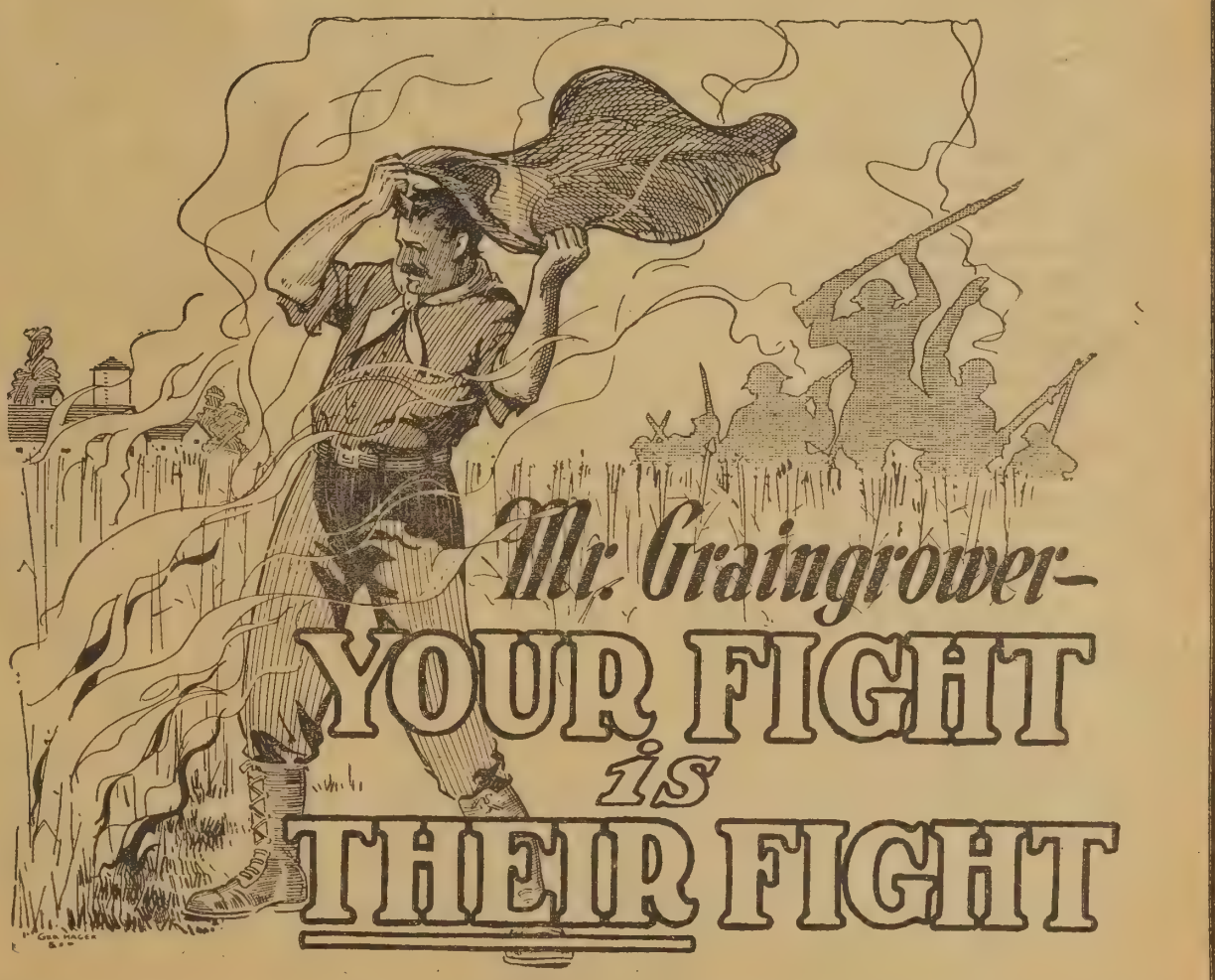
"Resolved, That the matrons of said grange refuse to prepare bread, cake, pickles, meatsauce, chow chow and other kinds of chow for the consumption of patrons of the grange during the months from June to October, inclusive, unless such food can be served at a time to take the place of a regular meal."

### Found a Copy.

I found a copy of your paper and want it sent to me as soon as possible.
MRS. CORA E. DECKER.
Toledo, Wash.

### Escapes Bread Rationing.

America's self denial in saving wheat has enabled Great Britain to escape the necessity of rationing bread. With higher extraction in milling and through the addition of substitutes, the British have been able to extend the bread value of the wheat which America has sent.

Mr. Graingrower—
YOUR FIGHT
is
THEIR FIGHT

MORE PRECIOUS THAN GOLD—is the golden harvest of the grain fields.

For all the yellow metal in the world, of itself, can not feed the starving or sustain a nation in its fight for LIBERTY.

Through the wheat fields of Northern France American boys—our boys—are battling in a struggle of life and death. Here at home the grain growers of the Inland Empire must battle another foe—FIRE!

Fire would rob hungry mouths of bread—fire unchecked could defeat America.

The grain grower is the bulwark of America's battle line.

Beat out the flames while they are small! Prepare for the EMERGENCY, with all the help that is offered—state, county, community.

What ORGANIZATION and PREPAREDNESS will do was demonstrated last year—a wonderful record for fire prevention.

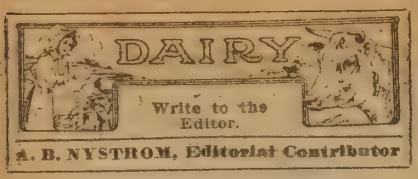
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A. B. NYSTROM, Editorial Contributor

## DAIRIES AT STAKE.

### Production Is a Grave Problem.

All over the country, from east to west and from north to south, the production of milk and cream appears to be jeopardized by the feed and labor situation. This condition is probably more true in the northwest than in most other sections.

The problem is doubly serious, for it involves not only the production of milk and cream and butter for the present time, but it involves as well their production for the next decade or even generation. And in addition to the food side of the question, there is the side involving the industry itself. It has been developed to an industry employing thousands of men and millions of dollars are invested in its land, equipment and stock.

In the midst of it all there stands the one undeniable fact: The people must have milk. The problem is: How can it be provided at prices the average family can pay?

It can not be produced at an economic loss to the producer. For a brief space of time an industry will survive even though it is losing money, but this can not continue long. Profits must be made or the dairy industry will be abandoned, and once it goes down it will be hard to revive, and it will take years to do it. Once it goes down, much of the effort that has been expended during the last century to build up producing strains of stock will be lost. Hence, it behooves the entire nation to look the dairy question calmly in the face and unite in solving it.

Assuming that milk and milk products are absolute essentials, as every one is willing to do, the entire statement of the case may be summed up in the one sentence: The customer must pay the true cost of efficient production plus a living profit to the producer.

Then comes the other question that is as yet unsatisfactorily answered: What is the true cost of efficient production?

Where may the cost of production in the northwest be reduced if at all? Where can the cost of distribution be reduced if at all? How can the public be made to appreciate the value of milk and be enabled to use more of it without increasing the cost of living or disturbing the food balance? These are some questions to be given thought, and the sooner the people as a whole, not alone the dairy industry, begin to ponder them, the sooner a solution can be worked out for the problem of milk production.

## NOT TOO GREEN.

### Give Silage Corn a Real Chance.

Those who have succeeded in making good corn silage frequently issue warning to beginners and to others who have not yet learned the art of making it against cutting their corn too green. Cutting too green is said to be inadvisable for two reasons: It puts the feed up before the maximum food value has been attained and it results in silage less palatable and less well preserved.

O. E. Reed of Purdue university says that the proper time to cut corn for silage is when the ears are well dented. This, ordinarily depending somewhat on the climate and the variety of the corn, is about 10 days before the corn would be cut if intended for fodder in the shock. At this age the corn will usually have plenty of moisture in the stalks and upper leaves to make it pack well, and it will make a silage that will keep better and be more palatable. Green corn makes an acidy feed, neither as wholesome nor as much enjoyed by the stock as the sweeter feed. And, after all, there is a lot in this very feature of feed enjoyment. Just as people digest and assimilate food more successfully when eaten with pleasurable accompaniments, so do live stock make better use of feed that gives pleasure as well as calories or vitamines or what not in the scientific phraseology.

One thing must always be remembered, however, in making silage with the more mature products. It must be well packed. The air must be excluded, or poor results will inevitably follow.

## THIN CREAM.

### Big Problem When Pasteurizing.

L. B. Ziemer, creamery and cheese factory inspector for the Oregon dairy and food commissioner, recently made a trip into central Oregon. He reports crops light. Farther north along the northern tier of counties the wheat is very good in general, though it is spotted to a considerable extent. In some places the winter wheat is good and the spring grain poor, and elsewhere this condition is reversed. Mr. Ziemer has been studying creamery conditions.

"Thin cream," said he, "is one of the difficulties with which the butter maker has to deal when pasteurizing, and the objections to it are so many that it becomes almost as much of a problem as poor quality. It is impractical to pasteurize thin cream, and this is especially true when it contains from .3 to .4 per cent acid, as such cream will curdle very easily when heated, and the loss in buttermilk will be excessive. Thin cream also has a tendency to make salvy and poor-bodied butter, which often affects the flavor and keeping quality. Thin cream requires more vat capacity, more steam to heat, more water and ice to cool, more churn capacity, more time and power to churn; it does not permit the use of a large starter, as it is already too thin for good churning. The farmer also loses by producing thin cream. He first loses a lot of good skim milk, and, in addition, he has more cream to cool and more to handle and haul to the creamery. In fact, thin cream is a disadvantage from every point of view. Cream testing around 20 per cent is worth 2 cents less per pound of fat than is cream testing around 30 per cent, and why not pay less for it?"

## Farm Pasture Lands

Of the total farm land in the United States, which comprised about 879,000,000 acres in 1909, somewhat more than one-third was in crops, about one-third was in pasture, and somewhat less than one-third comprised all other kinds of farm land. The fact that there was nine-tenths as much pasture land as crop land is enormously significant in connection with the possibilities of expanding crop production to assist in winning the war. It must be noted, however, says a specialist of the department of agriculture, that a large part of the pasture land is unimproved, about 99,000,000 acres being in "woodland pasture," and 108,000,000 acres "other unimproved pasture"; but even the improved pasture alone represents over $4,000,000 acres, or nearly one-tenth of the total land in farms. This improved pasture doubtless consists largely of land that is pastured in rotation with crop production in intermediate years. It may be used for crops three years out of four, two years out of three, or one year out of two, but most of it undoubtedly is arable land; in fact the definition of this type of pasture is "improved land in pasture, but which can be plowed or mowed." Of the unused farm land, that is, land not in crops or pasture, which comprised about 269,000,000 acres, or 30.6 per cent of the total land in farms, about a third, 10.4 per cent, was in woodlots, and two-thirds, 20.2 per cent, comprised fallow land, waste land, land in farmsteads, roads, etc.

**Winnipeg Firemen Out.**

Winnipeg, Canada, was practically without a fire department recently, 160 firemen having struck because the council refused the demands o fthe electricians and waterworks men.




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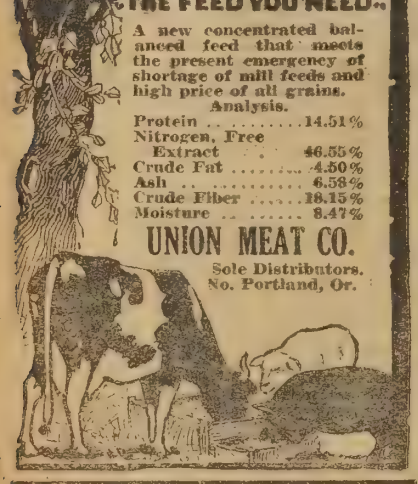
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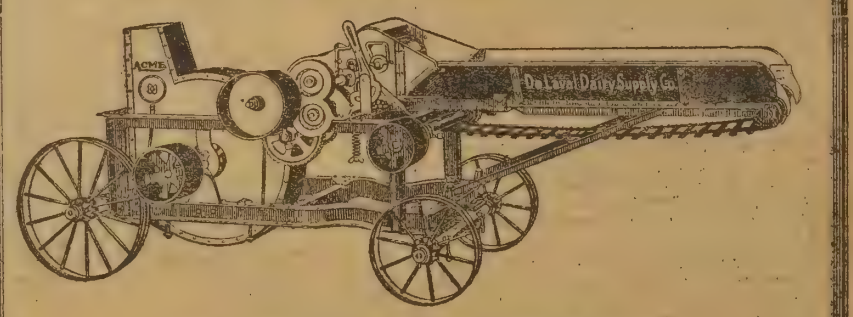
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E. J. IDDINGS, Editorial Contributor

# Fattening Pigs

## What Is Most Profitable Feed?

To the Editor: What is the most profitable feed for growing and fattening young pigs when prices are as follows:

Shorts, $37.50 per ton; barley, $60 to $65 per ton; corn, $4 per hundredweight; oil meal, $4 per hundredweight; buttermilk, 3 1-2 cents per gallon.

Have fed mostly shorts and buttermilk. S. S. S., Langley, Wash.

C. E. Howell of the department of animal husbandry, Washington State college, answers the above question as follows:

"Using the prices of feed which you give in your letter, I have worked out a column of figures showing the cost of the different kinds of feed and the cost of combining some of these different feeds. I have used the results of a large number of experiments that have been conducted with these feeds, and I have tried to select an amount that represents an average of the results. In figuring the value of shorts as a feed when they cost $37.50 a ton, it is found that it will cost $.097 to produce one pound of gain. This cost is secured upon the basis of using 522 pounds of shorts to produce a hundred pounds of gain.

"Of course, the amount of shorts required to produce a hundred pounds of gain will vary a good deal, depending upon the quantity of the shorts. We have just completed an experiment at the state college, and it required 620 pounds of shorts to produce 100 pounds of gain. In this experiment the pigs did exceptionally well on shorts alone during the early part of the experiment—that is, when they were weighing around 60 to 80 pounds. Shorts were just about a well-balanced ration for the pigs, having a nutritive value one to four and four-tenths. As the pigs got larger this ratio was too narrow, and it did not contain enough carbohydrates. Consequently the pigs did not fatten and make as rapid a gain on shorts alone as they did on some other combinations which we fed.

"In feeding barley alone and estimating that it requires 590 pounds of barley to produce 100 pounds of gain, the barley at $65 a ton, fed alone, should be a little better than shorts alone. Our own experiments here indicated this.

"In combining barley and shorts, and figuring at the prices which you have given, the cost of one pound of pork is a little more than 12 cents. A gain of 1.26 pounds was made per day. It is seen from this experiment that, while shorts alone is a little cheaper in producing a pound of gain, yet, when the length of the feeding period is considered and the rapidity of the gain is taken into consideration, it will be a little more advisable to combine the two feeds—that is, feed barley and shorts together.

"In figuring on this combination of barley and shorts, I took an average of the results of experiments where this has been done, and found that it required about 499 pounds of the mixture to produce 100 pounds of gain. In most of the trials the amount of barley was just a little larger than the amount of shorts.

"In the experiment which we conducted at the college we fed equal parts of barley and shorts and have secured 100 pounds of gain from 521 pounds of the mixture, and at the same time made a little more than one pound of gain per day.

"In feeding corn alone it would require 560 pounds to produce 100 pounds of gain. Figuring corn at $4 per hundredweight, it will cost 22 cents to produce one pound of pork, and the daily gain that can be expected is about nine-tenths of a pound.

"By combining corn and oil meal, the usual combination that is made, the cost may be reduced to 17 cents per pound, and a little more gain will be secured. About a pound of gain per day may be expected.

"The combination of shorts and buttermilk will perhaps be as economical as any you can make, especially when the pigs are just beginning the fattening period and are in growing condition. This combination will cost 11 cents to produce a pound of gain. As the pigs reach a hundred pounds or more in weight the combination will be a little too narrow to produce the most gain.

"I should recommend the combination which you are using, namely, shorts and buttermilk, for the growing pigs, because it will produce growth and framework. But for fattening the hogs to a marketable finish I would suggest that you add barley to the ration, or cut out the buttermilk entirely and finish them on barley and shorts."

# Veterinary

Dr. S. B. Nelson

**Can't Get With Calf**—I have a young heifer, 16 months old, which I wish to keep very much as her mother was such an extra cow, but can not get her with calf. Have bred her twice and she has just returned again for the third time. Can anything be done? She is in good condition.

E. W., Ione, Wash.

Let the heifer go three or four months and then breed her again. It will not hurt her if you let her go six months. It would be a wise thing if she were prior to breeding the next time. That may overcome the difficulty.

**Cow Had Milk Fever**—I have a fine-bred Jersey cow that was a great milk producer until she had her second calf, last April, when she had milk fever and was dried up at once, and has not been milked since. She is fat and feeling fine now, and I want your advice as to whether I should breed her again or not. One teat seems to be shriveled up. A READER, Spirit Lake, Idaho.

I believe that, with as fat a cow as you say this one is, she should be bred again and tried out once more before she is given up. You must handle her very carefully for two or three weeks prior to calving, taking her off rich food and putting her on a very good dry food for about 10 days to two weeks. In order to prevent constipation, give her, during this time, about one-fourth to one-half ounce of epsom salts in a quart of water daily. Then, when she calves, you can treat her just as though nothing were at all the matter.

**Bloat in Calves**—There seems to be a great deal of bloat among calves which are fed skimmed milk. Will you kindly tell us how this may be remedied? I noticed that the milk can be strained through a cloth and all trace of foam removed. Do you think the foam is what causes the trouble? How long after her calf is born should a cow go before cleaning? When is it dangerous if she seems well? What should be done to help her?

W. M. W., Shoshone, Idaho.

Bloat is a symptom of indigestion, which shows that the animals have eaten some food which they are not able to digest satisfactorily. Try adding an ounce or two ounces of lime water to the milk that you are feeding for a few days. See if that will help. Also be sure to scrub and scald the pail or utensils that you are feeding the calves out of. Personally, I do not believe the foam is any cause for the trouble. The cow should clean within 24 hours after she calves. It is dangerous any time after that if she is allowed to go. After that length of time the afterbirth should be removed and the organs washed out with a normal salt solution of a teaspoonful of salt to a gallon of water, and a sufficient number of gallons. The treatment should be repeated daily until she is well.

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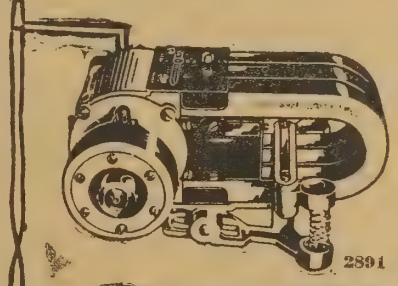
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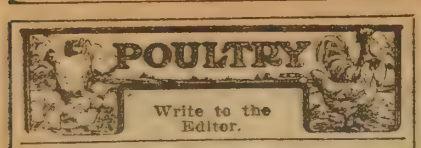
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JAMES DRYDEN,
Editorial Contributor.

# The Poultry Situation

The poultry situation is decidedly better than it was a year ago. Feed prices are no higher and eggs are 10 cents a dozen higher. With a flock of good layers the poultryman can probably do as well now as he ever could. With a flock of extra good layers he can do better than he has ever done before.

But with the poor layers there is a bigger loss than ever, and the necessity for culling out the slackers is now doubly important. The hens that stop laying in August are poor layers and should be marketed.

Consumers should not expect cheaper eggs. The chances are that the fall and winter will see record prices. Eggs never wholesaled in July and August at about 50 cents as they are now doing. The rigid culling out of the poorer layers will mean fewer eggs going to market and prices will be high. Poultrymen, on the other hand, need not expect fabulous prices, because when eggs reach a certain point consumption drops. If consumers can buy other foods of equal value at less price they will do it.

The last few weeks have witnessed a heavy marketing of hens and prices of hens have dropped 3 to 5 cents a pound live weight. If these hens are the slacker hens there will be little effect on egg receipts, but if they are shipped off to market promiscuously good and bad, it will mean a considerable loss of eggs. This should not be. There is no excuse now for killing off the good layers at this time of the year.

The grain crops have again suffered from the drouth, and the resulting shortage of of good oats and barley will handicap the poultryman. But it was the same proposition last year and they lived through it. J. D.

## SAVE THE HENS.

### Market None but the Slackers.

The hens are being sent to market in unusual numbers at the present time. The high cost of feed is, of course, the cause. If this movement continues there is likely to be a serious shortage of eggs in the coming fall and winter and prices will be high, so high as to curtail consumption.

It is a mistake, for two reasons: First, the poultry-keeper can aid in winning the war by keeping hens that produce eggs. Eggs are a substitute for meat, and the more that are eaten the more meats will be available for export to our soldiers and the soldiers of the allies. That is a patriotic reason for keeping laying hens. The second reason, which is a selfish one, is that there is likely to be good profit in egg production a little later. If not before, after the war feed will take a drop, while eggs are likely to continue high for several years.

Eggs are very high in price now, and there is really at the present time fair profit for fair to good layers. Twenty-five to 30 cents will pay for the feed of a hen for a month, and it is a poor hen that will not lay 40 cents' worth of eggs a month at this time. On the general farm under free range conditions the cost of feed will be less and the profit correspondingly higher.

If only the slacker hens were going to market it would be well and good. Hens that are so old that they have lost their "teeth" should be marketed, unless they have special value for breeding.

If some hens have to be marketed, pick out those any time between now and the end of September that are molting and have stopped laying. There will be some in the flock that are now molting and not laying and there will be no loss in eggs if they are sent to market. The early molters, or early quitters, are the poor layers. J. D.

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## Storrs Laying Contest.

The following are some of the salient facts of the international egg-laying contest at Storrs, Conn., for the first eight months:

Seventh contest began November 1, 1917.

Seventh contest ends October 31, 1918.

100 pens competing, 10 hens in each.

Average per pen for June 177.7 eggs

Average per pen for eight months, 1069.5 eggs.

Highest pen for June, O. A. C., Oregons, 245 eggs.

Highest pen for eight months, O. G. Knight's Wyandottes, 1462 eggs.

Second highest pen, Oregons, 1458 eggs.

Highest hen, Knight, 208 eggs.

3 hens of Oregon's pen among 11 best hens.

Since June 1 the Oregons have taken first place, and at the end of the 37th week were 26 eggs ahead of Knight's. For the week the Oregons were first, with 60 eggs, and the Hollywood farm, Washington, second. J. D.

## Broiler Turkeys.

In the effort to stop the wasteful practice of slaughtering broiler turkeys—those weighing from two to four pounds—the food administration is approaching the problem through three different channels.

Farmers are requested to raise their turkeys to maturity, thereby adding to the nation's meat supply; dealers have been notified of the food administration's desire that they refrain from purchasing the immature birds; hotels, clubs and restaurants, where most of the broiler turkeys are consumed, have been asked to discontinue serving them.

It is pointed out that turkeys, unlike chickens, do not become plump and well-meated until nearly full grown.

## Feed Cost of Eggs.

From the Storrs' June report we find that the 1000 hens in the contest consumed 91.6 pounds of food. This would cost about $2.75. The eggs produced numbered 178. The cost of feed for a dozen eggs for the month at that rate would be 18 to 20 cents. The eggs would be worth about 60 cents. This shows a good margin of profit. Of the total food the grain weighed 38 pounds and the mash 53.6 pounds. This is heavy mash feeding. The more mash that is fed the cheaper is the ration. J. D.

## FARMER NEEDS AUTO

### As Well as a House to Live In.

To the Editor: There are several reasons why every farmer should have an automobile on his farm as well as a house to live in.

Farm life is not real life without one. If you have an automobile on your ranch, and have a trip to make to town, you do not have to take a team from the field and drag the poor animals over the long, dusty, hot road. You can go to town and back on one-third the time it would take a team to go on the same trip, besides the automobile runs so swiftly it stirs up a breeze and makes the trip a pleasure to the driver. When you arrive home you have no tired horses to take care of.

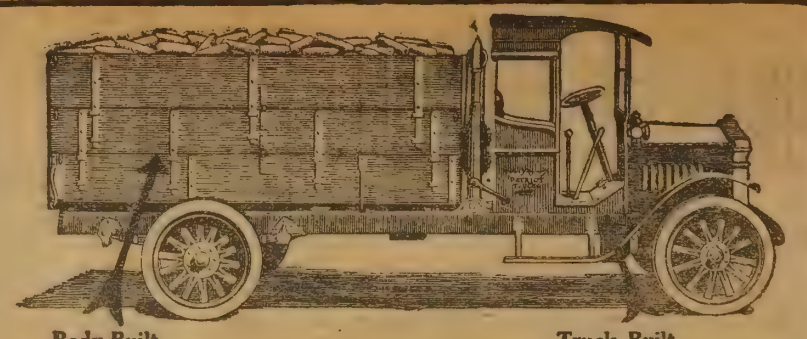
When you come in of a night from a hard day's work in the field, all tired out and roasting from the heat of the day, it is restful and cooling to take your family on a little spin. If you want to take a vacation and go to the mountains, you have your automobile, which will take you there in a day, where with a team it would have taken weeks. If you keep a team for no other use but driving and making your hurry-up trips, it costs more than an automobile would.

Taking it all around, I think every farmer should have an automobile.

VIOLA DOUGHERTY.
Star Route, Payette, Idaho.

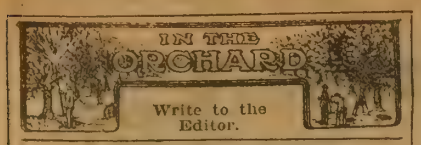
**Ten Acres of Ground Supports Family.**

A family of four, whose ages total 341 years, supports itself comfortably on 10 acres of ground in Coshocton county, Ohio. Henry Johnson, who is past 91, is the senior member. A brother, Silas, is 87. Mary Anne, 84, does the housework and milks the cows. George Wilson, a brother-in-law, just past 79, raises the crops, chief among which is the little tobacco patch that annually furnishes "dog leg" for solace on the long winter evenings.


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GRANVILLE LOWTHER,
Editorial Contributor.

# Orchard Troubles

## Diseases, Pests and the Remedies

By Granville Lowther.

This is the third instalment in this series of articles. The subject of pests and their remedies will follow the conclusion of the catalog of the diseases.

**Rust:** There are two forms of this disease so similar as to create the impression that they are the same, except that they exist under different conditions of climate. One is prevalent in the east, the other in the west. One is called, technically, gymnosporangium, the other gymnosporangium blasdeleanum. It attacks the apple, pear and several varieties of shrub and wild plants. It is particularly severe on pears of the Winter Nellis varieties. Orchards planted near to junipers and cedars are likely to be badly infected, because the foliage of these trees are often covered with the rust and it is transmitted from one to the other. The remedy is to burn the leaves or plow them under and spray the trees with Bordeaux or lime sulphur.

**Scab:** This disease attacks both foliage and fruit, and must not be confounded with any form of rust. On the foliage the spots are at first more or less circular in outline, olive green or brown in color, becoming darker and more irregular in shape as they become maturer. On the fruit they develop under the cuticle, not on it, as do most forms of rust. The treatment is the same as in rust.

**Shot-Hole Fungus:** See "Leaf Spot."

**Silver Leaf:** Not prevalent in this country.

**Soft Rot:** See "Brown Rot."

**Sooty Blotch and Fly Speck:** Are technically the same, being two aspects or forms of the same fungus. They give the apple a speckled, sooty appearance, and injure the market value without materially injuring its nutritive value, because the specks are on the surface. Treatment: Spray with lime sulphur or Bordeaux, and prune the tree so as to let in the sunlight.

**Spray Injuries:** These injuries are found where Bordeaux or lime sulphur are too strong or where they are applied at the wrong time. In such cases they injure both the foliage and the fruit. It is a little hazardous to use fungicides after the leaves and blossoms appear unless it is done by one who knows what he is doing and how to do it. There is more loss than gain, upon the whole, by using fungicides after the blossoms arrive.

**Stag Horn:** This disease gets its name because it is manifest in dead branches at the tops and they present the appearance of antlers, projecting above the foliage. I have examined this disease in the east and find that some of it is what we in the west call apple rosette. Other forms of it are due to lack of proper care in spraying, pruning, fertilizing and cultivation.

**Stigmonose:** Is caused by insect punctures. There is no remedy in so far as we know, but the trouble is not serious.

**Storage Rots:** The diseases growing out of storage rots are most generally the effects of infections before storage, which develop during storage. Also bruises and punctures of the skin give dead tissues in which saprophytic organisms work and hasten decay. The remedy is to keep the temperature of the storage room as nearly to the freezing point as possible without freezing. The warmer temperature hastens the multiplication and development of these diseases.

**Sun Scald:** This is the effect of injury to the bark, caused in some climates by the hot sun shining on the south side or the southwest side of the tree with sufficient force to injure the protoplasm in the cambium layer and impede the circulation. In winter the freezing and thawing of the bark, if the changes from heat to cold are sudden, will have a similar effect, and is often called winter injury. These injuries sometimes result in what is called collar rot, or the decay of the bark at or below the ground. Sun scald on fruit is the hardening of the skin and tissues caused by excessive heat or by spraying when the sun is hot.

**Water Core:** This disease is manifest by hard watery areas extending from the seed cavity outward. In the advanced stages the seed cavity contains liquid and the hard intermembrane of the carpels is cracked, the fruit has a somewhat sweetish flavor and the watery parts contain more sugar and less acid than the normal or unaffected parts. The causes seem to be: First, excessive water in irrigation or excessive rain just before the ripening of the fruit. Second, excessive wood growth, where the trees are strong and vigorous. Third, excessive pruning just before the ripening period. Fourth, high temperatures during the day and low temperatures at night. Fifth, exposure to extremes of temperature. The philosophy seems to be that certain chemical activities are set up by rapid growth which are disturbed by heavy prunings, frost, sudden changes from heat to cold, by the rearrangement of converting the starch into sugar. The rapid absorption of water by sugar may also be a cause, and very likely from other causes we do not understand. In fact, some of the reasons suggested are not definitely determined, but have been believed by experts to be probable. Remedy: Put the apples in common storage, not cold storage, but common storage for three or four weeks and there will be no water core, except the very worst specimens, say from 1 to 3 per cent of the whole.

### Diseases in General.

It must be borne in mind that the normal condition of all living organisms is health. This is seen in the tendency of any form of living organism, when injured or diseased, to react toward the normal and to repair the injury. Examples are found in the wounding of the flesh of animals or the wounding of any form of plant life, as the bark of a tree. A notable example is the cutting of certain grasses, like alfalfa, which sends up new stalks, and from two to four cuttings may be taken from the same ground in the same year without killing the plant. The following year the process may be repeated. Disease in plants is defined as any morbid condition resulting in the checking or stopping of growth and resulting sometimes in death. Also it is defined as one of the parasitic organisms attacking plant life. I do not believe the second definition is strictly correct, because the bacterium or fungus is a living thing as actual as a horse or a tree, but not so large. We would not call a horse or a tree a disease, although either one is subject to disease. However, fungi and bacteria are called diseases and we will have to follow the established usage or we will not be understood.

### Diseases Classified.

We give herewith a general outline under which diseases may be classified:

1. Secretional diseases, in which cellulose is transformed into gum, resin or manna. This effect is produced by over-action of the normal functions.
2. Diseases produced by fungi and other vegetable parasites.
3. Diseases produced by decomposition, as gangrene, or canker. These are processes of decay in which the cellulose is transformed into a muddy fluid, a brown powder or a carbonaceous mass.
4. Diseases produced by the attack of insects or animals.
5. Atmospheric conditions.
6. Soil and moisture conditions.
7. Light, electricity, winds and storms.
8. Crowding, so that the food supply is cut off.
9. Isolation, and consequent lack of fertilization.
10. Unknown causes.

The next article will be on the subject of pests, more especially of the apple.

(To be continued next week.)

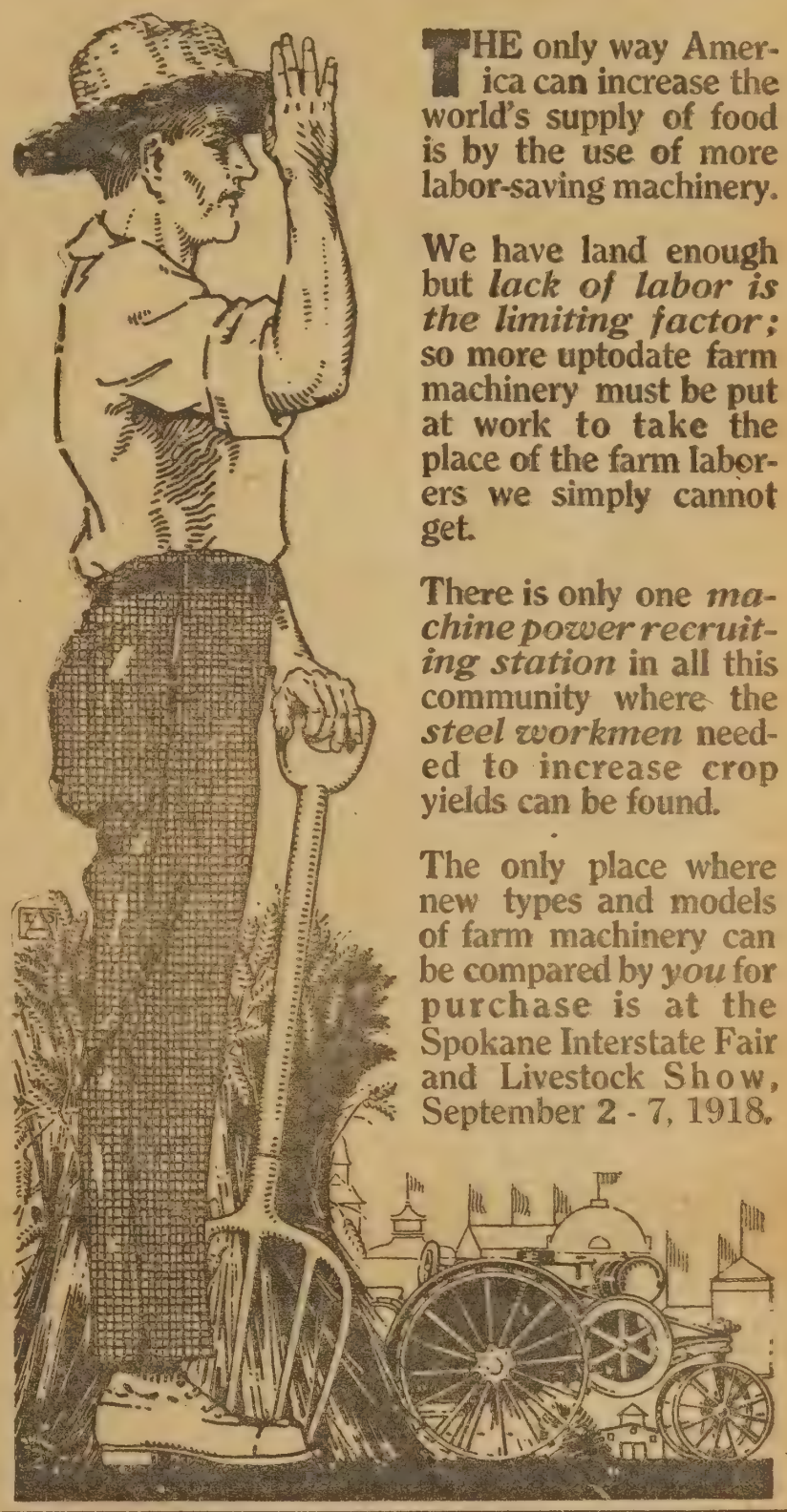
# Device to Unload Hay

C. E. Ricker of Reedsport, Ore., has a most ingenious arrangement for unloading hay into his barn loft. It consists of a platform 12x16 feet, hung at each corner on a pulley and placed about half way below the fork full of hay as it is drawn into the barn and the floor of the mow or level of the hay already in.

It is large enough to hold a big fork of hay, but is hung on a slant, so that the hay slides off to one side. This breaks the fall and lands the fork full of hay at almost any place in the barn desired, as the platform can be slanted in either direction, by a change of the length of ropes holding it. Its location can also be changed by changing the location of the pulleys.

The advantages are evident. While the loft is nearly empty a fork full of hay drops so far it packs very tightly and the middle of the barn is packed full, while two men can scarcely keep the hay spread to the sides. The platform or "slide" eliminates the work of at least one man and makes a much better job of filling the barn and, best of all, when the hay is to be fed out it is found to be not so tightly packed, is thus more easily moved and is not so apt to "burn" or mould if slightly damp when put in the barn.





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# Much Drying of Foodstuffs This Year

(Continued from page six.)

lic demands such fruit, the entire commercial output for many years has been so treated. Unsulphured fruit will darken to an extent directly dependent upon the time required in drying and is subject to souring and to insect attacks in drying, while sulphured fruit is not. There is neither gain nor loss in palatability or in food value as a result of sulphuring, and while the practice has been subjected to severe criticism it has never been shown that it is injurious to persons consuming the products. Consequently, the decision as to whether fruits dried for home use shall be sulphured or not is a matter to be left to individual preference. The sulphuring may be done by any convenient method that will confine the fruit in a box or cabinet with the sulphur fumes for the length of time required for various fruits as hereafter indicated.

### Apples.

The fruit intended for drying should be reasonably mature, but not soft, and should be handled with proper care in picking and hauling so as to avoid bruising, as bruised spots which have become discolored must be trimmed out in order to make a good-looking product. In preparing apples the working force must be so divided that the fruit is trimmed and sliced as rapidly as it is pared, as peeled fruit must not be allowed to remain standing in the air while awaiting its turn at the hands of the trimmers and slicers. After paring and coring, the apples should be trimmed immediately, to remove all bits of peel, discolored or decayed spots, and fragments of core, and at once sliced. Apples are usually cut by means of an attachment on the parer or by a special slicing machine into slices or rings at right angles to the core hole and one-fourth inch thick, but a few individuals will prefer to cut them in quarters. Quartered apples, by reason of their greater thickness and the varying size of the pieces, dry more slowly and unevenly than slices and hence reduce the daily capacity of the drier and require a greater expenditure of fuel per dry pound, for which reasons they are now rarely made in a commercial way.

If the fruit is to be sulphured, it should be spread upon the trays to a uniform depth of one to one and one-half inches as rapidly as it is sliced, and immediately placed in the sulphuring box for 20 or 30 minutes, after which it is transferred to the evaporator. If it is not to be sulphured darkening can be prevented only by providing pails of water into which the fruit is dropped after paring. Trimmers and slicers are also provided with such pails, so that the fruit is exposed to the air only while actually being handled by the workers until it is spread on trays and placed in the warm evaporator. Drying is begun at 130 degrees F., and the temperature gradually increased to 175 degrees. The trays of drying apples should be examined from time to time and, if necessary, stirred with the fingers to correct any tendency to unevenness in drying. The fruit is sufficiently dry when a handful of slices gripped firmly in the hand has an elastic, springy feel, separates promptly when the pressure is released, and leaves no visible moisture upon the hand. It should be removed when this condition is attained and before the slices become crisp and hard.

### Pears.

Pears intended for drying are picked when the fruit is still quite firm, but is readily loosened from the tree when slightly lifted with the hand. They are then stored in boxes or crates beneath a shed for a week or more until ripe, but still firm. They are prepared for drying by removing stem and calyx, splitting lengthwise into halves without removing either core or peel, and spreading on trays in a single layer, cut surface uppermost. In order to make a product having an attractive appearance it is necessary to continue the sulphur treatment for three or four hours, or even a longer time. If the fruit is not sulphured it is necessary to keep it under water after cutting, in the fashion described for apples, until it can be spread and placed in the drier. Half pears dry more slowly than apples and, if preferred, the fruit may be peeled and cored and put into quarters or eighths, which will facilitate drying and also reduce the time necessary for sulphuring. The temperatures to be employed in drying are those recommended for apples. The properly dried product is elastic and rubberlike, and it is impossible to press water out of the freshly cut surface of the pieces.

### Peaches.

Peeled evaporated peaches are comparatively unknown in the markets, practically all commercial dried peaches being dried without peeling. For home use the fruit may be pared by hand, or preferably by a hot lye bath, as no entirely satisfactory machine for peeling peaches has as yet been placed on the market. After paring and subsequent washing the fruits are cut in half, the stones removed, and the halves are immediately spread in a single layer, with the stone cavity uppermost, upon the trays. If the fruit is pared, sulphuring for 20 to 25 minutes will be sufficient; if unpared the time must be increased to one or two hours. These periods can not be considered as definitely fixed, however, as the time needed will vary with the degree of maturity of the fruit used, and even more widely with varieties, a variety of high water content, open texture, and soft flesh, such as the Elberta, requiring little more than half the time needed for such firm, dry-flesh varieties as the Lovell and Muir. The sulphuring is completed when juice begins to collect in the stone cavity. This necessitates careful handling in transferring the fruit from the sulphuring box to the drier, as this juice is rich in sugar and must not be lost by carelessly tipping the trays. Great differences will be observed in the time required for drying. The criterion for sufficiently dried fruit is the attainment of the pliable, leathery character described for apples.

### Apricots.

The fruit intended for drying should be picked from the tree before it becomes ripe enough to drop. The handling of apricots in preparation for drying is like that given peaches, with the difference that the fruit is never peeled, but is halved, stoned, and sulphured for one and one-half to two hours. In apricots, as in peaches, a rich sirup collects in the stone cavities after sulphuring, and careful handling to avoid its loss in transferring to the drier is necessary. With both apricots and peaches drying should be begun at a temperature of 130 degrees to 145 degrees and gradually increased to 165 degrees F. toward the end of the drying process.

### Prunes.

Prunes intended for drying should be allowed to become fully ripe and fall from the trees of their own accord, as such tree-ripened fruit is considerably richer in sugar than that obtained by shaking the trees. Three or four pickings will usually suffice to gather the crop. The fruit should be gathered into crates or boxes holding not more than a bushel and should not be allowed to stand in the crates more than 12 hours after it reaches the drier. In gathering, all partially decayed, overripe, or fermenting, or soft fruit should be discarded.

The term "prune" is applied to several varieties of plums which are alike in that they may be successfully dried without the previous removal of the

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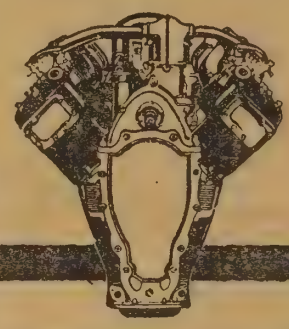
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stones, but which differ in other respects. All those varieties which are commonly dried require a short immersion in boiling lye to remove the thick waxy coating and to check or crack the skin and permit the contained moisture to escape. The exact time for dipping will vary with the variety and also with the degree of maturity of the fruit, but will be about 35 to 45 seconds for immature fruit and not more than half that time for that which is fully ripe. The dipping is properly done when the fruit shows a few very fine checks over the surface and particularly near the point of attachment of the stem, but must not be continued until the skin is actually split or begins to peel off. The lye should be boiling, and the dipping basket should be moved about in the liquid to aid in bringing all the fruit into contact with the solution. The basket should then be quickly transferred to a large vessel of cold water and thoroughly rinsed to remove the lye, after which the fruit is spread in a single layer upon the trays. With the dark-fleshed prunes, such as the Italian or Fellenburg and the Prune d'Agen (also known as the Petite or French prune), which, with the Imperial prune, constitute the principal varieties used for drying, no further treatment is given. Light-fleshed varieties, such as the Silver prune or Golden Drop, require a short treatment in the sulphuring box immediately after the lye dip, in order to preserve the color. Prunes are sufficiently dry when the flesh shows no moisture when torn across and pressed vigorously between the fingers.

It is possible to dry plums quite successfully by cutting the fruit into halves, removing the stones, and placing the fruits in trays in a single layer, stone cavities uppermost. Lye dipping is unnecessary with plums, but a short treatment with sulphur fumes, 20 to 25 minutes, will be required to preserve the color. The treatment of plums cut into halves is that given apricots and peaches, and the criteria for determining when the fruit is sufficiently dried are the same. By reason of their thick, waterproof skins, prunes are especially liable to be burst by overheating at the beginning of drying. Consequently, fresh trays should always be placed in the coolest portion of the evaporator, and the temperature should never be allowed to exceed 140 degrees F., and should preferably be 10 degrees lower for the first three or four hours. As wrinkling of the surface begins, the temperature may be gradually increased and may rise to 175 degrees F. without danger of injury as the fruit becomes nearly dry.

### VEGETABLES.

Practically all vegetables, after being sliced or otherwise made ready for the drier, undergo blanching. It is just here that the final quality of the product is largely determined, since the best material will be spoiled by careless or improper blanching. The word blanching is a canner's term and is applied to a brief treatment of the material with boiling water or steam. The purposes of the treatment are several. It stops destructive chemical changes by destroying the agents which produce them and consequently prevents darkening or discoloration, it preserves or "sets" the natural color, it coagulates some of the soluble constituents, and it kills the protoplasm and consequently accelerates the escape of moisture in drying. Blanching must not be confused with cooking; it in no sense takes the place of the subsequent cooking in preparation for the table. If too long continued it does harm by dissolving out some of the valuable constituents, by breaking down the pigments which give color to the material, or by converting the starch present into a partially cooked paste. For these reasons blanching, whether accomplished by dipping into hot water or by exposure to steam, must be carefully and intelligently done.

#### Potatoes.

Potatoes must first be thoroughly washed to remove dirt and stones. If they are to be peeled in one of the rotary peelers they should be roughly graded for size, as the percentage of waste is greatly increased when potatoes of different sizes are placed together in the machine. Whether the paring is done by machine or by hand, the operators must be cautioned against removing a needlessly thick peel, as the layer immediately beneath the outer skin of the potato contains a considerable percentage of valuable nitrogenous material which is lost by deep paring. When machines are used the eyes must be removed by hand and the workers at the same time must remove all bits of peel and diseased or discolored portions. If the women intrusted with this tedious work can not keep up with the paring, the tubers must be dropped into cold water immediately after paring. Slicing may be done either with a rotary slicer, an apple slicer, or by hand, but in any case the slices should be uniform in thickness to insure even drying. Three-sixteenths to one-fourth inch is the best thickness. As rapidly as the potatoes are sliced they must be dipped or steamed. If to be dipped, they are placed in a wire-bottomed basket or box to a depth of not more than four or five inches and plunged into the water, which should be eight or nine inches deep, and should be boiling so vigorously as to stir and separate the slices. They should remain in the water two or three minutes, and should then be withdrawn, drained, spread upon the trays to a depth of about an inch, and immediately placed in the drier. If steaming is the process employed, the trays are spread directly from the slicer and placed in the steamer. The steam box must be left open after the steam has been turned on until the air is displaced as completely as possible. The door is then tightly closed and the potatoes allowed to remain one to three minutes. The exact time necessary for either steaming or dipping will vary with the season, the variety of potato, the thickness of the slices and the depth to which the trays are loaded, and the efficiency of the steaming box; hence, it must be determined by experiment. The purpose in view is the prevention of darkening, and the treatment should be continued no longer than is absolutely necessary to accomplish this, as prolonged treatment partially cooks the potato and makes it less like fresh potato when subsequently cooked. The drying should be begun at 125 degrees F. and the temperature gradually increased as drying proceeds, finishing with a temperature of 145 degrees to 150 degrees. Potatoes are sufficiently dried when they rattle sharply when stirred with the hand and when the pieces no longer show opaque, spongy white areas here and there on their surfaces.

#### Turnips.

Turnips intended for drying should be gathered before pithiness begins to appear. They are treated precisely like potatoes in so far as washing, paring, slicing, removal of diseased or discolored portions, and spreading on trays are concerned. They require a somewhat shorter treatment with steam or hot water than potatoes, and slightly higher temperature may be used in drying, 135 degrees to 140 degrees F. at the outset and 160 degrees to 165 degrees toward the end being perfectly safe.

#### Beets, Parsnips and Carrots.

Beets, parsnips and carrots should receive the same general treatment given potatoes. They may be pared in the same way, or preferably merely scraped sufficiently to remove the outer dark layer, and are sliced the same thickness. If preferred, any of these vegetables may, of course, be cut into strips by cutting across the slices. A very short treatment in boiling water or steam, not more than two minutes in duration, preserves the natural color, which will change to a grayish or yellowish brown during drying if the product is dried without blanching. The drying should be begun at 120 degrees F., and the temperature should not be allowed to rise above 145 degrees at any time. Parsnips, carrots, or beets are sufficiently dry when the pieces break when one attempts to bend them and when they show no moisture upon being pressed between the fingers.

#### Cabbage.

Cabbage is prepared for drying by

(Continued on page sixteen.)


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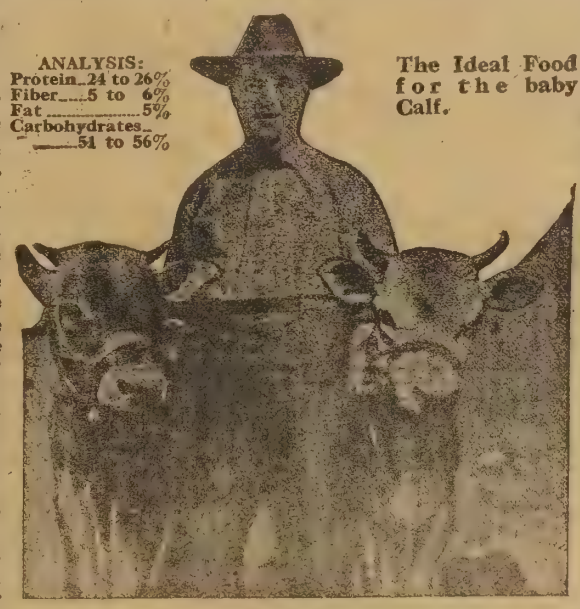


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TAYLOR

# Must Destroy Meat Monopoly

## *President Is Urged by Commission to Take Over the Big Packing Plants*

President Wilson has made public the recently filed report of the special commission appointed some time ago to investigate the alleged monopolistic control of the meat industry by the big packing companies. The commission declares that the five big packers control half of the meat supply of the allied nations and that the power of the companies has been used to manipulate the live stock market, restrict food supplies nationally and internationally, control the price of meats and meat substitutes, defraud both consumers and producers of food, destroy competition in the buying and selling of meat, secure special privileges from stockyards, railroads and municipalities and make unwarranted profits.

The five packing companies thus referred to are Swift & Co., Armour & Co., the Cudahy company, Wilson & Co., and Morris & Co.

The commission makes the following recommendations to the president:

**Government Take Charge.**

First—That the government acquire, through the railroad administration, all rolling stock used for the transportation of meat animals and that such ownership be declared a government monopoly.

Second — That the government acquire, through the railroad administration, the principal and necessary stockyards of the country, to be treated as freight depots and to be operated under such conditions as will insure open, competitive markets, with uniform scale of charges for all services performed, and the acquisition or establishment of such additional yards from time to time as the development of live stock production may require. This to include customary adjuncts to stockyards.

Third—That the government acquire, through the railroad administration, all privately owned refrigerator cars and all necessary equipment for their proper operation and that such ownership be declared a government monopoly.

Fourth—that the federal government acquire such of the branch houses, cold storage plants and warehouses as are necessary to provide facilities for competitive marketing and storage of food products in the principal centers of distribution and consumption. The same to be operated by the government as public markets and storage places under such conditions as will afford an outlet for all manufacturers and handlers of food products on equal terms. Supplementing the marketing and storage facilities thus acquired, the federal government establish, through the railroad administration, at the terminals of all principal points of distribution and consumption, central wholesale markets and storage plants with facilities open to all upon payment of just and fair charges."

"Out of the mass of information in our hands," the report continued, "one fact stands out with all possible emphasis. The small dominant group of American meat packers are now international in their activities, while remaining American in their identity. Blame which now attaches to them for their practices abroad as well as at home inevitably will attach to our country if the practices continue."

The commission says the five packing companies, either separately or jointly, own or control more than half of the export meat production of the Argentine, Brazil and Uruguay, and have investments in other surplus meat producing countries, including Australia, as well as branches in Great Britain, France, Italy, Germany, Canada, Denmark and Paraguay.

**Control Meat for Allies.**

"Under present shipping conditions," the report adds, "the big American packers control more than half of the meat upon which the allies are dependent."

Of the difficulties which the packers threw into the way of the commission's investigators, headed by Francis J. Heney, the report says:

"The commission, through Mr. Heney, had to meet deliberate falsification of returns properly required under legal authority; we had to meet schools for witnesses where employes were coached in anticipation of their being called to testify in an investigation ordered by you (the president) and by the congress of the United States."

The commission reports that the packers not only control the meat supply, but a "countless number of by-products industries" and have invaded allied industries and even unrelated ones. This control has extended now to the principal substitutes for meat, such as eggs, cheese and vegetable oil products, the commission says, and rapidly is being extended to cover fish and nearly every kind of foodstuff.

After detailing the control of the five companies over the meat and allied industries the commission says this control rests in the hands of a small group of individuals: J. Ogden Armour, the Swift brothers, Morris brothers, Thomas E. Wilson, acting under the veto of a group of bankers, including the Chase National bank, Guaranty Trust company, Kuhn, Loeb & Co., William Salomon & Co. and Hallgarten & Co., all of New York, and the Cudahys.

The commission says through the control of Wilson & Co., Inc., three of the most powerful banking groups in the country are "participating in the rapidly maturing food monopoly." This participation of the bankers in the packing industry, it says, was not at all displeasing to the big packers and J. Ogden Armour and Louis F. Swift were consulted during the negotiations looking to acquisition of an interest in the industry by the bankers.

**A Family Affair.**

"The menace of this concentrated control of the nation's food," says the report, "is increased by the fact that these five corporations and their five hundred and odd subsidiary, controlled and affiliated companies are bound together by joint ownerships, agreements, understandings, communities of interest and family relationships."

In detailing how the packers are alleged to have gained control of the meat supplies of the United States and the allies, the commission said:

"The Armour, Swift, Morris and Wilson interests have entered into a combination with certain foreign corporations by which export shipments of beef, mutton and other meats from the principal South American meat-producing countries are apportioned among the several companies on the basis of agreed percentages. In conjunction with this conspiracy meetings are held for the purpose of securing the maintenance of the agreement and making such readjustments as from time to time may be desirable. The agreements restrict South American shipments to European countries and the United States.

"Since the meat supplies of North and South America constitute practically the only sources from which the United States and her allies can satisfy their needs for the armies, navies and civil populations, these two agreements constitute a conspiracy on the part of the big five, in conjunction with certain foreign corporations, to monopolize an essential part of the food of the United States, England, France and Italy."

**Packers Object to the Plan.**

Protests against the recommendations of the federal trade commission that the government assume control of the packing industry were made by some of the heads of concerns involved.

J. Ogden Armour, president of Armour & Co., after pointing out that the government had been in control of the packing industry since November 1, 1917, said that the statement made by him at the beginning of the war, that "the United States government can have Armour & Co. and every employe and official thereof, if need be" was reiterated "a thousand times more emphatically."

Thomas E. Wilson, president of Wilson & Co., said that if any new methods for the benefit of the public can be worked out, "we will welcome them and cooperate to the fullest extent."

Edward Morris Jr., for Morris & Co., issued the following:

"I have not seen the report, but from what I can learn the idea of the federal commission is to turn the entire stockyards and packing industry over to the railroad administration.

"The main object now is the 'winning of the war' and we know of no institution that has played as important a part and with profits limited to 2 1-2 cents on the dollar of business done, or a total of not over 9 per cent for the year. On the capital invested I can not see where conditions would be improved.

"We believe that any one familiar with the situation will agree that the packing industry is the one industry that has performed its services with 100 per cent efficiency. This applies to the feeding of the army, navy and all our allies, besides taking care of the civil population.

"Food products are now being handled by the packers to the entire satisfaction of the army, navy and our allies. Why try an experiment at this critical time?"

Louis F. Swift, president of Swift & Co., issued the following statement:

"We naturally do not like to be publicly charged with unlawful methods of gaining monopoly control when we know that we are in open and honest competition with every other packer. The report apparently tries to prove that the packers have obtained a monopolistic control through the ownership of live stock and refrigerator cars, stockyards and branch houses, and advocates that the government acquire these facilities.

"Swift & Co. is perfectly willing to let the railroad administration decide whether it shall take over our live stock and refrigerator cars. The principal thing to consider is whether the present service could be improved. The only reason we ever built our own refrigerator cars was that the railroad did not furnish the equipment.

"The stockyards are already being regulated by the United States department of agriculture, and we have no objection to the government's taking them over completely if it sees fit to do so. We wish to point out, however, that our company has become interested in stockyards only for the purpose of providing proper market facilities that did not otherwise exist, and that in such stockyards there are open competitive markets with uniform and reasonable charges for services performed. It is difficult to see how the public could be benefited by such action; in fact, quite the opposite effect might occur.

"We do not believe that taking over branch houses and storage houses would be practicable, as it would destroy personal initiative in handling of a highly perishable product, where great skill, acquired only by long experience, is necessary. It would also be a risky experiment in government operation that would be of doubtful benefit, even if successful and would undoubtedly react unfavorably on live stock values.

"No one is more interested in improving conditions in the live stock and meat trades than we are, and we are willing to cooperate with the government in any practical constructive plan."

# Handicraft For Girls

### By Dorothy Perkins

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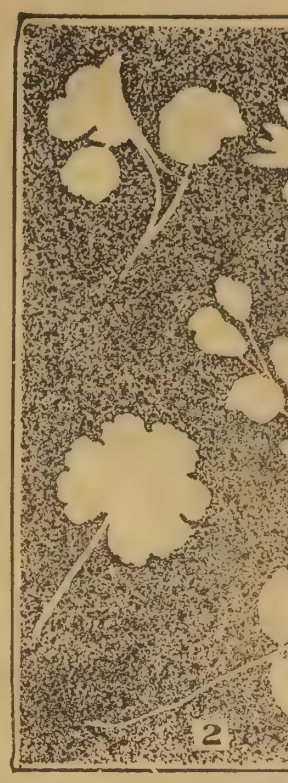
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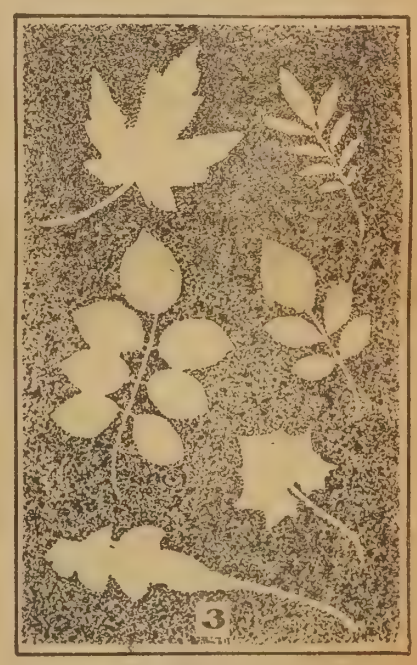

your collection. Perhaps you can find right about you varieties enough to fill a scrapbook. But it is not necessary to complete such a collection this season; in fact, after you once get it started you will wish to keep on adding new varieties as you come across them.

Before I tell you how to make the scrapbook, let us see how the spatterwork is done. There is not very much to learn and the work is easy. Besides paper upon which to make the pictures, which may be in sheet form or in the




form of a blank notebook, you need drawing ink, a penknife, and an old brush.

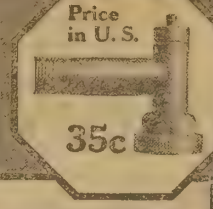
Place a leaf of which you wish to make a spatterwork picture flat upon a piece of paper. If its edges curl it must be pressed out by having a weight placed upon it, and it is best of course to do the pressing between sheets of paper other than those on which you are going to make spatterwork pictures, as the pressing will probably stain the paper. With the leaf in position upon the sheet of paper, dip the brush into the ink, and draw the blade of the pen-knife across the ends of the bristles, holding the brush in such position that the ink on the bristles will spatter over the edges of the leaf. Move the brush so the spattering




will be even. When the ink has dried lift the leaf from the paper and you will find a white silhouette of it upon a stippled background.

In making up pages for a scrap-book, mark off the margin that you wish to have around each page. Then cover these margins with pieces of paper, lapping the pieces at the corners and weighting them with coins, as indicated in Fig. 1, to protect the marks from the spattering. Arrange the leaves in some such order as that shown in Figs. 2 and 3, or classify them according to their species, and then proceed to spatter them. You will find the loose sheets easier to handle than a bound notebook, and if you classify the pictures extra sheets containing new varieties can be inserted at any time between the loose leaves, wherever they belong. Punch the left-hand edges of the loose sheets in three places, and bind them with shoe-laces between cardboard covers.

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# Much Drying of Foodstuffs This Year

(Continued from page thirteen.)

trimming off all dead, diseased, or discolored leaves, cutting out the central stalks, and cutting the heads into slices one-third to five-eighths inch thick, which are subdivided by again slicing at right angles to the first cut. A rotary slicer of sufficient size to receive a half head of cabbage will do the work rapidly and satisfactorily, but an ordinary slaw cutter, or even a butcher knife, may be used. The sliced cabbage is blanched by exposing to steam for three minutes after spreading on the trays or by dipping into boiling water in a wire-bottomed box or basket for four minutes. The dipping vessel should not be filled to a depth of more than 6 to 8 inches and the contents should be stirred vigorously during the dipping, in order that the hot water may quickly reach all parts of the vessel. Since cabbage tends to pack together rather closely on the trays, care must be taken to spread it as evenly as possible to a depth of not more than one inch, and to stir the material frequently in the earlier hours of drying, in order that thick masses may be spread out over the thinner areas. Start the drying at 115 degrees to 125 degrees F. and increase the temperature by 10 degrees as drying nears completion. Great care must be taken to avoid scorching the product; the thin portions of the leaves dry much more quickly than the thick, fleshy ribs, and are very prone to scorch and brown upon the slightest overheating. The product is sufficiently dry when no water can be squeezed out of the thicker pieces by strong pressure between the fingers.

**Cauliflower.**

Remove diseased or discolored portions of cauliflower, wash, and cut into small pieces, either by hand or preferably in the rotary slicer. Blanch five or six minutes in steam or four minutes in boiling water. Spread rather thinly on the trays and dry with an initial temperature of 120 degrees F., which may be increased, if desired, to 130 degrees as the material becomes almost dry. Cauliflower undergoes a very considerable darkening during drying, despite the rather prolonged period of blanching here recommended, but the original color is more or less perfectly regained when the dried material is subsequently soaked and cooked. It is treated in the curing room as are other vegetables and is sufficiently dried when no moisture can be crushed out of the pieces with the fingers.

**Onions.**

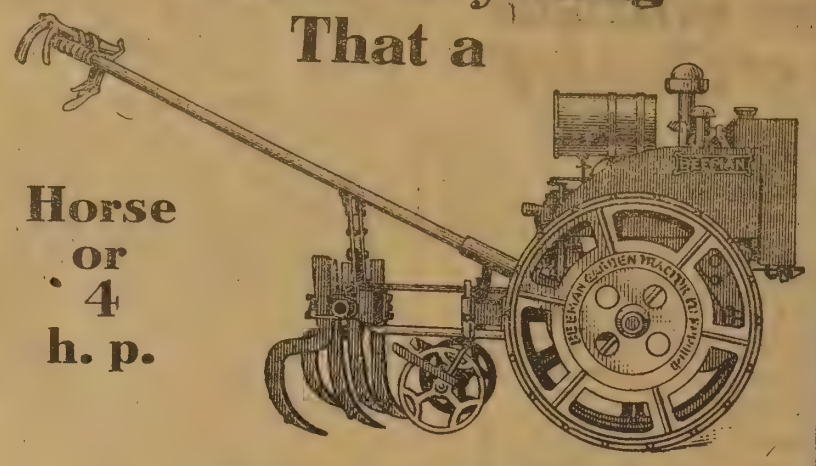
As no satisfactory machine for the purpose has been devised, the outer discolored portions of onions must be removed by hand. Blanching is not necessary, and the slight improvement in color which it gives is more than offset by the loss of soluble constituents into the water used for dipping. The onions should be spread on trays as rapidly as they are sliced and immediately placed in the evaporator. The temperature in the drier should be 140 degrees F. when the onions are placed in it, and should be held at this point throughout the drying. The product must be carefully watched toward the end of the process, as thin detached pieces rapidly scorch unless mixed with the thicker compact slices. The product is dry when pieces break crisply on bending, and it should be promptly removed to guard against overdrying.

The evaporator may also be used for curing onions to prevent storage rots and to prolong their season of storage. Alternate trays of the drier are used and the onions are loosely piled upon them to a depth of four to six inches. The ventilators are wide open and a very small fire, just sufficient to maintain a temperature of 95 degrees to 100 degrees F., is started in the furnace. The drying is continued until the outer scales are quite firm and hard and the onions have lost 8 to 10 per cent of their weight, after which they are stored in the usual manner.

**Pumpkins and Squash.**

Pumpkins used for drying may be of any variety, but the firm, solid-fleshed, deep-colored varieties will give a larger yield of a more highly flavored and consequently more desirable product. Either summer squash or the later maturing varieties may be dried. In any case the vegetables should be mature and in good condition for use fresh. The treatment given pumpkin and squash is identical. The vegetable is cut into strips two inches wide and peeled, the seeds are removed, and the strips are passed through a rotary slicer set to cut pieces one-half to five-eighths inch in thickness. The pieces are immediately blanched, either in boiling water or steam, for three to six minutes. The


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different varieties which are used vary so much in the character of their flesh and the amount and depth of their coloration that the operator must necessarily learn by a little experimentation the best length of time for blanching the particular lot of material on hand. The process is completed and must be stopped as soon as the pieces have become semi-transparent.

The drying should be begun with a temperature of approximately 135 degrees F., which may be gradually increased to 160 degrees as the material dries. The trays should be looked over once or twice, in order that any moist spots may be opened up and spread out. Pumpkins and squash should not be dried until brittle; the material is in proper condition for removal from the evaporator when the pieces have become leathery in texture, but show no moisture when cut across and crushed.

**Tomatoes.**

Fruit intended for drying should be well ripened but still firm. Wash the tomatoes, place in a wire basket, and submerge in boiling water for one or two minutes, to loosen the skins. Remove and allow to cool, strip off skins, remove the hard, woody central core and any adhering skin or diseased areas, and cut the fruit into slices three-eighths to one-half inch in thickness. Spread the slices in a single layer upon the trays. Tomatoes can not be placed directly upon naked wire trays, as the acids of the fruit become so concentrated during drying that the metal is rather vigorously attacked. Trays may be protected by painting them over with a brush dipped in boiling paraffin or by laying pieces of cheesecloth over them.

The temperature at the beginning should not be more than 120 degrees F. and may be gradually increased to a maximum of 140 degrees toward the completion of the drying.

Properly dried tomatoes as taken from the drier will show no moisture on being pressed between the fingers.

**Sweet Corn.**

Corn intended for drying should be gathered when in the milk stage, before glazing and hardening have begun and when the corn is in ideal condition for immediate table use. It should be gathered only as rapidly as it can be worked up at the drier and must never be allowed to remain standing in bags or boxes in the field or at the drier. This is imperative, as no produce deteriorates more rapidly on standing in a warm place.

The ears are husked and trimmed with a knife to remove any worm injuries, but no effort to remove adhering silks need be made, as these are readily separated from the grains after drying. The ears are then placed in wire baskets or wire-bottom boxes and plunged into boiling water for 8 to 12 minutes. The cooking is complete when the milk is "set;" that is, when no fluid escapes from the grains upon cutting them across. Younger corn will require a longer period of cooking than the more mature ears, so that the corn may very well be divided in husking into older and younger lots, which are cooked separately.

After cooking, the corn is emptied upon a table, allowed to drain and cool sufficiently to be handled, and then cut from the cobs with a strong, sharp knife. The knife should be so held that none of the cob is removed with the kernels. The adhering glumes like the silks, are easily screened out after the corn becomes dry. The kernels are spread upon trays to a depth of one inch and dried at 130 degrees to 140 degrees F. The grain should be thoroughly stirred several times during the drying, to separate any adhering masses and equalize the drying. Properly dried corn is hard and semitransparent, and the kernels break with a clean, glasslike fracture when crushed.

**TREATMENT OF PRODUCTS AFTER DRYING.**

After removal from the drier, fruits or vegetables must be subjected to an after-curing or conditioning process before they are permanently stored away. Any lot of material, even that removed from a single tray, will not be uniformly dry throughout, some portions being over-dried while others contain too much moisture for safety. If such material while still warm be piled loosely upon a clean floor and subsequently thoroughly stirred at daily intervals for 10 days or two weeks, the wetter portions give up some of their water to the drier parts or to the atmosphere, the moisture content of the entire mass becomes uniform, and a condition of equilibrium with the surrounding air such that the material neither absorbs nor gives off measurable quantities of moisture is presently attained. Material so treated is said to have been "conditioned" and may be stored without danger of spoilage.


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# Magazine Department of The Washington Farmer




Quite frequently we hear parents asking if it is safe to allow their children to have animal pets to play with —dogs, cats, rabbits, lambs, calves, or colts.

In the stricter sense, possibly there is opportunity for differences of opinion on this question. Many parents, of course, fear that their children will catch a contagious or infectious disease from animal pets. They may even forbid their children from having pets of any kind. They may get a husky youngster with a craving for pets, a goldfish to play with.

Most of us have observed the intense, inborn desire of a child to possess for its very own, live pets—something which they can care for and which they will fight for. This instinct is, after all, not greatly different from that of the more mature person, who likewise feels the longing for something of his own which will be loved, provided for, and defended. It certainly seems that this life begins with small things which develop into greater—unless normal development is arrested—and childhood's love for living pets is only an instance to the point.

It is a fact that in the early years of life a child "grows" in other ways than in stature. It is building character. What it builds then will last a lifetime. To me it seems impossible to neglect a child at this early period when it is building character for a lifetime, and make amends for this neglect in later years, when the traits of character have become fixed. Making a practical application of this thought I say that I believe is impossible to thrust out of a child its love for living pets of its own, and still have the child develop normally in childhood and mature years. It can not be done. Blight the love of a child for its living pets or its parents or its associates, and this blighting will show forth some day, to your sorrow.

A boy, we shall say, has a dog for a pet. If he is a real boy the chances are that some day when the dog is eating the boy will pinch his tail. The dog may snap at the boy, though not once in 20 times will the boy's pets snap hard enough to draw blood. He may seize the boy's hand in his mouth, or catch him by the leg and hold him for a second without biting at all. We have all had this experience if we have had anything to do with dogs in our childhood.

Then and there the boy learns that the dog has rights which he must respect. Here begins in the boy the development of a trait. He perceives that others as well as he, have rights. How much of this understanding and the character that is formed by this understanding will be developed in the child who grows up without playmates, always has his own way and never in his life has to stand aside in respect to the rights of another?

Suppose, however, that while this dog is eating, another boy comes along and pinches his tail, or throws a stone at him. The chances are excellent for a fight between two boys, unless the other boy runs. You may rest well assured that a boy who grows up fighting for his pets now and then will know, when he arrives at manhood, what it is to fight for his own rights or the rights of those weaker than he—or the rights of his home and country. But the boy who never in his life has had to give battle for the rights of his pet, or himself, will in all human probability, develop into such a man as in these days is occasionally called "slacker." It is the same with girls. She gets precisely the same training from her kitten which will scratch if abused, and often must be protected from the dog owned by the little boy across the street.

This love of children for living pets is so great that they will risk perils and adventure to lug home a stray kitten or puppy of unknown parentage and history and share their food with it, even if they lack what they want themselves.

As to the question of diseases transmitted from animals to children, I do not believe there is a hundredth part of the chance there is for the spread of contagious ailments from child to child. In a few instances the dog may become the innocent carrier of infective material; but in such a case the dog quite invariably will have acquired this from a child. Animals, as a rule, are healthy. If children were as healthy as the dogs and cats, the rabbits, calves, lambs and colts they love to play with the conditions of childhood as affected by sickness would be marvelously different from what now obtains.

I have gone so far as to make the statement that I believe where there is no indication of a desire on the part of the child to have as his own to love, protect and abuse occasionally, a living pet, afterwards you will see a man or a woman in which there is a trait spoken of in the vernacular as "a yellow streak."

# Woman Suffrage May Become National

Although the women of the northwestern states have been voters on a par with men for several years, the question of woman suffrage is still a live issue with them. The immediate reason for this is that there is now pending in congress an amendment to the national constitution granting women in all the states the privilege of voting. If this amendment is adopted by congress it must be ratified by the legislatures of three-fourths of the 48 states of the Union before it will become effective. Hence, the nation-wide interest that is being aroused at the present time over the question.

The present status of the constitutional amendment is as follows: The house of representatives in congress immediately following the indorsement of the amendment by President Wilson approved it on January 10 last. At that date leaders of the suffrage movement knew that they lacked 11 votes of having enough favorable senators to pass the measure in the senate. They have been working since that time and report that now they need to win over only one more senator to be able to pass the amendment. It is probable that the measure will come up for vote in the senate in the near future.

In some instances those who are opposing the enactment of the amendment do so on the ground that it is a matter for the states individually to settle, and not for the nation as a whole. Others, especially in the south, where there are large numbers of negro citizens, women as well as men, argue that the enfranchisement of women would give the ballot to thousands of negro women who, they claim, are incapable of its intelligent use.

Since President Wilson's indorsement of national suffrage as provided in the amendment now pending, national organizations of many varieties have indorsed it. The national executive committees of both the republican and democratic parties have indorsed the amendment as have also various women's organizations, the American Federation of Labor, the grange, the nonpartizan league and the political organizations of several of the states.

President Wilson indicated the deeper significance of the suffrage movement when last June in a letter to the speaker of the Louisiana house of representatives he said, "I can not help regarding the settlement of this question as of world-wide significance and as affording a standard by which to judge our present interest in the complete establishment of democracy." The amendment before the senate at the present time is brief, but to the point. It reads as follows:

Article 1—The right of citizens of the United States to vote shall not be denied or abridged by the United States or by any state on account of sex.

Article 2—Congress shall have power by appropriate legislation to enforce the provisions of this article.

# SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

## What Paralysis Is—How Science Cures Some Cases


Dr. Hirshberg.

Paralysis, palsies and apoplexies are abominations to tax Job himself. Apoplexy is not, as Falstaff took it, "a kind of sleeping in the blood." It is a blood clot or a hemorrhage in the brain, which transfers movement, sensation and memory and perception.

After an "apoplectic stroke" there may occur unconsciousness or not, in accordance with the degree or severity of the clot or hemorrhage or the area involved.

Loss of sensation and movement of an arm or leg indicates that paralysis has taken place on one side and bleeding on the other. The palsied limb may or may not have loss of the common senses of touch, pain, heat or cold.

Discretion and good judgment on the part of the medical attendant are necessary. If his ability as a diagnostician is equal to his skill in treatment he must decide whether to exercise the paralyzed side at once or in the future.

Electricity, osteopathy, massage, Swedish movements, and exercises each day have their intense advocates. All, perhaps, help more or less, and contribute to the repair of the disconnected tissues and restoration of some movements.

**The Movement Aids.**

Commonly spoken of as "active" or "passive," movements of muscles are considered as possible by the person's own efforts—active—or by some outsider's activities—passive. "Free" movements are made without much work or resistance. When the osteopath or Swedish masseur interposes obstacles to check these they are called "resistance exercises."

When the palm of the hand and the thumb are used to stroke the surface of the part affected, the flesh and blood are toned and aided materially. This receives the name of effleurage or stroking. Petrissage is a movement made losely with a circular motion of the tips of the thumb and fingers.

When paralysis, stiffness and adhesions are present, petrissage is a good method to break these up. Kneading and friction also assist the palsied muscles to return to a useful state.

It is also necessary to tap and strike muscles sharp blows with the sharp edge of the palm on a line with the little fingers. This is called tapotement, and its effects are mechanical and physiological. All of these methods have a value. They loosen the muscles when shrunken or contracted, and maintain the relaxed ones in a tonic, healthy condition.

A paralyzed structure is undertoned, defectively nourished, worn, wan and wasted. This is called the atrophy of disuse. The central depot and its nerves have been cut, diminished nutrition and action are the consequences.

A paralyzed arm or leg may be flaccid, relaxed, toneless, or it may be contracted. Friction adds to the nutrition and tone of the muscles. It should, like massage, electricity, osteopathy and exercises, be used upon the muscles of the back of the arms and the fronts of the legs. This helps to overcome the tendency of the front arm and rear leg muscles to curve, flex and contract.

Each instance of paralysis, whether of one or both sides of the anatomy, or only one limb, ought to be given special treatments. Successful restoration of a useful leg and arm are the rewards obtainable.

Results of treatments carried out by Dr. Robert Ogden of Washington confirm the years of practical, physical treatments. One subject, for example, had the left side of the brain injured, resulting in much the same effects as apoplexy. The right side was paralyzed —hemplegia it is called.

The left arm was strapped across the victim's chest so it could not be used, and he was compelled to try to use the palsied arm. To help him, friction, osteopathic exercises or massage were applied to the back of the arm. In a few days he was able to draw away the hand and to grasp weakly. At the end of two weeks he was able to use the arm and leg very well, and even to walk.

# Sidelights

**Easily Won Reputation.**

Betty—What a delightful conversationalist Jack is.

Belle—What did he talk about?

Betty—Me.—Boston Transcript

**A Minor Loss.**

The observant one (to brother officer sitting at the Officers' club).—Do you know you've lost your cap badge?

The gloomy one (of the motor transport).—I'm not surprised. I've just lost a couple of caterpillars, a six-inch Mk seven, nine motor lorries and a four-wheel drive.—Galveston News.

**Who's Who in War Time.**

He—Have the car ready at the Admiralty at 4:30.

Chauffeuse—Very well.

He—I am accustomed to being addressed as "My Lord!"

She—I am accustomed to being addressed as "My Lady!"—London Opinion.

**Makeshift.**

"Those oldtimers used to inscribe their historic records on rocks with a chisel."

"Yes," replied the young man noted for sudden outbursts of wisdom; "I suppose the ancients had their troubles about white paper shortage the same as we have."—Exchange.

**Short on Information.**

A dashing lieutenant colonel, ex-member of the general staff, was approached by a recently drafted man.

"What might your name be? Do you belong to this bunch?"

"I'm the colonel in charge."

"Wal, I see the balance of 'em busy around here, and I don't see you doin' anything. How does a fellow go about gittin' your job?"—Everybody's Magazine.

**What Frightened Him.**

Betty was milking the cow when the mad bull tore over the meadow. Betty did not stir, but continued milking. Observers who had run into safety saw to their astonishment that the bull stopped dead within a few yards of the maid and cow, turned around, and went away sadly.

"Were you afraid? Why did he run away?" asked every one of Betty.

"He got scared," said Betty. "This cow is his mother-in-law."—Good Jests.

**His Alibi.**

An old negro went to the office of the commissioner of registration in a Missouri town and applied for registration papers.

"What is your name?" asked the official.

"George Washington," was the reply.

"Well, George, are you the man who cut down the cherry tree?"

"No, suh, I ain't de man. I ain't done no work for nigh onto a year."—Everybody's Magazine.

# All the World's a Stage, and All the Men and Women Merely Players

## English King at Baseball Game.



The above photo shows King George of England being introduced by Admiral Sims to the captain of the American navy baseball team. The game, held at Chelsea, on Independence day, was attended, for the first time, by a British sovereign, King George.

## U. S. Regiment Passing in Review.



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An American regiment passing in review before they leave for the front.

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—New Castle Herald.

## Now for the Knock-Out Blow.




—National News, London.

## Major General Brown of Rainbow Division.




The 42d division, more commonly known as the famous Rainbow division, is now participating in one of the fiercest struggles of the war. Under the able leadership of Major General Brown, his division has been able to hold the line in face of continual waves of oncoming Huns. The Rainbow division was among the first to reach France, and its ranks are said to include men from every section of the United States. The division has been in action constantly.

# Trappers of the Ozarks

The Adventures of Two Young Trappers in the Wilds of Upper Louisiana, Now the State of Missouri.

By LEWIS B. MILLER

Copyright, 1914, 1915, by Lewis B. Miller.

## CHAPTER XXIX.

### With the Prince of Pioneers.

"Now that the redskins have at least one canoe, they can give us a lot of trouble as we drift along down—don't you think so?" Jodo inquired, soon after the two voyagers had got well out on the river.

"Undoubtedly they can. If they're still over there, and are watching us start out, they'll be likely to follow us."

"And we'd better keep a little close to the north bank, so as to get holp if they attack us while we're opposite the settlement."

"They'll be too cautious to attack us till we're below the island. After that, look out!"

When the last cabin had been left behind, the travelers, knowing it would be many miles before they saw another human habitation, found themselves feeling both lonely and anxious.

"It might have been best, after all, for us to have waited for those other canoes," Jodo remarked.

"I'd like some company. But that's not the party for us to travel with. They'll be light, and have two or three or four men to a canoe, while we've got three heavily-loaded, deep-sunk canoes for two men. Too much—altogether too much difference."

"Maybe so. But it would have saved us a lot of worry, even if we'd had to work harder."

The voyagers now had as much as they could look after; for they seemed to be in one of the worst parts of the river. There were numerous snags, with an occasional whirlpool that tried to keep them circling instead of sending them on down stream. Also, there were many invisible sand-bars for the canoes to run aground on. But the canoemen managed to keep a cautious eye out as they paddled their way along. Sometimes, too, one of them would turn and gaze back, half expecting to discover an Indian-filled canoe following them.

It was well on in the forenoon when they caught sight of two canoes, far down the river. Whether the canoes were coming or going could not yet be told. Nor was it possible, at such a distance, to make sure as to whether the canoes carried white men or red men.

Before long, however, Ben and Jodo could make out that the canoemen were keeping near the north bank. That meant that the canoes were coming up stream, the current being feebler near the banks. Now the trappers felt not a little anxious. Were the approaching canoemen red or white? More probably they were Indians.

The trappers put fresh priming-powder into the pans of their rifles and pistols, then took up their paddles again. But it was not long till they could make out that the approaching canoes carried white men. There were three in each canoe—six in all.

Ben steered over toward the north bank to meet them. The two parties gazed at each other as they came together. The others ran in against the bank, where they could hold to bushes, and Ben did the same.

"Where are you bound for?" inquired Ben, after the two parties had exchanged greetings.

"For the Boone's Lick country," one of the up-stream canoemen replied. "Newcomers in this part of the world, we are. We've left our families there a few miles above St. Louis, close to Fort Bellefontaine, and we're makin' a little trip up to the promised land to look it over."

"Well, I suspect you're wise to go on ahead for more reasons than one," Ben answered.

"What reasons?"

"Well, for one, and the main one, there's more or less danger just now."

"Danger from who—from what?"

"From Indians. They don't seem actually to have started on the war-path yet. At least they haven't made any open attack on the upper-river settlements. But they're ready to pounce onto every straggler they can catch away from shelter, like a hawk onto a lost chicken."

"We've heard tell that the redskins have done some devilment, and might be troublesome. That's one reason we though it best to go up free-handed first and spy out the land."

"I've been hearing a lot about the Boone's Lick country for a year or two, and I'm not a little interested in it myself," Ben remarked. "First I heard of it from Daniel Boone. He put up a cabin up there a few years ago, and spent a winter there, hunting and trapping. He and I went on a hunting-trip together after that, and he told me not a little about that region. Finest country a bird ever flew over, he insisted. But any country is apt to look fine to Uncle Dan'l if there's plenty of game there. I've heard a lot about the Boone's Lick country from others, though—men that have seen it. And I rather think I'd like to settle down there myself."

"Better turn round and go back with us," one of the other party suggested.

"Don't know anything I'd like better, if matters were a little different. But we've been away from home so long. And here are all these furs and other things to get to market. But I'm likely to make a canoe-trip up there later. In fact, I'm almost sure I will if the aborigines don't go scalp-hunting."

"Are you a family man? You look rather young for that."

Ben smiled slightly. "Not yet—not just yet."

"But he's got prospects," Jodo remarked.

"Did have prospects," Ben corrected. "But two or three other fellows are ready to steal my prospects, and—and eight months is a long, long time to leave a girl without a word or a line. I'll never do such a thing again."

"'Tis a leetle mite resky," the other man agreed. "Still, girls by the thousand have waited longer than that for men to come home."

"But he's got a dead-sure chance if the one back at the settlements flickers out," Jodo explained. "Away out yonder in an Osage village, where we made a little visit last winter, there's a nice fat squaw named Watermelon that loves the very ground Ben walks on. An Osage chief has got her now, I understand. But Ben could probably buy her back for a few deer-skins. She told 'im again and again that she'd cookee his meat allee time—"

"Let up there, will you!" exclaimed the embarrassed Ben, blushing.

The other men laughed heartily. "Mighty good thing to have two strings to your bow," one of them remarked.

"Even if one does happen to be a red string," laughed another.

"Well, mighty sorry you boys cain't turn round and paddle back up the river with us," the man who had done most of the talking now said to Ben.

"So am I. Did you men notice any redskins on your way up?"

"Late yisterday evenin' we ruther guessed we caught a glimpse of a red man in the woods on the river-bank. But we couldn't tell for certain. We took some little precautions last night. Camped one place and cooked our supper, then moved up the river about a mile to sleep."

"That was only common prudence. And you'll be wise to take some such precaution every night from here on. We've had to do the same thing, and will do it again, I've no doubt."

After an exchange of experiences, the up-stream canoes started on. But before the two parties were out of hearing, one of the men called back:

"Early this mornin' we passed a canoe on its way down stream. Two fellers in it, one white and t'other black. We was passin' a little island at the time. The two men went down the main stream and we paddled up the side stream, because there wasn't much current there. We didn't talk to 'em, but we waved at 'em at a distance, and the white man took off his 'coon-skin and waved at us. You may overhaul 'em by night. They had a right smart cargo aboard—so it looked to us like."

"I'm hoping we may," Jodo called back.

The two parties now moved on their ways, the up-stream party fighting the current along the north bank, and the down-streamers making for the middle of the river again.

"I'm glad we don't have to paddle all these canoes against the current," Jodo remarked.

"We could never get anywhere."

"It would not only be harder work, but it would be more dangerous, because we'd have to hug one bank or the other."

Ben agreed with him, and they paddled on. Eager to get through the wilderness that still separated them from the settlements below, they used their paddles with a will. The heavily-laden canoes kept them from making much progress with their paddles, but the current swept them along at a good speed. Here, as elsewhere, there were numerous snags in the river. But most of those could easily be avoided in the daytime. There was, of course, some danger that the canoes might be stopped and overturned by an invisible snag.

"Ben, you know they'he running boats away back east by steam. Do you s'pose they'll ever run boats that way on this river, or on the Mississippi?"

"I haven't a doubt in the world that they'll do that very thing, and that before many years, too. In fact, I've already heard talk of building a steamboat west of the Alleghany mountains, on the Ohio river. When they once start one on the Ohio, it won't be long till they'll start another on the Mississippi and the Missouri."

"Well, I do hope I shall live to see that. I hope I shall live to see a steamboat come pushing herself right up the Mississippi to St. Louis, and even on up the upper Mississippi, and up this river."

"Jodo, boy, if the redskins don't snuff us out before we strike the settlements, you'll stand a number one chance to see that very thing."

"When dinner-time came, the travelers laid down their paddles and allowed the canoes to drift till the meal was ended. While they tried to follow the main current most of the time, when it carried them too near either bank, they were accustomed to steer back toward the middle of the river. But now, being busy with eating and talking, they let the current sweep them too far over toward the south bank.

They had just noticed the fact that they were almost within rifle-shot of that bank, and that the current was carrying them still closer, when Jodo happened to glance at the woods along the bank and saw a dark face, with fierce black eyes, watching them from behind a tree-trunk!

After a few quietly spoken words to Ben, they took up their paddles and began to guide the canoes away from the dangerous spot. Both sat low in the canoe, and both half expected to hear a rifle crack. But no sound broke the stillness. Soon they were again a safe distance out. But their narrow escape made them nervous, and made them realize that they were in the very midst of perils.

"The red rogues have got their evil eyes fastened on us," Ben observed. "Plainly they don't intend to let us slip out of their clutches if they can prevent it. I'm beginning to dread tonight."

"So am I. We shall be lucky if we can give 'em the dodge somehow. Maybe we'd better not sleep tonight. Maybe we'd better keep on the go, like we did coming down the Osage.

"I've thought of that, more than once. If it wasn't for the treacherous character of this water-course, I'd favor it. But a man takes his life in his hand when he drifts down the Missouri in the dark. Still, we may have to risk it," Ben said, and relapsed into thoughtful silence.

When the sun was low, they began to watch for a camping-place. An island seemed better than the mainland, and they put off camping in the hope of coming to an island. While still looking, they happened to glance backward, and caught sight of three canoes far up the river. The canoes, outlined against the setting sun, seemed to be crossing from one bank to the other. And there could be little doubt that the figures in them were Indians.

"Three canoes—whew!" Ben whistled. "Jodo boy, sure's your're born, we're in for a lively night of it! Yonder's an island ahead at last! But with the Indians in canoes, an island isn't particularly safer than the mainland."

"While the moon shines it ought to be. We can station ourselves on opposite sides, and make it interesting for anybody that tries to approach."

"But we can't afford to stay in any one place long. We're likely to find ourselves surrounded if we do."

"Maybe we can drift away before moondown tonight. Those clouds rising from the south will soon cover the moon and the sky, I imagine. And then we can steal away without being seen."

While nearing the island, the travelers were startled to discover a smoke rising from the lower end of it. Now they ceased paddling and eyed the campfire suspiciously. The smoke was rising from some woods, and the fire itself could not be seen.

Both sat down rather low, holding their rifles in readiness to shoot, and allowed the canoes to drift.

When opposite the fire, both caught sight of a dark face peering at them through a fringe of willows.

"Indians there!" gasped Jodo, clutching his rifle hard.

Ben return no reply. He crouched low, ready to fire at the first hostile movement. Both were waiting anxiously to see what the Indian was going to do.

But instead of opening hostilities, the figure behind the willows reached out a swarthy hand and—beckoned to the canoemen!

"Come by! Come by! We's white folks! We ain't no redskins!" called out an unmistakably African voice. And out from the bushes stepped a young black fellow.

For a few moments the voyagers hesitated. Indians might be using the negro for a decoy. Such things had been done. But Ben remembered something, and began to steer toward the island.

"Don't you recollect the two travelers the party for Boone's Lick told us they'd met? We've come up with them."

"Guess maybe we have," answered Jodo, in much relief.

Soon their three canoes were drawn up and concealed among the willows, where another canoe was already tied. The negro had returned to the camp-fire, and Ben and Jodo now parted the bushes and followed him.

By the fire, broiling some meat on a stick, sat an old man, dressed in the usual garb of a hunter. At sight of the man's face, Ben started forward eagerly.

"Well, of all men—of all men!" he exclaimed.

With surprising agility the old hunter sprang to his feet, and the two were shaking hands.

"Why, Benoni, where do you pop out from? Where have you rained down from?"

"Same place you're from, I think, Uncle Dan'l! The upper-river country—the wilderness country. Some travelers for Boone's Lick told us that they'd passed a white man and a black man in a canoe. But we didn't expect to come up with the canoe. And it didn't occur to us that the white man might be Daniel Boone. But we're certainly glad to see you!"

Both Ben and Jodo knew the famous old pioneer well. Their parents had known him and his family back in Kentucky, and had lived neighbors to them there. Ben could recollect, dimly, the morning, now 20 years ago, when Boone had made the trip on foot, with his wife on horseback, to the Spanish region known as Upper Louisiana. Since then his home had been a few miles north of the Missouri river, on Osage Woman creek, only about a day's travel from where the Armstrong and the Henderson families lived. He had visited them and they him. Every winter he went off into the wilds on a hunting trip. And it was on one of these hunting trips that Ben had accompanied him.

The two newcomers were soon cooking and eating by the same camp-fire. There was much to talk about.

"No, we didn't stop at Loutre island, nor at the French village either," Boone said, in reply to Jodo's question. "The folks there almost compel you to stay a week or two with 'em; and I was in a good big hurry to get home. Reckon you boys wouldn't have caught up with us, but Tom here has to do most of the paddling. The fact is, I've had a rather bad sick spell on this trip. Thought for a few days Tom would have to dig a hole for me. But my time hadn't come, it seems. So I'm on my way home again. But I'm not strong. The fact, is, Benoni, I'm not so young as I used to be."

"You're looking rather vigorous, Uncle Dan'l, age or no age, sick or not sick."

"Oh, I'm feeling pretty well—about as well as ever. But my strength hasn't come back to me yet. I'm all right till I start to handle a paddle or exert myself somehow. Then I soon begin to feel all played out."

"Well, I'm the gladdest kind that we found you, Uncle Dan'l. We'll travel together from here on. If necessary you can tie on behind us and we'll tow you home. I never felt better or stronger in my life. And Jodo here can paddle as long as I can; and he can eat fully as much. But, do you know, I'm afraid we're in for a lot of trouble tonight?"

"How so, Ben? From Indians? I've been half expecting something of that kind. We thought we caught a glimpse of one on the bank today."

"We know we saw one watching us. And we just now caught sight of three canoes crossing the river a mile or two back. If they were Indian canoes, as we more than suspect, they're liable to swoop down on us some time tonight."

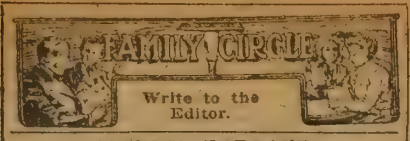
"Well, with four good rifles to talk for us, we ought to be able to tell 'em howdy-do when they come. Still, it might be easier to give 'em the slip. Tom and I thought we'd cook and eat a snack here, and then drop down with the current a piece and look up another place to sleep."

"Jodo and I had the same thing in mind. With three canoes, the redskins can surround this island while we're waiting for the moon to set. But with that cloud that's coming up wonder, we may not have to wait for the moon to set."

"No, I don't think we will. And I think I know a trick or two that'll fool 'em, moon or no moon."

"If the Indians in canoes come down here and don't find us, they'll be apt to follow us down the river."

(Continued on page twenty-seven)




**ALICE W. BARLAND,**
**Editorial Contributor.**

# Keeping Baby Fit

**By Mrs. Max West.**

Children must be kept as cool as possible. In hot weather this is not an easy task, but it may be accomplished in some measure by clothing them suitably. Babies need only the diaper and one other garment, band or slip. Older children need only enough to cover their bodies. As far as possible children should sleep out of doors at night, if screened porches are available, or, if not, with all the windows and doors wide open. A full tub bath in cool or tepid water will do much to make sleep comfortable, and a little plain talcum powder will help to allay the irritation of prickly heat.

Children must be provided, too, with occupations suited to their age. A play pen on a cool porch, or even under the trees in the yard where the mother can watch the baby, will give much pleasure. Sand piles, swings and many other simple pieces of play apparatus which are easily made at home without any great expense will keep older children happy and out of mischief. Rainy days may be spent on the porch. Hints for mothers as to the selection of play and occupation for young children will shortly be published by the children's bureau. Very much of the annoyance of mothers and the fussiness of children would be done away with if the little hands and minds had plenty of occupation. Many a cross child is cross because he has nothing to do which interests him, and many a piece of mischief is only the result of the child's trying to find something with which to busy himself.

Children's food must be chosen with special care in summer to suit the ages, and proper food habits should be established. The nursing baby will cause the least anxiety. If a baby is nursed at regular times, preferably three or four hours part, and is clean and as cool as possible, he will not usually suffer harm even in very hot weather.

Babies newly weaned from the breast and up to the end of the second year will need special care. Properly modified cows' milk will form the principal part of the diet of all such children, and must be as clean and as fresh as possible. Detailed directions for the feeding of children will be sent free from the children's bureau of the United States department of labor to all who care to send for the bulletins on the care of children.

Older children should be taught to observe regular habits also and mothers must guard against the dangers of over or underfeeding. And especially against poor food materials, such as overripe fruit. Young children need to be taught to chew their food thoroughly and to eat slowly. Cleanliness of the body is necessary for health and comfort at all times, but is demanded in the summer time. These fundamental rules for health should be in effect in every family, and where carried out faithfully sickness should be largely done away with.

## WATER SYSTEM.

### A Great Blessing in Farm Work.

To the Editor: A little over two years ago as I stood in the front yard and watched the hungry flames consume my home with all its contents for want of a convenient and adequate water supply, I resolved that before the foundation of a new home was laid a water system should be established.

Having a living spring of excellent water near and at a sufficient elevation to enable us to use gravity we have now installed a water system in our new farm bungalow. In the back yard we have a hydrant with a hose which is a safeguard against fire, waters the horses, washes the automobile and keeps the lawn and flowers fresh and beautiful.

There is no one to whom a water system is a greater blessing than a tired farmer, who has for years been confronted by an empty water pail, or the weary mother of several small children who looks forward with dread to the Saturday night baths. There is no convenience to compare with a water system and fixtures and I would not be without mine for any consideration.

MRS. F. L. SHAW.

Durkee, Ore.

### Time Saver for Farm Women.

To the Editor: I would like to say a word to those who have had bad luck canning string beans and peas. The first year I lost nearly all of mine, so the next year I tried an experiment of my own. The first year when I canned my beans and peas I salted them when canning, but the last year I cooked them without any salt at all and when sealing up my jars I added a tablespoonful of vinegar to each quart of beans or peas, and I never lost a jar. When I opened them to use I put them on to cook for 25 minutes, adding the salt then. That is a very simple way to can beans, corn or peas and also a great time saver for farm women.

MRS. O. ALLENBAUGH.

Malaga, Wash.

### Sugar Saving Hints.

Bottle fruit juice without sugar and save it for jelly until sugar is more plentiful.

Many fruits can be dried. This will save sugar.

Some fruits can be stored, such as apples or winter pears.

# A Little Bit of Spice

**By Mariella Ladd.**

One of my best friends in my efforts to carry out Uncle Sam's injunction to "make the new foods appetizing and attractive" is my spicebox. In learning to use it, however, I made a few discoveries which may be interesting.

Spice is a great economizer of sugar. A dash of cassia or cinnamon in a milk pudding lessens the amount of sugar needed to sweeten it, but too much of the spice is apt to offend some critical taste, so I have found it best to use just enough to give flavor and not enough to advertise what the flavor is. A little mystery is as good in the kitchen as elsewhere.

When I found that "substitute breads" were going slowly I made the substitutes into gingerbread. In making the gingerbread I used ginger, cinnamon and clove, but only used about half the quantity of each that I formerly used. I varied the gingerbread often by adding raisins or chopped nuts. This makes it quite as popular as the richer and more heavily spiced kind, of prewar days.

When I have very acid fruit to serve I add to it when stewed a little baking soda, skim it carefully when it boils up, then sweeten and add a little cinnamon or cassia. On no account must enough spice be used to destroy the flavor of the fruit. Just enough to balance and accentuate it is all that is needed.

In savory dishes the use of spice is of twofold value. It increases the aroma of a dish and so excites the psychic juice which physiologists tell us is an important element in digestion. It also balances strongly flavored foods and so prevents the "rising" which follows some meals.

In flavoring soups I find it best to tie peppers, allspice and cloves (sometimes a little pimento) in a little bag. Then they do not float about in the soup and tell tales. This is unimportant in clear soup which is going to be strained.

On meatless days I always make a good gravy, and for this I find the spicebox a help. One of these gravies, which I think is the most popular, is made by frying lightly a shredded onion in dripping, sprinkling flour, salt and pepper with a few grains of clove into the pan, and, when brown, adding cold water. When the gravy is thickened it is strained and served with vegetables or other meat substitutes.

# In Place of Lemons

The government is asking us to use as much as possible the things at hand, so that the railroads will not be so much burdened with shipping of all kinds of commodities from distant points. When housewives of the northwest are putting up their fruit this season, if they will add a considerable quantity of gooseberries and rhubarb, which grow so easily here, to their supplies, even though they may not have sugar for much of any sweetening, they will find that these two very acid juices can be made to take the place of lemons in all sorts of ways—in summer drinks, pie seasonings, sauce and pudding flavors, in jellies and jams, syrups and cakes. Simply strain the juice when wanted through a thin, clean cotton cloth and use in the same quantity as though it were lemon juice. Many people will find the rhubarb or gooseberry flavor more agreeable in some of the combinations than the lemon they have been accustomed to. L. C. F.

**It All Depends.**

A playwright and an actor were in conversation when the former, who has been none too successful of late, exclaimed gloomily:

"People will praise my work after I am dead."

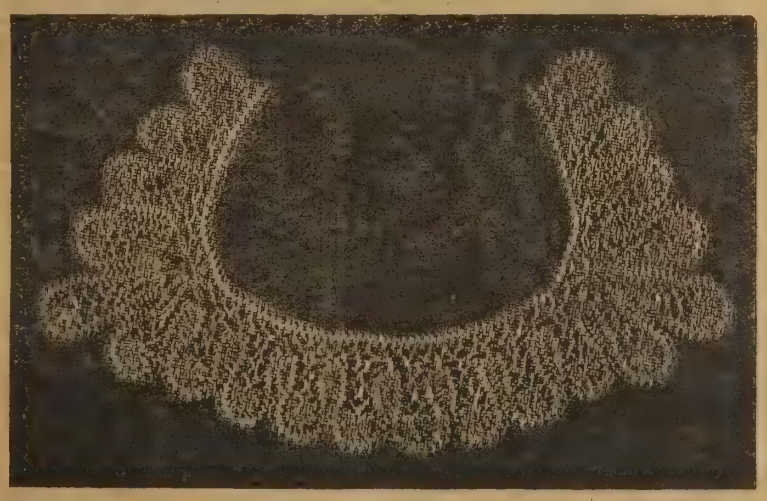
"Well," said the actor, in a consoling tone, "perhaps you are right, but don't you think it's a great deal of sacrifice to make for a little praise?"—Everybody's Magazine.

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# Maltese Lace Collar

**By WINNIFRED WORTH.**



Collar designs are always popular. This one is beautiful and at the same time very easy to make if you follow the concise instructions given here.

Fasten thread in 2 loops, ch. 7, dc., drawn out to 1, 7 times. Fasten to chain, chain 5, join to side, put needle on underside in next loop, fold braid, take up 3 loops. Draw thread through then and stitch. Draw thread through next, and next, keeping all on needle. Draw thread through 1 at time, back chain. 3, take up 2 loops at top, ch. 7, join (5 join twice) every scallop. 1 row of chains more than the corner; 2 chains of 5 more for point.

For front. Work across top 5 ch., 1 dc., 1 ch., 1 dc. in each space and 1 tight at end of scallop.

For corner. Ch. 5, 1 t. back in same, 2 t. in middle of scallop. So on until 7 bunches, then around as started in first scallop. Next row take up 2 loops, ch. 3, join to other side until corner, make as bottom.

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1247—Ladies' dressing sacque, boudoir cap and slipper. Cut in three sizes: Small, medium and large. It requires 5-8 yard for the cap, 1 yard for the slippers and 2 5-8 yards for the sacque, of 27-inch material, for a medium size. Price, 10 cents.

2576—Ladies' apron. Cut in four sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. Size medium will require 4 1-4 yards of 36-inch material. Price, 10 cents.

2554—Child's dress. Cut in four sizes: 2, 4, 6 and 8 years. Size 6 will require 2 3-4 yards of 36-inch material. Price, 10 cents.

2376—Girls' dress. Cut in four sizes: 4, 6, 8 and 10 years. Size 8 requires 3 1-2 yards of 44-inch material. Price, 10 cents.

2563—A simple undergarment. Cut in four sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. Size medium requires 2 7-8 yards of 36-inch material. Price, 10 cents.




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Enclosed find.....cents for which send me the following:

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Pattern No.....Size..... Pattern No.....Size.....

Name .....

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R. F. D. No.....Box No..... Street No.....
Be sure to give the pattern number and the correct size.

## To Dry Corn a New Way.

A new method of drying corn was given to women of the Canyon county farm bureau on their recent trip through the county by Miss Louise Riddle, home demonstrator. Here it is:

To five quarts of corn cut from the cob add one cup of sugar and one-half cup of salt. Mix well and place in a double boiler or in a pan set inside of another pan of water and cook for three-quarters of an hour to an hour. Dry in oven or in drier for one-half day. This method holds the milk in the corn and gives it a much fresher flavor.

L. P. F.

### He Knew Why.

"What is Professor Diggs doing these days?"

"He is studying the causes which underlie revolutions."

"He is, eh? Well, I suspect he has a great deal to learn about such things. He got tangled up the other day in a revolving door."

## Canning Without Sugar

The United States food administration is asking every one to buy for household use no more sugar than is absolutely necessary. This is asked in order that there will be some for canning. But fruits should be canned without sugar if possible. Here are some suggestions:

**Make Fruit Leather.**

Mash ripe fruit (berries, cherries, figs, apricots, peaches and blue plums may be used) to a pulp, spread on lightly oiled platters and dry in the sun or dryer. When dry, sprinkle with sugar and pack away in jars or very tight boxes lined with wax paper.

Peaches, or half and half peaches and figs, make delicious leather and need only a sprinkling of sugar.

Serve this leather in winter instead of candy, or with cream cheese and nuts for dessert. Fruit leather may be soaked in water and used for pies, shortcakes, puddings and sauces. When intended for this purpose, omit the sugar.

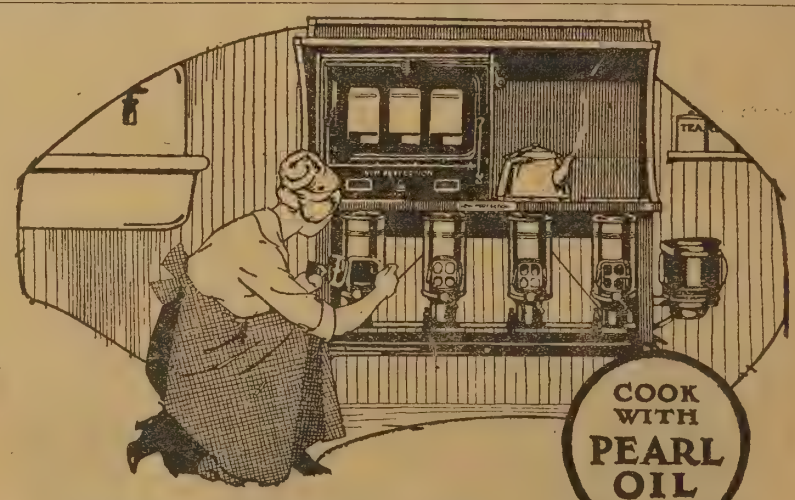
## Easy Way to Dry Vegetables.

To the Editor: Believing that my way of drying corn, peas and snap beans is a little better and a lot easier than any I have seen advocated in any of the farm papers we take, I gladly pass it on.

Gather the peas and beans when in their best condition for cooking and prepare the same as if you were going to cook them. Throw them into boiling water with a little salt added, and let them boil about three minutes, then drain as dry as possible. Have ready some sacks made of cheesecloth about six inches wide and a yard or more long, if you need so much room. Put the drained beans or peas into these sacks, shake them out evenly along the length of it and pin them out in the sunniest and breeziest place on your clothesline. You will be surprised to see how soon they are thoroughly dry and can be put away for winter in sacks. There is no danger of it spoiling.

It is best to boil the corn a few minutes on the cob. Just enough to set the milk. Then cut it off not too deep, scrape the cobs with the back of the knife and proceed the same as with the peas and beans. Pumpkin can be dried the same way, but without boiling, simply slice in very thin strips.

MRS. WINNIE ASHLEY.
Westmond, Idaho.



COOK WITH PEARL OIL

Ready to Cook in a Jiffy

Just the touch of a match and your New Perfection Oil Cook Stove is ready for cooking. No waiting for the fire to burn up.

Easier to operate than a coal or wood stove: No smoke or odor; no dust or dirt. Bakes, broils, roasts, toasts,—all the year round. All the convenience of gas. And a cool kitchen in summer.

In 1, 2, 3 and 4 burner sizes, with or without ovens or cabinets. Ask your dealer today.

A New Perfection Oil Cook Stove means kitchen comfort and convenience. Ask your friend who has one. Used in 3,000,000 homes. Inexpensive, easy to operate. See them at your dealer's today.

STANDARD OIL COMPANY
(California)

NEW PERFECTION OIL COOK STOVE




Dear Corner Cousins: A few days ago somebody told me about a very wealthy banker here in the northwest, who has everything he needs and who is very generous in his living and his giving and yet he saves every old circular letter and even the old envelopes to use for scratch paper. This, he said, is not because he can not afford to buy scratch tablets, but because he thinks it is right to save whenever possible, and partially, I think, because he wants to set a good example to those around him.

If a great banker can do that, we should do every bit as much, saving every place we can.

Tell me of different ways you can save with little things. Thrift is right and will help not only win the war and save the lives of soldiers, but it will give us a good habit through life.

AUNT NELLIE.

### Joke Books for Soldiers.

Dear Aunt Nellie: The topic I am going to write on is "Helping My Country." I am the president of the garden club for the La Center grammar school. We have meetings once a week and have topics to talk on such as beans, tomatoes, onions and carrots. Each member has a war garden and takes care of his or her own garden. I have signed the pledge not to eat any more candy during the war and have joined the Junior Red Cross. I have made several bunches of gun wipes, 100 in a bunch, for the soldiers up at Vancouver, Wash. Our school has made a great many bunches. I have made five joke books for the convalescent soldiers and sailors. I am saving up my money for war saving stamps. Now as school is out I am going to peel cascara bark this summer. We get quite a bit of money for a sack. I am going to sell sacks and bottles, too. Sacks are from 5 to 10 cents apiece and bottles 1 cent each. I am going to buy thrift stamps with the money. I eat dark bread, too. I hope that everyone will do their bit and put it together and make a big bit. Then we'll take it and hit the kaiser on the bean with it. My motto is W. S. S.—We Shan't Starve and War Saving Stamps.—Margaret M. Kane, 13 years, LaCenter, Wash.

### Won a Garden Club Pin Last Year.

Dear Aunt Nellie: I thought I would join the Cousin's Corner. How are you all and the cousins? I am fine. I am 13 years old and in the seventh grade. My birthday is March 4. I have light curly hair. Have I a twin? If so I wish she would write to me and I would answer. I have two sisters and one brother. My sisters' names are Olga, 4 years old, and Cora, 11 years old. My brother's name is Elmer. He is 16 years old. I live on a 32-acre farm; across the road is the Stillaguamish river, and we have lots of fun in the summer. We have six cows, Cherry, Star, Rose, Beauty, Lady and Queen. We have four calves, Sammy, Sally, Fanny and May. We have two horses named Rocksey and Dolly, one pig, a number of chickens, two big cats and five kittens. School closed May 24 and I am very glad because I do not like school. There were 35 children in my grade and 10 rooms in the school building. I have joined the Junior Red Cross and the garden club. Last year I won a pin and I am going to try to get one this year also. I planted potatoes, tomatoes, carrots, beets and onions. This is all I have to tell you this time, so good-by.—Elvis Helen Kenseth, Granite Falls, Wash.

### Find Fresh Water Clams.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner, and I hope it won't be my last time. I was 12 years old July 27. Have I a twin? If so, I wish they would write to me. I am in the sixth grade at school. My teacher's name is Mrs. Ward. I am helping my country by raising beans, peas, cucumbers, carrots, kale, flax and pumpkins. I have joined the Junior Red Cross. I have knitted three wash rags and am knitting a baby hood now. I go to Bethel school. My sister and I went to the creek and found some fresh-water clams, yesterday. I have two sisters and one brother. My sisters' names are Edna, 9 years old, and Emma, aged 7. Edna is in the third grade. Emma is in the second grade. My brother's name is Hilton. He does not go to school yet. I live on a 22-acre farm. I have one cousin that lives in Raymond, Wash. On the farm there is one dog named Bob, two horses named Nellie and Billy, and two cows, named Blackie and Daisy.—Hazel Morris, R. F. D. 1, Box 242, Port Orchard, Wash.

### Raising Beans and Chickens.

Dear Aunt Nellie: It has been a long time since I wrote to the Children's Corner. For the last three or four months the Corner has been growing big. I like to read the letters, and there are just a few that I haven't read. I have joined the Junior Red Cross. I have hemmed some handkerchiefs and knitted one pair of wristlets. My oldest sister has learned how to knit and she is knitting a pair of wristlets, too. I like to knit and I think I will knit some more. I am going to join the Red Cross next year, too. Our school was out May 24, 1918. We had a picnic in Utsaladdy on Camano island, in Snohomish county. I have joined the Agricultural Achievement club. I am raising beans and chickens. I have 16 chickens. My brother has graduated from public school. My sister that is 9 years old has passed into the fifth grade. I have passed into the seventh grade. I was 12 years old July 2, 1918.—Selma Lillquist, Mt. Vernon, Wash.

### One Rooster Brings $1300.

Dear Aunt Nellie: This is the third time I have written to the Children's Corner. I hope the Corner will grow three times as big as it is now. I will be 12 years old June 24. Have I a twin? If so I would like to hear from her or him. I hope, Aunt Nellie, I have not made any mistakes in spelling in my writing. I have a brother-in-law in the war. His name is W. D. Scott. My sister is staying at home with us now while he is in the war. He had to go May 22. I wish the war would stop. I am afraid my brothers, Jack and Gib, will have to go yet before it is over. I have three little kittens and some more around the place, but have not found them yet. I would like to buy war saving stamps. We had a Red Cross parade and sold stuff for the Red Cross. One rooster sold for $1300 for the town. In the last week they made over $2600 for the Red Cross. I think that was just fine. I think, Aunt Nellie, it would be a good plan to help win this war for all the little girls and boys to raise rabbits, chickens and hogs. I can knit. I have knitted three wash rags and pieced quilt blocks and made handkerchiefs for the Red Cross. Don't you think it is a very good plan? With love to all the cousins and dear Aunt Nellie, I will close.—Eunice Martin, Box 124, Riverside, Wash. (Yes, dear, it is a good plan to do everything we possibly can do to help our country.—Aunt Nellie.)

### Nothing Better Than Outdoor Life.

Dear Aunt Nellie: I have not written to you and my cousins for so long that I guess you nearly forgot me. I am out of school now and I am sorry of it for I do love to go to school. I passed this year and next year I will be in the seventh grade. Before school was out our teacher and we children planted a lot of lovely trees all along the fence. We also planted flowers around the porch and schoolhouse. I am helping my mother do the work a lot. The thing that I love best to do in life is to go out in the sunshine on a nice warm day and play with every little thing that I come to. To make little discoveries of probably a large bed of daisies or some sort of flower. We have 12 cows. Once in a while I go to the barn to milk a cow. I named her Buttercup. Her milk is rich. There is never anything better than outdoor life to me. These days now that we are having are the kind that anyone likes. Some people do not like rain, but when you come to think about it rain is your choice. I have corresponded with Alice Case. I like her letters very much. She seems to be a very pleasing kind of a girl. I enjoy her letters even if they aren't very large. She tells them so interestingly.—Winnie E. Jones, Box 61, R. R. 1, Auburn, Wash.

### Making Hairpin Lace.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 10 years old. My birthday is May 10. I am in the sixth grade. My teacher is Miss Anderson. She is my sister. I have three brothers and two sisters. Their names are Leonard, 14 years old; Russell, 6 years old, and Ernest Anderson, 21 years old. My sisters are Judith, 20 years old, and Ellen, 18 years old. Judith is a teacher. I go to the school she teaches. My home is in Spokane, but we moved from there to go to our farm. There were no schoolhouses near our farm, so my brother Leonard and I came out to Wauconda. We live in a cottage close by the schoolhouse. My chums are Violet Gray and Mildred Long. I can crochet. I am making hairpin lace. Have I a twin? If so would they please write to me.—Florence Anderson, Wauconda, Wash.

### Always Room for More Cousins.

Dear Aunt Nellie: The Farmer came this morning and my mother had to take it away from me or I wouldn't have done my work; I wanted to read it so badly. I will be 13 years old December 20. Have I a twin? If I have I wish that they would write to me. I would like any of the cousins to write to me. I would like to be a cousin if you haven't got too many now. I have two brothers and three sisters. Their names are Elliott, David, Lucile, Evelyn and Edith. It is rather peculiar, but there is just two years between all of us, so we are 2, 4, 6, 8, 10 and 12. We have about 75 head of cattle, nine horses and a dog.—Helen Elizabeth Munroe, R. F. D. 1, Hazelwood Farm, Spokane, Wash.

### Elna Takes Singing Lessons.

Dear Aunt Nellie: I am playing on the Victrola and now I am writing between time. I have joined the Red Cross and am knitting a wash cloth. We have Red Cross every Tuesday and Friday afternoon. We had an Easter program at Sunday school. I had to sing a song in Swedish. I take music and singing lessons from Professor Edgren of Mount Vernon. He is a fine teacher. I have two sisters, Elsa, 13, and Edna, 9, and I would like to correspond with Isola Starks, Washtucna, Wash. If she writes I will gladly answer. I am 12 and so is she. My birthday is January 12. Oh! I wish it would be summer now, for I will have so much fun when I can go away and stay with my best friends. One I like very well is Adelia Westlund. She lives in Box, Wash. I suppose some cousins know her. Elva Green, is the answer t othis riddle an egg? Within a marble dome confined, whose walls with silk are lined, a golden apple doth appear steeped in a bath of crystal clear. No doors, no windows to behold, yet thieves break through and steal the gold. Now I will send some riddles: Why is a stick of candy like a horse? I often murmur, but never weep; I lie in bed, but never sleep; my mouth is larger than my head; from my sources I am fed. I'm ever running, feet I've none, the more I fall the faster I run. Can you guess that one? My school teacher has been sick so we have had another teacher instead.—Elna Mattson, R. F. D. 5, Box 32, Mount Vernon, Wash.

### Juanita's First Corner Letter.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 9 years old. My birthday is December 12. Have I a twin? If I have I wish he or she would write to me. I am in the third grade at school. My teacher's name is Miss Della Barckey. I like her very much. I am left-handed and I have an aunt who is left-handed, too. I have three sisters and two brothers. My sisters' names are Thelma, Loretta and Mary Lea. My brothers' names are James and Verana. James is 4 years old. I have two sisters that belong to the Corner and so I thought I would, too. My mama has about 100 chickens and my papa has about 40 pigs.—Juanita Owens, R. F. D. 2, Oakesdale, Wash.

### Made a Block for a Quilt.

Dear Aunt Nellie: This is the first time I have written to the Corner. I hope it won't be the last time. I go to the Pleasant Valley school. We walk in the morning and at night the teacher brings us home in his car. I am in the fourth grade. I have three brothers and no sisters. We have four cats and four baby kittens, about two weeks old. I am 8 years old. My birthday is November 5. Have I a twin? If so, I wish he or she would write to me. The scholars have been having the measles. We have one pig, three cows, three calves and 100 or more chickens. I can knit. I have made one block for a quilt. Altogether the school has made 22 blocks. All the school has joined the Red Cross.—Ella Michael, Davenport, Wash.

### Planted a Big War Garden.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I would like to be a cousin, as I want the Corner to grow. I was 11 years old April 29. I am in the eighth grade. I go to a country school and live three and one-half miles from town. Have I a twin? If so I would like to hear from her. I have four sisters and four brothers. Their names are Helena, Ida, Ruth, Emma, William, Carl, Theodore and Frederick. None of my brothers have to go to war, because the oldest is only 17. We have planted a large war garden. I stayed out of school to help plant it. My sister Ruth Schmidt would like to find her twin. She is 9 years old and her birthday is March 15. She would like to hear from her.—Annabel Schmidt, R. F. D. 1, Box 60, Mansfield, Wash.

### Vonda Goes to High School.

Dear Aunt Nellie: This is the second time that I have written to the Children's Corner, but it has been so long ago that I will start over again. I am 12 years old and will soon be 13, June 30. Have I a twin? I have two sisters and two brothers. My sister's names are Dora and Orphia Boulden. My brothers' names are Bruce and Oades Boulden.

I am in the seventh grade. Dora is in the fifth, Orphia is in the eighth grade and so is Bruce, but Oades is in the 10th grade. In my room there are about 36 children. I go to the Elma high school and walk about a mile and a half to school. We live on a 140-acre farm. We have a cow, horse, dog and three cats. I would like for some of the children to write to me and I will write to them.—Vonda Boulden, R. F. D. 1, Box 2, Elma, Wash.

### Brown-Eyed Cousin Grace.

Dear Aunt Nellie: Have been reading the Children's Corner ever since we began to take The Farmer, and I certainly enjoy their little letters. I am 10 years old and will be 11 October 5. My eyes are brown and I have dark brown hair. I was promoted to the sixth grade. We live about one-half of a quarter of a mile from the schoolhouse. Our school is out now. Our teacher's name was Buryl Clinton. We have 20 head of cattle, six head of horses, five hogs, one dog, one cat and 17 little chickens. The names of our horses are Nig, Sorrelie, Dan and Mutt. Our dog's name is Watch, and our cat's name is Dollie. If I have a twin I wish he or she would write to me.—Grace Agnes Garner, Rice, Wash.

### Puppy Uppy Is Lilly's Pet.

Dear Aunt Nellie: I enjoy reading the letters in the Farmer very much. I have one pet, a dog. Its name is Puppy Uppy. We have seven cows and three calves, Susie, Lucie and Daisy. We have two horses. Their names are Happy and Johnny. We have a Chalmers car. We also have two cats. We have sewing at school and we are sewing for the Red Cross. I made two handkerchiefs for the soldiers already. My teacher's name is Miss Jones. I am in the fourth grade. I was 10 years old April 19. I will write more next time.—Lilly Pederson, Enumclaw, Wash.

### Have a Little Sunday School.

Dear Aunt Nellie: I am writing to the Corner for the second time. I was very glad to see my first letter in print. We are all feeling fine in my home. We have a little Sunday school here. There are very few who attend. I wish we had some more children here to join our Sunday school. It would seem funny without it. I like the Farmer because the Corner is so interesting. I am going to learn how to knit.—Ruth Peterson, R. F. D. 2, Mead, Wash.

### Hopes the Corner Will Grow.

Dear Aunt Nellie: I am writing to the Corner for the first time. I am 10 years old. I am in the fourth grade. My birthday is October 25. I have two brothers. Their names are Fred and Elmer. I have two sisters, Susie and Bertha. I like to read the letters in the Corner. Have I a twin? If so, please write. I hope the Corner will grow.—Mabel Schombron, box 69, Penawawa, Wash.

Address all letters to Aunt Nellie, care of Washington Farmer, Spokane, Wash.


## ADVERTISING SCATTERS KNOWLEDGE OF HIGH GRADE ARTICLES




Advertising has such a big place in the world today that it is used by people in all walks of life.

For years farmers, fruitgrowers, poultry breeders, stock raisers and dairymen have taken advantage of advertising in securing customers. Often, too, they have branched out and advertised in other lines.

"Agricultural Advertising," the trade paper of publicity, gives some striking examples of this in a recent issue. It tells of a western dairy farmer who originated and built an improved device for his silo that filled a long felt want. Later this was extensively advertised, not only bringing profit to its inventor, but benefiting hundreds of other dairymen.

Another instance given is of a poultry raiser who perfected a number of remedies for diseased fowls and also invented improved drinking fountains, incubators, brooders and runs. Through the medium of advertising he was able to give his fellow breeders the benefit of his discoveries.

Such instances could be multiplied indefinitely. Advertising makes it possible for man's knowledge to be scattered broadcast. Look over the announcements of manufacturers in this paper for news of discoveries and inventions.

# News for Breeders

## Shorthorns Milk Well.

That the milking variety of Shorthorns are proving themselves worthy of the name is indicated by the report of 28 cows of this breed that have been under test by their managers. The report says that five of the cows make yields slightly under 30 pounds of milk per day, but only one of the five fell below 4 per cent average butterfat and one reached 5.05 per cent. Twenty-three had average daily milk yields exceeding 30 pounds, 11, 40 pounds or more per day, three, 50 pounds or more and one slightly over 60 pounds. The highest butterfat percentage shown in the list was 6.72 pounds, and 16 of the list of 28 had averaged over 4 per cent but-

## Imports Clydesdales.

M. E. Metz, well-known as a breeder of Clydesdale horses at Colfax, Wash., has been in the east for the last two months for the purpose of securing additions to his stables. A letter from Mr. Metz says that he is shiping west two carloads of purebreds of the four big breeds and that they will be exhibited shortly after their arrival at the Spokane Interstate fair. Some of them will undoubtedly be taken to other fairs to compete for honors. Mr. Metz says he believes some of the stock he is bringing back are as good as any that have ever been brought to the northwest.

## Washington Cow Brings $2500.

The auction sale of the New England Ayrshire club, this season, resulted in a new record of prices for Ayrshire cattle in America. Top price of $4200 was paid for the 3-year-old Pansy's Daughter of South Farm, sold by John Sherman of Willoughby, Ore., and purchased by G. S. Mowhinny of Chatham, N. Y. One of the high prices paid was for Willowmoor Moss Rose C., consigned by J. W. Clise of Seattle, and bought by Peter B. Bradley of Hingham, Mass., for $2500.

## Europe Already After U. S. Cattle

Professor E. B. Fitts of the Oregon Agricultural college is authority for the statement that the United States department of agriculture has received from the government of Holland an order for 5000 Holstein milch cows from this country. This is but a small beginning of what will undoubtedly be an enormous demand from Europe for cattle from the United States when the reconstruction period following the war begins.

## Shipping Show Stock.

Wayne Dinsmore, secretary-treasurer of the National Society of Record Associations, announces that shippers are entitled to ship purebred show animals at reduced valuation, but it is a part of wisdom in such cases to see that such exhibition stock is covered by insurance.


AMERICAN FLAG

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SEWED STRIPES
CANVAS BOUND
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One of these big, fine flags will be mailed postpaid to any one securing and sending in seven subscriptions to your state family farm paper,

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## MUST NOT CHARGE.

### Legal Help to Draft Men Free.

Reports from various sections of the northwest indicate that some lawyers are charging a fee to drafted men for helping them make out their papers. This is not only against the spirit of the draft act, but against government regulations. Some lawyers have been disbarred from practice on account of making these charges, and cases are being brought against others. All young men who are called by the draft are assured that they should not pay fees to lawyers who aid them.

## Will Exhibit Herefords.

The management of the live stock department of the Spokane Interstate fair announces that the Curtis Cattle company of Regina, Saskatchewan, Canada, will have 40 head of Hereford stock on exhibition at the fair September 2-7. It is said that these cattle have been consistent winners at a number of western Canada fairs.

## Dairymen Have a Motto.

Manager A. Jansen of the Pacific coast branch of the Mutual Creamery company says that it is up to the dairymen to adopt a motto, and that that motto should be: "There is no substitute for milk."

## Letters to Editor

The Farmer is constantly receiving interesting expressions of personal opinions from its readers which it is glad to pass on to others. Below is one such interesting article.

To the Editor of The Washington Farmer: In the July 25 issue of The Washington Farmer, Dr. Panteleoni attacks government ownership, claiming that it will "bring us near to ruin." If the government was governed by one individual, well it might, but in a government "of, by and for the people" I don't see how government ownership of the things the people use could harm any one but the profiteers. Dr. Pantaleoni thinks that government ownership would not be fair to the farmers. Why couldn't the government own the farms too?

Why not build a town in the center of a piece of government-owned land and farm it with big machinery, eliminating the fences and duplication of machinery necessary to small farming? But, you say, the farmer would just work for the pay he gets and would take no interest in improving land he does not own. But he ought to take an interest in the improvement of land that belongs to the government when he is a part of that government. Who but the government, as Mr. Elliott suggests, would use gas for the destruction of rodent and insect pests?

If, as Dr. Pantaleoni says, "the less government a nation has the better it is for the prosperity of its people," I should think the people would be better off if they were not governed at all. Holy horrors! Wouldn't that be anarchy? DELBERT PEIRCE.
Loon Lake, Wash.

## Iowa Can't Beat Yakima.

R. P. Bean, federal agricultural expert for the Tieton irrigation project, says that the corn crop in the Yakima valley this year is good, and that it offers, in part, a solution of the pork production problem. Mr. Bean is not only conducting a series of experiments in the Yakima valley in the matter of hog production, but is doing what he can to influence the growers to produce pork.

"I am especially interested in the production of pork this year," said Mr. Bean. "That is why I emphasize the value of our corn crop, which is essential to a good quality of pork. We are just beginning to grow peas for this purpose.

"Our aims are to put this industry on a more economical and profitable basis. War conditions and the high cost of feed and labor have stimulated more interest in the factors of production. We field men do not strive to introduce new methods and ideas to the people that we visit, but are satisfied to spread the best systems that are already in use in this particular community. We have emphasized this year the proper ways of using pastures and forage crops. We have urged the greatest possible use of these means and at the same time urged the necessity for using the minimum amount of grain to produce a good quality of pork."

To the Editor of the Washington Farmer: Please send me one of your farm service war flags. I have the pleasure of securing two subscriptions, each to the Washington Farmer for one year. Enclosed find 50c.

MISS LOLA SANDERS.
Davenport, Wash.

### Italy's Live Stock Decrease.

The province of Milan, Italy, shows a decrease in live stock, based on the census of 1908, of 21 per cent for horses, 18 per cent for mules and 8 per cent for swine.

### Using Corn for Fuel.

Owing to lack of markets for their corn, farmers in Argentina, South America, are in some cases disposing of it for fuel at 40 cents per bushel.


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DIGESTER TANKAGE
*Puts Profits in Porkers*
Cuts down high feeding costs—saves costly grain—balances the hog ration.
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Combination Sale
SHORTHORNS
Hampshires and Cotswolds

Elvin Witham, Dick Kiger, Grant Elgin and M. A. Wyatt will offer at the O. A. C. pavilion at Corvallis, Oregon, August 24th, 1918, the following:

20 Shorthorn cows, 2 to 10 years of age.
8 Shorthorn yearling heifers.
9 Shorthorn heifer calves.
10 Shorthorn bull calves.
1 Shorthorn herd bull, champion and top priced bull of the Portland sale of April, 1917.
40 Cotswold yearling ewes.
24 Cotswold ewe lambs.
100 Hampshire ewes, not registered.
50 Hampshire ewe lambs, not registered. Sheep will be sold in lots to suit the purchaser.

This stock is not fat, but is in fine condition. All good, sound stuff and good breeders.

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For full particulars, pedigrees and prices call on or address

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Desirable Jersey Bargains

Mr. Swarts being in the service, I must sell our little herd of pure bred registered Jerseys, consisting of the following eleven head.
Oxford's Torono's Eminent Lad 140406, a grandson of Hood Farm Torono 60326, who has over 70 daughters in R. of M.
Thora F. 283283—Sire, Eurybia's Prince 69428.
Lucy Hope 302009—Sire, Monida's Rex 110260. Sire of Agnes Fern.
Thora F 2d 310878—Sire, Holger, sire of 12 in reg. of merit.
Wonder Boy's Alice 362437—Sire, Alice's Wonder Boy, a grandson of Golden Glows Chief, sire of 35 r. of m. daughters.
Gertrina's Yvonne 361205—Sire, Eurybia's Prince 69428.
The first four above named cows being two daughters, one granddaughter and 1 great granddaughter respectively of Picabo, 698.33 pounds butter fat in 1 year.
Also five beautiful heifers from these cows by Oxford's Torono's Eminent Lad 140406, ranging from 2½ months to 10 months of age. Flora F. will freshen September 11, and Lucy Hope Sept. 4.
These animals will be sold Cheap, considering their breeding.
For prices, pedigrees and descriptions write

MRS. C. A. SWARTS, Box 205, Springfield, Oregon.

# Breeders' Department

## SHORTHORN CATTLE

### MILKING SHORTHORNS

with world records behind them for milk production.

### A. R. O. HOLSTEINS

A son of the King of the Pontiacs at head of herd.
Can make special prices on young bulls of each breed.

**A. V. Bradrick & Son**
Palouse, Wash.

### SHORTHORNS

A few young stock for sale by such noted sires as Prime Prince, 421193, and Sultan Still, 493239.

**R. E. BOYCE,** Baker, Ore.

SHORTHORN COWS.

Ten high class Shorthorn cows, calf at foot or heavy in calf. Come and look them over or write for particulars.

**E. H. HALLOWAY,** Albany, Ore.

### H. H. SCHILDMAN

breeder of registered Shorthorn cattle, Hampshire sheep and bigtype Poland China hogs. Filer Idaho.

REGISTERED SHORTHORN COWS.

Young bulls and heifers, sired by Scotch bulls; liberal terms.

**CALDWELL CATTLE CO., Caldwell, Idaho.**

## GUERNSEY CATTLE

### Registered Guernsey Bulls

From heavy producing cows, most of them with A. R. records, among them 402 lbs. fat (472 lbs. 85 per cent butter) and 392 lbs. fat (461 lbs. butter), both with first calf. Good type, well grown. Prices reasonable.

CHICONA FARM.
A. L. GILE, Prop. Chinook, Wash.

### ORCHARD HILL FARM

"Home of High-Class Guernseys."
Dr. Park Weed Willis, Owner.
Redmond, Wash.

### FAIRVIEW FARM

Breeders of high class registered and grade Guernseys.
A. J. SINNES,
Route 5. Mt. Vernon, Wash.

## HOLSTEIN CATTLE

### 365-DAY HOLSTEINS

24,667 lbs. milk—1026 lbs. butter—is the S. O. advance registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.

THE HERD WITH YEARLY RECORDS.
**WESTERNWOLD RANCH, Prineville, Ore.**

### HOLSTEINS

Steno Farm is now offering a few high class reg. Holstein bull calves. Out of ARO cows and sired by one of the finest bulls in the west. Priced right.

**STENO FARM,** C. F. Williams, Mgr.
Mead, Wash., R. No. 2.

### LaConnor Flats Stock Farm

Pure bred registered Holstein cattle. Herd sire Segis Pontiac Acme; average of three of nearest dams; butter, 1 year, 1080.82 lbs.; milk, 24,380.3.

**J. H. HULBERT.** Mt. Vernon, Wash.

### Registered Holsteins

Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.

**H. R. BOOMER.** New Plymouth, Idaho.

### HOLSTEINS

Well-bred young bulls for sale.

**THOS. CARMICHAEL.** Gaston, Ore.

### Holsteins and Berkshires

FOR SALE.

**HUGH NISBET.** Chimacum, Wash.

**Just What You Want**

may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.

## POLAND CHINA SWINE

### Big Type Poland Chinas

Peter Mouw and John B. Lawson strains. Young boars and bred or open gilts. Good individuals.

**CLIFFORD RIGGS,** Touchet, Wash.

### LOCUST HILL HERD

Big type and medium Poland China. Bred gilts and spring pigs of both strains, unrelated. Sixteen years a breeder of Poland Chinas in Oregon.

**A. L. SWAGGART,** Athena, Ore.

### Poland Chinas and Holsteins

Strictly big type spring pigs of both sexes. Well grown, good individuals, sired by A. Price. A few choice young bulls.

**B. S. THURSTON & SON.** Jefferson, Ore.

### Oaksdale Farm

Poland Chinas and Holsteins. Two fall boars at bargain prices for quick sale. A fine lot of early spring pigs. Best of breeding. A few well bred young bulls at very reasonable prices.

**C. R. EVANS,** Halsey, Ore.

LOCUST LAWN HERD.

Breeder of big type Poland China swine. Some very choice spring pigs for sale.
1918 pigs sired either by famous boar "Sammy," undefeated grand champion of northwest, or by his son.

**W. F. HOWARD & SONS., Caldwell, Idaho.**

QUALITY AND UTILITY

our hobby. Poland Chinas, our breed. Weanling pigs, both sexes, also a few service boars. Satisfaction assured.

**FRANK NEEDHAM,** Eugene, Ore.

QUALITY HERD.

If you want to improve your herd, try stock from my winners at the Oregon state fair.

**RAY J. FOX,** Lyons, Ore.

PURE-BRED POLANDS.

A good herd boar for sale; also booking orders for spring farrowed pigs. Will ship C. O. D. subject to your approval.

**HERBERT WILLARD,** Dayton, Ore.

## CHESTER WHITE SWINE

REGISTERED
~~O. I. C.~~
### SWINE

Choice young pigs, either sex. Write me. Ringgold Farm, J. H. West, Prop., Centralia, Wash., R. I. Box 157.

### Blue Ribbon Stock Farm

Chester White Hogs. Hampshire and Rambouillet sheep. Swine of both sexes and a choice lot of ram lambs.

**ED SCHOEL,** Suver, Ore.

### COVE STOCK FARM

Unrelated fall and spring Chester White pigs from prize winning stock.

**ARCHIE CONLEY.** Cove, Ore.

## ABERDEEN ANGUS

### ANGUS CATTLE

In the famous valley of the Yakima there is located one of the best herds of Aberdeen Angus in America. Proof of this is evident by the many prizes won by this herd at all of the greatest shows of the northwest and central states, including the Chicago international.
Fifty extra good range bulls are now offered for sale. Also fancy herd headers and show cattle of both male and female. All prices very reasonable.
CONGDON & BATTLES.

**OTTO V. BATTLES, Manager.**
**Yakima, Washington.**

## BROWN SWISS CATTLE

### Brown Swiss Stock Farm

Breeders of Brown Swiss Cattle, the Farmer's Dairy Cow. Young stock for sale.

**THEO. BRUGGER, Route 3, Gresham, Ore.**

The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

## DUROC-JERSEY SWINE

### Crescent Stock Farm Durocs

Spring pigs by the great $1300 boar, King of Orions 2d, and by our own great boar, Burke's Cherry King, out of prize sows. Uniform cherry color, finest of heads and backs, heavy bone and best of feet.

G. M. BECKETT & G. O. SWALES,
Johnson, Wash.

### Ioka Farm Durocs

One excellent boar at breeding age. Bred gilts and weanling pigs of either sex.

**DOERFLER BROS.** Silverton, Oregon.
A. N. DOERFLER, Mgr.

### Chas. G. Sprong

BREEDER.

Registered Duroc-Jersey hogs. Weanling pigs for sale.

**GRANDVIEW,** WASH.

### Growthy March Pigs

Good breeding, good individuality, satisfaction guaranteed. Write for description and prices.

**GEORGE DEBOK,** Oregon City, Ore.

FOUR DUROC GILTS BRED TO FARROW

this fall, also spring pigs, on hand.
E. E. PRICE, CABINET, IDAHO, OR
**JAMES N. PRICE;** Yakima, Wash.

## BERKSHIRE SWINE

### Berkshire Hogs for Sale

Have a number of sows, 18 months old; will farrow second litter this fall. Also young gilts and boars of all ages; all from prize winners. Write for prices.

**EARL WOOD.** Silverton, Oregon.

## YORKSHIRE SWINE

### Weaned Pigs of Quality

Can furnish pairs or trios, best stock, $15 at eight weeks.

**WM. NEUENSCHWANDER,** Gaston, Ore.

## HAMPSHIRE SWINE

### Hampshire Hogs

have won every feeding contest entered since 1914. We are booking orders for weanling pigs. Our blood lines can not be beat.
Trios our specialty.

**TUTTLE BROS.** Asotin, Wash.

## SHEEP

### SHEEP FOR SALE

Registered Shropshire, Oxfords, Lincoln, Hampshire and Cotswold rams; 50 head registered Shropshire ewes; 3000 stock ewes, Lincoln, Cotswold and Shropshire breeds; 500 ewes, lambs, Cotswold and Lincoln ram lambs. Write for prices.

**EARL WOOD.** Silverton, Oregon.

SHROPSHIRE SHEEP.
SHORTHORN CATTLE.

Choice yearling and lamb rams. A few high class young bulls.

**FELZER BROS.,** Tangent, Ore.

## PERCHERON HORSES

### Hunter Ranch Percherons

The Grand Champion KROUMIR at head of herd. Young stallions for sale at all times at breeders' prices.

**A. R. HUNTER,** Island City, Ore.

## HEREFORD CATTLE

### Highland Stock Farm

offers for sale Hereford bulls, 1 or 2 years old. One or a carload.

**PLATT BROS.** Genesee, Idaho.

### BULL RANCH

Hereford Cattle.
Berkshire Hogs.
Hampshire Sheep.

**CHAS. BULL,** Mabton, Wash.

## JERSEY CATTLE

### Jersey Home Dairy

Young bulls, winners at Washington State Fair, make good herd sires. Attractive prices for quick sale.

**Erickson Bros. Prop.**
North Yakima, Wash.

### GOLDEN GLOW HERD

Young bull sired by a son of Golden Glows Chief, out of a daughter of Golden Glows Chief, sire of 37 R. of M. cows; 14 over 700 lbs; 32 over 600, one a world's record. Young bull's dam's official record 407.34 lbs. fat (509.17 lbs., 80 per cent butter) at 1 year, 11 mo. This is the blood to increase production in these times of high priced feed. Price reasonable.

**PICKARD BROS.,** Marion, Ore.

### All High Record Blood

Bull calf out of Lucy of P. V., full sister to St. Mawes Susie; 936 lbs. butter in a year; to St. Mawes Blossom 823 lbs., and to Susie's Twin Maiden, 842 lbs. Sire, Poppy's St. Mawes, son of St. Mawes Poppy, 1120 lbs.

**ED CARY,** Carlton, Ore.
Station, La Fayette, Ore.

### DOERFLER FARM

offers a few high producing cows for sale, including daughters of Rosaire Olga Lad. Our herd of 11 head now average 599.42 lbs. butter fat and 11,355 lbs. milk. In another year we will have a still better average.

**F. A. DOERFLER.** Silverton, Ore.

GOLDEN GLOW'S CHIEF.

Bred by estate of W. S. Ladd, has 37 daughters, 41 granddaughters and 5 proven sons in the register of merit, and a WORLD RECORD JUNIOR 3-YEAR-OLD DAUGHTER, who is dam of ONE OF OUR HERD BULLS by the old bull himself. Our second sire is also a son of Golden Glow's Chief, out of a Gold Medal Hood Farm cow. Write us for a young bull calf.
D. Brooks Hogan, Mgr., Iron Mine Farm, Oswego, Oregon.

**W. M. LADD, Owner.** Portland, Oregon.

### ASHBURN FARM

REGISTER OF MERIT JERSEYS.

St. Mawes-Golden Glow's Chief-Baronet. To breeders interested in any of these leading strains we can furnish a line bred calf with the best possible outcross. More big records back of it than any other herd in the west.

**J. M. DICKSON & SON,** Shedd, Ore.

### WAIKIKI FARM

Register of Merit Jerseys. Largest Jersey herd in the northwest. Young stock for sale.

**IRA P. WHITNEY, Manager.**
Route 7, Spokane, Wash.

824 POUNDS 85% BUTTER

is the average of the dam, sire's dam and sire's granddam of bull calf dropped May 28, 1918.
DAM MOYANE MONINE, 803 lbs. butter, 10,406 lbs. milk in 1 year.
SIRE DOMINUS, sire of 5 now on test and making big records (all heifers with 1st calf). His dam produced 817 lbs. butter, 12,928 lbs. milk 1 year, and his sire's dam 853 lbs. butter, 12,636 lbs. milk in 1 year. Price $250. Write.

**JOHN B. STUMP & SON.** Monmouth, Ore.

### ANOKA FARM JERSEY

We have for sale a bull calf dropped Oct. 25, from a register of merit cow. Solid color, good individual. His sire is a grandson of St. Mawes Poppy, with 1120-lb. record.

**R. B. SEELEY,** Sherwood, Ore.
R. R. Station, Wilsonville, on Oregon Elec.

### Ready for Service

Young bulls of Golden Glow's Chief, and King Melia Ann strains, out of register of merit dams. Priced to meet the unfavorable conditions. Write for full particulars and pedigrees.

**HENRY STEWART,** Albany, Ore.

FOR SALE VERY REASONABLY

or exchange, registered Jersey bull, Jonquil of Lebanon, 134649, dropped April 18, 1915. Also a yearling, Taurus of Lebanon, 155275, dropped Feb. 2, 1917. Both of these have good pedigrees.

**V. K. FROULA, R. F. D. 3, Lebanon, Oregon.**

### Jersey Farm Dairy

Peter Mouw's Poland China hogs, Cotswold sheep, White Leghorn and Buff Orpington poultry, carefully bred, great foundation stock.

**E. S. PELOT, R. F. D. 5,** Idaho Falls, Ida.

## AYRSHIRE CATTLE

EDGEWATER FARM

Only one bull left, calved Dec. 14, 1917, with high producing dam; grand dam and great grand dam both world's record cows.

**ELBERT M. CHANDLER, Burbank, Wash.**

In writing advertisers, be sure to say that you saw their advertisement in this paper.

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, Aug. 12. — Pessimistic crop reports from Nebraska and Missouri together with complaints of excessive heat in the southwest had much to do today with bringing about sharp advances in the price of corn. The market closed strong, 3 to 3 1-2 net higher with September $1.62 1-8 to 1.62 3-8 and October 1.63 1-4 to 1.63 3-8. Oats gained 1-2 to 3-4@7-8. The finish in provisions ranged from 15 decline to a rise of 12.

Except just at the outset and during another brief interval an hour later, the corn market showed a decided upward tendency throughout the day. The temporary setbacks were ascribed to reports of scattered showers but opinion became general that the moisture thus supplied was inadequate. Then a leading expert went on record with a statement that owing to irreparable injury by heat and drought the government estimate of yield for Nebraska and Missouri would prove 100,000,000 bushels too large.

Large receipts depressed oats but later the strength of corn gave prices an upward swing.

In provisions the fact that hogs had touched $20.15, the topmost point on record, was a strengthening factor. Demand for pork, however, was lacking.

**Cash Quotations.**

CHICAGO, Aug. 12.—Corn, No. 2 yellow, $1.82@1.85; No. 3 yellow, $1.77@1.80; No. 4 yellow, nominal. Oats, No. 3 white, 65¾@68c; standard, 67@68c. Rye, No. 2, $1.56@1.56½. Barley, 90c@$1. Timothy, $6@9 nominal. Pork, nominal. Lard, [illegible]. Ribs $24@25.

**Chicago Futures.**

| | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| Corn— | | | | |
| Sept. | 1.58½ | 1.62⅝ | 1.58¼ | 1.62¼ |
| Oct. | 1.59⅞ | 1.63⅜ | 1.59⅛ | 1.63¼ |
| Oats— | | | | |
| Sept. | .67¾ | .69⅛ | .67½ | .69 |
| Oct. | .69 | .70¼ | .68¾ | .70 |
| Pork— | | | | |
| Sept. | | 44.25 | 44.20 | 44.25 |
| Lard— | | | | |
| Sept. | 26.80 | 26.85 | 26.80 | 26.80 |
| Oct. | 26.80 | 26.92 | 26.72 | 26.72 |
| Ribs— | | | | |
| Sept. | 24.60 | 24.65 | 24.60 | 24.65 |
| Oct. | 24.70 | 24.75 | 24.70 | 24.75 |

**Pacific Northwest Grain.**

PORTLAND, Aug. 12.—Grain—August delivery bids—Oats, No. 2 white feed, $59; barley, standard feed, $54; Agr. barley A, $55.50. No September bids. Eastern oats and corn in bulk: Oats, No. 3 white, $52.50; 39-pound clipped white, 53c; corn, No. 4 yellow, 71c; No. 3 mixed, 69c. Sales, 100 tons September clipped oats at $53.

**Minneapolis Grain.**

MINNEAPOLIS, Aug. 12.—Wheat: Receipts, 399 cars compared with 238 a year ago. Cash, No. 1 Northern old, $2.32. Corn, No. 3 yellow, $1.72 @1.77. Oats, No. 3 white, 65¾@66¾. Flax, $4.31@4.34. Flour, unchanged. Shipments, 65,337 barrels. Barley, 90c@$1.07. Rye, $1.68@1.70. Bran, $29.31.

## Live Stock Quotations.

**At Omaha.**

OMAHA, Neb., Aug. 12.—Hogs—Receipts, 3800. Market, 10@15c higher. Heavy, $18.10@18.65; mixed, $18.20@18.40; light, 18.25@19.25; pigs, 15@18; bulk of sales, $18.20@18.50.

Cattle—Receipts, 8500. Market slow, 15c to 25c highery. Native steers, $10@18; cows and heifers, $7@11; western steers, $9@16.50; Texas steers, $9@12; range cows and heifers, $6.50@10.50; canners, $6.50@6.50; stockers and feeders, $6.50@12.50; calves, $9@12.45; bulls, stags, etc., $5.50@11.50.

Sheep—Receipts, 20,000. Market, steady. Lambs, $16.25@17.75; yearlings, $13.50@14.50; wethers, $12.50@13.50; ewes, $10.50@13.

**At Portland.**

PORTLAND, Aug. 12.—Cattle—Strong. Receipts, 1425. Steers, prime, $11.75@12.75; good to choice, $10.75@11.75; medium to good, $9.50@10.75; fair to medium, $8.50@9.50; common to fair, $5.50@8.50; cows and heifers, choice, $8@8.50; medium to good, $6@7.50; fair to medium, $5@6; canners, $3@5; bulls, $5.50@7.50; calves, $3.50@11.50; stockers and feeders, $6@8.

Hogs—Higher. Receipts, 900. Prime mixed, $18.95@19.25; medium mixed, $18.75@18.95 rough heavies, $17.25@17.65; pigs, $16.50@17; bulk of sales, $[illegible]@19.15.

Sheep—Steady. Receipts, 1100. East of mountain lambs, $13.50@14.50; valley lambs, $12.75@13.25; yearlings, $9.50@10; wethers, $8.50@9.50; ewes, $6@8.

**At Chicago.**

CHICAGO, Aug. 12.—(U. S. Bureau of Markets.)—Hogs—Receipts, 34,000; closing 10c to 25c lower than Saturday's average; most decline on common packing grades. Butchers, $19.15@19.90; light, $19.40@20; packing, $18.10@19; rough, $17.60@18.10; bulk, $18.25@19.90; pigs, good and choice, $18@18.50.

Cattle—Receipts, 17,000. Native and western steers, steady to a shade higher; no choice corn feds here; top, $18.25; butcher cattle, strong to 15c higher; calves, steady to 25c lower. Beef stock cows and heifers, $7@14.25; canners and cutters, $6@7; stockers and feeders, good, choice and fancy, $10@13; inferior, common and medium, $7.50@10; veal calves, good and choice, $16.50@17.

Sheep—Receipts, 15,000. Market strong to 25c higher; top native lambs, $17.75; western, $18.50; feeders, $17.65; range wethers, $14.60; lambs, choice and prime, $17.75@18.60; medium and good, $16@17.75; culls, $12@14; ewes, choice and prime, $13.25@13.90; medium and good, $[illegible]@13.25; culls, $4.50@9.50.

## Portland Market.

PORTLAND, Ore., Aug. 10.—A shipment of Bartlett pears from Yakima will open Monday at $2.50. This is $1 less than California Bartletts closed Saturday.

The end of the week found the potato market steady with supply and demand even, Californias selling at $3.50@3.75 and the best Oregons at 25 to 50 cents less. for immediate consumption. Buyers were offering 40 to 60 cents less.

There is a range from $1 to $3 in apples, with little demand.

Peaches moved slowly the last few days of the week, with arrivals limited to express shipments from points in the three states. Northern grown Hales sold as low as 75 cents, while the best Elbertas from California brought $1.50.

The butter market was strong today and best grades are short of the demand. Opening of the week is likely to see higher quotations.

Unless signs fail, there will be a rise in cheese prices. Supplies are inadequate and a "tilt" is looked for from Tillamook. Demand for poorer qualities, however, is slow.

Egg receipts are light and higher prices may be expected any day.

In dressed hogs the best easily brings 25 cents, without enough to supply demands. Veal is slow at 12 cents.

Butter—Cubes, extra, 48@49c; seconds, 44c; prime prints, extras, 52c; cartons, 1c extra; butterfat, No. 1, 55c, delivered.

Eggs—Oregon ranch, current receipts, 47@48c; candled, 49c; selects, 50c per dozen.

Cheese—Jobbers' buying prices, f. o. b. dock, Portland; Tillamok, triplets, 25c; Young Americas, 26c per pound; Coos and Curry, f. o.b. Myrtle Point, triplets, 24½c; longhorns, 25½c per pound; 1-4c discount to Portland trade.

Poultry—Hens, 23@24c; broilers, 27c; ducks, 23@30c; geese, 16c; turkeys, nominal.

Pork—Fancy, 24@25c.

Veal—Fancy, 18c per pound.

Potatoes—New, 3¼@3¾c per lb.

Hay—Buying prices, f. o. b. Portland; eastern Oregon timothy, $34 per ton; valley timothy, $29; alfalfa, $26 @27; valley, grain hay, $26@28; clover, $26@28; straw, $9@10.

## Seattle Wheat.

SEATTLE, Wash., Aug. 10.—Puget Sound millers will oppose any open bidding plans of eastern millers to the government for the exclusion of Washington soft wheat, and will urge that flour for the armies be bought on the zone system, that is,

The cargo of 60,000 bushels of Australian wheat which arrived at Tacoma this week was sold on the government price to Tacoma millers and will be ground and sold commercially under the new food regulations. Millers are hoping for more of this grain, as it will relieve the tension in the local millfeed situation.

## Seattle Market.

SEATTLE, Aug. 10.—A heavy movement of local new spuds is expected for next week on a steady to strong market. The buying end of the spud trade has been endeavoring to hold the market down, but efforts along that line which have for their object the closing of contracts are foredoomed to failure, according to the position taken by growers.

**Purchasing Prices.**

Eggs—Select ranch 48@49c per doz; Oregon, eastern Washington and Idaho, nominal.

Butter—Fresh dairy, 30c per lb; butter fat, 56c per lb; baking, 30@35c per lb; raw milk, $2.75 per cwt.

Poultry—Broilers, live, 1918, 30c per lb; hens, 3½ to 4 lbs and up, 27c per lb; under 3½ lbs, 25c per lb; old roosters, 17@18c per lb; ducks, live, fat, 25c per lb; squabs, large, $3.50 per doz; geese, fat, live, 23c per lb; Belgian hares, 19c per lb; guineas, $7 per doz; turkeys, young toms and hens, dry picked, 10 lbs and up, 30@33c per lb; smaller birds, 25@30c per lb.

Hogs—Light, 21c per lb; heavy, 19 @20c per lb.

Beef—Steers, fat, 14@15c per lb; heifers, fat, 14@15c per lb; cows and bulls, 13@14c per lb.

Veal—Fancy light, 19c per lb; do heavy, 13@18c per lb.

Mutton—Fat, 22c per lb; spring lamb, fat, dressed, 25c per lb.

Hides—Salted, 14@15c per lb; flint-dry hides, 28c per lb; salt kip, 15c per lb; green hides, 12c per lb; green calf, 30c per lb; dry calf, 6 lbs and under, 35c per lb; bulls and dry salts, 4c per lb less than dry hides; green bulls, 9c per lb; salt bulls, 11c per lb; salted horsehides, $1.50@4 each; clean, long wool western Washington flint-dry pelts, 42c per lb; heavy to clean, eastern Washington flint-dry pelts, 35@40c per lb.

Wool—Puget sound, clean, 50@55c per lb.

Tallow—No. 1, 12½c per lb; No. 2, 6 @8c per lb.

**Jobbing Prices to Dealers.**

Apples—Washington, $1@1.50 per 40-lb box.

Apricots—$1.75@1.85 per crate.

Pears—Washington—$2.65 box.

Peaches—Washington, $1.35 crate.

Potatoes—Local, new, 3c pound.

Hay and feed quotations, city prices, truckload delivery, are as follows:

Feed—Mill run, mill door basis. $35.60@36.60 ton; scratch feed, $83; all-grain chop, $75; oats, $72; sprouting oats, $77; rolled oats, $74; whole corn, $81; cracked corn, $83; rolled barley, $67; clipped barley, $70; alfalfa meal, $41; oil meal, $72; egg mash, $66.

Hay—Eastern Washington timothy, $27 per ton; do double compressed, $39@40; alfalfa, $33@34; straw, $16.

## Spokane Union Stockyards.

SPOKANE, Aug. 12.—The following is the record of receipts here for the last week:

| | Cattle | Calves | Hogs | Sheep |
|---|---|---|---|---|
| Monday, August 12.. | 428 | 39 | .. | .. |
| Saturday, August 10. | 28 | 2 | 14 | .. |
| Friday, August 9 .. | 24 | .. | 77 | 6650 |
| Thursday, August 8. | 30 | 4 | 75 | 194 |
| Wednesday, August 7 | 187 | 27 | 24 | 206 |
| Tuesday, August 6.. | 132 | 3 | 19 | .. |
| Week ago ..... | 303 | 26 | 10 | .. |
| Year ago ..... | 27 | .. | .. | 1964 |
| Two years ago..... | 12 | .. | 141 | .. |

Quite a heavy overSunday run of cattle in the pens Monday morning, consisting mostly of common to good stuff. The market opened a little slow, but closed very active at steady to firm prices. There were no choice steers on the market, the good to best crossing the scales at $9.50 to $10, with the common to fair butchers at $8.50 to $9 and the thin lightweight stuff at $5.50 to $7.50. No choice cows and heifers here, the best grades going at $5.50 to $6.50 and the thin kinds and canners at $4 to $5.25. Quite a few bulls among the arrivals, which sold at steady prices ranging from $4.75 for the lightweight ones to $6.25 for the heavier kinds. Calves remain steady at $9 for the best veal and from $6 to $8 for the heavier sort. Yearlings were steady at $5.25 to $5 for todays offerings.

The general cattle market is steady at following range:

| | |
|---|---|
| Prime steers | $12.00@12.75 |
| Good to choice steers | 11.25@12.00 |
| Medium to good steers | 9.50@10.25 |
| Fair to medium steers | 8.25@ 9.25 |
| Common to fair steers | 5.50@ 8.00 |
| Choice cows and heifers | 8.00@ 8.50 |
| Good cows and heifers | 6.00@ 7.10 |
| Common to medium cows and heifers | 4.75@ 6.00 |
| Canners | 3.00@ 4.75 |
| Bulls | 5.00@ 7.50 |
| Calves | 7.00@10.50 |
| Stockers and feeders | 6.00@ 8.00 |

Hog receipts were light and of very poor quality, mostly stockers and feeders. The best butchers brought $18.75, with the bulk going at $18.05@18.75. Quite a heavy demand for good feeders, the heavy kind going at $16.50 to $17 today.

General hog range:

| | |
|---|---|
| Prime mixed | $18.75@19.00 |
| Medium mixed | 18.50@18.75 |
| Rough heavy | 17.50@18.00 |
| Pigs | 17.00@17.50 |
| Stockers and feeders | 15.00@17.50 |
| Bulk of sales | 19.00 |

There were no sheep in evidence today. The market remains steady at following range of prices:

| | |
|---|---|
| Prime lambs | $14.00@15.50 |
| Good lambs | 12.50@13.00 |
| Prime yearlings | 8.75@10.00 |
| Prime wethers | 7.75@ 9.00 |
| Best mutton ewes | 5.00@ 8.00 |

Shippers:

Cattle—J. C. Gilmore, Rathdrum, Idaho, 2 loads: C. Carlson, Usk, Wash., 1 load; J. P. Helphrey, Curlew, Wash., 2 loads; R. Joslyn, Springdale, Wash., 3 loads; McInturf & Kind, Chewelah, Wash., 2 loads; J. R. Henshaw, Cam'den, Wash., 1 load.

Mixed Stuff—B. C. Baird, Wheeler, Wash., 1 load cattle and hogs; C. D. Slow, Pullman, Wash., 1 load cattle and hogs; L. R. Phillips, Molson, Wash., 2 loads cattle and hogs; J. P. Floow, Republic, Wash., 1 load cattle and hogs; J. P. Helphrey, Curlew, Wash., 1 load cattle and hogs.

Small Shippers—Doust & Stradley, hogs and cattle; L. A. Thompson, cattle; A. A. Johnson, hogs.

## Crops Are Estimated.

E. P. Marchetti of the federal market bureau of Spokane, estimated on August 1 that the wheat yield of Washing this year would be 32,355,000 bushels, a decrease of 4,736,000 from last year. He estimates a spring crop of 22,913,000 bushels, against only 4,423,000 of fall wheat. The estimated spring yield is considerably above the average, owing to the largely increased acreage, but the estimated fall yield is less than half of the average fall crop.

The corn crop is a little above normal, says the estimate. The potato crop is considerably below normal, as is also the hay crop. Barley, rye and oats are also far below the average crop.

# Fruit and Vegetables

SPOKANE, Aug. 10.—The prices quoted below are those obtained by Spokane wholesalers from retailers, hotels, mining camps and the like:

**Peaches**—Express arrivals, 232 crates Washington. Freight arrivals, 1 car Washington. Market steady. Washington, western box Carman, best size, $1.25, small size 75c@$1; soft, some decayed, 75@90c. Western box, Hales, $1. Slappey, few sales, $1.25 western box Elberta, $1.25. Early Crawford, $1@1.35. Home growns, western box, unwrapped, 75c.

**Tomatoes**—Express arrivals, 72 crates Washington, 83 crates Oregon, 74 crates Idaho. Market steady. Oregon-Washington: 18-lb box pinks, unwrapped, $1@1.25, mostly $1. Idaho-Lewiston district: 18-lb box, turning, unwrapped, 90c@$1. Home-growns: 18-lb box, turning and pink, unwrapped, $1@1.25. Washington-Walla Walla district: Hothouse, ripes, unwrapped, 4-basket crates, $2; 18-lb box, $1.25.

**Apples**—No fresh rail arrivals. Market steady. Duchess, wrapped, no early sales. Red June, peach box, $1. Red Astrachan, open box, $1@1.25; few best, $1.50, jumble packed.

**Raspberries** — Previously unreported, arrived August 8, 1 car express mixed berries. Today's arrivals, express 1 crate Washington. Washington-Puyallup district: 24-pint crates, $3@3.25.

**Loganberries**—Express arrivals, 4 crates Washington. Market, steady. Washington-Puyallup district: 24-pint crates, $3@3.25.

**Potatoes**—Market, weaker. California: 100-lb. sacks, white varieties, few red varieties, $3.25@4; mostly, $3.50@3.75. Washington-Kennewick district: 100-lb. sacks, white varieties, $3.75. Homegrowns: 100-lb. sacks, white varieties, $3.50.

**Onions**—Freight arrivals, 1 car Washington. Market, steady. Californias: 100-lb. sacks, yellow varieties, $2.50. Washington-Walla Walla district: 100-lb. sacks, Yellow Danvers, $2.50; few $2.75.

**Radishes**—Home growns, per dozen bunches, 20@25c, few $5@40c.

**Carrots, Beets and Turnips**—Home growns, per cwt, $2.25@3; Per dozen bunches, 25@45c, mostly 25c.

**Rutabagas**—Home growns, per cwt. sack, per pound, 6c.

**Pens**—Supplies very light. Home growns, quality and condition poor, per pound, 6c.

**Beans**—Home growns, quality and condition fair, wax and green, per pound, 4@5c. Kentuky Wonder, per pound, 6c.

**Lettuce**—Home growns, quality and condition fair, per dozen head, 40@85c, mostly 40c, few $1.

**Green Onions**—Home growns, per dozen bunches, 20@25c, few sales 35c.

**Cucumbers**—Market very weak. Hothouse, per dozen, 50c@$1, according to quality and condition, few $1.40. Home growns, field, per dozen, 10@15c.

**Corn**—Express arrivals, 20 sacks Washington. Market steady. Per dozen, 22 1-2@25c, few 35c; 8 dozen crates, from Wapato, $2@2.25.

**Summer Squash**—Home grown, white vars, per dozen, 40c; yellow vars, per dozen, 15c.

**Egg plant**—Express arrivals, 6 crates Washington. Market steady. Idahos-Lewiston district, 1-2 dozen box, 75c, quality and condition good.

**Cabbage**—Homegrowns: per cwt., Danish Ballheads, best, $4@4.50; soft, $2@3.

**Apricots**—Market, steady. Four-basket crates, quality and condition good, $2. Homegrowns: small size, bulk, few sales, per lb., 10c.


**FIRST ANNUAL RAM SALE**

At the Twin Falls County Fair Grounds at Filer, Idaho, August 23, 24, 1918. 2000 head imported and domestic rams and ewes. All breeds. Write for catalog.

H. H. Schildman, Sec'y.
Filer, Idaho.

HIDES WOOL FUR




RUBBER METAL SACKS

We pay full market value, correct weight and assortment, prompt returns. Write for prices. We want your business.

PACIFIC HIDE & FUR DEPOT
Joseph Thiebes and C. T. Symmes,
1101-09 Railroad Ave., Spokane, Wash.

# Deduct Too Much?

## Wheat Price Rule Causes Inquiry

Whether or not the deduction of 8 cents a bushel this season by the buyers of wheat to cover storage, handling, commission, insurance, interest and the like is fair to the growers is a question that is receiving much discussion throughout the northwest, following the Farmer's treatment of the matter last week. Opinions differ, though there appears a general sentiment among growers that the charges are excessive. As reported in this paper last week, the buyers and millers are deducting 8 cents per bushel from the basic Coast price less the freight, made up as follows: Storage for 30 days, 3 cents; commission, 2.2 cents; interest, 1 cent; insurance .4 of a cent; inspection, weighing and bad-order sacks .4 of a cent; handling, approximately, 1 cent.

Statements from various authorities throughout the wheat-growing sections, including buyers and warehouse men as well as growers, indicate that the 8 cents is an increase of from 25 per cent to 100 per cent over the charges for the same matters last season, depending upon the locality and the service rendered. From Garfield, Wash., comes a statement of a 5-cent margin there last year; from Ritzville, Wash., of a 4 1-2-cent margin; from Quincy, Wash., of a 6-cent margin; from Cheney of a 4-cent margin.

President A. A. Elmore of the farmers' union of Washington and northern Idaho says he considers the 8-cent deduction reasonable. In an interview he says:

"The charge of 8 cents a bushel for handling wheat this year is not excessive. But the trouble is the charge is not placed where it belongs. As it is now arranged the charge falls on the farmer.

"Last year there was considerable confusion, as government handling of grain was an untried proposition. The farmers were told they must sell to the grain corporation, and had just as well let loose of it, because they could not possibly get more later.

"The farmers turned in their wheat, and it was only a short time until the cry went up that the terminals were full and the railroads congested. In this dilemma something was demanded, and finally the government, acting through the food administration grain corporation, agreed to pay a carrying charge of 2 cents a bushel a month. The dealers could then go out and buy the grain, and did.

"This year there was no provision made for a carrying charge. In lieu thereof the government gave us the competitive buying concession. It remains to be seen if this is any benefit. The government has put a limit on the price of flour and mill feed, so the miller can't pay a premium over the government price.

"Experience shows that wheat is carried an average of four months. The carrying charge of 2 cents a bushel a month allowed last year would amount to 8 cents a bushel.

"This year there are two ways for the farmer to dispose of wheat. If he sells to a dealer the dealer deducts 8 cents a bushel, plus the freight, and gives the farmer the balance. On the other hand, if he is not satisfied with the dealer's terms he can ship direct to the food administration grain corporation. The grain corporation charges 2 cents a bushel for commission and 3 cents a bushel for the first 30 days for storage. After the first month the storage charge is 10 cents a ton, or about one-third of a cent a bushel.

"Suppose the charges had to be maintained four months, this would amount to 5 1-3 cents a bushel. In addition the farmer has to carry his own interest and insurance. Perhaps he will not get his returns from the grain corporation for three to six months, and the interest and insurance will amount to considerable."

J. C. Lawrence, an active member of the farmers' union and the grange, disagrees with President Elmore, claiming that last year's charges of about 5 cents a bushel were more nearly reasonable than the 8 cents this year.

# Demonstrate Tractors

Another indication of the increasing interest in power farming is the announcement by the Portland Implement and Tractor association of its first big tractor and power farming demonstration next month. The demonstration will be held near Portland September 5, 6 and 7, at which time it is already assured that at least 30 tractors and power farming implements will be demonstrated under circumstances conforming as nearly as possible to actual farm conditions. The promoters of the demonstration are planning to care for a large attendance, and farmers throughout the entire state and adjoining states are being urged to be present to witness the demonstrations.

A similar demonstration, though possibly less pretentious, is being planned by the power farming people in connection with the Idaho state fair at Boise next month. Both of these demonstrations are inspired in part by the remarkable success of the demonstration staged by the State college of Washington at Pullman, Wash., three months ago, when 200 acres of real Palouse farm land were plowed and cultivated during the three days' demonstration. Eugene Smith, who had charge of the demonstration at Davis, Cal., last May, will manage the Portland event.

## Coming Events.

August 19-25—Convention National G. A. R., Portland, Ore.

August 27-29—National Farmers' conference, Washington, D. C.

**Fairs, Shows, Exhibits.**

August 26-30—Southwest Washington fair, Centralia-Chehalis.

September 2-7—Spokane Interstate fair, Spokane, Wash.

September 16-21—Washington state fair, Yakima, Wash.

September 19-21—Roundup, Pendleton, Ore.

October 1-6—Western Washington fair, Puyallup, Wash.

November 7-13—Northwest live stock show, Lewiston, Idaho.

# Trappers of the Ozarks

(Continued from page twenty.)

"Yes, I low they will, Ben. But this is a big river, and we ought to be able to dodge 'em on it."

"I hope we can, Uncle Dan'l. And of course you know more about such things than I do. Still, it seems to me they've got just the right number of canoes to sweep the river as they go down. One can follow along and search each bank, and one can keep out in mid-stream. I don't know that they'll do that. But it's safer to figure that they will."

"Yes. It's safer to figure that they'll do that very thing," Boone agreed. "And if they do, we may have to fight it out with 'em."

(To be continued.)

# Want Ads


**Want Ad Rates 30c Per Line**

Want ads are run at this rate in The Washington Farmer and 1 t s associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

**Want Ads**

Send for card giving lower rates for ads running one month or longer.

**How to Figure Cost of Ads**

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

**HELP WANTED—MALE 3**

FARMERS, FRUIT GROWERS, AND OTHers seeking profitable employment as local agents to sell our high-grade nursery stock, will please write for terms to agents. Good pay, exclusive territory and steady employment to honest, reliable men. Albany Nurseries, Albany, Ore.

**EDUCATIONAL 45**

EARN MORE. ENROLL ANY TIME, AT Behnke-Walker, Portland, northwest's biggest business college, because best. Graduates assured positions. Write for catalogue.

**TEACHERS' AGENCIES 46**

TEACHERS REGISTER WITH B. F. WESTmore, Mgr. Hazard Teachers' Agcy. $1 registers you at three offices. 911 Old Nat'l Bank bldg., Spokane, Washington.

ALBERT TEACHERS' AGENCY, PEYTON bldg., Spokane. We need more teachers.

**HONEY, BEESWAX—Wanted. 58**

SEND SAMPLES OF YOUR HONEY AND beeswax; state quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

**EGGS and BUTTER WANTED 59**

WE ARE ALWAYS IN THE MARKET for good eggs and dairy butter. Send us your next shipment. Oregon Farm Products Co., 38 Halsey st., Portland, Ore.

**MISCELLANEOUS—FOR SALE 60**

SASH AND DOORS.

Let us mail you one of our large illustrated catalogues No. 27 of sash, doors, frames, building paper, prepared roofing, plaster board, paints, etc.

We make screen doors and sash covered with heavy 28-gauge galvanized wire.

Stock size screen doors, $2 and up.

Odd size screen doors, 20c per square foot. Screen windows and sash, 15c per square foot.

We sell any one. Ship anywhere, and guarantee safe delivery.

Direct from our factory to you.

O. B. WILLIAMS CO.

1943 FIRST AVE. SO. SEATTLE.

**MISCELLANEOUS WANTED 63**

POULTRY WANTED.

We are cash buyers of poultry and dressed meats, also cream. Write us for prices, shipping tags and premium catalogue for cream shippers.

COMMERCIAL CREAMERY CO.

SPOKANE, WASH.

**JUNK SHOPS 90**

HIDES HIDES HIDES

Write for prices and shipping tags.

BUYERS OF ALL KINDS OF JUNK.

CENTRAL HIDE & JUNK CO., SPOKANE.

**MACHINERY—FOR SALE 93**

PLOW TYPE RUMLEY STEAM TRACTOR, 25-HORSEPOWER, DOUBLE CYLINDER, PRACTICALLY NEW. FOR SALE AT A BARGAIN.

39x106 high-pressure boiler. Cylinders 7 inches in diameter, with a 12-inch stroke. Belt wheel 41 inches in diameter, with a 12-inch face. Rear wheels 74 inches in diameter. Width of tire, 30 inches. Extreme width of engine 122 inches, length 254 inches. Subject to inspection at Seattle, Wash. Ask us for prices.

AMERICAN HOIST & DERRICK CO.

Seattle, Wash., and St. Paul, Minn.

CUT YOUR OWN LUMBER

on a Wheland Portable Sawmill. You will save time and big money on your next lumber bill. With the sawmill you can supply the lumber needs of your neighbors also. The price is reasonable, and the profits will soon pay for the machine.

Write for catalog and full details.

CLYDE EQUIPMENT CO.

18TH AND UPSHUR STREETS,

PORTLAND, ORE.

"WITTE" GASOLINE ENGINES

save labor and are carried in stock by HIGGINS MACHINERY COMPANY, 312 FIRST AVE. S., SEATTLE.

Write for Catalogue.

**MACHINERY—WANTED 96**

WANTED—4 OR 8 H. CUSHMAN GASOline engine in good running order. Care Washington Farmer, Spokane.

**AUTOMOBILES 111**

FORDS CAN BURN HALF COAL OIL, ALL distillate, or cheapest gasoline, using our 1918 Carburetor; 34 miles per gallon guaranteed; easy starting; great power increase; attach it yourself; big profit selling for us; 30 days' trial; money back guaranteed; styles to fit any automobile. Air-Friction Carburetor Company, 321 Madison st., Dayton, Ohio.

**STOVE & FURNACE REPAIRS 120**

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

**HARES AND RABBITS 173**

"A FORTUNE IN RABBITS"—HAVE raised the price. We will pay to $8 per pair. Want you to raise them for us. Send stamp for particulars. H. E. Gibson Co., Arcadia, Calif.

PURE BRED NEW ZEALAND REDS, 6 mos., $3.50 each, younger stock, $1 up. Pine Grove Rabbitry, Bx. 73, Camas, Mont.

REGISTERED BELGIAN HARE BUCKS and does, $3 to $5 each. Cermer Rabbitry, Pasco, Wash.

**POULTRY 174**

FOR SALE—TRAP-NESTED BARRED Rocks and White Leghorn cockerels and breed. hens. Mrs. W. M. Roberts, Elmira, Ore.

S. C. W. LEGHORN PULLETS AND cockerels from heavy laying stock. Mrs. Rominger, Underwood, Wash.

**LIVE STOCK 177**

REGISTERED HAMPSHIRE RAMS.

We have for sale 30 head big-boned, nicely-wooled registered Hampshire ram lambs. These lambs are from imported ram and Walnut Hall ewes, purchased at the Salt Lake ram sale. One-half of these rams are excellent steed rams. Will price them so that they can be used as range rams if desired. W. H. Bullington, Gooding, Idaho.

REGISTERED HOLSTEIN BULL FOR sale. Price $150. Dam, Janie Baroness, sire, Buffalo Duke Doede, a half brother of Dutchess Skylark Ormsby; will be 3 years old Oct. 7; a sure breeder and a good disposition. Bernard Allhands, Gilmore, Ida.

BERKSHIRE SPRING PIGS OF CHAMpionship breeding for sale at reasonable prices. Send for circular giving description and price. R. W. King, Sweetwater, Idaho.

I HAVE A FEW PURE-BRED HAMPshire boars and gilts for sale at reasonable prices. G. R. Sullivan, Kamiah, Idaho.

REGISTERED O. I. C. SWINE; BREEDING stock for sale. C. I. Ballard, Rickreall, Ore.

1 HAMPSHIRE BOAR OF SERVICE AGE Weanling pigs. Tuttle Bros., Asotin, Wash.

SHETLAND PONIES; BARGAIN PRICES. Write for list. N. C. Sorenson, Onalaska, Wn

REGISTERED SHROPSHIRE RAM lambs. P. A. Loar, Silverton, Ore.

**HOTELS 306**

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water. 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

HOTEL TOURAINE, OPPOSITE REVIEW building. Rates, 50 cents and up. Wm. Snow, Prop., Spokane, Wash.

GALAX HOTEL; NEW AND MODERN; 75C and $1. Main and Bernard, Spokane.

NEW MADISON HOTEL, 75C AND UP. First and Madison, Spokane, Wash.

**FAIR PREMIUM LISTS 370**

SPOKANE INTERSTATE FAIR AND LIVE Stock Show, Spokane, Sept. 2-7. Premium list now ready. Write W. L. Tennant, Secy., Spokane.

WASHINGTON STATE FAIR, SEPT. 16-21. Premium list now ready. Write Frank Meredith, Sec'y, Yakima, Wash.

TWIN FALLS COUNTY FAIR, OCT. 1-4. Premium list now ready. Write J. M. Markel, sec'y, Filer, Idaho.

**RUBBER STAMPS and SEALS 384**

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

**ARTIFICIAL LIMBS 424**

SCHINDLER ARTIFICIAL LIMB CO., 8114 Wall st., Spokane, Wash.

**BUSINESS OPPORTUNITIES 516**

PAYING NEWSPAPER, WORTH $8000, TO trade for farm. News, Cambridge, Idaho.

**PLUMBING, STEAM FITTING 594**

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

**SEEDS 620**

WE SPECIALIZE IN TIMOTHY, ALFALfa, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Ida.

**FARM LANDS—FOR SALE 651**

A BIG LAND OPENING.

COWS, HOGS, AND A BANK BOOK.

Your dream of life, of ease, comfort and independence await you at

BIRMINGHAM,

On Port Susan Bay, Snohomish County; 6000 acres of the best land that lies out doors; a 2 hours' ride from Seattle places your feet on the richest, most productive soil in the whole state of Washington; rail and water transportation; near paved roads, schools, churches, cannery and condensery; 3½ miles of waterfront and finest beach on Puget Sound; 20 miles of beautiful lake shore, surrounding 8 picturesque lakes; these lakes teem with trout. Get in on the first choice for $35 per acre and up; 10 yearly payments, 6 per cent interest.

This is but the beginning of the story of Birmingham. Send to the owners for illustrated literature. BROWNELL LAND CO., 904 Third ave., Seattle, Wash.

680-ACRE IMPROVED RANCH, THREE miles from Helena, one mile from East Helena, Montana, at Four Range Ranch station of Great Northern ry.; a great wheat producer; quarter of mile from street car to state capital; electric power and lights; five-acre orchard; modern ranch house; deep well, pure water, artesian flow; over four hundred acres can be plowed; three hundred under cultivation produced good crop this year. A real ranch and suburban home combined. Easy terms. Owner going into government service for war. Write for descriptive circular. Thos. F. Mahoney, Empson bldg., Helena, Mont.

WHY RENT? BETTER OWN A FARM. MAKE MONEY BOTH WAYS—GOOD CROPS AND INCREASE IN THE VALUE OF LAND; GOOD SOIL; LOW PHICE; EASY TERMS.

New section of British Columbia just opened up by building of railroad. NO DROUGHT, NO CROP FAILURES. K. H. Blaesser, Box 2054, Spokane, Wash.

FOR SALE—440-A. WESTERN WASHINGton farm; 200 a. prairie pasture; 140 river bottom; 50 a. under cultivation, balance willow brush; 100 a. logged over; hill land; fair buildings and orchard; good roads; 3 mi. to town. Price, without stock, $12,000; $4000 cash, balance 10 years, 6 per cent. For particulars address A. Steinman, R. F. D. 1, Box 99, Tumwater, Wash.

155 ACRES; SIX MILES N. W. MT. HOPE, Wn.; 17 miles Spokane; 115 a. cultivated; 130 tillable, balance timber; orchard, 7-room house, fair barn, good water; I am going into service, will sell for $10,000, $3000 cash, balance time. Write me quick. This is a snap. Place adjoining sold for $100 per acre recently. Owner, Box 42, R. 2, Fairfield, Wn.

MONTANA IRRIGATED LANDS.

To close out two large sheep ranches, we are offering choice irrigated land in tracts of any size at bargain prices, and on very easy terms; 100 per cent tillable; best of water rights and crops. Address owners, Lewis Penwell Company, Helena, Mont.

FOR SALE—EIGHTY ACRES.

Dairy ranch; twenty acres irrigated; new buildings; good location; four miles from town; free range; all personal property included. A. C. Hoxie, Alsea, Ore.

FOR SALE—173 ACRES; ON COLUMBIA river; alfalfa, dairy and hog ranch; also 160 acres of wheat land; would consider good city property or smaller ranch as part payment. Box 76, Hanford, Wash.

FOR SALE—900-ACRE PLANTATION; well improved; two crops easily raised; eight-room colonial home; fine fishing and hunting. White Hall Plantation, Jones, La.

STOCK AND DAIRY RANCH FOR SALE at a bargain. 1160 a. in western Oregon, in Lincoln co. For details write Emil F. Raddant, Orton, Ore.

WATER FRONT AND INLAND FARMS, Md., Del., catalogue. RUSSELL REALTY CO., 2 E. Lexington st., Baltimore, Md.

**FARM LANDS—WANTED 654**

WANTED—TO HEAR FROM OWNER OF farm or unimproved land for sale. O. K. Hawley, Baldwin, Wis.

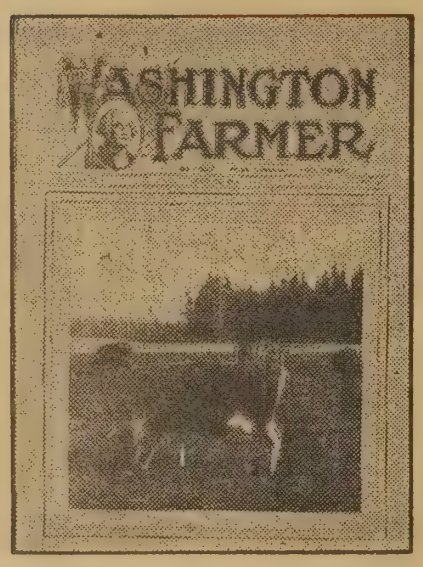
**FARM LANDS—Wanted to Rent 660**

WANTED—TO RENT GRAIN RANCH, cash or shares; furnished, part furnished or unfurnished; all particulars first letter. D. D. Lewis, Kent, Wash., R. 1.

**FOR SALE OR EXCHANGE 702**

TURKEY RANCH—160 A.; RIVER RUNS through; outrange. D 10, Oregon Farmer, Spokane, Wash.

# These Three Farm Papers Reach 80,000 Farm Homes










## Take Advantage of the Low Combination Rate for Insertion of "Want" Ads in These State Farm Papers

The "want" ad is a method of communication which will prove helpful at various times to all of our farm folks.

Do you desire to get in touch with a reliable, experienced hired man? The "want" ad brings your need to the attention of competent workers throughout three states.

Do you wish to turn used machinery into cash? The "want" ad reaches farmers in other districts who have use for your discarded implements, and who will probably be glad to make the saving you will be able to offer them.

Have you farm products to sell, such as live stock, poultry, seeds or dried fruits? Once more, the "want" ad in the three state farm papers offers a solution for the difficulty. It reaches the very class of homes where there is a constant demand for these things..

Have you a piece of land for which you are eager to find a buyer? The "want" ad in The Washington Farmer, The Oregon Farmer and The Idaho Farmer affords a splendid method for making a sale; inasmuch as these three papers are read by tens of thousands of farm owners and farm renters, a goodly proportion of whom are considering the purchase of farms or orchards in other sections.

To sum up, our "want" ads enable you to reach the people who have what you want or who want what you have. They are easy to insert. They are low in cost. Even if there is nothing you care to advertise at this time, you will always find interesting, profitable reading in our "want" ad columns.

Rates are printed at the top of the "want" ad columns. Be sure to read the "want" ad page today!

**Send Orders and Inquiries Regarding "Want" Ads to The Washington Farmer, 617 Central Bldg., Seattle, Wash.**

AUGUST 22, 1918. tined to proceed overseas. NO WRAPPER, NO ADDRESS. A. S. Burleson, Postmaster Gen. PUBLISHED WEEKLY.

THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

# Sign of the Red Triangle Bids Them Welcome

By WILLIAM H. CRAWFORD, Y. M. C. A. National War Council Headquarters, New York City.




Since the late spring of 1917, when the Y. M. C. A. overseas was represented by a tiny tent on a dock of a French port, up to the present time, with huts in almost 1500 centers in France, the "Y" has been constant companion of the American soldier. From the port of entry to the front line trenches it follows him with its comprehensive ministry. Its workers across the sea include 3500 men and women of the highest type of manhood and womanhood that America has to give.

Sometimes the "hut" is a beautiful chateau, again it may be just a small dugout behind the firing line. But to our boys it is home, college, club, church, and the stage. The best phases of each of these influences is taken to them through the medium of the Y. M. C. A.

To the boy from the farm the hut makes, perhaps, the most direct appeal. His fellow soldiers from the cities have had many outside attractions which tended to take them away from their homes, but the farm boy is primarily the home boy.

In the "Y" hut he reads, writes home, talks, smokes and enjoys the music and games. The "Over There" Theater league with its trench circuit

Continued on page twenty-four.

# Private Shipping Profitable

## More Money Is Realized by Shipping Livestock in Private Lots Than by Letting Buyers Handle Them.




COLVILLE, Stevens County, Wash., Aug. 8.—The crop outlook is a little more promising than it was some two months ago. The rains of the last few weeks have been a big help to the grain that had not fully matured, and in some places was still in the milk. The grain crop on the whole has been helped perhaps as much as 15 or 20 per cent. A second crop of alfalfa is showing up in good condition where it was thought there was very little chance of any second crop. Summer planting for fall pasturage or for soiling will mean the saving of a good many tons of hay if it is only practiced by the farmers. The winter grain is all in the stacks and a large part of the spring grain will soon be ready to cut. The farming in Stevens county is largely diversified, which means that the labor shortage is not felt as keenly as it naturally would be in other sections of the state. Some of the farmers are marketing their own live stock instead of selling to the local buyers and finding that they are money ahead. It is hoped that more of the farmers will get into this practice for it means the elimination of a middleman that can easily be spared.

E. C. DURDLE.

### Rain Benefits Crops.

SOUTH BEND, Pacific County, Wash., Aug. 12.—Recently we had our long-looked-for rain. It rained about two inches and soaked up the ground well. Many of the later garden crops will be greatly benefited, as well as root crops and kale. The farmers are harvesting oats; some are having their oats threshed while others are using oats for their silos. There have been a few more silos built this summer. There are a number of ensilage cutters scattered over the county in different communities, some are owned by individuals and others by two or three farmers together. The cannery in South Bend is running. The work is done by women and girls. They are canning fruit at present; the prices paid are five cents for loganberries and four and a half cents for blackberries and raspberries. A couple of girls near Bay Center have started a little cannery of their own. Their father has a small fruit and garden truck ranch and they can the surplus crop. They have a good-sized building for their enterprise; along the walls are racks reaching to the ceiling for the cans, in the center is a long work-table, while in one corner is a desk and telephone. Tin cans are used and the cooking done in a pressure cooker just outside of the store and work-room. They will have a ready market for all of their products. The women and girls harvested most of the cranberries. All products are high in price this year. Potatoes are 4 cents, butter, 63 cents, and milk, 10 and 12 cents a quart.

MRS. WINIFRED BUCKINGHAM.

### Harvest Good Hay Crop.

CATHLAMET, Wahkiakum County, Wash., Aug. 9.—This year the hay harvest was carried through very successfully without the importation of outside labor. Farmers cooperated to a greater extent than they have heretofore and were able to make just as good time in haying as they have ever made. By far the greater portion of the hay was well cured and went into the mows in splendid shape. The hay in this locality is mostly an orchard and rye grass mixture, with some native meadow hay. This hay is fed exclusively during the winter with very good results. At the present time a few farmers are getting ready to fill their silos with oats, while others are cutting a limited amount of oat hay. This will complete the harvest work in this county this year. Pastures have not dried up as they have in other localities, yet they have been shortened somewhat by the drouth. A rain, which has visited us, will do considerable good, and farmers generally are welcoming it. Our dairy cows have held up in their production remarkably well during the last six weeks. Wahkiakum county farmers sell cream altogether. There are two cooperative creameries in the county and one privately owned. Considerable cream is shipped to Astoria and Portland. Butterfat prices now are very satisfactory to our dairymen.

Wahkiakum county is the only county in the state of Washington which is not accessible by a road. We believe that our agricultural resources are so valuable that a road into this county would benefit the entire state, as well as the county itself. There are hundreds of acres of the best dairy land which could be improved if there were some means of getting in and out of the county except by river steamer. A road is of primary interest to the people of the county.

A. T. FLAGG.

### Crops Are Light.

RAINIER, Thurston County, Wash., Aug. 10.—Haying is mostly done. The crop was light with a few exceptions. This has been a very peculiar season; spring was cold until late and no heavy rains since the 1st of June; in fact, rains have been very light since then, except locally. For two months we have had light showers now and then to lay the dust, with lots of cloudy and cool weather, which has been a good thing on account of the dryness. This last week we had rain on several days and lots of cloudy weather, which improved field corn and vegetables. The cultivated crops are doing well, considering the dryness of the season. Pastures have dried up and cows are giving less milk. Feed is so high that many will not feed the cows on winter feed until they freshen, and some are disposing of their cattle.

L. F. DAVIS.

### Corn Prospects Are Fine.

METHOW, Okanogan County, Wash., July 27.—The 1918 crop year is the most puzzling we have had in 30 years. Owing to the ground being frozen hard, the snow water all ran off, followed by a cold freezing spring, which cut the first alfalfa crop down on the dry land half; then the thermometer went to the other extreme and mounted to 110. This wilted the potato tops so that the young potatoes stopped growing; then the rain came and the potatoes are sending new sprouts up. This makes the third growth, so with a two-inch rainfall today it is hard to say what the potato crop will be. Most of the wheat had to be cut for hay, as it was too short to bind. This is no spring wheat country anyway. Fall wheat, if it comes up in the fall, is good for from 20 to 30 bushels, but spring wheat is invariably a failure. Today's rain, while damaging the second crop of alfalfa, is a veritable God-send for the corn and bean crop, which is truly the poor man's standby. Summing the crop situation up, will say the alfalfa crop is good on irrigated land and fair on dry land; the wheat crop is all but a failure; the potato crop on irrigated land is good, but on dry land I would say it would be large in quantity but poor in quality. With today's rain the corn crop, which is the most vital crop, is going to be immense, and so is the bean crop. This rain will also improve the range.

CHARLES GRANT.

### Grain Yields Fair Crops.

CHIMACUM, Jefferson County, Wash., Aug. 2.—The haying is about over and crops are light in most sections, especially on dry land, but the oat and pea hay on the bottom land is showing up fine and will make a heavy crop. The late planting is coming along fine on account of two good rains during the month of July. Most grains yielded a fair crop. The labor situation has been somewhat of a handicap, but most of the farmers worked together. In some instances crowds got together and worked Sundays and these long evenings. Markets are good, but the feed proposition is not so good. Many of the cows have been taken from official list on account of not being able to secure suitable grains for the work.

JOHN VAN TROJEN JR.

### Crops Are Up to Standard.

PORT ANGELES, Clallam County, Wash., Aug. 6.—In regard to harvest conditions in Clallam county I may say that the prospects are exceedingly good for a normal harvest both in regard to quality and quantity. The late rains assisted materially to justify a good crop. While labor conditions are acute it appears from talking with the farmers that their misgivings in this respect have been dissipated. The hay crop is well taken care of and our county will harvest a splendid crop of peas. Probably potatoes and roots will be a trifle less than normal.

J. P. CHRSTENSEN.

**Where There's a Will.**

Country Constable—We haven't had any motorists violating the speed limit for most a week.

Justice of the Peace—We'll have to arrange to lower the speed limit.—From Milestones.

**Our Perseverance Required.**

"How did you learn to skate?" a little boy was asked.

"Oh," was the innocent but significant answer, "by getting up every time I fell down."—Christian Register.

# Make Fruit Juices

The Loju plant owned by Schmidt Bros., at Salem, and one at Olympia, Wash., are converted breweries, and comprise the largest fruit juice factories in the west, it is claimed. The Salem plant is working full blast on logans and it is interesting to watch the processes of converting berries into wholesome drinks. The pulp, once thrown away, is utilized for flavoring and other purposes.

Among the growers who supply the berries is Bruce Cunningham, who has one of the large loganberry yards in Marion county. About 35 acres are devoted to the logans. Mr. Cunningham also has a large prune orchard. The prune crop promises well, though some rot has appeared, due, it is believed, to the excessive dry weather. Two prune orchards side by side, with a road dividing them, offered an interesting study in commercial fertilizer. One orchard has been treated with phosphate at the rate of 400 pounds, while the other has had none. The difference in the thriftiness of the trees and the crop borne is marked in favor of the use of the fertilizer.

**Dare and Share.**

Those who dare all must share all.

# Washington Boys in War Service

From The Twice-a-Week Spokesman-Review.



**A. L. STRATTON, Rockford, Wash.**—Enlisted in the navy in May, 1917, and is now on the U. S. S. Mercy. He is the son of Mrs. J. Stratton of Rockford.



**CARL M. LARSON, Newport, Wash.**—Joined the marines on April 6, 1917, and when last heard from was at Guam Islands in the 42d company.



**EMERY S. PURDY, Revere, Wash.**—Enlisted in the U. S. service as a truck driver. Previous to his enlistment he resided in Revere, Wash.


## International Ensilage Cutters



The following table shows the sizes and capacities of the five types of **International** ensilage cutters. There is, you see, a size for every farm. The smaller sizes will easily fill a 30-ft. silo. The largest are used to fill the highest silos in the country.

| Type | Feed Throat Sizes | Capacity Tons per Hour | Power Needed | Length of Cut | Speed |
|---|---|---|---|---|---|
| A | 16″ x 6½″ | 16—25 | 20-25 H.P. | ⅜″ to 1 1/16″ | 500—700 R. P. M. |
| B | 14″ x 5½″ | 12—16 | 15-20 " | ⅜″ " 1 1/16″ | 700—800 " |
| E | 11″ x 4½″ | 10—12 | 10-15 " | ⅜″ " ⅞″ | 800—900 " |
| G | 11″ x 5 ″ | 8—10 | 8-10 " | 2/16″ " 1 ″ | 800—900 " |
| F | 9″ x 3 ″ | 3— 6 | 4—6 " | 2/16″ " 1 ″ | 800-1000 " |

All **International** cutters are of the knife on blower type—simplest and requiring least power. All are equipped with a corn chute for feeding from the wagon. Steady power feed insures even cutting, silage packs properly and keeps. The low speed at which they run, and the safety devices on the machines insure the safety of the operator. The machines are complete, there are no extra sprockets or gears.

A post card will bring you prices and full information on any of the cutters listed above. Send it to the address below.



**International Harvester Company of America**
(Incorporated)

Billings, Mont. Crawford, Neb. Denver, Colo. Helena, Mont.
Los Angeles, Cal. Portland, Ore. Salt Lake City, Utah
San Francisco, Cal. Spokane, Wash.

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

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# How Can Wheat Grower Ship Direct?

## *Does Provision Protect Him From Unreasonable Charges by Dealers?*

A statement issued by the United States Food administration concerning the purchase of wheat contains the following paragraph: "The farmer can protect himself by the study of the primary prices, deducting intermediate charges, or he can ship to the food administration grain corporation, or he may ship to a commission merchant, or a terminal merchant and through him secure the benefit of competitive buying."

Inquiries coming to the Farmer as to just what methods must be taken by the wheat grower to ship his grain directly to the food administration grain corporation, the following letter was sent to M. H. Houser of Portland, Ore., at the head of the food administration grain corporation for the three states of Washington, Oregon and Idaho:

"Wheat growers of the three states, Washington, Idaho and Oregon, are becoming anxious to learn just what steps they must take to ship grain directly to the U. S. Grain corporation. If some of your people can give us an answer to this question we are sure it will be of service to many wheat growers.

"Will it be better that they have a minimum carload of their own production or that they cooperate with other small growers in making up that carload?"

The following reply from Mr. Houser has been received:

"To the Editor of the Farmer:

Answering yours of the 11th inst., beg to say that the information you are seeking has gone out generally to the dealers and mills of the three states comprising zone 10. To the grain dealers there has been issued Bulletins No. 1 to 3 inclusive, and to the millers and manufacturers of flour and feed has gone forth Milling Bulletins No. 1 to 9 inclusive, together with some circular letters and data of like nature.

"We feel sure that by this time the grower is fairly well versed in the procedure that is to be followed this year. In dealing in grain this year a broad latitude is allowed the dealers and there should be no reason why a producer and dealer can not get together on a sound trading basis. The grain corporation stands ready to protect the fair price basis in case the producer feels that he can not meet with fair treatment from the dealer.

"Regarding the minimum carload feature, it would be much better to have two or more small growers pool their tonnage with a view of making up a maximum car for shipment.

"FOOD ADMINISTRATION GRAIN CORPORATION.

By M. H. HOUSER, Second Vice President."

As this letter from Mr. Houser does not give any direct and detailed information to the grower as to how he can ship direct to the food administration grain corporation and as the grower will be in no mood to seek this information from the grain buyer with whose terms he may not be satisfied, a second letter on this subject was addressed to Mr. Houser by the editor of the Farmer as follows:

"We thank you for your letter of August 12 in reply to our inquiry as to just what steps growers must take to ship grain directly to the United States Grain corporation. We can not agree, however, with your belief that the growers are fairly well versed in the procedure that is to be followed this year.

"We note from your letter that you have sent out three bulletins to grain buyers and nine bulletins to millers, but so far have heard of no informative bulletins to the grain growers.

"As you say, 'in dealing in grain this year a broad latitude is allowed the dealers,' and you add, 'there should be no reason why producer and dealer can not get together on a sound trading basis.' We find, however, that a wide difference of opinion has arisen as to what constitutes a sound trading basis. A recent convention of northwestern millers and grain buyers decided that total intermediate charges of about eight cents a bushel would be such a sound trading basis, but representative growers in this region believe that the proposed charges are excessive and are anxiously waiting helpful information in detail that will point the way to direct shipments by growers to the grain corporation.

"Our purpose in seeking this information is two-fold: To aid and expedite the prompt delivery of the wheat which the United States food administration so pressingly needs for our armies and navy, and for the military and civilian requirements of our allies; and to help the growers secure the full measure of compensation that is due them under the food control law of congress."

In reply to this letter Mr. Houser says:

"Any one can ship us wheat, for which we will account to them after the car is unloaded on the basis of terminal weights and grades according to our price schedule, fully set forth in our grain bulletin No. 1, a copy of same herewith attached, with the provision that there are terminal facilities available on arrival of car in which it can be unloaded. If car should arrive during a period of congestion demurrage on it would be for account of shipper. The grain corporation also makes a charge of 1 per cent for handling consignments. We make no advances against bills of lading. All cars should be billed to the Food Administration Grain Corporation, sending bill of lading and shipping advice in ample time so that they will have a record of car before it arrives. If a farmer is dissatisfied with prices offered by his local dealers or representatives of terminal dealers he has the alternative of consigning to the grain corporation on the above terms."

The bulletin referred to covers the basic prices for various grades and varieties of wheat at various points. These prices have been previously published in this paper.

While this statement covers in a general way the question involved, it does not answer certain vital questions before the grain grower who may desire to take advantage of the food administration's provision permitting shipping direct to the grain corporation. The grower must know how to get a car, how to get his grain loaded, what it is going to cost him to load it, what charges he must pay to the warehouse or elevator company at the terminal to which it is shipped, and the like.

Further complicating the situation are the results of a conference in Seattle recently reported in the following news item from that place under date of August 17:

"Agreements and decisions which interest all dealers and wheat growers of the state were reached this week between M. H. Houser, second vice president of the grain corporation, millers and grain dealers regarding vital matters involving the handling of the 1918 crop. Carrying charges on bulk grain will be $1 per ton for the first 30 days and 15 cents per ton for every additional month thereafter. Charges of 20 to 25 cents will be made for sack grain per ton additional. Adjustment of cleaning and sacking charges has not yet been made, but satisfactory progress is reported."

As previously announced in this paper, millers and grain dealers some time ago agreed to a set of deductions totaling 8 cents per bushel, covering commission, handling, storage, interest, insurance, inspection and the like.

### To Assist Shippers.

An official document of the grain buying corporation entitled, "Plans and Policies of the Cereal Division, U. S. Food Administration," contains the following paragraph touching upon the matter in question:

"The grain corporation maintains a traffic bureau for the purpose of assisting shippers of grain and flour in securing their car supply and also in expediting the movement of shipments to destination."

The same document contains the following statement relative to the shipment of grain by the producer direct to the food administration:

**"Producers or dealers have the right to ship wheat direct to the food administration grain corporation at any of the buying points heretofore named. When the wheat is unloaded in the elevator and returns made to the grain corporation remittance will be made on the basis of weights returned and the government price basis, less 1 per cent administration charge for the service."**

Among the buying points referred to in this statement are Portland, Astoria, Seattle and Tacoma in the northwest, indicating that the grower may consign his wheat to any one of these points billed to the grain buying corporation of the government.

It is also of special significance that this statement indicates that remittance will be made, apparently in full, "when the wheat is unloaded in the elevator and returns made to the grain corporation."

### More Details of the Plan.

Among other important provisions of the government's grain buying plan as presented in the document referred to are the following:

"The grain corporation will buy warehouse receipts in approved elevators at the principal primary markets. In intermountain territory where there are no public storage facilities available an adjustment will be made to make effective the $2 minimum for the No. 1 grade f. o. b. loading stations in outgoing car available for transportation to a public terminal elevator, also some plan to protect this basis or surplus flour production as well. For information apply to your zone agent.

"At all these principal primary points there is an open market where all classes of buyers are well represented, and the producer and consumer will be amply protected through competitive activities of the several interests, the grain buying corporation being prepared to buy and protect the fair-price basis.

"There is nothing in the plan, rules or regulations to prevent any mill or elevator or dealer or any other person from reflecting their judgment in premiums for qualities and varieties of wheat or for any other reason over the fair price basis.

"All buyers are expected to pay the producer a fair price for his grain, taking into account expense of handling and a fair profit for service rendered.

"As the miller is restricted to a fair price basis for his flour, he can not, of course, pay more for wheat than the expense of milling and a reasonable profit will allow.

"There is nothing in the 1918 plan which prevents a buyer at point of origin or at any other point from using his own judgment as to the grade and quality of the grain purchased.

"The seller of grain is not restricted as to his buyer or his market, or as to the price, except that the selling price shall not be in excess of the cost to him of his grain plus expenses and a reasonable margin of profit, and except that wheat fit for milling shall not be sold for feeding purposes.

"The government does not discriminate between shippers in matters of transportation.

"Regulations require cars shall be loaded to capacity."

## FREIGHT CUT ASKED.

### Want Reduction on Seed Grain.

Following a recent conference in Spokane between various parties interested in the seed wheat problem, President T. S. Lane of the Spokane Chamber of Commerce sent the following message to Director McAdoo of the railroads:

"We recommend and urgently request that local freight rates on seed grains in car lots or less, be reduced 50 per cent for a period of 90 days, this reduced rate also to apply on local seed grain shipments in car loats already shipped and delivered."

It is stated that the efforts on the part of wheat growers and other northwestern representative railroad traffic managers have worked out a plan to obviate the capacity carload rule which makes it obligatory that a car be loaded to capacity before it will be moved. Under the new plan an order for 40,000 pounds could be loaded into an 80,000-pound car if no 40,000-pound car were available. Under the old rule, a 40,000-pound order would have to await the arrival of a 40,000-pound car or until other orders sufficient to fill an 80,000-pound car were received.

## Apple Prices Are Excellent.

What is reported to be the highest cash figure for Jonathan apples ever offered in the Spokane district was made when buyers appeared in the Spokane valley and offered as high as $42.50 a ton for Jonathans.

"We have not been buying for cash, but we have closed some deals with the growers which will net them $1.65 to $1.70 a box for Jonathans," said B. A. Perham, general manager of the Earl Fruit company. "Fancy Jonathans run 20 to 25 cents a box less. These prices are undoubtedly the highest received by the grower in several seasons.

"The cash buyers have been offering $40 to $42.50 a ton for Jonathans, which works out about $1.60 a box, an exceptionally high figure. The Jonathan crop in the valley is about 60 per cent and represents a big percentage of the total tonnage, which runs largely to Jonathans, Wageners and Rome Beauties.

"Cash buyers are out in force this year because of the short Jonathan crop and the brisk demand. Southern Idaho, which ordinarily has nearly 1000 cars of Jonathans alone, probably will not have much over 100 cars this year. The market is strong. We have already sold extra fancy Jonathans in the east for $1.85 to $1.90 a box."

## Thresher Expert Appointed.

R. J. Stevens, head of the grain-threshing division of the Washington food administration, has received word from headquarters of the appointment of R. E. Carder as grain threshing expert for Washington this season. Mr. Carder is said to have had wide experience in threshing grain in middle, western and southern states. The object of the threshing division is to assist in the prevention of loss at harvest time, it being estimated that from two to three bushels of grain is lost in the threshing of every 100 bushels.

## Many Stock Go to Market.

Figures compiled by the United States department of agriculture show that much more live stock was marketed in the United States during July of this year than July of 1917. The following figures cover cattle, hogs and sheep received at the 34 principal market cities of the country, the first figures in each case representing July, 1918, and the second figures July of last year: Cattle, 1,897,847, 1,552,573; hogs, 2,813,749, 2,395,226, and sheep, 1,409,868, 1,174,335.

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## Cooperate on Securing Seed

That there is an actual shortage of seed wheat of the standard fall varieties in the Inland Empire is well recognized. There is an active committee at work attempting to get the seed that is available distributed where it is needed, and to secure importations from other districts. The work of this committee will be only partially successful if the farmers themselves do not cooperate with it. Those who need the seed should get in touch with the secretary of the committee at Pullman, Wash., Mr. E. G. Shafer of the Washington State college. Those having seed to sell should in like manner communicate with him. The object of the committee is to get the seed and the farmer needing it together. By full cooperation on the part of all concerned much needless shipping of grain back and forth will be eliminated

Investigate right now whether or not lime should be put on your soil. Thousands of farms have been improved wonderfully by an application of this rejuvenator.

## Smile in Spite of the Clouds

To enjoy the same pleasures and comforts in the same way that we did four years ago or even one year ago is impossible. In most cases those pleasures or those comforts still are present with us, for in truth the average American citizen has as yet sacrificed little. But no one in whose heart dwells the spirit of humanity can enjoy luxurious food when conscious of the fact that hundreds of thousands of his fellow creatures in other lands are dying of starvation. Who can nestle in his bed in full comfort knowing that somewhere, bearing indescribable hardships, others are fighting his battles for him? Who is so heartless as to laugh and make merry when boys and girls are being maimed, women being ravished by demons, and thousands of men and women being driven before the lash into slavery a hundred times more inhuman than that which threatened this nation half a century ago?

Heaven forbid that any of us be so thoughtless as to live longer within our own narrow luxury and pleasure loving selves! But likewise let none of us allow the clouds that hang about the world to make our lives gloomy. A smile with the horrible picture in full view need not weaken our endeavor to destroy the picture, but will add to our power. Gloom breeds only decay; sunshine breeds life and strength. Smile! Cheer yourself and your neighbor as you put your shoulder to the task before you. Smile, well knowing that the power that your smile engenders will spread the world over until, joined by the power from other smiles, it wipes the horrors of the present day from the face of the war-sick world and paints in their place the smile of victory that will never be effaced.

Every family should begin right now to plan a greater garden and a greater poultry or rabbit yard than was had this season. These things mean more pork and beef and wheat for the boys over there.

## Utilize Every Good Container

Garden, orchard and field are full of good things to eat, but careful conservationists may find themselves faced with a shortage of containers on account of the high price of jars. This shortage may sometimes be overcome by a little planning. First, are you going to dry, can or preserve? How much are you going to put up? in what form? and when? Answer these questions first; then commandeer all available containers from attic, cellar and barn and distribute them according to your needs. Use nontin containers as much as possible. The world's tin supply has been practically stationary for some years, while the demand has grown immensely.

"Hope springs eternal in the human breast." It is good to see the farmers buckle down to another year's effort, undismayed by the hard blows of the present season.

## Boys and Girls Will Show Us

One of the most vital demonstrations at the fairs this season will be those made by the boys' and girls' clubs. In fact, there is no more significant activity in modern rural life than that represented by this club movement. It will constitute a fair within a fair throughout the northwest this season. Hundreds, even thousands of boys and girls will be camped within the fair grounds, and will have on exhibition their work. Their canned goods, their dresses, their pigs, their corn and potatoes, their poultry will be there to testify to their success. They will have their demonstration schools alongside the machinery and creamery and other "grown-up" demonstrations. These boys and girls are not only "the men and women of tomorrow," as so often described. They are the young men and young women of today, and can teach the older folks lots of valuable lessons. And in addition, they are inspiring other boys and girls to efforts along productive lines in a way that will have much to do in the development of the new agriculture and the new rural life.

Don't wait to be reminded of the pledge you made to buy a certain number of war savings stamps each month. Buy them before you have to be notified of your promise.

## Don't Be Ashamed to Ask

The federal government has set aside $5,000,000 to be used to help creditless farmers secure seed wheat. The farmers of the northwest are entitled to share in this fund, which will be administered through the federal farm loan bank located at Spokane. Secretary G. C. Jewett of the bank says that it should be a matter of pride for a community or a farmer not to have to apply for the assistance offered, and he is right. But to need the assistance need not be a matter of shame. Conditions have arisen in many sections over which the farmers have had no control, among them drouth conditions that have twice in succession brought almost total crop failures. These failures are not due to negligence on the farmer's part, and he is not to be criticized for being hard pressed for finances. Thousands of farmers, especially the small farmers, are in sore distress this fall. They need help. In this way, small though it be, the government is offering help, and no man need feel backward in applying for and accepting it if his conditions warrant.

A movement is under way throughout the beet growing sections of the United States looking toward an increased acreage the coming season for the maximum sugar production possible. The present season has been a partial failure, but producers are urged to overlook this fact and again try out a liberal acreage.

## Follow Direction of Leaders

War demands alertness, a ready response to leaders, prompt action. Food problems are constantly changing, and call for the immediate response of all America. Conservation is democratic. All may share. All may help. Three times a day every American can say when he sits down to the table, "This is my chance to serve. Directions are given me by the food administration that I should follow, and follow at once like a good soldier. If I fail, whether selfishly or ignorantly, I desert the colors of the nations fighting for democracy—I stab in the back the men we have sent to France." Follow directions—emergency orders call for immediate action.

Heaven help the mothers and wives to be brave when the casualty lists come in. Their sacrifice is even greater than that of son or husband. They, too, pay the last full measure of devotion.

## Resident Stockmen's Rights

It is a significant development in the live stock industry of the northwest for the constitutionality of the Idaho law to be upheld giving the resident live stock owner a priority right to local range over the big, transient herds and flocks. It is another step in the direction of building up the great aggregate of small productions as against the less aggregate of the few large producers.

This is right, though the man who produces cattle or hogs or sheep on a large scale is to be encouraged rather than discouraged. Where conditions will permit the business on a large scale it should be so conducted. But what will make for permanent and heavy production is the guarantee of success to the thousands of small producers. What will insure adequate supply of meat is the multitude of small farm flocks or herds, and everything that looks toward the building up of this class of production is to be commended. The range question is but one, but it is a good example. If there are a few thousand acres of open range in a certain section adjacent to farms, it is logical to allot that range to the adjacent farmers to assist them in carrying their stock. For the large flockmaster to bring his stock into the community a short time to graze off this range is, indeed, an injustice to the local stockman.

The dairy business deserves the best thought of the entire people of the nation. It faces conditions that threaten its existence, and it is one of the most vitally essential industries of the country.

## Work-or-Fight Rule Applied

The war department's admirable rule commonly referred to as the work-or-fight rule is being applied vigorously at Camp Lewis to the so-called "conscientious objectors." These persons are being given furloughs for service on the farms. They are to receive regular wages for the work they perform the same as any other hired hands, but they are allowed only $30 of it for their own use, the amount that a private soldier receives in the army service. The balance must be turned over to the Red Cross. And while they are so employed they are under military supervision. If they desert they are subject to the same vigorous treatment as a soldier.

This action is not taken by the war department as a punishment for being conscientious objectors. There are many men who really believe that it is an unpardonable sin to wage war. They are directed to the farms where they can perform a real service to the country at this critical time without violating their consciences. The conditions are not too severe. Why should not every man eligible for army service be put on a like war basis? Why should any man, whatever his moral scruples, be permitted to remain at home and amass wealth in comfort while his fellows are facing suffering and hardship at $30 a month?

It is reported that the Mormon church organization has swept its granaries clean of all stored wheat and turned over to the national food administration, as a result, something like 250,000 bushels. The grain is that which has been stored under a tithing system to protect the people against a shortage of food or seed.

# Go Through Germans Anywhere

## *This Is America's Object in Building Up a Gigantic Army*

What is undoubtedly the most significant single event of the last few months in connection with the conduct of the war was the unqualified announcement from the war department at Washington last week that the object of the proposed extension of the draft ages was the placing of an army in France within the next 10 months sufficient, in the words of General March, chief of staff, "to go through the German line whenever we please." He said that an American army of 4,000,000 men under one commander-in-chief was sufficient for this purpose, and it is apparent that it is the object of the war department to have this many trained soldiers on the battle front within a year's time. General March stated in this connection that President Wilson had committed himself flatly to the policy of concentrating the effort of American arms on the western front, with a view to defeating Germany by sheer man power. It is pointed out that there are now approximately 1,450,000 Americans in France and approximately the same number in camps in this country. Figures given out by General March for the transportation of soldiers from this country to Europe under the department's present plans are as follows:

August, 250,000; September, 200,000; October, 155,000; November, 150,000; December, 150,000; January, 100,000; February, 200,000, and 300,000 monthly thereafter until the end of next year.

The reason for the rush in the passage of the new draft act is summed up in the following words by Provost Marshal General Crowder:

"The situation is urgent because by October 1 class 1, under the age limits of the original act, will have been entirely exhausted. Unless there is to be a very serious interruption in the flow of American troops to the camps and thence across the seas to France class 1 must be replenished at the earliest possible moment by available men both below and above the present age limits of 21 to 31. There is, literally, no time to be lost. The military man-power program of the United States requires that the now nearly depleted reservoir of class 1 men shall be replenished by more than 2,000,000 men available for full military service. On the basis of actuarial figures from insurance companies, census computations and the experiences of this office in the previous registration it has been estimated that the required number of men for class 1 may be had only by including within the draft age limits men between 32 and 45 and between 18 and 20. This is to say, about 13,000,000 men must be added to the list of registrants in order that with all exemptions allowed at least 2,000,000 men will remain in class 1.

"In other words, here is the problem presented: If the bill as introduced is passed it will be necessary, between the date of its passage and October 1, to register and begin to classify 13,000,000 men not heretofore included in the draft age limits. And, when this has been done, draft calls upon the new class 1 must start to fill the places in the training camps of those men going to France.

"This office, in its preliminary instructions sent to draft executives in the states, has proceeded on the assumption that the new registration might be held early in September. If, for example, the bill is passed by August 31, or soon thereafter, it would be necessary for the president's proclamation to fix a registration date as soon as possible, allowing ample time to be given for posting this proclamation in every region of the country. Thus, registration day might be set as early as September 5, or shortly thereafter. To have the first instalment of the new class 1 ready for camp by October it would be necessary to have the registration not later than September 15. In any event, it is obvious that we can not wait until the act is passed before beginning the preliminary work in this vast undertaking."

### Allies Continue to Make Advances.

The week just past has not resulted in any spectacular advances by the allied forces, but it has been a week of success for the allied cause. No reverses have been reported, but, on the other hand, positions have been improved and the pressure on the German and Austrian armies increased until, at this writing, it appears that the enemy is certain to make further retreats to better defended positions. As far as can be gathered from reports there is no plan on the part of General Foch and other allied leaders to make any attempt at a decisive drive this fall. It is evident, however, that the offensive is to be continued in such way as to keep the advantage with the allies, so that when the American forces arrive in full power in the spring everything will be in a favorable condition for the launching of the campaign that is hoped to bring victory before the winter of 1919.

During the last week no great fighting has occurred on the Rheims-Soissons front. Considerable fighting has occurred on the Amiens front, however, advances having been made that improve the line in that important sector. At the present time all the immediate danger to important allied bases has been removed. Paris is out of danger. Soissons, Montdidier and Amiens are all in the hands of the allies, with the lines well eastward of them. These points are important as part of the line of railroad communication from Paris and other allied bases to the allied forces. Their safe possession by the allies seems to insure the ready transportation of troops and supplies to all parts of the battle line without danger of German disturbance.

### Russia May Turn Against Germany.

Reports seem to indicate the rapid development in Russia of anti-German sentiment, and it is believed by many officials in touch with the situation that within a comparatively short time the mass of the Russian people will have repudiated the bolshevik government and will be uniting as best they can under allied leaders to drive the German army out of that country. It is officially reported that American troops have been landed at Vladivostok for cooperation with British, French and Japanese forces. How extensive these forces are is not announced. It is understood that their object is to form a nucleus about which the loyalist element in Russia may rally for the ultimate overthrow of the German element. Considerable talk has been heard recently of the possibility that the leaders of the latter element would soon flee from their country and probably take refuge in Germany. It is said that the Russian people are just beginning to learn that conditions on the western front are becoming increasingly favorable to the allies. Up to this time, it is said, the German propagandists had kept them in the dark as to the real conditions, even declaring that German success on the western front was practically attained. It is expected that the discovery of the truth will do much toward uniting the Russians about the allied cause.

### I. W. W. Leaders Convicted at Chicago.

After a trial lasting nearly five months, more than 100 leaders of the Industrial Workers of the World were found guilty last week of conspiracy to disrupt the war program of this country. The jury decided the case after only about one hour's deliberation. There were four specific charges against the defendants, as follows: Violation of the espionage act, violation of the criminal code prohibiting the interference with the civil rights of citizens, violation of the selective army service act and violation of the federal conspiracy act. The court has not yet, at this writing, passed sentence, and probably will not until the attorneys for the I. W. W. present their argument for a new trial, which it is reported they plan to do. The total penalty covering the four crimes of which the defendants were found guilty is 27 years in federal prison and a fine of $10,000.

The men found guilty include a large number of well-known I. W. W. characters of the northwest and William D. Haywood, executive secretary of the national organization. During the trial much evidence was submitted from the northwest to show that the defendants were responsible for wanton destruction of property in this section, including the burning of grain and separators, the burning of timber, the malicious destruction of logs and lumber and similar acts of sabotage. It was also shown that they had carried out an organized movement to oppose the vigorous prosecution of the war and had committed numerous unpatriotic acts.

If severe sentences are passed by Judge Landis, presiding judge at the trial, to the extent that the law warrants under the convictions, it is believed that the case will prove a death blow to the I. W. W. propaganda in this country.

### Hugh Profits Made by Industries.

In spite of the efforts to prevent the making of excess profits out of industries stimulated by the war, it is admitted that many industries have made great profits. The profiteering has been most marked, it is reported, in business devoted to food production and distribution, cotton and woolen manufacturing and dealing, coal mining, iron, copper, aluminum and other metal production and oil production and distribution. In addition thousands of small concerns in a great variety of classifications have made profits ranging from 100 to 3000 per cent above their normal prewar profits, which even then were considered high.

In citing certain industries as containing the largest percentage of profiteers the treasury has made it clear that not all individual businesses in these groups have gathered in swollen earnings. This is true particularly of coal operators, some of whom made enormous profits while others made barely enough to pay justified dividends. With few exceptions manufacturers of clothing and shoes reported big profits. This was true of most concerns holding government contracts. Lumber production, stimulated by the sudden enormous demand from cantonments and other government operations, netted forest and sawmill owners, as well as distributors, profits several times above those of normal years.

Meat packers, flour mills and canners stood at the top of the list of food profit takers, according to income returns. Farmers also made money heavily last year, but not enough of their returns have been analyzed to justify a general statement of their profits, officials say.

Profiteering was by no means confined to big business. Small-scale producers, in thousands of cases, reported profits equal to the aggregate of from five to ten years' earnings before the United States entered the war.

### Food Crisis Over, but Still Must Save.

Continue to save and increase production is the appeal of the allied food administrations sent out from London through Herbert C. Hoover, United States administrator, though the message from London, where the allied food conference has just been held, says that the food crisis is past. If production is continued on as great a scale as possible and conservation is carried on as heretofore there is no danger of actual food shortage for the allied armies, it is stated. As a result all the allied peoples are to be provided with a better grade of war bread than heretofore. Up to this time there has been no war bread in this country in the same sense of the term as in England, France and the other allied countries. Administrator Hoover urges the American people, however, to continue with the utmost loyalty the conservation and production of foodstuffs to prevent any possible shortage that might follow disaster of any kind to present stocks or future production.

### Free Information Bureau.

The Washington Farmer has established an INFORMATION BUREAU at the NATIONAL CAPITAL, which is at the service of its readers and which they are asked to use freely. It is intended to be a clearing house of governmental information. Address inquiries (includingg 3-cent stamp) to THE WASHINGTON FARMER INFORMATION BUREAU,
Washington, D. C.

## *Washington Gleanings*

It is estimated that about 10,000 tons of alfalfa in the Kittitas valley have so far been contracted for by hay dealers, according to advices from Ellensburg.

The Whatcom county game warden, John Aitken, has been busy planting 68,000 cutthroat and rainbow trout fry in Ten Mile, Fishtrap and Betrand creeks.

The harvest in Chewhilliken valley is turning out better than was expected. Some of the farmers are estimating their crops at a 50 per cent of normal.

A good crop of cantaloups is assured in Franklin county this season. Some 12 or 15 carloads will be shipped from the county, besides supplying local demands.

Dewey E. Gilman, who was appointed ranger for the Baker river district, Whatcom county, has reported at the forestry office and will take up his work immediately.

The Snake river ferry is being moved down the river to Burbank, where it will be operated as a free ferry to take the place of the boat which was sunk a few days ago.

Washington's 1918 wheat crop will total 30,000,000 bushels, or an increase of 3,000,000 over last year. Chief Grain Inspector P. J. Sweeney estimated in a statement issued August 2.

The state highway board has let a contract for $65,659 for the improvement of eight and a half miles of the Sunset highway in Lincoln county between Creston and Wilbur.

Forty thousand trout fry from the Green river hatchery were planted in the North and South Newaukum rivers, Mill creek and Winston creek, Lewis county, recently, by Game Warden Beusch.

Present indications are that the Wenatchee valley will have a fair crop of the largest and best quality of apples that it has had in many years, according to the statement of P. S. Darlington, district horticulturist.

The Waterville Union Grain company has increased its capital from $26,000 to $88,000, and has three new elevators under course of construction: Waterville, 90,000 bushels; Withrow, 90,000, and Alstown, 30,000 bushels.

The women of Wenatchee valley have agreed to look after the women and girls who go there to assist with the fruit harvest, and the Wenatchee Harvesters' league has been asked to assume charge of other phases of the work and was promised the cooperation of other organizations.

An automobile trailer, fully equipped with chemical tanks and other firefighting apparatus, is being maintained by the Pullman chamber of commerce during the harvest season for fighting grain and farm fires in that vicinity. A volunteer fire-fighting force of 15 men will be organized.

The organization of a children's industrial and agricultural department in the Washington state fair in North Yakima, September 16 to 21, is announced. S. W. Ness of North Yakima is named as superintendent of the children's department and Mrs. Elizabeth Jones is in charge of the boys' and girls' club work for the state college, as supervisor.

George E. Grant of Twisp, who has just returned from Seattle, where he took seven cars of beef cattle to market, reports that $205.70 was deducted from the shipment on account of bruises on the cattle inflicted by their horns. As a shipper of beef, Mr. Grant says it would be a great thing if all stockmen would at once resolve to dehorn their cattle.

One of the best wheat crops in the Spokane district was threshed from the 20-acre wheat field planted this spring by L. W. Hutton on the property bought and now being improved by him for the future Spokane Children's home at Pasadena Park. The crop averaged better than 35 bushels to the acre.

Spokane county will harvest a $2,000,000 pea crop, the Fairfield district alone producing peas valued at more than $1,000,000, notwithstanding the dry year, according to County Agricultural Agent J. R. Shinn. He says there will be enough shattered peas to feed 10,000 hogs until Christmas; is urging farmers to save all the pea straw, and has sent 500 hogs into the pea fields on which the crop has been harvested.

The state council of defense plans an exhibit at the Washington state fair, September 16-21, in Yakima, to illustrate all the war work that is being carried on by the council. Booths will be arranged to set forth the work that is being done in the following subjects: The allied relief, Americanization, educational propaganda, food administration, food production, health and recreation, maintenance of social agencies, and women in industries.

In addition to the fourth Liberty loan, which is coming for a three weeks' campaign beginning September 28, two other loans of about the same proportions are to be floated during the ensuing 12 months, according to the treasury department. The fifth loan probably will come in January and the sixth in May or June, say those in touch with the plans. The total bonds to be floated will approximate $16,000,000,000.

In addition to this stupendous sum the revenue bill now being worked out by financial leaders in congress is expected to raise $8,000,000,000 during the year. This latter amount is to be raised by taxation of various kinds, the chief feature of which is the income and excess profits taxes.

This entire financial program is designed in all its magnitude to carry out an equally gigantic army and navy program, the object of which is to put such a force in Europe by early next summer as to defeat Germany by sheer overwhelming weight of men and arms.

# Announce Prices

## Wheat, Flour and Feed Covered

At this writing the food administrators for the three states of the northwest, M. H. Houser of the grain buying corporation and representatives of the food administration are in conference in Boise, Idaho, for the purpose of working out problems dealing with the food and feed situation. Among those attending are Charles Hebberd for Washington, W. B. Ayer for Oregon and R. F. Bicknell for Idaho.

One of the purposes of the conference is the determination of equitable margins of profit for the millers of flour and mill feed, it is reported.

Recently the national food administration issued figures covering the so-called "fair price" schedule for wheat, flour and mill feed. These figures are for these articles in bulk, in carload lots at the mills. Whenever to be shipped out the freight to the destination plus sacks should be added if it is to be handled in sacks. The following table covers the schedule for the various milling points throughout Washington and indicate what the buyer should have to pay:

| Station | Wheat Bu. | Flour Bbl. | Mixed Middlings Bran ton | Feed ton | Shorts ton |
|---|---|---|---|---|---|
| Anatone | 2.071 | 9.52 | 19.11 | 20.36 | 21.11 |
| Asotin | 2.071 | 9.52 | 19.11 | 20.36 | 21.11 |
| Bridgeport | 2.056 | 9.47 | 18.63 | 19.88 | 20.63 |
| Cheney | 2.083 | 9.56 | 19.48 | 20.73 | 21.48 |
| Colfax | 2.071 | 9.52 | 19.11 | 20.36 | 21.11 |
| Colton | 2.077 | 9.52 | 19.11 | 20.36 | 21.11 |
| Colville | 2.041 | 9.42 | 18.16 | 19.41 | 20.16 |
| Creston | 2.071 | 9.52 | 19.11 | 20.36 | 21.11 |
| Dartford | 2.041 | 9.42 | 18.16 | 19.41 | 20.16 |
| Davenport | 2.071 | 9.52 | 19.11 | 20.36 | 21.11 |
| Holmes Spur | 2.086 | 9.57 | 19.57 | 20.82 | 21.57 |
| Huntsville | 2.092 | 9.59 | 19.76 | 21.01 | 21.76 |
| Kennewick | 2.101 | 9.62 | 20.04 | 21.29 | 22.04 |
| Lincoln | 2.071 | 9.52 | 19.11 | 20.36 | 21.11 |
| Lind | 2.086 | 9.57 | 19.57 | 20.82 | 21.57 |
| Mabton | 2.086 | 9.57 | 19.57 | 20.32 | 21.57 |
| Mansfield | 2.065 | 9.50 | 18.92 | 20.17 | 20.92 |
| Odessa | 2.086 | 9.57 | 19.57 | 20.82 | 21.57 |
| Okanogan | 2.047 | 9.44 | 18.35 | 19.60 | 20.35 |
| Pomeroy | 2.071 | 9.52 | 19.11 | 20.36 | 21.11 |
| Tacoma | 2.20 | 9.95 | 23.19 | 24.44 | 25.19 |
| Thorp | 2.113 | 9.66 | 20.42 | 21.67 | 22.42 |
| Toledo | 2.128 | 9.71 | 20.90 | 22.15 | 22.90 |
| Tonasket | 2.041 | 9.42 | 18.16 | 19.41 | 20.16 |
| Twisp | 2.062 | 9.49 | 18.82 | 20.07 | 20.82 |
| Vancouver | 2.20 | 9.95 | 23.19 | 24.44 | 25.19 |
| Waitsburg | 2.092 | 9.59 | 19.76 | 21.01 | 21.76 |
| Walla Walla | 2.098 | 9.61 | 19.95 | 21.20 | 21.95 |
| Wautoma | 2.215 | 10.01 | 23.36 | 24.61 | 25.36 |
| Waupaca | 2.215 | 10.01 | 23.36 | 24.61 | 25.36 |
| Wenatchee | 2.095 | 9.60 | 19.86 | 21.11 | 21.86 |
| Winona | 2.083 | 9.56 | 19.48 | 20.73 | 21.48 |
| Wilbur | 2.071 | 9.52 | 19.11 | 20.36 | 21.11 |
| Almira | 2.08 | 9.55 | 19.38 | 20.63 | 21.38 |
| Dayton | 2.092 | 9.59 | 19.76 | 21.01 | 21.76 |
| Deer Park | 2.041 | 9.42 | 18.16 | 19.41 | 20.16 |
| Douglas | 2.071 | 9.52 | 19.11 | 20.36 | 21.11 |
| Eastman | 2.215 | 10.01 | 23.36 | 24.61 | 25.36 |
| Ellensburg | 2.086 | 9.57 | 19.57 | 20.82 | 21.57 |
| Elberton | 2.071 | 9.52 | 19.11 | 20.36 | 21.11 |
| Everett | 2.20 | 9.95 | 23.19 | 24.44 | 25.19 |
| Fairfield | 2.071 | 9.52 | 19.11 | 20.36 | 21.11 |
| Goldendale | 2.101 | 9.62 | 20.04 | 21.29 | 22.04 |
| Harrington | 2.071 | 9.52 | 19.11 | 20.36 | 21.11 |
| Hartline | 2.071 | 9.53 | 19.20 | 20.25 | 21.20 |
| Oak Harbor | 2.20 | 9.95 | 23.19 | 24.44 | 25.19 |
| Pasco | 2.101 | 9.62 | 20.04 | 21.29 | 22.04 |
| Patouse | 2.071 | 9.52 | 19.11 | 20.36 | 21.11 |
| Prescott | 2.098 | 9.61 | 19.95 | 21.20 | 21.95 |
| Prosser | 2.104 | 9.63 | 20.14 | 21.39 | 22.11 |
| Reardan | 2.071 | 9.52 | 19.11 | 20.36 | 21.11 |
| Ritzville | 2.086 | 9.57 | 19.57 | 20.82 | 21.57 |
| Rockford | 2.071 | 9.52 | 19.11 | 20.36 | 21.11 |
| Sechlerville | 2.215 | 10.01 | 23.36 | 24.61 | 25.36 |
| Seattle | 2.20 | 9.95 | 23.19 | 24.44 | 25.19 |
| Sprague | 2.083 | 9.56 | 19.48 | 20.73 | 21.48 |
| Spokane | 2.071 | 9.52 | 19.11 | 21.36 | 21.11 |

## GRAIN ACREAGE HIGH.

### Yield Per Acre, However, Is Low.

The estimate of 32,335,000 bushels of wheat in Washington this year, compared to 29,218,000 bushels last year, does not mean that the yield per acre will be greater than last year, says E. J. Marchetti, field agent for the United States bureau of agriculture. The following figures indicate that the actual yield per acre of wheat in this state will be considerably below that of a year ago. The acreage of all wheat in Washington this year was 2,190,000, the largest acreage ever planted, compared to 1,850,000 acres last year, or an increase of 340,000 acres. The average yield of all wheat in this state, weighed in proportion to the acreage in each county, for this year, based on condition, will be approximately 14.3 bushels per acre, including four-bushel yields in the Big Bend counties and from 16 to 35 bushel yields in the more favored heavy land sections.

The increased acreage of 340,000 acres over last year will produce 4,862,000 bushels more than a year ago at 14.3 per acre. This includes over a million bushels of irrigated wheat that was not produced last year, at yields of from 35 to 40 bushels per acre. When this 4,862,000 bushels of wheat produced on the increased acreage this year is deducted from the estimated production of the state of 32,335,000 bushels there remains a production of 27,473,000 bushels. In other words, if this year's crop had been grown on last year's acreage the state would have produced 27,473,000 bushels of wheat this year, which is 1,745,000 bushels less than 29,218,000 bushels produced last year, indicating that the actual yield per acre of the state this year will be materially less even than the small yield of a year ago, and the production, had the acreage been the same, approximately 2,000,000 bushels less.

# Pure Bred Business Coming to the Front



Shorthorn owned by G. W. Cordiner of Walla Walla.

The pure bred business is coming to the front in Walla Walla county, Wash. W. G. Cordiner is laying the foundation for a fine herd of shorthorns, with stock secured from the leading breeders of the northwest. Mr. Cordiner is also making a start with sheep. W. E. Gross has some fine Holsteins from the Monroe herd. Walla Walla college has a $2500 Holstein bull at the head of its cows and heifers. Tom Copeland is raising Herefords, and Martin Hansen is trying out Guernseys. From this showing the claims of beef cattle and dairy cows seem at present about equally balanced in this part of the state, and with the vast possibilities for mixed farming which Walla Walla county presents, it is likely that both types of animals will make good.

## SELECT YOUR BUYER.

### Pays to Deal With Honest Men.

A bulletin recently issued by Director Asher Hobson of the office of farm markets urges upon the farmers who have produce to sell that they use great care in selecting the dealer to handle their products.

"The marketing of farm products in any considerable quantity generally necessitates the sale of those products to a middleman. This being the case, it is of much importanee that the farmer select honest and efficient dealers to handle his goods," says Director Hobson. "The office of farm markets receives many complaints concerning dishonest practices of unscrupulous dealers. For instance, goods are too often rejected on the grounds of quality when the real reason for rejection is that the market has fallen and the buyer does not wish to pay the contracted price. Another practice which deserves strong criticism is that of obtaining business by leading the grower to believe that he will receive a higher price than the market really justifies.

"It is largely the fault of careless shippers that firms following the above procedure are allowed to exist. Unquestionably these 'don't pay-what-they-offer' operators are in the minority. There is no need of patronizing 'crooks.' The wholesale produce trade has many honest and reliable houses, with large investments in the business and with good credit ratings. Such firms invite investigation.

"Do not consign shipments to dealers about whom you know little or nothing. Choose a firm that has an established reputation with the trade and does business in a way that has rendered satisfaction to other growers or shippers. Inquire concerning the firm's practices in such matters as:

"Prompt acknowledgment of receipt of shipment upon arrival.

"Accurate report concerning condition of goods upon arrival.

"Reliable information as to the general trend of the market.

"Prompt remittance upon sale of produce.

"If possible, write or confer with those who have transacted business with the dealer in question. Correspond with bankers or others who are in a position to know his trade practices. In short 'look up' the ones who represent you on the market.

"When a dealer has been found who gives reasonable satisfaction the grower or shipper should continue to do business with him year after year. Permanent trade connections are essential to successful marketing. Frequent changes of dealers should be avoided.

"It must not be understood, however, that the farmer should ship all of his products to one market. Trade connection might well be established with reliable representatives in a number of marketing centers. It often occurs that one market may be glutted with a particular product, and on the same day that product will be in demand on another market no great distance away. The farmer who has permanent trade connections at different markets with dealers whom he knows to have well established reputations for honesty and professional efficiency is in a good position to keep in touch with general market conditions and avoid an unreasonably low level."

## SCHOOLS FOR WORK.

### Demand for "Machine" Education

The young men who are being trained at universities and colleges for war purposes, I am told, are prohibited from receiving or from giving more than 30 minutes a day to lectures or book studies. All the rest of the day is devoted to learning by doing. American education has been developing a system of lectures or book work for a series of years first, and then doing after graduation. This theory receives a severe shock from war demands.

We have a magnificent system of public education in this country, built up at enormous cost, gladly contributed by the people in taxes, and yet, when the war requires thousands upon thousands of young people for clerical work, especially young women, "at least 90 per cent of this demand has been furnished by private schools," says M. M. Higley, president of the Northwestern Business college, of Spokane.

Mr. Higley further tells me that when the government sent out the requirements made of the schools in order to furnish the workers needed that there was only one minor point to be changed in their courses. When asked upon what features of education emphasis was laid by the government he replied that it was along the "machine" course. Machines for commercial work are coming into general use. The bookkeeper must be able to handle the adding or listing machine, the calculator or computing machine and the bookkeeping posting machine. "We had the second machine which came to Spokane," says Mr. Higley, "and that was only about two years ago." With this machine the operator, by the use of keys and levers, takes the old balance of a depositor in a bank, lists and totals the deposits for the day, lists and totals the checks drawn for the day and gives the new balance. If there is an overdraft the machine stops and can only be unlocked by supplying the figures which make up the overdraft, and then prints the overdraft in red ink.

This is only a hint of what is being done by machines in clerical work, and the government insists on this training, as it relieves probably 75 per cent of the bookkeepers and office employes whose employment was made necessary by the old hand methods.

## STICKS TO DAIRYING.

### Thinks Silage Will Be Big Help.

John Simm of King county is one of the dairymen who are going to stay with the business in spite of present apparently impossible conditions.

"I'm not going to sell my cows, but I am going to raise more of my feed," is the way Mr. Simm puts it. "Last year I bought considerable mill feed, and when I figured things up I found that this feed I bought had practically eaten up every cent of profit. I had worked for nothing. This year I am going to raise as much as possible. I think silage will be a big help in this direction."

Mr. Simm is a member of the big West Side association, and is a firm believer in associated effort among farmers. He thinks the day when the farmer can ignore selling conditions has passed, and that more and more it will devolve upon the producer to look after his own interests in this direction.

# Fall Gardens

## Some Things Can Be Grown Still

By PAUL E. TRIEM.

Kitchen garden crops can be divided into two broad classes: Those which have tissue building and energy producing values, and those which are valuable chiefly for their "salts" or chemical qualities. Beans, peas and corn are good examples of the former, and lettuce, celery and the various greens of the latter. Of course all tissue building and fuel foods have some available chemicals, and all of the salad vegetables have some proteins and carbohydrates; but the classification suggested serves a useful purpose in studying food values.

The fuel and tissue building vegetables usually require a fairly long season for their development. Beans and corn, in particular, need all of the warmth and sunlight the average northwestern summer can be expected to give them, if they are to reach maturity. The salad vegetables, on the other hand, can often be produced in a very short time, so that they can be planted in the late summer and still produce edible products during the fall. Lettuce can be planted in August for fall and early winter use, and so, too, can Chinese cabbage, onions, radishes, turnips, carrots and beets. Peas, which are tissue builders, can often be grown in the fall, particularly if a dwarf variety is planted.

In planting the fall garden, several rules should be observed. Remember, first, that if one crop has already been removed from the ground to be planted this same season, much of the available plant food has been taken out. Thoroughly rotted stable manure should be spaded in, if possible, and after the new crop is well started nitrate of soda may be used to hasten development. With vegetables valuable chiefly for their leaves, such as lettuce and cabbage, nitrate is the "dominant" fertilizer.

Another thing to remember in late summer planting is that soil moisture must be provided if the seeds are to germinate and develop rapidly. If the soil is dry and water for irrigation is available, irrigate before planting rather than while the seeds are germinating. A good method is to wet the ground thoroughly and then spade or plow and harrow as soon as the soil is in workable condition. This approximates the conditions of spring, and when added to the higher temperature of summer, the hot days and warm nights, insures rapid growth.

## GRAIN DEALER

### Can Increase Cost of Handling.

"There is a lot of misrepresentation about this question of grain handling costs, and the upshot of it will be that farmers will cut out the brokers and ship direct to the food administration grain corporation to a large extent this year," says Dan Morgan of Spokane, a wheat grower. "One would think the grain men would look at the situation in the same light as other patriotic people, and at least not boost the price.

"There are so many things whereby the grain dealer can increase the cost of handling that the farmer never knows what to expect. The dealers held a star chamber session on the Coast and got into cahoots to boost the schedule to 8 cents a bushel. There was a big howl when the farmer came to find it out, and the result is that a lot of the dealers are not now trying to put the 8-cent charge over.

"I have learned that the warehouse business is a profitable one by practical experience. I had so much trouble I decided to put up my own warehouses, and they have paid for themselves in three years.

"Up to last year the charge for handling grain and storing it 30 days was 1 1-2 cents a bushel, and this year it is jumped to 3 cents. I don't see the need for doubling this charge.

"There is a joke about advancing the money, too. All the dealer does is to go to the bank and put up the warehouse receipts and get the money. The farmer can do that as well as the dealer.

"Last year the buyer gave out the impression that the government would take all grain. They made an agreement to take the grain and ship it for the farmer, and advance him 90 per cent of the price. They held the remainder until they got the returns from the grain corporation. Some of the returns are being made recently. The dealers charged the farmer interest all the time until final settlement. The dealers then went to the grain corporation with a hue and cry, and finally got the government to allow a handling charge of 2 cents a bushel a month. All the time they were charging the farmer interest on the money advanced."

# Nonpartizan League Management

## *Prominent Members Declare the Organization Is Not a Strictly Representative Body*

"Because of our pride in this work and our realization of the vital necessity in preserving the independence, integrity and singleness of purpose of an organization which may be destined to play a tremendously important part in American history, we feel in duty bound to call to your attention, as president, certain conditions which we believe must be corrected if the National Nonpartizan league is to long survive, attain its expected strength, or to beneficially affect the mind and conscience of this country. Moreover, as co-workers in this institution, we desire to point out what in our judgment are the remedies for the conditions which we think are injurious to the league's present growth and absolutely fatal to its permanent success."

These are the opening sentences of a protest to President A. C. Townley of the Nonpartizan league, dated June 25, 1917, and signed by the following members of the national management of the league: Joseph Gilbert, Arthur Gilbert, W. W. Leggett, N. S. Randall, Murray King, J. E. M. Jauncey, W. G. Roylance, George D. Brewer, Carl Beck, Charles R. Barnes, O. J. Nelson, W. S. Shoemaker, W. H. Quist, Alf. Knutson, L. J. Duncan, Arthur Williams and O. M. Thomason.

The protest is alleged to have been prepared by Joseph Gilbert, the former manager of the organization department of the league, and is reprinted in full, with comment by Rev. S. R. Maxwell, in the Butte Miner, in an article copyrighted by the Dispatch Printing company.

Mr. Maxwell is a Unitarian minister, has been a prominent speaker in the Nonpartizan league, has made hundreds of speeches to thousands of farmers in its behalf, and personally has conducted a number of the league's conventions. He was on the stump throughout the Lindbergh campaign in Minnesota and also in North Dakota, where he campaigned with Congressman Baer and Governor Frazier. Mr. Maxwell says he quit the league because of what he calls its un-American program.

The protest continues:

"First of all, we think it self-evident that no democratic movement can ultimately succeed which rests upon an autocratic basis. The Nonpartizan league management is autocratic. This condition not only obtains in the administrative management, but in its political guidance as well. It is all very well to tell the people that its candidates are selected by pure democracy. We know that they are not. Both members and workers are under a despotism that can not survive.

"We, workers in the National Nonpartizan league, recognize your ability. We admire your qualities of leadership. You have performed an imperishable task, if the movement is guided right, and to you chiefly belongs the credit."

And again:

"But if this league is to become national in fact, as well as in name, it can not continue as it now is, essentially a one-man movement. It must be made representative as concerns both workers and members, and unless it is made representative it will certainly fail."

The recommendations are:

"That an administrative board of seven be created to serve until such time as a national executive council shall have been elected by the membership.

"That all matters of general policy must be referred to and decided by a majority vote of yourself and this board, and that no important matters of policy can be adopted unless so decided.

"That no department head, lecturer or salaried employe can be discharged, demoted or permanently transferred against his will without a hearing before this board, and not then until a majority have so decided.

"That no new departments may be created without the assent of the majority of this board.

"That not later than the first of July this board go over all salary accounts and reduce such as they think exorbitant, and increase such as they think insufficient."

The protest also recommends that the following departments be created: Finance department, national organization department, legal department, publicity department, educational department, legislative department, campaign department and public affairs.

"That such department heads hold a conference at least once every week, and oftener whenever advisable, at which matters of immediate policy shall be discussed.

"That a budget system be immediately instituted.

"That no unusual expense be undertaken without the sanction of a majority of the administrative board.

"That as early as is practicable, not later than the 15th of November, that calls be issued for state and national conventions, and that such conventions elect officials of the league and also a national executive council."

The signers of this protest are reported to have met with President Townley in conference and he promised he would take the matter under consideration and hold another conference later on. As a result, it is alleged, Joseph Gilbert was side-tracked and put into the office of the United Consumers' Store company, and Randall, another leading man in the revolt, was sent out to establish a country newspaper. Quite a number of the signers of the protest were employed in the publicity department. It is now charged that Townley abolished the entire department and that Nelson was excused and allowed to return to the state of Washington, that Carl Beck and wife resigned and went to Washington, D. C., and that John A. Currie was detailed to go out on a hundred dollar membership proposition or quit, while Arthur Williams was sent to North Dakota on a consumers' store proposition.

Mr. Maxwell adds, concerning the protest:

"What does the autocrat Townley do with this paper? Practically the same that the arch-autocrat William of Germany did with the treaty with Belgium. Tore it up and slung it into the waste basket. * * * He has refused to make the management of the league democratic, after a score of men who were loyal to the purpose of the league and who had demonstrated their loyalty at the risk of having their own reputation tarnished forever, undertook to defend the league by apologizing for the disloyalty of Townley himself, asked respectfully that it be done. He has refused to listen to the demands of these splendid men. He has refused to explain why he abolished the department of the league where the most of these men were employed. He has refused to publish to the world his connection with the absolute control of the league exchange, an affair that handles one and a half millions of dollars in good paper. He has refused to show his connection with the publication company. He has refused to show his connection with the United Stores company, another concern of his that has gathered one million from the farmers. He has refused to furnish the world a correct statement of what he did with the two millions collected from the league members. He has refused to show why he, and he alone, carries the key to the treasury of all these concerns. These facts carry their own answer with them."

---

TO the Editor of The Washington Farmer: I wish to take advantage of your big bargain rates and enclose herewith 55 cents, for which please enter my subscription to The Washington Farmer for three years and send me the farm service flag with eight small stars. THOMAS SMYTH.
Weston, Ore.

---

**Sugar Bowls Banished.**

Sugar bowls have been banished from American dining cars—a traveler is served his portion of sugar and no more.

---

### OPERATE OWN STORE

### Farmers Will Serve Themselves.

A report from Amsterdam, Idaho, tells of the formation of an association of 35 farmers and stockmen for the purpose of establishing and conducting a store of their own. The report says that the building has been acquired and equipped for business. The store will handle general merchandise, hardware, groceries and practically all the goods that the farmers of the community will require. It is planned also to operate in connection with the store a hotel with limited accommodations especially for farmers and their families when they are in town for the day or for longer periods.


# FORD OWNERS NO MORE ACCIDENTS FROM RUTS OR BUMPS

**You can now avoid turning turtle, leaving the road, buckling and upsetting and the many other dangerous accidents due to weak steering equipment. Get**

**THE**

**SPRAGUE WORM STEERING GEAR**
*For Fords*

**Makes Your Ford a Safer, Better Car**

All higher priced automobiles overcome the dangers from steering by use of the worm type steering gear. With the Sprague Worm Gear you can safely and easily steer your Ford out of any rut. It also eliminates that jerky, insecure motion in the Ford; holds the car to the road; prevents locking over center; makes steering easier through mud, sand and on center-crowned roads. The worm and wheel arrangement prevents bumps or other obstacles from cramping and upsetting the car.

**Adds to Pleasure**

This steering gear absorbs the vibration and strain on the arms, adding greatly to the pleasure of driving.

**Easy to Attach**

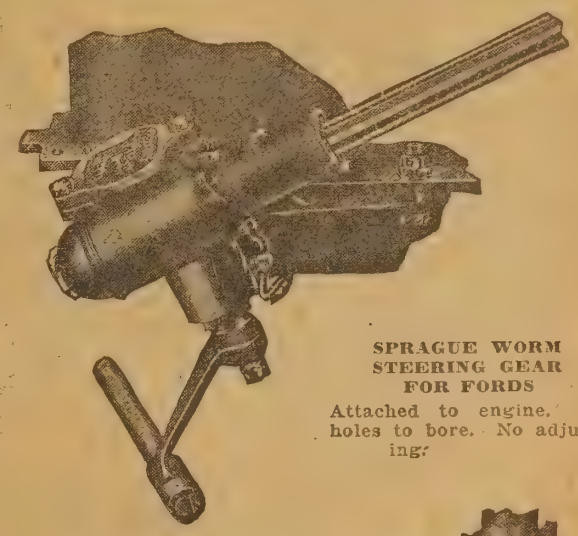
Our new model (ball-bearing floating shaft) worm steering gear requires no adjusting. You can quickly attach it yourself, without special tools. Replaces old gear. Will outlast the car.

**Guaranteed to Satisfy**

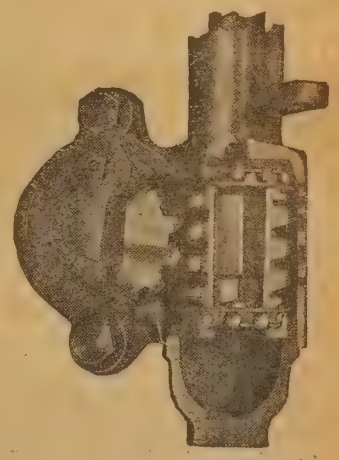
The Sprague Worm Steering Gear is guaranteed to satisfy you. If you don't like it, after a ten days' trial on your Ford, return it and your money will be refunded.

Don't wait for the accident to happen. Put this safe steering gear on your Ford—enjoy driving. See your accessories dealer, or send direct to us. Price $15. Thousands in use. Illustrated literature **FREE.** Write us today.

Your money refunded if you are not satisfied with this gear. Order it NOW.



SPRAGUE WORM STEERING GEAR FOR FORDS
Attached to engine. No holes to bore. No adjusting.



SPRAGUE WORM STEERING GEAR FOR FORDS
With part of housing cut away to show worm. Note ball bearings, also ferrule on end of steering rod (floating shaft).

**FROM THOSE WHO KNOW**

We have scores of letters from users praising this gear. The following show what they write:

Knoxville, Tenn., 6-9-18.

Gentlemen:—I received the worm steering gear and have installed same on my Ford. Am highly pleased with it. Have taken orders for two the second day. I will remit for six gears shortly. You understand that I accept the agency for the device at this point. When I took the matter up with some of the Ford dealers here they tried to discourage me. **It is O. K.** Would not be without it. Consider it the best life and accident insurance policy that could be taken out on a Ford car service.
R. L. BOWMAN.

Dayton, O., 6-29-18.

Gentlemen:—We received your Worm Steering Gear and put same on one of our one-ton Ford trucks which was very hard to steer, and after trying it out we drove over a road where a new sewer was built and found that we could let the steering wheel go and light a cigar without touching the steering wheel. I, myself, have driven Ford trucks almost four years and every night my shoulders would be so sore that I could hardly move my arms after driving from forty to fifty miles every day. Today I have made the same trip with your Worm Steering Gear and my shoulders felt rested after my day's work. Your Worm Steering Gear has really made a pleasure car out of my Ford truck.
THE WOLF CREEK SOAP WORKS.
Per Wm. Schander.

**E. H. SPRAGUE MANUFACTURING CO., Sole Mfgrs., Dept. 27, Omaha, Neb.**




# Swat the Flies Hard

Decrease in milk production, losses of live weight, discontent, and unrest are promoted among herds during the summer months as the consequence of the activities of the common stable fly and horn fly. An average decrease in milk flow of from 25 to 40 per cent is not uncommon as the direct result of flies and the extreme heat of summer. Under existing conditions with a keen demand for dairy products and with prices at a high mark, it is highly desirable that every dairy farmer exercise a maximum of care and caution to eliminate the fly evil. Such remedies as darkened barns, stable sanitation, and spraying with fly repellents, are recommended. Thorough treatment of manure, its daily removal from the barn to a distance, the use of hanging burlap or other devices in the barn doors to brush flies from the animals, baited fly traps placed outside the barn, and closed milk pails are among the necessary requirements for keeping flies away.

The stable fly, armed with biting mouth parts, punctures the hide of cows and sucks their blood, while the horn fly locates at the base of the horns, where it irritates the skin and causes the formation of congestions which resemble mosquito bites. Both species of these flies propagate rapidly and require only from 10 to 16 days in which to hatch their eggs and produce new hordes of pests which operate for cow discomfort.

The stabling of cows during the heat of the day in cool, darkened barns is recommended as one of the best means of eliminating the fly evil, provided adequate labor is available to keep the stables clean and sanitary. As manure provides an ideal breeding material for flies, it is imperative that none of it be allowed to accumulate in or around the stable. Spraying the animals with some fly repellent, such as kerosene emulsion, is an effective remedy, but requires repeated applications. Repellents should be used with great care, as no good one has yet been devised which is not likely to slightly taint the milk. It is best to spray the cows just before milking each evening, using a hand spray pump or applying it with a brush or a sponge, says the United States department of agriculture. There are some antifly solutions on the market which are more or less effective. Most of them consist of some coal-tar product combined with either fish oil, oil of tar, or rosin. Lime sprinkled about the barn on manure is also useful in destroying flies.

To prepare kerosene emulsion—one of the cheapest and best home-made fly repellents—dissolve one-half pound of yellow soap in a gallon of soft water heated to the boiling point, and with this combine two gallons of kerosene in a barrel where the solution can be churned vigorously. Dilute this mixture with six gallons of water. This amount of emulsion is sufficient for spraying 100 cows and should be prepared only as needed. When smaller amounts are required they should be prepared in the proportions given.

## Butter Packing.

Will you please tell me how to pack butter this summer so it will keep nicely until next winter?

I. N. H., Idaho.

Butter, to be packed for winter, should be of the highest grade, made from cream of a clean acid flavor, but not too sour. The churning should be stopped when the granules are about the size of peas or smaller. At that stage the buttermilk must be drawn off and the wash water added. Two washings are necessary for the best results. Add the usual amount of salt, which must be worked in evenly. Pack the butter in a clean, cool stone jar, filling it to within three or four inches of the top. Make a saturated solution of salt brine and fill the jar to the brim. Set the jar away in a cool place where the temperature is uniform. If the butter is of a good quality when packed it will keep until winter very nicely.

A. B. N.

## Winter Feeding for Dairy Cattle.

What do you think of feeding bran and shorts mixed with cut oat straw for winter feeding of dairy and beef cattle, and particularly of young stock ranging from 8 months to 2 years?

R. L., Shelton, Wash.

I believe that a good deal of oat straw will be used for feed this winter. It will not have a great deal of feeding value, but yet I believe if it is cut and mixed with bran and shorts as you suggest it will do for wintering cattle, particularly young stock. I have always felt that oat straw has about as much feeding value as most of the native hay and we know that many dairymen winter their stock on native hay.

A. B. N.

## Boosts for Cow Testing.

The value of cow testing association work is illustrated by the experience of J. C. Strong of Myrtle Point, Ore. When Mr. Strong joined the association, in 1917, he was milking 40 cows and sold 645 pounds of butter fat the latter half of May. He sold off 17 cows during the season and bought six more. This year, with 32 cows, with conditions not so good, and not feeding any heavier, Mr. Strong sold 690 pounds of fat the latter half of May. The cow testing association, Mr. Strong says, furnishes the only means the dairyman has of positive knowledge of what his cows are doing, and he hopes the war will not take all the cow testers.

## Feeding of Artichokes.

**Will you please tell me the feeding value of root artichokes for milk cows?**

**J. G. F.**

The tuber of the artichokes has about the same feeding value as potatoes. It is claimed by many that it is excellent feed for hogs, but for dairy cows the yield is not sufficient to warrant its use. In some places silage of good quality has been made from the stems, especially when it is mixed with other green feed, such as corn or clover.

A. B. N.

### Getting Along Nicely.

A clergyman taught an old man in his parish to read. After his lessons were finished he was unable to call upon him for some time, and when at last he did, found only the wife at home.

"How is John?" said he, "and how does he progress with his reading?"

"Oh, nicely, sir."

"I suppose he can read his Bible quite comfortably now?"

"Bible, sir!" exclaimed the woman. "Lor' bless my soul; why, John was out o' the Bible and into the sporting papers long ago!"—Philadelphia Star.

### Stay on the Job.

There is no vacation on the firing line.

## GET READY NOW.

### Fill a Silo for Next Summer.

Investment in a silo now will prevent loss of milk when drouth causes a shortage of pasture next summer. It will pay in many sections to provide an extra silo and fill it this fall, using the silage next summer. In this way a means will be provided to keep up the milk flow throughout the entire season.

The drouths of late summer always result in a marked decrease in the milk flow of herds that depend chiefly on pastures. This loss can not be recovered by good feeding at a later period. The milk production for each remaining month of lactation period will be smaller than if no decrease had occurred during the dry season. It is very important, therefore, that it be prevented. This can be done best by supplying a succulent feed to supplement the pasture. In most sections the most satisfactory supplement is corn silage. It is much cheaper, requires less labor, and is just as efficient as soiling crops. With the latter, great care in planting is necessary to provide the proper succession and in addition they must be harvested as usual, which requires much time at a busy season.

Be sure that the silo is small enough in diameter so that a layer two inches deep will be fed off each day, because silage spoils quickly in warm weather. Look ahead; plan for the next year now.

## Pea Straw Good Feed.

Reports from districts where field peas have been grown this year indicate that the straw is of more than ordinary quality for feed, owing to the character of the season. It is believed that in some of these localities pea straw will be of considerable value in tiding the dairy business over the winter months.

## Destroy Flies With Poison.

The use of formaldehyde as a fly poison is recommended by the United States department of agriculture. The method used is to place on a shallow vessel of some kind ten parts of formaldehyde in 90 parts of water and two parts of sugar. Place a sponge in the solution to retard evaporation. This mixture will attract flies, which die almost immediately upon drinking it.

It Is a Patriotic Duty to Prevent Loss of Cattle.



PROTECT THEM FROM BLACKLEG

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Double and Single Vaccinations in pill form.

ACCURATE. EASY TO USE. EFFICIENT.

Each Blacklegoid is a dose of blackleg vaccine ready to inject under the skin of the animal.

NO DOSE TO MEASURE.
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Animal Industry Department of

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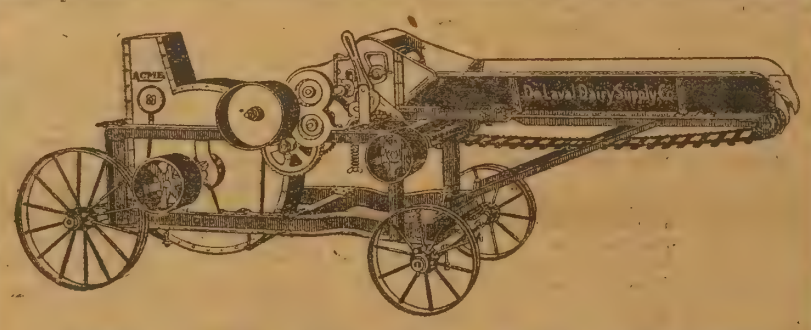


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THE SPIRAL KNIVES produce a clean cut silage of even lengths that packs tight in the silo and prevents spoilage.

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The same Acme cutter that fills your silo will soon pay for itself in cutting your dry feed and making alfalfa meal.

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Acme No. 40 Special Hay Cutters for Stock and Sheep Men. Enormous Capacity. Convenient. Economical.

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ALPHA ENGINES. IDEAL GREEN FEED SILOS

# LIVE STOCK NOTES

E. J. Iddings
Editorial Contributor

## WOOL STOCKS.

### Decreased Holdings This Year.

Wool stocks held by dealers and manufacturers in the United States on June 30, 1918, amounted to about 466,490,000 pounds, grease equivalent, according to the quarterly stock report issued by the bureau of markets. Stocks reported on the same date in 1917 were 585,000,000 pounds, grease equivalent. The decreased holdings on June 30, 1918, compared to those of the year before, are said to be due to a slower movement of wool to markets this year than last.

Stocks of wool on June 30, 1918 by classes, in pounds, were: Grease, 320,046,655; scoured, 29,413,208; pulled, 19,008,014; tops, 15,251,695, and noils, 15,784,791.

## PREVENTS DISEASE.

### Vaccination Proves Successful.

Two years ago C. W. Dwiggins, near Eugene, Ore., lost about $800 worth of registered Shropshire sheep with hemorrhagic sceptocemia. Since then he has vaccinated every sheep and last year and so far this year, he has lost none. While Mr. Dwiggins thinks the weather has much to do with the severity of the disease, he is now satisfied vaccination is a sure preventive. When County Agriculturist Robb first came to Lane county, Oregon, he found the disease rampant and got vaccination started. Since then hundreds of sheep are vaccinated annually, with complete success in keeping the disease out of the flocks.

## Fattening Hogs Without Grain.

Frank Welch, O. I. C. hog raiser, a few miles north of Salem, Ore., took a load of porkers to Portland recently. "It does not do to use grain on pigs now," said he. "In spite of the high price for hogs, that would be nothing but swapping dollars. I fatten on clover and slops and dairy byproducts, using potatoes to a considerable extent, and I brought in 9-month hogs weighing 260 pounds. However, I find the market prefers lighter hogs still. The days back in Indiana when we marketed 500-pound hogs haven't come back yet."

## Will Aid Montana Stockmen.

The appeal of stockmen and farmers of certain drouth-stricken districts of Montana has resulted in arrangements by the railway administration for the shipment of cattle feed into such localities with half the regular freight rates. It was declared by the stockmen that unless relief of this nature had been secured, large numbers of live stock would have been shipped out to other feeding grounds.

## Veterinary

Dr. S. B. Nelson

**May Be Ascess**—I had a small heifer calf about 4 months old and until recently seemed to be very robust and well fed. One day I noticed that she had difficulty in breathing and made a kind of snoring noise, but she still ate. The next day the snoring became more pronounced and a little more difficulty in breathing. Here I noticed a small lumb about two or three inches in front of her "Adam's apple." This lump increased in size until it was about an inch in diameter. The calf ate a little right along. She had a pronounced wheeze and also had difficulty in getting her breath. A slimy substance came out of her mouth continually and her eyes started to water. I gave her a dose of Epsom salts, but three was no improvement of the calf. Her breath came in shorter gasps, her eyes became nearly closed and watered almost continually and she was almost always grinding her teeth. Through all of her sickness she had fever, the most pronounced after the second day and from then on she also had chills. Just a few hours before she died she seemed to breathe through her mouth. I also noticed some blood on the tip of her ears, as if a small blood vessel had burst. The flies may have been responsible for this, though. The calf was run in a pasture after she was weaned and had plenty of fresh water. Could you, from the data given, give the probable disease that affected her, and if I have any more trouble with other calves, what treatment should be given? J. G. K., Eagle Creek, Ore.

From the description that you give, I would be of the opinion that the heifer was affected with the formation of an abcess in and about the throat, and because the soft tissues were in toward the pharynx, the windpipe, and the gullet, the abcess swells that way and choked her. I think that if the abcess had been opened either through the mouth or underneath the jaw, that she might have recovered. Of course, I am giving you my opinion simply from your description. There might have been other things which a personal examination would have revealed to change my diagnosis. I do not believe that the case was infectious and that the other animals would take it.

**Horse Has Lump on Breast**—I have a young horse that has a lump on his breast, probably caused by scratching, from rubbing on barbed wire fence. It has been there for two or three weeks and does not seem to go down, although the horse now has no chance to get near the wire. Can this be treated? If so, please let me know through columns of the Farmer. C. S., Davenport, Wash., R No. 2.

Your description of the lumps on the horse's breast is not very definite; but I would be led to expect that it contains pus, and therefore ought to be operated: or it is a fibroid tumor which needs taking off. The fact that it has been this way for two or three weeks indicates to me that it might be either one of these two things. Therefore, I would suggest to you that you consult your local veterinarian and have the tumor removed if such be the case. I think that it is a surgical interference that is needed.

**Trouble With Horse's Eye**—I have a horse 8 years old, a gelding, whose left eye runs and has been doing so for several months. Last fall I had his teeth floated, thinking the teeth caused the eye to run, but that did not stop it. At times he rubs the eye against the manger as though it itched; there does not seem to be any swelling. Please let me know what to do for it. C. E. M., Boyds, Wash.

It is possible that your horse is suffering from a little irritation of the mucous membrane of the eye. Try dropping into the eye two or three times daily a few drops of 2 per cent solution of protardol, or if you can not get that, a 2 per cent solution of argyrol.

**Sow Pig Has Rupture**—We have a small Duroc Jersey sow pig which we have just bought. It is spry and healthy, but has a lump on the navel, about the size of a large thimble. I believe it is a rupture as I can push it back and it will stay until it moves around. Will you please tell me what to do for it and will it outgrow the trouble? I bought it for meat next year. M. W. H.
Orient, Wash.

As you have not bought the sow pig to use as a breeder I do not believe I would bother the small rupture. If you were going to breed her it would have to be operated upon, but just for fattening, you had better leave her alone. I believe it will not give you any trouble.

**Hoofs Are Contracted**—I have an 8-year-old mare whose front hoofs are contracted. Two or three months ago I lump came on the back of each front leg between the ankle and the knee. Have blistered these and one is a little smaller. Are these lumps caused by the contraction and what would you advise to remedy the trouble?
E. M. C., Toppenish, Wash.

Your statement is not definite regarding the lumps on the mare's leg, whether they are attached to the bone on the inside, generally known as splints, or whether they are a little farther down close to the ankle and soft, and are known as wind puffs or wind galls.

## BOOST LIVE STOCK.

### Form Inland Empire Association.

For the purpose of stimulating the live stock industry of the Inland Empire, a number of stockmen are forming an organization with headquarters in Spokane. Frequent meetings of the officers and executive committee will be held for the consideration of matters of interest to the industry. The following are the officers that have been elected:

Grant Copeland, president; Dan Drumheller and E. E. McClintock, vice presidents, and E. E. Flood, secretary-treasurer.

The following executive committee was appointed:

W. T. Day, William Huntley, J. M. Van Kleeck, D. O. Leith, T. N. Conway, W. D. Roberts, D. W. Twohy, R. L. Rutter, Thomas F. Wren, James Davis, F. M. Rothrock, Peter McGregor, Roy Slater and T. H. Brewer.

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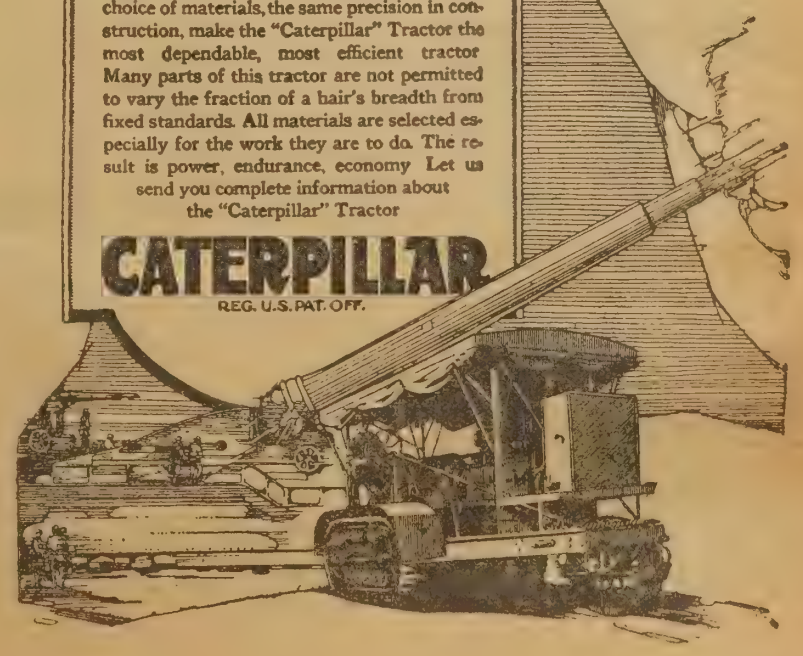
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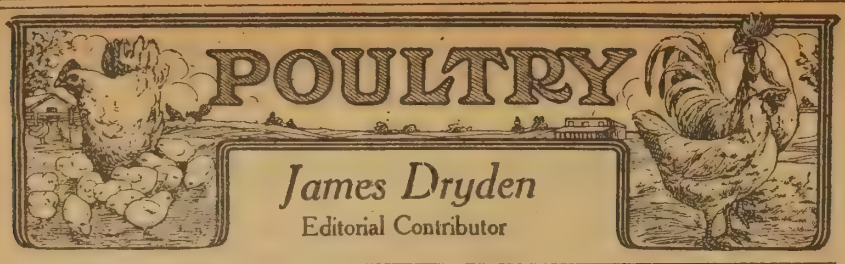
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The good layer is a good eater, and a good feeder is a liberal feeder.

Cutting down on the feed will not increase the profit. It will decrease the egg yield more than it will save on the feed bill.

Because feed is high in price, is not a good reason for stinting in feeding. It is an additional reason for better feeding.

The way to get even on the high prices of feed is to furnish the hen the proper raw materials so that she may increase the output of eggs.

The hen requires a certain amount of feed to make bone, flesh, feathers and to furnish heat. The first food she eats goes to these purposes, and eggs are made from any surplus food she gets.

The farmer who pays a high price for labor does not cut down on the man's food in order to get even. Rather he feeds him better in order to get greater efficiency. The factory manager who pays high wages, plans his men's work a little better in order to get greater efficiency. It is the supreme effort that is winning the war, not curtailment in expenditure. So it is in feeding; curtailment may save some, but it loses more.

J. D.

## Alfalfa Meal Feed

We advise liberal feeding of alfalfa meal to young chickens if green succulent alfalfa is not available. Where alfalfa is growing all summer, the chickens should be given all they will eat of it, and they will eat more of it if cut fresh and fed immediately. The morning is the best time to feed it when it is cool and moist, but it is better to let them have it any time during the day of possible. Let them run in the alfalfa field if there is one nearby. Then they will get it fresh and all they want.

In sections where alfalfa is not grown and where other green feed is scarce, it will pay to buy the alfalfa meal and feed it liberally. For the small chicks it should be rather finely ground and free from mustiness. The best meal is made when the alfalfa is cut rather early, say in first bloom. At this state there is less coarse fiber. Coarse alfalfa stalks are not worth much more than straw. By far the best part of the plant are the leaves and blossoms.

In feeding it, the chickens may not eat it at first unless it is pretty well camouflaged with meal or ground grain. Soak the alfalfa meal in a bucket for half an hour or more, than mix into it an equal weight of meal, mill feed, ground corn or other meals; then feed it when the chicks are rather hungry. When they learn to eat it, the meal may be reduced in amount. This will make a good mash for them, and besides furnishing the necessary green stuff, much protein and other nutritive material will be eaten.

There is no doubt that alfalfa meal is a substitute for ground grain, but to what extent is not very well known. But feed plenty of alfalfa meal and the chickens will make a thrifty growth. It has been demonstrated that alfalfa leaves have to a considerable extent, probably more than other plants, the properties of making rapid growth in young animals. Milk, eggs and alfalfa leaves, the investigators assure us, contain the vitamines, the "unidentified chemical substances," which are responsible for proper growth.

Sack up the leaves from the alfalfa stack bottoms or from the hay mows and horse mangers and save them for the chickens. This will make the chickens grow, and it will be evidenced by greater yellow color in the legs. And it will save on the feed bill. J. D.

### Mature the Turkeys.

In the effort to stop the wasteful practice of slaughtering broiler turkeys—those weighing from two to four pounds—the food administration is approaching the problem through three different channels.

Farmers are requested to raise their turkeys to maturity, thereby adding to the nation's meat supply; dealers have been notified of the food administration's desire that they refrain from purchasing the immature birds; hotels, clubs and restaurants, where most of the broiler turkeys are consumed, have been asked to discontinue serving them.

It is pointed out that turkeys, unlike chickens, do not become plump and well-meated until nearly full grown.

### Poultry in the Stubble Fields.

Every kernel of grain, at present prices, is worth saving, and there are a great many kernels, a great many bushels, left in the stubble fields after the threshers are gone and the grain hauled to market. The chickens will pick up the waste grain and make good use of it if housed in the fields. The best plan is to use portable colony houses about 8x10 feet or 12 feet, and pull them out into the field with a team of horses. These can be moved occasionally if the field is large, so that the chickens may clean up the whole field. They will wander, however, over a considerable field. If the house is placed in the center of a five-acre field the chickens will range over the entire tract.

If colony houses are not available, cheap straw sheds may be made. All the shelter the fowls need in the fall is a roof to keep the rain off during the night and a shelter from the hot sun if no other shade is available. A roof of poles may be built on posts set in the ground and sufficient straw piled on that to keep the rain off. The straw should be built up in the center, and to keep the wind from blowing it off a few poles may be tied together at the top and let hang down over the straw. If cheap poultry netting or other wire fencing is available, this may be spread over the frame, instead of using so many poles, and the straw piled on that. If this is not done the poles will need to be placed rather close together to keep the straw from falling through, especially if the straw is short. The roof should be about six feet high to keep the chickens from flying onto the roof. Poles will do for perches two feet from the ground and set two feet apart. If there should be grasshoppers and other bugs in the field there will be no need of meat or fish scrap so long as they last, and if there is some green stuff and running water near enough, the fowls will take care of themselves until the grain is gathered up. They should, of course, have grit supplied if there is none in the field.

Chickens thus housed in the stubble fields will do much better than crowded in small houses and fed two or three times a day; then look at the conservation of food. There will be trouble in some sections from hawks and coyotes. The scheme may be impracticable on this account in some sections, unless the field is near enough the residence where a good dog or a shotgun can be used for protection. Poultry netting may be stretched around the shed to keep out coyotes. In many sections of western Oregon no protection of this kind will be necessary. J. D.

### Storrs Laying Contest.

At the end of the ninth month of the international egg-laying contest at Storrs the Oregons from the Oregon Agricultural college were first with a lead of 51 eggs over the second pen, and gaining. The Hollywood farm at Hollywood, Wash., has the best pen of Leghorns and is fourth among all breeds. The following were the best four pens:

Oregon Apricultural college, "Oregons," 1707 eggs.

O. G. Knight, Rhode Island, White Wyandottes, 1656 eggs.

Jules F. Francais, Long Island, Barred Rocks, 1559 eggs.

Hollywood farm, White Leghorns, 1556 eggs. J. D.

### Water Glass Gets Thick.

My water glass has some eggs in it, but it has turned as thick as sour milk. Shall I add more water? I made it according to directions, but it has evaporated some. Last year the liquid stayed transparent and the eggs kept excellent. MRS. G. B., Stevenson, Wash.

Evaporation will cause the water glass liquid to become thick and milky. It is the water that evaporates and the chemical remains. Evaporation may be lessened by keeping the eggs in a cool place and also by covering the receptacle. If there has been much evaporation, more water may be added.

J. D.


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# Orchard Troubles

## Diseases, Pests and the Remedies

The word "pests" is broader in its general application than when used by horticulturists. In the larger sense it means any virulent epidemic, pestilence, plague, nuisance, mischievous person or thing. As used by horticulturists, it refers mainly to damaging insects. Apple pests would, therefore, mean pests dangerous to the apples. I will not treat the subject so as to include all the pests, but those most commonly known and most injurious, and will classify them in alphabetical order.

### APHIDS.

These pests are forms of what are commonly called plant lice, and are perhaps the most widely distributed of any of the great order, known technically as hemiptera. There are very few of the higher plants not subject to their attack. They feed by means of a stout beak, which they thrust into the bark or plant tissue, and suck the juices. In certain species this sucking method causes the plant tissue to form galls in which the lice continue to develop. Certain of them collect on the roots of the trees or plants, but mostly they live on stems, leaves or flowers.

**Apple Green Aphis**—Attack the leaves, young shoots and fruit. They reduce the size and market value of the fruit, and cause the leaves to curl. Remedy: The best remedy I have tried is black leaf forty, a preparation of tobacco. It will kill if used one to 800 or one quart to a 200-gallon tank of water. Whale oil soap, or fish oil soap, either is good and is generally used one pound to five gallons of water, with 7 per cent of kerosene emulsion added. Lime sulphur is also good. If the spraying is delayed until the leaves curl, it is hard to reach the aphis with any remedy. The lime sulphur spray will destroy some of the eggs, but is not sufficient to control the aphis because many of the eggs can not be destroyed.

**Rosy Apple Aphis**—The injury caused by this form of aphis is similar to that caused by the green aphis and the treatment is the same.

**Clover Aphis** is very similar to rosy apple aphis and is called clover aphis because it sometimes goes from the clover to the apple orchards. The treatment is the same as for green aphis.

**Woolly Aphis**—This is the most injurious aphid infecting pomaceous fruits and is found wherever apples and pears grow. It attacks the roots as well as the top and when on the root it is hard to eradicate. As a result of their injuries galls are formed and this causes decay and sometimes the death of the tree. A rosetted top is often a result or symptom of aphis on the root. They do not attack the fruit, nor to any great extent the foliage, but they feed on the tender juices of the new wood growth of the current year. They also feed on the sap exuding from wounds and often cause the formation of galls and excrescences at these points. Remedy: Use the tobacco spray the same as for green aphis and add to it four pounds of fish oil soap for every 100 gallons of water. The lime sulphur spray will reach some of those hibernating in the bark and trunk during the winter, and is efficient but not sufficient. To reach the root form it is necessary to dig away the dirt and apply either a strong solution of lime sulphur or of tobacco. Chickens in the orchard will destroy those at or near the base of the tree.

The following forms of aphis may be killed by any good insecticide or contact spray such as tobacco or lime sulphur. The treatment already prescribed will kill the following forms of aphis: Plum and prune aphis, hop aphis, black cherry aphis, green peach aphis, currant aphis, gooseberry aphis, black raspberry aphis, walnut aphis, chestnut aphis, citrus tree aphis, melon aphis, and many others. There are forms on the roots that can not be reached by spraying. For instance, the beet aphis attacks the small roots and later moves to the larger root, causing it to become spongy. The remedy is to discontinue for one or two years the planting of beets on infected ground and destroy the wild plants that are hosts of these insects.

**Cabbage Aphis**—Can be destroyed by spraying where they can be reached with spray, but in addition to that it will often be necessary to destroy the refuse of the crop in which they harbor and deposit their winter eggs which hatch the following spring.

All forms of plant lice multiply very rapidly. Some species will produce 20 or more generations in a single year, and one female will produce from 10 to 400 eggs or young as the case may be. Aphids would destroy most forms of vegetable life were they not held in check by natural enemies. Among those enemies are parasitic wasps, beetles, syrphus fly maggots, spiders, larvae of lace winged flies, aphis lions, ladybugs and many species of birds. Ants are the friends and protectors of aphids because they feed on the excretions which have a sweetish taste. The corn root aphis lays its eggs late in the fall in the ants' nests, where they have been carried by the ants, and where they receive protection. Some authors say that the ants carry only the females or egg depositors, thus showing economy or discrimination between productive and nonproductive labor. If this be true, it proves a higher degree of intelligence in ants than is generally believed to exist. Whether this be true or not, of this I am sure, that the ants carry the woolly aphis about, placing them where they can get food. These aphids for most of their lives can not fly and can not crawl sufficiently to place themselves in favorable positions, but the ants carry them and defend them in so far as possible from their enemies.

The apple leaf crumpler, apple leaf hopper, apple leaf sewer, apple leaf skeletonizer, may be killed by using the tobacco spray. The apple tree maggot is difficult to control, but does not attack fruit in the Pacific northwest. The apple tree measuring worm is very much like the canker worm, but they sometimes defoliage whole orchards. Being leaf feeders this pest can be controlled by arsenical sprays such as are used for coddling moth.

The apple red bug is not common in the Pacific northwest, but in case it is found it can be killed by the use of tobacco spray.

The apple tingis feeds on the under side of the leaf and can be killed by the tobacco spray if it is used about one-third stronger than usual.

The apple wilt bug and bag worm are neither of much consequence except in Kentucky, where it seems to have spread and to have done considerable damage. The remedy is arsenate of lead.

### BORERS.

This is a word which, used in its relation to insects, means a beetle, moth, or other insect that bores into the bark, wood or fruit of the tree. Usually the boring is done while in the larvae state. There are caterpillars that bore into the terminal buds and stunt their growth. There are apple twig borers that bore into the twigs just above the bud, where they find food and shelter. There are branch twig borers that attack the stems and branches. The flat head apple borer bores in the trunks and limbs of the larger trees, but is most destructive to young ones because they work under the bark and sometimes completely girdle them.

The fruit tree bark borer does not enter the wood, but works in the bark, passing the winter in a silken cocoon beneath the bark from whence it emerges late the following spring.

The round-headed apple tree borer lays its eggs on the bark near the base of the tree; when the eggs hatch the larvae immediately begin to bore into the wood in the direction of the heart of the tree. It takes three years for this form to mature and emerge into the fully developed life of an adult moth in the open air where another life cycle is begun.

The spotted apple tree borer is similar to the round-headed apple tree borer except in color. It has two white spots on each wing case, while the other is white and black striped.

The bronze apple tree weevil seems to be a native of the northwest and has done considerable damage in the Willamette valley, Oregon.

The remedy for all of these borers is to cut out the twigs which they infest and burn them, pick them out of the bark or wood with a sharp instrument and kill them, or spray for them. It is good also to scrape off the loose bark of the tree under which some of them deposit their eggs. Birds are their natural enemies and contact sprays will kill if the spray material reaches them.

(To be continued next week.)

# Strong Trees Needed

## Vigor Can Counteract the Cold

By E. F. STEPHENS, Nampa, Idaho.

Dr. Whitten of Columbia, Mo., has, by careful experimentation, demonstrated that apple trees in vigorous condition, with properly developed, strong fruit buds, will in an unfavorable spring endure five degrees lower temperature without harm than weaker trees and buds. In other words they would safely endure a temperature of 26 or 27 degrees, during the blossoming period.

To make sure that trees and fruit buds shall have that condition the following spring the care the orchard receives during July, August and September is of the utmost importance.

The soil should be kept in condition to ball in the hand. If a crop of weeds, clover or alfalfa should reduce the amount of soil moisture below this condition then fruit buds may not be developed with sufficient vigor and in abundant quantity.

If the trees were under cultivation and an effort is made to maintain suitable moisture by cultivation with water, the orchard should be cultivated at least 15 times every season. Our rapid growing period in the early life of the orchard up to 4 and 6 years of age, when it has been our habit to throw into bearing by seeding to clover or alfalfa. If the orchard is seeded to alfalfa, which is sometimes advisable where there are many gumbo spots of soil, the alfalfa should not be removed as a hay crop during any season when there is an apple crop. Alfalfa roots bore down through gumbo with greater success than clover. We have recently seeded 35 acres of our orchard with alfalfa seeding.

Apple fruit buds may begin development in late June and may continue as late as October. Personally we will make the effort to maintain a good degree of moisture in our apple orchard until the 1st of October. When there is an apple crop on the trees we water freely clear up to picking time. In absence of an apple crop, as this season, we will do all we can to develop vigorous fruit trees and plump, strong fruit buds.

**Lafayettes Still Heroes.**

Count Gilbert de Lafayette, son of the Marquis de Lafayette of revolutionary fame, has been decorated with the war cross. He has been serving as a sergeant in the French artillery.

**National Forests Produce Meat.**

The average annual meat product from the Tonto national forest of Arizona and the Humboldt national forest, in Nevada, is estimated at $2,000,000.




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# Syrup From Sugar Beets

## *Is Not Found Practicable to Make White Sugar at Home*

To the Editor: There have been several farmers here that have tried raising sugar beets. For the most part the planting was done on river valley soil, and was done exceedingly well. Will you give us the recipe for making sugar and syrup from them? Some have tried it, but can not get the beet taste out of the syrup, which makes it almost worthless.

Is it very expensive to make sugar from them on a large scale? How many tons does a factory need to make it profitable? There is quite a lot of land here that beets could be raised on profitably. Under the circumstances it might be a good move to start up a factory of this kind here. S. G. KERNS.

Yelm, Wash.

It would not be practicable to attempt to make granulated or white sugar by home processes. Intricate chemical processes are involved, and equally intricate and expensive machinery are necessary in the factory process. It is possible, however, to make, for home use, syrup, and to settle a dark sugar out of the syrup by carrying the evaporation sufficiently far. This syrup, if properly made, should, in the home, serve the purposes of syrup in general and considerably lessen the need for sugar, which now is running low in the world's market.

The process of making syrup from sugar beets begins in the gathering of the beets when their foliage is assuming a yellowish tinge. Top them by cutting deeply enough to go below any leaf scar. The upper part of the beet contains a large part of the mineral salts taken up by the beets in the process of growth, and it is desirable to have the syrup as free as possible from these substances on account of the unpalatable flavor imparted to the syrup. You mention the fact that some of you are having difficulty in getting the syrup palatably flavored, and this may be one of the causes.

Wash the beets thoroughly, using for this purpose a hand brush with stiff bristles. Otherwise, a small amount of soil is apt to get into the beet juice, which, like topping the beets too high, would not help the quality of the syrup.

After the beets are properly topped and thoroughly cleaned, slice them very thinly. One-sixteenth of an inch is good, and the thinner the slices are the more thoroughly can you extract the sugar. Put the sliced beets in a vessel and pour over the slices boiling water. Use no more water than is necessary to cover the beets. Burlap or similar material should be wrapped about the vessel to retain the heat as much as possible. Allow the sliced mass of beets to soak in the water for about an hour. Do not boil the beets—that is, cook them. Soaking in water at a temperature of 158 to 176 degrees, F., is about right, and the boiling water poured onto the beets will by the latter be cooled to about this temperature, which should, by protecting the vessel, be preserved as nearly as possible for an hour.

At the end of an hour strain the water through several thicknesses of cheese-cloth.

From now on the process is merely one of evaporation, taking necessary precautions not to scorch the liquid. While evaporation is proceeding a thin scum will keep forming on the heated liquid, and this should be promptly and carefully skimmed off as often as it forms. If left unskimmed this scum will give the syrup the strong, beet-like flavor to which you refer. As soon as the syrup has reached the desired consistency it should be bottled while hot and tightly sealed. Otherwise it is apt to mold.

By carrying this evaporating process far enough one can thicken the syrup till a dark, sugary material will settle out of it. The sugar, like the syrup, is dark, and the removal of this color would involve the use of processes too expensive and complicated for practical use in the home. The process here given is summarized from Farmers' Bulletin 823, and, when properly followed, is said to yield a syrup or sugar of a pleasing flavor, free from the beet taste to which objections are raised, and of use in making dark-colored cakes, certain kinds of home-made candy and so on.

The establishment of a sugar beet factory on the scope necessary to make it a commercial success should require a capital investment of not less than $1,000,000, with assurance of not less than 300,000 tons of beets a year. From the latter requirement you may figure how many acres you should have tributary to your sugar beet factory, the acreage varying, of course, according to the tonnage produced per acre.


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## FARM ASSOCIATIONS.

### Loyalty Is the Largest Asset.

Cooperation and organization will play an increasingly important part in the future of successful farming. The basis of cooperation and organization is the same the world over. The greatest asset of a farm association is the loyalty of its members. The degree of that loyalty, or the absence of that loyalty, marks the distinction between the different kinds of farmers to be found in these organizations.

William Ford, president of the Invercargill branch of New Zealand farmers' association, has summed up the attitude of their organization, dividing it into three sections:

(1)—Those loyal to their union, who paid their subscriptions, attended the meetings, gave much of their time to the union, willingly paid out-of-pocket expenses when working in its interests, and if any in their district required their assistance they gave it; (2) those who devoted almost the whole of their time to their personal affairs, who admitted they had sympathy with the union, but said they had no time to attend the meetings, paid their subscriptions, and were prepared to help, but left the affairs of the union in the hands of the enthusiastic members; (3) those who devoted not only the whole of their time, but everything they possessed to their own selfish ends, who were quite willing to accept any benefits that might come their way as a result of the efforts by the organization, but were not prepared to pay one copper in return.

Mr. Ford made a personal application to each farmer he was addressing by asking him to examine himself to see to which of these three classes he belongs.

### Sugar Limited Everywhere.

The present household sugar ration—with little chance of increase—is two pounds a month in America, two pounds in England, one and one-half pounds in France, and one pound in Italy.




## Holding Up the Nation's Defense

The telephone played a tremendous part in this Nation's mobilization for war. It continues vital to the Government's program.

At the same time it has remained at the service of the whole people whose demands upon it grow apace with that of the Government.

The public is entitled to the best service that it is possible to render. But the public has a partnership in the responsibility for good telephone service.

It takes three to make any telephone connection: the person calling, the company, and the person called. Without the cooperation of all three the service suffers.

The telephone company can make the connection, but no words can be heard at one end of the line which are not properly spoken into the transmitter at the other. The relation between the speaker and the hearer is the same as the relation between the orator and his audience. It cannot be maintained if the orator turns his back to the listeners or if the audience is inattentive.

Telephone traffic must be kept moving. Speak distinctly—answer promptly—and release the line as quickly as possible. Don't continue reading when the bell rings.

These seem little things to ask the individual telephone subscriber, but when the individual is multiplied by millions all over this country, it is easy to see how important it is that *all* should cooperate.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY
AND ASSOCIATED COMPANIES
*One Policy* *One System* *Universal Service*



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HIBBARD-STEWART CO. INC
SEATTLE
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If you raise stock or keep dairy cows here's a silo that will put dollars in your pocket every year.

It is built of thoroughly seasoned, selected staves, hooped with strong billet steel hoops, bound with malleable lugs—has an anchorage system that makes it staunch and firm even when not filled and hinge-rod doors that can't sag, swell or freeze into the frame. At least

**$20**

is saved you by reason of the fact that the Inter State is well painted when you get it.

**McGoldrick Lumber Co.**
Spokane, Wash.

TEAR OFF AND MAIL TO US

McGoldrick Lumber Co., Spokane, Wash.
Gentlemen: Please send me your 1918 catalog and oblige
Name .....
P. O. .....
..... R. F. D. ....

## How to Make Soap

Making soap from the drippings of meat is the practical war work of Mrs. O. O. van den Berg of Washington, D. C., who is seen at her task in the uniform of the United States food administration.

The drippings of all kinds of meats are saved until six pounds have accumulated. This, with one can of lye, will make 15 cakes of hard soap, delightful for the bath, excellent for washing fine fabrics or laces, she says.

Strain the drippings before putting away and again before being combined with the lye. Empty the lye into a quart of water, which will become hot as the lye dissolves.

Heat the grease until it is melted and lukewarm, then pour in the lye and water gradually, stirring constantly. The stirring is continued until the mass is thick and smoothly pasty. Pour this mixture into a dripping pan in which paper has been spread. Before it becomes hard cut it in cakes two and a half by five inches and about one and a half inches thick.

Mrs. van den Berg trims the cakes and uses the shavings as soap powder.

## SUNFLOWERS.

### Make Most Excellent Silage.

To the Editor of The Washington Farmer: A few days ago I read in some farm publication that sunflowers made most excellent silage. I took the matter up with our college at Pullman and they referred me over to Bozeman, Mont., and I enclose you herewith copy of letter from Professor Tretsven on the subject, which I have read with interest and I think will interest you.

M. E. HAY.

Spokane, Wash.

In his letter to former Governor Hay, Professor Tretsven says:

We found that one pound of good alfalfa hay was replaced in feeding value by 2.83 pounds of sunflower silage. The yield of sunflower silage last year was 24 tons per acre, against a yield of three to four tons of alfalfa hay per acre. We drilled our sunflowers in rows the same as corn is drilled in for silage purposes. The sunflowers were harvested in the same manner that corn is frequently harvested for the same purpose. We planted the Mammoth Russian sunflower.

We have compared green sunflowers with green corn for soiling dairy cows, and have found that the sunflowers give equal results to that of the green corn when fed in this way. We are very much encouraged from the results obtained here, and believe now that the sunflowers will become a staple crop throughout the northwest. Besides making a great tonnage per acre and being a suitable feed for cattle, we believe it is one of the means we have of combating noxious weeds. In our part of the state we have no staple cultivated crops, but by growing sunflowers we have a crop that can be cultivated several times during the early part of the season.

The sunflowers can be planted early in the spring and will stand hard frost until late in the fall. We harvested our sunflowers last year when about 30 per cent of the stalks were in bloom. However, we are not sure but what the sunflowers would have made better silage if the crop had been matured to the stage when the seeds were in the milk stage. I believe it would be well for you people to try sunflowers in your state. I feel sure that you will find them successful.

## CURES EAR MANGE.

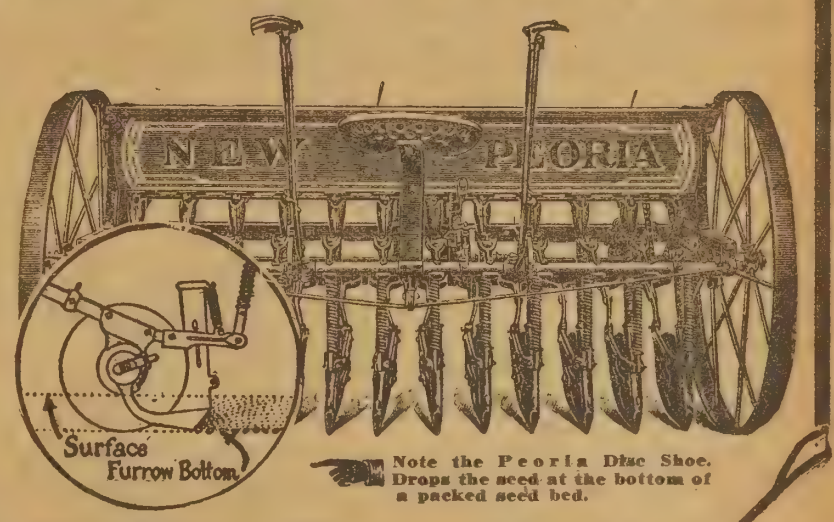
### Rabbit Trouble Is Overcome.

By FREDERICK J. POMEROY, Age 11.

As I have had quite a little to do with rabbits, I thought it would be of interest to those who raise rabbits to know how to handle and cure ear mange. It looks like a bunch of scabs in the ear. When you try to pull it out it begins to bleed and it hurts the rabbits so that they squeal and jump. When handling rabbits with the disease you want to be careful that they do not scratch you with their hind feet, because the rabbits take their hind paws and gently rub them around in their ears. The way to cure ear mange is to mix a solution of carbolic acid water. The solution should be eight parts water to one part carbolic acid. The way to treat the rabbit is to take a clean stick and wrap absorbent cotton around it. Then soak it thoroughly. If the rabbit has the mange in both ears, after you have soaked both ears the first ear will be so that you can take the stick and roll the scabs out and then the other will be ready. After you have cleaned it all out you want to burn it.


# Make $2.49 Greater Profit Per Acre From Your Grain

CAN any farmer afford to overlook a saving like this? Think what an extra profit of $2.64 would mean on 100 acres of grain! It has been absolutely proven by farmers all over the Northwest that the Famous Peoria Disc Shoe Drill will increase your crop profits this much and even more. Here's why. The New Peoria not only saves costly seed and increases your production, but it will assure you the best quality of grain from your land. Don't think the purchase of a NEW PEORIA will be an extra expense. It is just the opposite. It will be a saving.




Note the Peoria Disc Shoe. Drops the seed at the bottom of a packed seed bed.

## 20% Less Seed—1 to 2 Bushels Greater Yield With the Famous PEORIA Disc Shoe Drill

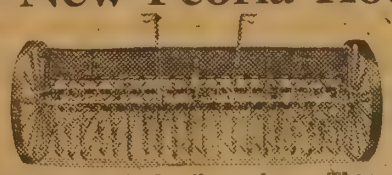
Here is a statement that has been proven by tests made all over the country. No matter how much grain you are going to plant this year. This is a saving that you are vitally interested in.

The average seed required for Spring seeding is approximately 40 pounds to the acre, the average price of wheat is $2.20 per bushel. One-fifth or 20 per cent of this amount would mean 44c cash saved per acre.

A farmer who sows 100 acres of wheat, ordinarily would use 4000 pounds or 66 bushels and 40 pounds. 1-5 or 20 per cent of this amount saved by the famous DISC SHOE would be 800 pounds, or at 44c per bushel at the average price of $2.20 would mean $29.33 he had saved in cash on 100 acres sown.

While official tests made in every great grain producing section show that grain will yield from 2 to 3 bushels more per acre when sown with the PEORIA DISC SHOE DRILL, we will be conservative and give the estimate of one bushel per acre, which would mean 100 bushels increase crop over the ordinary seeding methods, or $220.00, together with the amount of seed saved at the time of seeding of $29.33, would mean a total sum of $249.33 saved by seeding with a PEORIA DISC SHOE DRILL. With the price of grain this year if you have 25 acres or over you can well afford to discard any other seeder you have and buy a NEW PEORIA DRILL, it will MEAN MONEY IN YOUR POCKET.

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No matter what kind of soil you have. There is a Peoria Drill that will exactly fill your needs. Write today. Let us solve your drill problems.

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Gentlemen: Send me without obligations on my part full information regarding the famous PEORIA DRILL. Tell me how the PEORIA can increase MY crop production.

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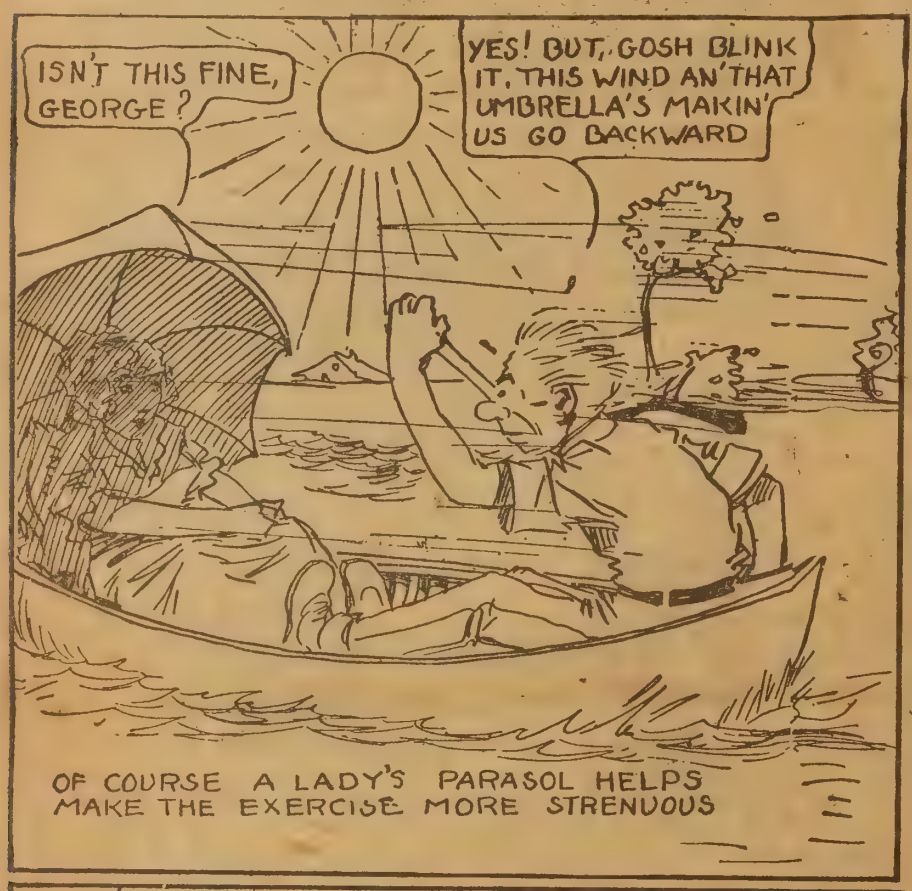
# SAY, HAS THIS EVER HAPPENED TO YOU?



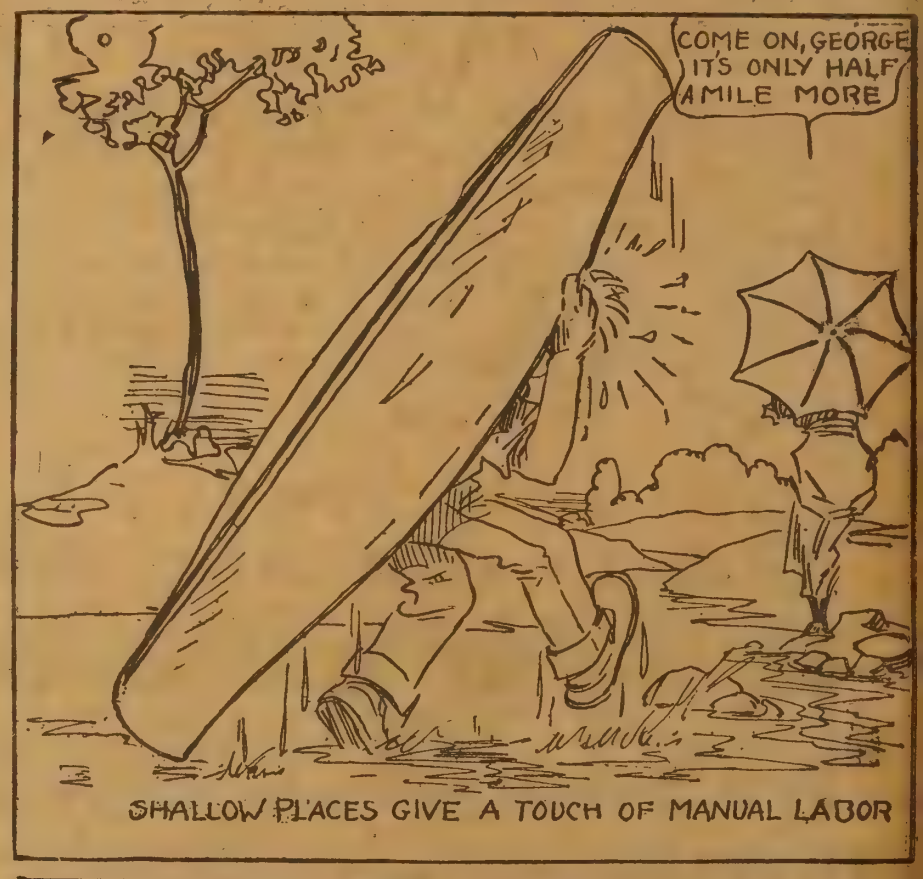

THE DOCTOR ADVISES EXERCISE ——




CANOEING IS FINE SPORT AND GOOD EXERCISE ——



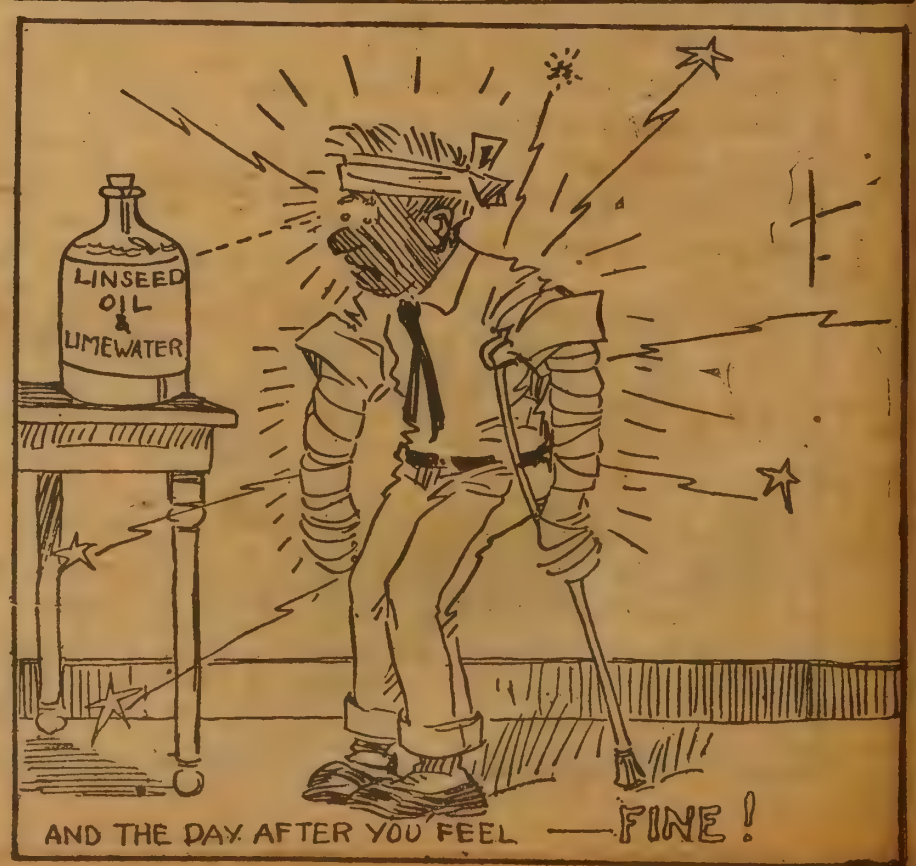

OF COURSE A LADY'S PARASOL HELPS MAKE THE EXERCISE MORE STRENUOUS




SHALLOW PLACES GIVE A TOUCH OF MANUAL LABOR




THE SUN ADDS TO THE COMPLEXION ——




AND THE DAY AFTER YOU FEEL —— FINE!

# JERRY MACJUNK GETS ON TO THE SIGN

'SNO USE TALKING 'BOUT IT- THESE OLD GUYS COULD CERTAINLY SCULPT. GEE- JUST LOOK AT THE ACTION IN THIS ONE—.

E VIETATO FUMARE

NEPTUNE ON THE ROCKS.

NYMPH

PREGO-PREGO SIGNOR- E VIETATO FUMARE—WE MUST ENFORCE THIS RULE - IT IS NECESSARY THAT WE POST THESE SIGNS ABOUT. I HOPE YOU UNDERSTAND THAT YOU ARE NO EXCEPTION.

I CAN'T TALK VERY MUCH OF ZE ENGLISH, BUT IT IS ALL ZE SAME LIKE DEFENCE DE FUMER —THEY'RE VERY STRICT ABOUT THAT RULE—YOU'D BETTER OBEY THE SIGN.

E VIETATO FUMARE

NEPTUNE ON THE ROCKS.

NYMPH

NIET ROOKEN-DOTS IT- NIET ROOKEN-I KNOW IT'S WRONG TO SAY TO A MAN-NIET ROOKEN, BUT IF YOU DON'T DO IT- OUT YOU WILL BE THROWN BY THE HEAD FIRST. I GNE YOU ADVICE - NIET ROOKEN-SEE?

EASY - NO TROUBLES YET- I WILL TELL YOU - E VIETATO FUMARE MEANS EXACTLY THE SAME AS WE SAY NICHTRAUCHER. AND DO IT-I ADVISE YOU.

OMEP

TAP TAP

HO-HO- IT MEANS NO SMOKING.

BOOK STORE

ITALIAN DICTIONARY

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Eaban

# Our Seattle Letter

# Farm Labor Issue

## *Women in the Fields and Orchards*

On the sixth floor of a Seattle office building, in a front office, whose regular and occasional visitors reflect the multifarious interests of a war-time city, sits the executive head—the brains, if you prefer that expression—of the Washington State Harvesters' league. The league is an organization for furnishing farmers with skilled and unskilled labor, and from the nature of the task it performs one might readily suppose that the person at its head would be a man; a big, husky, domineering sort of man, capable of putting things through by sheer will-power and masterfulness. Instead of being any such personification of the fighting spirit of the times, however, the individual who greeted me when I entered the league office was a distinctly feminine young woman, gray-eyed, slight of figure, enthusiastic as to the possibilities of the movement she is presiding over, and wonderfully sympathetic. That is the key to the success which this volunteer farm labor recruiting movement, backed and fostered by Frank Waterhouse, is achieving; it is quickened with the spirit of service and of understanding.

The Harvesters' league was organized last season, to meet the unprecedented conditions in the farm labor field. Throughout the season it did its work without much fuss or excitement, sending out city workers to spend their vacations at wholesome outdoor work in the country. At the same time something the same problem was being worked out in a little different way back in New York state, where the Women's Agricultural camp was established to utilize the spare time of city girls in doing country work. Miss Geithmann was one of these girls, and from the experiment which was worked out to a successful conclusion in Westchester county, she brought to the Coast a definitely formulated plan of campaign.

The New York experiment proved several things, probably the chief of which was that women workers without previous training could make good in the country. Another important point was the value of handling this class of workers in organized groups. There was an executive head to the Westchester camp, and the doing of camp work, cooking, dish washing, etc., was reduced to a definite schedule.

Both of these points have been kept in mind in handling the league's activities this season. Women can do more or less of farm work. There is no doubt of that, for they did it in New York last year, and they did it in this state. But they must be decently housed—all farm workers should be—and if they can be centrally grouped so as to secure the advantages of companionship and of the high ideals which radiate from workers trained for social service, the chances of success are increased. Two units of from 20 to 25 girls have been sent out, in addition to smaller groups. Each large unit has a cook and a superintendent. Its members are typically city girls — stenographers, students, social service workers, cashiers, artists, etc. At present all of the helpers sent out have gone to western Washington farms, but by the middle of August it is expected that groups or individuals will be sent into the eastern part of the state.

I asked Miss Geithmann a final question before leaving her office.

"Suppose some of our Washington Farmer subscribers need help in their fields or orchards," I said. "Could you do anything for them?"

"We certainly could, and we would be glad to," she replied. "All that is necessary is to write to us or call—648 Central building, Seattle, Wash. We're here to serve."

### Federal Labor Recruiting.

On June 17 of this year President Wilson issued his announcement on the need for federal control of labor recruiting, and in the various cities of the northwest the machinery for carrying out the federal plan is already in operation. The Seattle office is in charge of State Director Lawrence Wood, and here again I found optimism the prevailing emotion.

"What are we doing down here?" repeated Mr. Wood, in answer to my request for information. "Well, you can see for yourself that we are pretty busy," and his hand swept the circle of the big room, with its crowd of men and boys and its inquiry windows, each in charge of an executive experienced in the employment business. "And in spite of the fact that we're handling thousands where we handled hundreds last year," continued the superintendent, "we are getting along well. There has been no serious shortage of farm hands. The crops went in in good shape, and there will be plenty of men available for harvest."

These are a few of the angles in the handling of this big labor problem which come closest to the interests of the men and women on the farms; federal direction and control of employment, and the coming of women into the fields and orchards.

### More July Rain.

Twice the usual amount of rain fell in western Washington, during July of this year, measured by the average rainfall over a period of years. On August 8, the date of this writing, another rain is soaking into the ground. It is unfortunate that this break in the usual aridity of the west side could not have come early enough to keep the pasture lands and meadows green, but as it is it will undoubtedly add to the growing season and the ultimate production of most root crops. Seattle potato buyers report a diminished acreage of spuds, and the chances are that history will repeat itself; following the glut of last season a diminished acreage will bring high prices to this year's growers.

### Another Big Mill.

The Port Angeles Commercial club has recently succeeded in securing the location of a new mill, to cost approximately three quarters of a million dollars, in the city which already boasts one of the largest lumber mills in the world. With the coming of the first big mill, Port Angeles jumped to 5000 inhabitants. It is confidently predicted that the new mill, which is being built largely to handle spruce for the government, will double the present population.

### Uncle Sam a Railroad Builder.

Uncle Sam is demonstrating his ability as a railroad builder in the way he is handling the thirty odd miles of railroad extending from Port Angeles into the Olympic peninsula. Old railroad men say they have never seen a roadbed graded and rails laid more expeditiously. This railroad is being built to make available some of the wonderful timber resources of this almost unexplored part of the state of Washington. One thousand spruce division men are already on the ground, and it is rumored that there is to be a big increase in this number before long.

P. E. T.

## RAISE HORSES

### That Suit the Canadian Farmer.

By WAYNE DINSMORE.

Washington farmers, being so closely located to western Canada, will do well to first enlarge their horse breeding operations sufficiently to take care of their own needs and then try to raise a class of horses to suit the Canadian farmer. The one type, a good draft horse, with plenty of action, will satisfy the farmers on both sides of the line.

Unless present conditions are mighty misleading, northwestern Canada will, in a short time, be the greatest market for purebred draft stallions and mares to be found in North America. More than 1000 head of Percheron stallions and mares have been sold by farmers in the states to go to Canada in the last 19 months. Of this number 611 were purchased since November 1, 1917. Over 200 of these were mares. Most sections of the corn belt states report colts nearly all sold out last winter at very satisfactory prices. Between November 1, 1917, and June 24, 1918, 7646 transfer certificates were cleared through the office of the Percheron Society of America, a gain of 4 per cent over the same period last year. A report from the secretary of one of the leading county Percheron breeders' associations in Illinois indicates that there is practically no surplus of colts for sale in that district. Other counties that did not advertise so effectively have colts to sell.

It should be of unusual interest to horsemen all over the United States as well as Canada to know that the Bar U ranch, located in Alberta, has recently contracted to ship 30 head of select Percherons, principally 2 and 3 year old fillies, direct to Great Britain, shipment to be made as soon as boat space is available. Horses will be horses before very long. In 1916, according to the stallion board report, which is the latest information available, Washington was the fourteenth state in the Union in total number of purebred draft sires licensed, and eighteenth in total number of all sires enrolled. In 1916, Washington had enrolled in the state no Suffolks, 21 Clydesdales, 95 Shires, 23 French draft, 75 Belgians, and 274 Percherons—more horses of the last named breed than all the others combined. It is also interesting to note that there were 423 grade stallions enrolled—45.53 per cent of the total number of stallions licensed. No doubt this percentage has decreased rapidly during the last two seasons.

Washington farmers have only one purebred draft sire to every 631 horses and only one such stallion to every 115 farms or ranches.

### Pea Fields Need Hogs.

J. R. Shinn, agriculturist for Spokane county, reports that he is receiving many inquiries from farmers who have pea fields this fall and desire to buy hogs to glean them. Mr. Shinn says that any one having hogs to sell may communicate with him or with the Spokane union stockyards and thereby get in touch with the farmers who have the pea fields or pasture and need the hogs to utilize it.

### Saved Wheat; Save Sugar.

Out of the last harvest the American people, by abstinence, saved 140,000,000 bushels of wheat to feed the hungry allied nations; and these same people are going to stay right on the sugar job and see it through.

(PAID ADVERTISEMENT.)



JOHN W. SUMMERS
Walla Walla, Wash.
REPUBLICAN CANDIDATE FOR CONGRESS.
Fourth District.
Subject to Primaries Sept. 10, 1918.

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THE WASHINGTON FARMER
617 Central Building, Seattle, Wash.
Review Building, Spokane, Wash.

# Grow Your Seed Corn at Home

## *It Should Be Selected and Stored With the Greatest Care*

By B. F. SHEEHAN, Farm Crop Department, O. A. C.

The best way to secure good seed corn is to grow it at home. The best time to select seed corn is before the danger of a killing frost and the most practical method by which this may be done is to take a sack and go through the field selecting the choicest and best matured ears. Inasmuch as the growing of too large varieties and the lack of adaptation of varieties to climate and soil are the two greatest causes of immature corn, it is largely within the power of the grower to raise corn which will mature before frost year after year. There are a number of disadvantages in growing corn which is liable not to mature in a season. Some of the more important ones are: First, the corn will not sell for as much if marketed, in the case of soft corn it can only be marketed at a sacrifice. Second, immature corn is of low feeding value as compared with mature corn, pound for pound. Third, immature corn can not be stored in cribs or piled without deterioration. Fourth, it makes it difficult to secure seed for the following year.

Every well-formed, well-matured ear should be considered valuable for seed purposes, provided the stalk upon which it grew is strong. It is also a good plan to note whether the stalks about it are strong. Ears which grow very high or very low upon the stalk should be discarded as such position is undesirable. Ears carried about hip high and which have a tendency to hang with tip downward are preferred. Selected ears should be as nearly cylindrical as possible and of medium size. The rows should be straight, close together and well carried out over the butt and tip, the kernels uniform in size and shape, having a good depth and medium rough indentation, fitting close together. A slightly wedged or key-stone shaped kernel with a large clear germ is indicative of a strong vitality.

Field selections should include about twice as many ears as will be needed for planting next spring. This will allow for any culling and replanting that may be necessary. Fifteen to 20 medium-sized ears may be considered sufficient to plant one acre.

After the seed ears are husked, they should be hung immediately. An economical and convenient rack may be made at home by taking a smooth pole or two-by-four about three feet long, driving finishing nails into both sides so that they slant upward and simply slipping an ear over the head of each nail. Care must be taken not to allow any of the ears to touch one another. Driving the nails at from two and one-half to three inches apart will prevent their touching. These may then be suspended from the ceiling or rafters, lessening the danger of damage by mice because the corn can not be easily reached. The racks should be placed in a room where there is free circulation of air and heat may be applied. The farm kitchen or furnace room is a good place to store a small amount of seed. The attic, if well ventilated and heated, is a very good place.

During the winter, the corn should be sorted over, discarding the poorest ears. It should also be tested for germination. All ears that do not germinate or which show a lack of vitality should be rejected. Even when the best care in picking and drying of corn is taken, some ears are likely to be found which are dead and often some which show a decided lack of vigor.

The tests may be made either by the rag-doll or sawdust or sandbox method, both of which are simple and economical. The rag-doll is simply a strip of muslin, 10 or 12 inches wide and four or five feet long. This is marked into squares by marking crosslines every two and one-half inches. Each square is given a number. Damped the cloth, place six kernels, all of which have been taken from the same ear, germ side up, on each numbered square. Be sure that the ears from which the kernels came have the corresponding number. Roll up, tie loosely with a string or rubber band and place in a bucket of luke-warm water. Allow to remain several hours, then take the rag-doll out and place where it may drain. Be sure to see that the rag-doll is always kept moist. At the end of five to seven days, the rag-doll should be unrolled and the germination read for each square. Record must be kept and these readings checked up with the corresponding ear numbers, discarding all ears which failed to germinate or those which show lack of vitality.

The sawdust or sand-box tester. In a box of 20 inches square and four inches deep, place about two inches of clean sawdust which has been soaked in water. Pack tightly and place a cloth that has been marked off into two and one-half-inch squares, all of which have been given numbers. After all the kernels have been placed, cover with a wet cloth and fill with moist sawdust. In from five to seven days the top layer of sawdust may be removed, the cloth rolled back and the readings taken.

# Loving Cup

## For Shorthorns at Interstate Fair

The Pacific Northwest Farm Trio has posted a silver loving cup to be given at the Spokane Interstate fair September 2 to 7, for the best four Shorthorns, either sex, bred by the exhibitor and shown in the live stock show at the fair this fall.



## FOURTH LOAN.

### Farmer Is Ready to Do His Share.

Dedicating the products of wheat fields to the purchase of Liberty bonds is the plan that comes west from Indiana, where O. R. Westfall of Marion, Ind., has put up a placard in his field reading, "The proceeds from the sale of this wheat go into Liberty bonds."

The idea has met with favor among the farmers and it is expected that thousands of signs will soon be found in corn fields, hog lots, chicken yards, pumpkin patches and orchards throughout the Hoosier state.

"I think it a good plan and believe the farmers of the twelfth federal reserve district will take up the idea," said D. O. Lively, director agricultural division for this district. "I find the farmers are getting ready for the fourth loan and no matter how big the sum asked by the government, the farmer will be ready to do his share."

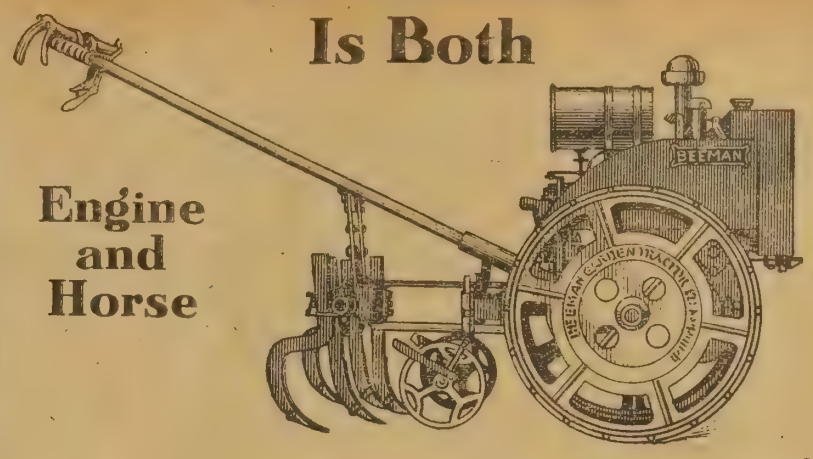




In answering advertisements don't fail to mention this paper.

The Beeman Is Both

Engine and Horse




To the Little Lander

Here's the one-horse tractor you have been dreaming about—designed and perfected by an expert implement man who gave most of his time for 3 1-2 years to experimenting with it on farms.

BEEMAN GARDEN TRACTOR

It draws the tools you now have—plow, harrow and every kind of cultivator. It pulls a cart with low wheels. It goes anywhere on its own wheels, and as an engine runs any machine—churn, pump, jack, woodsaw, washing machine, grindstone, emery wheel, separator.

It delivers 1 1-4 horsepower at the drawbar and 4 horsepower at the belt.

Give us your address on a postal card, and we will send you an interesting folder showing the Beeman Garden Tractor doing all kinds of work.

BEEMAN TRACTOR SALES AGENCY
3 DORCHESTER BUILDING, EVERETT, WASH.
A Little Territory Still Open for Agents

MR. LIVE-STOCK MAN

If you are a producer of less than carload lots of live stock, get your neighbors to join you in a community shipment to us.

This will put you on the same basis of marketing as the carload fellow and at the same time you will be helping to build up your home markets.

Write or wire us for our prices and our weekly Market Letter.

Spokane Union Stock Yards
SPOKANE, WASHINGTON

Great Northwest Tractor and Implement DEMONSTRATION

Educational, Beneficial, Profitable.

Every Farmer in the Pacific Northwest Should Attend

September 5, 6, 7, 1918.

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HIDES

WOOL, PELTS, MOHAIR, CASCARA BARK

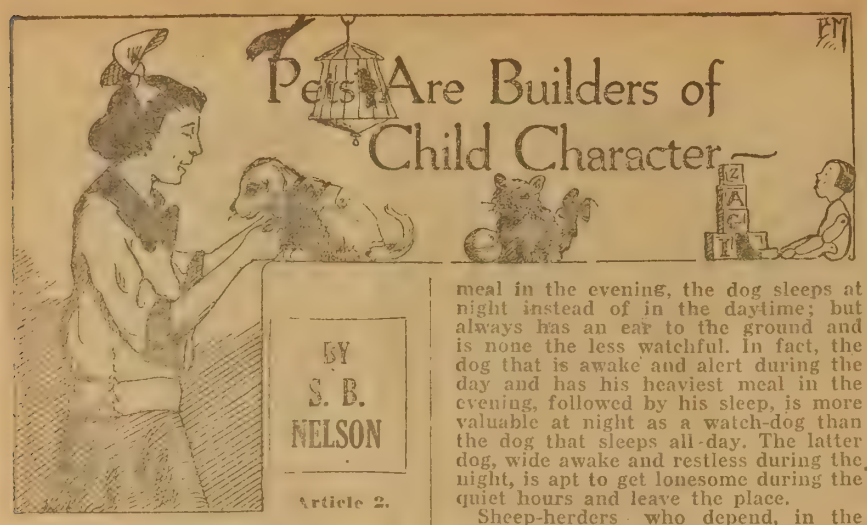
We do the largest consignment business in the northwest. Equally fair treatment on all shipments, large or small. Returns at full market value mailed same day as goods are received. Trial shipments wanted and appreciated, but are handled as regular shipments and not at inflated values.

THE H. F. NORTON CO.

S. W. Corner of 15th and Johnson Streets. PORTLAND, ORE.
206 Third Ave. So., SEATTLE, WASH.

Turn It Into Cash

If you have something you want to sell, offer it to our big family of over 50,000 subscribers. A want ad is the cheapest way we know of to get in touch with buyers.




Article 2.

The children's pet need not be a valueless animal. Indeed, it may be of great value, deserving, therefore, greater attention and consideration. It may be a purebred colt, or calf, or lamb, or pig, or dog. Such pets as these can be cared for better by the older children. Living pets for the younger children may include kittens, chickens, canaries or goldfish.

I doubt, however, if the latter call out sufficiently the emotions of the individual, and, failing in this particular, they fail to impart the character development in the child which comes through the possession and care of valuable animal pets. In the care and management of a purebred colt, calf, lamb, pig, or dog, the child gets lessons in sentiment and self-control.

In the proper caring for pets, certain general principles are involved. One is system. Teach the child to be systematic in looking after the animals that are owned by him or her. In growth and development both the child and the pets will respond to the habits of system, order and promptness thus acquired.

We may take, for example, a dog. As a puppy it should be fed three times a day. As it grows older, feed it twice a day. When it is a full grown dog, feed it once a day, and this at night.




**Boys and girls develop a sense of responsibility for the welfare of their pets, and, hence, of other animals and things.**

This system of feeding a dog from puppyhood up has advantages. Handled thus the dog is ready to work during the daytime, which is not the case when he is sluggish from a heavy morning meal. He will be wide awake and alert, ready for play, more watchful in looking out for the children. Fed a full meal in the evening, the dog sleeps at night instead of in the daytime; but always has an ear to the ground and is none the less watchful. In fact, the dog that is awake and alert during the day and has his heaviest meal in the evening, followed by his sleep, is more valuable at night as a watch-dog than the dog that sleeps all day. The latter dog, wide awake and restless during the night, is apt to get lonesome during the quiet hours and leave the place.

Sheep-herders who depend, in the management of the flocks, upon their "sheep dogs" know this very well, and always feed the dog at night. Every one who has been about sheep camps has noticed how alert the sheep dogs are during the day, and if he chanced to be about the camp at night will remember having noticed the dogs curl up and go to sleep after their heavy evening meal. But if anything goes wrong out in the flock these trained sheep dogs are on their feet in an instant.

In handling his pet dog, therefore, let the child learn from the herders of sheep, who are among the most skillful trainers of dogs that we have.

The kind of a dog to give a boy depends somewhat on the boy. There are many different breeds, sizes, types and dispositions of dogs, and which to get depends a good deal upon the surroundings, the home and the disposition of the boy and his ability to care for the animal. Dogs that are worthy of consideration may include such as the St. Bernard, the hunting dogs of nearly all breeds and description, and some of the shorter haired dogs.

There are, of course, individuals in every breed of dogs that make good pets, and there are other individuals of the same breed that would not. Quietness, steadiness, and lack of nervousness are good qualities in the dog which the children are to have as a pet.

### Two Pounds for 90 Meals.

Restaurants and hotels are restricted to two pounds of sugar for every 90 meals served. This includes sugar for kitchen as well as table use.

# SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

## Be Examined if You Are Middle Aged and Ailing



Dr. Hirshberg.

The person who has reached middle age is apt, very frequently, to think himself more of a physical wreck than he is. It is indeed true that the middle-aged must be more careful and watchful of his health than a young person, for the reason that his muscles are constantly being used less, and consequently less in tune. His joints, too, are perhaps less flexible.

The fact that the individual uses his muscles in a less strenuous way than before is only part of the general health question at this age. The thought of old age with its possible infirmities is like a nightmare to the mind of the person who has lived his or her first 40 winters.

The man who sees visions and dreams dreams can actually make these visions and dreams a reality if he is disposed to repeat the thought of these things too often. In order to be free from these mental afflictions he is often advised by his physician to leave his customary surroundings and go to some sanatorium, some country place of resort, where climate, people, activities and scenery are entirely new, and lure the mind into different channels.

One of the ways a person who thinks himself nearing decrepit old age may get rid of the notion is to go regularly to a competent physician and submit to a thorough examination each time.

### Other Possible Needs.

Although evil thoughs about your physical condition had better be dispelled forcibly, if need be, sometimes you find out some unpleasant truth after a physical examination. That you feel worn out, tired, dull, unambitious and almost ready to give way to your feelings, to become inactive, may be due to one, two, three, or perhaps half a dozen, causes.

It may be due to faults of your eyes that your head frequently aches, that your mind is dull, because your eyes can not see easily, and suffer from strain or other disorders.

If it is not your eyes, your ears may probably have become infected in some way or other. You may, accidentally, at some time have injured your ear drum or the internal ear, and slowly but surely you may be developing some serious infection.

Your ears may be very slow in their process of retrogression, and perhaps in a course of time it may or may not adjust itself. In the mean time, however, your general deterioration may not be due to these things at all, but to nose, throat, tongue or teeth troubles.

If you can not breathe properly through your nose you are obliged to open your mouth and let the germs fly into your system.

When you are thus compelled to breathe through your mouth, the lining of your throat may become inflamed by the rapid passage of unheated air; your tongue perhaps becomes dry and feels uncomfortable in this breathing process, and little wonder, under some of these conditions, that you think old age is approaching.

Your lungs, your heart, your scarlet blood stream may need to be examined as to their efficiency. Perhaps you need to take deeper breaths and walk either more slowly or faster in order to make the heart beat right. In the same way the blood stream must probably be given better nourishment in food and exercise, and the skin needs to be treated.

### Repairing the Faults.

Your liver has probably become sluggish, and the juices belonging to it are perhaps not doing their full function in the process of digestion, and these may need to be brought into proper condition.

If it is not the liver that is interfering with your digestive apparatus, and through that with the whole mechanism, it is apt to be your stomach or intestines that do not churn the food fast enough.

If any or several of these impaired conditions are in your mechanism your physician can discover them for you, and whether you have a specific complaint or just a general, unambitious, weak, decrepit feeling between the years of youth and old age, a thorough physical examination will dispel undue fears from your mind, or, if needed, it will lead to immediate measures for repair.

Under a well-carried-out examination of this sort you may even discover that troubles never suspected may be at the bottom of your discomfort. There may be an undiscovered rupture in some part of the anatomy, you may have faulty posture or flat feet, your spinal column may be unduly strained, or some other deformity may be present which you have never suspected.

As a result of such an examination you may have to undergo medical treatment much against your suspicions, or you may only be advised to take certain precautions, or perform certain prescribed exercises. You will probably find yourself very pleasantly surprised after treatment with plenty of fresh air, wholesome food and good exercise that in a short time you have become fairly well regenerated. After all, if there is no one or more specific troubles, these natural methods are the best cure.

# How Much Does Drying Reduce Food Weight?

The United States department of agriculture is authority for the following table which shows the number of pounds of dried fruit and vegetables secured from 100 pounds of each in the original form:

| | Pounds. |
|---|---|
| Apples, late autumn and winter varieties | 12 to 15 |
| Apples, summer varieties | 10 to 12 |
| Apricots | 16 to 18 |
| Blackberries | 16 to 20 |
| Beans | 11 to 13 |
| Beets | 14 to 17 |
| Cabbage | 8 to 9 |
| Carrots | 10 to 12 |
| Cauliflower | 12 to 14 |
| Celery | 8 to 9 |
| Cherries, pie | 17 to 21 |
| Cherries, sweet | 22 to 26 |
| Corn, sweet | 26 to 33 |
| Figs | 18 to 23 |

| | Pounds |
|---|---|
| Loganberries | 17 to 22 |
| Okra | 10 to 11 |
| Onions | 9 to 10 |
| Parsnips | 20 to 22 |
| Peaches | 13 to 16 |
| Pears | 18 to 22 |
| Peas, garden | 22 to 25 |
| Potatoes, sweet | 30 to 35 |
| Potatoes, white | 23 to 25 |
| Prunes | 30 to 33 |
| Pumpkin | 6 to 8 |
| Raspberries | 17 to 23 |
| Spinach | 8 to 10 |
| Squash | 7 to 9 |
| Tomatoes | 6½ to 9 |
| Turnips | 7 to 8 |

# Sidelights

### Congenial Company.

She was much interested in prison reform and was visiting a large prison one day.

"Don't any of your friends come to see you on visiting days?" she asked of a big burly ruffian.

"No'm," responded the ex-burglar; "they're all here with me."—Everybody's Magazine.

### Suspicious Little Girl.

A little girl went to the grocer's and asked the salesman if he had any fresh eggs.

"Yes," answered the man. "How many do you want?"

She viewed the eggs critically.

"Please, sir," she said, "these are not regular eggs."

"Certainly they are."

"No, they aren't," she persisted. "I heard my papa tell my mama there's a corner on eggs, and these are all smooth."—Exchange.

### A Strong Cigar.

Detective John McDonough, sleuthing one afternoon in a gilded cafe, overheard the following conversation:

"Whaddye gonna have?"

"I ain't takin' anything."

"Have a bracer."

"Nope."

"Take sometin soft."

"Nope."

"Will you have a smoke?"

"Yis, I'll have a smoke."

"Will it be a light one or a strong one?"

"Gimme a strong cigar; the last one I had broke in me pocket."—Youngstown Telegram.

### Another Mollycoddle.

"Do you play football?"

"N-No—that's too rough."

"Do you play baseball?"

"N-No—that's too exciting."

"Well, mebbe you tackle lawn tennis?"

"I have a weak heart."

"Rowing?"

"Too dangerous."

"Well, for the Lord's sake, as you never play, what do you do in the way of work?"

"I—I work in a powder factory."—Florida Times-Union.

### Willie and the Goat.

"When the Germans reproach the Belgians," said Colonel House at a luncheon in New York, "when the Germans talk about guarantees against Belgian aggression, I am strongly reminded of little Willie.

"Little Willie ran howling with rage to his mama.

"'That goat butted me!' he roared. 'The bad goat butted me in the stomach.'

"'Are you sure you weren't teasing it?' his mama asked.

"'No, no,' wailed Willie. 'What would I tease it for? I was only just carvin' my name on its back with my new penknife.'"—Washington Star.

### Colors Can Be Heard.

Facing the station on the sidewalk in front of her home in North Chicago, several sailors came abruptly to salute and stood for a minute or more. The woman had noticed others do the same thing on several occasions, and finally she asked one of them why he was saluting.

"Colors," replied the sailor.

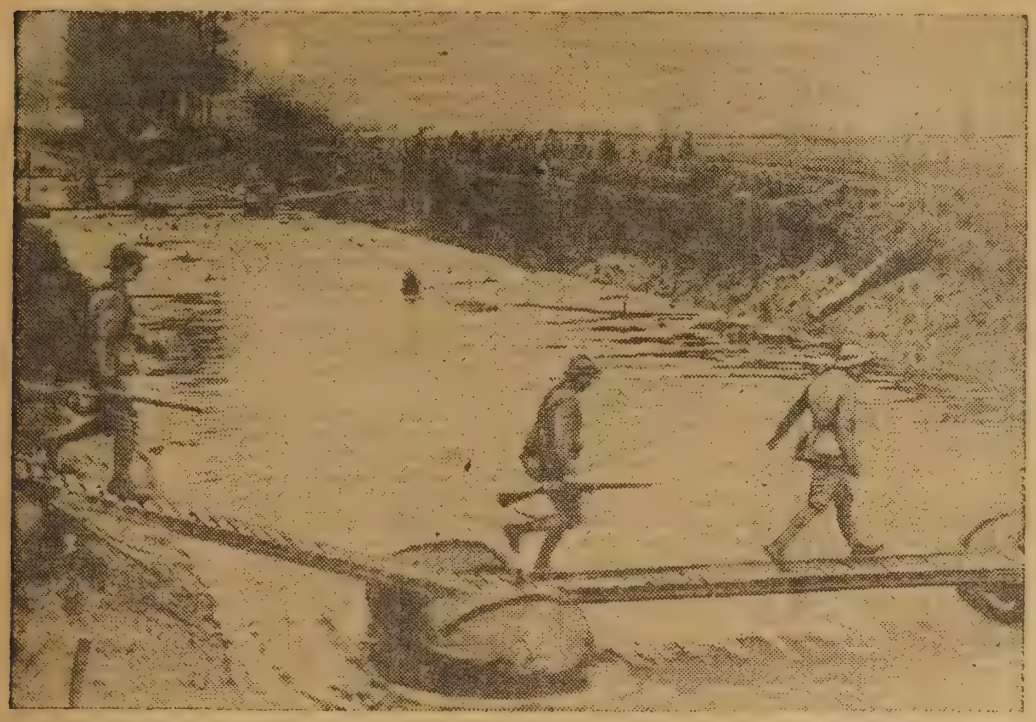
"But, where do you see the flag?" asked the woman.

"I can't see it, but I know the sound of the drum and now is the time," the sailor replied.

Her home is over a mile from the station and the actions of the sailors filled her with pride for the station and the respect shown by the men trained here in observing their duties, she says in a letter to the Great Lakes Bulletin.

# All the World's a Stage, and All the Men and Women Merely Players

## Crossing Pontoon Bridges to Attack Huns.



French troops crossing pontoon bridges to attack a German position. The bridges were constructed under a heavy bombardment which was still in progress when the attack was launched.

## American Soldiers Waiting for "Eats."



—Committee on Public Information.

A group of American "doughboys" watching an airplane overhead while waiting for the company cook to prepare the eats.

## Teaches Radio to Soldiers.



—Committee on Public Information.

This is Miss Elise Owen, a graduate of the Marconi Radio school, and who is teaching "buzzer classes" of soldiers.

## At Camp Lewis.



—Underwood and Underwood

Brigadier General Cornelius Vanderbilt, who was among the first to leave for France as a colonel in the 22d engineers, has returned. It is reported that he is to command at Camp Lewis.

## Hun Chief Retires.



Admiral von Holtzendorff, chief of the German admiralty staff, has been retired for reasons of his health. Admiral Scheer, commander of the battle fleet, has been designated to succeed Von Holtzendorff.

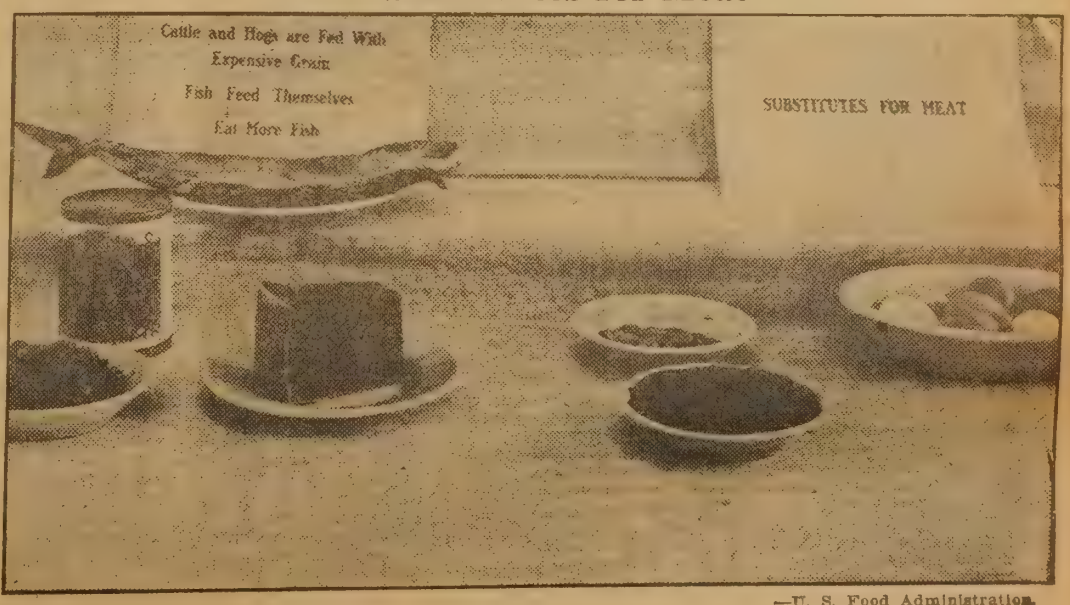
## French and British Advance to Fighting Front.



—British Official Photo.

British troops and French armored motor cars are advancing along the same road to the fighting lines. The French motor cars are of the latest type and have already proved their worth in battle.

## Use Substitutes for Meat




—U. S. Food Administration.

# Trappers of the Ozarks

**The Adventures of Two Young Trappers in the Wilds of Upper Louisiana, Now the State of Missouri.**

By LEWIS B. MILLER

Copyright, 1914, 1915, by Lewis B. Miller.

## CHAPTER XXX.

### "And Keep Your Powder Dry."

"Don't you think we could run up into some creek and hide from 'em till daylight?" inquired Jodo. "Ben and I did that all the time coming down the Osage. It worked to perfection, too."

"Yes, it worked well enough when the red fellows were not hunting for us, and didn't even know we were in the country. But once when they were after us it didn't work so well, you recollect, Jodo. In fact, if the cave we'd hid in hadn't happened to have a back door, we should have been caught in a trap."

"Think I know a way that will fool the red rascals," Boone remarked. And he proceeded to explain. Both Ben and Jodo believed that the plan would work.

Soon they and Tom, the black fellow, took the hatchets from their belts and went on into the thick woods, where they fell to chopping down bushes. When they came back, each was carrying an armful of bushes, which they laid at the water's edge, by the canoes. That done, Ben went to work and fastened the four canoes together, shapping them as nearly as he could like a floating tree-trunk.

"Now, Uncle Dan'l, that cloud's already in rifle-shot of the moon. If we are expecting to start as soon as the moon goes out, we'd better make ready. All of you step in and fix yourselves as low as you can, and as comfortable as you can, and I'll cover you up. Leave the bow of the front canoe for me."

So the old hunter and Tom found places in their own canoe, and Jodo crouched low in the after part of the canoe he commonly rode in. Then Ben, taking up bushes proceeded to cover the canoes over in the best way he could. When his task was completed, he stepped back and gazed at the result. The moon still shone, though not where the canoes were floating.

"That looks to me much—very much like a green tree that the current has undermined and dropped into the river," he said. "If it looks the same way to an Indian, we oughtn't to have any trouble passing ourselves off for a floating tree."

"Unless the Indians have tried this same trick themselves," remarked old Daniel. "And it's possible that they have—entirely possible that they have. Mighty hard to fix up any kind of trickery that some redskin hain't used before you. That's the main part of their lives—thinking up tricky schemes. Still, it's possible to outtrick even the tricksters, and maybe what we've done will fool 'em. At the same time it may not. And we must be ready for the worst."

The cloud was still rising, but had not yet covered the moon. While waiting, Ben took a walk around the island, listening intently, and running his eye over the water in every direction.

"If there are any red men around, I'm not sharp enough to discover them," he reported, on returning to the canoes.

He cut another bush or two and laid them on top of the brush-covered canoes. Later, just as the dark cloud was slipping over the moon, he returned to the camp-fire and piled some more wood on it. Then he came back, untied the canoes, and stepped in. After seating himself, he reached out his paddle and pushed off. As soon as the disguised canoes had begun to drift with the current, Ben drew some of the bushes over his head. But he could still see out in front and on each side. The canoes drifted slowly till they were in the main current, where the stream, split by the island, came together again. After that they moved faster.

Now Ben, in the forward end, sat looking and listening. He was looking for snags, and both looking and listening for Indians. He was glad that all the snags leaned down stream, and were not so dangerous as they would otherwise have been.

Half an hour passed, and the canoes were still drifting with the current. Ben was trying to imagine what the Indians were doing. Soon after the moon had ceased to shine, they had approached the island, he inferred. Just how long it would take them to discover that the camp-fire was deserted could only be guessed. But as soon as they had convinced themselves of that, they would paddle away down stream in pursuit of the elusive white men. When they overtook the disguised canoes, then would come the test as to whether the disguise was complete or not.

The clouds were heavy, but the moon behind them gave some light. At length a slow drizzle began to fall.

"Ben, do you and Jodo recall what Oliver Cromwell said to his men? It was 'Trust in the Lord, my boys, and keep your powder dry!'"

"That's excellent advice, especially for such a night as this, and on such a river as this," Ben answered.

"Yes. A good many men have neglected it to their sorrow," declared the old pioneer.

The rain continued to patter down slowly, lightly. The four in the canoes sometimes whispered together and sometimes drifted in listening silence. At length they began to hear the dipping of paddles. In time, gazing out through the brush, they could make out a canoe that was overtaking them. (As the canoe came nearer, they could see several Indians in it.)

Rapidly the paddled canoe gained upon the drifting ones. As it passed, only about 30 yards away, the Indians must have seen the white men's hiding-place. If so, they failed to suspect the deception, and paddled straight ahead. Gradually their canoe gained till it was lost to sight and hearing.

"Our brush-pile must look like a floating tree, all right," Ben remarked, as soon as it was safe to say anything.

"How long will they keep on down the river, do you reckon?"

"A right smart piece, Jodo—a right smart piece, I'm guessing," the old man answered.

"I'm wondering if they'll come back at all," Ben said.

"They may, and then again they mayn't," was Boone's opinion. "But we'd better take it for granted that they will, and lie low and keep still."

"The rest of you can go to sleep if you want to," Ben told his fellow-travelers. "I'm keeping watch. If anything out of the ordinary occurs, I'll wake you."

"No use to tell Tom that," chuckled Boone. "He's asleep already. If there's one thing Tom can do as well as the best, it's to sleep. He can always sleep when there's half a chance."

And Ben answered: "Let him sleep as long as he doesn't snore. Snoring would be dangerous when a canoe-load of Indians is passing. He's hard to wake, I suppose.

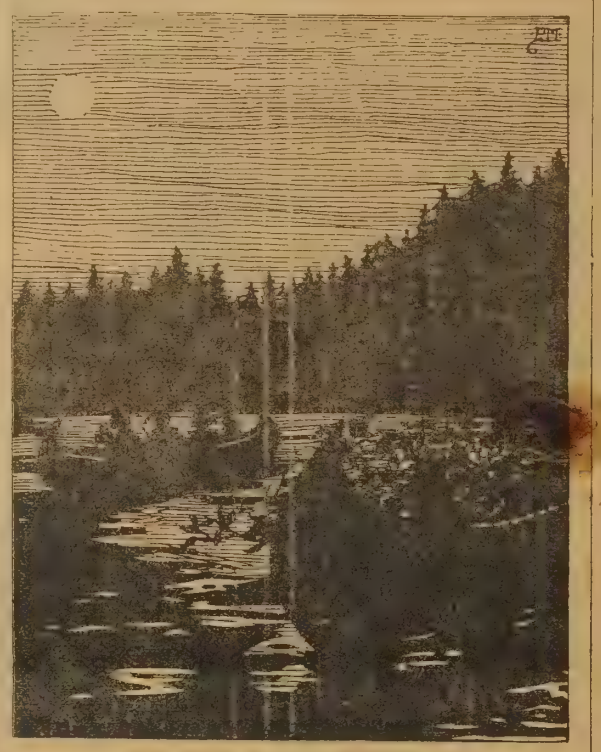
"No, that's not the case. He falls asleep easily, and he wakes almost as easily," the black fellow's master explained. "It won't be any trouble to wake 'im if we need 'im awake. Let all sleep who can. I know this treacherous old Missouri too well to sleep on it."

For a good while they drifted on. At length Ben heard familiar sounds. Looking out through the brush and drizzle, he could dimly distinguish a canoe approaching. Gradually it grew more distinct, till he could see the paddling Indians in it. With a word of warning, little more than whispered, to the others, he awaited their coming.

This time the canoe passed almost within reach of some of the leafy branches. Ben, watching, held his breath, as did the others. The savage paddlers could be seen glancing toward the brush-covered canoes. But evidently they suspected nothing; for they paddled on up the river. When the canoe was out of hearing, all those in hiding breathed freely again.

"Our little trick is doing the work all right," whispered Boone. "Twice they've passed close enough to scent us, almost; but they're too stupid to smell a mouse. That's better for us—and for them, too."

Before long the party heard paddles, and knew that



**Disguised as a tree, they escaped.**

another canoe was moving up stream. But it was farther away and, the moon probably having set, they caught not so much as a glimpse of it. After waiting a few minutes, the old frontiersman said:

"I've been acquainted with this river long enough to feel safer anywhere else than drifting down it on a black night. So if you boys don't mind, we'll steer over to land and tie up."

"I'm certainly willing, Colonel Boone," agreed Jodo.

"All right! We'll feel our way over to land if we can," Ben said, as he put down his rifle and took up his paddle. He had to lay back some of the bushes before he could use the paddle. Even then, so dark was the night and so black the river, they found no little trouble in getting the four canoes over to the bank.

Here they made fast to bushes. Then, feeling safe for the night, they covered their canoes over and went to sleep in them.

They all fell asleep; but both Boone and Ben promised to sleep with one eye and both ears open. Some wolves came close, and by their howling waked the sleepers once or twice. But if any more red men passed up or down the river, they were not heard by the sleeping white men. The slow rain pattered down all night long.

When daylight came the rain was still falling. The party remained where they were and under shelter till it had ceased. Then the old hunter and black Tom separated their canoe from the others and paddled out into the stream. Ben and Jodo followed.

After drifting a mile or two, they noticed a sand-bar rising up from the middle of the river. It was not very large, but there was some driftwood on it. And on the bar they stopped, kindled a fire and cooked their breakfast. While cooking and eating, they talked over the events of the night before.

"What do you think, Colonel Boone? Is there any danger that the Indians will attack us today—attack us out on the river?" inquired Jodo.

"Well, such a thing is possible, of course. And we've got to be on our guard against it. That's not the redskin's way of doing things, though. He delights in tricks and stratagems. But after failing to capture us last night, and knowing that we'll reach the settlements by tonight, they may get bold enough to make an open attack. We may see several canoes putting out from the bank at any time, or bearing down on us from up the river."

"An' ef dey comes—ef dey does come, what we gwine der do, massa?" asked the slave.

"Well, we'd better get our four canoes all in a block, with the ones we're in on the inside. Then we must rest our guns across the outer canoes and do our best to fetch a redskin every time we pull trigger. If we do some pretty straight shooting, they may get out of heart and beat a retreat."

"And a very important thing, it seems to me, is not to let them take us by surprise," Ben remarked. "If some of them should be in hiding along the bank, they could paddle out to us pretty quickly. And we want to keep an eye over our shoulders. They may come down the river as fast as they can paddle."

"That's what I think they'll do—come down the river after us," said Jodo. "The last we saw and heard of the canoes, they were on the way up."

"It seems rather likely that they're somewhere up there yet," remarked old Daniel. "At any rate it will be very safe for us to keep a constant lookout to the rear."

When the meal was ended, the party, leaving their camp-fire burning, got into their canoes and paddled away down the muddy stream.

"We want to keep together—close together," the old hunter said. "And if a fight comes on, we want to make our fight together, with all our canoes in a block, so that they can't drift apart while we're using our rifles."

While the two parties were paddling along side by side, Boone narrated his experiences on the present hunting-trip. In turn Ben and Jodo related some of their own exciting experiences.

"Well, you boys certainly have been putting in some hard licks since you turned your backs on the settlements," was the old pioneer's comment. "Even been tied to the stake, eh, Benoni?"

"Tied to the stake I certainly was, Uncle Dan'l. And I got just the least bit scorced before that squaw could get the fire scattered."

"Benoni, I've been knowing Osages for a good many years; and my opinion is that that whole burning-at-the-stake business was a put-up job on you. I don't believe they meant it."

"That's exactly what I suspected at the time," Jodo now put in. "I believe the whole big show was got up to give that fat squaw, Watermelon, a chance to prove her undying love for Ben, and to tie to 'im for a husband."

Ben made a wry face. "If that's what it was all done for, it was only time wasted. Watermelon didn't get anybody for a husband by that, and certainly not Strong Arm."

"But for some things at home, I wouldn't have been surprised at Ben's getting into a love-affair with an Osage squaw. You see, Colonel, everybody in our neighborhood knows that Ben is expecting to be my brother-in-law some day. And yet, in the face of all that, and with me there looking on, he must go and trifle with the affections of a poor, unsophisticated—"

Ben turned quickly. Now look here, Jodo Henderson, you let up on all such jokes as that, or kersplash into the Missouri river you go! I know Rachel, and I know I'd have as good a chance to get her after drowning her brother as I would after engaging in a flirtation with a red Indian. You know as well as I do that I had nothing to do with that. I can take pretty nearly any kind of a joke. But if you go to joking about that, you'll make Rachel think there's something in it. And that would mean trouble for me."

Old Daniel's eyes twinkled. "Not well to stir up the women-folks that way," he declared. "Now I could tell you a little experience of mine—"

"Lawsy mussy, massa, jes' looky yanner—jes' looky back yanner!" suddenly burst out the frightened Tom, his eyes rolling in his head with terror. "Dey's a-comin'—de Injuns is a-comin', a while lot of 'em! Dey'll hab us yit! Dey's jes' nachelly boun' ter git us!"

At this startling outburst all looked up the river, and Ben leaped to his feet.

"There's somebody coming in canoes—a swarm of somebodies!" he announced.

All the others kept gazing back. "Ben, your eyes are better than mine. Can you make out for certain who they are?" questioned Boone, anxiously.

"Yes, I'm pretty sure I can—can make out that they're Indians."

"I know I can!" declared Jodo.

"Then we'd better be getting ready for a hot fight!" said the old frontiersman, glancing around in search of a suitable place to fight from. "And the Lord help us if all that bunch comes at us at once! Here's where we've got to trust in the Lord."

"Hadn't we bettah git ter lan' quick—quick as ebber we can, an' hide ou'se'v's in de braish?" asked Tom.

"Yes, it seems to me any kind of a hiding-place would be better than out here on this bald river," said Jodo.

"I see a cliff down yonder a right smart piece," Boone was gazing down stream. "Looks to me like it overhangs the river. If it overhangs enough that the redskins can't shoot down on us, or drop rocks on our heads, we'd better get under that, with the cliff to our back and the canoes in front of us, and make our fight there."

To this Ben agreed, and they all paddled on as fast as they could. On coming to the cliff, they found that its top overhung several feet. There was an eddy under the cliff, and the canoes would not have to be tied to keep them from drifting on.

The party paddled under till against the rock-wall, then they got the canoes they were in against the rock, and the other canoes in front, as a sort of breastwork.

"Fresh priming, boys! Fresh priming!" suggested the old Indian-fighter. "Little damp on the river anyhow. And we've passed through a rainy night since any of us fired a shot. Don't forget. It's 'Trust in the Lord, my boys, and keep your powder dry!'" And, suiting the action to the word, he emptied the pan of his rifle and refilled it from his horn.

(Continued on page twenty seven)




# Cottage Cheese

## Expert Tells of Ways to Use It

By GRACE P. FISCHER.

Mrs. Hallie K. Davis, representing the department of agriculture of the United States government, closed a week of lecturing and demonstrating in Portland, Ore., July 27. She is a cottage cheese expert and enthusiast. She was assisted in her work by Professor E. B. Fitts of the Oregon Agricultural college and Miss Alice Joyce.

During the week she gave addresses and demonstrations before the Progressive Business Men's club, Rotary club, Ad club, Commercial club, Y. M. and Y. W. C. A., Liberty temple, Meier and Frank auditorium and at the city hall. She addressed thousands of housewives during the week.

"Why does my cheese get leathery?" This is a question asked by nearly every woman. Mrs. Davis' answer is, don't get it too warm when heating.

The campaign was for the purpose of increasing the production and consumption of cottage cheese; to use up the skim milk that is now wasted.

The Portland Demascus creamery is manufacturing cottage cheese from 4500 pounds of skim milk every day. Three other creameries have ordered machinery.

Milk left over in the homes can be made into good cottage cheese by either of the following methods:

**Sour milk method**—The milk should be set in a pail or can, preferably with straight sides, and warmed to 75 to 80 degrees Fahrenheit and held at or near this temperature until a firm curd is formed. If a little clean, sour milk is added to the milk when set, the curd will form more quickly. When this is done at night the milk will usually be curded in the morning. The milk should not be disturbed during the process of curdling. As soon as a good, firm curd is formed it should be cut into one-inch squares with a long-bladed knife and heated slowly to a temperature of 100 degrees, stirring occasionally, as the curd will have a tendency to mat together. A higher temperature will make a dry cheese that will be inclined to be tough. Temperature should be maintained for 15 to 30 minutes. The cheese should then be poured into a cheesecloth sack or into a piece of draining cloth thrown over a pail. In 15 to 20 minutes the larger part of the whey will have drained away. The draining process can be hastened by manipulation of the cloth so as to move the cheese from side to side. Do not squeeze it. When the curd is rather firm and when it has ceased to flow, it is ready for salting. This should be done to taste. A gallon of milk will make about one and a half pounds of cheese, and a teaspoon of salt to this amount will suit most tastes.

**The rennet method**—Cheese made by this method has a finer and more uniform texture and requires less time and attention in making. The milk, if sweet, should stand for five or six hours at a temperature of 80 degrees. At the end of this period dissolve about one-eighth of a junket or rennet tablet in a little cold water and add to the milk. This amount is sufficient for one gallon of milk. If the milk is sour to the taste or just on the verge of turning, the milk should not stand and the junket should be added at once. As soon as the curd is firm the process is similar to that given for sour-milk method, except that no heating is necessary and the cloth strainer must be of finer texture because of the fineness of the curd. After draining for a time, it is well to hasten the process by folding the curd in draining cloth and lay on draining board with a weight on top.

Cottage cheese is judged by flavor and texture. It should have a clean, mild acid flavor and a texture that is smooth and free from lumps. Flavor is governed largely by quality of milk and tetxure of process of making.

Cottage cheese can be kept for several days if stored in a cool place in glass or earthenware vessel. It can be used plain, with cream, or in a variety of combinations. Following are some of the receipts given by Mrs. Davis:

**Cottage cheese omelet**—Two eggs, one-half teaspoon salt, three rounded teaspoons cottage cheese, one tablespoon chopped pimentos, two tablespoons milk, one-eighth teaspoon soda. Beat the yolks and whites of the eggs separately. Add to the yolks the salt, the milk and the cheese, with which have been blended the pimentos; finally fold in the stiffly beaten whites; pour into a hot frying pan in which has been melted about one-half teaspoon fat. Cook the omelet slowly until the egg has set, place in the oven for a few moments to finish cooking and fold over the center. Garnish with parsley; other seasonings may be used, such as chopped parsley, green peppers or minced ham.

**Cottage cheese and nut loaf**—Two cups cottage cheese, one cup chopped nuts (use local nuts if possible), one cup cold left-over cereal (any kind), one cup dry bread crumbs (corn or victory bread), two teaspoons chopped onions or one-half teaspoon onion juice, one tablespoon fat, salt, pepper, one-third teaspoon soda or more to neutralize acid, poultry seasoning or mixed herbs, Worcestershire sause, or kitchen bouquet if desired. Mix all ingredients together thoroughly and bake in a buttered pan in a hot oven till top and sides are well browned over. Turn out on a hot platter. Serve with a brown or tomato sauce if desired.

**Variations**—This loaf is particularly good made with peanuts. Substitute for the cup of chopped nuts in the rule above, two tablespoons of peanut butter and one-half cup of coarsely chopped nuts and season with one-half teaspoon of ground sage or with one teaspoon of mixed poultry dressing.

Where walnuts are used pimentos make a good garnish.

**Cottage cheese pie**—One cup cottage cheese, two-thirds cup milk, two egg yolks beaten, one tablespoon melted fat, salt, one-fourth teaspoon vanilla. Mix the ingredients in the order given. Bake the pie in one crust. Cool it slightly and cover with a meringue made by adding two tablespoons of sugar and one-half teaspoon of vanilla to the beaten whites of two eggs and brown it in a slow oven.

**Cottage cheese loaf No. 2**—Two cups cottage cheese, one cup left-over cereal, one cup of bread crumbs dried in oven, four tablespoons peanut butter, one-half cup chopped peanuts, one teaspoon onion juice, a pinch of sage, salt, cayenne and paprika and liquid, if necessary to mix. Form into a loaf and bake in a hot oven 20 to 25 minutes or until brown. Turn out on a platter. The cracklings left from tried-out fat or suet may be used in place of the peanut butter.

### Veal Pot Pie.

Have the butcher cut two pounds of the scrag end of the neck into suitable pieces for stewing. Cook and just before it is done add one quart of potatoes, cut in quarters, one onion grated, two carrots, cut in dice. When done, lift the meat and potatoes to a baking dish. Thicken the gravy slightly, seasoning with salt and paprika to taste. Cover with crust of plain pastry in lattice style—crisscross. Bake in hot oven for 25 minutes.

### Breadcrumb Gingerbread.

Soak in a cupful of sour milk 1½ cupfuls of breadcrumbs. When the crumbs are soft, put them through a colander. Now add one cupful of molasses. Thoroughly mix and sift together one cupful of flour, one teaspoonful of soda, half a teaspoonful of salt and one-quarter of a teaspoonful of ground ginger. Add these to the wet mixture, stir it all thoroughly. Bake in a moderate oven.

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## By WINIFRED WORTH



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**Second Row**—At top of 8th cft. make 3 ch., 1 dc., 4 ch., 1 dc., 3 ch., 1 dc., 1 cft. Make 1 cft. and catch with sl. st. to top of 6th cft.; repeat to end of row. Ch. 12, 1 cft. in 6th st. from needle—repeat first and second rows until yoke is desired size.





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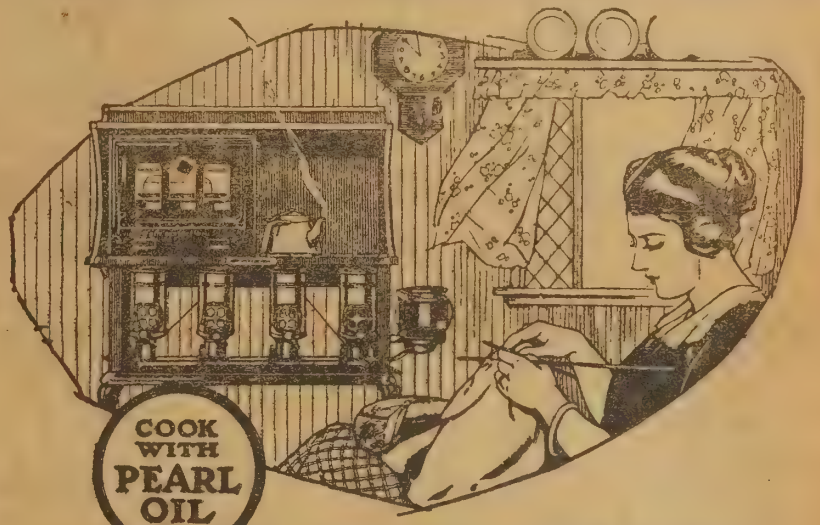
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## TRAINING CHILDREN.

### First Learn to Conquer Yourself.

In the training of children there is nothing that will take the place of religion, nothing that will give us the high standard of the Ten Commandments. Every child should be made familiar with this moral code and its meaning explained.

Teach the child that God loves good boys and girls; that if they always obey their parents and try to do what is right they will grow up into useful men and women and be able to do lots of good in the world. Tell them the world needs good men and women to help stamp out the evil and make the world a better place to live in.

Above all, teach them to be unselfish. Selfishness is at the bottom of more misery and crime than nearly everything else put together. Selfishness results from ignorance of the sufferings and trials of others. Children can be taught unselfishness by teaching them to help others. Teach them to be kind to old people. Take them with you to visit the sick and unfortunate.

Teach children to do all their work well and to finish each job before starting others. Teach them to be clean and orderly because it pleases people to see them neat and clean.

Praise them for work well done and don't find fault with them continually. Always love them no matter what they do.

Teach children to tell you everything and do not punish them for what they tell you, no matter what it is. Tell them their mistakes kindly and ask them to do better next time. When children quarrel or fight and you are not sure who is to blame, separate them and make them play alone till you think them sufficiently punished.

Never force a child to do something against his will when in a fit of temper. Wait till he is in a better humor, then ask him kindly why he refused to do as he was told; then give him another chance to obey. If you do this in a loving spirit and with the child's best interests at heart you will be rewarded by his repentance and obedience. It is absolutely necessary for you to conquer yourself before you can expect to gain good results in training your child.

Each child should have some little, regular work after they are 5 or 6 years old. As they get older it should be gradually increased. Teach them to love to do work well. Tell them that people are useful to the world only as they can do good work. Teach them that the idlers are in people's way and a misery to themselves.

When in doubt as to how to proceed in a difficult case, ask God to guide you. Let the Bible be your daily guide and friend and you will be richly blest.

E. L. D.

### Cabbage Salad.

Scald one cup of milk in a double boiler, add one tablespoon of flour mixed to a smooth paste in a little cold milk, stir constantly until thickened, then add the beaten yolk of one egg and one large tablespoon of butter. Cook until the egg is set, add one-half cup of hot vinegar, stir until well blended and pour immediately over finely shredded cabbage sprinkled with sugar, salt and pepper. Serve cold if desired.

## Cans Juice for Jelly

To the Editor: I have found it of great advantage to can the juice of fruits for jelly and make the jelly as you want it in the cooler weather. Prepare the juices as for jelly, heat to boiling point and can in sterilized jars, just as if you were doing fruit, only do not add sugar. Any time you want a little jelly, open a jar of juice, add the required amount of sugar and you have nice, fresh jelly.

I also save the apples which drop by making into apple sauce and canning. It is a great advantage to have them to use when apples are high in the spring and will not make as good apple sauce.

Another saving is to put all parings of vegetables and fruits, with leaves of cabbage and lettuce and even carrot tops, cut up, into a pail or kettle and cook on back of stove until noon, when the mess is dried up with shorts and bran and is ready to be fed to the chickens. If there is not enough to fill the pail, I put in some oats, also all of the table scraps. This is a great saving of the high-priced wheat for every feeding.

Not a scrap of bread is wasted. Any extra crust or small piece of bread, cracker or shredded wheat is dried in the oven, then ground and placed in baking powder cans, with holes in lid, to have ready for dressing, or for top of fish pudding or other dishes where crumbs are required.

A good omelet (which is saving of eggs) is to crumb one slice of bread in a cup, fill cup with milk, let stand two or three hours, or over night if wanted for breakfast. Place a little butter in frying pan, add two beaten eggs to soaked bread and pour in pan. Set in oven for a short time, or until browned, then serve on hot platter. This is enough for four people.

A friend of mine cans beans this way: Prepare as for the table and cook until tender, then add a little salt and can in sterilized jars; just before placing cap on jar add one tablespoonful of boiling vinegar for each quart. The vinegar does not taste, when the beans are opened. I have never tried this, but have eaten the beans, and they are fine. We always can a great many beans in our cannery, but use the pack method in glass jars, which we have always found successful.

MRS. FLORENCE DICKINSON.
Oswego, Ore.

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**Conquering Villa.**

Dear Aunt Nellie: I am 12 years old and am in the eighth grade. My brother, George, is 10 years old. We are living with Mr. and Mrs. Roberts. Our father and brother Bill are in Alaska. Our mother is sickly and not able to take care of us. We have two sisters, one is going to school in Hoquiam and one is in Seattle. This is a beautiful place here on South bay, just across from the whaling station. We can see the whale boats bringing in whales every day during the whaling season. We often go clam digging. I dug some for the cannery and made from 50c to $3 on a tide. One can only dig when the tide is low. We gather cascara bark occasionally. Mrs. Roberts has some rabbits. She gives George and I equal interest in them if we attend to the feeding. Mrs. Roberts helped us make pens for them. We help milk the cows and bring in the sheep. We have quite a variety of work. I want to tell you how I helped to conquer Villa last summer. He had given us a lot of trouble destroying our crops and breaking our fences. One day Mr. Roberts caught him and put a rope around his neck, then we tied his feet and Mr. Roberts strapped him up to a post and put a rope on his jaw and Mrs. Roberts pulled back on the rope. I took a board and put on his head between the board as a pry. Brother George held back the rope on his legs. Mr. Roberts took some heavy wire and the pinchers and put the wire through his nose and twisted it into a ring. I tell you he kicked and squealed, but we had him fast. After Mr. Roberts got him fixed we turned him loose, and he ran for the woods and hid away and sulked for several days. He kept his nose out of our business for some time afterward. I suppose it will be hard for you to believe that Villa was captured. You will believe me though when I tell you that Villa was Mr. Roberts' Duroc boar hog. I think he was properly named, for he was always causing trouble. I enjoy reading the children's letters and Joe Ashlock's stories. Mrs. Roberts says she can tell some bigger stories of frontier life than he can. She and her brothers took a homestead on the Nez Perce Indian reservation in Idaho. Her name was Mary Finney before she married. She said if I would send this to The Farmer there would likely be lots of people read it who knew her. Give my love to Joe Ashlock.—Herbert E. Nye, Westport, Wash.

**Keep People From Killing Birds.**

Dear Aunt Nellie: May I become a cousin? This is the first time I have written to the Corner. I will be 11 years old January 9, 1919. Have I a twin? If so I wish he or she would write to me. I like to read the Children's letters. My father takes the Farmer. I have one brother. His name is Boyd. My half sister is married. Her name is Vay. We have three horses. Their names are Bob, Babe and Pet. Bob and Babe are our work horses. Pet is our pony. I like to ride her very much. My little cousin has a Shetland pony. His name is Mike. We have two cows. Their names are Maud and Sadie. I read in one girl's letter that their cow's name was Louise. That is my name. I have brown hair and brown eyes. I know how to knit and crochet. I got a crochet bag and a dress for my birthday. I have joined the Liberty Bell Bird club. The club is to keep people from killing birds. I am going to buy thrift stamps. My friend is writing, too. Her name is Helen Stanley. We have a dog named Jack. He taught me how to walk. He would take me by the arm with his teeth and I would not fall.—Louise Hannah, Box 52, R. F. D. 1, Mica, Wash.

**Play Games of All Kinds.**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I wrote once and I never saw my letter in print. Papa has 23 horses and six cows and five calves. We have 40 chickens. Mamma and I planted a garden. I have a brother and half brother and they are both in school. My own brother is in the eighth grade and my half brother is 7 years old and in the third grade. He is as tall as I am. I am 11 years of age. I am four feet and three inches tall. I have dark hair, blue eyes and summer freckles. I had a little schoolmate to come and stay all night with me last Saturday. Her name is Verona Faulkner. We had lots of fun playing games of all kinds. My teacher's name is Miss Larsen. She is a good teacher. I like her fine. I can knit, tat and crochet and sew on the machine. I am taking lessons on the organ.—Royaline McMurry, R. F. D. 1, Bickleton, Wash.

**Fill Penny Slips.**

Dear Aunt Nellie: This is my first time to write. I am 12 years old and my birthday is March 24. Have I a twin? If I have I would like to hear from her or him. I have some freckles, brown eyes and brown hair. I am four feet 11 inches tall. Beulah Garner is my chum at school. I have three sisters and two brothers. My sisters' names are Ethel, Lola and Sylvia. Ethel is 19 years old, Lola is 17 and Sylvia is 10. My brothers' names are Clarence and Harold. Clarence is 15 years old and Harold is 5. I live on a 160-acre farm. Papa has two horses, four cows, two calves, nine pigs and mama has 17 old chickens and 29 young ones. I have joined the junior Red Cross. Our school has knitted five afghans. We had a Red Cross sale and got over $400. This money will help the soldiers. The school also filled penny slips. Each slip was a foot long and had 16 pennies to each foot. We filled enough to amount to $4.48, which went to help the Belgian children who are suffering. There are some places not far from here that are nice to see. One place is where the people here get their electricity for their telephones. They call it the powerhouse. There is a large falls and a bridge down below it. As we crossed the bridge the water looks white, is a flume where the water pours down out of the irrigation ditch into the bridge the water looks white. There other falls and rapids, but they are not so pretty.—Goldie Smith, R. F. D. 1, Box 41, Rice, Wash.

**Will Raise a Pig.**

Dear Aunt Nellie: My mother takes the Farmer and I enjoy it very much. May I join your Corner? I am nine years old and in the fifth grade. I am sun tanned, have brown hair, blue eyes and very red lips. My eyelashes are long and brown. I have four sisters, but one is dead. My sisters' names are Rebecka, Dorothy and Sara. I will tell you the books I have head: The Lamplighter, Alice in Wonderland, Little Prudy, Grimm's Fairy Tales, Camp Fire Girls, English History, Old Testament and Jan of the Windmill. I am very fond of reading and one of the reasons I wish I lived in the city is that they have libraries. There are other reasons, too. I have 12 thrift stamps and I am going to have five or six war savings stamps this year and a $50 Liberty bond. You see, I am going to have a pig this week because I have joined the pig club and I am going to pick huckleberries and gooseberries this year. Huckleberries grow a lot in Lake Bay. I wish to be enrolled.—Anna Aronin, Lake Bay, Wash.

**George's Dog Is Cross.**

Dear Aunt Nellie: This is the first letter to the Children's Corner, and I hope it will not be the last time I write. I was 10 years old the second of June. Have I a twin? If so, I wish she or he would write to me. We have nine cows and four calves. We have four horses. Their names are Dick, Balse, Bonnie and Bessie. I have a puppy. His name is Pedro. I have a pet hen. Her name is Ruth. My brother nice. I have two brothers and one sister. Her name is Ruth. My brothers' names are Jay and George. I have a book of thrift stamps and enough money for one more stamp. My brother Jay has a bond and so has my papa. My brother George has a dog and it is cross. We have 30 chickens and two ducks. I do not go to schol. Mama teaches me at home. I am in the fourth grade. We have a car. I like to ride in it. We have a homestead. My papa and Jay work at a mill. I am trapping gophers and squirrels. For gophers I get 10 cents, and for squirrels, five cents.—Miriam Miller, Addy, Wash.

**Pretty in the Summer Time.**

Dear Aunt Nellie: I have been reading the letters right along and like them very much. This is the first time that I have written to the cousins. May I become a cousin? I am 15 years old and my birthday is June 21. Have I a twin? If so I wish she would write to me. I would gladly write to her. We live about one mile and a half from school and I am in the eighth grade. We live on a 220-acre farm. We have three horses. Their names are Dell, Fly and Muggins. I have a rabbit and her name is Fluff. She has four baby rabbits. I have a bantam hen. I have three sisters and one brother. My sisters' names are Alice, Rosie and Velma. Alice is older than I am and Rosie and Velma are younger. Dornie is my brother and he is 10 years old. We live on the foothills of the Cascade mountains. It is very pretty up here in the summer time.—Lena Nowlen, Alpha, Wash.

**Edith Joins the Cousins.**

Dear Aunt Nellie: I have never written to the Children's Corner before. I am 15 years old September 19. I have real black hair, blue eyes and a fair complexion. I am 5 feet 7½ inches tall. I am in the eighth grade. Have I a twin? If I have I would like to correspond with him or her. I have three sisters and three brothers. My sisters' names are Geneva, Frances and Esther. My brothers' names are Oscar, Edgar and Orvall. We have a great number of cows and horses. I have one horse of my own. Her name is Mollie. My father owns 1789 acres of land. I belong to the Red Cross. I have knitted eight wash cloths for the boys. My friends, Ellen Elsensohn and Mildred Riley, are writing, so I thought I would write. May I join the Children's Corner? —Edith Marie Van Ausdale, Pomeroy, Wash.

**Sacqualmie Falls Are Beautiful.**

Dear Aunt Nellie: We take the Farmer and I saw such interesting letters from the other cousins and I thought I would write. I hope this will not be my last. I am 12 years of age, my birthday is May 20. Have I a twin? If so I wish she would write to me. We are going on a picnic Saturday to the Snoqualmie Falls. It is a beautiful falls. I hope all the cousins have seen it or could that have not. I have two sisters and one brother. My oldest sister is married and has a baby girl. She is awfully cute. Her name is Elberta. My other sister's name is Elnora. She is 17 years old. My brother's name is Howard. He is 13. He is in the same grade as I am. My oldest sister's name is Elsie May. We are trying to start a junior Red Cross and I am going to join. I think this war is a terrible thing. I have no relatives in the war. We live on a small farm about 12 acres. We are milking four cows. Their names are Pansy, Daisy, Rosy and Reddy. We also have one heifer named Violet and two calves. I have three pet cats. Their names are Whitefoot, Sally and Tommy. The condensery where we were shipping milk burned the other day, so we have to separate now. It was a terrible thing. I will try and write again soon. I hope Aunt Nellie and the cousins are well.—Bessie Violet Moser, R. 1, Pleasant Hill, Tolt, Wash.

**All the Flowers She Wants.**

Dear Aunt Nellie: This is the second time I have written to the Corner and I hope it will not be the last. Papa has rented 260 acres. Papa has 260 acres to seed next fall. I was very glad to see my letter in the Farmer, so I thought I would write again. I have another little puppy dog. His name is Purel-Curle, so he has a very nice name. I have moved to another place now and I do like it better now, after I moved. There are a let of flowers here, so I can have all I want. I am very glad for that. I have lots of fun at home playing with the two dogs and the cat. I hope all the cousins are feeling fine. One day I went home and my puppy and I saw a lizard and I made my puppy chase it and so he did and the lizard went down in a hole. A snake came and it was about to bite me, but I surely did kill it. I have seen six snakes and they are all the same kind. I have planted some flowers. They are coming up fine. They are house plants. I do love house plants and outside flowers, too. I like sunflowers awfully well. I have planted candytuft and snap-dragons. They are all up and I think they are very pretty. I wish some of my cousins would write to me. I will answer their letters as soon as I get them. I hope Aunt Nellie will enjoy my letter.—Hilda Knutsen, Ringold, Wash. (Aunt Nellie did like your letter, dear. Come again soon. Aunt Nellie.)

**Brother's Fighting in the Trenches.**

Dear Aunt Nellie: We drill at our school. My brother is the captain. We have a Junior Red Cross. We meet every Friday and make gun wipes, knit and sew some times. I hope every one is helping Uncle Sam and our boys over there. My brother has been in the trenches for about three weeks now. I think all the people that are not helping this war now will be pretty soon, don't you? I have two Aunt Nellies now, counting you. My other Aunt Nellie is in Alaska. She is far away. My uncle is there, too. I did have an Uncle Sam, but he died. I am glad school will soon be out. I hope the Corner will grow bigger next time I write and I hope every one and Aunt Nellie, too, will like my letter.—Elzina Rogers, R. F. D. 2, Box 12, Arlington, Wash. (We do like it, Elzina, come again. We are proud of your brother. Aunt Nellie.)

**Knitting for the Red Cross.**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I enjoy reading the letters very much. I was 14 years old March 8. Have I a twin? I was in the eighth grade last term. I haven't heard from my examinations yet. I am knitting for the Red Cross. I like to knit. Do you? I own a Liberty bond. I joined the Red Cross and I gave $2 to the Red Cross. I have a pet dog whose name is Teddy. He is a big yellow dog. We have five cows and he helps chase them from the pasture. If I have a twin I would like very much to hear from her or him.—Elizabeth Anna Green, R. F. D. 3, Box 19, Odessa, Wash.

**Two Brothers in War Service.**

Dear Aunt Nellie: I hope you are well. May I become a cousin? I have two brothers in war service. One has gone to Texas and one is at Tacoma Broadway. Have I a twin? If I have I wish she or he would write to me. I am 11 years old and my birthday is December 17. I will tell you some riddles. In in round round does that thing and then sits down, what is it? I know the answer to one riddle. It is Milwaukee. My name is not Tracy but Teresa—Teresa Germont, Route 1, Greenacres, Wash. (Aunt Nellie is sorry she has been misspelling your name, Teresa. Come again. Aunt Nellie.)

**Nine Little Chicks of Her Own.**

Dear Aunt Nellie: This is my first letter to the Children's Corner. I am 7 years old. My birthday is February 17. I help mama plant garden. I have nine little chickens, all my own. Mama has 78 little chickens. I have one sister and one brother. My sister's name is Ona and my brother's name is Wallace. Sister and I belong to the Junior Red Cross.—Martha Floch, Hooper, Wash.

**Ethel Is a Red Cross Helper.**

Dear Aunt Nellie: This is the first time I have written to the Corner. May I join the Corner? I was 13 years old June 15. I have five brothers and two sisters. My brothers' names are Clyde, Ralph, Paul, Howard and Harley. My sisters' names are Lottie and Evelyn. Clyde, my oldest brother, has to go to war some time this summer. Harley is my youngest brother. He is 2 years old. I wish the war would end soon, but I don't want Germany to win. We had a Junior Red Cross as long as school lasted. It won't start until school begins again. I helped knit wash rags, piece quilt blocks, sew rags together to crochet mop cloths, and made a comfort kit for the Red Cross while school lasted. I have one little nephew. He is four months old. His name is Virgil Louis Johnson. I can tell the answer to one riddle that Ida Shaw sent. The answer is Milwaukee. I will give some riddles. What is it that is round at each end and high in the middle? What is the most bashful thing in the world? Why is a host like a riddle? Big at the bottom, little at the top, a thing in the middle goes flippity flop. What might the man who raises and lowers the windows in a bank be called? I will write again and tell the answers to my riddles. Ethel Faye Kellogg, R. F. D. 1, Baird, Wash.

**Works in the Field.**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. Our school closed May 24. I was glad when it did because my friend and I have fun swimming at Salmon creek. We start in the morning and take lunch and stay all day. It is lots of fun. My birthday was April 27. My brother's is May 30. There is nothing to do till June. I'll have to do lots of work in the fields in the summer. I don't like to, but I have to with my brother, Clarence. He is 12 years old, but will be 13 May 30. I have a sister and brother married. I am the baby of the family. I have a sister. Her name is Rhea. She is 14 years old. Have I a twin? If I have I would like them to write to me or any of the other cousins.—Doris Decker, Toledo, Wash.

**Father and Brother in Alaska.**

Dear Aunt Nellie: I am 8 years old and my birthday is November 21. I am in the third grade. I have four sisters and one brother. My brother is in Alaska with my father. He is 16 years old. His name is Peter. My sisters' names are Martha, Gertrude, Sigred and Gladys. We have two cows, one calf and a horse. The cows' names are Molly and Beauty. The calf's name is Tussy and the horse's is Dolly. We have 21 chickens. I joined the junior Red Cross. My teacher's name is Miss Rau. We are going to Colby. We got white slippers and white stockings. Our cat has kittens, three are gray and one is black. Our dog is black.—Clara Peterson, Box 32 3-4, Colby, Wash.

**A Member of the Red Cross.**

Dear Aunt Nellie: We take The Farmer at our house and I also read the Corner. I find twins of my age. I am 12 years old. We live five miles from school. I have only one sister. I am a member of the Red Cross at school. This is the first time I have written to the Children's Corner. I have had 100 in spelling every day I went to school but two days. My teacher's name is Miss Meeker. She is the best teacher I have ever had. I have two cats of my own. Their names are Susan and Pussy. My sister's cats' names are Pearl and Kitty. We have one dog.—Anna Apold, Box 46, Milan, Wash.

**Brother Is Working in the Woods.**

Dear Aunt Nellie: This is my first letter to the Corner. I am 12 years old and will be 13 August 11. I have two sisters and four brothers. My oldest brother was drafted. He was in Camp Lewis. Now he is in South Bend. He is working in the woods. We have a car. I am a member of the Red Cross. Our daffodils and daisies are blooming. We are having fine weather. It is raining now. My father takes the Farmer and I read most of the letters. I have not read them all in the paper of today.—Anna Marie Nymeyer, R. F. D. 1, Lynden, Wash.

**Brother Is in the Navy.**

Dear Aunt Nellie: I am 8 years old and in the third grade. My teacher's name is Miss Rau. I go to the Banner school. I have a brother in the United States navy. I have 12 thrift stamps. I have four sisters. One is married. My dog's name is Sport. I have a pet sheep with two lambs.—Ole Jonsen, Box 33, Colby, Wash.

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During the last week Aunt Nellie has received letters from the following cousins: Gena Baungart, Carl Jones, Helen Hager, Margaret Lee, Hazel Smith, Mary Feegarden, Ethel Miller, Eva Priddy, Alma Hansen, Esther Grunden, Clara Grunden, Ellen Hannus, Bertha Hannus, Martha Hannus, Ula Easterling, Sallie Garry, Dorothy Butz, Nina Fish, Zelda Northcutt, Alga Shermer, Libbie Latimer, Lydia Young, Irene Knight, Gladys Arnold, Louise Murdock, Hazel Rosengranz, Mildred Webler, Alice Christensen, George Schew, Philinde Fisk, Borghild Nelson, Ida Schmidt, Tessie Duffy, Gladys Cole, Blencha J. Pete, Elsie Ashmore, Lois Carnahart, Agnes Sals, Bertha Luther, Euphemia McPherson, Helen McGinnis, Earla Lower, Marion Turner, Hilma Anderson, Gladys Strong, Violet Sheckler, Edna Sheckler, Marion McCormick, Phyllis Curtis, Lois Chance, Sarah Sturgeon, Bernice Nourse, Esther Oestrich, Cecilia Colleary, Eddie Sash.

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Address all letters to Aunt Nellie, care of The Washington Farmer, Spokane, Wash.

# Townley Urges Farmers to Talk

## *Nonpartizan League Head Opens the Campaign in Idaho*

By J. E. Nessly.

One of the first rallies of the nonpartizan league for the present campaign in Idaho, where the league has a full ticket in the field, was held at Moscow, Idaho, last week. A. C. Townley, president of the league, was the principal speaker. His address in part follows:

"Mr. Chairman, Ladies and Gentlemen: I won't keep you long. I know what you are going to do tomorrow and what time you will get up. You know who I am. I find that my name has traveled ahead of me. All over the state of Idaho they have been talking about me. I am known as the only crook in the United States who is not patriotic. All the other crooks have their reputations for patriotism established. I am going to establish mine before I go from here.

"I want to tell you what we did in North Dakota. The first thing you farmers must learn to do is to talk. It is hard at first, but you will learn it. I held a meeting recently in Missoula. The farmers there tried to secure a place for the meeting. They tried the halls, the streets, the fairgrounds, the roads in the valley. Couldn't get 'em. The farmers could not talk as fast or as well as the people in the valley. I arrived there and found that I had to go about 500 feet up a steep hill to talk, but we had a lot of farmers there and and we practiced for two hours. Then the farmers could talk as fast and as well as the people in the valley.

"In North Dakota the nonpartizan league was built on talk. We did nothing else at first. We never killed a man. We just talked. For a time I was the only man in the United States who talked nonpartizan league. It's different now. There are thousands who wish to God I was the only one that talked it. They are all talking it. If there is a man in the United States who isn't talking nonpartizan league I want to meet him. I have never seen him yet.

"The farmers of Minnesota are learning to talk. A few days ago I met an automobile parade of farmers in Minnesota. There were about 200 automobiles. The farmers have a habit of getting out on the roads together in Minnesota sometimes. Some places that is the only way they can get out on the roads, when they get together. As the parade passed me the people all seemed to know me, and from every automobile came some talk. It was just a few, simple words that any farmer can say. They said: 'We'll stick. We'll win.' That was all they said. Just simple, plain words, but it means much to those farmers. It spells success.

"In North Dakota the farmers have the language pretty well learned. There is not one farmer in ten in that state who can not talk with any banker or lawyer and tell him why the farmers should belong to the nonpartizan league. He can answer all their arguments. A North Dakota farmer came to me the other day and told me of a conversation he had had with a banker who told him I was getting all of the $16. He told the banker he was darned glad to know what was getting it, for he had been farming in that state for 27 years and was poorer and weighed 15 pounds less than when he came, and that was the first time he had ever known who got his money, and when the farmers all learn they will get together and stop the people from getting their money.

"And while we're talking about that $16 let me tell you that there is more talk about that than any other sum of money in the world. A farmer told me that he had bought $500 worth of stock in an insurance company and lost it; he paid $43 too much interest because he did not know how to figure interest, and no one offered to sympathize with him or tried to help him get it back, but he can't get in the city limits of his town without about 15 lawyers, bankers and business men offering to help him get back the $16 he paid to join the nonpartizan league.

"The farmers only get money once a year in North Dakota and other wheat-growing states, so when they join the league we have them predate their checks—that is, date them ahead, so they will come due about the time the farmer guesses he will have his money. A farmer went to a banker and asked him if he thought the farmer ought to go to the automobile show at Minneapolis, and the banker said yes, it was a good show and he ought to go. The farmer said it will cost me $18 or $20. Ought I to spend that much? And the banker asked why he came to him to ask if he could spend $18 or $20, and the farmer answered: 'Well, you made such a holler when I paid $16 to join the nonpartizan league I thought I'd better ask you before I paid out any more money."

"In North Dakota we raise 100,000,000 bushels of wheat a year. That's some wheat. The farmers found that by building elevators and mills and handling the grain at home and taking their business out of the hands of the elevator trust we could save $55,000,000 per year, about $1200 for every son-of-a-gun of a farmer in the state, so we wanted to do this. Before we had been raising the wheat. That's all we had to do with it. We raised it and then turned it over to the elevator trust to handle and sell, and they gave us just enough to keep us raising wheat the next year and the next.

"We went to the business men and the farmers and asked them to join with us and save that $1200 to every farmer. We had been sending our money away. We had to. When the elevator trust got its $55,000,000 and the beef trust got its share and the harvester trust and the banker and the lawyer got their share we had to send to a mail order house because we could save 10 cents on a pair of overalls.

"We didn't want to send our money away, but we had to do it. So we went to the merchants and we told them if they would help us save that $1200 per year we would have so much money that we would not have to send off for our overalls and they would have so much business and so much money that their wives would not have to send away for their clothes. And the merchants saw the logic and they helped us, and we elected every state officer but one and a majority of the legislature and most of the senators, and we got control of the state government.

"And the people liked it so well that last June they repeated the dose and elected every one of the state officers and 18 out of the 24 holdover senators and a majority of the legislature, and the people of North Dakota will keep control for the next 50 years. They have learned to talk. We organized 40,000 farmers and then we organized the merchants, and let me tell you that the merchant—I mean the merchant in the small town surrounded by a farming community—that does not know enough to stand with the farmers deserves to have to go out and work on a farm. How much of the war profits made by the meat trust goes over the counter of the merchant in the small town? Not a penny. He gets his money from the farmer, and the whole town gets its prosperity from the farmer, and the merchant who does not know enough to stand with the farmer deserves to lose.

"We object to the merchants not forming a nonpartizan league of their own and sending one man to where coffee grows and buying coffee for all of the merchants so they can sell it to us farmers at a reasonable price. There are 5000 highly trained high-salaried traveling men coming into Dakota to sell coffee and other things to the merchants at an expense of $15,000,000 a year for salaries and traveling expenses, and we who use coffee pay for it. Let the merchants organize a nonpartizan league and cut off this enormous expense and sell coffee at a reasonable rate to the consumers.

"When they were not satisfied with calling members of the nonpartizan league pro-German they haled them into court and tried to prove it. I know, for I was one of those haled, but they could not prove it, but they still say it and the newspapers publish that I am pro-German and they say it about all members, because we send off for our coffee."

# Sign of Red Triangle

(Continued from page one.)

including everything from the movies to grand opera, is closely allied with the hut because it also carries the home touch. No hardships or dangers have been too great for the player folk to brave that they might amuse for a little while the fighting man. Such artists as Elsie Janis, E. H. Sothern, Walter Damrosch and Margaret Mayo are among those who are entertaining the boys.

Owing to the difficulties of transportation it has been necessary to teach the soldier self-expression so that they are not wholly dependent upon the entertainers. So the "Y" has supplied baseball and other athletic equipment, trunks of musical instruments and stage properties, musical directors to teach the soldiers mass singing and dramatic directors to coach them in plays.

While the men are being made good soldiers they can, at the same time, improve their knowledge of medicine, chemistry, law, or any other profession in the "Khaki college." This is the most recent development and will reach every part of the army.

The sailors, who are constantly in the front line trenches of the sea, have not been forgotten by the Y. M. C. A. At the naval bases and the various foreign ports, the sign of the red triangle bids them welcome as they come in from their ceaseless vigils and dangerous cruises.

The "Y" secretaries cooperate with the army and navy chaplains in their religious services, which are held in the huts. But the Y. M. C. A. has a broader religious program—a program that is nonsectarian and nonpropagandistic. It is first of all the religion of service to men, who are themselves living religion.

## Coming Events.

August 19-25—Convention National G. A. R., Portland, Ore.

August 27-29—National Farmers' conference, Washington, D. C.

**Fairs, Shows, Exhibits.**

August 26-30—Southwest Washington fair, Centralia-Chehalis.

September 2-7—Spokane Interstate fair, Spokane, Wash.

September 16-21—Washington state fair, Yakima, Wash.

September 19-21—Roundup, Pendleton, Ore.

October 1-6—Western Washington fair, Puyallup, Wash.

November 7-13—Northwest live stock show, Lewiston, Idaho.

## Loans to Our Allies.

The United States treasury has extended additional credits of $100,000,000 to France, $9,000,000 to Belgium and $3,000,000 to Serbia. The total of credits advanced to our associates in the war against Germany is now $6,492,040,000.

## WM. H. BOUCK INDICTED.

### Arrested Under Espionage Act.

The following dispatch tells of the indictment and arrest of William Bouck, head of the Washington state grange, charged with the violation of the espionage act:

SEATTLE, Aug. 19.—As the result of a secret indictment returned against him by the federal grand jury last week, William Bouck of Sedro-Woolley, master of the Washington state grange and Pacific northwest organizer of the nonpartizan league, was arrested by a deputy United States marshal at Mount Vernon today.

Bouck is charged on three counts in the indictment with violation of the espionage act. The specific charges relate to a public address delivered by Bouck in Skagit county last June, in which he is charged with having said that if the war lasted three years longer it would cost America $100,000,000,000 and that the war would not end until the rich all filled their pockets.

Bouck was released on $5000 bail by United States District Judge Jeremiah Neterer in Seattle and given until September 3 to enter a formal plea.

## Reduce Crop Loan Interest.

With a view to assisting in the movement of crops this season, the federal war finance corporation is reducing the rate of interest on short-term advances to banks to cover loans made to farmers or merchants for marketing crops from 6 per cent to 5 per cent. To what extent this may be reflected in actual reduction on the interest on loans made to the farmers is a question somewhat conjectural.





A single WORM infested hog in your herd is a continual menace to your hog profits

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# 3 DAYS' AUCTION

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## 160 Swine Poultry, Bees, Etc.

## $25,000 Worth of Farm Implements

and Machinery. Completely Equipped Creamery, Packing House and Refrigeration Plant Machinery.

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## SEPT. 2, 3 AND 4

Sale Starts Each Day at 10:30 o'clock.

Monday, Sept. 2 ..... Machinery and Implements

Tuesday, Sept. 3.... Horses, Swine, Poultry and Grade Cattle

Wednesday, Sept. 4..Registered Holstein and Jersey Cattle, Grade Cattle and Real Estate.

**TERMS:** 10 Per Cent Cash and Balance on Delivery.

Trains or Auto Buses Hourly from Tacoma and Olympia. Lunches and Refreshments to be had on the Premises. Further details may be obtained from the undersigned.

LEWIS & SONS, Auctioneers. CENTRALIA, WASH.

C. D. CLINTON, Trustee in Bankruptcy in the Estate of A. L. Brown, 218 Marion St., Seattle.

# News for Breeders

This is the season when the purebred breeder has the real opportunity to show his stock to those who may wish to get a start of purebreds or add to their herds or flocks. The fair season is soon to be on when hundreds of thousands of people in the country will pass among the live stock and judge them more or less intelligently.

Here is a point that the breeders should not overlook. There is a big opportunity to give information worth while not only to those who are contemplating purchases but to all those who are interested enough to pause in the barns. What are the points that make an animal of a certain kind first class instead of second rate or even scrubby? Most people know in a general way whether an animal appeals to them or not, but only a comparatively few are actually good judges of stock. The breeder or the caretaker who takes a little pains to instruct those who stop to ask questions, or who would like to stop and ask, makes no mistake in so doing.

J. E. Finnicum of Amity, Ore., will be a contester in the Duroc Jersey futurity at the Oregon state fair this fall. While Mr. Finnicum's pigs are young, having been farrowed late in April, they have quality to make them real contenders in their class. His boar, Model Great Wonder, purchased from Waltermeier Bros., of Iowa, sired by Great Wonder, dam by Great Model, is proving himself a sire of large litters of uniformly good pigs.

C. S. Magee of McMinnville, Ore., will show both Holsteins and Durocs at the Oregon state fair this fall. His herd sire, Sir Nida Yamhill Wayne, that was grand champion at the Pacific International stock shows last winter, looks as if he might repeat the trick, when his fitting is completed. Mr. Magee's futurity Durocs are coming on well and he feels he will at least be a contester in a strong show.

O. L. Dunlap of Junction City, Ore., who has started a herd of Duroc Jersey swine, has for a herd sire Oregon Critic, a son of King of Oregon, he of Golden Rod, and out of the great sow Will Advance. He was bred by W. L. Sheard and is a typy, good young boar. Gladys L. and Marie L., Mr. Dunlap's brood sows, were purchased from J. W. Fruit. Each is raising a litter of ten. Mr. Dunlap has three registered Holstein females, also, purchased at the North Poland sale, and will build up a Holstein herd. His herd bull is by Hollywood Lilith Palmyra, and out of Cedar Lawn Mary Second, with a record of 26.06 pounds of butter in seven days.

Ed Rasher, superintendent of the Clifford Reid herd of Jerseys at McMinnville, has enlisted for training in the tank-driving corps and expects to be in France in a few months. Mr. Reid has, however, secured another herdsman and will not only continue test work but will show a full herd at the Oregon State fair this fall. All the test cows are now being milked only twice a day. Goldie's Nehalem Beauty, that produced over 100 pounds of fat in April, with the rest. It goes rather hard with her to be milked only twice a day after being milked three times for two and a half years, but there is a limit to what a man can do without help, says Mr. Rasher.

J. J. Morris of Bandor, Ore., who is the only breeder of registered Berkshires I met in Coos county, has for a herd sire Winona Laurel Masterpiece Eighth by Big Four and out of Silberfa Duchess Fifteenth, a daughter of Laurel Champion. Mr. Morris has a good little herd throughout, of which Aldora Duchess Third has made his best brood cow. H. A.

## Clip This Order Blank

Address all communications concerning thrift or war savings stamps to The Washington Farmer, War Savings Department, Room 26 Review Building, Spokane, Wash.

Remittances may be in any form desired, including personal check.

The Washington Farmer, War Savings Department, Room 26 Review Building, Spokane, Wash.

Gentlemen: I wish to invest in

.... U. S. government thrift stamps (number desired) at 25 cents each.

I wish to invest in ..... U. S. (number desired) war savings stamps at $4.19 each. (August figure)

Amount enclosed $.....

Full name .....

Town ..... State.....

R. F. D. No. .....

I have already bought..... (kind of stamp)

stamps and have a..... (card or certificate)

## DUROC-JERSEY SWINE

**OVER 150 SPRING PIGS.**
Sired by our grand champion Richards Defender, Richards Pathfinder and Cherry King Orion Jr., and out of our big type prize winning sows.
In the last three years at the Utah and Idaho state fairs our hogs won 76 champion and first prizes.
Can furnish unrelated pairs. Satisfaction guaranteed or money refunded. Priced very reasonable.
**Richards Live Stock Company, Virginia, Ida.**

### Ioka Farm Durocs

One excellent boar at breeding age. Bred gilts and weanling pigs of either sex.

**DOERFLER BROS.** **Silverton, Oregon.**
A. N. DOERFLER, Mgr.

**REGISTERED DUROC-JERSEY HOGS.**
Some good spring litters Richards Defender and Pathfinder breeding; big type. Send out nothing but high class stock. Guaranteed to please. Write me for prices on these pigs.
**ERIK W. OLSON,** **Virginia, Idaho.**

**OTTO'S DUROC JERSEYS.**
Get in line for a real boar pig for Sept. delivery. Also gilts and sows bred and open. The kind that is up to date.
**L. S. OTTO,** **Filer, Idaho.**

**AVONDALE STOCK FARM.**
Registered Duroc-Jersey hogs. Inspection invited. Correspondence solicited.
**H. C. POLLY.** **Route 3, Burley, Idaho.**

**FOUR DUROC GILTS BRED TO FARROW** this fall, also spring pigs, on hand.
E. E. PRICE, CABINET, IDAHO, OR
**JAMES N. PRICE,** **Yakima, Wash.**

### QUALITY DUROCS

A few spring boars and gilts.
Meet us at the Spokane Interstate Fair.
**WILLIS M. FISHER.** **Colbert, Wash.**

## POLAND CHINA SWINE

### Big Type Poland Chinas

Peter Mouw and John B. Lawson strains. Young boars and bred or open gilts. Good individuals.

**CLIFFORD RIGGS,** **Touchet, Wash.**

**GREENLEAF STOCK RANCH.**
Big type Poland China, either sex, for sale at all times.
**Wilson Bros., A. L. Wilson, Mgr.**
Greenleaf, Idaho.

**BIG TYPE POLAND CHINAS.**
Herd headed by Sammy (79833).
Correspondence Solicited.
**Fruitland Stock Farm, C. Royston, Mgr.**
Payette or Fruitland, Idaho.

## BERKSHIRE SWINE

### Berkshire Hogs for Sale

Have a number of sows, 18 months old; will farrow second litter this fall. Also young gilts and boars of all ages; all from prize winners. Write for prices.

**EARL WOOD.** **Silverton, Oregon.**

### Kintyre Farm Berkshires

Weanling pigs, bred sows, service boars.

**CLARK BROS.** **Yakima, Wash.**

### Riverby Orchard Berkshires

Riverby Orchard Berkshires won 12 out of 15 first prizes at the Washington state fair, 1916, also many prizes, including grand champion sow at the Panama-Pacific world's fair. We offer for sale a few good boars and young sows.
**D. C. BUNN,** **Prosser, Wash.**

## HEREFORD CATTLE

### Highland Stock Farm

offers for sale Hereford bulls, 1 or 2 years old. One or a carload.
**PLATT BROS.** **Genesee, Idaho.**

# Breeders' Department

## JERSEY CATTLE

### High Producing Jersey Stock

**Golden Maid's Prince,** sire of three Register of Merit daughters. One, beginning at 1 year 10 months, produced 341.27 pounds 85 per cent butter in one year; two junior yearlings, 480.40 and 450.08 pounds. Five more, over six months on test, will average over 600 pounds. He was grand champion Oregon State fair, 1913.

**Monmouth Noble**—4 Register of Merit daughters. Three 2-year-olds produced 482.10, 401.30 and 377.07 pounds butter, and one, beginning at 1 year 10 months, 427 pounds.

**ABOUT 25 HEIFERS**

From 8 months to 2 years old. Several to freshen this fall. All daughters of above bulls and nearly all out of Register of Merit cows. Heifers are well grown, typy, best of udders and some are extra fine show animals. Write for full particulars or call and see them. Will be sold very reasonably.
**WM. SCHULMERICK,** **Hillsboro, Ore.**

### TWO RICHLY BRED JERSEY BULLS

Dropped August 22 and November 28, 1917, both sired by a son of St. Mawes Susie, whose official record at 10 years old is 1012 pounds 85 per cent butter in a year. One dam is out of St. Mawes Mabel (660 lbs. butter), and she by Rosaire Olga Lad, sire of over 20 register of merit daughters, including St. Mawes Beauty, 870 lbs. butter as a junior 3-year-old. The other dam is by Poppy's St. Mawes, son of St. Mawes Poppy, 1120 lbs. butter.
Both solid color, cows were bred when I bought them and they have all the productions back of them that made the Ed. Cary herd famous. Will be sold far below their value.

**E. R. McCornack, Florence, Ore.**

### ROSE LAWN JERSEY FARM

Six excellent heifers ranging in age from 2 years to five months. Have a royal young bull of straight Island blood, can go with these for foundation herd. Special price for herd.
Also two register of merit cows of American breeding. Write for pedigree and prices.

**S. H. KAYLER, Twin Falls, Idaho.**

## SHEEP

### FIRST ANNUAL RAM SALE

At the Twin Falls County Fair Grounds at Filer, Idaho, August 23, 24, 1918. 2000 head imported and domestic rams and ewes. All breeds. Write for catalog.
**H. H. Schildman, Sec'y.**
**Filer, Idaho.**

### Romneys, Lincoln, Corriedale

AND HAMPSHIRE EWES AND RAMS.
All pure bred, not registered. Have especially fine lot Hampshire ewe lambs, yearlings and three-year-olds. Any size lot. Write me on any kind of sheep deal.
**H. STANLEY COFFIN,** **Yakima, Wash.**

### SHEEP FOR SALE

Registered Shropshire, Oxfords, Lincoln, Hampshire and Cotswold rams; 50 head registered Shropshire ewes; 3000 stock ewes, Lincoln, Cotswold and Shropshire breeds; 500 ewes, lambs, Cotswold and Lincoln ram lambs. Write for prices.

**EARL WOOD.** **Silverton, Oregon.**

## OXFORD SHEEP

### Oxford Ram Lambs

15 yearling rams, 40 ram lambs, 30 ewe lambs. Excellent stock and priced to sell.

EXPECT TO EXHIBIT AT INTERSTATE FAIR.

**FISK FARM,** **Spring Valley, Wash.**

## SHROPSHIRE SHEEP

### Shropshire and Hampshire Rams

Registered stock. Spring lambs and yearlings. No ewes for sale.
**GRANT B. DIMICK, Oregon City, Ore.**

**SHROPSHIRE SHEEP.**
**SHORTHORN CATTLE.**
Choice yearling and lamb rams. A few high class young bulls.
**FELZER BROS.,** **Tangent, Ore.**

## TAMWORTH SWINE

**ROUND KNOLL RANCH NO. 3.**
Herd headed by Knoll Slope Colonel, assisted by Jolly Lad IV. Correspondence solicited.
**Bliss, Idaho.**

## HOLSTEIN CATTLE

### 365-DAY HOLSTEINS

24,667 lbs. milk—1026 lbs. butter—is the S. O. advance registry, yearly, record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.
**THE HERD WITH YEARLY RECORDS.**
**WESTERNWOLD RANCH, Prineville, Ore.**

### HOLSTEINS

Steno Farm is now offering a few high class reg. Holstein bull calves. Out of ARO cows and sired by one of the finest bulls in the west. Priced right.
**STENO FARM,** **C. F. Williams, Mgr.**
Mead, Wash., R. No. 2.

### Registered Holsteins

Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.
**H. R. BOOMER.** **New Plymouth, Idaho.**

### HOLSTEINS

Well-bred young bulls for sale.
**THOS. CARMICHAEL.** **Gaston, Ore.**

**REGISTERED HOLSTEINS.**
Bull calves for sale, with good A. R. O. backing.
**BEEBE BROS., R. F. D. 2, Rupert, Idaho.**

## AYRSHIRE CATTLE

### Elbow Ayrshire Dairy

Young bulls out of heavy-producing dams, sired by Willowmoor Sentinel 16th, a bull with big A. R. records on both sides.

**J. R. MABEN, Reedsport, Ore.**

**EDGEWATER FARM**
Only one bull left, calved Dec. 14, 1917, with high producing dam; grand dam and great grand dam both world's record cows.
**ELBERT M. CHANDLER, Burbank, Wash.**

## SHORTHORN CATTLE

**SHORTHORN COWS.**
Ten high class Shorthorn cows, calf at foot or heavy in calf. Come and look them over or write for particulars.
**E. H. HALLOWAY,** **Albany, Ore.**

**REGISTERED SHORTHORN COWS.**
Young bulls and heifers, sired by Scotch bulls; liberal terms.
**CALDWELL CATTLE CO., Caldwell, Idaho.**

## ABERDEEN ANGUS

### Aberdeen Angus Cattle

**A. H. EAGLESON & SONS.**
Boise, Idaho.

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, Aug. 19.—Activity and strength of provisions were the features of board of trade business today. Pork futures registered net gains of 40@50c; lards, 15@17 1-2c and ribs, 37 1-2@40c. The trade was impressed by an advance in live hogs at the stockyards, where a $20 top was registered. Another factor was the export figures on lard and meats, which, while smaller than last week's were larger than a year ago at this period. Shorts were free buyers and the demand from packers moderately active. October lard closed at 26.82 1-2c and October ribs at $24.95.

There was nothing in corn crop reports to excite trade and although the range of prices embraced 1 1-4c the transactions were local in character and unimpressive in volume. An easy tone at the outset was eliminated for a time by the strength of oats and provisions, but the close found prices practically where they had started. September closed 3-8c lower at $1.61 7-8.

Oats were fairly active, but failed to maintain an early advance. At the opening the trade was disposed to regard oats as cheap compared with corn, but on the advance cash houses sold September. There was considerable changing, too, to the deferred delivery at about 1 1-2c difference.

Shippers were buyers on the sample market, but there was scarcely a nibble from the seaboard. September closed 1-8@1-4c higher at 70 1-8c.

**Chicago Futures.**

| | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| Corn— | | | | |
| September.. | 1.61⅞ | 1.62⅝ | 1.61⅜ | 1.61⅞ |
| October.... | 1.63¾ | 1.64 | 1.62¾ | 1.63⅝ |
| Oats— | | | | |
| September.. | .70¾ | .71¼ | .70⅝ | .70⅞ |
| October.... | .72½ | .73⅛ | .72⅛ | .72⅜ |
| Pork— | | | | |
| September.. | .... | 44.00 | 43.90 | 43.90 |
| October.... | .... | 44.15 | 44.10 | 44.15 |
| Ribs— | | | | |
| September. | 24.50 | 24.75 | 24.50 | 24.75 |
| October... | 24.70 | 24.95 | 24.70 | 24.95 |
| Lard— | | | | |
| September.. | .... | 26.80 | 26.70 | 26.72 |
| October .... | 26.72 | 26.90 | 26.72 | 26.82 |

**Cash Quotations.**

CHICAGO, Aug. 19.—Corn—No. 2 yellow, $1.88@1.91; No. 3 yellow, $1.83@1.84; No. 4 yellow, $1.74@1.75.

Oats—No. 3 white, 70 1-2@71c; standard, 71@72 1-2c.

Rye—No. 2, $1.66.

Barley—98c@$1.04.

Timothy—$6.00@$9.00; clover, nominal. Lard, $26.60. Pork, nominal. Ribs, $24.00@25.00.

**Pacific Northwest Grain.**

PORTLAND, Ore., Aug. 19.—Grain August delivery. Grain—No. 2 white feed, $59.50 bid; barley, standard feed, $54; barley, A, $55; barley, September, $54. Oats—No. 2, September, $59.50; No. 3, $53; clipped, $53.75. Corn—yellow, $74; mixed, $71. Eastern oats and corn in bulk: Oats—No. 3 white, $53; 38-pound clipped white, $54. Corn—No. 3 yellow, $74; No. 3 mixed, $71.

Grain car receipts: Wheat, 49; flour, 4; oats, 2; hay, 9.

TACOMA, Aug. 19.—Grain—Car receipts: Wheat, 19; oats, 1; corn, 2; hay, 4.

SEATTLE, Aug. 19.—Yesterday's car receipts: Wheat, 16; corn, 2; oats, 4; hay, 8; flour, 2.

**Minneapolis Grain.**

MINNEAPOLIS, Aug. 19.—Wheat receipts 317 cars, compared with 442 a year ago. Cash No. 1 Northern old, $2.28. Corn—No. 3 yellow, $1.77@1.82; oats—No. 3 white, 65 7-8@67 5-8c.

Flour unchanged. Shipments 69,934 barrels.

Barley, 85c@$1.01.

Rye, $1.65@1.67.

Bran, $29.31.

## Live Stock Quotations.

**At Omaha.**

OMAHA, Neb., Aug. 19.—Hogs, receipts, 5600; market 10 to 20c higher. Heavy, $19@18.65; mixed, $18.25@18.40; light, $18.40@19; pigs, $16@18; bulk of sales, $18.20@18.50.

Cattle, receipts, $10,000; market, steady to stronger. Native steers, $11.50@7.50; cows and heifers, $7.50@12.50; western steers, $10@15.50; Texas steers, $8.50@11.50; cows and heifers, $7@11.10; canners, $6@7; stockers and feeders, $6.50@13.50; calves, $10@13.

Sheep receipts, 22,000; market, steady. Wethers, $12.50@14; ewes, 10.50@13; lambs, $17.15@18.15; yearlings, $13.50@14.50.

**At Chicago.**

CHICAGO, Aug. 19.—(U. S. Bureau of Markets.)—Hogs, receipts, 25,000, mostly 25c higher than Saturday's average. Top, $20; butchers, $19.25@19.90; light, $19.20@20; packing, $18@18.75; rough, $17.75@18; bulk, $18.30@19.85; pigs, good and choice, $17.75@18.40.

Cattle, receipts, 17,000; market unevenly stronger to 25c higher. Top steers, $18.85; calves, steady; beef cattle, good, choice and prime, $16.50@18.85; common and medium, $10@16.50; butcher stock cows and heifers, $7.25@14.25; canners and cutters, $6.50@7.50; stockers and feeders, good and choice, and fancy, $10.25@12; inferior, common and medium, $7.50@12.25; veal calves, good and choice, $16.75@17.50.

Sheep, receipts, 29,000; sheep yearlings and fat lambs slow to 25c lower; feeding lambs, steady; choice and prime, $15.25@15.75; medium and good, $16.25@17.65; culls, $10@14; feeders, $16.50@17.75; ewes, choice and prime, $13@13.50; medium and good, $11.25@$13; culls, $4.50@$9; breeding ewes, choice, $12.50@18.25.

**At Portland.**

PORTLAND, Ore., Aug. 19.—Hogs sold here today for 20 cents on the hoof. This is a new record high price for live hogs in the local market.

Cattle, receipts, 1134; higher. Prime steers, $12.25@13.25; good to choice, $10.75@11.75; medium to good, $9.50@10.75; fair to medium, $8.50@9.50; common to fair, $5.50@8.50; choice cows and heifers, $8@8.50; medium to good, $6@7.50; fair to medium, $5@6; canners, $3@5; bulls, $5.50@7.50; calves, $9@12; stockers and feeders, $6@8.

Hogs, receipts, 452; record price. Prime mixed, $19.50@20; medium mixed, $19@19.50; rough heavies, $17.50@1850; pigs, $16.75@18; bulk of sales, $19.25@19.50.

Sheep, receipts, 188. Prime lambs, $14@15; fair to medium, $11@13; yearlings, $10@11.75; wethers, $9@10.50; ewes, $7@9.

**Hogs Reach $20 at Portland.**

Hogs, with the rise of 50 cents, touched $20 at the Portland Stock Yards Monday, a record price at the yards.

## Spokane Live Stock

August 19, 1918.

| | Cattle. | Clvs. | Hgs. | Shp. |
|---|---|---|---|---|
| Monday, Aug. 19. | 61 | 11 | 288 | 2154 |
| Saturday, Aug. 17 | 33 | 5 | 137 | .. |
| Friday, Aug. 16 | 60 | 22 | 37 | 1187 |
| Thursday, Aug. 15 | 98 | 3 | 64 | .. |
| Wednesday, Aug. 14 | 357 | 21 | 130 | .. |
| Tuesday, Aug. 13 | 203 | 11 | 6 | .. |
| Week ago | 428 | 39 | 139 | .. |
| Year ago | .. | .. | .. | .. |
| Two years ago | .. | .. | 121 | .. |

The over Sunday receipts of cattle were very light, but the quality of the few was above the average. The market opened very active at firm to stronger prices on all grades. The best steers sold at $12, with good to choice at $9.50 to $10, and the fair to medium kinds at $7 to $8. The fair killers were steady at $5 to $6. Cows and heifers were firm, the better sort selling at $8.35, a few medium grades butchers at $6 to $6.75, and canners at $4.10 to $5. Only a few bulls in the pens this morning, the best heavy bolognas going at $6.50, with the lighter sort at $5.75 and $6.25. Calves remain steady at Saturday's close, the best vealers selling readily at $10 and the poorer grades at $7 to $8. The general cattle market is firm.

General cattle range:

| | |
|---|---|
| Prime steers | $12.00@13.00 |
| Good to choice steers | 10.75@11.75 |
| Medium to good steers | 9.50@10.50 |
| Fair to medium steers | 8.25@ 9.25 |
| Common to fair steers | 5.50@ 8.00 |
| Choice cows and heifers | 8.00@ 9.00 |
| Medium to good cows and heifers | 6.00@ 7.50 |
| Common to medium cows and heifers | 5.00@ 6.00 |
| Canners | 3.00@ 5.00 |
| Bulls | 5.00@ 7.00 |
| Calves | 7.00@10.00 |
| Stockers and feeders | 6.00@ 8.00 |

The over Sunday hog run was only fair, the quality being ordinary. Best hogs brought $19.25, pigs $18.50 and feeders $18. The market is firm, with an upward tendency for best grades.

Today's range of prices:

| | |
|---|---|
| Prime mixed | $19.25@19.50 |
| Medium mixed | 18.50@19.25 |
| Rough heavy | 17.25@18.50 |
| Pigs | 17.75@18.50 |
| Stockers and feeders | 16.00@18.00 |
| Bulk of sales | 19.25 |

The sheep market was active this morning, with a heavy over Sunday run. Best fat lambs advanced a dollar to $15.50, with a slight advance on sheep. The market closed steady at the following range:

| | |
|---|---|
| Prime lambs | $14.50@15.50 |
| Fair to medium lambs | 12.00@13.00 |
| Prime yearlings | 9.00@11.00 |
| Prime wethers | 8.25@ 9.75 |
| Best mutton ewes | 6.00@ 8.50 |

Today's shippers:

Cattle—Wilson Produce company, Northport, Wash., one load; Poland & Hudsell, Wilbur, Wash., one load.

Hogs—B. C. Baird, Ephrata, Wash., one load.

Sheep—Barton & Co., Lyle, Wash., six decks; W. C. Brown, Kamiah, Idaho, ten decks.

**Monday's Sales.**

STEERS.

| No. | Ave. Lbs. | Price. | No. | Ave. Lbs. | Price. |
|---|---|---|---|---|---|
| 2 | 1315 | $12.00 | 1 | 1155 | $10.00 |
| 1 | 1135 | 9.50 | 6 | 923 | 8.00 |
| 2 | 1028 | 7.50 | 36 | 866 | 7.00 |
| 5 | 731 | 6.00 | 1 | 870 | 5.50 |
| 9 | 869 | 5.00 | | | |

COWS.

| | | | | | |
|---|---|---|---|---|---|
| 13 | 1080 | 8.35 | 2 | 980 | 6.75 |
| 2 | 910 | 6.50 | 2 | 1262 | 6.00 |
| 3 | 835 | 5.00 | 1 | 860 | 4.50 |
| 12 | 956 | 4.10 | | | |

MIXED.

| | | | | | |
|---|---|---|---|---|---|
| 3 | 488 | 5.00 | | | |

BULLS.

| | | | | | |
|---|---|---|---|---|---|
| 1 | 1575 | 6.50 | 1 | 1095 | 6.25 |
| 1 | 960 | 5.75 | | | |

CALVES.

| | | | | | |
|---|---|---|---|---|---|
| 1 | 290 | 10.00 | 5 | 248 | 8.50 |
| 2 | 222 | 8.00 | 4 | 391 | 7.00 |

HOGS.

| | | | | | |
|---|---|---|---|---|---|
| 28 | 192 | 19.25 | 4 | 133 | 18.50 |

STOCKERS, FEEDERS. LAMBS.

| | | | | | |
|---|---|---|---|---|---|
| 30 | 104 | 18.00 | 782 | 72½ | 15.50 |

## Seattle Market.

SEATTLE, Aug. 17.—Burrell Gems of good quality are coming more frequently from Yakima, going quotations today being $3.50. This market is now consuming five carloads a day, and unless brokers and buying pools grow overconfident and raise this average, prices will hold firm at the present levels.

**Purchasing Prices.**

Eggs—Select ranch, 49@50c per doz.; Oregon, eastern Washington and Idaho, nominal.

Butter—Fresh dairy, 31c per lb.; butterfat, 50c per lb.; bakers, 38c per lb.; raw milk, $2.75 per cwt.

Poultry—Broilers, live, 1918, 30c per lb.; hens, 3½ to 4 lbs. and up, 27c per lb.; under 3½ lbs., 25c per lb.; old roosters, 17@18c per lb.; ducks, live, fat, 23c per lb.; squabs, large, $3.50 per doz.; geese, fat, live, 23c per lb.; Belgian hares, 14@17c per lb.; guineas, $7 per doz.; turkeys, young toms and hens, dry picked, 10 lbs. and up, 30@35c per lb.

Hogs—Light, 21c per lb.; heavy, 19@20c per lb.

Beef—Steers, fat, 14@15c per lb.; heifers, fat, 14@15c per lb.; cows and bulls, 13@14c per lb.

Veal—Fancy light, 19c per lb.; do heavy, 13@18c per lb.

Mutton—Fat, 22c per lb.; spring lamb, fat, dressed, 25c per lb.

## Seattle Wheat.

SEATTLE, Aug. 17.—The Washington grain harvest has progressed to the point this week where millers can approximate quality and quantity in club wheat. All club varieties are coming into market freely, and are being used in filling government flour contracts. Millers report that the quality of winter wheat is satisfactory but the yield is below the average. Spring wheat is fair, with quality about an average excepting in late sown varieties, which is now filling well. The winter wheat yield is 23.5 per acre against 21.5 bushels for 1917.

Arrivals of wheat at this terminal during the week have averaged 4 to 5 cars a day, scarcely sufficient to encourage any heavy grinding operations by the millers. Mixed results have shown. In some districts the kernels are plump and fat, on others badly pinched, but the general average of quality is high.

## Portland Market.

PORTLAND, Aug. 19.—The following are produce quotations:

Butter—Cubes, extra, 50c; seconds, 44c; prints, extras, 52c; cartons, 1c extra; butterfat, No. 1, 55c, delivered.

Eggs—Oregon ranch, candled, 47c; selects, 52c per dozen.

Cheese—Jobbers' buying prices, f. o. b. dock, Portland; Tillamook triplets, 27c; Young Americas, 28c per pound; Coos and Curry, f. o. b. Myrtle Point, triplets, 26½c, longhorns 27½c per pound; 1-4c discount to Portland trade.

Poultry—Hens, 23@25c; broilers, 26@27c; ducks, 32c; geese and turkeys, nominal.

Pork—Fancy, 26c.

Veal—Fancy, 20c per pound.

Potatoes—$3@4 per hundred.

Hay—Buying prices, f. o. b. Portland; eastern Oregon timothy, $34 per ton; valley timothy, $29; alfalfa, $26@27; valley grain hay, $26@28; clover, $26@28; straw, $9@10.

**DRIED FRUITS.**

NEW YORK, Aug. 19.—Evaporated apples dull; state 13 1-2@15 1-2c; Prunes quiet. Californias 8@16 1-4c, Oregons 12 1-2@16c. Peaches quiet, standard, 12@12 1-2c; choice, 13 1-2c; fancy, 14@14 1-2c.

## Spokane Market.

SPOKANE, Aug. 19.—The following are prices obtained by wholesalers and retailers from hotels, mining camps and the like:

**Peaches**—Express arrivals, Washington, 687 crates. Freight arrivals, Washington, 1 car. Market steady feeling. Washington, quality and condition good. Western box Elberta $1.25@1.35, Globe $1.25, Hales $1.15, smaller sizes, various varieties, 85c@$1, soft stock, 50@75c. Western box Triumph, unwrapped $1, Alden 90c@$1.

**Tomatoes**—Express arrivals, Idaho, 51 crates; Washington, 39 crates. Market steady feeling. Washington-Idaho: Pinks and Ripes, unwrapped, 18-pound box, 90c@$1.00. Greens and turning, few sales, 85@90c.

**Bananas** — One car imported. Market steady feeling. Best per pound 7 3-4@8c.

**Grapefruit**—Market, weakening; few sales. Californias, $4.

**Peppers**—Homegrown: Peach box, 75c; few, $1.15@1.25.

**Apples**—Market, steady. 1-2 box Red June, 75@85c. Gravenstein, wrapped, poor color, $1.50; Dutchess, unwrapped jumble pack, $1.

**Raspberries**—Express arrivals, 8 crates Washington. Washington-Puyallup district: 24-pint crates, $3.

**Blackberries**—Express arrivals: 210 crates Washington. Market, steady feeling. Washington-Puyallup district and homegrown: 24-pint crates, $3

**Potatoes**—Freight arrivals, 2 sacks Washington. Market, weaker tendency. California: 100-lb. sack, white variety, few red variety, mostly $3.25@3.50; very few, $3.75. Homegrown: 100-lb. sacks, white varieties, $2.75@3.

**Carrots, Beets and Turnips**—Homegrown: Sacked, per cwt., $2@2.50; mostly, $2; few turnips, $3. Per dozen bunches, 25c.

**Rutabagas**—Homegrown: Sacked, per cwt., $2.50.

**Peas**—Homegrowns, per lb., 9c.

**Beans**—Homegrown: Green, per lb., 4-6c, mostly 4c.

**Corn**—Homegrown, per dozen, 22 1-2@25c.

**Egg Plant**—Express arrivals: 15 crates Washington, 18 crates Idaho. Market, steady. Few sales. Washington: Cantaloupe crates, $3; Idaho, 1-2-dozen crate, 75c.

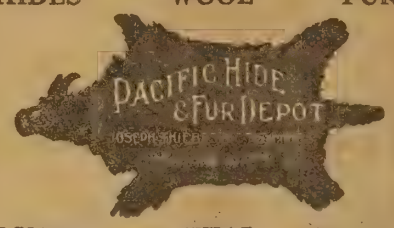
**Celery**—Express arrivals: 2 crates Washington. Market, steady. Homegrown and Seattle district: quality and condition fair, per dozen bunches, 90c@$1. Oregon: quality and condition good, per dozen bunches, $1.50.

**Summer Squash**—Home-grown: few sales, white and yellow varieties, per dozen, 50c.

**Radishes**—Home-grown: per dozen bunches, few, 40c.

**Cucumbers**—Home-grown: field, per dozen, 10@15c; few higher. Pickling stock, peach box, 50c.

HIDES WOOL FUR




RUBBER METAL SACKS

We pay full market value, correct weight and assortment, prompt returns. Write for prices. We want your business.

PACIFIC HIDE & FUR DEPOT

Joseph Thiebes and C. T. Symmes,
1101-09 Railroad Ave., Spokane, Wash.

Help Save the Canadian Crops

When Our Own Harvest Requirements are Completed

United States Help Badly Needed Harvest Hands Wanted

Military demands from a limited population have made such a scarcity of farm help in Canada that the appeal of the Canadian government to the United States government for

Help to Harvest the Canadian Grain Crop of 1918

meets with a request for all available assistance to go forward as soon as our own crop is secured.

The allied armies must be fed and therefore it is necessary to save every bit of the crop of the continent—American and Canadian. Those who respond to this appeal will get a

Warm Welcome, Good Wages, Good Board and Fine, Comfortable Homes.

A card entitling the holder to a rate of 1 cent per mile from Canadian boundary points to destination and return will be given to all harvest applicants. Every facility will be afforded for admission into Canada and return to the United States. Information as to wages, railway rates and routes, may be had from the

UNITED STATES EMPLOYMENT SERVICE

Branches at Aberdeen, Bellingham, Everett, Seattle, Spokane, Tacoma, Walla Walla, Wenatchee or Yakima.

# Houser Buys Mills

## Deal Involves Several Millions

M. H. Houser, second vice president of the federal grain-buying corporation, and representative of that corporation in the northwest, is the principal in probably the biggest flouring mill transaction on record in the northwest, according to advice from Portland. Mr. Houser, with several associates, has taken over the property of the Portland Flouring Mills company, the Puget Sound Flouring Mills company, the Puget Sound Warehouse company, the Pacific Coast Elevator company and the subsidiary corporations, say the reports. While the consideration has not been announced it has been estimated at something like $10,000,000.

The transaction covers a score or more of mills throughout the northwest having an aggregate daily capacity of more than 11,000 barrels of flour. The mills situated in Portland have a daily capacity of 4000 barrels alone.

The Portland Flouring Mills company was formerly under the control of the late Theodore B. Wilcox, and since his death several weeks ago, has been in charge of R. B. Wilcox.

It is stated that the transaction was made by Mr. Houser with the approval of Federal Food Administrator Hoover under whose jurisdiction the grain corporation, of which Mr. Houser is northwestern representative, is operated. It is also reported that Mr. Houser plans to place the property in trust for the duration of the war or until he is relieved of his duties with the federal grain corporation. It is said that R. B. Wilcox will sever his connection with the milling concerns when the reorganization plans are completed. J. W. Ganong, the present general manager of the Portland Flouring Mills company, will be continued in that capacity with his entire operative organization, it is said.

### He Was Right.

There were introductions all around. The big man stared in a puzzled way at the club guest.

"You look like a man I've seen somewhere, Mr. Blinger," he said. "Your face seems familiar. And a funny thing about it is that I remember I formed a strong prejudice against the man who looks like you; although, I'm quite sure, we never met before."

The little man laugher softly.

"I'm the man," he answered, "and I know why you formed the prejudice. I passed the contribution plate for two years in the church you attended."


## FARM SERVICE WAR FLAG



A Flag for Every Farm Home in the Northwest

An Extra Small Star for Each Farm Worker

(Patent applied for.)

**Get a Farm Service War Flag.**

The man, woman, boy or girl who stays at home and works hard to produce necessaries for the soldiers in Europe is entitled to real war service recognition. That is the idea back of the farm service war flag. It is pennant-shaped, made of the good old red, white and blue, and has a star representing the producing farm home. Small stars are added to represent each worker of that home.

.....

**Convenient Order Blank.**

....., 1918.

THE WASHINGTON FARMER, Review Bldg., Spokane, Wash.

Enclosed find five cents (5c), for which please send me a Farm War Service Flag (printed on enamel paper) with ..... extra small stars for farm workers.

Name .....

R. F. D. .....Postoffice .....

Box ..... State.....


# Trappers of the Ozarks

(Continued from page twenty.)

The others did the same. Ben and Jodo repriming both their guns and their pistols. And they also removed the flints from their locks and replaced them with others from their ammunition pouches.

From the party's present position, the canoes coming down the river were hid by a bend. But the white men could see at least a mile up stream, and sat waiting for the approaching canoes to round the bend.

"Let's hope you boys were mistaken, and that they're not red men but white men," Boone presently remarked.

"Yes, we'll hope we were mistaken, but I'm afraid we were not. Anyhow, we'll soon know for certain," Ben answered. And he rose and stood in the bow of his canoe, his gaze glued to the point where the dreaded canoes must soon appear. Minute after minute passed.

"There they come!" Jodo cried out, as the first canoe emerged into view, quickly followed by another, and that by a third. They were still rather far away.

Ben scrutinized the occupants carefully. "They're Indians! And we're in for a hot fight," he announced, in quiet tones.

(To be continued.)

# Want Ads


### EDUCATIONAL 45

EARN MORE. ENROLL ANY TIME, AT Behnke-Walker, Portland, northwest's biggest business college, because best. Graduates assured positions. Write for catalogue.

### TEACHERS' AGENCIES 46

TEACHERS REGISTER WITH B. F. WESTmore, Mgr. Hazard Teachers' Agcy. $1 registers you at three offices. 911 Old Nat'l Bank bldg., Spokane, Washington.

ALBERT TEACHERS' AGENCY, PEYTON bldg., Spokane. We need more teachers.

### HONEY, BEESWAX—Wanted. 58

SEND SAMPLES OF YOUR HONEY AND beeswax; state quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

### EGGS and BUTTER WANTED 59

WE ARE ALWAYS IN THE MARKET for good eggs and dairy butter. Send us your next shipment. Oregon Farm Products Co., 38 Halsted st., Portland, Ore.

### MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

Let us mail you one of our large illustrated catalogues No. 27 of sash, doors, frames, building paper, prepared roofing, plaster board, paints, etc.

We make screen doors and sash covered with heavy 28-gauge galvanized wire.

Stock size screen doors, $2 and up.

Odd size screen doors, 20c per square foot. Screen windows and sash, 15c per square foot.

We sell any one. Ship anywhere, and guarantee safe delivery.

Direct from our factory to you.

O. B. WILLIAMS CO.

1943 FIRST AVE. SO. SEATTLE.

### MISCELLANEOUS WANTED 63

CASH FOR OLD FALSE TEETH—WE PAY up to $21.50 per set (broken or not). Send at once—package held five to fifteen days, subject to owner's approval of our offer. Highest prices paid for old gold jewelry, crowns, bridges, platinum, silver. United States Smelting Works, Inc., 331 Goldsmith bldg., Milwaukee, Wis.

POULTRY WANTED.

We are cash buyers of poultry and dressed meats, also cream. Write us for prices, shipping tags and premium catalogue for cream shippers.

COMMERCIAL CREAMERY CO.
SPOKANE, WASH.

### JUNK SHOPS 90

HIDES HIDES HIDES

Write for prices and shipping tags.

BUYERS OF ALL KINDS OF JUNK.

CENTRAL HIDE & JUNK CO., SPOKANE.

## Want Ad Rates 30c Per Line

Want ads are run at this rate in The Washington Farmer and its associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

# Want Ads

Send for card giving lower rates for ads running one month or longer.

## How to Figure Cost of Ads

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

### MACHINERY—FOR SALE 93

PLOW TYPE RUMLEY STEAM TRACTOR, 25-HORSEPOWER, DOUBLE CYLINDER, PRACTICALLY NEW. FOR SALE AT A BARGAIN.

39x106 high-pressure boiler. Cylinders 7 inches in diameter, with a 12-inch stroke. Belt wheel 41 inches in diameter, with a 12-inch face. Rear wheels 74 inches in diameter. Width of tire, 30 inches. Extreme width of engine 122 inches, length 254 inches. Subject to inspection at Seattle, Wash. Ask us for prices.

AMERICAN HOIST & DERRICK CO.
Seattle, Wash., and St. Paul, Minn.

CUT YOUR OWN LUMBER

on a Wheland Portable Sawmill. You will save time and big money on your next lumber bill. With the sawmill you can supply the lumber needs of your neighbors also. The price is reasonable, and the profits will soon pay for the machine.

Write for catalog and full details.

CLYDE EQUIPMENT CO.
18TH AND UPSHUR STREETS,
PORTLAND, ORE.

FOR FARM LUMBERING USE "AMERICAN" PORTABLE SAWMILLS

Carried in stock by
HIGGINS MACHINERY COMPANY,
312 1st ave., So., Seattle. Write for Catalog.

HOLT TRACTOR FOR SALE.

18 H. P. Holt Caterpillar tractor; 3 bottom Emmerson plow and 9-ft. tandem disc; owner in service. J. W. Hill (Caterpillar agt.). 618 Lumbermen's bldg., Portland. Ore.

### AUTOMOBILES 114

FORDS CAN BURN HALF COAL OIL, ALL distillate, or cheapest gasoline, using our 1918 Carburetor; 34 miles per gallon guaranteed; easy starting; great power increase; attach it yourself; big profit selling for us; 30 days' trial; money back guaranteed; styles to fit any automobile. Air-Friction Carburetor Company, 321 Madison st., Dayton, Ohio.

TRANSIENT STORAGE. DEALERS IN USED CARS AND TRUCKS.
GET OUR LATEST PRINTED LIST.
WE SPECIALIZE IN WASHING CARS.
SPOKANE AUTO MARKET.
313-15-17 W. SPRAGUE AVE. MAIN 1033.

### STOVE & FURNACE REPAIRS 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

### HARES AND RABBITS 173

"A FORTUNE IN RABBITS"—HAVE raised the price. We will pay to $8 per pair. Want you to raise them for us. Send stamp for particulars. H. E. Gibson Co., Arcadia, Calif.

PURE BRED NEW ZEALAND REDS, 6 mos., $3.50 each, younger stock, $1 up. Pine Grove Rabbitry, Bx. 73, Camas, Mont.

REGISTERED BELGIAN HARE BUCKS and does, $3 to $5 each. Cermer Rabbitry, Pasco, Wash.

BELGIAN HARES! SEND STAMP FOR FOLder 2. Northwest Rabbitry, Sunnyside, Wn.

PURE BRED WHITE ENGLISH RABBITS. Write Austin Rull, Deep River, Wn.

### POULTRY 174

FOR SALE—TRAP-NESTED BARRED Rocks and White Leghorn cockerels and breed. hens. Mrs. W. M. Roberts, Elmira, Ore.

S. C. W. LEGHORN PULLETS AND cockerels from heavy laying stock. Mrs. Rominger, Underwood, Wash.

### LIVE STOCK 177

BERKSHIRE SPRING PIGS OF CHAMpionship breeding for sale at reasonable prices. Send for circular giving description and price. R. W. King, Sweetwater, Idaho.

REGISTERED HOLSTEIN BULL CALVES, 4 to 8 wks. old, from high producing cows; will sell cheap if taken at once. Glenwood Farm, R. 2, Snohomish, Wash.

REGISTERED RED POLLED HEIFERS, from 3 weeks to 3 years old. All bulls sold. Mrs. D. F. Alward, Orting, Wash.

REGISTERED O. I. C. SWINE; BREEDING stock for sale. C. I. Ballard, Rickreall, Ore.

SHETLAND PONIES: BARGAIN PRICE. Write for list. N. C. Sorenson, Onalaska, Wn.

### HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

HOTEL TOURAINE, OPPOSITE REVIEW building. Rates, 50 cents and up. Wm. Snow, Prop., Spokane, Wash.

GALAX HOTEL: NEW AND MODERN; 75C and $1. Main and Bernard, Spokane.

NEW MADISON HOTEL, 75C AND UP. First and Madison, Spokane, Wash.

### FAIR PREMIUM LISTS 370

TWIN FALLS COUNTY FAIR, OCT. 1-4. Premium list now ready. Write J. M. Markel, sec'y, Filer, Idaho.

### RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

### ARTIFICIAL LIMBS 424

SCHINDLER ARTIFICIAL LIMB CO., 8115 Wall st., Spokane, Wash.

### BUSINESS OPPORTUNITIES 516

I WANT TO SELL MY DAIRY AND ICE cream plant; doing good business. See owner or write H. Hermanson, Roslyn, Wn.

PAYING NEWSPAPER, WORTH $8000, TO trade for farm. News, Cambridge, Idaho.

### PLUMBING, STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

### SEEDS 620

WE SPECIALIZE IN TIMOTHY, ALFALfa, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Idaho.

### FARM LANDS—FOR SALE 651

A BIG LAND OPENING.
COWS, HOGS, AND A BANK BOOK.

Your dream of life, of ease, comfort and independence await you at
BIRMINGHAM,

On Port Susan Bay, Snohomish County; 6000 acres of the best land that lies out doors; a 2 hours' ride from Seattle places your feet on the richest, most productive soil in the whole state of Washington; rail and water transportation; near paved roads, schools, churches, cannery and condensery; 3½ miles of waterfront and finest beach on Puget Sound; 20 miles of beautiful lake shore, surrounding 3 picturesque lakes; these lakes teem with trout. Get in on the first choice for $35 per acre and up; 10 yearly payments, 6 per cent interest.

This is but the beginning of the story of Birmingham. Send to the owners for illustrated literature. BROWNELL LAND CO., 904 Third ave., Seattle, Wash.

680-ACRE IMPROVED RANCH, THREE miles from Helena, one mile from East Helena, Montana, at Four Range Ranch station of Great Northern ry.; a great wheat producer; quarter of mile from street car to state capital; electric power and lights; five-acre orchard; modern ranch house; deep well, pure water, artesian flow; over four hundred acres can be plowed; three hundred under cultivation produced good crop this year. A real ranch and suburban home combined. Easy terms. Owner going into government service for war. Write for descriptive circular. Thos. F. Mahoney, Empson bldg., Helena, Mont.

PRODUCTIVE BULKLEY VALLEY, B. C. Where 40 bu. wheat, 65 bu. oats, 40 bu. barley and 2 tons timothy are average crops; native grass and peavine waist high; good soil; 100 per cent tillable; right on R. R.; mild climate; pure running water; 35 inches rainfall. Price $18 to $25 per a. Easy terms. Low rate excursions every week. Write Bulkley Land Co., 305½ Riverside ave., Spokane, Wash.

WIDOW, PAST 80, OFFERS FARM. 115 a.; all fenced and cross-fenced; 35 a. in cultivation; 10 a. alfalfa; 30 a. timber, bal. pasture; good 6-room house, piped for spring water; good barn, outbuildings; unfailing spring to irrigate 30 a.; no waste land, $12,000, ½ cash, bal. terms; near R. R. and Columbia river transportation. Mrs. Rosanna J. Hendryx, R. 1, Orchards, Wash.

FOR SALE—440-A. WESTERN WASHington farm; 200 a. prairie pasture; 140 river bottom; 50 a. under cultivation, balance willow brush; 100 a. logged over; hill land; fair buildings and orchard; good roads; 3 mi. to town. Price, without stock, $12,000; $4000 cash, balance 10 years, 6 per cent. For particulars address A. Steinman, R. F. D. 1, Box 99, Tumwater, Wash.

MONTANA IRRIGATED LANDS.

To close out two large sheep ranches, we are offering choice irrigated land in tracts of any size at bargain prices, and on very easy terms; 100 per cent tillable; best of water rights and crops. Address owners, Lewis Penwell Company, Helena, Mont.

CALIFORNIA.

Buy a farm in sunny, prosperous California. All about land, soil, market, crops, dairy ranges. Send 25c for one year's subscription to Farm and Irrigation (illustrated) Magazine, Dept. F-18, Mysell bldg., San Francisco.

ONE OF THE BEST FIVE ACRES IN OREgon; ideal place for elderly couple or young couple; 5 sawmills close by; about 20 miles from Salem; half down, balance easy terms. For particulars address A. H. Persey, Scotts Mills, Ore.

SALE OR TRADE—320 ACRES; ALL broke; fenced; good house, well, hog house and pasture; grazing, etc. Loamy clay soil. Prefer Oregon for trade. For particulars write A. Detwiler, Stone, Oneida county, Idaho.

FOR SALE—EIGHTY ACRES.

Dairy ranch; twenty acres irrigated; new buildings; good location; four miles from town; free range; all personal property included. A. C. Hoxie, Alsea, Ore.

FOR SALE—173 ACRES; ON COLUMBIA river; alfalfa, dairy and hog ranch; also 160 acres of wheat land; would consider good city property or smaller ranch as part payment. Box 76, Hanford, Wash.

STOCK AND DAIRY RANCH FOR SALE at a bargain. 1160 a. in western Oregon, in Lincoln co. For details write Emil F. Raddant, Orton, Ore.

WATER FRONT AND INLAND FARMS, Md., Del., catalogue. RUSSELL REALTY CO., 2 E. Lexington st., Baltimore, Md.

### FARM LANDS—WANTED 654

WANTED—TO HEAR FROM OWNER OF farm or unimproved land for sale. O. K. Hawley, Baldwin, Wis.

### FOR SALE OR EXCHANGE 702

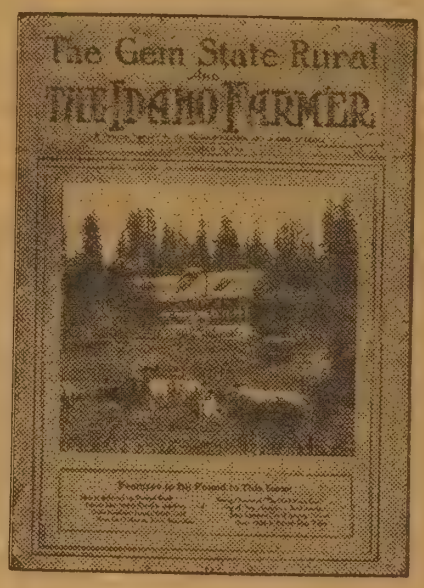
TURKEY RANCH—160 A.; RIVER RUNS through; outrange. D 19, Oregon Farmer, Spokane, Wash.

# These Three Farm Papers Reach 80,000 Farm Homes










## Take Advantage of the Low Combination Rate for Insertion of "Want" Ads in These State Farm Papers

The "want" ad is a method of communication which will prove helpful at various times to all of our farm folks.

Do you desire to get in touch with a reliable, experienced hired man? The "want" ad brings your need to the attention of competent workers throughout three states.

Do you wish to turn used machinery into cash? The "want" ad reaches farmers in other districts who have use for your discarded implements, and who will probably be glad to make the saving you will be able to offer them.

Have you farm products to sell, such as live stock, poultry, seeds or dried fruits? Once more, the "want" ad in the three state farm papers offers a solution for the difficulty. It reaches the very class of homes where there is a constant demand for these things..

Have you a piece of land for which you are eager to find a buyer? The "want" ad in The Washington Farmer, The Oregon Farmer and The Idaho Farmer affords a splendid method for making a sale; inasmuch as these three papers are read by tens of thousands of farm owners and farm renters, a goodly proportion of whom are considering the purchase of farms or orchards in other sections.

To sum up, our "want" ads enable you to reach the people who have what you want or who want what you have. They are easy to insert. They are low in cost. Even if there is nothing you care to advertise at this time, you will always find interesting, profitable reading in our "want" ad columns.

Rates are printed at the top of the "want" ad columns. Be sure to read the "want" ad page today!

**Send Orders and Inquiries Regarding "Want" Ads to The Washington Farmer, Review Building, Spokane, Wash.**

AUGUST 29, 1918.

NOTICE TO READERS: When you finish reading this paper, place a U. S. 1-cent stamp on this notice, mail the paper and it will be placed in the hands of our soldiers or sailors destined to proceed overseas. NO WRAPPER. NO ADDRESS. A. S. Burleson, Postmaster Gen.

PUBLISHED WEEKLY.

# THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

## Fairs Have Special Value This Year

*Will Demonstrate Solutions of Problems War Has Forced Upon the American People.*

Interstate Fair, Spokane
**September 2-7**

State Fair, Yakima
**September 16-21**







# Should Study Community Fairs

## Small Fairs Are Seen as a Means of Improvement. Some Crops Are Yielding Better Than Was Expected




MEAD, Spokane County, Wash., Aug. 21.—It is to be regretted that more interest is not taken in the various agricultural fairs. It is possible the management is to blame for it in a measure. It seems to me too much attention is given to useless and sometimes harmful entertainments, and not enough to the young people in the way of encouragement along useful educational lines. When they are interested the parents become interested and a two-fold effect is had. Any way, the youth will be the mature citizens in a short time, and it seems to me we should do everything possible for them. The destiny of our country will be in their hands in a few years at most. If the people of the city feel that they must have the sort of entertainment furnished in large proportion at our fairs, give it to them in some other way and at some other time. If no other way can be found to make the large fairs more useful and successful, break them up and establish smaller ones in the various smaller towns managed very largely by the people in whose interest the fairs are supposed to be—the farmers. I think it will be conceded by all who have given the matter attention that more interest and enthusiasm is shown at the small fairs, with relatively much more good resulting. Let us investigate the small community fairs and the resultant good that comes from them; it may be of service in handling the fair proposition.

This community is fairly prosperous this season as it has not been really hard hit. It is to be regretted that more stock could not be retained, but it was impossible under present feed conditions, especially as to mill feed. If something is not done to materially increase mill feeds, less stock will be kept next year than ever. There will be no hay shipped here, the prospect being that people can get their cattle through by utilizing the straw in the community. There will be a few oats to ship out, but no other feed grains. There will be sufficient amount of both wheat and oats for seed, and no necessity to ship any in; in fact there will be considerable surplus, especially of wheat. The late rains will be very beneficial to late apples and vegetables.

GEORGE HAMPTON.

### Hold Fair Despite Shortage.

OTHELLO, Adams County, Wash., Aug. 17.—The Adams County Fair association is getting busy and expects to have a fair in spite of the very short crops. We have noticed that the men who are the exhibitors at fairs are invariably the best farmers and leading citizens of their neighborhood. It's an incentive to greater efforts and adoption of later methods for a man to go and observe what these public spirited men have done. Our vicinity happened to be one of the hard hit localities and some farmers are at a standstill, undecided whether to give up or try to continue. Last year the writer paid $144 for threshing 150 acres of wheat at 10 cents a pushel. This year we cut only 80 acres out of 300 seeded, paid 40 cents per sack for threshing and the thresherman got our check for $17.60, and ours is a fair criterion to go by for this vicinity. The farmers are after federal aid to get seed. We must have that aid next spring to get feed also or the acreage will be greatly diminished.

A. O. LEE.

### Yields Are Below Normal.

COLFAX, Whitman County, Wash., Aug. 21.—Crop conditions throughout the county are approximately 50 per cent of normal. A few isolated farms are producing normal yields of wheat. Oats are very light as to yield, although quality is good. The potato acreage is small, but the yield and quality will be fair in spite of the dry weather. There will be no seed to ship out of the county, and it will be necessary to ship in mill feeds and probably hay. We have produced a sufficient amount of seed wheat for fall seeding, but it will be necessary to ship from one part of the county to another.

I have just received reports from every locality in the county and in every case the community has abandoned the idea of having a local fair. The cause, I attribute to the poor gardens, generally inferior crops and shortage of pasture and feed for live stock, bringing about conditions which make it impossible to feed them for show purposes.

F. L. KENNARD.

### Crop Conditions Are Good.

OLSON, Spokane County, Wash., Aug. 17.—Crops are generally good on the Queets river. Pasture is good and stock is in good condition. Hay is practically all in and was harvested in good condition. We have been having thunder showers, which will help gardens and potatoes. One car of beef cattle has been shipped from the Queets, and there are more to be shipped later during August and September.

M. L. DECHMAN.

### Have Good Crop Yield.

FAIRFIELD, Spokane County, Wash., Aug. 18.—Harvest is pretty well advanced and is about three-fourths done. The yields of peas and oats are much better than was expected at the beginning of harvest. The wheat crop is below the average, but of a good quality. Taking everything into consideration, this community can be considered prosperous and is. Fall wheat seeding is being done by some farmers in summer fallow and disking of pea land at an early date whether sufficient rain comes or not. Fall wheat on pea stubble this year has yielded as good as or better than the average summer fallow. Feed is plentiful, especially pea straw, and is of good quality. It will be difficult to bale the pea straw, as it was very dry when threshed, so is broken up very fine, but the feeding quality is that much better. Seed is plentiful and a local warehouse has a large re-cleaner where all seed wheat sent out is cleaned and graded.

So far nothing has been said or done towards the fall fair as every one has been too busy harvesting to think of anything else. Live stock is in good condition and should improve as the fall advances. Stubble pasture is good.

ROY G. ADAMS.

### Drouth Reduces Crops.

OLYMPIA, Thurston County, Wash., Aug. 9.—Effects of the severe drouth in the early part of the growing period are very apparent in the local crops. The majority of the oats is very short, making harvesting difficult even where the stand is sufficient to warrant harvesting. Reapers and mowers are being used for this purpose to a large extent. Wheat as a whole is looking good. This is especially true with the fall-sown and the later spring sown seed. Rhiz-octonia has caused severe damage to the wheat crop in some districts. Pea crop has suffered heavily through aphis. In some few instances where experiments in spraying the peas were carried out, the saving of approximately half the crop resulted.

C. H. BERGSTROM.

#### Oat and Pea Silage Substitute.

Cattle-feeding experiments at the Wyoming experiment station indicate that oat and pea silage can be substituted for alfalfa hay at two pounds of silage to one pound of hay. During 113 days of the winter of 1915-16 growing heifers with oat and pea silage in the ration made an average daily gain per head of two pounds, costing 8.4 cents daily. Without silage they made an average daily gain of .06 pound on a ration costing 9.4 cents per day. Ten pounds of silage more than replaces five pounds of alfalfa.

#### The World's Big Question.

What of tomorrow, is the world question of today.


# Intelligent Training---The Foundation of Success



This new building of more than twenty rooms was erected for the sole use of The Northwestern, and we make use of every room for school purposes. Ventilation, heat and light have been regulated upon scientific principles. The school is located convenient to the business district, yet sufficiently removed from the noise and rush of the main business streets.

## For Young Men of Draft Age

Men who are subject to the draft, or who will reach the draft age soon may make their advancement certain and their services valuable by training for business. The military service requires thousands of accountants, stenographers and private secretaries. You can qualify for such positions, or at least begin your training with every chance in your favor to be preferred for such work. Begin at once by enrolling with us, as others are doing, even for the time remaining. Ask for our new Nineteeth Annual Catalogue and information on this point. We can help you.

## For Men Not Subject to Draft

If you are above or below the draft age, your services are urgently needed in the business world and in the Civil Service. Business men are anxious to secure men of mature age, as well as young men, to fill those positions which demand men's services. There are thousands of such positions. Calls for men trained for business are coming to us daily. If you qualify yourself for such work permanent employment for you is certain. Now is the opportune time. Ask for our new Nineteenth Annual Catalogue, which will explain these opportunities.

## For Young Women

The demand for young ladies as bookkeepers and stenographers is so great that it should not be necessary to refer to it. Business houses and the government are in serious need of your services. Young ladies have not responded to the demand as fully as might be expected when it is considered how widely this need has been published. The demand is becoming more urgent with each succeeding month. You can qualify for one of these exeellent positions in a remarkably short time. Our new Nineteenth Annual Catalogue will explain to you how readily this can be done. Ask for it at once and begin to plan a successful business career.

# NORTHWESTERN BUSINESS COLLEGE

Spokane's Accredited Commercial School.
*M. M. HIGLEY*, President.
S317 Howard St. Spokane, Wash.

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 35 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF August 29, 1918

# Will It Pay Wheat Grower to Ship Direct?

## *Houser Has Not Yet Answered This Question to the Satisfaction of the Grain Producer*

**Theoretically the wheat grower has the alternative, if dissatisfied with the prices and grade offered him by private buyers, to ship his wheat to the government buying agency at Seattle, Tacoma or Portland. In other words, if he is dissatisfied with the prices and grade offered him by the huge privately owned combination that has been formed by Mr. Houser, he can deal with Mr. Houser in the latter's capacity as director of the federal grain-buying corporation for the three states of Washington, Oregon and Idaho.**

The authoritative announcement is made from Portland that M. H. Houser, second vice president of the United States Grain Buying corporation, and executive representative of that governmental organization in the northwest, is the principal in probably the biggest flouring mill combination on record in the Pacific northwest. Mr. Houser, with several associates, has taken over the property of the Portland Flouring Mills company, the Puget Sound Flouring Mills company, the Puget Sound Warehouse company, the Pacific Coast Elevator company and the subsidiary corporations. While the consideration has not been announced it has been estimated at something like $10,000,000.

The transaction covers a score or more of mills throughout the northwest having an aggregate daily capacity of more than 11,000 barrels of flour. The mills situated in Portland have a daily capacity of 4000 barrels alone.

Mr. Houser's identification with this deal must be embarrassing to him in view of his public obligation, since it will require him to make it plain that if conflict of interest should arise between his corporation and the public he will serve the public and not the interests of himself and his business associates.

Here is a combination of flour millers, warehouse and elevator owners and grain buyers which will have a practical mastery of the handling of the grain crop of the Pacific northwest. It will have the power and privilege, under the new grain marketing methods of the federal food administration (subject only to such checks as Mr. Houser, as Pacific northwestern director of the federal grain buying corporation, may raise against it), of buying wheat at any prices it may be able to force upon the growers. There is nothing in the new regulations that would prohibit this great combination, or any of its individual members, buying a farmer's wheat for $1 per bushel if the grower's necessities compelled him to accept at that price.

This combination headed by Mr. Houser has the further power and privilege (subject only to such doubtful limitations as Mr. Houser, as head of the federal grain buying corporation, may place upon it) of charging unreasonable and excessive intermediate charges, such as warehouse and handling charges, interest, insurance, grading, etc.

As a matter of fact and record, the North Pacific Millers' association and the Northwestern Grain Dealers' association, at a meeting in Seattle shortly after the issuance of the food administration's new grain buying regulations, entered into a compact to charge growers intermediate charges totaling eight cents per bushel, which is about double the previous ruling charges in this region.

Theoretically the grower will have the alternative, if dissatisfied with the prices and grades offered him by private buyers, to ship his wheat to the government buying agencies at Seattle, Tacoma or Portland. On this point the official statement of the Food Administration Grain corporation says:

"The producer or dealer should always keep in mind that if he is not satisfied with the prices paid by individual buyers, or with the grading of wheat, his protection lies in his being able to ship to the Food Administration Grain corporation at the various terminal markets named above."

In other words, if he is dissatisfied with the prices and grades offered him by the huge privately owned combination that has been formed by Mr. Houser, he can deal with Mr. Houser in the latter's capacity as director of the federal grain-buying corporation.

Realizing the tremendous importance to the grain growers of vigorous, disinterested competitive buying at the terminals by the government, The Washington Farmer wrote to Mr. Houser that "wheat growers of Washington, Idaho and Oregon are becoming anxious to learn just what steps they must take to ship grain directly to the United States Grain corporation." The following correspondence then followed:

"To the Editor of the Farmer: Answering yours of the 11th inst., beg to say that the information you are seeking has gone out generally to the dealers and mills of the three states comprising zone 10. To the grain dealers there has been issued Bulletins No. 1 to 3 inclusive, and to the millers and manufacturers of flour and feed has gone forth Milling Bulletins No. 1 to 9 inclusive, together with some circular letters and data of like nature.

"We feel sure that by this time the grower is fairly well versed in the procedure that is to be followed this year. In dealing in grain this year a broad latitude is allowed the dealers and there should be no reason why a producer and dealer can not get together on a sound trading basis. The grain corporation stands ready to protect the fair price basis in case the producer feels that he can not meet with fair treatment from the dealer.

"Regarding the minimum carload feature, it would be much better to have two or more small growers pool their tonnage with a view of making up a maximum car for shipment.

"FOOD ADMINISTRATION GRAIN CORPORATION.
By M. H. HOUSER, Second Vice President."

As this letter from Mr. Houser does not give any direct and detailed information to the grower as to how he can ship direct to the food administration grain corporation, and as the grower will be in no mood to seek this information from the grain buyer with whose terms he may not be satisfied, a second letter on the subject was addressed to Mr. Houser by the editor of the Farmer as follows:

"We thank you for your letter of August 12 in reply to our inquiry as to just what steps growers must take to ship grain directly to the United States Grain corporation. We can not agree, however, with your belief that the growers are fairly well versed in the procedure that is to be followed this year.

"We note from your letter that you have sent out three bulletins to grain buyers and nine bulletins to millers, but so far have heard of no informative bulletins to the grain growers.

"As you say, 'in dealing in grain this year a broad latitude is allowed the dealers,' and you add, 'there should be no reason why producer and dealer can not get together on a sound trading basis.' We find, however, that a wide difference of opinion has arisen as to what constitutes a sound trading basis. A recent convention of northwestern dealers and grain buyers decided that total intermediate charges of about eight cents a bushel would be such a sound trading basis, but representative growers in this region believe that the proposed charges are excessive and are anxiously waiting helpful information in detail that will point the way to direct shipments by growers to the grain corporation.

"Our purpose in seeking this information is twofold: To aid and expedite the prompt delivery of the wheat which the United States food administration so pressingly needs for our armies and navy, and for the military and civilian requirements of our allies; and to help the growers secure the full measure of compensation that is due them under the food control law of congress."

In reply to this letter Mr. Houser says:

"Any one can ship us wheat, for which we will account to them after the car is unloaded on the basis of terminal weights and grades according to our price schedule, fully set forth in our grain bulletin No. 1, a copy of same herewith attached, with the provision that there are terminal facilities available on arrival of car in which it can be unloaded. If car should arrive during a period of congestion demurrage on it would be for account of shipper. The grain corporation also makes a charge of 1 per cent for handling consignments. We make no advances against bills of lading. All cars should be billed to the Food Administration Grain corporation, sending bill of lading and shipping advice in ample time so that they will have a record of car before it arrives. If a farmer is dissatisfied with prices offered by his local dealers or representatives of terminal dealers he has the alternative of consigning to the grain corporation on the above terms."

This last letter from Mr. Houser does not give as much helpful information for the farmer as might have been expected from the government official to whom the growers must look for protection in marketing their crops. In a further effort to get at the basic facts the Washington Farmer has addressed the following letter to Mr. Houser, in his capacity as director of the United States Grain Buying corporation:

"We thank you for your courteous reply to our supplemental inquiry and note your qualifying proviso that competitive buying by the government will be affected by 'terminal facilities available on arrival of car in which it can be unloaded. If car should arrive during a period of congestion, demurrage on it would be for account of shipper.' In other words, should a grower's car arrive at a coast terminal at a time when the privately owned warehouses and elevators were full, the grower would be obliged to leave his car waiting for an indefinite period on a sidetrack and pay a daily demurrage charge to the railroad company.

"It is of the highest importance, if competitive buying by the government is to be practically helpful to the growers, that assured provision be made by the federal grain buying corporation for terminal facilities. The fear that will naturally rise in the producer's mind, from your disquieting warning of probable demurrage charges, unless allayed by prompt action by the government, will practically obliterate the protective feature of its grain-buying program.

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## Peace Must Be of Allied Make

The following quotation from the Bache Review well expresses the great consideration to be ever borne in mind relative to peace-making:

"Now that the turn of the war has come and defeat begins to make the German staff tremble, it is of the greatest importance that the public should have its opinions stabilized against a negotiated peace and firmly set to demand only the most rigid justice meted out as a verdict against the outrageous and high-handed iniquities of Germany. Innocent blood, mercilessly spilled in torrents during four years of atrocities, cries out against any other settlement of the war. In dictating terms to the destroyers of the world's peace (after unconditional surrender) it must never be forgotten that German unity if not effectively and permanently destroyed now will inevitably crystallize for a repetition of the frightful scheme of world domination, no matter how long it may take to recover."

## Mystery of Milk Nourishment

"There is a certain mysterious property in milk which scientists have not yet been able to isolate, but it is not beyond the realm of possibility to do so," Dr. E. V. McCollum said. "If we succeed in isolating this it will undoubtedly rank among the highest achievements of chemistry. More than that, it will no doubt be one of the greatest blessings the human race has ever known."

The speaker was Dr. E. V. McCollum, of Johns Hopkins university, noted for his experiments proving the indispensable food value of milk, and now lecturing in the Pacific northwest under the auspices of the United States food administration, which is spreading the gospel of the necessity of milk in the human diet.

Dr. McCollum was speaking of the mysterious nourishing properties that are now known to lie in certain food products, notably in milk and eggs, which elude chemical analysis, and which scientists now term vitamines.

Theoretically it is possible to make up a balanced ration which, so far as chemistry can see, contains everything that is essential to human health and vigor. Yet persons or animals fed on such ration do not thrive. We then say that vitamines are lacking.

When one comes to think of it, however, is it not strange that the government must send out instructors to preach anew the doctrine of the "absolute necessity of milk as a human food"—a fact learned by the ancient thousands of years ago? The human race began its higher development with the domestication of the cow. We know, from ancient sculpture, that cattle were domesticated 4000 years ago, and that it was impossible for population to increase rapidly until tribes had access to animal milk.

The sparse Indian population in America when this continent was discovered, and the failure of the red race to advance in civilization, are undoubtedly attributable to its failure or inability to domesticate milk-giving animals. Geologists tell us that parts of the Pacific northwest are the oldest lands upon the globe, the first to be lifted by internal forces above the sea; and other scientists tell us that man was here probably before mankind had occupied the ancient valleys of the Nile, the Tigris and the Euphrates. But civilization rose there thousands of years ago, and savagery lingered here till America was discovered by the white race. Asia and Egypt had cereals and milk; the native races of America, lacking those nourishing blessings, could not multiply nor progress.

## Every One Should Be a Judge

One of the great benefits that will be derived from fair work this fall will be the training that every one will receive in learning how to judge various products at the fairs. The man and woman and the boy and girl who learn how to judge at the fair will learn how to judge for the market. The article that wins first prize at the fair will be the best seller on the market.

The power of discriminating between good stock and poor stock, good crops and poor crops is a valuable asset for any one to possess. But the ability to explain the differences is still more valuable. In training judges for fairs we are training ourselves for better farming and better living on the farm.

## Plan Liberty Investment

It can not be too often or too forcibly urged that every one plan early the investment that he or she will be able to make in bonds of the fourth Liberty loan. The campaign for this issue will be launched on September 28, and will continue for a period of three weeks. During that time the treasury department hopes to be able to sell to people of this country some six billion dollars worth of these securities.

With three Liberty loans already successfully floated, it seems unnecessary that argument be repeated. There is no better investment in the world. There is no more loyal act that a person with money can perform for his country than the purchase of a bond or bonds. It is as essential to the success of the allied cause as is the placing of American soldiers on the battle front. The question that faces every man and woman who can possibly spare money from their absolutely necessary business is not, "Shall I invest?" but rather, "How much?"

## Why Not a Fertilizer Crop?

It has been charged that farmers in the extreme west have been slow to take up the most up-to-date methods of farming. To some extent the charge is undoubtedly true. The virgin soils of the west have been fertile enough to produce crops without the special effort required in some of the older sections, and in addition the areas capable of being cropped have been large per capita. But the time is at hand when the west must put the best ideas of scientific farming into practice.

How many northwestern farmers have ever tried a fall crop designed to be plowed under in the spring for purposes of fertilization? Comparatively few. Yet this is one of the best methods known of maintaining soil fertility. Much of the soil of the west is becoming deficient in humus to an extent that often accounts for the low crop yields in unfavorable seasons. While different local conditions make different crops advisable for this purpose, rye is recognized as one of the best for general use.

In addition to the fertility put into the soil by the plowing under of the cover crop, fertility is retained by the prevention of soil-washing during the wet season. A good covering of rye during the wet season does much to prevent soil-washing and leaching.

## Brand New Hopes Not the Best

Brand new hopes are the prettiest, the most entrancing, and life is not worth while without them; yet they are not the best.

The newest hat from the milliner, the newest coat from the tailor, the newest tie or the newest shoe look the best, and to all intents and purposes are the best—but not so with hopes. Good, well tried and serviceable second-hand hopes are the ones to tie to; hopes that are founded on human experience; hopes with the glamour not quite all gone; right down, every day, serviceable hopes; hopes that plod along with you through the long hours of routine, as well as on rare occasions, give you a glimpse of the mount of transfiguration.

It is not a thankful task to prick the toy balloon of the prettiest hopes, yet a word might save many a tragedy—but it won't.

Hope is the most abiding sustainer in life's work. Good, second-hand, tried hope; "that we through patience might have hope;" yes, good, second-hand hope built upon the enduring foundation of patience.

There is good reason for the hope of many more years of happy neighborly relations if you have patience with some word or act of your neighbor which you can not quite reconcile with neighborly spirit. There is good reason for your hopes for the future of your child if you will add patience to all your other efforts. Above all, have patience with the failure, now and then, of your own best efforts, if you hope for days of sweet content.

## Must Speak German Language

It is a thing to be approved that councils of defense and other officials are continually alert to prevent in this country those things deleterious to national welfare at this critical time in our history. One action that the councils in many states have deemed it wise to take is the banishment of the study of the German language from the public schools. This action is taken for a purpose or for purposes. One object undoubtedly is the prevention of the spread of German sentiment through German literature or through familiarity with the German language. And to whatever extent this object will be obtained, to that extent at least the dropping of the study is to be approved.

But we must not be carried away by our present antipathy for Germany and things German. As the U. S. department of state says in a report recently issued, "one must understand what they (Germans) say, read what they write, and endeavor to learn what they think." The statement contains also this striking sentence: "If we are ignorant of German, we do not know Germany; we only know and see of her what she wishes to show us."

Some day the war will be over and a Germany will live to be reckoned with—not the Germany of today, to be sure, but a Germany that will continue to hold a place in the affairs of the world. In that day we must be able to understand her language in order to deal with her in diplomatic and commercial ways.

## Save Your Garden Seed Now

Some of the garden seed now growing abundantly in your garden will be needed next year when planting time comes. Better save a supply while you can. It is not hard to save seed and quite frequently the home-grown supply is better than any that can be bought from the seed man. Home-grown seeds are suited to local environment and the vigor and productiveness of the plants from which they are selected can be taken into consideration—which is an important point in selecting home-grown seed. Wait until the seed matures, then dry it thoroughly immediately after it has been harvested.

# Manpower Bill Is to Be Passed

## *Great Army Assured; Allies Continue Their Move Forward*

Probably by the time this paper reaches its readers the new manpower bill extending the draft ages to include all men from 18 to 45 years of age will have been passed by both houses of congress and signed by President Wilson. At this date the house of representatives has already passed the bill in practically the same form as recommended by the war department. The senate is taking the matter up for formal action, and it is believed will adopt it without changes in any vital point. It is expected to be ready for the signature of the president by the latter part of this week.

Complete accord is noted in congress on the main object of the bill, which is the placing of a gigantic army on the European battle field at the earliest possible date. Only two votes were cast against the measure when it was placed before the house for final action. One of these votes was by the socialist member of the house. Considerable debate, however, was entered into on certain proposed amendments, chief among which were those looking to the exemption or deferred classification of boys from 18 to 20 years of age. A strong sentiment prevails in congress favoring the keeping of this class of men out of actual army service, but the war department, backed by President Wilson, urges the inclusion of the 18-year-olds as a necessary factor in the formation of the army. The house of representatives finally receded from opposition and adopted the measure as a whole. Another interesting feature of the consideration of the measure in the house was the adoption at one time of an amendment which would include members of congress, state legislators and other public officials in the draft. This amendment, however, was later rejected by a vote of the house.

As soon as the measure is adopted by both houses and signed by the president the war department will announce its plans for registration of the men to be drafted. It is probable that the registration will occur early in September, following which those in class 1 will become immediately subject to call to service.

General March, chief of staff of the army, has officially announced that more than 1,500,000 American soldiers have embarked for foreign service, including those that have been dispatched to Russia. The number of troops will be continued as rapidly as men can be made available and ships be had for their transportation.

### Allies Continue Gains on the West.

Contrary to the opinion that had been expressed by many following the launching of the allied drive nearly seven weeks ago, the drive is being continued with no apparent evidence of early cessation. Comparatively little activity has been reported on the front between Rheims and Soissons, the battle front of which now follows practically the straight line of the Vesle river. During the last week the French, with the assistance of greater or less detachments of British and Americans, have made considerable advances just to the northwest of Soissons, resulting in an advance to Noyon, making almost a straight line from Rheims through Soissons and Noyon to a point some 10 miles east of the recently captured Montdidier. From this latter point north the British, during the last two weeks, have made advances equally great and equally important to those made by the French and Americans further south a few weeks ago. Over a front of more than 25 miles advances of from one to 10 miles have been made since August 8, practically straightening the line to the east of Amiens so that it runs about north and south from the point 10 miles east of Montdidier to the old line east of Arras. A gain of a few miles in the Lys river valley to the north of Arras and Bethune has straightened the line in that sector to correspond to the straightening further south.

It is calculated that since the allied drive began on the Marne front July 18 the battle front has been shortened approximately 50 miles. While this is an advantage to the German armies for purposes of defense, it is perhaps a corresponding advantage to the allies for purposes of offense.

### Surrender Must Be Unconditional.

In debating the new draft bill before the senate last week Senator Lodge sounded a note that should be unanimously indorsed by all American people when he said that no peace which satisfies Germany can ever satisfy America; that we can not accept a negotiated peace, but a peace dictated by the allies on the basis of their objects as repeatedly set forth by allied statesmen. Among the terms of peace which Senator Lodge outlined were included the complete restoration of Belgium, the unconditional return of Alsace-Lorraine to France and of Italian Irredenta to Italy, safety for Greece, independence for Serbia, Rumania and Poland, independence of the Slav peoples and freedom of Russia from German domination, including return of Russian territory wrested by Germany in the Brest-Litovsk treaty. In addition, he said that Constantinople must be made a free port for commerce between the inland regions of eastern Europe and western Asia and the outside world and that Palestine must never be restored to Turkish rule.

### Allies 500 Miles From Berlin.

While many people are wondering if the war may not yet be brought to a successful conclusion this year, it is not amiss to be reminded that the fighting on the western front is now some 500 miles from Berlin. It is still approximately 100 miles from the German border, and several miles even to the Belgian border. While the gains have been exceedingly noteworthy, they have been made a mile at a time, with great effort. In addition to this it must be borne in mind that the German frontier is fortified in the most effective way known to modern military science. Assuming that the allied drive might actually free all French and Belgian soil of the Germans this year or next spring, it is evident that nothing short of a collapse of the German military power could make it anything but a Herculean task to get through the fortified frontier of Germany. One report last week indicated that at one point 90 miles in front of the allied line the Germans were preparing entrenchments as if expecting to be pushed back that far in the more or less near future. This in itself may be significant only in that it indicates that Germany is preparing back of her lines to make the allied advance increasingly difficult with every mile gained.

Without minimizing the importance of the allied successes of the last several weeks, it could scarcely appear at this writing that they are other than a sort of clearing of the decks for the greater drive next spring when 3,000,000 or more American soldiers will have arrived on the scene. It is sufficient evidence of optimism to predict the end of the war a year from now.

### Big War Revenue Measure Ready.

As soon as congress has disposed of the new draft bill the new revenue bill, designed to raise $8,000,000,000 by various forms of taxation, will be ready for its consideration. The measure is so drawn that the excess profit tax will provide the largest amount of revenue, estimated at $3,000,000,000. The income tax, both individual and corporation, is expected to yield $2,400,000,000; the estate or inheritance tax $110,000,000; beverages, including liquors as well as soft drinks, $1,100,000,000; tobacco, cigars and cigarettes, $350,000,000; automobile manufacturers' tax, $125,000,000, and users of automobiles and motorcycles, $73,000,000.

### What Is Austria Going to Do?

What Austria is going to try to do as a continuation of her part in the war is a question that is being widely asked since Italy gave her enemy the severe setback of the early summer. Some critics believe that Austria is soon to make another offensive against Italy. But this is hadrly given credence, owing to the unstable condition of the Austrians, due to food troubles. She has been asking aid of Germany, but apparently has been denied it. There has been no major action of any kind reported on the Austro-Italian front for several weeks.

### How Can the Soldier Abroad Vote?

The problem of enabling the American soldiers in France to cast their votes at the election this fall is one causing the states much trouble. Owing to different state laws covering elections, the government can not prepare a set of regulations covering the vote taking. Other defficulties stand in the way, until it appears at this time that the soldiers, in most, cases, will have to lose their votes. The government, however, has agreed to cooperate with the states in every way possible to secure the soldiers' votes.

### Spain May Join the Allies.

Relations between Germany and Spain are becoming more uncertain from week to week. The Spanish government has a number of German vessels interned at Spanish ports, and has officially notified Germany that for every Spanish vessel destroyed by submarines Spain will appropriate a German interned vessel. This has brought a vigorous protest from Germany. The situation is reported to be so tense that Spain may at any moment sever diplomatic relations with Germany.

### Must Eliminate Nonessentials.

The fact that there is a shortage in war work of 1,000,000 unskilled laborers and that the reserve of skilled workers is exhausted developed at a conference of field agents of the federal employment service. Further curtailment of nonessential production is planned to release men for war work. The labor shortage is so serious that completion of a number of important war projects for the army and navy is being delayed, it was said at the conference. "The time has come for the entire nation to realize that business as usual is no longer possible," Nathan A. Smith, assistant director of the employment service, told the conference. "If we are to end the war quickly the production of luxuries and nonessentials in this country must come to an end. It is a question of ending the war quickly or having it dragged on indefinitely."

### Aircraft Money Has Been Wasted.

The committee appointed by congress some time ago to investigate the manufacture of airships in this country for use on the battlefields has reported that the $640,000,000 appropriated for the building of airships has been practically wasted. It states as the cause three things: The dominance in the manufacture of men whose knowledge was along automobile lines only; the attempt to use Liberty motors instead of tried and proven engines in all airships, and the failure to build craft that has already been proven successful in Europe. The committee reports that excellent work has been done by the aircraft board recently, and that prospects are for the rapid manufacture of serviceable planes for use by the American army.

### Free Information Bureau.

The Washington Farmer has established an INFORMATION BUREAU at the NATIONAL CAPITAL, which is at the service of its readers and which they are asked to use freely. It is intended to be a clearing house of governmental information. Address inquiries (includingg 3-cent stamp) to THE WASHINGTON FARMER INFORMATION BUREAU, Washington, D. C.

## *Washington Gleanings*

Gangs of county prisoners have been put to work on repair of the Yakima-Ellensburg highway through the Wenas.

The first annual exhibition of the Adams County Fair association will be held at the fairgrounds at Ritzville on September 26, 27 and 28.

The Columbia River Milling company is making improvements in its mill at Wilbur, Wash., that will increase the capacity to 700 barrels daily.

One day's picking from his 40-acre prune orchard netted W. W. Hurst of Freewater nearly $5000. He estimates his receipts at $27,000 this year.

A big Indian council, including members of tribes from many parts of the Pacific northwest, is to be held on October 15 at the home of Rev. George Waters, in the Yakima reservation.

District Horticultural Inspector P. S. Darlington of Wenatchee has inspected the project orchards and says he has raised his June estimate of Omak apple shipments from 85 cars to 225 cars.

The Wenatchee Northern Warehouse and Marketing company of Wenatchee has purchased about 272,000 boxes of Omak apples for cash and this amount will undoubtedly be increased materially before the pool is closed.

Wenatchee apples have scored heavily at the international apple shippers' convention at Philadelphia, according to telegraphic advices. For the fourth consecutive year a display arranged by G. M. H. Wagner & Sons has captured first prize.

Blewett pass was opened to travel May 1, in which month 223 autoists used the road. In June 1470 cars crossed the mountain at this point, and in July 2150, which breaks the record for one month. Not one fatal auto accident has yet occurred on this route.

Clay Fisher of Warner, who is interested in a large herd of sheep, has decided that he will not breed his ewes this fall. Owing to the shortage of hay and condition of the range, he fears that the loss during the winter will be much greater than usual.

By a process discovered and patented by H. C. Shepard of Chelan, the Shepard Fruit Products company, which has headquarters in Seattle, will manufacture at Wenatchee bricks of compressed fruits and vegetables, something entirely different from anything on the market.

With five stalwart sons now serving under the Stars and Stripes, and the probability that three more will go into the service during the coming year, Mr. and Mrs. Lars Erickson of Kennewick claim the honor of having more stars in their service flag than any other family in the community.

Enthusiastic indorsement of the proposed plan to give Washington a $30,000,000 highway system, covering some 2000 miles of permanent hard-surfaced roads without cost to the homeowner or the farmer, put forward by the Thurston County Good Roads association, is coming from all parts of the state.

Guy Moore, a farmer, living on the river road near Finley, was instantly killed recently by electricution in coming in contact with a wire fence over which a power wire had fallen. Mrs. Moore, his mother, also received two shocks from the current while trying to pull her son's body away from the fence.

Present indications are that the Cashmere valley will have a fair crop of the largest and best quality apples that it has had in many years. That is the estimate of the situation as it stands, made by P. S. Darlington, district horticulturist. Picking will be about 10 days or two weeks in advance of last year's date.

Secretary Lane has announced that a contract has been made by the government whereby $150,000, or as much of that sum as necessary, is to be expended in the enlargement and betterment of the Tieton main canal and distribution system of the Yakima project, which provides water for 32,000 acres of land.

The Wenatchee Northern Warehouse and Marketing company, through George A. Coburn, general manager, has signed contracts for 30,000 boxes of apples with growers in the Entiat valley. F. E. Knapp, H. M. Roys, Z. Small, J. L. Phipps, H. B. Phipps, Austin J. Byers, William Goodman and R. J. Toler were among those who signed.

The Toppenish cooperative grain elevator is in the last stages of completion. It has a capacity of 50,000 bushels of grain, is able to elevate 1500 bushels an hour in loading and unloading, and will clean 100 bushels per hour. H. C. Ham, the manager, states that there are better than 3000 acres of wheat signed to pass through it this season.

Primitive methods of preserving fruit and vegetables have given place among the Yakima Indians to the white man's fruit can, and no Indian family on the Yakima reservation is considered well provided for unless it has its stock of canned goods. The Indians are now on their annual trip after huckleberries, and have taken their fruit jars with them.

For the purpose of giving advice, instruction and encouragement to drafted men who are to enter the service, an organization has been perfected in Pasco. Heads of departments were named as follows: On military instruction, Lee C. Henderson; camp life, C. W. Johnson; insurance and allowances, E. A. Davis; character of the soldier, B. B. Johnson; medical and physical advice, Dr. H. B. O'Brien; war history, F. C. Turner; war geography, J. W. Blanton.

# Will Test Beet Byproducts

## *Possibility of Feed Value Makes Question Interesting*

Dean E. J. Iddings of the University of Idaho college of agriculture announces that the University of Idaho is going to inaugurate a series of experiments in feeding sugar beet byproducts. Both stockmen and beet growers are deeply concerned in these experiments, as they will demonstrate to considerable degree not only the possibility of securing valuable feed not heretofore utilized, but because they will indicate a possible source of revenue to the beet grower not yet secured.

"The interests of stockmen are certainly at stake, because by the use of the byproducts of the sugar beet producing industry it is hoped to reduce the cost of live stock keeping and make feeding operations far more satisfactory and profitable," says Dean Iddings. "Farmers are concerned, because entire utilization of sugar beet byproducts in animal feeding will mean additional income from beet growing. Sugar company officials lend most hearty support for the reason that success in the proposed work is certain to mean extension of sugar producing areas and more sugar to supply the needs of the allied nations.

"What is the field of promise ahead? What can be done that means real and substantial progress? That can not be definitely answered until this winter's feeding operations are completed. The apparent prospect, however, is a most alluring one.

"Large quantities of beets will go to the factory. The residue and refuse syrup and the pulp will undoubtedly be fed, since experience of feeders and the tests of agricultural experiment stations have clearly shown a considerable feeding value for the molasses and pulp, such value that both can be fed with profit.

"There will be, in addition to the molasses, and pulp, thousands of tons of tops. The tops include a portion of the beet called the crown, which it is found advisable to remove in taking off the tops.

"Here is a great mass of green stuff suitable for feed, and what is to be done with it?

"In past years the tons were piled in the field and sold to sheepmen and cattlemen at $3.50 to $5 per acre. Rain and snow and wind came, live stock tramped and scattered the piles, and the waste has always averaged far more than some of us thought. This is, however, no time for waste, particularly of roughage that might serve to cheapen the cost of live stock feeding. A way out of the situation seems to be available.

"For many years in continental Europe green stuff of all sorts has been placed in pits, where the siloing process took place and winter succulence of relatively high feeding value resulted. Colorado, with extensive sugar beet growing interests, started siloing sugar beet tops some three or four years ago, using the pit method. Last year a considerable tonnage of sugar beet tops was siloed and an excellent quality of silage was produced and fed in northwest localities.

"Experience of men who have put forth effort in the endeavor to make wise and economical use of the sugar beet top indicates the feasibility of using the pit or trench silo. So much has been done already that the siloing of sugar beet tops can be considered an unquestioned success, and unusually favorable results have been reported from feeding the trench-made sugar beet top silage.

"Just how wide the field of usefulness and the approximate value of this silage, as compared with feeds known as standard, can not be stated with accuracy. Certain it is that the total amount of feed at stake is of very great importance, particularly at this time. Feeding at the rate of 100 pounds per head daily for a period of 100 days, the sugar beet top silage from the area before indicated would provide palatable succulence for approximately 80,000 head of cattle. The same tonnage would take care of 500,000 to 800,000 head of sheep, depending on a rate of feeding that might vary from three to five pounds per head daily.

"It has been claimed that for live stock feeding a ton of sugar beet top silage is worth a ton of alfalfa hay. An acre of beets that yields well will produce from four to eight tons of tops. On that basis, and conceding the best top silage the equivalent of an equal weight of hay, the farmer will have left after selling his beets to the factory a quantity of feed on each acre equivalent to a yield of from two to four tons of alfalfa per acre. Suppose that two tons of the silage are required for the alfalfa ton equivalent. On that basis the farmer would have a feed equal to two to four tons of alfalfa per acre. Even though three tons of silage are required to equal the feeding value of a ton of alfalfa, the prospect is still attractive."

# What's This Guarantee?

One of the conditions under which a wheat grower may take advantage of the government loan of $3 per acre for securing seed this year is as follows:

"Each borrower will be required, as part of his contract, that if his yield is seven bushels per acre or more, he will pay into a guaranty fund a sum equal to 25 per cent of the amount loaned him, to cover any loss that may occur. If the amount so contributed exceeds the actual loss by the government the excess will be returned pro rata to the contributors."

Commissioner E. F. Benson of the Washington state department of agriculture has taken up with Secretary D. F. Houston of the United States department of agriculture the question of just what this may mean. Commissioner Benson expresses the fear that it might mean that a farmer instead of paying only 6 per cent interest on the money advanced to him would, if he produced a successful crop and the government lost on the lending venture as a whole throughout the country, be required to turn over the additional 25 per cent which he deposited as a guarantee. Commissioner Benson believes that this is a serious drawback to the effectiveness of the plan worked out by the government to aid farmers in securing seed.

# Handle With Care

## Hides Too Valuable to Damage

The present urgent demand for leather as a war necessity and the increase in price which hides bring on the market emphasizes the importance and even necessity of exercising the utmost care in removing skins from farm animals. By devoting a little extra time necessary in skinning animals carefully—possibly only three to five minutes in taking off the skin of a calf, or 15 minutes in the case of a beef hide—the value of the hide may be increased several times, say specialists of the United States department of agriculture. The tanner pays more for packers' hides than for those obtained from farmers or country slaughterers. This is due in part to better facilities in the large packing houses for curing and storage of hides, but principally to the fact that such hides have been taken off properly. Country hides removed by unskilled workmen are often cut and scored. When such hides come from a tannery scores show very plainly, and in many cases one-half of the thickness of the leather is lost by such defects. Imperfections can be avoided by the careful use of the skinning knife, by keeping the hides clean and free from blood and by proper storage and packing.

The use of the knife may be avoided in taking off calfskins, except on the head, neck, legs, and flanks, as the body skin may be drawn or fisted off. Where the knife is used the skin should be drawn tight with one hand while the knife is used with the other, special care being taken to hold the back of the blade close to the skin. In lieu of the knife some butchers use a wooden stick shaked like a man's thumb and employ a knife only on the portions of the body mentioned.

It is objectionable to have blood on the hides, particularly in the summer time, as it is likely to cause the hair to slip from rotting or decomposition when the hides are packed and results in the placing of otherwise good hides in the No. 2 grade on the market.

Care should be taken to avoid placing any hides in the pack until they are free from animal heat. Allow them to lie folded for from three to five hours, or sufficiently long to allow the animal heat to get out of them. If this is not done patches of decomposition may result, and such hides are often reduced in market value at least a cent or more a pound.

In building up a pack of hides the outer edges should be kept a little higher than the middle, so that the liquid or brine formed by the dissolving of the salt in the natural moisture of the hides may be absorbed by them. If the pack is low on one side, or is built slanting like a shed roof, the brine will seep out, causing the hides to shrink in weight. Use salt that has been screened and is free from large lumps of dirt. Dirty salt will stain the fresh side of hides. One pound of salt to each pound of the hide is the general rule. Hides should remain in pack from 15 to 30 days and stored in cool (60 to 65 degrees F.) cellars from which the outside air is excluded.

# Prevent Smut

## Government Offers Suggestions

There are four kinds of smut which occur on wheat and barley, according to the United States department of agriculture, two of which (bunt or stinking smut, and covered smut) are effectively controlled by soaking or dipping the seed in or spraying it with formaldehyde solution. Loose smut is controlled by treating the seed grain with hot water.

Seed to be treated for smut should be cleaned in a fanning mill. Use formaldehyde (40 per cent solution) diluted at the rate of one pint to 40 gallons of water. If the soaking method is used, allow wheat to remain in a tub of the disinfectant 10 to 20 minutes, and barley 30 minutes to two hours. To get the best germination results the grain should be sown as soon as treated. If this can not be done, it should then be spread out and dried.

Solution of the same strength mentioned should be used for the dipping and sprinkling methods. In dipping, after thorough cleaning and grading, the seed grain is placed in gunny sacks, which should be filled not more than half full and tied at the top. After dipping repeatedly in the solution the sacks of grain are put where they will drain and dry enough so the seed will run freely through the drill. If not used within two hours, spread the seed out to dry and air.

Application may be made with an ordinary sprinkling can while the seed is being shoveled over from one pile to another. One gallon is sufficient to cover a bushel of grain when this method is used. The grain must be so well stirred that every kernel is thoroughly wet. It is then covered with sacks or other cloth wet with formaldehyde solution and allowed to stand for a period before being spread out to dry or sacked for use.

There are three methods of treating seed with hot water. The short method consists of dipping the wheat or barley for from 10 to 15 minutes in water ranging from 126 to 135 degrees F. and cooling and drying it immediately. To control loose smut the seed should first be soaked four to six hours in cold water before treating with the hot, or a lower temperature than recommended for the short method should be used and the soaking prolonged. If the latter method is used, keep the water at from 111 to 115 degrees F. and soak the seed for three hours.

Disinfecting seed grain will prevent certain diseases other than smuts (but not rusts), and thus may increase the yield even more than would be indicated by simply replacing the smutted with sound grains. More complete information on cereal smuts and the disinfection of seed grain is contained in "Farmers' Bulletin 939," a copy of which can be obtained, so long as the supply lasts, by applying to the United States Department of Agriculture, Washington, D. C.

### FOLLOW CROP SYSTEM.

### At Same Time Increase Wheat.

Though still perhaps the most enthusiastic advocate of pea growing as a great industry and a part of a proper cropping system in this state, J. R. Shinn, county agent for Spokane county, is urging upon pea growers that they increase their wheat acreage this fall.

Mr. Shinn believes that growers in the pea sections should put wheat on all land that has grown peas for two successive seasons. He advocates this for two reasons: First, the need of wheat makes it the patriotic duty of the producers to increase the acreage this fall, and, second, continued growing of peas on the same land is less advantageous in the long run than the systematic alternation of crops. He believes that the present opportunity is good for the development of systematic cropping, arguing that to increase the wheat acreage in the pea growing sections at this time will, in fact, be a vital move toward a permanent system of crop rotation.

### Wenatchee Ships Much Fruit.

Reports from Wenatchee indicate that during the busy part of the present fruit season soft fruits are moving from that section at the rate of 25 to 30 cars a day. Considerably more than 500 cars were shipped up to the 20th of August.

# Seed Is Found

## Farmers Will Seed Big Acreage

It is the opinion of E. G. Schafer of the state college, secretary of the seed wheat committee, whose purpose it is to see that sufficient fall seed wheat is available where needed, that the growers of Washington will make good on the government's request for an increase of the fall wheat acreage by 80 per cent over last year. Mr. Schafer has been traveling throughout the wheat growing sections and finds the spirit of the farmers alive to the need. Only lack of moisture can prevent the seeding of a large acreage. The fall wheat in the state, if conditions of seeding will justify, will reach from 900,000 to 1,000,000 acres.

Sufficient seed wheat, with the possible exception of Jones' fife, has been located and in most cases placed where needed. The seed committee has located more than 80 cars of desirable fall seed that has been diverted to localities that need the seed. It would otherwise have gone to the mills. Through the activities of the county agricultural agents, farmers have been assisted in locating seed in their own communities. The movement has been made and is still being urged for those who have desirable fall wheat to let it be known and those who need it to let their need be known. This often results in the placing of the seed in the same locality in which it was grown, thus preventing delay and shipping costs. In other communities where insufficient seed is available, farmers are going in together to have it shipped in by carload lots, thus likewise saving much unnecessary costs. Farmers desiring wheat for seed or having some for sale should get in touch with their county agents or Mr. Schafer at Pullman.

Mr. Schafer reports a general spirit of cooperation between the grain men, warehouse men and others in securing this seed. M. H. Houser of the federal grain buying corporation for the northwest, recently issued an order to warehouse men to hold the available seed wheat in their houses until the farmers' needs could be supplied. This prevented the shipment to the mills of much of the grain needed for seed. Mr. Schafer says that only in rare cases have the holders of this grain shown any desire to make undue profits on it because of the special need for it.

# Liberty Cattle Feed

To the Editor: The problem of getting hogs into the hands of farmers having feed is an important one at the present time. Scattered around through the Inland Empire are great numbers of feeder hogs for which there is a ready demand, provided they can be placed in some central point where buyers can find them. All owners of these hogs should be brought to realize the system that should be followed in meeting the situation.

For small lots of hogs which may be in the hands of these farmers I would recommend that they be shipped to the Spokane Union stock yards. There they will find a ready sale at good prices for hogs and pigs, as most of the men seeking such stock look to this source for their supply.

In regard to stock cattle, I would advise strongly that men retain their feeders until later on, as the market is now flooded with poor stock. We have an abundance of pea straw here which has a feeding value practically equivalent to alfalfa hay. This can be had at $15 per ton f. o. b. cars, Fairfield, Wash. Straw is baled the same as alfalfa. It makes excellent horse feed, also, when used with wheat hay, timothy hay, oat straw and alfalfa hay in proportion of two parts straw to one of other roughage. I know of several parties who cut their hay bill in two by using this combination last year. They rightfully claim they never had their horses do better.

Pea straw should not be fed alone to horses, as they will gorge themselves with it and impaction result. As the use of this kind of roughage becomes better known it will be much sought after by stockmen.

My office is prepared to place parties desiring pea straw in direct communication with farmers having pea straw for sale. I firmly believe that pea straw should be regarded as a Liberty cattle feed for the winter of 1918-19.

J. R. SHINN,
County Agent, Spokane County.
Spokane, Wash.

### Will Show Power Machinery.

A national exposition of trucks, tractors and power machinery equipment has been announced for Chicago, September 12 to 21.




# A Little "Tank"—for Farm Work

The Cleveland Tractor is built on the same principle as the wonderful European battle "tanks."

*It travels on its own tracks, laying them down and picking them up as it goes along.*

This efficient type of construction makes the Cleveland *specially* valuable to farmers, as it enables them to work practically *anywhere*—over almost *any kind* of farm land.

They are being operated over gullies, ruts and ditches, through soft soil, wet clay, sand and gumbo—without sinking or floundering. *They do not pack the soil.*

They are working under and among small trees, close up to fence corners, on hillsides and over rough ground with much better results than can be obtained with horses or with any other type of tractor.

And they are working much *faster.*

Thousands of Cleveland Tractors are helping to increase the production of food demanded by war conditions.

The Cleveland, pulling two 14 inch bottoms—which it will do under average conditions—plows 3½ miles an hour—eight to ten acres a day. This is equal to the work of *three* men and *three* good three-horse teams.

The Cleveland steers by the power of its own engine; it requires but slight effort on the part of the driver. Only one man is required to operate it. 12 horsepower is developed at the drawbar and 20 horsepower at the pulley. It is a constant source of tractive and stationary power for twelve months in the year.

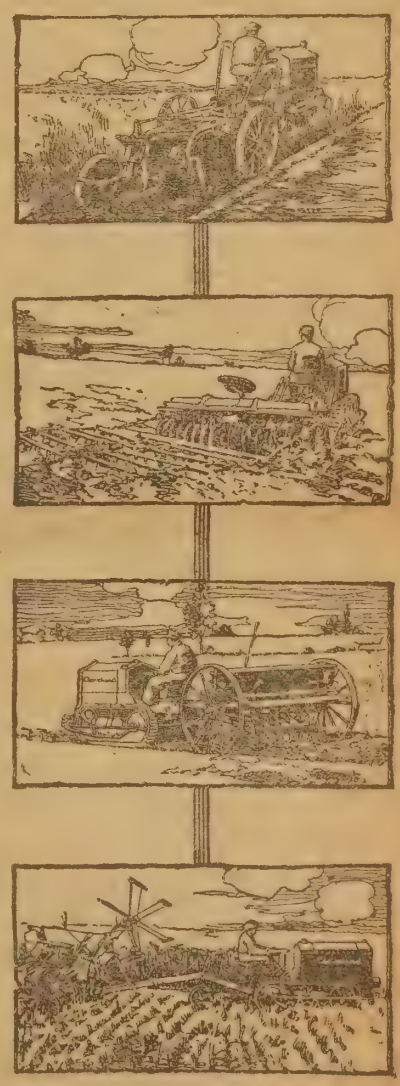
It plows, harrows, plants, reaps, cuts ensilage, runs saws and pumps, drags logs, pulls road machinery, hauls manure spreaders and does practically all the work formerly done with horses or stationary engines.

*The Cleveland Tractor produces food but consumes none of it. It conserves man power, horse power, time, energy, and effort—and produces greater returns.*

The Cleveland Tractor was designed by Rollin H. White, the well-known engineer. It is manufactured under his supervision. Gears and tracks are protected from dust and dirt. Materials throughout are of the best. The whole machine weighs only about 3200 pounds. It can be housed in less space than is needed for a horse.

Take advantage of present produce prices. Raise *more* food *now*. Help the nation and incidentally make more money yourself by using one or more Cleveland Tractors.

Write for complete information and the name of the nearest Cleveland dealer.



## The Cleveland Tractor Co.

*The largest producer of Crawler-type Tractors in the World*

**19087 Euclid Avenue** **Cleveland, Ohio, U. S. A.**

# Cleveland Tractor

# All Is Ready at Yakima

## *State Fair Holds Unusual Promise This Year*

By FRANK MEREDITH, Secretary.

The 1918 Washington State fair at Yakima, September 16-21, gives every promise, through the inquiries and correspondence that are coming into the secretary's office that it will be the most important and biggest fair that has ever been held at Yakima. The recognized need of state fairs at this time is fully felt. They stimulate production by competitive exhibition and furnish the means and common ground whereby different branches of agricultural industry may be presented. Such factors are placing these great institutions on a permanent basis, the foundation for the growth of their individual states and peoples.

The Washington State fair this year will have exhibits that cover a larger field of production and industry than ever before. Anticipating this, premiums have been increased in many classes and special new prizes are offered in several departments. The largest poultry premiums in the state are offered. Increases are noted on fat cattle and horses. The best five sheaves of either winter or spring wheat accompanied by 30 pounds of threshed grain from the same field will be awarded $50, first; $30 second, and $20, third. The best general display of corn, 10 ears each variety, will receive $15, first; $10, second. The best single ear of corn from among the first prize winners will receive $15.

Stock vegetables and roots this year are distinguished in a separate class from culinary and garden vegetables. The best individual farm display will bring $25. The best bushel of Netted Gems, grown east of the Cascades, will be awarded $25. The best display of 25 one-tier boxes of apples, 5 or more varieties of commercial fruit, extending through season, will win $50, and the best general collection of fruits for family use, for entire season. will receive $15. Proportionate second and third premiums are offered in all entries.

### Hold Second Sheep Sale.

The vital importance of the sheep industry is enlarging that branch of the fair's program. Romney sheep have been added to the list in response to a demand. The first annual sheep sale was held last year with such success that another will be held at this year's fair, beginning on the first day and extending through the week. An innovation in connection with this department will be the sheep school, which will be held every morning from 10 to 12 o'clock. Men who are expert in sheep knowledge will lecture and give practical demonstrations illustrating points they bring out in their talks. The men engaged as lecturers are W. T. Ritch of Australia, now with the American Wool Improvement association; F. S. King of Cheyenne, Wyo., one of the best informed breeders in the United States; Dean Iddings of the Idaho university, who will also act as judge of sheep, and V. O. McWhorter of the U. S. bureau of animal husbandry. Mr. McWhorter has a moving picture film entitled "From Wool to Cloth," which will be exceedingly interesting to every one whether in the sheep business or not.

The judges for the live stock have been selected. W. A. Kerrow of the University of Minnesota will judge dairy cattle. W. T. McDonald, who is now connected with the Canadian department of agriculture, will judge the beef cattle breeds and draft horses. Professor C. E. Howell will judge the swine; and William Coates of Vancouver, B. C., will judge the poultry.

### Women Will Have Display.

Lines of endeavor peculiar to women will be more in evidence this year than ever. The exhibits in the woman's building will be characteristic, but will show the adaptability of woman to demands and emergencies in the use of substitutes, economies and conservation. The Red Cross, the state council of defense, and the great benefit being carried on through the child welfare work will be represented with exhibits. A great movement that would make a story in itself is the work being done by the boys' and girls' clubs throughout the land. In this state 22 counties have already signified their intention of sending champion county club members to the fair where they will compete for honors. Their motto, "To make the best better," speaks for their accomplishments.

### New Auditorium Ready.

To make the 1918 fair a better one, permanent improvements on the grounds have been made, such as the new auditorium, built at a cost of $15,000, which will fill a long-felt need. It is attached to the south side of the horticultural building, has a seating capacity of 1200, and is equipped with stage and moving picture outfit. It is planned to have a continuous program in the auditorium of educational and entertaining features.

Four-inch water pipes have been installed all over the grounds, in place of the smaller pipes, which did not give the service, which will now be adequate for every purpose. A great deal more ground has been seeded to grass and camping space has been provided so that families may camp during the week.

The thought of a fair brings to mind horse races, and the management of the state fair is particularly pleased with the lineup for the races this fair time. The longest and sturdiest string of trotters and pacers entered in years has been entered. There are 21 entries in the 2:19 pace, and other races are well filled with contenders. Running races, over-night events, will be held every day, for which more money has been set aside this year. The fastest track in the northwest is on the state fair grounds. The course covers a mile. The new grandstand has a seating capacity of 4000. The automobile races will be held on Monday and will include five events. Two will be novelties. One will be a "bug" race of five miles for cars owned and driven by residents of Kittitas, Yakima and Benton counties. The other is a five-mile free-for-all tire change race, each contestant making one change of tire in front of grandstand. The other three events will be a 10-mile race for stock cars, a 10-mile race for small cars, and a free-for-all 20-mile race. The harness and running races will begin Tuesday and continue through the week.

With everything else in connection with the Washington State fair on an increased scale, the season tickets, on the contrary, have been reduced. If they are bought before the fair opens they will be $1.50 for the week, that is, six admissions, and they are transferable.

## SEES WOOL SHORTAGE.

### Army May Take Entire Supply.

Lewis Penwell, chief of the wool division of the war industries board of Washington, D. C., expresses the fear that the wool shortage will before long assume the proportions of a famine. Already he says an order has been issued that the manufacture of yarn for hand knitting be stopped. This is expected to interfere to considerable extent with the work of the Red Cross, which will be unable, says Mr. Penwell, to get any yarn except that which can be bought on the market at this time. He points out that it is more essential to the conduct of the war that the available wool be used in the manufacture of blankets and clothing for the soldiers than for miscellaneous uses of normal times. Discussing the subject further Mr. Penwell says:

"The military needs, which amount to 900,000,000 pounds of wool a year, can be handled by our available ships, but that amount is the limit, which leaves no surplus for civilian purposes. We only produce 280,000,000 pounds of wool a year in this country, so that the vast remainder must come from Australia, New Zealand and South Africa. There is wool enough in the world for all our purposes, leaving out the central powers, but the difficulty lies in bringing this supply in.

"I feel that the route and procedure for handling wool for military needs is little understood. The grower puts the wool on the cars and ships it to one of the big wool centers such as Chicago, Philadelphia or Boston. There a dealer receives it, stores it, grades it and insures it. When this is done, we have an appraisal committee to value it, after which the quartermaster general takes the wool and pays for it. The wool is next shipped direct to the mills and every pound of it goes into clothing for soldiers. There is none given over to civilian purposes, except a very small amount for war necessities.

This is the first time in the history of the wool business that the wool grower is getting everything that can be obtained out of wool. He gets the full government price and does not have to pay a commission to a dealer. This matter is taken care of by the government. The grower not only is reaping the highest price ever paid, but enjoying the satisfaction that the middleman is getting nothing."

# Washington Boys in War Service

From the Twice-a-Week Spokesman-Review.



**ROY R. STOUT, Yakima, Wash.**—Enlisted in August, 1917, in the field artillery, and is now "somewhere in France." He is a member of battery F, 150th field artillery. His mother is Mrs. Elmer Stout.



**JOHN J. McGLADE, Sprague, Wash.**—Joined the colors on June 30, 1917, and is now a member of the Ninth field artillery, Battery D, stationed at Fort Sill, Okla. He is the son of Mr. and Mrs. James McGlade.



**CHARLES F. GOSNEY, Steptoe, Wash.**—Enlisted from Winifred, Mont., in September of 1917. He trained at Camp Lewis as a member of the 348th field artillery, Battery B. He has a brother, Archie, also in the service.

## Have You a Good Garden?

Mr. Farmer, have you a good garden? If not, why not? A good garden is one of the best-paying crops a farmer can raise. It is a great help to keep down the "high cost of living."

I have a good garden every year and this year is no exception, only it is better in some respects and we are having one of the dryest seasons on record. The aphis got my peas—we had only a few messes. We planted a lot to can, but did not can any.

We have such fine beans, and lots of them, for canning, and have had them for the table for a month.

Many can not raise onions from seed; they get three or four inches high, then turn yellow and die. We plant the black seed and now have the white pickling onion. They are nice and mild for the table as a raw onion. I also have a lot of the large red Weathersfield onions that are good size now. We raise the onions on a small piece that will give my family all they want until April, besides seling some. We have the finest lettuce, beets and sweet corn ready to use now and other vegetables that go with a good garden.

The soil of my garden is a black, gravelly loam. I keep my garden on the same ground year after year, keeping it well fertilized and cultivated. A part of it I have so I can irrigate from my water tank by means of pipe and hose. This is what many farmers can do outside of the irrigated district.

L. F. DAVIS, Rainier, Wash.

## Keep Household Accounts.

Two methods of keeping simple household farm accounts are described in a new publication from the United States department of agriculture, entitled "Farm Household Accounts," farmers' bulletin 964. The suggestions contained in it should be helpful to women who are endeavoring to keep some record of the varying income and outgo of food supplies, and especially to those who wish to keep track of household expenses as related to farm business. Those desiring the pamphlet should address the department of agriculture at Washington, D. C.


**Tractors and Implements**

That Will Demonstrate on the Cotton, Ruegg & Phenix Ranches at the

**Big Demonstration**

Portland, Oregon, September 5, 6, 7, 1918.

Aultman, Taylor Tractors
Aultman, Taylor Machinery Co.

Russell Tractors
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Rumley Oil Pull Tractors
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Oliver Plows and Tractor Implements
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P. & O. Tractor Plows and Implements
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Bates Steel Mule
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Parrett Tractors
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C. L. Best Traclayers and Trundaar Tractors
Western Farquhar Machinery Co.

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**Portland Implement & Tractor Association**

Eugene Smith, Business Mgr
346 E. Morrison St.,
Portland, Oregon.



# A Simplified Tractor Operated Like an Automobile Is Entirely Practicable for a Woman to Handle

As in England, the tendency is growing in this country for women to help make up the deficiency in farm labor. They can do so to very great advantage where a machine like the Yuba tractor is employed. It is so simple and easy to operate, so seldom needs repairs, so responsive to the turn of the wheel that women are finding it suitable to their strength.

The Yuba 12-20 does the work of twelve horses. One woman can save the labor of several men, using the tractor. Farm labor decreases a half where a tractor is used instead of horses. There's less cooking, less housework, less chores to do where the tractor is used. It is a healthy occupation, and a most profitable one.

Yuba model 12-20 tractors are ready for immediate shipment. They are ready for your fall plowing, for discing, for hauling, for any work where power is needed.

Yuba 12-20 tractors are made of the qualities of steel that give long service under all kinds of conditions; all kinds of weather; 24 hours a day. They furnish the power, all you need is to direct.

The cost of construction is increasing. It may be necessary to raise the price. *Order now.*

## Yuba Manufacturing Company

**Marysville, California**

**Tractor Models: 12-20, 20-35, 40-70 Pump Models: For all Farm Purposes**
**Plow Models: Yuba Field Plow, Yuba All-Around Plow**
**There are separate catalogues – ask for the one in which you are interested**



# Fairs Will Demonstrate Power Farming

## *Study of All Makes Is Best Way to Determine Comparative Merits*

With the season of state and county fairs once more at hand and the season of fall plowing here also, there will undoubtedly be much interest shown this year in farm power machinery—especially tractors. Exhibits of power farming machinery will prove unusually attractive this fall. On the part of scores of farmers this interest will not be that of the casual looker-on, but will be the outgrowth of desire for practical information.

With the ability of the tractor to perform a wide variety of jobs, and with the fact established that the successful application of power farming is now well assured, the whole matter gets down to individual beliefs and preferences. These are times when the accomplishment of more work in less time is everywhere desired. Careful preparation of seed beds—deep plowing, thorough pulverizing, etc.—are just now important considerations. Power is called for and the tractor has been developed as the instrument to provide it.

The type and size of tractor must be decided by the individual, according to his needs. Obviously, a man with an 80-acre farm can not operate a 10-bottom plow economically and in choosing a tractor economy and need should be the governing thought in the mind of the prospective buyer. In these days of high feed, short labor and failing horse supply, a source of unfailing power supply is a need which practically all farmers recognize.

It goes without saying that no tractor is perfect nor trouble-proof. Nevertheless the fact remains that the farmer who buys a tractor today gets a much more practically constructed and much better machine than it was possible to get a few years ago. Steel has replaced castings and the finely adjusted machinery developed for the automobile has found its use on the tractor. Standard bearings, which make for smoother running and longer wear, are found. In the tractor of today is found a lubrication system as perfect as that in the automobile. Ignition systems, which work so perfectly on the touring car, are also serving on the tractor and modern radiation makes possible continuous tractor operation even in the hottest weather. Carburetion for the use of various kinds of fuel is no longer an experiment, and in buying a tractor nowadays one may with reasonable assurance look for a minimum of trouble with clutch, transmission, valves, piston rings, fuel supply, differential, etc.

There very likely will be many types of tractors on exhibit this fall and attendance at the fairs will afford a good opportunity to look them over carefully and to study the special features which each has to offer.

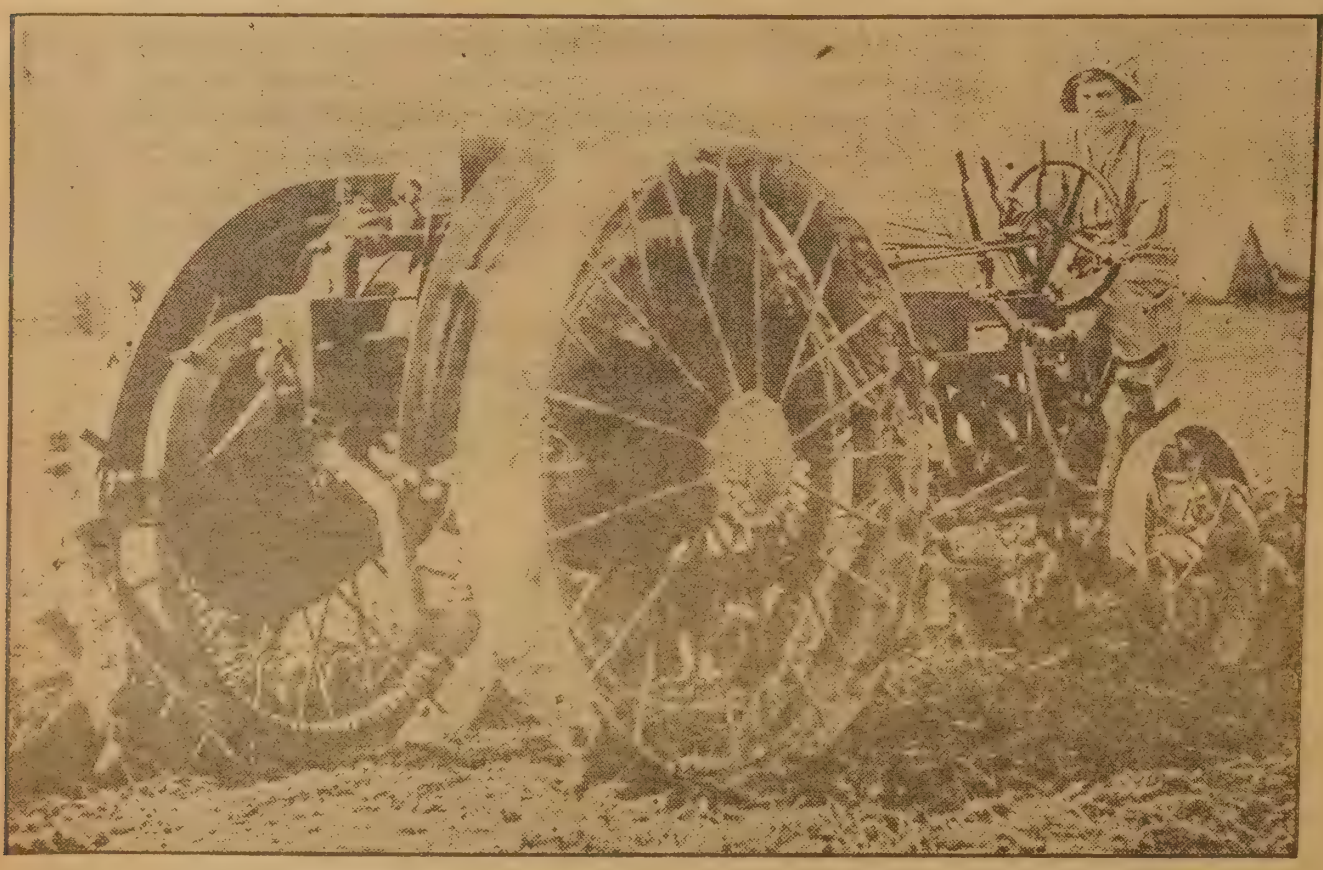
**A Diplomat.**

"My wife and I never argue, so we get along beautifully."

"How do you manage it?"

"When anything goes wrong I always figure that it was my fault and she never disagrees with me."—Boston Transcript.

## *Says It's Just As Easy to Run This Tractor As It Is to Run Your Auto*



Photograph from Underwood and Underwood, N. Y.

Ladies! Did you ever think how much help you can render your Uncle Sam if you know how to run an auto? Did you ever know that it is just as easy to run a farm tractor as it is to run an auto? If you don't believe us, ask Mrs. Henninger, who takes a ride in her tractor every morning to help raise Uncle Sam's crop.

## What Does It Cost?

The question of the cost of operating a truck as compared with the cost of teaming is one that is quite frequently discussed. Here is an estimate that has been made. The figures include these costs: Gasoline consumption per mile; oil, grease cost per mile; mechanical repairs, tires, depreciation, license, insurance.

Here are the cost figures: Gasoline is taken at 20 cents a gallon, the consumption varying from 4 to 10 miles per gallon; oil at 50 cents per gallon, giving 460 to 625 miles; grease costs, 11 to 3 cents per mile, varying with size of truck; repairs, from 1 1-2 to 3 cents per mile. Depreciation is figured on a basis of 150,000-mile life. Thus, if a truck averages 20,000 miles per year, its life will be about eight years. Depreciation varies from 8 to 15 per cent a year, depending on capacity of unit and the mileage covered. Insurance covering fire, theft, liability and collision varies from $185 to $270 per year. Two-ton truck, miles per day, 52. Cost per ton mile, 10.025 cents.

Much depends in economical truck operation from farm to market on the condition of the roads to be traversed. Over fairly good roads a 1 1-2-ton truck will operate to good advantage. On poorer roads a 3-4-ton truck is said to be more practical.

**Make Yourself Plain.**

Let every sentence you utter be absolutely clear.

## Mr. Miles' Daughter Operates Tractor



G. D. Miles of Fairfield, Wash., likes his tractor, and so does his daughter, who is driving it.

"I have had splendid success with my tractor," says Mr. Miles. "With three six-horse teams, three men, the tractor, my daughter and myself, I plowed, harrowed and seeded 600 acres of wheat between April 5 and May 10.

"With the tractor I have worked three eight-foot discs and a harrow at one time. In plowing I use seven 14-inch plows on land that was practically level. In the hills I used five 14-inch plows as you can see by the enclosed picture. My tractor has done the work of from 14 to 20 head of horses and reduced the help by from three to four hands on my ranch. The machine is simple and so easy to manage that my daughter has done a great deal of the work with it."

## On Easy Street

### Compare Yourself With a German

If any American finds himself inclined to be pessimistic over the great war expenditures of this country he should read the record of Germany a few minutes, according to a statement prepared by the United States treasury department. Before the war this country's resources were approximately three times those of Germany. Before the war this country's annual expenditure was only one-fourth greater than that of Germany. The country's national debt now, including the bonds of the third Liberty loan, is approximately $12,000,000,000. Germany's debt is $30,000,000,000. The following is the statement issued by the treasury department comparing the condition of the countries in these and other respects:

"The total resources of the United States are estimated at about $250,000,000,000; our annual earnings are estimated at about $50,000,000,000. Our national debt, including the third Liberty loan, may be put around $12,000,000,000. Before the war our government was spending about $1,000,000,000 a year. When the war is ended, interest charges, less the interest collected from our loans to our allies, government insurance expenses and other necessary expenditures growing out of the war may conservatively be estimated at something like $1,000,000,000. We are confronted, therefore, when peace comes, with raising only a couple of billions a year revenue, a slight task for a nation of such tremendous wealth, capacity and resources.

"The resources of Germany before the war were estimated to be $80,000,000,000. The annual expenditures then of the imperial government were about $800,000,000. Her debt now is $30,000,000,000, and her resources and man power have been severely impaired. After the war she is confronted with additional expenditures growing out of the war totaling some $4,000,000,000. The interest of her war debt, even if the debt grows no larger, will be about $1,500,000,000. Although she is niggardly in her pensions to private soldiers and their families, $1,000,000,000 a year would hardly suffice to pay even small pensions to her injured and the families of her soldiers who have been killed. Her war debt must be paid some time, and a sinking fund of 5 per cent would add $1,500,000,000 to her annual taxation. Here is a total increase of $4,000,000,000, all due to the war.

"Of course, both the United States and Germany may largely increase their debts, but the increases will not change the relative situations. The German government has drained the German people of their gold, even their jewels and heirlooms, and yet the Imperial Bank of Germany now has but little over $500,000,000 of gold in its vaults. The United States has made no special effort to obtain gold, has made no call upon the people for the precious metal, and yet today has in its treasury vaults practically $2,500,000,000 of gold coin and bullion."

### Dodging Battery Bills.

Winter is pretty generally conceded to be the hardest season on batteries. By exercising judgment, a good many battery ills and bills can be avoided.

There are two essentials that must be observed at any time of year. Keep plenty of distilled water over the plates in the jars and keep the battery fully charged. If you have a farm-lighting plant or a direct current of electricity in your house, it is easy to rig up a charging board and put "juice" into your batteries from outside source.

Automobile batteries have about the shortest life of any part of the car, but by taking good care of the battery a good deal of vexation and expense can be dodged.

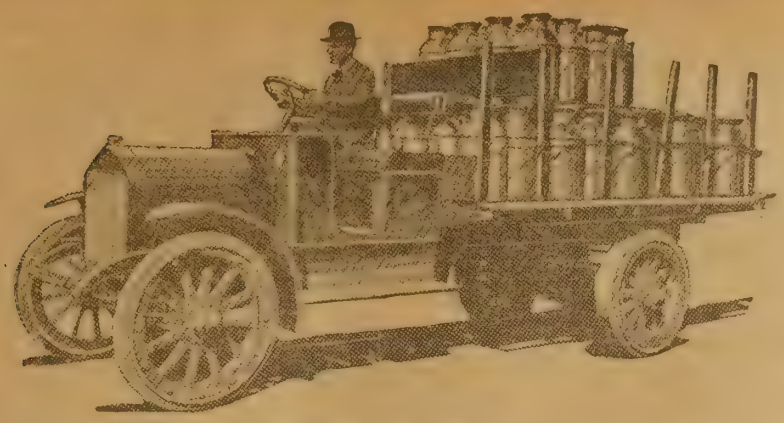
### Produce Munitions Rapidly.

Hand grenades of four types are now being produced at the rate of 2,000,000 a month, it is announced by the ordnance department. Within the next four months, according to program, this rate will be more than doubled. Rifle grenades are being produced at the rate of about 1,000,000 a month. This rate will be multiplied appreciably within the next six months. Orders have been placed for more than 60,000,000 grenades of both hand and rifle type, and more than 18,000 persons are employed in various plants throughout the country engaged in making them.

**The Man Worth While.**

It is easy enough to be pleasant when life goes by like a song, bu the man worth while is the man who will smile when everything goes dead wrong.—Riley.

# Truck Is Rapidly Taking Its Place on the Road



**It used to be uncommon to see vehicles like this even on city streets. It is a common sight now on the country roads of the farming districts.**

## Demonstrate Power

Another important demonstration of power farming for the northwest will be held near Portland, Ore., September 5, 6 and 7. The demonstration will be held on the old Cotton and Ruegg farm in the vicinity of Gresham and is easily reached either by auto or electric interurban line. More than a score of concerns will have their tractors and power farming implements on the scene for demonstration. Approximately 250 acres of typical farm land will be plowed, disked and harrowed. The event is in charge of Eugene Smith, who managed the tractor demonstration at Davis, Cal., a few months ago.

## ALFALFA SUCCESS.

### Western Washington Experiments

County Agriculturist Floyd Rader of King county is a firm believer in alfalfa for western Washington.

"When I first took up the work over here, every one told me alfalfa was out of the question for this side of the mountains," says Mr. Rader. "I couldn't see why this should be the case, and after a little consideration induced some of our King county farmers to put in experimental fields of alfalfa. This year there are patches running up to six acres on about 20 farms. On some places the hay is cut twice, averaging around two and one-half tons per cutting, while other growers make three cuttings, securing probably a ton per acre from the last cutting."

Several important points have been brought out by this experimental work on the West Side. In the first place, alfalfa does not drown out as easily as has been supposed—it stood the flood conditions of last winter, even in localities where practically everything was submerged. In choosing land for alfalfa Mr. Rader favors a sandy loam, and is of the opinion that the water table should not be closer than three feet to the surface. He also favors the Grimm strain, which is comparatively shallow rooting.

The value of these successful experiments for West Side farmers can hardly be overestimated. Alfalfa is the king of leguminous forage plants, and when fed in connection with corn silage, reduces the mill feed bill to a minimum. This is the end toward which every producer must work at present.

## FARM AUTOMOBILE.

### Has Become Absolute Necessity.

By IDA C. YOUNG.

Circumstances have so arranged themselves that there is no man in our home well able to look after traveling conveniences. We live over five miles from town and seven years of weekly and bi-weekly journeying to this same town with horse and buggy has grown to be not only a bugbear but almost impossible through the cold weather of winter.

Last fall a car replaced the buggy, a car with self-starter, and the problem of travel was solved. Twice a week, all summer long, the car made its journeys with farm produce, not only for ourselves, but for a near neighbor, whose horses have had no time to be on the road. Besides the produce the car has added to its load every trip some of the children of the house who are only too glad to take their joy-ride while their elders travel for business. And after all every business trip is a joy ride even for grownups when you know that your neighbor is being made comfortable, and that the children are happy and contented and the engine purring along as you make the trip and return home in one-third the time it takes with horse and buggy. About once in every two weeks church service is attended in town and all the family take a turn at relaxing for the week and get back in time for a comfortable Sunday dinner. An automobile is indeed a necessity with us.

### American Exports.

More than a billion dollars' worth of American agricultural exports were sold during 1917 to the European nations at war with Germany.

## Cauliflower and Cabbage Lice.

To the Editor: I noticed a little inquiry in The Farmer of August 8, from C. W. Bowers of Camas, Idaho, in regard to cauliflower and cabbage lice and worms. If you will publish the following, it may help a good many gardeners who are not able to procure the spray spoken of. After the plants are set out (we begin when they are just ready to start hearting or making heads), sprinkle heavily with common wood ashes, real early in the morning, over each plant, once a week at least, and if the white butterflies are plentiful, go over the plants two or three times a week. The ashes are easily shaken out of cauliflower and cabbage when wanted to use. We burn cottonwood and have been using cauliflower all summer and have not found a louse or a worm on any of them yet. Have used this with good success

MRS. THEBOLD, Bozeman, Mont.

In commenting upon this, L. E. Longley of the University of Idaho says: "On a small scale on a home garden it will prove effective, especially if applied as often as Mrs. Thebold says is done when the cabbage worm is plentiful. It would not be as economical, when labor is considered, as a soap-nicotine-arsenical spray on a large scale."

### Know the Reason.

To understand clearly is better than to be captivated by arguments.

## "Cold Method" of Branding.

A correspondent of The Farmer, who wishes to be known as "a Friend of the Four-Footed," writes: "Will you kindly give information through the columns of your valuable journal relative to what is known as the 'cold method' of branding cattle instead of branding them with a hot iron?"

Professor E. L. Potter of the Oregon agricultural college kindly answers our correspondent as follows:

The so-called "cold method" of branding cattle is a method of making the brands with an acid instead of a hot iron. The principle of all branding of cattle is to so blister or destroy the skin as to leave a permanent scar on which the hair does not grow. It does not matter much whether the brand is made with an acid or with a red-hot iron, the pain to the cattle is the same in either case, while the acid method is complicated and very hard to handle in ordinary field work and as a result has never been used extensively, except in an experimental way. It would certainly be a splendid thing if some means of branding cattle could be devised that would be less painful than either the hot iron or the blistering with acid.

### Accept Leadership.

Don't try to chart the seas for yourself every time you make a voyage.


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From start to finish the Happy Farmer Tractor is built for leadership. Every part of it is made in the Happy Farmer plant by the highest grade workmen and the most up-to-date machinery.

So many thousands of farmers want the Happy Farmer that we cannot keep pace with the demand, although we are continually increasing our manufacturing facilities.

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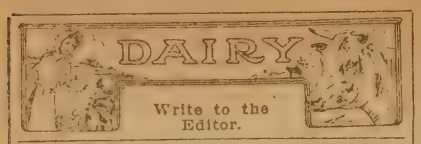
See The Next Demonstration

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A. B. NYSTROM, Editorial Contributor

## SUBSTITUTE "MILK."

### Cocoanut Oil With Skim Milk.

The chemical laboratories of a Boston firm announce the discovery of a process by which an ample supply of fresh milk can be assured to a city "without a cow in 10,000 miles." Analysis of the method, however, shows that the cow must be employed, in the background, perhaps, but none the less indispensable to the project.

The process is a blending of cocoanut oil with powdered skim milk and water. As described by the company "skimmed milk is pure milk with the fats removed. There remain behind among other things nearly all the casein, most of the milk sugar and part of the vitamines, dependent upon the method of drying. Vitamines are reported to be needful to make children grow. Casein is the most easilly assimilated of all proteid foods.

"The process was patented but not worked out to a commercial scale. The rights were bought by Chicago business men and when industrial research was necessary, they came to us. The new art consists in mixing skim milk in water and incorporating cocoanut oil with it until it becomes an emulsion just like milk or cream. It is not so simple as it looks, because one can shake up skim milk and coacoanut oil with water until the cows come home, but as soon as the mixture is allowed to stand the oil and water separate.

"The striking feature of the invention is the discovery of a stabilizer, a protective colloid, a perfectly harmless body found in raw sugar, which will make those minute particles of fat shy away from each other just as they do in milk, instead of merging together into one mass, as particles of fat will do under ordinary circumstances.

"The process fortunately lent itself to technical development, and all sorts of apparatus were tested out until finally it was ready for commercial scale manufacture. Then we found a purchaser and built a factory which is now in regular operation.

"We can get whatever type is wanted: thin milk, rich milk, half cream, full cream, or even thick, clotted Devonshire cream. It tastes like milk and cream, contains substantially the same bodies, is slightly more digestible than the original cow product, while its keeping qualities are fully as good if not better. It is already in successful use at table, in making cream caramels and ice cream, and in cooking."

Dairymen and the public will await with interest the commercial development of this scheme.

## COTTAGE CHEESE

### Made of Skimmed Milk on Farms.

Cottage cheese can be made on the farm or in the home with little labor and expense. One gallon of skim milk will make about one and one-half pounds of cheese. If the milk is sweet put it in a warm place at a temperature of about 75 degrees F. until it clabbers. As soon as the milk has thickened or firmly clabbered it should be cut into pieces two inches square, after which the curd is stirred thoroughly. Place the pan of broken curd in a vessel of hot water so as to raise the temperature to 100 degrees F. Cook at that temperature for about 30 minutes, during which time stir gently with a spoon for one minute at five-minute intervals. At the conclusion of the heating pour the curd and whey into a small cheesecloth bag and let drain. After draining sufficiently salt to taste and add any other vegetables or serve plain. Scrambled eggs and cottage cheese make a pleasing combination.

It is a palatable, nourishing product that furnished a means of utilizing skim milk to excellent advantage. It is an excellent substitute for meat. Many new ways of using it have been originated in Uncle Sam's laboratories at Washington.

The first consideration in the production of good cottage cheese is the quality of the skim milk used. Milk which is dirty or has undergone any abnormal fermentation is undesirable. The fresher the milk the more satisfactory it is for cheese making, because then it is possible to direct and control the souring. It is absolutely necessary to give the milk proper attention both at the time of its production and in all its subsequent handling. The temperature at which it is kept from the time of its production until made into cheese determines in a large measure the quality of the cheese. For best results milk should be kept cool, at 50 degrees F. or lower, if possible, until it is to be made into cheese.

The yield of cottage cheese depends upon the quality of the skim milk and the method of manufacture, says farmers' bulletin 850, "How to Make Cottage Cheese on the Farm," recently issued for free distribution by the United States department of agriculture.

Yields from 12 to 20 pounds of cheese per 100 pounds of skim milk represent the limits, while a yield of about 15 pounds produces best results.

A. B. N.

## Silage and Legume Hay.

At the Missouri experiment station in an experiment which has been under way for four years and has involved 50 heifers it has been found that heifers receiving a ration of silage and timothy hay will be maintained, but will make very little gain in weight during the winter. Gains much above the normal may be had by feeding liberally with concentrates, but this greatly increases the expense of raising the animals. Where summer pasture is relatively cheap and grain high, the economical plan is to feed the animals a ration composed largely of roughage during the winter and to keep them in a moderate condition. Under this plan of feeding, a large part of the growth is made from pasture, but the animal may be somewhat slower to mature. The most practical ration for Missouri conditions is silage and legume hay for roughage, with a grain allowance of about two pounds daily.

## Clover Silage for Cows.

At the Canadian experiment farm clover silage proved a valuable substitute for corn silage for dairy cows. Oat and barley straw, when it could be obtained cheaply, was an excellent form of roughage as compared with mixed hay. Field carrots produced good succulence for dairy cattle and are recommended for dairymen who can not successfully grow mangels.

NOTICE.

The Rhodes Harvester Co., and Colfax Mfg. Co. exhibit of wagon loaders, warehouse pilers, potato sorters, bulk grain elevators, truck loaders and combined harvesters will interest you at Spokane Interstate Fair, September 2 to 7.—Adv.




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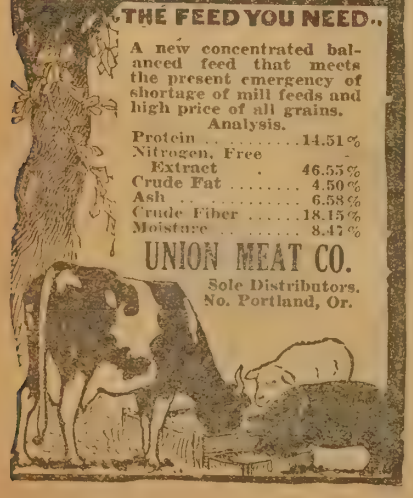
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| Nitrogen, Free Extract | 46.55% |
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| Crude Fiber | 18.15% |
| Moisture | 8.47% |

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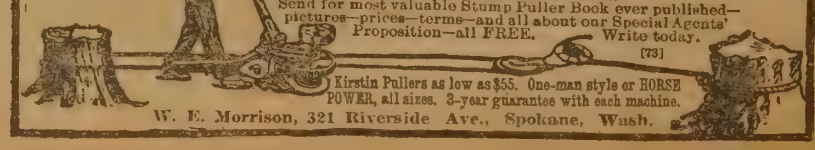
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## Builds Barn and Silo According to Condition



The photo herewith shows how natural conditions were taken advantage of in building the barn of Charles Watson, Coquille, Ore. Mr. Watson's farm is bottom land and where the barn stands the valley narrows down with high ground on each side. A driveway was built well up under the eaves of the barn and a slant trestle at each end connects it with the high ground. The barn is 92x46 feet, with a ceiling eight feet above the lower floor. On the lower floor both the horses and cattle are stabled, with a wide driveway and plenty of light.

Hay is hauled from the fields, by an easy grade, in at the end next the silo. From there it is forked off the wagons, to the ceiling below, and the wagon driven out at the other end. It does not pack so tightly as when dropped by a big hay fork and can be unloaded much more quickly. Three wagons can stand at once inside the barn, so there is no wait while the other wagon unloads. Time is thus saved, both ways. The loft is estimated to hold 200 tons, but Mr. Watson thinks 150 tons is as much as he has ever put in.

He has a good little herd of grade Jerseys and plans to begin soon with a purebred foundation herd.

## Use Good Seed.

### Home Grown Varieties Are Safest

Many bushels can be added to the 1919 Liberty wheat harvest, and farmers can reap added profits from increased yields with no more than the usual labor or expense if the variety of seed sown this fall is pure and is well adapted to the locality, say grain specialists. The seed should be free from noxious weed seeds and not infested by destructive plant diseases. It should be clean, plump and heavy.

Home-grown wheat should be used for seed wherever possible. The best seed to get is that of an adapted variety which has been grown continuously in the locality for some time, provided it is pure. The idea that varieties "run out" if grown long in one section is only an expression for the fact that they are allowed to become mixed and weedy and disease-infested. Changing the kind of wheat grown should be done only for the purpose of getting a proved, better variety. It is often desirable to do this, provided it is demonstrated beyond question that the new variety is better for that locality.

So-called "new" varieties, extravagantly advertised at fancy prices, should be disregarded completely. The varieties recommended by the state experiment stations or other authorities for the several districts within a state or region are the ones which should be grown.

The best way to be sure that the seed wheat is free from mixture with other varieties and also from weeds and diseases is to inspect the growing field. Each farmer should do this in his own fields and neighborhood. When his own variety is not well adapted or otherwise of good quality he should inspect fields of adapted varieties grown by some of his neighbors and arrange to obtain seed from them after threshing. In many instances he can arrange to have special care given to this field at threshing time in order to prevent mixture. Such care is especially desirable this year when the supply of seed wheat retained on the farms probably is smaller than ever before. If the best seed available is not free from weed seeds, the best possible cleaning should be given it.

Seeding with a drill always is advisable. In general, early seeding gives better results than late seeding. Where there is danger from the Hessian fly the time for seeding should be in accordance with the best advice given on this subject for each section of the country.

**One Never Can Tell.**

Marie—Don't cry, dear. You must be brave while Jack is away with the army. Remember the war won't last forever, and then he will return to you.

Betty—Y-yes; but I'm afraid that before he comes back some other hateful man will marry me.

**Rocks the Baby.**

An attachment has been patented to link together a rocking chair and baby coach, the motions of the former making the latter serve as a cradle.


A Continuous Chain of Boiling Points

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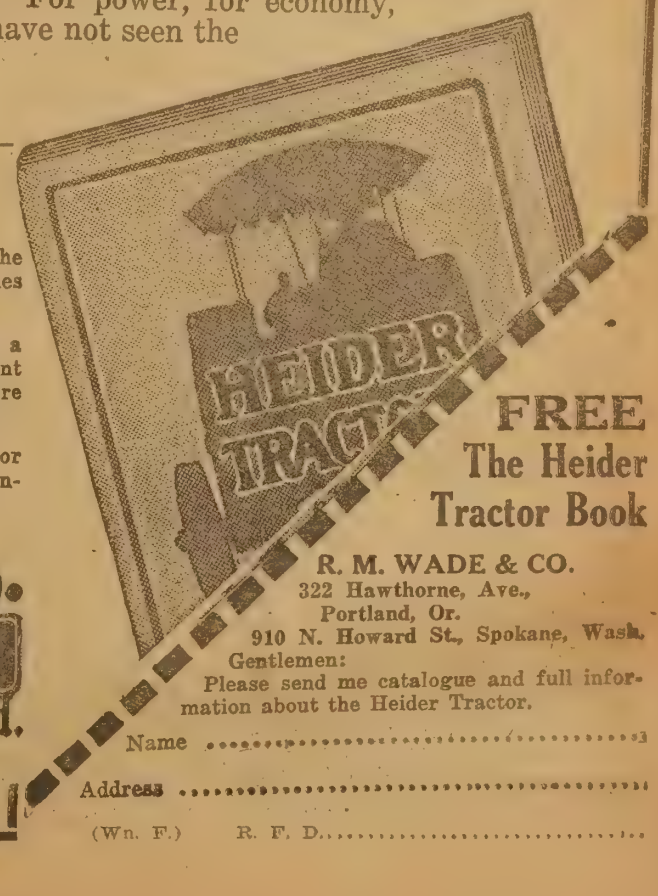
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LIVE STOCK NOTES

Write to the Editor.

E. J. IDDINGS, Editorial Contributor

# Fodder Substitutes

## Seaweed, Reeds, Horse Chestnuts

The very acute shortage of feeding stuffs in France, the central powers, and the northern neutrals has led to experiments with all sorts of wild vegetation, often resulting in their successful adoption as substitutes for ordinary fodder.

In France, where the shortage has been keenly felt, especially in the case of oats, the first experiments were made with a kind of seaweed called laminaires, common on the Breton coast. Experiments showed that, as a feeding stuff, three pounds of seaweed were equivalent to four pounds of oats. Horses which were fed on it grew fatter during the period of experimentation than those fed on oats; and animals suffering from lymphangitis, an epidemic disease which is rife among wounded horses at the front, improved under the diet, the disease eventually disappearing entirely. Grass wrack, another kind of seaweed, is also used in France with success; and in Germany, Holland and Denmark seaweed of various sorts is used extensively.

The French authorities recommend the use of fresh reeds for pigs, and a reedflour for fodder was put on the market in France this February. Reeds are also used in Germany, where the minister of agriculture recently declared that fodder obtained from reeds procured green before the blossoming period is quite equal to good meadow hay. The collection and sale of reeds is regulated in Germany by the government, and a maximum price of $1.25 per hundredweight is fixed. With acorns, horse chestnuts and seeds of forest trees the French government has made the most careful experiments, and has issued full information as to the use of these for substitutes. Acorns may be eaten by all animals, though in differing amounts. For horses, seven pints of acorns are equal to 5 1-4 pints of oats. Acorn feeding should be suspended for a week after continuous use for a month. Horses and cattle should have raw acorns crushed and the husks removed. For pigs, the acorns should be crushed into a coarse meal and mixed with cooked potatoes, or cooked with potatoes.

Horse chestnuts are especially good for sheep, one pound replacing three pounds of fodder beets.

Heather has been used extensively in Germany since 1916. It is mown, then chopped and dried. The leaves and flowers are stripped from the woody stalks, which are then ground. The use of foliage, twigs and young shoots of any trees and shrubs has been largely developed in Germany since 1916. The cuttings of all trees and shrubs may be utilized, with the exception of birdcherry, laburnum, ivy, acacia and alder. The material should be collected in the winter, before the buds burst. Sheep and goats can eat it unchopped; for other uses it should be cut fine in a chaff cutter and used wet or dry; but it must be kept dry if preserved at all, otherwise it will mildew. This year it will be collected officially in Germany.

The varieties mentioned above are the only ones which are now commonly used. There are numerous other fodder substitutes, however, some of which are most ingenious. Pine and fir needles have been used in Sweden, potato tops in Norway, hazel catkins have been dried and used as a sort of fodder flour in Germany, and in Austria-Hungary stinging nettles were being resorted to last January. Perhaps the strangest fodder substitute of all, however, is cockchafers, a kind of beetle, which are being collected throughout Germany and Austria by school children, and are reputed to be excellent food, when dried, for pigs and poultry.

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SPOKANE, WASHINGTON

## SELECT EWES NOW.

### Care Will Improve Farm Flock.

Now is the time to select the ewes for breeding, well before the mating season and after this year's lambs have been weaned, to produce next year's lamb crop. In culling ewes from the flock two types should be carefully noted: Those that are extremely fat and those that are very thin.

The fat ones, especially those carrying an excessive bunch of fat about the rump, may be barren, their high condition being due to the fact that they have not been under the strain of bearing and nursing a lamb.

On the other hand, it must not be supposed, according to the U. S. department of agriculture, that all thin ewes should be bred. If they have dull eyes, harsh fleeces, pale, dry skins, a general run-down and unthrifty condition, and poor teeth, due to old age, they should be disposed of at once. If there is a contrary good condition, the thinness may be safely attributed to the fact that the ewes have been heavy milkers and have raised pairs of strong, thrifty lambs. Such ewes should be retained, and if of approved type their ewe lambs should be selected in maintaining the flock.

As a final point in selection, a careful examination of the udders may result in further culling those likely to be unable to raise their lambs because of defective udders.

More than ever, says the department, farm flocks are being called on to contribute their full share to the food and clothing of the country. It is for this reason that the performance of each ewe in lamb and wool production must be known. All ewes must pay their way. If the flock owner will cull his stock annually, as here suggested, he will have good individuals plus regular performance. Not only will this mean greater profits, but it will be an assurance of increased supplies of mutton and wool to meet the insistent demands of wartime consumption and will help toward victory.

### New Bottle Invented.

To distinguish bottles containing poisons in the dark a sandpaper band encircles them, with an opening for their labels, has been invented.

NOTICE.

The Rhodes Harvester Co., and Colfax Mfg. Co. exhibit of wagon loaders, warehouse pilers, potato sorters, bulk grain elevators, truck loaders and combined harvesters will interest you at Spokane Interstate Fair, September 2 to 7.—Adv.

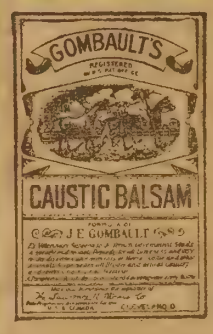
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# Veterinary

Dr. S. B. Nelson

**Sheep Have Cough**—Will you kindly tell me what to do for sheep that have a cough and discharge at the nose?
Winona, Wash. MRS. L. A. P.

Try to have the sheep breathe the fumes of tar. If it is not convenient for you to do this, try and rub a little tar on their feed, and let them get it that way.

**Lumpy Milk**—We have a 2-year-old heifer, just fresh, that seems to give lumpy milk. The lumps are a creamy color. She seems perfectly healthy. J. C. M.

I think if you purge the heifer well and then cut down a little bit on the feed for a few days afterwards that she will come along all right. For the heifer, I think a pound to a pound and a quarter of epsom salts given in about three quarts of water and then mixed with a pint of syrup—a heavy, coarse syrup—will make a good purge for her. I do not believe that you need any other treatment for the heifer.

**Growth on Fetlock**—I have a valuable horse that has a growth the size of an egg located on the front part of the fetlock. It is directly over the joint and feels like a bunch of thick, tough skin. It has been this way about one month. The horse is not lame. Please answer through your paper. A Reader, Palouse, Wash.

I am of the opinion that your horse can possibly be cured by a surgical operation. Since the growth is so near the fetlock joint, it very naturally would be wise for you to consult your local veterinarian. You have a very competent graduate veterinarian in your town.

**Cow Gives Bloody Milk**—I have a grade Holstein, a good milker, six years old. She is on pasture and has no other feed. Last year, about four months after she came fresh, she gave a small quantity of bloody milk, and kept it up for about four months and for the rest of her milking period she seemed to be all right. This year she has done practically the same thing, after four months she gives bloody milk out of the same teat. Apparently that quarter of her is in perfect condition otherwise. Can you please give me a remedy? F. R.
Stevensville, Mont.

Give your cow one and one-half ounces of epsom salts in two quarts of water. A few days later, begin giving her one teaspoonful of sodium hyposulphites in one quart of water morning and evening for a few days and then one teaspoonful daily for a week or ten days.

**To Kill a Ringbone**—Will you kindly tell me how I can kill a ringbone on a 2-year-old colt? F. B.
Enterprise.

The ringbone is a very difficult thing to kill, but on a 2-year-old colt it may be much easier. I would suggest to you that you have the colt fired by the actal cautery by a local veterinarian, and then a blister put on afterwards. This is the best treatment for the trouble. If you do not have a veterinarian in the neighborhood that is available, you might personally blister the colt. There are a number of blisters that are available, and the following is frequently used: Red iodine of mercury, one part; powdered contharites, one part; beeswax, two parts; lard, six parts.

Have your druggist mix this thoroughly. Then clip the hair off the bone, rub the part thoroughly with the hand and then rub in the ointment, taking 10 to 15 minutes to rub it in. Afterwards, apply the ointment about as thick as the back of a knife blade. Tie the colt up for 12 hours, so he can not get his head to the blistered part. Later, in two or three days, it should be washed and a little lard or vaseline applied on the blistered part.

**Cow Gives Bloody Milk**—I have a cow that gives bloody milk out of her left hind teat. She is a heifer, two years old in July. She came fresh in April. She has no calf sucking and is in good condition otherwise. Has alfalfa hay and green alfalfa to eat. Could you tell me what would be good to give her or do, and would the milk out of the other teats be good to use?
Yakima, Wash. C. B. G.

Whether or not the milk would be good would depend entirely upon what is causing the bloody milk from the one teat. As a general rule, the milk from the other teats may be used with safety. At other times, it can not. I think it would be wise for you to consult your local veterinarian and let him see the cow, make a personal examination, and determine what the trouble is and give you advice. In the meantime, you might try giving your cow a teaspoonful of hyposulphite of soda in one quart of water morning and evening for a week. This sometimes gives good results.

**Pig Has Piles**—I have a pig, two months old that has piles, anyway, the rectum protrudes the size of a half walnut. I fed her skimmed milk with dish water and vegetable trimmings, also alfalfa hay. She seems perfectly healthy and is always hungry. Someone told me that skimmed milk will cause this trouble in a young pig. Is it true, and is there anything I can do now to cure her? I am feeding her a mixture of feed mixed in water and the alfalfa hay. W. S. R.
Sunnyside, Wash.

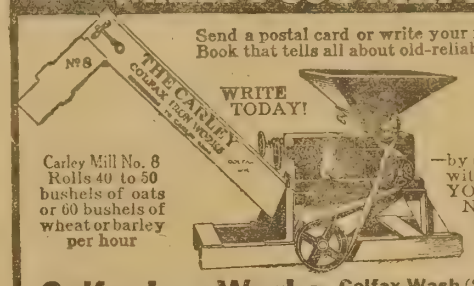
In the inquiry which I received regarding piles affecting pigs, in nearly all cases they have been fed skimmed milk with or without shorts; generally with. I believe that this is too heavy a feed for pigs and they should have a much broader diet than this, feeding roots and pasture—alfalfa or clover. I would therefore suggest to you that you take the skimmed milk away for a while and see if you can not give the pigs green alfalfa or clover for a few days. I would suggest that you give the pigs one ounce of castor oil in a mixture of slop feed mornings. If this does not give you good results, I will give you a prescription which you might use, but it is very expensive at the present time. It includes: Fluid extract of belladonna, one part; fluid extract of ergot, one part. Apply that to the piles with a little cotton two or three times daily.

**Don't Judge Harshly.**

Nine times out of 10 there is an explanation for what seems unreasonable upon first notice. Wait a while before passing judgment.


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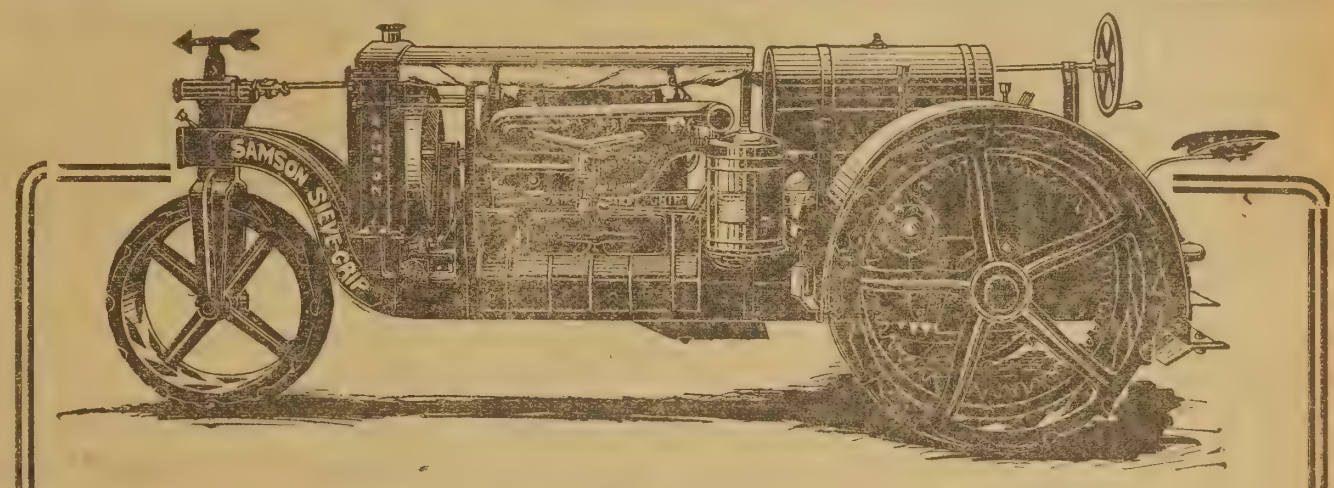
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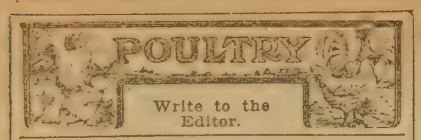
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**JAMES DRYDEN,**
**Editorial Contributor.**

The Oregon Agricultural college pen of Oregons were again first for month of July at the International egg-laying contest at Storrs, Conn. Their record was 249 eggs for 10 hens. They are also first for the full term of nine months. The O. A. C. has also the leading pens for the same period at the contest at Pullman, Wash., and Victoria, B. C.

The pullets that will lay the most eggs next fall and winter are the ones that have the best care now. Give them liberal range or exercise, liberal feeding, plenty of green feed, and do not crowd them in poorly ventilated houses. Then another thing, kill the mighty mites.

The mills are now turning out mill feed. The bran and shorts will be mixed. This will be all right for the poultry-keepers. Shorts and bran do not vary greatly in composition. There is slightly more mineral matter in the latter, but the protein content is about the same. A little alfalfa meal may be added to the bran and shorts if it can be obtained of good quality and at less than $40 a ton. Ten to 15 per cent of cocoanut meal or linseed oil meal may also be added to advantage. A mash made of 100 pounds of bran and shorts and 15 pounds each of alfalfa meal and cocoanut oil meal will make a good mash, and will be reasonable in cost.

The nice, slick, fat hen at this season of the year is a camouflageur; she is a poor layer. Kill her. J. D.

# Must Ventilate Well

The latter part of May and the first part of June we bought 250 baby chicks (White Leghorns). But we have lost about 200 of them. We didn't have any brooder for them, but we had them boxed up over night. Besides we had them locked up in the house all day long. Their wings seemed to grow, but not their bodies. It looked rather as if the body became smaller. After they became older they started to have trouble with their feet so they were not able to walk. J. A.

Hay, Wash.

**Answer.**

With the information given, a positive answer could not be given to this correspondent. The chicks, however, were not brooded well. Boxing them up at night and keeping them locked up in the house all day is pretty likely to kill them off by slow stages. Small chicks just hatched can be boxed up without much ventilation of air, but after a few days 250 pairs of lungs in bodies that are developing at a rapid rate need a liberal supply of fresh air or oxygen. This is just as necessary as food. Their need for oxygen becomes greater every day as they grow, and they can not be shut up in a box all night with very little air and have them grow and live.

But in a cold or fireless brooder, it is difficult to keep them sufficiently warm and furnish sufficient air at the same time. It is possible, however, to raise them successfully in a fireless brooder, especially in the warm season, but the ventilation must be elastic; it must be increased as the chicks grow.

Another unfavorable condition mentioned is the locking of the chicks in the house all the day for several weeks. Very few chicks are raised successfully this way. By the time they are a week old, or sooner, they should have a run outside on clean, fresh ground. They are sure to develop leg weakness if shut in the house all the time, especially if heavily fed and given little exercise. Do not let the chicks get chilled, but give them fresh air, exercise, and a variety of food.

It is possible there may have been other troubles, but the letter does not give information enough to judge.

J. D.

**Military Strategy.**

One of the boys who enlisted in the navy reserve, both for home and foreign service, tells this:

"A few days after I got to the barracks at ——, the commandant ordered all hands to assemble and stand in line with our backs touching the wall of the barracks. Then he said he understood a few of the boys had enlisted for home service only.

"'Let those who have,' he continued, 'take three paces to the rear. Adjutant you will check off the names of all those who remain in line as willing to do foreign service.'

"Strangely enough, the vote was unanimous."—New York Mail.

## National Poultry Organization.

The National War Emergency Poultry Federation, which was organized at Chicago, March 31, is now ready for business. Officers have been elected, bylaws printed, headquarters opened at Washington, a budget has been made by the advisory committee, and a national drive is now to be made for membership at a dollar. A membership of 25,000 is needed, and it is expected that every progressive poultryman will be a member within a month. This organization takes in all existing poultry organizations of whatever nature, and its purpose is to safeguard the poultry industry and help win the war. It is a critical time in the history of the industry, and it is felt that a strong national organization was needed during the period of the war, besides its influence will be felt for years after the war. Poultrymen are slow to organize and cooperate. They should get together now when the need is great and make their influence felt for the good of the nation and for the good of the industry. J. D.

## PREPARE FOR SHOW.

### Poor Preparation Loses Prize.

With a view to improving the poultry shows of the country, and thereby stimulating the poultry industry, the U. S. department of agriculture has issued the following recommendations covering the preparation of poultry for the show:

"The first thing after selecting the birds nearest the standard requirements in shape, color, and size is to look for disqualifications, the most common of which are side sprigs, stubs, wry tails, squirrel tails, crooked backs, etc.

The birds should be placed in training cages or pens similar to those used at the poultry shows. The bottoms of the cages should be covered with a litter of shavings or cut straw which can be removed frequently.

"Begin a few weeks before the show and take the birds from their roosts every evening and place them in the seperate training pens for the night. At first leave them quiet for an hour or two and then, by lantern light, stroke each bird quietly over the back and from the throat to the thighs. After it is accustomed to the hand, use a small thin stick and teach it to pose in the desired position. With patience and kind treatment it is surprising how quickly birds learn to do what is expected of them. This training is really the most important part of conditioning, as nothing is more discouraging to a judge than to have a bird dash about the cage in a frightened manner and stick its head in a corner.

"All white birds should be washed; in fact, washing improves any of the long-feathered varieties.

"Feeding is also a very important point to consider. For the small-combed varieties a feed of oats, corn and feed wheat, with a light feed of wet mash at midday, is very good. For some of the large-combed breeds, such as Leghorns and Orpingtons, do not use meat, as it forces the comb to grow too large and may cause it to turn over. A feed of bread, soaked in milk once a day helps the plumage wonderfully. All birds should have plenty of grit and a little green feed. Chopped onions help to keep them in good condition.

"Just before sending the birds to the show their combs, legs, and feet should be sponged with clean water and dried with a soft cloth. A little vaseline on the combs and faces greatly improves their appearance.

"Another point that many breeders do not understand is the proper shipping and tagging of their birds in suitable carriers. Some use entirely too small crates or coops, and others use large, heavy boxes that can not be handled by one man. The express employes handle them rather roughly and the birds come to the show with feathers broken and in bad condition. Always be sure that the tags with your name and that of the poultry show and the destination are securely fastened on the crates. It is well to have a number on the tag to correspond to the leg band on your fowl. In that way you will be reasonably sure to have your birds returned in the coops in which you ship them."

**Horrors of War.**

From a newspaper—"A shell from our forward gun landed squarely on her and she varnished."

That polished her off, what! Certainly in effectiveness that shellac-d nothing.

**Good at Visiting.**

Miss Anna Anderie of Sheboygan is visiting with friends in this city for several years.—Manitowoc News.




# Improve Quality; Increase Quantity

## *This Is the Motto of the Interstate Fair at Spokane*

The 25th anniversary of the Spokane Interstate fair and live stock show will be made the occasion for giving the greatest cooperative service possible to Uncle Sam's food conservation program.

"Improving the quality and increasing the quantity of cereals and live stock" in the Inland Empire will be the slogan for the 1918 fair.

The show will be open Labor day, September 2, and a program covering six busy days has been outlined by President Thomas S. Griffith of the fair association and his staff.

A big feature of the fair will be the encampment, on the grounds, of 550 United States sailors from the naval training station at Seattle. The contingent will be accompanied by a 60-piece band and corps of buglers, and consists of five companies of naval reserves, who will live in a tent city pitched in the center of the race track on the fair grounds. On Thursday of fair week, 70 yeomanettes, the women of the navy, will arrive for a three days' encampment.

A significant demand for exhibit space indicates already that the available space in the permanent exhibition buildings will be filled.

The advance entries for harness races, to be featured every afternoon before the grandstand, are greater this year than at any time in the history of the speed department.

Fourteen carnival exhibitions will fill the midway, and the annual Indian village will be a part of this display.

Inquiries for stall space for horses, cattle, sheep and hogs are being received from many sections of the Inland Empire, and it is expected that all available stall space will be assigned.

Machinery row has been sold out to exhibitors who will demonstrate tractors, threshing machines, trucks and other important new farm machinery.

Several entries have been received for the relay races, both for men and women, in which purses of $1500 each have been hung up for the fastest time in the daily two-mile dash of the men and women riders.

The special days assigned for the fair, briefly, are as follows:

Monday, September 2, opening day, labor day and everybody's day.

Tuesday, September 3, navy day, pioneer day and mining men's day.

Wednesday, September 4, democracy day, fraternal day, Ad club day and Spokane valley day.

Thursday, September 5, derby day, in which the derby will be the feature of the race program; grange and Farmers' union day and Rotary club day.

Friday, September 6, Spokane day, Lafayette day, Gun club day and automobile day.

Saturday, September 7, children's day, Inland Empire day and fun day on the midway.

The newly organized United Naval circle, which has a charter membership of over 100 matrons in the Inland Empire, will conduct a hostess house on the fair grounds. A register will be open to visiting friends and relatives of the sailors and soldiers who spend their week on the fair grounds. Accommodations have been provided for these visitors to meet with their relatives who may be in the United States army or navy service, and postcards have been sent by the boys who will be at Spokane to their friends throughout the Inland Empire, inviting them to meet them at the fair during the week.

Under the direction of the United States food administration a comprehensive exhibit illustrating graphically practical short-cuts on food conservation and its importance in ending the war will be maintained at a central place on the grounds.

## War and Farming

The cutting off of cheese imports has greatly stimulated the market for foreign styles of domestic manufacture, particularly Swiss and Italian.

Seventy-two pounds raw wool is required for a soldier's outfit. The clean and scoured weight of this outfit, however is found to be only 31 pounds. The articles of clothing which are included in the soldier's equipment are wool uniform, overcoat, blankets, overseas cap, flannel shirts, wool gloves and mittens, winter underwear, spiral puttees, stockings, lining for leather jerkin and several smaller items.

Uncle Sam paid 23 1-2 cents a pound for army beef to feed American soldiers during July. Hams were purchased for 31 cents a pound, delivered at camps, and bacon cost 43 1-2 cents a pound. Flour was purchased at $11.10 a barrel. The average price for army sugar was $7.30 per 100 pounds. The government also paid $2.97 per 100 pounds for onions delivered at the camps.

And now the lowly peanut is coming into its own—not as a food for squirrels in the parks and elephants in circuses, but as a means of producing oils; because it can be used in the place of wheat, thus saving a large amount of this cereal for war needs; and being rich in protein and in fat it may also serve as a meat substitute. According to the last census (1909) 869,887 acres were planted to peanuts, and the yield was 19,415,000 bushels, valued at $18,271,000. Since 1910 the acreage planted to peanuts has increased at an even more rapid rate than in the preceding 10 years. From figures secured by the bureau of crop estimates it is evident that over 2,000,000 acres of land were planted to this crop last year. J. H. B.

### Prevents Snoring.

One of the simplest of many new devices to prevent snoring consists of a pair of tubes to be inserted into the nostrils to keep them open.

### Let the Hogs Growl.

If men had been expected to growl about conditions they would have been furnished by nature with growlers like dogs have.

## FRUIT PESTS

### Standardize Laws in Northwest.

"There are many pests in the east which have not reached California yet," said G. H. Hecke, state commissioner of horticulture for California, to the Farmer representative. "California spends a large sum annually fighting pests and keeping new ones out. It is cheaper and easier to prevent them from coming than to combat them after they are here.

"We have been quite fortunate west of the Rockies. Each state makes its own quarantine laws and works absolutely independently of all the rest, though Washington, Oregon, Idaho, Montana, Utah and California are isolated in a way by desert and mountain from the rest of the country. It would be better if we could standardize those laws which affect all these states.

"Looking toward that possible end a convention of quarantine officials of all these states and including those of British Columbia has been called to meet at Riverside, Cal., November 11 to 16 of this year. We hope to form a permanent association at that time, and we look for a very large attendance, probably several hundred officials. Professor Marlatt, chairman of the federal board of horticulture, whose business it is to protect the United States from the entire world of pests, expects to be present. He is very much in favor of the convention.

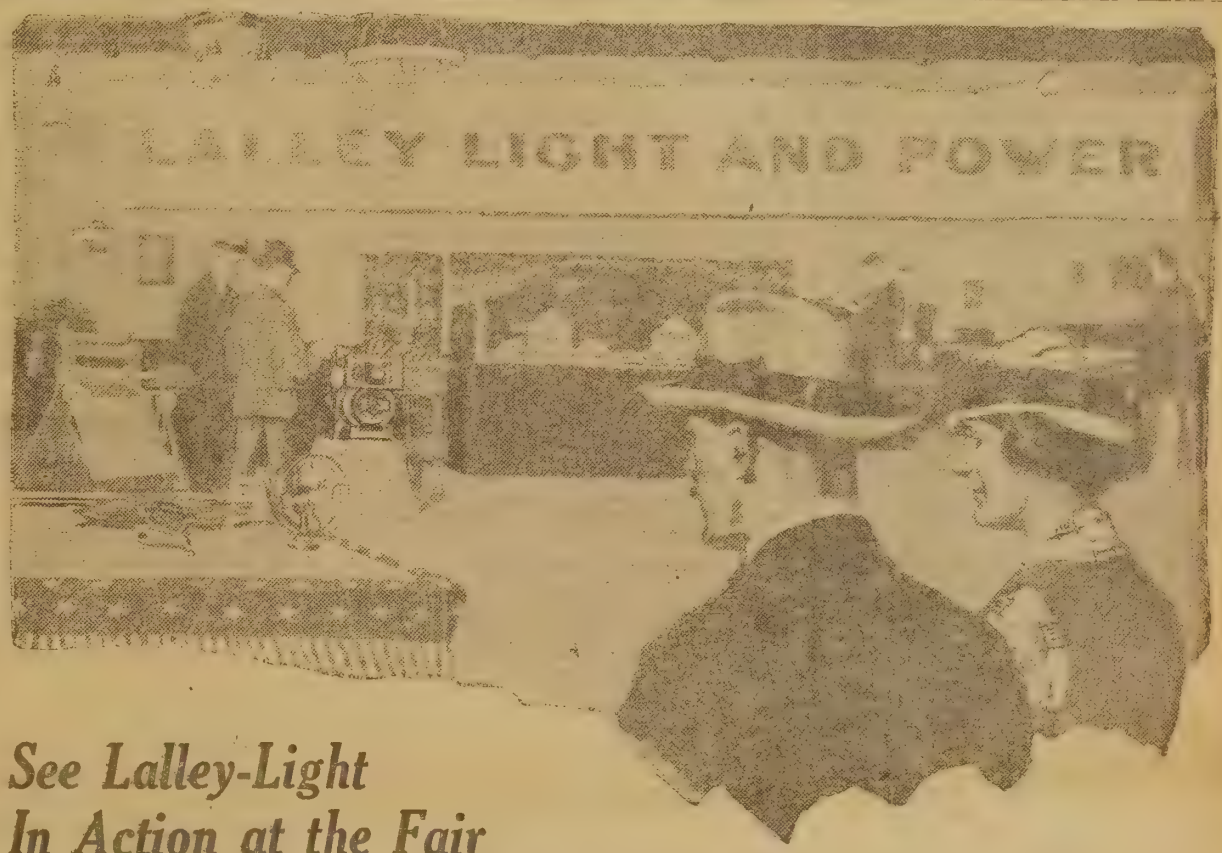
"Few people realize the danger of extinction our fruit interests confront all the time. Suppose the Mediterranean fruit fly should secure a foothold in this country. This fly lays its eggs on the surface of fruit and the maggots work into the pulp. Break open the fruit and you find it alive with maggots. This fly exists unchecked in swarms all over southern Europe, northern Africa, South Africa, in fact everywhere but America. It could and would ruin our fruit industry. Constant vigilance has kept it out. How easily it could gain admittance. Some visitor to the orient might bring back a mango or other fruit infested with it, and speedily it would spread all over this country as well.

"Here in the northwest we are in a strategic position to combat fruit pests and disease, but one weak place might admit them to all. Say, some eastern nurseryman might send infected trees into one state which might be lax in its quarantine laws; from this state it might gain access to others. Many laws need no change, some might need slight modification. The meetings would be of immense benefit to the officials themselves and enable them to understand what is going on elsewhere in the same line. Such conferences usually show weak spots in one's own system and are correspondingly valuable.

"If we could save what is spent in fighting fruit pests and diseases we would have enough to pay all taxes, even in war times. We can not save it all, but we can save a large part of it by working together."

### Light and Darkness.

Night is only day shut off.


## *See Lalley-Light In Action at the Fair*

Lalley-Light will be exhibited, and in operation, at most of the county and state fairs this fall.

We ask you to note particularly the way it runs, and the character of the electric light and power it produces.

If you will do this, we count on the plant itself to convince you of the superiority it has proven in eight years of every day farm use. You probably will be impressed, first, with its extremely smooth running; and the fact that a low hum is all you hear when it is running.

You will see that the electric lights are strong and steady all the time—without even a suggestion of a flicker.

You will observe, also, the same steady flow of power to the electrical machines which may be exhibited.

The men in charge will explain that Lalley-Light furnishes light and power from two sources—the storage battery; and the generator, independently of the battery.

That means with Lalley-Light you are doubly sure of having light and power.

Even if you are not of a mechanical turn, you can't help admiring the unusual simplicity of the plant, and its very compact design.

We urge you to study Lalley-Light, because it points the way to a great saving of farm labor and an equal increase of comforts and conveniences on the farm.

Next year the farmer's need for Lalley-Light's reliable, economical power and light will be even greater than this year.

You should prepare now to meet that need.

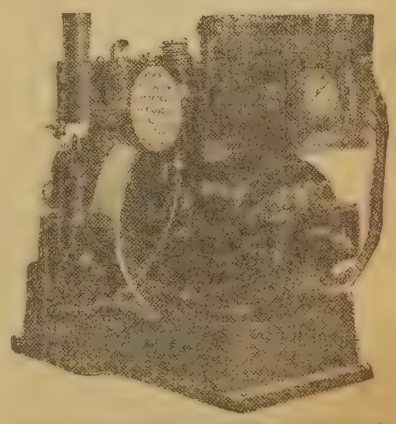
If Lalley-Light should not be displayed at your home fair, write to us for details and name of the nearest Lalley-Light merchant.

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Generating plant is 27 inches long, 14 inches wide, 21 inches high. Storage battery is included in complete outfit.

LALLEY-LIGHT

IN THE ORCHARD

Write to the Editor.

GRANVILLE LOWTHER,
Editorial Contributor.

# Orchard Troubles

## Pests, Diseases and the Remedies

By GRANVILLE LOWTHER.

Because the codling moth is one of the worst pests, I will give it more elaborate treatment than some of less importance. There are four stages in its life history. The first is the egg stage, second the larval, third the pupa, fourth the adult moth.

The eggs are laid singly and are minute little objects about one-twentieth of an inch in diameter, perfectly white in color and somewhat transparent. They look like trout's eggs glued to the surface of the leaf or fruit. The surface is finely wrinkled and so reflects the light that it appears as a fine glistening speck, if the fruit or leaf to which it is attached is held at the correct angle before the eye. After two or three days from the trees the eggs are deposited, the developing larva becomes visible as a black spot near the center of the circle and the outline of the whole body is discernible for a day or two before the egg hatches. The eggs hatch in from 7 to 10 days.

The larva when first hatched is scarcely one-sixteenth of an inch long. The head is large, black and shining; the body is slender, translucent, white in color and marked with distinct black spots, each of which has a minute bristle. Owing to their minute size and the fact that they enter the fruit soon after hatching these young larvas are rarely seen. As they develop they molt five times; the color of the head and the thoracic and anal shields turn black to brown and the body acquires a pinkish tinge. The full grown larva is about 3-4 of an inch long and 1-20 of an inch broad. The duration of the larval stage is from 16 to 24 days.

The pupa leaves the apple and seeks some protected spot in which to hide while passing through its transformation from larva to pupa. Having found a suitable place, it hollows out a suitable cavity with its jaws and proceeds to envelop itself in a thin, tough cocoon of silken threads intermingled with particles of excavated materials. When completed, the cocoon is usually oval in form and about 3-4 of an inch long. When the pupal stage is reached the insect remains in that state for about three weeks and emerges as an adult moth.

The body of the moth is about 3-8 of an inch long and of a modest greyish brown color.

The remedy is to spray with arsenate of lead, two to four times during the season. The first spray is most important after petals fall and before the calyx cup closes. The aim is to fill the calyx cup with poison.

The curculio is not very important in the Pacific northwest, but in the central states it does more injury than any pest except perhaps the codling moth. The snout is long and slender and may be folded under the body. The beetle winters under the rubbish or in the soil and in the early spring begins to feed on the opening leaves. After fruit sets it may gnaw holes in the fruit, but it does most of its damage by laying its eggs in the fruit, cutting a crescent flap in the place where the egg is laid.

This insect affects the plum, cherry, peach and apple, but develops most freely on plum and sweet cherry.

Remedy, same as for codling moth.

The ermine moth is small, with snowy white, black dotted wings. The hind wings are leaden in color. They feed upon the foliage and are easily controlled by arsenical poisons. They attack the apples, cherry and various other plants.

### European Fruit Scale.

This pest is much larger than the San Jose scale, being about 1-18 of an inch in diameter. They do not multiply so rapidly as the San Jose scale, in some northern climates producing only one brood in a year. They affect the apple, pear, peach, plum, cherry, birch, poplar, horse chestnut, basswood, alder, haw, maple, aspen, oak and others.

Remedy: Spray with lime-sulphur, late in winter or early spring.

### Eye Spotted Bird Moth.

When fully grown the larvas are about 1-2 inch long and of a dirty gray color. They feed upon the blossoms during the blossoming period and mat the blossoms and leaf clusters with their silken threads within which they feed, making it difficult to reach them with spray. The young larva feed upon the underside of the leaves and skeletonize them.

Remedy: There are two remedies recommended. First, to spray the trees before the buds start in the spring in order to destroy the overwise-teving largae. This spray may be of lime, sulphur, crude oil emulsion, or tobacco. The second is a poison and arsenate of lead may be used in connection with the codling moth spray. One is a contact spray, the other a poison.

### Fall Web Worm.

The moth producing this caterpillar is white and sometimes has a few black spots on the wings. The larvae hatching from masses of eggs laid on different parts of the tree spin their webs which extend over quite an area. The caterpillars will first eat all the leaves within the web, then those nearest by, then extend their injuries until they have often defoliated a whole tree. Two broods are reported in one season, the last one worse than the first. This is not the tent caterpillar which appears in the spring and builds its webs in the forks of the limbs.

Remedy: Destroy the clusters of eggs if possible when the leaves are off. They may be cut out and burned.

If this is not done the arsenate of lead spray will kill them.

## Tomato Blight.

I have a letter from Mrs. G. O. Cleveland, Gooding, Idaho, describing a condition in her tomato vines, that I am guessing is "tomato blight."

There are several forms of this disease; or similar diseases; but the one most common in this country is what is called "western tomato blight."

It is supposed to be caused by a bacterium in the soil; but the physical conditions which make it favorable for the bacterium to work are in so far as I know as follows:

1. Transplanting, and thereby injuring the root. It is better therefore to plant the seed where the plant is to grow, and thin to the desired number.

2. The hot sunshine of semi-arid and arid sections of the Pacific northwest is injurious to the plants. Therefore some tomato growers shade their plants, in part at least, from the sunshine.

3. If the plants are irrigated at night, in the morning the roots and stems will be sappy and turgid, and the evaporation of water from the plant on the following day will not be sufficient to cause it to wilt.

4. In irrigating, if the water is conducted as close as possible to the plants, causing the alkali in the soil to filter away from the roots, rather than toward them, they are less likely to blight. At this season of the year it may not be possible to save the crop, but it will pay to make an effort, as the blight may be held in check.

Cut out the blighted portions and burn them. Spray with bordeau.

G. L.

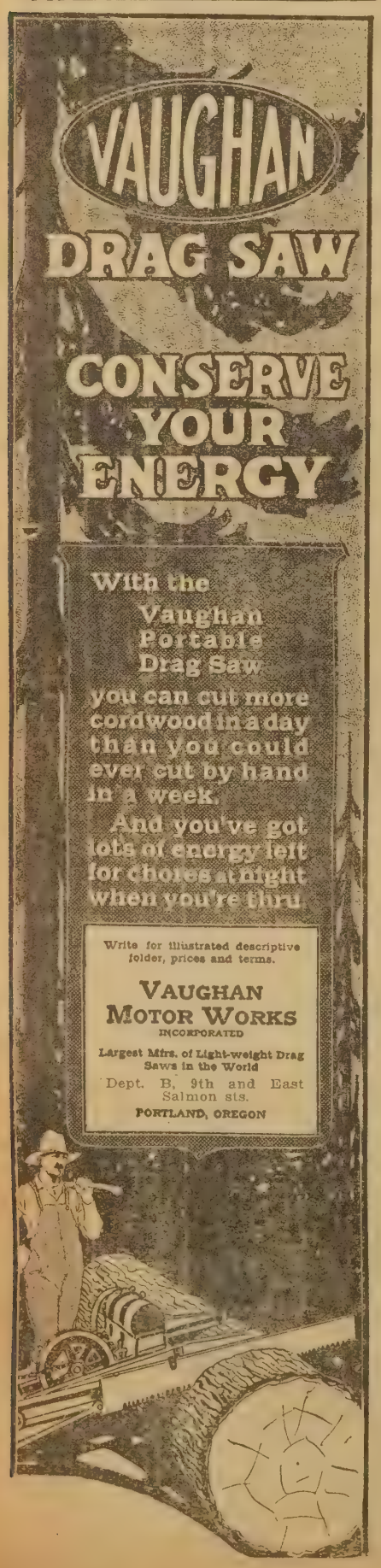
### Some System.

Secretary Daniels said at a reception:

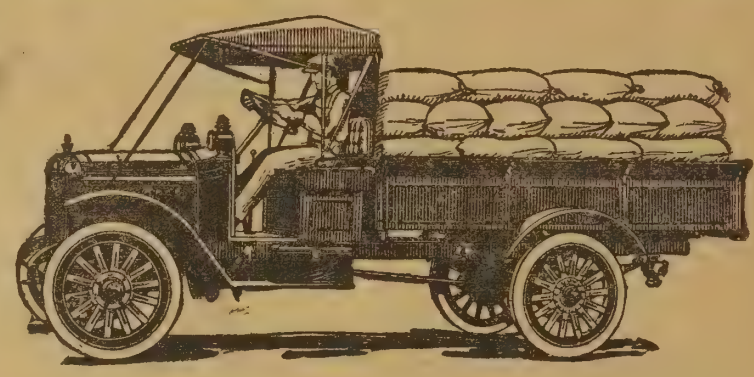
"Some of the ideas submitted to us for fighting the submarine peril are excellent. Some, again, remind me irresistibly of the pigeon fancier.

"There's a pigeon fancier in my native town who has great success with the birds. A farmer said, enviously, to him one day: 'You never lose a pigeon! How is it? Where's your secret?'

"'Well, you see,' said the fancier, 'I cross my pigeons with a talking parrot, so that if they get lost they can ask the way home.'"


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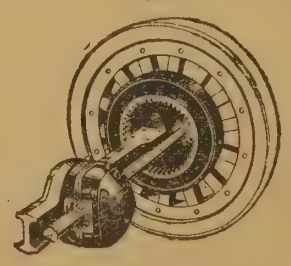
# Republic Trucks on the Farm

Republic Trucks are particularly adapted to the special requirements of farm work.

Republic Trucks have an Internal Gear Drive with I-beam load-carrying axle of solid forged steel. The driving mechanism is entirely separate from this axle and has nothing to do but drive the truck.

The power is applied near the rim of the wheel, gaining greater leverage for hard pulls. And this Internal Gear Drive permits 45% greater load clearance, a big advantage for country roads.

There is less unsprung weight which means important savings in tires, gasoline and all upkeep expenses. Every part is simple in construction, easy to get at and easy to adjust when necessary. 1300 Service Stations, distributed all over the United States, stand back of Republic Trucks to see that they give continuously satisfactory service.



The Internal Gear Drive gets extra power for pulling over bad roads and up hard grades by applying power near the rim of the wheel.

## Dependable—Economical Trouble Proof

Republics are easy riding and easy to drive. And they have proved so dependable and given such superior service to owners that it has been necessary to build more than twice as many of them as any other motor truck in order to supply the demand.

There are seven different Republic Models —¾ ton to 5 ton. One of these models will exactly fill your requirements.

See the nearest Republic dealer and send for latest booklet.

Republic Motor Truck Co., Inc.
Alma, Michigan

# Peas Six Cents

## Growers to Confer With Buyers.

Pea growers of the Fairfield district in eastern Washington, which is the leading pea growing section of the northwest, and one of the leading sections in the United States, believe that the price of peas for the season of 1919 should be at least six cents a pound for the Alaska variety with the usual premium over this price for the wrinkled varieties.

This was brought out at a meeting of 40 or 50 growers at Fairfield last week, when Agriculturist J. R. Shinn of Spokane county presented certain facts and figures bearing upon the situation. The growers arrived at their six-cent figure by comparing the price of peas and wheat before the war with the price of the same at the present time. It was pointed out that wheat in 1914 brought an average of approximately 80 cents a bushel. Peas of the Alaska variety at that time were contracted to the seed companies at about two and one-half cents a pound. With wheat at $2.20 a bushel or better this year for basic varieties at basic terminals, it figures out that the peas with a proportionate increase in price should bring between six and seven cents now.

For the purpose of conferring with the seed companies on the price to be paid for next year's pea crop a committee of growers was appointed at the suggestion of Henry Treede, one of the leading growers of the district. Other members of the committee are Charles Holsten, G. D. Miles, James Hayes of Waverly and Roy Adams. This committee, in cooperation with County Agent Shinn, is assembling data on the pea industry for presentation to the buyers.

The Fairfield meeting was noteworthy in the entire absence of any spirit of antagonism between growers and buyers. Several times during the session growers expressed confidence in the willingness of the seed companies to pay a fair price once the facts were available. In suggesting that a committee be appointed to thresh the matter out Mr. Treede said that while he felt that six cents was a reasonable price for peas, if the seed companies convinced him that they could not afford to pay that much he would be willing to continue growing for a less price. Other growers expressed the same sentiment.

Pending the result of the conference between the committee and the seed men, the growers present are informally pledged to enter no contracts at a less figure than six cents. It is said that in previous seasons the companies have made early contracts with sufficient numbers of the growers before the prices offered were thoroughly understood to practically compel the rest of the growers of the district to contract at the same figures. This year it is the plan of the growers to unify the contracting business as much as possible, and to get the price right at the start of the contracting season.

While no contracts are known to have been entered into up to this time, and no formal announcement of prices made by any of the buyers, it is understood that some have suggested five cents as a price for the Alaska pea for the 1919 crop, with corresponding higher prices for some of the most popular varieties. Representatives of several of the seed buying houses have expressed unofficially the opinion that the price would be voluntarily increased by the companies, but as to what extent they could give no information. Practically all of the Alaska peas in the Fairfield district were contracted at four cents for the present season's crop.

That the pea-growing industry in that section is to continue one of the big agricultural industries is indicated by the fact that two of the seed companies in the field have erected large, well-equipped warehouses for the sole purpose of handling the peas which they contract. These warehouses have been built and equipped at a cost of many thousands of dollars. Speaking to the growers present at the conference last week James Hays, one of the leading growers of the Waverly section near Fairfield, said: "I do not want it to appear that we are demanding something unreasonable from the seed companies just because they have spent a lot of money building their warehouses here, and must therefore continue to do business with us. All we want is a price that will divide the profit between the seed men and the growers."

Two years ago the Fairfield district harvested its most bumper crop of peas. Several thousand acres made a yield of 10 bushels or more to the acre. Few fields went below 25 or 30 bushels. Last year, owing to the almost unprecedented drouth the crop was nearly a failure, many pea fields being barely worth harvesting, though making considerable pasture for stock. The growers were not discouraged, however, and this year put in a largely increased acreage. They were again hit by drouth, but not so seriously as a year ago. Pea crops in the district this year are running all the way from 8 to 20 or 25 bushels per acre, with the average for the section being perhaps between 15 and 20 bushels. It is estimated that the crop in the vicinity of Fairfield will be worth approximately $2,000,000 this season.

## Old Sacks Relieve Scarcity.

The scarcity of sacks is being relieved by the appeal for all townspeople to return to the dealers all empty sacks which they find about their premises. There has already been a gratifying response to this appeal, which not only helps out in the matter of making more sacks available, but it teaches a lesson of thrift and economy. The old sacks are cashed in in many instances for more than the cost when new, and the money is being put into thrift stamps, so the old sacks are doing double duty.

### Democratic.

A Battle Creek lady danced three times with a good-looking first lieutenant, and then said:

"Pardon me, sir, but your face is strangely familiar. Haven't I seen you somewhere before?"

"Yes, madam, you have," responded the officer. "I was your milkman for more than three years."


# Help Save the Canadian Crops

When Our Own Harvest Requirements are Completed

## United States Help Badly Needed Harvest Hands Wanted

Military demands from a limited population have made such a scarcity of farm help in Canada that the appeal of the Canadian government to the United States government for

**Help to Harvest the Canadian Grain Crop of 1918**

meets with a request for all available sssistance to go forward as soon as our own crop is secured.

The allied armies must be fed and therefore it is necessary to save every bit of the crop of the continent—American and Canadian. Those who respond to this appeal will get a

**Warm Welcome, Good Wages, Good Board and Fine, Comfortable Homes.**

A card entitling the holder to a rate of 1 cent per mile from Canadian boundary points to destination and return will be given to all harvest applicants. Every facility will be afforded for admission into Canada and return to the United States. Information as to wages, railway rates and routes, may be had from the

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# Western Electric POWER and LIGHT



*Let the Western Electric man show you the kind of plant you need*

THERE is as much difference in electric light plants as there is in automobiles or gas engines. No one type is equally suited to all farms, and your power and light requirements may be different from your neighbors'.

Like every farmer, you want electric power and light, but you don't want an outfit either too large or too small for your needs. Start right! Get all the facts! *Let the Western Electric man show you the kind of plant you need!*

Our business is bigger than the mere selling of any particular electric plant. We sell electricity for the farm. There are all sizes and types of Western Electric outfits. We are not forced by policy to sell one type for every purpose. We can sell you an outfit with or without a gas engine.

If you have a gas engine, it may be a needless expense to buy another engine as a part of an outfit. On the other hand, if you want an outfit with built-in engine, the Western Electric man will tell you about a new outfit of this type ready for delivery this Fall. In any case, it is just a matter of fitting our equipments to your needs.

More than forty years of electrical manufacturing experience is back of all these Western Electric Power and Light Outfits.

Make your entire equipment "Western Electric." You can get Western Electric Motors, Water Systems, Milking Machines, etc., to save labor on the farm; as well as Irons, Vacuum Cleaners, Washing Machines and other electrical helps to save time and labor in the home.

*There is a Western Electric man near you. Mail the coupon for Booklet No. WNF-7, and we will tell him to get in touch with you.*

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I want to know more about your electric plants, so please send your book No. WNF-7, "Power and Light."

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# Lime Is Put on the Preferred List

The priority board has placed agricultural lime in preferred classification in the matter of fuel supply for burning in the stove as well as in the matter of transportation. It is pointed out that production and distribution of pulverized limestone and burned lime for agricultural purposes is essential in the production of food and other war necessities, both indirectly through the clovers and directly through many staple crops, such as wheat, corn and cotton.

The action of the war priority board should bring relief to farmers. Reasons given by the agricultural advisory committee for urging that lime be placed on the preference list were that the prices of lime and limestone are now very high, that they were advancing before the war on account of the newly-created demand on the part of farmers, and that now the high cost of labor and fuel has made further heavy increase. Inability to secure delivery by transportation lines, together with a great advance in the cost of material, is limiting the liming of land to a serious degree, the committee said. The limited coal supply and danger of actual coal shortage was declared to be a further serious handicap to the lime supply.

The full text of the advisory committee's recommendation to the secretary of agriculture is as follows:

We believe that hunger throughout the European countries is a thing to be greatly feared during the coming years, and the eastern half of the United States must do much in saving the situation. In a great part of this area production is hampered by soil acidity, which can be corrected only by plentiful use of lime. Meeting the lime deficiency of these soils should be our first consideration. Experiments running through long terms of years at various experiment stations, and the experience of thousands of practical farmers, indicate clearly that our acid soils will not produce the clovers unless lime is supplied. There has also been full demonstration of the fact, both by experiment station and repeated farm practice, that many staple crops can not profit rightly from applications of fertilizers until the lime requirement has been met. The prices of lime and limestone now are very high. They were advancing before the war on account of the newly created demand on the part of farmers, and now the high cost of labor and fuel has made further heavy increase. Inability to secure delivery by transportation lines, together with the great advance in the cost of material, im limiting the liming of land in a serious degree. A limited coal supply, and danger of actual coal storage is a further serious handicap to the lime supply.

We believe it to be just as important to deliver lime or limestone to the farmers quickly as it is to deliver most other war necessities. We believe that we are justified in asking that the railroads, under the director-general, make a special freight rate less than that now prevailing, and every possible improvement in the transportation of agricultural lime should be made. Manufacturers should be encouraged to put low-priced pulverizers on the market, and these should be delivered to buyers without any undue delay. Manufacturers of lime should be supplied all the fuel that they can properly use in the production of agricultural lime, and their shipments should go forward as promptly as other essentials. There should be assurance that material for new plants are necessary for an adequate supply of agricultural lime. If supplies of lime and limestone can not be secured by farmers promptly, and at prices that will encourage their free use, the government should regulate the whole business for the public good. This extreme course should not be taken until the transportation and fuel factors have been taken care of by the government and the full energy of the United States department of agriculture has been expended in propaganda to secure the liming of our soils.

Whereas, the advisory committee of the department of agriculture and the food administration fully indorses the above statement of agricultural lime situation, and

Whereas, it is our conviction that this statement is backed by the United States department of agriculture, by many state experiment stations, and by repeated experience of many practical farmers;

Resolved, that the production and distribution of pulverized limestone and burned lime for agricultural purposes should be declared essential in the production of food and other war necessities, both indirectly through the clovers, and directly through many staple crops, such as wheat, corn and cotton; and

Resolved, that our government should do everything in its power to further such production and distribution by placing agricultural lime in preferred classification in the matter of fuel supply as well as in transportation.

Subsequently the committee voted thanks to the secretary of agriculture for his prompt action in securing the placing of agricultural lime on the preference list of the war priority board, and requested that the ruling to that effect be made public, together with the resolution previously adopted by the committee.

## OBJECTORS WORK.

### Are Furloughed to Help Farmers.

After struggling for a long time with the knotty problem of conscientious objectors in army cantonments, the war department now announces that the difficulty has to a large degree been solved through the aid of the farm help specialists of the United States department of agriculture.

In the various states where there are farming communities which include sects opposed to war, such as the Dunkards and Mennonites, and where additional farm help is needed, these places are made known to the cantonment commanders, together with a record of their farm labor needs. Final arrangements have been made for labor furloughs for objectors in nearly all army camps, including Camp Lewis in Washington. The labor specialists in the states where the cantonments are situated have been instructed to communicate with specialists in other states in case they can not place all the conscientious objectors at work at once.

The furloughed men are under strict regulations drawn up by the war department. They are placed on farms at a standard wage and reports of their conduct and effectiveness are made to the cantonment commander at monthly intervals. If their services are not satisfactory the commandant is promptly informed of the fact.

The war department has expressed itself as thoroughly pleased with the arrangement for placing these men where their services will be an aid to victory through food production.

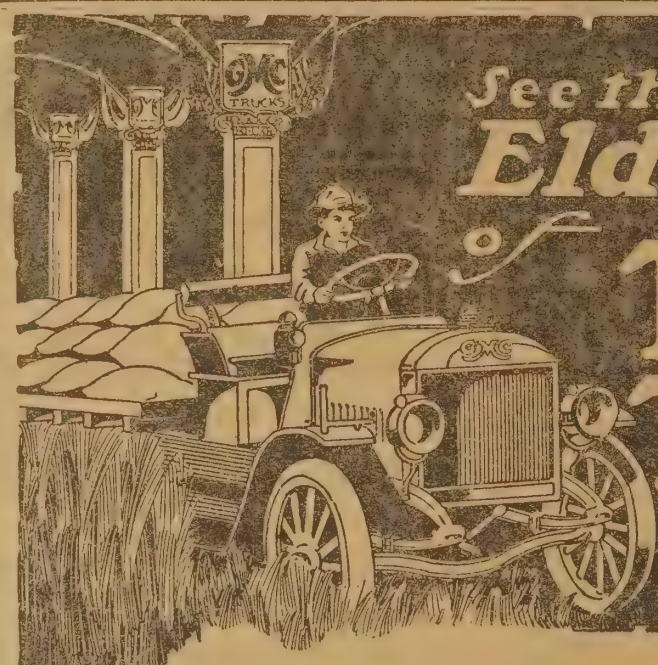
### Agree on Orchard Wages.

Wenatchee valley apple growers have agreed on the following scale of wages and charge for board during the present fruit harvesting season:

Picking, 40 cents per hour, or 5 cents per orchard box; sorting at ranch, 35 cents for inexperienced help, 40 cents for experienced help; machine sorting, 35 cents per hour; packing, 7 cents per box for graded but not sized apples, and 9 cents per box for ungraded fruit; packing from grading and sizing machine, 5 cents per box. Board for orchard help will be $1 a day or $7 a week. Little help will be needed in the valley before September 20.

### Don't Starve the Bees.

Those having bees are warned by the government against taking out too much of the honey.

See the Eldridge Line of TRUCKS & TRACTORS at the Fair!

You'll Find a Hearty Welcome

at our exhibit. Come in, look around. Expert truck men and tractor men will be on hand to give you any information you want.

GMC TRUCKS have earned a reputation as the real trucks for the farmer and dairyman. They help to solve his handling problem and reduce country hauling costs.

They are built extra strong for hard country use. Strong, economical, dependable GMC trucks give long life and freedom from trouble. Ask your neighbor who owns a GMC.

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All capacities and sizes, for use behind your passenger car or motor truck. They increase the loads you can haul—decrease hauling costs. Enable you to handle heavy implements, cattle, milk, produce, with your passenger car.

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Sixteen years of tractor experience is built into the Sampson—the tractor that grips and gets traction.

No frills; simple, strong construction; all parts accessible.

Exclusive Sampson features, such as the big, powerful 4-cylinder Sampson motor, Sampson cooling and oiling systems, sieve grip wheels, low center of gravity, easy steering, economy of fuel and oil, make the Sampson the tractor for your farm.

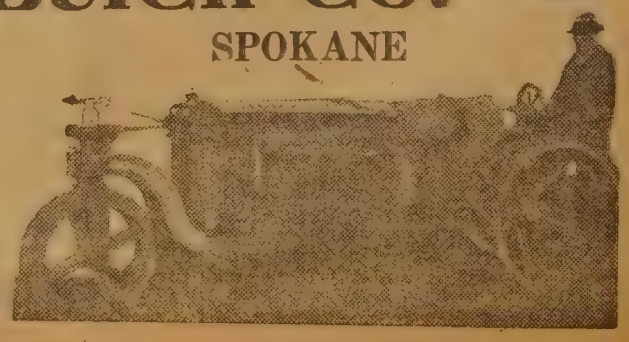
And this complete line of standard farm machinery is backed and guaranteed by the responsibility, the reputation of the Eldridge-Buick Co., and its state-wide organization of dealers.

Owners of GMC trucks, Sampson tractors, Warner trailers know their equipment will always be running, for the Eldridge-Buick service—expert mechanics and a big stock of repair parts—covers the entire northwest.

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Southwest Washington Fair, Chehalis, Aug. 26 to 30.
H. B. Quick Auto Co., Exhibitor.
Interstate Fair, Spokane, Sept. 2 to 7.
Eldridge-Buick Co., Spokane, Exhibitor.
Washington State Fair, North Yakima, Sept. 16 to 21.
Western Washington Fair, Puyallup, Oct. 1 to 6.
Mueller-Harkins Co., Exhibitor.



# West Side Fairs

## Will Set Pace Hard to Follow

By PAUL E. TRIEM.

That western Washington fairs for the year 1918 will be different than they have ever been before goes without saying. Some of them probably will not weather the strenuous conditions of war times. Others will meet the emergency by adapting their activities to the spirit of the times, realizing that a county or community fair at its best is one of the most important educational influences available.

In the matters of preparing both the public and the program, the southwest Washington fair, which is in session during this present week at the grounds between Centralia and Chehalis, stands among the foremost in the state. The live stock exhibition will naturally attract much attention from visitors to this fair. Lewis county has been rapidly forging to the head as a "purebred" community, and it is probable that this year's entries have never been surpassed, either in number or quality. The Holstein class is particularly strong.

Among other important exhibits are those in the grains and grasses department, which are up to their usual high standard in spite of the rather unfavorable season.

The better babies contest is proving a winner with the women of the community, who are quick to realize the tremendous importance of the recent federal movement to standardize the care and the measuring of children.

A splendid racing program has been provided, and the Wortham Shows, which presented their carnival features last year, have been secured again for this year.

### Puyallup Fair Coming.

The Western Washington fair, to be held in Puyallup October 1 to 6, inclusive, promises to measure up to its usual standard, which is praise enough for those who are acquainted with the Pierce county exhibition. In his annual letter, President Paulhamus sounds the keynote of the coming session:

"Western Washington is developed in many ways to a greater extent than in farming, and we believe that a good old-fashioned country fair that will bring the farmers out of their slumber and teach them the necessity of ascertaining what the other fellow is doing, will be helpful not only to the Puyallup valley, but to every other part of the state."

The Puyallup fair has been just this kind of a pacemaker in western Washington for years. It is always clean and progressive. Even the premium list which it gets out is worth a place on any farmer's book shelf, for it is full of vital information not easily accessible in other places, and this information is always compiled by recognized authorities.

Among the strong features of this fair as measured by past performances are the live stock exhibits, the displays of fruit and vegetables best adapted to western Washington conditions, the educational and floral departments, the agricultural college and experiment station features, and the racing and musical program. All of these things will be found at their best at Puyallup this year, and in addition President Paulhamus and his assistants may be counted upon to provide such additional features as shall best bring the fair into harmony with the interests of the present time.

Among other West Side fairs for 1918, the Grays Harbor county fair, to be held at Elma, September 4 to 8 inclusive, will interest many visitors as a measure of the growth of this important seaside county. It is safe to say that no county in the state has advanced more rapidly in the really worth-while agricultural activities, during recent years, than this community of timber and agricultural resources. Potato farming and dairying in particular have achieved a wonderful development, and both of these specialties will be reflected in the displays at this year's fair. Secretary Palmer states that food conservation, the stock shows, and horse racing will be the main features of the program.

School children's day, to be held Friday, September 13th, will be the great feature of the Mason county fair. The exhibition will open September 11 and continue four days, and in addition to the feature just mentioned will display representative exhibits of Mason county grains, grasses and vegetables. On former years the showing of potatoes has been particularly creditable, and it is to be remembered that Mason county contains at least one corn specialist, Mr. Rex, of Shelton.

The Lynden fair grounds have beeen turned over to the school children this year, in keeping with a strong tendency of the times to feature the work of the younger generations of farmers. The Whatcom county school fair will be held at Lynden, October 4 and 5, and will feature pretty much everything to be found at the best class of "grown-up" exhibitions. In addition to displays of farm and garden products, there will be milk testing contests, potato judging contests, cooking contests, stock judging contests, typewriting contests, etc. On Friday afternoon there will be an "Achievement Club Rally," to be followed by chorus singing. It is safe to predict that the fair-wearied adult who is inclined to take a pessimistic view of community fairs in general will receive a new lease of life and enthusiasm by visiting this boys' and girls' exhibition in Whatcom county. It sometimes seems as if it is only these farmers of tomorrow who are really profiting by the teaching of today, and they may be confidently counted upon to set a pace that will be hard for associations given up largely to older and less enthusiastic exhibitors to follow.

It is unfortunate that it has been impossible, up to the present moment, to get definite information on the activities of some of the other West Side fair associations for this year. An effort will be made to list as many as possible of these in the "Coming Events" column of The Washington Farmer.

### For Man or Wife.

I am very much pleased with your paper and think it is fine for either man or wife.

HOMER B. MYERS.
Omak, Wash.

## Sheep Are Lost.

A report from Baker, Ore., tells of the loss in that section of a considerable number of sheep. They were found dead or dying in their yards under circumstances which indicated poisoning, though some unrecognized disease may have been the cause of the loss.

### Two of a Kind.

Postmaster—Give that man a job.

Assistant—But he can't even read addresses.

Postmaster—Then put him to work sorting newspapers.—Buffalo Express.

## Crime and Philosophy.

Frederich Wilhelm Nietzche was one of the most noted of modern German philosophers. How much has his philosophy affected the views and character of the Germans of today? Is not the answer written in the blood of the women and children, the old men of occupied France and Belgium? Are not the Lusitania victims witnesses to German adoption of Nietzche's faith?

Here is his indictment of Christianity:

"With this I conclude, and pronounce my sentence: I condemn Christianity. To me it is the greatest of all imaginable corruptions. The church is the great parasite; with its anemic idea of holiness it drains life of all its strength, its love, and its hope. The other world is the motive for the denial of every reality. I call Christianity the one great curse, the one great intrinsic depravity, the one great instinct of revenge, for which no expedient is sufficiently poisonous, secret, underhand, to gain its ends. I call it the one immortal shame and blemism upon the human race."


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# Our Seattle Letter

## Dreamland Farms

*Profits Are of Dreamland Variety*

I heard two men on the streetcar recently gossiping. One of them said: "What's become of Jones? I haven't seen him for months." And the other replied, "Why, didn't you hear? Jones' uncle down in Frisco died and left him $50,000. Jones has become a farmer."

The details came out gradually. Jones had always desired to be a farmer—not the old-fashioned kind that gets up early and works late, wears heavy shoes, overalls, etc., and sets the pace for a hired man or a crew of them in the field; Jones wanted to be a sort of super-farmer, and he had made his plans accordingly. He had paid down half of his $50,000 on a "gentleman's farm," if you know what that is, and had spent most of the rest in buying purebred stock and fancy machinery. I have seen some of these fancy farms, and I was not surprised to hear that Jones' place was not famous so much for its soil or productivity or even its accessibility to market as for its scenic properties; it was a "dream of a place," with hills and dales and a small lake and winding trout streams. And without taking time to figure the thing out on paper, I thought I could see Jones' finish. At the first jump he had tied up most of his capital. He knew nothing about farming—a field of shocked grain to him was simply a beautiful picture, for he was as ignorant as any kitten of the hard work that lay back of the grain, and the additional labor that would have to be lavished on it before it made any cash return to its owner. Jones stood to me for a type of the city farmer at his worst.

Seattle has had a few city farmers of both sorts, the successful and the unsuccessful ones. Recently there was offered at public auction the famous "manufacturing farm," which crystallized the dream of A. L. Brown, one of the heirs to the Amos Brown estate. A few years ago I was commissioned by an eastern magazine to visit this farm and get a story on it. The editor's instructions were to "make it plain to our readers how such a place can be made to pay." After a 10-minute walk from the railroad station I found myself following a beautifully constructed private road, with broad, flat, well cultivated fields on each side. Before me lay a small village of farm buildings. As I approached one of these Mr. Brown himself came out. He had been assisting at the butchering of a hog, and his sleeves were rolled up and his hands bloody. Even before I explained my mission, I noticed the expression of his face - the wrapt, intent look of an enthusiast.

The Brown farm at that time was certainly a "dream of a place." It had its own electric light and power plant, its own blacksmith shop, its own highway system and telephone lines. The crew of men who did the farm work were comfortably housed and well fed. I think there were about 60 of them at that time, and every one of them with whom I talked had a good word for the "boss." He knew what he wanted, and if a man carried out the definite instructions given him, there would be no trouble with headquarters. Mr. Brown told me that he had no difficulty in getting plenty of good men, but that he intended to build cottages for married men, as he believed these would be even more dependable than the class he was then employing.

I don't remember the exact number of live stock on the place at the time of my first visit, but I know that the hogs were like the sands of the sea—there must have been thousands of them. There was a modern horse barn stocked with purebreds of various types—coach horses from Europe, and other high-steppers not particularly adapted to the rough, heavy work of an everyday farm. The cow barn was modern and sanitary, and Mr. Brown showed me a little wobbly-kneed bull-calf for which he had paid a fancy price a few days before. His herd was made up largely of Jerseys at that time, I believe. The chicken houses and runs were on a colossal scale, with an "expert" poultryman in charge.

I didn't write the story I went after, because I couldn't see just how to tell that eastern editor's readers how the manufacturing farm was being made to pay. Some time after my first visit a packing plant was added to the farm equipment. Mr. Brown specialized on parcel post selling, direct to the consumer. Theoretically the place was 100 per cent perfect, but most of its perfection seemed to me to be the result of putting money into the plant rather than taking it out in the form of a profit. The recent unhappy termination of this city farmer's dream lends probability to the surmise that the venture was not exactly a paying one, and that perhaps it was another case of too many "expert" agriculturists, and not enough practical, working farmers.

I have described the case of the Brown farm before taking up some other Seattle-owned country places for two reasons: In the first place, I would like to do my bit in warning those city-reared people who have visions of a workless, scenic, and profitable farm against yielding to any such deceptive dream. Better search for the pot of gold at the other end of the rainbow. And in the second place, I want to be free to tell of some of the city farmers in our town who are making good.

One of the most complete of these farms owned by city men is Hollywood farm, the home of the famous Hollywood Holsteins. Probably Mr. Stimson, the owner, would object to being called a "city man," as he spends most of his time on the farm, and is one of the most whole-hearted farmers and breeders in the northwest. His place might stand as a type of farming done on a big scale without that lost motion which so easily develops in show places. The farmstead is scenic, but it is first class farming land even before that. The cows in the dairy barn have long pedigrees, but they are also able to produce milk at a profit. A well located retail store in Seattle handles Hollywood products exclusively, thus effectually closing the usual gap between producer and consumer.

Willowmoor farm, owned by J. W. Clise, is given up largely to the breeding of Ayrshire cattle. Mr. Clise spent much time and money in visiting the various types of dairy cows in their

(Continued on page twenty-seven.)


## 80 Acres — Palouse Home

78 acres cultivated, 8 acres hay meadow, watered by creek and springs, 40 acres summerfallow (peas 1918), 30 acres stubble; 2 wells, good barn and sheds; 5-room house; granary, hog house, etc. This is a dandy Palouse farm and adjoins 100 acres of leased pasturage. $6100 takes it. Terms.

## Hay and Stock Farm

490 acres with ½ mile of lake frontage; 225 acres of the finest bottom land, well drained and in a high state of cultivation. The meadow lies near state highway and one hour's ride from Spokane. The farm is improved with nice 6-room house with water piped in, fireplace, fine view; barn for 50 head of stock, hay barn and hog house. $30,000 buys it and it's a bargain. Good terms.

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# "Make the Best Better," Is Motto

## *Boys and Girls Will Demonstrate at Fairs This Year*

By ELIZABETH DEITS JONES, Assistant State Club Leader.

The colleges of agriculture from the seven northwestern states are sending club members to the Interstate fair to compete in canning, cooking, sewing, stock judging, gardening, poultry and pig raising. The states entering into this plan are Wyoming, Montana, Idaho, Utah, Nevada, Oregon and Washington.

The contestants will be accompanied by the state club leaders from these states, who will assist in the arrangement and carrying out of the contest work.

The Interstate Fair association will entertain the boys and girls in a club camp which they have arranged for our accommodation. This camp is located inside the fair grounds and consists of a large tent where the girls will be quartered, a kitchen and dining room tent and another large tent for the use of the boys.

The quarters are furnished with excellent beds and blankets and every detail is worked out for the comfort and well-being of the competing teams.

The canning teams consist of three in number and will compete daily from 2 p. m. to 5 p. m. and will be in the nature of a canning demonstration. One member from each team will lecture by explaining every step in the process of the government cold pack method of canning, while the other two members prepare the material for canning and process the pack until the demonstration is completed.

Each team has the opportunity of competing in the drying demonstration, which takes place from 10 a. m. to noon. Fruits, vegetables and meats will be dried.

The sewing demonstration is under the supervision of Miss Z. Faye Fowler, assistant state club leader of Idaho, and will probably consist of the making of one Red Cross garment. The cooking contest will consist of the making of one loaf of war bread, the contestant being required to file cost and receipe. The stock judging will be under the direction of Mr. McCall, state leader of Idaho. Only boys who are club members, and who are actually raising an animal, can compete in the contest. This is for the purpose of interesting boys in stock raising and to afford those who do the real work an opportunity of winning a reward.

Demonstrations in good practices in poultry raising will be entered into by poultry club members. This is the first year that poultry contest work and that of gardening was offered club members. The contest in gardening will be a new and unique feature of the fair. The club members must exhibit, arrange and display 6 varieties of vegetables.

An exhibit of three pint glass jars of canned food by each canning club in the state will be one of the most attractive features of the club department. This display, consisting of fruit, vegetables, meat, fish and poultry, will be displayed first at the Interstate fair, then shipped to Yakima for display at the state fair, September 16-21. Two dozen of the best jars will then be selected from this exhibit. One dozen to go to the United States department of agriculture, Washington, D. C., and one dozen to remain at the Washington State college, Pullman, for permanent display. The remainder of the collection will be auctioned off to the highest bidder and the proceeds used to take care of Belgian babies. The names of these unfortunate little ones whose comfort is purchased with this money will be secured and published by the press of the state so that the canning club girls will know what little children received comfort from their patriotic efforts this year.

During the Interstate fair the Northwest Association of Club Leaders will convene for the purpose of formulating plans for increased efforts and results in club work. H. E. Seymour of Oregon is president of the association and has the arrangements of the program in hand. Anyone directing or assisting in furthering club work can become a member of the association. Mr. Seymour has sent an urgent request to O. H. Benton, Washington, D. C., to be present at this conference.

The generosity of the Interstate fair association in supplying the entertainment for the club members and their leaders and for the complete cooperation which they have manifested in furnishing building equipment and materials for their work, have made it possible to carry out these elaborate contest and demonstration plans in club work. The club people hope to continue these contests from year to year, and will try to demonstrate their motto, "Make the best better."

The winning team in canning will have the privilege of attending the National Corn show at Chicago. This will be a free trip, the winning team going from Chicago to the annual conference of state club leaders, at Washington, D. C.

The first two days of the fair, September 2 and 3, will be given to contest work among club boys and girls of Spokane county. The contests will consist of canning, sewing, cooking, pig club contest, garden, poultry and sheep club work.

The winners of first places will have the right to attend the state fair at Yakima.

Mrs. Josephine Corliss Preston, state superintendent of schools, is contributing $50 toward the expenses of the club leaders and their chaperons in attending the state fair.

The business men of Spokane, cooperating with the Interstate Fair association, are planning to give the club boys and girls a pleasurable and instructive time in the way of trips for sight seeing and shows. The evenings will be given over to plays, games, songs and taking in the sights of the fair.

Last year the boys and girls visited the most beautiful and important places in Spokane, enjoyed a trip to the paper mill, and were entertained one evening at the Clemmer theater by E. E. Flood of the Exchange National bank. The people of Spokane have been so generout in their hospitality and support of club work that it is an eagerly looked forward to pleasure by all club boys and girls.

### Grow Into Better Citizens.

The following letter from Mrs. Lenora B. Simpkins of the advisory board of the Spokane Humane society, will be appreciated by those who still believe that kindness to animals is one of the best paying investments in character growth:

To the Editor: Please accept my very sincere thanks for the article in the magazine department of the August 15th issue, entitled "Pets the Builders of Child Character." It is an education for children to find such reading matter and if there were more of it animals would have a happier time than they have now and children would be kinder and grow into better citizens. I hope you will keep it up. You have a splendid opportunity to reach a lot of children, for I think a farm paper is read by more of them than any other.

MRS. LENORA B. SIMPKINS.
Route 6, Spokane, Wash.

### Simply Impossible.

Pat Rooney was a new arrival on the job. Having gone to the top of the building and failed to return, the foreman shouted up:

"Come on, Pat; what's keeping ye?"

"Sure," said Pat, "I can't find my way down."

"Well, come down the way we went up," shouted the foreman.

"Faith an' I won't," says Pat, "for I came up head first."

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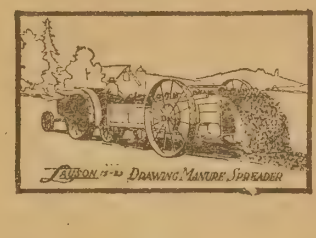
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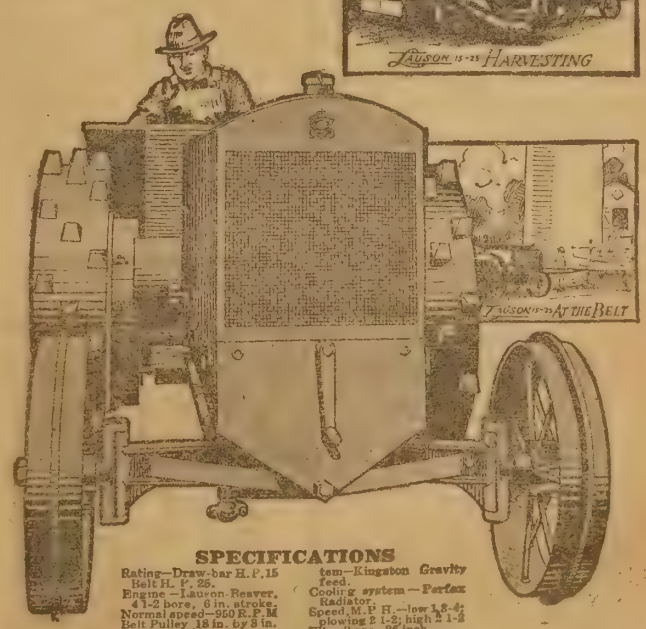

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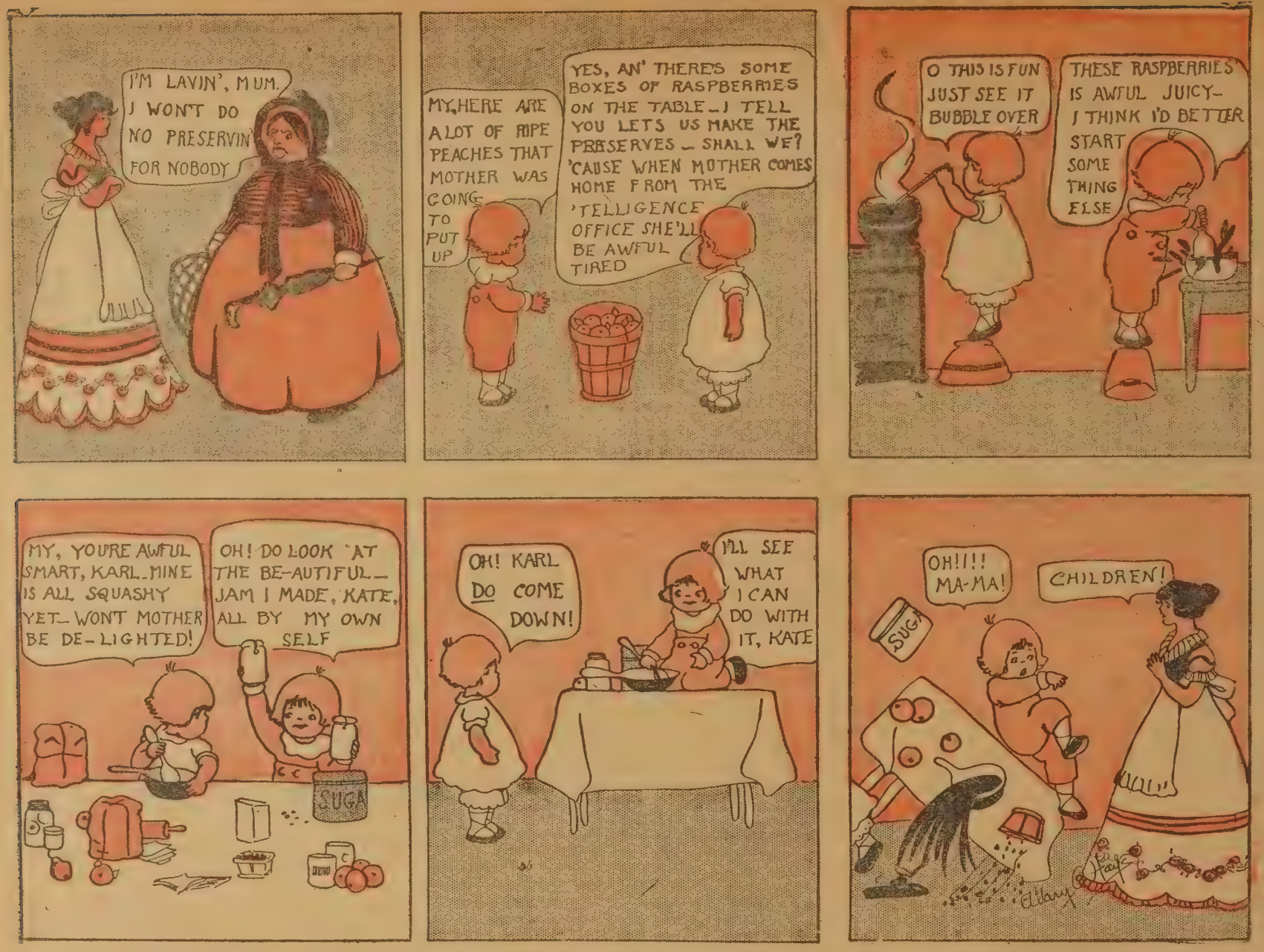

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## Save Garden Seed

### Insure Supply for Next Spring

Saving seed for the home garden—a practice that was the rule in earlier times—is the cheapest and best way of insuring a supply for planting next spring. Saving garden seed is an emergency meaure; and supply is limited, yet thousands of people had gardens this year and last year who never raised them before. There is but one general principle, say garden specialists, underlying the production of good vegetable seed, and that is: Save seed from the best plants. Seed should not be gathered until maturity, the specialists add, and should be properly dried, placed in suitable containers, carefully labeled and stored in a dry place where insects or mice can not get at them.

Even if the scarcity of seed does not emphasize the importance of saving a supply from the home garden there are advantages to be gained by the latter plan. The selection which the gardener gives his seed plants, while not greater than that which the seed grower gives his seed stock, is often better than can be given to the seed that is placed on the market. The plants selected also will be the ones which succeed best under the local environment. Well-matured seeds, if properly stored, with the possible exception of those of parsnip and onion, should retain their vitality from 5 to 10 years, and for this reason it is urged that an abundant supply be saved, for if it is not all planted next spring, it can be laid away for the following year.

Very little care is required to save seed for a home supply. With plants like beans and peas which are gathered for food before the seeds are mature, a few of the finest plants should be marked and the seeds which they produce allowed to ripen completely. In making such selections it is best to choose plants alike in varietal character and earliness. Never save seeds from plants that have suffered from diseast attacks. In selecting sweet corn for seed, select the best and earliest ears, mark them and allow them to mature on the plant before they are harvested. The ears should be dried immediately after harvesting and stored "on the cob." In saving cucumber and squash seed, select and mark fruits of desirable character while in the usable stage and allow them to remain on the vines until fully ripe, then remove the seeds and spread them out to dry before storage. In selecting tomatoes and potatoes for seed the vigor, productiveness and freedom from disease in the plant should be taken into consideration.

Seeds which have been grown and carefully saved should be well labeled and stored, or all the previous labor goes for nothing. Cloth bags are the best containers for large seeds, such as peas, beans and corn. They should be used also for larger quantities of small seeds, but for smaller lots, paper envelops, made at home or purchased are most desirable. Ordinary letter envelopes are fairly satisfactory, but usually are not gummed so as to close completely, and if handled carelessly small seeds may sift out of them.

Correct labeling is of paramount importance. Every envelope or container should show the kind and variety of seed, the date, including month and year when harvested, and the place where grown. For the cloth bags, a slip of paper bearing all this information should be inserted with the seed. It is very convenient also to have a tag on the outside of the bag, but on no account should the inner label be omitted, because of the liability of loss of the outside tag.

Many seeds, especially beans, corn and lettuce, are subject to injury by a number of insects, all of which may be destroyed by fumigation with carbon disulphid. A tight tin pail, box or barrel makes an excellent container for fumigating seeds. For a tight barrel full of seeds one-half cupful of carbon disulphid is sufficient. For smaller containers, use in proportion. Seeds to be fumigated must be dry, and if they are in paper bags, the bags should be opened. The gas penetrates cloth bags easily. Immediately after starting the fumigation, the container should be covered with several thicknesses of heavy paper, or other tight cover, and allowed to remain covered from one to two days. A longer fumigation in tin pails is apt to injure the germinating power of the seeds. Carbon disulphid gas is highly inflammable. No lights, or fire of any sort should be allowed near while fumigation is in progress, or an explosion may occur. The foul odor of the gas disappears after the seeds have been aired for several days.

After the seed has been properly labeled, and fumigated if required, it is necessary to store in a dry, well-ventilated room. Cellars are too moist, attics usually are too hot, but a second-story room furnishes the ideal location.






THESE are serious times, and every one *must* shoulder a serious task, but how efficient would we be if we worked all the time?

Each morning and afternoon at school the children are given a *recess*, to sharpen their tired brains and take the kinks out of their cramped little legs.

Like the boys and girls in school we *must* play a little now and then, too, to be able to work the harder after we are done playing.

That's why we have hunted to the four corners of the earth for clean talent of every kind to amuse you in a wholesome manner this year.

For recreation and play of the finest type no place compares with the Spokane Interstate Fair and Livestock Show, September 2-7, 1918.





**The Original Portable Drag Saw**



**Vaughan's**
**4 h. p. Portable Drag Saw**

WILL CUT 15 TO 20 CORDS OF WOOD IN 10 HOURS.

Can be operated by one man. Two men can carry complete machine. 4 H. P. gasoline motor mounted on frame. One gallon gasoline required to cut 8 to 12 cords of wood. Engine can be used for other work without removing from frame. No gears, cogs, belts or pulleys. Friction clutch prevents breakage if saw pinches. Saw makes about 125 strokes per minute. Will cut any size log up to 6 feet. Sprockets and cranks, etc., made of cast steel. All working parts guaranteed against defects in material and workmanship.

Net cash price for complete machine as shown in cut, $160 f. o. b. Spokane and common points. FOR SALE BY

**Washington Machinery & Supply Company**
8122 Monroe. SPOKANE, WASHINGTON

## Dreamland Farms

(Continued from page twenty-two.)

original homes in Europe before deciding upon the thrifty Scotch milk producers, and since his embarkation as a breeder he has been one of the well-known Ayrshire men of this country. His farm is well located, both for agricultural and scenic purposes, and the business end of the enterprise is adjusted as accurately as the parts of a fine watch.

J. von Herberg, the Holstein man, is another Seattle farmer who is making good in the city and the country at the same time. His farm is located on a beautiful little lake, five miles or so east of Kent, and from the number of A. R. O. records which are being made there, it is pretty evident that a moving picture magnate can also get down to the brass tacks of cattle breeding without losing efficiency.

When Dr. Park Weed Willis wants to forget the aches and pains of his patients—and possibly some of his own—he pins a card "Back in 15 minutes" on the front office door and slips out to his farm near Redmond. It is here that the doctor breeds those Guernseys which bring a twinkle of enthusiasm into his eyes, even during office hours, and a skeptic would have to admit that Oxford Hill farm seems to be a very practical working out of a practical man's dream of farming. Parts of the farm buildings lie on a hillside, sloping down from the road to the river-bottom plow land below. Barn and equipment are thoroughly modern and practical.

While there are probably many other farms owned and operated by Seattle business men, there is just one other I want to describe at this time. One of the first things the city man, turned farmer, tries to do is to shorten the distance between producer and consumer. Having been a consumer himself, he knows by experience the metallic taste of eggs at 5 cents each, and of butter at 60 cents a pound. When he himself becomes a producer of things to eat, he begins at once to figure on getting his products to the people who are to eat them without any unnecessary delay or expense.

This is one of the fundamental principles adopted by R. T. Reid of Seattle and Bellevue, in his farming operations conducted at the latter place. Mr. Reid produces grapes and loganberries, among other things. A few years ago one of the agricultural commandments of western Washington was, "Thou shalt not try to raise grapes, because it can't be done." Mr. Reid is raising them, however, and he is selling them without lost motion. His farm is partly hillside land and partly flat land. On the former he raises Island Belle grapes, and on the latter loganberries. Much of his marketing is done direct to the consumer, and in that part which is conducted through a middleman, Mr. Reid takes a personal interest in seeing that all the details, from the choice of a container and the form of packing to the actual merchandising, are fair and satisfactory to the housewife who is the ultimate purchaser.

### CONTROL DOGS.

### County Agents Adopt Resolutions

County agents in western Washington recently adopted the following resolutions:

"In anticipation of increased interest and for the furthering of the present growing interest in sheep husbandry in western Washington, and believing that a great handicap and hazard to the small farm flock exists in the stray dog and outcast cur,

"Therefore, we believe that a state law for the control of dogs is very important and we recommend that farmers' organizations should promote interest in the passage by the state legislature of such suitable legislation.

**Ingredients of Feed.**

"In face of the existing shortage of feeding stuffs there is a tendency on the part of some feed companies to resort to a large variety of mixtures of feed materials of unknown feeding values; hence, we believe that the dairymen should have a full knowledge of what goes into the composition of compound mixtures.

"Therefore, we believe it is urgent that a state law be passed which will require the statement of all ingredients used in the combination of concentrated feedstuffs, and that the statement, together with a statement as to the percentage of protein fat and crude fiber contained therein, be plainly marked on the package containing such feedstuffs.

**Supervise Milk Tests.**

"Inasmuch as all milk in western Washington is sold on a butterfat basis, and such tests are made by the recognized Babcock test, and the accuracy of such test depends on the accuracy of the glassware and the competency of the operator,

"Therefore, we believe that the supervision of the test should be controlled by the state and we recommend that legislation be made which will provide for the licensing of all operators of the Babcock test in commercial milk and cream purchasing plants, such license to be given on the basis of the passage of an examination under the direct supervision of the dairy division of the state experiment station. We further recommend that such legislation should provide for the state calibration and accurate testing of all graduated glassware used in the process of Babcock determination of the butterfat in milk and cream delivered to commercial milk purchasing plants, and furthermore, that only a licensed tester be permitted to sample or test such milk or cream received by and paid for by such commercial milk or cream purchasing plants. C. C. FARR."

**It Makes a Difference.**

Arthur was passing a day with his aunt. "I am going to do something to please you on your birthday," she said to the little boy, "but first I want to ask the teacher how you behave at school."

"If you really want to do something to please me, auntie," said the boy, "don't ask the teacher."—Lippincott's.

**Sugar Cargoes Reduced.**

Vessels sailing from New York in June were cut more than 25 per cent in their sugar requisitions, to conform to the food administration ration.


*Experts Say*

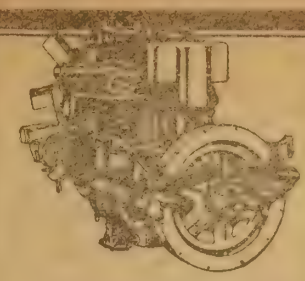
"ZEROLENE IS BETTER"

—because it holds better compression, gives better protection to the moving parts and deposits less carbon.

Zerolene is the correct oil for *all types* of automobile engines—the correct oil for your automobile.

Get our Lubrication Chart showing the correct consistency for your car.

STANDARD OIL COMPANY
(California)



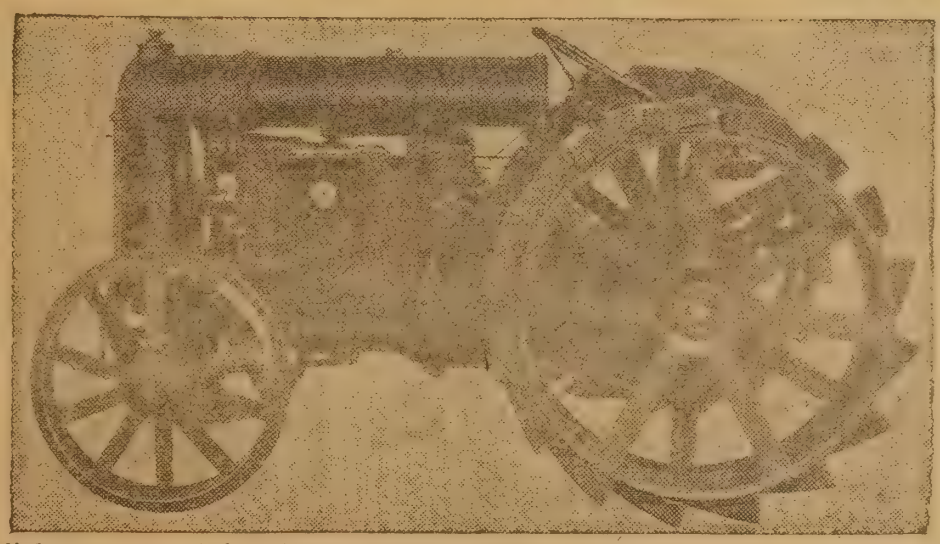
The "T"-Head type engine, illustrated here, like all *internal combustion engines*, requires an oil that holds its lubricating qualities at cylinder heat, burns clean in the cylinders and goes out with exhaust. Zerolene fills these requirements perfectly, *because it is correctly refined from selected California asphalt-base crude.*

ZEROLENE

*The Standard Oil for Motor Cars*


In writing advertisers, be sure to say you saw their advertisement in this paper.


# The "Fordson" Tractor



THE FORDSON TRACTOR is the result of extensive trials and experiments conducted by Mr. Henry Ford, covering a period of many years. Before placing the tractor on the market, every detail has been thoroughly tried out under actual farming conditions in various parts of this country and abroad.

Experience has pointed to the small, light tractor as being the one machine which will fill all varying conditions satisfactorily.

In developing the "FORDSON" Tractor, the aim has been to produce a small tractor which will be low in first cost, reliable, and above all—efficient.

Being small, light and economical, the "FORDSON" Tractor is adapted for use on small farms, as well as on the largest. It will pull all farm implements and do the work generally done by horses on the farm. In addition, by its belt pulley the tractor will drive farm machinery, such as a thresher, ensilage cutter, sawmill, etc., making the "FORDSON" a truly universal tractor.

In design and construction the "FORDSON" takes a long step in approaching the ideal tractor. The simplicity of its operation and construction will at once appeal to the farmer.

Special devices were perfected to keep out dust and dirt. All moving parts are enclosed and thoroughly lubricated. The number of lubricating points requiring attention are very few and easily gotten at.

As evidence of the success of this tractor there are approximately 20,000 in daily use at the present time. The English government placed an order for 6000 after the most extensive tests and there have just been delivered 100 FORDSONS in various sections of this state, whose owners will testify as to their merits.

Our allotment of tractors for the state of Washington is only about one-third the amount needed for this year, so if you are contemplating the purchase of a tractor kindly fill out the coupon and we will send you the new circular about the Fordson Tractor.

**E. A. Mitchel Tractor Co., Inc.**

Washington Distributor.
901 Hoge Bldg.
SEATTLE, WASH.

E. A. Mitchel,
901 Hoge Bldg., Seattle.
Please send me your tractor circular and information about the Fordson Tractor.

Name .....

Address .....




Saves Time Temper and Tires

With a

**SCHRADER UNIVERSAL PUMP CONNECTION**

attached to your tire pump, you will know when to stop pumping. It permits the measuring of the inflation without disconnecting the pump and the tire.

**A. SCHRADER'S SON, INC.**
783 Atlantic Avenue Brooklyn



**Do You Want a Well Drilled?**

If so, we can very likely put you in touch with a competent driller in your section.

**EXPERT ADVICE FREE OF CHARGE**

Upwards of a Thousand

**KEYSTONE**

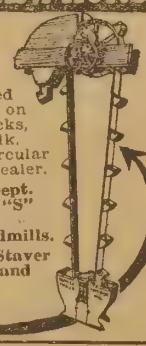
WELL DRILLING MACHINES

now operating in Pacific northwest. We will send you the name of driller nearest you free on request. Will there likely be other wells to drill in your neighborhood?

**J. H. Harris** 1210 Ide Ave. **Spokane, Wn.**
Pacific Northwest Distributor for Keystone Driller Co., Beaver Falls, Pa.



**DUPLEX** Superior Grain **ELEVATORS**



Handles Grain The Easy Way

The only low priced back geared elevator on the market. Save sacks, handle grain in the bulk. Write for descriptive circular and name of nearest dealer.

**Duplex Mfg. Co.,** Dept. "S"
Superior, Wis.
Also Pumps and Windmills.
Mitchell Lewis & Stayer Co., Portland and Spo Kane.



**The Farmers Record and Account Book**

Viewed from the most immediately pressing angle, The Farmers Record and Account Book furnishes an adequate and accurate basis for making complete income tax return to the government. Get one of these useful record and account books and keep the information and figures that you will need at the end of the year.

The Farmers Record and Account Book is sent postpaid for TWO subscriptions to your State Family Farm Paper,

**The Washington Farmer**

Subscriptions may be for one year at 25c; three years at 50c, or five years at $1.

Send your subscription with remittance to

**The Washington Farmer**

617 Central Building, Seattle, Wash. Review Building, Spokane, Wash.



**Just What You Want**

may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.


# Kill the Weevil!

## Peas and Beans Often Destroyed

The serious losses caused by bean and pea weevils—which amounts to millions of dollars annually—is claimed to be largely preventable by methods described in a new publication of the United States department of agriculture by E. A. Zack and A. B. Duckett. The crop should be harvested as soon as possible after maturity, according to the bulletin, and the seeds threshed or shelled and treated by fumigation, heat or cold storage in order to kill the weevils in them before they can increase in numbers and carry on their destructive work.

Weevils not only cause serious damage to peas, beans and cowpeas in storage, but also in the field, and are responsible for a curtailment in the acreage planted in these crops. In some sections this pest has carried on its work of destruction so successfully that growers have become discouraged and have discontinued to produce on a commercial scale. Badly infested seeds are worthless for planting.

In gathering the crop exercise care, the bulletin urges, to leave no portion of it in the field, as seeds scattered on the ground or left in shattered pods on the dried vines may carry the pest over winter and furnish a supply of weevils the following summer. The crop should be harvested as soon as possible after reaching maturity and the seed threshed or shelled soon afterwards. Storing in the pod does not confine the weevils. Immediately on placing the seed in storage, fumigate with carbon disulphide or carbon tetrachlorid. These chemicals, when exposed to the air, vaporize into a heavy poisonous gas, which immediately kills the weevil. Carbon disulphide is the more generally used though carbon tetrachlorid has the advantage of not being inflammable. Seed to be fumigated should be placed in an air-tight container, such as a tin can or barrel. The chemicals, used at the rate of from two to four pounds to each 500 cubic feet of space to be fumigated, should be poured over the top of the seed and fumigation should continue for from 24 to 48 hours. As weevils breed generation after generation in stored seeds, the seeds should be watched to make sure that they do not become reinfested. In such case fumigation should be repeated.

When there is only a small quantity of seed the weevil may be killed by heating the seed in the oven for several hours. The oven should not be hotter than 120 to 145 degrees F. Dipping seed in boiling water for one minute is also an effective remedy. Weevils will not feed or cause damage at low temperatures, and if seed can be kept in cold storage at a temperature of 32 to 43 degrees F. no trouble from this pest will result.

## Food Prices Soar High.

The United States department of labor authorizes the following: "The retail price of food for the United States on May 15, 1918, showed an increase of 3 per cent over the price of April 15, 1918. A comparison of prices as between May 15, 1918, and May 15, 1917, shows that food as a whole increased 5 per cent. Seven of the 25 articles recorded showed a decline in the retail price. Potatoes declined 64 per cent; onions, 35 per cent; flour, 24 per cent; sugar, 9 per cent; beans, 7 per cent; cheese, 1 per cent, and coffee less than 1 per cent. Ten articles show an increase of 20 per cent or more. Plate boiling beef increased 32 per cent; corn meal, 30 per cent; hens, 29 per cent; milk, 26 per cent, and pork chops, 20 per cent. A comparison for the five-year period shows that food was 63 per cent higher in May, 1918, than in the same month of 1913. Every article increased 38 per cent or over. The least increase was shown in potatoes. Three articles show an increase of 100 per cent or more."

### Squelched!

Mother was out, and Sister Sue was putting on her best blouse, so 6-year-old Bobby had to entertain Sue's young man. As is the way with his kind, he began to ply the unfortunate caller with questions.

"Mr. Brown," he began, "what is a popinjay?"

"Why—er—a popinjay is a—eh—vain bird."

"Art you a bird, Mr. Brown?"

"No, of course not."

"Well, that's funny. Mother said you were a popinjay, and father said there was no doubt about your being a jay, and Sue said there didn't seem to be much chance of your poppin', and now you say you aren't a bird at all."—Pittsburg Chronicle Telegraph.




**Frederick & Nelson**
**SEATTLE**

Take Pleasure in Announcing
The Opening of Their

**NEW STORE**

**At Fifth Avenue and Pine St.**

**Tuesday**
**September 3rd**

¶ It is hoped that you will make a special point of visiting this great new store on your next trip to Seattle.

¶ There will be extensive new stocks of Autumn merchandise to inspect—the building itself embodies many features of extraordinary interest—and every modern convenience has been provided to make shopping pleasurable.



**WAR, OR NO WAR**

**This Store Always Welcomes You**

Thirty-nine of our employes have already entered the service, but we are getting on the best we know how and it seems that the interest in this store is as keen as ever, although many of the faces familiar to you will be absent when you visit us during

**Spokane Interstate Fair Week, Sept. 2 to 7**

This house, whose slogan is, "If It's Made of Paper, We Have It," is considered one of Spokane's most interesting show places, no matter what season of the year. It is five stories in height and offers a most enjoyable trip to all who visit here.

Of special interest to you during fair week will be the Art Picture Exhibit, the Agricultural Book Department and America's Complete Exhibit of Character Dolls and Toys.

All the appointments of a modern store await you—free phones, free checking facilities and writing desk.

See our War Map on first floor, showing daily movements of the armies and display of best war books.

**School Board Directors and Educators** should write for our new school furniture catalog. **BETTER SCHOOLS**, just off the press.

**John W. Graham & Co.**
If It's Made of Paper We Have It.

707-709-711 Sprague Ave. 708-710-712 First Ave.
Spokane, Wash.

## Avoid Burlap Shortage

Continued and increasing war demand on the jute industry of India for burlap makes necessary the utmost conservation of this product, which we have been accustomed to use freely, even wastefully. India is the great jute center of the world. There the jute is grown, made into fiber and manufactured into jute cloth, which is commercially known as burlap or gunny-sacking.

Imports of burlap cloth by the United States normally average about 700,000,000 yards annually. After reaching this country most of the burlap cloth is sewed into bags, most of which are used as containers for food and feed. Investigations by the food administration show that somewhat more than three-fourths of all burlap imported is used by farmers in shipping agricultural products or in buying necessary supplies.

Familiar products shipped principally in burlap include cereal grains, mill feeds, mixed feeds, seeds, fertilizer, potatoes, onions, binder twine and nursery stock. In peace times burlap bags were worth about 6 or 7 cents apiece, and at this value dealers found it impracticable to advertise for, gather and reuse second-hand bags. But the present price, which is about four times these figures, and the decreased imports owing to such enormous prices warrant the most careful conservation and reuse of bags.

The United States food administration is without authority to control either the supply or price of burlap from India at the moment, but the importance of this product as a food and feed container makes a full understanding of the situation by farmers desirable. Here are the food administration's requests:

Save the present supply, reserving enough on farms for probable future needs.

Put surplus bags back into the channels of trade.

Even fertilizer bags can be saved unless acid fertilizers are allowed to remain in them too long. Empty the bags at once, wash and dry them. Sugar bags, after emptying, should also be washed and dried.

You need not mend torn bags that are to be sold. Bag manufacturers have special facilities for doing this work, and they prefer to do it.

Allow no burlap or bags to mildew or to be damaged by storing in a damp place. Keep them clean and dry.

In addition to the international and military sides of the question, which are the most important, a personal consideration may also be mentioned. New burlap imported by the United States now costs about $150,000,000 annually, of which at least $100,000,000 is ultimately paid by American farmers. The food administration believes that this figure can be materially reduced if conservation is actively practiced and the reuse of second-hand bags encouraged.

## DAIRYMEN LOSING.

### Public Must Be Shown Milk Value

The following resolution was adopted by the county agents of western Washington in conference at Puyallup recently regarding the dairy industry in western Washington:

We, the county agricultural agents of western Washington, recognize that dairying is the leading agricultural industry in western Washington, with millions of dollars invested. We also recognize that the following conditions exist relative thereto:

1.—That if the economic value of the dairy industry to the state is maintained and improved, it is necessary that dairy products be considered on the same commercial basis as other food stuffs and prices raised accordingly.

2.—That the advanced price of feed, labor and dairy supply has caused an increase in the cost of producing milk, so that the dairymen are not now receiving sufficient returns for their products to cover cost of production.

3.—That increasing the price of milk and its products will tend to decrease their consumption. We believe, however, that by educating the public concerning the special value of milk and its products for human consumption, through advertising and demonstrations, consumption will remain normal or perhaps be increased.

4.—In order to secure the cheapest production of milk and to market the milk and its products in the most advantageous manner, cooperative selling of dairy products and cooperative buying of feed and supplies are necessary.

5.—That the success of such a cooperative movement will depend largely on the number of dairymen that support it. If the majority of the dairymen join together in promoting the best interests of their business, great benefits will result, in our opinion.

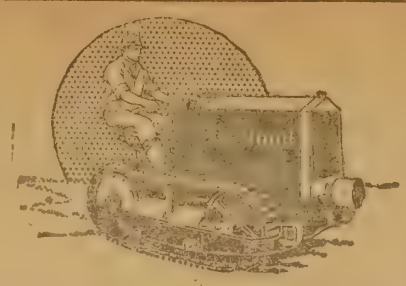
6.—We indorse the United Dairymen's association of Washington and the county auxiliaries of the same, and will endeavor to encourage this organization so long as the present policy is followed and its present constitution and by-laws lived up to.

This resolution was prepared by the following committee of agents:

A. B. Nystrom, Floyd W. Rader, C. B. Sprague, C. C. Farr and C. H. Bergstrom.

## Spokane Jersey Makes Record.

Rudolph C. Johnson, cow tester for Spokane and Whitman counties, reports that the registered Jersey, King Milans Mabel, belonging to T. S. Griffith of the Glen Tana farm near Spokane, produced 1552 pounds of milk with 74.4 pounds of butter fat during the month of July. The cow is a 10-year-old and has been fresh for three months. Her record topped the list of 280 cows of the Whitman and Spokane counties' cow testing association for the month of July.

**Read the Cleveland Tractor Ad**

**on Page 7**

of this issue, study the facts there presented, then see the Cleveland at the Interstate Fair, Spokane, next week Sept 2-7.

**Snyder Motor Co.**

**Distributors**

**1024 First Avenue** **Spokane, Wash.**

In writing advertisers, be sure to say you saw their advertisement in this paper.

# Big profits from YOUR PIGS




## SAFETY AND ECONOMY FROM PIG TO PORK

**The pig is the most economical animal for turning crops into meat. Start your pigs right; feed them BLUE BAG Pig Meal, the proper food in a well balanced ration and they will produce handsome profits**

BLUE BAG Pig Meal is made entirely of linseed oil meal, oatmeal, wheat flour, barley meal, rice polish, corn meal, cocoa shell meal, bean meal, crushed flaxseed, fenugreek and salt.

ANALYSIS

| | | | |
|---|---|---|---|
| Protein | 18 Per Cent | Fat (minimum) | 5 Per Cent |
| Fiber (maximum) | 7 Per Cent | Carbohydrates | 62 Per Cent |

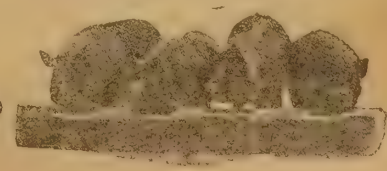
Every ingredient used in the manufacture of BLUE BAG Pig Meal has its special purpose. The feeding of BLUE BAG Pig Meal to the baby pig, and the bigger fellow as well, means sturdier, heavier, healthier pigs at the very small cost of less than 5 cents per pound. A POUND OF BLUE BAG PIG MEAL IS EQUAL TO A WHOLE GALLON OF SLOP.

Don't get the idea that BLUE BAG Pig Meal is meant for the little pigs only. When you want to fatten up your pigs for market and produce the finest quality and the largest quantity of lean, flavory bacon, feed them BLUE BAG Pig Meal as well as grain.

If you will feed BLUE BAG Pig Meal from an early date, you will find your pigs ready for market a month or two earlier than they would have been with your ordinary ration.

**Sears, Roebuck & Co.**

SEATTLE



MORE!

# Purple Vetch Is a Possibility

Purple vetch gives promise of being a valuable addition to the list of crops that can be grown in those parts of the states where winters are not severe, according to Farmers' Bulletin 967, just published by the United States department of agriculture.

This vetch, which is similar to the common and hairy varieties, but is less hardy, was brought into the United States by the office of foreign seed and plant introduction in 1899 from Italy. In California, where experimental work has been conducted, it has proved one of the best, if not the best, crop for use as green manure in orchards, and in commercial plantings it has been thought well of by the farmers who have used it.

It has not been sufficiently tested in the southern states to determine definitely its value in localities where common vetch is now being grown, but as it requires conditions similar to the common varieties, according to the bulletin, it seems probable that it may serve an excellent purpose in this region, as well as in the western United States. It is of high feeding value and makes good hay in pasturage.

Under average conditions, purple vetch will stand a winter temperature of 15 degrees above zero with little or no injury. Where the temperatures are not likely to fall below this mark, it should be sown in the fall. With colder winter conditions, spring seeding is essential. In localities where common vetch has been grown successfully and the necessary bacteria have been established in the soil, it is not necessary to inoculate for purple vetch.

Purple vetch should be drilled in close drills or broadcasted at the rate of 60 to 80 pounds of seed per acre. Harvesting can be done best with a common mower having a swather attachment. It should be cut for hay during the period from full bloom to the formation of the first pods. The yields average about two and one-half tons of hay per acre. When harvesting for seed, the crop should be cut soon after the lower pods are ripe, at which time the upper pods will be mature and the plant will be carrying a maximum quantity of seed. Purple vetch is less exacting as to the time of cutting than common vetch, as the seed shatters less readily. Threshing may be done with an ordinary threshing machine.

# Must Inoculate

For the fall seeding of alfalfa it is well to remember that this crop differs from most others by having bacteria living in nodules on its roots. Supplying these bacteria to the plants is what is meant by inoculation. Where the crop has never been grown, the bacteria are not usually present, or only in such small numbers that it is necessary to supply them. The few bacteria naturally present, or carried into the field by chance, spread so slowly that the plants are usually killed by weeds before they can profit by the bacteria and outgrow the weeds. For this reason it is good practice to innoculate and help the plants start vigorously by giving them bacteria, rather than trust to chance. Through these bacteria the plants can feed on the nitrogen of the air as well as that of the soil.

There are two good ways to inoculate: (1) By means of soil transfer and (2) by means of artificial cultures. Inoculation by soil transfer is simple, inexpensive, and, with reasonable care, generally successful. Soil about six inches deep, with many root nodules in it is obtained from old alfalfa field, or a field growing sweet clover, and scattered on the new field at the rate of at least 300 to 500 pounds per acre. It is then harrowed in while the seed bed is being prepared.

In case only small amounts of soil with numerous nodules in it can be had, it may be powdered and sifted on the seed which has been moistened with a glue solution (one pound liquid glue in one gallon water). The seed should be mixed with the soil until every grain is dirty. After the seed is dried and screened to break up any clumps, it may be sown. Useless exposure to the sun should be avoided. Artificial cultures can also be used successfully. They are distributed by various firms and state agricultural institutions with complete directions for their use, and are usually applied to the seed rather than the field.

A few precautions are important when inoculating. The soil used must contain the bacteria as shown by plenty of nodules on the alfalfa or sweet clover roots. It must be thoroughly distributed either on the field itself, or on every seed. Artificial cultures must be used according to the directions. When properly used by the farmer who follows all other precautions for alfalfa, inoculation will do much to guarantee a good stand of this valuable forage and hay crop.

## Yakima Valley Ships Sheep.

It is estimated in the reports from the Yakima valley that the section will ship approximately 25,000 head of sheep before the 1st of October. This will approximate 100 cars and at an average of approximately $14 a head will mean about $350,000. It is estimated that the total shipments for the year will equal those of last year, when 1150 cars were shipped to the markets from Yakima valley points.

## North Dakota Needs Help.

G. F. Christy of the United States department of agriculture says that 16 counties in western and northern North Dakota need considerable aid from the government in securing seed grain as a result of the serious drouth in that state this season. He estimated that 4000 farmers would require aid.


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Trio.




Article 3.

A good many people are getting to the point where they see and understand the craving of their children for living pets, and understand how much it means to the child in points of character development and satisfaction with its home life to own and care for a pet. They are willing for their children to have a pet dog, perhaps, but to safeguard their children take all manner of means to keep the dog "sanitary."

We are quite safe if we allow ourselves to be guided by this simple rule: Any animal is sanitary that is healthy. Animals, as a rule, are healthy. Indeed, you will go far to find a more perfect picture of health than a rollicking young dog. Its teeth are like ivory, its eyes fairly sparkle with health and high spirits, it does not wake up in the morning with a "bad breath," general sluggishness of body and in a bad temper.

The fact of the matter is that our animals, if given half a chance, will, as a rule, be in better health, and from this standpoint more sanitary than the children they play with. It is a fact, also, that if the dog that is your children's playmate does have anything insanitary or unhealthy about it it will usually be something that it has "caught" from your or somebody else's children.

Quite obviously, then, the first step in keeping a dog healthy and sanitary, a fit playmate for the children, is to keep the children healthy and sanitary, fit playmates for their pet puppy. The parent who, on the average, keeps the children as healthy as the dogs they play with will be doing something worthy of public commendation. The children will practically never have measles, whooping cough, grip, earache, toothache, chickenpox and other ailments of childhood.

It is unnecessary, I should say, to wash and scrub the dog every day, as some people think they must do. Occasionally this may be necessary, but it is only occasionally, and then should be for some specific thing.

The child that has for a pet such animals as colts, calves, lambs or pigs will naturally be guided somewhat by environment of his home and the business in which his parents are engaged. If the father is raising purebred beef or dairy cattle, chances are that the animal would be one of these. The same may be said for sheep, horses or pigs. Whatever animal it is, however, the child should own it and care for it with this ideal in mind: That some day it is going to be a fine big animal of great value. Every day it is getting finer and bigger under the care of the child. This has a tendency to develop an idealistic temperament in children which is hard to get in any other way in such practical terms.

Colts, calves, lambs and pigs, like the pet puppies and dogs, as a rule are in splendid health. They remain so unless exposed to contagious or infectious disease, or are not properly cared for. The exuberance of spirits, their desire to frolic about, their perpetual alertness, are indicative of one thing—health, and lots of it. I presume that statistical data are not available on this subject, but if they were I am very sure that they would show this fact in plain and unmistakable terms: that children catch ailments and maladies of childhood from each other a hundred times for every single time from the animal pets they own and love so much, and to which they owe so much in terms of character development and human sympathies.

### Does It Ever Pay?

Is there any circumstance that makes it advisable to tell a lie?

## KHAKI COLLEGE.

### For Canadian Troops in France.

A system of inspection has been organized in one of the divisions of Canadian troops in France, and known as the University of Vimy Ridge. Lectures are given to large groups on subjects selected to equip men in active service for "greater efficiency in business, the professions, agriculture and other great industries of the dominion." Classes are organized for smaller groups, and individual instruction for more advanced students with recognition and credit on their return to Canada for work accomplished. It is also planned to obtain in this way an organization and staff which will be prepared to devote its attention to educating the soldiers during the interval which may elapse between the conclusion of peace and their return to Canada. Agriculture, applied science and vocational branches are among the subjects to be taught in this way.

What is known as Khaki college has subsequently been organized. This work is carried on farther back of the lines than the foregoing and is constituted on an somewhat more elaborate and permanent basis. A chancellor and senate have been appointed to serve as the governing body, together with what is termed an executive faculty, consisting mainly of heads of departments. Certificates of proficiency are issued by the college on the recommendation of heads of departments.

Eight departments have been arranged, among which is agriculture. Lieutenant P. Stewart, formerly district supervisor of agriculture in New Ontario, has been given charge of the work in agriculture, which also has two lecturers on animal husbandry, and one each on field husbandry, horticulture, farm bookkeeping, agricultural English and poultry.

Khaki college has been under way about six months. Over 900 students have been enrolled and about 376 took the first examination.

## SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University.)

## Your Complexion---How to Keep It Fine and Clear



Dr. Hirshberg.

Some people are naturally endowed with a white skin, some naturally are not. The facial skin of milk and roses is not the only combination that is beautiful. Although the common subject of the poet on facial beauty is ordinarily the maid with cheeks of "milk and roses," and although many a maid allows her heart to yearn and pine for such complexion, real beauty consists in a good combination or harmonization of colors, regardless of what the slight varying shades of the skin may be.

The color of the skin is most frequently hereditary. Beauty is never "skin deep," moreover, but only half that depth. The child is born with a certain amount of coloring or pigment situated half way down the skin, and it is this which determines whether the new baby is to be a blond or a brunette.

The pigment in the skin may be increased so as to cause more darkness as years go by. If the future dame does not wish to grow darker she will keep out of the sun's rays, for they are great stimulants to the growth of this pigment. She will wear a hat when she is obliged to remain on the street and be subject to the heat.

When the little dame grows older she may use a little coat of rice powder upon her face, so as to absorb the perspiration, and thus prevent sunburn or further increase of the pigment in the skin.

Freckles are spots upon the face where the pigment has increased out of proportion. These may be permanent or only temporary, but under any circumstances are out of harmony with the entire facial skin.

The best prevention of freckles is to keep out of the sun. A hat or veil will usually serve as a protection against the sun.

If these preventive measures were not taken, and freckles, brown and spotted appear, the application of white precipitate ointment each night will most likely remove them.

#### The Proper Care.

Sunburn, unlike freckles, does not spot the skin, but makes the entire skin uniformly dark. The pigment increases equally all over the skin. Calamine lotion is an excellent cure for sunburn, and is also a good preventive.

A light skin is, of course, one of the first essentials of one type of beauty, but not by any means the only one. When lightness of the skin has been retained or acquired by the proper care it is necessary that the white or light background should be properly tinted with a suggestion of rose. Nor should this be artificial, for there is no beauty to outdo the natural beauty.

Cold water is excellent to stimulate the little blood vessels of the skin and make them carry pink to its surface. What corresponds to a pretty blush should, if possible, always be upon the face. If the water in summer is not cold enough, put a piece of ice into it. This not only adds color, but also freshness and brightness. A piece of ice, morever, is also excellent for ironing the cheeks.

There are times when the skin upon the face appears rough, as if chapped. This may be due to too sudden contact with the cold air, or to the use of warm water, which chaps the skin. It may also be due, as it very often is, to a natural shedding of the skin.

The skin constantly forms new cells, and the dead cells of the epidermis, or outer skin, are pushed off and appear in the form of tiny white scales. These are of the same nature as the scales of the scalp, known as dandruff. Dandruff is removed by constant combing, massage and shampoo, and the "dandruff" of the face may be removed by washing and the use of cream.

Cold cream serves the purpose of removing the dried epithelial cells from the face or hands. The cream should be used sparingly, only on the tips of the fingers, for too much grease is apt to stimulate the hair follicles unduly, and the tiny hairs on the face are apt to become noticeable.

#### Creams and Soaps.

Cold cream should be used as a massage cream, and used about twice a week, or over night if the face is too dry and scaly. The cushions of the fingers should be employed in the process, and a rotary movement should be used. Rub away from the lines, not toward them, and thus smoothem out and not deepen them or add new ones. Massage with cold cream will not only do away with scales and create smoothness, but also add to the color, produce greater firmness of the skin, and keep it bright and fresh.

Before bedtime and in the morning soap should be applied to the face to remove the oil. When the face is not too oily, soap may be entirely omitted if there is no dirt to be removed. The alkali in the soap combines with and neutralizes the oil on the face and leaves it dry. If, therefore, there is too much free alkali in the soap, it tends to dry up the skin and make it rough. It is also apt to interfere with the oil glands of the skin. Yellow soap is of this nature and should therefore be avoided.

Castile soap is "pure" and has no alkali in it. It is for this reason that it is freely used for babies. Castile soap is not as expensive as some of the medicated, "high-grade" soaps, and yet it is about the most effective and least harmful of all soaps.

### The Complaint of the Farmer.

I hear the complaint of the farmers,
Whose muscle, whose labor and brain
Have conquered the deep tangled forests,
The prairies, the deserts and plain.

They lived on the frontiers in cabins,
Sod houses and dugouts and shacks;
Built schoolhouses, churches and highways
For masses who followed their tracks.

They feed the world's millions with harvests
The products of all they can give.
Then why should exploiters and gamblers
Decide on how much they must live?

Why not let the farmers determine
How many exploiters they need.
And how many idlers and gamblers
The workers are willing to feed?

G. L.

## Sidelights

#### The Efficient P. M.

In the Willoughby Independent there is published weekly the list of unclaimed letters remaining in the postoffice. Last week's list, we note, contained the name of H. I. Emerson. Somebody ought to tell Postmaster Webster that H. I. Emerson is the congressman from his district.

#### Anxious Bantam.

The bantams were talking over a line of trenches from one of the guards' battalions during a very long spell of wet weather. As the guards were coming out one of the bantams asked a big guardsman:

"How are the trenches—comfortable?"

"Yes," replied the six footer. "Very cushy, but full of water."

"How deep?" inquired the four-footer, anxiosly.

"Oh, about up to here," said the guardsman, pointing to some clay on the breast of his tunic.

The bantam put his hand up to his head and exclaimed, wearily:

"Then heaven help my cap badge."—London Tit Bits.

#### What a Hole!

Although the new war secretary, Lord Milner, can not exactly be said to shine as a humorist, he can enjoy a good story against himself, as witness the following, which he is fond of relating:

Some years ago, fresh from his South African triumphs, he addressed an audience of undergraduates at his old university.

Early in his speech he used the following phrase:

"We must remember not merely the beauty of the individual colleges, but the beauty of Oxford as a whole. And what a whole it is."

"Here, here!" yelled the varsity men. "Yes, what a hole!" they groaned. "What a beastly hole!"

Then it dawned upon Lord Milner that this was a sentiment he would rather have expressed differently.—Pearson's Weekly (London).

#### It Shrunk a Little.

Scene—An American storehouse. Enter a Yankee customer.

Customer—Say, boss, have you got any red flannel shirts?

Boss—Wall, stranger, I guess I can just fit you out beautiful—now, here's a fine red flannel shirt, price $2—may I let you have half a dozen of these red flannel shirt for $11?

Customer—You may not; I'll take wan red flannel shirt, and if I like it I'll come back again for the other five at your reduced price.

Same scene three weeks later. Enter same customer.

Boss—Well, stranger, I guess you've come back for those other five red flannel shirts.

Customer—I guess I have not, but I've come back for my $2. That red flannel shirt you sold me came back from the wash this morning. I put it on, and while I was brushing my hair my wife said to me: "Sam, where did you get that little coral necklace?"—Tit-Bits.

### Pamphlets Are Helpful.

To the Editor: I have found sending to agricultural department in Washington, D. C. for pamphlets on cooking, canning fruits and vegetables, caring for meats, balancing articles of food for meals, sanitation, etc., very helpful. They are to be had for the asking.

When drying corn and prunes you increase your oven capacity by placing the gasoline stove oven on your range. The same fuel heats both ovens.

The vacuum cleaner saves time, strength, and dusting, as well as rugs.

MRS. DAVID DORMAN.

# Handicraft For Boys

By A. Neely Hall

(Copyright by A. Neely Hall.)

## A Signal Lantern.

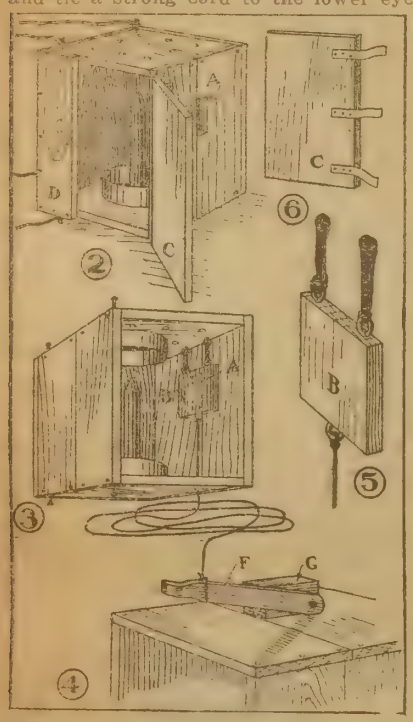
You boys can easily communicate with one another after dark by means of home-made signal lanterns similar to that shown in Fig. 1, at distances limited only by your range of vision. Field glasses or opera glasses would enable you to read messages from much farther points, of course. Communication is carried on by short and long flashes of light, which flashes correspond to the "dots" and "dashes" of the Morse telegraph code. First let us make the lantern; then I will explain how it is operated.

You will need a small box for the lantern. The dimensions are not important, but 10 or 12 inches is about right for the depth, width and length. Fig. 2 shows the completed lantern, and Fig. 3 shows the box before the door has been put on.

One side of the box becomes the front of the lantern. In the center of




the width of the front, a little above the center of the height, cut a slot one inch wide and three inches long, through which to flash the lantern light (A, Figs. 2 and 3); and make a shutter block (B, Figs. 3 and 5) by which to regulate the length of the flashes. Screw a couple of screw-eyes into the top edge of the shutter, and a third screw-eye into the center of the bottom edge; and loop a heavy rubber band through the upper pair of eyes, and tie a strong cord to the lower eye




(Fig. 5). Then tie the free ends of the rubber bands to a pair of screw-eyes screwed into the under side of the lantern top, in the right positions to come directly over the pair in the shutter when it is placed over slot A; and bore a hole through the bottom of the box for the cord attached to the shutter to pass through (Fig. 3). Then, by pulling the cord, the shutter can be opened so light will pass out of a small portion of the slot, for a "dot" of the code, or all the way open, for a "dash" of the code. The rubber bands will spring the shutter over the slot again.

The lantern may be lighted either by a candle or a bicycle lamp. If you use a candle, tack a can cover to the lantern bottom for a holder, and tack another to the top to protect the wood from the candle flame. Bore holes through the top for ventilators.

The cover board C (Figs. 2 and 6)

MORSE · CODE

| | | | | | |
|---|---|---|---|---|---|
| A | ·— | P | ·––· | 1 | ·———· |
| B | —··· | Q | ––·– | 2 | ··––· |
| C | —·—· | R | ·–· | 3 | ···–– |
| D | —·· | S | ··· | 4 | ····— |
| E | · | T | — | 5 | ····· |
| F | ··—· | U | ··— | 6 | —···· |
| G | ––· | V | ···— | 7 | ––··· |
| H | ···· | W | ·–– | 8 | –––·· |
| I | ·· | X | —··– | 9 | ––––· |
| J | ·––– | Y | —·–– | 0 | ––––– |
| K | —·– | Z | ––·· | | |
| L | ·–·· | & | ·–··· | | |
| M | –– | ' | ·––––· | | |
| N | —· | , | ––··–– | | |
| O | ––– | ? | ··––·· | | |

is hinged with three strips of leather or tape. Strip D (Fig. 2) provides a place for attaching the wooden button E.

The lantern is now ready for signaling. Fig. 1 shows a first-class position for it, upon a tree trunk. Any post, however will do. Connect ropes or skate straps to a pair of nails driven into both the top and bottom of the box for fastening the lantern (Figs. 2 and 3).

The operating key is shown in Figs. 1 and 4. Cut it about eight inches long and of the shape of F (Fig. 4); then nail a block G to a box (Fig. 4), and screw the end of the key to this block. Tie the operating cord to the key, allowing just enough length of cord to operate the shutter properly.

Fig. 7 shows the Morse alphabet code. Cut out and paste this diagram upon a piece of cardboard, and tack the cardboard to the box on which the key is mounted so the code will always be before you. Practice will enable you to memorize it.

## Feed Soil Properly

Stable or barnyard manure is of great benefit when added to soil sown to wheat. It supplies humus by the decay of the organic matter, and contains nitrogen and potassium, sometimes in considerable amounts. It usually does not contain a sufficient proportion of phosphorus. If 40 or 50 pounds of acid phosphate, rock phosphate, or basic slag are added to each ton of manure as it is being made in the stable or before hauling to the field, this deficiency of phorphorus is overcome, and a better form of fertilizer can scarcely be found. At least eight tons per acre of this treated manure should be applied at least once in four years.

When barnyard or other rotted manure is not available and plant refuse, such as straw and stubble, is not returned to the soil, the growing of suitable green-manure crops is imperative in order to maintain soil fertility and the supply of humus. On comparatively few farms is there enough rotted manure to take the place of green manures altogether, although by returning the plant refuse to the soil less of the green manure will need to be grown than where no returns are made. By the proper care of plant residues and the use of green-manure crops, principally the legumes, fertility can be maintained as cheaply and as effectively as with the use of large amounts of rotted manure only.

### All Gave It Up.

"Why," said the woman suffragist, stepping forward to the footlights, and commencing a lecture with a lofty flight of eloquence, "why was I born?"

She paused—a thrill ran through the audience. Again the rich tones of the winsome woman's voice rolled over the expectant people as she repeated the question.

"Why was I born?" and again she paused, that the due impression might be made upon her hearers before she answered her own question.

"Why was I born?" she asked once more, in touching and almost painful accents, when a wicked boy in the gallery shouted:

"We don't know. We give it up!"—Exchange.

### To Keep Flowers.

The addition of a little saltpeter or carbonate of soda to water in which cut flowers are placed will keep some varieties fresh more than two weeks.

### You Can Always Depend on It.

Two times two are four at any point in the universe.

CHANDLER SIX

*FAMOUS FOR ITS MARVELOUS MOTOR*

**This Is a Car You Need In Your Business**

A FARMER said recently, "To take the automobile from the farmer would be like taking the railroads from the country."

It is very generally agreed among intelligent people that the automobile is primarily a necessity to the progressive farmer.

*Any* automobile is of service to you.

The Chandler is of most *dependable* service to you. And in your business you want a dependable car.

The Chandler is like the big fine railroad, with rock-ballasted roadway, great steel bridges, bad grades cut down, mighty mogul locomotives and clean, deep-cushioned, easy-riding steel coaches.

The Chandler is famous for its marvelous motor, Chandler-designed and Chandler-built and now in its sixth year, without radical changes but with constant refinement until today it approximates perfection.

The Chandler motor is full of life and power. It will take you *anywhere*, and get you back quickly if you want to drive fast.

Nearly fifty thousand Chandler owners, many of them successful farmers, are Chandler enthusiasts.

Don't skimp on your new car this Fall. Make it a real car. Let it be a big and fine car, yet light and economical, that you can depend on.

**Choose the Chandler for Your Car**

*7-Pass. Touring Car, $1795* *4-Pass. Roadster, $1795*
*Four-Passenger Dispatch Car, $1875*
*Convertible Sedan, $2495* *Convertible Coupe, $2395*
*All prices f. o. b. Cleveland*

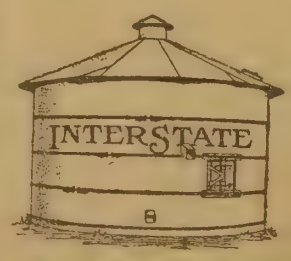
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# All the World's a Stage, and All the Men and Women Merely Players

## U. S. Soldiers Compete in Meet in France



Soldiers of all allied nations recently had a gala day when the Y. M. C. A. held a carnival behind the lines. American soldiers are here shown ready for the start of a bayonet pointing race.

## Service to Injured on Battlefield



First aid men rendering assistance to a wounded comrade.

## K. of C. Head.



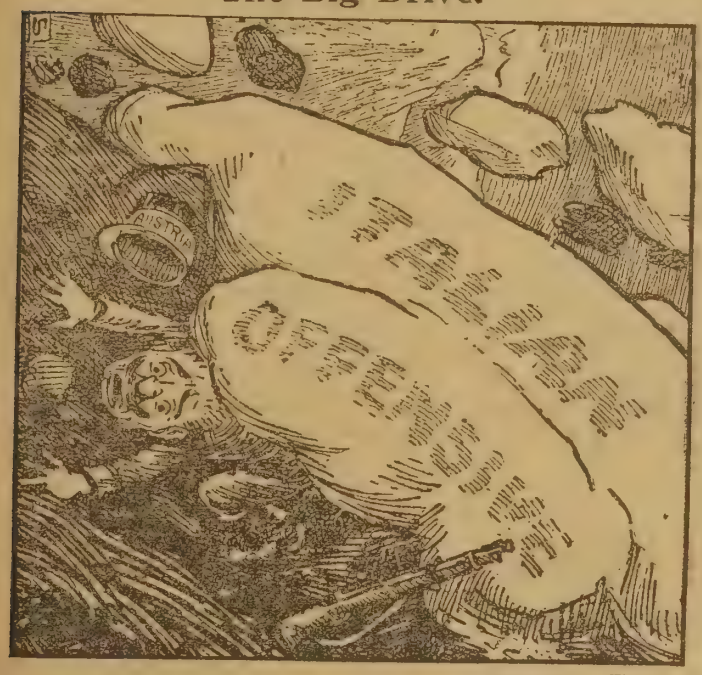
The above photo shows James A. Flaherty of Philadelphia, who is supreme Knight of the Knights of Columbus. The convention of the supreme council, Knights of Columbus, which opened recently in New York, was attended by representatives from every state in the country, also by representatives from Canada, the Philippines and from Cuba.

## Commander of Rainbow.



Above is Brigadier General MacArthur, commander of the Rainbow division, and below is his chief of staff, Maj. Gen. Chas. T. Menoher.

## The Big Drive.




—Washington Times.

## "And He Told Me It Was So Easy."




—News of the World, London.

## Directing American Fleet in European Waters



Admiral Sims, with members of his staff, photographed at the United States naval headquarters in London. Shown in the top row, from left to right, are: Captain P. H. Schofield, Captain H. C. Twining, Admiral Sims and Captain H. E. Yarnell.

## American Artillery Advancing



Committee on Public Information.

American light artillery passing through a French village in the wake of fast retreating Huns.

# Trappers of the Ozarks

**The Adventures of Two Young Trappers in the Wilds of Upper Louisiana, Now the State of Missouri.**

By LEWIS B. MILLER

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## CHAPTER XXXI.

### The End of the Journey.

"Are you sure they're Indians, Benoni?" questioned Boone, whose old eyes were not so good as Ben's young ones. "We don't want to make any mistake."

Ben looked again, as a matter of precaution. "No mistake, Uncle Dan'l! They're either Indians, or white men dressed in Indian costume."

"Not much chance of that, I reckon."

"Yes, they're Indians! I can make out their red faces," Jodo said.

"Count 'em, boys, if you can, and see how many we've got to hold out against."

Ben began to count, naming the number in each canoe: "Three—and five—and four—and three—and—What under the heavens does that mean?"

"What does what mean?" inquired the old hunter.

"Why, there come other canoes behind the Indian canoes—other canoes with white men in them!"

"That's right!" cried Jodo. "I can see 'em now, both the Indians and the white men!"

"Yassah—yassah! I sees 'em too!" burst out the black fellow, in great relief. "I sees 'em bofe. Reckon dem ah redskins cain't be on the wah-paf much! Caze ef dey wuz, what fo' dey keepin' so close ter dem ah white mens?"

"That's right!" cried Jodo. "There come more canoes with white men in them! My, what a swarm of canoes! Yes, and—and there's a boat—a boat full of white men!"

"And there comes another big boat—yes, and still another boat—three big boats full of white men!" Ben announced. "Those Indians are bound to be friendly, or they wouldn't be traveling with white people."

"Well, now, that's good news, boys!" cried the old hunter, evidently well pleased. "Fighting a big passle of redskins ain't half as funny as some folks think."

There being no longer anything to fear, the party under the cliff paddled out and moved on down the river again. Slowly the men in the rear gained, till the two parties were together.

And a very numerous party the new-comers proved to be. Besides several canoes with friendly Indians in them, which kept in the lead, there were about 30 other canoes, each paddled by from two to five men. Then there were the three boats, each boat with 20 rowers and a few other men in it. Indeed, the whole party numbered, by count, 179.

The three boats were owned by the Missouri Fur company, and were manned by hired rowers—Frenchmen, most of them. One of the owners of the company was in one of the boats, and in charge of them all. The Indians in the canoes were chiefs and prominent warriors from several of the upper-river tribes. The manager of the fur company had persuaded them to accompany him to St. Louis, by promising them valuable presents. He was bringing them down in the hope of keeping them friendly to the Americans, and because he knew that British agents were trying hard to coax and bribe them over to England's side in the coming conflict.

The white canoemen were, some of them, trappers from the Rocky mountains and regions not so far away. The others were settlers from Boone's Lick, Cote sans Dessein and Loutre island, on their way to St. Louis. The boats had gone up the river with trading-goods the fall before, and were coming down laden with furs. Most of the canoes also carried more or less furs and other skins.

Ben was acquainted with several of the men in the boats, and with several more in the canoes. Many of the big party knew Daniel Boone, and all the others knew of him and wanted to know him. As soon as the word was passed around that he was in the smaller party, all the paddlers and rowers rested, and the two parties drifted along together.

"Yes, the river from here up is just nachelly swarmin' with horsetyle redskins," one of a party of five, in a big canoe from Boone's Lick, informed Ben. "And 'tain't a powerful sight better from here down, I 'low. But with all these here rifles, what care we for redskins? We can snap our fingers at the whole caboodle of 'em—or our flintlocks either! It's a blazin' wonder, though, that your little bunch didn't have to fight for your lives."

"We haven't done any actual fighting since we struck the Missouri," Ben answered. "But we've done some pretty sly dodging at night. And we've been more than half expecting to have to do some fighting today."

"Well, no danger of that now. With all this noisy, rollickin' bunch around you, the horsetylest red man won't dare come a-nigh you."

"Yes, if we can keep up with you," said Jodo. "But we're loaded down and pretty slow—"

"Keep up with us! Of course you can keep up with us! We'll make you keep up! What's the use of travelin' lonesome when you can just as well travel in company? Here! Take this rope and tie it to your prow! Five of us in this holler log, and nothin' much aboard but a campin' outfit and a little grub. We can just as well do some towin' as not."

Ben caught the rope, thanked the man, and tied it to his own canoe. Another canoeman threw a rope to Boone's canoe, and the whole party were soon paddling down the river again.

And so they kept on during the rest of the forenoon. A noisy, jolly, good-natured crowd these trappers were. First the rowers in one boat would sing, and then those in another. And sometimes they would all sing together, with various trappers and settlers joining in. Wild songs they were, and rude, the songs sung by those wild men. But they were sung with a heartiness that made the two forests resound, and echoed from the lofty cliffs which walled in the valleys of the great river.

When noontime came, the boats and canoes were made fast to land; and presently the open woods along the bank were sending up smoke from many camp-fires. The whole camp was noisy with talking and laughing, and the air odorous with the smell of broiling meat.

Ben and Jodo had their camp with Mr. Boone and Tom. But there were always others at their camp-fire—men who had heard of the famous pioneer and wanted to talk with him. And very courteously the old hunter received them all.

Soon a trapper from a near camp came over with a bottle. Boone was busy talking to the man in charge of the boats, and the bottle was offered first to Ben.

He jerked his thumb toward the old man. "Not till after Uncle Dan'l drinks."

The trapper held out the bottle to Boone, who promptly waved it away.

"Young fellow, I'm 77 years old, and the first drop of that infernal stuff has yet to run down my gullet! Yes, I mean what I say. I don't even know what whiskey tastes like. I know what fools it makes people act like, though. Not a drop of it for me, now or ever!"

The man with the bottle looked astonished. And well he might. For nearly everybody drank in those days—even preachers. Had it been anybody else but Daniel Boone, he might have sneered at such sentiments. Soon he held out the bottle to Ben again.

That young man smiled and thanked him, but shook his head. "Not till you can get Uncle Dan'l to drink." He had long known of Colonel Boone's total-abstinence principles.

Again the bottle was held out, this time to Jodo. He also shook his head.

"Well, of all the crowds!" the trapper exclaimed. "All right, then! If I cain't git nobody else to drink, I'll drink myself!" So he turned up the bottle, drank long and heartily, then walked away, smacking his lips.

The party seemed in no great hurry, and full two hours passed before they were moving down the river again. And an hour or two later signs of civilization began to appear.

The first of these was a cow with a bell on, grazing on the north bank. Half a mile farther down a cabin was seen, standing between the river-bank and the great cliff which shut in the narrow valley on the north. Smoke was pouring from the cabin's chimney, and dogs were barking and chickens crowing near it.

To Ben and his partner the sight of the cabin was very pleasant, suggesting home. From here on, though very scattering, the settlement would be continuous to St. Louis.

Soon another cabin was sighted, and after that still others, from time to time, on both banks of the river.

When night came on, the voyagers camped on the north bank, in a narrow strip of meadow at the foot of a cliff. A spring issuing from under the cliff supplied them with plenty of clear, cold water. After dark the camp was a lively, noisy place, the merriment continuing till a late hour. Fortunately there was little drinking, less from a lack of inclination, perhaps, than from a lack of liquor to drink. Hence everything was pleasant and peaceable.

In spite of being up so late, the travelers were up again before daylight next morning, cooking and eating. And scarcely had the sun risen when they were on their noisy way down the river again.

"That's the mouth of Femme Osage creek, that I live on," Boone remarked to Ben, well on in the day. He was pointing to a good-sized creek that came down to the Missouri from the north through a deep gash, or gorge, cut through the hills and cliffs.

Ben nodded. "I recognize it. You're not many miles from home, Uncle Dan'l. Going to stop?"

"I'd like to, the best kind. But as we're together, all of us fur-catchers, I think I'd better run on down to St. Louis and market my furs and deer-skins with the rest of you. Maybe I can get better prices. And then I'll have the business off my mind."

"Jodo and I pass not many miles from home. We had intended to stop and tie up and tramp across the country. But now I think we'd better keep right on with this big party. Don't you believe that will be best, Jodo? We shall want to buy a few presents before we go home, anyhow."

"Whatever suits you suits me, Benoni."

Well on in the afternoon the voyagers were passing a house that stood not far back from the south bank. Jodo's uncle lived there; and it was there that they had intended to leave their canoes while making a brief visit to their homes. When near the house they saw a big boy tying a canoe to a stake as he gazed at the fleet of boats and canoes. Jodo recognized a cousin of his, and beckoned to him.

As soon as he noticed Jodo's signals, the boy sprang into his own canoe and came paddling out. In a few minutes his canoe was moving along by the one Ben and Jodo were in.

"Yes, your folks are all well," he told them, in reply to their inquiries. "I was just over there yesterday. And they're expecting you two some time soon. Spunky's already there. They'd found him grazing out in front of Mr. Armstrong's when they got up yesterday morning. He made it through all safe and sound."

"And did he have a little bottle on his neck?" Ben wanted to know.

"Yes, it was still on his neck, and your letter was still corked up in it."

While the boy kept paddling along near them, Jodo arranged with him to ride over at once and let their friends know that they had returned safely, and would soon be at home.

"We'll be glad if any of our folks can meet us in St. Louis tomorrow," Ben said. "Ask father to be sure to drive in with the wagon if he can. We shall have a lot of things to haul out."

"Yes, I'll tell 'im. And maybe I'll come in if pa will let me." The boy now turned his canoe and made for the bank.

Several miles further the big party of river-travelers paddled and rowed. Then they all tied to the south bank and went into camp for the night. Again there was a lively, jolly party of campers, now with numerous visitors from near-by farms and from Fort Bellefontaine.

Next morning all were up early, but the start was delayed, partly because they did not care to arrive in St. Louis at too early an hour; and partly because all the young fellows, Ben and Jodo among them, wanted to shave and array themselves in their most picturesque clothes. For to these trappers St. Louis, the great fur-market, was a very important place, and a visit to St. Louis was an important event. And because the place was a fur-market, trappers were very important people in St. Louis.

But at length, about 9 o'clock, all the canoes and boats were moving gayly down the river again. Out of the Missouri they soon swept, and into the Mississippi.

Once out in the Mississippi, the trappers knew that the end of their voyage—to many of them a very long voyage—was nigh. Gayly they swept along. Often the boatmen would start up a song, and any of the canoemen who could sing it would join in.

At last St. Louis itself came into view, strung along the top of a limestone cliff from 30 to 40 feet above the river. Just west of the town rose another hill, higher and almost as steep. Fourteen hundred inhabitants the little trading-post now boasted; and it was beginning to think itself a city. Word had reached town the night before that a great company of trappers, Indian chiefs and settlers were coming, and now the whole town had assembled on a big sand-bar between the cliff and the water, some to welcome them and others to watch the fleet come in. In the crowd a band was playing.

Down the middle of the broad river swept the whole fleet, till only about half a mile above the crowd. Then the boats turned in toward the west bank. As they turned, all the craft formed themselves in a V-shape, with the boat carrying the manager of the fur company in the lead, the other boats a little further back, the Indian canoemen on each side of the boats, and the other canoes spread out in two wings, one above and one below. They were headed straight toward the bank, but the current would carry them down.

And scarcely had the V-shaped fleet started for the bank when the crews of the three boats struck up one of their liveliest songs. Now the canoemen stood up to paddle. And so they moved in toward the bank and drifted down toward the crowd. Soon the band caught the air of the boatmen's song and began to play that.

When the boats touched the bar Colonel Auguste Chowteau, one of the founders of St. Louis, and at this time president of the town council, stepped forward from the crowd and held up his hand. The song ceased and the band ceased playing, and then he called out:

"Gentlemen, trappers, and chiefs of the mountain tribes, St. Louis, the greatest fur-market in the world, welcomes you to her hospitality! We're always glad to see you come, and always sorry to see you go!"

He spoke a few minutes longer. And when he had ceased came a loud hurrahing and a great waving of hats and handkerchiefs on shore, followed by a terrific hurrahing and a wild waving of 'coon-skin caps on the water.

Then willing hands seized the boats and canoes and held them fast, while the voyagers stepped ashore. There they were greeted with much hand-shaking, especially by the town-officials, the fur-buyers, the merchants, and others who expected to do business with them. The Indian chiefs were treated with especial consideration, that being the purpose for which they had been brought down here.

Most of the voyagers had friends or acquaintances in the crowd. Ben and Jodo had a good number, both men and boys and women and girls.

"Your folks are all here," the first acquaintance they met told them. And they looked toward the cliff to see Mr. Armstrong and Mr. Henderson making their way through the crowd to meet them. When they had greeted their fathers, they followed them to the back edge of the crowd, where their mothers and sisters were waiting.

(Continued on the following page.)


## Join Us September 12 in Following

# A CROOKED TRAIL

This is a story of the Texas plains, with just the dash and headlong adventure that holds the interest tight. It starts off with a casual, before-breakfast call to bring home a spotted, long-horned steer that has a strong desire for a change of scene. But you don't get back for breakfast. Not by a long shot. This roving steer's trail leads on, step by step, into a land of rare outdoor adventure. Before you know it, that steer has got you into a whole mess of trouble with cattle rustlers, Texas rangers and other rough-and-ready gentry who pack guns on their hips and pepper in their tempers.

## A CROOKED TRAIL

is surely a red-blooded story for red-blooded people of all ages and both sexes. Its author is Lewis B. Miller, whose story, TRAPPERS OF THE OZARKS, has been enjoyed by the readers of this paper for the last several months, and which is concluded in this issue.

Bear in mind the date when the new story begins, and get all the interest of the opening chapters. The first instalment will appear in our issue of September 12.

## Save Canning Space

The food administration sends out the following concerning tomato paste:

As the space-saver in canning and a time-saver in cooking tomato paste will commend itself to the thrifty. Get rid of the water in fresh tomatoes and you can pack all the food value, flavor and color in one-tenth of the original space. Bottle the paste in any size bottle, cork and seal for use in soups and sauces. One teaspoon of paste will make one dish of soup.

**Plain Paste**—Boil the tomatoes until soft. Crush thoroughly and pass through a fine sieve or screen to take out the skins and woody portions of the pulp. Place the pulp and juice which pass the screen in a shallow pan and boil down gently over a slow fire to a thick consistency. Then place it over hot water or in a slow oven where the heat is not sufficient to cause the paste to stick to the bottom of the pan. Allow the pulp to evaporate until it reaches the consistency of peanut butter. While still hot add about two ounces of salt to a gallon of the paste and pack into hot scalded jars or bottles. Sterilize in washboiler from half hour to an hour.

**Dried Paste**—Spoon paste into plates or pans in thin sheets and dry thoroughly in a very slow oven, from 130 degrees to 140 degrees, until it can be cut in squares or rolled in sheets. Store carefully in moisture-proof containers.

**Flavored Tomato Paste**—To one gallon of tomato juice and pulp prepared as above, add two sliced onions, two buttons of garlic, one bay leaf and two or three chili peppers. Boil down over a slow fire until it thickens and then concentrate over a steam bath or on the back of the stove to a thick paste. Beat in olive oil and salt to taste. Store in jars or cans. Sterilize as directed for plain paste.

## Onions Rot in Soil

To the Editor: Onions that I have raised here in this soil rot occasionally, and will not keep when pulled, dried and stored. Sometimes they are rotting before pulled, though the ground is dry. When stored, they often get soft and rot.

J. G. S., Soda Springs, Idaho.

The above question was answered by F. D. Heald, head of the department of plant pathology, State College of Washington, as follows:

"It seems probable from your description that the rotting of the onions is due to a definite fungus which is present in the soil. If such were true it would be advisable to discard the ground for the growing of onions for a number of years. If the soil is really infected with the fungus which causes the rot, there is no definite treatment which you can employ which would give you a healthy crop.

"The only other possible explanation for the trouble would be freezing temperatures, which cause injury to the onions before they are harvested and put into storage. It sometimes happens that low temperatures, which do not apparently injure the onions at the time, make them very susceptible to various rot-producing fungi, which develop during the storage period. In such case, the onions look fine when they go into storage, but go down rather rapidly."

## Trappers of the Ozarks

(Continued from the preceding page.)

"We started before daylight this morning, so as to get here in time to see you come in," Rachel Henderson told them, when all the greetings were over.

"And I'm glad we did. It was well worth seeing!" declared Betsy Armstrong.

"Benoni, you must have taken pretty good care of Jodo," Mrs. Henderson said. "He looks stronger and heartier than he did when he went away."

Jodo grinned. "I have to be stronger and heartier, to stand all the ups and downs we've been through, or I'd snap like a dead twig," he declared.

As soon as the crowd began to break up, the little party all went down to the water's edge to greet Daniel Boone. After 14 years in this country, the old pioneer knew almost everybody in town, and was now surrounded by a crowd of acquaintances. The Armstrongs and Hendersons urged him to go out home with them and stay a few days. But he declined, on the ground that he must get up to his own home just as soon as he could market his furs.

The Armstrongs and Hendersons were at the house of some friends on Main street—the street that ran along the top of the cliff; and Jodo and Ben, leaving their canoes in the care of black Tom, went up to the house with them. But after an hour or two spent talking over the happenings of the last eight months, the trappers returned to the river. And there they, assisted by their fathers, spent the rest of the day converting their winter's work into cash. For their own use they kept some of their salt, a few pieces of their wild meat, and the two pots of honey. Everything else was sold, including their canoes.

The following morning there were some presents and other things to buy. After that a farm wagon, with the two families in it, climbed the hill west of town, passing by the great stone tower—built by the Spaniards—and the old fort. Soon emerging from some woods, it rattled away across the prairie toward the west. At Camp Spring, a mile and a half out, it halted long enough for the team to drink, then jogged on toward a blue line of forest. Ben and Jodo, chatting gaily in the midst of their friends, declared themselves well satisfied with their winter's work. And they had reason to be. They had made as much as they had expected to make, and nearly $200 besides.

The wagon reached home just at sunset. As the trappers drew near, little Spunky, grazing by the road-side, lifted up his head and brayed them an ear-splitting welcome. And scarcely had the two jumped from the wagon when Bose and Tinker were leaping all over them.

After resting a day or two, while they told of their experiences in the wilds, the returned trappers went to planting corn. And after that there was plenty of farm-work to keep them busy.

Just now some of the talk in this part of the country was of a bill that had been introduced in congress to make Upper Louisiana, or at least the part of it found within the present states of Missouri and Arkansas, a territory under the name of Missouri, with a governer of its own, a legislature of its own, and a delegate in congress. That bill became a law of the 4th of June.

But even more interesting to these people, and far more exciting was the threatened war with England, which congress declared on the 18th of June, while Ben and Jodo were at work, plowing over their corn. The part of the war which concerned these frontier people most was the threatened Indian uprising, which, already begun in a small way, was to break out fiercely and continue for years. No one knew but that all the settlements along the Mississippi, not excepting the people of St. Louis, might have to fight for their lives.

Even while the returned trappers were busy with their farm-work, Jodo was planning to go to Kentucky to school in the fall, and Ben and Jodo's pretty sister were planning something even more interesting.

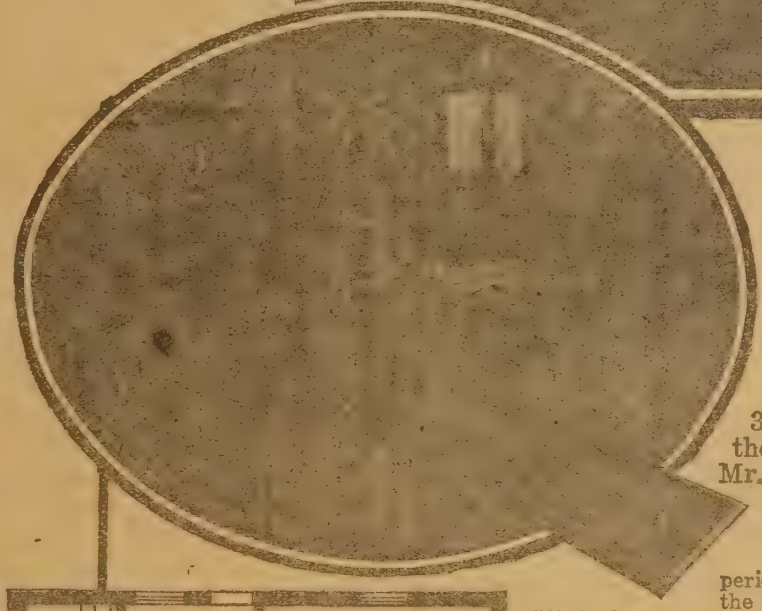
The wedding took place, and at the appointed time. Jodo also went to Kentucky to school. But the going away to school was not till three years later. As it happened, he spent most of the intervening time up in the Boone's Lick country, scouting for Indians and fighting Indians. But those experiences, exciting though they were, can not be narrated here.

This is the story of a trapping-trip into the Ozark wilderness. And that story has been told.

THE END.


# Save FUEL
## and Help Win the War
## The CALORIC
### Saves 35% to 50% Fuel








First floor plan of Mr. Stearns' house

"Air is always balmy and sweet"

### "So Low a Cost We Were Astonished"

"Our home faces the west. We get the northwest winds, which are very severe here." Just locate that home on Rural Route No. 1 out of Brookings, South Dakota, where the thermometers show even 30 degrees below, and you will realize the house heating problem faced by Mr. H. I. Stearns, who has lived near Brookings for 35 years. How he solved it let him tell himself:

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"But we have used the Caloric Pipeless Furnace now for two winters, and are much pleased with it. It keeps our eight room house uniformly comfortable, and our floors warm, a pleasure we never enjoyed before.

"And it is so clean and sanitary. The air is always balmy and sweet, and there is a remarkable freedom from dust and ashes.

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"All this we have enjoyed at so low a cost that we are astonished. Only four tons of coal kept our eight rooms comfortable all last winter—one of the severest we have experienced.

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## How the States Are Asked to Increase Winter Wheat

Acreage of winter wheat suggested for sowing in the fall of 1918, with data showing basis for the recommendations. States that have suffered from drouth conditions are not asked to increase wheat acreage, but if generally favorable conditions obtain it is expected that increases will be shown in those states. In Michigan, Wisconsin, Minnesota and South Dakota larger increase of winter wheat acreage is not suggested because of heavy increases suggested for rye:

| State | Acreage suggested 1918. | | | | Acreage Sown 1917 (000s omitted) | Maximum acreage sown, 1913 to 1917 | |
|---|---|---|---|---|---|---|---|
| | Minimum (000s omitted) | Per cent 1917 acreage | Maximum (000s omitted) | Per cent 1917 acreage | | Acreage (000s omitted) | Year |
| New York | 525 | 103 | 563 | 110 | 512 | 512 | 1917 |
| New Jersey | 101 | 102 | 104 | 105 | 99 | 99 | 1917 |
| Pennsylvania | 1,575 | 103 | 1,683 | 110 | 1,530 | 1,530 | 1917 |
| Delaware | 153 | 105 | 160 | 110 | 146 | 146 | 1917 |
| Maryland | 774 | 105 | 811 | 110 | 737 | 737 | 1917 |
| Virginia | 1,536 | 105 | 1,609 | 110 | 1,463 | 1,463 | 1917 |
| W. Virginia | 373 | 105 | 390 | 110 | 355 | 355 | 1917 |
| N. Carolina | 1,238 | 105 | 1,297 | 110 | 1,179 | 1,179 | 1917 |
| S. Carolina | 283 | 105 | 297 | 110 | 270 | 270 | 1917 |
| Georgia | 449 | 105 | 514 | 120 | 428 | 428 | 1917 |
| Ohio | 2,340 | 109 | 2,500 | 117 | 2,145 | 2,145 | 1917 |
| Indiana | 2,920 | 110 | 3,100 | 117 | 2,645 | 2,820 | 1914 |
| Illinois | 2,934 | 113 | 3,200 | 123 | 2,602 | 2,934 | 1914 |
| Michigan | 941 | 100 | 941 | 100 | 941 | 963 | 1914 |
| Wisconsin | 112 | 100 | 112 | 100 | 112 | 112 | 1917 |
| Minnesota | 89 | 100 | 89 | 100 | 89 | 89 | 1917 |
| Iowa | 600 | 131 | 900 | 196 | 459 | 525 | 1914 |
| Missouri | 3,100 | 108 | 3,235 | 113 | 2,875 | 2,875 | 1917 |
| S. Dakota | 132 | 111 | 132 | 111 | 164 | 132 | 1916 |
| Nebraska | 3,674 | 117 | 3,762 | 120 | 3,135 | 3,674 | 1914 |
| Kansas | 9,479 | 100 | 9,479 | 100 | 9,479 | 9,479 | 1917 |
| Kentucky | 1,047 | 110 | 1,142 | 120 | 952 | 968 | 1914 |
| Tennessee | 924 | 110 | 1,010 | 120 | 840 | 901 | 1914 |
| Alabama | 151 | 105 | 158 | 110 | 144 | 144 | 1917 |
| Mississippi | 40 | 110 | 45 | 125 | 36 | 36 | 1917 |
| Texas | 1,730 | 107 | 1,730 | 107 | 1,622 | 1,720 | 1915 |
| Oklahoma | 3,264 | 100 | 3,400 | 104 | 2,264 | 3,400 | 1916 |
| Arkansas | 302 | 105 | 317 | 110 | 288 | 288 | 1917 |
| Montana | 775 | 100 | 775 | 100 | 775 | 775 | 1917 |
| Wyoming | 88 | 105 | 92 | 110 | 84 | 84 | 1917 |
| Colorado | 485 | 105 | 508 | 110 | 462 | 462 | 1917 |
| New Mexico | 275 | 102 | 283 | 105 | 270 | 270 | 1917 |
| Arizona | 46 | 105 | 48 | 110 | 44 | 44 | 1917 |
| Utah | 256 | 105 | 275 | 113 | 244 | 256 | 1915 |
| Nevada | 5 | 100 | 10 | 200 | 5 | 23 | 1915 |
| Idaho | 377 | 125 | 405 | 134 | 302 | 405 | 1914 |
| Washington | 754 | 180 | 850 | 200 | 422 | 1,156 | 1914 |
| Oregon | 590 | 105 | 692 | 123 | 562 | 692 | 1914 |
| California | 513 | 105 | 538 | 110 | 489 | 489 | 1917 |
| United States. | 45,000 | 107 | 47,200 | 112 | 42,170 | 44,640 | |

## HOME CANNING.

### Sterilization Is the One Need.

Mrs. Elizabeth Jones, who is connected with the state club work, makes one thing clear in her various addresses and demonstrations along the line of home canning.

"It isn't the canning outfit or the can you use that determines your success as a canner," Mrs. Jones insists. "One method is as successful as another, provided you secure sterilization; that is the basic principle. The pressure method has some advantages—it saves time, labor and fuel, but it is possible to can garden products just as successfully by the old washboiler method as by any other."

This canning expert calls particular attention to the fact that the government is not condemning any style of jar or can, and that even the old type Mason jar, which many housewives are beginning to think is a thing of the past, can be used as successfully as its modern rivals, providing sterilization is secured and maintained. In this latter respect the rubber is of far greater importance than the jar.

In the home canning of vegetables, at least two steps precede placing the product to be canned in the jars. First comes the "hot dip," which is very hot, indeed; the beans, for instance, are put into boiling water—and this water must be at a jumping boil, not merely simmering—and are kept there from three to five minutes. Next, they are drained out of the hot dip and are at once given a cold dip. The water for this second bath should be as cold as possible—running water from the tap is good.

The purpose of these dips is somewhat as follows: First, the hot dip tends to do away with the acrid flavor observable in some vegetables canned in the old way; second, it removes part of the bacteria; third, some of the cellulose is broken down; and fourth, the color, which is started by the hot dip, is checked and in a measure set by the cold. This cold bath, in addition, firms the texture of the vegetable, and makes it easier to secure the full, solid pack so desirable in quality goods.


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## 2125 Acres Farm Land
## 225 Cattle 50 Horses
## 160 Swine Poultry, Bees, Etc.
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# TRUNDAAR TRACTOR



The Trundaar Tractor is strictly a one-man machine. The operator can easily control both the tractor and the plows.

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SEATTLE
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## FAMILY CIRCLE

Write to the Editor.

**ALICE W. BARLAND,**
**Editorial Contributor.**

### FRUITS FOR TABLE.

**Some Canning and Cooking Hints.**

To the Editor: We are told that fruit will keep without sugar. It will freeze more quickly, but if wrapped with papers or other precaution that can be forestalled. We can not very well eat it with no sweetening, but sweet apples will do wonders where they can be obtained. Dried or evaporated they will keep a long time if heated to kill all possible moth or other insect eggs and sealed in paper bags or other receptacles. When served they are especially nice after being soaked and added to corn meal or rice, cooking either separately or together with raisins.

In preparing acid fruit for canning add your sweet apples one-half or less as desired, cook well until surplus moisture is cooked away and it will be like Shaker or boiled cider. This can be done if desired by setting the vessel containing the sauce in a slow oven—covering so it will not crust over the top. It can also be cooked and canned in the ordinary manner and thus have variety. One lady of my acquaintance when canning up a small quantity by the cold process sets a few small jars of fruit in a pan of water and cooks them in the oven in place of steaming in a kettle upon the stove.

If molasses is used for sweetening fruits they must be cooked as soft as desired before adding the molasses as it hardens the fruit. In cooking juices the same precaution must be taken with sugar. Sweet apples require more time for cooking than do sour apples.

A pinch of cooking soda added to very acid fruit helps reduce acidity and save sugar, but care must be taken not to add enough to kill the acid or it will result in a flat, insipid flavor.

A small portion of salt added to fruits of all kinds will improve flavor, if not too much. We are told that the secret of all flavoring is to blend so that no one flavor can be distinguished from the other.

The pinch of soda will aid in the cooking of string beans or an old chicken more quickly and make it quite tender. In cooking green peas if just a pinch of soda is added in cold water to start with they retain their green color and the skins separate and come to the top and can be removed if desired.

MRS. G. W. DOUGLAS.
South Prairie, Wash.

**Is Old Merchant.**

Mrs. Rebecca Mayo, age 90, still conducts a shoe store in Provincetown, Mass. She has had charge of the business since her husband died, in 1875.

## A Talk to Girls

What are slackers? Men who avoid military duties? Yes. But there are even worse slackers than these. They are the girls and women who shirk their duties, who refuse to accept their share of responsibility. The girl who spends her time auto riding, preparing for dancing and parties when she could be helping her mother is a slacker. The woman who spends her time the same way is a worse slacker, because she is older and should know better. She should not spend any time foolishly when there are so many poor children that need clothes; for it is a sin for us to indulge in idleness because some one else makes our living for us.

Girls, do not feel you are abused because you have to work while some other girl idles her time away. Do not envy her, for she is really greatly to be pitied. Some day she may be a wife and mother and she will be poorly prepared for her duties. She will suffer greatly, and so will her innocent children, from her ignorance.

Try to do all your work well; avoid idleness. If you haven't enough to keep you busy, try and help some one else. Look around you and you will find golden opportunity for making others happy. Sew for the neighbor who has a large family, or help take care of some invalid. These things keep us from growing selfish and narrow-minded. The girl who is always helping others is bound to be happy herself, and she will have the love and respect of all who know her.

Dear girls, if there is one thing the United States needs more than soldiers, it is good wives and mothers. They are the backbone of the nation. Oh, that there were more of them! Now, girls, I will tell you the things that caused me sorrow. I went to dances against my mother's will before I was 16 years old. If I had my life to live over again, I would not go to dances before I was 18 or 20, for it caused me to lose interest in my school work. I read novels before I was through the eighth grade. If I had it to do over again, I would never read novels except those recommended to me by a teacher. Novels give us faulty ideals of life and cause us much unhappiness.

You are not a slacker if you can do things well.

**Cook, sew and knit.**
**Wash clothes, patch and iron.**
**Sweep, dust and scrub.**
**Change the clothes on a small baby.**
**Mind your mother without talking back.**

Girls, if you can not do these things, get your mother to show you how. Get her to let you get a part of the meals and do the family mending. It is such fun to know you are able to do things.

E. D. M.

**Happiness Begins at Home.**

You have a better chance of creating happiness at home than of finding it abroad.

## Circular Maltese Yoke

By WINIFRED WORTH



Crochet workers never tire of yoke designs. Here is a very beautiful and unusually different one for you to try.

Make 1 1-8 yards of 3-4 inch Maltese lace and another piece 5 yards in 1 piece.

**First Row**—Ch. 1 on 2nd L. ch. 3 take up 3 L on end of 5 yard piece, continue 2 on one side and 3 on other for widening.

**Second Row**—1 dc. in 2 L unite 3 in a bunch ch. 3, continue across.

**Third Row**—4 dc. as other row ch. 1, join to middle of first space of last row, ch. 1 make 3 dc. join.

**Top of Yoke**—1 dc. in 2 L. Ch. 3 across.

**Second Row**—1 t. crocheted in each dc. r ch. across for ribbon.

**For Edging**—1 dc. in 2 L ch. 7, 1 dc. ch. 5, 1 dc. the same 6 times. Ch. 2 and join 1 dc. to middle of the ch. 5 ch. 2 back to other side with 1 dc. ch. 2, join to 1 dc. to middle of ch. 5 ch. 2 back to other side with 1 dc. ch. 2 join to ch. Ch. 4 and join to braid, ch. 2, fold tops up two at a time until 5 on needle. Draw thread through 1 at a time, open and begin 2nd scallop. Whip edging on after joining.


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*The Best Player Value at or Near the Price*

## $545

To those that can't play but want so much to play the Piano—what a blessing is the Player! But the higher types of Player instruments are often beyond the reach of the average pocketbook. This is where the Aeolian Player Piano fills a great need—**it is a good, substantial instrument, yet moderate in price.**

The Aeolian Player Piano does not depend on any single sensational feature to command attention—**its excellence is due to a well balanced perfection throughout.** It is a product of the Aeolian Company, makers of the famous Pianola and the wonderful Duo Art.

We will gladly arrange convenient payment terms if desired.

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A New Perfection Oil Cook Stove in your kitchen means better and more economical cooking all the year round.

More convenient than coal or wood. Lights at the touch of a match and heats in a jiffy.

No smoke or odor; no dust or dirt. Economical.

And all the convenience of gas.

A New Perfection Oil Cook Stove means kitchen comfort and convenience. Ask your friend who has one. Used in 3,000,000 homes. Inexpensive, easy to operate. See them at your dealer's today.

In 1, 2, 3 and 4 burner sizes, with or without ovens or cabinets. Ask your dealer today.

STANDARD OIL COMPANY
(California)

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2191—Dress for elderly ladies. Cut in seven sizes, 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires six and an eighth yards of 36-inch material for a 36-inch size. Price 10 cents.

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2565—One-piece slip-on dress. Cut in three sizes, 16, 18 and 20 years. Size 18 requires four and a quarter yards of 54-inch material. The skirt measures about two yards at the foot. Price 10 cents.

2416—Child's set of short clothes. Cut in five sizes, 6 months, 1 year, 2, 3 and 4 years. The dress will require two yards of 36-inch material. The petticoat one and five-eighths yards of 27 or 36-inch material. The drawers one and a quarter yards of 27 or 36 inch material for a 3-year size. Price 10 cents.

2558—Ladies' apron and cap. Cut in four sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. Size medium requires three and a quarter yards of 36-inch material for the apron and seven-eighths yard for the cap. Price 10 cents.

2579—Girls' dress. Cut in four sizes, 4, 6, 8 and 10 years. Size 6 will require two and three-eighths yards of 36-inch material. Price 10 cents.

1644—Child's rompers. Cut in five sizes, 1, 2, 3, 4 and 5 years. It requires three yards of 27-inch material for a 4-year size. Price 10 cents.

2578—Girls' dress. Cut in four sizes, 6, 8, 10 and 12 years. Size 8 requires four and an eighth yards of 36-inch material. Price 10 cents.

2383—Ladies' skirt. Cut in seven sizes, 22, 24, 26, 28, 30, 32 and 34 inches waist measure. Size 24 requires three yards of 36-inch material. The skirt measures about two and an eighth yards at the foot. Price 10 cents.

2289—Ladies' house dress. Cut in seven sizes, 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires six and a half yards of 44-inch material. The skirt measures about two and a half yards at the foot. Price 10 cents.

1999—Ladies' one-piece pajamas. Cut in six sizes, 34, 36, 38, 40, 42 and 44 inches bust measure. It requires six yards of 36-inch material for a 38-inch size. Price 10 cents.

2377—Ladies' waist. Cut in seven sizes, 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires three and an eighth yards of 36-inch material. Price 10 cents.




Please fill in this order and mail with remittance to:
PATTERN DEPT., PACIFIC NORTHWEST FARM TRIO, Spokane, Wash.

Enclosed find.....cents for which send me the following:

Pattern No.....Size..... Pattern No.....Size.....

Pattern No.....Size..... Pattern No.....Size.....

Name .....

Postoffice ..... State .....

R. F. D. No.....Box No..... Street No.....

Be sure to give the pattern number and the correct size.

### Could Do His Bit.

The sergeant major had trouble in finding an accountant for his captain, but at last brought in a private for trial.

"Are you a clerk?" demanded the captain.

"No, sir," replied the man.

"Do you know anything about figures?" asked the captain.

"I can do a bit," replied the man, modestly.

"Is this the best you can find?" asked the officer.

"Yes, sir."

"Well," growled the captain, "I suppose I'll have to put up with him!" Turning to the private, he snapped: "What were you in civilian life?"

"Professor of mathematics at——— college, sir," was the unexpected reply.

### Further Saving Possible.

"Why do you live in the country, Smith?"

"So as to save money."

"Food cheap, eh?"

"Not much saved that way."

"How, then?"

"Well, no theaters, $50 a year; no swell restaurant dinners, $100 a year; no taxicab fares, $50 a year; no distractions of any kind, more saving. Get the idea?"

"Um, yes. But look here, old man, couldn't you save more money if you died."—Boston Transcript.

### Catalogue Notice.

Send 10 cents in silver or stamps for our up-to-date fall and winter, 1918-1919 catalogue, containing 550 designs of ladies', misses' and children's patterns, a concise and comprehensive article on dressmaking, also some points for the needle (illustrating 30 of the various, simple stitches), all valuable hints to the home dressmaker.


*A Million Housewives Like Yourself*

hesitated, then bought a 35c bottle of

**Mapleine** *The Golden Flavor*

to try it—and became, as you, yourself, will, a steady user and a loyal friend.

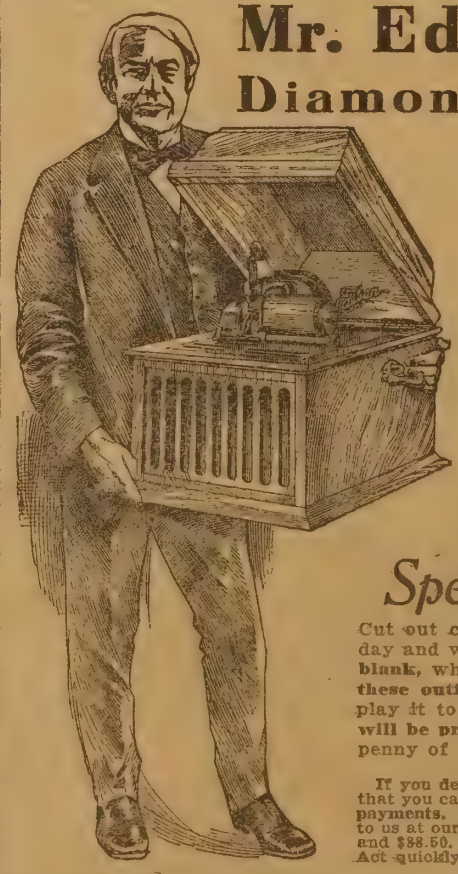
For desserts, icings, war breads, puddings, syrup, etc.



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Note the Price
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which includes a genuine Diamond Stylus Reproducer, which means no needles to change. Also 12 latest new four-minute records. All for the low price of $41.00.

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Cut out coupon below and mail it to us today and we will send you our **free trial order blank**, which will permit you to **keep one of these outfits in your home for 10 days** and play it to your heart's content. **All charges will be prepaid**, so there will not be a single penny of expense to you.

If you desire to keep it, then we will arrange so that you can pay for it in **small weekly or monthly payments.** If you do not want to keep it, return it to us at our expense. Other special offers for $64. and $88.50. **Send for our new, big free catalogue.** Act quickly, before this offer expires.

WRITE US TODAY.

Spokane, Wash.
Eilers Music House,
Please send me full particulars and catalogue of your special Edison offer in Washington Farmer for $41.

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TALKING MACHINE HEADQUARTERS OF THE WEST.

Eilers MUSIC HOUSE
Sprague at Post
Spokane, Wash.

# Must Not Profiteer on Farm Needs

To sell farm equipment on the basis of what it would cost the dealer to replace it may be considered profiteering, according to a statement issued by the office of farm equipment control of the United States department of agriculture.

Persons who have sold equipment at replacement values when costs were high must continue to do so if prices go down, even though such sales bring less than the original cost price of the stock. Morover, those whose selling price is fixed in relation to high replacement prices must restock immediately and carry the same quantity of equipment throughout the high-price period as they had at its beginning, in order not to profiteer. Those who desire to sell out without replacing their stock should not sell at a prevailing high price, but at cost plus a fair usual profit.

It will be considered hoarding if manufacturer or dealer holds contracts for, or arranges for, more equipment than the reasonable demands of his business require. Dealers finding themselves with excess stock on hand through inadvertence should sell their excess holdings at cost plus a fair usual profit.

The hoarding of farm equipment is defined by the act of congress of August 10, 1917. Manufacturers or dealers who hoard will be dealt with under the terms of this act of congress, and not under the ruling as to replacement values just issued by the equipment control office, says an official statement.

## SCHOOL LUNCH BOX.

### Pointers for New School Year.

By ALVARA P. WILLIAMS.

If you happen to be in a district which does not furnish hot lunches to the school children, you have a nine-months' program ahead of you, to properly put up lunches for your children, and be sure that they are all eaten and contain the proper amount of nourishment. Most families have their dinner at noon, and thus the child misses the most important meal of the day. His lunch must therefore have as nourishing food as possible, and yet there must not be so much of it that he will lose his appetite and leave some of it. What are the things which will fill the box, and be appetizing?

If you think back to your own school days, you will remember certain things you had so much that you were unable to eat them. You will remember the messy-looking lunches many of the children had, and how impossible it seemed to finish up a cold lunch after the first few weeks, when it had been a continual picnic. Do you suppose you or those other children were getting enough nourishment when you left half of those unattractive lunches?

First of all, then we must keep in mind that the child must get a certain amount of nourishment, and balance your lunches with that in view. There are some things which should never appear in school lunches, because they are hard to digest, and the stupid afternoons which will follow some lunches are due entirely to thoughtless food. A few of these foods are: Pork, fried foods, rich foods, especially cakes and pastries, highly seasoned foods, too many pickles; in fact anything that is hard to digest.

Into your ideal lunch box, then, you may put food which is easily digested, and which gives great food value for the small space it must occupy. The sandwich will be the best article of food with which to get the right proportion of nourishment. In their season, fresh vegetables may be added; canned fruit, fresh fruit of course being preferable when it is in season. Simple puddings, cookies, nuts and raisins, cheese, eggs, all furnish good value for the space they require. A collection of small jars with screw tops is a great help in putting in canned fruit or puddings such as custards, gelatine, rice or bread pudding; baked apples.

Sandwiches should give most of the variety of the lunch, and they generally show the least thought. Don't always put in the same kind of meat or egg sandwiches, but try to give enough variety so that all the sandwiches will be eaten. If you use meat, try mixing it with a little salad dressing after putting it through the meat chopper. Then add chopped pickles or olives; chopped celery, etc. A dozen different kinds of sandwiches may be made from the same kind of meat. Another point, which is often overlooked, is that the best sandwich is the one that keeps moist until it is eaten. That is why most children prefer chopped meats to sliced. That is why the addition of salad dressing helps so much.

Egg sandwiches do not need to be made every day of friend eggs. They may be made of hard-boiled, mashed eggs, with the addition of cream, salad dressing, parsley, cheese, pickles—anything to vary the flavor and still have the food value of the egg. Eggs scrambled, or scrambled with bacon; omelet; these add to the varfety.

Foods which may be kept on hand for some time to use in lunches are: Chipped beef, sardines, peanut butter, nuts, dates, figs, cooked salad dressing, minced ham, cheese, olives, jelly. Perhaps some of these seem too expensive, but when you consider the small amount necessary to make a lunch attractive, the outlay is justified. Anything which will induce the child to eat all of a properly balanced lunch is not extravagance. Consider also, the length of time 25 cents' worth of these things will last if used only for the lunch box.

If your child likes salad dressing, many kinds of salad sandwiches are possible, with lettuce, cheese, either cottage cheese or full cream cheese; tomatoes, celery, salmon, sardines, etc.

Bread should not always be the same, any more than the filling. Use a variety. Jell is particularly good with the "tan-colored" breads. When you make jelly sandwiches be sure to butter the bread first so that the jell will not soak into the bread.

A little care and forethought will result in attractive lunches, put up so that they are as good when eaten as when prepared. Sandwiches stay moist if wrapped in parchment paper or moistened cloth. The paper is better, and when purchased by the roll is cheap enough for any one to have. Cake and cookies should be wrapped, also. Nothing is more unappetizing than a layer of gingerbread on bread. The average child likes a surprise, as well as grownups. This is easy if you have little frosted cookies occasionally, instead of plain ones; individual molds of gelatine, saucer pies, little cup cakes, nuts, etc.

As to the lunch box itself: The best kind is not a box at all. Children deserve the best lunch bucket you can buy, if they are to lose one meal a day at your table. This is a bucket which has a top for drink, with a cup for a cover; a partition for pie or cake, and the lower space for sandwiches, jars of dessert, etc. Such a bucket costs a dollar and lasts for years. Don't give your child a spice box, a tobacco box, a lard pail, or any other makeshift, if you care about his feelings as well as his health. Get a good bucket and put in it all the child should eat, made attractive enough so he will eat it, and there will be less headaches, fewer worn-out children at the end of a school year, and perhaps even better natured children when they come home from school at night. You may even look ahead to the future of your child's digestion when he is full-grown, if you wish. Is it worth the effort?

## HOME CANNING.

### Sterilization Is the One Need.

Mrs. Elizabeth Jones, who is connected with the state club work, makes one thing clear in her various addresses and demonstrations along the line of home canning.

"It isn't the canning outfit or the can you use that determines your success as a canner," Mrs. Jones insists. "One method is as successful as another, provided you secure sterilization; that is the basic principle. The pressure method has some advantages—it saves time, labor and fuel, but it is possible to can garden products just as successfully by the old washboiler method as by any other."

This canning expert calls particular attention to the fact that the government is not condemning any style of jar or can, and that even the old type Mason jar, which many housewives are beginning to think is a thing of the past, can be used as successfully as its modern rivals, providing sterilization is secured and maintained. In this latter respect the rubber is of far greater importance than the jar.

In the home canning of vegetables, at least two steps precede placing the product to be canned in the jars. First comes the "hot dip," which is very hot, indeed; the beans, for instance, are put into boiling water—and this water must be at a jumping boil, not merely simmering—and are kept there from three to five minutes. Next, they are drained out of the hot dip and are at once given a cold dip. The water for this second bath should be as cold as possible—running water from the tap is good.

The purpose of these dips is somewhat as follows: First, the hot dip tends to do away with the acrid flavor observable in some vegetables canned in the old way; second, it removes part of the bacteria; third, some of the cellulose is broken down; and fourth, the color, which is started by the hot dip, is checked and in a measure set by the cold. This cold bath, in addition, firms the texture of the vegetable, and makes it easier to secure the full, solid pack so desirable in quality goods.

### Ignorance Is Bliss.

Few persons in Pine Top, a southern town in the mountains, had ever seen an automobile, so when a big car stopped for a few minutes in the isolated village the curious inhabitants gazed at the devil-wagon with a mixture of fear and awe, and the owner, who had entered the general store to make a purchase, heard one rustic remark:

"I'll bet it's a man-killer."

"Shore," assented the other.

"Look at the number on the back. That shows how many people it's run over. That's accordin' to law. Now, if that feller was to run over anybody here in Pine Top it would be our duty to telegraph that number—1344—to the next town ahead."

"And what would they do?" demanded the interested auditors.

"Why, the constable would stop him and change his number to 1345."—Harper's.

### Make Sugar Go Around.

Almost 70 per cent of all the sugar consumed in this country is used in the households; so it is up to the women to make the sugar go around.

### Put Everything Away.

There is a place for each thing, and it should be put there.

### Can't Beat the Game.

For every action there is an equal and opposite reflex action.


**Heal Itching Skins With Cuticura**

All druggists: Soap 25, Ointment 25 & 50, Talcum 25. Sample each free of "Cuticura, Dept. F, Boston."

**RECORDS FOR ALL MACHINES**

We carry all makes. Victors Columbias, Edison and Blue Amerolas. RECORDS SENT TO YOUR HOME ON APPROVAL. Pay for only those you wish to keep.

Records sent parcel post prepaid to any address. Write for our monthly supplement, which carries all the new music. Sent FREE.



Hopper-Kelly Co.
SEATTLE-WASHINGTON.

**Your Local HOME PAPER and Your State FARM PAPER at a Special Club Price**

A special clubbing arrangement has been made with a number of newspapers throughout the northwest. We can now offer you a one-year subscription to your local home paper with a one-year subscription to your state family farm paper at a special rate for both.

**YOUR HOME PAPER** is of great value to you. It brings you all the local happenings and news of the affairs of your community and keeps you posted on the gossip of the social and commercial life. It brings you the news of the home boys at the front and prints many interesting letters from them.

**YOUR FARM PAPER** brings you each week interesting facts of the agricultural development of your state, all the farm news, features for every member of the family, including color comic pages, women's and children's pages Departments devoted to every phase of farming and farm life.

We can now send you your local home paper and your state family farm paper for one year each at the special clubbing rates as quoted below:

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| The Daily Journal, Bellingham, Wash., and Washington Farmer. | $3.00 | Advocate-News, Sumas, Wash., and Washington Farmer. | $1.50 |
| The Blaine Journal, Blaine, Wash., and Washington Farmer. | $1.50 | The Enterprise, White Salmon, Wash., and Washington Farmer. | $1.50 |
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| Cashmere Valley Record, Cashmere, Wash., and Washington Farmer. | $1.50 | Twice-a-Week Spokesman-Review, Spokane, Wash., and Washington Farmer. | $1.00 |
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| Puyallup Valley Tribune Puyallup, Wash. and Washington Farmer. | $1.50 | The Spokesman-Review, Spokane, Wash., (Sunday only) and Washington Farmer. | $2.50 |

Take advantage of these special prices by sending in your order today to your local home paper or by mailing it direct to

**THE WASHINGTON FARMER**

617 Central Building, Seattle, Wash.

Review Building, Spokane, Wash.




**Lives in a Beautiful Country.**

Dear Aunt Nellie: I just finished reading the letters and I enjoy them very much. I wish more of the children of Washington would write. I think Washington is the best state of all, don't you? I have never written to the Corner before, though I've wanted to for a long time. I have not seen any letters from my part of the country yet. I live on the Little Pend Oreille river. This is a beautiful country. Mary, my sister, and I like to go fishing. We have caught a lot of fish already. There is a beautiful falls near our house. Our school was out May 7. We had a dandy program. My teacher's name is Miss Roberta Newman. I got a kodak for being neither absent nor tardy during the year. I am 11 years old and my birthday is November 28. Have I a twin? I have filled one card with thrift stamps and am going to fill another. I am not going to eat any more candy or gum, but I am going to use the money for thrift stamps. I am going to make a garden. I should be glad to correspond with any of the cousins.—Anita Hughes, Star route, Colville, Wash.

**Brother Will Help Whip the Kaiser.**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner and I enjoy reading it very much. I am 13 years old. My birthday is April 2. The way I am helping my country is eating rye bread, barley bread and corn bread and eating fish, rabbit and chicken, leaving pork and other fats for my brother in the war, for he needs it more than I do, because he is going to whip the kaiser with the other Sammies. I have made four Belgian squares and if I knew how I would knit a sweater for the soldiers. I went in town yesterday and bought a Red Cross doll that they sold for 25 cents. I bought one, mama bought one, papa one and my sister one and that made $1 for the Red Cross. The high school girls were selling them. Then one time I went to a Red Cross sale and I bought a rabbit for $1 and my sister bought a lamb, but gave it back to the Red Cross to sell over again. I hope some of my cousins will write to me.—Eva Priddy, R. 2, box 23, Touchet, Wash.

**Gave Their Money to the Orphans.**

Dear Aunt Nellie: This is the first time I have written. I wish to join the Children's Corner. I am in the sixth grade next year. Our school was out May 7. I am 12 years of age next January 16. There are 12 in the family with my two sisters-in-law. I have four sisters and three brothers. Alvin is 25, Ethel is 23, Eugene is 20, Claud is 18, Pearl is 15, Myrtle is 13, I am 11 and Florence is 3 weeks old. I have no pets now, but I used to have a little pony, but she was hardly good for us to ride because she was mean. Sometimes when the boys would ride her she was all right. She wouldn't let us ride her. Papa donated her to the Red Cross. I can crochet and can knit a little bit. Last Christmas we gave our money to the orphans instead of buying presents. I forgot how much we got; it was up in $40.—Wilma McDowell, R. R. 1, Deep Wash.

**Has a Flower Garden.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I have two miles and a half to go to school. My teacher's name is Miss Kelly. I like her. I am 10 years old. I am in the fourth grade. I have two brothers. Their names are George and Willis. George is 3 years old. Willis is 9 years old. I have no sister. We have four cows. We have four horses and one colt. We have 31 little chickens. I have a flower garden. I have pansies and nasturtiums in my flower garden. We have lots of wild flowers here. I go out in the fields and pick wild flags.—Viola Powell, R. F. D. 1, box 72, Winlock, Wash.

**Go Out Riding Often.**

Dear Aunt Nellie: This is the first time I have ever written to the Children's Corner. I am 11 years old. My birthday is February 18. I have three brothers and two sisters. Their names are Harry, Willie, Leonard, Ellen and Lilly. We have an automobile and we go out riding most every Sunday. I live on a 10-acre farm. We have two cows and one calf. I have a pet dog. His name is Prince. We have two kittens which I am very proud of. My papa gets the Farmer and I enjoy reading the letters from the other children.—Annie Anderson, Hobart Wash.

**A Belgian in the Play.**

Dear Aunt Nellie: This is the third time I have written to you. I will tell you about my school. We have two rooms: One room has from the first to the fourth grades, the other one has from the fifth to the eighth. I am in the fifth grade. I got 98 in spelling, 98 in grammar, 97 in geography and 95 in arithmetic. My brother is in the eighth grade. We had a picnic. Our school was Out May 17. We had school in the morning. First we practiced our pieces. I am in a play. The name of it is "The Cry of Belgian Children." I am a Belgian in that play. I have to have an old dress on, old ragged shoes and ragged stockings. Have I a twin? My birthday is January 26. I will be 12 years old in 1919. If I have a twin I wish she would write to me.—Dorothy Cain, box 200, Route 6, Vancouver, Wash.

**We Will Catch Old Kaiser Bill.**

Dear Aunt Nellie: I am 9 years old. My birthday is April 26. I go to the Paradise school and passed in the fourth grade. I like to go to school. I have two brothers and two sisters. My brothers' names are Albert and George and my sisters' names are Leona and Genett. We have five cows. Their names are Daisy, Rosie, Molly, Bell and Mutchy. Our calf's name is Beauty. We have one horse named Dolly. We have 20 acres of land, a small orchard and some chickens. We live a half a mile from the river and I go fishing sometimes and catch trout. I am going to Bellingham to my grandma's house to spend part of my vacation. I have a little garden. I belong to the Junior Red Cross. Mama has a big garden. I hope the war will soon be over and they catch old Kaiser Bill. My papa takes the Farmer and I like to read the Children's Corner. The letters are very interesting. If I have a twin I wish they would write to me as I like to receive letters. The place where we live they call Paradise, but we get our mail from Ferndale.—Lawrence Barraford, R. F. D. 1, box 37A, Ferndale, Wash.

**Taking Care of Little Nephew.**

Dear Aunt Nellie: This is my second time of writing to the Children's Corner. I think the letters are very nice, so I thought I would write again. I live on a 160-acre farm and have eight horses and 120 chickens. I have a little bantam rooster and chicken, and a pet dog and cat. The cat's name is Muff and the dog's camo is Curley. The dog is black and the cat is yellow. I have a little white pony and like to ride it very much. I am staying with my sister, Louise, and taking care of her little boy. His name is Fred. I will give some riddles. White told white to drive white out of the white. A man rides and yet he walks. A man took off his hat and drew off his gloves. What was his name? What hen lays the longest? What is it which you take off the last when you go to bed? What is the first thing you do when you fall in a pond of water? If a donkey and a person were walking along what fruit would you think of? I will write again and give you the answer to the riddles.—Virginia Brockmiller, Wheeler, Wash.

**Brothers Are in the Army.**

Dear Aunt Nellie: I read the letters in the Farmer and I enjoy them very much. I have seven brothers and two sisters. My brothers' names are William, Henry, Walter, Fred, Homer, Clinton and Ted. My sisters are twins. They are 16. Their names are Nida and Nita. My oldest brother is 32 and my youngest brother is 8 years old. Two of my brothers are in the army. We have about 60 hens, 10 turkey hens, one old gobbler, and about 60 little turkeys. I am 11 years old and I am in the fifth grade. I will be 12 December 16. I passed the fifth grade very well this year. I got 85 in history, 88 in physiology, 93 in arithmetic, 94 in language, spelling and geography. If I have a twin I wish she would write to me.—Della Davis, R. 1, Kennewick, Wash.

**In the School Play.**

Dear Aunt Nellie: This is the first time I have written to the Corner. I am 11 years old and my birthday is April 8. If I have a twin I would like to hear from him or her. I am in the fourth grade. I ride horseback to school. My teacher's name is Miss Wright. I like her fine. My school had a play and I was in it. I live on a 120-acre farm. I have six hens, a pony and a dog. My pony's name is Charley and my dog's name is Jack. When I was small I had a wagon and a harness and hitched Jack up and often drove him a mile and a half to town. I have one brother, Richard. He is 5 years old.—Zella Wilson, R. F. D. 1, box 46, Port Stanley, Wash.

**Their School Has the Cup.**

Dear Aunt Nellie: This is the first time I have written to the Corner. I have three brothers and five sisters. My brothers' names are Art, Mose and Jesse. My sisters' names are Cora, Ora, Leota, Lulu and Ruth. I have one pet dog and two kitties. My dog's name is Fritz. My cats' names are Tommie and Snowball. We are milking six cows. Their names are Mabel, Tiny, Beauty, Lady, Creamer and Spika. We have 14 pigs, 40 chickens and one pet bird named Bobbie. I am 10 years old. Next year I will be in the fifth grade. I missed just exactly 12 days last term. We have quite a bit of Red Cross work at our school. I haven't been tardy once this year. We have a loving cup


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at our school. It is silver, lined with gold. It surely is pretty. Our school is against five other schools. If we keep the cup for one more year we can keep it all the time. The things we won in this year are: First prize counts 10, second prize five. Girls won in a potato race, 10; boys won in a potato race, 10; girls' running race, 10; boys' running race, 10; girls' basket ball, 10; boys' basket ball, 10; boys' broad jump, 10. The other five schools won: Running race, 5; boys' running race, 5; girls' potato race, 5; boys' potato race, 5. Aninsle got first prize exhibit. Have I a twin?—Elsie McGlaughlin, R. F. D. 2, box 117, Winlock, Wash.

**Helping Uncle Sam's Soldiers.**

Dear Aunt Nellie: This is my first letter to the Corner. May I be a cousin? I have light brown hair, blue eyes and a light complexion. I am 12 years old. I will be 13 September 25, 1918. Have I a twin? If so I would like to correspond with her or him. I will be in the eighth grade next year. There are about 60 pupils in the school I go to. It is a country school. I live on a 40-acre farm. I have about a fifth of a mile to walk to school. The grades I got in my final examinations are as follows: Spelling, 100 per cent; reading, 100 per cent; grammar, 100 per cent; history, 100 per cent and arithmetic, 99 per cent. Geography and physiology were state examinations, so I don't know what I got in these. To help my country I have bought $4 worth of thrift stamps and expect to buy more. I have also gathered moss to put in bandages for our brave and noble soldiers. In the future I want to be a Red Cross nurse. They do such splendid things. I think it would be splendid to have a feeling in your heart that you are going to save the life of some of Uncle Sam's noble soldiers, or at least help save their lives. I am going to learn to knit so the soldiers can have the socks, etc. There are so many ways in which children can help their dear old Uncle Sam. I wish more children would become interested and want to help him. My birthday is September 25. I will be 13 years old my next birthday.—Elizabeth Odell, box 166, Monroe, Wash.

**Pet Horse Is Gentle.**

Dear Aunt Nellie: This is my first letter to the Corner, but I hope it won't be the last one. I am 12 years old. I was born on May 13. Have I a twin? If so wish that he or she would write to me. I go to school at the Naches public school, district 91. belong to the Junior Red Cross and have helped to make two quilts. I can knit now. One week after I learned to knit I knitted four afghan squares. We have 10 pigs. There are seven little Hampshire pigs and a Hampshire sow. Then we have two Berkshire sows. We also have three little calves. I have a pet horse, too. Her name is Daisy. She is just as gentle as a kitten. She had a ring bone on her right front foot, but papa put some medicine on it and killed it. I have four little pet kittens, two of them are gray, one is blue and one is yellow. Then we have two dogs also. If I have a twin I should like very much to correspond with him or her. I would like to correspond with any other boy or girl who writes to the Corner.—Bessie Kincaid, Naches, Wash.

**Father Used to Be a Soldier.**

Dear Aunt Nellie: My papa takes the Farmer. I like to read the letters. I was 10 February 15. Our school will be out next Friday. I am in the sixth grade and I am hoping to pass. Miss Turner, our teacher, got sick and her sister, Mrs. Rodda, finished the school year for her. There are three pupils in the school. I have a brother, Samuel, who was six last December 29. Mama, brother and I joined the Red Cross. I have one uncle in the army. My father fought in the Spanish-American war. I live on a 160-acre farm. We have 19 little pigs and five big ones. We have 16 cows and calves, one horse, two dogs, Ponto and Bobby. We have three cats, Petra, Dolly and Ring. Brothers and I go after the cows and pick wild flowers on the way. Have I a twin? If I have I wish he or she would write to me. I have blue eyes and curly hair. I can crochet and knit. This is my second letter to the Corner. I will write again.—Leona B. Jacks, box 473, Raymond, Wash.

**Picnic at the Lake.**

Dear Aunt Nellie: We take the Farmer and I like to read the Children's Corner. I was 11 years old April 9. Next year I will be in the seventh grade at school. We went down to the lake and had a picnic. We got a boat and rowed all around the lake. We got a ride home and were sorry that the picnic was over. I live on a 240-acre ranch. I would not trade for anything in the world. I like to ride horseback after the cows and to town. We milk five cows and we make butter.—Helen Christina McKeen, box 339, Republic, Wash.

**Little Chickens Are Cute.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I like to read the letters very much. My pets are a cat, a rabbit, a bird. We also have a cow, two pigs and some chickens. We have 38 little chickens. I think they are very cute. I am in the fifth grade and am 9 years old. Will Kathlyn Bowen write to me? She is my twin. I lost her address, and so could not write to her.—Gertrude Wittine, 16 B Street, Anacortes, Wash.

**Has Sibelle a Triplet?**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner and I hope I can write many more times. I enjoy reading my cousins' letters and I will try to make one more letter for the Corner. I have three sisters. Their names are Zelma and my twin, Adele, and Willamina. We live on a 10-acre tract near Prosser. We have two horses, four cows, six pigs, about 40 rabbits, 32 old chickens, 75 little chickens and a cat. The horses' names are Prince and Tom. The cows' names are Queen, Molly, Star and Butty and the cat's name is Tom. I am 13 years old. My birthday is March 18. Have I a triplet because I have a twin already. I will give two riddles. Spell live mouse trap with three letters.—Answer—Cat. What is the best thing you can put in pie. Answer—Your teeth.—Sibelle De Chenne, R. R. 1, Prosser, Wash.

**Cousins Expect to Go to France.**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. Quite a few of the girls I know have written to you. I am glad summer is here. My sister and I went in swimming yesterday and we both know how to swim. One summer I went down to my aunt's place in Centralia. That summer my aunt, uncle, cousin and I went to Olequa, where my uncle's mother and father live. I had an awfully good time. Today the Red Cross meets at our house. I have my thrift card full of thrift stamps and I have a war saving stamp. My little sister has the same amount of stamps that I have. I have two cousins that expect to go to France any time. One is in Kansas. The other is in Camp Lewis.—Lahville Fountain, Fragaria, Wash.

**Uncle Is in France.**

Dear Aunt Nellie: My first two letters to the Corner were both printed so I will write again. I like to write to the Corner and I enjoy the cousins' letters very much. One of the cousins, Erma Sparber, wrote to me and I answered her letter, but she hasn't written again. My sister and I like to gather wild flowers. We get our hands full every night when we get the cow. We will be sorry when they are all gone. I am still knitting for the Red Cross and have finished my fourth wash cloth. One of my uncles is in France. He is in the 24th engineers and has been in France nearly three months. Maybe Erma will see my letter and answer it. —Elizabeth Cook, R. 2, Box. 46, Mansfield, Wash.

**Clara Will Come Again.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner and I hope it won't be the last. I go to Whitman school and am in the seventh grade. My sister and I haven't missed a day of school nor been late. There are 25 pupils in our school. We have 50 big chickens, 150 little chickens, three ducks, 14 pigs, eight cows, three calves, eight horses and one colt. My birthday is July 8 and I am 13. Have I a twin? If I have please let me know. I will write again if I may be a cousin. May I?—Clara Pohle, Route 5, Spokane, Wash. (Of course we all want you to come again, Clara. We will watch for your letter.—Aunt Nellie.)

**Carl Joins the Red Cross.**

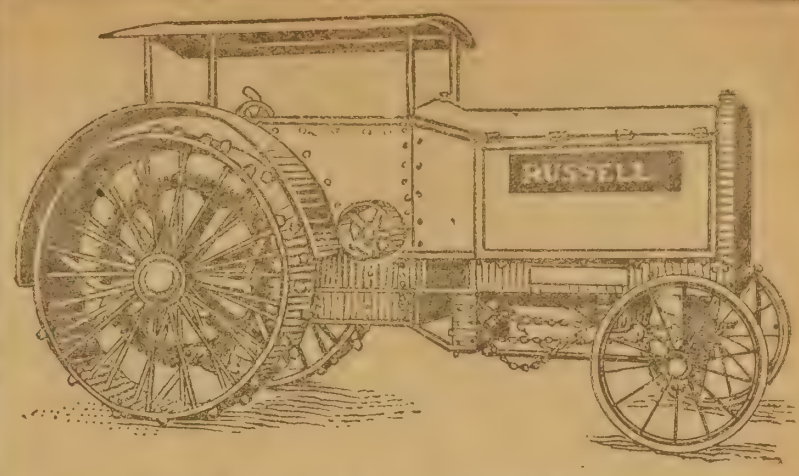
Dear Aunt Nellie: This is the second time I have written to the Corner. We have two cows and a horse. The cows' names are Pet and Blossom and the horse's name is Crib. We have two cats. Their names are Tommie and Minnie. We have 200 chicks and 60 old hens. I have a sister and her name is Marion. I joined the Red Cross. I have three thrift stamps and my sister has four. I am in the third grade at school. My teacher's name is Mrs. Parker. My birthday is May 4. I am 9 years old.—Carl Dahlstrom, Box 164, Elma, Wash.

**Jessie Is Eight Years Old.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 8 years old. I am in the second grade in school. My mother teaches me at home. I have a doll, 14 inches long, and her name is Mamie. My sisters' names are Florence, Evelyn and Marian and I have a sister married and she has three children. My birthday was March 30, 1918. Have I a twin?—Jessie Willey, R. F. D. 1, Ferndale, Wash.

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Aunt Nellie has received letters from the following cousins during the last week: Hazel Gleick, Phoebe Galbraith, Emma Mehus, Mary Dalan, Ludvig Peterson, Violet Eldred, Earl Joplin, Beatrice Smith, Sam Rich, Barbara Jenkins, Doris Jenkins, Ethel Harriman, Bessie Robinson, Myron McCormick, Lois Chace, Helen McBride, Waive Brooks, Elvira Anderson, Virginia Wilson, Lucile Weaver, Elfleda McNeilly, Gladys McNeilly, Naomi Ensley, Ethalee Magee, Zelma Parkinson, Lucile Turnley, Lois Turnley, Mae Turnley, Albert Ness, Pearl Chaney, Sterling Saunders, Catherine Harrier, Dema Boyd.


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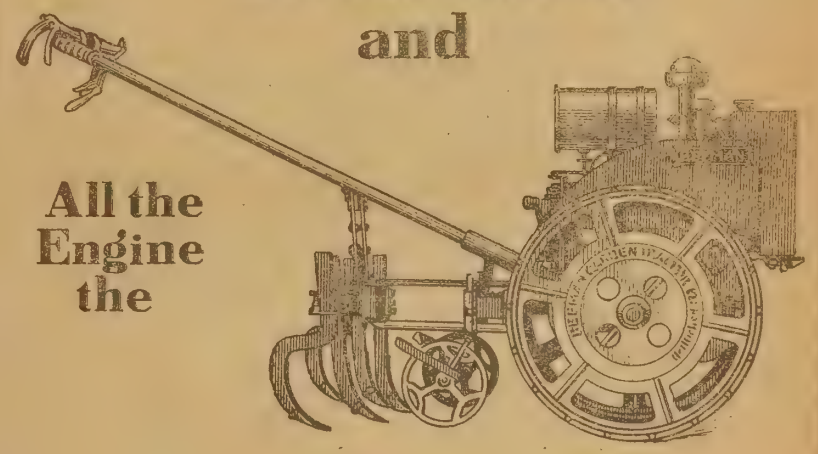
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# History of Liberty Loans Is Told

In connection with the announcement of the campaign for the sale of the bonds of the fourth Liberty loan the latter part of next month and the first part of October the treasury department at Washington, D. C., has issued an interesting statement of the history of the Liberty loan movement in America.

"The United States entered the war on April 6, 1917. Eighteen days later, by a practically unanimous vote, congress passed the Liberty loan bond bill," says the statement.

"On May 2 the first Liberty loan was announced, on May 14 the details were made public, and on the 15th the campaign began and closed one month later. The issue was for $2,000,000,000, the bonds bearing 3 1-2 per cent interest and running for 15-30 years. The bonds carried the conversion privilege, entitling the holder, if he chose, to convert them into bonds of a later issue bearing a higher rate of interest. Four and a half million subscribers from every section of the country, representing every condition, race and class of citizens, subscribed for more than $3,000,000,000 of the bonds. Only $2,000,000,000 was allotted.

"The outstanding features of the first Liberty loan were the promptness with which it was arranged and conducted, the patriotism of the newspapers, banks, corporations, organizations and people generally in working for its success, and the heavy oversubscription of more than 50 per cent. Another notable feature was that there was no interruption to the business of the country occasioned by the unprecedented demand upon its money resources.

"The second Liberty loan campaign opened on October 1, 1917, and closed on October 27. The bonds of this issue bear 4 per cent interest and run for 10-25 years. They carry the conversion privilege. It was announced that 50 per cent of the oversubscription would be taken. Nine million subscribers subscribed to $4,617,532,000 of the bonds, an oversubscription of 54 per cent. Only $3,808,766,150 of the bonds were allotted.

"This campaign was marked with the same enthusiastic support of the public as its predecessor. The labor and fraternal organizations were especially active in this campaign, and the women of the country did efficient organized work which greatly contributed to the success of the loan. The men in the army and navy worked for and subscribed largely to the loan.

"The third Liberty loan campaign opened on April 6, 1918, one year exactly after our entrance into the war, and closed on May 4. The bonds of this issue bear 4 1-4 per cent interest and run for 10 years, are not subject to redemption prior to maturity and carry no conversion privilege. The loan was announced for $3,000,000,000, but the right was reserved to accept all additional subscriptions. Seventeen million subscribers subscribed for $4,170,019,050 of the bonds, all of which was allotted.

"A great feature of this loan was its very wide distribution among the people and throughout the Union and the fact that the country districts promptly and heavily subscribed to the loan, in a great measure making up their quotas earlier than the cities. Secretary McAdoo pronounced this loan the soundest of national financing.

"A little over a year ago there were some 300,000 United States bondholders; there are now somewhere between 20,000,000 and 25,000,000. Awakened patriotism has made the American people a saving people, a bond-buying people. The effect of the Liberty loans on the national character, on our national life, on the individual citizen and our home life is immeasurable—of incalculable benefit. Not less incalculable is their effect on the destiny of the world as our ships plow the seas and our men and material in Europe beat back the Hun.

"The fourth Liberty loan campaign will begin Saturday, September 28, and close October 19. No American doubts its success; no good American will fail to contribute to its success. The blood of our men fallen in Europe calls to us; our answer must be and will be worthy of them and our country."


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## Clean Potato Cellars

Clean up the potato cellars now and don't wait until harvest, says the United States department of agriculture in pointing out that the potato crop promises to be a big one and that there is no excuse for allowing losses by rot in storage.

Among the suggestions the department makes the following: Get rid of every bit of vegetable matter in the storage cellar; sweep and brush until it is clean; then give a thorough dose of fungicide, either gas or spray, the quickest and easiest to apply being formaldehyde gas.

**Fungicides to Use.**

For each 1000 cubic feet of space use 10 ounces of formaldehyde and five of potassium permanganate. Pour the formalin over the permanganate in a deep container, and then leave the cellar immediately, because the gas is given off at once.

Should it be found that these chemicals are too expensive, the department recommends a bordeaux mixture of 5-5-50 strength. It may be applied with hand sprayer, pump or broom; it is effective when thoroughly used and it does not cost much.

It is expecting too much, says the department, to look for potatoes fit for market from a dirty, ill-ventilated cellar. Time, money and work spent in growing a crop are wasted if the potatoes are stored where dead potatoes are carrying over the organisms that cause rots.

## Reduce Winter Killing of Wheat.

An average of 10 per cent of the area annually sown to wheat is abandoned on account of winter kill. Much of this abandonment can be prevented by planting wheat in the right kind of soil, says the United States department of agriculture. Winter killing is usually a sign of poor drainage and the worst losses occur in soil that is low in humus or vegetable matter. On poorly drained soils wheat is often killed directly by the accumulation of water in low spots or is smothered by the formation of ice in winter. Wheat plants are also often heaved out of the ground by the alternate freezing and thawing in the fall or spring, this being due to the formation of ice in soils saturated in water. Sufficient moisture should be present for good growth, but all water in excess of this amount should be promptly removed by proper drainage. Better drainage results from the improved physical condition of the soil in which humus is plentiful.

## Cattle Men Want Aid.

W. B. Tagg, president of the National Live Stock exchange at Chicago, has appealed to Secretary McAdoo of the United States treasury, urging that the government take some steps to help finance the cattle business. Mr. Tagg says that as a general rule cattle growers can borrow money for six months' time only. He urges that congress make provision whereby longer term loans can be secured. He says that the present difficult conditions under which stock are raised and marketed render it especially important that some such action as this be taken.

## Should Gather Sumac.

The United States department of agriculture is now preparing a bulletin of advice to persons living in districts where wild sumac grows. It is said that there is opportunity for the development of a considerable sumac industry, owing to the fact that this plant is one of the sources of tannin, which is used in tanning and dyeing. Much of this product has come heretofore from Sicily, but war shipping conditions have practically stopped the trade, and the opportunity in this country therefore becomes more interesting.


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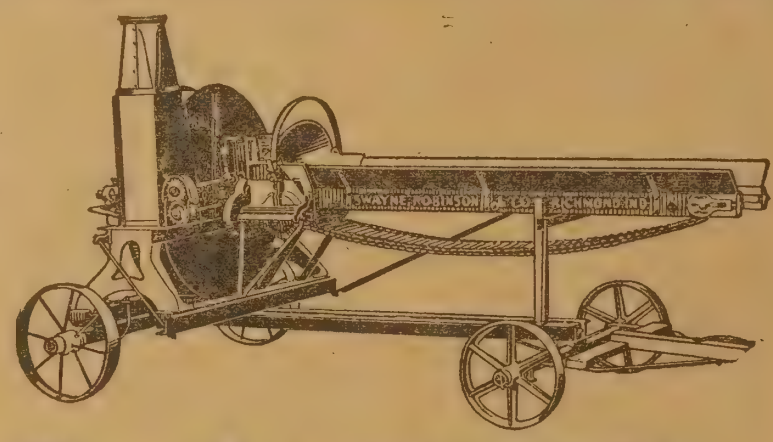
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# Fix Feed Price Regulations

## *Basic Prices and "Margins Over Basis" Are Announced*

Basic prices for various classes of mill feed at the mills in carload lots in bulk, as fixed by the "fair price" committee of the federal food administration, have been previously published in this paper covering the various milling points of the northwest. The question that these basic prices aroused in the minds of all farmers and dealers was what additional charges would be made for small purchases in sacks. The conference of northwestern representatives of the food administration at Boise, Idaho, last week prepared a schedule of what it terms "maximum permissible margins over basis," covering the sale of mill feeds. While it is understood that this schedule must be ratified by the national food administration at Washington, it is improbable that it will be altered in any vital feature by the national administration. The following are some of the important parts of the regulations:

A charge of $5.50 per ton shall be allowed over the bulk basic price to cover sacks, twine and packing.

On sales to retail feed dealers mills may charge an additional $2 per ton over the bulk, carload lot basis for feed sold in lots of a ton or over but less than a carload.

On sales to all feed dealers mills may charge an additional $3 over the bulk, carload lot basis for feed sold in lots of less than a ton.

Wholesalers and jobbers may charge a commission of 50 cents a ton in carload lots, $1 a ton in less than carloads but a ton or over, and $2 a ton for less than ton lots.

Retailers may charge consumers $1 a ton on carload lots over the cost to the retailer, $2 a ton on less than carload lots and a ton or more over the cost, and $3 a ton on less than ton lots over the cost.

The following is a complete list of these regulations as issued by the conference at Boise, including those referred to above:

Mill sale to any one, wheat mixed feeds, carload lots, bulk, mill, with or without screenings, cash or draft attached to bill of lading, base price.

Mill sale to any one, mixed carloads of feed and flour (containing at least 40 per cent of feeds or wheat flour substitutes), 50 cents per ton over base.

Mill sale to wholesale feed dealers, less than carloads and 2000 pounds or over, $1 per ton over base.

Mill sale to retail feed dealers, less than carloads and 2000 pounds or over, $2 per ton over base.

Mill sale to all feed dealers, less than one ton, $3 per ton over base.

Price of shorts and middlings, with or without screenings, 75 cents per ton over base. Bran with or without screenings, $1.25 per ton under base.

Trade acceptance discount 1-2 per cent or actual interest for time of credit where credit is extended.

In lieu of the $2 additional allowed on the sale of wheat mill feeds containing not less than 90 per cent soft winter wheat, a uniform advance by all mills of $1 is permitted in excess of the maximum fair price schedule for all wheat mill feeds.

A charge of $5.50 per ton for sacks, twine and packing shall be allowed over bulk price for all wheat mill feeds.

The base price shall be determined according to location of mill as established by the United States food administration grain corporation.

Mill sale to consumers at not more than $1 advance over above schedule of prices to retail dealers.

No licensee selling wheat mill feed as a broker shall charge more than a reasonable brokerage, not to exceed 25 cents per ton, and no licensee shall charge a brokerage on any wheat mill feed on which a brokerage has already been charged.

No licensee selling wheat mill feed as a commission agent for the sale of consigned wheat mill feeds, making sale, delivery and collection, shall charge more than a reasonable commission, not to exceed 50 cents per ton, and no licensee shall charge a commission on any wheat mill feed on which a commission has already been charged.

No licensee buying and selling wheat mill feeds as a wholesaler or jobber shall charge more than a reasonable advance over cost at warehouse door, and shall not exceed the following: In carload lots, 50 cents per ton; less than carload lots and 2000 pounds or over, $1 per ton; less than one ton, at the rate of $2 per ton.

Retailers buying and selling wheat mill feeds shall not charge more than a reasonable advance over cost, and shall not exceed the following:

Shall not charge more than $1 a ton to consumers in carload lots.

Less than carload lots and 2000 pounds or over, shall not charge more than $2 a ton over cost.

Less than one ton lots, shall not charge more than at the rate of $3 per ton above cost.

A reasonable charge may be added for delivery.

Interest permissible on credit sales.

It is understood that a resolution was adopted providing that any charge of buyers in excess of 7 cents for handling and marketing wheat would be unfair. Another resolution said to have been adopted by the conference calls the attention of the officials at Washington to the seriousness of stock feed shortage, due in some instances to drouth, and declares the situation in the northwest states "calls for the most sympathetic and intelligent consideration."

In line with this a resolution was adopted recommending that all wheat produced in zone 10 up to the capacity of local mills be milled in this zone in order that wheat mill feed may be made available for stock feeding.

Taking another step in the interests of the feeders of the northwest the conference is making an effort, it is said, to have the grain corporation designate sample grades of wheat impracticable for milling purposes to be used for animal feed purposes, upon a submitted sample, when released by the grain corporation or its representatives.

Like privilege is being sought concerning wheat at inaccessible points remote from transportation facilities.

Taking up again the interests of the wheat growers the conference is said to have decided on an effort to secure payment of a certain percentage of grain delivered by having a draft drawn direct on the grain corporation with bill of lading attached, this action to be taken after necessary rules and regulations have been formulated by the grain corporation to protect itself

The conference adopted a resolution declaring itself in full accord with the principle announced by Herbert Hoover that conservation of wheat be continued throughout the year and that a percentage of the surplus of the 1918 crop be retained for any possible shortage of the crop of 1919 and that fair amounts be retained in the territory where produced.

The conference was attended by R. F. Bicknell, food administrator for Idaho; Charles Hebberd, food administrator for Washington; W. B. Ayer, food administrator for Oregon; W. W. Armstrong, food administrator for Utah; M. H. Houser, second vice president food administration grain corporation, with headquarters at Portland; J. E. McAlpine of Pocatello, agent for the grain corporation; J. K. Smith, Spokane, a member of Mr. Hebberd's staff; W. A. Johnson of Portland, zone secretary and counsel to zone 10, and Edward G. Rosenheim, a member of Mr. Bicknell's staff.

### Conserve Moisture.

Weeds use up moisture. When they grow in a crop they compete with the crop for the moisture, and weeds usually keep on growing after the crop is cut, thus using moisture that should be saved up for next year's crop.

### First Thresher Destroyed.

The first destruction of a threshing machine reported this season was that of Herman Madsens, which was blown up and burned near Colfax last week. No grain was destroyed.

### Apple Crop Valuable.

Rufus Woods of Wenatchee is authority for the statement that the apple crop in the Wenatchee valley this year will have a value of $7,000,000. He predicts a crop of 7300 cars.


HIDES WOOL FUR




RUBBER METAL SACKS

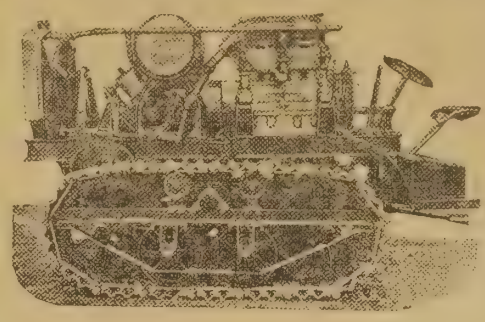
We pay full market value, correct weight and assortment, prompt returns. Write for prices. We want your business.

PACIFIC HIDE & FUR DEPOT

Joseph Thiebes and C. T. Symmes,
1101-09 Railroad Ave., Spokane, Wash.



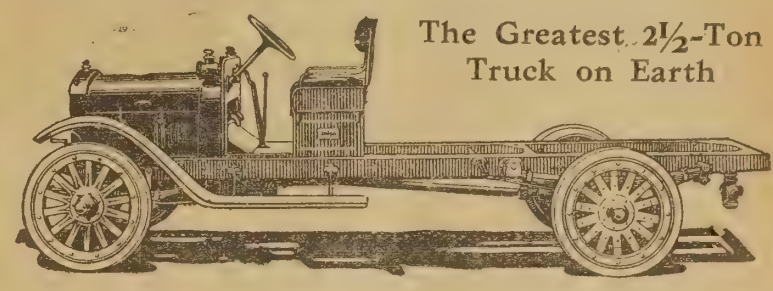
# Neverslip Tractors



will be one of the interesting Interstate fair exhibits. **Don't miss it.** Here is the tracklayer of **practical strength, medium weight** and **moderate price** for which you have been looking. See it at the fair.

# Jumbo Trucks

The Greatest 2½-Ton Truck on Earth



The Jumbo will surprise you, for its evident power and strength, due to oversize parts throughout.

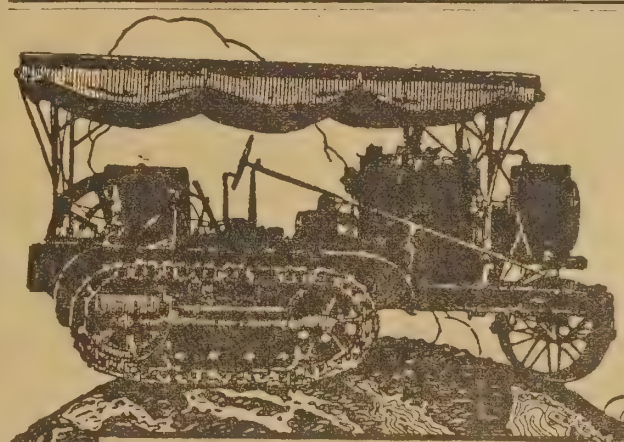
## Have a Demonstration While at the Fair

Mitchell
LEWIS & STAVER CO.

S120-122 Lincoln St.
Spokane, Wash.

Distributors
for
Mitchell and Jordan Automobiles, Monarch Tractors and Jumbo Trucks.





There's but ONE Caterpillar Holt builds it

THOUSANDS of owners in thirty countries have nothing but praise for the wonderful Caterpillar Tractor—nothing but praise for its design and for the sound mechanical construction of it.

The famous Caterpillar track; plus the steady, powerful, economical Caterpillar motor (built entirely in the Holt shops), plus the best of materials, workmanship and inspection throughout—these have made the Caterpillar the foremost tractor of the world today. Other tractors, lacking one or more of these elements, cannot achieve the same success.

There's only one Caterpillar—Holt builds it. Don't say Caterpillar unless you refer to this tractor.

We will gladly send details on all models

The Holt Manufacturing Co.
SPOKANE.

CATERPILLAR
Reg. U.S. Pat. Off.

We Will Exhibit at Spokane Interstate Fair, Sept. 2-7. And Demonstrate Our "45" and "75" at Portland Tractor Demonstration, Sept. 5, 6, 7.

## Loving Cup

### To Be Given for Shorthorn Bull



This picture shows the silver loving cup to be given by The Washington Farmer for the champion Shorthorn bull exhibited at the Washington State fair at Yakima September 16-21.

## More Sugar Is Allowed

State Food Administrator Charles Hebberd has issued a revised regulation concerning the use of sugar in this state following consultation with the national food administration on the subject. While no increased amounts are allowed for common table uses more will be permitted for canning and preserving, according to the regulations just issued. The following is a schedule of amounts that can be secured for canning purposes, based on the number of persons in the family:

50 pounds for 1, 2 or 3 people.
75 pounds for 4, 5 or 6 people.
100 pounds for 7, 8 or 9 people.
100 pounds for 10 or more, plus five pounds for each additional member of family above nine.

The following are instructions sent by Administrator Hebberd to the county food administrators throughout Washington:

"Sugar granted on the foregoing basis must be in amounts not greater than 25 pounds at any one purchase. In other words, first purchase permits for canning will allow the buyer not more than 25 pounds. On repurchase permits the purchaser must certify the number in the family, thus qualifying for subsequent purchases if there be four or more in the family. Only one repurchase permit will be granted purchasers where there are not more than three in the family.

"Hereafter there will be no definite restrictions in the use of sugar in making jams, jellies or preserves. You are urged, however, to advise as strongly as possible that every effort be made to conserve sugar to the utmost. The new plan of distribution does not mean that we have more sugar in the state for canning. It is only a different plan for equitable distribution of our limited allotment of sugar.

"You are advised and you should advise applicants for sugar permits that 25 pounds of sugar is sufficient for canning 100 quarts of fruit. Families should be urged to put up fruit juices and make jellies later when sugar is available.

"In cases, however, where it is shown that fruit or vegetables will otherwise spoil a special permit to purchase sugar in excess of amounts named in the above table may be granted in the discretion of the county food administrator or his local representative. All such cases must be carefully investigated, however, and reported to this office after certificate and permit for such excess use has been granted."

## Will It Pay Growers?

(Continued from page three.)

We are making these inquiries in a desire to aid, to the full extent of our ability, the prompt, unhampered buying of wheat by the government for its armies and navy, for the armies and navies of our allies, and for the civilian populations of those allies, as well as the securing by the growers of the full measure of prices which congress and the president intended for them when they enacted the food control law under which you are operating.

Mr. Houser's reply follows:

In response to yours of the 20th, before consigning wheat to the food administration grain corporation at basic terminals it would be wise, in the exercise of ordinary precaution, for the shipper to ascertain in advance the condition of the storage facilities at the designated terminal points, thereby eliminating the expense and delay of demurrage caused by congestion of terminal facilities from conditions over which we have no control.

Presume you are aware that at Seattle, Tacoma, Portland and Astoria there are public docks and elevator companies as well as private ones, also at three out of these four terminal points there are storage and dock facilities municipally owned.

That is just the information which The Farmer is trying to secure for the wheat grower who desires to ship direct to the United States grain buying corporation—"to ascertain in advance the condition of the storage facilities at the designated terminal points, thereby eliminating the expense and delay of demurrage caused by congestion of terminal facilities." It is that information which the grain producers of the three states of Washington, Oregon and Idaho have the right to ask of Mr. Houser's office, and it is the duty of Mr. Houser, as a high officer of the federal government, to supply it.

The grain producer also has the right of asking and expecting from the director of the grain buying corporation at Portland information as to all the other intermediate charges he may be called upon to pay in shipping his wheat directly to the grain buying corporation. It is only in this way that the wheat shipper can avail himself of the protection offered by the United States food administration against what he may regard as unfair charges made by privately owned combinations of grain buyers and warehouse men.

Mr. Houser's office of the grain buying corporation at Portland evidently has given explicit and needful information through its nine bulletins published for the information of the millers, grain buyers and warehouse men. It is hoped that Mr. Houser's office in Portland will now issue as explicit information to the wheat grower who desires to take advantage of the protection offered by the United States grain buying corporation in its provision giving him the privilege of shipping directly to the government agencies at Seattle, Tacoma, Astoria or Portland.

Unless the grain buying corporation can assure the wheat grower of terminal facilities or tell him when such terminal facilities are available the grower will be deprived of the protection which the shipping-direct provision is supposed to confer.

From the above correspondence it is evident that Mr. Houser has not yet furnished the important information which can enable the wheat grower to judge of the advisability of either marketing his grain through the customary channels or shipping directly to the grain buying corporation.

The foregoing developments and complications further emphasize the urgent need of the appointment by President Wilson of a national food production administrator who would serve in a big, constructive way the vital interests of the producers as Mr. Hoover is serving the interests of the consumers.

## Coming Events.

**Fairs, Shows, Exhibits.**

September 2-7—Spokane Interstate fair, Spokane, Wash.
September 16-21—Washington state fair, Yakima, Wash.
September 19-21—Roundup, Pendleton, Ore.
October 1-6—Western Washington fair, Puyallup, Wash.
November 7-13—Northwest live stock show, Lewiston, Idaho.

## All Should Adopt This Motto.

The League to Enforce Peace has adopted a new motto, which is: "Win the Next War Now." The object of the league is to win the next war by so organizing the world that there will be no next war.

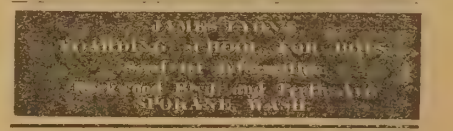

AT THE STATE FAIRS



AT SPOKANE, AT YAKIMA, AT SALEM AND AT BOISE.

Be sure to see the Aberdeen-Angus cattle. There you will have an opportunity to inspect the choicest representatives of the grand champion beef breed. These show animals are samples of the best American herds. Their produce has won at the world's greatest live stock show, the International Exposition, at Chicago, 15 out of 16 fat carcass grand championships over all breeds, as well as 13 out of 16 fat carlot grand championships, 11 out of 14 steer herd grand championships, and 10 out of 16 single steer grand championships. Calves of the breed have been demonstrating their baby beef making superiority at shows and markets from Canada to Texas. The bulls of the breed have been getting market-topping steers at all leading markets, demonstrating their place in the winning of the war.

"Ask the Man Who Owns Some."
AMERICAN ABERDEEN-ANGUS BREEDERS' ASSOCIATION,
817 NT Exchange Ave., Chicago.



In writing advertisers, be sure to say that you saw their advertisement in this paper.

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STOCKTON, CAL. P. O. Box 679. | JAMESPORT, Missouri. | LOS ANGELES, CAL. P. O. Box 1117.
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H. B. THORNBERRY
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REGISTERED AND PEDIGREED JACKS, JENNETS, PERCHERON AND SHIRE STALLIONS AND GAITED KENTUCKY SADDLE HORSES
Largest Importer in the United States



ECONOMY STOCK POWDER



For Hogs, Cattle, Horses and Sheep

Economy Stock Powders are not a stock food, but a medicine; not a panacea, but a remedy; not a medicated salts, but a purely medicinal compound, composed of the very best and choicest of herbs, roots and sodas; not a cure-all, but a genuine conditioner, composed of ten different ingredients, scientically compounded. No oil meal, no bran, no salt, no mill sweepings, no cheap filler, no poisonous or harmful drugs or stimulants, such as Arsenic and Black Antimony, that will create a false appetite. Economy Stock Powders are as carefully compounded as a doctor's prescription in a drug store.

It will keep your hogs free from worms, build up the constitution. It will also pay you in more pounds of fat out of the grain fed. It's like writing insurance on your herd against disease, as it purifies the blood, sweetens the stomach, expels and destroys all germs, worms and parasites, and it keeps your stock in a healthy condition. It stands in a class by itself—an honest article, which has been proved by the business that we have built up.

OVER 200,000 FARMERS AND STOCKMEN ARE FEEDING ECONOMY REGULARLY.

To the Dairyman

Economy Stock Powders will give you an increased flow of milk, and will keep your dairy cows in better flesh. The reason for this is that the stomach is sweet, the digestive organs are in a healthy condition, the fever suppressed, and a good pond of digestive fluid is made, so that the food consumed is thoroughly saturated, thereby giving the best results from the food.

FREE 36-page book and a liberal supply of Economy Stock Powder to make a thorough test—free. The book contains valuable information on live stock diseases, such as Lumbercoid, Lung Worm, Thorn-headed or Bodkin Worm, Whip Worm, Pin Worm, Kidney Worm, Typhoid Pneumonia, Spleen Fever, Swine Plague, Indigestion, Coughing, Thumps, Paralysis, White Scours, Cholera, etc. You will also find valuable information on feeding.

Economy Hog and Cattle Powder Company
1016-1017 Hearst Bldg., San Francisco, Cal.

Send me your booklet, "Economy-ize Your Farm," also a free sample of Economy Stock Powder to try out on my stock.

Name ..... R. F. D. .....
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I have.....hogs .....sheep .....cattle .....horses.

# News for Breeders

Willis M. Fisher of Colbert, Wash., reports that he has a gilt granddaughter of the grand champion Duroc sow at the Spokane interstate fair in 1917, which farrowed 17 pigs August 12, all of which are living.

Fred Mespelt of Scio, Ore., has purchased Gold Mine Third from E. H. Hollaway of Albany, Ore. The bull is now nine years old, straight and strong of back. Mr. Hollaway has a fine lot of calves by him and will exhibit this fall at the Oregon state fair.

Both hogs and cattle reached the highest price on the Portland market Monday, August 19, that has ever been paid in Portland or the Pacific northwest. A clear jump of 50 cents put hogs at $20, while steers rose over previous prices 25 cents, to $13.25. Lambs went to $15, which is a new record for this time of the year.

Jacob Fox of Silverton, Ore., recently sold four grade Jersey cows for $125 each. While Mr. Fox knows that not many dairy cows have sold for that price this year and while these were by his great herd sire, Foxhall's Fern Lad, yet he points to the fact to controvert the idea that good dairy cows are not in demand. Mr. Fox says it is possible, even with the high cost of feed, to have a balance on the right side at the end of every month. He now has seven registered Jerseys on official test, all making good records.

Helma of Ashwood, a Jersey heifer owned by McArthur & Staff of Rickreall, Ore., recently completed a year's official test, begun at 19 months old. She produced 365.5 pounds of butter fat, which is an excellent record for that age. If reported in terms of 85 per cent butter, it would be 425.2 pounds, or 456.9 pounds of 80 per cent butter.

Congressman McArthur is a strong believer in reporting records only in terms of fat, and a little study of this record will show how much "camouflage," as Mr. McArthur calls it, is involved in reporting records in butter, instead of what the cow actually produces—butter fat. This heifer is a daughter of their great herd sire Holger.

The quarterly publication Shorthorns in America, has compiled figures of 137 sales of bulls during 1917, at which 2254 bulls were sold, for a total of $746,619, an average of $331.24. At 133 of these sales females were sold, of which there were 4471, and they brought a total of $2,073,746, an average of $463.82. Highest average for bulls was at Anoka Farms, Waukesha, Wis., when 14 were sold at an average of $2607, highest average for females was at the Carpenter and Ross sale, Mansfield, Ohio, at which 81 averaged $1288. There were a few sensational sales, but in general sales were made up of fair prices for good animals throughout. H. A.

## Belma Triune.



Herewith is a picture of the beautiful Ayrshire cow, Belma Triune snapped by the Farmer camera, as she appears at pasture in her present home, "Elbow Dairy," of J. R. Maben, at the bend of the Smith river, near Reedsport, Ore. While Belma would not pose, her wedge shape, depth of body, straight top line, clean throat, good udder and excellent breed type are all apparent. While purchased from Walter Domes, she is of Clise breeding. Her sire is Willomoor Sentinel 16th, by Willomoor Sentinel, and he out of Garranton Dora 2d, with an official record of 21,025 pounds of milk and 804.7 pounds of fat. His dam is Willowmoor Coroline B., that with first calf produced 6011 pounds of milk testing 4.23 per cent.

Mr. Maben has secured some of the best breeding in the northwest, among the 36 head he now owns. A majority of them are of Clise breeding, including Willowmoor, Happy Give, Willowmoor Frances and Willowmoor June, all prize winners at the Panama Pacific stock show. Seven heifers and a fine young bull came from the Honeyman herd and several from the Domes herd. The young bull from the Honeyman herd is out of a dam now on official test at 14 years old. On her fifth month she has produced over 6000 pounds of milk and seemed sure of decidedly more than 10,000 pounds for the year.

Mr. Maben selected an Ayrshire herd because he likes the breed. He has started right, by selecting good stock. He is in a great little dairy region—the coast region of Douglas county, Oregon, and it is safe to predict he will put the Ayrshire "on the map."

## Lincoln and Cotswold Sheep.

William Riddell & Son, Monmouth, Ore., breeders of Lincoln and Cotswold sheep and Angora goats, will show both breeds of sheep at the Oregon state fair this fall and will fill all classes. Three of their Lincoln yearling rams sheared 30 pounds each, and the flock shears a heavy average. Their mohair has all been sold at 60 cents a pound. They have not decided about showing Angoras. H. A.

## May Have to Use Wood.

The United States fuel administration has suggested to state fuel administrators that in those states where a plentiful supply of wood is available the sale, shipment, and distribution of coal for domestic purposes to persons residing outside of cities or incorporated towns may be prohibited, except under special permit.

State fuel administrators are advised that if they find as a result of prohibiting the use of coal outside of cities excessive prices are demanded by wood dealers, they should be dealt with under the authority conferred by the Lever act.

The authority for prohibiting the sale, shipment, and distribution of coal to domestic consumers, it is pointed out, is contained in the order appointing state fuel administrators to office.

**You Can Count On It.**

The right thing at the right time in the right way can be depended upon to bring the right result.

# Breeders' Department

## SHORTHORN CATTLE

**Herds Bulls**

Imported Donne Radiance No. 609412

and

Gainford Perfection No. 442173.

**Hercules Shorthorns**

We can supply you with choice, well grown bulls and females of breeding age. Your inspection of our herd is invited. Visitors always welcome.

**Day & Rothrock Company**

205 Exchange Bank Bldg. Spokane, Wash.

## HOLSTEIN CATTLE

### 365-DAY HOLSTEINS

24,667 lbs. milk—1026 lbs. butter—is the S. O. advance registry, yearly; record of the dam of the yearling bull we are offering for sale. Fine individual. Good breeding. Ready for service.

THE HERD WITH YEARLY RECORDS.

**WESTERNWOLD RANCH, Prineville, Ore.**

### HOLSTEINS

Steno Farm is now offering a few high class reg. Holstein bull calves. Out of ARO cows and sired by one of the finest bulls in the west. Priced right.

**STENO FARM, C. F. Williams, Mgr.**
Mead, Wash., R. No. 2.

### For Sale—Pure Bred

High grade Holstein calves, yearlings and two-year-old, both male and female. None better in the northwest. Come and see them or write

**THE INTERMOUNTAIN INSTITUTE.**
R. F. D. I, WEISER, IDAHO.

### Registered Holstein Heifer

for sale; also May and June farrowed O. I. C. pigs, either sex, from matured sows, with pedigree; by a son from a grand champion sow. Also 18-month-old sows to farrow second litter this fall.

**E. C. SCHUMACHER, R. 1. Granger, Wash.**

### Registered Holsteins

Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.

**H. R. BOOMER, New Plymouth, Idaho.**

### HOLSTEINS

Well-Bred young bulls for sale.

**THOS. CARMICHAEL, Gaston, Ore.**

### A Registered Shorthorn On Every Farm

If you will put in a registered Shorthorn female and bull and retain the female produce you will soon have a pure bred herd at small cost. Then sell the surplus from your grade herd. It is good business. THE SHORTHORN IS THE BREED FOR YOU. For information or assistance address

**American Shorthorn Breeders' Association**
13 Dexter Park Ave., Chicago, Ill.

### MILKING SHORTHORNS

with world records behind them for milk production.

**A. R. O. HOLSTEINS**

A son of the King of the Pontiacs at head of herd.

Can make special prices on young bulls of each breed.

**A. V. Bradrick & Son**
Palouse, Wash.

**SHORTHORN COWS.**

Ten high class Shorthorn cows, calf at foot or heavy in calf. Come and look them over or write for particulars.

**E. H. HALLOWAY, Albany, Ore.**

**REGISTERED SHORTHORN COWS.**

Young bulls and heifers, sired by Scotch bulls; liberal terms.

**CALDWELL CATTLE CO., Caldwell, Idaho.**

## AYRSHIRE CATTLE

**EDGEWATER FARM.**

Only one bull left, calved Dec. 14, 1917, with high producing dam; grand dam and great grand dam both world's record cows.

**ELBERT M. CHANDLER, Burbank, Wash.**

**In writing advertisers, be sure to say that you saw their advertisement in this paper.**

### TEN GOOD HOLSTEIN COWS

All of excellent breeding. Three extra heavy producers, and all good. Seven safely in calf to Tobie DeKol 2d's Johanna Duke; a 75 per cent brother to Lady Tobie DeKol, once world's record senior 3-year-old, and sire of Jantilna Colantha Johanna, 22.5 pounds butter in seven days as junior 2-year-old, besides other A. R. O. heifers of fine type. Come and see them or write for full particulars and pedigrees. Will be sold below their value together or singly.

**HERMAN KEUNZI, Silverton, Ore.**

## HEREFORD CATTLE

### Highland Stock Farm

offers for sale Hereford bulls, 1 or 2 years old. One or a carload.

**PLATT BROS. Genesee, Idaho.**

## SHEEP

### Romneys, Lincoln, Corriedale

AND HAMPSHIRE EWES AND RAMS.

All pure bred, not registered. Have especially fine lot Hampshire ewe lambs, yearlings and three-year-olds. Any size lot. Write me on any kind of sheep deal.

**H. STANLEY COFFIN, Yakima, Wash.**

### SHEEP FOR SALE

Registered Shropshire, Oxford, Lincoln, Hampshire and Cotswold rams; 50 head registered Shropshire ewes; 3000 stock ewes, Lincoln, Cotswold and Shropshire breeds; 500 ewes, lambs, Cotswold and Lincoln ram lambs. Write for prices.

**EARL WOOD, Silverton, Ore.**

## OXFORD SHEEP

### Oxford Ram Lambs

15 yearling rams, 40 ram lambs, 30 ewe lambs. Excellent stock and priced to sell.

EXPECT TO EXHIBIT AT INTERSTATE FAIR.

**FISK FARM, Spring Valley, Wash.**

### Oxford Down Sheep

I have 20 rams 1 and 2 years old and 10 ewes one year and over for sale. All stock registered and in good condition.

**C. P. KIZER, Harrisburg, Ore.**

## SHROPSHIRE SHEEP

**SHROPSHIRE SHEEP.**
SHORTHORN CATTLE.

Choice yearling and lamb rams. A few high class young bulls.

**FELZER BROS., Tangent, Ore.**

## JERSEY CATTLE

### ROSE LAWN JERSEY FARM

Six excellent heifers ranging in age from 2 years to five months. Have a royal young bull of straight Island blood, can go with these for foundation herd. Special price for herd.

Also two register of merit cows of American breeding. Write for pedigree and prices.

**S. H. KAYLER, Twin Falls, Idaho.**

## DUROC-JERSEY SWINE

### Ioka Farm Durocs

One excellent boar at breeding age. Bred gilts and weanling pigs of either sex.

**DOERFLER BROS. Silverton, Oregon.**
A. N. DOERFLER, Mgr.

**FOUR DUROC GILTS BRED TO FARROW this fall, also spring pigs, on hand.**
E. E. PRICE, CABINET, IDAHO, OR
**JAMES N. PRICE, Yakima, Wash.**

### QUALITY DUROCS

A few spring boars and gilts.
Meet us at the Spokane Interstate Fair.
**WILLIS M. FISHER, Colbert, Wash.**

## POLAND CHINA SWINE

### Big Type Poland Chinas

Peter Mouw and John B. Lawson strains. Young boars and bred or open gilts. Good individuals.

**CLIFFORD RIGGS, Touchet, Wash.**

## BERKSHIRE SWINE

### Berkshire Hogs for Sale

Have a number of sows, 18 months old; will farrow second litter this fall. Also young gilts and boars of all ages; all from prize winners. Write for prices.

**EARL WOOD, Silverton, Oregon.**

## CHESTER WHITE SWINE

**REGISTERED O. I. C. SWINE**

Choice young pigs, either sex. Write me. Ringgold Farm, J. H. West, Prop., Centralia, Wash., R. I. Box. 157.

## GUERNSEY CATTLE

### Looney Farm Guernseys

Langwater, Glenwood and other best strains have won more show honors than any other herd in the west. A few very choice young bulls from heavy producing dams. Write for particulars to

**DAVID H. LOONEY, Jefferson, Ore.**

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, Aug. 26.—The corn market, which early was nine cents under the high point established last Wednesday, closed with a net gain of 2 1-8 cents today. The close was strong with October at $1.62 1-4.

Information that the government purchased 800,000 bushels of oats here last Saturday explained the stubbornness of that market at the time, and coupled with the corn strength today sent the market up for a net gain of 3-4@1c. October, closing at 83 1-4c, made the maximum gain. Standard grade sold at the September price, and No. 3 white 1c under it.

In the provisions pit pork declined 15@20c for lack of demand, but lard and ribs, influenced by the corn strength, were bid up 12½@17½c largely because offerings were light. The week's exports of lard and meats were materially in excess of last year.

### Cash Quotations.

CHICAGO, Aug. 26.—Corn—No. 2 yellow, $1.73@1.74; No. 3 yellow, $1.68 1.70½; No. 4. yellow, $1.62@1.65. Oats—No. 2 white, 71@71½c; No. 3 white, 69 3-4@70 3-4c; standard, 70½ @71½c. Rye—No. 2, $1.69@1.69½. Barley, $1@1.10. Timothy, $6@8.75. Clover, nominal. Pork, nominal. Lard, $26.77. Ribs, $24@25.

### Chicago Futures.

CHICAGO, Aug. 26.—

| Corn— | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| Sept. | 1.57¾ | 1.60⅝ | 1.57⅜ | 1.60⅝ |
| Oct. | 1.59½ | 1.62½ | 1.59½ | 1.62¼ |
| Oats— | | | | |
| Sept. | .71½ | .71⅝ | .70⅜ | .71⅝ |
| Oct. | .72⅜ | .73⅜ | .72 | .73¼ |
| Pork— | | | | |
| Sept. | | 43.55 | 43.25 | 43.55 |
| Oct. | | 43.95 | 43.65 | 43.80 |
| Lard— | | | | |
| Sept. | | 26.87 | 26.67 | 26.87 |
| Oct. | | 26.95 | 26.82 | 26.95 |
| Ribs— | | | | |
| Sept. | 24.60 | 24.80 | 24.60 | 24.80 |
| Oct. | | 25.02 | 24.82 | 25.02 |

### Pacific Northwest Grain.

PORTLAND, Ore., Aug. 26.—Grain, August delivery: Oats, No. 2 white, $60 bid. Barley, standard feed, $54 bid. Barley, standard "A," $55 bid. Oats, No. 3, $53.50 bid; oats, clipped, $53.50 bid. Corn, yellow, $74.50 bid. Mixed, $73.50 bid. Eastern oats and corn in bulk: Oats, No. 3 white, $53 bid; oats, 38-pound clipped white, $54 bid; corn, No. 3 yellow, $73 bid. Corn, No. 3 mixed, $74 bid.

Car receipts: Wheat, 44; flour, 12; oats, 1; hay, 18.

SEATTLE, Aug. 26.—Yesterday's car receipts: Wheat, 37; oats, 2; flour, 2; barley, 1; hay, 15.

TACOMA, Aug. 26.—Grain receipts: Wheat, 10; corn, 1; hay, 3.

### Minneapolis Grain.

MINNEAPOLIS, Aug. 26.—Wheat—Receipts, 816 cars, compared with 496 cars a year ago. Cash No. 1 northern old, $2.22½. Corn, No. 3 yellow, $1.73 @1.76. Oats, No. 3 white, 67 1-4@68c. Flax, $4.25½@4.27½. Flour, unchanged; shipments, 73,136 barrels. Barley, 85c@$1.03. Rye, $1.63@1.65. Bran, $29.31.

## Live Stock Quotations.

### At Omaha.

OMAHA, Neb., Aug. 26.—Hogs—Receipts 3300; higher; heavy, $18.20@18.75; mixed, $18.30@18.60; light, $18.35@19.30; pigs, $16@18; bulk, $18.30@18.60.

Cattle—Receipts 15,700; lower; native steers, $11.50@17.50; cows and heifers, $7.50@16.10; western steers, $16@17.50; Texas steers, $9@16; cows and heifers, $7 all; canners, $6@7; stockers and feeders, $6.50@12.50; calves, $10@13.75; bulls, stags, etc., $6.50@16.

Sheep—Receipts 27,500; steady; wethers, $11.50@13; ewes, $10@16; lambs, $16.50@17.50; yearlings, $16.25 @17.25.

### At Chicago.

CHICAGO, Aug. 26.—(United States Bureau of Markets.)—Hogs—Closed weak; receipts 30,000. Good hogs, steady to strong; bulk, $17.85@19.80; butchers, $19@19.85; packing, $17.75 @18.85; light hogs, $19.10@19.90; pigs, $18@18.50; rough, $17.10@17.75.

Cattle—Closed easy; receipts 21,000; market for butchers and good steers, steady; western cattle, slow to lower; top western steers, $17.25@18.

Sheep—Receipts 25,000; market generally steady; lambs, choice and prime, $17.65@18.50; medium and good, $16.25@17.65; culls, $10@14; feeders, $16.50@17.75; ewes, choice and prime, $12.50@13; medium and good, $11@12.50; breeding, $12.50@18.25.

### At Portland.

PORTLAND, Ore., Aug. 26.—Cattle—Receipts 2323; market strong. Prime steers $12,50@13.50; good to choice, $11@12; medium to good, $9.75 @11; fair to medium, $8.75@9.75; common to fair, $5.75@8.25; choice cows and heifers, $8.35@9.25; medium to good, $6.25@7.75; fair to medium, $5.25@6.25; canners, $3@5; bulls, $5@7; calves, $9@12; stockers and feeders, $6@8.

Hogs—Receipts 1288; market firm. Prime mixed, $19.50@20; medium, $19 @19.50; rough heavy, $17.50@18.50; pigs, $16.75@18; bulk, $19.25@19.50.

Sheep—Receipts 1195; market steady. Prime lambs, $14@15; fair to medium, $11@13; yearlings, $10@11.75 wethers, $9@10.75; ewes, $7@9.

## Spokane Stock Yards.

SPOKANE, Aug. 26.—The following is a digest of the business at the Spokane union stockyards for the week just ended:

| | Cattle | Calves | Hogs | Sheep |
|---|---|---|---|---|
| Monday, Aug. 26... | 297 | 82 | 337 | 22 |
| Saturday, Aug. 24.. | 35 | 1 | 171 | .... |
| Friday, Aug. 23.... | 229 | 65 | 94 | .... |
| Thursday, Aug. 22.. | 199 | 71 | 40 | 165 |
| Wednesday, Aug. 21 | 399 | 12 | 20 | 1136 |
| Tuesday, Aug. 20.. | 4 | 6 | 13 | 1270 |
| Week ago ..... | 61 | 11 | 288 | 2154 |
| Year ago ..... | 69 | .. | 76 | .... |
| Two years ago .... | 56 | 10 | .. | .... |

A very good over Sunday run of cattle in the pens this morning. The market opened with brisk bidding for the good to better grades and was active throughout the day. Twenty-five cents was added to the middle grades of steers, other grades remaining steady to strong at Saturday's close. The top in the steer line today was $12.00 paid for a small bunch, $10.50 and $11.00 was paid for a load of just good killers. The bulk of the trading was made at $7.00 to $9.00 for the common to medium grades. A few real choice cows were among the day's offerings at $9.00, the medium to good butchers going at $6.50 to $8.00 and the common kinds at $5.50 to $6.50. Canners were steady at $3.50 to $4.75. Twenty-five cents was added to the price of heavy bologna bulls, the best going at $6.60 to $7.25 and the light and poor quality at $5.00 to $6.50. Calves were steady at $10.00 for light vealers, $7.50 to $8.50 for the fair kinds down to $6.25 for the fair kinds down to $6.25 for the heavier sorts.

General cattle range:

| | |
|---|---|
| Prime steers | $12.50@13.50 |
| Good to choice steers | 11.25@12.25 |
| Medium to good steers | 10.00@11.00 |
| Fair to medium steers | 8.75@ 9.75 |
| Common to fair steers | 5.75@ 8.25 |
| Choice cows and heifers | 8.50@ 9.50 |
| Medium to good cows and heifers | 6.50@ 8.00 |
| Common to medium cows and heifers | 5.25@ 6.25 |
| Canners | 3.00@ 5.00 |
| Calves | 7.00@10.00 |
| Stockers and feeders | 6.00@ 8.00 |

A few more hogs than usual arrived over Sunday, the bulk being stockers and feeders. The quality of the packing hogs was only fair. The market was active from the start, the best going to the packers at $20, breaking all previous records for this market. The stocker and feeder market was active at prices from $17 for lightweights to $19 for heavy, good quality sort. General hog market was steady to strong at following closing prices:

General hog range:

| | |
|---|---|
| Prime mixed | $19.50@20.00 |
| Medium mixed | 19.00@19.50 |
| Rough heavy | 17.75@18.50 |
| Pigs | 18.25@19.00 |
| Stockers and feeders | 17.00@19.00 |

While there were only a handfull of sheep on the market this morning a decided decline was evident, due to weakness on other markets. Prime lambs dropped 50 cents to $15.00, prime yearlings to $11.00, weathers to $10.25 and ewes to $10.00.

The market closed at the following:

| | |
|---|---|
| Prime lambs | $14.00 to $15.00 |
| Fair to medium lambs | 11.50 to 12.50 |
| Prime yearlings | 10.00 to 11.00 |
| Prime wethers | 9.50 to 10.25 |
| Best mutton ewes | 8.00 to 10.00 |

Today's shippers.

Cattle—J. P. Helphrey, Curlew, Wash., 1 load; J. P. Flood, Republic, Wash., 1 load; J. Walker, Chewelah, Wash, 1 load; Wilson Produce Co., Colville, Wash., 1 load; E. Bain, Curlew, Wash., 1 load; J. R. Henshaw, Rocklyn, Wash., 2 loads; G. Mihills, Sawyer, Idaho., 1 load.

Hogs—B. C. Baird, Neppel, Wash., 1 load; J. P. Helphrey, Curlew, Wash., 1 load; E. M. Griff, Scott, Wash., 1 load.

Mixed loads—B. C. Baird, Neppel, Wash., 1 load cattle, hogs, calves; C. W. Betchell, Harrington, Wash., 1 load cattle, hogs, calves; A. J. Reed, Lauria, Wash., 1 load cattle, hogs, calves; L. R. Phillips, Molson, Wash., 1 load cattle, hogs, calves; A. P. Mundt, Kamiah, Idaho, 1 load cattle, hogs, calves; Garfield Meat Co., Granite, Idaho, 1 load cattle and sheep.

## Spokane Market.

### Wholesale Meats.

**Beef**—Beef steers, 13@19½c lb; cow beef, 11@14c lb; heifers, 15@16c lb; best loin, 25@31c lb; steer chucks, 11c lb; square chucks, 12c lb; prime ribs, 20@24c lb; rump and round, 19@20c lb.

**Mutton**—Breakers, 21c lb; wethers, 20c lb.

**Lambs**—Diamond T. C. lambs, 28c lb; lambs, 26@27c lb.

**Pork**—Packer dressed hogs, 29@30c lb; pork loins, 36@37c lb; legs, 33c lb; shoulders, 28c lb; leaf lard, 38c lb; tenderloins, frozen, 46c lb; spareribs, 18c lb; country dressed hogs, with head on, 22c lb to producer; country dressed veal, 13c lb to producer.

**Smoked Meats**—Washington hams, 36½c lb; T. C. hams, 37½c lb; T. C. bacon, 53½c lb; Washington bacon, 42@46½c lb; picnics, 25c lb; lean backs, 36c lb.

**Star Brand**—Hams, 37½c lb; Shield hams, 35½@36½c lb; picnics, 25c lb; bacon backs, 36c lb; Star bacon, 51@54½c lb; Shield bacon, 42@46½c lb; Simon Pure lard, $18 case; Shield lard, tierces, 27½c lb; White Cloud compound, tierces, 23¾c per lb.

**Dry Salt Meats**—Clear bellies, 28¾@29¾c lb; loin backs, clear, 29½@31c lb.

**Lard**—Tierces, 28c lb; $14.33@15.52 case; Diamond T. C. pure leaf lard, $16.25 case, $8.30 half case; Snowcap compound, tierces, 23c lb.

### POULTRY.

**Live Poultry**—Live hens, 20c lb; spring chickens, 22c lb; roosters, 10c; ducks, 20c lb to producers, f. o. b. Spokane.

### GASOLINE, LINSEED OIL, ETC.

**Gasoline**—Red Crown, bulk, 25c gal, cases, 35c gal; Shell, 25c gal; refined oil (Pearl), bulk, 14c gal, cases, 23c gal; Eocene, 15½c gal in bulk, cases 26½c gal; engine distillate, 17c gal, bulk.

**Linseed Oil**—Raw, bbl, $2.02 gal, cases $2.20 gal; boiled, bbl, $2.04 gal, cases $2.22 gal.

**Turpentine**—Bulk, 84c gal, cases, $1.04 gal.

**White Lead**—Strictly pure white lead in oil, ton lots, 13¼c lb; 50-lb lots, 14c.

**Rice**—Fancy head, $7.50@9.50 cwt.

**Flour**—Bluestem, $9.40; Blend, $9.40; graham, $8.65 bbl, 49-lb sacks; whole wheat, $8.85; eastern rye, $9.90; eastern rye meal, $10.30; oat flour, $12.15, 4 45-lb sacks.

**Oats**—$67 ton whole, $70 rolled, delivered in city; steam rolled No. 2, $65 ton.

### GRAIN AND FEED.

**Corn**—$72 ton; cracked corn, $74 ton.
**Barley**—Rolled, $70 per ton.
**Oil Meal**—$75 per ton.
**Hay**—Timothy, $38 per ton delivered, $37 by carload; alfalfa, $32 per ton delivered, $31 by carload.

## Portland Market.

PORTLAND, Ore., Aug. 24.—The butter market is very firm and may go higher, though the price is now at a point that means 60-cent butter at retail. Supplies are not equal to the demand in spite of large receipts from the east.

Dressed meats were also firm with receipts below the trade's requirements.

The onion market has eased off somewhat, Walla Walla Globes selling at $2.50@2.75. Oregon, Washington and Idaho potatoes are in larger supply and the market is barely steady at $3@3.50.

Hide dealers have begun buying on selection and are paying 15 cents for No. 1 and 14 cents for No. 2 stock.

Butter—Cubes, extras, 51c; prints, fat, No. 1, 56c, delivered.

Eggs—Oregon ranch, candled, 50c; selects, 52@53c per dozen.

Cheese—Jobbers' buying prices, f. o. b. dock, Portland; Tillamook triplets, 27c; Young Americas, 28c per pound; Coos and Curry, f. o. b. Myrtle Point, triplets, 26½c, longhorns, 27½c per pound; 1-4c discount to Portland trade.

Poultry—Hens, 26c; broilers, 26@27c; ducks, 32c; geese and turkeys, nominal.

Pork—Fancy, 26c.

Veal—Fancy 20c per pound.

Potatoes—Oregon, $3@3.50 per hundred.

Hay—Buying prices, f. o. b. Portland; eastern Oregon timothy, $34 per ton; valley timothy, $29; alfalfa, $26 @27; valley grain hay, $26@28; clover, $26@28; straw, $9@10.

## Seattle Market.

SEATTLE, Aug. 24.—The Elberta peach shipping season is on, but Seattle jobbers theoretically are unconscious of it. F. o. b. prices to growers of eastern Washington are $1 and buyers here are opposing any selling levels over $1.25. One of the largest houses on the street with strong connections at Yakima will offer three carloads of high grade Elbertas early next week at $1.25@1.50. Eastern buyers are laying off the cash market to some extent.

All kinds of dealers who have made it their business to ascertain the facts say that the peach crop will fall far short of supplying the eastern demand.

### Purchasing Prices.

Eggs—Select ranch, 52@53c per doz.; Oregon, eastern Washington and Idaho, nominal.

Butter—Fresh dairy, 31c per lb.; butterfat, 58c per lb.; bakers', 38c per lb.; raw milk, $2.85 per cwt.

Poultry—Broilers, live, 1918, 28c per lb.; hens, 3½ to 4 lbs. and up, 27c per lb.; under 3½ lbs., 24c per lb.; old roosters, 17@18c per lb.; ducks, live, fat, 28c per lb.; squabs, large, $3.50 per doz.; geese, fat, live, 23c per lb.; Belgian hares, 14@17c per lb.; guineas, $7 per doz.; turkeys, young toms and hens, dry picked, 10 lbs. and up, 30@35c per lb.

Hogs—Light, 21@22c per lb.; heavy, 19@21c per lb.

Beef—Steers, fat, 14@15c per lb.; heifers, fat, 14@15c per lb.; cows and bulls, 13@14c per lb.

Veal—Fancy light, 19c per lb.; do heavy, 13@18c per lb.

Mutton—Fat, 22c per lb.; spring lamb, fat, dressed, 25c per lb.

### Hides, Tallow and Wool.

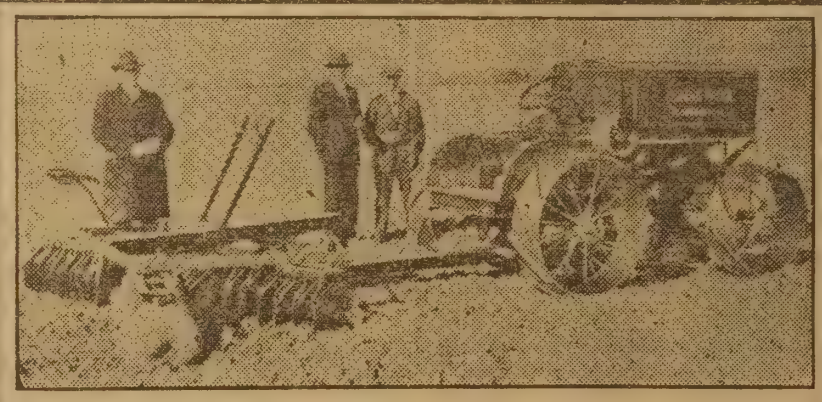
Bid prices to producers: Salted hides, cows and steers, No. 1, 15c lb.; do No. 2, 14c lb.; green hides, cows and steers, No. 1, 12c lb.; do No. 2, 11c lb.; salted, bulls or stags, No. 1, 12c lb.; do No. 2, 11c lb.; green, bulls or stags, No. 1, 10c lb.; do No. 2, 9c lb.; salted or green calfskins, No. 1, 32c lb.; No. 2, 30½c; salted or green kip skins, No. 1, 16c lb.; do No. 2, 14½c lb.; dry hides, No. 1, 30c, lb.; do No. 2, 29c, lb.; dry, bulls or stags, 25c lb.; dry salt hides, 24c lb.; dry calfskins (5 lbs. and under), No. 1, 35c lb.; do No. 2, 33c; tallow, No. 1, 13c lb.

Horse hides, green or salted, each, $2@4; do dry, each, 50@$2.

Clean ranch wool, full growth, lb. 50@55c.

Sheep pelts—Long wool, each, $2.50 @4.50; medium wool, each, $1.50@2.50; short wool, each, $1@1.50; shearlings, each, 35@75c.

Beeswax, per lb., 25@27c.

More Power at the Draw Bar Giving More Efficient, Economical and Durable Service to the User.

*The Fitch 4-Drive Tractor*

Is Delivering These in Every Community Where It Is Being Operated.

The special and exclusive feature of driving on all four wheels used in the construction of the Fitch Four Drive Tractor allows us to use the front end draw bar hitch, which gives a downward leverage pull on all four wheels. With this method we secure traction from the load we pull and eliminate excessive weight from the tractor.

Bear in mind every wearing part is encased in an oil tight, dustproof case, running in a bath of oil.

**Place your order now for a four-drive to insure having one when needed.**

**The government requests that 750,000 additional acres in Washington state alone be cultivated this fall.**

**Write for Descriptive Literature and see the Four-Drive at the Interstate Fair next week.**

Snyder Motor Company

Factory Distributors.

1024 First Avenue, Spokane, Wash.

# Food Substitutes

## Plan Timely Fair Exhibits

"The purpose of this circular is to present information which will help to prevent the waste ordinarily incurred in exhibits at fairs, and to encourage special effort to have in war time only such exhibits as will help win the war and to make our homes and communities better after the war," says the foreword to a circular recently issued by the University of Illinois, college of agriculture.

The conservation of food, energy, clothing, health and ideals is the basic idea underlying successful war time exhibits, in the opinion of the authors of this booklet. Organization and standardization of exhibits must be achieved in the very beginning, in order that the competition between communities, townships, counties, etc., may be placed on an impartial basis.

Turning to the very practical and timely matter of food exhibits, the keynote for this year's fairs is sounded in these words:

**"In planning the exhibits one must remember that our country's food problem is to use less of the foods which must be shipped 'over there'—wheat, meat, fat, and sugar—and to substitute for them in the diet the foods which are plentiful."**

Exhibits of substitutes for wheat products, exhibits of dishes to replace meat in the dietary, sugar saving ideas and the utilization of perishable products are suggested as the practical working out of this principle. Diagrams or models of drying and storing plants and equipment are also in order.

"In the textile department there is need to remember that everything should be considered in relation to the war," continues the circular. "Red Cross supplies, knitting and relief work should have an important place. Because of textile conditions, it is very necessary that remodeling, renovating and mending of garments be practiced by every housewife. This work can well be featured at the fairs."

In judging articles usually classed under the head of "fancy work," two tests are proposed: First, has the article real practical merit—is it useful? And, second, does the decoration conform to the principles of decorative design?

Under the head of home decoration and equipment, both the artistic and the practical should be considered. Economy of effort and material does not necessarily mean austerity, and such things as pottery, reed work, and artistic combinations of wall covering, floor covering, draperies, and curtains are suitable subjects for exhibits even during the present strenuous times. Displays of labor saving kitchen equipment and of models showing proper water and drainage systems, sanitary methods of garbage disposal, home made fly traps and practical window screening, carry out the main idea of effectiveness.

Turning to the subject of securing exhibits, the Illinois circular makes one suggestion which is too often overlooked! "The list of entries and the score cards should be published in the local papers far enough in advance to enable people to prepare the exhibits in such a way that they will conform to the standards and ideals which have been set." Eleventh hour preparedness and a lack of community education through the local papers make a poor team to hitch to your county fair.

This instructive circular closes with a list of suggested score cards, in the formulation of which the guiding principles of saving time, energy and material has been kept constantly in mind.

"If such standards are not to be maintained at a time like this, there can be no reason for the expenditures of materials, time and money for the exhibits," conclude the authors.

An acid test, truly, but hardly too searching a one for the spirit of the times.

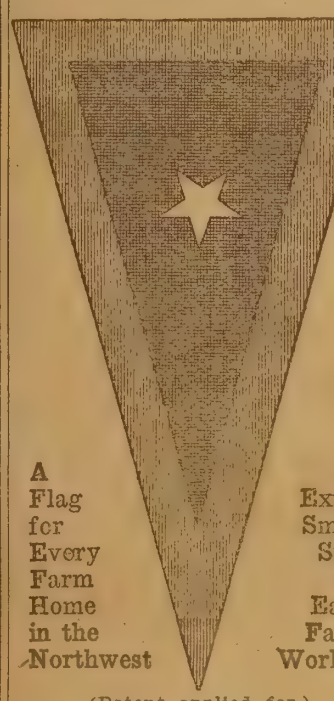
## Canadians Not Favored.

The common report that there are no restrictions against the use of sugar in Canada at a time when the people of this country are urged to conserve sugar as much as possible is flatly denied by the national food administration. It points out that Canadians are allowed even less sugar than are the people of this country. At the present time, while the people of the United States are urged to use not more than two pounds per person per month the Canadian is allowed only one and one-half pounds per person, according to the food administration's statement.

### Candidates in Japan.

Candidates for the Japanese parliament must be 30 years old at least. Members are allowed a salary of about $1000 a year.


## FARM SERVICE WAR FLAG



A Flag for Every Farm Home in the Northwest

An Extra Small Star for Each Farm Worker

(Patent applied for.)

### Get a Farm Service War Flag.

The man, woman, boy or girl who stays at home and works hard to produce necessaries for the soldiers in Europe is entitled to real war service recognition. That is the idea back of the farm service war flag. It is pennant-shaped, made of the good old red, white and blue, and has a star representing the producing farm home. Small stars are added to represent each worker of that home.

.....

**Convenient Order Blank.**

..... 1918.

THE WASHINGTON FARMER, Review Bldg., Spokane, Wash. Enclosed find five cents (5c), for which please send me a Farm War Service Flag (printed on enamel paper) with ..... extra small stars for farm workers.

Name .....

R. F. D. .....Postoffice .....

Box ..... State.....



**Want Ad Rates 30c Per Line**

Want ads are run at this rate in The Washington Farmer and its associate papers, The Oregon Farmer and The Idaho Farmer, thoroughly covering the three states.

# Want Ads

**Send for card giving lower rates for ads running one month or longer.**

**How to Figure Cost of Ads**

Figure four words for the first line, which is set in capital letters, and six words for each succeeding line. Multiply number of lines by 30 and you have cost each issue.

### MISCELLANEOUS WANTED 63

POULTRY WANTED.
We are cash buyers of poultry and dressed meats, also cream. Write us for prices, shipping tags and premium catalogue for cream shippers.
COMMERCIAL CREAMERY CO.
SPOKANE, WASH.

### JUNK SHOPS 90

HIDES HIDES HIDES
Write for prices and shipping tags.
BUYERS OF ALL KINDS OF JUNK.
CENTRAL HIDE & JUNK CO., SPOKANE.

### MACHINERY—FOR SALE 93

CUT YOUR OWN LUMBER
on a Wheland Portable Sawmill. You will save time and big money on your next lumber bill. With the sawmill you can supply the lumber needs of your neighbors also. The price is reasonable, and the profits will soon pay for the machine.
Write for catalog and full details.
CLYDE EQUIPMENT CO.
18TH AND UPSHUR STREETS,
PORTLAND, ORE.

"WITTE" GASOLINE ENGINES
save labor and are carried in stock by
HIGGINS MACHINERY COMPANY,
312 FIRST AVE. S., SEATTLE.
Write for Catalogue.

THRESHING MACHINES FOR SALE—If yours burns we can ship immediately, Farquhar vibrator separators in 36-in., 33-in., 30-in., and 24-in. cylinder machines, with blower feeder, etc., complete. Also steam or gas tractors. Write for catalogue. W. Farquahar Mchy. Co., 308 East Salmon st., Portland, Ore.

### AUTOMOBILES 111

FORDS CAN BURN HALF COAL OIL, ALL distillate, or cheapest gasoline, using our 1918 Carburetor; 34 miles per gallon guaranteed; easy starting; great power increase; attach it yourself; big profit selling for us; 30 days' trial; money back guaranteed; styles to fit any automobile. Air-Friction Carburetor Company, 321 Madison st., Dayton, Ohio.

### STOVE & FURNACE REPAIRS 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

### PETS—DOGS, BIRDS, ETC. 171

HIGH CLASS FOX TERRIERS, BOTH sexes. Mrs. R. J. Frakes, Scappoose, Ore.

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"A FORTUNE IN RABBITS"—HAVE raised the price. We will pay to $8 per pair. Want you to raise them for us. Send stamp for particulars. H. E. Gibson Co., Arcadia, Calif.

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BELGIAN HARES! SEND STAMP FOR FOLder 2, Northwest Rabbitry, Sunnyside, Wn.

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S. C. W. LEGHORN PULLETS AND cockerels from heavy laying stock. Mrs. Rominger, Underwood, Wash.

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GALAX HOTEL; NEW AND MODERN; 75C and $1. Main and Bernard, Spokane.

NEW MADISON HOTEL, 75C AND UP. First and Madison, Spokane, Wash.

### FAIR PREMIUM LISTS 370

TWIN FALLS COUNTY FAIR, OCT. 1-4. Premium list now ready. Write J. M. Markel, sec'y, Filer, Idaho.

### RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

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SCHINDLER ARTIFICIAL LIMB CO., 8115 Wall st., Spokane, Wash.

### BUSINESS OPPORTUNITIES 516

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### PLUMBING, STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

### SEEDS 620

WE SPECIALIZE IN TIMOTHY, ALFALfa, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Idaho.

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COWS, HOGS, AND A BANK BOOK.
Your dream of life, of ease, comfort and independence await you at
BIRMINGHAM,
On Port Susan Bay, Snohomish County; 6000 acres of the best land that lies out doors; a 2 hours' ride from Seattle places your feet on the richest, most productive soil in the whole state of Washington; rail and water transportation; near paved roads, schools, churches, cannery and condensery; 3½ miles of waterfront and finest beach on Puget Sound; 20 miles of beautiful lake shore, surrounding 8 picturesque lakes; these lakes teem with trout! Get in on the first choice for $35 per acre and up; 10 yearly payments, 6 per cent interest.
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To close out two large sheep ranches, we are offering choice irrigated land in tracts of any size at bargain prices, and on very easy terms; 100 per cent tillable; best of water rights and crops. Address owners, Lewis Penwell Company, Helena, Mont.

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ONE OF THE BEST FIVE ACRES IN OREgon; ideal place for elderly couple or young couple; 5 sawmills close by; about 20 miles from Salem; half down, balance easy terms. For particulars address A. H. Persey, Scotts Mills, Ore.

FOR SALE — FORTY-ACRE IMPROVED ranch; near Kent; fine large 8-room house, large barn; also ten acres logged off, good house, three large rooms. For particulars address George C. Harper, 409 E. Pike st., Seattle.

STOCK AND DAIRY RANCH FOR SALE at a bargain. 1160 a. in western Oregon, in Lincoln co. For details write Emil T. Raddant, Orton, Ore.

WATER FRONT AND INLAND FARMS, Md., Del., catalogue. RUSSELL REALTY CO., 2 E. Lexington st., Baltimore, Md.

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10 A. IN GROWING ALFALFA; UNDER government irrigation; near Sacramento valley town. $2000, half cash, balance mortgage. J. O. Blichfeldt, Oakland, Cal.

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FOR SALE OR EXCHANGE—300 ACRES diversified farm; in Eastern Washington; 3 mi. from town; all level; no stumps; splendid new set of buildings; well watered; new complete set of farming tools, horses, hogs, cattle and growing crop, everything goes. Will sell equity of $8000 for cash or trade for lumber yard, bank or grain elevator in good farming community. Address care of Home Lumber company, 2901 Trent ave., Spokane, Wash.



## Want Ads

### EDUCATIONAL 45

EARN MORE. ENROLL ANY TIME, AT Behnke-Walker, Portland, northwest's biggest business college, because best. Graduates assured positions. Write for catalogue.

### TEACHERS' AGENCIES 46

TEACHERS REGISTER WITH B. F. WESTmore, Mgr. Hazard Teachers' Agcy. $1 registers you at three offices. 911 Old Nat'l Bank bldg., Spokane, Washington.

### HONEY, BEESWAX—Wanted. 58

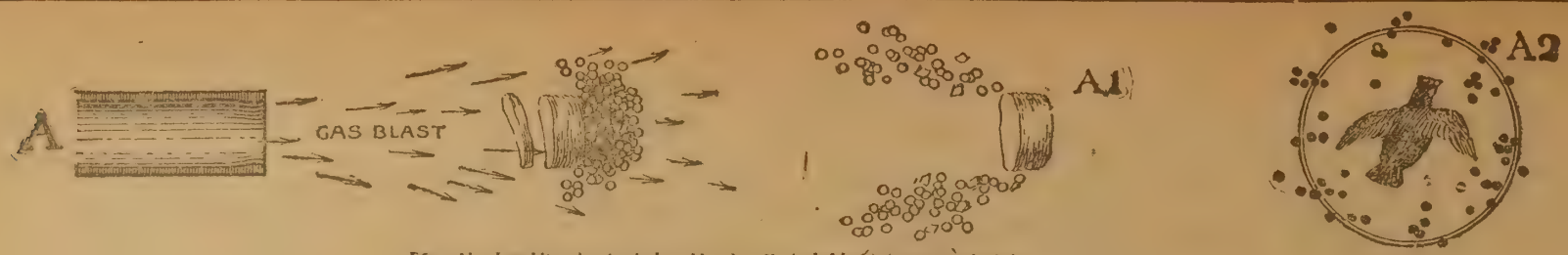
SEND SAMPLES OF YOUR HONEY AND beeswax; state quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

### EGGS and BUTTER WANTED 59

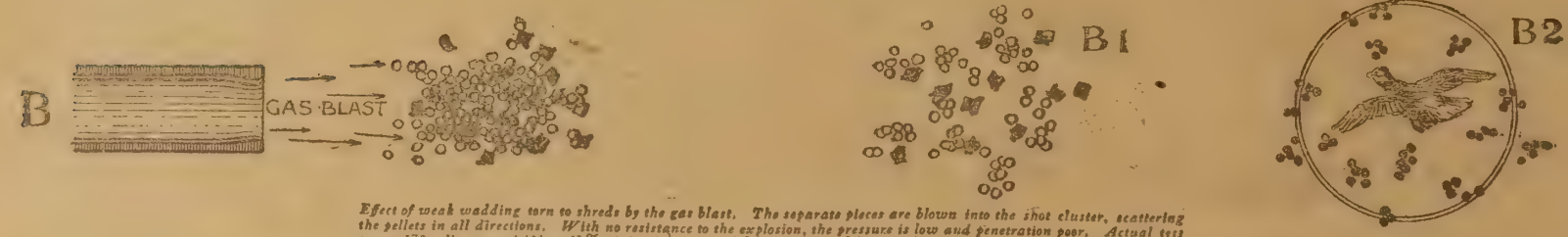
WE ARE ALWAYS IN THE MARKET for good eggs and dairy butter. Send us your next shipment. Oregon Farm Products Co., 38 Halsted st., Portland, Ore.

### MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.
If you are going to build we want to send you our catalog No. 27, of sash, doors, frames, paints, building paper, etc. Sent free postage paid, on request.
We are still selling prepared roofing at $1.35, $1.70 and $2.10 per roll of 108 square feet.
5 x panel doors, $2.16 and up.
Cottage front doors, $2.95 and up.
Rough cedar siding at $15.
Flooring, 4-0 to 9-0 at $25.
We sell any one. Ship any where, and guarantee safe delivery.
O. B. WILLIAMS CO.
1943 First ave. So., Seattle, Wash.




*Effect of hard wadding that fits the barrel loosely. Unchecked by friction or muzzle choke, it is blown through the shot cluster, scattering the shot charge. Actual test target, 221 pellets out of 431 or 51% of the shot charge (1¼ oz. of 7½ chilled) inside a 30-in. circle at 40 yds*




*Effect of weak wadding torn to shreds by the gas blast. The separate pieces are blown into the shot cluster, scattering the pellets in all directions. With no resistance to the explosion, the pressure is low and penetration poor. Actual test target 178 pellets out of 431 or 41% of the shot charge (1¼ oz. of No. 7½ chilled) inside a 30-in. circle at 40 yds*




*The Winchester system of wadding. The wadding expands evenly, sealing in the gas blast all the way to the muzzle, where it is checked by the "choke" or constriction. Shot cluster travels on ahead unbroken. Actual test target, 320 pellets out of 431, or 74% of the shot charge (1¼ oz. of 7½ chilled) inside a 30-in. circle at 40 yds*

# Effect of wadding construction on shot patterns

## *Poor wadding responsible for more faulty patterns and lost birds than all other gun and shell troubles combined*

A strong uniform shot pattern depends upon how perfectly the *wadding* in your shells controls the five-ton gas blast behind it.

The wadding, like the piston head of a gas engine, must give the explosion something solid to work against so that the shot may be *pushed* out evenly.

It must expand and fill the tube of the barrel, completely sealing in the gas behind it. No gas must escape to scatter the shot.

It must offer just the right amount of resistance so as to develop uniform pressure and high velocity without danger of jamming the pellets out of shape at the "choke" or muzzle constriction.

The illustrations at the top of this page show actual test patterns, 50% to 70% faulty, the result of poor wadding.

### The Winchester system

*Winchester wadding* is the result of repeated experiments to determine the most efficient control of the gas blast.

The special construction of the *Base Wad* gives what is known as *Progressive Combustion* to the powder charge.

Combustion spreads instantly through the powder charge. By the time the top grains of powder become ignited the *full* energy of the burning powder behind is at work. Though the explosion is almost instantaneous, it is none the less *Progressive*, the final energy and maximum *velocity* of the completely burned powder being developed at the *muzzle*, where it is most needed.

Meanwhile, under the heat of combustion, the tough, springy Winchester *Driving Wad* has expanded to fill the barrel snugly all around. No gas escapes. It is completely sealed in. The wadding *pushes* up the shot evenly.

At the muzzle, the shot pellets slip out without jamming, while the wadding is checked for a brief interval by the constriction of the muzzle. *It follows some distance behind the shot pattern.*

The shot cluster travels on unbroken by gas blast or wadding and makes the hard hitting, uniform pattern for which Winchester shot shells are world famous.

***Fish Tail Flash*** All Winchester smokeless shells are made with the new Winchester Primer—the quickest and most powerful shot shell primer made. Its broad *fish tail* flash gives even and thorough ignition. Every grain of powder is completely burned up before the shot charge leaves the muzzle.

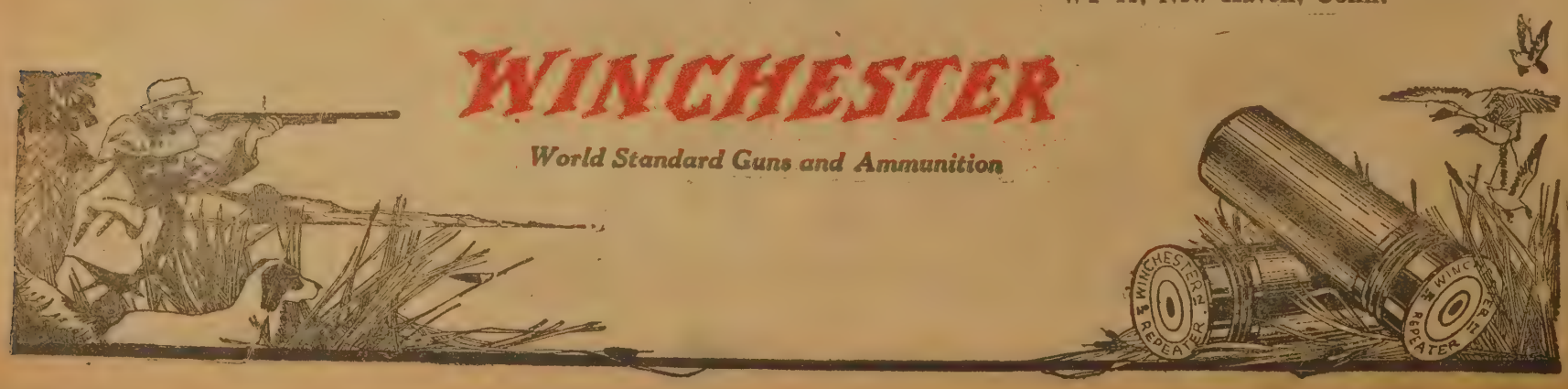
***The Crimp*** The required degree of pressure necessary in seating the driving wads is worked out in combination with the *hardness* or the *softness* of the *crimping* required for any particular shell.

***Water-proofing and Lubrication*** In the cold, damp air of the marshes, or under the blazing sun at the traps, Winchester shells will always play true. Winchester water-proofing process prevents them from swelling from dampness. Special lubrication of the paper fibres prevents brittleness and "splitting" in dry weather.

***Uniform Shells*** From primer to crimp, Winchester shells are constructed to insure the maximum pattern possible from any load and under all conditions. $100,000 is spent annually in the inspection and testing of finished shot shells. 25,000,000 rounds of ammunition are fired every year in testing guns and ammunition.

### Clean hits and more of them

To insure more hits and cleaner hits in the field or at the traps, be sure your shells are Winchester Leader and Repeater for Smokeless; Nublack and New Rival for Black Powder. Write for our Free Booklet on Shells. **Winchester Repeating Arms Co., Dept. WT-11, New Haven, Conn.**



SEPTEMBER 5, 1918.

NOTICE TO READERS: When you finish reading this paper, place a U. S. 1-cent stamp on this notice, mail the paper and it will be placed in the hands of our soldiers or sailors destined to proceed overseas. NO WRAPPER. NO ADDRESS. A. S. Burleson, Postmaster Gen.

PUBLISHED WEEKLY.

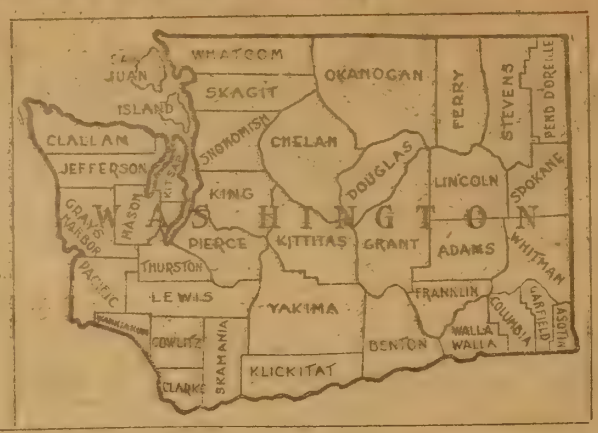
# THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF



# Crop Conditions Improve

## Potatoes Good, Béans Best, Corn Is Fair, But Greatest Improvement Is on Range; Stock Putting On Flesh to Begin Winter.




METHOW, Okanogan County, Wash., Aug. 26.—The general crop conditions have improved greatly since July. The potato crop is going to be good, although a little knotty with second growth. The bean crop is best of all, and the corn is fair, but the greatest improvement is on the range. A month of cool, rainy weather has transformed it from a parched desert to a fine pasture. Stock are putting on flesh and they are to go through the winter with 50 per cent less hay than if they came in thin in flesh. No interest is taken in fairs here any more. It used to be one of the greatest fair counties in the state, but it has died out. George had to do most of the work and he got tired. The greatest service a fair is to its patrons is seeing what your neighbor can do and getting acquainted. This community is as prosperous as usual. Most of the farmers here practice diversified farming, so if the wheat fails the corn makes good. All who are shipping cream declare that the test has increased from 25 to 50 per cent since the rain improved the range. We are shipping feed out of here. The fall wheat will have to be shipped in. There is plenty of spring wheat. CHARLES GRANT.

### Hay Crop Is Very Light.

COLVILLE, Stevens County, Wash., Aug. 23.—Crop conditions have steadily improved throughout this county since the rains have begun. Farmers report a very slight improvement in the grain yields of spring-sown fields, but the hay crop has hardly been improved, with the exception of alfalfa, of which there is only a limited acreage. There is some prospect of a third crop of alfalfa on some early-cut fields. Garden crops are finishing the season well. The general condition is not favorable, as the shortage of hay, the total lack of feed for swine and the scarcity of poultry are impossible to overcome this season. Farmers are cleaning out their cattle and spare horses at any price, and pigs are also going. One relief will be the excellent fall pasturage, which will relieve the hay situation greatly until snow falls. Inquiry among farmers reveals the intention to hold on to dairy cows, if possible, even at a loss, for the coming winter. Dry cows will undoubtedly be fattened and possibly some young stuff. Heavy cows are already a drug on the market. Many dairymen will sell their timothy hay at the prevailing high prices and will ship in alfalfa, saving the difference in price and getting a forage better suited to their requirements. There will not likely be any demand for seed grain to be shipped in, although the quality of this year's crop is very low.

Considerable interest in the local fair, to be held early in October, is already manifest. E. E. ELLIOTT.

### Grain Is Below Normal.

STEVENSON, Skamania County, Wash., Aug. 22.—There is nothing much doing here but getting in the supply of wood and hauling lumber to the railroad and river docks. This has been the most peculiar season ever seen here. The first of the summer was very dry with two good rains in July and this whole month has been cool and cloudy with no rain worthy of mention. Plums, pears and blackberries are a heavy crop, with no sale on account of the restrictions on sugar. Wood is selling for $6 per cord; slabwood, $4, delivered. The grain crop is nearer a failure than ever before in the history of this county. What little alfalfa is grown is a fair crop and the second crop is ready to cut. Though not a corn county it promises fair. The Portland market prices prevail here for feed and hay. W. T. JACKSON.

### Grain Production Is Fair.

GLENWOOD, Klickitat County, Wash., Aug. 25.—The Klickitat fair grounds are being put in good shape, or, rather, some new buildings are being added to the grounds, and the grandstand is to be changed somewhat, so I expect there will be a good fair this fall. The present crop conditions are about the same as they have been in that there is some good 20-to-25-bushel wheat, also a great percentage of the grain is from one sack to eight or nine per acre, so that there is, I think, at least a third shortage in the grain crop condition, according to former years. The small combines, as well as the large, are having a time of it to thresh on account of the damp nights and cloudy days until this last Friday. The steam threshing rigs will be through before the combines this year. Our community, really Klickitat valley, seems to be harder hit in the crops than the Columbia river district; also the Bickleton country, there having been scarcely any rain to start the winter wheat a year ago this fall. There has been a little rain in places already, but hardly enough to make it very safe for wheat sowing yet. I think there will be enough feed for stock only in the case of bran and shorts, of which we are always short, as our milling has not, until lately, ground much more flour than we use. There is plenty of seed grain here for all purposes. The fruit prospect should be good for those having fruit to sell, as we are paying about $1 a box for peaches, and there seems to be a good demand for everything in the fruit line. C. A. LESTER.

### Unirrigated Crops Are Poor.

OMAK, Okanogan County, Wash., Aug. 26.—There will be no fair in our community this season; farmers can not spare the time and other conditions are such that it would not be advisable. Our community has had a shortage of water and unirrigated crops are looking very bad. There are many pumping plants which have been installed this season and most of the orchardists will pull through with a fair crop. Hay is going to be very scarce and there will be a shortage of seed grain. Apple packing will start in a few days and prices are good. The peach crop will be very light. J. O. WOODS.

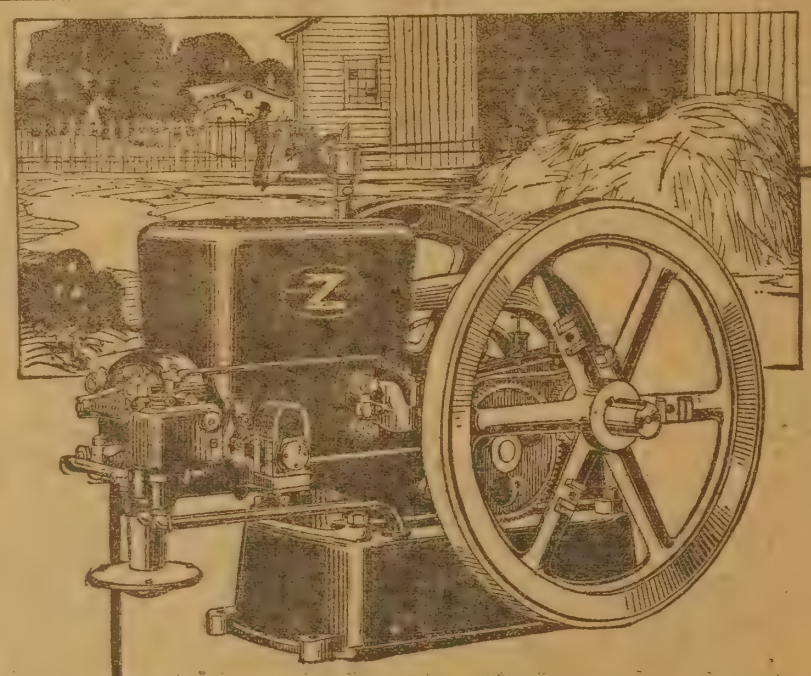
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V. T. TUSTIN

Democratic candidate for congress, Fifth district, subject to primaries, Sept. 10, 1918.

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FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 36 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF September 5, 1918

# Mr. Houser Explains Replies to Farmer

## *Says His Object Is Faithful Performance of Duties as Official of the U. S. Grain Corporation—Has No Interest in Management of Any Grain or Milling Concern*

In the following letter to the Farmer, M. H. Houser of Portland, in charge of the food administration grain corporation for Washington, Oregon and Idaho, explains the unfortunate circumstances connected with the unsatisfactory replies from him in our issue of last week with regard to the direct shipment of wheat to the grain corporation by the producer. Now Mr. Houser throws further light on this inquiry but leaves the wheat grower in ignorance of a number of points concerning the billing of wheat and the handling of it at the terminal station and elevators, such as:

What car switching charges, if any, may be made against the producer shipping directly to the grain corporation?

At what rate per day, per car, is demurrage charged in case of delay in unloading?

What condition might result in demurrage, and on the face of present terminal conditions is demurrage probable?

What charges, if any, not covered by the corporation's 1 per cent administration fee, does the terminal warehouse or elevator company make covering the following items on wheat shipped to the grain buying corporation: (a) storage, (b) handling, both bulk and sacked grain, (c) insurance, (d) bad order sacks?

What are the charges for inspection and grading at the terminal elevator?

The above points may seem extremely elimentary to Mr. Houser and grain buyers and warehouse men in general, but to the average wheat raiser, who is not familiar with shipping customs and their present modifications, details such as the above are of the utmost importance. The grain buying corporation seems the logical source of specific and official information on matters of this nature, if it is to be of the greatest practical assistance to the grain grower, who needs aid in marketing his grain.

The following is Mr. Houser's letter explaining the correspondence on this subject from his office:

To the Editor of The Farmer: I notice in your issue of the 29th a rather vicious attack that seems to the writer, under existing conditions, entirely unwarranted, though I must frankly admit that the answers to your letters were stupid to say the least. It was one of those unfortunate circumstances that at times seem to creep in regardless of my endeavor to give this work my general supervision as much as it is possible to do so.

When your letters of the 12th and 13th were received the writer was on the Sound looking over the terminal storage docks and taking up with the officers of the emergency fleet corporation the possibility of securing more ships, both steel and wooden, for the movement of the wheat and flour, as the army and navy needs for nitrate from the west coast of South America have made it necessary to divert a large amount of the tonnage that we had expected and been promised would be available for wheat and flour, as I consider if I can get the wheat and flour aboard ships, and cars to move from the interior I will have accomplished a great deal and that this will go a long way toward automatically solving our marketing problem.

Then, again, when your letter of the 20th reached this office the writer was at Boise, Idaho, attending a meeting of the Pacific northwest and intermountain state administrators, trying to assist in devising ways and means that would be best to move the wheat raised in the intermountain section and also to make a general survey and report on the serious feed shortage that is confronting the intermountain and Pacific northwest sections on account of the almost complete failure of the coarse grain crops, so you will see that notwithstanding your apparent apprehension we are giving our entire time and attention to the interests of the farmers of the Pacific northwest.

In carrying out this work it is naturally necessary for me at times to be away from the office, leaving the alternative of either letting the mail accumulate or depending upon some one else. Just at this time my assistant was away on a vacation, the first he has had in two years, and your letters, unfortunately, got into the hands of a new man that had just come into the office on August 1.

Regardless of your attempted reflections to the contrary, I have done absolutely all in my power through the grain corporation, food administration, emergency fleet corporation and regional railroad director of operations to bring about conditions that would make it possible to permit an expedient movement of the crop in the states of Oregon, Washington and Idaho.

Recently, when Mr. Aishton, regional director of railroads, was here on the Coast, I took the matter up with him personally, making the strongest appeal that was in my power, to see that ample cars were left here in the Pacific northwest for the movement of the crop. Last spring, when the delegation from the three states was at Washington, they were promised an advanced basic price for their wheat delivered at our northwestern terminals. The large prospective fleet that was under construction made possible a very low rate of freight, and everything looked extremely favorable for a rapid movement of the crop, but, unfortunately, the war demands have made it necessary, as stated before, to divert a large amount of the steel tonnage for nitrate, and it was trying to arrange for the loading of the wooden ships that necessitated my absence from the office when your first letter arrived, or I assure you you would have received an entirely different reply.

Personally I have no criticism to make of anything that you wish to publish, as that is the function of the press, and far be it from me to criticize so long as you adhere to the work we are endeavoring to carry out, and in fact I am at all times open and invite criticism and suggestion if it is made in the proper spirit.

As to your letter of the 12th, please allow me to say that the growers of the three states, Oregon, Washington and Idaho, can ship their grain directly to the food administration grain corporation. Under the law, which states payment to be made delivered at certain points, we of course can not make advances against bills of lading, but we will and are handling all shipments coming in to us, giving them our personal attention and supervision. For this we charge the shipper 1 per cent commission for looking after the consignment, placing it in store and remitting to the shipper the funds. There are several public docks in our list, and I may say we have taken in everything that was available for wheat storage that was open to receive these shipments from the farmer, and if the farmer wishes to send in his wheat and place it in storage he may send the receipts to us and we will remit to him in full on the basic price without any charge whatsoever.

The grain corporation and this office have covered this situation fully in the bulletins that have gone out and which apparently you have overlooked. We have tried to give them all the publicity possible, giving them to the press and sending them to the various state administrators, requesting them to give these bulletins all the publicity possible through their publicity bureaus. It is apparent that these have not come to your notice, so I am enclosing you a full list of the bulletins that have gone out this year, which are fundamentally on the same lines as we put out last year.

I wish to call your attention particularly to our own Bulletin No. 1, issued from this office as of July 13, wherein we say we expect the grain trade to operate on a fair basis, as we do not wish to solicit consignments which we are prepared to handle on a 1 per cent commission basis. The general grain trade fully realized what we meant in this paragraph that if we heard of any united unfair practice that we would at once solicit direct consignments, as it is not the intention of the grain corporation to disrupt the present and existing grain trade, as they have undoubtedly in the past furnished a needed service, and I see no reason why they should not continue to do so.

You make mention of an 8-cent charge. We wish to call your attention to the resolutions which were passed at Boise, Idaho, at the food administrators' meeting hereinbefore mentioned, that were given due publicity, that anything over a 7-cent charge would be classed as unfair. It is true that the advance in the net returns to the farmer, based on the terminal markets today, are on a wider margin than in the prewar period. A good part of this, though, is taken up in the advanced warehouse charges that used to be 50 cents and today are $1 in the sacked houses and in some instances in the bulk houses as high as $1.50 per ton, or practically two or three times what they formerly were. Another matter that enters into this is, in the prewar times a dealer buying wheat always had the chance of a speculative market, which does not now exist. In other words, he can not go out and pay a certain price with the expectation of "shopping" around or waiting for an advance in the market, which under the old conditions, with a strong market, made it very tempting to "bid 'em up." However, the three to four and one-half cent handling and storage charges are regulated by the public service commission.

The early run this year has been largely direct to the mills, both interior and terminal, the tenders to the grain corporation to date having been a lit-

(Continued on page six.)

## *Letter From Governor Withycombe*

"Will It Pay Wheat Grower to Ship Direct?" was the topic discussed at some length in the Farmer of last week. This article reviews the correspondence with H. M. Houser of the Food Administration Grain Corporation at Portland. Failing to find from the correspondence satisfactory information with regard to this matter, and in its acquiescence with the request of the government to conserve news print, this article was reprinted in circular form from the Farmer and forwarded to a number of prominent people. The following is the reply of Governor Withycombe of Oregon:

To the Editor: Have your interesting letter, with circular, which I have read very carefully. While it is true the farmers are not represented generally in the Food Administrator's office, however, I have very great confidence in the fairness and broad-mindedness of Mr. Max Houser. In Oregon we are fortunate in having as First Assistant Food Administrator Mr. W. K. Newell, who is heartily in sympathy with agriculture and food production.

JAMES WITHYCOMBE, Governor.

Salem, Ore.

## New Flour Rules

### International Plan Is Adopted

Food Administrator Herbert C. Hoover, upon his return to this country after a conference with food administrators in the allied countries of Europe, announced a new set of regulations governing the sale and use of wheat flour and wheat flour substitutes. Under the new provision a mixed flour containing one-fifth substitute and four-fifths wheat, complying with the international policy agreed upon at the European conference, will be put on the market. In addition, the rule heretofore in existence requiring that purchasers take equal amounts of wheat flour and wheat substitutes is revised so that they must now take only 20 per cent in substitutes. Where millers, retailers, wholesalers, bakers and consumers have been allowed only a 30-day supply of flour of various kinds, they are now, under the new regulations, allowed a 60 days' supply. Under the new rule requiring that only 20 per cent of purchases be substitutes it is required that the substitute be either corn or barley.

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## Wheat Price Fixed

### This Year's Prices Are Continued

This year's government wheat price was continued in effect for the 1919 crop by President Wilson today in a proclamation fixing $2.20 as the minimum price at primary markets. Winter wheat will be sold at this price, but the president accompanied his proclamation with a statement giving notice that before the harvest of next spring he will appoint a commission to report on increased cost of farm labor and supplies to guide him in determining whether there shall be an advance in price for the spring crop.

The proclamation fixes as reasonable guaranteed prices for No. 1 northern spring wheat and its equivalents at the principal primary markets, the following:

New York, $2.39 1-2; Philadelphia, $2.39; Baltimore and Newport News, $2.38 3-4; Duluth, $2.22 1-2; Minneapolis, $2.21 1-2; Chicago, $2.26; St. Louis, $2.24; Kansas City and Omaha, $2.18; New Orleans and Galveston, $2.28; Tacoma, Seattle, Portland, Astoria, San Francisco and Los Angeles, $2.20; Salt Lake City, Great Falls, Pocatello and Spokane, $2.

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## *Should Foster a Broader American Agricultural Policy*

The Washington Farmer does not have to endorse Mr. Roosevelt's sagacious views on farming problems in the United States, printed on another page, for they are but a more vigorous statement than we are capable of making of conclusions reached long ago by this paper, and expressed repeatedly in these columns. Summarized and enumerated, Mr. Roosevelt's recommendations are:

**Ownership of the land by the man who tills the soil.**

**Thorough reorganization of the United States department of agriculture and the adoption of an American agricultural policy.**

**Better marketing methods to "do away with the holdup methods that in so many places still obtain."**

**More small farms and fewer vast estates.**

**And the building up of strong cooperative farm organizations.**

All summer long, as our readers know, we have been appealing to the president to foster a broader American agricultural policy by appointing a national food production administrator, who would hold the same relation to food production that Mr. Hoover holds to food conservation. We became convinced long ago that the agricultural department needs revivification and reorganization, and are glad that Mr. Roosevelt is lifting his powerful voice for the reform, and for other policies that are substantially the platform on which this journal stands.

## *Too Many Cooks Spoil the Broth*

The sentiment of this old adage has many applications. Just as too many cooks spoil the broth, so do too many endeavors spoil the results.

Did you ever toss bits of meat to a dog? He catches them every time when thrown one at a time. But throw him two or three at once and what happens? He misses all of them because he tries to catch them all. Did he center his attention on one of them, disregarding the others, he would catch it and be only partial loser.

Just so when the farmer tries too many things or operates on too large a scale, he can not fully succeed. If he farms too many acres he doesn't farm them well enough, and a second rate crop results. If he milks too many cows he fails to feed and care for them properly, and the expense and income balance the wrong way. He should do one thing or a few things well, the very best possible. The results in the long run, if not at the first, will be more satisfactory.

## *Farmers in the Legislature*

The farming interests of the state should have a better representation in the legislature.

This can only come to pass by nominating and electing to the legislature farmers who know farming, who have farmed efficiently and who can put the facts of the agricultural needs of the state so plainly that they will be understood by all.

The bona fide farmer who successfully manages a big wheat ranch is needed in the legislature; so is the man needed in the legislature who efficiently cultivates the ten-acre tract. The fruit farmer, the truck farmer, the poultry raiser, the livestock man—all, alike, should find a place with the law making body of the state.

The mere talker and one who is taken up with every theory that comes along is not a fit legislator, whether he is a farmer or a carpenter or a lawyer or a merchant. It is the broad-minded, level-headed man of hard sense who should be sent to the legislature.

## *No Selfish Interest in the War*

While there are those persons in the United States who are making unwarranted profit out of the war, one of the world's greatest facts today is that the American people are fighting without selfish purpose. There is in the mind of no one a thought of conquest. No one wants to extend the American border line or secure additional colonial possession. No one is thinking of indemnities. No one is thinking of any material gain whatsoever—except those comparatively few who are using war conditions to bring to themselves financial profit.

On the other hand, the heart of America is throbbing with enthusiasm to right wrong, to secure and insure liberty and justice to all mankind. The heart of America aches for the millions on foreign soils who have suffered and are suffering untold horrors to satisfy the fiendishness of Prussian military lords and their misguided and servile warriors. Several generations ago the resources of the North American continent were dedicated to the establishment and perpetuation of liberty and democracy. One terrible war has since been fought on our own soil "that government of the people, by the people and for the pepole should not perish from the earth." And now America crosses the ocean to the Europe from which her first citizens came, there to take part in another struggle, even more terrible, that the justice and the liberty and the humanity and the democracy that she has tried and made true may become to the world what they have become to America. The people of the United States ask nothing; they offer all. "It is more blessed to give than to receive."

## *Selecting Seed Stock*

In the early fall while the crop is still growing is the time to select your seed stock. You can then get seed from the most vigorous plants —those that are not diseased and at the same time are the best yielders.

Go through your potato patch and put a stake down beside the plants that look the best from every standpoint. Select those with four or five sturdy stalks that show no disease whatever. Select enough so as to allow you to discard some. At harvest time dig the marked hills by hand before plowing up the patch. Select seed from the hills that have the largest number of smooth, medium sized potatoes of uniform size. Do not take the hills that have large and small ones in the small hill.

In the case of corn the seed selection should be done after the crop is mature. Put a hoop in the top of a burlap sack and fasten it across your shoulders so as to have both hands free. Go down the corn row and make individual selection from the most sturdy stalks that have the largest ears on them. Take those that are the most mature. In this way an early maturing variety will be obtained.

Practically all kinds of seed should be selected in this way. Seed from kale, rutabaga, cabbage, and all biennial plants should be selected by picking out the best individual plants and re-setting in a field that will not be disturbed the following year. By such methods it is a simple matter to get strains that will practicably double the present yield.

## *Watch Out for the Weevil*

With the increasing importance of the growing of beans, peas and other grains in the northwest that are subject to weevil attacks, the problem of keeping this pest out of this territory is one that demands the attention of every one growing or handling these crops. In many sections of the older farming regions the weevil has done irreparable damage, and in some cases has practically destroyed this class of farming. In fact it was, in part, to find a section free from the weevil pest that seed companies investigated northwestern possibilities several years ago, and set the northwest on the way toward extensive seed production. So far this section is practically free from the pest. Constant precaution should be taken and every grower and every handler be constantly on the alert to detect the first invasion of the pest. The United States department of agriculture recently published a bulletin on this particular subject dealing with methods by which the weevil can be controlled. Any one discovering evidence of weevil should write the department at once for specific information on how to destroy it.

## *Other Gains Besides Victories*

To America there will be other gains besides victory on the fields of battle. This war is giving impetus to men and women with latent abilities. It is inspiring them to do and achieve. Not until after the war will we know what great inventions and discoveries have been made which can be used for the benefit of man in times of peace.

It has been the incentive to men who were formerly satisfied with doing common labor to learn valuable trades. Not only is a great army of soldiers being trained, but a great army of skilled mechanics also, who will return from the battlefields and fill their place in a new industrial era.

In place of wastefulness we have learned thrift. In place of bragging we have learned humility. Not humility based on inferiority, but humility when we compare each individual with his duty to his community and country, for in times of danger liberty means collectively and not individually.

Since we have gone to war we have wrought great changes which in time of peace would seem almost impossible. Reforms which would not have been passed for some time are now passed without hesitation.

It has been the stimulus to home industries. Many things for which we were dependent on foreign countries are now manufactured at home and thereby creating new industries and employing home labor.

C. J. M.

## *The Milking Machine*

The milking machine is here to stay. It is one of the best labor savers recently invented. It takes drudges out of the dairy business. It does not talk rough nor abuse the cows. It does not go to town on Saturday nights and fail to come back for milking the next morning. It is always on the job and does a good job when the owner looks after it properly.

Do not hesitate because you do not know which machine to buy. Some farmers have had troubles with all kinds of machines, others have been successful. The trouble does not lie with the machine as much as with the men operating them.

The milking machine is probably in the same class as the farm tractor. It may still be further perfected, but it has reached that stage of development where it is a successful and paying investment when farm conditions warrant and it is carefully operated by an intelligent farmer.

A. B. N.

# Must Register on September 12

## *Twelve Million Men From 18 to 45 Will Sign Rolls*

Congress has passed and President Wilson has signed the new draft bill extending the draft ages so as to include all men from 18 to 45 years. Immediately following the signing of the bill the president issued a proclamation designating Thursday, September 12, as the date on which all the men included in the draft shall register. The registration offices will be open in precincts throughout the entire nation from 7 in the morning till 9 in the evening. All men within the new ages, whether citizens of the United States or not, must register, except where aliens are official representatives of their governments in the United States.

Calculations by the office of the provost marshal general indicate that between 12,000,000 and 13,000,000 men will be enrolled under the new act. The original draft act, taking those from 21 to 31 years, caused approximately 10,000,000 men to register.

Of those subject to the new draft, it is estimated that approximately 2,300,000 will be called for military service. Of this number probably a million and a half or more will come from the men between the ages of 18 and 21 years.

Men already registered under the old act or already in military or naval service will not be required to register.

General March, military chief of staff at Washington, D. C., has announced it as the policy of the government to place all of the eligible men under the new draft in France by the first of July, next year, swelling the total American forces in Europe to at least 4,000,000 men.

The motive behind the new draft act is clearly expressed by President Wilson in his proclamation designating September 12 as registration day when he says:

"We solemnly purpose a decisive victory of arms and deliberately devote the larger part of the military manpower of the nation to the accomplishment of that purpose."

Another part of the president's proclamation, designating the new move as "our final demonstration of loyalty, democracy and the will to win," is as follows:

"Only a portion of those who register will be called upon to bear arms. Those who are not physically fit will be excused, those exempted by alien allegiance, those who should not be relieved of their present responsibilities, above all those who can not be spared from the civil and industrial tasks at home upon which the success of our armies depends as much as upon the fighting at the front. But all must be registered in order that the selection for military service may be made intelligently and with full information. This will be our final demonstration of loyalty, democracy and the will to win, our solemn notice to all the world that we stand absolutely together in a common resolution and purpose. It is the call to duty to which every true man in the country will respond with pride and with the consciousness that in doing so he plays his part in vindication of a great cause at whose summons every true heart offers its supreme service."

### Allied Armies Continue Gains.

The last week has been another remarkable demonstration of the power of the allied armies and their determination to win over Prussianism. The week from August 24 to 31 shows as much ground gained on the northern portion of the western battlefront as had been gained during the preceding two weeks. At this writing the allies have regained two-thirds or more of all the territory taken from them since Germany launched her gigantic drive the latter part of last March. At one point in the Lys sector the line from which General Hindenburg launched his campaign in March has been penetrated there for a considerable distance. Before Arras the British armies are practically up to this so-called Hindenburg line. At the present time the allied battle line runs practically straight from the north and south to Noyon. Along this entire front there is practically no opening to invite strong counter attack by the Germans, and it is believed that the entire line is so well prepared that a counter attack could scarcely be successful except for a brief time. In the south, between Soissons and Rheims, comparatively little fighting has been done during the last week.

### Casualty Lists Not Withheld.

Some fear has been expressed in this country that the casualty lists from the American participation in battle have been to some extent withheld from the public. The war department declares, however, that this is not true, but that all casualties are reported as rapidly as they can be determined. Secretary Baker announced at the time of this country's entrance into the war that no misfortune and no casualties would be withheld from the public, but that no news would be good news. The department declares that it is strictly adhering to this policy at the present time.

### Prohibition Is Rapidly Advancing.

Very soon there will be a measure enacted by congress and signed by the president prohibiting the sale of intoxicating liquors anywhere in the United States after June 30, 1919. This act will be in effect until the war is over and the American armies disbanded according to the agreement that has been reached by the committees of congress that have worked out the measure. Whether or not the ban on liquor would be removed then is problematic. It is possible, if not probable, that within the next year or two the prohibition amendment adopted by congress some time ago and submitted to the various states for ratification will have been ratified and become legislation. The constitution requires that three-fourths of the states ratify a constitutional amendment, meaning that 36 of the 48 states must ratify the prohibition amendment before it becomes national law. Fourteen states have already ratified it, leaving 22 more necessary to put it into effect. Eighteen states that are now listed as dry have not yet acted upon the amendment, but undoubtedly will ratify it when their legislatures meet. This leaves only four wet states to be won over, and since one of the leading arguments against prohibition by individual states has been that national prohibition only could actually prohibit the use of liquor, it seems highly probable that the four states will be readily won over.

### Border Mexicans Cause Trouble.

For the first time in several months actual trouble has been experienced on the Mexican border. Three American cavalrymen were killed and a number of others injured. The immediate cause of the trouble is believed to have been an attempt on the part of a Mexican immigration official to pass a fellow countryman across the border illegally. American sentries drew their guns and the Mexicans involved fired, resulting in the clash. Whether the trouble is sufficiently explained to prevent further and greater activity is not known, but it is apparently the intention of the American officers in command on the border to rule the situation with an iron hand if necessary.

### Money Value Greatly Reduced.

The United States department of labor hsa compiled statistics showing that a dollar now buys as much foodstuff in the average city of the United States as from half a dollar to 75 cents bought five years ago. Food that cost $1 five years ago now costs as follows in the following six cities, according to the report: In Washington, D. C., $1.85; in Baltimore, $1.83; in Philadelphia, $1.77; in New York, $1.68; in Chicago, $1.69, and in San Francisco, $1.58. The report also shows that during the last 12 months food prices advanced on an average of about 20 per cent throughout the country.

# I. W. W. Get Sentences

## *Haywood Given 20 Years and a Heavy Fine*

What the chief prosecutor in the I. W. W. trial at Chicago terms "a closing chapter in America's biggest criminal case" was written last week when Federal Judge Landis, who conducted the trial, passed sentence upon nearly 100 convicted men, inflicting a prison sentence of 20 years and a fine of $20,000 each on 14 of the defendants and lesser penalties upon others down the line. The sentences range from 10 days to 20 years, and the fines aggregate $2,735,000.

The case was that in which more than 100 I. W. W. leaders were being tried for conspiracy to interfere with the government's conduct of the war. William D. Haywood, general secretary-treasurer and most prominent leader of the I. W. W. in America, was one of the 14 to receive the maximum sentence of 20 years in federal prison and $20,000 fine. Thirty-three of the members were given 10-year sentences, 33 others five years, and 12 one year each. Others drew lesser sentences.

The convicted men are allowed 90 days by the court in which to make their appeal for renewed trial or to file their formal appeal to the United States supreme court. It is understood that the I. W. W. organization throughout America has been raising a large fund with a view to appealing the case to a higher court.

## LAND BANK LOANS BIG SUM.

### Business of Northwest District Grows Rapidly.

President D. G. O'Shea announces that since the district land bank of which he is president was organized at Spokane in April, 1917, it has placed $19,359,695 in the hands of the farmers. More than 8300 loans have been made.

Since the bank opened for business last year it has received 21,445 applications from farmers desiring loans. They asked the huge total of more than $55,000,000. Of these applications, 11,972 have been approved and loans allowed on them totaling $27,262,000. While this amount has been allowed, much of it is not yet in the hands of the farmers, owing to the great amount of work that must be done in clearing up titles and executing legal papers before loans can be made.

The bank officials have rejected many applications because the security was considered insufficient or the title to land clouded so that safe mortgages could not be made.

The demands for farm loans by the farmers of the northwest continue, and the system has been extended practically into every rural community of the four states of the district. A total of 407 national farm loan associations have been chartered and are now serving the farmers of their respective territories. The associations are distributed over Idaho, Montana, Oregon and Washington.

The capital of the bank has been increased from $750,000 to $1,716,147.

Farm loan bonds find a ready market, the issues now being subscribed for in advance.

### Apply System to Dairy Prices.

One of the morsels of sweet to be found in the bitterness of the dairy situation these days is the fact that there is fair prospect that before much longer the prices of milk and milk products will be regulated on the basis of the cost of those things that are required to produce them. If so much labor, costing so much, and so much feed, costing so much, and so much capital invested, deserving such and such a rate of interest are required to produce and place so much milk on the market, it ought not be extremely difficult to calculate a fair price that the consumer should pay for the milk—assuming that the cost is not more than the value of the milk as food, which is a safe assumption.

## *Washington Gleanings*

Fire recently destroyed the plant of the Vancouver Ice and Coal company, entailing a loss of $20,000, with $5000 insurance.

M. E. Metz of Colfax has just returned from the east, where he purchased two carloads of blooded horses from the Blue Ribbon stud.

The boys' and girls' canning clubs of Yakima county will hold their annual canning contests at the Yakima high school Saturday, September 7. An all-day program has been arranged.

A big Indian council, including members of tribes from many parts of the Pacific northwest, is to be held on October 15 at the home of the Rev. George Waters, in the Yakima reservation.

The craze to work on the section has struck the women of Mineral and Morton. Some of them have stuck it out for some time, and others are sort of wavering. They are paid $3 a day.

The Walnut Grove school district, near Grandview, has voted to buy a school bus to take the children to school from the outlying districts and to take the high-school scholars to Prosser high.

Charles Kamm of Snohomish has purchased the O. A. Ottestad ranch of 53 acres at Hampton for $12,000. The purchase included the stock, implements, crops, teams, etc. Forty acres of the Ottestad farm are cleared.

The Yakima Fruit Growers' association recently established a record price for Yellow Transparent apples, when it sold in New York a car for $1475.58. The car contained 566 standard boxes and 391 peach boxes.

The Evergreen huckleberry harvest is on in Cowlitz county, and the boys and girls and many older ones are berrypicking. They are receiving 5 1-2 cents a pound, and it is said that they can easily pick 100 pounds a day.

J. J. Gallaher, who operates a five-header and threshing crew on his ranch near Mansfield, has a number of women header box drivers, and says they are delivering first-class work and equal any of the drivers in his employ.

R. B. Mitchell, late head of the poultry department of the Agricultural College of Delaware, will assume the headship of the poultry department of the state agricultural college on September 1, taking the place of Mrs. Helen Dow Whitaker, resigned.

The Indian women of the Yakima reservation have proven their interest in the art of canning and jelly making by asking the home demonstration agent to demonstrate before them. Their request was responded to by Miss Elizabeth Jacobson.

From the increase from one brood sow which he purchased eight years ago last March W. H. Amon of Kennewick has sold $6159.40 worth of pork, has butchered 72 hogs for home use and still has left on his Horse Heaven ranch 11 hogs and 48 young pigs.

One thousand homes to be built every month until January 1 is the goal set by the war house-building drive committee of Seattle to take care of the vast army of war industry workers there. An army of 5000 men to build these houses is now being recruited.

Jacob Harder of Ritzville has purchased 10 sections of land in the northeast portion of Adams county. Most of the land is grazing land, which Mr. Harder will consolidate with his other large holdings, using it in his stock business. The consideration was around $106,000.

The business men of Aberdeen have offered to organize a business men's shift at the shipyards to relieve the labor shortage. The men plan to abandon their offices and business clothes for from four to eight hours a day in order to speed up the production of ships.

It has been reported that 12,000 bushels of wheat on about 700 acres in the Okanogan valley have been destroyed by a horde of grasshoppers. This is the fourth year the insects have devastated this section, and it is estimated that the loss already caused by grasshoppers is $80,000.

For the first time in several years the Nooksack river is now clear of drift from its mouth to a point near Ferndale. A government snagboat has been working for three weeks and has just succeeded in clearing the river so that light-draft boats can make the trip from Marietta to Ferndale.

Plans for the mammoth state college mess hall, to accommodate 600 soldier mechanics, are completed and construction will soon commence. The building is to be in readiness for the third training contingent, to arrive October 15. The building will be 64x210 feet, with two full stories and a half basement.

Under the direction of James Brolin, flax expert, of Portland, the first Whatcom county flax gathered by Dr. A. W. Thornton for practical demonstration this year was broken and scutched last week at the building on Dock street, Bellingham, where several tons of the flax have been stored. Mr. Brolin was well pleased with the results, and hopes to see the flax industry developed in Whatcom county.

Mrs. Grandville Ross Pike, known throughout this state as the "Bird Lady," died recently at North Yakima. All her life she made a study of birds and their lives and habits, and it was through her efforts that the school children grew to know and love the birds. She obtained many members in this state in the schools for the society for the prevention of cruelty to birds.

# Roosevelt on Farm Problem

## *Should Formulate American Agricultural Policy and Reorganize National Agricultural Department.*

Twenty thousand people heard Ex-President Roosevelt at Springfield, Ill., last week. The occasion of his address was the centennial celebration of Illinois' admission to statehood, in 1818. Colonel Roosevelt spoke for the speeding up of our war program and for preparation for universal military training after the war and for solving social and industrial problems that will come with peace. Turning from labor problems to the farm, he said:

"The foundation of our permanent civilization rests on the farmer; and by farmer I mean not the man who owns land which others till, but the man who himself tills or helps till the ground part of which, at least, he himself owns. A cardinal feature of our national policy should be the insuring of his rights to this man; and this not only for his sake but for the sake of all of us. Normally he must be the owner of the ground he and his sons and his hired man till; and the hired man must have conditions shaped so that if he is hardworking, thrifty and energetic he shall have the means and the opportunity himself to purchase farming land on which to dwell and to bring up his family. We ought now to formulate, and we ought long ago to have formulated, an American agricultural policy; and the national agricultural department should be completely reorganized and its activities made far more productive than at present, especially in view of the large sum of money now allotted it. Normally, in farming regions, where the land is agricultural land, tenancy should be recognized only as a transitional and temporary phase, and normally the working farmer should himself be the landowner; and legislation to secure this should at once be enacted.

"Drastic action should be taken to stop the purchase of agricultural land for speculative purposes. Where necessary, this should go to the length of giving full title to the occupant for use only, and limiting his power or alienating the land. System of marketing must be developed, so as to do away with the holdup methods that in so many places still obtain. The producer must get more and the consumer pay less than at present, and both these ends can be and have been attained by proper legislation.

**Tenant Farming Growing.**

"We ought to do these and the many other things necessary now, when it is possible to do them without causing too great distress to those in possession of long undisputed privileges which by time have grown to possess much of the character of rights. Nine-tenths of wisdom is being wise in time. In this country tenant farming and the individual ownership of extensive tracts of agricultural land are growing at the expense of the homestead holders. Let us take whatever steps—conservatively if possible, radical if necessary—are needed to remedy the situation; for if left unremedied the result may be something unpleasantly near revolution a half century hence; and in such case the wrongs will be remedied only by action which causes other wrongs to innocent people and works deep demoralization to those benefited; whereas at present, by the exercise of forethought and resolution, we may escape both kinds of evil.

"There are certain things the state can do and must do for the farmer. But most things the farmer can do for himself by association with his fellow farmers, and such independence of unnecessary state action is healthy in itself and is consonant with the rugged self-reliance characteristic of that most typical of American citizens, the American who dwells in the open country and tills the soil with his own hands."

# Loving Cup

## For Championship Hereford Bull



The Pacific Northwest Farm Trio has posted a loving cup to be awarded the exhibitor of the champion Hereford bull at the Northwest Live Stock show at Lewiston, Idaho, November 7 to 16.

**Let Bygones Be Bygones.**

She was an eminent woman surgeon who before the war had been an ardent suffragist, and was attending to a wounded guardsman.

"Do you know," she said, "your face seems strangely familiar to me. I've been trying to remember where we've met before."

The guardsman looked at her for a moment unflinchingly. "Well, mum," he said, "let bygones be bygones. I was a police-constable."

**WHAT IS THE BEST COMBINation of poultry feed under present conditions of supply and prices, profitable production being the basis of comparison? James Dryden, editorial contributor to the Farmer's poultry department, answers this question in next week's issue of this paper.**

## POTATOES SHORT.

### Condition Less Than 80 Per Cent.

An official statement by the United States department of agriculture estimates the crop of potatoes this year for the entire country at 391,000,000 bushels. This is a reduction of 14,000,000 bushels from the estimate made on July 1. The figures give the northwest approximately 140,000 acres and an estimated production of approximately 18,500,000 bushels. The production in the northwest last year was approximately 24,000,000 bushels, which indicates a reduction this year of approximately 25 per cent. The estimated yields for the three northwest states this year are as follows: Washington, 8,463,000; Oregon, 5,533,000; Idaho, 4,309,000. The total acreage in potatoes this year in the entire United States is given as 4,113,000, approximately 93 per cent of the 1917 acreage. The state of New York leads this year with 344,000 acres and an estimated yield of 35,500,000 bushels. The next two states, in order, are Michigan, and Wisconsin.

# Mr. Houser Explains Replies to Farmer

(Continued from page three.)

tle over 300,000 bushels. Of this we have received over 20 cars that have been consigned direct to us. To give you an illustration of the service we are rendering on these direct consignments, I am enclosing a copy of a letter dated yesterday addressed to W. L. Gibson of Nyssa, Ore. This letter speaks for itself. Under the regulations, if I had taken this grain in for the account of the grain corporation I would have had to take it on the grade designated by the state and deputy federal inspector, which, on account of damaged kernels, would have been graded No. 4. This seemed to the writer a rather excessive charge, and knowing that the mills were anxious for wheat, we sold this on sample to a mill, netting to the shipper 4 cents per bushel more than I could have legally paid him.

I sincerely hope that I have made myself clear to you in this letter and that there will be no further apprehension on your part as to the protection of the farmer by this office. We receive here on an average of from 300 to 500 letters daily, and put in many nights going over this vast correspondence to personally see, as far as we can, that every letter coming in here receives a courteous and explanatory reply.

Please permit me to say that if at any time the farmers of the three states in my zone feel that some one else could give them better service in a large and broad way toward the movement and forwarding of this wheat crop to make it possible for them to receive their payment I do not wish to stand in the way for one minute, as I assure you that regardless of the reflection cast I have taken this work up with no other view than to be of some benefit to the wheat growers of the Pacific northwest. With the many perplexing problems that we have encountered in this work it is by no means at all times pleasant, as many conditions have arisen here in the northwest that are so different from those throughout the eastern part of the country that some of the regulations by no means fit our condition. These I have undertaken to modify and adjust wherever it was possible to do so. As you know, the grain corporation has a war function and is devised to meet war conditions. I fully realize that it is not perfect by any means, and I do not expect to see it perfect, but that is not going to deter me from continuing to try to make it perfect.

So much for our public work; just one word in regard to the Portland Flouring mills. I think if you will take the pains to read over our statement it should be apparent that we have not taken this over with any selfish motives whatsoever. It is unfortunate, through the death of Mr. Wilcox, that the heirs decided to dispose of this property and that I should have been rather embarrassed with the work that I am now doing, but I ask you in all fairness if I really should have been altogether disenfranchised from the opportunity that presented itself, as I assure you no one has ever undertaken any work with a higher motive than I had in taking up this work, having had to practically put in other hands my entire grain business, which I had toiled diligently, slavishly, for the last 20 years, on many days as much as 18 hours, in building up. The entire proceeds from this business, which is now being audited by a public accountant, have been turned over to the Red Cross and other war relief funds, the same as I am now doing with the proceeds that will come to me over and above 6 per cent on my part of the investment in the Portland Flouring mills, and so far as gouging or unfair treatment to the grower is concerned, I will respectfully refer you to any of the points or sections where we have been in direct touch with the grower and I will leave it for them to answer. The volume of our purchases and shipments during the five years preceding our entrance into the war speak for themselves. During that time there were not to exceed a few days in which we were not in the market, and needless to say, if we did not pay the price we would not have done the volume of business we did.

At present I have but one object, and that is the faithful performance of my duties as an official of the grain corporation. I have absolutely no interest in the management of any grain or milling concern. The grain business was turned over to Mr. Draper over a year ago. The Portland Flouring Mills and the Puget Sound Flouring Mills companies and their subsidiary companies are all under the direct management of Joseph Ganong. I have been to the office only twice since taking it over, and then only for the purpose of some signatures pertaining to the transfer.

FOOD ADMINISTRATION GRAIN CORPORATION.

M. H. HOUSER,
Second Vice President.
Portland, Ore., Aug. 31, 1918.

The following is the copy of the letter addressed to W. L. Gibson of Nyssa, Ore., with regard to the direct consignment of a car of wheat to the food administration grain corporation, which is mentioned in the accompanying letter of Mr. Houser:

"The grade on this car on arrival, as per official inspection certificate attached to account sales, shows No. 4 soft white on account of 8 and 4-10ths per cent damaged berries. Had this car been unloaded at the dock for our account we would have been compelled to purchase same at the discount for No. 4 wheat, 11 cents per bushel, but we were successful in turning the same to one of our local mills which was in need of wheat, and when so doing prevailed on them to take it as No. 3 wheat, 7 cents per bushel discount, and enclose herewith account sales on this basis.

"We were fortunate in having the opportunity to dispose of the car locally. The local mills now have more wheat on track than they can take care of, so arrivals to the grain corporation are going into the terminal docks for our account, and this condition will probably exist for some time to come."

# Will Be Big One

## Fourth Liberty Loan Comes Soon

The biggest financial achievements of a nation accustomed to big finances, the first three Liberty loans, are to be eclipsed by the fourth Liberty loan. The coming loan will be at least twice as large as the third loan, and perhaps larger, dependent upon whether it is finally decided to call for $6,000,000,000 or $8,000,000,000.

"It is for statisticians and economists to enlarge upon the extent to which individuals have responded to their country's call and to set forth to what extent history's greatest war chest was furnished by present and what by future generations and to dilate upon direct tax levies and bonded indebtedness," says a government official. "The general patriotic American only knows that six or eight billion dollars is needed and that it will be raised."

Germany's people, faltering at home as their soldiers are faltering beneath Foch's blows in the field, raised only enough in their last loan, it is said, to pay interest on previous war levies. Turkey's last feeble effort was to raise $12,000,000 of a proposed $32,000,000 loan.

Real sacrifice of many comforts will be the means by which many American families swell their purchase of fourth Liberty loan bonds. Those whose service flags bear a star of gold will not be inclined to sympathize deeply with those who complain at slight economies in the interest of war funds.

# Stick to Association

From the Spokesman-Review.

Mr. Roosevelt spoke in wisdom when he said, in his address the other day at Springfield, Ill., that progressive legislation can help to bring about better marketing conditions, but the farmers can do more themselves through cooperative organization and action.

While that truth applies to all farmers it has special force in relation to fruit growing. As P. R. Parks, general manager of the cooperative Spokane Fruit Growers' company, says, "the grower has his ups and downs and there is nobody to help him when he is down. The grower must stay with a competent sales agency that can get him the maximum price whether the season is good or bad."

After a series of poor seasons the apple growers of the Inland Empire are enjoying the liveliest market they have known in several years. Their product is in demand and far-seeing speculators have come into the field to tempt growers to leave their cooperative organizations and make quick deals for cash. Mr. Parks reports that the cash buyer who bought apples at $40 to $45 a ton is making a snug profit at the grower's expense of 25 to 50 per cent on his investment.

The grower will find it a pretty safe rule to follow that when cash buyers come into the field he will do well to stay with his own organization and its marketing agency. In a good season like this his organization will get him better prices the season through than the cash speculator will pay. In poor seasons the speculators vanish and the grower needs his own organization to find him markets and sell his apples through collective bargaining.

## Apples Good and High Priced.

Present indications are that the Spokane valley will produce three or four times the quantity of apples that it did last year and that the average price will be about 50 cents a box more than the price last year. This is the estimate made by P. R. Parks, general manager of the Spokane Fruit Growers company. The company represented by Mr. Parks reports the confirmation of orders for considerably more than 100 cars of fruit at the following prices:

Extra fancy Wageners, $1.75; Jonathans, $1.75 to $2; King David, $2 and Delicious $2.

Fancy Wageners, $1.25; Jonathans, $1.65 to $1.75, King David $1.75, Delicious $2.15 to $2.25.

C grade Wageners, $1.10; Jonathans $1.25 to $1.50, assorted varieties $1.15 to $1.25.

## Irrigation Development.

In the platform of Dr. John W. Summers of Walla Walla, who is a candidate for nomination for congress in his district, the following are among other plans: The speedy development of our streams for irrigation, and land allotments for our soldiers. Water power for factories and cheap electricity in every home and on every farm for light, power and fuel.

# Damaged by Clover Root Borer

## *In Western Oregon and Yakima Valley, Washington*

The clover root borer is doing considerable damage in Coos county, Oregon, this season. Its effects were seen by a Farmer representative while there recently, and it is present in both the Willamette and Yakima valleys. Mr. Creel, in charge of the United States



**These sketches show the root borer in various stages, also his work.**

department of agriculture's station for cereal and forest insect investigations in the northwest, at Forest Grove, Ore., advises plowing while the ground is dry as the most effective local remedy. When plowed, the ground should be harrowed and as many roots brought to the surface as possible. This will help, even if the same ground is seeded to clover the next year. The plowing and harrowing is estimated to destroy 50 per cent or more of the borers, depending on the number of roots brought to the surface. The beetles left must have good sized roots in which to bore, or they can not survive the next spring.

Ths beetle travels by spring flight and has been proven to travel a mile and a half and reach a height of 50 feet, so that in a country like the Willamette valley, when every farm has clover, it does not seem that even by eliminating clover from a farm for a season or two the danger of borers would be entirely eliminated.

The plan most recommended by Mr. Creel's office is short crop rotation. If clover is sown one season and, after the crop is harvested the next season, it is plowed up during the dry weather and sown to grain or some cultivated crop, most of the borers will be eliminated.

Originally from Europe, the clover borer was accidentally imported into America without the natural enemies with which it had to contend in its native home. Affected plants are apt to break off at the level of the ground, and on examination the roots of the clover will be found to be tunneled, the cavities being blackened and often containing the tiny beetles or the grubs; sometimes eggs will be found if the tunnels are examined with a good lens. The winter is passed in the tunnel, for the most part in the adult stage. Migration occurs usually in the latter part of the spring, new fields being attacked and tunnels made. In the course of a few weeks the eggs are laid, packed away in dead parts of the roots and covered up with refuse. Toward the latter part of the summer the larvae change to pupae in the tunnels and become adult beetles by fall. Both larvae and pupae feed on the substance of the roots.

## MUST RESPECT LAW.

### Must Handle Lawless Lawfully.

The council of national defense has sent to all the state councils of defense throughout the nation an urgent appeal that lawless treatment of persons suspected of disloyalty be prevented.

"In the last few months in many parts of the country there has been a tendency toward lawless treatment of those suspected of disloyalty," says the appeal. "However patriotic may have been the motives which prompted these outbursts, their effect is deplorable. They are blots upon the war record of a nation which has declared itself to be fighting for a universal reign of law; they furnish ammunition to those makers of enemy propaganda who are trying to make the world believe that the enemies of Germany, too, are capable of atrocities; and frequently, by rousing anger and fear, they tend to undo the work which the councils of defense, through their educational campaigns, their Americanization work and their community organization, have done and are successfully doing to unite the nation in the fellowship of war work.

"The council of national defense looks to each state council of defense to see to it that these disorders do not occur in its state, but that sedition is henceforward stamped out by lawful means only, and that differences and disputes are adjusted, not by voluntary or self-constituted committees, but by official authorities.

"This task calls for leadership and action. The council of national defense makes this request in the full confidence that each state council will assume the responsibility for keeping the fair record of its own state clean from this time forward."


# FALL SEEDING

## *Wheat, Rye, Oats*
## *Clover, Alfalfa, Timothy*

**RECLEANED STOCKS AT RIGHT PRICES**

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# You Sit Where You Always Sat On the Seat of the Implement




YOU wouldn't think of riding on the back of one of your horses while at work in order to guide your team. If you did you would require another person to operate the implement, because implements require constant attention.

Then why attempt to operate a tractor in a manner which your experience has proven impractical? It is just as illogical to ride on a tractor in front of the implement and expect to operate the implement from that position as it is to operate the implement from the back of your horse.

*Any way you look at it you are working at a disadvantage with the ordinary tractor. To do the best work two operators are required, one on the tractor and one on the implement. In these days of extreme labor shortage this is a tremendous handicap. With the operator on a tractor in front of the implement it is manifestly impossible for him to give the implement attention and make adjustments for varying field conditions without losing time.*

### *Just Like Driving Horses*

With the Moline-Universal Tractor you sit on the seat of the implement and have perfect control of both implement and tractor. You are in the best position to observe the work, make adjustments and manipulate both tractor and implement. This holds true regardless of the work being done—plowing, discing, harrowing, planting, cultivating, mowing, harvesting, both grain and corn.

### *A Time Tried Principle*

There is nothing new about this, we simply apply a principle which millions of farmers have demonstrated to be sound. The Moline-Universal gives one man control of greater power than is possible with horses, with the same method of handling and as much versatility. With the Moline-Universal one man can farm more land. It is a six-horse unit—easier to control than one horse and capable of doing the work of from 6 to 8 horses.

### *Works Day and Night*

The One-Man feature is just one of many advantages the Moline-Universal has over other tractors. It is the only tractor which will do all farm work, *including cultivating.* It is the only tractor regularly equipped with self starter and electric lights. Non-robust labor can operate the Moline-Universal successfully, and it can be worked day and night.

No detail has been overlooked to give the new Moline-Universal Model D Tractor positive reliability. The perfected, overhead-valve 4-cylinder engine develops unusual power, and is economical in operation. It is conservatively rated at 9-18 H. P. Oil is forced to crankshaft bearings under 35 lbs. pressure. Gears are steel cut, drop forged, and heat treated. All shafts are splined. Every working part is easy to get at, and every moving part is enclosed.

### *Valuable Information for You*

Our catalog tells how you can operate your farm with less help and expense by using a Moline-Universal Tractor. A post card will bring the catalog to you.

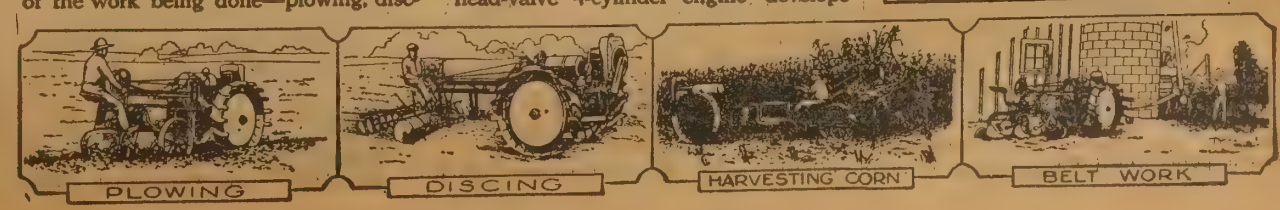
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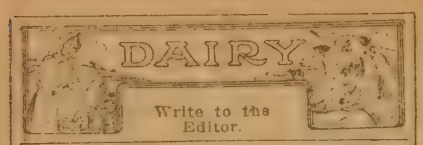
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A. B. NYSTROM, Editorial Contributor

# Keep Silo Air Tight

Dairy specialists of the United States department of agriculture issue warnings to beginners with silos and for those who have not made complete success of this method of preserving feed to use constant precaution to have the silo airtight. The complete exclusion of air is recognized as one of the first essentials in making a good quality of silage. Speaking of making corn silage the department says that corn should be cut when the kernels have passed the milk stage and are beginning to dent, as this is the period when it contains the greatest amount of food material. Concerning the packing of the silage the advice continues:

"Too much stress can not be laid upon the necessity of thoroughly packing the fodder in the silo so as to exclude the air as much as possible. It is upon this one thing that the keeping of silage largely depends. A device consisting of a jointed pipe, or some variation of it, attached to the top of the blower pipe is at present in use for distributing the corn fodder in the silo. By the use of this distributor it is possible for one man to scatter the cut corn evenly and at the same time to tramp it. Without the use of this device it is necessary to have at least one extra man in the silo to fork the material over so that it is evenly packed. Besides the saving of one man's labor, the distributor does away with the nuisance of having the loose material flying around, thus annoying the man in the silo, and also lessens the danger of being struck by some foreign object that may have passed through the blower.

"Oftentimes the corn fodder is so dry when it is cut that it is necessary to add water to make up for the deficiency in moisture and provide for the proper packing of the silo. This water is most easily added to the blower when the corn is being cut, and it is also more thoroughly mixed with the cut material in this way.

"For the top layer of the silo it is good practice to use heavy green stalks from which the ears have been removed. This forms a heavy layer that packs well and at the same time contains a smaller amount of food material, so that the minimum loss is sustained if it spoils. Various methods and materials have been used for covering the top of the silage to prevent its spoiling. None has given complete satisfaction, but the one mentioned above has given as good results as any, especially when the top layer was thoroughly wet down and packed firmly by tramping. The best practice is to commence feeding as soon as the silo is filled, in which case there will be no loss of silage through decay."

## Babies at Dairy Show.

How and why milk and butterfat are essential to the growth of babies and young children will be shown in the most graphic way at the national dairy show, Columbus, Ohio, October 10 to 19. One entire building will be devoted to the interest which mothers have in the use of dairy products. A large enclosure will be provided for a well babies' clinic to be held, and the cooperation of the children's bureau of the United States department of labor; state, local, as well as national children's welfare workers are being enlisted in this great movement that is designed to emphasize the importance of keeping children growing by supplying them all that they need.

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## TESTING COWS.

### At One-Half the Usual Expense.

By A. B. NYSTROM.

A new plan of testing cows has recently been started in Lewis county, Washington. It differs from the old plan of cow testing associations in the respect that the farmer must take his own samples and weights and make his own estimates of the feed consumed.

It is not presumed that all the dairymen who would patronize one of the old associations will join this new one for the reason that there is no advertising feature connected with this new plan. While the old plan was inaugurated for the purpose of weeding out the poor cows, experience has taught us that most dairymen join because of the advertising they get by having a certain number of cows pass the 40-pound mark for the month. Cow-testing association records can be made very authentic if the tester is "on the job" all the time, but too often it has been found that even though the tester is there the owner does his own weighing and sampling.

It was after considering these points that the writer decided to devise a plan whereby every dairyman in the county, no matter how far distant, could have his cows tested at one-half the usual expense of a cow testing association. The following is the plan and contract:

1.—Organization:
- a. (Name) Lewis County Cooperation Testing association.
- b. All Dairymen who sign contract shall become members.
- c. The Association shall be managed from County Agent's office.

2.—Finance.
- a. There shall be a membership fee of $1.
- b. Every member shall pay into the Association treasury in advance 75c for each cow tested each year, or part of year.
- c. This money shall be used to pay tester's salary, purchase acid, and other supplies.
- d. Dairymen must provide their own milk scales, sample bottles, and cases. The cases shall be uniform.

3.—Operation.
- a. Testing shall be done and record kept at the County Agent's office, under direction of the County Agent or his assistant.
- b. Milk to be weighed and samples to be taken of two consecutive milkings from each cow each month.
- c. Weighing and sampling to be done by the owner or his helpers and the records of the weights, with the samples, to be sent to the County Agent's office.
- d. Each member shall weigh (or estimate carefully) the daily amount and grade of feed each cow receives. In case the feed has been purchased he shall give price. He shall make make note of this on proper blanks and send them to the County Agent's office with the milk records.
- e. All association books and records to be kept at the County Agent's office.

4.—Special Rules.
- a. No herd less than five cows will be accepted.
- b. Farmers wishing a record on their cows must sign contract. (See attached.)
- c. All bills must be paid annually in advance. Checks made payable to the county treasurer but sent to the County Agent's office.
- d. The Association year will begin September 1, 1918.
- e. The County Agent shall make a complete report once a year showing the records of the testing and receipts and expenditures.
- f. No records of production shall be published, only general information, such as number of cows tested, the yearly report, cows sold for beef, shall be allowed to go to the press.

**Testing Association Contract.**

I ....., hereby agree to follow all rules laid down in the plan of organization of the Lewis County Cooperation Cow Testing association and herewith send a check for $1 for membership fee. I further agree to enter ..... cows, and to pay a testing fee of 75c per year in advance for each cow tested for the year or part of the year. You will find check for same enclosed. I also agree to provide myself with a milk scale, and the proper sample jars and case, and to take every precaution to see that my records are accurate and authentic.

Date .....

(Signed) .....

Address .....

A laboratory has been fitted up in the county courthouse, where a large electric tester and all the necessary equipment have been installed. The apparatus needed by each dairyman is assembled at the laboratory and sold at cost to the farmers as they sign up for the work. The regular cow-testing association books and record sheets are used. These are furnished by the dairy division of the United States department of agriculture.



Your Daughter and an Empire

can positively relieve you of the tiresome, irksome disagreeable task of milking. You and your sons can spend more time in the fields both morning and evening.

Empire Milking Machines are so simple—so easy to operate—that a boy or girl can milk the entire herd with it in less time than it took you and your hired hands.

Hard milkers or easy milkers—nervous or calm cows—large or small teats—even or uneven udders—make no difference to the Empire. It milks them all. And the teat cups stay on without surcingles.

The New Empire Super-Simple Pulsator has no piston. Nothing to wear and lose vacuum. Its action is regular and positive, gentle and soothing to the cow. Usually produces greater milk flow and lengthens period of lactation.

Learn the details. Have the Empire dealer in your locality give you a demonstration. Write for our 1918 Catalog No. 48,

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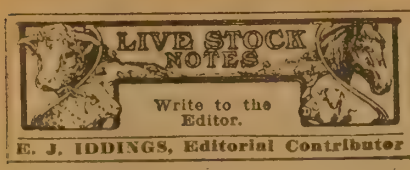
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HIDES

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We do the largest consignment business in the northwest. Equally fair treatment on all shipments, large or small. Returns at full market value mailed same day as goods are received. Trial shipments wanted and appreciated, but are handled as regular shipments and not inflated values.

THE H. F. NORTON COMPANY
206 Third Ave. So., PORTLAND, ORE.
SEATTLE, WASH. NAMPA, IDAHO.




E. J. IDDINGS, Editorial Contributor

# Use Cottonseed Cake

W. B. Ayer, federal food administrator for Oregon, is advocating the wider use by stockmen of cottonseed cake as a means of relieving the feed situation. Mr. Ayer believes that the cottonseed cake can be laid down at northwestern points so that it should cost the buyer not over $75 per ton in carload lots. Where smaller amounts are needed they might be secured by cooperative buying. Concerning the matter of this class of feed Mr. Ayer says:

"In view of the serious shortage of forage and other animal feeds, it has occurred to me that a much greater use of cottonseed meal or cake could be made to great advantage. The sheep industry has been using it to a limited extent for a number of years, but nowhere near as extensively as in many other sections of the country.

"I took the matter up with E. A. Peden, federal food administrator for Texas, and Mr. Peden advised me that the food administrator has fixed no price on cottonseed; that the present market price is $53.50 per ton basis, 43 per cent protein, f. o. b cars at mills; that the mills are in operation at the present time on the new crop of cottonseed, and he also states that he is unable to make any forecast of future prices. My own judgment is that the situation is so serious that sheep, cattle and dairy interests should not hesitate about filling their wants promptly.

"The rules governing the sale of cottonseed prohibit the dealer from carrying over a 60 days' supply and the consumer from buying an excessive stock. This rule, so far as it affects consumers, on account of our great distance from the market, will be suspended, and consumers will be permitted a full winter's supply, with the understanding that it is not to be resold.

"Consumers should be advised that any less protein content than 43 per cent should be bought at a reduction for every point under 43, but that there is no economy in buying cottonseed products of a less protein content; that 43 per cent is the standard and should be adhered to and the buyers should see that they get this percentage."

## Veterinary

Dr. S. B. Nelson

**Colt Is Ruptured**—I have a young colt three months old that is ruptured at the navel cord. It is now very near the size of my fist and seems to get larger all the time. The colt is fat and seems to be doing well. Can you tell me what to do for him?

Silvies, Ore. J. V. S.

The best advice I can give you regarding your colt is to take it to your nearest competent veterinarian and have him perform the radical operation for the rupture. The animal can be cured. Most of them recover perfectly; but it is an operation that only a skilled operator can perform.

**To Dry Heifer**—Our 8-year-old heifer comes fresh in September. It is hard to dry her up. Is it wise to cut down her green feed? Can you give me a good ration for her? G. I. F.

Prosser, Wash.

Put your heifer on dry feed, and not very much of it. Any kind of dry feed will do her, and not too much, of course, not so she will have a bowel disturbance. You want to keep the bowels open with a little physic, such as a quarter to a half an ounce of epsom salts daily or every other day. There would be no special ration for her until after she calves.

**Stomach Worms in Sheep**—My brother has lost five lambs all from stomach worms, I think. One died just recently and I helped him to make an examination and found the worms in the fourth stomach, all right, also about one-half a teacupful of soil. Under a glass it looked like soil, also several pieces of gravel one-half the size of a pea. I think the soil may have come from eating grass that had been irrigated with muddy water. But the pieces of gravel I can't explain. The lamb that just died was fat enough for mutton, but some have got thin.

Any advice you may give will be appreciated. F. J. C.

New Plymouth, Idaho.

The following treatment has frequently given very satisfactory results: Give one tablespoonful of gasoline in a couple of ounces of raw linseed oil, this mixture to be added to a smaller quantity of milk and given as a drench once daily for three or four days. It would be well to change the pasture for the sheep if this is possible.

**Bloat in Cows**—I am pasturing some cows on alfalfa pasture and they are bloating quite a bit and I understand that it becomes a chronic disease. Is it so, and is there a cure for it?

A SUBSCRIBER.

Hagerman, Idaho.

The best thing for you to do is to take your cows off the alfalfa. It may become chronic with the cows to bloat if kept on that kind of feed constantly. There is no cure for the alfalfa bloating the animal, but for that particular bloat a very valuable thing to do is to give one ounce of creolin in an ounce of water. Follow with one to one and one-half pounds of epsom salts in three quarts of water. If the weather is warm so as not to cause the animal to chill, the throwing of very cold water over the loins will also stimulate the contraction of stomach muscles. Of course, in severe cases, the best thing to do is to immediately tap the animal with a trocar and canula. This should be done on the left side, half way between the last rib and the hip joint and a hand's breadth below the back. Then follow with the treatment previously given.

**Udder Hard; Milk Stringy**—We have a cow that calved May 29, 1918. At times the right quarter of her udder seemed a little hard and milk was stringy, the last day or two this part of the udder has been very hard and manage to get very little milk out of right front teat. The milk is yellow from this teat. As I have five children would like an early reply to ascertain if milk is good to use and to know what to do for the cow. S. C., Yakima, Wash., R. 1, box 115.

The milk is not good for your children and you ought to consult your local veterinarian and have him give you treatment for the disease in your cows. It is never safe to feed children, or use it yourself, if it comes from an udder which is inflamed or diseased.

**Cow Has Sores**—We have a cow that has sores on her right side and on her head, around the horns. These sores have a white scab on them. She is not sick that we can see. She eats all of her feed, but she is very poor and holds her ears back all the time. What kind of a disease is this and is it catching? A. H.

Sumas, Wash.

The cow is probably affected with some fungous disease. Try painting the sores daily with a solution of one-half of 1 per cent of titric acid in water. This is poisonous and wants to be kept where children can not get hold of it.

### Boys' Idea.

Recruiting Office—But what would a boy like you do in the army.

Lad—Don't you need a caddie to carry the swords and things?—Dundee Herald.


# Why the cost of producing cattle does not determine their selling price

TO produce a steer for meat purposes requires, as you know, a period of from one to three years.

The prices the producer has to pay for feed, labor and other items during this period, together with weather conditions, determine what it costs to produce the steer.

But the price the producer receives for the steer depends on conditions existing at the time it is sent to market.

If the supply of cattle coming on the market at this time is greater than the consumer demand for dressed meat, the prices of meat and live stock go down.

On the other hand, if the number of cattle coming to market is less than enough to supply the consumer demand for meat, the prices of meat and live stock go up.

Not only do the receipts of animals vary from week to week but the consumer demand for meat also fluctuates.

The rise and fall of prices results from an economic law that operates in every business. It is the packer's task to turn live stock into dressed meat and by-products, and distribute them to the consumer under control of this law.

Market conditions and competition establish the prices the producer gets for his cattle. When meat prices go up or down, so do cattle prices.

The packer can't pay out more money for animals than he takes in from the sale of meat and by-products.

Swift & Company will gladly co-operate in the carrying out of any national policy that will tend to steady the prices of live stock and meat.

## Swift & Company, U. S. A.

A nation-wide organization with more than 20,000 stockholders

POULTRY

Write to the Editor.

JAMES DRYDEN,
Editorial Contributor.

# Win War With Eggs

## Poultry Industry Must Increase

The National War Emergency Poultry federation, an organization of poultry interests throughout the entire country, is making a nation-wide campaign for the increased production of poultry as a means of improving the food situation. The policy of the organization is set forth in an official list of objects which it is its purpose to attain during the year 1818-19. These objects are as follows:

1. To help win the war by uniting the poultry interests, fostering the industry and supporting the nation.

2. To enlist, for the federation in the fulfilment of its purposes and program, and the full and united support of every individual, firm and corporation, association or other organization having to do with or interested in any branch of the great poultry industry.

3. To eliminate duplication of effort and to studiously avoid conflict with the activities of any organization, individual or governmental agency in the accomplishment of the constructive and patriotic work we may later undertake.

4. To enlist and equip the American hen to fight the kaiser through her ability to economically produce more wheat and meat substitutes.

5. To formulate a sound, practical policy looking to the stimulation of poultry and egg production which shall secure to the producer fair remuneration for his efforts.

6. To educate the consuming public as to the food value of poultry and eggs and their proper use as everyday foods.

7. To assure those engaged in production that the increased per capita consumption of poultry and eggs from year to year is clear proof that this tendency will continue with reasonable profit to the producer under proper production methods and conditions.

8. To provide ways and means to assure producers they will get feed, fuel and other necessary supplies, and to make known to the authorities at Washington and elsewhere that the meeting of these requirements is a national necessity, without which the industry will perish.

9. To assist actively in securing raw materials and manufactured products needed by the people in various branches of our industry, so as to prevent the stopping of those processes essential to and a part of the fabric of our nation-wide business.

10. To encourage among producers modern business methods, such as cost accounting and the adoption of approved scientific practices.

11. To help to secure uniform, interchangeable standards for our products in all markets, as we believe this to be a progressive step for the welfare of all concerned.

12. To work diligently with government agents and otherwise to secure and provide adequate transportation facilities for our products and at such rates and charges which shall be upon an equitable basis compared with those applying to competitive products.

13. To appeal to bankers and other business men of this country for their help in properly safeguarding our billion-dollar industry, which represents one-twelfth of our annual agricultural crop wealth.

14. To cooperate with all educational and publicity agencies, particularly the poultry and agricultural press, in securing and giving wide circulation to all available information of vital importance to the poultry industry.

15. To inaugurate a nation-wide survey of our resources, and to collect statistics which shall be classified and distributed with other data bearing upon the welfare of our business.

16. To correct abuses and prevent waste in any and all phases of our industry.

17. To initiate and secure the passage of such laws and regulations as will insure the economical production of the largest possible volume of poultry and eggs.

18. To lay plans to promptly restock war-torn Europe with poultry for breeding and commercial purposes when peace shall have been declared.

19. To set forth more clearly the true function of the exclusive breeder in improving and spreading the best types of fowls for different sections of this country.

20. To aid in selecting a suitable date to be known as National Poultry and Egg day, when we aim especially to direct attention by all available methods to the value and desirability of poultry and eggs in our national dietary.

21. To cooperate with national, state and local government agents in all matters pertaining to our industry, with the aim of maintaining continued high efficiency in their work.

### The Slacker Hen Again.

The slacker hen is in evidence now. She is getting ready for fall styles rather than helping win the war. She is starting to grow a new dress—in other words, molting. Her large plebeian comb,' indicating usefulness, is growing smaller. She is beginning to paint her legs and beak yellow (if she is of a yellow-leg breed). Her ovaries contract; her intestines grow smaller, and her abdomen grows hard. She is not laying. She is getting ready for the fall shows, for society. In another month she will have a new dress and will look neat and trim and will be sent to the show and get a blue ribbon, while Old Reliable will be looking the worse for wear but shelling bullets as usual to beat the Huns.

If you want to save on the feed bill, courtmartial the slacker and send her to the pot. She is worth more dead than alive. The hen that quits early to dress up for the fall shows is the slacker hen, the pro-Hun hen, the profitless hen.

Pick out and market those hens that are molting and not laying in August, and those that have molted and are not laying in September and you will get the poor layers. J. D.

### Intelligent Dog.

"And is your dog intelligent?" asked the lady.

"I consider him so," replied the mere man.

"And does he do tricks?"

"Oh, no; he's too intelligent for that."

"Why do you consider him intelligent, then?"

"Why, madam, when the women folks are around that dog never opens his mouth!"—Yonkers Statesman.

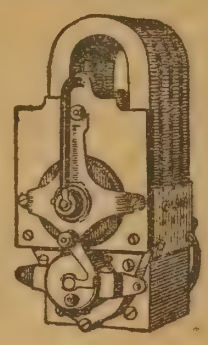
### Perfectly Safe.

Wife—The fact that there are germs on money doesn't worry me.

Hub—No, my dear. It would take a pretty active germ to hop from the money to you, during the brief time you have it.




Plow This additional Acreage Without Fuel Cost



Owners of tractors equipped with K-W Magnetos find they can fire thinner mixtures and cheaper grades of fuel and still develop full horse-power, than they could by any other system of ignition.

The intense hot spark that a K-W produces gets all the power out of every drop of fuel. It turns the ordinary wasted fuel into extra work *without* cost. A

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will start your tractor quickly and easily regardless of how cold the weather and will operate on all the low grades of fuel. It gives continuous—no trouble ignition.




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The powdered mica in Mica Axle Grease keeps the spindles smooth, resists wear and pressure, and makes the grease last twice as long. Mica Axle Grease would still be good axle grease without the mica. But the mica makes it better. Get a can from your dealer today.

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GRANVILLE LOWTHER,
Editorial Contributor.

# Orchard Troubles

## Pests, Disease and Remedies

By Granville Lowther.

ARTICLE IV.

The fruit tree leaf roller has of late years come to be considered as of more than ordinary importance. It has spread to most parts of the United States, and in some cases has damaged from 20 to 90 per cent of the fruit. I have seen a few orchards in New York state in which nearly all the foliage was destroyed, and a few cases have been reported in which every green thing on the trees was eaten off. In the Pacific northwest it has not been serious. In the spring, as the buds are bursting, the eggs hatch. At once the young caterpillars migrate to the developing buds and begin to feed on the unfolding leaves. In a few days they begin to spin fine silken threads from leaf to leaf. A little later they roll up a single leaf or cluster of leaves, and here they feed for most of the time, although straying out occasionally to feed in the open. As soon as the young fruit is set they go from leaves to fruit, sometimes destroying it almost entirely.

There are three stages of development, the egg, the larvae and the moth. The natural enemies are the bluebird, robin, catbird, redwinged blackbird, oriole, king bird, phoebe and English sparrow.

Control is difficult on account of the fact that they are to a considerable extent resistant to poisons. The contact sprays are better. Take the black leaf 40 in the proportions of one to 400, or one quart of the black leaf to 100 gallons of water, and it will kill. Kerosene emulsion or crude oil emulsion, in the proportions of one gallon to 15 gallons of water, will prevent most of the eggs from hatching if used before the buds open.

### Fruit Tree Leaf Syneta.

This insect is not well known, and is hard to eradicate, because it deposits its eggs in the ground, and the larvae have been found as much as 14 inches below the surface.

When the blossoms open in the spring the adults are found feeding on the petals. Later they feed on the leaves.

The remedy is not well known. Some think that arsenate of lead, double strength, is the best; but my own opinion is that black leaf 40, one to 400, is better. However, I have not tried it for this particular pest; but am basing my belief upon my knowledge of its effects on other insects.

### Greedy Scale.

In general appearance this pest resembles the San Jose scale, and is controlled by the same treatment.

### Green Fruit Worm.

In the apples these caterpillars often make small openings, which do not heal smoothly, and form a rusty or corky area, often mistaken for apple scab. They also affect the peach, plum, quince, currant, wild cherry, box elder and rose.

They are controlled by the same method as codling moth, in so far is it is possible to reach them with the poison; but the contact sprays, such as tobacco or lime sulphur, will kill them.

### Gipsy Moth.

This pest is not believed to have reached the northwest in any considerable number, but in Europe and in the eastern states it is quite destructive. It may be killed with arsenate of lead or tobacco spray.

### Mediterranean Fruit Fly.

This pest is carried into distant localities in fruit that is infested. It was probably brought to this country from Brazil; is abundant in parts of South Africa, is known to affect the peach, pear, plum, apple, fig, orange, lemon and other important fruits.

The eggs are deposited in the fruit; they hatch in about three weeks, then leave the fruit and enter the ground, where they change to puparia and later to adults. The adults push up through the soil and are again ready for the work of puncturing the fruit and depositing more eggs.

The remedy is some kind of contact spray, such as lime-sulphur, tobacco, etc.

### Oyster Shell Scale.

The adult scales measure about one-eighth of an inch in length and are dark brown in color. The color in early spring is grayish. The eggs hatch about the time the petals of the apple blossoms are falling. They are a little harder to kill than the San Jose scale on account of the stronger protection, but lime-sulphur or coal-oil emulsion will hold them in check, and tobacco will destroy them.

### Periodical Cicada.

This pest is what is familiarly known as the "seventeen-year locust." In the southern part of the United States it appears every 13 years. During the long period of their development as nymphs they live in the ground, sucking the juices of the roots of the trees. After they leave the ground and assume the form of moth or beetle a lime sulphur or tobacco spray will kill them.

### The Advance Guard.

The Puddelton Railway company, hearing that trains were being run more slowly to save wear and tear on the rails, adopted the idea.

One day, in consequence, a stranger waited for the train at Little Puddleton for over three hours. At last he said to the porter-cum-stationmaster-cum-ticket collector:

"Isn't this beastly train ever coming, man?"

The official sighed and then stared down the track. Suddenly his face brightened as a fat terrier waddled into sight.

"Ah, yes, sir. It'll be getting very near now," he said cheerfully. "Here comes the engine driver's dog."

LILLY'S SEEDS For Fall Planting

BEST FOR THE WEST

To lose a crop or part of a crop these days of food shortage is a calamity. Do not take chances with inferior cheap seeds or seeds not acclimated.

We test our seeds not in a general way but specifically for climate, soil, germination and pedigree. LILLY'S tested seeds, northern grown, are good seeds—by which we mean clean, pure, strong seeds, capable of producing the maximum crop of superior quality.

Write for Fall Catalog LILLY'S Seattle, Wash.

*Established 1885*

**The Advertisements in This Issue Are Well Worth Reading.**

They are informative and cover a wide range of subjects. You can profit by reading them carefully.




Raynster for Protection

Raynster is the family name of a complete line of weatherproof coats. Raynsters include coats for men and women, girls and boys, in all kinds of materials, at a wide range of prices.

Heavy rubber-surfaced work coats; warm, ulster-like coats for cold and rainy weather; imported cloth coats that are worn as overcoats; light slip-ons; school coats for youngsters—all these bear the Raynster quality label. Look for this label—be sure it is in the raincoat you buy. It is your protection. It assures good materials and fine workmanship and the best value for your money.

Write to us for a Style Book with illustrations and descriptions of the different kinds of Raynsters.

United States Rubber Company
Clothing Division, New York and Boston

Raynster
Reg. U. S. Pat. Off.

# United States to Furnish 70 Per Cent of Allies' Food Requirements

There are three outstanding features of the general international position which are exerting now, or which will exert in the future, a considerable influence on the supply and quality of our flour and bread, says George Broomhall's Corn Trade News.

The most important of the three influences is, perhaps, the continued good promise of American supplies, and the statement that in the coming season the United States will furnish 70 per cent of the allies' food requirements, compared with 50 per cent in the season just finishing. This statement includes all foodstuffs, but naturally breadstuffs are a very important part of the whole, and it is easy to reckon that if such a large part of our foreign supply is coming from the United States, whose food administration plans to export the surplus in the form of flour, we must be prepared for large imports of flour also in the new season.

The second important point is the expected large size of our own crop, which, if present hopes are realized, will yield some 3,500,000 quarters more than the 1917 crop. Everyone will welcome this fine addition to our home-grown food supplies, but unless the wheat is well harvested and millers receive plenty of strong, dry foreign sorts for admixture, the milling of such a large additional quantity of home-grown wheat will present difficulties.

The third point to which we may allude is the large proportion of our present foreign wheat supply, which is being furnished by the southern hemisphere. It is quite natural that these "mid-season" crops should furnish our supplies at the time when North American shipments are at their lowest ebb, and although the need for these supplies will be less urgent in the coming months, yet we are sure all will hope that we shall continue to get a good share of these favorite qualities. There are large supplies available, and we hope the transport difficulties will not be found unsurmountable.

**America's Great Effort.**

A telegram from Washington to the American embassy at London states:

Through the efforts of the United States food administration, the American people have voluntarily saved food to such an extent that in the last year the United States was able to provide 50 per cent of the general food shortage of the allies. This was done, even after three years of war demands, with no food surplus in the country and with crops 7 per cent below normal.

During the present year, with bounteous crops, the United States expects to provide against 70 per cent of the allied food shortage. During the last year the United States has shipped to the allies 150,000,000 bushels of wheat. The normal meat consumption in the United States averages 167.8 pounds per capita, but this was reduced voluntarily by the efforts of the people to an average of 159.8 pounds during the last year. By means of public cooperation of the general consumers an aggregate saving of 840,000,000 pounds was thus produced.

In peace times the export of food products from the United States for the two months of March and April averaged 196,000,000 pounds. In these two months this year the exports were 754,000,000 pounds. The total export of pork in May of this year was 281,000,000 pounds, almost all of it in bacon, ham and lard products.

## Mount Vernon Fair.

An agricultural fair will be held in Mt. Vernon on the ballgrounds October 4 and 5. The boys' and girls' agricultural clubs of the county will enter exhibits for prizes in competition. Professor P. Holland of the Washington State college will give some addresses. The Anacortes Elks' band has been asked to furnish music. The Junior Red Cross and the Boy Scouts will give exhibitions and demonstrations of their work.

**Real Dreams.**

"Ah, Miss Ethel, may I not dream that one day you will be mine?" "You may, but it won't come true."—Boston Transcript.


# The Biggest Link in the Chain of Greater Crop Production!

# PEORIA DRILL




NOTE the Wonderful PEORIA DISC SHOE

***AN ACCIDENT***

W. J. Rummens, of Pomeroy, while seeding along the right-of-way, his team became frightened by a passing train and ran across the track, breaking his drill so badly that he had to buy a new one to continue the seeding of his field. The new drill he bought was a PEORIA. The result is shown in the picture on the right.

***THE RESULT***

With the new PEORIA Mr. Rummens started seeding where he had left off. When the grain was grown the point where he began with the PEORIA could be easily marked with the eye. The grain sowed by the PEORIA was four inches higher and at least fifteen to twenty per cent thicker.

## Uncle Sam says "increase your crops"—the Peoria will do it

JUST as the big tanks play a vital part in the big offensive in France, so the New PEORIA DRILL plays an equally important part in the big food offensive which is constantly being waged in the Northwest. By actually increasing your crop yield the New PEORIA makes every acre of ground on which it is employed do nobler duty for our country in this hour of need. It is the duty of every farmer to produce the biggest crops possible.

The New PEORIA makes every seed count. It opens the furrow, drops the seed at the very bottom. This means a bigger yield—more profits for you. No seed is wasted—none left exposed to the birds or wind. Because every seed is laid at the bottom of a packed seed bed and covered, the grain grows evenly—the whole field ripens uniformly—the grain grades better in the market.

At the price of grain today can you afford to waste seed? Do you know that your crop yield will be greater when sown by a New PEORIA? NOW is the time to investigate the New PEORIA—not after your crop has been put in.

## Disc Shoe the Greatest Drill Feature in Existence

Does a saving of 20 per cent in your seed interest you? That's exactly what the famous PEORIA DISC SHOE will do for you. It has been absolutely proven by farmers all over the Pacific Northwest that grain sown with the PEORIA DISC SHOE at the same time and on the same soil and under the same conditions yields from 2 to 3 bushels more grain per acre than grain sown by any other method. With the high prices grain is bringing can you afford NOT to investigate the wonderful PEORIA?

At Washington on February 3, 1915, President Wilson said: "There is a shortage of food in the world. It is necessary that our land should yield more per acre than it does now. It is necessary that there should not be a plow or spade idle in this country."

The PEORIA will make the words of our great President come true—it will make greater crops and thereby help our Government in this time of need.

R. M. WADE & CO. SINCE 1865 PORTLAND, ORE. SPOKANE, WASH.

322 Hawthorne Ave., Portland, Or.
910 N. Howard St., Spokane, Wash.

*FILL in and MAIL THIS COUPON TODAY—Find out more about the NEW PEORIA—the greatest Drill ever perfected.*

## FREE COUPON! MAIL TODAY

R. M. WADE & CO., Portland, Oregon.

Gentlemen: Send me without obligations on my part full information regarding the famous PEORIA DRILL. Tell me how the PEORIA can increase MY crop production.

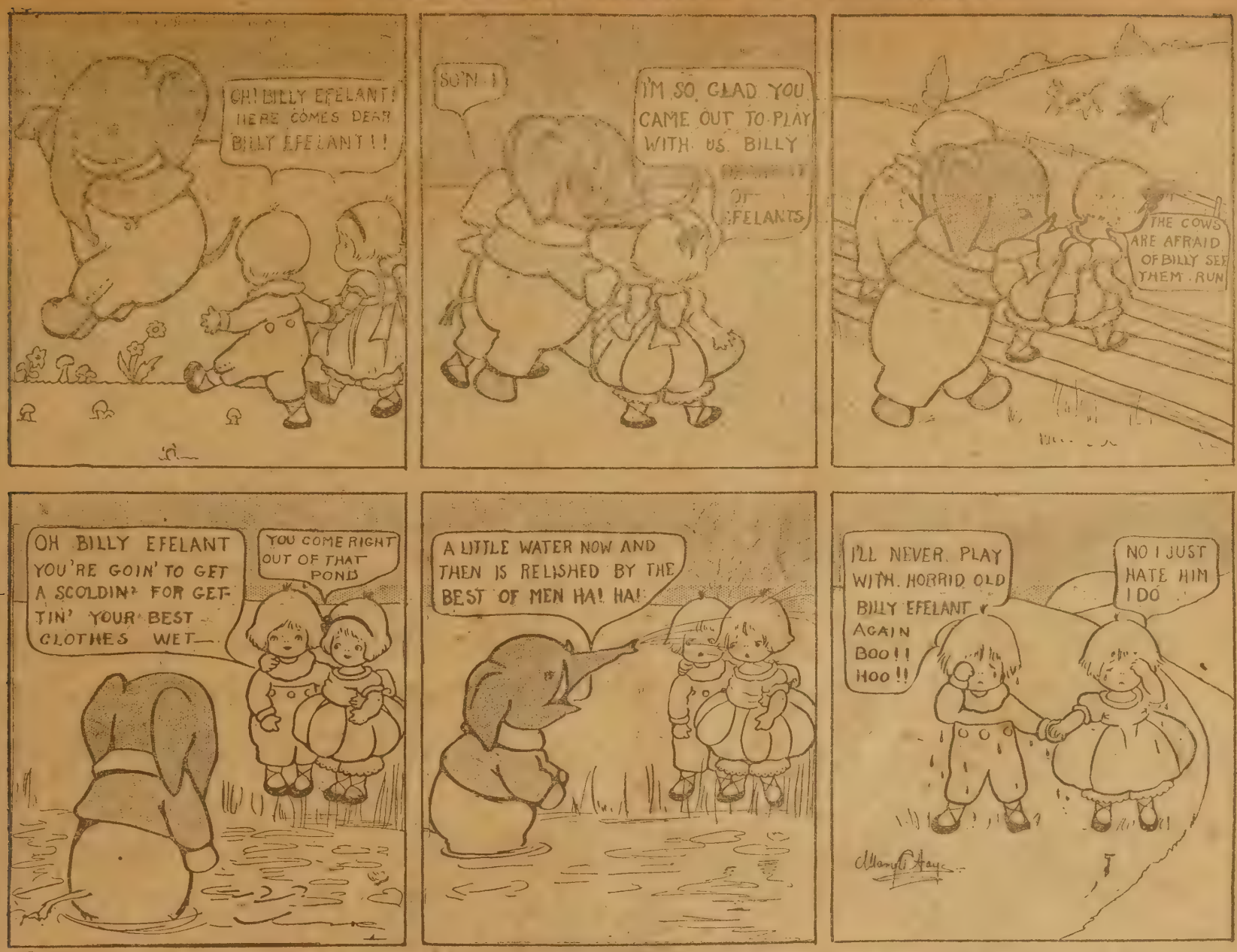
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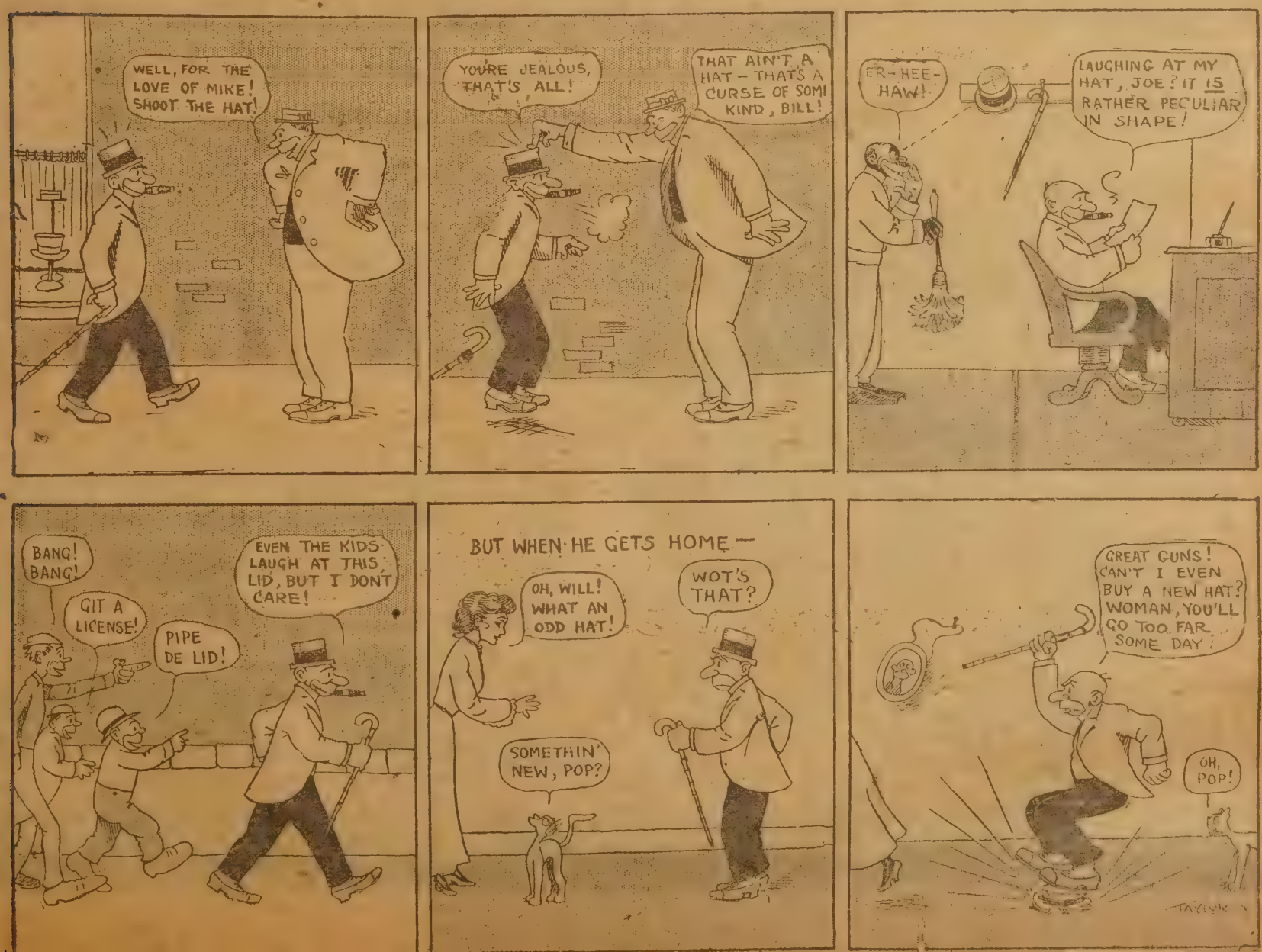
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# KATE AND KARL REGRET A PLAYMATE




# FOR HE'S A JOLLY GOOD FELLOW—UNTIL HE GETS HOME



# WATCH NEXT WEEK'S ISSUE OF THE

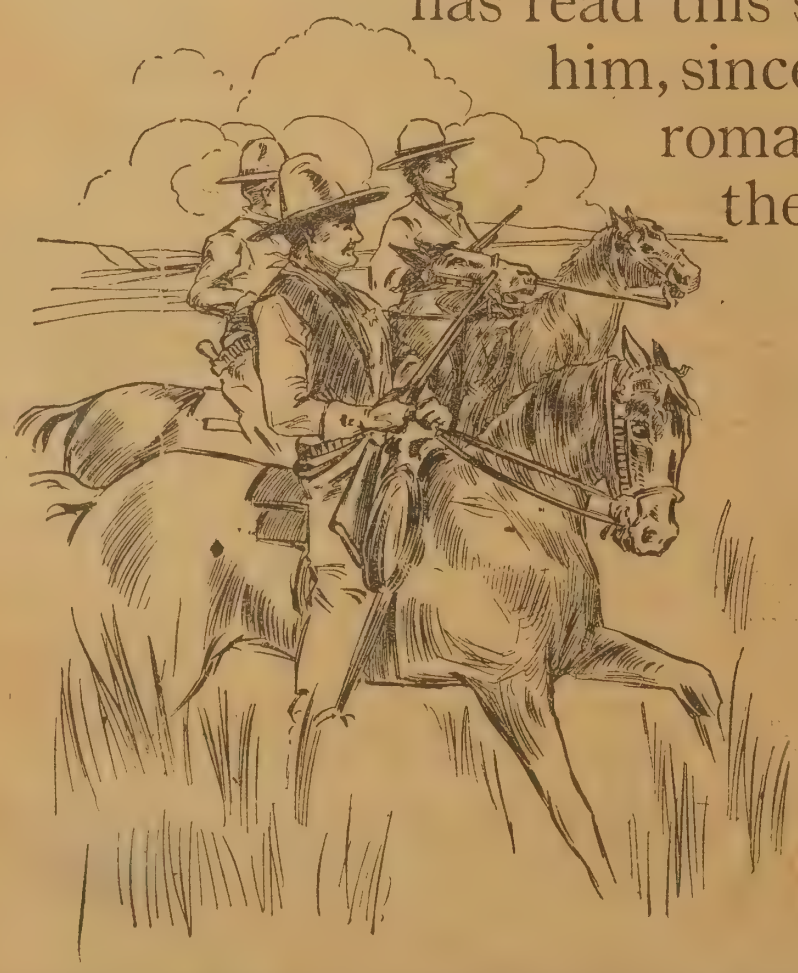
# A CROOK

*Written by Lewis B. Miller, Autho*

## Regarding this Story the Author Says:

THIS narrative has to do with that period of Texas during which the state was just emerging from its early pioneer period. All around the frontier from Red River to the Rio Grande spread miles of thinly settled country, into which only those who courted danger and were unafraid of hardships had ventured. Still farther out was the wide wilderness, with an occasional ranch and patrolled by the Texas rangers and the United States soldiers.

Such a country offered splendid possibilities for romance, the author points out, and we believe that every one who has read this stirring tale will fully agree with him, since he has woven a splendid lot of romantic charm into the chapters of the story.



## A Crook

Is bound to please all who like adventure of an unusual cha sentence in this story that your and good from start to finish.

**Next Week's Issue Will Chapters. Begin at the**

# ARMER FOR OPENING CHAPTERS OF

# ED TRAIL

*"Trappers of The Ozarks," Etc.*

## Can't You Feel the Thrill of These Chapters?

I. The Spotted Ox Runs Away.
II. A Night at Lookout Gap.
IV. On Guard for Assassins.
VII. Storm Bound in Haunted Cabin.
XI. That Mystery Wagon.
XII. The Mill Among the Mountains.
XIII. Found and Lost Again.
XIV. Outwitted by Cattle Thieves.
XVII. Some Startling News.
XIX. Betrayed by a Bell.
XX. "Up With Your Hands, There."
XXI. Prisoners at the Bar.
XXIII. In the Shadow of the Jail.
XXV. A Sensation in Court.
XXVII. Into the Wilds.
XXVIII. Defied by Desperadoes.
XXIX. The Vigilantes' Court.
XXX. Ten Prisoners Under a Limb.



# ed Trail

l, downright, pulse-quickening
er. There's not a word nor
olks may not read. It is clean

**Bring You the Opening**
**ginning and Enjoy It All**

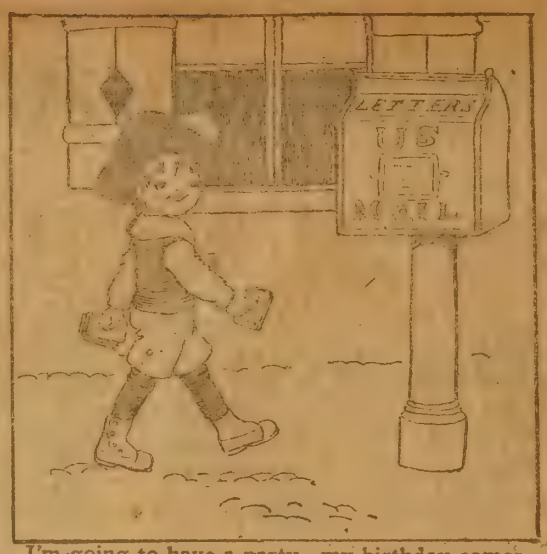
Illustrated by Mary A. Hays

# "BUDDIE"

Verses by Margaret G. Hays



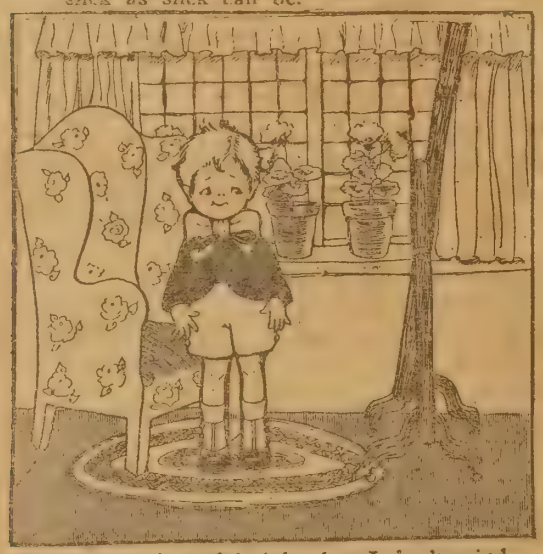
There's a new girl moved to our town, her name is Kitty Lee.
Her eyes are blue, her hair is brown—she's slick as slick can be.



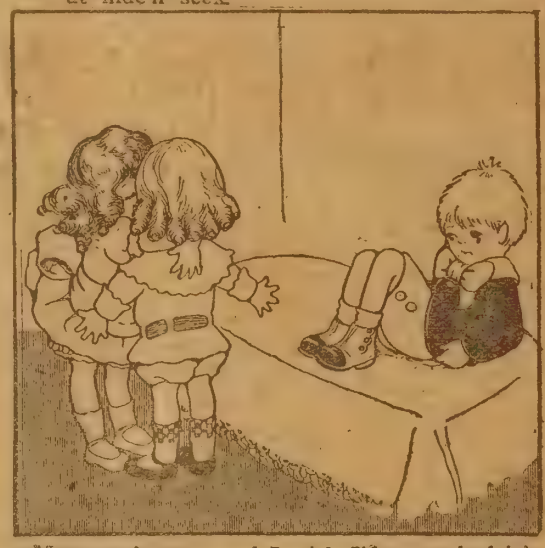

I'm going to have a party—my birthday comes next week.
We'll have ice cream an' candy—we'll play at hide'n seek.



SHE'S coming, 'cause her mother wrote and said, "Miss Kitty Lee
Accepts with pleasure, and will come, on Thursday next at three."



My new suit's awful tight, but I don't mind, 'cause Kitty said
She liked boys' clothes to fit "Jus' so." (Wish my hair wasn't red.)

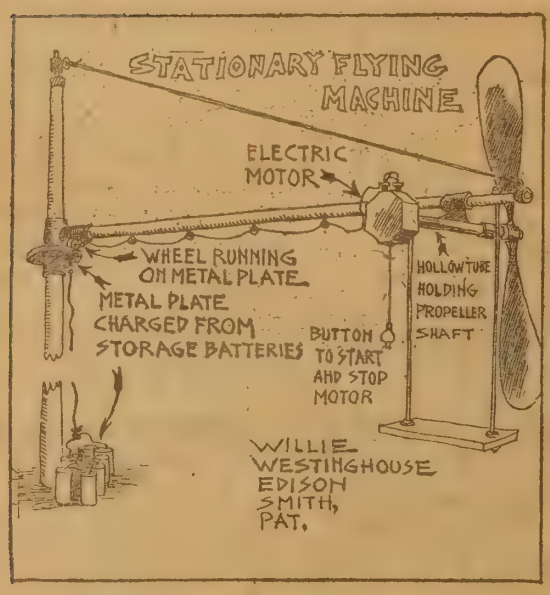


My party's over, and I wish I'd never had it! GEE!
SHE went and kissed old Percy Plunks and never noticed ME!



I've "had it out" with Percy Plunks—I pulled his PRETTY CURLS.
I'm goin' fishing now with Bill. AIN'T GOT NO USE FOR GIRLS.

# THE MINISTER TAKES A RIDE ON WILLIE'S AIRSHIP








DEAR TOMMY: This is a diagram of a new flying machine. I didn't put on enough power when I first tried it, so Papa had me connect up a whole barrel of batteries. Then it went so fast that the seat rods bent backward and the minister's coattails got tangled up in the propeller! Yours, etc., WILLIE.







ENCLOSED find check for $1 for which send me your publication. The enclosed clipping is worth this amount. I have taken almost all the stock and farm papers in the United States, and you are the first one I have seen that has struck the bull's eye on this subject.

Here is the editorial referred to above:

**INFLATED PRICES ARE DETRIMENTAL.**

All over this land there is the declaration of dairymen that they can not afford to produce milk and cream for what they can get for it. There is the accompanying declaration on the part of the consuming public that it can not afford to pay even the present high prices. And now there comes a report that a 6-month-old dairy bull calf sold for $106,000 in the middle west the other day.

Can the dairy industry pay that price for any dairy animal that ever lived? What is $30 hay and mill feed compared to prices like that for foundation breeding stock? What is $75-a-month labor, even inefficient labor, compared to that? What is the high cost of meals for the hired man and the family compared to $106,000 bull calves that are not ready for service for several months yet?

Strictly good stock is essential to dairy success. No dairyman can afford to keep an ordinary cow now, much less an ordinary bull. But when it costs $100,000, or $50,000, or even $10,000, to get a strictly good sire, or the makings of one, the dairyman that needs the good stock to keep from going bankrupt can not afford to invest. He must necessarily accept the ordinary animal. If any prospective sire on earth is worth $100,000 the sire that can be purchased for $1000 is not worth having. He is a scrub—just plain scrub. There is no sire good enough to be worth 100 times as much as the sire that is good enough for the successful dairy of these turbulent days of the industry.

The question forces itself upon us: Are not the professional breeders or dealers who manipulate things to be able to give or to receive these inflated prices for individual animals doing the great dairy industry an injustice? The answer likewise forces itself upon us: They are.

I, as well as many others, have quit taking many papers which go crazy talking such prices, and to discourage many stock readers. Come again on this subject if you want to succeed.

Lakeview, Ore. J. C. OLIVER.

## Need Left Hand Mower.

Pea growers in the southern part of Spokane county are figuring on how they can acquire mowing machines that will cut left-handed. The necessity arises out of the inability to keep the horses off of the windrow of cut peas when making successive swaths on rough land. It is a difficult matter to cut peas successfully with the present machinery available for the purpose. Owing to the fact that the vines do not stand upright throughout the entire season, but are easily blown over or lean over of their own weight, it is necessary to cut in the direction against which they lean. For this reason it is impossible to take advantage of the lay of the land in cutting as is the case in other crops that stand upright, such as wheat and oats.

The growers are considering making a definite effort to have the manufacturers of pea cutting machines put out a left-handed mower to be used on hillsides where the right-handed mower requires the tramping out of considerable seed by the teams. One grower states that he has information from a manufacturing house that if an order for 25 left-handed mowers could be placed at an early date would be prepared and shipped for next season's cutting.

**The Initial Dig.**

"Has the excavating been begun for your new house yet?"

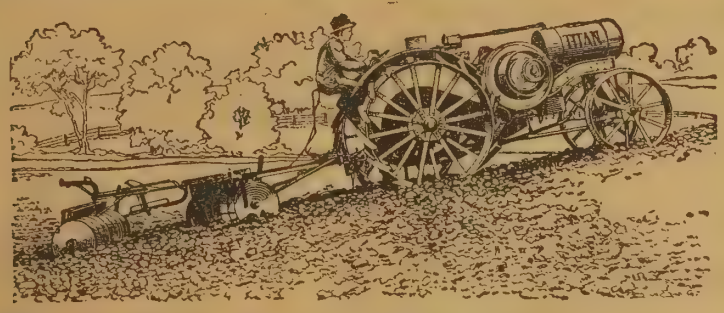
"Yes; I've just dug up $1000 advance money for the contractor."

**Another Source of Revenue.**

"The government ought to get after those peace predictors and tax them."

"Under what head?"

"Excess prophets."

# When You Buy a Tractor—

REMEMBER, it's the plows, disks, drills, binders, ensilage cutters, feed grinders, threshers and the like that do your farm work. The tractor is useful only as it furnishes cheap, dependable power for **all** the other machines.

That's why we say, if you need a tractor, you can't make a mistake in buying an **International kerosene tractor.**

We have had over 75 years' experience with farm machines. We know the kind of power they require—all of them. For over twelve years we have sold tractors that supplied that kind of power. We know from experience that the sizes and styles of tractors we sell today will work with the machines you depend upon for your success and prosperity. And—our tractors all operate successfully on cheap kerosene.

When you buy an International kerosene tractor you buy with it the benefit of our long farm machine experience and all the advantages of dealing with a service organization which brings a well stocked branch house or a live, wide-awake retail dealer within telephone call of you. It may surprise you to know that an International tractor, plus these advantages, which no one else can give, costs you less per year of active service than any other tractor sold in anywhere near the same numbers.

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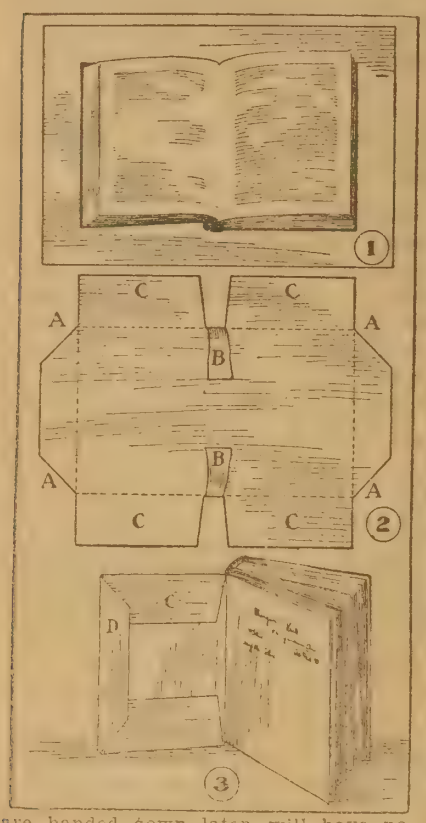
# Handicraft For Girls

By Dorothy Perkins

(Copyright by A. Neely Hall.)

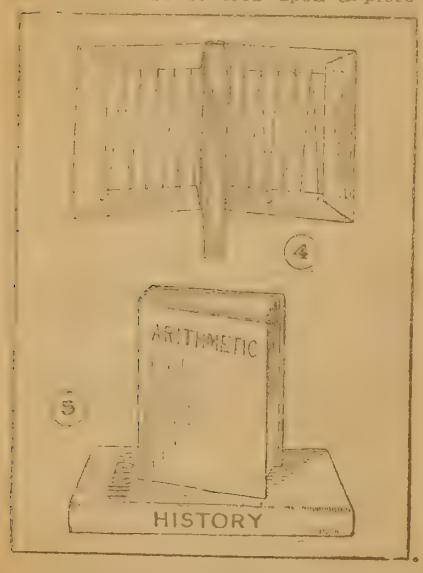
## School Book Jackets.

Protect the covers of your school books with paper or cloth jackets of one of the forms shown below, and they will look as fresh and new at the end of the school year as they do now. Then brother or sister, to whom they




are handed down later, will have no reason to complain about having to use "old books."

Heavy, glazed brown wrapping paper makes the best paper jackets. If you have none in the house, get a roll or two from your grocer. Place each book to be covered upon a piece

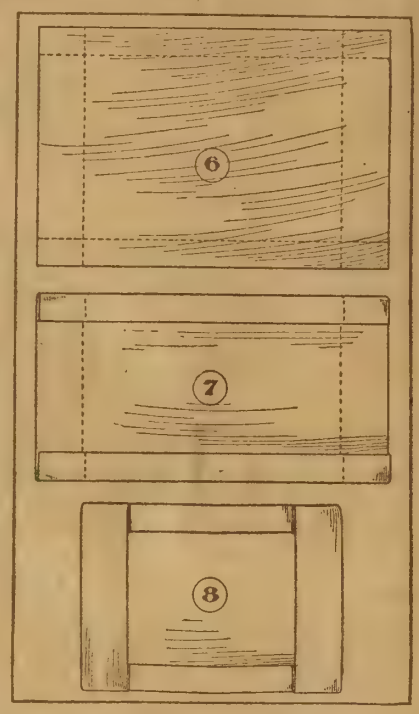



of the paper (Fig. 1), open it, and mark out around the edges of the covers; then measure off a margin of 2½ or 3 inches outside of this, and cut out the piece. Next, cut away corners A (Fig. 2), and cut and bend over tabs B. The dotted lines represent the edges of the covers, and with these as a guide it is a simple matter to snip away corners A with a pair of scissors. Tab B should be as wide as the book is thick, and the full depth of the margins, and should be located in the center of the top and bottom margins. Cut obliquely, as shown.

After folding over the tabs, place the opened book inside of the margins, and fold flaps C, then flaps D, over on to the covers (Fig. 3). Dob glue or mucilage upon the under side of the end of flaps D, and press down upon flaps C.

**Cloth jackets are more durable than** paper ones. Gray or brown cambric dress lining is the best material to use. Cut the cloth in exactly the same way as described for the paper jacket (Fig. 2), but instead of pasting the flaps together tack their corners with thread (Fig. 4). Then lace the thread back and forth from the upper flaps to the lower ones, as shown in Fig. 4, pulling the lacings taut.

If you are handy with a pen or brush, you might letter the title of




each book upon its jacket (Fig. 5).

The jacket shown in Fig. 8 must be made of heavy canvas, because it requires stiffness to hold its shape. The dotted lines in Fig. 6 indicate the margin to leave outside of the book covers, also the lines on which to fold. The top and bottom margins should be 1½ inches wide, the side margins 3 inches wide. Fold the top and bottom margins over, first, as indicated in Fig. 7, then the side margins; and tack the under folds of the ends of the side margins to the folds of the top and bottom margins. The result will be a pocket on each side edge of the jacket (Fig. 8). In putting the jacket upon the book, it is but necessary to slip the book covers into these pockets.

## France Superb

### Heroism Pictured by U. S. Banker

Otto H. Kahn, American financier who has been active in matters of war finance and who recently returned from a trip to Europe has the following to say concerning the spirit of France during the trying times of the present conflict:

"France is superb beyond words. I happened to be in Paris during the two weeks beginning May 27, when the Germans broke through at the Chemin des Dames and came within about 40 miles of Paris, when there was a long-range bombardment of Paris almost daily and air raids practically every night.

"Yet life and business in Paris went on as before; there was not the slightest evidence of excitement, let alone fear. A good many men sent their womenfolk and children away, other measures of prudence were taken to guard against contingencies, but there was absolute calm and sangfroid

"It was only the outburst of enthusiasm at the magnificent fighting and far-reaching success early last June of the Americans hurriedly thrown into the battle in the neighborhood of Chateau Thierry which showed how great had been the strain, how tense the nerves underneath the outer calm.

"It is a soul-stirring story—the story of that relatively small American force rushing forward at a very critical moment and turning the tide by throwing itself upon the enemy with irresistivle dash and bravery. When the full account of the war comes to be written it will, I believe, be found that that action, in its psychological and strategic consequences, was among its determining events.

"What the men—and the women, too—of France have done of heroism, and resolutely and uncomplainingly borne of sacrifice these last four years, forms one of the very noblest chapters in the world's history. The entire civilized world owes a debt to France which it can never repay.

"She has, indeed, become the sacred soil of humanity."

# SECRETS OF HEALTH AND HAPPINESS

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D. (Johns Hopkins University).

## Eat Well but Patriotically to Ward Off Indigestion



Dr. Hirshberg.

The blessed dinner hour may be accursed, if you eat not wisely but too well. To clog the hungry edge of appetite with pickles and peppers and all sorts of sauce and condiments that stir the stomach without nourishment, is to arouse a train of evil.

So many grown-ups go through life with a coated tongue or a bitter taste in their mouths that you might think the young mothers with respect to infant feeding of today would give no ear to the advice of some ancient yet mistaken grandmothers and aunts. Still neighbors and elderly women persist in thrusting their ancient, outworn methods upon their daughter's babies. If those old-time ways had been abolished and the infants of former days nursed at the breast, regularly by the clock, with no nipples, no pacifiers, no bone rings, no teething rings and no other abominations there would be fewer digestive ills in the grown-ups of today.

Another source of alimentary disorders is the lazy habit of bolting food at one gulp, with little or no mastication. To prevent many of the stomach troubles too hastily blamed upon "improper food" you should give your mouth and throat muscles the physical training of chewing your morsels until they're as soft and as sweet as molasses.

**For Health and Country.**

"Doctor," complains the average over-weight business man, "I belch up my food and feel my stomach overloaded whenever I eat." A glance at many such men suffices to prove that they eat not only too much, too often, but they dine at restaurants and hotels upon "the fat of the land," and consider sacrifices, the war, Mr. Hoover and doctors of preventive medicines pests and nuisances.

So selfish, self-satisfied and gluttonously comfortable are large numbers of men above 25 that they gulp, swallow, devour, bolt and gormandize three repasts a day, while their wives, sisters, mothers and daughters skimp and economize their fare. The upshot is that the feminine members of a family some times suffer less gastric evils. Their solid fare and meagre dishes ward off the digestive mischief, which downtown browsing in lunch-rooms and cafes produces.

You personally must help to win this war, as well as to achieve your own physical salvation by proper and patriotic attention to your food. Head off the Hun and the health disturber by eating no wheat, no sugar, no mutton, no chicken, no beef, no pork and no porterhouse or tenderloin on Sundays, holidays, Mondays, Wednesdays and Fridays.

In lieu of such rich substance as your comfortable living, your extravagant habits and modern civilization have hitherto allowed you, hereafter for the duration of the war ration your epicurean stomach upon the following provisions: Cornmeal, hominy, barley, rice, oatmeal, hard tack, hoe cake, pilot bread, ragout, bran bread, cottage puddings, hashes, stews, ship biscuits, cornstarch, watercress, succotash, clams, berries, apples, bananas, oranges, malts, tea and the rest of a potluck instead of your usual tri-daily blowout.

Good digestion doesn't always wait on appetite. Hunger is appeased and gastritis and other stomach inflammations are side-tracked long before that artificial and pampered habit, the appetite!

Finally, sustenance and nutrition are satisfied when hunger is allayed. To go beyond this is to invite trouble.

# Sidelights

**Takes the Cash, Too.**

"Mrs. Bing's new baby is just in the fashion."

"How do you mean?"

"It is such a red cross affair."

**The Line Drawn.**

Pat was celebrating and he had imbibed too freely. He punched another man in the face and got haled up before the court. The judge told him he was charged with striking a man. "Shure, yer honor, can't a man have a bit of fun?" asked Pat.

"Yes," said the judge, "but your right to have fun ended where this man's nose began."—Boston Transcript.

**Heavenly Visitants.**

Kirsty MacDonald, who lived in a remote highland parish, had a visit from her Edinburg nieces, who were to spend a week or two with the old lady. So she determined to show them off on Sunday at the village kirk of Lochaber. The young ladies wore costumes of the purest snowy white.

At one point of his sermon the minister, in speaking of the angels of heaven, said: "And who are they in white array?"

To the consternation of the congregation Kirsty said: "It's ma two nieces, sir, from Edinburgh."—Exchange.

**Practice Makes Perfect.**

A young Burnley weaver, according to an English paper, was taking her little baby to church to be christened. Its father had been in the trenches for three months, and it was impossible for him to get home for the ceremony.

The baby smiled up beautifully into the minister's face.

"Well, madam," said the minister, "I must congratulate you on your little one's behavior. I have christened 2000 babies, but I never christened one that behaved as well as yours."

The young mother smiled demurely, and said:

"His grandad and me hev' bin practicin' wi' him for a week wi' a bucket of water."—Current Opinion.

**Spoilt the Play.**

One of the favorite stories of that popular actress, Miss Mova Mannering, concerns a certain melodrama she once played in.

The strongest part was that of the villain, and the actor who took the part gave quite the best performance.

Half way through the second act the heroine, after having been left starving on the embankment with a bunch of children for several weeks, and generally having been well "put through it," finally got tired of this sort of treatment, and shot the villain stone dead.

"What have I done!" she cried, gazing up at the gallery.

"Shot the best blooming actor in the show, miss," came the prompt reply.—Pearson's Weekly.

**Try This.**

She was waiting for him.

Gathering her brows like gathering storm, nursing her wrath to keep it warm, and when he entered the room she began:

"This is a nice time of night——"

"I—er—know I'm late," he hastily interrupted, "but I couldn't help it, my dear. Club had—er—big discussion on female beauty."

"And what had you to do with that?" demanded the fretful wife.

"More'n any one there. I was the one—er—who had the most beautiful wife, an'—er—course, the best authority on female beauty, an'——"

"Why don't you take off your overcoat, Henry? Let me get your slippers for you. It's awful cold outside. I think you must be half frozen."

Half a minute later Henry was safely ensconced in his easy chair with his wife at his feet putting his slippers on.—Philadelphia Inquirer.

# All the World's a Stage, and All the Men and Women Merely Players

## Games Indoors Over There.



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The hut is built underground, but affords the boys much pleasure during their leisure. Note the boxing mitts hanging from the roof.

## Famous Tenor and His Bride.



Enrico Caruso, the famous Italian tenor, and his bride, who was Miss Dorothy Benjamin, daughter of Park Benjamin, a prominent New York lawyer.

## Signs of Respect to Allied Countries.



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Each of the allied soldiers represented here is giving the military salute of his country. Starting at the top, from left to right, they are: English, American, Belgian, Greek, Italian, Polish, Portuguese, Serbian and Czecho-Slovak.

## German Target Practice.



Brooklyn Daily Eagle.

## Doesn't Like It.



"Gott strafe der American Jokes!"

Baltimore Evening Sun.

# Two Weeks in the Harvest Field

## *During Which Great Ideas Were Born, Among Them Being the Need of Electric Starters for Mule Teams*

By M. S. Shrock, County Agent, Umatilla County, Oregon.

FEELING it my patriotic duty to forego my vacation and spend, instead, two weeks in the harvest field helping to save Umatilla county's wheat crop, I cast about early in the season for something to do. I had served my apprenticeship with a threshing machine crew some years ago, chiefly as a traction engineer with what Umatilla county farmers call a stationary outfit. From my recollection of it, it was far from stationary when we used to move eight or ten miles on a dark night over shaking bridges. But that is another story.



M. S. Shrock.

On a combine there seemed only one job at which I could exercise my talent and that was sewing sacks. I had sewed sacks a half day some 20 years ago and I was sure that I could qualify again. Judge J. W. Maloney needed a sack sewer and I accepted the job at whatever salary he cared to pay. It was the fun that I was after and the service I wished to perform. The shekels were an unimportant part of the program.

Weeks of anticipation rolled by and finally the time came. Just then a rainy spell delayed harvesting for five days, during which time Judge Maloney decided that he would "bulk" his grain and he put the crew to work making huge wagon boxes suitable for bulk grain.

Driving four mules to a grain wagon was the only job left. Hauling bulk grain is a snap. You "spot" your wagon at a given point 20 feet from the standing grain. There the combine crew "picks it up" and you hitch onto a loaded one which they have just "dropped." At the elevator the grain is dumped out with almost no effort. So the only effort on the driver's part is the agony of watching the mules do the work.

What I didn't know about mules would fill a library, having never driven one in my life. When I arrived on the scene on a damp morning the other three "skinners" had picked their teams. Having no ill feeling toward any one I should like very much to give them credit for leaving the best team for me since I was the only greenhorn on the job. I will let the readers judge from what took place the next hour and a half as to whether they are entitled to this credit.

My four mules were of the same breed and almost of the same color, but there the similarity ended abruptly. Nellie was a good wheel mule. She had good size and good judgment, would hurt no one, not even herself. She is like a lot of people I know who will never set the world afire but they can be relied upon to be on hand to put a lot of it out once it gets to burning good. Turk, her mate, was a high voltage, cantankerous sort of a critter, with a snorty disposition. The Swede roust-about assured me that he would not kick. My knowledge of Swedes being no greater than my knowledge of mules, I insisted that he demonstrate Turk's non-kickable nature by currying one side, which he did to my satisfaction. With a shaky voice and a jerky heart I succeeded in currying the other side and harnessed him.

For leaders they had left me a nice little span of colts, three and four years old, which the man afterward admitted had never been worked in the lead. The only thing that can be said against them is that they were densely ignorant. It was some relief to know that I was not the only ignorant one around.

When it came to my turn to take out a wagon I managed to get them all four out of the stable and as far as the wagon shed. When it came to hitching them to the wagon I found that four to one was too big a majority in their favor so I tied the leaders to the oil wagon and proceeded with two. In two jumps Turk had Nellie and the wagon and me out of the barnyard and across the road into the tall stubble field. I had foreseen the necessity of turning the wagon around, but Turk thought of it first; so round and round we went. If the O.-W. R. & N. company ever find it necessary to turn a helper engine around up in the Blue mountains where they have no turntable, I would recommend Turk for the job. He turned that wagon once and a half around in 25 feet of space. He believed in dividing up his efforts so he stayed on one side of the tongue for a few minutes and then jumped to the other. I finally got the wagon "spotted" and since there was no loaded wagon ready I put them in the barn preparatory for an early start after lunch. My! how relieved I felt when I finally got them all four back into their stalls and fed.

During the noon hour I held a conference with Judge Maloney and we decided that the leaders were superfluous. If Turk's pent-up energy could be controlled and timed to meet with the powerful Nellie's reserve force they would take any kind of a load to the station without help. I also saw the absolute need of giving my undivided attention to Turk whenever his moods possessed him and I could not possibly be bothered with a pair of infants whose sole virtue was ignorance.

With the judge's help I got the two hitched to a loaded wagon. With shaky nerves, a jumping heart and the sweat streaming from every pore I climbed up into the tallest wagon box I had ever seen. When I arrived at those dizzy heights performance on the ground had already commenced. Turk had started like a battering ram, his timing gear being all out of accord with Nellie and the rest of the world. In less than a jiffy the wagon tongue was broken and the mules stood 90 degrees to starboard.

Wagon tongues should never have been invented. They serve no useful purpose. They are a survival in culture. Much better steering apparatus has been devised and I asked that the steering apparatus be taken from my roadster and placed on the wagon, as I was determined to take that load to the elevator. But the judge thought otherwise and so he and the Swede assisted me in attempting to hitch them to another loaded wagon that had appeared from somewhere while our excitement was on.

With the Swede added to our force we were now in the majority, but Turk's success had made him invincible and sometimes almost invisible. The judge said my light colored shirt was the cause of Turk's fear. We will never know, for although I took it off, the frenzy Turk had worked himself into was untamable. Had the big red wagon boxes been properly camouflaged we might have succeeded; but it was now too late. Our combined efforts were insufficient to get him even hitched. Every attempt to move him backward or forward resulted in his going in the opposite direction.

While trying to drive the team up to the wagon Turk would suddenly cut loose on high gear and take Nellie and me through the stubble at an alarming rate. Before I had time to shift gears he was full length of the lines away and still going. I plowed acres of ground with my heels, then becoming over-balanced I must have skidded several yards on my elbows and nose as is evidenced by liberal abrasions.

The judge finally decided that a change of scenery would steady my nerves and perhaps Turk's, too. I therefore put the mules away and accepted a boy's job with the combine crew for the rest of the day.

The afternoon on the combine and the Sunday following gave me time to study Turk from a distance and to analyze his all too hasty actions. He is a good mule physically, but mentally he needs a balance wheel. I also received oceans of unsolicited advice from members of the crew on how to handle mules in general and Turk in particular. A buck strap to hold him back, they said, was a necessity in everyday life with Turk. I had noticed an extra strap with two snaps at one end and one at the other. I supposed it was the forward end of a jerk line and that Turk was so well broken that they had used him for a jerk line leader. What an insult this would have been to Turk had he known my thoughts.

Turk, from the most tangible history of the brute, is a Missouri-bred mule, immigrating to Oregon four year ago. Just why he left his happy home back there is known to no one on the Missouri ranch. I have known men to come west after taking great pains to keep



**Mules of the latest model but still lacking in some of the modern appliances that add pleasure to wheat wagon travel.**

secret their departure back there, and Turk may be just human enough to keep his early life a mystery.

Sunday is overhauling day on a wheat ranch during harvest time, and Turk was to be overhauled, too. It was generally agreed that he was to be worked and re-broke by the crew. When I returned on Monday morning I expected to find a perfectly docile mule in a repentant mood. To my surprise I found Turk turned out with the yearling colts and a 1600-pound bay mare of Belgian extraction in his stable. Later in the day I saw a huge concrete block with a log chain attached out in the stubble field that looked mighty suspicious. Indications of a terrific battle were seen all about. It is not good etiquette to be too inquisitive with a harvest crew so I added this battle scene to Turk's absence from his stall and resolved that victory over Turk must have been far from satisfactory. No one attempted to drive him during the rest of the harvest and it seemed of no interest to any one to talk about working him.

I was advised that since the colts were not really broke leaders I might use them as wheelers until they and I became educated. Success now crowned my efforts to hitch four at a time. I succeeded because Nellie and the big bay mare had sense enough to stay put. When once in place their feet hugged the ground like they had taken root and grown fast. This gave me time to place the colts, and the time seemed to be the chief factor with them. There is absolutely nothing harmful about these innocent-looking colts. Such a thing as balking, kicking, or running away, was beneath their dignity. They were lovable little creatures, but steeped in stupidity and ignorance. Slowly, inch at a time, I coaxed them up to the wagon tongue, only to find that as soon as my back was turned, they had slid a yard or two away. The sun was beating down at a terrible rate by the time I got them hitched. Very cautiously I climbed up the transport-like grain box and gathered up the lines. Nothing exciting took place for a moment or two. I yelled at Nellie, and everybody but Nellie moved. Nellie's brain hangs fire something awful.

No sooner had the bay mare learned that the wagon was loaded than she turned crosswise in the harness, her head across Nellie's back, her eyes glaring wildly at nothing in particular, one ear pointed at the north pole and the other down toward Cayuse station. "Cold shouldered," that's all. I understood horse nature and was not at all disturbed by her actions. If a mule had acted like that I would have died of heart failure. Slowly and cautiously I straightened her out and refastened her traces. I dropped a little dry dirt in her ear for her to think about, and jabbed a nail into Nellie's ribs as I walked past her.

The thing that really saved my reputation as a mule skinner happened after I had again mounted the wagon. By the time I got fairly started yelling at Nellie in approved mule skinner's language, and long before Nellie awoke from her lethargy, those two slender-legged colts shoved their tiny little feet into the soft dirt, gave a grunt or two and actually started the load. Once started, all hands took hold, and the day passed without further adventure. The old mare refused to tighten a tug until the load was in motion, but once it was started she would fly into the traces like a belated harvest hand flies into potatoes and gravy at the grub wagon.

While the team was now workable, all was not satisfactory. Nellie was a born wheeler, but will never make a leader. Her strength is unsurpassed by any animal of her size, but to get her into action one must be in close communication with her. She must be kept close to the ammunition box which every mule skinner has at his side. How should I rearrange the team? The big mare was as fast as Nellie was slow. She might tutor one of the colts into leadership. Then again, to separate the colts might break their tender hearts. Most of the night was spent worrying over the various changes that might be made.

As the first rays of the morning sun came over the Blue mountains into the open shed where I had made my bunk, I climbed out with my mind made up. Slipping into only such clothes as the law makes me wear, I searched the shop for a stay chain for Nellie. With her anchored where I could reach her, I had no fear of getting stuck. The colts were put in the lead, but it was an awful job to keep them there. At sight of the slightest object they would turn around and give such an appealing look of dismay that I had to get down and coax them into their places. As wheelers they were willing to start long before I was ready. When given leadership, like human beings, they became lazy.

A very unfortunate thing about this team was their names. The 3-year-old was named Belle and the big mare Dell. When yelling at Belle or Nell, old Dell would try to monopolize all the going, and my tender hands soon became blistered gripping the lines. Horses and mules recognize only the vowel sounds, there being no consonants in their language. Belle, Dell and Nell were therefore all the same to them. Nell could not be communicated with by other means, so Belle had to have her name changed.

When they christen a ship they break a bottle of wine over her bow or stern or other part of her anatomy. To christen a horse or mule you "break" a lot of rocks at her stern simultaneously as you yell her new name. In a remarkably short time I had Belle digging into the collar at the sound of the name Fanny. The 4-year-old was named Crop, due to a cropped ear. Dell needed no name, for she was always there when she wanted to be, and when she refused, it was just as well not to remind her of it.

Fanny (or Baby, as I would lovingly call her in the stable) was awfully curious. She wanted to see everything, and I noticed nothing that she overlooked Nor was it possible for her looking apparatus and her legs to work at the same time. She simply had to stop and look at every squirrel hole, rock, piece of paper, bird or beast. Crop was less curious than Fanny, but far more persistent when once her gazing mood possessed her. Until she had satisfied herself in her own way as to the object of her fear, no amount of persuasion, either verbal or with rocks, would move her. She had decidedly more of the eternal feminine about her.

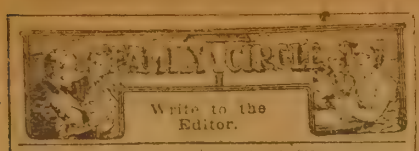
In approaching the wagon scale for the first time that morning a near-calamity resulted. The day before the leaders had virtually dragged the colts across. Now, with the colts in the lead, it was different. To get them up the narrow grade into the building where the automatic dump was located was worse still. With a man from the warehouse on either side of the wagon, well armed with rocks, the three of us laid down a perfect barrage just back of the leaders' ears, which brought results just as soon as we found their range.

After a few days of breaking-in, the weather became much cooler. This may have been more fancied than real, for there were so many factors that helped to raise the temperature the first day or two.

Observing the other mule teams as well as my own, I find there is great need of an electric starter that will set four or more mules off simultaneously, instead of the which-and-t'other fashion so common. There is, in fact, need for several attachments that will improve mules.

Nothing extraordinary happened during the remainder of my two weeks' vacation, except that the team improved with age and use. They actually learned to pull together and start the biggest kind of loads. It was with deep regret and a choking voice that I bade them farewell on that last evening.

I think I enjoyed the two weeks more than any vacation I ever took. As an appetizer it can't be beat. Judge Maloney supplied an abundance of wholesome grub and Mrs. Jacobs is a fine cook. I think I ate more those two weeks than any other two weeks of my life. I had no trouble getting the regular vacation tan. I returned with about the usual number of scars and bruises. For scenery we had on three sides the finest wheat-farming section in the world, with combines in operation on every farm. On the southeast are the Blue mountains, just where they would be if you were out there on a regular vacation, and just as pretty. For beautiful sunsets the harvest fields can't be beat. I have seen sunsets all along the Pacific ocean, but none prettier than those from the Maloney ranch. I am going to spend my vacation next year the same way if any one will have me. I hope Turk will be broke by that time.




ALICE W. BARLAND,
Editorial Contributor.

## Macaroni and Other Recipes.

Dear Family Circle: Most French women are good cooks and from one I learned how to make the nicest mustard, which, unlike most home prepared, does not get hard. It requires one-fourth pound can mustard, one-half cup white vinegar, one level teaspoon salt, a good handful of mixed spices, such as we use for pickles, a few pieces of fresh celery, or celery salt will do, and two tablespoons of olive oil. To make: Mix the mustard, sugar and salt together carefully, leaving no lumps. Put the mixed spices into the vinegar with the pieces of celery, and let simmer slowly for 15 minutes, covered. While very hot strain over the mustard mixture and stir smooth. The next morning stir in the two tablespoons of olive oil. This makes the best mustard I ever tasted and will keep moist till used, if kept in a jelly glass or some glass with a close cover.

Another thing I learned from this same lady was a new way to cook macaroni. If you are cooking a chicken, especially an old one, after it is done take out one-half cup of the liquid and set it away. The next day cook your macaroni till tender in salted water as usual, drain off the water and pour over the macaroni the chicken stock or liquid with any scraps of left-over chicken cut from the bones. Let the macaroni simmer in the liquid with a cover on it for a while, then remove the cover and allow all the liquid to absorb. It is delicious.

We are not eating much cake these days, but as it is almost time for school lunches again a good war cake recipe will not be out of place. I made this war cake the other day and it is fine: Two cups of sugar, brown if you can get it, two cups raisins, two cups hot water, one teaspoon salt, one teaspoon each of ground cloves and cinnamon, two tablespoons rounding of lard. Boil the above all together for five minutes after it begins to bubble; be careful not to burn it. Take from the stove and let stand until cold. Then add one teaspoon soda dissolved in a teaspoon of warm, not hot, water, and add three cups of war flour. This will make two loaves and should be baked slowly for 45 minutes. This cake put away in a stone jar will keep moist for some time, but I imagine these harvest days, cake will not get a chance to keep very long.

I learned a new way to make pancakes, and they are as good as I ever ate and cost the least. Use one-half fine corn meal or corn flour and one-half barley flour with sour milk or butter milk. Make them a little stiffer than when you use white flour and a little more soda always should be used when barley flour is used. For amount one must be guided by the number in the family. One cup of sour milk, a little salt, and one scant level teaspoon of soda and the mixture of corn meal and flour enough so they drop quite thick off the spoon; if too thick, thin with a little sweet milk. You can tell by the way they fry. They are fine; try them.

A. W. B.

### Vegetable Soup.

Soak one-fourth pound lima beans and one pound rice for 12 hours. Cook one-half pound pearl barley for two hours. Blanch one pound carrots, one pound onions, one medium-sized potato, and one red pepper for three minutes and cold dip. Prepare the vegetables and cut into small cubes. Mix thoroughly lima beans, rice, barley, carrots, onions, potatoes, red pepper. Fill glass jars or the enameled tin cans three-fourths full of the above mixture of vegetables and cereals. Make a smooth paste of one-half pound of wheat flour and blend in five gallons of soup stock. Boil three minutes and add four ounces salt. Pour this stock over vegetables and fill cans. Partially seal glass jars. (Cap and tip tin cans.) Sterilize 90 minutes if using the hot water bath outfit; 75 minutes if using a water-seal or a five-pound steam pressure outfit; 45 minutes if using a pressure cooker outfit.

### Cream of Pea Soup.

Soak eight pounds of dry peas over night. Cook until soft. Mash fine. Add the mashed peas to five and one-half gallons of soup stock and bring to boil. Pass the boiling liquid through a fine sieve. Make a smooth paste of one-half pound flour and add paste, 10 ounces of sugar, and three ounces of salt to the soup stock. Cook until soup begins to thicken. Pack in glass jars or tin cans. Partially seal glass jars. (Cap and tip tin cans.) Process 90 minutes if using a hot water bath outfit; 80 minutes if using a water-seal outfit; 70 minutes if using a five-pound steam pressure outfit; 45 minutes if using a pressure cooker outfit.

### Cucumber Pickles.

(Lazy housewife method—Very simple)

One gallon vinegar, one cup sugar, one cup salt, one cup mustard, four quarts small cucumbers.

Method: Mix salt, sugar and mustard together; then add the vinegar slowly, stirring well. Wash and look over the cucumbers, and put in a stone jar. Pour over the pickle brine. Let stand weighed down with a plate and stone to keep pickles under the brine or put in glass jars. Pour vinegar over and seal. The brine is not heated and these pickles are ready for use in a week's time.

### String Beans and Corn.

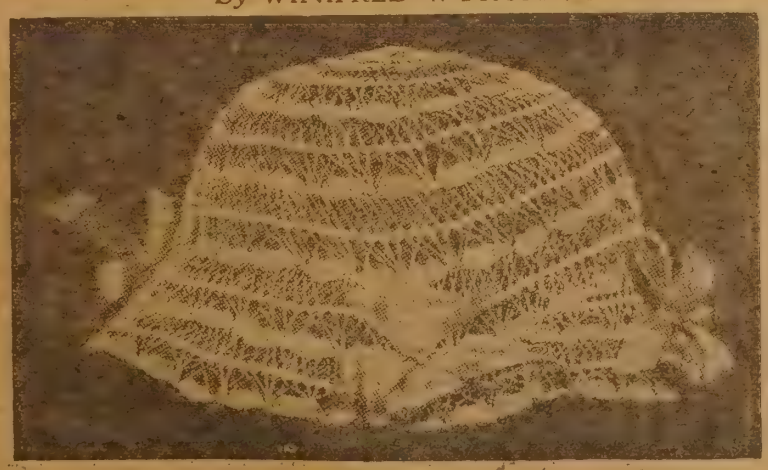
One and one-half cups string beans cut in small pieces, one and one-half cups corn, grated; cook until tender. Add one and one-half cups sugar, one and one-half lemons, cut in thin slices. Let simmer without stirring until mixture is thick. Pack in hot jars and sterilize.

### Green Tomato Marmalade.

Two pounds green tomatoes cut in cubes, two teaspoonfuls bruised ginger root in cheesecloth bags, two cups sugar, two lemons, cut in thin slices. Put in steel kettle and cook slowly without stirring until ingredients are tender and mixture is thick. Pack in hot jars and sterilize.

## Child's Maltese Lace Hat

By WINIFRED WORTH



Novel shaped hats always look cute on the little girls. You can make this over any shape you wish.

Cover any desirable shape with a colored silk, and crochet lace on as follows:

Take up 3 L. with sl. st., 8 dc. in next loop work up all the braid 1 ch. in 1 L. 1 ch. with fine thread at top.

Sew braid at edge and continue to top. Trim as desired.


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# Patterns

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2559—Girl's dress. Cut in 4 sizes: 8, 10, 12 and 14 years. Size 10 requires 5 yards of 36-inch material. Price, 10 cents.

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## Water System for Home.

To the Editor: I have had running water in my house for years, the first one in our vicinity. Now practically every one has at least cold water running in a modern sink, while the rest have hot and cold water, with a modern bathtub, several even with water closet. Myself and others are directly connected with a creek, some with a large ram and tank, while one, having a well, pumps his water twice a day into two 60-gallon barrels placed just high enough to flow through the hot water tank connected with the stove to the kitchen sink. This same one finds it so convenient he intends to install a bathtub and later a gas pump. It seems to me that if any one has any gumption at all there is no reason for not having running water at least on the first floor.

A. F. COPELAND.

Olalla, Wash.

Mrs. Knagg—You should stop fiddling away your time.

Knagg—And you harping on one string.—Boston Transcript.

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# Good Sales of Hogs and Turkeys

Mr. E. A. Kruse of Roseburg, Ore., who not only breeds fine, big type Poland China hogs and Mammoth Bronze turkeys, but is establishing an enviable reputation among those who purchase from him, in a letter written us July 6, says:

**I make practically all of my sales from my advertising in your papers. I enclose ad offering another boar and will run a turkey ad later.**

Any breeder of live stock or poultry will find our advertising columns a mighty good place to offer salable stock, as we reach tens of thousands of possible buyers every week in the year.




**Busy Licking the Kaiser.**

Dear Aunt Nellie: May I try for a prize, too? My subject is on what I want to be. I want to be a school-teacher and teach little children. I think a teacher has easy work, and there is also fun in it. What are all the cousins doing? You, too, Aunt Nellie? All of us are working for our country, I suppose. I am busy trying to help win the war. I work in the garden or orchard every morning. This is my second letter to the Corner. I like to read the letters real well. Our school was out May 24, and on Saturday, May 25, we had a picnic and a big time. I send you a piece of poetry which I wrote myself at school. That kaiser who wishes to beat, Will he? Will he knock Uncle Sam off his feet? Can it we bear—that we can not. Our produce we must not let rot. Will Uncle Sam the war win? We hope, hope all day within. Woodrow Wilson, who sends to France all of the boys. We shall now receive no more German toys. We sing "America," that song; they sing it all day long. I liked Vesta Anderson's letter best. My hair is light brown, just the same as hers. I am four feet eight inches tall.—Vesta Goldie Short, Molson, Wash.

**A Colt Named Nawasa.**

Dear Aunt Nellie: We have four horses. Their names are Nellie, Bessie, Dixie and Don, and a colt named Nawasa. The colt is nine months old. We had a colt before that had the same name, but it died of lockjaw. The colt I mean to ride. The mother of the two colts is Nellie and they had the same father. I got the name Nawasa from the name of an Indian girl I read of in a book. I do not go to school because I have been sick. I am nine years old. I was 10 on June 18. We have 13 white baby chicks and five black baby chicks. My father owns a farm, but we do not live on it. I mean to buy two weanling sows this summer. This is the first time I have writen.—Herman Abeling, Goldendale, Wash.

**On the Banks of the Columbia.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I have been reading the children's letters. May I join? I live on a 26-acre farm by the Columbia river. When there is high water it flows into our fence. I am packing strawberries. I am 13 years old and in the seventh grade. I have light brown hair and blue eyes. I am four feet 10 inches high. My birthday is April 25. I have one brother and six sisters. We have three horses, three cows, one calf, five rabbits, and a dog named Arrow. I belong to the Red Cross. I have three thrift stamps and am going to get more. —Louise Kramer, R. F. D. 1, Kennewick, Wash.

**Visiting Cousin Eva.**

Dear Aunt Nellie: I am a girl 10 years of age. I have light hair and blue eyes. I thought for a while I might have to wear glasses. I am very glad I won't have to. This is the first time I have written to the Children's Corner. I am visiting my cousin, Eva Hickman, who lives four miles out of Farmington. My real home is in Moscow, Idaho. I was born, December 14. Have I a twin? If I have I would like to hear from her. I helped my mother knit a sweater for our soldiers. I joined the Junior Red Cross.—Bernadine Hatfield, Farmington, Wash.

**Letha Is in the Second Grade.**

Dear Aunt Nellie: This is my first letter to the Corner. I live on a farm. I am 7 years old. My birthday is December 4. I have one sister. Her name is Lydia. I am going to school and am in the second grade. We have six horses, two cows, one calf, four hogs, seven lambs, three puppies, one old mama cat and five little kittens, 300 chickens and two rabbits.—Letha Waldrop, Route 1, Touchet, Wash.

**Esther Visits Us Again.**

Dear Aunt Nellie: This is the third time I have written to the Children's Corner. I am in the sixth grade at school. My two sisters have passed and my brother has passed. My oldest sister is taking music lessons. She knows how to run the car. My teacher's name is Miss Codville. My birthday is January 12.—Esther Hergert, Box 48, Penawawa, Wash.

**Goes After the Cows Every Night.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 9 years old and my birthday is June 15. I am in the fourth grade. Have I a twin? If so, have them write to me. My teacher's name was Miss Bauer. I have seven sisters and two brothers. Two of my sisters are married. We have two cows and two calves. Our cows' names are Daisy and Strawberry and our calves' names are Molly and Buster. We have them in the pasture. Every night I have to get them. We have 125 chickens. We get 20 eggs a day. I have joined the Junior Red Cross. I have made two joke books and one mop for the soldiers. I will write again.—Florence Gleich, Paha, Wash.

**Pet Cat Named Tommy.**

Dear Aunt Nellie: This is the first letter I have written to the Children's Corner, but not the last one. I am a little girl 12 years old July 10. Have I a twin? If so, I wish they would write to me. I am in the seventh grade. I have seven sisters and two brothers. I have one pet and that is a cat. His name is Tommy. I live in a little town by the name of Paha. I do not know how to knit, but am going to learn soon. I had two teachers this year. One was Mr. Dodge and the other one was Miss Straling. When I get around to it I am going to write to some of my cousins. I think they will write to me, which I know they will gladly do, whether I am their twin or not.—Hazel Gleich, Paha, Wash.

**Tells About Her Many Pets.**

Dear Aunt Nellie: This is my first letter to the Children's Corner. May I be a cousin? I have five sisters and two brothers. Their names are Louise, Emma, Martha, Rosa, Jennie, Elmer and Clarence. I am the oldest girl in our family. I am 11. My birthday is August 12. Have I a twin? I wish some of the cousins would write to me. I have a lot of pets. I have a lamb named Johnnie, a mother cat named Pussy, a calf named Spot, and some horse pets. Their names are Babe, Prince, Buck, Smilax, King and Dolly. These are the work horses. I call them my pets. I have a sprained collarbone when Babe fell with me. I am in the fifth grade.—Augusta Lewis, Hooper, Wash.

**Girls Are Trapping Squirrels.**

Dear Aunt Nellie: This is the first time I have written to the Corner. I was 9 years old June 14. Have I a twin? I will be in the fourth grade when I start to school this year. I have three sisters and their names are Ellen, Katie and Isabelle. We have three little colts named Annie, Daisy and Prince. Papa takes the Farmer. I enjoy the letters very much. We live on a farm on a half section. This year I have a garden of my own. We girls have been trapping squirrels this spring. I hope the Corner will be larger next time.—Blanche Bernard, Oakesdale, Wash.

**Jennie Lives Near Bluestem.**

Dear Aunt Nellie: This is the first time I have written to the Corner. I am 8 years of age. My birthday is August 11. I am in the third grade. My teacher's name is Miss Spining. Have I a twin? We have two cats, two cows, 21 horses, four colts and 11 little chickens. I have one sister and one brother. My sister's name is Elsie and my brother's name is Cleo. Their birthdays are on the same day a year apart. Elsie is 16 years old and in the tenth grade. Cleo is 17 years old and in the eighth grade. I live three miles east of Bluestem. Our house is painted with brown paint. I was born near Valley.—Jennie Margaret Van Skiver, Bluestem, Wash.

**Charlotte Is Her Playmate.**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I am 13. My birthday was April 25. I have two sisters. Their names are Emma and Frankie and I have two brothers, John and Harold. I have a pet dog. Her name is Tango. She has four puppies. I live on the farm with my mamma and papa, sisters and brothers. We have 24 head of horses and 12 head of cattle. We have three little calves and 150 little chickens and we live about six miles from town. I have a playmate. Her name is Charlotte Utter.—Jennie Hoy, R. F. D. 1, Prescott, Wash.

**Go Three Miles to School.**

Dear Aunt Nellie: May I join the Children's Corner? I am 9 years old. My birthday is March 19. We have one cow and five horses. The horses' names are Pet, Queen, Corbett, Maude and Charley. I have a dog and his name is Toby. We have some chickens. We have four hens setting. We have to go three miles to Winthrop to school. I have two brothers. Their names are Emery and Verle. I am in the third grade. We live on a 160-acre farm. Have I a twin? This is my first letter to the Corner. I hope this won't be my last one. I have light hair and blue eyes.—Delphie Schmidt, Twisp, Wash.

**Pleasant Times During Vacation.**

Dear Aunt Nellie: This is my first letter to the Children's Corner and I hope it won't be the last. The Corner is growing larger all the time and I hope it will continue to do so. My subject is "Helping My Country." We all must help our country to win this terrible war. There are many little things the boys and girls can do. We can save our money and buy thrift stamps and war saving stamps. We also can knit things for the soldiers. If we can not fight we can do these things to help this war. In the homes we can save foods. Instead of wheat flour we can use substitutes. We use rice, corn, barley, oats and buckwheat flours, also cornmeal, rolled oats, cornstarch and potatoes for substitutes. I hope all the children are doing what they can to win this war. I have not joined the Red Cross yet, but hope to soon. I have two brothers, but no sisters. Their names are Merwyn and Paul. Merwyn is 15 and Paul is 13. I wish Aunt Nellie and all the cousins pleasant times through vacation.—Lois Hodges, Deer Park, Wash.

**Would Be a Soldier or Farmer.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 8 years old. Why don't more boys write to the Corner? We can write just as good as the girls can. I am going to write about what I want to be. When I get big I am going to be a soldier and join the marines because they get to go to sea. I would like to fight on the big ships. But if the war is over then I'll be a farmer and raise lots of grain and ride in a big car. I want my house to be painted green and white and my barns red and white. I shall plant lots of trees and I shall farm with tractors.—Eugene Cannon, Dayton, Wash. (I do wish more boys would write, Eugene. We enjoy letters like yours. Come again.—Aunt Nellie.)

**Cousin Beatrice Is Visiting.**

Dear Aunt Nellie: My school is out. It was out May 17. My teacher's name is Miss Johnson. I liked her very well. This is the first time I have written to the Corner. I am 9 years old and am in the fourth grade. We have three little calves, Billie, Johnnie and Violet. We have a big dog. His name is Shep. We have 125 little chickens. Papa bought a place six miles out of St. John, Wash. We have a place and it is 425 acres. My cousin, Beatrice, is with me now. She and I have a big red rooster. He is a pet, too. We have a big garden. Papa and Beatrice and I planted it. My cousin Beatrice is 8 years old. She was 8 May 16.—Letha Peterson, R. F. D. 2, St. John, Wash.

**Brother Arthur Drives the Tractor.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner, and hope it will not be the last. I am 8 years old and in the third grade. I live on a 200-acre farm. I have three brothers and one sister. My sister's name is Ellen and my brothers' names are Arthur, and George and Gunner, who are twins. My birthday is August 15. Have I a twin? If I have I wish she would write to me. We have 14 horses and seven colts. We have three heifers, one calf and two cows. We have a tractor and my brother Arthur drives it.—Genevieve Halverson, Espanola, Wash.

**Two Little White Kittens.**

Dear Aunt Nellie: This is the first time I ever wrote to the Children's Corner. I read the letters in the Farmer and like them very much. I go to school four miles. School is out, but my teacher's name was Miss Windhusen. I was 11 years old June 19. I passed and am in the sixth grade. I have a mother cat that is white, and two little white kittens. We live on a 200-acre farm. We have nine horses and nine cows. We had a little colt, but the horse hurt it and it died. If I have a twin I wish she would write to me. I hope you will answer my letter.—Margaret Drew, Goodnoe Hills, Wash.

**Has Many Pets.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I have 15 acres of land. We have 20 chickens, two cows, one calf and one horse. The cows' names are Molly and Beauty, the calf's name is Tussy, the horse's name is Dolly. We have a dog and a cat. The dog's name is Prince. I have one brother and four sisters. My brother is 16 years old. He is in Alaska with papa. I have joined the Junior Red Cross and I have knitted one wash rug and five afghan squares. I am 12 years old. —Martha Petersen, Box 32¾, Colby Wash.

**Pearl Loves Music.**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I am 13 years old and in the sixth grade. I go to the Selah Central school. Every Tuesday noon I take music lessons from Professor Sharp. He comes Mondays and Tuesdays to the schoolhouse. I just love music. Every night I go right to the piano and practice my lesson. On Sunday I go to Sunday school. I like to stay for church, too. Well, goodby, with love to Aunt Nellie and cousins.—Pearl Mathis, Selah, Wash.

**Ella Passes With Honors.**

Dear Aunt Nellie: I have read many of the other cousins' letters. I think it is lots of fun. May I be a cousin, too? This is the first time I have written to the Children's Corner. I am 11 years old. My birthday as January 21. I have three sisters and one brother. We have a horse. I would like to ride her all the time. There are some girls live across the road from us, and I often take them for a ride. We have a cow, and a dog named Slats. We have had him four years. We brought him from Walla Walla with us. School closed May 24. I passed with honor. We have some ittle chickens, 10 of them are mine, and I like to feed them. I will write some riddles for the cousins to guess: Something that goes up and down the hill and yet it stands still. One hundred eyes and never a nose. Black and white and red all over, Grace Jones had a riddle in her letter. It was What time is it when the clock strikes 13? The clock does not strike 13. If I have a twin I wish they would please write to me, and I will answer their letters. —Ella Mae Payton, Greenacres, Wash. (Welcome to the Corner, Ella, dear. We are glad you are a cousin, too. —Aunt Nellie.)

**Barley and Corn Bread.**

Dear Aunt Nellie: I have never written to the Cousins' Corner before. May I be a cousin? My papa takes the farm paper. I read the Corner every time we get it. I wonder if I have a twin? I was 13 years old on August 12. I am in the seventh grade. I live on a farm. I don't like to live in town. I have two sisters in high school. One is in the 11th grade, the other is in the 10th grade. I belong to the Red Cross. I am going to raise a garden this year. We did lots of Red Cross work at school. We made three pillows and a spread and some gun wipers. We have four horses and a mule. Their names are Jack, Belle, Nellie, Mollie and Maggie, the mule. We have a colt that is 3 weeks old, but we haven't named it yet. We have four cows. Their names are Midget, Lady, Rose and Spotty. Our dog's name is Towser. We have 12 turkeys, 6 ducks, 60 chickens and 102 little chickens. My brother has a Liberty bond, and we are Hooverizing a lot. Mama makes barley bread and corn bread. We don't use very much wheat flour. I hope to find the cousins all well.—Alice Lillian Moore, R. F. D. 2, Pateros, Wash.

**Will Write More Next Time.**

Dear Aunt Nellie: This is the first time I have ever written to the Children's Corner. I am 11 years old, and will be 12 in October. Have I a twin? I live on an 80-acre farm. We have a team of horses, two cows, three pigs and some chickens. I have seven brothers and two sisters. My youngest brother is five years old. I will write some more next time.—Ruby Berthoff, R. F. D. 1, Tekoa, Wash.

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During the past week Aunt Nellie has received letters from the following cousins: Annie Mickelson, Matilda Mickelson, Olga Hamilton, Una Cumming, Hattie Bell Hogan, Jean Phyllis Wilson, Alice Clift, Evelyn Baker, Rovilla Fletcher, Mildred Demaris, Lorene Demaris, Evelyn Amon, Harriet Imislund, Agnes Annis, Effie Lewis, Ellen Granlund, Ida Smalley, Helen Peiklik, Victoria Peiklik, May Millam, Ruth Harbison, Ralph Springston, Velma Martin, Marie Guntert, Florence Evans, Emma Bennett, Mary Harbison, Nola Conn.

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# News for Breeders

At the Brookwater Farm sale of Duroc Jerseys at Ann Arbor, Mich., August 7, top price of $775 was paid for a sow by H. L. White of Mississippi. Hogs went to eight different states. The mature sows averaged $210.

### Shorthorn Record.

The Shorthorn breed has made a recent record of interest. In a series of auction sales covering a period of 27 months ended June 14 1282 Shorthorns have sold for $1000 or more each, the average being above $1500. The most impressive fact, however, is not that this large number sold for such prices but that they were the get of 680 sires. It is the general assumption that only a few bulls in any breed gain sufficient popularity or are prepotent enough to sire animals that sell for high value. Yet here within the Shorthorn breed are 680 bulls that have sired 1282 animals good enough to command this remarkable range of prices.

### Shipping Exhibition Stock.

Mr. Prendergast of the western classification committee declares that shippers are entitled to ship pure-bred show animals at released valuation, but it is a part of wisdom in such cases to see that such exhibition stock is covered by insurance.

Wayne Dinsmore, secretary-treasurer of the National Society of Record Associations, writes that if in any case this released valuation is denied the shipper should wire immediately to Mr. Prendergast of the western classification committee, 608 South Dearborn street, Chicago, Ill.

### U. S. Grows Own Bulbs.

The situations arising out of war conditions have taught the people of this country how to raise their own seeds, bulbs and plants that have heretofore been imported from various European countries. In various parts of the United States, especially on the Pacific coast, farms have been developed and have successfully grown the seeds and bulbs which Europe alone has heretofore produced.

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AT YAKIMA, AT SALEM AND AT BOISE.
Be sure to see the Aberdeen-Angus cattle. There you will have an opportunity to inspect the choicest representatives of the grand champion beef breed. These show animals are samples of the best American herds. Their produce has won at the world's greatest live stock show, the International Exposition, at Chicago, 15 out of 16 fat carcass grand championships over all breeds, as well as 13 out of 16 fat carlot grand championships, 11 out of 14 steer herd grand championships, and 10 out of 16 single steer grand championships. Calves of the breed have been demonstrating their baby beef making superiority at shows and markets from Canada to Texas. The bulls of the breed have been getting market-topping steers at all leading markets, demonstrating their place in the winning of the war.
"Ask the Man Who Owns Some."
AMERICAN ABERDEEN-ANGUS BREEDERS' ASSOCIATION,
817 NT Exchange Ave., Chicago.

### Two Jersey Breeders.



The photo herewith shows George Linn Connor and his father, George Connor; also his favorite Jersey cow, Bobby Marcus. George Connor senior is a dairyman and Jersey breeder and young George is planning to be a Jersey breeder "when he grows up."

### The California International.

The first annual exhibition of the California International Live Stock show will be held in San Francisco November 2 to 10, inclusive. Edgar J. DePue is president of the corporation, Joseph E. Painter manager and L. M. James secretary.

### Will Help France Produce Food.

A dispatch from Washington reports the arrival in Paris of a party of American agricultural experts whose object is to assist France in increasing the production of food stuffs. The party was sent out by the United States department of agriculture.

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LOCUST HILL HERD
Big type and medium Poland China. Bred gilts and spring pigs of both strains, unrelated. Sixteen years a breeder of Poland Chinas in Oregon.
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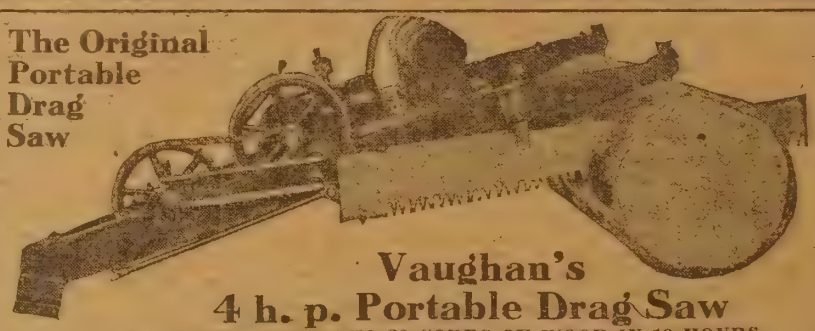
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Some good spring litters Richards Defender and Pathfinder breeding; big type. Send out nothing but high class stock. Guaranteed to please. Write me for prices on these pigs.

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Boars and gilts, best of breeding. Satisfaction guaranteed.

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The today's type and breeding bar pigs for November delivery, $25.

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## CHESTER WHITE SWINE

## Blue Ribbon Stock Farm

Chester White Hogs. Hampshire and Rambouillet sheep. Swine of both sexes and a choice lot of ram lambs.

**ED SCHOEL,** Suver, Ore.

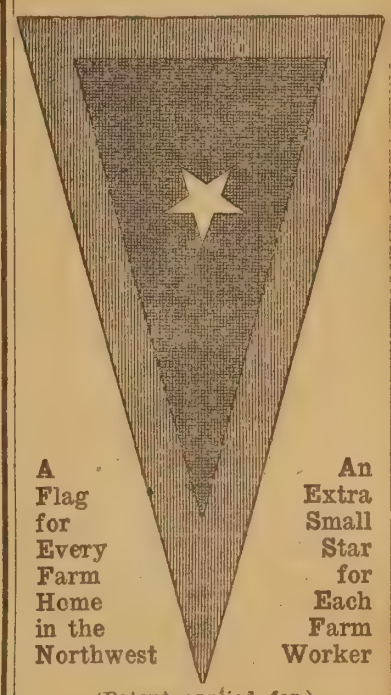
## TAMWORTH SWINE

ROUND KNOLL RANCH NO. 3.

Herd headed by Knoll Slope Colonel, assisted by Jolly Lad IV. Correspondence solicited.

**Bliss, Idaho.**

## FARM SERVICE WAR FLAG




(Patent applied for.)

### Get a Farm Service War Flag.

The man, woman, boy or girl who stays at home and works hard to produce necessaries for the soldiers in Europe is entitled to real war service recognition. That is the idea back of the farm service war flag. It is pennant-shaped, made of the good old red, white and blue, and has a star representing the producing farm home. Small stars are added to represent each worker of that home.

**Convenient Order Blank.**

..... 1918.

THE WASHINGTON FARMER,
Review Bldg., Spokane, Wash.
Enclosed find five cents (5c), for which please send me a Farm Service War Flag (printed on enamel paper) with ..... extra small stars for farm workers.

Name .....

R. F. D. ..... Postoffice .....

Box ..... State .....

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, Aug. 31.—A bullish crop report by the expert of a big brokerage house injected a bit of variety to the day's news as affecting the corn market today and while it boosted the price for a brief period, it was inadequate to stem the tide of bearishness and the bulk of the moderate business was done at prices under yesterday's close. The net loss for the day was 3-4c, with October closing at $1.55 1-2. The private report made the crop condition 64.8 per cent, as compared with 79 a month ago. This would indicate a month's shrinkage of 405,000,000 bushels. Much of the trading was to even up accounts over the double holiday—Sunday and Labor day.

Oats were firm early with corn, but declined later on a private estimate that the crop at present indicates 72,000,000 bushels in excess of the government's August calculations. No. 3 white oats sold at 2 1-4 and standard at 1 3-4c under October.

Provisions were dull and worked a little lower despite higher hogs. Pork close 25@27 1-2c under yesterday; lard, 2 1-2@7 1-2c down, and ribs 5c lower.

### Cash Quotations.

CHICAGO, Aug. 31.—Corn—No. 2 yellow, $1.63; No. 3 yellow, $1.60@1.63; No. 4 yellow, $1.55.

Oats—No. 3 white, 69@70 1-4c; standard, 69 1-4@70 1-4c.

Rye—No. 1, $1.67; No. 2, nominal.

Barley, $1.02@1.05.

Timothy—$6.00@9.00. Clover, nominal.

Pork—Nominal.

Lard—$26.75; ribs, $24@24.50.

### Pacific Northwest Grain.

PORTLAND, Ore., Aug. 31.—Grain—September delivery—Oats, No. 2 white feed, $60 bid; barley, standard feed, $53.50 bid; standard A, $53.50 bid. October, Oats, No. 2, $60 bid; barley, feed, $52.75 bid; barley A, $54 bid. Eastern oats and corn in bulk—Oats, No. 3 white, $52 bid; oats, 38-pound clipped, $52.50 bid; corn, yellow, $70 yellow, $70.50 bid; corn, No. 3 mixed, $69 bid; oats, No. 3, $52 bid; oats, clipped, $52.50 bid; corn, yellow, $70 bid; corn, mixed, $69 bid.

Sales—200 tons October feed barley at $55; 100 tons October A barley at $54.50.

Car receipts—Wheat, 34; barley, 44; flour, 5; oats, 5; hay, 25.

TACOMA, Aug. 31.—Car receipts—Wheat, 68; corn, 1; oats, 1; hay, 10.

SEATTLE, Aug. 31.—Yesterday's car receipts—Wheat, 30; oats, 1; hay, 4; flour, 10; barley, 1.

### Minneapolis Grain.

MINNEAPOLIS, Aug. 31.—Wheat—Receipts—608 cars, compared with 308 cars a year ago. Cash: No. 1 northern, old, $2.22½; corn, No. 3 yellow, $1.65@1.68; oats, No. 3 white, 66 1-2@67c; flax, $4.17@4.27.

### San Francisco Receipts.

SAN FRANCISCO, Aug. 31.—Receipts—Flour, 5474 quarters; barley, 15,937 ctls.; beans, 1260 sacks; potatoes, 5329 sacks; onions, 1135 sacks; hay, 296 tons; hides, 560; wine, 54,-230 gallons.

Peaches, lug boxes, $1.25@1.50; figs, [illegible] ware, 65c@1; black, 65c [illegible].

### Car Receipts at Coast Points.

Receipts of grain and hay in carlots at coast points for the fiscal year beginning July 1, up to Saturday night, for 1918-19 and 1917-18 were as follows:

| Seattle— | Wheat. | Oats. | Barley. | Hay. |
|---|---|---|---|---|
| 1918-19 | 625 | 98 | 12 | 492 |
| 1917-18 | 167 | 85 | 32 | 847 |
| Portland— | | | | |
| 1918-19 | 1277 | 117 | 119 | 265 |
| 1917-18 | 293 | 130 | 34 | 268 |
| Total— | | | | |
| 1918-19 | 1902 | 216 | 131 | 757 |
| 1917-18 | 460 | 215 | 66 | 1115 |

## Live Stock Quotations.

### At Omaha.

OMAHA, Neb., Aug. 31.—Hogs—Receipts, 6800. Higher. Heavy, $18.90@19.35; mixed, $19@19.25; light, $19.20@19.65; pigs, $17@18; bulk of sales, $19@19.25.

Cattle—Receipts, 1600. Steady. Native steers, $12@18; cows and heifers, $7.50@12.50; western steers, $10@16; Texas steers, $9@12; cows and heifers, $7@11.50; canners, $6@7; stockers and feeders, $6.50@15.50; calves, $10@13.75; bulls, stags, etc., $7@12.

Sheep—Receipts, 100. Steady. Wethers, $12@13; ewes, $10@11.50; lambs, $16.65@17.65; yearlings, $12.50@13.25.

### At Chicago.

CHICAGO, Aug. 31.—(U. S. Bureau of Markets.)—Hogs—Receipts, 5000. Market mostly 10@15c higher, but closed weak; top $20.30; butchers, $19.20@20.25; light, $19.50@20.30; packing, $18.25@19.25; roughs, $17.75@18.25; pigs, $18.25@19.10.

Cattle—Receipts, 3000, compared with week ago, native steers unevenly strong to 50c higher; the medium and common grades advancing mostly; western steers mostly 50c higher; medium and good butcher cows and heifers unevenly lower; canners, strong to 25c higher; calves and stockers and feeders mostly 50c higher.

Sheep—Receipts, 3500; arrivals practically all direct; compared with a week ago lambs 10@15c lower; fat sheep and yearlings mostly 10c higher; feeding sheep, strong.

### At Portland.

PORTLAND, Ore., Aug. 31.—Cattle—Receipts, 257. Market strong. Prime steers, $12.50@13.50; good to choice, $11@12; medium to good, $9.75@11; fair to medium, $8.75@9.75; common to fair, $5.75@8.25; choice cows and heifers, $8.35@9.50; medium to good cows and heifers, $6.25@7.75; fair to medium, $5.25@6.25; canners, $3@5; bulls, $5@7; calves, $9@12; stockers and feeders, $6@8.

Hogs — Receipts, 340. Market strong. Prime mixed, $20@20.25; medium mixed, $19.50@19.85; rough heavies, $18@18.10; pigs, $17@18; bulk, $20.

Sheep—Receipts, 147. Market strong. Prime lambs, $14@15; fair to medium, $11@13; yearlings, $10@11.75; wethers, $9@10.75; ewes, $7@9.

### At North Salt Lake.

NORTH SALT LAKE, Utah, Aug. 29.—Cattle—Receipts 408. Choice heavy steers, $11@12; good steers, $9.50@10.50; fair steers, $8@8.50; choice cows and heavy heifers, $6.75@7.50; fair to good cows and heifers, $5.75@6.50; cutters, $5.25@5.75; canners, $4.50@5.25; fat bulls, $6.50@7; bologna bulls, $5.50@6.25; veal calves, $9@11.

Hogs—Choice fat hogs, 160 to 250 pounds, $18.50.

Sheep—Receipts, 90. Choice spring lambs, $14@15; wethers, $9@10; fat ewes, $3@9.

## Portland Market.

PORTLAND, Ore., Aug. 31.—Freer offerings of eastern eggs have weakened the market for Oregon. Most of the orders coming in from the spruce camps are being filled with Kansas short held stock, and this has caused some accumulation of home-grown eggs.

Cube butter continues very scarce in spite of arrivals of eastern butter. For extras 52 cents is now obtainable. Another advance in print prices is expected. City creameries have raised their buying prices of butterfat 2 cents to meet milk competition from the condenseries.

Poultry and dressed meat receipts are fair, but not equal to local needs, and the markets are strong.

Potatoes are steadier at $3@3.50 for locals. Walla Walla onions hold at $2.50@2.75, but the demand is slow and prices weak.

Among the peach receipts at the close of the week were five cars from Washington. Coming on the eve of Sunday and Monday's holiday, the trade found it necessary to cut prices. Elbertas sold weak. Bartletts are freely offered at $1@1.25.

Butter—Cubes, extras, 51@52c; prints, 53@55c; butter fat, No. 1, 58c, delivered.

Eggs—Oregon ranch, candled, 51c; selects, 52@53c per dozen.

Cheese—Jobbers' buying prices, f. o. b. dock, Portland: Tillamook triplets, 27c; Young Americas, 28c per pound; Coos and Curry, f. o. b Myrtle Point, triplets, 28½c; longhorns, 28½c per pound; 1-4c discount to Portland trade.

Poultry—Hens, 25@27c; broilers, 28@30c; ducks, geese and turkeys, nominal.

Pork—Fancy, 26 1-2@27c.

Veal—Fancy, 20 1-2@21c per pound.

Potatoes—Oregon, $3@3.50 per hundred.

Hay—Buying prices, f. o. b. Portland; eastern Oregon timothy, $34 per ton; valley timothy, $29; alfalfa, $26@27; valley grain hay, $26@28; clover, $26@28; straw, $9@10.

## Spokane Market.

The Carsten Packing company weekly price list shows an advance of 1 cent a pound in beef and 2 to 3 cents a pound in mutton.

T. C. hams and bacon have declined. Lard has advanced 1 cent a pound.

### Wholesale Meats.

**Beef**—Beef steers, 13@19½c lb; T. C. steers, 20½c lb; cow beef, 12@15c lb; heifers, 15@16c lb; best loin, 27c lb; steer chucks, 11c lb; square chucks, 12c lb; prime ribs, 22@24c lb; rump and round, 19@20c lb.

**Mutton**—Breakers, 24c lb; wethers, 23c lb ewes, 21c lb.

**Lambs**—Diamond T. C. lambs, 28c lb; lambs, 26@27c lb.

**Pork**—Packer dressed hogs, 29@30c lb; pork loins, 36@37c lb; legs, 33c lb; shoulders, 28c lb; leaf lard, 38c lb; tenderloins, frozen, 46c lb; spareribs, 13c lb; country dressed hogs, with head on, 22c lb to producer; country dressed veal, 13c lb to producer.

**Smoked Meats**—Washington hams, 35@35½c lb; T. C. hams, 36½c lb; T. C. bacon, 51½c lb; Washington bacon, 42@46½c lb; picnics, 25c lb; lean backs, 32½@36c lb.

**Star Brand**—Hams, 37½c lb; Shield hams, 35½@36½c lb; picnics, 25c lb; bacon backs, 36c lb; Star bacon, 51@54½c lb; Shield bacon, 42@46½c lb; Simon Pure lard, $18 case; Shield lard, tierces, 27½c lb; White Cloud compound, tierces, 23¾c per lb.

**Dry Salt Meats**—Clear bellies, 28¾@29¾c lb; loin backs, clear, 29½@31c lb.

**Lard**—Tierces, 29c lb, $21, 30 buckets per case; Diamond T. C. pure leaf lard, $16.05 case; Snowcap compound tierces, 23c lb.

### POULTRY.

**Live Poultry**—Live hens, 20c lb; spring chickens, 22c lb; roosters, 10c; ducks, 20c lb to producers, f. o. b. Spokane.

### GASOLINE, LINSEED OIL, ETC.

**Gasoline**—Red Crown, bulk, 25c gal, cases, 35c gal; Shell, 25c gal; refined oil (Pearl), bulk, 14c gal, cases, 23c gal; Eocene, 15½c gal in bulk, cases 26½c gal; engine distillate, 17c gal, bulk.

**Linseed Oil**—Raw, bbl, $2.02 gal, cases $2.20 gal; boiled, bbl, $2.04 gal, cases $2.22 gal.

**Turpentine**—Bulk, 84c gal, cases, $1.04 gal.

**White Lead**—Strictly pure white lead in oil, ton lots, 13¼c lb; 50-lb lots, 14c.

**Rice**—Fancy head, $7.50@9.50 cwt.

**Flour**—Bluestem, $9.40; Blend, $9.40; graham, $8.65 bbl, 49-lb sacks; whole wheat, $8.85; eastern rye, $9.90; eastern rye meal, $10.30; oat flour, $12.15, 4 45-lb sacks.

**Oats**—$67 ton whole, $70 rolled, delivered in city; steam rolled No. 2, $65 ton.

### GRAIN AND FEED.

**Corn**—$72 ton; cracked corn, $74 ton.

**Barley**—Rolled, $70 per ton.

**Oil Meal**—$75 per ton.

**Hay**—Timothy, $38 per ton delivered, $37 by carload; alfalfa, $32 per ton delivered, $31 by carload.

## Seattle Market.

SEATTLE, Wash., Aug. 31.—The rush to clean up all perishables for the half holiday and double holiday of Sunday and Monday precipitated prices under their values and all prior predicates for the week, and were not to be taken, jobbers declared, for the key to the quotations that will prevail on Tuesday. Cantaloups were cut to $1.75@2.50. Alberta peaches, fancy and extra fancy, of good color and uniformity of pack to $1@1.25, with the bulk moving at $1@1.10.

The statement was made by carload distributors today that the Alberta extra fancy peach market would open Tuesday morning at $1.

### Purchasing Prices.

Eggs—Select ranch, 56@58c per doz.; Oregon, eastern Washington and Idaho, nominal.

Butter—Fresh dairy, 30c per lb.; butterfat, 58c per lb.; bakers', 38c per lb.; raw milk, $2.85 per cwt.

Poultry—Broilers, live, 1918, 28c per lb.; hens, 3½ to 4 lbs. and up, 27c per lb.; under 3½ lbs., 24c per lb.; old roosters, 17@18c per lb.; ducks, live, fat, 28c per lb.; squabs, large, $3.50 per doz.; geese, fat, live, 23c per lb.; Belgian hares, 14@17c per lb.; guineas, $7 per doz.; turkeys, young toms and hens, dry picked, 10 lbs. and up, 30@35c per lb.

Hogs—Light, 21@22c per lb.; heavy, 19@21c per lb.

Beef—Steers, fat, 14@15c per lb.; heifers, fat, 14@15c per lb.; cows and bulls, 13@14c per lb.

Veal—Fancy light, 20@21c per lb.; do heavy, 13@18c per lb.

Mutton—Fat, 22c per lb.; spring lamb, fat, dressed, 25c per lb.

### Hides, Tallow and Wool.

Bid prices to producers: Salted hides, cows and steers, No. 1, 15c lb.; do No. 2, 14c lb.; green hides, cows and steers, No. 1, 12c lb.; do No. 2, 11c lb.; salted, bulls or stags, No. 1, 12c lb.; do No. 2, 11c lb.; green, bulls or stags, No. 1, 10c lb.; do No. 2, 9c lb.; salted or green calfskins, No. 1, 32c lb.; No. 2, 30½c; salted or green kip skins, No. 1, 16c lb.; do No. 2, 14½c lb.; dry hides, No. 1, 30c, lb.; do No. 2, 29c, lb.; dry, bulls or stags, 25c lb.; dry salt hides, 24c lb.; dry calfskins (5 lbs. and under), No. 1, 35c lb.; do No. 2, 33c; tallow, No. 1, 13c lb.

Horse hides, green or salted, each, $2@4; do dry, each, 50@$2.

Clean ranch wool, full growth, lb. 50@55c.

Sheep pelts—Long wool, each, $2.50@4.50; medium wool, each, $1.50@2.50; short wool, each, $1@1.50; shearlings, each, 35@75c.

Beeswax, per lb., 25@27c.

## HEAR RATE PROTESTS.

### Commerce Commissioner Coming.

Announcement has been made that Clyde B. Aitchison, a member of the interstate commerce commission, will be in Portland, Ore., September 20 to 23 for the purpose of hearing complaints against the 25 per cent freight rate increase on fruits and other recent changes in the freight regulations. The hearing was arranged for by the public service commissions of Oregon, Washington and Idaho jointly with a view to presenting the case of the northwest producers and manufacturers in the most concise manner possible. While the three state commissions will be represented, it is desired also by the interstate commerce commission that every individual or organization desiring to present criticism of the increased rates show reasons why they should not be applied and present their side of the question.

The 25 per cent rate increase applies on fresh fruits and vegetables, fruit juices and empty containers for fruit and fruit juices. A 10 per cent increase in express rates on fresh fish and fresh fruits is also to be considered at the same hearing. On the last day of the hearing the matter of the reconsignment and diversion affecting the shipment of fruit and vegetables will be taken up by the representative of the interstate commerce commission.

HIDES WOOL FURS




RUBBER METAL SACKS

We pay full market value, correct weight and assortment, prompt returns. Write for prices. We want your business.

PACIFIC HIDE & FUR DEPOT

Joseph Thiebes and C. T. Symmes,
1101-09 Railroad Ave., Spokane, Wash.

HIDES
WOOL · PELTS
FURS · TALLOW

SHIP TO US
NO CARTAGE · NO COMMISSION
HIGHEST CASH PRICES PAID
PROMPT RETURNS-HONEST WEIGHT
WRITE FOR PRICE LIST AND SHIPPING TAGS
HIBBARD-STEWART CO. INC
SEATTLE
BE SURE AND MENTION THIS PAPER

A PROFITABLE SILO

Send for Silo Book Today




Use the Coupon

If you raise stock or keep dairy cows here's a silo that will put dollars in your pocket every year.

It is built of thoroughly seasoned, selected staves, hooped with strong billet steel hoops, bound with malleable lugs—has an anchorage system that makes it staunch and firm even when not filled and hinge-rod doors that can't sag, swell or freeze into the frame. At least

$20

is saved you by reason of the fact that the Inter State is well painted when you get it.

McGoldrick Lumber Co.
Spokane, Wash.

TEAR OFF AND MAIL TO US
McGoldrick Lumber Co., Spokane, Wash.
Gentlemen: Please send me your 1918 catalog and oblige
Name .....
P. O. .....
R. F. D. .....

## Protect Cattle Herds

In dealing with contagious diseases of cattle the basic principle of prevention is to keep carriers of infection away from the herd. Next in importance is maintaining the surroundings in a sanitary condition. Following this, the animal's natural resistance to disease should be increased by natural and occasionally by artificial means. Ordinarily, disease stalks about the country only in the bodies of diseased animals or attached to some intermediate object; these may include healthy or recovered animals, contaminated feed and water, infected cars and pastures, or the shoes or clothing of some inquisitive person who insisted on seeing the diseased stock. Avoiding such diseased animals and keeping healthy ones away from carriers of infection are the important methods of preventing disease.

The lack of immediate action upon the part of the farmer when he discovers animals that show symptoms of disease or sickness often is responsible for the loss not only of his own stock, but for that of his neighbors. At this time when every step should be taken promptly to avoid losses and to conserve production, it is all the more important that the farmer with sick cattle should get in touch at once with the local veterinarian or county agricultural agent.

## Make Rabbit Profitable

Fully 200,000,000 wild rabbits are killed in the United States every year, according to estimates made by the biological survey of the United States department of agriculture. Many of them are jackrabbits, the majority of which have not been utilized in the past. If all the rabbits killed were consumed, they would represent between 200,000 and 300,000 tons of valuable food, and if proper measures were taken to insure the collection of skins these alone would have a value of $20,000,000. The biological survey has frequently been called upon to help western farmers in coping with the rabbit pest. In view of the probable economic value of rabbit meat and fur in the coming few years, the energies of the farmers and ranchmen will be directed to the conservation of this important resource. Already a number of establishments for collecting, dressing, canning and shipping rabbit meat are in operation in western centers. As in Australia, the transition of the wild rabbit in this country from its status as a pest to a source of profit is assured, it is believed.


Warranted to Give Satisfaction.

**Gombault's Caustic Balsam**



**Has Imitators But No Competitors.**

A Safe, Speedy and Positive Cure for Curb, Splint, Sweeny, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunches from Horses or Cattle.

As a Human Remedy for Rheumatism, Sprains, Sore Throat, etc., it is invaluable. Every bottle of Caustic Balsam sold is Warranted to give satisfaction. Price $1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address

The Lawrence-Williams Co., Cleveland, O.



**AMERICAN FLAG**

*SIZE 3x5 FEET*

SEWED STRIPES
CANVAS BOUND
FAST COLORS
BRASS GROMMET

**FREE**

One of these big, fine flags will be mailed postpaid to any one securing and sending in seven subscriptions to your state family farm paper,

**The Washington Farmer**
**One Year 25c. Three Years 50c.**
**Five Years $1.00.**

Send your subscriptions with remittance, to

**The Washington Farmer**
617 Central Bldg.,
SEATTLE, WASH.,
or
Review Bldg.,
SPOKANE, WASH.


### This Means U!

Food conservation is necessary in this country, as well as in England, where placards on the war proclaim:

If U fast, U beat U boats;
If U feast, U boats beat U.

## MUST RESPECT LAW.

### Must Handle Lawless Lawfully.

The council of national defense has sent to all the state councils of defense throughout the nation an urgent appeal that lawless treatment of persons suspected of disloyalty be prevented.

"In the last few months in many parts of the country there has been a tendency toward lawless treatment of those suspected of disloyalty," says the appeal. "However patriotic may have been the motives which prompted these outbursts, their effect is deplorable. They are blots upon the war record of a nation which has declared itself to be fighting for a universal reign of law; they furnish ammunition to those makers of enemy propaganda who are trying to make the world believe that the enemies of Germany, too, are capable of atrocities; and frequently, by rousing anger and fear, they tend to undo the work which the councils of defense, through their educational campaigns, their Americanization work and their community organization, have done and are successfully doing to unite the nation in the fellowship of war work.

"The council of national defense looks to each state council of defense to see to it that these disorders do not occur in its state, but that sedition is henceforward stamped out by lawful means only, and that differences and disputes are adjusted, not by voluntary or self-constituted committees, but by official authorities.

"This task calls for leadership and action. The council of national defense makes this request in the full confidence that each state council will assume the responsibility for keeping the fair record of its own state clean from this time forward."

## CLASSIFIED ADS

### EDUCATIONAL 45

EARN MORE. ENROLL ANY TIME, AT Behnke-Walker, Portland, northwest's biggest business college, because best. Graduates assured positions. Write for catalogue.

### TEACHERS' AGENCIES 46

TEACHERS REGISTER WITH B. F. WESTmore, Mgr. Hazard Teachers' Agcy. $1 registers you at three offices. 911 Old Nat'l Bank bldg., Spokane, Washington.

### FRESH FOOD PRODUCTS 56

WILL DELIVER BOX 48 LEMONS ANY place, exp. paid, $1, or parcel post, $1.25. Ernest Vince, Santa Barbara, Cal.

### HONEY, BEESWAX—Wanted. 58

SEND SAMPLES OF YOUR HONEY AND beeswax; state quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

### MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

If you are going to build we want to send you our catalog No. 27, of sash, doors, frames, paints, building paper, etc. Sent free postage paid, on request.

We are still selling prepared roofing at $1.35, $1.70 and $2.10 per roll of 108 square feet.

5 x panel doors, $2.16 and up.
Cottage front doors, $2.95 and up.
Rough cedar siding at $15.
Flooring, 4-0 to 9-0 at $26.

We sell any one. Ship any where, and guarantee safe delivery.

O. B. WILLIAMS CO.
1943 First ave. So., Seattle, Wash.

### MISCELLANEOUS WANTED 63

CASH FOR OLD FALSE TEETH—WE PAY up to $35 per set (broken or not). Send at once—Package held five to fifteen days, subject to owner's approval of our offer. Highest prices paid for old gold jewelry, crowns, bridges, platinum, silver. United States Smelting Works, Inc., 331 Goldsmith bldg., Milwaukee, Wis.

POULTRY WANTED.

We are cash buyers of poultry and dressed meats, also cream. Write us for prices, shipping tags and premium catalogue for cream shippers.

COMMERCIAL CREAMERY CO.
SPOKANE, WASH.

# Classified Advertisements

### EGGS and BUTTER WANTED 59

WE ARE ALWAYS IN THE MARKET for good eggs and dairy butter. Send us your next shipment. Oregon Farm Products Co., 38 Halsted st., Portland, Ore.

### JUNK SHOPS 90

HIDES HIDES HIDES
Write for prices and shipping tags.
BUYERS OF ALL KINDS OF JUNK.
CENTRAL HIDE & JUNK CO., SPOKANE.

### MACHINERY—FOR SALE 93

CUT YOUR OWN LUMBER

on a Wheland Portable Sawmill. You will save time and big money on your next lumber bill. With the sawmill you can supply the lumber needs of your neighbors also. The price is reasonable, and the profits will soon pay for the machine.

Write for catalog and full details.
CLYDE EQUIPMENT CO.
18TH AND UPSHUR STREETS,
PORTLAND, ORE.

FOR FARM LUMBERING USE
"AMERICAN" PORTABLE SAWMILLS
Carried in stock by
HIGGINS MACHINERY COMPANY.
312 1st ave. So., Seattle. Write for Catalog.

THRESHING MACHINES FOR SALE—If yours burns we can ship immediately, Farquhar vibrator separators in 36-in., 33-in., 30-in., and 24-in. cylinder machines, with blower feeder, etc., complete. Also steam or gas tractors. Write for catalogue. W. Farquahar Mchy. Co., 308 East Salmon st., Portland, Ore.

### AUTOMOBILES 114

FORDS CAN BURN HALF COAL OIL, ALL distillate, or cheapest gasoline, using our 1918 Carburetor; 34 miles per gallon guaranteed; easy starting; great power increase; attach it yourself; big profit selling for us; 30 days' trial; money back guaranteed; styles to fit any automobile. Air-Friction Carburetor Company, 321 Madison st., Dayton, Ohio.

### STOVE & FURNACE REPAIRS 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

### HARES AND RABBITS 173

"A FORTUNE IN RABBITS"—HAVE raised the price. We will pay to $8 per pair. Want you to raise them for us. Send stamp for particulars. H. E. Gibson Co., Arcadia, Calif.

REGISTERED BELGIAN HARE BUCKS and does, $3 to $5 each. Cermer Rabbitry, Pasco, Wash.

BELGIAN HARES! SEND STAMP FOR FOLder 2. Northwest Rabbitry, Sunnyside, Wn.

### POULTRY 174

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REGISTERED HOLSTEIN BULL CALVES, 4 to 8 wks. old, from high producing cows; will sell cheap if taken at once. Glenwood Farm, R. 2, Snohomish, Wash.

BERKSHIRE SPRING PIGS OF CHAMpionship breeding for sale at reasonable prices. Send for description and price. R. W. King, Sweetwater, Idaho.

REGISTERED RED POLLED HEIFERS, from 3 weeks to 3 years old. All bulls sold. Mrs. D. F. Alward, Orting, Wash.

10 EWE LAMBS FOR SALE AT $10 EACH. Elmer Olson, R. 1, No. 29, Lake Bay, Wash.

SHETLAND PONIES; BARGAIN PRICES. Write for list, N. C. Sorenson, Onalaska, Wn

REGISTERED LINCOLN RAMS FOR sale. N. D. Brouillette, Newberg, Ore.

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WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

GALAX HOTEL; NEW AND MODERN; 75C and $1. Main and Bernard, Spokane.

NEW MADISON HOTEL, 75C AND UP. First and Madison, Spokane, Wash.

### FAIR PREMIUM LISTS 370

TWIN FALLS COUNTY FAIR, OCT. 1-4. Premium list now ready. Write J. M. Markel, sec'y, Filer, Idaho.

### RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

### ARTIFICIAL LIMBS 424

SCHINDLER ARTIFICIAL LIMB CO., 8115 Wall st., Spokane, Wash.

### BUSINESS OPPORTUNITIES 516

I WANT TO SELL MY DAIRY AND ICE cream plant; doing good business. See owner or write H. Hermanson, Roslyn, Wn.

### PLUMBING, STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 242 3d st., Portland, Ore.

### SEEDS 620

CHEAT SEED.

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### FARM LANDS—FOR SALE 651

STOCK AND DAIRY RANCH FOR SALE at a bargain. 1160 a. in western Oregon, in Lincoln co. For details write Emil T. Raddant, Orton, Ore.

### FARM LANDS—FOR SALE 651 Continued.

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Willamette valley farm; 125 acres, adjoining station; 25 miles from Portland, Ore.; all level and finest soil; 7-room house, big barn, machinery shed, silo and other buildings; fruits and berries for family use; running water; on good road; in fine farm district; near church and schools. Price $15,000; one-third cash, balance 5½ per cent.

Wheat farm—800 acres; in eastern Oregon; near county seat and railroads; good buildings, with water piped to them; good fencing; full equipment, including combined harvester, 15 head horses, 7 head cattle, 35 sheep, 40 hogs, seed and feed. All for $22,500; half cash, balance 6 per cent.

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We also have fine irrigated alfalfa lands for sale in best eastern Oregon district. Write us.

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WIDOW, PAST 80, OFFERS FARM.

115 a.; all fenced and cross-fenced; 35 a. in cultivation; 10 a. alfalfa; 30 a. timber, bal. pasture; good 6-room house, piped for spring water; good barn, outbuildings; unfailing spring to irrigate 30 a.; no waste land, $12,000, ½ cash, bal. terms; near R. R. and Columbia river transportation. Mrs. Rosanna J. Hendryx, R. 1, Orchards, Wash.

FOR SALE—440-A. WESTERN WASHINGton farm; 200 a. prairie pasture; 140 river bottom; 50 a. under cultivation, balance willow brush; 100 a. logged over; hill land; fair buildings and orchard; good roads; 3 mi. to town. Price, without stock, $12,000; $4000 cash, balance 10 years, 6 per cent. For particulars address A. Steinman, R. F. D. 1, Box 99, Tumwater, Wash.

1144 A. IMPROVED WHEAT LAND; ALL to be in crop next season; 2 miles from warehouse; for quick sale, $30 per acre.

2568 a. choice wheat land; Vermillion, Alberta; trade for income property.

320 acres wheat land; Alberta. Price $16 per acre. Terms. Union Investment Co., 406 Ziegler blk., Spokane, Wash.

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MONTANA IRRIGATED LANDS.

To close out two large sheep ranches, we are offering choice irrigated land in tracts of any size at bargain prices, and on very easy terms; 100 per cent tillable; best of water rights and crops. Address owners, Lewis Penwell Company, Helena, Mont.

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Buy a farm in sunny, prosperous California. All about land, soil, market, crops, dairy ranges. Send 25c for six months' subscription to Farm and Irrigation (Illustrated) Magazine, Dept. F-18, Mysell bldg., San Francisco.

FOR SALE — FORTY-ACRE IMPROVED ranch; near Kent; fine large 8-room house, large barn; also ten acres logged off, good house, three large rooms. For particulars address George C. Harper, 409 E. Pike st., Seattle.

ONE OF THE BEST FIVE ACRES IN OREgon; ideal place for elderly couple or young couple; 5 sawmills close by; about 20 miles from Salem; half down, balance easy terms. For particulars address A. H. Persey, Scotts Mills, Ore.

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83 A. GOOD LAND; RAISE ANYTHING; plenty of water. Write owner, Mrs. A. B. McMath, Box 82, Elmira, Cal.

240 A. WHEAT LAND CHEAP. T. M. Smith, White Sulphur Springs, Mont.

### FARM LANDS—WANTED 654

WANT TO TRADE MY NEWSPAPER FOR a small farm or fruit or poultry ranch; want to get into the open. Thomas Nelson, Cambridge, Idaho.

### FOR SALE OR EXCHANGE 702

FOR SALE OR EXCHANGE—300 ACRES diversified farm; in Eastern Washington; 3 mi. from town; all level; no stumps; splendid new set of buildings; well watered; new complete set of farming tools, horses, hogs, cattle and growing crop, everything goes. Will sell equity of $8000 for cash or trade for lumber yard, bank or grain elevator in good farming community. Address care of Home Lumber company, 2901 Trent ave., Spokane, Wash.

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## Here's the Way to Stop Cream Waste

ABOUT 8 out of 10 farmers with dairy herds are wasting cream every day. **They are actually feeding cream to pigs**—simply because they are using inferior cream separation machines.

### Sweden's Lesson for America

Sweden's farmers won't tolerate the slightest cream waste. Their economy has perfected the most economical, fastest greatest labor-saving cream separator—the **Viking.**

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There is no cream waste with the **Viking Cream Separator**—Sweden's most popular separator. It will pay you to investigate. Write your name and address on the coupon below and mail it to us. See a **Viking** work. You can do that by looking up the **Viking** dealer the next time you are in town. He will be glad to demonstrate it to you.



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Economical production and the largest cream separator factory in the world enable us to sell the **Viking** at a price that means a money-saving to you. **The Viking has a greater capacity than any other separator of equal rating.** Experts' investigations prove that the **Viking** has approximately 100 pounds of milk **per hour** greater capacity than many separators for which much higher prices are asked.

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World-wide demand makes it necessary to produce over 180,000 **Vikings** per year. Each **Viking** is made of finest quality Swedish iron and highest grade tool steel. No separator **at any price** uses finer tool steel in its working parts. Furthermore, it is marvelously simple in its design. That's one of the secrets of its economy of first cost—and also the reason why it operates so easily. You know that all of the average hard-running separators are bound to waste cream. Their hard-working mechanism makes the whole separator vibrate—tremble. This causes the cream to mix with milk. The result is waste of costly cream through the skim-milk spout.

The smooth, easy action of the **Viking** (which starts the minute you move the handle) distributes the milk in thin, even, smooth layers over the discs. The cream **naturally** separates from the milk. You get more cream; do less work.

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# THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND H[illegible]

VOL. XLI. NO. 37. SEPTEMBER 12, 1918. ** WEE[illegible]



# LILLY'S SCRATCH FOOD




*Builds from the Crop!*

**is the very bottom and foundation of your flock's body-building, stamina and egg production.**

A—In LILLY'S SCRATCH FOOD there is food to make the wattles red with the glow of health.

B—In LILLY'S SCRATCH FOOD there is the building material for a healthy body and a quick, vigorous eye.

C—In LILLY'S SCRATCH FOOD there is building material for the nerve, for vertebra and every vital nerve center.

D—In LILLY'S SCRATCH FOOD there is the material for feather building—without it your flock would feel a strain that would count against it in the end.




E—In LILLY'S SCRATCH FOOD there is bone-building material. It is the all round character of the mixture that imparts to the blood the necessary materials for cell-building in every part of the bird.

F—In LILLY'S SCRATCH FOOD there are good grains in correct proportions; not such grains as we happen to have in stock and can not use for other purposes, or grains that happen to be cheapest, but good, sound grains best suited for the purpose.

G—In the manufacture of LILLY'S SCRATCH FOOD each variety of grain is cleaned by the most modern machinery—then these different grains are mixed in scientifically correct proportions—then all chaff, dust and dirt removed by other perfect machinery.

LILLY'S

**The Oldest Poultry Food House on the Pacific Coast—Established in 1885**

**Seattle—Portland.**

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 37 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF September 12, 1918

## Interstate Fair Defies Handicaps

### *Drouth and Feed Shortage Show Effects, but Displays Convey Message*

The heat and drouth and the feed and labor shortage made a powerful drive on the Spokane Interstate fair this year, but lost. Live stock displays and exhibits of produce from the farms were somewhat cut down, but not sufficiently to rob the fair of its stimulation and educational value. Competition was less keen than usual in the live stock department. It was as keen as ever in the boys and girls' section, and the agricultural section was well filled with displays that would do many countries credit in their best years. The machinery department was filled as usual; automobiles, trucks and tractors were shown in numbers, the industrial building was full of exhibits and demonstrations highly interesting and with valuable ideas for imitators.

In the live stock department the feature was undoubtedly the herd of Hereford cattle shown by the Curtice Cattle company of Calgary, Alberta, heralded as the "champions of the prairie." These animals are making a circuit of the fairs, and will make Hereford breeders groom their favorites well or take back seats. Another notable display was that of the beautiful black Aberdeen-Angus herd from the Ohrmanndale farm at Philipsburg, Mont. Hercules farm, of Sprague, Wash., owned by Day & Rothrock, upheld the honors of that breed, with Washington state college and the University of Idaho among the contestants in some of the Shorthorn classes.

In the dairy division John L. Smith of the Hazelwood farm had a good string of Holsteins. Jay P. Graves of Waikiki farm and R. E. Logan of Loch Logan farm, of Stevensville, Mont., were among the leading Jersey exhibitors, and M. H. Jerdee of Kiesling, Wash., had Guernseys on exhibition.

The sheep show was less extensive than on some previous occasions, but contained some flocks of unusual excellence. Professor William Hislop, formerly head of the animal husbandry department of the State College of Washington, but now in the sheep business for himself, was judge of the sheep, and declared that some of the flocks exhibited were of such quality as to rank well up in any of the country's greatest sheep shows. The University of Idaho's fat flock was not in evidence this year, owing to the numerous disasters that have overtaken them during the year. Three times marauding dogs invaded the pastures and killed several head, and just recently fire destroyed 20 head of them. The well-known J. G. S. Hubbard flock, of Monroe, Ore., was shown, and other exhibitors playing a prominent part were H. S. Currie of Castor, Alberta, I. H. Jordens of Spokane, Wash., and J. P. Fisk of Spring Valley, Wash.

The horse show was the greatest sufferer from the unfavorable conditions of the present year, though even in this department some excellent exhibits were shown. A good string of Clydesdales were shown by Lee M. Ford of Great Falls, Mont. The Percherons and Shires were less in evidence than in past years.

One of the great features of the fair was the boys and girls' department, where all manner of work and produce were entered in competition and where various contests were held. Several northwestern states were represented by clubs. Sewing, cooking, canning, gardening, manual training and other competitions were strongly contested.

In the poultry division a notable condition was seen. The heavier breeds showed predominance as against the purely egg-laying breeds, though the latter were well represented. One of the greatest rabbit shows in the history of the northwestern fairs was staged under the poultry division. These two facts may indicate the increased interest in the meat birds and the rabbits from the standpoint of meat substitutes for beef, pork and mutton under the regulations of the food administration.

From the standpoint of entertainment the camp of sailors on the infield of the race track was the leading feature. There were more than 600 of the sailors from the naval training school at Seattle, under the leadership of Commander Miller Freeman. They went through daily drill before the grandstand and followed all the routine of their regular camp life.

The racing program held the interest of those following sporting events of this type.

The automobile and machinery display was excellent and extensive, as were also the exhibits of modern farm equipment, such as cream separators, lighting systems, gasoline engines and devices of all kinds designed to improve the conditions of farm life.

In the agricultural exhibits Alfred Knutson of Harrison, Idaho, won first for the individual display. Mr. Knutson had an exhibit from his own farm, including scores of products, among them all kinds of vegetables, grains, grasses and fruits. In this department F. C. Sudhoff, Elk, Wash., won second prize, J. R. Orrock, Sherron, Wash., third prize, Hans Peterson, Greenbluff prairie, fourth prize and W. A. Hughes of Colville fifth prize.

Interest was no less keen among the granges within easy reach of Spokane than heretofore, their displays being of high order and emphasizing war production and conservation as their principal lesson. Camden grange was awarded first in this class for exhibit of agricultural products. Valley Prairie grange won second and East Spokane grange won third.

The agricultural exhibit of garden produce by the A. A. Kelley gardens of near Spokane was a feature of the agricultural building, though the display was not entered in competition. It showed a remarkable collection of varieties of vegetables of unusual quality for a dry and hot year like the present has been.

The following are the live stock awards, as announced by the secretary of that division:

**HORSES.**

**Clydesdales.**

Stallion, 3 years old and under 4—Lee M. Ford, Great Falls, Mont., on Mendel Prince.

Mare, 4 years old and over—Ford, on Leathes Lily.

Mare, 3 years old and under 4—1 and 2, Ford, on Mendel Queen and Lady's Maid.

Mare, 2 years old and under 3—Ford, on Waverley Belle.

Champion and grand stallion—Ford, on Mendel Prince.

Champion and grand champion mare—Ford, on Mendel Queen.

Stallion, with two mares, owned by exhibitor—Ford.

Stallion, with four mares, owned by exhibitor—Ford.

**English Shires.**

Stallion, 4 years old or over—Jacob Bushur, Genesee, Idaho, on Frank Johnson Conqueror.

Mare, 2 years old and under 3—Lee M. Ford, on Ceylon Court Pride.

**Thoroughbreds.**

Mare, 4 years old or over—1. L. Istell, Spokane, on Ada Anne; 2. R. B. Pillans, Calgary, Alberta; 3. Thomas McFarlane, Calgary, Alberta, on Volima; 4. R. J. Fisk, Rosalia, Wash., on Pebble Fountain; 5. C. Reed, Mabton, Wash., on Far Cathay.

**Standard Bred.**

Stallion, 4 years or over—1. Harry S. Needham, on Cautoma; 2. P. B. Phillips, Prescott, Wash., on Senator H. Junior; 3. Erle Oglesbee, Spokane, on Pacific Bill.

Stallion, 3 years old and under 4—A. B. Wentworth, Spokane.

Mare, 4 years old or over—1. Paul Welp, The Dalles, Ore., on Song Sparrow; 2. Eddie Breim, Portland, Ore., on Complete; 3. C. D. Dosdell, Spokane; 4. James Oswald, Edmonton, Alberta, on Rubbell.

**Shetland Ponies.**

Stallion, 2 years old and under 3.—Karl and Dorothy Moore, Spokane.

Gelding, 3 years old and over—J. B. Unicume, Spokane.

Pony—Any age or sex shown to vehicle—1. J. B. Unicume; 2. Karl and Dorothy Moore.

**CATTLE.**

**Shorthorns.**

Bull, 2 years old and under 3—Washington State college, Pullman, Wash., on Village Excelsior.

Bull, junior yearling—1. Day & Rothrock, Spokane, on Village Heroine; 2. Day & Rothrock, on Hercules Stamp.

Bull, senior calf—1, 2 and 3, Day & Rothrock, on Hercules Diamond, Silver Cloud and Hercules Lord.

Bull, junior calf—Day & Rothrock, on Hercules Knight.

Cow, 2 years old or over—D. H. Bennett, Ione, Wash., on Frosty.

Heifer, senior yearling—Day & Rothrock, on Lady Missie Temp.

Heifer, junior yearling—Day & Rothrock, 1, on Golden Light; 2, on Hercules Topsy.

Bull, senior calf—Day & Rothrock, 7, on Hercules Matchless; 2, Washington State college, on Village Queen.

Heifer, junior calf—Day & Rothrock, 1, on Hercules Topsy 2d; 2, D. H. Bennett, Ione, Wash., on Pend Oreille Maid.

Exhibitor's young herd—Day & Rothrock.

Breeder's calf herd—Day & Rothrock.

Get of sire—Day & Rothrock.

Produce of cow—Day & Rothrock.

Senior champion bull—Washington State college.

Junior Champion bull—Day & Rothrock.

Junior champion cow—Day & Rothrock.

Grand champion bull—Day & Rothrock.

Grand champion female—Day & Rothrock.

**Herefords.**

Bull, 3 years old or over—Curtice Cattle company, Ltd., Calgary, Alberta, on Beau Perfection 48.

Bull, 2 years old and under 3—1. Curtice Cattle company, on Beau Donald 192; 2. Platt Bros., Genesee, Idaho.

Bull, senior yarling—Platt Bros.

Bull, junior yearling—1. Platt Bros.; 2. Curtice Cattle company, on Beau Donald 211; 3. Platt Bros.

Bull, senior calf—Curtice Cattle company, on Beau Donald 215.

Bull, junior calf—1. Curtice Cattle company, on Beau Donald 222; 2. Platt Bros.

Cow, 3 years old or over—Curtice Cattle company, on Bell Perfection 45.

Cow, 2 years old and under 3—Curtice Cattle company, on Bell Donald 236.

Heifer, senior yearling—1. Platt Bros.; 2. Curtice Cattle company, on Beau Donald 239.

Heifer, junior calf—1. Curtice Cattle company, on Beau Donald 243; 2. Platt Bros.

Heifer, senior calf—1. Curtice Cattle company, on Bell Donald 254; 2. Platt Bros.

Heifer, junior calf—1. Curtice Cattlecompany, on Bell Perfection 68; 2. Platt Bros.

Graded herd—Curtice Cattle company.

Exhibitor's young herd—1. Curtice Cattle company; 2. Platt Bros.

(Continued on page twenty-four.)

## Food Production Administration

### *Governor Frazier Believes Movement a Mighty Good One*

For some little time the Farmer has been persistently trying to obtain satisfactory information from the Food Administration Grain corporation as to just what methods must be taken and what costs may be expected by the wheat grower.

In connection with the direct shipment of wheat to the grain corporation, it addressed a letter to a number of farmers and others interested in this vital subject, saying:

"Eight months ago the Pacific Northwest Farm Trio led in a movement which resulted in a telegram to President Wilson urging 'the immediate appointment of the ablest available man in the country as national war-time food production administrator,' to whom the farmers in all sections of the country could appeal with confidence in meeting their war-time food production difficulties."

In answer to this letter, Governor Frazier of North Dakota, writes:

**Governor Lynn J. Frazier's Letter.**

I believe the movement advocating some one in the federal war work to directly represent the food producers of the country is a mighty good one. I expect to go to Washington in the near future and am going to take the matter up with President Wilson, and others, urging the necessity of having some one that we can depend upon to look after our interests and to whom we can petition and make requests to look after the interests of the farmers of the nation.

I am enclosing copy of a bill that was enacted during our last legislature, and which has worked out very satisfactorily. It has had the effect of guaranteeing the farmers a proper grade for their grain.

I appreciate very much the work your papers are doing and wish you the best of success.

LYNN J. FRAZIER, Governor.

Bismarck, N. D.

In a postscript to his letter, Governor Frazier adds:

"I have just been talking with Mr. Hagan, our commissioner of agriculture and labor, who is a member of the federal agricultural advisory board. He informs me that Hon. H. C. Stuart, ex-governor of Virginia, has been appointed as a member of the war industries board for the special purpose of representing the food producers of the United States. He speaks very highly of Mr. Stuart and says he believes he will make a good representative."

The North Dakota state grain law, referred to by Governor Frazier, provides for a uniform state grain grading law which contains many important features, provides for an inspector of grades, weights and measures whose duty it shall be to have charge of all grain inspection, and to establish grades when approved by the railroad commissioners; also inspectors of public warehouses to determine their financial condition, to provide for a proper system of accounting, and to aid in the marketing of grain. The bill also provides for the establishment of central markets at various points in and out of the state. It provides for the appointment of deputies in towns where provision is made, scales installed and a building for housing provided. It authorizes the appointment of buyers, or managers of elevators to be licensed as deputy inspectors with authority for grading grains and makes it illegal for public warehousemen not licensed to handle grain at elevators or elsewhere, and provides for the establishment of grades for all classes of grain and agricultural products.

## NONPARTIZANS WIN.

### Candidates Nominated in Idaho.

Returns from the primary election held last week throughout the state of Idaho show that the nonpartizan league succeeded in nominating practically all of the candidates that it had indorsed, including H. F. Samuels for governor and practically all of its candidates for congress and the state legislature.

Most of the candidates indorsed by the league filed on the democratic ticket. A close race was run in the First congressional district between the nonpartizan candidate and his opponent on the democratic ticket, the former winning out, according to figures at this time, by a very few votes. Samuels, for governor, received almost as many votes as both his opponents in the democratic primary.

**Unfit Officers Will Stay.**

Instead of rejecting officers who, for physical reasons, are unfit to be sent overseas, the war department is assigning such officers to home duties, it is announced.

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**Turn to page 6 and read the opening chapter of our new serial story, "A Crooked Trail."**

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## *Plan No Non-Essential Work*

Whatever questions may come before the legislature of this state at its next session, there is one principle that should be borne in mind by its members: No non-essential state work should be authorized.

In carrying out this policy the legislature might go so far as to work a serious injury to state development. The future should not be disregarded, but legislation should be so drawn as to prevent the use of funds and labor and materials during the war that might be better used for strictly war purposes. The one great thing now is the winning of the war, and every man taken from war work to do unnecessary work for the state, every dollar invested in a non-essential and every bit of material of any kind that is needed for the prosecution of the war, but used for other purposes, is just so much toward the delay of victory. Every dollar of taxes levied for a purpose not directly contributing to the winning of the war is a dollar added to the burdens of the public, who will, in the long run, if not now, have to bear the cost of the war. There never was a time when level-headedness and loyal patriotism were more needed in legislatures than now.

## *Don't Leave It to Somebody Else*

Following the urgent appeal of the public service commissions of the three states of Idaho, Oregon and Washington, acting jointly, the interstate commerce commission, with headquarters at Washington, D. C., has granted a hearing on the recent increase in freight rates affecting fruits and vegetables. This hearing will be held at Portland, Ore., September 20 to 23. At that time representatives of the northwestern commissions will present the case of the fruit growers and the manufacturers of fruit products with a view to having the 25 per cent freight rate increase and other new regulations governing freights on these commodities revised so as to be more equitable. The case is one of the most important with which the fruit industry of the northwest has had to deal. While the public service commissions will undoubtedly present the matter ably and fairly from the viewpoints of all concerned, every fruit grower and every fruit growers' organization should consider it an opportunity and a duty to take a personal interest in the conduct of the case. It is too often true that persons directly interested leave the conduct of their affairs of this character to some one else and later complain because the results were not what they desired. In this particular case the fruit man should make every effort to insure a complete and vigorous presentation of the facts before the representative of the interstate commerce commission.

## *Mr. Houser Quite Misses the Point*

We are glad to have Mr. Houser's assertion that previous answers coming out of his office and signed with his name to our letters of inquiry have the stamp of his disapproval. Mr. Houser explains (and his explanation given in his letter published last week is undoubtedly correct) that the answers, which he himself pronounces "stupid, to say the least," were written by a new man, while he was away from Portland on public business.

Mr. Houser, however, quite misses the point when he says that we have cast reflections upon the sincerity of his efforts "to bring about conditions that would make it possible to permit an expedient movement of the crop in the states of Oregon, Washington and Idaho."

We do not question, and have not questioned, his commendable efforts in that direction. The point we raised, and which is not yet satisfactorily illuminated by Mr. Houser's latest letter, was:

**Whether the growers of the interior will be guaranteed by Mr. Houser terminal facilities, under which, if necessary, they can send their grain direct to the grain buying corporation and save themselves from the payment of excessive profit or rakeoff by private speculators.**

Mr. Houser's explanation that he had previously announced "that if he heard of any united unfair practice he would at once solicit direct consignments" is not as reassuring as the grower would desire. Widespread individual unfair practice on the part of wheat buyers could become exceedingly burdensome to the producers, who still might be unable to prove a united conspiracy.

It was the original explanation of the new system of grain buying that there would be actual competition by the grain buying corporation against private buyers and speculators. The Farmer believes that that competition, to give the growers adequate protection, must be actual and not potential or prospective.

Mr. Houser says in his letter: "You make mention of an eight-cent charge. We wish to call your attention to the resolutions which were passed at Boise, Idaho, at the food administration meeting, that anything over a seven-cent charge would be classed as unfair." This action of the Boise conference seems to be but a ratification of a previous agreement entered into by the associated millers and the organization of grain buyers at a conference at Seattle. At the latter conference the declaration was made that a seven-cent intermediate charge would meet with their approval. It was also agreed that a handling charge be made on purchases by mills and exporters from coast and country dealers of one-half of one per cent, which would be about one cent a bushel. Apparently the Boise conference did not approve that extra one cent a bushel, but whether the millers and exporters will give up that extra rakeoff is yet to be seen. Apparently Mr. Houser is approving these intermediate charges which many farmers regard as excessive and unwarranted.

Mr. Houser's action, as explained by him in his last letter, of turning over the entire proceeds of his former private grain business to the Red Cross and other war relief funds, is admirably fine-spirited and patriotic.

That is apart from his newly acquired interest in the gigantic merger of the Portland Flouring Mills, the Puget Sound Flouring Mill companies and their subsidiary warehouse and milling companies in the Pacific northwest. He explains that the profits that will come to him over and above six per cent of his interest in this large merger will also be donated to war relief funds.

## *A Man Without a Country*

It is an old story, one that has been read no doubt by nearly every one. But this is a good time to read it again. It is grippingly interesting and, in addition, has a lesson peculiarly appropriate to the present time. There are yet in this country those whose patriotism is at a low ebb, those who fail to realize the value of their country, those who fail to recognize the high degree of justice and liberty that the constitution of the United States of America guarantees to them. They criticize their government where criticism is not due; they advocate policies that would destroy those great things for which the colonists and the heroes of '61-65 fought for and for which five million loyal Americans are now mobilizing to preserve for the entire world. That little book, "A Man Without a Country," lying on many a dusty shelf throughout the land and to be found in every well equipped library, public or private, should be brought forth and its story re-read and pondered over in the light of the present hour.

## *Entire Community Is Helped*

One of the commendable features of the government's movement to lend creditless farmers money with which to finance their seeding of wheat is that the movement is more than a mere seed wheat matter. It is a community matter. To illustrate: Suppose 100 farmers in a community secure from the government the maximum ($300) allowed under the seed financing plan. That means $30,000 put into that community by the government. It means $30,000 more money put into circulation. Instead of scraping together every dollar possible to buy seed wheat with, the farmers buy their seed to as great an extent as possible with the money advanced by the government and have their savings to spend for other things that not only they need but that the community merchants and tradesmen need to sell. Thus it is more than a question of increasing wheat acreage, though that is the main object. It is a question as well of community stimulation. The government is not only helping the farmer. It is helping the merchant and blacksmith and preacher and doctor—everybody.

## *Security Must Be Unquestionable*

Occasionally a criticism of the federal farm loan bank is heard on the ground that its officers are not liberal enough in accepting farm mortgages and making loans on them. Such criticism as a whole is to be condemned, for the future soundness of the land bank, and hence its value to the farmers of the country, depends wholly upon the character of the security behind its loans.

Here is the way the bank operates: With a capital of $750,000 in each of its 12 districts to start with, it makes loans to farmers. For each loan it takes a first mortgage on the farm as security. This mortgage is accepted by the government as collateral against which government bonds are issued. These bonds are sold to individuals or corporations throughout the nation. The money received for their sale is loaned to other farmers, who give first mortgages on their farms to secure the loans. These mortgages are in turn used for the issuance of bonds, which are sold to raise money to lend to other farmers. Thus the wheel turns—the original capital, the loans, the mortgages, the bonds, the new capital from the sale of the bonds, new loans, new mortgages, new bonds, new capital, and so on as long as the security given by the farmers remains absolutely sound. Let that security once become unsound and the security behind the government bonds automatically becomes unsound.

Instead of criticism for demanding absolute perfection of title and mortgage and reasonable valuation of land on which a mortgage is accepted, the officers of the land bank are entitled to highest commendation when they thus protect the interests of those who borrow and will desire to borrow in the future.

# Hindenburg Line Disappearing

## *Allies Continue to Force the Enemy From Captured Soil*

The past week on the western battle front, as well as in Russia, has been the most successful week of recent months for the part of the allies. Gains of ground and strategic positions on the western front and a closer welding of allied interests in Russia have marked the week. In view of the war department's announced plan that the military effort would be centered on the western front, chief interest lies in the developments in that section. The one outstanding fact in that development is that the famous Hindenburg line, where the German armies had established themselves prior to the launching of the westward drive last March, has been successfully penetrated in a number of vital places. In addition every important German base west of that line in the territory occupied by the Germans during the drive has been retaken by the allies. Cambrai is expected to fall soon. At this writing it seems evident that the entire Hindenburg line must give way with a short time.

What this seems to mean is that fortified German lines are not impregnable, as has so often been felt. Reliable commentators on the situation call attention to the fact that the Germans have had adequate time to prepare this Hindenburg line for defense and that to be able to hold it was a matter of life and death to them. Hence, it is reasonable to assume that it was given up, or is being given up, because the German power is unable to hold it. When this line is finally wiped out it is not an over-optimistic prophecy to predict that before many weeks shall have passed nearly all of the territory invaded by Germany on the western front since the launching of the first great drive in August, four years ago, was begun, will be recaptured.

### Germans Recognize Their Danger.

Extracts from German papers indicate that the people of that country are beginning to realize the danger that confronts them on the battle front. The Cologne Gazette is quoted as saying:

"The struggle on the southern front becomes every day greater and more formidable. The greatest German offensive can not even be compared to the present fights. We must not let the relative calm reigning in some sections deceive. Formidable forces are gathered there. Are these troops in need of rest, or are they designed to fresh fights, ready to attack on the first opportunity?"

Other German papers and papers published in Switzerland, but which are understood to have a German circulation, openly admit the increasing menace to the German arms.

### U. S. Soldiers Continue to Go.

General March, military chief of staff at Washington, has announced officially that more than 1,600,000 American soldiers had embarked for France at the close of business August 31. More than 250,000 embarked during that month.

### Allies Recognize Loyal Russians.

The so-called Czecho-Slovaks, the loyalist element in Russia, have been officially recognized as a government by the United States and the other principal allied government. The effect of this official recognition will be the building up of an allied unity in Russia in opposition to the bolshevik and German elements. The allied nations not only are lending military aid to the newly recognized government, but are financing its undertakings to a considerable degree.

### Many Men Are Registering Today.

Today, September 12, is registration day for those men between the ages of 18 and 45 years who are not already registered for war service or are not already in some form of the military or naval service. It is estimated that more than 12,000,000 men will be registered under the new draft act. A statement from Washington indicates that broader grounds for the granting of exemptions on the basis of occupation will be observed in preparing the lists of men for call to service than was the case under the last draft act. A questionnaire will go out to each registered man immediately to be filled out and returned to the exemption board in his district. The operation of the new draft act will be rushed in order to get the first contingent on the way to the military training camps at the earliest possible date.

### Bomb Thrower Works in Chicago.

Probably as a result of the conviction of 93 I. W. W. recently in Chicago on charges of attempting to obstruct the government's conduct of the war, a bomb was exploded in the federal building of that city last week, resulting in the death of four persons and injury to a considerable number of others. Judge Landis, who conducted the trial of the I. W. W., and who sentenced them following their conviction by the jury, has his offices in the building. It is believed probable that the person guilty of the attempted destruction of the building is among a considerable number of suspects that have been arrested by federal authorities.

The convicted I. W. W. members have been taken to Fort Leavenworth, where they are being placed in the federal prison to serve their sentences, the highest of which run to 20 years. William D. Haywood, national secretary of the organization, was among those taken to prison.

### Railroad Workers Get Higher Pay.

Nearly a million railroad employes, including clerks, track laborers and maintenance of way men, are to receive wage increases of $25 a month, the equivalent of $1 a day or 12 cents an hour over the pay they received last January 1, under a wage order issued by Director General McAdoo. Advances are effective as of September 1. This order represents the second largest aggregate wage increase ever granted in American industrial history. It is supplementary to the general railroad wage order issued nearly four months ago, providing for about $300,000,000 increases.

### President Is Not Coimng West.

Announcement has been made at Washington, D. C., that President Wilson has for various reasons canceled his proposed trip to the west during the Liberty loan campaign, which will be launched September 28.

### War Cost Breaks Records.

Official figures show that this country spent for war purposes during the month of August $1.805,513,000, an average of considerably more than $40.000 a minute. Of this amount more than $1,500,000,000 went for the operation of the army and navy and other direct war expenses.

## *Washington Gleanings*

The Wenatchee apple crop is beginning to move, and from now on there will be practically continuous activity in the apple harvest.

Walla Walla county is caring for 161 French orphans, nearly every school in the county supporting one or more. The rest are supported by individuals.

It is reported that 490 cars of fruit left Yakima valley during the last week. Most of the cars were peaches, although there are holdings of pears in storage.

The Riverside Fruit Growers' association is contemplating the erection of a fruit warehouse in Riverside. The association is preparing to handle a record apple crop in this district next season.

Reports come from Vancouver that the prune harvest is on. The crop has every indication of being unusually large in nearly all sections of Clarke county, and the price this year is the highest on record.

The Kennewick-Richland marketing union this year shipped 26,036 crates of strawberries. The average price for extra fancy berries was $3.06 per crate; for fancy berries $2.83 per crate, and field run $2.29 per crate.

John Horrocks, who owns 360 acres of wheat land just across the Idaho line east of Palouse, has purchased 240 acres adjoining it from Mrs. M. Miller, paying $18,000. He will take charge of the farm October 1.

The Stillwater Lumber company's mill at Vader recently suffered a loss of $100,000 from a fire in the boiler room. The planing mill and dry kilns were saved, but practically all lumber on the docks was consumed.

One of the largest real estate deals in the vicinity of Ridgefield was made when J. W. Davis purchased the Island farm, on Bachelor island, of the W. W. Cotton estate. The farm consists of 700 acres, and the deal involved more than $50,000.

The White-Dulany company of Seattle has entered the Palouse country market with the recent purchase of warehouses at Palouse, Potlatch, Princeton and Harvard. C. W. McFarland has been employed as district manager, and will make his headquarters at Palouse.

Puyallup valley hop raisers will pick enough of their crop this year to fill existing contracts, at least. They are dubious about the future of the business, due to the approach of prohibition. The crop this year is as good as in 1917, when it totaled between 6000 and 7000 bales.

Yakima hop growers, as a result of the announcement of the order prohibiting the manufacture of beer after December 1, ceased picking the valley's crop last week, which is estimated at between 17,000 and 20,000 bales. Cessation of harvesting will, it is estimated, result in a loss of at least $260,000 to the growers.

The Morrison Mill company is planning to put $75,000 worth of improvements into its Anacortes mill in the near future. In addition to a warehouse 200 feet long and an extension to the dock, a 1000-horsepower turbine generator and electric motors, a double-cut resaw and other machinery will be installed.

# Boys Paid to Go to School

## *Unprecedented Opportunity Is Offered by Government*

An unprecedented opportunity is being offered this fall by the government and the colleges and universities to every boy between 18 and 21 years of age to get a college education and a military education and draw pay at the same time. Never before in the history of the United States were boys offered pay for going to school, declare the great educators of the northwest.

Here is the proposition: Under the new draft law boys from 18 to 21 years are subject to call for army service, but the government needs young men with education and military training. Hence, it will pay high school graduates of these ages the regular army pay of $30 a month and furnish them uniforms if they enroll in regular college or university courses and enlist in the so-called "student army training corps" for military training. They will be required to do 20 hours of military drill or other military work each week. Special arrangements are made in some instances for boys under 18 years or those who have not graduated from high school, though they will not be able to receive all the assistance that the graduates will.

As one of the leading educators of the northwest said recently, a young man who wants to do what his country most desires to have him do and at the same time be getting a college education should investigate this proposition. He is subject to call to service under the new draft act and will remain so while taking the school work, but he will be securing military education that will fit him to advance rapidly in the ranks if he desires to do so when he is called to service.

Every boy in the northwest should think about this opportunity and if interested in it write to the school that he would like to attend. Letters may be addressed to the following for detailed information on the subject:

Washington schools—President Henry Suzzallo, University of Washington, Seattle, Wash.; President E. O. Holland, State College of Washington, Pullman, Wash.; President S. B. L. Penrose, Whitman college, Walla Walla, Wash.; President J. M. Brogan, Gonzaga University, Spokane, Wash.

Oregon schools—President P. L. Campbell, University of Oregon, Eugene, Ore.; President W. J. Kerr, Oregon Agricultural college, Corvallis, Ore.

Idaho schools—President E. H. Lindley, University of Idaho, Moscow, Idaho.

### HOGS KILL WEEVIL.

### Gleaning of Fields Effective.

Reports have come from a number of the pea and bean growing sections of the northwest indicating that weevil are threatening to secure a foothold in the northwest. While various methods of destroying weevil in the harvested crops are practicable and should be put into vigorous effect, J. R. Shinn, county agriculturist for Spokane county, Washington, adds another argument to his appeal for gleaning fields with hogs by declaring that this is one of the best possible methods of preventing the spread of weevil pest.

Mr. Shinn says that in a large percentage of cases the weevil secure their foothold in the shattered and unthreshed peas and beans that are left on the ground after harvest. Hogs will clean the fields completely if given access to them, he says, and will thus destroy what weevils are in the field and prevent the development of others.

# Powder to Clear Land

By CARL J. MENZE.

The war cry, raise more crops, should be changed to buy a box of powder in western Washington. The most difficult problem the farmers west of the mountains have to contend with is to get their land cleared and fit for cultivation. When once the land is cleared, it is not often known to lie idle. It is very hard to increase crop production in one year without clearing more land. To increase the yield per acre requires rotation, live stock, drainage and good weather conditions. This can not be expected to produce results in one year. Since the war started the price of powder has doubled and the result is very little land has been cleared. Consequently, if each farmer with uncleared land would buy a box or two of powder and use, cultivated acreage and crop production would increase materially.

### Lewiston Show Promising.

O. P. Hendershot, secretary of the Idaho state fair and also of the Northwestern Live Stock show at Lewiston, announces that the prospects for a great show at Lewiston this winter are first-class in spite of the handicaps with which the breeders have been contending. He announces also that owing to increased contributions to the premium funds by the slive stock association throughout the country and to increased state aid the premiums offered this year will be 150 per cent greater than those of last year.

### Cost of Feed Hits Fairs.

While the livestock exhibits at the fairs this season are good in the main, there is evidence that the cost of feed and labor is having a bad effect on the displays. Fewer animals as a rule are shown, and they are as a rule less thoroughly fitted.

# War-Time Farming

## Who Loses and Who Makes by It

George Wilson of Wilbur was at the interstate fair. I always enjoy talking with Mr. Wilson. He gets as near down to brass tacks as almost any man I meet. His hands show that he has been pretty busy at farm work. Need of help and need of feed are the two big outstanding factors in his farming. George Wilson is a not a man easily discouraged. He is tiding over the troublous days like many others who are hanging on to their stock as far as possible and doing all they can to meet the war demands for food production. "If it must be, I am willing to meet with losses in my farming operations if the consumer gets the result. What I do not want to see is to have some one between myself and the consumer get the profits when I am losing the money." This is the attitude of mind of many a farmer throughout the Pacific northwest today.

Pren Moore, at the head of the poultry department of the Idaho State university, was in the poultry show. He was pleased with the remarkable display, considering war conditions, both as to quality and quantity. The fine poultry show which has become a factor at Moscow is dear to the heart of Pren Moore. "I do not know whether we will have a show the coming season or not. We can get the money. We have a surplus of $100 left over from the last show, but can those of us who are spared from immediate war service get the time to pull it off?"

Everywhere that question is being asked. The disability of many undertakings, you might say the necessity of continuing these undertakings, is evident. How can they find time to pull it off? It may be a question, in more than one instance of waiting till the clouds roll by.

EAS



# A CROOKED TRAIL



**The story of a saddle trip up and down the Texas frontier in pursuit of a runaway ox.**

**By LEWIS B. MILLER**

**Author of "Trappers of the Ozarks," Etc.**

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**AUTHOR'S NOTE.**

Texas is a vast region; as wide at its widest as from New York city to Chicago, and as long at its longest as from Lake Erie to the gulf of Mexico. Naturally, owing to this enormous extent, it has had, at the same time, a greatly diversified and contrasting history. While the older-settled portion of the state was already enjoying a peaceful civilization, the whole circular frontier of nearly a thousand miles was waging a ceaseless, fierce warfare against the most savage tribes on the continent. And beyond the settlements stretched mighty, buffalo-grazing, Indian-infested wilds, [illegible] as extensive as the settled part of the state.

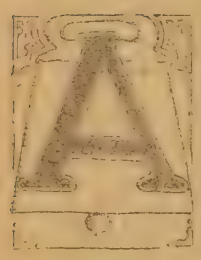
This narrative has to do with the brief period immediately following the pioneer period. The dreaded Rangers, aided by hunger after the buffalo-hunter had finished his bloody work, had driven the Comanche and the Kiowa to their reservation, never to leave it again. All around the frontier, from Red river to the Rio Grande, curved a wide, thinly peopled zone, from 5 day's travel to 10 days' travel from a railroad, into which as yet only those who feared neither hardships [illegible] dotted with an occasional cattle ranch or fort, [illegible] held by the Texas Rangers and the United States [illegible]

[illegible] and semi-wild region had come. In no [illegible] every man and every man's hand [illegible] the savage, too, he toiled not, and [illegible] by theft and robbery.

[illegible] tive, the "leading" character of which is one [illegible] already often in print. I have endeavored [illegible] the life of that day as I recollect it. That [illegible] sses wonderful possibilities for romance can not [illegible] And if they are not taken advantage of in [illegible] the fault lies not with the material, but is mine.

## CHAPTER 1.

### The Spotted Ox Runs Away.



T daybreak one morning, near the end of July, and less than a year after we had settled on the Little Pecan creek, I was startled by a vigorous pounding on the door of the east room of our double log-cabin—the room where my younger brother and I slept—and heard father's hearty voice saying:

"Up with you, boys! Up! up! up! Paw! out! Slide out! Bounce out! Out you come!

"All right!" I managed to call back, though still half asleep. And a little later I emerged from the door, dressed, but with a boot and a sock in each hand, and sat down, drowsily, on the edge of the entry-porch to put them on.

"You'd better find the calves and get to milking as soon as you can," mother remarked, from the door of the west room, where she had already begun breakfast.

"Didn't father go after the calves?" I inquired; for he was nowhere about the house. I was now standing up, groping along the wall for my hat. There was not yet light enough to see much.

"No. He spoke of driving up the oxen before they grazed off. He may bring the calves if he finds them and the oxen together; but you'd better not wait for him. Are you going to plow today?"

"Yes, I expect to start to breaking new ground if we can find Lep and Coaly."

My hat was not on its accustomed nail; and after looking everywhere without finding it, I reflected that the sun would hardly get very high before my return with the calves, and I started off bare-headed.

As I passed out through the yard-gate, hatless, coatless and breakfastless, not once did it occur to me that I should be gone more than a few minutes. As a matter of fact, I was destined to be absent nearly two months, during which I should travel a thousand miles and more, and pass through adventures I had never so much as dreamed of.

Crossing the creek at the ford, I climbed the hill beyond and soon entered the woods. A few hundred yards further on, and not far from the log schoolhouse, I came to a little prairie; and there, comfortably bedded in the thick, tall grass, lay all but one of our dry cattle. Coaly, the black ox, was with them, but Lep, his yoke-mate, was nowhere to be seen.

Wondering a little at this, I kept on, and after wandering about through the woods till the sun was shining against the upper tree-tops, I came upon the calves, all seven of them together. I had rounded them up and was just starting them toward home, when father came out of the bushes close by.

"Hello there, father! You've got on my hat!" I called out.

"Yes, I'd discovered that. Mistook it for mine in the dark. Thought it wasn't a very good fit." He took off my broad-brimmed head-covering and handed it to me. "Havn't seen anything of Lep, have you?"

"No, sir, I haven't. I noticed Coaly—"

"Yes, I found Coaly, down there at the little prairie, and I've been tramping about through the woods, thinking I might happen upon Lep. He likes to lie down by himself sometimes. How long has it been since you saw him?"

"A week or 10 days, I think, father. Lep and Coaly were both at the lick-log, I recollect. They don't often come down to the pen now, unless they get salt-[illegible]"

"It looks a little suspicious," father said, thoughtfully. "I'm afraid he may have run away again."

"But he couldn't run far, hobbled as he is now," I remarked.

"Yes, I know. He was hobbled. But rawhide has a way of stretching these dewy mornings. He may have lost his hobbles off. If he did, no telling how far he's gone by this time. And now is when we need him worst, too. We ought to get all that new ground turned over before cotton opens. I'll take a walk up toward the prairie and see if I can't run across him."

"Now that you're bare-headed, you'd better drive the calves home and let me look for Lep."

"All right," father agreed, starting after the calves. But he turned to add: "If you don't find him around here, one of us will have to get a horse after breakfast and strike out on his trail, and keep after the rascal till we run him down. But we want to make sure that he's really gone."

Father walked on after the calves, and I started off through the woods. Vic, my little dog, had been with father; but now she left him and followed me. I tramped on for more than a mile, listening constantly for the bell, till I reached the prairie. But not a stroke of the big bell-clapper had I heard.

At the edg of the prairie I happened upon our horses. Dick, my sorrel pony, walked straight up to me and rubbed his nose against me. He had been running on the range for a few months now, and was fat and shiny.

"Look here, Dick," I remarked, "guess I'll take a ride if you don't object."

Dick seemed willing enough, and I was quickly astride his round back. Of course there was neither saddle nor bridle. But I had taught him to turn when I leaned forward and slapped him lightly on the side of the head; so there was no trouble in guiding him. I intended to go home, and after eating my breakfast, and obtaining a saddle and a bridle, I would start out in quest of the missing ox and keep riding till I found him. But after mounting the pony I decided to follow down the edge of the prairie a few hundred yards, in the hope of hearing Lep's bell.

I did soon detect the dingdonging of a big bell, but it came from across the divide, from over in the Bosque creek country, and was so far away that I could not decide whether it was Lep's bell or some other bell. However, it would not take long to ride over there, and I promptly headed Dick in that direction.

The bell was traveling from me, and not till I had ridden two miles and more did I come up with the animal that wore it. Even before overtaking the bell, I felt sure it was not Lep's; and in that I was right. It was worn by a big red cow.

Now I turned the pony's head homeward. After riding several hundred yards, I came to Hank Richardson's cabin. Before settling here Hank had lived over on the Little Pecan, not far from us. He was a good friend of mine.

His cabin was small, but at the north end was a large brush-shed; and it was under this shed that he and his wife and children were just sitting down to breakfast as I rode up to the yard-fence. People lived largely out of doors here during the warm season. Besides the table, a bed stood under the shed.

"Hello there! 'Light and and look at your saddle!" Hank called out, in tones that might easily have been heard a mile. Hank had a terrific voice.

"Couldn't see it if I did," was my reply. "I'm looking for Lep. Haven't seen anything of him around here, have you?"

"Yes — no, not right around here. I've seen him, though—five or six days ago. I was down at Martin's, and old Lep was standing in the shade of a tree, right in front of Martin's house. I noticed him particularly, because I was a little surprised to see him there. But what made you go and sell your saddle and bridle?"

I explained how I came to be riding without them, and Hank said:

"Then get down and eat a bite of breakfast with us, and I'll lend you mine. Don't have much use for them anyhow. Off yith you! Here's a bridle now. You can hitch Dick with this. We've got plenty of bacon and eggs and coffee, all good an' hot, and there's surely no use of you going back home till you find that ox."



"Hello there, father! You've got on my hat!"

He caught up a bridle from the end of a log and came out to the fence. I was reluctant to stay, but Mrs. Richardson also insisted, and Hank said:

"How many meals have I sat down to at your house? What under the sun do you want to ride all the way home for, when you can just as easily get breakfast here, and then go on over to Martin's and find your ox? You can round up Lep and drive him home before you could go home and get back this far."

"But I'd have to come back to return your bridle and saddle; so it's about as broad as it's long," I objected.

"No, you won't have to return my bridle and saddle. Just let them stay over there till some time when you're passing. No matter if it's a month or two. Off you crawl, before I drag you off!"



Hank's hospitality was of a very hearty, almost violent, kind—and I dismounted. After bridling Dick, and hitching him to a limb, I went in and ate with the family. Afterwards, while I was saddling the pony, Mrs. Richardson fed Vic. Then I mounted and started for Martin's. But I soon stopped to shout back:

"Hank, was Lep hobbled?"

"Can't say positively as to that. Didn't notice any hobbles, but I wasn't right close to him. He might have been, or he might not."

I rode on. Martin lived four miles further, in the valley of the Bosque, but on the other side. On arriving at his house, I called "Hello!" Martin himself came to the door.

"Have you noticed a spotted ox around here, with a bell on?" I inquired.

"And with horns like that?" He reached out his arms at full length.

"That's the fellow—that's the ox I'm looking for. He's got about the longest horns I ever saw on a cow-brute. I can't quite reach from tip to tip. Hank Richardson told me he saw him here in front of your house."

"Yes, that steer was here for a day or two. I noticed him licking at my salt-log once or twice. But he's not here now. Four or five days ago, I took a ride over toward the prairie; and on my way back I met that spotted steer. He was following the main-traveled road and heading toward Lookout Gap. Chances are you'll find him over about Kelly's, at the edge of the prairie."

"Was he hobbled?"

The man shook his head. "No, no hobbles. He was walking a good, steady gait."

"Then I'll have a chase of it," I answered, and was soon hurrying on.

Kelly's house was six or seven miles away, but it was the first one I came to. Only recently had the Comanche Indians ceased their raids here.

Kelly was plowing cotton near the road, in a little field bristling with white-limbed, deadened trees. He was an acquaintance of my father's, and I had seen him a few times.

"Yes, I recollect that steer very well enough," he assured me, after I had described Lep. "Couldn't help noticing that pair of horns. Don't know when I've seen a longer pair. No matter where he goes, you can track him by his horns, if anybody sees him. It was four or five days ago that he stopped here. Guess you'll just about run across him somewhere between here and the mountains. If you don't find him standing under a live-oak, I'd advise you to go on to the gap yonder. Some springs there that never dry up, and it's a great watering-place for cattle."

I was starting on, when Kelly said:

"I'm going to ride over to the Little Pecan country after dinner. I'm agent for a nursery, you know. I

(Continued on page nineteen.)

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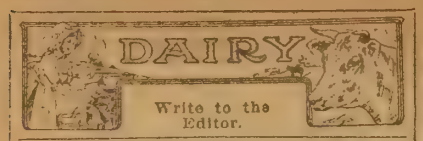
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A. B. NYSTROM, Editorial Contributor

# High-Priced Hay

## Can I Feed It to Dairy Cows?

Answering the question, "Can I afford to feed my high-priced hay to my dairy cows," L. W. Fluharty, director of extension work of the University of Idaho, says:

If you are testing your cows and finding that you are losing on all of them, then it is no doubt better for you to sell them and your hay to the highest bidder. If you are not testing them it is impossible to correctly advise you. Be perfectly fair to yourself and your cows. No doubt some are good and some are poor. Keep the good ones, and dispose of the poor ones, because you can not afford to feed a "star boarder." It is an unquestioned fact that a good cow will produce as much net profit as 25 poor ones.

Another factor that will determine whether to sell or not is the amount and kind of feed to be fed. If alfalfa hay alone is fed, a different problem is presented than where a balanced ration is available. As eminent an authority as Professor Eccles has suggested the following ration:

For 100 pounds live weight: Feed per day 1 to 1 1-2 pounds alfalfa hay and 2 1-2 to 3 pounds succulent feed (corn, beet top or other silage and root crop, etc.).

And 1 pound grain per day for every pound of butter fat produced in a week. Adjust this to the individual needs of your cows.

It is usually considered that the value of the manure and the calf will offset the labor and investment.

Assuming this to be true, then the value of the milk produced should equal the cost of feed.

In general it may be stated that a cow should produce 200 pounds of fat per year, or be sold for beef, and the goal should be 365 pounds or 1 pound per day for every dairy cow, and the ideal much higher.

Other points to remember are:

The added advantage of feeding your hay on your own farm, thereby retaining all of the fertility, by which 50 per cent greater crops may be raised on your farm. This is not an exaggerated statement, but has been proven by many dairymen over the state.

Also the monthly pay check which gives expense money while waiting for the returns from the cash crops. This one factor has very often produced success from apparent failure.

It is also a war measure because the dairy cow will produce more human food than any other animal from a given quantity of feed.

It is also well to remember the failures due to the absence of diversified farming, and dairying is an important part of successful diversified farming systems.

The presence of the dairy cow on the farm is desirable because of the better distribution of labor effected, relieving the labor congestion in the busy harvesting and planting seasons.

And finally let us take a glance into the future. Will it be an easy matter to buy what dairy cows we need if hay is cheaper next year and we desire to buy back our cows? Will the price of hay remain as high indefinitely? Will our cash crops continue to return us as good a profit? Undoubtedly the dairy situation for the future is very bright.

## Dairy Outlook Poor.

First-hand investigation of the dairy situation throughout the United States has convinced B. H. Rawl, chief of the dairy division of the department of agriculture, with headquarters in Washington, that the industry is in a serious plight in many places. The situation in Oregon is none too favorable to the dairymen, he said, at Portland, Ore., on completing a two-day survey, which covered points in Washington, Yamhill, Clackamas and Multnomah counties.

## Feeding of Artichokes.

Will you please tell me the feeding value of root artichokes for milk cows? J. G. F.

The tubers of the artichoke have about the same feeding value as potatoes. It is claimed by many that it is excellent feed for hogs, but for dairy cows the yield is not sufficient to warrant its use. In some places silage of good quality has been made from the stems, especially when it is mixed with other green feed such as corn or clover. A. B. N.

## Selling Butter.

Please tell me what to do in regard to selling butter? Do I have to have my cow tested? Whom shall I write to for a permit? J. W. P., Oregon.

Your cow must be tested for tuberculosis or the butter must be made from pasteurized cream. Apply to the state dairy commissioner, Salem, Ore., for a permit. A. B. N.

## Marketing in Motor Trucks.

An example of how motor trucks are relieving railroad transportation in many sections of the country is shown in the receipts of hogs delivered to the Omaha market by this method of conveyance. According to a report recently compiled by the bureau of markets there was an increase of 180 per cent in the number of hogs transported to that market by motor trucks during the first six months in 1918 as compared to the corresponding period of 1917. The number carried in this way amounted to 92,780 for the period in 1918 as compared to 33,084 for the corresponding months last year. Estimating 70 hogs as an average carload in railroad shipments, the number delivered by motor trucks on the Omaha market during the first six months of 1918 aggregated more than 1300 carloads, or an average of more than eight carloads for every market day during the period. The motor truck business is becoming so important that commercial organizations of Omaha are taking active measures to utilize the trucks on return trips to country points for hauling various kinds of freight. Experience has shown that motor truck marketing is as feasible in winter as in other seasons, as more than 26,000 hogs were delivered directly from farms to the Omaha market during January and February.

## Mrs. Williams a Pioneer.

Mrs. Ina Phillips Williams knows what pioneering in central Washington means. Her father died soon after the family came to the Yakima valley and at an early age she worked hard for her board while attending North Yakima's first school. She worked her way through grade and high school and later through the Ellensburg normal. Mrs. Williams is one of the women of the Pacific northwest who have been interested and active in public affairs, having been chairman of the legislative committee of the State Federation of Women's Clubs. As a member of the last Washington legislature she was instrumental in passing two important measures, the "single standard of morals bill" and the bill establishing an agricultural experiment station in the Yakima valley. She was also an effective worker in behalf of the "bone dry" law, the water code bill and the drainage bill. Mrs. Williams is a candidate for the republican nomination to congress from the Fourth district.

## Walla Walla Crop Low.

The latest reports from Walla Walla indicate that the wheat crop this year in that county will not exceed 3,000,000 bushels. These figures are considerably lower than the latest estimates prior to the beginning of harvest. They are likewise about 300,000 bushels less than last year, which was one of the shortest crop years ever known in that county.

### Most Unusual.

Two business men were discussing their partner during his absence from the office.

"A funny chap, Rattlepate," said one.

"How's that?" asked the other.

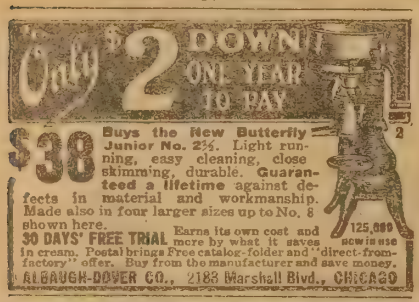
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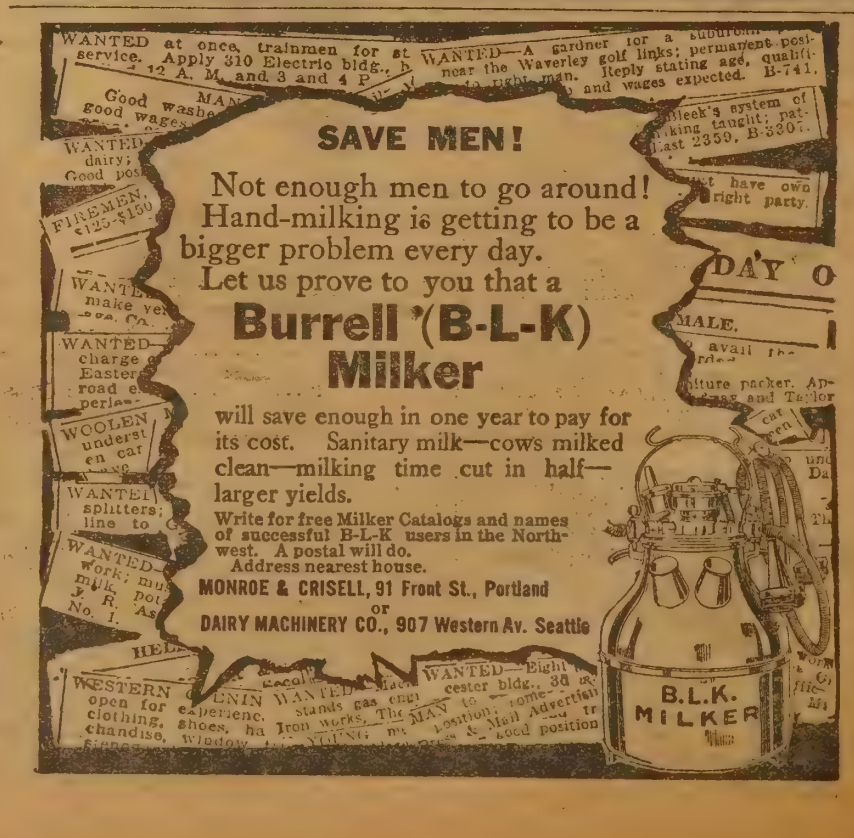
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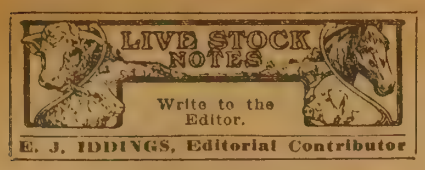
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E. J. IDDINGS, Editorial Contributor

## Believes It Pays

### Two Litters of Pigs a Year

By MRS. L. KOPPEL, Pullman, Wash.

I have tried raising two litters of pigs a year and have found it very satisfactory, although it was done on a small scale. There was only one sow. Last year eight pigs were saved from the first litter. Ten were saved from the second litter. The first litter came about the middle of April, and the last litter came about the middle of November.

I think it better to have the second litter come in September or October. Of course a program can not always be carried out to the very letter.

The sow mentioned above raised 22 pigs year before last, 12 of the first litter and 10 of the second litter. This gives 40 pigs from one sow in two years. This may not be a real big record, but it is at least fairly good. The sow when sold last winter weighed over 600 pounds. She was a grade Duroc Jersey and was a very well formed animal.

Only one of these litters had pasture. The others were raised in a dry lot. The first litter was fed some green stuff from the garden, turnips, carrots, etc. The third litter had plenty of alfalfa pasture all summer. The other two litters received very little green stuff from any source. All of the litters developed well, weighing from 200 to 250 pounds at 6 or 7 months old.

These pigs were fed plenty of ground or rolled barley and shorts. I began by feeding barley, but when the price went too high I turned to shorts. The barley was fed dry. The shorts were soaked in a barrel and fed as a slop. The last litter were finished on dry shorts, during about a period of six weeks.

I do not think these pigs were raised as cheaply as could have been done by using more pasture and more root feed. Still there was some profit in it. My plan now is to use more pasture and less grain feed. I think it pays to give a liberal amount of grain to young pigs running on pasture.

This year I have a grade Chester White and she has a fine litter of eight. I expect her to bring another litter this fall.

## VETERINARY

By DR. S. B. NELSON.

**Abortion In Sows**—Can you advise me as to the cause of abortion in sows? I have had two cases recently, one after the sow had been bred two months and the other three months. They are in apparent good health and have been on good pasture with some boiled potatoes and grain. They are in good condition, but not fat. Have had one litter each previously and were not good mothers. Is there anything against allowing a boar to run with the sows at all times? J. G.

Eastsound, Wash.

I can not give you any suggestions as to the reason why sows abort. It is not often that contagious abortion gets into a herd of sows. I believe it is generally considered better to keep the boar away from the sows except during the breeding period than it is to allow the boar with them constantly.

**Continuous Diarrhea**—Wish you would tell me what is the matter with my mare from the following description of the animal and her condition: The mare is a three-year-old, apparently sound other than a continuous diarrhea or scours. It may be her teeth or stomach. The animal has been fed dry hay and some of the time rolled barley also. This has run three months and the condition seems to have but little change with change of feed. Please advise me through the Farmer. JOHN HALLAN.

McCammon, Idaho.

You really ought to have the veterinarian see the animal, and make a diagnosis and give you advice and treatment accordingly, but until you can get a veterinarian I would suggest the following treatment: Cut down the feed to one-fourth of what you are feeding now. Keep her on this light ration for a few days, four or five. At the same time give her in her drinking water or in a drench two teaspoonfuls of listerine morning, noon and night for that period of time. If she should bet better, gradually increase the feed. Naturally you will have to do this anyway, but increase it very slowly, and then you can also decrease the medicine given, first giving twice a day, then a teaspoonful morning and evening, and then one teaspoonful at noon for a few days' time. This advice may be of service until you can get some one to make a definite diagnosis for you and give you the treatment indicated.

**Cow Gives Stringy Milk**—Can you tell me what to do for a cow that gives stringy milk, sometimes a little bloody? We thought perhaps she bruised her udder. She has been fresh since March. She has been giving this kind of milk every few weeks, but not all the time. MRS. N. M.

Chitwood, Ore.

Give your cow one teaspoonful of sodium hyposulphite in one pint of water night and morning. Give her light, easily digestible food and not too much of it.

**Don't Fail to Read It.**

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POULTRY

Write to the Editor.

JAMES DRYDEN,
Editorial Contributor.

# Wheat Substitutes

## That Give Best Financial Returns

Without considering prices, I would say that corn is the best single substitute for wheat for poultry. Corn has pretty much the same chemical composition of wheat. It has a little more fat and starch, but in composition and palatability it is a better substitute for wheat than any other single grain. Moreover, corn is a good poultry feed when fed in proper combination with other feed. No one pretends to say that corn alone will give good results in egg yield; neither will wheat nor any other single grain, but when fed in the proper combination it proves satisfactory, and it is doubtful if a ration with wheat as the base will prove any more satisfactory than one with corn. It all depends on the combination.

But profitable poultry feeding does not depend upon any best food. The best food may be too high in price to make it profitable to feed. So the poultryman must study prices as well as quality of feed. The question is not what is the best substitute for what, but what is the substitute that will give the best financial returns. Porterhouse steak may be better for egg production than meat scrap or fish scrap, but on account of its price it is not profitable to feed; at any rate the cheaper product will give better financial returns. Profit is not dependent altogether upon the egg yield, but the final result is measured by the cost of producing a dozen of eggs.

The cost of producing eggs will be high or low, not because we feed wheat or corn or oats or barley, but because of the kind and amount of other foods that we feed in combination with any of these. Wheat has a certain value, say 50 cents, when fed alone, but when the same amount of wheat is fed with animal food, green food and grit, it has a different and greater value, say $1. So it is with corn. Feed some other supplementary feed with it and corn or wheat—either of them—has a greater value.

As explained in a former article, it has been demonstrated that the protein of corn and wheat has an efficiency of only about 30 per cent when fed alone, but when fed with milk the protein has an efficiency of 60 per cent. In other words, there is a waste of feed in the single food, but combining different foods in a ration conserves the food.

The prohibition against feeding wheat applies only to the whole grain. We can feed parts of the wheat, probably the best part so far as poultry feeding is concerned—the by-products, bran and shorts. We are really not on a wheatless ration so long as we can get bran and shorts. If we can get bran and shorts and corn and meat scrap or milk, not forgetting green food, we have all that is needed; the rest of it is a matter of feeding, good feeding.

If corn is high in price, as it is at present, it will be cheaper to feed barley or oats, and barley and oats, or either, will do as a substitute for whole wheat.

We have then three grains that we can substitute for wheat or the hard part of the ration. To the list may be added screenings, a mixture of different grains. If a good quality of screenings can be had, and there should be a considerable quantity of screenings in the 50,000,000-bushel crop of wheat in the northwest, we can do without corn, oats or barley for hard grain, or scratch grain.

If neither of the three grains or screenings is available at a reasonable price, it is usually possible to buy commercial scratch feed, put out by the millers, of good quality. These contain a mixture of grains. If the price is not much in excess of oats or barley or corn, this feed can be fed profitably. Samples of different brands should be examined before purchasing, but if of a well known brand or from a reputable concern they may be fed without misgivings.

If the three grains are of about the same price, it will pay to mix them to give variety. If oats and barley are the grains selected, feed about two parts of oats to one of barley by weight. If oats are of poor quality, mostly hull, and the barley is good, feed barley alone. Corn is worth a little more per ton than oats or barley, and oats and corn or corn and barley will be a better combination than oats and barley.

So much for the whole grain, or hard grain. The hen requires some hard grain to keep her digestive organs functioning properly. The next question is, what proportion of hard grain to ground grain will give best results, and by best results I mean best financial results. Here is where war-time feeding comes in. Government regulations have made it profitable to feed more mill feed than ordinarily. The price of mill feed or bran and shorts has been fixed at a low figure, and it pays to feed more of the ground feed or mash than formerly. Best results may come in egg yield from feeding more hard grain than mash, but it is certain that the proportion of mash may be largely increased at present feed prices with profit. The more mash that is fed the less high priced hard grain will be needed.

One of the best ways therefore to win the poultryman's feed war is to feed more mill feed and less whole grain.

As much mash or ground grain by weight as of whole grain will give good egg yield and will give a better profit than if twice as much whole grain than of mash be fed.

As to mill feed, poultrymen do not know how to handle the combined product. As I understand it, there is more shorts than bran in mill feed. Poultrymen usually feed more bran than shorts. The composition of bran and of shorts is very much the same. There is a little more ash or mineral matter in the bran. This is what makes it laxative. I do not believe, however, that there will be any material difference in results one way or the other in feeding the combined product or buying it separate and mixing it in different proportions.

Combined bran and shorts and corn and oats, or oats and barley will give a good egg yield, with, of course, the animal feed and green feed.

As to method of feeding: In feeding a heavy mash, it will be better to feed it in the evening, or the last feed of the day rather than in the morning. If a heavy mash feed is given in the morning, the hens will not be as active during the day as if given a light feed of whole grain in the morning and the mash at night, and it is important that the hens have exercise. Give a light feed of grain early in the morning and another light feed about noon, then mash at 5 or 6 o'clock, or about an hour before dark. If the hens have free range on the farm one feed of whole grain will be sufficient. That is, all the grain may be fed at one feed.

There is another thing that may upset our calculations. The supply of mill feed may not be sufficient for the dairymen and poultrymen's needs, and there will be a question of a substitute for bran and shorts. Other by-products, therefore, may have to be fed. The chief of these are linseed oil meal, cocoanut oil meal and cottonseed oil meal. Alfalfa meal may also be included. The oil meals are rich in protein, cottonseed meal being the richest, linseed oil meal second, and cocoanut meal third They can not be heavily fed, therefore. Approximately 10 per cent cottonseed meal, by weight, 15 per cent linseed meal and 20 per cent cocoanut meal may be used in the mash mixture. If bran is scarce, or can not be had, use alfalfa meal at the rate of 10 to 15 per cent.

If bran can not be had, use ground barley and ground oats. Where mill feed can not be had, try the following mash: Ground oats 10, ground barley 10, ground corn 10, oil meal 10, alfalfa meal 20. Soak the alfalfa meal in water or milk for an hour, then mix with the ground grain and feed it. If mill feed is available, use it to the extent of 50 to 75 per cent of the other grains. That will cheapen the ration.

Let us hope that a large part of the wheat crop of the northwest will be milled here, so that there will be no severe shortage of mill feed. J. D.

---

### Increased Poultry Products.

Government poultrymen are appealing to the American people, both in the country and in the cities, to increase poultry production as much as possible. The following nine suggestions have been offered as a means to attaining this end:

1. Keep better poultry; standard-bred poultry improves the quality and increases production.

2. Select healthy, vigorous breeders to produce strong chicks.

3. Hatch early to produce fall and winter layers.

4. Preserve eggs when cheap for home use.

5. Produce infertile eggs, except for hatching.

6. Cull the flocks to eliminate unprofitable producers.

7. Keep a small backyard flock to supply the family table.

8. Grow as much of your poultry feed as possible.

9. Eat more poultry and eggs to conserve the meat supply.


CHANDLER SIX

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GRANVILLE LOWTHER,
Editorial Contributor.

# Orchard Troubles

## Diseases, Pests and Remedies

By GRANVILLE LOWTHER.

**Red-humped apple tree caterpillar**—These pests feed on many other trees besides the apple. Among those infested by them are the plum, cherry, rose, thorn, pear, blackberry, birch and poplar. They are not very destructive in those portions of the country where the orchardists spray regularly for codling-moth, because the same spray that kills the moth will also kill them. The same is true of the red-necked apple tree caterpillar.

**Red spider**—This insect, or mite as it is sometimes called, has done considerable damage in the northwest. The color is red with a yellowish tinge, with two darker spots on each side of the body. They spend the winter in the ground, and begin to appear with the approach of warm weather. They spin threads, so as to conceal themselves and their young on the underside of the leaf, and feed by sucking the juices and substances of the plant. They feed on most kinds of fruit and garden vegetables.

The tobacco solution is the best we have tried, although other contact sprays such as lime sulphur, kerosene emulsion and soap solutions are good.

**San Jose scale**—This pest is one of the most common known to orchardists. It is so small that it is likely to be overlooked, except for its effects upon the trees, or fruit. It is of a grayish color, much like the bark of the tree, but causes a reddish appearance, especially on the fruit. They multiply very rapidly and in a few years, if unchecked, will kill the tree. It is thought to be difficult to tell whether the scales are dead or alive; but if the branch on which they are found is scraped, the dead scales will rub off like a dry, gray scurf. If they are alive the crushed bodies will give off a yellow oil-like fluid, which gives the bark a greasy appearance.

While scale always causes red spots on the apples, very marked on the yellow varieties, but not so clear on the red varieties, yet there are other mites, insects, etc., that puncture the fruit, causing red blotches. However, red spots should cause us to examine closely to see if scale is present.

There is one remedy more commonly used than any other, and that is lime sulphur. This is generally applied before the buds open in the spring. If applied after the buds open, there is danger of injuring the foliage. The tobacco spray is more expensive, but it does not injure the foliage, and will kill scale, codling moth, or any other insect commonly known as an orchard pest.

**The tent caterpillar**—The tent caterpillar builds nests of silken threads, secreted by the larvae, and these nests, or tents, serve both as a shelter and as a protection against natural enemies.

The eggs are laid in masses on the small branches or shoots of the trees, and are covered with a cement-like substance which is impervious to water and climatic conditions. The larvae come forth from the eggs, early in the spring. The adult moths are about one inch long and are cream colored with indistinct white bands on the wings.

The tents may be cut off and burned, or they may be controlled by the arsenate of lead spray.

# Poison Leaf Eaters

I have a letter from Tom Neighbor, Loma, Mont., in which he says: "I have some poplar trees, infested with a little green worm in the leaf, and turns the leaf black. I would be glad if you could tell me what to do with them?"

If it eats the leaf, spray with arsenate of lead or some other poison. If arsenate of lead is used, apply one pound to 50 gallons of water thoroughly mixed. If it is a sucking insect and sucks the juices rather than eating the leaf, some contact spray must be used. Black leaf 40 is the best when the danger of injury to foliage is considered. It should be applied one quart to 150 or 200 gallons of water. G. D.

**Switzerland Rations Cheese.**

Rationing of cheese in Switzerland has been in force since June 1. The allowance is half a pound per person monthly.

# Cleaning Is Difficult

To the Editor: In The Washington Farmer of August 8 R. J. Stevens makes the following statement: "Cracked grain and trash, all of which could have been eliminated if better threshing methods had been used." I must say for his and the public's benefit that there is not a machine of any make that will clean green thistle out of grain. If he or any one else can produce such a one he will have made his fortune. It is easy to sit in a cushioned chair in an office and say what can be done, but it is quite different when you have to demonstrate. Let him come to Downs, Lincoln county, where there are combines and headers and threshing being done, and demonstrate what he says can be done. We are from Missouri, and we have to be shown, and are willing and glad to be shown. It is something that we are not capable of doing ourselves. We object to no one showing us. Show us how it is done and we will do our best to imitate the process.

F. H. DRINKARD.

Downs, Wash.

# State Fair Program

The following is a list of the special attractions at the state fair at Yakima September 16-21, by days.

Automobile day, Monday, with five auto races, sheep auction at barns at 1, boys' stock judging at 10 and dedication of new auditorium, with concert by U. S. naval reserve band at 7:30 p. m.

Tuesday—Children's day, boys' and girls' club festival parade, 11; picnic, 12 m.; moving pictures of club work at 1; athletic contests and games, closing with fireworks at night. Sheep sale continued at 10; live stock judging at 1; horse races.

Wednesday—Spokane and Yakima day.

Thursday—Governor's and Seattle day.

Friday—Elks' day, with special Elks' derby race.

Saturday—Patriotic day, closing with fireworks.

Every day features will be: Wortham shows, open at 10; sheep school in auditorium, 10-12; concert by Yakima band in horticultural building at 2; moving pictures and illustrated talks in auditorium, 2-5; concerts by U. S. naval reserve band at 1 o'clock in grandstand and 7:30 in auditorium, and moving pictures at 9 p. m.


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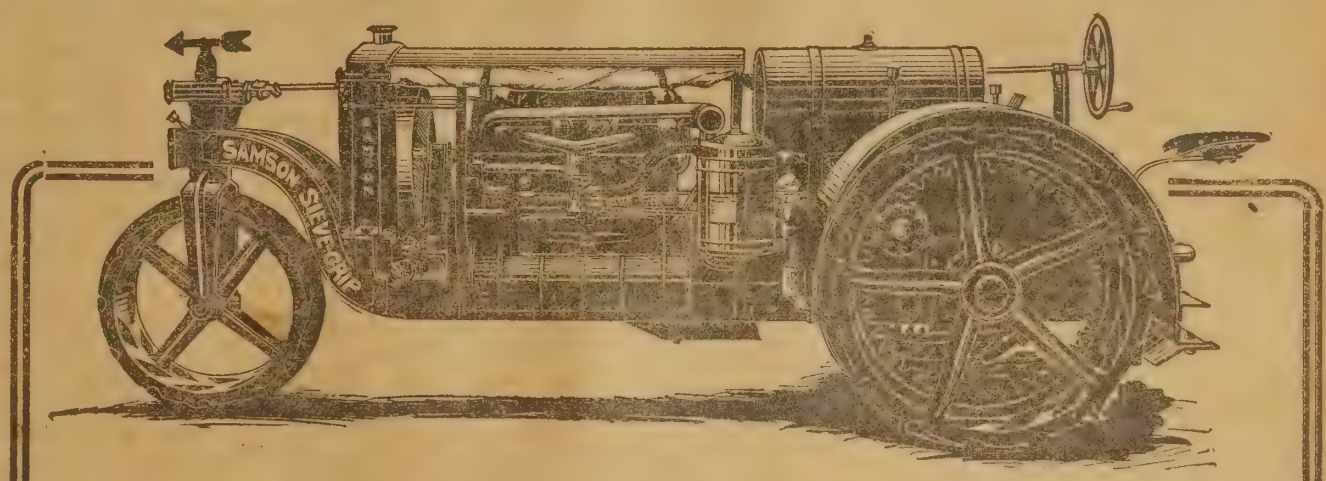
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# Fruit Brings Good Returns

## Yield Heavier Than Had Been Expected; Corn Best Crop in Years; Silo Construction Being Pushed




WAPATO, Yakima County, Wash., Sept. 3.—Farmers have had a very prosperous season. Fruit has brought good returns and was a heavier crop than expected by the ranchers, although it was considerably under the early estimates of the transportation companies. Sugar beets and potatoes are the disappointing crops, being far below an average yield. Corn is the best crop in years and will be out of frost danger by the middle of September. The high price of hay is stimulating silo construction, while there are a few old silos that will not be filled owing to the high value of matured corn. But little of the grain has been threshed, but there will be plenty for local seeding. J. F. M'CURDY.

### Oats Yield Good Crop.

MT. VERNON, Skagit County, Wash., Aug. 29.—The harvesting of oats is progressing satisfactorily. The cutting with binders is fully half completed and threshers will start in a few days. While labor is scarce, yet there is enough to comfortably take care of the harvests. The most serious labor shortage is felt by the small farmer who needs extra help for only a few days. The condition of pastures was never better at this season of the year, almost like May. There will be a considerable amount of alfalfa hay shipped in this season. Our hay crop was short and the acreage was short owing to the unusually large acreage of oats. Conditions in the county generally are satisfactory. While all expenses are very high, farm products are also high. The dairy farmers feel that they are hardly getting their share in that the prices of dairy products hardly correspond with the high costs of feeds. The unusually good pasture conditions help to compensate in this matter. C. S. PHILLIPS.

### Everybody Is Busy.

PORT ANGELES, Clallam County, Wash., Aug. 29.—As summer fades away our citizens commence to make preparations for an annual fair to be held at the county seat. If the writer's judgment is correct the interest in the enterprise is not as great as in former years, which I attribute to the abnormal times in the wake of the great world catastrophe. Everybody is so busy and the interest of the people is absorbed with dire necessities. Our community is very prosperous, due to the enormous activities of the government in opening up the great spruce stands of the west end of the county, the building of many miles of new railroad, and the construction of a very large mill at Port Angeles for the milling of the timber, all of which creates an enlarged market for the farmers. The hay crop has suffered somewhat from the recent incessant rains, but the damage will to some extent be offset by late feeding for the stock.

J. P. CHRISTENSEN.

### Conditions Exceptionally Good.

VANCOUVER, Clarke County, Wash., Aug. 30.—The conditions of this section are exceptionally good. Up to the present time there has not been any falling off from the last report and the help has responded better than was expected in harvesting the first crop of alfalfa, which was put up in splendid condition, and was a little above normal. The farmers are just beginning to cut the second crop and most of it is being sold in the field at $25 per ton. Grain harvest is over and the report from those who have threshed is about one-half of last year's crop, owing to the exceedingly dry weather just as the grain was filling. However, there will be plenty to carry through the stock that is held for winter feeding. Indications are that the dairymen will have a good season owing to the brisk demand for butter and hogs as conditions seem to stimulate this branch of industry more than any other. Up to the present time we have been supplied with sufficient labor to meet the demands, but our cannery, which is running at full blast, here in Vancouver has drawn on the available help, boys and girls being drafted into service, making room for the stronger help to work in the shipyards and on the farms. We are exceptionally fortunate in conditions that exist in Clarke county. Our prune crop is the best that we have had in years, and the indications are that the price will be 100 per cent better if the weather stays favorable and the help can be had when needed for drying. Tents are going up in the orchards for housing the help; women and boys are being engaged, and women who have always scouted the idea of working in the field are anxious to help out, and if the gun don't miss fire there will be a merry time and the crop will be a banner one for Clarke county. The nut crop is reported good and the price quoted is 25 cents per pound. This is one of the best crops for this section. Creameries are complaining that their supply is dropping off, which is less than one-third what it was last year at this time of season, and they give for the reason that selling off of part of the cows, owing to the high price of feed and the shortage of help to take care of the stock. This has a tendency to make butter a good stiff price, being 65 cents per pound. Buttermilk is 15 cents a gallon, which is rather high for pancakes or feeding hogs. Oats were a short crop and turned about 30 bushels per acre, and wheat went about 20 bushels per acre. Early potatoes have all been dug and the market price is 3 cents per pound. Over the counter farmers realize about 2 1-2 cents a pound. Eggs are bringing 60 cents retail, about 5 cents above the wholesale price. It has put the housewives at their wits' end to keep the table supply up to the standard during the time of canning and harvesting, but good, common sense has come to the rescue and women are finding out that they can get together a good, palatable meal without sugar, eggs and heaping spoons of melted butter. The Washington Farmer put it just right when it said that "Instead of man power that the war demands it is human power that the country is using." Women, children and men are all drafted into the world war. It is no uncommon sight to see women in overalls working on the sections in the shipyards and driving teams on the street and doing many things in the outdoor labor line that they were not doing before the war. C. C. BROWN.

### Feed Supply Is Adequate.

YAKIMA, Yakima County, Wash., Aug. 28.—There will be very few fairs in this county with the exception of the state fair at Yakima. Some of our granges are planning on holding community fairs, which, of course, will be of interest only to the community in which they will be held. The farm conditions in this county this year are still good and the community in good financial condition. The greatest difficulty experienced so far this year has not been so much in the number of laborers available as in the quality of the laborers. Most farmers have complained of the inefficiency of a great deal of the help they have been able to secure. It will be necessary to ship in very little feed of any kind with the exception perhaps of a small amount of mill feed or other supplementary feeds. As usual there will be a large amount of hay shipped out of the county and there will perhaps also be some corn available for shipment to outside points. With a proper balance of farm crops it should not be necessary to ship any feed into this county; but since the farmers have confined their crops largely in the past to alfalfa and corn, we usually find it necessary to ship in supplementary feeds. If it is possible to make arrangements this year to have the sugar beet pulp from the sugar factory distributed in this state we shall be very well supplied with feed. JAMES N. PRICE.


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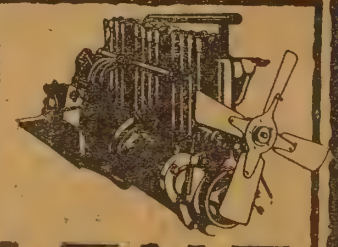
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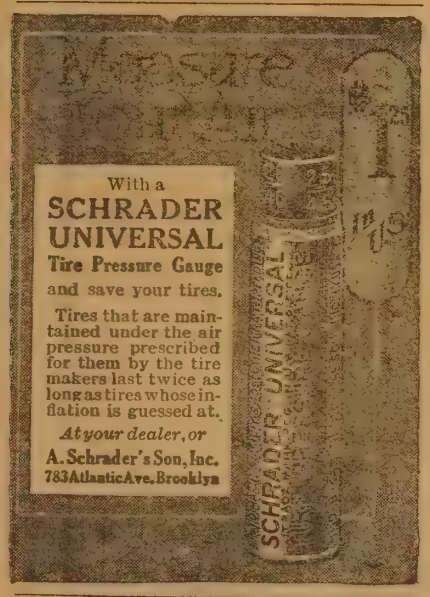
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# Housing Rabbits

By H. E. GIBSON.

One does not have the care of rabbits very long until he feels the need of having them housed so as to economize time in cleaning and feeding, so that we have no hesitation in advising you to build your hutches so that they will be self-cleaning by making all the floors of simple strips of laths a short distance apart so that all the droppings will fall through to a slanting floor underneath which will carry the refuse through to the back of the hutches which can be lifted up daily and drawn away in a wheelbarrow.

The average size of a hutch should be about 30 or 32 inches long by 24 inches deep and 22 inches high, but these sizes can be varied according to the breed; larger rabbits should have a larger hutch than a smaller breed. The four sides should be made of small mesh wire, the front door so built as to contain in itself the box for grain and stand for water bowl so that when the door is opened it carries out both box and water bowl, making it a very easy task to provide fresh water and grain. The fodder rack should be built at the front, and between every two hutches with a partition between so that the hay or green feed can be put in without opening the doors.

By this simple arrangement one can walk along in front of the hutches with watering can and feed, supplying all required without going to the rear of the hutches except to carry away the manure, which should be done once every day.

We would suggest having only three tiers of hutches, one above the other, with an extra roof say 18 inches above the top tier of hutches for air space, which will mean much to you in hot summer weather; also have the outer roof closed in overhead between the two rows of hutches so that the passage way between the hutches will be covered overhead, making it comfortable for the attendant to feed and take care of your stock in wet weather.

If your capital is limited and you have some outbuildings that have been used for barn or garage, etc., you can easily turn them into a rabbitry building by placing your hutches along the walls, or, if the building is wide enough, leave a passage way at the back to go behind to clean up.

There is no particular definite rule to go by, but every one should decide for himself and adopt these plans and suggestions to his own particular conditions and the money he has to spend on the proposition.

You should have a nest box in each hutch. It should be about one foot by 18 inches, ordinary apple boxes will do very well. This box should be closed in entirely except for a hole through which the rabbit will jump in and out. The hole should be about eight or nine inches square, according to the breed of rabbit. It is well to have a nest box for bucks as well as does. The rabbit will occupy this box during wet or cold weather, and when it happens to be frightened in any way; besides it likes to jump on and off the box, which is a source of enjoyment as well as good exercise.

A little bedding of clean hay or straw should be put in the nest box especially for does. What is left over after they have picked out the choicest can be used for this purpose.

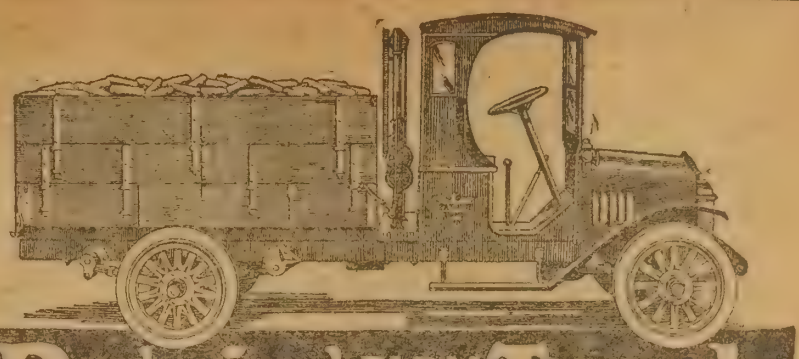
## Helps New Zealand Farmers.

A government hydro-electric plant is helping out the farmers and dairymen of South Island, in New Zealand. Electric power is used extensively by dairymen about their barns and sheds for lighting and the operation of milking machines, creameries, etc. In one case a farmer reports that the yearly charge covering all of these uses was a little over $80 for a herd of 60 cows. The government has now under consideration a big project for the hydro-electric station in the North Island of New Zealand. It is expected that this will provide power as cheap for the use of the general public as has been furnished in the South Island.

### Every One Should Watch.

The government is doing its best to regulate business so as to insure fair dealing. Every one should study the regulations and watch for violations, thus assisting the government in enforcing them.

TO the Editor of The Washington Farmer: I wish to take advantage of your big bargain offer and enclose herewith 50 cents, for which enter my subscription to The Washington Farmer for three years. CARL LAAKSO.
Winlock, Wash.

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## Built for Country Roads
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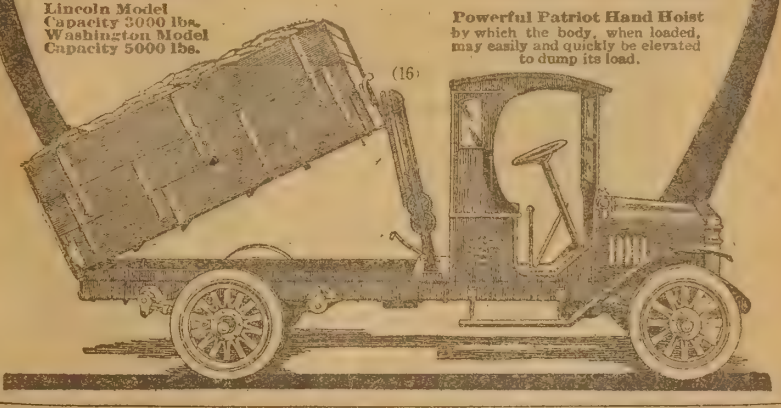
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Capacity 3000 lbs.
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Capacity 5000 lbs.

Powerful Patriot Hand Hoist by which the body, when loaded, may easily and quickly be elevated to dump its load.





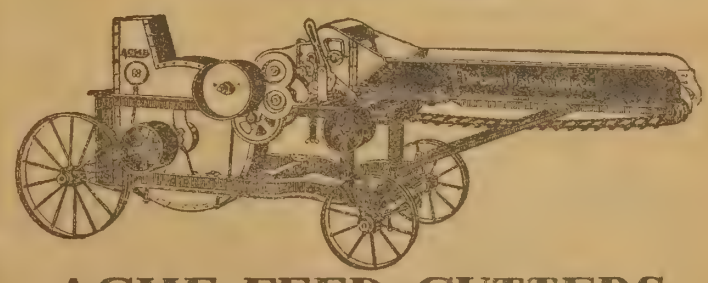
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# Farmers May Get Seed Aid

## *Government May Allot Washington $300,000 From Fund*

Following a conference in Spokane last week, at which G. I. Christie of the United States department of agriculture was present, a telegram was sent to Washington, D. C., with the approval of Mr. Christie, asking that $300,000 of the $5,000,000 which President Wilson recently set aside to assist creditless farmers in securing seed wheat, be allotted to the state of Washington, W. S. Thornber of the state college, chairman of the seed wheat committee for this state, presented evidence to show that there are between 500 and 1000 farmers in Washington who need the kind of assistance the fund is intended to render.

Under the provisions governing the fund a wheat grower who is unable to give security that a local bank will accept for a loan is entitled to a loan of $3 per acre up to $300. Interest on the loan is charged at the rate of 6 per cent.

A farmer who desires to negotiate a loan of this kind should go to his local bank and present evidence of his need and allow the local bank to lend him money if it is willing to accept the security he is able to give. If the bank will not accept the security it will issue a certificate to the applicant showing he is unable to give bankable security. The applicant then goes to the county agent, who will investigate his application. If the county agent finds that the applicant is deserving under the provisions of the loan he will approve the application, which will then be sent to the office of G. I. Christie at Great Falls, Mont. There his application will be again passed upon and if approved the loan will be made by the federal land bank, which has its headquarters at Spokane, but which also has a personal representative in the office at Great Falls to handle these seed loans.

One provision of the regulation governing the loans provides that a borrower shall pledge that if he produces a crop of seven bushels or more per acre he will contribute to a guarantee fund at the rate of 15 cents per acre for every bushel per acre over six that he produces. The maximum pledge of contribution to this guarantee fund is 75 cents an acre regardless of how heavy a crop is produced. This would amount to 25 per cent of the loan in case a farmer were called upon to pay in the amount pledged.

On this point, however, Mr. Christie emphasizes the fact that an impression that this guarantee requirement is likely to work a handship upon a farmer is entirely unfounded. The government, in lending this $5,000,000 to creditless farmers has no desire to collect interest on the amount, he says. All it wants is to get back the $5,000,000 which it lends. The 6 per cent interest on the $5,000,000 would amount to $300,000, which Mr. Christie feels undoubtedly would take care of much, if not all, of any failure on the part of the government to collect on some of its loans. He believes there will be no need to collect any considerable part of the guarantee fund pledges.

One of the unique features of the measure is that absolutely no administration costs are to be paid out of the $5,000,000 set aside for seed loans. The department of agriculture, the federal land bank and the county agriculturists share in administering the fund and all are required to pay the administration costs out of their regular operating funds.

Mr. Christie says that at first he found private banking institutions opposed to the movement, but that when it was fully explained the opposition disappeared. That it is a community proposition rather than purely a seed wheat proposition was the argument that he put up to the bankers, showing that where a number of farmers in a drouth stricken community secured loans it meant that several thousand dollars of government money were being dropped into that community and put into circulation, aiding business of all lines.

The counties in Washington that will share in the allotment proposed for this state are Douglas, Grant, Adams, Lincoln, Franklin, Benton and Klickitat.

# Prepare Shipment Well

That the wheat growers of the northwest actually lose probably 10,000 or more bushels of grain feed every year by failing to clean their wheat at home before shipping to the terminal warehouses or elevators is the belief of Daniel Morgan of Spokane, one of the representative wheat growers of the Inland Empire. Mr. Morgan estimates that when wheat is shipped to the mills uncleaned a deduction of one pound per bushel for cracked wheat and other nonmillable materials is not unusual. With the Inland Empire producing from 40 to 50 million bushels of grain a year, according to the seasonal conditions, this would mean probably not less than 700,000 pounds of cleanings annually, or more than 10,000 bushels.

On this 10,000 bushels the growers necessarily pay $1000 or more in freight to the terminals. In a large percentage of cases they likewise pay freight on the cleanings when they come back in the form of mill feeds. Thus the farmer who does not clean his wheat at home and keep the cleanings for feed is giving something that he has to buy back at a stiff price and is paying the freight on it going and coming.

Mr. Morgan is an urgent advocate of first-class preparations for grain shipment. Where farmers are shipping their grain subject to weights and grades at the terminals every precaution should be taken to prevent losses. Car bottoms should always be inspected and every opening of any kind well closed with old sacks or other material. Where grain is shipped in sacks every precaution should be taken to see that the sacks will not leak out grain while being shipped or handled.

Mr. Morgan, while always alert to prevent unfair or injudicious methods on the part of any one handling or regulating the handling of wheat, has the utmost confidence in the grain-buying corporation as represented in the northwest by M. H. Houser and his staff of assistants. "Mr. Houser has been one of the wheat growers' best friends," said Mr. Morgan, discussing his activity in the wheat markets during the last several years. He credits Mr. Houser with having been one of the principals in providing active competitive buying of wheat in the northwest in recent years.

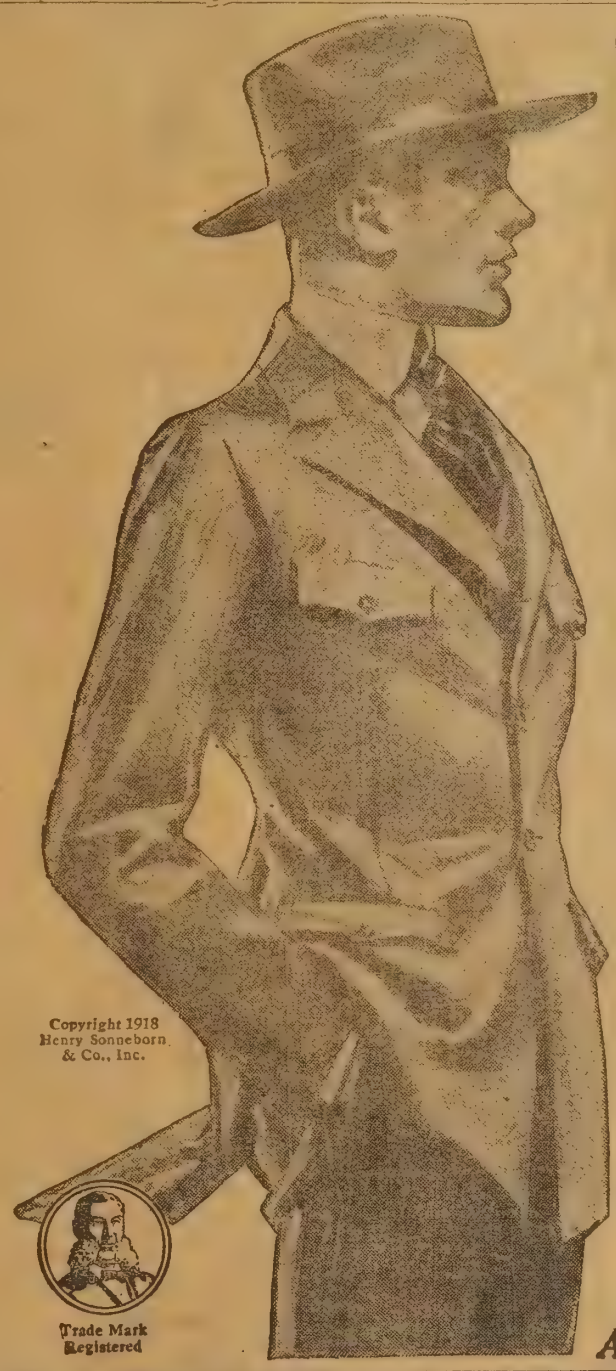
## Mr. Bouck Says Not Guilty.

William Bouck, master of the Washington state grange, who was recently indicted by a federal grand jury on the charge of violating the espionage act, entered a formal plea of not guilty before the federal court in Seattle last week. His case will come up for trial October 22, when Assistant United States Attorney General Clarence Reames will conduct the prosecution.

Mr. Bouck is charged with having made a seditious speech before an audience in Skagit county, Washington, several weeks ago. He has been given his liberty on $5000 bond.

## Everybody Should Vote.

The man or woman who fails to vote is to some degree a slacker. Every vote cast should be primarily a win-the-war vote, but the future when the war will be over should not be overlooked.


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VAUGHAN DRAG SAW

# Going to the City to School?

## *Country Girl Should First Take Account of Stock*

By ALVARA P. WILLIAMS

PART I.

I have just been hearing one side of the question of Ruth's leaving home this fall for high school in the city, and there is so much to be said on both sides of the question that I feel I must tell you some of my own experiences in the matter.

Ruth has finished the grade school in her country district; there is no young life there; no amusements; nothing but farm drudgery. She had a teacher once who started to give her music lessons; she wants to go to high school, take more music, meet more people, learn something besides milking cows, and feeding pigs, and washing dishes; feel that she is doing something more than trot up and down in one place. I don't blame her. But where, and how? With the cost of board and room in the cities now at 35 to 40 dollars a month, her father can not think of 10 months' school, with the new clothing, amusements, music, and other necessaries besides.

As I have learned the situation, there are at least three courses open to any Ruth in this position. First, most desirable perhaps under present war conditions, she may stay where she is and modify her situation there to a remarkable degree. I want to tell you later more of these war conditions as they affect women in the cities.

Second, next most desirable from all standpoints in most cases, she may start her higher education at a consolidated school or small town high school nearby—in most cases nearer than a city school would be. Perhaps she will find it possible to go back and forth from home, at least every week-end. If she must board, it will cost far less than in a larger city.

Third, if she is strong enough physically, and above the average in country school preparation, she may go to the city school, and earn all or part of her own way.

Now I know most of the Ruths will exclaim at once that the order of these should be reversed. Before we prove or disprove that, please, every girl of you who thinks of leaving home for higher schooling or even for work, if you are untrained, take account of stock. If you have lived all your life in the country, with only occasional visits to the city, there are dozens of matters to consider. Alive the city may be, inspiring, broadening—but are you ready for it? I'm not trying to dampen your enthusiasm; too few of us have enough of it, but impetuosity and desire merely will not carry you far. Is this too general? Let us get down to details, then.

You know thousands of things the city girl never dreams of—quiet things learned from all outdoors and its wild life; big, broad viewpoints that go with country air and freedom. You have a physical strength and endurance, if you were born normal and properly raised, that will leave you young at 50, while many city girls will be old at 30. You are slower at some processes than the city girl; slower at analyzing people. Put her in your surroundings, though, and she would be helpless, as a rule. Put yourself in her surroundings and you will be much more adaptable than she would, but it takes a little time to adapt yourself. There is the whole story—the length of time needed for you to make yourself fit. While you are going through this process life will be very hard; study nearly impossible to some; confidence in your own judgment shaken; if you are attempting to earn your own living, that is doubly hard. It is almost as if you were to be put down among a foreign speaking people. I know, for I've been through it.

Suppose you are a girl of 15 or so, perhaps knowing your way about the city, but a comparative stranger. If you are to do housework for your board, as most newcomers do, city houses and ways of living are different. Your studies are based on knowledge obtained in city graded schools, perhaps no more valuable than yours, but still different. Your housework interferes with your studies, and it is hard for you to decide what, if anything, to slight. Your clothes somehow aren't quite right, even if they were bought in the city. They aren't like city girls' clothes. The chatter of city girls is different. In fact, well-trained as you may me, there is so much that is different, so much to which you must adjust yourself all at once, that you can't help being a little upset for a while. Meanwhile school, and those accustomed to the life, go merrily on. I believe it is no exaggeration to say that 75 per cent of the country pupils starting school in the city do not "find themselves" until nearly the end of the first year.

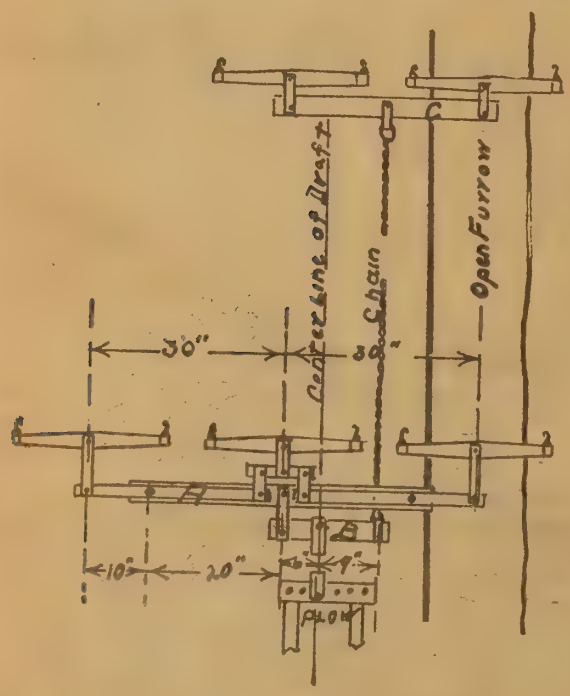
There are two ways in which this can be avoided: The first two I mentioned above. I would like to take these up somewhat in detail, after explaining to you first just what is expected of a girl who "works her own way" in a city school, and how the whole situation is complicated by the war and its demands on industry. Those of you who have already made definite plans for your work this fall in some city may not profit so much, but those who are undecided, or who can not leave the farm until later in the fall, may do some hard thinking and planning between now and that time. I want first of all to assure you that not one word of what I am going to tell you is fiction. It holds true of the large cities of this coast, and is true, with a few modifications, perhaps, of any of the other cities of our big three northwestern states.

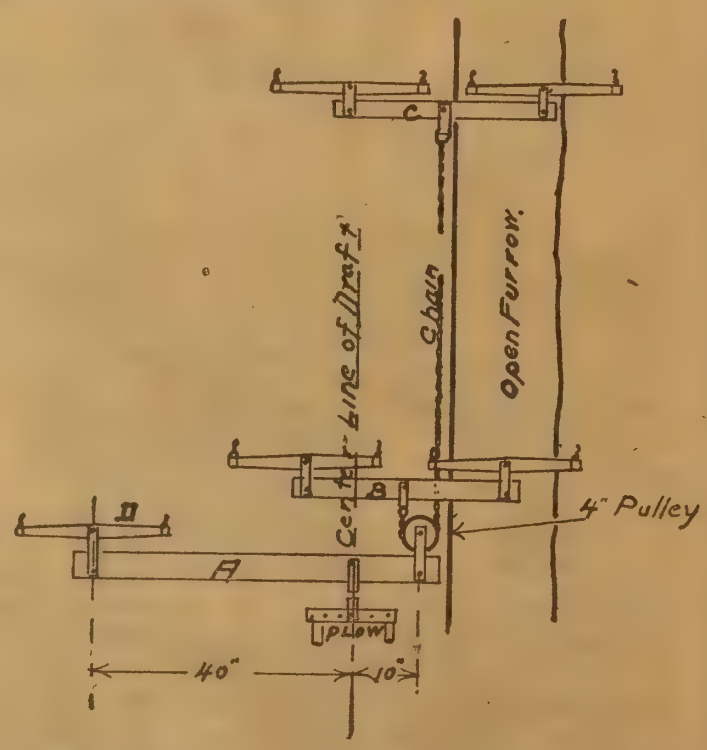
"WANTED—High school girl to help with housework after school for room and board. One used to children desired." This is an average type of advertisement appearing in the city papers this time of year. Last fall these ads ran for weeks without answers. Lists of people wanting wirls for help after school were twice as long as the lists of girls wanting work. High school principals, college registrars, Y. W. C. A. secretaries, commercial clubs, employment agencies, even children's homes, all of whom kept such lists, were never able to fill the demand. This year conditions will be about the same, perhaps worse. Here is our first touch of war industries. Bridget and Ellen and Mary have found that housework takes all their time, at perhaps thirty to forty dollars a month, while they may earn from $2 to $2.95 a day at work men used to do, and work only eight hours at that. So the clamor for girls for housework goes on.

Mollie last year took one of these places, a good one, too. High schools as

(Continued on page nineteen.)

# Keeping a Horse Out of the Plowing Is a Problem




In answer to an inquiry for a five-horse hitch for a gang plow so that one horse would not have to walk in the plowed ground J. P. Fairbanks, assistant professor of agricultural engineering at the State College of Washington, prepared the two plans as indicated in the sketches herewith. Figure 2 shows a hitch that is not uncommon and one which is easily understood. In Figure 2, A is a plain home-made evener with the clevis so placed that the one horse hitched to the singletree at the letter D will have the same draft as any one of the four horses at the pulley on the other end of the evener.

The other sketch, Figure 1, is also easily understood, but is considerably less familiar to the average farmer. In this figure B is a short and necessarily strong evener divided by the clevis pin in the ratio of two to three, with two horses on the lead chain pulling at one end and three horses on the somewhat unusual three-horse evener pulling on the other end. The three-horse evener is made about as follows: Take a first-class stick of timber and divide it as if for a two-horse evener or doubletree. Take two pieces of iron bars about one and one-half inches wide by one-half inch thick and make of each one what might be termed a one-and-one-half-horse evener. Attach these by means of pins at the ends of the wooden piece. It is well to bend the ends of these iron bars down over the end of the wooden piece so that the pull will be coming more nearly the center of the wooden piece. Take three pieces of lighter iron and bolt loosely to the other ends of the heavier iron pieces to form an attachment for the third horse's singletree in the center. Other details of the plan may be readily understood by a study of the sketch itself.

The object of each of these hitches is to prevent a side draft when all five horses are kept out of the plowed ground. Speaking of this feature, Mr. Fairbanks says:

"In order to overcome side-draft it is essential that the center line of pull of the team and the center line of draft of the plow nearly coincide. If we should hitch five horses abreast, all equally spaced, the center line of pull of the team would be behind the center horse. The center line of draft of a two-bottom 16-inch gang would be about 16 inches in from the land side of the open furrow. If the first horse walked in the furrow this would throw the center line of pull about 52 inches from the land side of the furrow. This would cause so much side-draft that it would be practically impossible to operate the plow."

### Bring Sugar From Hawaii.

A report from Honolulu says that the United States shipping board is providing 40 freight vessels with a total carrying capacity of 100,00 0tons to bring the sugar crop of Hawaii to the United States with a view to satisfying the needs during the present fruit season.

# SIDELIGHTS

**A Summer Discussion.**

"Whut's dem summer clothes you all is wearin'?" inquired Erastus Pinkley.

"Dat's a Pallum Beach suit."

"Pallum Beach! Mebbe 'tis. But it looks mo' like Coney Island to me."—Washington Star.

**The Secret.**

"How do you explain our friend's position on this public question?"

"I can't explain it," replied Senator Sorghum. "It's like the position of a contortionist. The fact that you can't explain it is what makes it interesting."—Washington Star.

**Can't Believe Him.**

Dorothy's baby brother is only beginning to babble a few words. The other day Dorothy came to our house to visit and I said to her: "Can brother talk any yet?"

She replied: "Yes, he talks a little, but you can't believe a word he says."

**Bedrock Prices.**

"Bernard M. Baruch will keep prices down," said a constituent. "Rich as he is, he never consents to be done without a protest.

"Once a hotel man tried to do Mr. Baruch on his bill. Mr. Baruch studied the bill over grimly. Then, putting it in his pocket, he said:

"'Got any two-cent stamps?'

"'Certainly, Mr. Baruch. How many would you like?'

"'Humph,' said Mr. Baruch. How much are they apiece?'

"The millionaire's bills after that were always reasonable."—Philadelphia Bulletin.

**Rubbing It In.**

Private Smith, after serving three weeks with the forces, had fallen beneath the avenging eye of the C. O. for some petty offense. Thereafter he sent this touching epistle to his mother:

"Dear Mother—I am now a defaulter." His grief was too great to write more, so he got a comrade to post it for him, and sat him down to do his punishment in silence. Five days later he got this:

"My Dear Son—I am so glad to hear of your promotion. Be sure to be kind to the men under you, and never forget that you were a private once yourself."

**In His Neighbor's Eyes.**

"I have been reflecting," said an old-timer, "upon the case of the average man, as his neigrbors see him.

"If he is poor, he is a bad manager. If he is prosperous, every one wants to do him a favor.

"If he is in politics, it's for pork. If he is not in politics, one can't place him and he's no good for his country.

"If he gives not to charity, then he's a stingy dog. If he does give, it's for show.

"If he is active in religion, he is a hypocrite. If he evinces no interest in matters spiritual, he's a hardened sinner.

"If he shows affection, he's a soft sentimentalist. If he seems to care for no one, he's cold-blooded.

"If he dies young, there was a great future ahead of him. If he attains old age, he has missed his calling."—The Lamb.

**Willie's Algebra Lesson.**

Little Willie was poring over his books one evening, when his father said:

"Can I help you, son?"

"I wish you would, father," said Willie. "I've got an algebra problem here, and it's awful hard."

"Algebra, eh?" The father looked rather dubious. "Well, let's see her."

So Willie handed her over. The problem read:

"If A does a piece of work in 14 days, and B does it in 2 days, how long would it take them to do it together?"

Willie's father frowned. Then he said:

"What makes you think this is algebra, boy?"

"Because," said Willie, "it's got an A and B in it."

His father frowned harder than ever.

"Well," he finally said, "the only proper thing to do in a case of this kind is, of course, to fire A."

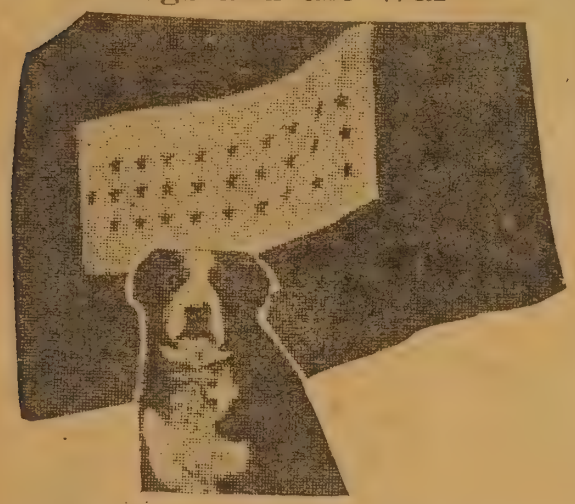
# All the World's a Stage, and All the Men and Women Merely Players

## Shows the Great Need in Italy



The above picture is of a group of little Italian children. The scene is in Palermo, at a public building which is called the Massimo. It is 3 o'clock on Thursday afternoon, the hour and the day set for the distribution of food by the American Red Cross. Only the proven relatives of men fighting at the front can be admitted to the Massimo, while the unfortunate ones outside show the need of our saving and sending over still more of the greatly needed food supplies.—U. S. Food Administration.

## Dogs and the War



"Baldy of Nome," who has 28 sons and grandsons serving as sled dogs in the French army in the Alps. Picture taken from "Our Dumb Animals."

## Doughnuts Pies and Smiles!

### A Sidelight "Over-There" on Food Saving Here




U. S. Food Administration.

These are what you might call long distance smiles, because they originated "over here" although they are being smiled "over there." The wheat and sugar tha you have been saving is being made daily by the Salvation Army lassies into doughnuts and pies for our soldier boys in the front line trenches in France. One glance at the picture will tell you that they thoroughly enjoy the treat. You can almost hear the soldier saying, "Just like mother makes!"

## Sound of Wood on Bone.



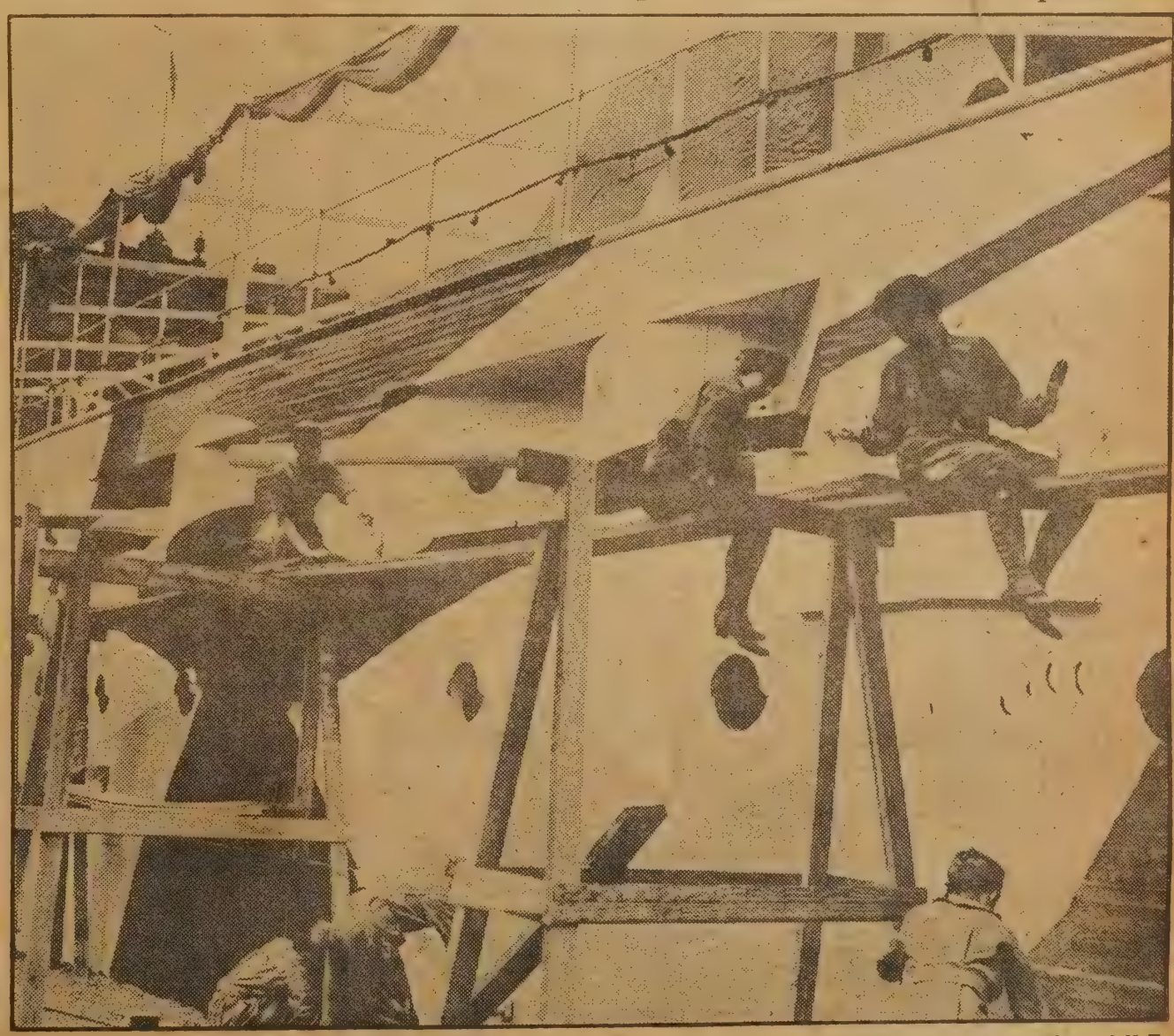

—Brooklyn Eagle.

## Both Doing Their Duty.




—Philadelphia Telegraph.

## Women Camouflage Land Battleship "Recruit" in Union Square



Copyrignt, Underwood & Underwood, N. Y.

Dressed in their neat-fitting khaki uniforms, these women camoufleurs of the Women's National Service league are disguising the land battleship "Recruit" in Union Square, New York. They trained in Van Cortlandt park on smaller objects, like rocks and stumps, but this was the first big stunt they tackled.

# Washington Boys in War Service

From the Twice-a-Week Spokesman-Review.



**VERNON TROYER, Walla Walla, Wash.**—Entered the marines April 25, 1917, and is now in France. His parents are Mr. and Mrs. L. N. Troyer of Walla Walla.



**A. L. DANIEL, Lacrosse, Wash.**—Entered Camp Lewis September 22, 1917. His parents are Mr. and Mrs. R. M. Daniel, who live on a farm near Lacrosse, Wash.



**SAMUEL A. WIGHTMAN, Leahy, Wash.**—Entered military service in 1917. Before entering the service he lived with his parents on a farm near Leahy.

## MILK AS FOOD.

### Essential Element Not Analyzed.

Dr. E. V. McCollum of Johns Hopkins university, whose experiments and lectures on diet have excited much comment, visited the northwest recently, delivering addresses of the most vital importance, particularly at this time.

He hesitated, he said, on entering on the study of diet because nothing had been done that was of value for 50 years, and the idea was pretty firmly fixed 11 years ago that any diet which furnished a proper amount of protein, starch, sugars, oils, fats and mineral salts was all that was necessary. This was not the opinion of Dr. Babcock of the Babcock test fame. He began experiments a number of years ago with groups of dairy cows. These tests were carried on for three years, when anthrax destroyed some of the herd and put an end to them. In these experiments a balanced ration was formed of wheat, the seed, stalk and leaves, another of oats and a third of corn. The results of these experiments indicated that animals fed exclusively on wheat even properly balanced as to protein, starch and so forth, was the progeny was born dead a month before the proper time for dropping, and they were undersized. Those fed on oats were born dead without exception, but came at the right time and were fairly well formed. Those fed corn were dropped alive and were properly formed and of normal size.

This was a starting point for years of experimenting. Hundreds and thousands of experiments have been conducted through from six months to several years and while much remains to be discovered certain well established and indisputable facts have been found out. There is some element needed to the proper sustaining of life in animals which can not be analysed so far. It is not found in seeds of plants. It is not found in tubers or edible roots. It is not found in meats. It is found in milk and eggs. Further, there is another essence or element which is almost as important which is not found in seeds, roots or meats, but is found in the leafy foliage of plants.

What results when the first of these unknown elements is omitted from the [illegible] The first thing that he noticed in his experiments was that the flesh around the eyes became sore and swelled up. Finally the eyes swelled shut. If milk or eggs were supplied the animal got well unless the experiment was conducted too long. Then when the animal recovered it was blind and never regained sight. When the other element was omitted paralysis ensued. With birds the paralysis was all over, but with mammals it affected the hind legs. If these experiments continued beyond a certain point, the animals died.

A perfectly balanced ration so far as proteins, fats and carbohydrates and minerals, chemically pure, fed to animals resulted in the patients' living just about as long as they would if they got no food at all.

Animals lacking these constituents sometimes lived, but they were undersized, sickly and from the first looked and acted old.

Dr. McCollum then drew an analogy between animals and man. In New York, in a negro settlement, almost without exception, the children have rickets. Their spines are affected; their legs are bowed, their chests cave in. The diets of their mothers is made up of wheat flour, corn meal, potatoes, rice and meat. They use no milk and eggs. In Baltimore the mortality from tuberculosis is very great among the negroes. Their diet is similar. The whites of Baltimore are not particularly subject to tuberculosis. In the south the spread of pellagra is very alarming. After considerable study and experiment he is satisfied that this terrible disease is due to lack of proper nutrition. It appears chiefly among poor people. All these troubles come in congested districts, where improper food is supplied.

The milk products, eggs and leafy foods such as spinach, cabbage and turnip tops he called protective foods. We have had them in abundance in the past and they have made us what we are. Take the oriental races; he did not think they are inferior by nature, but by food. They are nearly all undersized and shortlived. They are not progressive or original. The races which show the largest size, the greatest age and the best mental growth are those races which live largely on dairy products. What has saved the oriental races from extinction entirely has been the fact that they do consume very large amounts of leafy vegetables, though they have no milk to speak of.

A disease closely approximating that of the blindness in the animals lacking one of the unknown elements is said to be prevalent in Russia and Japan.

The accepted treatment for tuberculosis today is getting them in pure, cool air, keep them quiet and feed them food which is largely made up of milk and eggs. Degeneration follows lack of these food elements.

Having discovered these facts, the doctor said that he learned that in April, 1917, the normal consumption of milk daily in Chicago was 1,250,000 quarts. This year at the same date the consumption of milk had fallen off 40 per cent. Why? Because people will not buy milk when it advances in price, but they will buy meat at any price, because, he thought, meat has a higher flavor. It is unreasonable to expect milk to remain as cheap as it has been.

A farmer in DesMoines told him that 30 years ago he sold milk at 5 cents a quart and paid $4.50 a ton for bran. Today he got 12 cents a quart and paid $30 a ton for bran. Milk is not merely a good food, but it is almost a necessary food if we are to retain race superiority physically and mentally

At the close of his address he invited questions and replied as follows to them:

Processing milk, heating it and freezing it does not affect these unknown elements unless the milk is alkaline. In that case it disappears.

Certified milk is cleaner milk. He doubted the wisdom of urging all people to buy certified milk, but he believed that clean milk is vital.

He believed that a quart of milk a day should be the quota of every human being, child or adult.

Eggs were a little less valuable than milk because they lack calcium. If we ate the shells we would get it, however.

Buttermilk is an excellent drink, but the fat has been taken out and the sugar has been converted into acid. It is not as good as whole milk.

## Bars Retired Farmers.

The retired farmer who rents his farm to a tenant is not enough of a farmer to get in on the special concessions made by the food administration for eight pounds of wheat flour, according to H. H. Neal, Shelby county, Indiana, food administrator. The only person who may get eight pounds of white flour at one time is an agriculturist who raised the wheat and took it to the mill or elevator.


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Sprague at Post
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# Going to City School?

(Continued from page sixteen.)

a rule have one session, from 8 or 8:30 until 3. Good conscientious preparation of recitations, especially for one with the meager background Mollie had in district 27, meant an hour to three hours to spend on each of her four or five lessons per day, with only 50 minutes in school hours to do this. Some of her work had to be done in the library; you see district 27 had no library and no reference books, and in order to compete at all with her city classmates, she had to do a little extra reading. No chance for bluffing.

The school authorities, who always have some one to look after the welfare of student workers, have figured out that a student may reasonably be expected to work 25 hours a week, all told, to pay for room and board. Good workers are worth 20 to 25 cents an hour for short time work. Mollie, then, faced a daily two or three hours' housework, with extra work on Saturdays, and occasionally a Sunday off. She must be up by 6 in the morning to help with the breakfast dishes before leaving for school. No chance for study then. She must be home by 4:30 or 5 to help get dinner, perhaps do a little ironing or sweeping; do dishes after dinner, and be free to study by 8 o'clock, if her dishes were done. Generally they weren't, as the family dined at 7. What could she do about it? Somehow she couldn't stay awake to study after 10; that left her, if she had no recreation between 3 and 5, time to prepare thoroughly her two hardest recitations each day; one more already done in school hours left her one, or two, some days, undone. Saturday she had a full half day of baking and cleaning to do; and there still remained her own laundry work, mending, etc., to be done before Sunday night. I haven't mentioned that Mollie was on call any evening and Sunday, to keep an eye on 5-year-old Eleanor. Or that she happened to live a few blocks from the school, and thus saved the hour or more a day that some of the girls had to spend. Where in her program were amusement, recreation, companionship, music, the inspiration of the great city, and all the rest of it?

I haven't overdrawn it. In the middle of the year, Mollie was interviewed by the school authorities and requested to carry only three studies, taking five years for her course instead of the usual four. She was a good student, or they wouldn't have done this for her.

If you think this is unjust, here is Mrs. B's side of the question. Her home is exquisite, worth between five and ten thousand dollars. Mollie had to learn from the beginning the care of her floors, rugs, woodwork, windows, curtains, furniture, all expensive; how to cook with gas; how to manage electric appliances. Mrs. B. had to teach her all this, to endure poorly done work, poorly ironed clothing, broken china; a girl who expected to be one of the family on all occasions, and was correspondingly sulky when she could not be. She had to give up a room which she would have much preferred to rent for $10 a month, and furnished heat, light, laundry materials and food, all of which amounted to much more than the value of Mollie's unskilled and at times uninterested labor. She had to do the hardest work herself, which was exactly the opposite of what would happen if she had a servant. Was it worth it?

Please do not misunderstand this. After a year or two of this, any girl of average quickness can better these conditions; she can apportion her time and energy better, and as a rule find some work less exacting. But to the newcomer, unskilled, unused to city ways and studies, about the best she can expect is some variation of Mollie's experience.

If Ruth still persists in her plan of going direct to a city school, she will have no trouble in finding a home in advance, by listing her name with one or more of the authorities I have mentioned, preferably of the school and the Y. W. C. A. But she must expect long, hard, dreary days at first, among people who care nothing for her moods and whims. She will be very fortunate indeed if she finds time or permission from the family she is living with, to take up music with her other work.

Mothers, am I leaving you out of all this? Not at all. If your daughter faces such a task as this, you can help to an untold extent. Little things you can still do for her, perhaps mending and a bit of sewing. But most of all, your attitude towards her and her work will help or hinder her. Please be cheerful, be spunky. Let her know you're proud of her successes; you have faith in her ability, her independence. This is the hardest thing about the abrupt break from home life, that the more independent you can make her of your support, still keeping your sympathy and affection, the better she will succeed. The self-pitying girl will never finish the hard course ahead of her. The self-reliant girl, backed by your love and understanding and confidence in her, can accomplish wonders. A writer has said recently, "Boss yourself, and you become a member of the great ruling class. For 'he that ruleth his own spirit is greater than he that taketh a great city.'" Can you do this for yourself and for your daughter?

# A Crooked Trail

Continued from page six.)

talked with your father last spring, and he told me he might want some fruit-trees this coming fall. So I'm going to call on him and others and take their orders."

"If you're going over there," I said, "please be sure to tell the folks you saw me, and that I'm riding Dick and on Lep's trail, and that they needn't look for me till they see me."

"All right; I'll tell your father what has become of you."

"And be sure to tell him I'm riding Dick." Then I explained that I had started from home without anything, and had accumulated what I had on the way.

Kelly laughed. "I'll tell him how it is. And you don't seem to have any lariat. If you'll ride over to the house I'll lend you mine. I've got a good one, 50 feet long. You can leave it here on your way back."

"It might come in pretty handy, and I'm much obliged to you, Mr. Kelly," was my reply. And when he came with the rope I added: "But no telling when you'll see your lariat again. I'm going to overhaul that ox, if it takes me all the rest of the summer."

"That's all right," he assured me. "I don't expect to need it any time soon." He coiled the rope neatly and handed it to me.

I hung it on my saddle-horn and rode on.

Kelly lived in the post-oak and blackjack woods, but the road soon led me out upon the high prairie. Ahead of me, and apparently less than a mile away, a range of low mountains, rising steeply up out of the prairie, stretched across my course. But I had traveled this road twice already, and knew that those mountains were 12 miles distant.

The summer before, father and I had made a wagon-trip up into the Little Pecan country to look at the land father afterwards bought. And my first view of the whole region had been obtained from the top of those mountains. We had returned by a different road; but in the November following we had come again. This time we were moving—changing our home from within sight of the capitol building at Austin to this new and sparsely settled part of Texas. On the second trip father drove our heavily loaded covered wagon, while my brother and I rode behind, pushing along our little herd of 27 cattle and two yearling colts. We had camped one night in one of those mountain-coves, near Lookout Gap, through which the road ran, and which was now in plain sight. As I well knew, there was not a human habitation from here to the mountains, and none till 10 miles beyond. It was easier to live in the timber in those days than it was to haul wood and rails out upon the prairie. So the nearest house was 22 miles ahead.

Lep was not one of the cattle we had driven into the country. Father had bought him and Coaly, for heavy plowing, soon after our arrival on the Little Pecan. About the beginning of warm weather, having been allowed to run out on the range with nothing to do for a good while, Lep had deserted Coaly, his work-mate, and started off across the country. It might have been mere restlessness that made him go—the restlessness, or desire to travel, that often seizes animals, and especially horses and cattle, as well as people. But we knew that he and Coaly had been brought from somewhere in southwest Texas, three or four hundred miles away, and the natural inference was that he was trying to get back to his old range.

We had missed him soon after he started; and father had followed and overtaken him somewhere on this very prairie. Since then Lep had worn hobbles constantly.

But now the hobbles were off and he was gone again with four or five days the start of me. If he had kept traveling steadily all this time, except when grazing or resting, he must be more than a hundred miles ahead. It was important that no time be lost; otherwise I would have gone back and taken a new start.

So I pushed on into the unsettled country, fearing that there was a long chase ahead of me, yet trying to persuade myself that Lep would be tempted to linger along his way, and that I should overtake him somewhere out here before he had wandered many miles farther.

(To be continued.)





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Write to the Editor.

ALICE W. BARLAND,
Editorial Contributor.

# Watch for Defects

## Ways to Make Things Go Farther

By MARGARET PALMER.

We are all trying to make everything go as far as possible these days as well as prolonging the usefulness of everything we possess or come in contact with. So there will not be quite so much discarding as heretofore, instead, we will be more on the lookout, watching for little rips or defects, etc., and see that these things get immediate attention.

Ragged window shades will be turned end for end and, if not too bad, they may simply be cut off a little and rehemmed on the sewing machine by setting the stitch very long. Worn rugs are often a big problem, for it is hard to do much with them, yet sometimes much can be done with these to prolong their usefulness. All frayed ends should be rehemmed, broken threads fastened as soon as discovered they have worn or broken through or cut in two. Holes and rips, no matter how small, should be mended and sewed up. Small rugs with frayed ends may often be made to look almost like new again by simply adding new fringe.

Often a badly worn rug can be cut to pieces to insert in holes worn in large rugs and the spot covered with a small rug. Obtruding knots and the sharp edges of doors are often to blame for worn spots and holes in rugs. Where there are knots or sharp edges, they should be chiseled off smooth with the rest of the floor before they can do any damage. If any are missed, as soon as they are discovered, chisel them down.

This is especially true of floors covered with linoleum, as nothing is harder than knots and rough sharp edges. The best of linoleum will soon break and wear through over such places.

The furniture should be looked over, too. Often shabby and scuffed furniture can be made to look almost like new again through a coat or two of paint, or stain or enamel or varnish. The cost will not be great if one can do the work at home.

Sometimes it is a good plan to remove all the old varnish, but this is not necessary unless it is badly marred or cracked or worn off. This can be very easily and quickly done with any of the varnish removers sold on the market now. If this is done, sandpaper all rough places until smooth before applying the new stain and varnish.

In using white enamel on furniture and woodwork, it is best to give it a coat of flat white paint first, then when the white enamel is applied, there will be that thick lustrous white which can only be obtained in enamel. The flat white paint also will prevent the enamel from turning yellow, as it usually does if ordinary paint is used, or the enamel is put on without this flat coat of paint.

A little knowledge of staining, painting and varnishing is always of great value to every housewife, for then she can keep her furniture and often the woodwork and floors in good condition herself.

One can also soon learn to put in new bottoms or recover chairs, couches, etc., to prolong their usefulness, and it behooves us to make everything go as far as possible so we can help that much more in taking out Liberty bonds or in buying thrift stamps, or giving and helping the Red Cross. Often much of this work can be done on rainy days and the men then often find they can give a few hours of their time to help out.

# Little Sugar Hints

Fresh fruits and green vegetables used freely in the diet will cut the demand for very sweet desserts.

Serve very ripe, sweet peaches, pears and figs without the addition of sugar, or with cream whipped up with a little white syrup or honey.

For dark cakes and chocolate, cofee or caramel ice cream use half and salf sugar and molasses. For light cakes and light creams use half and half sugar and white syrup.

Fruit canned without sugar can be sweetened later by opening and reheating with sugar, sorghum, molasses, sugar cane syrup, white syrup, beet syrup, honey or maple sugar.

All fruits can be canned successfully witnout sugar for future jelly making, pie filling and marmalades. Can in hot water, in their own juice, or the concentrated juice of apples, pears or grapes.

Fruits can be preserved in grape juice or apple juice in place of a sugar syrup. Extract the juice from very ripe fruit and boil down to one-half the volume to form a thin grape or apple syrup.

Syrup made by reducing the juice of grapes, apples or pears to one-seventh of the original volume can be used in preserving, in canning or on the table to replace sugar to a great extent.

If sorghum syrup and sugar cane syrup is sealed to prevent fermentation, it will prove a good winter sweetener. Well made cane syrup can be used to take the place of sugar even in coffee.

If fruit is allowed to become soft ripe on the trees it will acquire enough sugar on its own account to make it very palatable for canning without sugar. Where fruit is abundant can ripe fruit in its own juice.

Drying fruit concentrates the sugar. The amount of sugar in some fruits is over 50 per cent. Dried fruit makes excellent jam, pickles, salads and ice cream, and when eaten as stewed fruit need less sugar than fresh fruit. Select the sweetest fruits for drying.

Too much sugar is used on the American table, with a consequent loss of variety and piquancy of flavor. The nutty flavor of grains, the natural sweetness of cornbread, the distinctive flavor of fruits and the real coffee taken are too often smothered with sugar.

### Sorghum Cake.

Half cup fat, one and a half cup sorghum, one cup boiling water, one-fourth teaspoon salt, one teaspoon ginger, one cup flour, one cup substitute flour, two eggs, one teaspoon soda.

Cream the fat, and add the sorghum, and the boiling water. Add the sifted dry ingredients to the first mixture. Add the eggs last. Bake the cake in a loaf or in a shallow pan in a moderate oven.

**Apple Sauce Variation**—To two cups of apple sauce, cooked until very thick, add one tablespoon butter, three tablespoons of syrup and cinnamon as desired. Spread the apple sauce half an inch thick over the bottom of the pan. Pour the cake batter over the sauce, and bake it in a moderate oven. When the cake is done, turn it out of the pan so that the apple sauce is on top. Cut it in squares and serve warm.

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# Handicraft for Girls

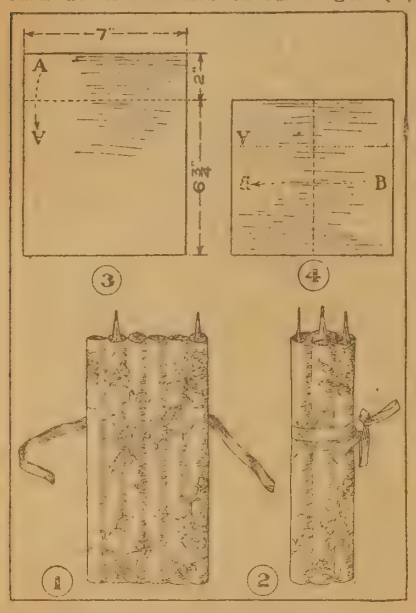
By DOROTHY PERKINS.

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## For Your School Desk.

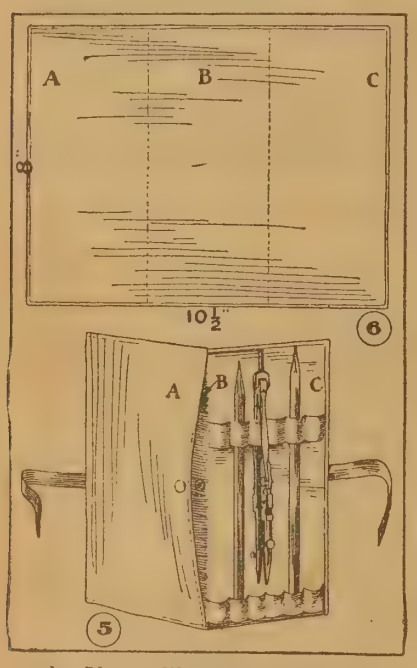
Every girl should have a holder for pencils and pen-holder, to keep them from scattering about in her school

Cretonne of a dark color, with a small pattern, is the best material to use. For the holder shown in Fig. 1, first cut a piece of cloth 7 inches wide and 8 3-4 inches long (Fig. 3). Then turn down 2 inches of its length (A,




Figs. 3 and 4) and stitch the turned-over edge as indicated by the row of small dots in Fig. 4. The heavy dotted line in Fig. 4 indicates where to make the second fold to bring side B over to the opposite side. Turn in enough of the side and bottom to conceal the cut edge of the cloth; then stitch along the side and across the bottom.

The pockets are partitioned off with up-and-down rows of fine stitching. In a holder of the width given, five rows of stitching will make six pockets of the right size so the pencils will fit

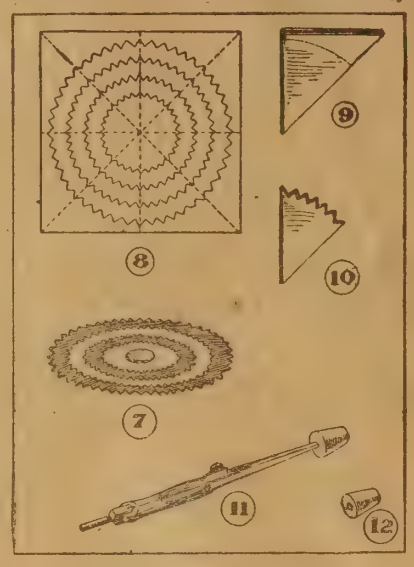



snugly. If you like, one or two of the pockets may be made a trifle narrower then the others, to provide for slim penholders.

Sew a short piece of tape to the center of one side of the holder, to provide for tying the holder in a roll (Fig. 1 and 2).

Some of you girls will prefer the holder shown in Fig. 5, because of its pocket for erasers, pencil-sharpener, pen-knife, pens, pencil stubs, etc. Figure 6 shows the pattern by which to cut the cloth; also, how the edges should be turned over slightly, or else be bound with a narrow braid, to conceal the raw edge. The dotted lines indicate the folding. The outer third A folds over on to the center third B, to form the pocket, and it is stitched to B along the top and bottom edges; and the outer third C is provided with small pockets for pencils. Form the pencil pockets with pieces of tape. Stitch the bottom tape along the bottom edge, as well as at the ends. Partition off the pockets by rows of stitching.

Sew a dress snap-fastener to parts A and B, for fastening shut the large pocket, and sew a piece of tape to the center of the back of the case for ty-




ing it after it has been closed and rolled up.

The pen-wiper shown in Fig. 7 is composed of four layers of light weight flannel, 4 1-2, 3 3-4, 3 and 2 1-4 inches in diameter, sewed together through their centers with a fancy button sewed to the top.

Figure 8 shows the four circular pieces placed one on top of the other. This diagram also shows by dotted lines how to prepare the pieces by first folding over a square of cloth from top to bottom, then from side to side, and then from corner to corner, into the form of Fig. 9. Cut off the upper corner on an arc of a circle, as indicated by dotted line in Fig. 9, and notch the folded edges (Fig. 10).

Use two colors of flannel, alternating them, and you will have a most attractive penwiper.

Never carry a pointed instrument in your pocket or lay it away in your desk without protecting the point. A cork pushed far enough on to the point to hold fast makes a good protection (Figs. 11 and 12).

## Some Good Recipes.

The following are some recipes suggested by the Delaware Agricultural college extension service:

Apple gems—Sift together one and one-half cups flour, one-half teaspoon salt, two teaspoons sugar, one cup cornmeal. Add one cup milk, four sour apples (chopped fine) and two tablespoonfuls molasses. Beat well. Bake in hot, greased gem pans 15 to 20 minutes.

Buckwheat biscuits—One and one-half cups buckwheat flour, one-half cup wheat flour, one teaspoon salt, four teaspoons baking powder, one teaspoon fat, milk or water to make dough. Mix as for baking powder biscuits and bake in hot oven 10 or 15 minutes.

Cornmeal ginger bread—Mix in a double boiler two cups cornmeal, one-half cup cornmeal, one-half cup molasses, one-half cup sugar, two tablespoons fat, one teaspoon salt, one cup sour milk, three-fourths teaspoon ginger, one teaspoon cinnamon, one-half teaspoon cloves. Cook over hot water for 10 minutes, stirring constantly. Cool, and add one cup wheat flour, one and one-half teaspoons soda, and one egg well beaten. Bake in a shallow tin pan.

## German Hens Must Lay.

What will be done with a hen in Germany when she refuses to lay 40 or more eggs a year is not officially stated, but it is stated that the owner of the hen must turn over to the kaiser's government 40 eggs annually for every hen that he possesses. The kaiser is quite reasonable, however, in agreeing to turn over $1.60 to the owner of the hen for each 40 eggs so requisitioned.

### Americans Give Europe Confidence.

While it is unfair to give this country credit for the success of the present allied offensive, it is true that the appearance of more than 1,500,000 U. S. soldiers in France and their dash and daring and general efficiency have given the allies the necessary confidence to insure success.




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### What Irene Did One Day.

Dear Aunt Nellie: The last day of school I got up at 6 o'clock and milked four cows, Pet, Buch, Blacky and Reddy. I then came to the house and fed six lambs. Their names are Spotty, my lamb, Lanky, Inky, Pinky, Sniffles, Snorts and Jerry. Then I was ready to eat a good hearty breakfast at 7 o'clock. After breakfast I put up two lunches, one for my brother, Chester, and the other for myself. Now it was time to get ready for school. After I got ready I dried the dishes for mama. My cousin Luther saddled my pony, Puss, then we rode to school. When I came home I borught the cows in. It was then time to milk the cows again, while mama got supper. After supper I fed the lambs again. Papa was going up to Leonardo's in the car, so I went with him. Coming back I drove the car. I think the people who saw my tracks think that some one who was drunk drove the car. The steering wheel was loose, so that was the reason I couldn't keep it on the road. I did all this in one day and think it enough. I will write again.—Irene Alma Clarke, Grand Dalles, Wash.

### Mildred Likes to Play.

Dear Aunt Nellie: I have not written to the Children's Corner for a long time. Since then I have gotten three little kittens, Spot, Fluff and Whiskers. It is lots of fun to see them play. We also have about 30 little chickens. Vacation has come and I have lots of fun playing. I like to play and I think all the rest of the cousins do, too. I have passed in all my studies at school. There was a girl, I don't remember her name, who wrote to the Corner and said she would like to correspond with me. I did not read that Farmer, so I did not know she wrote till a girl at school showed it to me, the letter. But I forgot to copy her address, so I would like to know if she would kindly write another letter telling her name and address and tell if she was the one I mean. — Mildred Tormey, Spokane, Wash., Star route.

### Every Little Bit Helps.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am eight years old. My birthday is January 27. I passed into the third grade this year in school. I have two sisters and one brother. They are 13, 12 and 11 years old. I am going to buy a war saving stamp to help win the war. I have read many cousins' letters who say they have brothers in the war. I have a little kitty and a hen that Mrs. Dick gave me. The hen is setting on 15 eggs. I made a little garden this year and planted many different garden seeds. My sisters made five quilts, six handkerchiefs and seven wash cloths. My letter is getting long, so I will close and go help brother and sisters as much as I can, for every little bit helps.—Frances Ruchert, Box 3, Peola, Wash.

### Plants Beans and Corn.

Dear Aunt Nellie: I read the letters and there are only a few boys' letters in the Children's Corner. I have five thrift stamps and I think I will buy more. I live on a 140-acre farm, but we have in wheat and oats about 500 acres. I have three sisters and one of them is married. I have four brothers and one of them is married. We are milking 11 cows and I milk three of them. We have 11 calves. We have 36 head of cattle altogether. We have about 30 horses and five little mules. I just got through planting beans and corn. I will be in the sixth grade next year. If I have a twin I wishthey would write to me.—Glenn Hiday, Coulee City, Wash.

### Produces Food for Soldier Boys.

Dear Aunt Nellie: This is the first time I have written to the Corner. I like the Farmer so well I will write a letter to you. Last year I picked some cherries and raspberries and made enough money to buy a pig. I kept it all summer and made $16 on it. I was 10 years old on December 20. I am buying thrift stamps with all the money I earn. I am going to get a pig this year, so I can help raise more bacon and ham for Uncle Sam to feed his soldiers and sailors at the front. I am trying to do my bit. We live on a five-acre farm and my father is away most of the time, so I have to take care of the garden this summer. I will have to do most of the hoeing. This fall I will have to put in the corn and potatoes and wheat for papa. We are going to get about six pigs this year. We will have to feed the corn to the pigs. I like to feed the animals, and I will have to feed them. We have two cows, and I milk them most of the time. I helped put up the hay this year, which I like to do. Our vacation has just begun. Have I a twin? If so, I wish he would write to me.—Robert Austin, Route 6, Box 233, Bryant avenue, Walla Walla, Wash.

### People Call Her "Johnny."

Dear Aunt Nellie: I have never written to the Corner before. I live in Seattle but most every summer I stay with my aunt and uncle on their 860 acres of land. Uncle Bud has a good many head of horses and cattle. They have three dogs, Jack, Bob and Jitney. Minnie is our cat. She has three of the sweetest kittens. Their names are Patty, Boots and Slippers. I love to ride horseback. My horse's name is Snowball. He is very small and easy to get on. My other pets are Boots and Jack. I always wear overalls around the ranch, and for that reason people who know it call me Johnny. My birthday is June 18. I was 12 years old. Have I a twin? Every morning I poison sage rats. One day Jitney killed 15 rats. I can milk. Our old cow's name is Red. She is very gentle, and will even let you ride her. Uncle Bud has a car. We go to town very often. We live nine miles from town.—Marguerite Weston, care Bud Weston, Ellensburg, Wash.

### Has a Dog Named Midget.

Dear Aunt Nellie: This is my first letter to the Corner. I like to read them. I am 10 years old and my birthday was March 31. It was on Easter this year. I am in the fourth grade. I have brown hair and brown eyes. Have I a twin? If so, I wish she would write to me. I have a pony. His name is Tom. I can ride him without a bridle on. He is half Shetland. I have two sisters and one brother. My sisters' names are Myrtle and Leona, but we call her Oney. My brother's name is Ernest. I missed some school on account of scarlet fever. I live on a 680-acre farm, but we have more land. I have a dog named Midget. He is 8 years old. We have some horses and cows. I do not know how many.—Bertha Wilke, Okanogan, Wash.

### Best Baby in Crescent.

Dear Aunt Nellie: This is the first time I have written to the Corner. I was nine years old February 21. Have I a twin? I live in the country, 10 miles north of Reardan. We have a 120-acre farm. We have nine head of cattle, two horses, one dog and five cats. I have four sisters, and two brothers and one half-brother. My baby brother's name is Ira Milton Haines. I think he is the best baby in Crescent. I belong to the junior Red Cross. We made quilts at school. I live one mile from school. I like to go to school very much. My friend's name is Eva McGough.—Ethel Clarke (Rourke), Reardan, Wash.

### Helps Sammies Lick the Kaiser.

Dear Aunt Nellie: The last time I wrote to the Children's Corner I received the second prize. I have decided to write on "Helping My Country." I have invested in a thrift card and my two brothers and sister also have one. We planted 24 rows of beans to help the Sammies lick Kaiser Bill. The beans will bring a dollar a row. Papa has promised one-fourth of the money to each. I am going to invest it in a baby bond. I would like to correspond with Delma Guffin, Warden, Wash. I am 10 years old and in the sixth grade.—Frances Cannon, Dayton, Wash.

### Play in the Grass.

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I have a sister and one brother. Their names are Lorena and Johnnie. We have two pet colts. The color of one is blue and the other is yellow. The blue one is mine and the yellow one is Lorena's. Our yard has got lots of grass and we play in it. I rode my pony today after the cow. I go barefooted. It is rainy today and so I have to keep on my shoes. I will write a riddle: I went across the bridge. I met my sister and cut off her head and sucked the blood and let the body stand. What is that? It was a beer bottle.—Anna Thomson, Goldendale, Wash.

### A New Little Brother, Bobbie.

Dear Aunt Nellie: I have written to the Corner once before. I have another brother now. His name is Robert. We call him Bobbie. He is seven weeks old. I found a little bluebird the other day with no feathers on it. I thought maybe she would leave her pest but she didn't.—Freda West, Dot, Wash.

### Going Camping This Summer.

Dear Aunt Nellie: This is the third time I have written to the children's Corner. I hope I will see my letter in print. My birthday is September 17. I saw a girl in the Corner that had the same birthday as I have. If she reads my letter I wish she would write to me. I could write to her, but the Farmer got lost. We have four kittens. Two of them are mine. I named them Bunny and Brownie. We are going camping this summer. When I have been up there I will write and tell you about it. I have joined the Red Cross at school. We have a pet calf. The other day my sister and I went out to feed him some milk. We couldn't find him. But at last we did. He tried to knock the bucket over. Our school is out now. —Edith Christensen, Box 143, Route 3, Cottonwood Farm, Ellensburg, Wash.

### Asks the Cousins Some Riddles.

Dear Aunt Nellie: This is my second letter to you. I did not see my letter in print. I saw my little friend's, Eula Manis. My birthday will soon be here. It is June 19. My brother, Carl, and my friend, Eula, are writing. I will ask the cousins some riddles. Why is a musician like an infant just learning to walk? A musician is like an infant because it is A minor and if it C sharp it will soon B flat. Our school is out. It is the Darden school. My teacher was the best teacher I ever had. Her name is Miss Fleeta Kinder.—Edna Short, Route 1, Waitsburg, Wash.

### Cleans Up the House for Mother.

Dear Aunt Nellie: I am 9 years old. I was born August 28, 1908. My brother, Derzil, and I wash the dishes for my mother. There are five in our family. I clean up the house for mother. I have two brothers and no sisters. I have a little baby brother and one 12 years old. I live in Pataha City. —Elma Moem, R. F. D. 2, Pomeroy, Wash.

### Has Hazel a Twin?

Dear Aunt Nellie: This is the first time I have written to the Corner and I hope it will not be the last. I am 11 years old. My birthday is January 1. I am in the sixth grade and my teacher's name is Mr. Thornton. I have three sisters and two brothers. I live on a farm. We have four horses and three cows. The horses' names are Buck, Dick, Fannie and Dock and the cows' names are Blossom, Buttercup and Bell. Have I a twin? If I have I wish they would write to me.—Hazel Lackey, Fruitland, Wash.

### Likes the Country Real Well.

Dear Aunt Nellie: I am 18 years old. My birthday is May 30. Have I a twin? If so I wish he or she would write to me. I live on a 280-acre farm five miles from Rockford. We have eight horses and three cows. I have two brothers, one of whom is in the aviation section of the United States army. We also have six hogs and nine pigs. I like to live in the country real well. I like to read the letters very much and enjoy the paper. This is my first letter.—Reno V. Carmack, R. F. D. No. 2, Rockford, Wash.

### Esther Has One Sister.

Dear Aunt Nellie: This is the first time I have written to the Corner. I am a little girl 6 years old. I started to school in January. I like to go to school. I have light hair and grey eyes. We have nine sheep, two horses, eight cows and one dog. I have one sister. Her name is Wilma. My birthday is October 24. Have I a twin?—Esther Peterson, Route 2, Mead, Wash.

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During the last week Aunt Nellie has received letters from the following cousins: Laura Lee, Mabel Bender, Eugene Bender, Stanley Bender, Helen Wilcox, Olive Wilkinson, Laura A'Shaughnessy, Flossie Packwood, Ruth Cory, Ollie Ervin, Jane Adams, Edith Miller, Pauline Swanson, Doris Jones, Thelma Chapman, Evalene Maurer, Elmer Benson.


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# Fair Defies Handicaps

(Continued from page three.)

Breeder's calf herd—1. Curtice Cattle company; 2. Platt Bros.
Get of sire—1. Curtice Cattle company; 2. Platt Bros.
Produce of cow—1 and 3. Curtice Cattle company; 2. Platt Bros.
Senior champion bull over 2 years—Curtice Cattle company.
Junior champion bull under 2 years—Curtice Cattle company.

[illegible]

Bull, senior yearling—Ohrmann, on Philips, Mont., 1, on [illegible] asterpiece; 2, on Quality Boy 2d; 3, on [illegible]nite King; 3, on Adams Perfection.

Bull, junior yearling—Ohrmann, on Black Jupiter 2d.

Bull senior calf—Ohrmann, on Adams Model.

Bull junior calf—Ohrmann, on Thick Set Ito Boy.

Cow, 3 years old or over—Ohrmann, on [illegible]n Beauty of Oakwood.

Heifer, senior yearling—Washington State College, on Enright's Queen.

Heifer, junior yearling—1, Washington State college, on Pullman's Inez 2d; 2 and 3, Ohrmann, on Wild Flower of Ohrmanndale and Queen of Granite.

Heifer, senior calf—1, Washington State college, on Enright's Queen 2d; 2, Ohrmann, on Fair Maid of Ohrmanndale.

Exhibitor's young herd—Ohrmann.
Breeder's calf herd—Ohrmann.
Get of sire—1 and 2, Ohrmann.
Produce of cow—Washington State college.
Senior champion bull—Ohrmann.
Senior champion cow—Ohrmann.
Junior champion cow—Washington State college.
Grand champion bull—Ohrmann.
Grand champion female—Washington State college.

**Milking Shorthorns.**

Bull, 2 years old and under 3—D. H. Bennett, Ione, Wash., on Western Goods.
Cow, 3 years old and over—Bennett, on Olive B's Jewel.

**Fat Cattle**

Junior 2-year-old steer—1, Washington State college; 2 and 3, University of Idaho.
Senior yearling steer—1 and 2, University of Idaho.
Junior yearling steer—1, University of [illegible]; 2, Washington State college; 3, Curtice Cattle Co.
Senior calf—1 and 2, University of Idaho.
Junior calf—1 and 3, Washington State [illegible]; 2, University of Idaho.
[illegible] 1 and 3, University of Idaho; 2, [illegible] State college.
Grand champion steer—University of [illegible].

**Jerseys.**

Bull, 3 years old and over—1, Waikiki Farm, on Count's Foxy Lad of Waikiki; 2, R. E. Logan, Stevensville, Mont., on Nell's Fairy Boy; 3, R. E. Logan, on Montana To[illegible].

Bull, 2 years old and under 3—1, Waikiki Farm, on Owlet's Jolly Lad; 2, Waikiki Farm, on Model's Pilot of Waikiki; 3, R. E. Logan, on Echo's Noble Star.

Bull, 1 year old and under 2—1, Waikiki Farm, on Tribby's Sultan of Waikiki; 2, R. E. Logan, on Monelle's Last Noble; 3, R. E. Logan, on Beauty's Fairy Andy.

Bull, senior calf—1, Waikiki Farm, on Cowslip's Noble Oxford; 2, Waikiki Farm, on Owlet's Majesty of Waikiki; 3, Waikiki Farm, on Owlet Sultan's Oxford.

Bull senior calf—1, Waikiki Farm, on Rosalie's Pilot; 2, Waikiki Farm, on Raleigh's Golden Pilot; 3, Thomas S. Griffith, Spokane, on Glen Tana King Milan; 4, R. E. Logan, on Winnie's Maid Karnak.

Cow, 4 years old or over—Waikiki Farm, 1, on Pilot's Model; 2, on Golden Maid's Clarebelle; 3, on Genesta's Duchess; 4, on Eminent's Foxy Belle.

Cow, 3 years old and under 4—1, Waikiki Farm, on Waikiki April Winner; 2, on Waikiki Golden Princess; 3, R. E. Logan, on Mona's Tina; 4, R. E. Logan, on Maud's Fairy Princess.

Heifer, 2 years old and under 3—1 and 2, Waikiki Farm, on Waikiki Countess Ella and Imperial's Jean Pogis; 3, R. E. Logan, on Winnie's Dairy Maid.

Heifer, senior yearling—1, Waikiki Farm, on Pilot's Lassie of Waikiki; 2, R. E. Logan, on Echo's Noble Lass; 3, Waikiki Farm, on Pilot's Golden Kate.

Heifer, junior yearling—1, Waikiki Farm, on Pilot's Genasta of Waikiki; 2, R. E. Logan, on Madeline's Lassie; 3, R. E. Logan, on Princess Billy's Belle.

Heifer, senior calf—1, Waikiki Farm, on Pilot's Foxy Clare of Waikiki; 2, Waikiki Farm, on Owlet's Winnie of Waikiki; 3, R. E. Logan on Lady Compass Fairy; 4, R. E. Logan, on Fairy Ethel.

Heifer, junior calf—1, Waikiki Farm, on Glen Tana Favorette; 2, Waikiki Farm, on Pilot's Meysie of Waikiki 2d.

Graded herd—1 and 2, Waikiki Farm; 3, R. E. Logan.

Exhibitor's young herd—1, Waikiki Farm; 2, R. E. Logan.

Breeder's calf herd—1, Waikiki Farm.

Get of sire—1 and 2, Waikiki Farm; 3, R. E. Logan.

Produce of cow—1, Waikiki Farm; 2, R. E. Logan.

Junior, senior and grand champion bull—Waikiki Farm.

Junior, senior and grand champion cow—Waikiki Farm.

**Guernseys.**

Bull, 2 years old and under 3—M. H. Jerdee, Kiesling, Wash.

Bull, junior calf—Jerdee.

Cow, 4 years old or over—Jerdee, on Helena's Helen 2d.

Heifer, senior calf—Jerdee, on Helen Dollie of Clover Hill.

Heifer, junior calf—Jerdee.

**Holsteins.**

Bull, 2 years old and under 3—J. Copaul, Coeur d'Alene, Idaho, on Bracelet Gerben Prilly.

Bull, 1 year old and under 2—Hazelwood Farm, on Hello Ormsby Korndyke.

Bull, senior calf—Hazelwood Farm.

Bull, junior calf—Hazelwood Farm.

Cow, 4 years old or over—1, Hazelwood Farm, on Madison De Pauline 2d; 2, Hazelwood Farm, on Hazelwood Ormsby Spofford.

Cow, 3 years old and under 4—Hazelwood Farm, on Hazelwood Ormsby Korndyke De Kol.

Heifer, 2 years old and under 3—Hazel-

(Continued on page twenty-seven.)


# JERSEYS The Profit Breed



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Two years old in Oct. and Nov. Nine of them will freshen this fall, 4 in April. All bred to St. Mawes Noble. Several of these heifers from register of merit dams. Will sell in lots to suit purchasers.

Priced for quick sale.

**J. C. BROWN & SONS, Shedd, Ore.**

## Where Can You Beat It?

Young bull, ready for service. Sire's dam, St. Mawes Poppy, 1120 lbs. 85 per cent butter, or 1190 lbs. 80 per cent, in a year. Is 75 per cent same blood as Poppy's Grace, that has recently finished year's test as junior 2-year-old, with 601 lbs. 85 per cent butter. His dam and dam's dam both register of merit cows. Priced at $250 for quick sale.

**F. E. LYNN**
**Perrydale, Ore.**

## Breeders of Registered Jerseys

**ERICKSON BROTHERS, Yakima, Wash.**

## Rose Lawn Jerseys

The Island bull (Rosy's Jolly Golden Fine 135023) at head of herd. Bulls for sale out of Register of Merit and high-testing dams. Bred right, of right type; priced right.

**S. H. KAYLER**
Twin Falls, Idaho.

## WAIKIKI FARM

Register of Merit Jerseys. Largest Jersey herd in the northwest. Young stock for sale.

**IRA P. WHITNEY, Manager.**
Route 7, Spokane, Wash.

## Dairymen, $75.00

buys your choice of two bull calves, both two months old; solid color, good individuals; out of register of merit dams and by bulls with heavy R. of M. backing. If you are looking for a bargain here it is.

**JOHN B. STUMP & SON, Monmouth, Ore.**

## Ashnook Farm Jerseys

Young bulls by Silver Chimes of S. B., whose first 6 daughters average 710 lbs. 80 per cent butter. A few good cows and heifers for sale.

**DEL PERKINS, Carlton, Ore.**

## Jersey Home Jerseys

Young bull out of Olalla 2d, daughter of Olalla (806.25 lbs. butter as junior 3-year-old). Bull's sire, St. Mawes Prince, by Poppy's St. Mawes, and out of Gertie's Fern Princess (842.5 lbs. butter), both 80 per cent. Also other good young bulls.

**THOMAS WILLIAMS, Forest Grove, Ore.**

## St. Mawes—Rinda Lad

The two most popular strains of Jerseys in the northwest. Young bulls from register of merit cows for sale.

**G. G. HEWITT, Monmouth, Ore.**

## Ready for Service

Young bulls of Golden Glow's Chief, and King Melia Ann strains, out of register of merit dams. Priced to meet the unfavorable conditions. Write for full particulars and pedigrees.

**HENRY STEWART, Albany, Ore.**

## Jersey Farm Dairy

Peter Mouw's Poland China hogs, Cotswold sheep, White Leghorn and Buff Orpington poultry, carefully bred, great foundation stock.

**E. S. PILOT, R. F. D. 5, Idaho Falls, Ida.**

# Our Entire Guernsey Herd

**FOR SALE AT THE**
**WASHINGTON STATE FAIR, YAKIMA, SEPTEMBER 16-21.**

Direct descendants of the great May Rose family. A few heavy milking cows, ten 2-year-olds in milk, a few senior and junior yearling heifers, a few bull calves, and two bulls of serviceable age. They combine production and Guernsey type.

**MIDDLEDALE FARMS, EUGENE, ORE.**

## Just What You Want

may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.

The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.

# News for Breeders

C. S. Haupt of Castle Rock, Wash., recently purchased a fine yearling Jersey bull from G. G. Hewitt of Monmouth, Ore. The purchase was made on the advice of L. S. Keyes, county agriculturist of Cowlitz county, and Mr. Haupt is much pleased with him. He is by Rhinda Lad of S. B. and out of a cow imported in dam that has an official record of 542.3 pounds of fat or 638 pounds of 85 per cent butter.

Frank Brown, the Carleton, Ore., Shorthorn breeder and representative of the American Shorthorn association for the Pacific northwest, will judge beef cattle at the Montana state fair at Helena, September 10-17.

Mr. Brown will show a young herd and calf herd at the Los Angeles and San Francisco stock shows this fall and at North Portland. These are the only places at which his Shorthorns will be exhibited.

S. O. Poole of Wenatchee, while on a trip to Spokane August 20, rounded up a carload of high-bred Jerseys for shipment to his ranch. Nine head of pure-bred Jerseys were secured from the Dillworth herd. Eight were obtained from Jay P. Graves of the Waikiki dairy farm. In the latter lot is included Raleigh's Golden Nellie, purchased for $500, who has just finished a test as a 2-year-old with a record of 12,500 pounds. Mr. Poole purchased the only brother of this heifer a year ago and is building up a fine herd of pure-breds.

At least nine Duroc breeders and at least eight Poland China breeders will compete in the futurities of these two breeds of swine at the Oregon state fair. Among them are the best known breeders in the state, besides one or two in each breed who have never shown before. As only under year pigs will be shown the futurity will comprise the greater part of the show. But as numbers will not be lacking, competition promises to be sharp and quality of the finest. H. A.

## Hias Pete Visits Fair

Hias Pete, one of the few remaining Indians of the Chehalis tribe, was a visitor at the Southwest Washington fair, midway between Chehalis and Centralia. Pete is about 85 years old and now belongs on the Black river reservation. This was his native land, and he claims to have had his teepee at one time where the fair grounds are now located. He claims he never ceded his rights and that title to the land never properly passed. On this account all Pete asks is that two acres of land be deeded to him so he can call it his own and live on it if he wishes.

Pete tells many interesting stories of early days. He was raised practically by Joe Vorst, a well-known early settler. Pete says there is little realization now of the hardships the early settlers endured. He says Vorst wore deer skin pantaloons and slept on a raw hide bed with no bedding and no blankets. He also says that most of the time Vorst had no sugar and no coffee. Pete made for the race track almost as soon as he reached the fair grounds and said the races were the only thing that interested him much. H. A.

## Holsteins Win Milking Tests.

There were eight entries in the milking contest at the Southwest Washington fair this year—exactly the same number as a year ago. Four were Holsteins, three Jerseys and one Guernsey. A handicap of eight hundredths of a pound of fat was allowed for each day under five years of age and five per cent of the cow's daily production for each month over two that a cow had been in milk. Holsteins won the first three places.

Professor G. G. Corman, state dairy inspector, had charge and managed the contest. Figured in money value of both skim milk and butter produced the following is a complete report:

1. Ostego Highlands Butterfly, Holstein, owned by N. Hamilton, Chehalis, Wash., $3.303.
2. Ann Lundy Fourth, Holstein, Nathan Hamilton, $2.907.
3. Buttercup, Holstein, F. M. Svinth, $2.215.
4. Lad's Juno, Jersey, E. L. Brewer, Satsop, Wash., $2.184.
5. Eugenia D., Guernsey, Middledale Farms, Goshen, Wash., $2.117.
6. Jessie Jelke Pontiac, Holstein, A. Wackerbarth, Chehalis, Wash., $2.055.
7. Marigold Juno, Jersey, E. L. Brewer, $1.788.
8. Edna Fogis, Jersey, E. L. Brewer, $1.41. H. A.

### Nobody Can Afford to Fail.

Nobody can afford to fail in his business now if his business is worthy of success. The condition of the world demands accomplishment these days.

# Breeders' Department

## SHORTHORN CATTLE

### Mulhall's Shorthorns and Percheron Dispersion Sale

to be held at

**MULHALL'S FARM, THREE MILES NORTH OF FENN,**

on the N. P. and O.-W. R. & N. R. R., Idaho county, Idaho, Sept. 25th, 1918. The entire herd of 100 registered horses and cattle will be closed out. Have sold my farm and must give possession October 1st, 1918.

**WM. MULHALL, Fenn, Idaho**

## HOLSTEIN CATTLE

### TEN GOOD HOLSTEIN COWS

All of excellent breeding. Three extra heavy producers, and all good. Seven safely in calf to Tobie DeKol 2d's Johanna Duke, a 75 per cent brother to Lady Tobie DeKol, once world's record senior 3-year-old, and sire of Jantilina Colantha Johanna, 22.5 pounds butter in seven days as junior 2-year-old, besides other A. R. O. heifers of fine type. Come and see them or write for full particulars and pedigrees. Will be sold below their value together or singly.

**HERMAN KEUNZI, Silverton, Ore.**

### Registered Holstein Heifer

for sale; also May and June farrowed O. I. C. pigs, either sex, from matured sows, with pedigree; by a son from a grand champion sow. Also 18-month-old sows to farrow second litter this fall.

**E. C. SCHUMACHER, R. 1, Granger, Wash.**

### Registered Holsteins

Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.

**H. R. BOOMER, New Plymouth, Idaho.**

## POLAND CHINA SWINE

### Big Type Poland Chinas

Mouw, Fesenmeyer and Herring strains, either sex. Also registered Shorthorn cattle; good individuals.

**H. J. HOWSER, Stites, Idaho.**

### NOTICE

On account of the war I am forced to sell my herd of Poland China hogs, also 100 M. B. turkeys, several geese, ducks and chickens. No help. Order from this ad.

**E. A. KRUSE, Roseburg, Ore.**

### Unrelated Spring Pigs

Big type and big medium. Both sexes. Most popular strains.

**C. W. SHUMATE, Tumwater, Wash.**

### BIG TYPE POLANDS

Genuine—Guaranteed.

**GEO. W. BUCK, Oregon City, Ore.**

## CHESTER WHITE SWINE

### REGISTERED O. I. C.

SWINE.

Choice weaned pigs. Will ship subject to approval.

**RINGGOLD FARM.**

J. H. Weist, Prop., Rt. 1, Box 15, Centralia, Wash.

### For Sale—Pure Bred

High grade Holstein calves, yearlings and two-year-old, both male and female. None better in the northwest. Come and see them or write

**THE INTERMOUNTAIN INSTITUTE.**

R. F. D. 1, WEISER, IDAHO.

### HOLSTEINS

Well-Bred young bulls for sale.

**THOS. CARMICHAEL, Gaston, Ore.**

## AYRSHIRE CATTLE

### Elbow Ayrshire Dairy

Young bulls out of heavy-producing dams, sired by Willowmoor Sentinel 16th, a bull with big A. R. records on both sides.

**J. R. MABEN, Reedsport, Ore.**

**EDGEWATER FARM.**

Government tuberculin tested herd headed by Wil. Peter Pan 63d, double grandson of Beuchan Peter Pan. No surplus stock available.

**EBERT M. CHANDLER, Burbank, Wash.**

## HEREFORD CATTLE

### Highland Stock Farm

offers for sale Hereford bulls, 1 or 2 years old. One or a carload.

**PLATT BROS. Genesee, Idaho.**

## SHORTHORN CATTLE

**REGISTERED SHORTHORN COWS.**

Young bulls and heifers, sired by Scotch bulls; liberal terms.

**CALDWELL CATTLE CO., Caldwell, Idaho.**

## HAMPSHIRE SWINE

**HAMPSHIRE HOGS**

have won every feeding contest entered since 1914. Weanling pigs, gilts, bred or open. Our blood lines can not be beat.

**TUTILE BROS., Asotin, Wash.**





SAVE YOUR HOGS

A single WORM infested hog in your herd is a continual menace to your hog profits

*Remove Those Worms With*

ECONOMY STOCK POWDER

Send for Our FREE Sample and Book

*Economy Hog and Cattle Powder Company*

Hearst Bldg. San Francisco, Cal.


## SHEEP

### A. J. KNOLLIN

POCATELLO, IDAHO.

**Breeder of Pure-Bred Live Stock.**

Established flocks of pure-bred sheep—Rambouillets, Cotswolds, Lincolns, Shropshires, Oxfords, Hampshires, Romneys. RAMS FOR 1918 SERVICE FOR SALE. Also a few ewes.

Also breeder of Shorthorn cattle, Belgian horses and Berkshire hogs.

### Romneys, Lincoln, Corriedale

AND HAMPSHIRE EWES AND RAMS.

All pure bred, not registered. Have especially fine lot Hampshire ewe lambs, yearlings and three-year-olds. Any size lot. Write me on any kind of sheep deal.

**H. STANLEY COFFIN, Yakima, Wash.**

### SHEEP FOR SALE

Registered Shropshire, Oxford, Lincoln, Hampshire and Cotswold rams; 50 head registered Shropshire ewes; 3000 stock ewes, Lincoln, Cotswold and Shropshire breeds; 500 ewes, lambs, Cotswold and Lincoln ram lambs. Write for prices.

**EARL WOOD, Silverton, Ore.**

## OXFORD SHEEP

### Oxford Ram Lambs

15 yearling rams, 40 ram lambs, 30 ewe lambs. Excellent stock and priced to sell.

EXPECT TO EXHIBIT AT INTERSTATE FAIR.

**FISK FARM, Spring Valley, Wash.**

### Oxford Down Sheep

I have 20 rams 1 and 2 years old and 10 ewes one year and over for sale. All stock registered and in good condition.

**C. P. KIZER, Harrisburg, Ore.**

## SHROPSHIRE SHEEP

### Shropshire and Hampshire Rams

Registered stock. Spring lambs and yearlings. No ewes for sale.

**GRANT B. DIMICK, Oregon City, Ore.**

**SHROPSHIRE SHEEP.**
SHORTHORN CATTLE.

Choice yearling and lamb rams. A few high class young bulls.

**FELZER BROS., Tangent, Ore.**

## DUROC-JERSEY SWINE

### Ioka Farm Durocs

One excellent boar at breeding age. Bred gilts and weanling pigs of either sex.

**DOERFLER BROS. Silverton, Oregon.**
A. N. DOERFLER, Mgr.

### Registered Duroc Jersey Pigs

Weanling pigs of Wonder and Inventor blood lines. Pairs and swins unrelated. Special prices to club members.

**F. E. KINGSBURY,**
Ass't Club Leader, Malaga, Wash.

**FOUR DUROC GILTS BRED TO FARROW** this fall, also spring pigs, on hand.

E. E. PRICE, CABINET, IDAHO, OR
**JAMES N. PRICE, Yakima, Wash.**

## BERKSHIRE SWINE

### Berkshire Hogs for Sale

Have a number of sows, 18 months old; will farrow second litter this fall. Also young gilts and boars of all ages; all from prize winners. Write for prices.

**EARL WOOD, Silverton, Oregon.**

### Kintyre Farm Berkshires

Weanling pigs, bred sows, service boars.

**CLARK BROS. Yakima, Wash.**

**Just What You Want** may be offered in this week's Want Ads at a bargain. It's a good idea to look them over every week.

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, Sept. 9.—Dread of crop impairment by frost carried values upward today in the corn market. Prices closed unsettled 5-8 to 1 1-2 net higher with October $1.57 7-8 to $1.58 1-8 and November $1.57 1-2 to $1.57 7-8. Oats finished unchanged to 1-4@3-8 up and provisions varying from 20 cents decline to 10@12 1-2 advance.

Chances of frost tonight over a wide section of the northern states brought about a prompt buying movement on the part of corn traders and kept bullish sentiment decidedly in evidence throughout the day. In this connection reports of a killing frost in North Dakota were received with interest, but most of the anxiety was in regard to possible damage elsewhere, as the prevailing temperature was almost everywhere below normal.

Oats hardened with corn. Hedging by cash houses though, prevented any sharp advance.

Provisions averaged higher owing to an upturn in the hog market and because of large exports of meats last week. Trade was mainly in ribs.

### Chicago Futures.

CHICAGO, Sept. 9.—

| | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| Corn— | | | | |
| Oct. | 1.57 | 1.58½ | 1.57 | 1.57⅞ |
| Nov. | 1.56⅝ | 1.57⅞ | 1.56⅝ | 1.57½ |
| Oats— | | | | |
| Oct. | .72¼ | .72⅝ | .72¼ | .72½ |
| Nov. | .73⅞ | .74 | .73¾ | .73¾ |
| Pork— | | | | |
| Sept. | | | | 41.20 |
| Oct. | 41.60 | 41.50 | 41.40 | 41.40 |
| Lard— | | | | |
| Oct. | 26.80 | 26.85 | 26.80 | 26.85 |
| Nov. | | | | 26.00 |
| Ribs— | | | | |
| Oct. | 24.05 | 24.12 | 24.00 | 24.00 |
| Nov. | | 23.97 | 23.90 | 23.90 |

### Cash Quotations.

CHICAGO, Sept. 9.—Corn, No. 2 yellow, nominal; No. 3 yellow, $1.62@1.65; No. 4 yellow, $1.58@.60. Oats, No. 3 white, 70@70 1-2c; standard, 70 1-2@71. Rye, No. 2, $1.65 1-2. Barley, 93c@$1.04. Timothy, $7@10; Clover, nominal. Pork, nominal. Lard, $27.10. Ribs, $23.37@24.12.

### Pacific Northwest Grain.

PORTLAND, Sept. 9.—September grain delivery bids: Oats, No. 2 white feed, $60.50; barley, standard feed, $53; A, $54. October bids: Oats, No. 2, $60.50; barley, feed, $53; A, $54; oats, No. 3, $52; oats, clipped, $53.50; corn, yellow, $71.50; mixed, $69. Eastern oats and corn in bulk—Oats, No. 3 white, $52; 38-pound clipped white, $53; corn, No. 3 yellow, $71.50; mixed, $69.

Today's car receipts: Wheat, 151; flour, 17; oats, 7; hay, 28.

SEATTLE, Sept. 9.—Yesterday's car receipts: Wheat, 91; oats, 7; corn, 1; hay, 15; flour, 9.

TACOMA, Sept. 9.—Car receipts: Wheat, 15; corn, 1; oats, 3; hay, 1.

### Minneapolis Grain.

MINNEAPOLIS, Sept. 9.—Wheat—Receipts, 1255 cars, compared with 582 cars a year ago. Cash, No. 1 northern, old, $2.22.

Corn—No. 3 yellow, $1.60@1.64.

Oats—No. 3 white, 67½@68½c.

Flax, $4.06@4.11.

Flour unchanged; shipments, 73,903 barrels.

Barley, 84@99c.

Rye, $1.61@1.61½.

Bran, $29.31.

## Seattle Wheat.

SEATTLE, Wash., Aug. 7.—Wheat is coming into market rapidly and storage spaces are filling at such a rate that millers and grain dealers have become alarmed. The port commission has leased all its bulk grain space to private parties, although it was not an approved receiving house until a few days ago.

Weather conditions have favored maturity of late spring wheat on the northern highlands. Cutting of this crop will be completed by the end of next week. Some winter wheat seeding has been done, but the weather generally is too dry.

The space for storing wheat from eastern Washington is becoming so congested that the chamber of commerce has appealed to the department at Washington for relief in detailing ships to the service, necessarily withdrawn for other purposes. It is openly announced that the flour mills in this territory must close down within 10 days unless means of transporting the flour to the Atlantic can be supplied. August grindings for the government orders totaled 25,000 tons at Puget sound terminals alone and is awaiting shipment. The mills have been notified that the government will buy no flour this month because of lack of tonnage. The average mill in this territory has facilities for storing sufficient wheat to operate three to four weeks and flour to run three weeks. Grain now purchased and aboard cars will practically fill all storage spaces in this city. It is stated that unless the government can offer relief all buying of grain will have to stop, together with all receiving of grain at interior warehouses from Washington, Oregon and Idaho shipping points.

Farmers generally are taking advantage of the fixed maximum prices by rushing wheat to market. Combination of this fact, with the shutting down of buying and accepting wheat for storage, will, millers and grain buyers declare, create a serious situation for farmers of Washington, Oregon and Idaho. The problem will be especially serious for farmers because live stock everywhere will be rushed to market for lack of grain feed, and the mills can not supply a short feed market unless they can grind.

## Live Stock Quotations.

### At Omaha.

OMAHA, Neb., Sept. 9.—Hogs—Receipts 3800; market 20 to 30 cents higher; heavy, $19.10@19.50; mixed, $19.25@19.40; light, $19.40@19.65; pigs, $16.50@18.

Cattle—Receipts 15,000; market steady to 10@15c lower; native steers, $12@18; cows and heifers, $12.25@17.50; western steers, $10@15.25; Texas steers, $9@12; range cows and heifers, $7@11; canners, $6@7; stockers and feeders, $6.50@13.50; calves, $9@13.50; bulls, stags, etc., $7@11.

Sheep—Receipts 35,500; market steady. Wethers, $11.45@12.45; ewes, $9@11; lambs, $16.25@17.25; yearlings, $12.25@13.25.

### At Chicago.

CHICAGO, Sept. 9.—(U. S. Bureau of Markets.)—Hogs—Receipts 21,000; market closed fairly active; mostly 25 above Saturday's average; some mixed loads advancing more; good clearances. Butchers, $19.40@20.20; light, $19.50@20.30; packing, $18.65@19.30; rough, $17.75@18.50; pigs, good and choice, $18.50@19.

Cattle—Receipts 8000; good to prime native steers, strong; others slow, mostly steady; top natives, $19.20, a new record; butcher stock steady to 15c lower; calves weak; stockers and feeders steady to lower; beef cattle good, choice and prime, $17@19.20; common and mediums, $10.25@17; canners and cutters, $6.65@6.75; stockers and feeders, good, choice and fancy, $11@14; inferior, common and medium, $8@11; veal calves, good and choice, $18@18.75.

Sheep—Receipts 40,000; market steady to 25c lower; feeding lambs weakened most; best range lambs, $18@18.05; top natives, $17; lambs, choice and prime, $17@18; medium and good, $15.75@17; culls, $10@13.50; ewes, choice and prime, $11.50@12; medium and good, $10.25@1.50; culls, $4@8.

### At Portland.

PORTLAND, Ore., Sept. 9.—Cattle, steady; receipts 2125. Steers, prime, $12@13; good to choice, $11@12; medium to good, $9.75@11; fair to medium, $8.25@9.25; cows and heifers, choice, $8@9; medium to good, $5.75@7.25; fair to medium, $4.75@5.75; canners, $3@4; bulls, $5@8; calves, $9@12; stockers and feeders, $6@8.

Hogs, higher; receipts 1136. Prime mixed $19.25@19.60; medium mixed, $18.75@19; rough heavies, $17.75@18.25; pigs, $16@17; bulk of sales, $19@19.25.

Sheep, steady; receipts 587. Prime lambs, $13.50@14.50; fair to medium, $11@12; yearlings, $10@11; wethers, $9@10; ewes, $6.50@8.50.

## Portland Wheat.

PORTLAND, Ore., Sept. 7.—The grain market was quiet but steady at the close of the week. At the exchange buyers bid $60.50 for sacked oats, $52@53 for bulk oats, $69@71 for bulk corn and $53@53.50 for barley.

Millers are awaiting word from the food administration as to when flour buying for export will begin. The specifications are out, but no offers can be accepted at present, owing to the lack of tonnage.

Hop growers received a jolt Saturday, when word came that the brewing season was ordered closed on December 1. Hop picking is under full headway, but may stop any day. The brewers are believed to have enough hops on hand to carry them until December 1, and in that case they can use none of the new crop. Growers who have sold their hops on contract will, of course, finish picking and try to deliver them, but those who have not sold, and they are in the majority, see only a dead loss before them. On the whole, the federal order appears to have dealt a death blow to the hop industry of the Pacific coast. The far seeing hop men saw it coming and pulled out long ago, but others stuck to the game, hoping something would develop to revive the business.

### War Spoils Porters' Tips.

Pullman porters now demand a wage increase, saying that the war has halved their tip harvest.

## Spokane Stock Yards.

SPOKANE, Sept. 9.—The following is a statement of the business at the union stockyards here for the week just ended:

| | Cattle. | Clvs. | Hogs. | Shp. |
|---|---|---|---|---|
| Monday, Sept. 9 | 134 | 19 | 101 | 13 |
| Saturday, Sept. 7 | 114 | 19 | 13 | 245 |
| Friday, Sept. 6 | 171 | 19 | 187 | 89 |
| Thursday, Sept. 5 | 81 | 13 | 97 | 20 |
| Wednesday, Sept. 4 | 442 | 33 | 220 | 380 |
| Week ago (holiday) | ... | ... | ... | ... |
| Year ago | 106 | 2 | 27 | ... |
| Two years ago | 48 | .. | 274 | ... |

The cattle run for Monday was barely heavy enough to take care of the usual demand at the week's opening. Few heavy steers came in, the predominating classes were of light weights, and while they were too light for government contract specifications, their fair quality and medium covering made them handy for local consumption. A number of drafts of good cows were sorted from the she offering and were freely bid on at top prices quoted in their respective classes. Best cows offered demanded $8.50 per hundredweight, and from this figure down to $6 were included the bulk of the offering. Light veal calves brought $9.50, $9 and $8.50. Best bulls sold at $7 and the plain, bologna kinds went at $6.25 and $6.50. The market closed strong on all good heavy stuff and remained steady on the medium and commoner grades.

General cattle range:

| | |
|---|---|
| Prime steers | $12.25@13.25 |
| Good to choice steers | 11.00@12.00 |
| Medium to good steers | 10.00@11.00 |
| Fair to medium steers | 8.50@ 9.50 |
| Common to fair steers | 5.50@ 8.00 |
| Choice cows and heifers | 8.25@ 9.25 |
| Medium cows and heifers | 6.25@ 7.75 |
| Common to medium cows and heifers | 5.00@ 6.00 |
| Canners | 3.00@ 5.00 |
| Bulls | 5.00@ 7.25 |
| Calves | 7.00@10.00 |
| Stockers and feeders | 6.00@ 8.00 |

While an extremely light run of hogs was offered, the declining condition that has prevailed on all other markets for the past 10 days forced a drop here of 50 cents per cwt. Much activity centered among the hog section, and after the pens had been entirely stripped of everything that would kill buyers were still wanting. The movement of stock hogs has slowed up slightly, especially noticeable on the lighter pigs. Market on hogs is steady at the following reduced quotations:

| | |
|---|---|
| Prime mixed | $19.50@19.75 |
| Medium mixed | 19.00@19.50 |
| Rough heavy | 17.75@18.75 |
| Pigs | 18.00@18.75 |
| Stockers and feeders | 17.00@19.00 |
| Bulk of sales | 19.50 |

The sheep division was practically free from sheep for the local trade. What few were offered were but the odd ends of mixed shipments, but were sufficient to keep the market felt out on the various classes. Steadiness prevails, as the following:

| | |
|---|---|
| Prime lambs | $14.00@15.00 |
| Fair to medium lambs | 11.50@12.50 |
| Prime yearlings | 10.00@11.00 |
| Prime wethers | 9.50@10.25 |
| Best mutton ewes | 8.00@10.00 |
| Breeding ewes, 1 to 4 years old | 14.00@18.00 |

Monday's shippers:

L. R. Phillips, Molson, Wash., 2 loads mixed cattle and hogs; Doust & Stradley, Addy, Wash., 1 load mixed cattle, hogs and sheep; J. P. Helphrey, Curlew, Wash., 2 loads mixed hogs and cattle; B. Dyer, Troy, Idaho, 1 load cattle.

Driven in:

O. A. Bittrick, S. M. Nixon, Don Adams, R. C. Tune, C. C. De Ford, William Hislop.

## Portland Market.

PORTLAND, Ore., Sept. 7.—City creameries advanced print butter prices 1 cent, but are paying no more for butterfat. Cubes are scarce and firm, with sales of extras at 52 cents.

The egg market has weakened because of a slower demand and large eastern supplies.

The peach season is practically at an end, as over 90 per cent of the crop has been moved. Prices have lately strengthened, with the best Elbertas bringing $1.50. Pears are also stronger, Bartletts selling up to $1.75.

Onions are weaker, with receipts of California browns and Walla Walla stock has declined about 25 cents, selling at $2.25@2.50.

Potatoes are also easier. Oregons are quoted at $2.75@3.25 and Idaho Rurals at $3.50@3.75.

Butter—Cubes, extras, 51@52c; prints, 54@56c; butterfat, No. 1, 58c, delivered.

Eggs—Oregon ranch, candled, 48@51c; selects, 52@53c per dozen.

Cheese—Jobbers' buying prices, f. o. b. dock, Portland: Tillamook triplets, 27c; Young Americas, 28c per lb; Coos and Curry, f. o. b. Myrtle Point, triplets, 28½c; long horns, 28½c per lb, ¼c discount to Portland trade.

Poultry—Hens, 26@27c; broilers, 28@30c; ducks, geese and turkeys, nominal.

Pork—Fancy, 26½@27c.

Veal—Fancy, 20½@21c per lb.

Potatoes—Oregon, $2.75@3.25 per cwt.

Hay—Buying prices, f. o. b. Portland: Eastern Oregon timothy, $34 per ton; valley timothy, $29; alfalfa, $26@27; valley grain hay, $26@28; clover, $26@28c; straw, $9@10.

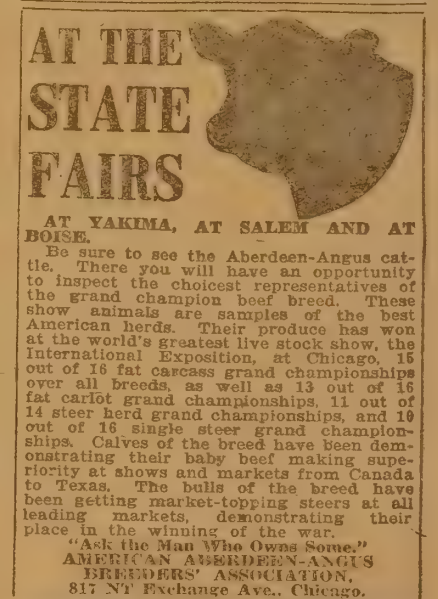
## Butter and Eggs.

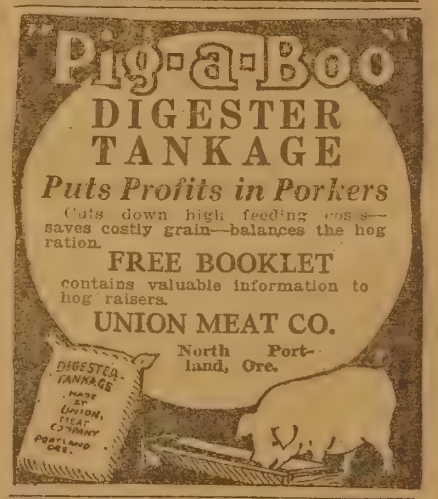
PORTLAND, Ore., Sept. 9.—Butter—Prints extras, 54@56c; cubes extras, 52c; prime firsts, 49c; dairy, 36c; butterfats, Portland delivery, No. 1 sour cream, 58c.

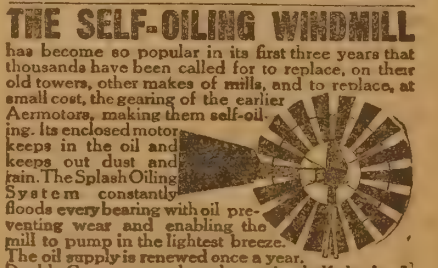
CHICAGO, Sept. 9.—Butter—Higher. Creamery, 44 1-2@45c. Eggs, steady; receipts, 6643 cases; firsts, 41@42c; ordinary firsts, 8@50c; at mark, cases included, 37@41c.

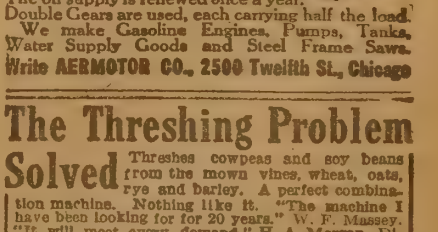








When you write to advertisers be sure to state that you saw their advertisement in this paper.

# FARM SERVICE WAR FLAG



A Flag for Every Farm Home in the Northwest

An Extra Small Star for Each Farm Worker

(Patent applied for.)

## Get a Farm Service War Flag.

The man, woman, boy or girl who stays at home and works hard to produce necessaries for the soldiers in Europe is entitled to real war service recognition. That is the idea back of the farm service war flag. It is pennant-shaped, made of the good old red, white and blue, and has a star representing the producing farm home. Small stars are added to represent each worker of that home.

..... .....

**Convenient Order Blank.**

..... 1918.

THE WASHINGTON FARMER,
Review Bldg., Spokane, Wash.
Enclosed find five cents (5c), for which please send me a Farm Service War Flag (printed on enamel paper) with ..... extra small stars for farm workers.

Name .....

R. F. D. .....Postoffice .....

Box ..... State.....



# AMERICAN FLAG

*SIZE 3x5 FEET*

SEWED STRIPES
CANVAS BOUND
FAST COLORS
BRASS GROMMET

## FREE

One of these big, fine flags will be mailed postpaid to any one securing and sending in seven subscriptions to your state family farm paper,

**The Washington Farmer**
**One Year 25c. Three Years 50c.**
**Five Years $1.00.**

Send your subscriptions, with remittance, to

## The Washington Farmer

**617 Central Bldg.,**
**SEATTLE, WASH.,**
or
**Review Bldg.,**
**SPOKANE, WASH.**


When you write to advertisers be sure to state that you saw their advertisement in this paper.

# Defies Handicaps

(Continued from page twenty-four.)

wood Farm, on Bessie Skylark De Kol 2d.
Heifer, senior yearling—Hazelwood Farm, on Hazelwood Hello Korndyke.
Heifer junior yearling—Hazelwood Farm, on Hazelwood Oakie Korndyke; 2, on Hazelwood Josephine Korndyke.
Heifer, senior calf—1 and 2, Hazelwood Farm.

Exhibitor's young herd—Hazelwood Farm.
Breeder's calf herd—Hazelwood Farm.
Get of sire—Hazelwood Farm.
Senior champion bull—J. Copaul.
Junior champion bull—Hazelwood Farm.
Grand champion bull—Hazelwood Farm.
Junior, senior and grand champion cow—Hazelwood Farm.

**SWINE.**

**Chester Whites.**

C. M. Menach, all awards, as follows:
Boar, under six month, 1, 2 and 3; sow under six months, 1, 2 and 3; boar and three sows under six months, 1 and 2; get of boar, 1st; produce of sow, 1st; barrow under six months, 1 and 2; champion barrow, 1st; junior boar under 12 months, 1st; junior sow under 12 months, 1st.

**Duroc Jerseys.**

Boar, 6 months and under 1 year—1 and 2, A. H. Poston & Sons, Spokane; 3 and 4, David Brown, Spokane.
Boar ander 6 months—1 and 2, A. H. Poston & Sons; 3 and 4, David Brown; 5, E. M. Fisher, Colbert, Wash.
Sow, 6 months and under 1 year—1 and 3, A. H. Poston & Sons; 2 and 4, David Brown.
Boar under 6 months—1 and 2, A. H. Poston & Sons; 3, B. E. Smead, Opportunity, Wash.; 4, R. A. Fisher, Colbert, Wash.; 5, P. P. Camp, Ione, Wash.
Boar and 3 sows under 1 year—A. H. Poston & Sons; 2, David Brown.
Boar and 3 sows under 6 months—1 and 2, A. H. Poston & Sons; 3, David Brown.
Get of boar—A. H. Poston & Sons.
Produce of sow—A. H. Poston & Sons.
Junior boar under 12 months—A. H. Poston & Sons.
Junior sow under 12 months—A. H. Poston & Sons.
Barrow under 6 months—E. M. Fisher, 1, 2 and 3.
Champion barrow—E. M. Fisher.

**Fat Hogs.**

Barrow, 150 to 200 pounds—1, 2 and 3, E. M. Fisher.
Pen of 3 barrows—1, E. M. Fisher.

**SHEEP.**

**Hampshires.**

Ram, 2 years old or over—1 and 2, J. G. S. Hubbard & Son, Monroe, Ore.; 3, H. S. Currie, Castor, Alberta.
Ram, 1 year old and under 2—1 and 3, Hubbard & Son; 2, H. S. Currie.
Lamb, under 1 year—1 and 2, Hubbard & Son; 3, Currie.
Ewe, 2 years old or over—1, 2 and 3, Hubbard & Son; 4, A. H. Poston & Sons, Spokane.
Ewe, under 1 year—1 and 3, Hubbard & Son; 2, A. H. Poston & Sons.
Flock—1 and 2, Hubbard & Son; 3, H. S. Currie.
Pen—1 and 2, Hubbard & Son; 3, A. H. Poston & Sons.
Champion ram—Hubbard & Son.
Champion ewe—Hubbard & Son.

**Shropshires.**

J. H. Jorgens, Spokane, all awards as follows:
Ram, 2 years old or over, 1; ram, 1 year old or under 2, 1 and 2; ram lamb, 1, 2 and 3; ewe, 2 years old or over, 1 and 2; ewe, 1 year old or over 2, 1 and 2; ewe, under 1 year, 1 and 2; flock 1; pen, 1; champion ram and champion ewe.

**Southdowns.**

J. G. S. Hubbard & Son, Monroe, Ore., all awards as follows:
Ram, 2 years old and over, 1; ram, 1 year old and under 2, 1 and 2; ram lamb, under 1 year, 1 and 2; ewe, 2 years old or over, 1 and 2; ewe, 1 year old or under 2, 1; ewe, under 1 year, 1 and 2; flock, 1 and 2; pen, 1; champion ram and champion ewe.

**Oxfords.**

Ram, 2 years old or over—1 and 2, H. S. Currie, Castor, Alberta; 3, Fisk farm, Spring Valley, Wash.
Ram, 1 year old and under 2—1, Currie; 2, Fisk; 3 and 4, H. W. Hastings, Thornton, Wash.
Ram, under 1 year—1, Currie; 2 and 3, Fisk.
Ewe, 2 years old or over—1, 2 and 3, Currie; 4, Fisk.
Ewe, 1 year old or under 2—1, 2 and 3, Currie; 4, Fisk.
Ewe, under 1 year—1 and 3, Currie; 2, Fisk.
Flock—1 and 2, Currie; 3, Fisk.
Pen—1, Currie; 2, Fisk.
Champion ram—Currie.
Champion ewe—Currie.

**Lincolns.**

J. G. S. Hubbard & Son, all awards as follows:
Ram, 2 years old and over, 1; 1 year old and under 2, 1 and 2; under 1 year, 1 and 2; ewe, 2 years old or over, 1; 1 year old or under 2, 1 and 2; under 1 year, 1 and 2; under 1 year, 1 and 2; flock, 1; pen, 1; champion ram and champion ewe.

**Fat Sheep.**

Yearling wether middle wool—1 and 2, Washington State collge; 3 and 4, H. S. Currie.
Wether lamb wool—1 and 2, Washington State college; 3, Hubbard & Son.
Best pen of 3 yearlings—Washington State college.
Best pen of 3 lambs—Washington State college.
Yearling wether long wool—1 and 2, Washington State college.
Pen of 3 yearlings—Washington State college.
Pen of 3 wethers, any breed—1, 2 and 3, Washington State college.
Grand champion wether—Washington State college.

**Goats.**

Buck lamb under 1 year—Mrs. Florence Hutchinson, Spokane.

# Farmers' Want Ads

## EDUCATIONAL 45

EARN MORE. ENROLL ANY TIME, AT Behnke-Walker, Portland, northwest's biggest business college, because best. Graduates assured positions. Write for catalogue.

# FARMERS' WANT ADS

This is the farmers' "Want," "Sale" and "Exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rate, 7 cents a word per insertion with a special rate to farmer subscribers to the Washington Farmer of 6 cents a word per insertion for from 4 to 12 times and 5 cents a word per insertion for 13 times or more.

All commercial and land advertising, 7 cents per word each insertion. Open also to nonsubscribers.

In using these columns advertisers must observe: (1) No advertisement will be inserted for less than 75 cents. (2) Every word, number and initial, including name and address, must be paid for. (3) Cash must accompany order.

Above rates also include insertion in the Oregon Farmer and the Idaho Farmer.

## FRESH FOOD PRODUCTS 56

WILL DELIVER BOX 48 LEMONS ANY place, exp. paid, $1, or parcel post, $1.25. Ernest Vince, Santa Barbara, Cal.

## HONEY, BEESWAX—Wanted. 58

SEND SAMPLES OF YOUR HONEY AND beeswax; state quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

## EGGS and BUTTER WANTED 59

WE ARE ALWAYS IN THE MARKET for good eggs and dairy butter. Send us your next shipment. Oregon Farm Products Co., 386 Halsey st., Portland, Ore.

## MISCELLANEOUS—FOR SALE 60

SASH AND DOORS.

If you are going to build we want to send you our catalog No. 27, of sash, doors, frames, paints, building paper, etc. Sent free postage paid, on request.

We are still selling prepared roofing at $1.35, $1.70 and $2.10 per roll of 108 square feet.
6 x panel doors, $2.16 and up.
Cottage front doors, $2.95 and up.
Rough cedar siding at $15.
Flooring, 4-0 to 9-0 at $25.

We sell any one. Ship any where, and guarantee safe delivery.
O. B. WILLIAMS CO.
1943 First ave. So., Seattle, Wash.

## MISCELLANEOUS WANTED 63

POULTRY WANTED.

We are cash buyers of poultry and dressed meats, also cream. Write us for prices, shipping tags and premium catalogue for cream shippers.
COMMERCIAL CREAMERY CO.
SPOKANE, WASH.

## JUNK SHOPS 90

HIDES HIDES HIDES
Write for prices and shipping tags.
BUYERS OF ALL KINDS OF JUNK.
CENTRAL HIDE & JUNK CO., SPOKANE.

## MACHINERY—FOR SALE 93

"WITTE" GASOLINE ENGINES
save labor and are carried in stock by
HIGGINS MACHINERY COMPANY,
312 FIRST AVE. S., SEATTLE.
Write for Catalogue.

## AUTOMOBILES 114

FORDS START EASY IN COLD WEATHER with our new 1919 carburetors; 34 miles per gallon; use cheapest gasoline or half kerosene; increased power; styles for any motor; very slow on high; attach it yourself; big profits to agents; money back guarantee; 30 days' trial. Air-Friction Carburetor Co., 321 Madison, Dayton, Ohio.

## STOVE & FURNACE REPAIRS 126

WRITE M. S. RUBENS, SPOKANE, FOR any parts needed to repair stove, furnace.

## HARES AND RABBITS 173

"A FORTUNE IN RABBITS"—HAVE raised the price. We will pay to $8 per pair. Want you to raise them for us. Send stamp for particulars. H. E. Gibson Co., Arcadia, Calif.

## POULTRY 174

S. C. W. L. AND R. I. RED CKLS. AND pullets. Mrs. Rominger, Underwood, Wash.

## LIVE STOCK 177

REGISTERED HOLSTEIN BULL CALVES, 4 to 8 wks. old, from high producing cows; will sell cheap if taken at once. Glenwood Farm, R. 2, Snohomish, Wash.

BERKSHIRE SPRING PIGS OF CHAMpionship breeding for sale at reasonable prices. Send for description and price. R. W. King, Sweetwater, Idaho.

REGISTERED RED POLLED HEIFERS, from 3 weeks to 3 years old. All bulls sold. Mrs. D. F. Alward, Orting, Wash.

SHETLAND PONIES; BARGAIN PRICES. Write for list, N. C. Sorenson, Onalaska, Wn

REGISTERED LINCOLN RAMS FOR sale. N. D. Brouillette, Newberg, Ore.

## HOTELS 306

WHITE'S HOTEL AND RESTAURANT. Rooms, hot and cold water, 75c up. Breakfast 20c to 40c. Dinner, 25c to 50c. Sprague and Stevens, Spokane.

GALAX HOTEL; NEW AND MODERN; 75C and $1. Main and Bernard, Spokane.

NEW MADISON HOTEL, 75C AND UP. First and Madison, Spokane, Wash.

## FAIR PREMIUM LISTS 370

TWIN FALLS COUNTY FAIR, OCT. 1-4. Premium list now ready. Write J. M. Markel, sec'y, Filer, Idaho.

## RUBBER STAMPS and SEALS 384

FOR RUBBER STAMPS, STENCILS, badges, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

## ARTIFICIAL LIMBS 424

SCHINDLER ARTIFICIAL LIMB CO., 8115 Wall st., Spokane, Wash.

## BUSINESS OPPORTUNITIES 516

I WANT TO SELL MY DAIRY AND ICE cream plant; doing good business. See owner or write H. Hermanson, Roslyn, Wn.

## PLUMBING, STEAM FITTING 594

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

## SEEDS 620

CHEAT SEED.
Carefully selected and recleaned. $3.25 per 100 lbs, f. o. b. Albany.
MURPHY'S SEED STORE.
ALBANY, ORE.

WE SPECIALIZE IN TIMOTHY, ALFALfa, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Idaho.

RECLEANED CHEAT SEED. VALLEY Hay. M. Senders & Co., Albany, Ore.

## FARM LANDS—FOR SALE 651

A BIG LAND OPENING.
COWS, HOGS, AND A BANK BOOK.
Your dream of life, of ease, comfort and independence await you at
BIRMINGHAM,
On Port Susan Bay, Snohomish County; 6000 acres of the best land that lies out doors; a 2 hours' ride from Seattle places your feet on the richest, most productive soil in the whole state of Washington; rail and water transportation; near paved roads, schools, churches, cannery and condensery; 3½ miles of waterfront and finest beach on Puget Sound; 20 miles of beautiful lake shore, surrounding 8 picturesque lakes; these lakes teem with trout. Get in on the first choice for $35 per acre and up; 10 yearly payments, 6 per cent interest.
This is but the beginning of the story of Birmingham. Send to the owners for illustrated literature. BROWNELL LAND CO., 904 Third ave., Seattle, Wash.

YOUR CHANCE IS IN CANADA—RICH lands and business opportunities offer you independence; farm lands $11 to $30 acre; irrigated lands, $35 to $50; twenty years to pay; $2000 loan in improvements; loan of live stock; taxes average under twenty cents an acre; no taxes on improvements, personal property or live stock; good markets, churches, schools, roads, telephones; excellent climate—crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Allan Cameron, general superintendent land branch, Canadian Pacific Ry., 30 Ninth ave., Calgary, Alberta.

PRODUCTIVE BULKLEY VALLEY, B. C. Where 40 bu. wheat, 65 bu. oats, 40 bu. barley and 2 tons timothy are average crops; native grass and peavine waist high; good soil; 100 per cent tillable; right on R. R.; mild climate; pure running water; 35 inches rainfall. Price $18 to $25 per a. Easy terms. Low rate excursions every week. Write Bulkley Land Co., 305½ Riverside ave., Spokane, Wash.

WIDOW, PAST 80, OFFERS FARM. 115 a.; all fenced and cross-fenced; 35 a. in cultivation; 10 a. alfalfa; 30 a. timber, bal. pasture; good 6-room house, piped for spring water; good barn, outbuildings; unfailing spring to irrigate 30 a.; no waste land, $12,000, ½ cash, bal. terms; near R. R. and Columbia river transportation. Mrs. Rosanna J. Hendryx, R. 1, Orchards, Wash.

WANTED—A PARTY WITH $10,000 CASH, as partner in one of the best high class land prospects in Washington.
We have Alberta land for sale in amounts to suit purchaser. Prices $9.50 per acre and up.
UNION INVESTMENT CO.
406 ZIEGLER BLK., SPOKANE, WASH.

MONTANA IRRIGATED LANDS.
To close out two large sheep ranches, we are offering choice irrigated land in tracts of any size at bargain prices, and on very easy terms; 100 per cent tillable; best of water rights and crops. Address owners, Lewis Penwell Company, Helena, Mont.

FOR SALE—ONE OF THE BEST DAIRY ranches in Lincoln county; on Yaquina river; half bottom land; good house, new barn and silo. Price, including all stock, feed and machinery, $17,000. Chas. Severson, Toledo, Oregon.

ONE OF THE BEST FIVE ACRES IN OREgon; ideal place for elderly couple or young couple; 5 sawmills close by; about 20 miles from Salem; half down, balance easy terms. For particulars address A. H. Persey, Scotts Mills, Ore.

FOR SALE—ALFALFA, WHEAT AND stock farm; well improved alfalfa farms for $75 to $100 per acre; paid water. The land produces 5 to 7 tons per acre. John Hardwick Realty Co., Vale, Ore.

$10,000—$4000 DOWN, BUYS QUARTER Palouse land; including $1600 stock, tools, feed, household goods; mile town; high school employment; 75 acres ready to seed. F. Draper, Rosalia, Wash.

STOCK AND DAIRY RANCH FOR SALE at a bargain. 1160 a. in western Oregon, in Lincoln co. For details write Emil T. Raddant, Orton, Ore.

83 A. GOOD LAND; RAISE ANYTHING; plenty of water. Write owner. Mrs. A. B. McMath, Box 82, Elmira, Cal.

## FARM LANDS—WANTED 654

WANT TO TRADE MY NEWSPAPER FOR a small farm or fruit or poultry ranch; want to get into the open. Thomas Nelson, Cambridge, Idaho.

WANTED—TO HEAR FROM OWNER OF farm for sale. Mrs. Booth, Drawer D, Highland Park, Des Moines, Iowa.

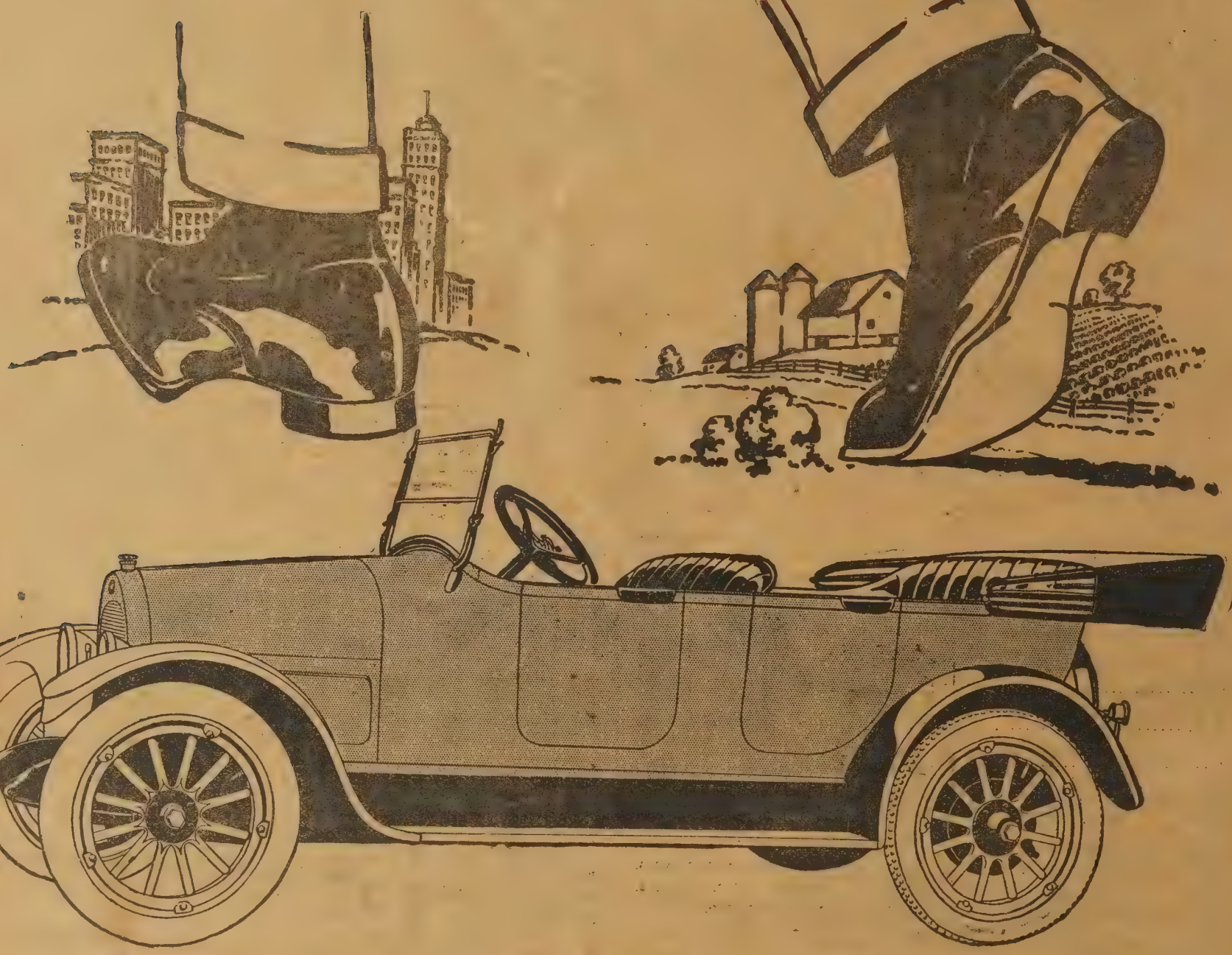
WANTED—TO HEAR FROM OWNER OF farm or unimproved land for sale. O. K. Hawley, Baldwin, Wisconsin.

## FOR SALE OR EXCHANGE 702

FOR SALE OR EXCHANGE—300 ACRES diversified farm; in Eastern Washington; 3 mi. from town; all level; no stumps; splendid new set of buildings; well watered; new complete set of farming tools, horses, hogs, cattle and growing crop, everything goes. Will sell equity of $8000 for cash or trade for lumber yard, bank or grain elevator in good farming community. Address care of Home Lumber company, 2901 Trent ave., Spokane, Wash.

# Overland

## The Thrift Car



# Makes a Bigger Man of the Farmer

FARMING is the biggest consumer of man-power; every farmer knows there is a shortage of man-power. Therefore every one must increase his efforts; he must do more work and more of it in less time.

A very large percentage of Overland cars are bought by farmers. They realize Model 90's value in multiplying their usefulness, saving their time, energy and increasing their efficiency.

Let an Overland perform innumerable work duties for you and in addition be an endless source of recreation and benefit for every member of the family.

Select this beautiful, roomy Model 90 and you save money in the first cost and maintenance.

You can not get complete satisfaction from less advantage than it gives—

And you can not get as much value in any other car for the low price of this Model 90.

It has a powerful, fuel-saving motor; narrow turning radius; rear cantilever springs; 106-inch wheel base; 31x4 tires, non-skid rear, electric Auto-Lite starting and lighting and vacuum fuel system.

Order your Model 90 now.

Five Points of Overland Superiority:

*Appearance, Performance, Comfort, Service and Price*

Willys-Overland Inc., Toledo, Ohio
Willys-Knight and Overland Motor Cars and Light Commercial Cars
Canadian Factory, West Toronto, Canada.
Catalogue on request, please address Dept 1192.

SEPTEMBER 19, 1918.

NOTICE TO READERS: When you finish reading this paper, place a U. S. 1-cent stamp on this notice, mail the paper and it will be placed in the hands of our soldiers or sailors destined to proceed overseas. NO WRAPPER. NO ADDRESS. A. S. Burleson, Postmaster Gen.

PUBLISHED WEEKLY.


# THE WASHINGTON FARMER

SUCCESSOR TO

THE RANCH PACIFIC DAIRYMAN HORN AND HOOF


## Home Service Flags Betoken War-Time Activities











THE first flag, on the top of this page, is the farm service war flag, designed by the Pacific Northwest Farm Trio, and dedicated to the farmers of the entire nation. Already this flag is widely displayed on the farms of Washington, Oregon and Idaho. The central star stands for the farm and small stars may be added to represent every wartime farm worker in the family.

The remaining four flags are reproduced in original colors. At the left is the Y. M. C. A. flag. In the center is the shipping flag, which may be used in honor of the member engaged in shipbuilding. In the upper right-hand corner is the flag used where some member of the family is engaged in work exclusively for the United States government. The remaining flag will be readily recognized as the Red Cross flag.

More Chickens

More Eggs

More Money

Makes Hens Lay

# LACTEIN

Makes Hogs Pay

More Hogs

More Pork

More Money

# A WONDERFUL DISCOVERY

## *Pure Condensed Buttermilk*

**Lactein for Chickens.**

Lactein is a scientific product produced under perfect sanitary conditions from fresh buttermilk and whey at the creameries. cheese and casein factories on the Pacific Coast.

The solids of both buttermilk and whey are very rich in the one greatest tonic known for chickens, LACTIC ACID. They are also rich in protein (albumin and milk sugar or carbohydrates). Lactein is produced by separating the water from the solids at a temperature and in a manner that not only thoroughly Pasteurizes and sterilizes the solids, but retains and stimulates the Lactic Acid which in buttermilk is practically lost if either is brought to a high temperature or reduced to a dry state.

**Lactein is buttermilk and whey without the water.**

Lactein retains all the health-giving food values and a uniform acidity without the useless bulk of water encountered in either whey or buttermilk and will keep pure and fresh under any condition or in any climate for any length of time.

**Lactic Acid is a tonic.**

For years the greatest poultry experts in the world have recognized the value of sour milk as a food tonic—a regulator for poultry, but when they have undertaken to use raw buttermilk have run up against objections which more than offset the many advantages for its use in poultry feeding. In the main these objections were the excessive cost, inconvenience, trouble and expense of handling and the poor keeping qualities. Lactein eliminates every objection to the use of raw buttermilk and reduces the cost to a mere trifle.

**One gallon Lactein equals thirty gallons buttermilk.**

One gallon of Lactein when mixed with 29 gallons of water has a tonic value for chickens equal to 30 gallons of the best buttermilk and will give better results than 30 gallons of raw buttermilk when fed according to our directions, not to mention the convenience in handling and the saving in price. Lactein is prepared by the chicken raiser in this manner each day in the amount required, and fed as drinking water or in mash feed or both.

**Lactein saves the baby chicks.**

Lactein will cut your heaviest losses 90% in baby chicks. It prevents the dreaded white Diarrhoea and will show much more rapid growth in weight than for chicks given the same food without Lactein. This has been proven many times. Lactein is equally valuable for the entire feathered family —turkeys, ducks, geese, pigeons, etc.

Lactein is a tonic, appetizer, liver and bowel regulator, body builder and egg producer.

Any chicken raiser who will feed Lactein as directed for 30 days will thereafter never be without it, for it means more healthy chickens, more rapid growth, more eggs and more money.

**Lactein for Hogs.**

Lactic acid is the best appetizing agent known. It not only keeps the digestive tract free from putrefying bacteria, but it promotes the growth of acid-forming bacteria and maintains and regulates normal digestion. There is nothing that compares with Lactic acid in making a grain ration palatable for hogs.

**Better Than Buttermilk.**

Lactein has proven to be much better than raw buttermilk, because the acidity is always the same, having been sterilized and heated to such a degree that all pathogenic bacterial life has been destroyed and the concentration with the special treatment has increased the Lactic acid that makes it the most safe, reliable and profitable supplement to grain when fed to poultry and hogs.

**Lactein Is a Muscle Builder.**

Lactein, on account of its easily assimilable protein and high content of nutritive salts, is of great value as a muscle and bone builder, and especially for young pigs and brood sows. It creates appetite, increases assimilation and is a splendid conditioner.

**Lactein Increases Profits.**

Lactein is not only a safe feed, but considering its high factor in weight production and in adding food value to grain feed is the most valuable and economical feed to be secured.

**Lactein Prevents Disease.**

Lactein is both a tonic and a laxative. It keeps the hogs strong and healthy and reduces the death rate to a minimum. In fact if pigs are fed on Lactein they will not be subject to cholera or other diseases, as the Lactic acid destroys all poisonous bacterial growth in the intestines, thereby making disease impossible, but nothing will convince you of the value of Lactein like feeding it for a few months to your own hogs—and see them "kink their tails" and "squeal" when they come to feed. Try it.

**How to Feed Lactein to Hogs.**

There are no set rules for hog feeding, but we all must acknowledge that hogs should have a balanced ration. They must also be fed something they like, for hogs, like individuals, have appetites and know what they like or dislike. There is nothing so good as Lactein to keep a hog's appetite at the top notch. It may be fed as a slop or drinking water by mixing one part Lactein to 30 parts water, or it may be first mixed as follows: Lactein one part to water 10 parts and then added to grain in the ratio of one gallon to 10 pounds of grain, or it may be fed both ways at the same time. It can be used with any feed where you would use raw buttermilk, and in the same way when the water has been added, as we only remove the water and you get the full feed and tonic value of the buttermilk with the added advantage of this product being thoroughly sterilized and Pasteurized, thereby killing all injurious bacterial growth which is only too common in raw buttermilk.

LACTEIN is a tonic, appetizer, liver and bowel regulator, body builder, flesh and bone producer. It is real buttermilk condensed.

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FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 38 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF September 19, 1918

# Break Deadlock in Grain Shipments

## *Should Permit Farmer to Ship Direct to Grain Corporation and to Draw Advance Money on Bill of Lading, Says Chairman E. A. Bryan, of the Idaho State Council of Defense.*

(Points From the Interview With Dr. E. A. Bryan.)

We are facing the great danger of serious losses of millions of bushels of wheat in Idaho, where the increased production has been quite large and where the storage capacity in southern Idaho is wholly inadequate.

In my judgment the solution of this problem is simple and easy. Permit the farmer or dealer to ship direct to the grain corporation and to draw on the bill of lading for 50 to 80 per cent of the amount.

We are facing a deadlock all around. The banks borrowed money payable this fall when the harvest should mature, with which to loan money to the farmer with which to buy the third Liberty loan. The banks must now pay that money back. To do that the farmers must pay their notes with money received from the grain and from the same source they must be ready to purchase the fourth Liberty loan.

The public generally understands that the grain corporation was created for the purpose of making such purchases and it seems a little strange that after having been created for that specific purpose, it can not act except by buying grain from a commission merchant at Chicago, Portland or other such point.

It occurs to me that the government can own grain at Twin Falls just as well as in Chicago or Portland. If the law is defective in this particular, can not congress remedy the defect inside of 48 hours?

By RAY W. FELTON.

Southern Idaho has more than 14,000,000 bushels of wheat to market this fall. Less than 1,000,000 bushels have been sold at this writing. Growers in many cases are in a quandary. They have met with unsatisfactory results in trying to deal with warehouse companies. Turning then to the food administration grain corporation they have found its mode of procedure impractical. In an effort to provide relief—and that quickly—the state council of defense and the extensive department of the University of Idaho, are acting jointly in a movement to secure a modification of the grain corporation's ruling as to advancing money on bills of lading. In short these two organizations are putting forth a determined effort to bring about a method of paying for southern Idaho wheat similar to the system employed by the government in buying wool from the sheepmen.

Appeals have been made to the grain corporation which, it is hoped, will result in permitting the farmer to ship direct to the United States Grain corporation and to draw on the bill of lading for from 50 to 80 per cent of the amount due him. M. H. Houser, vice president of the corporation, has advised that the grain corporation can pay for wheat only after it is placed in store at designated terminals, thereby making it impossible for the corporation to make advances. This, of course, makes it necessary under the present syster for the grower to deliver his wheat in store at one of these designated points, which, for southern Idaho, is Chicago, in order to secure the $2 f. o. b. guaranteed price. The grower, of course, has the privilege of shipping to any other market, but he will then not get the guaranteed price.

Serious difficulties have presented themselves in marketing locally. Nearly every elevator in southern Idaho is privately-owned. They store only their own wheat. The owners buy but do not store for the public. When the farmer brings in his wheat he must sell at the price offered or take his wheat home, and if he has no farm storage facilities, it may rot before it can be moved.

Dr. E. A. Bryan, chairman of the state council of defense, has been advised that elevators at Jerome, Wendell and other points, have ceased to buy because the dealers or owners of the elevators have received no returns from the government corporation for shipments made even as far back as 10 weeks. Money for purchasing is exhausted, and the owners, not being able to hypothecate bills of lading, are not able to obtain money with which to make further purchases.

"One of the worst results of this situation," said Dr. Bryan, in discussing the matter the other day, "is to leave our meager storage capacity partly filled. If the elevators were public, not private, we could at least fill them full; being private, either the lack of money or the indisposition of the owners may leave them far below their capacity and a bad storage situation is made worse thereby."

L. W. Fluharty, director of the extension department, tells me he knows of many warehouses and elevators in southern Idaho which are filled only to one-half or two-thirds of their capacity.

Discussing the situation further as it relates to the forwarding of grain shipments direct to Chicago, Dr. Bryan said:

"Mr. Houser, in a circular lately issued, suggests that shippers ship to the grain corporation, through some grain commission merchant who will charge 1 per cent for looking after it, and will permit the shipper to draw, charging 6 per cent from the time the draft is made until final settlement for the wheat. That is good so far as it goes. But if the farmer or small dealer ships in this way, he must know the name of a reputable dealer in Chicago whom he can trust with his business and he must have arranged with this firm to honor his draft. There is a very small percentage of farmers or small dealers who know the name of any grain commission merchant in Chicago, and they are much less acquainted with the reliability of any one of them. The grower is not able to make a trip to Chicago to investigate, and I can readily see that the grain corporation does not care to assume the responsibility of giving a list of such reputable firms, so for all practical purposes the farmer is stopped from making a shipment upon which he can make a draft.

"In my judgment the solution of this problem is simple and easy. Permit the farmer or dealer to ship direct to the grain corporation and to draw on the bill of lading for from 50 to 80 per cent of the amount. If the government fears there is risk in a draft for 80 per cent, let it be down to 50 per cent. If the government fears loss on a railway which it controls, let it insure or require the shipper to insure the grain in transit. The public generally understands that the grain corporation was created for the purpose of making such purchases and it seems a little strange that after having been created for that specific purpose, it can not act except by buying grain from a commission merchant at Chicago, Portland or other such point.

"Of course it is plain that the grain corporation has no warehouses, elevators or terminal facilities of its own for the handling of grain, but there is nothing to prevent it from leasing or even commandeering these facilities for its own use until after the war. This plan could be worked out in a thoroughly practical and satisfactory manner with no hardship to the warehouse or elevator companies."

Mr. Houser has stated that the legal department has held that advances are not authorized under the law creating the grain corporation.

"The question is," Dr. Bryan continued "what is an 'advance'? If anything is to be called an advance prior to the grain being received at Chicago, it might as well be called an 'advance' prior to its being received in France or at Liverpool. Is there anything in the act which forbids the government to buy and own the grain at the shipping point, subject, of course, to subsequent fixing of the grades at any point named? When the grain companies used to buy from our people in the Palouse country, they did not 'advance' us the money and the deal did not contemplate its becoming their grain after it had reached Portland or Liverpool. They gave us the money and we gave them the warehouse receipts. The grain was theirs and the money was ours. Instead of bringing about a congestion at the shipping point on the seaboard, they moved their grain when their ships were ready to receive it. It occurs to me that the government can own grain in Twin Falls just as well as in Chicago or Portland. If the law is defective in this particular, can not congress remedy the defect inside of 48 hours?

"In discussing this matter I wish to make it plain that the state council of defense does not take a point of view based upon our representing the interests of the farmer, or the dealer, or the banker or the people of southern Idaho. It is based upon the point of view of representing the government. We are faced with a grave danger of serious losses of millions of bushels of wheat in this state, where the increased production has been quite large and where the storage capacity in southern Idaho is wholly inadequate. The saving of that loss for our armies and our nation is our first concern.

"We take this point of view solely in the interests of the government. Of further concern to us is assurance that farmers who subscribed for the third Liberty loan, borrowing the money from the banks with which to pay it, may have the cash with which to pay the banks, and that they may have the cash promptly with which to purchase the fourth Liberty loan.

"We are facing a deadlock all around. The banks borrowed money payable this fall when the harvest should mature, with which to loan money to the farmer with which to buy the third Liberty loan. The banks must now pay that money back. To do that the farmers must pay their notes with money received from the grain and from the same source they must be made ready to purchase the fourth Liberty loan. Unless something can be done to meet this situation, we have a deadlock in which the grain which the farmers produced for governmental use, can not move, the money can not move and the bonds can not move."

## Letter From Mr. Houser on Wheat Shipments Direct to Grain Corporation

To the Editor: I see by your issue of September 12 that there still seems to be some doubt in your mind. I thought I had made myself clearly understood by fully covering your question that we were receiving direct consignments from the farmers, in fact we receive several cars every day. These we distribute around to the various docks in proportion to their facilities to unload and store.

The labor situation here is anything but what it might or should be at this time, but please rest assured that so long as there is room for a carload of wheat on any of the terminal docks all farmers' shipments will be taken care of the same as they have been.

We have capacity here on the terminal docks for between five and six million bushels of wheat. This, of course, does not include the terminal mill storage and what they are receiving. Taking the two together should approximately take care of eight to ten million bushels of wheat, and unless we get a greater allotment of tonnage than we have been receiving to keep either the wheat or the flour moving, the terminal facilities will sooner or later become congested, the same as they were last year.

FOOD ADMINISTRATION GRAIN CORPORATION.

By M. H. HOUSER,
Second Vice President.

Portland, Ore., Sept. 13, 1918.

## Wheat at Seattle

Announcement comes from Seattle that Puget Sound millers have withdrawn all buying in the country and temporarily abandoned future purchases, owing to the overcrowded condition of the bulk and sack wheat storage spaces at the terminal. Approximately 5,000,000 bushels of bulk and bag storage at the mills and in public warehouses has been filled, and with a scarcity of ocean tonnage for moving wheat and flour to the Atlantic millers have no alternative but to get off the market.

Friction has been generated because of the fact that the port commission of Seattle, whose properties were built under a special legislative enabling act authorizing an issue and sale of bonds to be paid by Seattle taxpayers, has leased all its bulk wheat storage space, consisting of 1,500,000 bushels, to the Tri-State Elevator company, an outside farmers' organization, and Kerr, Gifford & Co., nonresident exporters. Millers have demanded that this space be prorated, on the grounds that both the wheat and flour which it is desired to store are for the armies in foreign fields and is a war emergency measure. The port commission in reply holds that the lessees were first to apply and that it has no authority to alter the conditions of the contract.

M. H. Houser, second vice president of the grain corporation, has been appealed to to offer a remedy. Other governmental authorities will be sought out for relief. The chamber of commerce wired Chairman M. H. Hurley of the United States shipping board of the situation, urging him to supply some of the ships now so frequently built and launched at the Seattle yards for the flour and wheat carrying trade in the Atlantic. It was pointed out that the mills already have more than enough flour to overload all the three vessels scheduled to sail from this port during September, and that it was accumulating to a serious degree. Farmers in the three north Pacific states, it was urged, would be affected, and live stock, which can not be fed because of the scarcity of millfeed in the event that the mills shut down would be rushed to market and the industry uprooted.

Mr. Hurley's reply was to the effect that both himself and Julius Barnes, head of the grain corporation, were at work on the problem. Millers declare that if relief is postponed for more than 10 days a majority of the mills will be compelled to close down.

### RECORD PRICE FOR HOGS.

The highest price ever paid on the Kansas City market for both cattle and hogs was reached September 11, when steers were quoted at $18.80 and top hogs sold for $20.50.

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## *Twenty-Three Million Men*

Former Ambassador Gerard was once scoffingly told by a German official that America would not fight and that therefore Germany had nothing to fear from this country regardless of her insults and her inhuman offenses against mankind. Fifteen months ago nearly 10,000,000 of this country's best young men registered for war against the offender. Nearly 2,000,000 of them have crossed the seas, and several hundred thousand of them have participated in actual battle against the proud Prussians. Last Thursday nearly 13,000,000 more of America's men registered for service against the kaiser's fiendish horde, and before next June 2,000,000 or more of them will be on European soil ready for the great military tidal wave that will inundate and destroy forever the autocracy that has menaced the peace of the world since the family of Hohenzollern ascended the throne of Germany.

What would that German officer say to Ambassador Gerard now? What are the war lords saying among themselves just now, with the allied manpower doubled by the peace-loving nation that "would not fight"? There was a time, not so far back, when William Hohenzollern and his aides believed they had a chance to win the war, and when, in fact, they did have a chance. But that time is past. Germany can not win, and no nation knows it better than she herself. The end may be near or it may be distant; it is unwise to predict victory before next summer's sun moves southward, but victory will come. America has 23,000,000 men registered to bring victory, and if need be other millions will register. America's entire resources are back of those men as the resources of France and England and Italy have been back of the men of those nations who have borne the grievous burden of battle so long. America is in the war, soul and body, and it is well that the foes of humanity reflect upon the fact that America has never lost a war.

It doesn't take genius to discover imperfections, and less than genius to talk about the imperfections of others.

## *No Contaminating Alliance*

Governor Ernest Lister of Washington, in a recent address, told his hearers that no military victory could end the war, but that the war would be over only when the whole woof and warp of the undemocratic governments of Germany and her allies were made over and the world guaranteed for all time against the injustices that such governments make possible. He illustrated his point by reference to Turkey, reminding his hearers that recently there was a threatened break between Germany and her Turkish ally and that some people had predicted that Turkey would withdraw and join France, England, Italy and the United States. "Whatever attitude Turkey might take against her present ally," said the governor, "she can never become an ally of this country. No nation with her history for inhumanity can suddenly become a part of the world's great humanitarian army. There is no place for the soldiers of Turkey alongside the Stars and Stripes."

## *One of the Great Results*

Catholics, Protestants and Jews work together in one great movement to serve the common good. Humanity is greater than doctrine or creed. Last week, at a meeting in Washington, D. C., the object of which was to coordinate the effort to raise a total of $170,000,000 for war relief work, John G. Ager, representing the National Catholic War council, proposed that John R. Mott, national head of the Young Men's Christian association, be made director general of the united campaign. Mortimer L. Schiff, representing the Jewish Welfare board, seconded the motion. Mr. Mott was chosen as national leader of the movement.

There is something more than mere efficiency for raising money in this cooperative agreement. It is typical of the spirit of liberality that is seizing the minds of all people, regardless of religious beliefs or creeds or doctrines. This spirit of liberality rests upon a fundamental that transcends creed, the fundamental principle of humanity. Suffering is a thing to be relieved; wrong is a thing to be righted. It is one of the great results of the war that all denominations are enabled to lay aside differences and unite on the one great principle of unselfish service to suffering mankind.

This fall's elections will expose genuine and sham patriotism.

## *Too Few Citizens Voted*

The returns from the primary elections in various states this fall indicate that an unprecedentedly light vote was cast. There are reasons for this, but voting is not only a privilege, but a duty. No citizen should neglect to register and cast his ballot if it is physically possible for him to do so. It is especially urgent this year when hundreds of thousands of voters are practically disqualified because of military service. It is regrettable that no method by which the soldiers abroad may vote has been provided, but their absence should be only a greater inducement to the citizen at home to study the political problems and cast intelligent ballots. There is still opportunity for those who failed to qualify for the primary election to register for the general election in November, and it is to be hoped that the poll then will be truly representative of the people of the nation.

Recognition, rather than praise, gives fullest encouragement.

## *Poise in American Life.*

More than ever before in our history there is need of poise in American life. Poise is being willing to listen earnestly and patiently to what the other fellow has to say. Then you may expect the other fellow to listen earnestly and patiently to your own side of the question. When the two sides of the question are stated plainly, for instance, between the producer and consumer, there is less occasion for denunciation on the one side or the other. Technical language of the trade will not bring about this needed understanding between the parties. Facts must be stated plainly and simple language used.

The times are less auspicious than ever before for "putting one over."

As President James Foust said at the recent meeting of the Association of American Dairy, Food and Drug Officials at Chicago: "While we aid in readjustment let us continue to insist upon honesty. Let food be sold for exactly what it is. To encourage or permit one part of the people to fool the rest of the people is not to be excused under any circumstances and is especially reprehensible in these critical times."

Opportunity spells big for the young American today—girl or boy.

## *Food Supply Conditions*

The food supply depends on production and distribution. The production depends on labor; but labor is scarce because so many men have enlisted as fighters, and because so many others are working in factories at wages higher than the farmer has been able up to this time, to pay. The manufacturers have generally been able to fix the prices of commodities, while the farmer could not fix the prices of his products. Therefore, the manufacturer has been able to pay more for labor than the farmer could pay. However, the movement on the part of the men, women and children of the whole country, to economize time, land, labor and to cut out luxuries, will very nearly solve the problem.

After the labor problem comes the question of distribution, which means cars to transport the products to the markets, and a sane system of marketing. The government will not likely permit any man or corporation to corner any necessary article of food supply. The workers and the fighters will not be permitted to starve because some moneyed speculator wants to enrich himself while the workers suffer. Further, if the sentiment that seems to be growing takes form, there will be no groups of loafers on our streets and the old law, "if a man will not labor neither let him eat," will be revived and made effective. It will be hard on the parasites, but while the body politic or social group is fighting for its life there should be no social parasites.

Every one should be a worker or suffer the penalties that the bees inflict upon their drones. They sting them to death in order to save the food supply for the workers, fighters and young bees.

G. L.

## *Safety Depends Upon Fundamentals.*

Men and women must be fed and clothed and sheltered in the days to come as well as in the days that are passed. There are certain fundamentals in food and clothing and shelter. He who supplies any of these fundamentals is assured of a better demand for his products year in and year out than he who caters to the fads of the moment.

Bread made from wheat will remain a fundamental article of diet. The potato as a vegetable will remain in continuing demand. There may be days of scarcity and there may be days of plenty, but throughout it all milk will remain a food necessity. So will eggs; so will apples, and so will meat. To the starving man no heaven is more alluring than one whose tables are bountifully provided with bread and meat and potatoes.

Wool and cotton and leather can not be abolished from the civilized demands of mankind. Wood and iron and coal will remain permanent factors in human progress.

## *All Are Made of One Clay*

When L. W. Hill, president of the Great Northern road, was in the northwest recently, he traveled at least part of the time in an upper berth in a public sleeping car. Railroad presidents usually travel in private cars and sleep in little palace-like bedrooms on board their trains. But these are war times. Why shouldn't President Hill or any other man be glad of an upper berth in a public car? Over yonder there are thousands and thousands of rich men and poor men sleeping the eternal sleep side by side in shell holes in France. In army camps all over this country rich and poor are marching side by side, getting ready to go over there and offer their sacrifices. War is no respector of persons, and after the war is over the men of different classes are going to look with different eyes upon each other. Men who can fight and bleed side by side for a common cause, can live and cooperate together for common good.

## *Exhibitors Now in the Service.*

Here is a news item that applies to other than poultry exhibitors:

"Kegley Brothers, who have exhibited Barred Rocks at the Southwest Washington fair and other poultry shows for years, are both in the army and their flock was not represented this year. The young men were popular and are much missed."

# German Soil Is Jeopardized

## *American Troops Threaten Invasion of Lorraine Province*

Not since the launching of the allied drive two months ago has a more significant week been passed on the battle front than that just closed. Immediately following the announcement that the allied drive had paused came the report of the launching of a gigantic attack by the American first army under the leadership of General Pershing on the St. Mihiel salient, southeast of Verdun. Less than 36 hours later it was officially announced that this salient had been completely wiped out, the American forces covering approximately 155 square miles of territory, with the capture of 20,000 German troops and a large quantity of guns and munitions. The St. Mihiel salient is one of the relics of the early days of the war, when the Germans drove a sharp wedge deep into the French lines in an encircling movement about the fortified positions of Verdun. With its elimination the last of the wedges in the allied lines disappeared, the battle line at this writing being in the form of a smooth curve from the Belgian channel ports to the Swiss border, with the allies on the convex side of the curve and gradually but apparently surely pushing it back toward a straight line.

**ALLIED ARMY ON GERMAN BORDER.**

The drive by the Americans, who were assisted by French troops, is especially significant, as it places the allied army on the German border. Metz, one of the greatest German frontier forts, is directly in front of the American drive, only a few miles distant, some of the outside fortifications being only four miles from the American line at this writing. Whether it is the immediate intention of General Foch to use the Americans in an attempt to capture this position is conjectural, but it does not seem improbable that before this reaches the readers an attack will be made on Metz with a view to reducing its fortifications. Metz lies in the province of Lorraine, which was taken from France by Germany at the end of the Franco-Prussian war in the early '70s, since which time the population of that province, together with that of Alsace, have been restless under the burden of German rule. The advance of General Pershing's men brings within view of these people their first chance of deliverance from bondage in nearly 50 years. The position of the Americans at this time is approximately 380 miles from Berlin.

**FOCH LAUNCHES NEW DRIVE.**

Marshal Foch, pursuing his policy of giving the Germans never a minute's rest, followed up the incisive stroke of the Americans which wiped out the St. Mihiel salient in two days' time, by launching an offensive Saturday morning on the French front along the bend in the line around Laon. The blow took immediate effect on the German lines, pushing them back from one to two miles at points in this important sector where it is well nigh vital for the Germans to hold fast if they hope to retain control of any considerable part of northern France during the coming winter.

**SECRETARY BAKER AGAIN ON BATTLE FRONT.**

Secretary of War Newton D. Baker is again on the European battle front, making his second visit. He was with General Pershing at the time of the launching of the big drive near Verdun. Together with General Pershing the secretary made a tour of some of the captured villages in the St. Mihiel salient, and was warmly welcomed by the inhabitants. Even every American in their villages experienced a like reception. Aged men and women seized and kissed the hands of officers and correspondents, crying and laughing, the curiously aged children imitating their elders unknowingly. The inhabitants of the salient had been kept absolutely ignorant of affairs in the last four years, knowing only what their captors had told them.

**GERMANS TALK NEW PEACE OFFENSIVE.**

That the German leaders are losing no opportunity to sow the seed of a desire for peace among the allied peoples is evident by numerous statements and addresses recently given publicity. There apparently is no doubt that this is an organized movement, as there appears a manifest agreement between the German and Austrian statesmen in the messages that have been scattered broadcast. Allied leaders, however, are prompt to recognize the movement and forewarn the people of their countries against placing faith in the enemy utterances.

**U. S. PROMPTLY REJECTS PEACE PLAN.**

The United States, as was fully expected, has unconditionally rejected Germany's peace feeler. In doing so the government has spoken for all the cobelligerents. Almost immediately after receiving the Austrian government's note from the minister from Sweden, Mr. Ekengren, Secretary Lansing tonight issued this formal statement: "I am authorized by the president to state that the following will be the reply of this government to the Austro-Hungarian note proposing an unofficial conference.

"The government of the United States feels that there is only one reply which it can make to the suggestion of the imperial Austro-Hungarian government. It has repeatedly and with entire candor stated the terms upon which the United States would consider peace and can and will entertain no proposal for a conference upon a matter concerning which it has made its position and purpose so plain."

**MANY MILLIONS ADDED TO U. S. FORCES.**

Preliminary estimates of the number of men between the ages of 18 and 45 years who would register last Thursday under the new draft act show a realization not very far above or below the first estimate of 13,000,000. Provost Marshal General Crowder has announced that questionnaires will be sent immediately to all men newly registered between the ages of 19 and 21 and 32 and 36. These questionnaires will be filled out by the men in detail, giving to the draft boards complete information concerning all points to be considered in selecting men for service or exempting men, and upon the basis of these returns the first call under the new act probably will be made early in October.

**WILSON WANTS NO INDUSTRIAL STRIKES.**

When a considerable group of workmen at Bridgeport, Conn., members of the National Association of Machinists, went on strike last week, refusing to abide by the award of the national war labor arbitration board in settlement of certain disagreements between themselves and their employers, who were engaged in government work, President Wilson sent to them an official statement deploring their attitude and concluding with the following statement of the government's attitude:

"Therefore, I desire that you return to work and abide by the award. If you refuse, each one of you will be barred from employment in any war industry in the community in which the strike occurs for a period of one year. During that time the United States employment service will decline to obtain employment for you in any war industry elsewhere in the United States, as well as under the war and navy departments, the shipping board, the railroad administration and all government agencies, and the draft boards will be instructed to reject any claim of exemption based on your alleged usefulness on war production."

**BUTTE I. W. W. TRY TO START STRIKE.**

An unsuccessful attempt to strike in the production of copper and other materials essential to the progress of the war was made in Butte, Montana, district Friday morning by the I. W. W. The movement was said to be national in its scope. Eighty arrests were made by the police. Practically all the prisoners admitted membership in the I. W. W. Only a small proportion of miners, according to mining officials, abandoned their tasks, the majority of these resuming their labor Saturday morning. A high government official discloses that the strikers, I. W. W. and labor agitators of Butte are face to face with the same ultimatum which President Wilson issued to the strikers of Bridgeport, Conn.

**TO CREATE A COTTON COMMITTEE.**

President Wilson announced a plan Friday to create a cotton committee, and "if after investigation it is found necessary, a fair price will be fixed." This caused a wild and sensational opening on the New Orleans cotton exchange Saturday, trading prices dropping an average of $11.50 per bale. Senators and representatives from southern cotton growing states declared there was no authority for the president or any government agency to fix cotton prices without additional authority from congress. There has been growing dissatisfaction, especially throughout grain growing sections of the country, at the speculative privileges enjoyed by the cotton growing industry and denied to the wheat industry.

**GETTING READY FOR FOURTH LIBERTY LOAN.**

Both national and local workers are preparing for a vigorous campaign for the fourth Liberty loan, to begin Saturday, September 28, and continue for three weeks. The loan is to be for $6,000,000,000, the largest yet attempted. Preliminary work done by the banking interests throughout the nation indicates a ready and liberal response on the part of the people of the nation.

**NOTED SOCIALIST CONVICTED BY JURY.**

Eugene V. Debs, for many years leader of the socialist party in America and several times their candidate for president, was convicted by a federal jury at Cleveland, Ohio, last week on a charge of violating the espionage act. He was found guilty of attempting to incite insubordination and disloyalty in the military and naval forces; of attempting to obstruct recruiting, and of uttering language tending to incite resistance to the United States in its prosecution of the war. He was given a sentence of 10 years in federal prison. In imposing sentence Judge Westenhaver said: "Any one who obstructs the recruiting service does just as much injury and wrong to our country as if he were a soldier in the ranks of the German army." A writ of error was granted to United States supreme court, and Debs was admitted under $10,000 bail.

**FEDERAL LICENSE FOR PACKERS.**

Operations of packers in live stock markets were made subject to federal license in the same manner as those of other stockyard dealers by a proclamation issued September 13 by President Wilson under authority of the food control act. Licenses must be obtained September 19.

## A Crooked Trail—See Page 14

### Here Is the Synopsis of Last Week's Instalment

On another page of this issue is found the second chapter of the new serial story, "A Crooked Trail." The first chapter was published last week. This is a story that will run for many weeks, and those who like a good, wholesome story of adventure should not let the fall and winter evenings lengthen without having kept up with the story of "A Crooked Trail" during the first weeks. Every chapter is an interesting narrative in itself, but it is worth much more if all that has gone before is familiar to the reader.

Chapter I described the situation—Texas in the days before civilization had actually come west and possessed it—pioneer life on the frontier. The story follows a lad still in his 'teens as he and his pony and dog travel up and down the country searching for a stray ox and as they struggle with fate trying to get him back home. The opening chapter last week showed the young fellow starting out bareheaded, before daylight, without breakfast and on foot to bring in the calves and the yoke of oxen with which he intended to break virgin sod on his father's place that day. Little did he dream that he would discover old Lep gone, and even less did he dream that he would catch his pony and start out bareback and without bridle to hunt for the stray. But these things he did, and late afternoon found him pushing on into the wilderness with borrowed saddle, bridle and lariat, sending word back to his father and mother to look for him when they saw him. From the frontiersmen he gathered evidence that convinced him that the runaway ox had five days the start of him, but he determined to defy the dangers of the wilds. He camped that night on the prairie, with no covering but the starlit heavens. During the night—but that is a part of the story as told in the second chapter, which is found in the magazine section of this paper, and to which you can turn and get the full story of a night that would try the nerve of even a pioneer lad of the early west.

## *Washington Gleanings*

The last bit of paving on the Monroe-Sultan road is finished, and the pavement is now complete from Everett to Gold Bar, about 33 miles.

Threshing has started in the earlier section of the Molson country, with winter wheat making an average of 20 to 25 bushels to the acre.

The harvest crew on the Richardson ranch, near Pomeroy, contained about 18 hands, and one-third of it was composed of boys 17 years and under.

The Whitman county fair will be held the week beginning October 12, under the management of C. L. MacKenzie, John Bloom and C. N. Hinchliff.

About 25 business men have reported on the night shift at the Grays Harbor Motorship corporation's yard at Aberdeen. The shift starts at 11 o'clock, and is for four hours.

Freda Anderson of Nelson's Siding was awarded $50 by her father this summer for having obtained 10 certificates of merit for being neither tardy nor absent during 10 school terms.

Cedar Falls, north of Seattle, where the plant which furnishes electric power for Seattle's $5,000,000 lighting system is situated, was almost completely swept away by a forest fire recently.

About 30 pounds of butter and 20 pounds of cheese are being made at the state prison creamery daily at Walla Walla. That not used at the penitentiary will be shipped to other institutions.

Three miles of the new grade of Sunset highway in Lincoln county will be surfaced, as well as four miles of county roads in the vicinity of Almira. The rock crusher has already started work.

A $50,000 building, including lodging places, dining room, rest rooms, gymnasium, etc., is to be erected for the enlisted men at Bremerton by the war community commission, acting for the government.

The Lewis county commissioners awarded to Charles G. Hughes of Seattle the contract for building a concrete pier and straightening and raising the steel bridge across the Tildon river, near Morton, for $7897.

W. H. Mead, owner of an orchard near Wenatchee, recently sold his apples to the Wenatchee Products company for $30 a ton. This is one of the few sales in the valley where apples have been sold in bulk.

The report comes from Pacific county that a conservative estimate of the cranberry crop in that county alone is about 13,000 barrels. The growers' associations have placed orders for 36,000 box labels, which represent 12,000 barrels.

At a recent meeting of the citizens of Tonasket the Tonasket Community Council of Defense was organized. J. A. Merva was elected chairman, L. D. Burrus secretary and George Bailey and Mrs. A. J. Nickle members of the executive committee.

A. C. Amon, a pioneer rancher of the Horse Heaven country, near Kennewick, has traded his 320-acre wheat ranch, with two city residences, to G. E. Swartz for a 240-acre ranch at Day's Creek, Ore., in the Umpqua valley, 30 miles from Roseburg.

Because hay is scarce and the price higher than has ever been known, the farmers of Adams county are cutting and stacking Russian thistles for stock feed for the winter. It is said that if the thistles are cut before they get too old stock will eat them readily.

One of the best berry picking records in eastern Lewis county was made by Frank McMahan and family, of Swofford. Besides taking care of all his regular farm work, and with not more than three picking at one time, the family gathered $206 worth of evergreen berries in 11 days.

A. Ferguson, a Los Angeles capitalist, has purchased six 160-acre claims and taken options on two others in the Queets river valley, about 60 miles northwest of Hoquiam. He expects to expend about $40,000 on improvements, and will put a large herd of blooded stock on the property.

The Yakima committee for carrying out the government's plan for regulation and distribution of labor in that district has been completed by the selection of W. F. Calvert as government representative and H. M. Gilbert as representative of the employers and J. B. Williams as representative of union labor.

The first carload of California barley ever shipped into Garfield county for stock feed arrived recently at Pomeroy. The barley was consigned to F. M. Robinson, and was shipped in because it could be delivered for less money than the local product. The barley crop is almost a failure in Garfield county this year.

Two hundred and fifty grade school pupils of Yakima participated in the fifth annual school garden exhibit, held under the auspices of the welfare committee of the women's auxiliary of the commercial club at Yakima. Several of the girls proved themselves better growers of vegetables than the boys, while some of the boys walked off with prizes for growing flowers. All prizes offered were either war savings stamps or thrift stamps.

In view of the critical feed situation which confronts dairy and live stock men in Oregon, a feed committee has been organized at the Oregon Agricultural college at Corvallis with E. L. Potter, professor of animal husbandry, as chairman. Other members are E. B. Fitts, G. H. Hyslop and Paul V. Maris. The committee will make a thorough investigation of conditions with the assistance of the county agents and will indicate the best methods of meeting the situation.

# Walla Walla Fair "Comes Back"

## *Cooperation With Farmers and Stockmen Brings Surprising Results*

By HORACE ADDIS.

The Walla Walla fair "came back" September 9-14, in a way to make its sponsors feel much pride, and to the surprise of those who thought it could not be revived. For three years no fair has been held, and prior to that debts and other troubles had made it a precarious proposition. But with characteristic Walla vived. For three years no fair had been Walla energy the commercial club, including practically all the business organizations of the city, cooperated with the farmers and stockmen, and the result has been a most commendable and successful fair.

Secretary L. L. Lynn of the commercial club acted as secretary of the fair, and was on the job every minute with an able corps of assistants. Forest Supervisor L. E. McDaniels superintended the stock show. Through his efforts a far larger exhibit was secured than any one thought possible, including some of the finest herds and flocks in the Inland Empire. A unique feature was the carloads of range cattle, of which there were six entries and the stock was shown in good condition.

The forestry exhibit in the pavilion was one of the most interesting. Camouflage was such as to give the appearance of a regular camp in the woods, with cooking outfit and a campfire. A running spring and other touches of nature went to make up the illusion. The pioneer cabin alongside the camp was equally interesting.

There were a number of distinct agricultural displays, notably those of Burbank and Attalia, in which the finest of fruits and vegetables greeted the eye.

The state penitentiary had a notable exhibit of garden, field and dairy products, including butter, cheese and other dairy products from their own factory, as well as useful handiwork of the inmates. Warden Drum also deserves praise for the display of wild fowl from the state game farm. Rare as well as useful birds were shown, and the crowds along the cages proved the interest in the exhibit.

The canning demonstrations every day, in charge of Miss Mazie Wilson, county leader of girls' industrial clubs, deserve much praise. Ten canning clubs of quite young girls competed. The creditable work done was judged by Miss Edna Walker, assistant state leader of home demonstration agents. The sewing demonstrations, under the same management, had several entrants, and the girls competing had done excellent work.

The Washington State college had a useful and interesting demonstration of the value of drying both fruits and vegetables, with simple home methods, to secure the best results.

A display of sugar beets from several different farms seemed to leave no doubt of the adaptation of the Walla Walla valley to this profitable crop. Corn was shown in all its glory, and there was a good exhibit of wheat, both in grain and sheaf.

The fruit and vegetable display of the Walla Walla Gardeners' association and the competitive exhibits of fruit and vegetables were all good.

Tractor demonstrations were on all week. Farm machinery and autos were shown, and there were a number of interesting mercantile displays.

While one had to run the gantlet of a mammoth "carnival," with "barkers" on all sides to reach the stock show yet when it was reached a display of fine stock was seen, of which the management had great reason to be proud this dry year of scarce labor.

In their determination to make the fair a success and reawaken interest in live stock free entry and stall room and free bedding and hay were furnished, and the first two days of the fair visitors were admitted free. Thousands took advantage of the opportunity, and I know of nothing for which the association deserves greater credit, yet it must be admitted crowds were just as large the last three days, when 75 cents was charged with the "Border Days" program as the big attraction. Whatever may be thought of the utility of this "roundup," "stampede" or "border days" feature, there is no question of its drawing power.

### STOCK SHOW.

The size, as well as the excellence of the stock show both pleased and astonished those who know of the struggles of this fair in past years, and those who came expecting to see little except the "border days" program. In every department was the quality of stock shown very high, and only in the horse division was there any shortage in numbers. Even here there were a few choice entries. Both the Shire and Percheron stallions were in good condition and very creditable specimens of the breed.

The beef cattle show was exceptionally strong. Shorthorns were shown by five different exhibitors and competition was very sharp. The Day & Rothrock herd, fresh from Spokane winnings, was the most highly fitted and carried off a majority of the blues. Their grand champion heifer, Hercules Topsy, is a full sister to the one that won champion honors at Portland last winter. She has an even sweeter head, is smooth as well as growthy and seems to be still improving. But she had a close call in W. G. Cordiner's 2-year-old Helen's Pride and Cordiner's senior champion cow had just as close a call in class by G. W. DeLay's Scottish Jane 3d. And so it went all down the line.

Henry Thiessen's Herefords from Sweetwater, Idaho, were the only ones shown, but they are such an outstanding herd they made a show by themselves. In this herd the most superior animal is probably the 2-year-old champion heifer Lady Rex 20th, that really seems invincible in any company.

The Washington State college showed three very sweet Aberdeen Angus heifers, besides some good fat steers, and J. W. Harbert of Walla Walla showed a small herd of milking Shorthorns, the cows just off pasture, but presenting a good show of Shorthorn type with big, well-placed udders.

Dairy cattle were almost as well represented as beef. Three exhibitors showed Holsteins. The Walla Walla college had a full herd including their great cow, Clothilde Nita Jessie, her every outline, from her clean, thin throat to her great udder, indicating her A. R. O. record of over 31 pounds of butter in seven days. The state penitentiary had a grand lot of cows with good udders and good Holstein type, but not competing, because not registered. The champion cow was found in Ralph Tuttle's Uneda Korndyke, a little thick in the throat, but with a very perfect udder, and good lines.

Three different local exhibitors showed each a few Guernseys, several of them high class show animals, especially the champion cow and champion bull.

George Cochran, who made the Jersey show, had only a few, but they were typy, in good condition and well represented the breed.

The sheep show was perhaps the greatest surprise. Jaursand & Sons' pens of Hampshires, fresh from the Salt Lake sale, as well as those of Harry Riffle, and both the Jackson and Craig Rambouillets, together with the state college fat sheep, helped make up a surprisingly good sheep show, that had also a few good Polled Rambouillets and Oxfords.

The swine show was also very good and all from near home. Clifford Rigg's big type of Poland Chinas, headed by his great boar, Mouw's Touchet, and the Stubblefield Home Berkshires, headed by Rival's Duke 37th, were the center of most interest. But there was quality in the entire show.

The boys' pig clubs were represented by 16 entries and in many cases competition was very close. The boys did their part in a strong swine show.

William Daughtrey, president of the North Portland stock yards, judged beef cattle, and proved that he is a judge of breeding cattle as well as killers. Professor D. E. Willard, development agent for the Northern Pacific railroad, placed the ribbons for the dairy breeds; Professor C. E. Monroe, assistant state leader of county agriculturists, for the horses and hogs, and Adrian Magallon of Walla Walla, who has one of the best Rambouillet flocks in the country, for sheep. The following is a complete list of awards:

**Shire Horses.**

Stallion, three years or over—1 and 2, W. H. Laur, Walla Walla, on March Alma and Bon Klingor.

**Percherons.**

Stallion, three years or over—1, J. L. Revis, Walla Walla, on Rousseau. Filly, two years old—1, J. L. Reavis, on Ninette and Anita. Grade Percheron gelding—1, Mr. Palmer.

Three thoroughbreds were shown by J. Z. Smith of Walla Walla, and a few Shetland ponies were also shown and premiums awarded.

**Shorthorn Cattle.**

Bull, three years or over—1, W. J. Townley, Union, Ore., on Good Prospect. Two-year-old—1, Washington State College, on Village Excelsior. Junior yearling—1, Day & Rothrock, Sprague, Wash., on Hercules Villager; 2, W. G. Cordiner, Walla Walla, on Hercules Duke; 3, D. W. DeLay, Hot Lake, Ore., on unnamed. Senior bull calf—1 and 3, Day & Rothrock, on Hercules Diamond and Silver Cloud; 2, W. J. Townley, on Linwood Baron. Junior bull calf—1, Day & Rothrock, on Hercules Knight; 2, G. W. De Lay, on Scottish Plate.

Senior and grand champion—Day & Rothrock, on Hercules Villager. Junior champion, Day & Rothrock, on Hercules Diamond.

Cow, three years and over—1, G. W. Cordiner, on Fork Branch Meredith 13th; 2, G. W. De Lay, on Scottish Jane 3d; 3, W. J. Townley on Ringleaders' Rose. Two-year-old—1 and 3, W. G. Cordiner, on Helen's Pride and Violet's Princess. 2, G. W. De Lay, on Rushes Queen. Senior yearling heifer—1, Day & Rothrock, on Lady Missy 10th. Junior yearling—1 and 2, Day & Rothrock, on Hercules Topsy and Golden Light; 3, G. W. De Lay, on Mounds Rose. Senior heifer calf—1, Day & Rothrock, on Hercules Matchless; 2, Washington State College, on Village Queen; 3, W. J. Townley, on Mounds Maid. Junior calf—1, Day & Rothrock, on Hercules Topsy 2d; 2 and 3, W. J. Townley, on Radiant Rose and Mounds Maid.

Senior champion bull—W. J. Townley, on Good Prospect. Junior and Grand Champion—Day & Rothrock, on Hercules Villager. Senior champion cow—W. G. Cordiner, on Helen's Pride. Junior and grand champion—Day & Rothrock, on Hercules Topsy.

Get of sire—1, Day & Rothrock; 2, G. W. De Lay. Produce of dam—1, Day & Rothrock; 2, G. W. De Lay. Aged herd—1, Day & Rothrock; 2, W. J. Townley. Young herd—1, Day & Rothrock; 2, G. W. De Lay.

**Dairy Shorthorns.**

J. W. Harbert, Walla Walla, was the only exhibitor. His awards were: Two-year-old bull—1, Golden Rock. Bull calf—1, on Allo. Cow, three years and over—1 and 2, on Hazel Morris and Emaroy. Two-year-old—1, on Orleans Heart. Yearling heifer—1, on Golden Lass, champion bull and cow.

**Herefords.**

Henry Thiessen, Sweetwater, Idaho, was the only exhibitor. His awards were:

Senior yearling bull—1, on Royal Perfection. Senior bull calf—1 and 2, on Ideal Perfect 2d, and Ideal Perfect Jr. Junior bull calf—1 and 2, on Rupert's Model and Perfect Beau 5th. Two-year-old cow—1, on Lady Rex 29th. Junior yearling heifer—1, on Vanity Belle. Senior heifer calf—1, on Mildred Belle. Junior calf—1, on Ideal Belle 3d.

**Aberdeen Angus.**

The Washington State College, the only exhibitor, received awards as follows: Senior yearling heifer—1, on Enright's Queen. Junior yearling—1, on Pullman Inez 2d. Senior calf—1, on Enright's Queen 2d. Champion heifer—Enright's Queen.

**Fat Cattle.**

Pure bred, grade or cross bred steer, two years or over—1 and 2, Washington State College; 3, Roach Bros., Pendleton.

Range cattle, in lots of twenty; two years old—1, Asotin (Wash.) Live Stock Association; 2, Troy, (Idaho) Live Stock Association. Yearlings—1, Asotin Live Stock Association; 2, Touchet Live Stock Association.

**Holsteins.**

Bull, three years or over—1, Washington State penitentiary, on Sir Maldeta Segis. Two-year-old—1, Walla Walla College, College Place, Wash., on College Belle Mercedes. Bull calf—1 and 3, Walla Walla College, on unnamed; 2, Ralph Tuttle, on unnamed.

Cow, three years and over—1, Ralph Tuttle, Walla Walla, on Uneda Korndyke; 2 and 3, Walla Walla College, on Clothilde Nita Jessie and Cornelius Colanthe DeKol. Yearling Heifer—1, 2 and 3, Walla Walla College. Heifer calf—1, 2 and 3, Walla Walla College.

Champion bull—Walla Walla College, on College Belle Mercedes. Champion cow—Ralph Tuttle, on Uneda Korndyke. Get of sire and produce of cow—1, College.

**Guernseys.**

Bull, three years and over—1, V. R. Brown, Walla Walla, on Capt. Sam.

Cow, three years and over—1, A. H. Reynolds, Walla Walla, on Beatrice of Chicona. Yearling heifer—1, B. E. Ladue, Walla Walla, on Pansy. Heifer calf—1, V. R. Brown, on Veda; 2, A. H. Reynolds, on Linetto of Chicona.

Senior and grand champion bull—1, V. R. Brown, on Capt. Sam. Senior and grand champion cow—A. H. Reynolds, on Beatrice of Chicona. Junior champion—V. R. Brown, on Veda.

**Jerseys.**

George Cochran, Dixie, Wash., was the only exhibitor. His awards were: Bull calf—1, name not given. Cow, three years and over—1, 2 and 3, on Bonnie Marie, Calico Amelia and Amelia Calico. Also champion bull and champion cow.

**Rambouillet Sheep.**

Ram, one year or over—1, and 2, Mrs. A. R. Jackson, Turner, Wash.; 3, C. H. Craig, Walla Walla. Ram lamb—1, C. H. Craig; 2, Mrs. Jackson.

Ewe, one year or over—1, Mrs. Jackson; 2 and 3, C. H. Craig. Ewe lamb—1 and 3, C. H. Craig; 2, Mrs. Jackson.

Champion ram—Mrs. Jackson. Champion ewe—1, C. H. Craig. Pen of rams—1, Mrs. Jackson. Pen of ewes—1, C. H. Craig.

**Hampshires.**

Ram, one year or over—1, Harry Riffle, Walla Walla; 2 and 3, Jessaud & Son, Walla Walla. Ram lamb—1 and 2, Harry Riffle; 3, A. H. Reynolds, Walla Walla.

Ewe, one year or over—1 and 3, Jaussaud & Son; 2, Harry Riffle. Ewe lamb—1, 2, and 3, Harry Riffle.

Champion Ram—Harry Riffle. Champion ewe—Jaussaud & Son. Pen of rams and pen of ewes—1, Jaussaud & Son.

**Polled Rambouillets.**

Ram, one year or over—1 and 2, Byron Reser, Walla Walla.

**Oxfords.**

Ram, one year or over—1, G. G. Schueller, Walla Walla.

**Fat Sheep.**

Middle wool, long wool, and fine wool breeds—All awards went to Washington State college, besides champion pen, any breed.

**Poland China Swine.**

Boar, two years and over—1, Clifford Riggs, Touchet, Wash., on Mouw's Touchet. Boar pig—1, 2 and 3, Clifford Riggs, on unnamed.

Yearling sow—1, Clifford Riggs, on Minnie Wonder. Sow pig—1 and 2, P. H. Tomlinson, College Place, Wash., on unnamed; 3, Clifford Riggs, on unnamed.

Senior and grand champion boar—Clifford Riggs, on Mouws Touchet. Junior champion boar—Riggs. Senior and grand champion sow—Riggs, on Minnie Wonder. Junior champion sow—P. H. Tomlinson.

**Berkshires.**

Boar, two years and over—1, Stubblefield Home, Mr. Campbell, manager, on Rival's Duke 37th. Boar pig—1, Stubblefield Home, on Champion Elbertips.

Sow, two years or over—1, W. F. Devine, College Place, Wash., on Bonnyvale. Yearling sow—1, Stubblefield Home, on Silberfa Elbertips. Sow pig—1 and 2, Stubblefield Home; 3, Dan Toner, Walla Walla.

Champion boar and sow—Stubblefield Home, on Rival's Duke 37th, and Silberfa Elbertips.

**Hampshires.**

Sow pig—1, 2 and 3, Stephen Thomas, Freewater, Ore.; also champion sow.

**Boys' Pig Club Awards.**

Hampshire pig—1, Francis Cook; 2, Harold Cook, both College Place, Wash.

Duroc pig—1, Ena Cochran, Dixie, Wash. Sow and litter—1, Lloyd Watt, Walla Walla, Wash.

Berkshire pig—1, Connelly Kinehelve, of the Bernice Pig Club, Walla Walla.

Grade Poland China pigs—1, William Bunce, Dixie, Wash.; 2, Ewen Clancy, Dixie, Wash.

# Cattle Men Meet

## Work for a Stricter Brand Law

A legislative committee to draft a brand law and one to prevent any but registered bulls from running on the range, with a determined effort to have the laws passed by the next legislature, were the most important actions taken at a meeting of cattle men who graze stock in the Wenaha forest at the commercial club rooms in Walla Walla, Wash., the evening of September 10.

The meeting was called by District Forester L. E. McDaniels, who considered fair week an appropriate time for getting the cattlemen together. He presided at the meeting, and first introduced William Daughtrey, president of the North Portland Union stockyards, who told of the accomplishments of the Oregon Cattle and Horse Raisers' association; how it had broken up stock rustling, secured enactment of a good brand law and purebred range bull law. Mr. Daughtrey was followed by E. E. Faville, who spoke along the same lines, strongly urging the value of organization.

Mr. Welland was elected temporary chairman and C. A. Wynn secretary. Later they were elected president and secretary of the permanent organization. The board of directors elected is as follows: Mrs. Ada Wilbur, Gibbon, Wash.; P. A. McBride, Weston, Ore.; C. E. DeMaris, Milton, Ore.; Robert Lee, Touchet, Wash.; Albert Dick, Pomeroy, Wash.; Edward Walters, Asotin, Wash.; W. A. Moore, Troy, Idaho; A. P. Glenn, Summerville, Ore.

The organization is to include all who range stock in counties adjoining the Wenaha forest reserve, and the standard bylaws recognized by the forest service were adopted.

The legislative committee elected consists of C. Halsey, Asotin; Robert Lee, Touchet; A. Dick, Pomeroy. A committee to try to secure a change to the word "registered" instead of "purebred" in the Oregon brand law was appointed, as follows: J. D. Woodell, Union, Ore.; B. W. Murchison, La Grande, and J. Llewellyn, Adams, Ore.

A motion to hold a bull sale in the spring was carried, and a committee consisting of Charles DeMaris, J. Llewellyn and Robert Lee was appointed to assist Mr. McDaniels with the sale.

A motion of thanks to the Portland Chamber of Commerce for its support of the Pacific International Live Stock show was made by Mr. McDaniels and unanimously passed.

Before adjournment it was agreed to hold a general meeting of the association the second Saturday in February.

# Changes Name

## Wenaha Wool Growers' Association

A change of name from the Washington Wenaha Wool Growers' association by eliminating the word "Washington" and the securing of a large number of new members, as well as a much better feeling of cooperation between sheepmen of the states of Washington and Oregon, was accomplished at a meeting of sheepmen at the Walla Walla Commercial club rooms September 11.

District Forester McDaniels called the meeting, which was largely attended by sheepmen of both states. A legislative committee was authorized, which will attempt to secure the passage of a law by the next legislature along the lines of the Oregon law providing for a stricter supervision of a band of sheep by the herder.

An invitation was extended by F. M. Rothrock of Spokane to attend the state wool growers' meeting at Yakima this winter, and 23 signified their intention of going.

The meeting was addressed briefly by C. D. Minton of the Pacific Homestead and Horace Addis of the Farmer, emphasizing the value of organization. Mr. McDaniels told of a few necessary rules for sheepmen to follow, and expressed the belief that fair dealing and good fellowship would prevail.

# Less Print Paper

Fifteen per cent reduction in the consumption of print paper by agricultural periodicals, beginning October 1, has been ordered by the pulp and paper section of the war industries board, Chairman Baruch of the board announced September 16.

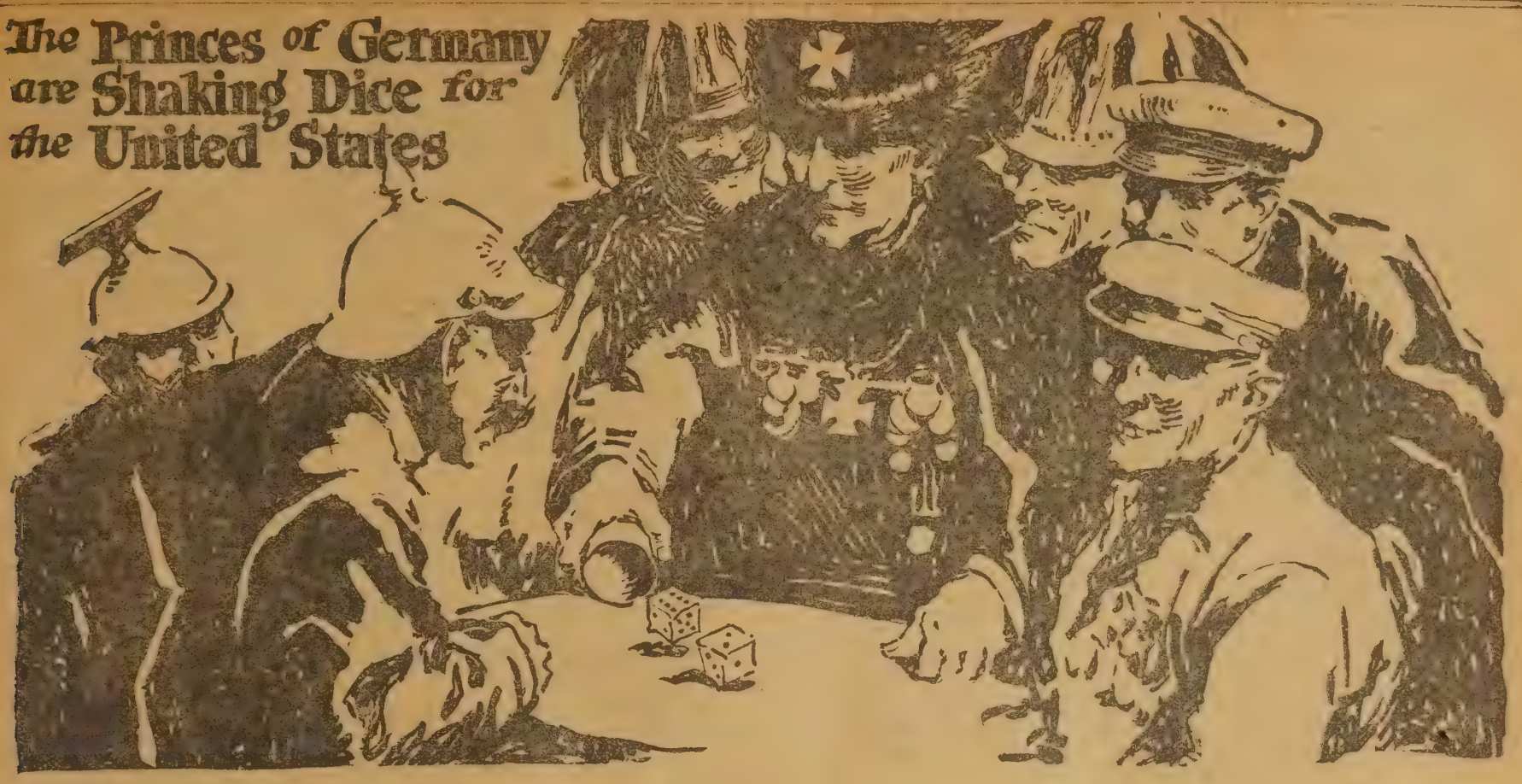
The order was issued after recommendations had been presented by a committee representing the publishers of such periodicals, who agreed to use lighter body paper, discontinue subscriptions in arrears, cut off free exchanges, restrict sales to advertisers and advertising agencies and to abandon the issuing of special or holiday numbers.

**Remember Those Waists?**

"I want a pair of button shoes for my wife."

"This way, sir. What kind do you wish, sir?"

"Doesn't matter, just so they don't button up the back."—People's Home Journal.




## By HERBERT QUICK

***WE MUST buy Liberty bonds to the last cent of our ability, because our country is fighting for its very life. Make no mistake, citizens of America, the crisis is just that—we are fighting for our very life.***

We must fight this war through. We must fight it through to a peace the basis of which will be written by us and our allies.

Germany must not write a single clause in the treaty. She must be whipped until she will sign a treaty every word of which will be drawn by the allies. Germany must not be allowed to dot an i or cross a t.

Why?

Because Germany has become nothing but a robber empire, a murderer empire, an empire every purpose of which is the enslavement of the rest of the world. Such purposes admit of no compromise. We must conquer or die. If we do not conquer we shall, nevertheless, die—and die slaves.

Germany began with the intention of robbing France of her iron, her coal, her best land and her great factories; of making Belgium with her rich mines, great cities and immense factories a part of Germany; of gaining the Belgian coast, from which she might conquer England, and of combining under her flag the hordes of Mohammedan Turks, and all the Balkan states, so that she might train soldiers in countless millions, build navies to sweep the oceans, and conquer the world.

This war was to be a step toward world conquest.

If we do not fight the war through to complete victory she will still keep on and she will succeed! She will surely succeed!

Russia with her nearly 200,000,000 people lies prostrate at Germany's feet. Germany could now give up the Balkan states, give up Belgium, force Austria to yield up the Italian territories, give up conquered France, yes, she could give up these, and even Alsace-Lorraine, and if allowed a free hand in Russia, she would still have won a victory greater than any of which she ever dreamed at the beginning of the war.

Give her control of Russia and she can, and will, within a few years come back with power to take back Alsace-Lorraine, crush poor Belgium once more and destroy exhausted France, sweep every vestige of resistance from Europe, Asia and Africa, and then what?

Then she will thunder at our doors—from Asia she will invade us on the west, from Europe on the east, and from Mexico on the south.

If Germany has control over the terms of peace, we who read this will live to see one of the kaiser's six sons Emperor of America.

***The time to whip Germany is now!***
***It is now or never!***
***The Princes of Germany are shaking dice for the United States!***
***It will take money, money, money, that we may send men, men, men!***

**Be Prepared to Buy Liberty Bonds, for so only can the war be won. Unless it is won, everything you possess is lost, and with it the American soul is lost.**

*This Space Contributed to Winning the War by*
**SEARS, ROEBUCK & CO., SEATTLE**

# Harvest Work Finished

## Most Farmers Have Their Wheat Already in Warehouse; Crops Average 15 Bushels to the Acre; Pastures Need More Rain




LA CROSSE, Whitman County, Wash., Sept. 6.—Harvest is practically finished with a few exceptions, and the later ones will finished next week. Weather conditions have been most ideal for harvesting the last 15 days with cloudless days, not a drop of rain, cool nights and high day temperature for season. Most farmers have completed hauling their wheat to warehouses. Crops were fair, probably 15 bushels would be a safe estimate as an average for wheat. Barley was very poor and oats a failure. Potatoes, although much improved by cool weather in August, are below normal. Pasture situation is somewhat relieved by turning stock into stubble, but unless early fall rains start green feed in stubble, the feed situation may become critical before spring. La Crosse vicinity is well supplied with fall wheat seed and with a few exceptions it has been a fairly prosperous year.

M. E. SCHRECK.

IDEAL HARVESTING WEATHER.

SOUTH BEND, Pacific County, Wash., Sept. 9.—The fall weather continues dry and warm and is ideal weather for harvesting the late crops. Evergreen blackberries are ripe and women and children are sending them to the local cannery by the ton. Cranberries are ready to pick beginning this week. We have the largest crop in the northwest, and it is estimated that it will take 700 people to harvest the berries. The first sweet corn is in the markets. Dairymen are looking after the "boarders" in their herds, for alfalfa is already $32 a ton. There will be a number of small fairs throughout the county at various places. Two fairs will be held in the Bay district, one at Leham, one at Menlo, one at South Bend and possibly one at Willapa. The largest fair will be that of the county schools and will be the children's fair. It will not be held until the first week in November. In some communities the boys have raised pigs; in other places their whole energy has been directed toward raising rabbits; but everywhere they have had their gardens. In garden work they have been encouraged to raise only three or four of the main crops such as peas, beans, corn and potatoes. The council of farmers meets Friday evening at Menlo.

MRS. WINNIFRED BUCKINGHAM.

ALFALFA YIELD IS GOOD.

NEPPEL, Grant County, Wash., Sept. 9.—The third crop of alfalfa is being saved here and the yield is good. There will not be much shipped out as the local people need what they can afford to buy, and some can not afford to buy alfalfa and are shipping out their stock, or selling for what they can get, and there is some talk of killing the horses that can't be fed through the coming winter. Unless it rains soon the sowing of fall wheat will not be undertaken by the farmers, and most of them have no fall wheat to sow. Local banks are not optimistic or able to finance all needing seed and feed, but may at an exceptionally high rate of interest, and this does not look good to any of the numerous farmers of the wheat section I have talked with. All ideal conditions usually present, are entirely absent this season. No fairs are to be held as every one is too busy to think of it. Every effort is required to harvest the local irrigated crops, while the wheat farmer is at work or leaving to go outside to get work.

MARTIN PENHALLICK.

FARMERS ARE OPTIMISTIC.

CATHLAMET, Wahkiakum County, Wash., Sept. 7.—The farmers of Wahkiakum county are optimistic as far as the coming winter is concerned. We are having considerable difficulty in supplying the wants of the farmers as regards concentrates and succulent feeds. Many farmers have a good supply of roots available for winter feeding. The hay problem is more serious in other sections than in this county and since it is giving so much concern elsewhere our farmers are satisfied to not grumble. We have been without a county fair for over two years. At present there are not immediate prospects for a fair. There is no farmer in the county, however, who does not feel that we are handicapped without the fair, and when

(Continued on page twenty-three.)

# Milk a Most Necessary Food

## *It Contains an Essential Element Not Yet Analized*

Dr. E. V. McCollum of Johns Hopkins university, whose experiments and lectures on diet have excited much comment, visited the northwest recently, delivering addresses of the most vital importance, particularly at this time.

He hesitated, he said, on entering on the study of diet because nothing had been done that was of value for 50 years, and the idea was pretty firmly fixed 11 years ago that any diet which furnished a proper amount of protein, starch, sugars, oils, fats and mineral salts was all that was necessary. This was not the opinion of Dr. Babcock of the Babcock test fame. He began experiments a number of years ago with groups of dairy cows. These tests were carried on for three years, when anthrax destroyed some of the herd and put an end to them. In these experiments a balanced ration was formed of wheat, the seed, stalk and leaves, another of oats and a third of corn. The results of these experiments indicated that animals fed exclusively on wheat, even properly balanced as to protein, starch and so forth, that the progeny was born dead a month before the proper time for dropping, and they were undersized. Those fed on oats were born dead without exception, but came at the right time and were fairly well formed. Those fed corn were dropped alive and were properly formed and of normal size.

This was a starting point for years of experimenting. Hundreds and thousands of experiments have been conducted through from six months to several years, and while much remains to be discovered certain well established and indisputable facts have been found out. There is some element needed to the proper sustaining of life in animals which can not be analyzed, so far. It is not found in seeds of plants. It is not found in tubers or edible roots. It is not found in meats. It is found in milk and eggs. Further, there is another essence or element which is almost as important which is not found in seeds, roots or meats, but is found in the leafy foliage of plants.

What results when the first of these unknown elements is omitted from the diet? The first thing that he noticed in his experiments was that the flesh around the eyes became sore and swelled up. Finally the eyes swelled shut. If milk or eggs were supplied the animal got well unless the experiment was conducted too long. Then when the animal recovered

(Continued on the following page.)

**Draft Is Most Important Thing.**

Officials are agreed that the most important thing now before the people of the United States is the carrying into effect of the new draft act which includes all men from 18 to 45 years.

POTATO SEED BALLS WANTED.

Or cleaned seed. Can use any amount this year and next. Tell Potato Growers—A. T. Cook, Seed Specialist, Hyde Park, N. Y.—Adv.


# SEEDS

*for FALL SOWING*

**VETCHES—CLOVERS—ALFALFA**

**GRASSES and GRAINS**

SPECIAL MIXTURES for Pastures, Hay, Dry and Wet Land, Burns and Logged off Land.

Over a quarter century as SEED HEADQUARTERS of the northwest qualifies us to serve you to your profit and satisfaction.

*Our* **FALL CATALOG** *of* **FRUIT** *and* **SHADE**

**TREES**

**Berry Bushes and Plants**

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YOU GAIN A WHOLE YEAR BY FALL PLANTING

**Write for prices or SEND in your ORDER. We guarantee full value for the money sent.**

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**LILLY'S SEEDS** For Fall Planting

BEST FOR THE WEST

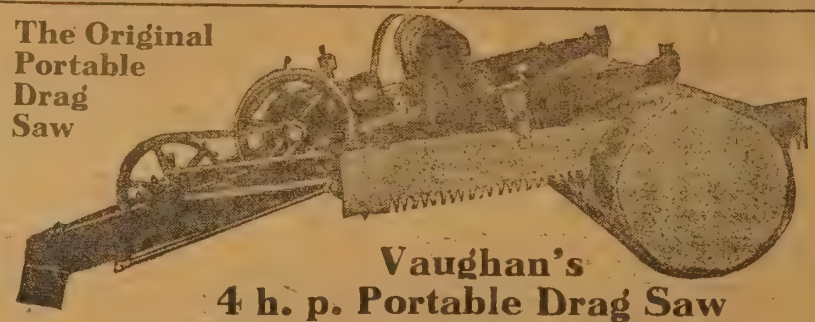
To lose a crop or part of a crop these days of food shortage is a calamity. Do not take chances with inferior cheap seeds or seeds not acclimated.

We test our seeds not in a general way but specifically for climate, soil, germination and pedigree. LILLY'S tested seeds, northern grown, are good seeds—by which we mean clean, pure, strong seeds, capable of producing the maximum crop of superior quality.

Write for Fall Catalog LILLY'S Seattle, Wash.

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**Vaughan's 4 h. p. Portable Drag Saw**

WILL CUT 15 TO 20 CORDS OF WOOD IN 10 HOURS.

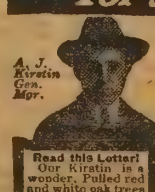
Can be operated by one man. Two men can carry complete machine. 4 H. P. gasoline motor mounted on frame. One gallon gasoline required to cut 8 to 12 cords of wood. Engine can be used for other work without removing from frame. No gears, cogs, belts or pulleys. Friction clutch prevents breakage if saw pinches. Saw makes about 125 strokes per minute. Will cut any size log up to 6 feet. Sprockets and cranks, etc., made of cast steel. All working parts guaranteed against defects in material and workmanship.

Net cash price for complete machine as shown in cut, $160 f. o. b. Spokane and common points. FOR SALE BY

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Single Double Triple Power

**SEND NO MONEY** Prove before you pay that ONE MAN alone with a Kirstin handles biggest stumps—Quick—Easy—Cheap! Pulls big, little, green, rotten, low-cut, or tap-rooted stumps. Also pulls trees, hedges and brush. If satisfied—after 30 days' trial, keep puller. If not pleased return at my expense. You don't risk a penny! Four easy ways to pay.

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Read this Letter! Our Kirstin is a wonder. Pulled red and white oak trees and stumps. Works best I ever saw. Ernest Walter Guttenberg, Iowa

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Cuts land clearing costs **way down.** Labor shortage no longer prevents pulling land-wasting stumps. Weighs less. Costs less to buy and use. Has greater speed, power, strength and **lasts longer!** Several speeds! Low starts 'em—high **rips 'em out quick!** Patented quick "take up" for slack cable. Easily moved around field. Free book explains Special Agents' Offer, etc. Shipment from nearest distributing point saves time and freight. Write today. Address

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In writing advertisers, be sure to say you saw their advertisement in this paper.




A. B. NYSTROM, Editorial Contributor

## DAIRY AND FOOD MEET

### Unnecessary Waste in the Shipment of Cream.

At a meeting of the Association of American Dairy, Food and Drug Officials just held in Chicago it was declared that a great and unnecessary waste attends the collection and shipment of cream for manufacturing purposes, and recommendation is made that the federal food administrator and director general of railroads investigate and take action to remedy the situation. The members also agree to pledge their support and assist Herbert C. Hoover by all means in their power.

Municipal food and drug control officials are made eligible to membership in the association. Heretofore the organization has been limited only to federal and state officials.

Benjamin L. Purcell, dairy and food commissioner of Virginia, was elected president, John B. Newman, superintendent of foods and dairies in Illinois, was elected secretary.

In order to more clearly set forth the objects the constitution was amended to read: "The object of the association is to promote and foster the enactment and enforcement of such legislation as will protect public health and prevent fraud and deceit in the manufacture and sale of foods and drugs, to promote uniformity in such laws and cooperate in their enforcement."

## CREAM TESTS AND CREAMERIES.

My cream tests from 40 to 45 per cent. My neighbors, whose cream tests from 18 to 30 per cent, tell me I would get much more for mine if I made it much thinner. Will you kindly straighten us out on this matter? SUBSCRIBER, J. W. G. Prosser.

Cream that tests as high as 45 per cent is really too heavy to handle nicely. There is always a chance for a loss through carelessness in mixing before the sample is taken. There is also a chance for a loss by having this thick cream stick to the containers and dippers. The creameries would prefer to handle cream that tests around 30 per cent, and so far as the farmer is concerned it would be to his advantage for the cream to test between 25 and 30 per cent. Cream testing lower than 25 per cent takes with it too much skimmilk, which should be left on the farm.

A. B. N.

## Milk Is Most Necessary

(Continued from the preceding page.)

it was blind, and never regained sight. When the other element was omitted paralysis ensued. With birds the paralysis was all over, but with mammals it affected the hind legs. If these experiments continued beyond a certain point the animals died.

A perfectly balanced ration so far as proteins, fats and carbohydrates and minerals, chemically pure, fed to animals resulted in the patients living just about as long as they would if they got no food at all.

Animals lacking these constituents sometimes lived, but they were undersized, sickly and from the first looked and acted old.

Dr. McCollum then drew an analogy between animals and man. In New York, in a negro settlement, almost without exception the children have rickets. Their spines are affected; their legs are bowed, their chests cave in. The diets of their mothers are made up of wheat flour, corn meal, potatoes, rice and meat. They use no milk and eggs. In Baltimore the mortality from tuberculosis is very great among the negroes. Their diet is similar. The whites of Baltimore are not particularly subject to tuberculosis. In the south the spread of pellagra is very alarming. After considerable study and experiment he is satisfied that this terrible disease is due to lack of proper nutrition. It appears chiefly among poor people. All these troubles come in congested districts, where improper food is supplied.

The milk products, eggs and leafy foods such as spinach, cabbage and turnip tops he called protective foods. We have had them in abundance in the past, and they have made us what we are. Take the oriental races; he did not think they are inferior by nature, but by food. They are nearly all undersized and shortlived. They are not progressive or original. The races which show the largest size, the greatest age and the best mental growth are those races which live largely on dairy products. What has saved the oriental races from extinction entirely has been the fact that they do consume very large amounts of leafy vegetables, though they have no milk to speak of.

A disease closely approximating that of the blindness in the animals lacking one of the unknown elements is said to be prevalent in Russia and Japan.

The accepted treatment for tuberculosis today is getting them in pure, cool air, keep them quiet and feed them food which is largely made up of milk and eggs. Degeneration follows lack of these food elements.

Having discovered these facts, the doctor said that he learned that in April, 1917, the normal consumption of milk daily in Chicago was 1,250,000 quarts. This year at the same date the consumption of milk had fallen off 40 per cent. Why? Because the people will not buy milk when it advances in price, but they will buy meat at any price, because, he thought, meat has a higher flavor. It is unreasonable to expect milk to remain as cheap as it has been.

A farmer in Des Moines told him that 30 years ago he sold milk at 5 cents a quart and paid $4.50 a ton for bran. Today he gets 12 cents a quart and pays $30 a ton for bran. Milk is not merely a good food, but it is almost a necessary food if we are to retain race-superiority, physically and mentally.

At the close of his address he invited questions, and replied as follows to them:

Processing milk, heating it and freezing it, does not affect these unknown elements unless the milk is alkaline. In that case they disappear.

Certified milk is cleaner milk. He doubted the wisdom of urging all people to buy certified milk, but he believed that clean milk is vital.

He believed that a quart of milk a day should be the quota of every human being, child or adult.




**Four Weeks Old**
*Tasted Milk Twice*
Grew to be a "WONDER" on
**Blatchford's**
Sell your milk. Raise big, healthy calves on Blatchford's Calf Meal at 1-4 cost of milk. Make 2 profits instead of 1.
**Send for Pamphlet** "How to Raise the Largest Calves at the Smallest Cost."
Blatchford Calf Meal Co.—Dept. 4346—Waukegan, Ill.




**Stop Cream Waste!**

$20 more profit per cow every year is the *average* gain of farmers using Viking Separators. Many do far better than that. Proved by carefully kept records of thousands of Vikings.

Don't let the valuable butter-fat dollars slip away in the skim milk through ordinary separators. Get *all* the butter fat that is in the milk with a

**VIKING CREAM SEPARATOR**

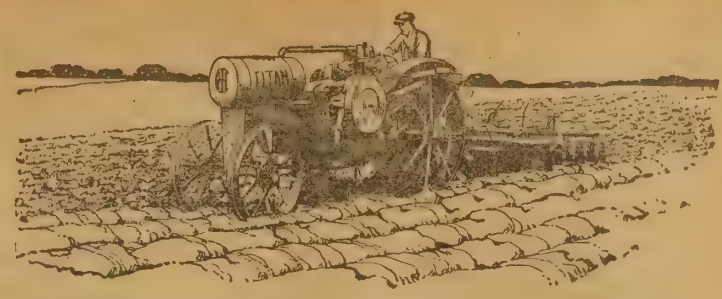
Guaranteed to skim to three one-hundredths of one per cent! No separator at any price gets a higher percentage of cream. Greater capacity than others of equal rating. Mechanically superior. Easy to operate (starts at a touch on the handle). Simple in construction and easy to clean. Lowest in price because it is made in the *largest cream separator factory in the world*. Guaranteed for a lifetime. More than one million in use, in all countries of the world. Look up the *Viking* dealer and investigate. The *Viking* is a money maker for you.



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SO MANY farmers ask us this question that it deserves a public answer. When you buy an International kerosene tractor you can expect—

**Plowing,** as deep as you need, as fast as good plowing can be done, at low cost because your tractor operates on kerosene.

**Good work on plowed ground.** This is important. You can use your tractor for all the seed bed work, giving your crops a better start and a better chance.

**All kinds of belt work.** Individual threshers, ensilage cutters, feed grinders, hay presses, and many other useful, labor-saving belt machines soon follow an International tractor because it does good belt work at low cost.

An International will haul your crops to market, clear your land, grade and level roads. In any size or style it is a true "general purpose" tractor, useful for all kinds of farm power work, built by a Company that has built farm machines and tractors in large numbers for many years.

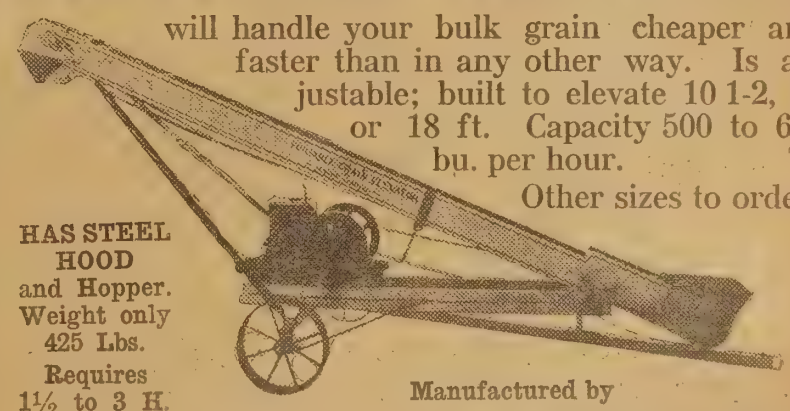
That is what you may reasonably expect from an International kerosene tractor. The local dealer can give you any further information you want. See him or write direct to us.

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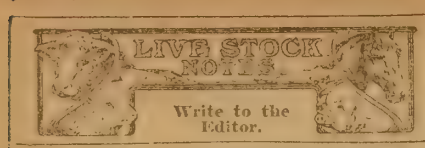
This will put you on the same basis of marketing as the carload fellow and at the same time you will be helping to build up your home markets.

Write or wire us for our prices and our weekly Market Letter.

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SHIP TO US
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BE SURE AND MENTION THIS PAPER




E. J. IDDINGS, Editorial Contributor

### SHEEP FUTURE GOOD.

**Growers Should Stick to the Business.**

William Hislop, formerly head of the live stock department of the State college of Washington, but now engaged in the sheep business for himself, told the live stock men at their banquet in connection with the Interstate fair at Spokane recently that he believed a great future lay before the sheep producer. The war has not only depleted the herds of Europe, but has virtually commandeered all the wool and mutton of the country, and labor shortage and feed shortage have contributed to make it exceedingly difficult to maintain normal production in America. He does not believe that the value of sheep will greatly decrease with the coming of the end of the war, but that the profits will probably be equally great, if not greater, than those now.

### MORE SCOTCH BOYS NEEDED.

C. M. McAllister, of the Portland union stock yards, is a great believer in the Scotch as animal husbandmen. He adds the shortage of the Scotch "lads" to the shortage of feed and labor as one of the handicaps with which the live stock industry must contend. The war has called so many of these stockmen as to make serious inroads into the supply of this class of help.

**THICK, SWOLLEN GLANDS**

that make a horse Wheeze, Roar, have Thick Wind or Choke-down, can be reduced with



ABSORBINE

also other Bunches or Swellings. No blister, no hair gone, and horse kept at work. Economical—only a few drops required at an application. $2.50 per bottle delivered. Book 3 R free. ABSORBINE, JR., the antiseptic liniment for mankind, reduces Cysts, Wens, Painful, Swollen Veins and Ulcers. $1.25 a bottle at dealers or delivered. Book "Evidence" free.

W.F. YOUNG, P. D. F., 371 Temple St., Springfield, Mass.

**Select Your Service**

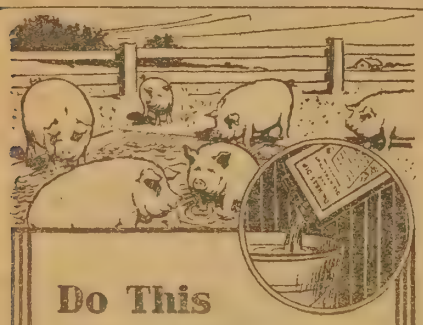
Men of draft age may prepare, within a few months, for preferred military service as bookkeepers and stenographers.

Men of mature years, men under draft age, and women, needed by thousands in business and the civil service.

How to prepare? Our new nineteenth annual catalog tells you.—Ask for it now.

*Northwestern Business College*

Spokane's Accredited Commercial School.
M. M. HIGLEY, President.
S317 Howard St., Spokane. Wash.



**Do This For Your Hogs**

Provide a wallow close to the feeding grounds to which add Dr. Hess Dip and Disinfectant. The **DIP** will kill the lice and cleanse the skin, and as the hogs pass back and forth from the wallow to the feed trough, the **DRIP** will destroy the disease germs and the worms that pollute the ground. That will mean a clean, healthy skin, freedom from lice, a safeguard against disease and larger, better porkers. Also sprinkle freely about poultry houses, pens and stables to destroy germs and avoid contagious diseases. An excellent disinfectant for the home.

Dr. HESS & CLARK
Ashland Ohio

DR. HESS DIP and DISINFECTANT

## VETERINARY

By DR. S. B. NELSON.

**Rubs Hair Off**—I have a 7-year-old mare which I bought last fall. She has rubbed her mane and the hair on her tail out completely. She also rubs her ears and head. Can you tell me what to do for her,
Freewater, Ore. R. J.

The trouble with your mare may be a simple eczema, or it might possibly be due to a parasite. It might be a true mange due to the scab mite or due to a mite infection the chickens. It is quite possible that you may get good results from the following treatment: Apply once daily to the affected parts one part of corrosive sublimate in solution in 1000 parts of water. This is very poisonous and must be kept where children can not get it.

**Tuberculosis in Cattle**—I have a Holstein-Freisian cow 5 years old which has a slight cough. She had what was called a blood boil on the back of her hip last winter. She is three months pregnant now. She eats well, is not overfat, but in good flesh. She gets nothing but dry alfalfa hay to eat. She has been milking 16 months, and gives about three quarts at a milking. Would this cough indicate tuberculosis? Whom does one have to get to test a cow for tuberculosis? Is there any cure for tuberculosis in cattle?
Hermiston, Ore. A READER.

I doubt that your cow is affected with tuberculosis, as just a simple cough is not sufficient cause to base a diagnosis of that disease. The symptoms of tuberculosis are a constant cough when the lungs are affected in advanced stages, a loss of flesh, the hair is turned toward the front and has a hard dry appearance. There is generally a disturbance of the bowels, either constipation or diarrhea. If the animal is put to mediumly violent exercise she shows considerable breathing disturbance. To get the cow tested for tuberculosis you should write to your state veterinarian, at Salem. There is no cure for tuberculosis.

**Sores on Cow's Udder**—Can you tell me what is the matter with my cow and what I should do for her? She has a sore on the udder. One year ago this summer, shortly before she went dry, a scab formed on the front udder near the junction of the udder with the belly. As far as I know there was no bruise or external injury. I used iodine. The scab would peel off, leaving a fresh sore, then a new scab would form and peel off again, and so on till the cow was dry. It healed then. Shortly after she was fresh this time the scab formed again, but in two or three places. About the time it heals up in one place it starts in another place, but always close together and on the front part of the udder. The cow is not sick, and eats well. I feed her alfalfa hay and such kinds of mill feed as can be had in the market. She gives two callons at a milking, and it tests high. She is never with other cattle. Has a small pasture of level land, so there is very little chance of being bruised. There are no blisters or pus that I can notice. W. R. H.
Vancouver, Wash.

It is quite possible that your cow is affected with the disease known as necrophorum, which is caused by the bacillus of the same name. I would suggest the following treatment: After each milking paint the sores which you describe with a one-half per cent solution of picric acid in water.

**Heifer Has Running of Bowels**—I would like to know what ails my heifer. She was 2 years old this spring. I had her bred to a young sire and she has been getting weaker ever since. She had running of the bowels about a month ago and now she has it again. It is clear and slimy at times, then green water. She won't eat at all now. We fed her flour and water before and gave her a dose of salts once, then flour and water to stop it. Could she have been injured inside when being bred? She seems to want to urinate all the time. Can you tell me what to do for her? C. E. R.
Boyds, Wash.

I am not sure what the trouble with the heifer is, but as a tentative remedy I would suggest that you give her a tablespoonful of turpentine in four ounces of raw linseed oil morning and evening for a few days, also give her a tablespoonful of listerine in a pint of water at noon for a few days.

**Horse Has Kidney Sores**—I have a saddle horse with what we commonly call a kidney sore on the back. The sore will scab over and does not seem to heal up no matter how long the animal is allowed to go out of service. Sore seems to be unhealthy. What treatment is advisable?
S. B. S., Walla Walla, Wash.

The saddle sores or kidney sores on the back of the horse are growths which have to be removed by surgical interference. I would suggest to you that you consult one of your local veterinarians and have him operate on your animal. That is generally the only way that a recovery from the trouble can be secured.

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# POULTRY

Write to the Editor.

JAMES DRYDEN,
Editorial Contributor

## A Good Start

### Usually Means a Good Ending

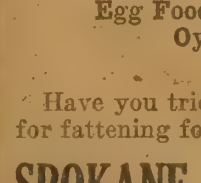
In noting in the December 13, 1917, issue the fact that a pen of White Leghorns entered by the Hollywood farm at the Storrs contest was first during the first two weeks of the contest which began November 1, the statement was made that "a good beginning in an egg-laying contest is a pretty good indication of a pretty good ending."

At this date, August 31, this pen is tied for third place. During the winter it went back considerable, but it is now showing the come-back.

A good beginning usually means a good ending, with hens. It is not because they get a start which makes it hard for contending pens to catch up, but because it means an inherent ability to perform well for the year. If the pen makes a good start, and then in two or three months drops back and allows a dozen other pens to pass it, it should not be concluded that because they have won and lost they may not win again. The "come-back" is a real fact with egg-laying hens. A good start means a good end, though between the start and the end there may be a quagmire.

Now, then, the hens that are laying now and continue to lay until November, are the hens that began to lay first last fall as pullets. Early laying maturity means long-laying capacity. Not only is this true of the beginning and end of the first year. It is true also that the hen that makes a good record or a good start the first year will make a good second-year record. Don't discourage the early starter when it comes to hens and say she is too good and won't live long. The reverse is true. Whether it be true of boys and pigs, I will leave to the hog men and the human men to argue. This is a hen story.

J. D.

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### SUPPLEMENT GRAIN.

**Hens Need Protein Concentrates in Their Feeds.**

Hens can not produce eggs profitably on grain alone. The grain ration must be supplemented by protein concentrates. Recent investigations show that the source of protein also influences egg production. That is, protein concentrates of animal and vegetable origin differ in ability to stimulate laying. A series of tests have been conducted at the University of Missouri to determine the relative efficiency of animal proteins, represented in experiments with meat scrap and sour milk and vegetable proteins, represented by oil meal, gluten meal and cottonseed meal, in rations for egg production. Feeding tests have shown that:

1. Meat scrap and sour milk are the most economical sources of protein for laying hens.

2. It is poor economy not to furnish the laying hen a protein concentrate of animal origin.

3. Vegetable proteins alone can not be fed economically.

4. Twenty-five per cent meat scrap is sufficient amount of animal food in a dry mash.

5. There is no evidence that vegetable proteins alone or in combinations with animal food, increase egg production.

6. One pound of eggs can be produced with every four pounds of feed if the proper ration is fed.

7. According to these tests; 100 pounds of sour milk is worth 5.4 pounds of meat scrap.

### FEED THE BEST STRAINS.

**Britain Eliminating Unprofitable Layers.**

The British government, according to a correspondent in England of the Iowa Egg Reporter, has set aside 50,000 tons of feeding stuffs "for the preservation of the best utility strains of poultry in this country. The selection of the best strains for preservation is to be made by committees formed in various localities among the poultry keepers themselves. These committees will be connected with the feeding stuffs committees of the ministry of food, which are already in existence for the rationing of horses and cattle. These poultry committees are a very democratic form of administration, all the poultry keepers in a district selecting their own representatives to administer the scheme."

It has taken the war and the scarcity of foodstuffs in Great Britain to bring about the elimination of the unprofitable layers. Poultrymen everywhere should take note and set his house in order, for if the war goes on there is no telling but what some governmental action may be necessary in this country to prohibit the feeding of grain to slacker hens.

J. D.

### GROW WHEAT ON SWAMP LAND.

A report from Sacramento, Cal., tells of the reclaiming of 20,000 acres of land in that section for the growing of wheat after it has stood useless for decades, owing to the flood waters of the Sacramento and American rivers. The reclamation was made possible by the cooperation of the federal government and the state of California. The reclamation project will eventually cost some $42,000,000, and is designed to reclaim 60,000 acres or more from the river flood waters. In addition the navigability of the Sacramento river will be greatly improved, it is stated. The report says that a first-class crop of wheat is this year being harvested from the 20,000 acres already reclaimed.

### Feeds the Orphan Lambs



The above photo shows Frances May Kershaw and her orphan lambs, Frances May is 18 months old and lives on a ranch in Yakima county.

### STUDY SHANK COLOR.

**The More Eggs Laid the Greater the Fading.**

Poultrymen who keep yellow shanked chickens have an excellent guide as to what the previous egg record of the hen has been. It is safe to state that the absence of shank color in yellow shanked varieties indicates that the hen has been a good producer, while an abundance of yellow color in the legs indicates just the opposite. This is true except in localities where the soil is of such a nature as to bleach the shanks. According to H. L. Kempster of the University of Missouri, the shank color is due to a yellowish pigment in the fat known as xanthophyll. When a hen lays there occurs a movement of this fat into the blood circulation, and as a result the yellow pigment is taken up and deposited with the fat in the yolk of the egg. Consequently the shanks fade. The more eggs laid the greater the fading. Of course, this does not occur all at once but gradually. By August 1 a good laying hen will show pink shanks, says Mr. Kempster, while the shanks of a poor layer will be yellow. After a few weeks, in which the hen is not laying, the color will return; but if a person wants to pick out good layers as breeders for next year he should select those with pink shanks.

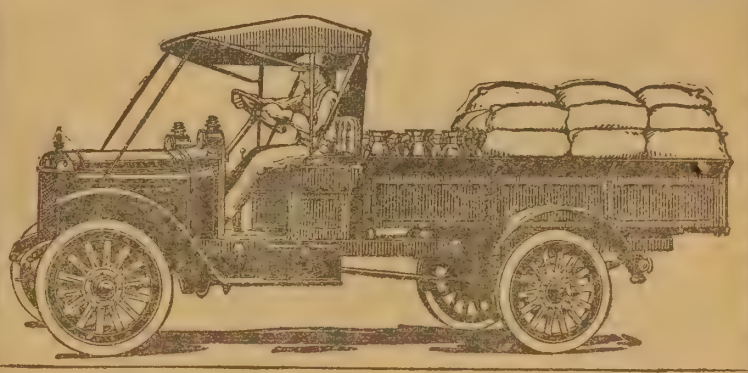
### Hash.

War has not changed the American darkey. A dusky cook of an American regiment now in France was being quizzed by an officer about the cleanliness of that free-for-all army product known as hash.

"How do you make your hash?" dutifully inquired the officer.

"We don't make it, boss," was the answer. "It just accumulates."


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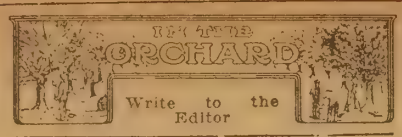
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GRANVILLE LOWTHER
Editorial Contributor.

# Orchard Troubles

## Diseases, Pests and Remedies

By GRANVILLE LOWTHER.

I have reached the close of a series of articles on apple pests. There are many other fruits besides apples, and each and every species and variety have their diseases and pests. Those affecting the apple generally affect other fruits, and some of them affect garden vegetables as well. Take, for instance, the green aphis. It is found on nearly all fruits, vegetables and farm products. There are others of a general character in so far as their ravages are concerned. The following conclude the list of apple pests:

**Trumpet Leaf Miner**—This pest is of very little importance in the northwest.

**Unicorn Prominent**—The technical name of this pest is Schizura unicornis. It is a chewing insect and may be controlled with the codling moth spray.

**Western Tussock Moth** — This pest is confined mostly at present to the Pacific coast and its work is very similar in feeding habits to that of the tent caterpillar. However, they do not build tents or nests, as do the caterpillars. They are chewing insects and may be killed with the arsenate of lead spray used for codling moth.

**White Dotted Apple Worm**—This is a light green worm about an inch long, marked with five white longitudinal lines and numerous whitish dots. They feed mostly on the under side of the leaves. When fully grown it draws together a portion of the leaf with silken threads to form a hollow tube. This is lined with a layer of silk and the caterpillar then passes into the pupal stage. The chrysalis remains in the fallen leaf until spring, when it issues as a gray moth. Remedy, arsenate of lead.

**Yellow Necked Dantum**—This pest is a chewing insect and may be killed with the arsenate of lead spray.

### The Subject Simplified.

It would be impossible to remember all the names, descriptions and methods of treatment for all the pests catalogued in this series of articles, unless the orchardist gave more time to the subject than is reasonable to suppose he could give. I will therefore divide them into three parts, viz., boring (or puncturing), chewing and sucking. These are killed by two kinds of sprays, called the contact spray and the poisonous spray.

(1) All kinds of insects that chew stems, leaves or fruit may be killed by spraying the foliage and fruit with arsenate of lead or some other poison.

(2) The sucking insects are those that insert their bills into the leaf, bark or fruit and suck the substances or juices. To this class belong scale, for which we spray with lime sulphur. The boring insects may be killed with any good contact spray, and no doubt lime sulphur kills a great many. But the best contact spray I have ever tried is the tobacco spray, generally put up in cans and labeled "Black Leaf 40." It will also kill codling moth, caterpillars and other chewing insects, provided it reaches them; but they are often so protected that they can be reached only by the use of poison. The only objection I have found to the use of the tobacco spray is that it is expensive. I am of the opinion that tobacco could be grown in this country and the spray manufactured at a cost much less than the present cost. But we have not reached that point yet in the development of aids to the fruit industry. One reason why we have not known more of the great army of pests is that we kill the chewing insects when we spray for codling moth, and the sucking insects when we spray for scale.

### Fungus Diseases.

The fungus diseases are all, in so far as I know, controlled by the fungicide sprays, of which one of the best is sulphate of copper, generally called Bordeaux. Powdery mildew may represent this class of diseases.

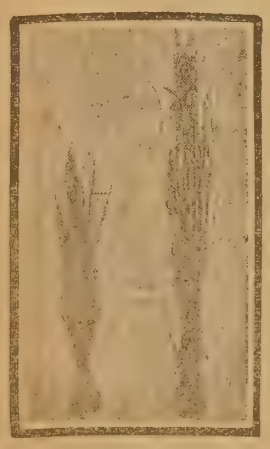
### Bacterial Diseases.

Bacteria are just as real and just as much alive as insects, trees or animals; but they are not so large. Because we can not see them with the naked eye, we judge of their presence by the effects. In some cases the only remedy known is to cut out the diseased portions, as in the case of pear blight. In other cases spraying with Bordeaux or copper sulphate is a remedy. The remedy in most general use is the Bordeaux.

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Other articles under the same head of "Orchard Troubles" will be given in coming issues of this paper.


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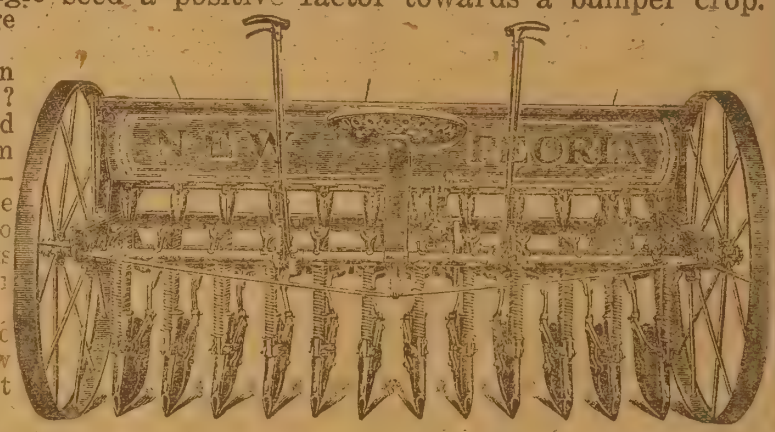


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Can you afford NOT to take advantage of a proven method to increase your crops in times like these? The New PEORIA DRILL means a bigger yield, and the profit to which you are rightfully entitled from your land and efforts. Note the two photographs—the difference between the work of a PEORIA and the ordinary drill is plainly seen. Time has proven that no other drill can duplicate the New PEORIA. It works in any soil. Use it for any of the small grains—or peas, beans or corn.

With the high price of grain you can well afford to discard any other drill, or any seeder, for the New PEORIA. Bigger and better crops pay back its cost quickly.




## Peoria Successes Made in the Northwest—Read Them

**Arthur Cole, Pullman, Wash., says: "I consider the New PEORIA DRILL the best drill on the market. I would not consider anything but a PEORIA DISC SHOE DRILL."**

**P. N. Huffman, Green Creek, Idaho, says: "Since 1903 I have sowed an average of 200 acres a year with my NEW PEORIA. I have also loaned it to my neighbors and it is safe to say they have sown 500 acres with it, making a sum total of over 2500 acres. I have never bought one repair. It feeds perfect, sows even and does as good work NOW as it did the first year I bought it."**

**G. L. Paxon, Madras, Oregon, says: "I consider the New PEORIA DRILL at least all that is claimed for it by those who make it. Chief among its features is the lightness of its draft. It can be easily regulated to sow from 18 lbs. of wheat up to any desired amount."**

**Sam J. Carlisle, Bonanza, Oregon, says: "I have used a good many different drills, but I have never used any that is equal to the NEW PEORIA DISC SHOE DRILL. The grain is all planted at the same depth and comes up even. A farmer will use no other drill after he has tried the NEW PEORIA."**



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A farmer who sows 100 acres of wheat ordinarily would use 4000 pounds, or 66 bushels and 40 pounds. One-fifth, or 20 per cent, of this amount saved by the New Peoria Disc Shoe Drill would be 800 pounds, or, at $2.20 a bushel, would mean $29.33 he had saved in cash on the 100 acres sown.

While many farmers who use the NEW PEORIA say that grain will yield from 2 to 3 bushels more per acre when sown with the PEORIA DISC SHOE, we will be conservative and give the estimate of one bushel per acre, which on 100 acres would mean 100 bushels, or $220; together with $29.33 of seed saved at the time of seeding, would mean a total saving of $249.33.

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# Patriotism of the Farm Family

## *Deserves Insignia of Recognition in Speeding Up Food Production*

Believing that the speeding up of food production is a war measure of first importance and believing also that every member of the patriotic farm family is deserving of recognition in the form of a special insignia, the Pacific Northwest Farm Trio, consisting of The Washington Farmer, The Idaho Farmer and The Oregon Farmer, designed a farm service war flag, distinct from the war service flag.

As will be seen by the several flags pictured on page one in this issue, other emblems of wartime patriotic service outside of the army and the navy are being recognized the country over.

It is difficult to understand how the triangular, pennant-shaped flag with a red border, blue field and white stars in the field can be confused with a rectangular war service flag having white center and blue stars. They are entirely distinct in outline and color scheme.

Some little time ago a letter was received at this office from H. A. Meyer, director of the University of Missouri experiment station, in which he said: "I think your idea of the service flag is a most excellent one, and since the flag has already been adopted in the four states of the Pacific northwest it might be used as a national emblem, provided that it gets the approval of the Washington authorities." Following out this idea Mr. Meyer wrote to C. B. Smith, of the states relations service of the U. S. department of agriculture, Washington, with regard to the matter, as will be seen below. This same matter was taken up with Mr. Smith by Senator W. L. Jones of Washington. The advisability of a farm service war flag was also submitted to a number of other persons throughout the country. Abstracts from their letters follow:

### Senator Jones Interested.

Senator W. L. Jones of Washington has taken much interest in the farm service war flag, writing: "This flag looks to me like a very good thing, and I am glad to know that it is taking so well in our state. If there is anything I can do to assist in promoting the matter of having the flag adopted generally I will be very glad to do it. I have today taken up the matter with Dr. C. B. Smith of the states relations service, and caught him just as he was about to leave his office on his way to Chicago to attend a conference of the extension directors of 11 of the agricultural states. He intends to submit this proposition to these directors and see how they view the proposition to have the flag generally adopted. When he returns he is to submit a report to me in the premises, and I shall be very glad to write you again at that time as to what, if anything, is done looking toward the adoption of this flag."

Returning from the Chicago conference Dr. C. B. Smith of the states relations service communicated with Senator Jones as follows: "You called recently at this office to make inquiry with reference to a farm service flag which is being used in some of the states in the northwest and promoted by the editors of the agricultural press of that section. I told you that this matter had been called to our attention from another source and would be considered at a meeting of our extension directors which was being called in Chicago. We had the Chicago meeting, but I found no unanimity among the directors as to the desirability of urging upon the farmers the use of a service flag. If it seems desirable to the nation to recommend such service flag or other emblem, it was the judgment of those present that something distinctive should be designed, and doubt was expressed as to the desirability of the federal government taking up and pushing an emblem of some organization or institution of local character.

"As I indicated to you on the occasion of your call at the office, we now have under consideration the possibility of a national campaign of a week or more in the interests of our agricultural extension organization, at which time it may seem desirable to recommend to the states a national emblem, badge or button, but it is impossible at this time to tell what this will be until those who may have charge of the work shall have been assembled and had time to consider the matter."

With reference to the same Chicago conference T. A. Coleman, acting superintendent of the extension service of Indiana Extension college, writes:

"Replying to your letter of July 16 addressed to Professor Christie, which has been referred to me, I will say that a sample of your flag was exhibited and a general discussion of this matter was indulged in by the Washington officials and extension representatives from 11 of the middle west states held in Chicago. The general concensus of opinion was that since the flag was, in a measure, a copy of the personal service flag now used in connection with the army, it was unwise for the agricultural people to use it in this form as a national flag. The matter of some insignia for the man who is rendering an agricultural service was discussed somewhat. Expressions generally favored a button instead of a flag. Nothing definite was decided upon."

### "Looks Good to Me."

S. B. Doten, director of experiment station, Nevada: "Looks good to me."

In Tennessee they are using red, white and blue posters to indicate farm production work.

Edwin T. Coman, president Exchange National bank, Spokane: "The idea is a most excellent one."

Marco Morrow, director of advertising, Capper publications: "The idea appeals to us as a good one."

V. O. Gilbert, state superintendent of education, Kentucky: "This proposition appears to be very interesting."

Charles H. Lugg, superintendent of education, South Dakota: "Let me say that I like your idea and I believe the flag will become popular."

A. E. Bowman, director extension service, Wyoming Agricultural college: "I believe the flag would appeal to the people of Wyoming."

J. B. Borden, executive secretary, state council of defense, Wisconsin: "I am much interested in the proposition, and I believe the idea to be a good one."

C. Larsen, director of extension, South Dakota Agricultural college: "I think this is an excellent motto. I should think that it might become a national emblem."

Dr. Oscar Dowling, president Louisiana state board of health: "I believe this would appeal to the farm homes not only in Louisiana but throughout the states."

Paul V. Maris, county agent leader, Oregon: "My conclusion with reference to the farm service emblem would be that it would depend entirely upon the method of distribution."

F. S. Harris, director state experiment station, Utah: "On first thought it appears to be an excellent idea, and I hope you will be able to arouse sufficient interest to put the idea into operation."

Robert Withycombe, director of eastern Oregon experiment station: "I feel that your idea of a farm service flag is a splendid one, and yet I realize that there is a possibility of having too many service flags."

### Incentive to Boys and Girls.

Alva Agee, secretary state department of agriculture, New Jersey: "If a farm service war flag proves an incentive to boys and girls in food production it surely serves a good end and is worthy of commendation."

M. P. Shawkey, state superintendent of schools, West Virginia: "The device has merit, obviously, and I see no reason why it could not be used to good effect in West Virginia as well as in your great state."

S. P. Cary, state superintendent of education, Wisconsin: "The plan suggested in your publications of a use of a farm service war flag appeals to me. I would be pleased to hear more about its use in the Pacific states."

E. E. Flood, Exchange National bank, Spokane: "While it may seem a small service to us who are engaged in the other lines of war work, it no doubt will appeal greatly to those on the farm who are bearing the drudgery of this work."

F. L. Houghton, secretary of the Holstein-Friesian Association of America, writes that he is pleased to receive the farm service war flag, adding: "It seems especially appropriate, and I trust may be widely used."

W. W. Long, director of extension work in the Agricultural College of South Carolina, says: "We are in receipt of your sample of the farm service war flag, and I think our people would be very much pleased in having one."

F. R. Gooding, Gooding, Idaho: "I wish to congratulate both yourself and the Cowles Publishing company for your enterprise and patriotism in the development of the idea of the farm service flag. I feel that this flag should be made a national emblem."

C. A. Bosworth, director of the state laboratory of Arizona: "I have no hesitancy in saying that I think the idea suggested is an excellent one, and can see no reason why it should not make the same appeal in Arizona as in the Pacific northwest."

### Will Make Strong Appeal.

E. J. Iddings, dean and director University of Idaho: "I was very much struck with the significance of this flag when it was first called to my attention, and I feel sure that it will make a strong appeal to the farm homes in our state."

A. B. Cordley, dean and director Oregon Agricultural college: "The fundamental importance of farm service in the promotion of the war deserves recognition. Your farm service war flag is a beautiful and appropriate emblem of such service."

J. C. Kendall, director extension work, New Hampshire Agricultural college: "The plan has much to commend it, and if the flag should be adopted as a national emblem no doubt the plan would meet with favor among the farmers of this state."

H. T. French, director of extension service, Colorado Agricultural college: "I know of nothing that would give our agricultural people a better rating among all the people who are interested than to see this pennant streaming from every farmhouse or gatepost throughout the country."

B. H. Heide, secretary-general superintendent, International Live Stock exposition, Chicago: "The farm service war flag idea is an excellent one, and should serve to stimulate food production. It should certainly be exhibited as a gratifying recognition of the loyal services rendered by the young people on and off the farm."

C. E. Allred of the extension work bureau in Tennessee writes: "I have noticed with interest your campaign to secure and establish a farm service flag. This seems to me a splendid thing to do, and I wish you the best of success in making this a national movement. The flag which you have suggested is a very attractive one."

J. L. Morris, executive secretary of the Ohio branch of the council of national defense: "This flag has real merit, in our opinion, and would appeal to a lot of rural people, provided, first, that the design is appropriate, and, second, that the flag is given only for some definite service in food production."

### Encourage Patriotism.

President S. B. L. Penrose, Whitman college: "It seems to me that this flag would make a decided appeal to people on the farm, and although I am not in general inclined to favor anything which emphasizes class distinction and throws one set of people apart from others, nevertheless I approve the idea of a war flag for farm service as likely to encourage a spirit of conscious patriotism on the part of farmers and their families."

N. D. Showalter, president state normal school, Cheney: "I received a sample of this flag some time ago, and I am glad to say that I believe it is serving a splendid purpose in the four northwestern states. I believe, too, that this service could be extended to the whole nation by adopting it as a national emblem, and therefore give my hearty approval to the move you have made. I may say that I have talked with several leading farmers since receiving your letter, and find them all enthusiastic about the matter."

W. S. Thornber director of extension work of the State College of Washington: "While I had seen this design illustrated in your valuable paper, I did not realize its beauty until I opened the sample. The idea of a farm service flag appeals to me very strongly because in all of our work we are meeting with the one factor that almost every phase of war preparation and war activity is receiving definite approval and recognition with the exception of the farmer and his family."

### Fear of Confusion.

Director James W. Wilson of the South Dakota experiment station fears that the farm service war flag would be confused with the war service flag. This is also the opinion of Dean R. F. Shaw of Michigan Agricultural college and Assistant Director K. L. Hatch of the extension work, University of Wisconsin. This symbol of war service on the farm does not appeal to Dean R. L. Watts, Pennsylvania State college, because the sacrifice made by the mother and father of the boy who goes to the trenches is far greater than that made by the boys who stay at home. C. G. Schulz, Minnesota state superintendent of education, also does "not believe any one at home particularly deserves to be commended or rewarded for work in any nonmilitary service." The director of the extension work in Virginia, Jesse M. Jones, sees so many flag emblems and cards that he does not think it would appeal to the farmers of his state. Professor W. D. Lyman of Whitman college is pleased with the farm service war flag, and believes it worthy of all commendation if we would avoid unnecessary duplication in these matters. While realizing the possibility of having too many service flags, Robert Withycombe of the Oregon experiment station thinks the idea of a farm service flag is a splendid one. State Commissioner of Public Schools Walter E. Ranger of Rhode Island reports that at least two farm and garden service flags are in use in that state and he does not know what appeal a third would make. Dean Henry G. Knight of Oklahoma Agricultural college thinks "the idea is a good one, provided the giving of these flags is placed in the hands of a committee in each county who would be the judge as to whether such flag was deserved. And Paul V. Maris, county agent leader in Oregon, thinks the value of the farm service emblem would depend entirely upon the matter of distribution.

# SIDELIGHTS

### Seizing the Chance.

Auntie—It is a very solemn thing to be married, dearest Ethel.

Ethel—It's a great deal more solemn not to be married, dearest Auntie.—Cassell's Saturday Journal.

### Did Better.

"Please lend a hand, my dear," we said,
"To help the boys who fight."
"Lend?" she said coyly, "why, I gave
My hand to one last night."

### Reforming a Crank.

He used to be an awful crank.

Yes, but he's turned since he got married and his wife took him in hand.—Philadelphia Bulletin.

### Dollar Alley.

"Why do they call this Dollar alley?" asked the stranger.

"Because there are 100 cents in it," answered the native.—Boys' Life.

### Mystery of War Soup.

"What's this, waiter?"

"It's bean soup, sir."

"I don't care what it's been—what the deuce is it now?"—Cassell's Saturday Journal.

### Slightly Twisted.

"What did the doctor do for your wife when he found her in such pain?"

"Oh, he eased it off at once. He gave her a epidemic interjection."—Baltimore American.

### Spreading Corruption.

"You will have to graft these trees before they will pay," said the country man.

"Alas!" moaned the city man. "Even old Dame Nature has learned the trick."—Baltimore American.

### Definite Information.

The recruit was both sulky and stupid and strongly resented the inquisitorial character of the questions put to him. At last the sergeant turned to him and sternly said:

"Look here, young fellow, you've got to give a straight answer to questions put to yer. Now, then, where were you born?"

Then came the answer slowly, as if the information imparted were grudged.

"London—right hand side, going in."—Liverpool Post.

### Embarrassing.

A man who had made a huge fortune was speaking a few words to a class at a business college. Of course, the main theme of his address was himself. "All my success in life, all my financial prestige," he said proudly, "I owe to one thing alone—pluck. Just take that for your motto—'Pluck, pluck, pluck!'"

He made an impressive pause here, but the effect was ruined by one student, who asked inquisitively, "Yes, sir, but please tell us how and whom did you pluck?"—Tit-Bits.

### Demand on Demand.

"The war is demanding great things of us, but it's a holy war, and we don't mind."

The speaker was a representative. He continued:

"No, we don't mind, on the contrary we're glad—but the war's demands, somehow, remind me of Smithers.

"Smithers entered a hatter's and produced a very dirty check for $20 which he asked the hatter to cash for him.

"'Can't do it, Mr. Smithers,' said the hatter. 'I couldn't possibly do it.'

"'All right,' said Smithers. Iron the durn thing for me, then.'"—Washington Star.

### Strenuous Work.

In a certain home missionary movement every participant was to contribute a dollar that she had earned herself by hard work. The night of the collection of the dollars came, and various and droll were the stories of earning the money. One woman had shampooed hair, another had made doughnuts, another had secured newspaper subscriptions, and so on.

The chairman turned to a handsome woman in the front row.

"Now, madam, it is your turn," she said. "How did you earn your dollar?"

"I got it from my husband," she answered.

"Oh," said she, "from your husband? There was no hard work about that."

The woman smiled faintly.

"You don't know my husband," she said.

# A CROOKED TRAIL---By Lewis B. Miller

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**A story of a thousand-mile saddle trip up and down the Texas frontier in pursuit of a runaway ox.**

(For the synopsis of Chapter I. see page 5.)

## CHAPTER II.

### A Night at Lookout Gap.

The far-stretching prairie which my hunt for the runaway ox had led me out upon, was dotted over with lone live-oak trees and little live-oak groves—dark-green islands in a sea of brighter green. Numerous bunches of long-horned cattle could be seen grazing here and there, or standing or lying in the shade of the live-oaks. Thinking that Lep might have sought companionship among some of these, I spent all the rest of the forenoon riding from one bunch to another, but without finding him.

When at length my shadow, pointing due north, indicated the hour of noon, sharp hunger had attacked me, but not a bite of anything had I to appease it. Dick, I knew, must be even hungrier than I was. So I dismounted in the shade of a big, thick-topped, spreading-topped live-oak. After removing saddle and bridle, I tied one end of Kelly's lariat around the pony's neck and the other to a low-hanging limb. Luxuriant grass crowded close up to the tree, and even under it, and the little horse was soon eagerly filling himself.

It was a splendid summer day. Now and then a slight breeze rippled the sea of grass around me. The sun shone brilliantly, hotly down, and the whole prairie was ringing with the voices of grasshoppers and other cheerful sounds. After gazing at prairie and mountains for a while, as they shimmered in the heat, I threw myself down on the thickest grass, in the thickest shade. My little dog came and sat close by.

"Vic," I said, "we can't eat grass; so we might as well take a nap."

Vic wagged her tail responsively, and I stretched myself at full length, with my arm for a pillow, and was soon fast asleep.

I must have slept an hour or two. When I awoke, Dick had grazed his fill and was standing quietly in the shade Vic was lying near me. The day was now at its hottest, and I waited half an hour or so longer before saddling up. While waiting I climbed to the very top of the live-oak and took a survey of the whole country, but failed to discover the object of my search.

When at length I was riding on, my general course was toward the mountains, but I kept zigzagging across the road, going out to every bunch of cattle I came in sight of for a mile or two on both sides.

The sun was not very high when I arrived at Lookout Gap—a break or pass through the mountain-range. Old settlers insisted that it had been so named because, from the first settling of the country until a year or two ago, one had to look out for redskins if he went over there. In the gap I stood and gazed both ways, but not in search of Indians. They would never come again. Finally I dismounted, and while the pony grazed I climbed one of the broken, jagged ends of the mountain for a wider view.

From this elevated position I could make out a little drove of cattle south of the mountains, but a mile or two east of the gap. They were grazing near the foot of the range, and among them could be distinguished two spotted animals that bore some resemblance to the one I was looking for. So I slid and stumbled down the steep slope, sprang into the saddle and trotted away to investigate. While riding along the foot of the mountains, I frightened several small herds of deer grazing in the coves. One herd numbered a dozen or more. Once, in a little patch of woods, I scared up some wild turkeys. There was an abundance of game here.

Again, for perhaps the twentieth time today, disappointment met me. Neither of the spotted animals was Lep.

The sun was near to setting by the time I got back to the gap. Now I was in a serious quandary as to what to do. The nearest house was ten miles ahead. If there had been anything to eat here, I would have camped at once, for I had already ridden many miles, and Dick, hardy as the little fellow was, was showing signs of weariness. It looked very much as if I should either have to go supperless or ride on. If I had had my gun I would have tried for a deer or a turkey; but my only weapon was a pocket-knife.

While sitting in the saddle, debating the matter, I heard a squeaking close by; and presently Vic came out of the tall grass, dragging a mule-eared rabbit that she had pounced upon and killed as he sat in his nest. The little dog was hungry, too, and looked up at me as if to say: "Here's something for our supper."

Quickly I dismounted and examined the game. It was a young animal, only about two-thirds grown, and plainly both fat and tender. Now I thrust my hand first into one pocket and then into the other. I did not smoke—I have always detested tobacco—but I had been burning brush on our cleared ground recently, and perhaps I still had a match.

All that my most careful search could discover was a broken piece of a match. But it was the right end. After examining it closely, I decided that there was fire in it.

"Dick and Vic, that settles it!" I exclaimed enthusiastically. "We're going to camp somewhere close by tonight. Vic, we'll have broiled rabbit for supper, but no bread or salt."

Vic wagged her tail, stuck up her expressive ears and looked up at me, as much as to say that if she had plenty of broiled rabbit she could get along without anything else.

Tying the game behind my saddle, I led Dick through the live-oak grove where we had camped the fall before, and up into a cove where some timber grew. Here I gathered up an armful of dry wood and brush, tied them with the end of Dick's lariat, and hung the bundle to the saddle-horn. Then, after collecting another and bigger armful, I started for the open prairie, leading the pony.

There was plenty of wood in the cove, and ordinarily it would have been the best camping-place. But, for different reasons, I did not care to camp here tonight. One reason: there was no water here, and I had no vessel to carry any in. But a far stronger reason was that the mountain-top was covered with dense, impenetrable thickets of scrub-oak, in whose thorny fastnesses, I had been informed, numerous wild animals of prey, such as wolves and wildcats and mountain-lions, and a few bears, had their hiding-places. The wolves and wildcats I did not particularly fear, but the bears and mountain-lions I much preferred to have no dealings with, especially while unarmed.

Before leaving the cove I noticed Vic nosing excitedly in the grass among some bushes, and on making an investigation found that she had discovered a wild turkey's nest, with six speckled, freckled eggs in it. These would make a valuable addition to our meager bill of fare, and I transferred them from the nest to my pockets.

A few hundred yards south of the mountain was a scattering line of small willows, and there I found a little stream. Throwing down my wood on its bank, I removed Dick's saddle and bridle, and after tying the end of his lariat to a bush, left him to help himself to water and grass.

By this time darkness was settling down, and the loneliness of my situation was already upon me. I now began my preparations for spending the night here.

Selecting a suitable place, I carefully pulled all the grass for a yard or two around. This was to keep my campfire from spreading. But the grass itself I put to one side, to be used for a bed later. Then I arranged my kindling and some of my wood, and soon a cheerful, crackling fire was blazing up. Now I felt less lonely.

First I skinned the mule-ear. After washing it in the stream I cut it into pieces, impaled each of the hams on a willow stick, and held them over the fire to broil. All the while, to keep from getting lonely, I carried on a one-sided conversation with Vic.

"Smells delicious, don't it, little dog. Won't take long to broil it now. Wish we had a sprinkle of salt to rub on it. But, salted or not, there won't be a smell of it left when we get through."

Vic was sitting near me, with her ears pricked up alertly, while she eyed the broiling game with hungry solicitude. When talking to her I could hear her tail rustling the grass as she wagged it sociably, responsively.

After the hams had been appetizingly browned, I laid them on the grass; and having thrust other parts of the rabbit through with the sticks, I stuck the sticks well into the ground, over the fire, and left them to take care of themselves. Now I gave Vic one of the hams and myself went to work on the other. We were both hungry, and the hams were not half enough. The other pieces were broiled by this time, and I divided them between us. Soon the mule-ear's bones had been picked clean.



**The two eggs that I had buried in the embers exploded loudly.**

I had intended to save the turkey-eggs till morning; but my hunger was still unsatisfied, and the temptation to eat them tonight was very strong.

"Vic," I remarked, "we'll have a square meal now, and try to reach the settlements in time for breakfast."

The two eggs that I first buried in the embers to roast exploded loudly, one after the other, scattering ashes and fragments of themselves for yards around. With the others I was more careful, making holes in the shells, and standing them in the embers open ends up. They were soon roasted to perfection. Vic ate one and I the other three. There was enough, but not a bite too much.

Supper finished, I leaned back with a sigh of satisfaction. Night had long since closed down upon the scene. The steep, wild mountain, veiled in gloom, seemed to overhang me. Somewhere over to the west a wolf kept yelping; and on the mountain-top close by two wildcats were engaged in a bitter quarrel, snarling and screaming at each other defiantly. Sometimes Vic, excited by their clamor, ran off into the darkness to bark at them.

Once more, a few weeks later, I should look upon this scene as it was now. After that 20 years would pass ere I should return. And then I should stand upon the broken end of the mountain and look down into the gap—upon something very different. The mountains themselves would be unchanged, but all the surrounding country would be netted over with barbed-wire fences, dividing it into farms and pastures, and dotted over with farmhouses. And in the gap, the wild, rugged break in the mountain-range which I could now see dimly, would stand a busy little town—in the very gap, and spreading out on each side of it like a fan. There would be stores and shops, and a schoolhouse and churches. What a change—what a wonderful change.!

And as I should stand and gaze down upon the changed scene, though my judgment would tell me that that was better, something within me would keep saying, as I recalled this night: "They have spoiled it all—they have spoiled it all!"

And even now, while I am writing this story, far from these scene of that night's lonely camp, and amid a great city's bustle and din, there comes over me a feeling of deep regret, amounting almost to sadness, for the old wild days—the days that will not return.



But tonight, as I sat in the ring of light encircling my campfire, I was not thinking of the distant future. My thoughts were busy, rather, with the task ahead of me—the task of overtaking and bringing back my runaway ox. Lep had a decided advantage; for while he could keep traveling the greater part of the time, I was under the necessity of searching the country on both sides of the road, lest I should pass him. This advantage, and the fact that he already had three or four or even five days' start of me, made my undertaking a peculiarly difficult one.

But I was tired after a long day in the saddle, and soon began to think of sleeping. All that I had to sleep on was the grass—the grass I had already pulled and some more; but I arranged it carefully, and soon had a fairly comfortable bed. At the head of the bed I placed my saddle for a pillow, and some grass on it to mitigate its hardness. My saddle-blanket I unfolded and placed near me, for use only in case the night grew cool enough for cover. As yet, however, there was no indication of that.

Then, after moving the pony to fresh grass, beyond the stream, and lying down for a drink, I came back and went to bed—my cool, fragrant, grassy bed. Vic lay down in reach of my head, where she could run her sharp little nose about in my hair.

As I lay there, with the blue sky and the innumerable host of stars above me, and the nearest human habitation 10 miles away, I felt a sense of loneliness, and at the same time a peculiar sense of satisfaction over my wild surroundings. The cries of prowling animals of prey on the mountain were mingled with the voices of night-birds and the shrill singing of harmless insects in the grass around me, and—then I was fast asleep.

Once or twice, I know not how long afterwards, I remember being half awake and sitting up and looking about me drowsily, to recall where I was. But I saw only the dim prairie, and the dark mountain overhanging me, with Vic lying at my head and the pony cropping the grass busily but a few yards away. Then I dropped down and was asleep again.

It must have been a good while after midnight when I was awakened once more, this time very differently. The pony was snorting in alarm, and Vic, backed up against the saddle, was growling fiercly, while every hair seemed standing on end in angry defiance. I leaped to my feet.

Following her gaze, I detected the outline of some large-sized animal, which I quickly recognized as a mountain-lion! The beast had its gaze fixed upon both me and the dog, and kept growling ominously in reply.

My first impulse was to make a dash for Dick, spring upon him and take flight. But before I could do so I happened to notice that some small sticks of my nearly dead camp-fire were still blazing slightly, though not enough to give much light.

Following another impulse, I snatched up a stick and thrust it into the high, thick grass close by. The grass was mostly green, but there was plenty of dry grass in it—of last year's growth—to burn readily.

The blaze leaped upward out of the grass with a frying, crackling sound, and quickly began to light up the surrounding prairie. As the flames rose skyward and the circle of light widened, the lion was soon in plain view.

But only for a few moments. The unexpected flame was too much for him. With one disappointed snarl the brute turned tail and fled toward the mountain, quickly vanishing into the outlying darkness.

The fire, though burning slowly in the green grass and the motionless air, soon spread till it was lighting up the prairie for hundreds of yards around. Presently it occurred to me that it had served its purpose, and that I ought not to allow it to sweep the whole country.

Breaking off a willow bush, I fell to thrashing the flames with that. But it proved too light, and I caught up my saddle-blanket, plunged it into the stream, and went to work vigorously. The blanket was far more effective, but so thick was the grass that not till after an hour of the hardest, hottest fighting I ever did was the fire completely subdued. And then a black, smoking area lay like a big ink-spot in the green prairie.

The sweat was now driping from my face, and I washed and splashed in the water till I had cooled myself. Then I carried my saddle across the stream, to the unburnt prairie, and sat down by it. The excitement of fighting the fire and the fright from the mountain-lion had banished all thoughts of sleep.

For perhaps an hour I leaned against the saddle and gazed off into the semi-darkness. Vic did the same, and kept up a pretty regular barking at what she heard. I half expected the mountain-lion to return. But now I was closer to the pony, and Vic would not fail to give me timely warning.

Finally, becoming weary, I lay down with my head on the saddle, and before I knew it was asleep again.

Vic's barking awoke me. I sprang up suddenly looking around in fright for the lion. But no lion was to be seen. A waning moon had risen during my last sleep, and was now bathing prairie and mountain in a dim, soft light. I stood, gazing about me, feeling like one in a dream.

Now I became aware that there was no indication of danger in Vic's barking. All she heard was the baying of some hounds.

The baying drew rapidly nearer. Soon two deer, a doe and her half-grown fawn, came into view through the hazy moonlight. Both, it was easy to see, had run far and were failing in strength. There were other mountains a few miles to the southeast, and they had probably run all the way from there.

(Continued on page eighteen.)

## Uniform of Food Administration



The uniform of the food administration is particularly adapted for summer. It is a one-piece dress of blue cotton with a front which buttons either way. With it are worn cuffs which button on and a high peaked cap of pique.

## Help to Save the Bumper Wheat Crop in Kansas



When the Kansas war council faced the situation of a bumper wheat crop and man power entirely inadequate to handle it, thousands of women with their army of children and girls, sprang up from all over the state, and the wheat crop was saved. If this volunteer army had not, unbidden, come to the rescue, a great part of this tremendous crop would have been lost. The above illustrations show them at their work.

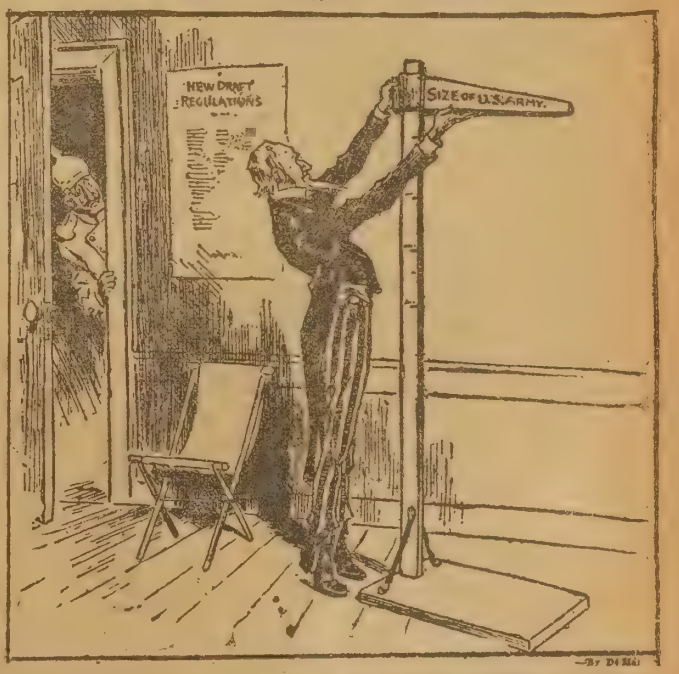
## Yankee Soldiers Comfort French Refugees



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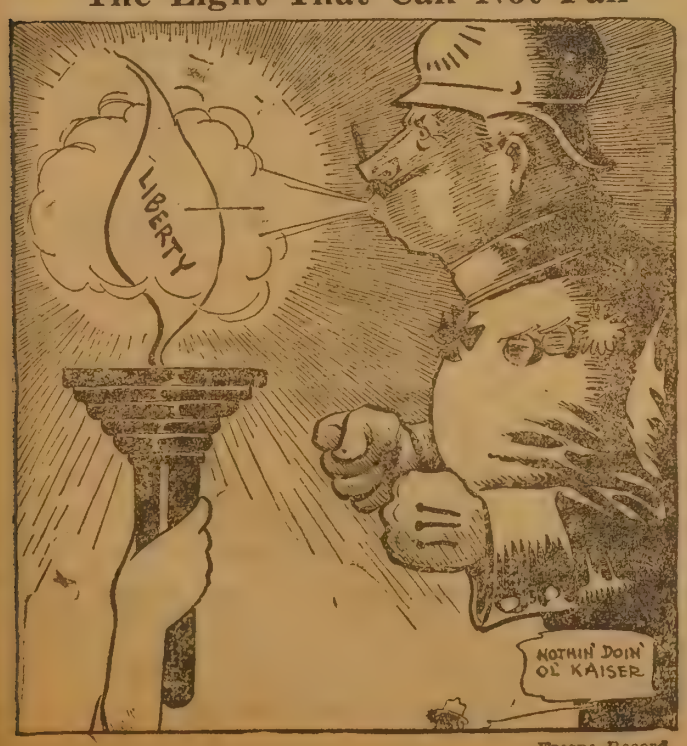
The above picture shows some of our American soldiers over in France befriending a family of French refugees, who are high in their praise of the Yankees.

## Removing the Limit




—De Mar, in Philadelphia Record.

## The Light That Can Not Fail

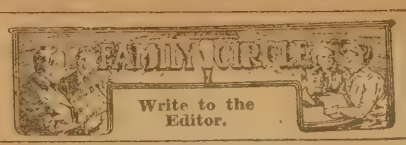



—Fresno Record.

## Haul Cattle in Big Truck



Motor trucks are helping solve the short-and-long haul problem and are being used for freight service in all parts of the country. In the above picture a big three and a half ton machine is demonstrating its eligibility to the essential industry class by carrying six cows.




ALICE W. BARLAND,
Editorial Contributor.

## Hyperperexia

### Too Much Heat for Human Engine

Few of us ever take time to consider the great change which has come over our dietetic habits since the day, say, of our great-grandfathers. Fifty or 100 years ago the present use of highly concentrated and refined foods was unknown. Coarse meal breads, the grain for which often was ground at home as it was used; plenty of vegetables, raised in the home garden; milk, eggs ant meat in moderate abundance—these were the things our ancestors worked on in the days when the average man had his share of manual labor to do.

Today refined wheat flour and refined sugar are regarded almost as necessities—so much so that when Mr. Hoover asks us to cut down our consumption of these concentrated foods we make as much fuss as if we were required to do without food altogether. The odd point about it all is that we do not perceive that while we have cut down our muscular exercise almost to the vanishing point within a few decades we have come to depend more and more upon a high-energy diet suitable only for men engaged in vigorous outdoor work. We are stoking our engines for strenuous labor, but the trolley car and the elevator and electricity and steam heat have taken most of the real labor out of life.

The result of all this overeating is an alarming increase in the number and the intensity of the diseases of mankind. New complications to the business of living are discovered every little while. Among these is one apparently directly attributable to the increased use of caloric foods. It is called hyperperexia, which literally means too much heat. The theory is that an overconsumption of such things as sugar and starch, both of them valuable principally as fuel for the human engine, leads to the gradual accumulation in the blood and tissues of oxidized material. This accumulation can go just about so far. Eventually an acute inflammatory process starts up, either local or general, and the rubbish is burned up within the body.

The application of all this theory is not hard to find. If you are blessed with a good digestion you certainly will be able to eliminate sugar and wheat flour from your bill of fare without hardship. If, on the other hand, you have a capricious stomach and have a tendency to colds and influenza and similar acute inflammatory troubles, a very decided cutting down of the concentrated fuel foods, among which sugar and refined flour are usually classed, will certainly be of benefit to you. Hooverize for your stomach's sake, if for no worthier motive. P. E. T.

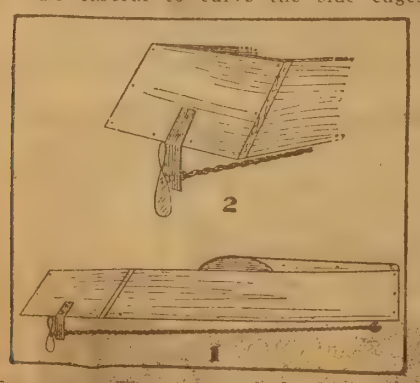
## Handicraft for Boys

By A. NEELY HALL.
(Copyright by A. Neely Hall.)

### A TOY MOTOR BOAT.

The toy motor boat shown in the illustration is propelled by a tin propeller run by a rubber-band motor.

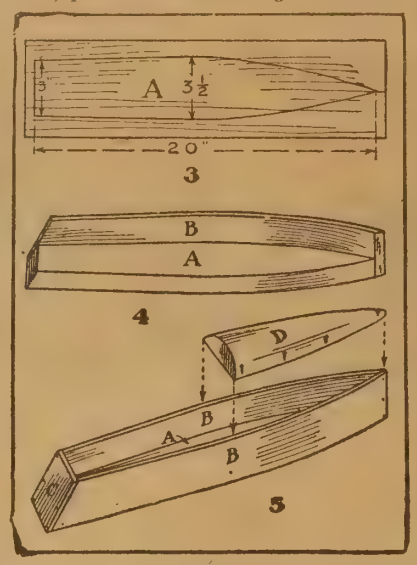
First cut out the hull from a piece of wood one inch thick, making it of the shape and dimensions shown in figure 5. Be careful to curve the side edges




the same. The stern end should be sawed off on a bevel as shown in figure 4.

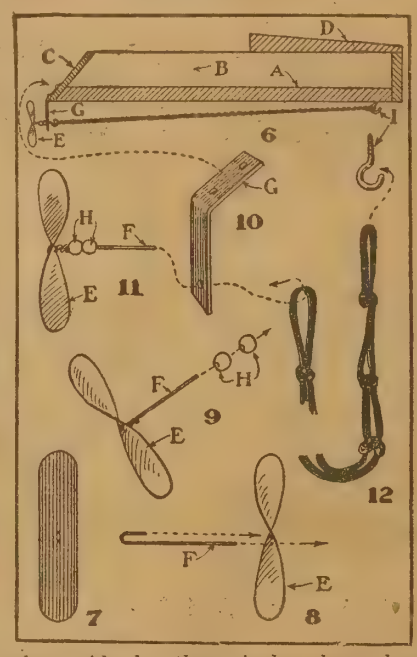
The sides of the boat (B, figures 4 and 5) are thin strips two and a half inches wide. Nail one to one edge of the hull, then saw off the bow end on a line with the bow of the hull, and the stern end on the same slant as the bevel cut on the stern of the hull. With one side in place, nail on the second side and trim off its ends. The stern piece (C, figures 5 and 6) should be cut next to fit the slanted ends of the sides. The deck piece (D) extends from the bow almost to the center of the boat. Its top surface should be tapered off lengthwise, as shown, and be curved from side to side. The piece may be whittled or planed to this shape. Fasten it with brads to the top edges of the sides of the boat.

The propeller (E, figure 6) is cut from the side of a tin can. Cut a piece three inches long and three-fourths inch wide, round its ends, and, with the point of a nail, pierce a hole through it each side




of the center of the length of the piece (figure 7). To finish the propeller, it is only necessary to take hold of the two ends and twist the piece into the shape shown in figure 8. The propeller is mounted upon a short wire shaft one end of which is bent into a hook (F, figure 8). Stick the long end of this shaft through one hole in the propeller, and the hooked end through the other hole, then twist the hooked end over on to the main part of the shaft, as shown in figure 9.

The propeller is supported upon the bearing plate G (figures 6 and 10). Cut this out of a piece of tin one and a half




inches wide by three inches long, bend it in half crosswise to give it stiffness, and then bend it lengthwise to the angle shown, so it will fit over the slanted stern of the boat. Punch two holes through the upper end for nailing to the stern, and a hole at the lower end for the propeller shaft to run through. A couple of beads must be slipped over the shaft between the propeller and plate G, to act as a "thrusts bearing" (H, figures 9 and 11). Probably you can find a couple of glass beads in your mother's button bag. After slipping the beads on to the shaft and sticking the shaft end through the hole in bearing plate G, bend the end of the shaft into a hook; then screw a small screw-hook into the bottom of the hull of the boat at the bow end (1, figure 6), and you will be ready for the rubber-band motor. Rubber-bands about one and a half inches in length are best for the purpose. Loop these together, end to end, (figure 12) to form a strand that will reach from hook 1 to the hook on the propeller shaft; then form three more strands of this same length and slip the end loops of all four strands over the hooks.

The motorboat now is ready for its maiden trip upon a lake, river or pond. Wind up the motor by giving the propeller about 100 turns. Then keep hold of the propeller until you launch the boat.

### GOVERNMENT REQUISITIONS BUTTER.

Announcement has been made that the government will take over 60 per cent of all the butter now in cold storage in the United States for army and navy uses. It is predicted that this will have a marked effect upon the fresh butter market as the 40 per cent remaining in storage will scarcely be enough to steady the market.


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2321-2319—Lady's costume. Waist 2321 cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 2319 cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. It will require 9 yards of 44-inch material for the entire dress for a 36-inch size. The skirt measures about 2 5-8 yards at the foot. Two separate patterns, 10 cents for each pattern.

2595-2597—Lady's costume. Waist 2595 is cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 3 yards of 36-inch material for a 38-inch size. Skirt 2597 is cut in 6 sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. Size 24 requires 3 1-4 yards of 36-inch material. It measures 2 yards at the foot. Two separate patterns, 10 cents for each pattern.

2515—Girl's coat. Cut in 5 sizes: 6, 8, 10, 12 and 14 years. Size 12 will require 3 3-4 yards, of 36-inch material. Price, 10 cents.

1614—Child's set, comprising a yoke dress, a slip, and one-piece drawers. Cut in 4 sizes: 1, 2, 4, and 5 years. The dress requires 2 1-2 yards, the slip 2 yards, and the drawers 3-4 yard of 36-inch material, for a 2-year size. Price, 10 cents.

2601—Girls' dress. Cut in 4 sizes: 6, 8, 10 and 12 years. Size 10 requires 4 yards of 36-inch material. Price, 10 cents.




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2592—Lady's house dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 5 yards of 44-inch material. The dress measures about 2 3-8 yards at the foot. Price, 10 cents.

2606—Girl's dress. Cut in 4 sizes: 4, 6, 8 and 10 years. Size 8 requires 3 yards of 36-inch material. Price, 10 cents.

2583—Lady's combination. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 38 requires 2 1-2 yards of 36-inch material. Price, 10 cents.

2593—Boy's blouse suit. Cut in 4 sizes: 2, 3, 4 and 5 years. Size 4 requires 2 3-4 yards of 40-inch material. Price, 10 cents.

2357—Lady's cover-all apron. Cut in 4 sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. Size medium requires 5 1-4 yards of 36-inch material. Price, 10 cents.

# The Crooked Trail

(Continued from page fourteen.)

The fugitives passed very near. To me there was something pathetic in their terror-filled eyes. Vic was eager to join in the chase, but I held her back.

Scarcely had the hard-pressed fugitives passed when the leading hound came by, soon followed by nearly a dozen others. So eager were they that they scarcely noticed me, even when I tried to scold them back.

Now for the first time I discovered a little drove of cattle lying between me and the the mountain—30 or 40 head. As the hounds approached the drove were all quickly upon their feet.

At first I thought the hounds had left the deer and were attacking the cattle; but a little later I discovered what was the matter. The doe and her fawn, being too nearly exhausted to climb the steep mountain, had taken refuge among the cattle. When the hounds came up, the cattle confronted them with a threatening array of horns. The dogs ran around, but everywhere they encountered that horned ring.

In vain the hounds tried to reach their intended victims. Not only could they not break through, but the moment a dog came too close a cow or a steer would rush out of the circle and chase him furiously for a hundred yards.

Public sentiment was against hunting deer at this time of the year; and as the owner of the pack did not come, I inferred that the hounds had gone hunting of their own accord.

Finding they could not penetrate that defensive ring, the dogs stationed themselves around the cattle, at a safe distance, and sat down to wait. Every now and then one of them would bay in that dismal, doleful way that only a flop-eared hound can bay. While I was still watching the interesting situation, moonlight began to give place to daylight.

Now I walked out toward the cattle and tried to call off the dogs. The one I approached only barked at me, which so provoked me that I moved around him to the foot of the mountain where stones were plentiful and began to let fly at him. Once started, I hurled stone after stone till the whole pack abandoned the chase and fled back the way they had come.

Soon afterwards the cattle moved off, and the doe and her young one, having rested, broke out of the group and bounded away up the mountain-side. Quickly they disappeared among the scrubby timber that covered those upper slopes.

While walking back to my camp, I was wondering how the deer had learned to avail themselves of the cattle's protection. Was this the first time the doe or any of her kind had made use of that experiment? Or had the deer learned long ago that the hostility of the horned animals towards beasts of prey was something that could safely be depended upon? Perhaps they had learned that when the first cattle came into the country. Possibly it was something they had known for ages, having found it out while the buffaloes were here, and when the wolves, the common enemies of both, had made it necessary for the defenseless deer to seek the companionship of their horned friends. But, however and whenever learned, it was certainly an ingenious and useful expedient.

By the time daylight had fully come, I had saddled Dick and was riding on in quest of my lost ox. With the dawning of morning my courage and determination, both of which had weakened a little during the hours of darkness, returned with full force. That ox must be brought back if I had to follow him to the "jumping-off place." And I should have need of all my determination; for, as the sequel proved, a long, difficult and even dangerous chase was ahead of me.

(To be continued.)

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My Dear Corner Children: There is something I want to tell you about unless you have noticed it yourselves. So many of the cousins have hoped I had a pleasant vacation. I know every last one of you did, but so many spoke about it. That is courtesy and thoughtfulness.

Those who are thoughtful and courteous to others have a great advantage over those who are not. People like them better, and will do more for them. A kind heart, a bright smile and a thoughtful mind are good things to have, and every one of us can have all three. Lovingly, AUNT NELLIE.

**Belongs to the Red Cross.**

Dear Aunt Nellie: This is my first letter to the Corner and I hope it will not be the last. I am 10 years old. My birthday is March 19. My chum is Effie Luddington. My dolls' names are Marie, Della and my kewpie's name is Lester. I have five brothers and two sisters. My brothers' names are Clyde, Ralph, Paul, Howard and Harley. My sisters' names are Lottie and Ethel. Lottie is married. She has a baby four months old. He is very cute. His name is Virgil Louis Johnson. Clyde is my oldest brother. He will have to go to war soon. I like to have the Corner grow. I think the other cousins do, too. The flowers are going to seed fast. I have a war garden. The things I planted are lettuce, carrots, beets, tomatoes and cucumbers. I belong to the Red Cross. I am in the fourth grade. I will write more next time.—Evelyn Blye Kellogg, R. F. No. 1, Baird, Wash.

**Buying Thrift Stamps.**

Dear Aunt Nellie: My father takes the Farmer and I read the cousins' letters and enjoy them very much. I want to join the Children's Corner. May I? I like our cousin Gean's letters very much, and I wish she would write and tell us of her home in Alaska. My birthday is the fourth of June. I was 11 years old. I am in the fifth grade. Have I a twin? If I have I wish she would write. I would answer. I am a member of the Junior Red Cross. I have knitted 13 hospital mops. I have bought war savings stamps and I am buying thrift stamps. —Ena G. Cochran, Dixie, Wash. (Cousin Geanie has written to us about Alaska. The letter will be printed soon, so keep watching for it.—Aunt Nellie.)

**Marguerite Knows How to Knit.**

Dear Aunt Nellie: This is the first time I have written to the Corner. We take the Farmer and I like to read the letters. We live about eight miles from Twisp. I am 10 years old now and my birthday is January 15. Have I a twin? I go to school at Frazier Creek and am in the fourth grade. There are 20 scholars in our school. I have two sisters and three brothers. Their names are Alice, Gertrude, Henry, Albert and Eugene. We have quite a few cows and six horses. We have two dogs and five cats. We walk about a mile and a half to school. I know how to knit.—Marguerite Selde, Twisp, Wash.

**Boat and Horseback Rides.**

Dear Aunt Nellie: Will you admit another cousin to your little circle? I have never written to the Children's Corner before, but I always read the letters, which are very good. Last year we moved onto an Indian ranch of 320 acres. As we live near the Columbia river and have five horses we have lots of boat and horseback riding in the summer. Clista Casey, I don't blame you for liking Leta Houch, as she was also my constant friend and playmate for over two years. I was 13 years old October 21. Have I a twin? I will close, wishing the Children's Corner good luck.—Bertha Hardlick, Covada, Wash.

**Six Cute Little Bantams.**

Dear Aunt Nellie: I was nine years old May 27. This is the first time I have written to the Children's Corner. Have I a twin? If so I wish he or she would write to me. I have one sister. Her name is Bernice. She will be 13 years old July 19. My papa takes the Farmer. I enjoy reading the Children's Corner, also the story of "Trappers of the Ozarks." I live two and one-half miles from Latah. We have a little black pony named Dolly. We drive her to school. I have six little bantams. They are so cute.—Marguerite Anderson, Box 97, Latah, Wash.

**Two Sisters and a Brother.**

Dear Aunt Nellie: This is the first time I have written to the Corner. I have two sisters and one brother. I am 10 and Carmen is 7. My birthday is December 27. Have I a twin? We live on a 160-acre farm. Papa has six horses. I have one two-year-old colt named Blossom. Papa is plowing.—Edwin Anderson, Corfu, Wash.

**Still Snow on the Mountains.**

Dear Aunt Nellie: This is my first letter to the Corner. I am 11 years old. I am in the sixth grade. My birthday is January 12. Have I a twin? If so, I wish they would write to me. We came to Dryden in our auto. We have great fun climbing the hills. There is a big hill right back of our house. We have a great big strawberry patch. The Wenatchee river is half a mile from our place. There is still some snow on top of some of the hills. We had a shower yesterday. Everything is fresh and green.—Martha Weber, Dryden, Wash.

**Skates on the Lake in Winter.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I hope it won't be the last time. I was 12 April 21. Have I a twin? If so, I wish she or he would write to me. I have two brothers and three sisters. My brothers' names are Roderick and Willie, and my sisters' names are Iva, Alice and Mildred. We have two dogs, four kittens, about two dozen chickens, about 50 cows and 40 horses. We have a big house and there is a lake in front of our house that we skate on in the winter time.—Violet Gray, Wauconda, Wash.

**Pick Flowers on the Way.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I hope it will not be the last time. I am 8 years old. My birthday is July 28. I have black hair and blue eyes. I have one sister. Her name is Florence. She is 2 years old and I have one brother named Albert who is 6 years old and goes to school with me. I am in the second grade and he is in the first. We go to school two miles. We walk and pick flowers on the way to school.—Rosie Wietz, Lancaster, Wash.

**Live With Grandpa on His Farm.**

Dear Aunt Nellie: There are three of us in our family besides mama. Our names are Edwin, 9 years old; Marion, 7 years old, and my name is June. I am 11 years old and was born the second of June. Have I a twin? We live with our grandpa on his farm. My uncle takes the Farmer. He lets me read it. May we become members of the Children's Corner?—June, Edwin and Marion Foster, Naches, Wash. (Three new cousins all in a bunch, and we welcome you all. Come again soon, won't you?—Aunt Nellie.)

**Brother Enlisted on His Birthday.**

Dear Aunt Nellie: This is the second time I have written to the Children's Corner, and I hope it won't be the last. I have one brother in the coast artillery. He enlisted on his birthday. I will be 12 years old August 25. Have I a twin? If I have I would like to hear from her. I know how to knit. I am going to knit a sweater right away for our soldier boys.—Eva Hickman, Farmington, Wash.

**Gladys Broke Her Arm.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner, and I hope it will not be the last. I am 10 years old. My birthday is August 26. I have found one twin. Have I another one? Her name is Mildred Buxton. I will write to her. I broke my arm Monday, May 6. Well, as my letter is getting pretty long I will stop, with lots of love for Aunt Nellie and the other Corner cousins.—Gladys Strong, R. F. D. 1, Deer Park, Wash.

**In the Third Grade Next Year.**

Dear Aunt Nellie: I am a little girl 9 years old. My birthday is August 5. I have two brothers and three sisters. Their names are Ruth, Harold, Herbert, Mary, and Bertha. I will be in the third grade next year. We live on a 720-acre farm. We have 25 horses and 25 pigs. We have 15 cows and five milk cows.—Ella Sherfey, R. F. D. 3, Colfax, Wash.

**Fun to Write to the Corner.**

Dear Aunt Nellie: I will write again as my letter was in print. I have planted a war garden. How many of the cousins have war gardens? Some of my garden is up. I go to the Darden school. It is hot here today. My sister is writing to you. It is lots of fun to write to the Children's Corner. I will write again.—Eula Manis, Waitsburg, Wash.

**Auretta's First Corner Letter.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 11 years old. I have blue eyes, brown hair and a light complexion. My birthday is January 30. Have I a twin? If I have, I would like to hear from her. I live on a farm. I have one brother. His name is Verl. I am in the fourth grade.—Auretta Barnes, Route 1, Dixie, Wash.

**Mildred's Third Corner Letter.**

Dear Aunt Nellie: This is the third time I have written to you. I am 9 years old and will be 10 November 27. I have one brother in the war. I am in the third grade. Have I a twin? If I have I wish they would write to me. I have six sisters and three brothers. —Mildred Weaver, Wapato, Wash.

**Passes Into the Fourth Grade.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 7 years old. I passed into the fourth grade. My papa is working on the road crusher. I have a little brother 6 years old. We have two horses named Don and Maud.—Florence Whitney, Goldendale, Wash.

During the past week Aunt Nellie has received letters from the following cousins: Carl Tubb, Agnes Liere, Henry Besel, Ruth Noah, Mae Noah, Evalena Crouch, Hazel Emmett, Effie Van Potter, Elizabeth Cook, Bertha Walker, Alice Clifford, Alberta Raymond, Dessie Jones, Donald McDonald, May Sanders, Grace Yowell.




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## Yearling Lambs on Stafford Farm



The above photo shows five Shropshire yearling ram lambs, owned by W. E. Stafford of Junction City, Ore., that sheared an average of 12 1-2 pounds of wool each. The flock averaged 11 pounds. Mr. Stafford has been breeding Shrops 18 years. He has a good type flock, but makes wool his first consideration and has never bred to a ram unless he knew how much wool it had sheared. The result is, he has a flock of Shrops that shear decidedly higher than the average flock of Shrops in these days when wool is so important, as well as profitable. H. A.

## News for Breeders

A stock-judging contest for boys was held at the Southwest Washington fair. There were six entries. Three breeds of dairy cattle were judged. Jens Svinth won first, with a score of 255 out of a possible 300, with Fred Gallup second, score 250.

George Bertrand of Castle Rock, Wash., had an object lesson in breeding with his herd of Shorthorns at the Southwest Washington fair the last week in August. Mr. Bertrand had a heifer calf sired by his herd bull, Gold Mine, out of a grade Jersey cow. The heifer, nearly a year old, had been well cared for, and could scarcely be told from a purebred Shorthorn. It has a good red color, with a little white, a Shorthorn head and a good beef conformation, yet with a good udder. Mr. Bertrand points to it as an example of what a good bull can do in a grade herd, and says it is the man with grades who most needs a high-class bull.

The Lewis County Pure Breeders' association has a good plan of meeting every month at the farm home of some member. It helps to keep up interest and invites friendly rivalry. The August meeting was at the home of Nathan Hamilton, Holstein breeder, near Chehalis. The regular midwinter meeting will be held in December at Chehalis.

Owing to the scarcity of men for cow-testing work in Belmont county, Ohio, a young lady is holding down the job for one association and is reported to be making good. H. A.

### OFFSPRING TO BE SHOWN AT FAIR.



The photo above shows the Poland China sow, Long Model, owned by Ray Fox, the Poland China breeder of Lyons, Ore., which was purchased from the Sievers herd of Iowa, and is not only a show sow of great quality, but has already proved herself a great brood sow by the litter she has raised for Mr. Fox. Her offspring will be shown in the futurity at the Oregon State fair.

Golden Lady 3d is another big type Iowa breed sow that Mr. Fox has a litter from, and they are almost, if not quite, as good as those out of Long Model. Besides these Mr. Fox has pigs sired by his great boar, Ike Knox, that will show well in any kind of competition.

Mr. Fox's pigs were growing rapidly, and just putting on flesh nicely when I was there. He will not only have the two classes allowed in both futurity and open competition this year, but will show some barrows sired by Ike Knox. H. A.

### BRUNK TO JUDGE HOGS.

Thomas Brunk, the veteran Poland China breeder of Salem, Ore., will judge all breeds of hogs at the Oregon State fair again this fall. This will make four years in succession that Mr. Brunk has judged at this hog show, where he began exhibiting about thirty years ago.

Mr. Brunk judged hogs at the Interstate fair at Spokane, Wash., also and both hogs and sheep at Salt Lake, Utah. This makes the eleventh time in twelve years that Mr. Brunk has judged at Spokane. He will act as judge at the Pacific International at N. Portland for the third time.

### FINE YOUNG BULL CALF.

M. J. Walthers, superintendent of Von Heim farm, at Kent, Wash., reports that Von Heim Mary Hartog, the world's record Holstein for butter production, has just become the mother of a fine young bull calf, sired by Finderne Mutual Fayne Valdessa, the junior herd sire of Von Heim farm for which Von Heim farm bid $21,000 at a Portland sale, nearly two years ago.

### RAM SALE AT FILER.

About 2000 head of imported stuff, consigned by H. L. Finch of Soda Springs, Idaho, and R. S. Blastock of Walnut Hall farm, Kentucky, were disposed of at the recent ram sale of the Southern Idaho Wool Growers' association recently.

### HEAVY YIELDS OF BARLEY.

Reports from Minnesota and South Dakota speak of exceptionally heavy yields of barley and oats as a source of supply for western North Dakota and Montana, where the feed crops have been a failure.

## SHEEP


### SHEEP FOR SALE

Registered Shropshire, Oxford, Lincoln, Hampshire and Cotswold rams; 50 head registered Shropshire ewes; 3000 stock ewes, Lincoln, Cotswold and Shropshire breeds; 500 ewes, lambs, Cotswold and Lincoln ram lambs. Write for prices.

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H. STANLEY COFFIN, Yakima, Wash.


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# Breeders' Department

## JERSEY CATTLE


### A GRANDLY BRED CALF

Doerfler Farms offers a great line-bred Jersey calf, dropped August 17, 1918. Solid color, dark tongue and switch, and very typy.

His sire, GERTIES POPPY'S ST. MAWES, is by Poppy's St. Mawes, sire of 5 register of merit daughters, including Poppy's KOFFEE ROSAIRE, 575.18 lbs. FAT at 2 years, 1 month; Poppy's Olga, 427.10 lbs., at 1 year 11 mo., and Poppy's St. Mawes Waltz, 436.98 lbs., at 2 years.

**POPPY'S ST. MAWES** is by **ROSAIRE OLGA LAD,** sire of St. Mawes Beauty, 773.93 lbs. fat; St. Mawes **TISHA BABE,** 731.51 lbs.; St. Mawes **SUSIE OLGA,** 698.49 lbs.; **ST. MAWES BLOSSOM ROSAIRE,** 685.11 lbs.; **ST. MAWES WALTZ,** 678.62 lbs.; **ST. MAWES ROSE,** 667.79 lbs., and 19 others, five producing bulls and one producing daughter.

**ROSAIRE OLGA LAD'S** sire is Pride Olga 4th's son, sire of 12 R. of M. daughters, and his pedigree contains the names of the great foundation cows, **GERTIE OF GLYNLLYN, PRIDE'S OLGA** and others, and such great bulls as **STOKE POGIS OF PROSPECT, MELIA ANN'S STOKE POGIS,** etc.

**POPPY'S ST. MAWES'** dam is the great cow, **ST. MAWES POPPY,** 952.58 lbs. fat, from 15,782 lbs. milk at 9 yrs. 2 mos. She is dam of one R. of M. daughter and two other producing sons. Won **A. J. C. C.** gold and silver medal for production 1914, and champion cow 1916. She is by **ST. MAWES,** sire of 20 R. of M. daughters, with average of 572.95 lbs. fat, highest average for Jersey breed for bull with 20 or more tested daughters and one of the greatest bulls in the history of Jerseydom.

The calf's dam, **GWENDOLA ROSAIRE,** is by **ROSAIRE OLGA LAD,** mentioned above. On her dam's side are such great bulls as **KING KOFFEE'S COUNT, CROTON'S TORMENT,** etc. She has an official record of 648.14 lbs. fat and 11,415.3 lbs. milk in 354 days, made at 4 yrs. 5 mos., and had this calf 2 months before finishing this test, which reduced her record at least 100 lbs. fat. She has an average test of 5.68. She won the $50 silver cup presented by R. L. Burkhart for the highest cow in 1917, being a new official test member, 1916. She is now milking as high as 54 lbs. a day and promises to produce 800 lbs. fat for this year's test.

**GWENDOLA ROSAIRE'S** full sister produced a daughter that made over 800 lbs. fat and we have a full sister in blood to the 800-lb. cow.

DOERFLER FARM JERSEYS have the highest herd average in the world, considering size and entire herd on test. The 11 head average 599.42 lbs. fat, 11,352.5 milk. WE STAND BACK OF EVERYTHING LEAVING THIS FARM. See us at the Oregon State fair. For price and further particulars write

### DOERFLER FARMS

F. A. DOERFLER, PROP. SILVERTON, ORE.

### HE MUST BE SOLD

Bull calf, dropped July 26, 1918; sire, St. Mawes Koffee Violet Lad, whose dam's official record is 777 lbs. fat, or 914 lbs. 85 per cent butter, or 971 lbs. 80 per cent. He is a show bull, and his sire, Rosaire Olga Lad, has 27 Register of Merit daughters. The calf's dam is a Register of Merit cow, and he should be worth $200.
Will be sold for only $75, if taken at once.

WARD L. HULL. Ballston, Ore.


## POLAND CHINA SWINE


### Watch This Space

for announcement of my Fall Boar Sale. We have a grand bunch of spring and fall pigs from our herd boars: Big Bone Equal 2d by Big Bone Equal, by Big Bone by Old a Wonder and Master Wonder, by Master Piece by the 1200-pound Grand Master and Wonder Timm, he by the $2500 Sever's Big Tim and he by the Old Grand Champion Nebraska Tim and A. L.'s Big Orange by Orange Boy.

GREENLEAF STOCK RANCH.
A. L. Wilson, Mgr., Greenleaf, Idaho.
"Big Type With Quality."

### LOCUST HILL HERD

Big type and medium Poland China. Bred gilts and spring pigs of both strains, unrelated. Sixteen years a breeder of Poland Chinas in Oregon.

A. L. SWAGGART, Athena, Ore.

### NOTICE

On account of the war I am forced to sell my herd of Poland China hogs, also 100 M. B. turkeys, several geese, ducks and chickens. No help. Order from this ad.

E. A. KRUSE, Roseburg, Ore.

BIG TYPE POLAND CHINAS.
Herd headed by Sammy (79833).
Correspondence solicited.
Fruitland Stock Farm, C. Royston, Mgr.
Payette or Fruitland, Idaho.

### Big Type Poland Chinas

Mouw, Fesenmeyer and Herring strains, either sex. Also registered Shorthorn cattle; good individuals.

H. J. HOWSER, Stites, Idaho.

### Oaksdale Farm

Poland Chinas and Holsteins. Two fall boars at bargain prices for quick sale. A fine lot of early spring pigs. Best of breeding. A few well bred young bulls at very reasonable prices.

C. R. EVANS, Halsey, Ore.

### Poland Chinas and Holsteins

Strictly big type spring pigs of both sexes. Well grown, good individuals, sired by A. Price, A few choice young bulls.

B. S. THURSTON & SON., Jefferson, Ore.

QUALITY AND UTILITY
our hobby. Poland Chinas, our breed. Weanling pigs, both sexes, also a few service boars. Satisfaction assured.

FRANK NEEDHAM, Eugene, Ore.

QUALITY HERD.
If you want to improve your herd, try stock from my winners at the Oregon state fair.

RAY J. FOX, Lyons, Ore.

### BIG TYPE POLANDS

Genuine—Guaranteed.

GEO. W. BUCK, Oregon City, Ore.

PURE BRED POLANDS.
Breeding stock of all ages. Will ship C. O. D., subject to approval.

HERBERT WILLARD, Dayton, Ore.

## SHORTHORN CATTLE

# Mulhall's Shorthorns and Percheron Dispersion Sale

to be held at

**MULHALL'S FARM, THREE MILES NORTH OF FENN,**

on the N. P. and O.-W. R. & N. R. R., Idaho county, Idaho, Sept. 25th, 1918. The entire herd of 100 registered horses and cattle will be closed out. Have sold my farm and must give possession October 1st, 1918.

**WM. MULHALL, Fenn, Idaho**

## DUROC-JERSEY SWINE

**OVER 150 SPRING PIGS.**

Sired by our grand champion Richards Defender, Richards Pathfinder and Cherry King Orion Jr., and out of our big type prize winning sows.

In the last three years at the Utah and Idaho state fairs our hogs won 76 champion and first prizes.

Can furnish unrelated pairs. Satisfaction guaranteed or money refunded. Priced very reasonable.

**Richards Live Stock Company, Virginia, Idaho.**

### Ioka Farm Durocs

One excellent boar at breeding age. Bred gilts and weanling pigs of either sex.

**DOERFLER BROS., Silverton, Ore.**
A. N. DOERFLER, Mgr.

### Registered Duroc Jersey Pigs

Weanling pigs of Wonder and Inventor blood lines. Pairs and twins unrelated. Special prices to club members.

**F. E. KINGSBURY,**
Ass't Club Leader, Malaga, Wash.

### Chas. G. Sprong

BREEDER.

Registered Duroc-Jersey hogs. Weanling pigs for sale.

**GRANDVIEW, Wash.**

### Crescent Stock Farm Durocs

Spring pigs by the great $1300 boar, King of Orions 2d, and by our own great boar, Burke's Cherry King, out of prize sows. Uniform cherry color, finest of heads and backs, heavy bone and best of feet.

**G. M. BECKETT & G. O. SWALES,**
Johnson, Wash.

**REGISTERED DUROC-JERSEY HOGS.**

Some good spring litters Richards Defender and Pathfinder breeding; big type. Send out nothing but high class stock. Guaranteed to please. Write me for prices on these pigs.

**ERIK W. OLSON, Virginia, Idaho.**

### Growthy March Pigs

Good breeding, good individuality, satisfaction guaranteed. Write for description and prices.

**GEORGE DEBOK, Oregon City, Ore.**

### Otto's Jersey Lawn Durocs

The today's type and breeding bar pigs for November delivery, $25.

**L. S. OTTO, Filer, Idaho.**

**AVONDALE DUROC-JERSEYS.**

If seeing is believing, then be sure and see my exhibit of big type Duroc-Jerseys at the Idaho state fair and pick you out a real boar.

**H. C. POLLY, Burley, Idaho.**

**FOUR DUROC GILTS BRED TO FARROW** this fall, also spring pigs, on hand.

E. E. PRICE, CABINET, IDAHO, OR.
**JAMES N. PRICE, Yakima, Wash.**

## BERKSHIRE SWINE

### Berkshire Hogs for Sale

Have a number of sows, 18 months old; will farrow second litter this fall. Also young gilts and boars of all ages; all from prize winners. Write for prices.

**EARL WOOD, Silverton, Ore.**

### Riverby Orchard Berkshires

Riverby Orchard Berkshires won 12 out of 15 first prizes at the Washington state fair, 1916, also many prizes including grand champion sow at the Panama-Pacific world's fair. We offer for sale a few good boars and young sows.

**D. C. BUNN, Prosser, Wash.**

## MILKING SHORTHORNS

with world records behind them for milk production.

### A. R. O. HOLSTEINS

A son of the King of the Pontiacs at head of herd.

Can make special prices on young bulls of each breed.

**A. V. Bradrick & Son**
Palouse, Wash.

### H. H. SCHILDMAN

breeder of registered Shorthorn cattle, Hampshire sheep and big type Poland China hogs.

**Filer, Idaho.**

**REGISTERED SHORTHORN COWS.**

Young bulls and heifers, sired by Scotch bulls; liberal terms.

**CALDWELL CATTLE CO., Caldwell, Idaho.**

## GUERNSEY CATTLE

### Looney Farm Guernseys

Langwater, Glenwood and other best strains have won more show honors than any other herd in the west. A few very choice young bulls from heavy producing dams. Write for particulars to

**DAVID H. LOONEY, Jefferson, Ore.**

### FAIRVIEW FARM

Breeders of high class registered and grade Guernseys.

**A. J. SINNES,**
Reute 5. Mt. Vernon, Wash.

### ORCHARD HILL FARM

"Home of High-Class Guernseys."
Dr. Park Weed Willis, Owner.
**Redmond, Wash.**

## AYRSHIRE CATTLE

**EDGEWATER FARM.**

Government tuberculin tested herd headed by Wil. Peter Pan 63d, double grandson of Beuchan Peter Pan. No surplus stock available.

**ELBERT M. CHANDLER. Burbank, Wash.**

## CHESTER WHITE SWINE

### Blue Ribbon Stock Farm

Chester White Hogs. Hampshire and Rambouillet sheep. Swine of both sexes and a choice lot of ram lambs.

**ED SCHOEL, Suver, Ore.**

### REGISTERED O. I. C.

SWINE.

Choice weaned pigs. Will ship subject to approval.

**RINGGOLD FARM.**
J. H. Weist, Prop., Rt. 1, Box 15.
Centralia, Wash.

### COVE STOCK FARM

Unrelated fall and spring Chester White pigs from prize winning stock.

**ARCHIE CONLEY, Cove, Ore.**

## HAMPSHIRE SWINE

**HAMPSHIRE HOGS**

have won every feeding contest entered since 1914. Weanling pigs, gilts, bred or open. Our blood lines can not be beat.

**TUTTLE BROS. Asotin, Wash.**

## TAMWORTH SWINE

**ROUND KNOLL RANCH NO. 3.**

Herd headed by Knoll Slope Colonel, assisted by Jolly Lad IV. Correspondence solicited.

**Bliss, Idaho.**

## HOLSTEIN CATTLE

# OPPORTUNITIES IN HOLSTEINS

**October 16, 1918 Scappoose, Ore.**

Seventy head registered Holsteins at auction, including herd bulls, cows, heifers and calves, both sexes—some good enough to win in any show ring and heavy producers.

The blood from this herd is represented in most of the herds in the west and this sale gives YOU an opportunity to secure your choice at prices set by the public. Catalogue giving full description of the cattle to be sold and how to reach the sale will be published. Send request to sale manager and one will be mailed when published.

Certificate of health for each animal will be given by federal inspector.

## P. A. FRAKES, Owner

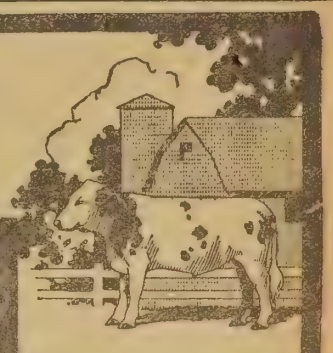
**SCAPPOOSE, OREGON**

COL. J. W. HUGHES
COL. GEORGE N. GUE **Auctioneers**

**E. A. RHOTEN, Sale Manager, Salem, Oregon.**

### FEED FEWER COWS— BUT FEED BETTER COWS

With Von Heim High-Testing Holsteins your revenue is not alone in milk and butter; the really big profits are in the increase of the herd. Some fine young bulls and females from world's record stock. Photos, pedigrees. Information gladly given. Address



H. J. WALTHER, SUPT.
**VON HEIM FARM**
KENT, WASH.
HOME of HIGH-TESTING HEAVY PRODUCING HOLSTEINS

### The HOLLYWOOD FARM Offers Four Registered Holstein Bulls

**Ready for service** **Well marked**
**Bred for production** **Straight on top**

Their Dams have official records of 20.3 lbs., 21.02 lbs., 23.02 lbs., 22.7 lbs. butter in 7 days, with lots of milk.

The average of the official records of their 4 nearest dams is:

**Bull No. 779—7 days' milk, 523.5 lbs.; butter, 26.1 lbs. Average test, 4.0% fat.**
**Bull No. 780—7 days' milk, 553.8 lbs.; butter, 28.8 lbs. Average test, 4.1% fat.**
**Bull No. 784—7 days' milk, 542.4 lbs.; butter, 28.69 lbs. Average test, 4.4% fat.**
**Bull No. 785—7 days' milk, 461.0 lbs.; butter, 26.3 lbs. Average test, 4.5% fat.**

To make room for our increase, these Bulls are priced to sell. Consider the high feed prices and raise only high producers.

Near Seattle.

**HOLLYWOOD, WASH. HOLLYWOOD FARM.**

### TEN GOOD HOLSTEIN COWS

All of excellent breeding. Three extra heavy producers, and all good. Seven safely in calf to Tobie DeKol 2d's Johanna Duke, a 75 per cent brother to Lady Tobie DeKol, once world's record senior 3-year-old, and sire of Jantilna Colantha Johanna, 22.5 pounds butter in seven days as junior 2-year-old, besides other A. R. O. heifers of fine type. Come and see them or write for full particulars and pedigrees. Will be sold below their value together or singly.

**HERMAN KEUNZI, Silverton, Ore.**

### 365 DAY HOLSTEINS

We are offering a bull calf, born June 27th, the two nearest dams of which average 19,866 lbs. milk, 855 lbs. butter for their yearly A. R. records. One a Jr. 2, the other a junior 4-year-old. The herd with yearly records.

**WESTERNWOLD RANCH, Prineville, Ore.**

### Registered Holsteins

Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.

**H. R. BOOMER, New Plymouth, Idaho.**

### HOLSTEINS

Well bred young bulls for sale.

**THOS. CARMICHAEL, Gaston, Ore.**

## HEREFORD CATTLE

### BULL RANCH

Hereford Cattle.
Berkshire Hogs.
Hampshire Sheep.

**CHAS. BULL, Mabton, Wash.**

### Highland Stock Farm

offers for sale Hereford bulls, 1 or 2 years old. One or a carload.

**PLATT BROS. Genesee, Idaho.**

## ABERDEEN ANGUS

### Aberdeen Angus Cattle

**A. H. EAGLESON & SONS,**
Boise, Idaho.

### For Sale—Pure Bred

High grade Holstein calves, yearlings and two-year-old, both male and female. None better in the northwest. Come and see them or write

**THE INTERMOUNTAIN INSTITUTE.**
R. F. D. 1. WEISER, IDAHO.

### Bargains in Bull Calves

Sired by Segis Riverside Pontiac, that sold in Pacific International sale, 1914, for $1025, and whose dam has A. R. O. record of 31.47 lbs. butter in 7 days; 118.89 in 30 days, and big records all through his pedigree.

**ERNEST JOHNSON, Scappoose, Ore.**

**REGISTERED HOLSTEINS.**

Bull calves for sale, with good A. R. O. backing.

**BEEBE BROS., R. F. D. 2, Rupert, Idaho.**

## BROWN SWISS CATTLE

### Brown Swiss Stock Farm

Breeders of Brown Swiss Cattle, the Farmers' Dairy Cow. Young stock for sale.

**THEO. BRUGGER, Route 3, Gresham, Ore.**

## PERCHERON HORSES

### Hunter Ranch Percherons

The Grand Champion KROUMIR at head of herd. Young stallions for sale at all times at breeders' prices.

**A. B. HUNTER, Island City, Ore.**

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, Sept. 14.—Favorable war news and better weather gave a decided advantage today to the bears in corn. Largely as a result the market finished nervous, 1c to 3c net lower, with October at $1.52½@$1.52⅝ and November at $1.49⅞@1.50⅛. Oats lost ⅛c to ⅜c. The outcome in provisions varied from 10c decline to 12c advance.

Higher quotations on hogs strengthened provisions. In the late dealings, however, pork evinced something of a tendency to sag.

**Cash Quotations.**

CHICAGO, Sept. 14.—Corn—No. 2 yellow, $1.65; No. 3 yellow, $1.64@1.65; No. 4 yellow, $1.57@1.59.

Oats—No. 3 white, 70½@71½c; standard, 71¼@71¾c.

Rye—No. 2, $1.63@1.61.

Barley—93c@$1.04.

Timothy, $7@10; clover, nominal; pork, nominal; lard, $27.07; ribs, $23@23.60.

**Pacific Northwest Grain.**

PORTLAND, Sept. 14.—Grain—September delivery bids: Oats, No. 2 white feed, $60.25; barley, standard feed, $51.50; A, $52.50. Eastern oats and seed corn in bulk: Oats, No. 3 white, $52.50; 38-pound clipped white, $52.50; corn, No. 3 yellow, $69.50; mixed, $68.50. October bids: Oats, No. 2, $60; barley, feed, $52; A, $53; oats, No. 3, $52.50; clipped, $53.50; corn, yellow, $69; mixed, $68.

Today's car receipts—Wheat 48, barley 7, flour 9, oats 2, hay 3.

SEATTLE, Sept. 14.—Yesterday's car receipts—Wheat 25, oats 5, corn 2, hay 16, flour 7.

TACOMA, Sept. 14.—Car receipts—Wheat 8, oats 3, hay 9.

**Minneapolis Wheat.**

MINNEAPOLIS, Minn., Sept. 14.—Flour unchanged; shipments, 73,636 barrels.

Barley—84@89c.

Rye—$1.59½@1.60½.

Bran—$29.31.

Wheat receipts, 550 cars, compared with 279 cars a year ago. Cash, No. 1 northern, old, $2.22.

Corn—No. 3 yellow, $1.62@1.65.

Oats—No. 3 white, 68¼@69¼c.

Flax—$4.12.

## Spokane Livestock Run.

SPOKANE, Wash., Sept. 14.

| | Cattle. | Calves. | Hogs. | Sheep. |
|---|---|---|---|---|
| Saturday, Sept. 14.... | 139 | 18 | 29 | 8 |
| Friday, Sept. 13..... | 173 | 75 | 144 | 5431 |
| Thursday, Sept. 12... | 78 | 7 | 208 | 167 |
| Wednesday, Sept. 11.. | 331 | 18 | 201 | 2061 |
| Tuesday, Sept. 10.... | 270 | 1 | 169 | 1194 |
| Monday, Sept. 9..... | 134 | 19 | 101 | 13 |
| Week ago ..... | 114 | 19 | 13 | 245 |
| Year ago ..... | 145 | 4 | 38 | .... |
| Two years ago..... | 79 | .. | .. | 67 |

Six carloads of cattle offered Saturday and the trading was quick and active. Most offerings were canner cows, with but few good animals in either the cow or steer classes. The offering being a little one-sided, the regular demand seemed wanting. The cattle market remains unchanged at the following:

| | |
|---|---|
| Prime steers ..... | $12.50@13.25 |
| Good to choice steers..... | 11.00@12.00 |
| Medium to good steers..... | 10.00@11.00 |
| Fair to medium steers..... | 8.50@ 9.50 |
| Common to fair steers..... | 5.50@ 8.00 |
| Choice cows and heifers..... | 8.25@ 9.25 |
| Medium cows and heifers..... | 6.25@ 7.75 |
| Canners ..... | 3.00@ 5.00 |
| Bulls ..... | 8.00@ 7.25 |
| Calves ..... | 7.00@10.00 |
| Stockers and feeders..... | 6.00@ 8.00 |

The run of hogs was extremely light. A few bunches of stocker and feeder hogs met sale at $18 per cwt. Former quotations remain unchanged as follows:

| | |
|---|---|
| Prime mixed ..... | $19.85@20.00 |
| Rough heavy ..... | 19.25@19.60 |
| Pigs ..... | 18.25@19.00 |
| Stockers and feeders..... | 17.00@19.00 |

The sheep division was almost entirely free of offerings. A few lambs averaging 93 pounds were weighed at $14 per cwt. The sheep market is active and steady as follows:

| | |
|---|---|
| Prime lambs ..... | $14.00@15.00 |
| Fair to medium lambs..... | 11.50@12.50 |
| Prime yearlings ..... | 10.00@11.00 |
| Prime wethers ..... | 9.50@10.00 |
| Best mutton ewes..... | 8.00@10.00 |
| Breeding ewes, 1 to 4 years old... | 14.00@18.00 |

Saturday's shippers: I. J. Davis, Trout Creek, Mont., 1 car of cattle; George Brown, Trout Creek, Mont., 1 car of cattle; W. D. Johnson, Quincy, Wash., 1 car of cattle; H. C. Miller, Ephrata, Wash., 1 car of cattle; B. C. Beard, Ephrata, Wash., 1 car of mixed cattle, hogs and sheep.

Driven in: Baker & Hadley; W. F. Runkle.

**Saturday's Sales.**

STEERS.

| No. | Av. lbs. | Price. | Po. | Av. lbs. | Price. |
|---|---|---|---|---|---|
| 5 | 1195 | $11.25 | 1 | 1185 | $10.00 |
| 1 | 1155 | 9.50 | 2 | 950 | 8.00 |
| 2 | 737 | 7.25 | | | |

COWS.

| | | | | | |
|---|---|---|---|---|---|
| 2 | 1182 | 7.00 | 2 | 1025 | 6.50 |
| 4 | 1538 | 6.00 | 5 | 921 | 6.50 |
| 48 | 666 | 4.75 | | | |

HEIFERS.

| | | | | | |
|---|---|---|---|---|---|
| 1 | 730 | 6.25 | 1 | 685 | 5.50 |

BULLS

| | | |
|---|---|---|
| 5 | 1171 | 6.00 |

## Seattle Market.

SEATTLE, Sept. 14.—Inclination of Puget sound potato growers is to reject bids of $30 to $35 and hold in dirt pits until spring unless they can realize $35 to $40. As a result, the market is unsettled. There is a big crop.

Fall pears are superseding the summer offerings, d'Anjou predominating at $3 per box. Jobbers are storing heavily good keeping fall pears for the winter trade, and surplus stock is being well taken care of. The local Bartlett season is closed. Oreas Island winter pears, a 10-carload crop, are soon due.

The tendency of the apple market is stronger. Prices that prevailed during the early trading have receded slightly as between various dealers without affecting the f. o. b. quotations due to too much slack in the profits. The decline of the week of 25c has adjusted this condition. Cash buyers are again becoming active.

The coloring process in the orchards is proceeding at a much slower pace than expected, and in place of an early delivery growers now state that they will be on the market at the customary time. General start in picking will be made Monday.

The butter, egg and cheese markets closed for the week at a much firmer tone. The supply of fresh ranch eggs has not been out of line with the five-year average, but the demand continues to be abnormal. Jobbers recalled that the market for fresh eggs is today 15 cents per dozen higher than for the same date last year.

Storage eggs are selling more freely, the spread between fresh and Aprils having become so marked that a heavier movement was obvious. Notwithstanding the buoyancy of the quotations for fresh stock the prices of storage eggs have remained unchanged.

There was so pronounced a shortage all week of fresh butter that the market, according to jobbers, should have advanced 2 to 3 cents over the one-cent incline, but quotations were held stationary while rigid.

Poultry prices to producers will remain unchanged for next week. There is a heavy demand for hens and light springs. The bulk of the poultry offering on the market comes from eastern Washington.

The high egg returns has been something of an inducement in preventing ranchers from selling off their poultry, as indicated earlier in the season, due to high and scarce poultry feed. Jobbers in reviewing their receipts for the last week declare that there is no visible increase in the arrivals of good laying hens.

The cheese market is firm, with the bulk of selling of Oregon and Washington triplets at 39c. Some of the sharp stock remaining in the hands of jobbers and bought in a lower market is selling at 28c.

**Purchasing Prices.**

Eggs—Select ranch, 59@60c per doz.; Oregon, eastern Washington and Idaho, nominal.

Butter—Fresh dairy, 31c per lb.; butter fat, 50c per lb.; bakers', 38c per lb.; raw milk, $3 per cwt.

Poultry—Broilers, live, 1918, 30c per lb.; hens, 3 1-2 to 4 lbs. and up, 27c per lb.; under 3 1-2 lbs., 25c per lb.; old roosters, 17@18c per lb.; ducks, live, fat, 23c per lb; squabs, large, $3.50 per doz.; geese, fat, live, 21@22c per lb.; Belgian hares, 12@16c per lb.; guineas, $7 per doz.; turkeys, young toms and hens, dry picked, 10 lbs. and up, 30@35c per lb.

Hogs—Light, 21@22c per lb.; heavy, 19@21c per lb.

Beef—Steers, fat, 14@15c per lb.; heifers, fat, 14@15c per lb.; cows and bulls, 11@14c per lb.

Veal—Fancy, light, 20@21c per lb.; do, heavy, 13@18c per lb.

Mutton—Fat, 22c per lb.; spring lamb, fat, dressed, 25c per lb.

## Livestock Quotations

**At Portland.**

PORTLAND, Ore., Sept. 19.—Cattle—Firm; receipts, 100 head. Steers, prime, $12@13; good to choice, $11@12; medium to good, $9.75@11; fair to medium, $8.25@9.25; common to fair, $5.75@8.25; cows and heifers, choice, $8@9; medium to good, $5.75@7.25; fair to medium, $4.75@5.75; canners, $3@4; bulls, $5@8; calves, $9@12; stockers and feeders, $6@8.

Hogs—Steady; receipts, 237 head. Prime mixed, $19.50@19.75; medium mixed, $19@19.25; rough heavy, $18@18.35; pigs, $16@17; bulk of sales, $19.35@19.50.

Sheep—Steady; receipts, 3216 head. Prime lambs, $13.50@14.50; fair to medium, $11@12; yearlings, $10@11; wethers, $9@10; ewes, $6.50@8.50.

**At Chicago.**

CHICAGO, Sept. 14.—(United States Bureau of Markets.)—Hogs—Receipts, 8000 head; market 5c to 10c higher than yesterday's average; top, $20.90, a new record; butchers, $20.30@20.85; light, $20.60@20.90; packing, $19.65@20.20; rough, $18.75@19.50; pigs, good to choice, $18.75@19.50.

Cattle—Receipts, 3000 head; compared with a week ago: Prime native steers, steady to 15c higher; steers selling between $16 and $18 25c to 50c lower; cheaper grades and western, steady to 25c lower; cows and heifers, 25c to 40c lower; calves, 25c to 50c higher.

Sheep—Receipts, 1000 head, compared with a week ago: Top lambs and yearlings, weak to 25c lower; feeding lambs, 50c to 75c lower; fat and breeding sheep, steady; feeding sheep and yearlings, firm to 25c higher.

**At North Salt Lake.**

NORTH SALT LAKE, Utah, Sept. 12.—Cattle—Receipts, 45 head. Choice heavy steers, $11@12; good steers, $9.50@10.50; fair steers, $8@8.50; choice cows and heavy heifers, $7.50@8.25; fair to good cows and heifers, $6.50@7.25; cutters, $5.75@6.25; canners, $4.75@5.50; fat bulls, $6.50@7; bologna bulls, $5.50@6.25; veal calves, $9@11.

Hogs—Receipts, 75 head. Choice fat hogs, 160 to 250 pounds, $19.25.

Sheep—Choice spring lambs, $14@15; wethers, $9@10; fat ewes, $8@9.

**At Seattle.**

SEATTLE, Wash., Sept. 14.—Cattle receipts were 240 head, all on the open market. A mixed shipment from Montana was the feature of the trading, although the lot was secondary. Two bunches of steers brought $12.65. Packers are willing to bid up strong for prime finished steers and cows and would pay a bonus for good quality.

Hog receipts, 175 head, all on contract direct to packers. Quotations are steady.

Cattle—Best steers, $11@13; medium to choice, $10.50@11.50 common to good, $8@8.50; medium, $5@7.50; bulls, $5@7.50; calves, $5@10.

Hogs—Prime light, $19.75@20; medium to choice, $19.50@19.60; medium heavy, $19.50@19; rough, $17.50@18; pigs, $17.50@19.

Sheep—Spring lambs, $13@15; yearlings, $9@12; ewes, $6@9.

## Portland Market.

PORTLAND, Ore., Sept. 14.—Print butter prices were raised 2 cents by city creameries, and the buying price of butter fat is also up 2 cents. This has likewise strengthened the cube butter market.

Sales of fresh Oregon eggs are dragging, with 51 cents the outside price. Shortage withdrawals are on a larger scale and offered at 43@45 cents, the legal limit. Eastern eggs are also plentiful.

Poultry cleaned up well at the close of the week on account of the Jewish holiday. Dressed meats held steady.

Yakima cantaloups are in the market and offerings at $2@2.50. Oregons are bringing $1.75@$2 and Californias $1.75.

There is no new feature to the potato trade, the market being well supplied. Burbanks are quoted at $2.50@3.25, according to quality. Onions continue weak.

Hop picking is under way in a number of yards, but fully half the crop will be abandoned. It is figured that 15,000 bales may be picked. About 10,000 bales represent contract sales. Other growers who are saving their crops will store them in the hope of some kind of a market after the war.

Wool valuing will be resumed by the federal administration here on September 24.

Butter—Cubes, extras, 53c; prints, 56@58c; butterfat, No. 1, 60c, delivered.

Eggs—Oregon ranch, candled, 48@51c; selects, 53c per dozen.

Cheese—Jobbers' buying prices, f. o. b. dock, Portland: Tillamook triplets, 29c; Young Americas, 30c per lb.; Coos and Curry, f. o. b. Myrtle Point, triplets, 28 1-2c; long horns, 29 1-2c per lb., 1-4 discount to Portland trade.

Poultry—Hens, 26@27c; broilers, 26@28c; ducks, geese and turkeys, nominal.

Pork—Fancy, 26 1-2@27c.

Veal—Fancy, 20@21c per lb.

Potatoes—Oregon, $2.50@3.25 per cwt.

Hay—Buying prices, f. o. b. Portland: Eastern Oregon timothy, $30 per ton; valley timothy, $29; alfalfa, $27; valley grain hay, $26@27; clover, $28; straw, $9@10.

## Butter and Eggs.

PORTLAND, Ore., Sept. 14.—Butter—Prints, extras, 56@58c; cubes, extras, 53c; prime firsts, 49c; dairy, 36c.

Butterfat, Portland delivery, No. 1 sour cream, 60c.

Potatoes, selling price, locals, $2.50@3.25.

CHICAGO, Sept. 14.—Butter unchanged. Eggs—Receipts, 5515 cases; unchanged.

SAN FRANCISCO, Sept. 14.—Butter 55@58½c.

Tomatoes, $2@2.50 a lug; celery not quoted; Australian brown onions, $1.50@1.70 cental; green corn nominal.

## SHEEP SCAB IS DISCOVERED.

The discovery of sheep scab in at least two of the large flocks on the ranges of central Washington resulted in a conference of the Washington Wool Growers' association in Yakima recently, the object of the meeting being to devise ways and means of stamping out the trouble and preventing its spread. Dipping of sheep will be used as a preventive and curative measure and sheep men are cautioned not to cross the trails used by the infected flocks. Representatives of the state department of agriculture are cooperating with the sheepmen.

## CORRECTION.

The August 29th issue of this paper contained an advertisement of Hayward O. Bair, featuring Dayton Airless Tires. The add was run without an address and should have mentioned that replies should be sent to Mr. Bair at W619 Second Ave., Spokane, Washington.—Adv.

# Stockmen's Smoker

## Is Well Attended at Walla Walla

The stockmen's smoker at the commercial club rooms Thursday evening September 12, during the Walla Walla fair, was quite largely attended by both club members and stockmen. And from it undoubtedly the good feeling already existing was increased, the fair spirit made stronger and the live stock industry encouraged.

E. L. Smalley, former president of the club, presided. He first called on E. C. Burlingame, who spoke of the growing interest in purebred stock and said we must have better stock on high-priced land.

Professor Willard, Northern Pacific development agent, expressed surprise at the quality of the stock and said it could show in the strongest company. He believed the time would come when there would be some kind of live stock on every Walla Walla valley farm.

Forester L. E. McDaniel, who was superintendent of the stock show, while complimenting the stock exhibited, said he was surprised that more stockmen did not realize the advantage of the Walla Walla fair. He said Walla Walla is the geographical center of the northwest live stock industry and must grasp the opportunity.

F. M. Rothrock of Spokane spoke in the highest praise of the show and of the treatment accorded himself and other exhibitors.

Horace Addis of the Washington Farmer referred to the high quality of individual animals and spoke of the educational value of stock shows.

Secretary L. L. Lynn told of some of the trials encountered and expressed gratitude for the cooperation of all. He promised a still better fair next year.

C. D. Minton of the Pacific Homestead told of the great opportunity Walla Walla has to become a live stock center. He urged encouragement of the boys and girls.

The chairman told of the manner in which $35,000 had been raised in city and county to finance the show.

Professor C. E. Monroe, assistant state leader of county agents, paid a high compliment to the stock shown.

Mr. Hanna, in charge of the W. S. C. herd, told of the fact that all the animals he was showing but one were bred at the college, and this one was calved on the college farm. He urged support of this college.

Major D. F. Powell said he had learned something, and now hoped to see Walla Walla stockmen go and win at other fairs.

Mr. Robinson, a sheep breeder and director of the old fair association, was proud to see what a good show had been made. He was glad of this spirit of fellowship, and said the man who sticks to the live stock business will win.

S. V. Davin, a sheep breeder, and several others spoke briefly. Punch was served, and several musical numbers were greatly enjoyed.

**SHIP** your cattle where they will bring you the most money.

OUR northwestern customers have found Kansas City their best market. We specialize on Oregon, Washington and Idaho cattle.

WRITE or wire us for market information at any time.

**WITHERSPOON-McMULLEN L. S. COM. CO.**

**Stockyards Station, Kansas City, Missouri.**

**HIDES** **WOOL, PELTS, MOHAIR, CASCARA BARK**

We do the largest consignment business in the northwest. Equally fair treatment on all shipments, large or small. Returns at full market value mailed same day as goods are received. Trial shipments wanted and appreciated, but are handled as regular shipments and not inflated values.

**THE H. F. NORTON COMPANY**

206 Third Ave. So., SEATTLE, WASH. PORTLAND, ORE. NAMPA, IDAHO.

The surface of any spindle shows rough through the microscope. But the powdered mica in Mica Axle Grease fills up this roughness and makes spindles smooth as glass. Then the grease works better and lasts twice as long. No hot boxes. Get a can from your dealer today.

STANDARD OIL COMPANY (California)



**MICA AXLE GREASE**

# Harvest Work Finished

(Continued from page eight.)

road connections are once established between the different communities of the county, our organizations will take up the fair proposition. On the whole our community is a very prosperous one. We may be able to show some of our prosperity when the fourth Liberty loan comes to us the latter part of the month. While we should like to be able to ship in some of the above stated classes of feed, we are not hard hit and if necessary we can sail through the winter without undue hardships. Farmers and business men are responding remarkably well to support a new organization known as the Wahkiakum County Development league. Through this organization it is hoped that sufficient pressure can be brought to bear on the powers that be, to the end that recognition can be given to this corner of the state, and road connections with the outside world granted. A. T. FLAGG.

**FEED IS SHIPPED IN.**

STEVENSON, Skamania County, Wash., Sept. 6.—Our crops are poor; no grain worth mentioning. Hay is short and feed is now being shipped in in quantities. Why is it with a much better crop of grain than last year, we can not get any shorts or mill feed as we did last year? The shorts are nothing but ground bran, but we pay the price for them all right. Our section is hard hit by the conditions of the times as we do not produce much grain hay or farm products and with the exorbitant prices prevailing, it is proving a serious handicap to the lumbering and timbering interests which are our main resources. Interest in fairs is completely "nil" in this county. W. T. JACKSON.

**Raise Record Corn Crop.**

GRANDVIEW, Yakima County, Wash., Aug. 23.—Some are preparing exhibits for the fair at Yakima. There should be a splendid exhibit of corn from this part of the valley, as there has never been better corn raised here. This vicinity is fairly prosperous. There is not more than one-third of an apple crop; pears are a short crop, and there are no peaches. Hay is pretty good. There are not many hogs. Those that feed grain and mill feed will have to ship in most of that kind of feed. E. H. FAULKNER.

**Production Is Below Normal.**

CHIMACUM, Jefferson County, Wash., Aug. 26.—In this part of the state the interest in fairs is overlooked this year to some extent. This county is going to have a small fair this year, but on account of a poor growing year, etc., we do not look for many exhibits. This year will not nearly be in proportion to the premiums offered at the fairs. This community has been hit hard this year by the drouth. Threshing is just starting and yields are not up to the expectations of what they should be. Some hay is being bought now, but on account of high prices much of the stock will be wintered on straw. There seems to be grain enough raised to supply seed enough and more, too, for this locality. The women are doing their part to help the labor shortage, a number milking cows and are doing very satisfactory work. JOHN VAN TROJEN, JR.

# Steamers for Wheat

## Shipping Board Will Allot Ten

News that the shipping board will allot 10 steamers to move flour and wheat cargoes from north Pacific coast ports has relieved millers, who feared the plants would have to be shut down. Large flour stocks have accumulated, owing to the government's delay in buying export flour. The order also means that the mill-feed situation will be improved. At the present time there is no millfeed on the local market. Country mills are selling all their output in their own territory.

The coarse grain markets at Portland were about steady at the close of the week. Bids were posted of $60@60.25 for sacked oats, $52.50@53.50 for bulk oats; $68@69.50 for bulk corn, $52 for feed barley and $53 for standard A barley.

The hay market is barely steady. Receipts have been running very large, but have been fairly well absorbed.

**MOHAIR TOO HIGH FOR GOVERNMENT.**

Lewis Penwell, chief of the wool section of the war industries board, explaining why the government has decided not to take over the mohair crop, says it is entirely due to the price. Mohair growers declared they could not afford to take less than 85 cents a pound, and that is more than it is worth to the government, according to Mr. Penwell. The government, he said, does not feel justified in fixing an arbitrary price below the cost of production.

**FREE FRENCH WORD BOOK.**

By enclosing a two-cent stamp for return postage every reader of The Washington Farmer may receive free a booklet of French words and phrases. Direct your letter to The Washington Farmer Information Bureau, Washington, D. C.


HIDES WOOL FUR




RUBBER METAL SACKS

We pay full market value, correct weight and assortment, prompt returns. Write for prices. We want your business.

PACIFIC HIDE & FUR DEPOT

Joseph Thiebes and C. T. Symmes,
1101-09 Railroad Ave., Spokane, Wash.


# FARMERS' WANT ADS

This is the farmers' "Want," "Sale" and "Exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rate, 7 cents a word per insertion, with a special rate to farmer subscribers to the Washington Farmer of 6 cents a word per insertion for from 4 to 12 times, and 5 cents a word per insertion for 13 times or more.

All commercial and land advertising, 7 cents per word each insertion. Open also to nonsubscribers.

In using these columns advertisers must observe: (1) No advertisement will be inserted for less than 75 cents. (2) Every word, number and initial, including name and address, must be paid for. (3) Cash must accompany order.

Above rates also include insertion in The Oregon Farmer and The Idaho Farmer.

**SITUATIONS WANTED—Male 21**

EXPERIENCED FARMER WANTS WORK on good farm or ranch for duration of the war; has wife and two children; desires location near school; Oregon, Idaho, Utah or California preferred; best of references. J. E. Swan, Moorcroft, Wyo.

CLERGYMAN, AGED 36, DESIRES POSITION with fruit ranch; capable wife; no children. Address F 2, The Washington Farmer, Spokane.

**EDUCATIONAL 45**

EARN MORE. ENROLL ANY TIME, AT Behnke-Walker, Portland, northwest's biggest business college, because best. Graduates assured positions. Write for catalogue.

**FRESH FOOD PRODUCTS 56**

WILL DELIVER BOX 48 LEMONS, ANY place, exp. paid, $1, or parcel post $1.25. Ernest Vince, Santa Barbara, Cal.

**HONEY, BEESWAX—Wanted 58**

SEND SAMPLES OF YOUR HONEY AND beeswax. State quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

**EGGS AND BUTTER WANTED. 59**

WE ARE ALWAYS IN THE MARKET FOR good eggs and dairy butter. Send us your next shipment. Oregon Farm Products Co., 386 Halsey st., Portland, Ore.

**MISCELLANEOUS—FOR SALE 60**

SASH AND DOORS.

Write for our large illustrated catalog No. 27, of sash, doors, frames, paints, building paper, etc., sent free, postage paid, on request.

Just received a fresh stock of prepared roofing, which we are selling at $1.80 for 1-ply, $2.25 for 2-ply, and $2.75 for 3-ply.

We sell any one, ship anywhere, and guarantee safe delivery.

O. B. WILLIAMS CO.
1943 FIRST AVE. SO., SEATTLE.

**MISCELLANEOUS WANTED 63**

CASH FOR OLD FALSE TEETH—WE PAY UP to $35 per set (broken or not). Send at once. Package held five to fifteen days, subject to owner's approval of our offer. Highest prices paid for old gold jewelry, crowns, bridges, platinum, silver. United States Smelting Works, Inc., 331 Goldsmith bldg., Milwaukee, Wis.

POULTRY WANTED.

We are cash buyers of poultry and dressed meats, also cream. Write us for prices, shipping tags and premium catalogue for cream shippers.

COMMERCIAL CREAMERY CO.
SPOKANE, WASH.

**MACHINERY—FOR SALE 93**

FOR FARM LUMBERING USE
"AMERICAN" PORTABLE SAWMILLS
Carried in stock by
HIGGINS MACHINERY COMPANY.
312 1st Ave., So., Seattle. Write for Catalog.

**AUTOMOBILES 114**

FORDS START EASY IN COLD WEATHER with our new 1919 carburetors; 34 miles per gallon; use cheapest gasoline or half kerosene; increased power; styles for any motor; very slow on high; attach it yourself; big profits to agents; money-back guarantee; 30 days' trial. Air-Friction Carburetor Co., 321 Madison, Dayton, Ohio.

**STOVE AND FURNACE REPAIRS. 126**

WRITE M. S. RUBENS, SPOKANE, FOR ANY parts needed to repair stove, furnace.

**POULTRY 174**

S. C. W. L. AND R. I. RED CKLS. AND PULlets. Mrs. Rominger, Underwood, Wash.

**LIVE STOCK. 177**

FOR SALE—TO CLOSE AN ESTATE, IN quantities to suit, some 20,000 sheep, ewes, lambs and bucks, from $10 up; also 800 head of stock cattle, 45,000 acres range land, best anywhere. Coffin Bros., North Yakima, Wash.

BERKSHIRE SPRING PIGS OF CHAMPION-ship breeding, for sale at reasonable prices. Send for description and price. R. W. King, Sweetwater, Idaho.

REGISTERED RED POLLED HEIFERS, FROM 3 weeks to 3 years old. All bulls sold. Mrs. D. F. Alward, Orting, Wash.

SHETLAND PONIES; BARGAIN PRICES. Write for list. N. C. Sorenson, Onalaska, Wn.

REGISTERED LINCOLN RAMS FOR SALE. N. D. Brouillette, Newberg, Ore.

**HOTELS 306**

WHITE'S HOTEL AND RESTAURANT—Rooms, hot and cold water, 75c up. Breakfast 20c to 40c; dinner, 25c to 50c. Sprague and Stevens, Spokane.

GALAX HOTEL; NEW AND MODERN; 75C and $1. Main and Bernard, Spokane.

NEW MADISON HOTEL, 75C AND UP. 1ST and Madison, Spokane, Wash.

**RUBBER STAMPS AND SEALS 384**

FOR RUBBER STAMPS, STENCILS, BADGES, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

**ARTIFICIAL LIMBS 424**

SCHINDLER ARTIFICIAL LIMB CO., S115 Wall st., Spokane, Wash.

**PLUMBING, STEAMFITTING 594**

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

**SEEDS. 620**

WE SPECIALIZE IN TIMOTHY, ALFALFA, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Idaho.

RECLEANED CHEAT SEED. VALLEY HAY. M. Senders & Co., Albany, Ore.

**FARM LANDS—FOR SALE 651**

A BIG LAND OPENING.
COWS, HOGS, AND A BANK BOOK.

Your dream of life, of ease, comfort and independence await you

On Port Susan Bay, Snohomish County; 6000 acres of the best land that lies out doors; a 2 hours' ride from Seattle places your feet on the richest, most productive soil in the whole state of Washington; rail and water transportation; near paved roads, schools, churches, cannery and condensery; 3½ miles of waterfront and finest beach on Puget Sound; 20 miles of beautiful lake shore, surrounding 8 picturesque lakes; these lakes teem with trout. Get in on the first choice for $35 per acre and up; 10 yearly payments, 6 per cent interest.

This is but the beginning of the story of Birmingham. Send to the owners for illustrated literature. BROWNELL LAND CO., 904 Third ave., Seattle, Wash.

60 ACRES SAGE BRUSH LAND; FINE SOIL; irrigable at very reasonable cost; will produce 6 to 8 tons alfalfa per acre, and great crops of corn, grains and truck; fine climate; 2 miles from Vale, county seat, R. R., schools, churches, health resort. $1600 cash will handle, 10 years' on bal., no interest due for two years; all can be cropped next year and once in crop, worth twice what I am asking. Would make two fine 30-acre farms. O. E. Carman, Vale, Ore.

STOCK AND GRAIN RANCH FOR SALE OR trade—275 a.; 120 on bottom in hay, rest grain land; joins limits of nice little town; railroad and state highway runs through; trade all or part for land in northern Oregon, Idaho, or Wash. Good house and well; springs for stock. Address Box 7, Midvale, Idaho.

MONTANA IRRIGATED LANDS.

To close out two large sheep ranches, we are offering choice irrigated land in tracts of any size at bargain prices, and on very easy terms; 100 per cent tillable; best of water rights and crops. Address owners. Lewis Penwell Company, Helena, Mont.

80-ACRE PRUNE ORCHARD AND DAIRY farm; 6-year-old trees; five acres pasture, balance trees and clover; 1½ miles from Meridian, Idaho; two big driers; must sell quickly. Bargain. Write Horn Orchard Co., Boise, Idaho.

330-ACRE FARM FOR SALE—200 UNDER cultivation; good buildings; close to town; income around $600 per month; 3 men can do the work; save commission, buy from owner. Write to Studer Bros., Elma, Wash.

FOR SALE — ALFALFA, WHEAT AND stock farm; well improved alfalfa farms for $75 to $100 per acre; paid water. The land produces 5 to 7 tons per acre. John Hardwick Realty Co., Vale, Ore.

320 ACRES CHOICE WHEAT LAND; ALBERta. Price $16 per acre. Terms.
UNION INVESTMENT CO.
406 ZIEGLER BLK. SPOKANE, WASH.

STUMP LANDS, FAMOUS FRUIT, HAY BELT, Hood river valley; irrigated; practically level; employment; 10 years' time. Box 185, Hood River, Oregon.

STOCK AND DAIRY RANCH FOR SALE AT a bargain. 1160 a. in western Oregon, in Lincoln co. For details write Emil T. Raddant, Orton, Ore.

83 A. GOOD LAND; RAISE ANYTHING; plenty of water. Write owner. Mrs. A. B. McMath, Box 82, Elmira, Cal.

**FARM LANDS—WANTED 654**

WANTED—TO HEAR FROM OWNER OF farm for sale. Mrs. Booth, Drawer D, Highland Park, Des Moines, Iowa.

**FARM LANDS FOR RENT 657**

12 HEAD WORK HORSES, 5 SETS HARNESS, 1 Jersey milch cow and calf, 1 Jersey heifer, 2 gang plows, 1 four-section drag harrow, 1 Smith weeder, 1 three-section packer, 4 grain drills, 1 surrey; also lease on 480 acres wheat land. Box 196, St. John, Wash.

**When you write to advertisers be sure to state that you saw their advertisement in this paper.**


THE BEST LINIMENT
OR PAIN KILLER FOR THE HUMAN BODY
Gombault's
Caustic Balsam
IT HAS NO EQUAL

For the Human Body — It is penetrating, soothing and healing, and for all Old Sores, Bruises or Wounds, Felons, Exterior Cancers, Boils, Corns and Bunions, CAUSTIC BALSAM has no equal as a Liniment.

We would say to all who buy it that it does not contain a particle of poisonous substance and therefore no harm can result from its external use. Persistent, thorough use will cure many old or chronic ailments and it can be used on any case that requires an outward application with perfect safety.

A Perfectly Safe and Reliable Remedy for
Sore Throat
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REMOVES THE SORENESS—STRENGTHENS MUSCLES

Cornhill, Tex.—"One bottle Caustic Balsam did my rheumatism more good than $120.00 paid in doctor's bills." OTTO A. BEYER.

Price $1.60 per bottle. Sold by druggists, or sent by us express prepaid. Write for Booklet R.
The LAWRENCE-WILLIAMS COMPANY, Cleveland, O.



Your Local
HOME PAPER
and Your State
FARM PAPER
at a Special Club Price

A clubbing arrangement has been made with a number of newspapers in your state whereby we can now offer you a one-year subscription to your local home paper and a one-year subscription to your state family farm paper at a special rate for both.

YOUR HOME PAPER
brings you all the local news and happenings of the social and commercial life of your community. It gives you the news of the home boys at the front and prints many interesting letters from them.

YOUR FARM PAPER
brings you, each week, all the news of the farm and farm home, with the agricultural developments of your state. Features for every member of the family, including women's and children's pages and colored comics. Also departments for every phase of farming.

Your Local Home Paper and Your State Farm Paper can now be sent to you for one year each at the special clubbing rate as quoted below:

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| The Blaine Journal, Blaine, Wash., and The Washington Farmer | $1.50 |
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| Castle Rock Independent, Castle Rock, Wash., and The Washington Farmer | $1.50 |
| The Cheney Free Press, Cheney, Wash., and The Washington Farmer | $1.50 |
| Chehalis Bee-Nugget, Chehalis, Wash., and The Washington Farmer | $1.50 |
| Cashmere Valley Record, Cashmere, Wash., and The Washington Farmer | $1.50 |
| The Everett Tribune, Everett, Wash., and The Washington Farmer | $3.00 |
| Puget Sound Mail, La Conner, Wash., and The Washington Farmer | $2.00 |
| The Montesano Vidette, Montesano, Wash., and The Washington Farmer | $2.00 |
| Oak Harbor News, Oak Harbor, Wash., and The Washington Farmer | $1.50 |
| Puyallup Valley Tribune, Puyallup, Wash., and The Washington Farmer | $1.50 |
| The South Bend Journal, South Bend, Wash., and The Washington Farmer | $2.15 |
| Sumas News-Advocate, Sumas, Wash., and The Washington Farmer | $1.50 |
| Walla Walla Bulletin, Walla Walla, Wash., and The Washington Farmer | $5.00 |
| White Salmon Enterprise, White Salmon, Wn., and The Washington Farmer | $1.50 |
| The Zillah Free Press, Zillah, Wash., and The Washington Farmer | $1.50 |

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A three-year subscription to your state farm paper and a one year subscription to the following papers at the special price for both.

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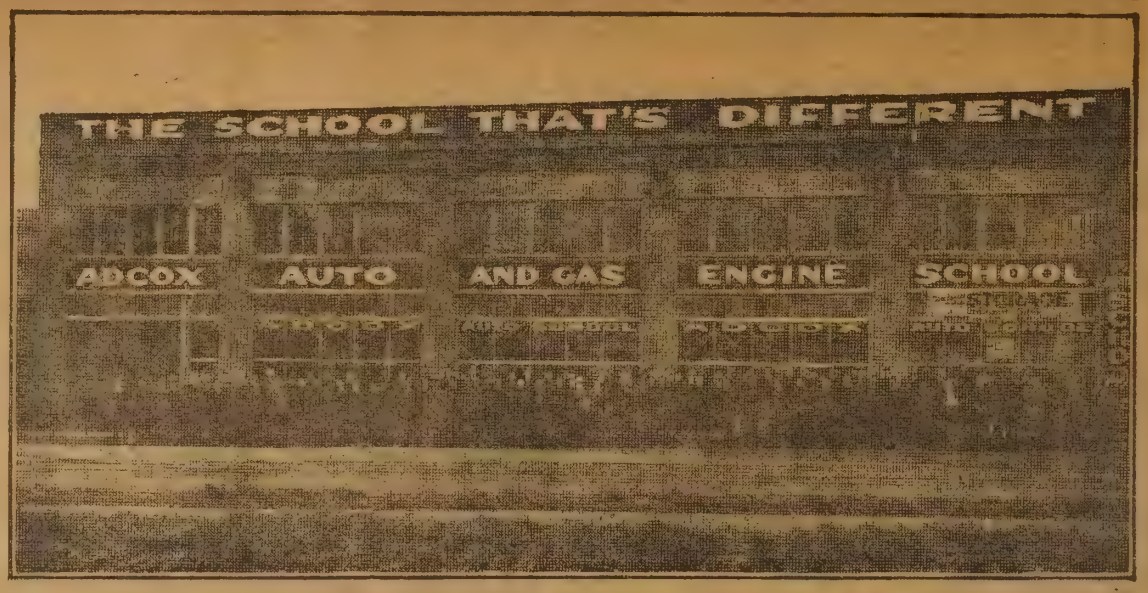
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A group of Adcox students.

# What Are You Going to Do?



Otto R. Daniels, now instructor for Uncle Sam.

If you go can you serve Uncle Sam in the auto, gas engine, or aviation department.? What are you going to do if you stay? The other fellow that goes must quit his job in the garage or repair shop. Can you take his place? Have you the knowledge? If not read this page.

18th Aerial Squad, Rockwell Flying Field, North Island, San Diego, California, February 2d, 1918.

Adcox Auto & Gas Engine School.
Union Ave. and Wasco Street, Portland Oregon.

Dear Mr. Adcox:

When you handed me my diploma as a graduate from your school, I went home to the farm near La Crosse, Washington, and repaired a few small engines, such as one-cylinder, and at harvest time got a job running a threshing engine and got by with it fairly well. I enlisted in the Aviation Signal Corps in November, 1917, and was sent to Fort George Wright, Spokane; from there to Kelly field No. 1, San Antonio, Texas, where I passed a trade test as gas engineer, and transferred here.

While only a private, I am assistant instructor and am teaching first-class sergeants. I am in the magneto department, where most of the magnetos are Berling, with some Bosch and Dixie. I give your school and you credit for these results.

Otto R. Daniel.

## IF THE MOTOR CAR PRODUCTION IN THE U. S. WAS STOPPED RIGHT NOW

**there would not be enough mechanics left to keep the 5,000,000 autos and 400,000 trucks now in use in repair, not to say anything of the 70,000 tractors now in service. After the war the auto and tractor business will be greater than ever. Auto and gas engine men can readily see why the wages will be better than ever before. Because after the war is over the opportunities all over Europe will be so alluring that thousands of the best mechanics will go to new fields. To keep mechanics here will be almost impossible, regardless of how big the pay. Automobile concerns, realizing they are confronted with this problem, are already beginning to train women. We, too, are aware of this necessity, so we have opened a**

## Special Department for Women

**Look at the proposition from any angle. Think what it means to you! If you take my course of instructions you will be prepared. IN THE ARMY or OUT OF THE ARMY, DURING THE WAR and AFTER THE WAR your services will be in demand if you have gas engine knowledge. This knowledge is yours if you want it. What I have done for Otto Daniels, Grant Farris and many, many others I can do for you. Clip the coupon below and mail it to me today and you will immediately receive my new 100-page catalog and a letter from me that will make you a friend of mine from the start.**

Camp Holibird, Baltimore, Md., August 17th, 1918.

Dear Mr. Adcox:

I enclose a picture of myself in uniform and wish to advise am working in the Ignition Department, which is composed of a unit of 44 men. It is the best detail in camp, and I am extremely lucky to get in this unit.

We have charge of all electrical work on trucks and automobiles, including carburetors, except storage battery.

When I first came here and was classified, I told them I had a diploma from your school, which I feel sure is the reason I was picked for this class of work, for I know it was not on account of the experience I had had previous to entering your school.

I certainly am glad I took the course in your school, and will gladly recommend it to any one wanting to go to an auto school.

By the time this reaches you our department will have a space to itself in the new shops that are equipped with the most modern equipment for testing and repairing trucks and automobiles.

I am glad your school is growing, and wish you the best of success in every way.

Grant Farris

A. M. M., R. S. U. No. 306, Company No. 3, Bks. 417.



Grant Farris—read how he is serving Uncle Sam—says my course did it.



First graduating class women's department.

## DON'T WAIT, ACT NOW!

Send for my big 100-page catalog—It's full of letters and pictures from the boys "over there" and "here" making good with autos, tractors and gas engines. Don't delay. Send for catalog today

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L. L. Adcox, Adcox Auto and Gas Engine School,
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TRIO

SEPTEMBER 26, 1918.

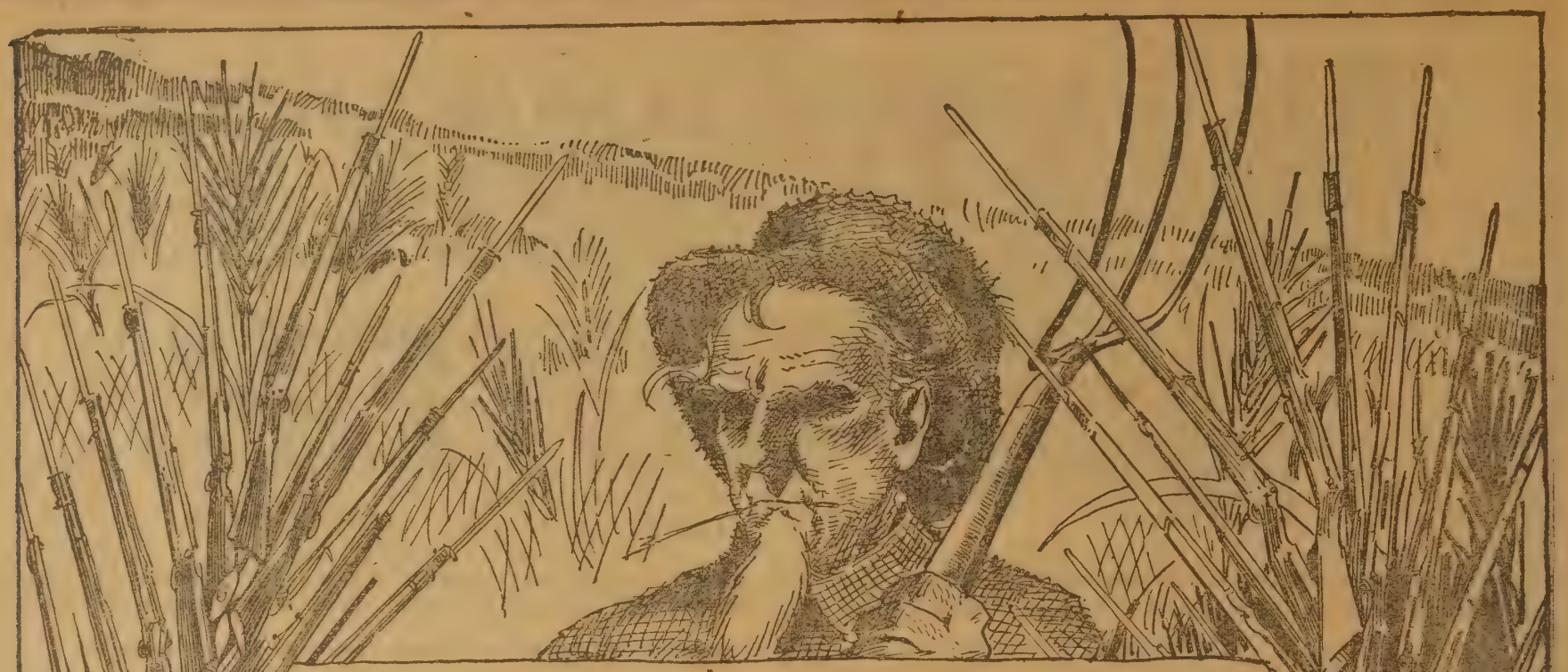
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PUBLISHED WEEKLY.

# THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF





BERKELEY, CALIFORNIA,
Sept. 10, 1918.

TO THE AMERICAN FARMER:

American farmers will buy Liberty Bonds with all the money they can spare from their patriotic business of food production because their country needs their money to protect human civilization, which is embodied in American national life and purposes, from the correlated menaces of autocracy and anarchy.

American farmers will lend their surplus earnings to their government because the birth of the United States, its early development, its survival of dangers at middle life and the greatness of the attainments of its national maturity are due more largely to the devotional and constructive patriotism of American farmers than to the acts of citizens of all other vocations combined.

American colonial farmers won the Revolution and declared the land free of feudalism; their grandsons won the Civil War and declared manhood free from slavery; their great grandsons won the war with Spain and declared all Americans free from foreign domination; their great, great grandsons are now at war to win world-freedom and democracy. What four generations of American farmers have created and maintained is now up to the fifth generation of them to make universal and securely establish for all time to come.

All these generations are not of the flesh; they are generations of the spirit which makes all American farmers of 1918 yearn for service and sacrifice for human freedom and equal opportunity—whencesoever from world-streams of true humanity their ancestral blood has been drawn. Thus the American farmers of 1918 are the spiritual offspring of the colonial farmers of 1776 and the obligation rests upon them to complete the world-work which their spiritual ancestors began. They owe to God and their country generous return for the ancestral service which made them free and prosperous!

Uncle Sam calls upon the American farmers to lend their surplus earnings and profits to make human liberty secure. He does not commandeer their gains from them, as from citizens in some other vocations because he is assured that these gains have been well, honestly and patriotically earned. He calls upon you farmers as loyal sons of the soil to lend your surpluses for the good of all mankind and he promises to pay you as wages for your money what your country can reasonably afford to pay and to recognize national obligation for your patriotic service—just as he pays for and honors service on the field or on the sea. And he offers you security, the best in the world: American good faith and American wealth—which you have yourselves largely created.

Uncle Sam says to American Farmers: "Sons, lend me your idle money; accept partnership with me that by our strenuous effort we may make the world fair to all mankind in the American way!"

Very sincerely,

C. J. Wickson

Former Dean and Director of College of Agriculture, University of California.

**BUY LIBERTY BONDS**

ANY BANK WILL HELP YOU

*This Advertisement Patriotically Contributed to the Fourth Liberty Loan Campaign*

**O. B. WILLIAMS CO.**

**SASH AND DOORS**

**SEATTLE, U. S. A.**

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 39 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF September 26, 1918

# Farm Output Calls for Ablest Available Man

## *Grain Marketing Muddle Needs the Undivided Attention of Food Production Administrator*

Present marketing conditions of farm products emphasize the urgent need of the appointment by President Wilson of a National Food Production Administrator, a man of ability, who shall serve in a constructive way, the vital interests of the producers just as Mr. Hoover's food administration department has been serving the interests of the consumers. For many months The Farmer has been impressed with the fact that the food producers were not getting just representation in the war councils of the nation. The present deplorable condition of the handling of the wheat crop of the Pacific Northwest under governmental regulations gives added strength to the contention for the appointment of the National War-Time Food Production Administrator. This matter has received the active cooperation of the United States senators from the state of Washington. Senator Wesley L. Jones will take this matter up with President Wilson and Senator Miles Poindexter, with the food administration. Two other letters from Washington, one from Senator William H. King of Utah, and the other from J. M. Baer, congressman from North Dakota, bearing upon this important matter, also follow:

### SENATOR W. L. JONES.

**Does Not See Where Farmer Is Trading With Himself.**

To the Editor: Your favor of August 29, inclosing a reprint taken from the Washington Farmer with reference to the problems which confront the farmers in disposing of their wheat, at hand. The situation disclosed by the letters referred to seems to be a very common one in governmental activities. It seems to be a good thing for business men to hold governmental positions that put them in the attitude of trading with themselves. I think it a very reprehensible position and am surprised that so many honorable men do not seem to see anything wrong about it. The farmer does not seem to be able to get a governmental position where he can do some trading with himself. You do not state whether you ever received an answer to your telegram to President Wilson with reference to the immediate appointment of a national war-time food production administrator. If you will write me a little more fully, giving me your idea as to the duties and power of such an administrator, I will be glad to take the matter up with the president and see what can be done.

W. L. JONES.
U. S. Senate.



Wesley L. Jones.



William H. King.

### SENATOR W. H. KING.

**Efficient Representation Is Needed for Farming Interests.**

To the Editor: I have your letter of August 29 upon the subject of the appointment of a national food production administrator. Food production is a very important matter during the war, and it would be very proper for the farming interests to be represented by a national food administrator. I note that you have brought the matter to the attention of the president, and I trust that something practical may be accomplished in this direction.

WILLIAM H. KING.
U. S. Senate.

### SENATOR MILES POINDEXTER.

**Farmers' Peculiar Interest May Be Entirely Overlooked.**

To the Editor: I have yours of recent date, with enclosures, all of which I have examined carefully, and appreciate fully, and concur with you in your protest against the failure to have any representation of the farmers and wheat growers themselves on the food administration grain agency in the Pacific northwest. I can readily see how the farmers' standpoint and peculiar interest might be entirely overlooked or ignored. I am presenting your view of the matter to the food administration, and insisting upon their attention to the matter, with a view of appointing some representative of the farmers in this administration.

MILES POINDEXTER.
U. S. Senate.



Miles Poindexter.

### CONGRESSMAN J. M. BAER.

**Needs Competent Man in Sympathy With Agricultural Interests.**

To the Editor: I am in receipt of your letter of August 29 and note what you say with regard to urging the appointment of a man who is competent and in sympathy with the agricultural interests of the country as war-time food production administrator. My sentiments are in accord with the contents of your letter, and if a recommendation from me will be the determining factor, there will be no doubt as to the outcome.

J. M. BAER.
U. S. House of Representatives.



J. M. Baer.

## May Require Permits to Ship Wheat

It is not improbable that all shippers of wheat in the Inland Empire, including the growers who want to ship directly to the grain-buying corporation, may soon be required to obtain permits to make their shipments.

A Washington dispatch of September 17 says: "Railroad grain shipments hereafter will be regulated jointly by the railroad and food administration through a system involving the issuing of permits by committees in different zones. The local committees will consist of representatives of the food administration and railroad men. The step was taken to prevent overloading of storage facilities at primary markets and seaboard terminals congested by the tremendous flow of grain this year. In announcing the new plan today, the railroad administration explained that if unrestricted grain shipments were to continue the result would be use of cars and tracks and storage congestion of terminals and withdrawal of the cars from other transportation needs."

"I have not yet been advised that this order will apply to the Pacific northwest," said Charles Hebberd, United States food administrator for the state of Washington, "and until I have more definite information I can not say very much upon the subject." Mr. Hebberd added, however, that, in view of the congested condition at Pacific coast terminals, it is not improbable that this order will be made applicable to this region.

"Our immediate difficulty out here," said Mr. Hebberd, "is a shortage of labor at the terminals for switching cars and handling the grain. I do not understand that it is as yet a question of storage capacity. A partial embargo is now in effect at our coast terminals, due, as I have said, to a shortage of labor. For example, no more grain is allowed to go to Astoria, yet there is a million-bushel elevator at that point that is still largely empty.

For the present all wheat shipments to Astoria have been embargoed. Astoria has a 1,000,000-bushel elevator that is nearly empty, but lack of labor and inadequate switching facilities have caused congestion. The problem is to move the accumulated grain from the yards to the elevator.

Excepting the Sperry dock and mill, Tacoma is practically under embargo, and similar conditions exist at Seattle and Portland. Labor shortage seems general in all the terminals.

This costly situation, laying a severe burden on the wheat-growing industry of the Inland Empire, emphasizes the duty of labor to speed up effort in every industry connected with the carrying on of the war. As more and more our men are drained into the cantonments and naval stations the labor shortage will grow more acute. How can that shortage be relieved? Governor Lister pointed out the true solution in a recent interview. Armies of workers are engaged in war industries at the Coast cities. If these well-paid workers will increase their daily output by but 10 per cent it will be equivalent to the labor of several thousand men. It is not improbable that if the men who are employed handling grain at the Coast terminals would throw just a little more constant energy into their eight-hour day the embargo could be lifted and the wheat of the interior could flow in unobstructed streams from the farms to the terminal warehouses.

"The situation is even worse in the middle west, on the Atlantic seaboard and at gulf ports," said Mr. Hebberd. "While I was east the other day I found a grain embargo on at Minneapolis, Buffalo, New York and other Atlantic ports and practically at all the gulf ports. The difficulty there is largely due to a lack of labor and congestion in the freight yards."

### HOUSER NAMES CHICAGO FIRMS.

**Commission Men Will Advance 7' Per Cent on Grain Value.**

Partial relief from the distressing situation confronting Idaho wheat growers is afforded in an announcement from the food administration grain corporation to the effect that it will furnish farmers and dealers with a list of reliable commission houses in Chicago through which they may ship and who will advance 75 per cent of the value of the grain, charging 1 per cent for the service and 6 per cent per annum from the time the draft is made until final settlement is made for the grain.

Joint effort has been made by Dr. E. A. Bryan, chairman of the Idaho state council of defense, and L. W. Fluharty, director of the university extension department, to effect a change in the system which would enable the grower to deal directly with the grain corporation and obtain an advance on bills of lading.

Mr. Houser does not seem to think it practical to deal direct with the grain corporation or possible for the corporation

(Continued on page seven.)

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## *Community Sing at State Fair*

A comprehensive report of the Washington state fair at Yakima last week, made by a staff correspondent of The Farmer, is published elsewhere in this issue. A striking and successful innovation was the morning community sings in the grandstand. While the big audience was made up largely of women folks there was a very respectable sprinkling of men folks. The interest was keen and it was not difficult for Mrs. J. Alexander Mahan of Ellensburg, who led, to wake up the people and bring out the chorus. The community sing at the state fair was fostered by the state department of education, and although the state superintendent, Mrs. Preston, was not able to be present, yet the department was actively represented by Mrs. Blanche A. Nagel.

The extension department of the State College of Washington made some extremely practical exhibits, showing the complex nature of farming operations. In grain growing, while rain is a prime factor, yet soil cultivation, times of seeding, smut prevention measures and the question of seed varieties, all were pictured in a way to impress even the casual visitor.

The boys and girls' club work also was a leading feature of the state fair. Taking all together, the managers are to be congratulated on the success which attended this season's exhibits and educational features.

Appearance is half, the world over; more often than not it is the whole.

## *Orchard Problems*

The most serious orchard problems that confront us in the near future are the labor problem and marketing. The manner in which we meet the situations growing out of these problems will, in a marked degree, determine the success or failure of the business. This is not a pessimistic statement, for the law of human progress proves that the law of life is changed and that the races, nations, groups or individuals that have survived succeeded and guided the world's affairs are those that have become adapted, while those who have not become adapted have perished.

There are plants that are adapted to an arid region, because they have small leaves, or leathery leaves with few pores that admit of very little evaporation of moisture. Other plants in the humid regions survive because they have large porous leaves that admit of rapid evaporation and thereby discharge the excess of water. The changes by which these plants became adapted were not sudden, but gradual; covering perhaps thousands of millions of years, but in the process of change numberless species and varieties perished and only those that became adapted survived.

This is what Charles Darwin called "The survival of the fittest." The same law runs through all the forms of life, vegetable and animal. It is a law of human progress and while the path of the evolution of mankind has been strewn with wrecks, the general trend has been upward.

Recent experiences taught us some valuable lessons, in devising ways and means for meeting difficult situations. In some sections the schools were closed in order to release students to help save the crop. Old men and cripples, not accustomed to regular work, offered their services to do what they could to relieve the situation. Women and girls; clerks from offices and stores; stenographers and others joined the ranks of apple pickers and assorters. Where a sufficient supply of boxes could be obtained, a few orchardists would put on a large force of merchants, office men and others on Sunday, while their places of business were closed. Those persons were patriotic enough so that they would rather work on Sunday than to go automobiling or pleasure riding.

Childhood is asleep in the heart of grown-ups. You never know when it will be awakened.

## *Astounding War Facts Made Public*

As our readers will recall, this war started in August, 1914, on a pretext growing out of the assassination of the Austrian crown prince. Austria charged Serbia with abetting and harboring the assassins and made threatening demands upon the little kingdom which the latter could not, out of decent self-respect, entirely yield. It did yield on every point but one, and offered to arbitrate on that.

Austria, backed, as we now know, by Germany, rejected Serbia's humiliating concessions and hurled her armies against the latter country.

Our government now publishes conclusive proofs that the Serbian situation was only a pretext. Our agents in Europe have secured a copy of an order from the German general staff, issued June 9, 1914, to the great industrial concerns of Germany, ordering them to prepare for war. That was before the assassination of the Austrian crown prince.

Germany planned and started this war, precipitating the conflict through its puppet ally, Austria. Only a pro-German can longer question the truth of this after the just-made-public revelations made at Washington.

American agents also gathered up a mass of other damaging proofs. Among others, that Germany actually made secret war on the United States in November, 1914, when the general staff of the German navy sent an official secret circular to trusted pro-German agents in the United States, directing them—

**"To hire agents for arranging explosions on ships bound (from the United States) for enemy countries, and for arranging delays, embroilments and difficulties during the loading, discharging and unloading of ships. For this purpose we are especially recommending to your attention leaders of gangs among whom there are many anarchists and escaped criminals. Money required for the hiring and bribing of persons necessary for the designated purpose will be placed at your disposal at your request."**

Our government has a copy of that infamous order, supplying German gold to hire desperate criminals to commit violent crimes in the United States. This throws a flood of revealing light on the reign of bomb explosions, incendiary fires, scuttling of ships in our harbors and strikes in American factories that startled our people in the closing months of 1914.

Through some means not yet revealed, probably through the aid of decent Russians, the American agent brought back from Russia conclusive proofs that Lenine, Trotzky and the other bolshevik leaders are in the pay of the German government; that an enormous sum was placed to their draft in a German bank to spread "peace propaganda" among the foolish Russian soldiers, peasants and workmen; that the real masters of the so-called Lenine government are a group of German officials who give orders to Lenine and Trotzky.

In some instances our government has the original official orders proving these crimes. In others it has photographs of the originals.

Undoubtedly the purpose of our government in making these astounding revelations is to put the people of the United States on guard against such treacherous "peace" propaganda as the Germans used so successfully to put Russia out of the war and bring that great country to ruin and shame.

Of all fool notions there is none more foolish than to believe that the world was made for you.

## *Austrian "Peace" Proposals*

The weight of authoritative opinion in the United States and Europe is that the Austrian "peace" proposal is a cunning German scheme to trick the people of the United States, France, England and Italy as the deluded Russians were tricked into "peace" negotiations that ruined Russia and put it under the heel of the Germans.

The Austrian proposal, which comes in the form of an official communication to all the warring countries, calls for the belligerents to send delegates for "a confidential and unbinding discussion on the basic principles for the conclusion of peace in a place in a neutral country and at a near date that would yet have to be agreed upon."

Right off the bat Secretary Lansing made this statement for President Wilson:

**"The government of the United States feels that there is only one reply which it can make to the suggestion of the imperial Austro-Hungarian government. It has repeatedly and with entire candor stated the terms upon which the United States would consider peace, and can and will entertain no proposal for a conference upon a matter concerning which it has made its position and purpose so plain."**

The time to consider peace terms will be when the victorious allied armies smash through the enemy's lines and march triumphantly into Berlin and Vienna. When Prussian militarism is overthrown and the kaiser and all his gang are our prisoners we can safely talk peace, and not sooner.

Cooperation, sooner or later, demands self-sacrifice—or the sacrifice of the other fellow.

## *War Troubles at Home*

All the discomforts and inconveniences and losses incurred at home because of the war are not worthy to be mentioned in moments of soberness and truth. Yet this does not prevent the historical fact that there are discomforts and inconveniences, and even serious losses, forced upon the American people during these war days.

The disturbing factor about these war discomforts and losses is that they are not always evenly distributed. Like the two women grinding at the mill, the one shall be taken and the other left.

Here are two men, perhaps equally situated with regard to needed work at home, perhaps one is needed more than the other, and yet, like the two women grinding at the mill, "the one shall be taken and the other left"—not always the one most needed at home. From common observation, one man's wealth may escape more than another's in war taxes; one part of the country looks over into another part of the country and is inclined to grumble.

The high call of patriotism searcheth out the heart. It is not what another does or neglects to do. "Here am I, call me."

Help yourself. Unite with your neighbors, your townsmen, your county, your state and your section in helping yourself. The government has bigger troubles to solve.

This does not mean that you must suffer unduly when governmental action may help out. Present your case, do all you can to get a hearing, then make the best of it. Don't let it cut into your war work.

It is not poverty that hurts, if poverty includes the whole man, but to have the mind of a millionaire, the tastes of an artist, the longing of an explorer, and the income of a tramp is painful, yet it is the pain we feel under such conditions that stimulates to greater activities and tends to our development.

# Allied Star in the Ascendancy

## *German Offensive Turned Into Great German Defensive*

Six months ago the great German offensive began. For weeks victory seemed about to perch upon the German banner. Today the allied star is in the ascendency. Anxiety and encouragement, depression and joy have succeeded each other since. March 21 the greatest battle of history began. It has been a period of almost incessant fighting and of bewildering changes in situations that developed from day to day and from week to week. Released by the absolute collapse of Russia, vast numbers of German veterans had been rushed to the western front and been given intensive training for the offensive. It was known that great bodies of men and tremendous stores of munitions had been concentrated at strategic points.

Moving with swiftness the German forces swept over the British lines in Picardy and rolled west like a tidal wave during the closing days of March until at last the British reached positions where they could stand at bay and the French had come to form a living wall before the gray-clad host of the German emperor. Then the offensive stopped. After a pause of nearly a month, May 27, the Germans suddenly broke through the French lines north of the Aisne river and smashed their way southward until they had reached the Marne over a wide front east of Chateau Thierry. A new assault by the Germans was aimed against the French lines between Montdidier and Noyon. It was here that the world had the first intimation that the allied armies under Marshal Foch had been pursuing a definite policy and had conserved their strength until it might be used with good effect.

July 18 Marshal Foch launched the attack which has changed the whole situation.

APPROACHING ST. QUENTIN DEFENSES.

Allied troops are progressing satisfactorily in their efforts to break down the defenses of St. Quentin. On the north the British are fighting in the Hindenburg positions and pressing toward the canal between St. Quentin and Cambrai, while on the west the French are moving east steadily. For a stretch of more than 10 miles north of St. Quentin the British now hold the dominating hills. Toward Lecatelet the British are progressing eastward on a front of three miles and are within four miles of the town, one of the important German bases on this front. West of St. Quentin the French are within two miles of the outskirts, while on the south they are forcing the Germans to give up important villages and other positions. Southwest of Metz, where the French and Americans recently cleared the St. Mihiel salient, the Germans have started further fires. Soldiers and wagon trains have been seen moving northward, and it is believed the Germans are preparing for a possible allied attack or a retirement on their own initiative.

GERMAN GOVERNMENT CRISIS.

The Leipzig Tageblatt declares that the government crisis in Germany is approaching a decisive stage. The socialists have declared their readiness to enter the new government under conditions allowing themselves substantial representation. There is suspicion in Washington that this discussion by the German newspapers of parliamentary reform is only the beginning of another phase of the German peace offensive; that the German government itself is again encouraging the socialists and liberals to agitate for such a change in order to be able to more thoroughly guide and neutralize the movement.

AMERICAN SOLDIERS OVERSEAS.

General March announces that the embarkation of American soldiers for all fronts overseas now has passed the 1,850,000 mark. Military news during the last week from all fronts has been continuously good, the general adds. On the Lorraine front, where General Pershing's first American army has completed its organization to eliminate the St. Mihiel salient, the situation has become stabilized, with the enemy hurriedly perfecting a new line in front of the Americans. This line stretches for 20 miles from Maizary to the Moselle Vandaires. The Americans are now 10 miles from Metz and an equal distance from Conflans.

The American army casualty list for publication last week contained 1999 names, divided as follows: Killed in action, 362; missing in action, 596; wounded severely, 733; died of disease, 60; died of airplane accident, 3; wounded, degree undetermined, 47; died of wounds, 158; died, accident or other causes, 23; wounded slightly, 8; prisoners, 8.

RUSH AHEAD IN MACEDONIA.

The allied struggle in central Macedonia, which opened with the expulsion of the Bulgarians from the important Sokol position, is developing successfully on a wide front. Further progress by the Serbs toward the Vardar river and the Uskub-Saloniki railroad paralleling it will probably bring about a readjustment of the Austro-German and Bulgarian positions throughout the whole theater. It is reported from Ukrainian sources that the crown prince of Rumania has fled from Jassy to Odessa. The reason for his flight is not disclosed.

BLOODY REIGN OF TERROR IN RUSSIA.

Horrified by the bloody reign of terror in Russia, the United States calls upon all allied and neutral nations to consider what they may do to impress upon the bolsheviki the aversion with which the civilized world regards their wanton crimes. This action aligns the United States with that of Great Britain and France in declaring the bolsheviki, responsible for the murders, crime and excesses which have shocked the world, outlaws and public enemies. The reported action of the bolsheviki in effecting an alliance with Germany for offense and defense is an added cause for the step. The reign of terror has already hindered the efforts of the United States to alleviate an impending famine in Russia, as it is impossible to furnish much-needed supplies to that part of the country under bolshevik control without actually feeding the German army and the German populace.

HOUSE PASSES REVENUE BILL.

The house of representatives Friday passed the war revenue bill designed to raise by taxation approximately $8,182,000,000 of the 24 or more billions needed by the nation for the current year. The agricultural appropriation bill, carrying $27,800,000, was also passed by the house Friday without the provision increasing the government guaranteed price of wheat, which once caused its veto by President Wilson.

Major tax features of the bill as transmitted to the senate and estimated revenue yields include:

Income tax, individuals' normal rate increased from 5 to 12 per cent, with the first $4000 at 6 per cent and the exemptions of $1000 for single and $2000 for married persons; $414,000,000.

Corporations' incomes, increased from 6 to 18 per cent, but with only 12 per cent payable on dividends distributed, debts paid and new Liberty bonds bought; $894,000,000.

War and excess profits of corporations, 80 per cent on war profits and virtually doubled rates on excess profits, ranging from 35 to 70 per cent; $3,200,000,000.

Beverages, present rate doubled; $1,137,600,000.

Tobacco, present rates doubled; $341,204,000.

Luxuries and semi-luxuries, 20 and 10 per cent; $272,555,000.

Other excise taxes, including automobile sales, jewelry, 2 cents a gallon on gasoline, etc.; $274,750,000.

Use of automobiles $5 to $50 each; $472,930,000.

Besides these leading revenue sources, the bill provides a general $10 annual tax for persons in business trade or professions earning over $2500, and taxes on transportation, insurance, club dues, inheritance, theaters, brokers, mail order sales, bowling, billiard and pool establishments, shooting galleries, riding academies and documentary stamp taxes.

COLUMBUS DAY FOR BONDS.

President Wilson has issued a proclamation making Columbus day, Saturday, October 12, a special occasion for unusual efforts to sell Liberty bonds. The day will be the 426th anniversary of the discovery of America. The proclamation says, in part:

"On that day I request the citizens of every community of the United States, city, town and countryside, to celebrate the discovery of our country in order to stimulate a generous response to the fourth Liberty loan. Commemorative addresses, pageants, harvest home festivals or other demonstrations should be arranged for in every neighborhood under the general direction of the secretary of the treasury and the immediate direction of the Liberty loan committee in cooperation with the United States bureau of education and the public school authorities."

BREWERS PUT UP THE MONEY.

The federal custodian of alien property, A. Mitchell Palmer, announces the names of 15 brewers who, with the United States Brewers' association, raised a fund of $407,500 from which $375,000 was loaned to Arthur Brisbane to buy the Washington Times. C. W. Fiegenspan, president of the United States Brewers' association, frankly admits that the association furnished Arthur Brisbane the money to buy the Times. He further admitted that the association and the brewing interests generally have maintained lobbyists at Washington and at various state capitals. He vigorously denied charges of disloyalty or pro-Germanism. Senator W. L. Jones of Washington has offered a resolution for an investigation of the whole matter.

THE SPANISH INFLUENZA.

The Spanish influenza, which is reported in many military and naval camps, is largely a repetition of the grippe epidemic started in southeastern Europe 27 years ago and traveling all over the world. American physicians who have had experience with Spanish influenza describe it as a milder type of disease than the old grippe.

According to the weekly summary of communicable diseases at Camp Lewis, there were 115 cases of influenza reported during the week. The influenza at this camp is not the Spanish influenza, it is announced, which has been found in some eastern camps and cities. At Camp Lewis the disease usually is checked and patients discharged from the hospital in three days.

SEVEN BILLIONS MORE FOR WAR.

Congress has been asked by the war department to provide $7,347,000,000 in addition to previous estimates for carrying out the enlarged American military program for the coming year. The new estimate is based upon plans for having nearly 4,000,000 soldiers in France next summer and another million in training at home. It brings the money sought for the army in the fiscal year 1919 up to more than $24,000,000,000.

PALESTINE NEARLY FREED OF TURKS.

Of transcendant interest, for the moment at least, are the operations of the British General Allenby's forces in Palestine. Here in less than four days the British have swept forward in the center between the river Jordan and taken the famous Nazareth, while their wings closed around in a swift enveloping movement and nipped with the jaw of the great pincer all of the Ottoman forces in the coastal sector, the plain of Sharon, the hill region in the center and also the western Jordan valley. Meanwhile, to the northeast, the friendly Arab forces of the king of the Hedjas have cut all communication in front of the fleeing Turks and are standing a barrier to their escape by way of the eastern plains. More than 18,000 Turks had been made prisoner by the British and guns in excess of 120 had been counted when the last reports from General Allenby were received. In addition great quantities of war stores had been captured and still others had not been counted owing to the rapidity of the movement.

ANOTHER glimpse into "The Heart of a Boy," by Joe L. Ashlock, will be given in an early issue of the Farmer. As you read Mr. Ashlock's sketches of his boyhood days, old, all-but-forgotten episodes and incidents of your own youth come out of the golden past and pass before your mind's eye in all too fleeting review.

## *Washington Gleanings*

The electric light plant of Coulee City was totally destroyed by fire last week.

E. F. Cadman of Wenatchee recently sold five acres of orchard land to Curt Clement for $10,500.

There will be a war-time community fair in La Conner Friday and Saturday, October 11 and 12.

John Hardinger of Centralia has purchased J. M. Vaughan's 40 acres on Lincoln creek for $2000.

Nearly $50 was added to the treasury of the Mount Vernon Red Cross chapter by the raffle recently of three white Spitz puppies.

George Midkiff, residing north of Lincoln, has disposed of his entire herd of fat cattle and dairy cows on account of shortage of hay.

Farmers in the La Conner vicinity are complaining of a light crop of oats this year, the crop running from 17 to 27 sacks to the acre.

The parent-teachers' association has been reorganized for the year with Mrs. H. E. Compton president and Mrs. Perry Willoughby secretary.

L. O. Janeck has been named as chairman of the Yakima county united war work drive, to be conducted during the week beginning November 11.

Some of the ranchers in the vicinity of Hanford are cutting their fourth crop of hay, and with favorable weather expect to get another cutting.

Threshing is entirely completed in the Spangle section. The crop, while not a normal one, is better than was expected before harvesting commenced.

A great part of the Benton county exhibit that won first prize at the state fair was procured from the Richland district through the efforts of S. M. Ross.

W. C. Schreck, a former citizen of Coupeville, but now in government work at San Pedro, Cal., has sold his 10-acre poultry ranch on Ebeys prairie to Bert Arnold.

Fire of an unknown origin recently destroyed two barns, a large machine shed, blacksmith shop and a 1500-bushel tank of wheat on the ranch of Mrs. Fred Kison, one mile north of Ralston.

At a meeting of the Skagit county game commission recently it was decided to prohibit the hunting of Chinese, Mongolian and ringneck pheasants in that county during the season of 1918.

Fred Aust has sold his 186-acre dairy ranch at Forest to David McCann, the consideration being $19,000. The sale included 20 head of cows and all dairy equipment. The new owner is from Montana.

The entire crop of Clarke county prunes, including all sizes and grades, has been ordered held by the government until a survey can be made in order that the government needs may be taken care of.

The Columbia River Milling company is increasing its capacity to 700 barrels daily. The Hartline mill, controlled by the same company, has been thoroughly overhauled and has a capacity of 600 barrels.

A $600,000 company has been formed to develop the farm land possibilities of the Olympic peninsula. The present plan is to develop the farms into going concerns and to sell them on the instalment plan.

The United States Highway council last week formally approved the continuance of the paving of the road between Moxee and Yakima, to cost about 187,000, and the paving of the Riverside road, near Sunnyside.

Four new silos are being built in Richland, one at the D. J. Dillon ranch, one at the Harry Davis ranch, one at the Grosscup ranch and one at the F. C. Anderson ranch. The corn yield in that vicinity is heavy, and silos are now being filled.

With the city public schools preparing mechanics, radio men, etc., and the state university training technicians and officers, Seattle probably feels that its young men are in a position to learn the new business of war efficiency to the best possible advantage.

The La Crosse Roller Mills company has been incorporated with a capital of $50,000. Officers are: President, Nelson Grewell; vice president and manager, Homer Williams; secretary-treasurer, E. S. Knowlton; executive board, Nelson Grewell, Homer Williams, Mr. DeLong, E. S. Knowleton and Ira M. Camp.

The Grays Harbor county commissioners at their session in Montesano last week received word from R. L. Fromme of the forest service to the effect that government money for the building of the strip of road which will connect the lower end of Quinault lake with the upper end will soon be available.

The Seattle branch of the federal employment service has been forced by the rapid increase in business to move into larger quarters. The bureau has been located in the United States Immigration Service building. It now moves to 110 Cherry street, where two floors, each 60x110 feet, will be given over to the work. Close to 1000 men are handled daily by the local and state offices.

N. D. Wortman, living on the Elwha river five miles west of Port Angeles, planted three acres of rutabagas last year on rented land. He sold the returns from two acres, but allowed the third to stand and this year go to seed. He harvested the crop with a sickle and threshed them with a flail. He shipped the crop to Seattle, and received a check for $2551.25 in payment for the shipment.

# Success of Washington State Fair

## *Educational Features Attract the Goodly Number in Attendance*

By HORACE ADDIS.

While Secretary Meredith and the entire management are to be congratulated on the success of the Washington state fair at Yakima, September 16-21, this dry year of disturbed conditions, they are much more to be complimented on the fact that their work has enabled the state fair to attain its true function of an educational institution.

While a program of high-class racing and other amusements was furnished, and the "carnival," though present, was not stuck in the most prominent place on the grounds, the educational features were emphasized more strongly than ever before. From the high school stock judging that began on Monday morning until the close of the state and government's various exhibits Saturday night, all informative in their character, there was at all times presented to visitors several centers of most useful agricultural or social information. The United States food administration, the state board of health, the Washington state college, the state department of agriculture and various independent organizations, such as the National Welfare league, had booths where a stock of useful knowledge could be gained in the study of most interesting subjects by direct object lessons. Grain and fruit diseases, insect pests and other enemies of farm crops were shown, as well as how to combat them.

The wool exhibit made by the government expert, Vincent McWhorter, from Wyoming, as well as the local wool exhibit by Coffin Bros., taken together with the sheep sale, was a school in itself, in which was taught the gospel of more and better sheep and better care and grading of wool. The presence of Mrs. Benson, mother of Commissioner of Agriculture Benson, at the wool exhibit every day, spinning yarn with an old-fashioned spinning wheel, added a touch of human interest to the exhibit. The sale of close to 1000 sheep for over $35,000 at the two-day sheep sale shows how the interest in more and better sheep is taking root. And now the annual sheep sale promises to be one of the most important activities of the state fair.

County exhibits from nine different counties in a year like this show the statewide interest in the fair, especially when nearly all of them were of the highest class. Benton county won first honors, Pierce county second place, King county third, Grays Harbor fourth, Stevens fifth, Lewis sixth, Jefferson seventh and Clark eighth. Only the total omission of a grass seed exhibit kept Lewis from being much higher, if not first, and it won a special prize for artistic arrangement.

Yakima county made an exhibit in a building of its own, but did not compete for prizes. A fish exhibit was an unexpected part of the display. The Coffin exhibit of wool and different breeds of sheep was here made; and corn, grain, garden vegetables and Yakima's wonderful fruit, besides its manufactured products, were all well displayed.

Benton's most notable feature was her illuminated centerpiece of grapes of various colors. Her products were varied and were well shown, as was the case with all the county exhibits. Five counties exhibiting are on the west side of the Cascades, where the drouth is supposed to have been severe.

Commenting on this Commissioner of Agriculture Benson said that not only the fact that counties from the western part of the state had exhibited, but that auto travel has greatly increased the attendance until no one can now say this is not in reality a state fair. The sheep sale the second year, he said, has brought the best grades of stock for breeding purposes obtainable in the United States, and the fact that it held 300 buyers in the sale barn during auto races shows the interest it awakened. The educational exhibits generally were better than he expected. He was especially gratified at the support of the state college and the good live stock exhibit, despite high feed and scarce labor, all gave him great satisfaction. Coupled with the increased attendance and receipts from concessions he felt that the fair is now on safe ground.

Industrial club work was emphasized, and its interest shown by representative clubs from 26 counties. Canning, sewing, cooking and garden competition were subjects worked on. Miss Gertrude Warren, from Washington, D. C., who judged the club work, said the outdoor garden work at this fair was the first she had seen at a fair and that she would carry the idea on to others. On school canning Whitman county won first, Yakima second and Spokane third.

The new auditorium holding 1200 people, and long needed, was used as a lecture room by various organizations, including the boys and girls' industrial clubs, and for band concerts at night. The Naval Militia band from the naval training station at Seattle furnished high-class music all week.

The machinery building was well filled and a great display of tractors and other power farm machinery was made outdoors. The child-welfare department and nursery was equipped with charts and information, and had many visitors. The art and ladies' building was filled with interesting displays. And all departments were well managed.

The poultry exhibit, again in charge of Harry Collier, while not as large as some years, on account of lack of bantams and fancy breeds, was one of the best shows in the history of the fair. Mr. Collier says it was the best show of utility birds, especially of White Rocks, White and Buff Orpingtons, White Leghorns and some others.

Added to all the other features, a live stock show of surprising quality in a year like this, and then a week of perfect weather, and success is the one word that defines this year's state fair.

### STOCK SHOW.

When the labor situation and the high price of feed is considered the stock show at the Washington State fair was surprisingly good.

The horse department disclosed the most shortage and the strength of the show was in the sheep division. Here, where the sheep show used sometimes to be negligible, over 1000 sheep greeted the eye and six breeds were represented. It took three barns to fully accommodate the sheep. Most of these, of course, were sale sheep and did not compete for prizes, though most of them might well have done so. But they filled up the space and helped make a really great sheep exhibit. Hampshires, Shropshires, Southdowns and Oxfords were shown in middle wool, Rambouillets in fine wool, and Lincolns and Romneys in long wool. Most of those shown for prizes were in fine condition, and there were very few poor sheep on the ground.

The horses shown were of excellent quality. The Clydesdales, though all shown by one exhibitor, would be a credit to any show and the Percherons were of high quality, though lacking in numbers. All Shetland pony exhibitors were children.

Of beef cattle, both Herefords and Shorthorns had good representation, but the Aberdeen Angus herd of Congdon & Battles, so notable the last few years, was greatly missed. The Washington State college showed just three very nice Angus heifers, of their own breeding.

In Shorthorns, the college won junior and grand championship on female on a very smoothly covered white heifer, that defeated a typy as well as blocky red, of the same age, shown by A. D. Dunn. Ringside opinion was divided and when they come together at Lewiston or Portland the outcome will have many watchers. A sappy young bull of much promise won grand champion honors for Mr. Dunn.

Charles Bull had an excellent herd of Herefords, but they could not win against the magnificent Curtice Cattle company herd. This herd, headed by their great bull, Beau Perfection 38, was one of the great drawing cards of the fair.

One full herd of Holsteins, shown by E. B. Marks, and eight head by William Todd & Son made up a most creditable Holstein show, even if numbers were not as large as usual in this Holstein valley.

The Middledale farm Guernseys from Cresswell, Ore., gave the breed a representation to be proud of and Erickson Brothers' Jerseys, nearly all by one sire, and of very fine Jersey type, gave that breed a good representation, besides a great bull owned by a community of dairymen at Prosser.

The hog show has been larger, but it was not a small show and the quality was most satisfactory. Three exhibitors of Tamworths gave that bacon breed a good representation, with all of the hogs of good type and some in good show condition. Earl Wood of Silverton, Ore., made the principal Berkshire show and carried off all but one championship, though there was some sharp competition in some classes. But for the pig club boys, Poland Chinas would not have been represented. The Toppenish club made nearly all its entries in the open classes and most worthy they were. Sons and daughters of Ray Fox's great boar, Ike Kfiox, at Lyons, Ore., were strongly in evidence.

Professor W. T. McDonald, commissioner of live stock of British Columbia, judged horses and beef cattle; Professor W. A. McKerrow, animal husbandman of the Minnesota Agricultural college, the dairy cattle and sheep, and Professor W. C. Rickman, acting animal husbandman of the University of Idaho, the swine. The following is a complete report of the awards:

**Clydesdales.**

O. I. Trice, Grandview, Wash., was the only exhibitor. His awards were: Stallion, 4-year-old or over—1 on Baron's Prince, that was also made grand champion; yearling stallion—1 on Liberty Bond; colt under 1 year—1 on Baron Gale; mare, 4 years or over—1 on Daisy; 3-year-old—1 on Queen Lucile; colt under 1 year—1 on Lady Lou, a daughter of Baron's Prince, and the baby was made grand champion.

**Percherons.**

Stallion, 4 years or over—1, Lee Taylor, Toppenish, Wash., on Helia. Two-year-old—1, E. M. Chandler, Burbank, Wash., on Cerebellon. Champion stallion—Helia.

**Shetland Ponies.**

Stallion—1, Forest Banks, Selah, Wash., on Fritz. Mare, 3 years old—1, Beverly Means, Yakima, Wash., on Dirola K. Two-year-old—1, Beverly Means, on Ridola K. Pony under saddle—1, Forest Banks, on Fritz; 2 and 3, Beverly Means, on Ridola K. and Dirola K. Team in harness—1, Beverly Means. Pony in single harness—1, Beverly Means, on Dirola. Champion stallion—Fritz. Champion mare—Dirola.

**Shorthorns.**

Bull, 2 years or over—1, Washington State college, on Village Excelsior. Senior yearling—1, A. D. Dunn, Wapato, Wash., on Proud Marshall. Senior bull calf—1 and 2, A. D. Dunn, on White Cup and Northover. Junior bull calf—1, A. D. Dunn, on Clipper of Dunbro.

Cow, 3 years or over—1, A. D. Dunn, on Mina 2d. Senior yearling heifer—1, A. D. Dunn on Roan Lady. Junior yearling—1, A. D. Dunn, on Roan Cassie. Senior heifer calf—1, W. S. C., on Village Queen; 2 and 3, A. D. Dunn, on Dunbro Queen and Roan Princess.

Senior champion bull—W. C. S., on Village Excelsior. Junior and grand champion—A. D. Dunn, on White Cup. Senior champion cow—A. D. Dunn, on Mina 2d. Junior and grand champion—W. S. C., on Village Queen.

**Herefords.**

Bull, 3 years or over—1, Curtice Cattle company, Calgary, Alberta, on Beau Perfection 48; 2, Charles Bull, Mabton, Wash., on Menlo. Two-year-old—1, Curtice Cattle company, on Beau Donald 192. Junior yearling—1, Curtice Cattle company, on Beau Donald 211; 2 and 3, Charles Bull, on Lewis and Menlo 3d. Senior bull calf—1, Curtice Cattle company, on Beau Donald 215; 2, Charles Bull, on Barney. Junior calf—1, Curtice Cattle company, on Beau Donald 222.

Cow, 3 years or over—1, Curtice Cattle company, on Belle Perfection 45. Two-year-old—1, Curtice Cattle company, on Belle Donald 236; 2, Charles Bull, on Lady Elma. Yearling heifer—1, Curtice Cattle company, on Belle Donald 236. Junior yearling—2, Charles Bull, on Beaulieu 4th. Senior heifer calf—1, Curtice Cattle company, on Belle Donald 254. Junior calf—1, Curtice Cattle company, on Belle Perfection 68.

Aged herd, young herd and calf herd—1, Curtice Cattle company. Get of sire—1, Curtice Cattle company; 2, Charles Bull. Produce of cow—1 and 2, Curtice Cattle company.

Senior and grand champion bull—Curtice Cattle company, on Beau Perfection 48. Junior champion — Curtice Cattle company, on Beau Donald 222. Senior champion cow—Curtice Cattle company, on Belle Donald 254. Junior and grand champion—Curtice Cattle company, on Belle Donald 254.

**Aberdeen Angus.**

Washington State College, the only exhibitor, received first on senior yearling heifer, junior yearling heifer and senior heifer calf and produce of cow. Also junior and grand champion on Enright's Queen.

Specials were given by the American Aberdeen Angus association on the same classes.

**Fat Cattle.**

Pure bred grade or cross-bred steer, spayed or Martin heifer, two and under three years, 1 and 2, Washington State College, yearling 1 and 3, Washington State College; 2, Curtice Cattle company, Calgary, Alberta. Under one year, 1, Washington State College.

Champion animal, any age, Washington State College.

**Holsteins.**

Bull, two years old—1, E. B. Marks, Yakima, Wash., on Skylark Tritomian; junior yearling, 1, E. B. Marks, on Sir Bessie Rags; 2, William Todd & Sons, on Sir Victor Korndyke. Junior bull calf—1, E. B. Marks, on Echo Segis; 2 and 3, Todd & Sons, on Sir Korndyke Cascade Jessie, and Sir Ormsby Cascade Jessie.

Cow, four years or over—1, 3 and 4, E. B. Marks, on Maldeta Canary Mercedes, Kakenson Gerben and Nellie Fobes; 2, Todd & Sons, on Lady May Fayne. Three-year-old—1 and 2 E. B. Marks on Mercedes Segis Fobes, and Leona Gerben Bracelet. Two-year-old—1, 2 and 3, E. B. Marks, on Bessie Segis Jewel, Jessie Longfield and Bessie Segis Prilly. Senior yearling heifer—1, E. B. Marks, on Bessie Fobes Tritomia, Princess Tritomia and Lucy Longfield 2d. Junior yearling—1, E. B. Marks, on Lucy Segis 2d; 2, 3 and 4, Todd & Son, on Cascade Pauline Mercedes, Cascade, Mary Ormsby and Cascade May Korndyke. Senior heifer calf—1, 2 and 3, E. B. Marks, on Bonnie Tritomia Queen, unnamed and Queen Fobes Maldeta; 4, Todd and Sons, on Cascade Stately Korndyke. Junior calf—1, 2 and 3, E. B. Marks, on unnamed, Bessie Segis Jewel, and unnamed; 4, Todd & Sons, on Cascade Barbara Piebe.

Aged herd—1, E. B. Marks. Young herd and calf herd—1 and 2, E. B. Marks. Get of sire and produce of cow—1 and 2, E. B. Marks.

Senior champion bull—E. B. Marks, on Skylark Tritonia Junior, and grand champion bull—E. B. Marks, on Echo Segis. Senior champion cow—E. B. Marks, on Maldeta Canary Mercedes. Junior and grand champion—E. B. Marks, on Tritomia Queen.

**Guernseys.**

Middledale Farms, Calkins & Riggs, proprietors, of Cresswell, Ore., was the only exhibitor. Their awards were:

Two-year-old bull—1, on Sir Julian, that was made senior and grand champion. Yearling bull—1, on Ross Langdon. Junior bull calf—1, on Middledale King.

Cow, four years or over—1, on Middledale Julia. Three year old—1, on Eugenia D. Two-year-old—1, on Middledale Queen of the May, that was made senior and grand champion. Senior yearling heifer—1, on Middledale Virginia, junior yearling—1, on Middledale Rosemond. Senior heifer calf—1, on Middledale Waukanee. Junior calf—1, on Middledale Tarbell. 1, each, on aged herd, young herd, calf herd, get of sire and produce of cow.

**Jerseys.**

Bull, 3 years or over—1, Prosser Community Bull association, on Prosser Pogis. Two-year-old—1 and 2, Jersey Home dairy, Erickson Brothers, proprietors, on Knight's Golden Prince and Belinda's Oxford You'll Do Jr. Yearling—1, Erickson, on Sultan's Olga Boy. Senior bull calf—1 and 2, Erickson, on Sultan's Raleigh Boy and Sultan Maud's Boy. Junior calf—1 and 2, Erickson, on Sultan's Lassie Boy and Sultan's Polly's Boy.

Cow, 4 years or over—1, Erickson, on Raleigh's Sunbeam. Two-year-old—1, Erickson, on Raleigh's Beauty of J. H. Senior yearling heifer—1, 2 and 3, Erickson, on Sultan's Raleigh Girl, Sultan's Star's Rioter's Girl and Sultan's Star's Lassie Girl. Junior yearling—1, Erickson, on Sultan's Figgis of J. H. Senior heifer calf—1 and 2, Erickson, on Sultan's Fancy Girl and Sultan's Bonnie Girl. Junior calf—1,

(Continued on page seventeen.)

# No Two Rabbits Alike

By H. E. Gibson.

While we can give instructions how to feed rabbits you must yourself use judgment in feeding, and as you try out any particular plan and do not find it a success, try and locate the weak point and remedy it, and you will eventually make a success. To illustrate this, some old, reliable rabbit fanciers feed their rabbits only once a day and have no hesitation in saying it is the best plan; still others, like the writter, believe that twice a day is better, but both plans have been used successfully, so that the point we are trying to make is that the feed and method of feeding may be all right and the feeder be a failure; everything depends on the feeder and everything depends on the feed. Be a student of rabbits, be a student of feeds and feeding; give it much thought, read all you can find on the subject, compare notes with other breeders, and do not be afraid of showing your ignorance and confess you are only a novice, for by so doing you will learn, and in a comparatively shore time, if you apply yourself faithfully, you will have a store of knowledge and experience that will be worth much to you, and you, in turn, will have the pleasure of dispensing information to others.

Every rabbit has a distinct individuality of its own, and no two are just alike. Some are very fond of certain foods, while others will only pick at it, but by being patient and careful you can train them to eat everything you give them. You will also notice some will eat more than others, so that you must be careful not to overfeed, and when you find a bunny having some grain left after last feeding, just let him skip grain this time or give him a very light portion—if you have been feeding a cupful of rolled barley and find he leaves considerable, cut him down to half a cupful at a meal.

We will give here a list of the grains, roots and greens that may be fed rabbits: Oats, corn, wheat, peas, barley and bran, potatoes, potato peelings, turnip parings, squash or squash parings, carrots, beets, alfalfa, clover, lawn clippings, dandelions, cabbage, lettuce, cauliflower, radishes, celery, crusts of bread and weeds. We can not tell you just the particular weeds you can feed rabbits, as weeds vary in different countries, but we would suggest that you pull different varieties of weeds and try your rabbits and you will soon discover the kind they like, but always be careful not to give your animals too much green food at a time, and never turn suddenly from dry hay to green feed, but make the change gradually, by giving green feed only once a day for, say a week, then cut out the dry hay altogether if you want to and you will find no bad results.

## SPOKANE VALLEY APPLE SALE.

### About 150 Cars Sold to the East for $170,000.

One of the largest apple sales ever made in the Spokane valley has been announced by Edward Pierce, president of the Spokane Valley Growers' union. Under a contract just closed the entire crop to be handled by the union this year, approximately 150 cars, is sold to a company of eastern fruit dealers for $170,000.

This is an average of nearly $1.50 for each box of apples from the Opportunity-Vera districts.

The prices quoted and the approximate number of cars are given below:

| Cars. | Variety. | Extra Fancy. | Fancy. | Choice. |
|---|---|---|---|---|
| 40 | Jonathan | $1.60 | $1.40 | $1.20 |
| 40 | Rome Beauty | 1.50 | 1.35 | 1.20 |
| 25 | Wagener | 1.35 | 1.20 | 1.10 |
| 6 | Winesap | 1.60 | 1.40 | 1.20 |
| 5 | Winter Banana | 2.25 | 1.85 | 1.45 |
| 5 | Stayman Winesap | 1.45 | 1.30 | 1.15 |
| 4 | Spitzenburg | 1.80 | 1.60 | 1.20 |
| 3 | Grimes Golden | 1.60 | 1.40 | 1.20 |
| 3 | King David | 1.45 | 1.30 | 1.15 |
| 2 | Yellow Newtown | 1.60 | 1.40 | 1.20 |
| 2 | Baldwin | 1.35 | 1.20 | 1.10 |
| 2 | Sen | 1.35 | 1.20 | 1.10 |
| 2 | R. I. Greening | 1.35 | 1.20 | 1.10 |
| 1 | York Imperial | 1.35 | 1.20 | 1.10 |
| 1 | Champion | 1.35 | 1.20 | 1.10 |
| 1 | Blk. Ben Davis | 1.45 | 1.30 | 1.15 |
| 1 | Delicious | 2.20 | 1.80 | 1.45 |
| 1-2 | Ark. Black | 1.60 | 1.40 | 1.20 |

## RACES AT WASHINGTON STATE FAIR.

It may interest lovers of the driving horse to know that on Friday evening, September 20, of the state fair at Yakima, Wash., 48 heats had been raced, with an average time of 2:09 3-4, which is a faster average than on most of the big circuits in the east. A world's record was made by Barongale, a trotter that raced in hopples. Ordinarily hopples are used only on pacers, but to correct a tendency to pace "cross hopples" are occasionally worked on a trotter. Barongale's time was a mile in 2:08 3-4.

H. A.

# Farm Output Calls for Ablest Available Man

(Continued from page three.)

to make advances on bills of lading. Dr. Bryan has suggested that if the law is defective in this manner congress can rectify it in 48 hours. Efforts to secure a ruling or legislation, if necessary, to provide a direct marketing system, which the growers thought they were getting when the grain corporation was created, have not ceased, and important changes are hoped for.

"Farmers or others desiring to ship wheat direct to Chicago to the United States grain corporation, through a Chicago commission house, who will arrange to handle the business and permit the shipper to draw on his bill of lading for a portion, say 75 per cent, of the value of the grain, may obtain the address of reliable houses in Chicago with whom they may arrange for such shipments and draft on the basis of 1 per cent for the service by applying to Howard Jackson, grain corporation vice president, Chicago, or M. H. Houser, second vice president, grain corporation, Portland, Ore."

### FREIGHT ON FEEDSTUFFS.

**Reduce One-Half When Shipped Into Certain Parts of Montana.**

In the Sanders County Farm Bureau News for September, F. M. Hillman, county agent, says:

It will not be necessary for farm bureau members to sacrifice their live stock this fall so as not to tax their patriotism so severely by selling wheat and buying higher priced feedstuffs. Very careful and satisfactory plans have been made, with the cooperation of the government, to ship necessary feedstuffs into Montana at half the regular freight rates. This will assure us feedstuffs that we can afford to feed. W. L. Beers, our field agent in marketing at Bozeman, has been furnished a special assistant from the bureau of markets, a Mr. Todd, who had experience in similar work in Montana last fall. They are also furnishing an expert traffic man to look after the reduced freight ruling, and to route the feedstuffs cars in the most direct manner. It looks like a mighty good plan that has been worked out for handling the feed situation.

Prices and offers will be wired to Bozeman from all producing centers and as soon as they are made up into lists they will be sent to county agents and others who are interested. These price lists will be mailed regularly, free of charge, to any one upon request to W. L. Beers, field agent in marketing. The county agent is trying to arrange to have these lists put up in each postoffice in the county.

Any one desiring to order any commodity from the lists may do so by having his bank wire Mr. Beers the order and their guarantee of the payment of draft, by prepaid telegram.

The reduced freight rate on feed applies to hay, straw, feed grains, ground feeds and concentrated feeds.

To obtain the half freight rate, a permit is secured from the county agent. Mr. Beers, in his instructions, says: "The county agents, being on the ground, have been granted considerable latitude in the granting of permits. They should bear in mind that the object of the order is to assist in the planting of crops and to resist the depletion of the live stock supply. Whenever, at any place within the drouth area, these ends can be obtained by granting the privilege, it should be granted. The privilege is intended for farmers and stockmen within the drouth area and feed dealers within the drouth area having distributing facilities and whose stocks are for sale to feeders within the drouth area."

### FEED FROM HOME-GROWN WHEAT.

**Saving of Live Stock Industry and Millions in Money.**

In a letter to Robert Insinger, chairman of the agricultural bureau of the Spokane Chamber of Commerce, dated Waterville, September 15, A. L. Rogers, the well-known member of the state council of defense, says:

I thank you very much for sending me a copy of your report to Senator Miles Poindexter on the vital subjects of "Seed and Feed" for the dry farming district of the northwest. No one in our state knows existing conditions better than yourself and no one is better qualified to give the federal administration sound advice on these subjects.

Of all men, I dislike a kicker, but this seems to be the only method whereby we can jar some people loose. If the department heads of our food administration and grain corporations would swing their legs out from under their mahogany desks and take a vacation in the country and see how their rules and regulations apply to different localities, we would make much greater progress in the way of food production and food conservation. Blanket flats issued from Washington, D. C., covering the whole United States, must be modified to meet local emergencies. We must keep in economical balance at home as well as abroad or we will spoil our usefulness all around.

I presented these vital questions by letter to our state council of defense, but upon reading the report of the these food administrators of Washington, Oregon and Idaho at their late conference and published in the Washington Farmer of its August 29 issue, I felt they were fully aware of existing conditions and therefore let the matter drop. But I am afraid they are resting again on these important matters.

A resolution was passed at that conference calling the attention of the officials at Washington, D. C., to the seriousness of stock feed shortage, due in some instances to drouth, and declares the situation in the northwest "calls for the most sympathetic and intelligent consideration." Another clause in this resolution recommended "that all wheat produced in zone 10 up to the capacities of local mills, be milled in this zone in order that wheat mill feed may be available for stock feed." Now this resolution is fine and covers the subject, but it will die in the borning and be pigeon-holed before it gets to Washington, if we don't get some punch and kick behind it.

Here are the facts in the case: The government has not fixed the feed price on oats, barley and corn and there is none of these products in the northwest for sale, and must be shipped in from the Mississippi basin and freight rates are shortly to be advanced.

Sacked ground mill feed shipped in from Minneapolis, Minn., is now retailing in ton lots at country points as follows, to wit:

Corn $89.80 per ton, oats $77.80 per ton and barley $72.80 per ton, and the prices on this class of feed are not regulated and fixed by the government.

The price of mill feeds made from wheat are regulated and fixed by the government and their basis is 33 per cent of the price of wheat.

Wheat at local points in bulk is worth $2 per bushel or $66.66 per ton and 33 per cent of this amount will make bran worth $22 per ton, plus $5.50 for sacks and twine, plus $2 per ton handling charges, makes bran worth $29.50 per ton, and shorts $2 more or $31.50 per ton.

With the great shortage of forage and stock feeds such as hay, corn, oats and barley it is imperative that all the wheat grown in the northwest, be milled in the northwest, and thereby keep the mill feed at home

It will also save the terrific spread in the cost of eastern corn, oats and barley at an average price of $80.10 per ton as against local wheat mill feeds at an average of $30.50 per ton; at the same time the entire output of flour can be held in reserve for war purposes.

Furthermore, there will be a 25 per cent saving in tonnage on rail transportation of the entire wheat crop.

To be more explicit, if the wheat crop of the state of Washington be 40,000,000 bushels, the sum total means 1,200,000 tons, and 25 per cent of this amount at least is feed and represents 300,000 tons of bran and shorts.

| | |
|---|---|
| 300,000 tons of eastern feed at an average cost of $80.13 ... | $24,039,000 |
| 300,000 tons of Washington bran and shorts at an average cost of $30.50 ..... | 9,150,000 |
| Difference ..... | $14,889,000 |

Or a saving to the farmer and animal industry of our state of practically $15,000,000.

I understand the great sticker in the wheat mill feed problem is, that all the millers are kicking on the basic price of the product, namely: 33 per cent of the price of wheat.

If this price is too low the food administration should be fair and change it, otherwise the millers must remember that, in war times, if the federal government can commandeer its men to fight its battles and likewise commandeer the railroads to transport its men and materials, it certainly can commandeer the flour mills and grind the country's wheat to feed its men. Our farmers and stockmen are not asking "the most sympathetic and intelligent consideration from the federal department at Washington, D. C.," but an opportunity to use what they already have on hand in a patriotic and intelligent manner.

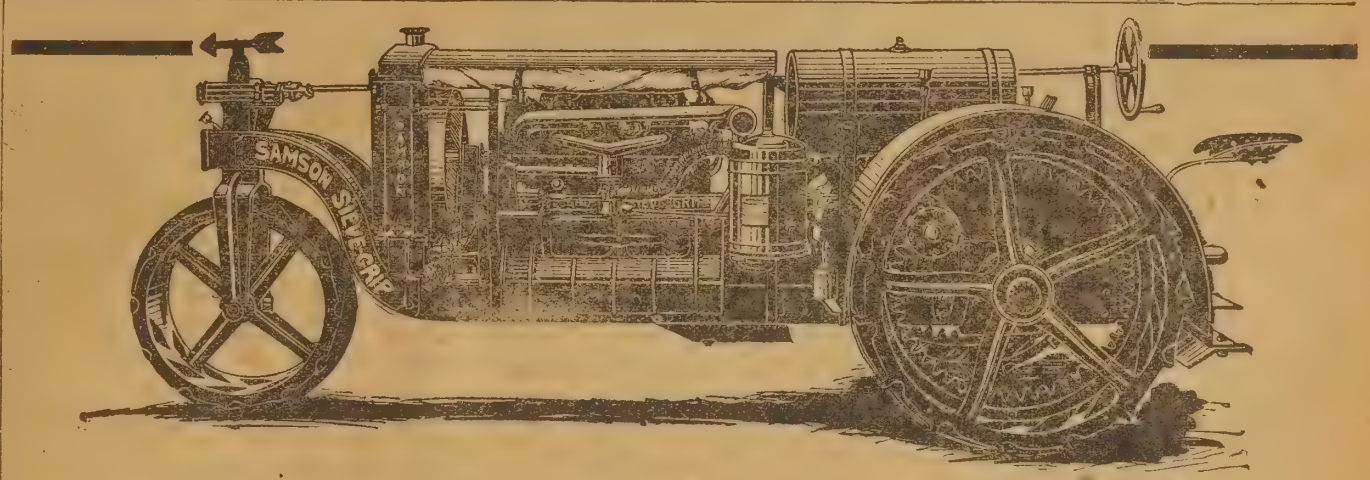
### FEEDING LOW-GRADE WHEAT.

**May Be Permitted Under Certain Conditions in the Northwest.**

Charles Hebberd, food administrator of the state of Washington, who has returned from a conference at the national capital, announces in a bulletin:

"It is possible that a more liberal rule will prevail in the northwest as to the feeding of low-grade wheat and wheat at inaccessible points. This will be permitted only on application to the grain corpo-

(Continued on page fourteen.)


# The *GMC* Samson Sieve-Grip Tractor is *your own idea* of what a tractor ought to be and what it ought to do.

IF YOU had started out to build a Tractor for **your farm,** to do everything you wanted it to do, in the long run you would have made it like the GMC Samson Sieve Grip Tractor.

It would have cost you a pile of money and a good many years to have done it. The GMC Samson Sieve Grip Tractor was designed out here in the far west for western farming conditions, and so when you know about it you will discover that it really is **your own idea** of what a Tractor ought to be and what it ought to do.

Do you know why the Sieve Grip Wheels are used?

Do you know why it steers with a single front wheel?

Do you know why the crank can't "kick back" when you start the engine?

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Do you know why it has 50 per cent more cooling surface than is really needed?

Do you know that one of the first GMC Samson Sieve Grip Tractors, bought in 1903, was used steadily until just a little while ago and then was traded in for another Samson?

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Eldridge Buick Company

Seattle
Spokane

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Address .....




A. B. NYSTROM, Editorial Contributor

# The Dairy Barn

## Start Now to Clean and Repair

During the summer months the dairy barn does not get very much attention. The cows are there only a short period during milking time. But before long, cows will have to be kept under cover if they are to keep up the milk flow. The cold rains will be injurious to the cow's health if she is allowed to be out in it. And it will certainly show up unfavorably on the milk sheet.

Start now to clean up and repair the barn and barnyard. The interior probably needs a coat of whitewash, after the cobwebs are brushed down, a window needs to be put in here and there. Remember that each cow should have at least four square feet of window light, and this light should be evenly distributed throughout the barn.

Pick up the boards and trash in the barnyard. Haul in some extra cinders and gravel in the low places, and make the yard usable for wet weather. It isn't playing square with a cow to ask her to wade knee deep in mud all winter, and then expect a full pail of milk twice a day.

A comfortable, clean barn and clean barnyard help to make healthy cows that will produce their utmost at the pail. It pays to look after these things. A. B. N.

### TO PROVIDE SUCCULENCE.

By THOMAS SHAW.

Those who have given careful thought to the milk question can not fail to have noticed how freely cows milk when on grass in the spring season. When turned onto the same after having been fed on dry food in winter the milk flow is at once increased, even though the cows should be well advanced in the lactation period. What is it that leads to such a result? It does not follow because of increased nutrition in the food. It rather follows mainly because of increased succulence in the food. It furnishes materials for producing milk and it exercises a favorable influence on digestion when not too succulent. There may be some other reasons, but if so they are much less important.

In the northwestern states, and especially in Washington and Oregon, the dry fodders that are most commonly fed are clover, clover and timothy, and alfalfa. The aim should be to provide succulence that will tend to balance the ration. As is generally known, clover and alfalfa are essentially protein plants. Corn and sorphum are essentially carbohydrate in their constituents. These, then, balance the fodders named; that is, they make a food when fed together that will be fed without waste, providing it is all eaten by the animals to which it is fed.

There is no plant more suitable for producing ensilage than corn where it may be successfully grown. For this use it can be grown over wide areas in the states named, also in Idaho. Of course there are other areas where the production is not enough to justify growing it for such a use. The elevation may be too high or the nights may be too cold or the two causes may work in conjunction.

### CONDENSERY AT NAMPA.

The Carnation Milk Products company opened its condensery at Nampa, Idaho, September 9. A special car operated over the Boise Valley Traction company's "loop" line, covering a wide territory in the Boise valley, was placed in operation for the sole purpose of carrying milk from the company's patrons to the condensery. Dairymen are receiving $2.80 a hundred for 4 per cent milk, which is equivalent to about 70 cents a pound for butterfat. The plant has a capacity of 250,000 pounds a day, but it will not run to capacity for some time to come. O. W. Jones is superintendent of the Nampa plant.

### Woman Cow Tester



Miss Pearl Snedeker, who lived on a farm in Iowa until she was 22 years old, has recently resigned her position as teacher in the Albany high school, to take charge of the testing association at Tillamook, Ore.

There are 761 cows in the association which she has charge of, and in one of the best cheese sections in the United States. The cheese factories in this section manufactured 4,074,388 pounds of cheese last year.

Miss Snedeker has an auto in which she travels from one dairy to the other, and since all dairies are close to cheese factories the testing is done in the factories, where a steam tester is used.

### FEEDING YOUNG FARM ANIMALS.

Professor R. E. Caldwell has been engaged as the director of the research and educational bureau, established by the Blatchford Calf Meal company at Waukegan, Ill. Professor Caldwell graduated from the Kansas State Agricultural college in 1908. For some years he conducted experimental feeding work at the Ohio agricultural experiment station at Wooster, Ohio. In 1911 he was called to Purdue university as associate in milk production, later being placed at the head of the dairy department.

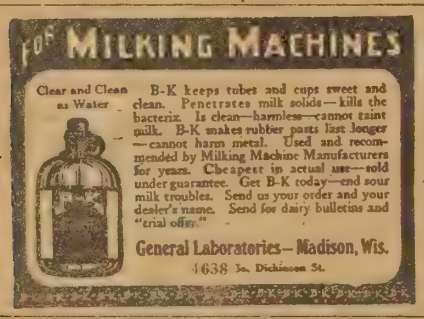
Writing of his new work, Professor Caldwell says that the purpose of the company is "to establish a division of their work designed to investigate all problems relative to the feeding of young farm animals; also to carry this information to the farmers, for whom it is designed. It is not to be tainted in any way with personal or commercial ambition. The object of the department is to render service. It is not our object to work individually, but rather expect to cooperate to the fullest extent with all private, state and government agencies having as their object the genuine welfare of the American farmer and stock breeder."

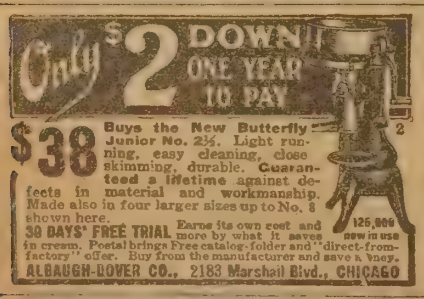
### AS TO BUTTER PRICES.

The food administration for the United States has decided that retail dealers must not charge in excess of five to six cents a pound over cost for butter. Anything over that figure will be considered profiteering. Cash and carry away stores are allowed five cents, while credit and delivery stores are given a cent more. This applies to both fresh and cold storage goods. The following items of expense are considered: Purchase price, transportation charge, cold storage, if any, insurance on cold storage butter, interest on money invested at current rate while goods are in storage, actual cost of printing. Cost does not include estimated shrinkage, commissions or similar expenses.

### French Names Pronounced.

Here's the pronunciation of the following French names: Ypres, Soissons, Aisne, Amiens, Douai, Bapaume, Meaux, Yser, Lys, Ayesnes, in the order named: Ee-pr, Swahsonn, Ain, Am-e-an, Dewai, Bah-pome, Mo, Eazer, Leece, Ah-eem.





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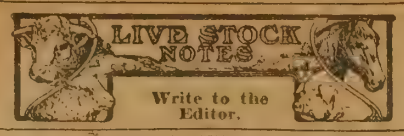
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**The Advertisements in This Issue Are Well Worth Reading.**

They are informative and cover a wide range of subjects. You can profit by reading them carefully.




E. J. IDDINGS, Editorial Contributor

# Dehorn Cattle

## Fall of Year Is a Good Time

By E. L. POTTER.

That cattle of all kinds should be dehorned is admitted by progressive beef men everywhere. The question is only one of how and when.

The instruments commonly used are the saw and the clippers. With animals less than 12 months of age the horns are soft and the clippers work very well. For older cattle the saw causes less crushing and bleeding and is decidedly the better instrument. Cattle should, if possible, however, be dehorned by the time they are not more than 12 months, since up to this age the horn cavity is very small, or entirely absent, so that the wound scabs over and will be free from flies or other danger in a few days. With older animals the horn cavity is too large to scab over and will contain matter and run for several weeks.

The secret of a good job is to cut close enough to take off a ring of skin at least one-fourth inch wide clear around the base of the horn. This is not always possible with the clippers, as the fleshy base of the ear tends to hold the knives too far away from the head. With the saw the saw is removed as soon as the bone is cut through and the cut finished with a knife, cutting downward between the horn and the ear. This makes a kind of notched cut that heals nicely and leaves a perfectly clean head. If the ring of skin is not taken clear around, however, a scar will form and the more skin there is left the bigger the scar will be. There is no danger whatever of cutting too deep, and the base of the horn is two inches or more from the brain cavity. The cavity in the horn connects only with the nasal passages. After the work is done the animal should be kept where it can be watched for a few hours. The bleeding will be severe at first, but should stop in a hour or so. If it does not stop put the animal back in the chute and either hold the finger on the wound for a few minutes until the blood clots, or draw out the end of the artery with a small pair of forceps and tie with a thread. Various dopes are used to put on the horn immediately after the cut is made with the idea of stopping the blood and keeping away flies, but it has been our experience that they do neither; 95 per cent of the animals dehorned are better off let alone and the other 5 per cent need more serious treatment than smearing on a little tar or sheep dip. There seems to be no practical way of keeping flies off range cattle so they must not be dehorned in fly time. Right now is a good time to dehorn calves and yearlings, but is rather late for older cattle. The fall is a good time. The work should be done just as soon as the flies are gone.

Calves may be dehorned by throwing them with one rope on the neck and one on the heels, but older cattle should be handled in a chute and the chute must be a good one with squeeze sides and proper facilities for holding the head. (Chute plans may be obtained from the Oregon Agricultural college.) Dehorning is not a bad job if one is equipped to handle the cattle properly. One can hardly dehorn cattle by simply snubbing them to the fence.

The exact kind of instrument used is not important so it is strong and sharp. A saw, to be really good, should be short and stiff. A 12-inch-back saw, such as carpenters and cabinet-makers use, is the best of all. Saws with a narrow blade like a meat saw do not work so well as the blade twists too much. A pair of fetlock clippers are needed to clip off the hair around the base of the horn before beginning to saw. If the hair is clipped the saw will cut very much faster and the operator can tell just where he is cutting. If the hair is clipped away any amateur can do a first class job on every animal.


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# VETERINARY

By DR. S. B. NELSON.

**Small Hole in Heifer's Teat**—I have a 2-year-old heifer that has been fresh about six weeks and has a very small hole in her left front teat. It is about an inch from the point. In milking her the milk comes from the hole as well as through the proper channel. Kindly advise me how to heal the hole.—C. M. C., Libby, Mont.

Practically the only satisfactory way to heal the hole in the teat is to place a harnessmaker's stitch in from the side and tie it. Then scarify the outside opening of the hole with a fine knife point and put two very fine stitches across the opening. Sprinkle it thoroughly with boracic acid and put on a little bit of cotton and seal with collodium. Leave it for three of four days unless it gets rather tender, which it will not do if this has been done absolutely clean. The entire teat should be painted with tincture of iodine before beginning to operate. After four or five days take off the dressing without injuring the tissues, and handle very carefully.

**Horse Rubs Out Mane and Tail**—I have a young horse that persists in rubbing out his mane and tail. There seems to be no indication of mange or anything else, but he continues to rub, whether in pasture or stable. I have washed it with a 2 per cent solution of lysol, but that has no effect.—J. F., Bellingham, Wash.

You might try giving a purge of one ounce of aloes made into a ball. Then apply to the mane and tail a solution of one part of corrosive sublimate to 1000 parts of water once daily. This solution is poisonous, and must be kept where children can not get hold of it.

**Cooked Potatoes for Hogs**—I have a brood sow about 5 years old which I can not get with pig. I have had her bred four times. She had pigs the 24th of February. I had to take her to the boar the second time the last time she was bred. This is the only trouble I have had since I have had her. Can you tell what is wrong with her and what I can do for her? Do you think cooked potatoes are good for hogs? H. F. B.
Troutdale, Ore.

It would be impossible for me to make a diagnosis of the trouble affecting your sow without having the opportunity to make a personal examination of her. It seems to me that the sow might well be put into the fattening pen and killed, and possibly you could buy a younger sow to advantage. This might be the best way to overcome the trouble. Cooked potatoes are good for hogs when fed in proper manner with other feeds. Remember that cooked potatoes are a very starchy food, and should be fed with nitrogenous foods, such as oats, barley and other grains of various kinds.





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WHETHER .22 repeater for the boy or autoloading shotgun for yourself, a high power autoloading rifle for that well earned deer hunt or a pump gun or rifle for general use, buy a Remington UMC and know you are getting the *right* arm.

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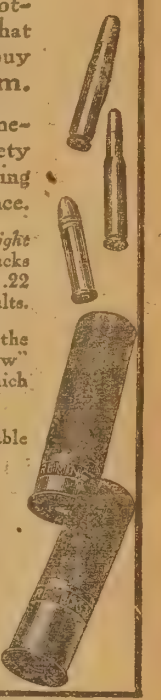
Buy Remington UMC Shotshells or Metallic Cartridges and add the *right* finishing touch. For example, for squirrels, woodchucks and other small animals, the Remington UMC .22 cartridge with hollow point bullet gives best results.

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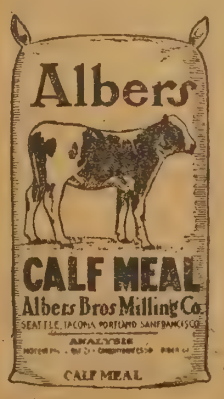
## Calves thrive on Albers Meal



and the farmer who is feeding this Calf Meal in place of milk is taking advantage of the present big milk prices and is enlarging his profits, as Albers Calf Meal does the work of milk and costs a great deal less.

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is made from a splendid assortment of meals, including ground Oatmeal, the most valuable body builder known. All ingredients used are easily digested, and assists the farmer to build up a strong, sturdy herd. Successful farmers substitute Albers Calf Meal for milk, because, like other brands of Albers Feeds, it brings the results expected and it is practicing economy. If your dealer cannot supply you, write us direct.




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POULTRY

Write to the Editor.

JAMES DRYDEN,
Editorial Contributor

# Show Birds

## Telling Points at Exhibitions

I have some White Wyandottes, hatched from eggs secured from one of the largest advertisers and supposed to be of the best. I paid extra for some of the eggs. Two of the chickens have single combs. Is that a good sign? Also I notice a few feathers on some of them that have a little brown or black in them; just a few, though. Also close to the skin the feathers are partly a cream color, otherwise they are a fine bunch. Tell me what to do and how to pick some of the best, as I wish to enter some in the chicken shows this fall.—A Reader, Walla Walla.

The single comb frequently shows in Wyandottes. It is not a sign of cross-breeding, except away back when the breed was made. They revert in this to their ancestors many generations back. This is called reversion. Of course the single combs might come from more recent crossing with single-comb breeds. The rose comb and the white plumage are dominant characteristics. If we cross a White Wyandotte with a White Leghorn or with a Black or Brown Leghorn we get the same result in comb and color of plumage. The comb will be rose and the feathers white. That is what is meant when we say that the rose comb and white plumage are dominant. If we cross a White Wyandotte with a Barred Plymouth Rock we also get a white fowl with a rose comb, and some of them might win prizes as Wyandottes in the show. But in the case of the Leghorn and Wyandotte cross, while they would have the White Wyandotte color and comb, they would resemble the Leghorn partly. They would have longer tails, and some would have white earlobes. It wouldn't be hard to tell they were crossed if one understood the distinctive type of each breed. In the second cross, however, some single combs would appear, even though there were no single combs in the first cross. If the single-comb cross chickens are bred together they will produce all single combs. Single comb is a recessive character, and the recessives always breed true, but the dominants do not always. The chicken takes after both parents in some characteristics, and in some others after one parent only. The same is true of cattle, horses and hogs, as well as plants and human beings.

We don't know why when we breed a single-comb chicken to a rose-comb chicken they produce rose-comb chickens only; but it is a demonstrated fact. We don't know why when we breed a white chicken to a black one they produce only white chickens; but it is a demonstrated fact. We don't know why when we breed these first crosses together they will produce some black and some white chickens, but it is a demonstrated fact.

But this is probably getting away from the subject. A Wyandotte with a single comb may be pure-bred, but it will not win a prize in the show where the judge uses the Standard of Perfection as a guide. The single comb is called a disqualification; it disqualifies the Wyandotte from winning a prize.

As to the color of feathers, it sometimes happens that some of the best specimens—I mean show specimens—have some black spots in the feathers. Of course they don't have them in the show room. The craze in a show bird is to get a pure white, without any suggestion of yellow or cream, and it happens that the birds that are the purest white—I mean birds with the least suggestion of creaminess in the feather, quill or the earlobe—are the ones that are most likely to throw black feathers or black spots. Now, black feathers or black spots, like single combs, are a disqualification. If you send a White Wyandotte to a show with a black spot in the plumage it will not get a prize if judged by the Standard, so that there is only one of two things to do: either pull out the feather before sending the bird to the show, which, sub rosa, has been done, or not send the bird to the show. The latter, of course, is the only honest way. There is no fun in winning a prize if to win it deception must be practiced. It is permissible and right to clean the bird by washing its plumage and legs; that shows it in its true color better, but painting is another thing, pulling out feathers is another. Yes, painting has been practiced, painting of the legs, and some experts can do it so as to fool the judge. But there is no sportsmanship or fun in that. The best bird should win, not the best artist.

But there are many points to consider in the show Wyandotte. The Wyandotte has a distinctive type or shape. It is not as long or rangy as the Plymouth Rock or Rhode Island Red. It is a blocky bird. The comb should not be too large; it should fit down on the head well. The earlobes must be red and the tail short. But one should study the birds themselves, the show birds, in order to get the right idea of what is required in the show room.

Once as a youngster I took a notion to break into the show business, and the first bird I sent was a White Wyandotte. I thought he was a fine bird, but the judge thought otherwise. My neighbors came home and consoled me by saying it was an outrage. They thought so, too. He was larger than the others; had a larger comb, which was nice and red; he would crow 10 times while the next best crowed only once. He looked like he could thrash the whole bunch of them if he had got a chance. But the blue ribbon was given to a rooster that had hardly any comb and less crow and acted like he was afraid to scratch for fear of hurting his toes, so the neighbors said. It dawned on me several years afterward that my rooster had too much comb and wattle, besides the little tinge of brass or creaminess on back could not be offset by any amount of crowing and scratching. But a Wyandotte may have a little creaminess and a large comb and still be a Wyandotte and a good layer. That is another question.

J. D.

### CHESTER M. WILCOX.

Chester M. Wilcox, manager of the poultry department of the Oregon State hospital, died suddenly of pneumonia at Camp Fremont, Cal., a short time ago. Mr. Wilcox was called into the service about two weeks previously, having passed a good physical examination. About a year ago he applied for enlistment, but was turned down on account of a slight murmur of the heart.

Mr. Wilcox was a graduate of the O. A. C., and had been very successful in building up the poultry work at the state hospital. It is the largest poultry farm in the state, and one of the most profitable in the United States. A few days before he died the writer received a letter from him in which he said that he had passed a good physical examination and he counted it a "rare privilege" that he could now enter the service.

A young man of rare ability and integrity was Chester Wilcox, and his taking away is a distinct loss to the community and the state.




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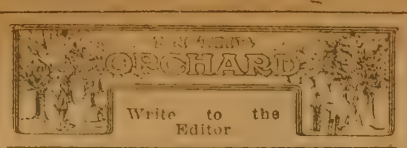
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GRANVILLE LOWTHER
Editorial Contributor.

# Orchard Troubles

## Blackberry Enemies Numerous

By GRANVILLE LOWTHER.

The diseases most common to the blackberry, are crown gall, fruit rot, leaf spot, mushroom rot, orange rust, red or bramble rust.

Crown gall is a bacterial disease, technically known as bacterium tumefaciens. It exists in the soil and in case the roots are wounded by cultivation, punctured by insects, or in any other way the bark is broken, the bacterium may enter and infect the roots. Galls of the same nature sometimes occur above the ground, but this is relatively infrequent.

The methods of control are to destroy all infected plants, destroy all aphis, gophers, field mice, ground squirrels, or whatever may injure the roots. Care should be used in cultivation not to injure the root system. For an extended article on the subject, see under apple, in this series of articles.

Fruit rot in blackberries is manifest by a dusty mold, or gray fungus on the fruit. No effective treatment has, in so far as I know, been discovered.

Leaf spot, known scientifically as Septoria rui, is manifest by small dead spots on the leaves. Since leaves are the breathing organs and manufactories of food, the injury is in proportion to the extent of the disease. The remedy is Bordeaux mixture. Spray first when the buds are beginning to unfold, and then at intervals of about 10 days, for four sprayings.

Mushroom rot is a fungus disease affecting many kinds of plants and is known to scientists as Armilaria mellea. It affects the roots at the surface and just below the ground, more than at any other point. I cured two apple trees in our orchard, affected with the same disease, by scraping away the earth, and pouring onto the roots undiluted lime sulphur, commercial lime sulphur without adding water. At the time, I though it was as likely to kill the tree as to cure it; but it cured. Most writers recommend digging out the trees or plants in order to prevent the spread of the infection. With my present knowledge, I would follow this advice in so far as it regards bush fruits; but not with reference to apples.

Orange rust produces bright orange masses of spores all over the underside of the leaves. The fungus spreads throughout the plant so that it is difficult to control. The remedy prescribed is to cut out the affected portions and burn them. When the new growth appears, spray with Bordeaux.

Rem bramble rust is similar in appearance to orange rust, and requires the same treatment.

The apple leaf hopper may be killed by spraying with coal oil emulsion, whale oil soap or tobacco. This subject was treated more fully under apple pests. Blackberry aphis and black cherry aphis may be destroyed by the tobacco spray.

Blackberry cane borer resembles the peach borer. Many of the canes will be found to be girdled at the base and the pith bored out by the caterpillar, which develops into a moth, or insect resembling a brightly colored wasp. The remedy generally recommended is to cut out the infested canes and burn them.

The bramble flea louse has been found troublesome in the eastern states, but in so far as I know has not troubled Pacific coast growers. It can be killed by spraying with tobacco or kerosene emulsion.

Blackberry bud moth is similar to the apple bud moth, and may be killed by spraying with arsenate of lead.

Further discussion of blackberry and raspberry pests will be given in a coming issue of this paper.

### SOMETHING ABOUT PEPPERS.

The pepper is a native of South America. The seeds are flat, and like the flesh of the pods have an acrid, burning taste, for which the plant is cultivated. The germinating power lasts about four years after the seeds are separated, but much longer than this if left in the pods.

The variety usually planted is Ruby King, a large, bright-red and mild-flavored pepper, considered best for general use. This is a mild pepper, while chili and cayenne are considered the hottest grown.

Peppers need practically the same cultivation as the tomato or egg plant, except that they may be planted two feet apart, with three feet between the rows.

### Siberia Is Big Place.

Siberia, of which at the present time there is so much talk, contains nearly 5,000,000 square miles and is about 45 times as big as the British isles.

### POTATO CROP ESTIMATES.

The bureau of crop estimates in its September report predicts a total yield of white potatoes of 385,000,000 bushels for the country. This is 58,000,000 less than last year's total crop, and 6,000,000 less than the August estimate. Estimates for the leading states are: Maine, 23,000,000 bushels, an increase of 3,000,000 over 1917; Minnesota, 32,800,000 bushels, a loss of 1,000,000 bushels; New York, 32,600,000, a loss of 5,300,000; Wisconsin, 31,600,000, a loss of 3,000,000; Michigan, 28,800,000, a loss of 7,000,000, and Colorado, 7,700,000, a loss of 1,500,000 bushels.

### WHEAT CROP IN SCOTLAND.

The president of the Scottish board of agriculture recently stated that the wheat crop in Scotland this year had been increased by 16,000 acres, the oat crop by 196,000 acres and the potato crop by 23,000 acres. There was some decrease in the barley crop, but the net increase on the whole of these crops was 227,000 acres, compared with 1917.

### Horse Racing in Mongolia.

Perhaps the prohibition of horse racing would be more deeply resented in Mongolia than in any other country of the world. There it ranks as the favorite pastime of all classes, including the Buddhist clergy, who number fully one-third of the total population. The races are never under 10 miles, and the Mongolian "derby" is a contest over 30 miles of rough steppe.

### Underground Theaters.

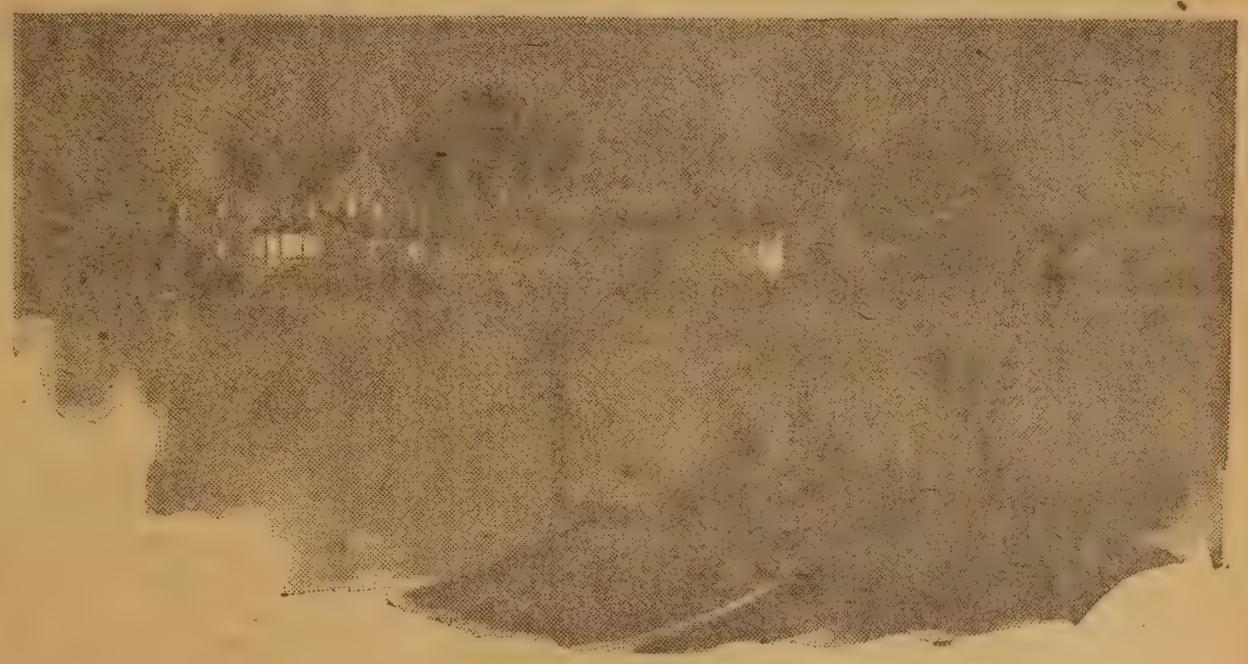
Because of frequent air raids, Paris is to have underground theaters.

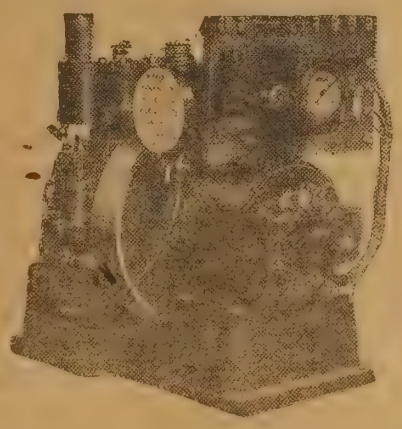




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# To Produce More Next Year

## Klickitat Farmers Are Conserving Feed, Even Straw. Will Get Through the Winter in Pretty Good Shape, With a Little to Spare




BOSSBURG, Stevens County, Wash., Sept. 20.—Crops of all kinds were short this year, except corn, but we will most all have enough feed to carry us through. A few farmers will sell off some cattle that would have been held over had there been plenty of feed. We have not had time to do much as yet to arrange for a fair for this fall, but we will have the Stevens County Live Stock association's stock show. As this event will not be held until October, after all harvesting is over, there will be a good showing of stock of all kinds, and we believe this show has done more for the farmers than the old county fairs of years past. I have been asked the question several times of late as to whether this section of the country was prosperous. In a way it is, although the dry summer was hard on some farmers and a few will have to sell off some young stock that should have been held over. Farm produce of all kind sells for a good price, except soft fruits, which have been just about the same as former years. Everybody is working, and there seems to be more money in circulation than for many years. We have managed to harvest all crops without sending out for help. There has not been much fall seeding done so far, as it has been too dry, but if we have rain in time there will be more wheat seeded this fall than usual. There is plenty of seed in the country, and of fair quality, and about all that will be shipped in will be millfeed for dairy cows. Every farmer is conserving all feed, even to the straw, this fall. Some are going to bale their straw and sell to others that have to buy some feed. Heretofore a large part of the straw has been wasted. All silos except one have been filled with corn, and some have cut the third crop of alfalfa, although it was short. Everything will be saved this year, and we will get through the winter in pretty good shape and have a little to spare. Although we have had two short crops, we are not discouraged, and will try to produce more next year, and "win the war" is what you hear at all times. W. W. PALMER.

### HAUL GRAIN WITH TRUCKS.

BICKLETON, Klickitat County, Wash., Sept. 14.—Harvest is practically over, and some of the farmers have part of their grain hauled to the warehouses. There was a wide difference in crops in this eastern Klickitat. In a radius of 10 miles of Bickleton the majority were good. In the Glade, Horseheaven and Six Prong some were nearly a failure. In Roosevelt, Alderdale and Mabton we are getting the government price less 15 cents off for freight and other charges of the warehouse man. We have had rain last night, which will benefit the roads. Everything is very high in price, but every one seems to have the money to pay. There is a shortage of all vegetables and fruit. There is a marked increase in the number of motor trucks this year. Many farmers are hauling their wheat this way this season. They make two trips daily to Roosevelt, while it takes two days to make a trip with horses. BERT H. FAULKNER.

## Why Grains "Run Out"

By B. F. SHEEHAN.

There is often complaint among farmers about varieties of grains "running out." They say seeds run out if kept too long on the same farm, and need occasional replacement by "fresh" stock from the seedsman.

Several facts may account for the general deterioration which occurs from year to year. One, and a very important one, is that many farmers use low-yielding varieties and pay little or no attention to seed selection. When no seed selection or seed grading is practiced and each year's seeding is allowed to put back all of the light and shriveled seed there is bound to be deterioration. The shriveled seeds will be slower to germinate, the first leaf will appear above ground after those of the other row are well under way, and the tardy seedlings, poorly nourished as they are, will make a hesitating and uncertain growth. In fact, in the short growing season they do not overcome this early handicap, and the yields will not only be low but many of the kernels will be imperfect. This effect will be in a measure cumulative from year to year if the imperfect kernels are planted—in fact, the stock will "run out." Liberal use of the fanning mill will get rid of these light and shriveled seeds.

Growing of varieties which are not suited to the soil and climatic conditions is a common cause of crops running out. This is especially true of potatoes. If a variety is not adapted to the soil and climatic conditions the best results can not be expected.

Grains should be seeded under as near the same soil and climatic conditions as they were grown.

The continuous cropping system which is practiced by many farmers is a common cause of varieties running out. Continuous cropping depletes the fertility of the soil, allows the entrance of weeds, insect pests and disease, which results in a light and unsatisfactory crop.

Many farmers refuse to obtain seed from a field which has not yielded well. For instance, one farmer may have a field of Turkey red wheat which gave a yield of 40 bushels, another farmer 20 miles away may have a field of pure Turkey red which has given a yield of but 10 bushels per acre. Considering that both fields are pure and contain plump seed—the seeds from the 10-bushel field are as good for seed purposes as the one which yielded 40 bushels. The lower yield may be due to any number of causes, such as lack of moisture, time of seeding, etc., which, of course, is not transmitted. Pure, plump Turkey red wheat is Turkey red, no matter what the yield, and such seed obtained from a high-yielding field and grown under the same conditions as identical seed obtained from a low-yielding field should result in the same kind of a crop.

By growing high-yielding varieties which are adapted to your soil and climatic conditions, and by practicing good seed selection and grading and also the practicing of a rotation and seed treatment, one may practically eliminate "running out," which is so common a complaint in many sections.

### CATTLE FROM DROUTH AREAS.

**Decrease of 25 Per Cent in Freight Rates Has Been Granted.**

Large shipments of cattle from the drouth-stricken regions of Texas and Oklahoma to pasture land in Pennsylvania, Virginia and other eastern states are to be undertaken by the railroad administration, upon request of the food administration. To make possible this food conservation measure a decrease of 25 per cent in freight rates has been granted, through recommendation of the food administration. Cattle buyers in the east will purchase western stock outright, and shipments in trainload lots will begin as soon as the plan is completed.

### LARGER MILK DEMAND FOLLOWS PROHIBITION.

Increased demand for milk, following curtailment of brewing in the United States, is a probable development in the nation's food situation during the coming year. In a recent conference with Food Administration officials at Washington R. C. Reed, secretary of the Michigan Milk Producers' association, presented facts of unusual interest to all dairymen. Since last May, when Detroit became dry, consumption of milk, according to Mr. Reed, increased 20 per cent and of buttermilk about 50 per cent. To satisfy this sudden demand it became necessary to bring in milk from greater distances and to a considerable extent utilize the supply formerly made into cheese.

### STABILIZING COTTONSEED MEAL.

In spite of the lower yield of cotton and the increased cost of production, the organized cottonseed producers have agreed with the food administration to stabilize the price of cottonseed at the average price of last year. This is a concession on their part to the cattle-feeding and dairy interests in this country. The prices will vary from $64 to $72 per ton in carload lots, f. o. b. cars, depending upon the yield in oil.

### May Draft Women.

A resolution has been presented in the English house of commons to draft all unmarried women between 19 and 30 years for war work.


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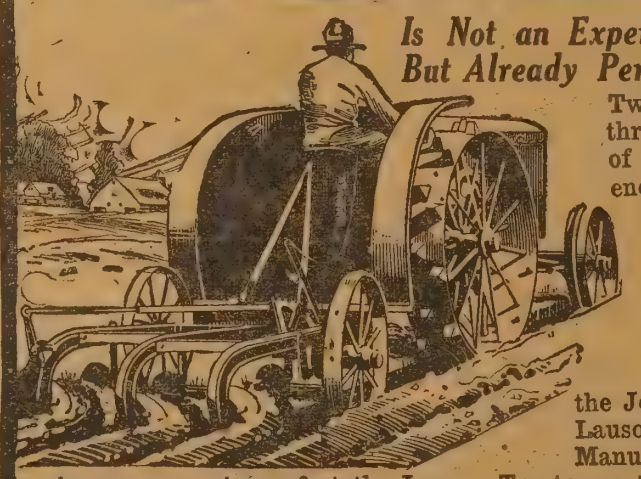
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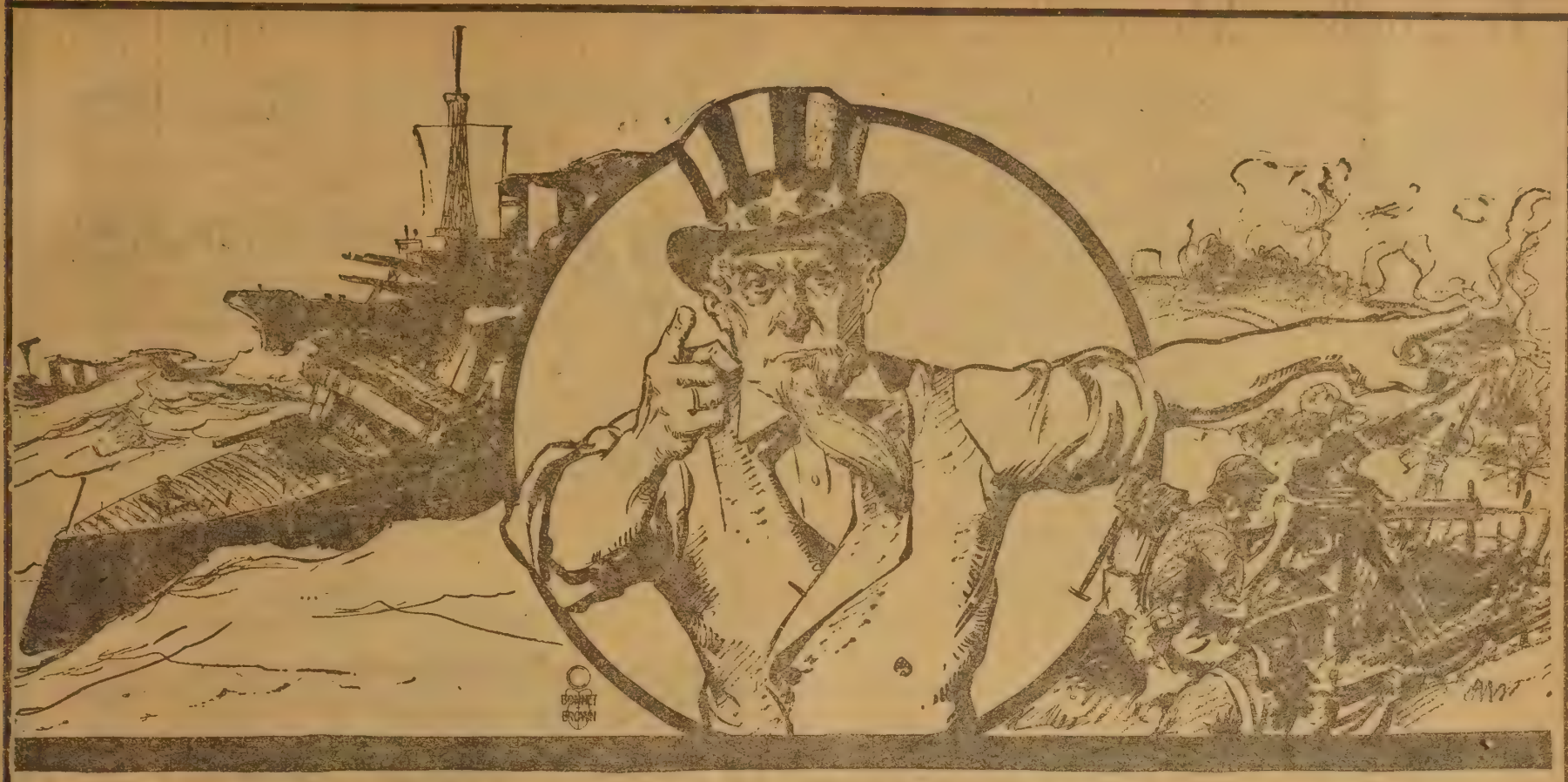
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SPOKANE, WASHINGTON

# Farm Output Calls for the Ablest Man

(Continued from page seven.)

ration and the furnishing of samples. In proper cases permits will be issued for this purpose.

"All feeders of stock should make plans at once to secure necessary supplies of coarse grains for feeding purposes. No barley is to be purchased on the Pacific coast for export purposes this year, so that coarse grains should be procurable here at reasonable prices. Feed barley can now be purchased at Minneapolis at about 90 cents per bushel, so that carloads should be laid in here at $50 to $55 per ton."

Continuing the discussion of this most important feed problem, Mr. Hebberd adds:

"While we have in this country an increased wheat crop almost 250,000,000 bushels over last year, the total production of feed grains is greatly reduced. Corn and oats together are down 597,000,000 bushels, and there is serious shortage in hay crops. Exactly the same condition exists in allied countries—wheat production up, fodder and feed grains greatly reduced. Feed conditions in the allied countries have caused a decrease of milk production from the already depleted dairy herds, the production per cow being reduced 20 per cent below former amounts. As a result of this condition milk is now available only for child feeding, and even in insufficient quantities for that purpose. The civilian population in allied countries go weeks without butter and other dairy foods.

"Thus, while our feed problem in the northwest is a serious one, it has none of the elements of danger to child life or morale of the people that exist in allied countries. It was apparent at the Washington conference that every section of the United States this winter will have its serious feed problem, due to shortages and drouth conditions in many parts of the country.

"There will be about 5,000,000 barrels less flour shipped the allies and neutrals this year than last. The northwestern food administrators received Mr. Hoover's assurance that 40 per cent of the flour that goes to Europe will be shipped from the Pacific coast and that no wheat would be shipped while flour is available for shipment. Notwithstanding this, there will be a greater demand for mill feeds than the mills will be able to supply. It was therefore determined to limit the feeding of mill feeds to dairy cows, young hogs and poultry."

## HOW WHEAT PRICE IS CUT.

**Farmer Gives Figures of Grain Sold This Fall in Palouse Country.**

| | |
|---|---|
| Coast price, bulk wheat | $2.20 |
| Freight rate to the Coast | $0.135 |
| Buying charge | .02 |
| Handling charge | .03 |
| Bad sacks, insurance, interest | .15 |
| Cut from grade No. 1 to No. 2 | .02 |
| Cut from grade No. 2 to No. 3 | .03 |
| Dirt and chaff | .02 |
| Smut | .02 |
| Total reductions | .32 |
| Amount received by farmer | $1.88 |

"I find that people as a whole are woefully misinformed as to the price farmers are receiving for their wheat," said George H. McCroskey, a prominent wheat grower of the Palouse country, in a published interview. "They read that the government has fixed the price for wheat at $2.20, and they labor under the misapprehension that the farmer receives this sum.

"To show that he gets nothing like the Coast price, I give the figures printed above. Those figures are correct, for they are reductions that I received for some wheat sold this fall in the Palouse country.

"These figures are for bulk wheat. Sacked wheat is 9 cents a bushel higher. The best price I received for any of my sacked wheat was $2.10 for 249 sacks of choice marquise wheat. Most of my crop gave returns of about $1.95, sacked.

"The government has fixed $2.20 on the Coast for wheat grading No. 1. Very little of this grade is grown in the Inland Empire, it being the hard wheat of the Dakotas. I doubt if one bushel in 1000 in this section will grade No. 1. At the very outset the farmer is docked 2 cents a bushel for wheat that grades No. 2, and then if the buyer thinks that it is No. 3 an additional penalty of 3 cents is added. The flour milled from this wheat, however, is sold as grade No. 1.

"Then the freight rate of 13 1-2 cents a bushel is deducted. It makes no difference if the wheat is bought for a Spokane mill, to which the freight charge will be only a few cents a bushel, the farmer is assessed the full freight rate charge to the Coast, of 13 1-2 cents.

"Then you are charged 2 cents for buying. If the farmer sells direct to the mill that is one of the reductions that is made in settlement. Then follows a charge of 3 cents a bushel for loading, and in addition to this another charge of 10 cents a ton a month is made for any wheat remaining in storage over 30 days.

"A buyer generally has no difficulty in discovering some small damage in sacks, and this, with the insurance and interest, all three items being combined in one charge, amounts to another cent and a half.

"The buyer will smell of the wheat and declare that there is evidence of smut, although the Palouse district has been remarkably free from this trouble this year. This alleged smut imposes a penalty of 2 cents a bushel. On top of this he will discover that there is dirt and chaff in the product, and this entails another cut of 2 cents.

"So instead of getting $2.20 a bushel, as the farmer hoped for and is entitled to, he gets about $1.88 for his bulk wheat.

"When you receive a statement from the buyer showing how much he has whittled you down and you voice some complaint he forthwith pulls out the government regulations and shows that he is entitled to make all of these charges.

"When the farmer consigns his wheat to the government on the Coast he fares better in some cases and in some cases worse. On consignment he runs up against the demurrage charges of $5 a day for unloaded cars. This eats into the profits. Some farmers have been compelled to buy sacks on the Coast and sack their shipment when they have been unable to get their cars unloaded and the demurrage penalty is in operation. The government buyers on the Coast make the same kind of reductions.

"It is peculiar that no two buyers make exactly the same reductions, although they

(Continued on page twenty-four.)


## FARM SERVICE WAR FLAG



A Flag for Every Farm Home in the Northwest

An Extra Small Star for Each Farm Worker

(Patent applied for.)

**Get a Farm Service War Flag.**

The man, woman, boy or girl who stays at home and works hard to produce necessaries for the soldiers in Europe is entitled to real war service recognition. That is the idea back of the farm service war flag. It is pennant-shaped, made of the good old red, white and blue, and has a star representing the producing farm home. Small stars are added to represent each worker of that home.

..... .....

**Convenient Order Blank.**

..... 1918.

THE WASHINGTON FARMER,
Review Bldg., Spokane, Wash.
Enclosed find five cents (5c), for which please send me a Farm Service War Flag (printed on enamel paper) with ..... extra small stars for farm workers.

Name .....

R. F. D. .....Postoffice .....

Box ..... State.....

GET EVERY OUNCE OF POWER FROM EVERY GALLON OF FUEL

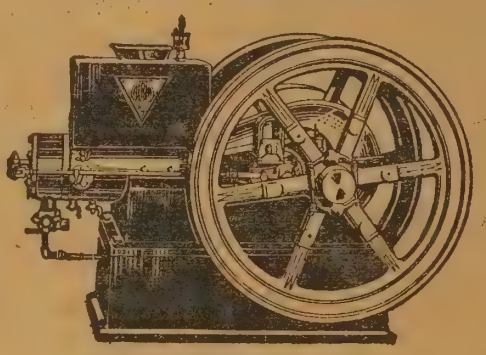
FUEL COSTS MONEY
DON'T WASTE IT

# ALPHA ENGINES

WILL produce at least 20 per cent more power than the ordinary engine and one-third more power than the average "cheap" engine. Consequently gasoline at 20c costs the "cheap" engine user 25c to 27c per gallon for the same amount of power. A loss like this day after day runs into money. Avoid it.

REDUCE YOUR FUEL BILLS
USE THE ALPHA ENGINE

1½ to 28 Horsepower



Gasoline and Distillate

The Smooth-Running Alpha
Perfect Balance—Fine Materials—Accurate Workmanship.
Write for complete description.

## De Laval Dairy Supply Co.

SAN FRANCISCO.
Warehouse Stocks Carried at Seattle and Portland.

# POULTRY FOODS

**Now Is the Time to Give Care to What and How You Feed**

Feed is high, eggs are high and will be higher. Feed for eggs. Write us about

**DIAMOND SCRATCH FOOD**
**DIAMONE EGG FOOD**

They are made of egg-producing elements, carefully mixed in right proportions.

## Spokane Seed Co.

902-4-6-8-10 First Ave.

Use Lee's Lice Killer to get rid of lice and mites.

# Look for this SIGN

It means full-powered, high-quality gasoline,—every drop! Be sure it's Red Crown before you fill.

STANDARD OIL COMPANY
(California)

RED CROWN GASOLINE

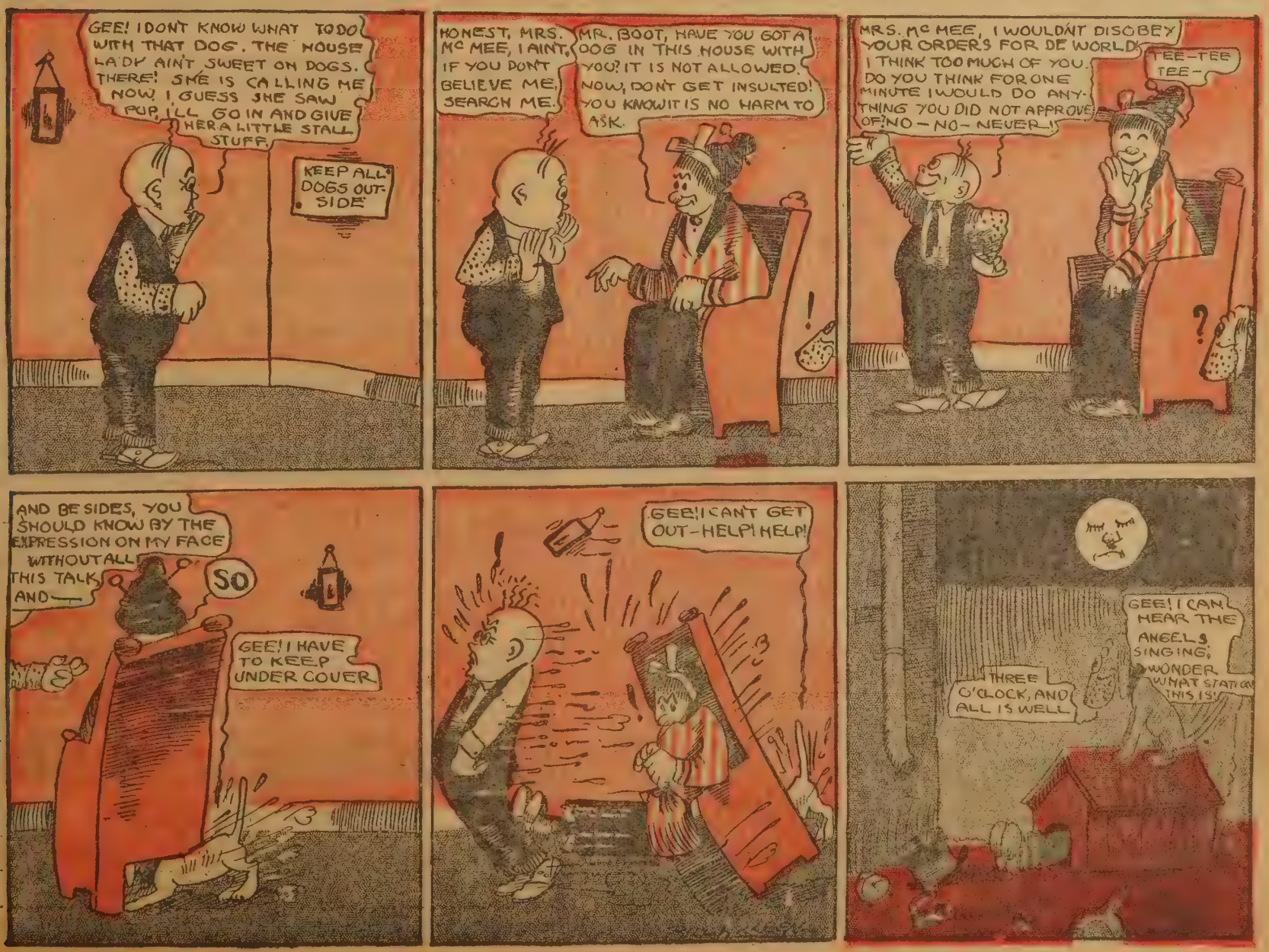
*The Gasoline of Quality*

In writing advertisers, be sure to say you saw their advertisement in this paper.

# FOR HE'S A JOLLY GOOD FELLOW—UNTIL HE GETS HOME




# PUP CAUSES BOOT TO LOSE A HAPPY HOME



# Washington Boys in War Service

From The Twice-a-Week Spokesman-Review.



**JOHN J. FREDSPIEL, Springdale, Wash.**—Is with the 256th aero squadron in France. He enlisted in the aero service on November 18, 1917. Before entering the service he lived with his sister, Mrs. D. F. O'Connor, on Walker prairie.



**HARRY A. B. GAVIN, Malott, Wash.**—Was called May 24, 1918, and was sent to Camp Lewis. Later he was transferred to Fort Leavenworth, Kan. Here, by an odd coincidence, his father, M. W. Gavin, was mustered out of service at the close of the civil war.



**JOHN W. YOUNG, Cedonia, Wash.**—On September 5, 1917, was called to the colors and is now with our army in France. He is bugler with the 361st infantry, Company M. Mr. and Mrs. W. W. Young, his parents, are residents of Cedonia, Wash.

## Canning Contest

### An Interesting Feature at Fair

By HORACE ADDIS.

One feature of the Walla Walla fair, September 9 to 14, that deserves special commendation was the girls' industrial club canning contest. Miss Mazie Wilson, county club leader, had aroused so much interest in the project that 11 clubs entered and 10 of them had contestants present and took part. The heat was furnished by a gasoline stove and conditions were much as they would be found in any good country home. While a majority of the clubs are from Walla Walla postoffice, several are from outside points that get mail on rural routes, so that the interest was well divided between the city and the outlying districts.

Miss Edna Walker, assistant state leader of home demonstration agents, made the awards.

Winner of first prize was the Sharpstein club, Misses Irene Brown and Mary Jane Cornelison, contestants; second prize, Springdale club, Gladys Plaquette and Hattie Troyer; third prize, Green Park club, Polly Van Patten and Dorothy Moore.

Other clubs and their representatives were: Baker club, Hester Augustave and Marian Garrett; Prospect, Bertha Morrison and Isabel Keeney; Jefferson, Iris Franklin and Willetta Franklin; Preston, Polly Van Patton and Dorothy Moore; Dixie, Cynthia Cochran and Lydia Monnett; Berney, Hilda Perkins and Alice Anderson; Burbank, Gladys Plemon and Doris Robinson.

## Vocational Course

### Is Offered to Washington Girls

Any young woman between the ages of 14 and 21 years of age, who resides in a non-high school district in Washington, is entitled to free tuition for the vocational course in home economics at the Lewis and Clark high school.

This is the first course in the school to meet the Smith-Hughes law. The course extends through two years of high school and leads to a certificate in vocational home making. The controlling purpose is to prepare young women for home-making and useful employment. The course is open to any young woman between the ages of 14 and 21 years, without regard to her previous education and training. Places may be obtained where a girl may work for room and board and some wages. Those interested should apply, either by mail or personally, to Miss Olive G. Fisher, Lewis and Clark high school, Spokane.

Miss Fisher explains that, though the classes have already begun, girls may yet enter for a few weeks, and that a girl who has not finished the eighth grade need not feel that she can not do the work, for the course is so arranged that it will meet the individual needs. Neither will it keep a girl from finishing the high school course if she decides to take the four years' course later on.

First year—Vocational sewing, vocational cookery, vocational English, vocational mathematics and applied art.

Second year—Vocational sewing, vocational cookery, vocational English and general household science.

Under the subject of "sewing" is included: Plain sewing and garment making, textiles, crocheting, costume designing, remodeling, millinery, embroidering, tailoring, making of baby layettes and knitting.

"Foods and cookery" includes the classification and study of foods and their preparation, equipment and care of the kitchen and the study of fuels, physiology and hygiene, special study of fats, oils and beverages and materials used in flour mixtures, preparation and serving of simple meals, canning, preserving, infant and invalid diet, home nursing and first-aid work, and household sanitation.

"Vocational English" takes up reading for upper grammar grades, letter writing, reading aloud, use of the dictionary, Old Testament stories, story telling, compositions on home subjects, use of the encyclopedia, Ashmun's Prose Literature for Secondary Schools, use of a public library, periodicals for the home, a home library, and a child's library.

"Vocational mathematics" includes home-making problems, clothing problems, thrift and investment.

Other subjects are: House planning and furnishing, physics in the home, simple machines, water supply, heat and ventilation, electricity, light, chemistry in the home, cleaning processes, sanitation, adulteration and dyeing and bleaching processes.

### FEEDING PEA STRAW.

The following letter was received by J. R. Shinn, county agricultural agent of Spokane county, in response to his announcement in our columns that pea straw has a feeding value practically equivalent to alfalfa hay, and that it makes excellent horse feed, also when used with wheat hay, timothy hay, oat straw and alfalfa hay in proportion of two parts straw to one of other roughage. Mr. Shinn added that pea straw should not be fed alone to horses. Mr. Shinn sends us a copy of a letter from William Jones of Newport, Wash., which he has received with reference to this matter:

"I am a reader of The Washington Farmer, and on August 29, 1918, I find an article you wrote to the editor, namely, 'Liberty Cattle Feed.' I have 12 head of stock and two horses and did not raise enough hay to winter the horses, so I thought I was up against it (can't sell the stock and get what they are worth); but when I read about the Liberty cattle feed, I said, 'me for some pea straw.' I know what pea straw is in feed value as I fed it in Oregon."

### TROUT AS FOOD SUPPLY.

On his way to the Green river state fish hatchery to receive a consignment of 32,000 rainbow trout for the lakes and streams of Skagit county, W. A. McKenna, county game warden, was interviewed by the Seattle, P. I. When these fish are placed in Skagit county, Mr. McKenna said, the county will have received this year a total of a half million fish, these being about 100,000 rainbow trout, 150,000 cutthroat salmon and 250,000 silver trout. Skagit county lakes and streams have been receiving approximately this amount of trout for the last three seasons, Mr. McKenna said, and the streams are now beginning to show the results to Skagit county fishermen. "People of Washington do not generally realize what a great benefit to the state it is to have well stocked fish streams," asserted Mr. McKenna. "The government has urged the eating of fish, as they feed themselves, and the people of Skagit county this year are finding for the first time in a number of years that it is possible to count trout as a food supply."

### SALE OF REGISTERED STOCK.

A sale of registered and high grade cattle is announced at the Island farm, better known as the Ladd & Reed ranch on Bachelor's island, one-half mile west of Ridgefield, Wash. The property was recently sold to J. W. Davis. This estate was formerly owned by the late W. W. Cotton, who spent thousands of dollars developing this herd.




# WAR NEWS

Keep up with the times. Learn what our soldier boys are doing at the front. Get a complete, reliable survey of the war and other current news by taking The Twice-a-Week Spokesman-Review.

# Our Clubbing Offer

**$1** Twice-a-Week Spokesman-Review, 1 Yr. The Washington Farmer, 3 Years Both **$1**

Purchased any other way The Twice-a-Week Spokesman-Review will cost you $1 per year. Our special clubbing rate is therefore seen to be extremely liberal. Take advantage of this bargain in reading matter for you and your family.

TELL YOUR NEIGHBORS

# The Washington Farmer

Spokane, Washington.

## ORDER BLANK

THE WASHINGTON FARMER, Spokane, Washington.

Gentlemen:

I desire to take advantage of your special clubbing offer. Enclosed is $1 in full payment for one year's subscription to The Twice-a-Week Spokesman-Review and three years' subscription to THE WASHINGTON FARMER.

In Canada add 1 cent per copy for extra postage.

Name .....

Town .....

R. F. D. ..... State .....

# Success of Washington State Fair

Continued from page six.)

2 and 3, Erickson, on Sultan's Violet Girl, Sultan's Vesta Girl and Sultan's Rosie Girl.

Aged herd—1, Erickson. Young herd, calf herd, breeder's herd, get of sire and produce of cow—1 and 2, Erickson.

Senior champion bull—Prosser Community, on Prosser Pogis. Junior and grand champion bull—Erickson, on Sultan's Lassie's Boy.

Senior champion cow—Erickson, on Raleigh's Sunbeam. Junior and grand champion—Erickson, on Piggis of J. H.

### Ayrshires.

Edgewater farm, Burbank, Wash., E. H. Chandler, proprietor, was the only exhibitor. His awards were: Two-year-old bull—1, on Peter Pan 63d, that was made senior champion. Junior bull calf—1, on Edgewater Sentinel, made junior and grand champion.

Aged cow—1, on Allaka, also senior and grand champion. Two-year-old heifer—1, on Barbella.

### Berkshire Swine.

Boar, 1 year and under 18 months—1, E. V. Cox, Zillah, Wash. Senior boar pig—1, Earl Wood, Silverton, Ore. Junior boar pig—1, Earl Wood; 2, I. J. Oder, Yakima, Wash.

Sow, 2 years and over—1, E. V. Cox. Junior yearling sow—1, Earl Wood. Senior sow pig—1, Earl Wood. Junior pig—1, 2 and 3, Earl Wood.

Young herd—1 and 2, Earl Wood; 3, I. J. Oder. Herd bred by exhibitor—1 and 2, Earl Wood; 3, I. J. Oder. Get of sire—1 and 2, Earl Wood; 3, I. J. Oder. Produce of sow—1 and 2, Earl Wood; 3, I. J. Oder.

Senior champion boar—E. V. Cox, on Fairview Champion 3d.

Junior and grand champion—Earl Wood.

Senior champion sow—Earl Wood.

Junior and grand champion—Earl Wood.

Junior and grand champion boar—Earl Wood, on Homewood Champion 3d. Senior champion sow—Wood, on Winona Lass. Junior and grand champion sow—Silverton Queen.

### Duroc Jerseys.

Boar, 2 years or over—1, Robert Nelson, Yakima, Wash.; 2, S. D. Cornell, Grandview, Wash. Junior yearling—1, Glen Chandler, Yakima, Wash.; 2, S. D. Cornell. Senior boar pig—1, S. D. Cornell; 2, Robert Nelson. Junior pig—1 and 2, S. D. Cornell; 3, Robert Nelson.

Sow, 2 years and over—1 and 2, Robert Nelson; 3, S. D. Cornell. Senior yearling sow—1, Robert Nelson; 2, Mark White, Yakima. Junior yearling—1 and 2, S. D. Cornell; 3, Weston Haskins, Yakima, Wash. Senior sow pig—1 and 2, S. D. Cornell; 3, Robert Nelson. Junior sow pig—1 and 2, S. D. Cornell; 3, Robert Nelson.

Aged herd—1, Robert Nelson; 2, S. D. Cornell. Young herd—1 and 2, S. D. Cornell; 3, Robert Nelson. Herd bred by exhibitor—1 and 2, S. D. Cornell; 3, Robert Nelson. Get of sire—1 and 2, S. D. Cornell; 3, Robert Nelson. Produce of sow—1 and 2, S. D. Cornell; 3, Robert Nelson.

Senior and grand champion boar—Robert Nelson, on Golden Komiac. Junior champion—S. D. Cornell, on Great Colonel. Senior and grand champion sow—Robert Nelson, on Queen.

Junior champion—S. D. Cornell, on Hazel Colonel 5th.

### Tamworth.

Boar, 2 years or over—1, I. J. Oder, Yakima, Wash. Senior yearling boar—1, I. J. Oder. Junior yearling—1 and 3, C. Starcher, Yakima, Wash.; 2, I. J. Oder. Senior boar pig—1, I. J. Oder. Junior boar pig—1 and 2, I. J. Oder; 3, C. Starcher.

Sow, 2 years or over—1 and 2, I. J. Oder; 3, C. Starcher. Senior yearling sow—1, I. J. Oder; 2, C. Starcher; 3, M. F. Thornton, Yakima, Wash. Junior yearling—1 and 2, I. J. Oder; 3, C. Starcher. Senior sow pig—1 and 2, I. J. Oder. Junior sow pig—1 and 2, I. J. Oder; 3, C. Starcher.

Aged herd—1 and 2, I. J. Oder; 3, C. Starcher. Young herd—1 and 2, I. J. Oder; 3, C. Starcher. Breeder's herd—1 and 2, I. J. Oder; 3, C. Starcher. Get of sire—1 and 2, I. J. Oder; 3, C. Starcher. Produce of sow—1 and 2, I. J. Oder; 3, C. Starcher.

Senior and grand champion boar—I. J. Oder, on Pleasant Hill Monarch. Junior champion—I. J. Oder, on Columbia's Choice. Senior and grand champion sow—I. J. Oder, on Lady Bacon. Junior champion—I. J. Oder, on Peggy Highland.

### Poland Chinas.

Boar, 2 years or over—1, Earl Storaasli, Toppenish, Wash. Junior yearling boar—1, W. A. May, Toppenish, Wash. Senior boar pig—1 and 2, H. E. Larimore, Toppenish, Wash. Junior boar pig—1 and 2, Frank Patterson, Toppenish.

Senior sow pig—1 and 2, H. E. Larimore.

Get of sire—1, H. E. Larimore. Produce of sow—1, H. E. Larimore.

Senior and grand champion boar—Earl Storaasli, on Ike Knox 2d. Junior champion—H. E. Larimore, on Patrick. Junior and grand champion sow—H. E. Larimore, on Lassie.

### Fat Barrow.

Senior pig—1, I. J. Oder, on Tamworth.

Champion fat barrow, any breed—Oder, on Tamworth.

### Rambouillets.

C. H. Craig, Walla Walla, was the only exhibitor. His awards were: 1 on ram, 2 years and over; 1, 2 and 3 on ram lamb; 1 and 2 on ewe, 2 years old and over; 1, 2 and 3 on yearling ewe; 1, 2 and 3 on ewe lamb; 1 on pen and flock, and champion ram and ewe.

### Shropshires.

H. S. Currie, Caston, Alberta, was the only exhibitor. His awards were: 1 and 2 on ram lamb.

### Hampshires.

Ram, 2 years or over—1 and 2, J. G. S. Hubbard & Sons, Monroe, Ore.; 3, H. S. Currie, Caston, Alberta. Yearling ram—1 and 3, Hubbard & Sons; 2, H. S. Currie. Ram lamb—1 and 3, Hubbard & Sons; 2, C. H. Currie; 4, J. L. Bull.

Ewe, 2 years or over—1, 2 and 5, Hubbard & Sons; 3, Robert Nelson; 4, H. S. Currie. Yearling ewe—1, 2 and 3, Hubbard & Sons; 4, H. S. Currie. Ewe lamb—1, 2 and 4, Hubbard & Sons; 3, H. S. Currie; 5, Robert Nelson.

Pen—1 and 2, Hubbard & Sons. Flock—1 and 2, Hubbard & Sons; 3, H. S. Currie.

Champion ram—Hubbard & Sons.

Champion ewe—Hubbard & Sons.

### Southdowns.

J. G. S. Hubbard & Sons, Monroe, Ore., were the only exhibitors:

Their awards were: 1, on ram two years or over; 1 and 2 on yearling ram; 1 and 3, on ram lamb; 1 and 2 on ewe two years or over; 1 on yearling ewe; 1 and 2 on ewe lamb; 1 on pen and flock; champion ram and champion ewe.

### Oxford Downs.

H. S. Currie, Caston, Alberta, was the only exhibitor. His awards were: 1 and 2, on ram two years or over; 1 and 2 on yearling ram; 1 and 2, on ram lamb; 1 and 2 on ewe two years or over; and 2 on yearling ewe; 1 and 2 on ewe lamb; 1 on pen and flock; champion ram and champion ewe.

### Romney.

Wm. Hislop, Spokane, Wash., had one exhibit and won first on ram, two years or over.

### Lincolns.

Ram, two years or over—1 and 2, Archie Prior, Yakima, Wash.; 3, H. Stanley Coffin, Yakima, Wash. Yearling ram—J. G. S. Hubbard & Sons, Monroe, Ore.; 3 and 4, Archie Prior. Ram lamb—1 and 4, Hubbard & Sons; 2 and 3, Archie Prior.

Ewe, two years and over—1, Hubbard & Sons; 2, H. S. Coffin. Yearling ewe—1 and 2, Hubbard & Sons; 3 and 4, Archie Prior. Ewe lamb—1 and 2, Hubbard & Sons.

Pen—1, Hubbard & Sons; 2, Archie Prior. Flock—1, Hubbard & Sons.

Champion ram and champion ewe—Hubbard & Sons.

### Fat Sheep.

All middle wool breeds:

Wether yearling—1 and 3, Washington State College; 2, H. S. Currie, Caston, Alberta.

Wether lamb—1 and 2, W. S. C.; 3, Hubbard & Sons. Pen of wether lambs—1, W. S. C.

All long wool breeds:

Washington State College, the only exhibitor, received awards as follows: 1 and 2, on yearling wether; 1 and 2, on wether lamb and 1 on pen of fat lambs.

Champion pen of the show—Washington State College on middle wool.

### Boys' and Girls' Clubs Live Stock.

All entries to be grown by exhibitors:

Pet lamb—1, Ray Banks, Selah, Wash.; 2, Harry Place, Yakima, Wash.; 3, John Eicheberger, Yakima, Wash.

Fat barrow—1, Ray Banks.

Berkshire gilt—1, Morrill Delano, Puyallup, Wash.

Duroc-Jersey gilt—1, Laurel Miller, Selah, Wash.; 2, Glen Chandler, Yakima, Wash.; 3, Mark White, Yakima, Wash.

Poland China gilt—1 and 2, H. E. Larimore, Toppenish, Wash.

Sow and litter—Larry Woods, Selah, Wash.

### Butter and Cheese.

There were thirteen entries of creamery butter and two of cheese at the Washington State Fair.

The three high scores on butter were: 1, Lynden Creamery company, Lynden, Wash., 96; 2, Old Dominion creamery, Colville, Wash., 95½; 3, Turner and Fease company, Seattle, Wash., 95.

Oakville Cooperative Cheese factory, Oakville, Wash., first on cheese.

### Boys' Stock Judging.

Stock judging by four teams of high school boys featured the opening day of the Washington State fair. Teams from Wapato, Yakima, Kittitas and Ellensburg competed, Ellensburg winning first place as well as most of the high individual scores. The following are the placings and scores: First, Ellensburg, 3960; second, Kittitas, 3755; third, Yakima, 3544. Possible score, 5000.

High man, total score, Carl Bregg, Ellensburg, 860; second, Garfield Kohler, Ellensburg, 820; third, Arol Doust, Yakima, 818. Possible score, 1000.

High team in dairy, Ellensburg, 825; high man, Gilbert Peck, Yakima, 196 (possible score, 200). High team in beef cattle, Ellensburg and Kittitas, each 775; high man, Carl Bregg, Ellensburg, 165. High team, horses, Kittitas, each 930; high man, Frank Hall, Ellensburg, 195. High team, sheep, Ellensburg 675; high man, Frank Hall, 160. High team, swine, Ellensburg, 805; high man, Burton Hall, Yakima, 195.

James N. Price, county agriculturist of Yakima county, and R. P. Bean, agriculturist for Yakima reclamation projects, had charge of the high school judging. The following is a complete list of the contestants:

Yakima—Gilbert Peek, Donald Eichelberger, Benton Hall, Aral Doust, Glenn Chandler; instructor, C. S. Cole.

Ellensburg—Everett Lull, Frank Hall, Garfield Hohler, Carl Bragg, Joseph Gallanor; instructor, Verne Hill.

Wapato—Lewis Hammel, Meryle Patterson, Mills Missinger, Allred Kestler, John Hummel; instructor, A. W. Wheeler.

Kittitas—John Sorenson, James Hayes, Harold Sorenson, Kenneth Jones; instructor, Harry Waldron.

The teams of judges are composed of boys of the student bodies of the four high schools represented, and range in age from 14 to 18 years. This is the first year that they have been without at least one girl on some team.


# What Does It Mean

Ignition K-W High Tension MAGNETOS With IMPULSE STARTER

In reading over the specifications of the leading tractors, you will see under *Ignition* the phrase "K-W High Tension Magneto with Impulse Starter."

## The Impulse Starter

**What Does It Mean?** To owners of these tractors, it means Sure and Easy Starting, regardless of how cold the weather, how large the motor or how slow the engine is cranked. It means *No* Batteries, *No* Starting Coils, and *No* Complicated Self Starters. It means absolute protection against motor "kick-backs" while cranking even when the spark lever is left fully advanced.

**What It Does!** The K-W Impulse Starter holds back the shaft or rotor of the magneto until the firing point of one of the cylinders is reached. The shaft is then automatically released and is propelled forward (by means of a powerful spring) at a very high rate of speed—until it catches up to its former position. This produces a spark as large and hot as though the engine was running at full speed, thus insuring an explosion in the cylinder and a positive immediate start.

K-W TRADE MARK **High Tension MAGNETOS**

not only insure the Easy and Quick starting of cold motors, but increase the power derived from the same amount of fuel, over that of any other ignition system. They permit the use of the cheaper grades of fuel and give "No Trouble" service.




**Before You Buy a Tractor.** Look up a neighbor who is using a K-W Magneto and talk it over with him. Then we know you will insist upon a K-W Magneto on *any* tractor you may decide to purchase.

THE K-W IGNITION Co.
2891 Chester Ave. CLEVELAND, OHIO. U.S.A.
Write for a list of K-W Equipped Tractors



# A New Bulletin

Of interest to all who have a garden or farm, is a new bulletin, just off the press of Randall-McLoughlin, 79 Madison St., Seattle.

The bulletin is issued primarily for the sale of seeds, bulbs, roots, roses, strawberry plants, incubators, brooders, poultry, etc., but it is seldom that one finds as much valuable information in a bulletin of this kind, for it is literally full of useful and instructive data pertaining to all of the above mentioned subjects.

Both Ralph B. Randall and Thos. F. McLoughlin are favorably known as being unusually well posted in their respective lines of business and they have given freely of this knowledge in their first edition.

They will gladly forward the bulletin to any person sending their name and address on a postcard to Randall-McLoughlin, 79 Madison Street, Seattle, Wash.



# AMERICAN FLAG

Size 3x5 Feet

SEWED STRIPES CANVAS BOUND
FAST COLORS BRASS GROMMET

One of these big, fine flags will be mailed postpaid to any one securing and sending in seven subscriptions to your state family farm paper.

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or
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# HIDES

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SHIP TO US
NO CARTAGE - NO COMMISSION
HIGHEST CASH PRICES PAID
PROMPT RETURNS - HONEST WEIGHT
WRITE FOR PRICE LIST AND SHIPPING TAGS
HIBBARD-STEWART CO. INC.
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BE SURE AND MENTION THIS PAPER


**The Advertisements in This Issue Are Well Worth Reading.**

They are informative and cover a wide range of subjects. You can profit by reading them carefully.

**In answering advertisements please mention this paper.**

# What Comes From "Bolting" Food

By DR. LEONARD KEENE HIRSHBERG, A. B., M. A., M. D.



Dr. Hirshberg.

You may not have trouble with your digestion as soon as you "bolt" a meal, though this very often is true if you are a naturally dyspeptic person. But this does not mean that you are going to be free for the rest of your days from pain in the stomach.

Pain may come to you one or two hours after you have eaten or five or six hours later, or it may not come to you for days. You then have what is called delayed pain, which may grip you in the middle of the night and take you by surprise.

Delayed pain usually occurs in the abdomen—the regions of the stomach and intestines. From here the pain sometimes radiates toward the spinal column and works through the spaces of the spinal bones around the ribs. When the pain is as extensive as this, it is usually very severe and is accompanied by a burning sensation, cramps, a sore of twisting in the abdominal regions. It is apt, also, to be quite as agonizing as extensive.

**Symptoms and Causes.**

The features of the sufferer may be drawn, his fact pale, and he may experience a feeling of weakness and irritability to the extent of collapse. This may be a neuralgic pain in the stomach, and often makes the patient moan and curl up in bed, hold his stomach with both hands, while cold perspiration covers his face. His feet become cold, and, altogether, he is in a state of torture.

The sufferer may also have an excessive secretion of saliva, which is an automatic aim of the human mechanism to neutralize some of the overabundant gas present. This is accompanied by pains in the breastbone. A feeling of nausea often culminates in actual vomiting, and when this stage is reached the patient almost invariably gets relief.

The agony of pain like this can at once be decreased if the patient is given food. If you have seen a person who suffers from digestive disorders you have probably noticed that if he is given water to drink and a few morsels to eat, the pain subsides. Many persons who have so deteriorated in health as to have frequent attacks of gastric trouble can overcome their ailment very largely if they permit digestion to go on every minute of the day. To do this, distribute your meals throughout the day, so that, instead of having three meals, have six. A little food, frequently taken, is much better than a great deal of food taken a few times a day.

It must be remembered, to be sure, that pain of this sort does not come to attack the individual over night. It is, as a rule, the result of a long process of deterioration, due probably to negligence or abuse of the bodily mechanism. Like the root of many a disease, overwork enters here, too, to create mischief.

Overwork by itself is not quite as harmful as when accompanied by other circumstances. One evil, however, is hardly left to trail along without a train of other evils. Overwork is usually accompanied by lack of fresh air, an unfortunate condition, because the bodily machinery is actually robbed of its necessary spark to light the fuel in it, burn or ozidize the food, and prepare it for absorption into the tissues and muscles.

**Some Simple Aids.**

In addition to hard work and lack of fresh air, you will also notice that food is incorrectly eaten, and as a result poorly digested by a person inclined to overwork. Sufficient time is usually not given to mastication, and the result is that food is swallowed in "chunks."

Not only is the food swallowed in large pieces, and not a deep breath, a few stretching exercises or a short walk taken, but you perhaps apply yourself quickly and suddenly to your work and neglect your bodily welfare, and so allow mischief to begin. Thus it happens that you are the cause of your own downfall. You may feel a burning sensation "once in a while," and try to ignore it, and, although you perhaps work without sufficient exercise and fresh air from day to day "without feeling bad," the day of reckoning is bound to come.

If the taking of food does not give relief when the pain attacks you, take some alkaline solution, such as chalk, magnesia or bicarbonate of soda. These will neutralize much of the surplus acid in your mechanism and thus give you relief. Of these powders, bicarbonate of soda is the best to take, for that creates the quickest action; it works in about 10 minutes.

Do not take any of these powders dissolved in water, but place them on the tip of your tongue and take a swallow of water afterward. This method will prove more effective and will bring relief sooner.

If you have been troubled two or three times with these stomach pains, put yourself on a diet of milk. Drink about four pints a day in divided doses until you have made for yourself quite a good foundation to protect yourself against the recurrence of these pains. Later you may add vegetables to your diet. Finally you may resume your ordinary diet, with precautions in taking food, against overwork and lack of fresh air.

# Handicraft for Boys

By A. NEELY HALL.
(Copyright by A. Neely Hall.)

**A HOME-MADE PUSHMOBILE.**

In building a pushmobile, the wheels are of first importance. Unless you own two pair, you must scout around among your boy friends until you find some one with whom you can strike a bargain. If the iron axles have been lost, go to a blacksmith and have him thread the ends of a pair of rods. A small hole should be drilled through the rods at the right distance from the ends to drive a nail through as a pin for keeping the wheels from running back on to the axles.

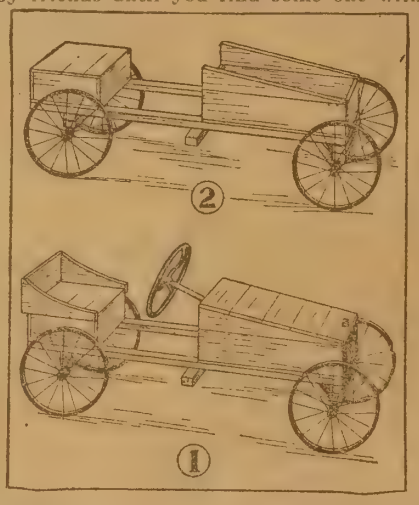
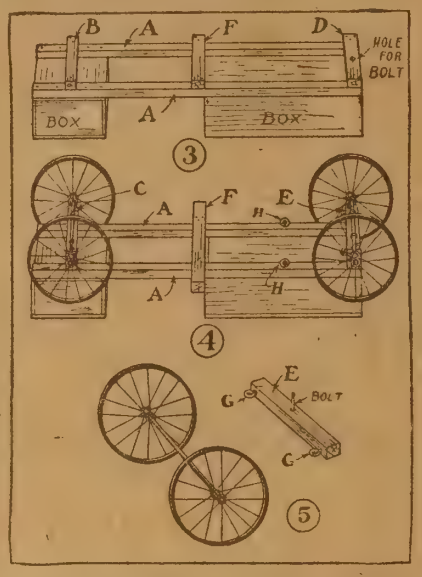


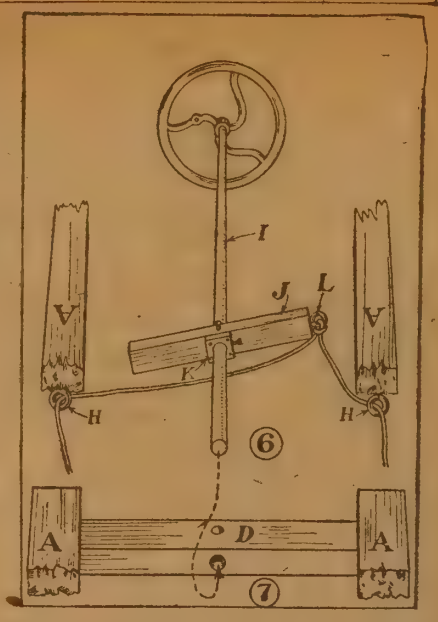

Fig. 3 shows the body framework. The side rails A should be 2 by 2's or 2 by 4's. Cut them to whatever length you wish. Upon these rails are mounted two grocery boxes, a long box on the bow end, and a box as long as this one is wide, on the stern end. Fasten the rails to the bottom of these boxes (Fig. 3). The crosspieces, B and D, provide for the mounting of the wheels. Nail one to rails A at the bow end, and the other so it will come under the center of the stern box. Crosspiece F forms a foot-bar.

The front iron axle must be attached to a pivotal wooden axle (E, Figs. 4 and 5).




This must have a hole bored through the center of its length for a 5-8-inch carriage bolt. Screw a pair of screw-eyes into one edge (G, Fig. 5). Fasten the iron axle to the wooden axle with iron staples, or with bent-over nails. Bore a hole through the center of crosspiece D (Figs. 3 and 7) for the carriage bolt to run through. Then in mounting the axles upon the framework, slip an iron washer over the carriage bolt so it will come between axle E and cross piece D. The rear axle must be fastened to a similar wooden axle (C, Fig. 4). Nail this wooden axle to crosspiece B.

The steering-gear should be made next. A sewing machine wheel is best for the steering-wheel, but a wagon-wheel will do. Cut a broom handle for the shaft (I, Fig. 6), and mount the wheel on one end. Then cut a crosspiece (J), and a square block (K), bore a hole of the diameter of the broom handle through the center of each, and nail K to J. Slip this crosspiece over the end of the shaft, and fasten it 12 inches above the end with screws driven through the edges of J and K, as shown. Cut a hole through the bottom of the bow box for the end of the shaft to run through, and another hole one-half inch deep in the center of the edge of the crosspiece D (Fig. 7) for a socket for it to turn in. Screw a screw-eye into the end of crosspiece J (L, Fig. 6), and one into the under side of each side rail (H, Figs. 4 and 6); then tie a four-foot length of rope at its center to screw-eye L, and run the ends through screw-eyes H, and tie to screw-eye G in axle E (Figs. 4 and 5).




Figs. 1 and 2 show how the hood of the pushmobile is completed by fastening a pair of triangular pieces upon the top of the bow box, nailing boards across them, and tacking screen wire over the front of the box for the radiator front; also how the seat is made.

# William McKinley at Eighteen

## *Began His Four Years of Service in the Civil War*

William McKinley, the twenty-fifth president of the United States, at the age of 18 was teaching a district school at a salary of $25 a month, and "boarding around" when Fort Sumter was fired upon. Among the first to answer the call of President Lincoln for volunteers was young McKinley, of whom it is stated that he never felt prouder than when General Fremont, after thumping his chest and looking into his bright eyes, said, "You will do."

This young man of Ohio, only 18 years old, became a member of Company E of the 23d Ohio regiment, of which W. S. Rosecrans was colonel, Stanley Matthews lieutenant-colonel, and Rutherford B. Hayes major. Thus that famous fighting regiment had the honor of producing two presidents and a senator of the United States, afterwards eminent as a justice of the supreme court.

For 14 months young McKinley carried a musket, attaining the rank of sergeant, April 15, 1862. Many years afterward, when governor of Ohio, he referred to that period in these words: "I always look back with pleasure upon those 14 months in which I served in the ranks. They taught me a great deal. I was but a school boy when I went into the army and that first year was a formative period of my life, during which I learned much of men and affairs. I have always been glad that I entered the service as a private and served those months in that capacity."

It is questionable if those 14 months could have done more for William McKinley if he had entered upon them at the age of 21 years rather than at the age of 18 years, and it may help to reconcile many fathers and mothers who are called upon to part with their 18-year-old boys under the recent registration into the army to review in the briefest way McKinley's progress in the war of the rebellion.

September 24, 1862, he was commissioned second lieutenant of company E, and on July 25, 1864, he had risen to be captain of Company G. Three months after receiving his first commission he was detailed as aid-de-camp on the staff of General Rutherford B. Hayes. From that time until the close of the war he served continually as a staff officer. With his regiment, or while on staff duty, he fought in West Virginia, in the army of the Potomac under McClellan, and in the Shenandoah valley under Sheridan. He was in all the early fights in West Virginia, at South Mountain and Antietam, receiving his shoulder straps one week after that last-named bloody battle, and exchanging his musket for the sword. His first battle was at Carnifex Ferry, W. Va., September 10, 1861. It is recorded of him that "for four long years he fought in every battle and skirmish until the very end, doing his whole duty, getting honors and adding to his fame as a soldier; fearless and without reproach."

**The Footpad and Jokesmith.**

The professional jester was walking along the darkened street, alone. He heeded not whither his footsteps tended, nor noted the lateness of the hour; for he was composing witticisms that he might peddle money.

"Hands up!"

The humorist started from his reverie, and found himself looking into the transmitter of a large revolver.

"Excuse me for talking your time," said the robber, chuckling at his own humor, though the joke was disgustingly old. But the jester laughed merrily, as if it were new.

"Don't apologize for that," he said. "I can well spare it. You see it is only a dollar watch. But I can sell this joke to a funny paper for $2 and make 100 per cent on the transaction."

**Get This One—Get It!**

Fellow came into the office—real likable fellow, too, albeit haggard; came in and slapped us on the shoulder and said:

"You're a poet, ain't you, huh? Yes? Say, I just came in to tell you—har! har! har!—to tell you the difference between a plumber and a poet! Know it? Naw, naw! It ain't anything about the plumber makes money, not 'tall, not 'tall. Listen, it's this: A plumber lays his pipes, see, and a poet pipes his lays! Har! har! har! Good one, ain't it? Nice weather for a murder!—Richmond Times-Dispatch.

# Washington Boys in War Service







From The Twice-a-Week Spokesman-Review.

**A. M. WEYER, Cunningham, Wash.**—On April 26, 1918, entered the military service, and after completing his training he sailed for France. He is a member of the 361st infantry, Company M, and is now doing his utmost for his country.

**ADOLPH MILAND, Selah, Wash.**—He was called in the draft to service for his country in November. He is now a member of the 157th infantry with the M. G. company. He is the son of Mr. and Mrs. F. J. Miland, who live on a ranch.

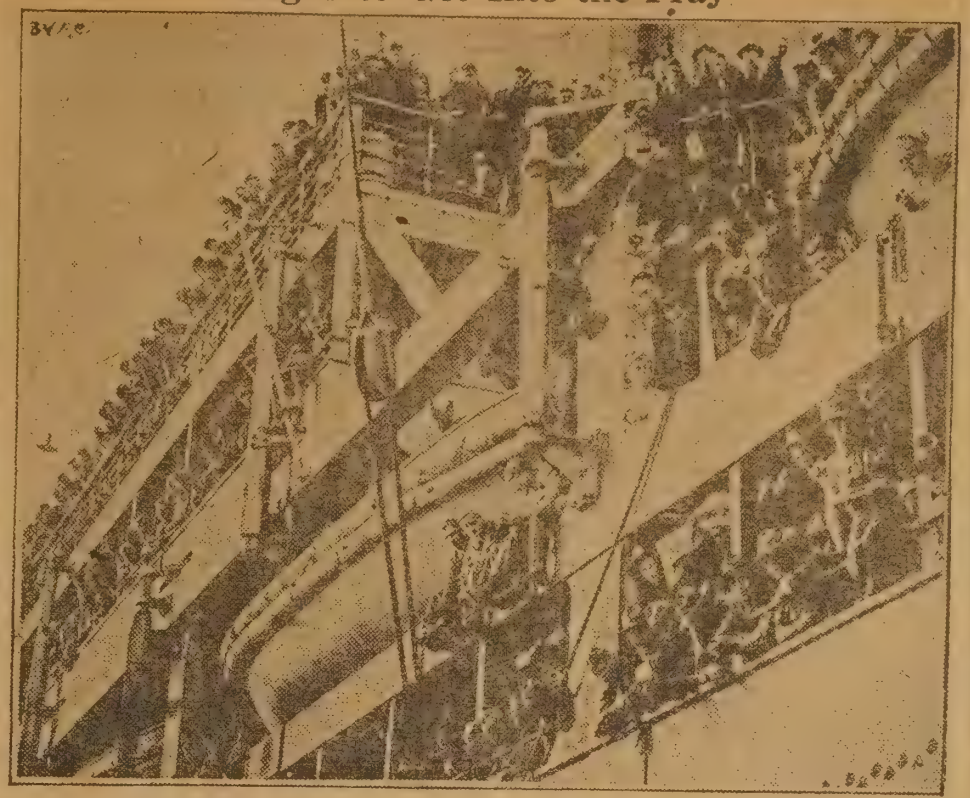
**EDWARD T. M'KOWN, Lind, Wash.**—He was drafted last September and is now somewhere in France. His mother is Mrs. Jennie Terry of Lind, Wash. He is 25 years old and before his enlistment was employed with the O.-W. R. & N.

## Sir Henry Horne.



Sir Henry Horne, whose British first army has advanced further east than the British have since early days of the war.

## Eager to Get Into the Fray



On board a former Hamburg-American liner, American soldiers are having their first look at the land of their chivalrous ally, France.

## U. S. General Wins Cross.



The above photograph is that of Brigadier General B. B. Buck, the commanding general of an American brigade in France. He has recently been awarded the distinguished service cross for conspicuous gallantry and heroic leadership displayed before and during the attack of Berzy le Sen, France, by General Pershing, according to an official communique made public by the war department. Brigadier General Buck is the first American general to be so honored during the war.

## Wealthy Girl Worker.



Miss Alice Davison, daughter of Henry P. Davison of the American Red Cross, is one of the first wealthy young women in the country to don overalls and work. Miss Davison is inspector at the De Forest Radio Telephone and Telegraph company, New York.

## Crocodile Tears




"I have not wished war!"—Campana de Gracia, Barcelona.

## Her Best Friends



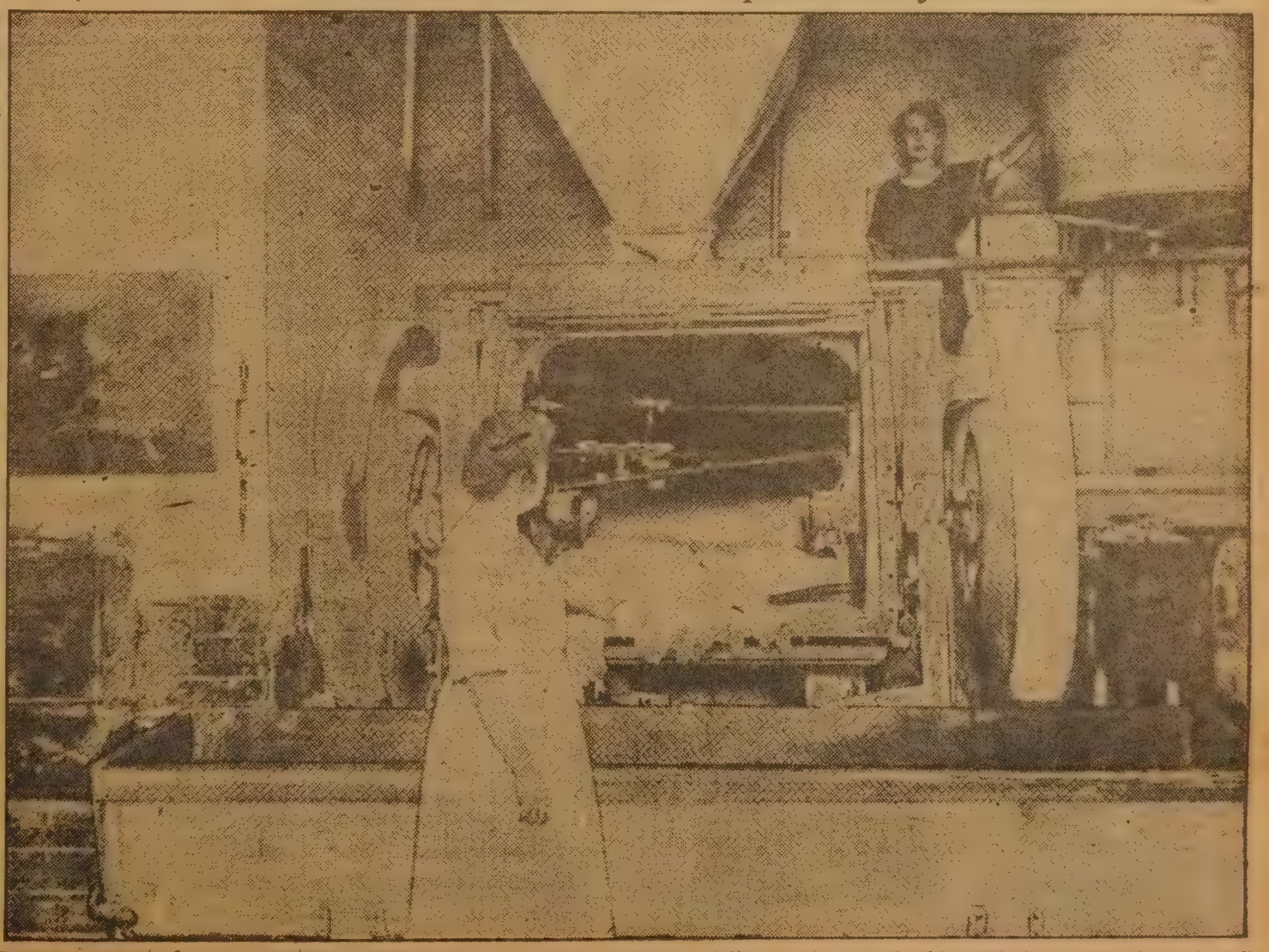

—National Security League.

## Prices Too High for Her.



Mrs. Howard Gould, according to a report, left Washington, D. C., for New York because she could not afford the war prices there. "I am wealthy, but I can not stand the prices here," said Mrs. Gould, "and I do not understand how the war workers get along on their meager salaries."

## Women Workers in Minneapolis Bakery



Women operating a dough mixer in a Minneapolis bakery. There is almost a full crew of women in this particular shop working in all the different departments. The picture is taken from The Northwestern Miller.

# A CROOKED TRAIL---By Lewis B. Miller

Copyright by The Page Company, 1911.

**A story of a thousand-mile saddle trip up and down the Texas frontier in pursuit of a runaway ox.**

SYNOPSIS.

Travis, a lad in his teens, lived on the Texas frontier in the days when Texas was a wild, unsettled region. One morning before daylight he started out to bring in the yoke of oxen for a day's plowing, but one of them was gone. He caught his pony and started to search for the stray. Going a little and a little further hour after hour, he continued until night caught him several miles from home with a tired pony, a borrowed saddle and lariat and little for himself or his dog to eat. A rabbit and wild turkey eggs served the purpose, and morning saw him again in pursuit of the ox after a night of disturbance by wild animals and marauding hounds.

## CHAPTER III.

### With the Hermit Shepherd.

I was still in the prairie country and, as on the day before, kept turning aside to investigate every bell I heard and every bunch of cattle I caught sight of. There were not so many cattle here as north of the mountains, and but little time was lost. I pushed steadily southward, and the sun was not very high when I arrived at the first house. Here a pack of hounds, the same that had pursued the doe and her fawn, ran out and, surrounding my pony, barked and bayed at me with a deafening clamor.

Evidently the family were not early risers; for they were just sitting down to breakfast, at the shady end of their cabin, when, pushing my way through the noisy pack, I rode up to the yard-fence and inquired for a spotted ox with very long horns and a big bell.

"Why, yes; that animal was here just yisterday—no, the day before," the man informed me. "He stopped here some time durin' the night, I guess it was. Anyhow, I found 'im layin' out there by the cow-lot gate, lickin' hisself, when I went out to milk next mornin'. That was the first I'd seen of 'im, and the last. But he must be some'r's around here. Where do you live?"

"Up beyond the mountains, in the Little Pecan Creek country. Nearly 40 miles from here, it must be."

"And where did you stay last night?"

"Back yonder close to the gap. I camped out, and slept on the grass."

"Then git down—git down and have some breakfast with us," the man was quick to urge, with the usual frontier hospitality.

I had expected this invitation, and was very glad to receive it. "I haven't got a red cent with me, but——" I had begun to explain.

The man interrupted with a wave of his hand.

"We ain't a-runnin' no tavern. If you can put up with what little you'll git, you're welcome to it."

So I turned my pony loose to graze, with his lariat trailing, and went in. And a very good breakfast they gave me. While eating, I related how I had left home without anything, even a hat, and had accumulated all my present possessions on the way. The family were much interested, and the man said:

"If you're goin' on, I can lend you a good slicker. You might run into a rain some'r's along."

I thanked him and accepted his offer, though not till after explaining that it might be a good while before I could return the coat.

While we were eating, Vic sat near the table, watching us hungrily. Fearing her wants might be overlooked, I told how she had given me warning when the mountain lion came prowling around my camp. I also explained how I had scared the lion away by firing the grass, and what a hard fight I had had to put out the fire afterwards.

"Lucky you had the little fyst along," the man remarked. "If you hadn't, you might have waked up to find the lion on top of you. Not a bit too good to do that very thing if they git a fair chanst, them varmints ain't. I've killed five of the creatures out here. The hounds treed 'em and I shot 'em."

I also mentioned how Vic had provided our supper by catching the mule-ear and finding the wild turkey's nest.

"Why, she's a nice little thing," the woman said. "Wisht we had one like her instid of all them hounds." She called Vic to her, and after patting her on the head, fed the little dog more than she could eat.

Then, in spite of my protests, the woman wrapped up something for my dinner and forced it upon me. I thanked her heartily, and after rolling the package in my borrowed slicker, and tying the bundle behind my saddle, I mounted and rode on.

Houses were few and far between. On my left rose a mountain-range; on my right, but several miles distant, spread out an extensive forest. I kept working both sides of the road as I advanced. At the first house I failed to learn anything; but inquiry at the second house brought out the information that Lep had been seen to pass there two days before, following the road.

"I could tell he was runnin' away from home, and I had half a mind to stop 'im," the settler remarked. "Sorry now I didn't."

"So am I," I replied, and hurried on.

Believing that the ox was now traveling steadily, I, too, took the road and pushed on after him, stopping only to visit the nearest bunches of cattle, and to make inquiries at every house.

Well on in the afternoon I forded the Leon river, and not far beyond it came to a small town. There were only two or three stores, a blacksmith shop and a cotton-gin. I made my usual inquiries, but Lep had not been seen. However, there was little doubt that he had passed. Coming from where I had last got word of him, he would have gone through here after dark.

Realizing now that the old fellow was likely to lead me a long and lively chase, I entered the postoffice, and approaching the postmaster with some diffidence, said:

"I'm 60 or 70 miles from home, on the trail of a runaway ox, and without a cent in my pocket. I want a postal card to write to my father. If you'll lend me one, I'll mail you another as soon as I——"

He stopped me with a gesture, then reached up, got a card, and laid it on the counter. "It's too little to bother about," he remarked, carelessly. The average Texan scorns to waste time with anything less than a nickel.

With a borrowed pen, I leaned on the show-case and wrote. After mentioning some of my experiences—the less exciting ones—I concluded by saying:

"I am hot on his trail, and expect to stay with him till I track him down, if it takes till cotton-picking time."

Then I slipped the card into the letter-box and was soon on the road again.

As Dick trotted along, I entertained myself by imagining how that card would be received at home.

"I wish Travis would come back and let the old steer go," mother would say. "I don't like to have him wandering all over the country by himself."

Then father would speak up in his brisk, hearty way:

"No, no, let him alone—let him alone! We need that ox and we need him mighty bad. And on top of that, it'll be the making of the boy. A boy that don't know how to hang on and hang on and hang on, no matter what he undertakes, or how hard it turns out, will never be worth the powder and lead it would take to blow his head off."

My road was now leading me toward the southwest. At a house a few miles beyond town Lep had been seen again. After that I entered a rough, broken country, half prairie and half brush, and the settlements ceased altogether. The road was old, but dim and little traveled. In places I could make out tracks which I believed to be Lep's. On I pushed, mile after mile, mile after mile.

At length the sun sang low, and Vic, trotting along by the pony, kept looking up as if to ask if it wasn't high time to find a camping-place. Recalling my experience with the mountain-lion, I was very reluctant to spend another night out of doors, especially in this wild region.

While still debating what to do, I was much relieved to hear dogs barking and sheep bleating, somewhere off to my right, and a good distance away. Quickly the pony was heading in that direction.

Nearly a mile from the road I came upon a sheep-ranch. It was by no means a pretentious affair, consisting of little besides a big rail-pen for the sheep and a cabin for the shepherd.

The man, a wild-looking fellow, with a great, bushy brown beard, was just penning his numerous flock for the night. I waited till they were all in and the gate shut, then rode up and made my inquiry, well punctuated now with bleats. The shepherd had not seen Lep. After waiting in vain for an invitation to get down, I ventured to ask:

"What would be the chance to get to stay all night?"

"Why, certainly you can stay—certainly—certainly—certainly!"

The words were spoken with an earnestness that was little short of vehemence. Though surprised, I was well



Don't you hear 'em—can't you hear 'em?"

pleased at receiving so warm a welcome. My attempt to explain that I had no money was promptly cut short with:

"Feel just as free here as if you had a gold mine in your pocket."

While I was unsaddling Dick the shepherd remarked, pointing:

"You'd better take him over yonder a few hundred yards. The sheep haven't been over there for some time. He'll think himself too good to feed after them, I guess."

While being led away, Dick kept putting down his head for a mouthful of grass, but only sniffed at it contemptuously. Having found a place where he was willing to graze, I tied him to a sumac bush and left him for the night.

Returning to the cabin, I saw the shepherd going out with a milk-bucket on his arm and followed him. No cows were in sight, but several goats were browsing around outside, and some noisy kids occupied a little pen at the end of the sheep-pen.

"What! Do you milk goats?" I inquired, half incredulously. I had read of such a thing, but had never yet seen it.

"Why, yes. Why not? They give good milk. They associate with my sheep, too, and cows wouldn't, I guess."

I watched the goat-milking process curiously. At last I took a cup and tried to milk one myself, using my thumb and forefinger, as the shepherd did. The attempt was fairly successful, but I did not try another one. The shepherd milked the rest, while I stood watching a long-bearded, patriarchal-appearing Billygoat as he stalked about outside the pen.

The milking finished, we returned to the cabin, the shepherd carrying his milk and I my saddle. By this time darkness had come on. The man, whose name, I had learned was Groves, kindled a little fire in a big fireplace and set about preparing supper.

The interior of the cabin, as revealed by the flickering firelight, was very rudely furnished—almost unfurnished. There were no chairs, and no floor but the ground. The only bed was half a wagon-load of prairie-grass in a corner, with a buffalo-robe and some blankets on it. In front of the fire a large-sized drygoods box, turned bottom up, served for a table at meal-time and for a seat at other times. In one corner lay a saddle, sprawling on its back; in another stood a gun, an old, retired army-musket; and high against the wall hung a six-shooter, neck-deep in its leather scabbard. These, with a few cooking-vessels, dropped where last used around the fireplace, and some sheepskins tacked against the wall to dry, made up the cabin's contents. No window cut the logs, the gaping spaces between them being amply sufficient to let in air and light when the door was shut.

Groves cooked some corn-cakes in a frying-pan, and fried some slices of bacon—all drowned in grease. These, with black sorghum molasses from a jug and some goat's milk made our supper. The milk was warm and had, to me, a peculiar taste, the bacon was fat and the bread soggy; but I was far too hungry to care for such trifles. We sat on the ground, and ate out of tin plates and drank out of tin cups, which the shepherd had fished out from under the box.

The meal ended for us, Groves fed his two dogs and Vic, then shut the door and came back and washed his tin dishes. Afterwards he divided his grass-pile, putting half of it and the buffalo-robe in another place for me to sleep on. Now he filled and fired his pipe, and we sat on the big box and talked, by the firelight. And a very interesting talker I found him.

"How old would you suppose I am?" he asked, in the course of our conversation.

I looked at his big, bushy beard and guessed 40.

"You're 13 years off. I'm not quite 27." He laughed and seemed rather pleased than otherwise.

Greatly surprised, I inquired if he had no razor.

"Yes, but I'm letting it rest now. I'm letting my beard grow for a—well, I'm letting it grow. People that knew me without it wouldn't begin to know me with it; and people that know me with it wouldn't begin to know me without it."

Something in the way this was said made me infer that he was wearing it as a disguise. And the suspicion flashed into my mind that possibly the fellow was a fugitive from justice.

After inquiring where I lived, and how long I had lived there, he said:

"I'm a Virginian. Two thousand miles from home I am now, and I get mighty, mighty homesick and lonesome sometimes. Eight years have gone by since I saw my folks, and it's a good while since I even heard from 'em."

"Have you lived on a sheep-ranch all that time?"

"All but a few months of it," he answered. "I hired out to a sheep-raiser only a week or two after I struck west Texas, and I've been tied to sheep ever since. Three years I herded for another man. After that I bought me a little flock, a mere handful, and started out on my own hook. That was in—in another part of the country. I pegged down right here just 14 months ago. Let me tell you, I had some stirring times when I first struck the range. Twice the Comanches dashed in among the sheep, and killed some and stampeded the others—scattered 'em like a whirlwind scatters chaff."

"It's a wonder they didn't carry off your scalp," I remarked.

"Yes, it is—a great wonder. But once I took to the brush and dodged 'em, and once I jumped onto my pony and outran the red rascals. Do you ever drink—ever touch whisky?" he suddenly demanded.

"No, never," I replied, wondering greatly what this abrupt question had to do with sheep-herding and Indians.

"Then, whatever you do, stick to that—stick to that!" he fairly hissed, as he leaned toward me. "Then you'll never have to leave home and go off into a wild, half-civilized country, among desperadoes and redskins."

He changed the subject at once, leaving me with the impression, however, that whatever trouble had sent him out here, drink had been at the bottom of it.

"Sh!" the shepherd whispered, warningly, as he sprang to his feet. For a few moments he stood motionless, listening intently. Once, while he was in this attitude, his eyes met mine, and even in the dim firelight I could detect a wild-half-terrified look in them—the look of a hunted animal!

Suddenly he sprang back to the corner and snatched up his gun, the old army-musket.

"Don't you hear 'em—can't you hear 'em?" he whispered excitedly, coming close to me. That wild, strange look was still in his eyes.

"Who is it?" I demanded, much mystified and not a little alarmed at his strange conduct.

"The cattle-men! They're coming to kill me! They're right close here!"

Snatching up a board, his makeshift for a shovel, he began to shovel ashes frantically upon the little fire. Nor did he stop till the last spark had been blotted out.

Now I understood. Often I had heard of those fierce, murderous quarrels that break out between sheepmen and cattlemen. But never before had I come in personal touch with one. The shepherd's manner meant but too plainly that he was in terror for his life.

After moving slowly, stealthily around the wall, listening and peering out, he returned to where I was standing, in the center of the room, and whispered excitedly:

"The cattlemen have been trying to kill me, and they're coming tonight to try harder. They're somewhere right close by now. They want to get near enough to stick their guns between the logs. When they once do that, they'll blow me to atoms, and you with me!"

Now I, too, was frightened, and heartily wished I had camped out in the brush somewhere—anywhere. Mountain-lions, frightful things though they were, were far less to be dreaded than these cattle-raising assassins.

Presently Groves moved over to the wall, then came back and thrust something cold into my hands. It was his six-shooter.

"Are you brave?" he whispered, almost hissed, into my ear.

"Not to hurt," I answered.

"Can you fight?"

"I'd rather not."

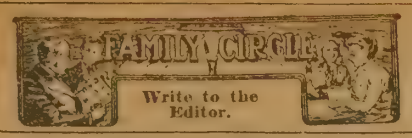
"Can you die?"

"I'd—I'd a good deal rather not," I protested. At this strange question, icy chills of horror began to chase one another up and down my back.

Soon the dogs burst out again, louder than before. Listening anxiously, my ear detected something that I took to be light, cautious footsteps not far away.

"Don't you hear 'em now?" whispered the shepherd. "Don't you hear 'em slipping up? They're coming closer and closer! And they'll get me—oh, I just know they'll get us tonight! But I'm glad you're with me. It won't be so hard to die when you've got company. We'll die together!"

(To be continued.)




ALICE W. BARLAND,
Editorial Contributor.

# High School Near Home

By MRS. ALVARA P. WILLIAMS.

SECOND ARTICLE.

I know Ruth will feel cheated of part of her education if she has to be contented with a small school nearer home. She is of an adventurous disposition, and this doesn't quite satisfy the craving for the change, the thrill of city life. But it makes a very good stepping-stone, and for many must always be the only step above their district school. Let us see just how satisfactory it is, and to what type of girl.

The course of study of the smaller high schools is generally carried out by a system of alternating subjects; few courses can be offered, usually only the required ones, as one or more teachers overburdened with too many classes, and often untrained for high school work at all, must do the work. Such things as cooking, sewing, laboratory science, business courses, if given at all, must be elementary and with small outlay for equipment. Pupils of good, bad and indifferent scholarship must be herded through the course somehow, without the automatic and unsympathetic weeding out of the city school with its higher standard of scholarship. Funds are usually scarce, with correspondingly little of broader, supplementary work. There may be provision for music, more often not. All these things are a drawback to a girl who wants to make the most of her education.

They are not the fault of the school system or any one connected with it, however. City advantages could not be expected here, any more than could Farmer Ellison be expected to work his 10-acre chicken ranch with a tractor. And these conditions are constantly being improved by the growth and progress of a newly settled country. It is unfortunate for a few to be restricted to these surroundings, but for the many who could have nothing unless this kind of training, it is a wonderful blessing. Your boy and girl, who must leave before finishing high school, can get here something they will look back upon all their lives with pleasure.

There are some pupils, too, who have ambition and means to go higher, who must be contented with this kind of education—those who have not the health to go far away from home alone, or who can only be spared for the few hours daily at a nearby school. I wonder if these realize to what extent they can improve not only their own condition, but that of the whole school? There is an indefinable spirit in some schools that can only be traced to the influence of those who might have been discontented there, but who instead do all in their power to make their surroundings the best possible.

If Ruth decides to start here, may she do so with this spirit, even while she has her mind fixed on something different after a year or two. Her very ambition, if it is unselfishly expressed, can be the making of an otherwise uninteresting, mediocre little school. A thorough mastering of the required studies of the first year of high school can be made as satisfactory here as elsewhere. For the outside influences, music, reading, amusements—a little initiative now to overcome the handicap of distance from the city, will be worth more than easily acquired culture. If she can not have actual music, for instance, she can get books about it; become familiar with the operas, composers, interpretation of music; she may even learn the rudiments of written music without an instrument, if necessary. Any other subject can be acquired in the same way. Buy these books? By no means. Your teacher or any householder can get a traveling library for your district from the state, some counties have them also. If you can't get the material you want in these, a direct appeal to the state librarian or to the nearest city or college librarian, will bring results. No one ever refused a frank appeal for help along these lines, if a full explanation is made of what is wanted, and why.

After one or two years of such a school, a girl of average high school age is better ready, physically and mentally, to make the change to a city school. Her main subjects already taken will be credited to her. Leaving the optional subjects until later means a better grasp of them. She will have gained a familiarity with methods of high school study, so different from grammar grades. She will be older, better balanced to weigh values and decide what she must omit from the too-full offerings of city school and social life. She will more quickly adapt herself to her work if she helps herself. Often the shortening of the time away from home means that she need not work as hard, receiving, perhaps, more help from home. She may even be able to carry out a system which many girls start in their nearby schools if these are too far away for them to go home every night—that of "baching" and getting some supplies from home. I am thinking of one such case, where the nearest high school is in a small town. Three girls have two rooms together, cooking their own breakfasts and sometimes dinners, using vegetables, eggs, butter and baked things from their homes. Their living expenses are a trifle, and occasional week-end trips home vary the monotony.

Another girl of my acquaintance is doing the same thing in the city, paying a higher rent, of course, and getting fewer supplies from home. She is able to work out by the hour on Saturday and occasional evenings, doing housework and caring for children, and finds that she goes a long way towards paying her expenses, and has her freedom at the same time. But she first went through the experience of working for her board and room, and was sure of her ground before she took this step. A girl unused to city ways would have risked failure.

This plan of starting away from home gradually must be more popular with most mothers than the abrupt change. Somehow it's easier to keep in touch with your daughters when you see them often and they're in surroundings much like yours. It's easier when they do leave for a more distant city to have had them away for a little, on trial, as it were. And it's so much easier to feel that your daughter is a year or two nearer what you consider an age of discretion before she leaves you, and then for a shorter time than if she had followed the other plan.

I am saying nothing about the dangers of a big city for a young girl, because that has been written about so much that it looms over-large in many people's minds. Your companionship, your sympathy and faith, backing up years of teaching of the right ideas at home, will determine your daughter's safety anywhere. There are many disagreeable things about city life, however, which you will be quick to detect and find a remedy for, or counteract. The one best method for this, no matter how busy you may be, is the never-failing use of Uncle Sam's mails.

And one other little suggestion—if there is any possible way, try to keep pace with your girl so you will be in touch with the finished product of the city school when she returns. It may seem impossible, but books and magazines at least are open to you, and any magazine editor, school principal, or city librarian would be proud of being asked to suggest possibilities to you. I think the same idea applies to you that was expressed recently by the head of the Hostess House at Camp Lewis. Speaking to an audience of women and girls, she told of the men in uniform who were getting the best training of their lives, here and in Europe, learning things which would send every man of them home bigger, broader and better in every way. Then she asked, "What are you doing to keep pace with them? Will they come home to find that you have struggled also, and are broadened by it—or will they find that you have stood still? What kind of women will you be when your boys and your lovers come home to you?"

Yours is the double responsibility in the case of your daughter as well; you must be a source of strength to her while she is away, and be ready to go on with a broadened view yourself when she comes back to you. This we must do if we would keep our daughters.

# Amusing Baby

## Teach Him Also to Amuse Himself

By MARGARET PALMER.

It is always a good plan to begin with the children when they are wee tots so that by the time they are old enough to creep or walk, they have learned pretty well how to amuse themselves, which is a great help to every busy mother.

First of all, the child must not be spoiled, no matter how sweet or how much we love it, while it is a "wee baby." Then is usually when the mischief is done; for we fond mothers think they are too small to know or understand, but the little dears soon "learn."

So do not permit too much excitement nor allow any jumping or bouncing or too much rocking or jiggling, but give him plenty of loving smiles and happy expressions of love and tenderness as you talk to the baby.

Guard the baby against sudden shocks from loud talking, yelling or screaming at him. Never allow the baby to become frightened under any circumstances by letting the older ones jump at him, for they think it fun to see baby jump, but it unnerves the baby. First of all, the baby must be made comfortable for the day, so that he will be as happy and contented as possible; for an unwashed, wet or soiled baby will fret and never try to amuse itself. The next step, the baby must be properly fed and clothed. A hungry baby is always cross or more or less fussy and the same is true if they are not properly dressed, according to the weather.

The first thing that the baby will amuse itself with is motion. They like moving things and bright colors before they do rattles or are even able to hold one. Try tying a ball, a bright one, or a piece of paper or a flower, where the baby can see it—just above the feet is a good place. Keep this in motion by giving it a tap once in a while and the baby will lie happy and contented, watching it swing back and forth for a long period of time. They very soon learn to kick at it and keep it in motion themselves.

A bird in its cage is also another source of amusement for the baby. If you have one, hang it where the baby can see it as it flies from perch to perch. It will soon learn to kick and crow in delight, often laughing out loud at these simple things.

After the baby is old enough to play with toys, do not give it too many at one time, for he soon tires of them; instead, give one at a time. When they are old enough to sit up among pillows, they often amuse themselves for hours with a rattle or a rubber ball in a pie tin or a tray.

As soon as the baby is old enough to sit in a high chair, teach him to pick up his own playthings by having them tied to a string and the string tied to the high chair. So when he throws them down, he can pull them up himself. This alone often affords him long periods of amusement.

# Warnings to Mothers

To the Editor: I am sending some warnings to the Farmer mothers, from my own experience in the last year:

Never only partly open a box of matches and place on the kitchen shelf, as friction caused by fingers trying to roll a match to the edge of the box may cause instant explosion of the whole boxful, and severely burn the fingers, in my case leaving a scar on the forefinger and removing the nail. Should such an accident happen, dip the fingers immediately in a thin paste made of baking soda and water till fire is about drawn out; sometimes it takes an hour, as a match explosion burn is more painful than common burns. Then saturate cotton batting or several thicknesses of clean cotton or linen cloths in castor oil and wrap up well.

Never apply hot water bags or bricks to limbs or any part of the body that aches or pains without first knowing what the trouble is. I used hot irons for aching limbs on my daughter, thinking she had grippe, and proved to be rheumatism instead, driving it to her heart and causing a severe leakage of that organ at the time; and probably, unless she outgrows it, a weak heart for life.

Never plug a child's ear tight with cotton when they have earache, for if there is any pus to run out, the cotton will force the pus to the base of the brain, causing serious trouble. The ear should be syringed out with warm boric acid water and gently wiped with cotton and a warm woolen cloth bound over it, urging the sufferer to lie with the aching ear down on the pillow.

Never throw flour into a bleeding wound—only as a last resort, tying a handkerchief between it and heart is much better. The flour causes unnecessary suffering when the wound needs to be cleaned and scrubbed, and then may fail to heal properly.

Never give coal oil for croup of sore throat as some people do. One of my children accidentally drank a small quantity and as it seemed to strangle him, we called the doctor. He told us it had poisoned him and that although coal oil or kerosene was commonly considered harmless, one would occasionally get some that was poisonous to take inwardly. MRS. SAM HAYES.

Mount Idaho, Idaho.

### MATCH BOX CABINET.

By Lissie C. Farmer.

Save all your match boxes, and when you have eight or 10 of them of the same size set them in a double tier four or five boxes high, and paste or sew the outer cases together at both front and back corners. Then with the inner boxes or drawers placed in the cases you have the handiest sort of a tiny cabinet for holding spices, seeds or other small articles in kitchen or pantry; for buttons, pins, hooks and eyes, etc., in sewing or living rooms; for a receptacle for beads, jewelry, etc., in the bedroom, or for a piece of doll furniture for the small daughter of the family. Such a little cabinet can be made very ornamental by covering it with bright-colored paper or cloth to match other articles near it in its place of use. If cloth is used for covering the cases can be joined together after the cloth covering is in place.

# Homemaking a Business

To the Editor: In reply to your inquiry concerning my method of saving food I will say: First, that the housewife should realize that making a home is a business. The object is well worth a good and wise woman's best efforts. Second, I want to state that often the best and most expensive foods are the cheapest—the greatest cost of food is not in the amount eaten, but in the amount that goes into the garbage can.

Preparing everything possible in our own kitchen is a saving in expense. Nothing, absolutely nothing, need be thrown away if the housewife makes the purchasing and preparing of food for her family her personal business.

One item of great economy is the making of vinegar for putting up all kinds of pickles. Two gallons of good cider and one-half gallon of sorghum molasses constitutes the entire cost of five gallons of good vinegar. Casserole dishes are a great economy if care is taken in preparing them. Many leftovers may be utilized in this way. It is essential to know food values and compositions to be able to serve a well balanced meal.

The required food served depends upon the condition of one's home and occupation. A wise housewife will know what each member of her family requires in the way of food. True it is extra work to prepare special dishes for a finical appetite, but often very necessary.

In our mad rush to put away everything in sight for next winter's use it behooves us housewives to pause and estimate the expense and utility of the commodity.

MRS. D. D. DRENNAN.

Rathdrum, Idaho.

### AGAINST WEARING BLACK.

The woman's committee, council of national defense, advises against wearing black as mourning for deceased soldiers—instead, a black band.

### Divorces Multiply in Petrograd.

As a result of the simplification of divorce proceedings 38,000 applications for divorce have been made in Petrograd since the revolution.




**FISH** Salmon, in brine, 100 lbs., meat, shipping weight 165 lbs., price $14; 50 lbs., $7. Smoked salmon, 20 lbs., $4.00. Dried cod, 10 lbs., $1.75. Herring, in brine, 50 lbs., $5.00; 25 lbs., $2.75. Cash with order.

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M. 39

# PATTERNS

2294—Girl's dress. Cut in 4 sizes: 2, 4, 6 and 8 years. Size 8 requires 3 1-4 yards of 44-inch material. Price, 10 cents.

2549-2436—Lady's suit. Cape coat 2549 cut in 4 sizes: Small, 32-34, medium, 36-38, large, 40-42, and extra large, 44-46 inches bust measure. Size medium requires 5 1-4 yards of 44-inch material. Skirt 2436 cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. Size 24 requires 2 3-8 yards of 44-inch material. It measures 1 7-8 yards at the foot. Two separate patterns, 10 cents for each pattern.

2602—Lady's dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 28 will require 5 yards of 44-inch material. The dress measures about 2 1-8 yards at the foot. Price, 10 cents.

2363—Boy's suit. Cut in 4 sizes: 3, 4, 5 and 6 years. Size 4 will require 2 3-8 yards of 40-inch material. Price, 10 cents.

2608-2590—Lady's costume. Waist 2608 cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 2590 is cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. A medium size will require 6 3-4 yards of 44-inch material. Skirt measures 2 1-8 yards at the foot. Two separate patterns, 10 cents for each pattern.

2588—An ideal suit. Cut in 3 sizes: 12, 14 and 16 years. Size 14 will require 3 5-8 yards for the skirt, 3 1-8 yards for the coat, and 7-8 yard for the vest, of 27-inch material. Price, 10 cents.

2369 Dress for misses and small women. Cut in 3 sizes: 16, 18 and 20 years. Size 16 requires 4 1-2 yards of 36-inch material. The skirt measures about 2 yards at the lower edge. Price, 10 cents.

2337—Girl's dress. Cut in 4 sizes: 8, 10, 12 and 14 years. Size 12 requires 4 1-2 yards of 36-inch material, with 2 strips 36 inches long and 5 inches wide, for the sash ends. Price, 10 cents.

2446—Lady's apron. Cut in 4 sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. Size medium requires 4 3-4 yards of 36-inch material. Price, 10 cents.

2609—Set of dress accessories. Cut in 4 sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. Size 38 requires 1 1-2 yards of 36-inch material for either guimpe. Price, 10 cents.

2610—Lady's house dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 4 7-8 yards of 44-inch material. The dress measures about 2 1-4 yards at the foot. Price, 10 cents.

2584—Girl's dress. Cut in 4 sizes: 8, 10, 12 and 14 years. Size 12 will require 4 1-4 yards of 44-inch material. Price, 10 cents.




Please fill in this order and mail with remittance to:
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Pattern No.....Size..... Pattern No.....Size.....

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R. F. D. No. ..... Box No. ..... Street No. .....
Be sure to give the pattern number and the correct size.

# Won a Blue Ribbon

The picture herewith shows Leota Tucker of Dryad, Wash., who won first prize for best individual booth by a girl under 15 years old at the southwest Washington fair, in industrial club work. The ribbon she is wearing is the blue ribbon won, although it shows white in the picture.



Prizes for individual booth were offered by Professor Canterbury, county school superintendent, in an effort to encourage individual work on the part of club members and pupils.

Leota's booth presented a great variety of subjects, and each was well done. She had made dresses and done fancy work that would be a credit to a grown woman; her canning of both fruit and vegetables was most praiseworthy; bread and cake good enough to win prizes, and made with war substitutes; flower garden and fancy work, besides many other exhibits, made up a booth showing great painstaking and wise management. Leota simply did everything well and worked hard; hence she won. H. A.

**Baked Apples.**

Prepare apples for baking as usual. Fill centers with honey, instead of sugar, add a few chopped nuts if desired. Put in pan and add three-fourths cup of water and one-fourth cup honey. Bake as usual.

# Drouth Affects Bees

I have two colonies of bees in regular 10-frame hives. They swarm quite early (in May), and the first swarm went right to work, with the result that two months ago I took out of the super 22 pounds of honey. Of course I put other sections properly prepared with foundation back into the super, leaving in six which were not filled.

Up to now the bees haven't even started to fill these, although they always seem to be busy. Neither has the colony where this swarm came from done anything at all, although I know that the brood-frames are full, and were so at the time of swarming.

What can be the reasons, and what the remedy? PAUL N. ANDRIESEN.
Rainier, Wash., Sept. 3, 1918.

**Answer by George W. York.**

It is often very difficult to say just why bees do so and so, or why they don't do so and so, particularly when one can not examine the bees themselves, or when he does not know the condition of the bees. Perhaps the reason neither colony did much at storing honey was on account of the drouth, that is, if it was very dry, and for as long a time as it was in this part of the country (north Idaho).

Often when a colony swarms it does not do much more at storing honey than to get its own supply for winter. The old queen leaves with the swarm, and it may be that the young queen that hatched out after the swarm left, failed to become mated, or was killed when on its mating tour. If such were the case, the old colony was probably queenless for awhile, which would result in a weakened condition.

Just why the new swarm failed to store more than one super of honey would be hard to say. Perhaps the honey-flow ceased about the time the second lot of sections were put in and some of the completed ones removed. That would cause the bees to stop work in the super.

Likely a better way would have been to put a super of prepared sections under the first super, when the latter were about half filled. The bees might then have continued to store in the empty super while completing the sections of honey in the first super, which would then be on top. Then when the lower super was about half filled, the upper one would likely have been entirely completed, and be ready to remove. Then the bees would have finished the remaining super, provided the honey-flow continued.

**CANDIED SWEET POTATOES.**

Parboil sweet potatoes about 10 minutes, cool slightly, slip the skins off, and cut in halves lengthwise. Put in a dripping pan, dot them with bits of savory meat drippings, and pour over them about one tablespoon of karo syrup to each whole potato. Bake in a moderate oven until the potatoes are cooked through. Add a small amount of water, if necessary, to keep potatoes from burning.

# War Time Farming in France

## *Country Would Be Out of Luck But for Women Folks*

Most interesting bits of information regarding wartime farming conditions in France are given in a letter to Dean E. J. Iddings of the Idaho State university, written by Corporal Walter F. Thomas, now with the American expeditionary forces in France. Walter was a Davenport, Wash., boy, who went to the Idaho university for work in animal husbandry. He would have graduated in 1918 if he had not entered the military service.

"These people in northern France," says Walter Thomas, "are good, industrious farmers, and although they lack machinery and seem to waste good time in unprofitable gleaning, still produce the crops. In recent travels I have seen miles of rich crops of wheat, oats, rye and a considerable acreage of sugar beets. These fields are unbroken by fences or farmsteads, the dwellings being clustered in small villages, where the house and barn are under the same roof and the stock is kept up and fed. Women, children and old men do practically all the work. This country would be out of luck but for the women, who are very industrious.

"I have seen everything from the cycle cradle to small binders used in cutting grain. Very few good binders are in use, and a great quantity of grain is tied with rye straw by hand.

"The horses left after the army has its share are fine, large animals, but are few in number. Oxen are not uncommon, most of them being large, white, strong looking animals, and although they are slow they do a great deal of work. I shall never forget watching a little slip of a boy plowing with four large oxen. Instead of roadsters, or light road horses, we often see little donkeys no bigger than a goat drawing large carts with one or several people riding.

"In speaking of army horses, the Americans appear to a disadvantage, while the French are more standardized. I saw some of their lancers, and the cavalry horses looked a great deal like our standard bred, which they may have been. But for a regular horse show a certain English-Scotch division which I had the privilege of watching from a roadside has anything beat that I have seen. The wagons, caissons and other vehicles were shined to perfection, while the large, sleek, drafty horses, groomed to the minute, showed excellent breeding and care.

"We see very few cattle, because they are kept up for the most part. In some places we are able to get milk, but conditions about are very insanitary, so that we are sometimes forbidden to use it.

"Water is a hard proposition in this country. The rivers and canals are very pretty, but we are seldom lucky enough to camp on them. Water is hard and must be chlorinated for drinking purposes."

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or
Review Building, Spokane, Wash.




My Dear Corner Cousins: Perhaps you have noticed that I have not commented on your letters lately. I will tell you why. There are so many letters that it is impossible to give a line on each one. We have to save on paper; our government has asked us to. Instead, I will answer as many letters as I can personally, print all we have room for and note the others. Don't you think that is all right?

When school was out I thought our Corner would be very small, as the cousins would be very busy with their war gardens, helping mother in the house and father in the field, and that Aunt Nellie would be forgotten for a time. But the letters kept coming and I was glad, because it shows how much you think of the Corner.

So many good letters were received during the last contest, and it was just as hard as ever to decide which were the best. If I could I would give prizes to at least a hundred, and there was really very little difference between the prize-winners and the Roll of Honor.

The new contest will run until the first of the year and I am going to let you choose your own subjects, and the prizes will be something extra nice.

**WASHINGTON PRIZE WINNERS.**

**Hazel Henrietta Arnold**, Sultan.
**Victoria Pieklik**, Benston.
**Rovilla Fletcher**, Fairfield.
**Arthur Heathers**, Everson (special).

**ROLL OF HONOR.**

Carol Jones, Winthrop; Dorothy Butz, Menlo; Alice Knapp, Harrington; Bertha Schoepke, Greenacres; Olive Wilkinson, Ford; Mary Tagarden, Wapato; Phoebe M. Galbraith, Wellpinit; George F. Barraford, Ferndale; Lucelia Sellman, Bothell; Zelda May Northcutt, Smyrna; Ralph Springston, Quincy; Alice Reinbold, Davenport; Lois A. Lumley, Yakima; Libbie Latimer, Plaza; Bertha M. Lundberg, Colville; Evelyn Olsen, Gig Harbor; Dick Engle, Krupp; Ida Irmer, Withrow; Eunice Martin, Riverside; Violet Dingerson, Keller; Waive Brooks, Mabana; Edna Hodges, Loomis; Geanie Amundson, Ketchikan, Alaska.

If Freda Pearl McAtee of Ellensburg has any twins she wants them to write to her. Freda was 10 years old June 13. She and her sister both have a colt out on the range. Freda thinks it is fun to read the letters. She is taking music lessons.

Our first letter from Elizabeth Gentry, of Turner, tells about her little baby sister. Elizabeth was 12 years old August 10 and if she has any twins will they please write to her? She had a nice garden this year.

Ruth Weaver, of Wapato, is another one of our little cousins whose brother has gone to fight the Germans. Ruth says she wants to do all she can here at home to help Uncle Sammy win the war. She has a thrift stamp and belongs to the Red Cross.

Cousin Florence Evans, who lives four miles from Warden, is 12 years old and has a pony named Nip.

Reta Cantrell, here is a cousin who says she is almost your twin. She is Isobel Katherine Urquhart, of Krupp, who writes that she has two sisters and a little baby brother, Duncan. Aunt Nellie is glad to know that Reta is a Red Cross member and has knitted three quilt blocks.

We thought Hazel Carney, of Tonasket, had forgotten us, she had not written for such a long time. Hazel is 10 years old now and is in the fourth grade. She has one brother and one sister. There are three nice springs on their ranch.

Are there any cousins who were 13 years old, September 10? If you were you are Christa Potter's twin and she wants you to write to her. Christa lives at Mayview and likes to read the letters her cousins write. She has three brothers, but she is the only girl in the family. Every one of them has thrift stamps. Christa has brown curly hair and is five feet four inches tall.

Washing dishes and hoeing thistles is the way Fannie Sheppard is earning her thrift stamps. Fannie's address is route 4, box 24, Palouse, Wash. She has two brothers and five sisters and they are all Hooverizing, eating cornbread three times a day. Fannie is 9 years old and her birthday is January 5.

We are all glad to have Amy Bonney, of Hooper, join the Cousins. Amy lives on a 350-acre stock ranch. She is learning to knit. We are going to get another letter from her some day.

Ruth Kayser has been moving around so much that she hasn't had time to write to us. Finally her family settled down at Rockford and they have a big house and a big barn. Ruth was 9 years old July 14, and if you are her twin she wants you to write to her.

A cat and five little kittens are Edna Cordill's pets. Edna was 10 years old December 18, and is in the fifth grade. She wants a twin. Her home is in Amber.

Bertha Aldrich's mother died when Bertha was just a little baby so she is living with grandpa and grandma and Aunt Amy Bonney, at Hooper. She is 10 years old and her birthday is November 6. She wants her twin to write to her. Bertha has five nephews in the war.

Tippietoe, a New Zealand Red rabbit, is Florence Burr's pet. Florence likes to milk and helps milk 10 cows every day. She has one war savings stamp and two thrift stamps; is a member of the Red Cross, and she knits. Florence's home is at Winchester.

One of our cousins, Edna Reinbold, of Hubby, has found a twin since she wrote the last time—Helen Calkins, of Sunnyside. Edna has an uncle fighting in France and he writes that he likes it over there. Edna enjoys farm life.

Clara Staley, of Elk, comes to visit us again. Just now she is living in a logging camp. For pets she has five kittens—Rose, Violet, Tom, John and Jack.

Alice Duncan, box 156, Benge, Wash., has done lots of Red Cross work. She has made gunwipes, sewed quilt blocks, jackets, booties and many other things for the Belgian children and towels and handkerchiefs for the Red Cross. Alice was 11 September 11, and if she has a twin she wants a letter from her or him.

Esther Chalenor, of Mead, writes that she is 7 years old and is in the third grade. She has four brothers and two sisters.

Cousin Leonard Johnson, goes fishing nearly every afternoon. He lives on a 160-acre farm at Plum, just one-half mile from the Columbia river. Leonard was 12 years old April 14, and is in the fifth grade. The groundhogs were eating the grain this summer so Leonard got after them and succeeded in trapping 20.

Helping mother and father on the farm is the way Irene Overdorff, of Davenport, spent a good deal of her time this summer. Irene is in the fifth grade and will be 11 September 28. She says that the boys and girls at her school all knit for the Red Cross.

There are horses, cows, pigs, chickens, turkeys, geese, dogs, cats and canary birds to tend to on the big 240-acre farm where Fay Sheppard lives. Fay was 11 February 8, and wants her twin to write to her, please. Her address is box 24, route 4, Palouse, Wash. Fay is earning a war savings stamp by washing dishes.

Another faithful little cousin, who reads the letters every week, is Fern Lewis, box 103, R. F. D. 1, Rockford, Wash. She writes that she has two playmates—Evelyn and Lucile McKinny. Fern has a horse of her very own that she calls Dan.

Many cousins have brothers in France but Elizabeth Woodward's father is "over there." Elizabeth lives with mother, grandfather and grandmother, and her address is box 82, Omak, Wash. She was 10 years old August 2.

A dog, Teddy, 12 chickens, a cat and a dear little lamb are Cousin Mildred Hooper's pets. Mildred's address is box 66, Hooper, Wash., and she will be 10 years old November 22. She is in the third grade.

**What Grace Is to Be.**

Dear Aunt Nellie: I am staying with my sister on the farm and like it much better than the city. I have brown eyes and brown hair and was 15 years old May 16. Papa is working in the shipyards at Aberdeen. I will go to high scchool in Pomeroy. I intend to finish a four-year course without interruptions. I will then take a course in nursing and housekeeping. This will help be to become a modern housewife. During this time I will help my country in every way possible, that is, in practicing economy, helping the Red Cross and Belgian relief workers.—Grace Tupper, Mayview, Wash.

**Valley Is Like Fairy Land.**

Dear Aunt Nellie: I live in the beautiful Wenatchee valley. It seems like fairy land to me. I go to the Lewis and Clark school. I am 12 years old and am in the seventh grade. I belong to the garden, poultry and pig clubs. I am making apple and pear boxes to pay for my pig. The rest of the money I am going to spend for thrift and war saving stamps. We own two horses, two cows, six rabbits, five pigs and one dog, named Teddy. He is black and is as full of fun as he can be. I would love to join the Corner. Have I a twin?—Ethel King, R. F. D. 2, Wenatchee, Wash.

**Ride in a Bus to School.**

Dear Aunt Nellie: May I be a cousin? I like to read the letters very much. I will be 12 October 7. I am in the seventh grade. I have some thrift stamps. I think every one should have them; don't you, Aunt Nellie? I live on a 10-acre orchard. We have all kinds of grapes and fruit. My sister owns a 40-acre homestead. I like to go and visit her and gather wild flowers. I have joined the Junior Red Cross. I made seven bandages. I would like to hear from one of the cousins. I will answer their letters. We live quite a little ways from school, so we ride in an auto bus to get to it. I have a pet cat and dog. The cat is yellow and his name is Pinky. The dog is black and his name is Tige. We named him after Tige in the funny paper. I think all the cousins, including me, like to hear from you, Aunt Nellie. So your letters are always welcome to the Corner. —Elizabeth Drenkhahn, Box 34, Benton City, Wash.

**The Picture in Alice's Mind.**

Dear Aunt Nellie: Before I moved I went to the Lantz school, which was about two miles from my home. This spring I would ordinarily walk to school and when coming home in the evening, I would often stop at the top of a steep hill. I always stood facing the east, and the scene was the most beautiful when the sun was just shining on the horizon, and the sky was bright with lovely colors all blended together. There were usually soft, silvery clouds floating about in the bright, blue sky, while the last rays of sunlight fell softly on a group of three very small lakes, which lay in a grassy pasture. Then, too, sheltered by one of the eastern hills, was a house, partly surrounded by tall, green trees, while between this and the silvery lakes were many large rocks. I tried to imagine these were houses and that they composed a city. Still nearer, were more hills and some grain fields. While at the very foot of the hill on which I stood, was a windmill, a barn and the house in which I then lived. The house had trees on the north and west sides and lilac bushes and flags along the front walk. I hope I shall never forget this place, which was my home for the last four years.—Alice Clinesmith, Marengo, Wash.

**A Dignified Sophomore Next Year.**

Dear Aunt Nellie: I would just love to have a twin. Especially if we looked just exactly alike so our parents couldn't even tell us apart. We could have the most fun. I also think it is fun to have a chum and to dress just alike, even if we don't look alike. If you have a sister about your size it's all right, but my sister is 5 years younger than I am. Last week I visited the penitentiary at Walla Walla. It was certainly very interesting to see the things the men can make. Just from a cherry pit they will carve a small dog or some other animal. They also engrave designs on silver spoons and pins and make some of the prettiest beaded handbags. I bought two souvenirs. There are 200 convicts there and 12 women. My birthday was May 30, and I was 14 years old. I am a dignified sophomore this year. I made good grades, too, as my average was 96 1-4 per cent. Of course, in country schools you don't have to study as hard as you do in the city schools.—Gladys Plemon, Burbank, Wash.

**Hopes He Has a Boy Twin.**

Dear Aunt Nellie: I like the Farmer very much and wish to join the Children's Corner. May I join? I am 11 years old and my birthday is March 2. Have I a twin? If so I would like to hear from them. I hope it is a boy. I have one brother and one sister. My brother said he would write next time. My sister and mother live at Pasco, but we two boys are staying at Rogers' ranch this summer, and here is where we got to see the Farmer first. We boys have always lived in town. It is a great treat to live on a ranch. My job is to care for the little pigs, so will tell about them. They are the sweetest little fellows. They get out from under the fence to get into the bran and shorts and then I slip up behind them and grab their tails and they squeal and kick.—John Kelly, Perry, Wash.

**Must Not Please the Kaiser.**

Dear Aunt Nellie: I will be 14 years old, December 21. I am in the seventh grade. Kathryn, my oldest sister, has earned her diploma. I think we should all help to win the war by saving all we can, for the kaiser thanks us every time we eat a slice of white bread or take an extra lump of sugar. We must eat less wheat, meat, fats and sugar because somebody over there is starving for the want of these things. I am doing all I can to help win this great war. I have one cousin on his way to France. I can crochet, knit and tat some. I wish I could find my twin and that she would write to me for I surely would answer her letter.—Mollie Hergert, Box 48, R. F. D. 1, Penawawa, Wash.

**Wading in the Ditches.**

Dear Aunt Nellie: I am 10 years old and in the sixth grade. My birthday is October 21. Have I a twin? I want Helen Elizabeth Munroe to write to me because my name is Helen Elizabeth. I am taking music lessons. We have three little ducks. My father has a lot of alfalfa and he waters it by a flume running from a creek. We have a big engine to pull the water up to the field. We go in wading in the ditches and have lots of fun. I am a Red Cross member. I have knitted one sweater, 11 quilt blocks, one wash cloth, hemmed two handkerchiefs and sewed a few things for the Red Cross for a layette.—Helen Elizabeth Urquhart, Krupp, Wash.

**Yellow and Gray Canary.**

Dear Aunt Nellie: I think it is nice that the children have a Corner. I am a little girl 7 years old and in the second grade. We have two dogs, Jack and Nig. We have one pet lamb. I have three brothers and one sister. My brothers' names are Willis, George and Harold. My sister's name is Ina. Harold is 3 years old. He has three little bantam chickens and some old hens. My brother, Willis, has two nice horses. We have a pretty little canary bird. It is yellow and gray. We have 19 old chickens and about 90 young ones. We have four pigs, three black ones and one red and black one. Mama takes the Farmer and we like it very much. My birthday is February 17. Have I a twin?—Helen Lucile Berry, Cloverland, Wash.


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A clubbing arrangement has been made with a number of newspapers in your state whereby we can now offer you a one-year subscription to your local home paper and a one-year subscription to your state family farm paper at a special rate for both.

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# Six-Months-Old Bull Calf

## *How Could Carnation King Sylvia Be Worth $106,000?*

By H. G. STIBBS.

The editor of the Washington Farmer has asked me to answer two questions: First, how can a six months' old bull calf be worth $106,000? And second, how can the purchase of such an animal by a northwestern breeder benefit other breeders, the vast majority of whom will not be able to invest a tenth of this sum in their herd sires? In order to answer these questions I shall have to touch upon some matters which for a moment will not seem to have much bearing upon the subject.

The Carnation farms herd of registered Holsteins is the largest in the United States, and is the practical working out of a dream and an ideal. Part of that ideal has been stated by E. A. Stuart, president of the Carnation company, in these words:

"Our farms are operated as model dairies and breeding farms for the benefit of dairymen supplying milk to the Carnation Evaporated Milk condenseries. Our company being interested in the distribution of unsweetened canned milk, we must have the best quality of fresh milk. Again, we want the dairymen not only to produce milk of good quality, but also to produce maximum quantity at a minimum expense. The only way to accomplish both purposes is to have good cows with high producing records."

With this ideal in mind Mr. Stuart began about six years ago to build up as fine a herd of registered Holsteins as he could get together. This was not an easy task. He knew nothing of the practical side of the pure-bred business, and his first experience was a disastrous one with tuberculosis. Some of his finest cows—animals for which he had paid big prices and to which he was attached in a way that only a natural lover of cows will understand—proved to be reactors. There was nothing for it but to swallow the bitter dose and start again. This experience cost a good many thousand dollars, but its fruits are to be seen in the fact that a recent government test showed not a single reactor in the entire herd. Tuberculosis has been wiped out clear and clean, and the big herd today is in the pink of condition.

There is no question but that it will remain so, because it is under the supervision of the United States bureau of animal industry. A visitor at the breeding farm outside of Seattle is struck with the practical measures which have been taken to insure the health and comfort of every living creature on the place. The Holsteins are housed in light, airy quarters, with roofed-in and well-drained exercise yards for the rainy season, and broad, sunny pastures for the summer. The men who care for the herds have everything from shower baths to reading rooms which will make for their well being. "Milk from contented cows" is not a mere advertising slogan—it is a dynamic policy, in force at the Carnation farms every day in the year.

The purpose of all this, as Mr. Stuart has said, is to aid the dairymen in the territory surrounding our factories to produce the kind of raw milk we must have. That is where Carnation King Sylvia comes in. It is true that he is the highest priced animal of his class ever sold at public auction, but that is an incidental matter in the broad policy which led to purchase. It is because this young animal represents the highest attainment of the breeder's art and skill, because he is perfect not only in conformation, but has in his veins the blood of such world's record producers as May Echo Sylvia, the world's greatest milk machine, that he was purchased. For example—if by placing his sons, daughters, grandsons and granddaughters in various herds and by careful breeding to grade as well as registered stock, the offspring will produce an extra pint of milk at each milking (or a quart each day per cow), with practically no more feed, one can readily figure up the increased production, when thousands of dairy cows have a percentage of the blood of May Echo Sylvia through her most perfect son, Carnation King Sylvia. The reader must keep in mind the fact that value, from the breeder's standpoint, depends not so much upon the productivity of the individual animal as upon his transmitting quality or "prepotency." Carnation King Sylvia comes of a line of transmitters. He represents that mysterious quality, heredity, raised to its highest power.

And how does all this affect the northwestern breeder or farmer who must operate on a modest scale? At the present moment, perhaps, not at all. Potentially and in the future, immensely. The "get" of every truly great breeding animal is like leaven which spreads through the mass of mediocrity, until the average is raised and the entire community, producers and consumers alike, is benefited. Twenty or fifty years hence the real value of Carnation King Sylvia will be more apparent than it will be five or ten years from now. His descendants will have become the foundation stones of innumerable lesser herds, each of which will have been made a more efficient producing machine because of the infusion of the blood of one of the world's greatest bulls.

These facts, it seems to me, explain what Mr. Stuart meant when he stated that his aim in purchasing this young animal was to do his part in improving the dairy industry. And to carry out this aim, which is part of the broad and definite policy I have explained, he has to pay the price. That is the answer to the first question: Carnation King Sylvia was well worth $106,000, because other breeders looked backward into the past represented by his ancestry and forward into the future which he is destined to dominate, and desired to possess him. Their desire established the selling price.

# Available Men Needed

(Continued from page fourteen.)

all make plenty. They all seem to grade the wheat differently. I took the same wheat to a number of buyers, and the price ranged from $1.75 to $1.95 1-2 a bushel. They are the judges, and the only thing one can do is to accept their prices. The woods are full of buyers, and with the wide range of prices offered it has been demonstrated that it is best to make the rounds of all before concluding a deal.

"While the wheat price has been fixed by the government, most of the commodities that enter into the expense have not. The cost of threshing this year ran as high as 20 cents in many instances. Sacks cost from 26 to 28 cents each. Sacking twine costs from $1 to $1.25 a pound, and binding twine from 22 to 25 cents a pound. Including the expense of boarding and rooming, shockers cost the farmer as high as $7 a day. Then, on top of all this expense the shortest crop in years was obtained.

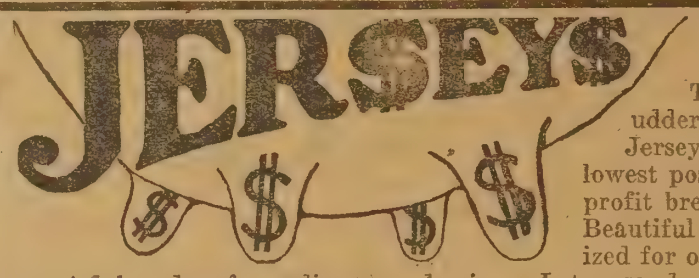
"It seems to me that a primary market should be established in the wheat belt, and that a farmer should be paid this primary market price instead of being compelled to endure all sorts of reductions as under the present system.

"Wheat buying must prove a lucrative occupation, judging from the number that are engaged in this line of business at present."

LATEST WHEAT NEWS.

Farmers who have been selling their wheat below the government guaranteed price because of railway embargoes placed on wheat shipment in certain localities were advised September 23 by the food administration that the embargo soon will be lifted and that if they hold their wheat the government will buy it at the guaranteed price. The embargoes were made necessary, it was explained, because the movement of wheat to seaboard has not kept pace with the internal movement to elevators.

The house, September 23, withdrew from its agriculture committee and passed a resolution calling for the recommendations of the secretary of agriculture and the agricultural advisory committee to the president regarding the 1919 price of wheat, which has been fixed at $2.20 a bushel. Representative Anderson of Minnesota asked for the action, no report having been made by the committee within seven days after the resolution was referred to it. The advisory committee is understood to have recommended a higher price than the president fixed.


**How much are a cow's teats worth?**

This depends on how much it costs to fill the udder and how rich the yield in butter-fat.

Jerseys are famous for the richest let-down at the lowest possible up-keep. Jerseys are known as "the profit breed" because they are natural money makers. Beautiful and hardy, their perfection has been standardized for over two hundred years.

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A few choice young bulls old enough for service, from imported sires and dams. Sired by Fussy Fern's Noble, son of the great $25,000 bull, Golden Fern's Noble. Dams milk 40 to 50 pounds a day with ordinary farm care.
On account of renting my farm, these bulls will be sold very reasonable if taken soon. Mention this paper.
H. WEST, Proprietor. L. J. SMITH, Manager.
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See us at the state fair.
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**Anoka Farm Jerseys**

We have some choice young bulls up to six months old for sale, whose sire has a 714-lb. dam and 1120 lb. granddam. St. Mawes breeding. The Best in the West. Prices very reasonable. Address
R. B. SEELY,
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**Register of Merit Cows**

Three registered Jersey cows, with good register of merit records. Two are on test again and will increase their records; all in class AA. Two are bred to the great sire FOXHALL'S FERN LAD. Come and see them or write for prices and full particulars.
FOX BROS. Silverton, Ore.

**LYNDEN JERSEY FARM**

Herd sire son of Fororio's Olindes Pogis, of Hood Farm and St. Mawes of Lynden, whose dam and granddam have records up to nearly 1000 lbs. of butter. Young bulls out of the Hood Farm bull for sale. Cows under official test and blue ribbon herd at Whitman county fair, 1917. You will find both type and production in the herd. For information write to
P. MEENDERINCH, Lynden, Wash.

GOLDEN GLOW'S CHIEF.
Bred by estate of W. S. Ladd, has 37 daughters, 41 granddaughters and 5 proven sons in the register of merit, and a WORLD RECORD JUNIOR 3-YEAR-OLD DAUGHTER, who is dam of ONE OF OUR HERD BULLS by the old bull himself. Our second sire is also a son of Golden Glow's Chief, out of a Gold Medal Hood Farm cow. Write us for a young bull calf.
D. Brooks Hogan, Mgr., Iron Mine Farm, Oswego, Oregon.
W. M. LADD, Owner. Portland, Oregon.

**All High Record Blood**

Bull calf out of Lucy of P. V., full sister to St. Mawes Susie; 936 lbs. butter in a year; to St. Mawes Blossom, 823 lbs., and to Susie's Twin Maiden, 642 lbs. Sire, Poppy's St. Mawes, son of St. Mawes Poppy, 1120 lbs.
ED CARY, Carlton, Ore.
Station, La Fayette, Ore.

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REGISTER OF MERIT JERSEYS.

A bred herd, tried out for several generations by every breeding test. Only the best blood lines. Three proven matings. Nothing for sale except from tried sires. Increase of both sexes for sale.
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**Jersey Bull for Sale**

I am offering at a sacrifice my young herd bull, dropped December 15, 1916. Has blood of Golden Glow's Chief and Majesty's Togo. None better anywhere. Write
E. F. MARYATT, Grandview, Wash.

**Edgewater Farm, Breeders**

Foundation stock is from most noted Island Jersey families—Golden Lad, Golden Jolly, Oxford Lad, Old Raleigh—names that stand for high production and showring winners as well.
E. T. SMITH. Myrtle Creek, Ore.

**Meridian Dairy and Fruit Farm**

Oldest Jersey herd in northwest Washington. Young stock for sale, both sexes, from good, producing dams. Herd headed by Kolander's Eminent 148256. A very fine bunch of young stock, both sexes, for sale.
B. C. CRABTREE, Lynden, Wash.

**Luckiamute Farm**

Register of Merit A. J. C. C. Jerseys.
Home of Octavia's Duke breeding. Daughters test as high as 7.58, second highest in U. S. A few good young bulls for sale.
FRANK LAUGHARY & SON,
MONMOUTH, ORE.

**Who Wants This Bull?**

A double grandson of Kadia F., world's Jersey milk record for senior 4-year-old, 16,191 lbs. He is also a grandson of Holger and Engineer's Bluster. Because slightly broken colored, will be sold cheap. Other good young bulls and a few heifers and cows, same line of breeding.
N. H. SMITH, Oregon City, Ore.

**Goldie's Nehalem Beauty**

won grand champion of the Jersey breed for production, 1917. Her record, 30 per cent basis, 1131 lbs. butter as 4-year-old. We have two bull calves sired by her son. Their dam's yearling records: 492 lbs. (average per cent fat, 6.08) and 433 lbs. butter. Both have been grand champions in show ring.
CLIFFORD F. REID.
Wilcox Bldg., Portland, Ore.

**Dairymen, $75.00**

buys your choice of two bull calves, both two months old; solid color, good individuals; out of register of merit dams and by bulls with heavy R. of M. backing. If you are looking for a bargain here it is.
JOHN B. STUMP & SON, Monmouth, Ore.

**BREEDERS OF REGISTERED JERSEYS**

ERICKSON BROTHERS, Yakima, Wash.

**Rose Lawn Jerseys**

The Island bull (Rosy's Jolly Golden Fine 135028) at head of herd. Bulls for sale out of Register of Merit and high-testing dams. Bred right, of right type; priced right.
S. H. KAYLER
Twin Falls, Idaho.

**WAIKIKI FARM**

Register of Merit Jerseys. Largest Jersey herd in the northwest. Young stock for sale.
IRA P. WHITNEY, Manager.
Route 7, Spokane, Wash.

**Ashnook Farm Jerseys**

Young bulls by Silver Chimes of S. B., whose first 6 daughters average 710 lbs. 30 per cent butter. A few good cows and heifers for sale.
DEL PERKINS, Carlton, Ore.

**Jersey Home Jerseys**

Young bull out of Olalla 2d, daughter of Olalla (806.25 lbs. butter as junior 3-year-old). Bull's sire, St. Mawes Prince, by Poppy's St. Mawes, and out of Gertie's Fern Princess (842.5 lbs. butter), both 80 per cent. Also other good young bulls.
THOMAS WILLIAMS, Forest Grove, Ore.

**St. Mawes—Rinda Lad**

The two most popular strains of Jerseys in the northwest. Young bulls from register of merit cows for sale.
G. G. HEWITT, Monmouth, Ore.

**Ready for Service**

Young bulls of Golden Glow's Chief, and King Melia Ann strains, out of register of merit dams. Priced to meet the unfavorable conditions. Write for full particulars and pedigrees.
HENRY STEWART, Albany, Ore.

**Jersey Farm Dairy**

Peter Mouw's Poland China hogs, Cotswold sheep, White Leghorn and Buff Orpington poultry, carefully bred, great foundation stock.
E. S. PELOT, R. F. D. 5, Idaho Falls, Ida.

**Please Do This**

Jersey breeders advertising on this page as well as the American Jersey Cattle Club will appreciate it if you will mention this paper when writing any of them. They want to be able to trace the exact source of your inquiry. Will you kindly show them this courtesy?

# A Grand Champion Holstein



The photo shown herewith is that of Ostego Highlands Butterfly, the Holstein cow that was grand champion at the Southwest Washington fair this fall of 1918. She is owned by Nathan Hamilton of Chehalis, Wash., who appears in the picture. Butterfly not only won championship of her breed, but she won the milking contest in which were three other Holsteins, one Guernsey and three Jerseys. She has an A. R. O. record of over 25 pounds of butter in seven days, made without any special preparation. H. A.

## News for Breeders

St. Mawes' Beauty's dam is St. Mawes Susie, that has a recently completed record of 873.6 pounds of fat, begun at 10 years and 7 months old. She has two former records, both over 700 pounds of fat.

The sire of St. Mawes Lad is Poppy's St. Mawes and his dam is Ed Cary's great cow, St. Mawes Poppy, with a record of 952.5 pounds of fat.

Thus the official records of St. Mawes Lad's three nearest dams is 2593.3 pounds of fat, or an average of 864.4 pounds. Figured in terms of 80 per cent butter this would be an average of 1007 pounds. His bull's dam was sold for $2500 to Mr. Ayer of Ayredale farm in Maine. H. A.

### RILMA'S GOLDEN POGIS.



The Jersey bull shown above is Rilma's Golden Pogis, owned by Grant Gleason of Chehalis, Wash. He was grand champion Jersey at the Southwest Washington fair this year. He was bred by Henry Stewart of Albany, Ore., and is out of a register of merit cow as well as being a show animal. H. A.

### ABERDEEN ANGUS SALES.

Secretary Charles Gray of the American Aberdeen-Angus Breeders' association gives some figures from the auction sales of the pure-bred Aberdeen-Angus cattle this season.

Here is Secretary Gray's table of prices for both bulls and cows:

| Cows. | Bulls. | | |
|---|---|---|---|
| 1 | 2 | at | $5000 and over |
| 11 | 3 | at | 3000 to $5000 |
| 37 | 3 | at | 2000 to 3000 |
| 152 | 12 | at | 1000 to 2000 |
| 66 | 7 | at | 800 to 1000 |
| 357 | 33 | at | 500 to 800 |
| 300 | 34 | at | 400 to 500 |
| 312 | 56 | at | 300 to 400 |
| 205 | 148 | at | 200 to 300 |
| 373 | 271 | at | 100 to 200 |
| 11 | 10 | less than | 100 |
| 1931 | 579 | | |

It is a noticeable fact that the top sales for the breed in Iowa this year were an advance of over 50 per cent over former years, "and they were higher than either of the other beef breeds in this greatest of all pure-bred live stock states."

### BOUGHT HIS FIRST BULL IN 1868.

J. W. Harbert, who showed Shorthorns at the Walla Walla fair for the first time this year, crossed the plains in 1859 and has been in the Walla Walla country ever since. He bought his first Shorthorn bull in 1868 from J. S. Folkes, who brought two Shorthorn bulls from Iowa. Mr. Harbert has been breeding cattle and using registered Shorthorn bulls ever since. He has had registered Shorthorn cows for the last four years. His exhibit at the fair consisted of seven head and included his herd sire, Golden Rock 2d, a bull of fine Shorthorn type, and of good size, purchased from J. H. McCroskey of Fishtrap, Wash. H. A.

### SHOWED 50 HEAD HAMPSHIRES.

The Hampshire sheep shown by Jaussaud & Son at the Walla Walla fair were bought at the National ram sale at Salt Lake in August, from the famous Walnut Hall farm in Kentucky. Mr. Jaussaud showed nearly 50 head, to fill up the pens and help the sheep show. His sheep, those of C. H. Craig's, and the Rambouillets of Mrs. R. A. Jackson and Harry Riffle, made a very strong show, where home grown sheep have usually been very scarce. H. A.

### "Black Death" in Asia.

The "black death," which ravaged China in 1546 is said to be breaking out again in Asia.

### SHEEP AND WOOL FOR JAPAN.

It is interesting to note that after a thorough investigation in this country regarding the plan of campaign for more sheep and more wool by Issa Tanimura, commissioner of live stock for Japan, that it is the purpose of the leading Japanese live stock men to create a bureau, consisting of seven expert wool men, together with a score of assistants and secretaries. The plan of action outlined will require 10 years to work out, but it is the intention to make Japan self-supporting as far as the country's wool requirements are concerned.

## Swinging Front

### Prevents Loss in Feeding Hogs

By E. D. ROSEMAN.

A contrivance that enables one to feed hogs without getting mad is a feaure of the piggery on Clarence Bowne's ranch, near Turner.

From disagreeable experience Mr. Bowne knew the hog's ability to spill ground feed and slop milk during the feeding operation, so he designed a swinging front pen to safeguard his temper and his pocketbook.

The arrangement is built of 2x12-inch planks, in solid door form, running lengthwise the pen, and is hung to a stationary plank at the top by heavy iron hinges. A V-shaped trough is built to the floor just inside the swinging front, and the door is hung high enough to clear the top of the trough when pushed in. Small strips nailed on the outside at each end of the door act as stops to prevent hogs from shoving it out and escaping.

Mr. Bowne's piggery is a simple rectangular building with a driveway running lengthwise through the center. A row of commodious pens all provided with this swinging front lines each side of the feedway.

The feeder in operating the device goes to each pen and pushes the door back over the trough, holding it in position by placing one end of a short stick against the outside stop and the other between the door and the trough. This transfers the trough from the pen to the feedway and keeps the animals out while feed is being distributed. After all the feed has been placed ready for consumption the short sticks are removed and the doors swung back to their normal position, allowing the pigs to reach the food.

The device as used by Mr. Bowne has been found very successful in simplifying the feeding operation and preventing loss of food while doing it.

### TOBACCO FOR HOG CHOLERA.

To the Editor of The Washington Farmer: I wish to state that if people would give their swine an occasional dose of a decoction of tobacco I do not believe they would ever be troubled with hog cholera. If hogs commence coughing, give a dose of tobacco in their feed. I use Granger Twist, but what they call "long green," or the natural leaf is best. An old stockman in Kansas told my father. We have never been troubled with that disease since, and father's hogs were sick at the time.

Sultan, Wash. E. W.

Commenting on the above, Dr. S. B. Nelson of the Washington State college says:

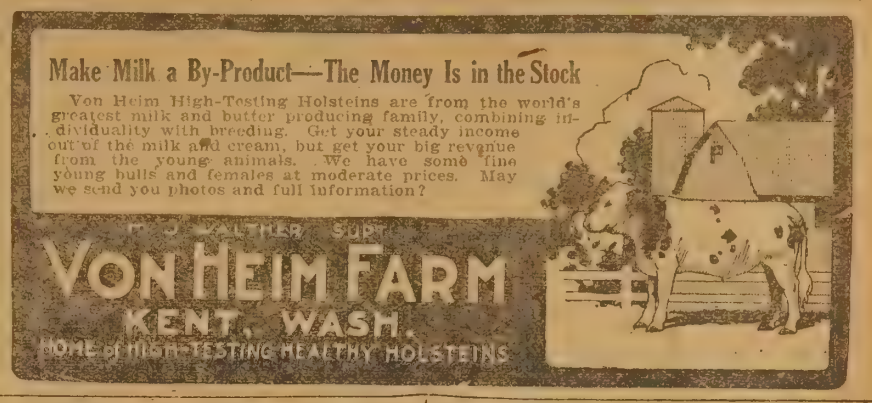
"First, follow the advice of the United States department of agriculture. They know exactly what they are talking about. Then, if you want to, before the serum can be obtained, use this treatment. But it would hardly be advisable to rely on tobacco alone until a great deal of definite evidence has been collected to prove that tobacco is a sure preventive. In these days the known thing must be depended upon for results, and let the other ones be secondary.

### Chinese Observe Boat Festival.

The Chinese have observed their annual dragon boat festival since 450 B. C. wherever streams in China will permit use of long dragon boat paddles with which the boats are propelled.

# Breeders' Department

## HOLSTEIN CATTLE


**Registered Holsteins**

Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.

H. R. BOOMER, New Plymouth, Idaho.

**HOLSTEINS**

Well bred young bulls for sale.

THOS. CARMICHAEL, Gaston, Ore.

## AYRSHIRE CATTLE

**Elbow Ayrshire Dairy**

Young bulls out of heavy-producing dams, sired by Willowmoor Sentinel 16th, a bull with big A. R. records on both sides.

J. R. MABEN, Reedsport, Ore.

EDGEWATER FARM.

Government tuberculin tested herd headed by Wil. Peter Pan 63d, double grandson of Beuchan Peter Pan. No surplus stock available.

ELBERT M. CHANDLER. Burbank, Wash.

## HEREFORD CATTLE

**Highland Stock Farm**

offers for sale Hereford bulls, 1 or 2 years old. One or a carload.

PLATT BROS. Genesee, Idaho.

## SHORTHORN CATTLE

REGISTERED SHORTHORN COWS.

Young bulls and heifers, sired by Scotch bulls; liberal terms.

CALDWELL CATTLE CO., Caldwell, Idaho.

## SHEEP

**A. J. KNOLLIN**

POCATELLO, IDAHO.
Breeder of Pure-Bred Live Stock.

Established flocks of pure-bred sheep—Rambouillets, Cotswolds, Lincolns, Shropshires, Oxfords, Hampshires, Romneys.
RAMS FOR 1918 SERVICE FOR SALE,
Also a few ewes.
Also breeder of Shorthorn cattle, Belgian horses and Berkshire hogs.

**Romneys, Lincoln, Corriedale**

AND HAMPSHIRE EWES AND RAMS.

All pure bred, not registered. Have especially fine lot Hampshire ewe lambs, yearlings and three-year-olds. Any size lot. Write me on any kind of sheep deal.

H. STANLEY COFFIN, Yakima, Wash.

**SHEEP FOR SALE**

Registered Shropshire, Oxford, Lincoln, Hampshire and Cotswold rams; 50 head registered Shropshire ewes; 3000 stock ewes, Lincoln, Cotswold and Shropshire breeds; 500 ewes, lambs, Cotswold and Lincoln ram lambs. Write for prices.

EARL WOOD, Silverton, Ore.

## SHROPSHIRE SHEEP

**Shropshire and Hampshire Rams**

Registered stock. Spring lambs and yearlings. No ewes for sale.

GRANT B. DIMICK, Oregon City, Ore.

**It Costs Only a Postal Card to Send for a Catalog**

on anything advertised in this paper in which you are interested. Keep a supply of postal cards handy so that when you find something you want to learn more about you can write a card for free literature about it.

**Registered Holstein Heifer**

for sale; also May and June farrowed O. I. C. pigs, either sex, from matured sows, with pedigree; by a son from a grand champion sow. Also 18-month-old sows to farrow second litter this fall.

E. C. SCHUMACHER, R. 1, Granger, Wash.

## POLAND CHINA SWINE

**Big Type Poland Chinas**

Mouw, Fesenmeyer and Herring strains, either sex. Also registered Shorthorn cattle; good individuals.

H. J. HOWSER, Stites, Idaho.

**Big Type Poland Chinas**

Peter Mouw and John B. Lawson strains. Young boars and bred or open gilts. Good individuals.

CLIFFORD RIGGS, Touchet, Wash.

**NOTICE**

On account of the war I am forced to sell my herd of Poland China hogs, also 100 M. B. turkeys, several geese, ducks and chickens. No help. Order from this ad.

E. A. KRUSE. Roseburg, Ore.

**Unrelated Spring Pigs**

Big type and big medium. Both sexes. Most popular strains.

C. W. SHUMATE, Tumwater, Wash.

**BIG TYPE POLANDS**

Genuine—Guaranteed.

GEO. W. BUCK, Oregon City, Ore.

## BERKSHIRE SWINE

**Berkshire Hogs for Sale**

Have a number of sows, 18 months old; will farrow second litter this fall. Also young gilts and boars of all ages; all from prize winners. Write for prices.

EARL WOOD, Silverton, Ore.

**Kintyre Farm Berkshires**

Weanling pigs, bred sows, service boars.

CLARK BROS, Yakima, Wash.

## DUROC-JERSEY SWINE

**Ioka Farm Durocs**

One excellent boar at breeding age. Bred gilts and weanling pigs of either sex.

DOERFLER BROS., Silverton, Ore.
A. N. DOERFLER, Mgr.

FOUR DUROC GILTS BRED TO FARROW this fall, also spring pigs, on hand.

E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE, Yakima, Wash.

## HAMPSHIRE SWINE

HAMPSHIRE HOGS

have won every feeding contest entered since 1914. Weanling pigs, gilts, bred or open. Our blood lines can not be beat.

TUTTLE BROS. Asotin, Wash.

When answering advertisements don't fail to mention this paper.

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, Sept. 21.—Lowest prices yet for corn since trading in present deliveries began resulted today, chiefly from prospects of sustained liberal receipts here. The market closed unsettled 1 3-4c to 2 1-2c net lower, with October $1.48 1-4 to $1.48 3-8 and November $1.45 3-4 to $1.45 7-8. Oats finished 1-4c off to 1-4c up and provisions varying from 17c decline to 10c advance.

**Cash Quotations.**

CHICAGO, Sept. 21.—Corn—No. 2 yellow, $1.62@1.65; No. 3 yellow, $1.53@1.58; No. 4 yellow, $1.48@1.52.

Oats—No. 3 white, 73@73 1-2c; standard, 73 1-4@73 3-4c.

Rye—No. 2, nominal; No. 3, $1.60.

Barley, 90c@$1.04.

Timothy, $7@10.

Clover, nominal.

Pork, nominal.

Lard, $26.80.

Ribs, $23@23.75.

**Pacific Northwest Grain.**

PORTLAND, Sept. 21.—Grain, September delivery bids: Oats, No. 2 white feed, $60.50; barley, standard feed, $50; A, $52. Eastern oats and corn in bulk: Oats, No. 3 white, $53; 38-pound clipped, $55; corn, No. 3 yellow, $67.50; No. 3 mixed, $67; October oats, No. 2, $60.50; barley, feed, $50; A, $52; oats, No. 3, $53; clipped, $55; corn, yellow, $66.50; mixed, $65.50.

Today's car receipts—Wheat, 81, barley 7, flour 12, oats 3, hay, 29.

SEATTLE, Sept. 21.—Yesterday's receipts—Wheat, 15, oats 5, corn 2.

TACOMA, Sept. 21.—Car receipts—Wheat 17, corn 2, oats 2, hay 1.

**Minneapolis Wheat.**

MINNEAPOLIS, Sept. 21.—Flour unchanged; shipments, 81,326 bbls.

Barley, 84@95c.

Rye, $1.58@1.58 3-4.

Bran, $28.77.

Wheat receipts, 423 cars, compared with 227 cars a year ago. Cash, No. 1 northern, old, $2.22.

Corn—No. 3 yellow, $1.62@1.65.

Oats, No. 2 white, 69 3-4@71 1-4c.

Flax, $4.13.

## Portland Market.

PORTLAND, Ore., Sept. 21.—The scarcity of butter has put the local market up 2 cents. Prints have been advanced to 58@59c, cubes are selling at 55 cents and butter fat is up to 62 cents. The cheese market has also gained a cent.

The egg market is slow and unsatisfactory. Ranch receipts are not heavy, but storage eggs and eastern stock are offered freely.

Poultry and dressed meats clean up readily at good prices.

There is little change in the potato situation. Idaho Rurals are selling at $2@3.25, Yakima Netted Gems at $3.25 and Oregon Burbanks at $2.50@3. There is a good movement in onions at slightly higher prices. Oregon Yellow Danvers bringing $2.50@$3.

Hop picking continues where the crops had been contracted for. Dealers estimate that 10,000 bales will be saved in Oregon, 8000 bales in Yakima and 1500 to 2000 bales in western Washington. The California harvest is figured at 65,000 bales.

Butter—Cubes, extras, 55c; prints, 58@59c; butterfat, No. 1, 62c, delivered.

Eggs—Oregon ranch, candled, 48@50c; selects, 54@55c per dozen.

Cheese—Jobbers' buying prices, f. o. b. dock, Portland: Tillamook triplets, 30c; Young Americas, 31c per lb; Coos and Curry, f. o. b. Myrtle Point, triplets, 28 1-2c; long horns, 29 1-2c per lb; 1-4 discount to Portland trade.

Poultry—Hens, 26@27c; broilers, 27@30c. ducks, geese and turkeys, nominal.

Pork—Fancy, 25c.

Veal—Fancy, 21c per lb.

Potatoes—Oregon, $2.50@3 per cwt.

Hay—Buying prices, f. o. b. Portland; Eastern Oregon timothy, $30 per ton; valley timothy, $29; alfalfa, $27; valley grain hay, $26@27; clover, $28; straw, $9@10.

## Portland Wheat.

PORTLAND, Ore., Sept. 21.—The mixed flour proposal of the government is still pending, and it is believed in the trade it will go through. In that case the millers will support it as a war time measure. To comply with it the milling industry of the northwest will have to be more or less readjusted. Mills that are not in a position to grind substitutes can not partake in government business, and after supplying their local wants will have to cease operations. The question of getting substitute cereals is said to be about as difficult as getting new machinery to grind substitutes. There is no doubt there will be plenty of California barley to be had, and it should be fairly reasonable in price, but the cost of getting it to the northwestern plants will be considerable.

Barley was quoted at the exchange the close of the week at $52 for milling grade. The impression prevails in the local grain trade that the price will go at least $5 cheaper. None of the big California crop of 600,000 tons has been sold yet. The Export company is not interested and it is believed will not be. The California home requirements, Hawaii, etc., are figured at 250,000 to 300,000 tons, so there will be a big surplus to work off on the Coast. The eastern market can not be invaded as there is plenty of barley there and the brewers are closing down. Eastern barley, in fact, is now being shipped into the northwest.

The other grain markets are quiet. Oats are quoted at $60.50 sacked and $53@55 bulk. Bulk corn bids were $65.50@67.50.

**The Threshing Problem Solved**

Threshes cowpeas and soy beans from the mown vines, wheat, oats, rye and barley. A perfect combination machine. Nothing like it. "The machine I have been looking for for 20 years." W. F. Massey. "It will meet every demand." H. A. Morgan, Director Tenn. Exp. Station. Booklet free.

KOGER PEA & BEAN THRESHER CO.,
Dept. 15 Morristown, Tenn.

## Live Stock Quotations.

**At Chicago.**

CHICAGO, Sept. 21.—(United States Bureau of Markets.)—Hogs—Receipts, 6000. Market 10c to 15c lower than yesterday's average. Butchers, $19.85@20.40; light, $20@20.40; packers, $18.90@19.65; rough, $18@18.75; pigs, good to choice, $18.50@19.

Cattle—Receipts 4000, compared with a week ago, top native steers, 25c higher, medium to choice unevenly 50c to $1 lower; cheaper grades, 15@25c lower; bulk western 25c lower; cows and heifers mostly 25c to 40c lower; canners and bulls 15c to 25c lower; calves 25c higher; best feeders strong; common stockers, 10c to 15c lower.

Sheep—Receipts 9000, compared with week ago, fat lambs mostly 50c higher; feeders strong; fat and feeding sheep steady to 25c higher.

**At Portland.**

PORTLAND, Ore., Sept. 21.—Cattle, steady. Receipts, 98. Steers, prime, $12@13; good to choice, $11@12; medium to good, $9.75@11; fair to medium, $8.25@9.25; common to fair, $5.75@8.25; cows and heifers, choice, $8@9; medium to good, $5.75@8.25; fair to medium, $4.75@5.75; canners, $3@4; bulls, $5@8; calves, $9@12; stockers and feeders, $6@8.

Hogs—Weak. Receipts, 294. Prime mixed, $19.50@19.75; medium mixed, $19@19.35; rough heavies, $18@18.35; pigs, $16@17; bulk of sales, $19.35@19.50.

Sheep—Firm. Receipts, 816. Prime lambs $13.50@14.50; fair to medium, $11@12; yearlings, $10@11; wethers, $9@10; ewes, $6.50@8.50.

**At Seattle.**

SEATTLE, Sept. 21.—Receipts, 130. Offerings exclusively secondary and common cows, the bulk of which went over the scales at under 7 cents, against a top of 8@8 1-2c.

Hogs—Receipts, 836. Market steady. Packers brought in a special trainload of finished South Dakota hogs from Mitchell to maintain local requirements.

Hogs—Prime light, $19.75@20; medium to choice, $19.50@19.60; medium heavy, $18.50@19; rough, $17.50@18; pigs, $17.50@19.

Cattle—Best steers, $11@13; medium to choice, $10.50@11.50; common to good, $8@8.50; medium, $5@$7.50; bulls, $5@7.50; calves, $5@10.

Sheep—Spring lambs, $13@15; yearlings, $9@12; ewes, $6@9.

**At North Sale Lake.**

NORTH SALT LAKE, Utah, Sept. 19.—Cattle—Receipts, 275 head. Choice heavy steers, $11@12; good steers, $9.50@10.50; fair steers, $8@8.50; choice cows and heavy heifers, $7.50@8.25; fair to good cows and heifers, $6.50@7.25; cutters, $5.75@6.25; canners, $4.75@5.50; fat bulls, $6.50@7; bologna bulls, $5.50@6.25; veal calves, $9@11.

Hogs—Choice fat hogs, 175 to 250 pounds, $19.25.

Sheep—Choice spring lambs, $14@15; wethers, $9.10; fat ewes, $8@9.

**At Spokane.**

At the Spokane stockyards the week opened with a heavy run of cattle, the majority of which were light steers and plain cows. Calves were plentiful, but few in prime veal condition.

Tuesday the cattle receipts were light, as well as the hog receipts, $19.60 per cwt. being the best price paid for fat hogs. A heavy supply of cattle was again offered on Wednesday's market. Choice killers in hogs were quoted at $19.75, the lighter in this grade at $19.65.

Fifteen carloads of cattle arrived Thursday. Ordinary steers and plain cows were in majority with a liberal supply of thin calves. Lambs were in fair condition selling from 11 to 13 cents. The bulk of hog sales were made at $19.85.

Plain cows were the chief offering Friday, the best price paid for hogs being $19.75. A summary of the livestock run follows:

| | Cattle | Calves | Hogs | Sheep |
|---|---|---|---|---|
| Saturday, Sept. 21 | 186 | ... | 96 | 4 |
| Friday, Sept. 20 | 251 | 68 | 202 | ... |
| Thursday, Sept. 19 | 386 | 82 | 103 | 309 |
| Wednesday, Sept. 18 | 258 | 10 | 325 | 173 |
| Tuesday, Sept. 17 | 35 | 255 | 38 | 13 |
| Monday, Sept. 16 | 515 | 82 | 555 | 1442 |
| Weeks ago | 139 | 18 | 29 | 8 |
| Week ended Saturday | 1831 | 313 | 1825 | 2708 |
| Year ago | 156 | ... | 2 | ... |
| Two years ago | 8 | ... | ... | ... |

The bulk of Saturday's cattle offering was a herd of stock driven in to be prepared for shipment to the country. The offering to the local trade afforded little material for much activity, with but few sales of fat stuff being made. The cattle market is firm, with Friday's close at the following:

| | |
|---|---|
| Prime steers | $12.50@13.25 |
| Good to choice steers | 11.00@12.00 |
| Medium to good steers | 10.00@11.00 |
| Fair to medium steers | 8.50@ 9.50 |
| Common to fair steers | 5.50@ 8.00 |
| Choice cows and heifers | 8.25@ 9.25 |
| Medium cows and heifers | 6.25@ 7.75 |
| Canners | 3.00@ 5.00 |
| Bulls | 5.00@ 7.25 |
| Calves | 7.00@10.00 |
| Stockers and feeders | 6.00@ 8.00 |

One carload of hogs arrived late and will not be submitted for sale until Monday. With prospects for light receipts Monday, the market closed strong at the following:

| | |
|---|---|
| Prime mixed | $19.60@19.85 |
| Medium mixed | 19.00@19.35 |
| Rough heavy | 18.00@18.75 |
| Pigs | 18.25@19.00 |
| Stockers and feeders | 16.75@18.75 |
| Bulk of sales | $19.75 |

## Butter and Eggs.

PORTLAND, Sept. 21.—Butter—Prints, extras, 58@60c; cubes, extras, 55c; prime firsts, 52c; dairy, 36c.

Butterfat, Portland delivery, No. 1 sour cream, 60c.

CHICAGO, Sept. 21.—Butter—Higher; creamery, 51@59 1-2c.

Eggs—Lower; receipts, 6929 cases; firsts, 42 1-2@43c; ordinary firsts, 41@42c; at mark, cases included, 40@42 1-2c.

## Seattle Market.

SEATTLE, Sept. 21.—Coloring of apples in eastern Washington orchards has been a slow process, due to heavy smoke clouds, through which the sun did not shine, and market conditions are being affected. Picking time has been delayed two weeks over the expected period and the movement to market has been retarded. It is not believed that the fruit will be rolling in volume before October 1.

Prices are holding at the present level. White winter bananas reached the market two weeks earlier than last season and a big volume was sold before the Jonathans started to move. Rome Beauties, according to reports received by distributors here, will be 400 carloads short. Quotations f. o. b. shipping points in eastern Washington are $2.25 for Spitzenburgs, $3 for Delicious, $1.85 for Staymans, $2 for Winesaps and $2 for Rome Beauties, prices being fixed on sizes of 175 and larger.

Fall peaches sell as fast as received at $1.75. A few October Krummels will arrive through the coming week. Pears are cleaning up at $2.75@$3 strong for fancy stock.

The potato market is weak, and a decline to $30 f. o. b. before fall digging is predicted. Spuds received from Yakima so far this season are of a very inferior quality and there is much loss through shrinkage.

The demand for storage eggs has been little short of phenomenal and operators who kept cleaned up on fresh stock admit that prices had reached the point where buyers would no longer participate, and accordingly switched in a body to storage eggs, which are selling at 11 to 13c per dozen less.

Poultry prices for the coming week will be stronger. Jobbers expect to bid a cent higher on large and small hens. Receipts throughout the week have been light, greatly reducing the surplus going into the coolers for the winter demand.

There was a slightly firmer tendency to the egg market for the weekend. Cut prices, carried on by a minority of the houses with 60 cents as the base, are spending their force with the exhaustion of surplus stocks. Jobbers will start the new week easy with bids of 57 cents and will endeavor to feel out the market before plunging heavily with higher bids to producers.

The butter market is as firm as before the advance of 2 cents earlier in the week.

**Buying Prices.**

Eggs—Select ranch, 57c per doz; pullets, 47@48c per doz.

Butter—Fresh dairy, 32c per lb; butter fat, 63c per lb; bakers', 38c per lb; raw milk, $3.10 per cwt.

Poultry—Broilers, live, 1918, under 2 lbs, 30c per lb; 2 lbs and over, 28c per lb; hens, 3 1-2 to 4 lbs and up, 27c per lb; under 3 1-2 lbs, 25c per lb; old roosters, 17@18c per lb; ducks, live, fat, 23c per lb; squabs, large, $3.50 per dozen; geese, fat, live, 21@22c per lb; Belgian hares, 12@16c per lb; guineas, $7 per dozen; turkeys, young toms and hens, dry picked, 10 lbs and up, 30@35c per lb.

Hogs—Light, 21@23c per lb; heavy, 19@21c per lb.

Beef—Steers, fat, 12@15c per lb; heifers, fat, 14@15c per lb; cows and bulls, 11@14c per lb.

Veal—Fancy light, 20@21c per lb; do heavy, 13@18c per lb.

Mutton—Fat, 22c per lb; spring lamb, fat, dressed, 25c per lb.

## Seattle Wheat.

SEATTLE, Sept. 21.—The embargo against receiving any more wheat at this terminal for eight days by the railway administration will in some degree relieve the increasing pressure on the storage spaces here, but it will add to the burdens of farmers in the interior of eastern Washington who must now pay storage and carrying charges, insurance and interest. Millers and grain dealers, however, insisted that there was no space available either in the mill bins, the port commission wheat storage spaces or elsewhere and that an emergency existed.

Millers and grain dealers estimate that 70,000 to 100,000 tons of wheat and flour per month would be ready if ships could be supplied. The government gives no assurances that the situation will be any easier in October, although the shipping board and grain corporation officials are working out a plan to divert sea tonnage here from other localities and so assist millers, grain dealers and farmers toward cleaning up their holdings and turning them into cash.

One reason for the wheat embargo as announced by millers is that the grain corporation has begun on its program of holding out 300,000,000 bushels of this year's crop for any emergency that might occur in 1919, such as shortage of crop, continuation of the war, destruction of ocean wheat-carriers by submarines, or any other event that might tend to reduce the food supply of the allied armies.

In their appeal to Washington for more ships, Seattle millers have said with much reluctance that unless they can get some of the wheat and flour aboard ship and to sea within 10 days they will be compelled to close down, Tacoma mills have already done so.

**Advantages of Smokeless Powder.**

The advantages of smokeless powder besides its virtue of high explosiveness are twofold. It does not create a smoke cloud that betrays the location of the gun or gunners, and at the same time the man behind the gun is not confused for a second by a pall of smoke that obscures the range of vision in the direction of the enemy.

**California's Weeping Trees.**

California has but two species of native trees that are normally of weeping habit. One is quercus lobata, the valley oak, having its most southerly range near Burbank. The other is picea breweriana, the weeping spruce, which is found in a few isolated mountainous sections in the northwestern corner of the state.

# Farmers' Want Ads

**SITUATIONS WANTED—Male** 21

DAIRY POSITION WANTED; MARRIED MAN, 29, 1 child, desires position in large dairy as milker, where he can learn up-to-date dairying, testing, record-keeping, etc. Mechanical milking preferred. Three years' experience with the Empire. Do not use liquor or tobacco. Draft 4A class. Myself and wife educated Americans. Address Mechanical Milker, care Oregon Farmer, Portland Ore.

EXPERIENCED FARMER WANTS WORK on good farm or ranch for duration of the war; has wife and two children; desires location near school; Oregon, Idaho, Utah or California preferred; best of references. J. E. Swan, Moorcroft, Wyo.

**EDUCATIONAL** 45

EARN MORE. ENROLL ANY TIME. AT Behnke-Walker, Portland, northwest's biggest business college, because best. Graduates assured positions. Write for catalogue.

**Do You Want a Well Drilled?**

If so, we can very likely put you in touch with a competent driller in your section.

**EXPERT ADVICE FREE OF CHARGE**

Upwards of a Thousand

**KEYSTONE**

WELL DRILLING MACHINES

now operating in Pacific northwest. We will send you the name of driller nearest you free on request. Will there likely be other wells to drill in your neighborhood?

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Pacific Northwest Distributor for Keystone Driller Co., Beaver Falls, Pa.

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RUBBER METAL SACKS

We pay full market value, correct weight and assortment, prompt returns. Write for prices. We want your business.

**PACIFIC HIDE & FUR DEPOT**

Joseph Thiebes and C. T. Symmes,
1101-09 Railroad Ave., Spokane, Wash.



Purebred Registered

**HOLSTEIN CATTLE**

Leave out of consideration the greater direct cash return and Holsteins are still the best investment you can make. Great strength and constitutional vigor make the typical Holstein long-lived, free from disease and sure to produce healthy calves.

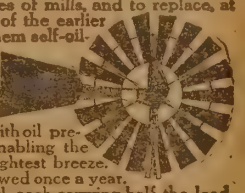
A thirteen-year old Holstein owned by the Kansas Agricultural college has recently finished a year's record of 15,773 pounds of milk and 513 pounds of butterfat.

This record indicates the dollars and cents value of Holsteins.

Send for FREE illus. descriptive booklets. The Holstein-Friesian Assn. of America, F.L. Houghton, Sec., Bx.205, Brattleboro, Vt.

**THE SELF-OILING WINDMILL**

has become so popular in its first three years that thousands have been called for to replace, on their old towers, other makes of mills, and to replace, at small cost, the gearing of the earlier Aermotors, making them self-oiling. Its enclosed motor keeps in the oil and keeps out dust and rain. The Splash Oiling System constantly floods every bearing with oil preventing wear and enabling the mill to pump in the lightest breeze. The oil supply is renewed once a year. Double Gears are used, each carrying half the load.



We make Gasoline Engines, Pumps, Tanks, Water Supply Goods and Steel Frame Saws.

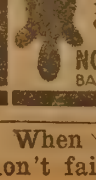
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This is the farmers' "Want," "Sale" and "Exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rate, 7 cents a word per insertion, with a special rate to farmer subscribers to the Washington Farmer of 6 cents a word per insertion for from 4 to 12 times, and 5 cents a word per insertion for 13 times or more.

All commercial and land advertising, 7 cents per word each insertion. Open also to nonsubscribers.

In using these columns advertisers must observe: (1) No advertisement will be inserted for less than 75 cents. (2) Every word, number and initial, including name and address, must be paid for. (3) Cash must accompany order.

Above rates also include insertion in The Oregon Farmer and The Idaho Farmer.

**FRESH FOOD PRODUCTS 56**

WILL DELIVER BOX 48 LEMONS, ANY place, exp. paid, $1, or parcel post $1.25. Ernest Vince, Santa Barbara, Cal.

**HONEY, BEESWAX—Wanted 58**

SEND SAMPLES OF YOUR HONEY AND beeswax. State quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

**EGGS AND BUTTER WANTED. 59**

WE ARE ALWAYS IN THE MARKET FOR good eggs and dairy butter. Send us your next shipment. Oregon Farm Products Co., 386 Halsey st., Portland, Ore.

**MISCELLANEOUS—FOR SALE 60**

SASH AND DOORS.

Write for our large illustrated catalog No. 27, of sash, doors, frames, paints, building paper, etc., sent free, postage paid, on request.

Just received a fresh stock of prepared roofing, which we are selling at $1.80 for 1-ply, $2.25 for 2-ply, and $2.75 for 3-ply.

We sell any one, ship anywhere, and guarantee safe delivery.

O. B. WILLIAMS CO.
1943 FIRST AVE. SO., SEATTLE.

SHARPLES MILKING OUTFIT, 4-UNIT, FOR sale; going out of business. Schroeder Bros., Arago, Oregon.

**MISCELLANEOUS WANTED 63**

POULTRY WANTED.

We are cash buyers of poultry and dressed meats, also cream. Write us for prices, shipping tags and premium catalogue for cream shippers.

COMMERCIAL CREAMERY CO.
SPOKANE, WASH.

**MACHINERY—For Sale 93**

FLOW TYPE RUMLEY STEAM TRACTOR, 25-HORSEPOWER, DOUBLE CYLINDER, PRACTICALLY NEW. FOR SALE AT A BARGAIN.

28x106 high-pressure boiler. Cylinders 7 inches in diameter, with 12-inch stroke. Belt wheel 41 inches in diameter, with a 12-inch face. Rear wheels 74 inches in diameter. Width of tire, 30 inches. Extreme width of engine 122 inches, length 254 inches. Subject to inspection at Seattle, Wash. Ask us for prices.

AMERICAN HOIST & DERRICK CO.
Seattle, Wash., and St. Paul, Minn.

"WITTE" GASOLINE ENGINES
save labor, and are carried in stock by
HIGGINS MACHINERY COMPANY,
512 FIRST AVE. S., SEATTLE.
Write for Catalogue.

**AUTOMOBILES 114**

FORDS START EASY IN COLD WEATHER with our new 1919 carburetors; 34 miles per gallon; use cheapest gasoline or half kerosene; increased power; styles for any motor; very slow on high; attach it yourself; big profits to agents; money-back guarantee; 30 days' trial. Air-Friction Carburetor Co., 321 Madison, Dayton, Ohio.

**STOVE AND FURNACE REPAIRS. 126**

WRITE M. S. RUBENS, SPOKANE, FOR ANY parts needed to repair stove, furnace.

**PETS—Dogs, Birds, Etc. 171**

PEDIGREED AIREDALE DOGS AND PUPS. Barron White Wyandotte cockerels from trapnested hens. Marc Tuttle, Beach, Wash.

**POULTRY 174**

SINGLE COMB WHITE LEGHORN AND Rhode Island Red cockerels and pullets. Mrs. Rominger, Underwood, Wash.

**LIVE STOCK. 177**

FOR SALE—TO CLOSE AN ESTATE, IN quantities to suit, some 20,000 sheep, ewes, lambs and bucks, from $10 up; also 800 head of stock cattle, 45,000 acres range land, best anywhere. Coffin Bros., North Yakima, Wash.

REGISTERED HEREFORD BULLS — WE have 60 head yearlings and twos; eastern-bred, and worth more than it takes to buy them. Nye & Nye, Rigby, Idaho.

OXFORD RAMS, YEARLINGS AND OLDER; have one, very large; farmers' prices. Albert Wiltz, Addy, Wash., Route 2.

**HOTELS 306**

WHITE'S HOTEL AND RESTAURANT—Rooms, hot and cold water, 75c up. Breakfast 20c to 40c; dinner, 25c to 50c. Sprague and Stevens, Spokane.

GALAX HOTEL; NEW AND MODERN; 75c and $1. Main and Bernard, Spokane.

NEW MADISON HOTEL, 75C AND UP. 1ST and Madison, Spokane, Wash.

**RUBBER STAMPS AND SEALS 384**

FOR RUBBER STAMPS, STENCILS, BADGES, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

**ARTIFICIAL LIMBS 424**

SCHINDLER ARTIFICIAL LIMB CO., S115 Wall st., Spokane, Wash.

**PLUMBING, STEAMFITTING 594**

PLUMBING SUPPLIES AT WHOLESALE. Stark-Davis Co., 212 3d st., Portland, Ore.

**SEEDS. 620**

WE SPECIALIZE IN TIMOTHY, ALFALFA, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Idaho.

**FARM LANDS FOR SALE 651**

YOUR CHANCE IS IN CANADA—RICH LANDS and business opportunities offer you independence; farm lands $11 to $30 acre; irrigated lands, $35 to $50; twenty years to pay; $2000 loan in improvements; loan of live stock; taxes average under twenty cents an acre; no taxes on improvements, personal property or live stock; good markets, churches, schools, roads, telephones; excellent climate—crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Allan Cameron, general superintendent land branch Canadian Pacific Ry., 36 Ninth ave., Calgary, Alberta.

$3 A. GOOD LAND; RAISE ANYTHING; plenty of water. Write owner. Mrs. A. B. McMath, Box 82, Elmira, Cal.

**FARM LANDS—FOR SALE 651**
**Continued.**

A BIG LAND OPENING.
COWS, HOGS, AND A BANK BOOK.

Your dream of life, of ease, comfort and independence await you

On Port Susan Bay, Snohomish County; 6000 acres of the best land that lies out doors; a 2 hours' ride from Seattle places your feet on the richest, most productive soil in the whole state of Washington; rail and water transportation; near paved roads, schools, churches, cannery and condensery; 3½ miles of waterfront and finest beach on Puget Sound; 20 miles of beautiful lake shore, surrounding 8 picturesque lakes; these lakes teem with trout. Get in on the first choice for $35 per acre and up; 10 yearly payments, 6 per cent interest.

This is but the beginning of the story of Birmingham. Send to the owners for illustrated literature. BROWNELL LAND CO., 904 Third ave., Seattle, Wash.

LANDSEEKERS! INVESTIGATE GOVernor Stevens' old homestead at Belmore, in Thurston county. Ten, 20, 30 and 40 acre tracts of fertile clay loam and alder bottom, at $75 an acre; level as a floor and absolutely free from gravel; productive farms all around; running stream for irrigation; crop failures are never known in this delightful locality, with its mild, equable climate; railroad station almost on the land, and big cities of Seattle and Tacoma quickly reached. Near big army cantonment known as Camp Lewis. A few dollars a month puts you in possession. Write for full particulars.

A. H. REID & CO.
314 New York Block,
Seattle, Wash.

JORDAN VALLEY PROJECT.
MALHEUR COUNTY, OREGON.
THIRTY THOUSAND ACRES
OPEN FOR ENTRY SOON.
WRITE FOR DATE.

JORDAN VALLEY FARMS.
524 IDAHO BUILDING. BOISE, IDAHO.

60 ACRES SAGE BRUSH LAND; FINE SOIL; irrigable at very reasonable cost; will produce 6 to 8 tons alfalfa per acre, and great crops of corn, grains and truck; fine climate; 2 miles from Vale, county seat, R. R., schools, churches, health resort. $1600 cash will handle, 10 years' on bal., no interest due for two years; all can be cropped next year and once in crop, worth twice what I am asking. Would make two fine 30-acre farms. O. E. Carman, Vale, Ore.

STOCK FARM FOR SALE—440 ACRES; 10 miles from Olympia; 60 acres upland, cleared; 100 acres bottom land, cleared; 280 acres logged-off land; good soil; good buildings; running water; good roads; owner unable to look after. $4000 will handle, balance on terms. Further particulars write J. M. Dempsey, Auburn, Wash.

RARE OPPORTUNITY—67 ACRES FRUITS, nuts, alfalfa, Tokays, etc.; irrigated; tools, tractor, horses and equipment; every convenience. Near state highway and capital; beautiful location. Price $185 per acre. Send for full information. Tubble Bros., Elk Grove, Cal.

FIVE CENTS AN ACRE CASH.

Texas school land for sale by the state at $2 per acre; 5 cents an acre cash and balance in 40 years at 3 per cent. Send 6 cents postage for further information. Investor Publishing Co., Dept. 36, San Antonio, Tex.

80-ACRE PRUNE ORCHARD AND DAIRY farm; 6-year-old trees; five acres pasture, balance trees and clover; 1½ miles from Meridian, Idaho; two big driers; must sell quickly. Bargain. Write Horn Orchard Co., Boise, Idaho.

330-ACRE FARM FOR SALE—200 UNDER cultivation; good buildings; close to town; income around $600 per month; 3 men can do the work; save commission, buy from owner. Write to Studer Bros., Elma, Wash.

FOR SALE — ALFALFA, WHEAT AND stock farm; well improved alfalfa farms for $75 to $100 per acre; paid water. The land produces 5 to 7 tons per acre. John Hardwick Realty Co., Vale, Ore.

LAND—NEVADA, NORTHERN CALIFORNIA and Oregon, with water for irrigation. Settlers rightly located—no charge. Colonization Department Western Pacific Railroad, Reno, Nevada.

320 ACRES CHOICE WHEAT LAND; ALBERta. Price $16 per acre. Terms.

UNION INVESTMENT CO.
406 ZIEGLER BLK. SPOKANE, WASH.

STUMP LANDS, FAMOUS FRUIT, HAY BELT, Hood river valley; irrigated; practically level; employment; 10 years' time. Box 185, Hood River, Oregon.

STOCK AND DAIRY RANCH FOR SALE AT a bargain. 1160 a. in western Oregon, in Lincoln co. For details write Emil T. Raddant, Orton, Ore.

**FARM LANDS—WANTED 654**

WANTED—TO HEAR FROM OWNER OF farm for sale. Mrs. Booth, Drawer D, Highland Park, Des Moines, Iowa.

**FARM LANDS FOR RENT 657**

12 HEAD WORK HORSES, 5 SETS HARNESS, 1 Jersey milch cow and calf, 1 Jersey heifer, 2 gang plows, 1 four-section drag harrow, 1 Smith weeder, 1 three-section packer, 4 grain drills, 1 surrey; also lease on 480 acres wheat land. Box 196, St. John, Wash.

**FOR SALE OR EXCHANGE 702**

FOR SALE OR EXCHANGE—300 ACRES DIversified farm; in eastern Washington; 3 miles from town; all level; no stumps; splendid new set of buildings; well watered; new complete set of farming tools, horses, hogs, cattle and growing crop, everything goes. Will sell equity of $18,000 for cash or trade for lumber yard, bank or grain elevator in good farming community. Address care of Home Lumber company, 2901 Trent ave., Spokane, Wash.

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For Subscription to The Washington Farmer

**25c**
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For 3 Years

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For 5 Years

We are holding open our direct-to-the-reader subscription plan during the summer months. It means a real saving at a time when most things cost more.

The central idea of the plan is to deal direct with our subscribers in securing and renewing subscriptions, thus eliminating the middleman and giving our friends the benefit of every penny saved.

It is gratifying to know that the new cooperative system has had the heartiest kind of backing; and that it has been put on a successful basis. We could not have got along without the assistance of well wishers who have told their neighbors about the plan and passed along copies of the paper.

There are many things of value which your state farm paper can bring you and your neighbors during the summer months. The various departments will be full of helpful hints, instructive articles and entertainment. Send in the orders!

**THE WASHINGTON FARMER**
Review Bldg., Spokane, Wash.

**THE WASHINGTON FARMER**
Review Bldg., Spokane, Wash.

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The Winchester pattern. 320 pellets out of a possible 431, or 74 per cent of the shot charge, evenly distributed. No birds get through.

# A quick eye and a good shot pattern

A QUICK eye and a good shot pattern, that's the game-getting combination. Given an old-timer with a reliable gun in his hand and the rest of the story is up to the shot pattern.

Now the secret of good patterns is in the control of the gas blast from the exploding powder. This in turn depends upon the *wadding* in the shell.

The wadding, like the piston head of a gas engine, must give the explosion something solid to work against so that the shot may be *pushed* out evenly.

It must expand and fill the tube of the barrel, completely sealing in the gas behind it. No gas must escape to scatter the shot.

It must offer just the right amount of resistance to the explosion so as to develop uniform pressure and high velocity without danger of jamming the pellets out of shape at the "choke" or muzzle constriction.




The Winchester system of wadding. The wadding expands evenly, sealing in the gas blast all the way to the muzzle, where it is checked by the "choke" or constriction. The shot cluster travels on ahead unbroken. Actual test target 320 pellets out of 431, or 74% of the shot charge (1¼ oz. of 7½ chilled) inside a 30-inch circle at 40 yds.

## The Winchester System

***Winchester Wadding*** is the result of repeated experiments to determine the most efficient control of the gas blast.

The special construction of the *Base Wad* gives what is known as *Progressive Combustion* to the powder charge.

Combustion spreads instantly through the powder charge. By the time the top grains of powder become ignited the *full* energy of the burning powder behind is at work. Though the explosion is almost instantaneous, it is none the less *progressive*, the final energy and maximum *velocity* of the completely burned powder being developed at the *muzzle* where it is most needed.

Meanwhile, under the heat and pressure of combustion, the tough, springy *Driving Wad* has expanded to fill the barrel snugly all around. No gas escapes. It is completely sealed in. The wadding *pushes* the shot evenly.

At the muzzle, the shot pellets slip out without jamming, while the wadding is checked for a brief interval by the constriction of the muzzle. *It follows some distance behind the shot pattern.*

The shot cluster travels on unbroken by gas blast or wadding and makes the hard-hitting, uniform pattern for which Winchester shot shells are world famous.

***Fish Tail Flash.*** All Winchester smokeless shells are made with the new Winchester Primer—the quickest and most powerful shot shell primer made. Its broad *fish tail* flash gives even and thorough ignition. Every grain of powder is completely burned up before the shot charge leaves the muzzle.

***The Crimp.*** The required degree of pressure necessary in seating the driving wads is worked out in combination with the *hardness* or the *softness* of the *crimping* required for any particular shell.

***Waterproofing and Lubrication.*** In the cold, damp air of the marshes, or under the blazing sun at the traps, Winchester shells will always play true. Winchester waterproofing process prevents them from swelling from dampness. Special lubrication of the paper fibres prevents brittleness and splitting in dry weather.

***Uniform Shells.*** From primer to crimp, Winchester shells are constructed to insure the maximum pattern possible from any load and under all conditions. 25,000,000 rounds of ammunition are fired every year in testing Winchester guns and ammunition. $100,000 is spent annually in the inspection and testing of finished shot shells alone.

## Clean hits and more of them

To insure more hits and cleaner hits in the field or at the traps be sure your shells are Winchester Leader and Repeater for Smokeless; Nublack and New Rival for Black Powder. Write for our Free Booklet on Shells. **Winchester Repeating Arms Co., Dept. WT-31, New Haven, Conn., U. S. A.**



**WINCHESTER**

*World Standard Guns and Ammunition*



OCTOBER 3, 1918.

NOTICE TO READERS: When you finish reading this paper, place a U. S. 1-cent stamp on this notice, mail the paper and it will be placed in the hands of our soldiers or sailors destined to proceed overseas. NO WRAPPER, NO ADDRESS. A. S. Burleson, Postmaster Gen.

PUBLISHED WEEKLY.

# THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

# REMEMBER BELGIUM

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THE road to independence for the orchardist, and the farmer of moderate grain acreage is marked by the trail of the Yuba Model 12-20 Tractor.

The owner of a Yuba 12-20 is independent of adverse conditions of weather or soil. He plows, cultivates and harvests at his own convenience with no worry over his ability to finish on time.

He is independent of unreliable labor, increasingly scarcer, dearer and harder to hold.

He is independent of the erratic horse market as his power resource.

He is independent of the rising cost of feed.

Successful orchard men realize now as never before, that they must abandon horses; and are placing orders for Yuba 12-20 Tractors.

Make your decision without delay.

Tractors may be dearer before they are cheaper.

Your road to independence is on a Yuba 12-20 Tractor.

## YUBA MANUFACTURING COMPANY

MARYSVILLE : CALIFORNIA

Tractor Models: 12-20, 20-35, 40-70 Pump Models: For all Farm Purposes
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There are separate catalogues—ask for the one in which you are interested

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FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 40 THE RANCH PACIFIC DAIRYMAN HORN AND HOOF October 3, 1918

# Farm Production Is Threatened

## *Unless Farm Labor Problem Is Managed With Intelligent Insight*

Unless the farm labor problem is managed with intelligent insight and wise prevision, agricultural production will be curtailed next year in the Pacific northwest.

It would be a serious mistake for those in authority to assume that because sufficient labor was at hand to harvest the crops this season in the Inland Empire, the drain of labor from the farming districts to the coast cities can be continued indefinitely in safety. If the Inland Empire had enjoyed normal crops this year, there would have been an acute shortage of labor. A light crop from Dakota to the Columbia river and from Oregon up into western Canada was handled with a short supply of labor. But the work of preparing for the next harvest requires a normal supply of labor, and it is not at hand. Grain growers are feeling the handicap already, and the outlook for spring operations is not encouraging.

There is a danger that agricultural production next year may be shortened through the whole country by an undue drain of labor to other war industries. Mr. Hoover evidently senses that peril, for he has issued an earnest appeal to the American people to keep up their practice of saving food, particularly wheat, fats and sugar.

The national food administrator informs the public that the allied civilians and armies, the American armies, the Belgian relief and certain neutrals who are dependent upon the United States will require 17,550,000 tons of food stuffs for the year beginning July 1. These requirements are thus classified by Mr. Hoover: Meats and fats, 2,600,000 tons; breadstuffs, 10,400,000 tons; sugar, 1,850,000 tons; feed grain, 2,700,000 tons.

These are enormous demands upon the food producers of this country. To meet the call for breadstuffs, to use one illustration, nearly 350,000,000 bushels of wheat would be required. Breadstuffs sent abroad the coming year will not be wheat alone. There will be some rye, oats and other cereals, but the main prop will be wheat.

The United States has never exported in a single year 350,000,000 bushels of wheat. The nearest approach was in 1915, when, with a bumper crop we exported 332,464,975 bushels.

In the five-year period from 1907 to 1911, our exports of wheat and flour averaged yearly only 116,137,728 bushels. In 1912 they were but 79,689,404 bushels; in 1913, 141,132,166 bushels; in 1914, 145,590,349 bushels, and in 1916 and 1917 they were, respectively, 243,117,025 bushels and 203,578,699 bushels.

Mr. Hoover is right. Food production continues a vital war time industry, secondary not even to shipbuilding; and it would be a lamentable mistake to drain labor from the farms to a point where production would be cut down.

### TO LIFT GRAIN EMBARGO.

**Plenty of Ships Are Now Available, Says Max H. Houser.**

Max H. Houser, federal grain administrator for Oregon, announced Sunday that the embargo from eastern Oregon and Washington points to Portland exporters, whose grain handlers refused further service last week following rejection of their wage demands, probably will be lifted beginning tomorrow.

"There are plenty of ships here now to carry away our grain," said Mr. Houser, "and there is much grain available. Only the refusal of the grain handlers to work is preventing rapid exports. About two-thirds of the exporting firms here have been affected by the walkout of men, who already were earning from $45 to $50 a week each, and who would not consent to arbitration of their demands for still higher wages. Efforts will be made at once to replace the men who quit work."

### MAX H. HOUSER

**Would Do Everything Possible to Assist Farmers of the Northwest.**

Former Governor M. E. Hay of Washington, who has been closely connected with the grain-farming operations of the Inland Empire for many years, writes with reference to the difficulties which have proved a serious embarrassment to wheat growers:

To the Editor: I had never had the pleasure of meeting M. H. Houser until the conference held in Portland about a year ago. I went to this conference prejudiced against Mr. Houser, but after seeing him in action I became thoroughly convinced that the man was thoroughly honest and was doing and would do everything possible to assist the farmers of the northwest. I believe he is working for the government for patriotic reasons and not for any ulterior motive or for financial gain to himself. The same as yourself, I thought he was not as frank as he might or should have been, but this, I can readily understand, came about from lack of time and not from any intentional effort to mislead or appear curt.

Spokane, Wash. M. E. HAY.

### ADVANCES ON WHEAT SHIPMENTS.

To the Editor: I have your favor of the 19th, enclosing copy of Dr. Bryan's article published in the current number of the Farmer. I have read this interview of Dr. Bryan's with great interest, and regret that the government has not found some way of making advances on shipments of grain to terminal points. The food administrators of the northwest zone took this matter up with Mr. Hoover and Mr. Barnes at their recent conference in Washington, but we were advised that no plan could be worked out for making an advance on these cars.

CHARLES HEBBERD,
Federal Food Administrator for Washington.
Spokane, Wash.

### SITUATION AFTER THE WAR.

To the Editor: Your letter of September 5, with Mr. Houser's reply to your article in the Farmer of August 29, is carefully noted. I appreciate very much the very patriotic and laudable position of the Farmer, and feel its argument was not very well answered. Undoubtedly the industrial situation after the war will be acute. The problem will vary in different states and localities. The American people are not giving as much thought to meeting the situation as is the case in foreign countries, particularly in Great Britain. Idaho has a very competent committee, I understand, seeking to solve their problem there. Washington thus far has made no attempt along this line.

H. C. SAMPSON,
Vice President-Manager Lincoln Trust Co.
Spokane, Wash.

### FARM ADVISORY COMMITTEE.

**Leading Producers Representative of All Agricultural Interests.**

To the Editor: It has been our recent experience in the east that the advisory committee of 24, which is composed of leading producers representative of all agricultural interests in the United States and serves as adviser to Secretary Houston and Mr. Hoover, does give to our farmers a very considerable measure of representation. Governor Stuart, the chairman of this committee, is also a member of the price-fixing committee of the war industries board, and this committee considers every question put to it by our producers, and in many instances has been most influential in securing needed changes in regulations and in policy. I am convinced that our national government has suffered through lack of counsel with representatives of farming interests, but we surely are improving conditions through this committee of 24. Personally I wish they had a more distinctive and independent official standing.

ALVA AGEE,
Secretary State Department of Agriculture.
Trenton, N. J.

### SITUATION CONFRONTING GROWERS.

To the Editor: I thank you very much for a copy of the interview of Dr. Bryan. There is a very serious situation confronting our wheat growers, and if they are not afforded some relief the farmers are not going to be in shape to subscribe very liberally to Liberty bonds or other patriotic funds.

EDWIN T. COMAN,
President Exchange National Bank.
Spokane, Wash.

### FOOD PRODUCTION ADMINISTRATOR.

To the Editor: I am heartily in accord with your urgent request asking for a food production administrator. It does seem to me that this is even more important than the partial management of price and distribution of that which the country produces. Surely President Wilson will respond to your request, and I shall look forward with personal interest to the result.

N. D. SHOWALTER,
President State Normal School.
Cheney, Wash.

### FULL INFORMATION FOR PRODUCERS.

To the Editor: I have read with interest your communication of August 29th, and have also looked over the article in the Farmer entitled "Will It Pay Wheat Grower to Ship Direct." It is important that full information should be before the producers, particularly as regards the sale of wheat. I have not gone into the wheat handling question much, as state food administrator, since this is more definitely handled by the grain corporation of the food administration.

ALFRED ATKINSON,
Federal Food Administrator for Montana.
Bozeman, Mont.

### DIVIDE THE PASTURE.

**By Carl J. Menze, Ferndale, Wash.**

On farms where cleared land is used for pasture, or on farms where logged off land is used for pasture, it is an advantage to divide the pasture into several fields and turn the cattle into one field at a time and let the grass in the other fields have an opportunity to grow. If the cattle are allowed to roam over the entire pasture, and there is a large number of cattle for the size of the pasture, when they graze the field short it will not grow much the remainder of the year, especially if it is a very dry year. When the pasture is divided into several fields, and they are used in turn, there will be an increase in the amount of feed produced and the grass plants will not be weakened by being constantly grazed close to the ground. The only draw back in this method is that more fencing is required on a farm that is cleared. However, as many farms contain partially timbered and logged-off land which is used for pasture the problem is not so difficult, as there is always a great amount of logs and brush which can be used for the division fences.

# Houser Did Not Name Firms

## *Referred Shippers to the Chicago Office*

Last week there was published a communication from the field editor of The Idaho Farmer, containing the following opening paragraph:

Partial relief from the distressing situation confronting Idaho wheat growers is afforded in an announcement from the food administration grain corporation to the effect that it will furnish farmers and dealers with a list of reliable commission houses in Chicago through which they may ship and who will advance 75 per cent of the value of the grain, charging 1 per cent for the service and 6 per cent per annum from the time the draft is made until final settlement is made for the grain.

From Mr. Houser's letter, which we are glad to print below, it appears that this item should have read that the Chicago office of the grain corporation would furnish this list of names of Chicago commission men.

In other words the names will be furnished to Idaho farmers by the Chicago office of the grain corporation instead of being furnished by the grain corporation office in their own zone at Portland.

**Mr. Houser's Letter.**

To the Editor: I notice in your issue of The Oregon Farmer, September 26, an article written by "R. W. F." I wish to take exception to the erroneous headlines that you have used in regard to this letter, as I can see nothing in the body of the article to warrant this statement, for I have had nothing to do with the naming of any Chicago firms.

In our letter of September 4th to the state council of defense we pointed out to them that the growers could have their own representative at Chicago or that they could make the shipment direct and through the assistance of their banks, who, in turn could rediscount through the federal reserve, avoid the necessity of dealing with any Chicago firms unless they desired to do so.

The only reference I made in my letter at all in regard to Chicago commission firms was to point out the proper railroad billing instructions if any of the shippers desired to handle it through that source so that there would be no question arise in regard to who should pay the war tax, to have it clearly show that it was the intent of the shipper that the wheat was destined and intended for the grain corporation.

Sometime later, on September 16th, when we received a request from the chairman of the council of defense to give the names of some of the commission people, we refrained from doing so and referred him to Chicago and I wish to have it thoroughly understood and known that I am not legging or boosting for any Chicago commission firms.

Now in regard to the necessity of keeping me supplied with the car orders. Please note that up to this time in 1916 south Idaho had shipped 295 cars; up to this time in 1917 a total of 301 cars; the total cars shipped this year to date is 2867. This result in comparison with former years speaks for itself, particularly in this time of stress when the entire country is clamoring for cars.

We have been continually handicapped by lack of information of the actual car orders filed in order to make the proper representation to the railroads and for this reason we have asked that we be sent a copy of the orders filed in order that we may substantiate our claims and I can freely say that if these had been coming forthwith as they should have been, we could even have made a better showing.

As you have no doubt noticed from the daily press reports, all the eastern grain terminals have been practically embargoed on account of the unprecedented wheat movement, but nevertheless, we have been able to get this embargo lifted for the south Idaho shippers.

FOOD ADMINISTRATION GRAIN CORPORTATION. By M. H. Houser, Second Vice President.

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## The Mill Feed Situation

The cheap mill feed during the last year, though limited in amount, has helped to prevent the slaughter of laying hens. Now the mills are not making flour and there is no mill feed to be had. The government did not buy flour in September, and the mills are overstocked. To keep the mills running there must be an outside market for flour. If limited to a home market for flour the mills, we are informed, would not make enough mill feed for the poultry alone of the Pacific coast, to say nothing of the needs of the dairymen and hog men. The price of wheat being the same on the Coast as at Chicago, the millers here can not ship flour east and pay the freight. The remedy is for the government to buy the flour or provide boats to ship it by water.

Unless something is done and quickly the poultrymen and dairymen will suffer and later on the public will suffer from a shortage of both milk and eggs. The feed is here, but the children have to suffer because the mills are not milling.

It should be possible for the food administration and the millers to get together and relieve this situation.

Trouble makers are born and the habit grows rapidly. It takes a capital operation to cut it out of the system.

## The Ability to Give

The sum total of any man's success and happiness is measured and determined by his ability to give. When we look into the lives of great men, living or dead, we find that they have been persons who gave largely and freely along some definite line; not spendthrifts, but givers, for the spender gives only to himself. The real giver adds to the comfort and well being of others.

To every individual in existence is given the privilege and opportunity to develop this ability, not only along one or two lines, but along every line. As a matter of fact, there are very, very few who take advantage of this wonderful privilege. If this were not so the world today would be full of genuises, super men and women, who have learned to give the very best and highest of their every effort and possession; for this, after all, is the natural and easy way to live.

Every hour of every day is a period opening up chance after chance to develop this one and only infallible rule of success and happiness. The pot washer in the basement, the chimney sweep, even the sodden drug fiend, are free to lay hold upon this truth and set their feet upon the upward way, working out each his own complete salvation from all discomfort and unhappiness.

Sometimes the beginning is slow, but there is no man so weak and poor that something better can not be given out in thought, word or deed every waking minute. Even the hopeless invalid upon his pillow can enter upon this way of progress. He may have nothing more to give than good will, but let this become a persistent daily and hourly practice—a period of real kindly good will given to every person, thing and incident, past and present, and there will come a time sooner or later when opportunities open up for larger giving. This in turn will react upon the patient's mind and body until he finds himself definitely improving, both mentally and physically. There are countless cases on record of miraculous healing which may come under this one principle of receiving as we give. I. C. Y.

Other campaigns may come and they may go, but every day is campaign day for the Red Cross. It fits into every other campaign.

## What Will the Farmer Boys in France Think?

A great host of farmer boys are fighting with Pershing in France. Fighting for us who are in safety and comfort at home. Putting their dear young lives to the dread ordeal of battle.

Always they are wondering about the folks at home, wondering whether we appreciate their sacrifice, whether the nation is going to back them up, whether the Liberty loan will go over the top, whether the people will make real sacrifices, too, and keep sending across the ocean that continuing stream of men, munitions and supplies which must flow in unbroken current if we are to win the war.

Buying Liberty bonds is not a sacrifice unless the individual buyer makes it a sacrifice. To buy bonds up to one's easy means is no sacrifice at all. It is only a wise investment wherein the government gives more than it receives. All through the long period of peace after the civil war there were shrewd investors who bought government bonds bearing three per cent, and even two. If they had said they were doing it on patriotic grounds they would have been laughed at for their pains.

But to buy Liberty bonds now, if one buy them in sizes that mean real self-denial and temporary loss, has come to be regarded as a patriotic service, and the man or the woman who refuses to buy bonds when able to buy has come to be regarded as distinctly unpatriotic.

That is the estimate which the boys are going to place upon those who can not exhibit a set of Liberty bonds when the armies come home. They are going to inquire into these matters, and a lot of close-fisted men in all ranks of life are going to do a lot of squirming then.

Just money! That is all we're asked to give.
He gave his life, Jim. He'd have liked to live
For Betty—bless her shy young heart—had only
The week before he left put on his ring.
How long her life will be to her, how lonely
With nothing of him but remembering!
She never flinched, nor he, my son, they gave;
She working still, and Jimmie in his grave.

And now today we're asked again to save,
And give, give, give the country what we've sweat
And toiled to earn. It's hard for all—and yet,
We safe, we calm, we fortunate, we living,
I wonder, dare, dare we call this giving?
—Mary Carolyn Davies.

Unless you can broaden your shoulders when needs be, you are no burden bearer.

## Deserved Promotion

King county is soon to lose the services of County Agent Floyd W. Rader, who has been with that county since the organization of his department. Mr. Rader, who has been instrumental in forming 11 drainage districts aggregating 18,125 acres, three of which have already completed their work, will become assistant director of extension work at the Washington State college. His successor has not yet been appointed.

The real tragedies of life are hidden. Those on display are not the hardest to bear.

## Freak Wheats

Professor G. R. Hyslop of the Oregon Agricultural college sounds a timely warning against the purchase of highly advertised grain specialties. Burbank superwheat, for instance, introduced in 1917 as a revolutionary strain destined to increase wheat production immensely, proved, in the experiment station wheat nurseries, to be identical with Jones' Winter Fife. Another freak wheat, acclaimed by one promoter as rust and smut proof, proved to have more than 50 per cent smutted heads. The advice of the nearest experiment station is the best guide to grain selection the grower can wish for, and this advice is always cheerfully and freely given.

Hearts and homes are drawn into closer companionship in war days.

## Loyalty Is Foremost Requisite in Winning the War

Loyalty is the foremost requisite in winning the war. Men and money and food will not give the world the victory outlined by President Wilson unless these most important war agencies are backed by unswerving loyalty to one's own country. This makes it doubly important that the farmers should scan closely the words and acts of all those who are seeking election to office in the state or nation. The very loyalty of farmers demands of them that they shall see to it that no person whose loyalty can be legitimately questioned shall receive their own patriotic votes.

Here is a letter from Arthur LeSueur, secretary of the nonpartizan league, to William D. Haywood:

Fellow Worker: Have just returned from Des Moines, Iowa, and am very glad to be able to report the case there disposed of favorably and the boys at liberty. I think the defense committee is satisfied with the handling of the case. Of course, it was not one in which any labor principle was involved, and, therefore, the fight was simply made to get the boys out.

My expenses for the trip were $34.30, and if you will send me check for that it will clean the matter up.

How are you coming with the Minnesota proposition? I hope you don't start anything until the year has expired. This damned war business is going to make it mighty hard to do good organization work or good radical work of any kind, but I think the fight should be now centered against spy bills and conscription. Have you heard from Pennsylvania with powers of attorney? Yours for industrial freedom, ARTHUR LESUEUR.

This letter, written three days after President Wilson made his historic speech to congress asking for a declaration of a state of war with Germany, was one of the government's exhibits in the recent I. W. W. trials in Chicago. It was written, as already stated, to William D. Haywood, the I. W. W. chieftain, convicted in Chicago of violation of the espionage act and sentenced to 20 years at Fort Leavenworth, Kan.

A man of this type, one who writes a letter like this, is unworthy of the support of any loyal citizen of the United States. It makes no difference whether he is the secretary of the nonpartizan league, the secretary of the National Manufacturers' association, secretary of the national grange, secretary of the National Bankers' association or secretary of the national farmers' union.

Loyalty first, loyalty last and loyalty all the time is now to be demanded of every candidate for office in the states of Washington and Oregon and none will be more strenuous in demanding this loyalty than the farmers of the state of Idaho.

## Do Not Make Exception the Rule

It is never safe to make the exception the rule, even in times of war. It is better to work out a wartime rule as soon as possible. There are many exceptional cases where men patriotically forsake their own business and devote their time to war activities. This evinces a high degree of patriotism. As a rule it is up to the business man to attend to his business in war times just the same as in times of peace. His business needs the business man in times of war more than in times of peace. Nothing would demoralize the country more than the abandonment of business affairs by private individuals.

The same is true of the home and the school and the church. No matter what difficulties have to be met these great agencies of civilization must be kept up.

If it were possible the ideal duties of the person at home during war days would be to divide his day into three parts, one-third for his usual and necessary occupation, one-third for wartime activities, and one-third for refreshment and sleep. Every one is called upon to do double duty. Every one is called upon to find his pleasure and recreation in patriotic stunts. These are no times for waste of words or waste of minutes. Make everything count. Save effort that you may put forth double effort.

# Smashing Into German Defenses

## *Bulgaria Surrenders and Is Now Definitely Out of War*

Bulgaria is definitely out of the war and Turkey, virtually cut off from communication with her allies and her armies in Palestine almost annihilated, is likely soon to be forced to sue for a cessation of hostilities against her.

Seeing eventual defeat staring her in the face through the swift progress of the Serbian, Italian, British, Greek and French troops in the reclaiming of Serbia and the invasion of Bulgarian territory, the Bulgars begged for an armistice, reserving to themselves no conditions. All the territory now held by King Ferdinand's army is to be immediately demobilized and all means of transport inside the kingdom, even along the Danube, is to be given over into allied hands.

Thus, in addition to the isolation of Turkey, the back door to a direct invasion of Austria-Hungary is flung wide open to the allies.

**TEUTONIC ARMIES EVERYWHERE CRUMBLING.**

The entente allied forces from Belgium to Verdun on six battle fronts are registering victory after victory over the Teutonic armies, and the enemy front almost everywhere is crumbling, notwithstanding the desperate resistance that is being offered on various sectors.

In the region of St. Quentin, where the Americans are fighting with the British, the old Hindenburg line has been cut and penetrated to a depth of three miles over a front of eight miles.

In conjunction with the operations of the French northeast of Soissons the Germans have begun the evacuation of the Chemin des Dames and the French now hold half of this famous defensive position. Likewise there is an indication that the enemy intends to give up the remaining positions held by him along the Vesle to Rheims.

**FOCH'S BATTLE REACHES CLIMAX.**

There can be no mistaking the fact that Foch's battle has reached its climax, says Frank H. Simonds, the noted war writer. Within a brief period, perhaps of hours, certainly days, a German retirement out of northern France is assured. German resistance, tremendous and sustained in certain sectors, is breaking down completely at others.

Perhaps the most amazing single incident of recent days has been the Belgian success about the old Ypres salient. In a single day, with insignificant losses, the Belgians have retaken all the ground which the British spent five months and 500,000 casualties in taking one year ago. This can only mean one thing: that the German army, as a whole, is breaking down.

**GERMANS REALIZE DEFEAT NEAR.**

The German press is hysterically emphasizing that the need for cool heads never was greater than now. The possibility never before entertained or visualized is beginning to dawn on the people that Germany may lose the war, and the suddenness of this realization has had a bewildering effect.

**AMERICANS FORGE AHEAD.**

On the western flank of the Champagne-Verdun offensive the French are pushing over the heights behind the Hindenburg line. From the Argonne east of the Meuse the Americans are forcing their way into the Kreinhild positions. Some ground has been gained near the Argonne forest, but the American progress Saturday apparently was slowed down some from the first two days.

**ALLIES GAIN IN MACEDONIA.**

In Macedonia the allies are pressing the defeated Germans and Bulgarians into Bulgaria on the east, into Albania on the west and toward Uskub on the north. The Serbians, who are at the apex of the salient, are moving toward Uskub, having taken Veles and its garrison. They are also approaching the Bulgarian border from east of the Vardar. In the Doiran region the allies are working their way over the mountains toward the important line of the Struma river.

**BULGARIA READY FOR PEACE.**

During the week the allies broke the link between the western and eastern Bulgar armies, cut the Uskub-Saloniki road, captured towns of vital strategic importance to the Bulgars, got north of Lake Doiran and up the Vardar into Bulgaria itself, and won such positions at Veles, Istib and the neighborhood of Uskub that they stand behind the Bulgarian army of the west and can march eastward upon Sofia the capital of Bulgaria, immediately followed by Bulgaria's begging for an armistice in order to discuss peace terms. Experienced officials at Washington temper the high hopes of the collapse of Bulgaria as an active military force by declaring that this appeal for peace, after all, can be considered as only the first step toward the end of Bulgaria's activities.

**AMERICAN FORCES IN RUSSIA.**

American troops which are taking part in the operations in virtually all sectors on the northern Russian front have captured several villages in recent fighting. The net result of the fighting, in which the Americans cooperated with the British and Russians in taking many more places in the last 10 days on the Dvina, is an advance of more than 50 miles. British and Russian airplanes are continually observing and bombing the bolsheviki. These operations, which are still in progress, besides scoring a 50-mile advance, have been accompanied by the sinking of at least four enemy ships, the capture of several guns, many machine guns and much war material. Prisoners have been picked up to the number of nearly 100. Enemy ships retiring hastily toward Kotlas sowed mines as they went back, and the allied progress has been impeded by the necessity of mine sweeping. Allied casualties have been very small.

**NEW GOVERNMENT TO RULE RUSSIA.**

Out of the chaos which has existed in Russia since the overthrow of the Kerensky government by the bolsheviki there is emerging a central authority which officials and diplomats here hope will be able to reestablish order and renew the fight against the common enemy. Official information reached the Russian embassy at Washington that the pan-Russian conference at Oufa, European Russia, which has been recognized by all the provisional governments opposing the bolsheviki, including the Siberian government, has constituted a committee of five as the lawful authority for all Russia. This committee will be responsible to the constituent assembly of all Russia, which will convene next January 1, provided 250 members attend.

**FIX NO MINIMUM HOG PRICES.**

In answer to a telegram sent to the food administration at Washington by the Chicago office of the bureau of markets as to the fixing of hog prices the following message was sent from Mr. Hoover's office: "No minimum price on hogs has been fixed or contemplated, but the report of the live stock producers' committee which met with the food administration this week recommends that an average price of about $18.50 be maintained at Chicago during October. Attention is called to the fact that the proposed price is a general average and not a minimum."

**TWO TURKISH ARMIES DESTROYED.**

At this writing 45,000 Turks are reported to have been taken prisoners, which means putting two armies out of business and virtually completing the conquest of Palestine under the British general, Allenby. Saunders, the German general, was completely surprised. The Turkish western, or right, wing has been utterly crushed. Allenby's immediate objective now is Damascus, his later goal Aleppo, the point of departure for Mosul on the east and for Constantinople on the northwest. The political and military effect of this decisive defeat upon the Ottoman government must be great. It has long been desirous to quit Germany and come to terms with England and France.

**THE FOURTH LIBERTY LOAN.**

Messages from all sections of the United States reached the treasury department Saturday almost simultaneously with the opening of the campaign for the fourth Liberty loan telling of villages, towns and cities which had within a few hours subscribed their quotas of the $6,000,000,000 total. Parades and other patriotic demonstrations marked the opening of the campaign throughout the nation, while news from the war fronts in Europe, particularly from the sector where American troops were driving forward, added to the impetus of the first day's campaign.

**PRICE OF PEACE IS JUSTICE TO ALL.**

Before an audience of fourth Liberty bond workers in New York city Friday night President Wilson declared that the price of peace will be impartial justice to all nations, and the instrumentality indispensible to secure it is a league of nations formed, not before or after, but at the peace conference; and Germany, as a member, "will have to redeem her character, not by what happens at the peace table, but by what follows." Although the president did not refer specifically to the utterances of enemy leaders, this is regarded as an answer to the recent peace talk from the central powers. The president added: "Germany is constantly intimating the 'terms' she will accept; and always finds that the world does not want terms. It wishes the final triumph of justice and fair dealing."

**THE EIGHT-BILLION TAX MEASURE.**

To collect within a few months $8,000,000,000 is the task confronting the bureau of internal revenue, says a bulletin from that board. This is the amount the new revenue bill now being framed is expected to yield. It is difficult to realize the immensity of this sum, and yet $8,000,000,000 is less than one-sixth of the annual income of the United States. If divided according to population it would mean a per capita tax of $76.76, or more than $336 per family. The total value of all crops on American farms in 1910, the last census year, was $5,000,000,000. The total value of all live stock on farms January 1, 1910, was slightly less than $3,000,000,000. In one year, therefore, the taxpayers are called upon to pay more than the aggregate value of all farm crops in the United States in 1910, plus the value of all farm animals.

**SPANISH INFLUENZA IN ARMY CAMPS.**

Epidemics of Spanish influenza in army camps provoked Marshal General Crowder to cancel calls for the entrainment between October 7 and 11 of 142,000 draft registrants. Thousands of new cases of influenza in the army camps have been reported, especially in the eastern and central parts of the country. Influenza is also on the increase among the civilian population, particularly in New England. The federal government has taken steps to cooperate with the state and municipal authorities in combating the disease where the epidemic has gained great headway. Vaccination with a recently discovered serum which from tests just completed at several army camps has been found to be an almost positive preventive against contraction of pneumonia will be used to combat the epidemic of Spanish influenza. The use of the vaccine will be widely extended, congress having appropriated $1,000,000 to be used by the public health service in fighting Spanish influenza and other communicable diseases. This influenza is simply a recurrence of the malady which swept Europe in the late '80s and reached the Atlantic seaboard along in 1890, sweeping through the entire country in 1892 and '93.

**WOMAN SUFFRAGE FACES DEFEAT.**

With certain defeat or withdrawal admitted to be the only present alternatives, the house resolution proposing submission to the states of the Susan B. Anthony equal suffrage amendment furnished another sharp but brief fight in the senate last Saturday and then went over. There are plenty of political prognosticators who assert that from now on the suffrage sentiment will go down. Although the vote has not been taken the result already is known. This will make the third time the suffrage amendment resolution has failed to secure the necessary two-thirds majority in the senate. The first time was in 1887, when only 16 votes for it could be mustered against 34 negative votes. The second time was in 1914, there being 35 yeas and 34 nays. How soon it will come up again no one ventures to predict save the aggressive suffragists, who say they will continue to fight more earnestly than ever.

**THE I. W. W. OF BUTTE AGREE TO WORK.**

The I. W. W. of Butte have agreed to resume work in the mines. The strike which was called September 12 was ended at a closed meeting Saturday, at which time the requests made by Federal Mediator Tom Barker were discussed. In the future the men will be employed through the federal employment bureau and their grievances will be adjusted by the national war labor board.

## *Washington Gleanings*

The Grays Harbor district is holding its lead in the production of airplane spruce.

The Bossburg ferry is again running, after being out of commission for three months.

School at the Yakima Indian agency at Fort Simcoe opened October 1. Three teachers have been hired.

The season's yield of cabbage seed from the farm of Louis Maupin, near Mount Vernon, amounted to between 1600 and 1800 pounds.

The directors of the Burley Fair association have announced that their second annual fair will be held Saturday and Sunday, October 12 and, 13.

When the Yakima Fruit Growers' union met last week its officers reported that its membership is now 250 and that there were 70 additional names to be voted upon.

Harvesting is finished around Sprague, and farmers are hauling their wheat and piling their straw. On account of lack of moisture, little winter wheat has been seeded.

The state highway commission has approved the graveling of nine miles of county road in Adams county from Hatton east and the building of five blocks of sidewalk in Omak.

The office of agricultural agent for Thurston county will be discontinued the first of December as a result of a change made in the county budget at a recent meeting of the county commissioners.

Miss Jeanne Mercier, sent here by the French government to enter Whitman college, expects to be joined by a sister in about a year. Miss Mercier is the daughter of a French territorial soldier.

N. E. Hinch, for 16 years an instructor in the English department of the state normal school at Cheney, has left for the University of Chicago, where he will take up special training in English.

The sale of the R. M. Saver sawmill at Lacamas was reported last week, Theodore B. Brown, Horatio Brown and Bert McPhee, all of Portland, being the purchasers. The plant has a daily capacity of 25,000 feet.

The Skagit County Rabbit Breeders' association was formed last week at Mount Vernon. The officers elected are Lloyd Hildebrand, president; T. A. Hanvey, secretary and treasurer; R. E. Beaty, vice president.

The Chehalis Mill company of this city has purchased from the O'Connell Lumber company two sections of timber land south of the village of Lacamas, at the terminus of the Cowlitz, Chehalis & Cascade railway line.

Under the budget of the Hood River Apple Growers' association, just adopted by the directors, a maximum charge of 6 cents per box for apples and 10 cents for pears may be made for handling the fruit the coming year.

Jeanette Olney, the 4-year-old Indian girl whose pet lamb was sold at the state fair at Yakima for the benefit of the Red Cross, netting $1000, has spent some of her allotment money in providing for the care of a French orphan.

Maurice Lodeon of Keller and J. C. McDevett, a homesteader, were hunting on Alice creek, about four miles up the river from Keller, last week, and they killed two large black bears. One tipped the scales at 450 pounds and the other at 350 pounds.

The heavy rain which fell near Uniontown recently left the ground in splendid condition for seeding, and as a result a large acreage is being sown. Most of the summer fallow is in fine shape, and the farmers are putting in the seed as fast as they can.

Ira D. Cardiff has started his season's evaporating run at his big plant near Yakima. During the season the plant will operate 10 hours daily. It has a capacity of between 40 and 50 tons of green fruit, which means an evaporated output of from five to six tons.

Grays Harbor county is in the enviable position of having enough funds in its coffers so there will be no levy this year for current expenses. This is the first time in the history of the county that there has been sufficient cash on hand to omit the tax levy.

The Cashmere union reports that it will erect a new unit 170 feet long and 72 feet wide, which, when completed, means a warehousing institution with a length of 570 feet. This warehouse will be the largest and most complete of its kind in that section of the state.

The threshing of grain in the Keller region is completed. There was but little wheat harvested from the grain, scarcely enough to get back the amount of seed sown last spring. Corn yielded well, and homesteaders are disposed to plant it extensively this year.

The Lewis county teachers' institute this year will be held October 21, 22 and 23, in Centralia. The second day will be allied patriotic day, when teachers will be addressed on how they can do the most effective work in all kinds of patriotic work among the school children.

The apple growers' association at Hood River has completed the pack of Bartlett pears, all of which have been shipped to eastern markets. The yield was only 24 cars, but 50 per cent of the estimates of growers. Other varieties are being packed and shipped, and the association will soon begin on the apple crop.

A conspicuous example of what a proper community spirit can accomplish is shown in the northwest of Pasco, in what is known as the Riverview district, where the farmers have organized the Riverview club. The community is divided into two sections, each section furnishing its quota of programs, and at the end of the season the section which has furnished the best number of programs will be banqueted at the expense of the other section.

# THE HEART OF A BOY---By Joe L. Ashlock

This teacher, my first, was a sad-faced, thin-featured, joyless fellow. On several occasions he reprimanded the pupils with some severity, and this struck me dumb with terror. I can not remember that he smiled as much as once.

Each day I dreaded school; dreaded the hour when I should start, and longed for the evening hour when I could go home. In the schoolroom the hours passed as slowly as the prehistoric ages.

In fact, there was a good deal of the prehistoric in the school administration of this young teacher. He carried with him an air of grave superiority and aloofness. As I look back I can see, plainly enough, that by his perpetual coldness and melancholy this young teacher was mainly responsible for the sepulchral air that filled his schoolroom.

Once he corrected me. Indians at that time went in bands through the Walla Walla valley, and passed the old Union schoolhouse on Dry creek, of which I am speaking. One morning at recess we beheld a band of them coming down the road toward us. With outcries the younger of the school children fled to the schoolhouse. But as for me, I made for home, our house being across the road from the schoolhouse.

The larger boys shouted derisively at me, and one called me a coward. But I halted not till I had sped in at our own doorway and sought refuge under the bed. Mother made use of the broomstick in driving me from my retreat, and assuring me repeatedly that there was no danger, sent me back to the school.

Recess was over when I returned. Sick with fear I made my cringing way down the aisle to my seat. Icy hands seemed to clutch my soul by the throat when the funereal faced teacher ordered me forward. Trembling like a leaf I went.

He did not explain to me in a friendly way that the Indians meant no harm. Instead, devoid of feeling as an Egyptian mummy, he wanted to know why I had run away. It was hard for me to tell why I had done this dreadful thing, being only 6 years old, but I managed to let him know that I had been scared by the Indians.

Acting the part of a mummy revived to an imitation of life he told me, if my memory is right, that never again must I get scared and run home. He said some other things, but must have used words too long for my 6-year-old understanding. Then he ordered me to my seat, and told me I could stay there during the noon hour, giving me barely time enough to get home for dinner and return.

I had three teachers at the Union school which I attended in parts of three different terms while we lived in the Walla Walla valley. The first was the gloom-bird referred to. The second was Miss Martin.

Miss Martin was utterly the antipodes of the gloom-crow. She filled the room with flowers—brought them to school herself, and led us children on flower-picking excursions in the woods near the schoolgrounds. Under her skilful administration the schoolroom was changed from a sepulchre to a place of love and brightness and good cheer. We had several months of her love and teaching, and then it ceased. She sickened, underwent an operation and failed to recover.

Her successor boxed my cheeks, and by that act has made herself well remembered by me. Possibly I deserved the punishment. One of the boys ahead of me in the row of seats had drawn a picture on his slate, and, although he spat vigorously on his slate and rubbed with his bare hand, he was not quick enough to obliterate all of the picture. What it was I never learned. I was craning my neck to see, and giggling with the other children; and, having soundly punished the artist, she came down the line and gave us each a small dose of the same thing.

She had to reach twice for me, because I dodged. For ducking her first blow, she gave me double measure.

Maybe she was right, but I did not think so. Silently I wept, and said to myself, over and over again, that Miss Martin would not have done it. I suppose I was 8 then, and my soul was a bit stiffer than when I had fled from the Indians. Following my grief, a new feeling possessed me—the first thing of the kind I can recall. It was deep, silent, brooding anger. This feeling stayed with me for months and years. That teacher may have occupied partly at least the place in my esteem that had been won by Miss Martin. But when she boxed my cheeks, she shut the gate on herself.

In the old Union school of those days, which was well populated, there were, of course, the usual school bullies who kept us smaller tots in a reign of terror. One of these bad boys took a special grudge at me. He would steal up behind me with a long pole and strike my legs from behind, at the knee joints. The effect of the blow, aside from the pain of it, was to double up my legs and make me sit on the ground.

Eventually, I ceased crying when assailed thus, and gave chase to my persecutor as soon as my legs had recovered from the numbness given by a blow of this kind. But the other boy was too quick for me. From a safe distance he would make faces at me, and call me vile names.

I began to plot. With an air of extreme nonchalance I would venture near him, giving him tempting opportunities to strike the back of my legs. Once down by the creek when I was thus secretly on guard he was trapped. Quicker than he, I dropped on my knees before the blow was delivered and received the full force of it on my thigh where it did no harm. A round stone the size of a small egg was in my hand. On my feet again before he could draw back for another blow, I let fly with the stone, all of my eight years of muscle in the throw.

My aim was wickedly good. The stone struck him on the side of his head and he dropped down, partially stunned. I suppose I would have been scared at seeing him fall, had he not hounded me to the point of desperation. As it was, I seized the pole he had dropped and started in to finish him. He managed to flee beyond reach of my wrath, though he was a bit wobbly on his pins.

The blow, as a matter of fact, was a bad one, and it was several days before my tormentor returned to school, pale, chastened, with a black bruise on his head. His mother called on my mother and made quite a fuss about it. I got a good scolding, though I think mother was half way pleased because I had planned and executed a successful defensive where one certainly was needed.

From certain memories I have carried since those early, schoolboy days, I can see that a child's hunger for play and playmates is second only to its hunger for food, and often takes precedence over food hunger. It is a seriously wrong thing for a parent to ill-naturedly and without reason, interrupt the play of a growing child, or starve it for play. The child who is treated thus is to be pitied; and the hermit-child growing up in a home without brothers or sisters or other children of its own age to play with, is likewise to be pitied.

In the Walla Walla valley during the brief time we lived there in a thickly settled country where there were large families of children living closely together and the rural schools were well attended I had playmates, some of which abused me, and some of which I abused, maybe, though as I recall, it was generally I who suffered. Most of the time we were on big wheat ranches, where I had only grownups to associate with. Compelled to be something of a hermit at home and to devise my own play, in school with other children I remained something of a hermit, and was generally on the outer edge of the group.

Down in the creek brush and trees near the schoolhouse I played "livery stable," and in a cool, shady place had my stick horses of red willow tied in straight rows waiting for customers to come and hire them. Alone, I got along fine, but when the other children trooped in upon my retreat and tied up their willow horses, my livery stable was all broken up. I moved out to another location, from which I presently was routed by my playmates.

There were many wild cherry trees along the creek bottom. I hunted alone in the brush till I found a good one with many richly red "choke cherries" at the top. When I wanted choke cherries I stole off alone to my tree; presently my playmates discovered the tree, climbed it for the cherries, whereupon I moved farther up the creek to another tree.

It interests me to watch my own young son grow up among plenty of playmates, now, the general conditions of his environment being the antipodes of mine. On our street which is in the edge of Pullman, with the farmed hills of the Palouse on one side and the state college campus on the other, there are 16 children ranging in age from 10 to 3 years of age. This is in the distance of one block and a half. There is scarcely any traffic through the street, so on cool, summer evenings the children use the place as a playground. It slopes downhill, and the youngsters get out in every conceivable kind of a coaster wagon. Down the hill they go, the older ones guiding, the smaller in the rear, and the ones left behind howling their wrath at times. It is a hubbub and shout all the time, and now and then they come together in a group to arbitrate or fight out their difficulties, when maybe the parents have to exercise some supervisory discretion.

Every day this 8-year-old boy is learning to adjust himself to the whims of others, and to plan his way through the tangle of his playmates' whims and caprices and interferences—or to battle it through. A blind man ought to see that he is now getting something that will last him through life, and be for his general good.

Now, in my case, between the ages of

(Continued on page twenty.)

# Measuring Hay in Ricks or Stacks

One of the continuing problems with the farmer is that of measuring hay in ricks or stacks. As Circular No. 67 of the office of farm management of the United States department of agriculture says, the problem of obtaining an accurate formula for determining the number of cubic feet in a hay rick is difficult because of the variation in the shape of ricks. Even if the number of cubic feet in the rick is known, the problem of converting this into tons is difficult, because of the wide variation in the compactness of hay in bulk. In fact, all the investigations made show that any general rule for determining the weight of hay in a rick by measurement must be only an approximation. However, as thousands of tons of hay are sold annually on such measurements, it is desirable to establish at least average values for the quantities concerned in those measurements.

The volume of a rick is equal to its length multiplied by the area of its cross section. The length is easily measured; the cross section not so easy. If the top of the rick were perfectly flat and the two sides straight up and down, the area of the cross section would simply be the width multiplied by the height. If the rick were triangular in cross sections, so that the sides represented straight lines from the top of the rick to the bottom on each side, the area of the cross section would be one-half of the product of the base and the height. The actual area of the cross section lies somewhere between these two.

It is difficult to measure accurately the height of a rick. It is much easier to measure the "over," which is the distance from the ground on one side of the rick over the top of the rick to the ground on the other side. The length of the over depends upon three things—(1) width, (2) height, (3) "fullness" of the rick. The over is always somewhat more than twice the height.

The accompanying illustration shows the cross sections of hay ricks of nine different shapes, the corresponding value of the fraction F for each of these shapes being inserted in the outline of each cross section. The height of ricks Nos. 1, 4 and 7 (upper row) is three-fourths the width. The height of ricks Nos. 2, 5 and 8 (middle row), is equal to the width, while the height of ricks Nos. 3, 6 and 9 (lower row), is one and one-forth times the width. Ricks Nos. 1, 2 and 3 (left column) are narrow, or nearly triangular, in outline; ricks Nos. 4, 5 and 6 (middle column) are medium full, while ricks Nos. 7, 8 and 9 (right column) are full and rounded. It will be noticed that the value of F is the same (0.31) in Nos. 3, 5 and 7; in Nos. 2 and 4 it is 0.28, and in Nos. 6 and 8, 0.34.

In attempting to find the volume of hay ricks the choice between these various values of F may be found by comparing the shape of the end of the rick—that is, the cross section of the rick—with ricks Nos. 1 to 9 in figure 1. If the shape of the rick to be measured is intermediate between those shown in figure 1, intermediate values of F may be used. The use of the above formula may be made clear by a few examples in the accompanying illustration.

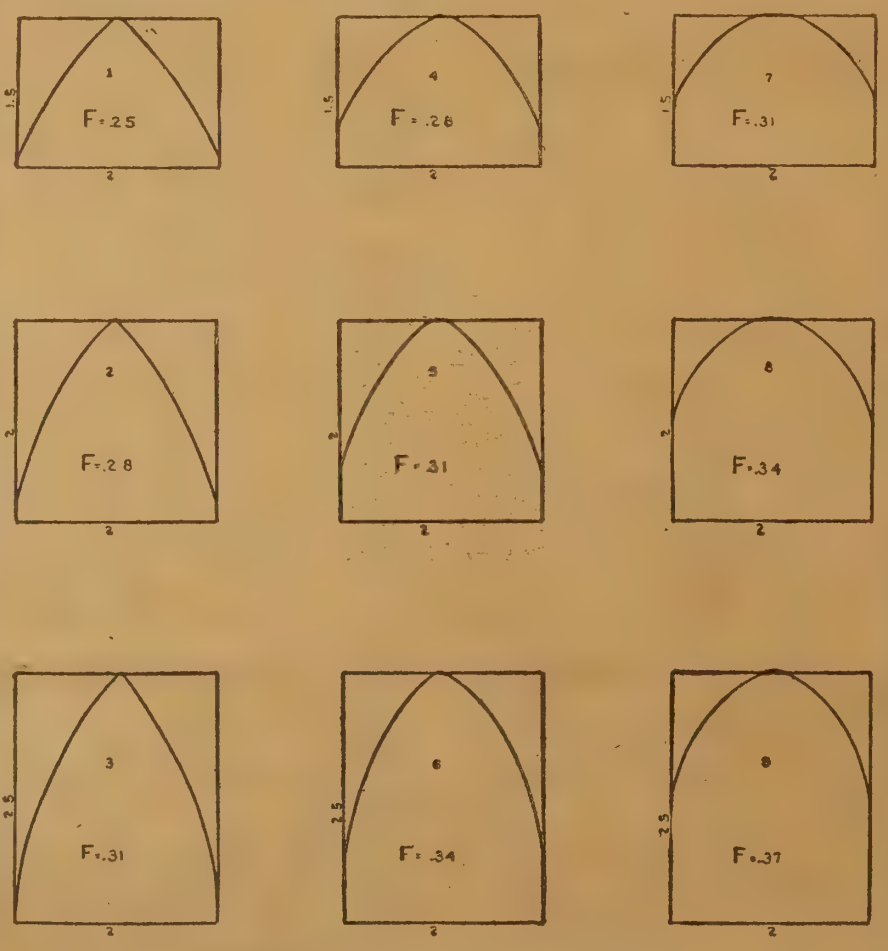
In general, hay ricks are more often measured short than long. The reason for this is because allowance is made on account of the sides of the stack being not well settled or pressed in. It sometimes happens that the corners are not square, which also tends to lead one to measure the rick short.

Two other rules are quite commonly used in measuring hay in the stack. The first is known as the "quartermaster's rule" and is often wrongly called the "government" rule. This rule is as follows:

Add the over and width and divide by 4; multiply the result by itself and then by the length; the result will be the volume in cubic feet. The second, commonly called the "Frye" rule, used a great deal in the middle west and west, is as follows: Subtract the width from the over and divide by 2; multiply by the width and then by the length; the result will be the volume in cubic feet.

**Example 1—A hay rick is 16 feet wide, 24 feet long, and the over is 31.2 feet. The end view indicates that the shape of the rick is very close to No. 4 in the illustration. What is the volume of the rick?**

**Solution—V equals 0.28 multiplied by 31.2 by 16 by 24, equals 3354.6 cubic feet.**




**Cross sections of hay ricks of different shapes.**

**Example 2—A hayrick is 14 feet wide, 20 feet long, and the over is 34.2 feet. Inspection of the end of the rick shows that it is of the type of No. 8 in figure 1. What is the volume of the rick?**

**Solution—V equals 0.34 multiplied by 34.2 by 14 by 20, equals 3255.8 cubic feet.**

## OREGON BOYS TO DRILL.

Every high school in Oregon having as many as 35 boys is called upon to organize a company for military instruction in a bulletin issued by State Superintendent Churchill. In commenting further upon what the high schools should do, Mr. Churchill says: "A competent military instructor should be secured by each high school, or there should be in the corps of regular instructors one man who has had sufficient military training or military experience to enable him to teach military science successfully.

## DAIRYMEN WOULD SELL.

Dairymen are preparing to retire from the business because of diminished revenues and increasing costs of feed and labor, according to information received by J. D. Mickle, Oregon dairy inspector, who says the situation is becoming serious in the extreme. Mr. Mickle received a report from Chairman Deckenbach of the Marion county Liberty loan committee that no less than six dairymen who were visited in one day were offering their herds for sale because of the shortage of certain varieties of feed and the poor returns.

# Potato Crop Will Be Short

## Average About 70 Per Cent Is Estimate—Prices of Dairy Products High, Cost of Feed Higher. Will Butcher Poorer Cows. Pasture Is Good




DARRINGTON, Snohomish County, Wash., Sept. 23.—The conditions in this section are good—plenty of work for everybody at very good pay. There are logging camps on every side. This will help the farmers out a good deal as practically all of the logged-off land will produce good pasture when seeded down to clover and grass. Some new settlers have bought small tracts of the best of the recently logged off lands. The oat crop did not turn out as good as was expected. Lots of oats was lost in the fields owing to getting overripe. Cloudy and rainy weather prevented it being harvested at the right time. The potato crop will be short, too, just how short is hard to say at present until digging time, but don't think it will be over 70 per cent, if that. Prices of dairy products are high and yet the dairy farmers feel as though they are not getting their share as the price for dairy products doesn't hardly correspond with the high cost of feeds. A number of the poorer cows will be butchered this fall in this section. Potatoes are selling at three cents per pound at present, eggs at 65 cents per dozen, butterfat 57 cents. Pasture is very good and stock is doing fine.

C. B. NEIDERPRUM.

### TOO DRY TO SOW WHEAT.

METHOW, Okanogan County, Wash., Sept. 23.—In regard to the special effort to raise fall wheat, some wheat was sown six weeks ago, but it does not look good and a good deal of it never came up. Owing to the dry fall not much wheat will be sown before the 1st of November unless it rains. One fact has stood out plainly here and that is that wheat sown in dry dust before this date invariably rots. Wheat sown even after the 1st of November in the dry dust never makes a big crop, owing to the soil running together and the young wheat growing on top of the soil so that it is impossible to harrow to break the crust without pulling out too much of the wheat. The growers are always willing to take risks. The largest per cent of farmers are going out to work in the orchards and the Sound shipyards. Were it not for the apple and cattle industry this section would be in bad shape.

CHARLES GRANT.

### CORN CROP LOOKS FINE.

GRANDVIEW, Yakima County, Wash., Sept. 23.—There is some fall wheat being sowed as nurse crop for alfalfa, but very little yet for a wheat crop and it is too dry on the nonirrigated land. Most of the valley is hay and corn. The corn crop looks fine. I think most farmers are willing to do what is best for the country. Farmers are paying off their debts and appear to be doing pretty well. The farmers generally say we are in this fight to win and are willing to do their best.

E. H. FAULKNER.

### LESS WHEAT THAN EXPECTED.

RITZVILLE, Adams County, Wash., Sept. 20.—After threshing is all done we have less wheat than we expected. It went from 15 to 20 bushels per acre and straw is correspondingly short. The interest in fairs is not marked as everybody is overtaxed with work, therefore fairs are neglected. Feed is very scarce and a lot of it is being shipped in. We have plenty of seed grain except winter wheat. Circumstances have hit us here somewhat, but no one is grumbling. Pastures are poorer this year than usually and water is another drawback. We have to provide watering places for stock to drink.

JACOB HARDER.

### APPLE PICKERS ASK MORE PAY.

While orchardists are sending in calls for help daily, there are about 100 apple pickers and packers who are refusing to accept employment at the standard wage offered, $3.50 a day, according to federal employment officials at Yakima, Wash.

In past years orchardists have paid pickers by the box, and experts could make as high as $6 a day. Growers claimed it was a losing proposition for them, as the pickers were not careful enough with the fruit, and adopted the $3.50 scale. Apple harvesting is now at its peak and calls for harvesters are insistent. Workers here claim the Yakima scale is lower than that of Wenatchee, and many of them are refusing to go to the fields, though they report for work at the federal office.

### ASKED TO COLLECT TIN.

Red Cross workers throughout the country are requested to devote part of their time to collecting platinum and tin for government uses. The campaign is being undertaken at the request of the war industries board. Despite the wide gulf that has hitherto separated lowly tin from aristocratic platinum, these two extremes in metals are now brought to a common level by the necessities of war. Each is regarded as of equal importance to many of the essential industries of the country, and as there is a shortage of both materials, the government has called upon the Red Cross to help make up the deficit.

# Washington Boys in War Service

From The Twice-a-Week Spokesman-Review.



**CORPORAL HARRY J. COLEMAN, White Bluffs, Wash.**—Enlisted in July, 1917, at Walla Walla, as a member of battery E, 146th field artillery. He now drives a tractor truck in the heavy field artillery, in France. His mother, Mrs. J. F. Colemaa, lives at White Bluffs, Wash.



**HOMER ALVA ARMSTRONG, Richland, Wash.**—Enlisted July, 1917, in the Rainbow division of the 117th United States engineers. He is at present serving his country "somewhere in France." He has the honor of being the first man from his home town, Richland, to be in France.



**FLOYD ANDREW SMITH, Harrington, Wash.**—Was called in the August draft of 1917, at the age of 28 years. He is a member of the 347th field artillery, battery F, which has been training at Camp Lewis, but is now on its way "somewhere." He has a brother, Walter, who is with an engineers' company.


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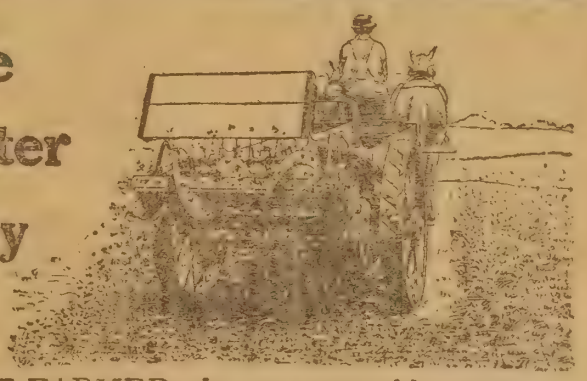
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A. B. NYSTROM, Editorial Contributor

# Milk Producers

## of West Side Uniting Rapidly

By PAUL E. TRIEM.

At the present rate of growth, it will not be long before the entire Pacific coast will be solidly organized, as far as the dairy interests are concerned. Whatcom county, Skagit county and Snohomish county, in western Washington, have long been thoroughly organized. Skagit was the pioneer in this movement. King county was a little slower in falling into line, but today is pulling shoulder to shoulder with the other west side counties. Pierce county recently organized and incorporated a producers' association, with O. R. McKinney as president, and J. M. Wilcox, L. M. Hatch, W. A. James and A. O. Johnson as other incorporators.

In Grays Harbor county an association of 150 members was organized in July, with the following board of directors: W. F. Darby, Montesano; W. J. Wharton, Satsop; Ransom Minkler, Elma; Lee Foster, Satsop; David Bey, Porter; E. E. Sweitzer, Oakville; J. Porter, Porter; O. M. Gerdon, Summit, and John Murphy, Montesano.

The Thurston County Dairy and Farm Products association represents producers of all farm products. There are about 500 members and the association has a concession for furnishing milk and vegetables to Camp Lewis. Some of the milk for this purpose is secured from Lewis county, however, the Thurston county association acting as a sort of clearing house.

At the present time the Lewis County Dairy association is one of the most active on the west side. It was organized in May, J. A. Scollard as president, Harvey Shoultes of Adna, vice president; Herman Young, Centralia, treasurer, and J. C. Bush, Chehalis, secretary. The nine directors are: George Olderson, Ethel; J. A. Scollard, Chehalis; V. M. Bullard, Menlo; Harvey Shoultes, Adna; A. N. Bennett, Chehalis; J. G. Bush, Chehalis; E. E. Wilkinson, Curtis; Herman Young, Centralia, and T. O. Hendricks, Forest. V. M. Bullard of Menlo is the board representative of Pacific county, which is at present affiliated with the Lewis county association.

Asher Hobson, head of the farm markets division of the state college, at Pullman, has given the dairymen valuable assistant in whipping their organizations into shape. Floyd Rader, who recently gave up his work as county agent for King county to take up important work at Pullman, worked with the dairymen in figuring up the actual cost of producing milk under western Washington conditions. The average cost per 100 pounds of milk, based on exact records kept on 89 farms, was $3.29.

As a final result of the work done by the county associations, the United Dairy association filed articles of incorporation at Olympia in August. The incorporators were: J. A. Scollard, Fred Nelson, John Kill, W. H. Guin and Ed Brown, representing the five west side counties, which have been most active in organizing. J. A. Scollard, president of the united association, recently went to Washington to represent local producers at a national gathering of dairymen.

This, in tabloid form, is the present situation in regard to organization in western Washington. It may confidently be predicted that the next six months will see the work of coordinating the various county associations advanced immensely. It is only a matter of time until the entire west side will be in shape to act as a unit in matters of buying feed and selling milk and its products.




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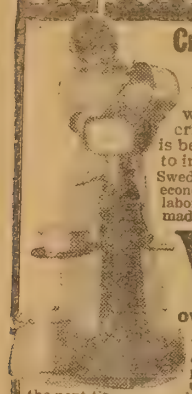
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# Good Dairy Cow

## Important Problem on the Farm

By E. D. ROSEMAN.

Successfully raising a good dairy calf is an important problem on the dairy farm, unless the herd is to be replenished by purchase of cows, and most dairymen find this profitable only under exceptional circumstances. Skim milk and egg has proven to be a very good calf feed in the herd of Octav Voget at Hubbard, Ore.

Mr. Voget, who is a breeder of purebred Guernseys, bought a registered cow from a herd in Washington. About the middle of July, after bringing the animal home, she gave birth to a heifer calf. In proportion to the mother's weight the calf was somewhat below the average size but appeared strong and vigorous.

At this time Mr. Voget was marketing the bulk of his product in the shape of whole milk and required a considerable portion of the output to supply his trade. Consequently the calf was taken off of whole milk as soon as possible—sooner, perhaps, than would have been advisable under other conditions. As a substitute Mr. Voget used skim milk and egg. Although this was supplemented by some other feeds, the surprising results are attributed to the milk and egg rather than the supplementary portion of the ration.

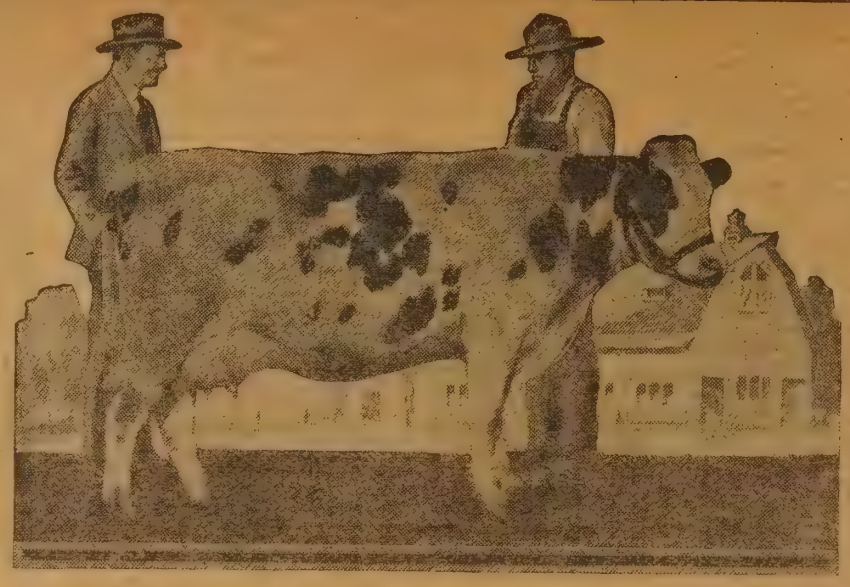
The calf received about six pounds of milk per feed and a raw egg was stirred into the milk before feeding, both night and morning. Digestion troubles never appeared and the calf grew and developed at a remarkable rate. By November 1 it might easily have been taken for a 6 or 6 1-2-months-old heifer. With hide soft and pliable, hair fine and silky, and body big and strong, it gives every indication of developing into a better cow than the dairyman can ordinarily buy for the enlargement of his herd.

The expense of this ration, Mr. Voget believes, is not prohibitive, in view of the results obtained. And this does not take into consideration the greater value that the animal may possess through having been raised by the owner of the herd in which it is to produce.

This dairyman's great advantage in raising his own cows lies in the fact that it can be done with a view to securing the maximum amount of production compatible with their inherent capabilities; and the greater advantage in his feed is that it does produce an unstinted, well-grown, well-developed cow, physically able to do the best that her breeding will permit.

### MORE SILOS IN LEWIS COUNTY.

Miles D. Coleman of Mossy Bank, Wash., put up a wooden hoop silo under the supervision of the county agent on September 30. This makes four silos of this type put up by the county agent in Lewis county this year.

**Buy Milking Machines As You'd Buy Stock**

When you buy a pure-bred cow you are interested as much in her pedigree as in her butter-fat record.

Scrub cows sometimes establish a highly productive record for a limited time. But when you buy a pure-bred cow, her pedigree is your guarantee of uniform, heavy production year in, year out. You know you are taking no chances.

Buy milking machines the same way.

Investigate their past records. Find out what machines are standing up best under years of service. Inquire into their effect on the herd—milk production, lessened udder and teat trouble, effect on lactation period, etc. Also find out what machines the big milk producers and breeders use.

When measured by these standards, you'll be surprised at the overwhelming Empire leadership. You'll find them milking the foremost herds in the country, and you'll find them on the small dairy farms of 10 cows or more.

They're everywhere. Why?

Because the Empire works in harmony with the cow. The Empire Super-Simple Pulsator—the pulsator without a piston—causes a uniform action on teat cups.

Pistons wear and leak vacuum, resulting in uneven teat cup action, nervous, irritated cow and reduced milk flow.

The Empire Pistonless Pulsator cannot leak vacuum. The action is always regular and positive.

Cows like it. It soothes them and they let down their milk in increased quantities. Lactation period is increased. Teat and udder troubles diminish and the health of the herd is improved.

Investigate the Empire. Look into its "pedigree"—past performance. Get our 1918 Catalog No. 48. Let us have our dealer give you a demonstration. No obligation, of course.

**EMPIRE CREAM SEPARATOR COMPANY, Bloomfield, N. J.**

Chicago, Ill. Denver, Colo. Montreal Toronto Winnipeg

*Also manufacturers of Empire Cream Separators, Gasoline Engines and Farm Electric Plants*

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**When a man gets a hankering for real tobacco satisfaction, he is on the road that leads straight to the Real Gravely Chewing Plug.**



*Peyton Brand*

**Real Gravely Chewing Plug**

**10c a pouch—*and worth it***

*Gravely lasts so much longer it costs no more to chew than ordinary plug*

P. B. Gravely Tobacco Company

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**WOOL, PELTS, MOHAIR, CASCARA BARK**

We do the largest consignment business in the northwest. Equally fair treatment on all shipments, large or small. Returns at full market value mailed same day as goods are received. Trial shipments wanted and appreciated, but are handled as regular shipments and not inflated values.

THE H. F. NORTON COMPANY

206 Third Ave. So., SEATTLE, WASH. PORTLAND, ORE. NAMPA, IDAHO.

# VETERINARY

By DR. S. B. NELSON.

**Cow Suffers From Abscess**—I have a cow about 6 years old, giving milk. She seemed healthy and was in good shape. One night when she came up I noticed a small hard lump about the size of an egg under her mouth. This lump increased in size. It swelled down till it came to her windpipe, then it swelled up to her ears. Her head was about twice as big as normal. The first week she had chills. The second week she had fever. She lived two weeks. The next day after we noticed the lump she ate quite a bit. The next two days she ate a little bran. Then she refused to eat unless I put it in her mouth. She seemed to want food, but couldn't pick it up. Her mouth seemed sore, and a slimy substance came out of her nose and mouth continually. I thought it was a snake bite and treated it as such. In a week it got soft and seemed to contain pus, so I lanced it. Then for two days she seemed to be better and ate more, but the third day she refused to eat and had difficulty in getting her breath. From then she got worse. Her breath came in shorter gasps, her eyes became nearly closed and she ground her teeth quite a bit. She stood almost all the time, and when she did lie down she was on her breast bone. The day before she died she moaned at every breath. She got poor and so weak she could hardly stand up. Could you, from the data given, give the cause of her sickness and if I have any more trouble with other stock what treatment would be given?—J. W. D., Reardan, Wash.

It seems to me that the cow was suffering from an abscess, due to injury. Whether it is snake bite or something else no one can tell; but the tissues were injured and pus formed. The lesions were pretty bad, judging from the way she had swelled. When you opened the lump and gave it drainage it may be possible you did not give it sufficient drainage, and the air coming in gave the bacteria an opportunity, after two or three days, to develop in very great numbers and affected her lungs, I think, and especially the windpipe or trachea. I believe that in the future, along this line, the treatment would be to give the abscess a free lancing and then wash it out with a disinfectant—any of the common disinfectants. Keep it thoroughly cleansed and be most careful that the opening does not close up until such a time that the drainage can not get into the body. Naturally, whatever symptoms would appear might have to be treated, and that I could not give you advice about in general.

**Trouble With the Heifer**—Will you kindly favor me by answering the following questions? What should be done when heifer 17 months old has not come in heat for the last three months? Will melons dry cows or decrease milk? Also squash and mangles? C. B.

Boise, Idaho.

If the trouble with the heifer is not an anatomical one, then you might get results from giving her a pretty strong purge, for instance, a pound of epsom salts; possibly only three-quarters of a pound, depending upon her size, and from a quarter to a half pint of heavy molasses, the two being mixed together and given in two quarts of water. The placing of hot blankets and leaving them on for some time across the loins may also have a beneficial effect along the same line. If, however, it is a disease of the ovaries or the uterus or the mouth of the uterus, naturally this treatment will not do any good, and it would have to be physical treatment that must be given. Melons, squash and mangles will not dry up cows, provided that they are simply fed these in addition to the regular feed of hay and grain. They should be fed as appetizers or regulators of the bowels, and not because of the material food value that they contain.

**Hogs Have Cough**—My hogs have a cough. They are on green pasture, and look well and are good eaters. Can you give me a remedy for the cough?—G. L. S., Tremonton, Utah.

The cough is just the sympton of some trouble, and if they are eating well and thriving I do not believe that I would give the hogs any medicine. I would, however, see to it that they are well provided with shelter at night and that they are not allowed to bunch so as to get heated and then chilled. That is something a hog can not stand.

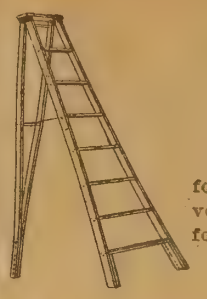
**Calf Needs Grain Feed**—I have a bull calf 2 months old that I bought when it was a day old. I fed it two quarts of new milk while warm from the cow morning and night, and at noon two quarts of morning's milk warmed, until it was 6 weeks old, then three quarts of warm skimmed milk after sitting from morning till night, and it has had all the alfalfa and clover it wanted and at any time it wanted it. Now for about two weeks I chop up two or three quarts of apples morning and night and give it about a quart of bran at noon. It looks poor and its hair is long and rough, but it eats a lot and its bowels are very loose most of the time, and I have never seen it chew its cud. Please let me know what to do for it and what ails it. It is Holstein and Durham. It's mother had to be milked up to the time of her freshening. —L. S., Clarkston, Wash.

I would first suggest that you quit feeding apples to the calf and add to your bran one-third ground oats and about a teaspoonful to tablespoonful of ground linseed. The calf needs grain feed.

**Muzzles for Sucking Cows**—On two different occasions I have read your advice on the prevention of a cow's sucking herself, and each time you described some kind of a harness. I have had some experience this year with two of my best cows sucking themselves, and I even caught my 3-year-old bull sucking one of the cows, and my method of prevention is simpler than yours. There were in our local store some muzzles called brad muzzles, just to be fastened into the nose, without making a hole, and I put these on the cows and fastened a board into the ring of the bull's nose and had no further trouble. These muzzles are very sharp and will certainly do the work. For a small cow an ordinary muzzle with sharp prongs, as is used on the calves, will suffice. A. H. G., Madras, Ore.

Your method certainly is simple; but it is just like any other remedy. You can take your choice. Sometimes one works, sometimes another. There are a number of these remedies, and I am very glad that you mentioned yours.


Inland Ladder



**Safety First Is a Splendid Maxim to Follow**

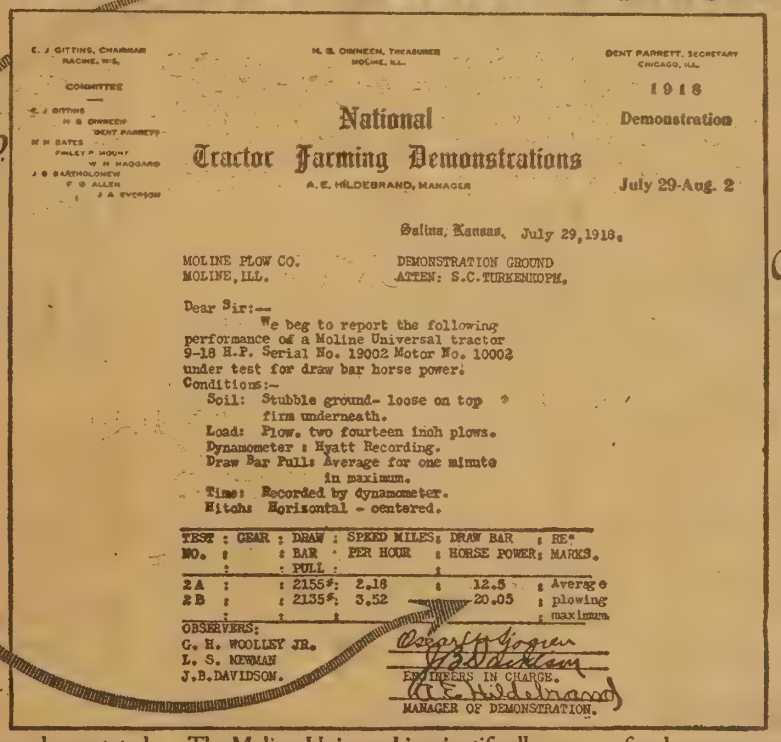
Our Inland ladder is well and strongly built, being reenforced with an iron rod under each step. It is very popular and very generally used; 6, 8, 10 and 12 foot lengths. Price 45c per foot f. o. b. Spokane.

**The Inland Seed Co.**
Spokane, Wash.

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# Moline-Universal Makes Wonderful Record at National Tractor Demonstration



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1918
National Tractor Farming Demonstrations
Demonstration
A. E. HILDEBRAND, MANAGER
July 29-Aug. 2

Salina, Kansas, July 29, 1918.

MOLINE PLOW CO. DEMONSTRATION GROUND
MOLINE, ILL. ATTEN: S.C. TURKENKOPH.

Dear Sir:—
We beg to report the following performance of a Moline Universal tractor 9-18 H.P. Serial No. 19002 Motor No. 10002 under test for draw bar horse power:
Conditions:—
Soil: Stubble ground- loose on top firm underneath.
Load: Plow. two fourteen inch plows.
Dynamometer : Hyatt Recording.
Draw Bar Pull: Average for one minute in maximum.
Time: Recorded by dynamometer.
Hitch: Horizontal - centered.

| TEST NO. | GEAR | DRAW BAR PULL | SPEED MILES PER HOUR | DRAW BAR HORSE POWER | REMARKS. |
|---|---|---|---|---|---|
| 2A | | 2155# | 2.18 | 12.5 | Average plowing maximum |
| 2B | | 2135# | 3.52 | 20.05 | |

OBSERVERS:
C. H. WOOLLEY JR.
L. S. NEWMAN
J. B. DAVIDSON.

ENGINEERS IN CHARGE.
MANAGER OF DEMONSTRATION.

*Develops 20 H.P. on the draw bar and we only rate it at 9 H.P. Think of it!-*

*Officially Accredited with 26.48 H.P. at the belt- We rate it at, 18 H.P.*

IN previous advertising we have stated that the Moline-Universal was conservatively rated at 9-18 h. p. Just how conservative is shown by the astonishing official tests made at the National Tractor Demonstration which showed the Moline-Universal to have an excess of over 11 h. p. on the draw bar and 8 h. p. at the belt.

Certainly these tests show beyond question of doubt the efficiency of the Moline-Universal. For each 169 lbs. of weight the Moline-Universal developed 1 h. p. on the draw bar. Compare this with the ordinary tractor which develops 1 h. p. for each 250 to 300 lbs. weight—and you will clearly realize the greater efficiency and corresponding greater economy of the Moline-Universal.

*However, we shall continue to rate the Moline-Universal at 9-18 h. p. A tractor to give satisfactory service and stand up for years under the strain of tractor work must have reserve power, and the greater the reserve the better. Under normal conditions the Moline-Universal has from 50 to 100 per cent reserve power. Think what this means.*

Ninety-eight per cent of its entire weight is on the two big drive wheels where every ounce is available for traction. The Moline-Universal is scientifically constructed and utilizes its weight to best advantage. It has no dead weight.

From the above report you will see that the Moline-Universal developed 20.05 h. p. at 3.52 m.p.h. pulling two plow bottoms 9 to 10 in. deep in exceptionally hard plowing. At 2.18 m.p.h. it developed 12.5 h. p. The difference in speed accounts for the extra draw bar pull. At 3.5 m. p. h. under average conditions the Moline-Universal will plow as much in a day as a 3-plow tractor traveling at 2.25 m.p.h.

***Just the Right Size***

If the Moline-Universal were built to pull a 3-bottom plow, it would be too heavy for light work. As the Moline-Universal is now built it has ample capacity for all ordinary plowing needs, and at the same time is equally suited for light operations such as cultivating, haying, harvesting, etc. which require far more work hours than your heavy work.

You are chiefly concerned in getting your work done quicker and better than you ever did before. You have no fixed power requirements. One day your work may be heavy, the next day light—and the light work is just as important as the heavy. Thus, you must have a tractor which will do both heavy and light work efficiently and economically, and the Moline-Universal fully meets both these requirements. You have plenty of power when you need it and when you don't want it you have no extra expense—as you would have with a heavy tractor for light jobs.

Remember this—here's what the Moline-Universal Tractor will do for you:

*(1) Gives you plenty of power for all your work, both heavy and light.*

*(2) It does all farm work including cultivating.*

*(3) One man operates both tractor and implement from the seat of the implement in all operations.*

*(4) Electric lights enable it to be worked nights to make up for unavoidable delays.*

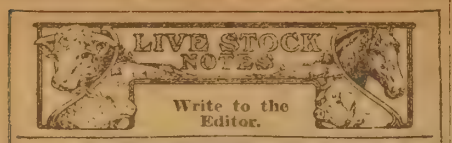
*(5) Because of self-starter, non-robust labor can operate tractor successfully.*

*(6) So well made and has so much reserve power that it will give many years of service.*

Send for free catalog which gives detailed description of the Moline-Universal Tractor. Address Dept. 50.

**Moline Plow Company, Moline, Illinois**






E. J. IDDINGS, Editorial Contributor

# Tuberculosis

## Government Eradication Work

That tuberculosis may be eradicated is not a theory, but a fact, demonstrated for a number of years by the bureau in the work accomplished among herds in Maryland, Virginia, the District of Columbia, and elsewhere, says J. R. Mohler, chief of bureau of animal industry at Washington, D. C. In the district during 1910 all of the cattle were tested, consisting of 1701 head; of the total 18.87 per cent were found to be tuberculous by the tuberculin test. The diseased animals were slaughtered and the premises cleaned and disinfected. Each succeeding year since 1910 all of the cattle have been tuberculin tested with the result that during the fiscal year terminating June 30, 1918, less than 1 per cent of the animals were found tuberculous.

The financial losses from tuberculosis of live stock each year is at least $25,000,000, but far greater than the loss in dollars and cents is the curtailment of our supply of meat, fats and dairy products. During the fiscal year terminated June 30, 1918, there were slaughtered at official abbatoirs in the United States 10,938,287 cattle and 35,449,247 swine; there were 222,787 cattle and 3,493,188 swine found affected with tuberculosis, which resulted in the condemnation of meat products to the extent of the stupendous sum of 25,875,200 pounds. It is for the purpose of preventing such appalling losses that the campaign against tuberculosis was inaugurated. The fact that it has been demonstrated over a considerable area that the disease can be eradicated, is sufficient encouragement to take up the work in every state in the United States in cooperation with the live stock sanitary officials, with the owners of live stock and others interested in the welfare, the preservation and the stimulation of the live stock industry.

### COMMUNITY BULL ASSOCIATION.

**Benewah County Stockmen Waking Up to Effect of the New Law.**

September 7 the new Idaho registered bull law went into effect. All scrub bulls must be taken off the public range. This makes it necessary that all who have cows running at large must own or have an interest in a purebred, registered bull. The Benewah county farm bureau in northern Idaho is taking advantage of this opportunity to organize the farmers into a purebred bull association for the purpose of buying and owning community bulls. The Cosmos Bull association has been formed, with John Kueber president and E. L. Miller secretary and treasurer. The directors are empowered to buy bulls, divide the association into blocks with one bull in each block, provide for the care and maintenance of bulls, levy assessments on each member in the proportion to the number of cows subscribed. None but members are permitted to use the association bulls. Other bull associations are being organized.

### SHORTHORN BREEDERS TO SHOW.

Arrangements are being made for the annual Canyon County Shorthorn Breeders' show and sale, to be held at Caldwell during the first week in November, just preceding the Northwest Live Stock show at Lewiston. There will be 60 or more head of purebred Shorthorn cattle in the show and sale ring. Cattle from all sections of Boise valley will be entered. This event, it is recognized, gives Boise valley a reputation as a community where good Shorthorn stock is being produced and herds built up on a solid, constructive basis. The following will have charge of the sale, the address of the first two being Caldwell, while Mr. Hall lives at Middleton: C. H. Howard, S. G. Tucker and W. A. Hall.

### YAKIMA MAN JUDGES STOCK IN EAST.

H. C. Davis of Yakima, Wash., once even better known as a Holstein breeder than he now is as a banker, judged Holsteins at th Minnesota State fair this fall. The classes were large in nearly all ages and competition was close, but Mr. Davis gave good satisfaction. Professor McKerrow of the Minnesota university, who judged dairy cattle and sheep at the Washington State fair, compliments Mr. Davis' work as judge very highly. Mr. Davis says the Minnesota State fair has a very fine judging pavilion, and that its value is appreciated when seen. H. A.

### HAS SHOWED SINCE A BOY.

Byron Reser, who showed live stock at the Walla Walla fair when only a boy of 15, had a few polled Rambouillet sheep on exhibition there this fall. Byron earned a reputation as a good breeder and a good sport when only a boy and his interest in live stock keeps up now that he is a young man. H. A.

### ALBERTA'S WOOL CLIP.

A conservative official estimate of the 1918 wool clip of Alberta places the total quantity of wool produced in this province at approximately 2,415,300 pounds net weight.

### WOMEN WORKERS IN BRITAIN.

Thirty-six per cent of the employes of the government of Great Britain, outside the munitions factories, in January, 1918, were women, according to an announcement by the department of labor. It is estimated that in all lines of work 1,442,000 women have stepped in to fill the depleted ranks of industry, and nearly three-quarters of this number work for the government.

### TWO CANNERIES CLOSE.

A consolidation agreement has been made by the two principal salmon packing companies of the Grays Harbor district in western Washington, to meet the food administration's call for economics and saving of man power, by which two canneries will be closed and all fish handled at their other canneries. The agreement closes one plant at Hoquiam and one at Moclips.

### HOOD RIVER APPLE VALUES.

Market men at Hood River, Ore., report that the apple market remains spotted. Big firms, who in former years have purchased large stocks of northwestern fruit on speculation, are buying none this season, it is stated.

### LIMIT OUTPUT OF THREAD.

The war industries board has directed manufacturers of cotton thread to limit their output of white thread to 14 sizes, of black to seven sizes and colored to one, with spools regulated to certain diameter made to hold about 200 yards.

TO the Editor of The Washington Farmer: Enclosed find $4.50, for which please renew my subscription for six months to The Spokesman-Review, which includes a three years' subscription to The Washington Farmer. I am sending five cents for a farm service war flag.

ROY E. HIBBS.

Addy, Wash.

### LAND BANK APPRAISEMENT.

C. Irving Worthington, engineer-appraiser of the federal land bank of Spokane, has been in White Bluffs, Benton county, Wash., and has been appraising the land upon which applications for loans from the bank have been made. Mr. Worthington has placed a maximum valuation of $300 per acre on orchard land and $200 per acre on land seeded to alfalfa in the valley, upon which the bank will loan 50 per cent. A value of from $40 to $60 per acre was placed on unimproved land, and the bank will loan 50 per cent of this value. The money loaned on unimproved land, however, must be spent in improving it; but the amount of the loan can be increased as the land is improved. Under the government plan, the rancher can, by paying 6 1-2 per cent of the loan each year, wipe out the entire debt in 36 years. If the rancher prefers, however, the loan can be paid off any time after five years.




HIDES
We want to buy hides. Highest market price paid. Our check by return mail. References, any Seattle bank.
NORTH COAST TANNING CO.
BALLARD STATION SEATTLE




DR. HESS Instant Louse Killer Kills Lice

For Use On Your Poultry

Seize the hen and dust Instant Louse Killer into the feathers. The handy sifting top can makes it convenient to use. Sprinkle it in the nests, on the roosts and floors. Put Instant Louse Killer in the dust bath occasionally—your hens will do the rest. This means louse prevention.

FOR STOCK

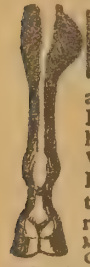
With one hand stroke the hair the wrong way, with the other sift in the Louse Killer. Especially good for lousy colts.

GUARANTEED. The dealer will refund your money if it does not do as claimed.

1 lb. 30c, 2½ lbs. 60c (except in Canada)

Dr. HESS & CLARK
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YOU CAN'T CUT OUT A BOG SPAVIN OR THOROUGHPIN but you can clean them off promptly with



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TRADE MARK REG. U.S. PAT. OFF.

and you work the horse same time. Does not blister or remove the hair. $2.50 per bottle, delivered. Will tell you more if you write. Book 4 R free. ABSORBINE, JR., the antiseptic liniment for mankind, reduces Varicose Veins, Ruptured Muscles or Ligaments, Enlarged Glands, Wens, Cysts. Allays pain quickly. Price $1.25 a bottle at druggists or delivered. Made in the U. S. A. by
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BEST EVER KNOWN

Every man or boy who sets out a line of traps this season will make **Big Money.** Weather conditions have been favorable for the propagation of fur bearing animals and for that reason they will be very plentiful the coming season.

Many of our old time trappers have gone to the front to fight for Uncle Sam and those who are left to trap will have a larger field to trap in and consequently will make larger catches. Prices on most furs will be the highest ever known. Get busy—order your traps, baits and supplies now and get your share of these **Big Fur Profits.**

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We carry a complete line of trappers' supplies. Below is a partial list of what we have to offer—guaranteed goods at lowest prices—if what you want is not in this list write for our catalogue today and get what you want.

Special Combination Offers

**No. 1** at **$3.10**
6 No. 1 Victor Traps
4 " 1½ " "
2 " 2 " "
1 Bottle Animal Bait (Specify kind wanted). Value $3.92

**No. 2** at **$4.95**
6 No. 1 Victor Traps
4 " 1½ " "
2 " 2 " "
1 Shaw Smoker
1 Bottle Animal Bait (Specify kind wanted). Value $5.92

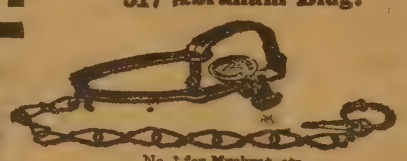
Partial List of Other Supplies

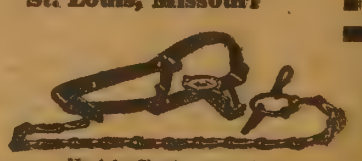
| Newhouse Traps | | | Victor Traps | | | Oneida Jump Traps | | |
|---|---|---|---|---|---|---|---|---|
| No. | Per Doz. | Each | No. | Per Doz. | Each | No. | Per Doz. | Each |
| 0 | $3.86 | $0.35 | 0 | $1.68 | $0.15 | 0 | $2.39 | $0.22 |
| 1 | 4.54 | .41 | 1 | 1.96 | .18 | 1 | 2.81 | .26 |
| 1½ | 5.26 | .48 | 1½ | 2.99 | .22 | 1½ | 4.20 | .38 |
| 2 | 5.74 | .52 | 2 | 4.15 | .38 | 2 | 6.19 | .56 |
| 3 | 6.80 | .62 | 3 | 5.53 | .50 | 3 | 6.75 | .61 |
| 3½ | 8.16 | .74 | 4 | 6.53 | .59 | | | |

| Tree Traps | | | Stop Thief Traps | | | | |
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| 0 | $3.24 | $0.30 | 1 | $1.55 | $0.14 | Shaw's Pneumatic Smoker | $2.00 |
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| 2 | 4.48 | .41 | 3 | 2.55 | .23 | Texas Steer Fox Horn | 1.60 |
| 3 | 5.68 | .52 | 3½ | 3.54 | .32 | Dayles Flash Light | 1.70 |
| | | | | | | Stevens Crack Shot Rifle | 5.60 |

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## Willing to Fight for Education

By DR. S. B. NELSON.

In November, 1913, William G. Hart wrote to me from Tulare, Cal., saying that he wished to take up the study of veterinary science. He said he had high school diplomas from the Arapahoe high school of Nebraska and the Tulare high school, which would admit him to the freshman class of the University of Nebraska; desired to know if admission requirements of the State college were sufficiently identical to those of Nebraska to permit him to enter the freshman class at the State college. I informed him that they were. Also, he wanted to know if I thought he would be able to earn his board after school hours, while attending the State college. He said he would do janitor work about the buildings, on the grounds, would work for private families for his board, or would do anything for his board that amounted to honest labor.



I told him that many of our students were making from $5 to $15 a month while studying, and that I saw no reason why he could not do as well; that we would help him all we could; that I advised him to come ahead. He did so. During the four years of study and work that followed I saw a good deal of Hart in class and out, and it has occurred to me that there is in his story a good deal that should be inspiring to any young man who now may be wavering slightly in his determination to fight on for an education, in the face of all odds and drawbacks.

Hart came up from California and enrolled in our veterinary classes in February, 1914, on the opening of the second semester of that year. He had practically no funds when he arrived. That winter and the next he worked in dairies near Pullman night and morning, milking and doing other work. Naturally, he had to be up very early in the morning, and often was working or studying till late at night.

Summers he worked in harvest fields in the neighborhood of Pullman. He became known among the farmers as a husky young fellow who understood farm work and could be relied upon to "take hold and go ahead," and who was not afraid to let out an extra link once in a while to save some hay from a coming rain. He had these characteristics, and his services were always in demand.

During the last semester of his junior year he roomed in the veterinary hospital at Pullman, and it was his business to be on the alert during the night to help look after the patients. Of course, he did not have to be up every night, but occasionally he did, for which service he received his room rent.

After finishing his junior year, which was the first of February, 1917, he was made an assistant in the hospital practice of Dr. F. T. Notz of Baker, Ore. He retained this position until about the middle of September, 1917, and then took up his studies at the opening of college, at the Spokane branch hospital of the State college of veterinary science. He received his degree of graduation last May.

While in the employ of Dr. Notz, Hart, although lacking a year of having finished his veterinary training, was able to take care of a considerable part of the practice during temporary absences of Dr. Notz. During this period, he earned sufficient money to pay some debts which he had contracted while studying in Pullman, by borrowing from the students' loan fund, which we maintain.

During his senior year's work in the Spokane branch hospital he was employed as groom. It was his particular duty to care for the patients in the hospital proper. This responsibility he discharged during the year to the satisfaction of all, and carried on his class work besides.

Soon after his graduation, Hart was eminently successful in passing the examination of the Washington state board; and a little bit later was equally successful in passing the examination of the Oregon state board. He is now at his home in Tulare, Cal., waiting his call, and is one of the large number of young veterinarians whose services are required in the medical corps of the army.

### Germans Sell Artificial Meat.

The Germans are selling artificial meat, camouflaged with pepper, salt and onions.

### Many Jews in Navy.

More than 4000 Jews are enrolled in the United States navy.

# Motor on the Farm

The tractor demonstration held at Chehalis, during the week of the Southwest Washington fair, August 26 to 30, was an eye-opener to the farmers. It showed conclusively that power farming is here to stay. It didn't make much difference what make of machine it was, all gave good account of themselves in all types of soil.

The first plat laid out for plowing was a pasture sod that hadn't been plowed but twice in 32 years and then only about four inches. For this demonstration it was agreed to plow six and a half inches, and, without exception, all the six tractors kept fully down to this depth. It was a test of power in this demonstration.

The second plat was laid out on oat stubble that was comparatively easy to plow. Here the depth was eight inches, and the contest was that of getting the best job of plowing and disking in the least time. The six tractors that took part were Fordson, Moline Universal, Cleveland, Samson Sieve Grip, Bean and the Lauson. The Beeman Garden Tractor also demonstrated.

Without a question the tractor will play an important part in food production during the next few years. Once it is used by a farmer it is safe to say he will not go back to the old method. A. B. N.





For years the standard of farmers everywhere—Mica Axle Grease. Its high-quality petroleum grease would alone make good axle grease. But the powdered mica makes it better. It can't gum or cake and it lasts twice as long. No hot boxes. Get a can from your dealer today.

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(California)

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# How the packer is saving millions out of waste

## —and how this results in higher cattle prices for the stockman

*The development of by-products out of waste means a saving of about one hundred and fifty million dollars annually—a sum sufficient to keep New York's six million people supplied with meat for six months.*



THERE was a time when the steer was handled solely for its edible meat, its hide, and its tallow.

The remainder of the animal, in weight totaling many millions of pounds annually, was thrown away—a sheer waste.

Today virtually all of this former waste is utilized. Over 250 articles are now contributed by the steer to human needs, and a larger proportion of the animal is saved for human food.

At the time of writing $135 is, on the average, the price paid for the average beef animal to the stockman by Swift & Company.

But if the old order of waste still prevailed and only the hide and tallow were saved, Swift & Company would be obliged either to pay not more than $125 to the stockman, or to charge the public higher meat prices.

Thus, you see, by-product utilization results in a saving of about $10 per animal—a saving which, when multiplied by the total number of cattle dressed annually by Swift & Company, over two million, amounts to more than twenty million dollars annually. This saving goes to the stockman in higher cattle prices and to the consumer in lower meat prices.

If applied to the entire number of cattle dressed annually in America, approximately fifteen million, this saving would amount to about one hundred and fifty million dollars annually.

The real development of by-products came with the development of the larger packing organizations.

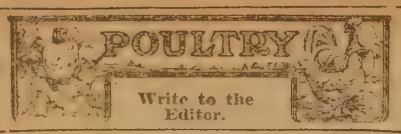
Success was attained not easily, but by patient effort, by exhaustive experiment, by intense specialization. It has been a big job and has called for big methods—a job far beyond the resources of the old, unorganized system of local meat dressing.

Not only are the by-products saved but their value has been increased through better handling of hides, fats, and other edible portions of the steer.

Swift & Company is glad to have had a part in this development. It is an achievement of thrift—an achievement that has made possible today lower meat prices to the consumer and higher prices to the producer of cattle than would have been possible under the old methods.

# Swift & Company, U. S. A.

A nation-wide organization owned by more than 22,000 stockholders




JAMES DRYDEN,
Editorial Contributor

# Lay 1000 Eggs

## Record of 35 Hens in Ten Months

The report of the all-northwest egg-laying contest for the month of August shows that seven pens, five hens in a pen, have laid 1000 eggs or more in the 10 months of the contest. This is an excellent showing, and the director is to be congratulated. The record shows that the 20 best pens among the 135 entered laid from 922 eggs to 1096 each.

The pen of Barred Rocks owned by the Oregon Agricultural college still leads all other pens for the full period. This pen has laid an average of 219.2 eggs a hen in the 10 months. If this pen lays no more in the next two months than it laid in the month of August it will establish a pen record for laying contests in the United States. The second pen, owned by Paul B. Towne of Tekoa, Wash., is only nine eggs behind the O. A. C. pen. For the last three months the race has been very close between these two pens. In June the college pen was eight eggs ahead, in July eight eggs, and in August it gained one egg on the Towne pen.

The leading pen for August was No. 56, White Rocks, owned by C. Daniels, Hoquiam, Wash., which laid 114 eggs. A pen of Rhode Island Reds owned by Bliss & Bliss, Southworth, Wash., was second with 113 eggs. The highest individual hen to date is a White Leghorn owned by C. F. Williams, Salem, 263 eggs; second, H. J. Kingsbury, Twin Falls, Idaho, 244 eggs. The highest individual record for the month of August was made by a White Orpington, 29 eggs, entry of Mrs. A. Gunn, Seattle, Wash.; second, Rhode Island Red hen by J. R. McRae, Milwaukee, Ore., 28 eggs. J. D.

### CARE OF MOULTING STOCK.

**By Mrs. George R. Shoup, Western Washington Experiment Station.**

Considering the large number of adult birds that are being kept over this year, the care of such stock during the moult is one that needs careful thought. Remembering the trying time that was experienced when chicks moulted, it stands to reason that fully grown birds undergo more or less inconvenience during the process of changing clothes.

The birds show timidity, dreading the attack of birds in full feather, and are not as active as during the laying period, and rarely seem happy or sing.

Those that have been the best layers usually drop their feathers quite suddenly, sometimes looking like a picked goose for a few days, and then begin feathering quickly and these moulters seem to use as much energy in providing clothes, as they have hitherto used in making eggs.

In designating the various stages of the moult it has been the custom at the western Washington experiment station to use numbers for tabulating purposes, and once so identified, selecting by physical test is easier. When a bird is in old feather (neither growing nor dropping feathers) it is called "O," and fowls are usually laying in the fall in this condition of moult. When the bird is shedding enough to show bare spots or complete areas, it is called moult "1." When the bird begins to shoot new feathers so that they are short and tight to the body but without new wing flights or tail yet showing half out it is moult "2." When the body feathers are practically grown, and the tail and wings are about half out, it is moult "3" and when the feathers are entirely renewed and comb growing plump it is moult "4."

Birds in moult "1" and "2" show loss of appetite and even hide away and occasionally are found dead, either from hunger or exposure.

Mash in some form seems to be especially liked, and an increase in this feed over what the layers will eat often gives the timid moulters a chance to get it. The same is true of green stuff. They care little for hard grain, using about one-fourth their laying ration of grain until moult "3," when they are again protected from attack and are willing to feed among the fully feathered birds and even return a fight for a disputed morsel. With moult "4" they again fill their crops as for laying, grow comb and return as producers. The entire process takes from 60 to 120 days and birds of over 250 egg records are known to have kept laying during the earlier part of moult "1" and to have resumed in moult "3" with only three weeks' rest from production. There are also a few birds on record as not having moulted in two years.

Where culling is in process, it is a distinct advantage to the birds to sort the breeders out when getting market birds and putting those kept into their future breeding quarters. In this way the producers can be partitioned into smaller quarters, making room in the pullet house for the oncoming well advanced pullets, as well as putting the moulters by themselves, greatly to their relief.

In feeds, plenty of sunflower seed or stalks turned down so the birds can harvest their own seed in their runs, all the mash they care to eat and a liberal supply of green feed besides an increased amount of sprouted grain, seem to give best results. If linseed meal is obtainable it adds to the quality of feathers and helps to regulate the bowels; also bone meal or else dry cut bone likewise is a help, fed in the mash.

Upon your skill in caring for this fall's moulters, depends your egg returns from them, so it is worth while to try to keep them comfortable, which, after all, is what a real poultryman does for his flock at all times of the year.

### Cheese and Macaroni.

The addition of cheese brings up the food value of cabbage or cauliflower and adds to the flavor. Cheese and macaroni make a well-balanced dish and take the place of meat.

**CHICKENS SICK?** Roup, Colds, Canker, bowel complaint, Limberneck, Sorehead, etc., the best remedy is always GERMOZONE. At most dealers or 75c postpaid, with 5 book poultry library free.
GEO. H. LEE CO., Dept. 421. Omaha, Neb.

**The Original Portable Drag Saw**



**Vaughan's**
**4 h. p. Portable Drag Saw**
WILL CUT 15 TO 20 CORDS OF WOOD IN 10 HOURS.

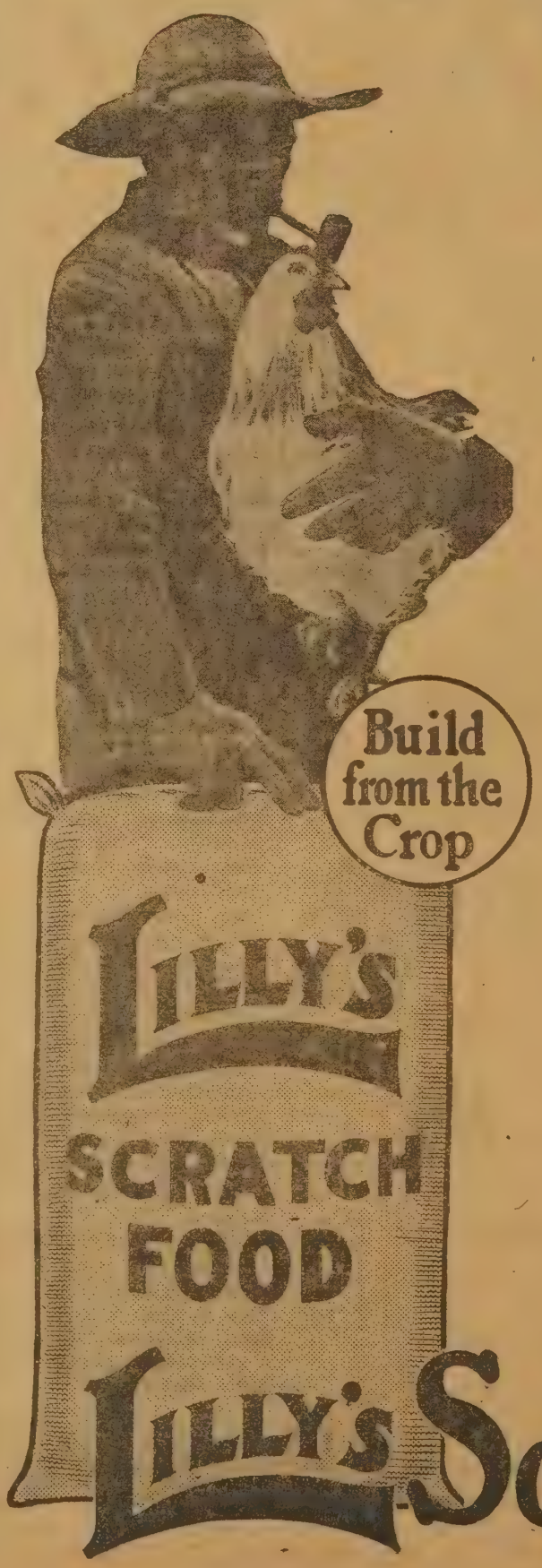
Can be operated by one man. Two men can carry complete machine. 4 H. P. gasoline motor mounted on frame. One gallon gasoline required to cut 8 to 12 cords of wood. Engine can be used for other work without removing from frame. No gears, cogs, belts or pulleys. Friction clutch prevents breakage if saw pinches. Saw makes about 125 strokes per minute. Will cut any size log up to 6 feet. Sprockets and cranks, etc., made of cast steel. All working parts guaranteed against defects in material and workmanship.

Net cash price for complete machine as shown in cut, $160 f. o. b. Spokane and common points. FOR SALE BY

Washington Machinery & Supply Company
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# What's a Good Flock of Hens to You?




To the poultryman a good flock of hens is his bank account. He must safeguard it in every way possible to insure a steady production.

To do this the poultryman must be sure that he is feeding correctly.

Make no mistake—select Lilly's Scratch Food—it builds from the crop. It is the very bottom and foundation of your flock's body-building stamina and egg production.

Lilyy's Scratch Food is made of good grains in correct proportions. Good sound grains best suited for the purpose—not such grains as can not be used for other purposes.

Lilly's Scratch Food is made of good modern machinery. Different grains are scientifically mixed—the proportions are correct and all chaff, dust and dirt is removed by machinery built for this purpose.

Insist on Lilly's, the original Scratch Food. Don't accept something

*JUST AS GOOD*

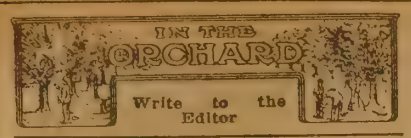
All progressive dealers handle Lilly's poultry foods.

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The Oldest Poultry Food House on the Pacific Coast.
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Lilly's Poultry Circular will interest you—A copy will be mailed you soon.




GRANVILLE LOWTHER
Editorial Contributor.

# Orchard Troubles

## Blackberry Enemies Numerous

By GRANVILLE LOWTHER.

The cane borer is a beetle that girdles the tip of the cane with punctures in laying her eggs, so that the tips droop and wither. The grub is a blind worm without feet, and burrows downward in the pith. The remedy is to cut out the affected canes below the injury, or if in autumn cut off the canes at the ground.

Gouty gall beetle, in the form of a round-headed larvae, enters the canes at the base of the leaf stalks and from such stalks work around the canes in long spiral tunnels through the sap wood. Later in the season, the canes swell over the eaten areas, forming enlargements or galls, very noticeable when the leaves have fallen. The only practical remedy is to cut out and burn the galled canes containing the larvae.

Leaf hopper is known by the curling and twisting of the infested leaves. The eggs are inserted under the bark of the tender twigs, or sometimes under the older bark. They hatch in the early spring in time to attack the first green foliage. The adult insect is a pale yellowish green, about one-eighth of an inch long. It may be controlled by sprays such as coal oil emulsion or tobacco.

The oyster shell scale, so common in apple orchards, affects blackberry plants as well. It is harder to kill than San Jose scale, but may be killed by the lime sulphur spray, a little stronger than is used for San Jose.

The red spider pest on blackberries is the same insect as affects many other plants and trees. It may be controlled by the use of coal oil emulsion, whale oil soap, or tobacco.

Rose scale infests mostly blackberries, raspberries and roses. When the plants are dormant, spray with lime sulphur. When the leaves are out, spray with tobacco.

San Jose scale affects blackberries and all bush fruits. The remedy is lime sulphur, used before the buds open, or after the foliage appears, the remedy is tobacco.

The saw fly is a chewing insect, and the remedy is arsenate of lead. In its larval form, it feeds on the under side of the leaves. If the fruit is formed, it is dangerous to spray blackberries, with this or any other poison. It has been scientifically proven that with apples, not enough poison will be present to affect the health; but it is considered hazardous in blackberries or raspberries.

The snowy tree cricket deposits its eggs in the canes or twigs during the autumn, they remain dormant during the winter, hatch in the early spring, and feed entirely upon plant lice or other soft insects during the entire summer. It is therefore the friend of the fruit grower. It is to soft insects in general what the lady bug is to aphis. However, if control measures are desired, cut out the canes affected and burn them.

# Aerate the Soil

## To Catch the Water From the Snows

Mr. Hassell of Grandview, Washington, came to North Yakima a few years ago from the state of New York. His pathway may have been strewn partly with roses, but they were the kind that had developed thorns, and his feet have often been bleeding as he pursued his journey. In spite of this, he is vigorous, optimistic, has imagination, and often sees things with the mind which people have never seen with their eyes.

For a number of years Mr. Hassell engaged in the making of concrete tiles, for drains and irrigating purposes. Meeting with various mishaps in this enterprise, due to labor and other complications, he eventually moved out into the Bickelton country, where he bought a homestead.

"I happened to know that country," says Mr. Hassell, "or at least I did know it 13 or 14 years ago, when it was just being settled by homesteaders who believed it would be a great wheat-growing section. These hopes have not been justified by the facts, however, for they lose at least half of their crops, and the yield on what they call 'good crop' years is not enough to tide them over."

Imagine my surprise, after hearing this recital, to have Mr. Hassell continue with the declaration that he intends to raise prunes on his ranch.

"How do you expect to raise prunes in that arid region?" I demanded.

"I intend to tile it," explained Mr. Hassell. "I am putting in tile to aerate the soil, to catch the water from the snows and the spring rains. If the soil can be wet down two or three feet, by surface cultivation I can hold enough moisture to develop good prunes. I have already tiled several acres, and know what this treatment will do for the soil."

When I asked him why he chose prunes instead of some other fruit, Mr. Hassell was ready with an answer. "Because the prune ripens early, is generally ready for picking before the dryest weather of the summer comes on and therefore before the ground dries out, if the latter has been tiled. Furthermore," he continued, "I am planting almond seeds, to raise stock upon which to graft my prune scions. The almond root is better adapted to dry weather conditions than is the prune."

Mr. Hassell estimates that it will cost him about $25 per acre to tile his land, laying the tiles 20 rods apart. Now let us figure a little: Suppose the arid or semi-arid regions, with 12 to 20 inches of rainfall per annum can be made to produce abundantly by tiling to the extent of $25 per acre; do you not see the tens of thousands of acres in Washington, Oregon, Idaho and Montana, now practically waste, that will in the future be made to yield good returns? Well, if you do not you need to awaken your imagination. G. L.

### The Heart of a Boy.

Read in this issue another chapter of the early school-day experiences of Joe Ashlock—and compare them with your own. Share with him his boyhood joys and little tragedies, and somehow the ups and downs of your own present-day life will be found subject to a broader interpretation and tempered with greater patience and tolerance.

"The Heart of a Boy" is on page 6 of this issue.

### SCHOOLS IN PERSHING'S ARMY.

Every officer and enlisted man of the American expeditionary forces is offered instruction under a vast educational system organized by the Y. M. C. A. with the approval of the commander in chief. The project has been under discussion by the military and Y. M. C. A. authorities for some time and details are now completed by general orders placing in operation a course of preparation. General John J. Pershing has taken a keen personal interest in the matter.

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THE WASHINGTON FARMER.
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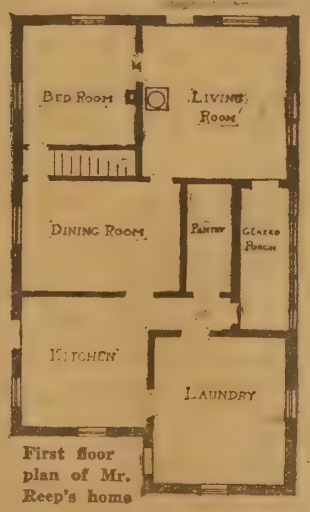
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SAVE FUEL

and Help Win the War
The Caloric Saves 35 to 50% Fuel



Much more room




First floor plan of Mr. Reep's home

Great Comfort and Cleanliness

"It's a great comfort to have our farm home as well heated as any city dwelling," said T. F. Reep, at his residence on Rural Route No. 2, Michigan, N. D. Mr. Reep is a successful farmer, well known throughout the community, and knows what the North Dakota climate in winter means.

Last Fall he installed the patented Caloric Pipeless Furnace. Since then he has been enthusiastic about its benefits.

"The Caloric Pipeless Furnace has heated my entire house with perfect satisfaction. All twelve of its rooms have been comfortable even in the severest Dakota weather, and I have found the fuel consumption to be very moderate as well.

"Not only that, but since getting rid of the stoves I had been using I have much more room, and we do not have the labor of carrying fuel and ashes. There is none of the dirt that made heating by stoves so unpleasant.

"I can readily recommend this furnace to anyone wanting a clean and economical heating plant."

Your home, in town or on the farm, may enjoy the genial warmth and healthful comfort of the Caloric ventilating and heating system, for this furnace may be put in an old or new house, in a cellar or in a pit, without cutting walls.

Over 6,000 people have willingly written their hearty endorsement of the Caloric, and over 50,000 are using it with great satisfaction. Why shouldn't you?

See the dealer, or let us send you our new catalog, which tells of the principles that have made the Caloric so successful. With it we will send the names of users in your section, and you may see for yourself. Write us today.

The Caloric burns lignite most successfully. Hundreds of people in this section are using lignite exclusively for fuel.

Burns coal, coke, wood, lignite or gas.

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The Original Patented Pipeless Furnace

## Fourth Liberty Loan

### Are Best and Safest Investment

The farmer will buy fourth Liberty loan bonds because they are the best and safest investment in the world.

Because they are backed by the greatest nation in the world, whose debts have been paid always in full.

Because they provide a full measure of insurance against want, old age, or temporary financial distress.

Because the possession of Liberty bonds will better your credit; as collateral Liberty bonds rank highest when you wish to borrow.

Because if you don't buy bonds, just that much more money will have to be raised by taxation; in the one case you receive interest for the money loaned, in the other a tax receipt.

Because the investment of money in Liberty bonds means a financial reserve that will enable one to share in the country's prosperity after the war.

Because no American citizen desires to shift the burden of supporting the government and the boys in the trenches on to his neighbor's shoulders.

Because every dollar loaned is a fighting dollar, helping to win the war by keeping our fighting men supplied with guns, munitions and everything necessary to keep the Hun on the move towards the Rhine and unconditional surrender.

Because the money loaned is coming directly back to the farm in high prices paid for farm products, through the purchases of our government and by the allies.

Because if we do not win the Hun will dictate peace terms and you will still pay the enemy.

Because if the war is a draw through failure to throw in our full force and resources, it will mean a world armed to the teeth with all the attendant cost, permanent high taxes, with the constant menace of another and more costly and sacrificial war.

The first instalment of subscriptions to the fourth Liberty loan bonds may be paid in United States treasury certificates of indebtedness of all outstanding issues except the 4 per cent series of August 20, 1918, it is announced by Governor James K. Lynch of the federal reserve bank of San Francisco.

Governor Lynch advises bankers throughout the twelfth federal reserve district that the certificates of indebtedness will be accepted in payment of the first instalment in even sums of $500 or multiples thereof only, and will not be accepted in payment of any smaller amount.

This plan is expected to materially simplify the work of bankers in handling the fourth Liberty loan.

### LIBERTY LOAN FLAG.

The treasury department has issued a warning against the unauthorized reproduction of the fourth Liberty loan honor flag design. This honor flag is the exclusive prerogative of the treasury department and is not to be reproduced by any person or organization either in the form of buttons, circulars, posters, flags or any other form of advertising matter. It is the intention of the treasury department to make the honor flag a real mark of distinction and to exercise a very careful supervision of its use.

### GIRLS' HALLS FOR MEN.

Waldo and Cauthorn halls, campus residences for women at the Oregon Agricultural college, will be requisitioned for housing men of the students' army training corps, thus supplementing the large barracks now being rushed to completion, and others to follow. This will make possible the desire of the war department to consolidate its men in a single group of buildings on the south side of the campus.


**AMERICAN FLAG**

**Size 3x5 Feet**

SEWED STRIPES CANVAS BOUND
FAST COLORS BRASS GROMMET

One of these big, fine flags will be mailed postpaid to any one securing and sending in seven subscriptions to your state family farm paper.

The Washington Farmer
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**The Washington Farmer**

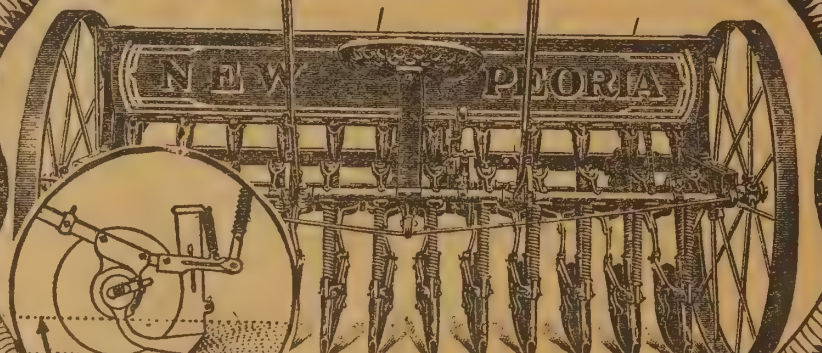
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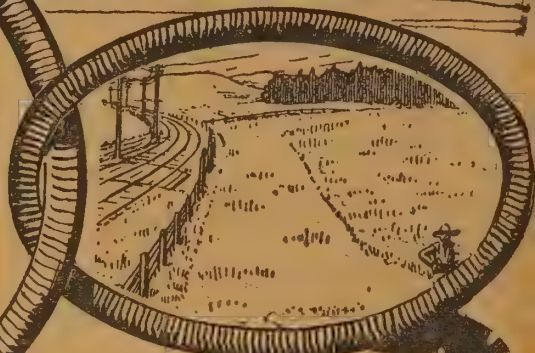

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# The Biggest Link in the Chain of Greater Crop Production!

# PEORIA DRILL





NOTE the Wonderful PEORIA DISC SHOE

***AN ACCIDENT***

W. J. Rummens, of Pomeroy, while seeding along the right-of-way, his team became frightened by a passing train and ran across the track, breaking his drill so badly that he had to buy a new one to continue the seeding of his field. The new drill he bought was a PEORIA. The result is shown in the picture on the right.

***THE RESULT***

With the new PEORIA Mr. Rummens started seeding where he had left off. When the grain was grown the point where he began with the PEORIA could be easily marked with the eye. The grain sowed by the PEORIA was four inches higher and at least fifteen to twenty per cent thicker.

## Uncle Sam says "increase your crops"—the Peoria will do it

JUST as the big tanks play a vital part in the big offensive in France, so the New PEORIA DRILL plays an equally important part in the big food offensive which is constantly being waged in the Northwest. By actually increasing your crop yield the New PEORIA makes every acre of ground on which it is employed do nobler duty for our country in this hour of need. It is the duty of every farmer to produce the biggest crops possible.

The New PEORIA makes every seed count. It opens the furrow, drops the seed at the very bottom. This means a bigger yield—more profits for you. No seed is wasted—none left exposed to the birds or wind. Because every seed is laid at the bottom of a packed seed bed and covered, the grain grows evenly—the whole field ripens uniformly—the grain grades better in the market.

At the price of grain today can you afford to waste seed? Do you know that your crop yield will be greater when sown by a New PEORIA? NOW is the time to investigate the New PEORIA—not after your crop has been put in.

## Disc Shoe the Greatest Drill Feature in Existence

Does a saving of 20 per cent in your seed interest you? That's exactly what the famous PEORIA DISC SHOE will do for you. It has been absolutely proven by farmers all over the Pacific Northwest that grain sown with the PEORIA DISC SHOE at the same time and on the same soil and under the same conditions yields from 2 to 3 bushels more grain per acre than grain sown by any other method. With the high prices grain is bringing can you afford NOT to investigate the wonderful PEORIA?

At Washington on February 3, 1915, President Wilson said: "There is a shortage of food in the world. It is necessary that our land should yield more per acre than it does now. It is necessary that there should not be a plow or spade idle in this country."

The PEORIA will make the words of our great President come true—it will make greater crops and thereby help our Government in this time of need.

***FILL in and MAIL THIS COUPON TODAY—Find out more about the NEW PEORIA—the greatest Drill ever perfected.***

**R·M·WADE & CO.**
SINCE 1865
PORTLAND, ORE.-SPOKANE, WASH.

322 Hawthorne Ave., Portland, Or.
910 N. Howard St., Spokane, Wash.

## FREE COUPON! MAIL TODAY

R. M. WADE & CO., Portland, Oregon.

Gentlemen: Send me without obligations on my part full information regarding the famous PEORIA DRILL. Tell me how the PEORIA can increase MY crop production.

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# Idaho State Fair

## War Work Is a Big Feature

Rain threatened to spoil things at the state fair of Idaho this year, but the silver lining of the clouds brought forth everything that could be desired, and the week ended with thousands of satisfied spectators and excellent gate receipts. Sunday exhibitors worked in a downpour. Monday dawned with more rain, which gradually diminished to a cold and disagreeable drizzle. Parts of the ground were bog mires, and cattle, automobiles, tractors and trucks plowed through it when they could and wallowed and snorted when they couldn't. Undaunted, Secretary O. P. Hendershot and his assistants went ahead with their work, and the exhibitors, catching the spirit, did likewise, with the result that when Old Sol showed his welcome face Tuesday morning everything was ready and working smoothly.

The tractor demonstration scheduled for Tuesday and Wednesday was postponed until Thursday and Friday. Great crowds witnessed the plowing of 120 acres on the Rankin farm, south of the fairgrounds, and later were given private demonstrations on the fairgrounds. Professor Wooley and Professor Neidig of the University of Idaho supervised the official plowing and drawbar tests, and farmers for the first time in southern Idaho were privileged to witness an exhibition which was in all ways practical and broad enough in its scope to give them an idea of the many uses to which tractors can be put in modern farming.

The tractor demonstration and the work attendant upon it represented a big undertaking for all concerned. It was recognized by the National Tractor association, and therefore was held under the rules and regulations governing demonstrations sanctioned by that body. With only limited funds at their disposal the committee in charge found hard going at times. Most of the committeemen had exhibits and demonstrations of their own to look after, and it was frequently difficult to drop their own work and do something for the school as a whole.

### War Work.

War work in all its branches was one of the big features of the fair this year. Red Cross exhibits were inspiring. Pretty girls tagged one everywhere, and the fellow who came away without a thrift stamp or a war savings stamp must have gone out the side entrance.

The work of the university and of the university extension department was effectively displayed in various booths. Economy in the preparation of home meals was demonstrated by the extension department people, and all other phases of the work were brought most forcefully to the attention of the fair visitors.

### Boys and Girls' Club Exhibits.

The work of the Idaho's 10,000 boy and girl club members was one of the most interesting of the hundreds of exhibits. To many persons this was one of the most inspiring exhibits on the grounds. This included the standard exhibits in the buildings and the pig and sheep entries outside. This movement has a hold on Idaho people which means support from nearly every section. The breeders of large and fancy herds are among the most interested in this work, some of them made so by meeting defeat in the open classes at the hands of some small stripling of a pig club member.

### Farm Exhibits.

Agricultural exhibits emphasized again the many and varied resources of the state. The county exhibits were noteworthy, and in many cases showed much hard work and painstaking effort.

The women's department was a place of absorbing interest to every one. It was shown on a large scale, and many and varied were the entries. This was also true of the fine arts.

The poultry and rabbit show was one of the busiest places on the grounds, great interest being manifested especially in the rabbits.

The fair management provided wholesome amusement, although I believe we could get along pretty well without the cheap sideshows that take up so much good space and provide so little diversion of any real merit. People are getting tired of being treated like they lacked good sense, and the sooner all of our fairs do away with this sort of amusement the more they will be appreciated.

Following is a list of the department superintendents: Horses, E. O. Walter, Filer; beef cattle, H. W. Dorman, Caldwell, and Henry Thiessen, Sweetwater; dairy, T. H. McDermott, Meridian; cattle, second division, H. A. Ireland, Caldwell; swine, Jesse H. Richards of Virginia, Idaho, and D. H. Vahlberg, Emmett; sheep, D. C. Mullen, Nampa; poultry, Graham Park, Fruitland, and E. S. Bailey, South Boise; farm products, M. A. Thometz, Twin Falls, and I. Lee Truax, Meridian; fruit, Guy Graham, Fruitland, and B. F. Hurst, Boise; dairy products, W. H. Blunt, Caldwell; pantry and kitchen, Mrs. H. E. Champlin, Boise; bees and honey, P. S. Farrell, Caldwell; women's department, Mrs. M. D. Badgley and Miss Ethel Mathews, Boise; fine arts, Mrs. T. C. Hollingshead, Boise; boys and girls' clubs, W. T. McCall and Miss Z. Fay Fowler, Boise.




# A Weatherproof Coat

In every Raynster there is a Raynster Label. That label assures you something more than just a raincoat. It is the sign of the best in weatherproof clothing of all kinds. It is the proof of full value for money received.

Buy a Raynster today and be sure the label is in it. Raynsters are good insurance of health and clothing for every member of your family.

There are Raynsters in all styles of weatherproof clothing. The heavy rubber surfaced kind for outdoor work; cloth coats suitable for dress or work, these are good overcoats as well as good raincoats; heavy ulsters that are warm and shower-proof, splendid for driving in cold or rainy weather. Raynsters are made for every member of the family and are priced according to materials and workmanship necessary to produce each particular kind—the label guarantees value for price—always look for it. Don't buy just any old raincoat when your dealer can get you a Raynster.

Write for a Style Book showing many Raynster models.

**United States Rubber Company**

Clothing Division, New York and Boston

Trade Mark Reg. U. S. Pat. Off.

*Look for this Label in your Raynster*

# Raynster

Reg. U. S. Pat. Off.

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**Has Imitators But No Competitors.**

A Safe, Speedy and Positive Cure for Curb, Splint, Sweeny, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunches from Horses or Cattle.

As a Human Remedy for Rheumatism, Sprains, Sore Throat, etc., it is invaluable. Every bottle of Caustic Balsam sold is Warranted to give satisfaction. Price $1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address

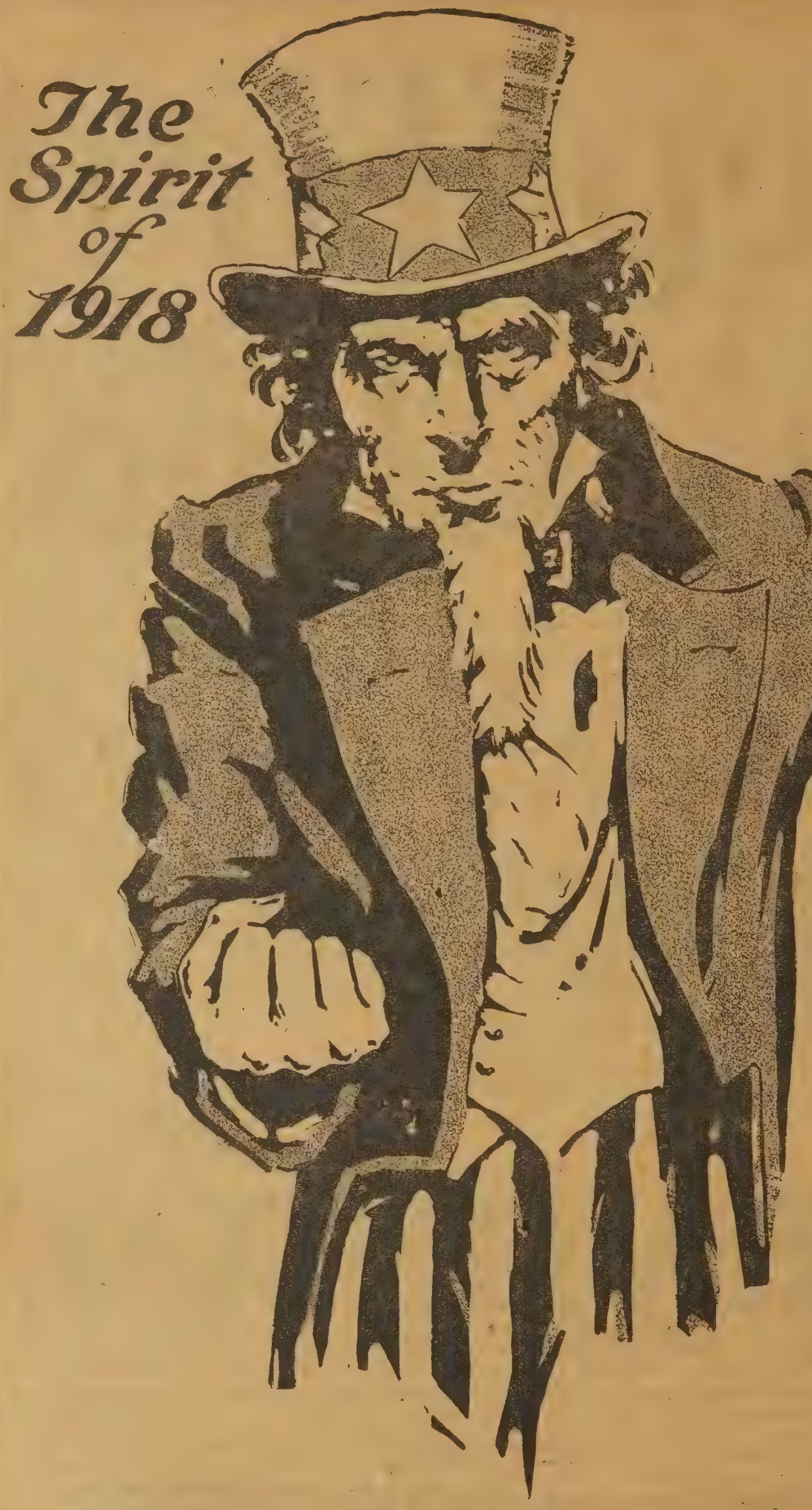
The Lawrence-Williams Co., Cleveland, O.

# Look for the Trademark

Trademarks are placed only on articles that the manufacturer knows will do the work expected of them—that will satisfy the buyer. The manufacturer isn't afraid to let it be known that he made the goods—and it is certain that he isn't going to send out anything that will be a discredit to his trademark or that will cause the buyer to pass that mark when he is buying again.

The trademarks of the various lines of equipment and merchandise you buy are safe guides to follow. They will lead you to goods of high quality and goods that are sold at one price. Your dealer who sold these goods can stand back of them, for he knows that the manufacturer who sold them to him will stand back of the goods and back of him, too.

When answering advertisements don't fail to mention this paper.




# We M
# Wa

**"We must ke**
**chest filled!"** W
and look after t
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to them to whip

**Washington Liberty Loan Committee**

JOSEPH A. SWALWELL,
State Chairman.

CHARLES PAGE BURNETT,
State Director of Publicity.

This Advertisement C
LILLY
Seattle. Established 1

# Fourth Liberty Lo

# ıst Keep That
# Chest Filled!

Yes! That is the spirit of 1918!

And Washington farmers know its meaning!

The **Fourth Liberty Loan** is Liberty's call to all Americans.



**ıat war**
ıst feed
boys at
leave it
Hun!

and.

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# SMALL FRUITS

## FALL PLANTED

**Strawberries**

Now Ready for Delivery.

**FRUIT TREES**

Soon.

Send for Fall Catalog.

**Peonies and Oriental Poppies**

Should Be Planted Now.

Catalog gives full lists of varieties and prices.

**Spokane Seed Co.**

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# *Walnuts*

are quoted 30c per pound—the highest price ever known. The demand for fine walnuts is so great that the present production is only a drop in the bucket. The northwest is the one section of the country where walnuts grow perfectly.

Our Vrooman Franquette nursery trees, grafted on California black roots, are making splendid records for growth and bearing. Our own young orchard plantings are bowed down with nuts now. Come and see for yourself. Wholesale and retail.

***Groner & McClure***

HILLSBORO, OREGON.





**Swanson**

**The Lightman**

Specializes in gasoline for the farm.

**Solar Light Co.**

937 Commerce St.
Tacoma, Wash.



HIDES WOOL FUR




RUBBER METAL SACKS

We pay full market value, correct weight and assortment, prompt returns. Write for prices. We want your business.

**PACIFIC HIDE & FUR DEPOT**

Joseph Thiebes and C. T. Symmes,
1101-09 Railroad Ave., Spokane, Wash.



**The Threshing Problem Solved**

Threshes cowpeas and soy beans from the mown vines, wheat, oats, rye and barley. A perfect combination machine. Nothing like it. "The machine I have been looking for for 20 years." W. F. Massey. "It will meet every demand." H. A. Morgan, Director Tenn. Exp. Station. Booklet free.

ROGER PEA & BEAN THRESHER CO.,
Dept. 15. Morristown, Tenn.



**SHIP** your cattle where they will bring you the most money.

OUR northwestern customers have found Kansas City their best market. We specialize on Oregon, Washington and Idaho cattle.

WRITE or wire us for market information at any time.

**WITHERSPOON-McMULLEN L. S. COM. CO.**

Stockyards Station,
Kansas City, Missouri.


When answering advertisements don't fail to mention this paper.

# Oregon State Fair

## Praise for County Exhibits

Three years ago the weather man cried first, then frowned, but finally relented over the Oregon state fair. Last year he threatened for the first two days and then decided he'd be decent. But in 1918 he smiled the whole week through. The weather was fair weather—take it both ways—and weather is one of the vital determining features of success or failure.

The Oregon state fair is one of the really great state expositions in the whole west but as everywhere else and in everything else, the war has had its effect. The exhibits were smaller than they have been for a good many years, but those who sought beauty and utility in fruit, pigs or dairy products found them.

Professor Larson, who judged the county exhibits, was enthusiastic in his praise of the quality of the products included in the county exhibits. He spoke particularly of the grain, which he described as being large and clean, with no overgrown soft stuff in it.

He said the three leading exhibits in district No. 2 were exceedingly well matched and it was almost a toss up as to which should be given first, as they scored very close and all of them high.

**County Exhibits Good.**

The county exhibits were very good, although there was room for more. In the Coast division Tillamook county stood first and Clatsop second; in the central division Lane county was first, Washington second and Linn third; in the eastern division Union county stood first, Morrow second and Asco third. Marion and Polk counties were both well represented, but neither entered to compete for the awards.

It is estimated that more than 20,000 persons witnessed the races Wednesday afternoon, while more than 30,000 were on the fairgrounds. The grandstand was packed to capacity. The day was bright and warm, an ideal state fair day, and Salem turned out en masse.

Among individual farm exhibits, western division, Banner farm, of Linn county, stood first and Chetco farm, of Clatsop county, second. Sagerhurst farm, of Morrow county, won first for the eastern division.

The O. A. C. display was larger than ever, and while it would not be correct to say that it was better than preceding ones it had been changed to suit new conditions. The clothing exhibit was very instructive.

The stadium was finished and filled with tractors and automobiles. This new building is a feature of the fair this year, and will be of great value in the years to come.

The free camp grounds were just as attractive as ever, the grove of oaks as shady and majestic, but not nearly so many people camped there.

The industrial pig and sheep exhibits in the live stock section were far better than they have ever been in the past. The barn which housed them was no doubt the most popular barn. More work to do for the boys and girls and less feed than usual, but just the same the children were there with some mighty fine hogs. The Marion county pig clubs were out in force.

**Splendid Work of Canning Teams.**

The canning teams did splendid work this year, showing the effects of the year's training. The boys' and girls' camps ran full blast and they had as good a time as ever.

Attendance this year was quite good. It was not as large as in some previous years, but it was very good. Salem day was well patronized and Portland day was a big one, as usual. The board states that the fair is again a financial success.

In addition to urging people of Oregon to save transportation by using Oregon products, the college exhibit gives many illustrations of how this can be easily done by showing the home products to be used.

It also has an interesting exhibit illustrating conservation in clothing. The big idea is to save wool. The way to do it, it is pointed out, is to use every scrap of old woolen clothing that can be used, and that which can no longer be used should be sent to the factories, where it can be worked over again.

In the exhibit are made-over garments of all kinds. Women's old dresses and coats have been made into boys' coats and suits, and castoff men's clothes have been turned into suits for boys. These made-over suits range in cost from 26 cents to $1.16. One boy's suits, which looks as neat as can be and good for lots of wear, came from a woman's gray skirt which has done yeoman service. The skirt was new four years ago. After the new was worn off, it was made into a girls' school dress, and as such was worn for three years.

In that time it was remodeled three times and finally dyed blue. During the last two summers it was used for an outing dress at the Coast, after which it was washed, ripped apart and next made its appearance as a boy's natty suit. The suit was made at a cost of 43 cents.

Other parts of the big college exhibit emphasize foods essential to growth and health. They call them "protective foods." The principal articles are dairy products and vegetables of all kinds, put up in form for winter use.


# DELCO-LIGHT
## INCREASES FARM EFFICIENCY

Delco-Light in the Farm Home Means

An abundance of clear, bright electric light throughout the house and barn.

Running water in house and barn. A modern bath room, fire protection. No laborious pumping.

Economical power to operate the washing machine, the churn, the cream separator, the vacuum cleaner and other small machines.

It means increased profits in time and labor saved.

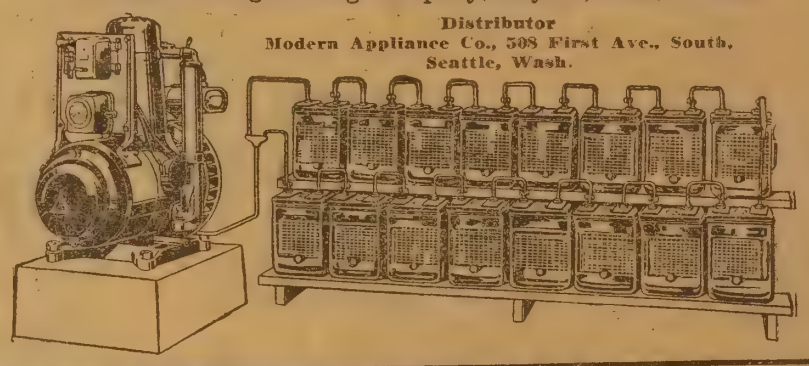
And a home that has in it the comforts and conveniences usually found only in the city.

Delco-Light is a complete electric light and power plant for farm or country home. It is self-cranking, air cooled; ball bearing. Has thick plate, long lived storage battery. No belts.

*RUNS ON KEROSENE*

**The Domestic Engineering Company, Dayton, Ohio, U. S. A.**

**Distributor**
**Modern Appliance Co., 508 First Ave., South, Seattle, Wash.**



MODERN APPLIANCE CO.,
508 First Ave. So., Seattle, Wash.

Gentlemen: Please send me catalogue and full information about Delco Light.

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**A Size for Every Engine and Motor**

Piston rings prevent escape of gas and power. They must fit exactly or there is compression leakage, excessive carbon, and power loss. The scientific construction of

**McQUAY-NORRIS LEAK-PROOF PISTON RINGS**

assures equal pressure all around the cylinder walls. They are made in all sizes to fit every model and type of engine, automobile, tractor, etc.—every size accurately gauged to fit the particular model of motor.

Your local dealer or garage has—or can get—our data book of piston ring sizes of practically every engine and motor made. This will tell exactly what rings you need. Complete size assortments are carried by more than 300 jobbing and supply houses all over the country from which you can be quickly supplied. Over 2,000 unusual sizes and oversizes—all widths and diameters—are kept constantly on hand at the factory ready for prompt shipment anywhere.

**McQUAY-NORRIS Superoyl RINGS**

A special ring for engines that pump oil. Used in top groove only of pistons to control excess oil, with McQuay-Norris LEAK-PROOF Rings in lower grooves to insure maximum compression and fuel economy.

SEND FOR FREE BOOKLET

"To Have and to Hold Power"—a simple, clear explanation of piston rings, their construction and operation.

Mfd. by McQuay-Norris Mfg. Co.
2837 Locust St. St. Louis, Mo.

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**This Is the Season of Preparation on the Farm**

This is the season of preparation on the farm. There's many a timely and practical suggestion on equipment, etc., to be gleaned from our advertisements these days. Read them.

# Cheese Factory

## Feature of West Washington

By Winifred Buckingham.

A large and valuable ranch in Pacific county is that run by Joseph Buerkli, a native of Switzerland. He leased the place from William A. Potter, who spends most of his time in Sacramento, Cal. The ranch is located west of South Bend, on the Willapa river, near the head of the bay. It is on the tideland, and 1000 acres of the land have been diked. Mr. Potter has leased the place for the last 15 years for dairying purposes. Six years ago he leased it to Joseph Buerkli, who came here from Portland.

For a while Mr. Buerkli ran a milk route, but as this was not satisfactory he sold his route and equipment and began operating a cheese factory, which has been a successful undertaking and is counted as one of the growing enterprises of the town.

The place is stocked with 200 cows, besides a smaller herd of young stock and several hundred pigs. The cows are a good grade Holstein. They are kept up to a standard of production, and the poorer ones are replaced by cows frequently purchased from other herds, for only a small herd of the best calves are raised every year, due largely to the high cost of feeding the calves milk while they are young. Recently two registered bulls purchased from the Carnation stock farms have been added to the herd, as Mr. Buerkli purposes to build up a better herd. During eight months of the year this large tract of tideland affords excellent pasture. If the winter weather is mild stock are permitted to pasture a longer period, especially the young stock.

Hundreds of pigs are raised on this ranch. A goodly portion of the pigs' ration is the whey from the cheese, as this seems to be the most profitable way in which to utilize this byproduct; in fact so profitable is it that the piggery is to be enlarged very soon.

The cheese factory is a newer building—built and equipped for the purpose. It is well lighted and has a concrete floor. Part of the equipment is a whey separator which is run by steam. The whey is then pumped into pipes and piped to the hog house. The cheese made is the kind generally known as American cream cheese. It is conveyed by an auto truck to the freight depot and shipped to the cities.

No crops are raised on the place, but during eight weeks of the summer part of the pasture is fenced off and some hay made.

About 15 men are employed on this ranch. The men do the milking—no machinery is used. One of the men employed is an expert cheesemaker and has entire charge of making the cheese.

Pacific county has hundreds of acres of tideland waiting development. The first cost, that of diking, is perhaps the most expensive, as it averages $50 an acre to dike tideland. W. E. B.

# This Year's Wheat

## Five Cents More for Same Grade

To the Editor: In regard to marketing of my wheat this season as compared with last year, will say, that last season I consigned my wheat, drawing about 90 per cent of the estimated price when loaded, the balance being paid when the returns were sent back, which was from one to four months. This season so far, I have shipped seven cars of the same kind of wheat to the same parties. So far have received returns on three cars within 30 days after shipment. As to prices and grades, will say that this year I am getting about 5 cents a bushel more for the same grade of wheat than last season. The terminal price is 15 cents higher, the difference being taken up in freight, warehouse charges and other expenses, which have been raised this season.

Yesterday I took a sample of wheat to several of our local buyers and offered it for sale. They all scrutinized it very carefully by testing, smelling and tasting. I got as many different buyers finally selling to the highest bidder at $2.06 for bluestem.

The warehouse charges on this wheat were 4 1-2 cents, as it was taken down Snake river bluffs on a tramway, for which they charge 1 1-2 cents extra.

On the whole, I am receiving about 5 cents more a bushel for the same grade of wheat this year. J. S. KLEMGARD.

Pullman, Wash., Sept. 25.

### BOY BUYS PRIZE BERKSHIRE.

During the Washington State fair at Yakima, September 16 to 21, Jesse Elmore, a member of the Selah, Wash., pig club, purchased from E. V. Cox of Yakima, Wash., a fine first prize Berkshire sow. Jesse is only 14 years old, yet he purchased the sow with his own money and did so with the full assent of R. C. Woodruff, leader of the club. The sow is soon to farrow by a good Berkshire boar.

### Dinner Time.



This is a photograph of James Felton and his lamb. The little woolly is an orphan, or was when this picture was taken, some time ago. His happy owner is one of the sons of Ray W. Felton, one of The Farmer's correspondents well known to many readers.


# MR. LIVE-STOCK MAN

If you are a producer of less than carload lots of live stock, get your neighbors to join you in a community shipment to us.

This will put you on the same basis of marketing as the carload fellow and at the same time you will be helping to build up your home markets.

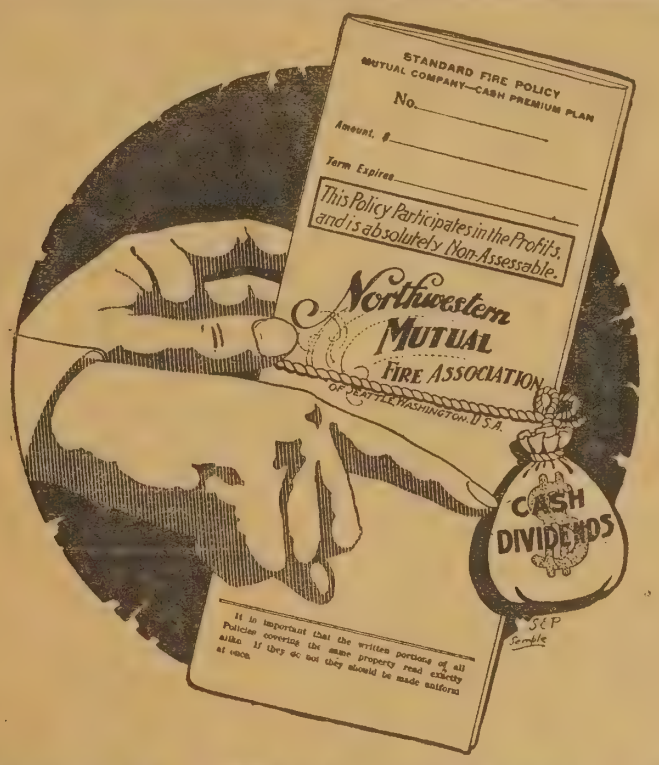
Write or wire us for our prices and our weekly Market Letter.

## Spokane Union Stock Yards

SPOKANE, WASHINGTON

# Truth in Advertising

Nationally advertised goods may be depended upon for the reason that national advertisers know that their goods must be truthfully advertised to gain and hold popularity. A good name in advertising has to be won on merit, therefore the buyer may be sure of obtaining right value when buying widely advertised articles.




# GIVE YOUR FIRE INSURANCE A LITTLE THOUGHT

BUY fire insurance INTELLIGENTLY—with your eyes open!

Sentiment is a poor guide in such an important business—involving the protection of home, business, lifetime accumulation.

A little thought on this question of fire insurance will not only repay you in money, but will provide greatly increased protection for your property.

When you take out a policy with the Northwestern Mutual Fire Association you become one of the owners of the company; your money is used wisely and economically in the mutual payment of losses, in efficient administration, in carrying forward an educational policy of fire-prevention to reduce losses.

All the money not needed for these purposes goes back into YOUR POCKETS in the form of CASH DIVIDENDS.

With the splendid cooperation of 50,000 policy holders the Northwestern Mutual Fire Association has been able to return more than $2,500,000 in dividends—equal to a stack of dollars piled up four miles in the air.

Under state authority Northwestern Mutual policies are absolutely nonassessable.

**Insist That Your Next Insurance Be Northwestern Mutual! Reach Us by Phone or Mail.**

## NORTHWESTERN MUTUAL FIRE ASSOCIATION

F. J. Martin, President. H. K. Dent, Vice President. M. D. L. Rhodes, Secretary.
Main Offices, Central Building, Seattle.

### INLAND EMPIRE DEPARTMENT

Old National Bank Bldg.
Main 5236, Spokane.

# THE HEART OF A BOY---By Joe L. Ashlock

(Continued from page six.)

5 and 8, I had in the Walla Walla valley some opportunity for play and association with children of my own age. But these opportunities were limited, and for months at a time I was wholly alone on the big wheat-farms with mother and father and the hired men. I grew actually to prefer the society of grownups. The actions of children of my own age were annoying to me. Toddlers just beginning to walk or to talk were funny, I thought. They said such funny things, got their words all twisted up and wrong end to, were regular little clowns, and I could find something for a laugh in every move they made. But as for playing with them or talking to them! I fled at the very intimation of such a thing.

It was the luckiest thing in the world for me that my wife was reared in a large family of children. In her girlhood home she was the eldest and had both brothers and sisters of different ages partly in her charge at times. So while she was a child she learned a good deal about children—and don't imagine there isn't a lot to learn about them. They are a world, including psychology, diplomacy and the rod, by themselves.

Well, when our two children, a boy and a girl, began to get up in years, temper, and initiative sufficiently to assert themselves contrariwise to the general weal, it was certainly amazing to me to see how their mother took hold of them. She could see through them, all around them, and a long way ahead of them. When they bluffed their way by her, they certainly did something worth crowing about. But as for me—in the management of my own children my wife says I'm an encumbrance to the household. They can run any kind of an old dodge on me, and I'll swallow it at 100 per cent.

I recall that when our little girl was 2 1-2 or three years old and could only say a few words, she began showing her displeasure when things didn't go just her way by sticking out her chest and prancing stiff-legged about the room. That was all she did, plus a sparkle of defiance in her eyes. I thought that was very funny, and tried to get her to do it when others were there so that they could laugh, too.

Her mother took hold of her for doing that in a way that spoiled all the fun. I wondered why, mildly, diplomatically, of course. My wife edified me thus:

"That is a bad little trick," she said. "It may look funny now, but wait till she grows some more. The thing it will grow into is throwing herself on the floor and kicking and crying; and I simply would not stand for any such nonsense."

She didn't.

About the same time, the little girl began to reach for things on the table. She would grab at anything that caught her eye—the sugar bowl, preferably; second to that, something that had a bright color. She particularly liked to reach out and grab a fistful of jelly.

That to me seemed very funny indeed, especially when she spread the jelly over her face in trying to get it into her mouth. But her mother again spoiled my fun. She stepped into the breach with abruptness that caused a near-riot.

"Maybe it looks cute now," she advised me. "That little trick is only the beginning. By and by she will pull off the tablecloth, dishes and all, to see what is on the table. The only thing to do is to nip these little tricks in the bud."

So, in the upbringing of our two children, into whose childhood I have wandered in telling of my own, my wiser half is busy nipping little buds all the time, and most of the time I do not know that any buds are budding. She knows children and I don't. That's the difference, and it is fundamental.

I should say that if a young man and a young woman are joined in ties which "let no man put asunder," neither having known children when they were children, in the rearing of their own children, they will have one devil of a time and so will the children, so will their maid servants and their man servants and their neighbors and their neighbors' children; and the doctors of the village will wear out a new set of auto tires and challenge the speed laws each time the stork visits this home.

Here ends my moralizing.

My education, which was commenced in the old Union schoolhouse on Dry creek in the Walla Walla valley, progressed only a little way before it was interrupted. About this time I heard mother and father speaking with recurring frequency about their desire to get a "claim" somewhere. Finally, one day, mother said, "We're going to the Big Bend." Not long afterward we were on the way in a covered wagon which contained all that was ours.

There were no other children in our wagon party, we passed none on the road, and, after watching vainly for other children for many days I decided that all the other children had stayed down in the Walla Walla country, where one could find plenty of red willow switches for stick horses, where there were creeks with swimming holes and fish in them, trees along the bank red with choke cherries, orchards, vineyards, watermelon patches, and all such joys.

I missed the trees most, I think. Also, I missed the flowers; and, oddly enough, I missed my whippings.

As a youngster, playing with other youngsters and partaking of their mischief, I suppose that I came in for a goodly share of spankings and switchings; but when we crossed Snake river my whippings ceased. I asked mother about this once. She laughed, and remarked to some one else nearby that since I had gotten away from other children, I was becoming really a good little boy.

I reflected upon this; and it came to me with force that for the sake of a few playmates, fishing excursions up and down the creek, watermelon patches, red switches for stick horses, and choke cherry trees to climb, I would take spankings with pleasure.

We found a claim by and by up in the bunchgrass country, surrounded on all sides by as many miles as you could see of gray-green grass which showed here and there a bluish-green tuft of prairie sage, and once in a while a tall clump of wild rye grass, the blades of which were so tough and sharp that they cut a horse's mouth if he tried to eat them. There was a good deal of monotony about it all, and it was to me a red letter day when a band of Indians came along with their pack ponies loaded with watermelons.

We seldom had money, of course, but usually had a few trinkets, or eggs, or odds and ends of food that we could trade for melons. On one occasion we had not a thing we could give in exchange for the melons. Providence intervened. A fat, cream-colored Indian pony that was about as broad as long and was stacked high with big melons, chose to lie down and roll in the dust while the squaw was at our door bickering for a trade.

The squaw let out a volley of sounds such as I have never heard issue from a human throat. What she called that old yellow cayuse I know not, but it was plenty. She raced toward it gesticulating and squalling, and upon reaching the recalcitrant, pelted it with sticks, clods and small stones. The pony rose slowly, with a satisfied grunt; then shook itself as is the custom of ponies after they have rolled in the dust. Broken watermelon flew in all directions.

The squaw, jabbering and scolding with the speed of a millrace, unstrapped the packsaddle, and let the crushed wreckage fall to the ground, where she left it. It certainly was a luscious looking pile. After the Indians had departed, I stole up to the cracked and broken melons they had left and had the feast of my life. Afterwards, in all seriousness, I remarked to mother that God must have made that pony do that so that we could have some melon. She laughed and said maybe so. Not being remiss in accepting the riches thus left at our door, she filled many pots, pans and kettles with the juicy fragments which she made into preserves flavored with lemon extract, spices and sugared richly. For days, weeks and months thereafter this event stood forth in my mind with the prominence of mountain peaks; and I never ceased to be thankful for the blessing which had been laid at our door from the open hand of the most gracious giver of all blessings.

I can remember how mother and I used to sit in the doorway of our small cabin when father was away in the Walla Walla harvest fields, and, in the lonely evenings when dusk was falling on the wide, empty waste of gray-green prairie about us, watch the wild sagehens that came in from the grass and wandered up and down the rows in our potato patch.

Sometimes she grew afraid and lonely, I think, for she would go inside the house and lock the door. Once, late at night when I lay awake listening to a multitude of imagined sounds in the prairie about us she asked me if I ever prayed. I said I did, sometimes. She talked about prayer or a while and said I must never be afraid, for God was always near and would protect us. I think she grieved a good deal because I was not in school. From the school books she had used as a girl she taught me a good deal, and, on several occasions, from somewhere she got Sunday school literature which she read to me and explained.

She loved flowers. In early spring she would go with me far over the fresh, fragrant prairie to the rocky places where the first pansies and buttercups came out of their winter nests. We gathered these by the handful, took them home and kept them fresh for many days.

On other occasions, with some help from me, she filled boxes with soil and planted the seed of pansies and verbenas. I remember well the loving care she gave to her boxes of flowers, and how richly they bloomed.

One year she had bad luck with them. A bug or pest of some kind worked havoc with them. Also, the soil was none too rich, and a dust laden wind one day whipped the tender plants almost to shreds.

She worked over them in a sad, discouraged way for a long time. I was 11 or 12 then, I suppose, and had begun to notice how she loved pretty things, and how few were the pretty things in the wide, bleak prairie about us. I shared her grief when her boxes of flowers came to grief, and when she sorrowfully gave up said and she was afraid we should have no flowers this year I stole away in sadness that would not be overcome.

I wanted to be a big man right then and there, with a lot of money to buy her a whole wagonload of flowers in nice, painted boxes that did not leak the soil from their corners. My imaginings ran riot and I grew happy in thinking what I would do some day. I would buy her a lot of pretty dresses and a horse and buggy so that she would not have to stay at home all the time. Rosettes were my dreams and when I told mother about it she grew wonderfully cheerful, in spite of our spoiled boxes of flowers.

I never gave up that hope, and was always planning to earn money and save it somehow, and bring my dream to pass. Occasionally I earned a little money, but usually it had to go for my own clothing, or some other necessary, as soon as earned. At the age of 13, with money I had earned poisoning squirrels, I bought my first pair of suspenders. They were of a rather unusual shade—a dull rose color, not "loud," but taking the light in a pleasing way.

Mother examined the color in the suspenders, facing them this and that way against the light. Presently she spoke to me in a wistful way, with a note of longing in her voice I had never heard before.

"You have been wanting to buy something for me," she said. "Now I will tell you what I want. When you are rich some day, I want you to buy me a silk dress the color of those suspenders."

She did not know how her words took root in my soul, and never will, because now she is dead. Nor did she know what happened that night after she was asleep.

I took off my new suspenders, slid the buckles up and carefully cut off a piece from each suspender. These pieces I stored away in a secret place, so that some day I should have them to match with a piece of silken goods.

I said nothing of this to any living soul, but in the years that followed made annual and semi-annual pilgrimages to the small, secret shrine where lay in hiding two small bits of rose-colored rubber fabric. The color faded, in spite of all I could do; but by the time it had faded, the original dull rose had made itself fast in my brain never to be forgotten or mistaken for another.

Some years later, when I was reaching the point where the dull rose silk was not far away, though still unattainable, I received a telephone message one day from a distant city whither my mother had been taken in a serious illness. The nurse was talking. My mother was dead.

Some hours later I was in the wareroom of the undertaker where there were rows and rows of caskets, most of them black with silver handles. I was selecting one. None that I saw seemed to do.

I came to one presently, different from the others. Its color was dull rose. I asked to have a curtain pulled up so that the sun could strike it and give me a better chance to be sure as to the color. It was the right shade of rose. The polished silver handles blended in the light with the dull-rose of the casket with the precise effect I had years before noted in my polished buckles and the dull-rose suspenders they adorned. I told the undertaker that the rose casket would do.

# Crawling Strengthens Heart

**By Dr. Leonard Keen Hirshberg, A. B., M. A., M. D.**



Dr. Hirschberg.

Odd as it may seem, effort and muscular work of a sort are of great assistance to the heart and arteries when they are diseased in some ways. To be sure, there are many kinds of heart trouble, several of which can not be treated in this way.

If you have a leaky heart, a rapid heart or some other type of a mild or harmless heart affection you must not be content to call it that, but visit some heart specialist to have the precise diagnosis made and treatment prescribed.

Professor Cecikas, a Greek physician, of Athens, has just announced that the position on all fours to relieve various heart symptoms have been triumphant over many kinds of cardiac distress. He tells how eight persons who were in great paroxysms of rapid heart beats were relieved when they were told to crawl on hands and feet. The quadruped position redistributes the fluids and blood, and, of course, modifies the heart action. The pressure, therefore, in and upon the chest and heart is reduced; the viscera change their relations to each other; the heart is moved by the force of gravity into a different perpendicular and twist, its axis is changed, and the gases or pressure from the stomach and abdomen are withdrawn. All of these remedy several disturbances of the heart.

One patient of 32, emaciated by dysentery, found this form of exercise the only means to check his rapid heart beat. Other victims were corpulent, and suffered from a tendency to dropsy of the lungs and angina of the heart. When they went down on all fours and stood still or crawled to and fro like an animal in a cage they were immediately at ease.

### Immediate Relief.

Another sufferer was very thin and emotional. Attacks of palpitation, sleeplessness and shortness of breath constantly upset him. He was at once benefited by getting up in bed and crawling around on hands and knees or feet, after which he would comfortably go to sleep.

A change to the country, with walks, dips in "the old swimming hole" and other exercises brought recovery to others.

Professor A. Jaquet of Basel, Switzerland, a French physician, who has devoted much observation to heart disorders, is particularly enthusiastic over the results obtained by hill climbing exercises. Caution, of course, must be maintained, and only persons with particular kinds of heart trouble chosen by an experienced physician dare to be given such muscular work. At the first sign of trouble these exercises are to be stopped. The doctor is trained to notice such evidences.

When you climb a hill or a mountain the legs are bent in such a way as to assist the movement of the blood from the veins in the legs. Ordinary walking does this only in a trivial way.

The deep breaths taken as you climb enhance the activity of the heart and also aid in the motion of the blood toward the heart.

The victim is to begin with short distances on the level. About 100 yards on the ground, with 40 to 50 steps to the minute and a deep breath every other step is a good start.

If the pulse beats too fast after this attempt and does not quiet down within a few minutes, nothing further should be done until the heart is relieved and rested. If this walking can not be resumed the doctor will then know it.

If, however, there is nothing abnormal, no shortness of breath, rapid pulse, palpitation or other unpleasant consequence of the climb, the distance and the slope are gradually increased, but always under constant medical supervision.

Finally you will know that you can climb hills without harm, and can be trusted to continue the exercises without the presence of the doctor. You should, nevertheless, always find out the exact grade of the slope, and never trust the eye alone.

# Teachers' Cottage

## Is Liked and Has Come to Stay

**By CARL J. MENZE.**

"What are the advantages of a teachers' cottage in the rural district from the viewpoint of the teacher and the community?" I asked this question direct of Miss Helena Stenvig, a rural school teacher of experience. Not expecting the question, she was at first silent. But when she started to answer it I was convinced that she had given some thought to the subject.

She replied, in substance, as follows:

"In most rural districts it is very hard for rural teachers to find suitable boarding places. Some farmers do not have the room to keep them; others do not wish to be bothered with them, especially if they come from the city. Sometimes the boarding places are too far from the schoolhouse. Unmarried teacheps can find a place to board easier than married ones. Married teachers like to live with their families, and in rural districts it is not often that there are vacant houses which can be rented. Personally, I believe that school boards should try to retain good teachers from year to year. I am opposed to the custom of teachers teaching in one district one year and in another district another year. If they intend to teach for several years, or make teaching their life work, they should stay in the same district, study the community and try to improve it. A teacher's cottage would appeal to these teachers.

"When teachers board with a private family they usually have a small room to themselves. That is, a room where they can have privacy to plan the school work. In the winter this room is usually not heated, which makes it very disagreeable to work in. In a cottage one has privacy with liberty; one can live as one pleases.

"Where I taught last year there were two teachers besides myself. We all lived together. At the end of each month the expenses were divided equally between us. We found that we could live a great deal cheaper than if we boarded with a private family. And the work, caring for the cottage and doing our own cooking, was a diversion from teaching. It gave us exercise and the pleasure of cooking what we wanted. Some people always accuse a teacher of being a poor cook, and if this is true doing our own cooking gave us practical lessons in the culinary art.

"During the winter we gave several entertainments and invited the community. We did our own planning, and had things just as we wanted them. Some families would object to this. In these entertainments the people felt that we belonged to the community, and we teachers felt the same way.

"The teachers' cottage has come to stay in this country. In time all rural schools shall have to adopt them. When the teachers live on the school grounds they have the property under their care. And in the future the country school will not have that bleak, barren look, devoid of grass and trees, but rather will have a campus planted with trees and flowers.

# Volunteer College Workers Renounce Vacations, Fudge, Hammocks; Spend Summer in War Work

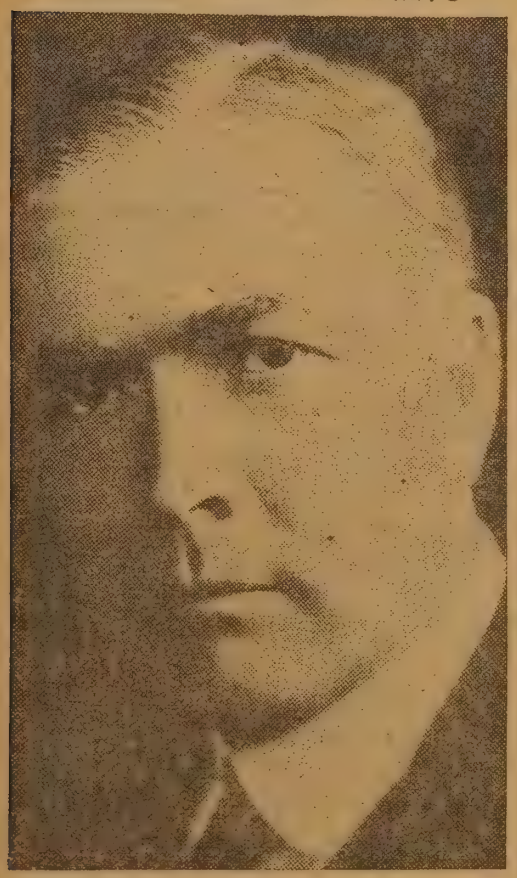



—Food Administration.

One of the main reasons why the absence of millions of young men serving the colors has not crippled American industry is that the College Volunteer Workers, comprising groups of girls from almost every woman's school in the country, have come to the rescue.

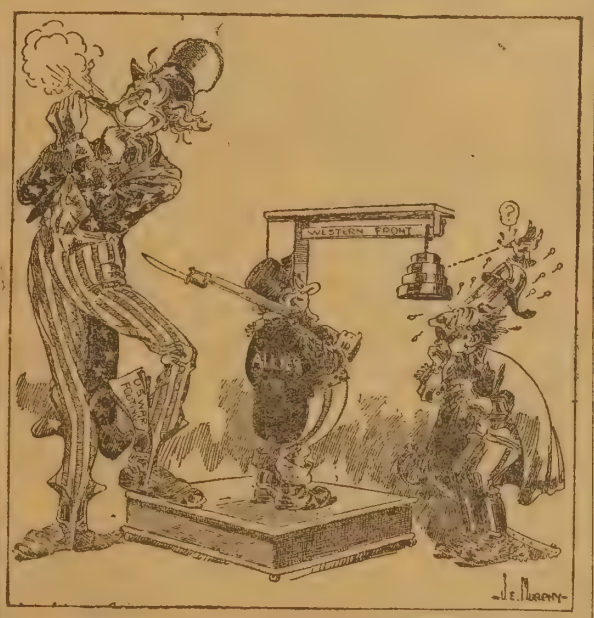
Nothing is too unimportant, nothing too difficult for these Volunteer College workers. They have harvested crops and canned them, too; they have assisted the state councils of defense in Propaganda work; they have helped immeasurably in disseminating the recommendations of the food administration. Yet they have not felt themselves above taking care of babies for busy housewives who need a release from home tasks in order to do the canning; or mending and patching, to aid in the conservation of clothing in order that the factories may be employed in the making of soldiers' uniforms. Almost all of the schools and colleges have maintained intensive courses in home economics and dietetics during the summer. Hundreds of girls have given up their vacations without a murmur to attend the courses. Before the war, the average college girl's definition of a vacation was a time of complete rest from brain work, and the recipe for enjoying it was one hammock, one book of fiction, and one large plate of fudge, all surrounded by soft breezes, blue sky and permeated with an atmosphere of utter irresponsibility. Today, when there is such a thing as a war on hand, the definition is strangely altered. Ask any Volunteer College Worker and you'll find out that her interpretation of the word "vacation" now is—intense application to some sort of work that will help to win the war.

## Directs United Drive



John R. Mott, international secretary of the Y. M. C. A., was made director general of the united drive to raise $170,500,000 for war work, at a conference held in New York of representatives of the seven organizations involved in the huge philanthropic drive. At the request of President Wilson, the drives for funds to carry on the war work of the various organizations have been merged into one big national drive, so as to conserve energy largely dissipated in individual drives, while it will be carried on throughout the country, November 11 to 18. The object of the campaign will be to raise $170,500,000, to be allotted as follows: Y. M. C. A., $100,000,000; Y. W. C. A., $15,000,000; Knights of Columbus, $30,000,000; War Camp Community service, $15,000,000; Hebrew Welfare board, $3,500,000; Salvation Army, $3,500,000; American Library association, $3,500,000. Of the total amount for the nation, the western department is to raise $8,525,000. An official party is making a tour of the western district, consisting of the western military department.

## "Ach! How He Iss Gaining!"



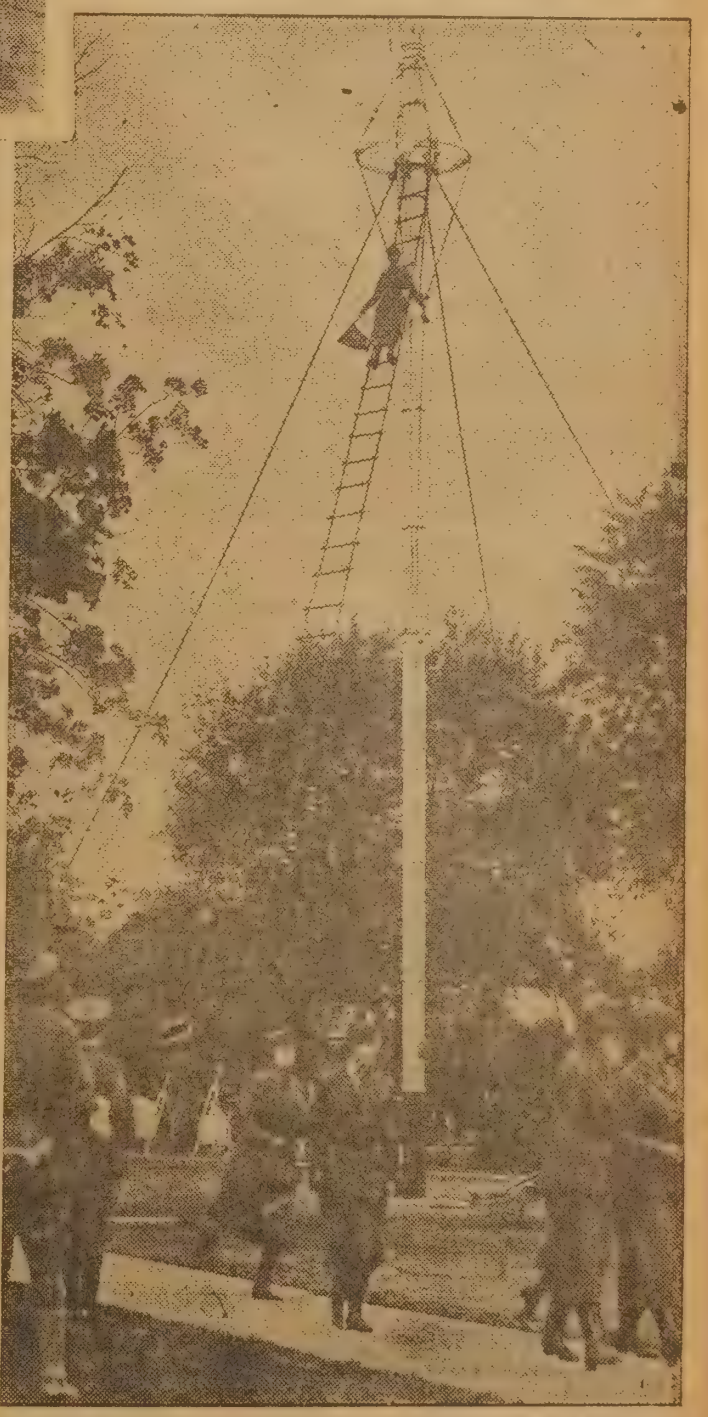

—Murphy, in Washington Times.

## "Peace—Kamerad!"



—Harding, in Brooklyn Eagle.

## Training for Motor Corps Women



The motor corps of the National League for Women's Service is undergoing real strenuous army training at Fort Totten, the women having decided to abandon home duties and social affairs. The photo shows Lieutenant Catherine Frederick wigwagging from the top of a flag pole.

# A CROOKED TRAIL---By Lewis B. Miller

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**A story of a thousand-mile saddle trip up and down the Texas frontier in pursuit of a runaway ox.**

**SYNOPSIS.**

Travis, a lad in his teens, lived on the Texas frontier in the days when Texas was a wild, unsettled region. One morning before daylight he started out to bring in the yoke of oxen for a day's plowing, but one of them was gone. He caught his pony and started to search for the stray. Going a little and a little further hour after hour, he continued until night caught him several miles from home with a tired pony, a borrowed saddle and lariat and little for himself or his dog to eat. A rabbit and wild turkey eggs served the purpose, and morning saw him again in pursuit of the ox after a night of disturbance by wild animals and marauding hounds. The next night he spent in the cabin of a crazy sheep herder who believed cattle men of the region were trying to kill him.

## CHAPTER IV.

### On Guard for Assassins.

"Yes, we'll die together," Groves kept repeating, as if the statement afforded him no little consolation.

"Not if I can help it," I said to myself. And at once I began to wonder how I could escape.

"Did they ever try to kill you before?" I wanted to know, after recovering from my first fright.

"Time and again—time and again," he assured me. "But I was always on my guard. I was too sharp for 'em. But they'll get me yet—oh, I just know they'll get me! But I'll get some of them first. Now see if I don't."

"Maybe you're worse scared than there's need for," I suggested. "Why should the cattle-men want to kill you?"

"To get me out of the way, of course. Then they'll kill the sheep, to get them out of the way. And they'll be here tonight—yes, sir, they'll be here tonight! Now watch what I tell you. I've had my warning that they're going to kill me if they can—if they can! But I'm watching out for 'em, and I'll get lots of them if they don't look sharp. Lucky you stopped here tonight. You can help me guard the house. I can't guard both sides at once, but with you to watch one side, maybe we can keep 'em off. Anyhow, we'll try."

I did not answer. The arrangement was little to my taste. It was no quarrel of mine, and I should have been more than glad to keep clear of it. It would be cowardly, though, to desert the shepherd in his hour of peril. And if the cattle-men were already around the house, there might be less danger in staying than in going. So, six-shooter in hand, I moved over to the wall and began to peer out between the logs in quest of assassins.

The night was partly cloudy, but there was light enough to reveal objects dimly. For several minutes I kept a cautious watch, but failed to discover anything dangerous. Groves, who was watching near the door, soon tiptoed over to my side to caution me not to shut an eye till the moon rose. All our conversation was carried on in whispers.

"If you let the scoundrels crawl up close enough, they'll blow us both to pieces," he declared.

"Why should they kill me?" I inquired, with a shudder.

"Because they won't know us apart in the dark. Kill one, kill both. You can depend on that. We'll die together."

This was terrible. While Groves moved on around the wall, my excited brain kept revolving various plans to escape; but not one seemed safer than staying here and defending the cabin. So I resolved to make the best of a bad situation.

Long I watched there, with ears strained and my eyes searching the darkness outside. Slowly, gradually my fears subsided. Perhaps the cattle-men might not come tonight, after all.

"Have they ever actually tried to kill you?" I inquired, when Groves, who was seldom still, got round to me again.

"Ever tried to kill me? Well, I rather guess they have—a dozen times at least. But I'm too sharp for 'em. I always see 'em slipping up to the cabin, and then I let drive."

"What! Did you shoot at them?"

"Of course I have. Fifty times, I guess."

"And did you hit any of them?"

"Yes, I have—that I have! I've let daylight through seven of the scoundrels; and I'll kill about seven more, I hope, before they finish me. Oh, I'll sell my life dearly. You can count on that. And they know it, too; every mother's son of 'em knows it. They're afraid of me, but they'll get me at last. Yes, they're bound to get me at last."

"Do you mean to tell me that you've actually killed seven of the cattle-men?" I demanded. The thought of all those seven corpses, lying pale and stark, well-night froze my blood.

"Yessirree! That's just what I did! I laid out seven of the scoundrels neatly, and I hope to lay out seven or eight more before they finish me. But they'll get me at last—they'll get me at last," he repeated, half sadly, as if realizing his inevitable doom.

He moved on around the wall, and I stood staring after him. The full horror of the fellow's confession had taken possession of me. No wonder the cattle-raisers were after this man, bent on revenge, when he had killed seven of their number! And no wonder Groves, with all that blood red on his hands, had little hope of escaping the cattle-men's vengeance in the end!

"If you see or hear anything suspicious, blaze away at it," he said, on coming to me again. "The more we shoot of 'em, the longer we have to live."

"Did you kill all seven right close here?" I asked, unable to drive that ghastly subject out of my thoughts.

"Yes. Every one was knocked over within a dozen yards of this cabin," was the reply, almost exultantly uttered. There was not the slightest sign of remorse. "They tried to sneak up to blow my brains out, but I was too quick for the rascals. The first thing they knew they were stretched out on the ground, kicking as hard as they could. My! how hard some of 'em did kick! One fellow kept kicking and flouncing about nearly five minutes after I knocked him over."

This was said with as little feeling as if he had been talking about the weather.

"Have you never been arrested?"

"No. The cattle-men won't put the sheriff after me, because they want to kill me themselves. They will, too, and that before so very long; but not till I've laid out some more of them. Maybe I'll get to shoot a few more tonight—who knows? Anyhow, I hope so. We must both keep a sharp lookout."

He moved on, and I stood by the wall, peering out into the darkness, and listening for any sound that would give warning of the enemy's approach. My thoughts, however, kept running on what I had just heard. Evidently Groves was a desperate, cold-blooded fellow, fully capable of taking care of himself. To say that I wished myself miles from here would be far short of expressing my feelings. If I escaped this time, I promised myself never to stop anywhere again, especially with a lone man, without knowing something of his history. Should the vengeance of the cattle-men fall tonight, I must inevitably be a victim to it. In leaving an out-of-doors camp to spend a night here, I had jumped out of the frying-pan into the fire.

An hour or two dragged by, and still nothing suspicious had been seen or heard. My fears had largely subsided, and I began to grow drowsy. After losing so much sleep the night before, and riding hard all day, weariness was heavy upon me. The bed Groves had prepared for my use was at my feet, and I sat down on the edge of it. The shepherd had called the dogs inside, and Vic came and curled herself up near me. Soon I lay down on my face, in such a position that I could see out between the logs. The six-shooter was in my hand.

While reminding myself that I must by all means remain awake, I fell asleep.

How long I slept is uncertain; but I awoke with a start to find somebody shaking me. I grabbed the six-shooter and started to my feet, under the impression that the cattle-men had got into the cabin and seized me. But it was only the shepherd.

"They're coming now! They're right close by!" he was whispering excitedly. "Don't you hear 'em—can't you hear 'em?"

I listened with all my ears, and certainly did detect footsteps somewhere not far away.

"Now keep a sharp lookout on your side, and I'll keep a sharp lookout on my side, and maybe we can get some of the rascals. Who knows but what we may kill one apiece? Wouldn't it be fine if we could?" he added, with



Up I leaped, frightened half out of my senses.

a cheerfulness that was little less than astounding. "Don't suppose you ever killed a man, did you?" he inquired.

"No, I—I never did," I answered, shuddering at his cold-blooded way of asking the question.

"Well, watch out now, and maybe you'll get a chance before long. Makes you feel a little queer when you knock over the first one; but by the time you've laid out as many as I have, you'll get used to it. Keep your eyes open now!"

He returned to the front side of the cabin. I sat listening and looking, ready to shoot instantly if an opportunity offered. I didn't care to kill anybody, not even one of the dreadful cattle-men. A shot in the air would answer all my purposes. But the sound of the footsteps—or whatever they were—came no nearer, and I had no occasion to use the six-shooter.

Again an hour or more dragged its slow length by, and again, after the excitement died out, I began to grow drowsy. Feeling confident that there had been a false alarm, I finally resumed my position on the bed.

Before I was aware of having fallen asleep, a terrific explosion tore the air almost over me—an explosion that seemed loud enough to lift the cabin-roof!

Up I leaped, frightened half out of my senses. My ears were still ringing with that report. The shepherd was standing near me, quietly reloading his gun.

"What's the matter? What did you shoot at?" I cried out in the dark, excitedly.

"Sh!" was his warning. Then he whispered: "He was crawling up, but I was too quick for him. He thought he had me that time, but he'll never trouble me any more."

"What! Did you hit him?"

"Yes, I laid him out. Don't you see him kicking out there?"

I put my eyes to an opening, and could certainly make out a body lying several yards away. It was barely distinguishable in the dark, but I could see it jumping and jerking convulsively, as if in the throes of death.

A strange feeling of horror, impossible to describe, crept over me as I watched that prostrate form till it became motionless. Indeed, I could scarcely keep my eyes away from it. But the shepherd seemed not in the least disturbed by the deed he had committed—the taking of a life.

"What made you go to sleep again?" he whispered. "If you'd kept awake, you might have killed that fellow, instead of me. But maybe you'll get one yet. I'm going back to my own side. Hope I can knock over another rascal there."

Again there was a long silence, and again, in spite of that motionless, lifeless body stiffening out there among the bushes, I lay down on my rude bed and slept—slept the sleep of weariness.

Once more I was awakened by an unusual noise, very different from the roar of the old army-musket, however. So sleepy was I that, though partly awake, I had been listening to the sound for some time, as it seemed, before I could realize what it was and where I was.

Now I sat up. The cabin-door stood wide open, and the moon had risen till everything outside was in plain view. In front of the cabin stood the shepherd, with his head thrown back, singing with all his might. In the still night-air his words must have been audible a mile or two away.

He was just finishing something as I woke up. Now he began on another verse. The words were very distinct:

"I comb my head with a curry-comb,
I grease my boots with a bacon-rind;
I grind my teeth on a big grindstone;
My claws are long as a punkin-vine!"

These words, shouted out, almost bellowed out, at the top of the singer's strong voice, had a strangely grotesque sound; so much so that I half believed myself still asleep and dreaming.

After pausing for a few moments, the singer started up something else:

"Go tell Aunt Nancy—
Go tell Aunt Nancy—
Go tell Aunt Nancy
The old gray goose is dead!"

At the end of that verse, Groves went first to one corner of the cabin and then to the other, as if looking for his enemies. Then he planted himself in front of the door again, and again he began to sing:

"I'll eat when I'm hungry,
I'll drink when I'm dry;
If a limb don't fall on me
I'll live till I die!"

Those silly words, shouted out so vociferously, would have sounded ridiculous under different circumstances; but they had no such sound to me now. If fact, a strange, creepy feeling of horror stole over me as I sat there on the buffalo-robe and grass, listening to them. For I knew well enough what they meant; the shepherd was crazy—as crazy as a loon! The persecutions of his enemies, and perhaps remorse for all the lives he had taken, must have driven him insane.

(To be continued.

# Sidelights

**Patriotic Girl.**

He—Will you share my lot?
She—Is there a war garden on it?—Boston Transcript.

**Couldn't Very Well.**

"Dine with me tomorrow at the Mitre, can't you?" asked one young man of another.

"Sorry, old man, but I really can't go tomorrow. I'm going to see 'Hamlet,'" answered the friend.

"Oh, bring him along," was the cordial answer.

**Returning a Favor.**

"So you and Nexdore are not on speaking terms?"

"We are not."

"What's the trouble?"

"Why, he sent me a box of axle-grease and advised me to use it on my lawn mower."

"Well?"

"Well, I sent it back and told him to use it on his daughter's voice.—Boston Transcript.

**His Specialty.**

"He's an infernal liar and a stuttering fool!" snarled Constable Sam T. Slackputter, as he sat alone on the porch of the Petunia Tavern. "He's a thief, a reprobate and—"

"Here, Sam!" exclaimed the landlord, appearing at the doorway of the hostelry. "What in thunder are you doing cussing along that-a-way, all by yourself?"

"I am running down a criminal!" ominously replied the sleuth.—Kansas City Star.

**What Mike Meant.**

In Indianapolis lives a young woman of wealth and philanthropic inclinations who has founded a club of street urchins. One Sunday evening she invited three of the members to be her guests at her home. The youngsters asked to be taken over the place. Their eyes grew bigger and bigger with admiration. Finally the smallest of the trio could contain himself no longer, and he burst forth.

"Honest to Gawd, this is the most notorious house I wuz ever in!"

"Why, Mike," asked his hostess, "what do you mean?"

"Beautiful! Jest beautiful!" said Mike.—Saturday Evening Post.

**"A Little Learning—"**

A Chicago man was walking through a foreign quarter of his city when, with an amused smile, he stopped in front of a small eating place, on the window of which was painted in white, "Lam Stew."

Now the proprietor happened to be standing in the door way, and when he saw the smile of the gentleman who had stopped in front of his place, he asked to be favored with an explanation of the joke.

Whereupon the other explained about the missing "b" in "lamb," and the proprietor accepted the correction in good part, at the same time expressing his thanks.

When next the Chicago man passed that restaurant he found that the menu had been changed, but that the lesson in orthography had not been forgotten. The proprietor was now offering "Clamb Chowder."—Harper's Magazine.

# Handicraft for Boys

By A. NEELY HALL.
(Copyright by A. Neely Hall.)

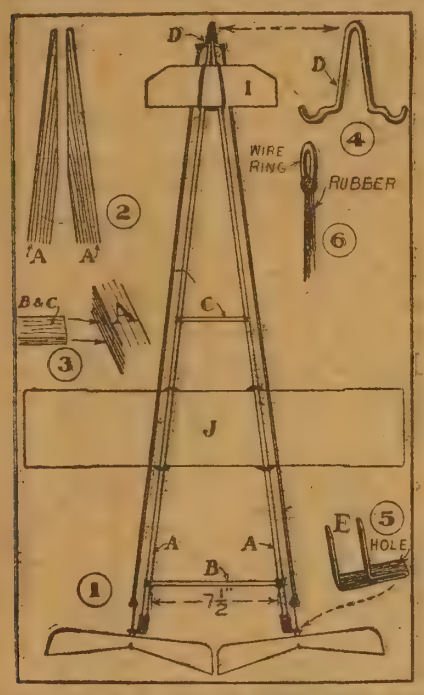
## A MODEL AIRPLANE.

This model aeroplane is built along the lines of the models that have won records for distance flights. Your success in building the little aircraft will depend upon the care with which you prepare, assemble and "tune up" the parts.

The triangular frame consists of the two pine side sticks A (Fig. 1), 1-4 inch square and 32 inches long, and two bamboo sticks B and C, 1-16 inch thick and 1-4 inch wide—B 8 inches long and C 4 1-4 inches long.

The bow end of sticks A must be tapered on the inside edges as shown in Fig. 2, so they will come together, and slots must be cut through these sticks for the ends of sticks B and C to stick through (Fig. 3). Cut the slots for B 2 1-2 inches from the stern end, and the slots for C halfway between these and the bow end. Slip separators B and C into the slots, and then bind with strong linen thread, coated with glue to make it stick.

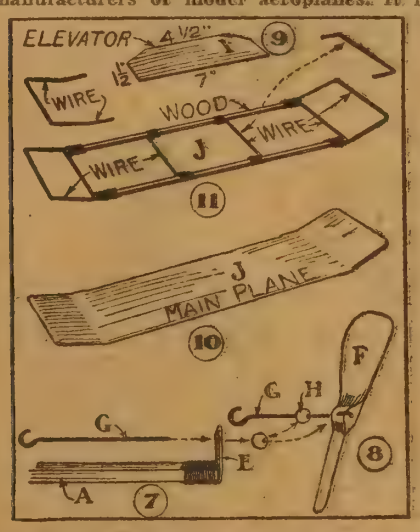
Bow hooks D (Figs. 1 and 4) support the bow end of the rubber motor, and are




bent out of a piece of heavy piano wire. Bend the wire V-shaped to fit the bow ends of sticks A, and bind to the sticks with thread (Fig. 1).

The bow ends of sticks A must have metal bearing-plates similar to E (Fig. 5) bound to them with thread. Bend these out of heavy tin or brass, and punch a hole in the position shown.

A pair of accurately made propellers can be purchased at toy stores, and from manufacturers of model aeroplanes. It is




not much of a trick to make a pair when you know how, and in another article I shall tell you about the work. Meanwhile, see what you can do unaided.

The propeller shafts (G, Fig. 8) are made of heavy piano wire. Bend one end into a hook (Fig. 7) to receive the end of the rubber motors, then run the other end (Fig. 7), slip a glass bead (H) over it for a "thrust-bearing," and run it through the propeller hub and bend over the side of the hub (Fig. 8).

The motors are made of strands of rubber. Rubber bands can be looped in one another, end to end, to form the strands, but strands all in one piece are better. Twelve strands are needed for each motor. Fasten the bow ends of the strands to wire rings (Fig. 6), so they may be slipped on and off hooks D quickly.

With the motors in place, the "elevator plane" I and "main plane" J (Figs. 1, 9 and 10) remain to be made. Elevator I is made of two wooden side strips 15 inches long, 1-16 inch thick, and 1-4 inch wide, connected with wide separators bent and joined to the strips in the manner shown in Fig. 11. The end wire tips should extend beyond the wooden strips 2 1-2 inches, and be bent to the angle shown. Cover the frame




with china silk. Sew or glue this on to the frame, then give it a thin coat of shellac.

The planes should not be fastened securely to the model aeroplane framework, but be held to it by rubber bands so their position may be adjusted to the points where they will give the model the greatest stability in flight.

# Saves Fryings for Gravy

To the Editor: We have a family of four. Instead of a too frequent serving of lemon pie—I make two at one time—I would use the lemons for lemonade, the eggs for meat and have some sugar left to sweeten sauce.

I seldom fry raw potatoes when they are high-priced or scarce. It takes such a quantity. I had supposed any leftover potatoes were utterly worthless until this winter I tried putting them in a porcelain basin, covering with milk and letting them simmer on the back of the stove for a boy who was out hunting. They were good and filled the boy.

Instead of fancy breakfast foods serve graham, cornmeal and oatmeal mush a part of the time.

When frying pork to be put down in lard, it is often necessary to rinse out the frying pans thoroughly several times if frying a large amount. I now save and cook this up and can for brown gravy—I used to throw this in the slop pail, thinking it useless to save. MRS. J. TEFFT.

M'Kee, Ore.

### PREPARES JUST ENOUGH.

To the Editor: I try to prepare just what I think will be enough for the meal. If there should be any left I make it over into something else for the next meal. The high price of meats makes one want something to substitute. There are many such things. As to garden, I can what vegetables I need for winter and dry fruit, such as apples, prunes and cherries.

MRS. M. H. TORPEY.

Farmington, Wash.

### One Starchy, One Green Vegetable.

With any meat one should serve one starchy and one green vegetable. A dinner made up of different rice dishes would not be attractive or satisfying. Dressing or dumplings with meat extends the meat food with a cheaper and less concentrated one.

### Dainty Dessert After Heavy Dinner.

A dainty and wholesome dessert should be served with a heavy dinner. Mince pie or plum pudding are not appropriate to serve after a turkey dinner. Chopped dates or raisins are good when added to cereal.


# DID YOU GET THE BULLETIN?

This is planting time for Bulbs, Roses, Fruit Trees, Rhubarb, Asparagus, Strawberries and bushes. It is also time to think about Incubators, Brooders and Chicks for the coming season.

Our bulletin gives you all the details necessary for successful planting and culture. Will be glad to mail you a copy upon receipt of a postcard.

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It is gratifying to know that the new cooperative system has had the heartiest kind of backing; and that it has been put on a successful basis. We could not have got along without the assistance of well wishers who have told their neighbors about the plan and passed along copies of the paper.

There are many things of value which your state farm paper can bring you and your neighbors during the summer months. The various departments will be full of helpful hints, instructive articles and entertainment. Send in the orders!

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ALICE W. BARLAND,
Editorial Contributor.

# Pleasing Clothes

## Aids Efficiency and Good Nature

That health, efficiency and good nature of any individual will be increased by wearing clean, comfortable and pleasing clothes is the opinion of Miss Edna E. Walker, emergency state leader home demonstrators, extension service State College of Washington. Miss Walker asserts that often the secret of being well dressed lies in one's ability to keep all articles of clothing clean and in good repair.

Mend clothes, if possible, before washday, advises Miss Walker, as rents grow in washing. Washing is facilitated by soaking the clothes to soften the fabric and loosen the dirt. The soaking is made more effective if soap, borax, ammonia or kerosene is added to the water. Yellow soaps are usually strong soaps, and should never be used on delicate fabrics. Boiling purifies and whitens clothes. Rinsing is a most important part of the washing process, for if soap is left in the clothes it may be very detrimental, bluing may react with the alkali of the soap and form rust spots.

When properly done, washing, cleaning and mending clothes is an art in itself, and should be studied if the best results are to be obtained and the full life of the cloth is desired.

### WAR TIME CAKES.

Many recipes have been sent out by the United States food administration since we have entered the war. The Farmer recently received the following cake recipes:

**Spice Cake, 100 Per Cent Barley Flour.**

One-half cup fat, two-thirds cup sugar (about 4 3-4 ounces) one cup sirup (11 1-2 ounces), three eggs, three-fourths cup milk, one teaspoon vanilla, one-half teaspoon ginger, six teaspoons baking powder, one-fourth teaspoon salt, one teaspoon cinnamon, one-half teaspoon cloves, one teaspoon allspice, three and three-fourths cups barley flour (10 ounces), one cup raisins.

Method: Cream the fat, sugar and egg yolk. Add the sirup and mix well. Add alternately the liquid and the dry ingredients, sifted together. Add the flavoring and fold in the well-beaten egg whites. Bake for one hour in a moderate oven (170 degrees C., 350 degrees F.). After 20 minutes raise the temperature to 250 degrees C., 400 degrees F..

**Spice Cake, No. 2.**

One-half cup fat, two-thirds cup sugar (about 4 3-4 ounces), one cup sirup, (11 1-2 ounces), three eggs, three-fourths cup milk (6 ounces), one teaspoon vanilla, one-half teaspoon ginger, six teaspoons baking powder, one-fourth teaspoon salt, one teaspoon cinnamon, one-half teaspoon cloves, one teaspoon allspice, one cup rice flour (5 ounces), one cup buckwheat (5 ounces).

Method: Cream the fat, sugar and egg yolk. Add the sirup and mix well. Add alternately the liquid and the dry ingredients, sifted together. Add the flavoring and fold in the well-beaten egg whites. Bake for one hour in a moderate oven (170 degrees C., 350 degree F.). After 20 minutes raise the temperature to 205 degrees C., 400 degrees F.

**Chocolate Cake.**

One-half cup fat, two-thirds cup sugar (about 4 3-4 ounces), one cup sirup (about 11 1-2 ounces), three eggs, three-fourths cup milk, one teaspoon salt, one cup rice flour (5 ounces), two cups barley flour (5 ounces), six teaspoons baking powder, one teaspoon cinnamon, one teaspoon vanilla, two squares chocolate.

Method: Cream the fat, sugar and egg yolk. Add the sirup and mix well. Add alternately the liquid and the dry ingredients, sifted together. Add the flavoring and melted chocolate. Fold in well-beaten egg white. Bake about one hour, starting in a moderate oven (350 degrees F., 177 degrees C.). After 20 minutes raise to 400 degrees F., 205 degrees C.

### SAVE THE FRUIT PITS.

Every American has the chance for direct war service that will save the lives of soldiers. Carbon is needed to make millions of gas masks for the American army. Cocoanuts have furnished much of this material, but cocoanuts mean ships, and during the present shortage material for carbon must be found nearer home. The pits of apricots, peaches, prunes, olives, dates, cherries and plums and the shells of Brazil nuts, hickory nuts, walnuts and butternuts make carbon for masks that will outlast the most diabolical of the German gases.

Here is work for all, every home, church and school. See that the work is started in your neighborhood. Place collection boxes in schools, churches, banks and stores, and above all in your own home, so your boys and girls can see the pile grow. It takes 200 peach stones, or seven pounds of nut shells to furnish carbon for a gas mask and save the life of an American soldier.

Dry the pits and shells before turning them in to the nearest Red Cross chapter. This organization is in charge of collecting all material.

### HOW TO MAKE KISSES.

Beat whites of three eggs very stiff with a pinch of salt. Beat in gradually one-half cup sugar, a pinch of cream of tartar, a few drops of any desired flavoring extract, the flour and nuts or spices. The following is the right quantity of the various flour substitutes to use: Three-fourths cup cornstarch or one cup rice flour, or one cup oat flour, or one cup corn flour or one-half cup each of cornstarch and soy bean flour sifted together. Three-fourths cup cocoanut or one-half cup walnuts or almonds, chopped fine; three teaspoons cocoa and one-half teaspoon cinnamon, or one teaspoon cinnamon and one-fourth cloves. Use a trifle less flour with the spices. Bake in a moderate oven, dropped in teaspoonfuls on an oiled pan.

**Wafers.**

Yolks of three eggs beaten very light. Beat in gradually one-half cup sugar, pinch of creaf tartar, the flour with a pinch of salt, one tablespoon of water and a teaspoonful any desired flavoring extract, nuts or spices. The following is the right quantity of the various flour substitutes to use: Three-fourths cup cornstarch, or one cup rice flour, or one cup oat or corn flour, one-fourth cup soy bean flour mixed with three-fourths cup of cornstarch or rice flour is good. Always try a little of the wafer dough, as the size of eggs varies and it is sometimes necessary to add a trifle more flour to prevent the wafers from spreading too much. Drop the batter in teaspoonfuls on an oiled pan, allowing plenty of room to spread. Bake is a moderate oven.—Mrs. W. F. S.

### SCRAP BOXES.

I wonder how many of the readers of The Washington Farmer save their papers. If you do not save them here is a good method to save the most important articles, such as recipes, helpful hints and any articles that will be of interest and use in the future:

Take small cardboard boxes or cigar boxes and put some paper neatly around them if they look unsightly. Label each box with the names of the articles that are to be put in it, as Poultry, Dairy, Household Hints, etc. By clipping out and saving the articles that are of interest a very good collection should be had in a short time.

When a particular article or recipe is wanted take the box that it is likely to be in and dump the contents on a table, and in a moment's time the one that is wanted will be found. C. J. M.

### CHOCOLATE DAINTIES.

One-half cup dates, 1-2 cup figs, 1-2 cup nut meats, 1 tablespoon orange juice, grated orange peel, 1 square unsweetened chocolate.

Put fruit and nuts through a meat chopper. Add orange juice, grated peel and melted chocolate. This mixture may then be molded into balls and rolled in chopped nuts or granulated sugar, or it may be packed in an oiled tin, put under a weight, and then cut into squares.

### SUGARLESS MARSHMALLOWS.

Two tablespoons gelatin, one-half cup cold water, two cups corn syrup, one egg white, one teaspoon vanila.

Soak gelatin in the cold water. Boil corn syrup to the crack stage and pour it over the gelatin, beating as it is added. Add egg white beaten stiff. Flavor with vanilla and beat the mixture until it holds very stiff. Pour into a pan thickly powdered with cornstarch and confectioner's sugar. Cut into squares when cold.

### BAKED CODFISH BALLS.

One cup codfish, two and one-half cups potatoes, one egg, pepper. Remove skin and bones from the codfish and cut into small pieces. Pare and dice potatoes. Cover fish and potatoes with water and cook until potatoes are done. Drain dry and mash fine. Mix egg and seasonings with potatoes and fish. Shape, and bake on an oiled pan until brown.

**Way to Save Fuel.**

You can save fuel in the war-saving times if you plan to bake when you bake and boil when you boil. If you have a roast for dinner, plan to bake your potatoes, have baked squash or baked tomatoes, and a pudding that can be cooked in the oven. Plan to have baked beans the next day, so that when your dinner comes out of the oven you can put the beans in to cook on the heat that would otherwise be wasted.

**Less Sugar in Tea and Coffee.**

Sugar in tea and coffee is frequently wasted because all of it is not dissolved. It is possible to use other sweetening in coffee, such as corn syrup.

# Saving Sugar

## Dry Fruits and Also Let Bees Help

By LISSIE C. FARMER.

There are several ways by which Pacific northwest householders can help the government save sugar and have more to send abroad and help win the war.

First, you can plant and raise plenty of the various products that produce saccharine substances. In many localities sugar beets will grow and syrup to be used in all kinds of cooking may be made from them. Sugar peas, parsnips, carrots and sweet corn contain considerable sugar, and these can be grown and used more in all kind of cookery. Almost all kinds of fruits contain sugar, greatest just when the fruit is at the right stage of ripeness. These can be dried and used in puddings, sauces, cakes and breads, lessening the amount of sugar required. Juices of fruits may be boiled down into syrups, retaining all the natural fruit sugar, and these syrups used in drinks, sauces and cooking.

Bees pay well for the work bestowed on them because they gather a good share of their own food from blossoms not otherwise used as food sources and do not require expensive housing, and the honey they produce is one of the best sweetening substances ever known, healthful to use and a splendid keeper.

It is not likely that much could be accomplished in growing sugar cane in our climate, as in most places the nights are too cool; but it is reported that the first cousin of sugar cane—sorghum—has been successfully grown by a Hood River man. If sorghum can be grown in the Hood River valley it can be grown in other northwest localities, and the molasses produced from this cane is a valuable sweetener.

Sugar maples thrive in our locality, growing very rapidly into healthy, graceful trees. They are easy to get started, are not particular about being crowded—in fact, they grow among other trees in uncleared land and can be tapped for sap when about 10 years of age. Why not, then, when setting out trees, do a little planning for the future and plant a few sugar maples? In a few years they will give you a high grade of syrup and sugar and they will require very little labor or attention in the meantime.

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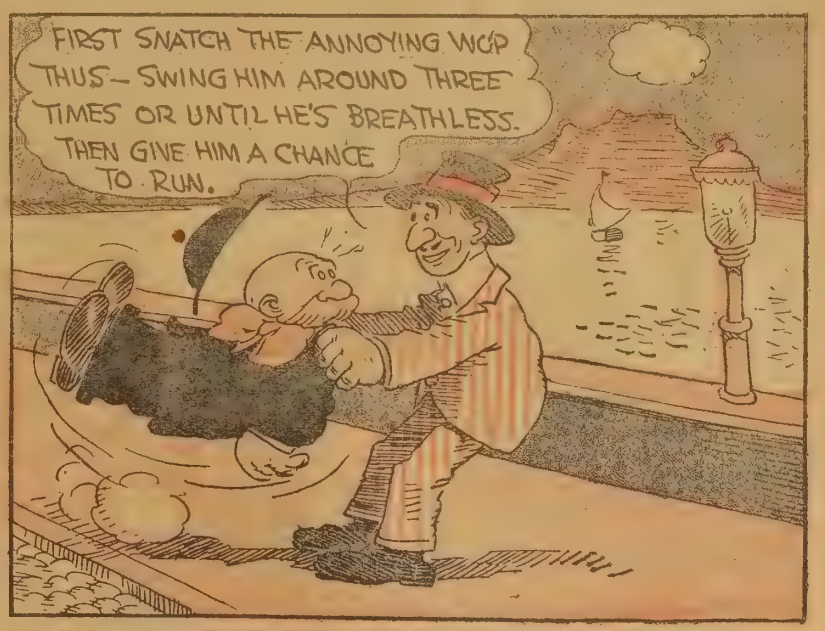
# JERRY MACJUNK FINDS IT BEST TO GIVE UP





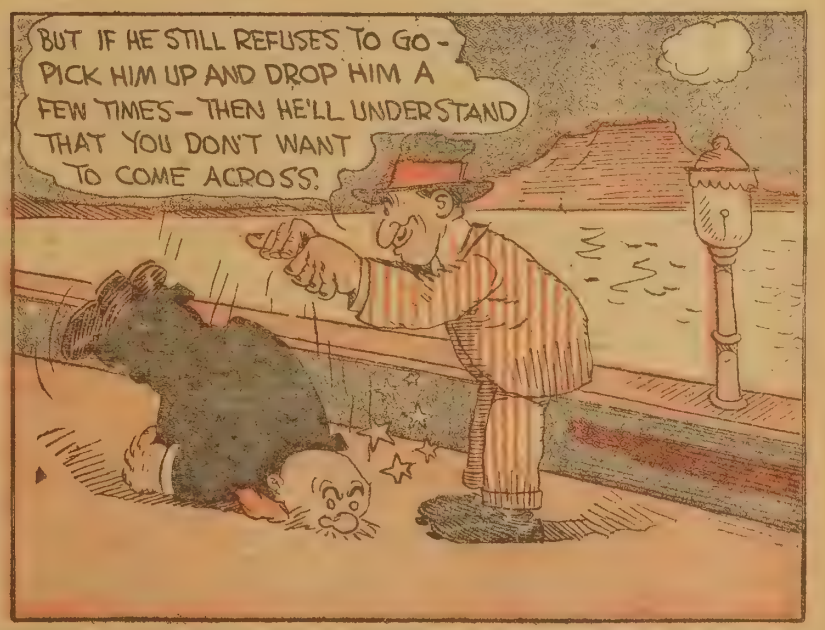


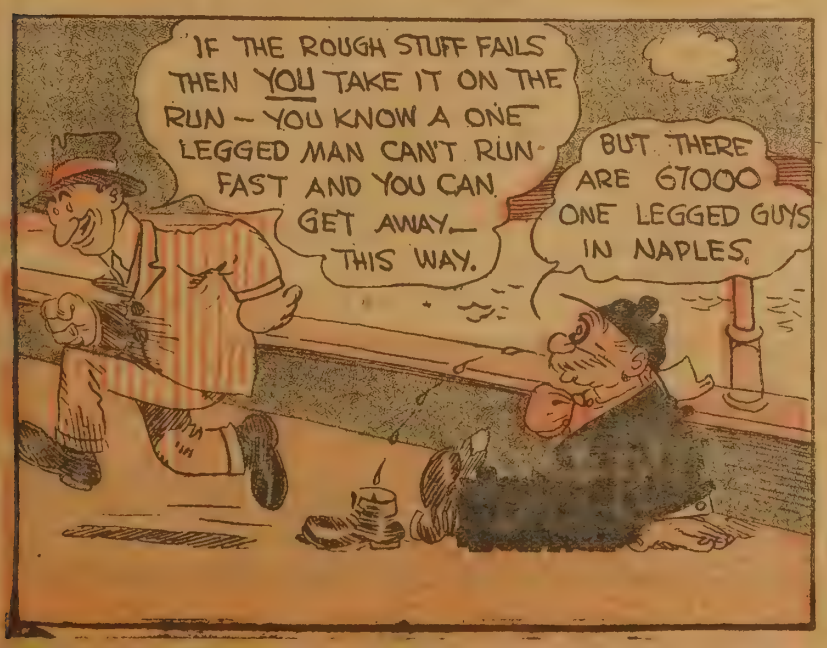











# PATTERNS

2423—Lady's dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 5 1-2 yards of 44-inch material. The skirt measures about 1 7-8 yards at the foot. Price, 10 cents.

2551—Boy's coat. Cut in 5 sizes: 6, 8, 10, 12 and 14 years. Size 12 requires 4 1-4 yards of 40-inch material. Price, 10 cents.

1328—Lady's shirt waist with convertible collar. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. It requires 2 3-8 yards of 44-inch material for a 36-inch size. Price, 10 cents.

2604—Girl's dress. Cut in 4 sizes: 8, 10, 12 and 14 years. Size 12 requires 3 7-8 yards of 44-inch material. Price, 10 cents.

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2603—Child's dress—Cut in 4 sizes: 1 year, 2, 4 and 6 years. Size 4 will require 2 1-2 yards of 44-inch material. Price, 10 cents.

2611-2605—Lady's costume. Waist 2611 cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 2 1-2 yards of 44-inch material. Skirt 2605 is cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. Size 24 requires 2 1-2 yards of 54-inch material. The skirt measures about 2 3-4 yards at the foot, with plaits drawn out. Two separate patterns, 10 cents for each pattern.

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2607—Lady's underskirt. Cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. Size 24 requires 2 1-2 yards of 36-inch material without the flounce, or 3 5-8 yards of material, with the flounce. Price, 10 cents.

2331—Lady's house dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 7 yards of 36-inch material. The dress measures about 2 1-2 yards at the foot. Price, 10 cents.

2589—Lady's cover-all apron. Cut in 4 sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. Size 38 requires 5 3-8 yards of 36-inch material. Price, 10 cents.

2322—Girl's dress. Cut in 4 sizes: 8, 10, 12 and 14 years. Size 12 requires 3 1-2 yards of 44-inch material. Price, 10 cents.




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# Rabbit Meat

## But Few People Know Its Value

By H. E. GIBSON.

Comparatively few people know the food value of rabbit meat. The ablest physicians of our country have declared that tame rabbit meat is more nutritious than any other kind of meat. The taste is preferred by many people to poultry. All that is left to be done is to educate the people to the peculiar advantages of rabbit meat.

Rabbits can be kept cleaner, perhaps, than any other meat-producing animals in sanitary out-door hutches. They are very particular about their food—much more so than either hogs or chickens—refusing to touch any kind of food that may be only slightly tainted, while hogs and chickens are noted scavangers. It is remarkable how people become educated to choose as choice food for the best tables the least particular of the meat-producing animals. It now becomes those who are interested particularly in the rabbit business to interest our people in becoming partial to a better, safer and cleaner meat food supply.

One can keep a few rabbits in their back yard and any time fresh meat is wanted, a young rabbit can be killed, dressed, cooked and on the table inside an hour's time. Here is a simple, cheap method of keeping an ever-ready supply of fresh meat always on hand.

There are many little plans one can think of to get people interested in eating rabbit meat. Suppose a special supper or banquet could be gotten up in your community, at which "dressed hare" should be the principal article of diet. Make a present of an occasional rabbit to some prospective customer and they are almost sure to become a regular weekly purchaser. Get after the hotels and restaurants, offer some special inducement just to get them started and once they get the taste you are sure to have them for good.

Talk rabbit meat. Ask for it when having a meal at a restaurant, hotel or public eating place of any kind. Make sure you have rabbit on the brain and by being enthusiastic yourself you will arouse interest in others. There is no other way. When you get one or two started they will tell others, so the news will spread and rabbit meat some day will be the most popular—as it ought to be—meat on the market.

### SOME LIBERTY LOAN SLOGANS.

Wear your old clothes and buy Liberty bonds.
Liberty bonds or German bondage.
"Come across" or the kaiser will.
The soldier gives; you must lend.
Liberty bonds or German taxes.
Buy over here to win over there.
It's billions for defense or billions for indemnity.
For Foch and freedom; buy bonds.
A bond slacker is the kaiser's backer.
A man who won't lend is the kaiser's friend.
The more bonds you buy the fewer boys will die.
Let all get on the bond wagon.
Be one of the millions to lend the billions.
Dig up the coin and bury the Hun.
Buy bonds before it's verboten.
Idle dollars are pro-German.
Put the "pay" into patriotism.
Bonds speak louder than words.
If you can't fight, your money can.
Freemen buy bonds; slaves wear them.

### Use Fruits.

Chopped figs, dates, or raisins cooked with cereals will give a sweet flavor without the addition of sugar.

Use more fresh and dried fruits in place of rich pastries and sweet puddings. Fruit cakes and puddings may be made without sugar with excellent results.

### Substitute Other Cereals for Wheat.

Use breakfast foods made from corn, oats and barley. Use yeast breads, griddle cakes, muffins, biscuits, cakes and desserts in which some buckwheat, cornmeal, barley or oats is used.

### Cottage Cheese Salad.

Cottage cheese mixed with chopped nuts, celery, olives, pimento, pickle, onion, or caraway seed may be made into balls and served on lettuce leaves with salad dressing.

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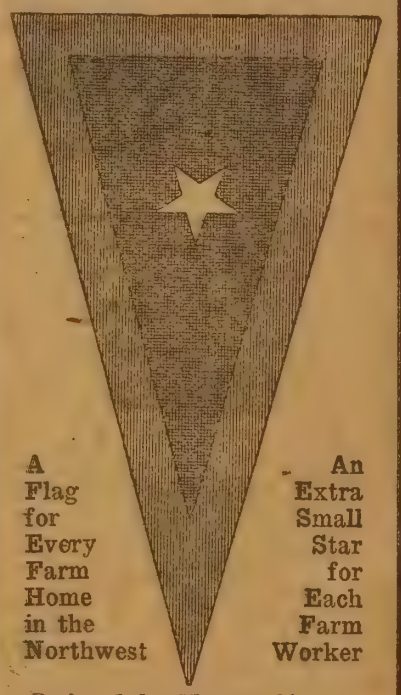
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The government urges the use of ice on the farm. It means food saved. Latham's Ice Molds solve the problem for those not situated near a stream or lake. They make good, pure ice right at home.

WARREN LATHAM, Mfg., Spokane, Wash.

GOOD PROFITS TO AGENTS
Cabbage Cutter with 6 Knives
that always keep sharp. Slices cabbage and all other vegetables easily and rapidly. Sent prepaid for $1.00. 3 for $2.00. LUSHER BROS., Elkhart, Ind.

## FARM SERVICE WAR FLAG




Designed by The Washington Farmer.
(Patent applied for.)

### Get a Farm Service War Flag.

The man, woman, boy or girl who stays at home and works hard to produce necessaries for the soldiers in Europe is entitled to real war service recognition. That is the idea back of the farm service war flag. It is pennant-shaped, made of the good old red, white and blue, and has a star representing the producing farm home. Small stars are added to represent each worker of that home.

Convenient Order Blank.

..... 1918.

THE WASHINGTON FARMER,
Review Bldg., Spokane, Wash.
Enclosed find five cents (5c), for which please send me a Farm Service War Flag (printed on enamel paper) with ..... extra small stars for farm workers.

Name .....

R. F. D. .....Postoffice .....

Box ..... State.....

**When you write to advertisers be sure to state that you saw their advertisement in this paper.**




Dear Corner Cousins: I have a treat for you this week. We have a letter to us from a "cousin" who has lived longer than any of us—such an interesting letter, too. He was born in 1847—a year after this country made the Oregon boundary treaty with Canada, and a year before gold was discovered in California. He did not tell us his birthday or I know some of us would write to him on that day. I do not suppose I could find a "twin" for him, though.

He was one of those gallant boys who wore his country's uniform when it was blue instead of khaki, but the same kind of a heart was under the blue. He offered his life for his flag as freely and generously as our brothers and cousins and friends are doing now, and all was for liberty.

What wonderful things he has seen in his 71 years. There were no automobiles then—no trains across the country. This beautiful land we live in now was then a wilderness with only wild Indians in it and wild animals. Now we have several Indian cousins, as bright and smart and good and just as dearly loved by Aunt Nellie as any of her great family of nephews and nieces.

I know we all want him to write to us again and if he feels able, to tell us all about the times when he was a little boy. Isn't it nice that he likes to read our Corner letters? Here is what he writes to us:

"As I am an old soldier I thought I would write a few lines. I served five years in the regulars from 1875 to 1880 at the Presidio, San Francisco, Cal. I have bought one war saving stamp and expect to buy some more when Uncle Sam makes me another pay day, which comes in next month, on the 4th or 5th of September. I am past 71 years, but I guess I am not too old to write you; will do it just the same. I read the story, 'Trappers of the Ozarks,' which occurred many years before my father and mother were born, but it is quite interesting all right, and I read all of the stories and all of the letters that come each week from the little folks. I think they are quite interesting and such nice letters from the little ones. It helps them in many ways to write letters. For fear I will tire you, I will close with many good wishes to the Farmer. I bid you adieu for this time.—E. L. B., Cherryville, Ore. (I am a subscriber)."

"I want to be a farmer when I get big because I like the looks of the stuff as it comes up," writes Graham Potter, of Mead. Graham has made a good beginning, for this summer he dropped potatoes into the planter for nearly 10 acres. The hardest part of farming, Graham thinks, is the pulling and digging. Graham's sister, Ruth, writes to the Corner, too. She was eight years old, February 4. Ruth tells us that they have a horse named Pat and one calf named Beauty.

Cousin Verna Tittle, and her sister, Ruth, helped papa put the crop in this spring. They thought it was lots of fun to plow. Verna lives at Republic. Last year when she was raking, the horse ran away with her and she was hurt so badly that she couldn't walk for a week. Papa was near when the accident happened so he took her home on a load of hay. Vera and Ruth and papa and mamma are charter members of the grange.

Arnold Menger can beat many men when it comes to playing horseshoe and he surely likes to play it. Arnold's parents live on a farm near Davenport and so Arnold has his work as well as his pleasures. He tends to all the stock and drove derrick last summer in harvest time. He has a 22-rifle and loves to hunt ducks and rabbits. He was 12, March 7.

How many cousins like to knit? Fern Carlisle of Espanola, says that she does. Fern has auburn hair and blue eyes and is very big for her age, she says. She is 12, October 4. Her home is on a farm about two miles from Medical Lake. She calls her pet calf, June.

A dog, Sport, and a cat, Tom, are Beulah Buckley's pets. Beulah lives at St. Andrews, and she was 11 years old, December 29. She has three brothers and three sisters.

A big wheat ranch near Waitsburg is where Cousin Dorothy Harris lives. Dorothy takes music lessons. She has a dog named Sport and a cat named Lion.

Gyp, the dog, and Buster, the calf, are Hazel Nelson's pets. Hazel lives at Diamond, just a little ways from the schoolhouse. She had a small garden this summer. Hazel was 10, May 30, and is a Red Cross member.

Living on a ranch with sister and taking care of her little niece, Georgia Jane, is the way Josephine Holland of Davenport spent her summer days. Josephine wonders if little Georgia Jane has a twin? She was 1 year old April 25, and she can walk and wants to go everywhere that Josephine goes. Josephine was 12 years old November 16. She has thrift stamps.

Echo Dell is the name of the school that Bertha Wahl of Warden, attends. Bertha was 11 years old January 8, and is in the fifth grade. Has she any twins?

Who was 10 years old September 4? Gladys Hill of Palouse was and she is looking for a twin. There are seven of us in the family, writes Gladys, and my cousin lives with us. Gladys wishes some of the cousins would write to her.

Cousin Margaret Silver lives two miles and a half from school. Her address is Box 80, Route 6, Spokane, Wash. Margaret was 10 May 30. Has she a twin? There are about 200 chickens, two cows, two horses and one cat Mike, on their farm.

Here is another little cousin who reads the letters every single week and enjoys them, Marvel Parriett, of Goldendale. Marvel is 10 years old, is in the fifth grade, and for pets has a goat, 37 chickens and one cat.

A pet cat, six little kitties, an old pet hen and a doll named Brenty, share the comfort of Cousin Clara's playhouse. Clara Baskette lives at Colfax, and just came to Washington one year ago from Tennessee. Blue-Eye, her pet cat, has one blue eye and one yellow one. Clara is a little Christmas present. Her birthday is December 25, and she is 7 years old. Can you guess her riddle? God never saw it, Washington might have seen it and we see it every day.

Cloe Jolly and her sister, Evelyn, live at St. Andrews, and they both wrote nice letters to the Corner. Cloe has made one handkerchief and knitted one washcloth for the Red Cross. She was 12 years old March 10, and Evelyn was 11 July 11. Cloe's pony, Bess, is white and very gentle. Evelyn calls her pony Bird and she has a little dog named Gippy. Their home is on a 320-acre ranch.

A five-acre orchard tract at Opportunity is the home of our 7-year-old cousin, Caroline Hunt. February 9 is her birthday, and she would like to have a twin. Caroline's father keeps White Leghorn chickens. Caroline buys thrift stamps with the money she earns by helping mama with the dishes and by picking berries.

It averages 103 in the shade in Cuba, and there is very little shade at that. Stella B. Ervin of Mead has a cousin who lives there, and that is what he told her. Stella helped papa cultivate this summer and raised a garden of her own. She had a birthday just a little while ago. She was 15 September 16. This winter she is going to Spokane high school. Stella likes the letters that Sallie Garry writes and would love to correspond with her.

Father, sister and my two brothers are in Canada, writes Norma Oliver, who lives on a 400-acre farm at Palouse. Father is coming back this fall, though. Fay and Fannie Sheppard, Norma's schoolmates, write to the Corner also.

**Picking Wild Currants.**

Dear Aunt Nellie: May I join the Corner? I haven't found a twin yet, but I know I will find one. I am 11 years old and in the fifth grade. My birthday is May 7. I have a sister but no brother. My sister's name is Ellen. She is nine years old and in the fourth grade. Her birthday is June 15. Has she a twin? My sister and I like to read the children's letters. We have two dogs, Shep and Towser. They are shepherd dogs. We have two working horses, Betty and Nancy. We have one pony, Jim, five colts, Molly, Merrylegs, Nagger, Rosa and Hutsytutsy. We live on a 160-acre farm and rent 160 acres, so we have 320 altogether. We have a dairy farm, A creek runs through our place. In summer we wade and swim. I can knit and have knitted a doll sweater, cap, stockings and a scarf. I have two cousins in the war. My sister and I have each two war savings stamps and are going to get more. We have been out in the pasture picking wild currants.—Agneta Bruhn, Wilbur, Wash.

**Hazel Has One Brother.**

Dear Aunt Nellie: I am 11 years old and am in the sixth grade at school. I live on a ranch. It is about eight miles from town. We have two horses, one colt, two calves, one cow and a dog. I have one brother. His name is Russell Crouch. He is 16 1-2 years old. My father takes the Farmer and I like to read the letters very much.—Hazel Crouch, Tonasket, Wash.

**Shep Chases the Kitty.**

Dear Aunt Nellie: This is the first time I have written to the Children's Corner and was glad to write. We went to Rosalia to meet my mama and I asked her if she took the Farmer and she said "No." Shep is a big dog and every time he sees kitty he starts after her and so kitty goes away.—Beatrice Clay, R. F. D. 2, St. John, Wash.

During the last two weeks Aunt Nellie has received letters from the following cousins: Myrtle Green, Myrtle Garrett, Luella Venneberg, Ruth Reynolds, George Turner, Anne Raisio, Esther Crider, Virginia Clarke, Anna Brandt, Margaret Wilkinson, Helen Huguenir, Bertha Brown, Inda Scott, Eva Dunlap, Ivy Ward.




# WAR NEWS

Keep up with the times. Learn what our soldier boys are doing at the front. Get a complete, reliable survey of the war and other current news by taking The Twice-a-Week Spokesman-Review.

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## The Washington Farmer

Spokane, Washington.

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I desire to take advantage of your special clubbing offer. Enclosed is $1 in full payment for one year's subscription to The Twice-a-Week Spokesman-Review and three years' subscription to THE WASHINGTON FARMER.

**In Canada add 1 cent per copy for extra postage.**

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# King Segis Pontiac 13th



On October 16, P. A. Frakes of Scappoose, Ore., the pioneer Holstein breeder of the northwest, will sell 70 head of his fine Holstein herd. Mr. Frakes' advancing years and the shortage of labor, which makes the burden of running a big herd of cows in milk too great for him, are the chief causes of the sale. The picture herewith is that of King Segis Pontiac 13th, one of the herd bulls, to which many of the cows are bred. He is a grandson of King Segis and King of the Pontiacs, two of the greatest sires the Holstein breed has ever produced. The sale will be held on the Frakes farm, and trains at Scappoose will be met from both directions. H. A.

# News for Breeders

Mrs. M. E. Vessey of Yakima, Wash., who is considered one of the best judges of sheep in the Yakima valley, was a good buyer at the state fair sheep sale. She paid $140 for one Butterfield Rambouillet ram and took others at high prices. Mrs. Vessey ranges about 9000 sheep in the Wenatchee forest, and carries over 5000 breeding ewes.

J. H. Compou of Walla Walla, Wash., during the Washington state fair purchased from Mr. Calkins of Middledale farm, Cresswell, Wash., two 3-year-old Guernsey cows and one yearling heifer, all of May Rose breeding and sired by Longwater Emigrant. W. E. Brown of Walla Walla was also a Guernsey purchaser, taking home a yearling heifer sired by Imp. Ivy's Masterpiece. Besides several other heifers, Mr. Calkins sold all his young bulls, Alphaland Farms, Grandview, Wash., taking one good youngster and C. R. Angel of Zillah, Wash., another. The largest shipment is to C. R. Schurch of Cloverdale dairy farm, Deer Lodge, Mont., who got the first-prize bull calf, Middledale King of the May.

Both the grand champion Holsteins at the Washington State fair were the get of E. B. Marks' herd bull, Sir Bessie Fobes Tritomia and most of the prize winning young stock shown by Mr. Marks are by him.

Members of the boys' pig clubs made all the Poland China exhibits at the Washington State fair. The entries were fully as creditable as is usually shown by older breeders and the young men have cause to feel proud.

Professor Hickman of the animal husbandry department of the Idaho University, who judged swine at the Washington state fair, purchased a young Berkshire boar pig from Earl Wood of Silverton, Ore., who exhibited a herd. The pig was dropped July 3 and is out of the grand champion sow at the Pacific International stock show last winter. He is large and thrifty and promises to be a show animal. Mr. Wood also made several other sales. H. A.

ST. MAWES LADD.



G. G. Hewitt of Monmouth, Ore., has for his Jersey herd sire St. Mawes Lad, and Mr. Hewitt believes this bull has greater production represented by his three nearest dams than any other Jersey bull in the world. St. Mawes Lad's dam is St. Mawes Beauty, the heifer with which Ed Cary won first in her class as a senior yearling at the Panama-Pacific stock show and first and junior champion at the Oregon State fair. She first freshened at 1 year and 11 months and produced 587 pounds of fat or 690 of 85 per cent butter or 703 of 80 per cent butter. Her next freshening was as junior 3-year-old, and she produced 767.2 pounds of fat, which was within three pounds of a world's record.

# Wheat Feeding Permits

Charles Hebberd, federal food administrator for Washington, has issued instructions which go more fully into detail of feeding low grade wheat to stock. He says:

On account of shortage of feed due to severe drouth conditions of the last season the food administration has made a special ruling applicable to the state of Washington and other states of the northwest zone relaxing the prohibition against feeding of wheat to animals and poultry.

Any wheat grading below No. 3, or which for any reason is not of a good milling standard, may be released for feeding. Also all wheat at remote points inaccessible to transportation and all wheat grown in such small quantities as not to be readily marketed may be thus released for feeding.

Samples of all such wheat must be submitted to the county food administrator, and none shall be fed until the county food administrator has issued a written permit to the owner of such wheat.

The prohibition against flour mills, grist mills and others grinding wheat for this purpose may be considered suspended in all cases where the county food administrator has issued a permit to the owner to feed such wheat.

County administrators will please impress upon all applicants for permits that it is not the intention of the food administration to issue permits to feed wheat except where it is impossible to obtain coarse grain for feeding purposes at reasonable prices. It is the duty of every feeder of stock to make every reasonable effort to supply his feed requirements without using wheat.

The foregoing permission from the food administration is made specially to the states of this zone, and must not be abused. In case of any abuse of the privilege granted or of any unfair practice as to price or otherwise, the county food administrator is authorized to cancel any permit issued by him.

County food administrators will exercise their best judgment in the issuance of wheat feeding permits, according to the foregoing limitations. In order that there may be uniformity in all sections, however, they are requested to notify J. K. Smith, chairman of milling and feeding division, food administration, Spokane, Wash., of each permit issued, forwarding sample on which permit was issued. Permit may be granted at once, however, by the county food administrator with the understanding that it shall continue effective unless disallowed by the milling and feed division.

**Barley as Breakfast Food.**

Pearl barley is also very good as a breakfast. We like it with milk or cream. Some of the family like a little bran stirred in it and a cup of seedless raisins.




**Just One Hour's Demonstration**

That's all we need to prove to you the merits of The Lauson Farm Tractor. Write and let us arrange for the test.

The LAUSON TRACTOR 15-25 Full Jewel

is just right for the average farm. It contains no experimental feature. Every part is standard. Driving gears are enclosed and run in oil. *Twenty-four* Roller and Ball Bearings are used in its construction.

The engine, of course, is the main thing. Our four cylinder *Heavy Duty Valve-in-Head Engine* is a great power plant—economical in fuel, reliable and easily controlled.

*Write us or our distributor for name of Lauson dealer in your locality.*

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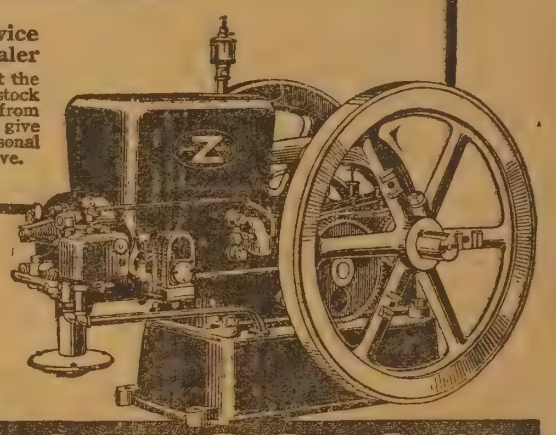
**RECORDS made by over 150,000 practical farmers buying over $10,000,000 worth of Fairbanks-Morse "Z" Farm Engines have never been equaled in Engine history.**

**Demand, as they did:**

1. Fairbanks-Morse Quality.
2. Economy in first and fuel cost, and low upkeep.
3. Simplicity and Staunch Durability.
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7. Complete with Built-in Magneto.
8. More than Rated Power.

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Your local dealer has just the type "Z" for your needs in stock waiting for you. Buy from him. He is prepared to give prompt delivery and personal service right where you live.



The 3 and 6 H. P. sizes are built to use kerosene, distillate, stove oil, tops or gasoline. The 1½ H.P. size uses gasoline only.

**FAIRBANKS, MORSE & CO.**
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POCATELLO, IDAHO.
Breeder of Pure Bred Live Stock.
Established flocks of pure-bred sheep—Rambouillets, Cotswolds, Lincolns, Shropshires, Oxfords, Hampshires, Romneys.
RAMS FOR 1918 SERVICE FOR SALE.
Also a few ewes.
Also breeder of Shorthorn cattle, Belgian horses and Berkshire hogs.

**Romneys, Lincoln, Corriedale**
AND HAMPSHIRE EWES AND RAMS.
All pure bred, not registered. Have especially fine lot Hampshire ewe lambs, yearlings and three-year-olds. Any size lot. Write me on any kind of sheep deal.
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**Lincoln Rams and Ewes**
Registered and pure bred, for sale in lots of from one to a carload. All by imported English and New Zealand rams.
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**Oxford Ram Lambs**
15 yearling rams, 40 ram lambs, 30 ewe lambs. Excellent stock and priced to sell.
EXPECT TO EXHIBIT AT INTERSTATE FAIR
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**QUALITY SHETLANDS**
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Breeders of Brown Swiss Cattle, the Farmers' Dairy Cow. Young stock for sale.
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**FOR SALE**
Choice young herd boars, old enough for service soon, sired by Richards Defender, Richards Pathfinder, and Victor Defender. Orders placed now for prize young gilts. They will be bred this fall to Idaho and Utah grand champion boars. Young pigs always for sale. Guaranteed to please.
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# Breeders' Department

## HOLSTEIN CATTLE

### YOU SHOULD COME
*AND BUY*
### HOLSTEIN CATTLE

**October 16, 1918.**

Here you have an opportunity to take advantage of the thirty years' experience of the pioneer breeder of the west. This sale will contain about seventy head from the well known herd owned by

**P. A. FRAKES, Scappoose, Oregon**

including herd bulls, cows, heifers and young stock of both sexes. There are cattle in this sale good enough to win in the show ring and capable of taking high A. R. O. records. Not a three-teated cow in the offering and every animal has a federal certificate of health.

The catalog tells all about them and how to reach the sale.

Send to the sale manager for one.

P. A. FRAKES, Owner, Scappoose, Oregon.
E. A. Rhoten, Sales Manager, Salem Ore.

Col. Geo. A. Gue
Col. J. W. Hughes
Auctioneers.

### Bargains in Bull Calves

Sired by Segis Riverside Pontiac, that sold in Pacific International sale, 1914, for $1025, and whose dam has A. R. O. record of 31.97 lbs. butter in 7 days; 118.89 in 30 days, and big records all through his pedigree.

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### 365 DAY HOLSTEINS

We are offering a bull calf, born June 27th, the two nearest dams of which average 19,866 lbs. milk, 855 lbs. butter for their yearly A. R. records. One a Jr. 2, the other a junior 4-year-old. The herd with yearly records.

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REGISTERED HOLSTEINS.

Bull calves for sale, with good A. R. O. backing.

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### Registered Holsteins

Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.

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## SHORTHORN CATTLE

### MILKING SHORTHORNS

with world records behind them for milk production.

### A. R. O. HOLSTEINS

A son of the King of the Pontiacs at head of herd.

Can make special prices on young bulls of each breed.

**A. V. Bradrick & Son**
Palouse, Wash.

### HOLSTEINS

Well bred young bulls for sale.

THOS. CARMICHAEL, Gaston, Ore.

### 5 SHORTHORN BULLS

One four year and four twelve to seventeen months, registered Shorthorn bulls, Whitehall Sultan strain. Ten registered Shorthorn cows. Exceptional prices if taken soon. L. B. Vincent, administrator.

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OVER 150 SPRING PIGS.

Sired by our grand champion Richards Defender, Richards Pathfinder and Cherry King Orion Jr., and out of our big type prize winning sows.

In the last three years at the Utah and Idaho state fairs our hogs won 76 champion and first prizes.

Can furnish unrelated pairs. Satisfaction guaranteed or money refunded. Priced very reasonable.

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breeder of registered Shorthorn cattle, Hampshire sheep and big type Poland China hogs.

Filer, Idaho.

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One excellent boar at breeding age. Bred gilts and weanling pigs of either sex.

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REGISTERED SHORTHORN COWS.

Young bulls and heifers, sired by Scotch bulls; liberal terms.

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THE GRAND CHAMPION SOW IS DEAD. We have a few of her pigs still for sale. Also fall litters, one of 17, from her prize-winning daughters. Priced right. Satisfaction guaranteed.

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Langwater, Glenwood and other best strains have won more show honors than any other herd in the west. A few very choice young bulls from heavy producing dams. Write for particulars to

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Registered Durec-Jersey hogs. Weanling pigs for sale.

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Breeders of high class registered and grade Guernseys.

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### QUALITY DUROCS

Breeding stock of all ages from prize winning stock.

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### ORCHARD HILL FARM

"Home of High-Class Guernseys."
Dr. Park Weed Willis, Owner.
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### DUROC JERSEY GILTS

From prize winning stock at Panama-Pacific exposition. Well grown, good individuals; priced to sell.

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Bull calves out of A. R. dams; also a few females. All good individuals. Herd tuberculin tested.

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REGISTERED DUROC-JERSEY HOGS.

Some good spring litters Richards Defender and Pathfinder breeding; big type. Send out nothing but high class stock. Guaranteed to please. Write me for prices on these pigs.

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Hereford Cattle.
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### Growthy March Pigs

Good breeding, good individuality, satisfaction guaranteed. Write for description and prices.

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offers for sale Hereford bulls, 1 or 2 years old. One or a carload.

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The today's type and breeding bar pigs for November delivery, $25.

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### Ashwood Farm Jerseys

Senior herd bull, Holger, whose daughters are qualifying for register of merit in six months. Junior herd bull, St. Mawes of Ashwood, a son of Poppy's St. Mawes. Write us about your wants or come and see our herd.

McARTHUR & STAUFF, Hickreall, Ore.

AVONDALE DUROC-JERSEYS.

If seeing is believing, then be sure and see my exhibit of big type Durec-Jerseys at the Idaho state fair and pick you out a real boar.

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FOUR DUROC GILTS BRED TO FARROW this fall, also spring pigs, on hand.

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JAMES N. PRICE, Yakima, Wash.

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### Greenleaf Stock Farm's Poland China Offerings

40 head of spring and fall boars from the

### BIG BONE FAMILY

We are offering a choice collection of boars out of the herd boar Big Bone Equal 2nd, by Big Bone Equal, by Big Bone, by Old A Wonder and Master Wonder, by Masterpiece and Wonder Tim, he by the $2500 Sever's Big Tim and he by the old Grand Champion Nebraska Tim and A. L.'s Big Orange by Orange Boy.

Among the lot we have now on hand are some fair prize winners. They are ready for service and guaranteed to be breeders. Your money back if they are not. We have them from $35 and up, and they are shipped C. O. D., guaranteed to satisfy or no sale, and the hog will be returned at our expense. Great care is taken in shipment and the hog will arrive in good condition. References: Caldwell Commercial bank or this paper. Write today. First come, first served.

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"Big Type With Quality."

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Mouw, Fesenmeyer and Herring strains, either sex. Also registered Shorthorn cattle; good individuals.

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Big type and medium Poland China. Bred gilts and spring pigs of both strains, unrelated. Sixteen years a breeder of Poland Chinas in Oregon.

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### Oaksdale Farm

Poland Chinas and Holsteins. Two fall boars at bargain prices for quick sale. A fine lot of early spring pigs. Best of breeding. A few well bred young bulls at very reasonable prices.

C. R. EVANS, Halsey, Ore.

### Poland China Swine

Strictly first class breeding stock for sale at all times at reasonable prices. Several very choice young gilts and one fine serviceable boar at a bargain; also young pigs, both sexes. (Everything registered free.)

C. B. COX Mabton, Wn.

### Poland Chinas and Holsteins

Strictly big type spring pigs of both sexes. Well grown, good individuals, sired by A. Price. A few choice young bulls.

B. S. THURSTON & SON., Jefferson, Ore.

QUALITY HERD.

If you want to improve your herd, try stock from my winners at the Oregon state fair.

RAY J. FOX, Lyons, Ore.

### Unrelated Spring Pigs

Big type and big medium. Both sexes. Most popular strains.

C. W. SHUMATE, Tumwater, Wash.

### BIG TYPE POLANDS

Genuine—Guaranteed.

GEO. W. BUCK, Oregon City, Ore.

### QUALITY AND UTILITY OUR HOBBY

Poland Chinas our breed. Young stock from prize winning ancestry. Satisfaction assured.

FRANK NEEDHAM, Eugene, Oregon.

PURE BRED POLANDS.

Breeding stock of all ages. Will ship C. O. D., subject to approval.

HERBERT WILLARD, Dayton, Ore.

## CHESTER WHITE SWINE

### REGISTERED O. I. C.

SWINE.

Choice weaned pigs. Will ship subject to approval.

RINGGOLD FARM.
J. H. West, Prop., Rt. 1, Box 15,
Centralia, Wash.

BIG TYPE POLAND CHINAS.

Herd headed by Sammy (79833).
Correspondence solicited.

Fruitland Stock Farm, C. Boyston, Mgr.
Payette or Fruitland, Idaho.

## HAMPSHIRE SWINE

### HAMPSHIRE PIGS

A few pigs of Messenger Boy and Look Out blood lines. Pairs and trios unrelated. Registered in purchaser's name. Priced to sell.

F. E. KINGSBURY, Malaga, Wash.

### COVE STOCK FARM

Unrelated fall and spring Chester White pigs from prize winning stock.

ARCHIE CONLEY, Cove, Ore.

HAMPSHIRE HOGS

have won every feeding contest entered since 1914. Weanling pigs, gilts, bred or open. Our blood lines can not be beat.

TUTTLE BROS. Asotin, Wash.

## BERKSHIRE SWINE

### Riverby Orchard Berkshires

Riverby Orchard Berkshires won 12 out of 15 first prizes at the Washington state fair, 1916, also many prizes, including grand champion sow at the Panama-Pacific world's fair. We offer for sale a few good boars and young sows.

D. C. BUNN, Prosser, Wash.

## AYRSHIRE CATTLE

AYRSHIRE CATTLE.

EDGEWATER FARM.

Young stock for sale, including senior calf, Edgewater Lentine, grand champion 1918 Washington state fair. Herd government tuberculin tested.

ELBERT M. CHANDLER, Burbank, Wash.

## TAMWORTH SWINE

ROUND KNOLL RANCH NO. 3.

Herd headed by Knoll Slope Colonel, assisted by Jolly Lad IV. Correspondence solicited.

Bliss, Idaho.

## ABERDEEN ANGUS

### Aberdeen Angus Cattle

A. H. EAGLESON & SONS,
Boise, Idaho.

**When you write to advertisers be sure to say that you saw their advertisement in this paper.**

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, Sept. 28.—Rushes to sell corn brought about a sharp fresh break today in prices. Broadening of the entente offensive, together with peace movements, furnished most of the impetus. The market closed unsettled 1 3-8 to 3 1-4 net lower with October 139 1-2 to 139 3-4 and November 139 to 139 1-8. Oats lost 1-2 to 7-8. The finish in provisions ranged from 85c decline to 12c advance.

Liberal buying for the seaboard kept the oats market from any radical setback. What weakness there was seemed due to sympathy with corn.

Provisions showed weakness, owing to an official denial that a guaranteed minimum price on hogs was contemplated. Liberal shipments for the week acted later as something of an offset.

### Cash Quotations.

CHICAGO, Sept. 28.—Corn, No. 2 yellow, nominal; No. 3 yellow, nominal; No. 4, nominal. Oats, No. 2 white, 72 1-2@73 3-4; standard, 73 1-2@73 3-4. Rye, No. 2 nominal. Barley, 96c@$1.05. Timothy, $7@10. Clover, nominal. Pork, nominal. Lard, $24.85. Ribs, $23.12@23.75.

### Pacific Northwest Grain.

PORTLAND, Ore., Sept. 28.—Grain September delivery bids: Oats No. 2 white feed, $60; barley standard feeds, $48; A, $49; oats, No. 2, $59.20; barley feed, $48.50; A, $49; oats No. 3, $52; chopped, $53; corn, yellow, $63.50; mixed, $62.50. Eastern oats and corn in bulk bids: Oats No. 3 white, $52; 38-pound clipped, $53; corn No. 3 yellow, $64.50; No. 3 mixed, $63.50.

### Minneapolis Grain.

MINNEAPOLIS, Minn., Sept. 28.—Flour unchanged. Shipments 86,992. Barley, 88@94c. Rye, $1.55 1-2@1.56 1-2. Bran, $28.77. Wheat receipts, 609 cars, compared with 378 cars a year ago. Cash: No. 1 northern, old, $2.22 1-2; corn, 3 yellow, $1.49@1.52; oats; No. 2 white, 69 1-4@70 1-4c. Flax, $3.91.

## Live Stock Quotations.

### At Chicago.

CHICAGO, Sept. 28.—(United States Bureau of Markets.)—Hogs—Receipts 8000; fully 10c higher than yesterday's average. Spots showing more gain. Butchers, $19.50@20.10; light, $19.60@20; packing, $18.60@19.35; rough, $18@18.50; pigs, good and choice, $18@18.50.

Cattle—Receipts 3000; compared with a week ago, prime native steers 10c higher; bulk of common, medium and good native and western steers, 50c@$1 lower; cow stuffs, 75c@$1 lower; bulls, 15@25c lower; calves, $1 lower; stockers and feeders, 25@75c lower.

Sheep—Receipts 100; compared with a week ago, best range lambs and fat sheep 50@75c; other killing and feeding lambs unevenly $1@2 lower; medium and common declining most; feeding and breeding sheep and yearlings, 25@50c lower.

### At Portland.

PORTLAND, Ore., Sept. 28.—Cattle steady; receipts 79. Steers, prime, $12@13; good to choice, $11@12; medium to good, $9.75@11; fair to medium, $8.25@9.25; common to fair, $5.75@8.25; cows and heifers, choice, $8@9; medium to good, $5.75@7.25; fair to medium, $4.75@5.75; canners, $3@4; bulls, $5@7; calves, $9@12; stockers and feeders, $6@8.

Hogs steady; receipts 244. Prime mixed, $19.50@19.75; medium mixed, $19@19.35; rough heavy, $18@18.35; pigs, $16@17; bulk of sales, $19.35@19.50.

Sheep steady; no receipts. Prime lambs, $12@14; fair to medium, $9@11; yearlings, $10@11; wethers, $9@10; ewes, $6.50@9.60.

### Spokane Union Stock Yards.

| | Cattle | Calves | Hogs | Sheep |
|---|---|---|---|---|
| Saturday, Sept. 28 | 86 | 1 | 16 | .... |
| Friday, Sept. 27 | 237 | 45 | 315 | 107 |
| Thursday, Sept. 26 | 134 | 10 | .... | .... |
| Wednesday, Sept. 25 | 220 | 59 | 36 | 219 |
| Tuesday, Sept. 24 | 166 | 22 | 164 | 2 |
| Monday, Sept. 23 | 491 | 54 | 470 | 41 |
| Week ago | 186 | .... | 96 | 4 |
| Year ago | 127 | 2 | 492 | .... |
| Two years ago | 1 | .... | 12 | .... |

As compared with a week ago medium and choice steers unchanged, common to fair, 10 to 25 lower. Stockers and feeders unchanged, with fair demand. Cow stuff declined from 25 to 50 cents, with a full 50 cents off on canners. Bulls and calves unchanged. The calves received during the week have been thin and poor quality.

| | |
|---|---|
| Prime steers | $12.25@13.25 |
| Good to choice steers | 11.00@12.00 |
| Medium to good steers | 10.00@11.00 |
| Fair to medium steers | 8.50@ 9.25 |
| Common to fair steers | 5.50@ 8.00 |
| Choice cows and heifers | 8.00@ 9.25 |
| Medium to good cows and heifers | 6.00@ 7.25 |
| Common to medium cows and heifers | 4.75@ 6.00 |
| Canners | 3.00@ 4.50 |
| Bulls | 5.00@ 7.00 |
| Calves | 6.00@10.00 |
| Stockers and feeders | 6.00@ 8.00 |

Compared with a week ago prime mixed hogs declined 10 cents and stockers and feeders 25 cents. The market closed firm at the following:

| | |
|---|---|
| Prime mixed | $19.50@19.75 |
| Medium mixed | 19.00@19.50 |
| Rough heavies | 18.00@18.75 |
| Pigs | 18.25@19.00 |
| Stockers and feeders | 16.50@18.50 |
| Bulk of sales | 19.25 |

Compared with a week ago, lambs declined 50 cents. Other classes of sheep unchanged. The market is steady, with a fair demand for fat sheep and lambs.

| | |
|---|---|
| Prime lambs | $13.00@14.50 |
| Fair to medium lambs | 11.00@12.00 |
| Prime yearlings | 10.00@11.00 |
| Prime wethers | 9.50@10.25 |
| Best mutton ewes | 8.00@10.00 |
| Breeding ewes, 1 to 4 years | 14.00@18.00 |

### At North Salt Lake.

NORTH SALT LAKE, Utah, Sept. 26.—Cattle—Receipts, 363 head. Choice heavy steers, $11@12; good steers, $9.50@10.50; fair steers, $8@8.50; choice cows and heavy heifers, $7.50@8.25; fair to good cows and heifers, $6.50@7.25; cutters, $5.75@6.25; canners, $4.75@5.50; fat bulls, $6.50@7; bologna bulls, $5.50@6.25; veal calves, $9@11.

Hogs—Market steady. Choice fat hogs, 160 to 250 pounds, $18.75.

Sheep—Receipts, 3161 head. Choice spring lambs, $14@15; wethers, $9@10; fat ewes, $8@9.

## Seattle Grain.

SEATTLE, Sept. 28.—In place of the 250,000 tons of flour expected for October business, the government has let contracts for 35,000 to 40,000 tons, according to the apportionment of 6000 tons to Puget sound mills, indicating that while some ships for moving the flour have been secured for that month, only a small percentage of the tonnage needed to clear this port of accumulated wheat and flour will be available. This situation interests every wheat farmer in Washington, Oregon and Idaho, for if ships to move flour and wheat are lacking, it will mean a backing up into the country, where growers must hold their grain in the interior, paying thereby additional holding charges in storage, insurance and interest.

Sessions were held this week between millers and the commissioners of the port of Seattle in regard to wheat storage. All the bulk wheat space, consisting of 1,500,000 bushels, had been leased to private interests. Millers contended that as a war emergency, and in view of the fact that the wheat and flour were for government use, this space should be prorated. The commission took the ground that since these leases had already been negotiated, it has no recourse. Millers objected to the lease because it was in favor of the Tri-State Elevator company, a farmers' organization, and Kerr, Gifford & Co., exporters, neither of which, millers pointed out, paid any taxes to build the public warehouses. Millers said the commission stood firm, declining to alter or amend its former action. Farmers who are endeavoring to get their grain off their hands and the cash in the bank before they are compelled to pay additional costs for holding the wheat at home will, millers declare, pay a good part of the penalty from the decision of the Seattle port commission when large empty storage spaces await the pleasure of private lessees.

The embargo against wheat shipments into this terminal placed by the United States railway administration eight days ago has been lifted in part. Grain up to 60 cars a day, or one-third the loading capacity, may now be shipped in.

## Portland Market.

PORTLAND, Sept. 30.—The shortage of dairy produce is becoming acute and no relief is expected until the fall rains set in. Cubes are holding firm at 60 cents and prints at 61@62c in box lots. Cheese is very firm at the recent advance.

Lighter receipts of Oregon ranch eggs have added strength to the egg market, though there is still a fair supply of Eastern on the market, and storage stock is being withdrawn continually.

There are fair arrivals of poultry and dressed meats, but no more than is needed.

The potato market is gradually declining under larger supplies of home grown stock. Yakima Netted Gems are quoted easier at $2.50@4.75, Oregon Burbanks are moving at $2.25@2.50, and Idahos at the same range.

There is also a weaker feeling in the onion market, owing to larger receipts of Oregons, which are selling at $2@2.50. The top on California Browns is $2.50.

Butter—Cubes, extras, 60c; prints, 61@62c; butterfat, No. 1, 65c.

Eggs—Oregon ranch, candled, 50@53c; selects, 54@55c per dozen.

Cheese—Jobbers' buying prices, f. o. b. dock, Portland: Tillamook triplets, 33c; Young Americas, 34c per lb; Coos and Curry, f. o. b. Myrtle Point, triplets, 32 1-2c; long horns, 33 1-2c per lb.

Poultry—Hens, 26@27c; broilers, 27@30c; ducks, geese and turkeys, nominal.

Pork—Fancy, 25c.

Veal—Fancy, 21c per lb.

Potatoes—Oregon, $2.25@2.50 per cwt.

Hay—Buying prices, f. o. b. Portland; Eastern Oregon timothy, $30 per ton; valley timothy, $29; alfalfa, $27; valley grain hay, $26@27; clover, $28; straw, $9@10.

## Portland Grain.

PORTLAND, Ore., Sept. 30.—Local grain prices are following the east downward. There was another drop of 50 cents at the close of the week, following a series of declines. Sacked oats closed at $59.25@60, bulk oats at $52@53, bulk corn at $62.50@64.50 and barley at $48@49. The demand was nominal. Considerable quantities of California barley is coming up by rail and boat. Millers are looking for the acceptance by the government of bids for several hundred thousand barrels of flour for October shipment.

Refusal of grain handlers at some of the Portland docks to continue working at the present scale of wages, 70 cents an hour straight time and $1.05 overtime, resulted today in a government embargo being declared against further shipments of wheat to the exporters here who are affected by the strike. About 150 grain handlers are out. They made a demand a week ago for an increase of 80 cents straight time and $51.20 overtime. The employers proposed that the demand be arbitrated and that meanwhile the men should remain at work. This they declined to do after several fruitless conferences.

## Butter and Eggs.

PORTLAND, Ore., Sept. 24.—Butter, prints extras, 61@62c; cubes extras, 60c; prime firsts, 58c; dairy, 36c. Butterfat, Portland delivery, No. 1 sour cream, 65c.

CHICAGO, Sept. 28.—Butter unsettled; creamery, 51@58c. Eggs higher; receipts 3720 cases; firsts, 48c; ordinary firsts, 44@46c; at mark, cases included, 44@47c.

SAN FRANCISCO, Sept. 28.—Butter unchanged. Eggs, fresh extras, 65 1-2c; fresh extra pullets, 55 1-2c. Cheese, new firsts, 28c; new California young Americas, 55 1-2c.

# Farm Building Operations

## *Should They Be Restricted by War Industries Board?*

The farmers' and business men's organizations of Mitchell, S. D., recently appealed to the council of defense with reference to the restriction of building operations by the war industries board. Here is their statement:

With reference to recent action of the war industries board and of your body in in the matter of restricting building operations, and in hearty agreement with the manifest purpose thereof, we are constrained to suggest the vital necessity of securing a modification of the regulations established, in so far as they hamper, or tend to discourage the construction of farm buildings. The increased production of grain, which is rightly demanded, makes adequate storage capacity absolutely essential but with the announced policy of holding a large reserve of food grains in storage until after next harvest, it is evident that even a normal yield in 1919 would result in serious congestion, unless immediate action is taken to stimulate the construction of granaries and farm elevators.

With a minimum loss of 30 per cent of feed (and food) value of corn when not reduced to ensilage, the construction of silos is evidently an important conservation measure.

In the proper housing of farm animals much remains to be done in securing a maximum of dairy and meat products from the feed and labor devoted to these purposes.

The loss incident to lack of implement sheds for the proper storage of farm machinery when not in use, is proverbial and it is unthinkable that, in the present stress, such waste may be ignored.

Again in the matter of marketing small grain, two related subjects demand attention, viz.: Storage at the farm when threshed, and properly cleaning the grain before marketing, the adoption of which procedure would in some cases require the construction of granaries and small elevators.

The shortage of labor, intensified by the extended draft will make it very difficult to deliver the grain from the field to the public elevator, even though such storage is found available and in any event, the fact can not be gainsaid that every bushel of grain should be cleaned and the screenings reduced to feed at the point of production, the clean grain being marketed as needed or indicated by the government.

If a reserve of wheat is to be held as a war measure, grain storage capacity must be increased. We submit that this construction should be on the farm.

In the increased acreage called for, new farms are being opened up and new sets of buildings required, the cost of which will usually exceed the exemption heretofore named.

Lastly, if permits are to be required for any buildings as herein indicated, the delay incident thereto, would in many cases prevent their construction, which is so urgently required under present conditions.

In view of the foregoing, we respectfully urge that farm buildings generally be exempted from the building regulations and that farmers be requested to prepare not only for increased production, but also to save the waste that will accrue from inadequate housing.

If this last suggestion is followed, attention may well be called to the fact that necessary building should be attended to, if possible, before field work opens next spring as a serious shortage of mechanics seems inevitable after that date.

## Seattle Market.

SEATTLE, Sept. 28.—Hope of lower apple prices vanished today with authentic advices from eastern Washington that worms, developing late in the season, had cut 4000 carloads of apples off the market. Both Wenatchee and Yakima valleys are affected, and extra fancy fruit in Jonathans and other standard varieties have dropped to the minimum.

Digging time in the White River valley is expected to begin this week. Growers are willing to sell, and there is a small movement at $30@35 f. o. b.

Predictions of a barren December butter market, with retail prices of $1 per pound, were made by Seattle city creamerymen today. Vigorous efforts have been made by Seattle jobbers to buy in California, Idaho, Utah, Colorado or any eastern point that seems to offer any encouragement, practically without success.

### Buying Prices.

Eggs—Select ranch, 56@58c per doz; pullets, nominal per doz.

Butter—Fresh dairy, 32c per lb; butter fat, 65c per lb; bakers', 46c per lb; raw milk, $3.10 per cwt.

Poultry—Broilers, live, 1918, under 2 lbs, 30c per lb; 2 lbs and over, 28c per lb; hens, 3 1-2 to 4 lbs and up, 27c per lb; under 3 1-2 lbs, 25c per lb; old roosters, 17@18c per lb; ducks, live, fat, 23c per lb; squabs, large, $3.50 per dozen; geese, fat, live, 21@22c per lb; Belgian hares, 12@16c per lb; guineas, $7 per dozen; turkeys, young toms and hens, dry picked, 10 lbs and up, 30@35c per lb.

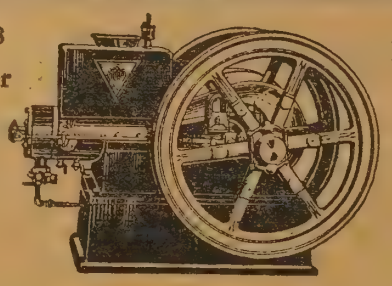
Hogs—Light, 21@23c per lb; heavy, 19@21c per lb.

Beef—Steers, fat, 12@15c per lb; heifers, fat, 14@15c per lb; cows and bulls, 11@14c per lb.

Veal—Fancy light, 20@21c per lb; do heavy, 13@18c per lb.

Mutton—Fat, 22c per lb; spring lamb, fat, dressed, 25c per lb.


1 3-4 to 28 Horsepower



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Will economically handle all your pumping, drive the feed cutter, grain separator, churn, washing machine or separator.

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A gallon of gasoline or distillate when supplied to an Alpha engine will produce 25% more power than an ordinary engine and 1-3 more power than the average cheap engine.

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Write today for full information. What is your power-problem? Our experience is at your service.

**DE LAVAL DAIRY SUPPLY CO.**

**SAN FRANCISCO.**

Warehouse Stocks Carried at Portland and Seattle.

# Food Conservation

## Outline Plans for Coming Year

Charles Hebberd, federal food administrator for Washington, reviewing the plans of the national food administration for food conservation during the coming year, says:

**Saving Is Essential.**

Food Administrator Hoover in outlining the food conservation program recommended for the American people during the coming year, said the United States was prepared to ship 5,730,000 more tons of foodstuffs to its armies and allies than last year and still have a margin over the amount necessary to maintain health and strength at home.

The great undertaking can not be accomplished, however, Mr. Hoover emphasized, without due regard to the importance of saving by every person, with no prospect, as he saw it, of a proper ending of the war before the summer campaign of 1919. The food problem, the food administrator declared, is no small part of the issue. The allied civilians and armies, the American armies, the Belgian relief and certain neutrals who are dependent upon the United States will require 17,550,000 tons of foodstuffs for the year beginning July 1st. This, in round numbers, will include meats and fats, 2,600,000 tons; breadstuffs, 10,400,000; sugar, 1,850,000, and feed grains, mostly army oats, 2,700,000.

There will be no food rationing in this country so long as the people continue to conserve, as in the past, Mr. Hoover said.

**Must Eliminate Waste.**

"Of our imports," Mr. Hoover said, "we shall apparently have sufficient sugar to maintain the present consumption and take care of the extra drain of the allies from our markets, instead of compelling them to send their ships to the far east. We can secure in sailing vessels the coffee we need, if no one makes an over-brew. In our own products we must secure a reduction in consumption and waste in the two great groups of, first, breadstuffs, and second meat and fats—that is, in all bread and cereals, beef, pork, poultry, dairy and vegetable oil products.

"The average consumption of our people of breadstuffs amounts to about six pounds a week and of meats and fats to four pounds a week for each person. On a reduction in consumption of less than half a pound a week a person in each of these two great groups of food would accomplish our purpose. We wish to emphasize, however, that we do not want curtailment in the use of milk for children.

**Health Is Important.**

"Some of our homes, by reason of limited income, can not now provide more food than they should have to maintain health in the family. They can not rightfully be asked to make the suggested reduction in consumption. But the great majority of our homes can do more than suggested.

"We need even greater simplicity of living than last year.

"We estimate that nearly 9,000,000 people eat at our public eating houses—hotels, restaurants, boarding houses, clubs, dining cars and so forth. The food consumption in these places is larger than in the average homes. We are asking the proprietors and employes of these institutions to undertake in many particulars a more strict program than last year, and we are confident that they will willingly do this.

"This is not rationing—a thing we will never have if our people continue to support us as in the past.

**No Meatless, Wheatless Days.**

"We have so arranged the international food program that except for a moderate substitution of other cereals in bread, it will not, we hope, be necessary to substitute one foodstuff for another nor to resort to wheatless and meatless days.

"It is necessary that every family in the United States study its food budget and food ways to see if it can not buy less, serve less, return nothing to the kitchen and practice the gospel of the clean plate."

### REED COLLEGE TO DO WAR WORK.

The entire resources and equipment of Reed college at Portland, Ore., have been turned over to the government for war work. Induction into the army is necessary for the admission of any man over 18 years of age. The work of women students will be concentrated on preparation for specific war service.

TO the Editor of The Washington Farmer: Enclosed please find 25 cents in stamps for one year's subscription to your very interesting paper, which was loaned to me by one of my neighbors. Also send me one of your war flags. We live on a small farm of 25 acres facing the main road from Union to Shelton.

MARY L. WARD.
Union City, Wash.

# Logged-Off Lands

## Survey in Montana and Idaho

W. H. Graves, a hydraulic engineer of San Francisco, assisted by C. B. Swim of the district forestry office at Missoula, is undertaking a survey at the behest of the reclamation service of the logged-off lands in western Montana and Idaho preliminary to seeking aid from congress to reclaim them for agricultural purposes where discharged soldiers could settle.

Mr. Swim will determine the location and acreage of the land, classify it, determine ownership and the areas suitable for agricultural purposes. Through this survey it is hoped to induce congress to assist in the development of the country by providing opportunity for returned soldiers and sailors to establish themselves on the arable land through granting them preference rights of entry.

### NEW KING COUNTY AGENT.

Virgil Patton has been made county agricultural agent for King county, with headquarters in Seattle. From the South Central high school in Spokane young Patton took the agricultural course at the Washington State college and was immediately appointed county agricultural agent for Walla Walla, where he has remained until his new appointment.

# FARMERS' WANT ADS

This is the farmers' "Want," "Sale" and "Exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rate, 7 cents a word per insertion, with a special rate to farmer subscribers to the Washington Farmer of 6 cents a word per insertion for from 4 to 12 times, and 5 cents a word per insertion for 13 times or more.

All commercial and land advertising, 7 cents per word each insertion. Open also to nonsubscribers.

In using these columns advertisers must observe: (1) No advertisement will be inserted for less than 75 cents. (2) Every word, number and initial, including name and address, must be paid for. (3) Cash must accompany order.

Above rates also include insertion in The Oregon Farmer and The Idaho Farmer

**SITUATIONS WANTED—Male 21**

RELIABLE MAN WANTS EMPLOYMENT; AM 21, but lame for military. Roy Hartman, Winchester, Idaho.

**HONEY, BEESWAX—Wanted 58**

SEND SAMPLES OF YOUR HONEY AND beeswax. State quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

**EGGS AND BUTTER WANTED. 59**

WE ARE ALWAYS IN THE MARKET FOR good eggs and dairy butter. Send us your next shipment. Oregon Farm Products Co., 386 Halsey st., Portland, Ore.

**MISCELLANEOUS—FOR SALE 60**

SHARPLES MILKING OUTFIT, 4-UNIT, FOR sale; going out of business. Schroeder Bros., Arago, Oregon.

**MISCELLANEOUS WANTED 63**

POULTRY WANTED.

We are cash buyers of poultry and dressed meats, also cream. Write us for prices, shipping tags and premium catalogue for cream shippers.

COMMERCIAL CREAMERY CO.
SPOKANE, WASH.

**MACHINERY—For Sale 93**

PLOW TYPE RUMLEY STEAM TRACTOR, 25-HORSEPOWER, DOUBLE CYLINDER, PRACTICALLY NEW, FOR SALE AT A BARGAIN.

39x106 high-pressure boiler. Cylinders 7 inches in diameter, with 12-inch stroke. Belt wheel 42 inches in diameter, with a 12-inch face. Rear wheels 74 inches in diameter. Width of tire, 30 inches. Extreme width of engine 122 inches, length 254 inches. Subject to inspection at Seattle, Wash. Ask us for prices.

AMERICAN HOIST & DERRICK CO.
Seattle, Wash., and St. Paul, Minn.

FOR FARM LUMBERING USE
"AMERICAN" PORTABLE SAWMILLS
Carried in stock by
HIGGINS MACHINERY COMPANY.
312 1st Ave., So., Seattle. Write for Catalog.

**STOVE AND FURNACE REPAIRS. 126**

WRITE M. S. RUBENS, SPOKANE, FOR ANY parts needed to repair stove, furnace.

**PETS—Dogs, Birds, Etc. 171**

PEDIGREED AIREDALE DOGS AND PUPS. Barron White Wyandotte cockerels from trapnested hens. Mare Tuttle, Beach, Wash.

**RABBITS and HARES 173**

MONEY IN RABBITS—RAISE RABBITS FOR us. We buy all you can raise. Supply the breeding stock. Will pay $6 per pair. Send stamps for particulars. H. E. Gibson Co., Arcadia, Calif.

2 THOROUGHBRED RUFUS RED BELGIAN does. George Wyman, R. 2, Elma, Wash.

**POULTRY 174**

SINGLE-COMB WHITE LEGHORN AND Rhode Island Red cockerels and pullets. Mrs. Rominger, Underwood, Wash.

**LIVE STOCK. 177**

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OCTOBER 10, 1918.

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# THE WASHINGTON FARMER

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# Makes Silage From Cat-Tails

## Shortage of Feed Results in Attempt To Make Use of the Weed; Drouth Cuts Acreage of Fall Wheat




SPOKANE, Spokane County, Wash., Sept. 25.—In regard to the increased fall wheat production in Spokane county I wish to say that most of the fields which were summer fallowed this year have been planted and the wheat is in a very promising condition at the present time. The large increase in wheat production, however, will be in the planting of fields which have been in peas during this season (1918). If weather conditions warrant, and there is sufficient rain this fall a greater increase may be expected in the acreage planted to fall wheat than what would normally be the case in Spokane county. Most farmers, however, believe in waiting until fall rains come in sufficient amount to insure the wheat getting a good start. Most of the farmers in this county are prepared to take care of their live stock in a satisfactory way. However, in the dairying sections of the county there is likely to be a shortage of roughage to feed. It is interesting to note that one man living west of Cheney has filled two silos this season with tules, or cat-tails, which grow profusely in the swamps of the southwestern part of the county. In other sections a limited number of farmers have tried this silage and it has been found very satisfactory.

J. R. SHINN.

### SEEDING WINTER WHEAT.

BICKLETON, Klickitat County, Wash., Sept. 30.—The seeding of winter wheat is now in progress. The condition of the ground is good, being moist to a depth of five inches. A few fields that were sown in the dust before the rain are up and showing green. The best farmers are still using the same careful methods they have always practiced. There is a tendency to utilize every acre possible, but I notice in the drier sections they are "stubbling in" a great deal. The taking of so many young men for the army is causing the ones that are left to try to farm more land than they can properly handle. Around Bickleton this has been a very prosperous year. The crops are good and the prices are in most cases satisfactory, although they are not satisfied with the toll the grain buyer takes. The farming this fall and winter will not be hindered to any extent, but the last draft of 18 to 45 is bound to make a shortage of working men next harvest. In my opinion it is going to be the greatest problem the government will have to handle here at home—the furnishing of man labor in sufficient quantity and quality to keep up the normal production of cereals.

BERT H. FAULKNER.

### TOO DRY TO SEED WHEAT.

COLFAX, Whitman County, Wash., Sept. 27.—Every effort is being made to increase the acreage of fall wheat, but it is not reasonable to expect farmers in general to sow $2 seed in dry soil and take the chance of having it result as so much did the last year. All summer fallow land and a great deal of the pea stubble is being prepared so that at any date that the moisture is present in sufficient amount to insure germination as well as growth after germination, a large acreage will be seeded. Farmers in general are not very prone to take long risks this season in spite of the grave need of the government. Crops in general were slightly better than anticipated at the beginning of harvest. Feed crops are short and farmers are planning on the utilization of straw to a greater extent than ever before. I have yet to see the first straw stack burning where in former years dozens could be counted on any night. Some hay will need to be shipped in, but in general the tendency is to use the low grade substitutes.

F. L. KENNARD.

### FARMERS GO TO SHIPYARDS.

COLVILLE, Stevens County, Wash., Sept. 27.—There does not appear to be any marked increase in the fall seeding of wheat throughout this county. In fact there is some probability that the acreage may be reduced owing to the very unfavorable season due to the drouth. While there have been some light rains the ground is in a very unpromising condition for seeding. Fields which were planted a month ago immediately after the one heavy rain of the summer are making some showing. Considerable fall plowing is being done, and the area of spring grain will be large, as many timothy fields have been plowed already and with a late fall much sod will be broken for re-seeding. There appears to be sufficient seed for all requirements. The war is working many changes, if the number of public sales and changes of residence are considered. Many small farmers who are capable workmen have gone to the shipyards, most of them taking their families. To some extent this drain is affecting the timber and logging industries, as many of their workmen are naturally attracted by the larger wages for work that they feel they can easily do. This county has sent a heavy percentage of its industrial workers to the war, but the draft has been well distributed and the farmers have possibly not suffered more than any other class. The late registration will make a more keenly felt draft than those which preceded as the enticing offer of college, where they can get an education without expense to themselves is sure to take almost the entire body of his class of registrants. The most noticeable effect this is having on farming is the drying up of the cows in the winter dairies. School officials report a serious falling off in attendance in the schools of the county, both in country and town. There is a reduction in the number of teachers hired for the coming winter and some two and three room schools have reduced their teaching force.

E. E. ELLIOTT.

### BIG ACREAGE AWAITS RAIN.

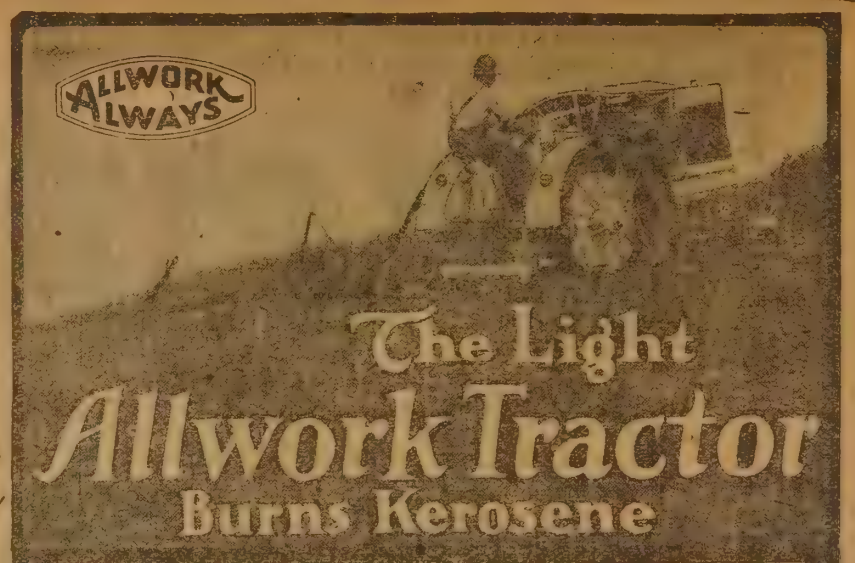
NEPPEL, Grant County, Wash., Sept. 28.—The community fair of Neppel was held on September 28, and was a success. There was a good average attendance and some extra fine displays of vegetables and fruits. Numerous prizes were awarded and the committee in charge has made arrangements for a bigger and better fair next year. Every dry land farmer in Grant county is eagerly awaiting a good shower of rain that the fall wheat seeding may start. As yet none has been seeded and tens of thousands of acres will be seeded immediately after a good rain falls. Every effort has been put forth to get in a large acreage. In the irrigated section more land is being developed and seeded to alfalfa as it has proven to be the farmers' best friend without fail. Most of the shortage of wheat hay to feed horses will be relieved by their purchasing alfalfa and carrots. A car of stock carrots was shipped from Neppel this week. The apple crop has turned out better than expected and packers are busy now packing the crop for shipment. A good price was realized by orchardists this season, running from $1.90 to $2.50 per box. The Delicious and Winter Bananas were unusually fine this year. There has been a good demand for soft fruit all season. A shortage is now felt as a large number of people are still in the market for their year's supply, the sugar situation having upset their usual method of securing their needed supply. The fourth Liberty loan opened here with a goodly list of willing bond buyers signed up. However, there are still people here that have never bought a war savings stamp; they keep their cash in a sock instead of in the bank. They are assuredly pro-German and will be looked upon in the future as traitors.

MARTIN PENHALLICK.

### APPLE HARVEST BEGUN.

OMAK, Okanogan County, Wash., Sept. 24.—The extreme dry weather has made is impossible for farmers to plant fall wheat and unless we get rain there will not be much wheat sown in this section. Most crops have been a partial failure and unless we get a good supply of snow this winter many of the orchards will die. Many of the orchardists have brought their fruit through in good shape by digging wells and putting in pumping plants. Hay is going to be very scarce and a great deal of the stock are being driven out and sold. The apple harvest has begun, but the crop will be much lighter than last year.

J. O. WOODS.


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# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 41. THE RANCH PACIFIC DAIRYMAN HORN AND HOOF October 10, 1918

# National Farmers' Headquarters Planned

## *Agricultural Temple Proposed to Guarantee Representation at Washington, D. C.*

If a movement which took official form at Washington, D. C. recently develops as leaders in the agricultural industry of the nation believe it should and will, the farmers of America will soon have a headquarters in the national capital.

At the recent "Win the War" conference of the National Board of Farm Organizations at Washington, D. C., a resolution was introduced by A. A. Elmore, president of the farmers' union for Washington and northern Idaho, providing for the erection and endowment of an agricultural temple in the national capital by and for the organized farmers of America. The resolution was adopted without dissenting voice by the one hundred and sixty-eight delegates present from all parts of the country. A building committee was appointed consisting of A. A. Elmore, chairman; Gifford Pinchot of Pennsylvania, Maurice McAuliffe of Kansas, J. H. Mills of Georgia, Milo H. Campbell of Michigan, S. J. Lowell of New York, F. J. Niccolls of Iowa, and J. A. McSparren of Pennsylvania. It is proposed to raise among the six million farmers of the nation by voluntary, though systematic, subscription a fund of approximately $8,500,000 of which approximately $1,250,000 would be for the construction and equipment of the agricultural temple and the remaining $7,000,000 or more an endowment fund, the proceeds of which would be used principally to maintain the ablest possible representation of the agricultural industry constantly at the national capital to protect and foster the farmer's interest at all times. The following is the resolution as adopted by the conference at Washington:

1. Whereas agriculture is the first, the most important and the most fundamental of all occupations, and

2. Whereas there is in the city of Washington no place where the farmers of America can bring together their interests and their needs, and

3. Whereas labor, commerce, and other great interests have established general headquarters through which their demands and desires can be promptly formulated and effectively transmitted to congress and the executive departments, and

4. Whereas, the farmers of America have never had such headquarters and have suffered greatly from the lack thereof, and

5. Whereas at this time, the need for united action among American farmers is greater than ever before in the history of our country, and

6. Whereas, the service which a national headquarters for the organized farmers of America can render is greater than ever before, now therefore,

Be it resolved, That the national board of farm organizations hereby approve the erection, endowment and maintenance of a Temple of Agriculture in the city of Washington to serve as a general headquarters for the organized farmers of America, and

Be it further resolved, That a committee of seven be appointed by the chairman with power to prepare plans and when such plans shall have been approved by the general council of the National Board of Farm Organizations to raise the necessary funds and thereupon to procure by purchase or otherwise such temple of agriculture in the city of Washington, D. C. But we declare that our patriotic duty requires us to do no building during the war.

The membership of the national board of farm organizations includes representatives of the National Farmers' Educational and Cooperative union (the farmers' union), the National Council of Farmers' Cooperative associations, the National Dairy union, the Pennsylvania Rural Progress association, the National Agricultural Organizations society, the Farmers' National congress, and the National Conference on Marketing and Farm Credits.

The executive committee of the national board is made up as follows: Chairman, W. T. Creasy of Pennsylvania; C. S. Barrett of Georgia, J. W. Shorthill of Nebraska, Gifford Pinchot of Pennsylvania, and Charles McCarthy of Wisconsin.

The national grange is not officially affiliated with the board, though it is understood that the two organizations are closely harmonized in their work and that a movement is under way to bring about a formal alliance on the part of the grange with the national board. At the recent conference in Washington, forty-four delegates were present representing the grange. There were sixty representing the farmers' union, and more than sixty others representing other agricultural organizations. Altogether there were fifteen organizations represented at the conference.

Among representatives from the northwest were A. A. Elmore, William U. Neeley of Davenport, Wash.; M. W. Merritt of Rosalia, Wash., and A. V. Swift of Baker, Ore.

Mr. Elmore said upon his return from the conference that there was a universal appeal from those who appeared at the meeting for the farmers to take some definite action in their own behalf in addition to doing their utmost to produce the food supplies needed during the war period. He said it was becoming recognized everywhere that the farmers as a class of producers are not represented at the national capital like those represented in other industries, and that the present movement for the establishment of national headquarters adequately endowed was designed to bring about the needed representation.

All details either as to the construction and equipment of the agricultural temple or as to the manner of securing the agricultural representation in the national capital are still to be worked out, but the big idea is that there shall be present at Washington at all times, men thoroughly familiar with the needs of the industry and thoroughly capable of presenting those needs and securing justice in all matters affecting farm life.



**A. A. Elmore.**

**At the "Win the War" conference of the national board of farmers' organizations, a resolution was unanimously adopted for the erection and endowment of an agricultural temple in Washington, D. C.**

**The resolution was introduced by A. A. Elmore, president of the Farmers' union for Washington and northern Idaho, and provides for a subscription fund of $8,500,000 to be raised among the 6,000,000 farmers of the nation. Of this $1,200,000 will be used in the erecting of an agricultural temple and the remainder for an endowment fund. The temple will not be erected until the close of the war, and all funds raised will be invested in Liberty bonds.**

**A building committee was appointed, of which A. A. Elmore was chairman.**

**The campaign to raise funds will be started October 12 in Columbia county, Washington. Northern Idaho and eastern Washington are allotted $196,000, while Oregon and southern Idaho are allotted $167,250.**

**Among those indorsing the movement are Senator Gore of Oklahoma, Senator Miles Poindexter of Washington, and Dr. W. J. Spillman of the department of agriculture.**

Mr. Elmore credits Senator Gore of Oklahoma with the first voluntary subscription toward the agricultural temple fund. Mr. Gore, upon learning of the movement, subscribed $100 as the nest egg for the fund. In a letter to Mr. Elmore, Speaker Champ Clark of the house of representatives, said in part:

"You have my heartiest good wishes for the success of an undertaking to which the farmers of this great country should respond generously and quickly. I believe the entire nation will be the gainer and that the farmers will be given contracts with the government in a way not possible heretofore."

Senator Miles Poindexter of Washington, in a letter to Mr. Elmore, touching upon the construction of an agricultural temple devoted to the interests of the farmers, said:

"A great building dedicated to that purpose and affording a meeting place and home for the representatives of this foundation industry of the nation would not only, in my opinion, be an inspiring object for your own organization, but would be of immense value and interest to our entire population. A great many of the difficulties with which the farmers have had to contend during the last generation have been due to the fact that they were an unorganized body competing with highly organized and specialized rivals. They produced and sold as individuals, whereas the interests that purchased their products, whether live stock or wheat, acted in unison. The consequence was that prices that the farmer received for his products were fixed by his competitors in the business world, and he was allowed only so much as they, in their generosity or wisdom, or for expediency's sake, saw fit to allow him. A universal organization of farmers or a close union of existing organizations is, in my opinion, the most essential agency and weapon with which the farmer should be armed in the industrial struggle of the future.

"A great building worthy of this noblest of all occupations will be a visible sign and token to all the world of the intelligent organization and direction of the farmers' forces and, so, powerfully encourage and facilitate that movement.

"Such a building, housing, permanently, representatives of the agricultural interests, and preserving and aiding their unity of action, will be a powerful force for justice and good government in our public affairs."

In expressing his approval of the movement W. J. Spillman, formerly of the State College of Washington, but now head of the department of farm management of the United States department of agriculture, says:

"Nothing that could be done would be of greater service to the farmers of the United States than to have here in Washington a building with offices for the various farm organizations of the country, and to have these offices filled by able men wholly devoted to the welfare of the farmers. The time has come when every one recognizes that unless the farmers of the country are fully organized they are helpless in the matter of getting the legislation to which they are entitled. A temple of agriculture in Washington city would at once be recognized as the official headquarters of the American farmer, and those interested in his welfare would naturally seek there for the advice of those who represent the farmers."

A campaign throughout the nation will be started soon to raise the fund needed for the agricultural temple and its endowment. In the state of Washington this will be started on October 12, with a county convention in Columbia county. This will be followed by similar conventions in other counties, each of which is designed to organize a campaign in its respective territory. Northern Idaho and eastern Washington are allotted $196,000, to be raised for the purpose, while Oregon and southern Idaho are allotted $167,250. Of the amount in each of these districts, $150,000 is to go to the endowment fund and the balance to the building fund. The building committee will hold its next meeting November 10 in Denver, Col., at which time definite plans will begin to take form.

It is worthy of note that the conference agreed that no building construction should be undertaken until the close of the war, it being agreed that no labor should be diverted from actual war-winning work at the present time. It was further agreed that all money secured for the building and endowment prior to the end of the war should be invested in Liberty bonds and war savings stamps to be held till the close of the war. The idea is further emphasized that contributions to the fund may as well be made in the stamps or bonds as in cash, and it is intended that this proposition shall not only assist materially in the sale of Fourth Liberty loan bonds, but also in the contribution to the agricultural temple fund.

# Hogs at $18.50

## For Packers' Droves at Chicago

The agricultural advisory committee has just recommended to the United States food administration that the "average cost per bushel of corn" for the purpose of determining the price of hogs be considered as the average "farm value of corn," or the average selling price of corn at local railroad stations as determined by the department of agriculture, and that the general corn figures be arrived at by taking these averages and weighing them according to production over the eight leading hog and corn producing states for a period of five months preceding the month the hogs are marketed, or prior to the month for which directions are given to the packers. The price of hogs should be calculated on the average of packers' droves at Chicago. At a recent meeting the packers agreed to help make the recommendation effective, though considerable disapproval of the plan was voiced.

To illustrate: Based upon the prices of corn figured on the above basis during the last five months, and a general survey of market and consumption conditions, it was agreed that a fair price interpretation of the ratio for the month of October would be an average price, for the average of packers' droves, of about $18.50 per hundred pounds at Chicago. It can not be expected that the day to day market prices, with the fluctuating flow of demand and supply, can be maintained at any fixed and definite figures, but that it should be the aim to maintain about an average during the month.

The communication adds:

The indication of war demands are that the supply of pork products for the future should be kept up to the present level of production. The producers have responded magnificently and are placing at the hands of the government the hogs with which to carry over the allied and domestic necessities for the next 12 months. It is obvious that after peace the world demand for pork products will be greatly increased over the present large war demands. The food administration should endeavor during the war to maintain prices for hogs that will be profitable to the producer and fair to the consumer, and to give this assurance to the producer, the committee recommends that the food administration should at once announce its intention to maintain the minimum price of not less than $15.50 continuously during the war.

It is recognized that the food administration has no power to fix the price of hogs or corn, and can only influence the hog price so far as the volume of controlled orders for the army, navy, allies and export trade will absorb the surplus production. If prices should go so high as to curtail consumption at home and abroad, then in this event the stabilization of prices during the next winter would be likely to fail, with disaster to the producer. On the other hand, it must be recognized that the costs of production are necessarily greatly increased, and that to maintain production fair returns must be assured to the farmer. It is, therefore, in the fundamental interest of the producer and consumer that both extreme high and low prices should be guarded against.

The special committee making the above recommendations was composed of Eugene D. Funk of Bloomington, Ill.; Professor John Evvard of Ames, Iowa; Professor John H. Skinner of Lafayette, Ind.; A. Sykes of Ida Grove, Iowa, and N. H. Gentry of Sedalia, Mo.

### DR. WILLIAMS APPOINTED.

Governor Lister has appointed Dr. Randall S. Williams as member of the Washington state board of dental examiners to succeed Dr. S. L. Moak of Montesano, who resigned to enter army service.

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## Make Victory Doubly Sure

There is no longer any doubt about who will win the war. There has not been since America threw her weight into the scale against the Hun. But there is one big question left: When will it be won?

Over there the armies of England and France and Italy and our own United States are doing wonderful work. Mile by mile, village by village, they are driving the German from the soil of France and Belgium. They are able to do it because the people of this country have furnished the money and the food and the clothing. The Germans are retreating because neither her arms nor her spirit is capable of standing before the indomitable arms and spirit of the well munitioned, well fed and well clothed armies of the allied nations. Let us now, those of us who are privileged to escape the hardships of the battle front, deal another blow, a final death blow to the arms and spirit of Germany by an overwhelming subscription to the Fourth Liberty loan, the loan that will insure food and clothing and loaded weapons to our soldiers as they drive the enemy across the border onto the soil of his fatherland, and there dictate to him terms of peace upon which a civilized world may depend for perpetual justice and liberty.

Carelessness is one extreme and morbidness is the other extreme. While seeking the middle of the road, do not give morbidness the benefit of the doubt.

## Urge $2.50 Wheat for 1919

Senators and representatives from wheat growing states, and officials of the National Wheat Growers' association, in conference at Washington, D. C., last week, decided to appoint a special committee to urge upon President Wilson immediate action, fixing the price of wheat for 1919 at $2.50 a bushel. Strong support came from Dr. W. J. Spillman, formerly of the State college at Pullman, Wash., and now chief of the office of farm management of the department of agriculture.

Dr. Spillman presented figures compiled by his office to show that $2.50 a bushel is essential if the maximum production is to be obtained next year. These figures will be read before President Wilson and it is not likely that the president will lightly disregard the careful judgment of so eminent an authority as Mr. Spillman.

Two reasons are readily apparent to sustain this judgment. Throughout the great wheat producing region of the northwest, extending from Dakota to the Cascade mountains, wheat growers have been severely handicapped by partial crop failures for the past two years. Thousands of growers are discouraged and need the incentive of a slightly higher price. The increase, in fact, will hardly cover the advanced costs of production. The price of $2.50 per bushel for the 1919 crop would in reality be no more liberal upon the part of the government than the price of $2.20 for the 1917 crop.

If the government wants a maximum production next year, it must make an extraordinary effort to secure it. Responding to urgent appeals, farmers all over the wheat growing areas of the United States have been forcing production. In this region particularly there has not been enough summer fallowing, and the yield per acre is declining.

This is no time to falter. It would be short-sighted on the part of the government now to haggle over the price of wheat a few cents more or less.

You are wasting precious time every minute that you spend in self-satisfaction.

## To Stabilize the Butter Market

The United States food administration announces that through the appointment of a committee to investigate the situation as to dairy products the first steps have been taken to stabilize the butter market. Increased demands from the army, the navy and the allies have produced a shortage of butter, and with the increasing scarcity, the price has risen steadily and consumption by the civilian population has decreased. These conditions, dairymen have agreed, will sooner or later produce a collapse in butter prices, possibly below the cost of production. Dairymen have recommended to Mr. Hoover that when such a fall occurs government purchase be used to support the market at a reasonable level.

There seems to be no other solution for this exceedingly difficult problem. It is well enough to appeal to dairymen to lower the price of butterfat and the dairymen would very gladly respond if the government could find some way to lower the costs of feed. There is no sidestepping, ducking or dodging the unalterable fact that extraordinary prices for feed stuffs must be reflected in extraordinary prices for butter. It is simply asking too much to say to the owners of dairy herds that they should go on indefinitely selling their products at a loss. That condition can benefit no one. It would mean ruin to the dairymen, deprivation to the consumer and added difficulties for the government in its supreme task of winning the war.

Discussing this immensely important subject, Charles Hebberd, federal food administrator for the state of Washington, says:

"There is a tendency apparent, especially on the Pacific coast, toward a runaway market on butterfat and dairy products. While present feed and labor conditions warrant high prices to producers, this tendency must not be permitted to develop beyond prices reasonable to producers in view of such costs. Otherwise a temporary advantage will result in an inevitable subsequent collapse. All producers, organizations and the trade generally are warned that undue competition for the restricted supplies available must not be permitted to carry these products to excessive levels. Failure to heed this warning will inevitably result in a market collapse disastrous to producers and the industry alike."

All that is undoubtedly true, but the situation is too difficult to be solved with words. Vigorous assistance must be rendered by the government, and the plan proposed by the dairymen at the Washington conference seems the only working remedy.

Storms would not be storms if they were the regular thing. During the height of the storm there is not much time to think of peace. Something must be done and there is no time for happy thoughts.

## Losses in Marketing Poultry

A recent federal bulletin contains these significant words: "The food administration points out the desirability of more water and less feed for poultry just before marketing. Experienced poultry handlers have recognized the soundness of this request, and during hot weather give their fowls an abundance of clean water, but a mere maintenance ration. This practice has greatly reduced losses in handling live poultry."

## Pioneer Demonstration Farm

The fifth annual meeting of the Stevens county (Washington) Live Stock association opened last Tuesday with fine weather and a good attendance. The stock exhibits are reported to be unusually attractive, with over 20 herds of thoroughbreds and about 50 individual exhibits of cattle. Horses, sheep and hogs were well represented.

A more fitting place for the holding of a live stock fair could not be found anywhere in the west than at Colville. In that vicinity the live stock industry of all the Inland Empire had its beginning nearly 80 years ago, when the Hudson Bay company built up extensive herds at old Fort Colville. From its herds the mission families at Walla Walla, in the Spokane valley and at Lapwai, Idaho, secured their milch cattle and beef. The old Hudson Bay settlement at Colville was, in fact, a great demonstration farm that proved the agricultural possibilities of the Pacific northwest.

In the warm valley of the Columbia, the company grew corn, wheat, oats and a great variety of garden produce. Its herds and its fields became famous all over the west. There the first flour mill in this vast northwestern land was set up.

The Stevens county stock show has, therefore, deep historical interest as well as present day influence in the way of improving the herds of that bountiful region.

## Haggling Spirit in Aiding Farmers

President D. G. O'Shea of the Spokane Federal Land bank recently expressed surprise and disappointment at the very slight response made by farmers in need of credit to buy seed wheat under the terms of the law recently enacted by congress. Mr. O'Shea thought that a good many farmers had "hollered" more than they were really hurt.

Ex-Governor M. E. Hay and others answered Mr. O'Shea, and their answers make it quite clear that the relief law is entirely too restricted. Only those farmers who have suffered two consecutive crop failures (harvesting a yield of less than five bushels per acre) can get loans for the purchase of seed wheat, and then only up to $300. It must also be made plain that such applicants are totally unable to borrow money elsewhere.

J. F. Lee of Othello, Wash., points out in a communication that the fact that a man can not establish an eligibility to get a loan from the government is far from conclusive evidence that he does not need aid. Mr. Lee writes:

"The man who is farming from one to three sections of land and has gone the limit to increase the production of wheat and by so doing has everything on the ranch mortgaged to the local bank, and by reason of a complete failure this year is unable to pay anything, and is told by his bankers that they are unable to furnish money to buy wheat for fall seeding, is in need of assistance, even though by reason of having raised a crop slightly in excess of five bushels per acre last year he is not able to establish his eligibility; or the man who has no mortgage on his outfit and has from 300 to 800 acres ready to seed, and has visited all the local banks in his vicinity and been turned down for the reason that the bank did not have the money to loan, needs some assistance, even though under the rules laid down by the government he is ineligible."

We frankly confess that we can not understand the government's exacting, rigid attitude in this matter. The need of increased food production is so great and apparent, and the government's appeals to the producers have been so emphatic and insistent, that it would be thought congress and the administration would eagerly adopt every reasonable means of fostering increased production.

That is the policy and the practice of the government in dealing with manufacturers who are building ships and making war munitions. In many cases it practically financed them outright, and that, under proper safeguards, is a sound national policy. Our criticism is not directed against such government action, but we do feel that the government's haggling spirit in aiding farmers who have been overtaken by misfortune to the extent of a few million dollars, is unfair and unwise.

# Teutons Would Negotiate

## *Peace Proposals Not Accepted at Par in Allied Nations*

If all the civilized nations of the world were not determined to see Prussianism completely wiped from the earth and if they did not see the certainty of its annihilation in the present developments of the war, the reports of peace movements in the Teuton countries might be taken as a more sensational feature of the year than they are. That the Prussian leaders realize that it is only a matter of time until Germany and her allies will be overwhelmed can not be doubted. Hence movements looking toward a "peace by negotiation" before a final military overthrow are not unexpected by allied leaders, and the allied peoples, realizing victory in the comparatively near future as a certainty, will not be lured into acceptance of any peace terms except those of an unconditional surrender.

Dispatches from all of the enemy countries indicate that a definite desire and a definite movement for peace negotiations are evident. Two outstanding developments that have been reached are noteworthy: First, the appointment by the kaiser of Prince Maximilian of Baden to become imperial German chancellor, filling the vacancy made by the resignation of Chancellor von Hertling; second, the formal appeal by Austro-Hungary to Holland asking the diplomats of that country to call upon all of the belligerent nations to enter into a peace conference at once.

The new German chancellor, Maximilian, is recognized as a leader of the anti-pan-Prussianism movement. Former Ambassador Gerard, who represented the United States in Berlin during the first two years of the war, describes Maximilian as "a real human being," saying that he was the only man among those whom he met in Germany who thought and acted like a citizen of a democratic country. That his appointment by the emperor is a definite move on the latter's part to make it easier for peace conditions to be brought about and accepted is evident, as his appointment is one step toward the democratization of Germany. It is evident, however, that the imperial party has limited his power to such a degree as to safeguard the war party's control of German affairs.

### Would Consider Making Peace.

At this writing it is understood that the new chancellor has made a strong appeal to the German house of representatives for consideration by them of the allied terms of peace as set forth by President Wilson on numerous occasions. One report published in Sweden as a dispatch from Berlin says that the new chancellor is willing to accept President Wilson's full list of 14 peace terms as expressed several months ago, but at this time there is no confirmation of the report, and it is not generally accepted as reliable. Reports also say that the Turkish government is on record as favoring steps toward peace.

All of these peace movements, however, are looked upon by the leaders in the allied nations as matters to receive no consideration at this time. The allies are unshaken in their determination to dictate such terms of peace to Germany as will restore all of the territory taken by the enemy, including Russia as well as Belgium, break the autocratic control over Austria-Hungary by Germany and even liberate the people of Germany itself from the imperialism that has made a war such as the present one possible. Whatever may be the real truth about the peace movements in the enemy countries, it is evident that the allied nations will not relax in any of their efforts until the military power of Germany and Austria is ready to forget "peace by negotiation" and consider a peace by the method of unconditional surrender.

### Bulgarian Peace Was Hard Blow.

The acceptance a week ago of the allied terms of surrender by Bulgaria probably was the hardest single blow dealt to the central powers since the war began. It practically isolates Turkey from her allies, and apparently is the first definite breaking of the German line of communication from Asia Minor to the North sea. Whether a special concentration of effort will be made against Turkey, with a view to putting the whole of Germany's southeastern allies out of the war, is problematic at this time. It hardly seems likely, however, since a military victory on the western front would humble Turkey automatically with the surrender of Germany.

### Allies Continue to Advance.

The last week has been one of the most successful of the war from the standpoint of actual military victory on the part of the allies. The drive has been prosecuted with vigor from the northern end of the line to the Albanian front in the south. Along the entire distance the forces of the central powers have been giving way until at this writing it seems practically certain that Germany will soon be compelled to withdraw from all of northern France and probably all of Belgium as well. The successful fighting of the Belgians and English a few miles inland from the Belgian coast is apparently about to compel Germany to evacuate the submarine bases established on that coast since Belgium was first overrun. This is one of the most significant features of recent developments.

From Belgium south practically all of the old Hindenburg line has crumbled, notwithstanding vigorous defense and counter offensive movements by the Germans. In the vicinity of Verdun the American forces are practically within artillery range of the railway line which has been one of Germany's greatest feeders for her army in the west. If this line can be reached and cut it will do much toward cutting off the supply both of men and materials for the southern portion of the main western front.

### Liberty Loan Moves Slowly.

The first week of the fourth Liberty loan campaign, which is designed to raise $6,000,000,000 for war purposes, resulted in the subscription of only a little more than $1,000,000,000, according to the figures compiled by the treasury department. As a result, activity will be speeded up during the remaining two weeks of the campaign, during which time it is necessary to take subscriptions totaling an average of over $4,000,000 a day to reach the proposed $6,000,000,000. The total amount allotted to the west under the twelfth federal reserve bank district is $402,000,000, of which approximately $104,000,000 had been subscribed at the end of the first week. It is notable that loan campaigns are on at the present time in both Germany and France. Reports indicate that the German loan is finding rough sledding, owing to the reverses that the German armies have felt during recent weeks.

### Austrian Navy Is Crippled.

The allied navies added another triumph to their share in the war when American, British and Italian warships entered the Austrian naval base at Durazzo, on the Adriatic sea, last week and destroyed a number of vessels and the effectiveness of the base fortifications. It is stated that this practically eliminates the Austrian navy as a factor in the war, for the time being at least.

### Germans Practice Vandalism.

Ancient history is repeating itself as the Germans retire from the territory that they have been holding. Scores of the cities and villages that they have held have been destroyed by fire when the enemy discovered that he was unable to prevent their recapture by the allies. It is understood that the allied nations are warning Germany that if this practice is not stopped at once for every city or village destroyed in France or Belgium a like city or village will be destroyed by the allies in Germany when that country is invaded, as it is certain to be unless peace is agreed upon before next summer.

### Spanish Influenza Is Spreading.

Reports from most of the army camps throughout the country indicate that the Spanish influenza epidemic is increasing in proportions. At this writing the total number of cases approximates 140,000, scattered throughout the entire country. Extreme preventive and curative methods have been brought into play, and the authorities express confidence that within a short time the epidemic will be checked. Considerable interference with the movement of troops to and from camp has been experienced as a result of the sickness, but the war department announces that the number of men embarking for Europe this month will reach the monthly average for this year, and it is believed that the epidemic will be controlled soon enough to prevent any serious interference with the training and concentration of troops this fall and winter. Considerable pneumonia in army camps has been reported also. Approximately 12,000 cases in all the camps are on record at this writing.

### Woman Suffrage Gets Setback.

By two votes the United States senate last week failed to pass the act amending the federal constitution so as to grant national suffrage to women. A two-thirds majority vote is necessary to adopt a constitutional amendment. All of the senators from the Pacific northwest states voted for the amendment except Senator Borah of Idaho. Senator Borah was absent, being "paired" with another senator. He would have voted against the amendment had he been present, as he had repeatedly stated he would not vote for it at this time. One of the friends of the amendment changed his vote from yes to no in order to be entitled to move for its reconsideration at a later date. It is planned to bring the matter before the senate again some time within the next few months.

### Regulate Price of Clothing.

The war industries board has taken action designed to regulate the price of clothing of all kinds. One of the first actions of the board in regulating the price of wearing apparel was the ruling that shoes may range in price from $3 to $12, though no shoe shall be sold for more than the top figure. Three grades of shoes will be manufactured and priced according to quality. Where certain varieties and fancy styles have been manufactured already they may be sold up to June 1 of next year at a price higher than $12, but no shoe manufactured after the first of October shall command more than the price as fixed.

## War Map Is Coming.

How far are the allied armies from Berlin? How far are the German armies from Paris and London? Just what part and how much of Europe is devastated by the present war?

The answers to these questions and a great many more are not very clear to many of us. With a view to assisting the readers of this paper in seeing clearly at a glance the relation of the countries of Europe, the territory involved in the fighting, the location of and the distances between the principal places and cities affected by it, we will publish next week a full page map which we believe will present the situation in a way to be of great value to those who study it and follow the events of the war.

In connection with this map we will publish on this page a smaller map of the fighting front only, showing the location of the battle line. Each week a similar map will be published showing the changes in the line resulting from the week's fighting.

Do not forget to watch for these next week and keep them for reference week after week as developments occur.

## *Washington Gleanings*

The Pomeroy Methodist church, which was erected in 1884, was burned to the ground last week.

Mount Vernon's Red Cross shop has proven successful. During September, without expense, this store has earned $562.58.

Albion schools have organized a Junior Red Cross, 100 strong, every pupil and teacher joining, with paid-up membership.

Arthur Muller of Mabton, 14 years old, earned an even $200 during the school vacation working as a farmhand in the Glade country.

The preliminary work for the big hydro-electric power plant to be erected in the upper Skagit river valley by the city of Seattle is now well under way.

The contract for the construction of five miles of the Meyers Falls-Davenport highway from Kettle Falls south has been awarded to Paul La Plant of Colville for the sum of $6000.

The A. P. Peterson Mercantile company of Granger has been acquired by L. H. Nichols of Yakima. Mr. Peterson receives a large tract of land in Bonner county, Idaho, in exchange for his store.

The ranchers under the P. T. D. ditch, near Pateros, have cut and in the stack their fourth crop of alfalfa and are pasturing the fifth. There were four big cuttings, even in the orchards.

The boys' and girls' agricultural clubs of Skagit county will hold a fair and exhibit at Mount Vernon October 11 and 12. The funds for the premium list have been donated by the business men of Mount Vernon.

When the Ferris steamer Chino, put out by the Seaborn Shipbuilding company at Tacoma, went over her trial course she averaged 13 knots. It is said by marine men that her record is new to the northwest for vessels of this type.

The Carnation Milk Products company of Chehalis announces a price of $3.30 per 100 pounds of milk for the first half of October. This is an advance of 20 cents per 100 pounds over September, and is the highest price ever offered dairymen there.

Approximately 40 acres of sphagnum moss have been burned over, one mile north of Ilwaco, rendering one of the northwest's principal sources of the moss supply practically valueless. The moss is considered most valuable for surgical dressings.

Members of the Yakima Potato Growers' association, which is said to control about three-fourths of the valley's spud production, have agreed to stand by $40 a ton as the minimum price for No. 1 Netted Gem potatoes and $36 as the minimum for other varieties.

E. B. Gay of Oroville has demonstrated that a cannery is the solution for the handling of the surplus fruit and vegetables grown under the irrigation system there. He put in a small cannery and has canned upward of 40,000 cans of tomatoes gathered from some five acres of valley land.

Many farmers in the vicinity of Ritzville have bought seed wheat for seeding this fall, paying about $2.30 per bushel, hoping to be able to seed soon. There has been practically no fall wheat in the county for two years, and new seed is shipped from Montana and other northern states.

Game Warden Jack Winslow of Grays Harbor county has been notified that 15,000 cutthroat trout fry are ready for planting in the streams of that county. They are at the Chambers Creek hatchery, near Tacoma, and will be called for at once. A total of 50,000 fry is assigned to the county.

A statement showing that of the $1200 appropriated by the Thurston county commissioners for the expense of the county farm agent's office during the last year only $978.09 has been expended and the salary paid by the county amounts to $900, was issued recently by C. H. Bergstrom, county agent.

Water was struck in the well of the Columbia River Natural Gas company, about 20 miles west of Hanford. The well is over 600 feet deep, and the water was flowing out of the top of the casing. The formation is a blue shale with pieces of preserved wood which looks like peat or lignite mixed through it.

J. McPhee Ferguson of Yakima has claimed the record return of the season on a pear crop. Ferguson has two and three-quarters acres of pears in the Naches. He harvested four carloads of pears from them, which brought him a gross return here of $5467. After deducting expenses for picking, packing and the like he had $4220, a net return of $1534 an acre for the fruit.

James Hulburt Jr. of Mount Vernon is one of the three members of the industrial and agricultural advisers of the draft board which will convene in Seattle a few days each week. The object of the board, which has been recently created, is to encourage the farmers of draft age to remain on their farms, as the government considers this as important as any other branch of war service.

Fred Loeffler, a logger, who was one of the men who, while fighting fire in the Matlock district, had to flee for their lives, had a terrible experience after he became separated from the other men who escaped. He followed the Wynoochee river, and at many points was forced to wade, some places almost up to his shoulders, to get away from the fire and smoke. He was without food for 84 hours.

With the exception of a small amount of outlet work, construction of the Lake Keechelus dam, near Yakima, was completed last week, according to R. K. Tiffany, project manager of the U. S. R. S. The dam, which has cost $1,700,000, will store 152,000 acre feet of water. The dam itself is 70 feet high and 6500 feet long, 639,000 cubic yards of earth and gravel being used in the construction.

# Farmers Borrow $20,000,000

## *Splendid Growth of Spokane Federal Farm Loan Bank*

By N. W. DURHAM.

President D. G. O'Shea of the Spokane Federal Farm Loan bank reports that at the close of business September 30, the bank had completed and paid on first mortgage loans to farmers an aggregate of $20,422,520. The loans run from $100 to $10,000 and the average is $2330.

**Since the bank began operations in May, 1917, 22,062 applications for loans have been received for the grand total of $56,827,535. To date 12,396 loans have been approved in sums aggregating $28,388,000.**

In the same period 7789 loans were rejected and withdrawn, aggregating $19,934,000.

This is a splendid growth and there is every reason to believe it is only the beginning. Farmers everywhere are appreciating more and more the advantages offered by the government and they have learned by long experience of the disadvantages of the old system. These disadvantages were clearly set forth in Farmers' Bulletin 792 of the United States department of agriculture, published in January, 1917.

"The borrower often pays excess rates of interest and commission, with additional charges for the abstracts for recording and so forth, while interest rates may be relatively low in the more highly developed sections of the country. In these areas the borrower, even the man with well established credit, is often forced in times of stringency to pay high rates for loans. The usual mortgage loan runs for a relatively short period, thus making it necessary to incur added expenses for renewals. In many sections the borrower has no opportunity to pay off any part of his principal before maturity and as a result the indebtedness remains undiminished to the end of the term."

When the federal farm loan act was passed, farmers in the Pacific northwest were paying interest rates far in excess of the present government rate of 5 1-2 per cent. Naturally they turn to the federal land bank for relief. Under the old system, if a farmer paid 8 per cent, or if his charges for interest, renewals, commissions and so forth, aggregated 8 per cent, he had to pay every year in interest charges a sum of $80 for every $1000 of his mortgage. If he went on borrowing for 20 years, he had to pay that $80 every year and at the end of the 20 years he still owed the $1000.

Under the government system, borrowing money at 5 1-2 per cent on a mortgage running for 20 years, he pays $83.68 a year and at the end of the 20 years his mortgage is entirely extinguished and he has nothing more to pay on the principal.

**In other words, it costs him only $3.68 a year to wipe out a thousand dollar principal in 20 years.**

The full benefit of this law, however, is not measured by the volume of business transacted by a federal farm loan bank. The government's entrance into the business has forced the mortgage companies to lower their rates approximately to the government rates, thus thousands of farmers who are not themselves members of federal farm loan associations are benefited by the law.

The growth of the Spokane Federal Farm Loan bank is particularly gratifying to the committee which worked so hard for the creation of a Pacific northwest district and the location of a bank at Spokane. The splendid growth of the institution thoroughly bears out every representation the committee made to the representatives of the government.

# Are Wheat Farmers Satisfied?

## *Is the Reduction From $3 to $2.20 Fair and Liberal?*

Whatever may be the prospects or lack of prospects for an increase in the price of wheat for 1919, the subject is still fraught with interest. Senator Gore of Oklahoma, a leader in the fight for higher wheat, is still fighting, as indicated by a recent speech in the senate.

Here are passages from Senator Gore's speech:

**Are Farmers Satisfied?**

"The president in his veto message declared that an overwhelming majority of the farmers regard the administrative price upon wheat as fair and liberal; that an overwhelming majority of the farmers regard the reduction of the price of wheat from $3 a bushel to $2.20 a bushel as fair and liberal. I have often thought that the farmer is the only class of our citizenship who has occasion to feel that his luck is high when he happens to get justice. In his veto message of December last the President declared, with truth, that the farmers complain, with justice, that they are obliged to sell in a restricted market and are obliged to buy in an unrestricted market.

"Mr. President, when did the farmer come to regard a situation fraught with injustice as fair and liberal? How could the farmers complain with justice of a system or of a situation which they regard as fair and as liberal? Such a thing is little short of a moral miracle. It is a moral miracle unless something has happened to change the situation, unless something has happened to reconcile the farmers to injustice, or rather to remove the injustice.

**Dollar's Value Shrinks.**

"What has happened to convert a system and a situation, admittedly characterized with injustice, into a system and a situation now hailed as fair and liberal by its victims? Since December last the cost of living has greatly increased; the cost of production has greatly increased; the wages of farm labor have greatly increased; the price of farm implements has greatly increased. The $2 and less which the farmer actually receives for his wheat today will buy one-third less than when the price was fixed in August last. The $2 and less which the farmer receives for his wheat today will buy 25 per cent less than it would buy in December last, when the farmer complained with justice that he was obliged to sell in a restricted and to buy in an unrestricted market.

"I have no choice but to believe. Indeed, I could believe without proof that all the political farmers who have conferred or communicated with the president upon the subject have assured him that this 30 per cent reduction below the market price was a realization of poetic justice and of the highest ideals of fairness and of liberality. I mean the agricultural courtiers, whose chief delight is to stir and fan the incense in no unseen censers; I will not say censers swung by sycophants whose footfalls tinkle on the tuffed floor. It is no fault of rulers; it is rather their misfortune that they are ofttimes surrounded by courtiers and by flatterers who speak to them what they imagine will be pleasing to the ear and do not speak the plain unvarnished truth."

**Price Put Below Cost.**

Senator Fletcher of Florida interrupted Senator Gore with a remark that a farmer who owned land in both Nebraska and Montana had told him that any amount he could get over a dollar a bushel for wheat was profit. Senator Gore countered with the question whether Fletcher would support an order reducing the market price of cotton in the same proportion that the price of wheat had been reduced, and Senator Fletcher evaded answering. Gore continued:

"When the wheat committee met here in Washington last August there were a few representatives upon that committee who were qualified to speak for the wheat farmer and for the wheat section. The president of the Agricultural college of North Dakota made a survey of his state, and upon his responsibility reported to that committee that the cost of producing wheat in North Dakota last year was $2.19; but the farmers have been receiving under government control only $2.05 and $2.10 in that state. A similar study was made in the state of Minnesota, and the report was that the cost of producing wheat last year was $3.01; and yet they were obliged to take $2.10 and $2.10 for wheat in the state of Minnesota.

**Drastic Cut Is Made.**

"It may be true that the senator from Florida fell into the arms and listened to the siren voice of one of these agricultural courtiers, who whispered sweet suggestions in the president's ear.

"Mr. President, the day this government broke the price of wheat it was selling for $3.06 in Minneapolis. From that time forward it has been selling for $2.19 in Minneapolis—a reduction of more than 80 cents. Cotton today is selling for 30 cents a pound. Is the senator from Florida willing to vote to reduce the price of cotton to 22 1-2 cents a pound?

"Mr. President, $2.50 a bushel for wheat is 20 per cent less than the market price when the government broke the price. Twenty-four cents a pound for cotton would be 20 per cent less than the prevailing price. Would the senator vote for such a reduction on cotton? There was a meeting in this city yesterday of the agricultural commissioners of a number of southern states, a meeting of representatives of farm organizations from a number of southern states, to protest against meddling with the price of cotton and the breaking of the price of cotton. I assert now that they will find in the senator from Florida an unyielding champion of their position. Nobody will obtain power to reduce the price of cotton with his vote or with his consent. I only ask, Mr. President, that the senator apply the same principle and the same protection to the wheat farmers that he will extend to the cotton farmers of the state of Florida."

TO the Editor of The Washington Farmer: Enclosed find five cents, for which please send me a Farm Service flag printed on enamel paper with four extra stars.

A. J. WARNER.

Orin, Wash.

### GOOD ROADS MEETING.

**State Convention Sets Date Forward One Week.**

The dates of the Washington State Good Roads association convention have been set forward one week on account of the United war fund drive, this being acceptable to the state council of defense.

The new dates for the Pasco convention are Thursday and Friday, November 21 and 22.

### SUGAR RULES REVISED.

While it is just as essential to save sugar now as it has been heretofore, the food administration has revised the ruling so that a family may purchase a month's supply at one time. The following extracts from a letter sent to dealers by State Administrator Charles Hebberd, explain the change:

"Effective October 1 you are allowed to sell at one time a month's supply of sugar to the consumer. This supply, of course, is based on two pounds per person per month. For example, if there are five in the family they may buy 10 pounds at one time, but are not entitled to buy another supply until a month has elapsed.

"This supersedes the rule allowing sale of two pounds to town trade and five pounds to the country.

"The change is not made because there is any less need of conservation in sugar. The domestic canning demand, however, will soon decrease and the available spot stocks of sugar will make possible this change as a convenience to both the consumer and the retailers."

### FOUNDATION IDEA IN BREEDING.

"Away off down the line I've got a mile post which I hope to reach. That mile post approaches perfection in the breeding of Duroc-Jersey hogs. Maybe I won't get there, but I hope the work I do now will help somebody else to and that will be just as well as if I had done it myself."

So remarked L. S. Otto of Filer, Idaho, the other day. Mr. Otto expressed the sentiment of a real breeder—the kind who will bring the northwest into prominence as a producer of quality stuff in all breeds of animals. The Otto farm is not only noted for its excellent type of Durocs, but also for the general agricultural products it turns out.

# Good Show at Colville

The Stevens County Live Stock association held its fifth annual show at Colville last week. Notwithstanding the influence of the war the show was one of the most successful in the organization's history. Except in the horse exhibits the entries were nearly as numerous and as high class as in previous years.

For the fourth time Joseph Turner of Myers Falls, widely known throughout the west as a breeder of Shorthorns, was elected president. He will also be acting secretary until such time as he selects some one to act in that capacity. H. T. Skeels of Addy was chosen vice president and M. A. Daggy of Colville treasurer.

The movement to secure reduced rates on registered live stock shipments was given a boost when the association went on record pledging its cooperation with the Northwest Live Stock show and the Pacific International Live Stock show in an effort to secure from the railroads reduced rates both by freight and express for the transportation of such stock.

The development of the baby beef industry is favored by the association, which has undertaken to assist in the formation of boys' and girls' baby beef clubs throughout the county. The animals that will be cared for by the boys and girls will be exhibited and offered for sale if desired at the next annual show, which will be held the first week in October next year.

The show next year will have a fund of from $1000 to $1200, with which to carry out its program, half of this amount having been raised in or about Colville. Spokane men interested in the work of the association have agreed to contribute an equal amount.

# Open Mohair Market

Textile and trade papers in the east have much to say concerning the recent conference between Chief Penwell and the mohair growers and dealers, as the mohair situation is of interest, not only to those making a specialty of handling this raw material, but to the wool trade generally. Chief Penwell gave as the reason why the fall clip would be released until further notice: "The needs of the government are not such at present that it feels justified in taking any arbitrary action in fixing the price below the cost of production. The accredited representatives of the National Mohair Growers' association, the Texas Goat and Sheep Raisers' association and the Arizona Goat Raisers' association have all stated that if a price less than 85 cents per pound were fixed it would be less than the cost cost of production and would work a great hardship upon the industry."

Mr. Penwell's added remark that "it is hoped advantage will not be taken of the situation, and that profiteering on the part of speculators will not force the government to take further action" is an implied threat which appears to have sobered the market. The situation from this viewpoint is complicated by the fact that considerable mohair is in transit from Cape Colony.

# Paternalism in Government

Pater was the Roman father. He was the center and circumference of the Roman family of the earlier day. The slaves, the sons and the wife were "in his hand." That is to say, not only was his word law for all, but he had the power of life and death over all. With this power there went the highest responsibility for the action of every member of his household. The Roman government was organized on the principle of the primitive family, the "patria potestas" being transferred to the state as the father of all its citizens.

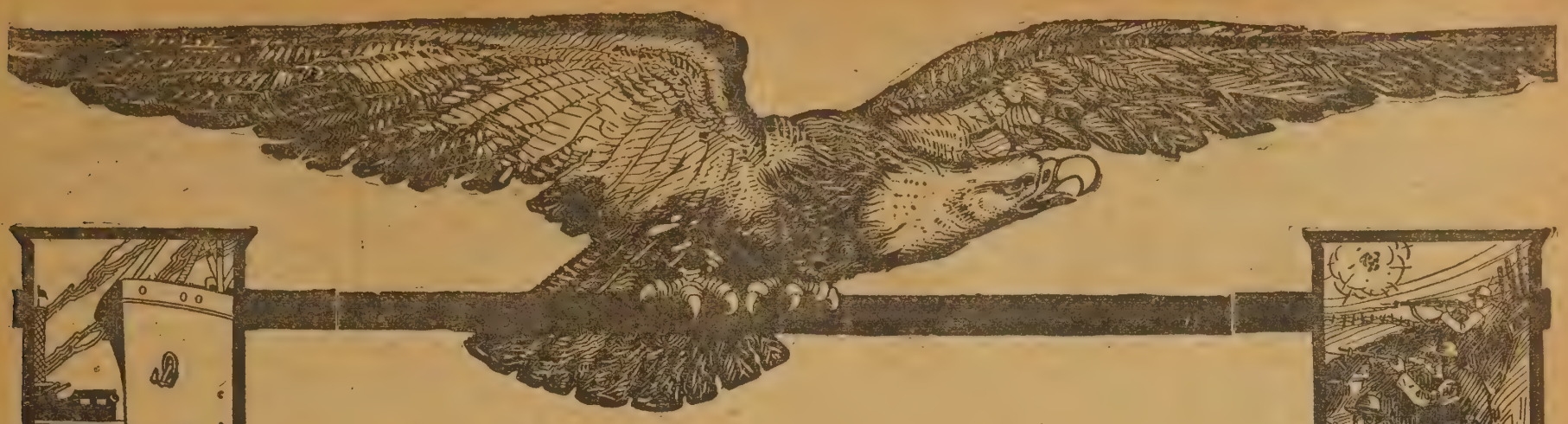
The American people are just now caught and held by the ideal of paternalism in the central government. Government regulation of all public concerns and most of the private concerns of life; government ownership of public utilities; government ownership of all the instruments of production; government ownership for any and all who can not or do not take care of themselves; government determination of wages; government regulation of prices; all needs, aspirations and desires to find their fulfilment in government provision.

For some centuries the race had been struggling in precisely the opposite direction—namely, to get away from the o'erweening power of government and toward the largest liberty of action of the individual. It is needless to point out that the modern tendency toward paternalism is against personal liberty—the freedom of the individual. The tastes, needs, desires of the one must be sacrificed for the good of the many, is the fundamental trend. The modern tenet assumes that government is necessarily beneficent, that it is always wise, that it knows the facts, that it is all efficient, that officialdom will never be selfish, stupid, ignorant, partial, oppressive or tyrannical. Yet, officialdom in all the past has been the exemplification of these very things. Power has always turned the head. Governments have always been prostituted by some for selfish ends. Our modern paternalistic tendencies are toward the creation of two classes—officialdom and the rest of us; those who feed at the public crib and those who gather up the crumbs which fall from the rich man's table.

Officialdom never creates anything. Then the rest of us must create enough for ourselves and for them. By how much soever they increase in numbers, by so much the more must we create to support them. For a while all will go well, for we can make the transfer under the name of taxes. But when the accumulations out of which taxes may be paid are exhausted, then what? We will do as they did in Egypt under Pharoah—turn the property over to the state. That is what some already most earnestly desire. But what then? Then we will be a race of tenants-at-will, on the national domain, working for officialdom. And officialdom will use the same old tricks of the demagogue to get the places, and once in the high places the same tyrannical tendencies of necessity will appear. There be those who think that the only tyrant is a monarch, though all history shows that a heartless government bureau may be more tyrannical than any individual.

The doctrine of our forefathers, the doctrine of Jefferson, that "that people is the best governed which is least governed" is yet worthy of our consideration. Trust in ourselves, in our own creative power, in local self-government, deserves more consideration than it is now receiving.





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A. B. NYSTROM, Editorial Contributor

# Dairymen's Question

## What Shall We Feed This Winter?

By A. B. NYSTROM.

Dairymen of the northwest are confronting a serious feed problem for the coming winter. Hay is scarcer than it has ever been before. Mill feeds are impossible to buy for some unknown reason, and the ground grains such as barley and oats are likewise so high that it does not seem advisable to use them in large quantities.

To the farmer who has a silo, with fair prospects of getting something to put in it this year, this high price of mill feeds does not make much difference. He can get good results without feeding any or but very little grain. This has been proved numbers of times by practical farmers and experimenters. The dairyman without a silo or without succulent feed of any sort is certainly in hard circumstances.

The following suggestions on feeding and management may help some dairymen in solving their problems:

1. Give cows all the water they can drink all the time. Don't make them walk a mile or more for it. During cold weather see that the water is at least 50 degrees fahrenheit.

2. Don't let cows stand out in the rain. If they are feeding or are kept moving they can stand exposure to rain, but they should have access to a covered shed at all times. Remember it takes feed to warm the rain which falls on their backs. Put yourself in the cow's place. Can you do better work in the wet or in the dry?

3. Use bedding freely no matter where the cow lies down. Never allow her to lie down in filth. She will produce more milk on less feed if you make her comfortable. Give her fresh air when inside.

4. Feed all the hay the cow will eat. What she leaves feed to the young stock or to the horses. If the hay is course and unpalatable sprinkle a little salt water on before feeding.

5. If you have roots or silage feed just enough of this to make it last through the winter season, or until green feed is available next spring.

6. If only dry hay is used make sure that the cows' bowels are kept in good shape. You may find it necessary to feed linseed oil meal in small quantities. One-half pound per cow each day is usually sufficient.

7. Use the legume hays, (clover, alfalfa, etc.) even at $32 per ton rather than timothy and native grass hays at $20 to $25.

8. Treat the cows kindly at all times.

### DAIRYMEN ASK FOR RELIEF.

At the convention of 200 farmers and dairymen in Washington county, Oregon, resolutions were adopted reviewing the serious condition of the dairy industry and asking the food administration, the Oregon delegation in congress and the department of agriculture to come to their assistance. The sane judgment of the meeting was expressed by Judge George Bagley, presiding officer, who declared that the dairy industry of Oregon was one of the greatest assets of the state and must be maintained, "the splendid herds must have feed; the dairymen must keep heart." J. D. Mickle, state dairy and food commissioner, promised the hearty cooperation of his office. The message sent to Washington asked the government to provide shipping and storage facilities for flour manufactured on the Coast so that mills may continue operations and furnish additional feed.

### HAS 19 COWS ON TEST.

To the Editor: I am sending you a report of the herd of A. H. Reilly of Waukon, whose herd I just finished testing. Mr. Reilly has a small dairy ranch, milking about 20 cows. He put 19 cows in the Whitman-Spokane Cow Testing association. Mr. Reilly is a graduate of the Washington State college and from the department of dairy husbandry in the class of 1914.

The cattle are of excellent type and well kept. The monthly records are proof of these facts. His herd of 19 cows averaged as follows:

Average daily milk production, 37.6 pounds; average monthly milk production, 1093 pounds; average test, 3.63 per cent; average monthly fat production, 39.7 pounds; average cost of feed per month, $17.33; average profit above feed cost, $2173.

RUDOLPH C. JOHNSON,
Tester.

### DAIRY HERDS LISTED.

Every dairy herd in the United States that on July 1 had been officially accredited as free from tuberculosis or that had passed successfully one test with a view to certification is listed in a publication just issued by the bureau of animal industry, United States department of agriculture. Copies of the list are available for the use of state and municipal officials and private persons.

Certificates of freedom from tuberculosis are soon to be issued by the bureau of animal industry to all owners of the accredited herds. Certificate No. 1 is to go to the United States soldiers' home in the District of Columbia. The Holstein-Friesian dairy herd at this institution includes 134 registered purebred cows and is one of the oldest accredited herds in the United States.

### SENATOR FAULKNER RESIGNS.

Senator J. W. Faulkner, representing Okanogan, Grant, Douglas and Ferry counties in the Washington state senate, has placed his resignation as a member of the state senate in the hands of Governor Lister. Senator Faulkner has moved to Wyoming and expects to take up his permanent residence there. The governor is now preparing the writ of election and hopes to be able to fix the time when the selection of a successor to Senator Faulkner will be made on November 5, the general election day, so that the holding of a special election may be avoided.

### Prepare for Coming of Peace.

The city or community that keeps its present industrial life most nearly normal during the war will feel the shock of the reconstruction at the close of the war less than the "mushroom" city or community. A reaction is inevitable, and now is the time to brace ourselves to withstand it.

# Profit in Winter Wheat and Vetch

To the Editor of The Washington Farmer: I believe that other farmers living on the cut-over lands in the northern end of Spokane and in Stevens and in Pend Oreille counties will be interested in the results which I secured this year from a field of winter wheat and vetch. Six years ago a field which I had rented was seeded to hairy vetch, and since that time no vetch seed has been used except that which volunteered upon the field. Two years ago, in 1916, I had a wonderful crop of wheat and vetch grown together, but I was unable to market the wheat which I threshed, owing to the fact that vetch was mixed with it so badly that wheat buyers and mills did not wish the wheat. In fact, I believe that I had fully two to four times as much vetch seed in the 1916 crop as I was able to secure this season.

The land was summer fallowed in 1917 and planted to winter wheat a year ago this fall. In this wheat vetch volunteered in a more or less degree—so much so that I feared I would be up against it to market the wheat in case it was threshed. I had fully made up my mind to cut the crop for hay, but first of all I desired to consult the food administration, and was advised by him to take the matter up with the county agent of Spokane county, Mr. Shinn.

Mr. Shinn advised me to cut the crop for grain and seed, stating that he could supply me with a machine that would separate the wheat from the vetch. As a result I cut the crop for threshing, and the following figures show the returns I have had from this crop, showing that I was warranted in following Mr. Shinn's advice. They are the returns from 16 acres of vetch and wheat:

| | |
|---|---|
| 387 bushels wheat at $2 per bushel | $774.00 |
| 3777 pounds vetch seed at $2 per bushel | 755.40 |
| 44950 pounds baled straw at $15 per ton | 337.12 |
| 1 1-2 tons hay at $30 per ton | 45.00 |
| Total | $1911.52 |

One reason why such satisfactory results were secured with the wheat on this light soil is the fact that the vetch builds up the land the same as peas. The vetch, which has been volunteering ever since it was first planted, was well inoculated, and the nodules were very profuse on the roots of the vetch plants. This is a point that should not be overlooked, because it adds to the value of vetch as a seed crop and also exercises a beneficial effect upon the soil in supplying nitrogen through the nodules from the bacteria on its roots.

The vetch separator works very satisfactorily in separating the wheat from the vetch, although the process is rather a slow one.

J. M. HODGES.

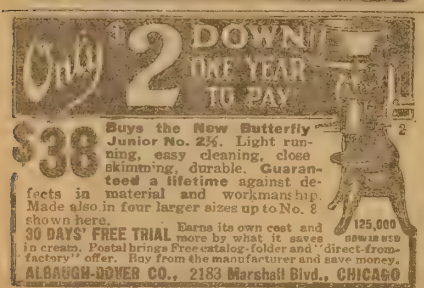
Deer Park, Wash.



Mr. Hodges' field after harvest.








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¶ *We must stop waste*—waste of money, waste of labor, waste of transportation. *We can do it with concrete.* The bulk of materials required can usually be obtained on the farm or near by. Home labor can do the work.

¶ Granaries, silos, fruit and vegetable storage cellars, corncribs, milk, hog and poultry houses, hotbeds, cisterns, feeding and watering troughs or tanks, barns, all kinds of floors and pavements—any necesssary building or improvement you can think of—is most economically made with concrete, for *with concrete you build once only.*

Cold weather need not stop you.

*Write for Bulletin 115, which will tell you what you can do with concrete in your spare hours this fall and winter.*

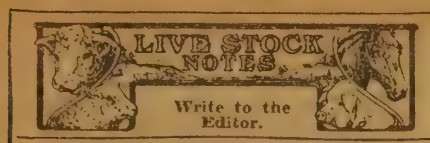
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E. J. IDDINGS, Editorial Contributor

### BUYS PURE-BRED JERSEYS.

R. E. Bean, secretary-treasurer of the Hudson Bay creamery at Umapine, Ore., attended a sale at Hermiston recently and purchased three pure-bred Jersey heifers which were selected in the Willamette valley and shipped to Hermiston and sold at auction. These animals have exceptional productive records secured from the Ed Carey herd of pure-bred Jerseys at Carlton, Ore. One of the heifers, St. Mawes Rosaire Girl, is a great-granddaughter of St. Mawes Poppy, who has a record of 1120 pounds of butter in one year, and her grandsire on her sire's side has 30 daughters in the register of merit. Golden Rosaire's Esther is a great-granddaughter of Golden Dotsey, who is a sister of King of Nehalem, sire of Goldie's Nehalem Beauty, who has a world's record of 750 pounds of butter fat as a 3-year-old. The other heifer is Rosaires Lady Mabel 1 year old, whose grandmother made 561 pounds butter fat and great-grandmother on her sire's side produced 677 pounds butterfat. There were 22 animals in the shipment, the balance being purchased by a Hermiston butcher. Prices ranged from $95 to $335 each.

## VETERINARY

By DR. S. B. NELSON.

**Warts on Heifer's Flank**—I have a heifer 1 1-2 years old, in good flesh, running on pasture, that since June has been growing warts along her flank and down her leg in front of her udder. They grow in clusters large as a man's fist. What will remove them and prevent others from forming. D. C. B.

Ione, Wash.

Try covering the wart daily with castor oil. Give internally one-half ounce of Fowler's Solution of Arsenate morning and evening. This may give you good results. It has given good results in many cases. In some cases it has failed. The warts are due to a malnutrition, which may be overcome by the arsenic.

**Cows Need Phosphorus**—Can you tell me the reason for cows eating old bones? They stand around for hours eating them instead of their feed. They are on white clover pasture and are eating alfalfa hay. I have put lime with their salt, but that seems to have no effect. W. C. R.

Troutlake, Wash.

I think possibly that other mineral salts besides salt and lime are what you want for your cows. I have an idea that if you could add precipitated calcium phosphates to the salt or if you could grind up the old bone and give them the phosphorus that is in the bone, that would be of value to them. The fact that they try to eat the old bone is simply because they lack certain mineral salts and I think phosphorus is the one. A dose of precipitated calcium phosphate is about a half a teaspoonful once daily, kept up for a long period of time.

**Result of Injury**—I wish you could tell me what is the matter with my cow. About five or six weeks ago she had a bunch come on her left side in front and to the left of her udder about 15 inches in diameter and out about five or six inches which opened on the outside a couple of days ago. She will be fresh in about six weeks. Her milk got bitter about seven weeks ago and we had to dry her up. The stuff coming out is of a thin mattery substance which has quite an odor. Please answer as soon as possible and tell me if there is anything I can do for her. F. A. W.

Locke, Wash.

You give a pretty good description of an injury to the tissues of the abdomen which may have been caused in various ways, such as a kick, a blow from a heavy stick, the throwing of a rock, or various kinds of injuries. This has crushed the tissues and nature is trying to remedy the trouble by forming an abscess and eliminating the diseased tissue. I would recommend that a little larger opening be made to give drainage, and then wash out with a two per cent solution of creolin or other coaltar disinfectant once daily. There should be an opening at the most dependent part of the injury, then healing will begin above and gradually heal toward the opening.

**To Remedy Seam on Hoof**—I have a mare that was cut in the wire over a year ago on the hoof of the right hind foot and about an inch and a half from the heel. The seam has cracked open and is sore as it gets the heel piece work. Is there anything that can be done to have the seam grow together again, or can it be cut off so as to kill that part of the hoof? P. H. C.

Fernwood, Idaho.

If the seam or crack extends up to the hair then the injury can not be permanently remedied except in very rare instances. If it does not extend clear to the hair, but stops below the growing ring of horn, just under the hair, then it can be permanently remedied. There are two ways of doing this, by cutting across the top of the injury and trimming it out, and then blistering and making the hoof grow down. Secondly, by using splints and setting them into the horn on each side of the seam and then drawing the horn together and afterward using the first treatment. You ought to have a veterinarian see the animal to do this work for you.

### NEED HELP TO PLANT.

Though the northwest got along fairly well harvesting its short crop with short help, a full strength of labor is needed to sow the seed for next year's crop, which, it is hoped, will be above normal. A labor shortage is being felt.





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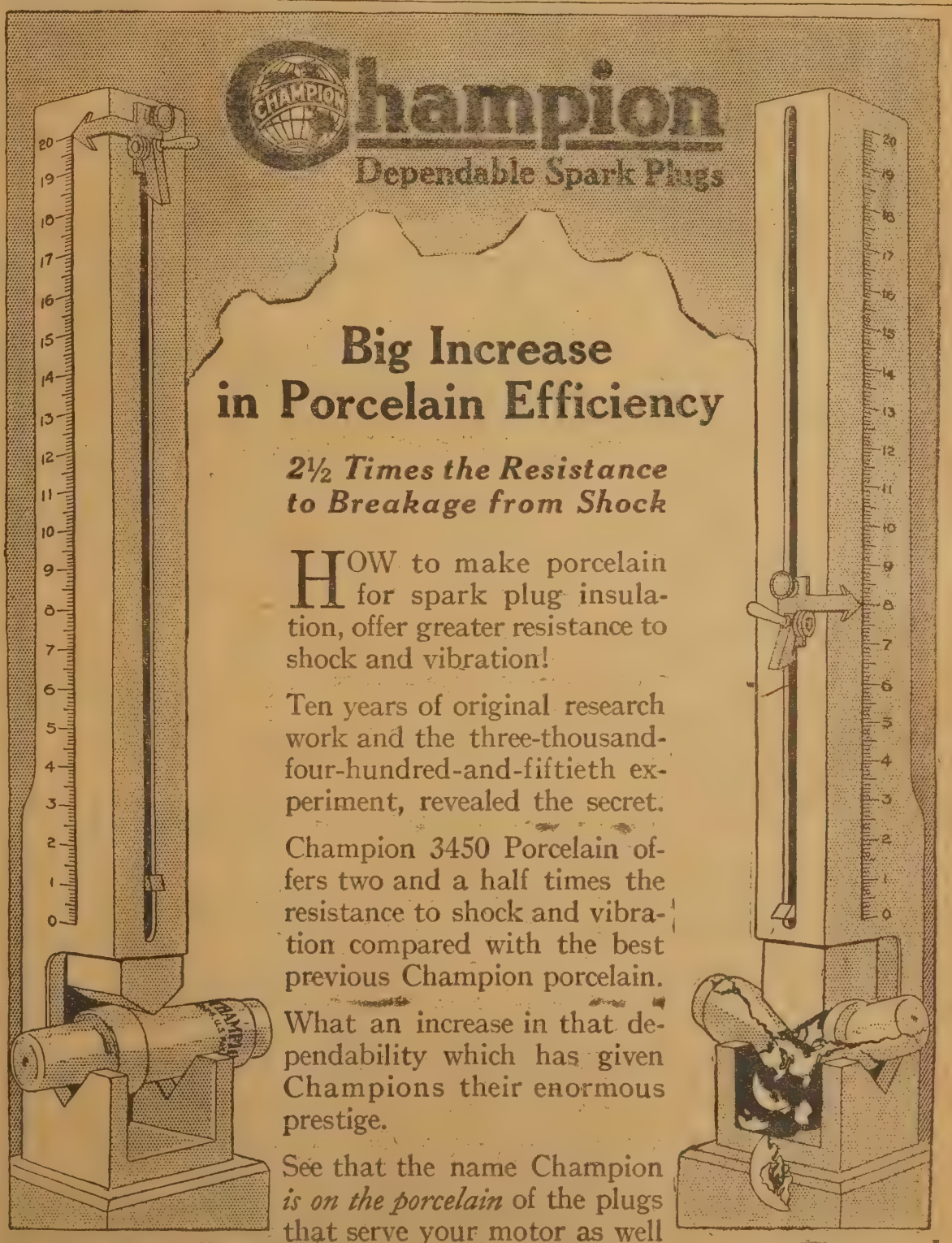
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JAMES DRYDEN,
Editorial Contributor

# Cull the Slackers

By JAMES DRYDEN.

Heavy egg laying is correlated with certain visible or physical characteristics of the hen. This has been demonstrated by studies of trap-nest records of individual hens. A knowledge of these characteristics makes it possible, at certain seasons of the year, to cull the poor layers of the flock with a fair degree of accuracy.

Judging and culling by physical charteristics is not as accurate as the trap-nest, but it is possible to pick out a large proportion of the unprofitable hens in the flock by this method.

Trap-nest records prove that the poor layer discontinues laying early in the season. The hen that stops laying and molts in July and August is, on the average, a poor layer. She will not lay as many eggs in the following year as the hen that continues laying throughout the summer and early fall. Neither has she laid as many eggs in the months preceding. The hens that have stopped laying in July and August should, therefore, be culled. Hens that have made a poor record in the first year will, generally speaking, make a poor record the second and subsequent years.

If the trap nests are used it is a simple matter to go over the records and pick out the non-layers. In the absence of trap-nests non-laying is indicated by:

1. The shriveled condition of the comb, wattles and ear lobes.
2. Closeness of pelvic bones.
3. Contracted or hardened condition of the abdomen.

Another indiciation of non-laying, which may be called the color test, is valuable only with breeds that naturally have yellow skin and shanks, as for example, White or Brown Leghorns and Plymouth Rocks. This test can be used on breeds of naturally pale or dark skin and shanks, such as the Orpingtons, Black Minorcas, or Campines. Hens of the former breeds that show distinctly yellow shanks and beaks have not been laying for several weeks. If, in addition to this yellow color, their combs and wattles are shriveled and the abdomen is hard they are certainly not laying. The yellow in shanks and beaks does not necessarily indicate non-laying, but it does indicate that the hen had a rest period for several weeks. They may have started again to lay and the color not yet become pale. It requires several weeks for the color to disappear.

Non-laying is also indicated by the molting of the feathers. Occasionally, however, a hen may be observed to lay while in partial molt, in which case the comb and wattles will indicate a laying condition.

In culling by these methods there will be greater accuracy if the flock has received normal feeding and care throughout the year. Any irregularities in feeding or care, or sudden changes therein, may cause a good layer to stop laying and sometimes to molt early. Where the feeding and care have been normal the culling will be accurate. If the flock should be producing an abnormally low yield of eggs it would indicate that many good layers had stopped laying.

In the average flock, it is possible, during July and August, to cull 20 per cent of the hens without decreasing the egg yield of the flock.

Cull in July, August and early September the hens that show:

A. Well-developed molting and distinctly contracted comb and wattles.

B. Contracted abdomen or dry, puckered vent.

C. Yellow shanks and beak.

Test "A" will usually be sufficient, but sometimes it will need to be combined with "B" to insure greater accuracy. Test "C" alone is not sufficient. It should be combined with "A" or "B."

The above tells how to select the poorest layers. This method, however, does not tell how to separate the medium good layers from the best.

If the poultryman wishes to cull everything but the very best, or those with a capacity of about 200 eggs in a year, he should make the selection from October 15 to November 15 by the following tests:

Keep those hens showing:

1. Incomplete molt, red comb and wattles, and bright eyes.
2. Well-spread pelvic bones, good depth from pelvic bones to keel bone, and soft abdomen.
3. Pale shanks and beak and vent, among breeds that have naturally yellow skin and shanks.

To make the selection with the greatest accuracy, use all three tests.

The high price of feedstuffs, as well as the added expense of labor and other items which enter into the cost of producing eggs, makes it imperative that there should be a careful culling of the laying flock if a profit is to be made by the producer.

# Artificial Heat

## Is It Good in Poultry House?

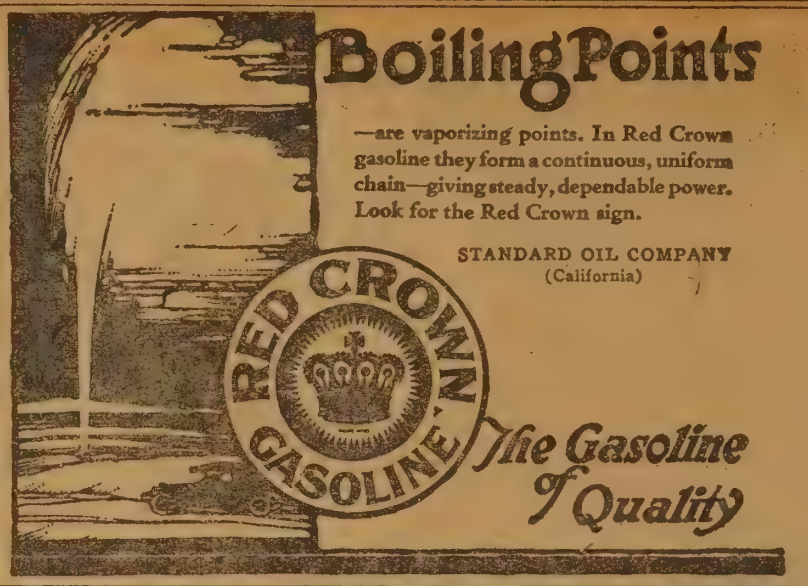
"A Reader" sends us the following: "Is artificial heat in a chicken house in winter all right? What is the best temperature when the heat doesn't cost anything? It is electric."

Artificial heat has to be handled very carefully, otherwise it will be worse than artificial cold. Artificial heat is not used in practice. The chicken can stand a good deal of cold without injury. If the spring temperature could be reproduced in winter it would no doubt result in a better egg yield, but the trouble is to reproduce it. It will not do to make the house warm unless it is kept warm all the time. To heat up the house for a week or more and then let the heat go out would result seriously to the hens. Or to keep the house cold and then put in a heater for a day would result in an epidemic of colds and sickness that would take the fowls months to recover from. Again, a heated house during the night and a cold house during the day also would bring disaster. What causes more colds and so-called roup among fowls is a close, overheated house at night a cold room or yard for them during the day. They need in such cases less heat rather than more. I have no doubt that with good ventilation or plenty of fresh air, artificial heat could be used successfully, but it has never been used successfully in a commercial way, to my knowledge. Fresh air is just as essential as feed to the hen. If artificial heat is to be used, the temperature should not be allowed to go much higher than 35 or 40 degrees in cold weather at night. Artificial lighting of houses has been successfully used, but artificial heating is a more disputed point. But if the temperature and ventilation can be controlled, there seems to be no reason why it might not result in better egg yield in winter.

J. D.

### Won't Lend for Non-Essentials.

There is a growing sentiment among bankers to discriminate between necessary and unnecessary industry in making loans, the general policy being followed of making no loans where the expenditures of the money would not aid in winning the war.


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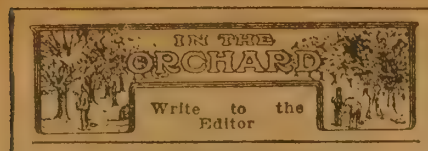
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GRANVILLE LOWTHER
Editorial Contributor.

# Orchard Troubles

## Currant Diseases; Treatment For

By GRANVILLE LOWTHER.

The principal diseases of currants are supposed to be caused by various forms of fungi, and are listed as anthracnose, cane blight, currant blight, dropsy and leaf spot. As is true in fungus diseases in general, the standard remedy is the Bordeaux mixture, which is a preparation of copper sulphate (bluestone) and lime. The ordinary formula for Bordeaux is unslacked lime, four pounds; copper sulphate, four pounds; water, 50 gallons. Now, when it is remembered that nearly all diseases of plants are the results of fungi, and that Bordeaux is the standard remedy, it simplifies the treatment of diseases.

Currant anthracnose is probably the most common fungus disease on currants in the United States; or perhaps in the world. It is very common on the Pacific coast, and is more severe on the red and white currants, than upon the black. Primarily it is a leaf disease, although it may grow on any part of the plant above the ground. When on the leaf, the disease causes small brown spots, which, if they appear in sufficient number, cause the leaves to turn yellow and fall. This injury to the leaves devitalizes the plant, and prevents a normal development of fruit. If the plants are partially shaded, the disease is not so severe as in the continuous hot sunshine. The fungus holds over winter on the leaves that lie upon the ground, and on the branches of the plants.

Treatment may be by various methods such as raking the leaves and burning them, plowing them under, spraying with Bordeaux, and where the disease is bad, repeat the spraying at intervals of about 10 days, except the blossoming period, until the fruit is two-thirds grown.

Currant blight, currant cane blight and currant cane necrosis are caused by the same fungus. On certain portions of the canes, or branches of the canes, the leaves wilt, turn brown and die.

This disease is common in Hudson valley, New York, but has not been found to any considerable extent in other portions of the United States. The experts at the stations of Geneva and Cornell, N. Y., have given the matter attention, and have not, in so far as I am informed, discovered a remedy.

Dropsy is an enlargement of the stems, and somewhat resembles gall. It is not considered serious, and the only remedy I have seen recommended is to prune out the disease portions.

European currant rust—This disease, until 1906, was supposed to have been confined to Europe and Asia; but it recently appeared in New York, and in so far as I know has not spread to other portions of the United States.

Leaf spot is characterized by spotting, and premature dropping of the leaves. The remedy is to spray with Bordeaux. It is better to spray more than once, but late applications may make it necessary to wash the fruit, which is not desirable.

Powdery mildew in currants is controlled by the same means as the same fungus on other fruits, the Bordeaux.

The currant blight is so similar to pear blight that the same means of control are recommended. Cut out the blighted portions and burn them.

### GRAPE GROWERS ORGANIZE.

A grape growers' association has been formed in the eastern part of Mason county, Washington, in the vicinity of Detroit and along Pickering passage.

Grape growing has been practiced for about 20 years in this locality with very marked success, and on a commercial basis, says Roy Larsen the county agent. Mr. Eckert, president of the organization, has had a varied experience and has a wide reputation throughout western Washington for grape growing.

The purpose of this organization is to organize the grape growers in order to develop that industry through the improvement of marketing conditions, and particularly in the standardization of product, and in developing markets.

### LEWISTON DISTRICT APPLE CROP.

According to H. H. S. Rowell of Lewiston Orchards association the total apple crop in that district is approximately 50 per cent of last year. The state, taken as a whole, will give only a 20 per cent crop, according to Mr. Rowell.

### Exactness Is Lesson of War.

One of the lessons taught by the war is the necessity for exactness in every act. No haphazard methods are permissible in a matter of such vital import.















# The Farm Labor Army *de*creases as the National Army *in*creases

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# A CROOKED TRAIL---By Lewis B. Miller

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**A story of a thousand-mile saddle trip up and down the Texas frontier in pursuit of a runaway ox.**

### SYNOPSIS.

Travis, a lad in his teens, lived on the Texas frontier in the days when Texas was a wild, unsettled region. One morning before daylight he started out to bring in the yoke of oxen for a day's plowing, but one of them was gone. He caught his pony and started to search for the stray. Going a little and a little further hour after hour, he continued until night caught him several miles from home with a tired pony, a borrowed saddle and lariat and little for himself or his dog to eat. A rabbit and wild turkey eggs served the purpose, and morning saw him again in pursuit of the ox after a night of disturbance by a mountain lion and marauding hounds. The next night he spent in the cabin of a crazy sheep herder who believed that cattle men were trying to kill him. He made the night hideous by his crazy ramblings and songs in the moonlight.

## CHAPTER V.

### A Song in the Night.

Now, even more than before, I wished myself a thousand miles from this uncanny creature and his cabin. No telling what he might do. But for the fact that he was standing in front of the door, I should doubtless have tried to slip out and steal away. But before I could decide upon any course of action, the shepherd took another look around the corner of his cabin, then began to sing again.

The contrast between this song and his others could scarcely have been greater. Those, with their silly words, were shouted out loudly, boisterously, almost with insane vehemence; but this song was sung with such expression and feeling as affected me strangely. Both the words and the air I had never heard before; nor have I ever heard them since. Perhaps the shepherd had composed both; for, in spite of some crudities of speech, he was an intelligent fellow, and, I think, a born musician.

Most of the words I have forgotten, but the beginning of the refrain was: "I'm far, far from home." It was the heart-broken plaint of an exile, homesick for the home to which he dared not return.



I have heard some famous singers since, but never one that seemed to me to sing from the heart as this man did, and never a song that affected me as this song did. Perhaps my surroundings, and what I had learned, and guessed, of the hermit shepherd's life, may have had something to do with it; but as I sat and listened, I could scarcely keep the tears out of my eyes. Such was the pathos pouring out with the exile's words.

Verse followed verse, and until the song was concluded I scarcely moved. When he had finished, the shepherd sang no more, but stood motionless, gazing far away. Before I had been a little afraid, not knowing what the fellow might take it into his crazy head to do. But now I felt that, however insane the man might be, there was, for the present at least, no violence in his insanity.

Laying the six-shooter aside, I stole to the door and stood watching him. At last, when he did not turn, I worked up courage enough to speak:

"What are you doing out here, Mr. Groves?"

He spun round instantly. "Oh, it's you, is it?" he exclaimed, in relieved tones. "I'd forgot you were here. When you spoke, thought the cattle-men had come back. But I might have known better. They never show their heads after the moon rises. They only come when it's dark—pitch-dark, the scoundrels! They know what's ready for 'em if they come about when I can see. I was singing to—did you hear me singing? I was just singing to let 'em know I'm not afraid of 'em. That was what the first songs were for. When they hear me singing like that they know I'm not afraid, and it makes the scoundrels shiver. Yessirree, you'd better believe it makes 'em shiver! And they go sneaking back to their holes."

"Yes, they've all gone back now," I said, thinking it better to humor him. "Why don't you come in and sleep awhile? You've been up all night. It's my turn to stand guard now. Come in and lie down, and I'll take your place."

"Think you can keep 'em off if they all come together?" he inquired, somewhat doubtfully.

"But they won't come, now that the moon's up," I reminded him.

"Why, yes, of course. I'd forgot about the moon." He turned and gazed at it. "Sure enough, there it is. Well, maybe I'd better sleep awhile."

He went inside and stretched himself on his bed. I was hoping he had gone to sleep, when he rose to his elbow and said:

"Did you hear that last song I sung?"

"Yes. Did you sing that to the cattle-men, too?"

"No!" he answered, scornfully. "What would they know about such a song as that? I never cast pearls before swine. I was singing that to the folks at home. It has been a year or two since I heard from 'em. I used to write when I first came out here, and they wrote to me. But I got afraid—afraid somebody else might read the letters; and so I don't write any more. But sometimes in the night, when I'm too restless to sleep, I go out and sing 'em that song—the song you heard me sing. But I'm afraid they don't hear it. Two thousand miles is a long, long way. Do you think they could hear it as far as that?" he asked, appealingly.

"Well, sound carries a good distance on a still night like this."

"That's so," he said. "But it would carry further if the wind came from the west. Maybe it will be blowing from the west by tomorrow night, and then I'll sing it to 'em again. If they're asleep and can't hear it, maybe they'll dream they hear it. Almost every night I see them in my dreams and talk to 'em."

He lay down again, but soon came to the door.

"You haven't found that spotted ox of yours, have you? That's because you've not looked in the right place. I happened to glance through a crack just now, and saw him first thing. Yonder he is!" He was pointing straight at the moon.

I turned and gazed in the same direction. "My eyes are not as good as yours," I finally answered.

"Well, now, that's strange. I can see him as plainly as I can see you. His horns sprouted feathers and turned to wings, and he flew up to the moon. And the man in the moon has yoked him up and gone plowing with him. Strange you can't see that."

"Oh, well, no matter," I answered, carelessly. "It serves the old rascal right for running away. Let the man in the moon plow him as much as he pleases. You go back and get some sleep."

The shepherd returned to his bed, and this time he remained there. I sat down on the door-sill and waited. At last his regular breathing told me he was asleep. That was what I was waiting for.

My saddle was lying by the house, and I took it up, as noiselessly as possible, and started. Vic was at my heels.

As I passed round the cabin, something impelled me to turn aside and take a look at that lifeless form. The moon had crept around till part of the corpse was now in the light. I gave a frightened start and a half-gasp at the sight of a long-grayish beard. The slain cattle-raiser must have been an old man. But the next moment I breathed freely again. I had seen the face above the beard. It was the face of a goat—the Billy-goat that had been stalking about near the milking-pen. Poor Billy was stone-dead! His insane master had given him a fatal bullet.

While hurrying on in search of my pony, I was almost laughing, so great was my relief at learning that no human life had gone out here tonight. "That loony sheep-man has got blood enough on his hands," I reflected.

The pony found and saddled, I lost no time in mounting and riding away. This had been a horrible night to me—the most horrible of my life—and very glad was I to escape from the sheep-ranch and its crazy hermit shepherd.

By the time I had regained the road day was tingeing the eastern sky. More than once during the night I had half decided that, if I ever got safely away, I would take the back track and go straight home. But now, the danger escaped, my courage had revived, and without hesitation I started on after the runaway.

My plan was to keep riding till I came to a house; and then, after informing his neighbors that the shepherd had become a lunatic, I would determine what to do next by the information received there.

Rapidly I rode, and the sun was just peeping over the horizon when I looked down into a valley and discovered a farm and a neat-appearing farm-house. A boy and a girl, both bare-headed, were in the stake-and-ridered cow-pen, milking. I rode up to the pen.

The boy, who was tall, light-haired and fair-faced, and not much older than myself, came over to the fence.

Scarcely had I mentioned a spotted ox with unusually long horns, when the young fellow broke in:

"Yes, that steer is here now. That is, he's close around somewhere. We found him lying at the gate day-before-yesterday morning when we came out to milk. He went off with our cattle, and was here again yesterday morning. My sister and I noticed him on account of his horns. And we noticed him still more closely because we knew he didn't belong around here. He has taken up with our cattle. You couldn't run him off. They failed to come home last night—our dry cattle, I mean. But your ox went off with them, and he's still with them. They're all somewhere close around. Have you followed him far?" he inquired, with friendly interest.

"Seventy-five or 80 miles. This is my third day out from home.

"Your third day! You are having a chase of it. Where did you sleep last night?"

"I didn't sleep, to speak of. I spent the night a few miles back on a sheep-ranch, with a wild, raving lunatic. The night before I camped with a mountain-lion, and managed to get along fairly well. But sleep was out of the question last night."

"So you stayed with Sam Groves, did you? I know the fellow but I'd rather not spend a night with him, if you please. Guess you had a time of it."

"I never spent such a night before, and hope I may never again," I replied with some feeling, the memory of my recent experiences being still vivid.

"What did he do, anyhow?" the young fellow inquired, eagerly. And his sister left off her milking and came over to the fence to listen.

I related some of the night's happenings, and concluded by saying:

"The fellow is crazy as crazy as a loon. Remorse for all those lives he has taken has driven him insane. The blood of seven human beings on one conscience is too much for anybody to stand."

The boy smiled as he answered: "Sam Groves is about half-crazy as you say. But it wasn't remorse that upset him. If he ever hurt anybody in his life, it was before he came here."

"Then what made him tell me he did?" I demanded, in amazement.

"Oh, that's just one of his insane delusions" spoke up the girl, quickly.

"That's right," said her brother. "He hasn't killed anybody yet; but he may if he keeps on shooting around at night, like he's been doing for some time. He's wounded a yearling steer and a horse for people in this settlement, that we know of; and no telling how many others that nobody knows of yet. People that know the fellow is wrong make it convenient to keep away from him. But if a stranger was to ride up to Sam's cabin at night, he'd stand a fine change to get his head shot off."

"It's a wonder he didn't take a shot at me," I remarked.

"Not if you went there in daylight. That's the strangest thing about him. He has crazy spells after dark, but in the daytime he's all right, at least so far as anybody can tell."

"If it wasn't remorse that drove the fellow crazy, what did?" I wanted to know.

"Herding sheep—being so much alone," said the girl. And her brother added:

"Sheep-men have a saying that six years of steady herding will get the best man 'a little out of fix upstairs,' especially if he lives a hermit's life. And Sam has been at it longer than that, he says. He sticks to it so closely, too. Every day in the year, cold or hot, rain or shine, those sheep must go out to grass. Once in a long while he takes half a day off to ride somewhere that he has to go. But even then he hurries back as if his life depended on it. Unless he drops the sheep business and goes at something else, no telling how crazy he will get. Cattle-men don't like sheep, because no other animal likes to graze after a sheep. There are some cattle-men here, and every settler has cattle; and Sam has got an idea from somewhere that they're all down on him, and would like to run him out. But it's just a delusion of his."

"Do you mean to tell me there wasn't any danger last night?" I demanded, incredulously. Such a thing had never occurred to me before.

The young fellow smiled. "Not from the cattle-men—no more than there is this minute. Sam did have some trouble where he came from, I understand. Somebody stuck a few warnings on his door, and Sam rounded up his sheep and traveled. But there never has been the slightest trouble where he is now. He has a flock of several hundred head; but there's plenty of grass for them and all the other stock here, and a good deal to spare.

"But get down and hitch your pony. You're at the end of your hunt now. After breakfast I'll saddle up and ride out with you, and we'll soon bring in your lost ox."

The girl now left off her milking and hurried away to the house. I dismounted, turning Dick loose to graze, and climbed over into the pen to help with the cows. There were still three to be attended to. While I roped the calves and pulled them off, the young fellow did the milking. We talked all the time, and when the last cow was "stripped" and her calf turned loose, we had arrived at a very friendly footing.



His name was Frank Booth. The family had come here from Missouri three years before. They owned a good farm here in the creek-valley, and better improvements than most of the settlers.

"My sister and I are alone just now," he explained. "Father and mother left home nearly two weeks ago to visit our married sister, down close to Wasco. We're expecting them back tomorrow or next day—don't know just when."

We now started for the house, Frank carrying one bucket of milk and I the other. He took the buckets into the kitchen and left them on the table. After washing, out by the well, and getting ready for breakfast, we entered the principal room of the house and sat down. The girl soon appeared at the door to announce that breakfast was ready, and we passed out into the room which was both dining-room and kitchen.

"Stella," Frank said, "this is Travis Holloway. He used to live in Bates county, Missouri. Bates joins Henry on the west, you recollect. It was the only county between us and the Kansas line."

The girl came to meet me with a friendly smile and a warm, firm hand-clasp that I have never forgotten. She was not quite 15, and though not large, was as tall as she would ever be. In appearance she was in marked contrast to her big, light-haired brother, both her eyes and her hair being dark. The most noticeable thing about her was her alert, wide-awake look. While not at all bold in her ways, she was more friendly than timid. Her face, viewed from the standpoint of my nearly 17 masculine years, was very attractive to the eye.

"And so you're another Missourian," she said, smiling up at me confidently. "As we're from adjoining counties, I almost feel that we've been neighbors, and are acquaintances already."

"No, I'm not quite a Missourian," I had to tell her. "I happened to be born in Texas. But my father and mother came from Missouri, and we've been back there since. We lived there four years, and most of my mother's relatives live up there somewhere—those that don't live in Kansas or Iowa or Illinois."

"Then you're a Texan, a sure-enough Texan, are you? Most of the people one meets here were born somewhere else. Oh, I know? They named you Travis for the hero of the Alamo, didn't they?"

"That's right. I was named for Colonel Travis, the commander at the Alamo."

"I've read all about him, in the History of Texas," cried the girl, her dark eyes shining. "Only I pronounced his name with the 'a' long—Trayvis—instead of the short sound you give it. I can't forget those words: 'Thermopylae had its messenger of defeat; the Alamo had none.' Wasn't it grand—and awful? Are you as brave as your distinguished namesake? He died rather than retreat or surrender."

Remembering how badly frightened I had been the night before, at nothing, I looked down.

"No, I'm not," I had to answer. "I'd be an out-and-out failure at the hero business."

The girl and her brother laughed, and we sat down and went to eating.

During the meal it developed that we three had one ambition in common—to get an education. Good schools were very scarce in this part of Texas at the time. But in a little town over on the Brazos two brothers, both ministers, both fine scholars and fine-looking men, and both young and full of enthusiasm, had opened a a mixed school. Though its age was less than half a dozen years, so many young men and women had flocked to it that it now numbered several hundred students, with nearly a score of teachers, and its reputation had covered the big state.

Frank and his sister had a catalogue from this school, and so had I. And we were all planning to enter it just as soon as we could. The fact that we expected to meet again put us at once on the friendliest terms.

(To be continued.)

# SIDELIGHTS

### The Boy Was Hep.

The Honorable—My boy, do you realize how great is the solemnity of an oath, before you commit yourself?

The Boy—Why—why, yes, sir. I caddied for you last Sunday.—Widow.

### Oh, Yes.

Flatbush—Are you doing anything to cut down your table supplies?

Bensonhurst—Oh, yes; we've eliminated the finger bowls.—Yonkers Statesman.

### Right!

Mr. Titus was traveling in Italy and one morning was quite surprised to meet some people from his native town.

"Why, Mrs. Clarke!" he cried, "How do you do? You are the last person I expected to see in Italy."

"If it isn't Mr. Titus!" exclaimed the lady, in surprise. "Yes, we are spending the winter here. You must call on us often. You know just how it is—persons we never think much of at home seem like dear friends when we meet them in a strange country."—Elsie May Lutes, Iowa.

# Washington Boys in War Service







From The Twice-a-Week Spokesman-Review.

**GILLIE GISLASON, Blaine, Wash.**—On April 26, 1918, entered the U. S. army service and was sent to Camp Lewis for training. Here he remained for a while and was later sent to Kansas as a member of the medical corps.

**LESLIE L. CARPENTER, Krupp, Wash.**—Is the youngest son of P. D. Carpenter of Krupp, Wash., and entered the U. S. naval service as a fireman during the fall of 1917. Now he is on the U. S. S. Chatham, "somewhere at sea."

**EDWARD E. BALCOM, Peach, Wash.**—In November, 1916, he enlisted in the U. S. navy and is now on board the U. S. S. Paul Jones, "somewhere on the ocean." He is the oldest son of Mr. and Mrs. W. H. Balcom of Peach.

# Would Adjust Rates

## Local Freights Appear Excessive

With a view to securing relief for the farmers who have to ship grain or feed over two railroad lines and at present have to pay two "local" freight charges, amounting to considerably more than the distance seems to justify, the farmers' union is undertaking to have the railroad administration approve and put into effect a revised schedule that eliminates the excess charge. Under the present system of rates, if a person desires to ship grain or feed between such points that the shipment has to go part way over one line and part way over another, he has to pay the local rate on the first line to the point of transfer and then the local rate on the second line to the final destination. In some cases this results in a total rate equal to or more than the rate twice the distance on one line only.

Secretary A. D. Cross of the Washington and North Idaho Farmers' union, some time ago took the matter up with Director General McAdoo of the railroad administration, who replied that the matter would have to be acted upon by the Portland District Freight Traffic committee before any changes could be considered. Consequently Secretary Cross, acting for the farmers' union, has prepared a schedule of proposed rates which has been approved by the officials of the union and submitted to F. W. Robinson at Portland, chairman of the district committee. It is hoped that the committee will approve the suggested changes and that the railroad administration will adopt them.

The proposed changes are not a reduction of rates except where the two local rates, when added together, are considered unjustifiably higher than the total distance warrants. It is the desire of the union to have the distance determine the rate, and that it be the same even though it is necessary that the shipment pass over two roads to reach its destination.

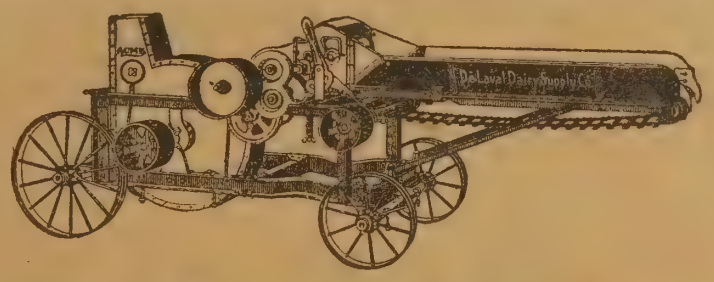
The rates are drawn up, one set to cover grain and grain products, and another set to cover hay and straw.

### Need More Water.

Shortage of water in many irrigation districts prevented maximum production during the last season, and there still remain hundreds of thousands of acres of valuable land without reclamation.


# Chop Your Dry Feed

**Don't Lose $3 to $5 Worth of Hay Out of Every Ton You Feed**




## The ACME Cutter

USE THE ACME AT ALL SEASONS
USE IT TO CHOP ALL YOUR DRY FEED
USE IT TO MAKE ALFALFA MEAL
USE IT TO FILL YOUR SILO

### CUT YOUR FEED COSTS WITH AN ACME

The most substantial and lightest running cutter manufactured—the ONLY ALL STEEL FRAME CYLINDER CUTTER MADE. The three-bearing cutter shaft reduces vibration and economizes power. Frame can't warp or sag or the bearings get out of alignment, causing unnecessary wear like the old style wood frame cutters. Stoutly built for continuous hard work.

**BUILT IN SEVEN SIZES—FOR DAIRY MEN, STOCK MEN, SHEEP MEN**
**Catalog Mailed Free.**

## De Laval Dairy Supply Co.

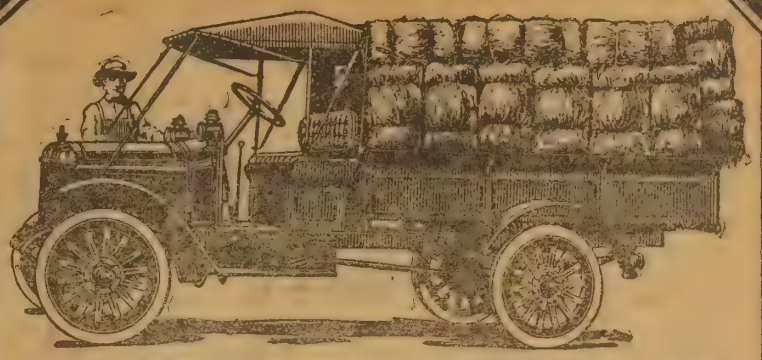
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# REPUBLIC

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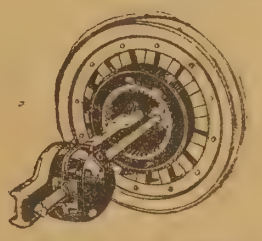
Farmers who own Republic Trucks don't have to depend on extra teams to help them out when the rush of getting fall crops to market is on.

Republic Trucks are a profitable investment on any farm. They are built with the extra strength and durability that insure their working for you day in and day out in any kind of weather.

The Internal Gear Drive has nothing to do but to drive the truck. It applies the power near the rim of the wheel and gets a big increase in pulling ability. The load is carried on a separate I-beam axle of solid forged steel, much lighter than any other form of construction and at the same time stronger.

This saving in unsprung weight means longer life to tires and important savings in gasoline and all other upkeep expense. 45% greater road clearance make these trucks travel any country road easily without fear of stalling even in mud and snow.

Republic trucks have been proved efficient in every kind of hauling. Last year Republic produced and sold more than twice as many motor trucks as any other maker.



The Internal Gear Drive delivers 92% of the motor power to the wheels. We know of no other drive that delivers as much.

More than 1300 Republic Service Stations distributed all over the United States, back up Republic quality.

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**Alma, Michigan**

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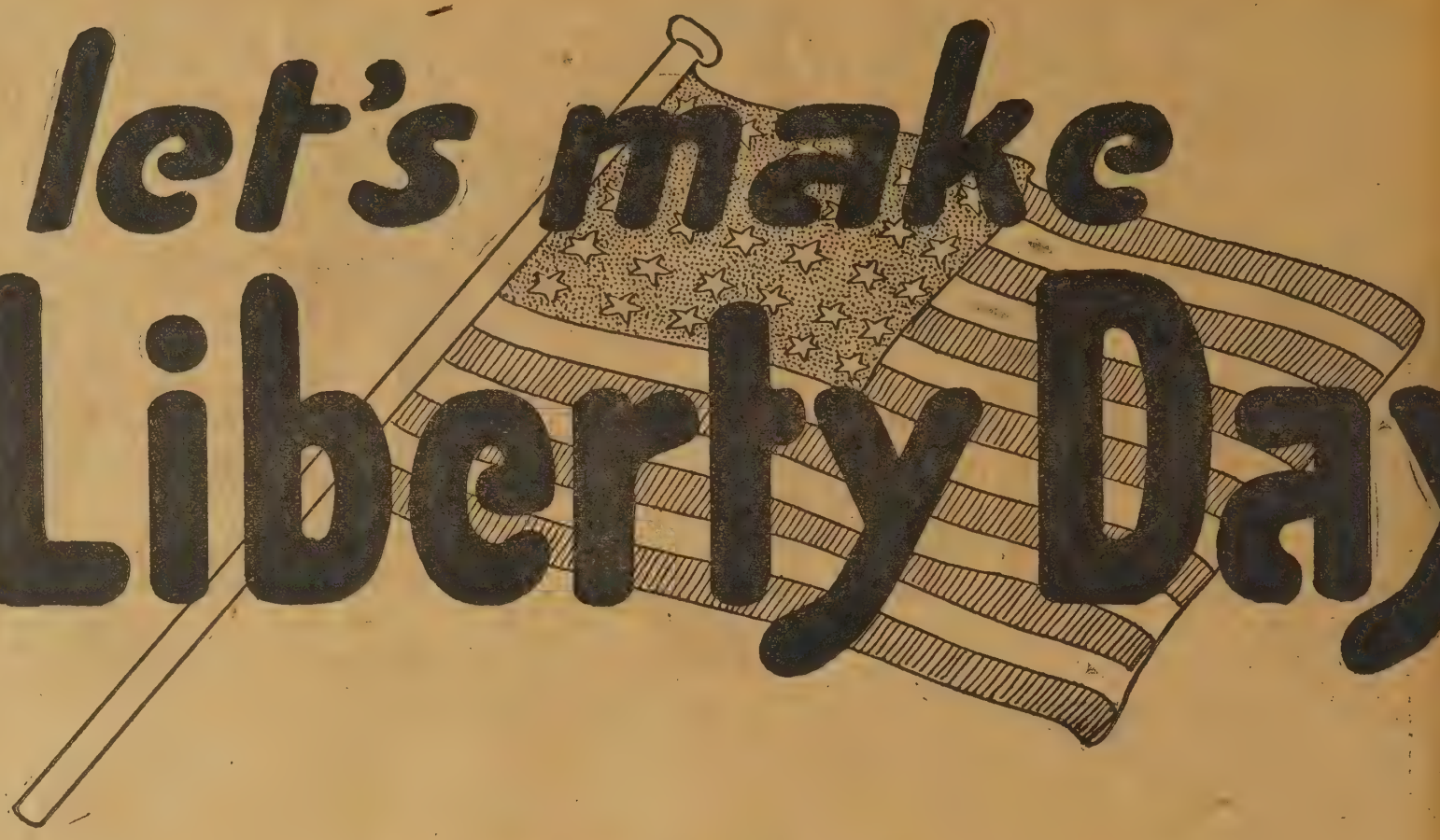
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**The trademarks of the various lines of equipment and merchandise you buy are safe guides to follow. They will lead you to goods of high quality and goods that are sold at one price. Your dealer who sold these goods can stand back of them, for he knows that the manufacturer who sold them to him will stand back of the goods and back of him, too.**




## *October 12, 1492*

## *Columbus Discovered America*

When Columbus, 426 years ago, "gave to Castle and Leon a New World" he did know that it would really be a New World spiritually.

He didn't dream that it would be the teacher of the Old World.

He hadn't the slighest idea that some day Young America would start to cl out the Old World of Kaisers and petty princelings; of peoples ordered to war at behest of one man, or set of men; of cruelty run rampant, where nations could martyred at the word of a mad war lord.

But America is doing it.

Our boys, our guns and our bayonets are bringing the blessings of liberty to oppressed nations.

WASHINGTON STAT

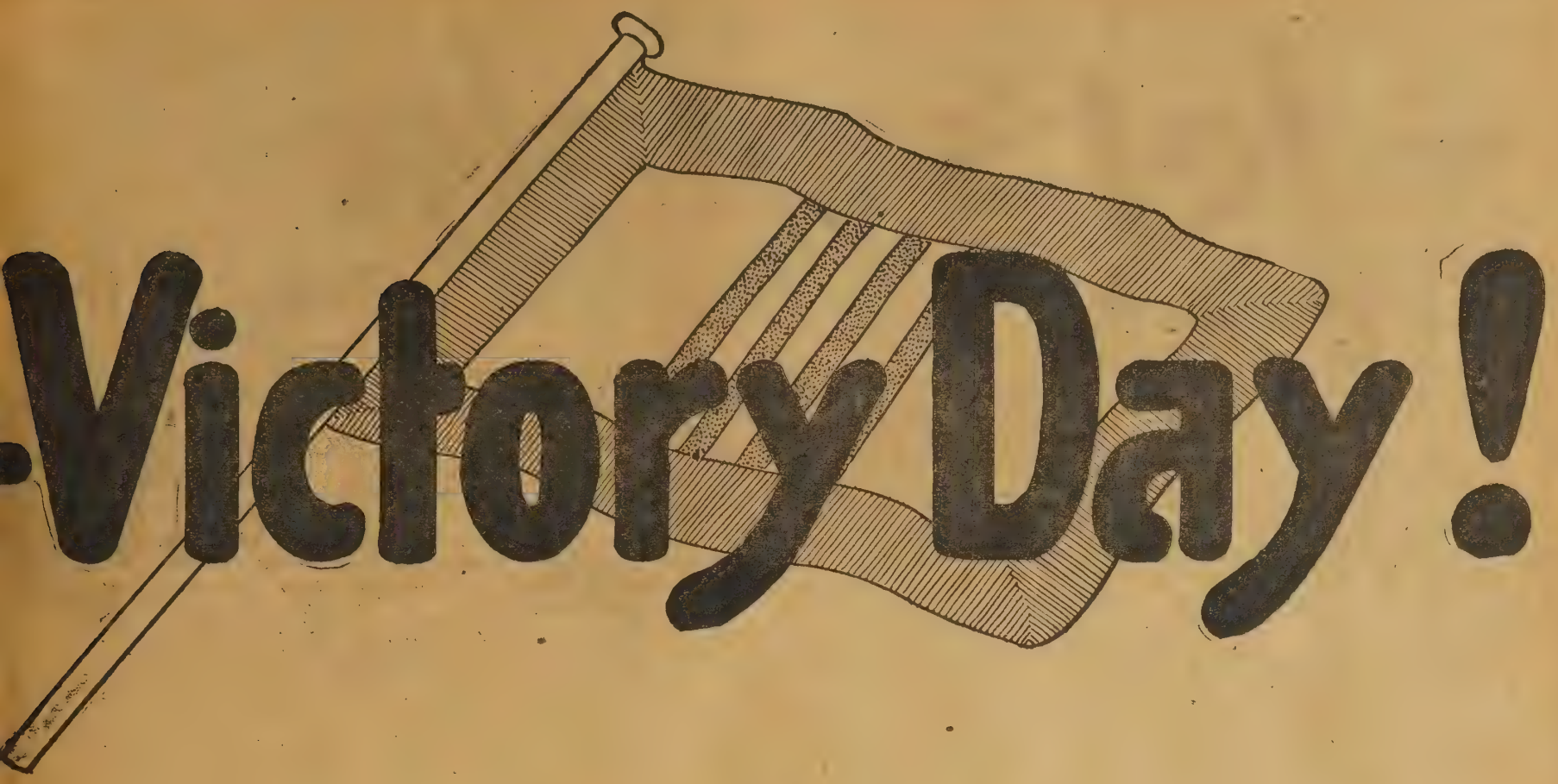
JOSEPH A. SWALWELL, Chairman

This page contributed to the Fourth Liberty Loan campaign and victory by Crescent Manufacturing Company.

Crescent Products
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# Fourth Li

## *BUY BONDS TO YOUR LI*




## *October 12, 1918*

## *Proclaimed Liberty Day by President Wilson*

Proclaimed as liberty day by the President here the 426th anniversary of the iscovery of America means Victory Day for our soldiers "over there."

Is it Victory Day for us over here? Can a search of our inmost hearts truly nswer yes? Can we at home say we have done to the best of our ability to back p our soldiers; to supply them with food, clothes, and munitions? Have we? Then buy more. Remember what the dispatches said time and again: "The Americans attained their objectives and passed beyond them." That's the way o victory!

ENTRAL COMMITTEE
C. P. BURNETT, Director of Publicity.

# erty Loan

## —*THEN BUY MORE BONDS*

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When answering advertisements don't fail to mention this paper.

# Max Houser's Work

## Genius, Industry and Patriotism

In pursuance of its steadfast policy of fairness and thoroughness in discussing topics of vital interest to its readers, the Farmer is glad to publish the following words in appreciation of the ability and character of Max Houser by C. C. Chapman, editor of the Oregon Voter:

It is fortunate for the grain growers of Oregon and the Pacific northwest that a man of Max Houser's genius, industry and patriotism is at the head of the grain administration of this territory. The extent to which Houser is on the job and the ability which he has brought to bear are hard to realize.

Houser's business career certainly was a schooling for his present patriotic responsibilities as grain administrator. He was a little, odd-mannered, peculiar and impetuous grain dealer of eastern Washington before he located in Portland. On his trips here he made little impression except with a few with whom he actually transacted business. He called upon a good many people in a business way, but only those with whom he established actual business relations seemed to sense anything of the power of the man. His conversations were short and jerky and his mannerisms so unusual that he was looked upon as somewhat of a curiosity and then was forgotten for the time.

After he came to Portland he began to cut a figure in the grain trade. He gave offense to some of the old-established firms by his aggressive buying. He seemed to smell conditions, to have an intuitive faculty for correctly interpreting signs of a rising market. Perhaps, though, it was not so much intuition. He is an investigator, who makes many trips to get at the facts, is always observing and who asks penetrating questions, the object of which often is not clear, but the answers to which are full of meaning for his acute understanding.

Before he had his big establishment, he covered the whole northwest himself by long distance telephone—call after call in rapid succession to buyers, dealers, growers in every part of his territory. He went after information by wire, got it in a hurry, acted on it instantaneously and closed up deals in rapid succession. Swinging from one telephone to another he handled calls with a snappy quickness that was marvelous. And he didn't wait for the other fellow to call him. He was shoving the out calls faster than the crowd could come back with the in calls.

He made some losses after he cleared a fortune of unknown great or small size in his big barley season, but he had the money with which to meet his losses and then had some left. He always seemed to play safe, taking no chances on deals where he could not cover himself should he figure wrong. It was his policy to clean up about once in so often, and get his cash in bank, so he would know he had it. Then he would breathe for a spell before jumping into the nerve-racking game again.

When the European war broke out, Houser got grain to the allies. The prodigies he performed in getting cars and ships were stupendous. Houser was on the job everywhere. His outfit was a big one by that time; he foresaw conditions accurately, and kept his buying organization so invigorated with his own nervous energy that it kept at least one jump ahead of competition and got the grain. The farmers rejoiced in Houser, for it was his aggressiveness that kept crowding the prices up. Houser was always in the lead with his offers; the other growled and had to follow. How much money he made no one knows outside of himself. Likewise, the stories of losses at sea, owing to failure to deliver cargoes upon which he had guaranteed delivery to the allies—he and the income tax collector alone know how the debit and credit sides balanced up, for he is intensely secretive about his private affairs.

When the United States entered the war, Houser ceased to be a private citizen. He bought a shipbuilding plant at Astoria and it has made a fine record of production. He was appointed grain administrator.

With this appointment he transferred his private business—built up by such slavish hard work for 18-hour days—to a corporation. This corporation runs entirely without his direction, and all its profits for the war period go to the Red Cross. He has visited its offices only twice in the last six months, and then only to hurry up the reports that would make possible quicker donations of the profits to the Red Cross.

After the death of Theodore B. Wilcox, the great figure in the flour milling trade of the Pacific northwest, the heirs to the estate decided to dispose of the Wilcox interest in the flouring mills—a big interest—variously rated as worth $1,000,000 to $3,000,000 or $4,000,000. There were buyers in sight, but none of them were Portland interests. Actuated very largely by the desire to keep the ownership of this interest in Portland, Houser bought the Wilcox interest.

Last year the biggest problem was to get cars to get the grain shipped eastward. Houser had fought for cars to get his own grain to the Atlantic seaboard. Similarly he fought for cars to get his country's grain forwarded in the same direction. And he fought a winning fight. His success as a fighter meant everything to the grain growers.

The car shortage made it necessary for grain to be held in the interior. The general plans of the grain corporation laid down in the east did not fit the northwest conditions that were aggravated by the car shortage. To hold this grain was a stupendous financial burden to the farmers. Unless it could be bought for cash and held in the interior until cars were available, farmers would have to pay interest on the money they had tied up in their crops.

Houser made a heroic fight to get the government to allow these carrying charges on the wheat, so the farmers could get their money without having to





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"Giant Powder is the most satisfactory," says John Zurr, Santa Rosa, Cal. "I account for this because Giant Powder is made with the utmost care."

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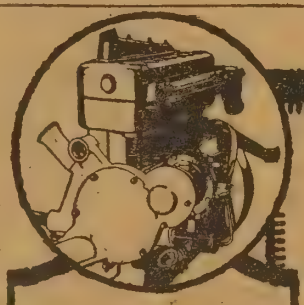
Send me the 52-page illustrated book "Better Farming." I am especially interested in (please check) 203

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pay the interest. It cost Houser's office more than $1,000,000 paid out in carrying this wheat. This amount was more than what was paid out for the same purpose by the government in all parts of the United States outside of Houser's jurisdiction. The fact is cited to show that the Pacific northwest has special and peculiar problems that require an energetic, resourceful, thinking man at the helm to solve them and then get action. Houser made good wonderfully.

This year the big fight is to get ships to get the grain away from our Coast ports. Already there is a congestion, and grain is being left in the interior because of the congestion at the terminals. It was supposed there would be plenty of ships among all those being manufactured here in the Pacific northwest. There were plenty of ships completed, but they were diverted to Chile to get nitrates. This held up the grain situation. It took all of Houser's impetuous resourcefulness to get some of these ships called off the nitrate mission so they could be used to relieve the grain congestion. It is only within the last few days that Houser won out by getting some of the ships that were needed, and he is still actively on the job to get more.

## Apple Situation

### Outlook Is for Steady Prices

Commercial apple growers who read the Farmer will be interested in knowing that the outlook for steady good prices is better than it has been for some years.

The writer, while in central Kansas, Omaha, Kansas City, St. Louis and Denver, was in touch with dealers, as well as consumers and growers, and with scarcely an exception the information showed a light crop, particularly of certain varieties like Jonathan and Delicious, and the certainty of good prices for good stuff.

There were no western apples on the markets at the places named up to September 22—barring California Belleflowers. This variety, poorly colored, was selling at $2.25 to $2.50 per box.

Local Jonathans, fairly good, but which would not rank with northwest apples, were selling at $7 to $7.50 a barrel in St. Louis. Box stuff of the same variety sold at $3 to $3.25 a box, as the writer was told. This was the report from several markets, with an active demand.

While most dealers wanted boxed apples, there was some call, especially at Omaha and Kansas points, for bulk apples. One extensive dealer told the writer that he could sell a car of Jonathans with a rush on that day at $3 a box.

As to the probable price for western Jonathans, dealers seemed to be at sea and said they could not tell, but some of them thought they would be able to pay around $2 for extra fancy, f. o. b. shipping point. The other grades would run proportionately less.

An extensive Colorado grower said that his crop of Jonathans had been contracted at $1.90 per box, fancy and extra fancy—jumble pack.

In several of the cities the bushel basket was being used by nearby growers, but did not seem to be in great favor. It is, however, convenient in some ways, and will have a place in marketing methods. Reports from different states received by dealers indicated that the Winesap apples were, as a rule, yielding better than almost any other variety. But, as before stated, the reports were practically in accord that there would be a shortage of good apples and that prices would be pretty certain to be profitable to growers.

The fruit in the retail market was, as a rule, inferior, and considerable of it was wormy and scale marked, and of course would not be permitted to be sold in the markets of the Pacific northwest. However, the leading dealers realize the importance and seem willing to pay for and to encourage the production of good fruit.

Summarizing the apple situation, then, it seems to be this: Crop below normal, and this means considerably below the forecast earlier in the season, prices to growers around $1.75 to $2 and $2.25 per box for leading commercial sorts, with some better for Delicious, which is reported scarce, and choice Winter Bananas. Bulk stuff, taking a good average orchard run—culls and cider apples excluded—ought to reach $50 a ton when compared with other prices.

In talking with the writer a heavy wholesale dealer declared that if he owned a commercial orchard of good leading varieties he would be inclined to refuse any offer under $60 a ton for them in bulk. While this was a considerable admission for a dealer, it reflects the general belief that good apples are going to rule firm in price and that growers who have good stuff should not be stampeded into selling at any ordinary average price through fear that the apple market is going to slump or go to pieces. It may have some "off" days, but if present indications can be relied on as a safe guide there will be an active demand at worth-while prices for good stuff. Growers should therefore harvest their apples as soon as ready, handle them carefully, whether to be sold in bulk or boxes. But if to be marketed boxed, then grade and pack with care, so that you know your pack is right. Sell, if possible, cash f. o. b. at your home station. But if you deal in any other way know your men and see that your fruit is properly inspected before shipment. Buyers now understand that the government will take a hand and will permit no "snap judgment" on deliveries at the other end of the line, as has often been the case in the past. It is a good practice, for that reason, to have inspection both at shipping point and at the place of destination.

A. E. G.

### DR. PEARSON RESIGNS.

Dr. R. A. Pearson has resigned from the position as assistant secretary of agriculture in order that he may resume his duties as president of the Iowa State College of Agriculture and Mechanic Arts.

The nomination of G. I. Christie of Indiana to succeed Mr. Pearson has been transmitted to the senate. In April of this year Mr. Christie came to Washington as assistant to the secretary to aid the department in further organizing and developing its farm-labor activities. More recently he has been representing the secretary in the field in connection with loans from the president's special fund to farmers in Montana, North Dakota and Washington.

### CHERRY TREE IN BLOOM.

Councilman Taylor has a freak cherry tree in bloom in the yard of his home in Jackson street, says Pendleton, Ore., Tribune. The tree shed its leaves earlier in the year and Mrs. Taylor said at the time that the tree was dying. A few days ago, however, the tree showed signs of life again, and now the blossoms are out in full force. The tree bears the May Duke variety of cherry.

NONE of us can afford to neglect a single opportunity to help win the war. You can help by posting the first page of The Washington Farmer this week in a conspicuous place, in your house or on your farm, so that others passing by can see it. These colored patriotic posters help to keep national war needs before the minds of all the people.


# Do Not Delay the Purchase of a Piano Too Long

Owing to difficulty in obtaining raw materials and labor, and the rising costs of both, Piano manufacturers raised their prices to us several times in the past year and a half—we were forced to raise our prices accordingly. The manufacturers now warn us that as their production has been cut down by the War Industries Board to a small fraction of their original output, they can not manufacture pianos on a quantity basis and sell at a quantity price—that the prices of the small number of pianos they will be permitted to make, will soon increase enormously.

In fairness to our customers and friends, whose good will we value above all else, we issue the warning—**purchase now (in the next month) if you want a Piano**—otherwise those in moderate or even comfortable circumstances must defer the purchase of a Piano for several years until the greatly increased prices go down because of a return to normal manufacturing conditions.

**We invite you to call at any of our stores—or write us asking for illustrated catalogues and prices.**

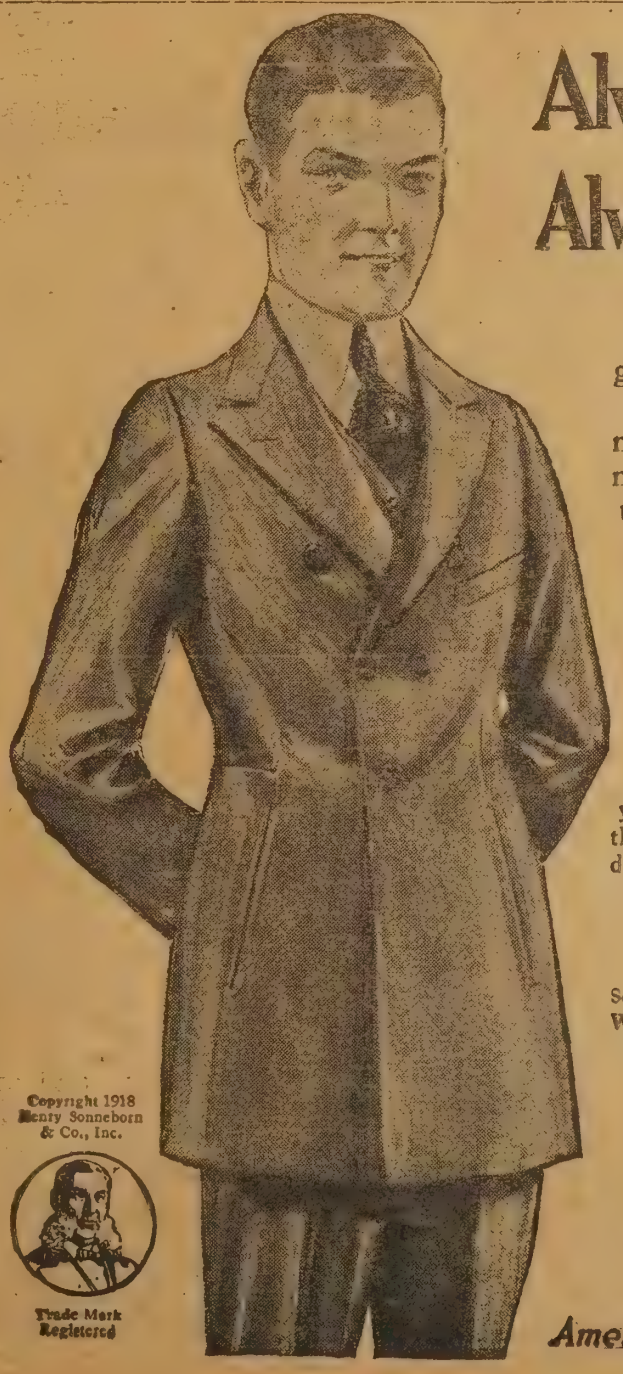
*We are dealers in Steinway and other Pianos, Pianola Pianos, Aeolian Player Pianos, etc.*

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Third Avenue at Pine Street, Seattle.
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"Each grade one price the nation over"

*America's only known-priced clothes*

# Build Up Men for Country's Use

By DR. LEONARD KEENE HIRSHBERG, A. B., M. A., M. D.

He came to the big training camp in a recent draft from a rural district. The draft board accepted him, although he was so round-shouldered that he looked like a hunchback.

He drilled with his company in the depot brigade. At least, he tried to drill. But no amount of exercise nor of coaxing by the drill officer could get him to straighten up and throw back his shoulders. To make matters worse, his feet went bad, and finally he could scarcely hobble about. Then he was sent to the army surgeon, where he became a patient in the new base hospital.

Surgeons looked over his bent form and then went to work. They massaged his back, and even baked it under an electric heater. They compelled him to undergo exercises until he winced at the pain of muscles and tendons put into play that had been useless for years. The crooked spine became supple. With a supreme effort he could straighten his back while in bed. When he sat up or walked, however, he slouched into the same old stoop-shouldered posture.



Dr. Hirschberg.

**Physically Impossible.**

"It's no use. I can't do it," he pleaded when a physical director told him to straighten up and go through a certain series of exercises. And apparently he couldn't. But the experts of the new department had another card to play. They began to teach him self-confidence. Before another week ended they had proved to his own satisfaction that he could straighten those shoulders.

To eliminate further detail it is merely necessary to relate that he is now ready to go back to his company—not for a clerk job nor even for the new United States guards, but as fit for a first-line unit. The orthopedic experts actually have inverted that hump on his back, and have made it bulge out his chest. He carries his head erect, his shoulders are thrown back, and he walks with a confident, easy stride, for they have straightened, by special exercises, the arches of his feet and have given him special shoes to correct any threatening pedal defects.

**Betters the Mind.**

Marvelous as has been the physical change in the man, it can scarcely be compared with his improved mental condition. He was inclined to be dull, listless and careless. The straightening of his body seems to have given him a higher, brighter outlook on life, and there is a snappiness even in his conversation that is impressive. The doctors have made a better citizen as well as a good soldier.

The story of this recruit is one of many cases in which really wonderful results have been obtained in this new branch of the army hospital service, which has been made the experimental center for this science, which aims, figuratively and actually, to "put a man on his feet again."

The treatment does not, however, confine itself merely to correction of foot defects. It covers the subject of joints in any part of the body. A knee, a stiff shoulder and a dislodged vertebra, all come under ministrations.

Foot troubles, of course, send the greatest number of patients to the army doctors. Some estimate that as high as 95 per cent of negroes and 49 per cent of whites called in the draft have foot defects of one kind or another, a considerable percentage of which are likely to become acute under the stress of continued marching.

**Other Valuable Services.**

A year ago the flat-footed recruit was rejected for military service. Today he is accepted and eventually lands in the orthopedic hospital for a course of treatment that it would be almost impossible for him to procure in civil life. One of the patients recently discharged as cured was the son of a wealthy physician, who had been unable to obtain for the boy the very special treatment which he received free as one of Uncle Sam's soldier nephews.

So-called broken arches are built up by massage, various prescribed exercises, development of self-confidence, and last but not least the equipment of the patient with shoes specially built to overcome any pedal defects from which he may be suffering. A special cobbler's shop has been opened in the main ward. Former cobblers among the patients sent to the hospital are now doing the work, and, incidentally, are learning a special branch of their trade that will enable them to demand big wages when they leave the army.

War doctors do another important service for the army in that they can quickly spot the man who may be "stalling" in the hope of getting out of the service. A few of the tests they have devised make the faker quickly convict himself. At the same time they discover many instances of real debility in cases that have aroused the suspicion of others.

Occupation is playing a big part in hastening cures among the more serious cases in these camps. The army physicians have found that a patient is much benefited physically and mentally when he can be given some definite work to offset the monotony of hospital days. Hench some knit socks on bedside looms, others weave baskets, make checker boards and other games, or do other work that their condition will permit.




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Read about the Samson special non-kick starting device in the booklet "Better Farming." We'll send it to you free.

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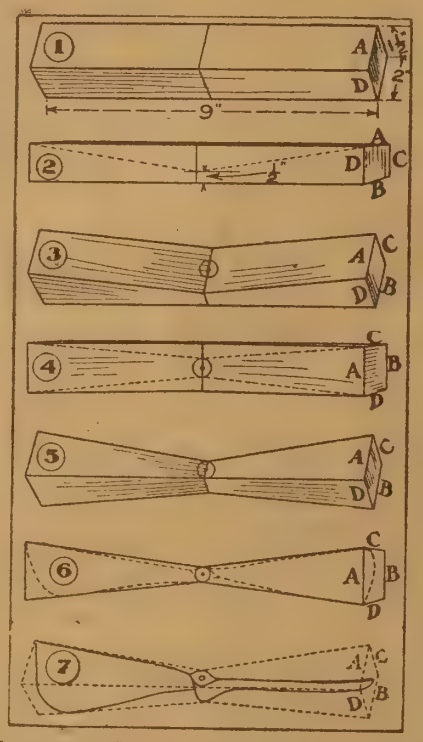

# Handicraft for Boys

By A. NEELY HALL.
(Copyright by A. Neely Hall.)

## MODEL AEROPLANE PROPELLERS AND A MOTOR WINDER.

In the recent article upon model aeroplane construction, lack of space prevented us from going into the matter of propeller making. One-half of the secret of successful model building lies in this work.

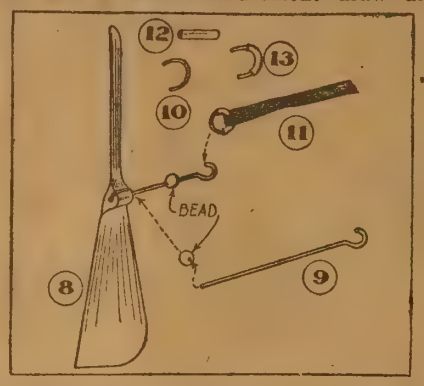
A pair of propellers must be of identical size, but opposites—right-hand and left-hand; that is, the upper end of the right-hand propeller must be shaped to turn to the right, and that of the left-hand propeller to turn to the left, when viewing




the mounted pair from the rear of the model. After preparing one propeller in the manner described below, make the second one with blades turned in the opposite direction.

Figures 1 to 7 show the seven steps in preparing a propeller. Let the "Figure" numbers also represent the "Step" numbers. First of all prepare a propeller "blank" of the dimensions shown in Step 1. This block should be of straight-grained white pine, and be planed up straight and true on all sides.

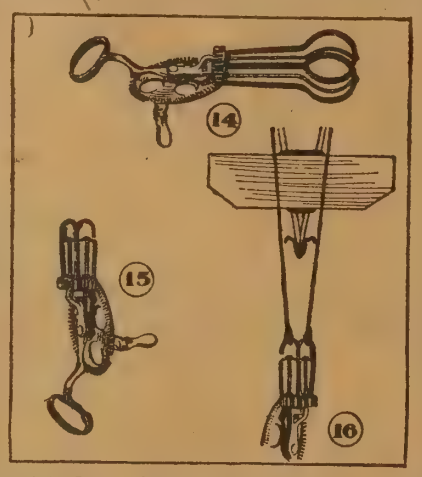
Draw a line around the four faces of the block at the exact center of its length. Then on faces C and D, lay off a distance of one-half inch on the center-line, measuring from the edge of face B, to provide for the thickness of the propeller-hub (Step 2), and from the point representing the end of this measurement draw di-




agonal lines to the upper left and upper right-hand corners (Step 2). Then with a saw cut away the portions above these lines, as shown in Step 3. Mark out the one-half-inch hub upon faces A and B of the block, and bore a small hole through the center for the propeller-shaft to run through (Step 3). Then draw diagonal lines from the ends of the hub center-line to all four corners (Step 4), and saw away the wood above and below these lines (Step 5).

Step 6 consists in laying out the form of the propeller blade upon all four sides and ends of the block, and Step 7 is the final cutting and shaping of the blades, scooping them concave on one side, and carving them convex on the other side. Use a very sharp knife and cut slowly and carefully.

After finishing the cutting, place the propeller at its center upon the edge of your knife, and if it does not balance perfectly, cut away enough of the heavy end




until it does. Smooth up the surfaces with emery-paper, then shellac them.

In the previous article you learned how to bend the propeller shafts out of piano-wire (Figs. 8 and 9). You also learned that the rubber-strand motors are looped over rings bent out of wire (Figs. 10 and 11), and that the rings hook over the propeller-shaft hooks. A short piece of small rubber-tubing should be slipped over the wire (Figs. 12 and 13), to prevent the wire from cutting the rubber strands.

The rubber-strand motors are wound 1000 turns or more, for a flight. The pair must be wound an equal number of times. To simplify this winding, boys take a Dover egg-beater (Fig. 14), and cut off the ends of the wire loops, and the central pivot wires on which the loops turn. Then they bend the cut-off ends of the loops into hooks, punch the loop ends for the pivot wire ends to stick through (Fig. 15), and rivet these to keep the hooks in position. Figure 16 shows how the bow ends of the rubber-strand motors are removed from the framework, and slipped on to the winder hooks, for winding.

## TO REMOVE INK STAINS.

Ink stains can usually be removed from colored fabrics by soaking the stain in either sweet or sour milk; but unless the colors are fast they will probably fade to some extent.

As soon as possible after spilling the ink, the spot should be put in the milk. As the milk becomes discolored it should be poured off and replaced by a fresh supply. It will take a day or two to remove all the stain. If the material is gathered together just above the stain and wrapped tightly with many turns of cord, the milk will not spread and disfigure so large a portion of the garment.

Red ink may be removed by soaking the stain in clear water, to which ammonia has been added. The water will need to be changed several times.

India ink may be removed by washing the material in a warm soap solution.

**Order Prevents Losses.**

If everything were put exactly where it belongs each time it is handled, much loss of time and material would be prevented every year.


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A clubbing arrangement has been made with a number of newspapers in your state whereby we can now offer you a one-year subscription to your local home paper and a one-year subscription to your state family farm paper at a special rate for both.

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brings you all the local news and happenings of the social and commercial life of your community. It gives you the news of the home boys at the front and prints many interesting letters from them.

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| The Morning Olympian, Olympia, Wash., and The Washington Farmer | $4.00 |
| The Weekly Recorder, Olympia, Wash., and The Washington Farmer | $1.00 |
| Puyallup Valley Tribune, Puyallup, Wash., and The Washington Farmer | $1.50 |
| The South Bend Journal, South Bend, Wash., and The Washington Farmer | $2.15 |
| Sumas News-Advocate, Sumas, Wash., and The Washington Farmer | $1.50 |
| Walla Walla Bulletin, Walla Walla, Wash., and The Washington Farmer | $5.00 |
| White Salmon Enterprise, White Salmon, Wn., and The Washington Farmer | $1.50 |
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## Just What You Want

may be offered in this weeks' Want Ads at a bargain. It's a good idea to look them over every week.

## Now Commands Armies.



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Would you recognize in the above the great General Pershing, in command of the expeditionary forces in France? It is he at the age of six years.

## Girls From France to Enter Our Universities



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Sixty-two young French girls, energetic and ambitious to receive an American education, arrived at an Atlantic port not very long ago. They are the first of a group of 230 girls chosen for scholarships at the various American universities. They are to study at American colleges so that, when the war is over, they may return to their homes in France with American educational ideals, and teach them there among their own people. The people of France, as well as the officials, are very enthusiastic about the plan.

## Cited in Army Orders.




Miss Morgan, vice president of the American committee for relief of devastated regions of France, has been cited by General Degoutee, commanding the Sixth French army, for having for more than a year "consecrated herself with intelligent activity and admirable devotion to restoring French firesides devastated by the enemy."

## A Strangle Hold




—New York Evening Telegram.

## The Truth of It




—Washington Times.

## Boy Scouts Show Grown-Ups How to Raise Corn

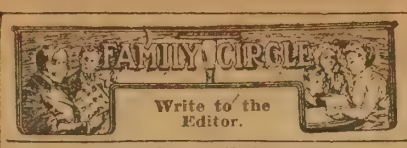



The boy scouts of Washington, D. C., not only have made two ears of corn grow where one grew before, in the fields about the nation's capital, but they have made as many as five, six and seven ears grow where none grew before. Enlisting regulars in the great food conservation army of the food administration, they planned and planted their crop unaided.

A perfect swarm of small persons in khaki, replicas of their older brothers across the sea, are flocking into the corn fields and stripping the tall stalks of their juicy burdens.

The boy scout food administration regulars are away up and "over the top," when it comes to growing corn.

Visitors from all over the United States have wondered all spring and summer about the beautiful corn crop—who planted it, whose was it, and who was going to take it away.




ALICE W. BARLAND,
Editorial Contributor.

# Preparing the Way

## To Attend School a Little Later

By MRS. ALVARA P. WILLIAMS.

THIRD ARTICLE.

If there is one thing dear to any heart, it is the daughter, who for many reasons must give up or at least defer going away from home, who goes about it with a stiff upper lip and does not slump. And most fascinating to me are the means these stay-at-homes may use in their endeavor to keep abreast of those with more advantages within arms' reach.

When I was a child, I lived too far from school to go alone and as a result, was educated at home until I entered high school. I can still remember my semi-annual visits to the office of the superintendent of schools, when I climbed up his big ladder and was pushed around the book-lined walls to pick out for myself copies of the free text books to take home and study. A fascinating room it was to me, even with the background of our well-assorted library at home. The most startling feature of this system of education was that when, after a schooling of an hour or two a day for several years at home, I entered high school. I had a better knowledge of English and American literature, fiction, Latin, and science in general, than the average high school senior, but I was hopelessly out of my depth for a year or so in mathematics and history.

I quote this bit of personal experience to show what may be accomplished by a very little home study. And if this was achieved with grade school subjects, how much more could be done by any one with the foundations properly learned, simply building upon a grammar school education.

This is not theory, but a proven fact, and the fact that school and government authorities have spent so much time and money to perfect every means of helping home students, shows how valuable the results must be. Comparatively few years ago, we began to hear about university extension courses which might be carried on by correspondence. Gradually the idea has broadened until now the government furnishes outlines and help for home courses, and many public schools give credit for home work which is far from being the old type of "book learning."

Now let us suppose that you are a typical "Ruth" as described before wanting to get away for education, change, broader views of life, and so on. And let us see how under present conditions it may be most desirable for many to stay at home for a year or two, distasteful as that may seem. Aside from more or less patriotic reasons why your help may be needed just now in the country, there are the considerations of excessively high prices of food, clothing and shelter in cities just now and indeed difficulty in many cities in finding suitable living quarters, crowded as they are with soldiers' families, shipyard workers and so on. If you had seen, as I have, soldiers walking up and down one street after another, ringing every doorbell and asking for any information about any kind of a place to sleep, anywhere, you would realize what advantage there is in staying away if you can.

If I were in your place, living in one of these western states, under present war conditions, here is what I would plan for a ear's work supposing I were ready to enter high school. First of all, if I lived in or near a section which has any harvesting or canning of any kind to be done, I would work at that as late in the fall as necessary. If at home, I would try to have a definite arrangement for at least small wages, allowing, of course, for board. If conditions were such that I must give my services at home, I would bargain for a vacation of an equal length of time away from home, after harvest is over—a month or two, perhaps. Never mind if that seems to occupy your time till the first of the year, without ever starting that course of home study.

Can you guess how I'd spend this vacation? Not in play entirely, not visiting, at all. I would, through the secretary of a city Y. W. C. A., as the most reliable agency, get a position doing housework in the city, for a small family where the work would not be too hard or hours too confining. Present day wages are such that at the end of two months you would have at least 40 or 50 dollars, maybe more, besides much experience. Why do this? First, a complete change of scene and work will prepare you better for a few months' hard work with books. Second, you will earn for yourself the wherewithal for books and any other supplies you may desire before the winter is over—a few music lessons if you can get them. Third, you will learn the ways of the city in the home where you work, and will save yourself much trouble if you go later to work and study at the same time. Fourth, you will have a valuable lesson in keeping your aim of a winter's learning clearly before you through all your varied work. Remember the arguments put forth by all government and school officials, to urge pupils to stay in school. I do not consider that the course I am suggesting is contrary to this advice, but merely preferable for some temporarily. The final aim must be clear. Fifth, you will have some leisure time, and opportunity to obtain personally from schools and libraries much help as to outlines of your course of study, references, etc., which you would find it hard to obtain by mail. You may even have a chance to start one or more of your subjects in night school, and in this way get most valuable ideas of how to continue such a course by yourself later. You should be able, before you leave the city, to map out your entire plan of action up to the next school year, with the help any school or library officials are always glad to give.

Then, when the time you have set for yourself is up, go. Don't be persuaded to stay on at housework, or don't spend your money for clothes and pleasure. Your purpose should be definite enough to keep you from this, and the things you can do at home, valuable enough to influence you. And I do hope that every family thus situated can spare its daughter for a month or two, as I thoroughly believe this part of the year's work is most valuable to her and to you. Think of the fresh life she can bring back to you, aside from her own new ideas.

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In an early issue of the Farmer, Mrs. Williams will continue her discussion on how a girl may best prepare herself to attend school away from home.

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# Answers to Prayer

By IDA C. YOUNG.

In a large percentage of cases God does not answer prayer and the reason for this is that so very few people really know how to pray effectively. We look up the passage "Whatsoever thing ye desire, when ye pray ask believing that ye receive and ye shall have it." Then we present our petition and straightway proceed to cut ourselves from any and all good things that a kind and beneficent God is ever ready and waiting to bestow upon us.

This is because we do not understand that our minds and bodies must work in unison with our prayer. We must carry in our minds pictures of fulfillment, and we must persistently and everlastingly do unto others as we would have them do unto us and do it cheerfully; not merely a semblance of cheerfulness, but a deep, sweet good nature in which there exists no trace of worry, irritation, envy or rebellion.

Who has not prayed for a good crop and then let his imagination picture his hay ruined by rain, and his wheat shriveled by drouth? We pray for safety and see with our minds visions of wrecks, illness and disaster. Then when these visions materialize we wonder why the hand of God is so hard upon us.

It matters not whether our imagination busies itself with ourselves or others, the result is very much the same. The man who broods over revenge brings upon himself, or loved ones, sure disaster; while the same man, with his mind continually serene and sweet and busied with active and successful planning, can accomplish all things.

This is especially true if he is careful in the coordination of his body; that is, the doing to the very best of his ability any and all work that lies nearest at hand. Even though it may seem to lead directly away from the thing prayed for, he will find in the end that only in this way comes the answer to prayer and the blue bird of happiness comes singing and winging its way into human life.

There is no work so humble that it can not be done a little better, a little more sweetly each day of our lives. And when it is so done, patiently and persistently, we shall soon find ourselves mounting upward and onward into higher and larger circles of work, success and usefulness and our prayers become higher and finer, and more quickly answered.





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I Am Public Opinion



All men fear me!

I declare that Uncle Sam shall not go to his knees to beg you to buy his bonds. That is no position for a fighting man. But if you have the money to buy and do not buy, I will make this No Man's Land for you!

I will judge you not by an allegiance expressed in mere words.

I will judge you not by your mad cheers as our boys march away to whatever fate may have in store for them.

I will judge you not by the warmth of the tears you shed over the lists of the dead and the injured that come to us from time to time.

I will judge you not by your uncovered head and solemn mien as our maimed in battle return to our shores for loving care.

But, as wise as I am just, I will judge you by the material aid you give to the fighting men who are facing death that you may live and move and have your being in a world made safe.

I warn you—don't talk patriotism over here unless your money is talking victory Over There.

*I am public opinion!*

*As I judge, all men stand or fall!*

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*This space contributed for the Winning of the War by*

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New York

# PATTERNS

2640-2616—A Pretty Costume—Waist 2640 cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. The skirt 2616 is cut in 6 sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. It will require about 6 1-4 yards of 40-inch material for the entire dress for a 38-inch size. Width at lower edge of skirt is about 2 yards, with plaits drawn out. Two separate patterns, 10 cents for each pattern.

2633—A Smart Junior Suit—Cut in 3 sizes: 12, 14 and 16 years. Size 14 requires 5 yards of 36-inch material. Price 10 cents.

2638—Girl's Dress—Cut in 5 sizes: 4, 6, 8, 10 and 12 years. Size 10 requires 3 1-2 yards of 36-inch material. Price, 10 cents.

2631—Lady's dress in tunic style. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 38 requires 5 yards of 44-inch material. Width of skirt at lower edge is about 2 yards. Price, 10 cents.

2642—Ladies' Apron—Cut in 4 sizes: Small, 32-34; medium, 36-38; large, 40-42; and extra large, 44-46 inches bust measure. Size medium will require 2 1-2 yards of 36-inch material. Price, 10 cents.

2249—A Simple Coat and Cap for the Little One—The pattern includes coat and cap. Cut in 4 sizes: 1, 2, 3 and 4 years. Size 2 requires 2 yards of 36-inch material for the coat, and 5-8 yard for the cap. Price, 10 cents.

2629—"New sleeves for old." Cut in 4 sizes: Small, for a 10-inch arm; medium, 12-inch; large, 14-inch, and extra large, 16-inch. Size medium will require 1 yard for style No. 1, 7-8 yard for No. 2, and 7-8 yard for No. 3. Price, 10 cents.

2255—Girl's Dress—Cut in 4 sizes: 4, 6, 8 and 10 years. Size 6 requires 1 1-4 yards for the guimpe, and 3 3-4 yards for the dress, of 27-inch material. Price, 10 cents.

2207—Ladies' House Dress—Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires for a medium size, 6 3-4 yards of 44-inch material. The skirt measures 2 2-3 yards at the foot, with plaits drawn out. Price, 10 cents.

2425—Ladies' Waist—Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 2 1-2 yards of 36-inch material. Price, 10 cents.

2263—Dress for Misses and Small Women—Cut in 3 sizes: 16, 18 and 20 years. Size 18 requires 5 1-4 yards of 44-inch material. The skirt measures about 2 yards at the foot. Price, 10 cents.

2464—Ladies' Skirt—Cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. Size 24 will require 3 1-4 yards of 36-inch material. The skirt measures 2 yards at the foot. Price, 10 cents.




Please fill in this order and mail with remittance to:
PATTERN DEPT., PACIFIC NORTHWEST FARM TRIO, Spokane, Wash.

Enclosed find.....cents for which send me the following:

Pattern No.....Size,..... Pattern No.....Size.....

Pattern No.....Size..... Pattern No.....Size.....

Name .....

Postoffice ..... State .....

R. F. D. No. ..... Box No. ..... Street No. .....

Be sure to give the pattern number and the correct size.

## MAY BUY MONTH'S SUPPLY OF SUGAR.

Effective on October 1, retail dealers are allowed to sell at one time a month's supply of sugar to the consumer. This supply, of course, is based on two pounds per person per month. For example, if there are five in the family they may buy 10 pounds at one time, but are not entitled to buy another supply until a month has elapsed.

This supersedes the rule allowing sale of two pounds to town trade and five pounds to the country.

The change is not made because there is any less need of conservation in sugar. The domestic canning demand, however, will soon decrease and the available spot stocks of sugar will make possible this change as a convenience to both the consumers and the retailers.

In order to supply our army and allies with the sugar that is absolutely essential in winning the war we must not exceed the two pounds per person per month allowance.

## RED CROSS TO HAVE DAIRY PLANT.

Fresh milk will be supplied to 20,000 sick and wounded soldiers in France by 1000 cows which the French government has agreed to loan to the American Red Cross, according to an announcement just issued by the Red Cross. With these cows the Red Cross will establish a model experimental dairy plant at the largest American army hospital in France, $5000 having been set aside for the inauguration of the plant. As the dairy will be operated by convalescent soldiers, the cost of maintenance will be comparatively small. It is pointed out, however, that cost is not important, as fresh, pure milk is absolutely essential in the proper diet of the cases at the hospitals.

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# MUGGSY'S PREMATURE FOURTH PREVENTS A COLLISION






My Dear Corner Boys and Girls: When the judging time comes it would make the work much easier if I could find on every letter your age. Just put it at the end of the letter and not in a sentence. Even though you have told me how old you are in other letters, please put it at the end of every letter you write. This will save me from looking up each one of you, over and over. Will you do that for me? I know you will if you can remember. Lovingly, AUNT NELLIE.

Elizabeth Brown of Delrio believes her birthday is unlucky because she can not find a twin. It comes on August 26, and she is 13 years old. This summer, her mother, two sisters and two brothers went to her aunt's ranch in Idaho to can strawberries. Elizabeth stayed at home to keep house for father. She wishes Sally Garry would write again because she likes her letters so well. She wants the girl who wrote from Delrio to visit the Corner again.

One of our cousins, Anna Entel, wishes the war would quit, so she is doing all she possibly can to help win. She has a war saving stamp. Anna lives at Colton, and was 15 years old May 27. She would like to hear from her twin.

It is a great treat to go to the country, Cousin Alice Reinhold of Davenport, thinks. She writes and tells us about the good times she had when she went this summer. While she was there a snake was killed and so some of the girls had a regular funeral for the snake, picked flowers for the grave, made a coffin for it, and let the poor thing rest in peace. Alice had a good time when she visited Spokane, too. She was 12 years old June 12.

The first thing that Cousin Teresa Germont of Greenacres does when the Farmer comes is to turn right to the Children's corner and read every single letter. Teresa has a little pet calf and 10 little chickens. When they see Teresa, they always come running after her.

Henry Yoss of Whitcomb, doesn't see why so few boys write to the Corner. He turns to the Corner the first thing whenever the Farmer comes. Henry has four war savings stamps and belongs to the Junior and Senior Red Cross.

Herding cows, pulling weeds, watering gardens and helping dad haul hay are the things Lila Warner of Wallula did to earn her shift stamps. Lila lives by the Walla Walla river on a 140-acre farm. This summer they made three trips after fruit in their car. Lila was 12 years old April 7, and she would like to get some letters from Washington cousins.

Lela Thorpe's pet cat comes in the house every morning, climbs up on Lela's chair and meows for his milk. Lela knows some of the girls who write to the Corner. She would like to hear from a cousin who was 11 years old last May 22, because she was herself. Lela lives at Edwall and has knitted 12 afghan squares and has two war savings stamps.

January 16 is the day that Minnie Cardwell is looking forward to, because that is her birthday and she will be 10 years old. Minnie lives at Harrington. She has a dog named Buster. She wishes the cousins and Aunt Nellie good luck.

A cousin, whose last name is Miller, and who lives at Aladdin, wrote a nice letter to the Corner, but forgot to give his or her first name. This cousin was 10 years old July 25, is in the sixth grade and has a brother, Paul, in the army.

At a basket social held at the schoolhouse, $95 was made and turned over to the Red Cross, writes Dorothy Phinney of St. John. Dorothy enjoys reading the letters. She was 15 years old August 5, and is going to high school this year. She wishes her twin would write to her, and she would like to correspond with any of the girls of the Corner.

Vacation was a great pleasure to one of the little cousins, Irma Joyner, of Deer Park, because she likes being outdoors so much. Irma lives on an 80-acre farm and they keep 20 head of cattle and milk 12 cows. Irma was 7 years old January 29. She would rather live in the country than in the city.

A large farm near St. John is Esther Phinney's home. Esther is going to write to the Corner again. There are two horses on the farm that she can ride. She was 13 years old November 10. Has she a twin?

Papa and mama had an accident with the car and papa's foot was broken, writes Cousin Ella Brown of Miles. They have six horses, three dozen chickens and eight pigs on their farm.

Callie is the name of the cow that Violet Howell milks every morning and night. Two cousins and one uncle are serving Uncle Sam. Violet lives on a 71-acre farm at Farmington. A cat named Jim is one of her pets.

Paul Craddock's grandfather came as far west as the Columbia river in 1885. Paul lives at Paterson, with his uncle. He is in the sixth grade at school, was 13 June 29, and wants to know if he has a twin.

Washing and drying the dishes is part of the work that Mary Foster of Pomeroy does every day. Mary was 12 years old September 3. For a pet she has a little black chicken. She has a big brother and a little sister.

Violet Wheeler has to ride 11 miles every day in a bus to school. Violet lives at Blewett, in a small lumber camp. She will be 13 next April 11, and would like to correspond with her twin or with some other Corner boy or girl.

Any letters which she receives from cousins will be gladly answered by Winnie Davenport of Pomeroy. Winnie likes to read about what the other boys and girls are doing. She was 12 years old April 10. Has she a twin?

One cousin is going to have a birthday pretty soon, Frankie Baldwin, of La Crosse, who will be 13 years old November 14. Frankie was glad to get a letter from Cousin Sally Garry. Frankie was sick in bed for two weeks, but is better now and we are glad. She wants some of the cousins to write to her.

Evelyn McKinney likes to read the Corner letters. Evelyn's address is R. F. D., Box 59, Rockford, Wash., and she was 10 years old July 11. She has one brother and one sister.

Hazel Haydon's home is in Spokane, but she spent the summer with her Aunt Nellie and Uncle Arthur on a big 360-acre ranch at Republic and it was while there that she wrote to us. Uncle Arthur has 18 head of cattle, three pigs, three cats, 30 little chickens and 22 big ones. At home, Hazel has a pet dog, Spot. She was 10 years old, September 30, and she wants her twin to write to her.

Effie Luddington would write to any of the cousins if they would write to her first, but she doesn't know which one to write to. Effie, who lives at Baird, goes on horseback after the cows and to the mail box for the mail. She found a little chicken with a broken leg, and is going to make a pet of it.

Eight little goslings, seven little ducks, some chickens, and Fanny, the dog, are Erma Broyles' pets. Erma lives on a farm near Penawawa, and goes to a country school. She hopes the cousins will write to her sometimes. Erma was 9 February 25.

Jewel Howard of Waitsburg milks two cows. She can knit and so can her little 6-year-old brother. Jewel is 9 November 14, and she wants to hear from her twin.

One of Mabel Stevens' brothers enlisted in the army in 1916, and is now in Mexico. Mabel lives on a 400-acre ranch near Okanogan now, but she used to live in Canada. She will be 13 September 23.

Cousin Evelyn Engstrom of Aladdin spent the summer on a ranch. She used to live in town. Evelyn was 11 years old March 25. She belongs to the Red Cross and has $4 worth of war savings stamps. The children in her room at school pieced a quilt for the Red Cross.

"The state highway is being built past our house," writes Ada Warner, of Wallula. Ada will be 11 years old January 3. She has five sisters and one brother, and they have eight pet lambs, one of which belongs to Ada. Ada has a thrift card with seven thrift stamps in it, and has money enough to buy seven more.

**A Letter From Springdale.**

Dear Aunt Nellie: May I join the Corner? I have been reading the letters and enjoy them very much. I also read "The Trappers of the Ozarks," and thought it an interesting story. I am 13 years old and am in the sixth grade. My birthday is October 25. Have I a twin? If so I wish he or she would write to me. I live on an 80-acre farm, 40 of which is cleared and 40 covered with timber. We have 27 head of cattle and two work-horses. The horses' names are Babe and Bill. I have seven brothers and four sisters. I think two of my brothers will have to go and fight for Uncle Sam.—Dorothy Canary, Springdale, Wash.




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**Both Drivers Level When Plowing**

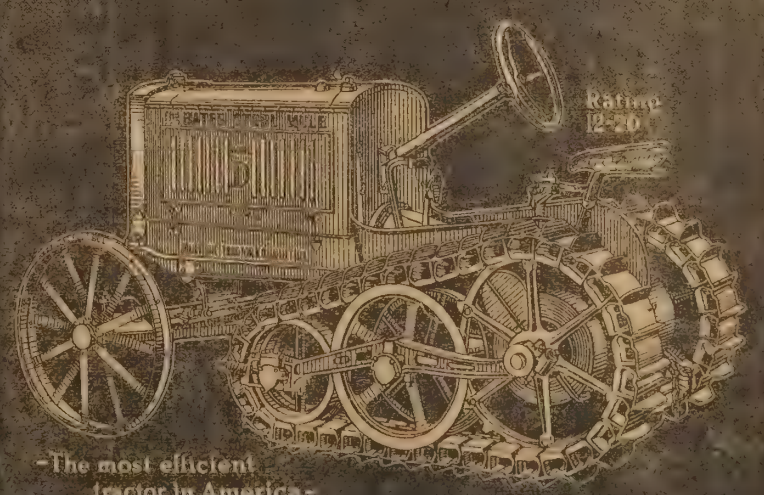
When plowing both drivers run level on the unplowed ground and one front wheel runs in the furrow for self steering. This keeps the tractor standing straight, and eliminates any of the side thrust on bearings that is always present in tractors where they *lean over* because of a driver running in the furrow.

Perfect flexibility; unit construction of working parts; hardened cut steel transmission gears; Timken bearings; heavy duty valve-in-head kerosene motor; and crawlers that double the usefulness of the tractor are some of the additional features of superiority.

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# The Disk in Farming

**The following paragraphs are taken from a recent document issued by the government, entitled "Hints From a Practical Farmer," designed especially for settlers on the projects of the United States reclamation service, by I. D. O'Donnell, supervisor of irrigation.**

Ordinarily I would begin with the plow, for plowing is generally understood to be the first important operation in preparation of the fields for seeding. I am, however, starting with the disk, for the reason that the use of this implement on the irrigated farm—on any farm—is very important as a preparatory step to plowing.

For irrigation farming it is important that the soil be handled in such a manner that it will be kept in a physical condition favorable to use by plants of the moisture in the soil. When plowing time comes on the irrigated farm the soil dries out on top very rapidly unless preventive measures be taken. If the plowing is started when the soil is just right, it is likely to be breaking up in a cloddy condition before the field is finished, having air spaces where a good, compact seed bed should be. Double disking the ground ahead of the plowing will thoroughly pulverize the surface and effectively prevent drying out of the soil; also, this pulverized surface is turned by the plow into the bottom of the furrow, making a perfect contact between the bottom of the furrow and soil turned by the plow. While this disking ahead of the plow appears to be extra work, it is really labor saved, as much less work is required to bring the plowed ground into good condition for seeding, and the farmer may be positive that the all-important seed and root bed is in first-class condition.

A similar use of the disk following the grain binder prepares the ground for fall plowing, retaining the moisture in the soil until the grain is removed for threshing, and opportunity given for plowing.

Following the plow the disk may be used to good advantage in two ways. Set at an angle it will pulverize the surface, and followed by the harrow prepares a good top to the seed bed. Set to run straight or nearly so it acts as a packer to settle freshly plowed ground which is soon to be seeded.

The disk is also a labor saver in putting in crops on land that has been in cultivated crops the year before. Here the farmer gets the advantage of crop rotation. By going from a cultivated crop to a small grain crop he is enabled to prepare the land in the spring with the disk for seeding, which is a quick and easy operation as compared with the plow.

If stubble ground is not to be fall-plowed it should at least be gone over with the disk, turning under the scattered grain and weed seed which will be sprouted by fall rains and later winter killed. Otherwise these seed would volunteer in the next year's crop and cause trouble.

As outlined, the disk has its use, but it should not be substituted for the plow. It is a surface worker and does fine execution both before and after the plow. Where it is necessary to turn the soil to a considerable depth the plow must be used.

Cross disking does not give as satisfactory results as double disking or lapping the disk one-half its width.

A number of companies manufacture disks, for which they make various claims. All disks work on the same principle. An important item is the size of the disk. This implement operates with a combined cutting and revolving motion and the smaller in diameter the disk the more efficient it is in pulverizing the soil. From this it may be judged that preference should be given to the smaller disk. A 14-inch diameter gives good all-around service. The width of the disk will depend upon the amount of horsepower available. As this implement is worked at a time when speed is important it is well to get the widest size consistent with the available horsepower.

Keep the disk sharp; it is impossible to get good work out of this implement when it is dull.

### Next Year Looms Up.

The work of this season is about over and the problems of how to produce the most food and save it next year are the things to be considered now.

STATEMENT OF THE OWNERSHIP, MANagement, circulation, etc., required by the act of congress of August 24, 1912, of The Washington Farmer, published weekly at Spokane, Washington, for October 1, 1918.

State of Washington, county of Spokane, ss.

Before me, a notary public in and for the state and county aforesaid, personally appeared J. F. Young, who, having been duly sworn according to law, deposes and says that he is the vice president of The Washington Farmer, and that the following, is to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor and business managers are:

Publisher, Cowles Publishing Company, Spokane, Washington; editor, ——; managing editor, Edwin A. Smith, Spokane, Washington; business managers, none.

2. That the owners are: (Give names and addresses of individual owners, or, if a corporation, give its name and the names and addresses of stockholders owning or holding 1 per cent or more of the total amount of stock.) Cowles Publishing Company (a corporation), Spokane, Washington; W. H. Cowles, Spokane, Washington; H. C. Cowles, Spokane, Washington; J. F. Young, Spokane, Washington; F. J. Whaley, Spokane, Washington.

3. That the known bondholders, mortgagees and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages or other securities are: (If there are none, so state.) none.

4. That the two paragraphs next above, giving the names of the owners, stockholders and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company, but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stock holders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association or corporation has any interest, direct or indirect, in the said stock, bonds or other securities than as so stated by him.

COWLES PUBLISHING COMPANY,
By J. F. YOUNG, Vice Pres.

Sworn to and subscribed before me this 26th day of September, 1918.
(Seal) F. J. WHALEY,
(My commission expires Oct. 17, 1919.)

# Rush to Cities

## In Australia as Well as America

At the present time the bulk of the population in Australia is confined to the five big cities on the coast, and these cities are rapidly growing larger and larger, says the Pastoral Review. Although huge flats are erected and immediately let, and building, especially in the suburbs of Sydney and Melbourne, is rapidly being pushed, it is hard to find a vacant house or cottage. If the official statistics are studied, Australia has only increased its population by 100,000 souls in the last five years, therefore there can be no doubt but what the population is leaving the country and going to the towns. And it is not to be wondered at. Our "democratic" governments have put handicap upon handicap on our producers, and cater only for the big bulk votes of the cities. The result is that our farmers are made the galley slaves of the big town unions, and have to slave month after month with a very poor return to themselves to keep the city men in luxury and higher wages. Now they are having the last straw put on their backs by the fixing of maximum prices for their meat. Ignoring all history where price-fixing has ever brought chaos, our "national" government have indulged in this folly. If they expect to get labor votes by it they will be grievously disappointed, and they will lose votes which put them into power at the last election. As has been done in true democratic countries, the price fixed should be a minimum one, so as to encourage the producer to enormously increase his supply, then the law of supply and demand will bring down the price. Fixing a maximum price means under-supply and starvation. Fixing a high minimum means ample supply and plenty.

### Seed Has Been Saved.

There probably never was a year before when so much seed of various kinds of agricultural crops was saved on the farms or in the gardens, and this only goes to indicate further the widespread growth of the conservation idea.

If the same determination and system were employed in carrying out the normal activities of normal times as are absolutely necessary in carrying out the abnormal activities of abnormal war times, the wealth of the world in material and spiritual things would be multiplied many fold.


## The Business End of a JERSEY

THE business end of a Jersey is the udder. It's a money-making machine. One of the marvels of nature. Automatic and sure! The Jersey does not adulterate her own milk. She gets the utmost nourishment from the least feed. She gives it to you in milk richer in butter fat than that produced by any other breed. Hundreds of farmers who started with one Jersey now have herds bringing them a continuous income that makes them independent of crop conditions. The facts about Jerseys will surprise you. We send them FREE.

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## Golden Glows Chief 61460

One of two gold medal Jersey bulls west of New England states. Bred by us. Two of his sons in service in our herd. A few animals, all ages, both sexes, for sale.

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## All High Record Blood

Bull calf out of Lucy of P. V., full sister to St. Mawes Susie; 936 lbs. butter in a year; to St. Mawes Blossom, 823 lbs., and to Susie's Twin Maiden, 642 lbs. Sire, Poppy's St. Mawes, son of St. Mawes Poppy, 1120 lbs.

ED CARY, Carlton, Ore.
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## Doerfler Farm Jerseys

Have largest herd average in the world considering size. Entire herd of eleven head average 599.42 fat. Herd headed by Gertie's Poppy's St. Mawes. The Cary breeding is our standard.

See us at the state fair.

F. A. DOERFLER, Silverton, Ore.
Phone 54 Silverton or 43F24 Salem.

## Anoka Farm Jerseys

We have some choice young bulls up to six months old for sale, whose sire has a 714-lb. dam and 1120 lb. granddam. St. Mawes breeding. The Best in the West. Prices very reasonable. Address

R. B. SEELY,
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## Register of Merit Cows

Three registered Jersey cows, with good register of merit records. Two are on test again and will increase their records; all in class AA. Two are bred to the great sire FOXHALL'S FERN LAD. Come and see them or write for prices and full particulars.

FOX BROS. Silverton, Ore.

## LYNDEN JERSEY FARM

Herd sire son of Fororio's Olindes Pogis, of Hood Farm and St. Mawes of Lynden, whose dam and granddam have records up to nearly 1000 lbs. of butter. Young bulls out of the Hood Farm bull for sale. Cows under official test and blue ribbon herd at Whitman county fair, 1917. You will find both type and production in the herd. For information write to

P. MEENDERINCH, Lynden, Wash.

## Ready for Service

Young bulls of Golden Glow's Chief, and King Melia Ann strains, out of register of merit dams. Priced to meet the unfavorable conditions. Write for full particulars and pedigrees.

HENRY STEWART, Albany, Ore.

## Desirable Young Bulls

Sons of Sultan Star, whose dam, now on official test, will qualify for gold medal, with over 800 lbs. of butter. His sire's dam, Knight Star, has record of 865 lbs. butter.

Priced right.

JERSEY HOME DAIRY.
Erickson Bros. Yakima, Wash.

## Dairymen, $75.00

buys your choice of two bull calves, both two months old; solid color, good individuals; out of register of merit dams and by bulls with heavy R. of M. backing. If you are looking for a bargain here it is.

JOHN B. STUMP & SON, Monmouth, Ore.

## Who Wants This Bull?

A double grandson of Kadia F., world's Jersey milk record, for senior 4-year-old, 16,191 lbs. He is also a grandson of Holger and Engineer's Bluster. Because slightly broken colored, will be sold cheap. Other good young bulls and a few heifers and cows, same line of breeding.

N. H. SMITH, Oregon City, Ore.

## Goldie's Nehalem Beauty

won grand champion of the Jersey breed for production, 1917. Her record, 80 per cent basis, 1131 lbs. butter as 4-year-old. We have two bull calves sired by her son. Their dam's yearling records: 492 lbs. (average per cent fat, 6.08) and 433 lbs. butter. Both have been grand champions in show ring.

CLIFFORD F. REID.
Wilcox Bldg., Portland, Ore.

## Jersey Bull for Sale

I am offering at a sacrifice my young herd bull, dropped December 15, 1916. Has blood of Golden Glow's Chief and Majesty's Togo. None better anywhere. Write

E. F. MARYATT, Grandview, Wash.

## Edgewater Farm, Breeders

Foundation stock is from most noted Island Jersey families—Golden Lad, Golden Jolly, Oxford Lad, Old Raleigh—names that stand for high production and showring winners as well.

E. T. SMITH. Myrtle Creek, Ore.

## Meridian Dairy and Fruit Farm

Oldest Jersey herd in northwest Washington. Young stock for sale, both sexes, from good, producing dams. Herd headed by Kolander's Eminent 148256. A very fine bunch of young stock, both sexes, for sale.

B. C. CRABTREE, Lynden, Wash.

## Luckiamute Farm

Register of Merit A. J. C. C. Jerseys. Home of Octavia's Duke breeding. Daughters test as high as 7.53, second highest in U. S. A few good young bulls for sale.

FRANK LAUGHARY & SON,
MONMOUTH, ORE.

## Where Can You Beat It?

Young bull, ready for service. Sire's dam, St. Mawes Poppy, 1120 lbs. 35 per cent butter, or 1100 lbs. 80 per cent, in a year. Is 75 per cent same blood as Poppy's Grace, that has recently finished year's test as junior 2-year-old, with 601 lbs. 35 per cent butter. His dam and dam's dam both register of merit cows. Priced at $250 for quick sale.

F. E. LYNN
Perrydale, Ore.

## Must Be Sold

Bull calf dropped July 26, 1918. Sire, St. Mawes Koffee Violet Lad, whose dam's official record is 777 lbs. fat, 914 lbs. 85 per cent butter, 971 lbs. 80 per cent. A show bull, son of Rosaire Olga Lad, sire of 27 R. of M. daughters. Calf's dam a register of merit cow. Only $75 if taken at once.

WARD L. HULL, Ballston, Ore.

## Rose Lawn Jerseys

The Island bull (Rosy's Jolly Golden Fine 135028) at head of herd. Bulls for sale out of Register of Merit and high-testing dams. Bred right, of right type; priced right.

S. H. KAYLER
Twin Falls, Idaho.

## WAIKIKI FARM

Register of Merit Jerseys. Largest Jersey herd in the northwest. Young stock for sale.

IRA P. WHITNEY, Manager.
Route 7, Spokane, Wash.

## Ashnook Farm Jerseys

Young bulls by Silver Chimes of S. B., whose first 6 daughters average 710 lbs. 80 per cent butter. A few good cows and heifers for sale.

DEL PERKINS, Carlton, Ore.

## Jersey Home Jerseys

Young bull out of Olalla 2d, daughter of Olalla (806.25 lbs. butter as junior 3-year-old). Bull's sire, St. Mawes Prince, by Poppy's St. Mawes, and out of Gertie's Fern Princess (842.5 lbs. butter), both 80 per cent. Also other good young bulls.

THOMAS WILLIAMS, Forest Grove, Ore.

## St. Mawes—Rinda Lad

The two most popular strains of Jerseys in the northwest. Young bulls from register of merit cows for sale.

G. G. HEWITT, Monmouth, Ore.

## Jersey Farm Dairy

Peter Mouw's Poland China hogs, Cotswold sheep, White Leghorn and Buff Orpington poultry, carefully bred, great foundation stock.

E. S. PELOT, R. F. D. 5, Idaho Falls, Ida.

## Three Prize-Winning Herefords



The three Hereford bulls shown in the picture are from the prize-winning herd of the Curtice Cattle company of Calgary, Alberta, that have been shown at Spokane, Yakima and Salem, making a practical clean sweep at each place. From left to right they are: Beau Perfection 48, grand champion at nine fairs in Canada, before crossing the line. Beau Donald 92, undefeated in any Canadian show or at those named above. Beau Donald 215, sired by Beau Donald 192, and junior champion of Canada in 1918. They were all bred by the company that owns them.

### DECREASE IN HOGS AND CATTLE.

According to a recent report of County Agent A. W. Holland of Adams county, Wash., the scarcity of feed is causing the county to be depleted of hogs and cattle. Popular opinion places the number of hogs in Adams county at 50 per cent of last year and a rapid decrease. Hogs and cattle are being thrown on the market in a very poor condition. Many are selling their breeding stock.

A serious hay shortage and the high price of feed is going to seriously damage the live stock interests of Okanogan county, reports County Agent W. A. Holt. Many are contemplating the shipment of all classes of live stock, fat or unfinished, with the result that in the years to come it will be necessary to repeat the building up of the live stock business as it has been done in the past.

### FORM LIVE STOCK ASSOCIATION

A live stock association with 24 members was recently formed in Pend Oreille county. The main purpose of this organization is to market cooperatively the cattle of the county, to standardize and improve all the live stock of the county.

### CAVALIER GALE MAKES RECORD.

"Cavalier Gale" is the name of the trotter that made a world's record racing in hopples at the Washington State fair, instead of "Baron Gale," as published in a recent issue of The Washington Farmer.

### WAIT FOR RAIN TO SOW.

In many parts of the northwest the farmers have been compelled to wait long and patiently for rain before sowing their fall crops.

## HOLSTEIN CATTLE


**SOME CHOICE OFFERINGS FROM WORLD'S RECORD STOCK**

Don't just buy Holsteins; buy Von Heim High-Testing Holsteins that give both milk and butter and that make you profits in the increase of your herd. Why not your next herd sire a Von Heim Holstein? We have a few fine young bulls at the right prices. Photos, pedigrees and prices on request.



M. J. WALTHER SUPT.

**VON HEIM FARM**

KENT, WASH.

HOME of HIGH-TESTING HEALTHY HOLSTEINS

**Registered Holstein Heifer**

for sale; also May and June farrowed O. I. C. pigs, either sex, from matured sows, with pedigree; by a son from a grand champion sow. Also 18-month-old sows to farrow second litter this fall.

E. C. SCHUMACHER, R. 1, Granger, Wash.

**Holsteins and Berkshires**

All ages for sale.

HUGH NISBET, Chimacum, Wash.

**HOLSTEINS**

Well bred young bulls for sale.

THOS. CARMICHAEL, Gaston, Ore.

**Registered Holsteins**

Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.

H. R. BOOMER, New Plymouth, Idaho.


## HEREFORD CATTLE


**Highland Stock Farm**

offers for sale Hereford bulls, 1 or 2 years old. One or a carload.

PLATT BROS. Genesee, Idaho.


## SHEEP


**A. J. KNOLLIN**

POCATELLO, IDAHO.

Breeder of Pure-Bred Live Stock.

Established flocks of pure-bred sheep—Rambouillets, Cotswolds, Lincolns, Shropshires, Oxfords, Hampshires, Romneys.

RAMS FOR 1918 SERVICE FOR SALE,

Also a few ewes.

Also breeder of Shorthofn cattle, Belgian horses and Berkshire hogs.

**YEARLING RAMS**

Get some new blood from our eastern bred stock. Price $30 each.

J. J. DOERFLER, Silverton, Ore.

**Romneys, Lincoln, Corriedale**

AND HAMPSHIRE EWES AND RAMS.

All pure bred, not registered. Have especially fine lot Hampshire ewe lambs, yearlings and three-year-olds. Any size lot. Write me on any kind of sheep deal.

H. STANLEY COFFIN, Yakima, Wash.

**Shropshire and Hampshire Rams**

Registered stock. Spring lambs and yearlings. No ewes for sale.

GRANT B. DIMICK, Oregon City, Ore.

**CHAMPION OXFORD SHEEP**



Choice stud rams, lambs and yearlings; also a choice lot of yearling ewes, bred to imported rams and our best stud ram from imported stock.

First prize yearling and champion Oxford ram, leading fairs of western Canada and U. S. Pacific Coast.

**H. S. CURRIE,** ALBERTA, CAN. Castor, Box 56


# Breeders' Department

## POLAND CHINA SWINE


**Greenleaf Stock Farm's Poland China Offerings**

40 head of spring and fall boars from the

**BIG BONE FAMILY**

We are offering a choice collection of boars out of the herd boar Big Bone Equal 2nd, by Big Bone Equal, by Big Bone, by Old A Wonder and Master Wonder, by Masterpiece and Wonder Tim, he by the $2500 Sever's Big Tim and he by the old Grand Champion Nebraska Tim and A. L.'s Big Orange by Orange Boy.

Among the lot we have now on hand are some fair prize winners. They are ready for service and guaranteed to be breeders. Your money back if they are not. We have them from $35 and up, and they are shipped C. O. D., guaranteed to satisfy or no sale, and the hog will be returned at our expense. Great care is taken in shipment and the hog will arrive in good condition. References: Caldwell Commercial bank or this paper. Write today. First come, first served.

**GREENLEAF STOCK FARM**

A. L. Wilson, Manager, Greenleaf, Idaho.

"Big Type With Quality."

**Fox's Quality Herd Wins Again**

At the Oregon State Fair, 1918, first prize, senior boar pig; second and third, junior boar pig; first, senior sow pig; first, junior sow pig; second, futurity litter. The first prize junior boar pig and the first prize litter were sired by boars from my herd. Why not buy from top herd? They cost no more.

RAY J. FOX. Lyons, Ore.


## BERKSHIRE SWINE


**Kintyre Farm Berkshires**

Weanling pigs, bred sows, service boars.

CLARK BROS, Yakima, Wash.

**BABY BERKSHIRE BOARS**

Also boars ready for service. Best breeding. Will ship subject to approval.

DR. GREEN & SON, Wapato, Wash.


## DUROC-JERSEY SWINE


**Golden Rod Wins Again**

Our herd was largest money winner at Oregon state fair, 1918.

One excellent boar of breeding age, bred gilts and weanling pigs of either sex.

DOERFLER BROS., Silverton Ore.

A. N. DOERFLER, Mgr.

**One Hundred Dollars**

will buy the first prize futurity boar, Oregon state fair, 1918. A grand individual with greatest blood lines of the breed. Litter mates almost as good, cheaper.

JONES PRATER, Amity, Ore.

FOUR DUROC GILTS BRED TO FARROW this fall, also spring pigs, on hand.

E. E. PRICE, CABINET, IDAHO, OR

JAMES N. PRICE, Yakima, Wash.


## HAMPSHIRE SWINE


HAMPSHIRE HOGS

have won every feeding contest entered since 1914. Weanling pigs, gilts, bred or open. Our blood lines can not be beat.

TUTTLE BROS. Asotin, Wash.


## PERCHERON HORSES


**Belgian Horses**

Herd sire, grand champion Idaho state fair. Winnings also include grand champion mare. Correspondence solicited.

H. H. SMITH, Nampa, Idaho.


When answering advertisements don't fail to mention this paper.


**Big Type Poland Chinas**

Mouw, Fesenmeyer and Herring strains, either sex. Also registered Shorthorn cattle; good individuals.

H. J. HOWSER, Stites, Idaho.

**BIG TYPE POLAND CHINAS**

Winners of first prize junior herd, Oregon state fair, 1918. Big Bob Wonder and Sammy blood boar pigs of all ages, also a few good gilts.

LOE FARMS, Silverton, Ore.

SAMMY AND MOLLY WIN AGAIN.

Our herd boar, Sammy, and Hanna's Big Molly were again made grand champion Poland China boar and senior and grand champion sow, respectively, at the 1918 Idaho state fair. Correspondence solicited.

W. F. HOWARD & SONS, Caldwell, Idaho.

**BIG TYPE POLANDS**

Genuine—Guaranteed.

GEO. W. BUCK, Oregon City, Ore.


## SHORTHORN CATTLE


**5 SHORTHORN BULLS**

One four year and four twelve to seventeen months, registered Shorthorn bulls, Whitehall Sultan strain. Ten registered Shorthorn cows. Exceptional prices if taken soon. L. B. Vincent, administrator.

J. W. VINCENT ESTATE, Chesaw, Wash.

REGISTERED SHORTHORN COWS.

Young bulls and heifers, sired by Scotch bulls; liberal terms.

CALDWELL CATTLE CO., Caldwell, Idaho.


## AYRSHIRE CATTLE


**Elbow Ayrshire Dairy**

Young bulls out of heavy-producing dams, sired by Willowmoor Sentinel 16th, a bull with big A. R. records on both sides.

J. R. MABEN, Reedsport, Ore.

AYRSHIRE CATTLE.

EDGEWATER FARM.

Young stock for sale, including senior calf, Edgewater Lentine, grand champion 1918 Washington state fair. Herd government tuberculin tested.

ELBERT M. CHANDLER, Burbank, Wash.

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, Oct. 5.—Progress in the smashing of German defense lines made the corn market today average lower, and so likewise did a renewal of peace talk. The close was heavy, 1-4 to 1 1-4 down, with November 129 1-2 to 129 3-4 and December 128 3-8. Oats gained 1-4 to 5-8. Provisions finished irregular, 5 cents off to 12 cents advance.

Sharp watch of war developments, especially in France and Belgium, shut out all other factors in the corn market except peace tactics and the need of week-end adjustments of trade. As a whole business was light.

Scantiness of offerings seemed to be chiefly responsible for the firmness of oats. Seaboard call was slow, but industrial demand quite keen.

Liberal shipments sent provisions upgrade most of the session. At the end pork sagged owing to weakness of hogs.

### Cash Quotations.

CHICAGO, Oct. 5.—Corn—No. 2 yellow, $1.55@1.59; No. 3 yellow, $1.45@1.48; No. 4 yellow, $1.38@1.40. Oats, No. 3 white, 72@72 3-4c; standard, 72 1-2@73c. Rye, No. 2, $1.62 1-2. Barley, 95c@$1.05. Timothy, $7.50@10. Clover, nominal. Pork, nominal. Lard, $27.12. Ribs, $23@23.87.

### Pacific Northwest Grain.

PORTLAND, Ore., Oct. 5.—Grain—October delivery, bids—Oats, No. 2 white feed, $58.25; barley, standard feed, $47.50, $48.25 asked. November bids—Oats, No. 2, $58.25; barley, feed, $48, $48.25 asked; oats, No. 3, $51.25; clipper, $51.25; corn, yellow, $58; mixed, $57. Eastern oats and corn in bulk—Oats, No. 3 white, $51.25; 38-pound clipped, $52; corn, No. 3 yellow, $58.50; No. 3 mixed, $57.50.

### Minneapolis Grain.

MINNEAPOLIS, Minn., Oct. 5.—Flour unchanged; shipments, 84,883 bbls. Barley, 85@93c. Rye, $1.57@1.58. Bran, $28.77. Wheat receipts, 526 cars, compared with 452 cars a year ago. Cash, No. 1 northern, old, $2.22 1-2. Corn, No. 3 yellow, $1.33@1.37. Oats, No. 3 white, 67@68c. Flax, $3.76

## Live Stock Quotations.

### At Portland.

PORTLAND, Ore., Oct. 5.—Cattle—Top stuff good; rest slow. Receipts 156. Steers, prime, $12@13; good to choice, $11@12; medium to good, $9.75@11; fair to medium, $8.25@9.25; common to fair, $5.75@8.25; cows and heifers; choice, $8@9; medium to good, $5.75@7.25; fair to medium, $4.75@5.75; canners, $3@4; bulls, $5@7; calves, $9@12; stockers and feeders, $6@8.

Hogs—Unchanged, but buyers cutting hard. Receipts 574. Prime mixed, $19.50@19.75; medium mixed, $19@19.35; rough heavies, $18@18.35; pigs, $16@17; bulk of sales, $19.30@19.50.

Sheep—Weak and slow. Receipts 494. Prime lambs, $12@14; fair to medium, $9@11; yearlings, $10@11; wethers, $9@10; ewes, $6.50@9.

### At Seattle.

SEATTLE, Oct. 5.—Hog receipts 355 head. Market closed strong. Cattle receipts 30 head, 100 being on contract. Offerings wholly of a secondary assortment of steers and cows.

Hogs—Prime light, $20@20,25; medium to choice, $19.50@19.60; medium heavy, $18.50@19; rough, $17.50@18; pigs, $17.50@19.

Cattle—Best steers, $11@13; medium to choice, $10.50@11; common to good, $8@8.50; medium, $7@7.50; bulls, $5@7.50; calves, $5@10.

Sheep—Spring lambs, $17.50@19; yearlings, $9@12; ewes, $6@9.

### At Omaha.

OMAHA, Oct. 5.—Hogs—Receipts 4400; 10 to 25c lower. Heavy, $18.10@18.50; mixed, $18.20@18.35; light, $18.30@18.65; pigs, $15@18; bulk of sales, $18.20@18.35.

Cattle—Receipts 200. Steady. Native steers, $12.50@19; cows and heifers, $7.50@12; western steers, $10@16.50; Texas steers, $8.75@12.25; range cows and heifers, $7@11.50; canners, $6@7; stockers and feeders, $6.50@15.50; calves, $9@13.50.

Sheep—Receipts 1100; steady. Yearlings, $11@13; wethers, $10@11; ewes, $8@8.75; lambs, $14@15.75.

### At Chicago.

CHICAGO, Oct. 5.—(U. S. Bureau of Markets.)—Hogs—Receipts 9000; 10 to 15c lower. Butchers, $18.75@19.25; light, $18.25@19; packing, $17.85@18.65; rough, $17.40@17.75; pigs, good to choice, $16.50@17.50.

Cattle—4000 compared with a week ago; best native steers steady, $15@18; grades mostly 25c lower; cheaper kinds strong to 25c higher; western steers 25@50c higher; cow stuff 50c@$1 higher; canners advancing most; stockers and feeders mostly 25c higher; bulls 25@50c higher.

Sheep—1000, compared with last week; western lambs 75c@$1.25 lower; natives mostly 50c lower; fat sheep and yearlings, 75c@$1 lower; feeding and breeding, 25@50c lower.

### Spokane Union Stock Yards.

| | Cattle | Calves | Hogs | Sheep |
|---|---|---|---|---|
| Saturday, Oct. 5... | 130 | 52 | 36 | 84 |
| Friday, Oct. 4..... | 371 | 47 | 297 | .... |
| Thursday, Oct. 3... | 207 | 26 | 143 | 1910 |
| Wednesday, Oct. 2. | 239 | 81 | 327 | 4290 |
| Tuesday, Oct. 1... | 42 | 17 | 22 | .... |
| Monday, Sept. 30.. | 151 | 52 | 158 | 250 |
| Week ago ..... | 86 | 1 | 16 | .... |
| Year ago ..... | 96 | 7 | 60 | .... |
| Two years ago ... | 150 | .. | 81 | .... |

Receipts of cattle were heavy for Saturday. The market was active from the start at steady to strong prices. The offerings were mostly of the common to medium grades. Stockers and feeders were a feature, one load of extra good feeders averaging 1120 pounds going to a Montana feeder at $10.50. Another load of lighter weights sold at $8, and several small lots at from $7.50 to $8.50. The offerings of cow stuffs was of the ordinary kinds, with a few choice cows which sold at $8. Compared with a week ago the prices are unchanged. The market closed steady to strong at the following:

| | |
|---|---|
| Prime steers | $12.00@13.00 |
| Good to choice steers | 10.75@11.75 |
| Medium to good steers | 9.50@10.50 |
| Fair to medium steers | 8.25@ 9.00 |
| Common to fair steers | 5.50@ 8.00 |
| Choice cows and heifers | 7.75@ 8.75 |
| Medium to good cows and heifers | 6.00@ 7.00 |
| Common to medium cows and heifers | 4.75@ 5.75 |
| Canners | 3.00@ 4.25 |
| Bulls | 5.00@ 7.00 |
| Calves | 6.00@10.00 |
| Stockers and feeders | 6.00@ 8.00 |

Only a few hogs of the light half finished kinds on the market. The market is firm at Friday's close. The demand is good. Compared with a week ago all grades declined from 10 to 25 cents.

| | |
|---|---|
| Prime mixed | $19.40@19.50 |
| Medium mixed | 19.00@19.35 |
| Rough heavies | 18.00@18.50 |
| Pigs | 18.25@18.75 |
| Stockers and feeders | 16.50@18.50 |
| Bulk of sales | 19.00 |

Lambs and fat sheep firm at Friday's close, the offerings being of the medium grades. The following is the sheep range:

| | |
|---|---|
| Prime lambs | $12.00@13.00 |
| Fair to medium lambs | 11.00@12.00 |
| Prime yearlings | 9.50@10.50 |
| Prime wethers | 8.50@10.00 |
| Best mutton ewes | 6.50@ 9.00 |
| Breeding ewes, 1 to 4 years | 13.00@17.50 |

### At North Salt Lake.

NORTH SALT LAKE, Utah, Oct. 3.—Cattle—Receipts, 78 head. Choice heavy steers, $11@12; good steers, $9.50@10.50; fair steers, $8@8.50; choice cows and heavy heifers, $7.50@8.25; fair to good cows and heifers, $6.50@7.25; cutters, $5.75@6.25; canners, $4.75@5.50; fat bulls, $6.50@7; bologna bulls, $5.50@6.25; veal calves, $9@11.

Hogs—Receipts, 314 head. Choice fat hogs, 175 to 250 pounds, $18.25@18.50.

Sheep—Choice spring lambs, $14@15; wethers, $9@10; fat ewes, $8@9.

## Portland Markets.

PORTLAND, Ore., Oct. 5.—The potato market is holding steady with sufficient receipts for current local demand. The best Oregon Burbanks bring $2.50 with average sales at $2@2.25. Yakima Gems are selling at $2.25 and Idaho Rurals at $2.25@2.50.

There is a fair demand for apples and supplies are increasing. Jonathans, Gravensteins and Winter Bananas are moving at $1.75@2.25 for extra fancy, according to size.

The Oregon butter shortage continues acute, with cube extras readily selling at 63 cents. Fresh eastern butter is offered at 61 cents.

Eggs are firm at the 55 cent basis, as receipts are small. The demand is not extensive.

Butter—Cubes, extras, 63c; prints, 61@62c; butterfat, No. 1, 65c.

Eggs—Oregon ranch, candled, 50@53c; selects, 54@55c per dozen.

Cheese—Jobbers' buying prices, f. o. b. dock, Portland: Tillamook triplets, 33c; Young Americas, 34c per lb.; Coos and Curry, f. o. b. Myrtle Point, triplets, 32 1-2c; long horns, 33 1-2c per lb.

Poultry—Hens, 26@27c; broilers, 28c; ducks, 32c; turkeys, 28@32c; geese, nominal.

Pork—Fancy, 25c.

Veal—Fancy, 21 1-2@22c.

Potatoes—Oregon, $2@2.50 per cwt.

Hay—Buying prices, f. o. b. Portland; Eastern Oregon timothy, $30 per ton; valley timothy, $29; alfalfa, $27; valley grain hay, $26@27; clover, $28; straw, $9@10.

## Seattle Wheat.

SEATTLE, Oct. 5.—The lifting of the embargo against receipts of wheat into this terminal from eastern Washington points to a limit of 60 cars daily has been taken care of in the domestic flour trade without creating a demand for any additional storage space. The unloading capacity here is about 180 to 200 cars a day.

The rules regarding the percentage of wheat allowed in poultry foods have been modified for the benefit of wheat growers on the Olympic peninsula, who have raised a large crop of unmillable grain, and have been unable to find a market. The percentage of wheat allowed in poultry feed has been increased to 25 per cent. Under the former rules these farmers were not allowed to sell nor millers to buy.

## Seattle Market.

SEATTLE, Oct. 5.—In order to protect the crop of Winesaps from depletion by reason of the raid from eastern buyers on Jonathans orchardists have advanced their price on Winesaps 15c per box. The movement and demand of applies is brisk, and with all Jonathans in the hands of firm buyers and Spitzenbergs and Rome Beauties coming on in two weeks for attention. Winesaps, the longest keepers of all, are coming into a much more active price zone.

The actual movement of extra fancy apples has now practically begun. For the first time, as indicating the widespread strength of apples, Spitzenbergs are opening on Jonathan prices of $3 to $3.50 per box, with Rome Beauties at $3.

Due to the heavy crop in southern California orange prices are expected to be normal, with outline of sales of medium to small sizes down to $3.50@4 per box.

The potato market is very unsettled. White River valley growers have been selling this week what carload buyers claim is No. 1 stock at $24, concededly an actual loss to growers on the basis of high labor costs, bags, culling and cartage to station platform. Valley growers claim they can break even only at $30. Sales at $28 have been frequent. The most active buyers are carload shippers to eastern and southern markets, who are brought into stiff competition with middle western producers. Yakima baking Gems, No. 1 stock, are being quoted at $35 f. o. b. which would mean $30 for Puget sound whites.

In searching through other centers for a supply of butter to keep down the local shortage, city creamery men today declared that they will be unable to replenish depleted stocks until the Seattle market reaches 70 cents. Creamery men would be compelled to sell butter shipped from Chicago at 63 cents to get a profit and California butter would be a loss under 72 cents. On this basis it is contended that the Seattle market commercially is too low.

The fresh ranch egg market is stronger for the week-end. Jobbers paid up to 61 cents Saturday. The bulk of sales is at 64 cents.

### Purchasing Prices.

Eggs—Select ranch, 58@59c per doz.; pullets nominal.

Butter—Fresh dairy, 32c per lb.; butterfat, 68c per lb.; bakers, 46c per lb.; raw milk, $3.30 per cwt.

Poultry—Broilers, live, 1918, under 2 lbs., 32c per lb.; hens, 3 1-2 to 4 lbs. and up, 28c per lb.; under 3 1-2 lbs., 26c per lb.; old roosters, 17@18c per lb.; ducks, live, fat, 23c per lb.; squabs, large, $3.50 per doz.; geese, fat, live, 21@22c per lb.; Belgian hares, 11@14c per lb.; guineas, $7 per doz.; turkeys, young toms and hens, dry picked, 10 lbs. and up, 36c per lb.

Hogs—Light, 22@25c per lb.; heavy, 19@21c per lb.

Beef—Steers, fat, 12@15c per lb.; heifers, fat, 14@15c per lb.; cows and bulls, 11@14c per lb.

Veal—Fancy, light, 20@21c per lb.; do., heavy, 10@18c per lb.

Mutton—Fat, 22c per lb.; spring lamb, fat, dressed, 25c per lb.

### Hides, Tallow and Wool.

Bid prices to producers: Salted hides, cows and steers, No. 1, 15c lb.; do. No. 2, 14c lb.; green hides, cows and steers, No. 1, 12c; do. No. 2, 11c lb.; salted bulls or stags, No. 1, 10c lb.; do. No. 2, 11c lb.; green bulls or stags, No. 1, 10c lb.; do. No. 2, 9c lb.; salted or green calfskins, No. 1, 32c lb.; No. 2, 30 1-2c; salted or green kip skins, No. 1, 16c lb.; do. No. 2, 14 1-2c lb.; dry hides No. 1, 30c lb; do. No. 2, 29c lb.; dry bulls or stags, 25c lb.; dry salt hides, 24c lb.; dry calfskins (5 lbs. and under), No. 1, 35c lb.; do. No. 2, 33c; tallow, No. 1, 13c lb.

Horse hides, green or salted, each, $2@4; do. dry, each, 50c@$2.

Clean ranch wool, full growth, lb., 50@55c.

Sheep pelts—Long wool, each $2.50@4.50; medium wool, each, $1.50@2.50; short wool, each, $1@1.50; shearlings, each, 35@75c.

Beeswax, per lb., 25@27c.

### City Prices.

Hay and feed quotations, city prices, truckload delivery, are as follows:

Feed—Millrun, $34@37 ton; scratch feed, $82; all grain chop, $74; oats, $70; sprouting oats, $72; rolled oats, $70; whole corn, $82; cracked corn, $84; rolled barley, $ clipped barley, $69; alfalfa meal, $44; meal, $82; egg mash, $66.

Hay—Eastern Washington timothy, per ton; do., double compressed, $42; alfalfa, $34; straw, $17.

## Farmers' Want Ads

**EDUCATIONAL**

IN BUSINESS OR ACTUAL LIFE THE BE is none too good for you. Write Gooding C lege, Gooding, Idaho, Charles Wesley Tep president, today.

SEND NEWS NOTES TELLING OF T work of your school today. Address Educator, Gooding, Idaho.


HIDES WOOL FU




RUBBER METAL SACK

We pay full market value, correct weig and assortment, prompt returns. Write prices. We want your business.

Pacific Hide & Fur Depot

Joseph Thiebes and C. T. Symmes.
1101-09 Railroad Ave., Spokane, Wash.

Ditching Made Easy

With this Simplex Ditcher-Terracer
Works in any soil, clay or gumbo. Digs V-shaped ditch down to 4 ft. Practically all steel. Reversible. Equal to 100 men. Pays for itself in a day.

Sent on 10 Days' Trial

Ditches, Terraces, Builds Levees, Levels Bumps, Fills Gullies, Grades Roads, Back Fills, Cleans out old ditches at low cost.
Simplex Farm-Ditcher Co., Inc., Box 78 Owensboro, Ky.

Write for Ditching book and money back guaranty




The LAUSON 15-25

DUST PROOF-ALL GEARS ENCLOSED



Surplus Power

The engine is the heart of a tractor. It must supply a steady flow of power. There must be power to spare. Soil conditions increase the draft at the drawbar. Wet grain requires more power at the belt pulley.

THE LAUSON FARM TRACTOR

is made by the John Lauson Manufacturing Co. and equipped with the famous LAUSON-BEAVER valve-in-head motor, which is noted for its efficiency under heavy loads. It burns kerosene successfully. It is dust-proof, but accessible. It has 30 per cent surplus power, a giant force always in reserve, ready for any emergency.

Designed for Field or Belt Work

The LAUSON 15-25 pulls three 14-inch plows in any soil and four under favorable conditions; runs the ensilage cutter, grain separator, corn sheller, feed grinder, rock crusher; in fact, does any kind of field work or belt work requiring surplus power.

When other tractors fail at the last trench—you can go "over the top" with a LAUSON.

T. G. YOUNG

Distributor.
1000 Pike Street, Seattle.

Mail the following coupon for valuable hints on power farming:

COUPON.

Please send me, without charge or obligation, catalogue and full particulars about Lauson Tractors and Plowing Costs.

Name .....

Town .....

State .....

## Motor on the Farm

Unless the user of farm machinery is familiar with the mechanical makeup of his machine, the ends which both the agriculturist and the maker strive to reach will not be gained, farm work will be held up while the tractor is in the shop, doubt regarding the availability of the tractor for farm work will creep in, and food growing will suffer.

The prospective buyer will have a better idea of the sort of tractor which is fitted to his needs if he can get into a shop where many makes of tractors are assembled or repaired. He can then make his own selection more intelligently, armed with a technical knowledge of the makeup of farm tractors.

The National Automobile school of Los Angeles was established largely for the purpose of instructing farmers and others in tractor construction, repair, operation and maintenance as well as all repair work associated with the motor. At the present time there are 135 men at the school engaged in absorbing the details of motors, parts and operation.

### NATION'S FINANCES SOUND.

Unlike many of the nations of the world, the United States' financial condition is sound in spite of the abnormalities of the war period.

# FARMERS' WANT ADS

This is the farmers' "Want," "Sale" and "Exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rate, 7c cents a word per insertion, with a special rate to farmer subscribers to the Washington Farmer of 6 cents a word per insertion for from 4 to 12 times, and 5 cents a word per insertion for 13 times or more.

All commercial and land advertising, 7 cents per word each insertion. Open also to nonsubscribers.

In using these columns advertisers must observe: (1) No advertisement will be inserted for less than 75 cents. (2) Every word, number and initial, including name and address, must be paid for. (3) Cash must accompany order.

Above rates also include insertion in The Oregon Farmer and The Idaho Farmer.

**SITUATIONS WANTED—Male 21**

RELIABLE MAN WANTS EMPLOYMENT; AM 21, but lame for military. Roy Hartman, Winchester, Idaho.

**HONEY, BEESWAX—Wanted 58**

SEND SAMPLES OF YOUR HONEY AND beeswax. State quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

**EGGS AND BUTTER WANTED. 59**

WE ARE ALWAYS IN THE MARKET FOR good eggs and dairy butter. Send us your next shipment. Oregon Farm Products Co., 380 Halsey st., Portland, Ore.

**MISCELLANEOUS—FOR SALE 60**

HARPLES MILKING OUTFIT, 4-UNIT, FOR sale; going out of business. Schroeder Bros., Ajago, Oregon.

**MISCELLANEOUS WANTED 63**

CASH PAID FOR OLD FALSE TEETH.
We pay up to $35 per set (broken or not). Send now. Cash sent by return mail. Package held 5 to 15 days for sender's approval of our offer. Highest prices paid for old gold jewelry, gold crowns, bridges, dental gold, platinum, diamonds and silver. Send for fall catalog of new jewelry.
UNITED STATES SMELTING WORKS, INC.
331 Goldsmith bldg., Milwaukee, Wisconsin.

POULTRY WANTED.
We are cash buyers of poultry and dressed meats, also cream. Write us for prices, shipping tags and premium catalogue for cream shippers.
COMMERCIAL CREAMERY CO.
SPOKANE, WASH.

**MACHINERY—For Sale 93**

FLOW TYPE RUMLEY STEAM TRACTOR, 25-HORSEPOWER, DOUBLE CYLINDER, PRACTICALLY NEW. FOR SALE AT A BARGAIN.
39x106 high-pressure boiler. Cylinders 7 inches in diameter, with 12-inch stroke. Belt wheel 41 inches in diameter, with a 12-inch face. Rear wheels 74 inches in diameter; Width of tire, 30 inches. Extreme width of engine 122 inches, length 254 inches. Subject to inspection at Seattle, Wash. Ask us for prices.
AMERICAN HOIST & DERRICK CO.
Seattle, Wash., and St. Paul, Minn.

FOR FARM LUMBERING USE
"AMERICAN" PORTABLE SAWMILLS
Carried in stock by
HIGGINS MACHINERY COMPANY.
512 1st Ave., So., Seattle. Write for Catalog.

**AUTOMOBILES 114**

FORDS START EASY IN COLD WEATHER with our new 1919 carburetors; 34 miles per gallon; use cheapest gasoline or half kerosene; increased power; styles for any motor; very slow on high; attach it yourself; big profits to agents; money back guarantee; 30 days' trial. Air-Friction Carburetor Co., 321 Madison, Dayton, Ohio.

**STOVE AND FURNACE REPAIRS. 126**

WRITE M. S. RUBENS, SPOKANE, FOR ANY parts needed to repair stove, furnace.

**PETS—Dogs, Birds, Etc. 171**

PEDIGREED AIREDALE DOGS AND PUPS. Barron White Wyandotte cockerels from trapnested hens. Marc Tuttle Beach, Wash.

**POULTRY 174**

SINGLE COMB WHITE LEGHORN AND Rhode Island Red cockerels and pullets. Mrs. Rominger, Underwood, Wash.

**LIVE STOCK. 177**

FOR SALE—TO CLOSE AN ESTATE, IN quantities to suit, some 20,000 sheep, ewes, lambs and bucks, from $10 up; also 800 head of stock cattle. 45,000 acres range land, best anywhere. Coffin Bros., North Yakima, Wash.

REGISTERED HEREFORD BULLS — WE have 60 head yearlings and twos; eastern-bred, and worth more than it takes to buy them. Nye & Nye, Rigby, Idaho.

OXFORD RAMS, YEARLINGS AND OLDER; have one, very large; farmers' prices. Albert Wiltz, Addy, Wash., Route 2.

GUERNSEYS—MALE AND FEMALE, OF MAY Rose and Masher breeding at a sacrifice. Write at once. A. G. Franklin, Route 2, Mt. Vernon, Wash.

REGISTERED BIG TYPE POLAND CHINA pigs for sale. John Bushaw, Route 2, Anacortes, Wash.

FINE BUNCH ANGORA GOATS; BARGAIN prices. C. A. Sams, Cedonia, Wash.

**HOTELS 306**

WHITE'S HOTEL AND RESTAURANT—Rooms, hot and cold water, 75c up. Breakfast 20c to 40c; dinner, 25c to 60c. Sprague and Stevens, Spokane.

GALAX HOTEL; NEW AND MODERN; 75C and $1. Main and Bernard, Spokane.

NEW MADISON HOTEL, 75C AND UP. 1ST and Madison, Spokane, Wash.

**RUBBER STAMPS AND SEALS 384**

FOR RUBBER STAMPS, STENCILS, BADGES, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

**ARTIFICIAL LIMBS 424**

SCHINDLER ARTIFICIAL LIMB CO., 8115 Wall st., Spokane, Wash.

**SEEDS. 620**

WE SPECIALIZE IN TIMOTHY, ALFALFA, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Idaho.

**FARM LANDS FOR SALE 651**

A BIG LAND OPENING.
COWS, HOGS, AND A BANK BOOK.
Your dream of life, of ease, comfort and independence await you
On Port Susan Bay, Snohomish County; 6000 acres of the best land that lies out doors; a 2 hours' ride from Seattle places your feet on the richest, most productive soil in the whole state of Washington; rail and water transportation; near paved roads, schools, churches, cannery and condensery; 3½ miles of waterfront and finest beach on Puget Sound; 20 miles of beautiful lake shore, surrounding 8 picturesque lakes; these lakes teem with trout. Get in on the first choice for $35 per acre and up; 10 yearly payments, 6 per cent interest.
This is but the beginning of the story of Birmingham. Send to the owners for illustrated literature. BROWNELL LAND CO., 904 Third ave., Seattle, Wash.

$75 AN ACRE
pays for rich alder bottom and shot clay soil; level as a floor and absolutely free from gravel; located at Belmore, Thurston county, Wash.; on the railroad and near Camp Lewis, Seattle, Tacoma and Olympia; good roads, good schools, running streams; rural mail delivery; good developed farms all around; delightfully mild climate, where crop failures are unknown. We sell on easy monthly payments. Write us for particulars.
A. H. REID & CO.
314 New York Block,
Seattle, Wash.

YOUR CHANCE IS IN CANADA—RICH LANDS and business opportunities offer you independence; farm lands $11 to $30 acre; irrigated lands, $35 to $50; twenty years to pay; $2000 loan in improvements; loan of live stock; taxes average under twenty cents an acre; no taxes on improvements, personal property or live stock; good markets, churches, schools, roads, telephones; excellent climate—crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Allan Cameron, general superintendent land branch Canadian Pacific Ry., 36 Ninth ave., Calgary, Alberta.

JORDAN VALLEY PROJECT.
MALHEUR COUNTY, OREGON.
THIRTY THOUSAND ACRES
OPEN FOR ENTRY SOON.
WRITE FOR DATE.
JORDAN VALLEY FARMS.
524 IDAHO BUILDING. BOISE, IDAHO.

STOCK FARM FOR SALE—440 ACRES; 10 miles from Olympia; 60 acres upland; cleared; 100 acres bottom land, cleared; 280 acres logged-off land; good soil; good buildings; running water; good roads; owner unable to look after. $4000 will handle, balance on terms. Further particulars write.
J. M. DEMPSEY, Auburn, Wash.

RARE OPPORTUNITY—67 ACRES FRUITS, nuts, alfalfa, Tokays, etc.; irrigated; tools, tractor, horses and equipment; every convenience. Near state highway and capital; beautiful location. Price $185 per acre. Send for full information. Tubble Bros., Elk Grove, Cal.

MUST SELL AT ONCE—160 ACRES CHOICE land; ¼ mile from Rice, Wash.; the finest farm home in Stevens county, including all furniture, machinery and stock. Price to sell, $16,000. Terms. If interested write for description. M. H. Thornton, Box 3, Rice, Wash.

VERMILION, ALBERTA—160 TO 5000 ACRES, $16 to $25 per acre. Union Investment Co., 406 Ziegler blk., Spokane, Wash.

**FARM LANDS—WANTED 654**

WANTED—TO HEAR FROM OWNER OF farm or improved land for sale. O. K. Hawley, Baldwin, Wisconsin.

**FOR SALE OR EXCHANGE 702**

FOR SALE OR EXCHANGE—300 ACRES DIversified farm; in eastern Washington; 3 miles from town; all level; no stumps; splendid new set of buildings; well watered; new complete set of farming tools, horses, hogs, cattle and growing crop, everything goes. Will sell equity of $18,000 for cash or trade for lumber yard, bank or grain elevator in good farming community. Address care of Home Lumber company, 2901 Trent ave., Spokane, Wash.

**When you write to advertisers be sure to state that you saw their advertisement in this paper.**

# SUBSCRIPTION PLAN SAVES YOU MONEY




**RATES**
For Subscription to The Washington Farmer
**25c**
For 1 Year
**50c**
For 3 Years
**$1**
For 5 Years

We are holding open our direct-to-the-reader subscription plan during the summer months. It means a real saving at a time when most things cost more.

The central idea of the plan is to deal direct with our subscribers in securing and renewing subscriptions, thus eliminating the middleman and giving our friends the benefit of every penny saved.

It is gratifying to know that the new cooperative system has had the heartiest kind of backing; and that it has been put on a successful basis. We could not have got along without the assistance of well wishers who have told their neighbors about the plan and passed along copies of the paper.

There are many things of value which your state farm paper can bring you and your nieghbors during the summer months. The various departments will be full of helpful hints, instructive articles and entertainment. Send in the orders!

**THE WASHINGTON FARMER**
**Review Bldg., Spokane, Wash.**

**THE WASHINGTON FARMER**
Review Bldg., Spokane, Wash.

**Enclosed is $.... for ..... years' subscription.**
**In Canada add 1 cent per copy for extra postage.**

If you are already paid in advance your subscription will be set forward from the date to which you are paid.

NAME .....

TOWN .....R. F. D. .....

STATE .....



# SPEED
# Is Winning the War

When the news was flashed over the wires, "America Declares War," the answering thought of the people of the world was the one word—"speed."

That was their conception of our characteristic national trait—"speed."

Coincident with this news came the demand upon America's farmers to feed the world.

This demand continued to increase calling for the utilization of the most efficient time saving and production increasing methods.

The value of the motor car to farmers cannot be measured in dollars.

It has won its place as a necessity together with the reaper, the plow and other modern implements.

The economy, steady performance, and all 'round usefulness and complete satisfaction of the Overland Model 90 car has earned the universal esteem of American farmers.

Overland cars everywhere are helping their owners speed up the work of a nation at war, dependably, thriftily, saving time and economizing man power, alike for the captains of industry, the workers in industry, and for the farmers, large and small, and the farm workers.

Everywhere lines of communication between the great agricultural sections and the great industrial centers are being kept open by time-saving, man-saving Overlands.

We want every Overland built and delivered during the war to contribute its share to the war-speed of the nation.

And speed is winning the war.

*Five Points of Overland Superiority:*

*Appearance, Performance, Comfort, Service and Price*

Overland
The Thrift Car

Willys-Overland Inc., Toledo, Ohio.
Willys-Knight Touring Cars, Coupes, Sedans, Limousines
Overland Motor Cars and Light Commercial Cars.
Canadian Factory, West Toronto, Canada.

Catalog on request. Address Dept. No. 1192.

OCTOBER 17, 1918.

NOTICE TO READERS: When you finish reading this paper, place a U. S. 1-cent stamp on this notice, mail the paper and it will be placed in the hands of our soldiers or sailors destined to proceed overseas. NO WRAPPER. NO ADDRESS. A. S. Burleson, Postmaster Gen.

PUBLISHED WEEKLY.

# THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF



A SCENE ON THE FARM OF
FRED METCALF NEAR LOCK WASH.
IN THE CALISPELL VALLEY

*This page contributed to the success of Fourth Liberty Loan by Sears, Roebuck & Co.*



# Every Liberty Bond You Buy Brings the War's End That Much Nearer

The kaiser is watching you. His peace moves are plain fakes to fool you, if he can!

America is in the war to the hilt. There can be no compromise with the Beast of Berlin or with the gray-coated hordes that brutishly carry out his orders.

Germany is weakening, but not yet beaten. We're almost over the top, but it's the last ounce that counts. We're gaining every time we attack, but the gains are being measured in kilometers. They must be measured in miles, before we can hit our stride on the road to Berlin.

What does all this mean to you?

It means you must buy more Liberty Bonds. The Fourth Liberty Loan, America's latest and greatest financial drive, must show the same speed, the same pep, the same go-get-'em spirit that our boys showed at Chateau Thierry and St. Mihiel.

Buy more Liberty Bonds and prove to the kaiser that you're with our boys in France in their demand for "Unconditional Surrender to the U. S. A."

# Buy More Liberty Bonds

**Any Bank Will Help You Help Uncle Sam**

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 42. THE RANCH PACIFIC DAIRYMAN HORN AND HOOF October 17, 1918

## Apple Men Win

### Freight Increase Is Not So Great

A dispatch says that a maximum rate of $1.10 per hundred pounds on Washington, Idaho and Oregon apples shipped to Atlantic seaboard points has been agreed upon by representatives of the railway commissions of the three states, shippers and the railroad administration before the interstate commerce commission.

This rate takes the place of the rate of $1.25 recently authorized by Director General McAdoo. The established rate is the one asked for by the public service commissions of Washington, Idaho and Oregon.

It was agreed that the proposed increase in freight rates of 25 per cent over the old rates would be made effective on other fruits than apples, and that some increase would be made on apples where it would not make the total rate more than $1.10 a hundred pounds.

Some time ago the apple growers, through the public service commissions of the three northwestern states, appealed to the interstate commerce commission to grant relief from the 25 per cent blanket increase freight announced some months ago by Secretary McAdoo when he took over the operation of the railroads for the government. Hearings were recently held, and the announcement of the maximum $1.10 rate is the result.

## English Walnuts

### Can Be Grown in East Washington

By GRANVILLE LOWTHER.

I have been asked three questions concerning the growing of English walnuts in the Spokane district of eastern Washington, as follows:

(1) Can they be grown successfully in this part of the country? (2) When should the nuts be planted? (3) How should they be cultivated and how soon after planting should they come into bearing?

I am not positive that they can be grown successfully under the conditions that obtain in the vicinity of Spokane, but am reasonably certain that they can. One reason for believing so is that we have in our orchard four English walnut trees 22 years of age, and the conditions at North Yakima, where our orchard is located, are not so very different from those that obtain in the vicinity of Spokane. It is true that at Spokane it is a little colder, but I think not enough colder to make very much difference and I feel reasonably certain that if the hardier varieties of the English walnut are planted, such as the Franquette, that they would suceeed in that climate.

Second—When should the nuts be planted? I would plant the nuts late in the fall or early in the spring and let them grow one year and bud them without transplanting. Generally trees are bought at the nursery and transplanted, but I believe it is better to plant the nuts where we want the tree to grow. Plant three or four nuts in a place and select the strongest after they are budded and it is assured that the buds will grow. They should be planted in a rich, deep soil. The walnut tree is a heavy feeder, and needs plenty of rich, deep soil in order to make the best results. The tree has a heavy tap root and large, long laterals. The root system of the walnut tree is much larger than that of the top, if the conditions are favorable for the development of the root. If they are planted in a soil where there is sub-irrigation and a gravel base so that the roots will go to the sheet water or moisture beneath the surface it is all the better.

In answer to the last question I would say that our experience in growing young orchards of English walnuts in those sections where they are now being planted for commercial purposes proves that in 10 years they ought to bear profitably. In other words, it takes about the same time for a walnut tree to come into profitable bearing that it does for an apple. After they have begun to bear profitably, if the soil and climatic conditions are right, they ought to live and bear profitably for 100 to 200 years.

**Perhaps He Deserved It.**

"What's your objection to this motto, 'Work or Fight'," asked Mr. Rafferty.

"It's too easy," answered Mr. Dolan. "Many and many's the time I had to do both." -Washington Star.

## Up-to-Date War Maps Published This Week

Turn to page 17 of this paper and get at a glance a lot of information, the lack of which has heretofore made war reports more or less meaningless. On that page is a map that answers the two most common questions of the day: "Where is it? How far is it?" It shows the geographical relationship between the great centers of the warring nations. It shows how far it is from Paris to Berlin, from Paris to the German border, from the cities on the present fighting line to the fortifications on the Rhine, to which the Germans will soon be compelled to retreat. Turn to that map, study it a few minutes, and then turn to page 5. You will find a smaller map on page 5, but one that gives vital details that are omitted from the large one to avoid confusion. The small map shows the battle line of the famous "western front," where General Foch is directing the most remarkable warfare in the world's history. The large map shows the main points; the small map shows the details of the small area where the stupendous battle is raging. The large map is permanent; the small one is ever-changing. Therefore, the large one will be published this once only, but the small one, brought up to date each time, will be published weekly. The big idea is this: Clip out the large map and paste it on a large sheet of paper. Put it on the wall somewhere. Then each week paste below it the small map clipped from your copy of THE FARMER. This will give you a birdseye view of the whole situation and a detailed record of the progress on the battlefield. By no means fail to begin now, this week, today, to preserve these maps. Then, when next you wonder "Where is it?" or "How far is it?" you can look it up and see.

## Washington Boys in War Service

From The Twice-a-Week Spokesman-Review.



RUDOLPH TURNER, Alameda, Wash.—On December 7, 1917, he and his brother, Marcus, enlisted in the U. S. navy and he is now on the U. S. S. West Alseck, serving with his brother, Louie.



LOUIE B. TURNER, Alameda, Wash. — Enlisted January 23, 1918, and is now serving as a cook on the same ship as his brother, Rudolph—the West Alseck. They are now on their way to France.



MARCUS TURNER, Alameda, Wash., who is the oldest son of Mrs. C. J. Turner, enlisted with his brother, Rudolph, December 7, 1917. He is now stationed on the flagship Virginia at Fortress Monroe.

**BUY PUREBRED COWS.**

Three hundred and thirty-seven cows were tested in the Walla Walla Cow Testing association, of which William Dawson is tester, during the month of September. Sixty-four of that number were dry. The average pounds of milk per cow, including dry cows, was 475; the average pounds of butterfat per cow, including dry cows, 22.2; the average cost of feed per cow, $6.62; the average cost of producing 100 pounds of milk, $1.37.

The three high herds for the month belong to William Reser, Washington state penitentiary and H. G. Gordon.

Many dairymen are buying purebred cows. Some of the cow testing association buyers are: R. E. Bean, Umapine; D. O. Saunders and A. A. Bixby, Freewater. At the state fair J. H. Compau bought for the John Ankeny herd two purebred Guernsey cows and one heifer; V. E. Brown, one heifer. These four head were purchased from the famous Middledale herd, and averaged over $300 per head.

**BEE MEETING ANNOUNCED.**

The Washington State Bee Keepers' association will hold its annual convention at Yakima November 14-16. President J. B. Ramage of the association has announced that H. A. Scullen, bee specialist for the United States department of agriculture, will be present to address the conference. Owing to the dry weather of the present year, the output of honey in the northwest is estimated at considerably less than normal. The price, apparently, is correspondingly higher, one of the Yakima valley producers having sold a carload of honey at 24 cents a pound, which is believed to be the highest price on record for honey in wholesale quantities.

**THE AMERICAN LANGUAGE.**

At a recent meeting of the Wayside War Saving society, in school district No. 137, Lewis county, Washington, F. T. Lambert presented a resolution which was unanimously adopted advocating a unified American language for all the people of the United States and "free our educational departments from all dead languages and all difficult and doubtful names and methods of expression."

TO the Editor of The Washington Farmer: Enclosed find 75 cents, for which please send me The Washington Farmer. I am also enclosing five cents, for which please mail me a Farm Service Flag with three extra small stars.

CARROLL RICKETS.

Aberdeen, Wash.

## Crop Prospects

### Billion Bushels Almost Reached

General improvement in crop prospects on October 1 over a month ago is shown by the department of agriculture's monthly report.

Spring wheat improved to the extent of about 20,000,000 bushels more than that produced last year. With this addition to spring wheat the total wheat crop, including 555,725,000 bushels of winter wheat now in prospect, is 919,920,000 bushels. That comes close to the billion-bushel mark set by the government last fall to meet the war needs of America and the allies.

Corn improved to the extent of 46,000,000 bushels, and now gives prospect of a 2,717,775,000-bushel crop, smaller than last year's.

"Crop prospects generally and materially improved during September," a statement of the department of agriculture said in commenting on crop conditions as shown October 1.

"Moisture was sufficient and farm work was favored. Though killing frosts were earlier than usual over large areas of the northern states, relatively small damage was done.

"Corn in the main belt matured earlier than usual as a result of summer heat and droughty periods. An increase of 46,000,000 bushels is shown in the expected outturn, now promising 2,717,775,000 bushels. That is 441,000,000 bushels below the crop of last year, which was, however, of extremely poor quality. It is 43,000,000 bushels, or 1.6 per cent less than the five-year average.

"Spring wheat is turning out better than expected, except in the Pacific northwest, showing a gain of about 20,000,000 bushels over last month's promise and giving a present estimate of 919,920,000 bushels of spring and winter wheat combined. This is 267,000,000 above last year and 110,000,000 above the five-year average, being exceeded only by the bumper crop of 1,025,800,000 bushels in 1915.

"Oats, too, are turning out well above earlier hopes. A crop of 1,536,000,000 bushels is estimated, the third of record, and but 3.4 per cent below the bumper crop of last year. The quality is high, .94.

"Barley, potatoes, both white and sweet; rice, tobacco, cotton, apples and sugar beets show gains over last month's outlook, and buckwheat, flax and kaffirs only show slight losses."

Condition of crops October 1 follows:

Corn, 63.6 per cent of a normal; buckwheat, 75.6; white potatoes, 73.7; sweet potatoes, 77.4; flax, 70.8; rice, 85.4; tobacco, 87.45; sugar beets, 89.6; kaffir, 49.

Estimates of production of other crops follow:

Oats, 1,535,297,000 bushels; barley, 286,505,000; buckwheat, 19,473,000; white potatoes, 391,279,000; sweet potatoes, 85,473,000; flax, 15,606,000; rice, 41,918,000; tobacco, 1,265,362,000 pounds; pears, 10,194,000 bushels; apples, 198,389,000; sugar beets, 6,458,000; kaffirs, 72,650,000; beans, 17,802,000.

**WILL CONSIDER OAT GRADES.**

Hearings upon the proposed official grain standards for oats are being held throughout the country the last half of this month. Hearings will be held at Spokane October 22 and at Portland October 23, both sessions beginning in the forenoon. The hearings will be under the direction of the federal bureau of markets, and will be for the purpose of getting the point of view of those persons interested in various parts of the nation. Producers, millers, merchants, bankers and any other persons directly interested are invited to attend these sessions. Upon the basis of the information received at this series of hearings the bureau will announce the standards agreed upon as soon as the information can be compiled and applied.

**IMPROVE SEED CORN.**

Professor Leonard Hagnauer of the state college and E. S. Scott, assistant Yakima county agriculturist, have been holding a series of meetings throughout the county recently, with a view to assisting the farmers in the selection of proper seed corn. The development of the corn industry in the Yakima valley during the last few years has indicated great possibilities for a northwestern "corn belt" comparable in quality almost to that of the middle western states.

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## Give Freely and Forget It

There must be no fear in the matter of giving. If you have only a sandwich to give to a beggar, give it freely and gladly and forget it. Anything given in the proper spirit can result only in good to both parties in the transaction, and some way as the habit of giving grows upon us, circumstances arrange themeslves in wonderful and mysterious ways so that our gifts fall upon the truly deserving.

Not the least interesting part of it all is the fact that all our giving comes back to us at some time or place. The more and better we give, the more and better we get. So the matter of friendship, of prosperity, of health and comfort and happiness lies entirely within our own hands; for just as we measure out these things to others, just so far as we give out these things to others they will come back to us and more, for they will be pressed down, heaped up and running over. I. C. Y.

Praise and blame are like disturbing factors; content comes from neither.

## Wheat Must Be Milled at Home

Portland advices say ruin impends in the dairy industry of Oregon because of lack of mill feed. At least 75,000 tons of feed are needed to keep the herds through the winter, and at present virtually none is available.

There seems to be no justifiable excuse for this lamentable condition. For months well informed dairymen have been warning the food administration that the dairy interests were coming to this disaster. Time and again THE FARMER has pointed out the peril of food administration regulations which required the sending of northwest wheat to distant mills for grinding. Long ago it was apparent that the welfare of the dairy and live stock industry of this great region required the grinding of northwest flour to the capacity of the mills in order that the live stock of these states might have the mill feed that was grown in this region.

As we pointed out long ago, a practice that sends our wheat to distant mills and requires our live stock interests to import stock feeds from distant regions is shortsighted, burdensome and an interference to the winning of the war.

It is not agreeable for THE FARMER to criticize an organization that is under the able and patriotic leadership of Mr. Hoover. This journal has gladly and cordially supported the food administration in nearly all its orders and regulations, but it has seen from the beginning that in this matter of milling our own wheat some one was advising Mr. Hoover badly.

## Why Not Put All on Record?

It has been suggested that every man, woman and child able to work should be registered. Why not put us all on record?

There are some too old to do military service, or even hard manual labor, but all can do something. There are some too young to do much, but they are growing into usefulness.

Then when it is all over and the war is won, we shall know who went to France and what he surrendered to go; who stayed at home and what he sacrificed that others might go; who silently gave what he could for the cause of liberty and country; who gave money; who took advantage of the opportunity to amass wealth at the expense of his fellows when they needed his best efforts; who demanded unreasonable wages just because his employers dared not refuse.

These things should be on record that none may have injustice in the days to come.

Success largely depends upon seeing things as they are and not as colored by your own likes or dislikes.

## To Visualize War Demand for Yet Greater Food Production

Last year the United States shipped to the allies 10,000,000 tons of food of all kinds. It was a great achievement, made possible only by the loyal response of the farmers to the government's urgent appeal to put extraordinary effort into food production.

But greater effort is demanded. Mr. Hoover told the state food administrators at the recent conference in Washington, that this year the program requires the shipment of 15,000,000 tons, or an increase of 50 per cent.

To meet these requirements it is indispensable that enough labor be retained on the farm—that vigorous action be taken to counteract the farmer's natural and commendable desire to break away from the soil and go into the army, or seek employment in the shipyards.

The government has emphasized the fact that the farmer who, in patriotic spirit, puts the limit of his strength into food production, is serving the country's cause just as much as the willing worker who puts all his energy into ship-building.

Men engaged in ship-building are entitled to display an adopted emblem. Workers in food production are entitled to display the farm service flag designed by The Washington Farmer. The mere fact that the emblem was given to the country by this journal should not limit its adoption and use anywhere, for we studiously refrained from putting any marking on it to indicate its origin.

Its broadcast use on the farms of the United States will stimulate food production immensely. The fact that the emblem is displayed in his home is a constant reminder to the individual of his duty to give his full strength to food production. Even the labor slacker will feel its inspiring influence.

The right to display this farm service emblem stands on the same footing with the right to display the emblem that tells of military service, for the latter is not dealt out by any committee, but is used at will by the family of the soldier. Any tendency to misuse the farm service war flag of our designing can safely be left to local public opinion. If one of its stars is displayed for a farm worker who is not putting real service into his labor, the slacker will quickly feel the sting of protesting neighbor comment.

From the day that marked America's entrance into the war we have been told, and told truthfully, that increased food production is essential to the winning of that war. But mere words lose their effect from constant repetition. An emblem is needed to visualize any great truth, and in The Washington Farmer's design the country has a beautiful emblem which dignifies farm service.

## The Champion Bread Maker

In these times of high patriotic spirit and commendable admiration for our soldiers and sailors, Red Cross nurses, Salvation Army lassies and all others who are going over seas to win the war, we are going to digress a moment to lay our tribute of respect and admiration at the feet of Miss Andelia Swanson of Kenyon, Minn.

We are truthfully told that food will win the war, and it follows that the hand that is capable of making the best food is rendering patriotic service. Miss Swanson has the honor of being declared the champion bread maker of Minnesota. She competed with 4000 contestants, and we may be sure that many of them were A1 bread-makers.

Miss Swanson is only 16 years old, but she has had domestic science training, so evidently she is a mighty bright girl. She is certainly deserving of her prize of $25 and a gold medal.

Do not try to understand your neighbor's affairs. Your own keys will not fit his locks.

## Watch for Dangerous Weeds

It is a common sight in the summer time to notice two fields on either side of the road. One field full of foul weeds, and the other free from them. Farms that have been cultivated for some years are weedy, due to the fact that not as much precaution was taken in the past to spread foul seeds. Land that has recently been brought under cultivation is usually free of weeds.

There is not so much danger of getting foul weeds in purchasing seeds as there is in purchasing feed and hay. It is not an uncommon instance that farmers who have purchased hay, straw or grain for feed to also have purchased the stubborn weeds, Canadian thistles, wild mustard and white daisies. In feeding it to stock the seeds pass through the animals and are returned to the soil with the manure. When a farm becomes infested with these three weeds, it is only by constant, intelligent efforts that they can be removed.

On the farms where new land is being brought under cultivation if care is taken in buying grain for seed, grain, hay and straw for stock, the main avenue for the introduction of foul weeds will be closed. On the farms where the weeds have a foothold there is only one remedy and that is rotation of crops, cultivation, preventing them from forming tops which shuts off the air supply, cleaning the seed continued over a long period of years and used with constant and intelligent efforts according to local conditions.

Eating records every trait of the individual.

## To Check Undesirable Curiosity

To stop undesirable curiosity, state the facts of the case in plain language. Years ago I was serving my apprenticeship in the editorial office of a daily newspaper. The editor-in-chief was a wise man, and occupied a high place in the counsels of the nation. One day a prominent manufacturer of the city came in and requested the suppression of an item of news reflecting upon the financial reputation of a young man of good family. I remember hearing the editor tell that leading manufacturer: "If you will let us state in plain language all the material facts in this case that will end its publicity. If you try to hide it, there will be all sorts of surmises and mysterious complications. It will make a newspaper story day after day until the truth is finally sifted out by the public authorities."

It is pitiable, but it is true, that misdeeds of one sort or another happen. A simple statement of one of these outward events in the paper satisfies the reader and he is ready to forget it in reading the next and perhaps far more interesting item involving a good measure of mystery. It would be better if there were no occasions for this kind of news and less people who read it with avidity. This is not the time or place, however, to discuss the morals of publishing all sorts of news. It is simply the occasion of saying that the best way to stop undesirable curiosity is to state the plain facts of the case in a plain way. E.A.S.

## Vegetable Oil Trade

Tank steamships are now being used in the vegetable oil trade centering in Seattle. This oil, most of which is a byproduct of Manchurian soy beans, was formerly handled by way of Suez to New York. The closing of this route, due to war-time conditions, made Seattle the port of entry for this class of business for the United States. The introduction of tank ships, to take the place of the small cases formerly used, marks a big step in eliminating wasteful methods of handling this trade. The various vegetable oils are used in many ways, ranging from soup to explosives.

# Germany Makes Peace Offer

## *Must Make Sweeping Concessions Before Allies Will Listen*

Germany has offered to withdraw her armies from all invaded territory, including France, Belgium, Serbia, Rumania and Russia, as a prerequisite for the discussion of peace between the warring nations. She has also asked President Wilson to call a conference of representatives of the allies and the central powers to decide upon the terms of an armistice while the peace discussions are going on.

The overture has caused an interchange of notes, the last of which was a refusal by President Wilson to consider an armistice until German atrocities on land and sea cease, and in no case till the maintenance of the present military advantage is guaranteed.

This action comes at a time when the allied armies are wreaking havoc with the German lines, and apparently indicates that Germany realizes that she is beaten and wants to secure peace before her own soil is invaded and laid waste by battle. The form of her messages to President Wilson, through whom she is making her overtures, indicates that she is almost ready to make the "unconditional surrender" that the allies demand. The allies, however, look with grave suspicion upon the movement, realizing that no faith can be put in any promise or pledge of the German government with which they have been dealing.

In the notes between the German government and President Wilson mention is made of the terms of peace enumerated by the president on January 8. A summary of these terms is given in this paper on page 19.

The peace talk of the last week began with many rumors of moves by Germany and her allies. Then came a formal note to President Wilson reading as follows:

**"The German government requests the president of the United States of America to take steps for the restoration of peace, to notify all belligerents of this request and to invite them to delegate the plenipotentiaries for the purpose of taking up negotiations.**

**"The German government accepts as a basis for the peace negotiations the program laid down by the president of the United States in his message to congress of January 8, 1918, and in his subsequent pronouncements, particularly in his address of September 27, 1918.**

**"In order to avoid further bloodshed the German government requests to bring about immediate conclusion of a general armistice on land and water and in the air."**

This was signed by the new imperial chancellor of Germany, Maximilian of Baden.

To discover whether this was a trick or a sincere proposal, President Wilson prepared the following note of inquiry in reply, it being sent by Secretary of State Lansing:

**"Before making reply to the request of the imperial German government, and in order that the reply shall be candid and straightforward, as the momentous interests involved require, the president of the United States deems it necessary to assure himself of the exact meaning of the note of the imperial chancellor.**

**"Does the imperial chancellor mean that the imperial German government accepts the terms laid down by the president in his address to the congress of the United States on the 8th of January last and in subsequent addresses, and that its object in entering into discussions would be only to agree upon the practical details of their application?**

**"The president feels bound to say, with regard to the suggestion of an armistice, that he would not feel at liberty to propose a cessation of arms to the governments with which the government of the United States is associated against the central powers as long as the armies of those powers are upon their soil.**

**"The good faith of any discussion would manifestly depend upon the consent of the central powers immediately to withdraw their forces everywhere from invaded territory.**

**"The president also feels that he is justified in asking whether the imperial chancellor is speaking merely for the constituted authorities of the empire who have so far conducted the war. He deems the answer to these questions vital from every point of view."**

This note brought an immediate reply from Germany reaffirming the purpose of that country and apparently accepting the terms laid down by the president last January and in recent addresses. The following is the German reply, received unofficially in Washington Saturday night:

**"The German government has accepted the terms laid down by President Wilson in his address of January 8 and in his subsequent addresses on the foundation of a permanent peace of justice. Consequently, its object in entering into discussion would be only to agree upon practical details of the application of these terms. The German government believes that the governments of the powers associated with the government of the United States also take the position taken by President Wilson in his address. The German government, in accordance with the Austro-Hungarian government, for the purpose of bringing about an armistice, declares itself ready to comply with the propositions of the president in regard to evacuation.**

**"The German government suggests that the president may occasion the meeting of a mixed commission for making the necessary arrangements concerning the evacuation. The present German government, which has undertaken the responsibility for this step toward peace, has been formed by conferences and is in agreement with the great majority of the reichstag. The chancellor, supported in all of his actions by the will of this majority, speaks in the name of the German government and of the German people."**

In reply to this message, Secretary Lansing sent the following message for the president:

"The unqualified acceptance by the present German government and by a large majority of the reichstag of the terms laid down by the president of the United States of America in his address to the congress of the United States on the 8th of January, 1918, and in his subsequent addresses justifies the president in making a frank and direct statement of his decision with regard to the communication of the German government of the 8th and 12th of October, 1918.

"It must be clearly understood that the process of evacuation and the conditions of an armistice are matters which must be left to the judgment and advice of the military advisers of the government of the United States and the allied governments, and the president feels it his duty to say that no arrangement can be accepted by the government of the United States which does not provide absolutely satisfactory safeguards and guarantees of the maintenance of the present military supremacy of the armies of the United States and the allies on the field.

"He feels confident that he can safely assume that this will also be the judgment and decision of the allied governments.

"The president feels that it is also his duty to add that neither the government of the United States nor, he is quite sure, the governments with which the government of the United States is associated as a belligerent, will consent to consider an armistice so long as the armed forces of Germany continue the illegal and inhumane practices which they still persist in.

"At the very time that the German government approaches the government of the United States with proposals of peace its submarines are engaged in sinking passenger ships at sea, and not the ships alone, but the very boats in which their passengers and crews seek to make their way to safety; and in their present enforced withdrawal from Flanders and France the German armies are pursuing a course of wanton destruction which has always been regarded as in direct violation of the rules and practices of civilized warfare. Cities and villages, if not destroyed, are being not only stripped of all they contain, but often of their very inhabitants. The nations associated against Germany can not be expected to agree to a cessation of arms while acts of inhumanity, spoliation and desolation are being continue, which they justly look upon with horror and with burning hearts.

"It is necessary, also, in order that there may be no possibility of misunderstanding, that the president should very solemnly call the attention of the government of Germany to the language and plain intent of one of the terms of peace which the German government has new accepted. It is contained in the address of the president, delivered at Mount Vernon on the Fourth of July, last.

"It is as follows:

"'The destruction of every arbitrary power anywhere that can separately, secretly and of its single choice disturb the peace of the world; or if it can not be presently destroyed, at least its reduction to virtual impotence.'

"The power which has hitherto controlled the German nation is of the sort here described. It is within the choice of the German nation to alter it. The president's words just quoted naturally constitute a condition precedent to peace, if peace is to come by the action of the German people themselves. The president feels bound to say that the whole process of pace will, in his judgment, depend upon the definiteness and the satisfactory character of the guarantees which can be given in this fundamental. It is indispensable that the governments associated against Germany should know beyond a peradventure with whom they are dealing."

### Where the Battles Are Being Won.

Herewith is a map showing the present battle line of the "western front." With increasing speed the allies are forcing the enemy back. Before this reaches the readers it is probable that the towns of Douai and Lille, both important, will have been taken by the English and French, as have Laon and La Fere, since this map was made. Great changes are being wrought daily, and a sweeping German retreat is imminent unless the proposed peace terms are accepted immediately. Turn to page 17 and find there the Farmer's large war map showing the relationship of France, Germany and England and their principal cities, rivers and strategic points. Then return to this map and see just the position of the fighting front with reference to the whole. Next week this map will be reproduced on this page with the position of the battle line brought up to that date. Each week thereafter an up-to-date map will appear. If you desire to have always before you a clear view of the situation, clip the large map and each week the small one and paste them on a large sheet of paper, to be hung on the wall. This will give you a complete record week by week. The dotted line on the map herewith shows the present fighting front.




## *Remember Belgium! Fight On!*

Germany knows she is defeated. She asks an armistice during which she would discuss peace. She desires to withdraw before the victorious armies of the allies without the losses that are resulting from her retreat under fire. She desires to save her own villages and countryside from the fate that she heaped upon Belgium and northern France. Her heart is not changed. She is still an outlaw nation ruled over by fiends.

The civilized world wants peace, but it does not want it bad enough to negotiate with murderers and libertines and slave drivers. Germany can have peace when William Hohenzollern and his gang are hog tied with cords that time can not sever; when he and his damnable philosophy are banished from Germany never to return; when Belgium and France and Serbia and Russia are paid as far as humanly possible for the unspeakable wrongs done them by the heathen war lords and their hordes.

Until then, remember Belgium and fight on! General Foch, General Haig, General Pershing have not quit! We at home must not quit until the kaiser is delivered, a burnt offering on the altar of peace, by the German people who have blindly and unpardonably followed his leadership. Every drafted son of America must prepare to go; every soldier in camp must drill for battle; every private citizen must produce and save and contribute to war needs with redoubled determination; the Fourth Liberty loan must go over the top. Potsdam must know, once and for all, that the terms of peace will be of allied making, and must be unconditionally accepted now or next spring, when the heroic and long-suffering armies of France and England will have beside them four million invincible allies from U. S. A.

## *Washington Gleanings*

Gerard Clarke, a farmer near Colfax, reports the soil in excellent condition for fall seeding, due to recent rains.

Farmers in the Walla Walla section are bringing hogs to market, and the price last week dropped from $18 to $17.50.

Owing to the outbreak of Spanish influenza in Colfax—some five or six cases having been reported—the county fair has been called off.

J. E. Miller, formerly of the Albion State bank, has leased several hundred acres four miles south of Albion, and will do extensive farming.

Pupils of the Fruitvale school, near Yakima, of which Miss Mae Mark is principal, recently held a peach pit drive, which netted 1314 pounds.

Eleven hundred lambs were shipped last week from the Walla Walla section to R. H. Stanfield at Stanfield, Ore., the lambs averaging 71 pounds.

Another effort will be made soon by the Chelan and Douglas county commissioners to have the Columbia river bridge paved with asphalt macadam.

A. S. Beede of Portland, Ore., has purchased a half section of wheat land two miles east of Eltopia, and will at once begin operations for seeding 200 acres of rye.

The flow of artesian water in the well of the Columbia River Gas company is increasing as the drilling continues. The flow now is about 500 gallons per minute.

The contract for building a wooden bridge across the Cowlitz river near Harmony has been awarded to Ward & Jarvis by the Lewis county commissioners. The bid was $6975.

Lester Robinson has bought the old Chris Ennis ranch from Pat Hughes, who bought it a year ago. The ranch is rated as one of the most valuable in Walla Walla county. It lies just north of Walla Walla.

The Stillwater Lumber company, of Vader, has decided not to rebuild its plant, which was recently destroyed by fire. The company's holdings of timber have been sold to the Winlock Lumber company, of Winlock.

Yakima county commissioners have adopted the 1919 budget, which is slightly higher than that of 1918. No allowances are made for additional road construction, though there is a large allowance for road maintenance and repair.

Yakima will entertain the state beekeepers' association for its annual convention on November 14-16. According to the announcement made by J. B. Ramage, H. A. Scullen, bee specialist for the United States department of agriculture, will be the chief speaker. Mr. Ramage estimates the honey output for 1918 of Yakima valley at 600,000 pounds, as compared with last year's output of 750,000 pounds.

# Compares Increase in Prices

## *Federal Committee Says Wheat Increase Is Greatest*

The federal committee on public information has just issued a statement citing figures designed to show that the price of wheat has increased more during the four years of the war than have the prices of most other commodities, including those things which the wheat producer must buy. The committee's figures were compiled by the bureau of labor statistics and the United States department of agriculture. They indicate that from July 1, 1914, to July 1, 1918, wheat increased about 164 per cent in price. Corn during the same period showed an increase of about 103 per cent, oats 197 per cent, hay 42 per cent, cotton 131 per cent, hogs 107 per cent, beef cattle 65 per cent and lambs 132 per cent. The report does not include the comparative prices of wool during that period.

Turning to the things that the farmer has to buy the report of the committee shows that such articles as barb wire, cultivators, drills, gasoline engines, plows, wagons and harvesting machinery increased in price during the four years an average of about 78 per cent. Barbed wire led in this increase with about 92 per cent. Gasoline engines increased 44 per cent, wagons increased 66 per cent, drills about 75 per cent, cultivators about 86 per cent, and plows about 85 per cent.

Comparing the prices of food stuffs the committee's figures indicate that wheat flour advanced about 115 per cent, sugar about 55 per cent, cheese 52 per cent, salt 95 per cent, rice 78 per cent and molasses 45 per cent. The figures do not include the price of meats, the only thing along this line being preserved fish, which shows an increase of from 36 to 116 per cent.

Comparing the price of clothing in June, 1914, with those of June, 1918, the committee shows an increase in the price of cotton wear of from 118 to 295 per cent. The increase in woolens apparently was considerably less. Serge suitings increased 192 per cent, all-wool blankets increased 161 per cent.

Fuel showed a comparatively low increase. Wood is not included in the report, which shows that hard coal increased 21 per cent and soft coal 41 per cent. Kerosene increased approximately 42 per cent, while gasoline showed an increase of about 66 per cent.

In building materials, brick showed an increase of from 27 per cent in Chicago to 97 per cent in New York, cement increased 64 per cent, lime 110 per cent and common building lumber from 40 to 61 per cent.

A miscellaneous list of items, the prices of which are compared, show linseed oil to have increased 214 per cent, shingles about 82 per cent, window glass 75 per cent, wire nails 114 per cent, household cuttlery 107 per cent, tobacco 59 per cent, soap 53 per cent, cotton seed meal 76 per cent and rope 168 per cent.

### BEET SUGAR REDUCED.

Henry C. Bonsall, manager of the sugar distribution committee of the food administration for southern California, estimates the beet sugar production in that section at about 75 per cent of the normal yield. Southern California, he says, will produce approximately 1,750,000 bags of beet sugar this year, as against a normal production of 2,500,000 bags.

# Save Mill Feed

With a view to more uniform distribution of mill feeds so that all sections will receive a reasonable supply, Food Administrator Hoover has issued a direct appeal to the farmers who feed it. The following is the appeal in part, explaining the plan which Mr. Hoover desires followed:

"Owing to the extension of the drouth area, the shortening of the corn crop, the larger population in the country, and the allied demands upon us for feeding stuffs for their own animals because of their own shortage in produce of feed grain, it is necessary that we should exert every effort in the proper conservation of feeding stuffs during the next 12 months. It is necessary that we should ship a larger proportion of wheat as compared with flour during the next 12 months than during the last 12 months to the allied countries, because their own shortage of feeding stuffs is such that if they are to keep alive their dairy herds, they must have a larger supply of wheat milled.

"Already, the milk supply in the allied countries has been limited practically to the supply of children and other vitally necessary national uses, and any failure on our part to supply them with necessary feed stuffs for their dairy herd means that we shall cut into the actual safety of the children among the allies. On the other hand, both our own population and the allies are dependent upon our production of animal products, and we do not in any way wish to stifle this production. What we must secure is the utmost conservation in feed, and the total elimination of waste by the careful feeding of animals and the use of all the roughage available.

"One of the difficult problems is the distribution of wheat mill feeds, and this is made more difficult by the fact that the food administration, in an endeavor to protect the farmer, is maintaining an artificially low price on these feeds. One consequence is that a great deal of mill feeds are now going unnecessarily into work animals or beef production. Every farmer will recognize that the wheat mill feeds are vitally necessary for the dairy cattle, to some extent for the poultry, and for young pigs. Owing to the absorption of mill feeds at local points near the mill, considerable sections of the dairy industry are practically without mill feeds and our dairy production is thereby in danger.

"With view to correcting this, so far as possible, the food administration desires to appeal for the assistance of the farmers of the country in the use and distribution of wheat mill feeds, in addition to general conservation of feeding stuffs. In this view, we are asking every buyer of wheat mill feeds, outside of the acute drouth area, to sign a pledge of honor not to use the wheat mill feeds for any purpose except the essential use in dairy, young pig and poultry production, and not to purchase or hold at any one time more than 60 days' supply. Unless we can secure this careful and specialized use of mill feeds, our dairy production in the congested eastern areas of the United States is bound to fall and to jeopardize the food supply of our people in that section. Otherwise it will be necessary to release the price restrictions on mill feeds and allow them to take their natural course.

"With a view to securing this cooperation from the farmers all over the country in the interests of their industry as a whole, we are instructing the mills and all dealers in feeds to secure from the buyer of wheat mill feeds the following pledge:

"In order to assist the food administration in the distribution of wheat mill feeds, I hearby undertake on honor not to use wheat mill feeds for any other purpose than the feeding of dairy cattle, poultry, young pigs, or young calves, or the preparation of a weekly bran mash for work animals.

"I will not feed and more wheat mill feeds than is customarily fed to such animals, and I further agree not to have at any one time more than a 60-day supply of wheat feeds on hand."

# Storing Potatoes in Pits

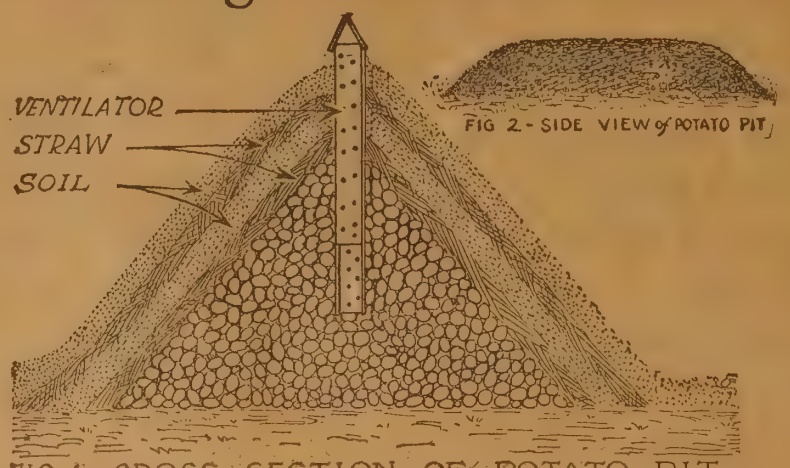



FIG 1.-CROSS SECTION OF POTATO PIT SHOWING LAYERS OF STRAW AND SOIL.

By P. G. HOLDEN.

Potatoes may be stored in pits, out of doors, successfully if the pits are provided with good drainage and ventilation and the potatoes are given such covering as will protect them from external heat and cold.

For such a pit a well-drained site, or one which can be easily drained, is the first essential. In depth the excavation may be anywhere from practically nothing to two or more feet, but it is generally best not to excavate more than six inches. The pit should be long and narrow, as shown in figure 2.

The size of the pit, to a certain extent, must depend upon the quantity of potatoes to be stored, but too large a quantity should never be stored in one pit.

In preparing the pit a light layer of straw should be placed on the floor to keep the potatoes from coming in direct contact with the soil, and some provision should be made for ventilation to permit the evaporation of such moisture as may rise from the potatoes.

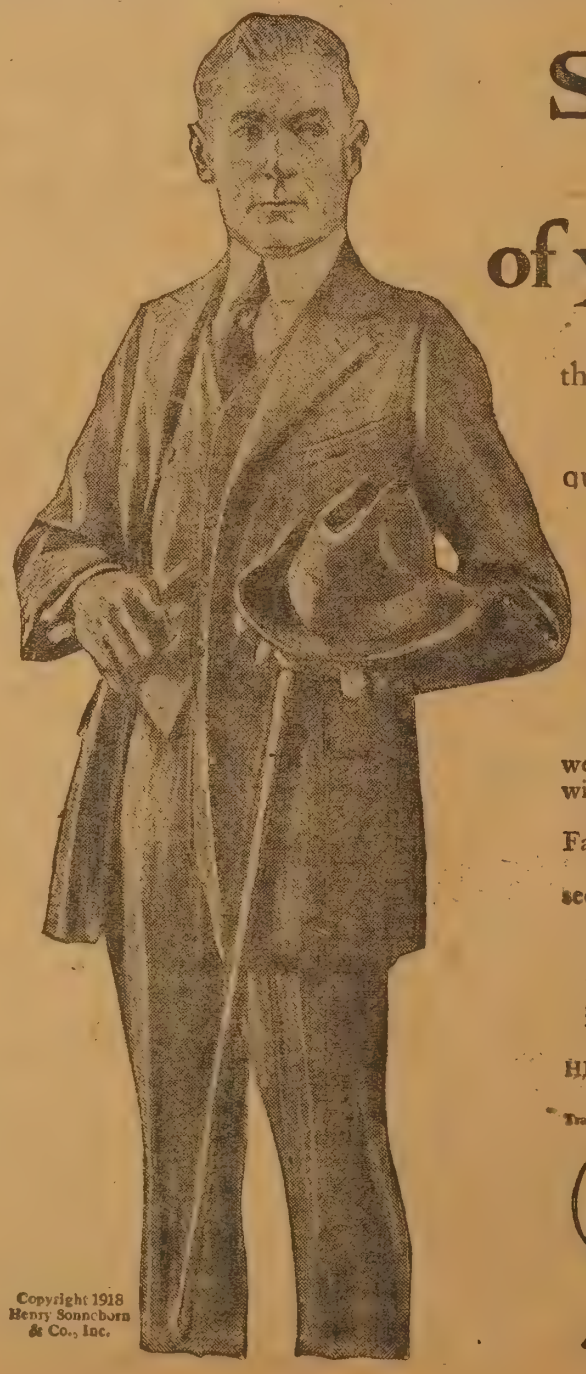
The potatoes should be piled in a ridge, in the shape of an inverted V, as shown in figure 1. This will expose a greater area of the pile to the circulation of air, and will shed rain much better.

To protect the potatoes from cold and heat, they should be covered with alternate layers of straw, or hay, and soil.

The first layer should be straw or hay; the second should be just sufficient soil to prevent injury to the potatoes by light or frost. This will quickly cool off the potatoes and free them from the moisture resulting from the sweating process. As the temperature lowers, more hay or straw and another layer of soil should be added.

### WOULD DEVELOP IRRIGATION.

With a view to speeding up the development of Five Mile rapids, on the Snake river, for the purpose of adding probably 60,000 acres to the irrigated land of that part of the state, representatives of the Burbank company have taken the matter up with Secretary Lane of the department of the interior. Secretary Lane has asked congress for an appropriation to survey various prospective irrigation projects, including the proposed Five Mile rapids development.

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# Good for Harvest; Poor for Feed

## Eastern Part of the Stae Has Unusually Dry Season; Seeding Will Be Late in Some parts of the West Side




LA CROSSE, Whitman County, Wash., Oct. 4.—Weather conditions have been most ideal for finishing up all harvest, but very detrimental for pastures and field work in general. The last two fall seasons have made farmers most cautious as to seeding dry land or seeding too late, and on the other hand, spring crops as a whole are very unsatisfactory both as to yield and crowding farm work. The lack of rain since breaking up of last winter followed by drying winds left the summerfallowed ground in a very rough condition and a good soaking rain is needed to put the ground in good condition for seeding. A few little tracts have been seeded and most farmers are holding off until next week, hoping the longed-for rain arrives. The rainfall since January 1 to October was 7.06 inches and the total amount since October 1, 1917, to October 1, 1918, was 11.65 inches, which is one of the driest on record. War conditions made many seed a larger acreage in the past, but costly lessons of the last two years are making farmers more conservative as land needs to be in prime condition to produce maximum crops. Haphazard farming spells poor crops. M. E. SCHRECK.

### HORSES ARE VERY CHEAP.

FAIRFIELD, Spokane County, Wash., Oct. 3.—Fall wheat acreage has been increased over last year by 25 to 30 per cent, and indications point to an increase of spring wheat, especially if the proposed $2.50 price goes into effect for the 1919 crop. Unless the price is fixed high more oats will be seeded. The early sown fall wheat is up, but not an even stand. The wheat sown on pea stubble has not had sufficient moisture yet to bring it up. There seems to be plenty of feed for the stock in this section. Some pea straw is being shipped out at a fairly good price to the grower. The fall sales are revealing the fact that horses are a drug on the market. Fairly good work horses have been sold as low as $5 with others at $8 to $10, that a year ago would have brought $75 to $100. Hogs and cattle bring good prices. A grade Jersey sold today for $88. She gives two and one-half gallons of milk a day. ROY G. ADAMS.

### SEEDING WILL BE LATE.

RAINIER, Thurston County, Wash., Oct. 5.—Sunday night, September 29, was the first rain in a long time and it helped to put out the timber fires. Since then we have had frequent showers, making plowing possible. Weather is warm and we have had no frost. Grass is starting and with a warm fall we will get some green pasture for winter. All seeding will be late, as we can seed up to Thanksgiving time. Late potatoes are green and growing, late tomatoes and cucumbers are ripening up to finish out the vegetable part of the household, along with the squash, pumpkin and the growing cabbage. This country was hard hit by drouth conditions. Seed grain is high in price. Wages are very high and many ranchers will work in the saw mills through fall and winter and let farm work go. Feed is also very high. While many farmers are short on feed and seed they will meet the situation as a business proposition. Dairying is one of the principal occupations here. Rather than dispose of a whole or a part of the herd of cattle, it will pay to buy and haul straw and buy some hay even at the present high price, as cattle will be in good price next season. The farmer should have his fall and winter cows to do this in order to get the benefit of the high prices of milk products. The price of wheat straw is $4 and oat straw is $5 per load. Home grown hay is $20 per ton in the barn and haul it yourself, and not much to be had at that. Alfalfa is $35 per ton, mill feed $40 per ton. Some banks are willing to help out the farmers to carry over their dairy herds till next season. L. F. DAVIS.

### BRISK DEMAND FOR HONEY.

TWISP, Okanogan County, Wash., Sept. 26.—This section is very dry and farmers are making no effort to comply with the request of the government for an increased acreage of fall grain. Some grain is produced here, but this section is better adapted to fruit and stock growing. Farmers that irrigate, as a rule, have good crops, but crops are very light on non-irrigated land here. Most of the dry land farmers are selling their stock in preference to buying high priced hay. Farmers are willing to make extra efforts to produce more but weather conditions have been very unfavorable the last season for upland farmers in this section. Bees have done well this summer and there is a brisk demand for all the honey produced here. Most of the farmers seem to be possessed with a patriotic spirit and are willing to make sacrifices to help the government win its object. GEORGE LA RUE.

### BUYING POWER MACHINERY.

CENTERVILLE, Klickitat County, Wash., Sept. 27.—Running through Klickitat September 13 was a rain storm of various degrees of intensity. In the vicinity of the Larger Klickitat there was a cloud-burst or nearly so, causing those having sown grain to work the ground immediately, as the rain came so hard as to bake the ground hard. About two-thirds of the wheat has been seeded up to date, perhaps a larger percentage than that. All the first sowing is looking fine with a good deal better prospect for the coming winter wheat crop than for several years at this time of year. This is all a winter wheat section, that being the principal grain grown when the season is right, to the exclusion of every other grain. Everything here is set on a winter wheat crop and if that fails then something else is sown in the spring. There has been a great rush in the seeding of the fall grain. Everything else has been dropped to get the seeding done and get it up. The weather has been warm enough to bring the wheat up rapidly and give it a good start. War conditions here simply mean that every farmer is studying how he can get his next season's crop taken care of. With the new draft regulations going into effect a great many like myself are left with a 16-year-old son on a 400-acre ranch. Some even have less help than I have. Many farmers are getting tractor machinery to help out and considerable of it is being contracted for now. The harvest this year reveals the fact that a great many are harder hit than usual. In places along the Columbia river section the rain was heavy enough to start the fall growth so that sheepmen and stockmen are relieved. Some after harvesting have just about enough to seed back again without much left for last year's expenses. Farmers that are used to good yields every year fell down in proportion the same as others. The small combines are cutting into the large steam thresher job this year and there will be more next year. There is a fair crop of apples in places through the county, but the main crop was killed by frost in the spring. Our special winter needs will be an extra allowance of feed, which is rather scarce. Some will have little for next spring's work.

C. A. LESTER.

TO the Editor of The Washington Farmer: Have received your circulars. Have just finished reading "The Trappers of the Ozarks." Ben and Jodo are certainly interesting boys. I have received the Washington Farmer of September 12, 1918, containing the first chapter of "A Crooked Trail." I want to watch that young man hunting for Lep, the ox, and see where he finds him, and what a time he has taking him back home. I herewith enclose a money order for 50 cents for a subscription to The Washington Farmer for three years. Please let this subscription commence with the issue of September 19, 1918, so that I can get the whole story of "A Crooked Trail."

WILLIAM GARLAND.
Port Ludlow, Wash.

### Pick Apples Carefully.

Apples will keep better if they are picked carefully from the trees and wrapped immediately in paper and placed in boxes in a cool cellar. Rough handling causes quick decay.


# LEND AS THEY FIGHT

THE GOVERNMENT OF THE UNITED STATES asks you for a loan - - all you can spare - - - - to make up a total of Six Billion Dollars.

This money is necessary to keep those boys fighting in France - - to keep them well fed, well armed and fully supplied with ammunition.

If you lend as they fight, victory will come, and if you lend as willingly victory will come quickly.

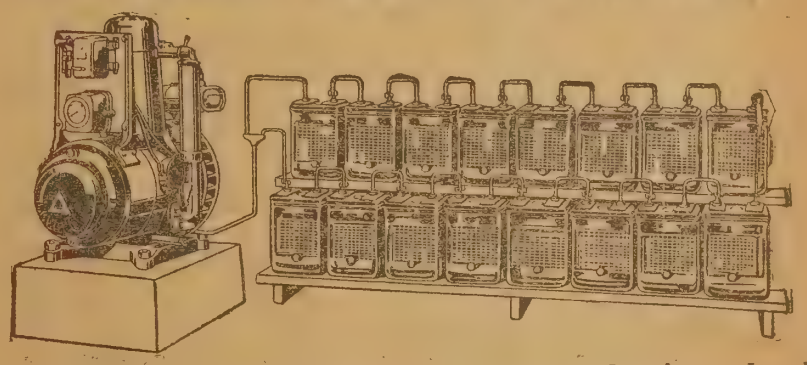
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## INCREASES FARM EFFICIENCY



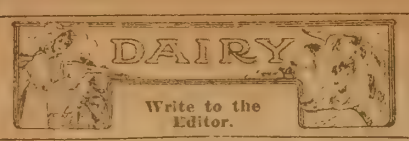
Electric light and power anywhere on the farm. Here is an electric plant that will do your chores and relieve yourself and wife of much household labor.
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A. B. NYSTROM, Editorial Contributor

## Need More Speed

Many dairy experts are agreed that much butterfat is lost each year by the failure of the dairymen to operate their separators at a sufficiently high rate of speed. Experiments carried on for the purpose of the speed at which various makes of separators should be operated, together with experiments to discover at what rate the average dairyman operates his machine, seem to indicate that many use too low a speed. A speedometer to indicate the speed obtained is recommended, as no one is capable of judging speed sufficiently accurately enough.

While loss of butterfat by this means is a great loss, it should not be considered wholly loss if the skim milk is fed to pigs or chickens as it always should be unless used in the preparation of food for the table.

## Conditions Change

A few seasons ago the Farmer said in its dairy department: "When a farmer gives up dairying in disgust, being convinced that it does not pay, it is not the business that is at fault. It is the method, or, rather, the lack of method, that is wrong."

This principle is still sound, though conditions have changed since that was written. Today many are giving up dairying more or less in disgust because it does not pay them, but the fault does not lie entirely with the "method or lack of method" pursued. There are conditions over which the best methods known can scarcely exercise control. Nothing short of the most scientific and skilful conduct of the dairy business can carry the farm through the perils of the present month.

There are feed and labor conditions over which the dairyman can hardly be expected to have control, however excellent his method of dairying may be. There are marketing conditions and restrictions that baffle the most learned student of dairy products marketing.

The one who fails now or who gives up temporarily is not to be condemned for a lack of method or the use of a poor method, but the one who persists, who breaks even or makes a little profit, or who actually loses money but clings to that finest branch of agriculture until normal times return, is greatly to be praised. The dairy business now in many sections is one to try the patriotism of the dairy farmer.

## Give Salt and Water

Sometimes with the approach of cold weather there is a tendency on the part of cows to drink considerably less water, and a corresponding tendency on the part of dairymen to consider that they should be given less. The truth about it seems to be that a cow that produces heavily requires much water. Experiments indicate that the water she needs varies with the amount of milk she gives. Extremely heavy milkers sometimes require as much as 200 pounds of water a day. The average milker needs 60 to 100 pounds, it is claimed. Every effort should be made at all times of the year to induce heavy drinking.

Care should always be taken to insure the taking of plenty of salt. As a rule, the cow will attend to this if she has the opportunity and all the opportunity needed is a trough of salt where she can get at it. It is a wasteful and generally unsatisfactory practice to dump salt out on a salt lick somewhere about the yard or field. It isn't the natural thing for a cow to eat dirt. She does it only because she can not get salt without doing it. Give her some feed on the ground and see if she appears to relish the dirt that she has to take to get the feed.

### KEEPING BUTTER FOR WINTER.

**Cream Should Be Not More Than Three or Four Days Old for Best Results.**

Fifty years ago, before the cold storage and the creameries were developed, it was common practice, to preserve the butter made in the summer time for use in the winter by packing it in jars and storing in a cool place. The market at that time, as compared to now was not critical. Such butter could not be sold in the city market at present. It is possible, however, to preserve butter in fairly good condition, says C. H. Eckles of the University of Missouri college of agriculture, and those who are willing to use butter that is not first-class may find it of advantage to use this plan:

Butter that is to be kept for several months should be made from cream that has not been kept more than two or three days before churning. The quicker it is churned the better. The churning should be stopped when the butter is in small granules, so that as much buttermilk as possible can be worked out. It should be worked and salted and packed in a glazed crock or jar. A layer of about one inch of brine as strong as can be made should be kept over the butter. Keep the jar cool by placing it in the basement or an ice-box. Special attention should be given to keeping the butter entirely away from light and air, because light and air cause butter to spoil rapidly.

### IMPORT GERMAN PRISONERS?

Why this country should not bring German prisoners from Europe to America and put them on American farms to relieve the present shortage of labor is the question asked by Representative Young of North Dakota, who has proposed such a movement to Food Administrator Hoover. Representative Young suggests that the prisoners be employed at $1 for themselves and 33 1-3 cents a day to go to the government to pay the expenses of importing them.

### MANY STUDENTS ENROLL.

Many thousands of young men have enrolled or are enrolling in the universities and colleges of the country as members of the student army training corps. Under this head a young man of draft age may go to school, taking certain required military courses and training in connection with the regular college work. He receives his uniform and board and regular army pay. It is a great opportunity for the boy to go to school and get paid for it.

### Impossible!

Mistress (engaging new maid)—You say the last family you worked for were Germans?

Maid (apologetically)—Yes'm, but they was sterilized when the war broke out.—Wadsworth Gas Attack.


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THE FEED YOU NEED

Shortage of millfeeds and high prices of all grains have no terrors for the farmer and stock raiser who uses "Sunnybrook." It's a new, concentrated, balanced feed, the analysis of which is as follows:

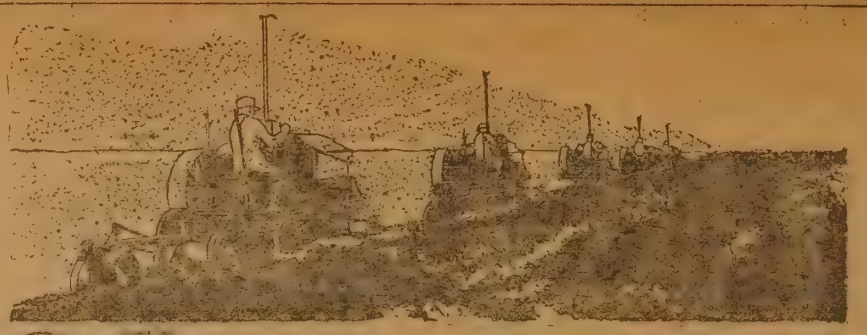
| | |
|---|---|
| Protein | 15.51% |
| Nitrogen, free extract | 16.55% |
| Crude fat | 4.50% |
| Ash | 6.58% |
| Crude fiber | 18.15% |
| Moisture | 8.47% |

UNION MEAT CO.
North Portland, Ore.



**Cost $2.50 so far**
One month old, 150 lbs. 50 lbs. when born.
**Blatchford's**
Sell your milk. Raise your calves on Blatchford's Calf Meal at ¼ the price of milk. The other ¾ stays in your pocket as clear profit.
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Blatchford Calf Meal Co.—Dept 9347 Waukegan, Ill.

**SPOKANE SEED CO.**
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**K-W High Tension Magnetos are Protected Against Powder Fine Dust-Oil and Water**

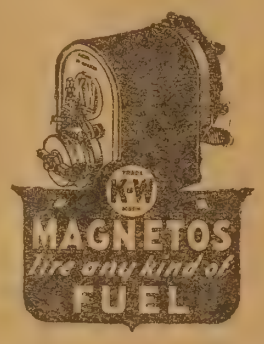
IN many localities tractor manufacturers find it necessary to equip their tractors with "periscope" air intakes which reach up above the cloud of fine dust. But the Magneto must be mounted on the engine and give satisfactory service under these same conditions. This is one feature that has made the K-W Magnetos the standard on tractor work.

These tractor manufacturers don't worry about dust getting into a K-W Magneto. They know its working parts are protected against even the finest Alkaline dust, and oil and water, can't reach its internal parts and give trouble.

The protection of all working parts is only *one* feature of K-W Magnetos. K-W users get quick and easy starting without troublesome batteries or coils; more power out of the same fuel, and continuous, reliable, no-trouble ignition.

If you are not using K-W Ignition now, write us and let us show you how a K-W Magneto will cut your fuel bills and free you from ignition troubles, regardless of the weather or working conditions.

Insist that your new tractor be K-W equipped. Forty tractor manufacturers pay more for K-W Magnetos because of K-W superiority. Write for list of K-W equipped tractors.




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**Your Calves Are War Babies**

*Raise Them!—*

Give to the country all the dairy products that you can possible produce. Instead of feeding milk, raise your calves on Albers Calf Meal at one-quarter the cost. They will thrive on it, grow rapidly and will be valuable additions to your herd, because they will be sturdy, and free from disease.

Albers Calf Meal is made on a basis of Ground Oat Meal, exactly what calves should have for bone and body building. It is not a stock food made of waste products, but a perfect milk substitute high in food value, every ingredient easily digested.

Your dealer sells Albers Calf Meal in 25 and 50 pound sacks—if he happens to be out of a supply, he will get it for you.

**Albers CALF MEAL**

# Meat Is Regulated in Australia

By A. C. MILLS, Melbourne, Australia.

(From the Pastoral Review.)

The item of overshadowing interest to graziers just now is the commonwealth government's action in fixing the maximum price of meat for local consumption. Nobody knows where it will lead, but it is very certain that the policy is creating an air of uncertainty and unrest that can not be good for the live stock industry. I may explain that the national government, contrary to its previously avowed intentions, about six weeks ago decided to fix the price of meat for local consumption. Schedules containing wholesale and retail rates were hurriedly drawn up and came into force on the 29th of July. Wholesale rates for beef range from $10.2 to $12 per 100 pounds, mutton from 10 to 12 cents, and lamb from 12 to 14 cents per pound, according to locality. The retail rates vary more widely and run from 28 cents for fillet steak to 12 cents for the cheaper cuts of beef; from 18 cents for loin chops to 10 cents for forequarters of mutton, and from 22 cents for lamb chops to 14 cents for forequarters. Pork, veal and small goods are not dealt with.

Compared with the values that were ruling during July, the proclaimed wholesale rates meant a reduction of about 1 1-2 cents per pound on prime light beef and 1 cent per pound on mutton and lamb. When graziers realized this those who could decided to hold off the market until they saw how things were likely to go. Being winter and the period of natural scarcity of fats, the result has been that the supply of stock sent in for sale has been quite inadequate since the schedule came into force. Butchers have been scrambling for the limited offerings, paying a good deal more than they were justified in doing and are now appealing to the government to help them out. Up to the present the government has mostly contented itself with issuing vague threats of commandeering stock in the country (it will be difficult to find the fats), but whether it will dare go to such lengths remains to be proved. Temporary relief is to be afforded this week by releasing certain stocks of frozen mutton and beef held in cold store on account of the British government, but the quantity is small and it is doubtful if it will tide the local trade over until spring, when more fats are in the country and the markets may be better supplied.

The absurd feature about the whole business is that the fixed retail prices have not benefited consumers, for whose sake solely the policy was adopted. As a matter of fact they are rather worse off than before. The schedule only applies to prime quality meat sold at the block for cash. Booking or delivery may be charged extra and it is. Those customers who buy for cash are getting poorer quality of meat, and, what is more, the joints and cuts are not trimmed as they used to be. Many a housewife is finding to her disgust that she is now getting one chop less to the pound and a mighty lot of useless skirt.

The season over practically the whole of the country south of the tropics is developing satisfactorily and gives promise of a fair to excellent spring. As far as Victoria, South Australia and the southern half of New South Wales are concerned conditions right through the winter have been moderately favorable. There has been an abundance of rain and the subsoil must have received a thorough soaking. On the other hand northern South Wales and southern Queensland were under a dry spell until three weeks back and things got into a pretty bad way in many districts before the weather broke. However, the last rains extended well into this territory and matters are now greatly improved. Within the tropical belt conditions are dry though there is still plenty of feed of a sort about. Given the thunder storms that usually turn up about this time graziers should be able to carry on without anxiety until the regular northern wet season sets in toward the end of the year.

**Autumn and Winter Lambing.**

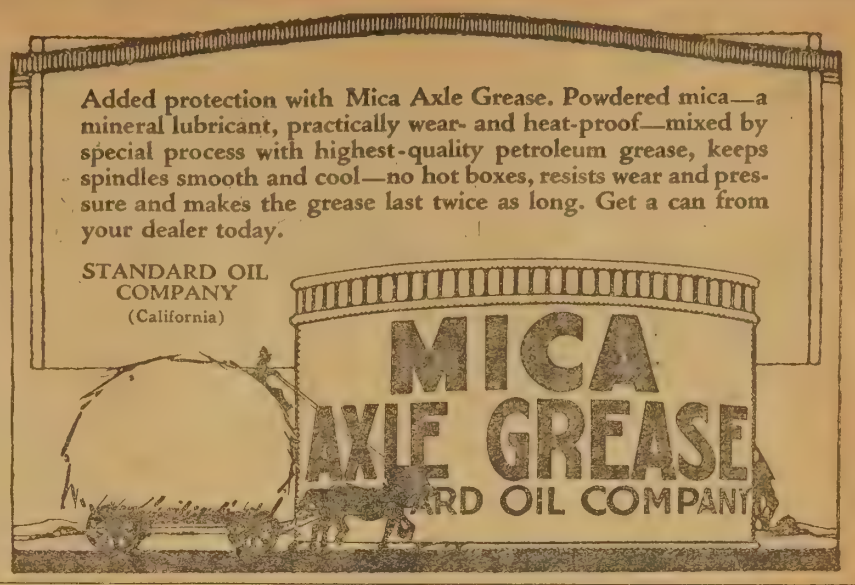
A return just published by the New South Wales government statist shows that of the 19 odd million ewes in that state at the end of last year 13,310,000 were put to the ram for the autumn and winter lambing. The lambs dropped are given as 9,719,000, an average of 73 to the 100, which, considering that the bulk are Merinos, and practically every sheep has to fend for itself in the open, is a fair percentage. However, it appears that the losses between lambing and marking were unduly heavy, owing to the dry weather in the northern districts. The numbers marked are estimated to have outreached 7,720,000. This will give a net return for the ewes mated of but 58 per cent, which is poor, and seeing that the country is still understocked to be regretted. It is confidently anticipated that a much better average will be obtained with the spring lambing for which it is estimated 3,260,000 ewes have been reserved.

No official statistics are published in any other state, but it is possible to gather reasonably accurate figures from other sources. The season over Victoria, South Australia, Tasmania and most of western Australia has been fairly favorable, and the percentages must be a good deal better than in New South Wales. Also apart from climatic conditions, the part that the more prolific crossbreds and various British breeds form, the greater part of the sheep stocks of those states indicate higher averages. Probably there were 15,000,000 ewes in the country at the beginning of the season. It may be estimated that nearly 12,000,000 were mated and the lambs marked to be between 8,000,000 and 9,000,000, say from 70 to 75 per cent. The season in Queensland has been much on a par with New South Wales and Merinos again predominated there. Allowing for 8,500,000 ewes in the state probably 7,000,000 were mated and the ultimate marking was about 4,000,000, or say 60 per cent.

These estimates give a net increase to the sheep stocks of the commonwealth of roughly 20,000,000 lambs as a result of the autumn and winter lambing to which may be added another 3,000,000 in the spring. The total number of sheep of all sexes in Australia at the beginning of 1918 was 79,000,000.

**DECLINE IN STOCK ON FARMS.**

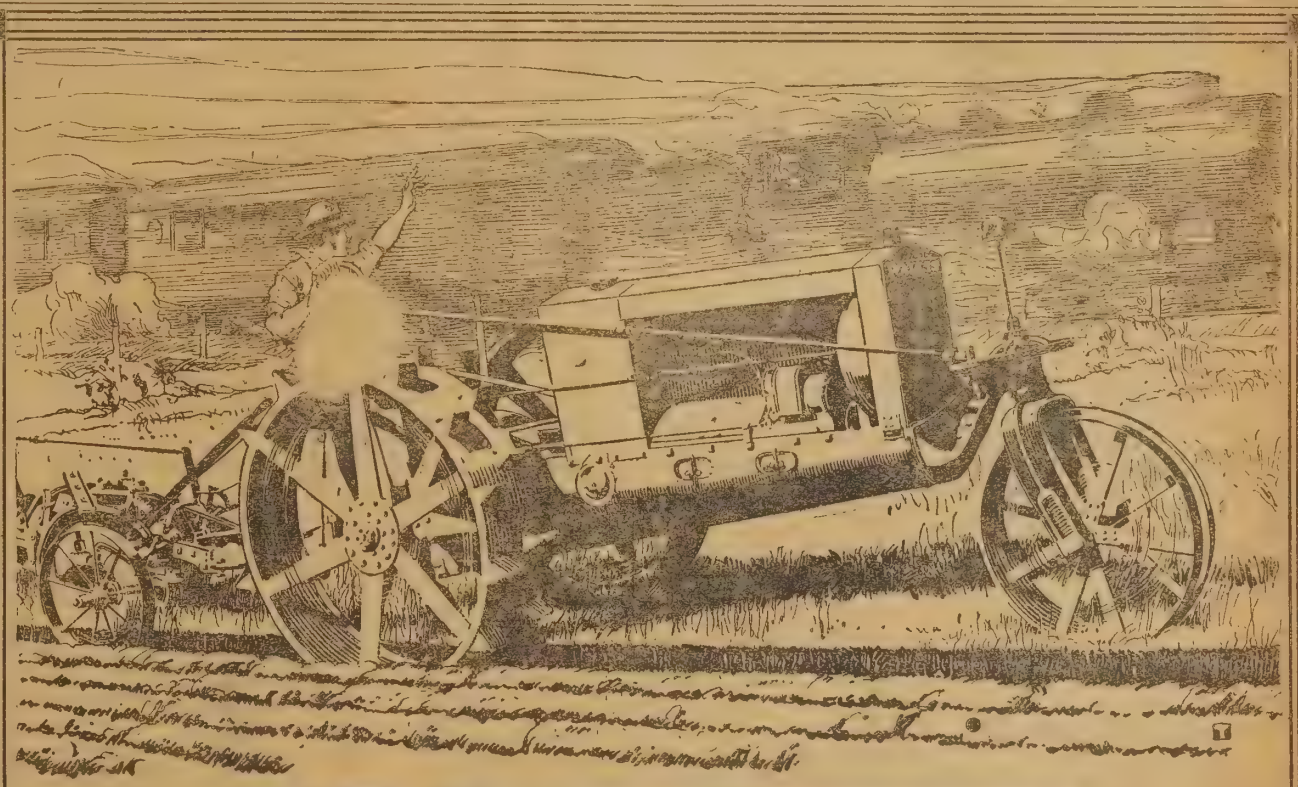
On about 5000 representative farms, scattered throughout the United States, reporting to the bureau of crop estimates, the decline in the number of cattle was 0.8 per cent from last July 1 to August 1, 2.9 per cent in hogs, and 3.3 per cent in sheep.


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Wilson's Modern Business College

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The Wallis has completely enclosed gears, operating in oil. This includes the rear axle drive. All gears are drop forged, cut and hardened steel. Vital points operate on Hyatt bearings. Throughout this advanced type tractor every part is as carefully designed and finished as a modern motor car. As a result the Wallis does from 30 per cent to 50 per cent more plowing per gallon of fuel.

Investigate the Wallis. Write for name of local dealer and a copy of new Wallis Catalog.

**J. I. CASE PLOW WORKS, 540 Mead St., Racine, Wis.**

***Sales Agents for Wallis Tractors***

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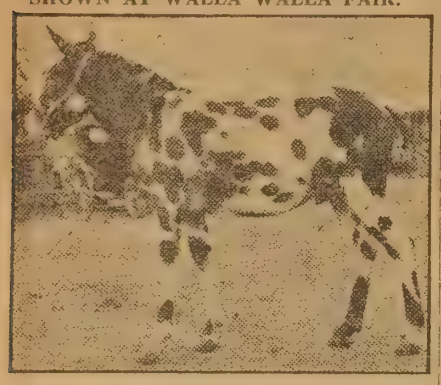
Reg. U. S. Pat. Off.

## LIVE STOCK NOTES.

Write to the Editor.

E. J. IDDINGS, Editorial Contributor

### SHOWN AT WALLA WALLA FAIR.



The picture is not a circus animal; he is a mule, shown at the recent fair at Walla Walla, Wash., and he won a prize, not for his spots, but on his qualities as a mule.

### POOL WOOL SHIPMENTS.

**Idaho Farmers Receive Sum of $76,400.**

Two hundred and thirty thousand pounds of wool were handled by a farmers' wool pool organized with the help of the farm bureaus of Ada and Canyon counties, Idaho, and the United States department of agriculture. The wool sold at 60 cents a pound, and the total amount received by the farmers was $76,400. The cost of handling was prorated and found to be 3-1000 of a cent a pound. The farmers feel that the pool saved them several thousand dollars. Members of this year's pool are planning for next year. They are learning something of the different grades of wool, so that next year they can grade and classify to better advantage, says the weekly news letter of the United States department of agriculture. Through the help of the Lewis county farm bureau, a similar pool was organized, which shipped 10,000 pounds of wool to Salem, Ore. Since the organization of the farm bureau, a great interest has been developed in sheep-raising. Ninety-five thousand pounds of wool were sold by the Jerome Woolgrowers' association, developed with the help of the farm bureau in Lincoln county.

## VETERINARY

By DR. S. B. NELSON.

**Severe Case of Mange.**—I have a bob-tail English sheep dog, one year and a half old, has had mange for six months. Have been using a mange cure, but he does not get well. He has had distemper and worms. He has had the best of care. Can you tell what to do for him? G. S.

Seattle, Wash.

If your dog has had mange for six months and you have not been able to cure it, the chances are the disease is very deeply seated, and for that reason, I would suggest to you that you consult one of your local Seattle veterinarians. I regret that I can not give you a treatment that you can use in as severe a case as this either has been or is at the present time.

**To Wean Mule Colt**—I have a mare with a mule colt 3 months old. The mother is rather thin and pretty old. I would like to wean the colt. What is your opinion?

P. N. A.

Box 18 Rainier, Wash.

If you possibly can, let the mule colt run with the mother a little while longer. While you are doing this try and have the colt eat a little hay and feed a little grain to him—ground grain; not very much; but start him on it, and then in from four to six weeks, you can wean the colt without any trouble. Feed the mare pretty strongly especially on grain, until you get ready to wean the colt, and then when you wean it, decrease the grain being fed to the mare.

**Is Pen Safe for Use?**—Are pig pens that had 40 hogs die with cholera 18 months ago safe to put hogs in at present? There has been nothing in the pens for 18 months. If not, kindly advise what disinfectant to use and if it will be perfectly safe for hogs at present time.

A SUBSCRIBER.

Camas, Wash.

Whether or not a pen would be safe to use would depend somewhat on the weather and general conditions. With this length of time I believe it would be safe if you would disinfect the pen. First, if there are wooden floors, wash all the woodwork with a one to 1000 solution of corrosive sublimate. Four days later wash the floors and up the sides with a saturated solution of bluestone. Four days later whitewash the woodwork thoroughly, cracks and all. If the floors are of dirt sprinkle the floors thoroughly with lime (unslaked) and then either plow or have them spaded up and then sprinkle lime on top of it. After this has been done I believe the pen would be safe for use.

**Wire Cut in Fetlock**—I have a horse obtained about 10 weeks ago that had a bad wire cut in the fetlock, which was done about a year ago. The injured foot was not properly taken care of and proud flesh grew in. About the middle of June, just before I got him, a veterinarian operated on him, cutting out the surplus flesh. I am unable to get the sore to heal. I am of the opinion more should have been cut out or else proud flesh is coming in again. The local veterinarian looked at him about two weeks ago and said there was no proud flesh now and gave me a liquid to apply with a feather. It is a hard matter to keep dirt out, as I have to work him. Cloths on the foot irritate it. He is a nervous beast—never still. When in the barn he is pawing and jumping around half the time. When hitched to the wagon will paw and fret unless on the move. When in the barn at night will rub the sore foot with the other foot and keep it raw, or sometimes uses his teeth. I am of the opinion it needs cutting or burning out more. Have been told to use blue vitriol. How would one use it, and how strong? I keep a leather boot on him now at night, but it seems to irritate the sore, as he keeps in motion so much.—L. D. B., Newport, Wash.

Wounds in the fetlock are very serious things, because they are low in vitality to build up, and therefore it takes a long time to get the tissues to heal. I believe that your veterinarian is on the right track, and he should see the horse frequently to see if the skin heals and around the edge of the wound is gradually closing in. If the cells grow too rapidly in the center of the wound, naturally they will have to be burned out either with a cauter as you suggest or by strong drugs. Blue vitriol can be used quite strong in these cases—20 to 30 per cent even is not too strong.




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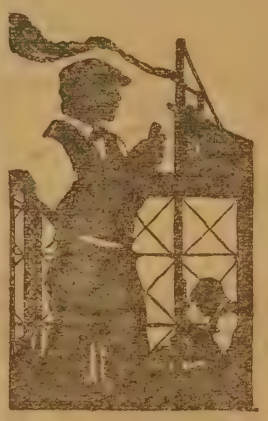
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# Three-in-One Pay

## Trappers Scent Season's Opening

The capture of fur-bearing animals in the northwest offers a three-in-one profit in most cases, and in some even more than that. The season is about here when the profits can be taken, in fact, it is here, but not yet at its best.

It is real sport to trap for any animal that has a value when captured, or that is a pest that should be destroyed. Possibly sport should be enumerated as the first common inducement to trap coyotes, muskrats, moles and the like in the northwest. Second, there is the riddance of a real pest when one of these animals is killed. Third, there is in some cases, depending on the animal and the locality, a bounty that is well worth considering. Fourth, and by no means least these days, there is the value of the fur. Any good fur has high value, and in localities where there are any considerable number of fur-bearing animals either man or boy is safe to figure an actual money profit from his leisure time during the winter season spent in trapping.

Of course, there are other ways than trapping that the animals may be taken. They may be poisoned or shot. Drawbacks to these methods, however, are that many animals when poisoned are never found and the bounty and fur value are lost, while shooting, especially with the smaller animals, often damages the fur to such extent that it is of little value.

Furthermore, it is a real art to trap successfully. One has to set his cunning against that of the wild animal, and it affords a contest that appeals to the average boy or man.

### HOLD BIG FUR SALE.

The first three days of the international fur auction at St. Louis, Mo., last week brought a total of $2,595,500. Red fox pelts were the largest sellers today, 20,400 of them bringing $611,840. Many sold as high as $70 a pelt. The highest price paid for a single skin was $410 for a silver fox. Hudson bay sables brought $81 a pelt, and polar bear pelts sold for as high as $110 apiece.

# SIDELIGHTS

### Joy in Hearing.

"What would your mother say, little boy," demanded the passer-by virtuously, "if she could hear you swear like that?"

"She's be tickled to death if she could hear it," answered the bad little boy. "She's stone deaf."

### Some Bird.

Officer of the guard (to sentinel No. 1)—Would you know the commanding officer if you were to see him?

"Yes, sir," replied the rookie; "he's the man with the chickens on his shoulder."—Judge.

### Dignity of a Doctor.

An army officer's wife wrote to an R. A. M. C. officer saying her child was suffering during teething. She addressed the letter to "Mr. Brown."

The recipient returned it with the remark that he should be addressed "Brigade Surgeon Lieutenant Colonel Brown."

"Whereup the lady wrote back:

"Dear Brigade Surgeon Lieutenant Colonel Brown: I am sorry about mistake. —Yours, May Jones.

"P. S.—Please bring your sword to lance baby's gums."

### Fond Mother Critic.

Recently an entertainment was given by the pupils of a public school. The fond mothers of nearly all the youngsters were assembled in the audience. Finally the boy orator of the occasion arose.

"Friends, Romans, countrymen," he began, in a loud voice, "lend me your ears."

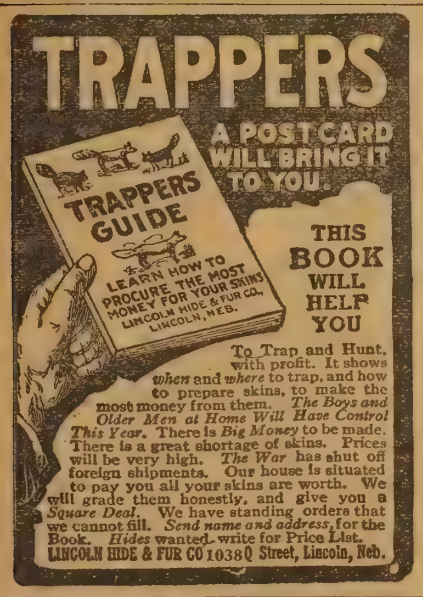
"There!" whispered one of the fond mothers to the woman next to her. "I knew it! Just like his mother!"

"Just like his mother!" returned the other, wonderingly.

"Yes," answered the first. "He's Mary Jones' boy. He wouldn't be his mother's son if he didn't want to borrow something."—Philadelphia Telegraph.









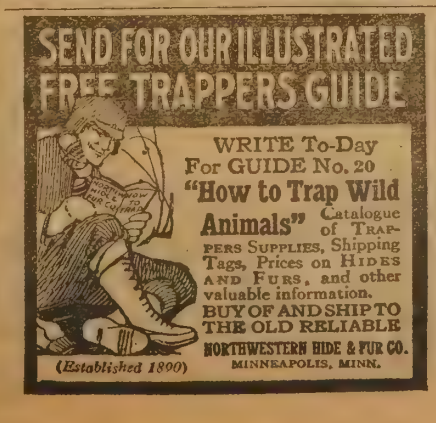


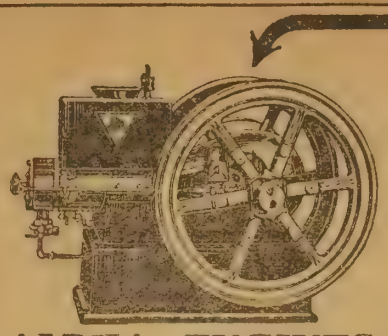








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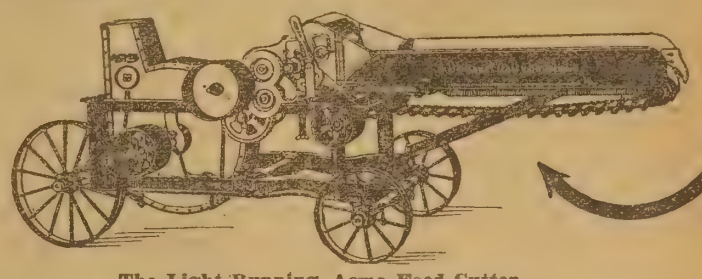
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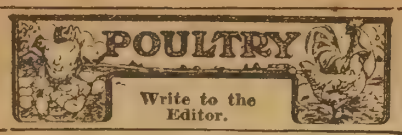
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JAMES DRYDEN,
Editorial Contributor

# Hen's Measure

## Different Ways of Judging It

The hen's productive capacity may be measured in different ways. In egg-laying contests the number of eggs laid is the measure used, but the eggs must be of marketable size and in some contests the eggs must reach a certain minimum weight. It does not necessarily follow that the pen that has laid the greatest number of eggs has laid the greatest weight of eggs. It might be that the greatest weight of eggs laid was the best measure of production. But this would be open to the objection that the pen that laid the greatest weight of eggs would not necessarily lay the greatest weight of marketable eggs; in other words, on account of a lack of uniformity in shape and texture of shell the heavier eggs might not be worth as much as the lighter. Again, if the heavier eggs sold for the greater amount of money, it would not necessarily follow that the pen that laid them had the greatest productive value. It might happen that this pen ate so much more food than the others that it fell behind when put to the test of profit on feed.

In the fifth international egg laying contest at Storrs, Conn., the pen winning the contest laid eggs weighing 23.8 ounces a dozen; total weight of eggs was 281.21 pounds, cost of feed $19.26, return above cost of feed $49.35. It happened that this pen won the contest, whether measured by number of eggs laid, weight of eggs or return above cost of feed; but when it came to weight of eggs a dozen it was beaten by half the other pens in the contest. The eggs of all pens averaged 24.3 ounces a dozen.

The pen that laid the second greatest number of eggs and won second on that account, would lhave been beaten, if weight of eggs had been the deciding point, by the third and also by the ninth pens, both of them laying a greater weight of eggs. When it came to the return above feed cost the first, second and third pens were properly placed.

There is considerable variation in weight of eggs laid by different breeds and different pens of the same breed. But it can not be said that one breed has a monopoly of large eggs. In the contest mentioned the eggs varied among the 100 pens from 21.8 to 28.2 ounces a dozen. The heaviest eggs were laid by a pen of Rhode Island Reds, the average for the pen being 28.2 ounces a dozen. They were indifferent layers, however, the average being 139.6 eggs a hen. The smallest eggs were laid by a pen of Leghorns; they averaged only 21.8 ounces. They were good layers, averaging 184.8 eggs a hen. Though they laid the smallest eggs of any pen in the contest they laid so many more that the weight of all the eggs laid in the year was greater than those laid by the pen that laid the heaviest eggs, the weights being as follows: The large egg pen laid in the year 203.48 pounds and the smallest egg pen 209.59. The latter pen, though it laid the more eggs and the greater weight of eggs, ate less food than the other. The net returns on feed was $15.66 for the small egg pen and $19.07 for the large egg pen.

The pen that laid the smallest number of eggs laid the fifth largest eggs in the contest. This pen averaged 92.4 eggs a hen and the eggs weighed 26.6 ounces a dozen.

The second place in the contest was won by a pen that laid the second smallest eggs. This pen averaged 219.8 eggs a hen and the eggs averaged in weight 22.1 ounces a dozen.

It is noteworthy that in this contest all the pens that averaged over 200 eggs, and there were six of them, laid eggs weighing less than 24 ounces, and in the whole contest there were 43 pens, whose eggs averaged less than 24 ounces. These 43 pens averaged 170.6 eggs a hen, while the 57 whose eggs weighed 24 ounces or more, averaged 155.5 eggs a hen.

The evidence seems to indicate that there is some correlation between high production and small eggs, and it may be that if selection of breeding stock were made on the basis of number of eggs laid without regard to size of eggs, there would in time be a decrease in size of eggs.

The evidence is pretty clear, however, that the hens that win the contests, even though they lay small eggs, lay so many that they lay a greater weight of eggs than the hens that lay large eggs and not so many.

The size of egg is a question of breeding or inheritance, and by picking out the large eggs for hatching it is a simple matter to breed a strain that will lay large eggs.

There is no particular object, however, in breeding for very large eggs. A flock that averages as pullets 23 ounces and as hens 24 or 25 ounces is all right. Eggs are made from the food eaten and the larger the egg the greater the cost of the food for making it has been. Neither under-size nor over-size eggs should be used for hatching.

The real measure of a laying hen is not the number of eggs laid, nor the size or weight of eggs produced, but the use she makes of the food she eats; or, in other words, the product in eggs for a given amount of food eaten. J. D.

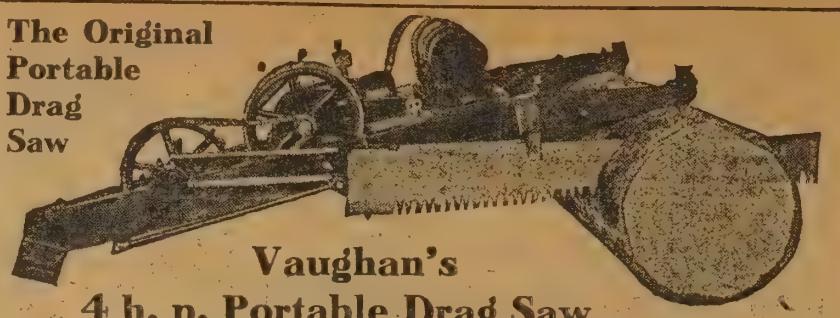
### Lumps on Her Head.

To the Editor: I just found a hen that has large lumps all over her head. They appear larger on her earlobes. She eats and drinks well. What can I do for her? —Subscriber, Dietrich, Idaho.

This case is not described fully enough. If they are wart-like growths it is probably chickenpox. If that is the trouble paint the spots with iodine and then grease with vaseline. If the trouble continues, would suggest that you take the matter up with the poultry department of the state university.

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GRANVILLE LOWTHER
Editorial Contributor.

# Orchard Troubles

## The Diseases and Pests of Pears

By Granville Lowther.

There is no disease to which pears are subject that is so destructive as "pear blight," known technically as Bacillus amylovorus. First in alphabetical order of diseases, we would mention "black leaf," but it is of sight importance when compared with blight. This black leaf is in some respects similar to blight. One side of the limb of a pear tree dies, the leaves turn black and hang on for some time. Sometimes there is a narrow strip of uniform width of dead bark, but there is not the red, juicy condition of the inner bark and cambium found in blight, nor is there the blight-producing organism, nor the infection from limb to limb and from tree to tree through the blossoms, young shoots or suckers. The disease appears to be mostly in the nature of sour sap, possibly caused by too much water in the late fall or early spring; or it may be some injury to the root that causes the corresponding limbs on the same side of the tree to die.

The history of pear blight dates from 1780 and the first record was published by the Massachusetts society in 1794. It is supposed to be of American origin, but has found its way to Europe and other parts of the world. The true character of the disease was worked out by Professor T. J. Burrill of the University of Illinois in 1878. The germ affects in a greater or lesser degree all the pome fruits, such as service berry, thorn apple, christmas berry, wild pear, crab apple, mountain ash, apples and pears.

There is scarcely a fruit-producing district in the United States not affected with blight, and in some sections it has wiped out the pear industry. The first appearance is likely to be in the blossoms, the young shoots and twigs becoming withered, leaves a dark brown, and a sticky substance oozing from the bark. Later, the larger branches, the body, and even the roots and fruit may become infected. Birds, bees and other insects carry the infection from flower to flower and from tree to tree.

The only remedy known is to cut it out and burn it. In cutting, care should be observed in disinfecting the tools, lest the germs be carried to healthy parts of the tree. It can be controlled if properly watched and guarded. One year it was spreading rapidly in the Yakima valley, and the industry of growing pears seemed imperiled. We organized ourselves into "blight fighters," under district leaders, and inspected every orchard at stated periods. Personally, I examined every pear tree in our orchard and certain varieties of apple trees susceptible to blight twice every week. We were two years bringing it under complete control, but now we are seldom troubled with it. It is easily detected when passing through the orchard in cultivating, irrigating and other work, and needs but little attention besides.

Pear rust is similar to rust on apples and may be cured by the Bordeaux spray.

Pear scab is similar to apple scab, and the remedy is to spray with Bordeaux.

### Pear Pests.

The pests that affect apples and fruits in general, most of them affect pears, and the same remedies may be applied as on other fruits.

Aphids are of several varieties, such as white aphis, black aphis, green aphis and brown aphis. Kerosene emulsion may be applied in any form of aphis; but, after careful experiment, I believe the tobacco spray is the best insecticide I have ever known. Tobacco will kill the apple leaf hopper, bean thrips, black scale, blight beetle, blister mite, bud worm and any other insect to which it may be applied. The only trouble is to reach them. On account of this difficulty, other sprays are better for such insects as bore into the wood, bark or fruit. Take the codling moth, for instance—arsenate of lead is better, because the codling moth is a chewing insect, and after it enters the apple is protected from a contact spray. There are certain stages in the life history of beetles, caterpillars and boring insects when they may be reached with contact sprays. A list of the pests known to affect pears and the remedies generally applied may be given as follows:

Aphids of all classes, kerosene emulsion or tobacco.

Apple leaf hopper, spray with coal oil emulsion or tobacco.

Black scale, San Jose scale or any other kind of scale, spray with lime-sulphur or tobacco.

Climbing cut worms, various species, spray with arsenate.

Codling moth, spray with arsenate. However, the pear is not much troubled with codling moth.

Fall canker worm, spray with arsenate of lead.

Fall canker worm, spray with arsenate cut off the webs and burn them.

The pear slug is a tender, soft insect that is easily killed by the use of almost any kind of contact spray. A dust spray will kill it, and it need not be a poison. Road dust, ashes, lime or anything that will adhere to the slimy or mucilaginous coating of the body will kill it.

### WILL OFFER SHORTHORNS.

The Northwest Shorthorn Breeders' association has announced that it will place on sale at auction a considerable number of registered Shorthorns at Lewiston, Idaho, November 11, one of the days of the Northwest live stock show. The stock will be consigned by a number of the well-known Shorthorn breeders. Joe Turner of Myers Falls, Wash., will be sales manager.

### Care of Grape Vines.

Trim and lay down the grape vines ready for covering as soon as the ground begins to freeze.




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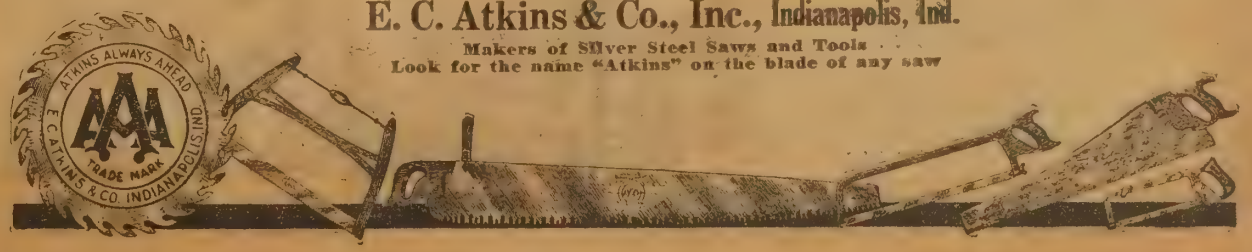
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# War Takes M

## The Washington Farmer Will Contin
## Plan Which Saves Man Power and S

At this season The Washington Farmer in common with other general and family magazines, maps out its subscription campaign for the year ahead.

Last autumn, it will be remembered, we were face to face with a new and critical condition. The government had strongly urged employers to release as many men as possible for productive labor in field, forest, mine and factory. To meet the situation we virtually cut out the entire force of agents who had been handling our subscription business and depended on our readers to send in their own subscriptions unsolicited; also to do the friendly missionary work among their neighbors which is so necessary in introducing a publication to additional homes.

Today we find even stronger reasons for *continuing* our cooperative system than we had last year in *adopting* it.

Wartime industries have been speeded up. Shipbuilding and other government activities have absorbed thousands upon thousands of men previously available for civilian work. Greater demands for output have been put upon mines, lumber mills and farms. Finally the sweeping draft measure became effective, calling upon all men between 18 and 45 to register for war service, meaning a still greater tax and drain upon the country's man power in the cause of justice.

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## the *First*. Send

# ore Men

## Cooperative Subscription Money for Our Readers

of these conditions, we feel that it would be unpatri-
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d we are, therefore, glad to state that the widespread
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us in going on with it.

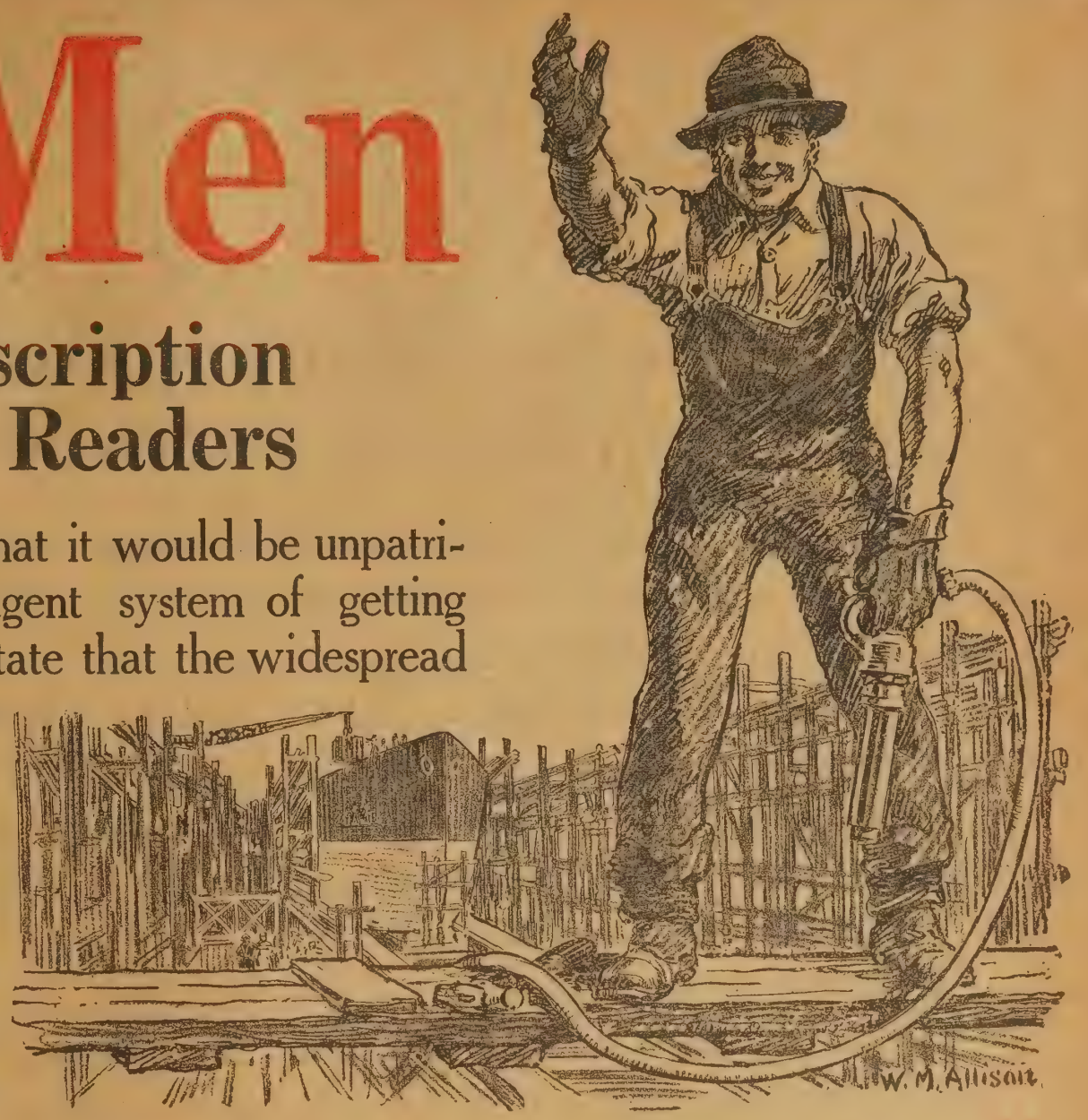
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Oct. 17.

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# Handicraft for Girls

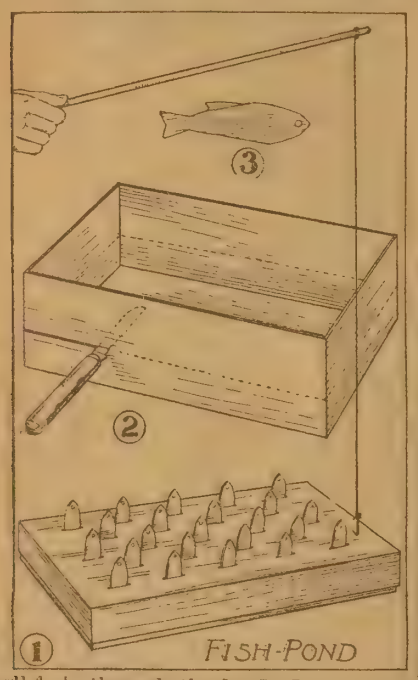
By DOROTHY PERKINS.
(Copyright by A. Neely Hall.)

## THREE HOME-MADE GAMES.

If you have never played the game of fish-pond (Fig. 1) you have missed a great deal of fun.

Get a cardboard box for the pond, and cut down its depth to 1 inch (Fig. 2). Then cut rows of slots through the cover, as shown, for the fish to stick into.

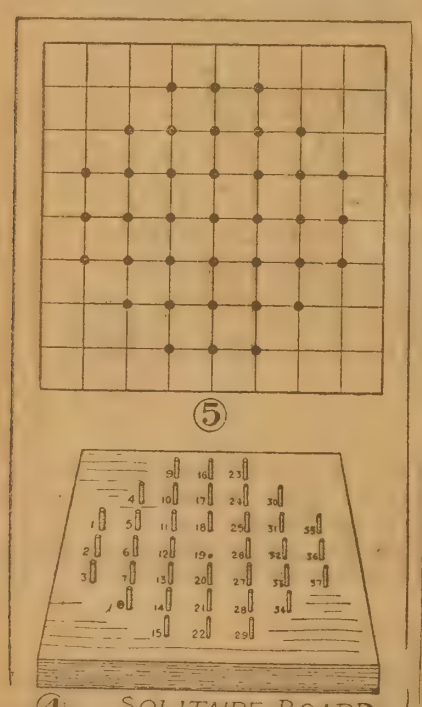
Draw the outline of a fish upon a piece of cardboard, as shown in Fig. 3. Make it two inches long. Then cut it out and use it as a pattern for marking out one fish for every slot in the pond. Punch a




small hole through the head of each fish, to provide for hooking it. Number the fish 5, 10, 15, 20 and 25.

Each player must have a stick for a fishing pole, with a short piece of string attached to the end for a line, and a bent pin tied to the end of the line for a hook. In fishing, the line must be lowered and the fish hooked out of the pond without allowing the hook to strike any part of the fish. If the hook strikes, the turn passes to the next player. The points scored are determined by the numbers on the fish.

The solitaire board (Fig. 4) should be eight inches square. Divide the edges of

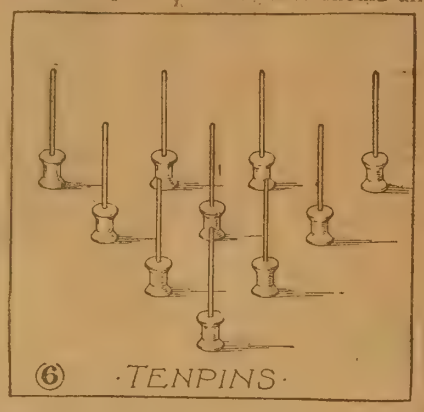



this into eight equal parts, and with ruler and pencil draw lines across from side to side, connecting the points of division (Fig. 5). Then with a large nail and a hammer (or, better still, with a gimlet, if there is one in the house), make holes at the intersections of the lines indicated in Fig. 5.

When the holes have been made, cut enough wooden pegs to fit all but one. If the holes are small enough, match ends will do for pegs.

The game is played by one person. The pegs are stuck in all but the center hole, and the game is started with a peg second from the hole, jumping it over the peg between it and the hole, into the hole. The peg jumped over is removed. Then, one by one, the pegs are jumped over and removed. The object of the game is to jump the pegs in such an order that, finally, all but one will have been removed. Unless the jumps are made in the proper order, several pegs will remain scattered over the board when the last possible jump has been made; then you will have to try all over again.

Fig. 6 shows a quickly made set of tenpins. The spools for the bases should all




be of an equal size. Cut the stick uprights six or seven inches long and drive them into the spool bases.

Arrange the ten pins upon the floor in the positions shown in Fig. 6, and use three rubber balls with which to bowl them over. Each player in her turn should roll the three balls at the pins. One point is scored for each pin bowled over, and, if by striking the center pin all 10 pins are bowled over, a score of 10 points is made.

---

"Do you think that the things one eats influences one's dreams?"

"Undoubtedly, I ate a porterhouse steak the other evening and dreamed about bankruptcy all night."


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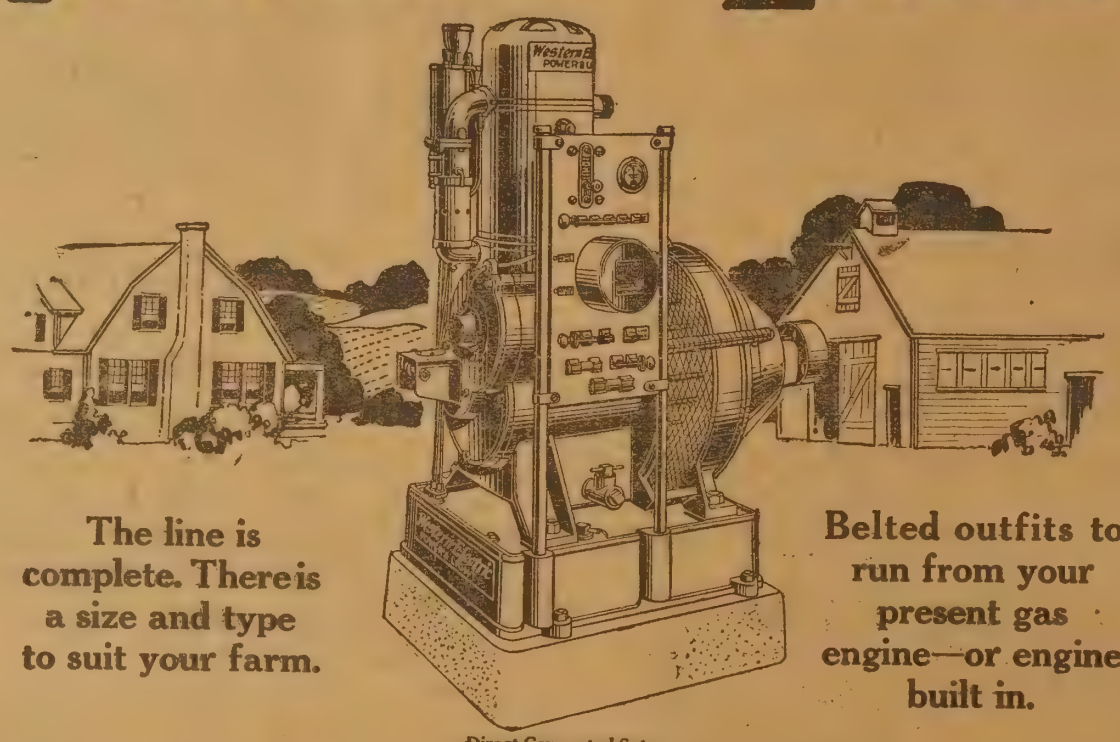
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# Paris, London, Berlin! This Map Shows at a Glance the Geographical Relationship of These War Cities and the Nations They Represent




**APPROXIMATE DISTANCES.**

| | |
|---|---|
| Paris to Berlin | 570 miles |
| London to Berlin | 620 miles |
| Paris to London | 240 miles |
| Cambrai to Berlin | 490 miles |
| Cambrai to German border | 125 miles |

# A CROOKED TRAIL---By Lewis B. Miller

Copyright by The Page Company, 1911.

**A story of a thousand-mile saddle trip up and down the Texas frontier in pursuit of a runaway ox.**

### SYNOPSIS.

Travis, a lad in his teens, lived on the Texas frontier in the days when Texas was a wild, unsettled region. One morning before daylight he started out to bring in the yoke of oxen for a day's plowing, but one of them was gone. He caught his pony and started to search for the stray. Going a little and a little further hour after hour, he continued until night caught him several miles from home with a tired pony, a borrowed saddle and lariat and little for himself or his dog to eat. A rabbit and wild turkey eggs served the purpose, and morning saw him again in pursuit of the ox after a night of disturbance by a mountain lion and marauding hounds. The next night he spent in the cabin of a crazy sheep herder who believed that cattle men were trying to kill him. He made the night hideous by his crazy ramblings and songs in the moonlight, and Travis was glad when the opportunity came to escape from him, and fall in with new friends, Frank and Stella Booth, at their farm home a little further on. The three young people became much interested in each other because of common plans for attending school the following year. It was here, also, that Travis got his first definite clue to the whereabouts of the stray ox.

## CHAPTER VI.

### Friends and a Fellow-Traveler.

Frank Booth was an easy-going, good-natured fellow, not quite 18 years old, and brighter out of books than in them. Stella, though three years younger, had already outstripped her brother in some of her studies. And, like myself, she had read everything she could put her hands on in this country of few books. She was not only remarkably bright and wide-awake, but a bundle of energy and ambition. Their plans for getting an education were, I soon found, mostly of her making.

I myself had not been in school for almost two years; but I had read Aesop's Fables and Roman History in Latin, and knew some algebra, a little geometry, and a little—a very little—Spanish. Neither of my new friends had ever studied any language except their own; and the fact that I had explored some of the mysteries of a strange, dead tongue gave me a standing with Frank and Stella Booth that would have been hard for me to attain otherwise.

"We had planned to enter school this fall," Stella said during the meal, "but father thinks now that he won't have money enough to send both of us. I wanted Frank to go alone—he's so much older than I am, and of course has more need to be in school. But he won't go without me. Says he must have me with him, to spur him on to study hard."

"She's a pretty sharp spur," spoke up Frank, smilingly.

"No sharper than I ought to be—for you," she answered, smilingly also. For they were very courteous to each other, this brother and sister. "Then I proposed that we both go, and economize by renting a little house and boarding ourselves. I could do the work for two, and never miss the time. I even wrote to President Clark about it, and he wrote back that two or three of the girl students did that very thing last year—kept house for themselves and their brothers. I was just wild to go. I've read of plenty of men that worked their way through college, but never a woman. Though I can't see why girls shouldn't do that kind of thing just as well as boys."

"They could—they all could if they were as work-brittle as my sister Stella," Frank remarked.

"Oh, I like to work. I like to make things go!" cried the girl. "I can stand anybody but a lazy somebody."

"No insinuations, if you please, ma'am," interrupted her brother.

"Oh, Frank's not lazy. He would be, just a little bit, if I'd let him, but I won't. Of course I won't. I'd make life a burden to him if he were half as lazy as some people I know. But I've got off the subject. As I was saying, I wanted to go to school and keep house, but father and mother have decided that we'd better wait for another cotton-crop. And we expect to have some cattle to sell next fall, too. Then we can go as boarding school students and have nothing to do but mind our books. Father says, 'One thing at a time. Work when you work and study when you study.' But I can do both; or could if I had half a chance. When do you expect to go?" she inquired of me.

"That all depends. For awhile I counted on getting off this fall—this coming fall. When I gave that up, I thought I could start next year without fail. But now I don't feel even half-way sure of that."

"What a pity—what a great pity!" said Stella, sympathizingly. "It would be so nice if Frank and I could meet you over there—so much better than going among utter strangers."

"Oh, I'll be there sooner or later. You can drive a nail into that," I assured her. "I expect to go and keep going till I graduate, if it takes me 15 years."

"That's the way to talk!" cried the girl, enthusiastically. "If Frank would only talk like that! But I do wish you could go next year, when we go. Why can't you?"

"Well, you see, it's this way," I explained. "When we moved up to the Little Pecan Creek country, father had money enough to buy all the land he cared for, and a few hundred dollars more to improve it with. But he wanted the best land; and the piece he picked out was part of a big survey—a tract of about 1700 acres. The owner lived away down in south Texas. But father was so eager for that particular piece of ground that he drove 80 miles to Waco—that's our nearest railroad. There he took a train and went to see the owner. The man was willing to sell the whole tract, but not part of it. He was willing to sell for part cash, though; and rather than miss getting the land he wanted, father planked down all the money he had, and signed notes and a mortgage on the land for the balance. So we've got a big tract of good land, but we're nearly $2000 in debt. Our crop's on new ground, and won't turn out much this year. I doubt if we can pay the interest on what we owe—at 12 per cent—without selling our cattle. Part of the principal has to be paid each fall, too. The man has already agreed to postpone this fall's payment. But that means a double payment for next fall; and father says he can't see how we're going to meet that and the interest, let alone finding money for my schooling."

"Why don't you sell off the land you don't need?" inquired Frank.

"Father did sell a little of it, to some people we knew near Austin. They came a few weeks after we did. But he had to sell that on time. He'd be glad enough to get rid of the rest—all except the 500 acres he wants to keep. But there's nobody to sell it to yet."

"Maybe some new settlers will come in this fall, and buy all you have to sell," suggested hopeful Stella.

"Yes, maybe they will—I'm hoping they will; but I'm afraid they won't," I answered. "You see, it's a long, long way to a railroad, and people don't usually plunge so deep into the backwoods. They don't like to wagon their cotton so far to market. That's one thing makes me glad to find my ox. Work-cattle are high, and it took every cent we could rake and scrape to buy Lep and Coaly. But we had to have them to break new ground with."

"Have you no other team?" Frank wanted to know.

"Yes, father has a team of work-horses, but they're rather light for such heavy plowing. We've got a big lot of new ground to break this fall and winter, but we can't afford to buy another ox—another yoke of oxen it would be. People won't usually split a team. But without a heavy team we can't get much new ground broken; and without the new ground we can't put in much of a crop; and without a big cotton-crop we can't hope to meet the payments and interest on our land. So we'd stand a fine chance to lose both the land and all the money father paid on it. Then we'd have to pull up and roll out somewhere and start over again. And it would be years and years before I or my brother—he's five years younger than I am—before we could hope to see the inside of a schoolroom. I mean a good school. We've got some neighborhood, loghouse affairs, where the children learn to spell a little and read a little and cipher a little."

"So there was a great deal depending upon your overhauling that spotted ox, eh?" Frank remarked, thoughtfully. "Well, I'm glad your hunt has turned out all right."

"So am I," declared Stella. "But I should think you'd be afraid to work such a great-horned, fierce-looking fellow as that."

"Afraid of Lep! Why, you could look Texas over without finding a milk-cow gentler or better-natured than he is. I can handle him from his head to his heels. I can crawl under him or over him, or do anything else I want to with him. Instead of trying to hurt anybody with his long horns, he always turns his head slowly and cautiously when I'm close to him, for fear of hurting me accidentally."

"You can't always judge by appearances," observed Frank.

After breakfast—and a good breakfast the young cook had set before us—Frank and I went out into the cotton-field and carried in some big, ripe watermelons, which we stored away in the milk-house to keep cool. Afterwards we unsaddled Dick, and Frank insisted upon giving him a liberal feed of corn and oats. While the pony was eating, we went to the orchard and gathered a basketful of fat, red-cheeked peaches.

We had intended to ride out before dinner in search of the cattle. But the day was now growing sultry, and when Frank proposed that we wait till the afternoon, I readily agreed. After that we busied ourselves with shelling peas, peeling peaches and similar work.

Stella gave us a good dinner, with peach-cobbler for dessert. She rose high in my estimattion as a cook; and rose even higher by feeding Vic abundantly, without being asked. Frank and I helped to wash and wipe the dinner-dishes. After that we all sat on the front porch and talked. By this time we were calling one another by our first names, and were as well acquainted as if we had lived together years instead of hours.

So congenial were we that Frank now proposed that, instead of starting home with Lep next morning, I should remain with him and his sister for a few days. I objected that I ought to get home as early as possible, to begin plowing; but Frank insisted that I ought also to give my pony a rest before starting back. Stella joined her persuasions to his, with the result that I consented to remain at least another day.

As soon as the shadows began to grow long and the weather cooler, Fraank saddled a horse and I my pony, and we rode out in quest of the cattle. They were not so easily found as we had expected, and it was well on toward night when we came upon them, in some scattering woods.

"Here they are at last!" my companion sang out, on catching sight of the little drove.

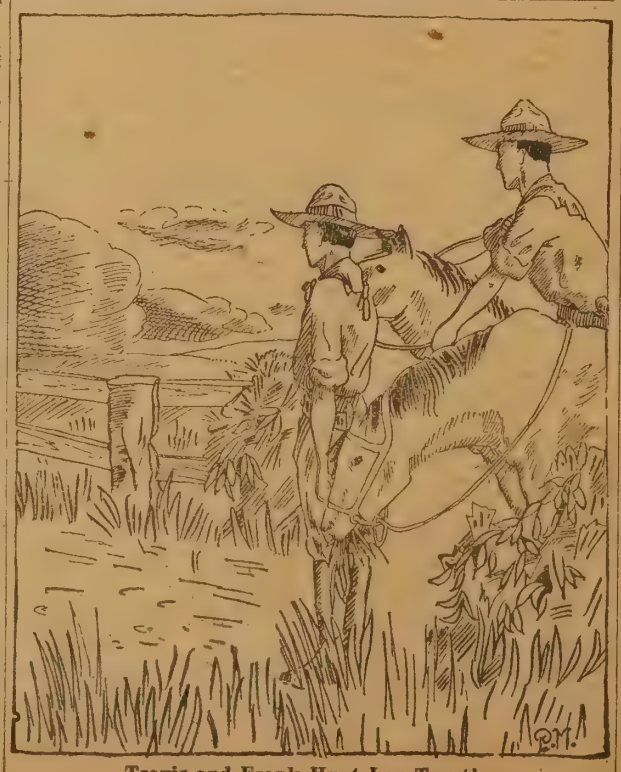
"But Lep—he's not here," I replied, gazing around blankly.

"Oh, he's close about somewhere," Frank assured me.

"But we could hear his bell."

"He may be lying down. It won't take us long to scare him up."

But after scouring all the surrounding woods for an hour, we had convinced ourselves that Lep had abandoned his recent companions and started on his travels again.



Travis and Frank Hunt Lep Together.

"The sly old rascal!" I exclaimed, irritably, on learning that he had escaped. "I'll make him pay for this when I get him yoked to a plow-beam again. And the worst of the trouble is, nobody knows whether he's been gone two hours or two days."

"That's so," answered Frank, soberly. "We ought to have started out early this morning, instead of waiting. When we might have found him. But never mind! We'll nab him yet before he travels many miles. I'll ride with you tomorrow morning, and it won't take us long to strike his trail and track him down."



"I'd like to have company, Frank, but I'm not going to put you to as much trouble as that."

"Oh, don't worry about me," was the cheerful reply. "I could like in the saddle this fine weather. Guess it was my fault, too, that you missed your ox Believe we'll drive our cattle home as we go."

We rounded them up and started, but Frank soon made another discovery. Two of his cattle, a yearling steer and a two-year-old heifer, were missing.

"I recollect now," he said. "Those two animals acted like they'd fallen in love with your ox. Maybe they admired his horns, and hoped to grow some just like them—no telling. Anyhow, they kept hanging around him like two little boys around a big one. And there's only one conclusion; they've followed him off. There are three runaway cattle now instead of one."

"That's right. And it's a pity, too, Frank. I'm sorry to miss Lep, but sorrier to have him leading your young cattle astray."

"Oh, rest easy about that, Travis. I intended to go with you anyway, and now I have to go. It's all the same. If Stella had somebody to stay with her—but I can arrange that. There's a young man and his wife living just below us on the creek. I'll get them to come up for a night or two, till we get back or the folks come home. We'll have those runaways back here in three or four days at the longest."

"Don't be too sure of that," cautioned I, grown wise from experience. "That old longhorn of mine is a traveler. And he seems to have an instinct for eluding jursuit."

"Well, three or four days or three or four weeks, we'll camp on their trail till we run them down," declared Frank.

"Now that's too bad—too bad!" exclaimed Stella, when told that the three cattle were gone and must be followed. "It will spoil your visit."

"Not a bit of it," spoke up her brother. "It will only postpone it. He must spend at least a few days with us after we get back."

"Yes, we shall expect you to stay, and get acquainted with our father and mother," said his sister. "I'm glad of one thing; it won't be so lonely for you, now that Frank is to keep you company."

"No, but you'll find it very lonely here, I'm afraid."

"Oh, one doesn't get lonely at home. There are too many things to do and think about, and books and papers to read. And mother will be at home with me in a day or so, and father."

"I'm going down to get Tom Jones and his wife to come up and stay with you at night," said her brother.

"Huh! What do you want them to stay with me for? What will hurt me? I'm not afraid of the dark!"

"No, of course not. But it will be lonely here for you at night, and I want you to have company."

Scarcely had Stella learned that her brother and I expected to be off next morning, when she fell to cooking us a supply of eatables to carry with us. Various things that would keep several days she prepared, till Frank had pretty well filled a pair of capacious saddle-bags which he proposed to take. Besides these, he would carry a slicker, and he had laid us out a blanket apiece.

"Look out that you don't load us down with one thing and another," I warned him. "If you do, we may never overtake those cattle this side of the Rio Grande."

"We can make better time by carrying a full commissary department, I think," he answered.

That night I penned a letter home, borrowing paper and envelope and stamp for the purpose from my new friends. After detailing my experiences up to date, I explained that Lep was not far ahead, and that from here on I should have a traveling-companion. I also assured father that I would drop him a line every time I came to a postoffice. This letter Frank carried down and left with the people that were to stay with Stella, to be mailed.

We fed our horses well that night, and were up long before daylight to feed them again. My the time there was light enough to see, we had eaten our breakfast, girted on our saddles and were ready to start. As he was tying the saddle-bags behind his saddle, Frank showed me a big-mouthed, dangerous-looking six-shooter that he was about to stow away in their lighter end.

"It might come in pretty handy, and we'd better have it with us," he remarked. "When we first settled here, the Comanches raided the country a few times, and this is what father carried. Sometimes he would let me wear it, and I always felt very important when I got it buckled around me. It's against the law to 'tote' it in a scabbard now in this county. But the law says that a traveler may carry it in his saddle-bags or other baggage. I know that, because father is justice of the peace here. This is not a very good six-shooter. It has seen better days. But it's a deadener just the same."

As we were starting ,Stella proposed to keep Vic till our return, and I readily consented. "That is, if she will stay with you," I explained.

"Oh, she likes me and I like her, and she'll stay all right—never fear about that. She's a nice little thing. But to make sure, I'll shut her up till you're gone. Then she'll have to stay."

She took the little dog into a room and left her there, closing both doors and windows securely.

"A short journey and a prosperous one!" the girl called after us from the front gate as we rode away, waving her good-bye.

Before we had got out of sight of the house, there was a crash and the jingle of broken glass behind us, and a minute later Vic came running, with some slight cuts on her nose. She had jumped through a window pane.

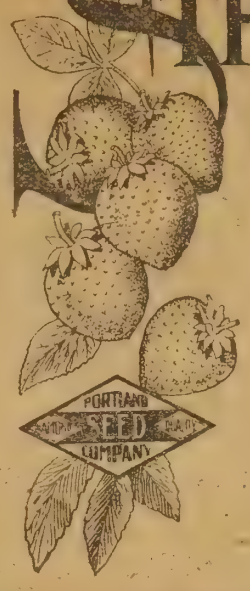
"Oh, never mind the glass," Frank said, when I had stopped and turned. "We've got a spare one or two. It's

(Continued on page twenty-seven.)

## Peace Conditions

News dispatches relative to the possibilities of peace frequently refer to "the 14 conditions of peace" as enunciated by President Wilson several months ago. While nearly every one knows in a general way what the peace terms of the allies must be, comparatively few are familiar even now with the comprehensive statement of terms made by President Wilson last January. They are as follows:

1. Open covenants of peace without private international understandings.
2. Absolute freedom of the seas in peace or war except as they may be closed by international action.
3. Removal of all economic barriers and establishment of equality of trade conditions among nations consenting to peace and associating themselves for its maintenance.
4. Guarantee for the reduction of national armaments to the lowest point consistent with domestic safety.
5. Impartial adjustment of all colonial claims based upon the principle that the peoples concerned have equal weight with the interest of the government.
6. Evacuation of all Russian territory and opportunity for Russian development.
7. Evacuation of Belgium without any attempt to limit her sovereignty.
8. All French territory to be freed and restored and reparation for the taking of Alsace-Lorraine.
9. Readjustment of Italy's frontiers along clearly recognizable lines of nationality.
10. Freest opportunity for autonomous development of the peoples of Austria-Hungary.
11. Evacuation of Rumania, Serbia and Montenegro, with access to the sea for Serbia and international guarantees of economic and political independence and territorial integrity of the Balkan states.
12. Secure sovereignty for Turkey's part of the Ottoman empire, but with other nationalities under Turkish rule assured security of life and opportunity for autonomous development, with the Dardanelles permanently opened to all nations.
13. Establishment of an independent Polish state, including territories inhabited by indisputably Polish populations, with free access to the sea, and political and economic integrity guaranteed by international covenant.
14. General association of nations under specific covenants for mutual guarantees of political independence and territorial integrity to large and small states alike.


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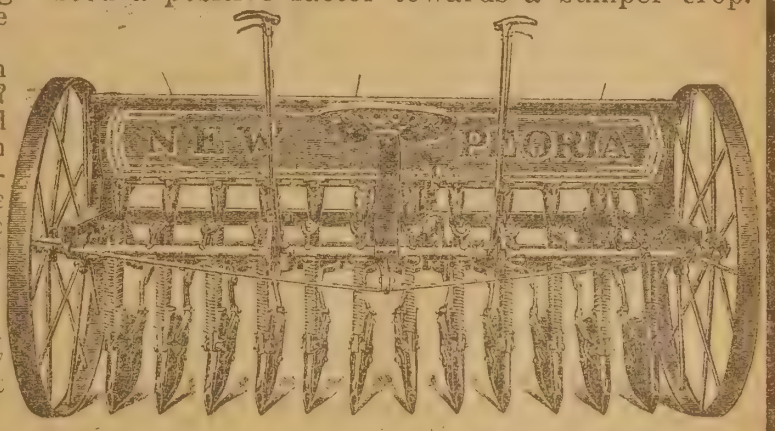


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**Arthur Cole, Pullman, Wash., says: "I consider the New PEORIA DRILL the best drill on the market. I would not consider anything but a PEORIA DISC SHOE DRILL."**

**P. N. Huffman, Green Creek, Idaho, says: "Since 1903 I have sowed an average of 200 acres a year with my NEW PEORIA. I have also loaned it to my neighbors and it is safe to say they have sown 500 acres with it, making a sum total of over 2500 acres. I have never bought one repair. It feeds perfect, sows even and does as good work NOW as it did the first year I bought it."**

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**Sam J. Carlisle, Bonanza, Oregon, says: "I have used a good many different drills, but I have never used any that is equal to the NEW PEORIA DISC SHOE DRILL. The grain is all planted at the same depth and comes up even. A farmer will use no other drill after he has tried the NEW PEORIA."**

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While many farmers who use the NEW PEORIA say that grain will yield from 2 to 3 bushels more per acre when sown with the PEORIA DISC SHOE, we will be conservative and give the estimate of one bushel per acre, which on 100 acres would mean 100 bushels, or $220, together with $29.33 of seed saved at the time of seeding, would mean a total saving of $249.33.

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ALICE W. BARLAND,
Editorial Contributor.

# Study at Home

## Prepare for Future School Work

By ALVARA P. WILLIAMS.

The following is a continuation of Mrs. Williams' last article, in which she outlined a number of things a girl could do at home to fit herself for going to school away from home.

You can do whatever is possible by mail, to get an outline of studies and required books and to borrow what you need from state, county, city or school libraries. You can write to the United States department of agriculture and the United States bureau of education, Washington, D. C., for lists of their publications and find many to help you in several of your studies. Most of these are sent free upon request. Your state agricultural college will also have many bulletins which you should read, merely as a matter of information. If you are studying agriculture, domestic science, physical or commercial geography, botany, you will find dozens of pamphlets to help you. And no matter whether you have such studies now or not, you should add to your library and master, as a matter of common knowledge, the splendidly illustrated pamphlets on such subjects as textiles, food values, uses of different kinds of foods, such as milk, cheese, eggs, vegetables, meat; bulletins on sanitation; on kitchen planning; on vegetable and flower gardens; birds; weeds; local conditions of soil, live stock practices and crops.

There are three or four of the better class of women's magazines costing now about $2 a year, that would be of great benefit to any home student. These all have household articles, articles of current interest, especially dealing nowadays with women and war conditions, and besides a page at least which keeps in touch with all material published by the government, the needs of the government for workers of all kinds, and, most valuable, gives addresses of departments and bureaus at Washington from which all kinds of information may be obtained. Obviously, such magazines have more space, therefore more information, than can be crowded into a small paper such as ours.

If you have time and can possibly do the work you should get from your state college information about canning and similar clubs. These are not necessarily a community enterprise; but a system has been organized known generally as "mother-daughter clubs," under which any mother and daughter, or two sisters even, can take up work at home under the leadership of state club organizers. Free enrolment blanks, outlines of work, study pamphlets, questions on sewing, cooking and canning can be obtained. The state college can put you in touch with the leader of this work, which, as you can see, requires no elaborate equipment and can be started any time, in any isolated place.

There is one other avenue of learning open to us now which it is the duty of every girl to take advantage of wherever possible—that is Red Cross work. I do not mean by this that you are to take training to be a Red Cross nurse, but wherever you are there is sure to be some organization near you for Red Cross work, and it is a privilege to be allowed to learn what you can from their instructors. It may be knitting, sewing, surgical dressings or first aid work, but whatever it is you will profit by learning it. Did you ever stop to think how much better equipped our nation will be after this war, due entirely to the knowledge of such things our women are gaining?

One other thing should be mentioned in case you live where such an organization exists or can be formed—the Camp Fire girls. They correspond to the Boy Scouts, and like them base their membership upon knowledge which every well-informed person should have, but which hundreds of high school graduates do not possess—knowledge of first aid, cooking, sewing, help to selves and others along a dozen different lines.

I am saying nothing about your main studies in high school work—English, mathematics, history and so on—because tests and courses differ, and the school where you expect to do your future work can help you best. But I am trying to show a few ways in which you can broaden out your year's work to make up for lack of city material—ways which should interest your whole family along lines of which too often country girls are ignorant.

Your year at home should give you a definite start on your school work; a good working knowledge of your own home conditions, perhaps a record of some improvements made; and if you are quick to seize opportunities, a little ready money to start the next year. If your are able to do any work in gardening, poultry raising, canning, harvesting, housework or any work suggested by local conditions, you will be ready to start without handicaps the following year. Not only that, but you should have a better fund of general information, a readier mind and better health than if you had started earlier. But you must never, never falter in your determination to finish that schooling; you must never let the means overshadow the end and become a slacker. Study everything with this idea in mind: "This will be useful to me some day," and keep your goal in view.

# Can Poultry

## Stop Feeding the Non-Producers

Now is the time to store in glass cans the cockerels and the unproductive hens. In this way both unnecessary feeding and possible loss from storm and disease during the winter months will be avoided. Then, too, it is very convenient to have a few cans of chicken for emergency use.

The following directions for canning meat are given by O. H. Benson in "Home Canning by the One Period Cold Pack Method," Farmers' Bulletin 839, United States department of agriculture.

**Method of Canning Poultry.**

1. Kill fowl and draw at once; wash carefully; cool; allow to stand in cool place 12 to 24 hours. Scald in boiling water and dip at once into cold water. Pack immediately into glass jars or enameled cans; fill with boiling water; add level teaspoonful of salt per quart; put rubbers and caps into position, not tight. Process for the length of time given below for the particular type of outfit used:

| Type of Canner. | Hours. |
|---|---|
| Water bath | 6 |
| 5 pounds steam pressure | 2 |
| 10 to 15 pounds steam pressure | 1 |

Remove jars, tighten covers; invert to cool, test. Store in cool, dry place.

2. Kill fowl and draw at once; wash carefully and cool; allow to stand in a cool place 12 to 24 hours. Cut into convenient sections. Place in boiling water and boil slowly until meat can be removed from the bones; pack closely into glass jars or enameled cans; fill jars with hot liquid after it has been concentrated one-half; add level teaspoonful of salt per quart of meat; put rubbers and caps of jars into position, not tight. Process for the length of time given below for the particular type of outfit used:

| Type of Canner. | Hours. |
|---|---|
| Water bath | 6 |
| 5 pounds steam pressure | 2 |
| 10 to 15 pounds steam pressure | 1 |

Remove jars; tighten covers; invert to cool, test. Store in cool, dry place.

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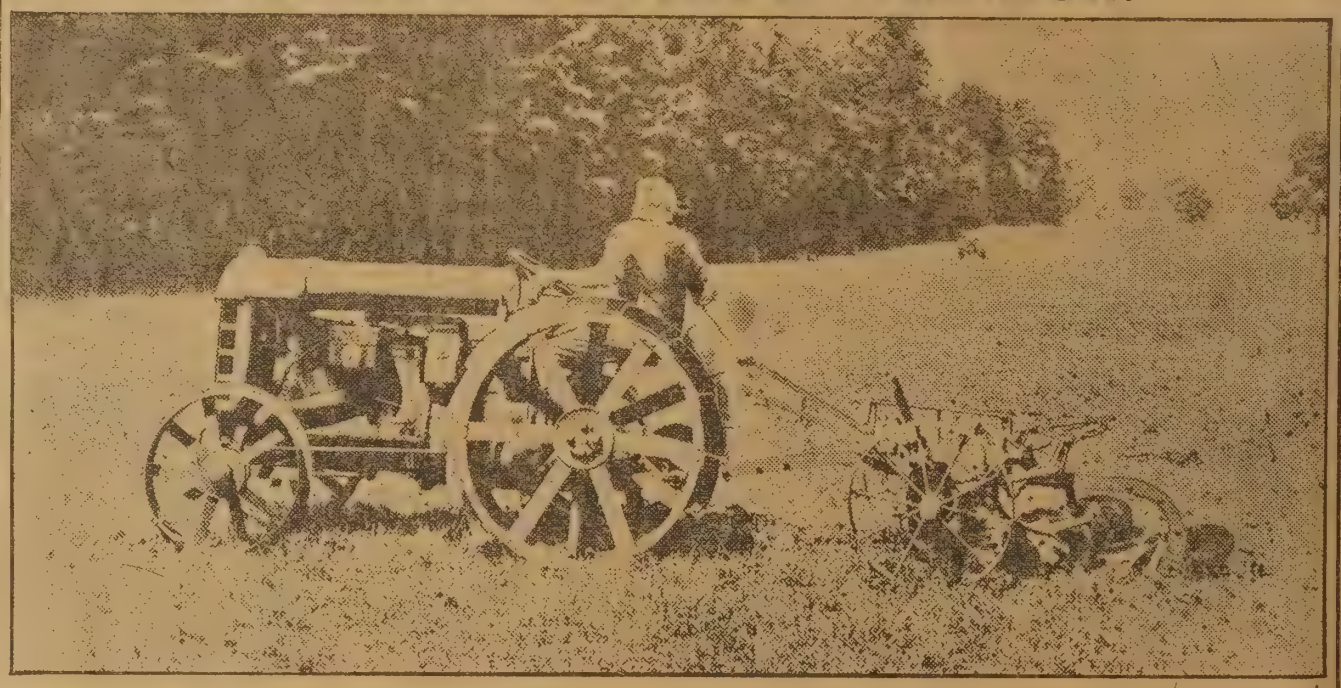
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2639—Girl's dress—Cut in 4 sizes: 8, 10, 12 and 14 years. Size 12 requires 3 5-8 yards of 36-inch material. Price, 10 cents.

2641-2620—A charming costume. Waist 2641 cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. The skirt 2620 is cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. To make the dress for a medium size will require 6 1-8 yards of 27-inch material. The skirt measures 2 yards at the foot. Two separate patterns, 10 cents for each pattern.

2270—Girl's dress. Cut in 4 sizes: 4, 6, 8 and 10 years. Size 8 requires 3 3-8 yards of 44-inch material. Price, 10 cents.

2457—Lady's apron—Cut in 4 sizes; Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. Size medium requires 5 1-2 yards of 36-inch material. Price, 10 cents.

2621—A natty dress for mother's girl. Cut in 5 sizes: 2, 4, 6, 8 and 10 years. Size 6 will require 2 1-2 yards of 36-inch material. Price, 10 cents.

2206—Child's set of short clothes. Cut in 4 sizes: 1, 2, 3 and 4 years. The dress requires 2 1-2 yards of 36-inch material, the slip requires 1 1-2 yards, and the drawers require 1 1-8 yards, for a 3-year size. Price, 10 cents.

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2613—Here is a popular suit for your small boy. Cut in 4 sizes: 2, 3, 4 and 5 years. Size 4 requires 3 5-8 yards of 27-inch material. Price, 10 cents.

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2617—A simple style for "all the day through." Cut in 4 sizes: 14, 16, 18 and 20 years. Size 18 requires 4 1-2 yards of 44-inch material. Width of skirt at lower edge is 1 7-8 yards. Price, 10 cents.

2622—A new petticoat for the little miss. Cut in 5 sizes: 6, 8, 10, 12 and 14 years. Size 12 requires 2 7-8 yards of 36-inch material. Price, 10 cents.




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## GREEN TOMATO RECIPES.

By Elizabeth Quaker.

The following is a recipe for green tomato sauce: Two quarts green tomatoes, 3 lemons, 1 cup of water, 1 1-2 cups sugar. Wash the lemons and slice them very thin. Simmer in the water until tender. Then turn in the tomatoes, cut in thin rounds, and cook until translucent. Add the sugar, cook until thick and rich. Seal as usual. Ginger and cinnamon may be added if liked.

### Chow-Chow.

Two quarts of green tomatoes, 2 quarts of green cucumbers, 2 quarts of onions, 2 quarts of cabbage. Chop all fine and soak over night in weak brine. In the morning cook until tender, then drain. Take 1 gallon of vinegar, 1 large cup of flour, 1 1-2 pounds of sugar, 1-4 pound ground mustard. Put sugar into vinegar and place on stove. Mix flour and mustard in a little cold water. When sugar and vinegar are hot pour in the flour and mustard, stirring fast until it boils, then pour over the vegetables and can.

### Green Tomato Sweet Pickles.

To 7 pounds of tomatoes allow nearly a quart of vinegar, 2 ounces each of cinnamon, cloves and ginger, 4 pounds of sugar. When the vinegar boils after the sugar is dissolved add the tomatoes cut in quarters and cook all together 45 minutes, or until tender.


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**FISH** Salmon, in brine, 100 lbs., meat, shipping weight 165 lbs., price $14; 50 lbs., $7. Smoked salmon, 20 lbs., $4.00. Dried cod, 10 lbs., $1.75. Herring, in brine, 50 lbs., $5.00; 25 lbs., $2.75. Cash with order.
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# SMILIN' EDDIE HOPE RUNS OUT OF TOBACCO AGAIN




# PUP ONCE MORE PLAYS CUPID FOR BOOT






My Dear Corner Cousins: Some time ago one of our cousins asked for a recipe for honey cookies. The following one has been tried and found excellent:

One-half cupful of sugar and one cupful strained honey, three tablespoonfuls butter, one egg, one cupful sour cream, one teaspoonful soda, flour. Cream the honey, sugar and butter; add the well-beaten egg, then the soda dissolved with the sour cream, and mix the other ingredients, adding flour enough to roll. Knead carefully and make the cookies soft. Cut and bake in a moderate oven. These make a delicious cookie for the lunch basket, and I am sure the boys and girls will enjoy them. AUNT NELLIE.

---

For getting 90 per cent and above in the spelling contest all four times, Dick Engle of Krupp was awarded a diploma of honor. Dick has three war stamps and nine thrift stamps. He was 12 years old July 12, and wants a twin. Towser is his dog and besides he has three white rabbits for pets.

---

May Sanders will be 11 years old November 24, and she is in the fourth grade at school. Her address is R. F. D. 4, Box 138, Yakima, and she wishes to correspond with some girl or boy her age. Josie and Helen are her sisters and James is her only brother.

---

Here is a cousin who saves all the "funnies" in the Farmer because she likes to read them. She is Nellie Ruark of Pomeroy. Nellie receives letters from one of the cousins.

---

"Sister and I have a little pony named Vixen," writes Edith Callaway of Lantz, who will be 9 years old February 18. Edith can milk cows and for pets she has three cats, Gray, Brindle and Yellow Jacket, a dog, Tracy, and two of the cutest little goslings. Edith wants a twin.

---

A new cousin who is very much interested in the Corner, Ida Richert, of Farmer, writes a nice long letter. She was 11 years old just a little while ago, October 4; if she has any twins she wants them to write. Her baby sister has just learned to walk. When does a man sneeze three times? On which side has a dog the most hair? Ida lives on a 320-acre farm and feeds the little chickens every morning and night.

---

Did any of the cousins besides Myrtle Garret, have a birthday September 16? If you were 13 years old then, you are Myrtle's twin? Myrtle lives near Okanogan and she has two cows, Flossy and Mary Jane, seven hogs, 100 chickens, four horses and two colts.

---

"Grandma takes the Farmer and I like to read the letters the cousins write," says Thelma Auvil of Entiat. Thelma was 9 years old September 21, and if she has a twin she wants a letter from him or her. Thelma has two sisters.

---

"I saw in the paper that Harry Wegele wanted boys to write to the Children's Corner so I decided to do it," writes Cylde Walton of Mondovi. Clyde was 12 years old June 25. He has a brother, Elmer, and a sister, Esther. They live on a 160-acre farm and Clyde milks the cows. He has beans in his war garden.

---

The little country town of Grandview is the home of Evalena Crouch, who wants to know if town girls may join the cousins. To be sure they may. Evalena's papa has just started to build a new home. Evalena will be 12 years old December 13, and she is a Red Cross member. She and her chum go swimming.

---

It is lots of fun to watch the little ducks swim in the pond, Melvin Hadford thinks. Melvin lives at R. F. D. 6, Box 89, Spokane, is 9 years old and in the third grade. There are a dozen tame pheasants down at the spring. Melvin rides horseback on Billy, after the cows. He has three miles to go to school.

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Most of her vacation time, Edith Templin spends in helping mama. She has a little baby brother and she has to watch him to see that he doesn't get into the irrigating ditches. Edith lives in the country on a 160-acre farm near Grandview. They have a large house and a nice lawn. Edith takes music lessons, crochets and sews. She has graduated from the eighth grade.

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On a farm of 160 acres, south of Sprague, lives a little cousin of ours, Grace Cook, who was 13 years old January 4. Grace walks to school and to Sunday school. She has bought some thrift stamps.

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Waffles and muffins, corn bread and cake, they sound good, don't they? Cecile Schlee knows how to make them. Cecile lives at Walla Walla, and enjoys reading the letters. She has knitted a scarf, a wash-rag and a flag. Star is her pet colt. Cecile and her brother, Fred, have $250 in Liberty bonds.

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Eva Van Syke of Toroda has three sisters and four brothers. She is 10 years old and is in the fifth grade.

---

How many of our boy cousins know how to knit? I know one who does, J. Wright Baylor of Colfax, who was 11 years old January 10. He has read many of the cousins' letters and likes them very much. Wright has a sister and a brother. Babe is the name of his pony, and he has 50 rabbits also.

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A homestead near the Columbia river is where Marie Proctor lives. Marie is in the fourth grade and is 10 years old. Her birthday is February 7. Richard, Robert and Gordon are her three brothers. Oakesdale is the nearest town.

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Blanche Hamilton and her mother went to Rattlesnake to cook for the headers during the rye harvest. When she was there she saw a great big rattlesnake with 12 or 13 rattles, a coyote and a big eagle. Blanche's home is at Prosser.

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Helen Callaway of Lantz lives on a farm where wheat, hogs, sheep and cattle are raised. Helen was 10 years old September 15. She likes to ride horseback after the cows. She and her sister are both in the third grade.

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Some chickens, four pigs and three cows, one pup and one old dog, are the pets of Alice Fredrickson, Box 251, Northport. Alice was 9 years old July 10, and is looking earnestly for a twin. She will write again.

---

Grace Esch of Otis Orchards, is busy knitting a pair of socks for the Red Cross. She has already knitted eight afghan squares and a pair of wristlets. Grace has a cow, Browny, a little calf, Dick, and a kitten, Teeny. She was 12 years old August 13, and wants her twin to write. Do you know what is the difference between a soldier and a lady? Why is a caterpillar like a hot biscuit? What has teeth but can't bite.

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Irene Templin lives in the country on a 160-acre farm near Grandview. She goes to a country school. Irene is the youngest girl in the family. Alice and Edith are her sisters. In the summer she helps mama with the work and in the winter she is busy with her lessons. Arithmetic is her hardest study.

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**From the Land of Red Apples.**

Dear Aunt Nellie: Here is a girl from the land of red apples who wishes to join the Corner. I live on a 23-acre hay farm. I have a war garden. We have two horses, one cow, a calf, two pigs, 75 chickens, a cat, a kitten and a dog. We live two miles from school and ride in a truck to school. I have dark blue eyes, light hair, fair complexion, am five feet two and one-half inches tall, slender, weigh 85 pounds and I was 13 years old January 16. I have one sister. I have no brother. I can pack 25 boxes of apples a day. I am a member of the Red Cross, War Saving society, Garden club and Canning club. I am buying war saving stamps. My papa bought a Liberty bond. I am doing all I can to help can the kaiser. At school we have three blue stars in a field of white surrounded by a border of red, representing the three boys that are in United States service. If I have a twin it would please me very much if she would write to me. I would like to hear from any of the cousins if they wish to correspond with me.—Edna Vining, R. F. D, 1, Malaga, Wash.

**Camping in the Mountains.**

Dear Aunt Nellie: I will be 11 years old October 17. My sister and I went to the mountains with our neighbors and stayed 11 days. We had a fine time. We live on a 500-acre farm. We have lots of cows, horses and calves. We milk about 35 cows. We raised some sugar beets this summer. I hope all the cousins are doing all they can toward saving food. I have two brothers and one brother-in-law that may have to go to war. I live about six miles from town and about one mile from school. I am in the sixth grade. There are seven in our family. I have light hair, blue eyes and a light complexion. Have I a twin? We live by the Walla Walla river and we surely have fine times when we go swimming. We have been threshing barley, but we are all through now—Florence Swegle, Walla Walla, Wash.

**A New Baby Brother.**

Dear Aunt Nellie: How are you and all the cousins? Last time I wrote I said I was the only child in the family. I am not now because I have a new baby brother. He is 2 months old and has blue eyes and curly brown hair. His name is Vernon Lester. I just love to wash and iron his little dresses because they are so cute. He is just getting big enough to coo and play. I had quite a nice surprise this morning. Papa came in while I was doing the dishes and told me to go see what was out by the calf lot and what do you suppose it was? It was a little red and white calf. I haven't named it yet, but I will tell you its name next time. A man has eggs every morning for breakfast. He has no chickens. He does not buy them or steal them, but how does he get them? Green as grass and grass it isn't, white as snow and snow it isn't, red as blood and blood it isn't, black as ink and ink it isn't. Inez Gagen, Mt. Vernon, Wash., is my twin. I wish Sally Garry would write again because her letters are so interesting. I have been hoeing potatoes for war saving stamps. I helped papa shock hay. I am trying to save. I have not bought any candy or other sweet things for a long time. I hope all the cousins are trying to save. I wish some of the cousins would write to me. We have a fine big Corner. I will write again.—Thelma Green. Box 555, Hartline, Wash.

**Brother Is Safely Over Sea.**

Dear Aunt Nellie: I am 14 years old and in the eighth grade. I have blue eyes and light hair. Have I a twin? I walk two and one-half miles to school. The children all belong to the Junior Red Cross in our school. In school we made one quilt and nearly another, besides lots of snippings for pillows for the Red Cross. My sister's name is Ruth. My brothers' names are Ray and Alvin. We just received a card yesterday saying Brother Alvin arrived safely over sea to France. We live on an 80-acre farm. We have another farm. We will move on it in the spring. We have two cows, two calves, one pig and one dog. We have about 20 little chicks. Our cows' names are Beauty and Lady. We have three rooms in our school. I suppose Aunt Nellie enjoys reading the letters. I do.—Myrtle England, R. F. D. 2, Addy, Wash.

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During the last week Aunt Nellie has received letters from the following cousins: Beulah Walker, Hazel Elsie Stock, Emily Florence Boldt, Celia Reichel, Stella B. Ervin, Elvin McQuarie, Anna Bell Gangewer, Pearle Smith, Alice Graham, Alfred Hall, Beulah Shaw, Norma Heuple, Mabel Main, Louisa Fries, Elsie McGlaughlin, Karin Molinder, Albert M. Needham, Lela Thorpe, Phoebe Collins, Lahville Fountain, Lester Collins.

ECLIPSE
38 years old
-still pumping

Think of it! 38 years old and still pumping—from a 200-foot well—and no repairs. This farmer adds: "It's a mighty still day when the Eclipse can't pump some water."
Let the Eclipse pump *your* water—it's the cheapest way. Figure its cost on

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for 38 years—not on the first cost of the mill. The Eclipse Wood Windmill has been sold for 50 years, always giving wonderful service. It is sensitive to light breezes—automatically turns in and out of wind—practically storm-proof. Requires only occasional oiling—has direct stroke, no gears—but little friction—noiseless. Buy an Eclipse from your dealer and get your water

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GOOD PROFITS TO AGENTS
Cabbage Cutter with 6 Knives
that always keep sharp. Slices cabbage and all other vegetables easily and rapidly. Sent prepaid for $1.00. 3 for $2.00. LUSHER BROS., Elkhart, Ind.



Start Your Moulted Hens to Laying



THE world is calling for more poultry and more eggs. Everybody must speed up—it's a patriotic duty. Now's the time to get ready for regular fall and winter laying.

DR. HESS POULTRY PAN-A-CE-A

**Will start your pullets and moulted hens to laying promptly**

Remember, going through the moult is like going through a long spell of sickness. The egg organs become dormant, but why let nature bide its own time to revive the egg organs? Feed a tonic.

Dr. Hess Poultry Pan-a-ce-a contains *Nux Vomica* and *Quassia*—tonics that promote digestion, that tone up the dormant egg organs. It has *Iron* for the blood, and *internal antiseptics*. This combination will keep your whole flock healthy and start your pullets and moulted hens to laying.

*IMPORTANT:* If your hens are not yet over the moult, supply them with Pan-a-ce-a daily to give them strength and vitality to force out the old quills and grow new feathers. Always buy Pan-a-ce-a according to the size of your flock—a penny's worth for each hen to start with. There is a package for all sizes of flocks.

You have no chances to take. The dealer in your town who sells Pan-a-ce-a will refund your money if it does not do as we claim. 30c, 60c and $1.25 packages. 25-lb. pail, $3.50; 100-lb. drum, $12.00.

Dr. HESS & CLARK
Ashland, Ohio

Dr. HESS Stock Tonic
Keeps Hogs Healthy
Drives Out the Worms

Dr. Hess Instant Louse Killer Kills Lice

# News for Breeders

Thomas Kay, the well-known sheep man of Mabton, Wash., recently purchased 40 Hampshire rams at Salt Lake, Utah. The purchase was made for him by William Hislop. Mr. Kay is well pleased with the type, size and vigor of the lot.

Nathan Hamilton, Holstein and Duroc Jersey breeders of Chehalis, Wash., has purchased a fine young boar from Doerfler Brothers of Silverton, Orc. The pig is a son of the great boar, Golden Rod, and is a fine individual. Doerfler Brothers also sold recently two good gilts to Mrs. Dunagan of Scotts Mills, Ore., all at good prices.

### NATIONAL SWINE SHOW.

The third annual national swine show was held the first few days of October at Cedar Rapids, Iowa, and proved to be probably the greatest swine show ever held. The number of animals exhibited was approximately that of last year, when the show was held at Omaha, Neb., but the quality of the exhibits was declared by experts to exceed that of either of the two previous shows. It is also reported that more people passed through the gates of the show this year on one day than attended the show at Omaha during the entire week last year. There were a considerable number of educational and entertainment features as a part of the week's program.

### PERCHERON SOCIETY TO MEET.

Announcement has been made by Wayne Dinsmore, secretary of the Percheron Society of America, that the next annual meeting of the stockholders of the society will be held in Chicago on the evening of December 2. The meeting occurs at the opening of the international live stock exposition, which takes place in Chicago that week.

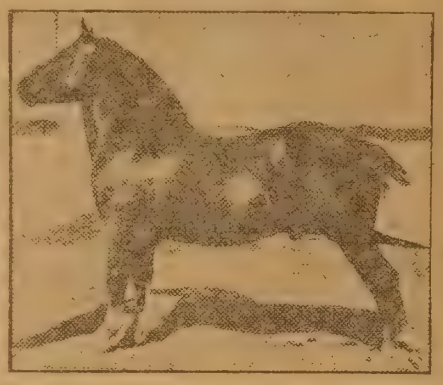
### QUIT SHEEP BUSINESS.

C. B. Stewart, secretary of the Utah Wool Growers' association, is authority for the statement that many sheepmen of Utah are quitting the business, owing to the effects of war.

"The war has taken hundreds of the best herders," Mr. Stewart said. "Men can be secured, but they are not trained herders. When a sheepman entrusts $40,000 to $50,000 worth of sheep to one man the herder must be competent or great losses result.

"Sheep herding is a trade which a woman can not handle. I know that it is wholly out of the question for her to supplant man at this occupation, and so, as the draft calls more men into the service the woolmen are selling their flocks. I look, for this reason, to see a big decrease in sheep raising during the coming year."

### AIDS THE RED CROSS.



The lamb shown in the above picture is the little grade Southdown that was sold in the sheep sale at the Washington state fair for $1000 for the benefit of the Red Cross. The little girl holding it is Jeanette Olney, who gave the lamb to the Red Cross society, which in turn donated it to the sale. Jeanette is an Indian, 5 years old, whose home is at White Swan, some 15 miles from Yakima, on the Indian reservation. Jeanette held the lamb while the sale proceeded, and patiently posed for her picture to be taken.

### A GRAND CHAMPION AYRSHIRE.



Edgewater Sentinel is the very classy Ayrshire bull calf shown above. He is owned by Edgewater farms of Burbank, Wash., of which E. M. Chandler is proprietor. The young bull was grand champion at the Washington state fair, and Mr. Chandler, who, although engaged in engineering enterprises, is very proud of his farm and Ayrshire herd, is the man holding him.

### SULPHUR SOMETIMES A CURE.

To the Editor: In reading The Farmer of September 19, I came across the letter from W. R. H. of Vancouver, Wash., in regard to a sore on his cow which could not be healed. One year ago last spring we had exactly the same experience with a good cow, and in the same place. I disinfected and washed, and even bought all kinds of remedies recommended, but without avail. The sore on our cow gradually grew larger as every scab peeled off, till finally it began to have an offensive odor. Then, after some six months, or possibly more, we read in the Kansas City Star of a remedy that completely cured it, and in a very short time. It was as follows: Take fresh lard, but do not heat, and thicken with sulphur. Apply once a day, after milking. Do not wash off. I am writing, hoping this will help W. R. H. out of his trouble.

J. H. COLLINS.

Sunnyside, Wash.

Commenting on the above letter, Dr. S. B. Nelson says: Sulphur frequently overcomes the invasion of tissues by the hay bacillus, which probably was the cause of the trouble affecting J. H. C.'s cow. It may be that treatment would also be of value to W. R. H., but you must always keep in mind that very seldom do we find that there is only one treatment which is absolutely sure. Sometimes we find that there is no treatment absolutely sure.


## GET GUERNSEYS

Tabulations made by the U. S. department of agriculture show that the average income over cost of feed from one cow that produces 450 lbs. fat is equal to the average income over cost of feed from 20 cows that produce 100 lbs. each. The average of all official Guernsey records is 450 lbs. fat. Learn more about these profitable cows. Ask for our free booklet, "The Story of the Guernsey."

THE AMERICAN GUERNSEY CATTLE CLUB.
BOX W, PETERBORO, N. H.

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Threshes cowpeas and soy beans from the mown vines, wheat, oats, rye and barley. A perfect combination machine. Nothing like it. "The machine I have been looking for for 20 years." W. F. Massey. "It will meet every demand." H. A. Morgan, Director Tenn. Exp. Station. Booklet free.

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OUR northwestern customers have found Kansas City their best market. We specialize on Oregon, Washington and Idaho cattle.

WRITE or wire us for market information at any time.

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## RUBBER METAL SACKS

We pay full market value, correct weight and assortment, prompt returns. Write for prices. We want your business.

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Joseph Thiebes and C. T. Symmes,
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## Rhode Island Red Cockerels

Both combs, pedigreed and line-bred. Best color and quality I ever raised. Rhode Island Whites, both combs. Get your breeding stock in the large Toulouse geese and Bronze turkeys. Pedigreed Belgian hares and Flemish Giant rabbits—the large kind.

HIGHLAND FRUIT AND POULTRY RANCH.
J. NONNENMACHER,
R. F. D. 3, Yakima, Wash.

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## More Dollars From Your Dairy

## *NOW* You Can Get *ALL* the Butter-Fat Profits from Your Herd

YOUR cows are all right. The butter fat is in their milk, but you are wasting this precious profit by using old-fashioned separation methods or an old or inferior separator. Swedish farmers won't tolerate such extravagance. They have to make every penny possible. That's why the best cream separator in the world—the **Viking**—is made in Sweden. You can profit **at once** by the work they do. Start today. Get a

**VIKING CREAM SEPARATOR**

### Made in the Largest Separator Factory in the World

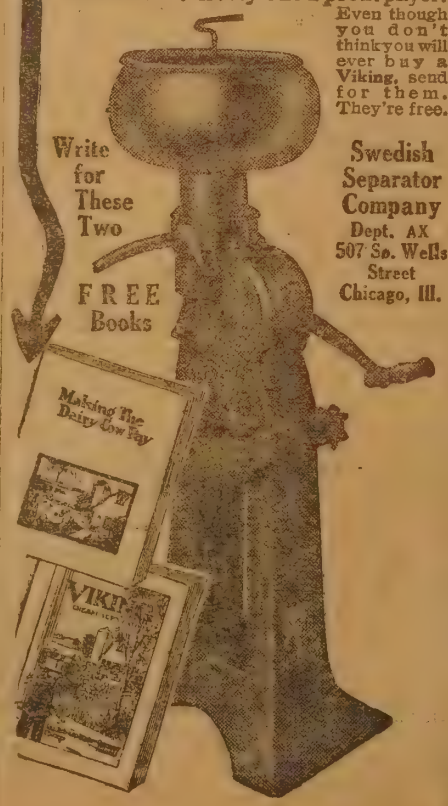
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### Registered Duroc Jersey Boars

Choice boars sired by Richard Pathfinder and Cherry King Orion Jr., and out of sows representing the best blood in the west. Big growthy fellows, with quality. Satisfaction guaranteed or money refunded. Write me for prices.

**Erik W. Olson**
VIRGINIA, IDAHO.

OVER 150 SPRING PIGS.

Sired by our grand champion Richards Defender, Richards Pathfinder and Cherry King Orion Jr., and out of our big type prize winning sows.

In the last three years at the Utah and Idaho state fairs our hogs won 76 champion and first prizes.

Can furnish unrelated pairs. Satisfaction guaranteed or money refunded. Priced very reasonable.

Richards Live Stock Company, Virginia, Idaho

### Golden Rod Wins Again

Our herd was largest money winner at Oregon state fair, 1918.

One excellent boar of breeding age, bred gilts and weanling pigs of either sex.

DOERFLER BROS., Silverton Ore.
A. N. DOERFLER, Mgr.

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THE GRAND CHAMPION SOW IS DEAD. We have a few of her pigs still for sale. Also fall litters, one of 17, from her prize-winning daughters. Priced right. Satisfaction guaranteed.

CRESCENT STOCK FARM. Johnson, Wash.

### FOR SALE

Choice young herd boars, old enough for service soon, sired by Richards Defender, Richards Pathfinder, and Victor Defender. Orders placed now for prize young gilts. They will be bred this fall to Idaho and Utah grand champion boars. Young pigs always for sale. Guaranteed to please.

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### One Hundred Dollars

will buy the first prize futurity boar, Oregon state fair, 1918. A grand individual with greatest blood lines of the breed. Litter mates almost as good, cheaper.

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### QUALITY DUROCS

Breeding stock of all ages from prize winning stock.

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### DUROC JERSEY GILTS

From prize winning stock at Panama-Pacific exposition. Well grown, good individuals; priced to sell.

MIDDLEDALE FARM, Creswell, Wash.

### Growthy March Pigs

Good breeding, good individuality, satisfaction guaranteed. Write for description and prices.

GEORGE DEBOK, Oregon City, Ore.

### Otto's Jersey Lawn Durocs

The today's type and breeding bar pigs for November delivery, $25.

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FOUR DUROC GILTS BRED TO FARROW this fall, also spring pigs, on hand.

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## HAMPSHIRE SWINE

### HAMPSHIRE PIGS

A few pigs of Messenger Boy and Look Out blood lines. Pairs and trios unrelated. Registered in purchaser's name. Priced to sell.

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have won every feeding contest entered since 1914. Weanling pigs, gilts, bred or open. Our blood lines can not be beat.

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Young stock for sale, including senior calf, Edgewater Sentinel, grand champion 1918 Washton state fair. Herd government tuberculin tested.

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### Riverby Orchard Berkshires

Riverby Orchard Berkshires won 12 out of 15 first prizes at the Washington state fair, 1916, also many prizes, including grand champion sow at the Panama-Pacific world's fair. We offer for sale a few good boars and young sows.

D. C. BUNN, Prosser, Wash.

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### Fox's Quality Herd Wins Again

At the Oregon State Fair, 1918, first prize, senior boar pig; second and third, junior boar pig; first, senior sow pig; first, junior sow pig; second, futurity litter. The first prize junior boar pig and the first prize litter were sired by boars from my herd. Why not buy from top herd? They cost no more.

**RAY J. FOX.** **Lyons, Ore.**

### LOCUST HILL HERD

Big type and medium Poland China. Bred gilts and spring pigs of both strains, unrelated. Sixteen years a breeder of Poland Chinas in Oregon.

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### Big Type Poland Chinas

Mouw, Fesenmeyer and Herring strains, either sex. Also registered Shorthorn cattle; good individuals.

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### Poland China Swine

Strictly first class breeding stock for sale at all times at reasonable prices. Several very choice young gilts and one fine serviceable boar at a bargain; also young pigs, both sexes. (Everything registered free.)

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Poland Chinas and Holsteins. Two fall boars at bargain prices for quick sale. A fine lot of early spring pigs. Best of breeding. A few well bred young bulls at very reasonable prices.

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Big type and big medium. Both sexes. Most popular strains.

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**PURE BRED POLANDS.**

Breeding stock of all ages. Will ship C. O. D., subject to approval.

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### BIG TYPE POLANDS

Genuine—Guaranteed.

**GEO. W. BUCK,** **Oregon City, Ore.**

**BIG TYPE POLAND CHINAS.**

Herd headed by Sammy (79833). Correspondence solicited.

**Fruitland Stock Farm, C. Royston, Mgr.**
Payette or Fruitland, Idaho.

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First prize yearling and champion Oxford ram, leading fairs of western Canada and U. S. Pacific Coast.

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**Breeder of Pure-Bred Live Stock.**

Established flocks of pure-bred sheep—Rambouillets, Cotswolds, Lincolns, Shropshires, Oxfords, Hampshires, Romneys.
RAMS FOR 1918 SERVICE FOR SALE,
Also a few ewes.
Also breeder of Shorthorn cattle, Belgian horses and Berkshire hogs.

### Oxford Ram Lambs

15 yearling rams, 40 ram lambs, 30 ewe lambs. Excellent stock and priced to sell.

EXPECT TO EXHIBIT AT INTERSTATE FAIR

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### Romneys, Lincoln, Corriedale

AND HAMPSHIRE EWES AND RAMS.

All pure bred, not registered. Have especially fine lot Hampshire ewe lambs, yearlings and three-year-olds. Any size lot. Write me on any kind of sheep deal.

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### YEARLING RAMS

Get some new blood from our eastern bred stock. Price $30 each.

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### Looney Farm Guernseys

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### Hunter Ranch Percherons

The Grand Champion KROUMIR at head of herd. Young stallions for sale at all times at breeders' prices.

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Breeders of high class registered and grade Guernseys.

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"Home of High-Class Guernseys."
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### QUALITY SHETLANDS

"The women's pleasure and the children's delight." Richest Shetland breeding. Write for prices on early delivery.

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Bull calves out of A. R. dams; also a few females. All good individuals. Herd tuberculin tested.

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### ANNUAL COMBINATION SALE *OF* Registered Shorthorn Cattle

Held Under the Auspices of

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**Lewiston, Idaho, November 11, 1918**

During Northwest Livestock Show, Consisting of High Class

**Bulls, Cows and Heifers**

Catalogue of Entries Mailed Only on Request.

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Both Grand Champions at Oregon State Fair, 1918.
Bulls and Heifers in Lewiston Sale.
Herd Headed by Challenge Plate III.

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Bulls in Service:
Good Prospect.
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### MILKING SHORTHORNS

with world records behind them for milk production.

**A. R. O. HOLSTEINS**

A son of the King of the Pontiacs at head of herd.
Can make special prices on young bulls of each breed.

**A. V. Bradrick & Son**
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### H. H. SCHILDMAN

breeder of registered Shorthorn cattle, Hampshire sheep and big type Poland China hogs.

**Filer, Idaho.**

**REGISTERED SHORTHORN COWS.**

Young bulls and heifers, sired by Scotch bulls; liberal terms.

**CALDWELL CATTLE CO.,** **Caldwell, Idaho.**

## HOLSTEIN CATTLE

### The HOLLYWOOD FARM Offers Four Registered Holstein Bulls

**Ready for service** **Well marked**
**Bred for production** **Straight on top**

The average of the official records of 20.3 lbs., 21.02 lbs., 23.02 lbs., 22.7 lbs. butter in 7 days, with lots of milk.

The average of the official records of their four nearest dams:

**Bull No. 779—7 days' milk, 523.5 lbs.; butter, 26.1 lbs. Average test, 4.0% fat.**
**Bull No. 780—7 days' milk, 558.8 lbs.; butter, 28.8 lbs. Average test, 4.1% fat.**
**Bull No. 784—7 days' milk, 542.4 lbs.; butter, 28.69 lbs. Average test, 4.4% fat.**
**Bull No. 785—7 days' milk, 461.0 lbs.; butter, 26.3 lbs. Average test, 4.5% fat.**

To make room for our increase, these Bulls are priced to sell. Consider the high feed prices and raise only high producers.

Near Seattle.

**HOLLYWOOD, WASH.** **HOLLYWOOD FARM.**

### Bargains in Bull Calves

Sired by Segis Riverside Pontiac, that sold in Pacific International sale, 1914, for $1025, and whose dam has A. R. O. record of 31.47 lbs. butter in 7 days; 118.89 in 30 days, and big records all through his pedigree.

**ERNEST JOHNSON,** **Scappoose, Ore.**

### 365 DAY HOLSTEINS

We are offering a bull calf, born June 27th, the two nearest dams of which average 19,866 lbs. milk, 855 lbs. butter for their yearly A. R. records. One a Jr. 2, the other a junior 4-years-old. The herd with yearly records.

**WESTERNWOLD RANCH,** **Prineville, Ore.**

**REGISTERED HOLSTEINS.**

Bull calves for sale, with good A. R. O. backing.

**BEEBE BROS.,** **R. F. D. 2, Rupert, Idaho.**

### Registered Holsteins

Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.

**H. R. BOOMER,** **New Plymouth, Idaho.**

### HOLSTEINS

Well bred young bulls for sale.

**THOS. CARMICHAEL,** **Gaston, Ore.**

## HEREFORD CATTLE

### BULL RANCH

Hereford Cattle.
Berkshire Hogs.
Hampshire Sheep.

**CHAS. BULL,** **Mabton, Wash.**

### Highland Stock Farm

offers for sale Hereford bulls, 1 or 2 years old. One or a carload.

**PLATT BROS.** **Genesee, Idaho.**

## TAMWORTH SWINE

**ROUND KNOLL RANCH NO. 3.**

Herd headed by Knoll Slope Colonel, assisted by Jolly Lad IV. Correspondence solicited.

**Elisa, Idaho.**

## CHESTER WHITE SWINE

### REGISTERED O. I. C.

SWINE.

Choice weaned pigs. Will ship subject to approval.

**RINGGOLD FARM.**
J. H. West, Prop., Rt. 1, Box 15, Centralia, Wash.

### COVE STOCK FARM

Unrelated fall and spring Chester White pigs from prize winning stock.

**ARCHIE CONLEY,** **Cove, Ore.**

### Chester White Swine

Choice weanling pigs; spring gilts and service boars.

**FRED H. HOFFMAN,** **Albion, Wash.**

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, Oct. 11.—General evening up of trades so as to be prepared for any surprise during the double holiday ahead tended to bring about advances today in the corn market. Prices closed firm, 1 cent to 2 1-8 cents net higher, with November $1.13 7-8 to $1.14 1-8 and December $1.12 5-8 to $1.13. Oats finished 3-8c off to 3-4c up, and provisions varying from 17c decline to a rise of 40c.

Word that the German answer to President Wilson's note would be deferred until after a conference of the sovereigns of the German federated states was an important factor in curtailing the selling pressure which has been forcing down the value of corn. Buying, however, appeared to be restricted largely to shorts who wished to collect profits and to avoid the risks that would be invited if covering were delayed until Monday.

Oats averaged higher for the same reasons as corn.

Lard and ribs advanced sharply notwithstanding that buying was scattered. Pork continued minus of support.

### Pacific Northwest Grain.

PORTLAND, Ore., Oct. 11.—Grain, October delivery: Oats, No. 22 white feed, $54 bid; barley, standard feed, $46.75; barley, standard "A," $47.50. November oats, No. 2, $54; barley feed, $47; barley, "A," $47.50; oats, No. 3, $48; oats, clipped, $48.75; corn, yellow, $58; corn, mixed, $51. Eastern oats and corn in bulk: Oats, No. 3 white, $48; 38 pounds clipped white, $48.50; corn, No. 3 yellow, $53; corn, No. 3 mixed, $52.

### Minneapolis Grain.

MINNEAPOLIS, Oct. 11.—Wheat receipts 638 cars; holiday year ago. Cash No. 1 northern old, $2.21 1-2. Corn No. 3 yellow, $1.27@1.30. Oats, No. 3 white, 61@62c. Flax, $3.36@3.39. Flour unchanged. Shipments 82,894 barrels. Barley, 80@88c. Rye, $1.57 1-2@1.58 1-2. Bran, $28.77.

## Live Stock Quotations.

### At Chicago.

CHICAGO, Oct. 12.—(U. S. Bureau of Markets.)—Hogs, 8000. Market fully steady on hogs; packing grades dull, about steady with yesterday's close. Good pigs, butchers, $18.15@18.60; light $17.60@18.50; packing, $16.75@18; rough, $16.25@17.25; pigs, good to choice, $15.50@16.50.

Cattle—Receipts, 3000; compared with a week ago, beef and butcher cattle 75 cents to $1 lower; calves $1.50 to $1.75 lower; stockers and feeders, 50 cents to $1 lower.

Sheep—Receipts, 8000; compared with a week ago fat classes of lambs and ewes mostly steady; fat yearlings and wethers 25 cents lower; best feeding lambs 50 cents lower; others and feeding and breeding sheep unevenly, 50 cents to $1.50 lower.

### At Omaha.

OMAHA, Neb., Oct. 12.—Hogs—Receipts, 2700; market steady. Heavy, $17.40@17.75; mixed, $17.50@17.60; light, $17.55@17.90; pigs, $15@17.25; bulk of sales, $17.50@17.65.

Cattle—Receipts, 400; market steady. Native steers, $12@18; cows $9@15.50; Texas steers, $6.50@11.50; cows and heifers, $6.75@7.25; canners, $6@6.75; stockers and feeders, $6.50@14.50; calves $8.50@13.50.

Sheep—Receipts, 800; market steady. Wethers, $9@11; ewes, $7.25@8.75; lambs, $13@15; yearlings, $10@11.50; feeder lambs, $11@17.35; culls, $5.75@7.50.

### At Seattle.

SEATTLE, Oct. 12.—Hogs—Prime light, $19@19.25; medium to choice, $18.75@19; medium heavy, $17.75@18.25; rough $16.75@17.25; pigs, $14.25@15.75.

Cattle—Best steers, $11@12; medium to choice, $10@11; medium to good, $8@8.50; medium $7@7.50; bulls, $5@7.50; calves $5@8.

Sheep—Spring lambs, $17.50@19; yearlings, $9@12; ewes, $6@8.

### Spokane Union Stock Yards.

| | Cattle. | Calves. | Hogs. | Sheep. |
|---|---|---|---|---|
| Saturday, Oct. 12 | 59 | 8 | 72 | 24 |
| Friday, Oct. 11 | 342 | 32 | 50 | 73 |
| Thursday, Oct. 10 | 137 | 5 | 31 | 121 |
| Wednesday, Oct. 9 | 145 | 6 | 254 | 37 |
| Tuesday, Oct. 8 | 78 | 23 | 55 | 571 |
| Monday, Oct. 7 | 274 | 27 | 80 | 55 |
| Week ago | 130 | 52 | 36 | 84 |
| Year ago | 174 | 30 | 536 | 132 |
| Two years ago | 34 | 1 | 89 | .... |

Saturday's cattle receipts were light, but the quality in a measure made up for the light receipts. The market opened with a continuation of Friday's activity at strong prices; in fact, today's market was the best in two or three weeks. A few choice steers were offered, selling at $11 to $11.50, and several drafts of the medium class at $9. Just a few of the fair kinds were offered and sold at $5.50 to $8. Choice cows were strong at $7.50 for the best offered, the good kinds going at $6 to $7 and the common butchers at $5.50. Heifers were steady to strong at $5.75 to $7. Compared with a week ago choice and prime steers are strong, the fair to medium killers steady to 25 higher and the cheaper grades steady. Cow stuff is steady to strong on all grades. Calves and bulls steady to strong. The week closed with a good strong demand for the good to better grades of both steers and cows.

| | |
|---|---|
| Primes steers | $11.00@11.00 |
| Good to choice steers | 10.75@11.75 |
| Medium to good steers | 9.50@10.50 |
| Fair to medium steers | 8.25@ 9.00 |
| Common to fair steers | 5.50@ 8.00 |
| Choice cows and heifers | 7.50@ 8.50 |
| Medium to good cows and heifers | 6.00@ 7.00 |
| Common to medium cows and heifers | 4.75@ 5.75 |
| Canner | 3.00@ 5.00 |
| Bulls | 5.00@ 7.00 |
| Calves | 6.00@10.00 |
| Stockers and feeders | 6.00@ 8.00 |

One car of prime hogs was the extent of the hog receipts. The market declined another 25 cents to $18.25 for the top. The quality was good. Compared with a week ago prices have declined from 75 cents to $1. Due to the weakness at other markets a further decline is predicted. The demand is strong but at the lower figure.

| | |
|---|---|
| Prime mixed | $18.00@18.25 |
| Medium mixed | 17.75@18.00 |
| Rough heavies | 17.00@17.50 |
| Pigs | 16.50@17.25 |
| Stockers and feeders | 15.50@17.25 |
| Bulk of sales | 18.25 |

Sheep receipts were very light the entire receipts being a small bunch of fat wethers, which sold at $10.50, or at a 50-cent advance. Fat lambs and sheep are steady to strong with a fair demand.

| | |
|---|---|
| Prime lambs | $12.00@13.00 |
| Fair to medium lambs | 11.00@12.00 |
| Prime yearlings | 9.50@10.50 |
| Prime wethers | 9.00@10.50 |
| Best mutton ewes | 6.50@ 9.00 |
| Breeding ewes | 13.00@17.50 |

## Portland Market.

PORTLAND, Ore., Oct. 14.—Creamery men report a further slight increase in production and with green feed plentiful in the country, an easing up of the butter situation is expected. The supply, however, is still under local needs and prices on cubes are holding firm. Extras bring 63 1-2 cents. Several cars of eastern butter are reported due.

Ranch egg receipts have fallen to the lowest point of the season. Jobbers have no trouble in getting 60 cents for the candled stock, and selects bring 62 cents.

Considerable poultry is coming in but the market remains steady on the basis of 25 cents for hens. Dressed meats are weaker, particularly pork.

Front street dealers report a good demand for apples and are getting $3 to $3.25 for extra fancy grades. From these prices the market ranges down to $1.35 for cooking apples. Picking of the late crop will be finished in Oregon this week. Shipments to the east are steadily increasing in volume.

The potato market is steady. The best Oregons bring $2.25 and ordinary grades $1.75 and $2. Yakimas and Idaho's are quoted at $2.25.

Onions are holding even with Oregon and California's selling at $1.75 to $2.25, according to size.

### Quotations.

Eggs—Oregon ranch, candled, 60 cents; selects 62 cents.

Cheese—Jobbers' buying prices, f. o. b. dock. Portland: Tillamook triplets, 36 cents; Young Americas, 37 cents a pound; Coos and Curry f. o. b. Myrtle Point, triplets 35 3-4 cents per pound.

Poultry—Hens, 25 cents; broilers, 26 cents; ducks, 32@34 cents; turkeys, 28@30 cents; geese, 16@18 cents.

Pork—Fancy, 24 cents.

Veal—Fancy, 20@20 1-2 cents.

Potatoes—Oregon, $1.75@$2 per cwt.

Hay—Buying prices, f. o. b. Portland: Eastern Oregon timothy, $30 per ton; valley timothy, $29; alfalfa, $27; valley grain hay, $26@27; clover, $28; straw, $9@10.

## Seattle Market.

SEATTLE, Oct. 12.—Spud growers in the Yakima valley are quoting $30 and in the White River valley $24 and $25 f. o. b. for the week end, but there is little movement and no interest pending adjustment of costs to square with conditions in the east. Digging time has just begun at Yakima.

The state of the potato shipping trade is reflected in the fact that at Yakima, while digging time is on, only a few are moving. Growers are now discussing storage until prices right themselves. It is obvious to dealers who know conditions that unless a shipping demand is developed there will be no stability to the potato market of the state.

The effects of the heavy selling of extra fancy Jonathans and the ravages of the worms are showing in increasing arrivals of jumble pack Jonathans from eastern Washington and sales at $1.50. Jumble pack Delicious apples are selling at $1.75 and jobbers report that they will have a liberal supply. Buyers seem less inclined to look for fancy colors and paper wrappings this year and evidently convinced that in view of the high prices "apples are apples." Spitzenburgs are selling freely in eastern Washington, and $2.25 is being quoted for extra fancy. The crop of Winesaps is normal and the fruit is not yet in heavy demand, although a few eastern buyers are endeavoring to recoup the shortage of Jonathans with the long keepers.

Poultry prices will be bid off a cent Monday by Seattle jobbers due to the increase in the receipts. The street is unable to move the birds as fast as they come in, and cooler stocks are now well taken care of. First turkey shipments have begun to arrive from eastern Washington. Jobbers are not encouraging the trade, as cold weather is best adapted to feeding conditions. It was stated today that turkeys will job around 40 cents per pound this season, although this forecast is subject to modifications by possible increase in production or demand.

The fresh ranch egg market is firmer for the weekend, the bulk of sales being at 65 cents per dozen, as against 64 and 65 through the week. The straightening out of prices has been due more to failure of receipts than through any accentuation of the demand. Storage stocks are moving out at an abnormally heavy rate.

### Purchasing Prices.

Eggs—Select ranch, 58@59c per doz.; pullets nominal.

Butter—Fresh dairy, 32c por lb.; butterfat, 68c per lb.; bakers, 46c per lb.; raw milk, $3.30 per cwt.

Poultry—Broilers, live 1918, under 2 lbs., 31c per lb.; hens, 3 1-2 to 4 lbs. and up, 27c per lb.; under 3 1-2 lbs., 25c per lb.; old roosters, 17@18c per lb; ducks, live, fat, 23c per lb.; squabs, large, $3.50 per doz.; geese, fat, live, 21@22c per lb.; Belgian hares, 11@14c per lb; guineas, $7 per doz.; turkeys, young toms and hens, dry picked, 10 lbs. and up 36c per lb.

Hogs—Light, 22@25c per lb; heavy, 19@21c per lb.

Beef—Steers, fat, 12@15c per lb.; heifers, fat, 14@15c per lb.; cows and bulls, 11@14c per lb.

Veal—Fancy, light, 20@21c per lb.; do., heavy, 10@18c per lb.

Mutton—Fat, 22c per lb.; spring lamb, fat, dressed, 25c per lb.

### Hides, Tallow and Wool.

Bid prices to producers: Salted hides, cows and steers, No. 1, 15c lb.; do., No. 2, 14c lb.; green hides, cows and steers, No. 1, 12c; do. No. 2, 11c lb.; salted bulls or stags, No. 1, 10c lb; do. No. 2, 11c lb.; green bulls or stags, No. 1, 10c lb.; do. No. 2, 9c lb.; salted or green calfskins, No. 1, 32c lb.; No. 2, 30 1-2c; salted or green kip skins, No. 1, 16c lb.; do. No. 2, 14 1-2c lb.; dry hides No. 1, 30c lb.; do. No. 2, 28c lb.; dry bulls or stags, 25c lb.; dry salt hides, 24c lb.; dry calfskins (5 lbs. and under), No. 1, 35c lb.; do. No. 2, 33c; tallow, No. 1, 13c lb.

Horse hides, green or salted, each $2@4; do., dry, each, 50c@$2.

Clean ranch wool, full growth, lb., 50@55c.

Sheep pelts—Long wool, each $2.50@4.50; medium wool, each $1.50@2.50; short wool, each, $1@1.50; shearlings, each 35@75c.

Beeswax, per lb., 25@27c.

### City Prices.

Hay and feed quotations, city prices, truckload delivery, are as follows:

Feed—Millrun, $34@37 ton; scratch feed, $81; all grain chop, $74; oats, $70; sprouting oats, $71; rolled oats, $65; whole corn, $78; cracked corn, $84; rolled barley, $63; clipped barley, $69; alfalfa meal, $44; oil meal, $78; egg mash, $66.

Hay—Eastern Washington timothy, $33 per ton; do., double compressed, $42; alfalfa, $34; straw, $17.

## Seattle Grain.

SEATTLE, Oct. 12.—Price cutting in flour all along the Pacific coast has brought the selling levels of eastern hard wheat flour to that of Washington soft wheat. Disappointed in the amount sold to the government on October delivery, these mills say they have been compelled to stimulate trade by offering price concessions. Local semi-hard wheat flour in the interior has been cut heavily, but soft wheat has held due to the conditions of the mill feed market.

Stocks of flour on Puget sound are accumulating heavily, a problem in which all Washington wheat farmers are directly interested. Accumulations here threaten to force millers off the buying market and to render the duration at which farmers must hold wheat in the country more or less conjectural. Puget sound millers are still buying wheat owing to competitive conditions. It is believed that the government will be able to provide ships for the haul and that the November and December business will be large enough to offset the accumulations.

But little more flour can be ground here without overcrowding the storage space, and the mills interested are rapidly coming to the point where they must close down. The most encouraging symptoms that have reached Seattle millers in 60 days were the telegrams from Herbert Hoover and Charles Hebberd urging farmers to be patient.

# More Rural Truck Lines

The national highways transport committee is working out ways and means increasing the number of motor truck lin to serve the farming districts. The immediate object is to relieve the railroa of much of the local traffic, thereby allowing them freer hand in handling w materials. Julius L. Meier, representi Oregon, Washington and Idaho on t transport committee, has recently return from a meeting at Washington, D. C.

"The committee fully realizes the vit importance of the motor truck as a tran portation factor in winning the war," sa Mr. Meier. "Its work has been organiz to cooperate with the railways in co gested terminal districts to create rur motor truck lines to take care of loc freight and express problems.

"The work already begun throughout t whole United States of establishing the lines is to be continued.

"These lines are to be operated with view to giving the farmer the same ser ice at his door that the railroads give their depots. It can readily be seen ho this will benefit not only the farmer, b providing cheap and speedy transport tion on a regular schedule, but also t whole population of the state, for t farmer's products can thus be brough quickly and cheaply to the consumer. A the same time the railroads will be le free to devote their facilities to the longe hauls.

"The committee is desirous that the ge eral public shall be brought to realiz the importance of these motor truck line in solving transportation problems. Shi pers, particularly, are urged to give ful est cooperation.

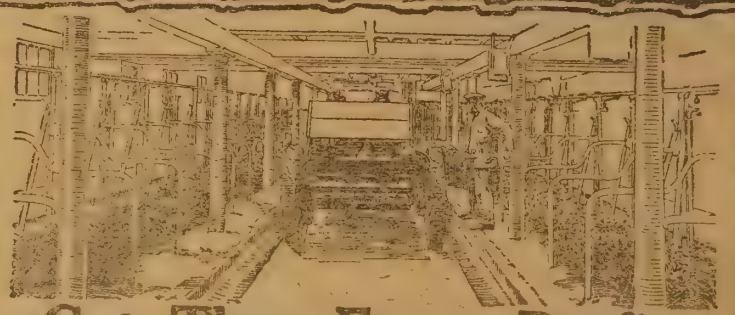
"Of course, it can readily be seen tha when the farmer is assured of transpo tation almost from his dooryard to th consumer he will be relieved of furthe worry about the distribution of his prod uct, and this will result in increased foo production. Such products as milk, egg vegetables and garden truck will b brought to the city the same day the leave the farm."

## Portland Grain.

PORTLAND, Ore., Oct. 14.—Corn is stil very weak but the other coarse grain have become steadier, particularly bar ley. At the closing session of exchang feed barley was posted at $47.50 bid an standard A at $46.50. The best bid fo sacked oats was $54 and for bulk oat $48.50. Corn was nominal at $53 for yel low and $52 for mixed. The hay marke is still holding steady.

### Boches Are Disappointed.

Many a boche who was thinking o luncheon in Paris now confines his aspira tions to any kind of a quick handout in hi home town.—Washington Star.

# Get That Extra Profit

SAVE stable manure. It's worth a lot of money now. Either spread it when it's fresh and contains all its fertility, or pile it where the losses will be smallest, and spread it as soon as you can. Balance it with phosphate if necessary, spread a little on many acres rather than much on a few, but don't waste a single lump. Stable manure is working capital. With it you can get bigger, better crops off the acres your present help can handle. Waste it, or neglect it, and you are losing an easy, handsome profit, probably more than enough to pay for a new

**Low Corn King, Cloverleaf, or 20th Century Manure Spreader.**

These machines do the kind of spreading that has been proved most profitable. They are all low, light draft, narrow box, wide spreading machines, made in three handy sizes, small, medium and large. They spread a full load in from three to five minutes, in an even coat that extends well beyond the rear wheel tracks.

Stable manure, properly handled, will increase the crop production from any soil. Buy one of these spreaders and get that extra profit. See the machine at the local dealer's place of business or write us for spreader information you ought to have.

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San Francisco, Cal. Spokane, Wash.

# The Cause and the Control of Fevers

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D.

You sometimes hear the anxious one inquire about a relative, "Has she any temperature?" This is an inaccuracy as well as bad grammar. What is intended is this: "Is there any rise of temperature above the normal?" because there is always a temperature as long as a living thing is alive.

"Has she any fever?" would be a correct and intelligent inquiry. The temperature of the average person will rise above the normal whenever more heat is made than there is heat expended.

Whatever the cause of this overproduction or diminished output, it is fever. A very high temperature outside, with a generation of heat from too much food within, may be a momentary source of fever. Bacteria, poisons, congestions and severance of the coordinating brain wires between the various structures of the living anatomy also are causes of fevers.

It matters not what the cause, there will be a rise of temperature if the heat loss by perspiration, respiration and kidney fluids is interfered with.

The combination of arrested heat loss or excess heat production with high humidity leads to an accumulation of heat in the tissues. Of fever in general it may be averred that it is less the result of overproduction than of a failure of the flesh to dissipate what there is.



Dr. Hirshberg.

A rapid heart, high blood pressure and rapid breathing, to be sure, yields more heat than a quiet bed. Children and babies kept awake near older persons on hot summer nights, even in parks, are hotter than when undressed, asleep and in bed in their own homes. The earlier they are put to bed the cooler they are.

### Senses Are Unreliable.

Fever does not arise if the central stations, such as the gland juices or the brain fibers, send quick and accurate messages back and forth to balance the output and the manufacture of heat. If the balance between "thermotaxis" and "thermogenesis" is swiftly and precisely maintained there is no rise of temperature; that is to say, no fever. But this balance may be reestablished at a wrong point, several degrees above the standard. This is what happens when a fever is present and holds a steady course. Such a fever is at a false standard.

A man's sense of temperature, of touch, of recognition are not reliable as to a fever. Your senses would have to be as accurate as an instrument of precision, such as a spectroscope or a thermometer in order to indicate a man's temperature.

The proof of man's unreliability as a judge without instruments is well illustrated in a myriad of ways, one of which has to do with the sensation of heat.

# A Crooked Trail

(Continued from page eighteen.)

not needed now. I'll putty it in when we get back."

"I got Vic five years ago in Missouri, when I was a small boy and she was a little puppy," I explained. "She doesn't know what it is to stay away from home unless she's with some of the family."

We now struck the road we thought Lep had probably followed, and were soon riding it at a brisk gait. There were numerous cattle-tracks in it, and we felt practically sure that some of them had been made by our cattle.

"A good deal pleasanter to have company on a hunt like this—don't you think so, Travis?" Frank remarked, not long after we had got well under way.

"Yes, it is that—ever so much pleasanter," I answered heartily. "But my old longhorn has brought you a lot of trouble."

"No, he didn't," Frank protested. "I like trips of this kind. And to tell you the truth, it's a wonderful relief to find somebody that has an ambition to do something besides turn his hat up behind and down before, and wear high-heeled boots and spurs and spit tobacco. That's the kind of boys we have around here—mostly. Stella has two or three ardent admirers of that kind, and when I tease her about them she gets so mad she'll hardly speak to me. They like to station themselves where she can see them, and then go pegging about on their high heels, with their spurs jangling, to attract her attention. Sometimes she laughs at them, but usually she scorns to see them. With their boots and spurs they imagine themselves dead-shot lady-killers."

I laughed at his description. That type of young man was altogether too common.

Houses were far from plentiful, and we halted at every one to make inquiries. At length we found a man who had seen Lep and his two younger followers pass.

That was the day before, however. If they had traveled steadily, they must have a pretty good start of us by now. We pushed on till noon, then halted for dinner. But we were in the saddle again as soon as our horses had grazed and rested.

An hour later we came to where the road forked, one branch leading south and the other southwest. The number of tracks here prevented us from trailing our cattle; but we thought it probable that they would travel southward. So we turned our horses' heads in that direction.

Two or three miles further on we found a settler and questioned him. Lep and his traveling companion had not been seen here. Still we pushed on till we had passed two more houses.

Having heard nothing, we now became convinced that a this was the wrong road, and we turned back. A few miles brought us to the forks of the road, and we started out on the other fork.

We passed no houses now, but at one place we made out the tracks of three cattle in the road. This discovery encouraged us to push on.

The day had been warm to sultriness, and late in the afternoon a black cloud rose slowly in the west and northwest.

"That's beginning to look like a storm," I observed, turning in the saddle to gaze at that inky mountain of blackness.

"Yes, very much like a storm," Frank agreed. "We may have a bad night. I like to camp out in fine weather; but such a night as this promises to be I'd rather have a board or two over me, thank you. Hope we may discover a house about camping-time."

Heartily I echoed the wish, and we pushed ahead. The country seemed utter wilderness here, and no sign of a human habitation appeared.

(To be continued.)


## Your Local HOME PAPER and Your State FARM PAPER at a Special Club Price

A clubbing arrangement has been made with a number of newspapers in your state whereby we can now offer you a one-year subscription to your local home paper and a one-year subscription to your state family farm paper at a special rate for both.

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Your Local Home Paper and Your State Farm Paper can now be sent to you for one year each at the special clubbing rate as quoted below:

| | |
|---|---|
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| The Buckley Banner, Buckley, Wash., and The Washington Farmer | $1.50 |
| Castle Rock Independent, Castle Rock, Wash., and The Washington Farmer | $1.50 |
| The Cheney Free Press, Cheney, Wash., and The Washington Farmer | $1.50 |
| Chehalis Bee-Nugget, Chehalis, Wash., and The Washington Farmer | $1.50 |
| Cashmere Valley Record, Cashmere, Wash., and The Washington Farmer | $1.50 |
| The Everett Tribune, Everett, Wash., and The Washington Farmer | $3.00 |
| Puget Sound Mail, La Conner, Wash., and The Washington Farmer | $2.00 |
| The Montesano Vidette, Montesano, Wash., and The Washington Farmer | $2.00 |
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| The Weekly Recorder, Olympia, Wash., and The Washington Farmer | $1.00 |
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A three-year subscription to your state farm paper and a one year subscription to the following papers at the special price for both.

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# FARMERS' WANT ADS

This is the farmers' "Want," "Sale" and "Exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rate, 7 cents a word per insertion, with a special rate to farmer subscribers to the Washington Farmer of 6 cents a word per insertion for from 4 to 12 times, and 5 cents a word per insertion for 13 times or more.

All commercial and land advertising, 7 cents per word each insertion. Open also to nonsubscribers.

In using these columns advertisers must observe: (1) No advertisement will be inserted for less than 75 cents. (2) Every word, number and initial, including name and address, must be paid for. (3) Cash must accompany order.

Above rates also include insertion in The Oregon Farmer and The Idaho Farmer.

**SITUATIONS WANTED—Male 21**

RELIABLE MAN WANTS EMPLOYMENT; AM 21, but lame for military. Roy Hartman, Winchester, Idaho.

**EDUCATIONAL 45**

IN BUSINESS OR ACTUAL LIFE THE BEST is none too good for you. Write Gooding college, Gooding, Idaho, Charles Wesley Tenny, president, today.

SEND NEWS NOTES TELLING OF THE work of your school today. Address the Educator, Gooding, Idaho.

**HONEY, BEESWAX—Wanted 58**

SEND SAMPLES OF YOUR HONEY AND beeswax. State quantity, price. Oregon Farm Products Co., 386 Halsey st., Portland.

**EGGS AND BUTTER WANTED. 59**

WE ARE ALWAYS IN THE MARKET FOR good eggs and dairy butter. Send us your next shipment. Oregon Farm Products Co., 386 Halsey st., Portland, Ore.

**MISCELLANEOUS WANTED 63**

POULTRY WANTED.
We are cash buyers of poultry and dressed meats, also cream. Write us for prices, shipping tags and premium catalogue for cream shippers.
COMMERCIAL CREAMERY CO.
SPOKANE, WASH.

**MACHINERY—For Sale 93**

PLOW TYPE RUMLEY STEAM TRACTOR, 25-HORSEPOWER. DOUBLE CYLINDER, PRACTICALLY NEW. FOR SALE AT A BARGAIN.
39x106 high-pressure boiler. Cylinders 8 inches in diameter, with 12-inch stroke. Belt wheel 41 inches in diameter, with a 12-inch face. Rear wheels 74 inches in diameter. Width of tire, 30 inches. Extreme width of engine 122 inches, length 254 inches. Subject to inspection at Seattle, Wash. Ask us for prices.
AMERICAN HOIST & DERRICK CO.
Seattle, Wash., and St. Paul, Minn.

"WITTE" GASOLINE ENGINES
save labor, and are carried in stock by
HIGGINS MACHINERY COMPANY,
312 FIRST AVE. S., SEATTLE.
Write for Catalogue.

FOR SALE—COMPLETE SET DRILLING tools; 5-inch hole, also one 6, and one 3 h. p. gas engine. Write John Therleen, Govan, Wash.

**MACHINERY—Wanted 96**

WANT TO BUY A ONE-MAN STUMP PULLER. F. J. Kaizer, Nahcotta, Wash.

**STOVE AND FURNACE REPAIRS. 126**

WRITE M. S. RUBENS, SPOKANE, FOR ANY parts needed to repair stove, furnace.

**PETS—Dogs, Birds, Etc. 171**

PEDIGREED AIREDALE DOGS AND PUPS. Barron White Wyandotte cockerels from trapnested hens. Marc Tuttle, Beach, Wash.

**RABBITS and HARES 173**

FOR SALE—FIRST-CLASS NEW ZEALAND rabbits, also a few white Angora rabbits. F. O. Hagg, Burley, Idaho.

MONEY IN RABBITS—RAISE RABBITS FOR us. We buy all you can raise. Supply the breeding stock. Will pay $6 per pair. Send stamps for particulars. H. E. Gibson Co., Arcadia, Calif.

**POULTRY 174**

SINGLE COMB WHITE LEGHORN AND Rhode Island Red cockerels and pullets. Mrs. Rominger, Underwood, Wash.

SINGLE COMB WHITE LEGHORNS; HENS and pullets for sale. Mrs. F. L. Moulton, St. John, Wash.

**LIVE STOCK. 177**

FOR SALE—TO CLOSE AN ESTATE, IN quantities to suit, some 20,000 sheep, ewes, lambs and bucks, from $10 up; also 800 head of stock cattle. 45,000 acres range land, best anywhere. Coffin Bros., North Yakima, Wash.

DR. JAS. R. SHUPE WILL SELL AT PUBLIC auction October 26, at the Sugar City Park, Sugar City, Idaho, at 2 p. m., 34 head of registered Shorthorn cattle. Don't overlook the date.

REGISTERED HEREFORD BULLS — WE have 60 head yearlings and twos; eastern-bred, and worth more than it takes to buy them. Nye & Nye, Rigby, Idaho.

OXFORD RAMS, YEARLINGS AND OLDER; have one, very large; farmers' prices. Albert Wiltz, Addy, Wash., Route 2.

FOR SALE—30 PURE BRED OXFORD RAMS, mostly yearlings, some two. Chas. A. Cairns, Meridian, Idaho.

FOR SALE—WEANLING BIG TYPE POLAND China pigs. S. S. Mullen, Bellingham, Wash., R. 1, Box 86.

REGISTERED BIG TYPE POLAND CHINA pigs for sale. John Bushaw, Route 2, Anacortes, Wash.

REGISTERED O. I. C. SWINE. BREEDING stock for sale. C. I. Ballard, Rickreall, Ore.

**HOTELS 306**

WHITE'S HOTEL AND RESTAURANT—Rooms, hot and cold water, 75c up. Breakfast 20c to 40c; dinner, 25c to 50c. Sprague and Stevens, Spokane.

GALAX HOTEL; NEW AND MODERN; 75C and $1. Main and Bernard, Spokane.

NEW MADISON HOTEL, 75C AND UP. 1ST and Madison, Spokane, Wash.

**RUBBER STAMPS AND SEALS 384**

FOR RUBBER STAMPS, STENCILS, BADGES, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

**ARTIFICIAL LIMBS 424**

SCHINDLER ARTIFICIAL LIMB CO., 8115 Wall st., Spokane, Wash.

**SEEDS. 620**

WE SPECIALIZE IN TIMOTHY, ALFALFA, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Idaho.

**FARM LANDS FOR SALE 651**

A BIG LAND OPENING.
COWS, HOGS, AND A BANK BOOK.
Your dream of life, of ease, comfort and independence await you
On Port Susan Bay, Snohomish County; 6000 acres of the best land that lies out doors; a 2 hours' ride from Seattle places your feet on the richest, most productive soil in the whole state of Washington; rail and water transportation; near paved roads, schools, churches, cannery and condensery; 3½ miles of waterfront and finest beach on Puget Sound; 20 miles of beautiful lake shore, surrounding 8 picturesque lakes; these lakes teem with trout. Get in on the first choice for $35 per acre and up; 10 yearly payments, 6 per cent interest.
This is but the beginning of the story of Birmingham. Send to the owners for illustrated literature. BROWNELL LAND CO., 904 Third ave., Seattle, Wash.

LANDSEEKERS.
Here's just what you're looking for: Level land, free from gravel, deep shot clay and alder bottom soil; running streams; good farms all around; good roads; good schools; rural mail delivery; railroad station only quarter mile distant, and big markets of Camp Lewis, Seattle and Tacoma quickly reached; crop failures are unknown in this delightful mild climate. $75 an acre pays for your land; easy monthly instalments. located at Belmore, Thurston county, Wash. Write for particulars.
A. H. REID & CO.
314 NEW YORK BLOCK.
SEATTLE, WASH.

JORDAN VALLEY PROJECT.
MALHEUR COUNTY, OREGON.
THIRTY THOUSAND ACRES
OPEN FOR ENTRY SOON.
WRITE FOR DATE.
JORDAN VALLEY FARMS.
524 IDAHO BUILDING. BOISE, IDAHO.

EIGHTY ACRES; IN THE HEART OF THE rich Des Chutes valley; 3 miles from Des Chutes, 7 from Redmond; fifty-eight acres paid water right, half in cultivation; $200 would get balance ready. Price $3000. Consider registered sheep for half, balance federal loan. F. B. Baughman, Redmond, Ore.

RARE OPPORTUNITY—67 ACRES FRUITS, nuts, alfalfa, Tokays, etc.; irrigated; tools, tractor, horses and equipment; every convenience. Near state highway and capital; beautiful location. Price $185 per acre. Send for full information. Tubble Bros., Elk Grove, Cal.

KENNEWICK IRRIGATED RANCH FOR SALE —22 acres; best location and ground in valley. L. Balerlipp, Kennewick, Wash.

VERMILION, ALBERTA—160 TO 5000 ACRES, $16 to $25 per acre. Union Investment Co., 406 Ziegler blk., Spokane, Wash.

**FARM LANDS—WANTED 654**

WANTED—TO HEAR FROM OWNER OF farm or improved land for sale. O. K. Hawley, Baldwin, Wisconsin.

## Just What You Want

may be offered in this weeks' Want Ads at a bargain. It's a good idea to look them over every week.

More Chickens
More Eggs
More Money

# Makes Hens Lay
# LACTEIN
# Makes Hogs Pay

More Hogs
More Pork
More Money

## A WONDERFUL DISCOVERY

## *Pure Condensed Buttermilk*

### Lactein for Chickens

Lactein is a scientific produce produced under perfect sanitary conditions from fresh buttermilk and whey at the creameries, cheese and casein factories on the Pacific Coast.

The solids of both buttermilk and whey are very rich in the one greatest tonic known for chickens, LACTIC ACID. They are also rich in protein (albumin and milk sugar or carbohydrates). Lactein is produced by separating the water from the solids at a temperature and in a manner that not only thoroughly Pasteurizes and sterilizes the solids, but retains and stimulates the Lactic Acid which in buttermilk is practically lost if brought either to a high temperature or reduced to a dry state.

### Lactein Is Buttermilk and Whey Without Water

Lactein retains all the health-giving food values and a uniform acidity without the useless bulk of water encountered in either whey or buttermilk and will keep pure and fresh under any condition or in any climate for any length of time.

### Lactic Acid Is a Tonic

For years the greatest poultry experts in the world have recognized the value of sour milk as a food tonic—a regulator for poultry, but when they have undertaken to use raw buttermilk have run up against objections which more than offset the many advantages for its use in poultry feeding. In the main these objections were the excessive cost, inconvenience, trouble and expense of handling and the poor keeping qualities. Lactein eliminates every objection to the use of raw buttermilk and reduces the cost to a mere trifle.

### One Gallon Lactein Equals 30 Gallons Buttermilk

One gallon of Lactein when mixed with 29 gallons of water has a tonic value for chickens equal to 30 gallons of the best buttermilk and will give better results than 30 gallons of raw buttermilk when fed according to our directions, not to mention the convenience in handling and the saving in price. Lactein is prepared by the chicken raiser in this manner each day in the amount required, and fed as drinking water or in mash feed or both.

### Lactein Saves the Baby Chicks

Lactein will cut your heaviest losses 90% in baby chicks. It prevents the dreaded white Diarrhoea and will show much more rapid growth in weight than for chicks given the same food without Lactein. This has been proven many times. Lactein is equally valuable for the entire feathered family—turkeys, ducks, geese, pigeons, etc.

Lactein is a tonic, appetizer, liver and bowel regulator, body builder and egg producer.

Any chicken raiser who will feed Lactein as directed for 30 days will thereafter never be without it, for it means more healthy chickens, more rapid growth, more eggs and more money.

CUT THIS OUT AND MAIL TODAY.

LACTEIN FOOD COMPANY,
405 Lowman Building, Seattle, Wash.

Ship me a five-gallon trial order of LACTEIN by express, prepaid, for which I hand you herewith $4.00. Send full directions for feeding.

Name .....

Address .....

### Lactein for Hogs

Lactic acid is the best appetizing agent known. It not only keeps the digestive tract free from putrefying bacteria, but it promotes the growth of acid-forming bacteria and maintains and regulates normal digestion. There is nothing that compares with Lactic acid in making a grain ration palatable for hogs.

### Better Than Buttermilk

Lactein has proven to be much better than raw buttermilk, because the acidity is always the same, having been sterilized and heated to such a degree that all pathogenic bacterial life has been destroyed and the concentration with the special treatment has increased the Lactic acid that makes it the most safe, reliable and profitable supplement to grain when fed to poultry and hogs.

### Lactein Is a Muscle Builder

Lactein, on account of its easily assimilable protein and high content of nutritive salts, is of great value as a muscle and bone builder, and especially for young pigs and brood sows. It creates appetite, increases assimilation and is a splendid conditioner.

### Lactein Increases Profits

Lactein is not only a safe feed, but considering its high factor in weight production and in adding food value to grain feed is the most valuable and economical feed to be secured.

### Lactein Prevents Disease

Lactein is both a tonic and a laxative. It keeps the hogs strong and healthy and reduces the death rate to a minimum. In fact if pigs are fed on Lactein they will not be subject to cholera or other diseases, as the Lactic acid destroys all poisonous bacterial growth in the intestines, thereby making disease impossible, but nothing will convince you of the value of Lactein like feeding it for a few months to your own hogs—and see them "kink their tails" and "squeal" when they come to feed. Try it.

### How to Feed Lactein to Hogs

There are no set rules for hog feeding, but we all must acknowledge that hogs should have a balanced ration. They must also be fed something they like, for hogs, like individuals, have appetites and know what they like or dislike. There is nothing so good as Lactein to keep a hog's apeptite at the top notch. It may be fed as a slop or drinking water by mixing one part Lactein to 30 parts water, or it may be first mixed as follows: Lactein one part to water 10 parts and then added to grain in the ratio of one gallon to 10 pounds of grain, or it may be fed both ways at the same time. It can be used with any feed where you would use raw buttermilk, and in the same way when the water has been added, as we only remove the water and you get the full feed and tonic value of the buttermilk with the added advantage of this product being thoroughly sterilized and Pasteurized, thereby killing all injurious bacterial growth which is only too common in raw buttermilk.

LACTEIN is a tonic, appetizer, liver and bowel regulator, body builder, flesh and bone producer. It is real buttermilk condensed.

Always keep one or two inches of water over Lactein in barrels or kegs. This prevents the air coming in contact with it and keeps it fresh. Always keep the sides of barrels scraped down and clean.

**Guarantee**—LACTEIN MUST BE USED ACCORDING TO OUR DIRECTIONS AND WHEN SO USED WE GUARANTEE RESULTS OR RETURN WHAT YOU HAVE PAID.

## LACTEIN

is put up in wood barrels holding five, ten, twenty-five or fifty-two gallons. Should your local feed dealer not have LACTEIN, write us direct and we will see that you are supplied without delay, or better yet, fill out and mail the coupon below or a copy of it, and we will send you a five-gallon keg by express, prepaid. This when diluted with water as per instructions is equal to 150 gallons of the best fresh butermilk, and is sufficient to acquaint you with the wonderful merit of LACTEIN. The price in 52-gallon barrels is 60c per gallon, or 2 cents a gallon when the water necessary for feeding is added.

## Lactein Food Company
405 Lowman Building, Seattle, Wash.

OCTOBER 24, 1918.

NOTICE TO READERS: When you finish reading this paper, place a U. S. 1-cent stamp on this notice, mail the paper and it will be placed in the hands of our soldiers or sailors destined to proceed overseas. NOWRAPPER. NO ADDRESS. A. S. Burleson, Postmaster Gen.

PUBLISHED WEEKLY.

# THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

LIBRARY
COLLEGE OF AGRICULTURE
UNIVERSITY OF ILLINOIS
URBANA



# Fall Pasture Reported Excellent

## Heavy Rains Have Helped in Several Respects, but Done Damage in Others; Fall Is Good for Maturing of the Corn




TOPPENISH, Yakima County, Wash., Oct. 16.—Heavy rains falling the 15th and 16th have done considerable damage to hay, delayed threshing and baling, as well as apple picking, but will help late root crops, pastures, and will put the ground in good condition for plowing. The extra lateness of killing frosts (there has not yet been a killing frost) has allowed the corn to mature in fine shape, and many gardens and melons are yet producing. Apples are showing a large percentage of w[illegible] yet the late varieties are not so bad as the [illegible] apples. Jonathans, Grimes [illegible] Delicious, Spitzenb[illegible] and Bens are the wor[illegible] little short of help, [illegible] not as [illegible] Potatoes are selling at [illegible] from $2.25 to $1.25. Onions are n[illegible] The crop of onions in the valley is smaller than usual. Corn is good, but is a little too sappy to market. There are more turnips and rutabagas in the valley this year than ever before. Sugar beets are doing fine and have showed a wonderful improvement in the last two months. Practically no fall grain will be sown. Fall pastures are the best ever known in the country. Sheepmen report that the grass is coming fine, and many will not bring their sheep down to pasture until the snow drives them from the hills. The extremely high price of feed has kept many from enlarging the dairy herds, but those who have herds are getting very satisfactory results. The high price of feed is putting a good many good work horses on the market at prices considerably reduced from last spring. The number of hogs in the valley has not materially increased during the last year, while flocks of poultry are reduced about half. All those who have tried to keep poultry in town and have kept any accurate account of feed costs declare that poultry keeping in town is a very heavy losing proposition; the returns in eggs and the sale of fowls being much less than the cost of feed. Grain crops sown following the plowing up of beets yielded light crops of hay, but no grain. Many state that they would have been much better off to have left the beets stand. C. A. WYCOFF.

### WHEAT HAS FINE STAND.

BICKLETON, Klickitat County, Wash., Oct. 15.—Ideal fall weather prevails here. We have had two fine rains and the majority of the summer fallow is green with a fine stand of wheat. I have just returned from our county fair at Goldendale, 40 miles from here. The races were the main feature. The exhibits and stock were quite good, but the premiums on stock and agricultural products were too low to induce people to bring them in. The winning horses on the race track got most of the fair money. I think the fair would be better if the management would take some of the race track money and increase the premiums on farm products and live stock. I saw better stock at home on the ranches than were shown at the fair grounds. Crops were good here this year and people are in good circumstances. Several big wheat ranches have changed hands this summer, the latest was J. T. and Leland McCredy, who sold 400 acres of highly improved land, one mile southeast of Bickleton, to George and Clarence McCredy for $28,000. I never knew of this community being compelled to ship in feed. There is plenty of seed grain in the wheat line, barley and oats are plentiful, but are becoming badly mixed and there is a demand for pure seed, which is difficult to find. BERT H. FAULKNER.

### GET 13 BUSHELS PER ACRE.

COLFAX, Whitman County, Wash., Oct. 11.—Harvest is all cleaned up in the county and from reports received from threshers to date the indications are that wheat averaged approximately 13 bushels per acre. This is considerably below the published estimates, but in my estimation a great deal more nearly correct. Rains during the last week have put the soil in fair condition for seeding fall wheat and farmers are doing their utmost to put in the maximum acreage. Moisture has not gone deep enough to make plowing easy, but with very little more rain this condition will be remedied. The feed situation is beginning to look more and more serious. The food administrator states that there is sufficient only for 90 days. Barley is being shipped in from Minnesota and other points. It is to retail here at Colfax at $52 per ton. F. L. KENNARD, County Agent.

Editor Washington Farmer: Your Farmer is a fine paper and extend my present subscription date to same.
A. W. SWEAT.
Methow, Wash.

### UTAH BUTTERFAT IS HIGH.

A report from Salt Lake City says that creameries there are paying 62 cents for butterfat and about 26 cents a gallon for milk testing 4 per cent butterfat. These prices are attributed to the government's taking over much of the condensed milk output and partially to the high cost of production, due to high feed and labor. Utah dairymen, it is said, have in many cases depleted their herds because of the labor shortage.

## Should Feed Barley

### Price Is Reasonable, Says Hoover

In a recent telegram to Governor Withycombe of Oregon in answer to an inquiry made by the governor, Herbert Hoover, national food administrator, expressed the opinion that the solution of the feed problem on farms of the northwest was to feed barley instead of the ordinary wheat mill feeds.

In his message Mr. Hoover says that the northwest has been permitted to mill about twice as much wheat this year as last year and that more flour has been exported from the northwest than from the other milling sections of the country. He also says that barley costs 30 per cent less than last year, but that it is not being bought in the northwest because the price of mill feeds as recently fixed by the government is lower than that of barley.

"If you make an examination of the subject," he said, "you will find that the excess consumption of mill feeds arises largely out of their cheaper price and the unwillingness of the farmers to pay prices for barley and other feeds that are lower than last year. There are 200,000 tons of feed barley in California that can be purchased at from $40 to $45 a ton and can be advantageously mixed with oats for feeding."


The LAUSON 15-25

DUST-PROOF
ALL GEARS ENCLOSED



Dust Has No Terrors for
The LAUSON TRACTOR

Because the LAUSON is dust-prof, with all gears and moving parts fully enclosed and running in a bath of oil.

The illustration shows the LAUSON pulling three 14-inch bottom plows in light volcanic ash near Walla Walla, Washington.

It can do the same on your farm, on any farm, under any soil conditions.

It can perform any farm task—up to filling the largest silo or running a 28-inch grain separator.

It can do more work with less men, do it quicker, and do it cheaper.

Lauson Performance
is the
FINAL PROOF

Write for our catalog
20½ Cents Per Acre Ploughing Cost

T. G. YOUNG
Seattle

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 43. THE RANCH PACIFIC DAIRYMAN HORN AND HOOF October 24, 1918

## Prepare for Returning Soldiers

### *Land Settlement Plan Begins to Take Preliminary Form*

**Provide farm home opportunities for returning soldiers and industrial war workers.**

**Lands for settlement to be provided by the state, citizens, or communities.**

**The federal government to reclaim and put the lands in readiness for settlers, who shall repay the cost in small payments, extending over a long term (perhaps 40 years), at low rate of interest.**

**Every suitable tract in the state of Washington, containing not less than 5000 acres in a reasonably solid block, should at once be listed with Thomas B. Hill, secretary of the Washington Land Settlement association, Arctic building, Seattle, Wash. Secretary Lane of the department of the interior has asked Governor Lister for this information and the governor has requested the above association to furnish the data.**

The above are some of the suggestive points in the plan to provide homes and work for returning soldiers and industrial war workers after the close of the war. This plan is under serious consideration by the Washington State Land Settlement association, which was organized in Seattle in June, 1918, to secure the enactment of sound state and national laws looking toward the reclamation and settlement of unused lands. The association strongly indorsed Secretary Lane's land settlement program set forth in his letter to the president, May 31, 1918. The following officers were elected: E. F. Benson, state commissioner of agriculture, president; R. K. Tiffany, United States reclamation engineer, first vice president, and farm arid land group; W. A. Linklater, superintendent Puyallup experiment station, second vice president and farm logged-off land group; N. B. Coffman, Chehalis, third vice president and farm men's swamp and overflow land group; Colonel Howard A. Hanson, Seattle, secretary-treasurer. The above officers, together with Dr. C. A. Short of Bellingham, Senator Ralph Metcalf of Tacoma, T. H. Morrow of Walla Walla and R. Insinger of Spokane, make up the executive committee.

Thomas B. Hill of Yakima was elected executive secretary of the association, and will give all his time to the work of the association, this to include the collection of available information of reclamations of various types of waste land; the collection of information on land settlement as practiced in various counties and states and to assist in the formulation of national and state legislation to carry out the propositions of the association and put into operation the program outlined by Secretary Lane.

Believing that this problem of securing land for returning soldiers and industrial war workers could be most profitably taken up at the international farm congress scheduled at Kansas City, October 17, 18 and 19, the following men from the Pacific northwest attended: E. F. Benson, Olympia; W. A. Linklater, Puyallup; N. B. Coffman, Chehalis; George W. Dilling, Seattle; E. F. Blaine, Seattle; E. M. Chandler, Yakima; H. Loyd Miller, Sunnyside; S. K. Pingery, Burbank; T. B. Hill, Seattle; E. A. Smith, Spokane; together with F. B. Lindfield and J. A. Haradan, both of Bozeman, Mont.

With the International Farm congress was combined the annual session of the International Dry Farming congress and the International Irrigation congress. Previous action had been taken looking to the consolidation of these bodies and the report of a committee favoring such consolidation was to come up for action. The Washington delegation received a telegram from Governor Withycombe authorizing them to act for the state of Oregon.

The ban which had been placed on Kansas City because of the prevalence of influenza, which had been lifted, was again placed on the city Thursday, October 17, the opening day of the meeting of the International Farm congress. However, the congress was permitted to hold session on Thursday morning, followed by a short session on Thursday afternoon. All other sessions of the congress were cut off. During the meeting in connection with the farm congress the Washington delegation believed that a great opportunity presented itself for the combined bodies to form a new national land reclamation and land settlement association to aid in the big problem of reconstruction following the war. It was contended that such an association must be national and could not be named an international body, that all other objects of the dry farming and irrigation bodies become subordinate when considered in connection with the great outstanding problem of furnishing land for the returned soldiers and industrial war workers. This did not appeal to the delegations from the section of the country surrounding Kansas City, and it was decided to follow out the program of merging the dry farming and irrigation congress into International Farm congress.

Notable addresses were made to the farm congress by Dr. Ellwood Mead, high authority on land settlement and rural life problems, and by A. P. Davis, director and chief engineer of the United States reclamation service, who urged the necessity of immediate action on the land settlement policy to be pursued at the close of the war. This legislation needs to be enacted by state legislators and by congress during the coming winter.

Indicating the attitude of farm congress towards this matter is the following telegram, which was sent to Secretary Lane:

The undersigned, acting under the authority and direction of the International Farm congress assembled at Kansas City, Mo., this, the 17th day of October, A. D., 1918, representing the following states, desire to express to you our hearty approval of the policy outlined in your letter of May 30, 1918, to the president, to provide useful employment and homes for returning soldiers, and we desire to cooperate in every way in bringing that policy into effect.

We believe that the legislation that is to be enacted in regard to this matter should embrace the following features:

The proposed legislation should provide for the cooperation of the federal and state governments under laws to be enacted by the congress and legislatures of the several states.

A state board should be created in each state to act in cooperation with the federal authorities.

The federal government to provide the money for reclamation work, and to be expended in the preparation of farms for cultivation and the reclamation work to be carried out by the federal government.

If privately owned or state owned land is used, the state should provide it. The land submitted by the state should be subject to the approval of the federal government, both as to quality and cost.

The states provide facilities for the agricultural training of soldiers lacking experience or knowledge of local conditions.

Wherever such agricultural training is provided, the state and the federal government shall share the cost equally.

Money provided for the acquirement and reclamation of lands and the preparation of farms, shall be repaid in small payments, extending over long terms, at low rates of interest.

This telegram was signed by the following members of the executive committee: George Albert Smith, Utah; D. Mayes, Missouri; Leonard Tillotson, Texas; D. L. White, California; L. B. Linfield, Montana; Kurt Grunwald, Colorado; Frank M. Byrne, South Dakota; Fred D. Sherman, Minnesota; E. F. Benson, Washington; N. B. Coffman, for Oregon; C. L. Seagraves, Illinois; Thomas M. Potter, Kansas; Andrew Kimbull, New Mexico; Alfred C. Sicbeth, Arizona; W. W. Burr, Nebraska.

## Wheat Will Be Moved

There is no occasion for wheat growers to sell their wheat to any one at below the prizes fixed by the government, Herbert Hoover again declares with a view to preventing an unnecessary loss to the producers through a temporary ship shortage. He recently gave out the following message on the subject, and it is understood that the ship shortage to which he refers is already being somewhat relieved.

"Enlarged demands by General Pershing for material resulting from progress on the western front has necessitated temporary diversion of grain ships to his service. This temporarily curtails wheat movement from seaboard and has filled our seaboard and terminal elevators and thus checks movement. It is reported that some farmers have become panicky and are selling wheat at less than governmental price. There is no occasion for this. If holders will have a little patience, wheat will be moved and the full price secured by every grower."

## R. V. Mitchell

### Knows Poultry Marketing Game

When R. V. Mitchell was a small boy on the home farm near Mahaffey, in central Pennsylvania, he owned some chickens. A man came by one day and offered him 20 cents for a big, fine Plymouth Rock rooster. Master Mitchell held out for 25 cents, which in those days was a fairly respectable price for a fairly respectable chicken. The man held to the extra nickel, and the boy held fast to his big rooster.

"After I grew up I got into the business of selling flour, chicken feed and supplies and similar merchandise to the farmers," says Mr. Mitchell. "I saw more and more the shortcomings of the poultry industries, particularly in the marketing. A big problem was there I believed; and so, eventually, I was led to go to college and study poultry."

Such was the beginning of Professor R. V. Mitchell, recently made head of the department of poultry husbandry in the State College of Washington. His interest in the marketing side of the poultry business, beginning with the time when he clung to his rooster for the sake of the additional nickel which he knew was due him, was the spur which put him through college, established him in teaching and poultry investigations, caused him to make a tour through the states of Ohio, Kentucky, Tennessee, Arkansas, Texas, Oklahoma, Missouri, Kansas, Iowa and Indiana, making a first-hand study of poultry conditions, always with an eye to the marketing of poultry and their preparation for marketing.



R. V. Mitchell.

From 1907 till 1909 Mr. Mitchell had charge of the poultry work of the Pennsylvania state college. From 1909 till 1911 he did advanced studying at Cornell university. Returning to Penn State, he there had charge of the plant and the experimental work in poultry. In 1912 he was at the University of Missouri, which state is rated as one of the very foremost of the country in point of poultry production. He engaged in advanced study there, taught, and published some bulletins on the marketing of poultry.

In 1913 he went to New Hampshire State college, later to the Delaware Agricultural college, all the while being engaged in poultry teaching and investigation. Last spring he was commissioned by the food research laboratory of the United States bureau of chemistry to investigate and report upon the commercial handling of poultry and eggs in this country. A few weeks ago he arrived at the state college to assume charge of the poultry work of the institution, including the all northwest egg laying contest in progress there.

## It Pays to Plow in the Fall

### *Five Reasons Stand Out for Preparing Seed Bed Now*

By PROF. GEORGE SEVERANCE, W. S. C.

The recent rains have again made it possible to plow and we would urge as a patriotic duty, as well as a source of profit, that every acre that is to be planted to spring crops be plowed this fall if possible. There are several advantages in this practice.

First—The spring work will be lightened. With a continuation of present labor conditions, it will be almost impossible to seed all the land that is due to be seeded in the spring unless a great deal of plowing is done this fall.

Second—In the great majority of cases, a better seed bed can be prepared with a given amount of work in the spring or fall plowed ground than on spring plowed ground; for the firming of the furrow which is desirable for grain is accomplished by the settling effect of the winter precipitation.

Third—It is possible to seed earlier in the spring. Experience indicates that early seeding is much safer than late seeding and usually gives higher yields. Very late seeding is attended with risk of entire failure and practical certainty of low yields.

Fourth—Fall plowed ground left rough over winter absorbs a considerably higher percentage of the precipitation than unplowed land. Fall plowed ground stands drouth much better than spring plowed ground, the difference being quite marked in very dry seasons.

Fifth—Fall plowed ground is in better shape to begin early development of available plant food than spring plowed land.

Fall plowing should be of good depth, about seven inches being satisfactory under average conditions, and the furrows should be left rough till spring. Every day should be utilized between now and the final "freeze-up," when the weather and soil are both fit for plowing. Every day thus spent will be a blow against the kaiser and a source of profit to the producer.

### JAPANESE PROVE LOYALTY.

New light was thrown upon what used to be called the "Japanese problem" by the attitude of Japanese in the United States during war times. When a Liberty loan committee visited I. Keda, a successful Japanese dairyman of Kent, Wash., with the request that he buy bonds, Mr. Keda said:

"I will take $1000 worth of bonds. If that is not enough I will take $5000 worth. If that is not enough I will sell everything I have and will put all that I can raise in this way, about $10,000, into Liberty bonds. This country gave me the opportunity to earn this money, and now if the government needs it it can have every cent."

This same spirit of loyalty has been reported from many other Japanese colonies.

### GET GOPHER IN FALL.

Ezra Carter, a well-known Caldwell, Idaho, farmer, says that fall is the best time to catch the pocket gopher. Last fall he started in early and caught more than 50 on and around his premises. He uses a box trap, and says the animals seem to go into it much more readily in the fall than in the spring, or at any other season, so far as his observation has been. The farmer also has more time to devote to the job, and Mr. Carter strongly urges that the campaign be started right now. A. E. G.

### CANNERY SOON TO CLOSE.

The fruit and vegetable cannery at Yardley, near Spokane, plans to close its season about the middle of November, according to Manager S. B. Coon. Owing to the high price of apples this season it is not planned to can any considerable amount of them. The plant at present is putting up squashes and pumpkins, which will keep it busy for two or three weeks, by which time it is estimated approximately 300 tons will have been canned.

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## New York Farmers Set Example

New York state farmers marketed this year 456,756 pounds of wool cooperatively through county associations. It is now planned to federate the county organizations into a state body next year for the sale of the entire wool supply through a single committee.

New York farmers seem to be learning the secret of true cooperation. It was New York dairymen, our readers will remember, who saved the dairy industry of that state from ruin by determined cooperative effort and set an example that has been adopted by dairy farmers in all parts of the union.

We have always been a stout contender for cooperative action by farmers—for genuine cooperation worked out by the producers themselves rather than the kind of cooperation that is peddled out by glib professional promoters, with the usual trimmings of stock selling and other devices designed to tap the farmer's pocketbook good and plenty. The New York brand of cooperation is the kind to be aimed at. It costs the members little and brings big results. Real farmers organize it, run it and make a success of it.

Happiness should not be rushed.

## Wheat Grower's Need Is Not Met

The United States department of agriculture's October crop report closely estimates the Washington wheat yield this year at 26,429,175 bushels. That is about half a crop, for under ordinary climatic conditions this state, with the acreage that was seeded to wheat this year, would yield from fifty to sixty million bushels.

Even in the banner wheat growing counties of Whitman and Walla Walla, the average yield this year is but a ltitle more than 13 bushels. Franklin and Grant counties had the lowest yield—an average in the former of five and a half bushels, and in the latter of five, amounting practically to a crop failure, for the government calculates that any yield below five bushels hardly justifies harvesting.

We are always reluctant to criticise the government, but it must be said that the department of agriculture and congress have not met this unfortunate situation in the quick and responsive spirit that was needed. It can not be pleaded that the responsible officials were taken by surprise, for months ago the true conditions were vigorously pointed out to Washington by representative farmers, commercial organizations and the Washington Farmer. After protracted controversy in congress, a bill was finally passed, apppropriating $5,000,000 to be loaned to wheatgrowers in drouth districts who were in urgent need of financial aid to enable them to go forward with seeding operations for the 1919 harvest.

That sum was ridiculously inadequate to the actual needs of the country and its expenditure is so hedged in with restricting conditions that it almost totally fails as a relief measure. Only those farmers who have suffered a total crop failure for two consecutive seasons can get credit under the measure, and even then, to the trifling limit of $300.

Here is an additional proof that the country needed, in this wartime emergency, a national food production administrator—a man of the initiative genius of Hoover, in his great work of food conservation; of Schwab in shipbuilding, and of Ryan in aircraft construction. The need was so apparent that it was incomprehensible that the goyernment at Washington did not fill it upon its own initiative. It is still more incomprehensible why the government persistently rejected the earnest counsel of well advised individuals and organizations, urging that this step be taken.

The longer you live the less satisfying is your knowledge of life.

## One Big War Work Campaign.

President Wilson decided before the Fourth Liberty loan was launched that all the activities of the seven organizations, the Y. M. C. A., the Y. W. C. A., the K. of C., the Jewish welfare board, war camp community service, the American Liberty association and the Salvation Army should be consolidated under one head, and instead of going to the country frequently for money to support them, it would be better to ask for one amount.

Speaking of this coming campaign, Charles Dillon, who is taking a leading part in the movement, says: "If we expect our men to do a good piece of work; if we want these boys to come back to us fit and able to take up their work on the farm, in the stores, colleges or business houses as strong as, or stronger than when they went away, we must respond freely whenever we are asked to give in the support of activities, such as are included in the United War Work Campaign."

There is nothing more tempting or practiced more liberally than to tell the other fellow how to do it.

## We Are Making It at Home Now

When the war started we were getting our supply of potash fertilizer from Germany. Last year we produced 32,000 tons of potash and this year's production will probably exceed 40,000 tons, manufactured out of material much of which until the chemists proved its availability was regarded as waste. Cement manufacturers are beginning to utilize the dust that heretofore floated off into the atmosphere and a very large recovery of potash from that source is possible. Another source, as demonstrated by chemists and scientists, may be secured from waste products of blast furnaces.

Science is working wonders for the benefit of the American people, and the agricultural colleges, once regarded contemptuously even by the farmers themselves, are fostering science in many serviceable ways. We are rapidly learning true education, getting away from the old dry forms of classical knowledge and carrying the wonders of science, through our scientific schools and colleges, direct to the people upon the soil.

Next to religion, a harmless hobby gives most peace of mind.

## Agriculture Is Dignified

Science is imparting a new soul to agriculture and giving it a dignity it had never known before through all the ages of the past. Boys and girls from the farm who enjoy the benefit of scientific education are learning more and more to appreciate and love the wonderful mysteries of nature. This beautiful and inspiring influence, in conjunction with other changes that have come upon the farm, brought by good roads, by the automobile, rural mail delivery and the parcel post, and by more frequent community gatherings, is lifting agriculture to a higher and more inspiring realm.

## Save the Fruit Pits

The pits from cooked fruits, such as cherries, peaches, prunes, plums and so on, are just as valuable for the manufacture of gas masks for the soldiers as are the pits taken from the fresh fruits. All pits should be saved. Every one furnishes its bit of carbon for the gas masks. The Red Cross is acting as the collection agent for the pits, each organization forwarding the pit harvests to the nearest general pit collecting center. Every boy and girl, every woman and man on the farms of this country should feel it as great a mistake to throw away a fruit pit as a spoonful of sugar or a handful of wheat.

To be saved from yourself is your biggest salvation.

## It's Up to the Producer

Whether he likes the fact or not, the producer is the man who eventually must take upon his shoulders the burden of discovering and developing markets for his goods. Much profitless abuse of the "middleman" has come about through failure to grasp this principle. On the other hand the lasting success of such institutions as the California Fruit Growers' association, or, in our own northwest, of the Salem Fruit Union, has been built on a foundation of development work. The Salem producers have not rested their case when they turned their fruit or their vegetables over to the canner or the wholesaler, but have watched the market and whenever production has threatened to tread on the heels of consumption, have found a way to increase the latter. This is real creative marketing, and the man who does it is entitled to the benefits secured in the way of increased profit.

The lesson learned by these fruit farmers is being rather slowly assimilated by dairy farmers and poultrymen. At times producers of these essentials have attempted to speed up the market by the old process of "pushing on the lines." They have insisted that the middleman return to them a larger share of the money he receives irrespective of his margin of profit. There is no gainsaying the fact that from a time when the memory of man goeth not to the contrary, commission men, jobbers and wholesalers have in many instanees gouged the farmer. But also it is a fact that where competition for buyers and markets is unusually keen, the man through whose hands farm products pass may have nothing to show for his trouble.

The moral of the whole tangled situation is obvious: ethically it may be the duty of the middleman to develop new markets, but practically it is up to the producer. His will be the ultimate loss if consumption lags behind production. If he wants to receive more for his milk or his eggs, he must take a hand in educating the public to consume his wares. Otherwise the channels of trade will become choked and the surplus will flow back upon the men who created it.

Half considered plans are worse than hasty ones.

## Keep Tax on Farm Auto Down

The house committee in congress proposed a 10 per cent tax on passenger automobiles and motorcycles, and the house ratified that action. The bill is now in the hands of the senate committee on finance and that body, wisely, we think, when all facts are considered, has cut the proposed tax to five per cent.

If there were some practical way of sorting out automobiles used distinctively for pleasure from the cars that are so helpful to the carrying on of essential industries, we should say that a 10 per cent tax would be too low upon pleasure cars, but a 10 per cent tax upon the farmer's automobile would result in very serious interference with food production.

The automobile, as every one can see, is a wonderful time saver, and time at this crisis means not only money, but food.

It is deplorable that owners of automobiles that are run almost entirely for pleasure must be allowed to escape under a general law with no greater tax than the farmer must pay upon his farm utility car, but unfortunately there seems to be no feasible way of separating the goats from the sheep.

# Germany Sends Evasive Reply

## *Allies Continue Pounding Enemy Regardless of Proposal*

Germany has sent her reply to President Wilson's last ote, in which he made it clear that the kaiser must go nd that German atrocities must cease before thought of n armistice can be entertained. The reply is evasive and nsatisfactory. It claims that the German people are actual- becoming a part of the government, but shows no proof f it. It denies that atrocities have been committed, hich denial serves to incense the allies who have suf- ered from these atrocities. Up to this writing President Vilson has made no statement regarding his view of the eply, and all the allies are continuing all their activities ust as if there was no possibility of early peace. No slack- ning has been allowed in any war activity. All operation f the draft law continues without check, and this country s carrying out its plans to a letter for the increasing of he American forces on the front next spring to 4,000,000 nen. Shipbuilding continues as usual; munition factories re rushing their output; airplane factories are building ircraft with increased speed. In other words, while the llied forces now on the battle fields are driving the Ger- nans back on every front, while Germany and Austria are truggling with their own internal problems that are con- inually threatening to disrupt their governments, this na- ion and her allies are getting ready to force the "uncon- itional surrender" either this fall or next spring that the nemy apparently finds himself unable to make now.

It is evident that Germany wants to continue the effort o involve the allies in a discussion. Her reply makes par- ial concession, with appeal for discussion of some of the uestions involved.

**AUSTRIA'S PEACE PLAN REJECTED.**

President Wilson last week caused Secretary Lansing o transmit to Austria, through the Swedish legation at Washington, a note in which he rejected on behalf of his country and the allies the peace proposal recently nade by Austria. In his note the president called atten- on to the fact that since his 14 terms of peace were id down last January the Czecho-Slovaks, a strong ele- ent heretofore under Austrian control, have formed a overnment of their own that is now opposing Austrian ule. This, he says, makes it impossible longer to be atisfied with the autonomous development of Austria- Hungary as provided in one of the original 14 terms of eace. Instead the president "is obliged to insist that ney (Czecho-Slovaks and Jugo-Slavs), and not he, shall e the judges of what action on the part of the Austro- ungarian government will satisfy their aspirations," the ote reads.

**ALLIES INCREASE SUCCESSES.**

The remarkable offensive by the allied armies has con- nued with no signs of a letup. Success has been piled pon success. No attempt to advance has failed at any oint, though stubborn resistance by the Germans has nade progress slow in some sections.

The most noteworthy development of the last week is n Belgium at the northern end of the line, extending rom the North sea to Cambrai. Advances greater han could have been reasonably predicted even a week go have been made. The entire Belgian coast has been leared of the enemy after he had held it since the first ig drive four years ago. Ostend and Zeebrugge, the wo great Belgian ports that have been used as German ubmarine bases, have been taken, and if the submarine arfare is to be continued it must be from bases farther ack and harder to get into and out of. A few miles nland the city of Bruges has been occupied by the allies. arther south the important city of Lille has been taken, nd south of that Douai has fallen to the allies. Indi- ating the scope of the advances, it is reported that during our days of last week the allies recaptured 800 square iles of Belgian territory that had been occupied by the uns since 1914. This is equal to a strip of land 100 iles long and eight miles wide, though it is in more ompact form.

The situation in Belgium at this writing is that the vacuation of the coast makes it possible for the allied orces to be landed for a drive southeastward along the olland border while the drive from the westward con- nues, virtually requiring the enemy in that section to ace attacks from two directions. At the present time he allied forces are driving directly toward Ghent, Ant- erp and Brussels, with the apparent assurance that all hese cities will be taken before many days, though sev- ral miles must be made before even the first of them, hent, is reached.

During the last week comparatively little fighting has een in progress farther south than Laon, though at no oint has the enemy been allowed to relax his defense.

**HOLLAND INTERNS GERMAN SOLDIERS.**

It is reported that when 15,000 German soldiers were ompelled to retreat from northwestern Belgium last week cross the Holland border or be captured by the Belgians nd English, they were promptly interned by Holland for he duration of the war.

**INFLUENZA IN CAMP DECREASES.**

The official report at the end of last week indicated hat the measures enforced against the Spanish influenza pidemic in the military camps in the country were bring- g results, as a considerable decrease in the number of ses was evident. Since the beginning of the epidemic here have been nearly 285,000 cases reported in the mili- ry camps. The deaths reported total more than 14,000. is stated, however, that the disease continues to spread rough the civilian population of the country, though is believed that the measures being used against it ill soon bring about a decrease in the number of cases.

**LIBERTY LOAN SEEMS OVERSUBSCRIBED.**

Apparently, though official figures are not available at his writing, the American people have made their an- wer to Germany's peace-by-negotiation proposal by over- ubscribing the fourth Liberty loan to finance the war. p to the last two days of the campaign, it looked as if he $6,000,000,000 would not be reached, but the subscrip- ons came in strong at the finish and indications that ore than that amount by several millions of dollars has een subscribed. It is estimated that 25,000,000 people, early one-fourth of all those in the country, bought bonds f this loan. This is by far the largest number of people ever in the world's history, to subscribe to a government loan.

**TURN THE CLOCKS BACK SUNDAY.**

It is announced from the national capital that there will be no further effort made to continue the "daylight saving" plan through the winter, but that the clocks, which were turned up one hour last spring, will be turned back that hour at midnight Saturday night, October 26. This will have the effect of making Sunday, October 27, a 25-hour day. Every watch and clock in the nation should be turned back one hour when its owner retires Saturday night. Then the change will cause no inconvenience at all, as it will not only take effect on a Sunday, but practically during sleep.

# Stick to Hoover's Plan!

## There Is No Danger of Too Much Wheat

Julius H. Barnes, president of the food administration's grain corporation, has written the following surprising letter to Senator Hitchcock of Nebraska:

**"I feel it to be a fact that the wheat acreage of this country has already been stimulated as far as it should soundly be developed and any further stimulation or expansion of wheat acreage is liable to be at the expense of the necessary acreage of other crops, particularly fodder grain. Last year's acreage of wheat of 65,000,000 acres was much the largest ever sown yet. This year's acreage promises to exceed that.**

**"Last year's acreage produced a wheat crop which is exceedingly burdensome in all sections, while a large acreage next year presents some problems under the price guarantee given which must probably be solved by congress. With a fair normal yield on the acreage now in sight for the coming crops and with any developments of peace which restrain the demand upon us by throwing open other sources of wheat supply it will probably require a large appropriation by congress to make effective the present price guarantee."**

The country will wonder if that letter was written with the knowledge and approval of Mr. Hoover. Mr. Barnes' views on wheat production are in direct variance with everything that Mr. Hoover has said upon the subject. Mr. Barnes seems to think that even a slight surplus or carry-over in this country is a national burden, but Mr. Hoover, who has been consistently and constantly urging increased production and decreased consumption, has repeatedly said that America ought to build up a large reserve as a safeguard against possible crop shortage.

If, as Mr. Barnes says, the present crop has become burdensome, would it not be better, instead of actually discouraging increased production next year, for the food administration to lift its restrictive substitute regulations and encourage the American people to consume more wheat bread?

Present government figures indicate that this year's crop will be sufficient to permit the American people to consume wheat flour normally, without substitutes, and still meet all calls of the allies for export. The government's October crop report calculations indicate that this year's wheat yield will be 919,000,000 bushels. The military requirements call for the exportation of about 300,000,000 bushels. If allowance be made of 80,000,000 bushels for seed there would be left of this year's crop 539,000,000 bushels for home food consumption.

Only twice in the nine years between 1908 and 1916, inclusive, did the American people consume more wheat. In 1916, prior to our entrance into the war, it was down to 479,000,000 bushels, according to the statistics of the United States department of agriculture.

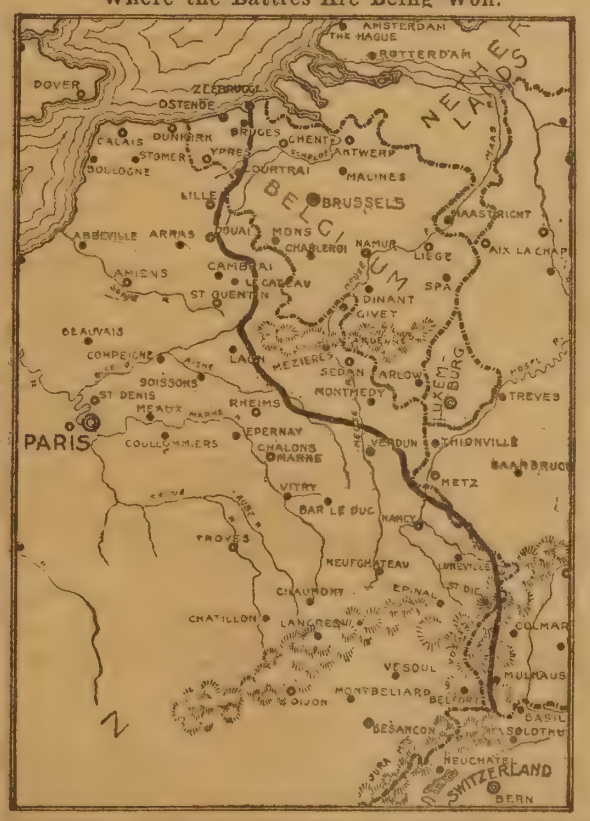
If the American people consume 479,000,000 bushels this year there would remain a surplus beyond the 300,000,000 bushels we are sending to the allies and the 80,000,000 bushels reserved for seed of 60,000,000, assuming that the government's crop estimate of this year's crop is accurate.

It is our opinion that Mr. Hoover's judgment, as previously expressed, should be followed by the government, instead of the judgment of Mr. Barnes. We must remember that extraordinary efforts were made by the government to increase wheat acreage this year. That the crop harvested is the greatest, with a single exception of 1915 when 1,026,000,000 bushels was the yield, in the history of the country.

Even so, accepting the foregoing statistics as dependable, there will be a carrying over of only 60,000,000 bushels. In past times that would be ample, but it is too close a margin for war times. With a short crop next year this surplus would be quickly wiped out and America might find it impossible to supply the needs of its allies.

We fear that Mr. Barnes, having to deal only with the problem of handling a single year's grain crop, has a wrong perspective of allied requirements. We hope that Mr. Hoover will adhere to his previously expressed judgment that the farmers go on producing more wheat, the people continue to use substitutes and that, if possible, a safe reserve be built up as a bulwark against future shortage.

## Where the Battles Are Being Won.




Herewith is given the Farmer's second weekly map of the European battle line. Those who clipped from this paper the large map of Europe and the small battle line map last week and preserved them as suggested on this page in last week's issue may see the advances made by the allies by comparing the map given herewith with that of a week ago. If last week's maps were not clipped and preserved on a large sheet of paper it should be done now, so that each new map may be added and a permanent record of the progress of the fight kept. A map similar to this one will be published on this page each week hereafter, showing the position of the battle front.

## *Washington Gleanings*

Fine rains last week insure a good stand of fall grain in the wheat fields south of Mabton.

A. M. Holman of Oysterville, on Willapa bay, recently harvested 208 barrels of cranberries from a one-acre bog. This 208 barrels counts only the first-class berries, the culls and smaller berries being additional.

A postoffice inspector has recommended the discontinuance of the Boistfort postoffice, in Lewis county, owing to the fact that he was unable to secure an applicant to succeed Postmaster Jochim Baumann, resigned.

E. B. Wood, Yakima county horticulturist, has announced that he would ask the government to station an entomologist in the valley to study the codling moth and see if something could not be done to prevent its ravages another season.

The Thurston county board of commissioners will rescind their action by which appropriation for maintaining a county agricultural agent was eliminated from the budget for the coming year, and provision will be made to continue the office.

Surfacing of the eight-mile stretch of Sunset highway between Creston and Wilbur commenced last week from a pit near Creston. Two miles of the eight, on the Creston end, have been graded, and grading of the remainder of the highway is progressing rapidly.

After spending the last month working in the vicinity of Yakima Dr. J. H. Martin of the state veterinarian's force has completed the task of giving the tuberculin test to 1401 Yakima valley dairy cows. In this number he found but 14 reactors, practically 1 per cent.

Walla Walla County Agent H. H. Boone recently brought to Walla Walla 85 pounds of ladybugs to be put in cold storage during the winter and liberated next spring to fight apsis, which destroyed vegetables and alfalfa this year. The supply is sufficient for 650 acres.

Work is well under way on the new plant of the Shepard Fruit Packing company at Wenatchee. This building will be 52x115 feet and two stories high. The Shepard fruit brick is a form of concentrated apple butter. The process is the invention of Mrs. Hulda Shepard of Chelan.

J. W. Susses, who has been secretary-treasurer and manager of the Cashmere Fruit Growers' union, has tendered his resignation to the trustees. Miss Gooding was appointed secretary and W. S. Tallman treasurer and manager, to take charge of the receiving, packing and shipping department.

The water users of the Okanogan government irrigation project have taken steps looking toward the organization of the project into an irrigation district under the state laws. At the recent election he following officers were elected directors: John S. Peterson, Dr. E. E. Copple and Frank Garber.

On Friday and Saturday, November 29 and 30, a southwest Washington improvement conference will be held at Chehalis. The meeting is the outcome of the get-together session recently, when more than 20 representatives of Cowlitz, Wahkiakum, Pacific, Clarke and Lewis counties met to consider road improvements in Pacific and Wahkiakum counties.

Anton Hylant, a pioneer Newaukim valley farmer, accidentally shot and killed himself recently while driving a bull from a field. Mr. Hylant was carrying a shotgun, and in crawling through a barbed-wire fence pulled the gun toward him, the weapon discharging. Mr. Hylant had lived most of his life in Lewis county.

Agriculturist Charles D. Gaines has completed a partial survey of yields of the different varieties of wheat produced in Lincoln county the present season. South of Odessa he found two varieties grown, bluestem, averaging 6.43 bushels per acre and early Bart, averaging 7.15 bushels, the survey in that territory covering more than 8000 acres. On the Almira flats, between Almira and Wilbur, the survey covered approximately 7000 acres, with bluestem, marquis and early Bart under examination. Marquis averaged 14.44 bushels, bluestem 13.32 and early Bart 13.14 bushels per acre.

# Half Rate on Feed May Come

## *U. S. Grain Administration Representative Promises Help*

"I think the most important thing you people can concentrate on is a half rate from the east on feed and we will do all we can to help bring it about."

In these words John R. Shanahan, personal representative of Julius H. Barnes, head of the grain corporation of the food administration, brought to a climax a meeting with the agricultural bureau of the chamber of commerce of Spokane October 16, and R. Insinger, chairman of the committee, who presided at the meeting, brought renewed cheers when in closing the meeting he said: "While we need and hope to get assistance from the food and railroad administrations, so far as our business is concerned it can go to h—l until the war is won."

Mr. Insinger opened the meeting by explaining the shortage of crops and the lack of iompleteness in railroad rates, especially in the fact that some rates do not apply to branch lines. He told how the Inland Empire is more dependent than any other part of the country on mill feeds and that the dairy industry is now in a deplorable condition.

A. A. Newbery, secretary of the Inland Empire Dairymen's association, said the danger of a shortage is more prospective than present, as it seems certain now that the mills will shut down and that means ruin to the dairymen. If the mills go on, they might be able to manage with the importation of barley and oats, he said. If bran and shorts are cut off he did not know what dairymen could do.

J. R. Shinn, county agriculturist, said he was primarily interested in keeping breeding stock on hand. He said the dairy industry can be conducted if we can get mill feed, but pigs and other stock need other feed. He was encouraging the use of other feed. He hoped to get the farmers together when the influenza epidemic is over and arrange to get barley cheaper. He spoke of the value of velvet bean meal and there was considerable discussion regarding the value and availability of that and other protein feeds. He declared that dairymen are getting rid of their breeding stock now and thought organization might save and situation to some extent.

J. M. Van Kleek, manager of the Armour Packing plant at Spokane, said every part of the United States except the Pacific northwest has shown an increase in hog production. Here we have stood still on account of not having feed or of high prices. The northwest has to market part of its hogs and lard outside in times of a normal run, so the food administration set a price of $1 less than Chicago. The price on this market has been as high as $20.35, but we must have cheaper freight rates so we can get corn in here or there will be fewer instead of more hogs.

R. J. Stevens, manager of the Stevens-Smith Milling company, told of the increase in rates by the railroad administration on oats, while wheat and barley retained the old rate. There is now a rate on branch lines, but barley is omitted, so his mill and others are afraid to quote prices on barley. A number of inequalities, besides the omission of barley, were discussed by several of those present.

S. M. Glasgow, miller, reviewed the loss of oriental trade as well as the fact that the government is not taking all the orders it promised. He said he is a stockman himself and the owner of three mills and yet can not get a pound of bran for his cows. If we were allowed to ship flour by rail it would relieve the situation, he said. To a suggestion by Mr. Shanahan that lower flour rates east would amount to a bonus, he replied that a bonus had been talked of, but Mr. Shanahan said it is impracticable.

Mr. Insinger called attention to the fact that the shipping out of wheat from the northwest, instead of milling it, would not only accentuate the feed shortage, but create a great problem of seed wheat.

R. J. Lord, Spokane manager of the Seattle Grain company, suggested the government buy and store flour. The farmers want money for their wheat and the mills can not buy, but will have to shut down unless something is done. He called attention to the incorrectness of the government reports on the amount of barley at northwest points, and said neither oats nor barley exist in the quantities quoted. He said we must look to barley and corn to feed hogs and that barley is really a cheaper hog feed than wheat.

The danger of a shortage of seed wheat was emphasized by several speakers.

Mr. Insinger suggested that the railroad administration could give a half rate on feed, as is done for Montana. The Canadian government has supplied the farmers with seed wheat for 35 years. What it has done our government can do. The food administration, he said, is the only governmental department to which we can explain our situation and look for a way out.

Mr. Bryan, secretary of the Merchants' association, read a telegram from Montana telling how and to whom special rates on barley are given. It is through a permit from the county agriculturist or certain other persons.

In beginning his address Mr. Shanahan said: "The first object and desire of the food administration is to supply our soldiers and those of the allies with sufficient food for their needs. The first object of the government is to transport the many and various things needed to win the war and this it is going to do regardless of the desires or needs of any section of the Union or any class of people."

As patriotic citizens he relied upon them to agree to this program. Mr. Shanahan briefly referred to similar conditions in other parts of the Pacific northwest and closed with the remark quoted above. In part he said:

"The wheat price of $2.20, Pacific coast, was possible because Pacific coast congressional representation induced the shipping board to name a very low rate on wheat and flour to establish at the Coast approximately the same price as at Chicago. Necessarily, this has changed the basis, and mills can not rail their flour into their old markets, but must depend for flour outlet on local demands and export aid furnished them at the Coast. The amount of flour to be exported from this country, limited by factors of port facilities and absorption abroad, and the per cent of Pacific coast flour that can be taken is influenced by necessary consideration to the fair claims of millers east of the Rockies also for export outlet.

"The grain corporation believes that 40 per cent of its flour export outlet to be taken from the Coast is treating the Coast very generously, and the practical effect of taking that amount should be to provide fully as large an export outlet as last year, and consequently should enable the mills to operate almost as largely as a year ago.

"As to the feed situation: Other feeds are cheap this year. California has a large surplus of barley, offered at much lower than last year's basis, and North Dakota and South Dakota also have cheap barley, available at not a great expense into the Pacific northwest. Pressure seems to be for mill feed because it is cheap, and not alone, as somtimes claimed, because it is the only feed.

"The shipping board now assures us, outside of further interference in its plans by war requirements, they will furnish us at least 50,000 tons monthly of Pacific coast shipping, and will probably increase this slightly. Their allocations to us for October, if carried out as we expect, will make a total of 240,000 tons Pacific coast shipping furnished for four months. Last year our flour exports from this country ran 22,000,000 to 24,000,000 barrels. As nearly as we can estimate this year the outlook is for 17,000,000 to 18,000,000 barrels, and 40 per cent would indicate a total outlet for flour from the Pacific coast of about 7,000,000 barrels. Last year, commencing October 1, with the grain corporation's first buying, exports were as follows: Pacific northwest, 4,165,826 barrels, out of 6,474,285 produced. California exports, 1,160,811 barrels out of 2,028,032 barrels produced. As this is for nine months, it is at the rate of 7,100,000 barrels annually, or 32 per cent of our total exports; whereas, this year, we expect to give the Pacific coast 40 per cent of our exports.

"Present figures indicate mill production for the Pacific northwest will run larger than a year ago. The weekly marketing sheet will show the percentage of crop in each state which has left the farm, and this would indicate that the producer has had a fair opportunity of securing some measure of relief in cashing in his crop.

"The total crop production, excluding seed, was apparently:

| | |
|---|---|
| Idaho | 17,000,000 |
| Oregon | 16,000,000 |
| Washington | 27,000,000 |
| California | 5,500,000 |
| Total | 65,500,000 |

"This amount of wheat, plus Australian brought in, which might be three or four millions additional, and less that part of Idaho which moves east, probably 10,000,000 bushels, would furnish a net amount of wheat available for milling, of about 60,000,000 bushels. Last year's nine-months' production was 8,500,000 barrels, or at the rate of about 12,000,000 barrels per year, representing about 54,000,000 bushels. As some wheat may be fed it looks as if not much wheat, if any, should be moved out as wheat, if the mills are to grind at this rate."

The meeting closed by Mr. Insinger saying: "So far as our business is concerned it can go to —— until the war is over."

# Wheat Not Cheapest

J. K. Smith, representing the mill feed division of the food administration, told a meeting of stockmen, feed dealers and manufacturers at Colfax last week, that barley and oats, if transportation to bring them in from outside territory could be made available, were a cheaper feed than wheat, even if stockmen were allowed to feed wheat at this time.

The meeting had been called by J. N. Emerson, Whitman county food administrator, for the discussion of the feed situation. It was agreed that the feed shortage is local and not national and that if transportation difficulties could be overcome it would be possible for every section that has a feed shortage to secure enough to carry it over the critical period.

As one means of improving the feed situation, R. C. McCroskey Jr., of Garfield recommended that straw and alfalfa be mixed, not only because it would enable the feeding of a considerable amount of straw, but because, as he believed, it would actually improve the alfalfa for horse feed.

A resolutions committee consisting of L. W. Lanning, acting chairman; A. C. Whistler, secretary; J. Emert, John L. Lanritzen, Roy Jones, Carl Grieff and J. A. Henderson, was appointed. The meeting expressed its attitude on certain points by adopting a resolution, part of which reads as follows:

"We find that there exists a shortage of feed grain and hay throughout the county, no locality having a surplus. We also find that the barley and corn supply of California and the east will be sufficient to take care of the needs of the country providing transportation can be obtained. We also find that there is a reasonable supply of alfalfa hay in southern Idaho and the Yakima valley.

"We recommend that owing to the scarcity of hay in this county, farmers be urged to conserve straw by fencing their stacks or securing it in some way so stock can not waste it and we suggest that alfalfa hay be mixed with one-third straw and two-thirds hay, as the ration will be improved by the mixture for the feeding of horses.

"We call attention to the order of the food administration that milk feed can only be fed to dairy cows giving milk. In order that we do our part in the perpetuation of the live stock industry we especially urge the farmers to keep their breeding stock, both cattle and hogs, in order that we may help replenish our herds and flocks and those of our allies when we have won the war. Taking the present price of barley and corn in comparison with the price of mill feed and their feed value for hogs and stock cattle, we believe that the grains have more feed value than the mill feeds."

# Unite War Work Drives

On November 11 there will be started throughout this country a campaign by which it is planned to raise $170,500,000 to carry on the war work activities of seven humanitarian organizations. Some time ago, at the request of President Wilson, these organizations agreed to unite in the raising of one large sum at one time rather than for each to wage a campaign of its own for the smaller amount that is required. The organizations for which the fund is to be raised and the amount for each are as follows:

Young Men's Christian association, $100,000,000; Young Women's Christian association, $15,000,000; National Catholic war council, including the work of the Knights of Columbus and special war activities for women, $30,000,000; Jewish Welfare board, $3,500,000; American Library association, $3,500,000; War Camp Community service, $15,000,000, and Salvation Army, $3,500,000.

# Live Stock Men Urge Congress to Act

A memorial has just been issued under the auspices of the American National Live Stock association indorsing the report of the federal trade commission on the meat packing industry. It is addressed "To the President of the United States, to Congress and to the Federal Trade Commission." It is signed by H. H. Jastro, Edward L. Burke, Dwight B. Heard, Joseph M. Carey, Henry C. Wallace, E. C. Lacater and W. R. Stubbs, composing the market committee of the American National Live Stock association. The memorial follows:

The live stock producers of this nation, in a spirit of loyal service, wish to give their utmost efforts to assist our government in winning this war. The most practical service which we believe they can render is to produce an adequate supply of meat animals for the military and civilian needs of ourselves and allies, and to aid in opening the channels of distribution so as to free the industry completely from practices which have encouraged the growth of monopoly and special privilege.

The market committee of the American National Live Stock association was fully conversant with the critical meat situation at home and abroad, and the menace to the food supply of the nation which existed when the president, on February 7, 1916, directed the federal trade commisison to make its investigation; and later, on March 18, 1918, when, at the earnest solicitation of Mr. Hoover, he appointed a committee of five capable members of his own official family to determine a "positive national live stock policy." The extremely unsatisfactory conditions prevailing in the live stock business fully justified the action of the president in both instances, as well as the action of congress in appropriating the necessary funds.

After carefully considering the report of the federal trade commission, the American National Live Stock association, through its market committee, and on behalf of the live stock producers of the country, desires to convey to the president, to congress and to the commission its deep appreciation of the fearless, convincing and constructive summary of the report of the commission on the meat packing industry, and to express its belief that both producers and consumers should unite in vigorous support of the prompt enactment of appropriate legislation to carry into effect constructive policies and remedies of the character recommended by the commission.

The misrepresentation of these recommendations, which has been given widespread publicity, must not be permitted to mislead either congress or the people. The commission did not recommend that the packing plants of the five large packers should be taken over by the government. It did recommend that these packers should be deprived of the means by which they have acquired and maintained their monopolistic control of the live stock markets, and of meats and a constantly increasing list of other food products.

We have carefully considered the report of the committee of five and thoroughly indorse the idea of a positive national stock policy. It must be borne in mind, however, that the report of the committee of five is essentially a war measure, while the report of the federal trade commission relates more especially to the permanent conditions that should prevail after the close of hostilities. While we deeply regret that the report of the committee of five did not touch on the great question of production, we especially commend that portion of it which dealt with the necessity of a uniform system of accounting in the packers' industry, the regulation of stockyards and commission men by the department of agriculture, the advisability of greater publicity regarding wholesale prices of meats, and the need of an investigation into the conditions of the retail trade, and we strongly urge the early appointment of a commission clothed with ample power to investigtae thoroughly this situation and present a definite plan for a simplification of retail distribution which will assure the consumer a wholesome meat supply under a system free from waste and needless expense; and, most important of all, we indorse the need of a revision of the packers' license, being thoroughly convinced that the welfare of the live stock industry and the consuming public demands effective regulation of the packers' entire business instead of only a portion.

We therefore respectfully, but earnestly, urge the prompt and favorable consideration by congress of the remedies recommended by the federal trade commission.

Accompanying the above, the market committee of the American National Live-Stock association, under date of September 23, 1918, says:

All and more than all the market committee has charged is abundantly confirmed by this report. The commission not only gives the facts and proves its case by convincing evidence, largely taken from the letter files and records of the packers, but it suggests what it believes to be the remedies which strike at the root of the evil practices, and which, if put into effect, will "open the channels of commerce in foods and related products, and insure their free and unrestricted flow from the producer to the consumer."

The remedies suggested by the federal trade commission are as follows:

"1. That the government acquire, through the railroad administration, all rolling stock used for the transportation of meat animals and that such ownership be declared a government monopoly.

"2. That the government acquire, through the railroad administration, the principal and necessary stockyards of the country, to be treated as freight depots and to be operated under such conditions as will insure open, competitive markets, with uniform scale of charges for all services performed, and the acquisition or establishment of such additional yards from time to time as the future development of live stock production in the United States may require. This to include customary adjuncts of stockyards.

"3. That the government acquire, through the railroad administration, all privately-owned refrigerator cars and all necessary equipment for their proper operation and that such ownership be declared a government monopoly.

"4. That the federal government acquire such of the branch houses, cold-storage plants and warehouses as are necessary to provide facilities for the competitive marketing and storage of food products in the principal centers of distribution and consumption. The same to be operated by the government as public markets and storage places under such conditions as will afford an outlet for all manufacturers and handlers of food products on equal terms. Supplementing the marketing and storage facilities thus acquired, the federal government establish, through the railroad administration, at the terminals of all principal points of distribution and consumption, central wholesale markets and storage plants, with facilities open to all upon payment of just and fair charges."

# Urge More for Wheat

Representatives of the National Wheat Growers' association are presenting to President Wilson an appeal that he increase the minimum price of wheat for next year to $2.46 a bushel, based on No. 1 northern grade for Chicago delivery. A brief of the argument that is being presented to him says:

"Cost-of-production figures prepared independently by trained statisticians show that the 1918 wheat prices barely cover the average cost of production of wheat this year and will be far below the inevitable cost of production of the year 1919 wheat crop."

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# Wheat Too Low

## Statistics Warrant Higher Prices

Statistics just published by the United States department of labor present convincing proof that the American farmer needs and is entitled to a better price for wheat. Since December, 1914, men's clothing has advanced 105 per cent; women's garments, 120 per cent; furniture and furnishings, 116 per cent; fuel and lights, 80 per cent. It costs the farmer more to produce a bushel of wheat and it costs him more to live.

There was a time in the Pacific northwest when it was profitable to grow 60-cent wheat, and even a 50-cent price left the grower some margin. But those conditions are gone, and the growers have to face enormously increased costs of production all along the line. A maximum price of $2.20 in 1917-18 was based upon production and living costs of the former year. Every one knows that these costs have gone upward since 1917, probably to a considerably greater extent than the difference between $2.20 and $2.50 wheat.

Not only that, but the growers here in the Pacific northwest have to face a decreasing yield, partly due to over-forcing the soil and partly to the increasing difficulty of finding efficient help.

American wheat farmers are patriotic, none more so, and are deserving of more sympathetic treatment than the government has yet accorded them. They can not understand why the price of their product should be held down by government restrictions when the price of cotton is allowed to take its unrestrained high course under the normal law of supply and demand. They must sell their wheat in a restricted market and buy all manner of cotton goods in an unrestricted market.

Notwithstanding this injustice, it is the duty, of course, of the farmers to respond to the limit of their ability to every call of their government, and they will do it without a doubt, but their fine, loyal spirit ought to have more responsive recognition at Washington. N. W. D.

# Smut Travels Far

## Progress Being Made Against It

At a conference on smut control at the Oregon Agricultural college recently, H. B. Humphrey, cereal specialist of Washington, D. C., predicted that within two years the annual grain loss from smut in the northwest will be reduced at least half by methods that have been previously put into effect and by new methods yet to be put into operation.

While this prediction is encouraging to those who have been active in the fight against smut and to those farmers who are heavy losers each year because of it, a report from the State College of Washington indicates that there is yet a difficult problem to solve as a result of what it terms the "harvest time smut shower." The state college has been getting data on this subject under the direction of George I. Zundell, some of this data indicating that the smut spore, which is the germlike organism that infects the sprouting grain, is sometimes carried hundreds of miles in the air and deposited to infect the grain sown in that particular locality. The state college has been making observations by means of what it calls "spore traps" all over the wheat producing sections of Washington.

Counts have just been made from spore-traps set out in both eastern and western Washington. The western Washington trap, placed at Puyallup, showed that in that region from 12,000 to 69,000 smut spores settled on a square foot of soil surface in harvest. In Columbia county the smut-shower per square foot went as high as 288,000 spores. In Asotin county the counts ran as high as 334,000 per square foot, and in Garfield county 100,000 smut spores were caught to the square foot. In Klickitat county the spore counts went as high as 912,000 to the square foot; In Lincoln county, 20,000; Walla Walla county, 285,000; Whitman county, 225,000.

Mr. Zundel states that the variation in spore counts should not be taken as an indication of the prevailing amount of smut there, since the spore catches of the traps were so greatly dependent upon prevailing directions of wind currents, and other causes.

In the Blue mountain section near Pendleton, Ore., spores were discovered on vegetation which must have floated in from parts of California, northern Utah, or southern Oregon, these being the nearest localities in which threshing was in progress at that time, meaning that the wind-borne smut had floated from 200 to 500 miles. One particular variety of smut was discovered there which occurred no nearer than the immediate vicinity of Portland, Ore. It had floated no less than 300 miles before settling on the vegetation.

Reports at the Oregon conference on the use of smut traps brought out the fact that smut spores had traveled from Umatilla county to Union, a distance of 100 miles. Time of sowing proved to be a factor in the amount of infection, fields sown in October showing but 1 per cent infection, while those sown between the 10th and 20th of November showed an infection varying from 1 to 5.6 per cent. The time of greatest infection appeared to vary with the season, reaching a maximum at a temperature of between 40 and 45 degrees, and less at a higher or lower temperature.

While much benefit has been derived and much more will yet be derived from the treatment of seed grain for the prevention of smut, it is the belief of the experimentors that in many cases grain thoroughly treated and in which all smut infection has been destroyed is again infected by the smut spores that are sown broadcast by the winds during the threshing season. Mr. Humphrey, who predicts the winning of the fight against smut, is a firm believer in the effectiveness of formaldehyde as a seed treatment. Fear is expressed that some of the advantage gained against smut will be lost through the shortage of wood alcohol needed for the manufacture of formaldehyde.

# Hold School Fair

## Communities Unite in Enterprise

The recent community school fair and teachers' institute at Ridgefield added its bit of evidence as to the value of community undertakings of this nature. Five districts were represented.

One of the features of the fair was the display of agricultural products and domestic science work by the boys' and girls' clubs. In the contests of this department Albert Sederburg, aged 14 years, was the winner of the greatest number of prizes, being a contestant in the sewing and canning work as well as in agriculture. The displays of the boys and girls included all kinds of agricultural products, sewing, cooking, knitting and the like. This department of the fair was under the supervision of C. E. Alexander, who had been in charge of the clubs during the summer.

A program of entertainment and educational features was given, among which were a lecture by Professor Stahl of the state college experiment station and addresses and demonstrations by a representative of the United States department of agriculture. A number of local speakers discussed agricultural and general farming subjects. The program also included vocal and instrumental musical numbers.

### BEET PRICE TO BE GOOD.

The Utah-Idaho Sugar company has announced through its representative at Yakima, Wash., that it will pay $12 a ton for beets grown in the Yakima valley next season. Already considerable acreage has been signed up at $10 a ton, but it is stated that those who have so contracted will receive the benefit of the increased price the same as those who have not yet signed up. Other districts throughout the northwest are understood to be offering corresponding prices. This is twice the price first offered for beets of the 1917 crop. Later that year's price was increased to $7.50 a ton. Much of last season's crop was contracted at $10 a ton.


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A. B. NYSTROM, Editorial Contributor.

# Care of the Bull

## Good Feed and Plenty Exercise

By A. B. Nystrom.

Most dairymen consider that "the bull is half the herd," and this is the right way to look at it. But how many take care of him in that light? To be sure it is not necessary to give the bull as much care as the rest of the herd is given, but surely he should be given more attention than a single cow in the herd. Many dairymen do not even look after him to that extent.

The same kind of a ration that your best cows are getting is none too good for the bull that is in full service. Give him some nice alfalfa and clover hay, all he will eat up clean. If the clover is mixed with timothy or other grasses it will do fairly well, but grass hays alone are not satisfactory. In the absence of the legume hay use the grain hays, oat hay cut in the milk preferred. For grain use a mixture containing a liberal amount of high-protein feed, such as linseed oil meal or soy bean meal. Three parts ground oats, three parts mill run and one part oil meal will make a good ration; he should have from five to seven pounds of this daily. Feed silage sparingly, usually from 15 to 20 pounds good corn silage each day will be sufficient. It is claimed by some dairymen that the heavy feeding of silage to a bull will injure his breeding power. Kale and root crops may be fed more liberally.

Plenty of exercise is a prime essential for a bull in service. It makes no difference how ugly his disposition, the bull must be provided with a means for exercise. An ample dry paddock with his stall door accessible will take care of the quiet bull. But the ugly one must be securely tied at all times. For him stretch a small cable or heavy wire between a high post outside and a convenient post inside his stall, allowing the wire to pass through the door leading into the paddock. Fasten the bull to this cable by means of a sliding chain. This will give him exercise, even though he is securely tied.

Forced exercise will be found necessary for some bulls. Putting them in a treadmill is one sure way of forcing it. The writer has seen the bull used in a tread power that was attached to the milking machine pump. In this way "the bull was forced to milk the cows." Where such an arrangement is not possible the bull may be driven or led for a considerable distance each day. He may also be harnessed and hitched to a wagon.

Give the bull a good, strong box stall that is light, airy and easy to keep clean. Keep the stall cleaned out and well bedded, and at the same time provide a paddock that is free from mud and filth.

Never trust any bull. Remember that it's the "quiet" ones—the ones that are trusted—that are responsible for the accidents. Always use a strong staff to lead him, and walk by his side rather than in front while leading him.

The breeding power of many bulls is often ruined by too heavy service. A mature bull in good health and properly fed should not be expected to take care of more than 60 cows. Services should not be more frequent than four or five per week, unless he is given complete rest every alternate week, and in that case only one service daily should be allowed. Young bulls should not be used over once a week, and if he is only a yearling, he should be allowed but 10 to 12 services in the year. With proper care a bull should maintain his virility up to 10 and 12 years of age.

### VALUE OF PASTEURIZATION.

Pasteurization of milk has both its advantages and disadvantages. It does not, as sometimes supposed, destroy all the germ organisms, though a heating of the milk to 160 degrees for a period of 20 minutes is considered a practical safeguard against most disease germs that the milk might contain. Some pasteurization is done now at a slightly higher temperature for a period of 30 minutes.

One effect of this treatment is the destruction of a certain bacteria native to the milk that causes normal souring. This means that pasteurized milk does not sour normally, but decomposes instead by the introduction of a germ of decomposition instead of oue of souring.

There is still controversy as to the food or feeding value of pasteurized milk. Some experiments seem to show that it is less valuable as a food or feed than the raw milk.

### EUROPEAN FARMERS MAY COME.

It does not seem improbable that many people from Europe will be inclined to come to America with the close of the war. Already inquiries have begun to arrive. Former Governor Oswald West of Oregon reports that a group of Holland bankers have requested of him information bearing upon the possibilities of land settlement in Oregon. The farmers in whose behalf the inquiry was made are of Holland stock, who have been living in the Ukraine district of Russia, which was some months ago subjugated by Germany.

### PLANS BUG BATTLE.

County Agricultural Agent H. H. Boone of Walla Walla, Wash., has secured 85 pounds of ladybugs, with which he plans to combat the aphis pest in his county next season. The aphis did much damage during the last season to crops of the Walla Walla valley, especially alfalfa. Agent Boone estimates that the 85 pounds of ladybugs that he has in cold storage will be sufficient to populate 650 acres next season. The ladybug is a noted natural enemy of the aphis.

### GIRL IS MULE TEAMSTER.

A report from Kansas claims for that state the champion girl mule-skinner of the world. The alleged champion is Opal Braley, age 10 years, who has been driving four mules on a gang plow during the last season, owing to her father's inability to get help. Neighbors of the Braley family testify that she has done the work as well as any hired man could have done it.





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is favorable to economical yielding of milk. The food of support in comparison to size is much less in large cows than in small ones, and for this reason the Holstein-Friesian cow returns a greater net profit on the total amount of food consumed.

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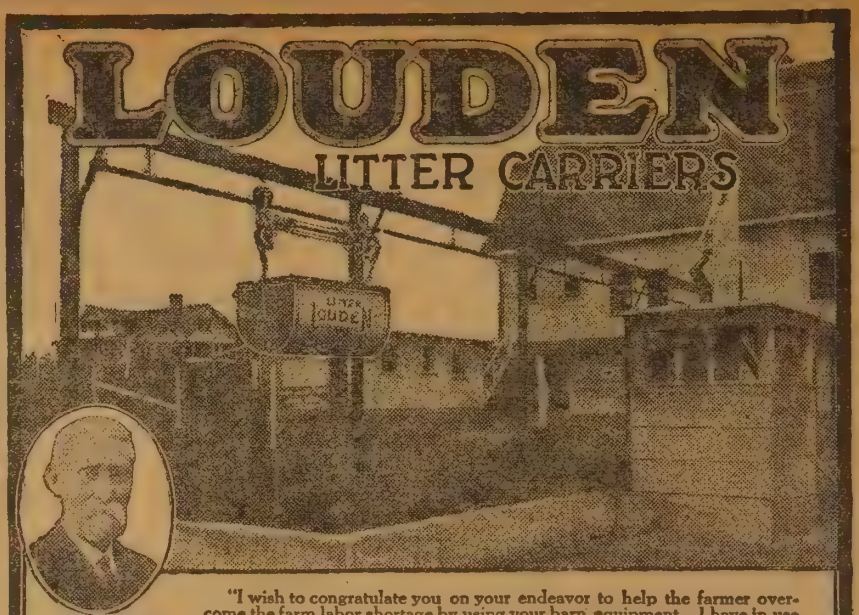
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# LOUDEN

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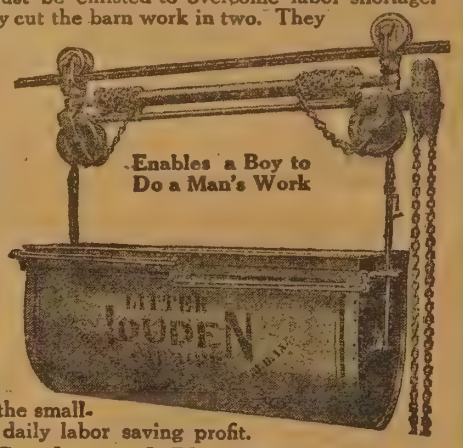


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As is well known, a few years ago Sand Vetches were all imported. We are just in receipt of a shipment of Oregon grown and suggest prompt ordering by any one wanting any of this.

We are also in receipt of a car of Eastern WINTER RYE.

**THE INLAND SEED CO.** Spokane, Wash.


In answering advertisements please mention this paper.




E. J. IDDINGS, Editorial Contributor.

# Time to Get Busy

## Stockmen, Prepare for Winter Now

By Dr. S. B. Nelson.

Winter is not far away now, and it may be a critical time for many stockmen. Now is the time to make preparations.

The man who is bringing his sheep down from the mountain pastures will feed this winter at high cost. He will miss more than ever the cheap roughage of the mountain ranges. In this emergency it might be well for him now to see if there is anything he can do to make his sheep get more energy from the feed they consume than they otherwise would. It goes without saying that one can winter a fine, vigorous, healthy band of sheep more economically than sheep that are ticky and contaminated with some communicable disease. Clean up the band now, get it in good fighting trim for the winter.

The same is true of horses. A man should now examine the teeth of his horses. If the teeth are not in good shape the horse can not get the most out of his feed, which this winter will be high-priced. Therefore, it is merely the part of common sense and good business policy to have the horse's teeth put in good condition now. Some ticky sheep whose ticks are consuming blood the sheep must make out of this high priced feed; several diseased sheep that die after they have eaten some high-priced feed, and communicated their ailments to others who likewise may die; horses with teeth in bad shape all constitute leaks in the feed manger, and we want no leaks there now.

Now is a good time for the hog-raisers to get busy. Be sure the animals have a place to sleep this winter where they will be protected from draughts. Cracks may have opened up in the floor of the hog house the past dry summer. If so, close them now. Otherwise they will cost you pork and high-priced feed this winter.

If the pigs are not thrifty now you are fairly safe in presuming the presence of intestinal worms. Give them one of the standard treatments for this disorder now.

I drove through a man's pasture the other day and saw an animal just recovering from infectious keratitis. This is a very annoying inflammation of the cornea of the eyeball. Out in the pasture this trouble does not spread very much, but when the animals are housed together in close quarters the story is very different.

So observe your animals very carefully, and if you find anything wrong out in the open, correct it before the animals are housed together, when the contagion will have a better opportunity to spread. If you can not cure the disorder now, at least segregate the stricken animals so that it will be less likely to spread through your herds.

One may have a band of cattle to be brought in from the range. On the jaw of one there may be a lump. The owner may try to deceive himself—hopes and tries to believe against his conviction that it is not a case of lumpy jaw. He may argue to himself that the animal has merely been kicked, or injured in some other way.

But the chances are that it is lumpy jaw just the same. The wise cattle man will take no chances. He will segregate the animal at once, and by no means allow it to run with the rest of the band till he knows very certainly what the trouble is.

These are small, simple little things; but in their totality they constitute a large leak in the nation's hay-loft. If every live stock man and every farmer will do his part valuable meat and valuable feed will be saved this winter, saying nothing at all of the money that will be kept where it can buy Liberty bonds.


**Calf Enemies**

**WHITE SCOURS**
**BLACKLEG**

**Your Veterinarian** can stamp them out with **Cutter's** Anti-Calf Scour Serum and **Cutter's Germ Free** Blackleg Filtrate and Aggressin, or **Cutter's** Blackleg Pills.

**Ask him about them.** If he hasn't our literature, write to us for information on these products.

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**A PATRIOTIC DUTY**
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BY USING
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double and single vaccinations in pill form.

**NO DOSE TO MEASURE.**
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ACCURATE. EASY TO USE. EFFICIENT.

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**BLACKLEG VACCINE**
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FOR BLACKLEG PREVENTION.

**ANTI-BLACKLEG SERUM**
for the preventive and curative treatment of blackleg.

Order through your Veterinarian or Druggist.
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ANIMAL INDUSTRY DEPARTMENT OF
**PARKE, DAVIS & CO.**
DETROIT, MICH.


# VETERINARY

By DR. S. B. NELSON.

**Possibly Inflammation**—I have a 5-year-old cow that has had four good, healthy calves but she lost the fifth one through an accident in which she slipped and almost fell down. I had a veterinarian remove the after-birth after three days and he says there were no signs of abortion. I have not been able to get her with calf since then, and have bred her five times; the last time she threw a bloody discharge the second day after being bred. She is a good eater and seems to be in fine health. Any information with regard to this case will be greatly appreciated.
HARRY HEYER.
Melba, Idaho.

It is quite possible that there is an inflammation of greater or less extent, resulting from the mechanical removal of the after-birth. I am therefore sending you under separate postage, circular letter dealing with the treatment of the possible conditions.

**Bathe Udder With Hot Water**—Am writing to find out what to do about a 2-year-old heifer I have that just came in fresh the 27th, and she has a fine large bag of milk, but when I go to milk her I don't get much milk and her udder is hard, sort of caked above the teats and just a little above the top end of the teat. I put some salve on her udder when I milk, but has no effect on the caked part. I don't know what to do exactly, but have let the calf run with her thinking that it would bunt and work the cake out, but it doesn't do any good. R. S.
Sweetwater, Idaho.

Quite possibly bathing the udder with hot water once or twice daily prior to milking might be of value. Then after you have milked, apply the following liniment to the affected part of the udder. Soap liniment, five ounces; tincture of iodine, three ounces. Apply after each milking.

**Cow Gives Bloody Milk**—I have a cow that gives bloody milk from one teat part of the time. Bag does not seem to be inflamed or sore. What is the cause and treatment? F. L. B.
Leavenworth, Wash.

Try giving your cow a teaspoonful of sodium hyposulphites in a pint of water once daily for a week or 10 days. Watch the bowels to see that they are normal or even a little looser than, or softer than normal. If they are not, give her a slight purge so as to regulate this condition.

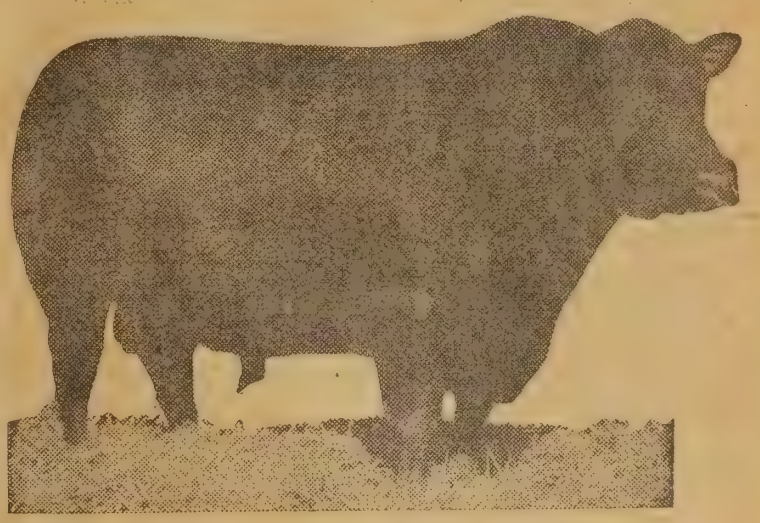

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Danville, Virginia




JAMES DRYDEN, Editorial Contributor.

## Range or Confinement?

There are quite a number of poultry ranches in western Oregon and western Washington conducted on the close confinement plan. On some of them the fowls have the liberty of a small yard, and in some they are confined entirely in the house. Some of these are doing well under present conditions. To confine the hens in a house and never allow them out on the ground is a development of recent years. This system makes a strong appeal to the labor-saver and the land-saver. It is certainly a saving of land, and where land is high in price that is a considerable item. Whether it will be permanently successful may be open to question. At any rate, there is not a great deal of data bearing on the subject. Poultrymen who have good stock and give them good care are getting a good egg yield from hens confined in houses. The question is, however, whether the same man with the same kind of stock and given the same good care they would not do better on free range.

An experiment conducted at the Ohio station gave results which, though not probably final, were in favor of free range. In a flock of Leghorns kept under observation for 882 days the flock confined had a mortality of 23.23 per cent, and the lot on range 15.52 per cent. The average egg production of the hens on range was 15.4 per cent higher than those in confinement. The cost of feed per dozen was 14.8 per cent higher for the confined lot than the range lot. The value of the range in this experiment was 62 cents a hen. This item would amount to more at present prices of feed, as the experiment was made in 1912 to 1914, when feed was cheap.

Another experiment, which began November, 1913, and continued for 728 days, showed results also in favor of range. The mortality for the range was 12.3 and for confinement 17.5 per cent. The average egg production was 29.8 per cent higher for the range lot than for the lot in confinement. The feed cost for a dozen of eggs was 26.1 per cent higher for the confined lot than for the range lot. The value of range was 86 cents a hen for the first year and 55 cents the second year.

A still later experiment showed a 43.9 per cent higher egg production for the range lot than for the lot in confinement, and the cost of feed for a dozen of eggs was 36.3 per cent higher for the confined lot than for the lot on range.

The hens in confinement in these experiments had access to a small bare yard covered with gravel and on which there was no green feed. J. D.

**CHICKENS SICK?** Roup, Colds, Canker, Bowel Complaint, Limberneck, Sore head, etc., the best remedy is always GERMOZONE. At most dealers or 75c postpaid with 5 book poultry library free. GEO. H. LEE CO., Dept. 421, Omaha, Neb.

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Kills Maggots
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### WITH THE CHICKENS.

By CARL J. MENZE, Ferndale, Wash.

Gather the eggs often through the winter. If it is freezing there will not be so much danger of them cracking.

Where the weather is cold and the fowls have large combs a curtain made of muslin should be hung up in front of the roosting place on cold nights.

Which is the cheapest, to take the chill off the chickens' drinking water on cold days, or feed them more feed and let them warm it themselves?

Chickens always scratch with their heads toward the light. If the henhouse has windows on one side only, they will scratch all the scratching material in a pile in the dark corner. To remedy this, place windows in the dark part of the house.

At night, chickens will always try to crowd on the highest perch. Place all perches at the same height and the crowding will be avoided.

The hens that are to be used for next year's breeding pens should not be forced for winter egg production. If they are forced through the winter and then used for breeding in the spring the small chicks will not be so strong. The breeding hens should commence to lay a short time before the eggs are wanted for incubators.

The roosters that are to be used in next year's breeding pens should not be allowed to run with the rest of the flock through the winter.

Incubators and brooders should be ordered early so as to be sure to have them on time. In the spring, manufacturers are flooded with orders and your order might not be filled for some time; and again trains are sometimes held up on account of slides and bad weather so it is best to order early.

All small coops, brooders and incubators should be cleaned, repaired and made ready for spring.

If new blood is to be introduced into the poultry flock next spring, the male birds should be bought now. Later on the best birds will be sold.

### CHICKENS' HEADS DROOP.

To the Editor: We are having trouble with our chickens and would like to know the cause. They droop their heads all the time and can't stand up. Their eyes are closed nearly all the time. They have no lice or mites. The chickens are young ones of this spring. They seem to get sick all of a sudden. Their foods is all kinds, for they run loose. They have plenty of green food and grain. When we found them we fed them warmed lard. The first one got well after about two weeks. They eat nothing for four or five days. G. C.

Pateros, Wash.

From this brief description, I can only guess at the trouble. In the case of limberneck, the chicken loses control of its head, which hangs down and is stretched out in front. It is caused by stoppage of the stomach. Give a teaspoonful or two or castor oil or olive oil and feed on soft bran mashes for a few days. Would suggest that particulars be sent to the poultry department of the state station at Pullman or the branch station at Puyallup. J. D.

### DON'T KILL THE LAYING HEN.

Eggs are a good price, even if feed prices are very high, and good laying hens should not be killed off. If they are extra good layers they will make a good profit. It is a mistake to slaughter the hens indiscriminately, and I do not think this is being done to any great extent. Keep the layers and cull out the non-layers by methods that have already been explained. When the war is over there will be cheaper feed, and the prospect is that eggs will continue high for some time. Cull out the slackers; give the others more and better feed and you will be serving yourself as well as the country. J. D.

### Y. M. C. A. SPREADS MUSIC.

One of the activities of the Y. M. C. A. in connection with the war is the distribution in the army camps and among the soldiers in Europe of large numbers of leaflets containing songs that are popular or are rapidly becoming popular.

**Rubber Footwear at the "Front"**

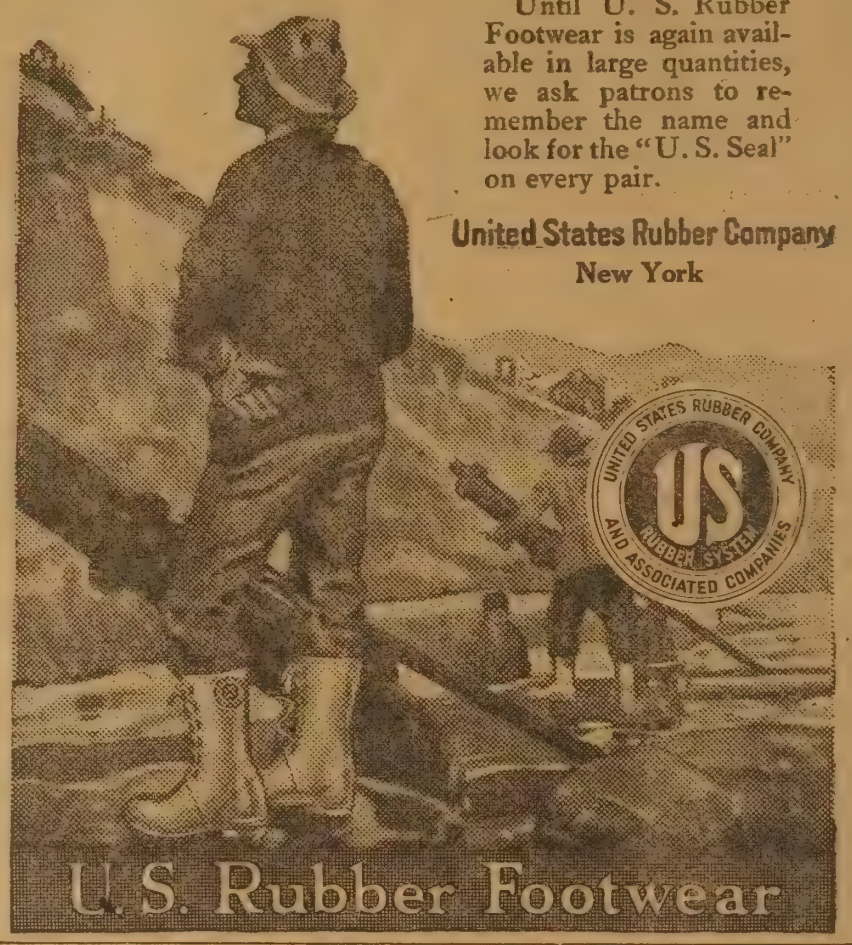
In the first line trenches, where the need is greatest, rubber footwear is helping to make life more livable for the doughboy.

Men in the trenches are being supplied before civilians at home. This means limited supplies for outdoor workers.

Our customers, we are confident, will cheerfully bear with this situation. We regret our inability at present to meet every demand for "U. S. Protected" footwear.

Until U. S. Rubber Footwear is again available in large quantities, we ask patrons to remember the name and look for the "U. S. Seal" on every pair.

United States Rubber Company
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**Building Service into the "Caterpillar" Tractor**

The "Caterpillar" Tractor is built for service—everyday, dependable service, regardless of weather or ground conditions.

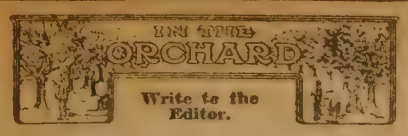
That sort of service is insured by correct design, by careful construction, by proper choice of materials—some of manganese bronze, some drop-forged, some case-hardened—each selected for the special work it must do. And into the construction of every "Caterpillar" Tractor goes Holt experience of 35 years in manufacturing.

The results are:—exceptionally low operating and upkeep costs, long life, higher efficiency and bigger profits. "Caterpillar" Tractor owners will testify that the purchase of this tractor is an investment that pays big returns. Send for complete "Caterpillar" Tractor information.

CATERPILLAR
REG. U.S. PAT. OFF.

¶Order now for spring. Otherwise we can not promise delivery. We can furnish a limited number of "Caterpillar" tractors from Spokane this fall.






GRANVILLE LOWTHER,
Editorial Contributor.

# The Apple's Value

By A. E. GIPSON, Caldwell, Idaho.

Writers on health and dietetics are practically agreed as to the wholesomeness of the apple as a food and relish. With equal unanimity they agreed that it would be clearly a beneficial thing if this fruit could become a part of the daily ration of the masses. The doctors say that the apple is not only a food but has a cooling and cleansing effect upon the system, and that the free apple eater is not so likely to have the same craving for intoxicants and narcotics that one often has who does not eat freely of this famous fruit. This is all good testimony, and has been generously given by the health and food experts. Why, then, should not the apple be given greater prominence in the food rations of the war board, especially at the army posts and cantonments? With the apple as comparatively cheap as it is, and within easy reach of so many of the soldier boys, why should not Uncle Sam encourage its use as a part of the daily ration? Such an effort would be in line with the general policy of the government to assist in marketing and to give the soldiers wholesome and appetizing food at a reasonable cost?

Furthermore, could the army commissary do a better thing than to give the fresh apple a prominent place on the bill of fare of the army ration, especially in view of the fact that this fruit is not only easily accessible, but is probably cheaper than any other commodity with anything like its palatableness and value as a food? The dried or evaporated apple is good, so far as it goes, but it does not fill the place of the fresh article, which is the flower of commodities and the most perfect union of the useful and the beautiful that the world has ever known.

While this appeal for a larger use of the apple has particular reference to army consumption, it has also a wider application, and the national government, as well as the states, can render a positive service to the masses of the people by assisting the apple grower and the grower of every other kind of good orchard fruit to find a market for the same at the minimum expense and with the greatest possible facility.

While the apple is well termed the king of fruits, its use is, nevertheless, comparatively restricted from lack of proper distribution, and hundreds of thousands who would like it are denied the privilege under existing conditions.

Since the above was written one of the strongest endorsements of the apple is at hand that we have ever seen, and particularly with reference to its value as a nerve food and corrective agent of the human system. It is by an eminent British physician, Dr. Josiah Oldfield, senior medical officer to the Lady Margaret's Fruitarian hospital, of England.

He says, in part:

"The people of Germany are beginning to develop the disease of mal nerve nutrition. There are beginning in Germany already grave manifestations of the basic origin of many diseases. The latest is a widespread oedema in the legs and feet and face, of which particulars are given in a late issue of 'The Lancet.' This will steadily get worse and worse as another winter comes on unless fresh fruit, and salads and seed oils, can be introduced largely into Germany. I have dealt at length with Germany and her fate, to emphasize the great importance of avoiding a similar catastrophe for England. English stamina, courage, endurance and heart for the war depend on complete nerve nutrition. Now for this the calorific values of wheat, or beans, or beef, affords no criterion. The danger is that laboratory scientists will measure the comparative importance of cargoes by calorific values, and will on this ground tend to debar juicy fruits as being very light cargo compared with legumes or cereals. Every effort should be exercised to prevent this, or else, when the mischief is done, there will be a panic importation of anti-scorbutic fruits. I note that a small number of ships are still allowed to run to the West Indies for bananas, and this is excellent, but weight for weight and bulk for bulk, the most important fruit to be imported during the winter and early spring of 1918 is apples. Were I food controller in Germany and allowed the choice of free import of one article of food from November to April, I should select the apple. So, in England, while for importation purposes legumes and peanuts are the most concentrated form of proteid; rice and wheat and maize, the most important of the cereals; olive oil, sesame oil, peanut oil and almond oil, the finest forms of fat; apples, lemons, oranges (and onions) are immeasurably the most important of fruits, which are nerve foods, and without the presence of whose salts physiological functions fail. It will be a grave risk to England's home stamina if her supply of apples is cut off, because during winter conditions in this climate they are superior to either lemons or oranges, and can not be replaced by any other fruit."

## STORING VEGETABLES IN GROUND.

A limited quantity of vegetables can be stored satisfactorily for winter use in a large box or barrel buried in the ground. The container should be set in a hole, the edges flush with the ground, and a layer of sawdust placed between the earth and the sides of the box or barrel, to serve as insulation and to absorb drainage water. If a box is used, it should have a tight-fitting cover hinged on one side, and, to give complete protection, a larger box can be inverted over the one buried in the ground. For storing a few home garden products for winter use, says J. T. Rosa Jr. of the University of Missouri college of agriculture, a small contrivance of this sort may be very useful, especially for root crops and potatoes.

To store parsnips, salsify, rutabagas and other root crops which are not injured by freezing, an outdoor trench is satisfactory. This must be in a well-drained spot and should be three feet deep, three or four feet wide, and as long as desired. The roots are placed in the trench in direct contact with the earth, but at a somewhat later date than when placed in outdoor banks. The roots are piled about flush with the ground line and covered with a six-inch layer of earth and a heavy mulch of straw or manure on the surface, which completes the insulation. Celery and cabbage are stored nicely in shallower trenches of this style, but generally must be used by midwinter. The root crops can be kept to the middle of the spring if the outdoor trenches are in a shaded spot.

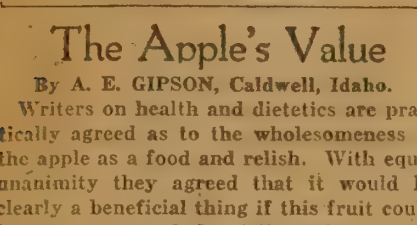
## PLANTS KILL EACH OTHER.

Mrs. Minnie Agnes Avery of Ojai, Cal., has a theory that there is a natural law of antagonism among plants, and that where one plant is a pest another can be found that will eradicate it. Further than this, she believes that she has proved that the tomato plant has a natural antagonism for the wild morning glory, which is a serious pest in some parts of the country. She has notified the United States department of agriculture that she has succeeded in eradicating the morning glory from her fields by using the tomato plant, which turns a heavy loss into a profit.

### Patriotic, Nevertheless.

"How did your husband's gardening turn out?"

"Not well, so far," responded the serious woman. "The outdoor work gave him such an appetite that he ate the potatoes instead of planting them."—Washington Star.

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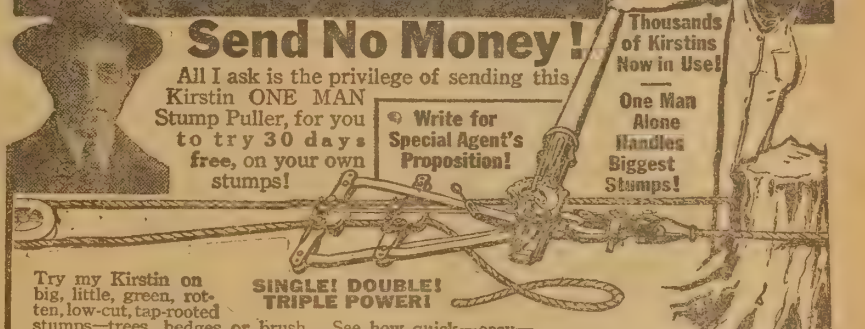
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Cheapest—Quickest—Easiest Way to Pull Stumps!

With Kirstin's new scientific leverage principle, a few pounds pull or push on handle exerts tons on stump! One man alone pulls stubborn stumps in few minutes at low cost. No horses or extra help needed. No digging, chopping or other expense. Several speeds. Use low speed until stump loosens, then shift to high—and rip it out quick! Patented quick "take up" for slack cable—saves time, cable and machine.

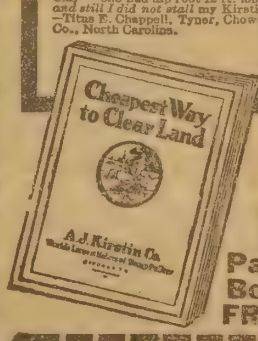
Read These Letters

If there is a better machine than the KIRSTIN, it must be a peach. —V. E. Newcomb, Creswell, Ore.

My pine stumps are solid in the ground, and average about 1 1 2 to 4 feet across the top, but the little KIRSTIN takes them all out fine.—Mr. R. J. Stoltz, Washburn, Wis.

Pulled oak stumps up to 88 in., pine stumps up to 24 in., in "Pipe Clay"—one had tap root 12 ft. long, *and still I did not stall* my Kirstin. —Titus F. Chappell, Tyner, Chowan Co., North Carolina.

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Tells why thousands of farmers prefer Kirstin ONE MAN outfits! Why every single acre of fine, rich stump land can now raise big crops. Labor shortage no longer prevents pulling pesky stumps! The Kirstin quickly pays its cost in BIGGER CROPS—and goes on making money for years! The book describes Kirstin One Man Clutch Model; Kirstin One Man Drum Model; and Kirstin Horse Power Model. Explains four easy ways to pay. Filled with valuable information for farmers. Send Coupon for it quick. Also for Special Agent's Offer. Shipment from nearest distributing point saves time and freight. Address me personally.

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Dear Mr. Kirstin: Without obligation on my part, please send me your New Catalog of Kirstin Stump Pullers. Also Special Agent's Proposition.

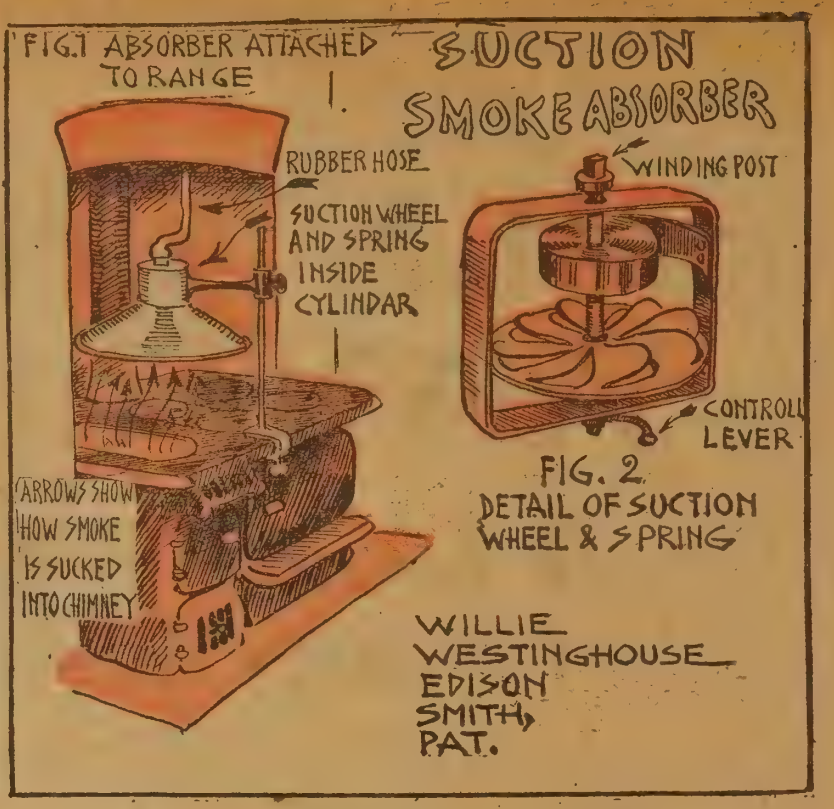
Name _____

P.O. _____ R.F.D. _____

State _____ County _____

# PAPA QUEERS ANOTHER OF WILLIE'S DEMONSTRATIONS














DEAR TOMMY: I invented this smoke absorber because our cook gets the house full of smoke every time she broils a steak. Papa thought so well of it that he got a promoter to look at it. But while I was getting the broiler ready he put the suction wheel in backward and it sucked about a bushel of soot down the chimney! Yours, etc., WILLIE.

# MEN ARE WANTED

## *To Keep the Torch of Liberty Alight*



The army, the navy, the ammunition factories, the shipyards, the mines and the hundreds of industries which play an important part in war work are calling for men, men—more men. The purpose of each and every one of these branches of war activity is to help keep the torch of Liberty alight. Every effort must be made to release as many men as possible for such employment.

## *The Washington Farmer Subscription Plan Conserves Man Power*

Last year at this time the shortage of man power throughout the nation was already becoming serious. To do its share in meeting the situation, The Washington Farmer decided to do without its usual big force of subscription agents. In place of these we urged our readers to send in their own and their neighbors' subscription orders direct.

We congratulate our readers, therefore, that their efforts during the past year have put our co-operative subscription plan on a basis which enables us to keep it in force for a longer period.

This plan gives the subscriber the benefit of every penny which would ordinarily go toward paying the salary and expenses of the subscription agent. It brings our friends their state farm paper at a fraction of what it used to cost and at a price far below that which other high grade farm and family papers generally are obliged to ask.

In order that our readers may continue to save money on their subscriptions, we ask every subscriber to send in his or her renewal well in advance of the date of expiration stamped on the address label on the wrapper, and that you will also make an effort to send in the orders for your friends and neighbors with your own. Assistance of this kind, so cheerfully given by hundreds during the past year, will assure the success of our second year of cooperation.

**Remember—you receive The Washington Farmer every week—fifty-two great big issues in a year, chuck full of the best of all-around family reading at the remarkably low cost, under our cooperative plan, of only 50 cents for 3 years. Send your orders in today and get your share of the money saved.**

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# Cardinal Qualities

## Courtesy, Industry and Honesty

By Dr. S. B. Nelson.

I talked to a friend of mine a few days ago, and in the course of the conversation we discussed several questions pertaining to the bringing up of boys—giving them a good start for the right kind of citizenship.

"I impress upon my boys that there are three cardinal qualities they must have to succeed in the right way," said my friend. "They may succeed for a time without one or the other of these qualities—but without all three they can never get to the top and stay here."

The three cardinal qualities my friend mentioned in this connection were courtesy, industry and honesty.

Our daily experiences and observation will prove to us the truth in what this man said. Most of us have met in the course of our lifetime some one who was lacking in one or the other of these cardinal qualities. He may have been a very industrious man and perfectly honest—but he lacked courtesy! Because of this he failed to get from life what should have come to him through his honesty and industry.

Another we may know is honest and courteous, but lacks industry. Admittedly, this would be rather a rare combination, for lack of industry is certainly a first cousin to dishonesty, and usually is linked with it; still, it is conceivable that a person may be courteous and honest but lazy; and just how successful in any undertaking would such a person be? It requires no imagination at all to make a prophecy.

Then we see the man who is industrious and courteous but not a bit honest. This man we presently class as "a smooth tongued rascal," and will have none of him. He reminds us of the story of the Scotchman who made it a rule of his life to speak ill of no one. If he spoke at all concerning a neighbor, it was to speak of the good in that person, and he could always say something good about any man.

A friend asked this Scotchman one day what good thing he could say about the devil.

"Verra industrious," replied the Scotchman. He may have added in truth that the devil is courteous, if being smooth-tongued and subtle can pass for that quality.

So the courteous and dishonest individual is about the last one we desire to have dealings with.

I say that one who is not industrious, honest and courteous can not be a good live stock man. He may not be industrious enough to care for the animals properly; or not honest enough to deal fairly with customers who come to him to buy; or, failing in courtesy, he will mistreat the animals and offend the public with whom he deals. So, lacking any one of these three cardinal qualities, sooner or later he will fail, or, at best, can only struggle along in a mediocre way.

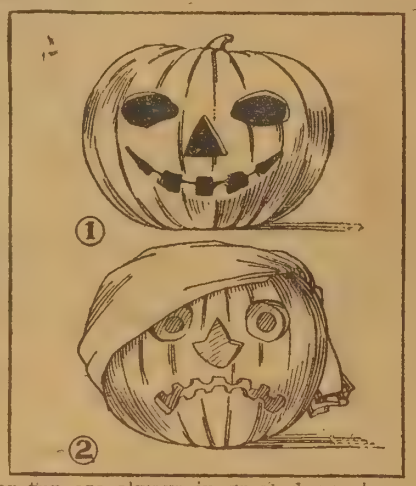
I should say that the parents who put into the lives of their children these three virtues accomplish two important results: They safeguard the future for their children, provide them with a very fine kind of life insurance; and, secondly, they provide for the welfare of their immortal souls. You can not find much in the theologies that is not comprehended in these three words—Courtesy, Honesty and Industry.

# Handicraft for Girls

By DOROTHY PERKINS.
(Copyright by A. Neely Hall.)

### Hallowe'en Fun.

Possibly you have already made your plans for a Hallowe'en party, but ideas




for fun are always in great demand, so I shall give you a number.

The fun should begin the instant the guests reach your home. A ghost or witch to receive at the door, with a number of lighted jack-o' lanterns placed around her, is the proper idea. A ghost should wear a sheet and pillow case costume, and a witch should have a peaked hat, pair of smoked spectacles, gray dressing gown and a broom.

Figs. 1 and 2 show two forms of pumpkin lanterns. No two of your lanterns should be alike. Fig. 1 shows the ordinary type of jack-o' lantern. The large teeth are an important feature to make a fearsome appearing face. The old pirate jack-o' lantern in Fig. 2 has his eyes, nose and mouth backed with colored tissue paper. Use white tissue paper for the eye openings, pasting a round center of black to one and a center of red to the other, for pupils; then back the nose opening with green tissue paper and the mouth with red tissue paper. A turban of red cloth supplies the finishing detail.

Did you ever hear of this method of fortune-telling? The guests are sent one at a time to a tent in a corner of the room where a witch hands them a mirror, which upon being breathed on tells what the future holds forth for them. This is how the trick is done. The witch writes the fortune upon the mirror with French chalk, then rubs it off with a handkerchief so no trace of the writing can be seen. When the mirror is breathed upon, the moisture makes this writing reappear.

Pinning the tail upon the witch's cat is lots of fun. Upon a sheet or large piece of wrapping paper make a drawing of a witch astride of her broom, with her cat seated behind her. The sketch in Fig 3 will help you in drawing this. Use black crayon or charcoal. Prepare short pieces of clothesline with a small safetypin sewed to one end, as shown in Fig. 4, for tails.

Blindfold the guests, one at a time, and start them across the room with instructions to pin the tail upon the cat.

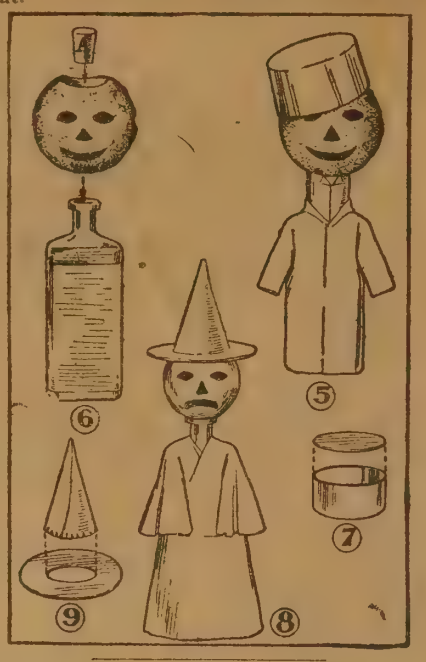
When the time arrives for ghost stories, alcohol should be poured in a saucer and a match applied. This will produce a blue, ghastly light.

Figs. 5 and 8 show appropriate favors for the table. The head of the goblin (Fig. 5) is an orange hollowed out jack-o' lantern fashion, and a small bottle forms the




body. Fig. 6 indicates how the head should be fastened to the bottle by a cork (A) pushed down through a hole in the orange into the neck of the bottle. Make a collar of white paper, a gown of colored tissue paper and a paper cap as shown in Fig. 7.

Make the witch (Fig. 8) in the same way as the goblin, but with an apple head. Fig. 9 shows how to prepare her peaked hat.




# "Y" Does Not Profiteer

By Charles Dillon.

Don't let any one tell you that the Y. M. C. A. or some other of the seven organizations in the united war work campaign makes your boy pay for the things he gets at the front! There's nothing to it.

In the front line the "Y" sells nothing. Chocolate, fruit, soup and cigarettes are given away for the asking, to the amount of hundreds of thousands of dollars. In the canteens further back tobacco, which is the largest item, is sold at the same prices as in the quartermaster's stores, the "Y" standing the transportation cost, which amounts to a very large total. The "Y," which is the name used by soldiers everywhere for the Y. M. C. A., never has and never will make one cent of profit on its activities.

This is just as true of the Salvation Army, the Jewish welfare board, the war camp community service, the K. of C., American Library association and the other war work organizations. They are not in the war for profit; they are our representatives in camps of this country, and in the other countries where our men are fighting, our representatives sent out to supply the comforts and entertainments and the helpful companionship or advice which will make life worth while living and bring our boys home in better condition than when they left.

### CALIFORNIA SHOW COMING.

The California International live stock show will be held at San Francisco, November 2-10.

# To Cure Children of Stammering

By DR. LEONARD KEENE HIRSHBERG, A. B., M. A., M. D.


Dr. Hirshberg.

After recovery from illness children are usually very much petted, and as a result sometimes show signs of affectation by speaking in an unusual way. It is true, on the contrary, that sometimes stammering is the direct result of illness or one of the signs of growth. It is most common among children of 5 and more and is so slight at first that it is hardly noticed by parent or child.

It is absolutely essential to take every possible step to prevent the development of stammering, as it is seldom that the child outgrows such an ailment. Not only does the child not outgrow the stammer without serious efforts on the part of the parent to correct it, but the chances are that this speech impediment will grow and develop as the child advances in years and what at first seemed insignificant may become a permanent defect.

The cure for stammering is gentleness, calmness and careful attention on the part of the parent. Excitement should be far removed from a boy or girl inclined to stutter, for there is nothing more harmful to this state of being, perhaps, than a constant jolting of the emotions.

When a mother seems that her child has the habit of stuttering, she may immediately begin to correct the wrongly pronounced letters and syllables, and urge the child to repeat after her the proper pronunciation.

### Patience and Persistence.

In her effort to correct, the parent should speak quietly and distinctly, and without startling the child by too sudden interruptions. If the child, moreover, has failed to make himself clear about a statement or a wish, it is part of the training by the mother not to try to understand what was said, until each word has been carefully restated. No wish of the child should, therefore, be granted until he speaks clearly, though with effort. The manner of correction, however, should always be kindly and patient, and too sudden or violent commands should not be practiced, for these startle the emotions and, therefore, much damage is likely to be done.

Encourage the child who stutters to take a deep breath before he attempts to speak and to make this a habit. Simple, short stories told to stuttering children is a splendid exercise to correct the trouble. In the midst of the story, pause every now and then, and after taking a deep breath quietly ask the absorbed listener to repeat parts of the story slowly and distinctly. If the story is very short, the child may be asked to repeat the gist of it in his own words, so that those present can understand what he says, word for word.

### Aid for Lisping.

"If, as the child grows older, this habit of impeded speech continues, it will probably be necessary to employ a conscientious instructor who can, as a professional, give systematic training.

Lisping or mispronunciation of certain lingual sounds starts, at times, as casually as does stuttering. This habit is perhaps more of a sign of affectation than is the habit of stuttering, and can more easily be corrected. Sometimes, however, this too has a foundation in abnormal formation of the tongue, which may be too long, too short, too broad or too thick.

Those who are afflicted with the defect of lisping must carefully train themselves or be trained to place the tongue where it belongs, and its tip exactly on the teeth or palate when it is necessary to utter words which demand this position. In the word "sin," for example, the lisper should carefully draw in his tongue and raise the tip. It is better, moreover, to raise the tip of the tongue too high rather than not high enough, and this must be especially stressed at the outset of the correcting exercises.

The word "zone" may be practiced with benefit. Let the mother pronounce the "z" by itself and keep up the buzzing tone for a time and then add the rest of the word, "one." Let the child repeat this exercise for the tongue, and pronounce at length, and in the same way as many words as possible beginning with "z." When the child once learns to keep his tongue inside of his mouth, and contracted, with its tip at the teeth, he will soon learn to pronounce all the dental words correctly.

No child is too young to be taught systematically if due care is taken not to fatigue or irritate him.

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## Victim of New Jersey Explosion



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Jackie caring for little refugee after the explosions which wrecked the huge shell factory of the T. A. Gillespie company at Morrison, N. J., and left thousands homeless.

## Getting Too Hot for Him




Denver Post.

## Save Pits and Shells for Uncle Sam



PHOTO TAKEN NEAR CHATEAU-THIERRY SHOWS AMERICANS ADVANCING THROUGH A GAS-FILLED TOWN







Copyright, U. S. Food Administration.

An opportunity for any one and every one to do war work is now offered by the government. This opportunity is the saving of the pits of certain fruits and the shells of certain nuts, which are to be used in the making of gas masks. Receptacles for receiving the pits and shells will be placed in every city and town, at centrally located points. Uncle Sam wants you all to save the pits of peaches, prunes, plums, apricots, olives, cherries and dates, and the shells of Brazil nuts, hickory nuts, walnuts and butternuts. These must be cleaned and dried before being turned in. The charcoal carbon made from these pits and shells has an absorption value beyond anything else known. The greater the absorption of German-made poison gases, the less danger to the American soldier who encounters them. Two hundred peach pits, or seven pounds of nut shells will supply carbon for one mask. Make this your minimum task. Having saved enough for one mask, keep on for a second, a third and then keep on. Bakers, confectioners, wholesale and retail druggists, restaurant keepers, fruit sellers, hotel proprietors—in fact every source from which material for the masks can be got, has been lined up by the government. It only remains for the millions of American homes to join in the work. Housekeepers can either deposit their accumulations of shells and pits in some public receptacle, or can give their offerings to the local Red Cross chapter.

## Gentler Sex Aids Sick Equines



Copyright, British Official Photo.

British women veterinary surgeons are now keeping the artillery horses fit.

## Hun Uses These to Fight Land Battleships



Copyright, International.

The photo shows one of the anti-tank rifles captured recently by the French.

# A CROOKED TRAIL---By Lewis B. Miller

Copyright by The Page Company, 1911.

**A story of a thousand-mile saddle trip up and down the Texas frontier in pursuit of a runaway ox.**

**SYNOPSIS.**

Travis, a lad in his teens, lived on the Texas frontier in the days when Texas was a wild, unsettled region. One morning before daylight he started out to bring in the yoke of oxen for a day's plowing, but one of them was gone. He caught his pony and started to search for the stray. Going a little and a little further hour after hour, he continued until night caught him several miles from home with a tired pony, a borrowed saddle and lariat and little for himself or his dog to eat. A rabbit and wild turkey eggs served the purpose, and morning saw him again in pursuit of the ox after a night of disturbance by a mountain lion and marauding hounds. The next night he spent in the cabin of a crazy sheep herder who believed that cattle men were trying to kill him. He made the night hideous by his crazy ramblings and songs in the moonlight, and Travis was glad when the opportunity came to escape from him, and fall in with new friends, Frank and Stella Booth, at their farm home a little further on. The three young people became much interested in each other because of common plans for attending school the following year. It was here, also, that Travis got his first definite clue to the whereabouts of the stray steer. Together the two boys set out to hunt him, but he was farther away than they suspected.

## CHAPTER VII.

### Storm-Bound in the Haunted Cabin.

At last we met a horseman and stopped him.

"No, I didn't meet no cattle travelin' along the road," he informed us, in reply to our inquiries. "But I do recollect seein' a spotted steer lyin' in the shade, a good piece off to one side. He had long horns and wore a bell, and there was some other cattle with 'im. I didn't pay much attention to them, though."

"That's Lep and company; no doubt about that, I guess," Frank remarked to me.

"Where did you see them—how far back?" I inquired of the horseman.

"Oh, sever'l miles—I don't recollect. It was durin' the heat of the day."

"And whereabouts on this road shall we find a house?" Frank wanted to know.

"Must be 10 or 12 miles to the first one anybody lives in."

"Is there an empty house closer—one that we could find shelter in if the storm comes down on us?" I said to the man.

"Yes, one. That's five or six miles back. It's half a mile west of the road. But you can see the roof if you look close. You won't want to spend a night in that, though, I guess." The fellow grinned.

"Why not?" demanded Frank.

"Because—well, everybody says it's ha'nted. They call it the ha'nted cabin. Nobody that knows the place would stay all night there for love or money. It hain't been lived in for years and years. Never was lived in much."

"Oh, we'll stay there if we don't find a better place. The ha'nts won't bother us, and we won't bother them," laughed Frank.

"But why do people say the place is ha'nted?" I wanted to know, curiously.

"Had enough to make it ha'nted," the horseman replied. "It was built some 15 years ago; and less than a week after the settler moved into it, the whole family was murdered and scalped by the Comanches. Bloody endin' they come to."

We were both much interested, and Frank said:

"Seems to me now I'd heard of that place before. What kind of ha'nts do people see there?"

The man laughed a shivery laugh. "Some think they see one thing and some another. But it's mostly what they hear that scares 'em into fits—screams and groans and yells and sech like. Enough to make a feller's hair stick straight up, they say."

"Did you ever spend a night there?" I questioned.

"Ever spend a night there? Well, I ruther guess not. Not for $500 I wouldn't. I don't hang around no ha'nt-dens much any time, I can tell you, let alone at night."

He rode on his way and we on ours. Higher and higher climbed the cloud, and thicker and thicker deepened the gloom. At length we looked off to our right and could make out the roof of a house, barely distinguishable among the tree-tops.

"Yonder's the famous ha'nted cabin!" exclaimed Frank. "Glad we got here while there's light enough to see it. No time to lose, either. Bad storm brewing, or I'm a false prophet."

The deeper gloom of night was already settling down, and the utter silence that goes before a storm was in the air as we rode up to that cabin in the woods.

"Gloomy old place, that," Frank remarked. "If there was any other shelter within reach, don't know but I'd vote to give this the go-by. But I'd rather run against a whole caviyard of ha'nts than to get a soaking."

"Same here. It's the ha'nted house or the storm, and I choose the ha'nted house every time. Here goes!" I swung myself out of the saddle.

Frank did the same. "Of course that ha'nt-story is all stuff," he declared, rather loudly, perhaps by way of propping up our falling courage. For in the gathering gloom there certainly did seem to be something grewsome about the place. I did not reply.

We had dismounted at the end of the house, and now lost no time in stripping off our saddles.

"What makes these logs so black?" Frank suddenly burst out, walking up to the wall. But after rubbing his hand over them, he added, wonderingly: "Why, they're charred—burnt. Somebody must have been trying to set fire—"

He looked at me and I at him. Both of us had guessed what we afterwards learned to be the truth. The savages, after murdering the family, had piled brush against the end of the house and tried to burn it; but the logs, being green, had refused to take fire. The charred wall remained, and would remain while the cabin stood, a black reminder of the black deed enacted here.

Neither of us spoke of the matter again. Somehow the discovery had produced a depressing effect on our feelings. The house was in the woods, but rank grass grew among the trees, and crowded close up to the cabin itself. We selected the best spots we could find and lariated our horses there, as close to the house as we could get them. Then we walked around the uninviting structure.

It contained two rooms. One, the larger, was built of logs. The other, a side-room or lean-to, had been made by nailing boards—rived clapboards—to upright pieces. In one gable-end, near the rough-stone chimney, gaped a good-sized hole.

"Not a very cozy shelter, but a long shot better than none," Frank observed. "But we'd better get inside. I felt a drop of rain just now. This storm can't hold off much longer."

Taking up our saddles and other things, we went around to the open front door. Vic had been inside, making a tour of inspection, and now came to meet us.

It was already dark within, and before entering Frank struck a match and held it up.

Most deserted houses lose everything that can be carried away, such as floors and doors and windows. But this place's history and uncanny reputation had protected it. The floor, which was of puncheons, or hewn slabs, remained as it had always been. There were no windows. The shutter for the front door was off its wooden hinges, but it was lying inside, and we afterward replaced it. A loft of puncheons, supported by big joists, hid all but one small patch of the roof, and the hole in the gable was not visible from the inside. A wide fireplace occupied a large part of one end. Dirt and leaves littered the floor. The room was rather large and very gloomy, and the corners and the fireplace and the underside of the loft were a black tangle of spider webs.

The match went out and Frank struck another. As he did so there was a whirring and flapping of wings overhead, whether of owls or bats, or both, we could not tell.

A shutterless door connected the two rooms. The leanto had no floor but the ground; and the winds had swept it half knee-deep with dead leaves. An open doorled out of it on the far side. After a hasty view, for the duration of a match, Frank said:

"Not a very inviting place to spend a night."

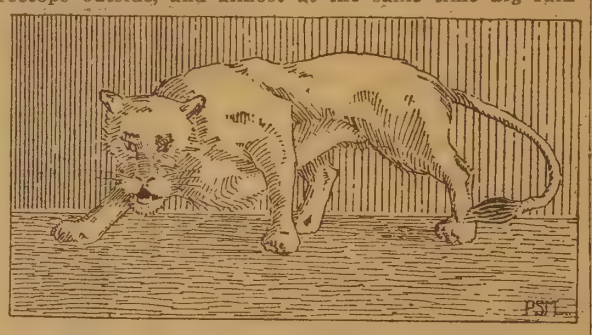
"Looks like there might be scorpions and centipedes and—spooks around here," I answered, shivering. "No wonder the old house wears a bad name. Let's kindle a fire. That'll liven things up a little bit, maybe."

An occasional drop of rain was spatting the roof, but the long-threatened storm had not yet begun. It was now almost as dark outside as inside; but we went out and groped around a few minutes, then came back with our hands full of sticks and brush. The fireplace, as well as the old chimney itself, was almost choked with spider webs and the trash that had lodged in them; but with a roar the flames soon swept them clean. Now we put up the shutter and closed the front door. The firelight scattered the gloom, but seemed powerless to banish it altogether.

Frank's saddlebags were soon open between us, and though our surroundings had depressed our spirits they had not depressed our appetites.

The storm was still holding off when we began our supper. We talked of everything but "ha'nts." For some reason neither of us cared to allude to them again.

In the midst of our meal came a roaring among the treetops outside, and almost at the same time big rain-



drops began to patter on the roof. Slowly they spattered the clapboards at first, then faster and harder, harder and faster. Present both of us gave a frightened start. Something had struck the roof a resounding whack.

"What was that?" exclaimed Frank, turning a startled, puzzled face toward me.

"Somebody must have hurled a stone," I replied.

Soon another stonelike object smote the clapboards, then another and another, all with deafening violence. Now the storm burst upon us in its fury.

"Hail!" shouted Frank, leaping to his feet. "Come on quick. We're in for a hailstorm!"

Out we both rushed into the darkness; and though the water and ice pelted us frightfully, we soon had our horses safe in the shelter of the shedroom. There we had to stand and hold them to keep them quiet; for the lightnings were now gleaming and the thunders crashing constantly, and the pelting of the hailstones on the roof had turned to a thunderous roar. Soon the lightning-flashes showed the ground white outside with deepening ice.

Soon the hail slackened and ceased, but the rain kept falling in floods. Now we fastened a stick across the door of the leanto and left our horses inside. Having rekindled our fire, we finished our supper. The hail had chilled the air.

It was Vic's fierce growling, almost in my ear, that finally aroused me. Now I became conscious of something or somebody moving about a few feet away. And while I was wondering what it could be the most blood-freezing, unearthly scream or shriek that had ever startled my ears rang out in the very room with us.

Both Frank and I were on our feet instantly, wonderfully wide-awake now.

"Did—did you ever hear the like?" Frank whispered, half gasped.

"No, I never did—in all my born days I never did!" I whispered back. "It must have been that—that—that thing."

We stood still and listened. Again something or somebody began to move about over the puncheons, just where we could not tell. It had been easy in broad daylight to declare our disbelief in "ha'nts." But here in the pitchy darkness, with those mysterious noises close by and that awful scream ringing in our ears our disbelief was very seriously shaken. Vic, backed up against me, kept growling, but in a badly frightened way. Putting my hand down to quiet her, I found every hair on her slim little body standing erect from anger. And I have a strong suspicion that the hairs of my head may have been doing likewise—from a very different cause.

"What could it have been, Frank?" I whispered. But he did not reply. Those mysterious movements had begun again. Then, suddenly, that same blood-curdling scream started up again. And scarcely had it started when another one joined in, and then others, all in the same room with us!

"Let's get out of here!" I cried.

"The quicker the better!" shouted Frank.

And even before that medley of shrieks and screams had died away we had found the door, torn it open and rushed forth into the rain and darkness!

A hundred yards I fled, with my hands held before me to ward off unseen trees. The darkness appeared solid. How much further I might have run in my panic is uncertain, but I was suddenly stopped by plunging headlog over something.

"Frank, where are you?" I shouted, under the impression for the moment that the ha'nts had seized me and that I might need assistance to break loose from them.

"Here I am!" he called back, from thirty or forty yards ahead. Like myself he had not been letting the grass grow under his feet. "What's the matter, Travis?" he called again, this time coming in search of me.

But now I was on my feet and had learned what had happened.

"Nothing serious," I replied. "I just ran over a tree or log or something, and turned a few somersets. What was that—that—those awful things, anyhow?"

"Sounded like—like the people the Comanches murdered."

"Yes, it did," I agreed with him. Our excited imaginations were equal to anything just now.

"Reckon it could have been the ha'nts that fellow told about?"

"I—I—don't—don't believe in ha'nts," was my reply, through teeth that would persist in chattering.

We were barefooted, and the rain, still falling slowly, sent a chill through me.

"Neither do—did I. But what else could it have been, Travis?"

That was more than I could tell him. So we groped our way together, then stood still in the rain and the black night, waiting and listening and shivering. Our horses could be heard snorting loudly. Vic, who had followed me, sometimes barked and sometimes reared up against me and whined anxiously. Still we stood and listened.

Strange sounds were issuing from the old house. Soon they grew louder. Here Frank uttered a half-angry, half-disgusted exclamation.

What a pair of silly cowards we are!" he burst out. "It's just animals—some kind of woods 'varmints.' Don't you hear them fighting?"

He was right. Two or more animals could be heard in furious combat. The battle finally came to an end, but they kept snarling and spitting at each other. Whether they were wildcats or panthers or what they were we could only guess.

"But how did they get into the house?" I wanted to know. "The front dor was shut, and—"

"They might have come in through the shed room," Frank suggested. "Oh, if I just had my old sixshooter and a light!"

The rain, slowly though it fell, was soaking us through, and we groped our way toward the cabin. The unknown "varmints" were still quarreling noisily, growling and screaming and hissing by turns. After drawing near where the house was believed to be—we could not catch the faintest glimpse of it—I made a discovery:

"Frank, they're not in the big room at all; I mean down where we were. Those sounds come from the roof. The varmints must be up in the loft."

"That's just where they are! They crawled in at that hole in the gable-end. Good hiding place for them up there. The hail or rain drove several of them in, and they're fussing for possession. They were screaming at one another when they scared a couple of gumps half out of their senses."

"And wholly out of their shelter, which is even worse this kind of a night," I shivered.

"Something's got to be done," Frank announced. "I don't want much more of this. I've got a match or two in my pocket. Let me see if I can strike a light."

He stood in the door and scratched match after match on the inside of a log, but all his matches were damp and missed fire. The quarreling was still under way upstairs, and he finally stole in, groped about till he found the saddlebags, then sprang back to the door with them. Now we were in possession of both matches and a formidable weapon.

The sixshooter he put into my hands. "Be ready when I strike a light," he whispered. "Might be a panther in there."

I grasped the weapon eagerly, and felt my courage rise with a bound. As the match flared up the noises in the loft ceased instantly. Cocking the sixshooter, I stepped inside, ready to do battle, if necessary, to regain possession of our shelter. But the animals we had heard, whatever they were, were all in the darkness of the loft.

The last stick of our wood had been burned and the fire had gone out; but there were plenty of leaves in the leanto, and we brought in some and started a blaze in the fireplace. Not knowing what might be over our heads, we moved about noiselessly, and spoke only in whispers. Vic, with her eyes fixed on the loft and her sharp little nose snipping the air, kept growling angrily, her hair straight up.

"Travis," Frank said, as soon as we had got our fire started, "we can't stay in here with that pack of varmints up there. We don't know what minute a panther will jump down on our heads. We've either got to move out into the rain and give them possession or drive them out."

"I've had all the soaking I want for one night," I answered, feeling of my dripping clothes. "We'll rout them out."

"But how?"

I flourished the sixshooter. "What's the matter with this? It's big enough to knock over a buffalo or a grizzly."

"Rather risky business, tackling panthers in such close quarters," he objected. "I can shoot pretty well with a gun, but no telling what I'd hit with that old concern."

(Continued on page twenty three.)

FAMILY CIRCLE

Write to the Editor.

ALICE W. BARLAND, Editorial Contributor.

# Christmas Packages

## For the Soldiers and Sailors

Christmas packages for the army overseas and marine corps detachments serving with the army will be limited to one three-pound box for each man, and that must be sent only in a prescribed container and upon receipt of a label from the man himself. Those labels General Pershing is having prepared and distributed, one to each man, to be filled out by him and mailed to any person he may select.

The containers, which will be available shortly, can be secured upon presentation of the label at the nearest Red Cross chapter, or if there is no Red Cross chapter in the community at the postoffice. The boxes being prepared will give the best protection to the contents, with the least possible weight. The size decreed, 9x4x3 inches, does not admit of either many or large presents, and the box must be packed so that it does not bulge nor weigh over three pounds. It must be mailed November 20 in order to secure delivery by Christmas. Aside from these orders, the only restrictions regarding package or content are against alcohol in any form, liquids, matches, labeled safety or not, and other inflammable substance. This year all packages must be referred to the Red Cross for examination before mailing.

In the navy a smaller and more scattered force permits of greater leeway as regards the Christmas box. The sailor's package may weigh as much as 20 pounds, whether sent by parcel post or express. If directed to a vessel abroad it should reach New York not later than November 15. Boxes must be of substantial material, of wood if sent by express, and must have hinged or screw tops to facilitate opening for inspection. The navy follows the rules of the army regarding explosives and alcohol, and requires perishable food to be packed in cans or glass jars.

Correct addresses of overseas army packages are insured by having each soldier fill out his own label, which is to be pasted on the cover of his box. To this designation should be added the sender's full name and address, placed in the upper left-hand corner of the side addressed. The navy department also urges the return address, and suggests that the package be labeled "Christmas box." According to navy orders, express packages are to be forwarded "Care Supply Officer, Fleet Supply Base, Twenty-ninth street and Third avenue, South Brooklyn, New York." Parcel post is to be sent according to the mail address given by the sailor for letter mail.

# To Cook Rabbit

## Fried, Roasted and Other Ways

It is important to kill and dress your rabbits in a clean, neat manner, so the carcass will look attractive. When cleaned and dressed place in cartons with clean white paper tucked underneath and they will command the highest market price.

When dressing a rabbit, hold it by the hind legs, with head hanging downward, strike a sharp blow with a stick on the head behind the ears, then cut the throat with a knife to allow it to bleed, then commence to take the hide off, beginning at the hind legs, which should be held up firmly by two strong cords. When started the hide pulls off very easily. If in the summer the fur is of very little value, but in winter it should be carefully preserved and a market secured.

Rabbits for fryers should be killed at from 2 to 3 months old, and for roasting or stews up to 1 year, but they are tenderer at a younger age than one year. They should always be well fed on either greens or well cured clover or alfalfa and grain, and when dressed should be plump and attractive.

### Fried Rabbit.

Cut in eight pieces; have your frying pan real hot; put any fat you may have in the pan; when brown add rabbit, sprinkle with flour and keep turning until browned; then add water, pepper and salt and let boil until gravy is smooth.

### Roasted Rabbit.

Lay rabbit in salt water for an hour; prepare dressing as for fowl. Stuff rabbit, cover with thin slices of bacon or a few pieces of butter or any kind of fat; pour a cup of hot water in the pan and bake one hour, basting occasionally. Add a little lemon juice to the gravy. Thicken the drippings with browned flour, to which should be added a few onions and a little of the dressing. Serve on platter garnished with greens and slices of lemon.

### Modern Rabbit.

Cut rabbit in as small pieces as possible. Brown well in a frying pan in hot butter or drippings. Add a few onions chopped fine and some browned flour. Season to taste and boil half an hour, then put in fireless cooker for several hours until meal time. This is delicious.

### Rabbit Stew.

Cut rabbit in pieces, put in stewpan, cover with boiling water and stew for one hour, adding more water if necessary. Season with salt and pepper, also a tablespoon of butter browned with flour. This plan can be varied with onions or any kind of vegetables one may have handy. The quickest and simplest method of preparing rabbit for the table and is unexcelled.

### Rabbit Pie.

Stew rabbit as above, put in deep pudding pan and cover with thick pie crust and bake until nicely browned. This will make a splendid meal for six people.

## WHAT OF THE LATE TOMATOES?

### Ripe or Green, They May Be Put Away for Winter Use.

Ripe tomatoes may be canned, dried, made into paste, marmalade or pickles. Green tomatoes may be brined whole for winter dishes or sliced and brined for pickles or made into marmalade. Save them all. Here are a few recipes from the U. S. food administration:

### Green Tomato Marmalade.

Two pounds tomatoes, 2 teaspoons ginger root, 1 1-2 cups sorghum, 2 lemons cut thin. Cut large green tomatoes in cubes, crush ginger and place in cheesecloth bag. Add sugar and lemon. Cook slowly without stirring until ingredients are tender and mixture is thick. Seal while hot.

### Tomato Butter.

Ten pounds ripe tomatoes, 6 cups sorghum, 3 pounds apples, 3 cups vinegar, 1-2 ounce stick cinnamon, 1-4 ounce whole cloves, 1-2 ounce ginger, 1-4 ounce mace. Tie spices in a bag and boil all ingredients together about three hours, or until thick, stirring frequently. Remove spice bag and seal.

### Tomato Carrot Relish.

One cup ground carrot, 2 cups ripe tomatoes, 1 cup sorghum, 1 teaspoon ground horseradish, 1 teaspoon ginger, 1 teaspoon vinegar, 1 lemon sliced thin. Cook carrot until tender, add tomatoes peeled and sliced and other ingredients. Cook slowly until mixture is thick. Pack in hot jars and sterilize.

### Green Tomato Mincemeat.

Two quarts green tomatoes, 1 1-2 cups sorghum, 1 pound seeded raisins, 1-4 cup citron, 1 1-2 pounds chopped apples, 3-4 cup chopped suet, 1 tablespoon salt, 1 cup cider vinegar, 2 teaspoons cinnamon, 1 teaspoon cloves, 1 teaspoon nutmeg. Chop tomatoes or run through meat grinder using coarse blades and drain off juice. Cover with cold water and let it come to a boil. Scald for half an hour and then drain thoroughly. Repeat until the tomatoes have been boiled three times. Add all ingredients except spices, stir well together and cook until thick. When cold add spices and stir thoroughly. Heat and seal in glass jars.

### Pumpkin Butter.

One gallon cooked mashed pumpkin, 1 quart or less sorghum, 1 gallon boiled cider, spices to taste. Boil about two hours and stir constantly, or cook in stove until proper consistency. Seal while hot.

## APPLE FORECAST VERIFIED.

The prediction of $50 a ton bulk apples, f. o. b. shipping point, recently made by the writer, are being verified at Caldwell. Quite a number of cars have lately been sold at that figure, orchard run, clean stuff, regardless of size.

The forecast on box apples is also being realized, and prices for leading varieties are stiffening each week. Well-informed apple men fear shortage later on, as most of the light crop this season is being rapidly shipped out.

Winter Bananas and Delicious are bringing the grower, boxed, $2 to $2.25, right at home. Good Romes, fancy and extra fancy, combination pack, are held at $2, and other good winter sorts are about the same.

This reflects the condition of the local markets. Culls of any kind, not decayed, are in great demand for manufacturing into byproducts, and so the grower who has anything in the shape of an apple does not have to look far for a customer.

A. E. G.

## TO CLEAN AN OILED MOP.

These oiled mops lose their efficiency when they become too dirty and caked with dust. They may be washed in strong hot suds, but this can be done much better if the mop is first washed in gasoline to cut the oil. Gasoline which has been used for cleaning should be saved for this purpose. After the mop is well washed in gasoline let it dry, then wash in suds. Then when thoroughly dry, oil it again and it is as good as ever. The best way to apply the oil is to pour a little in the tin box the mop comes in and put the mop with the strings down into the can and let it remain for a few days to evenly absorb the oil.

## POSTPONE FARM BOND SALES.

The federal farm loan commission has announced that no more bonds of the federal farm loan bank will be offered for sale this year, owing to the general policy of curtailing bond sales that are not absolutely necessary during the war. The commission announces that the banks have on hand, as the proceeds of the last bonds sold, sufficient money to take care of the applications for loans to farmers up to nearly the end of the present year. Bonds will again be offered probably early next year in order to keep the land bank operating actively.


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# A Few War Recipes

By MARGARET PALMER.

The following suggestive recipes have proved very helpful to us in using rice, hominy, eggs, fish and pearl barley.

**Rice and Fish Balls.**

One or two cups of cold rice, one cup of flaked fish, left over fish can be used, one egg. Beat egg until light, add rice, fish, a little salt and pepper. Form into balls and bake until brown. This goes well with almost any vegetable. They are nice for breakfast or supper.

**Rice, Codfish and Eggs.**

Two cups of cooked rice, one and one-half cups of boiled or left-over creamed codfish, one tablespoon butter substitute and four eggs. Have ready a well-greased casserole or a baking dish and arrange in alternate layers the rice and fish, finishing with the rice. Break the eggs on top whole. Season with salt. Dot with the butter substitute. Bake until well heated through and until the eggs are done. This dish can easily be prepared in individual baking casseroles or cups and an egg placed on each.

**Hominy and Eggs.**

A half a cup of boiled hominy, two eggs, one cup of milk, one tablespoon of butter substitute, a little salt. Add the milk to the hominy and beat in the eggs with a fork, add the salt, fat and pour into a well greased dish or casserole and bake 20 minutes. This can be made into a pudding by adding a little sweetening and a few dates or raisins.


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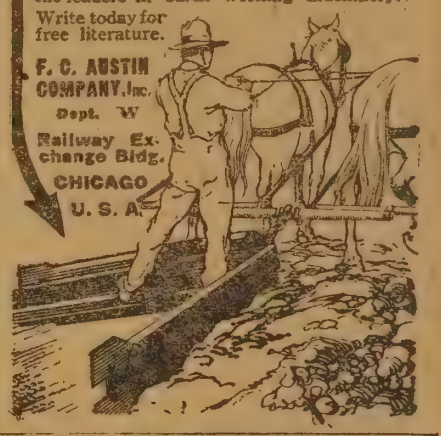
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**Hanes for the boys!** Hanes Winter Weight Union Suits for boys are the very limit of value—material, workmanship, warmth! They are the men's suits in boys' sizes. ***Such value has never before been put into a boy's union suit!*** You'll realize that as quick as you see one!

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New York Office, 366 Broadway

*Warning to the Trade—Any garment offered as Hanes is a substitute unless it bears the "Hanes" label.*




### Dearest of Plamates Is Ella.

Dear Aunt Nellie: I live on a farm seven miles from Wheeler. We have two cows and two calves, many horses, chickens and geese. I have to walk almost one mile to school. When I started to school last fall my dearest little playmate, Ella Behrenda, and I were in the fourth grade, and now we are in the sixth, class A. We both want to go through high school and be schoolteachers. Ella won the gold medal at Ephrata, May 4. I learned a reading, too, but I couldn't go. I'm glad Ella got the prize. She and I sang a song at the county contest at Neppel. The name of it was "When Pershing Gets the Goat of Kaiser Bill." Father and mother have Liberty bonds. I have three sisters. Their names are Barbara, Pauline and Eleanor. I haven't any brothers in the army. Today I made the paper beads that Aunt Nellie showed us. I made them of green paper and strung two white glass beads between each green one. They look very pretty. My birthday is April 4. I was 12 years old. Have I a twin? If so please write to me.—Margaret Ottmer, Box 41, Wheeler, Wash.

### Blue Eyes and Auburn Hair.

Dear Aunt Nellie: I am 13 years old. I have blue eyes and auburn hair. My birthday is July 8. I am in the ninth grade. I live on a 160-acre farm. We have gasoline engine and irrigate about 15 acres of alfalfa and one and one-half acres of garden. We have three horses, two cows, one calf, four cats, two dogs, one pup and several head of sheep. I have eight sheep of my own. Their names are Helen, Bessie, Ruby, Flora, Nora, Shirley, Herman and Flossie. I have one brother and one sister. Their names are Dea and Frances. Our school organized a Junior Red Cross and I am making a scarf. We only have five members. We sold a pig and give a basket social to raise money for the Red Cross. I can crochet, tat and do plain knitting. What is it that has four legs, two wings, is flat on the back and never sings .When is a bed not a bed? When is a dog's tail not a dog's tail? What is the difference between a pie and a pair of pants? I will answer the puzzles next time.—Derla McManamon, Othello, Wash.

### Rivers Beautiful in Springtime.

Dear Aunt Nellie: I am a girl 13 years old. My birthday is December 9. Have I a twin? If so I wish he or she would write to me. I live on a wheat farm about seven miles from Snake river and five from Palouse river. They are very beautiful in the springtime. The Palouse falls are about five miles from here. They are 195 feet high and are situated in some very beautiful rocks. I live seven miles from Hooper. Hooper is a village situated on the Palouse river. It is a small village but has some beautiful buildings. I am in the eighth grade. My favorite studies are geography and history. How many of the cousins like them best? I go to district No. 183. This part of Whitman county is not thickly settled. I would like to correspond with Josephine Wagner, Tekoa, Wash. Papa is haying now. I milk a cow every night and morning and dig weeds out of the potatoes and corn. I hope my letter will be interesting to every cousin. I won $20 worth of war savings stamps. I will write more letters.—Bessie Ross, Box 3, Hooper, Wash.

### Hester Likes the Country.

Dear Aunt Nellie: I was 10 years old September 28. I go to the Waterloo school. We have a Victrola at our school. I have light brown hair and brown eyes. Have I a twin? If so I wish he or she would write me a letter. I have a pet lamb and I like her very much. Her name is Flossie. I live on an 80-acre farm near the Columbia river. I like the country very much. We have six horses, five cows and three calves. I have one war saving stamp and have knitted some wash rags for the Red Cross. I have four brothers and three sisters, Archie, Clarence, Milton, Harry, Helen, Goldie and Sylvia. I have two cousins in France that I know of and some more in the training camps.—Hester Eslick, R. R. 1, Daisy, Wash.

### Cans Fruits and Vegetables.

Dear Aunt Nellie: I am 13 years old and will be 14 next April 21. Have I a twin? If I have I would like to hear from her. I am in the seventh grade. I have four brothers and seven sisters. One of my brothers passed the eighth grade this last year and one of my brothers will go to the army. Three of my sisters are married. We have not very far to go to school. I like spelling the best of any study. There are eight boys in our school and seven girls. I picked strawberries this summer for two days at 40 cents a crate and I earned $2.40. I picked three crates each day. We have organized a canning club for the boys and girls. I belong to it. I have canned some raspberries, corn and beans. I also belong to the Junior Red Cross at school. The girls in our school have made a quilt already for the Red Cross and the boys are snipping old goods to make the soldiers pillows and the women have organized a Red Cross. They sew in a little old house near the school house. This is the first year we have taken the Farmer and we like it very much. I like to read the letters the best of all. I think it is very interesting to find a twin. I will write again.—Bertha Schoepke, R. F. D. 1, Greenacres, Wash.

### Likes All Her Studies.

Dear Aunt Nellie: I live out on a large wheat farm in Adams county about five miles from Benge. I am 12 years old and in the eighth grade. I like all the studies pretty well. We have quite a few horses on the farm. Some of their names are Denver, Nance, Clide and Lady. We have a calf named Nellie and a lamb named Fanny. She drinks milk yet and eats grass. We have four little kittens who are just the size to be cute. Two are blue, one is black and one is gray. We have a dog that we call Joe. Can any one write and tell me what we could do in a patriotic club and maybe we could start clubs in different parts of the country. In each place that one is wanted we could have them choose officers for themselves and then we could see what we could do for the Junior Red Cross. I think it would be nice if my cousins would like to. This is the first time I have written to the Children's Corner, and my sisters and I are sending ours in the same envelope to save paper and stamps. I hope to hear from Aunt Nellie, about my plan and from my cousins.—Lena Duncan, Box 156, Benge, Wash.

### Picks Gooseberries for Canning.

Dear Aunt Nellie: I am the only girl in the family, but I have two brothers whose names are Loran and Oliver. I have light hair and blue eyes. I am 10 years old and my birthday is October 27. Have I a twin? If I have I wish they would write to me. We have a car which is called the thrift car. The boys have a beautiful black saddle pony which we call Black Beauty. She has a white star in her forehead. May I join the Children's Corner? I love to read the letters written by the cousins. We live on the farm and I like it very much better than in town. I know how to knit, tat and crochet, but I don't have time to do any of them. I pick gooseberries for mama to can. We have strawberries and raspberries and vegetables in our war garden. I have a pretty little black and white spitz dog which we call Buster. I have a calf which I think I will sell and buy war saying stamps with the money. I am in the sixth grade at school and I like school fine. I will give some riddles: Why does a miller wear a white hat? Why is a washerwoman like Saturday?—M. Anderson, Garfield, Wash.

### Reva Milks Two Cows.

Dear Aunt Nellie: I am 12 years old and am in in the sixth grade in school. My teacher's name is Miss Rogers. We are going to have her two years. My birthday is May 20. Have I a twin? If I have I wish he or she would write to me. I am five feet three inches tall. If there is no twin, I wish one of the cousins would write to me anyway. I have two miles and a fourth to go to school. We are milking about 20 cows. I can milk a little. We are feeding 15 calves now. I ran a nail in my foot. I just began milking this spring the 1st of May. I milk two cows. At the Red Cross sale if they sold everything they would get about $2000 in everything. I like to go flower picking in the spring.—Reva Lamb, Box 162, Coulee City, Wash.

### Will Come Again.

Dear Aunt Nellie: I live on a 10-acre farm two and a half miles from Kennewick, with my aunt and uncle. I am 13 years old. My birthday is December 28. Have I a twin? If so I wish they would please write to me or any one else who sees this. I read the letters in the Corner and find them very interesting. Today I wrote to Viola Tarbert, one of the cousins. We raise tomatoes, muskmelons, potatoes and a number of other things here. We have 600 little chicks, also a lot of big ones. I have no brothers or sisters, and get quite lonesome sometimes. I would gladly answer any letter. We have a big bulldog whose name is Bull, and a little puppy, whose name is Razz. I will write again some other time.—L. Lita Forslund, Kennewick, Wash.

### Six Dear Little Ducks.

Dear Aunt Nellie: I was so interested in the Corner I thought I would write for the first time. My birthday is July 24. I was 12 years old. Have I a twin? If I have I would like to hear from her. I am in the eighth grade. I have two miles and a quarter to go to school. In spring and fall I have to walk, but in winter my brother takes me to school in a wagon. I live about 30 miles from Spokane. I like to ride in the auto about 30 miles. I'll send my picture to you if you would like to have me. My sisters and I have a little camera and I'll send you a picture of our house, too. We have six dear little ducks, which I think a lot of. Verna Flower, R. F. D. 1, Box 5, Fairfield, Wash. We surely do want your picture, dear. If it is clear, perhaps we could print it. Aunt Nellie.

### Go Riding in Their Car.

Dear Aunt Nellie: I am 9. I have a light complexion, with blue eyes and gold hair. My hair is naturally curly. I am four feet and eight inches tall. I have two brothers and one sister. I am 10 years old. My birthday is May 6. We have eight head of horses and seven colts.

We milk two cows, Roany and Blacky. We have 11 head of cattle and 12 calves. We have four sows and about 29 little pigs. We have a car and go out riding every Sunday. Mama has 18 White Leghorn chickens. I have six little Leghorn chicks and a bantam hen. I live on a 480-acre farm. We have 85 acres of wheat, seven of oats, one and a half of potatoes, 12 of maize and five of alfalfa. Mama is a member of the Red Cross. My two brothers and I have five thrift stamps apiece. For pets I have only one cat. His name is Tom. We have a big orchard. There are apple trees and cherry trees in it. Have I a twin? If I have I wish she would write to me. We bought a tractor and a plow and papa is plowing 120 acres.—Alice Clifford, Greenacres, Wash.

### Drive One Pony to School.

Dear Aunt Nellie: I was 12 years old July 22. Have I a twin? If so I wish she or he would write to me. I have two brothers. Their names are Everett and Shannon. Everett is 13 years old and Shannon is 9. We go three miles to school. We drive one pony to school. Her name is Dolly. I am in the sixth grade. My papa died three years ago, May 29. He was good to me. My mama got married June 5, 1918, to another man, just as good as the one she had before. Mama knew he would be good to us children if she married him. We lived on a 160-acre farm. Mama rented the place to my uncle, and June 10, 1918, our house burned down. It was a seven-room house, so you may know it was a nice big house. We live on a 180-acre farm now. We have five horses and four colts, and we have seven cows. I have a pet kittie named Pet. We have one pig and one dog. The dog's name is Chub. I will write again.—Albert A. Lund, Miles, Wash.

### Jump in After the Fish.

Dear Aunt Nellie: Grandpa takes the Farmer and I enjoy reading the cousins' letters very much. I was 13 years old December 4. Have I a twin? If so I would like very much to hear from her or any of the cousins that wish to write to me. I live on a large farm. For pets I have one black dog, two cats and one black pony named Midget. I like to ride her after the cattle and horses. I used to ride her to school, but last year I went away to school so she had a rest. I am in the eighth grade. There is a creek half a mile from here where some fish live. I go fishing sometimes, but the fish are so smart sometimes I can't catch any. If I can't catch them with the hook maybe I can jump in after them.—Mable Proctor, Route 3, Box 40, Wenatchee, Wash.

### Maude's First Corner Letter.

Dear Aunt Nellie: This is the first time I have written to you. I am 13 years old. My birthday was May 8. Have I a twin? If so I would like to hear from her. We have two incubators setting and we have nearly 150 little chickens. I am in the sixth grade. I live about one-half mile from school. I am going to write again.—Maude Lackey, Fruitland, Wash.

### Dog Goes After the Cows.

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. For pets I have a dog, cat and a chicken, but I like my dog the best. He is white with brown spots. He goes with me after the cows. That is why I like him so well. Have I a twin? If so I wish they would write to me.—Hazel Lackey, Fruitland, Wash.

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Address all letters to Aunt Nellie, care of The Washington Farmer, Spokane, Wash.




**Plow an Acre an Hour—on Kerosene**

HUNDREDS are doing it and more with the "Allwork"—the light tractor that's different. Burns kerosene perfectly—has the largest 4 cylinder motor on any 3 plow tractor—mounted crosswise on the frame. Direct spur gear drive, no intermediate; belt pulley on direct drive from crank shaft extension. Four wheels; turns in a 12 foot radius. The

**Allwork KEROSENE TRACTOR**

is proving one of the biggest successes in light tractors. Its low upkeep cost, all around usefulness, ease of handling, great store of power make it the popular tractor everywhere. Built with the construction that insures years of good service—backed by an organization that can give you quick, dependable service. Satisfied owners everywhere. Write today for special folder.

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ALLWORK ALWAYS Burns Kerosene or Gasoline



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We pay full market value, correct weight and assortment, prompt returns. Write for prices. We want your business.

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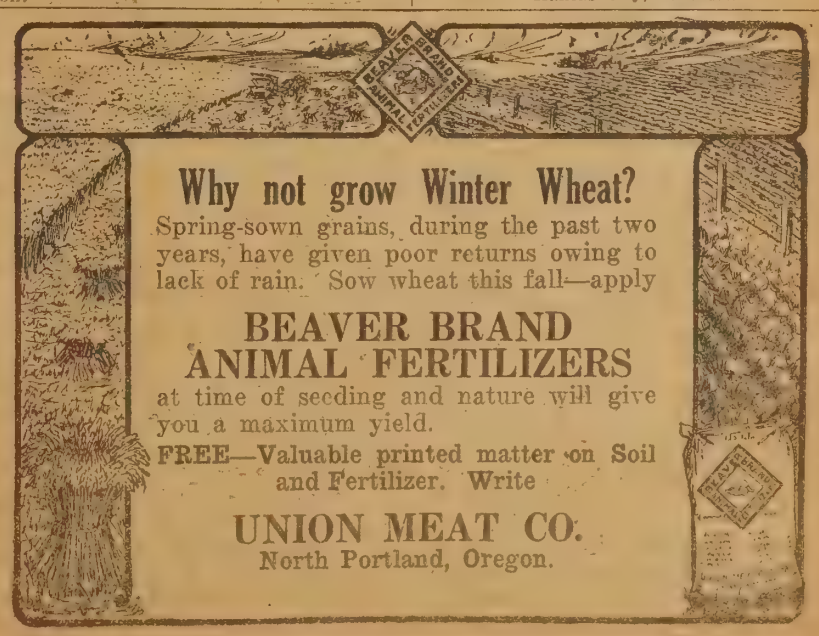
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**SHIP** you cattle where they will bring you the most money.

OUR northwestern customers have found Kansas City their best market. We specialize on Oregon, Washington and Idaho cattle.

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Spring-sown grains, during the past two years, have given poor returns owing to lack of rain. Sow wheat this fall—apply

**BEAVER BRAND ANIMAL FERTILIZERS**

at time of seeding and nature will give you a maximum yield.

**FREE—Valuable printed matter on Soil and Fertilizer. Write**

**UNION MEAT CO.**
North Portland, Oregon.

# News for Breeders

Among the awards made by the Holstein-Friesian association of America for the fiscal year ending April 30, 1918, the names of the following Washington breeders appear:

William Bishop, Chimacum, $210; Carnation stock farms, Seattle, $106.25; Charles Eldridge, Chimacum, $130.25; H. J. Evans, Ferndale, $22.75; J. H. Hulbert, Mt. Vernon, $83; C. E. Peabody, Seattle, $18.50; A. E. Smith, Seattle, $07.75; F. S. Stimson, Seattle, $259.75; J. G. Von Herberg, Seattle, $246.50; Yarr Bros., Chimacum, $8.75.

These awards were made on a milk or butterfat basis.

### IS A GRAND CHAMPION.



The picture above shows the grand champion Tamworth sow at the Washington state fair, shown by J. J. Oder of Yakima, Wash. She is of extremely large size, as the picture indicates, and is of true Tamworth type, the "approved bacon hog." H. A.

### HORSEBREEDING WILL GROW.

The blue ribbon stud at Colfax, Wash., received two cars of horses September 27 and another a few days since, making 60 stallions and mares now in the barns. Mr. Metz reports the sale of 70 horses last season and expects to sell more the one coming. He laughs at the idea of the tractor displacing the horse, but says it is a helper, especially in these times when the greatest possible production is needed. He believes farmers are just waking up to the fact that there is a shortage of horses, and thinks horsebreeding will be increased the next few years. H. A.

### SHORTHORNS TOP THE MARKET.

Recently two loads of Montana Shorthorn steers sold on the Chicago market for 18 cents per pound, the world's record for range steers up to that date. The Wisconsin record on the Chicago market was made by a load of Shorthorns. Iowa broke the world's record with a load of Shorthorns at $19.50, and early in October a load of Shorthorn yearlings from central Illinois exceeded this price by 10 cents, making the world's record of $19.60 per hundredweight.

### MUST SHIP MUCH MEAT.

Figures were presented to the recent convention of the American Meat Packers' association at Chicago indicating that America must ship to Europe before July 1 next enough meats and fats to make a total for the year of 2,600,000 tons. This will be an increase over the previous 12 months of about 1,000,000 tons.

### SHIPS MUCH LIVE STOCK.

A report from Myers Falls says that Ike Brady, a cattle buyer, has shipped to the Spokane market during July, August, September and October more than $500,000 worth of cattle, hogs and sheep, bought from the growers tributary to that point.

### Got Results.

Lewiston, Idaho, Oct. 12, 1918.

The Pacific Northwest Farm Trio, Spokane, Washington.

Gentlemen:

I take pleasure in saying that during the past year I ran my small classified advertisement offering Shorthorns for sale in your classified columns. I received 750 replies and made a satisfactory number of sales. When I decided on a dispersal sale at my farm at Fenn, Idaho, September 25, I thus had a list of 750 names, to which I sent catalogs or other advertising matter, resulting in by far the largest gathering of people ever at an auction sale on Camas Prairie.

I believe any one who advertises judiciously in the Trio can not help but get satisfactory results.

WILLIAM MULHALL.

# Silage for Defense

The importance of silage in the win-the-war activities of America is recognized by the Utah state council of defense, which is taking part in a great campaign designed to add 1000 silos to those already on the farms of that state. The council estimates that this number of silos would enable the farmers to care for 50,000 more cattle than they are at present able to carry.

Besides the state council of defense, the farm bureaus, United States department of agriculture, state agricultural college, county councils of defense and similar organizations are enlisted in the movement. Sugar beet tops are urged as good for ensilage, as well as corn and other well-known crops. Particular effort is to be directed toward using parts of crops that are now entirely wasted, such as the peapods, which can be secured from the canneries at little expense, and which are said to make excellent ensilage.

### BOYS AND GIRLS MAY HELP.

America's boys and girls are to have a chance this fall to help win the war. Seven great organizations engaged in providing for the comfort and happiness of our soldiers and sailors the whole world over have joined to give the young generation this opportunity to do its share.

The Young Men's Christian association, the Young Women's Christian association, the National Catholic war council (the Knights of Columbus), the Jewish welfare board, the war camp community service, the American Library association and the Salvation Army, in their united war work campaign to raise $170,500,000 for the continuance of their war activities, will challenge every boy and girl in the country to serve and to sacrifice in the "great cause." A separate division of the campaign, that of the Victory Boys, will have for its goal the lining up of "a million boys behind a million fighters." The girls, too, will have a separate division, to be known as the Victory Girls.

Those enrolling in either division must pledge to earn and give an amount to be individually determined for welfare work among our soldiers and sailors; and this means that no boy and girl can give money he or she has not earned.

The war has called half our workers away from their ordinary peace-time occupations, leaving much work undone in the homes and in the home communities. As the boys and girls will find their tasks in these now neglected fields, their united effort will go a long way toward helping us keep our affairs in order


## High Class Percheron Stallions

### At Breeders' Prices

American bred horses out of the best imported dams and sires carrying the blood of **Moulinet, Calypso, Dragon** and, further back, **Besigue, Brilliant,** and other great Percheron sires.

We have stallions that will suit the most particular, and at prices you can afford to pay. Now is the opportunity to buy.

See them at the Lewiston Stock show, or send for photos, description and pedigrees.

**WM. MULHALL, Lewiston, Idaho**

## JERSEYS

COST GOES DOWN — *the PROFIT breed* — PROFIT GOES UP

WHEN you begin to substitute Jerseys for "beef-makers" you immediately begin to see your feed costs go down and your milk profits go up. The Jersey, while famous for beauty, is even more noted for the profit she yields in rich milk, fancy butter and premium cheese. In these days of high-priced feed the Jersey is supreme.

Write Breeders for Pedigree and prices. Let us send you some eye-opening facts about Jerseys. These facts have started many a man on the road to dairy success.

**THE AMERICAN JERSEY CATTLE CLUB,**
**314 West 23rd St., New York City.**

### Golden Glows Chief 61460

One of two gold medal Jersey bulls west of New England states. Bred by us. Two of his sons in service in our herd. A few animals, all ages, both sexes, for sale.

**IRON MINE FARM, Oswego, Ore.**
W. M. LADD, Owner.
D. BROOKS HOGAN, Mgr.

### All High Record Blood

Bull calf out of Lucy of P. V., full sister to St. Mawes Susie; 936 lbs. butter in a year; to St. Mawes Blossom, 823 lbs., and to Susie's Twin Maiden, 642 lbs. Sire, Poppy's St. Mawes, son of St. Mawes Poppy, 1120 lbs.

**ED CARY, Carlton, Ore.**
Station, La Fayette, Ore.

### Doerfler Farm Jerseys

Have largest herd average in the world considering size. Entire herd of eleven head average 599.42 fat. Herd headed by Gertie's Poppy's St. Mawes. The Cary breeding is our standard.
See us at the state fair.

**F. A. DOERFLER, Silverton, Ore.**
Phone 54 Silverton or 43F24 Salem.

### Anoka Farm Jerseys

We have some choice young bulls up to six months old for sale, whose sire has a 714-lb. dam and 1120 lb. granddam. St. Mawes breeding. The Best in the West. Prices very reasonable. Address

**R. B. SEELY,**
**R. 5, Sherwood, Ore.**
Shipping Sta. Wilsonville, on Ore. Elec. Ry.

### Register of Merit Cows

Three registered Jersey cows, with good register of merit records. Two are on test again and will increase their records; all in class AA. Two are bred to the great sire FOXHALL'S FERN LAD. Come and see them or write for prices and full particulars.

**FOX BROS., Silverton, Ore.**

### LYNDEN JERSEY FARM

Herd sire son of Fororio's Olindes Pegis, of Hood Farm and St. Mawes of Lynden, whose dam and granddam have records up to nearly 1000 lbs. of butter. Young bulls out of the Hood Farm bull for sale. Cows under official test and blue ribbon herd at Whitman county fair, 1917. You will find both type and production in the herd. For information write to

**P. MEENDERINCH, Lynden, Wash.**

### Ready for Service

Young bulls of Golden Glow's Chief, and King Mella Ann strains, out of register of merit dams. Priced to meet the unfavorable conditions. Write for full particulars and pedigrees.

**HENRY STEWART, Albany, Ore.**

### Dairymen, $75.00

buys your choice of two bull calves, both two months old; solid color, good individuals; out of register of merit dams and by bulls with heavy R. of M. backing. If you are looking for a bargain here it is.

**JOHN B. STUMP & SON, Monmouth, Ore.**

### Who Wants This Bull?

A double grandson of Kadia F., world's Jersey milk record for senior 4-year-old, 16,191 lbs. He is also a grandson of Holger and Engineer's Bluster. Because slightly broken colored, will be sold cheap. Other good young bulls and a few heifers and cows, same line of breeding.

**N. H. SMITH, Oregon City, Ore.**

### Goldie's Nehalem Beauty

won grand champion of the Jersey breed for production, 1917. Her record, 80 per cent basis, 1131 lbs. butter as 4-year-old. We have two bull calves sired by her son. Their dam's yearling records: 492 lbs. (average per cent fat, 6.08) and 433 lbs. butter. Both have been grand champions in show ring.

**CLIFFORD F. REID.**
Wilcox Bldg., Portland, Ore.

### Jersey Bull for Sale

I am offering at a sacrifice my young herd bull, dropped December 15, 1916. Has blood of Golden Glow's Chief and Majesty's Togo. None better anywhere. Write

**E. F. MARYATT, Grandview, Wash.**

### Edgewater Farm, Breeders

Foundation stock is from most noted Island Jersey families—Golden Lad, Golden Jolly, Oxford Lad, Old Raleigh—names that stand for high production and showring winners as well.

**E. T. SMITH. Myrtle Creek, Ore.**

### Meridian Dairy and Fruit Farm

Oldest Jersey herd in northwest Washington. Young stock for sale, both sexes, from good, producing dams. Herd headed by Kolander's Eminent 148256. A very fine bunch of young stock, both sexes, for sale.

**B. C. CRABTREE, Lynden, Wash.**

### Luckiamute Farm

Register of Merit A. J. C. C. Jerseys. Home of Octavia's Duke breeding. Daughters test as high as 7.53, second highest in U. S. A few good young bulls for sale.

**FRANK LAUGHARY & SON,**
MONMOUTH, ORE.

### ASHBURN FARM

REGISTER OF MERIT JERSEYS.

A bred herd, tried out for several generations by every breeding test. Only the best blood lines. Three proven matings. Nothing for sale except from tried sires. Increase of both sexes for sale.

**J. M. DICKSON & SON.**
**Shedd, Ore.**

### Must Be Sold

Bull calf dropped July 26, 1918. Sire, St. Mawes Koffee Violet Lad, whose dam's official record is 777 lbs. fat, 914 lbs. 85 per cent butter, 971 lbs. 80 per cent. A show bull, son of Rosaire Olga Lad, sire of 27 R. of M. daughters. Calf's dam a register of merit cow. Only $75 if taken at once.

**WARD L. HULL, Ballston, Ore.**

### ROSE LAWN JERSEYS OFFERS

First prize junior bull calf, Idaho State Fair, Minnidoka Co. and Twin Falls Co. fairs. Sire, Rosy's Jolly Golden Fern 135028.

Grand champion bull, above fair circuit. Dam Gem Nehalim Lassie, a reg. of merit cow line bred in blood of Hood Farm Torona, Oonan 23 and Figgis.

**S. H. KAYLER.**
**Twin Falls, Ida.**

### WAIKIKI FARM

Register of Merit Jerseys. Largest Jersey herd in the northwest. Young stock for sale.

**IRA P. WHITNEY, Manager.**
Route 7, Spokane, Wash.

### Ashnook Farm Jerseys

Young bulls by Silver Chimes of S. B., whose first 6 daughters average 710 lbs. 80 per cent butter. A few good cows and heifers for sale.

**DEL PERKINS, Carlton, Ore.**

### Jersey Home Jerseys

Young bull out of Olalla 2d, daughter of Olalla (806.25 lbs. butter as junior 3-year-old). Bull's sire, St. Mawes Prince, by Poppy's St. Mawes, and out of Gertie's Fern Princess (842.5 lbs. butter), both 80 per cent. Also other good young bulls.

**THOMAS WILLIAMS, Forest Grove, Ore.**

### St. Mawes—Rinda Lad

The two most popular strains of Jerseys in the northwest. Young bulls from register of merit cows for sale.

**G. G. HEWITT, Monmouth, Ore.**

### Jersey Farm Dairy

Peter Mouw's Poland China hogs, Cotswold sheep, White Leghorn and Buff Orpington poultry, carefully bred, great foundation stock.

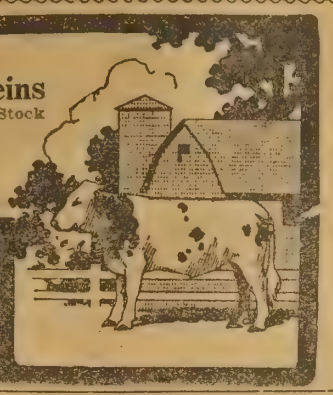
**E. S. PELOT, R. F. D. 5, Idaho Falls, Ida.**

# Breeders' Department

## HOLSTEIN CATTLE

**Breed Up Your Herd With Von Heim High-Testing Holsteins**

The better your stock the bigger your profits. Stock from the Home of Wholesome Holsteins means more milk and butter; more money from the young animals. Blood tells in Von Heim Holsteins. To make room, we are offering some fine young bulls and cows at very moderate prices. Write today for full information.



H. L. WALTHER, SUPT.
VON HEIM FARM
KENT, WASH.
HOME OF HIGH-TESTING HEALTHY HOLSTEINS

**Registered Holstein Heifer**

for sale; also May and June farrowed O. I. C. pigs, either sex, from matured sows, with pedigree; by a son from a grand champion sow. Also 18-month-old sows to farrow second litter this fall.

E. C. SCHUMACHER, R. 1, Granger, Wash.

**Registered Holsteins**

Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.

H. R. BOOMER, New Plymouth, Idaho.

**Holsteins and Berkshires**

All ages for sale.

HUGH NISBET, Chimacum, Wash.

## HEREFORD CATTLE

**Highland Stock Farm**

offers for sale Hereford bulls, 1 or 2 years old. One or a carload.

PLATT BROS. Genesee, Idaho.

**HOLSTEINS**

Well bred young bulls for sale.

THOS. CARMICHAEL, Gaston, Ore.

## POLAND CHINA SWINE

**Fox's Quality Herd Wins Again**

At the Oregon State Fair, 1918, first prize, senior boar pig; second and third, junior boar pig; first, senior sow pig; first, junior sow pig; second, futurity litter. The first prize junior boar pig and the first prize litter were sired by boars from my herd. Why not buy from top herd? They cost no more.

RAY J. FOX. Lyons, Ore.

SAMMY AND MOLLY WIN AGAIN.

Our herd boar, Sammy, and Hanna's Big Molly were again made grand champion Poland China boar and senior and grand champion sow, respectively, at the 1918 Idaho state fair. Correspondence solicited.

W. F. HOWARD & SONS, Caldwell, Idaho.

**Big Type Poland Chinas**

Mouw, Fesenmeyer and Herring strains, either sex. Also registered Shorthorn cattle; good individuals.

H. J. HOWSER, Stites, Idaho.

**BIG TYPE POLANDS**

Genuine—Guaranteed.

GEO. W. BUCK, Oregon City, Ore.

**BIG TYPE POLAND CHINAS**

Winners of first prize junior herd, Oregon state fair, 1918. Big Bob Wonder and Sammy blood boar pigs of all ages, also a few good gilts.

LOE FARMS, Silverton, Ore.

When you write to advertisers be sure to state that you saw their advertisement in this paper.

## SHEEP

**A. J. KNOLLIN**

POCATELLO, IDAHO.
Breeder of Pure-Bred Live Stock.

Established flocks of pure-bred sheep—Rambouillets, Cotswolds, Lincolns, Shropshires, Oxfords, Hampshires, Romneys.
RAMS FOR 1918 SERVICE FOR SALE.
Also a few ewes.
Also breeder of Shorthorn cattle, Belgian horses and Berkshire hogs.

**Romneys, Lincoln, Corriedale**

AND HAMPSHIRE EWES AND RAMS.

All pure bred, not registered. Have especially fine lot Hampshire ewe lambs, yearlings and three-year-olds. Any size lot. Write me on any kind of sheep deal.

H. STANLEY COFFIN, Yakima, Wash.

**YEARLING RAMS**

Get some new blood from our eastern bred stock. Price $30 each.

J. J. DOERFLER, Silverton, Ore.

**Shropshire and Hampshire Rams**

Registered stock. Spring lambs and yearlings. No ewes for sale.

GRANT B. DIMICK, Oregon City, Ore.

**CHAMPION OXFORD SHEEP**



Choice stud rams, lambs and yearlings; also a choice lot of yearling ewes, bred to imported rams and our best stud ram from imported stock.

First prize yearling and champion Oxford ram, leading fairs of western Canada and U. S. Pacific Coast.

H. S. CURRIE, ALBERTA, CAN. Castor, Box 56

## HAMPSHIRE SWINE

HAMPSHIRE HOGS

have won every feeding contest entered since 1914. Weanling pigs, gilts, bred or open. Our blood lines can not be beat.

TUTTLE BROS. Austin, Wash.

## BERKSHIRE SWINE

**Kintyre Farm Berkshires**

Weanling pigs, bred sows, service boars.

CLARK BROS, Yakima, Wash.

## ABERDEEN ANGUS

**Aberdeen Angus Cattle**

A. H. EAGLESON & SONS,
Boise, Idaho.

**BABY BERKSHIRE BOARS**

Also boars ready for service. Best breeding. Will ship subject to approval.

DR. GREEN & SON, Wapato, Wash.

## SHORTHORN CATTLE

# Live Stock Breeders!

## Here Is Your Chance

**Fifty of the great herd of Shorthorns owned by the I X L stock ranch in the Boise valley are to be offered at AUCTION WEDNESDAY, NOVEMBER 13, 1918.**



SOME OF THE COWS TO BE SOLD

Included in sale is the great sire, Diamond Count No. 487809; also 20 cows (10 Scotch), some with calf at foot, others bred; 16 young heifers (8 Scotch) and 14 bulls (4 Scotch).

This herd is of the highest registered type and in splendid condition.

The following registered Percherons are also to be offered at auction during this sale.

**Three yearling fillies, one 2-year-old in foal, six this year's colts.** **Five fillies. One stallion.**

The following farm machinery will be disposed of at auction: One combine, one 12-foot drill, one Smith Form-a-Truck, one self binder, three mowers, hay rakes, one 16 h. p. R. & V. gas engine nearly new, one ensilage cutter, one De Laval separator, one roller mill, one fanning mill, graders, scrapers and all kinds of implements and machinery.

Household furniture for what it will bring.

In addition to the above we are offering at private sale the following registered Percheron horses:

**One 4-year-old stallion**
**Two 3-year-old stallions**
**Five 2-year-old stallions**
**Four yearling stallions**
**Eight imported mares**

Will also offer at private sale mammoth jack Monarch, register No. 12248, 4 years old. This jack is justly considered the best in the state; stands 16 hands high and weighs nearly 1200 pounds. He has taken first prize wherever shown. Works quick and sure.

Also Monarch, the Second, register No. 23010; 1 year old. He has all the earmarks of developing into as good a jack as his sire.

Everything will go at a big sacrifice. The I X L ranch, consisting of 240 acres of highly improved land and excellent buildings, is for sale. It is 10 miles from Boise and five miles south of Beatty station.

It will pay you to travel far to attend this sale.

Write P. A. Sorensen, R. 2, Meridian, Idaho, for catalog and transportation to ranch on day of sale.

COL. E. MARSTERS & SON,
COL. AMOS MILLER,
Auctioneers.

**P. A. Sorensen**
Owner

# First Annual Auction Sale

—OF—

## Canyon County Shorthorn Breeders' Association

To Be Held at

**CALDWELL, IDAHO, FRIDAY, NOV. 1.**

FIFTY HEAD—35 females and 15 bulls. Females range from weanlings to mature cows. Ten bulls of breding age. Five young bulls.

Contributors.

T. W. Tarr, Wilder, Idaho.
L. M. Beals, Kuna, Idaho.
A. L. Wilson, Greenleaf, Idaho.
H. W. Dorman, Caldwell, Idaho.
Smeed Brothers, Caldwell, Idaho.
T. H. Griffith, Wilder, Idaho.
E. H. Fuher, Greenleaf, Idaho.
Charles Wells, Caldwell, Idaho.
Bert Bowman, Caldwell, Idaho.

Breeders and Farmers, make it a point to attend this, the association's first annual sale and get acquainted whether you are a buyer or not. We want you there.

Sale held under cover, corner 9th and Main streets.

DICKENS & MILLER,
Auctioneers.

If interested send for catalog to Charles Howard, Secretary, Caldwell, Idaho, R. F. D. 2, or J. W. Smeed, Sales Manager, Caldwell.

## DUROC-JERSEY SWINE

**Golden Rod Wins Again**

Our herd was largest money winner at Oregon state fair, 1918.

One excellent boar of breeding age, bred gilts and weanling pigs of either sex.

DOERFLER BROS., Silverton Ore.
A. N. DOERFLER, Mgr.

FOUR DUROC GILTS BRED TO FARROW this fall, also spring pigs, on hand.

E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE, Yakima, Wash.

## CHESTER WHITE SWINE

**Chester White Swine**

Choice weanling pigs; spring gilts and service boars.

FRED H. HOFFMAN, Albion, Wash.

REGISTERED SHORTHORN COWS.

Young bulls and heifers, sired by Scotch bulls; liberal terms.

CALDWELL CATTLE CO., Caldwell, Idaho.

## AYRSHIRE CATTLE

**Elbow Ayrshire Dairy**

Young bulls out of heavy-producing dams, sired by Willowmoor Sentinel 16th, a bull with big A. R. records on both sides.

J. R. MABEN, Reedsport, Ore.

**EDGEWATER FARM**

Young stock for sale, including senior calf, Edgewater Sentinel, grand champion 1918 Washton state fair. Herd government tuberculin tested.

ELBERT M. CHANDLER, Burbank, Wash.

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, Oct. 19.—Anxiety to even up trades rather than to risk surprise happenings over Sunday brought material advances today in the corn market. As a result the finish, although unsettled, was 1 3-8c to 3 1-8c net higher, with November $1.22 5-8 to $1.22 3-4 and December $1.18 1-4 to $1.18 3-8. Oats gained 1-2c to 3 3-4c. The closing in provisions varied from 20c off to a rise of 10c.

Bullish inferences drawn from the delay of the German answer to President Wilson's note had much to do with the evident tendency to reduce open trades in the corn market to a minimum. Shorts covered on a liberal scale as soon as business opened, and the top figures of the day were touched before the end of the first hour.

Reactions, which took place later, seemed to be due to moderate profit-taking on the part of the longs.

Oats followed corn, and after an advance receded somewhat. Country offerings to arrive were light.

Weakness in the hog market carried down provisions. Subsequently, however, the strength of corn led to upturns, but losses in pork, especially, were not altogether overcome.

### Cash Quotations.

CHICAGO, Oct. 19.—Corn—No. 2 yellow, $1.52@1.54; No. 3 yellow, $1.42@1.45; No. 4 yellow, $1.30@1.35. Oats—No. 3 white, 67@68 1-2c; standard, 68@69c. Rye—No. 3, $1.62 1-2@1.63. Barley, 90c@$1. Timothy, $7@10. Clover, nominal. Pork, nominal. Lard, $25.40. Ribs, $21.75@22.50.

### Pacific Northwest Grain.

PORTLAND, Ore., Oct. 19.—Grain, October delivery: Oats—No. 2 white feed, $54.50 bid. Barley—Standard feed, $48.25; asked, $48.50. November oats—No. 2, $54.50. Barley—Feed, $48.25; asked, $49. Oats—No. 3, $48; clipped, $49.50. Corn—Yellow, $55; mixed, $52.50. Eastern oats and corn in bulk: Oats—No. 3 white, $48; oats, 38-pound, clipped, $49.50; corn, No. 3 yellow, $55; corn, No. 3 mixed, $53.

### Minneapolis Grain.

MINNEAPOLIS, Oct. 19.—Flour—Unchanged. Shipments, 88,894 barrels. Barley, 84@92c. Rye, $1.57 1-2@1.58 1-2. Bran, $28.75. Wheat—Receipts, 972 cars, compared with 423 a year ago. Cash, No. 1 northern, old, $2.21 1-2. Corn—No. 3 yellow, $1.35@1.38. Oats—No. 3 white, 63 1-4@64 1-4c. Flax, $3.35@3.39.

## Portland Market.

PORTLAND, Ore., Oct. 21.—The butter market has become easier, but sellers have not reduced their asking prices on cubes. There is evidence of larger production in the country and the influenza closing order has had the effect of cutting down local consumption. With stock accumulating prices would no doubt immediately work lower but for the action of the city creameries during the week in advancing print prices.

Receipts of eggs are very small, and the market is strong and higher.

Poultry continues steady, with moderate receipts.

Dressed meat prices have become very weak with the declines at the stockyards and the lessened local demand.

The apple market is well stocked with orchard run and the cheaper grades, and the demand for fancy and extra fancy fruit is small. Prices range from $3.25 for extra fancy Delicious down to $1.25@1.50 for cooking apples.

Potato prices have not been lowered, but the demand is slow and prices weak. Yakima Gems are selling at $2@2.25 and Oregon Burbanks at $1.75@2.

Wool Administrator Green has resumed grading northwestern wools in storage here, and will value between 1,000,000 and 1,500,000 pounds for distributing orders in hand.

Hops, stagnant since harvest, are again showing signs of life, owing to the presence of an English demand. A few lots have already been bought for London account and will be stored here until they can be moved.

### Quotations.

Eggs—Oregon ranch, candled, 62@63c; selects, 66@67c.

Cheese—Jobbers' buying prices, f. o. b. dock, Portland: Tillamook triplets, 36c; young Americas, 37c a pound; Coos and Curry, f. o. b. Myrtle Point: Triplets, 35 3-4c per pound.

Poultry—Hens, 25c; springs, 25@30c; ducks, 30@34c; turkeys, 28@30c; geese, 16@18c.

Pork—Fancy, 20@22c.

Veal—Fancy, 20c.

Potatoes—Oregon, $1.75@2 per hundred.

Hay—Buying prices, f. o. b. Portland: Eastern Oregon timothy, $30 per ton; valley timothy, $29; alfalfa, $27; valley grain hay, $26@27; clover, $28; straw, $9@10.

Butter—Cubes, extras, 64c; prints, box lots, 65@66c; butterfat, 69c, delivered at Portland.

## Spokane Market.

SPOKANE, Oct. 19.—The following are the prices obtained by Spokane wholesalers in their sales to retailers, hotels, mining camps, etc., as reported by the federal bureau of markets in Spokane:

**Peaches**—Supply very limited. Few sales. Good quality and condition. Washington Octobers, $1.50 per box.

**Pears**—Home grown receipts moderate. Demand and movement moderate. Winter Nellis, Washington Bartlett, D'Anjou, etc., faced, $2.50 per box. Best keepers, $2.50 per box.

**Grapes**—Demand and movement slow. California Malagas, in 30-pound lugs and California Cornichons, in 27-pound lugs, $2.50.

**Apples**—Two cars Washington, one Idaho, arrived for storage. Approximately 130 boxes express, and home-grown receipts liberal. Very few sales. Delicious, extra fancy, Washington, $2. Jumble pack McIntosh Reds and Wageners, some wrapped, others jumble pack, faced, $1.50 per box.

**Tomatoes**—Home growns supplying market. Locals, ripe and hard ripe, 60c; green, packed in peach boxes, 40@45c. Pear tomatoes, in peach boxes, 75c.

**Onions**—Home growns supplying market and few California Australian Browns from storage. Sacked, per 100 pounds, $2.50. Locals, in smaller lots, 2 1-2@3c per pound for Yellow Globes and Danvers. Demand and movement only moderate.

## Live Stock Quotations.

### At Omaha.

OMAHA, Neb., Oct. 19.—Hogs—Receipts, 3000; market steady, 10c to 15c lower. Heavy, $16.75@17; mixed, $16.75@17; light, $17@17.30; pigs, $14.50@16.50. Bulk of sales $16.75@17.

Cattle—Receipts, 300; market steady. Native steers, $11@18; cows and heifers, $7@11; western steers, $9@14; Texas steers, $8@11; cows and heifers, $6.75@10.50; canners, $5.50@6; stockers and feeders, $6.50@13.50; calves, $6@13.

Sheep—Receipts, 100; market steady. Culls, $4.50@7.50; wethers, $6@9.50; ewes, $7@8; feeder lambs, $10@12.50; lambs, $13@14.25; yearlings, $10@11.

### At Chicago.

CHICAGO, Oct. 19.—U. S. bureau of markets.)—Hogs—Receipts, 11,000; market mostly 25c lower than Friday's general trade; some mixed and packing grades show 75c decline; early top, $18.15; practical top late, $18. Butchers, $17.25@18.15; light, 16.75@17.90; packing, $16.25@17; rough, $14.50@15.25; pigs, good choice, $14.50@15.25.

Cattle—Receipts, 2000; compared with a week ago, better grades of medium and western steers, 25c to 40c higher; common light, 25c lower; beef cattle and canning stock, unevenly steady to 25c lower; bulls, 25c to 50c lower; calves, 75c to $1 lower; feeding cattle closing 25c higher.

Sheep—Receipts, 15,000; compared with a week ago fat classes 25c to 50c lower; feeding and breeding stock unevenly 50c to $1 lower, ewes declining most.

### At Portland.

PORTLAND, Ore., Oct. 19.—Cattle—Receipts, 140; market steady. Prime steers, $12@13; good to choice steers, $11@12; medium to good, $9.75@11; fair to medium, $7.25@9.25; common to fair, $5.75@8.25; choice cows and heifers, $8@9; medium, $4.75@5.75; canners, $3@4; bulls, $5@7; calves, $9@12; stockers and feeders, $6@8.

Hogs—Receipts, 256; market steady. Prime mixed, $17.25@17.50; medium mixed, $17@17.25; rough heavies, $15@15.50; pigs, $14.50@15.50. Bulk of sales at $17.25@17.50.

Sheep—Receipts, none; market lower. Prime lambs, $11.50@12.50; fair to medium, $8@10; yearlings, $10@11; wethers, $9@10; ewes, $6.50@9.

### At Seattle.

SEATTLE, Oct. 19.—Cattle—Receipts, 114. Good grade steers and cows, stronger. Best steers, $11@13; medium to choice, $10.50@11; medium to good, $8@8.50; medium, $7@7.50; bulls, $5@7.50; calves, $5@10.

Hogs—Receipts, 170; steadier. Prime light, $17.75@18; medium to choice, $17.50@17.75; medium heavy, $16.50@17; rough, $15.50@16; pigs, $15@17.

### At North Salt Lake.

NORTH SALT LAKE, Utah, Oct. 17.—Cattle—Receipts, 35 head. Choice steers, $10.75@11.75; good steers, $9.50@10.50; fair steers, $8@8.50; choice cows and heavy heifers, $7.25@7.75; fair to good cows and heifers, $6.50@7.25; cutters, $5.75@6.25; canners, $4.75@5.50; fat bulls, $6.50@7; bologna bulls, $5.50@6.25; veal calves, $9@11.

Sheep—Receipts, 120 head. Good choice lambs, $13.50@14; fat wethers, $9@10; fat ewes, $7@8; feed ewes, $6@7.

Hogs—Receipts, 157 head. Choice smooth fat hogs, 175 to 250 pounds, $16.75@17.

### Spokane Union Stock Yards.

| | Cattle | Calves | Hogs | Sheep |
|---|---|---|---|---|
| Saturday, Oct. 19 | 269 | 9 | 224 | 171 |
| Friday, Oct. 18 | 148 | 11 | 75 | 1072 |
| Thursday, Oct. 17 | 140 | 13 | 66 | 687 |
| Wednesday, Oct. 16 | 265 | 9 | 29 | ... |
| Tuesday, Oct. 15 | 127 | 15 | 90 | 238 |
| Monday, Oct. 14.— | 470 | 30 | 235 | 3028 |
| Week ago | 59 | 9 | 72 | 24 |
| Year ago | 31 | 8 | 45 | ... |
| Two years ago | 70 | 1 | 2 | ... |

Practically all of the cattle receipts arrived too late to be placed on the market, due to the short day. Compared with a week ago the market is unchanged.

| | |
|---|---|
| Good to choice steers | $10.75@11.75 |
| Medium to good steers | 9.50@10.50 |
| Fair to medium steers | 8.25@ 9.00 |
| Common to fair steers | 5.50@ 8.00 |
| Choice cows and heifers | 7.50@ 8.50 |
| Med. to good cows and heifers | 6.00@ 7.00 |
| Com. to med. cows and heifers | 4.75@ 5.75 |
| Canners | 3.00@ 7.00 |
| Bulls | 5.00@7.00 |
| Calves | 6.00@10.00 |
| Stockers and feeders | 6.00@ 8.00 |

Quite a heavy run of hogs arrived during the night and early morning. The market was weak, declining 25 to 50 cents. Quality was fair.

| | |
|---|---|
| Prime mixed | $17.00@17.25 |
| Medium mixed | 16.75@17.00 |
| Rough heavies | 15.50@16.25 |
| Pigs | 15.75@16.25 |
| Stockers and feeders | 14.00@15.50 |

Bulk of sales at $17.25.

A light run of sheep arrived overnight. The lambs were good, and sold at $11. The market was steady at the following range:

| | |
|---|---|
| Prime lambs | $11.00@12.00 |
| Fair to medium lambs | 9.00@10.75 |
| Prime yearlings | 8.75@10.00 |
| Prime wethers | 8.50@ 9.75 |
| Best mutton ewes | 6.00@ 8.00 |
| Breeding ewes, 1 to 4 years | 12.00@16.00 |
| Breeding bucks | 25.00@75.00 |
| Bulls | 5.00@ 7.00 |

## Seattle Market.

SEATTLE, Oct. 19.—The average of worm stings in Washington apples is running much higher than early estimates, thereby throwing more bulk to the lower grades of fruit and decreasing the visible supply of fancy and extra fancy by a large percentage. The effect is showing more particularly in the noninspected fruit, for which there is a brisk demand. Markets are steady, but the general movement slow.

The demand for cheap fruit is unprecedented on this market, and jobbers who saw futures with clear vision and bought for cash are taking some good profits while handling the bulk of the business. "C" grade fruit is selling at $2 per box, and fancy stock is moving at $2.25. It is stated that there are more margins in this grade than any other.

Orchard-run fruit, practically free of worm stings, fair as to uniformity of color, but wild as to sizes, is bringing about $2 per box in open lugs of approximately 40 pounds. The unit of sale is 5 cents per pound.

Extra fancy apples are dull, due to high prices and substitutions of "C" grade and orchard run stock, which is plentiful. The retail trade reports quick and easy sale on the box basis, stating that buying for storage by consumers is exceedingly heavy.

Spuds are wobbling slowly and laboriously to some sort of a level, progress being made from the small lot or sack basis to commodity proportions in new quotations by the ton. The supply of Yakima gems is limited, and although some No. 1 stock is being offered, jobbers, selling by the sack out of the stores can not get over $35 to $40. The local market is being demoralized by liberal offerings of many grades and varieties of Puget Sound and island whites, which are moving at $30 to $35 per ton. The bulk of this stock will be cleaned up before a domestic balance is reached. The supply from all sources is today too extensive to bring about any market strength.

Onions are in a demoralized state. The best stock offered is Oregon fannons, for which buyers are bidding 2c per pound, sacked, off the street. Jobbers are holding off.

The demand for root vegetables is heavy. The Yakima valley is able to offer a rutabaga and turnip this season that is free of wire worms, pith and "woody" flavor, and buyers are taking hold vigorously. Colder weather would stimulate the demand.

There was a perceptible unsteadiness in the fresh ranch egg market for the week-end, and jobbers are more inclined to bid a little lower to producers for Monday. Nothing over 64 cents is offered, and there is a strong leaning toward 63 cents.

Butter sales are running on the average seven cubes of storage to one of fresh. The cream supply is diminishing, and will continue to the point of 25 per cent less than last week's average before the minimum is reached, according to jobbing houses, with no relief until April and May.

Poultry will be lower for the coming week. Jobbers are offering 1c to 2c per pound less to producers on hens.

## Seattle Grain.

SEATTLE, Oct. 19.—The unusually high percentage of gluten in Washington grown wheat this year will be the means of winning the bakery trade back to local avenues, according to tests by Seattle millers this week, who say that local wheat gluten is higher than any eastern hard wheat flour yet delivered excepting Dakotas, which have just begun to arrive. Eastern hard wheat flour, because of its better expansive qualities, has almost wiped out the demand for soft wheat flour from bakers, and this is particularly true since substitutes are being used.

Samples of eastern Washington early bart are showing 55 per cent gluten, but an excess of glaidin has shown in spots. The average for eastern flours shows only 40 to 46 per cent gluten. The advantage will, millers believe, enable them to compete with their eastern rivals in a year when the only buyers are the government in small quantities and from families.

Seattle millers assign the cause of their vanished markets to the high terminal wheat price to farmers which, they claim, made such a cost that they are unable to compete with middle western mills for their established trade in the southeast.

Wheat storage space here is filled. This fact, and that of the possible losses entailed to millers should the 1918 wheat price go over into 1919 as has been suggested at Washington, was pointed out to representatives of the grain corporation, who came out from New York this week to confer with local millers and get the viewpoint as to why conditions here were different from any other wheat and milling section, and why grain and flour rules should be modified to suit the manufacturers here.

Millers were advised today of the action of the head of the grain corporation in discouraging increase wheat acreage next year in view of the possible intervention of peace, and anxiety regarding the carrying over of the 1918 terminal price into 1919, with its consequent liability to loss to all buyers, has subsided.

## Portland Grain.

PORTLAND, Or., Oct. 19.—The Merchants' exchange at Saturday's session adopted a resolution denouncing the abuses practiced by eastern grain sellers and declaring that purchases of eastern oats and corn would hereafter be made only on the basis of Oregon and Washington inspection and weights. The so-called Minneapolis terms, under which the eastern trade has been operating, will be ignored by local dealers in the future, as they are declared to be unfair and can no longer be tolerated. The trade here was a unit in taking this action.

The grain market continues quiet, but at the close the feeling was firmer. Sacked oats were held at $54.50, bulk oats at $48@49.50, bulk corn at $52.50@55 and barley at $48.25@49.

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Seed Grader and Cleaner



Cleans, Grades and Separates Grain in One Operation

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Emphatically Independent

# Expect Good Horse Show

The Lewiston stock show will again have a great exhibit of horses. I have seen the carload of Percheron stallions William Mulhall has brought from his ranch at Fenn and do not hesitate to pronounce them a fine lot of American bred horses. Eight of them are 2-year-olds. One of these, Normaneer, weighed 1875 pounds when I saw him. He is a typical old-time Norman, with their size, gray color, good head and kind eye. In only a few generation he goes back to Brilliant, by Coco. Several others are almost as heavy and have even more style. Most of them are blacks, with a few dark grays.

General Funston, a 3-year-old, has been herd sire and has served over half the mares in the herd. He is rather light gray, has a beautiful head and crest, a deep chest, flat, flinty bone and much grace of outline. Archie Robinson, who judged at the International last year, said he was the best horse of the 400 at the Bloomington, Ill., sale last winter and as good as Singmaster's great Keota Jalap. Minet, Mr. Mulhall's other head sire, is by Imp. Moulinet. He is another International winner. He is a little darker than Funston, a little blockier and a great horse of much substance.

Colonel, a black 4-year-old, an intensely bred Brilliant, caught my eye. He has much style, but plenty of size and bone.

Eclipse, a 3-year-old June 20, weighing 2050 pounds, a grandson of Calypo, is a dark bay that Secretary Hendershot pronounced the best horse of the bunch, though he was not expecting to be quoted. But you may watch Eclipse.

These stallions and a fine lot of Percheron brood mares were purchased by Emmett L. Mulhall, Mr. Mulhall's son. He did not spare money, but bought the best he could get. Emmett has now enlisted in the service of Uncle Sam, and Mr. Mulhall expects to dispose of most of the horses, but will retain a foundation herd.

# A Crooked Trail

(Continued from page sixteen.)

especially if I got a little nervous. And it's more dangerous to wound a panther than to miss him. Are you a pretty good revolver shot?"

"Ought to be. I was born where every man went with from one to three of the things buckled around him. I could shoot my father's sixshooter when I was 5 years old. Usually I can drive a nail at twenty or thirty steps."

"Can you? Good! Then you must do the shooting. I'll hold a light for you."

Now we began to discuss ways and means. There was but one opening into the dark, cavern-like loft, and that was at the end, at one side of the fireplace. It was about two feet and a half square. The only way I could think of was to climb up the wall till my head was above the puncheons, then hold to the logs with one hand and shoot with the other.

"But that old blunderbuss is too heavy. You can't hold it steady with one hand," objected Frank.

I agreed with him, and he suggested something else:

"I'll tell you, Travis. You get on my shoulders and let me hold you up. Then you'll have both hands free to shoot with."

The suggestion seemed a good one, and we made hasty preparations to carry it out. Taking some paper from the saddlebags, he tore and twisted it into tapers. Then he squatted down and I got astride his neck, with a leg on each shoulder.

"Now be ready," he said, still in cautious tones, as he struck a match against the floor.

My only answer was the tick-tick of the big sixshooter as I pulled the hammer back.

When the paper began to blaze Frank started to rise up with me. That he could easily do; for he was a broad-shouldered, well-muscled fellow, while I, though rather tall, weighed scarcely 140 pounds. But he suddenly dropped down again.

"I forgot something. Whatever you do, Travis, keep both hands back of the cylinder. That old thingamabob sometimes lets off two or three barrels at a pop."

Most of the old cap-and-ball sixshooters would do this after their tubes got burned out so the caps did not fit closely.

"Risk me to keep behind the thing," I answered.

"And you'd better not hold it too close to my head, either. I don't want to get powder-burned. And whatever you do don't wound one of the varmints, especially if they're panthers. Shoot to kill. Ready now!"

Again he rose up, slowly, this time, till my head was above the loft. It was like a cave up here, and at first I could see nothing at all; but the darkness snarled and growled at me with a chorus of frightful voices. A breath of wind fanned my neck, coming in at the hole in the gable, not far from my back. Then, steadying himself, Frank reached up the light.

For a moment or two the whole loft seemed spotted with fiery eyes. Then, as the blazing taper itself came above the puncheons, I was more than startled to see four good-sized animals of prey in the back part of the loft!

One, the largest, which I recognized as a panther, was crouching on the floor, as if for a spring. But the light, flaming suddenly in his eyes, had blindned and frightened him, and he had started back. Behind the panther, in a corner, stood another animal, a big wildcat, and over in the other corner crouched two more wildcats.

There was not a moment to lose. My hands shook from excitement as I aimed the six-shooter at the panther's head; but I gripped the handle hard to steady them, and sighted at a point between the eyes. The taper had nearly burnt out before I got a satisfactory aim, but those eyes were still glowing like live coals, and I pulled the trigger.

Instantly the whole loft seemed on fire, and heaven and earth crashing together around me!

After that I seemed vaguely conscious that the house was falling to pieces! And a wild, fierce scream rang in my ears as some of the animals rushed by me, making for that hole in the gable!

(To be continued.)

### PORTLAND SHOW NEXT MONTH.

The annual exhibition of the Pacific International Live Stock show will be given at Portland November 18 to 21, according to announcement by A. H. Lea, general manager. Mr. Lea, who is also secretary of the Oregon State fair, expressed the opinion that the Pacific International will have a first class show this year in spite of the handicap due to the war.

### WOOL CLIP WORTH MILLIONS.

Secretary S. W. McClure of the National Wool Growers' association announced recently that the 1918 wool clip in this country totaled approximately 290,000,000 pounds, with a value of $170,000,000.

# FARMERS' WANT ADS

This is the farmers' "Want," "Sale" and "Exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rate, 7 cents a word per insertion, with a special rate to farmer subscribers to the Washington Farmer of 6 cents a word per insertion for from 4 to 12 times, and 5 cents a word per insertion for 13 times or more.

All commercial and land advertising, 7 cents per word each insertion. Open also to nonsubscribers.

In using these columns advertisers must observe: (1) No advertisement will be inserted for less than 75 cents. (2) Every word, number and initial, including name and address, must be paid for. (3) Cash must accompany order.

Above rates also include insertion in The Oregon Farmer and The Idaho Farmer.

**HELP WANTED—Male 3**

SALESMEN—MANY OF OUR SALESMEN have gone to war and we are filling their places with men exempt from draft. Lack of competition and great prosperity of our customers makes sales the best we have ever known. Selling experience desirable, but not necessary. McConnon & Company, Dept. J., Winona, Minn.

**EDUCATIONAL 15**

IN BUSINESS OR ACTUAL LIFE THE BEST is none too good for you. Write Gooding college, Gooding, Idaho, Charles Wesley Tenny, president, today.

TELEGRAPHY—YOUNG WOMAN'S POPULAR vocation; good paying positions available. Write for booklet. Pacific Telegraph Institute, Spokane.

SEND NEWS NOTES TELLING OF THE work of your school today. Address the Educator, Gooding, Idaho.

**HONEY, BEESWAX—Wanted 58**

SEND SAMPLES OF YOUR HONEY AND beeswax. State quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

**EGGS AND BUTTER WANTED. 59**

WE ARE ALWAYS IN THE MARKET FOR good eggs and dairy butter. Send us your next shipment. Oregon Farm Products Co., 386 Halsey st., Portland, Ore.

WE PAY HIGHEST PRICE FOR LARGE, clean infertile eggs not over one week old. Honey also wanted. J. B. Chaney, Spokane, Wash.

**MISCELLANEOUS WANTED 63**

CASH PAID FOR OLD FALSE TEETH. We pay up to $35 per set (broken or not). Send now. Cash sent by return mail. Package held 5 to 15 days for sender's approval of our offer. Highest prices paid for old gold jewelry, gold crowns, bridges, dental gold, platinum, diamonds, and silver. Send for full catalog of new jewelry.
UNITED STATES SMELTING WORKS, INC.
331 Goldsmith bldg., Milwaukee, Wisconsin.

POULTRY WANTED.
We are cash buyers of poultry and dressed meats, also cream. Write us for prices, shipping tags and premium catalogue for cream shippers.
COMMERCIAL CREAMERY CO.
SPOKANE, WASH.

LIVE POULTRY WANTED—TOP MARKET price paid; honest weights; prompt remittance. Smith, 420 Second ave., Spokane.

HIGHEST PRICES FOR POULTRY AND EGGS. Washington Meat & Poultry, 409 Second avenue, Spokane.

**LIGHTING EQUIPMENT 74**

THE SAFETY LAMP CO., N208 HOWARD ST., Spokane, Wash. Gasoline lighting and supplies.

**MACHINERY—For Sale 93**

FOR FARM LUMBERING USE.
"AMERICAN" PORTABLE SAWMILLS
Carried in stock by
HIGGINS MACHINERY COMPANY.
312 1st Ave., So., Seattle. Write for Catalog.

**AUTOMOBILES 114**

FORDS START EASY IN COLD WEATHER with our new 1919 carburetors; 34 miles per gallon; use cheapest gasoline or half kerosene; increased power; styles for any motor; very slow on high; attach it yourself; big profits to agents; money back guarantee; 30 days' trial. Air-Friction Carburetor Co., 321 Madison, Dayton, Ohio.

HEADQUARTERS FOR
used cars, trucks and tractors; printed list. Spokane Auto Market, W315 Sprague ave., Spokane, Wash.

AUTO RADIATORS, FENDERS AND LAMPS repaired. Lester Allen, 607 Second avenue, Spokane.

**STOVE AND FURNACE REPAIRS. 126**

WRITE M. S. RUBENS, SPOKANE, FOR ANY parts needed to repair stove, furnace.

**RABBITS and HARES 173**

FOR SALE—FIRST-CLASS NEW ZEALAND rabbits, also a few white Angora rabbits. F. O. Hagg, Burley, Idaho.

**POULTRY 174**

SINGLE COMB WHITE LEGHORN AND Rhode Island Red cockerels and pullets. Mrs. Rominger, Underwood, Wash.

**LIVE STOCK. 177**

FOR SALE—TO CLOSE AN ESTATE, IN quantities to suit, some 20,000 sheep, ewes, lambs and bucks, from $10 up; also 800 head of stock cattle. 45,000 acres range land, best anywhere. Coffin Bros., North Yakima, Wash.

DUROC-JERSEY BOARS; 1 BOAR, YEAR OLD, and 2 boar pigs, 5 months old. Write for prices. J. H. Pruter, Trout Creek, Mont.

**LIVE STOCK Continued. 177**

DR. JAS. R. SHUPE WILL SELL AT PUBLIC auction October 26, at the Sugar City Park, Sugar City, Idaho, at 2 p. m., 34 head of registered Shorthorn cattle. Don't overlook the date.

OXFORD RAMS, YEARLINGS AND [illegible] have one, very large; farmer [illegible] Miller Wiltz, Addy, Wash., Route [illegible].

SHORTHORN CATTLE, PERCHERON [illegible] of both sexes. Wm. Mulhall, stock [illegible] grounds, Lewiston, Idaho.

FOR SALE—30 PURE BRED OXFORD RAMS, mostly yearlings, some two. Chas. A. Cairns, Meridian, Idaho.

FOR SALE—WEANLING BIG TYPE POLAND China pigs. S. S. Mullen, Bellingham, Wash., R. 1, Box 86.

REGISTERED BIG TYPE POLAND CHINA pigs for sale. John Bushaw, Route 2, Anacortes, Wash.

REGISTERED O. I. C. SWINE, BREEDING stock for sale. C. I. Ballard, Rickreall, Ore.

REGISTERED SHORTHORN BULLS FOR sale. Baring Bros., R. 1, Creston, Wash.

FINE BUNCH ANGORA GOATS; BARGAIN prices. C. A. Sams, Cedonia, Wash.

**HOTELS 306**

WHITE'S HOTEL AND RESTAURANT—Rooms, hot and cold water, 75c up. Breakfast 20c to 40c; dinner, 25c to 50c. Sprague and Stevens, Spokane.

GALAX HOTEL; NEW AND MODERN; 75c and $1. Main and Bernard, Spokane.

NEW MADISON HOTEL, 75C AND UP. 1ST and Madison, Spokane, Wash.

**RUBBER STAMPS AND SEALS 384**

FOR RUBBER STAMPS, STENCILS, BADGES, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

**ARTIFICIAL LIMBS 424**

SCHINDLER ARTIFICIAL LIMB CO., S105 Wall st., Spokane, Wash.

**TAXIDERMISTS 426**

FUR RUG MOUNTING A SPECIALTY, HEADS, animals and birds mounted. Withers Bros., 822 Sprague, Spokane.

**SEEDS. 620**

WE SPECIALIZE IN TIMOTHY, ALFALFA, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Idaho.

**FARM LANDS FOR SALE 651**

SNOHOMISH COUNTY, WASH., FARM LANDS. The greatest proposition on the market for the man who wants a farm. 12,000 acres to select from; 3½ miles salt water front; 20 miles of beautiful lake shore; good towns, railways, steamboats, factories, mills, schools, churches, paved roads; where the largest profits are made, where the great variety of crops and wonderful productive climate makes it the most productive farm section of America. Good lands in good localities, as low as $25 to $35 per acre. 10 yearly payments. Send for maps and literature to the Brownell Land Co., 904 Third ave., Seattle, Wash.

YOUR CHANCE IS IN CANADA—RICH LANDS and business opportunities offer you independence; farm lands $11 to $30 acre; irrigated lands, $35 to $50; twenty years to pay; $2000 loan in improvements; loan of live stock; taxes average under twenty cents an acre; no taxes on improvements, personal property or live stock; good markets, churches, schools, roads, telephones; excellent climate—crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Allan Cameron, general superintendent land branch Canadian Pacific Ry., 30 Ninth ave., Calgary, Alberta.

JORDAN VALLEY PROJECT.
MALHEUR COUNTY, OREGON.
THIRTY THOUSAND ACRES
OPEN FOR ENTRY SOON.
WRITE FOR DATE.

JORDAN VALLEY FARMS.
524 IDAHO BUILDING. BOISE, IDAHO.

ONE OF THE BEST 80S IN MALHEUR VALley; good buildings; well improved; 50 acres alfalfa; 6 miles to Vale; crops last year $4400. Price, $9000. Terms. O. E. Carman, Vale, Or.

VERMILION, ALBERTA—160 TO 5000 ACRES, $16 to $25 per acre. Union Investment Co., 406 Ziegler blk., Spokane, Wash.

**FARM LANDS—WANTED 654**

SELL YOUR PROPERTY. WE PLACE A full description of your property with dealers and possible buyers in every state in union for a small fee. Information free. Real Estate Salesman Co., Dept. 10, Lincoln, Neb.


## Your Local HOME PAPER and Your State FARM PAPER at a Special Club Price

A clubbing arrangement has been made with a number of newspapers in your state whereby we can now offer you a one-year subscription to your local home paper and a one-year subscription to your state family farm paper at a special rate for both.

**YOUR HOME PAPER**

brings you all the local news and happenings of the social and commercial life of your community. It gives you the news of the home boys at the front and prints many interesting letters from them.

**YOUR FARM PAPER**

brings you, each week, all the news of the farm and farm home, with the agricultural developments of your state. Features for every member of the family, including women's and children's pages and colored comics. Also departments for every phase of farming.

Your Local Home Paper and Your State Farm Paper can now be sent to you for one year each at the special clubbing rate as quoted below:

| | |
|---|---|
| The Blaine Journal, Blaine, Wash., and The Washington Farmer | $1.50 |
| The Buckley Banner, Buckley, Wash., and The Washington Farmer | $1.50 |
| Castle Rock Independent, Castle Rock, Wash., and The Washington Farmer | $1.50 |
| The Cheney Free Press, Cheney, Wash., and The Washington Farmer | $1.50 |
| Chehalis Bee-Nugget, Chehalis, Wash., and The Washington Farmer | $1.50 |
| Cashmere Valley Record, Cashmere, Wash., and The Washington Farmer | $1.50 |
| The Everett Tribune, Everett, Wash., and The Washington Farmer | $3.00 |
| Puget Sound Mail, La Conner, Wash., and The Washington Farmer | $2.00 |
| The Montesano Vidette, Montesano, Wash., and The Washington Farmer | $2.00 |
| Oak Harbor News, Oak Harbor, Wash., and The Washington Farmer | $1.50 |
| The Morning Olympian, Olympia, Wash., and The Washington Farmer | $4.00 |
| The Weekly Recorder, Olympia, Wash., and The Washington Farmer | $1.00 |
| Puyallup Valley Tribune, Puyallup, Wash., and The Washington Farmer | $1.50 |
| The South Bend Journal, South Bend, Wash., and The Washington Farmer | $2.15 |
| Sumas News-Advocate, Sumas, Wash., and The Washington Farmer | $1.50 |
| Walla Walla Bulletin, Walla Walla, Wash., and The Washington Farmer | $5.00 |
| White Salmon Enterprise, White Salmon, Wn., and The Washington Farmer | $1.50 |
| The Zillah Free Press, Zillah, Wash., and The Washington Farmer | $1.50 |

Papers mailed to Canadian addresses require additional postage of 1 cent a copy.

## EXTRAORDINARY CLUBBING OFFER

A three-year subscription to your state farm paper and a one year subscription to the following papers at the special price for both.

| | |
|---|---|
| Twice-a-Week Spokesman-Review | $1.00 |
| The Bellingham Daily Journal | 3.00 |
| The Sunday Spokesman-Review | 2.50 |
| The Spokane Daily Chronicle | 4.00 |
| The Daily Spokesman-Review | 5.50 |
| Daily and Sunday Spokesman-Review | 8.00 |

Take advantage of these special clubbing rates by sending your order today to your local home paper, or by mailing it direct to

**The Washington Farmer**
617 Central Bldg., Seattle, Wash.
or
Review Bldg., Spokane, Wash.

## Just What You Want

may be offered in this weeks' Want Ads at a bargain. It's a good idea to look them over every week.

# *How Many Kills to Your Shot Pattern?*

MOST hunters agree that three shot pellets or more are essential to a *kill*. Less than three may mean a *cripple*, no matter what the size of shot or its velocity. Hence uniform pattern, i. e., an even spread of shot is essential to successful shooting, in the field or at the traps.

The secret of good patterns is in the *control* of the powder explosion. Good, evenly distributed patterns are the direct results of a correct system of wadding scientifically adjusted to the bore of the gun and the load. The wadding, like the piston head of a gas engine, must give the explosion something solid to work against, so that the shot may be *pushed* out evenly.

It must expand and fill the tube of the barrel, completely sealing in the gas behind it. No gas must escape to scatter the shot.

It must offer just the right amount of resistance to the explosion so as to develop uniform pressure and high velocity without danger of jamming the pellets out of shape at the "choke" or muzzle constriction.

## The Winchester system

Winchester Wadding is the result of repeated experiments to determine the most efficient control of the gas blast.

The special construction of the Winchester *Base Wad* gives what is known as *Progressive Combustion* to the powder charge.

Combustion spreads instantly through the powder charge. By the time the top grains of powder become ignited the *full* energy of the burning powder behind is at work.

Though the explosion is almost instantaneous, it is none the less *Progressive*, the final energy and maximum *velocity* of the completely burned powder being developed at the *muzzle* where it is most needed.

Meanwhile, under the heat and pressure of combustion, the tough, springy, *Winchester Driving Wad* has expanded to fill the barrel snugly all around. No gas escapes. It is completely sealed in. The wadding *pushes* the shot evenly.

At the muzzle the shot pellets slip out without jamming while the wadding is checked for a brief interval by the constriction of the muzzle. *It follows some distance behind the shot pattern.*

The shot cluster travels on unbroken by gas blast or



wadding and makes the hard hitting, uniform pattern for which Winchester shot shells are world famous.

***Fish Tail Flash.*** All Winchester smokeless shells are made with the new Winchester Primer—the quickest and most powerful shot shell primer made. Its broad *fish tail* flash gives even and thorough ignition. Every grain of powder is completely burned up before the shot charge leaves the muzzle.

***The Crimp.*** The required degree of pressure necessary in seating the driving wads is worked out in combination with the *hardness* or the *softness* of the *crimping* required for any particular shell.

***Waterproofing and lubrication.*** In the cold damp air of the marshes, or under the blazing sun at the traps, Winchester shells will always play true. Winchester waterproofing process prevents them from swelling from dampness. Special lubrication of the paper fibres prevents brittleness and splitting in dry weather.

***Uniform shells.*** From primer to crimp, Winchester shells are constructed to insure the maximum pattern possible from any load and under all conditions. $100,000 is spent annually in the inspection and testing of finished shot shells. 25,000,000 rounds of ammunition are fired every year in testing guns and ammunition.

## Clean hits and more of them

To insure more hits and cleaner hits in the field or at the traps be sure your shells are Winchester Leader and Repeater for Smokeless; Nublack and New Rival for Black Powder. Write for our Free Booklet on Shells. **Winchester Repeating Arms Co., Dept. WT-51, New Haven, Conn., U. S. A.**

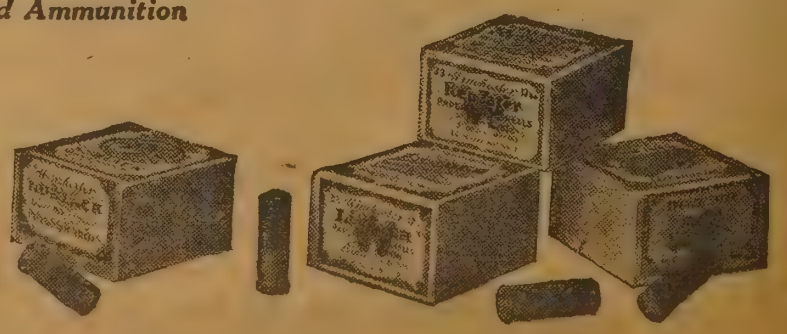



*The Winchester system of wadding. The wadding expands evenly, sealing in the gas blast all the way to the muzzle, where the wadding is checked by the "choke" or constriction. Shot cluster travels on ahead unbroken. Actual test target 320 pellets out of 431 or 74% of the shot charge (1¼ oz. of 7½ chilled) inside a 30-inch circle at 40 yards*

# WINCHESTER

***World Standard Guns and Ammunition***





OCTOBER 31, 1918.

NOTICE TO READERS: When you finish reading this paper, place a U. S. 1-cent stamp on this notice, mail the paper and it will be placed in the hands of our soldiers or sailors destined to proceed overseas. NO WRAPPER, NO ADDRESS. A. S. Burleson, Postmaster Gen.

PUBLISHED WEEKLY.

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THE WASHINGTON FARMER

SUCCESSOR TO

THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

# Common Cow Must Go; Good Cow Must Come

IT has been said that more men and women dream of some day owning a good cow than of any other one thing in the world. This is probably a far-fetched statement, but this will be a better world when more dream this dream and awaken to put it into reality. And the more emphasis they lay in their dreams on the word "good" the better, for nobody today can afford to own an ordinary cow. The day of the good cow, not alone on the specialized dairy farm, but upon the general farm as well, is at hand.

It is doubtful if the average cow on the general farms of the United States produces more than a gallon and a half of low testing milk daily, approximately 4500 pounds a year. What would it mean to the family of five were this animal supplanted by one that would give 10,000 pounds of milk a year testing five per cent butterfat? It would mean plenty of good milk for every member of that family to drink whenever it was wanted, plenty of good milk for cooking, plenty of good cream for coffee, fruit, cereals and the like, all the butter that the family could use and two or more gallons of skimmed milk every day for the chickens or pigs.

The cow that produces 10,000 pounds of high testing milk is not a freak; she is just a good cow, the equal of which is found on many dairy farms today. To be sure, she is not available for every farm, but the sooner the farm families of the country begin to get rid of the "just cows" on their farms and get 6000-pound cows, 7000-pound cows and 8000-pound cows in their places, the sooner will come the time when every farm can have a first-class producer.

Continued on page six.



GENESTA'S DUCHESS 266615, THAT PRODUCED 15,293.9 POUNDS OF MILK IN A YEAR.

# Must Get Together on Future Plans

## Farmers Are Reluctant to Be Influenced by the Ideas of Others, but Prefer to Go by Their Own Judgment on Most Matters




GRANDVIEW, Yakima County, Wash., Oct. 21.—Most farmers in the valley have done pretty well this year, but some on the dry land had almost a total failure and can not pay their debts, but are sowing fall wheat and rye. Hay is a fair price here, which helps the farmers. I think the irrigated land has produced well this year. Some of the dry farmers did not sow because it was so dry. We have had a fine rain now and seeding will soon be finished. There is plenty of feed for stock. The pasture is better than usual. I believe farmers would do well to get together and plan for the future. Too many would rather go by their own judgment.

C. H. FAULKNER.

### ORGANIZING FARM BUREAU.

COLVILLE, Stevens County, Wash., Oct. 18.—The harvesting in Stevens county has been completed and on the whole the yields have not been as good as was expected earlier in the season. However, there was very little acreage that did not pay for the harvesting. The financial conditions seem to be only fair and quite a number of the farmers are selling out and getting into other lines of work. I believe this is a mistake, for I think the agricultural interests are soon going to come into a position where they are to be better off than they have for years.

The prospects for next year's crop are not as good as they should be at this time of the year, due largely to the lack of rain at the proper time for the fall planting. The prospects, however, are much better than they were two weeks ago, as considerable grain has been sown since and during the rains of the last three weeks.

The feed problem is still rather serious, due largely, I think, to the lack of proper organization among the farmers. The county farm bureau has been organized to some extent and as soon as we can get it thoroughly organized in every community it is my belief that we can make the feed problem a much easier one to handle. Some cattle are still being sold from the county due to the high cost of feeds.

Better grades of all classes of live stock and a plan of farming which provides for all, or nearly all, of the feeds necessary for the entire year, wherever this is possible, are the things which I believe our farmers should consider seriously.

E. C. DURDLE.

### LIGHTEST CROP IN YEARS.

RITZVILLE, Adams County, Wash., Oct. 18.—The farmers in Adams county have about finished harvesting and threshing one of the lightest crops that have ever been harvested in the county. Massive ricks of sacked wheat, for lack of warehouse space, are not piled, this year, by the side of the railroad tracks. Straw piles are not being burned as a last resort of getting rid of them. And as a result of the light yield, farmers have lost a large amount of money by this year's operations. Especially farmers who increased their usual acreage in response to the nation's call for more wheat have suffered heavy losses, but I have not heard complaint on that account. Even in the face of their losses, they are proud of their efforts.

Hay is being shipped into the county at a high price as are coarse grains and mill feeds. This condition is necessarily throwing much of the stock on the market and the rest is being held only as a result of the belief that it may be almost impossible later to replenish the herds from outside sources. Farmers are hopeful for next year and are taking advantage of the recent moisture by starting their drills. While the amount of moisture is not yet sufficient to carry over fall wheat, many are seeding with the expectation of more rain coming.

A. W. HOLLAND,
County Agriculturist.

### HOGS ON PEA STUBBLE.

FAIRFIELD, Spokane County, Wash., Oct. 20.—There is every reason to think that this community is prosperous. Farmers have met their obligations and have had considerable left to buy Liberty bonds and some other things besides. Fall seeding of wheat is practically completed and a large acreage has been seeded. Prospects are good for a good wheat crop next year. Feed is plentiful, but commands a high price. Several farmers this fall, after the peas were harvested, bought a car of hogs and turned them on their pea stubble. Profits of $1000 and $1100 have been realized from a single car in about six weeks' time. It is safe to predict that next fall will see many cars of feeder hogs here on the pea stubble.

ROY G. ADAMS.

### APPLE HARVEST ABOUT OVER.

OMAK, Okanogan County, Wash., Oct. 21.—The apple harvest will soon be over. The yield is much better than was expected a few weeks ago. With the present good prices most of the ranchers will come out fairly well and can meet all obligations. The lack of sufficient moisture has caused the loss of many trees and will leave some ranchers in some distress. Recent rains have helped the pastures and fitted the soil to go into the winter. Considerable amount of stock has been sold on account of shortage of hay and things in general seem adjusted for the coming winter. Most crops are turning out fairly well considering the weather conditions the last summer.

J. O. WOODS.

### ROOT CROP YIELD HEAVY.

COLVILLE, Stevens County, Wash., Oct. 22.—Except for late crops of alfalfa and oats the harvest is entirely cleaned up in Stevens county. Many of the farmers cut three good crops of alfalfa in spite of the dry weather, and some reported that a fourth crop might have been cut if it had been possible to cure it. The late growth was a great help in eking out the short pastures. Oat fields which were cut at the usual time make considerable second growth, most of which was pastured off to good advantage. Some fields of late oats are still in the shock and the recent rains are making it difficult to thresh them. The feed problem has been somewhat eased by the fall pasturage, but it still remains an acute problem and cattle are being disposed of as rapidly as possible. Few hogs are being kept except for home use. Some good sales of lambs are reported. There is a cleaning up of old and worthless horses and it is likely that a good many such will reach the bonepile before winter. Good horses are not changing hands, although there will be a better market for heavy draft animals as soon as the roads break up and the tractors and trucks have to pull in. Stevens county had the best yield of good corn in its history and the regret of farmers is that they did not plant more extensively. In driving through the country new silos are frequently seen and these will prove missionaries in a good cause and will doubtless stimulate the production of cattle. Fall seeding is looking well. Early sown grain is several inches high and the late seeding is just coming through the ground. Little fall plowing is yet done as the soil is not yet in condition. Farmers are not looking into the coming winter with any degree of satisfaction as the certain shortage of feed is sure to work a hardship, but every effort to conserve feed is being made and they will make the most of a bad season and short crop. Fortunately the garden crops turned out well and the yield of potatoes is surprising. Those who had planted root crops for stock find that it was a profitable venture as the yield is heavy.

E. E. ELLIOTT.

### ARE DIGGING POTATOES.

METHOW, Okanogan County, Wash., Oct. 21.—I do not know of any farmers around here who are not able to meet their obligations. The harvest is all cleaned up and the wheat went from 4 to 10 bushels per acre. With a big rain on October 16 the prospects for next year are reasonably good, as a great deal of fall wheat can be seeded. There is a reasonable supply of feed, the dry land alfalfa making a great stand. The only condition that could be improved on is never to depend entirely on one kind of crop, wheat especially. Diversified farming in this community is the only safe line to follow. Potato digging is now in hand. The potatoes are sufficient in quantity, but knotty, owing to second growth.

CHARLES GRANT.

### British Women in Factories.

In one of the largest British munition factories where 35,000 workers are employed more than 33,000 are women.


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# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 44. THE RANCH PACIFIC DAIRYMAN HORN AND HOOF October 31, 1918

## Farmers Must Reach Across Sea

### *rica's New Merchant Fleet Offers Big Opportunity*

United States, least hurt industrially all the great nations of the world, tedly faces an era of exceptional unity as the close of the war ap- es. This opportunity extends to all of industry, including the many es of agriculture. Local markets for ducts of the farm will yet have to plied, but in addition there will be l demand for the products of the an farm in foreign lands and at ne time an unusual opportunity for roducts to reach the countries that nem.

is the gist of the opinion expressed ward N. Hurley, chairman of the States shipping board, under whose n America has developed a real nt marine. When the war is over, rley points out, reconstruction will u the countries of Europe, the in- s of which have been so seriously ined by the war. They must have ls such as those produced in this . Up to this time America's new f ships has been engaged in trans- soldiers, supplies and munitions of The soldiers must be returned to a, but the supplies, if they are to e, must be for the civil population pe and not for armies. The muni- f war will no longer be shipped; it seems possible that vessels re- to Europe for the American army eadily be utilized in carrying the ts of America.

ners must acquire worldly vision epare to take advantage of these hen peace returns," says Chairman , and he urges farm organizations p the situation, realize its possibili- d let the shipping board know im- ly to what extent they will be able ze the vessels that will be available. s upon the live stock producers, the industry, the apple growers, the farmers and every one representing e industry to look abroad for mar- id prepare to avail themselves of he coming peace offers. Not only , but Asia, South America, South and many other districts heretofore ouched, if at all, by many of the ies of America will be good fields e cultivation of markets.

ners everywhere should begin to ess in terms of next-town trade and n terms of world trade," says Mr. "The country merchant can also nstructive factor in his community. his business to look about and see is section produces, then investigate out if there is a chance of develop- export market for local products. that it will be up to the farmers lves to organize for developing trade and advise the government of eeds in ocean transportation."

ers' organizations are urged to uti- lize government agencies such as the federal department of agriculture, the federal bureau of foreign and domestic commerce, the consular service and the federal trade commission. Some of these departments have representatives all over the world and are ready to supply export information and connections, while others, like the federal trade commission, will assist farmers' organizations in forming export corporations.

## nt High Oat Standard

oat producers of the northwest are ntly united in their desire to have standard adopted for grading oats. gs have been held throughout the y during the last few weeks, two gs having been held in the north- one at Portland and one at Spo- the purpose being to secure infor- and the advice of the producers ealers as a basis for fixing govern- standards.

grain supervision section of the States department of agriculture repared a tentative scale for grad- oats which would require that No. e weigh 32 pounds per bushel, No. pounds, No. 3 28 pounds, No. 4 26 , and No. 5 24 pounds.

hwestern interests declare that this would work an injustice to the pro- of the northwest where a much grade of oats is raised than in the part of the United States. It is mended by northwest men that the be increased four pounds for each tive grade, requiring oats to weigh nds per bushel to grade as No. 1 down two pounds per grade, re- that oats weighing 28 pounds per grade No. 5.

dopted, this scale would mean that f a quality to grade only No. 5 be the same quality as would grade under the government's tentative

## Grain Ships

### War Necessitated Their Diversion

In a letter to The Farmer, under date of October 11 M. H. Houser, vice president of the Food Administration Grain Corporation, writes:

"I notice in your issue of October 3d an article in reference to the ship and tonnage supply. True, until recently I had the promise of a considerable number of wooden ships, besides an allotment of steel vessels; but recent developments and conditions at Atlantic ports have made it necessary to use these ships for other purposes.

"I am enclosing copy of a wire sent to me and also the various state administrators which has already been given publicity. I was somewhat in the dark until the last day or two as to the far-reaching effect of this change of program and the withdrawal of some of this wooden tonnage on account of the congestion and activity at the Atlantic ports.

"No one realizes any better than I how annoying it is to the farmer, after raising and delivering his wheat, to be confronted with difficulties in the sale. I have worked through every conceivable channel that I know of, to secure an adequate amount of tonnage to keep the funnel at the terminals open, feeling that by accomplishing this, we would go a long way toward solving the marketing problem. I think we all realize with the ports open, thereby permitting a free movement, and with the fair price basis and regulation, the minor local interior difficulties should more or less regulate and adjust themselves.

"I also realize that the present situation makes conditions rather acute in the later sections where the farmers were unable to profit by the earlier marketing facilities. Just as soon as relief is possible and we can get the embargo lifted, I intend giving these sections all the relief possible. Whatever inconveniences or sacrifices may be necessary just now, if they would make it possible to bring the war to a successful and speedy termination by using this tonnage in backing up General Pershing with the necessities that he requires, I think we all feel they undoubtedly would be made for a very worthy cause.

"I wish to take this opportunity to assure every one that we are doing the best we possibly can under these rather adverse circumstances. From the figures at hand and the amount of wheat taken care of at the terminals and now left in the interior warehouses, I feel that for the most part we are as well, if not better off here, in the percentage of wheat marketed, than they are through some of the other wheat raising sections."

The telegram to which Mr. Houser refers was published last week under the heading, "Wheat Will Be Moved." Every effort is being made to relieve the ship shortage, and success is promised for the early future.

## Stabilize Butter Prices

With a view to preventing undue fluctuations in the market price of butter in the northwest, the food administrators of Washington, Oregon, Idaho and Montana have issued a regulation prohibiting an increase in the price of butter without the dealers first securing the food administrator's permission. This agreement was reached at a meeting in Portland last week, at which Charles Hebberd, food administrator for Washington; W. K. Newell, for Oregon; R. F. Bicknell, for Idaho, and Alfred Atkinson, for Montana, were present.

The plan worked out by the food administrators requires that if the dealers in any city desire to increase the price of butter they must meet in their city at 2 o'clock on any Monday afternoon, agree upon the increase desired, wire the food administrator promptly at 3 o'clock, stating definite reasons for the proposed increase. The increase will be allowed or rejected in time for the publication of butter quotations in the newspapers of Tuesday morning. All price quotations are to be on the basis of solid pack cubes with 1 cent per pound differential for prints. After October 31, according to the food administrator's regulations, no butter will be sold in the northwest in cartons.

### SHIP MANY APPLES.

The Wenatchee district is this year producing about 7000 carloads of apples, according to the report of District Horticultural Inspector Darlington. They have been shipped out recently at the rate of 200 or more cars daily.

**Worth Thinking About.**

**New Fields**—Will farmers of Washington take advantage of an unusual opportunity that the coming of peace is going to bring? Now is the hour to act. We must reach across the sea. Read what Chairman Hurley of the U. S. shipping board says on page 3.

**Cross Breeding**—Is it advisable to stick to one breed of animals or to cross breed? Page 9.

**How Much Mercy?**—Secretary Lansing says there is a limit to the degree of mercy that should be extended the German people. Do you agree with him as he expresses it on page 23?

### BUTTERFAT SEVENTY CENTS.

The highest northwest butterfat price on record was reported from Yakima recently when buyers paid 70 cents a pound. The same report said that approximately 3000 pounds of butterfat are produced daily in the county, which is a decrease from that of last year. This would amount to about $700,000 a year, were the 70-cent price to be maintained that length of time.

### Early Christian Music Greek.

It is declared that the early music of the Christian church was probably in part of Greek and in part of Hebrew origin.

## More Pork Needed; Can We Furnish It?

By PROF. GEORGE SEVERANCE, W. S. C.

Uncle Sam is urging the production of more pork and now is the time to look up brood sows if not already on hand. A small herd of swine kept on each grain farm would fulfill our part and would be the most economical method of meeting the situation. Hogs should be a by-product of the grain farm. When they are kept in such numbers that they are produced largely from salable grain or purchased mill feeds, it is difficult to show a profit under present conditions, and very easy to show a deficit with poor management or a little ill luck.

One of the most profitable methods of producing the main growth on pigs that have been raised cheaply on pasture during the spring is by "hogging off" peas. Peas are one of the very best hog feeds and may be grown on the better portions of summer fallow tracts with no detriment to the succeeding wheat crop. Pea raisers in the Fairfield district of Washington quite generally claim better results from wheat after peas than on bare fallow. There are very few wheat farms in those portions of the wheat belt where the average annual rainfall exceeds 18 inches where one could not have picked out 20 to 50 acres that would have produced 15 to 25 bushels of peas per acre even in this dry year, or 25 to 40 bushels in a good year. They usually make a heavy crop on the lower portions of slopes and the bottom lands if the soil is not water logged.

Pigs feed off the pea crop very clean. The crop will not only show a nice profit "hogged off," but will leave the soil mellow and in condition to put into wheat at a very low cost for preparation.

The highest yielding variety is the best since all varieties have practically equal feeding value. Tests conducted at the Washington experiment station at Pullman, Wash., covering 15 or more years, and including several scores of varieties including the common ones show the Bangalia variety standing at the top in yield. They were originally secured from India by the United States government, and are found to be a particularly drouth resistant variety.

**One Must Inoculate.**

For best results the ground that is to be planted to peas should be plowed in the fall and left rough over winter. A mellow seed bed should be prepared as soon as the soil is fit to work in spring and the peas seeded deep, three to four inches. If the soil has never grown peas before the seed should be inoculated. This is very important.

The hogs may be turned in to good advantage as soon as the pods are well filled. They will be fed off with less waste if the pigs are confined to small portions of the field at a time with a portable fence. The "hogging off" period may continue till time to seed wheat, if desirable, but more waste must be expected if the "hogging off" isn't completed for several weeks after the peas are ripe.

The area required for a given number of hogs will depend upon the amount of growth that you wish to make from the peas for each hog, as well as, of course, upon the yield. Under good average conditions, a bushel of peas should make 12 to 15 pounds of pork. A 20-bushel crop should make from 240 to 300 pounds of pork, or put 80 to 100 pounds of gain each on three hogs. This would probably involve their feeding off the peas for about two months.

Will you aid Uncle Sam by growing a few peas and producing some much needed pork? This form of patriotism is as much needed as the buying of Liberty bonds or aiding the Red Cross.

## Influenza Delays Live Stock Show

Owing to the prevalence of Spanish influenza, the authorities of the state of Idaho last week required the officers of the Northwest Live Stock show to postpone its exposition that was scheduled for Lewiston the week beginning November 11. This action followed the general prohibition of public gatherings throughout the state, which included the schools, the idea being to prevent as completely as possible the spread of the malady. Though much inconvenience is caused the stock show officials by the situation that has arisen, they readily recognized the grounds for the action and sent broadcast a notice that the show was postponed. A meeting of the directors was held, and it was decided to put on the exposition as early after the passing of the influenza epidemic as possible. It is probable that the date will be fixed for early in December.

At this time no definite announcement has been made as to the holding of the Pacific International Live Stock show at Portland, which was scheduled for November 18-25. A movement is under way to revise the entire show schedule so that the Lewiston, Portland and San Francisco expositions will be held in December in regular order. If this is carried out it means the postponement of the Portland show. The San Francisco show has already been postponed indefinitely owing to the prevalence of the influenza in that city.

Further announcements concerning these events will be made in this paper as decisions are reached by the official boards of the organizations.

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## Mr. Hoover Issues Sound Advice

Do not allow yourselves to get panicky. Be patient and secure your rights. This is the advice of Herbert Hoover to the wheat growers of the northwest who have not yet sold their wheat.

Mr. Hoover, always alert to serve in the most effective way possible the interests of the producers as well as the consumers, urges wheat growers whose grain is not sold because of the congestion at terminals, due to diversion of shipping to the transportation of soldiers and supplies to Europe, to be patient and not accept from any buyer less than the government's guaranteed price for wheat. He renews the government's pledge to move the farmers' wheat and to pay him the full price agreed upon. Every grower should take the advice in the spirit in which it is given. Delay may be necessary. Some will feel it as a hardship. But this is an age of hardship, and the producer should be glad to wait if, by doing so, he can help in sending food to the army and in increasing the army, the quicker to bring the enemy of us all to his knees.

It is not a sign of pessimism for one to lay up a store for a time of famine.

## Who Feeds the Soldiers?

At a recent meeting of meat packers in Chicago one of the speakers, himself a representative of that great industry, said to those present:

"The feeding of millions today has ceased to be a problem because you gentlemen—the packers of America—have solved the problem, and it is due almost entirely to you that General Pershing's boys in France eat three square meals a day."

Surely the speaker himself did not take that declaration seriously if he thought about it soberly. While there is no desire to minimize the great work that the meat packers, through their vast business organizations, have done to assist this country in feeding its soldiers and those of its allies, this is the first time that it has been brought to our attention that the man who raises the beef and pork and mutton has had only a minor part to do with feeding the army. Likewise, it comes as a surprise that the wheat grower and the dairyman are largely nonessential in the food campaign, for we had thought that bread and butter were a requisite part of the balanced human ration.

In fact, THE FARMER still clings to this belief, and will continue to urge the farmer to produce more and more pork, beef, wheat and other foodstuffs and give him liberal credit for making good at it. Here is what General Pershing says with regard to the farmers' part in winning the war:

"Food is of vital necessity and from the day of our entry into the war America's army of food producers have rendered invaluable service to the allied cause by supporting the soldiers at the front through their devoted and splendidly successful work in the fields and furrows at home."

Isn't it strange that the city folks complain at 15-cent milk but never think of criticizing the 20-cent movie?

## What Must We Do To Be Saved?

One of the so-called socialist papers of Germany recently asked the question on behalf of the people of that country: "What must we do to be saved?"

The asking of the question is a hopeful sign. It indicates that the German people realize, in some degree at least, that they are lost, and it indicates that they are beginning to take their bearings in the hope of finding themselves.

What must they do to be saved? President Wilson has answered that question. They must get a new guide. Their present predicament is due to their blindly following William Hohenzollern. Their salvation lies in ceasing to follow him and in choosing from among themselves a leader with democratic vision and powers of leadership.

With all the blood of this terrible war upon the hands of Germany and the German people, the allies do not desire to destroy them. In so far as it is humanly possible, Germany should pay and will be required to pay for what she has done, but England and France and Italy and America have set their hands not to annihilate her, but to punish and purify her. And let it not be overlooked: Her punishment must be severe or her reformation will be inadequate to guarantee the future peace of the world. Her slave-driving master and his gang of ruffians must go. Their unholy hands must be removed from the earth forever. And the German nation itself, whatever reformation in the way of democratization takes place, must pay the price of its error in the limited degree that price can be exacted. German toil and resource through years to come can rebuild cities and reestablish farms and industries in the lands that the army has devastated, but through no effort can she give back the life she has taken, through no effort right the sickening wrongs her unbridled soldiers have committed against the women and children of the invaded area. But sometime, somewhere, somehow, in the great, relentless movement of nature, compensation will be made.

Until the war is completely won we should use nothing that has to be shipped in if we can get along without it or with a home product.

## War Makes Change in Travel

Say what we may, the elimination of the news agent and vender of numerous articles on the railway trains is noticeable and causes a feeling of something in the nature of an aching void.

To be sure, the fellow who "worked the trains" was more or less irrepressible, but he at the same time helped to relieve the monotony of a long trip, to say nothing of what he had to sell, which the traveler was often glad to get. In any event, those who are planning the long trips in particular should provide themselves in advance with reading matter and anything else that they used to look to the news boy to furnish.

In a railway trip of any considerable distance one notices an increasing number of people of those who are evidently comfortably off who patronize the chair cars or the tourist sleepers. This is due quite likely both to the desire to avoid the "penalty" visited on the Pullman patron and to carry out the general plan of conservation. So, likewise, more lunch baskets are in evidence, and other things that indicate a consistent effort to avoid being too heavily penalized for any indulgence in luxuries or nonessentials.

With reference to railway travel, it is in order to say that while the cars, as a rule, are reasonably comfortable, and perhaps in most respects are as sanitary as existing conditions permit, yet in the matter of ventilation they are wofully lacking, not to say vile. One has but to pass through a crowded day coach or chair car to sense this fact very strongly. Some way should be devised to correct this menace to the health and comfort of the traveling public. A. E. G.

## He Has Condemned Himself.

Back in the hills in the shade of the firs was great stream of clear, cold water. It ran dow through a worn channel and out on a fruitf plain. There a dweller caught it as a fisherm nets a fish, and cunningly distributed it throu his fields by ditches and canals; and the fiel yielded abundant crops without fail.

But the dweller cast his eyes on the forest a translated it into dollars and cents. He cut t trees with ax and saw, and the harsh voice of t mill filled the sweet silences. The dweller w jubilant and jingled the money in his pockets.

And after that the money was a prey t thieves, to bank failures, to foolish investmen to fire and flood and a thousand unforeseen po sibilities that lurked and lay in wait for it.

In March the spring ran full, but it was n clear any more. In May it dwindled to a trick In July it failed altogether. The crops we stunted and turned yellow and they failed, too.

He preferred cash to the source of prosper and life, and he suffered ruin for his foo choice.

So with the man whose short-sighted greed p fers to stint and hoard when the country ca on him, who will buy no Liberty bonds, w turns a deaf ear to the appeals of the Red Cro who shrugs his shoulders when he hears the cry French and Belgian babies for milk.

We need not condemn him, for he has co demned himself. His punishment is that t money he clings to will parch his heart a shrivel his soul. He has wrought a curse for hi self. The man who has done a wrong in the he of great passion may repent and offer himse as a sacrifice for his sin. He who hardens hi self against the suffering of others and will nothing to right a wrong has dried up the spri that might have saved him.

The man of Galilee said: "He that shall sa his life shall lose it." Let us forget ourselves a serve others that our living may be justified.

## Collectivism or Individualism?

Any one possessing even a limited understan ing of the philosophy of government usually r ferred to as socialism and undertaking to inves gate its scope under American conditions can n help being struck by some unexpected revelatio He will discover early in his search that its wide support is being secured, not in the towns a cities, nor from that class usually referred to industrial workers, but from among farmers a country residents. Another discovery he w make: Most of these self-termed socialists a land and home owners. Many of them are ca talists, frequently only in a small way, but oft owners of considerable property. They have ga nered this by their own individual efforts, throu the plannings of their own brains, the sweat their own brows, the labors of their own han the tightening of each individual pocketbook. has been a personal and not a collective fight t each of them. Not all have considered themselv successful. The struggle has been strenuous a failure has been the lot of many, but for mo there is a cherished rooftree and a bit of soil th can call their very own. Why should such man choose the way of the socialist? Why shou he prefer the collective system of industry to t individual?

It is to be feared that few so-called socialis among the farmers have anything like a clear co ception of the real meaning of this question. Ha they read Kant or Karl Marx or do they grasp t real significance of the final outcome of all su reasoning if given practical application under o conditions here in free America? Are they willi to surrender their individual interest in "t means of production" and their moderate hol ings of capital goods to a common pool of indu try and wealth in which they would be mere e rected agents and little above hirelings? Th American farmer with his educational advantag and his ability to think straight ought to s through to the end of these fallacies. His own e periences ought to help him to distinguish b tween false theory and practical results. Josh Bi ings once said: "The trouble with many fol is not that they know too much, but that th know too much that ain't so." E. E. ELLIOT

# Peace Situation Is Uncertain

## *Allies Require the Unconditional Abdication of Kaiserism*

Whether peace is near or far away is problematical. elopments of the week just passed make its coming re and more certain within the comparatively near fu-, but whether it is to come this winter or next summer ct a matter for speculation. The events of the last weeks as they have stood out most prominently in development are about as follows:

1) The continued advance of the allied forces, which the immediate cause of the unrest in Germany out of ch peace desires have developed.

2) The unconditional surrender of Bulgaria, Germany's an ally.

3) The peace feelers sent out by Austria and Turkey.

4) The first actual note from Germany to President son stating that that country was ready to accept president's 14 conditions of peace as a basis for otiation, and asking for an armistice.

5) President Wilson's reply asking for evidence of the erity of the German note and a statement of whether not the new chancellor, Maximilian of Baden, repre-ed the Kaiser or the German people; and stating that armistice could be considered until Germany evacua-all occupied territory.

6) A second note from the chancellor claiming that the man government was being reorganized so that it rep-nted popular sentiment, reaffirming his statement they would accept the president's terms, and agree-to the proposed evacuation of invaded territory.

7) A second reply from President Wilson stating that armistice could be considered while Germany con-ed to destroy villages, sink passenger vessels and mit other atrocities, and declaring that no negotia-s could take place with a government representing the er and his staff.

8) A third note from the chancellor promising to cease ing passenger ships, denying the charge of atrocities reaffirming the statement that Germany was under-g the transformation from a monarchical to a demo-ic government.

9) A third reply from President Wilson agreeing to mit all the peace correspondence to the other allied ernments, but declaring that the terms of any armis-agreed upon must be dictated by the allied military ers. He also stated unequivocally that no negotiations ld be entered into until the present German rulers supplanted by popular government under adequate stitutional guarantees. A part of this note reads as ows:

t does not appear that the heart of the present diffi-y has been reached. It may be that future wars have brought under the control of the German people, the present war has not been; and it is with the ent war that we are dealing. It is evident that the man people have no means of commanding the ac-scence of the military authorities of the empire in popular will; that the power of the king of Prussia ontrol the policy of the empire is unimpaired, that determining initiative still remains with those who hitherto been the masters of Germany.

eeling that the whole peace of the world depends on plain speaking and straightforward action, the ident deems it his duty to say, without any attempt often what may seem harsh words, that the nations he world do not and can not trust the word of those have hitherto been the masters of German policy, to point out once more that in concluding peace and mpting to undo the infinite injuries and injustices his war the government of the United States can not with any but veritable representatives of the Ger-people who have been assured of a genuine consti-nal standing as the real rulers of Germany. If it deal with the military masters and the monarchical crats of Germany now, or if it is likely to have to with them later in regard to the international obli-ons of the German empire, it must demand, not peace tiations, but surrender. Nothing can be gained by ng this essential thing unsaid."

10) A fourth note from Germany, reaffirming the that popular government is being adopted, and sta-that further action awaited the statement by the allies e terms upon which they will grant an armistice. This was received at Washington Sunday night, and at writing has not been considered there officially. It is erstood, however, that the allies have their armistice s practically worked out.

11) General Ludendorf's resignation as military leader ermany. This is looked upon by many as one of the actual steps toward the abdication of the German ary power, which is headed by the kaiser, who, it ated, has announced the acceptance of the general's nation.

### T TERMS ARE ACCEPTABLE?

rmany is feeling the allies out for their terms, for wants peace. What the terms are; expressed in con-form, is conjectural, though many suggestions have made. It is generally agreed that no cessation of ighting can be considered until such concessions are by Germany as will absolutely prevent her taking ntage of the cessation for her own military improve-. It is suggested that she surrender all the arms munitions now on invaded soil; that she place Helgo-which is her seacoast base for military and naval ation, in the hands of the allied forces; that she over to the allies sufficient of her warships and arines to guarantee her naval impotency until peace s are agreed upon, and that she turn over to the d forces a sufficient number of her fortresses in ern Germany to prevent their use in continued war-It is also being urged as one of the terms of final e that German vessels of all kinds be turned over he allies to replace those that have been destroyed iermany during the war, the idea being that unless is done it will enable Germany to rebuild her foreign faster than the allied nations can rebuild theirs.

### GERMANY ACCEPT THE TERMS?

rmany can accept the terms that will be imposed when she is practically ready to make an uncondi-l surrender. She may be near that point now, or distant from it. Certainly she knows that defeat ts her ultimately. One of the important develop-s of recent days is the probability that Turkey is preparing to accept the allies' terms of peace. Reports that she has made a definite offer of peace are unconfirmed at this writing, though it seems probable that her surrender will come soon. Continued evidences are seen that Austrian and Hungarian unrest is increasing. Reports have come from Austria that the newspapers of Vienna have published statements that plans were being drawn up for the demobilization of the Austrian army. The failure of her allies, the increasing unrest among her own war-weary people and the continual and successful pounding of the allied armies at her western gates are the things that compel Germany to consider making peace. Unquestionable certainty that his dynasty must ultimately fall is all that can make Kaiser William abdicate, and it is certain that the German throne must be relieved of him before the allied nations of civilization will conclude peace.

### WILSON ASKS SUPPORT AT POLLS.

In a formal statement issued to the public last week addressed "To my fellow countrymen," President Wilson urged upon the voters that they elect democrats to both the senate and the house of representatives in congress at the election next Thursday. He argued that the presence of a republican majority in congress would handicap him in the conduct of this country's share in the war and convince the enemy and the allies as well that this country was not unitedly behind the administration in its war program. Republican party leaders made statements, following the publication of the president's appeal claiming that the republicans have been even more loyal in supporting the administration in the vigorous prosecution of the war than have democrats, and expressed regret that the president saw fit to thus bring partizan politics into the situation.

### INFLUENZA EPIDEMIC IS PASSING.

While the Spanish influenza epidemic is still of serious proportions and is actually increasing in some sections, still it is believed to be beginning to recede in the country as a whole. Conditions in the army camps are improving.

### OVER TWO MILLION ARE ACROSS.

General March, chief of staff at Washington, reports that there are now more than 2,000,000 United States soldiers "over there." The transportation of a quarter of a million a month continues. This would make the total in France by March 1 approximately 3,000,000, and 4,000,000 by July 1, if peace is not agreed upon prior to those dates.

### AMERICAN WHEAT SUPPLIES.

In his letter to Senator Hitchcock of Nebraska Mr. Barnes, head of the United States Grain corporation, overlooked the fact that the evacuation of northern France and Belgium will add about 10,000,000 people who will be dependent on wheat supplies from America. This will tax American supplies heavily as there is a decrease of 422,000,000 bushels of corn against an increase of 200,000,000 bushels of wheat. Mr. Barnes expresses the opinion in his letter to the Nebraska senator that our prospective wheat surplus was becoming burdensome and that production ought not to be further increased in this country. It is a short-sighted point of view. No one can tell what crop conditions may be in 1919. There might be a very sharp falling off both in wheat and corn. Every consideration of prudence points to the wisdom of close adherence to Mr. Hoover's original judgment that wheat production should be fostered in every way possible so that the United States and her allies will not be taking desperate and unnecessary chances in 1919.

# Eight-Hour Farm Day

## With Saturday Half Holidays Thrown in

Washington correspondents hear that President Wilson may proclaim a universal eight-hour day for all United States industries beginning November 1 in order to eliminate all disputes that are now retarding necessary production. We wonder what would happen to the great agricultural industry if it were reduced to an eight-hour basis. If the farmer and his household, his man-servant and maid-servant, his ox and his ass, should resolve and put that resolution into action not to work at any time more than eight hours a day with Saturday half holidays thrown in we fear the American people would face real food deprivation. There is no probability of that being attempted, but there is a lively probability that after this war is over there will be a growing determination in the minds of the American farmers that farm life in the future shall not be held to the dragging conditions that have governed it in the past. We do not think that the consumers of this country would ever again see the low prices of farm products that they enjoyed in the period of the civil war and this great conflict. Those low prices were made possible only by the farmer himself working excessive hours and, in many cases, necessitating the labor of members of his own family with long hours and with scant recompense.

The great dairy industry in particular, as recent searching surveys have shown, has only been kept going by the dairy farmers working the members of their own families long hours and with scant or no compensation. The consumers have been the beneficiaries of the ridiculously low prices of farm products in the past and the farmers and their families have borne the burden. A way must be found to put an end to that injustice.

### Where the Battles Are Being Won.




Herewith is the Farmer's weekly map showing the position of the battle line on the western front. Comparatively slight changes are noted since last week, though movements have been made that probably will result in more rapid advances in the near future. General March, chief of staff, cites figures to show that the allies have recaptured 7000 square miles of territory since they started their drive last summer. It is practically certain that Germany will make no attempt to hold a line again until a line is reached that would pass through Antwerp, Brussels, Sedan and just east of Verdun. If she decides to continue the war it is probable that she will make a desperate stand along this new line. If driven from it it is hardly possible that she could prevent an invasion of her own territory, as the next strategic line of defense lies somewhat within her own border.

## *Washington Gleanings*

The grade school at Chewelah has four barrels of peach pits ready for shipment to the Red Cross.

Recent rains have put the ground in fine condition for seeding fall wheat in the Palouse country—the first time in three years.

The Chehalis cannery has been busy recently canning corn, and the cannery is making a good showing for the first year of this product.

The Northwest Fruit Products company of Wenatchee has purchased for $12,000 a five-acre tract and will erect a storage plant immediately.

Yakima valley beet growers estimated that the increase in the price of sugar beets from $10 to $12 a ton will add $340,000 to their profits next season.

About 20 cars of Canadian potatoes are being loaded at Danville for shipment to the drying plant at Vancouver, B. C., for use of the allied armies.

W. A. Hately has closed up his realty business at Pullman and has left for Richland, Ore., where he will engage in the stock business with his brother-in-law, W. H. Stout.

The directors of the Columbia irrigation district held a meeting at Kennewick recently and voted to advertise for bids for the sale of $250,000 worth of bonds November 8.

R. F. Stubblefield of Enterprise, Ore., who purchased a large stock ranch near Ringold, Franklin county, is planning to bring a large number of sheep from Oregon to his Washington ranch.

Oscar Abbey of Waitsburg has purchased 500 acres of raw wheat land on the Tucannon, in Columbia county, the consideration being $20 an acre. There is a running spring of water on the place.

Imports valued at $5,703,531 and exports valued at $9,461,507 were handled through the port of Tacoma in July. Collections for the month totaled $100,944.35, a gain of more than $40,000 over June.

A. H. Kelly of Monroe recently purchased the 40-acre tract in Park Place owned by the late Wesley Clark. This piece of land is entirely cleared, and can be farmed very conveniently with the 15 acres already owned by Mr. Kelly across the road.

The White-Dulaney warehouse and elevator was damaged last week by a derailed flatcar passing on the warehouse side of the building. The corner of the flatcar went the whole length of the building. All the foundation on the side of the building was taken away and 50 bales of new sacks crushed in the floor.

Government orders for over $2,500,000 worth of lumber have been awarded western Oregon and Washington mills. The railroad administration wants 80,000,000 feet of fir, worth $2,400,000, for building cars, and the war department desires 2,000,000 feet, worth $216,000, for cantonment buildings at Camp Mills, New York.

District Horticulturist Darling says that the apple crop of his district, including the Okanogan, Chelan and Entiat territory, will approximate 7000 cars of commercial apples. One factor that is operating to offset the loss by worms is the fact that the late apples are proving to be much larger than usual. This is attributed to heavy pruning last year.

O. E. Brashears, Yakima county engineer, has filed his report for the national highway council, in which he estimates that the 1919 highway maintenance and construction work in Yakima county will cost $300,000. About half of this will be spent for construction work, which will include two miles of permanent highway and 16 miles of gravel roadway.

# Why Time of Sowing Wheat Affects Smut

## *Threshing Machines Sow Smut Spores Which Germinate According to Definite Laws*

By J. L. ASHLOCK

Last year enough wheat was produced in the United States to load two freight trains reaching across the continent from New York city to San Francisco. Enough smut was produced to fill one train reaching from New York to Cleveland, Ohio.

These estimates, compiled by the bureau of plant industry, convey a notion of what wheat-smut means in the wheat-producing industry of this country.

Stated in other terms, the wheat loss due to smut last year amounted to more than 21,000,000 bushels. Oat smut destroyed over 91,000,000 bushels. Annually the nation loses about 600,000 bushels of perfectly good rye, on account of smut.

There is an organization of American plant pathologists now at work in this country that is striving its utmost to drive this dusky plague from the nation's grainfields. The work is national in scope, is headed by Dr. H. B. Humphrey of the bureau of plant industry at Washington, D. C., and reaches every principal and lesser wheat-producing region from the Atlantic to the Pacific.

Washington's share in this nation-wide move to save wheat from this destructive ally of the kaiser's is now organized under the direction of George I. Zundel, assisted by W. F. Nehrling and W. E. Green, and is conducted under closely cooperating terms with the state college extension service department, the Washington experiment station, and the college department of plant pathology headed by Dr. F. D. Heald.

The most perplexing phase of the smut situation which confronts the investigators is the wide diversity of opinions regarding it. Not only are there differences of opinion among the scientists, but there are differences of opinion among farmers, neighbors living side by side. What to one man seems a solution of the plague to another seems an encouragement of it in its worst form. Obviously, among the many methods in use for preventing smut, some one is best of all; and the work of the plant pathologists and affiliated agencies and institutions throughout the country amounts in reality to a hunt for the one best method.

Mr. Zundel says that as the work progresses and as facts are accumulated, it is becoming increasingly evident that injuries to seed wheat have a good deal to do with the prevalence of smut—much more than was suspected at the outset. Wheat threshed in a high-speed separator comes through with injuries so slight that they can not be detected by the naked eye; yet, when the grain is treated the formalin gas or copper sulfate solution enters these tiny cracks and reduces or destroys completely the life of the wheat kernel.

Many poor stands of wheat are due to this cause. There is evidence to show that a weak, spindling wheat plant that develops from an injured kernel is more susceptible to smut attack than the thrifty, vigorously growing plant. There came recently under Mr. Zundel's observation, the case of a man who sowed 500 acres of wheat which, on account of the injured seed he sowed, had to be replanted. Approximately 800 bushels of wheat which could have been made into perfectly good flour, thus went the way of oblivion when the world is hungry for bread.

The Washington work for the immediate future includes wheat planting in different sections of the state accompanied by the use of 10 different solutions of hot water, formaldehyde and copper sulfate. From this work it is desired to ascertain the effect on seed injuries on yield and smut control. A line of study supplementary to this and of fully as great importance will be to learn more of the smut-resistant characteristics of different varieties of wheat.

The work as above outlined for fall sowings of wheat will, next spring, according to present plans, be undertaken for the spring varieties.

Enough is now known of the characteristics of smut to make it plain that the annual "summer smut showers" are of vital importance in carrying the plague forward in the wheat crop of the succeeding year. By "smut shower" is meant the clouds of smut which are liberated at threshing time and on the wind float for miles and eventually settle to the ground.

The smut-shower is of fairly recent discovery, and, up to the present time, it has not been known definitely how widespread it was—that is, how far the smut-dust would float; but it is now known to float scores and even hundreds of miles.

Obviously, wheat seeded in soil which had previously been showered with 10,000 or 500,000 smut spores would be in grave danger of soil infection, regardless of the smut-killing treatment applied to the seed previous to sowing.

Herein, according to Mr. Zundel and others who have worked on this problem, lies one of the secrets of smut prevention. The summer temperature, the late summer or early fall temperature, rather, is too high to favor the germination of smut spores; so wheat sown then has a good chance to start its growth ahead of the smut. This, likely, is one of the reasons why this year, throughout the state, early sown fall wheat was comparatively free from smut.

Second, the late autumn temperatures are generally too low to favor the germination of smut, though often permit the wheat to get a start ahead of the winter freeze-up. So, in the experience of wheat-growers, the early fall sowings and the late sowings show the smallest percentage of smut.

Unfortunately, the wheat growers find it quite convenient to follow their threshing with fall sowing of wheat, at the time when smut spores are lying on the soil 10,000 to a million to the square foot.

Third, the smut spore in its process of growth must attach itself to a tender wheat sprout, or other suitable host-plant — or die! It can not grow by itself alone.

It follows, then, that when half a million smut spores drop from the clouds to a square foot of summer-fallowed land, many of them are doomed to die for lack of nourishment. All of this dusky horde can not thrive at the expense of the few wheat plants starting in this area.

But if no wheat at all is there, the smut spores fare much worse. When the warm, fall rains come they germinate, and send forth their microscopic tentacles in quest of the tiny wheat sproutlet that, if reached, will give food and nourishment to the growing smut. Finding no such wheat sproutlet, the smut spore merely germinates and dies there in the ground—and next spring, the whole half a million smut spores will have perished.

This is why spring sown grain is ordinarily so free from smut. If the seed of spring sowing is clean of smut when put in the ground, it is not apt to be contaminated by the soil smut, which does not ca through the winter alive except in unb ken balls which may be broken up by spring cultivation accompanying the pla ing of the wheat.

Some facts are now known about t dusky enemy of the flour bin; but pathologists are not yet satisfied. Mr. Z del says this: That wheat men sho realize, at the outset, that in combat this plant disease they must be just careful, just as attentive to the treatm prescribed, as is the phy cian in writing his p scription for the tre ment of a human ailme and the druggist in f ing the physician's ord Until this care is exerci the plague will continue levy its toll of millio npon the flour bins the world.

Wheat growers have en felt discouragement their fight against sm While afraid to put th seed in the soil with first treating it with bl stone or formaldehy they have actually many cases expres doubt as to whether ei er had any real effect. a group of wheat grow together and listen them. One has tried method and succeede another tried the sa method and failed. has trusted to luck a succeeded; one trusted luck and practically his crop. One has preve ed smut while across road the same treatm failed to win.

There is a reason every failure and a r son for every succe Nothing happens. Ev effect has a cause and ery cause has an effe The state college expe ment station in its w in cooperation with government has been, these years, trying identify the causes of failures when the rec nized smut preventi is abundant evidence t success is about to cro their efforts.



**Fig. 1. Various stages in the germination of spores of stinking smut. (a) Spore surface showing characteristic ridges; (b) spore in early stage of germination with young smut plant protruding from the ruptured spore wall; (c) a later stage in the formation of the smut plant; (d) mature smut plant with a tuft of H-shaped sporida (s) borne at its summit; (e) a separated sporidium which has produced secondary sporida (ss); (f) a separated sporidium which has given rise directly to an infection thread (in); (g) several secondary sporida which have started to germinate or have produced infection threads.**

# Common Cow Must Go

(Continued from page one.)

The dairy record books are filled with records of performance, the keeping of which has inspired much of the effort that has developed the dairy breed to a point where plain folks can have big producers. No one breed has monopolized the honors; each excels in its particular line. Some produce a maximum of milk with lower butterfat test; some produce a maximum of butterfat with a lesser flow of milk; some are hardier than others and require less care; others require less feed, it is claimed by some of their partisans.

On page 1 is the photograph of a typical Jersey, a breed that claims many of the top records. This particular animal, Genesta's Duchess, is at home in the northwest, which, while an honor in itself, scarcely compares with the additional honor of having produced 15,293.9 pounds of milk in one year, having a butterfat content of 902.5 pounds, equal to over 1128 pounds of 80 per cent butter. This record was made in the year ending March 2, 1918, on the Waikiki farm near Spokane, Wash., and is officially reported by Ira P. Whitney, manager of the farm, who gives much credit to the Waikiki herdsman, C. L. Batcheldor, for the cow's performance. Her record is claimed to be the highest of any cow ever imported from the Isle of Jersey, the native home of the breed. She was imported by Harry West of Scappoose, Ore., in 1911, and was brought to Waikiki farm in 1912.

Another Jersey that has made fame for the state of Washington as well as for her breed is Olympia's Fern, a Grays Harbor county cow, that, when just under 5 years old, produced 16,147.8 pounds of milk with a butterfat content of 937.8 pounds. She was developed by E. L. Brewer of Satsop. Still another Washington cow, among the many that this state boasts, is Eminent Jimps Owl, owned by T. S. Griffith of Glen Tana farm, near Spokane. This animal produced, for the year ending May 14, 1918, at the age of 4 years, a total of 16,728.1 pounds of milk with 708.8 pounds of butterfat.

A few other American Jersey records, compiled up to May, 1917, are as follows: Lass 66th of Hood Farm, just under 4 years old, 17,793.7 pounds of milk, with 910.6 pounds of fat: Eminent's Bess 209719, in the class of 5 years old or over, 18,783 pounds of milk, with 962.8 pounds of fat; Sophie 19th of Hood Farm, 189748, in the class of 5 years old or over, 17,557.8 pounds of milk, with 999.1 pounds of fat.

The honors of the Twelfth National Dairy show at Columbus, Ohio, just held, were clearly carried by the Jerseys, says the Breeders' Gazette. Measured by any yardstick this is true. The stall count of 205 Jerseys was almost half of the total of 485 cattle in the barn; in average merit, in attendance of breeders and in enthusiasm the dominance of the breed on this occasion was pronounced.

### IS A MIGHTY BIG AND GOOD PAPER

To the Washington Farmer, Spokane, Wash.: Enclosed please find 25 cents in stamps, for which kindly send publication, adding my name to your subscription list. To judge THE FARMER by the issue of October 10th, just at hand, it is a mighty big and good paper for the money. It ought to have a place in every home, in town and country, in the Pacific northwest.

State Marketing Bureau,
MOSES FOLSOM, Sect'y.
Jacksonville, Florida.

### PRIVILEGE EXPIRES NOVEMBER 9.

Secretary McAdoo has issued the following statement to holders of 4 per cent bonds of the first Liberty loan converted and 4 per cent bonds of the second Liberty loan: The privilege of conversion which arose in consequence of the issue of 4 1-4 per cent bonds of the third Liberty loan will expire on November 9 and under existing law can not be extended or renewed. Holders of these 4 per cent bonds lose nothing by exercising the privilege of conversion and gain 1-4 of 1 per cent interest per annum. Holders of 4 per cent bonds should not wait until the last moment to exercise the privilege of conversion, but proceed to do so promptly. Delay will result in overburdening the banking institutions of the country and the treasury department

# Wheat Growers

## Relief in the Drouth Districts

Of the $5,000,000 congressional appr priation for the financial relief of wh growers in drouth districts $1,650,000 w alloted to the Pacific northwest. The pub is now advised by President D. G. O'Sh of the Spokane Federal Land bank, t disbursement of financial assistance fall planting is now virtually ended a indications are that only about $300,000 the northwest allotment has been borrow by the farmers. This leaves approximat $1,350,000 for the purchase of seed spring planting in the northwest. Prac cally all of the $300,000 so far taken gone to Montana. Reports from the Gr Falls office up to October 19 show t said loans have been made to 1435 farm in that state, aggregating $291,988. The fi applications from Washington farm have only just reached Mr. O'Shea.

We are not surprised at the failure this legislation to carry adequate relief wheat growers in general who need su relief. The government's conditions we so restrictive that only farmers in d distress could get loans under the la Applicants had to show that he had su fered two consecutive total crop failur and even then could only borrow up to $3 The farmers pointed out at the time t law was passed that these restrictio made the law substantially inoperative the great majority of cases where practic broad-gaged relief should be extended.

Acknowledgment of the ineffectivene of the law is partially made in new regu tions which will permit farmers who ha suffered two consecutive failures to borr up to $500 for spring seeding. That is on a slight alleviation. We insist that co gress, at the earliest possible mome ought to pass broad, helpful legislation th will meet real conditions in the Paci northwest. Unless that is done producti is bound to be lessened in this region and great many deserving farmers, the ve class, in fact, that would be capable seeding extensive areas if they had liber assistance from the government, will unable unless liberal aid is granted to forward with wheat production in 1919.

### Mobile Infirmaries Behind Line.

Mobile infirmaries, operated by wome are to be established behind the Unit States lines in France.

# Miss Babcock Farms

## "Keeps the Books and Pays Bills"

**Dr. S. B. Nelson.**

Miss Bess Babcock is a farmerette whose farming is done on the scale characteristic of the wheat and cattle kings of the west. In the transaction of business in the management she has of several large wheat farms and herds of cattle and sheep in western Whitman county she has run her own little automobile a trifle over 13,000 miles since the first of last December.

"Very few pleasure trips are included in this mileage," she says. "Occasionally, of course, it is possible to work pleasure and business together."

Miss Babcock in recent months has telephoned across Whitman county to the state college of veterinary science for more than 800 doses of blackleg vaccine. I received many of her calls myself, and began to wonder what she was doing. Eight hundred doses of blackleg vaccine means 800 calves somewhere, and 800 calves means somewhere else 800 cows at least. I began to wonder what Miss Babcock had to do with them all, and made inquiry to find out. Here is her explanation, written from Ewan, Wash., a few days ago:

"I have your letter of inquiry, but owing to the fact that I have been away from home lately I am just catching up in our correspondence. I am afraid my position is rather uninteresting, but know you are interested in what we girls are doing to help the country along at this time.

"Father, as you know, raises considerable stock, but about all I have to do with them is to pay the men and keep them fed. Father and I had 1000 sheep this last year. It was our first venture in the sheep business, and we found that mixing the sheep business with other stock was not the best plan. We had, principally, high-grade blackfaces, and sold them about a week ago. We have found it hard to get herders this year; then, too, pasture is short, and sheep ruin pasture for cattle. I did most of the overseeing of the sheep.

"It is rather hard to describe my position. We have three different places to buy food for always, and sometimes five. It is my business to buy the food and see that the supplies are kept in stock. Then we have quite a large acreage of wheat in. I see the renters whenever anything comes up, and if I do not know about the matter



Miss Bessie Babcock.

at hand I talk it over with father and settle it. I do the secretary work, keep the books and pay the bills. Also I do most of the telephoning, and that is the reason you have had such frequent calls from me for blackleg vaccine.

"I have my own little car, and use that on my trips. Just in order that you may know how much I travel in my work, will say that I got the car the last of last November and have since then driven it 13,100 miles. There have been few pleasure trips in this mileage, though often it is possible to work business and pleasure together.

"If you are really interested in seeing the sort of work I am doing, would be very glad to have you come down.

"You ask what sort of work I had in college. I was graduated from the normal school at Cheney. Later I entered the state college and was graduated from the department of economic science and history, with especial emphasis on social economics. Later I took special graduate work along this line at the University of California."

# Avoid Sweeping Orders

To the Editor of The Washington Farmer: In reading the article, "Save Mill Feed," I fail to see the logic of Mr. Hoover's explanation unless English and French industries and babies are more precious than our own. He or his advisers seem to have not even the least data of the needs and difficulties of a strictly wheat producing area. If there is any man that is wilfully wasting feed or anything else let him be singled out and be dealt with justly. But do not make a mistake by making a sweeping order that injures nine men to get at the tenth. It appears to me that the producer is getting it both going and coming. The administration forbids him to use certain feeds and food. His hired help refuses to work without them. I ask what can he do? Patriotism first, last and all the time, and accept nothing but an unconditional surrender of the central powers; but it takes the foundation of everything to hold up the weight of heavy structures and feed is the foundation of the heavy structure of production. S. G. NOBLE.
Peach, Wash.

### Trains Stand Still.

Trains that were on time Sunday night at 12 o'clock stopped where they were and stood for one hour, this being the time when the clocks were set back one hour to the old time schedule.

TO the Editor of The Washington Farmer: Please find enclosed check for $1, and 15 cents in postage stamps, the $1 to pay for The Washington Farmer and The Twice-a-Week Spokesman-Review, the 15 cents to pay for a cotton felt war flag. I am a new subscriber.
ANNA CASPERSON.
Castle Rock, Wash.


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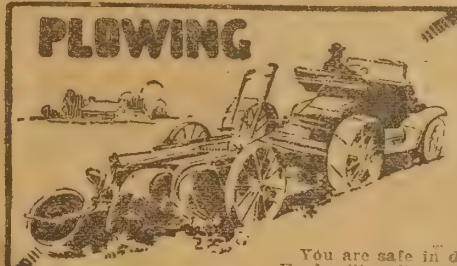
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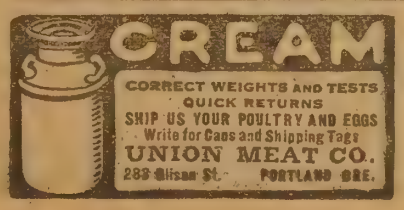
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DAIRY

Write to the Editor.

A. B. NYSTROM, Editorial Contributor.

# Alfalfa or Bran, Which?

By A. B. Nystrom.

With mill feed as hard to get as it is this year, it is interesting to learn about an experiment recently conducted at the Nebraska North Platte experiment station, and reported in their general bulletin No. 164.

Most feeders have known for some time that the general composition of alfalfa hay and bran differs only slightly. Henry gives the following analysis of these two feeds:

| | Dry matter in 100 lbs. | Digestible nutrients in 100 lbs. | | |
|---|---|---|---|---|
| | | Crude protein | Carbohydrates | Fat. |
| Bran | 89.9 | 12.5 | 41.6 | 3.0 |
| Alfalfa hay | 91.4 | 10.6 | 39.0 | .9 |

This shows bran to be slightly superior so far as composition is concerned. However, it does not follow that the feeding value differs in the same ratio, for having recently read of the findings of Dr. McCollum of John Hopkins university, we come to the conclusion that the compositions of the different nutrients in a feed is a factor quite as important as the weight of them.

Six pairs of cows were selected for each test, says the Nebraska bulletin. "Each pair was matched as closely as possible in respect to breed, lactation period, previous record, milk flow, percentage of fat, and other factors that would be expected to affect production. One cow from each pair was put in group A, the other cow into group B. The six cows of group A were fed a grain ration consisting of 4 parts ground corn, 2 parts bran, and 1 part oil meal during the first period of 15 days, while the six cows of group B were fed a grain ration consisting of 4 parts ground corn, 2 parts chopped alfalfa and 1 part oil meal. During the second 15-day period the A group received the alfalfa ration, while the B group received the bran ration. The tests were extended through four 15-day periods, during which time the bran ration and alfalfa ration was alternated between the two groups."

### Results of the Test.

"Bringing together the results of the first test from both groups we find that the 12 cows, while eating the bran mixture during two 15-day periods, produced 8216 pounds of milk containing 303 pounds of fat, and gained 96 pounds in weight. The same 12 cows, while on the alfalfa mixture during similar periods, produced 8284 pounds of milk containing 302.3 pounds of butterfat, and gained 224 pounds in weight.

"Combining the results from the two groups in the second test we find that the 10 cows while being fed the bran mixture during three 15-day periods, gave 14,669 pounds of milk containing 491 pounds of fat and lost 128 pounds in weight. The same 10 cows while being fed the alfalfa mixture during three 15-day periods gave 14,456 pounds of milk containing 484 pounds of fat and gained 16 pounds in weight.

"When we combine the two tests for both groups we find that 22 cows, while being fed a forage ration of silage and alfalfa hay, and a grain ration of 4 parts ground corn, 2 parts bran, and 1 part oil meal during an average period of 75 days, gave 22,886 pounds of milk containing 794 pounds of butter-fat and lost 32 pounds in weight. The same cows during a similar period, and under similar conditions, and fed the same ration, excepting that chopped alfalfa replaced bran in the grain ration, gave 22,741 pounds of milk containing 786 pounds of butter-fat and gained 240 pounds in weight.

"During these tests with 12 cows for two months and 10 cows for three months chopped alfalfa was substituted for bran in the grain ration without any appreciable unfavorable effect. The slight decrease of 145 pounds of milk and 7.5 pounds of fat production while the alfalfa was fed was more than overcome by the gain of 272 pounds in the weight of the cows. It is evident that in these tests alfalfa was fully equal to bran. If these results are the same as are found in general practice, then alfalfa fed in this manner has the same feeding value as bran."

# "Burned" Clover Hay

By A. Claudus Krittur.

Accidents and their resulting circumstances often lead to profitable discoveries. Such was the experience of F. M. Roseman in Yamhill county, Ore., when he attempted to put some green clover hay in the barn.

By spreading this green hay in thin layers over the mow floor area, Mr. Roseman figured that no injurious results would follow, and doubtless such would have been the case had the plans worked out. But the extra weight from insufficient curing prevented the fork from operating properly and resulted in most of the green hay being dumped together just inside the mow door. Since this part of the mow was to be fed out almost immediately Mr. Roseman did not take the time to tear the pile apart and spread it around, but simply covered it intact with other hay that was being hauled in.

A striking contrast both in the appearance and texture of this hay was noted when the pile was opened in the course of feeding. It had all burned to a golden brown, while the sweat and heat of the process had converted the stems from hard, dry sticks to a soft pliable product retaining all the original leaves.

This hay was fed to dairy cows, and the most gratifying results in production followed its consumption. The milk yield amounted from one-third to one-half as much again as had been secured prior to feeding the burned hay. As there had been no other changes either in kinds or amounts of feed Mr. Roseman could attribute the greater milk flow only to the difference in the hay being fed.

With this experience in mind Mr. Roseman expects if possible to "burn" all of his clover hay next year before feeding it.

Other experiences with this kind of feed, indicating the results, good or bad, will be welcomed by this paper—Editor.

### Burning Candle at Both Ends.

You are burning the candle at both ends when you sell uncleaned wheat.

TO the Editor of The Washington Farmer: Enclosed please find 50 cents, for which kindly send your paper for three years and also please find five cents in payment for one Farm Service Flag to me. Please enclose five smaller stars for helpers.

MRS. S. H. THOMPSON.
Winlock, Wash.

### CLEAN UP THE GARDEN PATCH.

A fall clean-up in the garden is important in the control of insect pests and diseases next year. Removing and burning the trash will destroy cucumber beetles, cabbage worms and squash bugs. Plowing the garden this fall will destroy potato bugs, grub worms and wireworms.

### USE SELF-FEEDERS.

Not only because the hog can feed himself as well as the farmer can feed him, but because a farmer has not time these days to look after him, the use of self-feeders both as to water and grain feed, are urged by many hog authorities.

### Rice in Japan.

Twelve thousand square miles—7,680,000 acres—constitute the rice land of Japan, which feeds a nation of about 50,000,000 people on an average of a pound a day for each person. It takes 135 days to grow a crop of rice, and in Japan the laborious work of cultivation is done almost entirely by hand.

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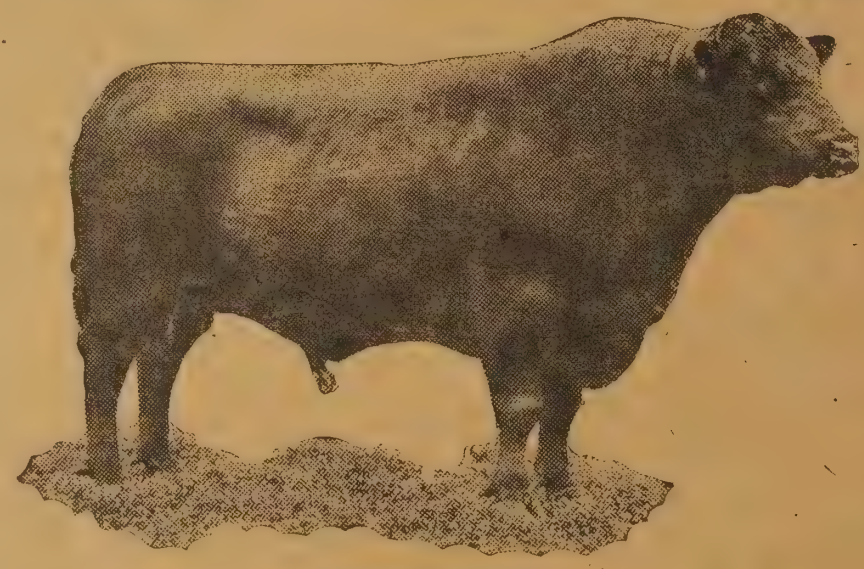
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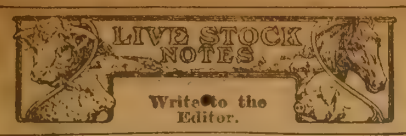
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E. J. IDDINGS, Editorial Contributor.

## Stick to One Breed

"I have a type of hog which I have not seen surpassed anywhere. I believe in pure blood, but these hogs are the result of crossing breeds. They are a combination of Poland China, Berkshire and O. I. C., and they appear to have the good qualities of all. Perhaps it was the result of individual mating, but the result is all that I could ask for. They are all white.

N. H. Smith, a well-known breeder of Oregon City, Ore., made the above statement. It was referred by this paper to Dean E. J. Iddings of the college of agriculture, of the University of Idaho, who discusses cross-breeding as follows:

"I am not surprised that good results have been had in cross-breeding, since the mingling of different blood lines is responsible for the foundation of most of the modern popular breeds of swine in America. The Poland China, Duroc Jersey and Chester White are the result of systematic mingling of blood lines, and later the exertion of careful selection in order to secure uniformity of type.

"It is thought by many men who cross breed that increased vigor and growthiness is the result. It is very hard to either support or deny this assertion. It is a belief held widely, and the average man gives credence to it. It would seem to me, however, that it would be confusing to have two or three different breeds of hogs on the farm, and to have to take into account three different blood lines in planning for one's future operations in breeding swine. The question always meets the man sooner or later who cross-breeds as to what is the best to do in the future. He must either systematically go from one of these breeds to another until he has introduced a certain percentage of each one of them, or he must introduce the blood of one largely to the exclusion of the others.

"I feel, from the standpoint of convenience, that he will probably decide to use more largely one breed. On the whole, I think he will be far better satisfied. It will render it easier for him to get his breeding stock, and furthermore will give him uniformity in shape, conformation, and color marking of the hogs that he has to sell from the farm. It is a belief of many close students of live stock management and feeding that uniformity secured by holding to one breed or strain is in the long run worth more to the farmer than such results as may be secured by cross-breeding."

## Grind Alfalfa for Hogs

Careful test by the department of agriculture indicates the value of grinding alfalfa hay, soaking it for 24 hours in barrels containing hot water, adding a little salt, and possibly one-half bushel or more of shorts to a barrel of feed and giving the mixture to hogs in the form of a thick slop. It is suggested that the preferable time for feeding this slop is the morning, so that during the balance of the day the animals can rustle about for other feed. Good alfalfa hay should also be available in convenient racks so that they can eat this roughage as they please.

One of the most important matters, and undoubtedly the one which is most commonly neglected in the proper handling of hogs, is to supply the porkers with an abundance of clean, pure drinking water. For this purpose some automatic watering device or home-made convenience of this nature should provide the hogs constantly with water. Without question, water is the cheapest material used in pork production, and the importance of having it supplied in quantity and proper quality can not be overestimated. Hogs should not be forced to drink from an icy tank nor should they be provided with only a limited supply once or twice a day.

## VETERINARY

By DR. S. B. NELSON.

**Possibly Lumpy Jaw**—I have a steer 10 months old that had a swelling come under his jaw and afterwards broke on both sides in red bunches full of mattery tubes. These bunches hang on him in the shape of big warts. He also has one on his flank. Is it caused from drinking water that has stood a long time or is it some kind of a fly sting? Is it contagious? What can I do for it? E. G. J.

South Bend, Wash.

Your description of the symptoms affecting the steer is somewhat indefinite, but I gather from your description that it possibly may be lumpy jaw. I do not think that the lump on the flank has any relation to the one on the jaw. If the disease should be lumpy jaw I would suggest the following treatment. Surgically the lump should be removed, the bone scraped if attached to the bone, and the wound dressed daily with tincture of iodine. At the same time the animal should be given one and one-half drachms of potassium iodide in a pint of water once daily for a week, then the next week stop treatment, repeat the third week, stop the fourth, and repeat the fifth week. This treatment has given good results in many cases of this kind of trouble.

**Milk has unpleasant odor**—After standing several hours the milk of our cows has a very unpleasant odor. Was not noticeable till they were fed alfalfa hay from new seeding, the hay being mixed with barley and watergrass. The cows are on pasture part of the day. One cow's milk is more affected than the others. She has been giving milk about 17 months. I am not sure she is with calf. Have noticed her crewing dried strawy manure a few times. Can you give an opinion as to the cause of the trouble? C. L. S.

Emmett, Idaho.

Oftentimes the milk of cows that have been in lactation and giving milk for a long period of time takes on the bitter and unpleasant taste. That may account for the character of the milk of the cow that has been in lactation for 17 months, an exceptionally long period of time. Regarding the other cows it is quite possible that it is due to some condition about them, just what, of course, I am not able to say from the limited information you give in your letter. I would suggest that you change the feed of your cow, and before doing that give the cow from one pound to a pound and a half of Epsom salts in two quarts of water. That may change the character of the cream. Of course, you can drive away the unpleasant odor by heating the milk, not to boiling, but just prior to boiling.

**Examination Will Determine**—We have a mare 17 years old that seems to have something in her throat that bothers her breathing. She is all right when walking slow, but if urged she breathes heavy and seems to choke. She has to stop and cough. She runs a little at the nose. She is in good condition and eats well. She seems to have a lump just back of the jaw bones in the soft part of her throat. Could this be caused from feeding orchard hay? Some seem to think it is caused from the lead spray. Is there danger in feeding the same hay to a cow? It is first cutting alfalfa. Please advise through the columns of the Farmer what to do for the mare. L. E. C.

Grandview, Wash.

Last week I had an opportunity to go into your valley and see the horses affected with the symptoms which you describe in your letter. I do not think it is a mineral poison. Whether or not it is, I am not certain. I made arrangements to have specimens sent to the chemist at our station, so that he might definitely determine whether there is present in the various tissues of the animal's body sufficient lead or arsenic to cause the chronic symptoms of mineral poison. As soon as these specimens arrive and can be examined and the information is obtained, it will be given publicity.

**Treatment for warts**—I have a three-months-old heifer which gives bloody milk from one front teat. She came fresh in June and was bred about two weeks ago. She has been hurt in no way that we know of. She runs at large on wild pasture without grain or other feed. There are also warts on her teats. Could you tell me what to do for her in regard to the bloody milk and also what will remove the warts without hindering her from being milked? N. M. S.

Westmond, Idaho.

I would suggest to you that you give the heifer one pound of Epsom salts in three quarts of water. Twenty-four hours later begin giving her one teaspoonful of sodium hyposulphite of soda in a pint of water once daily. Regarding the warts on the teats, you will find the following sometimes to be of considerable value: Chloral Hydrate, 1 1-2 drachms; acetic acid, absolute, drachms, 1 1-2; salicylic acid, drachm, 1; spirits of ether, drachms, 1; collodion, 4 drachms. Apply to the warts twice daily.

**Growth Under Colt's Jaw**—We have a 2-year-old colt that has some kind of growth under his jaw as large as a baseball, and hangs by cord or skin the size of a finger. It is raw all the time and bloody when hurt. Has another on neck near collar the size of hickory nut. Have a 3-year-old that has one coming just in front of the hip-bone. Some call them warts. Can you tell from the description what they are and the cure for same? Also are they contagious? O. D. M., Wheeler, Wash.

Cut off the growth very close to the skin, as closely as it can be done, with a dull instrument, if possible a dull pair of shears, and then apply to the bleeding wound tannic acid until the bleeding stops.


**MILK** ..... and WAR TIME

In these days of high prices for dairy products, the "poor milker" is more than ever a liability.

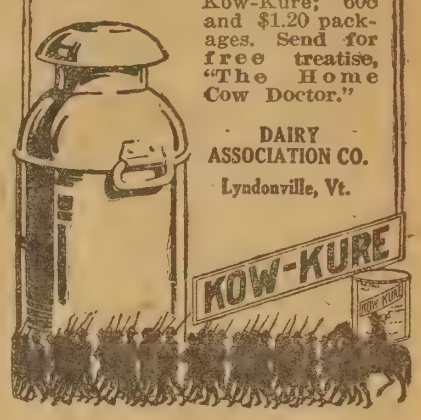
But before you sell the cow that is not producing well, try to improve her condition. Her milk value is much greater than her meat value.

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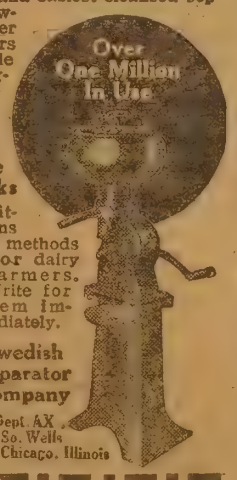
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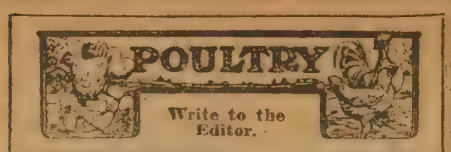


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JAMES DRYDEN, Editorial Contributor.

## Five-Cent Eggs

Consumers have now been introduced to the five-cent egg, and in a few days they will likely form the acquaintance of the six-cent egg. But this is a very moderate price compared with what our allies in Great Britain and France have to pay. There it is the 10 and 12-cent egg. It would be more here if ships were available for carrying eggs across the water.

And yet, five and six-cent eggs do not mean big profits for the poultry producer. Six cents will not buy any more feed than three or four cents bought a few years ago. The poultryman, however, with a good strain of layers is making a good profit, more than before the war. The average flock, the flock that produces the great proportion of the egg crop of the country, is not making as much money. In fact, the average hen that lays 100 eggs or less in a year is not making money, because of the high price of feed. J. D.

## Buttermilk for Fowls

To the Editor: I am writing for information as to the value of buttermilk and meat scraps. We have to buy nearly all of our chicken feed. You state in one of your articles that 100 pounds sour milk or buttermilk is equal to 5.4 pounds of meat scraps. We pay 25 cents for five gallons milk and six and a half cents a pound for meat scraps, making 100 pounds of buttermilk cost about 55 cents and 5.4 pounds of meat scraps about 35 cents. Unless the milk is necessary to the chickens, the meat would be much cheaper. Does Dr. McCollum's test apply to chickens as well as mankind and stock?

MINNIE MAY SPICER.

Colville, Wash.

The value given for sour milk as mentioned in this letter was taken from a bulletin of the Missouri university station and was computed from the results of an experiment on sour milk and meat scrap for laying hens. It was found in that experiment that 100 pounds sour milk had a value of 5.4 pounds of meat scrap in rations for egg production.

It will be noted that this value is given as the result of the experiment, and the experiment was carefully conducted. I am inclined to think, however, if the experiment was repeated under varying conditions it would be found that milk had a greater value compared with meat scrap.

If the relative value is computed from the chemical analysis alone 15 pounds of buttermilk is worth about one pound of meat scrap, judging from protein content; in other words, 100 pounds milk would be equal to 6.6 pounds meat scrap.

But milk has a greater value than its protein content would show. It has been shown by Dr. McCollum and other investigators at the Wisconsin station that the protein of milk is not only valuable in itself, but it increases the efficiency of the proteins of the grains fed. Pound for pound the dry matter of milk is worth more in the feeding of poultry than meat scrap.

The prices given by the correspondent for buttermilk as well as for meat scrap are high. He should be able to purchase both of them at a lower rate.

Dr. McCollum's tests apply to chickens as well as to livestock and children. Nothing responds more rapidly to milk feeding than chickens. J. D.

## Prevent Poultry Disease

Poultry raisers who wait until disease appears in the flock and then prepare to make a defensive attack are likely to be successful only in rare cases. By far the best plan, say poultry specialists of the United States department of agriculture, is to care for the flock in such a way that disease will not appear. The aim in controlling the disease of poultry is, they add, to learn how to prevent them rather than how to cure them. To enlighten poultry owners as to the characteristics of the more important diseases in order that they may intelligently use the most improved methods of combating them, Farmers' Bulletin 957, "Important Poultry Diseases," has recently been published by the department. The causes, symptoms and treatment of poultry ailments, from brooder pneumonia to worms, are given in this publication.

As all poultry is susceptible to many diseases, some of which are highly infectious and resist all efforts of treatment, the bulletin suggests that when birds become sick it is often the best plan to kill them. The greater the number of birds kept upon any farm or plot of ground, and the more they are crowded together, the more important are the measures for excluding, eradicating and preventing the development of the causes of disease.

When disease appears among poultry the fowls should be removed from the poultry yard and a good coating of freshly slacked lime be applied to the entire surface of the ground, according to the bulletin. After a few days it should be plowed and then cultivated three or four times at intervals of a week and finally sowed with oats, rye or other grain. It is best to leave the ground unoccupied by fowls until the winter has passed. After the fowls have been returned the premises must be frequently cleaned and occasionally disinfected.

The drinking fountains and feed troughs must be washed every week with boiling water or other disinfectant, and if any lice or mites are found on the birds or in the house, the roosts and adjoining parts and walls should be painted with a mixture of kerosene, one quart, and crude carbolic acid or crude cresol, one teacupful. The house may be whitewashed with freshly slacked lime or sprayed with kerosene emulsion. In case of an actual outbreak of a virulent disease it is well to add to each gallon of the whitewash six ounces of crude carbolic acid. Good disinfectants destroy the germs of contagious diseases, the external parasites such as lice and mites, and in some cases the eggs of parasitic worms, and should be used frequently in and about the poultry house.

### PLANT GRAIN CHICKEN YARDS.

On the diversified farm, where a small flock of laying hens are kept, they are usually confined in the yard during the summer months when they will do great damage to growing, cultivated crops, and are given the run of the farm during the winter months. When they have the run of the farm they pick up a great amount of food which would otherwise go to waste. In the spring, when they must again be confined, there is a notable decrease in the number of eggs produced, unless they are supplied with the foods which they gathered when they roamed the farm. A good way to supply some of the green food for early spring feed and also help to disinfect the ground in the yard is to seed it down in the fall with a winter cereal like winter rye, oats or wheat. This will grow practically all winter in the Coast district and make a good, early green feed and at the same time helps to incorporate the hen manure into the soil. C. J. M.

### LET THE TURKEY GROW.

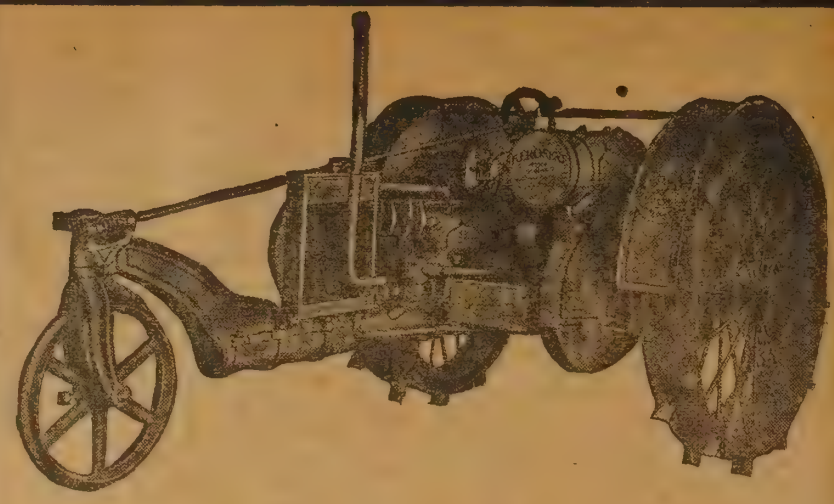
Turkeys should be allowed to reach maturity as nearly as possible before marketing, in the opinion of Thomas G. Farrell, head of the poultry and dairy products division of the Oregon food administration. Mr. Farrell is urging poultry dealers not to buy turkey hens that weigh under seven pounds live weight, nor gobblers that weigh under 10 pounds.

**CHICKENS SICK?** Roup, Colds, Canker, Bowel Complaint, Limberneck, Sorehead, etc., the best remedy is always GERMOZONE. At most dealers or 75c postpaid with 5 book poultry library free.
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GRANVILLE LOWTHER,
Editorial Contributor.

# Alfalfa and Cows

## One Good, One Bad for the Orchard

I have been advocating alfalfa in the orchard because it has a strong root that penetrates more deeply than the tree roots and aerates the soil. Besides, it lets the water down to greater depth, and tears up, in some degree at least, any hardpan near the surface. Then, too, it nitrogenizes the soil, for it takes nitrogen from the air, deposits it on the roots, where bacteria are formed that break down the small particles of sand, leaving the chemical qualities so that the water dissolves them and the roots of the trees drink them up. So much for alfalfa.

Now about cows in the orchard. I have invariably noticed that they damaged the trees. A few days ago I was passing an orchard where about half of the old trees had been dug out and new ones planted in the spaces from which they had been taken. A cow was staked out with the view that she would eat the alfalfa. This view was fully realized, for she had eaten it close to the ground. But she had browsed among the branches of the large trees, broken down some of the small ones and eaten off all the foliage of others. The cow was doing well; but it was damaging the orchard. I thought of a story I once read of a man who, after the death of his wife, had engraved on her tombstone, "Here lies the body of Mary Ann. She rests in the bosom of Abraham. 'Tis very good for Mary Ann, but very hard on Abraham." G. L.

# Protect the Bees Well

For the successful wintering of bees proper stores are essential, but good hives and thorough packing as protection from the elements are also necessary. A colony properly protected will winter with a much larger force of workers and really consume less stores than a colony unprotected. While considering feeding, therefore, also consider giving all colonies protection from the elements.

The bee specialists of the United States department of agriculture advise packing stands in units of fours. Two face west and two east. The packing case consists of a movable bottom, sides and cover. The stands are raised upon two-by-fours, allowing for four inches of packing beneath. Six inches of packing is given on all sides and eight inches on the top. Dry leaves, sawdust, fine excelsior or broken and packed straw may be used. The cover and sides should be made waterproof. Each colony is wintered in two hive bodies, the second one being placed on as a super. An exit is provided, so that on warm days the bees can take flights and so that necessary ventilation may be had. Bees do not hibernate, but keep up a certain amount of activity all winter. They consume stores in order to produce sufficient heat to keep the cluster from freezing, so do not neglect to help them conserve food by giving them the best winter protection possible.

# Store Manure in Yard

Farmers who are confronted with the problem of maintaining soil fertility—important in carrying out increased food production—will find it profitable, the United States department of agriculture suggests, to study the methods of handling barnyard manure practiced in parts of eastern Pennsylvania, where excellent results in adding to crop yields have been secured. These methods are described in Farmers' Bulletin 978, recently published by the department. For over a century it has been the custom in this region to store stable manure in a walled manure yard, partly or wholly covered, in which the stabled animals are allowed to exercise during the day. Manure thrown into such a yard and thoroughly tramped by stock, according to the department's bulletin, loses much less through heating and leaching than does manure piled in the open.

Nearly all manure produced on the farms in the region to which the bulletin refers accumulates in the manure yards. All cornstalks, straw and other roughage not used as bedding are added as needed to take up excess liquids. In this way the covered portion of the barnyard not only affords a dry and comfortable shelter for the live stock during the winter months, but it protects the manure so that no leaching occurs. In some instances the cornfodder is run through a cutter, which increases its power of absorption and makes the manure easier to handle. The tramping of the stock packs the manure, so that an even temperature is obtained, which seems to favor proper fermentation, as is evidenced partly by the strong odor of ammonia in the vicinity when the manure is being removed and partly by absence of dry combustion or "firing," so common in manure piles exposed to the weather.

The manure is hauled to the fields twice a year on the majority of farms. Many farmers apply it during the winter, when the ground is frozen and hauling is easier, and when there is more time for this work, but this method should not be done on hillside land or where there is danger of the manure being washed away when the snow melts and before the ground is sufficiently thawed to allow the soluble material to sink in. In general practice the sod is usually manured in the early spring at the rate of eight to 10 tons an acre, and is immediately plowed and rolled.

# Belgians Need Help

A state and nation-wide drive is now in progress to get funds for the work of the commission of relief in Belgium. Herbert Hoover has issued an appeal to the American people to send money immediately, and to their utmost possibility, to the Belgians, who face a severe winter entirely denuded of even the commonest necessaries of life. The Spokane committee for Belgian relief will be glad to accept sums of money, either down or in monthly instalments. All that is necessary is to address a postal money order or check to W. Dick, treasurer of the Belgian relief fund, Bank of Montreal, Spokane, Wash. The drive has been indorsed by the county council of defense. Not one penny goes in salaries or in expenses. The funds are distributed by the committee for relief in Belgium by voluntary workers. The need is great and urgent.

### FUR EXCHANGE SALE.

The autumn auction of the international fur exchange closed at St. Louis with sales for the six days aggregating $6,400,000. Approximately 3,500,000 pelts were sold. Fur buyers purchased $2,500,000 of Liberty bonds during the week and contributed $10,000 to war charities.

### NO "BEST" STUMP METHOD.

There is no one "best" method of clearing land of stumps. The kind of stumps, the kind of land and other local conditions require different methods on different farms.

Any friends or relatives who happen to have a birthday this year I am going to give them as a present a subscription to The Washington Farmer, which will be a present all the year and will be greatly enjoyed.
MRS. GEORGE W. DOUGHTY
Spokane, Wash.

### MAXIMUM COLD STORAGE RATES.

A schedule of maximum rates which applies to all public cold-storage warehouses having a capacity of 150,000 cubic feet or more has been announced by the United States food administration. All charges for storage which exceed those promulgated will be deemed unreasonable or exorbitant within the meaning of the food control act and the regulations of the food administration. Public cold-storage warehouse men are also warned that the maximum rates are not to be regarded as allowable rates. Licensees whose rates are lower will not be permitted to increase them unless justified by actual increase in costs. The purpose of this provision is to prevent those warehouse men whose operating costs are low from unjustifiably increasing their charges.

### FIRST TESTING REPORT.

Following is the first month's report of the Lewis County Testing association:

| | | |
|---|---|---|
| Number of cows tested | | 45 |
| | Milk. | Fat. |
| Highest production | 1743 | 49.7 |
| Average production | 713.6 | 25.4 |
| Lowest feed cost | | $4.50 |
| Average feed cost | | $6.77 |
| Highest feed cost | | $15.07 |
| | Milk. | Fat. |
| Highest herd average | 1119.9 | 40.43 |
| Number of cows producing 40 lbs. or over | | 3 |

### ALLIES CAPTURE WHEAT.

During the recent few weeks the allies have captured approximately 2,000,000 bushels of wheat grown in territory that has been held by the Germans. The grain was intended by the German army for use back of their lines. Considerable foodstuffs of this character are being taken by the allies in their advances.

### NEED MORE LOCUST WOOD.

The United States shipping board, through its representative in the northwest, is endeavoring to secure more black locust wood for use in making "tree nails," which are used extensively in shipbuilding. The shipping board is paying about $15 a cord for the wood from which they are made.

### PRUNES BRING $110 A TON.

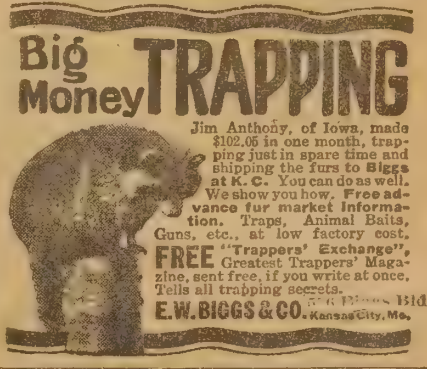
Prunes in the Walla Walla valley this year netted the growers approximately $110 a ton, according to figures given out. The total crop of the valley is worth approximately $700,000.




To Trap and Hunt, with profit. It shows *when* and *where* to trap, and how to prepare skins, to make the most money from them. *The Boys and Older Men at Home Will Have Control This Year.* There is *Big Money* to be made. There is a great shortage of skins. Prices will be very high. *The War* has shut off foreign shipments. Our house is situated to pay you all your skins are worth. We will grade them honestly, and give you a *Square Deal.* We have standing orders that we cannot fill. *Send name and address,* for the Book. *Hides* wanted, write for Price List.
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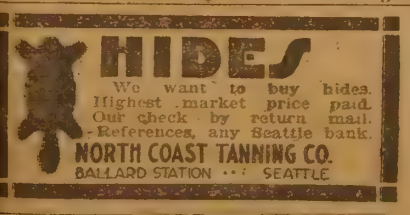
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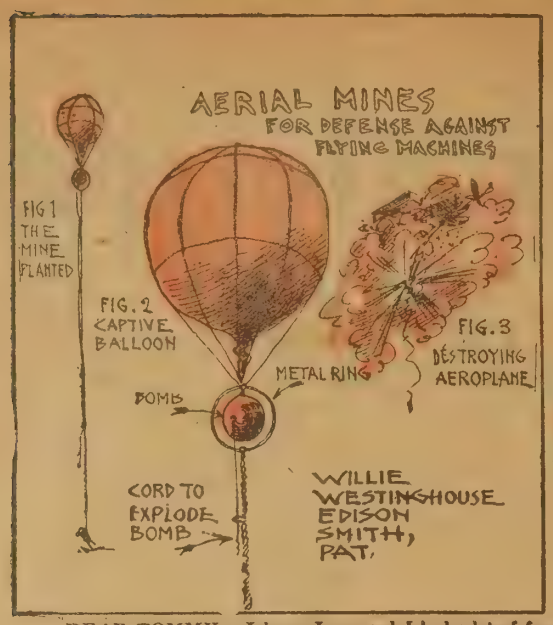
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# BROTHER REGGIE BUTTS INTO WILLIE'S WAR GAME








DEAR TOMMY: Johnny Jones and I had a lot of fun trying to land an aeroplane model on the beach through a battery of these mines. Then Brother Reggie came along and got in the game. He pulled a balloon way down before exploding the bomb, and you can imagine what his white flannels looked like, for the bombs were filled with lampblack! Yours, etc., WILLIE.





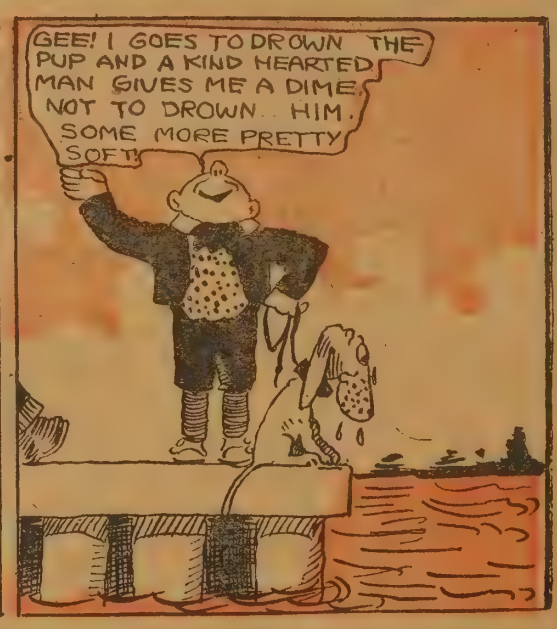


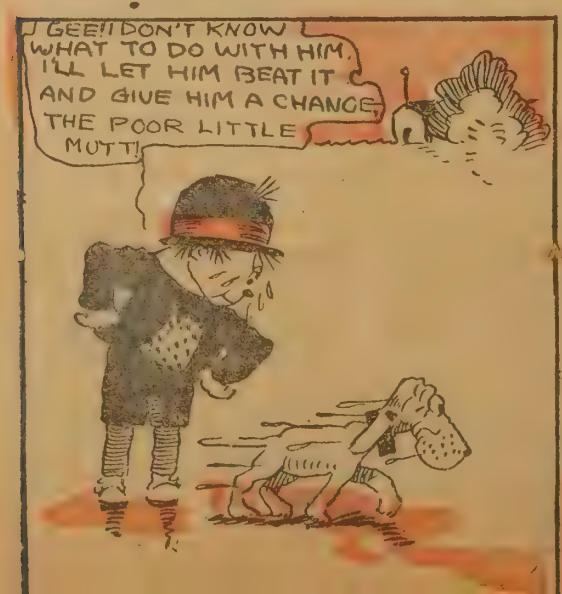
# BOOT AGAIN ARRANGES FOR PUP'S DESTRUCTION









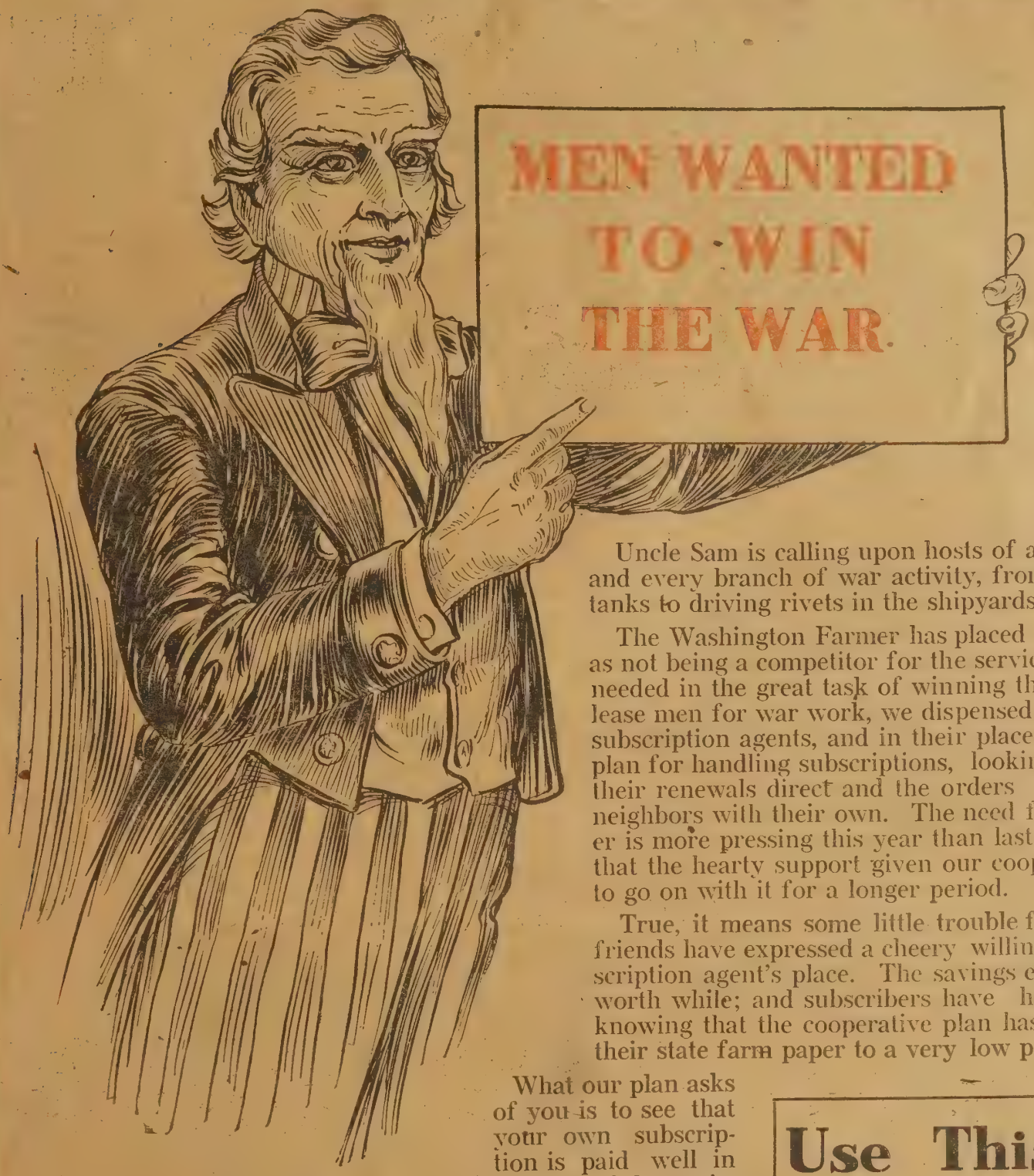









# We're Not Competing With Uncle Sam!




Uncle Sam is calling upon hosts of able-bodied men for each and every branch of war activity, from manning the monster tanks to driving rivets in the shipyards.

The Washington Farmer has placed itself squarely on record as not being a competitor for the services of these men who are needed in the great task of winning the war. Last year, to release men for war work, we dispensed with our big force of subscription agents, and in their places adopted a cooperative plan for handling subscriptions, looking to our readers to send their renewals direct and the orders of their friends and neighbors with their own. The need for conserving man power is more pressing this year than last; so we are glad to say that the hearty support given our cooperative plan enabes us to go on with it for a longer period.

True, it means some little trouble for our readers: but our friends have expressed a cheery willingness to take the subscription agent's place. The savings effected have been well worth while; and subscribers have had the satisfaction of knowing that the cooperative plan has brought the price of their state farm paper to a very low point.

What our plan asks of you is to see that your own subscription is paid well in advance of the expiration date stamped on the address label on the wrapper of your paper; and to make an effort to send in the subscriptions of those in your neighborhood who will be interested in their state farm paper with its live information, helpful departments, and entertaining stories.

Remember, you receive The Washington Farmer every week brimful of helpful information and entertaining features. The price is only 50 cents for 3 years, which amounts to but 17 cents per year.

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# Putting the Glands to Rights

By DR. LEONARD KEENE HIRSHBERG, A. B., M. A., M. D.



Dr. Hirshberg.

A thoroughly frightened person can not expectorate. The "bad" man or "tough" tries to show his bravado and absence of fear to "all comers" by spitting sharply and forcibly. If you have read the researches of modern physiologists presented in my various articles, you know that the emotion of fear is associated with the overflow of the thyroid, adrenal, intestinal glands and a cessation of action of the salivary glands.

Those chronic triplet offspring of fear, doubt, despair and cowardice, have been found by physiologists to abide in those whose grandular tissues are diseased, weak, fatigued or otherwise below par. One of the happy results of training camps, setting up exercises and physical deeds of daring, is in the elimination of the emotions of fear, timidity, despair, doubt, hesitation and cowardice.

The thyroid, adrenal and other glands are in this way disciplined to supply the human personality with only the exact amount of its substance necessary to combat and counteract the influence of weakness or ill health.

"A Settled Anger."

When you are angry your adrenal glands pour forth more than the normal quantity of adrenalin. Whether the sensations or perceptions aroused by the outside impression moves the glands to work first and thus initiates the physical emotion called anger, or whether anger starts an instant sooner, was in doubt until experiments proved that the emotions of anger, fear and others could be reproduced by artificial inoculations of these gland substances.

The flushed face, tense skin and muscles and elevated blood pressure, all signs of anger, are part and parcel of the effects of adrenalin and its allied glands. "Hatred is a settled anger." When an individual suffers this chronic sort of madness you may suspect that his adrenal or some similar glands are overactive. At any rate, they should be investigated.

Look to the Glands.

Just as "passion seeks aid from its opposite passion," so physiologically, nature attempts to combat the overflow of those glands which generate fear, anger, excitement or other emotions. Love is sometimes disguised in hate; fear and admiration become intermingled with envy and hypocrisy. The braggadocia of the cowardly braggard is of the same sort. The adrenal glands are then summoned and stimulated artificially to overcome the overproduction of the thyroid, thymus and other glands.

If the various lymph glands, the thyroid, pituitary, thymus, adrenalin, pineal and arathyroid glands are healthy, the emotions will be stable and not nuisances to you and your friends. On the other hand, if you are inclined to exaggerate, to be hypersensitive, to overdo the sympathy and martyr act for yourself, to be psychaesthenic, neurasthenic, neurotic, nervous, irritable, jealous, easily angered, see to it that you do not overwork your glands and allow them to become tired or diseased or in some fashion overstimulated.

# His Monument

By Carl G. Menze, Ferndale, Wash.

I walked leisurely along the road outside the cemetery. I noticed the many monuments of different sizes and shapes. On some I read names and dates of school friends whom I had played with in my youth. And as I loitered along, reflecting o'er the past and introspecting into the future, I wondered why all those monuments were there. Would they help us to remember friends of bygone days or will their purpose be in vain.

I walked on and left the cemetery with its sepulchral silence. But I still thought about the monuments and if those departed ones would be remembered by those who did not know them well. So content was I in my meditation that I had walked some distance and was in front of the Hans Schmit place before I knew it. When I had passed the cemetery I had forgotten Hans Schmit. He lay in an out-of-the-way corner and did not have a tombstone on his grave. I remember he had often told me that he did not want a tombstone to mark the place where he lay.

Hans Schmit came to our part of the country when it was covered with a virgin forest, except now and then a cleared spot which was the home of another pioneer settler. The other settlers cut all their timber, but not Hans Schmit. Where he had decided to locate his permanent buildings he had left groups of strong trees standing. I once asked him why he did this. He straightened up from his bending position and said, "My boy, when I am dead and gone thees trees will stand and people will ask for the one who had the vision to read the future and leave them." At that time I thought it very odd, as there were so many trees.

When he had cleared the land along the road in front of his place he planted a row of shade trees and patiently coaxed them to grow. In time the people elected him director of the school district. Immediately after election he insisted on starting to beautify the school grounds; and he was persistent, he had his way and was given charge of the work.

All his farm work was sound and practical. His land was well tilled, his stock was well cared for, and his buildings were attractively painted. His crops always had a healthy look; his fields were free from foul weeds.

One day, in his old age, I found him supervising the damming of a large ravine, which was to be converted into a miniature lake. Although old in years, he had the enthusiasm of youth. "My boy," said he, "probably this will be my last active work when this pond is finished. On its banks I shall plant trees and flowers and a lawn. And then in my old days I shall spend my time in ease, satisfied that my mission on earth is finished. All these works which you see on my farm will be my monument when I am gone. By my farm people shall judge me."

I did not take his remarks seriously at that time. Years, however, have changed my opinion. Today Hans Schmit's shade trees stand proud and stately. The groups of trees around the buildings give shade in the summer time and wind protection in the winter. The school yard does not have that bleak and barren look like that seen around neighboring rural school grounds. The yields of his acres have been constantly increasing. Where once his ideal types of farm stock was a vision, they are now a reality. His place bears the unmistakable stamp of his individuality, for his children now own it and they have unconsciously assimilated his philosophy of life.

In the cemetery there is no monument in honor of Hans Schmit. In fact, I know he did not want one. But to my mind he is not forgotten. I have had a new revelation of his exemplary character. His work as a broad-visioned farmer will be appreciated more and more in the future when other farmers realize the lesson he will have given them. His monument is his service to his fellowmen.

And as I stood there that day looking over the change Hans Schmit had wrought of the virginal forest a large touring car came up the road and stopped near me. The driver was the monument salesman.

"It is funny," he said, "why I can never sell these Schmit people a monument for old man Schmit. They can easily afford one, I guess."

"You will never sell them one," I replied. "This is old man Schmit's monument," and I waved my hand in the direction of his model farm.

# Be a Victory Girl

By Carrie D. McComler.

"Every girl pulling for victory." This is the slogan of the Victory Girls.

To be a Victory Girl, a girl must pledge herself to earn and give to her utmost for war work. Many communities are making $5 the goal. In multitudes of other places the mark is much lower.

How can a school girl earn money? All over the land the girls are asking it. Some of them are already involved in enterprises that are bringing in much more than $5.

When President Wilson requested seven national organizations to combine in one campaign for the funds which they would need for their war work during the coming year, everybody throughout the country was automatically lined up, girls and boys with the rest.

Six of the societies uniting are working directly with soldiers, sailors and aviators who are in training camps here and abroad and also in actual warfare. They are the Y. M. C. A., the National Catholic War council and Knights of Columbus, Jewish Welfare board, American Library association, War Camp Community Service and Salvation Army. The remaining one, the Y. W. C. A., concerns itself with women friends of the men in the service and with girls who are employed in government work in offices and factories. The organizations together make a gigantic concerted movement to keep the spirits of the fighters and workers at their best in order that the Hun may the sooner be defeated.

The Victory Girls and Victory Boys are the "earn and give" division of the United war work fund campaign for $170,500,000. Miss Gertrude Gogin, girls' work secretary of the National Y. W. C. A., is secretary of the girls' division.

Every farm has some product that the girls can utilize in some money-making scheme. Just now thousands of bushels of good apples in many parts of the country are going to waste because the farmers have not time to gather them. Here is a chance for the girls to do double service—earn money for the big campaign, and also help the food administrator by saving the apples.

Every girl who lives in a bean section knows about sorting the good beans from the gravel and the broken and discolored ones. Here is a chance for the girls.

The poultry yard is a never failing source of revenue under normal conditions. Many farmers can not take the time to get the retail price for eggs by selling them in small quantities. A daughter might work up a special list of customers through the telephone and see that the eggs are delivered. After paying her father the wholesale price, which he is accustomed to receive, she would have a balance for her war fund. Some of the poultry would bring better prices if they were dressed and special customers can be found. The reward for the work involved would be the difference between the usual and the dressed price.

Nearly all farms have more or less junk lying around which, in these times of help shortage, no one has time to dispose of. The old iron, automobile tires and all of the rest of the unsightly rubbish can be assembled, sorted over and sold.

Old broken furniture not infrequently yields fine timber for which cabinet makers and lumber yards would gladly pay well if they knew of it. Many an attic in the farm house has cast-off clothing put away that might be brought to the air and disposed of to peddlers or to persons who are making rag carpets.

Whatever enterprise a girl adopts to earn her part of the big fund, a few good old rules should be remembered. First of all, use all the resources at hand. Girls who have felt the most delicate about selling farm products in their home communities are doing it now for the war fund's sake.


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**Live Stock Breeders!**

**Here Is Your Chance**

**Fifty of the great herd of Shorthorns owned by the I X L stock ranch in the Boise valley are to be offered at AUCTION WEDNESDAY, NOVEMBER 13, 1918.**



Some of the yearling stallions to be sold.

Included in sale is the great sire, Diamond Count No. 487809; also 20 cows (10 Scotch), some with calf at foot, others bred; 16 young heifers (8 Scotch) and 14 bulls (4 Scotch).

This herd is of the highest registered type and in splendid condition.

The following registered Percherons are also to be offered at auction during this sale.

**Three yearling fillies, one 2-year-old in foal, six this year's colts. Five fillies. One stallion.**

The following farm machinery will be disposed of at auction: One combine, one 12-foot drill, one Smith Form-a-Truck, one self binder, three mowers, hay rakes, one 16 h. p. R. & V. gas engine nearly new, one ensilage cutter, one De Laval separator, one roller mill, one fanning mill, graders, scrapers and all kinds of implements and machinery.

Household furniture for what it will bring.

In addition to the above we are offering at private sale the following registered Percheron horses:

**One 4-year-old stallion**
**Two 3-year-old stallions — Four yearling stallions**
**Five 2-year-old stallions — Eight imported mares**

Will also offer at private sale mammoth jack Monarch, register No. 12248, 4 years old. This jack is justly considered the best in the state; stands 16 hands high and weighs nearly 1200 pounds. He has taken first prize wherever shown. Works quick and sure.

Also Monarch, the Second, register No. 23010; 1 year old. He has all the earmarks of developing into as good a jack as his sire.

Everything will go at a big sacrifice. The I X L ranch, consisting of 240 acres of highly improved land and excellent buildings, is for sale. It is 10 miles from Boise and five miles south of Beatty station.

It will pay you to travel far to attend this sale.

Write P. A. Sorensen, R. 2, Meridian, Idaho, for catalog and transportation to ranch on day of sale.

COL. E. MARSTERS & SON,
COL. AMOS MILLER,
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## Influenza Mask.



Because of the tremendous strides in the influenza epidemic in Boston, 1700 germ masks were issued to the police of that city, according to a report from there. The mask is a fold of antiseptic gauze which is placed over the mouth and nose when exposed to infection. The photo shows a Boston patrolman wearing a mask.

## British Cavalry Achieves Glorious Place in History



—Copyright, Underwood & Underwood.

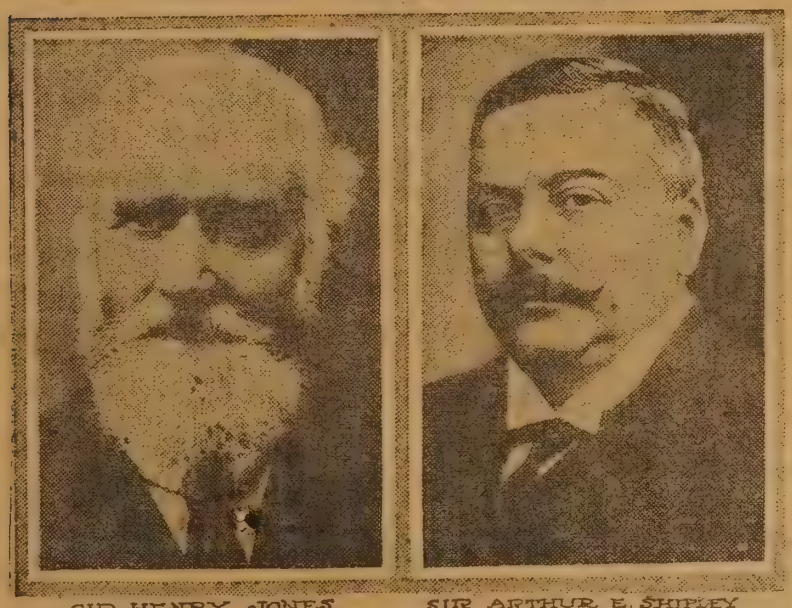
"Grays" of British cavalry cited for wonderful work in driving back the Hun.

## Chief Is Wounded.

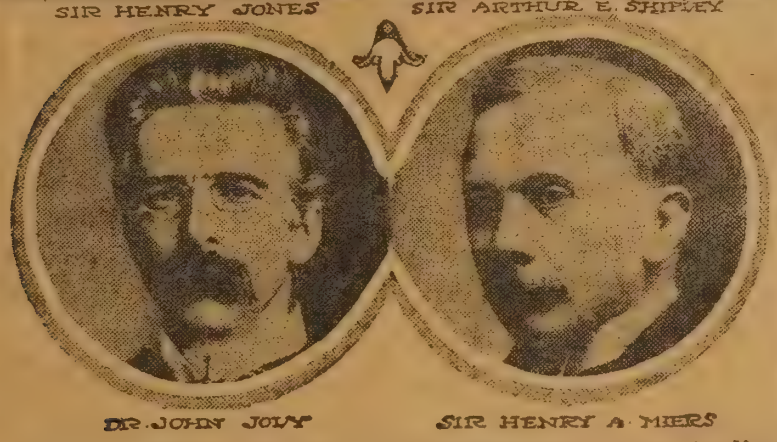


Photograph shows Chief Harvey, from Oklahoma, the first American Indian chief to be wounded in the world war. Chief Harvey was wounded during the fighting at Fimes and is now convalescing at an American base hospital at Vichy, with other American soldiers.

## British to Visit U. S. Colleges



SIR HENRY JONES SIR ARTHUR E. SHIPLEY



DR. JOHN JOLY SIR HENRY A. MIERS

On the invitation of the council of national defense five leading British educators have arrived here. As guests of the American council of education they will visit American universities and colleges. Photographs of four of the members of the mission appear above. "For 50 years," says the editor of The London Telegraph, "the best minds and the most generous hearts in both England and America have been working for complete reconciliation, recognizing that in spite of all their differences the springs of action, the modes of thought, the political and moral instincts, the tests of right and wrong and the ulimate aims and goals of both are essentially the same. The greatest prize which Great Britain and the British dominion can hope to win from this war is an enduring sympathy and interest with America."

## A Wayside Scene Not Far From the Line



British Official Photo—Copyright, Underwood & Underwood.

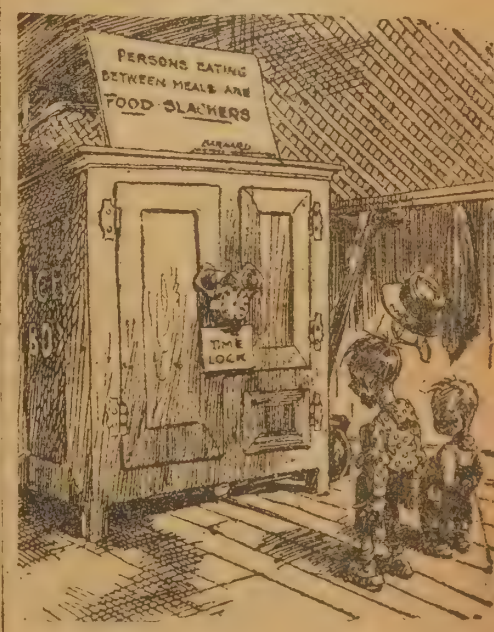
French peasant girls grazing cattle and chatting to Tommy.

## Right Through the Barrage




—Nelson Harding, in Brooklyn Eagle.

## Gee!!!




—Williams, in Indianapolis News.

# A CROOKED TRAIL---By Lewis B. Miller

Copyright by The Page Company, 1911.

**A story of a thousand-mile saddle trip up and down the Texas frontier in pursuit of a runaway ox.**

SYNOPSIS.

Travis, a lad in his teens, lived on the Texas frontier in the days when Texas was a wild, unsettled region. One morning before daylight he started out to bring in the yoke of oxen for a day's plowing, but one of them was gone. He caught his pony and started to search for the stray. Going a little and a little further hour after hour, he continued until night caught him several miles from home with a tired pony, a borrowed saddle and lariat and little for himself or his dog to eat. A rabbit and wild turkey eggs served the purpose, and morning saw him again in pursuit of the ox after a night of disturbance by a mountain lion and marauding hounds. The next night he spent in the cabin of a crazy sheep herder who believed that cattle men were trying to kill him. He made the night hideous by his crazy ramblings and songs in the moonlight, and Travis was glad when the opportunity came to escape from him, and fall in with new friends, Frank and Stella Booth, at their farm home a little further on. The three young people became much interested in each other because of common plans for attending school the following year. It was here, also, that Travis got his first definite clue to the whereabouts of the stray steer. Together the two boys set out to hunt him, but he was farther away than they suspected. Startling adventures were in store for them, among the first of which was a night in a "haunted" house, the principal haunts being wild animals.

## CHAPTER VIII.

### Cut Off by a Wall of Water.

A few moments later I was down on the floor, with the smoking six-shooter still in my hand. Frank was putting leaves on the fire, and Vic was barking. The beating of hoofs could be heard in the distance. The air reeked with burnt powder.

"What happened, Frank? I thought the house was blowing up."

"Did sound like it, Travis. And I could have made oath I heard some of it fall."

"Why didn't you tell me I was to shoot a cannon?" grumbled I, as I stooped down and began to examine the weapon by the light of the blazing leaves, turning the cylinder with my fingers. Presently I straightened up. "No wonder!" I exclaimed.

Frank looked up at me questioningly.

"Every barrel went off at once! With six bullets crashing through it, it's a wonder the house didn't tumble to pieces."

"And what did it do to the varmint you shot at?"

"That's what I'm going to find out."

"Better reload first."

He got a little powder-horn, some bullets and a box of caps out of the saddle-bags; and while he fed the fire with leaves, I reloaded three barrels.

"Now we're ready to investigate the loft," I remarked. "I can't hear anything up there."

"No. Guess they've all escaped by this time—those not shot or scared to death. You light that piece of paper and hold it up, and I'll climb the wall."

Up he went, and I held the blazing paper high.

"What do you see, Frank?"

"Nothing alive." He took the paper out of my hand and held it still higher. "But there are two dead varmints up here. One's a panther, and the other looks like"—he moved the paper about—"like a big wildcat. And that's what it is." He climbed down. "Pretty good for one shot, Travis."

"One shot, do you call that? I'd call it a volley. Why, I ought to have killed all four."

"You would, I guess, if you'd had them all in range like you did those two. But we'd better see about our horses. Think I heard them running off. They must have got out. That was enough to scarce them out of their hides."

Sure enough, both horses were gone. In their panic they had plunged through the narrow door, perhaps at the same time, and had knocked down the rotten outer wall and run over it.

"I thought I heard something falling," said Frank. "The rain has about stopped. Guess we'd better stir out and try to round them up while we can."

I took a look outside. "It's frightfully dark. Why not wait till morning?"

"Well, Bob might be somewhere close by when daylight comes, but he's more likely to be 20 miles on the road towards home. And as we're situated now, the loss of a horse would prove a serious matter."

"Yes, it would—mighty serious," I admitted, thoughtfully.

"Must confess, though, that I don't know how to go about finding them, dark as it is now. We might pass a dozen yards from them without suspecting it."

"No, we won't," I told him. "If I can get within calling distance of Dick, he'll answer me every time."

"Will he? That's good! Then we'd better get out right away."

Before starting, however, we found a few dry sticks to kindle with, then put on our boots and slickers and brought in some wood from outside—enough to make a good fire in the fireplace. Now we lost no time in getting out after our horses.

We had left the door open, that the light might guide us back. But before we had gone 20 steps the darkness was like pitch. We groped our way along, holding our hands before us. All the time I was calling Dick at the top of my voice.

Presently I heard a crash, and Frank, a few steps ahead of me, uttered a half-startled, half-frightened exclamation. Then came a splash, seemingly from the depths of the earth.

Believing that something dreadful had happened, I stopped suddenly.

"What's the matter, Frank?" I called out.

"Matter enough!" came back, seemingly from far away or from far down.

"Where are you?" I called again.

"I'd like to know myself! I'm in some kind of a hole. Better look out! You may tumble in on top of me."

"Are you hurt?"

"No. But I'm in water up to my arms. This must be an old well."

And that was just what the hole proved to be. Years before it had been covered over with rails, or poles, to keep anything from tumbling into it. But these had become rotten with age, and when Frank stepped on them in the dark they had snapped like twigs and let him drop through. The place had been a veritable pitfall.

Cautiously I approached, feeling every inch of my way. Just how deep the well was we could not tell in the dark. But undoubtedly Frank was several feet down.

"If we just had a rope!" I exclaimed. But the only ropes we had with us were trailing from the necks of our horses. Rapidly I studied the situation.

"Wait a minute!" I called out. Hurrying back to the cabin, I found our bridles, and after fastening their reins together, returned and let them down into the darkness.

"I can hear them hitting the bank up there somewhere," Frank called up. "But they're not half long enough."

Again I returned to the cabin and came back, this time with half a dozen blazing sticks in my hand. The rain had now ceased, and I kindled a fire for light, on the very brink of the old well.

"That looks cheerful up there!" cried Frank. "Wish I could start up a fire down here, to warm this water."

"Anyhow, we can see something now," I answered, as I moved round to the other side, where I could look down. The light fell poorly, but I could make out Frank's head and shoulders, set in a background of water, 20 or 25 feet below. The well was just as it had been dug, never having been walled up. It was very large—five or six feet across—and there was not ever a possibility of Frank's climbing out.

Again I tried the bridles, to see how much too short they were. Then I ran to the house and brought all our girts—there were two on each saddle—and after fastening them together and to the bridles, lowered them into the well. By lying flat on the bank, and reaching as far as I could, I got the lower end of my improvised rope within a few inches of Frank's fingers. But even if he could have reached it, it would have been impossible for me to pull him out, heavy as he was; nor could he have held on long enough if I could.

"Can you think of anything else, Frank?"

We discussed every plan that seemed even half-way possible.

Among them was the cutting of an "Indian ladder"—a long pole with short limbs left on it. But that would require an axe.

"You can't get me out of here without a rope," was Frank's conclusion, and mine as well.

"Then I must find our horses. Can you wait till I make a round, Frank?"

"That I can," he replied. "In fact, it's the only thing I can do just now. But find them as soon as possible, Travis. This water must have run in after the hail-storm, and it's chilling me faster than I'm warming it."

Frank rose suddenly in my estimation. I have always loved cheerful people.

"Never fear; I'll get you out!" I called down, rather rashly perhaps. "A fellow that can joke after taking the tumble you took, and after being in ice-water as long and as deep as you've been in it, is too valuable to lose."



The wall of water.

I started off at a run, but soon got beyond the circle of light and had to move cautiously. As I advanced I kept calling, so loudly that the woods rang with it: "Co'up, Dick; Co'up, Dick! Co'up, pony! Co'up! Co'up!"

After getting so far away that I was in danger of losing the light, I began to circle about it. And as I circled I kept calling, anxiously calling, tremulously calling.

Having made what seemed to me a complete circuit, without receiving the slightest response, I had almost concluded that I should have to return without a rope. But to go back and tell Frank that I had failed was little less than dreadful. So I pushed out further into the darkness. At length my perseverance was rewarded by hearing a faint nicker.

As fast as possible I groped my way toward it, and finally came upon Dick. The other horse may have been near, but I did not hear him, and I could see nothing at all. Even the firelight was no longer visible. Leading Dick, I groped my way toward it till it glimmered through the trees. Then I moved faster.

"Here I am! And here's a rope, Frank!"

"Good for you, Travis!" came up, more cheerfully than could have been expected, out of the gloomy hole.

The rope was quickly let down. It reached well enough; but drawing Frank up, without windless or pulley, proved a practically impossible task. And when he attempted to climb the rope, after I had secured it to a tree, he was no more successful.

"My hands are too numb to grasp it," he said, the first note of discouragement in his voice.

"Make a big loop and sit in it, and I'll have you out before you can wink twice," I called down, as I started for the house at a run.

When I came back, my saddle was in one hand and a big puncheon under my other arm. The puncheon I threw cross the well. And I was careful to smear one edge with wet clay, to keep it from wearing the rope. Then I clapped the saddle on Dick. The girts were off, and a minute was lost in getting them in place. But they were soon fastened hard, and I bridled Dick, tied the end of the lariat to the saddle horn, and sprang into the saddle.

"All ready below?"

"Wait till I find my hat," came from the well. Then a minute later: "Pull ahead!"

"All right! Hold hard, and up you come!" I shouted, as I started Dick straight away from the well.

It made the little horse pull, for Frank was a solid fellow. But the lariat slipped rapidly over the muddied puncheon, and soon a wet, bedraggled, unrecognizable head thrust itself up into the firelight.

A minute or two later I had my soaked, half-frozen traveling-companion in the house, steaming before the fire. And I kept lugging in sticks and chunks and short logs till the fireplace, big as it was, was roaring like a furnace.

After getting his clothes partly dried, Frank stripped them off and hung them before the fire, on some sticks, while he himself crawled between our blankets to sleep. I piled fresh fuel on the roaring, crackling heap, and was soon sleeping by his side. The sun was shining when we awoke.

Up we sprang, eagerly. I was feeling remarkably fresh and vigorous. Frank's clothes were dry, but stiff and yellow with clay. He declared himself none the worse for his unlucky experiences of the night.

We dressed and hurried out in search of his horse. The storm itself had utterly disappeared, and the hail had all melted, but its ravages were visible everywhere. Most of the leaves were beaten off the trees, and here and there we noticed a dead bird.

"It will surprise me if we find Bob," Frank remarked, when we were well out in the woods.

But we did; and that before we had gone a hundred yards further. The trailing lariat had got caught in a root and held the horse fast, though it left him free to graze.

"Well, now, wasn't that a lucky accident?" exclaimed Frank. "If we'd had to make a trip back home, those runaway cow-brutes would have got a long start of us."

After breakfast, thinking it prudent to let our horses graze a little longer, we climbed up into the loft and threw down the dead panther and the dead wildcat. Vic sniffed around them suspiciously.

"Do you suppose those varmints were hiding up there when we first came in last night?" asked Frank, after we inspected them.

"No, I know they were not," was my answer. "Vic would have scented them instantly. They'd been up there before, I've no doubt, and the storm drove them to shelter."

"Yes, that must have been the way of it. But we've got to skin them. Nobody will ever believe you killed both at one shot if we don't have some proof. We can leave the skins at the first house, and get them as we come back by with our cattle."

"All right," I agreed. And we soon had the dead animals stripped of their hairy coverings. The skins we tied behind our saddles, the carcasses being thrown out for a breakfast for the buzzards. A little later we were riding on our way.

After a mile or two we found some new cattle-tracks in the road, and felt hopeful that our runaways might have made them. Our horses were fresh, and we pushed on rapidly.

At length we came to a house—the first house since the deserted one—and stopped to make inquiries.

"Yes, them very three brutes passed here not more than a hour ago," the bearded settler informed us. "They was follerin' the road, like they knowed whur they wanted to go. And they was trampin' a good, steady gait, too. You ought to overhaul 'em some'r's over about the river. Camped out last night, did you? Must have had a ruther lively time."

"No, we didn't camp out, but we had a lively time just the same," laughed Frank. "We spent the night in that old house a few miles back."

"What! Not in the ha'nted house?"

"That's the place."

"And what did you see?" The settler came closer.

"Oh, we saw sights," Frank assured him.

"But what did you see—and hear? Did any of the ha'nts show theirselves?"

"Indeed they did," I spoke up. "We saw four, and we killed two of them and skinned them."

The man stared at me in hopeless, incredulous bewilderment.

"That's right," indorsed Frank. "We've got the proof here with us." He related our experiences with the wild animals, and displayed the two skins.

The settler was greatly surprised. "Well, now, I wonder if that's what's been scarin' folks clean out of their wits all these years. It might have been, or it might have been their imaginations—who knows? I never did take a great deal of stock in them wild tales."

The man readily agreed to keep the skins for us till our return, and we left them with him. After talking a few minutes about the dreadful event that had occurred, so long before, at the deserted house, we rode on.

"Well, our chase is nearing its end," my companion remarked, as we trotted along. We were out on the prairie now. "It has been a rather short one, but we had a lot of fun while it lasted."

"Yes, it seems to be about over. Old Lep can't well dodge us any longer now," I agreed. "But he would if he had half a chance."

Every time we turned a rise we expected to catch sight of our cattle. But we had still not discovered them when we looked down into a valley and saw the timber of a stream, which we knew to be the Cowhouse river.

"Wonder if it will be up," Frank was saying, when our ears detected a faint roar.

"Shouldn't think it would be much, yet, but that sounds like it," I replied.

The noise seemed all in one direction—upstream. We rode faster. Our horses pricked up their ears and gazed toward the roar, which kept growing louder. Soon, wondering, we struck a gallop.

The Cowhouse is a deep, swift stream—deep as to its channel, with a rocky bed and high, rocky banks. Much of its course, if not all, lies in a broken, half-mountainous country. On the near side, at the place we were approaching, there was no timber, the prairie terminating in a high, overhanging bank.

As we reined up near the edge of this bank, the first sight that greeted our eyes was our three runaway cattle, just emerging from the stream at the farther side. The river, which was about 150 yards wide here, was slightly swollen, and the water extended from bank to bank. But it was not deep. Lep and his companions had waded it.

Eager though we were to overtake our cattle, we little more than noticed them as they climbed the farther bank. For that roar, coming from somewhere upstream, had swelled deafeningly, alarmingly. Our horses pranced about and tried their hardest to run.

We kept staring toward the awful sound, and our eyes were soon rewarded with a sight that made our hearts stand still.

"A head rise! A wall of water!" shouted Frank, excitedly.

And that was just what we saw coming. Around a bend in the river it rolled, with a voice of thunder, foaming, boiling, raging, roaring!

(To be continued.)

# Dogs or Sheep?

## Are They Incompatible on Farms?

In a recent booklet published by the agricultural division of the International Harvester company on the subject, "A Bunch of Sheep on Every Farm," H. S. Bobley takes the dog to task as an enemy of the farm flock. He says:

"At the time when the woods and plains were inhabited by wild animals, some useful as a source of food and clothing, and others a menace to his safety, man found the dog a most useful and dependable aid in the chase or as a sentinel and defender. Thus originated a racial attachment that continues to the present.

"But these old time conditions are changed. Man now has recourse to breeding and raising the domesticated animals, the cow, the horse, the hog, the goat, and the sheep for a large part of his meat and clothing supply. Regarding this combination the dog has reversed his former position until now so far as sheep and goats are concerned, he has become a menace and disadvantage where he was formerly a most efficient helper. His value now is almost wholly sentimental on account of his past service.

"The question to be decided now is, does his past services as a helper give him sufficient value to justify his ravages of the flocks of sheep and goats which now are so necessary to man as a source of food and clothing?

"The irresistible conclusion is that since the sheep and the goat are producers of food and clothing, and the dog produces nothing, but is a consumer of and a destroyer of one of the most important food resources, man must deny his sentimental appreciation of the dog in favor of his more pressing need of meat and clothing and substitute the sheep and the goat for the dog."

The compiler of the booklet claims that the scarcity of sheep on the farm is due to the dog menace. He gives the following facts and suggestions relative to them:

"In a review of 5000 farmers in all parts of the United States, all but 18 gave 'dogs' as the main reason for the scarcity of sheep.

"The dog is a carrier of hog cholera, stomach and tape worms, lice, ticks, fleas, rabies, and foot and mouth disease.

"He brings contagious diseases home to the family.

"He runs at large, practically unrestrained, enjoying undisputed rights, and all for what?

"What has the dog family ever done that they should have more rights than their owners?

"All states have 'dog laws' that if enforced would lessen dog troubles, yet dog laws are nearer dead letters than anything on the statute books.

"What is the remedy?

"First—Enforce the laws already passed until better ones are enacted.

"Then—Unqualifiedly put the dog on the same legal status as sheep, hogs, horses and cattle. Take away the right to run at large day and night.

"Compel every dog owner to keep his dog on his own premises or under his control when away from home.

"A dog to be of any value to his owner must be about his owner's business.

"How long would law or public opinion allow a 100-pound shote or a three-months old calf to follow its owner to town, down the street, into the store, blacksmith shop, postoffice, and on the way home gallop through the neighbors' fields, yards, sheep folds, and feed lots?

"Any one has a right to own a dog, but no one has a moral right to maintain a nuisance.

"Dog-proof fences are all right, but let the dog owner build them. A fence that will keep dogs out will keep dogs in.

"Dog chains and muzzles are inexpensive.

"The use of both can be prescribed by law.

"The dog problem is not solved by license.

"Licensing a dog, requiring the owner to buy a collar for him, or to pay a heavy tax on him, does not keep the dog from killing sheep or being a worthless cur.

"Require the dog owner to be responsible for the whereabouts of his dog.

"Back this requirement with public sentiment and officers with backbone, not of gristle, and sheep will come to their own.

"A medium sized cow bell on every tenth sheep will help to frighten dogs away and alarm the owner and neighbors. Don't use little dinky sheep bells. They don't make enough noise. Use cow bells."

# Rabbit Skin Market

Several readers have written regarding the marketing of rabbit skins with felt manufacturers, as well as asking how the skins should be prepared. The following letter from R. A. Ward of Redmond, Ore., will be of interest to these inquirers:

"The skins for felt manufacture must be skinned flat and not cased. This is best accomplished by spitting the hide up the belly and tacking it out on a shingle. They may also be cased and afterwards split. This is not so satisfactory, however, if drying has set in, as the skin does not lie flat. As the pelts are laid on skiving or shaving machines which shave the hair from the skin itself, it is necessary that they be dried as flat as possible. The skins should be prime, but in the northwest our rabbit skins are prime in ordinary years from October 15 to February 15, or even later. It is not essential that the heads and feet be left on. They may be clipped from the skin providing the general rectangular shape of the skin is not injured.

"The skins can be marketed through the Hatters' Fur Exchange of New York city. There are also a number of private firms that will buy them. It is possible that Funston Brothers of St. Louis will take all that your correspondents have for sale."

# Plan Wool Institute

An interesting feature of the Lewiston stock show will be a wool exhibit under the supervision of J. L. Chapman, who is again in charge of the sheep department. Wool will be shown in its various states from the time it leaves the sheep's back until it becomes finished cloth or other material. The Columbia Basin Wool warehouse of Portland, of which L. W. Alt is the Lewiston representative, will make the principal exhibit of wool. Local exhibitors will include John Moran, who will make an extensive exhibit of Rambouillet fleeces.

W. T. Rich of Salt Lake, recognized as a wool expert, and others will hold a wool institute all week and deliver lectures. They will explain the proper method of sorting and packing, and show why the mixing of coarse and fine or middle wool in the sack and the inclusion of tags, etc., reduce prices.

### MORE CALVES SOLD THIS YEAR.

Figures show that for the first nine months of this year, 4524 calves were received at the Portland Union stock yards as against 4072 during the same nine months last year.

### Wire Frame Holds Cup.

A wire frame to hold a cup securely on the edge of a plate has been invented for use where refreshments are served informally.

### Seeing Is Believing.

To see is to believe, but who ever saw faith or hope or ambition or love? Yet who ever denied the existence of these things?


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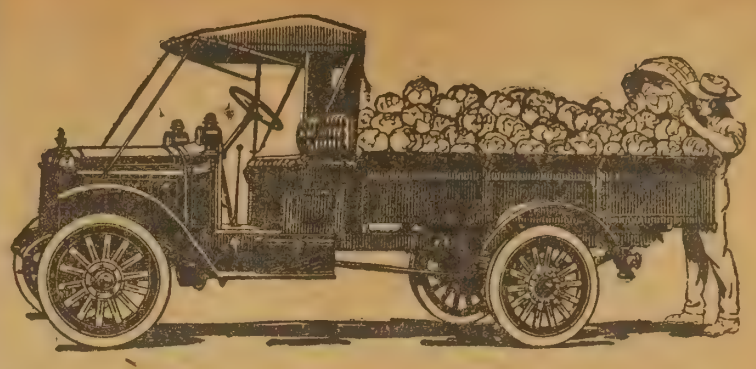
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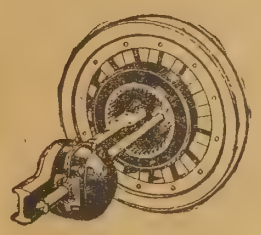
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THE STANDARD FANNING MILL is guaranteed to be the best general purpose fanning mill on the market. It will clean and grade more grain in an hour than any other fanning mill on the market and do it twice as well.

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Modernize Farming



The Internal Gear Drive is simple as well as powerful. Owners say that it is practically trouble proof.

WITH a Republic Truck on your farm, you can get the same speed and efficiency in your hauling that are making profits for successful business men in every other line.

Republic Trucks are built by the largest manufacturers of motor trucks in the world, who build nothing but motor trucks and know just how to build them to insure their giving constant dependable service at a minimum cost. Last year more than twice as many Republics were produced and sold as any other make.

The Internal Gear Drive used on all Republics, gains extra leverage by applying the power near the rim of the wheel. That gives greater pulling ability under all conditions. The load is carried on a separate I-beam axle of solid forged steel and the driving mechanism has nothing to do but to drive the truck.

45% greater road clearance makes this the ideal truck for country roads and there is less unsprung weight which means a big saving in tires, gasoline and all upkeep expense. Republics are also remarkably easy riding.

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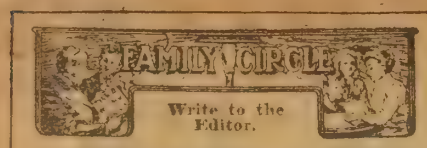
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SAND VETCHES

As is well known, a few years ago Sand Vetches were all imported. We are just in receipt of a shipment of Oregon grown and suggest prompt ordering by any one wanting any of this.

We are also in receipt of a car of Eastern WINTER RYE.

THE INLAND SEED CO. Spokane, Wash.




ALICE W. BARLAND, Editorial Contributor.

# Household Record

## Supplement to Farm Accounts

The modern farmer's wife is no longer satisfied with the old accepted idea that "the farm gives us a living," but she gets out her pencil and paper and asks, "How much of a living does it give us?"

Household expenses on the farm are very intimately associated with the business of the farm itself. The farm normally supplies much material which otherwise would become a household expense. The household, in turn, very often furnishes board for farm labor, which would otherwise be a farm expense. Merely from the standpoint of keeping track of household expenses as related to the farm business, household accounts are desirable and should serve to supplement and round out farm accounts.

There are two methods of keeping a record of household expenditures, says the weekly news letter of the United States department of agriculture. One is to record the purchases or money paid out without classifying the expenditures. The other is to classify when the record is made.

The first method is very simple, requires no special form, and gives all necessary information regarding expenditures. At the end of the month or at the end of the year the total expenditures readily may be determined. In order, however, to know the totals for each kind or class it will be necessary to make up a monthly summary in which the items will be distributed in different columns, by classes. This extra work at the end of each month (or at the end of the year) may cause discouragement and neglect of classification, with the result that the greatest good that could be derived from the records is not realized.

Under the second method, in addition to being entered all together in one column, the items are classified in separate columns. This method has the same advantages as the first method and the additional advantage of allowing for the distribution of the items of expenditure to the proper classes without the inconvenience of turning to some other page. The distribution may be left to moments of leisure if the farmer is busy at the time the entry is made. When the page is filled the next page is begun, the top line next to the heading being reserved for the total carried forward from preceding page. The items may be totaled at the end of the month and these totals carried to the summary page at the end of the book.

The kind of book to use is not important. An ordinary blank daybook or ledger book with a stiff cover may be bought at a reasonable price. If the vertical rulings in the book do not serve the purpose others may be inserted with a pen or pencil.

In order to simplify accounts it is well to group expenditures. If all individual items were listed in separate columns it would require a great amount of detail work. The distribution of the different household expenditures into groups is largely a matter of individual viewpoints.

# Handicraft for Boys

By A. NEELY HALL.
(Copyright by A. Neely Hall.)

### HOME-MADE LAMPS FOR THE PUSHMOBILE.

Every boy who builds a pushmobile wants it as complete as possible, and lamps are part of the equipment that ought not to be overlooked.

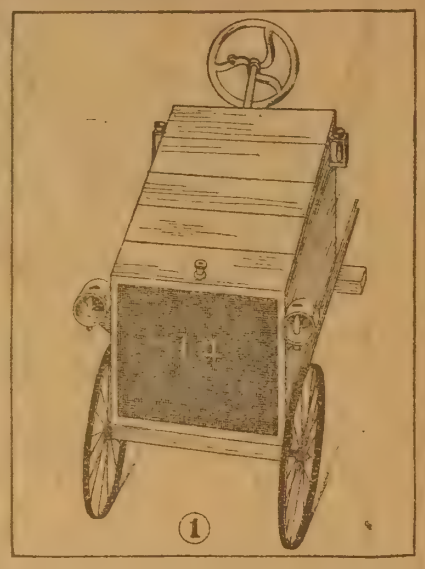
There should be two headlights and two sidelights (Fig. 1); also a tail-light.

The headlight shown in Fig. 2 is made from a syrup can, the kind having a flanged cover that fits inside of the rim. The bottom will be the front of the lamp, therefore it must have all but a rim of the tin removed (A, Fig. 3). Cut the tin with a can opener.

If you can find an old alarm clock of the right size, the glass from it will be just the thing for the front of the lamp. If not, and you haven't a glass cutter, you can get a circular piece cut at a paint store for 5 or 10 cents. Use a measurement that will make the glass fit fairly snug in the end of the can. To get the glass inside of the can, it is necessary to remove the rim on the top, which can be done by holding the can over a flame for a few seconds, and then knocking off the rim (B, Fig. 3). When the glass has been slipped into the can, replace rim B. Cover C, fitting inside of rim B, will be left removable for the purpose of lighting the lamp. Fasten the glass close against the front of the can by means of short nails driven through holes punched through the side of the can, just inside of the glass (Fig. 2).

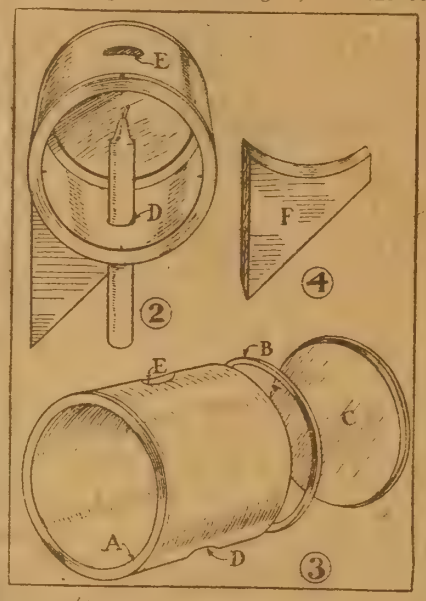
With a can opener cut a hole a trifle smaller than a candle through the side of the can (D, Figs. 2 and 3) for the candle to stick through, and another directly opposite it (E) for a chimney.

Cut a bracket block with its upper edge



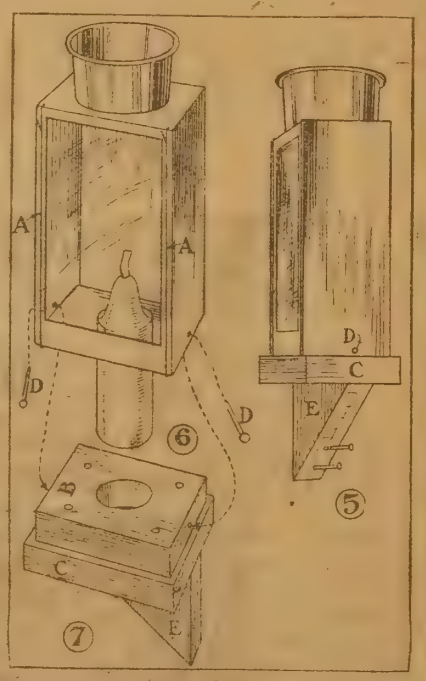

curved to fit the can (F, Fig. 4), nail the can to the curved edge, and then nail the block to the side of the pushmobile (Fig. 1).

The lamp shown in Fig. 5, is made out




by means of two pieces of wire run around it and the outside of the can as shown at A (Fig. 6).

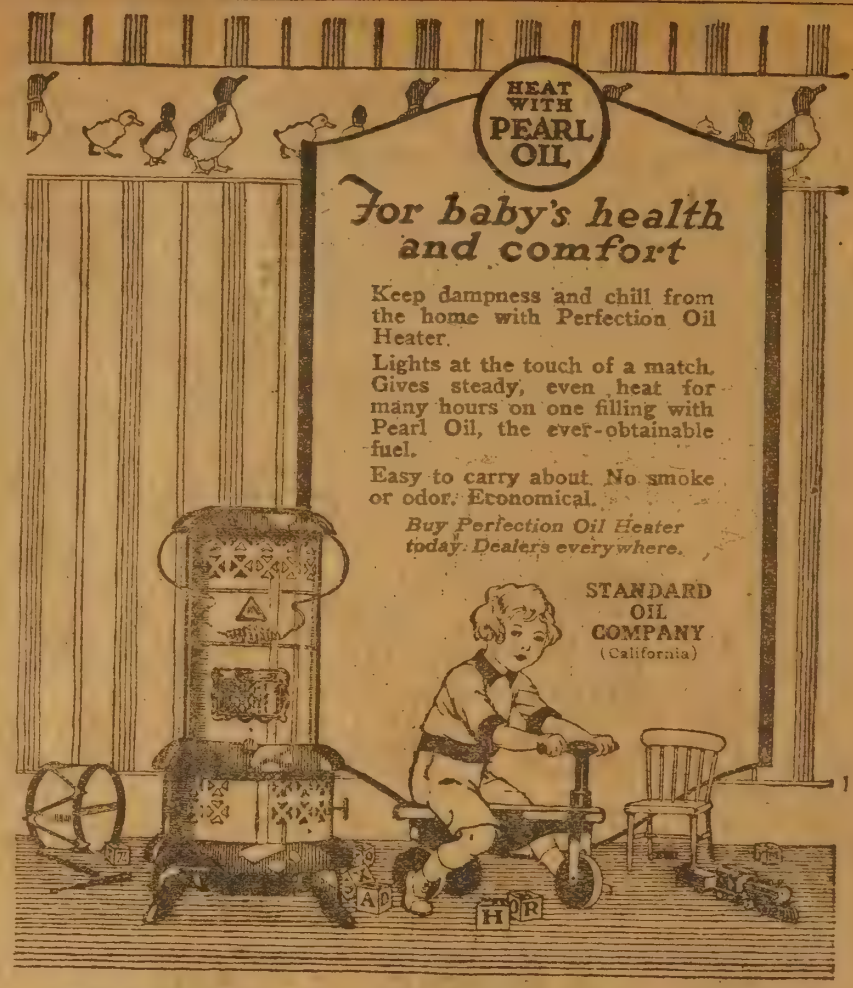
Cut the block (Fig. 7) enough smaller of a pint or half-pint varnish can. Remove the bottom, and cut away all but a narrow rim of one side for the glass front (Fig. 6). Cut a piece of glass to slip in back of the opening and fasten it in place




than the can so the can will set down over it, bore a 3-4-inch hole through its center, and nail to a block a trifle larger (C, Fig. 7). The candle sets in the hole in block B. The can sets down over block B on to block C, and is pinned to B by two short nails D slipped through holes made in opposite sides of the can and block B (Figs. 6 and 7).

Fasten the triangular bracket E to the under side of base C, as a means for bracketing the lamp to the side of the body of the pushmobile.

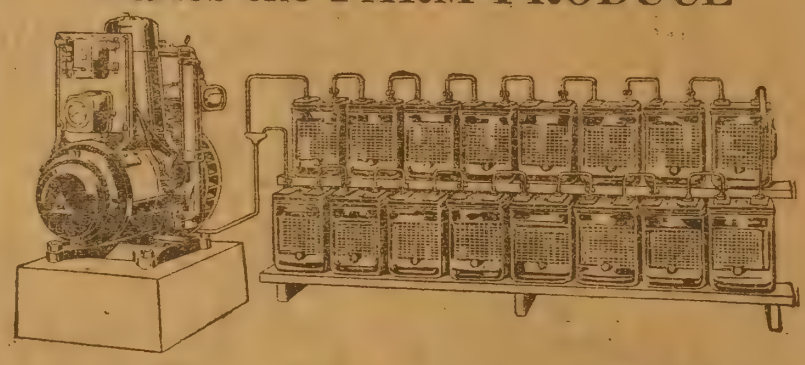
A taillight may be patterned after either the sidelamp or headlight.


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2634—Girls' dress. Cut in four sizes: 6, 8, 10 and 12 years. Size 10 requires three and three-fourths yards of 27-inch material. Price, 10 cents.

2477—Ladies' work dress. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires four and three-fourths yards of 36-inch material. The dress measures about two and one-eighth yards at the foot. Price, 10 cents.

2643-2618—Ladies' costume. Waist 2643 cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 2618 cut in seven sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. A medium size will require two and seven-eighths yards of 36-inch material for the waist, and five yards of 36-inch material for the skirt. The skirt measures two yards at the foot. Two separate patterns, 10 cents for each pattern.

2316—Juniors' dress. Cut in three sizes: 12, 14 and 16 years. Size 14 requires five and five-eighths yards of 44-inch material. Price, 10 cents.

2636—Misses' dress. Cut in three sizes: 16, 18 and 20 years. Size 16 requires six yards of 36-inch material. Width of skirt at lower edge is two and one-half yards, with plaits drawn out. Price, 10 cents.

2339—Ladies' dress. Cut in seven siezs: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires seven and one-fourth yards of 36-inch material. The skirt measures about three yards at the foot, with plaits drawn out. Price, 10 cents.

2614—A comfortable work uniform. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires four and seven-eighths yards of 44-inch material. The cap, cut in medium head size, will require five-eighths yard. Price, 10 cents.

2246—Ladies' dressing sacque. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 36 requires three and three-fourths yards of 36-inch material. Price, 10 cents.

2615—A simple style. Cut in five sizes: 1, 2, 3, 4 and 5 years. Size 4 requires two and five-eighths yards of 44-inch material for the coat, and five-eighths yard for the cap. Price, 10 cents.

2543—Ladies' dress. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 38 requires five and five-eighths yards of 44-inch material. The skirt measures about two and one-eighth yards at the foot. Price, 10 cents.




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"I have no twin yet," writes Alice Fredickson of Northport. Sam, Dick and Gerie are three little calves. Alice has a little arden of her own.

Earla Lower of Box 62, Pullman, was 11 ears old March 26. She is in the seventh rade and wants a twin very badly. This s her first Corner letter.

Eva Priddy of Touchet reads the letters the farmer every week. What goes round the house and leaves only one rack? We wish Eva to write again?

Carl Jones of Winthrop writes for the rst time and wants to be a cousin. He is the second grade and has two rabbits. eith and Wanda are his brother and sister.

On washday Lena Bailey keeps house hile mama washes. Lena lives near Yakia and she has a bridle for her colt so she n ride. She is in the fourth grade this rm.

Clara Grunden of Route 6, Box 40, Yakia, is 9 years old and her birthday is ... 19. She is in the fifth grade. On eir farm there are the three pigs, two rses and one cow.

"Frost damaged lots of the early fruit, t we have a good crop of apples, pears d grapes," writes Mildred Webler of Hanrd. Mildred is in the sixth grade. She ll be 13 October 14. She will write again on.

One of Clyde Braden's brothers is a maie. Clyde's address is Box 87, Route 1, randview, Wash. He was born in 1908 d has blue eyes and brown hair. Clyde n swim and skate and likes to do both. you are his twin, please write to him.

Gerda Ekholm of Rockford has been knitg. She has made a sweater and two ttlcoats for the Red Cross. Mother and ter do lots of sewing for the Red Cross. hat is it that turns but never walks? Milk ns, but never walks. Gerda was 12 years d, May 11, and is looking for a twin.

A part of a quilt, two wash rags, four rfs, two towels and two hospital bags the things that Alma Hensen of Box Route 1, Ray, Wash., has made for the d Cross. Alma was 13 September 30, and wishes to hear from her twin. Her other and she had a war garden which ned out fine:

One time the flames from a forest fire t way up in the tops of the pine trees l one of the buildings on the Smith m caught on fire and so Cousin Hazel it out. Hazel Smith lives on a 40-acre m in Colbert. Minnie Meloy is her twin. ey are both 12 years old and their birthis May 8. Hazel works hard on the m.

A little long-haired, yellow kitten named bby, and a puppy with a black spot on back and called Spot, are the pets of her Grunden of Yakima. Esther says t her puppy and kitten play together. her was 11 years old June 23 and she nts a twin. She has nine thrift stamps l will soon have a war saving stamp. She crochet and feather stitch.

Helen Hager of Mabton is in the fifth de and she goes to the Wendell Phillips h school, which is two miles from ere she lives. The school, Helen says, is ice concrete building three stories high. re are five teachers who teach from fifth grade to the last year in high ol. Helen has six rabbits, four Giant gian hares and two Belgian hares. She joined the Red Cross and has a Lib bond. She lives on a 120-acre farm ut a mile north of the Yakima river.

has been quite a long time since el Rosenkranz of St. John has written is and we have missed her letters. All ng and summer Gazel caught squirrels papa. She is buying war stamps to help the war. One of her uncles, who is a ier, got a furlough this summer to help father on the farm. Thank you, , for the picture. Aunt Nellie would e loved to have put it in the paper, but as not clear enough to make a good Will you send us another, some time?

ttle Gena Baumbart has been sitting wheel chair for some months, and she very tired and lonely, so she hopes e of the cousins will write to her. She try and answer all the letters that can. Gena's address is Box 72, Cunningham, and will be 11 years old, December 13. She has a few pet chickens and one of them will fly in the wheel chair and let Gena hold it. We are glad to have dear little Gena for a cousin and we hope that she will write to us again.

### Has a Pet Chicken.

Dear Aunt Nellie: My papa has taken the Farmer for two years. I was 13 September 21. I am five feet two inches tall, have red, curly hair and blue eyes and a fair complexion. Have I a twin? If so, I would like to correspond with her or him. The other day I was feeding mama's chickens and I saw a little chicken with her bill deformed. I thought I would take pity on her, so I did. I picked her up and looked at her bill, and it was crossed so she could hardly eat. I took her for my pet, and in a few days she was following me around the yard. I just love chickens and rabbits. We have got over 300 chickens. Now I will tell you about my brother at war. He just went over a while ago and he wrote home and said he liked Camp Lewis fine. He said he was a real soldier boy because he had his suit. Then he sent us his picture of his regiment.—Libbie Latimer, Plaza, Wash.

### Knows How to Swim.

Dear Aunt Nellie: The last time I wrote I had $7.25 in war savings and thrift stamps, but now I have $102.50. I have no relatives in this war, but I hope what I am giving will help some poor soldier out. I know all the children that write to this Corner are trying to do their bit. I have learned to swim and I expect some day that it will come in handy. I might be glad that I do know how to swim. Sometime when I write I will send you my picture. I have quite a few pictures of myself, as my sister has a kodak. To write to the Children's Corner teaches me how to write letters, or, I mean, it is good to practice how to write, although I don't know how to write yet. — Hazel Agnes Land, Cheney, Wash.

### Working in the Field.

Dear Aunt Nellie: I am 13 years old and my birthday is November 24. If I have a twin, I wish they would write. I have been working out in the field hoeing and shocking hay. I am five feet and two inches tall. I have a dog and five cats. One of my cousins is in the war, and I think my brother will have to go. I have nine thrift stamps and got $2 more to get some more. I have seven brothers and two sisters. Four of my brothers are in Idaho.—Sophia Havlicak, Odessa, Wash.

### Reading Fairy Tales.

Dear Aunt Nellie: I am 9 years old and in the fourth grade. Have I a twin, and may I join? If I have, I would like her to write to me. I was 9 years old June 7. I knit for the Red Cross. We have 12 horses and two colts. We have nine head of cattle and five calves. My brother has about 100 rabbits. Mama has about 50 chickens. Some of them are big enough for friers. I have a fairy-tale book for children I am reading. It has all kinds of stories in it. My brothers' names are Lowel, Arthur, Francis, Laurence and Rue. My sister's name is Nora Bessie.—Mary Tagarden, Wapato, Wash.

### Takes Care of the Garden.

Dear Aunt Nellie: I was 13 years old September 27. I am in the eighth grade. I expect to finish school next January. I have two brothers and one sister. My oldest brother is 18 years old. He finished school two years ago. My sister is 16 years old and finished school a year ago. My youngest brother and I walked to school most of the time last year. I live on a 160-acre farm. We have a large garden and I like to take care of it.—Lillian M. Hadford, R. F. D. 6, Box 89, Spokane, Wash.

### Helps With the Work.

Dear Aunt Nellie: I had a good time this summer. I have to dry the dishes and help set the table and milk one cow all alone. I had two little kittens, but I gave one to a little friend. She didn't have any, so I shared mine with her. My little brother helped me put two of the dogs in the watering trough, and then they got in a fight while they were in there, and my goodness! the water did splash! I have an old rooster, and his name is Crook. His bill has grown crooked and he can't eat with it. He has to eat soaked bread. My soldier brother was at Camp Lewis for nearly 10 months. Now he is at Camp Mills. I will write again soon.—Goldie Miller, Box 63, Mayview, Wash.

### Junior Red Cross School.

Dear Aunt Nellie: Have I a twin? I am 10 years old, and my birthday was April 15. I am in the fourth grade. We have 11 horses and one colt, two cows and two calves. All of our school joined the Junior Red Cross. I have two brothers. Their names are Evert and Bertie. I have two sisters, Berenice and Edith.—Clark Tyrrell, Box 504, Kennewick, Wash.

### Hear Coyotes Howl.

Dear Aunt Nellie: I am 9 years old. My birthday is May 11. Have I a twin? Papa takes the Farmer. I like to read the little letters. I have four brothers: Milo, Rowe, Harry and Oren, and one sister, Grace. We live on a 40-acre farm. We have two horses, Molly and Dollie, and two cows, Bruin and Queen. We call her Bruin because she is the color of a bear. We have 22 old hens and 51 little ones. We have two cats. Their names are Rex and Tom. I like to take care of chickens and go to school. We often hear the coyotes howl, sometimes very close to the house.—Ethel Strausbaugh, Winthrop, Wash.

### Ellensburg Cousin Writes.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I would like to join it. I am 10 years old and will be 11 May 30. Have I a twin? Father is sick and has the lockjaw and is in the Seattle sanitarium. I am in the fifth grade and have one brother and a sister. My brother is 12 and my sister 17 years old.—Alga Shermer, Ellensburg, Wash.

### To Get the Kaiser's Goat.

Dear Aunt Nellie: I will be 14 June 27, 1919. Have I a twin? If so will he or she please write to me. I have two sisters and one brother. Their names are Gladys, Dorothy and Donald. I have a cat and a rabbit and I did have a dog until last spring when papa gave him away. The cat is a year older than I am. He catches lots of squirrels and gophers every summer. My uncle gave me the rabbit a few days ago. We had a Red Cross sale in town that brought $2750, which will help get the kaiser's goat. We had a red Cross war drive and raised $2000, and money still came in until we got $3504.50. I have not seen hardly any boys writing and I wish more of them would write.—Arnold J. Taylor, Box 216, St. John, Wash.

### Some Sidelights.

Dear Aunt Nellie: I am 11 years old. My birthday is October 19. I am in the sixth grade. I have two thrift stamps and I am going to get some more. I hoe in the garden. I can crochet, tat, knit, sew, cross stitch and hemstitch. I like stories and I have read a good many. I am sending you some funny sidelights to put on the Corner page. Well, dear Aunt Nellie, I think I must close, but I'll not forget to write again.

Bill—He always said he'd never marry until the right girl came along. Jill—Well, how does he know that the one he is about to marry is the right one? Bill—Oh, she told him she was.

What sort of neighbors have you? The usual sort. Costs just a little more than I earn to keep up with 'em. What a happy world this would be if every man spoke as well of his live neighbors as he does of his dead ones.—Ida Irmer, Withrow, Wash.

### Will Buy the Baby a Present.

Dear Aunt Nellie: I am very busy. I picked five boxes of cherries. I did not pick the Royal Anns, just the Bings and Republicans. My friend, Ardelle Carsner, was picking with me. She began before I did. My mother is in the hospital. I have a baby sister named Caroline. She is very sweet and has blue eyes. I live 13 miles from town, but now that my mother is in Yakima, I am staying with my aunt and live 20 miles from town. I have bought a $100 Liberty bond with my own money. As soon as I get my cherry money I will buy the baby a present and then I will spend the rest for thrift stamps. I hope we will win the war. If we are patriotic and eat less wheat we will. The pro-Germans don't care how much wheat they eat.—Helen Mehl, Naches, Wash.

### Wild Flowers in the Mountains.

Dear Aunt Nellie: I was 10 years old August 2. I have been to school three years and am in the fifth grade. I have a pony. I do not know her right name. We just got her last week. I call her Lady. She is very gentle. I live six miles from town and in the mountains where there are lots of wild flowers, tiger lilies, honeysuckles and tulips. I have no brothers or sisters. My mother died when I was a baby. I was born in Holland and came across the ocean when I was 5 years old. There are rattlesnakes here. I went to Spokane to see my auntie. Have I a twin? If I have I wish he or she would write to me.—Trina Westendorf, Box 124, Chewelah, Wash.

### Gladys' First Corner Letter.

Dear Aunt Nellie: May I be a cousin? I am 10, and my birthday is August 26. Have I a twin. If so may he or she write to me. I broke my arm. It is all right now. We have four rabbits, two horses, two cows, one dog, one cat, three canary birds, four pigs. I have two sisters and two brothers. We live on a 20-acre farm.—Gladys Strong, R. F. D. 1, Box 58, Deer Park, Wash.

### Makes Clothes for Belgian Babies.

Dear Aunt Nellie: I am 12 years old and in the sixth grade at school. My birthday is May 12. Have I a twin? If I have I wish that she would write to me. I will answer her letter. I have a little nephew, Dale Nickerson. He is a year and a half old. He can walk and say a few words. My pets are Pup, the dog; Put, the horse, and Tillie the cat. Mississippi is a hard word, but you can't spell it? If a mule was on one side of the creek and a load of hay on the river how would the mule get to the hay? He couldn't jump; it was too far. He couldn't swim; it was too deep. There was no bridge. Now, how is he going to get the hay? What goes to the river and sticks its head in but never drinks? I joined the Junior Red Cross. I have knitted for the Red Cross. I have made Belgian baby clothes. I have knitted a pair of wristlets and part of a scarf. I live on a 420-acre farm. I like to live on a farm. Augusta Chevalier wrote to me.—Beatrice Giles, Marengo, Wash.

During the last two weeks Aunt Nellie has received letters from the following cousins: Dorothy Callaway, Letha Peterson, Lucile McKinley, Beatrice Clay, Zella Coad, Bonnie Beck, Augusta Lewis, Lura Herrick, Vivian Kidwell, Emma Pohle, Alta Howsden, Christina Grant, Mildred Riley, Della Crumpacker, Alice and Alma Root, Ula Brown, Mildred Tormey, Marie Christiansen, Jeannetta Simpson, Mary Sawyers, Mildred Smith, Fannie Sheppard, Fay Sheppard, Orleana Easterling, Ruth Clement, Verona Faulkner, Evelyn Kiehn, Mildred Wentz, Ethel King, Ruth Harbison, Edna Webb, Olive Ervin.




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Size 3x5 Feet

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FAST COLORS BRASS GROMMET

One of these big, fine flags will be mailed postpaid to any one securing and sending in seven subscriptions to your state family farm paper.

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Five Years $1.00.

**The Washington Farmer**
617 Central Bldg., SEATTLE, WASH.
or
Review Bldg., SPOKANE, WASH.

## News for Breeders

Among the northwest breeders who are booked to exhibit at the California International Live Stock Show November 2 to 10 at San Francisco, are Congdon & Battles of Yakima, Wash., and J. G. S. Hubbard of Monroe, Ore. The former will exhibit some of their well-known Aberdeen Angus cattle, while sheep of several breeds will be shown by Mr. Hubbard.

### AIDS THE RED CROSS.



The lamb shown in the above picture is the little grade Southdown that was sold in the sheep sale at the Washington state fair for $1000 for the benefit of the Red Cross. The little girl holding it is Jeanette Olney, who gave the lamb to the Red Cross society, which in turn donated it to the sale. Jeanette is an Indian, 5 years old, whose home is at White Swan, some 15 miles from Yakima, on the Indian reservation. Jeanette held the lamb while the sale proceeded, and patiently posed for her picture to be taken.

### IMPORTS PUREBRED SHEEP.

While visiting the Panama-Pacific exposition Stock show at San Francisco, E. F. Benson, now commissioner of agriculture of Washington, became interested in the exhibit of the Romney breed of sheep. He finally came home with two Romney rams. After two years of breeding he purchased 10 more and one year later, or this season, the firm of Benson & Nye purchased and imported from New Zealand 25 ewes and one more ram; also one Corriedale ram.The ewes were purchased from Alfred Matthews, president of the Romney breed association; the ram from William Perry, one of the leading breeders, and the Corriedale from C. H. Ensor. Mr. Benson reports all his importation as satisfactory. Eleven of the ewes dropped 14 lambs. The plan of the firm is to breed Romneys on Rambouilett ewes, which is the manner in which the Corriedale breed has been developed in New Zealand. H. A.

### BECOMING HOLSTEIN CENTER.

Four purebred Holstein heifers were purchased recently by W. J. Galvin of Centralia. Three of these came from William Bishop's herd and one from Yarr Brothers, both of Chimacum. All the heifers were bred by Mr. Bishop. They are from cows with exceptionally high yearly records. The average yearly production of the dams and sires' dams being close to 1000 pounds. With such stock coming into the county it will not be long before Lewis county will be known as a Holstein center. A. B. N.

**Don't Know What It Is.**

Nobody knows yet what electricity is.

# Breeders' Department

## HOLSTEIN CATTLE

**Registered Holsteins**

Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.

H. R. BOOMER, New Plymouth, Idaho.

**HOLSTEINS**

Well bred young bulls for sale.

THOS. CARMICHAEL, Gaston, Ore.

## SHORTHORN CATTLE

REGISTERED SHORTHORN COWS.

Young bulls and heifers, sired by Scotch bulls; liberal terms.

CALDWELL CATTLE CO., Caldwell, Idaho.

## HEREFORD CATTLE

**Highland Stock Farm**

offers for sale Hereford bulls, 1 or 2 years old. One or a carload.

PLATT BROS. Genesee, Idaho.

## GUERNSEY CATTLE

**GET GUERNSEYS**

Tabulations made by the U. S. department of agriculture show that the average income over cost of feed from one cow that produces 450 lbs. fat is equal to the average income over cost of feed from 20 cows that produce 100 lbs. each. The average of all official Guernsey records is 450 lbs. fat. Learn more about these profitable cows. Ask for our free booklet, "The Story of the Guernsey."

THE AMERICAN GUERNSEY CATTLE CLUB.
BOX W, PETERBORO, N. H.

## POULTRY AND RABBITS

**Walter Hogan's Famous White Leghorns**

hatched by Hogan on April 3d. Pullets $2; cockerels, $3. S. C. R. I. Red pullets, two to ten dollars; cockerels, five, ten and fifteen dollars. I can guarantee these pullets and cockerels to be from pens headed by cockerels from a trap-nested 289-egg hen—the females in these pens being sisters to my pen in the All-Northwest Egg-Laying Contest at Pullman, Wn. These birds have good shape, color and undercolor, plus wonderful winter egg blood.

MRS. ROMINGER, Underwood, Wash.

**Rhode Island Red Cockerels**

Both combs, pedigreed and line-bred. Best color and quality I ever raised. Rhode Island Whites, both combs. Get your breeding stock in fine, large Toulouse geese and Bronze turkeys. Pedigreed Belgian hares and Flemish Giant rabbits—the large kind.

HIGHLAND FRUIT AND POULTRY RANCH.
J. NONNENMACHER.
R. F. D. 3, Yakima, Wash.

MAMMOTH WHITE HOLLAND TURKEYS

Yearlings, Toms and young stock for sale. From prize winners. No eggs.

MRS. E. D. SITTON, Carlton, Ore.

FLEMISH GIANT DOES.

For sale—Young, vigorous Flemish Giant does, bred to order, $2.50 to $3.50 each. Pair, $5.

W. T. WILSON, R. R. 3, Weiser, Idaho.

When answering advertisements don't fail to mention this paper.

## DUROC-JERSEY SWINE

**Registered Duroc Jersey Boars**

Choice boars sired by Richard Pathfinder and Cherry King Orion Jr., and out of sows representing the best blood in the west. Big growthy fellows, with quality. Satisfaction guaranteed or money refunded. Write me for prices.

**Erik W. Olson**
VIRGINIA, IDAHO.

OVER 150 SPRING PIGS.

Sired by our grand champion Richards Defender, Richards Pathfinder and Cherry King Orion Jr., and out of our big type prize winning sows.

In the last three years at the Utah and Idaho state fairs our hogs won 76 champion and first prizes.

Can furnish unrelated pairs. Satisfaction guaranteed or money refunded. Priced very reasonable.

Richards Live Stock Company, Virginia, Idaho.

**Golden Rod Wins Again**

Our herd was largest money winner at Oregon state fair, 1918.

One excellent boar of breeding age, bred gilts and weanling pigs of either sex.

DOERFLER BROS., Silverton Ore.
A. N. DOERFLER, Mgr.

**DUROC JERSEY GILTS**

From prize winning stock at Panama-Pacific exposition. Well grown, good individuals; priced to sell.

MIDDLEDALE FARM, Creswell, Oregon.

FOUR DUROC GILTS BRED TO FARROW

this fall, also spring pigs, on hand.

E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE, Yakima, Wash.

## POLAND CHINA SWINE

**Registered Poland Chinas**

Fall pigs ready to ship Nov. 5. Price $15.

CHAS. KELIHAM, R. 2, Troy, Idaho.

**Big Type Poland Chinas**

Mouw, Fesenmeyer and Herring strains, either sex. Also registered Shorthorn cattle; good individuals.

H. J. HOWSER, Stites, Idaho.

**BIG TYPE POLANDS**

Genuine—Guaranteed.

GEO. W. BUCK, Oregon City, Ore.

## HAMPSHIRE SWINE

HAMPSHIRE HOGS

have won every feeding contest entered since 1914. Weanling pigs, gilts, bred or open. Our blood lines can not be beat.

TUTTLE BROS. Asotin, Wash.

## AYRSHIRE CATTLE

**EDGEWATER FARM**

Young stock for sale, including senior calf, Edgewater Sentinel, grand champion 1918 Washton state fair. Herd government tuberculin tested.

ELBERT M. CHANDLER, Burbank, Wash.

## SHEEP

**A. J. KNOLLIN**

POCATELLO, IDAHO.
Breeder of Pure-Bred Live Stock.

Established flocks of pure-bred sheep—Rambouillets, Cotswolds, Lincolns, Shropshires, Oxfords, Hampshires, Romneys.

RAMS FOR 1918 SERVICE FOR SALE.
Also a few ewes.
Also breeder of Shorthorn cattle, Belgian horses and Berkshire hogs.

**Romneys, Lincoln, Corriedale**

AND HAMPSHIRE EWES AND RAMS.

All pure bred, not registered. Have especially fine lot Hampshire ewe lambs, yearlings and three-year-olds. Any size lot. Write me on any kind of sheep deal.

H. STANLEY COFFIN, Yakima, Wash.

## CHESTER WHITE SWINE

**Chester White Swine**

Choice weanling pigs; spring gilts and service boars.

FRED H. HOFFMAN. Albion, Wash.

**HOLLYWOOD FARM HOLSTEINS**

The four registered bulls from high testing dams with large milk records advertised here the last week

**Have Been Sold**

Watch this space for four other bulls just as good and ready for service.

**We Have No Bulls**

whose four nearest dams average less than 4% butterfat, with lots of milk, some over 100 pounds milk in one day.

Hollywood, Wash. Near Seattle. Hollywood Farm.

**The Rushes Farm Shorthorns**

Both Grand Champions at Oregon State Fair, 1918.

Bulls and Heifers in Lewiston Sale.
Herd Headed by Challenge Plate III.

**G. W. DeLay**
Hot Lake, Ore.

**The Mounds Farm Shorthorns**

Bulls in Service:
Good Prospect.
Violet King.
Bulls and Bred Heifers in Lewiston Sale.

**W. J. Townley**
Union, Ore.

## Your Local HOME PAPER and Your State FARM PAPER at a Special Club Price

A clubbing arrangement has been made with a number of newspapers in your state whereby we can now offer you a one-year subscription to your local home paper and a one-year subscription to your state family farm paper at a special rate for both.

**YOUR HOME PAPER**

brings you all the local news and happenings of the social and commercial life of your community. It gives you the news of the home boys at the front and prints many interesting letters from them.

**YOUR FARM PAPER**

brings you, each week, all the news of the farm and farm home, with the agricultural developments of your state. Features for every member of the family, including women's and children's pages and colored comics. Also departments for every phase of farming.

Your Local Home Paper and Your State Farm Paper can now be sent to you for one year each at the special clubbing rate as quoted below:

| | |
|---|---|
| The Blaine Journal, Blaine, Wash., and The Washington Farmer | $1.50 |
| The Buckley Banner, Buckley, Wash., and The Washington Farmer | $1.50 |
| Castle Rock Independent, Castle Rock, Wash., and The Washington Farmer | $1.50 |
| The Cheney Free Press, Cheney, Wash., and The Washington Farmer | $1.50 |
| Chehalis Bee-Nugget, Chehalis, Wash., and The Washington Farmer | $1.50 |
| Cashmere Valley Record, Cashmere, Wash., and The Washington Farmer | $1.50 |
| The Everett Tribune, Everett, Wash., and The Washington Farmer | $3.00 |
| Goldendale Sentinel, Goldendale, Wash., and The Washington Farmer | $2.00 |
| Puget Sound Mail, La Conner, Wash., and The Washington Farmer | $2.00 |
| The Montesano Vidette, Montesano, Wash., and The Washington Farmer | $2.00 |
| Oak Harbor News, Oak Harbor, Wash., and The Washington Farmer | $1.50 |
| The Morning Olympian, Olympia, Wash., and The Washington Farmer | $4.00 |
| The Weekly Recorder, Olympia, Wash., and The Washington Farmer | $1.00 |
| Puyallup Valley Tribune, Puyallup, Wash., and The Washington Farmer | $1.50 |
| The South Bend Journal, South Bend, Wash., and The Washington Farmer | $2.15 |
| Sumas News-Advocate, Sumas, Wash., and The Washington Farmer | $1.50 |
| Walla Walla Bulletin, Walla Walla, Wash., and The Washington Farmer | $5.00 |
| White Salmon Enterprise, White Salmon, Wn., and The Washington Farmer | $1.50 |
| The Zillah Free Press, Zillah, Wash., and The Washington Farmer | $1.50 |

Papers mailed to Canadian addresses require additional postage of 1 cent a copy.

**EXTRAORDINARY CLUBBING OFFER**

A three-year subscription to your state farm paper and a one year subscription to the following papers at the special price for both.

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| The Bellingham Daily Journal | 3.00 |
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| The Spokane Daily Chronicle | 4.00 |
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617 Central Bldg., Seattle, Wash.
or
Review Bldg., Spokane, Wash.

# Market Quotaions

## Chicago Grain.

CHICAGO, Oct. 26.—Reports that Turkey ad made an offer which virtually nounted to surrender brought about a cided setback today in the value of corn. The market closed heavy, 1 1-2c to 2 1-2c et lower, with November $1.25 3-8 to .25 and December $1.20 3-4 to $1.20 7-8. ats finished 1-8c to 1 1-2c down. The tcome in provisions was an advance nging from 50c to $1.50.

Corn closed at nearly the lowest figures the day, regardless of announcements at minimum hog prices for November ould be advanced, and of the likelihood erefore that demand for corn to feed gs would be much enlarged.

Oats weakened with corn. Provisions ent soaring on account of a big lift ven to minimum hog prices for ovember. The advance was agreed upon conferences at Washington between od administrators and representatives of oducers, commission men and packers. ie resulting advance was $3 on the Jan- ry delivery of pork. Topmost quotations the day, though, were not maintained.

### Pacific Northwest Grain.

PORTLAND, Ore., Oct. 28.—Grain—Octo- r delivery bids: Oats, No. 2 white feed, 3.50; barley, standard feed, $48.50. No- mber bids: Oats, No. 2, $53; barley, feed, 8@49; oats, No. 3, $47; clipped, $49; corn, llow, $56.50; mixed, $55. Eastern oats d corn in bulk: Oats, No. 3 white, $47; -pound clipped white, $48.50; corn, No. 3 llow, $53; mixed, $57. Sales, 100 tons ovember feed barley at $48; 100 tons tober feed barley at $49.

### Minneapolis Grain.

MINNEAPOLIS, Oct. 26.—Flour—Un- anged. Shipments, 81,178 barrels. Bar- y, 86@95c. Rye, $1.58@1.59. Bran, 7.94. Wheat—Receipts, 274 cars, com- red with 431 cars a year ago. Cash—No. northern, old, $2.21 1-2. Corn—No. 3 llow, $1.45@1.48. Oats—No. 3 white, 1-2@66 1-2c. Flax, $3.78@3.82.

## Live Stock Quotations.

### At Chicago.

CHICAGO, Oct. 26.—U. S. Bureau of Mar- ts.)—Hogs—Receipts, 6000; market tive, unevenly 50c to $1.25 higher than iday's opening, mixed and packing ades advancing most. Butchers, $17.25 18; light, $16.75@17.75; packing, $15.25@ 25; rough, $14.65@15.25; pigs, good to oice, $13.50@14.50.

Cattle—Receipts, 2000; compared with a ek ago, good to choice western and na- e steers, 75c to $1 higher, with instances more; light, 50c up; butcher cattle, 50c $1 higher; canners, steady; calves, 50c gher; feeders, 25c higher.

Sheep—Receipts, 1000; compared with a ek ago, market 50c to $1.50 higher; most vance on medium grades of killing and eding lambs.

### At Portland.

PORTLAND, Ore., Oct. 26.—Cattle— eak; receipts, 164. Steers, prime, $12@ 50; good to choice, $11@12; medium to od, $9.75@11; fair to medium, $8.25@ 5; common to fair, $5.75@8.25; cows and ifers, choice, $8@8.50; medium to good, 75@8.25; fair to medium, $4.75@5.75; .n.s, $3@4; bulls, $5@7; calves, $9@ ; stockers and feeders, $6@8.

Hogs—Lower; receipts, 322. Prime mixed, @17.10; medium mixed, $16.85@17; igh heavy, $15@15.10; pigs, $14@15; lk, $17.

Sheep—Slow; no receipts. Prime lambs, @12; fair to medium, $8@10; yearlings, @11; wethers, $9@10; ewes, $6.50@8.50.

### At Seattle.

SEATTLE, Oct. 26.—Hogs—Receipts, ; market slow, barely steady. Prime ht, $17.50@17.75; medium to choice, @17.50; medium heavy, $16.25@16.75; ght, $15.25@15.75.

Cattle—Receipts, 184; market weak. Best ers, $11@13; medium to choice, $10.50 1; medium to good, $8@8.50; medium, @7.50; bulls, $5@7.50; calves, $5@10.

### Spokane Union Stock Yards.

SPOKANE, Oct. 26.—

| | Cattle | Calves | Hogs | Sheep |
|---|---|---|---|---|
| urday, Oct. 26 | 2 | .. | .. | .. |
| day, Oct. 25 | 283 | 11 | 455 | 4715 |
| ursday, Oct. 24 | 168 | 24 | 57 | 223 |
| ednesday, Oct. 23 | 337 | 34 | 57 | 223 |
| esday, Oct. 22 | 64 | 11 | 293 | 944 |
| nday, Oct. 21 | 402 | 40 | 83 | 1064 |
| ek ago | 269 | 9 | 224 | 171 |
| ar ago | 57 | 13 | 138 | 187 |

Cattle receipts for the day were prac- ally a minus quantity. Compared with week ago best steers have declined about cents, while the cheaper grades have re- ined about steady; cows and heifers ve been slow during the week, but ces unchanged. Bulls and calves un- anged over a week ago. Stockers and ders have been active during the week steady to strong prices. Fat heavy- ight steers are in demand.

| | |
|---|---|
| me steers | $12.00@12.50 |
| od to choice steers | 10.75@11.75 |
| dium to good steers | 9.50@10.50 |
| ir to medium steers | 8.25@ 9.00 |
| d. to good cows and heifers | 6.00@ 7.00 |
| n. to med. cows and heifers | 4.75@ 5.75 |
| mmon to fair steers | 5.50@ 8.00 |
| oice cows and heifers | 7.50@ 8.25 |
| ves | 6.00@ 9.50 |
| nners | 3.00@ 5.00 |
| lls | 5.00@ 7.00 |
| ckers and feeders | 6.00@ 8.00 |

## Spokane Markets.

SPOKANE, Oct. 26.—The following are ces obtained by Spokane wholesalers in ir sales to retailers, hotels, mining mps, etc., in this city and tributary ter- ory, as reported by the federal bureau markets in Spokane:

Pears—Winter Nellis, D'Anjou and Win- Bartletts, per box, $2.50.

Grapes—Malagas, $2.50; Red Emperors, od quality and condition, $3.25 per lug; gon Cornishons, holdovers, in lug boxes, d quality and condition, $3.25; Wash- ington Concords, in six-pound Climax bas- kets, 45@50c for best.

**Apples**—Jonathans, wrapped and packed, home grown, $1.85@2; good quality, jum- ble pack, $1.50; Winter Bananas, fancy, orchard run, $2.50; extra fancy, wrapped Wageners, few sales, jumble pack, $1.50; Wageners, few sales, jumble pack, $1.75; Wenatchee Delicious, fancy, wrapped and packed, $3.25; extra fancy, no sales. Small sizes, $2.50@2.75 for fancy; medium or- chard run, wrapped and packed, $2.75@3.

**Onions**—Yellow Danvers, sacked, per cwt., $2.50@3; mostly small lots at 3c per pound.

**Potatoes**—Very slow demand and move- ment. Sales in small lots, sacksd. per cwt., Washington white varieties, $1.50, few at $1.75.

**Sweet Potatoes**—Crated Californias, Tur- lock section, 3@3 1-2c per pound.

**Garlic**—Demand and movement good at 17c per pound.

**Peppers**—Home grown supply adequate, demand and movement slow. Best Green Bells, packed in peach boxes, 60@75c; Red Bells, mostly 75c; Red Hots, $1 per box.

**Eggplant**—Locals, $1.25; best Prossers, $1.50.

**Cabbage**—Home growns supplying mar- ket. Danish Ballhead, trimmed and crated, $2.50 per cwt.

**Beets, Turnips, Radishes and Carrots**—Local gardeners' supply adequate. Sacked stock, per pound, 1 1-2@2c. Small lots, per dozen bunches, generally 20c.

**Celery**—Local and home growns supply- ing market. Medium to large white, per dozen bunches, 85c@$1; yellow, $1@1.25. Small sizes and mediums, local gardeners, mostly 60@80c per dozen bunches.

**Lettuce**—Fancy home grown, gardeners' head lettuce, per dozen, 60@75c; small size, 40@45c per dozen; five-pound boxes leaf lettuce, 75c.

**Hubbard Squash and Pumpkins**—Home grown supply ample, quality and condition good, demand and movement moderate, mostly 1 1-2c per pound, few at 2c.

## Seattle Market.

SEATTLE, Oct. 26.—Heavy offerings of stock from the intermountain territory and uncertainty as to what the food administration may do regarding further marketing restrictions was the cause, it is stated, of the decline of 2 and 4 cents in the creamery butter market today. Dealers who are handling only city creamery extras or California butter take the position that quotations fell only 2 cents, as the outside stock, which was the primary cause of the slump, could not, in any event, sell higher than 2 cents under the city creamery market.

The egg market is firm, but a majority of the houses will refuse to lead or follow it to any greater heights and have omitted their weekly advance quotations to pro- ducers for the first time in their history.

Poultry is steady. Cold storage reserve stocks for the later winter are ample and fresh receipts normal. There is a slightly increased demand for fat, young tom tur- keys. Jobbers predict a jobbing price around Thanksgiving at 40 cents, with 45 cents per pound to consumers and 33 to 35 cents to producers, 6 to 7 cents higher than last year.

With conceded change of hands of the bulk of the good keepers in the Wenatchee and Yakima valley, apple interests are giving serious attention to Winesaps, which at this date are regarded as the best buy of the season and likely to be moved on the most substantial market of the year. Field surveys show that the fruit is a record breaker in color, size and keep- ing qualities, so that holders will be able to live down any erratic tendency of the later California orange market as a com- petitor.

The crop of Rome Beauties is light and is ready for shipment. Unsold Spitzen- bergs are scarce.

The onion market is weak. Carload op- erators are storing heavily of well selected keepers, approximately 200 cars now being held out here as reserves after the "junk" has been cleaned up and prices and de- mand stabilized. The storages consist al- most exclusively of Oregons, which have demonstrated their keeping qualities to the satisfaction of all. Oregon fannos are moving at 2 1-2 cents, against 2 cents for Walla Wallas, in direct competition with strong flavored Australian browns, not popular on this market.

Quotations f. o. b. White River valley are $25 to $30 for white spuds and $35 to $40 f. o. b. for Yakima gems. A little No. 1 gem baking stock was placed on this market during the week at $34. There are a few sales of valley spuds at $25, but farmers are storing heavily and will hold for $30, against free bids of $25 today.

## Portland Grain.

PORTLAND, Ore., Oct. 26.—The week closed with an easier feeling in the grain market, except for barley, sales of feed grade being made at $48 and $49. Corn bids at the Merchants' Exchange were re- duced 50 cents and $1 and oats were 50 cents and $2 lower, the greatest cut being made in sacked northwestern, for which $53 and $53.50 was bid.

### Butter and Eggs.

PORTLAND, Ore., Oct. 26.—Butter— Prints, extras, 60@65c; cubes, extras, 59@ 60c; prime firsts, 58c; dairy, 56c; butter- fat, Portland delivery, No. 1 sour cream, 62@67c.

SAN FRANCISCO, Oct. 26.—Eggs—Fresh extras, 56c; fresh extra pullets, 76c.

# WORLD'S VISIBLE WHEAT SUPPLY

Stocks of wheat and flour considered as wheat in second hands European, afloat and Argentine data, compiled by George Broomhall's Corn Trade News and American associates:

| | Oct. 1 1918. | Sept. 1. 1917. | Oct. 1, 1917. | Oct. 1, 1916. | Oct. 1, 1915. | Oct. 1, 1914. | Oct. 1, 1913. | Oct. 1, 1912. | Oct. 1, 1911. | Oct. 1, 1910. |
|---|---|---|---|---|---|---|---|---|---|---|
| United States | 148,132,000 | 97,328,000 | 24,954,000 | 111,234,000 | 43,222,000 | 100,479,000 | 92,166,000 | 73,844,000 | 93,194,000 | 93,385,000 |
| Canadian | 12,967,000 | 6,536,000 | 18,145,000 | 20,960,000 | 20,057,000 | 36,674,000 | 24,302,000 | 10,562,000 | 8,714,000 | 13,167,000 |
| Total American | 161,099,000 | 103,864,000 | 43,099,000 | 132,194,000 | 63,279,000 | 137,153,000 | 116,468,000 | 84,406,000 | 101,908,000 | 108,552,000 |
| Europe | 40,000,000 | 135,000,000 | 20,000,000 | 19,810,000 | 36,760,000 | 34,070,000 | 42,440,000 | 39,490,000 | 52,010,000 | 69,882,000 |
| Afloat, Arg. and Aus. | 182,590,000 | 190,500,000 | 172,775,000 | 99,200,000 | 27,168,000 | 31,320,000 | 33,470,000 | 39,780,000 | 32,730,000 | 38,510,000 |
| Total European | 222,590,000 | 225,500,000 | 192,775,000 | 119,010,000 | 63,928,000 | 65,390,000 | 75,910,000 | 79,270,000 | 84,740,000 | 108,392,000 |
| World's | 383,689,000 | 329,364,000 | 235,874,000 | 251,204,000 | 127,207,000 | 202,543,000 | 192,378,000 | 163,676,000 | 186,648,000 | 216,944,000 |

## Portland Market.

PORTLAND, Ore., Oct. 26.—A butter war has broken out between the city cream- eries. After the 2-cent decline earlier in the week one of the larger firms made a further cut of 3 cents, which is being gradually met. There is a considerable accumulation of butter on the street, and it would occasion no surprise if the mar- ket went lower.

Eggs are holding firm, as receipts con- tinue very small.

Poultry of all kinds is also firm, but dressed meats are weak and dragging.

There are indications of lower prices soon in the local apple market. Stocks are quite heavy, and except for the cheaper grades the movement is slow.

Potatoes and onions are steady and un- changed, with fair receipts of home-grown stock.

The federal wool administration is val- uing a lot of 2,250,000 pounds of wool. About 4,000,000 pounds, mostly mixed clip, remain to be graded later. Shipments of fine wool to the east will be resumed about the first of the year.

### Quotations.

Eggs—Oregon ranch, candled, 65c; se- lects, 67c.

Cheese—Jobbers' buying prices, f. o. b. dock, Portland: Tillamook triplets, 36c; young Americas, 36c a pound; Coos and Curry, f. o. b. Myrtle Point: Triplets, 35 3-4c per pound.

Poultry—Hens, 26c; broilers, 26@30c; ducks, 25@30c; turkeys, 31c; geese, 16@ 18c.

Pork—Fancy, 21@22c.

Veal—Fancy, 18 1-2@19c.

Potatoes—Oregon, $1.75@2 per hundred.

Hay—Buying prices, f. o. b. Portland: Eastern Oregon timothy, $30 per ton; val- ley timothy, $29; alfalfa, $27; valley grain hay, $25@27; clover, $28; straw, $9@10.

Butter—Cubes, extras, 59c; prints, 60c; butterfat, 64@67c, delivered at Portland.

## Seattle Grain.

SEATTLE, Oct. 26.—Price cutting among the mills that are grinding semi-hard wheat flour continues along the Coast, but it is not known that any new avenues of sale have been opened thereby. Seattle millers are advised that interior mills lo- cated in the bluestem and bart sections of Washington have been indulging in this form of marketing.

The government has requested bids for the November allotment of Washington flour, and the volume will be the same as that of October, it is reported, at 35,000 to 40,000 tons, practically all of the club wheat varieties. Millers take the govern- ment's rejection of all hard-wheat flour bids in October to mean that this grade is not to be used on any export flour con- tracts. Should this be the case bluestem and bart may be held by farmers of east- ern Washington for an indefinite time, as there is little movement and only a small quantity has been ground. Complaints at the delay in getting the wheat into the terminals are being heard. Scarcity of ocean tonnage is the reason for the small flour purchases by the government. Pur- chases not to exceed 25 per cent of the mill capacity on Puget sound are outlined.

The millfeed situation is acute. Millers say they could deliver 10 tons on orders for every ton they are turning out if they had the stock.

Eastern hard wheat flours, particularly Montanas, are plentiful. Many obscure mills of Montana, never before heard of here, are wiring quotations. This flour is actually selling under the market of Seat- tle soft wheat flours.

So far as millers see it here the higher grades of wheat may remain in the coun- try for some time, possibly as a reserve for the grain corporation. In the meantime holding charges will be paid by the farm- ers in storage, insurance and interest.

### FIX NOVEMBER HOG PRICES.

CHICAGO, Oct. 28.—A minimum of prices of hogs for November has been fixed at $17.50 as the daily average for packers' drives. A minimum of $16.50 has been fixed for all other hogs under 130 pounds, stags, boars, sows and skips.

As packing house products have been selling on a basis of $16.50 for hogs, the announcement today at Washington of the new basis for November resulted in a big jump of prices for pork, lard and ribs.

The prices have been agreed upon here at a conference between food administra- tors and representatives of producers, com- mission men and packers.

### CAN BUILD ON FARMS.

Notwithstanding many regulations that have been placed about building construc- tion during the war, the war industries board has announced that new construction for farm purposes may be done where the total cost does not exceed $1000. This regu- lation is for the purpose of enabling farm- ers to build much needed farm equipment, such as silos, granaries and the like.

### The First War Fleet.

The first war fleet ever possessed by a British overseas dominion consisted of four thinly-armored boats purchased and equipped by the New Zealand government more than half a century ago.

Second Hand
25,000 Gallon
Wood Stave Tank
and 60-foot structure
for sale cheap.
PHOENIX LUMBER COMPANY
Dept. II.
Spokane, Wash.

HIDES
WOOL · PELTS
FURS · TALLOW
SHIP TO US
NO CARTAGE - NO COMMISSION
HIGHEST CASH PRICES PAID
PROMPT RETURNS - HONEST WEIGHT
WRITE FOR PRICE LIST AND SHIPPING TAGS
HIBBARD-STEWART CO. INC.
SEATTLE
BE SURE AND MENTION THIS PAPER



An ounce of "Eureka" means $ $ to you

Eureka Harness Oil gives long life to harness. That means dollars to you. Pro- tects leather fiber from dust, sweat and moisture, which cause rot. Replaces the nat- ural oils that have dried out. Keeps harness strong, flex- ible and jet black. No animal oils in "Eureka"; rats, mice and other rodents dislike it and won't gnaw harness dressed with

EUREKA HARNESS OIL
MADE BY STANDARD OIL COMPANY (CALIFORNIA)

# Mercy Must Not Destroy Justice

Robert Lansing, United States secretary of state, in a public address recently warned the people of this country against showing too much mercy toward the German nation as its surrender approached.

"Let us not forget that, while stern justice without mercy is un-Christian, mercy which destroys justice is equally un-Christian," said Mr. Lansing.

"When the time comes to balance the account—and it seems to be drawing near as the vassals of Germany seek refuge from the day of wrath—the authors of the frightful wrongs committed against mankind should not be forgotten.

"The period of readjustment and restoration which will follow the disorganization and destruction caused by the war will tax human wisdom to the uttermost.

"In a conflict so universal as to involve the whole earth, new impulses of human action have been set in motion, not only in the political, industrial and commercial spheres, but in the structure of society and in the spiritual life of mankind.

"Many of the fundamental principles of the present social order will be threatened; some will be changed; some discarded; while novel and possibly extravagant and dangerous doctrines will find earnest and honest advocates. With all this we must reckon.

"The American people ought not, after the war is won, cherish a pitiless hate for all those who have served the military dictators of central Europe. We should discriminate between the ignorant and the intelligent, between the responsible and the irresponsible, between the master and the serf.

"The new era, born in blood and fire on the battlefields of Europe, must be a Christian era in reality and not alone in name. The years to come must be years of fraternity and common purpose.

"International injustices must cease. Unreasoning class hatreds and class tyrannies must come to an end. Society must be organized on principles of justice and liberty. The world must be ruled by the dominant will to do that which is right."

## Farmer's Efficiency

### Take a Look at His Back Yard

By CARL J. MENZE.

To judge a farmer's efficiency take a good look at his back yard.

I have yet to see the farmer that can afford to work like a slave to clear up a piece of land and then let it lie idle or grow up to weeds and trees again, like in fence corners, around buildings and in pastures. When a piece of land has been cleared it should be made to grow a crop on every square inch of ground every year.

Go through the pasture about once a year and cut down the small trees that have started to grow. In localities where the alders grow it takes only three or four years for a pasture to grow up to trees again if it is not cut over.

Remove the large stumps that have been left in certain fields. If they are not removed the weeds and brush will crowd out a little farther each year until there is no field left. After they are removed a great deal of time will be saved that was lost trying to plow and cultivate among the roots.

Parsnips may be left out in the field through the winter, digging them as they are needed. The frost does not hurt them; it improves them.

## Horse Thieves of War

By Charles Dillon.

If the boys in your neighborhood were to form a posse to run down a horsethief you would not be likely to lose interest in them and go about your ordinary work because the report had come in that the criminals were eager for peace, but intended to keep the stolen horses until terms were arranged. You'd be suspicious. You would be likely to assure yourself first that the boys were safe, and then demand that the live stock be returned before any peace talk was allowed.

Your boys in France are chasing a lot of criminals right now who would like to go on stealing and murdering while asking for peace. You can't afford to stop, look and listen. You will have to go ahead doing your part, supporting the army and navy with food and money. You will have to carry on the program just as if Germany had never let out one solitary yap for peace.

Your boys will be in France a long time yet, and you can not expect the government to provide much of anything for them except food, clothing and arms. The seven organizations that have cared for the soldiers and sailors in this country and abroad, spiritually and physically, will have to go right on with the work. They are the Young Men's Christian association, Young Women's Christian association, the Knights of Columbus, the Jewish Welfare board, the War Camp Community service, the American Library association, and the Salvation Army. They are making one campaign to raise money for their work.

The field army of these seven great agencies comprises more than 15,000 uniformed workers on both sides of the water, and General Pershing is asking that additional workers be sent at the rate of at least 1000 a month.

It will take money—$170,500,000. That is about $1 a week for every soldier we have in Europe and this country. More than 500 tons of supplies for our boys leave American ports every week under the direction of these seven organizations. They provide just what the boys need, the things they had at home, the comforts and the guidance they must have. Don't turn down the solicitor who asks for your contribution. He is trying to do something for your boy or your neighbor's boy, or some other American boy marching under the Stars and Stripes.

The campaign begins November 11 and continues for one week.


**YOU NEED ONE**

**The Farmer's Record and Account Book**

Sent postpaid for TWO subscriptions to your State Family Farm Paper.
THE WASHINGTON FARMER.

Subscriptions may be for one year at 25c; three years at 50c, or five years at $1.

**The Washington Farmer**
617 Central Bldg., Seattle, Wash.
or
Review Building, Spokane, Wash.


### E-E-E-Yah-Yip!

To the Editor: I have just received with surprise and pleasure a copy of The Washington Farmer for September 12, carrying our E-E-E-YAH-YIP poster as a cover design in color.

The interest you have shown in the Marine Corps by honoring this poster in a conspicuous manner is very much appreciated, and doubt not that the publicity accruing to the corps from the large circulation of The Washington Farmer will have a material result in advancing public interest in sea soldier service.

A. S. M'LEMORE.
Colonel, Asst. Adjt. and Inspector, U. S. Marine Corps.

Headquarters U. S. Marine Corps, Washington, D. C.

## SIDELIGHTS

**Not the Idea.**

"That pretty young widow has such taking ways."

"Yes, I hear she was something of a kleptomaniac."—Baltimore American.

**A Good Proposition.**

First Clerk—How many people work in our office?

Second Clerk—Oh, I should say, roughly, about one-third of them.—Ellery Haines, Indiana.

**A Thing of the Past.**

"You don't seem to take much interest in history?"

"I'm afraid I'm too busy," replied Senator Sorghum. "You see, history is publicity that comes too late to be any good in a campaign."—Washington Star.

**A Tragedy of War.**

John McCormack, the famous tenor, tells a story which he claims graphically illustrates the horrors of war. On returning from a Red Cross concert he was amazed to find his wife laboriously trying to remove the spots from a palm beach suit. "Where's Norah?" demanded the amazed songbird. "She's in the kitchen. I thought I'd do this myself, because the poor girl simply can't bear the smell of gasoline since the chauffeur enlisted."

**Well Fitted.**

Campaign Manager—I hear poor Jobb has lost his memory. Can't remember a thing from one day to another.

Secretary—Wouldn't he be a good man to take charge of the campaign contributions?—Baltimore American.

**Will Have to Sleep Home.**

A new jury box has been completed for the circuit court room at the Macon courthouse. "We've got it big enough now so the jurymen can't lean against each other and go to sleep," boasts a county official, proud of the improvement.—Kansas City Times.

**Immaterial Either Way.**

Mrs. Hashleigh (to boarder)—How is it you are taking your medicine after dinner? I thought the doctor told you to take it before meals. Boarder—He said it didn't make any difference as long as I took it on an empty stomach.—Boston Transcript.

**Slightly Different.**

An old negro went to the office of the commissioner of registration in a Missouri town and applied for registration papers.

"What is your name?" asked the official.

"George Washington," was the reply.

"Well, George, are you the man who cut down the cherry-tree?"

"No, suh, I ain't de man. I ain't done no work for night onto a year."—Everybody's Magazine.

**Yet They Talk About Women.**

"I say, Brown, can't you manage to pay me that $10 you owe me? I need the money."

"Awfully sorry, old man, but I can't do it."

"I notice you manage to go to the theater two or three times a week, though."

"That's just it. The thought that I owe you money is worrying me so that I have to do something to help me forget it."—Boston Transcript.

# FARMERS' WANT ADS

This is the farmers' "Want," "Sale" and "Exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rate, 7 cents a word per insertion, with a special rate to farmer subscribers to the Washington Farmer of 6 cents a word per insertion for from 4 to 12 times, and 5 cents a word per insertion for 13 times or more.

All commercial and land advertising, 7 cents per word each insertion. Open also to nonsubscribers.

In using these columns advertisers must observe: (1) No advertisement will be inserted for less than 75 cents. (2) Every word, number and initial, including name and address, must be paid for. (3) Cash must accompany order.

Above rates also include insertion in The Oregon Farmer and The Idaho Farmer.

**HELP WANTED—Female** 1

LEARN TO DO MATERNITY AND CHILD nursing—Christian women, 18 to 50 years, wanted for girls' institutions and baby homes. Write Pacific Coast Rescue and Protective Society, Portland, Ore.

**HELP WANTED—Male** 3

SALESMEN—MANY OF OUR SALESMEN have gone to war and we are filling their places with men exempt from draft. Lack of competition and great prosperity of our customers makes sales the best we have ever known. Selling experience desirable, but not necessary. McConnon & Company, Dept. J., Winona, Minn.

**AGENTS WANTED** 9

POWERINE IS EQUAL TO GASOLINE AT 5C a gallon. Salesmen and agents wanted; exclusive territory granted. Powerine is guaranteed to be harmless, to remove and prevent carbon, doubling the life of all gasoline motors, saving repairs, adding snap, speed and power. An amount equal to 20 gallons of gasoline will be sent to any address in the United States, charges prepaid, for $1.00. W. Porter Barnes, Santa Rosa, Cal., dept. 8K.

**EDUCATIONAL** 45

IN BUSINESS OR ACTUAL LIFE THE BEST is none too good for you. Write Gooding college, Gooding, Idaho, Charles Wesley Tenny, president, today.

TELEGRAPHY—YOUNG WOMAN'S POPULAR vocation; good paying positions available. Write for booklet. Pacific Telegraph Institute, Spokane.

SEND NEWS NOTES TELLING OF THE work of your school today. Address the Educator, Gooding, Idaho.

**HONEY, BEESWAX—Wanted** [illegible]

SEND SAMPLES OF YOUR HONEY AND beeswax. State quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

**EGGS AND BUTTER WANTED.** 59

WE ARE ALWAYS IN THE MARKET FOR good eggs and dairy butter. Send us your next shipment. Oregon Farm Products Co., 386 Halsey st., Portland, Ore.

WE PAY HIGHEST PRICE FOR LARGE, clean infertile eggs not over one week old. Honey also wanted. J. B. Chaney, Spokane, Wash.

**MISCELLANEOUS WANTED** 63

POULTRY WANTED.
We are cash buyers of poultry and dressed meats, also cream. Write us for prices, shipping tags and premium catalogue for cream shippers.
COMMERCIAL CREAMERY CO.
SPOKANE, WASH.

LIVE POULTRY WANTED—TOP MARKET price paid; honest weights; prompt remittance. Smith, 420 Second ave., Spokane.

HIGHEST PRICES FOR POULTRY AND EGGS. Washington Meat & Poultry, 409 Second avenue, Spokane.

**LIGHTING EQUIPMENT** 74

THE SAFETY LAMP CO., N208 HOWARD ST., Spokane, Wash. Gasoline lighting and supplies.

**AUCTIONEERS** 75

M. SEIDENBACH, AUCTIONEER, GIVES best service. Sales solicited. 418 Fernwell, Spokane.

**MACHINERY—For Sale** 93

"WITTE" GASOLINE ENGINES
save labor and are carried in stock by
HIGGINS MACHINERY COMPANY,
312 FIRST AVE., S., SEATTLE.
Write for Catalogue.

**AUTOMOBILES** 114

HEADQUARTERS FOR
used cars, trucks and tractors; printed list. Spokane Auto Market, W315 Sprague ave., Spokane, Wash.

AUTO RADIATORS, FENDERS AND LAMPS repaired. Lester Allen, 607 Second avenue, Spokane.

**STOVE AND FURNACE REPAIRS.** 126

WRITE M. S. RUBENS, SPOKANE, FOR ANY parts needed to repair stove, furnace.

**PETS—Dogs, Birds, Etc.** 171

A PAIR OF GOOD TREE DOGS FOR SALE. Male and female. Isaac Callahan, Molalla, Oregon, Route 2.

**POULTRY** 174

SHIP US YOUR POULTRY. TOP PRICES. Home Poultry House, S173 Washington, Spokane.

50 USED INCUBATORS FOR SALE, FROM 70 to 700 egg capacity. A. R. Badger, Centralia, Wash.

**LIVE STOCK.** 177

FOR SALE—TO CLOSE AN ESTATE, IN quantities to suit, some 20,000 sheep, ewes, lambs and bucks, from $10 up; also 800 head of stock cattle. 45,000 acres range land, best anywhere. Coffin Bros., North Yakima, Wash.

FOR SALE—50 REGISTERED SHORTHORN bulls, coming 2 years old; Scotch topped with plenty of size and bone. Priced low for quick sale. Chas. A. Norton, Salmon, Idaho.

REGISTERED O. I. C. BOAR, READY FOR service; no better stock in the market. Price reasonable. W. R. Gibson, R. 2, Hood River, Ore.

SHORTHORN CATTLE, PERCHERON HORSES of both sexes. Wm. Mulhall, stock show grounds, Lewiston, Idaho.

FOR SALE—30 PURE BRED OXFORD RAMS, mostly yearlings, some two. Chas. A. Cairns, Meridian, Idaho.

FOR SALE—WEANLING BIG TYPE POLAND China pigs. S. S. Mullen, Bellingham, Wash., R. 1, Box 86.

REGISTERED O. I. C. SWINE. BREEDING stock for sale. C. I. Ballard, Rickreall, Ore.

REGISTERED SHORTHORN BULLS FOR sale. Baring Bros., R. 1, Creston, Wash.

**HOTELS** 306

WHITE'S HOTEL AND RESTAURANT—Rooms, hot and cold water, 75c up. Breakfast 20c to 40c; dinner, 25c to 50c. Sprague and Stevens, Spokane.

GALAX HOTEL; NEW AND MODERN; 75C and $1. Main and Bernard, Spokane.

NEW MADISON HOTEL, 75C AND UP. 1ST and Madison, Spokane, Wash.

**RUBBER STAMPS AND SEALS** 384

FOR RUBBER STAMPS, STENCILS, BADGES, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

**ARTIFICIAL LIMBS** 424

SCHINDLER ARTIFICIAL LIMB CO., S115 Wall st., Spokane, Wash.

**TAXIDERMISTS** 426

FUR RUG MOUNTING A SPECIALTY, HEADS, animals and birds mounted. Withers Bros., 822 Sprague, Spokane.

**SEEDS.** 620

WE SPECIALIZE IN TIMOTHY, ALFALFA, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Idaho.

**FARM LANDS FOR SALE** 651

SNOHOMISH COUNTY, WASH., FARM LANDS. The greatest proposition on the market for the man who wants a farm. 12,000 acres to select from; 3½ miles salt water front; 20 miles of beautiful lake shore; good towns, railways, steamboats, factories, mills, schools, churches, paved roads; where the largest profits are made, where the great variety of crops and wonderful productive climate makes it the most productive farm section of America. Good lands in good localities, as low as $25 to $35 per acre. 10 yearly payments. Send for maps and literature to the Brownell Land Co., 904 Third ave., Seattle, Wash.

VERMILION, ALBERTA, FARM LANDS. FREE transportation to inspect these lands. This district has never had a drouth or crop failure. We have just returned from Vermilion with first hand information about this year's crop. First class land for $16 and $25 per acre. Union Investment Co., 406 Ziegler block, Spokane, Wash.

ONE OF THE BEST 80S IN MALHEUR VALley; good buildings; well improved; 50 acres alfalfa; 6 miles to Vale; crops last year $4400. Price, $9000. Terms. O. E. Carman, Vale, Or.

IMPROVED FARM, STOCK, HAY, MAchinery; near Seattle, Tacoma. For particulars write owner, Box 57, Graham, Wash.

**FARM LANDS—WANTED** 654

SELL YOUR PROPERTY. WE PLACE A full description of your property with dealers and possible buyers in every state in union for a small fee. Information free. Real Estate Salesman Co., Dept. 10, Lincoln, Neb.

WANTED—CATTLE RANCH IN THE NORTH west. W. D. Campbell, Lebanon, Ore.

When answering advertisements don't fail to mention this paper.

# My K Hand Stump Puller

# Gives Your Hand 96,000

## Pounds of Power



Big stumps! stumps and trees with deep tap roots! any stump that can be pulled with the best inch steel cable!—you *alone* can pull with my "K" Hand Power Stump Puller—*without digging and without the expense of teams and powder.* I guarantee it. I refer you to U. S. Gov. officials. I give highest banking references. If you have stump land, the cheapest way of clearing it is with the

HAND POWER

# K Stump Puller

Frank Hance, a *one-armed* farmer of Bowie, Md., pulling a double silver maple 3 ft. 8 in. in diameter at the ground, with deep tap roots. This is an easy pull for the "K," as the cable can be hitched high and the leverage is consequently greater.

### How the "K" Pulls Biggest Stumps

The "K" works on the leverage principle of the ordinary lifting jack, except that the power is applied on a cog-wheel instead of a standard. 100 lbs. push on the lever develops a 48-ton pull on the stump—all an inch steel cable will hold. One man operates it alone—no teams to pay for—no walking.

### A Mechanical Wonder

Made of finest steel—guaranteed against breakage. Weighs only 171 lbs.—easily carried or hauled about on its own truck wheels. Has two speeds—60 feet per minute for hauling in cable or for small stumps—slow speed for heavy pulls. *Works equally well on hillsides and marshes where horses can not work.*

### Owners Praise It

H. Sinclair of the Dept. of the Interior, a U. S. Gov. official, writes: "The stump puller is a wonder."

Ernest Thompson Seton, author and naturalist, declares the "K" "a great success."

Hundreds of owners write in, telling of pulling six- and seven-foot stumps, of pulling faster and pulling bigger stumps than by any other machine.

**Special Offer** I am making a special offer to get a "K" Stump Puller introduced in every neighborhood. Write me today for full information and for free book on Land Clearing.

**Walter J. Fitzpatrick**

Box 32 182 Fifth St. San Francisco, Cal.

H. G. Hunzicker of Foster, Wash., pulling a 24-inch fir stump with deep tap roots out of hard ground, without using powder or cutting any roots.

**Tear Out and Mail Today**

Walter J. Fitzpatrick
Box 32 182 Fifth St., San Francisco, Cal.

Send me full particulars on your special offer and your free booklet on Land Clearing.

Name_____

Address_____

NOVEMBER 7, 1918.

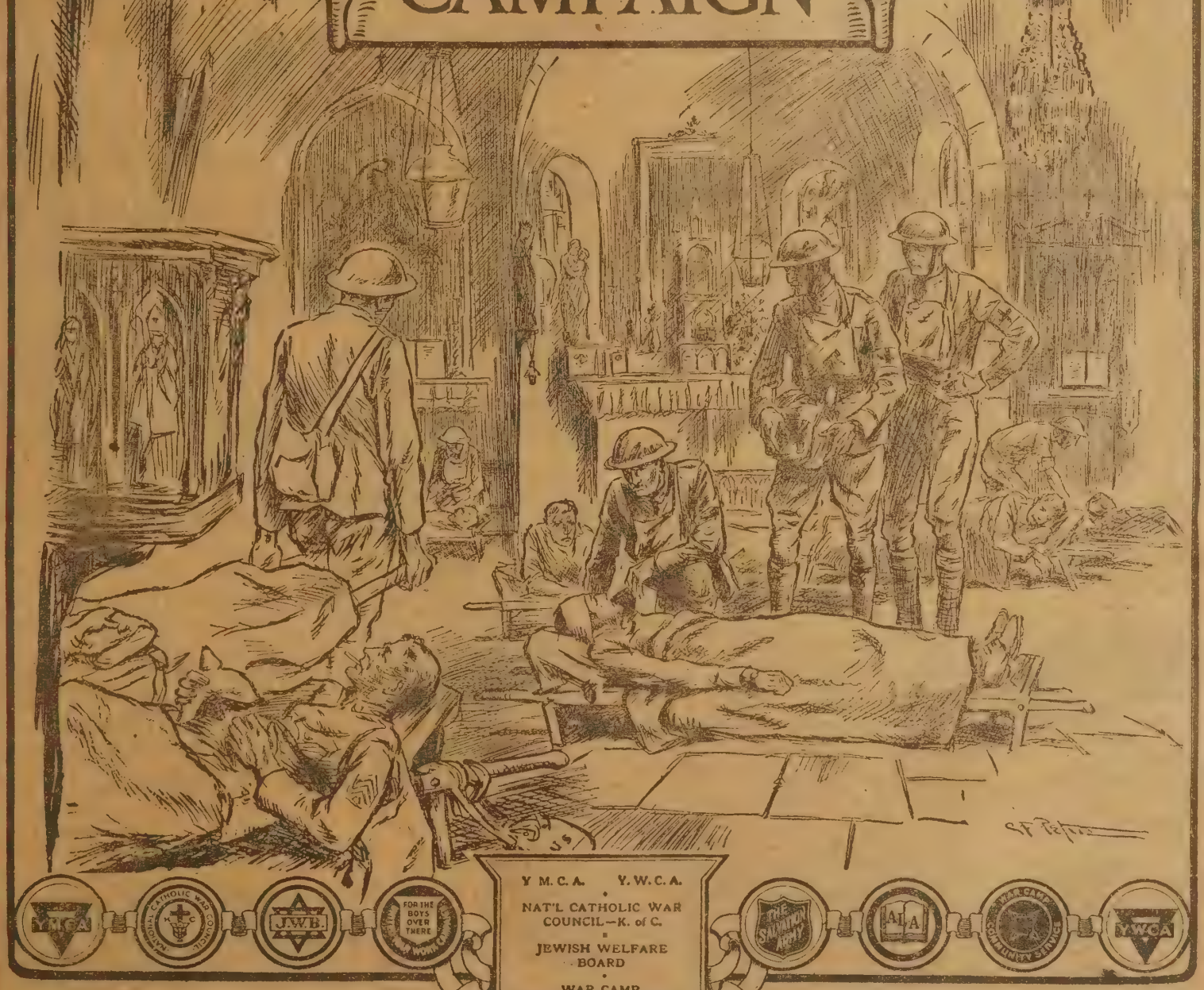
NOTICE TO READERS: When you finish reading this paper, place a U. S. 1-cent stamp on this notice, mail the paper and it will be placed in the hands of our soldiers or sailors destined to proceed overseas. NO WRAPPER, NO ADDRESS. A. S. Burleson, Postmaster Gen.

PUBLISHED WEEKLY.

# THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF


## UNITED WAR WORK CAMPAIGN



Y M. C. A. Y. W. C. A.
NAT'L CATHOLIC WAR COUNCIL—K. of C.
JEWISH WELFARE BOARD
WAR CAMP COMMUNITY SERVICE
AMERICAN LIBRARY ASSOCIATION
SALVATION ARMY

**Double Your Gift** **Back Up the Boys**

# Washington Boys in War Service

From The Twice-a-Week Spokesman-Review



**LEWIS E. KREPS, Hooper, Wash.**—On the 25th of March, 1918, Lewis enlisted in the U. S. army service as a truck driver. He trained at Fort Myer, Va., and on July 4 sailed for France. Before his enlistment he was a student at W. S. C. and lived with his uncle, Alfred Eccles, near Hooper.



**ARTHUR HOWE, Cheney, Wash.**—In May, 1918, enlisted in the navy and is now training at San Diego, Cal. Before entering the ranks of Uncle Sam he and his brother, Herman, ran a farm in the Rock Lake district. He is 21 years old and the son of Mr. and Mrs. Tom Howe of Cheney.



**ROY L. WATSON, Pomeroy, Wash.**—On August 28, 1918, was called to the colors and is now training at Camp Lewis. He was assigned to Company H, First U. S. infantry. He has a brother who is now in France. Mr. and Mrs. George Watson, farmers near Pomeroy, are his parents.

# Teach Agriculture

## Under Terms of Smith-Hughes Law

By HORACE ADDIS.

The public school at Colfax, Wash., is one of the few in the state that is giving agricultural education under the terms of the Smith-Hughes law, and with Professor E. E. Elliott in charge of the work much is being accomplished. While there are quite a few schools attempting to teach more or less agriculture there are only about 10 systematically operating under this law.

The Smith-Hughes law, passed by congress February 23, 1917, requires agriculture, domestic science, or trade and industry to be taught on a certain standardized plan, in which case half the expense of the teacher is borne by the government. The Colville school teaches only agriculture, and most of the schools receiving the appropriation confine themselves to the one science.

Professor Elliott was at one time head of the agricultural department of the Washington State college and later was dean of the Idaho university. To a natural aptitude for teaching he adds a personal interest in his pupils. He makes companions of them and leads in a way that fully gains their confidence.

Both laboratory and project work are required. The plan calls for 90 minutes for project work and 90 for class, every day, though the project work may be finished by devoting more time to it, and work may be done outside of the regular school term. The school must conform to the work outlined by the government. This year Professor Elliott is teaching two courses in agriculture, with civic biology as an allied science. These courses the students are expected to take, devoting the balance of their time to supervising their projects. Eighteen pupils are enrolled, which is almost the limit of what an instructor supervises, as the pupils are compelled to take project as well as laboratory work.

It is the desire of all teachers, as well as the framers of the law, to fit the courses to the needs of the community, and a review of the projects being worked out indicates the success with which Professor Elliott is doing this.

One boy bought three goats in April, paying $27 for them at a sale. He took care of them on his father's place during the summer. The two does had three kids. He sheared the goats himself, though he had never used sheep shears before, afterward selling the three goats for double what he paid, and has the kids yet.

The project taken by one of the girls is the preservation and storage of food for the family. She has done much canning, but her work includes the care of meat butchered on the place and the storage of eggs and vegetables. This is not a project on which a profit in dollars and cents can well be calculated, but its value is great and the young lady has learned much, besides doing good work.

One boy started with 21 day-old chicks. He made quite a profitable venture, but his report was not in when I was at Colville.

Several of the boys are carrying on individual cow-testing work for local dairymen. The dairymen weigh their own milk, when the milking is done, but the boys make regular visits, probably every week, and do the testing in the well-equipped laboratory at the school, under Professor Elliott's direction. They make the reports and Professor Elliott certifies them to the dairymen.

One boy took a project of beans. He planted a dozen varieties. The dry season cut down the yield and some varieties were complete failures, while others have clearly shown their value by making a good yield. The beans will be studied in the laboratory when school opens.

One young lady plans revival of an old orchard. She will prune, spray and properly care for about 15 trees out of 60, and thus demonstrate the effect of proper care.

Professor Elliott has a demonstration tract in town, for instructional work. He had about 70 varieties of farm crops. Some of the students helped in preparation of an exhibit at the county fair.





# Sulphur

It has been proven and so recommended by the University of California that if you sulphur your grape vines and orchards SIX times they will not be affected by MILDEW or RED SPIDERS.

ANCHOR Brand Velvet Flowers of Sulphur, also EAGLE Brand, Fleur de Soufre, packed in double sacks, are the fluffiest and PUREST sulphurs that money can buy; the best for vineyards; the best for bleaching purposes, LEAVING NO ASH.

Try our new brand of VENTILATED Sublimed Sulphur, 100 per cent pure, for making Paste—(Atomic Sulphur)—and for dusting.

For Lime Sulphur Solution, use our DIAMOND S Brand refined Flour Sulphur. We can furnish you this sulphur at such a low price that it will pay you to mix your own solution.

To create additional available plant food, drill into the soil 100 to 400 pounds per acre of our Diamond "S" Brand Powdered Sulphur.

It has been proven that sulphur has increased various crops up to 350 per cent.

Save this advertisement for reference, as it may not appear again.

Write immediately to Balfour, Guthrie & Co., Portland, Ore., or Seattle, Wash., our representatives,

Or direct to

SAN FRANCISCO SULPHUR COMPANY

624 California Street, San Francisco, Cal.

We are equipped to make immediate shipment. Send for illustrated booklet; price list and samples.



# SAMSON

GMC

Buick-Built

# TRACTORS

Can't strip the gears of a Samson. Know why? Come in or let us send you the booklet, "Better Farming."

Eldridge-Buick Co.

Seattle. Spokane.




# LAND

## Now Ready for ENTRY

Live Stock Men

This Is Your Chance

## Jordan Valley Is Surrounded by Thousands of Acres of FREE RANGE

*Which Will Furnish Spring, Summer and Fall Feed, and the Products of Your Farm Will Support Your Stock in Winter*

See Jordan Valley and the **State Supervised** irrigation system. Write for auto dates from Boise.

# Jordan Valley Farms

524 Idaho Bldg., Boise, Idaho. Harley J. Hooker, Sales Mgr.

# DELCO-LIGHT



## Increases Farm Efficiency

IT'S no hardship to do the chores after dark these long evenings if you have Delco-Light.

Plenty of bright, clean, safe light, in house, barn and yard.

Running water everywhere.

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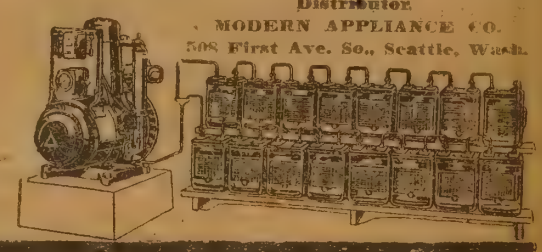
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# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 45. THE RANCH PACIFIC DAIRYMAN HORN AND HOOF November 7, 1918

## How to Winter Bees Safely

### *Good Protection Is Necessary, but It Is Easily Given*

By George F. York, Sandpoint, Idaho.

The wintering of bees is one of the most important problems that confront beekeepers in almost every part of our great country, and especially in the northern or colder portions.

There are a number of methods of preparing bees for successful wintering, any one of which will likely prove satisfactory if directions are carefully followed.

For the coldest portions of the north probably the best wintering method is that of the bee-cellar, specially made for the purpose; though cellars under dwellings are sometimes used, and with good results, says Farmers' Bulletin 1014, which has recently been issued by the department of agriculture. Bee-cellars must be insulated so that the temperature within the hives does not fall below 52 degrees F. A sidehill is a good location for a special bee-cellar. It should be entirely underground, and the top covered with a good insulating material, such as sawdust. The sides and floor may be of concrete, or the floor may be of earth and the sides made of boards. A good height is 6 1-2 feet in the clear, high enough to allow the operator to work comfortably. The hive bodies containing the bees should be piled four deep, with say two-inch space between them, up and down. The cellar should be kept dark, else there is danger of the bees leaving the hives and flying or crawling al over the cellar.

A bee cellar in a sidehill under a building gives excellent results in wintering the bees.

The hives with bees should be removed from the cellar to their summer stands in time for the earliest honey-flow. This does not mean the honey-flow for surplus honey, but in time to allow the bees to avail themselves of any nectar or pollen that may be secreted by such early-blooming plants as pussy-willows, the fruit blossoms, dandelions, etc.

For wintering bees successfully in the warmer parts of the country the hives may be left out of doors, in cases, with good insulating material around the sides, top and bottom. (Complete directions are given in Farmers' Bulletin 1012, recently issued by the department of agriculture.) The packing should not be delayed too long, October being the best time in the north central states. Four colonies of bees are kept on one foundation, according to the bulletin, and are enclosed in one case. Insulating material, such as cork chips, fine shavings, sawdust, dry leaves and other substances, should be packed closely six to eight inches thick about the hives. The entrances are kept open by what is known technically as a tunnel. The size of the opening is made smaller as the winter grows colder. The apiary should be protected from wind as much as possible, and the case made rainproof.

Some beekeepers prefer the easy way (and also very simple) of preparing their bees for winter right out on the summer stands, and thus avoid the extra work and expense of placing them in a bee cellar.

In the first place, see that each colony has ample stores of honey for their winter need—say about 30 to 40 pounds. If it is less the bees should be fed sugar syrup sufficient to make the necessary amount or weight of winter stores. This feeding should have been done, if needed, during the warm days of October. But if cold weather has come sooner than expected, and it is too late to feed the bees in the regular way, then sugar cakes can be made and placed directly over the brood frames in each hive. This can be done even in midwinter, if the bees are found to be short of stores.

Bees wintered on their summer stands should have from six to eight inches of packing over them, in empty supers. This packing may consist of burlap, felt or small sacks filled with cork chips, leaves, sawdust or any other absorbent material. Before putting the packing in the empty supers it is well to place six or eight half-inch square sticks crosswise of the brood frames and about two inches apart, so that the bees can pass over the tops of the frames containing their winter stores. In cold weather bees can not break their winter cluster and go down to the bottom of the hive and pass around the cold lower edges of the frames, but they can "go over the top" of the frames, for the heat that they generate rises, and so the air above the cluster of bees is likely to be warm enough for the bees to move if necessary to reach a new supply of food.

Sometimes the snow becomes, in colder climates, so drifted over the hives that they are utterly covered and out of sight. There is no danger of the bees smothering if the hive entrances are left so that they could not become clogged with snow or ice. Perhaps a good plan would be to stand up a short board slanting in front of the hive entrance. It might also be well to shovel the snow away when the bees have been covered over for about a month. It will usually be found that there is quite a space around the front of the hives thus covered where the snow has melted, and the bees found in good condition, especially if they had plenty of winter stores and were in good condition when entering the winter season.

All details for wintering bees are given quite fully in all of the best bee books. Every beekeeper should own and study carefully one or more of the standard text books on bee keeping. As in all other lines of work, the beekeeper can not learn too much about his business if he really desires to have the largest measure of success with bees.

## May Feed Wheat

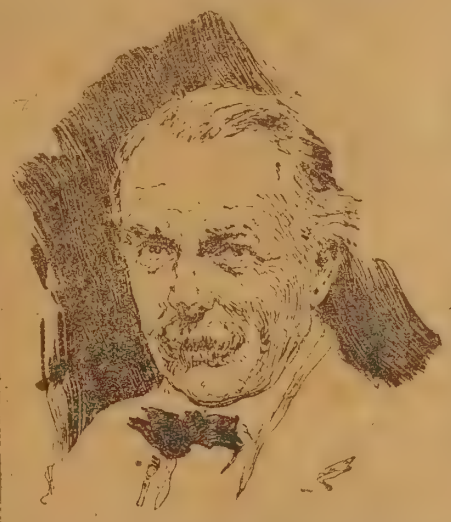
### To Live Stock as Before War

**The rules of the food administration prohibiting the use of wheat for feed purposes have been repealed, effective November 4, according to a telegram received by Charles Hebberd, federal food administrator for Washington, from Herbert Hoover.**

**This makes possible the return in the Inland Empire of pre-war feeding conditions, but the food administration expresses the hope that while this privilege has been extended it will not be taken advantage of and that farmers will continue to make use of a balanced ration, all those using wheat mixing coarse grains with it as much as possible.**

## D. Lloyd George

### Says War Work Is Indispensable



**It gives me the greatest pleasure to testify that the work has been conducted upon the broadest lines of service, not merely to the gallant soldiers of the army of the great republic of the west, but to all they could assist. The high quality of character of those conducting this work needs no praise, but I affirm that in my opinion it would have been impossible to have afforded the boys that inspiration and succor they need—and which they so richly deserve—without your efforts—D. Lloyd George, Prime Minister of Great Britain.**

Next Monday, November 11, there begins in every locality of this country a remarkable campaign, that of seven humanitarian organizations in a joint effort to raise $170,500,000 for war work. Religious creed is forgotten—Protestants, Catholics and Jews are one in the campaign. The seven organizations, with the proportion of the total amount each will receive, are as follows: Y. M. C. A., $100,000,000; Y. W. C. A., $15,000,000; National Catholic war council, $30,000,000; war camp community service, $15,000,000, and the American Library association, the Jewish Welfare board and the Salvation Army $3,500,000 each. The campaign is being waged jointly at the request of President Wilson, it being believed that greater success could be attained in one campaign than in several for the smaller amounts. The campaign continues for one week, ending November 18.

### Election Returns.

There are many interesting features to this year's election, which was held this week too late for returns to be published in this issue. Results of vital interest will be published in next week's paper.

## Spanish Influenza

### Good Home Treatment Important

With Spanish influenza sweeping the country, physicians overburdened and unable in many cases to respond to calls from farming communities, clear knowledge of home treatment becomes of vital importance.

Prevention is better than cure, and on that subject we have seen nothing better than these rules, recommended by Surgeon General Gorgas of the United States army:

**1. Avoid needless crowding; influenza is a crowd disease.**

**2. Smother your coughs and sneezes; others do not want the germs which you would throw away.**

**3. Your nose, not your mouth, was made to breathe through. Get the habit.**

**4. Remember the three Cs—a clean mouth, a clean skin and clean clothes.**

**5. Try to keep cool when you walk and warm when you ride and sleep.**

**6. Open the windows always at home at night; at the office when practicable.**

**7. Food will win the war if you give it a chance; help by choosing and chewing your food well.**

**8. Your fate may be in your own hands; wash your hands before eating.**

It is vitally important that we should learn to distinguish the symptoms of influenza and those of an ordinary cold. While there are some points of similarity, the trained physician has little difficulty in diagnosing the two ailments.

Influenza comes on without warning, it strikes as by an unseen hand, it comes with definite chills and marked fever, the appearance of both more or less sudden. The patient has a feeling of profound, sudden and continued prostration. Water discharges begin at once, with little or no dry stage preceding. There is a marked flow from the nostrils and the eyes.

On the other hand, the onset of a cold is not so sudden; it usually passes through a warning stage. Where there is frequently a sensation of chilliness, the hard definite chills that are characteristic of influenza are lacking. Usually in colds there is little or no fever. Prostration is not so profound as in influenza. The patient has just a general "good-for-nothing feeling." The water discharges come on gradually, preceded by a dry stage lasting a few hours to several days.

In Spanish influenza headache is usually severe, often in the eyes or at the back of the head, and is hard to control. It is often described as a splitting headache. Severe backache is nearly always characteristic, accompanied by marked and severe pains in the legs and bones.

In ordinary colds headache is not so profound, the eyes are not so affected, backache is not usually present—only a feeling of weakness; nor is there much evidence of pain in the legs or in the bones.

Fever runs high for several days with influenza, from 100 to 105 or 106 degrees in severe cases. In colds, fever is absent or runs low, and usually comes on more gradually.

In Spanish influenza the lungs are usually affected and severe complications often make an early appearance. In colds the lung complications appear later, generally as the third or last stage of the attack.

In Spanish influenza the nervous symptoms are very marked, in some forms resembling meningitis, the patient is restless and sleepless, and in severe cases

(Continued on page thirty.)

## Wenatchee Fruit

### Harvest Is Nearing Completion

About 6400 carloads of marketable apples are estimated for the Wenatchee district by P. S. Darlington, horticultural inspector for the central Washington, or Wenatchee, district. His headquarters are at Wenatchee. He estimated 600 cars of culls to ge shipped to byproducts mills. In addition to these he says there are about 600 more cars that will probably be utilized at home for byproducts. Mr. Darlington divides the total product among the counties of the district as follows: Chelan, 5600 cars; Okanogan, 985; Douglas, 775; Grant, 150.

Prices, Mr. Darlington says, are better than last year, and growers generally are fairly well satisfied. Most of the orchards are in full bearing, but the trees are still growing, and the output is therefore increasing.

A good share of the crop is packed cooperatively, and apple growers' associations own many well equipped packing plants. Cooperative packing has been a success, but cooperative selling agencies have not all been successful. It has been hard to keep growers together in them.

On October 30 Mr. Darlington estimated 85 per cent of the picking to be completed, and he thought the balance of this crop would be picked by November 10. The fall has been rather favorable for picking, which is fortunate, as the fruit was late in coloring up and put on its color very rapidly when it did start.

Immediately after picking fall pruning will begin, and in many orchards continue most of the winter. The season is farther advanced than last year. H. A.

## Stock Show Dates Fixed

Believing that the Spanish influenza will have abated sufficiently to permit the holding of the live stock shows of the northwest the latter part of this month and early in December, the officials have set the dates as follows:

Northwest live stock show, at Lewiston, Idaho, November 28 to December 4, inclusive.

Pacific International live stock show, at Portland, Ore., Dec. 9-14, inclusive.

Other of the leading shows are to be held as follows: At Los Angeles, November 2-14; at San Francisco, November 16-25; at Chicago, December 2-10.

This puts these five shows in the following order, with time enough in some instances for shipment of stock from one to the other: Los Angeles, San Francisco, Lewiston, Chicago and Portland.

Speaking of the schedule of dates, Secretary O. P. Hendershot of the Lewiston show says:

"This mutual cooperative plan which we have now adopted for the western part of the United States is the best plan possible and will prevent conflicting dates, giving a chance to ship from one show to another and plenty of time to make exhibits at all four shows.

"This will certainly strengthen every show on the circuit. There is every indication now that we will have a great show at Lewiston, the best that we have ever put on."

It is not definitely decided yet where the Portland show will be held, a difference of opinion having arisen over possible sites. It was at one time agreed that it should be held uptown at the ice rink, but a protest was made by those desiring it held at North Portland, where it has previously been held under the auspices of the stockyards.

## Wool Shipments

The following communication has been received from Lewis Penwell, chief of the wool section of the war industries board:

The information coming to the wool section of the war industries board would indicate that there is still an appreciable amount of wool in the hands of the growers, particularly in the fleece wool sections throughout the United States.

It is desirable and necessary that this be gotten in to the wool centers as soon as possible, in order that it may be taken over by the quartermaster general, to be used for the military and naval needs of the government. The farmers are urged to send this wool in as quickly as possible, for the above reasons.

The wool section of the war industries board would be glad to answer inquiries from farmers or others as to the manner of marketing wool.

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## A Worthy Cause Asks Your Aid

The people of the United States are to be given an opportunity to do something mightily worth while next week. They are to be allowed to lend definite aid in giving comfort and cheer to the soldiers of America, France, England and the other allies as they face the hardships and perils on the battlefield or in camps preparing to face the foe.

Seven organizations, not including the Red Cross, which operates independently, have united in one campaign to raise $170,500,000 during the coming week for war work. They are the Y. M. C. A., the Y. W. C. A., the Knights of Columbus, the Jewish Welfare board, the War Camp Community service, the American Library association and the Salvation Army. Each is a worthy organization, doing a wonderful work for the soldiers. They ask an average of $1.70 from the people of the United States. It is a small amount to give compared to what the boys who face the enemy are required to give. Those of us at home should seize this little opportunity to help.

Distraction is a means as well as a cause.

## Get Ready for Soldiers' Return

There is much discussion these days about preparing for the return of the soldiers who have gone ahead to fight this country's battles. There must be more discussion and then action. They have left good positions, in most cases. Those positions have been taken in many instances by others. Women have taken many places formerly held by men, and all of them will not quit the field when the war is over. Many of the plants in which the boys were employed will have ceased business. Conditions will have changed in a multitude of ways. The whole industrial problem will be different.

It is the big opportunity for the back to the soil movement, for the returning men will need the soil, and the soil will need the men. No plan can be too well worked out to meet the condition. It is a question that deserves the best thought of the best men and women of the country. The land must be available and placed in a condition that will invite its occupancy and produce from the beginning a first class living.

But never let it be thought that the soldier boys are going to return expecting a gift or something easy. Never let it be thought that they will return expecting, or willing to accept, a pension in the form of an easy living. Boys that shouldered arms and marched away to the battle front do not want a snap. All they want is an opportunity. They are not afraid of a fight. They have learned to shoot big guns and to face the fire of big guns. Give them the opportunity to get hold again when they return, and they will give those of us who remained at home a bit of the healthiest competition that American industry has ever known.

The line between self-reliance and self-importance is better imagined than drawn.

## If the German People Knew

If the people of Germany knew that under the terms of peace the allies will grant them they will be enabled to develop more in the next generation than they have in all their past history as a people, they would rise as one man, overthrow the kaiser and kaiserism and surrender unconditionally. While Germany must pay a just penalty for the crimes that she has committed, the allied victory means that popular government will take the place of despotism, that light will shine where darkness has been and that right will take the place of might. Germany is a benighted land and her people a benighted people. Germany's masters have forced a system of education and thought upon her that civilized nations banished decades and decades ago, a system that has been a stone wall about a great people shutting from them the light of modern thought. That is why they have run amuck of all civilized law; that is why they have brought the present awful cataclysm upon the world. Away with her masters! Away with her system of thought! Let the civilization of America and England and France shine in upon and redeem her. Thus only, can Germany, through the years to come, be enabled to compensate for the sins she has committed.

## Danger Point for Dairy Butter

With creamery butter selling at 70 cents a pound, and oleo at 45 cents, there is danger that the latter may come into more general use than it ever has. This danger is intensified by the announcement that there is likely to be a still greater advance in the price of dairy butter.

People, as a rule, are loyal to the dairy cow and to her product, and for that reason would prefer good butter, even at a considerable advance over former prices, and in keeping with the advance in other food products. They certainly will expect, and be willing, to give the dairy article the preference, at a wide margin in price, over oleo, butterine, or whatever it may be called. But will they do so if the creamery article continues to advance in price?

Even now dealers in butter say that they are selling a good deal of oleo, and some of them say that the demand is rapidly increasing.

Where this article is put upon the market on its own merits, for what it really is, with the fraud eliminated, so that it isn't masquerading under false colors, there can be no valid objection to it. And so, if people know what they are getting, and are willing to use it, or feel that they ought to get get along with it rather than to pay the much greater price for the real butter, it is not easy to question their position.

So here is the danger to the dairy industry at the present time, especially if prices go higher.

If anything can be done to safeguard the business cow from this danger it should be done. There is no doubt but that the dairy industry has a real menace confronting it in the present situation. It would be a calamity to one of the great agricultural industries to have it thus handicapped and imperiled by prices which the people look upon as prohibitory.

A. E. G.

## The Family Question Box

The Farmer will be glad to help you answer all sorts of questions; will be glad to answer them for you. Make this paper your Family Question Box. Write to the editor. There is no doubt at all but what you can give points of valuable experience in your own life which will answer the questions of other readers of this paper. While writing out your own question to send us, see if there is not something you can add in the way of helping some other farmer, some other farmer's wife or some other boy or girl on the farm.

The one who lives to himself alone leads a beggarly life. The one who is continually helping somebody else finds life worth while.

You have answered more than one question in your own life; somebody else is just at the point where they would like to have that question answered. You can help them. You can make the Family Question Box of the Farmer a medium for doing this.

Send in your questions. Write to the Editor. This is your paper.

## Vital Need of More Food for Shipment to Europe

We said two weeks ago that the American people would want to hear from Mr. Hoover before accepting and acting upon the opinion of Mr. Barnes, head of the grain buying corporation, that the time had come to discourage wheat production and that our present stores of that cereal had become a burden to the government.

Judging from the earnest utterances of J. W. Hallowell and R. W. Boyden, who are now in the Pacific northwest as Mr. Hoover's personal representatives, the food administrator does not indorse Mr. Barnes' amazing statement. These representatives of Mr. Hoover come direct from Washington and are holding conferences with the state and county food administrators. In a public statement, Mr. Hallowell said: "There is such a vital need of more food for shipment to Europe this year than last that he has sent us out to meet the workers personally and present the magnitude of the task at the same time that we learn the problems in the various states. Mr. Hoover brings back the word that the United States must send 17,500,000 tons of food to Europe in the coming year, or 50 per cent more than last year, when we shipped 11,800,000 tons. Last year we shipped 6,800,000 tons of bread grains, 1,500,000 tons of sugar, 1,500,000 tons of meats and fats and 2,000,000 tons of feed grains, mostly oats for horses. This year we must increase each item 50 per cent. Last year we sent enough food to feed 20,000,000 people; this year we must send enough to feed 30,000,000."

If we increase our shipment of bread grains 50 per cent, we shall have to send to Europe 10,200,000 tons the coming year, preferably wheat. That will mean exports of 337,000,000 bushels.

The greatest wheat crop ever grown in the United States was that of 1915. That year we exported 260,000,000 bushels, or 7,000,000 bushels less than Mr. Hoover says we should have for export the coming year. In 1916 and 1917 we exported respectively 173,000,000 bushels and 150,000,000 bushels of wheat. We are now called upon by Mr. Hoover to export twice that quantity.

In the light of these authentic official statistics, the country can only wonder what prompted Mr. Barnes' remarkable letter to Senator Hitchcock of Nebraska, actually deprecating an increased production of wheat in 1919.

America has just raised some $6,000,000,000 for the conduct of the war. Let every one now put his shoulder to the wheel to raise $170,000,000 for the organizations whose duty it is to bring relief and comfort to the soldiers over there.

## The Best Is None Too Good

No producer should be content with the ordinary. He should strive always for the best. It is the easy way, the lazy way, or the more-than-you-can-do way to put in a crop in a second class fashion and let it do what it will. It is easy to do poor plowing and poor harrowing and poor seeding. It is easy to let the weeds grow and easy to let the ground get hard and dry, which cuts down the yield both in quantity and quality. Usually it is easy to harvest the crop that is produced that way, for there is less of it to harvest. Invariably it is easy to spend the money received for it, for there is little received for a small and inferior crop.

The day of the ordinary thing is rapidly passing. The day of the common cow is giving way to the day of the strictly first class producer. The day of the second class crop of wheat or corn or barley is gone from the successful farm community. The day of the catch-as-catch-can root crop is ready to be counted out. A little extra effort in preparing the land, a little extra effort in cultivation mean No. 1 grain, big yields of potatoes and mangels of high quality. There is a remarkable difference between 20 bushels of wheat and 25 bushels of wheat per acre. It is a difference of 800 bushels to the quarter section, or about $1500 in market value these days. There is a great difference between $1.90 a bushel and $1.95 a bushel. It is a difference of $200 on a quarter section crop of 25 bushels per acre, but it is a difference easily made between wheat that grades high and wheat that grades low.

In everything, the best is none too good. Slack methods of farming must go. Profit demands it.

# Germany Loses Her Last Friend

## *Both Austria and Turkey Lay Down Arms on Allied Terms*

Austria has surrendered. Turkey surrendered a week ago. Bulgaria had already given up the struggle more than a month ago. Germany, therefore, stands alone fighting a hopeless battle against a group of allies whose power is daily increasing. The fate of Germany is to be decided by herself, and two courses are open to her: (1) Surrender unconditionally or (2) fight on until her armies are weakened to a point where they can no longer put up battle.

**THE TERMS GIVEN TO AUSTRIA.**

The terms granted Austria are little short of unconditional surrender. The leading points in the conditions are as follows:

Complete demobilization of Austrian forces.

Surrender of one-half of all artillery and military equipment.

Occupation by American and allied forces of such strategic places as may later be selected.

Use of Austrian railroads for operations against Germany.

Evacuation of all invaded territory, leaving behind all equipment and supplies, including coal.

Surrender of a portion of the Austrian surface and submarine fleets and disarmament of others under American and allied control.

Surrender of all German submarines in Austrian waters.

Repatriation of allied and American prisoners without reciprocity.

**THE TERMS GIVEN TO TURKEY.**

Among the vital points in the surrender agreement with Turkey are the following: (1) The opening of the Dardanelles; (2) demobilization of the Turkish army; (3) release of all allied prisoners; (4) surrender of all warships in Turkish waters; (5) cessation of all relations between Turkey and her former allies; (6) surrender of all strategic points to the allies; (7) disposal of Turkish prisoners held by the allies to rest with the latter; (8) adequate safeguards against violation of all allied rights by the Turks.

It is to be remembered that these terms are subject to revision and additions by the allies at the time of final peace settlement, when details are considered.

**TERMS TO BE MADE TO GERMANY.**

All these things point unerringly to the liberation of Germany from the rule of the kaiser and his family. The surrender of Bulgaria and Turkey destroy absolutely the possibility of a great chain of territory ruled over by Germany from the North sea to Persia. It opens the Dardanelles for the passage of world commerce without the arbitrary control of Turkey for the first time since that country secured her grip on that vital waterway. It relieves the allies of all necessity for a campaign against any enemy except Germany.

The supreme allied war council has been in session all the last week drafting specific terms upon which they will grant Germany's application for an armistice. Those terms are being withheld in strict secrecy until such time as they are ready for presentation to the German authorities and people.

Word is given out, however, that all the allies are in accord in the terms that are being framed, and that they will adequately safeguard the interests of the allies. It is also understood that they will amount to a complete surrender by Germany. It is suggested that one of the terms may be that Germany must leave all her arms and supplies where they are and withdraw her army unarmed to a line 30 miles behind the Rhine. The significance of this is realized when it is remembered that the Rhine river is the great frontier line of fortifications on which Germany has always depended for protection on the west. A withdrawal behind this line would leave the railroads and this line of fortifications in the hands of the allies, with nothing but an unarmed army to defend the interior of Germany. It is probable that the complete terms will be announced within a few days.

**MANY OF THE ENEMY CAPTURED.**

It is unofficially stated that since the allied drive began in July there have been nearly 500,000 of the enemy captured. This number is probably increased by the most recent successes on both the Italian and western fronts. The losses by killed and wounded have not been officially estimated.

**MANY MORE DRAFT MEN CALLED.**

The draft officials announce that during the first three weeks of this month approximately 290,000 new men will be called in the draft to go to the camps for training. This will bring the total number of men inducted into the service through the draft up to 3,000,000, which, with those already in the various branches of the service under voluntary enlistment, will make the total men in service or in camps about 4,000,000.

**FOURTH LIBERTY LOAN OVERSUBSCRIBED.**

Final figures have been announced on the fourth Liberty loan, showing the total subscriptions reached over $6,866,000,000. This is an oversubscription of more than $866,000,000, and constitutes the largest war loan ever floated by any country at one time in the world's history.

**HOLD VICTORY "SING" ON THANKSGIVING.**

Patriotic songs that will be heard around the world will be sung by the people of America on Thanksgiving day, according to the plans of the National Council of Women. It is planned to arrange a program of songs to be sung in every community of the nation at the same hour on the afternoon of Thanksgiving.

**ELECTIONS ARE BEING HELD.**

Election returns from the voting of November 5 come in too late to appear in this week's issue. In fact, some of them will likely be incomplete for several days. Great interest is manifested in the outcome, due to three things: The fight for and against the recommendation of President Wilson that only democrats be elected to congress, the question of the "Americanism" of the candidates, and the effect of the nonpartizan league in the campaigns of the various states, especially the state of Idaho, where a full state and congressional ticket has been supported by a vigorous campaign for the first time.

# Australian Wheat Surplus

## Will Have Over 200,000,000 Bushels for Market

When the war ends Australia and New Zealand will be able to get ships to transport their large accumulations of wheat to the open markets of the world. Undoubtedly there is a great deal of wheat unsold. The British government contracted for 3,000,000 tons, 112,000,000 bushels, of 1915-16 and the 1916-17 crops at $1.16 f. o. b. A large part of that still awaits delivery. In addition there is still unsold a part of the 1916-17 crop, all of the 1917-18 production and the prospective crop of 1918-18, harvest of which will begin about December. The guarantee for the 1918-18 crop is 97 cents a bushel and for the 1919-20 production $1.05. The official preliminary estimate of the Australian wheat crop is 123,000,000 bushels. The comparison of the two preceding seasons is as follows:

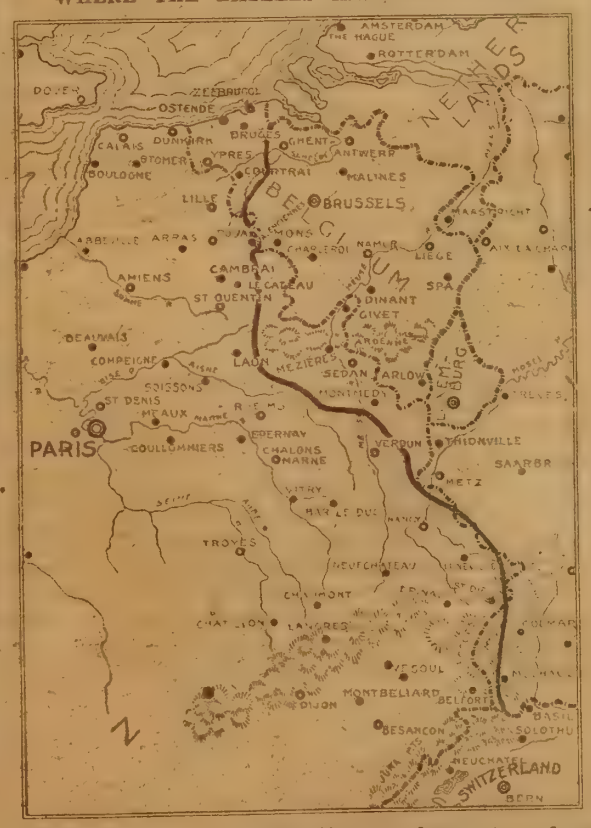
| | 1917-18. | 1916-17. | 1915-16. |
|---|---|---|---|
| Victoria | 37,737,552 | 51,162,438 | 58,521,706 |
| New South Wales | 37,843,930 | 36,598,000 | 66,764,910 |
| South Australia | 28,692,594 | 45,745,064 | 34,134,504 |
| Western Australia | 19,304,995 | 16,103,216 | 18,236,355 |
| Queensland | 1,405,664 | 2,463,141 | 414,438 |
| Tasmania | 252,383 | 348,330 | 993,790 |
| Total Australia | 115,237,118 | 152,420,189 | 179,065,703 |
| New Zealand | 7,800,000 | 5,083,227 | 7,108,360 |
| Grand total | 123,037,118 | 157,503,416 | 186,174,063 |

If the war should end this winter Australia and New Zealand would probably have for market between 200,000,000 and 300,000,000 bushels. That is a large quantity, but there is reason to believe that it would be quickly absorbed by the hungry peoples of the earth. Russia alone, once a great wheat exporting country, will need many hundreds of millions of bushels from outside sources. An American traveler who came out of Russia a few weeks ago doubts if that country has grown this year one-tenth of its usual harvest. Everywhere, he reports, from St. Petersburg across Russia and Siberia to the Pacific he saw overwhelming evidence that the peasants have grown only enough wheat for their own consumption. They saw that any production beyond their own needs would be confiscated by the bolsheviki government and paid for in worthless paper currency. All over Russia the peasants are standing guard over the scanty wheat stacks with rifles and machine guns. The coming winter will be the blackest and most devastating that Russia has known in hundreds of years. Unless the war should end quickly and relief be gotten to the distressed people millions will perish of starvation.

The world is hungry for wheat, and if given an opportunity will revel in it. We predict that when the war is over the accumulated stocks wherever available will be absorbed almost as quickly as the August sun sucks up the dews in the morning.

For a while, at least, after the war is over our government should continue its guarantee of prices. By doing that it will stabilize agriculture, insure our growers a reasonable profit through the period of world reorganization and prevent a violent price fluctuation one way or another.

**WHERE THE BATTLES ARE BEING WON.**




The changes in the battle line on the western front this week are not particularly striking, though some vital changes are noticeable. One of the important features is the capture of Valenciennes, one of the last remaining strongholds between the allied armies and the German frontier. The allies are gradually advancing to the outskirts of Ghent, which likely will be taken before many days.

## *Washington Gleanings*

Shannon Shafer of Vancouver has sold his dairy and pasteurizing plant to C. W. Horton and W. W. Hamilton.

The Superior Milling company at Winona, after overhauling its mill, has started on the season's run. The capacity is 100 barrels a day.

Daniel Hay of Spokane has sold to Karl Janson 140 acres of land for $12,600. The land is southwest of Latah in Whitman county and is all in cultivation.

Tieton water users will meet in the commercial club at Yakima November 18 for their annual meeting, according to the call sent out by R. H. Hayden, secretary of the association.

The Stegenwald Dairy company of Portland has bought the stock and equipment of the Gerlinger dairy ranch at Washougal, the price being about $100,000. There were 450 dairy cows.

C. A. Kohler has rented his farm at Saxon and has rented a larger farm in the Ferndale neighborhood, and has moved his family, stock, household and farm belongings to the new home.

Walla Walla county and the municipalities of the county plan to spend $212,000 in road, bridge, street and sidewalk maintenance and to use 13,436 days' work in so doing, according to information gathered by G. C. Cookerly, county engineer.

Emerson Woods and his mother, Mrs. Viola M. Woods, have purchased the H. M. Hoover place, two miles northeast of Waitsburg, from Wilfred Beechinor. The ranch consists of 480 acres of wheat land. The consideration was about $120 per acre.

Grays Harber County Game Warden Jack Winslow has been notified by the state game and fish commissioner that that county will receive 125,000 cutthroat trout fry for streams in the county. About 100,000 are also to be received from federal hatcheries.

Total municipal, state and county tax levies have been fixed for Grays Harbor county cities. Aberdeen's rate is .05707, as compared with .076 last year; Hokuiam, .0478, as compared with .05439; Montesano, $05349, last year, .05592; Elma, .05294, last year, .05592.

Five thousand bushels of seed wheat were disposed of last week at the Mansfield farmers' elevator. Many who, on account of the dry weather, did not summer fallow are now preparing the land by first pulling, raking and burning the weeds that are proving a menace.

The apple crop of the Kennewick district will be off the market in excellent shape in a very short time. In spite of the shortage of labor, the shortage of box materials and the general disorganization of shipping facilities, the harvest is progressing very satisfactorily.

Christmas Nancy, a cow owned by Roy Dobbs of Washougal, produced within two ounces of 60 pounds of butterfat in September. She stands at the head of the list of cows giving the most butterfat in Clarke county for the month, according to L. Lauderdale, official tester.

Fruit men from four states and the province of British Columbia are expected at the general growers' conference to be held in Spokane December 10-13, in connection with the Washington State Horticultural society's annual convention and the grade and pack conference of the Pacific northwest.

Asotin county farmers are raising more beans this year than was ever believed could be grown there, and as it is a crop that is grown on summer fallow ground, whatever the returns are will be that much to the good. Indications are that the yield will run from 300 to 400 pounds to the acre.

Fire last week destroyed the plant of the Yakima Evaporating company at Selah, owned and operated by Mr. and Mrs. Edward Myers of San Francisco and Mr. and Mrs. P. V. Davis of Seattle, and three hop kilns belonging to Henry Schott of Yakima, together with part of this season's crop of hops.

Potato growers of the Yakima valley are considering the formation of a potato sales agency, a project which is sponsored by Asher Hobson, state director of the bureau of markets. The movement is the outcome of the decision made by the potato growers' association to hold potatoes of first class at $40 a ton.

An essay contest in every one of the 2650 grade schools in the state of Washington, on the subject of "Earning and Giving," has been authorized by Mrs. Josephine Corliss Preston, state superintendent of public instruction, to stimulate the efforts of the Victory Boys and Victory Girls. The schools have been divided into 500 community centers.

Several farmers and citizens residing near Lyman met with the Skagit county commissioners at Mount Vernon recently and argued the question of whether or not Lyman should maintain a herding district. The farmers wanted it maintained and the citizens wanted the herding district abolished. The county commissioners decided to continue the district as it is now.

King county will receive $77,993.52; Pierce, $31,887.98; Thurston, $5874.57; Whatcom, $14,420.63; Grays Harbor, $10,061.73; Lewis, $11,147.74; Mason, $1496.34, and Spokane $37,033.04 of the apportionment of the current school fund for October by Mrs. Josephine Corliss Preston, state superintendent of public instruction. The total amount to be apportioned among the counties is $330,688.94.

The Pierce county food administration wishes information from every farmer or dealer who has or will have this season any surplus stock of mill feed. They have organized a committee under Charles T. Plass as chairman, to handle this matter, and will arrange to buy all such surplus stocks and see that they are distributed to the owners of cattle and poultry in Pierce county, especially in need.

# City Builds Wharves and Warehouses

## *Seattle Port District Only One of Its Character in the United States*

By PAUL E. TRIEM

As I ride down to work every morning, my car takes me within easy sight of a massive concrete building which bears the enigmatical sign, "Port of Seattle." For a long time that building was just a landmark to me, indicating that half of my long ride was over. Now, with the knowledge of what it stands for and what it is a part of, this great concrete warehouse, built and operated by the port district of Seattle, has become symbolical of a new order of community thinking and doing—almost of a new era.

In 1911 the Port of Seattle district and the machinery of port commissioners, etc., necessary for its administration were created by an act of the state legislature. The enabling act was a very general and flexible one, and left to the voters of the district much of the working out in detail of this revolutionary scheme. The general idea was that Seattle itself, that theoretical and loosely knit unit which comprises a typical modern American city, should become a builder of wharves and warehouses, of "terminals," and should either operate these terminal facilities or should get some private concern to operate them.

Before considering more closely the way in which this idea was carried into execution, it is necessay to turn for a moment to a matter of social psychology. This northwestern empire in which we live represents the last trek in a pilgrimage which has been continuing ever since Columbus discovered this continent. And always it has been the conservatives who have stayed in the old home, and the restless and discontented ones, the cranks and kickers and idealists, who have pulled themselves up by the boot-straps and undertaken the next lap of the journey. So, by a process of social selection, the men and women who have finally reached these northwestern states are very similar in one respect, diverse as they may be in every other detail; almost without exception they are "initiators," iconoclasts, the sort of people who are willing to cut loose from the known and to take a chance on the untried and experimental.

It was the great mass of this sort of voters who conceived, under the guidance of skillful leaders perhaps, the idea of not only building, but of operating, the wharves, warehouses, cold storage plants, etc., necessary to the upbuilding of Seattle. And it was the scattering of conservatives, of precedent worshipers, who opposed the plan as socialistic and contrary to the principles of good business. Up to the present time this latter class, among whom are many fine citizens, has been waging a losing fight.

The Seattle port district is under the executive charge of three commissioners, one of whom is elected each year. A port manager is in direct charge, but he is responsible to the commissioners. This port commission is what Port Manager Hamilton Higday calls a "unique institution." "It is the only one of its character in the United States," explains Mr. Higday. "It fixes its rates without there being any appeal or review by state or local authorities; levies taxes, and, with the approval of the voters, issues bonds, entirely independent of the city, county or state governments. Its sole purpose is the development of the water-borne commerce of Seattle."

You can imagine what a blow at the settled order of political institutions this Seattle experiment was. The fact that it was the logical outworking of a doctrine found safe and sound in private business—the idea of giving one man or a few men absolute authority to do certain definite things, and then demanding 100 per cent efficiency from them—did not comfort those whose faces were turned toward the past rather than toward the future. They predicted that private business would be driven from the Seattle water front; that it would be throttled by unfair competition, initiated by the city itself.

Nothing of the kind has happened. All of us who live in the state of Washington—all who are not blind and deaf, at any rate—know that Seattle has become the second port in the United States, in its volume of foreign commerce. At least part of the credit for this wonderful growth is due to the comprehensive system of terminal facilities created and organized by the port commissioners. During its seven years in business, the commission has built up properties costing about $6,000,000. Measured by present prices for material and labor, these wharves and their adjuncts are worth at least double that sum. There is one pier given over principally to fish and fishermen, located on Salmon bay, and wharves, warehouses, etc., at Bell street, Stacy, Lander, Hanford and Spokane streets. The Smith's Cove terminal is half a mile long by 310 feet wide, and is provided with a huge sheer-legged crane, tanks for vegetable oil, automatic sprinkling system, etc. Other auxiliaries, connected with the various piers, are cold storage plants, a hay compressing plant, grain elevators, and a fish icing and packing equipment. All of these things have been created to meet an actual or potential demand, and when once created have been sold to the logical consumers of such equipment and services through the consistent efforts of an up-to-the-minute sales department. That old brick under the hat salesmanship has not been allowed to April fool the port commission.

Against the present order of things along the Seattle water front, two objections have been raised. First, said the critics, the whole thing was impractical. It might be well enough for the Port District of Seattle to build the terminals, but for a community to undertake to operate so vast a business would be suicidal. The public's money would be hopelessly squandered by long-haired theorists. The reply to this objection may be taken from the books of the commission today. The investment is on its feet, and not only is paying, but promises to pay still better as the results of present and past industry roll up.

The second objection put forward by political and economic recalcitrants is that the Port of Seattle, operating as a business concern on the Seattle waterfront, dominates this class of business and puts private firms under a handicap of unfair competition. A sufficient reply to this charge would seem to be that recent months have demonstrated the wisdom of a community or a state or a nation doing collectively for its citizens those things which can be done most effectively on a large scale and from a community rather than from a personal standpoint. Moreover, the Port of Seattle does not really "dominate" the water front business—it merely serves as a pace-maker, insuring good service at reasonable rates to such shippers as choose to patronize it.

In the long run, here as elsewhere, the proof of the pudding is in the eating. Seattle has had a nibble at this community-owned enterprise, and during the next decade or so she will have full opportunity to pass a leisurely judgment upon it. Certainly the case of private ownership vs. the public should not be decided upon any imaginary a priori grounds—there is no reason in the nature of things why this class of business should not be handled partly or even entirely by the public, through its representatives, if such a system is found to work out to the best advantage of the community as a whole. At the present time the burden of proof would seem to be distinctly up to the advocates of the old order of things—in the eyes of most of those citizens who judge the tree by its fruit, Seattle's community-owned port facilities would seem to have made good beyond the shadow of a doubt.

### Isn't She Clever.

Nell—What would you give to have such hair as mine?

Belle—I don't know—what did you give?—Boston Transcript.

# Wheat Lessons of 1918

## *Good Job of Summer Fallowing Pays the Grain Grower*

By BYRON HUNTER, Agriculturist U. S. Department of Agriculture.

While the 1918 crop year was hard and many grain growers suffered financial loss, it never theless teaches many valuable lessons.

The federal government strongly urged us to increase our acreage of wheat in 1918. To meet this appeal, and possibly to profit by the high price of wheat as well, considerable wheat was planted on stubble-plowed land. In practically all instances such crops were very poor and in most cases they were failures or nearly failures. The season of 1918 has thus forcefully reminded us that it is a mistake, under strictly dry farming conditions, to deviate from our well-established system of alternating wheat and summer fallow and to attempt to grow a crop annually on the same land. Thirty or more years of experience in farming in the Inland Empire has shown that as much or even more wheat can be raised by doing a good job of summer fallowing and growing a crop on alternate years than can be produced by growing a crop annually.

There are certain conditions under which a farmer, except in the very dry districts, might be justified in planting a crop on stubble-plowed land.

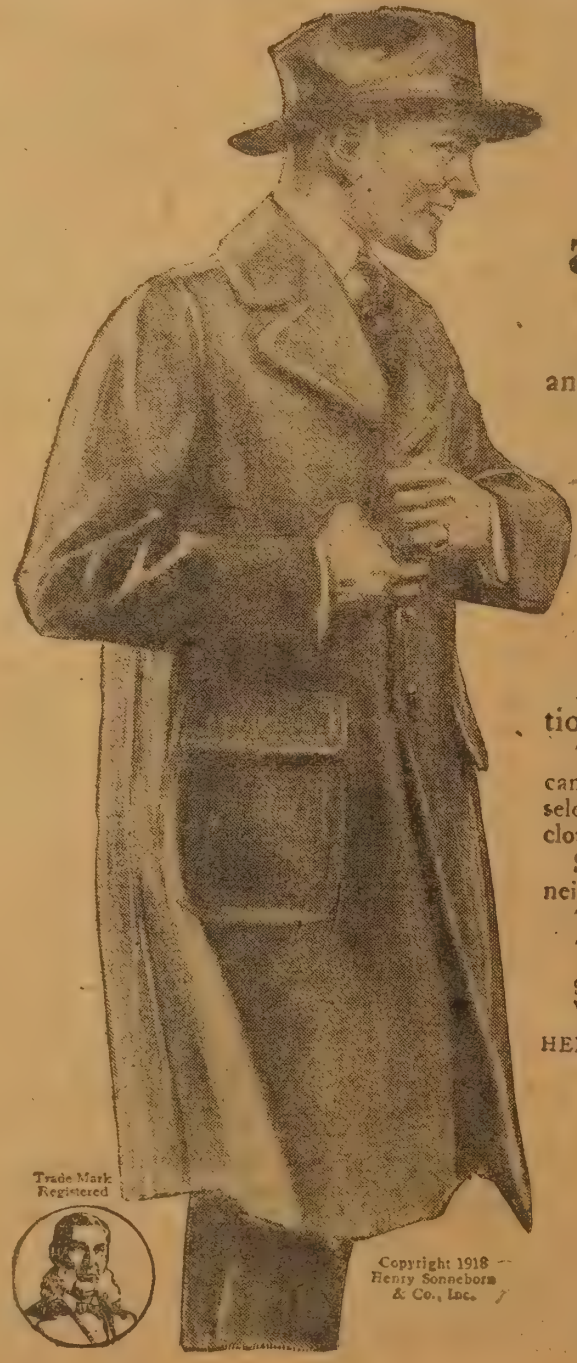
1. If the crop can be planted in the early spring.

2. If the soil contains an abundance of moisture at the time the crop is planted (this can be determined with a spade or posthole digger).

3. If the price of wheat is reasonably certain to be high, a farmer may be justified in taking the chances.

Of these three conditions we only had the promise of a high price of wheat in 1918, the soil moisture being very deficient and the spring not extra early.

Farm experience and the results of our dry land experiment stations show that winter wheat, when a good stand is secured, outyields spring wheat about 20 per cent. For this reason all farmers should attempt to grow winter wheat. In some localities winter wheat may be successfully planted almost every autumn. In much of the Inland Empire, however, there is often an insufficient supply of soil moisture to properly germinate fall sown wheat. In summer fallowing the aim should be to prepare a seed bed in which winter wheat may be sown and properly germinated with the minimum amount of autumn rain. To do this the land must be thoroughly worked in the early spring and kept free from weeds during the summer fallow season. The stands of winter wheat planted during the fall of 1917 were very uneven and irregular. This was due, in the main, to the difference in the thoroughness with which the land had been handled in summer fallowing.


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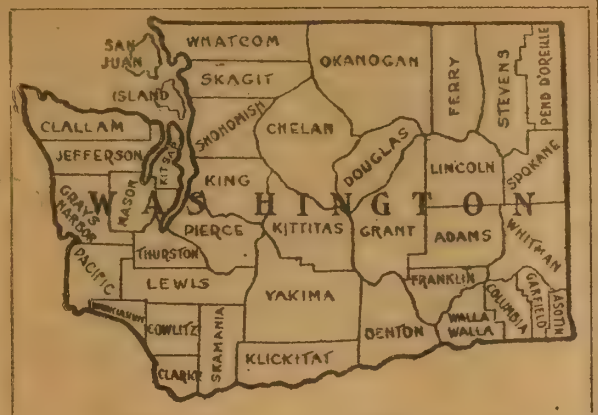
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# Short Crops Mean Short Money

## Finances Are Strained in Some Sections, But in Most Cases Farmers Are in Good Condition to Enter Winter




CENTERVILLE, Klickitat County, Wash., Oct. 28.—On the average, Klickitat county is only in fair condition financially. A third of the usual crop usually means a strained financial condition, to some at least. A few have had better crops. We have borrowed through the government farm loan system in the last few weeks upward of $100,000, thereby relieving the high interest condition to some extent. I do not hear any complaint of unpaid accounts. There is still a great effort being made to get tractors to do more farming easier and somehow those needing them are making the raise for what is necessary. With our present crop condition outlook, which is better than for nearly three seasons, the average farmer believes there will be some profit in next year's crop. Our fall seeding has been finished for some time and nearly all grain is up and in good shape, with moisture sufficient to carry it through for some time. I should think that a great part of the grain was in the elevators along the railroad. I hear some complaint with regard to selling grain. The grain feed is short, but, having to rely on our own resources, I guess we will get through. Hay of all kinds is bringing about $25 a ton. Stock are not being sold especially on account of a shortage of feed here. There is at present a good deal of plowing being done by those wanting to get their next season's work ahead. Stock are in good condition and winter pastures look good. There is only a fair crop of potatoes, probably enough for home consumption. The apple crop was short and the apples are very wormy. C. A. LESTER.

### PLENTY FEED FOR STOCK.

PROSSER, Benton County, Wash., Oct. 22.—We are having good fall weather. The first hard frost came the 22d of October. The farmers are busy putting in their winter wheat. The ground is in good shape and some wheat is up. Most of the farmers in this community can meet their obligations. The farmers are putting in more winter wheat this fall than for years. This year's harvest is all cleaned up. Wheat went from three to 10 bushels to the acre. There is plenty of feed for stock in the valley and most of the farmers have enough to winter their stock. G. W. WILGUS.

### GOOD POTATO CROP.

CHIMACUM, Jefferson County, Wash., Oct. 28.—This community is not very prosperous this year, as very few farmers have enough hay and feed for their stock to be wintered on, and they have to buy hay and grain. Many farmers are butchering the inferior stock to save wintering. The potato crop looks good, as the harvest is now on and some very good yields are reported. Fall plowing is in progress where land is fit, but, like everything else, shortage of men makes it so that most of the land will not be seeded in time.

JOHN VAN TROJEN Jr.

### SOIL TOO DRY FOR SEEDING.

OTHELLO, Adams County, Wash., Oct. 26.—Not much rain has fallen here and the farmers in this immediate vicinity have done but little seeding. A good many horses have died from the eating of green thistles and all efforts by the farmers have failed in most cases to save any that sicken. A. O. LEE.

### SOW MORE WHENT AND VETCH.

MONTESANO, Grays Harbor County, Wash., Oct. 26.—The potato harvest is now taking place. A normal yield is reported by a few farmers. Other crops, of course, are harvested and the threshing is almost completed. There will be quite an increase in the seeding of fall wheat on lands adapted to that purpose. Especially is more wheat and vetch being seeded to be used for silage and hay for dairy stock. The Agricultural council has been instrumental in securing seed for this latter crop. Wheat and vetch is popular because a crop is generally assured to the man who seeds it, while spring-sown crops are not always a success, as was the case this year, due to dry weather and crop pests. The recent agreement reached between the Grays Harbor Dairymen's association and the milk distributors of the county, whereby the producers receive 30 cents per gallon for 4 per cent milk, with a differential of a half cent per gallon for milk testing above or below the stated percentage, will perhaps check somewhat the selling of dairy cows. O. T. M'WHORTER.

### FEED BEETS TO DAIRY COWS.

PACIFIC CITY, King County, Wash., Oct. 29.—The dairymen are getting good prices for milk here on the Coast. Of course, if they have to buy any hay for their cattle it takes off most of the profit. Hay is $40 per ton; alfalfa and native grass hay. There are lots of beets raised here for stock feed. The sugar beet is fed to cows with good success. Corn does better here than in a dry climate. It grows so rank that it makes the best of silage. There is good pasture here nearly the year round, and the big dairymen always keep two pastures. They let the stock run on one until the grass is eaten off and then turn them in on the other one. There is a good market for milk and cream, as the condenseries take most of it. The dairy stock here, for the most part, is the best in the state.

MRS. O. ALLENBAUGH.

### URGE FEEDING OF BARLEY.

SPOKANE, Spokane County, Wash., Oct. 26.—Threshing is entirely completed in Spokane county and the grain crop generally has been rather disappointing. As a general rule, winter wheat has given much better returns than spring wheat, and while the yield has been only about 50 per cent normal, yet with the high prices our farmers have very little reason to feel discouraged because of planting it last fall. Owing to the drouth there was very little wheat planted in

(Continued on the following page.)

HIDES

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"Two winters have clearly shown me Caloric superiority. My house has eight large rooms, two halls and two bathrooms, and I had installed a hot water system of heating that cost me over $1,000.

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The Caloric heats the house perfectly, upstairs and down, at a wonderful saving of fuel.

"During the winter of 1915-16 I burned twenty tons of coal with the hot water system. I kept fire continuously in the Caloric all through the winter of 1916-17, a most severe winter in Idaho, and used only twelve tons. Last winter I guess we learned how to manage the furnace properly, for we kept the house comfortable with only eight tons of coal.

"A saving of twelve tons of coal a year with my home even more comfortable makes me an enthusiastic advocate of the Caloric Pipeless Furnace. Five new pressed brick houses I am building this year will all be equipped with the Caloric, and I will be glad to tell any inquirers how well it has satisfied me."

Equally satisfactory has been the written experience of thousands of other home owners among the 50,000 who are delighted with the Caloric. Your heating difficulties, in either an old or a new house, may be solved by this wonderful furnace.

See our dealer, who will courteously show you the furnace and discuss your problem. Get our new catalog, which tells of the revolution in house heating, and we will send with it the names of users in your section, so you may investigate for yourself. Write us today.




First floor plan of Mr. Lyons' home, showing location of Caloric register.

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A. B. NYSTROM, Editorial Contributor.

## IMPORTS GOOD STOCK.



That Lewis county, Wash., dairymen are wide awake and progressive is shown by the fact that they are rapidly getting in better stock, and recently some especially high record stock has been shipped into the county.

The accompanying photograph shows the $1200 bull recently brought from Ohio by Bouchard brothers in the Hanaford valley. This young bull is sired by Friend Hengerveld De Kol Butter Boy, and is out of a full sister to Highlawn Hartog De Kol, a cow with a record of 1247 pounds of butter in a year. The sire of the dam is Pontiac Aggie Korndyke, a bull of national fame.

With such blood as this coming into the district, the dairy industry is sure to advance. Bouchard brothers have but six pure bred females at present, but they expect to gradually weed out their herd of 30 grades until they have only pure breds. A. B. N.

## PREDICT INCREASE IN DAIRYING.

The Farmers' Mutual creamery of Tonasket, Wash., is two years old November 15, and is a healthy infant. The last dry year its business has been fully equal to the one preceding. Fine crops of alfalfa are grown, even on the benches, and corn makes a big yield. A big increase in dairying is predicted as soon as times are normal. About 200,000 pounds of butter were made during the year.

This creamery, unlike some cooperative enterprises, got a good plant at a very fair valuation, and has been well and conservatively managed. M. Iverson is manager, secretary and butter maker, and performs all his duties well. The building has concrete floor and walls, is sanitary, and the machinery is up to date and in good condition. Only butter is made. Seventy cents a pound was paid for butterfat for the month of October. Butter is not stored, but is sold as soon as practical after making, so that payment is made the middle of the month following delivery of cream. Most of the butter is sold in the Okanogan valley, though at times small quantities are shipped to Seattle. Members of the association receive 1 cent a pound more for fat than do outsiders, which causes nearly all shippers to be stockholders. One cent a pound from stockholders goes into the sinking fund and is paying for the plant, which was purchased largely on credit, the First National bank of Tonasket, of which Arthur Lund is president, having financed the venture. The real cooperative spirit seems to prevail. H. A.

## PROF. WM. M. RIDER.

### Now in Holstein Extension Work.

Professor William M. Rider has recently accepted the appointment of director of extension service of the Holstein-Friesian Association of America, and will be located at the secretary's office at Brattleboro, Vermont. Professor Rider, at the time of his appointment, was professor of animal husbandry and dairying at Syracuse university, Syracuse, N. Y., and has served in that capacity since 1915. Professor Rider took up his work at Syracuse in the fall of 1913, and taught during the college year of 1913-14, also superintending the university farm. He was retained at Syracuse for the college year 1914-15, and during that period raised to full professorship, and occupied the summer of 1915 in work on a master's degree in dairying at the University of Wisconsin at Madison. He returned to Syracuse university, taking up his duties for the college year of 1915-16, and was acting as the head of the animal husbandry and dairy departments and as manager of the university farm at the time of receiving his present appointment.

## SPOKANE LAND BANK LEADS.

During September $7,056,700 was loaned to farmers of the United States by the federal land banks on long-time first mortgages, according to the monthly statement of the farm loan board. The Federal Land Bank of Spokane leads in amount of loans closed, $1,079,625, with the Federal Land Bank of St. Paul running second, $930,400. October 1 the total amount of mortgage loans closed since the establishment of the federal land banks was $131,903,634, numbering 58,202.

## DAIRY INDUSTRY GROWS.

W. A. Acorn, manager of the Colville, Wash., creamery, says the dairy industry in the Colville valley is growing. In spite of the crop shortage and labor conditions his creamery is putting out just a little more butter than a year ago. Dairymen, Mr. Acorn says, are improving their herds and weeding out the poor cows. Some purebred cattle are being brought in, Holsteins and Jerseys.

## Short Crops; Short Money

(Continued from the preceding page.)

1917. Some of the best reports coming in now from threshermen show that the winter wheat on pea ground has given us the best returns of all. In fact, in one field of 50 acres where peas had been grown for two years in succession, wheat planted on pea stubble in 1917 made a yield of 34 bushels per acre this year. On ground planted to peas in 1917 only and cropped to winter wheat for 1918 harvest, the yield was 25 bushels per acre. This shows the accumulative effect of two years' cropping to peas. In looking forward to next year's crop it is very encouraging to note the large acreage being planted to fall wheat at this time. Much of the land that has been used for growing peas in the southeastern part of Spokane county for two years or longer will be planted to fall wheat for next year's harvest. This will mean a very much increased yield, if the season is satisfactory, over what normal summer fallow conditions could yield, as has been demonstrated during the last few years by using pea ground for wheat. Since pea-growing has been established the farmers are keeping quite a lot of stock hogs and are also reserving a few additional brood sows over what they have normally kept. These farmers, however, are wanting to know what to feed these animals after their stubble fields have been gleaned. So far as possible, we are going to recommend them to buy barley for this purpose. Very few men realize that they can get barley in carload lots in Spokane county at $52 per ton in sacks. It is necessary for them to arrange for a cooperative system in buying this feed, so that they can take it in car lots. If the farmers will prepare to handle this feed locally and get the banker to guarantee the payment, for the barley when it is received, they can get it at the above figure. I look for this kind of an organization for feed buying to do much in saving the breeding stock and dairy cattle in this county. Plans are also under way for working out a system of handling hay and getting it to the farmers at wholesale price. We expect to have an announcement of the details of this plan in the near future. J. R. SHINN,
County Agriculturist.





# Two Record Makers

THE cow at the extreme left in the above picture is the new California State champion two-year-old Holstein, K. P. Tola Joe, who recently made the fine record of 27.15 pounds of butter in seven days, from 459.1 pounds of milk, testing 4.73 per cent fat. Like many other famous record cows of all breeds, K. P. Tola Joe is milked by an Empire Milking Machine.

These two record makers, the Empire Milker and K. P. Tola Joe, have succeeded in breaking all State records for two-year-old milk production among Holsteins. Empire Milking Machines will help you to increase the production of your cows; they will safeguard the health of your cows and solve your labor problem; they will cut down costs and increase profits. Read what Mr. Karl A. Gotshall, of Gotshall & Magruder, the owners of K. P. Tola Joe, says about the Empire Milking Machine—his letter is reproduced above. Then consider that the following successful dairymen and hundreds of others in the State of California are using Empire Milking Machines with equal success.

F. W. Helm, Fresno; F. W. Kiesel, Sacramento; H. E. Vogel, Fresno; A. W. Morris & Sons, Woodland; Minor & Thornton, Fresno; Millbrae Dairy, Millbrae; M. J. Schoonderwood, Chowchilla; Cotati Company, Cotati; Johnson & Jepson, Ferndale; Ole Oleson, Ferndale; Hopland Stock Farm, Hopland; A. Meister, Sacramento. (Write for a full list of California users.)

You cannot afford not to follow the example of these successful men. We will be glad to send you full information about Empire Milking Machines without obligation to you. Write at once for Catalog No. 48

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There are good reasons why so many are buying the Perfection Milker.

After investigation they find it has many superior points, such as a very simple pulsator that gives no trouble. The application of teat cups with downward squeeze. Milking with less vacuum, safety for the cows. Regulating length of suction and squeeze. Slow running Vacuum Pump, meaning durability. Wearever Aluminum Pail, less expensive for upkeep.

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THINK of it! For only $2 down you can now get any size of the New Butterfly Cream Separator direct from our factory on a plan whereby it will earn its own cost and more **before you pay.** You won't feel the cost. For only $38 you can buy the No. 2½ Junior. A light running, easy cleaning, close skimming, durable, guaranteed separator. Skims 120 quarts per hour. We also make four other sizes of the

**NEW BUTTERFLY**

up to our big 800 pound capacity machine shown here—all sold at similar low prices and on our liberal terms of **only $2 down and a year to pay.** Every machine guaranteed a lifetime against defects in material and workmanship.




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You can have 30 days' FREE trial and see for yourself how easily one of these splendid machines will earn its own cost and more before you pay. Try it alongside of any separator you wish. Keep it if pleased. If not you can return it at our expense and we will refund your $2 deposit and pay the freight charges both ways. You won't be out one penny. You take no risk. Postal brings Free Catalog Folder and direct-from-factory offer. Buy direct and save money. Write today.

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The growing scarcity of staple food supplies has led to curtailments and restrictions in the distribution and use of many foods. Here is shown the value to humanity of the inventive minds of science, which selects the proper combination of raw materials and out of them creates new alternative foods—thus adding to the food supply of the world.

Up to a comparatively recent time the edible fats used as human food were derived solely from herbiverous animals. Through the invention of processes for the purifying of and making edible certain vegetable fats, science has enlarged the supply of fats for human use.

One of these is cocoanut fat, pronounced high in food value by the U. S. Bureau of Chemistry. By the scientific combining of cocoanut fat with evaporated skimmed milk—the alternative food product HEBE is made.

HEBE is sold under its trade name "HEBE" for just what it is. It is properly and plainly labeled—"a compound of evaporated skimmed milk and vegetable fat."

The manufacture of this product is in no sense an endeavor to gain large profits by replacing butter fat with vegetable fat, for HEBE is a licensed product and its profits are regulated by the U. S. Government.

The manufacture of HEBE opens a new and more important market for a portion of the skimmed milk which heretofore has either been fed to live stock or wasted. The importance of utilizing skimmed milk for human consumption is emphasized by a bulletin of the U. S. Department of Agriculture as follows: "By converting this partial waste to use as human food, many million pounds of meat may be saved."

HEBE converts this Dairy by-product into a tasty, wholesome, alternative food. Skimmed milk, large in quantity, but comparatively small in net returns, thus becomes a more important factor in the Dairy Industry. HEBE is recommended principally for cooking, baking and for coffee—its use for these purposes will widen the market and serve to stabilize the demand for skimmed milk—which is of real importance to the Dairy Farmer.

A booklet telling the interesting story of HEBE and its value to the Dairy Industry will be sent free on request. Ask for it. Your name and address on a post card will bring it postpaid. Address The Hebe Company, 3110 Consumers Bldg., Chicago.

## THE HEBE COMPANY

CHICAGO SEATTLE




E. J. IDDINGS, Editorial Contributor.

# Live Stock and Beets

By RICHARD HAMILTON BYRD.

Sugar beet growers should raise more live stock, according to experts in the department of agriculture. The stock utilizes by-products of sugar beet growers—the tops and pulp—and increases the growers' profits, but there is another reason—the nation needs more meat as well as sugar. The combination of stock raising and sugar beet growing, while beneficial to the farmers, will also benefit the nation.

Live stock on the sugar beet farm constitutes an important factor in success of beet growing from two standpoints—the utilization of beet tops and pulp to the best advantage and the production of stable or barnyard manure which can be used to enrich the soil.

Sugar beet tops, the experts say, are good feed for many kinds of live stock, including chickens, hogs, sheep, cattle and, to some extent, horses. Generally the tops and pulp are fed to sheep and cattle. They may be pastured off, a process which consists in turning the live stock into the beet field after the beets have been harvested and the roots removed. The tops are left scattered over the ground, and this method of feeding results in the ground being more or less trampled. Sheep, especially, are inclined to travel more generally in paths, thereby trampling the ground unevenly. Animals can not be finished for the market on the beet byproducts alone, and unless other feed is available it will not be advisable to purchase animals for feeding purposes with a view to turning them on the market later. If the farmer is provided with dairy cows it is advisable to furnish them with one or two feeds of tops or pulp each day. The tops, when cured or pitted, will keep for several months; the pulp, when left in a large pile, will not spoil for feeding purposes, except in a thin layer on the surface. If the tops or the pulp are fed heavily to dairy cows a distinct increase in the flow of milk marks the top and pulp feeding period, and there will generally be a distinct falling off in the flow of milk when this feed is discontinued.




ARE YOU A MEMBER?

The Holstein-Friesian Association of America—the organized breeders of cattle of that name, was organized in 1885, then having 275 life members. Today it has nearly 12,000 members, and is recording 80,000 Holstein-Friesian cattle per year, giving employment to 150 clerks, and has a reserve fund of nearly a quarter of a million dollars. It spends nearly $50,000 per year for publicity and extension work, promoting the interests of its membership. The Holsteins are prosperous and popular. If interested in

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## SAVE CATTLE FROM DROUTH.

To prevent hundreds of thousands of beef-producing cattle from being slaughtered and removed from the country's sources of meat the United States department of agriculture has begun work of the same nature as that carried out last year to aid in the removal of breeding stock from the drouth regions of Texas to good grazing grounds in other states.

An agent at the Fort Worth, Texas, cattle market locates and grades good breeding cows and heifers being offered for sale in that territory. He notifies beef-cattle specialists in the states where feed is abundant, and farmers who want to buy beef-breeding stock are told by county agents of the opportunities for purchase. A 75 per cent freight rate for such cattle has been announced from Texas to points east of the Mississippi river.

It is estimated that from 150,000 to 200,000 head of beef-breeding cattle were removed from Texas last year through the efforts of the department of agriculture, and that at least as many more, of which the department has no record, were taken to good grazing land in other states.

## SHORTAGE OF DRAFT HORSES.

By Wm. T. Tracy.

There is a shortage of draft horses; the real lack of good, heavy teams was never so great as at the present time. The eastern and southern states do not produce enough draft horses to supply their own demands, and the same is true of the states west of Nebraska. The shortage of farm labor makes necessary the use of heavier horses in order that more work may be accomplished per day with fewer men. On every well managed farm enough colts should be bred and reared to keep up the farm stock so that one or more good teams could be sold each year. Those who are aware of the true situation and breed their mares to the best stallions are certain to profit greatly by producing all the good draft horses they can.

Drafters of quality sold on the Chicago market recently at from $250 to $325 each, but they must have quality. There never was a time when quality in draft horses was so essential.

## PURE BRED SIRE DEMONSTRATION.

Some years ago at his farm near Kansas City, Mo., the late W. R. Nelson, founder of the Kansas City Star, began the practice of using pure bred white Shorthorn bulls on red cows, such as he could obtain at the Kansas City market. He had well-founded faith in the value of white bulls to sire roans of good quality when mated with red cows, although at that time white bulls were not generally used, nor were they in popular favor. The heifers from the first cross were retained in the breeding herd and now females of the second cross are producing on the farm.

An invitation was extended to the public to visit Sni-A-Bar farm October 10 and make a study of the results. Nearly 2500 people responded to the invitation. More than half a dozen states were represented. One of the comparisons was had in two lots of steers, one representing the first cross, the other the second cross. The first cross steers averaged 850 pounds in weight; the second cross steers 965 pounds. A difference of 150 pounds. But here is the striking difference: The first cross steers were given a valuation by a stockyards salesman of 14c per pound, and the second cross steers a valuation of 17c per pound—a total per head valuation on the first lot of $119, and on the second a valuation of $164, a difference of $43.





The Light Allwork Tractor Burns Kerosene

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THE Light "Allwork" Tractor is built for all around work in any season of the year. Powerful for heavy plowing—light enough to get out on wet land in early spring or on a soft seed bed for harrowing and seeding—low enough for orchard cultivating—plenty of power for belt work. Here is the *practical* light-weight, high-power farm tractor. Free from freakish features—runs on four wheels; carries the largest 4-cylinder engine we know of on any 3-plow tractor. It sets crosswise on the frame, thus giving direct spur gear drive—no bevel gears. Belt pulley is on direct line with crank shaft.

*4 cylinders, 5 in. bore, 6 in. stroke, 750 R. P. M., develops 28 H.P. at belt and 14 H.P. at drawbar. Automobile type front axle, roller bearing rear axle—self-oiling steel gears thoroughly protected from dust. Weighs 5000 lbs. Develops 3000 lbs. drawbar pull and 4000 lbs. on low gear. Burns kerosene. Turns in 12-foot radius—pulls three plows (will pull four under favorable conditions)—will run 18-inch silage cutter, 28-inch separator—pull an 8-foot road grader. Gasoline or kerosene fuel. Two-speed transmission working in oil.*

**Write for Our Catalog** and learn how the "*Allwork*" can make tractor farming pay big dividends on your farm. It's built by a company with an established reputation—satisfied customers everywhere. Let us refer you to "Allwork" owners near you. Write today.

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**Spring** Plow, harrow, drill, pull manure spreader, cultivate orchards, etc.

**Summer** Pulls binder, hay loader, drives clover huller, thresher, plows, etc.

**Autumn** Run silo filler, corn sheller, baling press. Plow, haul loads, etc.

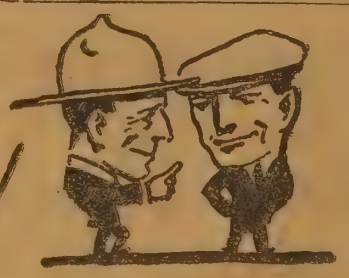
**Winter** Run woodsaw, feed grinder, pull stumps, general belt work, hauling.



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Boy. Howdy!



If you only knew tobacco you'd get a pouch of Real Gravely today. Then you'd have a satisfying chew, a good tasting chew. It lasts so much longer that any man can chew this class of tobacco without extra cost.

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*It goes further—that's why you can get the good taste of this class of tobacco without extra cost.*

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10¢ a pouch—*and worth it*
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# VETERINARY

By DR. S. B. NELSON.

**Some Form of Mange**—I have a dog that had a breaking out come first in the flanks just in small pimples. It seems to itch for he chews it continually. Then the hair falls out leaving the skin bare and chapped looking, sometimes it even bleeds in the places where it cracks. It has now spread to his front legs. Please tell what to try. A SUBSCRIBER.

Manette, Wash.

Your dog probably has some form of mange. Which one it is I could not tell without making or having a microscopical examination made of the parasite causing the trouble. It seems to me that the best thing you could do would be to send your dog to the college of veterinary science, State College of Washington, Pullman, unless you have a veterinarian handy and close to you who can treat the dog for you. In an emergency send it to the college. In the meantime if you do not care to do this you might try applying a 10 per cent solution of any of the coal-tar disinfectants, treating a part of the body daily, so that you can get over the dog about once every four days. If he shows any signs of poisoning wash the drug off immediately by giving him a bath.

**Mare Has Trouble**—I have a mare that about four weeks ago began to feel dull and seemed to get a little stiff as time went on. Last week she began to drag her left front leg, and leg swelled up very large at muscle, also some swelling back of fore legs under belly. Today left hind leg is swelling some. Mare is getting thin, but seems to have a fairly good appetite. About four weeks ago she got into a corn field and probably filled up, but did not show any bad results at that time. She is not a glutton by any means, but is always in good condition. What is the matter and what can be done? We do not have a good veterinarian near here.

CHARLES H. BROWN.

Malott, Wash.

I would suggest that you give your mare a purge of one ounce of aloe and two drams of ginger mixed into a ball and given to her. Two days later, begin giving her one dram of potassium iodide in a pint of water at noon, and give her one full ounce of sodium salicylate in a pint of water morning and night for two or three days. The potassium iodide you can give a week or 10 days.

**Sheep Have Trouble.**

I have a small flock of sheep that are badly affected by what seems to be a cold in the head, their noses discharge a thick, yellowish pus. In some cases same seems to dry on until the nose is almost stopped up. Can you advise me what the trouble is and suggest a remedy. E. B. S.

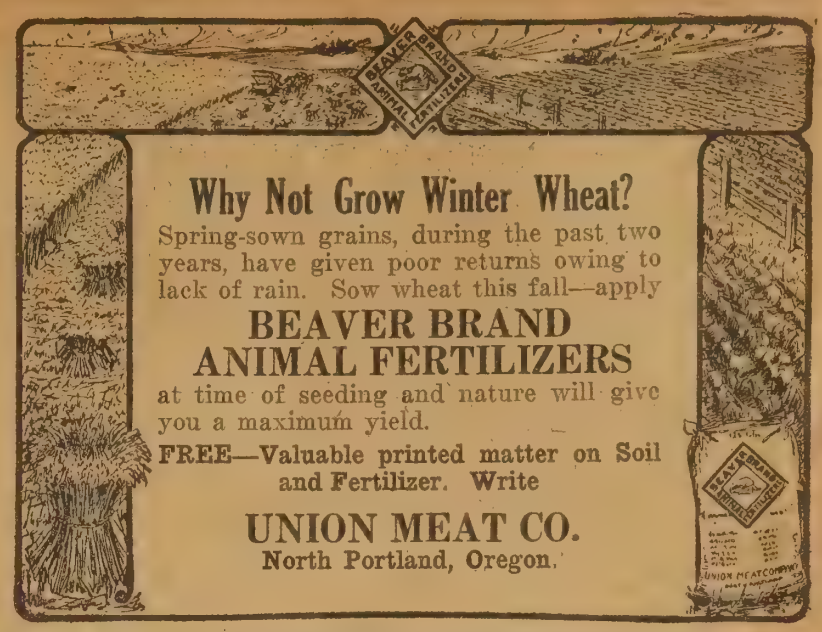
Priest Rapids, Wash.

The treatment of your sheep would depend entirely upon what the cause of the discharge from the nose might be. If it is a catarrh due to disturbance of the circulation, like catching cold, then probably a little tar smeared on the nose and around the inside of the nostrils would be about as easy a thing as you could do. If the trouble should be the result of infestation from the bot-fly then treatment is very difficult. About as good a treatment as any in this case is to bore into the head and take out the grub, if it is only small, but with large bunches this is entirely impracticable. They have also been snared with fine wire snares, and some authors recommend pouring olive oil with a little snuff mixed with it down the nose of the sheep. The snuff causes sufficient irritation so that the sheep will blow out a number of the larvae. However, in the latter case prevention is a very fine treatment, and at the time that the flies are on wing—June, July and August—the edges of the nose should be well smeared with tar. With a band like yours you could do that by boring large holes in the planks and smearing the edges with tar and filling up the holes with salt for the sheep to lick.

**Milk Is Watery**—We have a cow that was purchased before she came fresh last time and supposed to be a sound cow, but when she came fresh, milk from one of her teats was watery and we have milked it on the ground hoping it would come out all right. It is the left front teat. She is due to come fresh in January. She is a Jersey cow and is tuberculin tested. We have had hopes when she came fresh this time she would be all right. Can you tell us what is the matter and if there is anything we can apply now to help it or if there is any cure or is it best to dry up the teat and let it go? C. B. P.

Grandview, Wash.

Try painting the affected quarter of the udder with tincture of iodine once every three or four days. I think it would be wise for you to try to save it, and therefore keep on milking it for a while.




How the packers have helped to develop good stockyards

—and how this has benefited you as a producer

WHOSE job is it to provide and maintain stockyards, or markets, for the open buying and selling of cattle?

Who shall see that these markets have good pens where your stock can be properly watered, fed and taken care of until sold?

Stockyards, in early days, were not efficiently managed, and were not financially attractive to investors, except in the largest markets.

As the packers built their big-capacity plants at the various live-stock centers, they naturally became interested in helping to develop adequate stockyards facilities, where stock raisers could ship their animals.

The present high efficiency of most of the principal stockyards is due largely to the time, the effort, and the money the packers have put into them.

All stockyards, including those in which packers are interested, are conducted as *public* market places for the benefit of all.

They are open to all—to producer, commission man, dealer, speculator, the packer's buyer—and with exactly the same rights to each.

Packer-ownership gives no special advantages to the packer and no control over live-stock prices.

These spot-cash markets have been a factor of very great importance in promoting the growth of the live-stock industry.

If stockyards efficiency can be increased by Government ownership and operation, all well and good. Swift & Company is content to stand on its record of having helped the live-stock industry by the part it has played in developing these market places.

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As a Human Remedy for Rheumatism, Sprains, Sore Throat, etc., it is invaluable. Every bottle of Caustic Balsam sold is Warranted to give satisfaction. Price $1.75 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address

The Lawrence-Williams Co., Cleveland, O.

# POULTRY

Write to the Editor.

JAMES DRYDEN, Editorial Contributor.

## Advertise Egg Records

An examination of two poultry papers published at Sydney, Australia, shows that the utility idea in poultry-keeping has made a healthy growth in that far-away country. One of these journals is called the Australian Hen, published twice a month, and the other paper, "Australia's Weekly Newspaper on Poultry Husbandry." Both papers are well edited and contain a large amount of advertising. The striking thing in both papers is the fact that in practically all the advertisements the egg record is played up. There are this and that strain with records of so and so, at certain government competitions. There are very few advertisements that do not contain reference to egg records made at Hawkesbury Agricultural college, at Burnley and Roseworthy government schools. The breeders who have won contests at the various competitions have prominent display advertisements, and other breeders who have stock from the winners advertise the same strain. The advertising pages make up an interesting chapter of poultry history. They show that the utility hen is paying in Australia, as it is paying in America, otherwise so much money would not be paid out for advertising.

There is very little advertising of the fancy or of prizes won at poultry shows. There are utility shows, however, and they seem to be in the majority so far as the pages of these papers give evidence. But the big talking point in the advertising pages are the egg records made at laying competitions.

The egg-laying competition really started in Australia more than a dozen years ago, and they have been growing in interest every year. Wonderful egg records have been secured.

There have been some things doing in this country also in utility poultry breeding, but our poultry papers, most of them, judging from the preponderance of advertising in their pages of show specimens and of winnings made for fancy, rather than utility, get their financial support largely from the fancy, or from the breeders of show stock.

But even in those papers the utility breeder, the man who has a strain of heavy layers, is beginning to exhibit a little daring and is throwing his hat into the ring to compete with the old-time advertisers. There is no doubt but that the poultry buying public is now placing more importance on the egg record than on the blue ribbon in the poultry show.

Poultry breeders who have a good egg-laying strain, with official trapnest records behind them, have splendid advertising material and they should not hesitate to make the world acquainted with the fact. The more of that kind of advertising the better for the poultry industry. The farmers everywhere are looking for that kind of stock and don't know where to find it.

There have been, however, glaring abuses in this kind of advertising. It has even been said that men have advertised a 200-egg strain and they never used a trap nest. That kind of thing is dishonest and discourages the reputable breeder. J. D.

### LIMBERNECK IS REPORTED.

To the Editor: There is some disease starting among our chickens. The first symptom seems to be a weakening of the neck and they finally squat to the ground with their necks outstretched. They live only about half a day. Can it be the food they are eating? They have had no wheat, only corn. Might this be limberneck? LON ANDREW.

Conconully, Wash.

This correspondent has diagnosed the case correctly as limberneck. A tablespoonful of castor oil or olive oil will frequently cure the trouble. It is due to a stoppage or impaction of the stomach. Dissect one of the fowls and it is possible that the cause of this stoppage may be found. J. D.

### ALL-NORTHWEST CONTEST.

The report for the eleventh month of the Pullman contest shows a production of 40.6 per cent, which, as stated by the director, is a very good production for the month of September. Further, he says: "I am pleased to report that, up to October 1, there was 67 per cent of the contest flock having laid 150 eggs or over, and to the same date, there are 136 birds in the contest which have laid 200 eggs—a very remarkable performance."

During the month Paul B. Towne's pen of White Leghorns passed the pen of the Oregon Agricultural college, the latter pen having held first place for several months. The Towne pen had a lead of four eggs at the end of the month. Both these pens have made remarkable records.

The highest pen record for the month was made by White Leghorn pen owned by Carl Caverley, Chehalis, Wash., 107 eggs; second, Bliss & Bliss, R. I. Reds, 105 eggs. The highest individual record for the 11 months was 287, by C. F. William's White Leghorn hen; second, Rhode Island White hen, owned by H. J. Kingsbury, Twin Falls, Idaho, 264 eggs.

This contest closes October 31, and a new one begins November 5.

### FARM MARKETS PREVENT WASTE.

Experiments with community markets in Massachusetts have resulted in the prevention of waste of important perishable foodstuffs, according to the United States department of agriculture. The markets enable the farmers to place their products on an open market, where they receive more than they would from middlemen in many instances, and at the same time enable the townspeople to purchase them for less than the middleman charges and secure them in better condition in many cases as well.


**Chickens Sick or Not Doing Well?**

**An Extraordinary Offer:** Germozone is a standard remedy everywhere for chicken troubles, roup, colds, cholera, swelled head, bowel complaint, chicken pox, canker, not doing well, non-laying, etc. Now our proposition: If no dealer there handling Germozone and you will agree to use it and pay if satisfied, we will send you a 75c package without a cent in advance. No pay if not satisfied. Can we do more? And we will send free 3 poultry booklets. Write today.

Local dealers handling Germozone will do the same.

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**The Choice of Those Who Know**

Manufacturers and leading motor car distributors *recommend* ZEROLENE. The majority of motorists use ZEROLENE. ZEROLENE reduces wear and gives more power because it keeps its lubricating body at cylinder heat. Gives less carbon because, being refined from selected California asphalt-base crude, it burns clean and goes out with exhaust. ZEROLENE is the correct oil for *all types* of automobile engines. It is the correct oil for your automobile. Get our lubrication chart showing the correct consistency for your car.

*At dealers everywhere and Standard Oil Service Stations.*

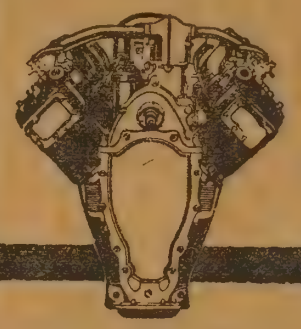
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**ZEROLENE**

*The Standard Oil for Motor Cars*

**Correct Lubrication for the "V"-Type Engine**

This, the "V"-Type of automobile engine, like all internal combustion engines, requires an oil that holds its lubricating qualities at cylinder heat, burns clean in the combustion chambers and goes out with exhaust. Zerolene fills these requirements perfectly, *because it is correctly refined from selected California asphalt-base crude.*





HAPPY FARMER LA CROSSE TRACTOR CO.

**La Crosse Happy Farmer TRACTOR**

"THE best buy on the market!" That is the opinion of tractor buyers everywhere about the 12-24 horsepower of the La Crosse Happy Farmer Tractor for $1150. In its big power and low price the La Crosse Happy Farmer Tractor is in a class by itself. It offers you much more power for the money than you can get in any other tractor.

Only a company of ample capital, immense manufacturing facilities and a strong sales organization, with the simplest, most practical machine, could build and sell a tractor of the power and quality of the La Crosse Happy Farmer for $1150. The low price for which the La Crosse Happy Farmer is sold is the direct result of the buying power and skill of the great La Crosse organization and the simple, practical design of the tractor itself.

**The Perfect Kerosene Burner**

Men who are looking for the perfect kerosene burning tractor buy the La Crosse Happy Farmer. With its specially designed motor, it burns kerosene without carbon or smoke. While it is rated at 12-24 horsepower, the La Crosse Happy Farmer is the tractor which can "dig in its toes" and develop even more power when you need it.

One big reason for the great popularity of the La Crosse Happy Farmer is its simplicity. It has only two-thirds the number of parts found in the ordinary tractor and every working part of its engine can be reached from the driver's seat.

The La Crosse Happy Farmer is the one-man tractor, with the short turning radius of less than 9 feet. Think of the time and work it will save you to be able to do every power-farming job single-handed.

**Happy Farmer Tractor Implements**

You can be sure of securing equal satisfaction from your La Crosse Happy Farmer Implements as from your La Crosse Happy Farmer Tractor. These well-made tractor implements live up to the La Crosse Happy Farmer standard of leadership. La Crosse Happy Farmer Moldboard Tractor Plows can be handled from the driver's seat on the tractor by simply pulling a cord. The La Crosse Happy Farmer Disk Harrow is made unusually strong and heavy for tractor work. In the La Crosse Happy Farmer Drill you have the only one with patented Automatic Power-Lift and Power-Pressure, which can be operated entirely from the driver's seat on the tractor.

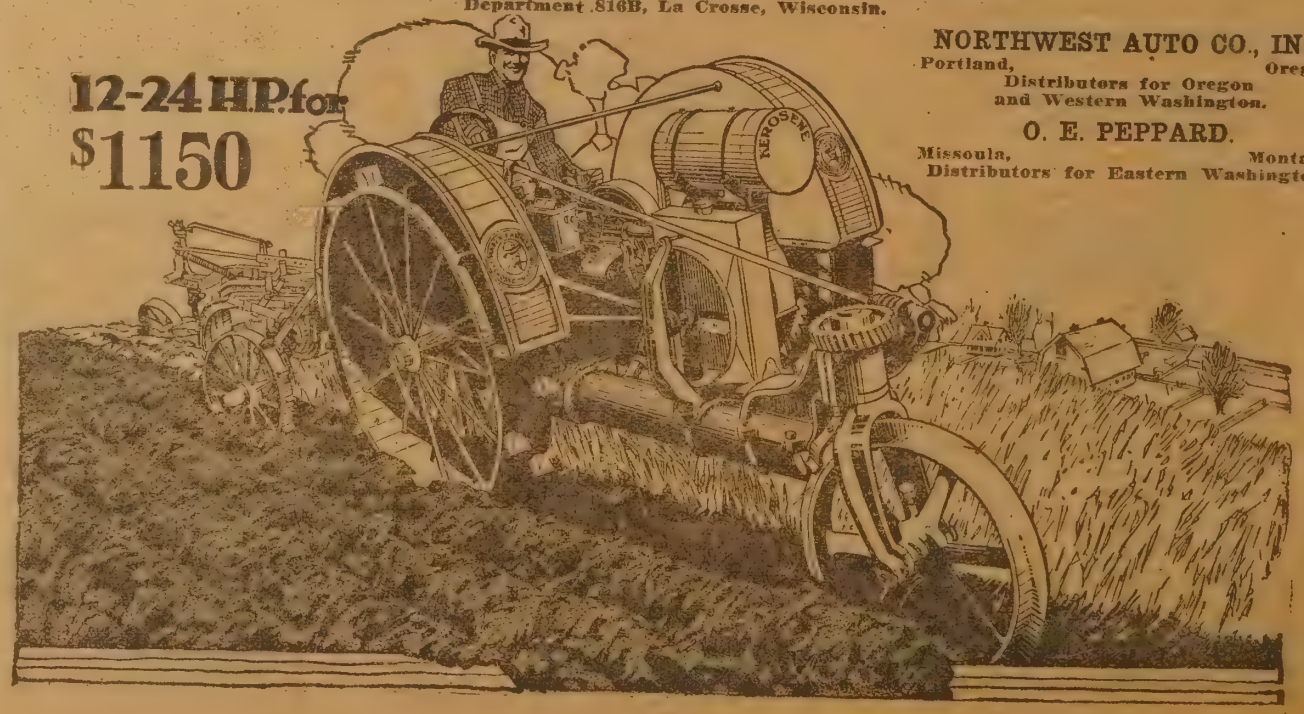
**Happy Farmer Demonstrations**

The actual work of the La Crosse Happy Farmer in the field will prove its leadership to you just as it has to the thousands of men whose orders we are working nights to fill. We can not guarantee that your La Crosse Happy Farmer dealer will be able to fill your order unless you act at once. Write us today for the name of the nearest La Crosse Happy Farmer distributor, who will let you know the next time he holds a demonstration.

**LA CROSSE TRACTOR COMPANY**

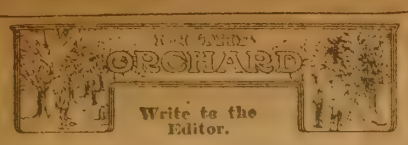
Department 816B, La Crosse, Wisconsin.

12-24 H.P. for $1150




NORTHWEST AUTO CO., INC.
Portland, Oregon.
Distributors for Oregon and Western Washington.

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Missoula, Montana.
Distributors for Eastern Washington.




GRANVILLE LOWTHER,
Editorial Contributor.

# Oroville Apples

## About 1000 Acres in the Fruit

The East Oroville orchard, at Oroville, Wash., contains 90 acres. A car of Jonathans was being loaded when I was there and A. P. Murray, president of the First National bank, was assisting in the loading because he is one of the principal stockholders, and as competent labor was hard to get and he likes to see the apples properly packed, labeled and loaded, as well as for the exercise. This was not the extra fancy grade, though many extra fancy are shipped this season by this orchard. The car was being shipped to New York city at $1.90 a box. They had offers of $1.90 for Winesaps and $2.40 for Delicious. "Redhead" is the attractive brand under which these apples are sold. L. P. Redhead is the superintendent under whose care the orchard has been brought into bearing and the apples ready for shipment. The apples are packed under state grading rules.

About 1000 acres are estimated to be in apple orchard around Oroville. The West Okanogan irrigation district, which takes water out of the Similkameen above Oroville and carries it a good many miles below, has only watered the district three years. But many of the orchards, including this one, used pumping plants, while some used only the floodwaters of the creeks, which lasted until about July. Most of these are young orchards, and are not in full bearing, but I was assured that there are orchards 60 years old and that trees 40 years old are yielding good commercial apples.

Jonathans, Winesaps, Stamens and Delicious are the leading varieties grown, but all commercial varieties flourish.

H. A.

# Plum Diseases

By Granville Lowther.

First in the alphabetical order of plum diseases is "Bladders," sometimes called pockets. It is caused by the same fungus as that which causes leaf curl on peaches. On the fruit of the plum they form enlargements, which are hollow, and this has given rise to the name bladders. It is supposed to be caused by excessive cool and wet weather in the spring. The remedy is to spray with Bordeaux.

Brown rot is a fungus disease, and the remedy is Bordeaux.

Cankers is the same disease treated under that name in the list of apple pests, and the remedy is hard to define. The difficulty seems to be that it is caused by any one of several conditions, such as winter injury from freezing, sun scald, injuries from insects or from other diseases. It seems certain that pear blight is one of the causes, although not very common.

As a remedy, my habit is to cut out the diseased limbs, and if the tree is not profitable, dig it out. However, I do not recommend this to others unless it seems to them better.

Crown gall is the same as in apples and pears, with no specific remedy.

Fire blight is the same as pear blight, and the remedy is to cut it out and burn it.

Gummosis is the same as in cherry gummosis, or so similar that it seems the same. Authorities are not agreed as to the causes, but it seems to originate from a number of causes. The remedy most recommended is to cut out the wound and sterilize it with corrosive sublimate.

Leaf curl and mildew are found on plums, and both diseases may be cured by the Bordeaux spray.

### Plum Pests.

All classes of aphids may be controlled with the tobacco spray.

The beetles and the moths may be controlled by the arsenate of lead spray.

The curculio is an old pest on plums, and has probably done more damage in the eastern states than almost any other pest. The remedy is arsenate of lead.

# Spray Fundamentals

All sucking insects may be controlled by the use of lime-sulphur or tobacco. All chewing insects may be controlled by the use of arsenate of lead.

All bacterial diseases and all fungus diseases may be controlled by Bordeaux, provided the spray can be made to reach them. The reason no spray has ever been found to cure blight is that it is in the sap.

The caterpillar family may be controlled by cutting out their webs or tents and by the arsenate of lead spray.

The scale family, such as San Jose scale, scurvy scale and any others, may be controlled by the use of lime-sulphur.

# Orchard Troubles

## Apricot Diseases and Pests

By GRANVILLE LOWTHER.

The brown rot is scarcely known in the arid regions, but is prevalent in damp, humid climates. The fruit decays while still on the tree, and sometimes the new shoots die back as a result of the work of this fungus. The remedy is lime sulphur or Bordeaux.

### Bud Blight.

This is a fungus disease, manifest by a dying of the buds. It is the same fungus as causes peach blight, and the remedy is to spray with Bordeaux.

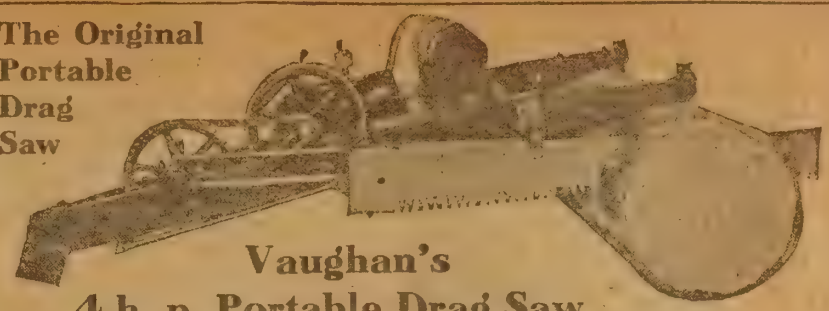
### Fruit Drop.

The dropping of the apricots may be due to weather conditions, lack of vitality in the tree or to lack of proper polination of the flowers. Where there is a heavy crop it is impossible for the branches to mature all the fruit, a certain proportion will naturally drop, and it would be unfortunate for the grower if it did not. The available remedy for excessive dropping is to mix the varieties so that all the trees will be sufficiently pollinated.

### Sour Sap and Seasonable Effects.

The apricot is very sensitive to stimulating effects of heat, cold, moisture and drouth. The excessive flow of sap caused by warm weather and plenty of moisture, and the opposite effects, caused by cold or dry weather, may cause a souring of the sap, the forming of gum and injury to the tissues. The remedy is in so far as possible a regular flow of water.


**The Original Portable Drag Saw**



**Vaughan's**

**4 h. p. Portable Drag Saw**

WILL CUT 15 TO 20 CORDS OF WOOD IN 10 HOURS

Can be operated by one man. Two men can carry complete machine. 4 H. P. gasoline motor mounted on frame. One gallon of gasoline required to cut 8 to 12 cords of wood. Engine can be used for other work without removing from frame. No gears, cogs, belts or pulleys. Friction clutch prevents breakage if saw pinches. Saw makes about 125 strokes per minute. Will cut any size log up to 6 feet. Sprockets and cranks, etc., made of cast steel. All working parts guaranteed against defects in material and workmanship.

Net cash price for complete machine as shown in cut, $160 f. o. b. Spokane and common points. FOR SALE BY

Washington Machinery & Supply Company

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**Ship Your Cattle, Sheep and Hogs**

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*Trade Mark Reg. U. S. Pat. Off.*

*Look for this Label in your Raynster*

**A Mark of Value**

There are many kinds of raincoats at varying prices. You cannot estimate their value by their looks.

But you can recognize the Raynster Label and avoid uncertainty. The Raynster Label identifies honest worth—it is the manufacturer's assurance of full value in materials and workmanship.

The Raynster Label is found in a complete line of weatherproof garments—heavy rubber surfaced work coats, smart cravenetted cloth coats, slip-ons, featherweight silks, and warm, heavy ulsters.

Many of these coats look like good overcoats and are generally worn as overcoats as well as raincoats.

Outfit your family with Raynsters. There are Raynster models for women, men, girls and boys. You'll find a Raynster at just the price you want to pay.

**United States Rubber Company**

Clothing Division, New York and Boston

**Raynster**

Reg. U. S. Pat. Off.

# Byproducts Stabilize Prices

"The ratio of cost of animals and other materials to the value of the products is greater in the slaughtering and meat packing industry than in the similar ratio in any other manufacturing lines," is the report of the United States department of agriculture in government bulletin No. 113. In other words, the live stock producer gets more of the money paid by the consumer than does the producer furnishing supplies to any other industry.



J. Ogden Armour.

As a matter of fact, the cost of the live animal is generally greater than the price brought by the dressed meat. So that if Armour & Co. were forced to pay the producer for his live stock on a meat and hide basis alone, the prices to the grower would have to be much lower or the cost of the meat to the consumer much higher. The reason such conditions do not exist is that specialization, research and efficiency have developed ways to make commercial use and profit out of every part in or on the animal, as explained by Armour & Co.

That the producer shares in the returns from the by-products the following figures show: Armour & Co., at the prevailing prices of November, 1917, paid the producer $170 for a 1000-pound steer, the dressed meat of which weighed 600 pounds, which sold to the retailer at $140. The difference of $30 was paid to the farmer for the raw materials from which the by-products are manufactured.



Improved processes and refrigeration have made it possible to prepare delectable foods of the edible parts once thrown away, such as sweetbread, tongues, brains, livers and hearts, now prized and served everywhere. Scientific laboratory work has utilized the inedible portions to the last vestige, and today these once worthless parts are made into hundreds of marketable products, from violin strings to soap, from pharmaceutical supplies to glue.

But aside from the savings effected, resulting in better prices to the live stock grower on the one hand and reduced prices for meat to the consumer on the other, the manufacture of these by-products has brought greater efficiency, greater comfort and improved living conditions to the world, and, as in the case of the marvelous medical preparations, the alleviation and often the cure of many subtle and hitherto fatal maladies.

# Are Just Americans

**By Bruce Barton.**

The war has taught the people many lessons they needed very much to learn. It has made possible many things that were impossible. And there is scarcely a man or woman in America who has not in some degree been lifted by it out of his old prejudices, to a higher, broader plane of thought. We shall see the truth of that statement splendidly demonstrated the week of November 11-18, when seven agencies engaged in war work for our soldiers and sailors are to unite in a great campaign for funds with which to continue their ministry. Of these seven agencies two are Protestant, the Y. M. C. A. and the Y. W. C. A.; one, the National Catholic War Council, embracing the Knights of Columbus, is Catholic; the Jews are represented by the Jewish Welfare League, and the other three, the American Library association, the War Camp Community Service and the Salvation Army have no denominational affiliation. According to the almost general conception these organizations could not be consolidated. But when President Wilson suggested that they get together the impossible was done in a single day. What years of discussion and convention had failed to bring about the larger spirit which the war has engendered was achieved without an effort.

The sum sought by the seven agencies is immense, $170,500,000, the largest single gift ever asked of any people at one time. Yet compared with the figures to which the war has accustomed us, it is small. Measured against the huge total which we shall pay to keep our boys under arms next year, this sum which is to provide for their comfort and cheer, becomes almost insignificant. It is less than ten cents a day for each boy—less than the average man spends for cigars.

It will be raised—not grudgingly, but in a spirit of splendid enthusiasm. The country will go over the top for the Big Seven as it has gone over the top for the Liberty loan and the Red Cross.

TO the Editor of The Washington Farmer: I am enclosing herewith $1, for which please enter my subscription to The Washington Farmer for three years and The Twice-a-Week Spokesman-Review for one year. I am enclosing five cents, for which please send me a Farm Service flag for farm workers.

GEORGE DUNN.

Meyers Falls, Wash.

**Is Rapid Apple Picker.**

George Clementia, an Italian, picked 256 boxes of apples in a day at Yakima, Wash., recently, receiving wages for it of $12.60.





They Fit and They Last-

Mayer

HONORBILT WORK SHOES

Ask your dealer for Mayer Shoes. Look for the trade-mark on sole.

F. Mayer Boot & Shoe Co.
Milwaukee, Wis.

Western Branch: Washington Shoe Mfg. Co., Seattle, Wash.


When answering advertisements don't fail to mention this paper.


# Select Your Service

**Men of draft age may prepare,** within a few months, for preferred military service as bookkeepers and stenographers.

**Men of mature years,** men under draft age, and women, needed by thousands in business and the civil service.

How to prepare? Our new nineteenth annual catalog tells you—Ask for it now.

*Northwestern Business College*

Spokane's Accredited Commercial School.
M. M. HIGLEY, President.
8317 Howard St., Spokane, Wash.



*I Am Interested*

and ask you to mail to me full information and

*FREE BOOKLET*

describing the possibilities of Stevens county logged-off lands.

Name .....

Address .....

CUT OUT THIS COUPON

and the booklet and information will be sent to you by return mail.

*PHOENIX LUMBER CO.*

Farm Dept.,
SPOKANE, WASHINGTON.



# Cleveland Tractor




## Machinery Must Replace Muscle

Man-power is at a premium on our farms.

War has taken several million men into the service.

And in spite of these conditions, which are steadily growing worse, there must be *more* crops produced than ever before.

Machinery *must* replace muscle.

Thousands of Cleveland Tractors are successfully meeting the labor shortage and the demand for increased production.

The Cleveland Tractor, pulling two 14-inch bottoms in medium soil, plows 3½ miles an hour—eight to ten acres a day. That is all you can expect from *three* good men with *three* good 3-horse teams.

The Cleveland travels on its own tracks, laying them down and picking them up again like the famous battle "tanks." It turns around in a twelve foot circle. It gives you 12 horsepower at the drawbar for pulling, and 20 horsepower at the pulley for stationary work. It has 600 square inches of traction surface continually on the ground and will go almost anywhere. It weighs less than 3200 pounds.

But in spite of its power, the Cleveland Tractor is so small that it can easily go under and among small trees.

It will go through ditches, gumbo, sand and gravel, over unused roads, plowed fields and stubble. It will not pack the soil, will not mire or flounder.

Rollin H. White, the famous automotive engineer, is the designer of the Cleveland Tractor. It is produced under his supervision.

He has used only the best materials. Gears are protected by dust-proof, dirt-proof cases.

The track is designed for long service. The sections are joined with hardened steel pins which have their bearings in hardened steel bushings.

You must replace muscle with machinery on *your* farm.

The Cleveland Tractor offers the means of meeting the emergency.

Write us for detailed information and name of the nearest Cleveland dealer.

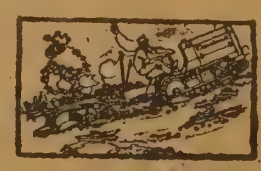


The Cleveland Tractor Co.

19087 Euclid Ave., Cleveland, Ohio









## Corn Raising

### In the Lower Palouse Country

By IRVIN DELEVAN, Winona, Wash.

Having been raised on a farm in Minnesota on which continuous wheat raising had impoverished the soil until we were forced to raise corn, when I located at Winona, Whitman county, Wash., it did not take me long to try the corn growing again, as I did not want to wait till wheat for one year after another had worn out my soil. My first experience was in 1917, a rather dry year, but I grew an immense lot of fodder for cattle feed, not attempting to make a corn crop.

On March 15, 1918, I began to plow up a 26-acre field, which had been in wheat in 1917. This I turned over one foot in depth, harrowed it twice, and on May 20 planted it with a two-row planter, using home-grown White Dent seed, then harrowed the field once. Two weeks later I put the harrow over it again, and when the corn was up six inches it was cultivated with a two-horse cultivator, no further cultivation being given. On September 20 I husked out 20 rows of this corn, obtaining 94 measured bushels of as good corn as I ever saw, and better than any I had raised in Minnesota, and a splendid crop for this very dry year. Other work coming on, I have not as yet completed the corn harvesting, but shall do so now. While Whitman county is known as the banner wheat growing county of the state, I believe that it will not be many years until she shall be known as the banner corn growing county.

## Dynamiting Stump Land

"I am often asked whether it pays to clear land with dynamite since it has become so high in price compared to what it was before the war," says C. H. Hockman of Virginia. "Perhaps the best way to answer the question is to give the figures connected with a little blasting job I did in May, 1917, when dynamite had about reached its top cost.

"The tract cleared embraced about an acre in area. It was about the hardest stump blasting job I ever tackled. The timber had been cut about seven years, and there were 25 of the stumps to be taken out, averaging about two feet in diameter. Nine of them measured over three feet. I used a dirt auger to put the bore holes down under them. In case of the larger ones I used as many as five loaded bore holes in order to distribute my charge at the most vulnerable points under the stumps. This, of course, necessitated firing the charges with electric blasting caps and a blasting machine.

"The entire job required 75 pounds of dynamite and two days' labor of two men. The ground was very hard and gravelly. In spite of this difficulty the cost was but $29. We consider that even part of that should be charged to plowing expense, because we have noticed a great improvement in crops on the cleared acre, due, in our opinion, to the deep breakage of the soil when blasting out the stumps."

### RAISES 15 TONS SPUDS ON HALF ACRE.

W. S. Ramsey, on the edge of Oroville, Wash., this season raised 15 tons of Carmen potatoes on slightly less than an acre of ground. Fifteen tons equal 500 bushels; but the amount is well authenticated. Mr. Ramsey has a partner in his farming operations, and so a strict account is kept of all production. Mr. Ramsey is an intensive farmer, raising big crops on small acreage. He prepares his ground thoroughly for any crop he raises, then gives it thorough cultivation, and attributes his success to the wonderful productiveness of the Oroville region. His potatoes were all good, marketable tubers, very uniform and of large size. He cropped the land again after the potatoes were taken off.

Another big yield of potatoes was made by W. E. Weaver, who from half an acre sold six tons. Besides this, in advance of the regular digging time, he sold 16 sacks to a mining company and used what he wanted at home. His variety was the Mortgage Lifter. H. A.

### THE FARMER WAR MAP VALUABLE.

To the Editor: I thank you for your letter and the war map enclosed. You are rendering an excellent service to your readers, and I think your plan for adding little maps weekly is ingenious and valuable. I congratulate you upon the idea.

STEPHEN B. L. PENROSE,
President.

Whitman College,
Walla Walla, Wash.




*"Keeping the Home Fires Burning"*

# Air-Tight Stoves Have Caused Far Too Many "Home-Fires"

**To the Policyholders of the Northwestern Mutual Fire Association:**

THE AIRTIGHT STOVE MUST GO!

A stove must have some circulation to carry the gas up the flue or an explosion will surely result.

You might better have a powder mill in your home. There are types of so-called airtight stoves with cast iron hinge top and hinged draft which very largely eliminate the danger. When the gas accumulates these hinge lids raise and allow it to escape. Sheet iron tops like the one shown above are very likely to become stuck so that the stove explodes, or the top and pipe may be blown entirely off.

Our 50,000 policyholders are showing such a disposition to cooperate with this office in the prevention of fires that we believe this word of warning against the air-tight stove, which has caused the loss of so many homes, will save many homes.

We also desire to call your attention to the following necessary precautions:

1. Place stoves, furnaces and pipes far enough from walls and woodwork to avoid overheating. Wooden surfaces should be at least 12 inches from stove.

2. Cover the nearest wooden surfaces with sheet asbestos, sheet iron or tin; if iron or tin is used, leave an air space behind it.

3. Where stove pipes or heating pipes pass through walls, enclose the pipes in galvanized iron, double-walled, ventilated thimbles at least 12 inches wider than the diameter of the pipes.

4. Protect the floor beneath the stove with sheet metal, and have it extend forward at least 12 inches directly beneath the door to the ash-pit.

5. Surround the base of the furnace with brick, stone or concrete.

6. Make sure that all pipes are free from rust, and that all joints and conections are sound and tight.

7. Stovepipes should never pass into an attic. If they do, fix the guard about the pipe so that nothing combustible may come in contact with the pipe. This should only be temporary until the pipe can be removed from the attic.

8. Never pour kerosene into a coal or wood stove, even when the fire is out.

9. Never put ashes into wooden boxes or barrels; have a strong metal can.

10. Study the drafts and dampers.

11. Do not let the stove or pipes become red-hot.

12. Keep stoves, furnaces, flues and chimneys clean.

13. Inspect the chimneys and flues to be sure that they are sound.

14. Do not dry wood in an oven.

15. Do not hang wet clothing too near a stove.

16. Keep curtains and other cloth away from stoves and pipes.

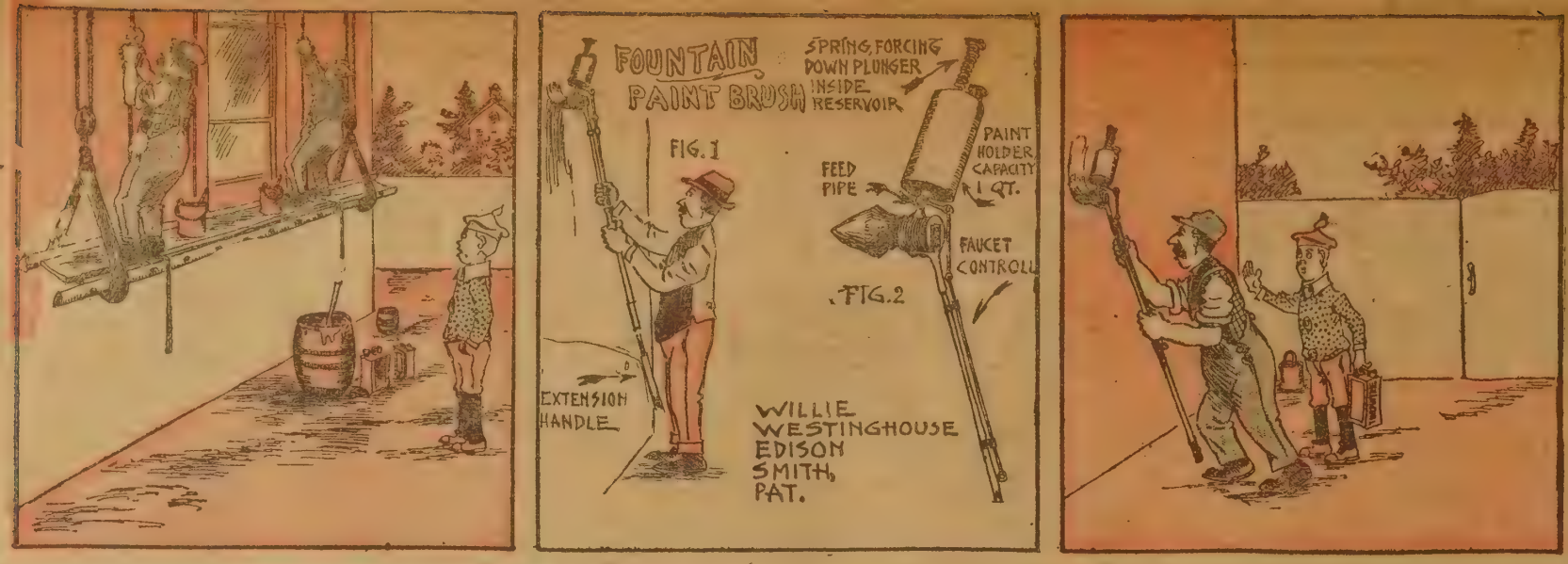
By following precautions of this kind the policyholders of the Northwestern Mutual Fire Association have not only saved hundreds of homes but by so doing have enabled the Northwestern to return them over $2,500,000 in cash dividends and insurance savings.

**A Postal Card or Telephone Call Will Place You in Touch**

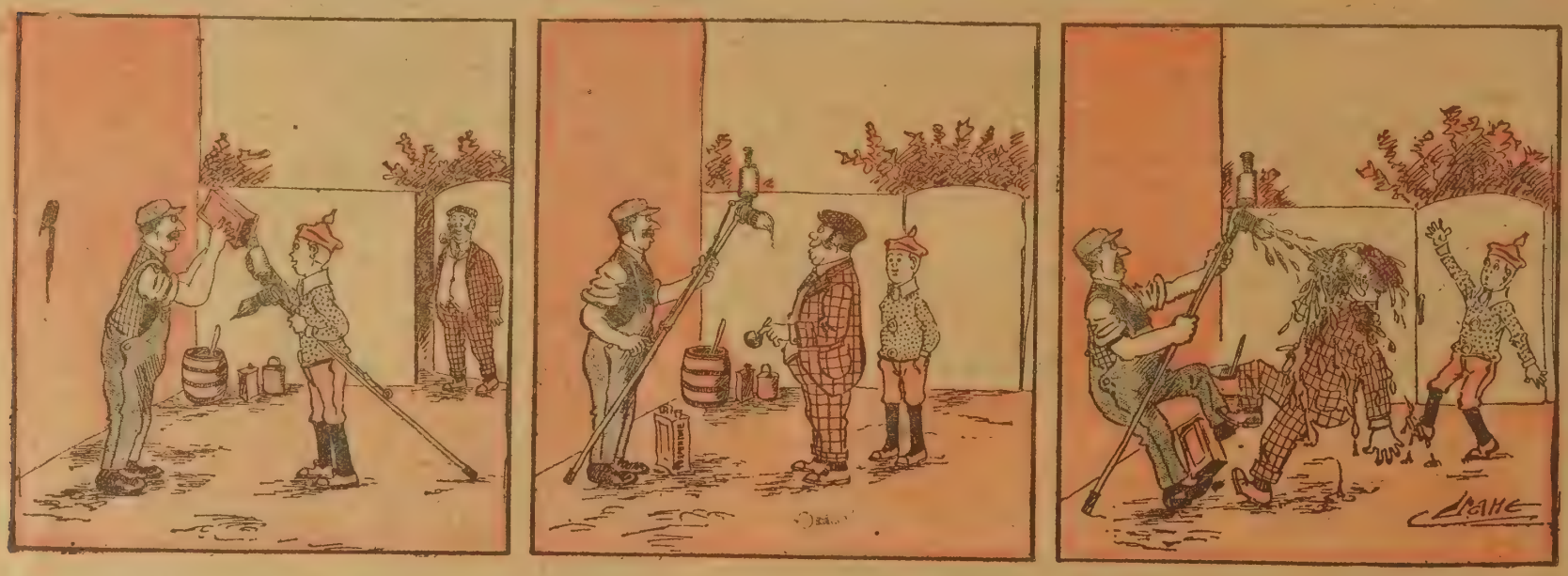
## Northwestern Mutual Fire Association

F. J. MARTIN, President.
Main Office, Central Building, Seattle, Wn.

**Inland Empire Department**
OLD NATIONAL BANK BUILDING.
Phone Main 5236. Spokane.




DEAR TOMMY: I invented this scheme after I noticed that the painters working on Mr. Jones' house wasted so much time shifting the scaffold. Mr. Jones thought it was great. At first we got the paint too thick; then the painter put too much turpentine in, and it squirted right out of the brush and I got my shoes spattered up! Yours, etc., WILLIE.



# KATE AND KARL ARE BRAVE PICNICKERS



# "UNCLE SAM NEEDS A MILLION MORE LABORERS AT ONCE"

The words above are the heading of an article in The Current Opinion magazine dealing with the shortage of man power throughout the United States. This article states:

"Unless employers engaged in business that is not essential to the carrying on of the war are willing to release those working for them, that they may engage in war industries, the country will see the shutting down of many war industries. This announcement is made by the Department of Labor, which asserts that a million unskilled workers are needed immediately in these industries. The announcement states further that the existing shortage will no doubt be greatly augmented by the extension of the draft ages."

Our readers have come to understand that a great many men—good men capable of war industry work—will be required to handle their subscriptions unless our readers send in their orders direct.

For over a year now our friends have been cooperating with us in a plan to conserve man power; and since the need is growing more and more pressing, we are confident that your efforts will not be lessened.

You are asked to send in your subscription renewal well in advance of the expiration date stamped on the address label on each copy of your paper; also to mail with your own order the orders for friend and neighbor.

Incidentally, you and those whose subscriptions you handle for us will receive the benefit of every penny which you save by acting as your own agents. A 3-year subscription at 50 cents means 52 big issues yearly. This is less than 17 cents per year for each of the three years. Think it over. Then let us hear from you in a way that will convince us that you are in sympathy with this cooperative plan.



**Uncle Sam urges the employer to release as many workers as possible for war service. Will *you* help *us* make our answer the right one?**

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**The Washington Farmer.** Nov. 7.

Review Building, Spokane, Wash.

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Farmers who want to make money and save labor, write for our illustrated folder. Learn all about the new and remarkable *Austin Farm Ditcher* and Road Grader—a machine of sturdy, simple construction, wide range of work, and low price. It is revolutionizing farming.

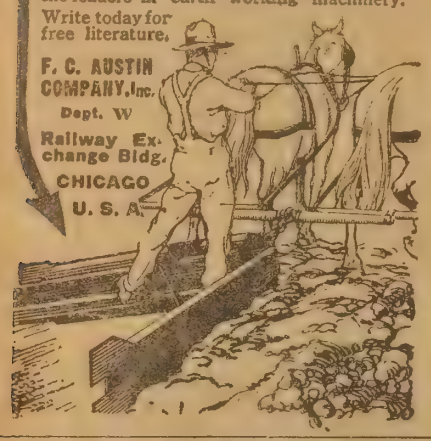
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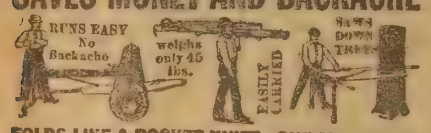
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**FOLDS LIKE A POCKET KNIFE. ONE MAN** with the **FOLDING SAWING MACHINE** saws down trees—saws any kind of timber on any kind of ground. One man can saw more timber with it than two men in any other way, and do it easier. Send for free illustrated catalog No. D64, showing Low Price and latest improvements. In use 30 years. First order gets agency.
Folding Sawing Machine Co., 161 West Harrison St., Chicago, Ill.


When answering advertisements don't fail to mention this paper.


**Fathers**

How would you like to sit down at your own piano and play—actually play yourself—that one old tune you like above all others, that one tune that was so popular when you were young?

"Impossible," you say? No, it isn't. You can do it—you can play it just as you would like to hear it played—putting your own personality into every note. You can do all this without being able to read a single musical note.

Here's how: We can convert that seldom-used upright piano of yours into a standard player-piano—a player piano that will play perfectly any and every 88-note player roll ever made.

We can do this at a generous saving to you—on easy terms and an attractively low initial payment.

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Gentlemen: Without obligating me in any way you may send me further information on how to convert my upright into a modern 88 note player-piano, giving prices and terms.

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# Council of Defense

## Not a New Thing Under the Sun

That committees of public safety, as they are called in some states, and state councils of defense, as they are called in others, is not a new thing under the sun is proved by the fact that there was a council of safety appointed in Vermont July 2, 1777, says Charles D. Greenfield, secretary of Montana state council of defense.

The first order made by the council was August 15, 1777, the day preceding the battle of Bennington. This order was addressed to the chairman of the committee of safety at Williamstown, indicating that in each community there was a subcouncil of safety corresponding to the present county or community councils.

This Williamstown chairman was requested to forward to Bennington all the lead he could collect in his vicinity. The reason given for this order was: "It is expected every minute an action will commence between our troops and the enemies within four or five miles of this place and the lead will be positively wanted."

A similar order was sent to numerous other chairmen of local committees.

That the council of safety had a great deal of work to do in connection with royalists and slackers to the Revolutionary cause is indicated by a lot of orders it made. For instance, under date of August 23, 1777, David Breckenridge "is permitted to remain at his father's house under the care of a guard at that place until further orders."

On August 27, in the same year, the council notified Lieutenant Martin Powel to return to Auger Hawley's wife a cow, as her children were in a suffering condition and the scouts had taken all the live stock on her place.

This man, Breckenridge, must have been a slacker and a royalist, because in another order an officer is required to take four horses belonging to him, which had been left by him in the care of John Bruno.

Hearings and trials for seditious utterances and giving help to the enemy was one of the activities of the council. For instance, on August 27, 1777, Lieutenant Silas Watson received this order:

"You will please send all the evidence you have against Jonathan Card and Pelig Card, as we propose to bring them on trial on the 29th instant."

On the same date an order is made permitting Mrs. Munro to keep her cattle, sheep, swine and other effects until further order of the council.

It would appear that Breckenridge was a farmer and that he grew wheat, because on the same date a Mr. Harris is directed to employ men to harvest Breckenridge's wheat, to put the grain into his barn, to pay the expenses of the harvesting out of the wheat, and what is not required for the use of Breckenridge's family, Harris is to hold until further orders of the council.

### WINTER WHEAT AND VETCH.

To the Editor of The Washington Farmer: In connection with your story concerning my experiences with winter wheat and vetch, I note that you place the vetch seed at $2 per bushel, when as a matter of fact it sold at 20 cents a pound, or $12 a bushel. The gross receipts, however, of $755.40 have been increased since that data was given, owing to the fact that 40 pounds more seed were found, which was sold at 20 cents per pound, or $8. This makes a total receipt of $763.40 for the vetch seed alone. When the data which was published in your issue of October 10 was made up the straw was credited with bringing $15 per ton. As a matter of fact, the entire lot of straw has been sold for $18 per ton, making $404.55. The entire gross receipts from this 16-acre field of wheat and vetch, therefore, should be $1986.95. J. M. HODGES.

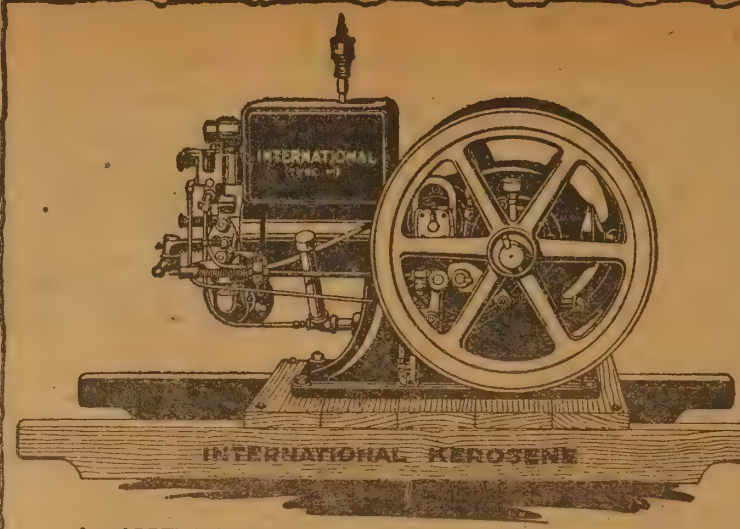
Deer Park, Wash.

### RECORD POTATO YIELD.

What is said to be the world's record production of marketable potatoes on one acre—49,531 pounds, or 825 bushels—has been made on an acre of land near Kanab, in the southeastern section of Utah, a few miles from the Arizona state line. The record yield was made in response to a competition fostered by the Mormon church.

I wish to discontinue my subscription to The Washington Farmer; not because I don't like your paper, but because I am in other business. It is too good a paper to be wasted and we seldom have it because it is not in line with our work.

W. L. COX.


THE PRESENT line of **International Engines** gives every farmer a chance to buy the very engine he needs at a price he can well afford to pay.

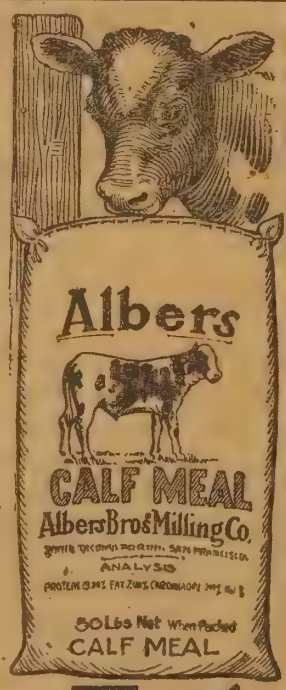
The sizes now run from 1 to 15-H. P., with a special line in the 1½, 3, and 6-H. P. sizes, known as the **International Type M.** All sizes, even the smallest, operate on common coal oil and other cheap fuels testing down to 39 degrees Baume. Every engine develops more than its rated horse power. All conform to International standards of quality, insuring good service, long life, and cheap operation.

It will pay any farmer who is in the market for a good engine, at a fair price, to pay close attention to the International line. If you can use a 1½, 3, or 6-H. P. engine, the Type M will give you a number of pleasant surprises in features, the value of which any engine-using farmer can appreciate.

The local dealer either has an International engine in stock, or can get one for you to see. If he has not told you about our engines yet, write us for complete information.

**International Harvester Company of America**
(Incorporated)

Billings, Mont. Crawford, Neb. Denver, Colo. Helena, Mont.
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**Raising Calves**

is a patriotic duty. It does not mean the feeding of expensive milk, nor does it mean unprofitable work. It means an increased revenue in your dairy business as well as adding strong, sturdy stock to your herd. You can raise your calves successfully for approximately one-quarter of the cost of whole milk by feeding ALBERS CALF MEAL as a milk substitute.

This Calf Meal is specially prepared for promoting health, rapid growth and a sturdy constitution; all the ingredients being thoroughly and easily digested. Directions for feeding in every sack.

Your dealer carries ALBERS CALF MEAL in 25 and 50 lb. sacks or he can get it for you.

**Albers**
**CALF MEAL**

**On Exhibition**

At present we have on exhibition in our store window a long red Mangel Wurzel Beet that was grown on Indian Prairie without irrigation, weight 19 pounds. Also an Ox Heart Carrot grown in the city limits of Spokane which weights 3 1-4 pounds. Both are true to type and of perfect shape, and shows the quality of seeds we furnish.

**THE INLAND SEED CO., Spokane, Wash**

# Comparative Potato Yields and Prices

By ASHER HOBSON, State Director of Farm Markets.

Comparing the estimated supply this year with other years it will be seen that Washington's potato crop will be about 1,500,000 bushels less than it was last year and the year before, but that it is a little larger than it was in 1915, and it is about three-fourths of a million bushels in excess of what it was in 1914. The estimate for the five western states is about 7,000,000 bushels short of last year, about 500,000 bushels greater than it was in 1914 and 1915. It must not be forgotten, however, that in 1916 the yield for the United States was more than a hundred million bushels short of what it will be this year.

It should be noted further that in judging this year's yield care should be taken against making comparisons with the two previous years. Both these years were abnormal. In 1916 northwest growers, because of the 100,000,000 bushels shortage in the east, were able to sell a big crop on a high market for eastern shipments. Such prices are not likely to be obtained this year. On the other hand, last fall the northwest bumper crop had practically no market in the east. Idaho, Montana and even California shipped to Seattle and other Coast cities much stock which would have gone east during normal years. This contributed greatly to the low market of the entire season.

A study of the table would seem to indicate the following: Including the country as a whole the estimates for this year show a comparatively high yield. The fact is that with the exception of three years, 1912, 1914 and 1917, this estimate is higher than any year's yield in the history of the country. As compared with the last four years this year's Washington crop will be somewhat below normal, but considering the five states of Washington, Oregon, Idaho, California and Montana as a unit, estimates indicate a good yield for this year, being slightly above the average for the last five years. It should be kept in mind, however, that the demand this year will be raised by the increase in population in the northwest.

In this particular there may be noted a fairly close similarity between this year's estimate and the yield for 1915. It should be kept in mind, however, that in comparing supply with prices received, one must consider that prices of all commodities have advanced during the last two or three years. If the supply and demand were exactly the same this year as in some previous year, prices would necessarily be higher for this year. Further, the cost of labor, and other expenses have been appreciably advanced, a circumstance which must reflect upon prices generally.

The first table herewith shows the potato supply in the northwest and in the country generally for each year from 1914 to 1918, and also the estimated supply for this year as reported by the bureau of crop estimates of the United States department of agriculture. The second table shows the prices paid growers f. o. b. Seattle upon October 1, January 1, and April 1, each season. By use of both these tables one may compare yields to prices in previous years. Growers by doing this should be in a better position to judge the probable market this year.

In the following table the amounts are given in thousands. To get correct figures add three naughts, "000."

| Season Fall to Spring | Potatoes, in bushels, fall harvest. Wash. | Idaho | Oregon | United States. |
|---|---|---|---|---|
| 1914-15 | 7552 | 5270 | 4753 | 409,221 |
| 1915-16 | 8235 | 3500 | 3520 | 359,103 |
| 1916-17 | 990 | 4050 | 8250 | 286,953 |
| 1917-18 | 9875 | 5084 | 8100 | 442,000 |
| 1918-19 | 8330 | 4583 | 5625 | 391,033 |
| 5 years average | 8778 | 4697 | 6049 | 377,662 |

The table below shows growers' prices of potatoes f. o. b. Seattle, as quoted upon October 1, January 1, and April 1, each season:

| Season, Fall to Spring | Growers' price f. o. b. Seattle. Oct. 1. | Jan. 1. | April 1. |
|---|---|---|---|
| 1914-15 | $21.75 | $15.00 | $24.00 |
| 1915-16 | 14.00 | 18.00 | 27.50 |
| 1916-17 | 23.00 | 37.00 | 60.00 |
| 1917-18 | 30.00 | 26.50 | 26.50 |
| 1918-19 | 40.00 | ? | ? |

# Farm Motor Truck

## Compared With Hauling by Wagon

Is the hauling of farm products cheaper by motor truck than by wagon?

The October crop report of the United States department of agriculture gives some facts which will aid in answering this question. According to answers received from its correspondent the estimated cost for hauling in wagons from farms to shipping points averaged in 1918 about 30 cents per ton per mile for wheat, 33 cents for corn and 48 cents for cotton; for hauling in motor trucks or by tractors the averages are 15 cents for wheat or corn and 18 cents per ton-mile for cotton. These figures are based upon reports made by correspondents of the bureau of crop estimates. While most of the hauling from farms is done by the farmers themselves, these estimated costs are based largely upon the usual charges in the various counties for hiring team and wagon or for motor truck, by the day.

In 1906 a similar inquiry showed an average for wagons of 19 cents per ton per mile for hauling corn or wheat and 27 cents for cotton. In 1918 wagon costs were naturally higher, since prices and wages have increased, but motor-truck costs are much lower in 1918 than even the wagon costs of 1906, due to greater efficiency of the motor truck.

Motor-truck hauls in 1918 from farm to shipping point averaged 11.3 miles, while wagon hauls averaged 9 miles; and a motor truck made 3.4 round trips per day over its longer route of 11.3 miles, while wagons made 1.2 round trips per day over the nine-mile distance.

The motor trucks generally in use by farmers are not the large trucks, but the small ones whose nominal capacity is usually one to two tons. In quite a number of counties throughout the country the trucks used for hauling are made-over passenger cars. In some cases light wagons are attached as trailers to ordinary passenger cars and produce taken to market in that way. In North Dakota and California, as well as other states, tractors, each drawing several wagons, are used for hauling grain. Trailers are also used, especially in the west, with horse-drawn wagons. This practically helps to raise the average wagon load as reported from the Rocky Mountain and Pacific states. For the United States as a whole the average wagon load of wheat was 56 bushels in 1918, while the motor-truck load averaged 84 bushels.

**As a reader of The Farmer have you had any experience with marketing farm crops in motor trucks, and if so what has been the relative cost as compared with marketing by wagon? Are you interested in the answer to some other question? Write it down and send it to the Editor of this paper. Encourage your boys and girls to ask questions, for that is the finest way of gaining valuable information. Make of The Farmer your Family Question Box.**

The Washington Farmer has come regularly and is a dandy little paper. We can notice a large improvement since we took it last.

J. B. RUSSELL.
Rimrock, Wash.

### We'll Make Mistakes.

We make lots of mistakes and will continue to make them, but ultimately all mistakes will be rectified—somewhere, sometime, someday.


YOU NEED ONE

The Farmer's Record and Account Book

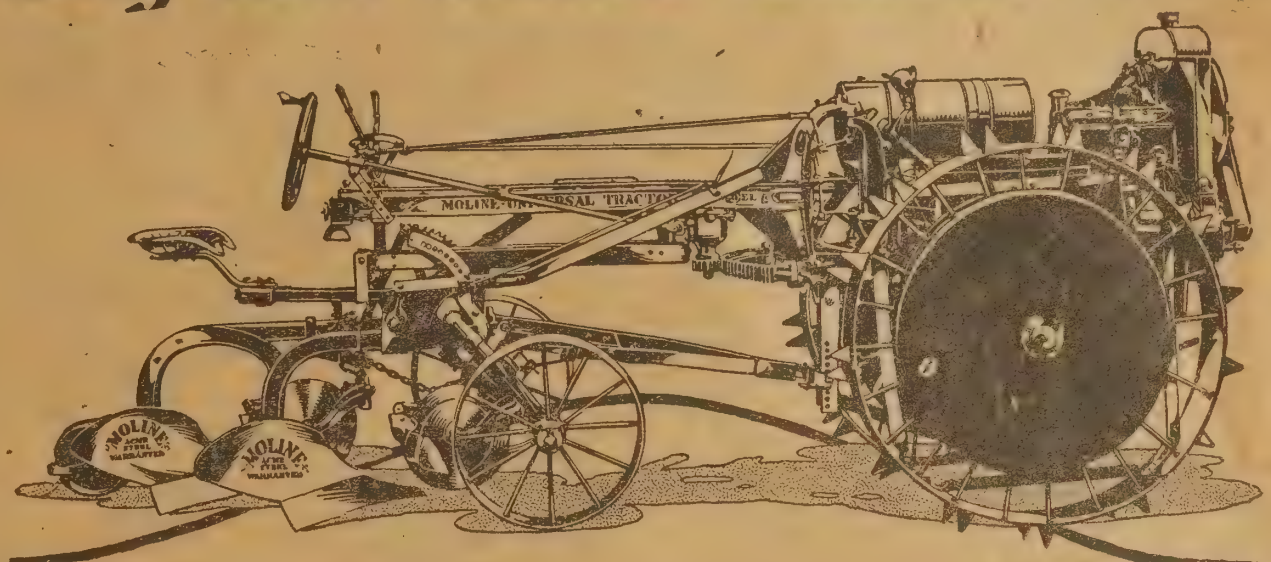
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THE WASHINGTON FARMER.

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## Because:

You may not be able to get a Moline-Universal if you delay ordering.

You will help relieve spring congestion of shipping by buying now.

You will have plenty of time to become familiar with its construction and operation before the spring rush and will be able to work your tractor in on belt work and other light jobs.

It is the only tractor which does all farm work including cultivating.

One man operates both tractor and implement from the seat of the implement where you must sit in order to do the best work.

Tractor and implement form one unit—backs as easily as it goes forward—turns in a 16-ft. circle.

It has plenty of power for your heaviest work, yet light in weight to operate economically on light jobs. All the weight on two big drive wheels—no dead weight—no extra expense.

Substantially constructed for many years of service.

Electric lights for night work and self starter for non-robust labor.

You can practically double your efficiency—you can produce more food with less help. You will need it, order now.

**Write today for full information and name of your nearest Moline Dealer. Address Dept. 50.**

**Moline Plow Co., Moline, Illinois**

# MOLINE UNIVERSAL TRACTOR



# It Is the Farm of Your Dreams, but Is Not a Dream Farm

By S. B. NELSON, W. S. C.

Traveling on the train a few days ago I met a successful young farmer who is a graduate of the college of agriculture of the State college of Washington. He made this remark:

"If you have ever had a vision of the farm of your ideals and dreams, you can find that vision fulfilled within half a mile of Sprague, Wash."

He was referring to the Hercules Stock ranch of Day & Rothrock.

Quite recently, at the invitation of Frank M. Rothrock, I revisited this stock farm, my former visit having been three or four years before.

A surprise awaited me. At the time of my previous visit there was sagebrush on the hills and sedge in the swales. But the land had been leveled and drained and put under irrigation. This year more than a thousand tons of alfalfa hay has been raised where but a few years ago the sagebrush reigned supreme.

It is true that the owners of this farm of your dreams are wealthy, but you would never discover this by meeting and talking to them. They are what we call "plain, homey folks," who, when all is said, are the highest American type there is, and the type that has written America on the map of the world.

For the reason that Mr. Rothrock and his associates have wealth I was interested a few years ago to see them start the Hercules stock farm in so modest a way. The very first thing they built on the ranch was a silo. Mr. Rothrock believed that real live stock could not be raised without plenty of feed.

Shelter was the next consideration. They built large well planned though not elaborate stables for cattle and horses. During my recent visit I noticed one little thing about their stables which is significant. The main posts in the partition between the stalls did not extend from the ceiling above to the floor below where the moisture at the bottom could rot them, but they had been set in a concrete foundation in an iron pipe, and would last for years. There will be no wiggling or wobbling of the stall partitions in this building.

The Hercules stock ranch at the present time is fairly good sized—15,000 acres! All its irrigation is done by the use of electrical power, which has succeeded gasoline, the latter having proved unsatisfactory. Having the hay land under cultivation, it is the custom of Day & Rothrock to run about one animal on 10 acres of the rocky land. Now, they are running about a thousand head of cattle, 250 of which are purebred Shorthorns. One hundred and 20 of the latter number are breeding cows, and the rest are bulls and young stock.

I saw 300 steers in one pasture. Quite recently I noticed in the public press announcement of the fact that Mr. Rothrock had sold 78 of these steers for the highest price ever paid in Spokane for fat steers.

The Hercules herds are headed by two magnificent bulls. One of these is Gainsford Perfection, the first bull to head the herd. Some of his offspring are now in great demand, and are bringing very satisfactory prices. The other is the imported bull, Dounes Radiance, bred by Lord Mouray of Scotland.

When I went out in the pasture to see this bull, there was recalled to my mind a little story told me recently by a cattleman from Salmon City, Idaho. They had a stock show over there, and secured an eastern man to do their judging. He was a very competent man, and they got along very well until he reached the wild steers. After trying vainly to lay hands on them, he said to the superintendent of the show:

"I can't judge these steers—I can't get close enough to put my hands on them and see whether or not they are in prime condition."

If this judge had seen Dounes Radiance approaching him in the pasture he would not have cared to lay hands on him to judge his condition. The bull walked like he was on springs when I saw him. The grand play of the muscles underneath the rolling folds of his skin was that of high power mechanism oiled and polished to the last degree of perfection. No judge would need to feel his skin to know that Dounes Radiance had what stockmen speak of as "condition." It was a wonderful sight. But really, the animal was only in good breeding shape.

Mr. Rothrock gives a great deal of attention to the farm, rather more than Mr. Day, possibly. He says the ranch must pay, and that they must get their pleasure out of running a ranch that is kept on a practical, paying basis. Mr. Rothrock, Mrs. Rothrock, the children—Zena, a girl of 17, and Wallace, who is 15—the superintendent, the herdsmen and the farm laborers, all have their work to do, and they do it in the right way and on time. No one overworks, but every hour of the day in everybody's time counts for something. Mr. Rothrock believes in system and order. On the Hercules ranch things move by the clock, and the clock is not allowed to run down.

He believes in plenty. Better have feed left over in the spring and well-fed live stock, than to run low in feed and skimp or buy. From end to end of the ranch, in its smallest details and in the greatest undertakings, you see no sign of neglect, oversight, or improvidence. Thrift is everywhere—in every barn, in every field, in the farm home and shows in every animal from hoofs to ear-tips. Waste is abhorred on the Hercules stock ranch, and there is none of it. Upon these simple, homely ideals has been built the great ranch, and it is still building.

When I was there a few days ago they had 30 young bulls on the place. Thirteen were in and 17 were out in the fields. Each group of youngsters had 12 hours in the fields and took its turn alternately with the other. Even the young bulls worked and moved by system.

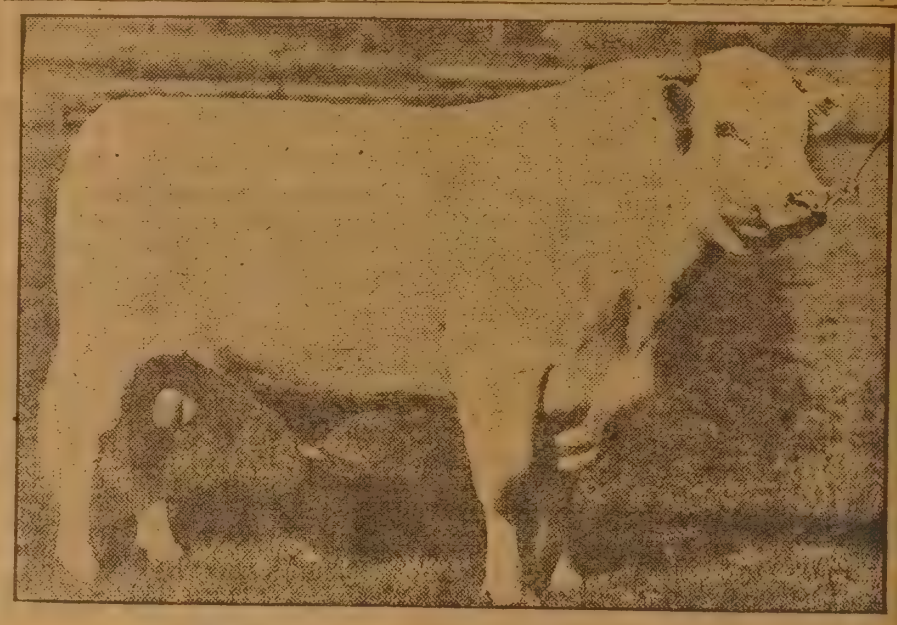
I chanced to be down at the field when the band of 17 were let out. Immediately there were eight bull fights in progress. The odd seventeenth had no antagonist, so acted as referee until he managed to horn in somewhere. It was a spectacle at once comical and magnificent. Out of their sheer exuberance of spirits they battled in play with one another, and all the while they were thus engaged you could walk in perfect safety among them.

At the time of my visit they were just finishing the new ranch house, which was spacious and splendidly planned for solid comfort and convenience. The bunkhouse for the men is comfortable, equipped with shower bath and with other modern sanitary conveniences.

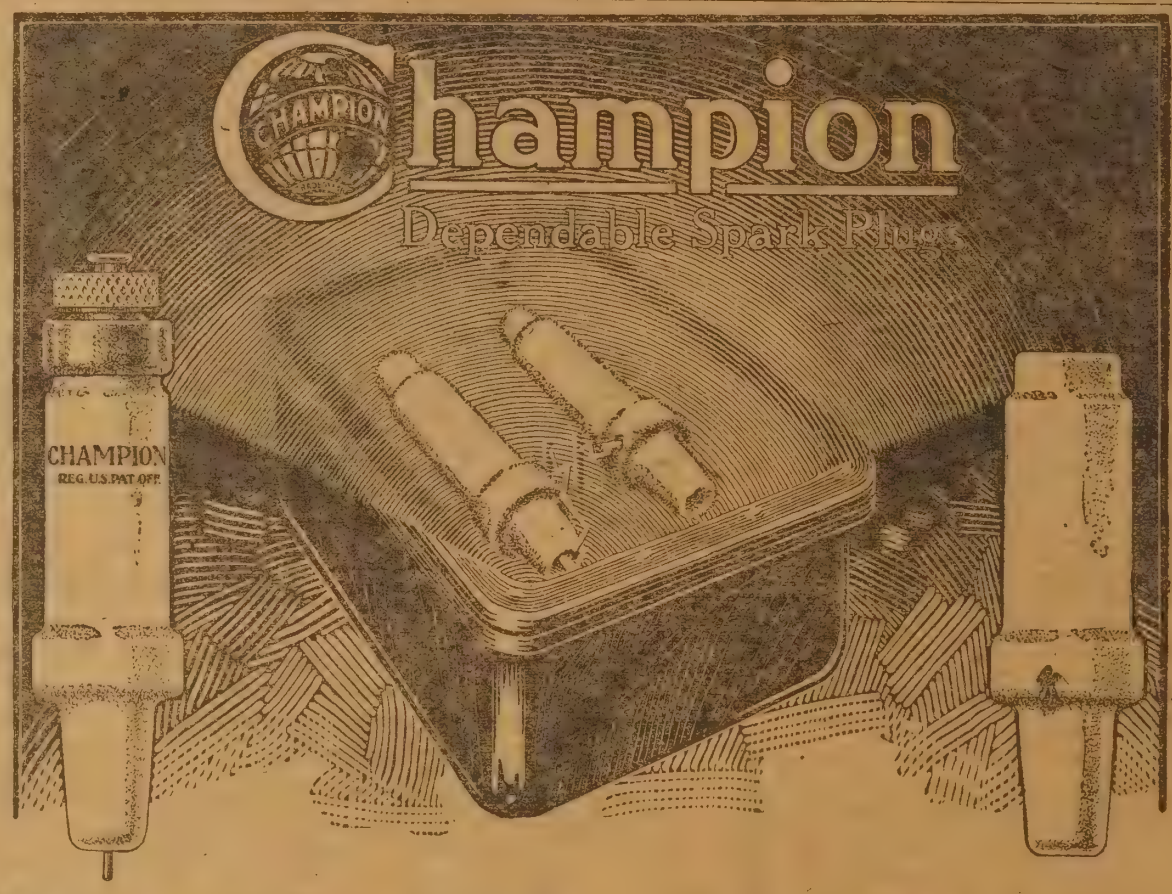
Going over the ranch I noticed in particular Mr. Rothrock's sub-irrigation plan. There is a meadow three hundred acres in extent which has at its upper end a large living spring. Formerly, the spring flowed away through its surface channel, and was lost.

Studying the situation very carefully, Mr. Rothrock saw a way to make use of both the normal and the overflow of the spring. First, a canal was dug above the

(Continued on page twenty-two.)



Dounes Radiance, one of the Hercules herd leaders.


# Big Increase in Porcelain Efficiency

*Half Again as Much Resistance to Current When Heated*

In the high-speed, high-compression motors of today spark plugs must work in heat undreamed of a short time ago.

Yet under intense heat the porcelain insulator that once worked perfectly, actually becomes a conductor of the electric current—fails to supply the explosive spark.

But science has now more than kept pace.

Experiment 3450 in the tenth year of unremitting original research work in our porcelain laboratories has produced a porcelain with half again as much resistance to current when heated.

Champion Dependability takes so long a step forward that it seems well nigh inconceivable that any future motor will ever again develop heat enough to threaten short-circuiting through the porcelain insulator.

This greater dependability is yours if you merely take the pains to see that "Champion" *is on the porcelain* of your spark plugs as well as on the box.

There is a Champion Spark Plug for every type of motor car, motor truck, tractor, motorcycle and stationary engine.

**Champion Spark Plug Company, Toledo, Ohio**

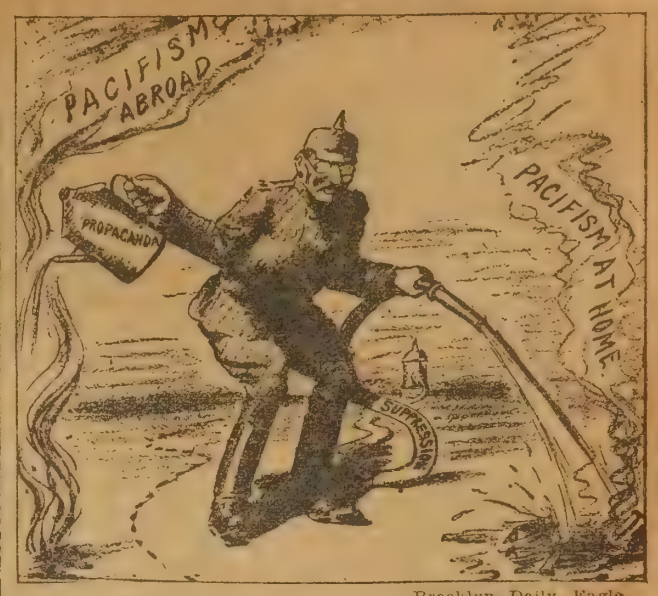
*Champion Spark Plug Company of Canada, Limited, Windsor, Ontario*

## Parents of Fighters in War Work



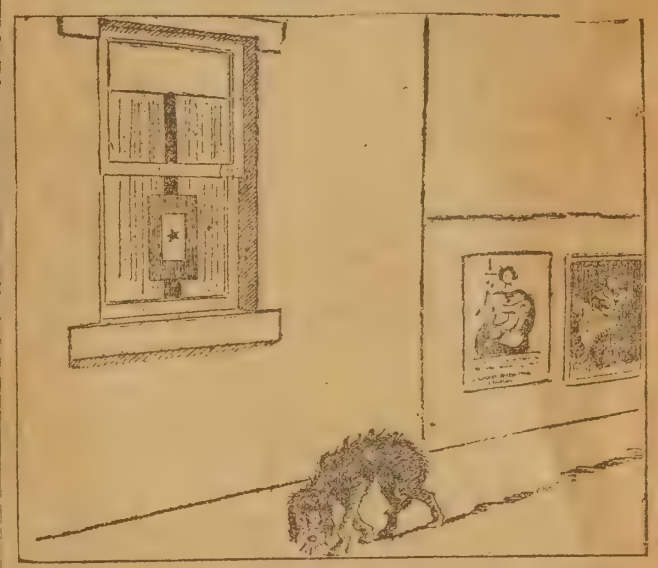

Fathers and mothers of soldiers and sailors have entered into the work of the united drive of seven great agencies to raise money for the comfort of those who are fighting for their country. Mrs. Edward T. Statesbury represents the Y. W. C. A. workers who have sons in service. In the National Catholic War council John G. Agar, treasurer of the organization, has three sons who are aviators. The majority of fathers in the Y. M. C. A. work have sons in uniform. Among these is George W. Perkins. Colonel William R. Peart, chief secretary of the Salvation Army, has a son, Lieutenant Herbert L. Peart, in the 18th infantry. Of the war camp community service, a noteworthy example is that of William E. Hopkins, who has three sons in service. Three of the directors of the Jewish welfare board have fighting sons. Charles Hartman is one of these. Dr. Frank P. Hill is one of the American Library association workers who have sons in uniform.

## Watch the Hun




Brooklyn Daily Eagle.

## What a Slacker Feels Like



Philadelphia Bulletin.

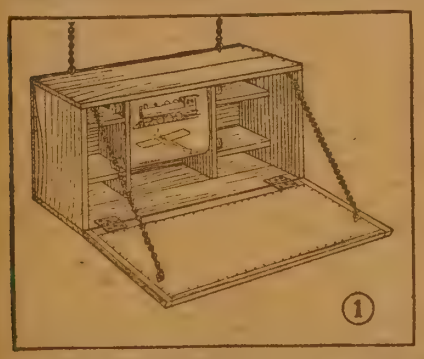
# Handicraft for Boys

By A. NEELY HALL.
(Copyright by A. Neely Hall.)

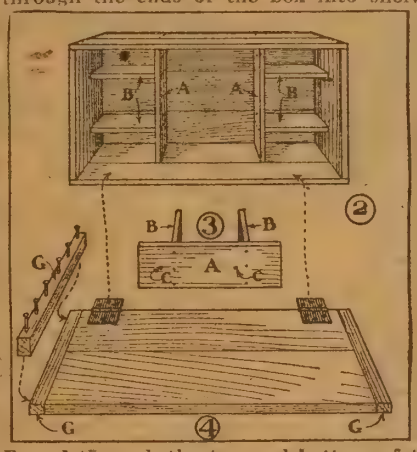
### A HOME-MADE DESK.

Every boy can own a desk, because it is one of the simplest pieces of furniture to build. I have designed a great many desks for boys to make, but I believe that the one shown in Fig. 1 will be the most popular yet. You see, in addition to its being a first-class desk, with lots of pigeonholes for papers, envelopes and other things which boys always want to keep near at hand, a scroll is provided on which to paste pictures of animals, locomotives, aeroplanes, automobiles, battleships, and all sorts of interesting inventions. Unless you are different from most other boys, you like to draw pictures of all of these things, and with the scroll turned to the picture that you want to draw you will have all of the data you require directly before you.

This desk is made out of a small packing-case, or a grocery box. Select the best-looking box you can find. Get the cover boards, too, because you will need them for the hinged dropleaf. The first thing to do is to

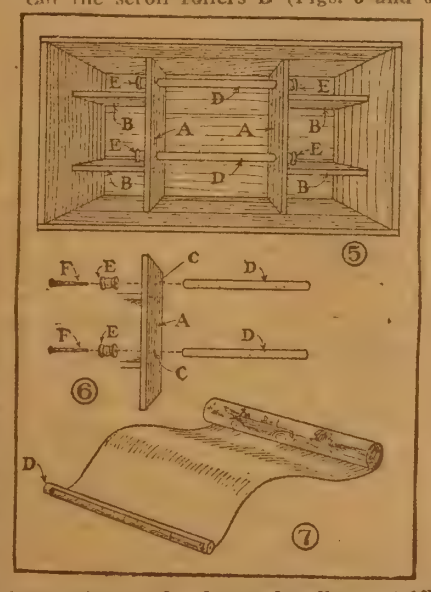



reenforce the nailing of any boards which show signs of coming loose. Then prepare the pigeonhole partitions. Fig 2 shows the inside of the desk. Partitions A should be fastened seven inches each side of the center of the length of the box, or 14 inches apart and shelves B should be so spaced that there will be a small top and bottom pigeonhole and a larger one between. Holes C in partitions A (Fig. 3) are provided for the rollers of the scroll to turn in. Bore the upper one about three inches below the upper end of A, and place the lower one 10 inches or so below it. Nail partitions A to the end of shelves B; then stand these assembled pieces in the box, set a temporary brace between partitions A to hold them in the right position, and drive nails through the ends of the box into shelves




B, and through the top and bottom of the box into the ends of partitions A.

Cut the scroll rollers D (Figs. 5 and 6)




from pieces of broom-handle, a trifle shorter than the distance between the partitions A, and get four large spools, such as crochet-cotton comes on, for the end knobs E (Figs. 5 and 6). Rollers D turn on the nail pivots F (Fig. 6), which must be long enough to run through the spool knobs E, through holes C in partitions A, and half an inch into the ends of the rollers. The spools must fit tightly on the nails. Wrap nails F with paper, and then coat the paper with glue so the spools will stick fast.

A tough wrapping-paper should be used for the scroll. Perhaps you can find a store dealer who has a roll of paper from which you can get the length you want in one piece. Tack the ends of this paper to the scroll rollers (Fig. 7). Be careful to get the paper square on the rollers, so it will roll up evenly. The pictures should be put on before the scroll is pivoted in the desk. Cut out and paste these in place, or, if you can copy them exactly, draw them upon the scroll.

Fig. 4 shows how the box-cover boards are fastened together by means of the end battens G, and how the pair of hinges are placed for hinging this drop-leaf to the desk. To support the outer edge of the drop-leaf, when the desk is open, a pair of chains must be provided. Screw screw-eyes into the drop-leaf and the other side of the desk, to attach the chains to. A covering of oilcloth will give the drop-leaf a good writing surface.

Putty all joints and nail holes. Then a coat of stain or two coats of paint or white-enamel, will complete the desk.

# Flickering Light Injures Eyes

By DR. LEONARD KEENE HIRSHBERG, A. B., M. A., M. D.



Dr. Hirshberg.

If you would do justice to your eyes, you should shun glaring, dim and flickering light. Poor illumination of the printed page, writing, sewing or other work and employment of the eyes in twilight all contribute toward a severe strain of the eye muscles in their vain attempts to dilate the pupils to their widest degree.

Sharp, intense, bright or glaring light produces a contrary effect. The ocular muscles now try to shrink the pupil to its smallest point. This is intended by nature to exclude the cutting, radiating particles of light from the retina. Headaches, eye muscle exhaustion and tired, droopy, sleepy eyelids soon give warning.

Flickering light is produced by a combination of brightness and dimness. The delicate structures of the visual machinery alternately try to keep pace first with poor, then with intense, light. You call this a flicker, but the swift, fine perceptions of the eyes sense the automatic variations and suffer accordingly.

Obviously, all sorts of eye disturbances are the price you needs must pay if you use your eyes in any of these three varieties of light without some sort of corrective eyeglasses.

### Sacrifice for Appearance.

Eyeglasses ought to be worn by a great many beautiful women and handsome men too vain to try to ward off serious eye troubles. When so important a sense as eyesight is sacrificed for personal appearance you can understand the failure in life of the guilty persons.

Of the various kinds of eyeglass materials to be had you should pick out a glass which most clearly defines objects and removes all glare. Glasses that have a pale yellow green tinge are recommended as a means to diminish the glare of light.

The eye is most sensitive to the yellow green light in electric arc welding as well as in the manipulation of melted quartz. A smoky effect introduced, yet almost invisible, and certain tints of dark mica have been found very effective. They exclude the glares and absorb the heat rays.

### Reflections Are Bad, Too.

Finally, the reflection of vivid and flickering flashes from walls, floors and ceilings should be taboo. These damage the eyes as much as a flicker in the actual source of light.

Eyeglasses and goggles made with ordinary pebble or crystal clear quartz do not eliminate the glare and the ultra-violet rays of arc lamps. To protect your eyes these mild, pale tints or plain, clear glasses should be adopted.

# Washington Game Laws for 1918

**Open seasons:**

West of Cascades—

Deer (see exceptions), goat ..... Oct. 1-Nov. 1

Exceptions: Deer in Island and San Juan counties, Jan. 1, 1921; does in Skagit, Snohomish and Whatcom counties, no open season.

Bear ..... Sept. 1-May 1

Quail (see exception), ruffed grouse native pheasant, Chinese pheasant (see exception), blue grouse, ptarmigan ..... Oct. 1-Oct. 15

Exceptions: Quail, in Clallam, Clarke, Jefferson, San Juan, Skagit, Skamania, Snohomish and Whatcom, Oct. 1, 1919. Chinese pheasants, in Clallam, Kitsap and Skamania counties, no open season.

Duck, goose, brant, coot ..... Oct. 1-Jan. 15

Black-bellied and golden plovers, Wilson snipe or jacksnipe, yellowlegs ..... Oct. 1-Dec. 15

Rail ..... Oct. 1-Nov. 30

East of Cascades—

Deer (Kittitas county, Oct 15-Dec. 1) ..... Oct. 1-Nov. 15

Bear ..... Sept. 1-May 1

Goat ..... No open season

Ruffed grouse (native pheasant), blue grouse (see exception ..... Nov. 1-Nov. 15

Exceptions: In Asotin (in precincts of Clarkston, South Clarkston and West Clarkston, no open season), Garfield and Walla Walla. Aug. 15-Oct. 1. Ruffed grouse in Kittitas and Yakima counties, no open season. Blue grouse in Spokane county, Oct. 1, 1919.

Quail in counties of Asotin (in precincts of Clarkston, South Clarkston and West Clarkston, no open season) and Garfield ..... Oct. 1-Oct. 10

Prairie chicken in Stevens county ..... Sept. 15-Oct. 1

Sharp-tailed grouse in Ferry and Okanogan counties ..... Sept. 15-Nov. 1

Sage hen, Hungarian partridge, male Chinese pheasant in Kittitas county ..... Oct. 1-Oct. 10

Bobwhite quail in Spokane county ..... Oct. 1-Nov. 1

Hungarian partridge in Lincoln, Spokane and Stevens counties ..... Oct. 1-Nov. 15

Chinese pheasants in Benton, Stevens and Yakima counties Oct. 1-Oct. 15

Duck, goose, brant, coot ..... Sept. 16-Dec. 31

Black-bellied and golden plovers, Wilson snipe or jacksnipe, yellowlegs ..... Oct. 1-Dec. 15

Rail ..... Sept. 16-Nov. 30

**No open season:** Moose, elk (1925), fawns, caribou, mountain sheep, squirrels (gray, black, fox), quail, prairie chicken, sage hens, introduced birds (except as above), turkey and dove.

**Hunting and fishing licenses:** Nonresident: Hunting, $10; fishing, county, $2. Resident: State, $5; county, $1. Issued by county auditors.

No license required of honorably discharged Union soldiers of civil war to hunt or fish, or of women and persons under 16 to fish, if residents.

**Bag limits and possession:** One deer in counties east of Cascades. Two deer (one buck in Skagit, Snohomish and Whatcom), one goat in counties west of Cascades.

Five in all of partridge, grouse, prairie chickens, Hungarian partridge, Chinese or English pheasant a day or in possession; 10 quail a day; 10 upland birds, but in no event to exceed five if quail are included in bag, and 25 in all a week. In Kittitas county two male Chinese or English pheasants in bag of five upland birds; 20 ducks, geese, brant, golden plover, yellowlegs, Wilson snipe a week (week ends at midnight Saturday), but not more than eight geese, eight brant, 15 in all of plovers and yellowlegs a day; 30 ducks, geese, grant in possession. Possession during closed season permitted under permit, but migratory birds shall not be possessed longer than 10 days after close of open season.

**Sale:** Sale of all protected game prohibited.

**Export:** Export of all protected game prohibited.

**Washington:** No open season on waterfowl on Columbia or Snake rivers or within one-fourth mile of their shores in counties of Benton, Columbia, Douglas, Franklin, Garfield, Grant, Kittitas, Klickitat, Walla Walla, Whitman and Yakima.


**Furs Made to Order**

Highest market price paid for raw furs.

WRITE FOR PRICE LIST.

**BODENECK & JACOBS**

LEADING FURRIERS.

Spokane, Wash. Opp. Postoffice.

**HIDES**

We want to buy hides. Highest market price paid. Our check by return mail. References, any Seattle bank.

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**HIDES TANNED**

FUR ROBE AND COAT CATALOGUE

LINCOLN HIDE & FUR CO., INC. LINCOLN, NEB.

A POST CARD WILL BRING IT TO YOU

BEAUTIFUL FUR ROBES AND COATS, made from your Horse and Cattle Hides. Every Farmer send for Catalog. Learn how easy to have nice warm Fur Coats and Robes, at one-half retail price. Woolen clothing is high. Have your Hides tanned and made up. LADYS FURS to order. We carry fine stock HEAVY NORTHERN dressed skins. Honest treatment. Ship us your hides. Write for catalog.

Lincoln Hide & Fur Co 38 Q St., Lincoln, Neb.

**RAW FURS**

are bringing the highest prices known in years. I am in the market to buy large quantities of moles, muskrats, coyotes and all other raw furs. Price-list ready November 15, 1918.

**OSCAR GARD**

Seattle, Wash. 77 Marion St.


When answering advertisements don't fail to mention this paper.

# The Farm of Your Dreams

(Continued from page twenty.)

back of the spring, leading the water to a point from which, by means of ditches, the water could be divided about equally over three parts of the field, each part comprising about 100 acres. Dams of simple, but ingenious concrete and steel construction were installed to back up the water, and the arrangement of the dams is such that the amount of water they hold in storage can be increased or diminished at will. The plan is such as to put the water at the very place it is needed and waste none of it.

This year the field produced a rich crop of hay, and when I was there, 150 steers were grazing on the green forage that had come up after the hay-cutting.

This little feat in irrigation is only a small thing. One might pass it by without a thought. But it is one of the many little things on the Hercules farm, the sum of which in ideals of simplicity, economy, the practical and good service, have gone to build the ranch of your dreams.

## GOATS FOR WAR FOOD.

The Hawaiian island of Kahoolawe is to be devoted to lowering the cost of living if production of 10,000 goats for marketing will do it, says the Evening Wisconsin.

The Hawaiian board of agriculture and forestry authorized Chairman Rice to confer with the governor and land commissioner on a plan to withdraw the island from the forest reserve and offer it for lease. This has been done, and Chairman Rice has placed in the hands of Attorney General Smith the drawing up of the necessary papers.

Kahoolawe now produces goats and sand. It is believed that thousands of goats of marketable quality can be exported from the island, and a chance is to be given for some enterprising rancher to become the great goat king of the territory.

## FIGHTING TANKS.

A. F. Knobloch, vice president and works manager of the Cleveland Tractor company, Cleveland, Ohio, has been appointed assistant to L. J. Horowitz in the Ordnance department at Washington. In that capacity Mr. Knobloch will represent Mr. Horowitz in matters having to do with the practical, manufacturing and technical details in providing the fighting tanks required in Europe.


**Abraham Fur Co.**

St. Louis, Mo.

America's Leading Fur House



**Furs Are Worth Big Money**

Furs will be higher than they have ever been in the history of the fur business and the Abraham Fur Co. will again be the leaders in paying trappers more money for their furs than they can get from any other fur house in the World.

We were the only large fur house in the United States that made a gain in number of shipments received last year; all others showed a decline. Why? **Because trappers everywhere have found out that it pays and pays big to ship furs to Abraham Fur Co.**

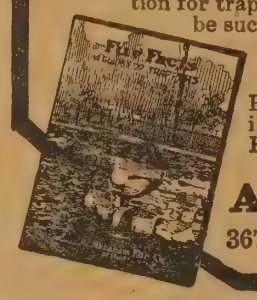
*Anybody can tell you how high furs are but we will show you with real money. Send us furs you have on hand now.*

For many years we have made a specialty of handling early caught furs and we can pay you a better price for this class of furs than ever before.

We will pay you more than you can get at home—more than you can get from any other fur house and more than you expect yourself—that's going some, but **we are in a position to beat all price records for furs and we are going to do it.**

**Write For Our New Book Today**

—the most complete catalogue of trapper's supplies carried by any house in the United States—quality of goods guaranteed to be as represented and prices the lowest possible. Most valuable information for trappers ever published—will show beginners how to be successful on the trap-line, giving rules and methods for trapping that never fail, contains information for old timers that will surprise them.



Pictures of a Herd of Seals in beautiful colors illustrating how the seal lives in his native state. Free to anyone interested in fur business. Write today.

**Abraham Fur Company**

367 Abraham Bldg., St. Louis, Mo.

**TRAPPERS**

IT'S FREE

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(AN ACCURATE FUR MARKET REPORT AND PRICE LIST ISSUED AT EVERY CHANGE IN THE MARKET)

and keep me posted on Raw Fur Market Conditions during the Fur Season of 1918-1919.

Name _____ ☐ County _____ R.F.D. No. _____

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"The Shubert Shipper," is a reliable and accurate Market report and price list, issued at every change in the Fur Market. It is something more than merely "something to read." It is the advisor, friend and sign post to the right road to reliable market information and accurate market quotations. "The Shubert Shipper" is received by hundreds of thousands of trappers and Fur shippers all over North America. Never was a serious misstatements of facts published in "The Shubert Shipper" and this character of accuracy and reliability has demonstrated that such information is absolutely essential to the successful trapper and Fur shipper. You should read "The Shubert Shipper"—we want your name on our mailing list.

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A. B. SHUBERT, INC.

THE LARGEST HOUSE IN THE WORLD DEALING EXCLUSIVELY IN AMERICAN RAW FURS

25-27 W. AUSTIN AVE. — CHICAGO, U. S. A.

**10 to 50% more for FURS AND HIDES**



By shipping to us than by selling at home. We are the largest Hide and Fur House in the N.W. Est. over 25 yrs. Prompt cash returns guaranteed. No commission.

**HIDES TANNED INTO ROBES $2.50 TO $6.00**

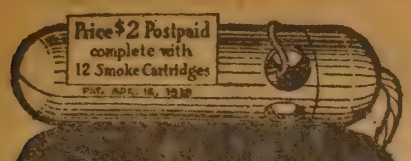
We tan Furs. Sell Leather, Fox and Wolf Poison. Our 450-page *Hunters' and Trappers' Guide* tells how to become a successful trapper, and how to raise Skunks, Fox, etc. Ship your Hides, Furs, Pelts, Tallow to Us. Write for Price List.

**ANDERSCH BROS.** Dept. 35 **MINNEAPOLIS, MINN.**

**TRAPS** AND GUNS at factory cost.

We pay highest prices for Furs and sell you Guns, Traps, Supplies, etc., at Factory Prices. Write for Free Catalog, Trappers' Guide, and fur price list. E. W. Biggs & Co., 176 Biggs Buildings, Kansas City, Mo.


The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.




"Taylor Smoke Torpedo Got Me 14 Skunk In 10 Minutes!

You can do as well. And this season, with wool scarce and fur prices high, you can make good money, too. **Start now!** Make all the profits of a full season. Send coupon for our "Book of Traps." Tells just what traps you need for each animal; about wonderful baits that draw them to a sure catch; how to make "old-timer" sets for mink, skunk, opossum, muskrat, coon, etc.; contains pictures in natural colors of North American fur bearers; explains how to take off, prepare and ship pelts. This book is absolutely free. All you've got to do is send the coupon!

**What Taylor Means to Boy Trappers**

Every trapper "connects up" with a fur house—to get supplies and sell his furs. Begin right—with Taylor, the house that has pleased the experienced trappers of all North America for 48 years and earned our reputation of "America's Greatest Fur House." That means we pay always the **highest prices** for skins and charge lowest for traps, etc.

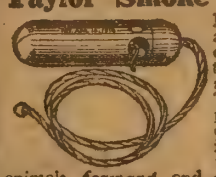
**Get Your Traps—Don't Delay**

Traps, like everything else made of steel, are going up constantly. Ours are low because we bought a tremendous stock before the advances. As long as they last we'll give you the advantage of low prices. But when we restock, we'll have to charge higher. So act immediately! Get everything you need at pre-war prices! Here are

Taylor
INTERNATIONAL FUR EXCHANGE

**BARGAINS**

**Taylor Smoke Torpedo**



For smoking animals out of dens. Employs the *only correct principle.* Torpedo is pushed to back of den on flexible wire cable, thus forcing animals *forward* and *out*—instead of suffocating them in den as when smoke is forced in through entrance with ordinary smoker. Uses smoke cartridge which lights instantly. No trouble—no fuss. Weight only 1 lb.—easy to carry. Outfit complete comprises the torpedo, 10 feet flexible cable and 12 smoke cartridges. Price, complete postpaid.....$2.00

**Waterproof Match Box**



Absolutely water and moisture proof. Always easy to open. Lasts a lifetime. Heavily nickeled to prevent rusting. Convenient size. A dry match when you want it—sure. Price, postpaid .....25c

**F. C. TAYLOR FUR CO.**
International Fur Exchange
891 Fur Exchange Bldg.
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F. C. TAYLOR FUR CO.
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Please send me FREE your "Book of Traps," showing American fur-bearing animals in colors.

Name .....

R. F. D. ..... Box .....

Town ..... State .....


# Thirty Herds Testing

Professor Woodward, head of the dairy department of the Washington State college, reports that at present about 30 herds in the state are doing official or semi-official testing. The number of Jerseys on official test is larger than that of any other breed, with Ayrshires and Holsteins about equal.

Since Mr. Woodward has been with the college he has systematized official testing until it is now believed to be on a more nearly perfect system in Washington than in any other state in the union. H. M. Coleman, who for three years was superintendent of official cow testing work in Nebraska, came to the college in that capacity March 1, and to him Professor Woodward largely gives the credit for the excellent condition of the cow testing work in this state.

Up to July 31 there had been 1471 two-day tests of all cows; 91 seven-day tests, one 14-day test, one 21-day test, 30 30-day tests, four 60-day tests, one 90-day test, three 100-day tests. There were 20 retests to verify high production. The Waikiki herd has the largest number of Jerseys on test—63. The Clise and Van Tassel herds of Ayrshires and the Hollywood and Carnation Holsteins are the largest herds of those breeds doing official testing. Some months there have been as high as 40 herds on test.

Mr. Coleman says he was agreeably surprised at the number of small breeders doing official work, and feels that there is a great future for the dairy business of Washington. H. A.

**Anyway, He Appreciated It More.**

"My poor man," said the sympathetic prison visitor, "just think, if you hadn't gone wrong and broken the law you might now be enjoying the sunshine and the breeze of the great outdoors."

"Mebby so, mum," said the luckless yeggman. "But I gits three tollerbly square meals a day here, clothes to wear an' a place to sleep. That's more'n I got a lot of times when I wuz enjoyin' th' sunshine and the breeze of th' great outdoors."—Birmingham Age-Herald.

**They Never Heard of It.**

"What's wrong now? The district attorney is sending for books, the judge seems up in the air and the jurors down and out."

"A new point of law. The prisoner says he committed the crime under the irresistible influence of the cosmic urge."

**FARM SERVICE FLAG.**

Honorable David F. Houston, Secretary of Agriculture, Washington, D. C. Dear sir:—The "Washington Farmer," Spokane, Washington, together with the "Idaho Farmer" and the "Oregon Farmer," suggested some time ago a farm service flag intended to stimulate essential war-time activity in food production. It is now used to a considerable extent in the Pacific northwest.

I believe this to be a very appropriate and very useful emblem and one calculated to accomplish the object for which it was designed.

Yours truly,
E. A. BRYAN,
Commissioner of Education,
Boise, Idaho, Oct. 16, 1918.




**Get The Most Money For Your Raw FURS**

The money you get out of your furs depends upon the grading. When you ship us a No. 1 skin, you get paid for a No. 1, not for a No. 2. We absolutely guarantee to pay exactly the prices we quote. Positively no commission charged. We pay all express charges, and refund postage on mail shipments. We refer you to any bank in the U. S. as to our responsibility. Write for Price List.

**JOSEPH ULLMANN, Inc.**
(Established 1854)
Dept. N. 51, Cor. 5th and Rosabel Sts., St. Paul, Minn.




*"My, what a relief!"*

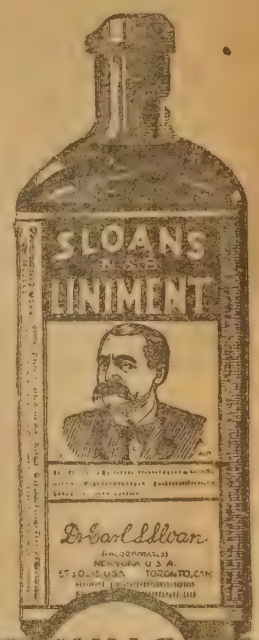
THAT *rheumatic twinge* doesn't bother you long after you've had the aching part bathed with the old standby—Sloan's Liniment.

You just put a little on—it doesn't stain the skin—gently pat it, and it penetrates, sending a *warm, soothing glow through the tortured part.* Soon the pain eases down and you feel that warm, comforting, tingling relief for which Sloan's Liniment is regularly used by hundreds of thousands of families.

It stands alone in promoting quick relief from *after-effects of exposure, lumbago, sciatica, muscle* and *joint strains, pain strains,* and *stiffness, neuralgia, bruises.* There's a successful record of 37 years back of Sloan's Liniment.

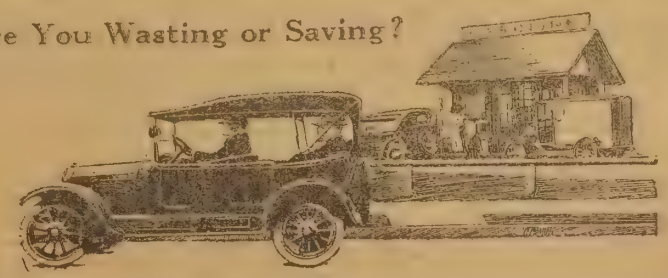
Keep a big bottle ready for use—it may be any minute. The big bottle holds six times as much as the small one, so get the most for your money.

Save-Buy-
W.S.S.
WAR SAVINGS STAMPS
ISSUED BY THE
UNITED STATES
GOVERNMENT




**Sloan's Liniment** KILLS PAIN
The World's

Are You Wasting or Saving?



**Is Your Motor Producing or Consuming?**

Thousands are running old cars this winter as a necessary measure of loyalty and economy. But it is not necessary to put up with an old car's loss of power and waste of gas and oil.

Renew your old car's power—stop its waste of gas and oil—check its carbon troubles—make it economical transportation by installing a full set of

**McQUAY-NORRIS**
**LEAK-PROOF**
**PISTON RINGS**

They repay their cost many times over in saving gasoline and oil. They increase power, reduce carbon, save trouble, delay and expense.

Send for FREE Booklet—"To Have and To Hold Power"—a simple, clear explanation of piston rings, their construction and operation.

McQUAY-NORRIS
Superoyl
RINGS
A special ring for engines that pump oil. Used in top groove only of pistons to control excess oil, with McQuay-Norris LEAK-PROOF Rings in the lower grooves.

Your dealer can get you any size or oversize quickly. Over 300 jobbing and supply houses in all parts of the country carry complete size assortments. If you have any difficulty getting them, write us.

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2837 Locust St. St. Louis, U. S. A.


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# A CROOKED TRAIL—By Lewis B. Miller

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A story of a thousand-mile saddle trip up and down the Texas frontier in pursuit of a runaway ox.

**SYNOPSIS.**

Travis, a lad in his teens, lived on the Texas frontier in the days when Texas was a wild, unsettled region. One morning before daylight he started out to bring in the yoke of oxen for a day's plowing, but one of them was gone. He caught his pony and started to search for the stray. Going a little and a little further hour after hour, he continued until night caught him several miles from home with a tired pony, a borrowed saddle and lariat and little for himself or his dog to eat. A rabbit and wild turkey eggs served the purpose, and morning saw him again in pursuit of the ox after a night of disturbance by a mountain lion and marauding hounds. The next night he spent in the cabin of a crazy sheep herder who believed that cattle men were trying to kill him. He made the night hideous by his crazy ramblings and songs in the moonlight, and Travis was glad when the opportunity came to escape from him, and fall in with new friends, Frank and Stella Booth, at their farm home a little further on. The three young people became much interested in each other because of common plans for attending school the following year. It was here, also, that Travis got his first definite clue to the whereabouts of the stray steer. Together the two boys set out to hunt him, but he was farther away than they suspected. Startling adventures were in store for them, among the first of which was a night in a "haunted" house, the principal haunts being wild animals. The next day they found the stray ox, but suddenly a wall of water from a furious storm rushed down the river between them and the animal.

## CHAPTER IX.

### Water-Bound on the Cowhouse.



N swept the wall of water, resistlessly, raging in its might and fury. We watched it with fascinated eyes. Soon it had rolled by, and not long afterwards it disappeared around a bend below. Behind it the river was a mad torrent.

"I'd heard of walls of water before, but that's the first one I ever got a glimpse of!" cried Frank. "I wouldn't have missed it for a ten-dollar gold-piece! A regular water-spout must have turned loose somewhere above here last night."

"Well, we're completely cut off from our cattle."

"That's just what we are," he replied. We stood gazing across the dark, angry river toward where the three objects of our search had stopped in the shade of a big tree and were unconcernedly chewing their cuds. "So near, and yet so far! Isn't it tantalizing?" he exclaimed.

"Tantalizing's no name for it, Frank. Why did we gab so long with that bearded fellow? Five minutes sooner we could have forded this stream easily. Now the only way to cross is to swim."

"Excuse me from swimming that river today, if you please."

Dismounting and hitching our horses to bushes, we walked down the road to the water's edge. The river, we soon discovered, was rising very fast—a foot every four or five minutes. Vast quantities of driftwood kept floating by, bobbing up and down furiously. Brush, logs, trees, rails, cornstalks and similar objects half hid the troubled bosom of the stream. Evidently the valleys and valley-farms above were already flood-swept. Several wash-tubs went hurrying by, as if running away guiltily from their accustomed drudgery.

So fast did the water climb that it kept us retreating up the bank before it. An army of lizards, spiders and other creeping things, routed from under stones by the advancing flood, were also making a panic-stricken, disordered march up hill.

"Rise fast, fall fast. Soon up, soon down," observed Frank.

"But it won't be fordable before morning," I told him. "And no telling how many miles more old Lep and your yearlings will put behind them by that time."

"Can't be helped, Travis. No ferry-boats along here, I guess, and they wouldn't dare run if there were any. So there's no chance to get across till this big rise runs out. We might as well go into camp and possess our souls in patience."

"Just watch Lep looking across at us," said I, a little later. "I half believe he's laughing to himself over the shabby trick the river played us."

"Waitin' to get across, are you, boys?"

We turned quickly. A man was standing on the bank above.

"Yes. And we seem likely to have a long wait of it," I answered, grumblingly.

"Where you bound for?" the man wanted to know.

"We're bound to catch those three cattle over yonder, as soon as the river gives us permission," Frank replied.

The settler came down, and we three stood together discussing the flood. He lived half a mile above.

"Well, boys, let's go to the house," he soon invited hospitably. "You're not likely to get over today, and maybe not tomorrow. Come up and stay with us."

"Much obliged to you, sir," replied Frank, "but I think we'd better camp here somewhere. We want to keep an eye on those cattle over yonder."

Lep and his followers were lying down now, in the shade. From time to time the spotted fellow would turn his head and gaze across at us with mild curiosity.

"Won't do a bit of good to watch 'em," the settler answered. "If they want to pick up and mosey on, you can't help yourselves."

"No, that's what hurts," I admitted, in an irritated tone. "If we just had that old spotted rascal tied to a tree over there, we wouldn't mind waiting."

"The settler looked thoughtful. "Tell you how we can work that," he said, presently. "See that house on the hill yonder? Jim Edwards lives there. He's got a calf-pasture of 10 or 15 acres. If we can catch sight of 'im, we'll motion 'im down; and then if we can once make 'im understand, he'll look after your cattle for you. Clever fellow, Jim is."

That seemed an easy solution of the difficulty, and we gladly walked down with Anderson—that proved to be our settler's name—till we were opposite the house. It stood two or three hundred yards back from the river. But, as it happened, both Edwards and his wife were on the farther bank, viewing the fast-swelling flood.

The river was still roaring loudly, and not till the three of us had nearly torn our throats shouting did we succeed in making the people on the other bank understand what was wanted. But when once the man did understand, he readily agreed to hold our cattle in his pasture till we could cross over and get them.

As we three walked back toward the road, Edwards walked up the south bank to where the cattle were lying. Driving them up, he started off with them and we watched till they had all disappeared among the thick timber of the bottom-land.

"Thank goodness, we've got them safe at last!" I exclaimed. "Now we can rest easy till the river runs down."

Frank and I proposed to camp near the road; but Anderson insisted that we at least go up close to his house to camp.

"I see another cloud getherin' up t'wards the head of the river. If it keeps on rainin' up there, you may have to hang around here several days."

So, leading our horses, we walked up with him. But we stopped under a big live-oak on the river-bank. Here we established our camp, where we could keep watch over the stream's rising and falling. Anderson invited us to the house, which was very close by; and when we declined with thanks, he urged us to take our meals there. We assured him that we still had plenty to eat, but he made us promise to come over for supper.

I was on the point of asking him if he could lend us some fish-hooks to while away the time with, when he remarked:

"I've got to go to grubbin' myself. Got half a dozen big live-oak thickets up yonder above the field to dig out, and this wet weather is the best time to do it. Want to put in several acres of new ground by spring. I've been tryin' to hire help. I've set three or four men to work, but they don't stick more than a day or two. Grubbin' is the hardest work in the world, I guess; and rootin' up live-oaks is the hardest kind of grubbin'."

This interested me. Idleness was something I was little accustomed to. And, incited by my empty pockets, I was especially eager to earn some money for traveling expenses.

"Here's a boy that won't shy off from live-oaks," I told him. "I've been clearing ground, off and on, for about a year, and I'm up to the work. What will you pay me to grub for you while we wait?"

"All depends on what you can do. If you can clear as



"How long have they been gone?" I yelled.

much land as I can, I'll give you a dollar a day and board. Of if you'd like to grub by the job, I'll give you so much for a thicket, accordin' to its size."

"Frank, you can look after our camp, can't you? I left home without a cent; and I didn't have any money there to speak of. I'd like to earn a little while we're water-bound here."

"Wouldn't mind turning an honest dollar myself," replied Frank. "I'll go up with you."

After unsaddling our horses, and lariating them out on the grass, we hung all our things on live-oak limbs, out of reach of the hogs running about. Then we went out to the house, where Anderson armed us with a mattock apiece.

The land to be cleared was a prairie valley, spotted over with big live-oak thickets.

"I'll give $5 to have that one grubbed out," the settler remarked, on coming to the first thicket.

"Show us something smaller," I said. "Put us on one that we can clean out by noon tomorrow."

"Why not pitch into this, Travis?" spoke up Frank. "It won't take us a great while to finish it."

"But our cattle—what can we do with them while we're working?"

"You can cross over in the mornin' and get 'em, and keep 'em in my pen," suggested Anderson. "I ain't got any pasture fenced, but there's planty of cotton-seed and green corn you're welcome to feed 'em."

"That's good enough!" I assured him. "Now to work!"

We were soon swinging our mattocks; and slowly, very slowly, the live-oak bushes went down before them. The hail-storm, though miles from here, had cooled the air, but before long our faces were wet and dripping. All the rest of the day we stuck to our hard task.

By noon the river had risen 25 or 30 feet. It was flooding all the bottom-land on the other side, and the lower part of the valley we were at work in. But not long afterwards it began to run down, dropping more slowly, however, than it had come up. Just at nightfall, when Frank and I walked down to the road to examine it, there seemed good reason to believe that it would be fordable by morning. But a black cloud was piled up in the northwest, and all night long the electric fires flashed and flamed in it. And when morning dawned we were not greatly surprised to find the water higher than on the night before. And it kept crawling up.

So Frank and I went on with our grubbing. We took our meals at Anderson's, and worked early and late and hard. By the second night we had finished our thicket; and very promptly we received our money.

"Now guess I won't have to beg stamps and postal cards when I want to write home," I remarked, as I pocketed my two dollars and a half, and felt much better for having it.

The weather was fine here, but up the river rain kept falling daily, and one flood followed close on another's heels. One night, I am pretty sure, the water fell low enough for deep fording. But by morning it was booming again.

Once we went down to the point opposite Edward's house, and beckoning him to the river, we inquired about our cattle. He shouted back that they were still in the pasture, with an abundance of water and grass, and that they could stay there a month or two longer, if necessary. Then we returned to our work.

Having finished our first thicket, we spent half a day fishing, then started in on another and larger thicket. This was a longer job, but it paid us a dollar apiece more than the first one.

During this time we had written letters home and sent them to the nearest postoffice by one of Anderson's neighbors. In them we explained that we had overtaken our cattle and had them safely fenced in; and that we expected to start home just as soon as the high water would let us cross over and get them.

After finishing our second thicket, we tried fishing again, then came back and took a contract to grub up a third thicket. We had now been here a whole week, and still the river was too deep to ford. But as we were making fair wages, and had no anxiety about our cattle, that did not worry us greatly.

One night, however, we went to the house to find some news awaiting us.

Anderson's little boy, who had been down the river fishing, came running home to tell his father that Edwards had shouted something across to him. All that the little fellow could understand was the word "cattle."

"Boys, that must be something about your big steer and the two yearlings," Anderson said, turning to Frank and me.

We both agreed with him; and soon we were all hurrying down to see if we could get in communication with Edwards. For some reason a strange misgiving kept tugging at my heart. Edwards was still on the river-bank, and we quickly learned what he had to tell us.

Our cattle, he shouted across, were out of the pasture and gone. He tried to explain how they came to escape, but that we failed to understand. However, it made little difference.

"How long have they been gone?" I yelled.

"Since night before last," came back, rather faintly.

I was thoroughly angry at Lep. "The tricky old scoundrel! Can we never get hold of him?" I exclaimed, hotly.

"He seems pretty hard to put your fingers on," observed Frank, rather glumly for him.

"That settles it!" I declared, as the three of us walked back through the gathering dusk toward Anderson's. "No more hanging around here for me! I've got to get across this river first thing tomorrow morning."

"But how can we cross, Travis?" protested Frank. "The river is as high as ever, and as dangerous as ever. I don't see anything to do but cultivate patience and wait."

"Wait!" I exclaimed, impatiently. "Frank, if that old longhorn had your hopes of getting an education tied to his tail, as he has mine, and a lot of other things with it, the very word wait would drive you frantic. No, we've waited too long already. I've got to cross somehow, and strike out on that old rascal's trail, if I have to swim over and then foot it. Once let him get another long start of me, and I might as well sing, 'Good-by, Lep!'"

(To be continued.)

# SIDELIGHTS

### She Knew Her Husband.

Master—And so you're the new maid. Has my wife told you your principal duty here?

Good-looking Maid—Yes; I am always to keep out of your way.

### He Got the Oyster.

Bill—I was down to the oyster supper at the church last night.

Gill—That's nice.

Bill—And I found two pearls in the oyster stew.

Gill—No! Really? I didn't know they ever found but one pearl in an oyster.

### Absolute Obedience.

When Elsie came home from a neighbor's house munching a chocolate, her mother said reprovingly.

"Now, Elsie, how many times have I told you not to ask Mrs. Gray for chocolates?"

"I did exactly what you told me to do, mother. I didn't ask her," replied Elsie. "I know where she keeps them."—Ladies' Home Journal.

### Of Course.

"Come on" said the first flea as he hopped from the brown bear's left foreleg, "come over and join me in a short game of golf."

"Golf!" exclaimed the second flea, hastily taking a bite of hyena. "Where in the realm of Barnum are we going to play golf?"

"Why," said the first flea, "over on the lynx, of course."

### A Canny Scot.

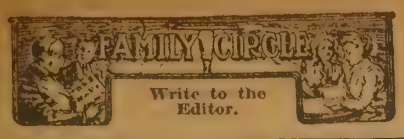
Sandy and John were sitting in a car when a pretty girl got in and smiled at the former. He raised his hat.

"Do you know her?" asked the Englishman.

"Oh, yes, very weel," the Scot replied.

"Well, shall we go and sit over beside her, and then you can introduce me?" asked his companion.

"Wait a bit," returned the canny Scot. "She hasna paid her fare yet."—Pittsburg Chronicle-Telegraph.




ALICE W. BARLAND, Editorial Contributor.

# Doughnuts and Duty

By CHARLES DILLON.

Farm mothers in every part of America will smile over this pen picture: A soldier stands at the door of a hut behind the lines in France. A girl in the service uniform of the Salvation Army—lassies, they are called—is rolling out dough for pies. He saw the appetizing fabric placed in the tins and slid into the waiting ovens. He was big, ruddy-cheeked, husky son of America, a product of the farmland, with a clear brain, a clean mind and a mighty well-regulated stomach. As he watched the girl at the dough board his thoughts went back to his home, and that, of course, meant to mother. "Fine pies," said the boy, with a catch in his throat. "They make one think of home. Wish I was home today."

But the girl was doing more than make pies. She was making doughnuts—which is a very important job at the front—and every time she handed one to the farmer's son or to any other soldier of the allies she was taking the mothers' kitchen and the heart of home itself right into the trenches. She was keeping alive the love of home and the longing for it, and when a chap's heart is filled that way—remembering mother—why, war can't brutalize him. He may be homesick, but he'll be gentle.

Not so trivial as you might suppose—this scene in the kitchen in France. Millions of men on the battlefield and training for it are fighting homesickness with as much zeal as they are fighting the Hun. It is largely to save the waste of fighting strength by abolishing homesickness that the Y. M. C. A., the National Catholic War council, the Jewish Welfare board and the Salvation Army are all taking home atmosphere along with the men of the army and navy going to training camps and overseas; the first object of the American Library association, which has already collected 3,000,000 books, is not so much the education of the boys as it is to give them something that will occupy their leisure hours and help them forget for a time the errand on which they have left home. The war camp community service gives its entire attention to just this issue while the boys are training in this country.

It does seem far-fetched, especially for a civil war veteran, to be talking about doughnuts and books and comforts of many kinds. But the great leaders of men, generals who know a lot about such things, say the war would be lost without them. We are not "winning the war" with doughnuts and basket ball and moving pictures. We are creating, with these things, the mental state, the morale without which the armies would fail. Help us to get the money—$170,500,000—to keep up the work here and overseas. Help the united war work campaign in its great job of keeping your boys clean and satisfied and ready for the home-coming day.

# Learn to Be Happy

By Ida C. Young.

No person can be said to be truly successful if he has not achieved great and lasting happiness for himself. For the key to happiness is in the hands of every responsible individual, and he who has not learned to use it in the opening of doors that lead to greater and greater joys must asknowledge himself at least partially defeated.

Perhaps it is because it is so easy, this principle that never fails to work, that people continually pass it by and strain and struggle against adverse and foreign forces that keep them beaten back and discouraged. For it is only the simple and easy matter of learning to pray in the right way—learning the lesson of service, the giving freely and gladly of the very best that is in us to every known duty nearest at hand. It may be only the baking of a modest pan of cornbread, or the mending of worn garments, the digging of ditches or hoeing of corn. It may be any and all of the endless round of recurring duties that make up life's plan. There is no person living whose work does not touch others, and just so far as the worker adds to the actual improvement of his work and of those whom his work touches, so far has he advanced upon the way of real happiness.

Then if he has learned to pray so that his prayers are answered he will know for a certainty that no man nor company of men, no government nor system can in any way lessen his comfort and well-being. He may make some miscalculations to begin with, and pray for something he really does not want, but one learns with practice and as the habit of prayer grows and man gets nearer and nearer to the divine spirit the things prayed for approach continually nearer to the ideals of perfection.

Humanity has so long looked upon this life as a vale of tears and a bloody battle that it takes considerable reconstruction to change the viewpoint of the average person and enable him to incorporate into his plan of life this principle that was lost when humanity was young. However, there are among us today continually increasing numbers of those who are succeeding in putting into actual practice this marvelous thing. Humanity is slow to learn, and it has taken all the time from the day of Christ for this wisdom to become an assured fact, but from now on people are going to learn faster and faster; for more and more man is learning that his brother can not save him from danger, his father can not save him, nor his mother nor his sister. Even the powers of his own government are futile. Only at his own hands as he observes the power of prayer, faith and service can man ultimately achieve perfect peace, health, prosperity and happiness.

Then let us be happy; even though at times it may seem as if apparent calamity sweeps the whole sum and substance of our earthly happiness out of existence we surely know that somewhere in the wreckage is a stepping-stone to higher and better joys than we ever knew before.

## THE CHILDREN'S REST HOUR.

By Elizabeth Quaker.

In these strenuous days of junior Red Cross duties and school work the older children need and should have a daily period of relaxation.

They are being trained in mind concentration; parents should see that they learn to rest as well, lest the weak nerve-organization be overtaxed.

This relaxing, or "letting up" may be accomplished in any of several ways. For instance, a change of occupation. Here is where the country children score one over the city youth. What's better to relieve the nervous tension of school than the chores awaiting them when they get home? Cows to bring from the pasture, eggs to gather, anything that affords light exercise in the fresh air.

Outdoor games, just as long as the weather permits, should be encouraged. Let the older girls join these games, better a tomboy than a lady-like invalid.

When the weather is damp and days grow too short to allow time for outdoor games, this relaxation may be taken in form of indoor games, light reading or pictures and music, instrumental or vocal.

With the playing of games often comes the request for "something new." I am prepared for this. When in my reading I find the description of a game or contest with directions for playing, I clip it out and place in a large envelope kept for that purpose. When a new game is desired I simply refer to my envelope.

I keep all the simpler handicraft for boys and girls which I find described in my different magazines in another large envelope. These are very handy on rainy days or for convalescents.

A well-established children's hour in which the whole family joined would leave less demand for nerve and insomnia cures among the old folks.




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# PATTERNS

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2253—One-piece dress for juniors. Cut in 3 sizes: 12, 14 and 16 years. Size 14 requires 4 1-2 yards of 36-inch material. Price, 10 cents.

2296—Lady's dress. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 38 requires 6 1-4 yards of 36-inch material for the dress and 1 1-2 yards for the jumper. The skirt measures a little over 2 yards at the foot. Price, 10 cents.

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2472—Girl's set of undergarments. Cut in 6 sizes: 2, 4, 6, 8, 10 and 12 years. Size 8 requires for the waist, 7-8 yard; for the bloomers, 1 3-4 yards; for the petticoat, 1 5-8 yards of 36-inch material. Price, 10 cents.

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# Sweets From Orchard

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**Apples and raisins**—Simmer raisins in the water in which they were soaked overnight; add quartered apples and simmer together until done.

**Apples and bananas**—Quarter fruit and place in a baking pan; dot each layer with butter and chopped nuts; bake in a quick oven, basting frequently with a sauce made of a half-cup of water, a tablespoon of white syrup and a little lemon juice.

**Baked pears**—On baking days, try baked pears. Place pears in deep baking dish; cover closely and bake slowly until pears are a deep red.

**Steamed pears**—Steam pears until tender with a little water and a tablespoon of white syrup.

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At all grocers. Crescent, 25c a pound.
Crescent Mfg. Co., Seattle, Wash.
(B347)




Your guarantee of real winter underwear satisfaction
HANES
This label on every garment. Buy none without it.



GUARANTEE
We guarantee Hanes Underwear absolutely—every thread, stitch and button. We guarantee to return your money or give you a new garment if any seam breaks.

PUT the fleecy warmth of Hanes Heavy Winter Weight Union Suits or Shirts and Drawers next to your skin—and, you're fit to face the stiffest blast the North can let fly! Get the friendly hug of the elastic knit, long-fibre cotton, and prove how perfectly Hanes gives-and-takes with every body movement!

Realize what Hanes offers you *at a popular price:* guaranteed unbreakable seams; elastic tailored collarette that cannot gap; pearl buttons that are sewed on for keeps! And, behind them all stands Hanes workmanship—perfect knitting, tailoring and finishing—an unbreakable combination!

Greatest winter underwear sold at popular prices:
Shirts and Drawers HANES Union Suits
ELASTIC KNIT UNDERWEAR

Illustrated above are Hanes Shirts and Drawers—for many years the American standard at popular prices! Note the snug-fitting, three-button, sateen waistband.

**Greatest underwear for boys!** Hanes Boys' Union Suits exceed in quality, workmanship and service any boys' underwear we have ever seen. They combine the features of men's union suits with the cosiest warmth.

If your dealer does not have Hanes, write us at once.

P. H. HANES KNITTING CO., Winston-Salem, N. C.
New York Office, 366 Broadway

*Warning to the Trade—Any garment offered as Hanes is a substitute unless it bears the "Hanes" label.*




Address all letters to Aunt Nellie, care of The Washington Farmer, Spokane, Wash.

One of our cousings lives by the beautiful Palmer lake, and she wishes the other cousins could be there to fish, bathe and boat ride with her. She is Edna Hodges, of Loomis, and she loves to read all the little letters. Her birthday is July 14. Edna loves to go to school. For playthings she has two dolls, a nice set of dishes and cooking sets. She has lots of tea parties. Some dear little orioles have built a nest in a tree in their yard, and Edna and her brother watch them feed their little ones.

A swimming pond in the creek near the back door makes lots of fun for Malvina Bonner of Rockford. Malvina lives in a log house and goes to the Lone Pine school. Guess what she has for pets. Three dear little chipmunks.

Velma Johnson of Box 93, Dixie, was 12 years old July 3. She wants a twin. Velma likes the Corner letters, and she belongs to the Red Cross.

Laura O'Shaughnessy of Hunters was 13 years old last March 10, and is in the sixth grade. Laura gets the Farmer and loves to read the letters. She lives on a 160-acre farm, and has five brothers.

Esther Jensen, who lives on a 280-acre farm near Kittitas, was 13 years old December 30. She has one war savings stamp and six thrift stamps. She joined the Junior Red Cross and made two handkerchiefs for the hospital. Pussy, the cat; Teddy, the kitten, and Shep, the dog, are her pets. She planted a garden of popcorn, cabbages and cucumbers this summer. Esther is going to write again.

A Junior Red Cross member, Meldon Belknap, of Farmington, lives on a 160-acre farm. He was 10 years old July 21, and is in the sixth grade. He has two brothers and two sisters.

Little Lucille Feenan of Colfax is 7 years old. She has a sister. On their farm they have 50 little ducks, 95 chickens, a little cat, 102 hogs, some guineas and a pony.

Yellowed-haired, blue-eyed Orleana Easterling of Winthrope goes to Bear Creek school, and is 12 years old. She has four sisters and one brother. The week before she wrote to us she spent in hoeing the garden.

"Brother is in the quartermaster's corps of the army," writes Anna Chambers of Sunnyside. Anna was 10 years old February 5. Her father has a car. When Anna wrote to us her brother and mother were visiting in Nebraska. Anna likes to live on a farm. This summer she weeded beets and earned $3.75, with which she will buy thrift stamps.

A cousin, whose home is near Mead, and whose last name is Chalenor, writes to us. He or she is 7 years old, and is in the third grade, has two dogs, two pigs, one cow, three cats and lots of chickens.

"Brother Joe is at Camp Lewis," writes Lillian Litzenberger of Colfax, a Junior Red Cross member. Lillian has three war savings stamps and two thrift stamps. She was 12 years old March 14.

One reason why Stella Lambert is so anxious to buy war savings stamps to help lick the kaiser is that she has two brothers in the navy. Stella lives at Waverly, and will be 15 years old December 31, the last day in this year. Frances Lambert is almost her twin, and Stella wishes she would write to her.

"Cecil Barnett is almost my twin, there is just five days difference in our ages," writes Elsie Butts of Benge, who will be 12 years old November 18. She would like for her twin or some one else to write to her. She has one sister named Velma.

This cousin has a lucky birthday because she has had letters from three Corner girls, two of whom were one day younger than she is and the other one the same age, and then she found another twin when looking over the Corner. Elizabeth Green of R. F. D. 3, Odessa, was 14 years old March 8. She has seven thrift stamps, and is going to save all the money she can to get more. Lake creek runs through their farm, and so they call their place Lake Creek farm. Elizabeth is going to high school this term in Spokane.

Alice Graham of Rocklyn went on a vacation to see her sister 10 miles from Tekoa. Alice has some paper dolls and a real doll. The sister she visited has two kittens, one dog, one calf, three cows and a lot of horses. Alice goes after the cows.

A 200-acre ranch four miles from Curlew is the home of Ethel Copp, who will be 11 years old November 20. Ethel and her brother go to a white school with a green roof. One of Ethel's sisters is in high school, one is a teacher and another is studying to be a teacher.

Mary Alice Brooks of Cowiche would rather live on a farm than in town. Mary was 11 August 16, and she wishes her twin to write to her. There are about 200 pupils going to her school. Her chum is Helen Mehl. Mary is going to write again.

"My brothers caught two chipmunks which they call Skinny and Midget," writes Bertha Keck of Elk, who was 11 years old January 8. Bertha rides six miles to school in a wagon. She thought The Trappers of the Ozarks was a fine story.

Tessie Duffy of Midvale says her papa has been taking the Farmer for four or five years. They used to have three cows, Topsy, Boss and Dairy. They sold Boss, and Topsy got killed on the railroad track. Tessie rides Jim, a horse, to school in the winter. She helps mamma sew for the Red Cross, and she owns a $5 war stamp.

### Vacation on the Farm.

Dear Aunt Nellie: I hope the cousins and yourself have not forgotten me. I live in Spokane, but I came to stay with my aunt and uncle for the summer. They have seven boys. One boy, the biggest, is to go to a city to be examined to see if he is all right to go to serve Uncle Sam. My aunt has two girls, too. I am 10 years old. My birthday is June 25. I am in the five B grade at school. I go to the Hamilton school in Spokane. Have I a twin? I will tell about the farm now. The children have one dog, named Jack. There are three little pigs and three big hogs. There are 11 horses. There are three colts. There are three cows. The calf's name is Tom Thumb. The others are so small they are not named yet. There are 80 big chickens and 20 little chickens. There are 10 ducks and 10 geese.—Melba Hughes, R. F. D. 1, Wilbur, Wash.

### War Garden All Her Own.

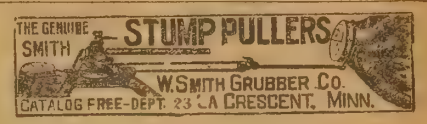
Dear Aunt Nellie: This is the first time I have written to the Corner. My birthday is November 27. Have I a twin? If so, will they please write to me? I have for pets a bird, a black chicken and a kitten. I am learning to tat. I have a war garden, all my own. —Edna Colyar, Box 24, Tyler, Wash.

During the last week Aunt Nellie has received letters from the following cousins: Laura Sandbring, Zelda Northcutt, Minola Stoller, Agnes Stoller, Edna Stoller, Irene Benner, Lillian Wendland, Lily Cromar, Frances Cromar, Lorena Bullack, Leila Bullack, Leona Dartt, Marie Newmann, Myrtle Golladay, Nellie Neel, Almeda Green, Virgil Smith, Gala Peed, Lela Detling, Lena Wietz, Ella Payton, Mary Davis, Evelyn Haworth, Mildred Range, Dorsey Shore, Gertrude Hough, June Campbell, George Farmer, Annie Croghan, Nancy Moore, Aubrey Le Plant, Dorothy Krug, Helena Reinbold, Melvin Hadford, Jerome Gottwals.





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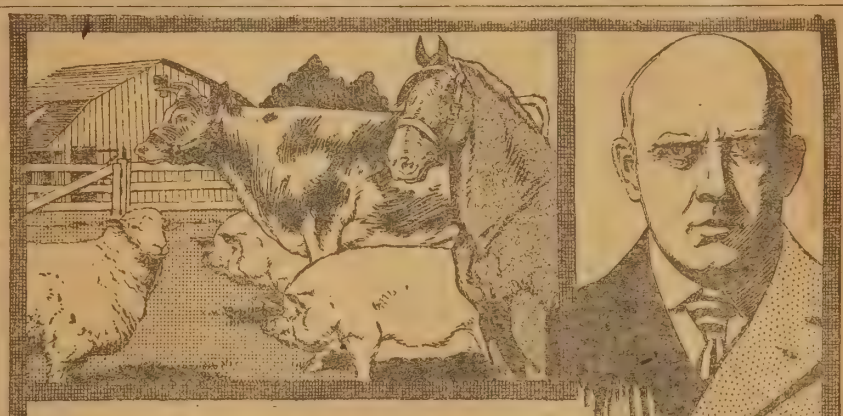


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Solar Light Co.
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Records sent parcel post prepaid to any address.
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Feed Your Hogs and Chickens for Larger Profits
BUTTERMILK
Two cents per gallon when reduced to original consistency.
MILKOLINE is a highly condensed buttermilk—each gallon being equal to 50 gallons of buttermilk.
Every Hog and Poultry raiser should feed buttermilk—this makes it possible.
WRITE FOR CATALOGUE.
T. E. HOPKINS
5516 Wallingford Ave. Seattle, Wash.



Don't Let Your Stock Lose their Summer's gain through November neglect

Your animals are now going on dry feed—hay and grain. It's a big change from the succulent, nutritious grasses of summer pastures which supply the needed laxatives and tonics.

Keep your animals' bowels open and regular—drive out the worms—keep their blood rich—keep their digestive apparatus in order—by feeding Dr. Hess Stock Tonic.

A Conditioner and Worm Expeller

Don't allow your stock to "get off feed" and in a rundown condition. Dr. Hess Stock Tonic eliminates waste and gives appetite, good health and good digestion. It enables animals to get the most benefit out of their feed.

Buy Stock Tonic according to the size of your herd. *Here's a suggestion for your guidance:* Get from your dealer 2 pounds for each average hog, 5 pounds for each horse, cow or steer, to start with, feed as directed and then watch results.

Why Pay the Peddler Twice My Price?

You buy Dr. Hess Stock Tonic at an honest price from a responsible dealer in your own town who guarantees it, and who refunds your money if it does not do as claimed.

25-lb. Pail, $2.50 100-lb. Drum, $8.00
*Smaller packages in proportion*

DR. HESS & CLARK, Ashland, Ohio

DR. HESS STOCK TONIC

Dr. Hess Poultry PAN-A-CE-A
Will Start Your Pullets and Moulted Hens to Laying

Dr. Hess Instant Louse Killer Kills Lice

# News for Breeders

The Oregon Pure Bred Live Stock association has adopted a resolution calling upon other live stock organizations to join with it in sending a delegation to Washington to work with the railroad administration for a reduced shipping rate on purebred breeding stock. The association urges similar action and cooperation on the part of the like organizations of Washington and Idaho.

The American Shorthorn Breeders' association, Chicago, desires to make a complete list of all local, county, district, state and interstate Shorthorn associations, and asks that such associations report to Secretary F. W. Harding the name of the association and the name, also, of the secretary. It is desired to have this information in hand as early as possible, and a prompt response will be appreciated.

The influenza has resulted in the postponement of many live stock sales throughout the northwest, thereby working an additional hardship on the stockmen who have announced dates and advertised their sales. All prospective buyers should watch carefully for the announcement of the new dates. This paper will gladly make announcement of such new dates if those holding the sales will send them in.

### BREEDERS FEEL ENCOURAGED.

Two years ago a carload, or about 30 head, of registered Jerseys was brought into the Colville valley, in Stevens county, Washington. About the same time a Jersey association was formed, with Harvey Skeels president and George Lewis secretary. Mr. Skeels reports that there are now about fifty purebred Jerseys and that breeders generally feel encouraged, in spite of two bad seasons.

### READY FOR SHORTHORN SALE.

By Frank Brown, Carlton, Ore.

The Shorthorn sale to be held during the Pacific International Stock show at Portland should attract the attention of every breeder and lover of the noble red, white and roans. They are the cattle that make good in every state of the Union, and they are the breed that is profitable for either the big or the small farmer, while the demand from the range man for Shorthorn bulls can not be supplied.

The consignments this year are from the leading breeders of Oregon, Washington and Idaho and will compare favorably with the best that has been sold in former sales.

At the 1917 Shorthorn sale there were cattle good enough to attract the attention of some of the best eastern breeders, and they were purchased by them at top prices; it is pleasing to note that some of these cattle that went east have been on the show circuit at the leading shows and have been well up in the winnings at every show. This class of cattle should be more appreciated by the breeders of the northwest, and they can be purchased more reasonably here than in the east.

We are offering at this sale a very select lot of breeding cows and young heifers, and they are sired by bulls that took lots of money to bring them west. Some high class bulls are consigned; they have individual merit and breeding combined and should prove high class sires.

Catalogs will be mailed on request by writing Frank Brown, sales manager, Carlton, Ore.

### KEEPS ON WINNING.

Topsy 4th, the Shorthorn heifer for which Day & Rothrock received $1775 at the Pacific International sale at North Portland last winter, has had a successful season of show winning again this year. It will be remembered that Topsy, as a senior yearling, was junior and grand champion at all the fall fairs and at the Lewiston and Portland shows. That she has kept up in good form for another season and is still a great show animal is proved by the fact that in the Indiana, Illinois, Ohio and Kentucky State fairs, she stood fourth at each, in strong competition, and closed the season at the Tennessee fair by winning first in class, senior and grand championship.

The pride of northwest Shorthorn men lies in the fact that Topsy 4th is strictly a northwest product. She was sired by a bull of W. O. Minor, breeding out of a cow of Alex Chalmers breeding, and was dropped on the breeding farm of Day & Rothrock, where she was developed by that prince of herdsmen, Jack Napier. H. A.

### SALE DATES ANNOUNCED.

The new dates for the Shorthorn and Hereford sales at the Lewiston show have been announced as follows: Shorthorns, December 2; Herefords, December 3.


## Get Guernseys

If you want to increase your dairy profits you need to know about the cows whose average production, under test supervised by state agricultural colleges, is three times as great as the average of all dairy cows in the United States. Ask for "The Story of the Guernsey."

THE AMERICAN GUERNSEY CATTLE CLUB.
Box W., Peterboro, N. H.

## ABERDEEN ANGUS

### Aberdeen Angus Cattle

A. H. EAGLESON & SONS,
Boise, Idaho.

## JERSEY CATTLE

### Ashwood Farm Jerseys

Senior herd bull, Holger, whose daughters are qualifying for register of merit in six months. Junior herd bull, St. Mawes of Ashwood, a son of Poppy's St. Mawes. Write us about your wants or come and see our herd.

McARTHUR & STAUFF, Rickreall, Ore.

## BERKSHIRE SWINE

### Kintyre Farm Berkshires

Weanling pigs, bred sows, service boars.

CLARK BROS, Yakima, Wash.

### Riverby Orchard Berkshires

Riverby Orchard Berkshires won 12 out of 15 first prizes at the Washington state fair, 1916, also many prizes, including grand champion sow at the Panama-Pacific world's fair. We offer for sale a few good boars and young sows.

D. C. BUNN, Prosser, Wash.

# Breeders' Department

## DUROC-JERSEY SWINE

### Golden Rod Wins Again

Our herd was largest money winner at Oregon state fair, 1918.

One excellent boar of breeding age, bred gilts and weanling pigs of either sex.

DOERFLER BROS., Silverton Ore.
A. N. DOERFLER, Mgr.

### QUALITY DUROCS

Breeding stock of all ages from prize winning stock.

S. D. CORNELL, Grandview, Wash.

### Duroc Jersey Service Boars

Weaned pigs, open and bred gilts of the best breeding. Write for prices.

GEO. DEBOK, Oregon City, Ore.

## AYRSHIRE CATTLE

### EDGEWATER FARM

Young stock for sale, including senior calf, Edgewater Sentinel, grand champion 1918 Washton state fair. Herd government tuberculin tested.

ELBERT M. CHANDLER, Burbank, Wash.

### DUROCS

THE GRAND CHAMPION SOW IS DEAD. We have a few of her pigs still for sale. Also fall litters, one of 17, from her prize-winning daughters. Priced right. Satisfaction guaranteed.

CRESCENT STOCK FARM. Johnson, Wash.

### FOR SALE

Choice young herd boars, old enough for service soon, sired by Richards Defender, Richards Pathfinder, and Victor Defender. Orders placed now for prize young gilts. They will be bred this fall to Idaho and Utah grand champion boars. Young pigs always for sale. Guaranteed to please.

V. R. FISHER, Oxford, Idaho.

### Otto's Jersey Lawn Durocs

The today's type and breeding bar pigs for November delivery, $25.

L. S. OTTO, Filer, Idaho.

FOUR DUROC GILTS BRED TO FARROW this fall, also spring pigs, on hand.

E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE. Yakima, Wash.

When you write to advertisers, be sure to say that you saw their advertisement in this paper.

# AUCTION SALE
## OF
# 60 Head Aberdeen Angus



PRINCE ADAM.

Bulls, calves and cows—fine, young stock, all of them, sired by Prince Adam, grandson of the great Prince Ito, famous $9100 bull who, before this year brought the highest price ever paid for a bull of the Angus breed. All cows sold will be rebred to this magnificent sire, Prince Adam.

## 15 HEAD PERCHERON HORSES

will also be offered at this sale—imported and American bred—and all registered with the Percheron Society of America. Every animal a fine, classy, outstanding individual.

## *Date of Sale — November 15, 1918*

TO BE HELD AT

# OHRMANDALE RANCH

**August Ohrman, Owner** **Phillipsburg, Mont.**

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W. H. COOPER.

Field Manager,
E. T. DAVIS.

## SEND FOR DESCRIPTIVE CATALOG

# Breeders' Department

## Von Heim Means World's Record Holsteins

SENIOR HERD SIRE—Colantha Sir Hartog (95459), sire of youngest 31-lb. cow in world and of world's champion senior 2-year-old for butter production.

JUNIOR HERD SIRE—Finderne Mutual Fayne Valdessa (174999), called by Holstein authorities "Best-bred Bull in the World." Write today for information about some fine young bulls and cows we are offering at attractive prices.



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**VON HEIM FARM**

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HOME of HIGH-TESTING HEALTHY HOLSTEINS

## The Hollywood Farm Offers Four Registered Holstein Bulls

Ready for Service. Well Marked.
Bred for Production. Straight on Top.

Their dams have official records of 28.19 lbs. 20.88 at 2 years old, 21.53 lbs., 17.49 lbs. at 3 years old.

The average of the official records of their 4 nearest dams is:

Bull No. 809, 7 days milk, 494.6 lbs., butter, 27.59 lbs.; average test, 4.5% B. F.
Bull No. 805, 7 days milk, 520.0 lbs., butter, 27.77 lbs; average test, 4.3% B. F.
Bull No. 801, 7 days milk, 502.6 lbs. butter, 26.62 lbs.; average test 4.2% B. F.
Bull No. 782, 7 days milk, 549.3 lbs., butter, 28.27 lbs.; average test 4.2% B. F.

To make room for our increase, these bulls are priced to sell. Consider the high feed prices and raise only high producing stock.

HOLLYWOOD, WASH. Near Seattle. HOLLYWOOD FARM.

### A Rare Chance to Head Your Holstein Herd

We still have for sale five prize-winning purebred males, ranging in age from eight to eighteen months. Weight six hundred to one thousand lbs. Pedigrees furnished on application. Address

THE INTERMOUNTAIN INSTITUTE
Weiser, Idaho.

### 365 DAY HOLSTEINS

We are offering a bull calf, born June 27th, the two nearest dams of which average 19,866 lbs. milk, 855 lbs. butter for their yearly A. R. records. One a Jr. 2, the other a junior 4-year-old. The herd with yearly records.

WESTERNWOLD RANCH, Prineville, Ore.

### Registered Holsteins

Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.

H. R. BOOMER, New Plymouth, Idaho.

### Bargains in Bull Calves

Sired by Segis Riverside Pontiac, that sold in Pacific International sale, 1914, for $1025, and whose dam has A. R. O. record of 31.47 lbs. butter in 7 days; 118.89 in 30 days, and big records all through his pedigree.

ERNEST JOHNSON, Scappoose, Ore.

### HOLSTEINS

Well bred young bulls for sale.

THOS. CARMICHAEL, Gaston, Ore.

## POLAND CHINA SWINE

### LOCUST HILL HERD

Big type and medium Poland China. Bred gilts and spring pigs of both strains, unrelated. Sixteen years a breeder of Poland Chinas in Oregon.

A. L. SWAGGART, Athena, Ore.

### Big Type Poland Chinas

Mouw, Fesenmeyer and Herring strains, either sex. Also registered Shorthorn cattle; good individuals.

H. J. HOWSER, Stites, Idaho.

### Poland China Swine

Strictly first class breeding stock for sale at all times at reasonable prices. Several very choice young gilts and one fine serviceable boar at a bargain; also young pigs, both sexes. (Everything registered free.)

C. B. COX. Mabton, Wn.

### Oaksdale Farm

Poland Chinas and Holsteins. Two fall boars at bargain prices for quick sale. A fine lot of early spring pigs. Best of breeding. A few well bred young bulls at very reasonable prices.

C. R. EVANS, Halsey, Ore.

### BIG TYPE POLAND CHINAS

Winners of first prize junior herd, Oregon state fair, 1918. Big Bob Wonder and Sammy blood boar pigs of all ages, also a few good gilts.

LOE FARMS, Silverton, Ore.

### Poland Chinas and Holsteins

Strictly big type spring pigs of both sexes. Well grown, good individuals, sired by A. Price. A few choice young bulls.

B. S. THURSTON & SON, Jefferson, Ore.

### QUALITY AND UTILITY OUR HOBBY

Poland Chinas our breed. Young stock from prize winning ancestry. Satisfaction assured.

FRANK NEEDHAM, Eugene, Oregon.

PURE BRED POLANDS.

Breeding stock of all ages. Will ship C. O. D., subject to approval.

HERBERT WILLARD, Dayton, Ore.

### BIG TYPE POLANDS

Genuine—Guaranteed.

GEO. W. BUCK. Oregon City, Ore.

MEDIUM TYPE POLAND CHINAS.

The money makers. Mine won at Walla Walla, first and second junior sow, champion and grand champion. Both sexes for sale.

P. H. THOMLINSON, College Place, Wash.

QUALITY HERD.

If you want to improve your herd, try stock from my winners at the Oregon state fair.

RAY J. FOX, Lyons, Ore.

## CHESTER WHITE SWINE

### REGISTERED O. I. C.

SWINE.

Choice weaned pigs. Will ship subject to approval.

RINGGOLD FARM.
J. H. West, Prop., Rt. 1, Box 15,
Centralia, Wash.

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### Romneys, Lincoln, Corriedale

AND HAMPSHIRE EWES AND RAMS.

All pure bred, not registered. Have especially fine lot Hampshire ewe lambs, yearlings and three-year-olds. Any size lot. Write me on any kind of sheep deal.

H. STANLEY COFFIN, Yakima, Wash.

### COVE STOCK FARM

Unrelated fall and spring Chester White pigs from prize winning stock.

ARCHIE CONLEY, Cove, Ore.

### Oxford Ram Lambs

All registered rams, including ram lambs sold, all yearling range rams sold. Could get one or two from another party. Still have a nice bunch of ram lambs for general trade.

FISK FARM, Spring Valley, Wash.

### Chester White Swine

Choice weanling pigs; spring gilts and service boars.

FRED H. HOFFMAN. Albion, Wash.

## HAMPSHIRE SWINE

HAMPSHIRE HOGS

have won every feeding contest entered since 1914. Weanling pigs, gilts, bred or open. Our blood lines can not be beat.

TUTTLE BROS. Asotin, Wash.

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### High Class Percheron Stallions

At Breeders' Prices

American bred horses out of the best imported dams and sires carrying the blood of **Moulinet, Calypso, Dragon** and, further back, **Besigne, Brilliant,** and other great Percheron sires.

We have stallions that will suit the most particular, and at prices you can afford to pay. Now is the opportunity to buy.

See them at the Lewiston Stock show, or send for photos, description and pedigrees.

WM. MULHALL, Lewiston, Idaho



### JUST RECEIVED

Another carload of Percheron and Belgian stallions. Most of the Percherons are of the famous Brilliant blood, sound and guaranteed to be breeders. Two, three, four and five year olds, weighing from 1700 pounds to 2200 pounds. The best lot of stallions that has ever been shipped to the northwest, and will be sold at very reasonable prices. Write for information or come to my barns and see them.

WILLIAM T. TRACY, Kennewick, Wash.

### Hunter Ranch Percherons

The Grand Champion KROUMIR at head of herd. Young stallions for sale at all times at breeders' prices.

A. R. HUNTER, Island City, Ore.

### Handsome Black Percheron Stallion

3 years old, registered; black, registered, 7-year-old mare with colt, and again in foal; 7 fine young work horses, 3 and 4 years old.

J. J. BAEDER, Waukon, Wash.

PERCHERON BELGIAN AND SHIRE **STALLIONS** and **Mammoth Kentucky Jacks**

in our barns include winners at leading western shows.

Our prices, terms and guarantees will suit you. Come and make your choice.

S. METZ & SONS
Pendleton, Oregon.

## SHETLAND PONIES

### QUALITY SHETLANDS

"The women's pleasure and the children's delight." Richest Shetland breeding. Write for prices on early delivery.

DR. GREEN & SON, Wapato, Wash.

## GUERNSEY CATTLE

### Looney Farm Guernseys

Langwater, Glenwood and other best strains have won more show honors than any other herd in the west. A few very choice young bulls from heavy producing dams. Write for particulars to

DAVID H. LOONEY, Jefferson, Ore.

### FAIRVIEW FARM

Breeders of high class registered and grade Guernseys.

A. J. SINNES,
Route 5. Mt. Vernon, Wash.

### ORCHARD HILL FARM

"Home of High-Class Guernseys."
Dr. Park Weed Willis, Owner.
Redmond, Wash.

### RED WING GUERNSEYS

Bull calves out of A. R. dams; also a few females. All good individuals. Herd tuberculin tested.

A. I. & J. HUGHES, Oregon City, Ore.

### Registered Guernsey Cow for Sale,

Will be fresh Nov. 15. Registered Guernsey bull, four years old.

J. J. BLUM, Stayton, Ore.

## POULTRY AND RABBITS

### Walter Hogan's Famous White Leghorns

hatched by Hogan on April 3d. Pullets $2; cockerels, $3. S. C. R. I. Red pullets, two to ten dollars; cockerels, five, ten and fifteen dollars. I can guarantee these pullets and cockerels to be from pens headed by cockerels from a trap-nested 289-egg hen—the females in these pens being sisters to my pen in the All-Northwest Egg-Laying Contest at Pullman, Wn. These birds have good shape, color and undercolor, plus wonderful winter egg blood.

MRS. ROMINGER, Underwood, Wash.
Member of N. W. R. I. Red Club.

### Rhode Island Red Cockerels

Both combs, pedigreed and line-bred. Best color and quality I ever raised. Rhode Island Whites, both combs. Get your breeding stock in fine, large Toulouse geese and Bronze turkeys. Pedigreed Belgian hares and Flemish Giant rabbits—the large kind.

HIGHLAND FRUIT AND POULTRY RANCH.
J. NONNENMACHER.
R. F. D. 3, Yakima, Wash.

FLEMISH GIANT DOES.

For sale—Young, vigorous Flemish Giant does, bred to order, $2.50 to $3.50 each. Pair, $5.

W. T. WILSON, R. R. 3, Weiser, Idaho.

## HEREFORD CATTLE

### BULL RANCH

Hereford Cattle.
Berkshire Hogs.
Hampshire Sheep.

CHAS. BULL, Mabton, Wash.

### Highland Stock Farm

offers for sale Hereford bulls, 1 or 2 years old. One or a carload.

PLATT BROS. Genesee, Idaho.

## SHORTHORN CATTLE

### MILKING SHORTHORNS

with world records behind them for milk production.

A. R. O. HOLSTEINS

A son of the King of the Pontiacs at head of herd.

Can make special prices on young bulls of each breed.

A. V. Bradrick & Son
Palouse, Wash.

### H. H. SCHILDMAN

breeder of registered Shorthorn cattle, Hampshire sheep and big type Poland China hogs.

Filer, Idaho.

REGISTERED SHORTHORN COWS.

Young bulls and heifers, sired by Scotch bulls; liberal terms.

CALDWELL CATTLE CO., Caldwell, Idaho.

# Grain and Produce Markets

## Grain Market.

CHICAGO, Nov. 2.—Corn averaged lower today, chiefly as a result of the bearish character of war developments. The market closed unsettled at 7-8c net decline to 3-8c advance, with December $1.13 to $1.13 1-4 and January $1.14 1-4 to $1.14 1-2. Oats gained 1-8c to 3-8c, and provisions finished unchanged to 20c off.

Lack of support except from shorts formed the principal feature of the corn market throughout the session. Bears derived advantage from the fact that the movement of the new crop was increasing and that liberal arrivals were looked for next week. Weather conditions were regarded as favorable for curing and handling the grain.

Government bidding put strength into oats.

Provisions sagged a little with corn and hogs. Western receipts of hogs for the week were considerably larger than a year ago, but so, too, were shipments of lard and meats.

**Cash Quotations.**

CHICAGO, Nov. 2.—Corn—No. 2 yellow, $1.40; No. 3 yellow, $1.28@1.35; No. 4 yellow, $1.21@1.25. Oats—No. 3 white, 67@68 1-4c; standard, 68@79c. Rye—No. 2, $1.62. Barley, 80c@$1. Timothy, $7@10. Clover, nominal. Pork, nominal. Lard, $26.20@26.30. Ribs, $23@24.

**Chicago Futures.**

| Corn— | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| Dec. .... | 1.12½ | 1.14¼ | 1.11¾ | 1.13 |
| Jan. .... | 1.14⅝ | 1.15¾ | 1.13 | 1.14¼ |
| Oats— | | | | |
| Dec. .... | .66½ | .67¼ | .66⅛ | .66⅝ |
| Jan. .... | .66⅛ | .67 | .65¾ | .66¼ |
| Pork— | | | | |
| Nov. .... | 35.00 | 35.00 | 34.90 | 34.90 |
| Jan. .... | 40.10 | 40.10 | 39.90 | 39.90 |
| Lard— | | | | |
| Nov. .... | .... | .... | .... | 26.20 |
| Jan. .... | 24.80 | 24.90 | 24.70 | 24.70 |
| Ribs— | | | | |
| Nov. .... | 21.95 | 22.15 | 21.95 | 22.10 |
| Jan. .... | 22.05 | 22.17 | 22.05 | 22.05 |

**Pacific Northwest Grain.**

PORTLAND, Ore., Nov. 2.—Grain—November delivery: Oats—No. 2 white feed, $53 bid; barley, standard feed, $47.75@$48.50. December: Oats, No. 2, $53; barley, feed, $47.75@48.50; oats, No. 3, $46; oats, clipped, $48; corn, yellow, $53.50; mixed, $52.50. Eastern oats and corn in bulk: Oats, No. 3 white, $46; 38 pounds, clipped, $48; corn, No. 3 yellow, $53.50; No. 3 mixed, $53.

**Minneapolis Grain.**

MINNEAPOLIS, Nov. 2.—Flour unchanged. Shipments 79,985 barrels. Barley, 91@94c. Rye, $1.56@1.57. Bran, $24.94. Wheat receipts, 48 cars, compared with 523 cars a year ago. Cash: No. 1 northern, $2.22. Corn, No. 3 yellow, $1.42@1.45. Oats, No. 3 white, 62 1-2@63 1-2c. Flax, $3.63@3.65.

## Live Stock Market.

**At Seattle.**

SEATTLE, Nov. 2.—Hogs—Receipts, 95; strong. Prime light, $17.50@17.75; medium to choice, $17.25@17.50; medium heavy, $16.25@16.75; rough, $15.25@16.75.

Cattle—Receipts, 195; steady. Best steers, $11@13; medium to choice, $10.50@11; medium to good, $8@8.50; medium, $7@7.50; bulls, $5@7.50; calves, $5@10.

**At Portland.**

PORTLAND, Ore., Nov. 2.—Cattle—Strong; receipts, 166. Steers, prime, $12@12.50; good to choice, $11@12; medium to good, $9.75@11; fair to medium, $8.25@9.25; common to fair, $5.75@8.25; cows and heifers, choice, $8@8.50; medium to good, $5.75@7.25; fair to medium, $4.75@5.75; canners, $3@4; bulls, $5@7; calves, $9@12; stockers and feeders, $6@8.

Hogs—Steady; receipts, 495. Prime mixed, $17.10@17.35; medium mixed, $16.85@17; rough heavy, $15@15.10; pigs, $14@15; bulk, $17.

Sheep—Strong; receipts, 14. Prime lambs, $11@12; fair to medium, $8@10; yearlings, $10@11; wethers, $9@10; ewes, $6.50@8.50.

**At Chicago.**

CHICAGO, Nov. 2.—(United States bureau of markets)—Hogs—Receipts, 15,000. Generally steady with yesterday's average. Butchers, $18.10@18.40; light, $17.25@18; packing, $16.75@17.90; throw-outs, $15.50@16.50; pigs, good to choice, $14.75@16.

Cattle—Receipts, 5000; compared with a week ago native steers strong to 15c higher; others mostly steady; western steers 25c to 50c higher; butcher stock and canning cattle, steady to lower; calves, steady to strong; stockers and feeders, steady to lower.

Sheep—Receipts, 5000; compared with a week ago, fat lambs and light yearlings 25c to 50c higher. Feeders and sheep, steady to strong.

**At Omaha.**

OMAHA, Neb., Nov. 2.—Hogs—Receipts, 2500; 10c to 20c higher. Heavy, $17@17.75; mixed, $17.30@17.65; light, $17.50@18; pigs, $15@17. Bulk of sales at $17.35@17.75.

Cattle—Receipts, 300; steady. Native steers, $11@13.50; cows and heifers, $7@12; western steers, $9@16.50; Texas steers, $8.50@11.75; cows and heifers, $6.75@11.50; canners, $5.75@6.75; stockers and feeders, $6.50@13.50; calves, $7.50@13.50.

Sheep—Receipts, 100; steady. Culls, $4.50@7.50; wethers, $10@11.25; ewes, $6.75@9.50; feeder lambs, $10@14.75; lambs, $13@16.50; yearlings, $10.25@11.75.

**SPOKANE UNION STOCK YARDS.**

| | Cattle | Calves | Hogs | Sheep |
|---|---|---|---|---|
| Saturday, Nov. 2... | 230 | 19 | 4 | 1189 |
| Friday, Nov. 1..... | 337 | 23 | 388 | 36 |
| Thursday, Oct. 31.. | 322 | 37 | 512 | 28 |
| Wednesday, Oct. 30 | 349 | 18 | 234 | 26 |
| Tuesday, Oct. 29.. | 43 | 28 | 98 | 288 |
| Monday, Oct. 28.... | 315 | 23 | 243 | .... |
| Week ago ..... | 2 | .... | .... | .... |
| Year ago ..... | 127 | 1 | 152 | 12 |
| Two years ago.... | 27 | 4 | 66 | 1 |

Quite a heavy run of cattle in the yards for Saturday. The market opened fairly active, closing at noon about steady. The steer offerings graded fair to good, the best selling at $10 and a few small lots of medium killers at $9 to $9.50. The stockers and feeder trade was quite active, there being a good demand for the good quality and good colored stuff. There were no good cows offered, the most of the receipts being common to medium grades selling at $4.75 to $6. Compared with a week ago prices remain practically unchanged.

| | |
|---|---|
| Prime steers | $12.00@13.00 |
| Good to choice steers | 10.75@11.75 |
| Medium to good steers | 9.50@10.50 |
| Fair to medium steers | 8.25@ 9.00 |
| Common to fair steers | 5.50@ 8.00 |
| Choice cows and heifers | 7.50@ 8.25 |
| Med. to good cows and heifers | 6.00@ 7.00 |
| Com. to med. cows and heifers | 4.75@ 5.75 |
| Canners | 3.00@ 5.00 |
| Bulls | 5.00@ 6.50 |
| Calves | 6.00@ 9.50 |
| Stockers and feeders | 6.00@ 8.00 |

Hogs—Receipts were exceedingly light, the sales as shown being some late arrivals Friday. The market was fairly active and steady. The quality was fair. Compared with a week ago the market is unchanged.

| | |
|---|---|
| Prime mixed | $17.00@17.25 |
| Medium mixed | 16.75@17.00 |
| Rough heavies | 15.00@15.25 |
| Pigs | 15.75@16.25 |
| Stockers and feeders | 14.00@15.50 |
| Bulk of sales | 17.00 |

There were no sheep on the local market, the receipts as shown were 12 decks in transit from Montana summer range to the Yakima valley. The market is steady and unchanged over a week ago.

| | |
|---|---|
| Prime lambs | $11.00@12.00 |
| Fair to medium lambs | 9.00@10.75 |
| Prime yearlings | 8.75@10.00 |
| Prime wethers | 8.50@ 9.75 |
| Best mutton ewes | 6.00@ 8.00 |
| Breeding ewes—1 to 4 years | 12.00@16.00 |
| Breeding bucks | 25.00@75.00 |

## Seattle Market.

SEATTLE, Nov. 2.—The movement of extra fancy apples has increased through the week despite liberal offerings of "C" grade, tree-run and western Washington cooking fruit. Buyers evidently are determined to get the top grades at the present market.

**Purchasing Prices.**

Eggs—Select ranch, 75@76c per dozen; Oregon, eastern Washington and Idaho, normal.

Butter—Fresh dairy, 31c per lb.; butter fat, 70c per lb.; bakers', 46c per lb.; raw milk, $3.50 per cwt.

Poultry—Broilers, live, 1918, 32c per lb.; hens, 2 lbs. and over, 25c lb; under 3 1-2 lbs., 25c per lb.; old roosters, 17c per lb.; ducks, live, fat, 25@26c per lb.; squabs, large, $3.50 per doz.; geese, fat, live, 21@22c per lb.; Belgian hares, 11@14c per lb.; guineas, $7 per doz.; turkeys, young toms and hens, dry picked, 10 lbs. and up, 30@35c per lb.

Hogs—Light, 18@21c per lb.; heavy, 12@22c per lb.

Beef—Steers, fat, 12@15c per lb; heifers, fat, 12@15c per lb.; cows and bulls, 11@14c per lb.

Veal—Fancy, light, 19c per lb; fancy, heavy, 10@18c per lb.

Mutton—Fat, 22c per lb.; spring lambs, fat, dressed, 25c per lb.

**Hides, Tallow and Wool.**

Bid prices to producers: Salted hides, cows and steers, No. 1, 15c lb. same, No. 2, 14c lb; green hides, cows and steers, No. 1, 12c lb; same, No. 2, 11c lb.; salted bulls or stags, No. 1, 12c lb.; same, No. 2, 11c lb.; green bulls or stags, No. 1, 10c lb.; same, No. 2, 9c lb.; salted or green calfskins, No. 1, 32c lb.; No. 2, 30 1-2c lb.; salted or green kipskins, No. 1, 16c lb.; same, No. 2, 14 1-2c lb.; dry hides, No. 1, 30c lb.; same, No. 2, 29c lb.; dry bulls or stags, 25c lb.; dry salt hides, 24c lb.; dry calfskins (5 lbs. and under), No. 1, 35c lb.; same, No. 2, 33c; tallow, No. 1, 13c lb.

Horsehides, green or salted, each, $2@4; same, dry, each, 50c@$2.

Clean ranch wool, full grown, lb., 30@55c.

Sheep pelts—Long wool, each, $2.50@4.50; medium wool, each, $1.50@2.50; short wool, each, $1@1.50; shearlings, each, 35@75c.

Beeswax, per lb., 25@27c.

## Portland Market.

PORTLAND, Ore., Nov. 4.—Grain prices at the close of the week were steady, but there was little life to the market. Traders believe the near approach of peace has been well discounted and that the coarse grain markets will go but little lower after the war is ended. Last bids at the exchange were 53 cents for sacked oats, $46@48 for bulk oats, $52.50@53.50 for bulk corn and $47.75@48.50 for barley.

**Quotations.**

Eggs—Oregon ranch, candled, 65c; selects, 67c.

Cheese—Jobbers' buying prices, f. o. b dock, Portland: Tillamook triplets, 36c; young Americas, 37c a pound. Coos and Curry, f. o. b. Myrtle Point: Triplets, 35 3-4c per pound.

Poultry—Hens, 25@28c; broilers, 26@30c; ducks, 25@30c; turkeys, 28@31c; geese, 17@18c.

Pork—Fancy, 21@22c.

Veal—Fancy, 18@18 1-2c.

Potatoes—Oregon, $1.75@2 per hundred.

Hay—Buying prices, f. o. b. Portland: Eastern Oregon timothy, $27 per ton; valley timothy, $29; alfalfa, $28; valley grain hay, $26; clover, $27; straw, $9@10.

Butter—Cubes, extras, 58c; prints, 60@64c. Butterfat, 64@67c, delivered at Portland.

## Spokane Produce.

SPOKANE, Nov. 2.—The following are produce prices paid to wholesalers by hotels, mines, camps and the general retailer:

**Pears**—Russet and Winter Nellis, few sales, $2.50 per box; Kieffers, no sales reported.

**Apples**—Washington Spitzenburgs, extra fancy, $3; fancy, $2.75; Wageners and Jonathans, jumble pack and faced, $1.50@1.75; orchard run, fancy wrapped Jonathans, $2; Winter Bananas, extra fancy, $2.50; fancy, $2; Wenatchee Delicious, extra fancy, wrapped and packed, few sales $3.25; fancy, $2; C grade, no sales reported. Cooking varieties, various, all jumble pack, $1.25 per box.

**Potatoes**—Yakima Gems, good quality and condition, sacked, per cwt., $1.75@2; Montana whites, mostly $1.75; local white varieties, $1.50.

## Spanish Influenza

(Continued from page three.)

there is delirium. Nervous symptoms are not so prominent in a cold, as a rule, and are not profound. The patient often rests and sleeps well if the nose is not completely stopped up.

Notwithstanding these different symptoms, health authorities all over the United States are advising people to suspend work at the first attack that may be either cold or influenza and go to bed.

Dr. Anderson, the city health officer of Spokane, says the patient should take a thorough sweating.

There are a few old and time-proved rules that may well be followed by patients everywhere. The system should be flushed with a good cathartic and every effort made to keep the feet warm and the head cool. A hot foot bath is always beneficial. Diet is vastly important. The patient should take nourishing but not heavy food, avoid meats, hot biscuits and all foods that are difficult to digest. Coffee should be dropped, though mild tea, if the patient seems to crave it, is not injurious. Milk, soft-boiled or poached eggs and certain kinds of fruits may be prescribed, such as sweet oranges, grapes, pears and ripe peaches. Bananas and hard apples should never be a part of the diet.

If, as the case progresses, it is evidently one of Spanish influenza, extraordinary care should be taken so far as possible to isolate the patient from contact with other members of the family. Only those persons who are actually nursing the patient should be allowed entrance to his room, and these should wear a mask made of gauze of several folds or cheesecloth when in the patient's room. On leaving the room the mask should be immediately boiled for 30 minutes before using, and the nurse should wash her hands thoroughly with soap and hot water.

Above all, avoid close, foul air as you would avoid a pestilence. If possible have a stove going in the patient's room, with a cheerful fire, and leave the windows open.

If our readers will follow these hygienic rules promptly and faithfully where a physician can not be quickly obtained they will be taking just the course that a thoroughly good doctor would recommend. Of course, a physician should be gotten to the patient as quickly as possible and wherever possible.

Do not make the mistake of assuming that because you are a strong and healthy person you will be immune from Spanish influenza. The record of the disease everywhere has astonished physicians by its seeming preference for vigorous people, a great majority of the victims being between the ages of 18 and 40. Children and older people are much less likely to be attacked.

Don't make the mistake of administering drugs (except a good cathartic) without the advice of a physician.

**SHIP** you cattle where they will bring you the most money.

OUR northwestern customers have found Kansas City their best market. We specialize on Oregon, Washington and Idaho cattle.

WRITE or wire us for market information at any time.

**WITHERSPOON-McMULLEN L. S. COM. CO.**
Stockyards Station.
Kansas City, Missouri.

**HIDES WOOL FUR**




**RUBBER METAL SACKS**

We pay full market value, correct weight and assortment, prompt returns. Write for prices. We want your business.

**Pacific Hide & Fur Depot**
Joseph Thiebes and C. T. Symmes.
1101-09 Railroad Ave., Spokane, Wash.

**Wilson's Business Modern College**
Seattle



**"IF YOU GO"**

**Can you serve Uncle Sam in the Auto, Gas Engine or Aviation Department?**

IF THE MOTOR CAR PRODUCTION IN THE UNITED STATES WAS STOPPED RIGHT NOW there would not be enough mechanics left to keep the 5,000,000 autos and 400,000 trucks now in use in repair, not to say anything of the 70,000 tractors now in service. After the war the auto and tractor business will be greater than ever. Auto and gas engine men can readily see why the wages will be better than ever before. Because after the war is over the opportunities all over Europe will be so alluring that thousands of the best mechanics will go to new fields. To keep mechanics here will be almost impossible, regardless of how big the pay.

**"IF YOU STAY"**

**Can you take the other fellow's place who must quit his job in the garage or repair shop to go?**

Look at the proposition from any angle. Think what it means to you! If you take my course of instructions, you will be prepared. **In the army or out of the army—during the war and after the war** your services will be in demand if you have gas engine knowledge. This knowledge is yours if you want it.

Mail this coupon today and you will immediately receive my "big 100-page catalog," full of pictures and letters from the boys "Over There" and "Over Here" who are making good with Autos and Tractors. It is a book that will make you a friend of mine from the start.

**SEND FOR IT TODAY! It's Free.**

**Use Coupon**

L. L. Adcox, Adcox Auto & Gas Engine School, Union Ave. and Wasco St., Portland, Oregon.
Dear Sir—Please send me your Big 100-Page Catalog. This is No. 2

Name .....
Address .....

# The Real Test

—of gasoline is in its boiling points. In "Red Crown" they form a continuous, uniform chain,—giving easy starting, quick acceleration, power and mileage. Look for the Red Crown sign.

STANDARD OIL COMPANY
(California)

RED CROWN GASOLINE

The Gasoline of Quality



A little advertisement about a big machine: The Yuba 12-20 Ball Tread Tractor is the most powerful machine of its size devoted to farm work. Small, compact and easily handled; its power is mostly delivered at the draw-bar. Mechanically the Yuba is a model of skilful workmanship. The repairs it requires are few and easily made. There are no discarded Yuba tractors, and no dissatisfied Yuba owners. As an investment the Yuba Tractor earns its way and pays good dividends.

*Yuba 12-20's are shipped promptly*
*Write or Wire*

YUBA
MANUFACTURING COMPANY
MARYSVILLE, CALIFORNIA



Emerson's
## OAT KICKER



A new machine in big demand on the Pacific Coast. Takes out every kernel of wild or tame oats from wheat, barley and rye, at the same time cleans out the small foul seeds and dirt; something that no fanning mill or grain cleaner will do.

Run your grain through the OAT KICKER before selling and save yourself the costly dockage. Before sowing, clean your seed free from oats and dirt, foul seeds, etc., you will find it pays back big returns. Three sizes, $40 to $160. Hand or belt driven. Send for descriptive booklet "WF."

The J. J. ROSS MILL FURNISHING CO.
Seattle, Wash.


When answering advertisements don't fail to mention this paper.

# FARMERS' WANT ADS

This is the farmers' "Want," "Sale" and "Exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rate, 7 cents a word per insertion, with a special rate to farmer subscribers to the Washington Farmer of 6 cents a word per insertion for from 4 to 12 times, and 5 cents a word per insertion for 13 times or more.

All commercial and land advertising, 7 cents per word each insertion. Open also to nonsubscribers.

In using these columns advertisers must observe: (1) No advertisement will be inserted for less than 75 cents. (2) Every word, number and initial, including name and address, must be paid for. (3) Cash must accompany order.

Above rates also include insertion in The Oregon Farmer and The Idaho Farmer.

### HELP WANTED—Female 1

LEARN TO DO MATERNITY AND CHILD nursing—Christian women, 18 to 50 years, wanted for girls' institutions and baby homes. Write Pacific Coast Rescue and Protective Society, Portland, Ore.

### HELP WANTED—Male 3

SALESMEN—MANY OF OUR SALESMEN have gone to war and we are filling their places with men exempt from draft. Lack of competition and great prosperity of our customers makes sales the best we have ever known. Selling experience desirable, but not necessary. McConnon & Company, Dept. J., Winona, Minn.

### AGENTS WANTED 9

POWERINE IS EQUAL TO GASOLINE AT 5C a gallon. Salesmen and agents wanted; exclusive territory granted. Powerine is guaranteed to be harmless, to remove and prevent carbon, doubling the life of all gasoline motors, saving repairs, adding snap, speed and power. An amount equal to 20 gallons of gasoline will be sent to any address in the United States, charges prepaid; for $1.00. W. Porter Barnes, Santa Rosa, Cal., dept. 8K.

### SITUATIONS WANTED—Male 21

FARMERS—MAN WITH GOOD FARMING education and experience wants position as farm manager or foreman. Address B, Oregon Farmer.

### EDUCATIONAL 45

IN BUSINESS OR ACTUAL LIFE THE BEST is none too good for you. Write Gooding college, Gooding, Idaho, Charles Wesley Tenny, president, today.

TELEGRAPHY—YOUNG WOMAN'S POPULAR vocation; good paying positions available. Write for booklet. Pacific Telegraph Institute, Spokane.

SEND NEWS NOTES TELLING OF THE work of your school today. Address the Educator, Gooding, Idaho.

### HONEY, BEESWAX—Wanted 58

SEND SAMPLES OF YOUR HONEY AND beeswax. State quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

### EGGS AND BUTTER WANTED. 59

WE ARE ALWAYS IN THE MARKET FOR good eggs and dairy butter. Send us your next shipment. Oregon Farm Products Co., 386 Halsey st., Portland, Ore.

WE PAY HIGHEST PRICE FOR LARGE, clean infertile eggs not over one week old. Honey also wanted. J. B. Chaney, Spokane, Wash.

### MISCELLANEOUS WANTED 63

CASH PAID FOR OLD FALSE TEETH. We pay up to $35 per set (broken or not). Send now. Cash sent by return mail. Package held 5 to 15 days for sender's approval of our offer. Highest prices paid for old gold jewelry, gold crowns, bridges, dental gold, platinum, diamonds and silver. Send for fall catalog of new jewelry.
UNITED STATES SMELTING WORKS, INC.
331 Goldsmith bldg., Milwaukee, Wisconsin.

POULTRY WANTED.
We are cash buyers of poultry and dressed meats, also cream. Write us for prices, shipping tags and premium catalogue for cream shippers.
COMMERCIAL CREAMERY CO.
SPOKANE, WASH.

LIVE POULTRY WANTED—TOP MARKET price paid; honest weights; prompt remittance. Smith, 420 Second ave., Spokane.

HIGHEST PRICES FOR POULTRY AND EGGS. Washington Meat & Poultry, 409 Second avenue, Spokane.

### LIGHTING EQUIPMENT 74

THE SAFETY LAMP CO., N208 HOWARD ST., Spokane, Wash. Gasoline lighting and supplies.

### AUCTIONEERS 75

M. SEIDENBACH, AUCTIONEER, GIVES best service. Sales solicited. 418 Fernwell, Spokane.

### MACHINERY—For Sale 93

FOR FARM LUMBERING USE
"AMERICAN" PORTABLE SAWMILLS
Carried in stock by
HIGGINS MACHINERY COMPANY.
312 1st Ave., So., Seattle. Write for Catalog.

### AUTOMOBILES 114

HEADQUARTERS FOR
used cars, trucks and tractors; printed list. Spokane Auto Market, W315 Sprague ave., Spokane, Wash.

AUTO RADIATORS, FENDERS AND LAMPS repaired. Lester Allen, 607 Second avenue, Spokane.

### STOVE AND FURNACE REPAIRS. 126

WRITE M. S. RUBENS, SPOKANE, FOR ANY parts needed to repair stove, furnace.

### RABBITS and HARES 173

FOUR THOROUGHBRED STEEL GRAY FLEMish Giant bucks, 6 months old, $4. L. Beauregard, Rochester, Wash.

NEW ZEALAND REDS, YOUNG BUCKS AND does; pedigreed and registered; extra fine. E. Kelly, 834 Main st., Petaluma, Cal.

### POULTRY 174

BUY YOUR INCUBATOR NOW.
Incubators will be scarce and high next spring. Send for our list of new and used incubators and save money. Agents: Famous Queen incubators and brooder stoves. Queen Hatchery, 89 Pike st., Seattle.

SHIP US YOUR POULTRY. TOP PRICES. Home Poultry House, S173 Washington, Spokane.

50 USED INCUBATORS FOR SALE, FROM 70 to 700 egg capacity. A. R. Badger, Centralia, Wash.

WANT RED TURKEYS, HENS AND GOBbler; state price. J. Jungwirth, Scio, Ore.

PURE BRED MAMMOTH BRONZE TURKEYS. Mrs. C. R. Lowery, Route 2, Boise, Idaho.

### LIVE STOCK. 177

FOR SALE—TO CLOSE AN ESTATE, IN quantities to suit, some 20,000 sheep, ewes, lambs and bucks, from $10 up; also 800 head of stock cattle. 45,000 acres range land, best anywhere. Coffin Bros., North Yakima, Wash.

FOR SALE—50 REGISTERED SHORTHORN bulls, coming 2 years old; Scotch topped with plenty of size and bone. Priced low for quick sale. Chas. A. Norton, Salmon, Idaho.

FOR SALE OR TRADE—REGISTERED FOUR-year-old Holstein bull; De Kol Alban Segis; an excellent bull reasonably priced. M. F. Maurer, Rocklyn, Wash.

REGISTERED O. I. C. BOAR, READY FOR service; no better stock in the market. Price reasonable. W. R. Gibson, R. 2, Hood River, Ore.

FOR SALE—30 PURE BRED OXFORD RAMS, mostly yearlings, some two. Chas. A. Cairns, Meridian, Idaho.

FOR SALE—WEANLING BIG TYPE POLAND China pigs. S. S. Mullen, Bellingham, Wash., R. 1, Box 86.

REGISTERED O. I. C. SWINE. BREEDING stock for sale. C. I. Ballard, Rickreall, Ore.

REGISTERED SHORTHORN BULLS FOR sale. Baring Bros., R. 1, Creston, Wash.

### HOTELS 506

WHITE'S HOTEL AND RESTAURANT—Rooms, hot and cold water, 75c up. Breakfast 20c to 40c; dinner, 25c to 50c. Sprague and Stevens, Spokane.

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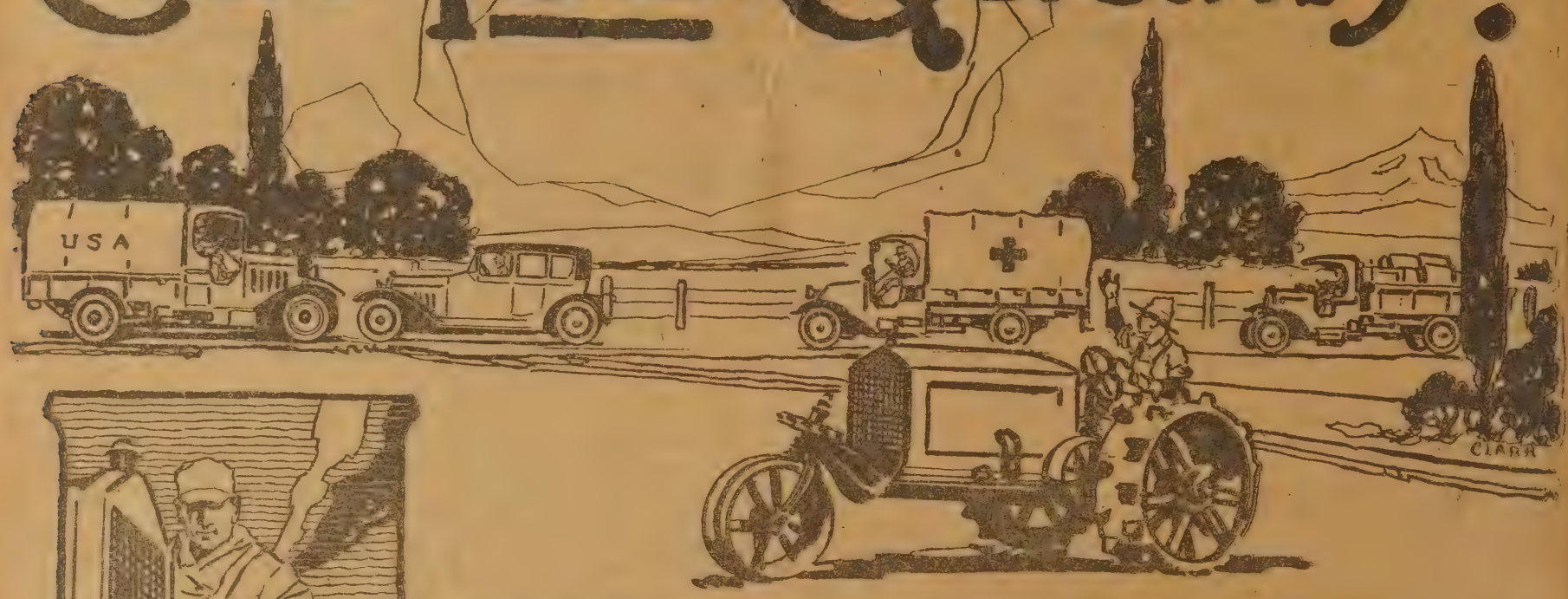
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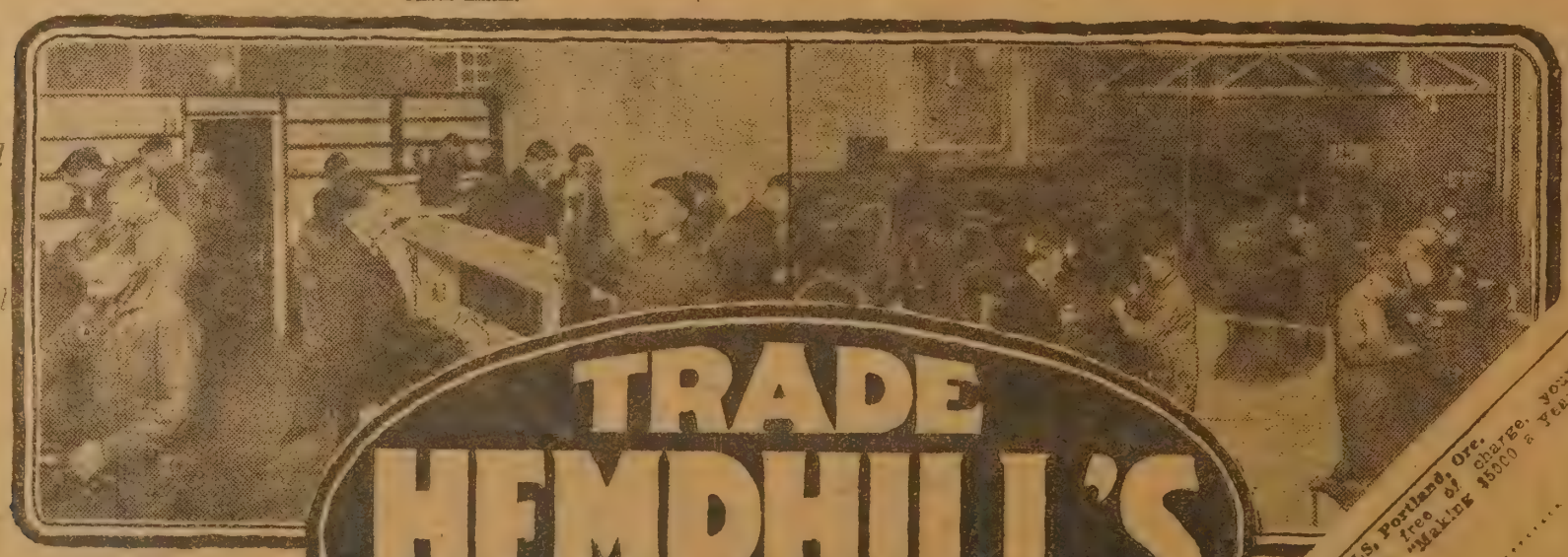
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# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 46. THE RANCH PACIFIC DAIRYMAN HORN AND HOOF November 14, 1918

# After War Prices on Farm Products

## *And Interest Rates Are Two Questions of Outstanding Importance*

By N. W. DURHAM.

Every farmer has produce to sell. Most farmers find it necessary to borrow money at times—either on mortgage or notes in bank. The prices the farm products will bring after the war and the interest rates that money will command are therefore questions of outstanding importance in every farm home.

He would be a rash prophet who would predict that the present high range of prices of farm products would continue for any extended period after the war. The consensus of expert judgment, however, is that it will be a long while before consumers will see the low prices they enjoyed between the civil war and the present world conflict.

Charles D. Michaels, the Chicago Tribune expert, says a shifting of opinion as to the effect of peace on grain values is noticeable. Some of the most successful and conservative operators, who study conditions closely, incline to the belief that peace has been well discounted in the recent decline of corn. Since that was written the price of corn has rallied on the Chicago market.

**Demand for Surplus Grain.**

Summarizing the opinions of operators who look for a continued eager demand for food products, the Chicago writer says: "They argue that there will be a demand for all the surplus grain and foodstuffs that the world has in the next six or eight months. They believe that the immediate effect of peace would bring lower prices for a time. They base their ideas on statements issued by the food administration and others which show that a large number of people of the central powers will have to be fed, and say the food problem will be greater after than previous to peace, and that the declaration of peace will open our markets to them."

Mr. Hoover's views are set forth in a message which he asked the churches to have read from their pulpits on October 27. The needs of the allies were computed at an inter-allied food council held last summer and the resources from which they could be met were calculated. These schedules show that America must greatly increase her exports of food supplies during the coming year. In place of the 11,750,000 tons of foodstuffs shipped to Europe last year, the shipments this year must be 17,500,000 tons. We are pledged to send 50 per cent more food from the 1918 harvest, which, taken as a whole, is no larger than the harvest of the previous year.

**Continue War Food Program.**

Mr. Hoover plans to carry forward his war program of food conservation just the same as though the war were to go on for another year. While he has relinquished the prohibition against feeding of wheat to stock in the Pacific northwest, that step was taken to save the stock industry here. The wheat thus fed will simply be converted into fats and meats, for which there is even a greater need among our allies than for bread.

The consuming public is urged to save wheat even more carefully than before. The federal food board at New York announces that home cards are to be issued shortly to families aiding in the conservation of grains. Chairman Mitchell says that the government's program of sending 17,500,000 tons of food to our armies and allies can only be attained through conservation in the homes. Chairman Mitchell adds:

"The largest item in the problem of food exports consists of 10,400,000 tons of bread-making flour and grains. Part of that is the surplus of one of the largest wheat crops ever harvested in this country—reduced again by a shortage of corn. Every table should be spread with the idea of the wants of the world in mind. The new home card shortly to be issued will carry this idea to our 20,000,000 homes."

Since the foregoing was written Colonel E. M. House, President Wilson's personal representative to the supreme war council at Versailles, France, telegraphed that the council has adopted a resolution announcing its desire to cooperate with Austria, Bulgaria and Turkey in furnishing the necessaries of life for the suffering peoples of those nations. If the German army should surrender, these relief measures would undoubtedly be extended to the German people; for the American nation, however bitter it may feel toward a ruthless enemy, will never want to see women and children suffer for food.

**Enormous Relief Agencies.**

Undoubtedly enormous relief agencies will have to be organized to save the starving women and children of Russia. With these gigantic demands upon the food supplies of the world Europe will absorb the Australian wheat surplus as a sponge absorbs water. England, Scotland and Ireland alone will need 113,000,000 bushels the coming year, and that need alone will take half of the Australian surplus.

Already Food Administrator Hoover is working out new food conservation plans to assure supplies not only to the nations that have been eliminated from the war, but also the liberated populations of Belgium and northern France and even Germany when that country has accepted armistice terms. It is understood that the plan proposed by Mr. Hoover will provide for a rationing system in Europe similar to that employed in Belgium by the Belgian relief commission. Supervision of this rationing will probably be in charge of representatives of allied and American governments.

**Ocean Freight Rates.**

Another factor that will tend toward stabilizing wheat prices in this country will be the release of large fleets of merchant ships now attached to the allied navies. With the ending of the war hundreds of these vessels can be put immediately into the grain carrying trade and we may reasonably anticipate a very considerable reduction in ocean freight rates that in turn will tend toward the maintenance of the present prices of wheat in this country.

The allied war council further announces that a thorough survey will be made of the world's food supplies. Undoubtedly these supplies will be insufficient to meet the world's needs for some time to come. Food production is at a low ebb over the greater part of Europe. Millions of horses have been killed, the soil has run down in fertility, labor efficiency has been lowered by war, farm equipment of all kinds has deteriorated. World agriculture can not recover instantly from these conditions and it seems altogether probable that for two or three years to come we may expect a large and constant demand upon the food sources of the United States, Canada and Australia.

Turning from the consideration of food requirements to the future of the money markets, we note a growing belief in the minds of financial experts in this country that interest rates, contrary to their prevailing belief, will be lower. Adams, a well-known Boston authority, is quoted as follows in the Wall Street Journal:

"What of money conditions after the war and will history repeat itself? Contrary to the average ideas some of the most eminent bankers believe that peace will be followed not by stringency, but by a prolonged period of easy money. Those who expected a tight money market after the civil war, owing to Uncle Sam's big debt, were surprised in the few years following to see government bonds advance and interest rates decline. After the most devastating wars in history, the Napoleonic wars, money became cheap despite huge borrowing by the governments, and in the next few years British consols advanced over 25 points, while the interest yield of them was cut down from 5 per cent to close to 3 per cent."

It is thus seen that what seems to be the most dependable judgment points to a period of continued prosperity on the American farms. The American farmer has proved himself a bulwark in war and he will prove himself the world's most valuable productive agent in the period of peace and reorganization that now seems imminent. Mr. Hoover well says:

"When the history of the war is written no more glorious page will be found than that which records not only the principle for which the great American republic fought, namely, the principle of justice to all as distinguished from the principle of might by power, but also the wonderful response given voluntarily by a great people to the call for consecration and sacrifice."

## Is Found in This Issue

After war prices for farm produce present big problems. See Page 3.

Water is the one cheap but valuable feed for the dairy cow. Page 10

Nonorganic fertilizer is not sufficient to perpetuate soil fertility. Page 13

"Power, Mechanics and Devices" The Farmer is beginning something new. See page 18.

Cooperative associations can not succeed without adequate volume of business. Read page 14.

A great test of strategy has been going on in Europe. A member of The Farmer staff lets his imagination loose on the subject and writes a gripping story of one way the marshal of France might have brought the kaiser to his knees. Page 20.

Christmas packages for the boys over there must go now or never. Read page 25.

## Special Food Conference

State food administrators for the entire nation were last week called to Washington by Food Administrator Hoover to consider emergency food regulation problems. The conference, which is in session this week, probably will have to do largely with the plan for a national food conservation week, December 1-7. It is probable also that questions arising out of the coming of peace also will be taken up. It is acknowledged by practically every one familiar with the situation that the coming of peace will increase rather than decrease the need for food supply exports from America. This is due to the fact that the cessation of hostilities will enable the shipment of food to peoples that have heretofore been cut off from the allies, including parts of Russia, Armenia and the peoples of the countries which have been at war with the allies.

## Avoid Dockage

### Get a Better Price and Save Feed

Wheat producers for many years have realized that they were burning the candle at both ends when they sold uncleaned grain; that they were often allowing the buyers to give them a lower grade than the grain really deserved, consequently receiving a lower price than they should, and at the same time losing a lot of cleanings that possessed an actual feed value. It is evident that these producers, both individually and through their organizations, are beginning to overcome this problem in many cases by cleaning their own grain.

Under the old system, which is still practiced in perhaps a large majority of cases, the grower shipped his grain or sold it locally, paying the freight on the cracked grain and foreign material, taking the reduced price for his wheat at its reduced grade and bought the cleanings back as feed at a price which included the return freight. In other words, he accepted a lower price for his wheat than it deserved, gave away the cleanings, bought them back and paid the freight on them both ways.

While many wheatgrowers are installing cleaning machinery on their own farms, it is probable that the greatest advance along this line has been through the work of the farmers' union warehouses. These houses all over the northwest have in most cases enabled the farmer to receive his cleanings back at the warehouse after pay a comparatively small charge for the cleaning. This charge has as a rule not exceeded 3 cents a bushel, or $1 a ton. In many cases it has been less, it is reported. This cost is frequently more than made up by the improved grade of the grain, and the farmer has the cleanings left for feed.

President A. A. Elmore of the farmers' union for Washington and northern Idaho is a strong believer in the cleaning of all grain before shipment. He expresses gratification over the success that the union's warehouses have had in this regard.

Considerable benefit can be gained by attachments on threshers to take out considerable quantities of foreign material and cracked wheat, it is pointed out by experienced producers. This is especially true of the combine. Arthur D. Jones of Spokane, who operates a wheat farm in the Spokane valley, says that the cracked wheat which the "third sack" cleaning device on his combine took out brought him 3 cents a pound, as much as, or more than, the first-class, marketable grain.

**Experiences that might prove helpful to other graingrowers along the line of cleaning grain before shipment will be gladly received by this paper.**

## No Restrictions on Silos

### *War Industries Board Favors Their Construction*

It is with much gratification that the following communication from the war industries board is published. When the reported restriction in the use of reenforcing steel for the building of silos came The Farmer wired a strong protest. It appears that many such protests have been received by the board. B. M. Baruch, chairman of the war industries board, now authorizes the following statement made by Judge Edwin B. Parker, priorities commissioner:

"From the flood of telegraphic and mail communications pouring in upon the war industries board, it is evident that some one laboring under the misapprehension that this board had placed or was about to place a definite restriction on the building of silos, has launched a propaganda of protest against such restriction and to stimulate silo building. Without undertaking to make reply to each communication, suffice it to say that no such restriction has been made or is in contemplation.

"In order to release labor, materials, fuel and transportation urgently needed in war work, it has been necessary to restrict nonwar construction. Circular No. 21, issued by the priorities division of the war industries board, as revised October 15, 1918, among other things provides that new farm construction may be undertaken without a permit where the aggregate cost does not exceed $1000. Where the cost does exceed that sum, applications for permits to build may be made through the local representatives of the council of defense and, in proper cases where compatible with the public interest, permits will issue. While as a war measure it is imperative that the strictest economies be practiced, especially to release labor and iron and steel needed in war work, still the war industries board, being mindful of the importance of silos as a means of stimulating production and of preserving feed, will, speaking generally, look with favor upon their construction."

## Trying to Move Wheat

M. H. Houser of Portland, vice president of the food administration grain corporation, returned last week from California, where he was in conference on the grain situation, the results of which conference, he believes, will prove very beneficial to the farmers of the northwest. The complete and detailed program has not yet been outlined. Mr. Houser was to leave for New York and Washington last Friday to confer on the subject of tonnage. He is hoping to get enough tonnage to move enough wheat or flour from the Pacific coast terminal to permit every farmer in the interior to be paid for his wheat by January 1.

**FOUR SCORE POTATOES.**

A report from Okanogan says that Thomas La Neve dug 83 potatoes from one hill this year. Many of them, of course, were exceedingly small, but the report says that the big and little together filled a five-gallon can.

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## Don't Let the Chance Go By

There are only two days left in which those who have not yet subscribed to the united war work fund may do so. Don't let the chance go by. No greater opportunity to do a valuable service was ever offered. These seven great humanitarian organizations are doing a wonderful work. They are following the boys over there with those things that add the only real touch of home comfort to warfare. Books, hot coffee, music, opportunity to write home, cheer in a thousand different ways these organizations offer. They are asking those of us at home for money with which to do it. We can not refuse them. How much more valuable a dollar must be spent that way for the boy in the trench or camp than spent for something that we really do not need here. Don't let the chance go by!

Environment can not escape duties.

## Germany's Ingenious Substitutes

One can but admire the ingenuity of the German people in finding substitutes for necessaries of life that the war has taken from them. C. W. Barron, a noted New York financial and economic authority, recently went to Switzerland to make a first hand study of industrial conditions in Germany. He reports a wonderful development of substitutes. Shirts are made of paper and so strong that they can be laundered nine times. There has been developed a wonderful substitute for cloth that can not be distinguished by the casual observer from their best cloths. It is soft, gray and flexible, and the fiber is gotten from peat. Cotton experts in Switzerland have samples of German cloth woven of various other fibers and grasses. They are of wonderful variety in texture and color. The Germans have serges, cheviots and meltons in astounding perfection, and are still experimenting to get an econoimc substitute for American cotton. Shoes are made of paper with laminated wooden soles and big premiums are offered by the government to find substitutes for leather.

Real cotton has practically disappeared from Germany, as shown by the fact that Germany's cotton thread is actually sold there by the yard at the equivalent of six dollars per spool.

The Germans have no longer any real soap, as long ago fats became too scarce and valuable for that utilization, but they have scores of substitutes, none of which, however, are entirely satisfactory.

Notwithstanding the incredible folly that plunged the German people into this cruel and needless war, and the long line of atrocities that have marked their warfare, it must be said that they have shown amazing persistence in their futile and foolish conflict, and developed extraordinary capacities for maintaining their existance with limited natural resources. The entire German empire, with its 70,000,000 people, has less extent and variety of natural resources than are known to exist in any of the four states of the Pacific northwest.

In hospitality, offer what you have; a king can do no more.

## Whom Nature Favors

Illinois farmers used to think that 50 bushels of corn per acre was a good yield. Later they supposed they had reached the climax when they grew 100 bushels per acre. But a boy 12 years old, Jerry Moore, who received the title of "Corn King," grew 212 bushels per acre on land in a locality where only 14 bushels was the average yield. This taught the Illinois farmer that 100 bushels was not the highest possibility.

Nature does not always favor the person most favorably circumstanced, but rewards those who keep her law, harness her forces, and struggle to perfect any line of work under all circumstances.

If business interferes with our patriotic duty right now let's cut out the business. There will be plenty of time for business after the kaiser is whipped.

## Quantities of Foreign Foodstuffs Are Eaten in the United States

Holland, a staff writer in the Wall Street Journal, who has a well-earned reputation for accuracy, finds that the American people were only able to send enormous food supplies to our allies the last year by themselves importing vast quantities of foodstuffs from other countries. Japan sent to us in the last fiscal year nearly 500,000,000 pounds of rice, equivalent to five pounds for each man, woman and child in this country. From Japan, we imported 5,000,000 pounds of crab meat, and Canada sent us nearly 100,000,000 pounds of codfish. We are importing unheard of amounts of tapioca, receiving it not only from the tropical country south of us, but from Africa and the far east. We imported from China in the 12 months ending June 30 last, nearly 15,000,000 pounds of eggs, some of which were dried and some frozen. In the same fiscal year, ending June 30 last, we imported 260,000,000 pounds of cocoanut oil and nearly 500,000,000 pounds of copra, from which cocoanut oil is obtained. These vegetable oils are utilized by processes recently invented, as a substitute for butter.

Four hundred million pounds of cocoa were bought in tropical countries and brought here.

Of course, this commercial process adds very largely to the increased cost of living in this country. Manifestly it would be more economical for the American people to consume their own food products more freely and diminishing, instead of increasing, their imports from distant countries. When the war is over, these are conditions that the American farmers will want to inquire into very closely.

American people are now being trained to a very greatly increased use of foreign food products. When the war is over, markets for our agricultural products may not be so eager as they were in war times, and we may have a condition that will throw vast quantities of foreign products into direct competition with home-grown foodstuffs.

When peace comes we must continue to produce and conserve. We must not forget the lessons we have learned.

## Make Winter Meetings Valuable

The season of the year is rapidly approaching when the farmer and his family will have a little more leisure. It will be the season for meetings of both social and business nature, and these bring great opportunity. Questions of vital interest may be discussed. Problems that need to be settled may be threshed out. Organizations that need to be formed or that need to be strengthened may be formed or strengthened. Social intercourse may be stimulated. Fun, just plain, wholesome fun and amusement may be enjoyed. And there is none too much of it in the life of the average farm home. It will not be amiss for the community gatherings this winter to lay special stress upon this idea of froliesome entertainment.

## Germany's War Debt Stupendous

It is assumed by every one that Germany must be required to pay or in some way make restitution for all the material damage done the Belgians and the people of northern France, as well as those of other countries trampled by the ruthless heel of Prussianism. So far no attempt has been made to estimate what the damages will amount to They are stupendous. It will take years to repair the damage, even though monetary restitution be made today.

But Germany has another financial burden to meet, her internal war debt. That war debt now totals approximately 7,000,000,000 pounds sterling, or nearly $35,000,000,000 in United States money. That is over five times the amount of the fourth Liberty loan just floated in this country. It is equal to about two-fifths of the entire wealth of the German nation. That is, Germany has mortgaged all her property for two-fifths of its actual value to finance this war that has brought to her people nothing but hardship and suffering. If her property could be sold today at full value to pay the debt, it would leave her about three dollars out of every five of her present wealth with which to begin over again. What if this remaining three dollars were confiscated to pay the Belgians and the French for what the German armies destroyed? Is there actual wealth enough in Germany to right the material wrongs she has done? God knows there is not wealth enough in the world to right her moral wrongs. Money can not reunite dismembered households; can not stifle the cries of the fatherless children of girls whose motherhood was forced upon them by the libertine soldier and the damnable system of Germany; can not bring to life the thousands and thousands whom Germany's accursed ambition has sent to their graves.

Stupendous as is the financial debt that Germany must pay to the civilized people of the world and to her own benighted people, it is simply calculated and simply paid when compared to that which she must face at the great, relentless throne of moral justice. Long after the former is settled she will be paying, paying, paying on the latter. Nature never forgives, but requires the uttermost farthing.

## Looking for "Predatory" Bugs

Nature frequently supplies remedies for all her own ills. Possibly she does for all of them if they could only be discovered. The old rule of "dog eat dog" may be applied to modern times in the rule, "bug eat bug." At any rate, bugs do in many cases feed upon one another greatly to the benefit of mankind. To illustrate, the ladybug is a natural enemy of the aphis. County Agent Boone of Walla Walla county, Washington, is now putting a staggering number of these little speckled beetles in "cold storage" with a view to populating the fields of the Walla Walla valley with them next spring so that the aphis which did so much damage there this year, will be unable to propagate himself next season.

There are many, many animate and vegetable pests that can be combated in this manner. Many of them are being now so combated, and scientists the world over are looking for natural enemies of them. It is one of the great works of science.

## Doing Business on Credit

Most of the business of the world is done on credit. There is not enough actual coin or currency in existence to conduct the business of mankind more than a few hours, it is said, if every buyer of every commodity or thing had to hand out actual cash in payment for it.

The time was when it was considered bad business to borrow money, but this is not necessarily true now, if it ever was. One thing is true, however, and that is that it is bad business to borrow money for anything but actual development. To borrow for spending where it will not return itself with interest in one form or another in the regular course of business is fatal to success. Borrow if it is needed to buy seed for a crop. Borrow if it is needed to buy live stock to utilize feed. Borrow if it is needed to put land in shape for crop or buy necessary machinery. But remain on a strictly cash basis so far as things that do not possess a productive possibility are concerned.

# Germany Accepts Peace Terms

## *Kaiser Wilhelm Abdicates; People Take Over Government*

German representatives at the allied headquarters in France signed the stringent terms of armistice offered by General Foch at midnight Sunday, hostilities to cease at 11 o'clock Monday morning, Paris time, or 3 o'clock Monday morning Pacific coast time.

Kaiser Wilhelm and the crown prince, taking with them the last remnant of the family of Hohenzollerns that might claim the German throne, had abdicated shortly before the signing of the armistice terms and sought refuge in Holland.

Chancellor Maximillian of Baden, recently appointed as imperial chancellor by the kaiser, has turned the government over to Friederich Ebert, a representative of the so-called socialist element, who will become chancellor for the purpose of forming a popular government to take over the national wreckage left by the Hohenzollerns and try to build a democratic Germany upon it.

The foregoing are the three events of incalculable world importance transpiring in Europe during the last few days. While there yet remain stupendous problems before the allies, it appears improbable that Germany as a nation will attempt any further warfare. The political and economic situation in Germany is such as to make agreements virtually unbinding, necessitating the maintenance of a military force on the part of the allies until all the peace terms are put into actual effect. It is evident that the German people and leaders are sincere in their attempt to set up a government of the people, but the task is one that will require the best talent of the defeated and war-worn nation and the greatest possible cooperation of the allies. It must be remembered that the allies have been fighting for the establishment of democracy in Germany as well as the overthrow of the autocracy of the kaiser, and undoubtedly they will do all in their power to assist in the setting up of a real popular government.

**THE NEW CHANCELLOR STATES HIS CASE.**

The new chancellor, Friederich Ebert, in his first message to the people of Germany, is quoted in part as follows, indicating a sincere desire to work out the nation's problems in a democratic and conservative manner:

"Citizens: The ex-chancellor, Prince Max of Baden, in agreement with all the secretaries of state, has handed over to me the task of liquidating his affairs as chancellor. I am on the point of forming a new government in accord with the various parties and will keep public opinion freely informed of the course of events.

"The new government will be a government of the people. It must make every effort to secure in the quickest possible time peace for the German people and consolidate the liberty which they have won.

"The new government has taken charge of the administration to preserve the German people from civil war and famine and to accomplish their legitimate claim to autonomy. The government can solve this problem only if all the officials in town and country will help.

"I ask you immediately to leave the streets and remain orderly and calm."

**GERMAN INTERNAL SITUATION IS GRAVE.**

With the abdication of Kaiser William a grave situation developed that manifestly demanded the most careful judgment on the part of General Foch and the allied war council. It was the kaiser's government that authorized the commission from Germany to go to the allied headquarters and receive and consider the allied terms of an armistice. With the abdication of the kaiser that government apparently disappeared, and a new government, from which the commission had received no authority, took charge of German affairs. How capable that new government might prove to handle the difficult situation in their country became an important problem, and another important question was: Could General Foch grant an armistice even if the old government's commission agreed to sign the terms?

The developments up to the arrival of the German representatives in regard to peace may be summarized about as follows: The collapse in rapid succession of Bulgaria, Turkey and Austria; the relentless blows of the allied armies on the western front against the weakening German forces; the repeated application by Germany for an armistice; the sitting of the supreme allied war council in Versailles and its agreement upon terms of peace and its designation of General Foch as the one to present those terms to Germany; and the arrival of the German emissaries at General Foch's headquarters behind the allied lines just east of Compeigne. They arrived there late Thursday night, Paris time. They requested time to refer the terms to German headquarters at Spa, a city in eastern Belgium occupied by the Germans, and urged that hostilities cease during their consideration. They were given 72 hours to accept or reject the terms and were told that there would be no cessation of hostilities until the terms were signed. A messenger was sent to the German headquarters, but it is understood that he had not yet arrived when the official decree was issued in Berlin telling of the abdication of the kaiser and the crown prince. With the report came others also, but unconfirmed, telling of the abdication of other Teutonic rulers, among them the kings of Bavaria and Saxony.

**ALMOST UNCONDITIONAL SURRENDER.**

**In addition to the cessation of hostilities, the terms of the armistice are extremely drastic. They provide as follows:**

**Evacuation of all invaded territory, including Russia, Alsace-Lorraine and Rumania, as well as Serbia, Belgium and France, within 14 days.**

**The withdrawal of the German army, disarmed, to the east side of the Rhine river.**

**The return of all allied prisoners and persons taken from invaded territory by Germany within 14 days, the allies holding German prisoners until they find it agreeable and advisable to return them.**

**The abandonment of the treaties by which Germany subjugated Russia and Rumania.**

**The surrender of all war supplies and munitions on invaded soil.**

**The surrender of 160 submarines, 50 destroyers, six battle cruisers, 10 battleships, eight light cruisers and other miscellaneous ships.**

**The surrender of 5000 guns, half field and half light artillery; 30,000 machine guns; 3000 flame throwers and 2000 airplanes.**

**The surrender of 5000 locomotives, 50,000 wagons, 10,000 motor lorries, the railways of Alsace-Lorraine for use by the allies and stores of coal and iron.**

**The armistice is for a period of 30 days only, though it is heralded as the end of the war.**

**DRAFT MACHINERY ORDERED STOPPED.**

Shortly after the announcement of the signing of the armistice, President Wilson instructed the war department to cancel all draft calls. This stopped the movement of more than 250,000 men already on the way "somewhere," and cancelled the calls for 300,000 more that would have gone to camp during this month. It is announced that so far as practicable all men in camps in America will now be returned to civil life as rapidly as possible.

**HOOVER GOES TO EUROPE.**

Announcement is made that Food Administrator Herbert Hoover is to go to Europe to take charge there of the part the United States is to play in solving the increasingly difficult food problems. The coming of peace throws upon this country the additional burden of feeding millions of people that could not heretofore be reached. Food conservation will be even more necessary for months to come than it has been in the past, it is stated.

# Voting Is Not Heavy

## All Congressmen Elected Are Republicans

Washington voters responded fairly well last week to the call to election, but the vote was not as heavy as it would have been had not war work and Spanish influenza held much popular interest.

The state of Washington elected five republican congressmen, its full list. C. C. Dill, democratic congressman, who had been charged with un-Americanism, was defeated. The legislature will be strongly republican.

In the nation as a whole the republicans won, giving them an easy working majority in the lower house of congress and probably a small majority in the senate, though the latter is uncertain at this writing.

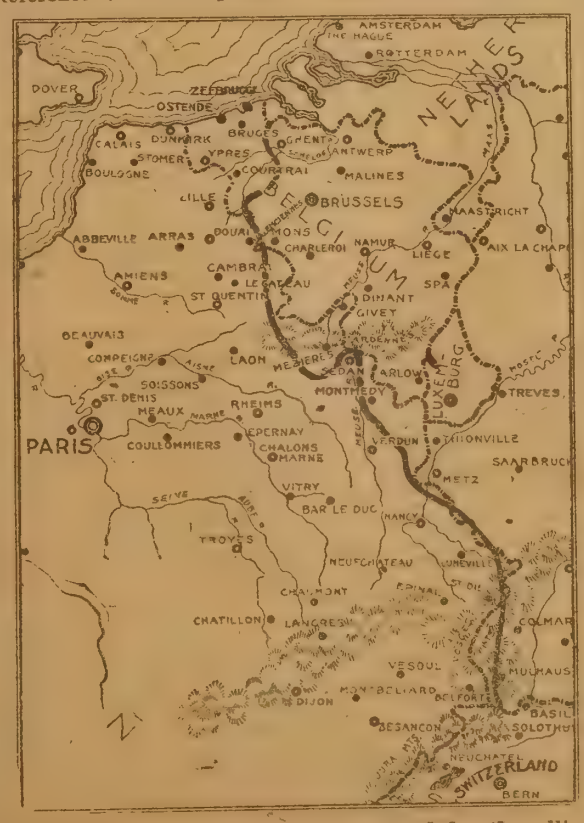
All republican representatives in congress were reelected in Oregon and the legislature will be republican. The representatives are McArthur, Sinnott and Hawley.

The result of the election in Idaho, where the nonpartizan league has waged a strong campaign for a full state and congressional ticket, showed defeat for all the league candidates except three. Senator Borah, republican; Senator Nugent, democrat, and State Treasurer Eagleson, republican, had been indorsed by the league and were elected. All other league candidates were defeated, including H. F. Samuels for governor. He was defeated by Davis, republican, by nearly 20,000 votes.

In North Dakota, the nonpartizan league retained their control of the state government and the legislature. Only one candidate indorsed by the league for a state position was defeated.

**WHERE THE BATTLES ARE BEING WON.**

During the past week the American soldiers have driven a deep wedge into the German lines north of Verdun. Reference to the map herewith shows the addition of




Sedan to the important points captured by the allies. Other advances have been made, as will be seen by reference to this map and that published last week.

## *Washington Gleanings*

Clarke county dairymen have formed a pool and have ordered 35 carloads of alfalfa from Kennewick.

Prunes grown in Clarke county are said to be among the finest purchased by the United States government.

Water in the irrigation canals of the Consumers' Ditch company at Hanford was shut off last week, ending the 1918 season.

In the Albion schools correspondence work in all the grades above the fourth commenced Monday and will continue until the school is opened.

Live stock is moving out of the Molson country because of the feed shortage. Marketable beef stuff and feeders are also going out in unusual numbers.

Whitman county teachers' institute, which was to have been held November 25, 26 and 27, has been indefinitely postponed because of the influenza situation.

Sheep scab may mean extra cost of approximately $100,000 for holding over this year's lambs by sheep men using the Okanogan national forest grazing ranges.

The soldier students of the two branches of the S. A. T. C. in Pullman are to have a $12,000 Y. M. C. A. building, fully equipped and designed to meet the demand of the men.

Members of the state woolgrowers' association will meet in Yakima probably December 10, according to plans announced by E. F. Benson, state commissioner of agriculture.

The sale of O. S. Johnson's 70-acre farm in the Selzer valley to Charles Johnson was announced last week. The consideration was $13,000. The sale included all stock and farm implements.

Every fruit warehouse in the entire Wenatchee district is now filled to capacity with packed apples ready for shipment and more apples are being received daily than are going out.

The appropriation of $200,000 for the extension of the Sunnyside canal to cover the 48,000 acres near Kennewick, development of which is retarded for lack of funds, has been recommended by Secretary Lane.

Growers of Winesap apples will this year make an average of between $800 and $1000 an acre, according to C. B. Wood, Yakima county horticultural inspector, who has completed a survey throughout Yakima county.

A. P. Gray, on the William Young ranch at Richland, has contracted his entire 1918 corn crop, amounting to something like 10 tons, to Pasco parties at $60 a ton. This corn will be fed to a large herd of hogs by the purchasers.

Fall wheat at Ralston, sown during the last few weeks, has been greatly benefited by recent rains, which have wet the ground down about five inches. The acreage is light, owing to the delayed rain. A few farmers are still sowing.

Fall sown wheat is up in most places in Walla Walla county. In the lighter land sections west and north of Walla Walla more rain is needed before the grain will sprout well. An unusually large amount of wheat has been sown this fall.

The Walla Walla board of education has voted to reduce the insurance on school buildings $156,750. Approximately $2500 in premiums will be saved. It was found that some of the buildings were insured for more than their estimated value.

The 1918 crops in Whatcom county are on the whole pretty good, considering the conditions this year, declares H. B. Carroll Jr., county agent. Some crops are below normal, as in the case of peas, but in nearly all other cases normality or better has been reached.

Gibson Brothers, live stock men of Yakima, have announced what is said to be the record sale of cattle for the Yakima valley for some years. The firm sold 11 loads of cattle to T. H. Masson, representing Frye & Co. of Seattle, for $35,000. There were 375 head of cattle in the lot.

For immediate shipment to the soldiers overseas the United States government has commandeered 2000 cases, or 48,000 cans, of the Yakima valley cherries canned by the Libby, McNeill & Libby company, and has given orders that the cases are to be strapped with iron for the journey across.

The October report of the Walla Walla Cow Testing association shows that in two years the average increase of milk given by the cows is 121 pounds. During the month 27 of the 282 cows tested produced 40 pounds or more of butterfat. The average of butterfat for the entire herd is 25.1 pounds.

Hog cholera was found among three or four bunches of hogs in the vicinity of Raymond last week. One hog raiser had a bunch of 61 hogs, 23 of them died of cholera and examination of the others by W. W. Stewart of Chehalis, deputy state veterinarian, showed them infected and they were ordered killed.

A Snohomish county ranch, comprising a little more than 40 acres, was sold recently for $11,000. The property sold was owned by J. A. Grannell and is situated a half mile this side of English, a point north of Everett, and included horses, stock and implements. Andrew Martin of Colorado was the purchaser.

The forest service has taken steps to rid the Colville and Mount Hull ranges of all cayuses, in order to accommodate more cattle next season. The Knob Hill Cattle association has about completed its fall roundup of horses and cattle from the Colville reserve ranges, about 350 head coming in last week to finish the drive.

# Purpose of Land Bank

## *To Aid Farmers on Business Principles; Not to Distribute Gifts or Bounties*

The Federal Land bank of Spokane completed mortgage loans during October, for which cash was actually paid, in the sum of $1,260,180, making the total of mortgage loans on its books outstanding as of October 31, $21,659,900.

Since the opening of the bank 26,737 farmers have filed applications for farm loans in amounts aggragating $60,785,000. Of those 21,365 farms have been appraised and loans were approved on 15,087, having rejected 6269.

Discussing the organization and operation of the Federal Land bank of Spokane, D. G. O'Shea, the president, says:

In the first place it should be understood that the Federal Land bank is designed to make business loans involving the taking of security and the collection of payments. It is not distributing gifts or bounties. It has nothing to give away but its service. It was organized with a capital provided by law, without surplus and without appropriation, to conduct a loaning business and be self sustaining, earning its expenses out of its operations and selling its bonds to the public, who will buy only if the security be shown to be adequate, the interest paid thereon and the principal returned. The twelfth land bank district comprises the four large states of Idaho, Montana, Oregon and Washington, an immense territory with every variety of soil and product, a territory that has been exploited by promoters and speculators, much of it newly settled by persons struggling to secure homes, with land values fluctuating and variable and affected by seasonable and changing conditions.

Interest rates in these northwestern states were high, the persons engaged in making farm loans were numerous, active and organized. They have fought the Federal Land bank with every means at their disposal to misrepresent and discredit it; we expect and look for their opposition and fear it not; but we do believe we are entitled to the support of the farmer whom we want to serve and of those who profess to represent the farmers.

If there were nothing to the business but the distributing of money to all who asked for it, the operation would be simple. To make loans, however, involves the taking of security, the collection of interest, and the ultimate return of the principal. It involves also the collection of information, the gathering of reports, and reasonable conformity to useful and proper business regulations.

**If every applicant got from the land bank what he asked for, the doom of the system would be sealed ere this, and the farmers of the northwest would be permanently committed to the good old 10 and 12 per cent interest rates, plus commissions, fees and renewal costs.**

That some have been disallowed, and others got less than they sought, naturally causes disappointment. If the "kicks" of those disappointed persons be registered, and no reference made to the thousands who have been beneficially served, the record is assuredly incomplete and misleading.

The Federal Land bank began business without precedent to guide it, and without a form to follow. It has organized and chartered 408 national farm loan associations in a widely extended territory. It has endeavored to conduct a technical business through persons, the great majority of whom were untrained in the work. It has had not only to organize, but to do business as well, in competition with men highly trained and spurred by personal gain; and it has had to consider many problems too numerous to mention in a brief letter, which problems were aggravated by serious crop failures in much of its territory.

It has conceived it to be its first mission to establish itself on a secure, lasting and firm foundation, regardless of individual disappointments, and to demonstrate it has done so, we ask brief consideration of some of the things we have done as well as the things that were left undone.

We have examined and appraised to date, 20,600 farms, and paid the railroad fare, travelling expenses and salaries of the appraisers; All such applications were not approved, and many others were approved in less amounts than asked for. We have had our legal department examine over 10,000 abstracts of title, draw mortgage papers, cure defects and correct titles that were imperfect. We have paid out in actual cash to this date $21,200,000 to the farmers of the northwest in sums averaging from $100 to $10,000 at interest rates—some at 5 per cent, where we sold bonds at 4 1-2 per cent, the others at 5 1-2 per cent, where our bonds were sold at 5 per cent, and we are daily adding to the amount in large volume.

**The farm loan act allows the land bank to charge 6 per cent, and allows it to charge the borrower the cost of appraisal and the cost of examining his title. We have never charged the man who completed his loan $1 for any service rendered him, believing we can operate on the small margin of interest we charge over and above the interest we pay on our bonds; and we are doing so.**

We pay for large supplies of stationery and legal forms, pay for postage the same as any other business concern, pay office rentals and for legal and clerical help, and it may be no harm to say that we know nothing and care less, of the political affiliations of our employes. They are expected to work hard and full time, and results only count. For all we furnish and for all the work we do as aforesaid, we get not a dollar until after the loan has been out six months, and then, if the borrower pays, we get 1-2 per cent per annum profit. That on a loan of $1000 would be $2.50. Operating under those conditions and on those terms and with no other source of revenue we have met all the organization expenses, all the cost of examining and considering thousands of applications from which no results were had, and have been on a paying basis since early in this year, and gradually accumulating a surplus which, by the way, will make dividends for no one but the farmer borrower.

We ask only of all friends of the system that they be fair and constructive in their criticism, not destructive; not joining those who attack us for the very good reason that their profits have been affected. Tell us of the things that will enable us to give better service, and we will endeavor to measure up to the expectations if they are reasonable and right.

Many wise persons sagely shook their heads in derision at the idea that the farmers bank could operate at any reasonable cost; they said it could not sell its bonds; they said politics would get into it and "chair warmers" would get jobs; that common persons without fees or big profits could not deal with financial matters through farmers' organizations; that farmers would not pay and politicians would not make them pay; that the placing of mortgage loans is an abstruse and wonderful mystery to be approached only by a select and chosen class.

Bless them, there is an institution now being developed that even on the small margin it charges, if permitted to work out its own destinies, will within a few years accumulate a surplus that will be surprising; that will pay dividends to the Farm Loan associations; that will accord safety and economies to the farmers of the northwest to the end that they can become financially independent; an institution, the securities of which are already so well established, that its bonds, even in these times, are already selling in the open market at a substantial premium.

### STOCKMEN'S CLUB OF SPOKANE.

**To Have Weekly Luncheons and Furnish Headquarters for the Live Stock Industry.**

The Stockmen's Club of Spokane starts out with the purpose of selecting a permanent headquarters where stockmen may gather together to talk over their business affairs and enjoy a weekly Saturday noon luncheon. The officers are: Grant Copeland, president; D. M. Drumheller, vice president; E. E. McClintock, vice president, and E. E. Flood, secretary-treasurer. These, together with W. T. Day, William Huntley, J. M. Van Kleeck, D. O. Leith, T. N. Conway, W. D. Roberts, D. W. Twohy, R. L. Rutter, Thomas F. Wren, James Davis, F. M. Rothrock, Peter McGregor, Roy Slater and T. H. Brewer, constitute the directors and executive committee.

The Stockmen's Club of Spokane is taking advantage of the undoubted fact that live stock is destined to become more of a factor in the Pacific northwest than ever before. Since the establishment in Spokane of a union stockyards and two large packing plants, the industry has been on its feet as never before. Spokane's central situation was one of the first reasons why Armour & Co. made it their headquarters on the Pacific coast. While the Spokane yards and the packing houses are yet in their infancy, W. D. Roberts, president of the Stock Yards company, says that even with a hard season this year the yards will do a business amounting to $6,000,000.

One purpose of the club is to accelerate the policy of farmers buying feeder cattle at the Spokane yards, taking them home to fatten and then returning them to market in prime condition. To aid the farmers in financing these feeding operations the Spokane Cattle Loan company has been formed and E. E. Flood is authority for the statement that it has placed $1,500,000 worth of cattle paper during the last year.

# The Farmer War Map

**W. H. PAULHAMUS, President Puyallup-Sumner Fruit Growers' Canning company, Puyallup, Wash.:** Very thankful for your good favor enclosing copy of your new map, which I took pleasure in taking home last evening to be delivered to my youngest boy. The oldest boy is in the service and the youngest boy is very much interested in watching the movement of the troops.

**CHARLES HEBBERD, Federal Food Administrator for Washington, Spokane:** I have your favor enclosing war map and also the small map to be pasted on same. This is certainly a very valuable map as well as being handy and convenient. I have same posted in my office and shall be glad to clip the weekly map from the Farmer.

**W. D. VINCENT, Old National Bank, Spokane, Wash.:** I received your letter of the 30th, together with a copy of the war map. Your idea as to additions is a fine thing and will appeal to every one who is fortunate enough to receive a copy of the map.

**R. INSINGER, Hypotheekbank, Spokane, Wash.:** I am delighted with your map, which I am putting on cloth. I feel that your map, with the weekly maps showing the difference in the battle line, is not only of interest just now, but will be of permanent interest after the war is over, and I am going to keep the map you sent me for that purpose and keep it posted up as long as the war lasts.

# Are Planning Cannery

That a big commercial cannery will be erected at Oroville, Wash., by the Food Products company of Keremous, B. C., in time for next season's vegetables and fruit now seems pretty well assured. R. C. Cliff, manager and principal owner of the company, looked over the surrounding country and had a meeting with the business men of the city. He wants contracts signed up for 100 acres of tomatoes, for which he agrees to pay $20 a ton; 80 acres of corn, at $15; five acres of beans at $50, and five acres of pumpkins at $10. Peaches and other fruit will also be canned. Del Hart, who is giving most attention to securing contracts, expresses the opinion that there will be no trouble in securing all the acreage required and, with the big production of all crops, in that region, when irrigated, Mr. Hart points out that it means much development for both town and country.

### TO WATER 12,000 ACRES.

**New Irrigation District Extends Eighteen Miles.**

An irrigation district that will bring approximately 12,000 acres of land under ditch, and mean greatly increased production of the region, is the Whetstone Horsesprings Cooley irrigation district, extending 18 miles west from Tonasket, Wash., to Loomis, Wash. The region watered is all bench land. The water will come from Chopaka lake, Spectacle Jake, Sinlahekin creek and Toats Cooley creek, sufficient water for 20,000 acres being developed, it is claimed.

The new district will take over the holdings of the present Whetstone Water and Power company, which has been developed under the personal supervision of Marion Chase, state hydraulic engineer, and known in the immediate region as the Chase project. J. M. Hall is president; E. V. Latour, secretary; J. A. Meva, attorney, and W. H. Brown and J. M. Walker, directors. They are all Tonasket men and members of the live commercial club there, to whose activities is credited the organization of the district.

H. A.

### POSTPONE ROAD CONVENTION.

The annual convention of the Washington State Good Roads association which was scheduled for November 21 and 22 at Pasco has been indefinitely postponed owing to the prevalence of Spanish influenza. President Arthur D. Jones of Spokane announces that an effort will be made to secure other dates prior to the convening of the legislature in January. If this can not be done the executive committee of the association will meet and endeavor to formulate recommendations and road legislation by the legislature.

### GET READY FOR CONFERENCE.

Reports from various sections of the northwest indicate that fruitmen are holding local meetings where possible to select delegates to represent them at the fruitgrowers' conference to be held in Spokane next month. The Spokane meeting is scheduled to be held for four days, beginning December 11. Important questions relative to the production and marketing of fruit will be taken up, including the proposed revision of grading regulations.

# Farm Labor Problem

## Lessons That 1918 Has Taught

**By BYRON HUNTER, Agriculturist U. S. Department of Agriculture.**

The season of 1918 has taught us considerable regarding the labor problem. With the new draft law in operation, and from our experience during the last harvest, we can be certain there will be a scarcity of labor in 1919. Something can be done to meet this problem in the way of using labor more conomically.

1. The available labor should be kept employed as constantly as possible. In order to get the summer fallow work done in good season next spring and to prevent land from lying unworked, as much plowing should be done this fall and during the winter as it is possible to do.

2. Arrangements should be made on every farm for each man to drive the maximum sized team within the bounds of efficiency.

Last season Charles Moody of Lind coupled three grain drills together and handled them with one man. Mr. Moody's land is reasonably level and we are aware of the fact that three drills coupled together could not be operated very satisfactorily on very steep land. Another man near Edwall, Wash., operated two disks and harrows with one team, cutting 16 feet instead of eight feet. We have known one man to drive 24 horses in plowing, the plows being coupled together in the same manner as when plowing with a large tractor. There certainly is little to hinder an experienced man from driving a team that will handle two gang plows coupled together. In other words, we must use our ingenuuity, meet the labor problem as best we can, and grow every bushel of wheat that good farming will produce. If we do this and if every man who is able to work will consider it his patriotic and sacred duty to produce, be he rich or poor, and to do what he can, we shall grow and care for a bountiful harvest in 1919.

### WALLA WALLA COW RECORD.

Many of the dairymen who have cows in the Walla Walla Valley Cow-Testing association are selling their grade cows and replacing them with registered stock, according to the report of William Dawson, the official tester of that association. The shortage of labor and the high price of feed has also caused many dairymen to sell their herds. The average price of butterfat for October is about 67 cents. All but two members of the association own or use registered bulls.

R. H. Tuttle, a new member of the association, has a registered Holstein cow, Uneda Korndyke Ada, that produced over a ton of milk during the last month.

There are 282 cows in the association, 31 of which are dry at the present time. The average pounds of milk during October per cow, including the dry cows, was 559; average pounds of butterfat per cow, including dry cows, 25.1; average cost of food per cow, $7.30; average feed cost of producing 100 pounds of milk, $1.31. Twenty-seven cows produced 40 pounds of milk or more; the owners are: Washington state penitentiary, R. A. Atwood, R. H. Tuttle, R. E. Bean, Roy Saunders, A. A. Bixby; F. C. Kralman, J. H. Compau, Charles Baker, D. O. Saunders and D. F. Baker. The three high herds for the month are owned by R. A. Atwood, F. C. Kralman and J. H. Compau.

### WOOL MEN WILL MEET.

December 20 has been selected as the probable date of the annual meeting of the Washington State Woolgrowers' association, according to announcement by E. F. Benson, state commissioner of agriculture. The meeting will be held in Yakima, where it is regularly held, owing to the central location of that city. Among the questions that will come up are the enforcement of the sheep dipping law, use of the public range, government regulation of the wool market and feed problems. It is expected that some 200 wool men will attend the meeting.

### LET TREES BE MONUMENTS.

The American Forestry association, of which Charles Lathrop Pack is president, is starting a movement to encourage the planting of trees along transcontinental highways, the trees to be planted as memorials to the nation's soldiers and sailors who have given their lives during the present war. The idea has been presented by the association to the governor of each state in the Union.

### BUY FEEDERS IN SPOKANE.

Seven carloads of two-year-olds have been bought in Spokane by H. C. Biering of Bozeman, Mont., president of the Taylor's Fork Cattle company. These are to be fed on the ranges of the company in Montana. Mr. Biering's company is introducing registered Hereford bulls on his place.

### SHIP OUT LIVE STOCK.

Owing to feed shortage, it is reported that considerable live stock is being shipped out of the Molson district, much of it going to the meat markets.

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# Closer Cooperation Is Needed

## Improvement in Both Buying and Selling Is Possible When Farmers Join Together in Facing Mutual Difficulties and Problems




DARRINGTON, Snohomish County, Wash., Nov. 1.—Crops are about all harvested except a few carrots and a few potatoes are yet to be dug. The potato crop is about three-fourths of normal. Practically all of the farmers in this section are able to meet their obligations and go into the winter able to pay for all their needs and buy Liberty bonds besides. As this is not a grain country very little, if any, grain is planted here in the fall of the year. Prospects for next year are reasonably good. So far no fall plowing has been done on account of an excessive amount of rain. Should it clear up so that people can plow some of the land this fall it certainly would help a lot towards getting crops in at least two weeks earlier next spring. I am a firm believer in fall plowing, for the early planting always brings the best results in this section. Feed for stock is not any too plentiful, although hay crop was about normal. The oat straw is of poor quality as it was overripe when cut and not very well cured. Some hay will have to be bought but not a great deal. Some of the farmers have disposed of some of their stock so as to avoid buying high priced hay and mill feeds. Good beef sells here for 16 cents per pound; dressed pork brings 21 cents per pound; butter fat, 69 cents per pound; eggs, 75 cents per dozen. Hogs will be rather a scarce article in this section by next spring. Closer cooperation is what we need around here among the farmers more than anything else. That is the only way they can better their condition both in buying and selling. Not very much land was cleared this fall because labor and powder are two things to be reckoned with. Two new stump pullers have been bought around here helping to get the stumps out without using powder. The writer has one and has very fair success pulling them out without powder on bottom land. There have been no killing frosts and we are still having ripe strawberries on the table. They are the ever-bearing kind.

C. B. NEIDERPRUM.

### HARVEST BIG PRUNE CROP.

VANCOUVER, Clarke County, Wash., Nov. 2.—After harvest notes are coming in and the reports are exceptionally good. All are able to meet their obligations and in several cases the prune farmers are paying off the entire mortgage and back interest. The estimate for the prune crop of Clarke county has been put at 12,000,000 pounds, dried and ready for the market. This means about 10 cents per pound to the grower. This, taken with the other industries, has put Clarke county in the lead, which shows in the last fourth Liberty bond allotment, as they raised $316,200 over that called for, making a total of $978,200 subscribed in the county. Farms have been bought and paid for with this season's crop of prunes, with a good, substantial allowance for the beginning of next season. Potato digging is nearly completed, and the bulk of the crop will be put into the pits or cellars for a better market. Only $40 a ton is offered now and the sales are slow. The potatoes are of very good quality and the yield averages up with the past years. The supply of mill feeds seems to be holding out and farmers say that by holding their best stock they will be able to go through the winter all right. The last month a stream of live stock has been taken from the county to the stock yards, and the report comes from there that cows and feeders are a drug on the market. Fresh eggs are selling at 70 cents a dozen. The shortage of hog feed will compel some to sell off their breeding stock and immature stock. Conditions are changing so fast that there is no basis to work on accurately as to the amount of fall crops that will be planted or the number of producing stock that will be wintered. A great many farms have changed hands in the last month, and most of the present owners are bringing their own stock onto the places. Former owners are auctioning off their stock, and most of it is going to the stock yards and as feeders. This will not help next year's production. The chicken market has fallen off and egg production is on the wane. Storage eggs are on the market at 60 cents a dozen. The apple market is dull. Fall and winter apples are very wormy, especially Spitzenbergs, Spies and Grimes Golden. Farmers are a little short of help, but with the help of the school children and the lateness of the fall, the crop will be harvested without any serious loss. The supply of onions is about normal and bringing a good price. Rutabagas, carrots and beets are reported good and will be used to a great extent in the place of mill feeds for stock. Not very much fall grain will be sown in the county. The ground is being used for pasture, which is the best known in years, and many are regretting that they sold their stock off so close. Sheep are one of the side issues in the stock business. Many are going into this in a small way. Horses are selling as low as $50. Although the bidding at auctions is lively, they usually stop at prices that the owner considers below cost.

C. C. BROWN.

### FEW SELL OFF LIVE STOCK.

CHEHALIS, Lewis County, Wash., Oct. 30.—With but few exceptions the farmers of this county are in good financial condition and will be able to go through the winter without any hardships. There are a few, however, who have considerable stock on hand who will either have to sell their stock or buy high priced feed. Several sales of live stock have been held by farmers in this condition. The 1918 harvest is over, and in spite of the dry year farmers are fairly well satisfied. Fall seeding is about half done, the remainder was too dry to plow until after the fall rains came. It has only been within the last two weeks that plowing with other than tractors could be done. The high price of feed and the scarcity of labor will encourage many to dispose of their poor cows before winter.

A. B. NYSTROM. County Agent.

### FARMERS ARE SATISFIED.

PORT ANGELES, Clallam County, Wash., Oct. 30.—As a whole, Clallam county has had a splendid harvest and the farmers feel very satisfied on this score. They have worked hard, but with the aid of all of the members of the families they have been able to overcome the handicap of shortage of labor. The increased prices of all of the products have put them in a good financial condition and the fruits of all of this will show itself in the purchase of more machinery and also a part of the proceeds will go into the clearing of more land. We look to an increase in the tillable area of at least 10 per cent for the coming year. The harvest is about all cleaned up and the impression is that the farmers are well stocked with winter feed.

J. P. CHRISTENSEN.

### FINANCIAL CONDITIONS GOOD.

CATHLAMET, Wahkiakum County, Wash., Nov. 5.—No one could truthfully state that the farmers of Wahkiakum county are in financial distress. In a dairying section where the pastures remain green for eight months in the year, we usually find that the returns from the products from the farms are sufficient to keep every one fairly well contented. This is certainly true of Wahkiakum county.

The winter feed situation has given some concern. Heretofore the farmers have been able to secure beet pulp, but this year this feed will form a very small portion of the ration. Mill feeds can now be obtained in quantity, but the quality is such that little satisfaction can be gained by feeding them. As a consequence many of our dairymen who practice winter dairying will be be somewhat disappointed in the production of their cows. Several farmers were fortunate enough to secure a good yield of roots and they are now feeding them to good advantage. A few farmers have silos, but there are so few of them that only the few will receive the benefit. This winter presents a wonderful possibility for an excellent demonstration with regard to the use of silos in this section.

The first annual report of the Wahkiakum County Cow Testing association is now ready for publication. The cows which completed the year have an average butterfat production of 317 pounds, which record will undoubtedly be surpassed the coming year. Through the good work of this association, dairymen of the county are taking advantage of opportunities to study feeding problems and breeding problems. The interest in purebred sires was never greater and the good work of Mr. Sonner, the tester, has at last resulted in having every member of the association the owner of a purebred sire.

Farmers as well as business men and fishermen are actively supporting the movement to secure state-wide recognition of the fact that Wahkiakum county needs state assistance in securing road connections with the rest of the state. While we believe Oregon to be a grand old state we are heartily tired of being called Oregonians, because we live in Wahkiakum county, Washington. The recent Liberty loan drive, in which this county subscribed over $131,000, with a quota of $49,000, has demonstrated that this county is worthy of recognition.

A. T. FLAGG.

### It Requires Judgment.

Hard work is necessary, but hard work must be backed up by judgment.




**My Son Is Lost**

Will you help me, his mother, find him? He is Cyrus Harrison Hollingsworth. He disappeared from his home near Genesee, Idaho, July 22. Is 14 years old, tall for his age, has light hair and blue eyes.

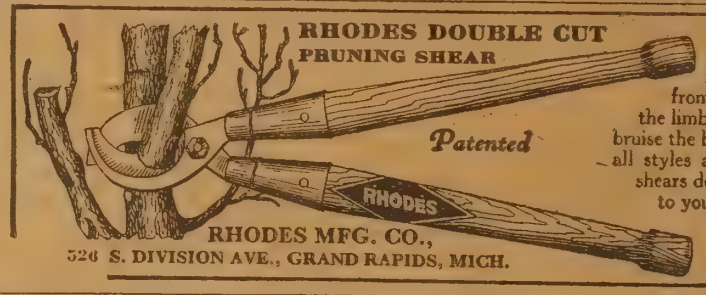
The uncertainty of his whereabouts or what may have befallen him is unutterable anguish to me, and as a nearly distracted mother I appeal to you who read this to notify me immediately if you have seen him or can in any way help me to trace and locate him.

**Mrs. M. A. Hollingsworth**
Genesee, Idaho.

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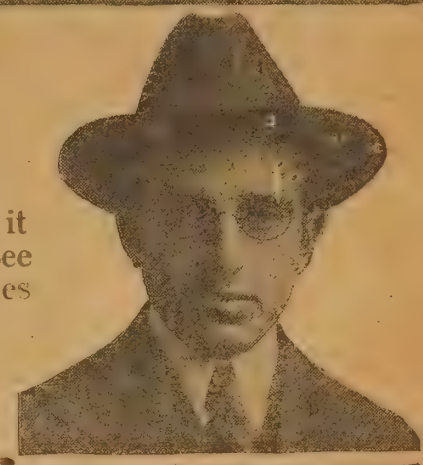


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Your puller works fine. 25 of my neighbors were present and watched me pull stumps. It pulled stumps we thought it could not pull. Mr. E. A. Buckley, Bay Springs, Jasper Co., Miss.

From what experience I have had with other machines your machine is the best and cheapest of them all. Lewis Packard, Gowen, Mich.

I like my Kirstin. I have pulled old pine stumps as big as 20 inches. I have not hitched to anything but what has come. Earl Rogers, Kelliher, Minn

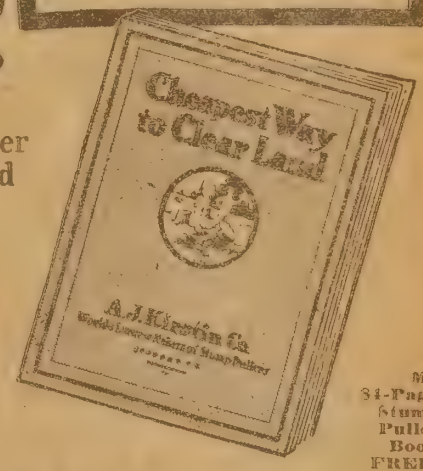
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A. B. NYSTROM, Editorial Contributor.

# Dairy Industry

## New Milk Prices in New York

It will be many years before the consumers of this country will see the low and ruinous prices for dairy products that ruled two years ago, when the Farmer made its survey of the dairy industry of the United States. The federal food board at New York has just announced the new milk prices for November, as approved by the food administration at Washington. The authorized prices in greater New York will be as follows:

| | |
|---|---|
| Grade A, bottled, delivered, quarts | 18c |
| Grade A, bottled, delivered, pints | 11c |
| Grade B, bottled, delivered, quarts | 16c |
| Grade B, bottled, delivered, pints | 16c |
| Grade B, bottled, to stores, quarts | 15½c |
| Grade B, stores, to consumers, quarts | 16c |
| Grade B, loose, to stores | 12½c |
| Grade B, loose, by stores | 13c |
| Grade B, wholesale, 10 gals., quarts | 12¾c |
| Grade B, under 10 gallons | 13c |

This table presents some vivid contrasts with the conditions existing two years ago. A single pint of A grade milk will cost the consumer 11 cents. Two or three years ago the producers were getting but little more than that for a gallon. The New York price to the producers is approximately nine cents a quart—more than double the price received by the farmers two or three years ago. Apparently the distributors have been effectively curbed in their former practice of taking excessive profits, for the food administration states that a thorough examination of the accounts of the New York milk distributors shows that they have lost money on milk sold during October, and will lose money during November at the price announced. The distributors, however, accept these rulings rather than have a further increase in the cost to the consumer, which will likely result in a decreased consumption. It is not, of course, the policy of the food administration to require the distributors to lose money continuously. In all probability this examination of the accounts showed that the distributors had earned liberal profits in the summer months preceding October, and that its purpose is to equalize profits over the full period of 12 months.

We think it is now a certainty that the great dairy industry of this country will not be allowed to slip back into the ruinous conditions that forced producers everywhere to organize for self-preservation.

# Value of Water

## Give the Cows All They Require

By A. B. NYSTROM.

No attempt will be made to estimate the value of the water your cows drink in dollars and cents. It is usually the one part of the ration that is supplied in abundance. Still, there are many dairymen who fail to give the cows all the water they want all the time. We must not forget that milk is 87 per cent water. And if we want our cows to be heavy producers we must give them all the water they require.

An interesting incident that shows the value of water came to the writer's attention recently. Joe Kiser of Lewis county, Washington, milks 28 cows. During the summer months his cows run out night and day where they have access to the pastures and plenty of fresh water. His returns from them show they are well fed. When pasture dried up this fall he began feeding silage and grain and was able to keep up the milk flow as long as the weather was warm. When it got cold he kept the cows in at night, feeding them the same as when he turned them out at night. The cows kept going down in their production until Mr. Kiser became alarmed. He fed heavier rations of silage and hay without results. One evening after supper he thought he would go out and see if the cows were thirsty. He carried a bucket full to the first cow, and to his surprise she drank it all as fast as she could swallow it. He went after another bucket full and then another. Other cows drank four pailfuls that evening and before Mr. Kiser went back to the house he had carried a couple of barrels of water to his cows.

In spite of the extra work, which took about an hour each night, Mr. Kiser was determined to continue it for a few days to see what effect it would have on the milk flow. To his surprise and satisfaction the cows came back to their normal flow in a very few days, and now Mr. Kiser is thinking seriously of installing drinking cups in the cow barn.

When asked how much his cows increased, on the average, by night watering he said four pounds per day, and it all showed up in the morning milking. These figures are not guesses, for there is a milk scale and record in daily use in this barn. Others can well profit by Mr. Kiser's experience and provide for watering your cows at night.

### BUTTER SUBSTITUTES.

**Restaurants Using Same Must Display Placards to That Effect.**

J. K. White, state sanitary inspector of Idaho, has notified F. R. Cammack, field dairyman for the extension department, that all restaurants and public eating houses using oleomargarine have been ordered to display placards calling attention to that fact. Mr. Cammack called the inspector's attention to the fact that oleo was being used in some places without the designation required by law. Not very many Idaho restaurants have resorted to the use of butter substitutes, largely through a sense of patriotism because they realize the dairy business is one of the more important industries of the state and to use butter substitutes not only lowers the standard of their places of business, but also serves as a direct rap at the dairymen and a benefit to interests not in sympathy with dairy development.

### FLOUR PURCHASES LIGHT.

So far this season government flour purchases in the northwest have averaged only about 350,000 barrels a month bought by the milling division of the administration last year. A year ago the mills not only had large government orders, but also enjoyed good markets in South and Central America and made large shipments to the southeastern states. This season they are shut out of those markets and the only outlet for their flour is the reduced government business and the small trade available in local territory.

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LIVE STOCK NOTES

Write to the Editor.

E. J. IDDINGS, Editorial Contributor.

## Paid Back in Two Years

In a statement some time ago on the advantages to be gained by the stockman who uses a purebred bull to head his herd, E. E. Flood of Spokane gave some interesting calculations. He declares that a first-class sire will pay for himself in two years.

"The basis for figuring," he says, "is that the animal be used as the head of a herd of 40 cows that will produce 80 per cent calves the first year. Any live stock man will agree that these calves, 32 in number, will be worth 25 per cent more than they would be from a scrub sire. In other words, we have eight calves as a profit from this experiment. These calves at 8 weeks old will sell for an average of $14 each, which is $100 of the purchase price of the bull and 12 per cent interest, inasmuch as we are financing this bull for a term of two years at 6 per cent interest. In the second year the same results will have been obtained and the animal paid for in two years' time, with a good crop of halfblood calves to show for the experiment."

It is probable that the price of calves for vealing has increased more than has the price of purebred bulls since Mr. Flood made this calculation. If so, his argument becomes stronger.

### CALL FOR REMOUNT STALLIONS.

New and significant evidence of the heightened interest of the national military establishment in thoroughbred breeding and horse racing has been furnished by the appeal of the high-priced officers of the remount department to the Maryland Jockey club for the institution at Pimlico of a race for miliary horses so conditioned that the remount division of the army may, after the finish, purchase at $1000 a head any or all of the horses that may take part in it, says the Baltimore correspondent in the Cincinnati Inquirer. There will be no entrance fee, but the Maryland Jockey club will put up a purse of $2500, which will be split four ways—$1500 to the winner, $500 to the second horse, $300 to the third and $200 to the fourth. In providing for the division of the remount breeding purse among four starters the Maryland Jockey club is pursuing a policy it adopted some time since, in connection with all of Pimlico's big purses.

## VETERINARY

By DR. S. B. NELSON.

**Feed for Young Colt**—I would like to know what to feed my colt. The colt is 3 weeks old and I am raising it by hand by feeding milk mixed with stock feed four times a day, feeding about one quart at a feeding. The colt seems to be getting poor and sucks itself. What is your advice? J. L. M.

Nyssa, Ore.

Dilute the cow's milk one-half and add a teaspoonful of sugar. Do not add any stock food to the milk. Gradually increase the amount of milk that you are giving the colt so that he gets more milk.

**Scab Covers Teat**—I have a thoroughbred Jersey cow 5 years old with calf that gives her milk very hard. There seems to be a scab that forms over the hole of the teat. She is on pasture, also fed corn fodder, cow kale, and mill feed, with dairy food mixed. She has a very good appetite. MRS. H.

Boring, Ore.

The condition that you mention is quite often caused by the invasion of the bacillus aecrophorum. The treatment I would advise is to dip the teat in tincture of iodine before and after each milking.

**Defective Tooth Causes Trouble**—I have a fine horse that is getting no benefit from its feed. The veterinarian says the teeth are perfect, yet after chewing hay or bundles a short time, does not swallow it, but lets it fall from the mouth. This has been the case for over a year. Gets very poor when given anything to eat except when out on green pasture. Will be grateful if you can tell me the trouble. The veterinarian has examined the animal several times and does not know the cause. Please reply in your paper. R. B.

Ashton, Idaho.

The symptoms that you give above are the special symptoms that indicate that the animal either has a tooth with an abscess in it, or a cavity in it and the tooth is tender, or there is a cracked tooth, a slit tooth. The only treatment for this is to remove the offending tooth.

**Stick in Cow's Udder**—My cow run a stick into her bag about three weeks ago. The stick, as near as I can tell, is about one and one-half inches long and a good one-eighth inch in diameter. It seems to be in the milk vein because when I milk the stick comes down and partly stops the milk flow. Can you tell me any remedy for this? A SUBSCRIBER.

Valley, Wash.

The offending piece of wood will have to be removed surgically. Whether you have to make an incision above the teat, and take it out or whether it could be taken out through the teat I do not know. That is the treatment that will have to be given. Of course, if you could do so it would be better to remove the stick through the natural opening of the teat with a pair of forceps, but if that can not be done then you will have to make an incision up in the udder and remove it that way. It is not wise to make an incision in the side of the teat because that is so difficult to heal. Naturally, if the incision is made in the udder every antiseptic precaution will have to be made or you may get infection in the udder and it will be ruined.




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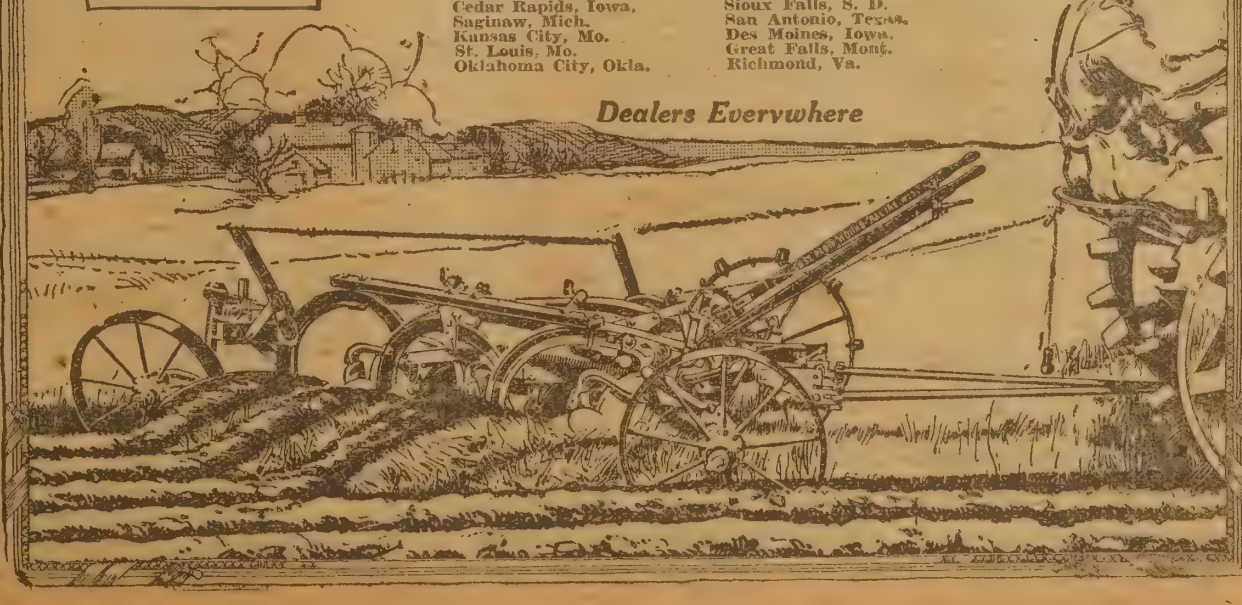
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JAMES DRYDEN, Editorial Contributor.

# Give Hens Room

## If You Would Have Them Lay

The pullets should be got to lay now as soon as possible. This implies that the laying of the eggs does not all rest with the pullet herself. Or, rather, the making of the eggs is under the control of the poultry-keeper largely. No matter how good the pullet may be, or how well bred she may be, no matter whether she is from a 200-egg or a 300-egg strain or not she will not lay eggs unless the owner gives her breathing space at night. She will not lay if the roosting quarters or the house is crowded.

This is the point I wish to emphasize in this article. There are other things under the control of the poultry-keeper that keep the pullets from laying though they have the inherited ability to lay. At this season of the year, however, the special danger is from overcrowding.

It is the crowding that causes 90 per cent of the colds among the pullets in the fall, and a pullet with a cold is not likely to lay eggs. Where they are crowded together too closely the pullets become overheated and they take cold easily. The greater the crowding the less the pure air for each pullet, and this soon shows in lack of vigor and in lack of resistance to colds as well as other ailments.

As the pullets grow they need more house space or air space. The requirement for air increases as their body weight increases. The house may be large enough for two-pound pullets, but too small for three or four pound pullets. They need more air as they grow just as they need more food as they increase in weight.

The trouble is not always that the house is too small; it is very often due to the crowding of the roost perches at the back of the house. The roosts may be so close together that the roost quarters show a solid mass of chickens. There is no space between the rows. The pullets become overheated and they are breathing impure air, and the owner wonders why he gets no eggs. They suffer from colds and lack of pure air. Better close up the house and force the chickens to roost in the trees or on the fence than crowd them too much in a house.

What space should they have? The matter of fresh air for the hen is easily regulated because the hen must roost on a perch. They will not crowd together on the floor; they want perches. All the poultryman needs to do to regulate the fresh air for the chickens is to regulate the perches.

Put them farther apart if you want the fowls to have more fresh air. That keeps the fowls farther apart. Here is a safe rule: Allow six to eight inches space on the roost for each hen, depending on the size of the hen, and set the perches at least 18 inches apart, better 20 inches. With an open front this arrangement will insure ample fresh air and prevent perhaps 90 per cent of the colds among the pullets in the fall. Give them this, and watch them grow and develop red combs.

There is little use in building open front houses, or any other kind of house if the fowls are compelled to roost back in the rear where they are packed close together. Fresh air is the cheapest kind of food and is just as essential as mill-run and corn. J. D.

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# What Are Vitamines?

Referring to an article in this department in which "vitamines" were referred to, a reader writes to inquire as to the exact meaning of the term, saying that he fails to find the word in his dictionary.

The word is not found in dictionaries, and I can not at the present time give any information as to its origin. It has been used, rightly or wrongly, to signify a vital substance of nutrition in foods and is used in the Wisconsin bulletin which I quoted in my recent article on "Life-Giving Eggs and Milk." This substance, or element, is as yet an unidentified chemical substance, and Dr. McCollom has taken exception to the use of this word. All that is known, so far as the writer is aware, is that there is a something, or a substance, that is very favorable to growth, but which is found only in milk and eggs. That much has been demonstrated, and that may be enough for the practical feeder.

The fact is, a great discovery has been made through feeding experiments, but the thing discovered remains hidden. The discovery is of great practical value and we will take advantage of it even though science has not given us the whys and the hows and the name of it. It is a fact, so far as the practical application is concerned, just as much as though we could measure it with a tape line, weigh it with a balance, see it with our own eyes, or photograph it with the X-ray. J. D.

# Your Boy Needs Help

By CHARLES DILLON.

If ever you have a doubt about the importance of giving money to the united war work campaiagn you can clear your mind completely by comparing the history of your country's early days with the history of the western front. If, perchance, you have forgotten the history you studied in the eighth grade, or in high school, it would be a good thing to go over it again. When the first American army went into battle a hundred and forty years ago, very little thought was given to anything except fight. There were no comforts and very often there was no food. You will remember Valley Forge even if you have forgotten the story word for word. You certainly remember the picture of Washington standing on snow-covered ground, usually with one foot on a tree stump, worrying about his hungry, shivering soldiers. You know what a terrible time they had all that winter.

Compare the story of Valley Forge with the history of the last three winters in the European war. You haven't heard of any frozen soldiers—not among the British, the French, the Italians or the Americans. Why? Because of the perfect organization for comfort, physically and spiritually, under which the great associations are employed now consolidated in the united wark work campaign. Whether they be in American camps or on the western front, our boys are cared for by some of these organizations. It doesn't matter whether they are Protestants. Jews or Catholics, some competent person with more thought for comfort than for creed is there, ready and willing to help. There are always men and women present to cheer the homesick boy, to keep up the communication line between him and his home. This is the influence that keeps your boy clean and cheerful. It is the influence that saves him, sometimes from himself, because there are certain circumstances you may know nothing about in which boy or man is tempted beyond his strength to resist. A boy accustomed to the freedom of country life is likely to feel himself a strange figure among the thousands of every class encountered in a great army, far from his native land. The seven organizations I mention are asking for money to keep up their good work among the soldiers here and across the sea. They are represented by men and women who understand the country boy just as they understand the man from town. They know something about country mothers, and when they talk to a boy it is with those mothers in mind.

# Profit on Small Farm

Pacific City is a little village or one of the dozen or more little stations in the valley between Seattle and Tacoma. The little farms are very small, not exceeding three acres. But three or even one acre is all one man can handle. Down close to Seattle there are dairy farms, and up this way mostly garden truck is raised. These garden patches are handled mostly by the Japanese. There are lots of berries grown here. Then on the smaller places they raise their own garden and some hay. Every one has some cows, and cream and milk routes have been established. Cattle here are mostly of the best stock. Cows are worth $125 to $200. and even more.

There are some apples raised, though they are not as nice as apples in the Wenatchee valley. Potatoes yield better here than in any part of Washington that I have seen. There is a good sale for all the berries, beans and the like that can be raised. This stuff is all sold to canners. Everything in the fruit line can be raised here except peaches, and it is too wet for them. Horses are used very little. Most of the produce is taken to the markets in autos. MRS. O. ALLENBAUGH.

Pacific City, Wash.

### WANT BETTER LIVE STOCK.

The International Live Stock show will be held at San Francisco beginning November 16 and continuing until the 24th. The slogan of the show this year is "More and better live stock." It is stated that some of the best beef cattle herds in America will be represented at the show, including Shorthorns, Herefords and Aberdeen Angus. An excellent showing of horses is also expected.

### NO SLACKERS ON RANGES.

Persons applying for use of the forest ranges for next season may have to show evidence that they are not slackers by submitting proof that they have bought liberally of Liberty bonds or war savings stamps, according to reports from forest service officials.

### HOLD POWER FARMING SCHOOL.

The J. I. Case company is holding a series of tractor schools. Those for the northwest are at Spokane November 26-30, and at Portland December 3-7.

### Had His Number.

"What made that man jump so and run when I said there must be a draft somewhere about? Do you think he was afraid of taking cold?" "No; I guess he was a slacker."—Baltimore American.

### Lay the Fire at Night.

It is good policy to be ready for a good start the next morning.

**The ECLIPSE for $1.65 a year**
That is the cost per year, figured on a basis of 38 years of service. Eclipse Windmills erected 38 years ago are still pumping water *today—with no repair bills!*
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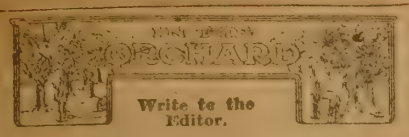

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GRANVILLE LOWTHER,
Editorial Contributor.

# Need Organic Matter

## Chemical Fertilizer Insufficient

It is generally agreed to be a mistake to consider that the application of a fertilizing element to soil by direct means, such as the sprinkling of nitrate of soda upon it, is as valuable as the injection of the same element through the introduction of organic matter. A paragraph in a report of experiments along this line at the Hood River, Ore., experiment station of the Oregon Agricultural college, touches strongly on this point. It says:

"While nitrate of soda will stimulate trees and bring them from a devitalized condition back to a normal condition, it will not, however, exert much influence on the soil, and therefore, in order to improve the physical condition of the soil in many orchards it is necessary to add organic matter."

There are many orchardists today who believe that the growing of alfalfa in orchards is not only one of the best ways of introducing this needed organic matter, and the needed nitrate element, but that it is much to be preferred to the clean cultivation that was so long favored by leading orchardists and that is still adhered to by many.

Alfalfa possesses the power of collecting nitrogen on its roots, as do all leguminous plants, including peas, vetch, clover and beans. This tends to put the needed nitrogen in the soil. In addition, and this is a point emphasized by many fruit growers, it penetrates deeply into the soil, serving a twofold end: (1) It aerates the soil deeply, and (2) it leaves a root system deep down to decay into available organic matter when the crop is plowed up and a new crop started.

# Questions Answered

**By Granville Lowther.**

I have a letter from J. B. Weaver, Union, Oregon. Mr. Weaves says: "I read your page in the Farmer with interest, and have a few questions you might be able to answer.

"Can you give me any information in regard to the spray gun? Do you consider it a success for liquid spray?

"Have you tried, or do you know any one who has tried the dust spray here in the west for codling moth, or cherry slugs?

"If dust spray is successful would it not be advisable to add to the powdered arsenate of lead some cheap powderlike gypsum, which can be had for 75 cents per 100 here? The purpose of the gypsum is to increase the bulk and make it so you could distribute the lead cheaper.

"Would gypsum alone kill the slug?"

Thanking Mr. Weaver for his compliment to me in adding to the interest of the Farmer, I would reply as follows:

1. We have tried the spray gun and like it very much. It makes it possible for one man to do the work that ordinarily required two men. We calculate that the last year we saved in labor many times the cost of the gun. We used the liquid spray, and can testify as to the value of the gun for liquid spray.

2. Several years ago we tried the dust spray with the hand spraying machines. We did not consider it a success. Now, with the new forms of spray materials, and with the improved machinery it is a success. I have not tried it personally, but I know of many who have, and am sure it is all right.

3. As to the advisability of adding to the arsenate of lead some cheap powder like gypsum, I do not know. I do know it would kill cherry slugs, pear slugs or any other of that class of insects that are covered with a slimy, mucilaginous substance, at certain stages of their development. Several years ago, I experimented with lime, wood ashes and road dust in order to learn their effects on slugs. I found that all three killed the slugs. The reason seemed to be that the dust adheres to the body, mixes with the mucilage and causes an irritation from which they die. Gypsum would do the same, or have the same effect as the other dust sprays.

My doubt is in reference to the effect of gypsum on the codling moth.

Gypsum is composed of calcium sulphate, and is what is generally known as plaster of paris after it has been dissolved in hot water at a temperature of about 100 degrees. Perhaps that temperature should be called warm water rather than hot, but a much higher temperature injures it for use as a plaster. The calcium has something of the nature of brass, and the sulphate of sulphur. I do not know what effect the mixture would have on the blossoms in the first codling moth spray, nor do I know what proportion of arsenate of lead would be necessary in order to kill the moth. I wish some one would try it out on a small scale and let the public have the benefit of his experiments. I have on hand at this time about all the experiments I can watch successfully, or I would try it myself.

### The Standard Prune.

I have had an inquiry from Mr. Persons of Yakima, Wash., as to the value of the Standard prune.

I am frank to confess that I know very little about it. We have never grown them, and I have never seen them. I consulted my books and bulletins, and the only literature I could find on the subject was from the voluminous publication called The Plums of New York. In that volume, it is said that the Standard is a cross between the Tragedy and Sugar, sent out by Luther Burbank. Professor E. J. Wickson of the University, Berkeley, California, describes it as follows: "Freestone pit, five-eighths inch by five-eighths inch. Flesh yellow, melting, fine grained; very juicy and sweet; skin dark blue, sub-color dark red, medium texture."

Since the principal difference between the plum and the prune is in the larger sugar content of the prune, I am guessing that the Standard prune is especially valuable on account of its large percentage of sugar. However, if I were planting, I would write to Professor Wickson for any information he may have on the subject. Further, I have faith in Burbank; not all the new things he has turned out have succeeded, but so many of them have that when he gives indorsement to a fruit or vegetable it is worthy of careful consideration.

The question has been raised whether the prune might not be well adapted to California, and not to a colder climate? This is often true, but in this case a prune bearing the same name and similar description is grown in England; and if it could be grown in that climate, it would doubtless succeed in this.

G. L.

# Storing Vegetables

One of the easiest and cheapest ways to store vegetables during the winter is by burying them in a pit. Select a location that is well drained, preferably on sandy soil. Dig the pit long and narrow and about one foot deep. Line with straw and heap the vegetables in. Cover with leaves or straw, on top of which place from four to eight inches of soil. Do not cover too closely in the milder weather, and be sure to arrange wisps of straw at intervals in the peak for ventilation. If the winter weather is severe, a covering of manure over the top will afford warmth and protection.

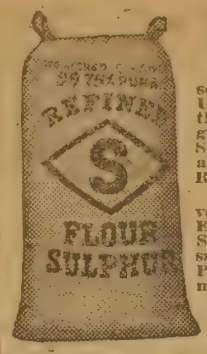
If the vegetables are to be used during the winter the pit can be arranged with dirt partitions so that one compartment of the stored product may be removed without exposing the remaining portions.

### GANNON GOES SOUTH.

T. A. Gannon, national organizer for the National Catholic War Council in the united war work campaign, has left San Francisco after completing preliminary organization work in this state, and is on his way to do the same work in Arizona, Nevada, Mexico and Texas.

### Women in Parliament.

Women are now entitled to sit in the British parliament.


# Sulphur

It has been proven and so recommended by the University of California that if you sulphur your grape vines and orchards SIX times they will not be affected by MILDEW or RED SPIDERS.

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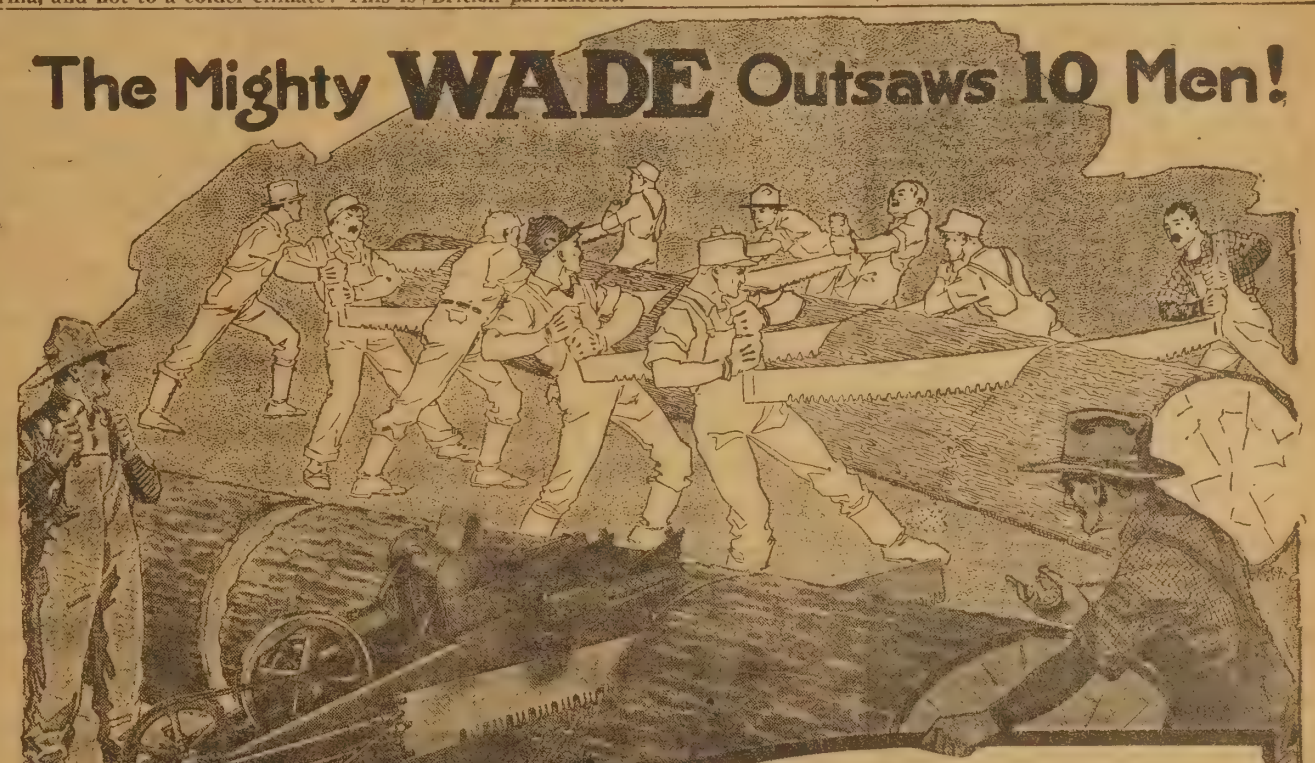
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I cut thirteen and one-half ricks of cottonwood in six hours.—J. W. Stratton, Atkins, Ark.

One gallon of gasoline will cut six to ten cords of wood; it depends on the kind of timber you cut. —W. D. Thomas, Bull Run, Ore.

Thirty-six inches in diameter, yellow birch, is the largest I have cut and I cut down to six inches.—P. L. Cole, West Duluth, Minn.

My WADE saw paid for itself six times over.—F. W. Taylor, Swisshome, Ore.

I am making $250 a month with my WADE.—F. A. Storts, Orville, Cal.

I cut down to eight inches in diameter.—F. T. Swank, Park Falls, Wis.

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A 53 YEAR REPUTATION BACKS THE WADE

# Associations Must Be Patronized

## *Volume of Business Often Spells Success or Failure*

By ASHER HOBSON, Farm Markets Director for Washington.

For the last half century, at least, the farmers of the United States have turned to collective bargaining as a solution of many of their problems. They have associated themselves cooperatively for the purpose of doing collective bargaining along many different lines. Some of the more important of these activities are: Live stock improvement, community development, legislative promotion, manufacture of dairy products, buying supplies, and the sale of farm products. In fact, collective bargaining has been an applied means to many an end. Unfortunately collective bargaining in the sale of farm products has not fulfilled the highest expectations of its adherents. If the history of cooperative marketing associations in the United States were written, the failures would fill many, many more pages than would the successes. These failures, however, have not lessened the belief of the farmer as a class, in the principles of cooperation. They have merely convinced him that the bringing about of successful cooperative effort is a rather difficult and complex matter.

Although there are numerous factors which contribute to the success or failure of cooperative undertakings, two of these factors have proved themselves to be of primary importance.

### Management.

It has been found, in the light of past experiences, that too often boards of directors of cooperative concerns have not been willing to pay the necessary salaries in order to attract managerial ability equal to that employed by competitors. Cooperative marketing organizations by no means manage themselves. Every association must meet competition of some sort. In order to meet this competition successfully, its activities must be supervised by managers as highly efficient as are the managers of the concerns competing against it. Many associations follow the policy that one way to cut down marketing expenses is to eliminate the high salaried employees. This practice often proves a costly one, in that cheap concerns may be cheap in more ways than one—by rendering an unsatisfactory service.

A marked improvement among cooperative marketing concerns has been noticeable during the last few years in respect to their attitude toward managerial ability. At present one is able to find as highly paid managers at the head of cooperative undertakings as are found among many private companies following the same line of business.

A majority of associations follow the capital stock plan of organization. In following this plan capital stock is generally made the primary consideration in determining whether or not an organization should be effected. The general procedure is to bend all efforts in the sale of stock until sufficient funds are secured to begin operation. Then the association is declared to be a going concern. By this method capital is given the prime consideration. Experience has shown, however, that capital, although necessary in most cases, is only of secondary importance to the success of the enterprise. The item that is far more essential is patronage—volume of business. For instance, if a cooperative creamery is to be a successful undertaking it must have butterfat. No matter how much capital a creamery may command, if it handled no butterfat it would be a failure as a creamery. But if it received a sufficient amount of butterfat to run it at full capacity, there is little doubt that it could command the credit with which to borrow the required capital.

In any commercial enterprise there is a lower limit to the volume of business below which the undertaking ceases to be a successful one. The first consideration of a prospective cooperative association is to assure itself that its volume of business will be well above this lower limit. With this precaution, and with a reasonably efficient management, the financial end will cause little difficulty, nor need the association fear the effects of legitimate competition.

### How Much Business Is Needed?

In considering the advisability of organizing a specific association, the first task is that of ascertaining the minimum volume of business required to make the association a thorough going concern. After arriving at a definite estimate of the amount of business required, the next step is to obtain this minimum volume of business before actually forming the organization. If the required amount of business is secured among those in the communities interested, within a reasonable length of time, the organization is completed. If the estimated volume is not pledged, the undertaking is dropped.

Each farmer who pledges himself to become a member agrees to sign a contract appointing the association his exclusive sales agent for the specific product or products which the association expects to handle. Furthermore, he agrees to give a negotiable noninterest bearing note to the association. The amount of this note is based upon the amount of business which he expects his organization to handle for him—so much per acre or so much per ton. This note serves two purposes: (1) It furnishes security for obtaining the necessary capital for financing the company. (2) It serves as security for damages to the association in case the member does not live up to the terms of his contract.

As a rule cooperators consider "loyalty" of members as the keynote to successful cooperation. Patronage is another term for loyalty. A member who patronizes his association is loyal to that association. Consequently, it is advisable to insure that loyalty by means of patronage contracts backed by notes as evidence of a member's good faith to abide by the terms of his contract. If a member is not willing to back his allegiance to his association in this manner, his support is not to be depended upon in times of stress; and every competitive business, private as well as cooperative, has its times of stress.

When the required amount of business has been secured on the above basis, the association is formally organized.

The office of farm markets will furnish upon request suggested bylaws, crop contracts and other forms for the information of those considering the advisability of organizing a cooperative marketing association. Further, the office will personally assist in presenting methods of organization and finance to the people of those communities interested. Requests for this service should be taken up with the local county agricultural agent, who will make the necessary arrangements with this office.

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If you wish to sell some piece of machinery, advertise it now, when the want ads are being read and when buying and exchanging are active.

This is a good season, too, to offer livestock if you have some surplus animals you wish to sell.

Improved farms and farm lands are also being given consideration now, before winter sets in, and a want ad is likely to bring you in touch with those who are looking for just such a place as you wish to turn.

Poultry is also finding ready sale, especially good breeding stock of good egg-producing strains.

Rabbits and hares can also be advertised now to very good advantage, we believe.

MORE THAN 80,000 FARM HOMES IN WASHINGTON, OREGON AND IDAHO ARE REACHED EVERY WEEK BY OUR THREE BIG STATE FARM WEEKLIES. AMONG THESE TENS OF THOUSANDS OF READERS THERE IS ENDLESS BUYING, SELLING AND TRADING GOING ON WEEK BY WEEK THE YEAR THROUGH. THAT'S WHY A WANT AD WITH US ALMOST ALWAYS BRINGS GOOD RESULTS.

WRITE US THE FACTS ABOUT ANYTHING YOU WANT TO FIND BUYERS FOR AND WE WILL WRITE AN AD FOR YOU AND TELL YOU THE SMALL COST OF RUNNING IT.

THE PACIFIC NORTHWEST FARM TRIO
General Offices, 36 Review Bldg.
Spokane, Washington

# Fight with Concrete

**¶The way is open**

The War Industries Board recognizes farm buildings as necessary to increased food production. No permit is needed for a farm improvement not exceeding $1,000 in cost.

**¶Concrete is the way**

Bull's-eye hits against fire, rot, disease, rats, cyclones, expensive upkeep and insurance, are fired by such concrete weapons as *feeding floors* and *barnyard pavements, milkhouses, hog houses, manure pits, granaries, fruit and vegetable storage cellars and dipping vats.*

**¶You build once only with Concrete**

You save labor, transportation, and with one stroke increase production and defeat waste.

Put up that necessary building now. Cold weather need not stop you.

Write for Bulletins 115 and 137, which will tell you how you can use spare hours to

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CONCRETE FOR PERMANENCE

W.S.S. WAR SAVINGS STAMPS ISSUED BY THE UNITED STATES GOVERNMENT


## New Edible Fat

### Skimmed Milk and Cocoanut Oil

Skimmed milk is a byproduct of the dairy industry. It is very large in quantity, but comparatively small in net returns to the farmer. The United States department of agriculture estimates that annually 30,000,000 pounds of skimmed milk is either fed to live stock or wasted. Fed to growing animals only a small percentage of the solids which represent the food value of skimmed milk are recovered in the animal as meat or other products. Now comes the Hebe company in the market for skimmed milk, combining the vegetable fat of the cocoanut with evaporated skimmed milk, making the fat of the cocoanut oil available for human use, recommending it principally for use in cooking, baking, coffee and on cereals.

Up to a comparatively recent time the edible fats used as human food have been derived solely from the small quantities of fats collected in the bodies of animals. Thus the human race has been dependent upon the herbivorous animals eating vegetable materials and collecting small percentages of the fat eaten in their bodies. This has been the sole source of pure edible fats. Vegetable fats, instead of being collected in comparatively pure masses, are distributed throughout plant material in small percentages and mixed with nonedible substances, from which they can not be separated readily—that is, the human organism can not digest such material as cellulose and so can not digest much of the vegetable material which surrounds the fats distributed in plants. Thus it is impossible for the human organism to digest such material as clover-leaf, alfalfa or grass of any kind. Therefore, in order to get the fats contained in such materials in a form which can be utilized, people have been dependent upon the herbivorous animals to collect and provide the fat.

The first two great sources of vegetable fat which science has been able to bring to a state of purity great enough to make them edible, in the same sense as animal fats, are cottonseed oil and cocoanut oil. In making the latter fat available for human use, due both to the process of purifying it, developed within the last five years, and to the process of introducing it into skimmed milk, the Hebe company offers to the human race a new source of food fat for certain uses.

### FEED RULES IN GREAT BRITAIN.

The effect of war on agriculture in Great Britain is strikingly shown by regulations now in force affecting feeds and bedding. Among restrictions of unusual interest are the following:

"The use of straw for bedding purposes is forbidden. Oat straw, in particular, may be used only for feeding purposes.

"All persons owning horses, entitled to limited supplies of hay, straw, chaff and cereal feeding stuffs, must keep records showing the number and class of horses, and full facts regarding source, kind and amount of feed used.

"The occupier of an agricultural holding may not sell or part with the possession of any horse which is used or capable of being used for the cultivation of the holding except with the authority of a licensee."

When it is realized that these orders are necessary war measures, the importance of voluntary feed conservation in the United States is apparent. The United States food administration especially asks for elimination of all feed waste and utilization of farm byproducts to which little attention may have been paid in former years. During the year ending July 1, 1919, we must export 2,700,000 tons of feed grains (mostly army oats) overseas. This amount is 750,000 tons more than last year, and must come from our present supplies.

### GROWS FINE POTATOES.

"I could have picked out a ton just as good as these," said Jarvis of Cataldo, Idaho, as he opened a suitcase in the farmers' office the other day and displayed 16 fine, big, white potatoes weighing an average of a little more than two pounds each. Mr. Jarvis had two and a half acres of the potatoes which he sold to the mining and lumber camps in the vicinity of Rose lake at three and one-half cents a pound, at the same time escaping much of the cost of shipping to the city markets. He reports an excellent yield in quantity as well as quality.

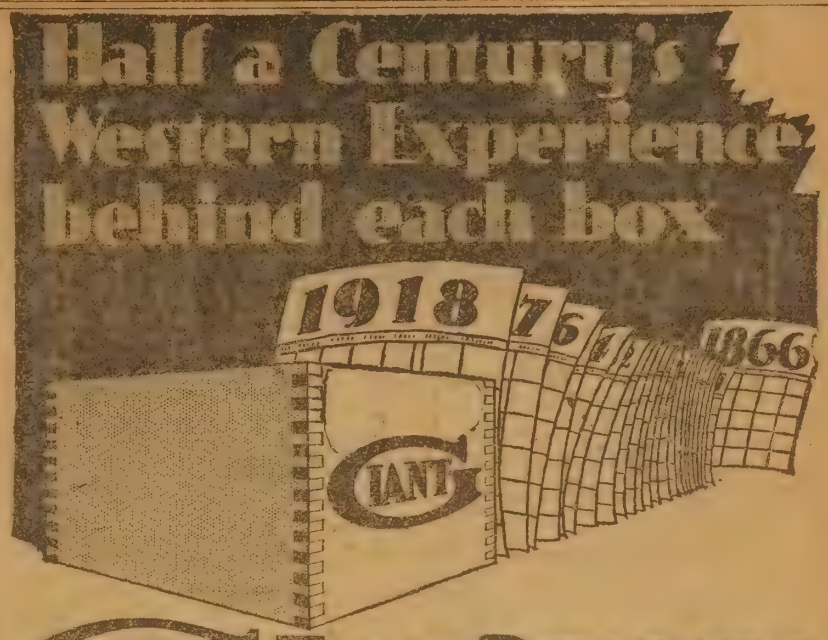
### MANY SEEDS IN A SUNFLOWER.

Actual count shows that in some big sunflower heads there are upwards of 4000 seeds. It is interesting also to note that they are in perfect order. It is claimed that if one unit of their curved arrangement is counted the exact number of seeds can be calculated by simple multiplication.

### Slightly Different.

Sarah, the little daughter of a clergyman, was asked if her papa ever preached the same sermon twice. After considering a moment, she answered:

"Yes, I think he does; but I think he hollers in different places."


GIANT FARM POWDERS
STUMPING — AGRICULTURAL

For more than 50 years Giant Powders have cut the cost of western blasting. In all this time they have been constantly improved and adapted to western conditions by a western company. Naturally they make western land clearing easier, faster and cheaper.

Giant Farm Powders—Giant and Eureka Stumping—go further than ordinary dynamites. Farmers and orchardists find that they can do more and better work at less cost with Giant Powders. Hundreds write us that Giant brands "save money"—"give better results"—"have wider breaking power"—"shoot the roots"—and "are always uniform in strength and action."

**Caution:** Be sure you get the genuine Giant Powders, the product of the manufacturers who originated the name. Look for the Giant trade-mark. It is your only sure protection against imitations.

Send coupon (or postal mentioning this paper) for the big free book "Better Farming." It tells you scores of money-saving ways of doing farm jobs. Write for this gold mine of information today.




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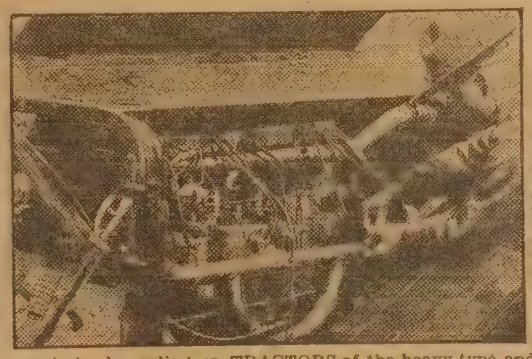
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Send me 52-page illustrated booklet "Better Farming." I am especially interested in (please check)

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have drained the country of the best gasoline engine mechanics everywhere. Thousands of positions are now open to qualified men. Learn the AUTOMOBILE and TRACTOR business in the largest and best equipped AUTOMOBILE and TRACTOR schools in the west. We teach this business in a thoroughly practical manner. You actually work on the engines of tractors and automobiles just as you will be required to do in a garage, repair shop, or as an operator. Do not waste your time in a poorly equipped motor school when you can go to a real school.

Our school is equipped with the latest types of AUTOMOBILE engines and stationary engines from one to twelve cylinders, TRACTORS of the heavy type and caterpillar or crawler systems. We have every type of electric starter, magneto, carburetor, generator and transmission made. We have brand new engines with which to test magnetos and carburetors. We teach the use of heavy fuels. Our instructors are the best informed men in the country, being originally superintendents of factories and service stations. Our school is well located, well ventilated, steam heated, is fireproof and is equipped with sanitary drinking fountains, etc. Do not delay, but learn this wonderful, fascinating and well paying business at once. Don't spend your money to go to a school a thousand miles farther away that is not as well equipped as this school. Call at main office or write at once for information and free catalogue. Special rate for a short time to those that are alive. Address

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Your eyes are worth more than all the money in the world so why neglect them? Install a "Knight" Lighting System and flood your home with the purest, whitest and best light known to science. Costs one-fourth the price of electric outfits. Burns either gasoline or kerosene. Sixty hours of the most beautiful light from each gallon of fuel. No smoke. No dirt. No odor. No chimneys to clean. No wicks to trim. Nothing to get out of order. Simple. Safe. Satisfactory. Send for introductory offer and agency proposition.

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# THE MILLION-DOLLAR KID WOULD GO A-SAILING




# BOOT MAKES ONE MORE EFFORT TO LOSE PUP



# Brought Alfalfa to Palouse

## *Downen Showed That It Could Be Grown on Dry Land*

By J. E. NESSLY.

E. W. Downen & Son, who recently donated a purebred, registered Shorthorn bull calf to the Red Cross, Knights of Columbus and Y. M. C. A., which brought $1542, giving each of the organizations $514, have been notified that the calf has again been sold and has brought more than $350 for war work.

E. W. Downen is one of the pioneers and best known breeders of Shorthorn cattle in eastern Washington, but probably gained greater fame from the fact that he first introduced alfalfa into the Palouse country and raised it successfully for nearly 20 years on "dry" land, where it had been thought alfalfa would not grow.

Mr. Downen came to Pullman, Washington territory, in 1884, and in 1889 he secured alfalfa seed from his old home in Colorado, where he had seen it raised on his uncle's 12,000-acre farm, and planted it on his homestead on the rimrock above Wawawai, on the bluffs of Snake river. The alfalfa grew and did so well that he increased his acreage to 160. When Mr. Downen first broached the subject of raising alfalfa without irrigation he was laughed at and his proposal treated as a joke. His first field of alfalfa stood for 20 years and yielded a good crop every year before it was plowed up.

Mr. Downen and son have secured several hundred acres of land in Washtucna coulee, located only 750 feet above sea level, where they are successfully raising alfalfa and corn, getting as high as six and one-half tons of alfalfa per year and as high as 100 bushels of corn have been grown by their neighbors. They are stocking the ranch with purebred Shorthorn cattle, and have many of the double-standard (hornless Shorthorns) in their herd. Their ranch is about 90 miles due west of Pullman, and is regarded as an ideal winter ranch for all kinds of stock. They are also raising purebred, registered Duroc swine.

Mr. Downen had been raising alfalfa for several years before it became generally known. The first report of his alfalfa crop ever published was written by the writer and published in the Spokane Spokesman in 1892. The next year E. A. Bryan became president of Washington Agricultural college, and when Professor W. J. Spillman, now with the department of agriculture at Washington, D. C., became professor of agriculture at the college he accompanied President Bryan to Mr. Downen's farm and inspected the alfalfa, which they pronounced "remarkable." Although the seed had come from irrigated districts of Colorado, because of the fact that it was grown without irrigation it became known as "dry-land alfalfa," and many believe it to be a separate variety. Mr. Downen sold that ranch to W. L. La Follette, who kept the land in alfalfa for several years after purchasing it, and it continued to yield well.

Mr. Downen is an enthusiastic stockman, and has secured many of the best individuals in the northwest for his herd, which now numbers close to 200 head.

**SHIP** you cattle where they will bring you the most money.

OUR northwestern customers have found Kansas City their best market. We specialize on Oregon, Washington and Idaho cattle.

WRITE or wire us for market information at any time.

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**GET GUERNSEYS**

Tabulations made by the U. S. department of agriculture show that the average income over cost of feed from one cow that produces 450 lbs. fat is equal to the average income over cost of feed from 20 cows that produce 100 lbs. each. The average of all official Guernsey records is 450 lbs. fat. Learn more about these profitable cows. Ask for our free booklet, "The Story of the Guernsey."

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**RUBBER METAL SACKS**

We pay full market value, correct weight and assortment, prompt returns. Write for prices. We want your business.

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**"Swanson"**
**The Lightman**

Specializes in gasoline lighting for the farm

**Solar Light Co.**

937 Commerce St.
Tacoma, Wash.

# Beautify the Farm

## Lawn, Some Shade Trees and Paint

By CARL J. MENZE.

By a carefully worked out plan covering a number of years the farm grounds can be beautified and the results obtained without a great outlay of capital. The work can be done by the farmer himself between the other rushing farm work.

The average farmer has no time for an extravagant plan of work. But a good lawn, a few shade trees, painted buildings, clean fence corners and a neat appearance in general are within the means of all farmers. These improvements not only make the place look homelike, but are an index to the character and are of a monetary value when one wants to sell.

In planting a lawn around the house and front yard it is of no use to plant the seeds without a thoroughly prepared seed bed. But on every farm there is plenty of manure which will aid in preparing the soil. If the ground is rough and cloddy a cultivated crop like potatoes helps to put the soil in good mechanical condition. Before seeding, the ground should be leveled to the right degree, because after the lawn is made this can not be corrected. A good lawn should produce a good turf, and at the the same time a green, continuous crop of grass the entire growing season. The main thing in starting a lawn is to start right; after this the care of it does not take much time, if there are no flower beds in the way to hinder clipping. It is advisable to plant flowers on one side in a bed by themselves rather than in the center of the lawn. For a border on a lawn a trimmed privet hedge is very attractive.

Shade trees are not only a wind-break, but also add to the appearance of any place. In the summer stock like to lie beneath them. On timbered land a group of trees can be left standing in the pasture for the stock. If one has decided where he is going to locate his permanent buildings and leaves a few trees standing, he will never regret it. If trees are planted, they must be protected while young so that the stock will not break them. In the west, where trees are plentiful, shade trees can be transplanted from the forest to the farm.

When buildings are painted they not only are more attractive, but also are protected against the elements and therefore will last longer. In selling a farm they have a greater effect on the mind of the prospective purchaser than otherwise. Old buildings which can not be painted may be covered with vines which will practically cover their unsightliness. For example, in this locality the only way a ripe crop of grapes can be grown is by letting the vines grow unmolested over some building. For this reason they make an excellent covering for buildings and at the same time are a source of revenue and do not take up much ground.

How many farms are there that are full of unsightly fence corners? They are legion. They are full of foul weeds and pests and each year their area increases, unless energetic efforts are taken to destroy them. Every year, after a crop is taken off, the corners should be cut free of weeds and the rubbish burned. At plowing time, plow as near the fence as possible.

On every farm there is more or less scrap which always accumulates. Old rubbers and rags can be gathered in a box or bag and sold. By having a box in an accessible place tin cans and whatever material is useless can be collected and hauled away. At the present time farmers have a good opportunity to sell scrap iron at a good price.

### CANNERY ON THE FARM.

E. B. Gay & Son, Iowa farmers who recently invested rather heavily in irrigated farm lands close to Oroville, Wash., on a little less than six acres raised, picked and canned 2000 cases of tomatoes this season. Each case contains 24 solid pack two-and-a-half-pound cans. Besides this they shipped out 15 tons. Their supply of cans was not received in time or they would have canned a great deal more. This was their first year of farming the land and they built a small cannery on the place, at a nominal cost. The tomatoes have been sampled by local people, as well as travelers, and pronounced as good as those on the market. It is probable the government will take the entire pack. These men expect to plant 15 acres of tomatoes next year, and may erect a commercial cannery.

I did not meet the elder Mr. Gay, but the young man gives their plan of growing tomatoes as very simple. They should be started in a well prepared hot bed, then transplanted to a cold frame and gradually hardened to the spring weather before being planted out. He plants the vines 4x4 feet after thorough preparation of the ground.

In the tomato fields five roads had to be left for hauling and other purposes. Down the middle of these roads five rows of Carmen potatoes were planted. These five rows yielded five tons. As there would be about 12 of the rows to an acre, a yield of 12 tons is indicated. H. A.

### FOURTEEN POTATOES PER HILL.

C. W. Burbank of Tonasket, in the Okanogan valley, had 20 acres of potatoes which, it is claimed, ran 14 potatoes to the hill. The entire patch is upland and unirrigated. It averaged over five tons per acre of good marketable potatoes.

**Emerson's**
**OAT KICKER**



A new machine in big demand on the Pacific Coast. Takes out every kernel of wild or tame oats from wheat, barley and rye, at the same time cleans out the small foul seeds and dirt; something that no fanning mill or grain cleaner will do.

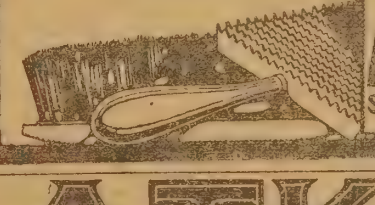
Run your grain through the OAT KICKER before selling and save yourself the costly dockage. Before sowing, clean your seed free from oats and dirt, foul seeds, etc., you will find it pays back big returns. Three sizes, $40 to $160. Hand or belt driven. Send for descriptive booklet "WF."

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Seattle, Wash.

Mica Axle Grease lasts twice as long as ordinary axle grease. Contains powdered mica—a mineral lubricant that is practically wear and heat proof. It gives a cool, slippery coating that clings to the spindle and makes pulling easier. No hot boxes. Get a can from your dealer today

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**MICA**
**AXLE GREASE**




**ATKINS**
**SILVER STEEL SAWS**




## How ATKINS Has Made Sawing Easier and Faster

These better saws are made to save you time, labor and material. It costs you money to use a "cheap" saw. A really good saw is an economy.

For instance, only Atkins Silver Steel Cross-Cut Saws are segment ground. The small sections above show why they make sawing easier and faster. Notice, on the left, how the Atkins blade, tapers from the cutting edge to the back, avoids sticking and binding in the wood. On the right, see how ordinary saw blades bind themselves to make sawing a hard, expensive job.

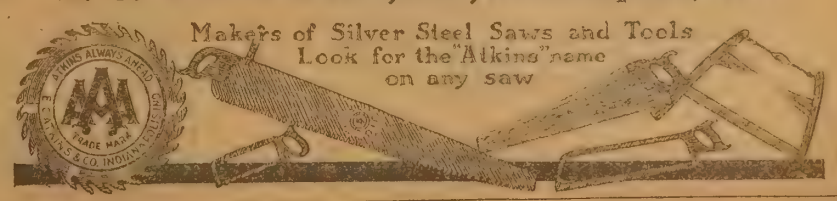
And remember—Atkins saws are made from the famous Silver Steel formulas—the development of three hundred years of experience of the Atkins family—the steel that adds years of service and makes any saw hold its edge longer.

You will find the Atkins name and guarantee on all kinds of saws; one-man or two-men cross-cut saws, hand saws of all styles, hack saws, circular saws, meat saws, buck saws. In fact, there is an Atkins for every purpose. If the name isn't there it isn't an Atkins. Nearly all dealers are proud to sell and guarantee you the time-and-money-saving Atkins satisfaction. If your dealer does not, write us.

**Carpenters' Helps Free**—*"The Saw on the Farm" tells how to make neat joints, how to build things, how to file saws and take care of them, etc. Sent free on request.*

**E. C. Atkins & Co., Inc., Indianapolis, Ind.**

Makers of Silver Steel Saws and Tools
Look for the "Atkins" name on any saw



# Power, Mechanics and Devices

How would you like to have a department in THE FARMER under the above heading of "Power, Mechanics and Devices?"

Will you help us to make this department one of the very best in this paper? It is only through your active cooperation that it can be made one of our best features.

It is growing more and more difficult to obtain farm help.

Just what kind of farm machinery are you thinking might help you out in addition to what you already use?

It is just as important that the good housewife should have the help of machinery in her home as it is that you should have machinery on the farm. Possibly you may not have thought of it in just that light, but is it not a fact?

People in the towns dream of what they would like to have in their houses even more than they have now. Why should not farmers and farm women folks have the right to the same kind of dreams? You may not have an electric lighting system in your house, but is that reason why you should give up all ideas of ever having it? You may not have a pressure water system, but what is to forbid you hoping for it in the future?

All these conveniences are becoming more and more common, more and more within the reach of the farmer. more and more within the reach of farm homes.

The farm tractors are now being made for smaller farms as well as for the larger farms.

Gas engines are worming their way into every kind of farm work as well as helping out in the farm home.

One farmer may be able to tell other farmers through this department how to make devices which will help out both farm work and housework. These home made devices are most helpful. This column is open to you all. Send us drawings as well as descriptions and we will have them put in shape.

Let us make this department one of information, one of hope, one of inspiration.

Where there is a will there is a way. This proverb has held its own through many years. It is not out of date yet. If you have got the will, let this department help you to find the way.

Anything and everything in the way of power, mechanics and devices goes in this column that reasonably promises to help out the farmer and the farm housewife during these days of change in farm production and in farm living.

## FARM SERVICE WAR FLAG



A Flag for Every Farm Home in the Northwest

An Extra Small Star for Each Farm Worker

Designed by The Washington Farmer.
(Patent applied for.)

### Get a Farm Service War Flag.

The man, woman, boy or girl who stays at home and works hard to produce necessaries for the soldiers in Europe is entitled to real war service recognition. That is the idea back of the farm service war flag. It is pennant-shaped, made of the good old red, white and blue, and has a star representing the producing farm home. Small stars are added to represent each worker of that home.

Convenient Order Blank.

..... 1918

THE WASHINGTON FARMER,
Review Bldg., Spokane, Wash.

Enclosed find five cents (5c), for which please send me a Farm Service War Flag (printed on enamel paper) with ..... extra small stars for farm workers.

Name .....

R. F. D. .....Postoffice .....

Box ..... State.....

## The Farm Cottage

The following schedule of materials, prepared by the engineering bureau of the National Lumber Manufacturers' association, will aid the farmers in ordering and checking up materials necessary to complete any modest cottage:

Posts.
Sills.
Joists and bridging.
Studding.
Plates.
Rafters.
Sheathing, paper and felt.
Shingles or siding.
Flooring, rough and finished.
Interior window and door frames.
Cornices.
Other exterior moldings.
Gable finish.
Attic ventilators and door casing.
Interior ventilators and door casing.
Ceilings.
Base and quarter round.
Closet and pantry finish.
Exterior window and door frames.
Exterior and interior panel doors.
Windows and glass.
Steps and stairs.
Porches.
Screens.
Door and window hangings.
Weight cords and locks.
Nails and hardware.
Valley tin, gutters and spouts.
Lath and plastering, wall board or sheathing.
Paint, putty and shingle stain.

Additional items to be considered are:

Excavation.
Masonry and brick work.
Iron work.
Plumbing and gas fitting.
Heating and electric wiring.
Grates and mantels.
Grading and sodding.
Sewerage and cartage.
Walks and drives.
Gas and electric fixtures.

The division of rural engineering of the United States department of agriculture at Washington has prepared plans of moderate cost farm houses, copies of which are sent out upon application. The plans are most complete, with working drawings giving sizes of timbers, location and sizes of doors and windows, etc., and suggest a modest type of design for the exterior.

### HOGS ARE INCREASING.

County Assessor Hoover's returns for Grays Harbor county, Washington, show that in 1917 there were 1497 hogs in the county, valued at $13,545, and in 1918 there were, on March 1, 2303 head, valued at $28,565. An increase of 806 head, valued at $15,020.

## Block and Tackle

One of the hardest jobs on the farm, in some respects, is swinging the hogs at killing time. This is not always true, but it is in too many cases, and all because preparation is not made for handling the porkers the easy way. A 200-pound hog has to be swung on a hanger higher than the head of a 200-pound man. A hog right out of the scalding vat is hard to get hold of, and one who has handled him knows what the term "dead weight" means. Furthermore, there is no way of taking advantage of the job if you choose to handle him by main strength. Not more than two men can take hold advantageously, and they must lift him to a point higher than their strength can be effectively applied. No big hog was ever hung that way without somebody doing some unnecessarily hard work.

A block and tackle obviates the trouble at once. Attach the tackle at a point a couple of feet or so above the hook or spike or what not on which the hog is to hang. This will prevent trouble when the blocks come together, as they would otherwise have to do. With a block and tackle one man can swing a hog with greater ease than two or three or four can without such device. It reduces the power required by half or three-fourths, depending on the kind of blocks. The workman pulls down instead of lifting up, and he can always keep his body in a natural and advantageous position with reference to the strain.

### AUTO CHANGES FARM HABITS.

It is not uncommon to be reminded that the automobile has wrought great changes in rural life, but it is not commonly recognized that it has actually altered the farmer's fundamental ideas of business. David A. Pepp of Portland, Ore., says that it has, in one particular at least. He declares that when the automobile came onto the market the farmer quite properly wanted it, but that he couldn't buy it without money. Hence, says Mr. Pepp, he began to save money until such time as he acquired enough to secure his car. And since then he has been more in the habit of saving and paying cash than before, resulting in his doing a far larger cash business than ever before. There may be differences of opinion on this point, but the fact remains that the auto has done great things to make the country a better place to live in.

### NEED "LEAN" GAS MIXTURE

"There is much that any car owner, whether he is a mechanic or not, can do to make sure he is getting the most out of his machine," says H. W. Mitchell, an experienced automobile man of Portland, Ore. "In the first place, he can make sure that his carburetor is set to feed the leanest practical mixture of gas into his engine. This makes a world of difference not only in the amount of fuel consumed, but in the condition of the motor.

"If a too rich mixture is used, the combustion chambers and valves will foul quickly, and this means a trip to the service station that will involve considerable expense. If a man does not trust himself to make this slight adjustment, it is only a moment's work for an experienced garage man. Of course, every one finds it necessary to change the carburetor in cold weather, but it is advisable to check up three or four times during the year to make certain of best possible results."

### SCAB CAUSES TROUBLE.

The dipping of some 86,000 head of sheep has just been completed by sheepmen on the Okanogan national forest range. This was to destroy the scab that was introduced into the range by one flock that was brought in from another state. All the sheep that have been on the particular range or driveways over which the infected flock were driven had to be dipped. One result is that many lambs that otherwise would have been ready for market are being held over until spring, which will cost the growers much in feed.

### WILL AID THEIR ENEMIES.

The allies are already planning ways and means of aiding the stricken people of the countries that have recently signed armistice agreements. The need for food is tremendous.

### KEEP OUT THE RAIN.

Now is the season of the year when the pig pen needs a good roof.





## Rubber Footwear in "No Man's Land"

"Over there" our boys are fighting knee-deep in mud. Keeping fit under these conditions is difficult. Rubber footwear has therefore become almost indispensable for men in the trenches.

To keep America's troops supplied with rubber footwear is all-important. Men who are fighting must have first choice. This limits home supplies but saves valuable lives overseas.

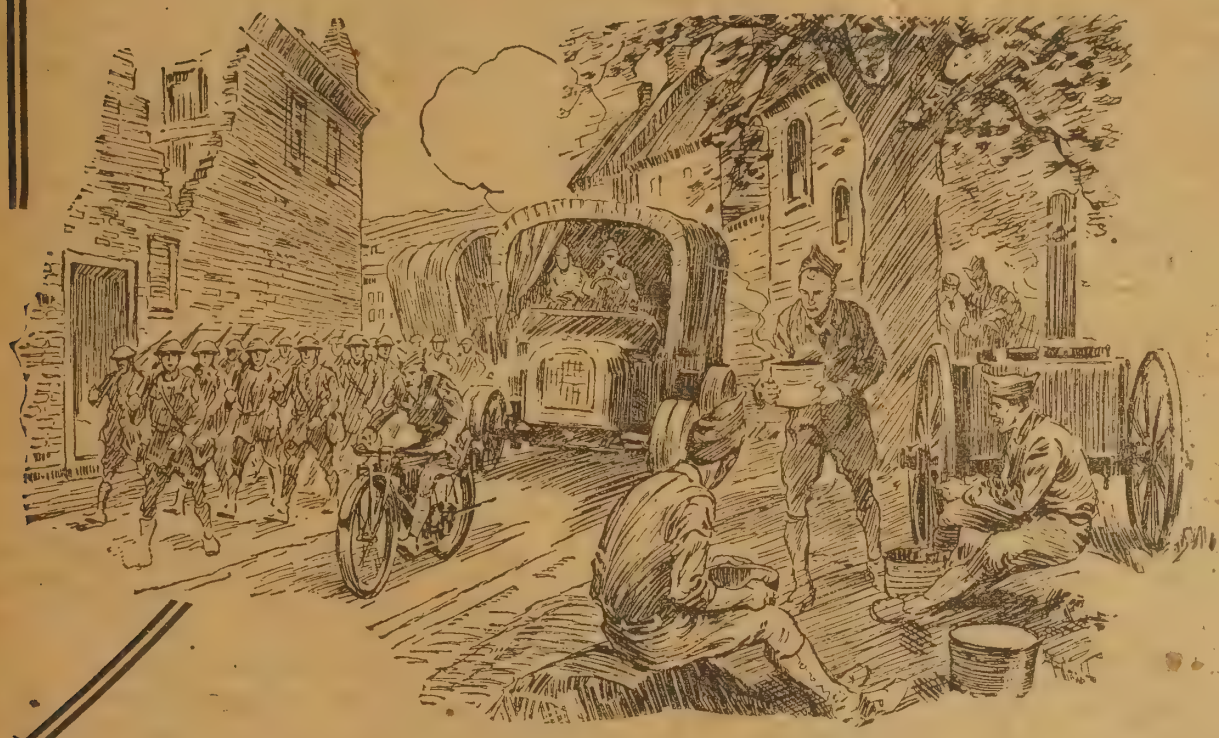
Our outdoor-working customers, we are sure, will cheerfully meet this situation. We regret our inability to take care of every demand for "U. S. Protected" rubber footwear. We thank our patrons and look forward to serving them again. Until then, look for the "U. S. Seal" on every pair and remember the name.

**United States Rubber Company**
New York

U. S. Rubber Footwear

# Grave Shortage of Labor for War Work

## *Says Director of U. S. Employment Service*



"As the army increases the situation grows more grave." Help release man power by sending your subscription direct to the Washington Farmer.

Nathan A. Smyth, director of the employment service of the United States government, says:

"Americans must know that common labor when performed for one's country in time of war is worthy of any man, whatever may be his prior position or experience. As the army increases the situation grows more grave. It must be faced resolutely and squarely. There are plenty of men in the country to meet the present crisis, but they are now engaged in non-war work."

"The shortage in skilled labor is becoming as grave as that in unskilled," adds Mr. Smyth. "The available supply of unemployed is rapidly being depleted and the seriousness of the situation can hardly be exaggerated."

That is the problem stated clearly and forcefully. Each and every one of us must do his or her part in meeting it.

By the cooperation of its readers, THE WASHINGTON FARMER has for over a year been able to dispense with its big force of subscription agents. Seeing clearly the need for voluntary action on their part, our friends cheerfully took upon themselves the task of sending in their subscription renewals direct to this paper and mailing the order of a friend or neighbor along with their own.

By thus acting as his own agent, the reader is entitled to and gets his share of the money that formerly went to pay the agent's salary and expenses. The price of your state farm paper is thus cut to the minimum—three years for 50 cents, or less than 17 cents for each of the three years.

All will agree that efforts to save man power must not be relaxed at this critical time. With a loyal body of subscribers such as ours, we know that we can count on united support of our cooperative plan. Send in your renewal without delay and make an effort to send at least one other order with your own.

**Please Act Promptly**

**Rates:-25c** For 1 Year **50c** For 3 Years **$1** For 5 Years

The Washington Farmer. Nov. 14

Review Building, Spokane, Wash.

I desire to take advantage of your plan to deal direct with your readers in securing and renewing subscriptions, thus saving the middleman's cost and releasing men for productive labor.

Enclosed is $..... for ..... years subscription. In Canada add 1 cent per copy for extra postage.

If you are already paid in advance your subscription will be set forward from the date to which you are paid.

Name .....

TOWN ..... R. F. D.....

STATE .....

# A Test in Strategy

By W. S. CHARLES

Along the whole battle front vague rumors had come that peace parleys were being considered. But these rumors had caused no diminution of the great allied drive that had pushed forward relentlessly for the last three months.

The roar of heavy artillery steadily continued. Streams of prisoners and thousands of wounded were still flowing to the rear. Fresh divisions of soldiers were moving to the long battle front in order to keep to its maximum the relentless pressure by which the allied commander-in-chief, the famous marshal of France, was slowly, but steadily, annihilating the ranks of the foe.

On Saturday these rumors found expression through an order received by the commander of one of the American divisions holding an advanced sector to the east of Metz. This order read that on this portion of the battle line all war activity should cease on Sunday from 10 a. m. to 10:15 a. m. All troops of all classes were to carefully observe this 15-minute respite, but were ordered to resume the drive with full intensity promptly at the end of the time specified. The foe also, stated the order, had agreed to cease activity for the same length of time, in order that the allied representatives chosen to arrange terms for an armistice might safely pass over the battle line in a DeHaviland battle plane under a flag of truce on their way to German great headquarters. Beyond the allied lines it would be met by a battle plane of the Fokker type, which would pilot the allied plane to the place of conference.

When this order was received at the advanced machine gun position, located in the heavily wooded section near Ingweiler, Sergeant Bill Langford, who was in charge, swore roundly.

"—— —— ——! I'll bet that headquarter's bunch will sign peace affidavits before I get a crack at that Hun snipper who nipped me this morning," he growled, tenderly rubbing his left arm, where a white bandage showed through a long slit in his sleeve.

"Aw, take it easy, Bill," grunted Mart Johnson, one of the members in his squad. "If you don't get him now you can visit Berlin and punch his mug after peace is declared."

"Oh, ——, Mart, this guy ain't no Berlin giezer! I think I know this guy. He's one of those cheap skates who used to sling hash on the Bowery in peace times and then slips over the big pond to fight for 'Me und Gott' when war was declared. One of those dirty curs who bite the hands that feed them, and then expect to slip back to the same old job when this scrap is over. That's what makes me see red, ol' timer, every time I think of it."

"Don't blame you, Bill," Mart answered. "The woods is full of the same kind of skunks. If you don't get him here cancel that ticket to Berlin and take a stroll up Broadway when the big push is over."

"I'll get him—sometime," Sergeant Bill snapped back, "but I'd rather get him now. They don't hold post-mortems and ask fool questions over dead Huns over here!"

---

At allied headquarters there was a bustle of activity. The hour was 9 a. m. Sunday morning. The Marshal of France was holding a conference with his leading generals.

A grey-haired, stern-faced general, whose face clearly showed his Scotch ancestry, stood at the side of the table. For three months his English legions, supported by Belgians, French and Americans, had hammered the Hun hordes steadily eastward under the direction and keen strategy of the Marshal of France, who now sat quietly at the head of the table.

"None of us," the English commander said slowly, with distinct clearness, "but have implicit confidence that you clearly and thoroughly understand and measure each war move carefully. None of us who have watched the successful working of your strategy during the last hundred days but must acknowledge that in no single instance have you made a mistake. But, sir, knowing all these things and recognizing the supreme value your military science gives to the allied cause, I, speaking for the British empire, fear you are taking too great a risk in carrying out the resolve you have made to go personally on this mission to German headquarters to arrange terms for capitulation. The past treachery of the foe, who holds no promise sacred, bids me caution you for the sake of the future of civilization not to trust yourself in their power. I plead with you, together with the allied commanders here present, to rescind your decision and send any one of us in your stead. The cause of civilization can not spare you nor allow you to enter the trap of their treachery under the circumstance; while one or all of us, should their usual treachery manifest, could the better be spared."

An acclaim of approval echoed around the table. The Marshal of France only smiled, shaking his head negatively.

"France dares even the Hun in his stronghold and fears not to give all to the cause of liberty! I deeply aappreciate your attitude and the great confidence each and all of you impose in me. But my decision is irrevocable. I shall go in person, lay down the terms for an armistice concerning which we all are agreed as only just, and I shall not fail!"

Turning to an orderly he said:

"My compliments to the commander of the aerial reserves with a request that he report to me at once."

In a few minutes the officer appeared. Drawing from his inner pocket a sealed envelope the Marshal of France handed it to the awaiting aerial commander.

"Emergency Aerial Fleet order 'X21.' If at 1 p. m. today I have not returned to these headquarters in the war plane in which I depart, open these orders and proceed at once to execute. Have you installed and adjusted the wireless automatic transmitter in my war plane so that it is working perfectly with your receiving and recording instruments?"

"It has been installed and tested by two flights of one hour each. Both instruments worked perfectly as to location and distance."

"That is all, sir."

With a snappy salute the aerial commander turned on his heel and departed.

---

"There she goes, Bill! See that old air horse split the ozone!"

Sergeant Bill peered up for a moment as the great war plane of the Marshal of France passed swiftly over the battle lines. Then cautiously parting the screen of bushes in front of him with his uninjured hand, gazed intently out into the tangled maze of underbrush in No Man's Land.

"It's him all right, Mart! That fellow is a goner, take it from me!"

"So says I, Bill! But what in 'ell does the great marshal mean by going over himself to Hun headquarters to get caught in their trap?"

Bill looked around in surprise.

"Marshal of France goin' over to Hun headquarters, you say? You withered turnip, who do you think I'm talking about, anyway! I'm talking about Heinie Schmidt out there in the bushes. That d—d Hun snipper from the Bowery. He's the guy I'm looking for, b'lieve me. That air horse up there can attend to its own funeral. I've got trouble of my own to look after."

Mart looked into the stern face of Bill with a new interest.

"Say, Bill, you're a queer duck," he exploded. "Up there goes the strategic brains of the allies with three or four smaller side lights, right into the jaws of the Hindenburg trap, an' you don't show no interest a-tall! But here you are hugging a grouch against Heinie Schmidt out there in the bushes when you might be enjoyin' a smoke and taking it easy for 15 heavenly minutes. I'll bet Heinie Schmidt ain't lookin' for you just now, Bill. Time enough to look for that polecat when the big ball starts rolling again."

Sergeant Bill spit disgustedly.

"Mart, those orders said 'all classes were to carefully observe the re-spite.' That's just what I am doing. They said to 'resume the drive with full intensity promptly.' That's another thing I ain't forgetting. But they didn't say anything about not maneuvering for position one way or another. I saw Heinie take a sneak just now for a big bush-covered rock about 200 yards to the right out there, and he thinks this Yank ain't wise. But I've got this machine gun dead center on that rock for the first move in the game when the re-spite is up. How much longer does it last, Mart?"

"About six minutes."

"All right. Now listen. You get behind this Browning spitfire and when the big guns begin to bark turn it loose on that rock and keep the air full of lead until you hear from me. I'm going to snake down that little draw to the left and side swipe that Bowery Hun to a fare-you-well. Are you on?"

"Go to it, Bill. But hurry back 'cause that rock won't stand the racket all day."

With the cautious woodcraft of an Indian Sergeant Bill slipped amid the thick undergrowth.

---

At German great headquarters the kaiser and his staff stood looking toward the west, out of which two war planes were swiftly approaching.

At their near approach the thrumming roar of the DeHaviland's great Liberty engine suddenly ceased as with a graceful glide it came to the ground on the level field.

The Marshal of France and his four aide-de-camps stepped from the plane and stood facing the group of war lords. Drawn up on either side of the emperor's field tent was a regiment of imperial guards. On every side were other evidences of the care by which the emperor was guarded. Anti-aircraft guns, machine gun battalions, several high-power armored automobiles, and a squadron of swift Fokker battle planes caught the eye of the Marshal of France as his keen glance swept the field.

At a sign from the emperor a smartly dressed lieutenant approached the allied group and saluted.

"His imperial majesty bids me present his compliments and inquire if you are the authorized representatives sent by the commander-in-chief of the allied forces?"

"I am the commander-in-chief of the allied armies."

A look of perplexed unbelief for a moment crossed the face of the lieutenant. Straightening stiffly he again saluted.

"I have orders to conduct you to the presence of his imperial majesty."

Returning the salute the Marshal of France gave expression to one crisp word:

"Proceed!"

Halting before the emperor and the group surrounding him the lieutenant saluted, announcing:

"The commander-in-chief of the allied armies with his military escort."

The emperor, his withered hand resting upon his bejeweled sword, bent slightly forward, scanning closely the quiet face of the marshal. Apparently satisfied with his inspection he granted the courtesy of a military salute. With quiet dignity the marshal returned it. Then seizing the initiative he addressed the emperor:

"Sir, I am at your service for exactly 30 minutes in the arranging of necessary details looking to the surrender of the German forces."

An angry flush suffused the face of the emperor. He took a menacing step forward.

"Germany, in her expressed desire for peace, has not entertained the thought of surrender. She is willing, however, to enter upon a discussion regarding an armistice. The details can be better taken under advisement at my council table within the tent."

Preceded by the emperor the imperial staff entered the tent. The emperor took his place at the head of the table, Generals Hindenburg and Ludendorff on his either hand. The imperial chancellor, the crown prince and other members of the German group came next. The Marshal of France took his position at the end of the table opposite to the emperor, his aide-de-camps beside him. When all had gathered about the table the emperor seated himself, followed by all present, save the Marshal of France, who remained standing.

The emperor appeared ill at ease. His every move seemed nervous, his manner excitable. There was little in his appearance indicating him as the modern Thor, the mighty war lord of Germany, whose invincible military might could eventually hammer the world into servile submission. At this historical moment he appeared in strange contrast to his military opponent who stood quietly facing him across the length of the table. The Marshal of France, whose strategic genius had broken the picked legions of the mighty war lord into fragments and sent them reeling backward to the shores of the Rhine.

The emperor spoke:

"Do I rightly understand that the commander-in-chief of the allied armies stands before me?"

"You are correctly informed."

"Are you aware that we are at war—cruel, relentless war—and that the rules of necessity developed by this conflict give you no guarantee of safety by coming upon this mission?"

"I am a citizen of France. The citizens of France fear not. France has laid her all upon the altar of liberty and counts not the sacrifice. I am here to proclaim the terms upon which the allied nations will grant Germany an armistice and to secure the guarantees Germany must give to prove her desire for a lasting peace is sincere."

An angry frown crossed the brow of the emperor. His lips curled in a crafty smile. The great hand of the heavy jowled Hindenburg that rested upon the table clinched suddenly at the marshal's words until the flabby creases on its back straightened out like ancient parchment as the general muttered audibly:

"Krieg ist krieg!"

"My general is right," exclaimed the emperor. "War is war. I have heard much of the strategy of the new marshal of France from my commanders in the field. For that strategy to assume it can triumph over my invincible armies is pre-supposing the impossible. But for the author of that strategy to come into my royal presence to proclaim its worth and infallibility is something new in the art of war. Enough of such presumption! I will, however, hear from your lips the allied proposals to see if they contain aught of interest."

There was a shifting of the German staff as each turned to hear the marshal's reply. Slowly and distinctly the measured words fell upon their ears.

"The surrender of the German battle fleet; the complete surrender of all arms and ammunition of German armies operating upon invaded soil; the withdrawal of such disarmed soldiers in military order into the borders of Germany; the surrender of the Keil canal, Essen, Strassburg, Colmar, Mulhausen and all fortified cities and territory west of the Rhine, to the allies; the complete restoration of the devastated portions of Belgium, France, Italy and Serbia; the surrender of the German emperor and his leading commanders at once to the allies without a guarantee of immunity from punishment for the crimes they have committed against civilization——"

The emperor leaped to his feet.

"Gott!" he cried. "Such insufferable insult!"

The Marshal of France smiled. A cold, indifferent smile, at the interruption.

"Such are the allied terms," he continued, unruffled. "I leave the decision with you—accept or reject."

"Never!" the emperor fumed in rage, striking the table with his clenched hand. "Germany will not tolerate such insolence! Our armies in the field and the subjects of the fatherland at home, who are loyal to the head of the divinely appointed house of Hohenzollern, would not consent. With you, their supreme strategist, in my power I am in a position to dictate liberal terms, including the return of my colonies, as a beace basis!"

"I had not finished," quietly continued the marshal. "As an evidence of good faith in the ultimte fulfillment of these terms the supreme allied war council today demands the surrender to me in person of the emperor and his generals, Hindenburg and Ludendorff, and their return with me to allied headquarters as hostages."

"Enough!" snapped the emperor. "I am done with this nonsense!"

Turning to Hindenburg, he commanded:

"General, I give this strategic upstart into your gentle keeping. Send word at once, under flag of truce, to the nearest alied general, that unless hostilities cease at once and a mixed peace commission be sent to me within three days with proposals favorable to the imperial German government I will take as reprisal the life of the commander-in-chief whom I hold as prisoner."

"Wait!"

The words fell like the sting of a whiplash from the lips of the marshal. The emperor turned in surprise at the interruption.

"It is now 12:15. If at 1 p. m. you have not arrived with me at allied headquarters, together with your two generals, the terms I now offer will not hold. If you refuse I warn you as supreme commander-in-chief of the allied armies that the terms I shall later impose will be more severe!"

A sneer curled the lips of the emperor.

"Before that time the messenger I send will have informed the allies that the strategy of the marshal of France has come to naught before the superior strategy of the imperial German high command! Your offer is rejected!"

The marshal bowed low.

"Strategy, sir, has a comparative value. The historians of the future will carefully weigh yours and mine upon its merits. Yours has been here declared. Mine is yet to be considered."

There was a rattle of sabers. A guttural sound of German voices in hasty discussion. Then the marshal of France was led from the presence of the emperor under guard. But that quiet smile failed to desert the marshal's face beneath the brutal scowl of his guardsmen.

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Out of the gathering dusk toward the west the unremittent roar of thousands of pieces of heavy artillery seemed to increase in volume and draw constantly nearer.

The emperor paced back and forth impatiently, stopping to speak now and then to his two generals, who were closely scanning a battle map.

Every report told of disaster. Defense after defense had crumbled. Picked divisions of the emperor's best reserve troops had been hurled against the allied advance in vain. Headquarters' wires were silent. For the last hour not even aerial messengers had reported. The emperor called his aide.

"Lieutenant, what has been done to re-establish wire communication.

"The emergency wire battalion has been sent forward, but no word as yet. The blowing up of Fort Moltke and Fort Prince Royal by American bombing fleets destroyed the two switchboard systems connecting us with the front. At least, we can expect no repairs under three hours."

"Why no aerial reports."

"The last messenger, who arrived one hour ago in a damaged plane, reported that the allied air forces were coming into action, with thousands of new, heavily armored and swift combat planes, sweeping the air clean. This messenger says he can not understand how he himself escaped."

"Report to me the first information obtained, lieutenant."

Ten minutes later he again called this aide.

"Watch closely that bank of clouds to the north and tell me what you make of those frequent flashes of light."

The lieutenant placed his glasses to his eyes. He uttered an exclamation of surprise:

"Sir, that is not a cloud! It is a great fleet of monster battle planes moving

(Continued on page twenty-two.)

## Washington Boys in War Service

(From The Twice-a-Week Spokesman-Review.)



**SERGT. C. J. SEVDY, Palouse, Wash.**—Entered the military service of the United States on September 27, 1917, and is now at Carlisle, Wash. He has a brother in France. His parents reside near Beeler, Idaho.



**JESSE A. SEVDY, Palouse, Wash.**—Entered the military service on the same day as his brother, Sergeant Clarence, did. He is now in France, while his brother trains in this country.

## Women War Workers Turn Out Tractors

That its output of farm tractors may continue unabated the Minneapolis Steel and Machinery company has placed much of the work of its large plant in the hands of women and girls whose careful and accurate work is proving a highly satisfactory solution to the problem of keeping up production. The picture shows a little bunch of the women war workers. While they are drawn from all classes, they are on the same level in the shops.



## Handicraft for Girls

By DOROTHY PERKINS.
(Copyright by A. Neely Hall.)

### A JAPANESE GARDEN.

Do you own a Japanese garden? If not, you should get one right away, because it is the latest fad to have one. A garden can be bought ready planted, but it is more fun to plant one yourself.

First of all, you will need a shallow baking pan in which to plant the garden. This may be round or square. For soil you must have some coarse pebbles or pieces of broken stone. This can be had for the asking some place where a building is in course of construction. Half a panful of sand and several handfuls of pebbles will be enough. In addition, you must buy some birdseed or Japanese grass seed to plant in the soil. The rest of the garden material can be picked up at home.



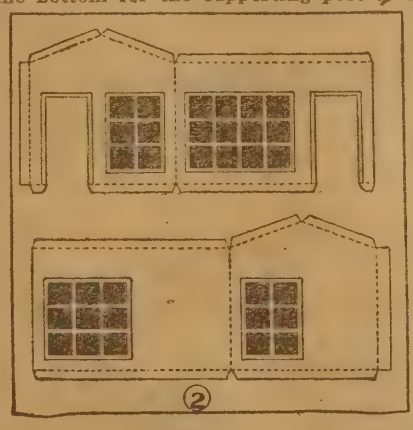

There are any number of arrangements for the garden that can be worked out, and you can replant your garden from time to time to make it different. Fig. 1 shows a good plan to follow for your first one. Pile up the sand around the sides of the pan, forming hills and hollows, and leave an irregular-shaped space in the center, and extending over to one side of the pan, for a pond. Make a shore line of pebbles around the pond, and scatter other pebbles here and there over the sand.

Plant the birdseed or Japanese grass seed in the sand, then sprinkle it with water, and fill the pond. Paths and roadways should be provided for, but these can be weeded out after the seed has sprouted.

One of the hills must be selected as a site for a little Japanese house. This house may be made of cardboard. Fig 2 shows patterns for the walls. The dotted lines indicate where the pieces are to be folded. The strips outside of the dotted lines are to be turned in and pasted to adjoining surfaces, in fastening the walls, foundation and roof together. Faster the walls upon a cardboard foundation (Fig. 1), and glue another piece to their tops for the roof.

A high arched bridge must be built over a narrow portion of the pond, as shown in Fig. 1. Make this of a piece of a peach-basket handle (Fig 3), with a cardboard railing (Fig. 4), tacked to each edge. The arch of the handle will determine the curve of the railings.

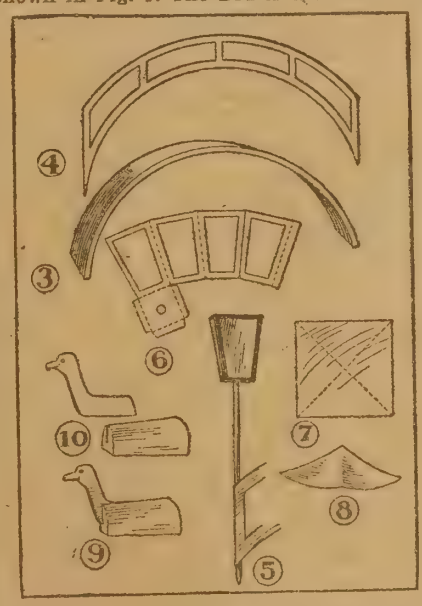
The pair of lamps at each end of the bridge (Figs. 1 and 5) have four sides and a bottom, cut in one piece like the pattern shown in Fig. 6. Cut an opening in each side as indicated, and punch a hole through the bottom for the supporting post to fit




in. Fold on the dotted lines, and paste the turned-in edges together. Use short sticks for posts (meat skewers will do), and fasten the posts to the bridge railings.

There must be a bird house similar to that shown in Fig. 1. Cut and fold the sides in the same manner that you did those of the lamps. Make the roof of a square of paper (Fig. 7), fold from corner to corner as indicated by dotted lines, and pinch up the corners as in Fig 8. The round end of a hatpin forms the ball at the peak of the roof, and the pin extends down through the house and is wrapped with paper to form the supporting post.

There must be a number of ducks in the pond, and these are easily made as shown in Fig. 9. The bodies are halves of




corks (Fig. 10), and the necks and heads are made of cardboard and fastened in slots cut in the round side of the halved corks.

With these suggestions to show you how easily a garden is built, you can use your own ideas for devising other garden accessories.

**Peanut Brittle.**

1 cup white corn sirup.
1 tablespoon vinegar.
1-4 teaspoon salt.
1 teaspoon vanilla.
1 cup freshly roasted peanuts, halved.

Cook the corn sirup, vinegar, and salt in saucepan until a little dropped in cold water forms a soft ball. Put the peanuts and this sirup into an iron skillet and stir until the sirup becomes a golden brown. Remove from the fire and stir in vanilla. Have ready a shallow buttered pan, pour candy in and spread out in a thin sheet. Allow to cool, then remove from pan and crack into pieces.

## Fall Food Hints

The shortage of dried fruit in America is a hint to housewives to gather up all the left-overs and store them, either dried or canned. Winter pears, apples, grapes, pumpkins, carrots all furnish material for jam.

Apples are 90 per cent juice, and practically all the food value is in the juice. So store up the windfalls in the form of sweet cider, boiled cider, vinegar, butter, jelly, syrup, pie filling and sauce. All of these can be made and kept without sugar. Reduce five gallons to one for syrup, seven to one for jelly.

Get the best out of the last green vegetables and fruits—stews, hashes, salads, soups, scallops, plain boiled or creamed. Don't draw on the winter supplies until you have to.

Dry a supply of green peppers, sweet red peppers, parsley, sage, mint and thyme for seasoning stews, scallops, salads, sausage and cottage cheese.

When you prepare chickens for roasting why not put aside the livers, gizzards, neck, head, feet, and last wing joint for creamed chicken? These parts add little to the dinner roast, but supply an extra breakfast or supper dish.

**PEANUT BUTTER SOUP.**

Peanut butter is a wholesome and highly nutritious food not nearly as much used as it should be. Pound for pound it possesses higher food value than round steak, though it sells for a lower price. Peanut butter added to any dish raises its protein, fat, and carbohydrate value.

**Tomato and Peanut Soup.**

1 1-2 cups seeded and strained tomatoes.
1-2 cup peanut butter.
1 level teaspoon of salt.
1-4 level teaspoon of paprika.
2 1-2 cups boiling water.

Add tomatoes gradually to the peanut butter and when smooth add the seasoning and water. Simmer for ten minutes and serve with croutons. Well-seasoned soup stock may be substituted for the water; if used the quantity of salt should be reduced.

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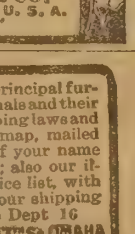
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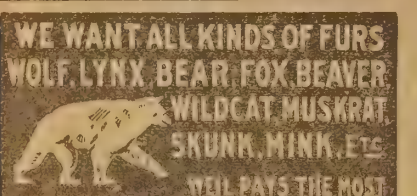
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## Sort Furs

### If You Want to Get the Best Price

"What plan do you follow in getting the best price for the fur you take?" I asked a trapper whom I met in the woods of northern Idaho, last summer.

"Well, for one thing, I don't trap any until fur is prime," he answered. "No use trying to rush that part of it. It isn't how many pelts you get, but how much money you get out of them when you sell.

"Most anybody can trap," he went on, "and most anybody can get some skins; but when it comes to getting what the fur is worth, most trappers fall down."

"Maybe they don't know how to stretch and dry the skins in the right way," I suggested, with the idea of drawing him out.

"There's a good deal in that, too," he said between puffs as he relighted his pipe.

"Some trap too early, some don't savvy stretching and drying and not very many know how to sell to advantage. I nearly always get about a third more for my furs than others that trap in the same territory, even when they have just as many good skins as I have."

"If it isn't a secret," I ventured, "just how do you do this?"

"Simple as anything," he said, "and no secret about it. I just simply sort my pelts before I ship them. I put all the 'firsts' of a given kind together, then all the 'seconds,' and finally all the ones that for one reason or another should be classed in 'thirds.' Most trappers, especially those who don't know much about selling—and a big lot of those who think they do—just bundle up all their pelts together when they get them ready to ship, and let the buyer do the sorting. Consequently they don't get as much for their pelts as they would if they took some pains to do their own sorting and make some estimate from their price list to figure out what the different grades of pelts are worth."

"How do you determine what fur house to sell to?" I asked. "Do you sell to one house year after year, or try different ones from time to time?"

"Oh, I 'shop around,' as my wife says," he grinned. "I write for the prices of a dozen or fifteen houses every season, and sometimes ship to several in one season. One house may be offering more than another for some certain kind of fur, so I scatter my shipments around."

It struck me that this trapper's methods were worth telling about. The lesson to be drawn from his talk is that it pays to sort your skins, tying each grade in a bundle in itself, before tying up the whole lot for shipment, giving the number of firsts, seconds and thirds of each kind, and what the price list of the house you are shipping them to show the lot, so sorted, ought to bring you.

C. V. R.

I think the Washington Farmer is the best farm paper in the state.

A. H. BRUMS.
Lynden, Wash.

## A Test in Strategy

(Continued from page twenty.)

east toward the interior of Germany! Those flashes of light are signals!"

The emperor seized his own glasses.

"What possible business has our battle planes in such numbers in that region, lieutenant?"

"If I might venture a solution, sir," his glasses still fixed to his eyes, but trained toward the south, "I would say these are not German, but allied planes! Look, sir, to the south! Those lights are signals between two operating fleets!"

The emperor turned his own glasses to the south.

"Gott! Another fleet! How many, think you, are in either fleet?"

"Not less than 1500 to the north. Double that number to the south."

"A trap!" the emperor exclaimed. "My car—secure my documents—sound the alarm! I dare not be taken!"

The lieutenant leaped to obey the command, pausing only long enough to point to the east.

"I fear, sir, you are too late! They are between you and Berlin! I would suggest you escape toward the west!"

A bugle sounded. The imperial guard fell in at double quick, surrounding the tent where the emperor, the crown prince and the two generals were holding a hasty conference. Several anti-aircraft guns began to spit viciously at the nearest battle planes that had begun to circle high in the sky above the camp.

Lights were snuffed. The emperor's car drew up beside the tent. The bulky Hindenburg and the crown prince climbed in as it came to a pause. The emperor stood nervously on the running board, calling impatiently to Ludendorff, who was still within the tent. Suddenly Hindenburg


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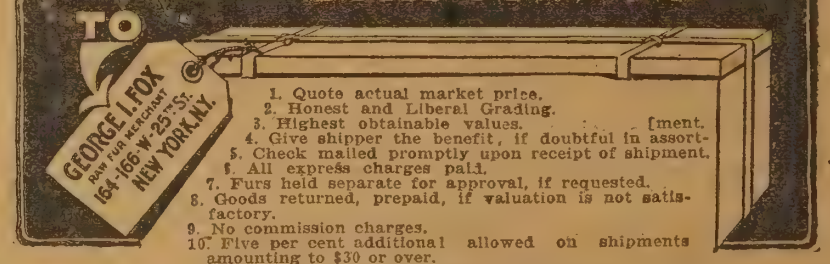
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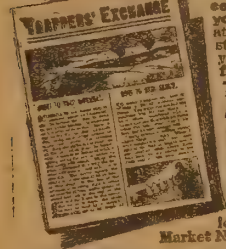
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leaned close to the emperor and muttered something in German. The emperor nodded affirmatively and called Lieutenant Hoffman.

"Bring the Marshal of France beefore me!"

In spite of the fact that the marshal was a prisoner the emperor saluted him as he appeared.

"I am leaving at once, according to prearranged plan, for the interior of Germany. For strategic reasons, incident to a successful termination of the war in favor of my dynasty I have decided to invite you as a hostage to accompany me."

The marshal glanced around before replying.

"I am very sorry to disappoint you, sir, but I must decline with thanks. I am about to start for my own headquarters where the allied war council impatiently awaits my arrival. Rather, sir, it is now my privilege to reverse the order of strategic intention and invite you to change your plan and accompany me to allied headquarters for an indefinite stay as my prisoner."

"Enough of braggadocio! I enjoy satyr; but your insults to my royal station will no longer be tolerated!"

"My words, sir, contain naught of braggadocio, nor insult to royalty. I only state a plain military fact," the marshal replied with quiet precision. "The power of royalty, as vested in the person of William Hohenzollern, has ceased to exist. Look!"

The marshal pointed overhead where the droning of the mighty fleet of battle planes had increased to a staccatic roar as they circled in perfect formation just out of reach of the bursting shells from the flashing guns below.

Suddenly a hundred flashes of intense light fell upon the scene below, lighting German headquarters with the glare of midday as a squadron of planes released parachute flares that swung lazily back and forth in space as if mocking the helpless emperor and his staff below.

"William Hohenzollern, war lord of Germany and imperial butcher of helpless innocents, I demand your complete surrender in the name of the allied armies of civilization! Ten thousand battle planes, each carrying six men armed with repeating shotguns and 20-shot automatic Browning rifles, have you hemmed in! Lieutenant Hoffman, order your guns to cease firing!"

With a snarl of rage the emperor stepped back, attempting to draw his sword. Lieutenant Hoffman seized his arm, saying:

"Your majesty, discretion seems to be the better part of valor! It is only for your own safety that I thus lay restraining hands upon you!"

He pointed to the outer circle of the camp where from every side solid ranks of hooded aviators, heavily armed, were converging on foot toward the center of the camp. As the emperor's eyes caught sight of them the barking of the guns died down as the gunners raised their hands, crying: "Kamerad! Kamerad!" The imperial guards were also repeating the cry as they, too hastily threw down their arms.

Dejectedly drawing his sword, the emperor handed it, hilt first, to the marshal of France. He refused it, saying:

"Sir, your sword is now a useless relic of a barbarous age. Keep it as a reminder that the force of right has made useless the sword of might. Lieutenant Fouck, my aviator, I think is waiting. Let us depart for allied headquarters."

---

Ten o'clock Monday morning. Every gun along the great battle line is silent. Behind the German lines regiment after regiment of the emperor's troops were stacking their arms under the watchful eyes of the allied officers.

Sergeant Bill rolled another cigarette as he listened to the clatter of Mart Johnson's tireless tongue.

"Say, Bill, that marshal of France is sure some he man! Went right over to German headquarters and brought back old Kaiser Bill in that air-horse as a prisoner! Me for him if he ever runs for the president of the world. Some he man! Yes sir-ee!"

"Aw, shut up and give me a match!"

"And they say," Mart continued as he tossed the match, "that the marshal had some kind of a wireless buzzer attached to his air-horse engine that tipped off the allied bunch to where his air-horse had landed in Germany! Last night the allied air fleet slipped out on a big raid and rounded up the whole bunch. Kaiser Bill and all! What d'ye think of that? I'll bet old Kiser Bill never gets back to Berlin again, no sir-ee!"

"That's nothin'!" Bill snorted, as he kicked aside a German helmet that had a bullet hole drilled through it from side to side, "Heinie Schmidt will never get back to the Bowery again, either, b'lieve me!"

---

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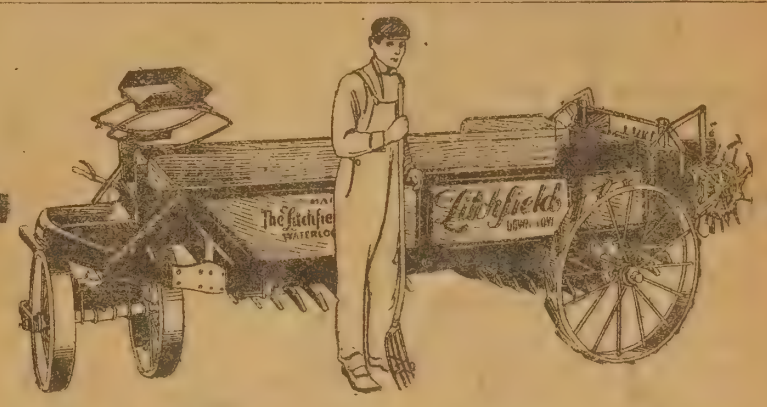
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# A CROOKED TRAIL---By Lewis B. Miller

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A story of a thousand-mile saddle trip up and down the Texas frontier in pursuit of a runaway ox.

SYNOPSIS.

Travis, a lad in his teens, lived on the Texas frontier in the days when Texas was a wild, unsettled region. One morning before daylight he started out to bring in the yoke of oxen for a day's plowing, but one of them was gone. He caught his pony and started to search for the stray. Going a little and a little further hour after hour, he continued until night caught him several miles from home with a tired pony, a borrowed saddle and lariat and little for himself or his dog to eat. A rabbit and wild turkey eggs served the purpose, and morning saw him again in pursuit of the ox after a night of disturbance by a mountain lion and marauding hounds. The next night he spent in the cabin of a crazy sheep herder who believed that cattle men were trying to kill him. He made the night hideous by his crazy ramblings and songs in the moonlight, and Travis was glad when the opportunity came to escape from him, and fall in with new friends, Frank and Stella Booth, at their farm home a little further on. The three young people became much interested in each other because of common plans for attending school the following year. It was here, also, that Travis got his first definite clue to the whereabouts of the stray steer. Together the two boys set out to hunt him, but he was farther away than they suspected. Startling adventures were in store for them, among the first of which was a night in a "haunted" house, the principal haunts being wild animals. The next day they found the stray ox, but suddenly a wall of water from a furious storm rushed down the river between them and the animal. The boys arranged to have the steer held in pasture till they could cross the raging river. The meantime they spent working with a farmer in grubbing out live-oak thickets.

## CHAPTER X.

### Rafting on the Cowhouse.

On our way down to interview Edwards, we had noticed a covered wagon approaching the river from the north; and on our way back to Anderson's we saw that the wagon had camped a hundred yards or so from the bank. Near it an old couple, man and wife, were eating their supper by a little camp-fire. Evidently they were waiting for the river to run down.

The night that followed was an anxious one for me. Before falling asleep Frank and I discussed every plan we could think of, practicable and impracticable, for reaching the south bank. There were no ferryboats, either above or below. And, as it happened, an unexpected rise, coming when the river was low the spring before, had carried off all the skiffs along here. The nearest one left was six miles above.

"The simplest way to cross is to swim," Frank observed, as we lay on our blankets, gazing up at the starlit sky.

"If Dick was ever in swimming water, I don't know when it was, Frank. He might go in all right, or he might not. Father was a cowboy when he was a young fellow, only a little older than we are. He was part of an outfit that tried to take 2500 longhorn steers from Texas to California, but they marched thousands of miles and swam rivers by the dozen. He says there's a world of difference in horses. All of them can swim, of course; but some swim well naturally, and some don't, especially with anybody on their backs. And the only way you can find out about a horse is to try him."

"Well, the Cowhouse is not just the kind of a stream one likes to experiment in," answered Frank.

"It's anything else. And a horse is an excitable animal. They sometimes drown themselves. I believe Dick could swim all right. He's a sensible little fellow. But he's too light to hold me up in the water. If I could swim by his side, or hang to his tail it wouldn't be so bad. But to sit up in the saddle—I wouldn't dare risk it."

"And even if you did swim by him or tow behind him, how could you guide him?"

"There's the rub, Frank. I couldn't guide him; at least not in such a stream as this."

"No, I guess not. What Bob would do in the water I don't know. He's bigger than your pony; but then I'm a good deal heavier than you are. It would make me feel shaky to try to swim the Cowhouse on him. I'm only a passable swimmer myself. In fact, I wouldn't dare run the risk."

"A boat's what we need, and a boat we've got to have, Frank. Then we can pull across, and let our horses swim after us."

"Yes, a boat's the thing," agreed Frank. "And the wisest course for us is to strike out up the river tomorrow morning, and keep on the move till we find that one Anderson told us about, or some other."

With this understanding we fell asleep. We were up before daylight next morning, and went down to examine the water. But the stream was still far too deep to ford.

We told Anderson what we had decided to do, and he approved of it as being safer than attempting to swim the river on horseback.

He was going to town, and we wrote two hasty letters home and sent them by him to mail. In them we explained that our cattle had escaped and were gone again, and that we were about to follow.

Just as the sun was rising we said goodby to the Anderson family and rode away up the river. Anderson had paid us all the money due for grubbing, and his wife had stowed a new supply of provisions in one end of Frank's saddle-bags. Our horses were well rested by this time, and we took up the chase again very hopefully.

But a mile above we happened upon something that caused us to change our plans.

In a very low place in the valley—a sort of pocket from the river—back-water was standing. While the river was higher, many logs and rails had been thrust out into this pocket by the stream. And here they remained, floating in the shallow water.

As we were riding around this place, Frank suddenly reined up.

"Travis, let's not go a step further. It's six miles up to that boat and six miles back—a 12-mile trip. The boat's on the other side, and the owner lives a quarter of a mile away, Anderson said. If we don't happen to find him down at the river, and the chances are we sha'n't, we'll have to keep riding till we happen onto a boat on this side. And that may be six miles further—or 16—or sixty. And even after that we'll have to double all the way back here and—"

"And do what, Frank?"

"Make a raft. Plenty of logs here for a good one. A raft is better than a boat, too, for a swift stream like this. It can't upset, and it can't sink—unless you load it to death."

"But I wouldn't know how to handle it."

"Risk me to show you that. One of my uncles lives near the Osage river in Missouri. He and his boys used to make rafts of sawlogs in a big creek. When the creek got up they'd work the raft out into the Osage, and then several miles down that to a sawmill. I helped take three or four down while I was there on visits. Finest fun in the world, too. We can manage a raft all right. Of course we can!"

He was so enthusiastic over his new plan that I quickly caught come of his enthusiasm.

"If you'll right back to Anderson's and borrow an ax and an auger, I'll pick out the best logs and get them together," he proposed.

I readily consented; and when I returned with the tools, Frank had the logs in position and ready for the cross-pieces.

"At first I planned to make a little raft," he explained. "But these logs are nearly all long, and it would take a lot of time to chop them in two. So I've decided that we'll use them full length. The thing will be a little clumsier to manage, but it'll be safer. And our ponies can swim behind a big raft just as well as behind a little one."

With boots and socks off, and his trousers rolled as high as possible, he was down in the shallow water, putting the logs in position.

I now felled a small tree close by, and between us we split it in half. These timbers we laid across the logs, one at each end, and flat side down, and bored holes and pegged them there.

"With as big a raft as this, what's the use of making our horses swim?" I wanted to know.

"Hadn't thought of that. Guess we might as well ferry them across and save them the exertion of swimming. Why, yes, we can do that. Of course we can; and we will."

Now we filled in the hollows between the logs with rails and sticks, so that Bob and Dick could walk over them better.

In a clump of woods on the river-bank we cut two slender poles, each about 15 feet long.

"All ready for business—for navigation!" cried my friend, as we laid the poles on the raft.

While Frank attended to various small matters, I carried the tools back to Anderson's. When I returned, he had the raft against the bank, at a suitable place, and called on me to lead the two horses aboard.

Dick smelt the logs and snorted several times, but gave no serious trouble. Frank's horse was more stubborn, and a quarter of an hour's coaxing was necessary before he would take the venture. But when once on, both stood in their tracks in the center of the raft, too frightened to move an inch. Vic was stampering about over the logs.

Frank now set his pole against the bank and pushed off, and we had started on our voyage. As we poled the raft through the still back-water, nearer and nearer to the swift, angry, angrily-muttering river, it must be confessed that I grew not a little nervous. And when we had pushed out into the stream, and the current had seized the heavy raft and was running away with it, as a mud-bottom cat runs away with a fisherman's cork, I was badly frightened.

Frank, however, showed no signs of alarm, and profiting by his example, I soon shook off most of my fears.

"Yonder's the landing-point I picked out," he said, pointing down the river to a sloping place in the south bank. "I don't know whether we can stop there or not. Let's try, though."

On sped the runaway raft, at dizzying speed, and the place where we had hoped to land was soon left behind. Now even Frank appeared a little dismayed.

"Don't just like the looks of things," he admitted. "No telling how far we may drift before we find another landing-point on that side. Wish my pole had grown a few feet longer. But let's keep feeling for bottom."

Again and again we stabbed the turbid stream with our poles, but nothing solid could we reach. The banks now stood up like walls on both sides; but even if we had seen ever so many landing-places, they would have availed us nothing. The raft was utterly beyond our control. We were riding a wild steed without bridle or halter.

"Maybe the river will grow shallower further down," Frank remarked, as we stood anxiously, poles in hand, watching the green banks hurry by us.

"It ought to," was my answer. "It's at least 30 yards wider at the ford; and I doubt if it's quite as swift. And now that we've started, we might as well run down to the road. It won't take more than a jiffy to get there, if we don't hit a snag or something."

"That's right. We're whooping things up. Nothing slow about this old creek. So we'll wait for the ford. Have to, whether we want to or not. But what if the water's too deep for our poles down there?"

"We'll have to risk that."

"Yes, no help for it now. We can't do anything worse than drift on into the Brazos or into the Gulf of Mexico." He laughed, rather nervously.

Every now and then, as the torrent hurried us along, we passed a place where the current, bobbing up and down, rocked the raft as if it had been a bundle of sticks. Our horses, standing with outspread feet, and trembling, snorted loudly, and Vic set up an excited barking. Once or twice the raft swung around with us.

Soon we had navigated a mile of the stream on our clumsy craft; and rounding a bend, we saw the roof of Anderson's house overtopping the bank. The raft rounded another bend, and presently we could see where the road came down. And I noticed that the old traveler and his wife were standing at the water's edge, observing us.

Now the river was beginning to widen, and we made ready to try our poles again. The raft was rushing down stream at a gallop, so to speak; and when I rashly thrust my pole into the water in front of it, the pole struck a rocky bottom and was jerked out of my hands so violently that I came within an inch of diving head first into the river after it. The raft swept over the pole, but I ran round the horses to the upper end and caught it as it bobbed up.

"Come over to this side!" Frank called to me.

Hastily I complied. Thrusting our poles down at the north edge, we pushed the raft toward the south bank, and kept pushing it further and further and further, till it was out of the swiftest current. After that we had no serious difficulty in getting it to land, at the point where the road led out.

We had fastened a rope to one log; and while Frank leaped ashore and held the raft against the sloping bank, I led the horses off. They went with a jump, well pleased to find themselves on firm land again.

"What shall we do with this old concern, Travis? Let it float away?"

"No. Let's find a grape-vine and tie it to a tree. Somebody else may need it."

Leaving me to hold the raft, Frank struck off through the woods in search of a vine. While he was gone, I noticed the old man and his wife gazing toward the raft wistfully. Finally the man called out:

"What'll you take to ferry us across on that?"

"Too risky!" I shouted back. "We wouldn't dare to bring a wagon and team over."

"The horses could swim."

I did not answer, and the man soon called again:

"I'll give you $2 to raft my wagon across."

"Don't think we'd better try it."

The couple talked together, and then the man shouted:

"Don't know but what I might make it three."

I shook my head. "Rather not undertake it," I shouted back. I had eight pound dollars in my pocket just now, and was more than anxious to get started on the trail of those cattle.

There was another consultation between the couple on the north bank, and the outcome of it was another offer:

"What do you say to $4?"

Again I shook my head, a little less decidedly this time. Finally the man asked:

"Would you do it for five?"

In my eyes this was a considerable sum, and I was very loath to reject it. "Wait till my partner comes back," I shouted, "and I'll see what he says."

"What's that you'll see about?" Frank called out just then, as he came hurrying through the woods, trailing a long vine.

"The folks camped over yonder are very anxious to cross," I explained. "The man says he'll give us $5 to come over and get his wagon. Says his horses can swim. What do you think?"

"Five dollars! That's big money for a job like that. They must be hard up to cross. A whole lot easier than grubbing up live-oaks. Why not rake it in?"

"Would the raft float a wagon?"

"If the wagon's not too heavy." Then lifting his voice: "How much load do you carry?"

"No load to speak of. Just the empty wagon."

"I'm in for trying it," Frank now said. "Good big job to get this old concern over there and back—bigger than I thought at first; but we're the boys that can do it. We'll have to pull up stream about a quarter of a mile, or we can't land at the road yonder. If you want to try it, hop aboard, and keep the raft away from the bank. I'll do the pulling."

After hitching our horses, I jumped out upon the raft, followed by Vic. Frank seized the rope, threw it over his shoulder, and started up stream, along the edge of the bank. With my pole I kept the raft from rubbing the bank; and I also aided in pushing the raft along.

The current offered but little resistance close to land, but our awkward craft moved slowly, and we spent a full half-hour toiling up to a point where it seemed safe to launch out. Then Frank threw the rope aboard, and scrambled down the bank after it, and we pushed off.

The stream was soon hurrying us toward the Gulf of Mexico, but we plied our poles vigorously, pushing the raft across, and doing what we could to retard its downward progress. And we landed at the right place.

"The reason we're so anxious to cross," the traveler told us, "is that the river's crawlin' up. It ain't climbin' so very fast, but it's purty tryin' to wait for a stream to run down that's on the rise. And we're powerful anxious to get on our way."

Now we secured the raft to bushes, against the end of the broken road. Then the three of us went up and brought the wagon down the steep bank by hand, its hind wheels locked fast. It was rolled to the center of the raft, leaving passage-room all around it where we could use our poles.

The old man remained on the raft, to keep it clear, while Frank and I went up, and walking along the edge of the high bank, dragged the raft up stream. The woman followed us, leading their two horses.

Believing that the raft would be harder to manage when loaded than it had been when light we towed it nearly up to Anderson's house. Anderson had gone to town, but his wife and children came out to watch us. At a place where a steep hog-path climbed the bank, we brought the horses down. Mrs. Anderson came to the water's edge with the traveler's wife. The latter was evidently very nervous.

"I feel mighty juberous about settin' foot on that thing," she said, tremulously. "If we wasn't so powerful anxious to get along, I wouldn't think of reskin' it. We've been visitin' our married son, up on the Leon river. And while we was there we got word that our daughter back at home had been took bad sick. If it wasn't for that, I wouldn't trust myself on this thing—not for love or money I wouldn't! I hope we'll come out all right, but I don't know—I don't know."

She spoke in a strained, high-pitched voice, which expressed her agitation even better than her words. Mrs. Anderson tried to reassure her, and so did Frank.

'We made one voyage of a mile and a half on this raft," he said, "and we landed all right-side up. Nothing much to be afraid of, I guess."

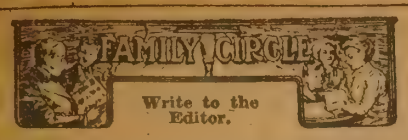
Now we got ready to push off. The woman was by the wagon and her husband near the raft's edge, holding the ropes that were on his horses' necks. Frank and I, armed with our poles, stood at the corners. As the raft moved slowly out, the horses seemed very reluctant to follow it. And not till Anderson's little boy had pelted them with gravel did they enter the water. But, once in, they swam easily enough.

By the time we had reached mid-river, where the current ran like a mill-race, both the man and his wife were plainly very much frightened. But neither of them uttered a word; and Frank and I were too busy with our poles to give them more than an occasional glance. In one place the bobbing current rocked the raft threateningly.

Having a half-mile to do our work in, we found no great trouble in effecting a landing at the road. As the raft touched solid ground, I heard the woman behind me breathe a sigh of relief.

The horses were now led, streaming, out of the river. After being harnessed they were put to the wagon, and the wagon was pulled up the bank. While I held the raft, Frank followed the wagon up to level ground to get his

(Continued on page thirty-one.)




ALICE W. BARLAND, Editorial Contributor.

# Christmas Packages

## For Soldiers, Sailors and Marines

The following rules for sending Christmas packages to soldiers of the American expeditionary force have been promulgated after a series of conferences by the adjutant general of the war department, the postoffice department and the American Red Cross:

1. The war department authorizes relatives of officers and soldiers in France to send Christmas packages, which will be of standard size and weight, one to each individual in the American expeditionary force.
2. In order to insure the limitation of one package per man, which in itself will consume a very large amount of tonnage, a plan has been worked out by which General Pershing is distributing to members of his command coupons on which are inscribed the correct names and addresses of the members of the American expeditionary force. These labels will serve as address labels for the packages. The coupons or labels will be mailed by the members of the American expeditionary force direct to the persons they wish to designate as senders of packages and no package will be forwarded without such a coupon. It is expected that the labels will be received in this country by November 1.
3. On receiving a Christmas package label the person to whom it has been sent should present it at the nearest chapter, branch or auxiliary headquarters of the Red Cross, where he will receive a pasteboard carton 3x4x9 inches in size. The Red Cross is to allot boxes to its chapters, based on the number of men in service from each community. It is expected that these will be ready for distribution by November 1.
4. Boxes may be filled with any combination of articles except those on the list barred by postal officials. Prohibited articles are all intoxicating liquors, all inflammable material, including friction matches and any composition likely to ignite or explode (cigarette lighters come under this classification), liquids and fragile articles improperly packed. Under postal regulations no note or message or written matter of any kind will ber permitted to remain in the boxes. In addition to the list of prohibited articles, relatives and friends of the soldiers are urged to bear these facts in mind when preparing Christmas parcels:

Do not put anything in the package which will not keep fresh until Christmas.

Pack dried fruits and other food products in small tin or wooden boxes. Give preference to hard candy over chocolates unless the latter are enclosed in heavy wrappers. Soft chocolates are easily crushed and may spoil other contents.

Do not put articles packed in glass in the package.

Gifts should be wrapped in khaki colored handkerchiefs 27 inches square.

5. The weight wrapped should not exceed three pounds; unwrapped the weight may be approximately two pounds fifteen ounces. Parcels may bear inscriptions such as "Please do not open until Christmas," "Merry Christmas," "Happy New Year," "With best wishes," and the like.
6. When the box is packed it should be taken unwrapped and unsealed to the nearest collection center indicated by the Red Cross, together with the address label and sufficient stamps to carry it by parcel post to Hoboken, New Jersey. After the package has passed the inspection of Red Cross representatives as to contents and weight and has been wrapped in stout paper, the Christmas label bearing the address of the man for whom it is intended is placed on it. The person sending the package in the presence of the Red Cross worker, is required to affix the stamps which will carry it to Hoboken. A label certifying that inspection has been completed by the Red Cross is placed on the package, which is left in the custody of the Red Cross until delivery to the postal authorities.
7. No package will be accepted for transmittal after November 20.

### Packages for the Sailors.

The following instructions regarding the manner of packing and shipping Christmas packages for men in the naval service, both in home waters and abroad, have been prepared by the bureau of supplies and accounts of the navy department:

1. Packages forwarded by parcels post must comply with the postal regulations and should be inclosed in substantial boxes with hinged or screw-top cover to facilitate opening and inspecting.
2. All boxes shipped by express are limited to 20 pounds in weight. should measure not more than two cubic feet in volume, be of wood, well strapped, and have a hinged or screw-top to facilitate opening and inspecting.
3. No perishable food products other than those inclosed in cans or glass jars should be packed in parcels post or express shipments.
4. All mail matter should be addressed as now prescribed by the postal regulations. All express packages should be forwarded in care of supply officer, fleet supply base, Twenty-ninth street and Third avenue, South Brooklyn, N. Y.
5. All packages must be plainly marked with the name and address of the sender together with a notation indicating the nature of the contents, such as "Christmas present."
6. The supply officer at New York will cause each express package to be opened and carefully examined to see that nothing of an explosive or other dangerous character is forwarded.
7. The shipment of Christmas packages for vessels abroad should be made so as to reach New York as early as possible, and not later than November 15.

### Packages for the Marines.

The war department regulations for Christmas parcels for soldiers overseas will be observed in the case of every marine whose address is American expeditionary force. For all other marines, whether in training or serving actively in this country, at naval posts and stations, at home and abroad, or on ship duty, navy regulations will govern.

**FISH** Salmon in brine, 100 lbs. meat, shipping weight 165 lbs., price $14; 50 lbs., $7. Smoked salmon, 20 lbs., $4.00. Dried cod, 10 lbs., $1.75. Herring, in brine, 50 lbs., $5.00; 25 lbs., $2.75. Cash with order.

T. A. BEARD.
4322 Winslow Place, Seattle, Washington.

## CORN A SUCCESSFUL CROP.

Corn is a most successful crop in Okanogan county, on both irrigated and dry land, according to County Agriculturist W. A. Holt of Okanogan. On the Methow and other tributaries of the Okanogan, where water is plentiful, fine crops of alfalfa are grown, but even there corn has proven its value and this dry year it has surprised many people by its productiveness on dry land. Many silos are being erected to conserve all the possible food value of the corn. Mr. Holt says corn and live stock must be included in the final plans of farmers if permanent prosperity is to endure. H. A.

# What Your Eyes Really See

By DR. LEONARD KEENE HIRSHBERG, A. B., M. A., M. D.

Seeing is not always believing, for there are times when you can not believe your own eyes. Moreover, there are more things in heaven and earth under your very eyes, which you do not see, than there are things which you do see, and of those you do see you fail to note most of the truth about them.

Your eyes are insensitive to most particles in vibration in space. Indeed, they are sensitive only to a restricted, narrowed range of illuminated things.

Wave lengths of light or, to be scientific, of the spectrum, from No. 4000 at the beginning of the violet to No. 7600 at the end of red and through violet, blue, green, yellow, pink, orange and red, are taken in by human eyesight, but all waves below 4000 and above 7600 fall on "deaf ears," to mix the metaphors, as far as vision is concerned. In other words, there are billions and trillions of things in existence that are hard, material facts, which the best human eyes can not see because their particles vibrate slower than 4000 times a second or more than 7600 times a second.

Obviously, specters, apparitions and other alleged immaterial objects so called are nothing at all but the suddenly increased or decreased vibrations in the molecules of some real thing that has become more visible than usual or visible in a new way. Thus it is not necessary to believe in spirits or to understand the physical reality of materializations.



Dr. Hirshberg.

### Your Color Perceptions.

This marvelous organ of man, the human eye, selects so few colors, shadows and forms in the world, compared with what are actually present and unperceived, that man was driven to invent spectroscopes, telescopes, microscopes, periscopes and photography to help the unaided eye explore the great unseen realm of reality all around us. Radium, Crookes tubes, X-rays and other unexpected aids have come to the assistance of man to help equip him with knowledge.

The sensation which you call color, which makes a normal person recognize green from red or blue, lies in the back, inner surface of the eye. This is called the retina. You used to be told that sight had its location in the brain.

The color perceiving apparatus with three pendulums, to represent red, green and blue, the three primary sensations for color. It is the swing of these pendulums from the impact of the particles in vibration in space which makes you see these colors. If these outside vibrations beat against the retina 4000 times, your pendulum swings that many times with it and you see violet. Thus, according to the number and size of the pendulum beats, you recognize a particular color.

Form, contour, distance and perspective are perceived visually only within limits. If the human eyes could see things from 1 to 4000 vibrations or with 7600 and all higher vibrations, human knowledge would be greatly multiplied. Perhaps this conclusion can be proved by Professor H. L. Whited's explanation of why a chicken or cow crosses the road in face of danger.

Professor Whited avers that it is due to the fact that chickens and cows have monocular single vision—that is to say, they can see two ways at the same time, and each eye simultaneously can be focused on a different object.

### Some Strange Oddities.

If you drive toward cows or chickens in a roadway, those which face your motor car will turn to one side and let the car pass. Those with a side toward your car will, if on the right side, attempt to run across to the left side of the road. Those headed away will run down the road in front, and turn off then.

The chicken on the right side of the road runs to the left side, and vice versa, because the eye of the creature which sees and recognizes the danger is kept on the car or dangerous object. To turn to the right or to the left and escape would blind the animal as it turns and it can not afford even for that fraction of a minute to take the chance. If a cow or a chicken runs across the road in front of the car, the eye with which it first observed will keep the car clearly and continuously in view and allow the animal to escape pending danger.

If safely across the road and blocked by a fence or other obstruction, a cow or a chicken may turn fully around to perceive her enemy with the other eye and then run for dear life to recross the road.

Children

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# PATTERNS

2659—Lady's dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 3 7-8 yards of 54-inch material. Width of skirt at lower edge is 2 yards. Price, 10 cents.

2521-2520—A good combination for business or home. Waist 2521 cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. It requires 3 yards of 27-inch material. The skirt 2520 cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. Size 24 requires 3 7-8 yards of 44-inch material. The skirt measures about 2 3-8 yards at the foot with plaits drawn out. Two separate patterns, 10 cents for each pattern.

2540—Misses' dress. Cut in 3 sizes: 16, 18 and 20 years. Size 16 requires 5 5-8 yards of 36-inch material. The skirt measurets about 2 yards at the foot. Price, 10 cents.

2657—Child's short clothes set. Cut in 5 sizes: 1, 2, 3, 4 and 5 years. Size 4 requires 3 1-4 yards of 26-inch material for the dress, 1 3-4 yards for the petticoat and 2 7-8 yards for the combination. Price, 10 cents.

2645—Child's play dress. Cut in 5 sizes: 1, 2, 3, 4 and 5 years. Size 4 will require 2 3-4 yards of 36-inch material. Price, 10 cents.

2546—A set of useful bags. The patterns are cut in one size. No. 1 will require 1 3-4 yards. No. 3 will require 3-4 yard, of 36-inch material. Price, 10 cents.

2660—Girl's dress. Cut in 4 sizes: 8, 10, 12 and 14 years. Size 12 requires 4 1-8 yards of 40-inch material. Price, 10 cents.

2650—A good service dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 5 7-8 yards of 44-inch material. The skirt measures about 2 yards at the foot. Price, 10 cents.

2498—Lady's apron. Cut in 4 sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. Size medium requires 4 7-8 yards of 36-inch material. Price, 10 cents.

2381—Lady's skirt. Cut in 6 sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. Size 24 will require 2 3-8 yards of 44-inch material. The skirt measures about 2 1-8 yards at the foot. Price, 10 cents.

2306—Girl's dress. Cut in 4 sizes: 8, 10, 12 and 14 years. Size 12 requires 6 yards of 36-inch material. Price, 10 cents.

2349—Lady's shirt waist. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 3 yards of 36-inch material. Price, 10 cents.




Please fill in this order and mail with remittance to:
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Pattern No.....Size..... Pattern No.....Size.....

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Be sure to give the pattern number and the correct size.

## FOOD FROM THE FOREST.

### Careful Preparation of Game for Table Will Prevent Waste.

Do not let wild game be an added luxury; let it take the place of your market meat, urges the U. S. food administration. No more game than can be eaten should be killed. Do not let your desire to tell a big story when you reach home lead you to shoot everything in sight. Good sportsmen will observe these conservation suggestions in addition to the game laws.

Careful preparation of game for the table also will prevent waste. As a rule game is preferred cooked rare rather than well done. Venison steak should be sprinkled well with salt and paprika, if desired, and cooked quickly. Serve immediately on a very hot platter. Venison steak requires at least three minutes longer to broil than beefsteak. When broiled it should be sprinkled well with salt and paprika, and put over a dish of hot water to stand a while before serving. With venison steak serve a tart jelly, such as that made of currants or sour grapes, to which vinegar and spices have been added.

Rabbit is most delicious when roasted. After cleaning well stuff body of the game with a dressing of salt pork, minced onion and crumbs well seasoned with pepper and salt. The body is then sewed up and roasted one hour. A few thin slices of pork are necessary in the roasting pan to supply fat. Rabbit meat is almost entirely lean. A gravy made in the pan after the rabbit has been removed adds to the finish of the dish. Rabbit stew is also delicious.

Wild birds are usually roasted in the same manner as domestic fowl. Since they lack fat they require careful basting to prevent drying out of the meat. Squirrels are cooked in much the same way as rabbit. Squirrel pie prepared in the same manner as chicken pie is a special favorite among most lovers of wild game.

## CONSERVE WHEAT STRINGENTLY.

M. H. Houser, northwestern representative of the grain division of the food administration, recently issued a bulletin urging upon the people that they continue to conserve wheat as carefully as in the past. He says that the coming of peace probably will mean that America must feed a greater number of people than it has been feeding under the conditions of war. He likewise urges the use of substitutes under about the same regulations that have been prevailing.

### New York Is Largest.

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The Pathfinder, Box 89, Washington, D.C.

The Way to Poultry Profits

If you have a bunch of pullets—more than you want to carry through the winter—why not sell some of them this fall?

If, on the other hand, you can add a dozen or so winter layers to your flock, why not increase your revenue from eggs by buying additional birds?

Many poultry raisers can make money by selling.

An even greater number of farms can realize good profits by buying fowls of good laying strains.

Those who have a surplus should get in touch with those who will buy—and the "want" ad page of the three big state farm weeklies—The Washington Farmer, The Idaho Farmer and The Oregon Farmer—makes an excellent market place, where buyer and seller can get together with mutual profit.

Those who have anything to sell should RUN A "WANT" AD in those papers. Those who wish to buy should WATCH "WANT" AD offerings.

RATES FOR "WANT" ADS WILL BE FOUND ON WANT AD PAGE, BUT IF UNCERTAIN ON ANY POINT WRITE

The Pacific Northwest Farm Trio

General Offices, 36 Review Bldg.
SPOKANE, WASH.




Dear Corner Cousins: It was my pleasure the other day to visit a schoolroom and I at once thought of a poster that used to hang in our schoolroom, and I am going to write it here so that the cousins can see what I have in mind.

TO BE OR NOT TO BE.

**To be punctual; to be neat, to be prompt; to speak pleasantly; to stand erectly; to smile brightly; to be frank; to respect your parents; to obey your teacher; to reverence old age; to enunciate (speak) clearly; to be athletic; to be cheerful; to be exact; to be pure in mind; to be pure in body; to be polite; to be helpful to the needy; to be able to hold your tongue; to be at the head; to be in good company; to be attentive to your affairs; to be civil; to be mannerly; to be kind to animals; to be thoughtful; to be humble.**

AUNT NELLIE.

"I have two twins, so I am lucky," writes Hattie Hayden of Benge, who is 11 years old, and in the sixth grade. Hattie has six cats, four little ones, an old mother cat and one little kitten that she found. She also has a very good dog named Tip, and a pony named Peanut. What is the difference between a lady and a soldier?

"I went to the river and had a good time wading in the water," says Hilda Thompson of Benton City. Hilda was 11 years old November 24. She has seven thrift stamps. She wants a twin.

Sophia Havlicak of Odessa hopes that she has at least one twin. She was 13 years old November 24. She has good times riding in their car.

The cutest little pony named Tricksy belongs to Mildred Heidegger of Rice. Mildred was 11 September 11. She wishes her twin would write. They have a cock that chases them nearly every time they go to the barn. Mildred wishes that some of the cousins who live in the city and can hardly get any cherries could live out where she does so they could have all they could eat.

"Baby Jack has fallen asleep, so I will have time to write to you," says Iva May Day of Granger, in her third letter to the Corner. This summer Iva used to go swimming in the flume and had lots of fun. She is in the sixth grade now, and her mamma can hardly realize it. Iva would be glad to have some one correspond with her.

Lowell Eden of Cunningham chops thistles for the two pigs that he has to feed. Lowell set a hen on bantam eggs and five little chickens hatched out. He will be 10 years old November 9.

Hazel eyes, golden hair, light complexion and rosy cheeks describes our little cousin, Margaret Vining, of R. F. D. 1, Malaga. She had a war garden, and is a member of the garden club. She is also a member of the war saving society and of the Junior Red Cross. Her pet kitten, Mischief, surely lives up to his name.

Erma Broyles of Penawawa owns a $250 liberty bond, and with the interest she buys war savings stamps. Erma was 9 years old February 25. She goes to Lincoln schoool, where 21 scholars go. Erma lives on a large farm, and she has eight pigs, a cow and a calf of her own.

Cousin Velma Eichenlaub, who forgot to send her address, says she likes to read the letters. She belongs to the Red Cross. If a man died from eating a green cucumber, what would his phone number be?

**Lives on a Big Farm.**

Dear Aunt Nellie: I enjoy very much reading the letters and thought I would write too. I am 13 years old and in the seventh grade. My birthday is May 11. Have I a twin? If I have I wish he or she would write to me. I live on a 9000-acre farm. We have 50 horses and two cows. I have a pet dog and cat. The dog's name is Nellie. The cat has no name. We drive to school in a buggy. We have four miles to go. I have a pony named Daisy. I like to ride her very much. I am trying to raise corn, but it is almost too dry. Alice Gronewald, Connell, Wash.

**From Our Cousin Sallie.**

Dear Aunt Nellie: I have been away visiting and that was the reason why I did not write. In May we went to Coeur d'Alene, Idaho, where my uncle and aunt live. We stayed there a week and then we came back home. About the first of June there was to be a camp-meeting up at Wellpinit. Some Indian missionaries from Nez Perce were to be there, so we went. There were many children and middle-aged and old people who joined the church. Nineteen days later we went up to Nez Perce for our Fourth of July celebration, and we certainly enjoyed some good times there. We went in a buggy as far as the Spokane river and then we took the evening stage and arrived in Davenport about 7 p. m. We camped there and the next morning we took the stage to Spokane. When we got to Spokane the train to Vollmer was gone, so we stopped in Spokane overnight and on Wednesday we went to a place where we were going the evening before. The place is called Talmaks, and that means "butte on the prairie." I am a regular old traveler, don't you think so? I help my mother can. We canned 152 jars of fruit and about two gallons of currant jelly. We canned some cherries, three kinds of currants, raspberries and strawberries. My cats are getting along just fine, and I have decided what to name them. I have found a twin from the Nez Perce Indians, and her name is Susie Newton. I haven't any more twins, have I? I found one in Fruitland and her name is Margaret, but I have forgotten her last name. I just started to raise chickens last spring and I now have 78. I know Hazel Defreece, for she lives about two or three miles from our house; and I know Ella Brown, because she lives about four miles from here. I also know Annie Phillips. These are some of our cousins. We will all try our best to win this war, won't we? Oh, yes! on the Fourth of July the leader dressed us up. Four girls were Red Cross nurses and they were dressed in white, with red crosses on their foreheads, and, just think! I was "Liberty." I was dressed up in the flag of Old Glory, and I wore a silver crown. One boy was Uncle Sam, and he wore red, white and blue pants, blue coat, white collar, and red, white and blue hat. The Red Cross nurses made offerings for the Red Cross. They made $321. We did pretty good, didn't we? Then Uncle Sam and I led out first, and then our nurses, and about 1000 people, and we raised the flag with 14 stars on it, because there are 14 Indian boys who have gone to war from Nez Perce. We all sang "The Star-Spangled Banner," and we had about three dozen pictures taken. I am 15 years old, and my birthday is March 24. May God bless you all. Aunt Nellie, I thank you a thousand times for my prize, and that letter which you wrote to me.—Sallie S. Garry, Miles, Wash.

**"Thrifties" to Lick the Kaiser.**

Dear Aunt Nellie: I am always very glad when the Farmer comes so I can have my sister read about the other little girls of the state of Washington and what they are doing. I live in the country about five miles from town. I like the farm better than the town because I like to hunt the eggs and ride horseback. Nearly every day I find a little bird who is just learning to fly. I get him some crumbs to eat. We have a car and every year we go over to Seattle and then down to the Washington State fair at Yakima. My birthday is on St. Patrick's day, March 17. Have I a twin? If so I wish he or she would write to me. I go to a country school a mile and a half away. I have a sister, Dorothy, and two brothers, Bruce and Harold. Dorothy and Bruce go to high school. Dorothy graduates this year. Harold goes to the country school with me. My father is helping the Red Cross and buying Liberty bonds and we children are buying thrift stamps to lick the kaiser.—Jean Phyllis Wilson, Meadow Brook Farm, Ellensburg, Wash.

**Likes the Farm Best.**

Dear Aunt Nellie: I am so pleased with the Corner that I think I will help. I am staying with my grandparents. Grandpa gets the Farmer, so I read the letters. I go to the city school, but, let me tell you, the farm for me! I have no pets, but I was raised on the farm and then we moved to the city. I long for the farm more than anything else. I have brothers and sisters, and I will tell you their names: Leddie, John, Oswald and Louie are the boys, and the girls are Rosa, Martha, May and Annie. I have a real twin at home. Her name is Martha. This is the first time I have written to the Corner and I thank the children for such nice letters, for when I was sick in bed they cheered me more than anything else. Now who is sick? I think these letters will help them. If I have a twin, will you tell her to write, please? I am 13 years old and in the sixth grade.—Bertha Luther, R. F. D., Box 35, Penawawa, Wash.

**Swimming in the Creek.**

Dear Aunt Nellie: I am 10 years old and when I was a year old I took the prize in the better babies' contest. I have blue eyes and brown, curly hair, and I also took the prize for being the prettiest little girl. Have I a twin? We have five cows. We have 60 horses. We have a dog, and his name is Joe. I live with my cousins, Fern Lyle and Elmore Lyle. Fern is 12 and Elmore is 10. Elmore likes me. We go swimming every day in the week in the creek behind the barn and sometimes we go riding on a log down the lake. My papa and mama and sister and brothers and cousins and aunts and uncle are very nice to me. My sister and brothers live with my mama and papa. My sisters' names are Mabel, Dorothy, Catherine, Marjorie and Marguerite. My brothers all go to high school, and I am in 2B. I didn't pass twice. When I was little my mama taught me French, and I can speak and write it. My cousin is in France, and he says he likes it. We have a big car and my papa can drive it. My aunty is out picking berries. My sister Dorothy is writing this for me because I fell down and broke my arm. We have a little bird named Nancy Dickey, and he likes me. My aunty is calling me, so au revoir.—Josephine Perkins, Pullman, Wash.

**Lives on a Big Ranch.**

Dear Aunt Nellie: I live on a big ranch near Pullman. There are lots of pine trees here. I am 12 years old. My cousin, Josephine Perkins, lives with me. I have dark blue eyes and dark brown hair. I am in the seventh grade. I am just four and a half feet tall. Have I a twin? I have a little brother named Elmore. I haven't any sisters, but would like very much to have one. I also have a big brother in France. I wish he was home. We have a lot of horses and seven milk cows on the other place. We have nine little calves and one is a pet. We call him Pet. We go in swimming back of the barn nearly every day. This is the first time I have ever written to the Children's Corner, and hope this isn't the last time. We have a dog named Joe, and a big cat that weighs 14 pounds. I have knitted quilts for the Red Cross. I also have two war saving stamps. I like to help my mama work. I milk one cow while my mama milks six, sometimes the old cow gets tired and kicks. We used to have a dog named Uno, but she died, I was so sorry because I liked her so well. She was a good sheep dog. I think my cousin and I will take a little trip in our roadster in a few days. My cousin and I go to school in it. I can drive it pretty well. I sometimes run into a fence or a tall pole. I've run over two dogs, a chicken and a pig with it. Well, we are going to town in our car, and take some eggs in and sell them. The money comes to me when I take them in. I guess I will buy war saving stamps with it. If I have a twin please let me know.—Fern Lyle, R. 2, Pullman, Wash.

**Cousin Ferne Joins the Corner.**

Dear Aunt Nellie: I will be 13 March 12, 1919. Have I a twin? If I have will they please write to me. I would gladly and most willingly answer their letters. I have dark grown hair, brown eyes, light complexion and a few freckles across my nose and I am pretty well tanned up, too. I have a quarter Indian in me also. I have a little gray rabbit. Her name is Miss Rabbit Runaway. Is that not quite a queer name? Well, it certainly suits her character well enough, as she is always running away. I just found the way she escapes. I had her house in the corner by the fence and she jumps up on her house and from there jumps over the fenc. I took her house and put it away out in the middle of the pen so now she can not get out. She seems dreadfully disappointed about it. The other morning mother went out to feed her and found her sitting up on top of her house looking as solemn as an owl. I hope I have a twin who will correspond with me and hope this won't be my last letter to the Corner. I am in the seventh grade.—Ferne Danels, Depublic, Wash.

**Working for Mother.**

Dear Aunt Nellie: I am 12 years old and my birthday is August 23. I am in the sixth grade and go to Mt. View school. I have brown hair and blue eyes. Have I a twin? Mama has been sick over a month, but is better now. Papa and I did the work. Now papa is working out and my two oldest brothers are plowing. I will give some riddles as I have no news. As I went over London Bridge I met a man and if I tell his name I'll be to blame and I've told his name five times. Why is a dead doctor like a dead duck? What is the first thing you set in your garden? If all the women went to China where would the men go? Which is the most important state in the United States?—Sadie L. Olin, Baird, Wash.

**Helps With the Milking.**

Dear Aunt Nellie: This is my second letter to the Corner. I hope it will not be the last. I have one cow and two calves. Their names are Elsie, Pansy and Roy. I have seven little chickens. We have five little mules, three of their names are Ike, Bing and Betty. My birthday is August 26. I help do the milking. Sometimes I milk four cows. For the last two or three days I have milked eight cows a day and helped feed the calves and separate. Have I a twin?—Beulah Hiday, Box 93, Coulee City, Wash.

**Helps to Lick the Kaiser.**

Dear Aunt Nellie: I enjoy reading the children's letters very much. I am 13 years old and am in the eighth grade. My birthday is October 27. Have I a twin? If I have I wish he or she would write to me. I have two sisters and one brother. Their names are William, Anna and Regina. Why does a rooster shut his eyes when he crows? He shuts his eyes because he knows it by heart. Why does a dog try to catch his tail? Because he wants to make both ends meet.

I hope some of the other cousins when they put riddles in will put the answers, too, don't you? I have some war saving stamps. I am helping raise a garden this year. I will do all I can to help lick the kaiser. We have seven cows. We have eight horses and two colts.—Martha Entel, R. F. D. 1, Colton, Wash.

**Iva Is Counted Among the Cousins.**

Dear Aunt Nellie: I have one long row of garden with onions, lettuce, parsley, muskmelons, carrots. I planted my muskmelons and in between every one I would put a parsley and in between the next one I would put a carrot seed. I forgot I did this and I hoed them all up. I am some glad girl because I am in the sixth grade. Aunt Nellie, I wish I got as many letters as you do through the mail. My birthday has passed and I got an organ, a good one, too. I can play some. I was 11 years old May 30. The organ is light oak. Vivian Mirosche said country life was better than city life and she or he is telling the truth, too. I surely do believe it after I have lived on the farm. I am running out of news like the cars run out of gasoline. When they run out they can't go any more. Now count me as a cousin, no matter if I don't write often.—Iva May Day, Granger, Wash.

**Tony, a Yellow Canary Bird.**

Dear Aunt Nellie: May I be a cousin? We have five little kittens and four of them are gray and the other one is maltese. I have school at home and my big sister is teaching me. I am four feet 10 inches tall. I have light hair and blue eyes. When I wrote the first time a girl wrote to me and she was the same age as I am, and her name is Alice Daniel. She lives in Oregon. I am always glad when spring comes because we go out flower picking. We had a Red Cross sale in town and we donated a 6-months-old calf, and she brought $400.96 for the Red Cross. We have a bird and he is a canary bird, and he is yellow with a black ring around his neck, and his name is Tony. I hope this war will end soon. I am 12 years old.—Grace Hicks, Coulee City, Wash.

Address all letters to Aunt Nellie, care of The Washington Farmer, Spokane, Wash.




**Tommy Tumbles**

The acrobatic doll. The most lifelike toy novelty yet devised. He affords fun and amusement by the hour for old or young.

Tommy stands nine inches high and has no gears or springs to get out of order. Tommy Tumbles makes the finest Christmas present for the girls and boys. 50c brings Tommy to your home.

D. G. GIFFORD.
Box 4026. Portland, Oregon.



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For Spring Bloom
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Snowdrops

Send for Catalog No. 36, giving full cultural directions. It also lists Fruit Trees, Shade Trees, Small Fruit, Shrubs.

**SPOKANE SEED CO.**
First and Lincoln St.
Spokane.

## News for Breeders

As The Farmer goes to press word comes that the California International Live Stock show has again been postponed. It was scheduled for November 16-24, as announced on another page of this issue, but will not be held until early in February.

### LIKES THE RED POLLED.

Red Polled cattle have their admirers in Idaho, although the breed is not as numerous or well known in the state as some of the other breeds. Recently Adam Blackstock, a well-known farmer and live stock breeder of Owyhee county, bought of Fred Kress of Caldwell the 2-year-old Red Polled bull, Jean De Luth Bollinger, paying therefor $500. The sire of the animal is Proctor Knott, one of the most noted sires in the country. Proctor Knott heads the advance registry herd of Jean Du Luth farm, of Duluth, Minn., which is making a big milk and butterfat record and contesting for honors as a leading dual purpose herd. Mr. Blackstock has 30 head of selected females, and likes the Red Polled very much. He says the animals are very docile and easy to keep and fill an important place on the farm.

### WILL SELL AT PORTLAND.

The dates of the stock sales that will be held in connection with the Pacific International Live Stock show at Portland have been officially announced as follows: Herefords, December 11; Shorthorns, December 12; and Holsteins, December 13.

### Edgewater Sentinel.

E. M. Chandler of Yakima, Wash., reports selling Edgewater Sentinel, 10-months calf, grand champion Washington state fair 1918 and silver cup winner from the Ayrshirt Breeders' association, to Mr. N. T. Frost of Naches, Wash.

### Sure to Find Buyers.

Pacific Norhwest Farm Trio, Spokane, Washington.

Gentlemen:

In the spring of 1916 I advertised a large number of Mammoth Bronze turkeys in your paper and was certainly pleased with results. In fact, we sold our entire stock.

Last spring I sent to East Tennessee and Iowa and secured some extra fine stock from high-scoring prize-winning turkey farms.

I am inclosing my ad herewith because I know your papers are sure to find buyers for all my saleable birds. Yours very truly,

MRS. C. R. LOWERY.
Route No. 2, Boise, Idaho.

# BREEDERS' DEPARTMENT



## One JER$EY Starts a Profit Herd

One Jersey will prove the profit of the breed. She will prove her economy in feed. She will show a return in milk richness truly astonishing. (Vigorous in the hot South; hardy in the cold North.) Get one Jersey and you will never be satisfied until you have more. Ask breeders for prices and pedigrees. Write us for Jersey information worth having. We have gathered it from men who know from experience. It's free to you.

**The American Jersey Cattle Club.** 314 West 23rd Street, New York City.

## Doerfler Farm Jerseys

Awarded first, second and third in milking contest, open to all breeds at Oregon State fair, 1918. Also first for 4 best cows, judged 50 per cent type and 50 per cent production. These were the 4 best prizes awarded. They also received many other prizes in the show ring, but type follows production: A few cows and a dandy bull for sale, with great records back of them.

**F. A. DOERFLER, Prop.** Silverton, Ore.

## Register of Merit Cows

Three registered Jersey cows, with good register of merit records. Two are on test again and will increase their records; all in class AA. Two are bred to the great sire FOXHALL'S FERN LAD. Come and see them or write for prices and full particulars.

**FOX BROS.** Silverton, Ore.

## WAIKIKI FARM

Register of Merit Jerseys. Largest Jersey herd in the northwest. Young stock for sale.

**IRA P. WHITNEY, Manager.**
Route 7, Spokane, Wash.

## Dairymen, $75.00

buys your choice of two bull calves, both two months old; solid color, good individuals; out of register of merit dams and by bulls with heavy R. of M. backing. If you are looking for a bargain here it is.

**JOHN B. STUMP & SON, Monmouth, Ore.**

## Who Wants This Bull?

A double grandson of Kadia F., world's Jersey milk record for senior 4-year-old, 16,191 lbs. He is also a grandson of Holger and Engineer's Bluster. Because slightly broken colored, will be sold cheap. Other good young bulls and a few heifers and cows, same line of breeding.

**N. H. SMITH,** Oregon City, Ore.

## Goldie's Nehalem Beauty

won grand champion of the Jersey breed for production, 1917. Her record, 80 per cent basis, 1131 lbs. butter as 4-year-old. We have two bull calves sired by her son. Their dam's yearling records: 492 lbs. (average per cent fat, 6.08) and 433 lbs. butter. Both have been grand champions in show ring.

**CLIFFORD F. REID.**
Wilcox Bldg., Portland, Ore.

## Jersey Home Jerseys

Young bull out of Olalla 2d, daughter of Olalla (806.25 lbs. butter as junior 3-year-old). Bull's sire, St. Mawes Prince, by Poppy's St. Mawes, and out of Gertie's Fern Princess (842.5 lbs. butter), both 80 per cent. Also other good young bulls.

**THOMAS WILLIAMS, Forest Grove, Ore.**

## St. Mawes—Rinda Lad

The two most popular strains of Jerseys in the northwest. Young bulls from register of merit cows for sale.

**G. G. HEWITT,** Monmouth, Ore.

## HIGH CLASS JERSEY BULL CHEAP

**Last Chance of Rocky Run,** by Doctor of Fair Acres, a register of merit sire; 5 daughters in the list, others on test. Dam, Buttercup of Rocky Run, R. of M. record, 474.25 lbs. fat at 3 years 10 mo, two milkings a day. She is a daughter of Rosaire Olga Lad, out of a R. of M. daughter of the great St. Mawes. Other young bulls and a few cows and heifers at reasonable prices.

**E. L. LLOYD, Monroe, Wash.**

## WHERE CAN YOU BEAT IT?

Young bull, ready for service. Sire's dam, St. Mawes Poppy, 1120 lbs. 85 per cent butter, or 1190 lbs. 80 per cent, in a year. Is 75 per cent same blood as Poppy's Grace, that has recently finished year's test as junior 2-year-old, with 601 lbs. 85 per cent butter. His dam and dam's dam both register of merit cows. Priced at $250 for quick sale.

**F. E. FLYNN, Perrydale, Ore.**

## Edgewater Farm, Breeders

Foundation stock is from most noted Island Jersey families—Golden Lad, Golden Jolly, Oxford Lad, Old Raleigh—names that stand for high production and showring winners as well.

**E. T. SMITH.** Myrtle Creek, Ore.

## Meridian Dairy and Fruit Farm

Oldest Jersey herd in northwest Washington. Young stock for sale, both sexes, from good, producing dams. Herd headed by Kolander's Eminent 148256. A very fine bunch of young stock, both sexes, for sale.

**B. C. CRABTREE,** Lynden, Wash.

## Luckiamute Farm

Register of Merit A. J. C. C. Jerseys. Home of Octavia's Duke breeding. Daughters test as high as 7.58, second highest in U. S. A few good young bulls for sale.

**FRANK LAUGHARY & SON,**
MONMOUTH, ORE.

## ROSE LAWN JERSEYS OFFERS

First prize junior bull calf, Idaho State Fair, Minnidoka Co. and Twin Falls Co. fairs. Sire, Rosys Jolly Golden Fern 135028.

Grand champion bull, above fair circuit. Dam Gem Nehalim Lassie, a reg. of merit cow line bred in blood of Hood Farm Torona, Oonan 2d and Figgis.

**S. H. KAYLER.**
Twin Falls, Ida.

## ASHBURN FARM

REGISTER OF MERIT JERSEYS.

A bred herd, tried out for several generations by every breeding test. Only the best blood lines. Three proven matings. Nothing for sale except from tried sires. Increase of both sexes for sale.

**J. M. DICKSON & SON.**
Shedd, Ore.

## Ashnook Farm Jerseys

Young bulls by Silver Chimes of S. B., whose first 6 daughters average 710 lbs. 80 per cent butter. A few good cows and heifers for sale.

**DEL PERKINS,** Carlton, Ore.

## Golden Glows Chief 61460

One of two gold medal Jersey bulls west of New England states. Bred by us. Two of his sons in service in our herd. A few animals, all ages, both sexes, for sale.

**IRON MINE FARM,** Oswego, Ore.
W. M. LADD, Owner.
D. BROOKS-HOGAN, Mgr.

## All High Record Blood

Bull calf out of Lucy of P. V., full sister to St. Mawes Susie; 936 lbs. butter in a year; to St. Mawes Blossom, 823 lbs., and to Susie's Twin Maiden, 642 lbs. Sire, Poppy's St. Mawes, son of St. Mawes Poppy, 1120 lbs.

**ED CARY,** Carlton, Ore.
Station, La Fayette, Ore.

## Anoka Farm Jerseys

We have some choice young bulls up to six months old for sale, whose sire has a 714-lb. dam and 1120 lb. granddam. St. Mawes breeding. The Best in the West. Prices very reasonable. Address

**R. B. SEELY,**
R. 5, Sherwood, Ore.
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## LYNDEN JERSEY FARM

Herd sire son of Fororio's Olindes Pogis, of Hood Farm and St. Mawes of Lynden, whose dam and granddam have records up to nearly 1000 lbs. of butter. Young bulls out of the Hood Farm bull for sale. Cows under official test and blue ribbon herd at Whitman county fair, 1917. You will find both type and production in the herd. For information write to

**P. MEENDERINCH,** Lynden, Wash.

## Ready for Service

Young bulls of Golden Glow's Chief, and King Melia Ann strains, out of register of merit dams. Priced to meet the unfavorable conditions. Write for full particulars and pedigrees.

**HENRY STEWART,** Albany, Ore.

## Jersey Farm Dairy

Peter Mouw's Poland China hogs, Cotswold sheep, White Leghorn and Buff Orpington poultry, carefully bred, great foundation stock.

**E. S. PELOT, R. F. D. 5, Idaho Falls, Ida.**

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## Walter Hogan's Famous White Leghorns

hatched by Hogan on April 3d. Pullets $2; cockerels, $3. S. C. R. I. Red pullets, two to ten dollars; cockerels, five, ten and fifteen dollars. I can guarantee these pullets and cockerels to be from pens headed by cockerels from a trap-nested 289-egg hen—the females in these pens being sisters to my pen in the All-Northwest Egg-Laying Contest at Pullman, Wn. These birds have good shape, color and undercolor, plus wonderful winter egg blood.

**MRS. ROMINGER,** Underwood, Wash.
Member of N. W. R. I. Red Club.

## Rhode Island Red Cockerels

Both combs, pedigreed and line-bred. Best color and quality I ever raised. Rhode Island Whites, both combs. Get your breeding stock in fine, large Toulouse geese and Bronze turkeys. Pedigreed Belgian hares and Flemish Giant rabbits—the large kind.

**HIGHLAND FRUIT AND POULTRY RANCH.**
J. NONNENMACHER.
R. F. D. 3, Yakima, Wash.

### MAMMOTH WHITE HOLLAND TURKEYS

Yearlings, Toms and young stock for sale. From prize winners. No eggs.

**MRS. E. D. SITTON,** Carlton, Ore.

### FLEMISH GIANT DOES.

For sale—Young, vigorous Flemish Giant does, bred to order, $2.50 to $3.50 each. Pair, $5.

**W. T. WILSON, R. R. 3,** Weiser, Idaho.

## BERKSHIRE SWINE

## BABY BERKSHIRE BOARS

Also boars ready for service. Best breeding. Will ship subject to approval.

**DR. GREEN & SON.** Wapato, Wash.

## GUERNSEY CATTLE

## Registered Guernsey Cow for Sale,

Will be fresh Nov. 15. Registered Guernsey bull, four years old.

**J. J. BLUM,** Stayton, Ore.

## HORSES

## Percheron Prize Winner

First-prize two-year-old Percheron Stallion, Washington State Fair, 1918, and silver medal winner Percheron Society of America. For sale at my Edgewater farm, Burbank, Wash. Weighed 1890 pounds when 2 years old. If interested in a horse of great promise, look him over and make me an offer.

**E. M. CHANDLER, Yakima, Wash.**

## Handsome Black Percheron Stallion

3 years old, registered; black, registered, 7-year-old mare with colt, and again in foal; 7 fine young work horses, 3 and 4 years old.

**J. J. BAEDER,** Waukon, Wash.

## Belgian Horses

Herd sire, grand champion Idaho state fair. Winnings also include grand champion mare. Correspondence solicited.

**H. H. SMITH,** Nampa, Idaho.

## POLAND CHINA SWINE

## Satisfaction or Money Back

Big Litter, Easy Feeding.

BIG TYPE POLAND CHINAS.

Fifty vigorous young boars, ready for service. Best breeding of the times and quality to equal it.

**H. J. STILLINGS, Hermiston, Ore.**

## BIG TYPE POLANDS

Genuine—Guaranteed.

**GEO. W. BUCK.** Oregon City, Ore.

## HAMPSHIRE SWINE

### HAMPSHIRE HOGS

have won every feeding contest entered since 1914. Weanling pigs, gilts, bred or open. Our blood lines can not be beat.

**TUTTLE BROS.** Asotin, Wash.

**When answering advertisements don't fail to mention this paper.**

## Big Type Poland Chinas

Mouw, Fesenmeyer and Herring strains, either sex. Also registered Shorthorn cattle; good individuals.

**H. J. HOWSER,** Stites, Idaho.

### SAMMY AND MOLLY WIN AGAIN.

Our herd boar, Sammy, and Hanna's Big Molly were again made grand champion Poland China boar and senior and grand champion sow, respectively, at the 1918 Idaho state fair. Correspondence solicited.

**W. F. HOWARD & SONS,** Caldwell, Idaho.

## HEREFORD CATTLE

## Highland Stock Farm

offers for sale Hereford bulls, 1 or 2 years old. One or a carload.

**PLATT BROS.** Genesee, Idaho.

## SHORTHORN CATTLE

# The Northwest Shorthorn Breeders' Association

**Will hold its Annual Fall Sale of**

# REGISTERED SHORTHORNS

## At Lewiston, Idaho, Dec. 2, 1918

**During the Northwest Live Stock Show.**

The offering consists of

## 35— BULLS —35
## 31—FEMALES—31

Selections have been made from the following breeders:

Day & Rothrock Co.
W. J. Townley.
W. H. Leonard.
W. G. Cordiner.
Joe Turner.
H. L. Summers.
University of Idaho
A. D. Dunn.
G. W. De Lay.
E. H. Harper.
H. D. Wester.
Jas. H. McCroskey & Son.
W. Hoover.

Catalog mailed on request.

Geo. A. Gue,
Harry C. Cranke,
Auctioneers.

JOE TURNER,
Sales Manager.
Meyers Falls, Wash.

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## The Rushes Farm Shorthorns

**Both Grand Champions at Oregon State Fair, 1918.**
**Bulls and Heifers in Lewiston Sale.**
**Herd Headed by Challenge Plate III.**

**G. W. DeLay**
**Hot Lake, Ore.**

## The Mounds Farm Shorthorns

**Bulls in Service:**
**Good Prospect.**
**Violet King.**
**Bulls and Bred Heifers in Lewiston Sale.**

**W. J. Townley**
**Union, Ore.**

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## The Valley Junction Shorthorn Herd

**W. W. GREEN & SONS, Owners**

Home of General Hampton 390583 and Barmpton Ring 430122. A few choice bulls ready for service and a few choice cows and heifers for sale. Bred right and priced right. Farm located half way between Union and Union Junction on the Central R. R. of Oregon. Visitors always welcome.

**Phone 644 Union.** **Union, Oregon.**

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When you write to advertisers be sure to state that you saw their advertisement in this paper.

**REGISTERED SHORTHORN COWS.**

Young bulls and heifers, sired by Scotch bulls; liberal terms.

**CALDWELL CATTLE CO.,** Caldwell, Idaho.

## DUROC-JERSEY SWINE

**OVER 150 SPRING PIGS.**

Sired by our grand champion Richards Defender, Richards Pathfinder and Cherry King Orion Jr., and out of our big type prize winning sows.

In the last three years at the Utah and Idaho state fairs our hogs won 76 champion and first prizes.

Can furnish unrelated pairs. Satisfaction guaranteed or money refunded. Priced very reasonable.

**Richards Live Stock Company, Virginia, Idaho.**

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**Golden Rod Wins Again**

Our herd was largest money winner at Oregon state fair, 1918.

One excellent boar of breeding age, bred gilts and weanling pigs of either sex.

**DOERFLER BROS.,** Silverton Ore.
A. N. DOERFLER, Mgr.

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## Registered Duroc Jersey Boars

Choice boars sired by Richard Pathfinder and Cherry King Orion Jr., and out of sows representing the best blood in the west. Big growthy fellows, with quality. Satisfaction guaranteed or money refunded. Write me for prices.

**Erik W. Olson**
**VIRGINIA, IDAHO.**

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## DUROC JERSEY GILTS

From prize winning stock at Panama-Pacific exposition. Well grown, good individuals; priced to sell.

**MIDDLEDALE FARM,** Creswell, Oregon.

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**FOUR DUROC GILTS BRED TO FARROW** this fall, also spring pigs, on hand.

E. E. PRICE, CABINET, IDAHO, OR
**JAMES N. PRICE,** Yakima, Wash.

## CHESTER WHITE SWINE

## Chester White Swine

Choice weanling pigs; spring gilts and service boars.

**FRED H. HOFFMAN.** Albion, Wash.

## HOLSTEIN CATTLE



**Hartwood Heilo Hengervold.**

# AVALON ORCHARDS DISPERSAL SALE

**49 Head Registered Holsteins**

## *at AUCTION*

**December 5, 1918, at Kuna, Idaho.**

This is the well known herd of Registered Holsteins brought to Idaho four years ago from Illinois by the Avalon Orchard Tract Co. The affairs of the company are being wound up and the dispersion of this fine herd comes as a natural consequence.

There will be offered at auction the following:

16 Milch Cows, 16 Heifers, 3 months to 2 years; 15 Bulls, 2 months to one year.; and the leading herd sire

# Hartwood Heilo Hengervold

A son of Pontiac Korndyke Hengervold. who already has one daughter with a seven-day record of over 30 pounds. He is a brother of the sire of K. P. Pontiac Lass, the only 44-pound cow of the breed. His dam was a great producer and capable of making 30 pounds. She is a granddaughter of Mooie Mutual De Kol and sire, Korndyke Manor De Kol 24, who is a son of Sir Korndyke Manor De Kol. Hartwood's sire has 30 A. R. O. daughters.

The cows offered were bred by H. Stillson Hart of Barrington, Ill., and were brought from his farm direct to Kuna. The foundation of the herd is composed of some of the finest New York dairy stock.

The young stock will be from 30-pound cow ancestry, all backed by good producers on both sides and trace to some of the most noted sires of the breed.

Everything offered is sound and backed by the guarantee of the Avalon Orchard Tract company.

Send today for catalog.

# Avalon Orchard Tract Company

**Col. E. O. WALTER,** Auctioneer. Kuna, Idaho.

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## Carnation Holsteins

Over 300 in herd to select from. Herd has been under federal inspection for several years.

Our herd sires are Matador Segis Walker, a grandson of King Segis out of Matador Twisk Minette 4th, with record of 33.69 lbs. His first five 4-year-old heifers to freshen have averaged nearly 22 lbs. in seven days; King Segis 10th; Johanna McKinley Segis, the 40-lb. bull.

Write today your needs. Buy registered Holstein sires when they are young. Save on purchase price and express charges. Careful attention given to mail orders.

**Visitors Welcome---Correspondence Invited**

Carnation Stock Farms

**Farm, Carnation, Washington.**

**Offices 2030 Stuart Bldg., Seattle.**

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## Registered Holstein Heifer

for sale; also May and June farrowed O. I. C. pigs, either sex, from matured sows, with pedigree; by a son from a grand champion sow. Also 18-month-old sows to farrow second litter this fall.

**E. C. SCHUMACHER,** R. 1, Granger, Wash.

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## Holsteins and Berkshires

All ages for sale.

**HUGH NISBET,** Chimacum, Wash.

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## HOLSTEINS

Well bred young bulls for sale.

**THOS. CARMICHAEL,** Gaston, Ore.

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## A Rare Chance to Head Your Holstein Herd

We still have for sale five prize-winning purebred males, ranging in age from eight to eighteen months. Weight six hundred to one thousand lbs. Pedigrees furnished on application. Address

**THE INTERMOUNTAIN INSTITUTE**
**Weiser, Idaho.**

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## Registered Holsteins

Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.

**H. R. BOOMER,** New Plymouth, Idaho.

## SHEEP

## Romneys, Lincoln, Corriedale

AND HAMPSHIRE EWES AND RAMS.

All pure bred, not registered. Have especially fine lot Hampshire ewe lambs, yearlings and three-year-olds. Any size lot. Write me on any kind of sheep deal.

**H. STANLEY COFFIN,** Yakima, Wash.

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## Shropshire and Hampshire Rams

Registered stock. Spring lambs and yearlings. No ewes for sale.

**GRANT B. DIMICK,** Oregon City, Ore.

## AYRSHIRE CATTLE

## Elbow Ayrshire Dairy

Young bulls out of heavy-producing dams, sired by Willowmoor Sentinel 16th, a bull with big A. R. records on both sides.

**J. R. MABEN,** Reedsport, Ore.

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## Wenatchee Ayrshires

Offspring of Cavalier's Hover O'Blink, son of the great Bargenoch Gay Cavalier, Imp., and out of Barboigh Maggie X, Imp. The dams are advanced register cows and include Lady Emperor Scott, that holds world's record for high test. Send for pedigrees and A. R. records.

**E. W. VAN TASSELL, Wenatchee, Wash.**

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# Grain and Produce Markets

## Chicago Grain.

CHICAGO, Nov. 9.—Selling to anticipate bearish results from expected official announcement of the signing of armistice terms with Germany made the corn market today heavy throughout the session. Prices closed weak, 2c to 4c net lower, with December, $1.17 3-4 to $1.17 7-8 and January, $1.19 1-4 to $1.19 1-2. Oats lost 5-8c to 1 3-8c. In provisions the outcome ranged from 5 cents decline to 70 cents advance.

Belief in the probability of the armistice announcement was so general that the directors of the board of trade decided to meet at 8:30 a. m. Monday to consider an adjournment of the exchange in recognition of and thankfulness for the ending of hostilities, and as a tribute to those who had lost their lives in the conflict.

**Chicago Futures.**

| | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| Corn— | | | | |
| Dec. | 1.19¼ | 1.20 | 1.17⅝ | 1.17¾ |
| Jan. | 1.20⅝ | 1.21⅛ | 1.18⅞ | 1.19¼ |
| Oats— | | | | |
| Dec. | .70 | .70½ | .69⅝ | .69¾ |
| Jan. | .70 | .70 | .69¼ | .69¼ |
| Pork— | | | | |
| Nov. | 37.80 | 38.80 | 37.80 | 38.50 |
| Jan. | 42.90 | 43.65 | 42.90 | 43.55 |
| Lard— | | | | |
| Nov. | | 26.70 | 26.45 | 26.60 |
| Jan. | 26.30 | 26.62 | 26.30 | 26.55 |
| Ribs— | | | | |
| Nov. | | 23.90 | 23.75 | 23.90 |
| Jan. | 23.65 | 24.00 | 23.60 | 23.90 |

**Cash Quotations.**

CHICAGO, Nov. 9.—Corn, No. 2 yellow, $1.36; No. 3 yellow, $1.29; new No. 3 yellow, $1.28; No. 4 yellow, $1.23@1.24; new No. 4 yellow, $1.25. Oats, No. 3 white, 70½@71c; standard, 72@72½c. Rye, No. 2, $1.62. Barley, 90c@$1.01. Timothy, $7@10. Clover, nominal. Pork, nominal. Lard, $26.60@26.65. Ribs, $24@25.

**Pacific Northwest Grain.**

PORTLAND, Ore., Nov. 9.—Grain—November delivery: November oats, No. 2 white feed, $53.50 bid; barley, standard feed, $47.50; barley, "A," $49; December oats, No. 2, $53.50; barley, feed, $48; barley, brewing, $49; oats, No. 3, $48.50; oats, clipped, $51.50; corn, yellow, $53.50; corn, mixed, $53. Eastern oats and corn in bulk: Oats, No. 3 white, $48; 38-pound clipped, $51.50; corn, No. 3 yellow, $55; corn, No. 3 mixed, $54.

**Minneapolis Grain.**

MINNEAPOLIS, Nov. 9.—Flour—Unchanged. Shipments 67,429 barrels. Barley, 86@94c. Rye, $1.58@1.59. Bran, $27.73. Wheat—Receipts 166 cars compared with 426 cars a year ago. Cash, No. 1 northern, old, $2.22. Corn, No. 3 yellow, $1.33@1.40. Oats, No. 3 white, 65¾@66¾c. Flax, $3.89.

## Live Stock Market.

**At Omaha.**

OMAHA, Nov. 9.—Hogs—Receipts 5000; steady to 20c lower. Heavy, $17@17.50; mixed, $17.25@17.40; light, $17.40@18; pigs, $15@17; bulk of sales, $17.25@17.50.

Cattle—Receipts 400; market steady. Native steers, $11@13; cows and heifers, $6.75@11.75; steers, $9@16.25; Texas steers, $8.25@12; cows and heifers, $6.50@12; cows and heifers, $6.50@11; canners, $5.50@6.50; stockers and feeders, $6.50@13; calves, $7.50@13.50.

Sheep—Receipts 100. Market steady. Culls, $4.50@7.50; wethers, $10@11.90; ewes, $7.50@9.50; feeder lambs, $10@14.50; lambs, $13@15.50; yearlings, $10.50@11.50.

**At St. Paul.**

SOUTH ST. PAUL, Minn., Nov. 9.—Hogs—Receipts 1600; steady. Range $17@17.30; bulk, $17.25@17.30.

Cattle—Receipts 2800; killers 15@25c lower; steers, $5@16.25; cows and heifers, $6@9.50; veal calves steady, $5@14.50; stockers and feeders steady, $5.25@12.50.

Sheep—Receipts 6000; steady. Lambs, $10@14.50; wethers, $7@10.50; ewes, $3@9.

**At Chicago.**

CHICAGO, Nov. 9.—(United States Bureau of Markets.)—Hogs—Receipts 17,000; fairly active; mostly 10 to 15c lower than yesterday's average. Butchers, $17.65@18; light, $17.15@18; packing, $16.50@17.60; throw-outs, $15.25@16.25; pigs, good to choice, $14.50@15.25.

Cattle—Receipts 4000; compared with a week ago, good and choice native and western steers, 15 to 25c higher; common to medium, unevenly 25c to 50c lower; choice beef cows and heifers, steady; others unevenly 25c to $1 lower; bulls 25c lower; calves, 25c higher; stockers and feeders, 25c to 75c lower.

Sheep—Receipts 3000; compared with a week ago, killing classes of lambs and light yearlings, $1.25 to $1.50 lower; sheep and heavy yearlings, 75c to $1 lower. Feeding lambs about steady.

**At North Salt Lake.**

NORTH SALT LAKE, Utah, Nov. 7.—Cattle—Choice steers, $10.75@11.75; good steers, $9.50@10.50; fair steers, $8@8.50; choice cows and heavy heifers, $7.25@7.75; fair to good cows and heifers, $6.50@7.25; cutters, $5.75@6.25; canners, $5@5.75; fat bulls, $6.50@7; bologna bulls, $5.50@6.25; veal calves, $9@11.

Sheep—Receipts, 3386. Good choice lambs, $12@13; fat wethers, $8.50@9.50; fat ewes, $6.50@7.50; feeder ewes, $5.50@6.50.

Hogs—Receipts, 176. Choice, smooth, fat hogs, 175 and 250 pounds, $16@16.50.

**At Portland.**

PORTLAND, Ore., Nov. 9.—Cattle steady; receipts 98. Steers, prime, $12.25@12.75; good to choice, $11@12; medium to good, $10@11; fair to medium, $8.50; common to fair, $6@8; cows and heifers, choice, $8.25@8.75; medium to good, $6.50@7.50; fair to medium, $5.50@6.50; canners, $3@4; bulls, $5@7.50; calves, $9@12; stockers and feeders, $6@8.

Hogs, steady; receipts 881. Prime mixed $17.25@17.35; medium mixed, $17@17.25; rough heavy, $15.25@15.35; pigs, $14@15; bulk of sales, $17.25.

Sheep steady; receipts 115. Prime lambs, $11.50@12.50; fair to medium, $8.50@10.50; yearlings, $10@11; wethers, $9@10; ewes, $6.50@8.50.

**At Seattle.**

SEATTLE, Nov. 9.—Hogs, receipts 212. Firm to strong. Prime light, $17.50@17.90; medium to choice, $17.25@17.75; medium heavy, $16.75@17.25; rough, $15.50@16.50; pigs, $15@16.

Cattle, receipts 62. Strong. Best steers, $11@13; medium to choice, $10.50@11; medium to good, $8@8.50; medium, $7@7.50; bulls, $5@7.50; calves, $5@10.

**Spokane Stock Yards.**

| | Cattle | Calves | Hogs | Sheep |
|---|---|---|---|---|
| Saturday, Nov. 9 | 22 | | 189 | |
| Friday, Nov. 8 | 173 | 2 | 305 | 204 |
| Thursday, Nov. 7 | 325 | 29 | 240 | 115 |
| Wednesday, Nov. 6 | 192 | 33 | 76 | 52 |
| Tuesday, Nov. 5 | 40 | | 145 | 744 |
| Monday, Nov. 4 | 487 | 31 | 48 | |
| Week ago | 230 | 19 | 4 | 1189 |
| Year ago | | | 50 | 13 |
| Two years ago | 19 | 9 | 119 | 1243 |

There were practically no cattle receipts, due to its being Saturday and a short sales day. Only a few steers of the common grade were sold, and they went as feeders. Compared with a week ago prices on all grades of cattle remain practically unchanged. There is a good demand for fat steers of good quality and weight.

| | |
|---|---|
| Prime steers | $12.00@13.00 |
| Good to choice steers | 10.75@11.75 |
| Medium to good steers | 9.50@10.50 |
| Fair to medium steers | 8.25@ 9.00 |
| Common to fair steers | 5.50@ 8.00 |
| Choice cows and heifers | 7.50@ 8.25 |
| Medium to good cows and heifers | 6.00@ 7.00 |
| Common to medium cows and heifers | 4.75@ 5.75 |
| Canners | 3.00@ 5.00 |
| Bulls | 5.00@ 6.50 |
| Calves | 6.00@ 9.50 |
| Stockers and feeders | 6.00@ 8.00 |

The hog supply for Saturday was sufficient to supply all demands for the day. The market was steady to strong. Quality just fair.

| | |
|---|---|
| Prime mixed | $17.15@17.40 |
| Medium mixed | 16.75@17.00 |
| Rough heavies | 15.15@15.40 |
| Pigs | 15.75@16.25 |
| Stockers and feeders | 14.00@15.25 |
| Bulk of sales | 17.00 |

There were no sheep receipts. The market is steady at Friday's close.

| | |
|---|---|
| Prime lambs | $11.00@12.00 |
| Fair to medium lambs | 9.00@10.75 |
| Prime yearlings | 8.75@10.00 |
| Prime wethers | 8.50@ 9.75 |
| Best mutton ewes | 6.00@ 8.00 |
| Breeding ewes, 1 to 4 years | 12.00@16.00 |
| Breeding bucks | 25.00@75.00 |

## Portland Market.

PORTLAND, Ore., Nov. 9.—Higher butter prices are looked for by local dealers. Cube extras are selling at 60 cents and very firm at that. Price cutting of prints has ceased and all creameries are on the 63-cent basis. Storage stocks are practically exhausted.

The egg market remains firm at 65 cents for ordinary candled and selects are 3 cents higher at 68 cents. Eastern fresh eggs are offering at 59@60 cents.

A 40-cent Thanksgiving turkey market is expected by the poultry trade. A full supply seems assured, but the demand is likely to be very heavy. There is not much doing as yet in live turkeys, few of which have enough weight. Other kinds of poultry are ruling firm. The dressed meat market is steady.

There is a wide range in the quality of apples offering, but the market on the whole is firm at $2.65@2.75 basis for extra fancy Spitzenburgs and Winesaps.

The demand for potatoes is moderate and prices unchanged at $2@2.15 for Yakimas and $1.75@2 for Oregons.

Onions are firmer with Oregon yellow stock bringing $1.75@2.25 and California's, $1.75@2.

In view of the chances of big changes in the grain markets this week all buying and selling here has been reduced to a minimum. Closing bids at the merchants exchange were $53.50 for sacked oats, $48@51.50 for bulk oats, $53@55 for bulk corn and $47.50@49 for barley.

Local flour trade continues slack. Mill feed is unchanged and the demand is still far in excess of the supply.

**Quotations.**

Eggs—Oregon ranch, candled, 65c; selects, 68c.

Cheese—Jobbers' buying prices, f. o. b. dock, Portland: Tillamook triplets, 36c; young Americas, 37c a pound. Coos and Curry, f. o. b. Myrtle Point: Triplets, 35 3-4c per pound.

Poultry—Hens, 26@28c; broilers, 27@30c; ducks, 25@30c; turkeys, 30c; geese, 17@18c.

Pork—Fancy, 21@22c.

Veal—Fancy, 19c.

Potatoes—Oregon, $1.75@2 per hundred.

Hay—Buying prices, f. o. b. Portland: Eastern Oregon timothy, $30@33 per ton; valley timothy, $27; alfalfa, $28; valley grain hay, $26; clover, $27; straw, $9@10.

Butter—Cubes, extras, 60c; prints, 63@64c. Butterfat, 67c, delivered at Portland.

**Butter and Eggs.**

CHICAGO, Nov. 9.—Butter unchanged. Eggs unsettled; receipts, 1848 cases; firsts, 58@58 1-2c; ordinary firsts, 52@56c; at mark, cases included, 53@57c.

SAN FRANCISCO, Nov. 7.—Eggs, fresh extras, 86@92c; fresh extra pullets, 72c.

PORTLAND, Ore., Nov. 9.—Butter steady; creamery prints, extras, box lots, 63c; half boxes 1-2c more; less than half boxes 1c more. Buying prices butterfat Portland, 67c; cube extras, 60c.

**Raise Plenty of Cabbage.**

This year's cabbage crop is estimated at 18 per cent more than last year's crop.

## Spokane Produce.

SPOKANE, Nov. 9.—These are the actual prices obtained by Spokane wholesalers in their sales to retailers, hotels, mining camps, etc. This information was given by the wholesalers and retailers to the federal bureau of markets in Spokane.

**Apples**—Boxes, extra fancy Spitzenburgs, wrapped, $3; fancy, $2.75. Fancy Wagageners and Jonathans, wrapped, $1.85@2; jumble pack, $1.50. Fancy Winesaps, $3. Fancy Grimes, $1.85@2. Combination extra and fancy Delicious, small, $2.25@2.50; medium, $2.75@3; large, $3.25.

**Cabbage**—Crated, retrimmed, fancy Danish Ballhead, 2@2 1-2c lb.

**Pears**—Winter Nellis, $2.25@2.50. Fancy fall Butters, $2.25@2.50; d'Anjou, $3.

**Potatoes**—Montana-Idaho-Yakima district, sacked white varieties, $1.75@2 per cwt. California Burbanks, quality and condition fair, $1.50. Homegrowns, quality and condition generally good, $1.50. Extra fancy, quality and condition fine, $2.

## INFECTED FRUIT SHIPMENTS.

**Several Shipments Intercepted at Spokane by State Inspectors.**

Yakima reports several attempts to evade the law by shipping infected fruit, on account of the unusual number of cull apples in the valley this year. Several shipments of this character have been intercepted at Spokane by state inspectors and turned over to cider mills. Inspector C. B. Worth claims that it is unlawful for anyone to dispose of cull apples other than through the channels provided by law. He says the department is ready to issue permits for shipping this class of fruit and that it will do all it can to make the operation of securing the permits easier for the shipper. Here is the law:

It shall be unlawful for any person to import into this state, sell, barter, or otherwise dispose of or offer for sale or have in his possession for the purpose of sale or barter any fruit which is or has been infected with peach mildew, peach twig borer, San Jose scale or other insect pests or the larvae of the codling moth or peach twig borer, and the fact that any fruit bears the marks of any such scale insect or is worm eaten by any such larvae, shall be conclusive evidence that the fruit is infected, within the meaning of this section: Provided that nothing in this section shall be construed to prevent the growers of such infected fruit grown within the state of Washington from manufacturing the same into a byproduct or selling and shipping the same to a byproduct factory. (Sec. 15, Chap. 166, Sessions Laws, 1915.)

## INCREASES CAPITAL STOCK.

Announcement has been made that the Cudahy Packing company is increasing its capital stock approximately $35,000,000.

## Seattle Market.

SEATTLE, Nov. 9.—The decline in the market for Winesap apples during the early part of the week vanished as soon as the fruit began moving and prices from extra fancy apples down to worm stings are strong. The best apple seller during the week has been the "C" grade, selling at 75c to $1 per box under fancy. These include numerous stings which do not appear to affect the movement. Orchard run, composed of all winter brands, but without selection as to size or color, has been popular with buyers, and the volume of extra fancy at top prices has increased heavily.

**Purchasing Prices.**

Eggs—Select ranch, 75@80c per doz; pullets, 64@65c.

Butter—Fresh dairy, 35c per lb.; butter fat, 68c per lb.; bakers', 46c per lb.; raw milk, $3.50 per cwt.

Poultry—Broilers, live, 1918, 43c per lb.; hens, 2 lbs and over, 25c lb.; under 3 1-2 lbs, 25c per lb.; old roosters, 17c per lb.; ducks, live, fat, 25@26c per lb.; squabs, large, $3.50 per doz.; geese, fat, live, 21@22c per lb.; Belgian hares, 11@15c per lb.; guineas, $7 per doz.; turkeys, young toms and hens, dry picked, 10 lbs. and up, 30@35c per lb.

Hogs—Light, 18@21c per lb.; heavy, 12@22c per lb.

Beef—Steers, fat, 12@15c per lb.; heifers, fat, 12@15c per lb.; cows and bulls, 11@14c per lb.

Veal—Fancy, light, 19c per lb.; do, heavy, 10@18c per lb.

Mutton—Fat, 22c per lb.; spring lamb, fat, dressed, 25c per lb.

**Hides, Tallow and Wool.**

Bid prices to producers: Salted hides, cows and steers, No. 1, 15c per lb.; do, No. 2, 14c lb.; green hides, cows and steers, No. 1, 12c lb.; do, No. 2, 11c lb.; salted, bulls or stags, No. 1, 12c lb.; do, No. 2, 11c lb.; green bulls or stags, No. 1, 10c lb.; do, No. 2, 9c lb.; salted or green calfskins, No. 1, 32c lb.; No. 2, 30 1-2c lb.; salted or green kip skins, No. 1, 16c lb.; do, No. 2, 14 1-2c lb.; dry hides, No. 1, 30c lb.; do, No. 2, 29c lb.; dry bulls or stags, 25c lb.; dry salt hides, 24c lb.; dry calfskins (5 lbs. and under), No. 1, 35c lb.; do, No. 2, 33c; tallow, No. 1, 13c lb.

Horsehides, green or salted, each, $2@4; do, dry, each, 50c@$2.

Clean ranch wool, full growth, lb., 30@55c.

Sheep pelts—Long wool, each, $2.50@4.50; medium wool, each, $1.50@2.50; short wool, each, $1@1.50; shearlings, each, 35@75c.

Beeswax, per lb, 25@27c.

**Prevention Rather Than Cure.**

To cure is as expensive as to prevent, and prevention eliminates the loss, as well.




LOOK for the K-W Trade Mark on the MAGNETO

Before Buying Your Tractor Make Sure Of Its Ignition System

Every K-W Magneto carries the K-W trade mark. It is put there for your protection. It is a symbol of quality. It assures you of continuous, reliable, no-trouble ignition regardless of working conditions.

K-W High Tension MAGNETOS

give immediate and easy starting regardless of how cold the weather, how large the motor or how slowly the engine is cranked. K-W Magnetos fire any kind of fuel and increase the power derived from the same amount of fuel over that of any other ignition system. They enable you to plow additional acreage *without additional fuel cost.* They are protected against powder-fine dust, oil and water.

The Time To Avoid Ignition Trouble Is When You Buy Your Tractor

Forty tractor manufacturers pay more for K-W Magnetos but it is their assurance that you—the tractor buyer—are being provided with the most reliable ignition system, guaranteeing to you a "no-trouble" service day in and day out.

If you are *not* using a K-W now write us. Let us show you how a K-W Magneto will give quick and easy starting, and get full power out of the cheaper grades of fuel. There is a type for *your* tractor that will do this.

Before You Buy A Tractor

look up one neighbor or a dozen using K-W Ignition and talk it over with them. Then we know you will *insist* upon a K-W Magneto on *any* tractor you may decide to purchase.

Write for list of K-W equipped tractors and full information.

THE K-W IGNITION Co
2891 Chester Ave. CLEVELAND, OHIO. U.S.A.

# A Crooked Trail

(Continued from page twenty-four.)

grape-vine. He soon returned, with the nine in one hand and a five-dollar bill in the other.

"Here, Travis, take this and give me two and a half in change."

"What do you want with change?"

"Why, I thought I'd hand my half back. You heard what the woman said about their sick daughter at home. And they seem to be rather poor, too. Of course we're entitled to the five dollars if we want it. We've earned it fairly, according to agreement. But somehow I don't want my share."

"Then never mind about the change. Just hand it all back, and call the matter square."

Both the man and his wife declared they could not accept the money; but Frank tossed it, laughingly, into the woman's lap as she sat in the wagon, and then he hurried away.

"We're a thousand times obleeged to you, both of you," the man leaned out to say.

Just as he was driving off, another wagon appeared on the north bank. This one was also covered, or partly covered; and two men sat on a spring-seat in front, but out from under the canvas.

After coming down to the water's edge to look at the river, one of them shouted across:

"What's that you've got there?" And on being informed he demanded: "Can you ferry us across on it?"

"We don't care to try," I called back.

"How did that other wagon get over?"

"We rafted it over."

"Then why can't you come back again for us?"

"We're not running a ferry. And we've lost more time now than we can afford to lose."

The man offered us a dollar to come and get them, and kept adding to it till the bid reached twenty dollars. And if we had held off long enough, he might have offered us a hundred.

Frank had been willing to accept a much smaller sum, but I was obstinate. It was well on in the day, and I felt very impatient to get started after our cattle. Though eager enough to earn money, I reflected that if I lost an ox worth 30 or 40 dollars, I should be greatly the loser in the end.

But when the offer was increased to $20 --$10 apiece—it proved too tempting, and I could hold out no longer.

Again we dragged our cumbersome craft far up stream; and again we launched out into the turbid torrent, upon the most exciting river-voyage I have ever made.

(To be continued.)

### HEAVY HONEY CROP.

Some 40 carloads of honey have been sold, and are being shipped out of the territory covered by the South Idaho and East Oregon Producers' association, the headquarters of which are in charge of Secretary and Manager P. A. Farrell, at Caldwell.

Mr. Farrell says the crop is largely extracted honey, although there is now a considerable demand for comb honey, and that there will be around 15 cars of the latter. The entire output will bring the producers not far from a quarter of a million dollars. The prices, in keeping with other food products, are much higher than usual, and the honey producers are correspondingly elated. They feel that they have needed substantial encouragement, and are now getting it.

## Farmers' Want Ads

**HELP WANTED—Male 3**

SALESMEN—MANY OF OUR SALESMEN have gone to war and we are filling their places with men exempt from draft. Lack of competition and great prosperity of our customers makes sales the best we have ever known. Selling experience desirable, but not necessary. McConnon & Company, Dept. J., Winona, Minn.


**YOU NEED ONE**

**The Farmer's Record and Account Book**

Sent postpaid for TWO subscriptions to your State Family Farm Paper.

THE WASHINGTON FARMER.

Subscriptions may be for one year at 25c; three years at 60c, or five years at $1.

**The Washington Farmer**

617 Central Bldg., Seattle, Wash.
or
Review Building, Spokane, Wash.


# FARMERS' WANT ADS

This is the farmers' "Want," "Sale" and "Exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rate, 7 cents a word per insertion, with a special rate to farmer subscribers to the Washington Farmer of 6 cents a word per insertion for from 4 to 12 times, and 5 cents a word per insertion for 13 times or more.

All commercial and land advertising, 7 cents per word each insertion. Open also to nonsubscribers.

In using these columns advertisers must observe: (1) No advertisement will be inserted for less than 75 cents. (2) Every word, number and initial, including name and address, must be paid for. (3) Cash must accompany order.

Above rates also include insertion in The Oregon Farmer and The Idaho Farmer.

**AGENTS WANTED 9**

POWERINE IS EQUAL TO GASOLINE AT 5C a gallon. Salesmen and agents wanted; exclusive territory granted. Powerine is guaranteed to be harmless, to remove and prevent carbon, doubling the life of all gasoline motors, saving repairs, adding snap, speed and power. An amount equal to 20 gallons of gasoline will be sent to any address in the United States, charges prepaid, for $1.00. W. Porter Barnes, Santa Rosa, Cal., dept. 8K.

**SITUATIONS WANTED—Male 21**

YOUNG MAN, WELL EDUCATED, WITH years of experience in all lines of commercial work, stenography, etc., offers his services in exchange for room and board where conditions are conducive to good health, in order to thoroughly recover from injury received a short time ago; satisfactory references upon application. Address P. O. Box 501, Portland, Ore.

**EDUCATIONAL 45**

IN BUSINESS OR ACTUAL LIFE THE BEST is none too good for you. Write Gooding college, Gooding, Idaho, Charles Wesley Tenny, president, today.

TELEGRAPHY—YOUNG WOMAN'S POPULAR vocation; good paying positions available. Write for booklet. Pacific Telegraph Institute, Spokane.

SEND NEWS NOTES TELLING OF THE work of your school today. Address the Educator, Gooding, Idaho.

**HONEY, BEESWAX—Wanted 58**

SEND SAMPLES OF YOUR HONEY AND beeswax. State quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

**EGGS AND BUTTER WANTED. 59**

WE ARE ALWAYS IN THE MARKET FOR good eggs and dairy butter. Send us your next shipment. Oregon Farm Products Co., 386 Halsey st., Portland, Ore.

WE PAY HIGHEST PRICE FOR LARGE, clean infertile eggs not over one week old. Honey also wanted. J. B. Chaney, Spokane, Wash.

**MISCELLANEOUS—FOR SALE 60**

BIG RED DENVER STRAWBERRY PLANTS; none better. Bronze turkeys, never beaten. Big type Poland Chinas, Toulouse geese. Order before the 20th. E. A. Kruse, Roseburg, Ore.

TRAP COYOTES—FULL INSTRUCTIONS ON a sure catch method and reliable scent recipes sent on receipt of $5. C. L. Willis, Dillard, Ore.

**MISCELLANEOUS WANTED 63**

POULTRY WANTED.
We are cash buyers of poultry and dressed meats, also cream. Write us for prices, shipping tags and premium catalogue for cream shippers.
COMMERCIAL CREAMERY CO.
SPOKANE, WASH.

LIVE POULTRY WANTED—TOP MARKET price paid; honest weights; prompt remittance. Smith, 420 Second ave., Spokane.

HIGHEST PRICES FOR POULTRY AND EGGS. Washington Meat & Poultry, 409 Second avenue, Spokane.

**LIGHTING EQUIPMENT 74**

THE SAFETY LAMP CO., N208 HOWARD ST., Spokane, Wash. Gasoline lighting and supplies.

**AUCTIONEERS 75**

M. SEIDENBACH, AUCTIONEER, GIVES best service. Sales solicited. 418 Fernwell, Spokane.

**MACHINERY—For Sale 93**

"WITTE" GASOLINE ENGINES
save labor and are carried in stock by
HIGGINS MACHINERY COMPANY,
312 FIRST AVE., S., SEATTLE.
Write for Catalogue.

**AUTOMOBILES 114**

FORDS START EASY IN COLD WEATHER with our new 1919 carburetors; 34 miles per gallon; use cheapest gasoline or half kerosene; increased power; styles for any motor; very slow on high; attach it yourself; big profits to agents; money back guarantee; 30 days' trial. Air-Friction Carburetor Co., 321 Madison, Dayton, Ohio.

HEADQUARTERS FOR
used cars, trucks and tractors; printed list. Spokane Auto Market, W315 Sprague ave., Spokane, Wash.

AUTO RADIATORS, FENDERS AND LAMPS repaired. Lester Allen, 607 Second avenue, Spokane.

**STOVE AND FURNACE REPAIRS. 126**

WRITE M. S. RUBENS, SPOKANE, FOR ANY parts needed to repair stove, furnace.

**RABBITS and HARES 173**

NEW ZEALAND REDS, YOUNG BUCKS AND does; pedigreed and registered; extra fine. E. Kelly, 834 Main st., Petaluma, Cal.

FOR SALE—WHITE ANGORA RABBITS, breeders, $1.50, 4 months, 60c. Austin Rull, Deep River, Wash.

**POULTRY 174**

BUY YOUR INCUBATOR NOW.
Incubators will be scarce and high next spring. Send for our list of new and used incubators and save money. Agents: Famous Queen incubators and brooder stoves. Queen Hatchery, 89 Pike st., Seattle.

FOR SOMETHING GOOD IN SILVER WYANdottes and Golden Campines, write G. G. Wherry, Payette, Idaho.

THOROUGHBRED BARRED ROCK ROOSTers, $2.50 each. Mrs. F. J. Dyche, Thornton, Wash.

SHIP US YOUR POULTRY. TOP PRICES. Home Poultry House, 8173 Washington, Spokane.

50 USED INCUBATORS FOR SALE, FROM 70 to 700 egg capacity. A. R. Badger, Centralia, Wash.

PURE BRED MAMMOTH BRONZE TURKEYS. Mrs. C. R. Lowery, Route 2, Boise, Idaho.

**LIVE STOCK. 177**

FOR SALE—50 REGISTERED SHORTHORN bulls, coming 2 years old; Scotch topped with plenty of size and bone. Priced low for quick sale. Chas. A. Norton, Salmon, Idaho.

FOR SALE—FINE REGISTERED BERKSHIRE boar pigs ready for service, $25 each, with papers; 1 registered Holstein bull calf, $35. Write Dean Ickes, Palouse, Wash.

FOR SALE OR TRADE—REGISTERED FOUR-year-old Holstein bull; De Kol Alban Segis; an excellent bull reasonably priced. M. F. Maurer, Rocklyn, Wash.

DUROC CHINA CROSS WEANED PIGS, $6 and $8 each. Also Mammoth Bronze turkey toms. S. M. Wilson, Carley, Wash.

FOR SALE—WEANLING BIG TYPE POLAND China pigs. S. S. Mullen, Bellingham, Wash., R. 1, Box 86.

REGISTERED O. I. C. SWINE. BREEDING stock for sale. C. I. Ballard, Rickreall, Ore.

**HOTELS 306**

WHITE'S HOTEL AND RESTAURANT—Rooms, hot and cold water, 75c up. Breakfast 20c to 40c; dinner, 25c to 50c. Sprague and Stevens, Spokane.

GALAX HOTEL; NEW AND MODERN; 75C and $1. Main and Bernard, Spokane.

NEW MADISON HOTEL, 75C AND UP. 1ST and Madison, Spokane, Wash.

**RUBBER STAMPS AND SEALS 384**

FOR RUBBER STAMPS, STENCILS, BADGES, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

**ARTIFICIAL LIMBS 424**

SCHINDLER ARTIFICIAL LIMB CO., 8115 Wall st., Spokane, Wash.

**TAXIDERMISTS 426**

FUR RUG MOUNTING A SPECIALTY, HEADS, animals and birds mounted. Withers Bros., 822 Sprague, Spokane.

FIRST-CLASS WORK, ALL BRANCHES TAXIdermy and furs. Mohr, Bernard st., Spokane.

**SEEDS. 620**

WE SPECIALIZE IN TIMOTHY, ALFALFA, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Idaho.

**NURSERY STOCK 621**

FRUIT TREES, ORNAMENTALS, SHRUBS, vines, etc. Complete assortment of general nursery stock. Lowest quotations given on application. Now is the time for fall planting. Albany Nurseries, Inc., Albany, Ore.

**FARM LANDS FOR SALE 651**

SNOHOMISH COUNTY, WASH., FARM LANDS.
The greatest proposition on the market for the man who wants a farm. 12,000 acres to select from; 3½ miles salt water front; 20 miles of beautiful lake shore; good towns, railways, steamboats, factories, mills, schools, churches, paved roads; where the largest profits are made, where the great variety of crops and wonderful productive climate makes it the most productive farm section of America. Good lands in good localities, as low as $25 to $35 per acre. 10 yearly payments. Send for maps and literature to the Brownell Land Co., 904 Third ave., Seattle, Wash.

YOUR CHANCE IS IN CANADA—RICH LANDS and business opportunities offer you independence; farm lands $11 to $30 acre; irrigated lands, $35 to $50; twenty years to pay; $2000 loan in improvements; loan of live stock; taxes average under twenty cents an acre; no taxes on improvements, personal property or live stock; good markets, churches, schools, roads, telephones; excellent climate—crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklets. Allan Cameron, general superintendent land branch Canadian Pacific Ry., 30 Ninth ave., Calgary, Alberta.

WONDERFUL WENATCHEE VALLEY.
Finest apple region in the world.
PROFITABLE BEARING ORCHARDS
IRRIGATED LANDS, STOCK RANCHES.
If interested, write us.
PFAU & GREER, WENATCHEE, WASH.

40 ACRE FARM; 20 ACRES PLOWED OR IN crop; 5-room house, barn, other outbuildings; fenced, implements, horses, 10 cows, hogs, chickens, ample hay and grain to winter. $8000. Terms. John A. Cook, Sumas, Washington.

OWNER OFFERS BARGAIN IN 10 OR 20 acres improved prune or nut land; 6 miles from Vancouver, Wash. Address Box 853, Vancouver, Wash.

VERMILION, ALBERTA, FARM LANDS. FREE transportation to inspect land. Union Investment Co., 406 Ziegler blk., Spokane, Wash.

IRRIGATED LANDS IN THE RICHEST SECtion of the great Okanogan valley, also stock ranches. Del Hart, Oroville, Wash.

STOCK, FRUIT AND WHEAT RANCHES IN heart of the rich Okanogan valley. Lindsay & Forsyth, Okanogan, Wash.

KENNEWICK IRRIGATED RANCH FOR SALE —22 acres; best location and ground in valley. L. Baierlipp, Kennewick, Wash.

**FARM LANDS—WANTED 654**

SELL YOUR PROPERTY. WE PLACE A full description of your property with dealers and possible buyers in every state in union for a small fee. Information free. Real Estate Salesman Co., Dept. 10, Lincoln, Neb.

WANTED—TO HEAR FROM OWNER OF farm or unimproved land for sale. O. K. Hawley, Baldwin, Wisconsin.

**FARM LANDS FOR RENT 657**

123 ACRES DAIRY FARM; OVER 80 ACRES hay, pasture, balance good natural pasture; 5-room house, barn for 30 head stock; excellent soil; will raise anything; 3 miles from Tolt, Wash. Inquire Tolt State bank. Will rent reasonable, cash basis. Chas. J. Davies, Kirkland ave., Kirkland, Wash.

**CITY REALTY—Not Spokane 696**

COZY HOME AT DUNDEE, OREGON; 1¾ acres good red hill land; four-room house, wood house, well, orchard; bargain at $700; easy terms. Emma Snow, Box 376, Newberg, Ore.

## Your Local HOME PAPER and Your State FARM PAPER at a Special Club Price

A clubbing arrangement has been made with a number of newspapers in your state whereby we can now offer you a one-year subscription to your local home paper and a one-year subscription to your state family farm paper at a special rate for both.

**YOUR HOME PAPER**

brings you all the local news and happenings of the social and commercial life of your community. It gives you the news of the home boys at the front and prints many interesting letters from them.

**YOUR FARM PAPER**

brings you, each week, all the news of the farm and farm home, with the agricultural developments of your state. Features for every member of the family, including women's and children's pages and colored comics. Also departments for every phase of farming.

Your Local Home Paper and Your State Farm Paper can now be sent to you for one year each at the special clubbing rate as quoted below:

| | |
|---|---|
| The Blaine Journal, Blaine, Wash., and The Washington Farmer | $1.50 |
| The Buckley Banner, Buckley, Wash., and The Washington Farmer | $1.50 |
| Castle Rock Independent, Castle Rock, Wash., and The Washington Farmer | $1.50 |
| The Cheney Free Press, Cheney, Wash., and The Washington Farmer | $1.50 |
| Chehalis Bee-Nugget, Chehalis, Wash., and The Washington Farmer | $1.50 |
| Cashmere Valley Record, Cashmere, Wash., and The Washington Farmer | $1.50 |
| The Everett Tribune, Everett, Wash., and The Washington Farmer | $3.00 |
| Goldendale Sentinel, Goldendale, Wash., and The Washington Farmer | $2.00 |
| Puget Sound Mail, La Conner, Wash., and The Washington Farmer | $2.00 |
| The Montesano Vidette, Montesano, Wash., and The Washington Farmer | $2.00 |
| Oak Harbor News, Oak Harbor, Wash., and The Washington Farmer | $1.50 |
| The Morning Olympian, Olympia, Wash., and The Washington Farmer | $4.00 |
| The Weekly Recorder, Olympia, Wash., and The Washington Farmer | $1.00 |
| Puyallup Valley Tribune, Puyallup, Wash., and The Washington Farmer | $1.50 |
| The South Bend Journal, South Bend, Wash., and The Washington Farmer | $2.15 |
| Sumas News-Advocate, Sumas, Wash., and The Washington Farmer | $1.50 |
| Walla Walla Bulletin, Walla Walla, Wash., and The Washington Farmer | $5.00 |
| White Salmon Enterprise, White Salmon, Wn., and The Washington Farmer | $1.50 |
| The Ziilah Free Press, Zillah, Wash., and The Washington Farmer | $1.50 |

Papers mailed to Canadian addresses require additional postage of 1 cent a copy.

### EXTRAORDINARY CLUBBING OFFER

A three-year subscription to your state farm paper and a one year subscription to the following papers at the special price for both.

| | |
|---|---|
| The Bellingham Daily Journal | 3.00 |
| The Sunday Spokesman-Review | 2.50 |
| The Spokane Daily Chronicle | 4.00 |
| The Daily Spokesman-Review | 5.50 |
| Daily and Sunday Spokesman-Review | 8.00 |

Take advantage of these special clubbing rates by sending your order today to your local home paper, or by mailing it direct to

**The Washington Farmer**

617 Central Bldg., Seattle, Wash.
or
Review Bldg., Spokane, Wash.

# Applying Win-the-War Policy to the Automobile

## *A Letter to Overland Dealers:*

Toledo, Ohio, Oct. 1st, 1918.

OUR first consideration, as it is yours—and that of every right thinking citizen—is "win-the-war."

Immediately following the American Declaration of War, we offered our production capacity, and the Government is using a very large part of it.

We are ready if need be to devote it entirely to war work.

The Automobile Industry as a whole is on a similar win-the-war basis.

We are building only a limited quantity of automobiles.

How many cars conditions will permit us to build for any future period is problematical—dependent wholly upon the urgency of war needs.

Any existing transportation must be used to its fullest capacity in order to increase the diminishing man-power of our home forces.

The total output of automobiles is fast becoming insufficient to replace cars wearing out in service.

And fewer cars rather than more is the production outlook.

With "win the war" our first consideration—and yours—this condition places a responsibility upon us which we are bound to fulfil.

* * * *

**Because it has assumed its transportation burdens so gradually few realize the extent to which the automobile is performing essential service.**

**—so essential that the rest of the system, railroads, trolleys and every other means of transportation that could be pressed into service, would be wholly inadequate quickly to assume the load were automobiles suddenly not available for the performance of their usual service.**

In even so essential a matter as our food supply the automobile is a most important factor.

**MY war-time conception of the automobile is that it is simply a given number of miles of rapid transportation.**

**It goes into service as a unit of our national transportation system.**

**In placing our restricted output of these units of our national transportation system in the hands of individuals, I want our distributors and dealers to discern the uses to which they will be put and to place each unit where it will best serve in the winning of the war.**

J. N. Willys
President

Few realize that over half the automobiles now in use are owned by and serve the people of the farms upon whom we and our allies are dependent for food.

Farm labor is already scarce.

Lack of automobiles to serve our farmers would mean a loss of untold hours of productive farm labor.

**Lack of automobiles to serve our loyal industrial workers would seriously hamper our industrial efficiency.**

**Lack of automobiles for those who direct and serve our essential workers would hamper our national efficiency as a people.**

* * * *

It is time for public appreciation of the fact that every mile that an automobile is driven needlessly is a mile of wasted transportation that ultimately may be needed for essential service.

It is time for public understanding that these smaller units of our transportation system should be used and maintained with the same thought for national needs as we demand in the use and maintenance of our larger units of transportation.

Failure on our part to take every means available for us to inform the public concerning the importance of this matter would be neglecting an opportunity to perform a valuable public service and a failure to live up to our win-the-war policy in a vital respect.

Let us, as automobile manufacturers, and you, as automobile dealers, put ourselves on a one-hundred-per cent win-the-war basis.

Let us to the full extent of our influence put the war-importance of the automobile fully before the public—you in your contact with the public—we in the public print.

**Let us to the fullest extent realize that when we sell an automobile we are in reality selling miles of transportation—placing a unit of our national transportation system in the service of an individual.**

Let us intelligently discern the uses to which it will be put and place each unit where it will best serve in the winning of the war.

In this spirit of full cooperation we can bring about a fuller understanding and appreciation of the situation and its trend, and perform a service of value to the whole people.

Willys-Overland
TRADE-MARK REG.
*Incorporated*
Toledo Ohio

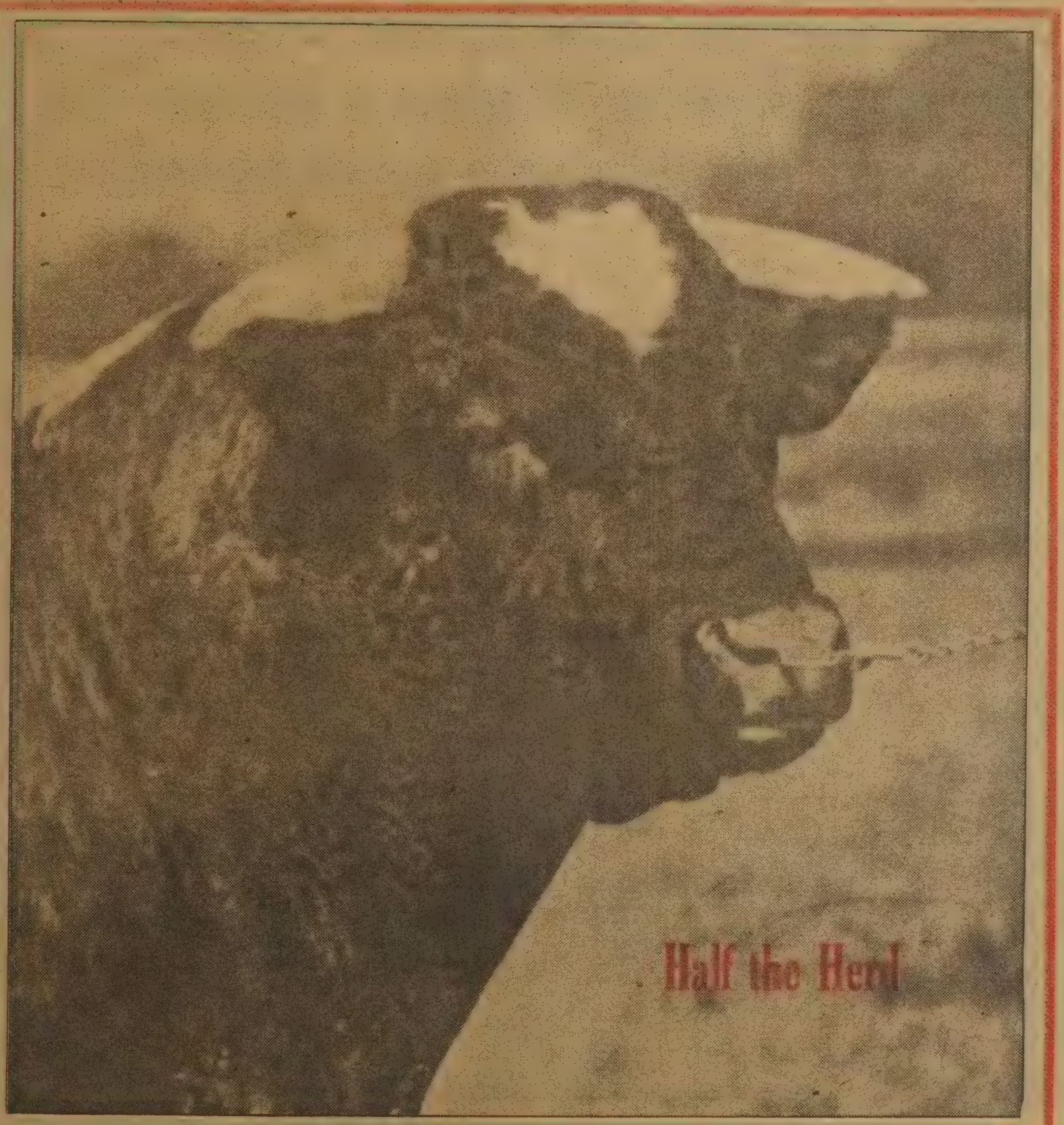
NOVEMBER 21, 1918.

NOTICE TO READERS:-When you finish reading this paper, place a U. S. 1-cent stamp on this notice, mail the paper and it will be placed in the hands of our soldiers or sailors destined to proceed overseas. NO WRAPPER, NO ADDRESS. A. S. Burleson, Postmaster Gen.

PUBLISHED WEEKLY.

# THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF



Half the Herd



WELL-BRED STEERS



A SCRUB

*"It costs no more to raise a 1200-pound well-bred steer than a 500-pound scrub."*

# Rising Farm Values Must Be Met by Better Livestock

IN the ten years between 1900 and 1910, according to U. S. Census figures, American farm-lands doubled in value—an increase greater than the entire fifty years preceding. With this land growing costlier year after year, it must bring a greater dollars-and-cents return per acre if it is to yield the farmer the right kind of profits on its higher valuation. Likewise, unless it *does* produce more, the consuming public faces a serious scarcity in its meat-supply, as statistics show population-increase is outstripping livestock production.

These are problems that every thinking farmer is considering, or should consider. Armour and Company, serving both the grower who produces the meat and the consumer who eats it, have a vital interest in the solution of these problems. Hence, whatever best promotes the welfare of both the producer and consumer benefits Armour also.

Breeding for quality that brings maximum weight at lowest cost and in the shortest time is undoubtedly the surest method of guaranteeing adequate returns to the producer and safeguarding the country's meat supply for the future.

## Better Breeds Make Bigger Profits

A well-bred beef animal requires no more feed, and at the same time attains larger size and puts on more quality meat in a shorter period than a low-grade steer. In other words, it costs no more to raise a 1,200 pound well-bred steer than a 500 pound scrub—and the profits are vastly larger.

The same thing applies to hogs and sheep. When there is "too much daylight under a hog" it costs you extra money in feed and you get nothing for it. High-grade sheep produce finer cuts than can be secured from poorer animals; they are worth more and they bring more.

The smaller the farm, the more important good breeding becomes. For quality-bred animals use the feed to better advantage, give the grower more value per pound and cost less to produce.

## Working Toward Higher Standards

Armour and Company recognize the importance of better livestock and better farming practice. To encourage and aid in improving animal-husbandry, we have established a well-organized Farm Bureau under the direction of specialists. Producers everywhere are invited to consult with this Bureau freely in regard to production problems.

At this time Armour and Company are operating under Government control—meat profits being limited to 9% on capital invested. They may be less than that, but they cannot be more. Hence, this seems a particularly opportune time for Armour and Company to discuss with growers the problems which materially affect both, and to set forth the facts frankly without danger of motives being misunderstood.

This is the first of a series of messages that will appear regularly in this paper. Watch for the others.

Armour's QUALITY PRODUCTS

This is the Mark Under Which Your Best Products Reach the Consumer

ARMOUR AND COMPANY
CHICAGO

## "Win-the-War" Preparedness

*A year of bounteous harvests is just closing. Farmers have responded in magnificent measure to the Government's call for food. But there is need for more. Europe is still struggling—provisions for our Army and the Allies' Armies must be assured for another year. We know every producer realizes this and will exceed even former efforts the coming season. To you our strongest pledge is that the Armour organization and Armour facilities will be maintained at the highest point of efficiency to prepare and to ship this food with the utmost economy and dispatch—to best serve the interests of the producer and the needs of our Government.*

2632

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 47. THE RANCH PACIFIC DAIRYMAN HORN AND HOOF November 21, 1918

## Food Production Supreme Peace Problem

### *Appointment of National Food Production Administrator Is the Imperative Duty of Congress and the President*

The world will be even more clamorous for food in time of peace than it was in time of war. All outstanding signs indicate that the call upon the American farmer for increased food production will be greater in 1919 than it was in 1918. The greater part of Europe is either starving or upon the verge of starvation. Mr. Hoover told a conference of state food administrators in Washington last week that conditions of famine exist in Europe that will be "beyond our powers to remedy." In northern Russia alone, he declared, there are 40,000,000 people who have but little chance of obtaining food this winter. Millions of others throughout Europe, he said, who can be reached, must be fed.

Last year to feed our allies the United States exported 11,000,000 tons of foodstuffs before the peace armistice was signed. Mr. Hoover said exports the coming year would have to be increased to 17,500,000 tons. Now he tells the country that the very lowest minimum of food exports from the United States and West Indies the coming year should be 20,000,000 tons. In other words, America is called upon to supply the coming year twice the quantity of food for the European people that it gave last year and three and one-third times the quantity that it normally exported in time of peace.

It is plainly now more a problem of increased production than of increased conservation by consumers. We can not see how the American people can conserve to a much greater extent than they have been conserving. We fear that the tendency will rather be the other way by the great masses of the consuming public, particularly in the larger cities, who, seeing that the war is over, will feel that they can go back to peace time methods. With all the appeals that it can possibly make, the food administration will do well if it can hold down consumption to the level of the past year.

This thrusts a tremendous and grave problem upon congress and the administration. Now as seldom before the country needs breadth of view and far-seeing vision. We note that Secretary Houston, of the department of agriculture, has just issued a statement urging that steps be taken to secure the better organization of agricultural forces of the country, especially of the local farm bureaus, in preparation for the necessary production program for 1919. Secretary Houston dwelt especially upon the need for an increased production of beef and fats, saying it seems clear that for a considerable period the world will demand particularly a larger supply than normal of these commodities.

"During the war," said Mr. Houston in a merited tribute, "the farmers of the nation have responded magnificently to the appeals of increased production. During this present fall season our farmers have planted an increased acreage of wheat and a large acreage of rye. It is too early now to make detailed suggestions for the spring planting season."

These well-sounding utterances

(Continued on page five.)

**What Is It?** German socialism is forming a government to replace the autocracy of the kaiser's dynasty What is German socialism? Dr. L. A. Bryan has prepared an article explaining it. Be ready to read and digest that article next week.

## More Silos

### Okanogan County Has 25 New Ones

About 25 new silos were built in Okanogan county, Wash., this year, which is a 50 per cent increase. County Agriculturist W. A. Holt says all are filled with corn but two. He and his assistant, A. K. Millage, have given assistance in the building of 17 wood hoop silos, which are considered the best by himself and are recommended by the government. The Woodbury Lumber company donated the lumber for a hoop form and Agent Holt had it made to use in making the hoops for the silo. It was designed by Mr. Mickle, county agriculturist of the adjoining county of Chelan, and can be carried on the back end of an auto. It has been in every district in the county.

A few of the silos in the county have alfalfa mixed with the corn and one is filled with weedy wheat and oats. A number of the silos, containing about half the tonnage, are for feeding beef cattle and one or two for sheep feeding. Mrs. McDonald of Loomis, Wash., in the northern part of the county, has a 300-ton concrete silo, built last year. She has one of the largest herds of beef cattle. There are several more silos in that strictly beef region. There are several pit and partly pit silos. While not the best silo, Mr. Holt tells me he believes it is sometimes the best for a man to build, owing to monetary and other conditions. One homesteader built one for a cash outlay of less than $50.

Mr. Holt predicts an increased corn acreage and expects 50 more silos to be built next year, as people see the corn crops and realize the benefits of the silo. He hopes for better stock, more corn and more silos. H. A.

**FRUIT MEN TO MEET IN SPOKANE.**

The State Horticultural association will meet in Spokane December 10, 11 and 12, and on the 13th the Packers' and Graders' convention will be held. This is considered one of the most important meetings of the association ever held and an effort is being made to have Secretary of Agriculture Houston and other men of his caliber present to address the convention. A special effort is made to have a high-class program throughout. Spokane has guaranteed the expenses of the convention and a large attendance and increased membership is expected.

## High Class Herd of Jerseys Owned by Woman

"Illihee herd" of Jerseys received just recognition when it was featured in Great Northern railroad advertising literature. This high-class little herd is owned and was bred up by a woman, Mrs. Charlotte K. Stanton. It is at Oroville, Wash., only four miles from the British Columbia line, and far from any other breeders who might help in keeping up enthusiasm and breed interest.

In 1907 Mrs. Stanton bought a few foundation animals from that constructive breeder, Adam Stevens, of Ellensburg, Wash. Included was a young bull by Gertie's Stoke Pogis, and out of Golden Glow 2d, a daughter of Golden Glow, dam of the noted Oregon bull, Golden Glow's Chief. Golden Glow 2d was a beautiful cow, with broad, straight top line, good capacity and length of body. She was never officially tested. The bull is reputed to have been handsome, of great depth of body, and he never sired a poor daughter. Mrs. Stanton kept him until he died, and he seems to have been worthy the great breeding on both sides of his ancestry.

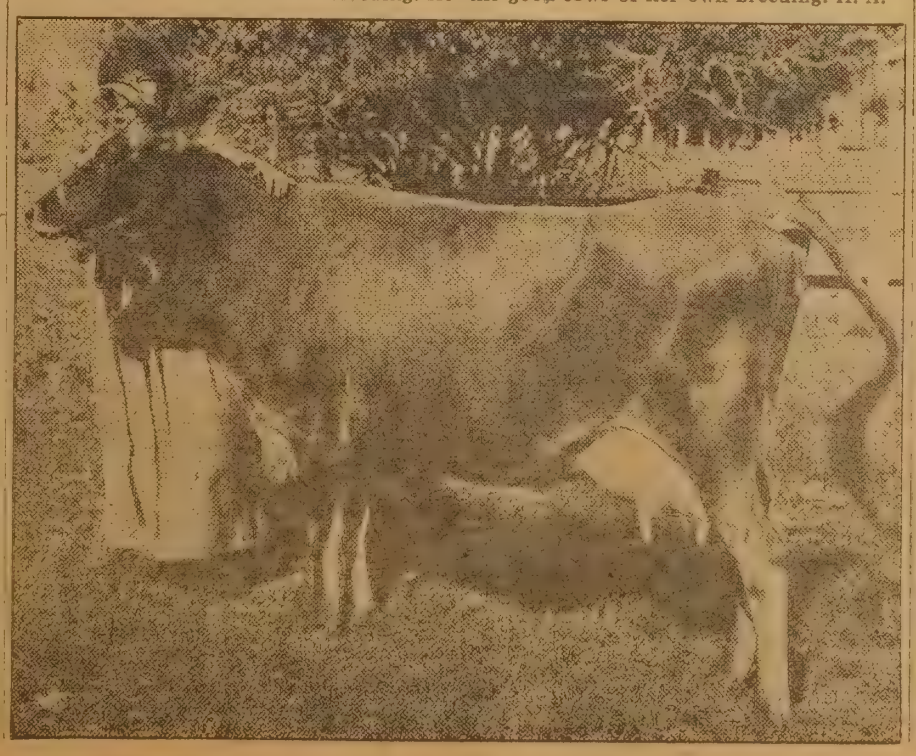
Mrs. Stanton's second bull was also purchased from Mrs. Stevens, and was out of a daughter of Golden Glow 2d, which shows she had the idea of line breeding. He proved to be a good breeder and put excellent udders and teats on his daughters.

Mrs. Stanton's present herd bull is Mayfield's Buster, by Fabby Shylock, and his dame is Imp. Mayfield's Orphan. Fabby Shylock, it will be remembered, sired Sans Aloi, also Financial Countess Lad, the sire of Financial Sensation, that recently sold for $60,000; so Mayfield's Buster is a half brother to these two famous bulls. He is a handsome animal, but for his horns, has a kind disposition and all his daughters have beautiful heads as well as good udders. He has one heifer in milk that produced almost 50 pounds a day and made 72.9 pounds of 85 per cent butter in 31 days.

Mrs. Stanton has done no official testing. She is too far from any tester and has no other herd to share the test expenses.

Mrs. Stanton has, on account of conditions sold off a good part of her herd. She retains among others, Silver Grace, a cow 16 years old, that is still a good, useful cow. Five head have recently been sold to Mrs. A. D. Craster of Vernon, B. C., at $250 and $200 each, and others of her herd have gone to British Columbia at good prices.

The photo herewith shows Mrs. Stanton holding Lady Velveteen of N. I., one of the good cows of her own breeding. H. A.



**WENATCHEE APPLE DISTRICT.**

**Fruit Becomes Famous With Travelers Throughout the Southwestern States.**

One of the many things of which the famous Wenatchee district is justly proud is the fact that it supplies all the apples for the Harvey system of eating houses. This season's order, made late in October, was for 20 carloads of fancy and extra fancy grades. The largest order was for Winesaps, the sizes being 96 to 113 to the box. Rome Beauties are 56 to 80. Jonathan and Spitzenbergs are the same size as Winesaps and Winter Bananas as the Delicious.

The Harvey system restaurants have made the Santa Fe railway famous. Away out in Arizona and other parts of the hot and arid American desert, wherever Santa Fe trains stop, it is the boast of these restaurants that they serve anything you can get anywhere else, and serve it better.

The Wells & Wade Fruit company have supplied this company for the last four years. Mr. Wade, who supervises the filling of this order, informed me that Mr. McCormick, the buyer, has been buying in the Wenatchee valley for the last 10 years. He does not stop at the question of price, but must have the quality desired. He used to buy from the individual growers, because it was the only way in which he could get extra select apples. H. A.

**COMPILES CROP FIGURES.**

E. T. Marchetti, field agent for the department of agriculture, has issued the following statement as to the production of corn and potatoes by counties in the state of Washington during the season just ended:

| County. | Corn. | Potatoes. |
|---|---|---|
| Adams | 11,500 | 54,500 |
| Asotin | 16,900 | 27,080 |
| Benton | 172,500 | 90,000 |
| Chelan | 79,000 | 143,260 |
| Columbia | 98,000 | 32,060 |
| Douglas | 55,000 | 120,120 |
| Ferry | 5,500 | 23,100 |
| Franklin | 6,000 | 23,040 |
| Garfield | 38,000 | 9,000 |
| Grant | 13,500 | 48,560 |
| Kittitas | 1,500 | 270,000 |
| Klickitat | 8,500 | 103,040 |
| Lincoln | 26,000 | 98,896 |
| Okanogan | 89,000 | 105,560 |
| Pend Oreille | 2,500 | 49,500 |
| Spokane | 49,000 | 178,815 |
| Stevens | 58,500 | 291,225 |
| Walla Walla | 100,500 | 116,880 |
| Whitman | 85,000 | 237,100 |
| Yakima | 690,900 | 2,059,025 |
| State total | 1,634,000 | 8,580,318 |

A special inquiry disclosed that 34 per cent, or 2,917,518 bushels of potatoes are consumed on the farms producing them, leaving an available visible supply of 5,662,800 bushels for the state. Practically the entire corn crop is utilized on the farms producing it.

**Potato Crop Below Normal.**

This year's potato crop is estimated by the department of agriculture at 11 per cent below normal.

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## Victories of Peace

"Peace hath her victories no less renowned than war," is a phrase that was never more applicable than today. The victories of war are uppermost in the minds of men; but what about the coming victories of peace?

The victories of peace may be very nearly as strenuous as those of war. They will receive less medals than the victories of war. They must be fought out in the quiet before they are fought out in the halls of legislation, in the parliaments of the nations.

Milton spoke to our own times no less than to the Cromwellian days when he declared that peace hath her victories no less renowned than war.

redevils are not necessarily fools.

## Short Time Farm Loans Next Reform

For most part the bankers of the United States have accepted in good spirit the founding of the farm loan bank system. Occasionally, though, a short-sighted banker, hide-bound in his devotion to the old order, emits an angry protest against what he terms "government favoritism for the farmer."

An utterance of that character was voiced in Chicago last week before the convention of the American Bankers' association. E. D. Huxford of Cherokee, Iowa, attacking the farm loan bank, tried to be sarcastic when he said:

"When federal farm loan banks are firmly established, may we not expect the move to include some provision for a federal packers' loan bank, or a federal manufacturing loan bank, or a federal railway loan bank, and so on, until the 57 varieties are fully covered by federal chartered institutions and every little business has a bank all its own?"

The truth is that all of the commercial and manufacturing interests enumerated by Mr. Huxford have long enjoyed favorable banking facilities through the national banking system. That system, which has served the commercial interests continuously since the civil war, is under government patronage, inspection and regulation. A business man, finding himself held up for excessive interest charges, could readily appeal to the government officials and the offending bank could be quickly and effectively disciplined.

More and more as the years passed by it became apparent that the great farming interests of the United States needed some such government banking system. Long ago European countries had seen the need of farm loan banks and had worked out and perfected systems that were of tremendous benefit not only to the producers but to the nation.

Mr. Huxford and other objectors to the federal farm loan bank entirely miss the point of the legislation that founded it. It is essentially an institution for the public benefit—and of ultimate aid to the consumer more than to the producer, because its unerring effect will be to reduce the cost of production, and in the end the consuming public will get the lion's share of the benefits of that reduction.

Mr. Huxford only wastes his breath in bewailing this wise legislation. He had better accept it in good spirit, and, what is more, he might as well fortify his soul against another reform that is surely coming—the enlargment of the federal land bank system so that farmers can have short-time loans on better terms and easier conditions.

Good health comes from good air, good food and good exercise of body and mind. All modern appurtenences of good health are poor counterfeits.

## The Unanswered Question

As a rule we know little about the things with which we deal, even the commonest of them. What they are we know not, thought we do know, or think we know, something about how they operate. For instance, what is electricity? There is no man living who can tell. It is something that we know exists, for we see its effects. We see it lighting cities and homes and turning machinery. We know how it acts but we do not know what it is. What is this thing that we call mind? What is this thing we call matter? What is hope? What is aspiration? What is life itself? The whole race must content itself with knowing something about how these things operate, admitting that it knows nothing or next to nothing about the thing itself.

Recently there appeared an article in this paper discussing a certain something that exists in milk and eggs that gives them particular nutritive value. The word used to indicate this something was "vitamine" or "vitamines." A reader writes in to inquire what the word means, saying that his dictionary does not contain it. The writer of the article, one of this journal's contributing editors and one of the recognized northwestern authorities on scientific subjects, replied in part:

"All that is known, so far as the writer is aware, is that there is a something or a substance that is very favorable to growth, but which is found only in milk and eggs. That much has been demonstrated. The fact is, a great discovery has been made, but the thing discovered remains hidden. It is a fact, so far as the practical application is concerned, just as much as though we could measure it with a tape line, weigh it with a balance, see it with our own eyes or photograph it with an X-ray."

Use it! What matters whether we know what it is or not? If vitamines exist and are the vital substance of nutrition that it seems proven they are, they may revolutionize the use of foods and feeds. Apply what is known; do not haggle over the unknown. What if we had said: "We do not know what electricity is, therefore we will not use it"? What if we refused to hope because we do not know what hope is, refused to aspire to better things because we do not know exactly what aspiration is or refused to solve our problems because we do not know what the mind with which we solve them is?

How far can the principles of Christianity be applied in reaching terms of peace? It depends upon the interpretation of those principles. The Master Christian said: "I came not to bring peace, but a sword."

## Keep the Feed at Home

The shipment of wheat out of the northwest for grinding into flour and feed in other milling centers has been rightfully criticised. The feed is needed here, and it is manifestly poor policy to pay the freight on it both ways as is necessary when the grain is shipped out and the mill feed shipped back. It is also just as poor a policy to ship uncleaned wheat to market when the cleanings might be taken out locally and kept for feed. The producers pay out annually thousands and thousands of dollars in both-ways freight on these cleanings, besides the price that they have to pay when they buy the cleanings back.

## Selling Prices of Food Products

I read from the daily papers that the government is establishing a system of reports of prices at which groceries and other food products should be sold. These reports are to be based upon the cost of production and shipments in, or into the various sections of the country.

I think this is a splendid movement; one that is necessary in order to make an equitable system of fair profits and no extortionate charges. I think further that every one should write to his congressman, senator, and to the chief of bureau of markets of any speeial cases in order that our agents in Washington may know the conditions we have to face and devise a means to remedy them.

I wrote the bureau a few days ago and gave the following item. Apples that we sold in the Yakima valley, Washington, at $1.50 per box were shipped to Seattle and sold on the fruit stands at, retail, two for 25c, or $12.50 per box. The cost of shipment in car lots to Seattle could not have been more than 50c per box, for that is all it costs to Chicago. Before the war we shipped to New York or Boston for 50c per box, in car lots. Allowing that the cost to retailer for rent, labor, etc., is $1.00 per box, this still leaves a net profit of $10.00.

The grower does not get too much, for he has an investment of $500 to $2000 per acre in land. Then he prunes, sprays, irrigates, cultivates, pays taxes, water rent, insurance, hires labor, buys boxes, paper, nails, picks, assorts, packs, hauls to town and runs all the risks of frost, storms, winds and other conditions damaging to crops. The railroad company does not get too much, for they have large expenses as well as the farmer. But the handlers, with no investment or very little, and but little expense, make the public pay five times as much as the grower and the railroad company combined receive. Yet the grower and the railroad company do the work, have the principal expense compared with which the work and expense of the distributor is very light indeed.

My point is, that these facts and similar facts should be brought to the attention of our agents at Washington, in order that in the course of time these defects in our system of marketing may be remedied.

In a government "Of the people, for the people and by the people," the people are the principal and the officers occupying official positions are their agents. But the agents can not know what the principal wants except as these wants are expressed in letters of information, or at the ballot box. It is no use to grumble and find fault with our representatives if we do not tell them what we want. Generally we find them ready to serve their constitutents as best they can.

G. L.

Brain inspirations are suicidal, unless the heart is at the helm.

## More Bonds Must Be Issued

The first thought, now that the armistice is signed, is that the government will issue no more bonds, but a survey of the situation shows that it is very probable that further issues will be required.

Now that the war is over the allies will need enormous credit in the United States. They will require vast quantities of raw materials for manufacturing, heavy importations of food and probably a great deal of merchandise and equipment. These purchases can not be made in the United States unless credits are created here and such credit can only be created by our government making further loans to its allies. It is to our own commercial and industrial interests that this be done in order that the business situation shall be sustained in the critical period when the war business is disappearing. Bond issues for that purpose will not increase the net debt of the United States. The government at Washington would simply borrow the money from its people and re-loan it to the allies.

Past loans of that nature were attended with some risk, but now that the war is victoriously over we can make the desired advances with every assurance that they will be honorably repaid.

Justice, generosity and our own interest require that we render this service in a big and magnanimous way.

# Army Camps Will Break Up

## *Plans Under Way for Systematic Demobilization of Troops*

The war department has announced that all army camps in the United States will be broken up as rapidly as possible consistent with the maintenance of order and reasonable conditions of traffic. General March, chief of staff, said Saturday that orders had already been issued that would return about 200,000 men to civil life within two weeks, and that when the program of demobilization was in full swing something like 30,000 men daily would leave the camps. These orders refer only to camps in America, as no definite policy concerning the demobilization of the troops in Europe has yet been announced, though it has been openly discussed.

There are approximately 1,700,000 men in the training camps of the United States at the present time. Assuming that 200,000 of these start for home during the next two weeks and that the prediction of General March that 30,000 per day leave camps thereafter, it would require approximately two months to demobilize this entire force. It is probable, however, that a considerable number will be maintained more or less permanently at the camps until such time as the troops begin to return from Europe, when the American camps would probably be converted into demobilization quarters. Many of the men who will be released will be given the opportunity to recalist voluntarily in the army service for regular army duty. The war department, says General March, is going to recommend to congress that every discharged soldier be given one month's additional pay as a bonus, regardless of the rank which he holds.

**LAY PLANS FOR THOSE IN EUROPE.**

Chairman Hurley of the United States shipping board has gone to Europe for the purpose of arranging the details for bringing back the troops that are now over there as soon as the war department decides upon the time and method of their return. He says that if the war department wants them returned as rapidly as possible the shipping board can furnish transportation to bring them back at the rate of 300,000 a month. There are now in Europe something more than 2,000,000 American soldiers. Should they be returned to this country at the rate of 300,000 monthly it would require only about seven months to bring the entire force home. It is certain, however, that they will not be returned at that rate for any considerable length of time, as it will undoubtedly be necessary for several hundred thousand of them to remain in Europe for various forms of duty for one or two years.

**UNITED STATES CASUALTIES ARE ESTIMATED.**

Government officials have estimated that the total casualties of the American army will not exceed 100,000, including all men killed, wounded or missing and those who have died of disease or injuries. An official tabulation up to November 12 showed a total of approximately 72,000 casualties. The daily lists are still being received in this country, and probably will be for a few weeks, as the classification of casualties is far behind their actual occurrence. According to the estimate of the government officials, there probably would be still some 20,000 to be officially reported.

It is not indicated what proportion of the total casualties will be fatalities.

Few official estimates have been made of the losses by other nations who have participated in the war. The semi-official estimate places the total French casualties at 2,500,000. A semi-official statement from Germany says that that nation has lost 3,000,000 men killed or dead as the direct result of battle.

**GERMANY IS WITHDRAWING TROOPS.**

In accordance with the terms of the armistice, the troops of Germany are being slowly withdrawn from the invaded territory of Belgium and France. They are being followed up closely by the allied armies, also in accordance with the armistice terms. The terms require that they be out of the invaded territory and on the east side of the Rhine river by 11 o'clock on Monday, November 25, 14 days after the taking effect of the armistice terms. Little official report of their movement is being made, and little is known publicly of the exact manner in which they are fulfilling the terms which require them to leave munitions and other equipment on the field. Reports that the retreating soldiers were committing depredations in violation of the terms of the armistice brought a vigorous statement from the allied headquarters to German headquarters demanding that any such depredations cease at once.

**GERMAN NAVY SLOW TO GIVE UP.**

After having floated during the entire war in comparative idleness in German waters, with no combat except in the case of the submarines, the German navy was slow to accept the terms of the armistice which required that it surrender to the allies under stringent conditions, many of its vessels and their arms to be turned over to the allies. At this writing, however, a German cruiser carrying German delegates has been escorted into a British port, where negotiations for the fulfilment of the armistice terms are being carried on. Under a revision of the armistice terms just prior to their acceptance by the German delegates at allied headquarters, all submarines owned by Germany are to be surrendered to the allies.

**REVOLUTION HARD TO CONTROL.**

With the food situation desperate in Germany, Austria, Russia and other European countries, the new authorities in these countries are having great difficulty in preventing the spread of a revolution little short of anarchy. The people's government in Germany, under the leadership of the new chancellor, Friederich Ebert, and the socialist leaders, is apparently doing all in its power to prevent the catastrophe which would inevitably follow a state of anarchy. Those in charge of the formation of the new government apparently are endeavoring to stabilize economic conditions as rapidly as possible as the most effective means of combating the spirit of revolution.

**FOOD IS THE GREATEST PROBLEM.**

That it is a food shortage amounting almost to a famine at the present time that has caused the new government to accept all of the drastic terms of the armistice is evident from repeated appeals that have come to the United States urging that this country and its allies do everything in their power to alleviate the distress in Germany in order to prevent a grave disaster. Foreign Secretary Solf of Germany has sent a message to Secretary Lansing requesting that President Wilson allow a German commission to come to the United States to take up the problem of food with this country. Other appeals urge the hastening of the final peace conference, with a view to removing as many barriers to food production and transportation as possible at the earliest possible date. The peace conference probably will meet in December.

**HERBERT HOOVER ON WAY TO EUROPE.**

Food Administrator Hoover left last Saturday for Europe, where he will take charge as this country's representative in the handling of the food situation there as it affects all European nations. Mr. Hoover says that arrangements have long since been completed by which France, England and Italy will be provisioned. He says that Germany can take care of itself if given a chance, but that a blockade of its transportaion facilities must be abandoned. He says this country's first and deepest concern must be for the feeding of the little allies, including the Belgians, Serbians, Rumanians, Greeks, Czechs, Jugo Slavs and others, totaling some 75,000,000 people. While the food problem of the former enemies of the allies is great and affects some 90,000,000 people, Mr. Hoover says that he can not approach this problem without remembering the manner in which the central powers have wantonly destroyed food stuffs during the last four years and the misery and suffering that were caused thereby among the allies. It is expected that Mr. Hoover will visit both Germany and Austria in connection with the duties of his mission immediately.

# Food Production Is Problem

## Appointment of Administrator Is Imperative Need

(Continued from page three.)

will not carry us very far along the road of increased production. Something must be done in a big and constructive way toward helping the farmers to grow the enormously increased yield that is vital to the saving of millions upon millions of people from starvation. Appeal is well enough up to a certain point. What is now needed is real government help to supplement that appeal.

First of all, without a day's unnecessary delay it is imperative that boys from the farms be released for return to the soil. It is idle to talk about doubling our agricultural exports with labor conditions upon the farms as they exist today.

Congress should immediately abandon its niggardly policy of providing very limited credit under almost impossible conditions for farmers in drouth districts who are in need of seed, and not only seed in many instances, but equipment as well. The petty appropriation of $5,000,000 to that end showed a most disheartening lack of comprehension in the congressional and executive mind.

Wise and far-reaching legislation is needed to insure good prices for every farm product that the world so desperately needs today. The crisis calls for extraordinary effort and unprecedented production, and nothing can so effectively stimulate the increased planting wanted by the government as wise legislative steps that will put the farmer's mind at ease and assure him that he will be at least fairly rewarded for his sacrifice, his hazard and his toil.

We do not venture at this stage to lay down the hard and fast program to that end. The problem is so great that reasonable discussion will not be wise, but we do insist that the situation will not be saved if the government goes drifting along on the present lines. There is yet another consideration as yet glimpsed by but few that ought to spur the government to quick action: Europe's hungry call may drain our own supplies and leave our own people hungry before the end of another year.

The government can, with seeming safety, provide price guarantees that are the only true key to the solution of the problems now confronting us. It need not be in the slightest concern about the possibility of over-production, it is the under-production that will hurt. There is every sign that a hungry world will make abnormal demands upon America for food for the next five years. Russia, once a great granary of the world, is drunken and demoralized with bogus liberty. It will take years to restore its farms, restore its wornout machinery, rebuild its ruined railways and bring Russian products back to normal. Throughout the rest of Europe the soil is run down, man-power weakened, horse-power killed off, machinery destroyed and implements worn out.

Will congress and the administration rise equal to the occasion, or will they continue as short-sighted, as niggardly and as unconstructive as they have been since America entered the war?

For the greater part of a year the Farmer has been urging with every emphasis it could put upon the demand the appointment by President Wilson of a national food production administrator—comparable in intellect, energy and resolution to Hoover in the field of food conservation, Schwab in the realm of shipbuilding, and Ryan in the work of aircraft construction. Unfortunately these appeals have gone unheeded, but, while a reparable damage has been suffered from the government's failure to act upon this suggestion, it is not yet too late to take the step. We therefore call upon the senators and representatives from all the northwestern states to give this imperative duty their immediate consideration and press it with insistent urging upon congress and the president.

In response to a telegram from Secretary D. F. Houston of the department of agriculture, calling a conference of representatives of the food producing regions of the nation to consider the present problems of the agricultural industry, the managing editor of this paper is in Washington, D. C., at the present time in the interests of the producers of the northwest.

## *Where the Armies Next Line Up.*

This map shows the neutral zone along the Rhine river that the Germans must establish shortly. They must reach the east side of the Rhine by November 25, and shortly thereafter vacate the 20-mile strip on that side of the river and leave it a neutral strip pending the final conclusion of peace.




## *Washington Gleanings*

Yakima valley "banters," as the larger Netted Gem potatoes are called, are this year being shipped in crates instead of in sacks. Crates, which are being manufactured locally, are cheaper than sacks, which are scarce.

County boards empowered to pass upon mill feed needs for live stock in the several communities are being organized throughout eastern Washington at the suggestion of Charles Hebberd, food administrator for the state.

Commissioners of Walla Walla and Franklin counties, at a joint meeting recently in Burbank, agreed upon changing the ferry landing on the Walla Walla side of Snake river to a point a quarter of a mile below the present landing.

Live stock shipments out of Molson are on the increase. A car of purebred Shorthorn breeding animals from Vincent's Skookum stock farm was shipped to Spokane and Sandpoint buyers last week. Sanger and Burden also shipped a carload of horses to Iowa.

The wheat threshing in the Leavenworth vicinity came to a close last week, according to a report made by O. B. Robertson, who operated the thresher. John Emig had the largest yield, 358 bushels, and W. W. Burgess of Plain, the largest yield per acre, almost 34 bushels.

Installation of two pumping plants, with a capacity of 4500 gallons per minute, will be begun at once by the United States reclamation service at Prosser, announced R. K. Tiffany, project manager. One is located two miles north of Prosser and the other five miles northeast of Prosser.

Last week Joseph Moorcroft and W. A. Davis, two of the most successful farmers in the Big Bottom, shipped a carload each of steers from Morton, which were said to be some of the finest cattle ever shipped from eastern Lewis county. The stock had been pastured this season on Whale Head range, north of Mt. View.

The Bonaparte Irrigation district, near Tonasket, extends about 15 miles east and will water land adjacent to the Bonaparte valley. The water is to be brought from a reservoir at the head of Lost creek and from the flowing waters, sufficient to water 10,000 acres. Harold Smith, W. C. Dobbins, C. E. Verbeck are directors and J. A. Merva, attorney, all of Tonasket.

Miss Mae Mark, county club leader, has completed her report of the activities of the girls' canning clubs in Yakima county. During the season their clubs have canned 16,115 jars of fruit, vegetables and meat, and in addition have dried 645 pounds of fruit and vegetables. Yakima county has 18 canning clubs, with a membership of 182. Margaret Kirk of the Fruitvale club holds the county record.

Growers of the Selah district are this year operating the Selah evaporating plant as a cooperative concern. The plant was formerly a part of the Yakima Fruit Growers' association, but now has withdrawn entirely from the parent body, says S. M. McKee, president. He states that the plant is using 20 tons of green apples a day, taking cull stuff. The cores are sold to another byproduct plant for conversion into apple jelly, and the peelings are made into "apple chops," which in turn are made into apple butter.

While Snohomish county conditions can not be said to be ideal for the general raising of sheep in large flocks or bands, yet it is the opinion of a good many farmers in Snohomish county who have kept a few sheep on their farms that sheep have not the place on Snohomish county farms that they really deserve as a profitable farm animal. It is the opinion of these men that every farmer should make use of his waste land in raising a few sheep Some of the men in Snohomish county who are keeping sheep are: I. S. Thomple, Stanwood; Edward Holcomb, Snohomish, and Henry Frohning of Monroe.

# Need One Standard

## Conference Will Discuss Proposal

BY GRANVILLE LOWTHER.

I have read with care the proposed national grade and pack rules for apples as they will be presented for discussion at the conference in Spokane in December.

One system of marketing has always been misleading unless the consumer had a system of education, corresponding to our local usages and customs. For instance, I was in New York state visiting several cities and towns, a few years ago. I found on the markets, extra fancy, fancy and choice grades. I knew what choice meant, but a friend of mine bought a box thinking that "choice" meant first grade. Oregon, Idaho and Montana had apples on the markets, with their systems of grading, and all were different. Think what it would mean to have a different standard of weights or measures for every state in the Union. If the Colorado yard stick were 34 inches long, Utah 38, Oregon 36, Washington 35, and all the states with their different standards, it would be little more confusing than the present system of grading apples. Besides, state lines are only arbitrary lines, imaginary lines, and not natural divisions like mountain ranges, rivers and climatic differences. The conditions that prevail in the Inland Empire are very similar, no matter if it does include parts of the states of Idaho, Oregon, Washington and Canada. Why should the apples grown in these states, similar in quality not be put up in similar packages and marked with similar brands?

It will be greatly to our advantage to nationalize many of our industries under rules that have formerly been localized.

More and more, our modes of action are to be broadened; the individual into the collective, the local into national, and the national into the international.

This may not seem better from the viewpoint of the individualist, who is afraid he will lose his identity, and not have sufficient scope for the exercise of his powers. But it is in the nature of the evolution of thought! the survival of the fittest; the success of the economically efficient, and the elimination of waste. Corporations and combines in the industries caused labor organizations and federations. The conditions caused by the combinations and organizations have made necessary government regulation and laws for the equitable adjustment of the products which the people must have in order to live. We may not like it, but it is in the nature of evolution, and will come whether we like it or not.

### OMAK APPLE PRODUCTION.

**Better Water Supply Gives Promise of a Constantly Increasing Output.**

About 80 cars of apples will be shipped this season from Omak, Okanogan county, by Wagner & Son, according to J. P. Wantz, the local manager of the firm. Each car holds from 750 to 850 boxes. Mr. Wantz says the crop would have been more than double but for water shortage. The shortage is partly attributed to poor management on the part of the United States reclamation service. Omak people declare it was well known that snow in the mountains was far less than normal last winter and the consequent shortage of water was imminent. While the reclamation service has its defenders those who complain point to the fact that private parties got pumping plants ready for the time when water would be needed. On the other hand pumping plants were not made ready until water was badly needed and crops damaged. The instalment of pumping plants at Salmon lake and Beck lake and other provision it is now said give assurance that a water shortage will not occur again, and it is expected that the Omak output of apples will steadily increase. H. A.

### CANNERY WANTS CONTRACTS.

A campaign is being waged in the Spokane valley to see whether or not sufficient acreage of vegetables may be depended upon by the Spokane branch of the Puyallup & Sumner Fruit Growers' Canning company for next season's canning. The prices which are being offered in the contracts that the company proposes with growers are as follows:

Spinach (cut above the crown), $35 per ton.

Royal Anne cherries, $100 per ton.

Sour cherries, Montmorancy, $100 per ton.

Late Duke, $100 per ton.

Strawberries, to be red, suitable for canning purposes and to cover the entire crop, $140.

Gooseberries, $75 per ton.

Tomatoes, $15 per ton.

Pears (Bartlett) large, desirable, $30 per ton.

Prunes (Italian), $30 per ton.

Pumpkin (Mammoth King, Connecticut Field or Kentucky Field), $8 per ton.

Squash (Boston Marrow), $10 per ton.

Damson plums, $40 per ton.

### SUGAR BEETS AT TONASKET.

Experimental tests of sugar beets grown around Tonasket have shown a sugar content of 19 per cent. There is considerable rivalry for the first factory. 'I was informed at Tonasket the latter part of October that practically 6000 acres were signed up and Tonasket believed she would be the winner. Besides the irrigation project in which Tonasket is now included, the Bonapart district of 6000 acres is tributary and the Whetstone Horse-Spring Cooley district will be under irrigation in 1919. From these districts additional acreage is expected. H. A.

### WHEAT CONDITIONS ARE GOOD.

Reports from various parts of the Big Bend country indicate good prospects for next year's wheat crop. There is said to be a greater amount of moisture in the ground at this time than is usual. Though this came late, the continuation of the open fall has enabled the farmers to sow liberal acreages of grain and it is stated that the acreage of the Big Bend country as a whole is about normal.

### GREW FETERETA AND SORGHUM.

Arthur C. Egbert, who lives on the edge of Okanogan, Wash., this year grew feterета (a species of Kaffir corn) and sorghum on land too dry to mature a corn crop. Each of them made a good crop of fodder and matured good seed. Mr. Egbert believes either of them far better than corn, where moisture is deficient. He uses them for cow feed.

### SWAT THE GRAIN WEEVIL.

A. L. Melander, entomologist of the State College of Washington, gives the following ideas in the matter of treating for insects infesting stored grain:

"The granary weevil is the most commonly met with of the several insects infesting stored grain, meal flour and other cereal products. It is a small, brown, hard-shelled snout beetle, measuring about one-eighth of an inch in length. The females make small punctures with their beak in wheat, corn, etc., and then lay eggs in the punctures. These eggs develop into fat maggots, which hollow out the seed, and if the surroundings are continually warm may develop into new weevils in a month. In infested mills the weevils bore into sacks of flour before they are sold and later produce wormy flour. Whenever any of these insects are discovered the food material must be sterilized. If breakfast foods are to be dealt with at home the easiest way is to place them in a moderately hot oven to kill the insects and any eggs."

### Should Have Plenty of Sugar.

The sugar beet crop of 1918 is reported as 10 per cent greater than that of last year and the sugar cane crop about 25 per cent more than last year.

### DAIRYING IN THE OKANOGAN.

At both Twisp and Winthrop, Wash., is a successful creamery. These towns are in Okanogan county, "up the Methow valley," 36 and 45 miles respectively, from the nearest railroad point. The creamery at Winthrop is owned by Seattle parties; the one at Twisp is cooperative. It is making probably three tons of butter per week, and the one at Winthrop two and a half. These towns are at an altitude of about 1600 and 1800 feet. The valley is practically all irrigated. Seventy cents a pound was being realized for butterfat at Twisp late in October.

While there are quite a number of small orchards and several large ones in the upper Methow valley, dairying is the largest industry. There are a few purebred dairy cattle, some good grades and some poor ones. Among them J. F. Bean, at Winthrow, has Ayrshires and R. C. Garrett, Holsteins. A number of silos have been put up in the last year. Alfalfa on irrigated land made a good crop, but on dry land it made only two light cuttings.

Winthrow ships about 2000 beef cattle each year and the balance of the valley has many more. There is the best beef cattle range, and in addition, 40,000 sheep, owned outside the county, use the mountain range on both sides of the valley, and are driven in and out each season. H. A.


Alfalfa Lands
General Farming




Grazing Lands
Free Range

# Jordan Valley, Oregon

## Opened for Entry November 1, 1918

20,000 acres of rich farming land with full water right; in the heart of a great cattle range. Can be had now at a low price and reasonable terms.

Jordan Valley offers one of the few remaining opportunities to secure a home in a new country where the climate is favorable, the water supply ample, the soil deep and fertile, the prospects for profitable farming and the enhancement of farm values unusually favorable, and the general conditions exceptionally good for rapid development and money-making opportunities.

**Jordan Valley Offers You a Home**
**Don't Overlook This Offer**

Every good farmer will appreciate Jordan Valley and the project welcomes every good farmer. All the leading farm crops can be successfully raised in Jordan Valley—alfalfa, wheat, oats, barley, clovers, corn, seed crops, root crops, vegetables and fruit.

**It Can't Be Beat**
**Investigate and Do It Now**

## Jordan Valley Farms

524 Idaho Bldg.
BOISE, IDAHO

MAIL THIS COUPON TODAY.

Jordan Valley Farms, 524 Idaho Bldg., Boise, Idaho.

Gentlemen: Please send me full particulars about Jordan Valley.

Name .....

P. O. .....

R. F. D. .....

State .....

# Reconstruction and the Farmer

By CHARLES A. LYMAN, Secretary National Board of Farm Organizations.

Now that the war is about over, what plans have the farmers made to make certain that in the readjustments the welfare of agriculture will receive its full measure of consideration?

Letters will be sent out by the national board of farm organizations within a few days to farmers in every state in the Union suggesting that quick action be taken in regard to matters of reconstruction after the war.

Bills are already in congress and others are certain to follow bearing on the methods under which this nation, unhampered by the restrictions of war, shall once more pursue the commercial and industrial pathways of peace.

Unless the farm organizations of this country take a hand in the shaping of legislation bearing on the problems arising out of the war there is grave danger that measures will be enacted which may lead to permanent injury to agriculture. It is high time for farm organizations to get their affairs in order and be ready to act together in the making of wise and constructive plans.

The farmer who belongs to no farmers' organization should join one without a moment's delay; every part of the country has some educational or business organization ready to receive him. Individual's ideas count for little in the framing of laws or in the building of national institutions unless they reflect the thought and accurately interpret the desires of the masses. To weigh evidence in the business experience of many farmers and unite on a program which will give the greatest benefit to the greatest number is the legitimate object of farm organizations. In this way only can the voice of the individual be heard and the needs of communities be made articulate.

Business long before the days of the Hanseatic league has been organized to take care of its own. At this moment wealth, prestige, the power to do great good or evil are in the hands of men who have organized.

These men will emerge from the war still better prepared and with sharpened appetite. Business will reach out in every direction for trade and profits.

It will ask for legislation, special privileges, and get both if it can. On former occasions it has been successful. Unless agriculture develops simultaneously with business there will be no real progress in this nation. There must be greater guarantees in agriculture than now exist. People flock into the businesses that are remunerative. The tendency is to the cities and away from the farm. The number of tenant farmers in this country is increasing too rapidly. Perhaps half of the farms are now operated by renters and tenants who afford the basis for shifting farm populations concerned but little with the responsibility for sound and healthy rural institutions.

Without organizations of farmers and unity of action among them industry and commerce will get more than their share of consideration from the law-makers in matters affecting the creation and division of wealth. Great corporations are now in existence with insatiable desire for profits. New vast combinations are in the making with ambitions for world trade conquest. International combines are already formed, now a necessary arm to military success, and in them lie the seeds of commercial world-wide domination.

(Continued on page twenty-nine.)


# THIESSEN STOCK FARM

## SWEETWATER, IDAHO

# Registered Herefords



Lady Rex 29th.

BULLS IN SERVICE

The Grand Champion

Prince Rupert 80th

Beau Perfection 26th

**In the LEWISTON SALE** I have listed several good bulls for range service.

**In the PORTLAND SALE** I will offer part of my show herd, including Royal Perfection and Lady Rex 29th, both grand champions wherever shown this season.

**ROYAL PERFECTION** is an outstanding senior yearling weighing approximately a ton.

**LADY REX 29th** is a two-year old, safe in calf to Prince Rupert 80th. I consider her the best female I have ever shown.

**HENRY THIESSEN.** **Sweetwater, Idaho.**

# NORTHWEST LIVESTOCK SHOW AND SALE

## Lewiston, Idaho, November 28 to Dec. 4, Inclusive

### Shorthorn Sale, Monday, December 2

(Under the auspices of the Northwest Shorthorn Breeders' Association)

Sixty head of breeding Shorthorns, in strong breeding condition, both sexes.

JOSEPH TURNER, Sales Manager
Meyers Falls, Wash.

### Hereford Sale, Tuesday, December 3

(Under the auspices of the Northwest Hereford Breeders' Association)

Sixty head of breeding Herefords, in strong breeding condition, both sexes.

L. R. McGEE, Sales Manager
North Portland, Ore.

## Dairy Cattle, Draft Horses, Sheep, Duroc Jersey, Poland China and Hampshire Swine

**Sell on Wednesday, Dec. 4th, Under the Auspices of the Northwest Livestock Association**

# $30,000 in Cash and Trophies $30,000

The show with exhibits worth while.

The place worth while to exhibit.

The place where the best specimens of the various breeds will be found.

An educational opportunity for all, old and young.

This is your show and worthy of your patronage.

If you are in the market for purebred stock of any of the breeds advertised, watch the dates on which the stock you are interested sell and be present, or still better, engage rooms for the week, and see the big show and sales from start to finish.

Rooms may be secured by writing the Lewiston Commercial club. Don't forget the time and place. Time, November 28 to December 4, inclusive. Place, Lewiston, Idaho.

All inquiries cheerfully answered. Address

O. P. HENDERSHOT, Lewiston, Idaho.

# Power, Mechanics and Devices

Of the 1473 county reports which were received by the government bureau of crop estimates, 898 mentioned motor trucks being used in hauling from farms to shipping points. In a large fraction of these counties motor-truck service was just coming into use in hauling products from the farm. There were many more reports of use for light traffic, such as poultry, eggs, vegetables, than for hauling grain. A few reports, scattered from Delaware to the Pacific coast, mentioned the great importance of the light motor-truck service in delivering perishable fruits to shipping points. At least two reporters claimed the truck to be a necessity in their localities to fruit growing on a commercial scale, on account of the long time required for wagon trips and the scarcity of farm labor. In many states, including the north and south central, hogs were hauled preferably in motor trucks on account of the relatively small amount of shrinkage compared to hauling in wagons. Some counties reported hogs hauled exclusively in motor trucks, although these vehicles had not yet come into general use for grain or other products. One of the chief limitations in the use of the truck is the condition of the roads, and several reporters mentioned a beginning of motor-truck use as following closely an improvement in roads. Another hindrange to using motors is connected with the seasonal distribution of farm work. Some correspondents said that after their harvest was over there was no work for their horses to do but haul, and that motor trucks would not be an economy. In other instances, the trucks were reported to have done needed hauling at times when laborers and horses could not well be spared from the farms.

### Efficiency.

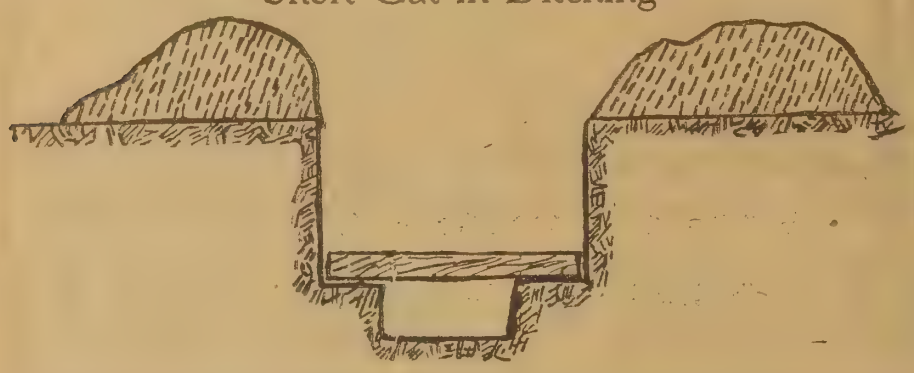
The bravery and simplicity of the native soldiers of India is proverbial in the British army. One of these, in the campaign in German East Africa, was in charge of a railway station, where he was besieged by the enemy. This was the wire he sent to headquarters:

"One hundred Germans attacking station. Send immediately one rifle and 100 rounds of ammunition."

### GOOD TO LIVE IN COUNTRY.

These are days when the farmer and his family may be especially glad of their privilege of living in "God's great outdoors." The city folks, with their "flu" masks look like a Hallowe'en party.

## Short Cut in Ditching



The usual method of making a ditch with cedar rails and cribbings after it is dug, is to lay a row of rails on each side of the bottom of the ditch, each rail held firmly in place against the side with small wooden pegs, and then lay the cribbing on top and fill. If the subsoil is of clay the rails may be omitted by simply drawing in the ditch several inches on each side before the bottom is reached. The banks thus formed will take the place of the rails. The cribbing is then laid in place and filled in the usual way.

C. J. M.


## KING OF THE PONTIACS

Here is the opportunity to get some of this, greatest of all, Holstein blood. We will accept a few approved cows for service by our new herd bull.

**KING PONTIAC SEGIS OF BROOKSIDE, 195818.**

Sired by King of the Pontiacs, Dam Queen Segis of Brookside, a 27-pound daughter of Old Pontiac Clothile De Kol 2d, with record of 37.21 lbs. butter in 7 days. The grandest old cow of the breed. He is also grandson of Prince Segis Korndyke, the sire of high priced bulls, and out of A. & G. Inka McKinley, the dam of King Segis.

There is more 30-pound cows and high priced sire in the breeding of this young bull than any other Holstein bull in the Pacific northwest. Write for illustrated pedigree and terms.

Two or three A. R. O. Holstein cows bred to King Pontiac for sale.

**Also Breeders of Milking Shorthorns**
With milk records behind them. One or two high class bull calves for sale.

**A. V. BRADRICK & SON**
PALOUSE, WASH.



Chief's Gold Mine No. 561727

## Do You Want a Herd Sire?

*See This Great Bull in the Portland Sale*

Chief's Gold Mine is by Chief Goods, considered by many good judges to be the best son of the great Golden Goods. He is of a fine roan color, best of Shorthorn type, great fleshing, gentle disposition and a sure breeder.

He and others of my breeding will be in the **Shorthorn Sale at Portland, December 12.** Look him over if in need of a good sire.

**OLEQUA STOCK RANCH**
GEO. BERTRAND, Castlerock, R. F. D. 2, Wash.

# FOXHALL'S FERN LAD 99378

## A Great Jersey Sire for Sale

This bull was bred by H. F. Probert, Jackson, Mich. He was brought west by Robert Burkhart of Albany, Ore., and topped his dispersion sale, being purchased by the pioneer breeder, Charles Miller of Jefferson, Ore. After Mr. Miller's death he topped the Miller dispersion sale. He is now in prime condition and fit to do years of service. His six daughters in the Register of Merit, and more to enter, make him worth more as a herd sire than ever before.

**Foxhall's Fern Lad** was born October 26, 1910; is solid fawn color with light tongue and black switch. He is a very stylish bull, has a lofty carriage, fine head, good eye, wide between eyes, well-arched, good neck, sharp on withers, fine back, straight and level, good tail setting, broad-hips, large barrel, well-sprung ribs, good deep body, soft mellow skin, brilliant satiny coat. He comes from a long line of heavy producers at the pail and churn. This bull has many prize winnings back of him and is himself a great prize winner. Both sire and dam in Register of Merit. This bull headed first prize breeder's show herd at National Dairy Show, 1911. His calves are exceptional, showing remarkable udders and nice, long teats. His sisters are a wonderful lot of producers. H. F. Probert, the breeder of this bull, said: "I consider your bull as desirable a bull as can be bought, and worth several thousand dollars."

**Foxhall's Fern Lad 99378**
sire of
Spozza Foxhall of F. O., 798 lbs. butter at 3 years, 9 months.
Foxhall's Melia Nancy V, 767 lbs. at 3 years, 7 months.
Foxhall's Sunbeam, 639 lbs. at 4 years, 1 month.
Green Meadow Fern, 382 lbs. at 2 years, 1 month.
Spotsie Fern Fox, 376 lbs. at 1 year, 10 months.
Foxhall's Nancy Figgis, 348 lbs. at 2 years, 3 months.
(Above records and all others in this pedigree, 85 per cent butter.)

**Foxhall's Jubilee 76944**
Sire of
Foxhall's Variella, 846 lbs. butter.
Foxhall's Carola, 812 lbs. butter.
Foxhall's Sig-Mardag, 767 lbs. butter.
Foxhall's Oxford Kate, 722 lbs. butter.
Foxhall's Crown Princess, 704 lbs. butter.
Foxhall's Signalome, 685 lbs. butter.
Foxhall's Sweet Rose, 673 lbs. butter.
Foxhall's Pretty Princess, 653 lbs. butter.
Foxhall's Sirona Croton, 611 lbs. butter.
A bull of exceptional quality and beauty, backed by the best-producing blood of the breed. Grand Champion bull Mich. State Fair and West Mich. State Fair, 1911. Shown at National Dairy Show, Chicago, 1911, in the greatest ring of Grand Champion bulls ever shown in one ring. Winner of A. J. C. C. special gold medal, 1911. His daughters are a wonderful lot of great producers; all have the best of udders and teats and are beauties of excellent type.

**Fern of Florence 2d 205059** .....
In Reg. of Merit. Over 600 lbs. butter and over 10,000 lbs. milk in 10 mos., 54 lbs. milk, 3 lbs. 6 oz. butter in 1 day; 357 lbs. milk, 21.42 butter 7 days; 1554.1 lbs. milk, 92.52 butter in 1 month. A prize winner. Dam of 1 in list and 2 bulls heading 1st prize Breeders' Show at National Dairy Show, 1911.

**Flying Fox's Foxhall, Imp. 61435** .....
Sold for $2500. Selected by committee of the A. J. C. C. and sent to the St. Louis test barn, 1904, to breed to many of the cows at the great test. A splendid show bull. Sire of Mermaid's Tiona, test 16 lbs. at 23 mos. Full brother to Flying Fox's Creampot, churn test 20 lbs. 2 1-2 oz. butter from 315 lbs. of milk.

**Blossom of Florence 164108** .....
In Reg. of Merit. In St. Louis test herd. 278.75 lbs. butter from 4906.3 lbs. milk in 120 days. 412.84 lbs. butter from 7560.3 lbs milk in 187 days. On the last day of the test she milked 41.4 lbs and made 2.89 lbs. butter.

**Jubilee's Crown Prince 64383** .....
In Reg. of Merit. 8 tested daughters. Dagmar of Florence, 621 lbs., 11,074.4 milk; Fern of Florence 2d, 586.1 lbs., 10,100.8 milk; Mab's Crown Princess, 511.3 lbs., 9150.85 milk from 3 quarters.

**Fern of Florence 164625** .....
In Reg. of Merit. 650.5 lbs. from 9650.5 lbs. of milk. 25.9 lbs. butter in 7 days. Grand Champion Ohio State Fair. 1 daughter in Reg. of Merit.

**Champion Flying Fox, Imp 61441** ...
Champion over Island, 1899. Sold at auction for $7500 in same sale three of his heifers in first calf averaged $933. Sired many noted daughters.

**Golden Lad Creampot, Imp. 162061**...
1st over Island and Blythwood bowl winner, 1900-1, beating many Royal winners, although only 4 years old.

**Jubilee of Bois d'Arc 29041** .....
The greatest butter sire in the Signal family.

**Variella of Florence 111427** .....
In Reg. of Merit. 584 lbs. from 7972.64 lbs. milk at 12 years old. 258.7 lbs. butter from 384.5 lbs. milk in 120 days. Churn test 15 lbs. 11 oz. in 7 days at 3 yrs. old. Dam of 3 full sisters in Reg. of Merit.

**Jubilee of Bois d'Arc 29041** .....
In Reg. of Merit. 28 tested daughters, 16 with large yearly tests.

**Vida's Crown Princess 76010** .....
16-9 in 7 days, 67-13 1-2 in 30 days. Dam of 1 in list; 2 producing sons.

**Jubilee of Bois d'Arc 29041** .....
In Register of Merit. 28 tested daughters.

**Anselma 2d 92814**.....
Dam of 3 great cows: Fern of Florence, 25-8; Fairy of Florence, 18-9; Anselma Signal, 21-1.

For want of room, the fourth generation is omitted from above pedigree. It includues Golden Fern's Lad, Golden Lad, Ethlecl's 2nd Jubilee, Fancy's Landseer and other great foundation bulls, besides several of the great foundation cows of the breed.

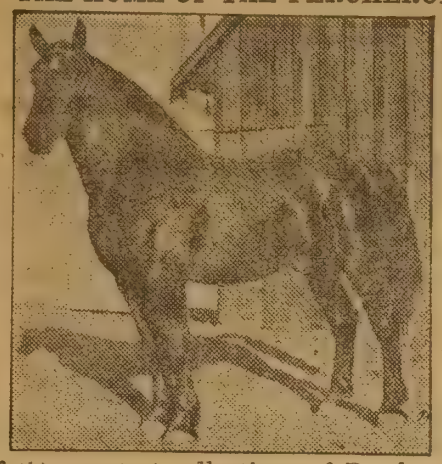
Write us for any further information, also for prices on a few Register of Merit cows.

**FOX BROS., SILVERTON, ORE.**

# STALLIONS AT RIGHT PRICES

Always found at
THE HOME OF THE PERCHERON

"Francis C,"
No. 116,927,
Weighs
2100 Lbs.



First Prize 2 Year Old and Grand Champion Percheron Stallion at Yakima Valley Horse Breeders' Assn., Toppenish, 1917.

I have one of the greatest collections of Percheron stallions in the Pacific west, rich blood lines, splendid quality, magnificent size.

**17 Beauties to Select From**

Before you buy come or write for terms.

**WILLIAM T. TRACY, Kennewick, Wash.**

# Stallions and Jacks

We can show you more big TON imported and native bred
PERCHERON, BELGIAN AND SHIRE STALLIONS
AND MAMMOTH KENTUCKY JACKS
than any other **two firms** in the northwest. Many of the stallions in our barns are winners at the Chicago International and the leading western shows. Come and make your choice. Our prices, terms and guarantee will suit you.

## S. METZ & SONS

Commercial Barns, Pendleton, Ore.
See our exhibit at the Lewiston, Idaho, show Nov. 7-13.

# The Northwest Shorthorn Breeders' Association

Will hold its Annual Fall Sale of

# REGISTERED SHORTHORNS

## At Lewiston, Idaho, Dec. 2, 1918

During the Northwest Live Stock Show.
The offering consists of

## 35— BULLS —35
## 31—FEMALES—31

Selections have been made from the following breeders:

| | |
|---|---|
| Day & Rothrock Co. | A. D. Dunn. |
| W. J. Townley. | G. W. De Lay. |
| W. H. Leonard. | E. H. Harper. |
| W. G. Cordiner. | H. D. Wester. |
| Joe Turner. | Jas. H. McCroskey & Son. |
| H. L. Summers. | W. Hoover. |
| University of Idaho | |

Catalog mailed on request.

Geo. A. Gue,
Harry C. Cranke,
Auctioneers.

JOE TURNER,
Sales Manager.
Meyers Falls, Wash.


In answering advertisements please mention this paper.


# HERCULES SHORTHORNS

Herd Headed by

Gainsford Perfection 442173
Undefeated Grand Champion of Canada 1914-15

Imported Doune Radiance
and Hercules Villager



Breeder's young herd, winners at Spokane, Walla Walla and Boise, 1918, will be exhibited at Lewiston Nov. 28-Dec. 4, and Portland, Dec. 9-14

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## HERCULES STOCK FARM, Sprague, Washington

Owned and Operated by Day & Rothrock Company, 205 Exchange Bank Bldg., Spokane, Wash.

# West Side Silos Are Well Filled

## Best Silage for Years Is Reported From Various Parts of the Coast Section; Dry Season Has Been Followed by Wet Fall




PORT ORCHARD, Kitsap County, Wash., Nov. 7.—Farmers in this county are generally reporting a very successful season just passed and are in good shape to begin another next year. Harvest has yielded a normal return. Prices received for farm products have been above normal and farmers have experienced very little, if any, difficulty in disposing of their produce. The hay crop is short in the county, and many dairymen have been forced to dispose of some of their cows. The best corn silage crop was harvested this season that was ever known of. Every silo in the county was filled and farmers are reporting splendid quality of silage from them all. Frosts have held off remarkably late here. Some corn in a field was noticed last week as being untouched by frost, and the dairyman was feeding from the field as if it was in early fall season. Planting is progressing in good manner. Dry weather delayed plowing for a while, but everything is moving along now towards a big acreage to be seeded this season. Prospects for farmers in this county going over the top in food production for next season are good. C. B. SPRAGUE.

SHORT OF SILAGE FOR FEED.

RAINIER, Thurston County, Wash., Nov. 9.—We have had a warm fall and it was dry well up into October. Then one extreme follows another—for three or four weeks now there has been lots of rain so it is hard to get the grain in. There has been lots of seeding done and there is still some to put in if it will let up raining long enough. The weather is mild, grass is growing and dry stock can get most of their living in the pasture. Considerable wheat for this section will be put in this fall. The last season was so dry that a number were short on material for silage, but those who put up some silage find it helps out in the feed situation. Many do not have silos. It is well to prepare from now on for that crop of silage if you have not already done so. Sow some vetch and wheat, roots and peas, and prepare the ground for a corn crop, also try to have a good patch of cow kale. I have some very large plants of cow kale for green feed. A few cow horn turnips are good to mix in with hay and straw. All this takes work, but to run a farm and have enough for the stock to eat and make anything out of it, it takes work. I think farmers in this coast country, where the land will permit, should sow early and not wait for late spring seeding. L. F. DAVIS.

INCREASE GRAIN ACREAGE.

OLYMPIA, Thurston County, Wash., Nov. 9.—From about 75 per cent of the threshers reports of the total amount of grain threshed in Thurston county is 10,923 bushels of wheat from 971 acres, 42,108 bushels of oats, 1057 bushels of barley, and 4190 bushels of rye. The 1918 acreage of wheat was greatly increased over that of 1917, but the average yield is fully one-third less than that of last season. This is due to the very unfavorable weather conditions during the early growing period. There has been a considerable increase in acreage of fall seeded grains this season over last. Nearly all of the locally-grown fall wheat has been disposed of to local farmers. C. H. BERGSTROM, County Agent.

RAIN IMPROVES ROADS.

NEPPEL, Grant County, Wash., Oct. 31.—The condition of the average farmer, considering the poor crop of wheat in the dry sections, is fairly good, as all have been able to get some fall wheat to sow. Some are not taking any chances, thinking it too dry yet. In irrigated sections the crop has been all gathered and fair prices received and farmers are looking forward to increased food production next season. The labor situation is anything but satisfactory and the only remedy is to import Chinese coolie labor, as the average American will not work at farm labor at a profit to the land owner. If the labor can not be obtained the food prices will soon be so high that a lot of people will do without it if they have not got the price. The stock feed problem is one of the main drawbacks with the stockraiser and is going to decrease the live stock production for the next three years, as the stockers that have been sold and shipped out have brought a low price—3 to 5 cents a pound. This has discouraged the main part of the farmers in raising small flocks and the tendency is to raise only what they need themselves. This condition has been brought about by the unbalance of prices, brought on by war conditions and high cost of production. Alfalfa is being baled and shipped to local points. The rain has improved roads so that people in the wheat sections are able to take their wheat in and return with a goodly supply of potatoes and vegetables and fruit from the Moses valley. MARTIN PENNHALLICK.


# The Pacific International Holstein Sale

## Portland, Oregon

**FRIDAY, DECEMBER 13, 10:30 A. M.**

If you are interested in Holstein cattle you must not pass this great show and sale by. I believe the consignments are the finest lot of individuals, well bred and in calf to WORLD'S GREATEST SIRES, ever offered in a western sale. The consignors speak for this assertion. The cows are young, either heavy in calf or fresh. The heifers are heavy in calf. Young bulls of splendid breeding. All tuberculin tested and consigned by the greatest breeders in the west, viz.:

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# Study the Shorthorn Entries

## At Lewiston, Idaho, Nov. 28 to Dec. 4

## and Portland, Oregon, Dec. 9 to 14.

Shorthorn breeders from Oregon, Washington, Idaho, Montana and other states will have exhibits and will afford a remarkable opportunity for ranchmen and farmers to make a study of improved types. It is the **pure bred Shorthorn sire** that is working improvement wherever used. Steers by Shorthorn sires recently topped the market at Chicago, making the **record price of $19.60 per cwt.** Another load of Shorthorns had made the previous high record of $19.50. It was a **Montana shipment, two loads of Shorthorn steers,** that sold earlier for 18c per pound, the **world's record price for range steers** on the open market. Shorthorn steers recently made the highest record at the St. Louis and Kansas City markets and Shorthorn steers have repeatedly won the car-lot championship at Portland, Salt Lake City and Denver.

As the grade Shorthorn is more profitable than the scrub, so the pure bred Shorthorn is more profitable than the grade. There's a swinging back to the Shorthorn in the ranch country as well as in the corn belt.

Don't forget the **International at Chicago, the first week in December.** The most important Shorthorn sale of the year will be held in connection with this great show.

The Shorthorn exhibit at the **California Live Stock Show, San Francisco, November 16 to 24,** will include the pick of western breeders and some of the best blood of the Shorthorn world.

If you are in the market for Shorthorn breeding stock this association will be glad to assist you in locating them through its free service department. Address, at any time,

# The American Shorthorn Breeders' Association

13 Dexter Park Ave., Chicago, Ill.

# Northwest Live Stock Show

## *Has Been Entirely a Home Talent Affair*

By E. J. IDDINGS.

One of the really effective and potent agencies in the development of the live stock industry of the northwest has been the Northwest Live Stock show at Lewiston. This show has been entirely a home-talen affair, conceived, built up and maintained by public-spirited stockmen and business men of the states of Montana, Idaho, Washington and Oregon. The original founders and most influential factors have been a score or more of men located for the most part in the Inland Empire section.

In addition to uniqueness so far as sponsors is concerned, fathered by men of little experience in such matters, but men imbued with the idea and the ideal that such an institution might stand for and attain, the Lewiston show, as it is commonly designated, though it belongs to the entire northwest, is notable for another thing. There are no side issues, no amusements, no carnival—even the bronco, the wild steer and the professional buckaroo have not been featured.

The whole program is live stock. The lesson taught is that of diversified farming, the value of good breeding and good feeding, the true meaning and significance of the pedigree. Yet another feature has been of marked importance, as many visitors have testified. The young people have always been given attention at Lewiston. The show is not only for adults, but has for a fundamental ideal the direction of the minds of the growing generation into constructive channels of thought and attitude in regard to the northwest's biggest business, that of agriculture. The opening day is set aside for the judging contests for college men, high school students and farm boys and girls. Last year at Lewiston something more than 160 young people representing many different sections of at least three of the northwestern states took part in these contests.

The writer has been fortunate in being able to attend each of the annual exhibitions of the Northwest Live Stock show, from the first little affair held on the old fair grounds at Clarkston to the record-breaking exhibition of last year, which unquestionably ranked in importance with the half dozen leading live stock shows of America. Year by year higher standards of excellence have been reached, until the original dream of the founders has become a reality in the wonderful culmination of yesterday and the very great promise of tomorrow.

Why speak of tomorrow? Because the end is not yet, and greater things are in prospect. Even though the past has been a fine record, the future is even more alluring. Our energetic and hustling secretary, O. P. Hendershot, tells us that in value of premiums set forth for the stockman in the premium list the show at Lewiston ranks third among the 1918 shows of America. This year, for the first time, in several different sections of the premium list, cash prizes are offered to eight places. This offers a special inducement for the man with the smaller herd and for the man new to the show ring. The big fellow may take the biggest prizes, but he can not take all the cash awards.

One who has not had the opportunity to become acquainted with stockmen farther removed from the railroad can hardly appreciate the great constructive work of the northwest Live Stock show. The writer was privileged a few days ago to take a trip to the Joseph plains section, something like 50 miles from Grangeville. Some of the most ardent supporters of the Lewiston exhibition have come from this district. Many good Hereford bulls have gone to this great cattle-growing section, unquestionably as the direct result of the show and sale.

Something like two years ago a rancher came to the University of Idaho and picked out a small purebred Poland China boar and pig and ordered it expressed to a station in the central portion of Idaho. This pig was taken from the express office and carried in a hack 60 miles into the interior section, where purebred pigs had not gone before. This ranchman had seen the Poland Chinas at the Lewiston show the year before and realized that such hogs would mean money for his home section.

These are only isolated instances of a great impetus for live stock improvement that has come out each year from the show grounds at Lewiston.

The early financing of the show was difficult. The burden rested almost entirely upon public-spirited stockmen of the northwest and the business men of Lewiston. The 1917 Idaho legislature made a reasonable appropriation, and a way has been found to legally obtain help from the city of Lewiston and Nez Perce county. The stockmen expect more support from the 1919 Idaho legislature, and plans are under way for substantial aid from other states. Great is the field of work and undoubtedly great is the future of this wonderfully effective agency for live stock upbuilding and improvement.

The 1918 dates had been set for November 7-13. It did not seem safe, however, to rely upon a lifting of the influenza quarantine by that time. The new dates, therefore, are November 28 to December 4. All danger of influenza should be past by that time, and the weather will undoubtedly still remain good at Lewiston. The later date should be equally as satisfactory for the exhibition of breeding stock and should be even more favorable for the sales of Shorthorns, Herefords, purebred sheep, swine and other live stock.

Immediately following the show at Lewiston the Pacific International will open at Portland, continuing during the week of December 9-14. This makes for the stockman a circuit of two large shows with only a moderate ship between. Those who want a larger circuit may first take in the California shows early in November and still be able to return to the northwest and make both Lewiston and Portland.

There will be stock-judging contests and other special features for the young people. There will be assembled great herds of horses, beef and dairy cattle, sheep and swine. Among the visitors will be the most progressive stockmen of the northwest. Lectures and demonstrations will be given by men of national reputation and influence. Sales will send out purebred live stock potent for herd improvement, and the entire week at Lewiston will be dedicated to features that mean for progress in the live stock industry. Those interested in the live stock business can not afford to miss such an event.

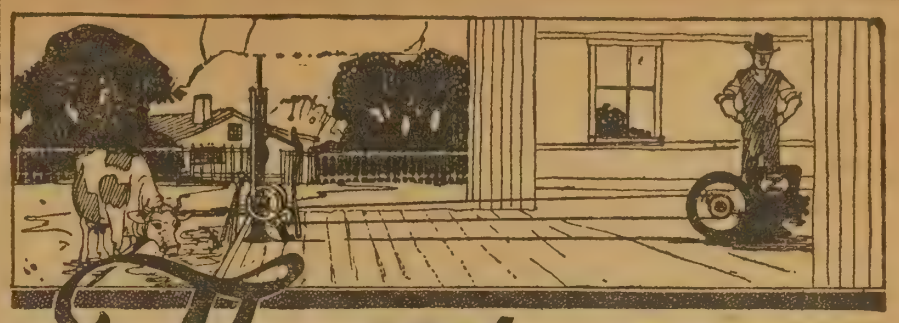
## Raises Big Mangels

C. A. Cram, whose farm is on Indian prairie near Spokane, has on exhibition in the window of the Inland Seed company of that city a Mammoth Long Red mangel wurzel that is in truth mammoth. It weighs 19 pounds and is as excellently formed and proportioned as the average mangel of one or two pounds weight.

In addition to the size of this root it is especially notable that it was grown without irrigation and without rain from the time it was planted until harvesting. The soil on which it was grown was strictly first class and was to some extent, so Mr. Cram reports, subirrigated by nature.

While the specimen on exhibition was Mr. Cram's most notable one, from the standpoint of size, he reports an excellent yield of first-class roots from his entire patch. They were from local grown seed, furnished to Mr. Cram by the Inland Seed company. A number of persons who have seen the big mangel have made an interesting calculation as to the possibilities of root-crop tonnage, if mangels were grown the size of this one. They were in rows three feet apart and a mangel to each foot in the row, and it would mean more than 135 tons per acre. At the time this sample was put on display it was stated that one producer had just sold his crop of mangels at more than $20 per ton, which would make a gross revenue of $2700 per acre on this mathematically-grown crop. It was likewise pointed out that an acre of the roots one-half or even one-fourth of the size of this one would produce a good profit at even half the quoted price.

That growing large root crops is something of a family trait is indicated by the fact that Israel Fink, father-in-law of Mr. Cram, has on exhibition beside the big mangel an Oxheart carrot weighing three and a fourth pounds. It grew in a patch of less than a city lot in Spokane which yielded about two tons.

The Engine Selected by over 150,000 Farmers

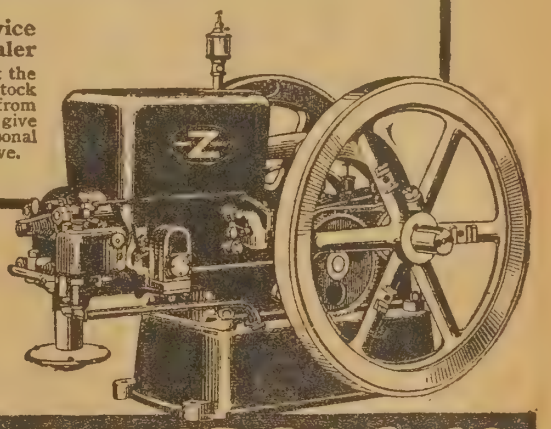
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Demand, as they did:

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A. B. NYSTROM, Editorial Contributor.

## KEEPS CLOSE RECORD.

### Has Weighed Every Milking of Every Cow for Five Years.

Joe Iddings, a progressive dairyman of Okanogan, Wash., weighs every milking of every cow and has done so for five years. He has preserved his milk records and now he keeps no cow that will not produce at least 200 pounds of butterfat with her first calf and 300 pounds at maturity.

In 1913 Mr. Iddings purchased 10 2-year-old and five yearling grade Holstein heifers. He secured a purebred Holstein bull of George Hill & Son breeding, of Wisconsin. He has used registered bulls ever since. His present herd sire, Sir Bonheur Johanna Fayne, was purchased from J. T. Compton & Son of Wenatchee, Wash. He is of Monroe breeding and goes back on both sides of Grace Fayne 2d's Homestead, for many years the accredited queen of the breed.

By careful breeding as well as careful feeding and weighing, Mr. Iddings is making money dairying, in spite of numerous disadvantages and some poor crops. Mr. Iddings uses a patent churn and butter worker that runs by power. He makes and sells butter and has built up a reputation for his products.

When I was at Mr. Iddings' place six of his 15 cows had been milking for over a year. Seven freshened in September. He makes his own milk sheets, on which the dairy records are kept. H. A.

## AS TO VETCH STRAW.

To the Editor: I would like some information as to the feeding value, palatability and milk-producing quality of vetch straw.—A. S. R., Oroville, Wash.

So far as I know there has been no feeding test made comparing vetch straw with other roughages. However, vetch does not differ a great deal in composition from pea straw, and feeding tests on the latter show it to have a very high nutritive value. With ordinary hays, such as alfalfa and clover, selling at from $30 to $35 per ton, I think it will be wise to use some vetch straw if it is fairly clean and can be obtained at a reasonable price. It possibly will depend upon how it has been cured and how free it is from dust. Using oat silage as succulence, vetch straw would supplement the ration very nicely.

A. B. N.

# VETERINARY

By DR. S. B. NELSON.

**Heifer is ailing**—I have a young Jersey cow. She came fresh in June. She seemed all right for about a month or more; gave one gallon of milk at a milking, and made four pounds of butter per week. Then she acted as though she were sick and didn't chew her cud. We gave her a rag and she chewed again, but seemed to fail and went down in her milk. Now she gives one-half gallon to a milking, and she acts as though she had a cold in her head, blows or sort of coughs when she comes in from the pasture. She was on the hills all summer. Now she is in a clover field. When we give her mangels, etc., sometimes she eats them and then again she won't. Can you tell me what the trouble is? We have no veterinary anywhere near here or no way of testing her milk. T. B.

Kellogg, Idaho.

Give the heifer six ounces of raw linseed oil once daily for several days, after which begin giving her one-half ounce of compound tincture of gentian in a pint of water once daily. She should have this latter treatment for a week or 10 days.

**Eruption on Pig's Neck**—We bought a pig which is now about 4 months old. This pig is apparently in good health, eats well, etc. We feed shorts and vegetables cooked with a little salt. Has comfortable and clean quarters, and is regularly fed. Within last few days there has been a breaking out which scabs over, more noticeable around neck, but also has eruptions on other parts of body. What do you think is the trouble and can the pig be treated so as it will be safe to eat the pork? A SUBSCRIBER.

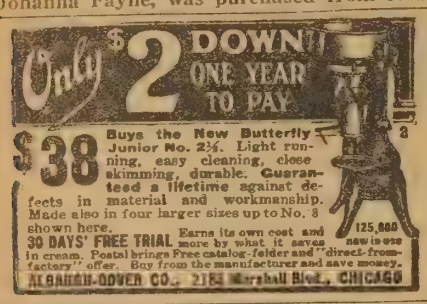
Newport, Wash.

I can not make a definite diagnosis of the trouble affecting your pig, and would suggest to you that you have your local veterinarian see the pig and examine it. In the meantime you might try the following: Take nitric acid one part, water, six parts. With a glass rod or stick apply a drop or two on the affected parts, treating the tissue under the scab quite thoroughly. Do not get it on the well tissue.

**Cow Gives Bloody Milk**—We have a 4-year-old Holstein cow that has given birth to two nice calves. Her present calf is 5 months old. Since the last calf she has given bloody milk, not all the time but at intervals of perhaps a month to six weeks. She is a very good cow and gives about 12 quarts at a milking. Has the best of alfalfa pasture all the time. What can we do for her? Is there any cure? Is the trouble serious? We do not use the milk, of course, during the time it is bloody. This condition usually lasts about 10 days. Is there any place in Oregon where I could send her milk to have it tested? She is apparently in perfect health. There are no bruises of any sort on her udder. I do hope you can tell us what to do for her, as she is quite a good milker and we would like to keep her if we can cure her or find out the trouble. A. E. J.

Ione, Ore.

I think you could possibly have the milk from your cow tested at the Oregon Agricultural college. Write to Dr. E. T. Simms, professor of veterinary science. In the meantime you might give your cow a teaspoonful of hyposulphite of soda in a pint of water once daily for a week to 10 days. Watch her digestion very carefully and if possible give her a light purge of either oil or salts, if that seems to be necessary.




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Present-day prices for dairy products are making dairymen everywhere think more about the milk production of their cows.

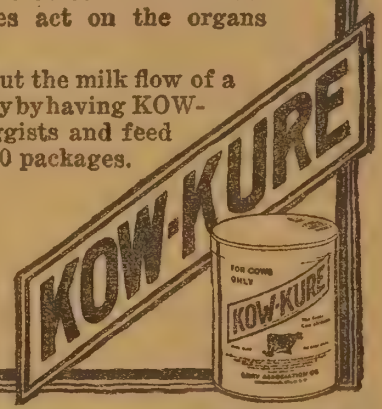
The "poor-milker" is usually non-productive because of some disorder of the digestive or genital organs that is sapping at her health and strength. Even apparently slight troubles of this nature usually lead to more serious ailments so common among dairy cows, such as Abortion, Retained Afterbirth, Barrenness, Scouring, Bunches, etc.

A sick cow should be treated like a sick person—with medicine that will correct the trouble. Kow-Kure is the most valuable and best known remedy for the prevention or treatment of cow ailments because its medicinal properties act on the organs where disease originates.

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THE LAWRENCE WILLIAMS CO., Cleveland, Ohio

LIVE STOCK NOTES
Write to the Editor.

E. J. IDDINGS, Editorial Contributor.

# Draft Horse

## Has Yet a Future on the Farm

By E. J. IDDINGS.

The emergency of the last couple of years has given a highly favorable opportunity for the growth of interest in mechanical forms of power for use on the farm. The various makes of tractors have had powerful organizations behind them, and have to the fullest taken advantage of the opportunity afforded. As a result, the tractor has been advertised as a means of speeding up work on the farm, as a means of doing more than might be done with horses and as a vehicle through which service might be rendered to the nation in connection with its program for making war.

As a result of the work of all of these influences the tractor has obtained greater attention and has made greater progress in securing the interest of the public than might have been possible during a much longer time had the nation been at peace.

Those interested in the live stock producing industry are naturally wondering what effect this increased public interest and popularity of the tractor has had and will have on horse breeding. The writer is of the opinion that there has been a lessening of interest in the problems of horse breeding. There has probably been less of a disposition to buy the best of stallions. There has been somewhat of a careless attitude in the selection of a stallion for use on the mares of the farm, and in general there has been a lack, in some districts at least, of a highly ambitious attitude to breed only the best of mares to the best of stallions, with the idea of securing constantly better horses for public service.

Many men may not feel that this point of view is correct, but it seems probable that the unprecedented sale of tractors has been unfortunate for the horse business, and, in many cases, has been, to say the least, of no advantage so far as the future of a tractor is concerned. First of all, many farmers have felt that it would only be a question of time until horses would no longer be in demand, and have taken less pride and paid less attention to their horses than formerly. So far as the tractor is concerned, it has been sold to some men, undoubtedly, who will never make a success with the tractor, and in the enthusiasm of the moment has been taken by many men who have thought that it would do much more than it can ever hope to do. Many men will be disappointed, naturally, in the result, and if they come back to horses they will undoubtedly need to start at the bottom and build up a horse supply anew.

That the tractor has a future can not be successfully questioned. Many of the most enthusiastic horsemen of today are recommending the tractor because it will do some heavy work and save the horses thereby. It will work in the busy season and supplement the horse power on the farm, and its use for belt power is also an important factor on a large number of farms. The unfortunate thing is that many men think that the tractor can entirely supplant the horse and can work at any season and on almost any farm. There are undoubtedly many farms of the west that will never successfully operate tractors.

It will be many years, if at all, before the horse is other than the biggest source of power on the farm. It will be many years before good horses will not be in widespread demand.

It is probably not wise to depend too strongly on foreign demand, but there will be an unquestionably heavy call on America's home supply as soon as real peace is declared. Only the other day there was loaded from Canada a shipment of 23 purebred Percheron mares and one stallion, consigned by the Bar U ranch, of Alberta, to England. This is the first shipment of purebred horses ever sent to England from the American continent, and in the opinion of many horsemen it is only a forerunner of a large number of shipments to Europe. Some of the most prosperous and substantial horsemen of the corn belt claim to have already booked orders for a large number of horses to be sent to France, Belgium and other European nations.

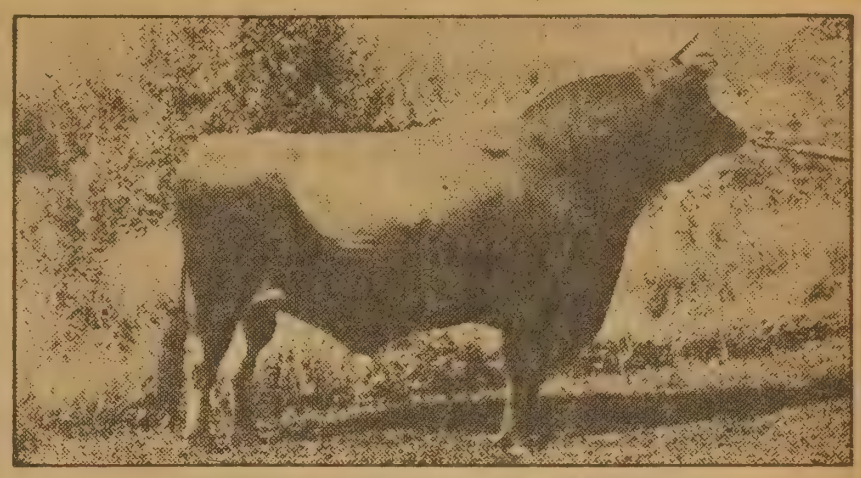
The horse is with us and has a future. What constructive measures may we take in the immediate future? One thing is certain, and that is that small, ill-formed, unsound and mongrel types of horses will not be in demand when normal times have returned. The demand will be for the fit, for the well-bred, for the sound; and the premium will go to the man who is producing that class of stock.

There has been much said in regard to size, both in favor of extreme size and against it. Unquestionably, one can get horses a little too large for use on the average farm. On the whole, however, the premium is for size, and where we can have balanced conformation, quality and soundness, increased size means a more ready sale and increased money. Along with the readjustment of our horse business for the future, we need a lot more attention to the kinds of stallions that stand for public service. In practically all of the states of America something like one-half of all the stallions standing for

(Continued on page twenty-eight.)


# Waikiki Farm Jerseys

## "Home of the Pilots"



COUNT'S FOXY LAD OF WAIKIKI.

A grandson of Pilot, Grand Champion Bull Spokane, 1917-18. His sire; Golden Winners Count, has five daughters in the Register of Merit. His dam, Eminent's Foxy Belle, stands second in her class in America with 14,907 lbs. milk, 816 lbs. of butterfat in one year.

## Largest Jersey Herd in the Northwest

"Production with type," our motto.

**Herd Sires:**

Count's Foxy Lad of Waikiki 142803 (see description under cut).

Model's Pilot of Waikiki 152038, Junior Champion, Spokane, 1917. Sire, Golden Winnie's Count 105789. Dam, Pilot's Model, Champion Senior 2-year-old Jersey of the West. Register of Merit record with first calf, 12,639 pounds milk, 618.2 pounds butterfat. With second calf, 16,080 pounds milk, 744 lbs. butter fat. Grand Champion cow, Spokane, 1918.

Our foundation cows are equal to the best in America. Register of Merit records up to 901.79 pounds of butterfat in one year.

Write for illustrated booklet. Several young bulls of excellent breeding for sale.

Waikiki Farms. Spokane, Wash.

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## 60—HEAD—60

### Percheron, Shire, Clydesdale and Belgian Stallions and Mares

We are confident and fully believe that you will find here a GREATER, LARGER and BETTER selection of the FOUR principal draft breeds than can be found in any stable in the Northwest, and on the most LIBERAL TERMS, and we know that if you will visit our barns that you will find our prices within the reach of any one wanting a stallion, and that you will save considerable money, believing that we are in a position to make you prices that DEFY COMPETITION, and a GILT-EDGED BREEDING GUARANTEE with every stallion sold. Write us your wants. Will pay buyer's fare to our stables.

**Colfax Blue Ribbon Stud, Colfax, Wash.**

To My Many Friends and Patrons:
My Consignment of



## *Stallions and Jacks*

will reach my barn December 1. The horses are Percheron, Shire and Belgian with size and quality the best to be had.

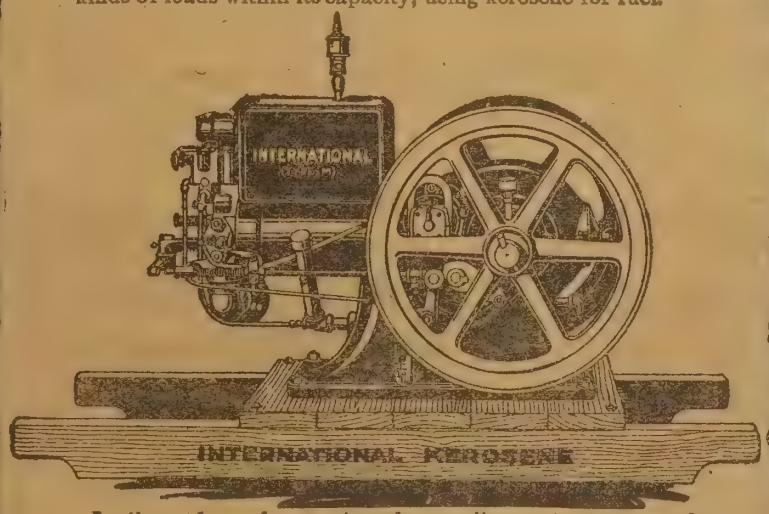
Six registered Mammoth Missouri Jacks, 15½ to 16½ hands high—real jacks—comprise my jack order.

Write for information and photos.

C. W. BROWN, Moscow, Idaho.

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EVERY engine in the International line, from the smallest to the largest, operates on common coal oil. Every International engine will develop its full rated horse power, at all times and under all kinds of loads within its capacity, using kerosene for fuel.




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We have all sizes, from 1 to 15-H. P., with a special line, the **International Type M**, in 1½, 3, and 6-H. P. sizes. Here is a line of real farm engines that no farmer can afford to overlook when he is in the market for an engine. See your local dealer or write to us for complete details.

**International Harvester Company of America**
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*Washington, the home of the Pathfinder, is the nerve-center of civilization; history is being made at this world capital. The Pathfinder's illustrated weekly review gives you a clear, impartial and correct diagnosis of public affairs during these strenuous, epoch-making days.*

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**The Pathfinder, Box 89, Washington, D.C.**

POULTRY

Write to the Editor.

JAMES DRYDEN, Editorial Contributor.

# A Hen Mash

## Compounding Is a Work of Art

I have a letter asking how to make a good mask for laying hens. I think the writer means mash, but the word "mask" has been on everybody's mind, if not on his nose, so much lately that the mistake was a very natural one.

The compounding of a good hen mash is a work of art, if not of science. It means a study of the hen's digestive requirements, of the hen's likes and dislikes, of the composition of foods, and of the market values of foods. The purpose is first to compound a mash that will tickle the hen's palate and the owner's pocketbook at the same time. Those two things don't always go together. Some of our popular breakfast cereals if seasoned with sugar and salt and soaked in cream would be a very tempting dish for the hen; it would be palatable, and it might produce the eggs in abundance; but it would not tickle the pocketbook. The cost would be so great as to eat up the profits. Many mashes are fed that fail to give results in profits just because they cost too much. The fact is that the cost of the foods must be figured on in compounding feeding rations if a profit is to be made, and then a study must be made of the composition of the foods and their hen palatability.

The food must have a certain composition to give certain results. Eggs are made from the food eaten by the hen, and we can not expect eggs from food that does not contain the materials of which eggs are made. Then, again, the foods may have the right food composition. The proteins, carbohydrates, fat and minerals may be there in proper proportions and yet the food may not be palatable and the hen will not eat it in right amount.

The three R's are—palatability, composition and cost. As to palatability, the taste of the hen is susceptible to education, like humans. In the middle west states, or the corn states, the farmer says his hens won't eat wheat, while in the west states, the hens won't eat corn. That is not because one grain is more palatable than the other; it is because the hens have been "brought up" on one grain and have not been used to the other. They are both palatable when they are used to them. The human who has been brought up on the corn mush does not like porridge until he goes through a process of training in a Scotch family.

There is, however, a difference in palatability of grains. Corn and wheat might be given a rating of 100 per cent palatability, while rye would probably be 50 per cent. Fowls can not be taught to eat rye greedily. Barley is another that is not very palatable, say 70 per cent, and oats 85 per cent. This refers to the whole grains. When ground and mixed in a mash they will eat them better.

As to composition of the mash or ration, there must be a balance between the proteins and carbohydrates and fats. A ration of all corn would be too fattening and the fowls would not lay many eggs on that ration, and in time they would die if they had no other food. Bran and shorts are higher in protein and help to balance the corn, and yet that is not enough. There must be meat scrap or some other form of animal food to make the proper balance. Buttermilk or skim-milk will balance and render more efficient the corn. And then to aid in the assimilation or digestion of the food there must be some bulky or succulent food, such as kale, cabbage, clover, or alfalfa.

Now, as to a formula for a mash, would suggest the following for a wet mash under present conditions in most sections of the northwest:

Mill-run (mixed bran and shorts), four parts by weight.
Ground corn, one part by weight.
Mix with buttermilk or skim-milk.

If ground corn is not available at reasonable price, use ground oats or ground barley. If mill-run is scarce, use half as much of it and add one-half part of alfalfa meal, and increase the ground corn one-half part. If cocoanut meal or linseed meal can be had at reasonable price, add one-half part to any of the mixtures. Use fine dairy salt at the rate of one-third pound to 100 pounds of the dry mash.

If a dry mash is to be fed, use the same ingredients and add meat scrap or fish scrap at the rate of 15 per cent of the weight of mash. This makes the mash more palatable and the fowls will eat more. If a wet mash is fed as above, keep a hopper of beef scrap before the fowls all the time. If plenty of milk is available, no meat scrap will be needed, but it will be better not to give water to drink so they will drink more milk and thus supply the need for animal food.

Where good alfalfa meal can be had at reasonable price, it will be well to use it in the mash all the time, giving a little at a time at first till the fowls learn to eat it. J. D.

### THE BREEDING MALE.

It is a good time now to secure the breeding males for next season. Most of the good males will be sold before another month.

The male is half the flock, and often he is more than half. If he happens to be a pedigreed male from trap-nested stock of good layers he is worth considerably more than half the flock if the flock has no particular breeding. By mating a male from high-producing stock to poor layers or average layers, the progeny will average considerably higher than the dams in egg yield. This is the easiest and cheapest way to improve the laying qualities of the flock. A male from high-producing, trap-nested stock is worth $5, or $10, or even $20, where the one from average-laying stock is worth only $1. By all means, begin now planning for increasing the egg output a year from now by securing good breeding males. J. D.

### DISTRIBUTE THE FERTILIZER.

Time should be taken to haul the manure out to the fields or garden patches as it accumulates, not after it has stood for months in a big, over-heated pile. It has much greater fertilizing value and is less of a nuisance.

**Chickens Sick?—Use Germozone**
Roup, colds, bowel troubles, sore head, limber neck, etc. At dealers or postpaid 75 cts. with 5 book Poultry Library. GEO. H. LEE CO., Dept. 421 OMAHA, NEB.

*Ike always thought*



—a man was foolish to buy plug of the Gravely class when he could get a big plug of ordinary tobacco for the same money. But one day Bill gave him a chew of Gravely—just two or three small squares. Then Ike got the pure, satisfying Gravely taste. It lasted so long, you can't tell him nowadays that it costs him anything extra to chew Real Gravely.

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PEYTON BRAND
Real Gravely Chewing Plug
*each piece packed in a pouch*
P. B. GRAVELY TOBACCO CO., DANVILLE, VA.

In answering advertisements please mention this paper.



Beauties, Aren't They?

WATTLES RED, feathers smooth and even, eyes clear and alert. Such a flock is a big asset in this time of record-price eggs. Proper feeding is absolutely essential for the insurance of highest egg production.

LILLY'S Scratch Food

Contains all the correct grains, in right proportions, with all the dust and chaff removed. Insist on Lilly's—don't experiment—always the same standard quality.
For a food high in protein qualities—an absolute necessity for success—feed

LILLY'S High Protein Egg Mash

Look for Lilly's trade mark on every sack—all reliable dealers can supply you.

LILLY'S Established 1885

SEATTLE PORTLAND






GRANVILLE LOWTHER,
Editorial Contributor.

## Northwestern Ideals

### Great Industry Needs Great Plan

The following was published in these columns many months ago under the heading "Our Purpose in the Northwest," and over the signature of Granville Lowther, editorial contributor to the orchard department of this paper. It sets forth an ideal worthy the great fruitgrowing industry of the great northwest:

**OUR PURPOSE IN THE NORTHWEST.**

"To grow as good fruit as can be grown anywhere on earth, and better than most sections can grow.

"To have roads so good that we can haul as much at one load as we now haul in two, and do it with more comfort.

"To encourage the preservation of the forests so that these forests will hold the snows that furnish water for irrigation, and thus prevent floods in the lower valleys by sudden melting of the snows and the rushing waters toward the seas.

"To be broad enough to see the good in all countries with no less love for our own.

"To be just enough to acknowledge the rights of others, even when they conflict with our own.

"To become so well organized that we can obtain our rights if others fail to grant them.

"To grow a class of men and women who will be noted for their excellence of character, as our fruits are noted for beauty.

"To make our homes places of health, happiness and love.

"We know this can not be done in a day, a month or a year; but if we hold the ideal steadily in mind we shall be surprised at the rapidity of approach toward it."

**FOOD SAVER**

Big money maker for vegetable and fruit growers, farmers, dealers and consumers. This is the best and cheapest saver in the world. Write for further information. Representatives wanted.

**New-Way Drier Company**

Humboldt Bank Building, San Francisco, Cal.

***Incomes for All***

The U. S. government, in order to secure competent men and women, is providing good incomes for its employes. No "influence" is required—no "pull."

**IT REQUIRES PROPER TRAINING ONLY**

The same is true of employment in business offices.

How to prepare? Our Nineteenth Annual Catalog tells. Ask for it.

**NORTHWESTERN BUSINESS COLLEGE**

National Accredited School.
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2317 Howard St. Spokane, Wash.

**Franquette Walnuts**

35c per pound, 35 nuts to the pound

**One Cent Apiece**

That is what our 12-ton crop of nuts is worth this season. Some people think it takes a lifetime to develop a profitable walnut orchard, yet we have a 75-acre, 6-year-old orchard that bore three tons, and one 8-year-old orchard in Oregon averaged 20 pounds to the tree.

These two splendid orchards and 90 per cent of the successful walnut orchards of Oregon are plantings of trees from our nursery. Get your trees from us. Wholesale and retail. Write for prices.

GRONER & McCLURE.
Hillsboro, Oregon.



**Eldridge-Buick SAMSON**

GMC

SIEVE-GRIP

**TRACTORS**

Uplands, bottoms, peat, volcanic ash, dobe—it makes no difference. The Samson Sieve Grip Tractor works in all of them.

Ask for booklet, "Better Farming."

**Eldridge-Buick Co.**

Seattle. Spokane.

## Omak Fruit Growers

### Represent 3000 Acres of Orchard

By HORACE ADDIS.

The Omak Fruitgrowers, incorporated, with headquarters at Omak, Wash., in the Okanogan valley, has about 150 members. It represents about 3000 acres of orchard, mostly in early bearing age. They own a big packing and storage plant and operate it on the cooperative plan.

The packing house is 98x140 feet and the warehouse 50x200. The latter is built of tile, with two inches of cork insulation, making it safe for any kind of weather. It is probably as thoroughly equipped with every modern appliance as any plant in the west. An automatic grader drops each apple in front of the packer using its size. It never makes a mistake. Rollers carry the filled box by gravity from the men who nail on the covers to the car, where they are loaded. A similar device carries the boxes in from the wagons as they are unloaded. Five per cent of each wagonload goes to the grading room (also by a conveyor), and from this sample the grading of the crop is done.

Twenty-five thousand boxes of apples were piled up in the warehouse waiting to be graded and packed. Between 15,000 and 20,000 more were packed and ready for shipment. Car shortage has delayed shipping a little and space was beginning to be a problem when I was there. About 50 people were at work and, although the many labor-saving appliances reduce the work, this was not a full crew. A number of those employed are growers.

To build and equip the plant, stockholders paid a membership fee of $25 and $10 per acre for their orchards. This was in either cash or notes. Notes are liquidated annually at so much per box, as a sinking fund. The charge last year was 4 cents per box. The stock is not issued until $10 a share is paid. Growers are charged pro rata for the expenses of packing and shipping. Earl Barnhill, the manager, says the association has been a great benefit and has caused prices of at least 25 cents a box higher than for cash at the home market here and elsewhere in the valley.

This year the association will ship about 175 cars of good marketable apples, which is only half what the crop would have been had there not been a shortage of water. The varieties grown are Winesap, Jonathan, Delicious and a few Winter Bananas. The last named have stood the shortage of water far better than any other variety.

About 100 cars of apples will be shipped from Omak in addition to those sent out by this association.

## Chief Destroyer

Building up and pulling down are normal conditions. Even the pyramids are not eternal; nor are the mountains; nor are the boundaries of the seas; nor are the establishments of men.

Pride is the chief destroyer of human institutions. That pride goeth before a fall is basic. Knowledge begins to crumble as pride enters. Be it school, or church, or legislature, or pride in arms—all are doomed just to the extent that pride rules them. Arbitrary power breeds its own destruction.

Absence of pride makes the name of Abraham Lincoln immortal. His memory will be cherished when even the proud military genius of Napoleon becomes a discard.

"Nerve" is much desired, to be able to "put one over" is highly prized, and yet there is a day of accounting, even unto the third and fourth generation.

Pride goeth before a fall, and many ever ride to that fall. Perhaps this gives the other fellow a chance. Perhaps this is the way that balances are kept. Perhaps this is the way that ultimate justice is meted out. Perhaps these are the negative and positive poles which guide and control human history.

**CATERPILLAR**

Reg. U.S. Pat. Off.

**"TRADE MARK REGISTERED"**



Over 10 years ago Ben Holt, founder and president of the Holt Manufacturing Company, invented, designed and took out patents on a traction engine with an endless track. For as long before he had already been building round-wheel tractors. Some of them had wheels each 18 feet wide—necessary to provide a big enough surface on the ground to prevent slipping, and to keep the tractor from sinking into or packing soft ground. But when he built the endless track Holt quit building round wheels.

This new tractor, that laid its own track, rolled over it and picked it up again, was named the "Caterpillar," and the name adopted and registered by the Company as a special trade-mark. The Company registered the trade-mark and filed nearly a hundred patents in almost every country on the globe. No one has a right to use that term without this Company's consent, either as a trade-mark or in description or advertisement of any self-laying track, or vehicle using a self-laying track, not of Holt manufacture.

Don't say "Kodak" unless you mean the Eastman Camera—don't say "Vaseline" unless you mean Cheseborough's petroleum jelly—and *don't say "Caterpillar" unless you mean a bug or a Holt machine.*

**Order your 45 or 75 "Caterpillar" Tractor this fall for early spring shipment, otherwise it may be impossible to obtain a delivery.**

**THE HOLT MANUFACTURING COMPANY**

[Incorporated]

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STOCKTON, Cal. P. O. Box. 679.
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REGISTERED AND PEDIGREED JACKS, JENNETS, PERCHERON AND SHIRE STALLIONS AND GAITED KENTUCKY SADDLE HORSES

Largest Importer in the United States

**Four Good Jersey Cows**

Three in Register of Merit

All Safe in Calf to Moose o' Fernwood

Moose o' Fernwood is of the great Owl and Interest families and carries over 50 per cent of the blood of three cows with records of over 1000 lbs. 35 per cent butter, including Spermfield Owl's Eva, 1168 lbs. He is undoubtedly the greatest butter bred Jersey bull in the west. One calf from him will be worth more than the price of the dam. All four cows are solid golden fawn color. $600 will buy the four, or will sell singly. Part time, if desired, with good security.

A few Jersey bulls by this great sire, ready for service.

**ROBT. L. BURKHART** Albany, Oregon

**ECONOMY STOCK POWDER**



fed regularly to sheep will keep them free from worms. It also acts as a tonic, a laxative, a blood purifier and as an aid to digestion can not be improved upon. Will eliminate BLOAT and ALL AILMENTS COMMON TO SHEEP.

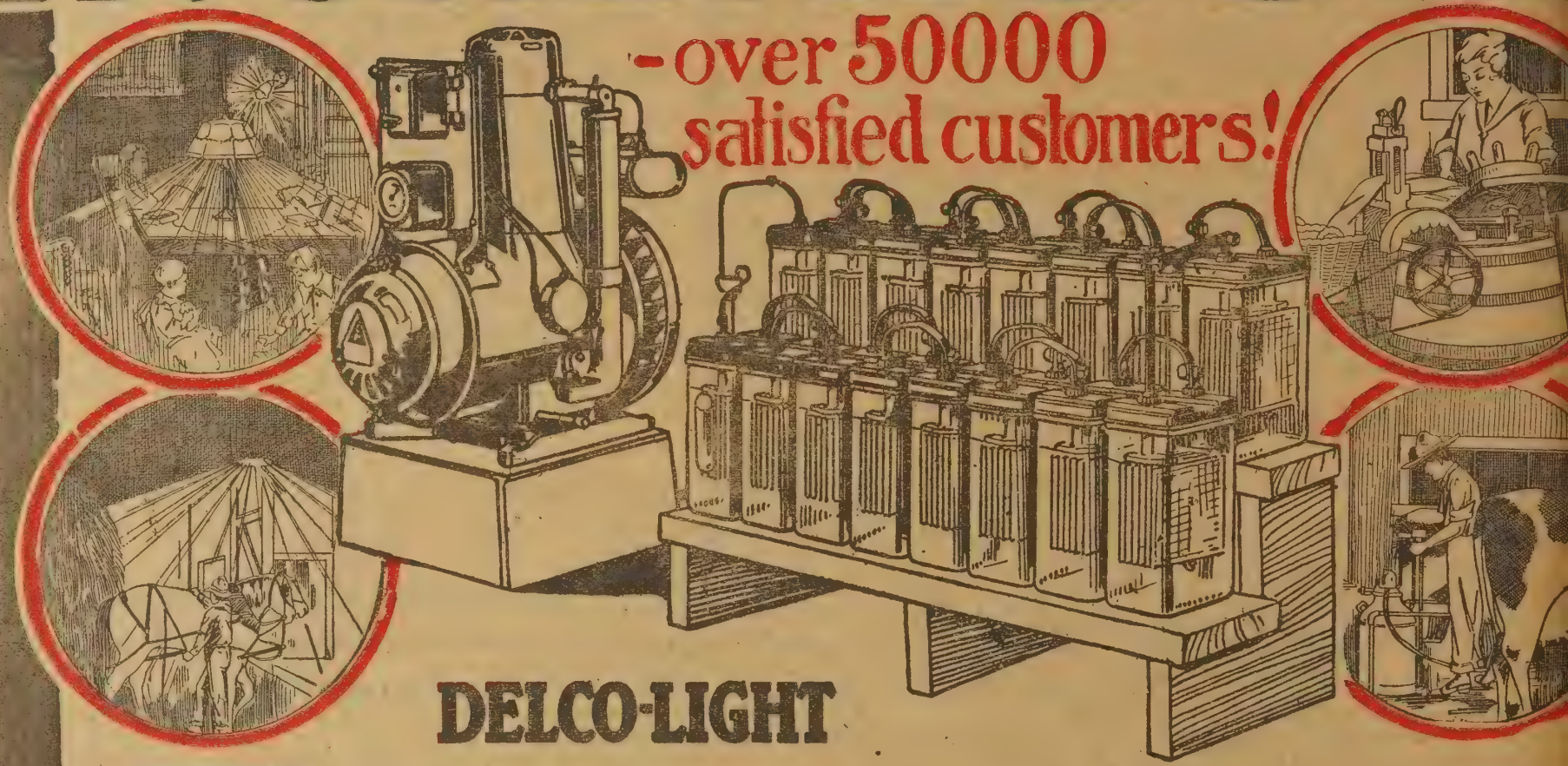
SEND FOR A FREE SAMPLE.

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Hearst Building. San Francisco, Cal.

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## DELCO-LIGHT

DON'T you want to make the farm yield more with less work—and less help—increasing profits?

**THE DELCO-LIGHT BOOKLET WILL TELL YOU HOW. MAIL THE COUPON RIGHT NOW.**

How many thousand rubs has your wife given the washboard in the last year for the lack of modern equipment?

**YOU NEED DELCO-LIGHT!**

You buy all kinds of farm machinery to help do your work; most of it used only from three to thirty days a year. Why not provide modern machinery for the wife?

**GET DELCO-LIGHT — IT WORKS 365 DAYS A YEAR.**

More power means more progress. It means more comfort and convenience in the home; more time to do the important things—freedom from the little things that just take time and can be done with a chine.

**GET THE DELCO-LIGHT BO LET RIGHT NOW AND SEE H DELCO-LIGHT WILL HELP KEEP THE BOYS AND GIRLS HOME AND MAKE THEM T PROSPEROUS PRODUCERS THE NATION.**

A man working continuously on a farm six day week puts in 2300 hours a year. How would you to save 1000 to 1500 hours on your farm per year?

**THE DELCO-LIGHT BOOKL WILL MAKE THE WAY EASY, A THAT BOOKLET IS YOURS F THE ASKING.**

How would you like to do your productive work daylight and the winter chores by electric light?

**THEN SEND FOR THE DEL LIGHT BOOKLET TODAY.**

# Modern Appliar

## 508 First Avenue, South. (DISTRIBUT

# LIGHT
# RM PROFITS!

ow many times did you have to use the lantern winter? Do you realize that every time you used lantern you were endangering your property from ?

**DELCO-LIGHT MEANS SAFETY AND FIRE PREVENTION ON THE FARM. THE BOOKLET WILL. TELL HOW.**

## DELCO-LIGHT
## WATER SYSTEM

ow many tons of water did your wife carry last r?

**IF IT IS YOUR PURPOSE TO GUARD HER HEALTH AND STRENGTH AND ADD TO HER COMFORT AND HAPPINESS YOU SHOULD PUT IN A DELCO-LIGHT WATER SYSTEM. THE DELCO-LIGHT BOOKLET EXPLAINS.**

low much has it cost you in labor to pump water hand in the last year?

**THAT COUPON DOWN BELOW IS AWAITING YOUR SIGNATURE. IT COSTS YOU NOTHING BUT A STAMP TO FIND OUT ABOUT DELCO-LIGHT WATER SYSTEM**

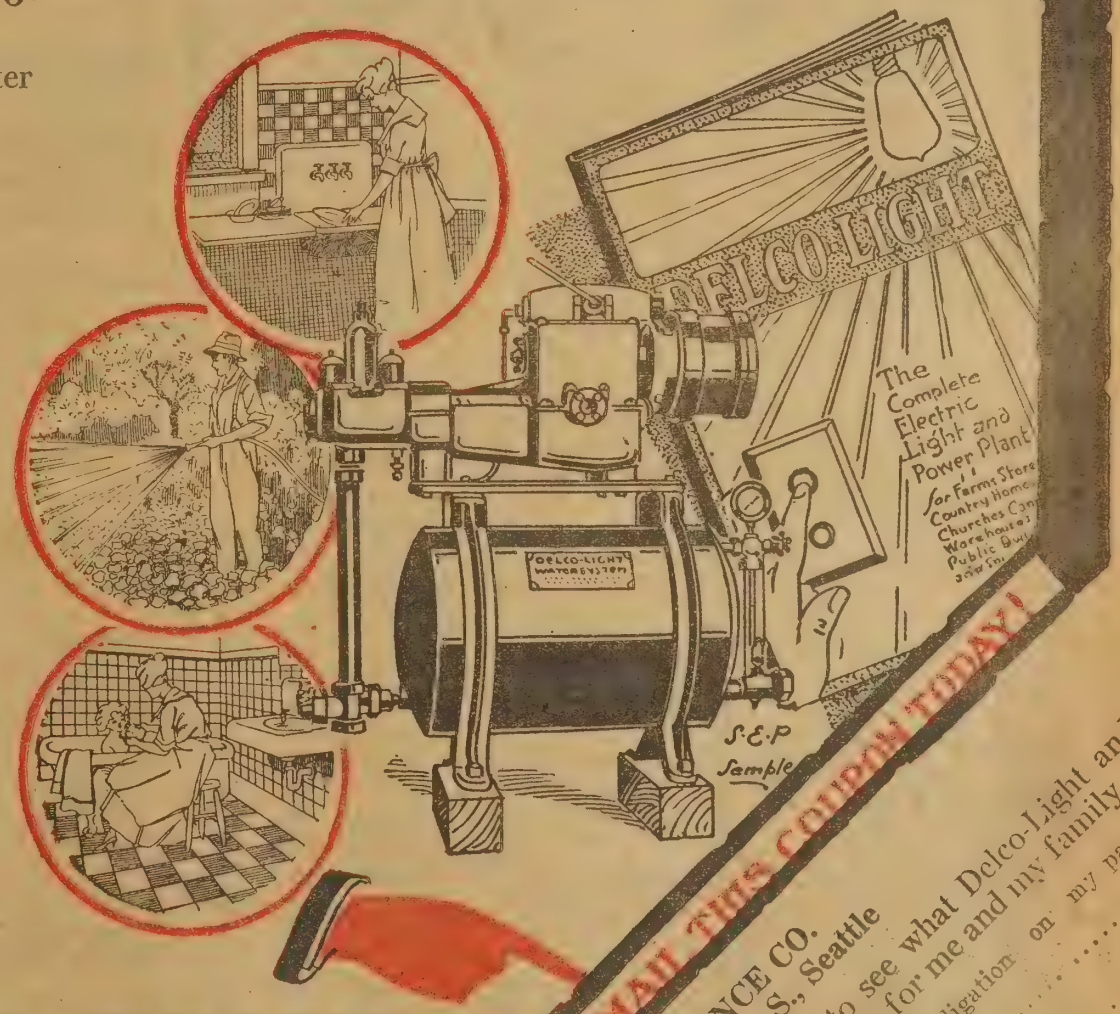
***Think of the extra farm profits 50,000 satisfied Delco-Light users are getting. Mail the coupon without another hour's delay.***

We want you to have the DELCO-LIGHT booklet without the slightest obligation on your part. Just mail the coupon.

***No investment you have ever made can equal in dollars and cents the returns that a Delco-Light and Power Plant will bring you. By reason of the tremendous number of Delco-Light and Power Plants manufactured the price is so low as to be within reach of every farm owner.***

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**R. F. Weems,** Hotel Leopold, Bellingham.
**Big Bend Motors Co.,** Ritzville.
**Central Implement Co.,** Uniontown.
**Chas. E. Flagg,** Electric Terminal Bldg., Spokane.
**Alex McDonald,** 701 South Naches Ave., Yakima.
**Gale Partridge,** 115 South Second St. Walla Walla.
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I want the Booklet to see what Delco-Light and Water System can do for me and my family.
Please send it without obligation on my part.
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# e Company
) Seattle, Washington

# WORLD FARM FACTS — WHEAT

There are eight important distinct wheat growing regions in the world.

1. The plains of south Russia and the Danube valley.
2. The countries bordering on the Mediterranean.
3. Northwestern Europe.
4. The central plains of United States and Canada.
5. The Columbia basin of the United States.
6. Northwestern India.
7. Argentina.
8. South Australia.

Europe produces about 50 per cent of the world's wheat and consumes about 60 per cent.

The Russian Empire leads the world in both acreage and production of wheat, but owing to the low yield per acre, her lead in production is slight.

In Europe, France is second to Russia in both acreage and production of wheat. Notwithstanding this, France consumes about 14 per cent more wheat than she produces.

Italy is the only country where a large wheat region is located in rocky land. About one-fourth of the crop is grown on land classed as mountainous; one-half on hilly land and only one-fourth on plains.

The United States produces one-fourth of the world's wheat, ranking next to Russia among the wheat-growing nations, and in some years exceeding that country in production. From one-fourth to one-eighth of the United States wheat crop is exported.

Manitoba and Saskatchewan have more than three-fourths of the wheat acreage of Canada.

Argentina ranks fourth among the nations of the world in wheat acreage, but eighth in production.

Wheat ranks third among the crops of India following rice and the grains sorghums, but occupies less than 14 per cent of the land in crop.

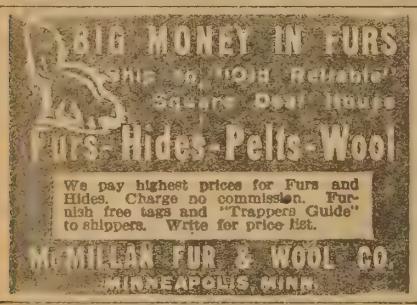
Australia leads in the production of a crop land in wheat, 57 per cent; ranks tenth in acreage and eleventh in production.


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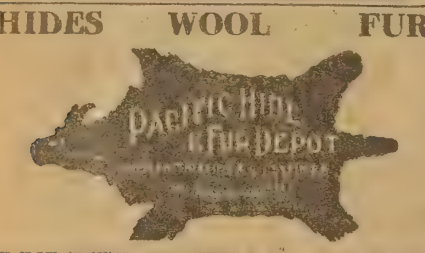
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## When Is Fur Prime?

There is only one excuse—a poor one for all concerned—for trapping too early. The excuse is, of course, that some other trapper may get ahead of you.

But where the trapper hasn't any competition—on his own farm, for instance—or where an agreement can be reached to wait, the taking of furs at the right time will bring far larger returns.

In a great many cases inexperienced trappers get out too early because they are not quite sure when the various furs are prime. Hence the following may enable no inconsiderable number of trappers to make more money out of their work this year.

Skunk are prime in the north toward the end of October; south, toward the end of November. They depreciate about the middle of March.

Mink is best during November to the end of January in the north and in December and January in the south. The fur depreciates during February.

Muskrat is fair in the fall, when trapping is, of course, easiest. But the prime fur is taken in the period from mid-winter to March. A good condition may be expected in the north up to about the first of June, while the similar date in the south is about the first of April.

Opossum in the north becomes prime toward the middle of November and remains good until March. In the south the prime fur comes about the first of December. It depreciates somewhat earlier than in the north.

If you are after raccoon in northern territory, you will find the fur prime about November 1st. The time is a little later for the south.

Fox, speaking generally, is prime in northern territory from the first of November until the middle of March. For the south the period is from the last of November to the beginning of March.

It will pay trappers handsomely to concentrate their efforts upon the periods when furs are prime.

By having plenty of traps and making every possible preparation to work vigorously during the right season is the way to get the most out of trapping.

BIG feeders of live stock are coming more and more to look upon the silo as almost indispensable and it is not taking much of a venture in prophesying to predict that in the coming days it will be pretty hard to find a feeder without a silo.

Feed for stock means feed for our people and to fully conserve this feed for stock the silo is indispensable. What kind of a silo to have, what kind of crops to grow to put into the silo are questions which every farmer must decide for himself after obtaining all the information he can on the subject.

Have you had any experience with the silo? Tell it to other feeders of live stock through the columns of THE FARMER. Send along your letter. Write to the Editor.


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Bull No. 801, 7 days milk, 502.6 lbs.; butter, 26.62 lbs.; average test, 4.2% B. F.
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## Removing Honey

### How to Take It From Bee Hives

To the Editor: I would like some information about how to take honey out of bee hives. J. W. H.

Port Angeles, Wash.

George W. York, formerly editor of the American Bee Journal, who has contributed a number of articles on bee keeping to our columns, has kindly answered the above question as follows:

It is a little difficult to reply to your request, as you do not say whether the honey is in the usual square so-called one-pound boxes, or sections, or in the large extracting frames. Perhaps I would better give directions for removing both kinds of honey, and then you can select the suggestions best suited to your own case.

If the honey has been stored in the little one-pound boxes then it probably is in the super or supers directly above the brood-chamber of the hive. In such case it is well to have a bee-escape board to insert between the brood-chamber and the super containing the surplus honey to be removed. Putting in the bee-escape board should be done about 24 hours before you want to remove the super from the hive. At the end of that time the bees should all be out of the super, having gone down into the brood-chamber, when the super with the surplus honey may be taken into the house and removed, and the hive-cover be put over the brood-chamber.

But if the honey to be removed is to be extracted, the same procedure can be followed as to the use of the bee-escape board, being sure that the queen-bee of the colony is below in the brood-chamber. (If there is sealed brood in the surplus honey super, then the queen is very likely in the brood-chamber already.)

After removing the super containing the frames of honey to be extracted, the honey can be thrown out of the uncapped combs with the usual honey-extractor, and the empty combs be returned to the hive for refilling by the bees, provided this is done during the honey-flow. Still, it is much the best to leave the honey in the hives until the close of the season, as the honey will be better ripened then, than if extracted as soon as the combs are sealed over during the honey-flow.

If there is anything in this reply that is not clearly understood, or if there are any other questions to be asked by yourself or any other bee-keeper who is a reader of the Idaho Farmer, I will do my best to supply the information desired. But I can not urge too strongly that everybody who wants to be successful with bees, should possess not only one of the several bee-papers devoted to bee-culture, but should have at least one of the standard bee-books published in the interest of all progressive bee-keepers.

## Sorghum Growing

### Kentuckian Starts It in Oregon

By H. H. BUSHNELL.

Seven years ago John A. Prior came to Oregon from Kentucky, and his greatest craving was for sorghum. He had been used to it and it furnished the sweet that his system wanted and needed. But he couldn't find it locally and there was very little to be had. What there was had been shipped over the mountains.

Last year Mr. Prior, who lives at Umatilla, in Umatilla county, Oregon, decided that he would make an effort to gratify his own palate and help his neighbors as well. He went out among the farmers and made a proposition to them; if they would grow some sorghum he would furnish the seed and buy a portable mill. When it was ready he would grind it and evaporate it.

He made the same proposition to them as that in force in Kentucky—he would take a third of the sorghum as pay for the work.

"I had trouble in getting the seed," he said. "I finally bought seed in California. I prefer the early orange, but had to take early amber. The farmers didn't know me and they were slow about taking hold. Some agreed to take a little and try it, but few of them put much time and effort on the growing. I had the promise of about 15 farmers and they raised anywhere from a little garden patch to as much as three-quarters of an acre. Altogether there was about seven acres in a territory which I covered, about three miles wide and 10 miles long.

"I went around and ground the cane and altogether turned out about 600 gallons of sorghum. The quality I find is as good as that anywhere and I think the quantity would be as good as any if as much care were taken.

"The seed companies advise planting three to four pounds to the acre. My own experience is that this is too much. I advise to sow in drills three and a half feet between the rows and with plants from six to eight inches apart."

**Women Agents in Washington.**

Several women in the state of Washington are working as station agents on the various railroads.


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# What Makes Your Mouth "Water"?

By DR. LEONARD KEENE HIRSHBERG, A. B., M. A., M. D.



Dr. Hirshberg.

"Ah-h, that makes my mouth water," you say, as you sniff the aroma of a juicy steak on the gridiron. If your mouth really "watered," it is one thing. If the fragrant vapors urged your dilated nostrils to flash a message to your gourmand of a stomach and incite an appetite there, that is another thing.

When your belt is loose, your alimentary canal slim and vacant, and your muscles lean and tense, the tang of fresh bread or the smell of roast beef may literally invoke saliva to form in your mouth and hydrochloric acid and pepsin in your stomach. So when you aver that your "mouth waters," you understand only that you are a bit greedy and desirous to have a taste of what you see or smell, irrespective of real hunger.

Actual hunger from a long interval without food, such as an enforced fast or starvation, will at the sight, smell or taste of food arouse the digestive glands of the mouth to pour forth saliva and the peptic acid glands of the stomach wall to spout gastric juices in anticipation of the needed feast to assuage the famished tissues.

### Effects of Emotions.

Contrary to this "mouth-watering" state of alimentary affairs is the dry mouth of the victim of stage fright. Just as pleasure and happiness are apt to inaugurate an extra amount of saliva and gastric juice, so fear and grief check their output to the extent of causing a dry mouth and a hungerless stomach.

The stellar role played by those physical whips and mischief-makers, the emotions, upon the productive tissues of the animal anatomy are perhaps nowhere emphasized more than in the tears, saliva and gastric juice.

The effect of the emotions on the stomach is indicated when many persons tell you they prefer "home cooking" to hotel and restaurant meals. It is the glow and satisfaction, the joy and contentment of the family circle and the motherly and family associations of the home which help the digestive juices to do more than their part.

### A Household Contrast.

Home cooking "tastes good" because the excitement, worry, rush, annoyances, business problems and other irritations are all left behind in the balmy comfort of the home.

On the other hand, the mother and housewife seldom eats her own cooking with zest or pleasure. Her mouth does not "water" for the treasured delicacies her son or husband would travel miles to eat. It is because her stomach has "had such a fill" of the odor, tastes and sight of the good things in course of their preparation that she is surfeited with them and can not enjoy them as they deserve to be enjoyed.

It is on this account also that the man of family may wax fat and lazy, while his worried, busy, industrious housewife remains gaunt, thin and spare. The husband enjoys his wife's appetizing meals to the utmost, and his digestive powers need no artificial urging. The very happiness of his home makes his stomach digest and absorb the delectable foods his spouse sets before him.

The wife, however, frets, stews and worries over the kitchen range. These emotions, the very contradictory of the husband's, give pause to her salivary and stomach glands. Because she does not half-digest her rations she fails to take on flesh or to have the good digestion which waits on appetite.

The remedy is plain and is to be found in the facts. It is up to the all-too-comfortable husband to make it easier for his wife.

## WANT NO USELESS CAYUSES.

The authorities controlling the forest ranges in the Molson, Wash., district, are making a campaign to rid the ranges of worthless cayuses that eat up the pastures that should maintain beef cattle or sheep.

# Romance of 20th Century Progress

By N. W. DURHAM

A valuable and pleasant new agricultural industry has developed on the marsh lands adjacent to the mouth of the Columbia, both on the Washington and Oregon shores. Cranberry culture there yielded a crop this year of 15,000 barrels and the wholesale price in Portland is $12 a barrel. The fruit has never been better than this year and the size is excellent compared with the eastern product in every way. The yield on the better lands around the mouth of the Columbia is amazing. One, a Chinook woman, grew this year 100 barrels on a single acre, for which she will receive more than $1000.

One hundred and thirteen years ago the Lewis and Clark exploring party, sent across the continent by President Jefferson, wintered in the vicinity of these present-day cranberry lands. It was then a most desolate appearing country and the hardy little band, the first white men to cross the American continent, were hard pressed for winter subsistence. They were men of vision and daring, but it may well be doubted if their fondest dreams ever anticipated the wonderful changes that have come over that region with the advent of the white man. Through the long, dark winter of 1805-06 Lewis and Clark and their intrepid followers subsisted on salmon, clams, an occasional elk and deer killed in the mountains. If their brave spirits are permitted to return to earth with what keen delight they will look quietly down on the abundant feasts that will be spread on thousands of home boards in the very region that was so wild, so desolate and so forbidding in that dark winter of their sojourn. Oregon-grown turkeys and Clatsop cranberries will be varied with delicacies from the four quarters of the globe. With tea from distant Asia, coffee from Brazil, bananas from Central America, oranges and grapefruit from southern California, rosy-cheeked apples from Wenatchee, Yakima and Spokane, the rich steaks from the herds of the Pacific northwest and nutritious loaves made from the wheat grown upon the vast grass lands over which Lewis and Clark and their heroic followers trudged, ragged and hungry, more than a hundred years ago. It is a contrast that constitutes one of the romances of twentieth century progress.

## POTATOES ON FREE LIST.

A report from Ottawa, Ontario, says that the Canadian government has taken advantage of the reciprocal provision of the United States tariff schedule and placed potatoes on the free list.

## SALE OF OLEOMARGARIN.

### Public Hearing at Washington, D. C., to Consider Definitions and Standards.

F. R. Cammack, Field Dairyman of the extension department of the State University of Idaho, has addressed a memorandum to creameries and cheese factories of his state as follows:

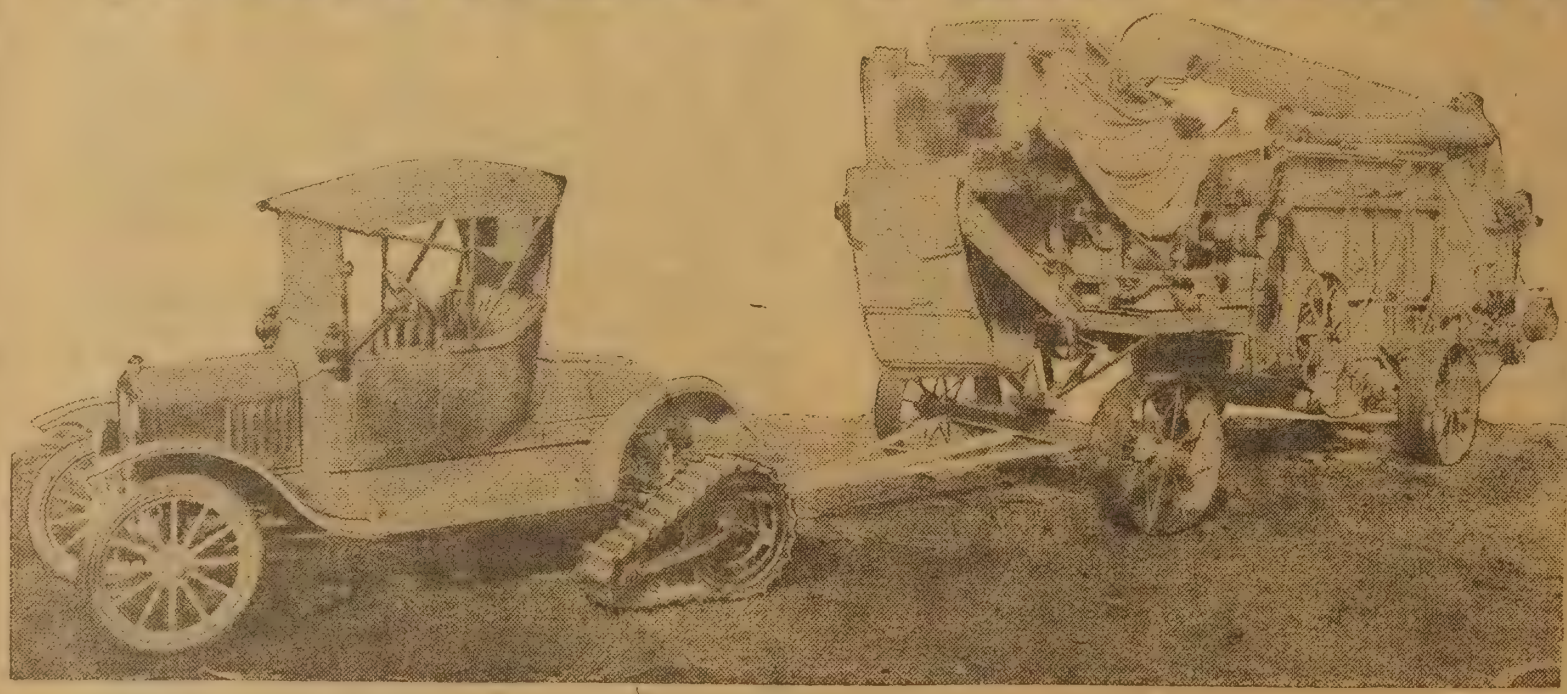
I am sending you a notice which I believe is worthy of your attention. We have in Idaho the foundation for a good dairy industry, but its extension is being hampered by the sale of oleomargarin. I need not inform you that the interests back of this product are constantly alert and subtly trying to discourage the enactment of just laws controlling it. I would suggest that all of you who are interested write to the joint committee on definitions and standards, giving your opinion on this matter. The following letter is self-explanatory:

"A public hearing to consider definitions and standards for oleomargarin will be held by the joint committee on definitions and standards at 10 a. m., December 4, at the bureau of chemistry, United States department of agriculture, Washington, D. C.

"All persons interested are invited to attend this hearing and present any facts that will assist the committee in arriving at correct conclusions on the subject. Those who desire may present their views in writing, on or before the date of the hearing, to the secretary of the committee, bureau of chemistry, Washington, D. C. The hearing will be held at the bureau of chemistry building 216, 13th St. SW.

"The joint committee on definitions and standards is composed of representatives of the United States department of agriculture, the association of American dairy, food and drug officials, and the Association of official agricultural chemists."


# "Catterlouse" Pulls Six Tons



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**FARMERS CAN MAKE MONEY WITH A "CATTERLOUSE"**

This attachment on a Ford car does the work of four to six horses. It sells for $265 f. o. b. Spokane. Subject to change without notice. Why pay from $1500 to $6000 for tractive power when you can convert your Ford into a tractor with a "Catterlouse" for $265. The most practical tractor attachment on the market.

**LIMITED DELIVERIES NOW**

Gallagher & Co., Inc., Spokane, Wash. Nov. 8, 1918.

Gentlemen: "In regard to the 'Caterlouse' tractor attachment purchased from you in January, 1918, will say that I attached it to my Ford car and did the work of four to six horses with it. It pulled two fourteen-inch bottoms and walked right along. I used this machine on my 240-acre ranch, which is northwest of Othello, Wash., and did all my plowing and seeding with same, and did not use a horse on the ranch. We pulled our plows seven inches deep.

"Will say that, in a day's work, the Ford consumed about 9 gallons of gasoline and two quarts of oil. The repair expense on the 'Catterlouse' was very slight—only $10. I am going to do my work with it next season.

"The 'Catcrlouse' attached to a Ford is the best tractive power I have been able to find, especially considering the money I invested in same. My soil is of light volcanic ash, and every farmer knows it takes a self-laying track to pull a load in that stuff.

"One reason for my writing this letter and expressing my satisfaction with your attachment, is that it went out and did the work you said it would.

"Yours truly,

(Signed.) "J. W. CUMMINS,
"1612 Spofford Ave., Spokane, Wash."

*Correspondence Solicited*

Ash and Sinto **GALLAGHER & CO., Inc.** Spokane, Wash.

*MANUFACTURERS*

# Washington Boys in War Service

From The Twice-a-Week Spokesman-Review.



**FAIR L. SNODDERLY, Tonasket, Wash.** — Entered military service March 22, 1918, at Camp Lewis, but later was transferred to Camp Kearny, Cal., and is a member of Company B, medical department, base hospital. Mr. and Mrs. I. R. Snodderly of Tonasket are his parents.



**JOHN BARTELL, Leese, Wash.**—Is a member of the Eighth trench mortar battery, Eighth brigade, at Fort Sill, Okla., and was called to the colors on May 1, 1918. He has been selected for telephone line work. Mrs. Lizzie Crone, his mother, lives on a farm at Leese



**GEO. TREJBOL, Odessa, Wash.**—Entered military service on April 29, 1918, at the age of 23 years. After training two months at Camp Lewis he sailed July 23 for France, where he is now stationed with Company I, 55th infantry. He worked on his father's farm before entering the service.

# Handicraft for Girls

By DOROTHY PERKINS.
(Copyright by A. Neely Hall.)

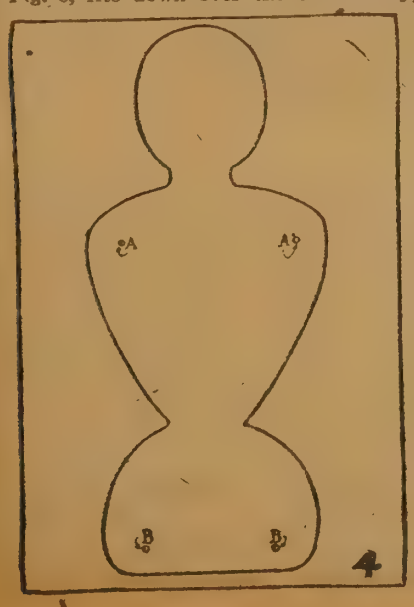
## A DANCING DOLL.

The little dancing doll in the illustration will dance as gracefully as a fairy and keep perfect time to any music you may furnish. All the materials required to make it are a piece of thin white cardboard, a coarse thread and needle, some pink watercolor paint or a pink crayon pencil, four broom straws, and a piece of tissue-paper.

The first thing to do is to prepare the different parts of the doll, and as these are shown natural size in Figs. 4, 5, 6 and 7, they can be cut right out of this page.

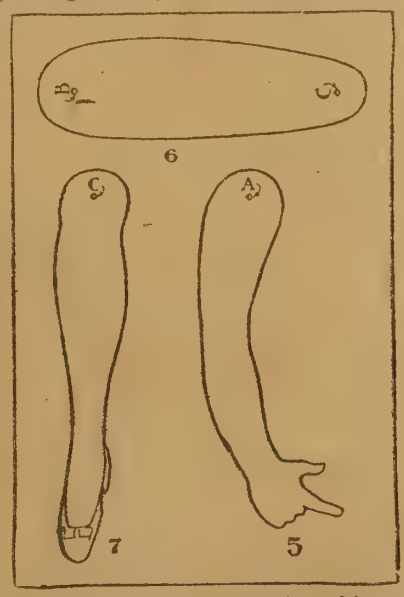



Only one arm and one leg is shown, however, and you will have to use these parts as patterns for marking out the second arm and leg. Paste the paper parts upon lightweight carboard to give them stiffness. To fasten the parts together, pierce holes through them with a pencil point or a hat-pin, at the points A, B and C (Figs. 4, 5, 6 and 7), and join the correspondingly lettered holes with thread, tying a knot on each end of each thread enough larger than the holes to keep the parts from slipping off. Figure 2 shows the doll assembled complete. The circular piece with the center cut out of it, shown in Fig. 3, fits down over the doll's body, resting upon its hips, as shown in Fig. 2. It is cut through on one side to make it easier to slip it over the doll's body. This piece forms the top of the standard which supports the doll while dancing. Pierce four holes through it, near the outer edge, and at equal distances apart; insert a broom straw in each hole, bend over the top, and glue it to the cardboard so it will not slip out. Cut off the lower ends of the straws so they will extend just a trifle below the doll's feet when the doll is stood upon its broomstraw standard.




To dress the doll, cut a strip of tissue-paper three and one half inches wide and 25 inches long; pleat or gather it, and sew it around the doll's waist for a skirt. Then make a waist out of the same material and sew it in place. Cut a pretty head of the right size from a magazine, and paste it to the doll's head; then color the face and arms a flesh pink, and paint the shoes and stockings to match the dress.

When the doll is finished, place her on a piece of cardboard with the end of the cardboard extending over the edge of the table, tap the cardboard with your fingers, and you will be delighted upon discovering how gracefully she can dance. By making several other dolls, using this one as a pattern, you may arrange all upon the piece of cardboard and have a doll's dancing party.




The dolls should not be made to look alike, for the dolls' party, but as different as possible. This will be quite easy to do. A variety of pretty heads will be found by a careful search among fashion pictures and magazine illustrations, and with tissue-papers of different colors to work with, there will be no limit to the number of styles of pretty party dresses that you will be able to devise. Tissue-paper doll dressing is fun, and just the right kind of fun for an afternoon when the weather is too disagreeable for you to play outdoors.

## POTATO CAKES.

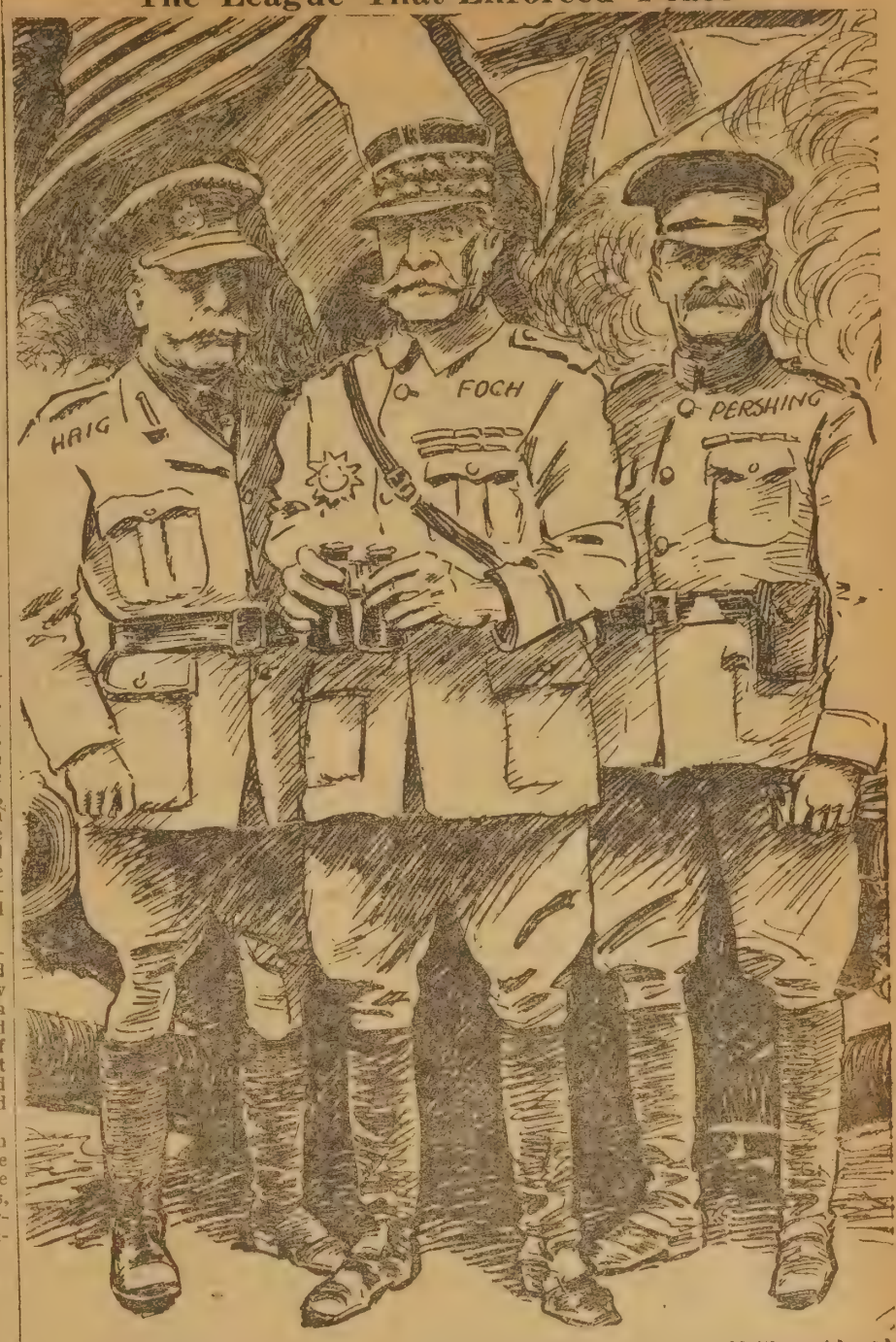
Shape mashed potatoes into balls or cakes. Roll in bread crumbs, egg and bread crumbs if desired. Bake on an oiled pan until brown.

Variations: An egg yolk may be mixed with two cups of mashed potatoes, or a whole egg with four cups or one quart of mashed potatoes.

Ground nuts, meat or fish may be added.

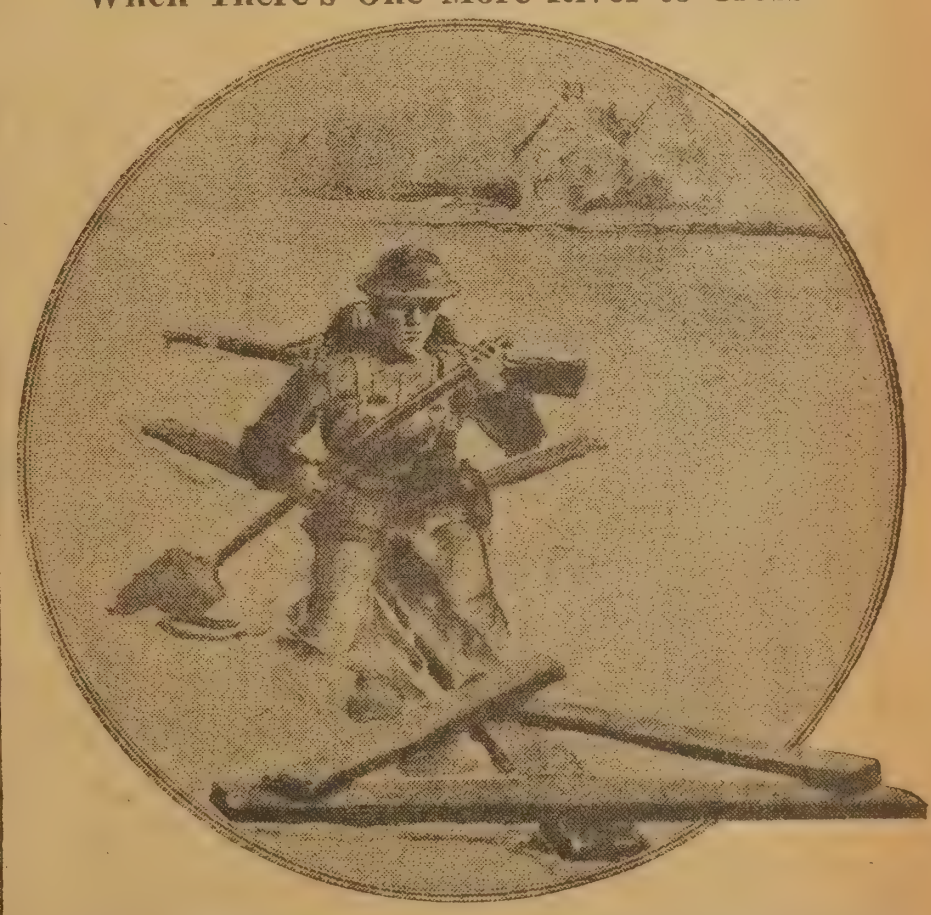
Minced parsley may be mixed with the mashed potatoes.

# The League That Enforced Peace




(Cartoon by Morris.) (Copyright by George Matthew Adams.)

# When There's One More River to Cross



A barn door nailed on poles and provided with outriggers makes a good emergency ferry boat for Yank or Tommy; but a single beam with board outriggers knocked from a handy fence makes a splendid catamaran, and a trench shovel a very efficient paddle. High-water trousers are the proper costume for this aquatic sport. Wet clothes hamper a fighter. If the soldier is a good swimmer, his raft becomes a welcome ferry for the arms and equipment of some less gifted pal. The above photograph is from Popular Science Monthly.

# A CROOKED TRAIL---By Lewis B. Miller

Copyright by The Page Company, 1911.

**A story of a thousand-mile saddle trip up and down the Texas frontier in pursuit of a runaway ox.**

**SYNOPSIS.**

Travis, a lad in his teens, lived on the Texas frontier in the days when Texas was a wild, unsettled region. One morning before daylight he started out to bring in the yoke of oxen for a day's plowing, but one of them was gone. He caught his pony and started to search for the stray. Going a little and a little further hour after hour, he continued until night caught him several miles from home with a tired pony, a borrowed saddle and lariat and little for himself or his dog to eat. A rabbit and wild turkey eggs served the purpose, and morning saw him again in pursuit of the ox after a night of disturbance by a mountain lion and marauding hounds. The next night he spent in the cabin of a crazy sheep herder who believed that cattle men were trying to kill him. He made the night hideous by his crazy ramblings and songs in the moonlight, and Travis was glad when the opportunity came to escape from him, and fall in with new friends, Frank and Stella Booth, at their farm home a little further on. The three young people became much interested in each other because of common plans for attending school the following year. It was here, also, that Travis got his first definite clue to the whereabouts of the stray steer. Together the two boys set out to hunt him, but he was farther away than they suspected. Startling adventures were in store for them, among the first of which was a night in a "haunted" house, the principal haunts being wild animals. The next day they found the stray ox, but suddenly a wall of water from a furious storm rushed down the river between them and the animal. The boys arranged to have the steer held in pasture till they could cross the raging river. The meantime they spent working with a farmer grubbing out live oak thickets. Some interesting experiences were awaiting them, however, rafting on the flooded river.

## CHAPTER XI.

### That Mysterious Wagon.

By the time we had effected a landing on the north bank, the two men with the wagon were boiling over with impatience. One of them was pacing up and down like a chained bear. Scarcely had our raft butted the shore, when he began to hurry us. He was a fellow of rather striking appearance, with a heavy black mustache, which drooped over the corners of his mouth.

"What are you in such a fidge about?" demanded Frank, half resentful, after being several times urged to make haste.

"Why, we've got a mighty sick man in the wagon up there, and we want to rush 'im to a doctor just as quick as we can."

"Oh, a sick man, eh? That's a different thing. Why didn't you say so at first? Of course we'll hurry," answered Frank, all his resentment gone instantly.

"How can we get our wagon onto your old log-pile?" asked the man with the black mustache.

"You'd better take your horses loose, and we'll run the wagon down by hand," I spoke up. "That's the way we did the other wagon."

"And then we'll put the team on, eh?"

"Your horses will have to swim," Frank informed him.

"They're mighty hot to be put into the water. We've been travelin' like a prairie-fire for the last hour or two. Won't this old contraption float our whole outfit? It's big enough."

"We could make a second trip for the horses; or raft them over first and then come back for the wagon," I suggested.

"No, that won't do—won't do at all. Take too long," the man declared, irritably.

"We might roll the wagon on," said Frank, "and then try leading the horses on, one at a time. If the raft will float them, all right. But if it won't float, they'll either have to swim or we shall have to make a second trip."

The traveler agreed to this; and we all went up and brought the wagon down and rolled it out upon the raft. The sheet, I noticed, covered only the part of the wagon behind the spring-seat. But it was so closed at both ends that nowhere could we catch even a glimpse of the sick man. I wondered why it was necessary to seal him up so hermetically.

When the horses were brought on board, their weight, added to the wagon's weight and ours, settled the raft pretty deep in the water. Not so deep, though, but that we thought it safe to make the voyage over with the whole load.

The two men remained on the raft, one to hold the horses and one to use a pole. Frank and I walked along the edge of the cliff-like bank above, tugging the current. By And a hard, hot pull we had of it. For the heavily loaded, deep-sunk raft fought mightily against the current. By the time we had toiled two hundred yards up stream, in the broiling sun, our faces were dripping. And when the man with the black mustache, still impatient, urged us to come aboard and push off, we gladly took advantage of the first sloping place to do so.

Frank and I were now using the poles, and the men were standing, one on either side of the wagon, and each holding a horse. Before we had moved far out into the river, Frank, whose curiosity must have been aroused, inquired as he passed the black-mustached man:

"What ails your sick friend?"

"Oh, nothin' but smallpox, I guess."

I had happened to overhear both the question and the answer; and so startled was I that I dropped my pole, narrowly catching it again. Frank spun around as if he had been shot at, and I saw him turn pale.

As for myself, for a few moments I came dangerously near to plunging into the river and swimming for land. I had never been much closer to smallpox than a hundred miles. But to me the word was synonymous with a slow and awful death. I had heard of one case where all of a man's relatives had fled from him in terror, leaving him to die alone of the dread disease.

"Why didn't you tell us that sooner?" demanded Frank, in a voice husky with anger.

"Because you didn't ask me," was the innocent reply.

Frank came over to me. "What can we do?" he said, in low, agitated tones. We were both half frightened out of our senses; for neither of us had ever been vaccinated.

"What are you boys doin'? Whur you lettin' us drift to? If you'll git us across right quick, ain't much danger of you ketchin' it."

"Yes, let's push across the first minute we can, Frank!" I exclaimed, arousing myself from my dazed condition. Like a drowning person, I had clutched at the straw of hope in the man's words. "And just look where we are!" I cried out.

While we had stood idle the current had been industriously sweeping us down stream. Already we saw ourselves opposite the point where we should have touched land; and the raft was not yet half-way across.

Both Frank and I took in all this at a glance. And both now fell to poling as hard as we could. The very thought of keeping company for any considerable time with that death-infected wagon was sufficient to fill us with terror. We worked frantically—so frantically that when I dropped my pole into a deep place in the river bed, I narrowly saved myself from tumbling overboard.

Hard as we poled and pushed, we missed all the sloping bank below the road. Below this was an inlet 40 or 50 yards wide, where backwater now reached out into the woods. And immediately below this inlet began a line of low cliffs on that side.

With all our frantic haste we fought to reach the inlet. For a few minutes it seemed that we must be carried by it. But the outer current was weaker, and once in that we could hold the raft. We quickly decided to pole out into the inlet and seek for a landing place at its far end.

Just as we were approaching the trees—those standing knee-deep in the backwater—I heard the rapid beating of hoofs on the north bank, up at the road. Glancing in that direction, I saw three horsemen galloping down the river bank. Another glance, a little later, showed them reining up opposite us, and drawing their guns. This, though a strange proceeding, scarcely attracted my attention at the time. I was too eager to land the raft and put distance between me and that wagon.

"Halt! Halt there!"

Presently a Winchester roared out. The report, tossed back by the hills, went echoing through the woods, ripping and roaring, and seeming to rend the very forest. And a bullet came singing over our heads—singing a tune of death. Other reports followed in quick succession, and other bullets ping-winged over us, clipping off leaves and twigs among the tree tops.

Ordinarily I should have been terrified at this strange proceeding; now I little more than noticed it. I wondered vaguely what it all meant, but neither Frank nor I stopped poling for a moment. There was something in that wagon more frightful to us than bullets.

Our two men were behind the wagon, and one of them called out:

"Push into the woods just as quick as you can, boys!"

The admonition was wholly unnecessary. Guiding the raft between trees, we soon had it deep in the flooded forest, and behind some land, where the horsemen were out of sight. Then, and not till then, did their bullets leave us in peace.

"Mighty close shave for us," I overheard one of the men remark, in a relieved tone. And then he came round and explained:

"Just some fellers after us for bringin' a smallpox patient through the country."

"Pity they didn't catch you!" I answered, wrathfully.

The water kept growing shallower, and within a few yards of dry land the raft ran fast aground.

"Come on, Travis!" cried Frank, as he threw down his pole, stepped off into the water, and made for land. I followed, and we had soon waded ashore, climbed a sloping bank, and started off through the woods toward our horses.

"Hold on there, boys! What are you in such a rush about? Cain't you give us a lift with the wagon?"

We dropped from a run to a walk, but kept on.

"We'd better ride full-tilt for the nearest doctor," Frank was saying, "and try to get vaccinated."

"But isn't it too late now?"

"No. They claim it will do good, even after you've been exposed to smallpox. If you have the disease at all, it will prove very mild."

"Then let's start quick and ride hard. We shall never see our cattle again, I suppose."

"Who cares for cattle?" exclaimed Frank. "I wouldn't have the smallpox for all the cattle in Texas."

"Hold up, boys!" the black-mustached man now called out. "Say, boys, I was just jokin' about that. No smallpox here."

At this we stopped suddenly, in amazement. "Queer kind of a joke," growled Frank.

"You musn't be takin' to your heels, boys. I didn't intend to scare you to death. Our friend in the wagon has got somethin' ailin' of 'im, and we're takin' 'im to the doctor for it. But I doubt if it's smallpox."

"Smallpox!" exclaimed the other man, scornfully. "He ain't got no more smallpox than I have."

Ordinarily we should have been angry at the deception practiced upon us. But so wonderful was our relief at this latest development that we forgot everything else. Now, for me at least, the world seemed suddenly to turn right side up again.

"Why didn't you tell us that before?" demanded Frank. Then he added, in a lower tone, to me: "We were about to forget our money. Let's go back for it. How much shall we charge them?"

"When they first told us they had a sick man in the wagon, I felt that we ought to let them off with four or five dollars, or even less. But after that smart joke, I vote to charge them full price."

"So do I. They shall pay the last cent."

We went back, and, wading into the water, aided in rolling the wagon off the raft and out upon dry ground. Then we helped put the horses to it. The men were evidently in a great hurry to be gone; but so nervous were they both that in their frantic haste they seemed to get very little done. Now they leaped up into the spring-seat, ready to start.




**Rafting Under Difficulties.**

"Our money, if you please," said Frank, a little gruffly, perhaps.

"Your what?" exclaimed the man with the black mustache, in well-feigned surprise.

"Our money," I said. "The $20 you owe us for rafting you across the river."

"Oh, don't mention it, boys—don't mention it!" replied the man, with a wave of his hand, as if waving aside our thanks for some favor he had done us. And up the bank went the wagon, and away it trotted swiftly, through the woods toward the road.

For a full minute, as it seemed, we stood staring after it.

"Well, for downright, bare-faced, devilish rascality, that beats anything I ever ran up against!" exploded Frank, wrathfully, disgustedly.

I was still past speaking. "Come on!" I finally burst out. "Let's get to our horses and follow the scoundrels!"

Frank started with me, but stopped again, rather suddenly.

"It won't do any good, Travis. If they don't want to pay us, I don't know of any way to squeeze it out of them now. If we'd been wise, we'd have collected in advance. We'll know better next time. They're not the right sort, those fellows. There's a big, black streak in them somewhere. Come to think of it, there's something suspicious about this whole business. If they didn't have smallpox in that wagon, what were those fellows shooting at them for?"

"The chances are they did have smallpox, after all, Frank. They lied to us one way or the other, and they're just as likely to have lied last as first. Let's go back. Maybe those fellows are still over there."

We hurried through the woods till we came to the river, at the place where we had left our horses. The three men had dismounted on the far bank, evidently at a loss for some means of getting across. Scarcely had we shown ourselves when one of them, a little man with a big voice—the same voice we had heard before—shouted to us:

"Is there any kind of a ferry on this river?"

"Who are you?" I shouted back.

"I'm the sheriff of Palo Pinto county."

"And what do you want?"

"We're after that wagon that just crossed."

"What for?"

"There's a notorious desperado in it. We've been on his trail for days."

"Has he got smallpox?"

"Got what?"

"Small—pox!" I yelled, spreading the syllables far apart for distinctness.

"No. But he'll get something worse if we capture him."

"Are you sure he hasn't got it?"

"Of course I am! The devil never catches smallpox!"

I was wonderfully relieved. The fellows with the wagon had invented the whole story.

"We can swim the river if we have to," the sheriff was saying. "But our horses are pretty hot and tired, and we'd rather not put them into the cold water if there's any way to ferry."

Frank and I consulted. "We brought those desperadoes across; now let's give the officers a lift," I proposed.

"That we will! Of course we will! And be glad of the chance to!" exclaimed my friend, heartily.

Both of us were feeling pretty sore over that lost $20; and 10 times sorer over the high-handed way we had been robbed of it, and over the horrible fright we had received.

"Yes, we can raft you across," I shouted. "It will take some time, though."

"All right! Be just as quick as you can, boys. Those scoundrels are gaining on us every minute!"

(To be continued.)

# SIDELIGHTS

### A Hard Knock.

During the cross-examination of a young physician in a lawsuit, the plaintiff's lawyer made disagreeable remarks about the witness' youth and inexperience.

"You claim to be acquainted with the various symptoms attending concussion of the brain?" asked the lawyer.

"I do."

"We will take a concrete case," continued the lawyer. "If my learned friend, counsel for the defense, and myself were to bang our heads together, would we get concussion of the brain?"

The young physician smiled. "The probabilities are," he replied, "that the counsel for the defense would."

### Modern Way.

Flubdub—"Isn't there some fable about the ass disguising himself with a lion's skin?"

Synicus—"Yes, but now the colleges do the trick with a sheepskin."—Buffalo Courier.

### Not Much Bait.

Two men were discussing as to what Noah did to pass away the time on board the ark.

"I guess he did a good deal of fishing," suggested the ardent angler.

But some one is always ready with a wet blanket. "He couldn't do much fishing with only two worms," was the retort.

### Sauerkraut Is Dutch Dish.

The food administration, finding that the use of sauerkraut has been curtailed as a result of ill-advised patriotism, explains that the dish is of Dutch rather than German origin, and is urging its use as a valuable food.

### Hopeful.

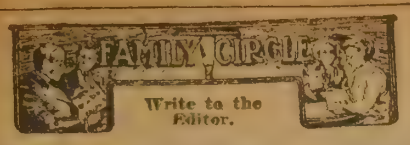
The New Parson—Well, I'm glad to hear you come to church twice every Sunday.

Tommy — Yes, I'm not old enough to stay away yet.—London Opinion.

### Safety First.

"Why," asks a Missouri paper, "does Missouri stand at the head in raising mules?"

"Because," says another paper, "that is the only safe place to stand."




ALICE W. BARLAND, Editorial Contributor.

# Care of Clothing

By MARGARET PALMER.

With the prices of clothing advancing, a shortage of clothing materials facing us, the constant appeal of our government to conserve on all these materials, we must do our utmost to help conserve the present supply.

Many garments are discarded before they are much worn or because they have been abused. Clothes, like everything else, need care in order to make them last. This means one must not throw them down, but have plenty of hangers, so that the clothes can be hung on them out of the way and from all dust.

First of all one must repair all little rips, mend torn buttonholes, sew on lost buttons, keep the clothes well brushed, free from dirt, and pressed. Repairing is important, pressing is next and all spots and dirt removed, for nothing will make a garment wear out as quickly as dirt and grime and unmended tears and rips. Pressing keeps the garment in shape.

Sleeves which become worn at the edges should be turned up a little and pressed or they can be faced back. If this will make them too short, put cuffs on.

Skirts that show any wear at the bottom should be turned back a little or braid sewed all the way around. Do not wear good clothes roughly; that is, do not lie down in them, cook or do other work that will be hard on them. Have clothes for this purpose. Many garments are discarded because they are badly faded. These can be re-dyed.

I dyed a lot of faded stockings black and they will last two or three summers for every-day use. I had some gingham dresses that were faded, one was blue, one pink, one green, that is, they were blue and white check and so on. I dyed each one different; the blue and white, blue; the pink and white, pink; the green and white green. I added white collars to them, which were bought at the 10-cent store. The dresses made very good house dresses and will wear a year or so.

Wool garments can also be dyed, but one should rip them apart and make them over as they are apt to shrink some.

Summer clothing should be put away in good condition. It is always disheartening to bring forth a lot of garments in the spring not ready for immediate use.

Mend all those that need mending and lay aside those which are to be made over or altered.

Hats should be carefully brushed, wrapped in tissue paper and stored in boxes. Children should be taught the importance of caring properly for their clothes. Never allow them to throw their clothes around or kick them about as so often boys will do, but teach them the importance of conserving our supply of clothing.

# School Lunches

## Made Nourishing and Pleasing

It is most essential to good health that the school child have a nutritious, well packed lunch, says Dorothy Taylor, home demonstration agent from the University of Idaho. These lunch meals, which must be packed in a closed container and often carried some distance by the child, must supply materials for health and strength as well as growth. Its preparation, then, requires a knowledge on the part of parents and teacher of the different foods which supply these materials and of their combinations to make a nourishing and pleasing lunch.

If possible, the lunch should include a warm soup or drink, as such articles are conducive to slower eating and improved digestion. It is also necessary that these lunches observe the rules of conservation. Bread made from victory flour, sweets from chopped, dried fruits, and fish, eggs, poultry in place of more solid meats may be used.

Suggested bills of fare for the lunch basket:

1. Sandwiches with sliced tender meat for filling; baked apple, oatmeal cookies.
2. Slices of meat loaf or bean loaf; bread and butter sandwiches; stewed fruit; gingerbread.
3. Bottle of milk; thin corn bread and butter; dates; apple.
4. Cottage cheese; rye bread, celery; and honey drop cakes.
5. Egg and lettuce sandwiches made of oatmeal bread; cornmeal cakes; and fruit.
6. Rice cooked in skim milk and molded in cups; corn meal wafers; and baked or stewed apples.

Lunches prepared partly or entirely at school:

1. Creamed potatoes, corn biscuits and fruit paste made from chopped figs, dates and raisins.
2. Sand codfish chowder, corn meal wafers, orange or sliced oranges, and oatmeal cookies.
3. Spoon bread, cocoa, raisin sandwiches, and an apple.
4. Bean or pea soup, crackers, lettuce sandwich made with corn meal and wheat yeast bread, and stewed figs.

### ESCALLOPED POTATOES.

Arrange a layer of raw or boiled potatoes in an oiled baking dish. Sprinkle with flour, seasonings and bits of fat. Repeat until the dish is filled. Pour enough milk over the potatoes to cover them within half an inch of the top. Cover with crumbs and bake about 20 minutes if cooked potatoes are used, or for an hour, or until tender, if raw potatoes are used.

Variations: Minced meat, grated cheese or sliced hard-cooked eggs may be added between the layers of potatoes.

White sauce may be substituted for the flour, fat and milk.

### Wash Dresses for Children.

Among the dresses for the older tots are colored chambrays and crepes, most of them made with yoke or guimpe of white organdie or nainsook, the edges finished with piping or chain stitching in black or contrasting color.

Some of the little dresses have skirts buttoned to high waists with large pearl buttons, nearly all featuring cunning little pockets. Suspender effects are also seen in these dresses, the simulated suspenders apparently held in position by large buttons.

### Along the Food Lines.

England tries to overcome the fruit shortage by using vegetable marrows for jam. This suggestion might be taken up by housewives of the United States now that sugar is more abundant. Carrots, pumpkins and squash can be used for jam-making.


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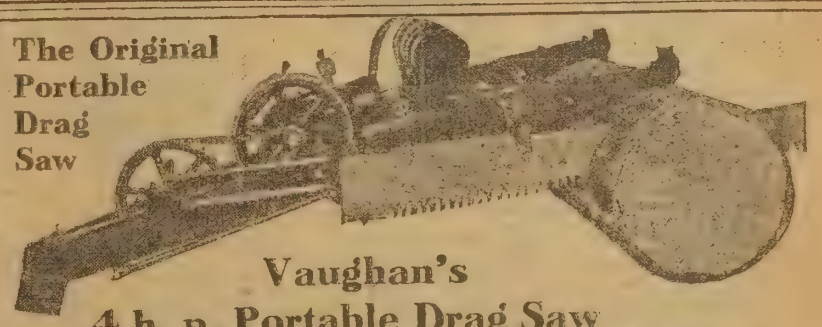
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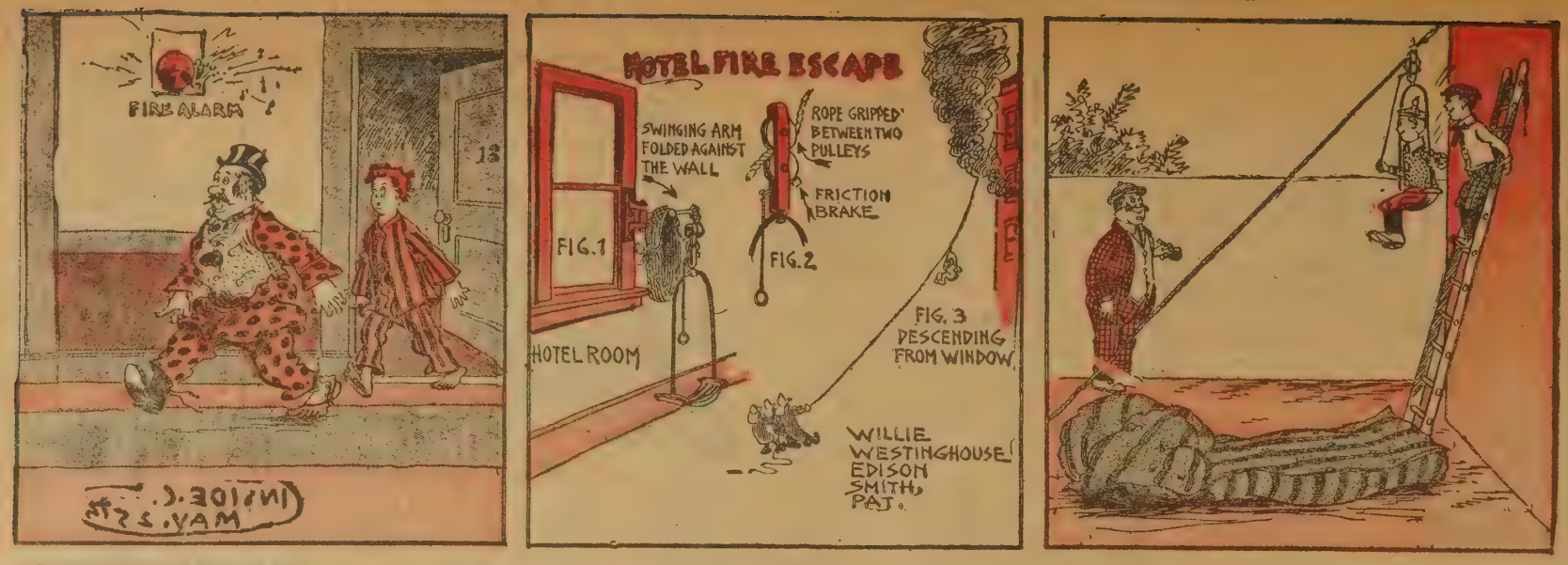
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Can be operated by one man. Two men can carry complete machine. 4 H. P. gasoline motor mounted on frame. One gallon of gasoline required to cut 8 to 12 cords of wood. Engine can be used for other work without removing from frame. No gears, cogs, belts or pulleys. Friction clutch prevents breakage if saw pinches. Saw makes about 125 strokes per minute. Will cut any size log up to 6 feet. Sprockets and cranks, etc., made of cast steel. All working parts guaranteed against defects in material and workmanship.

Net cash price for complete machine as shown in cut, $175 f. o. b. Spokane and common points. FOR SALE BY

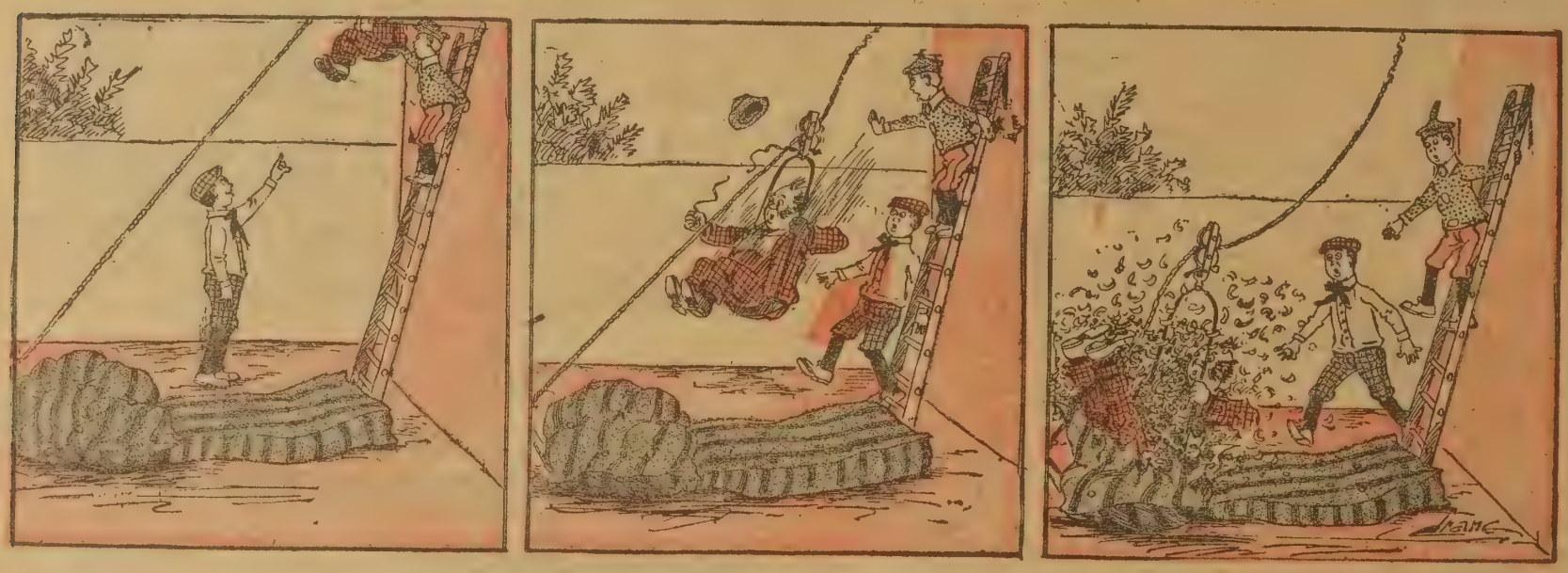
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SPOKANE, WASHINGTON.
8122 Monroe.

Did you ever stop to think what a difference there is between READING the advertisements in this paper and just GLANCING THEM OVER? In the advertisements we publish week by week there are frequently bits of practical information that may be the means of making or saving you hundreds of dollars. Don't "skim over" the ads. Read them. It will pay you.




DEAR TOMMY: I invented this fire escape after Papa and I had a scare in a hotel last week. I got Johnny Jones to help me build it, and his father insisted on trying it, but got excited and broke the brake cord. He also broke a feather bed.

Yours, etc.,
WILLIE.



# WHAT BOOT GETS FOR BEING JEALOUS



# PATTERNS

2652—Girl's dress. Cut in 4 sizes: 4, 6, 8 and 10 years. Size 10 requires 3 yards of 36-inch material. Price, 10 cents.

2273—A dainty set for dolly. The pattern includes all styles illustrated, is cut in 6 sizes for dolls: 16, 18, 20, 22, 24 and 26 inches in length. The dress requires 1 1-4 yards of 27-inch material, the petticoat 1-2 yard, and the combination 5-8 yard for an 18-inch doll. Price, 18 cents.

2666—Girl's dress. Cut in 4 sizes: 8, 10, 12 and 14 years. Size 12 will require 3 1-2 yards of 44-inch material. Price, 10 cents.

2261—Lady's dress. Cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 38 requires 5 1-8 yards of 46-inch material. The dress measures about 2 3-8 yards at the foot. Price, 10 cents.

2654-2653—A smart coat suit. Coat 2654 cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 2653 cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. It will require about 8 yards of 44-inch material for a medium size, for the entire suit. The width of skirt at lower edge with plaits drawn out is about 2 yards. Two separate patterns, 10 cents for each pattern.

2672—Lady's apron. Cut in 4 sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. Size medium requires 4 yards of 36-inch material. Price, 10 cents.

2190—Lady's one-piece corset cover. Cut in 6 sizes: 32, 34, 36, 38, 40 and 42 inches bust measure. It requires 1 3-8 yards of 36-inch material for a medium size. Price, 10 cents.

2664—Misses' dress. Cut in 3 sizes: 16, 18 and 20 years. Size 16 will require 5 1-4 yards of 40-inch material, with 1 5-8 yards of 27-inch lining. Width of skirt at lower edge is 1 7-8 yards. Price, 10 cents.

2220—Girl's dress. Cut in 4 sizes: 6, 8, 10 and 12 years. Size 10 years requires 3 1-4 yards of 44-inch material. Price, 10 cents.

2221—An ideal under garment. Cut in 4 sizes: Small, 32-34 inches bust measure; medium, 36-38; large, 40-42, and extra large, 44-46. Size medium requires 3 3-8 yards of 36-inch material. Price, 10 cents.

2241—Lady's house dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 36 requires 5 5-8 yards of 44-inch material. The skirt measures about 2 5-8 yards at the foot. Price, 10 cents.

2259—Boy's suit. Cut in 4 sizes: 4, 6, 8 and 10 years. Size 8 requires 3 1-2 yards of 44-inch material. Price, 10 cents.




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A clever little scarf may be made of fur or fur fabric, or of velvet or plush. Inasmuch as the shops are showing wraps of this type at high prices, the woman who makes one for herself is to be commended. A perfectly straight section of fur or fabric, about 19 or 20 inches wide, and as long as desired, furnishes the major part of the wrap, and this is held in at the waist by a simple, straight belt of self fabric three or four inches wide. Small pockets are set in or on the ends of the scarf, and the ends may be finished with fringe if desired.

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Pattern No.....Size..... Pattern No.....Size.....

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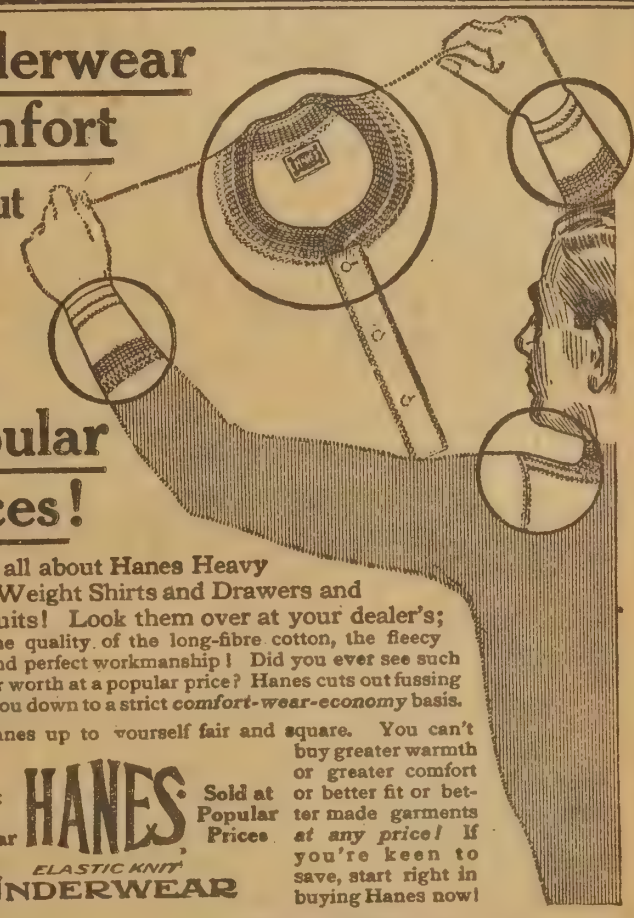
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Put Hanes up to yourself fair and square. You can't buy greater warmth or greater comfort or better fit or better made garments *at any price!* If you're keen to save, start right in buying Hanes now!

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**Real Warmth for the Boys!** One of our big special lines is Union Suits for Boys. Superbly made, and combine all features of the men's suits. Downy softness and genial warmth win mothers and fathers as well as the boys. *You can't duplicate the value.* If your dealer does not have Hanes write us immediately.

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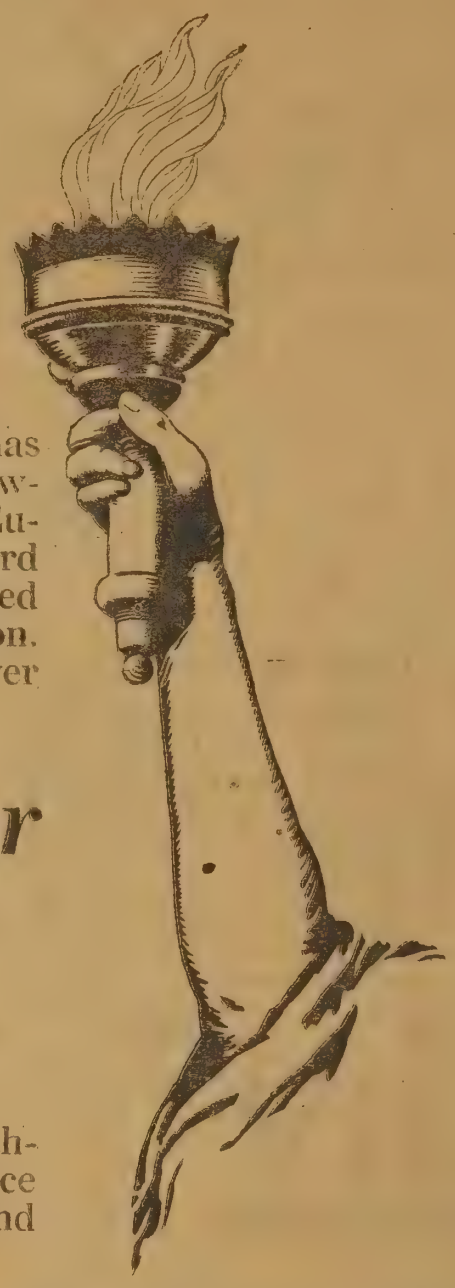
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PEACE HAS COME TO THE WORLD and autocracy has been crushed. For many months, however, manpower will be at a premium. A big army will be kept in Europe for a long time, shipbuilding will be carried forward on a gigantic scale, and thousands of men will be called upon to lend a hand in the great work of reconstruction. There is every reason to continue to save manpower whenever possible.

## The Washington Farmer Subscription Plan Conserves Man Power

To do its share, The Washington Farmer is doing without its usual big force of subscription agents. In place of these we urge our readers to send in their own and their neighbors' subscription orders direct.

This plan gives the subscriber the benefit of every penny which would ordinarily go toward paying the salary and expenses of the subscription agent. It brings our friends their state farm paper at a fraction of what it used to cost and at a price far below that which other high-grade farm and family papers generally are obliged to ask.

In order that our readers may continue to save money on their subscriptions, we ask every subscriber to send in his or her renewal well in advance of the date of expiration stamped on the address label on the wrapper, and that you will also make an effort to send in the orders for your friends and neighbors with your own. Assistance of this kind, so cheerfully given by hundreds during the past year, will assure the success of our second year of cooperation.

**Remember—you receive The Washington Farmer every week—fifty-two great big issues in a year, chuck full of the best of all-around family reading at the remarkably low cost, under our cooperative plan, of only 50 cents for 3 years. Send your orders in today and get your share of the money saved.**

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**The Washington Farmer,** Nov. 21.
Review Building, Spokane, Wash.

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**Enclosed is $..... for ..... years subscription.**
In Canada add 1 cent per copy for extra postage.

If you are already paid in advance your subscription will be set forward from the date to which you are paid.

Name .....

TOWN ..... R. F. D. .....

STATE .....




Dear Corner Cousins: So many of the cousins have asked how to make rose petal beads that I shall have to tell it to you all instead of writing to just those who have asked. Pick a quantity of freshly opened, dew-laden, dark red rose petals of the most fragrant varieties. Grind the petals through a food-chopper, using the very smallest blade. Grind them the second and third time, each time allowing the pulp to fall on a sheet-iron baking pan. It is absolutely necessary that this pan be sheet iron. Collect the juice as it falls from the chopper and turn it over the mass of pulp. Set the pan of pulp in a cool place for 24 hours. On the second and third mornings, repeat the grinding, three times each morning. Grinding for the fourth and fifth morning is advised, but not necessary, if the mass is smooth. On the fourth morning mold by rolling the pulp in bead form at least twice as large as the desired bead. Shrinkage varies with climate. If pulp crumbles, moisten it. Before the beads are quite dry, mark them with the round end of a hatpin. Pierce with a hat pin and stick the hat pin on a cushion until the beads are dry. Afterwards polish them with a touch of vaseline and a bit of velvet. String beads alternately with silver, gold, glass or steel beads and they are very pretty. The beads are dead black, owing to having put them on the sheet iron. Other rose petals than those of the red rose may be used and essence of rose may be used to make the bead fragrant.

AUNT NELLIE.

### Cousin Effie Writes Again.

Dear Aunt Nellie: I am corresponding with Olive Cummins, and I think, from her letters, that she is a nice and companionable girl. She is seven months and 18 days older than I am. Elna Mattson, your riddles' answers are these, if I am not mistaken: (2) a river, (3) water. I will give some riddles: When is a rope like a child at school? When taught. When should a person always make a stop? When they come to a period. What force or strength can not get through, I, with a gentle touch, can do; and many in the street would stand were I not a friend at hand. A key. We have increased in stock since last I wrote to the Children's Corner. We now have seven little baby rabbits and two old ones, one kitten named Nig, one dog named Taft, one pig and 30 chickens. I have one war savings stamp and am saving money on the clothes I wanted to buy for this winter. I can knit, crochet and tat, also embroider some. I would knit some for the Red Cross, but they can not get the yarn now for any one. I have one twin who lives in Gentry county, Mo., but I would like to find a twin in good old Washington state. I was 15 on October 20, 1918. I would be glad to correspond with any of the cousins.—Effie Lewis, Colville, Wash.

### Chickens Are Ready to Fry.

Dear Aunt Nellie: I would like to be a cousin. I am 9 years old. My birthday is December 29. We have two cows, a little calf and four horses. How many of the cousins have seen the building the Farmer is printed in? I have lots of times, and I am going in to see Aunt Nellie some time, if she will let me. We have a good war garden. We have lots of young chickens ready to fry. I would like to have Aunt Nellie come out and see me some time. School is going to start in three weeks, and mother's cousin is going to teach. I like her fine. I have been reading the Children's Corner every week. My uncle has got a little brown dog named Sport. We have three little kittens and a mother cat, seven little pigs and an old mother pig. I have two sisters, Elnora May, aged 5, and Edna Ruth, aged 1 year and 11 days. I have a brother named Melvin Le Roy. He is 7. I am in the fifth grade at school. My brother is in the first grade. Mama is swatting flies now, but if Noah had swatted the two flies that roosted in his ark, she wouldn't need to be swatting them now. I will come again.—Rovilla Fletcher, R. F. D. 2, Fairfield, Wash.

### Entered High School This Year.

Dear Aunt Nellie: I enjoy reading the letters very much. I have two sisters and three brothers, Lucile, Mae, Hial, Roy and Forrest. My oldest brother, Forrest, enlisted in the mechanic service in the war last June. I live on a 104-acre farm. I am 12 years old and my birthday is October 29. Have I a twin? If so, I wish he or she would write to me. I entered high school this coming year. My sisters are in the fourth and sixth grades. We have a truck, a binder and a touring car. We have four horses and a pony. Their names are Pete, Polly, Nib, Maude and Betsy. Our dogs' names are Shep and Fritz. I had to help my dad mow hay last week. Elna Mattson, is the answer to this riddle a brook or a river? I often murmur, but never weep, I lie in bed but never sleep, my mouth is larger than my head, and from my sources I am fed. I am ever running, feet I've none, the harder I fall the faster I run. I hope I am accepted as a cousin—Lois A. Turnley, Route 5, Yakima, Wash.

### Chosen Four-Minute Speaker.

Dear Aunt Nellie: I am in the seventh grade and am 11 years old. Have I a twin? If so I wish he or she would write to me. My brothers' and sisters' names are John, Catherine, Jane, Thomas and Griffith. We play hide and seek, steal sticks and bear. We live on a farm. We have two horses, two cows, one heifer and we have one black cat and two little ones, one of them is black and the other is gray. The gray one is mine and I am going to put a ribbon around its neck if I can find one. We have one dog and 20 little chickens. I hope Uncle Sam will win the war. I can knit and I have one war savings stamp. We have a garden. I have read Trappers of the Ozarks and some of the letters in the Corner. My birthday is April 16. I was chosen the four-minute speaker in our school. —Eleanor Jones, Box 38, R. F. D. 1, Almira, Wash.

### Still Watching for Her Twin.

Dear Aunt Nellie: I was 13 June 30. I am in the seventh grade at school. I have been watching for my twin for a long time, but have not found one yet. If I have one, I wish she would write to me. We have four white Angora cats. They have blue eyes, and two of them are deaf. I have a pony. Her name is Dolly. I have a little colt that I named Junior. She will shake hands with me and kiss me. We live about one mile from the Columbia river. I have to herd the cattle along the river almost every day. I have one brother, Wilbert, who was 10 years old November 2. He is in the fourth grade. Has he a twin? I like to tell riddles. Why is a slacker like a lemon pie? Because he is yellow all through and hasn't got the crust to go over the top. Why do we go to bed? Because the bed won't come to us. Why is a dressing gown like a cake of ice? Because they are both easy to slip on. I have knitted one sweater for the Red Cross, and I am knitting another one. I belong to the Junior Red Cross. I have helped to cut blocks and helped sew them together to make quilts. I play on the piano. I think every one should save all they can. Grandma makes corn bread for us all the time. If we didn't save, the soldiers couldn't fight the Germans over there, and the Germans would be fighting us over here.—Agnes Annis, Attalia, Wash.

### A Story of Pet and Pat.

Dear Aunt Nellie: This is the second time I have ever written to the Children's Corner. I am going to tell a little story about Pet and Pat. Pet and Pat lived in a house at the edge of the wood where the mosquitoes were thick. One day Pet said to Pat, "Let's go to bed." So they climbed into bed and covered up their heads. In the morning Pat awoke and said, "Oh! Pet they got a lamp looking for us." But Pet did not awaken until it was gone. But Pet and Pat never knew that the mosquito with a lamp was a lighting bug. My hardest thing to do is to pick beans.—Margaret Lee, Penawawa, Wash.

### A Pig Named Wig.

Dear Aunt Nellie: May I become a member of the Corner? I enjoy reading the letters very much. They are interesting. I am 11 years old. My birthday is September 2. I am in the sixth grade. I have one brother and he is in the fifth grade. His name is Clarence. We live a half mile from school. We live on a small farm and have five cows and two heifers and 20 pigs. My brother and I have a pig and we call him Wig. We will sell him and buy war savings stamps. We each have a Liberty bond.—Elmer Benson, Mabton, Wash.

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During the last two weeks Aunt Nellie has received letters from the following cousins: Valla Parfitt, Verna Parfitt, Chester Johnson, Eleen McDonald, Judith Thompson, Maysel Parish, Floyd Brady, Dorothy Tuten, Elma Wilson, Anna Anderson, Nita Anderson, Ralph Kisler, Mildred Self, Thelma Lifener, Ruth Naught, Ruth Dearing, Ethel Strausbaugh, Oren Strausbaugh, Dorothy Erdman, Matilda Lautenschleger, J. Wright Baylor, Neva Baker, Eva Baker, Deana and Donna Earl, Shirley Case, Arvilla Armour, Sybil Pipton, Esther Menke, Pauline Menke, Leslie Palmer, Eva Priddy, Dorothy Sampson, Mary Simpson, Helen Wicks, Lester Olson, Georgia Young, Gladys Waterman, Lillian Waterman, Telma Lakin, Florence Rafosos, Evelyn and Belva Latimer, Iva May Ward, Christina Olsen, Cecile Cason, Alice Lindskog, Lenora Dorothy, Helene Nagel, Madeline Wiesenbach, Margaret Thompson, Mildred French, Esther Miller, Dessie Jones, Opal Jones, Hilda Knutson, Emma Bennett, Elizabeth Bowen, Allie Wright, Mildred James, Chauncey Beeman, Anna Wasem, Delphine Smith, Lewis Kime, Erma Olson, Annabell Campbell, Ethel Purdin, Viola Thornbrue, Minnie Cardwell, John Cardwell, Lena Baumgart, Bobby Baumgart, Eileen McMillan, Dorothy Canary, Gladys Thomas, Ella Brown, Dorothy Hathaway, Elma Hathaway, Bernard Hathaway, Lena Straub, Thomas Harper, Cecilia Hanlon, Viola Tarbert, Hazel Hammer, Clara Pohle, Harold Miles, Pearl Miller, Alberta Miller.




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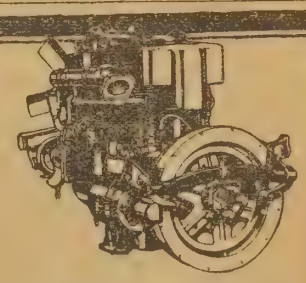
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# News for Breeders

R. L. Burkhart of Albany, Ore., has a Jersey cow by the same sire as the great bull, St. Mawes. She is now 14 years old and is milking over 40 pounds a day. Her calf, a bull, is by Mr. Burkhart's Moose o' Fernwood, and is a handsome little fellow. Mr. Burkhart's Karnak Noble heifer that produced 550 pounds of fat with her first calf is fresh again and starting off with promise of a decidedly larger record.

The well known registered Holstein herd of the Avalon Orchard Tract company of Kuna, Idaho, is to be sold at auction December 5, according to announcement made recently by R. T. Walbank, president of the company. The affairs of the company are being closed up and the sale of the herd follows as a natural consequence. Included in this splendid bunch are 16 milk cows; 16 heifers, ranging in age from 3 months to 2 years; 15 bulls, 2 months to 1 year, and the herd sire, Hartwood Heilo Hengerveld, a son of Pontiac Korndyke Hengerveld, that has one daughter with a seven-day record of over 30 pounds of fat. The foundation of this herd is composed of some of the best New York dairy stock.

"I breed to type," said R. W. Hogg, Poland China breeder, of Salem, Ore., "just as carefully as a Jersey or Shorthorn breeder. By this I do not mean merely the choosing of a sire, but the selection and mating of all the breeding stock, year after year." Clymers, Mr. Hogg's old boar, is now 8 years old. He proved his worth as a breeder while young, and that is why he is now in service. Mr. Hogg has a herd that looks to be fully equal to the one with which he made such winnings at the P. P. I. E. stock show. Both boars and gilts have good hams, good heads, deep bodies, and are up on their feet. His sows bring big litters, too, when bred to Clymers, from nine pigs up. His young boar, selected to breed on Clymer's offspring, was purchased from his neighbor, Herbert Wilard, because the type suited him. He has great bone, stretch and strong back, and is a worthy successor to the old boar.

About a year ago Hirshberger & Steele, of Oroville, Wash., brought in a carload of registered Shorthorns purchased from H. B. Drake & Son of Wisconsin. The shipment included three fine bulls and good big breeding cows of quality. Two of the bulls have been sold and the firm now has 35 head, including a few good young bulls, though they have found the demand much exceeds what they can supply. The herd sire they retained is Roan Baron 435849, by Stanford Royal and out of Rosamond 182097, by the great Broadhook Prince. One bull calf by him, now 10 months old, weighs 800 pounds.

These men own land some miles from Oroville, and were hit by the dry weather, having almost a crop failure where wheat has produced 40 bushels per acre. Mr. Steele informs me that one firm owns over 3000 head of beef cattle and that there are probably 7000 in the valley and ranges surrounding Oroville. H. A.

### STOCK SHOW SALE DATES.

The Northwest Live Stock show will be held at Lewiston, November 28 to December 4. On December 2 the Shorthorn sale will be held, and on December 3 the Herefords.

The Pacific International Live Stock show will be held at Portland December 9 to 15. On December 11 the Hereford sale will be held; on December 12 the Shorthorns, and on December 13 the Holsteins.

### Gainsford Perfection.

The photograph on the cover page of this issue is that of the head of Gainsford Perfection, one of the great Shorthorn herd leaders of the Hercules stock farm of Day & Rothrock, at Sprague, Wash.

### GRAZE STOCK IN FORESTS.

A report of the Bitter Root and Lolo forest reserves shows that during the last season these reserves pastured about 87,000 sheep and about 3,000 horses and cattle. The fees collected by the forestry department for this pasture totaled $8819.

### PUREBRED CALVES.

Boys' calf club members in Georgia are planning to use purebred calves in their work next year.

### GREATEST STOCKER MARKET.

Kansas City claims the distinction of being the world's greatest feeder and stocker market.

# Draft Horse

(Continued from page thirteen.)

public service are not registered stallions. Why this condition should persist in our day, when there is every reason why the benefits of pure blood and of good breeding should be universally known, is hard to explain. One of the measures of peace should be to make vigorous war upon the mongrel and grade stallion.

Along with this should go more discrimination in the kind of mares that are used for breeding purposes. Many men who are highly discriminating in their judgment of the male for use in horse breeding have no scruples in using for reproducing horses misshapen, unsound and in some cases diseased mares. Discrimination in this respect must go with increased appreciation of the value and importance of a stallion of breeding and of outstanding individuality.

The writer, therefore, simply wants to impress upon horsemen that their business is a highly important one, with an invaluable function in connection with the reconstructive days of peace. If there is any need of losing faith at all it is because we relax from our high ideals in regard to horse type and from our strict observance of the well-grounded and important rules of horse breeding.


## Shorthorn Beef Records

An Illinois load of yearling Shorthorn steers made the world's market record at Chicago October 3, selling for $19.60 per cwt.

An Iowa load of Shorthorns sold for $19.50 September 16, averaging $301 per head, the previous record.

A Wisconsin Shorthorn load made the Wisconsin record at $18.35 and a Shorthorn load bred in Montana made the record for range steers at $18.

**American Shorthorn Breeders' Association**
13 Dexter Park Ave., Chicago, Ill.

## Get Guernseys

If you want to increase your dairy profits, you need to know about the cows whose average production, under test supervised by state agricultural colleges, is three times as great as the average of all dairy cows in the United States. Ask for "The Story of the Guernsey."
THE AMERICAN GUERNSEY CATTLE CLUB.
Box W., Peterboro, N. H.

## SHEEP

### Romneys, Lincoln, Corriedale

AND HAMPSHIRE EWES AND RAMS.

All pure bred, not registered. Have especially fine lot Hampshire ewe lambs, yearlings and three-year-olds. Any size lot. Write me on any kind of sheep deal.

H. STANLEY COFFIN, Yakima, Wash.

### Oxford Ram Lambs

All registered rams, including ram lambs sold, all yearling range rams sold. Could get one or two from another party. Still have a nice bunch of ram lambs for general trade.

FISK FARM, Spring Valley, Wash.

## POULTRY AND RABBITS

### Rhode Island Red Cockerels
Both Combs

RHODE ISLAND WHITE COCKERELS—BOTH COMBS.

My stock is pedigreed and line bred. Buy your breeding stock in Mammoth Toulouse geese and Mammoth Bronze turkeys. Have pedigreed Belgian hares and Flemish Giant rabbits. Also registered Airedale puppies, Cerner strain.
J. NONNENMACHER, R. F. D. 3, Yakima, Wn.

FLEMISH GIANT DOES.

For sale—Young, vigorous Flemish Giant does, bred to order, $2.50 to $3.50 each. Pair, $5.
W. T. WILSON, R. R. 3, Weiser, Idaho.






Hartwood Heilo Hengervold.

## AVALON ORCHARDS DISPERSAL SALE

49 Head Registered Holsteins

*at AUCTION*

December 5, 1918, at Kuna, Idaho.

This is the well known herd of Registered Holsteins brought to Idaho four years ago from Illinois by the Avalon Orchard Tract Co. The affairs of the company are being wound up and the dispersion of this fine herd comes as a natural consequence.

There will be offered at auction the following:

16 Milch Cows, 16 Heifers, 3 months to 2 years; 15 Bulls, 2 months to one year.; and the leading herd sire

## Hartwood Heilo Hengervold

A son of Pontiac Korndyke Hengervold, who already has one daughter with a seven-day record of over 30 pounds. He is a brother of the sire of K. P. Pontiac Lass, the only 44-pound cow of the breed. His dam was a great producer and capable of making 30 pounds. She is a granddaughter of Mooie Mutual De Kol and sire, Korndyke Manor De Kol 2d, who is a son of Sir Korndyke Manor De Kol. Hartwood's sire has 30 A. R. O. daughters.

The cows offered were bred by H. Stillson Hart of Barrington, Ill., and were brought from his farm direct to Kuna. The foundation of the herd is composed of some of the finest New York dairy stock.

The young stock will be from 30-pound cow ancestry, all backed by good producers on both sides and trace to some of the most noted sires of the breed.

Everything offered is sound and backed by the guarantee of the Avalon Orchard Tract company.

Send today for catalog.

## Avalon Orchard Tract Company

Col. E. O. WALTER, Auctioneer. Kuna, Idaho.

## LEWISTON HEREFORD SALE

## 60--Head Bulls and Cows--60

Consigned by

the Leading Hereford Breeders

of the Northwest

TUESDAY, DECEMBER 3, 1918

Sales Pavilion Northwest Live Stock Show

Lewiston, Idaho

Auspices

Northwest Hereford Cattle Breeders' Assn.

Catalog can be had from L. R. McGee, Sec.

North Portland, Oregon

## Reconstruction

(Continued from page seven.)

Since last year the farmers of America have been affected by regulatory powers vested in the national food administration. On this body have sat the leaders and representatives of some of the greatest industrial and commercial interests of the nation. Packers, millers, manufacturers, processors, dealers and vendors of foods and feeds have been called to Washington frequently to determine policies affecting the financial condition of every farmer in the United States. The same thing is true of the war industries board, the fuel administration and other governmental agencies. The last year has called for the patriot and found him fighting on land and sea and in the air and unquestionably on the war boards. The national danger has stirred men's nobler impulses. With few exceptions, the representatives of business who have sat on the war boards have sought to protect the public interests as they understood the meaning of the term.

Few, if any, farmers have been asked to become members of these boards. There are a number of men in the food administration who own fine farms. But ownership of land does not make a city man a farmer. His business connections and instincts throw him into sympathetic association with the urban trend of thought whenever it conflicts with that of the farmer. The farmers' part in determining policies has been largely negative. A small handful of wealthy and influential farmers have been called into consultation at Washington from time to time. Several leaders of farm organizations, among them members of the national board of farm organizations, are consulted in times of emergency. The job of the national food administration has been to get sufficient food at the lowest cost to the non-producers of food at home and abroad. Farmers believe they are entitled to what is fair and rightfully theirs. They are still asking that they be assured the cost of production for wheat, live stock, milk and other products. Whatever concessions have been made to the farmers have been made slowly, reluctantly, of necessity, and from fear that the food program would fall down.

Military necessity alone justified such a policy, in the carrying out of which captains of industry have directly or indirectly had a hand. Working patriotically for a dollar a year on the government boards some of these people have secured an insight into trade conditions and human psychology which at the close of the war may be capitalized for countless millions by the interests these men represent.

The farmers of America should know and consider these facts and be ready to protect themselves. Nobody else will do it for them half so well. There is talk of continuing these boards after the war. Then patriotism will not be so strong a motive in men's hearts. Farmers are not wholly unselfish. They are but human. But the structure of their plan for cooperative business is sound and democratic. It is based on the principle of "self-help through mutual help." It is a more altruistic conception than that of the modern business world and as one of the builders of true democracy its voice should be heard in the reconstruction.

## Historic Towns

METZ is almost directly east of Paris, and just across the line into Lorraine. It is at the junction of the Seille and Moselle rivers. By the Romans the town was called Divodurum, which means "on the two rivers." This idea was also conveyed when in the sixth century it was called Mettis, which means "in the midst of waters." It is the strongest fortress of German-Lorraine, and before 1871 was the principal bulwark of the northeastern frontier of France.

This fortified city has had a somewhat stormy career through its history. The last great event was the surrender of Metz to the German forces on the 27th of October, 1870. This surrender included Marshals Bazaine, Conrovert and LeBouf; 66 generals, about 6000 officers, 173,000 men, including the imperial guard; 400 pieces of artillery, 100 miltraifleuses and 53 eagles or standards. Later on, Marshal Bazaine was tried and condemned to death for surrendering Metz and the army; the punishment being commuted to 20 years' imprisonment. He escaped from Isle Ste. Marguerite in France in August, 1874.

The cathedral of Metz is remarkable for its vast size and its architectural lightness, and has a beautiful spire of open work 363 feet in height. In the northern cemetery is a memorial to 8400 Frenchmen buried there in 1870. Its population was little less than 70,000 in 1910.

### Negro Elected to Legislature.

William M. Riley, a negro of St. Louis, was elected a member of the Missouri state legislature at the recent election. He is said to be the first of his race ever elected to the Missouri legislature. He is a republican.

# Breeders' Department

## HOLSTEIN CATTLE

**A Rare Chance to Head Your Holstein Herd**

We still have for sale five prize-winning purebred males, ranging in age from eight to eighteen months. Weight six hundred to one thousand lbs. Pedigrees furnished on application. Address

THE INTERMOUNTAIN INSTITUTE
Weiser, Idaho.

### 365 DAY HOLSTEINS

We are offering a bull calf, born June 27th, the two nearest dams of which average 19,866 lbs. milk, 855 lbs. butter for their yearly A. R. records. One a Jr. 2, the other a junior 4-year-old. The herd with yearly records.

WESTERNWOLD RANCH, Prineville, Ore.

### Bargains in Bull Calves

Sired by Segis Riverside Pontiac, that sold in Pacific International sale, 1914, for $1025, and whose dam has A. R. O. record of 31.47 lbs. butter in 7 days; 118.83 in 30 days, and big records all through his pedigree.

ERNEST JOHNSON, Scappoose, Ore.

### Registered Holsteins

Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.

H. R. BOOMER, New Plymouth, Idaho.

### HOLSTEINS

Well bred young bulls for sale.

THOS. CARMICHAEL, Gaston, Ore.

## GUERNSEY CATTLE

### Looney Farm Guernseys

Langwater, Glenwood and other best strains have won more show honors than any other herd in the west. A few very choice young bulls from heavy producing dams. Write for particulars to

DAVID H. LOONEY, Jefferson, Ore.

### FAIRVIEW FARM

Breeders of high class registered and grade Guernseys.

A. J. SINNES,
Route 5. Mt. Vernon, Wash.

### Orchard Hill Farm

"HOME OF HIGH-CLASS GUERNSEYS"

Dr. Park Weed Willis, Owner, Redmond, Wn.

### RED WING GUERNSEYS

Bull calves out of A. R. dams; also a few females. All good individuals. Herd tuberculin tested.

A. I. & J. HUGHES. Oregon City, Ore.

### Registered Guernsey Cow for Sale,

Will be fresh Nov. 15. Registered Guernsey bull, four years old.

J. J. BLUM, Stayton, Ore.

## HEREFORD CATTLE

### Highland Stock Farm

offers for sale Hereford bulls, 1 or 2 years old. One or a carload.

PLATT BROS. Genesee, Idaho

### BULL RANCH

Hereford Cattle.
Berkshire Hogs.
Hampshire Sheep.

CHAS. BULL, Mabton, Wash.

## SHORTHORN CATTLE

### H. H. SCHILDMAN

breeder of registered Shorthorn cattle, Hampshire sheep and big type Poland China hogs.

Filer, Idaho.

REGISTERED SHORTHORN COWS.

Young bulls and heifers, sired by Scotch bulls; liberal terms.

CALDWELL CATTLE CO., Caldwell, Idaho.

## AYRSHIRE CATTLE

### Wenatchee Ayrshires

Offspring of Cavalier's Hover O'Hink, son of the great Bargenech Gay Cavalier, Imp., and out of Barbeigh Maggie X, Imp. The dams are advanced register cows and include Lady Emperor Scott, that holds world's record for high test. Send for pedigrees and A. R. records.

E. W. VAN TASSELL, Wenatchee, Wash.

**Just What You Want**

may be offered in this weeks' Want Ads at a bargain. It's a good idea to look them over every week.

## DUROC-JERSEY SWINE

### DUROCS

THE GRAND CHAMPION SOW IS DEAD. We have a few of her pigs still for sale. Also fall litters, one of 17, from her prize-winning daughters. Priced right. Satisfaction guaranteed.

CRESCENT STOCK FARM. Johnson, Wash.

### Golden Rod Wins Again

Our herd was largest money winner at Oregon state fair, 1918.

One excellent boar of breeding age, bred gilts and weanling pigs of either sex.

DOERFLER BROS., Silverton Ore.
A. N. DOERFLER, Mgr.

### FOR SALE

Choice young herd boars, old enough for service soon, sired by Richards Defender, Richards Pathfinder, and Victor Defender. Orders placed now for prize young gilts. They will be bred this fall to Idaho and Utah grand champion boars. Young pigs always for sale. Guaranteed to please.

V. R. FISHER, Oxford, Idaho.

### Duroc Jersey Service Boars

Weaned pigs, open and bred gilts of the best breeding. Write for prices.

GEO. DEBOK, Oregon City, Ore.

### Mt. Angel College Stock Farm

Two March boars and one two-year-old boar of excellent type and heavy bone.

ST. BENEDICT, ORE.

### Otto's Jersey Lawn Durocs

The today's type and breeding bar pigs for November delivery, $25.

L. S. OTTO. Filer, Idaho.

FOUR DUROC GILTS BRED TO FARROW this fall, also spring pigs, on hand.

E. E. PRICE, CABINET, IDAHO, OR

JAMES N. PRICE, Yakima, Wash.

## CHESTER WHITE SWINE

### REGISTERED O. I. C.

SWINE.

Choice weaned pigs. Will ship subject to approval.

RINGGOLD FARM.
J. H. West, Prop., Rt. 1, Box 15,
Centralia, Wash.

### Schumacher's O. I. C.'s.

For sale—May and June boars, ready for service, from matured sows, with pedigree and from show ancestors. Also 18-month-old sows to farrow second litter in January.

E. C. SCHUMACHER, R. 1, Granger, Wash.

### COVE STOCK FARM

Unrelated fall and spring Chester White pigs from prize winning stock.

ARCHIE CONLEY, Cove, Ore.

### Chester White Swine

Choice weanling pigs; spring gilts and service boars.

FRED H. HOFFMAN, Albion, Wash.

## HORSES

### Percheron Prize Winner

First-prize two-year-old Percheron Stallion, Washington State Fair, 1918, and silver medal winner Percheron Society of America. For sale at my Edgewater farm, Burbank, Wash. Weighed 1990 pounds when 2 years old. If interested in a horse of great promise, look him over and make me an offer.

E. M. CHANDLER, Yakima, Wash.

FOR SALE.

A good five-year-old registered Clydesdale stallion, of proven worth, at a bargain.

C. F. JINDERLEE, Diamond, Wash.

## SHETLAND PONIES

### QUALITY SHETLANDS

"The women's pleasure and the children's delight." Richest Shetland breeding. Write for prices on early delivery.

DR. GREEN & SON, Wapato, Wash.

## HAMPSHIRE SWINE

HAMPSHIRE HOGS

have won every feeding contest entered since 1914. Weanling pigs, gilts, bred or open. Our blood lines can not be beat.

TUTTLE BROS. Asotin, Wash.

## ABERDEEN ANGUS

### Aberdeen Angus Cattle

A. H. EAGLESON & SONS,
Boise, Idaho.

## POLAND CHINA SWINE

### Big Type Poland Chinas

Mouw, Fesenmeyer and Herring strains, either sex. Also registered Shorthorn cattle; good individuals.

H. J. HOWSER, Stites, Idaho.

### LOCUST HILL HERD

Big Type and medium Poland China. Bred gilts and spring pigs of both strains, unrelated. Sixteen years a breeder of Poland Chinas in Oregon.

A. L. SWAGGART, Athena, Ore.

### Poland China Swine

Strictly first class breeding stock for sale at all times at reasonable prices. Several very choice young gilts and one fine, serviceable boar at a bargain; also young pigs, both sexes. (Everything registered free.)

C. B. COX, Mabton, Wn.

### Satisfaction or Money Back

Big Litter, Easy Feeding.

BIG TYPE POLAND CHINAS.

Fifty vigorous young boars, ready for service. Best breeding of the times and quality to equal it.

H. J. STILLINGS, Hermiston, Ore.

### Oaksdale Farm

Poland Chinas and Holsteins. Two fall boars at bargain prices for quick sale. A fine lot of early spring pigs. Best of breeding. A few well bred young bulls at very reasonable prices.

C. R. EVANS, Halsey, Ore.

BOAR PRICES FOR NEXT 30 DAYS.

On account of the influenza will not hold our fall boar sale, so in order to make room for our next crop of pigs will make special prices for the next 30 days. They are real herd boar material. Write for description and the price will interest you. Also 7 yearling Shorthorn bulls. Everything guaranteed to please or money back. Shipped C. O. D.

GREENLEAF STOCK RANCH, Greenleaf, Ida.

### Poland Chinas and Holsteins

Strictly big type spring pigs of both sexes. Well grown, good individuals, sired by A. Price. A few choice young bulls.

B. S. THURSTON & SON., Jefferson, Ore.

### BIG TYPE POLAND CHINAS

Winners of first prize junior herd, Oregon state fair, 1918. Big Bob Wonder and Sammy blood boar pigs of all ages, also a few good gilts.

LOE FARMS, Silverton, Ore.

### QUALITY AND UTILITY OUR HOBBY

Poland Chinas our breed. Young stock from prize winning ancestry. Satisfaction assured.

FRANK NEEDHAM, Eugene, Oregon.

25 HEAD PURE BRED

China boars, 6 weeks to 8 months old, $25 to $50, according to age. These are from my prize winning herd, including 1st and 2d prize boars. They are from litters of 10 and 12 pigs.

C. W. SHUMATE, Tumwater, Wash.

### BIG TYPE POLANDS

Genuine—Guaranteed.

GEO. W. BUCK. Oregon City, Ore.

QUALITY HERD.

If you want to improve your herd, try stock from my winners at the Oregon state fair.

RAY J. FOX, Lyons, Ore.

PURE BRED POLANDS.

Breeding stock of all ages. Will ship C. O. D., subject to approval.

HERBERT WILLARD, Dayton, Ore.

MEDIUM TYPE POLAND CHINAS.

The money makers. Mine won at Walla Walla, first and second junior sow, champion and grand champion. Both sexes for sale.

P. H. THOMLINSON, College Place, Wash.

## BERKSHIRE SWINE

### Kintyre Farm Berkshires

Weanling pigs, bred sows, service boars.

CLARK BROS., Yakima, Wash.

### Riverby Orchard Berkshires

Riverby Orchard Berkshires won 12 out of 15 first prizes at the Washington state fair, 1916, also many prizes, including grand champion sow at the Panama-Pacific world's fair. We offer for sale a few good boars and young sows.

D. C. BUNN, Prosser, Wash.

**When you write to advertisers be sure to state that you saw their advertisement in this paper.**

# Grain and Produce Markets

## Grain Market.

CHICAGO, Nov. 16.—Famine conditions in Europe brought about fresh advances today in the corn market here. Prices closed strong, 1½c to 3⅝c net higher, with December $1.25½ and January $1.26⅛ to $1.26⅝. Oats finished ¾@⅞c up, and provisions at a range varying from 17c off to a rise of $1.

Corn went upward from the start, and closed at nearly the top figures of the day. Interest continued to center chiefly in the need of large supplies for transatlantic countries that were represented as on the brink of starvation. Wet weather, which threatened to hinder the crop movement, was an additional bullish factor. Besides, country offerings were light.

Strength and activity characterized the trade in oats as well as in corn. Hedging sales, however, became plentiful on the bulge.

Provisions ascended with grain. Current gossip dwelt mainly on indications of immense quantities of meats and fats required for export.

### Cash Quotations.

CHICAGO, Nov. 16.—Corn—No. 2 yellow, old, $1.38; No. 3 yellow, old, $1.37; No. 4 yellow, old, $1.30@1.31; No. 4 yellow, new, $1.28. Oats—No. 3 white, 73@73½c; standard, 73¾@74c. Rye—No. 2, $1.64@1.65. Barley, 85c@$1.05. Timothy, $7@10.50. Clover, nominal. Pork, nominal. Lard, $27.10@27.15. Ribs, nominal.

### Chicago Futures.

| | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| Corn— | | | | |
| Dec. | 1.22 | 1.25½ | 1.22 | 1.25⅛ |
| Jan. | 1.23¼ | 1.26½ | 1.23¼ | 1.26⅛ |
| Oats— | | | | |
| Dec. | .71⅞ | .73 | .71⅝ | .72¾ |
| Jan. | .71⅛ | .72⅜ | .71⅛ | .71⅛ |
| Pork— | | | | |
| Nov. | .... | .... | .... | 41.00 |
| Jan. | 45.50 | 46.30 | 45.50 | 46.30 |
| Lard— | | | | |
| Nov. | .... | 27.17 | 27.10 | 27.10 |
| Jan. | 26.60 | 26.70 | 26.42 | 26.45 |
| Ribs— | | | | |
| Nov. | .... | .... | .... | 24.65 |
| Jan. | 24.25 | 24.55 | 24.25 | 25.52 |

### Pacific Northwest Grain.

PORTLAND, Ore., Nov. 16.—Grain, November delivery—Oats, No. 2 white feed, $54 bid; barley, standard feed, $50.25@51; December oats, No. 2, $54; barley, feed, $50.50@51.75; oats, No. 2, $50; oats, clipped, $52.50; corn, yellow, $56.75; corn, mixed, $55.50. Eastern oats and corn in bulk: Oats, No. 3 white, $50; 38-pounds, clipped, $52.50; corn, No. 3 yellow, $58; No. 3 mixed, $55.50. Sales, 100 tons yellow corn, November, at $58.25.

## Live Stock Market.

### At Omaha.

OMAHA, Neb., Nov. 16.—Hogs—Receipts, 5800; market lower. Heavy, $16.75@17.40; mixed, $17@17.25; light, $17.15@17.50; pigs, $15@16.50; bulk, $17@17.25.

Cattle—Receipts, 800; market steady. Native steers, $11@18.50; cows and heifers, $6.50@11.50; western steers, $10@17; Texas steers, $8.50@12; cows and heifers, $6@10.50; canners, $4.50@5.75; stockers and feeders, $6@13.50; calves, $7.50@18.50; bulls, stags, etc., $6.60@9.

Sheep—Receipts, 1200; market steady. Culls, $4.50@7.50; wethers, $10@11; ewes, $7.50@9.25; feeder lambs, $10@14.25; lambs, $12@15.40; yearlings, $10.50@11.50.

### At Chicago.

CHICAGO, Nov. 16.—(U. S. Bureau of Markets.)—Hogs—Receipts, 16,000; market slow, unevenly lower, averaging 15c to 20c under yesterday's general trade. Butchers, $17.50@17.90; light, $17@17.80; packing, $16.50@17.45; throwouts, $14@15.25; pigs, good and choice, $15@16.25.

Cattle—Receipts, 4000; compared with a week ago, native steers 25c to 75c higher; in between to good grades advancing most; butcher cattle irregularly 25c to $1 higher; westerns generally 25c to 50c higher; calves, $1 higher.

Sheep—Receipts, 6000. Compared with a week ago, fat lambs steady to 25c higher; sheep and yearlings steady to 25c lower; feeding stock steady.

### At Portland.

PORTLAND, Ore., Nov. 16.—Cattle—Steady; receipts, none. Steers, prime, $12.25@12.75; good to choice, $11@12; medium to good, $10@11; fair to medium, $8.50@9.50; common to fair, $6@8; cows and heifers, choice, $8@8.50; medium to good, $6.50@7.50; fair to medium, $5.50@6.50; canners, $3@4; bulls, $5@7.50; calves, $9@12; stockers and feeders, $6@8.

Hogs—Steady; receipts, 107. Prime mixed, $17@17.75; medium mixed, $16.75@17; rough heavies, $15@16; pigs, $14@15; bulk, $17.

Sheep—Steady; receipts, none. Prime lambs, $11.50@12.50; fair to medium, $8.50@10.50; yearlings, $10@11; wethers, $9@10; ewes, $6.50@8.50.

### At Seattle.

SEATTLE, Nov. 16.—Hogs—Receipts, 269; steady. Prime light, $17.50@17.75; medium to choice, $17.25@17.50; medium heavy, $16.25@16.75; rough, $15.25@15.75; pigs, $15.75@16.25.

Cattle—Receipts, 152; steady. Best steers, $11@13; medium to choice, $10.50@11; medium to good, $8@8.50; medium, $7@7.50; bulls, $5@7.50; calves, $5@10.

### SPOKANE UNION STOCK YARDS.

| | Cattle | Calves | Hogs | Sheep |
|---|---|---|---|---|
| Saturday, Nov. 16 | 83 | 3 | 100 | .... |
| Friday, Nov. 15 | 136 | .. | 217 | .... |
| Thursday, Nov. 14 | .. | .. | 139 | .... |
| Wednesday, Nov 13 | .. | 17 | 147 | 1166 |
| Tuesday, Nov. 12 | 107 | .. | 146 | 26 |
| Monday, Nov. 11 | 279 | 23 | 88 | .... |
| Week ago | 22 | .. | 130 | .... |
| Year ago | 216 | 3 | 240 | .... |
| Two years ago | 33 | 7 | 136 | 27 |

New arrivals in cattle were very light Saturday, there being but three straight loads appearing. Those cattle, together with a few mixed ends held over from Friday, afforded scarcely sufficient material to supply the week-end demand. Closing sales on all classes were made in line with the average for the week, with a firm market prevailing at the following quotations:

| | |
|---|---|
| Prime steers | $12.00@13.00 |
| Good to choice steers | 10.75@11.75 |
| Medium to good steers | 9.50@10.50 |
| Fair to medium steers | 8.25@ 9.00 |
| Common to fair steers | 5.50@ 8.00 |
| Choice cows and heifers | 7.50@ 8.25 |
| Med. to good cows and heifers | 6.00@ 7.00 |
| Com. to med. cows and heifers | 4.75@ 5.75 |
| Canners | 3.00@ 5.00 |
| Bulls | 5.00@ 6.50 |
| Calves | 6.00@ 9.50 |
| Stockers and feeders | 6.00@ 8.00 |

One carload and a few small driveins constituted the hog offering. While the run was light, the quality and condition were considerably above the average, demanding $17.25 for the best sorts, which price carried with the bulk of sales. The market is steady at the following:

| | |
|---|---|
| Prime mixed | $17.15@17.40 |
| Medium mixed | 16.75@17.00 |
| Rough heavies | 15.15@15.40 |
| Pigs | 14.75@16.25 |
| Stockers and feeders | 14.00 |
| Bulk of sales | 17.25 |

Again the market opened without an offering of sheep. Although the sheep demand has not had a tryout during the last half of the week, indications point to steadiness at the following:

| | |
|---|---|
| Prime lambs | $10.00@11.00 |
| Fair to medium lambs | 8.50@ 9.50 |
| Prime yearlings | 8.00@ 9.00 |
| Prime wethers | 7.50@ 8.50 |
| Best mutton ewes | 6.50@ 7.50 |
| Breeding ewes, 1 to 4 years | 12.00@15.00 |
| Breeding rams | 25.00@50.00 |

## Spokane Market.

SPOKANE, Nov. 16.—The Carstens Packing company announces a decline of 1 cent a pound for best steers. Cuts of beef have also declined 1 to 2 cents a pound. Wether and ewe mutton have each gone down 1 to 3 cents a pound.

Packer dressed hogs have declined 3 cents a pound, and country dressed hogs 2 to 3 cents a pound.

Ham, bacon and lard have advanced 1 cent a pound.

### WHOLESALE MEATS.

**Beef**—Beef steers, 15@19c lb; T. C. steers, 20c lb; cow beef, 11@14c lb; heifers, 15c lb; best loin, 24@25c lb; steer chucks, 12c lb; square chucks, 13@14c lb; prime ribs, 18@19c lb; rump and round, 18@19c lb.

**Mutton**—Breakers, 19c lb; wethers, 18c lb; ewes, 15c lb.

**Lambs**—Diamond T. C. lambs, 22c lb; lambs, 20c lb.

**Pork**—Packer dressed hogs, 24@27c lb; pork loins, 30@34c lb; legs, 30c lb; shoulders, 28c lb; leaf lard, 27c lb; tenderloins, frozen, 45c lb; spareribs, 17c lb; country dressed hogs, with head on, 19@21c lb to producer; country dressed veal, 13@15c lb to producer.

**Smoked Meats**—Washington hams, 38c lb; T. C. hams, 40c lb; T. C. bacon, 53½c lb; Washington bacon, 43@50c lb; picnics, 27c lb; lean backs, 37c lb.

**Star Brand**—Star hams, 37¼@37¾c lb; Shield hams, 35¾@36¾c lb; picnics, 27c lb; bacon backs, 33@38c lb; Star bacon, 52¾c lb; Shield bacon, 45¼@47¾c lb; Simon Pure lard, 35@36c lb; Shield lard, tierces, 24¼c lb.

**Dry Salt Meats**—Clear bellies, 30@31c lb; loin back, clear, 29½c lb.

**Lard**—Tierces, 30c lb; $22 buckets, per case; Diamond T. C. pure leaf lard, $16.55 case; Snowcap compound, tierces, 23½c lb.

### GRAIN AND FEED.

**Rice**—Fancy head, $7.50@9.50 cwt.

**Flour**—Bluestem, $11; blend, $11; graham, $9.75 bbl; whole wheat, $10.35; eastern rye, $10; eastern rye meal, $10.20; oat flour, $12.80, two 100-lb sacks.

**Oats**—$62 ton whole, $63@65 rolled, delivered in city; steam rolled, No. 2, $65 ton.

**Corn**—$77 ton; cracked corn, $79 ton.

**Barley**—Rolled, $61 per ton.

**Oil Meal**—$75 per ton.

**Bran and Shorts**—$30 ton; if soft wheat feed, $32 ton.

**Hay**—Timothy, $39 per ton delivered, $36 by carload; alfalfa, $32 per ton delivered, $28 by carload.

### GASOLINE, LINSEED OIL, ETC.

**Gasoline**—Red Crown, bulk, 25c gal, cases 35c gal; Shell, 25c gal; refined oil (Pearl), bulk, 14c gal; cases 23c gal; eocene, 15½c gal in bulk, cases 26½c gal; engine distillate, 17c gal, bulk.

**Linseed Oil**—Raw, bbl, $1.94 gal, cases $2.12 gal; boiled, bbl, $1.96 gal, cases $2.14 gal.

**White Lead**—Strictly pure white lead in oil, ton lots, 13½c lb; 50-lb lots, 14c.

### CHEESE.

**Wisconsin**—33@38½c lb; first-grade western, 30@26c lb.

### POULTRY.

**Live Poultry**—Live hens, 20@22c lb; spring chickens, 22c lb; roosters, 10c lb; ducks, 20c lb; geese, 13c lb to producers, f. o. b Spokane.

### BUTTER.

**Creamery Butter**—One-pound prints, 59@60c lb.

### EGGS.

Fresh local, 58½c doz; storage, 45c doz.

## Spokane Produce.

SPOKANE, Nov. 16.—The following are prices received by wholesalers from retailers, mines, camps and the like in the city and tributary territory:

**Potatoes**—Montana and Yakima valley district, sacked, white varieties, $1.75@2. Home grown, quality and condition good, $1.25@1.50. Few extra fancy at $2.

**Apples**—Boxes: Washington, extra fancy Delicious, $2.50@3.25; extra fancy Winesaps, large, $3; fancy Grimes and Wageners, small to medium, $1.85@2.25; jumble pack orchard run, $1.50; fancy Jonathans, small, $1.85.

**Onions**—California Australian browns, extra fancy, $3.25 per cwt; quality and condition good, $2.25@2.50; home grown Danvers, $2@2.50.

**Pears**—Winter Nellis and Fall Butters, $2@2.50; Keefers, $1.50@2. Nine boxes express arrived, Washington.

**Beets**—Sacked, $1.75@2.25 per cwt; bunched stock, 20@35c per dozen bunches.

**Cabbage**—Crated, retrimmed Danish Ballhead, 2¼@2½c per lb.

**Carrots**—Sacked, per cwt, $1.50@2; bunched stock, 20@35c per dozen bunches.

**Celery**—Large size, per dozen bunches, white, $1@1.25; smaller, 65@85c; celery hearts, 40@60c per dozen bunches.

**Turnips**—Sacked, $1.50 per cwt. Bunched stock, 20c per dozen bunches.

**Parsnips**—Extra fancy, sacked, $2@3 per cwt.

## Portland Market.

PORTLAND, Ore., Nov. 18.—Egg authorities believe the egg market has reached the top for this season. Prices are unchanged, but the undertone of the market is easier. Receipts of fresh stock are still light.

### Quotations.

Eggs—Oregon ranch, candled, 65c; selects, 68c.

Cheese—Jobbers' buying prices, f. o. b. dock, Portland: Tillamook triplets, 36c; young Americas, 37c a pound. Coos and Curry, f. o. b. Myrtle Point: Triplets, 35¾c per pound.

Poultry—Hens, 26@28c; broilers, 28@30c; ducks, 25@30c; turkeys, 30c; geese, 17@18c.

Pork—Fancy, 20c.

Veal—Fancy, 20c.

Potatoes—Oregon, $1.75@2 per hundred.

Hay—Buying prices, f. o. b. Portland: Eastern Oregon timothy, $30@32 per ton; valley timothy, $27; alfalfa, $28; valley grain hay, $26; clover, $27; straw, $9@10.

## Seattle Market.

SEATTLE, Nov. 16.—The big apple seller during the week has been the "O" grade, indicating to jobbers that consumers have not yet arrived at the point where $3 fruit is desired.

### Purchasing Prices.

Eggs—Select ranch, 75@80c per doz.; pullets, 64@65c.

Butter—Fresh dairy, 35c per lb.; butterfat, 68c per lb; bakers', 46c per lb.; raw milk, $3.50 per cwt.

Poultry—Broilers, live, 1918, 43c per lb.; hens, 2 lbs and over, 25c lb.; under 3 1-2 lbs, 25c per lb.; old roosters, 17c per lb.; ducks, live, fat, 25@26c per lb.; squabs, large, $3.50 per doz.; geese, fat, live, 21@22c per lb.; Belgian hares, 11@15c per lb.; guineas, $7 per doz.; turkeys, young toms and hens, dry picked, 10 lbs and up, 30@35c per lb.

Hogs—Light, 18@21c per lb.; heavy, 12@22c per lb.

Beef—Steers, fat, 12@15c per lb; heifers, fat, 12@15c per lb; cows and bulls, 11@14c per lb.

Veal—Fancy, light, 19c per lb.; do heavy, 10@18c per lb.

Mutton—Fat, 22c per lb.; spring lamb, fat, dressed, 25c per lb.

### Hides, Tallow and Wool.

Bid prices to producers: Salted hides, cows and steers, No. 1, 15c per lb.; do No. 2, 15c lb.; green hides, cows and steers, No. 1, 12c lb.; do No. 2, 11c lb.; salted, bulls or stags, No. 1, 12c lb.; do No. 2, 11c lb.; green, bulls or stags, No. 1, 10c lb.; do No. 2, 9c lb.; salted or green calf skins, No. 1, 32c lb.; No. 2, 30 1-2c lb.; salted or green kip skins, No. 1, 16c lb.; do No. 2, 14 1-2c lb.; dry hides, No. 1, 30c lb.; do No. 2, 29c lb.; dry bulls or stags, 25c lb.; dry salt hides, 24c lb.; dry calf skins (five lbs. and under), No. 1, 35c lb.; do No. 2, 33c; tallow, No. 1, 13c lb.

Horsehides, green or salted, each, $2@4; do dry, each, 50c@$2.

Clean ranch wool, full growth, lb., 30@55c.

### BUTTER AND EGGS.

PORTLAND, Ore., Nov. 16.—Butter—Prints, extras, 63c; cubes, extras, 60c; prime firsts, 59c; dairy, 36c. Butterfat, Portland delivery, No. 1 sour cream 67c.


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*The Gasoline of Quality*


# FARMERS' WANT ADS

This is the farmers' "Want," "Sale" and "Exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rate, 7 cents a word per insertion, with a special rate to farmer subscribers to the Washington Farmer of 6 cents a word per insertion for from 4 to 12 times, and 5 cents a word per insertion for 13 times or more.

All commercial and land advertising, 7 cents per word each insertion. Open also to nonsubscribers.

In using these columns advertisers must observe: (1) No advertisement will be inserted for less than 75 cents. (2) Every word, number and initial, including name and address, must be paid for. (3) Cash must accompany order.

Above rates also include insertion in The Oregon Farmer and The Idaho Farmer.

### SITUATIONS WANTED—Female 18

A MIDDLE AGED WOMAN WANTS POSITION as housekeeper; no woman boss; have had years of experience. Mrs. A. Truax, Broten, Idaho.

### SITUATIONS WANTED—Male 21

YOUNG MAN, WELL EDUCATED, WITH years of experience in all lines of commercial work, stenography, etc., offers his services in exchange for room and board where conditions are conducive to good health, in order to thoroughly recover from injury received a short time ago; satisfactory references upon application. Address P. O. Box 501, Portland, Ore.

### EDUCATIONAL 45

IN BUSINESS OR ACTUAL LIFE THE BEST is none too good for you. Write Gooding college, Gooding, Idaho, Charles Wesley Tenny, president, today.

TELEGRAPHY—YOUNG WOMAN'S POPULAR vocation; good paying positions available. Write for booklet. Pacific Telegraph Institute, Spokane.

SEND NEWS NOTES TELLING OF THE work of your school today. Address the Educator, Gooding, Idaho.

### HONEY, BEESWAX—Wanted 58

SEND SAMPLES OF YOUR HONEY AND beeswax. State quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

### EGGS AND BUTTER WANTED. 59

WE ARE ALWAYS IN THE MARKET FOR good eggs and dairy butter. Send us your next shipment. Oregon Farm Products Co., 386 Halsey st., Portland, Ore.

### MISCELLANEOUS—FOR SALE 60

TRAP COYOTES—FULL INSTRUCTIONS ON a sure catch method and reliable scent recipes sent on receipt of $5. C. L. Willis, Dillard, Ore.

### MISCELLANEOUS WANTED 63

CASH PAID FOR OLD FALSE TEETH. We pay up to $35 per set (broken or not). Send now. Cash sent by return mail. Package held 5 to 15 days for sender's approval of our offer. Highest prices paid for old gold jewelry, gold crowns, bridges, dental gold, platinum, diamonds and silver. Send for fall catalog of new jewelry.
UNITED STATES SMELTING WORKS, INC. 331 Goldsmith bldg., Milwaukee, Wis.

POULTRY WANTED.
We are cash buyers of poultry and dressed meats, also cream. Write us for prices, shipping tags and premium catalogue for cream shippers.
COMMERCIAL CREAMERY CO.
SPOKANE, WASH.

HIGHEST PRICES FOR POULTRY AND EGGS. Washington Meat & Poultry, 409 Second avenue, Spokane.

### LIGHTING EQUIPMENT 74

THE SAFETY LAMP CO., N208 HOWARD ST., Spokane, Wash. Gasoline lighting and supplies.

### AUCTIONEERS 75

M. SEIDENBACH, AUCTIONEER, GIVES best service. Sales solicited. 418 Fernwell, Spokane.

### MACHINERY—For Sale 93

IMPORTANT NOTICE.
We not only stock "WITTE" gasoline engines, 2 to 30 h. p., but carry a full line of repair parts for them. Prompt service our hobby.
HIGGINS MACHINERY COMPANY.
312 1ST AVE., SO., SEATTLE.

PRACTICALLY NEW "K" HAND STUMP puller, 200 feet cable, blocks, takeup, and root hook; cost $220, will take $100. James DeVine, Metaline Falls, Wash.

### AUTOMOBILES 114

HEADQUARTERS FOR
used cars, trucks and tractors; printed list. Spokane Auto Market, W315 Sprague ave., Spokane, Wash.

AUTO RADIATORS, FENDERS AND LAMPS repaired. Lester Allen, 607 Second avenue, Spokane.

### STOVE AND FURNACE REPAIRS. 126

WRITE M. S. RUBENS, SPOKANE, FOR ANY parts needed to repair stove, furnace.

### RABBITS and HARES 173

NEW ZEALAND REDS, YOUNG BUCKS AND does; pedigreed and registered; extra fine. E. Kelly, 834 Main st., Petaluma, Cal.

FOR SALE—WHITE ANGORA RABBITS, breeders, $1.50, 4 months, 60c. Austin Rull, Deep River, Wash.

### POULTRY 174

BUY YOUR INCUBATOR NOW.
Incubators will be scarce and high next spring. Send for our list of new and used incubators and save money. Agents: Famous Queen incubators and brooder stoves. Queen Hatchery, 89 Pike st., Seattle.

FOR SOMETHING GOOD IN SILVER WYANdottes and Golden Campines, write G. G. Wherry, Payette, Idaho.

WHITE CORNISH COCKERELS, LARGE, good layers, quick growth, $2 to $3. Everett Gould, Harrah, Wash.

50 USED INCUBATORS FOR SALE, FROM 70 to 700 egg capacity. A. R. Badger, Centralia, Wash.

THOROUGHBRED BARRED ROCK ROOSTers, $2.50 each. Mrs. F. J. Dyche, Thornton, Wash.

SHIP US YOUR POULTRY. TOP PRICES. Home Poultry House, S173 Washington, Spokane.

PURE BRED MAMMOTH BRONZE TURKEYS. Mrs. C. R. Lowery, Route 2, Boise, Idaho.

### LIVE STOCK. 177

YOUNG JERSEY BULL AND SEVERAL young Jersey cows—St. Mawes breeding—all splendid animals. Also complete Empire milking machine, very reasonable. A. Adolphsen, R. 2, Chehalis, Wash.

FOR SALE—50 REGISTERED SHORTHORN bulls, coming 2 years old; Scotch topped with plenty of size and bone. Priced low for quick sale. Chas A. Norton, Salmon, Idaho.

FOR SALE—FINE REGISTERED BERKSHIRE boar pigs ready for service, $25 each, with papers; 1 registered Holstein bull calf, $35. Write Dean Ickes, Palouse, Wash.

WANTED—TO BUY REGISTERED HOLstein cows or heifers; price and description. H. H. Stiver, Box 697, Nampa, Idaho.

DUROC CHINA CROSS WEANED PIGS, $6 and $8 each. Also Mammoth Bronze turkey toms. S. M. Wilson, Carley, Wash.

FOR SALE—9 PEDIGREED DUROC-JERsey pigs; 2 months old; 30 cents per pound. Asael Larson, Friday Harbor, Wash.

THREE REGISTERED SHORTHORN BULLS, 18 months old, for sale. Ernest W. Haag, Sandpoint, Idaho.

FOR SALE—WEANLING BIG TYPE POLAND China pigs. S. S. Mullen, Bellingham, Wash., R. 1, Box 86.

REGISTERED O. I. C. SWINE. BREEDING stock for sale. C. I. Ballard, Rickreall, Ore.

### HOTELS 306

WHITE'S HOTEL AND RESTAURANT—Rooms, hot and cold water, 75c up. Breakfast 20c to 40c; dinner, 25c to 50c. Sprague and Stevens, Spokane.

GALAX HOTEL; NEW AND MODERN; 75C and $1. Main and Bernard, Spokane.

NEW MADISON HOTEL, 75C AND UP. 1ST and Madison, Spokane, Wash.

### RUBBER STAMPS AND SEALS 384

FOR RUBBER STAMPS, STENCILS, BADGES, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

### ARTIFICIAL LIMBS 424

SCHINDLER ARTIFICIAL LIMB CO., 811 Wall st., Spokane, Wash.

### TAXIDERMISTS 426

FUR RUG MOUNTING A SPECIALTY, HEADS, animals and birds mounted. Withers Bros., 822 Sprague, Spokane.

FIRST-CLASS WORK, ALL BRANCHES TAXIdermy and furs. Mohr, Bernard st., Spokane.

### SEEDS. 620

WE SPECIALIZE IN TIMOTHY, ALFALFA, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Idaho.

### NURSERY STOCK 621

FRUIT TREES, ORNAMENTALS, SHRUBS, vines, etc. Complete assortment of general nursery stock. Lowest quotations given on application. Now is the time for fall planting. Albany Nurseries, Inc., Albany, Ore.

### FARM LANDS FOR SALE 651

SNOHOMISH COUNTY, WASH., FARM LANDS. The greatest proposition on the market for the man who wants a farm. 12,000 acres to select from; 3½ miles salt water front; 20 miles of beautiful lake shore; good towns, railways, steamboats, factories, mills, schools, churches, paved roads; where the largest profits are made, where the great variety of crops and wonderful productive climate makes it the most productive farm section of America. Good lands in good localities, as low as $25 to $35 per acre. 10 yearly payments. Send for maps and literature to the Brownell Land Co., 904 Third ave., Seattle, Wash.

CIRCUMSTANCES NECESSITATES MY selling my forty-acre bearing apple orchard, located on main street, in Imbler, Ore, in the beautiful Grande Ronde valley, one mile from apple warehouse and transcontinental railroad; orchard is fenced and has 2000 trees. This property is worth $500 per acre. Will price for quick sale at $250, one-third cash, balance terms to suit. Quick action necessary. Address owner, S. E. Hayes, Hoge bldg., Seattle, Wash.

YAKIMA VALLEY RANCH; 40 ACRES; ONE mile from town; 20 acres alfalfa; 15 acres plowed ground; 5 acres pasture; house, barn, fully paid water right; thickly settled district; price $150 per acre, $1500 down; joining land held at $300 per acre. Roy C. Lichty, Sunnyside, Wash.

WONDERFUL WENATCHEE VALLEY.
Finest apple region in the world.
PROFITABLE BEARING ORCHARDS
IRRIGATED LANDS, STOCK RANCHES.
If interested, write us.
PFAU & GREER, WENATCHEE, WASH.

80—BEST BUY IN VALLEY; 50 ALFALFA; well improved; first man who knows a good thing will buy this on sight, $9000, cash $4000. Other alfalfa and grain farms under the new Warm Spring which is opening a great country. O. E. Carman, Vale, Ore.

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VERMILION, ALBERTA, FARM LANDS. FREE transportation to inspect land. Union Investment Co., 406 Ziegler blk., Spokane, Wash.

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KENNEWICK IRRIGATED RANCH FOR SALE —22 acres; best location and ground in valley. L. Baierlipp, Kennewick, Wash.

### FARM LANDS—WANTED 654

WANTED—TO HEAR FROM OWNERS OF land in Idaho, Washington or Oregon for sale or trade for western Montana land. Scott & Rummel, R. D. 1, Eureka, Mont.

## Farmers' Want Ads

### AGENTS WANTED 9

POWERINE IS EQUAL TO GASOLINE AT 5C a gallon. Salesmen and agents wanted; exclusive territory granted. Powerine is guaranteed to be harmless, to remove and prevent carbon, doubling the life of all gasoline motors, saving repairs, adding snap, speed and power. An amount equal to 20 gallons of gasoline will be sent to any address in the United States, charges prepaid, for $1.00. W. Porter Barnes, Santa Rosa, Cal., dept. 85.


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brings you all the local news and happenings of the social and commercial life of your community. It gives you the news of the home boys at the front and prints many interesting letters from them.

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Your Local Home Paper and Your State Farm Paper can now be sent to you for one year each at the special clubbing rate as quoted below:

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| The Cheney Free Press, Cheney, Wash., and The Washington Farmer | $1.50 |
| Chehalis Bee-Nugget, Chehalis, Wash., and The Washington Farmer | $1.50 |
| Cashmere Valley Record, Cashmere, Wash., and The Washington Farmer | $1.50 |
| The Everett Tribune, Everett, Wash., and The Washington Farmer | $3.00 |
| The Colville Examiner, Colville, Wash., and The Washington Farmer | $1.50 |
| Goldendale Sentinel, Goldendale, Wash., and The Washington Farmer | $2.00 |
| Puget Sound Mail, La Conner, Wash., and The Washington Farmer | $2.00 |
| The Montesano Vidette, Montesano, Wash., and The Washington Farmer | $2.00 |
| Oak Harbor News, Oak Harbor, Wash., and The Washington Farmer | $1.50 |
| The Morning Olympian, Olympia, Wash., and The Washington Farmer | $4.00 |
| The Weekly Recorder, Olympia, Wash., and The Washington Farmer | $1.00 |
| Puyallup Valley Tribune, Puyallup, Wash., and The Washington Farmer | $1.50 |
| The South Bend Journal, South Bend, Wash., and The Washington Farmer | $2.15 |
| Sumas News-Advocate, Sumas, Wash., and The Washington Farmer | $1.50 |
| Walla Walla Bulletin, Walla Walla, Wash., and The Washington Farmer | $5.00 |
| White Salmon Enterprise, White Salmon, Wn., and The Washington Farmer | $1.50 |
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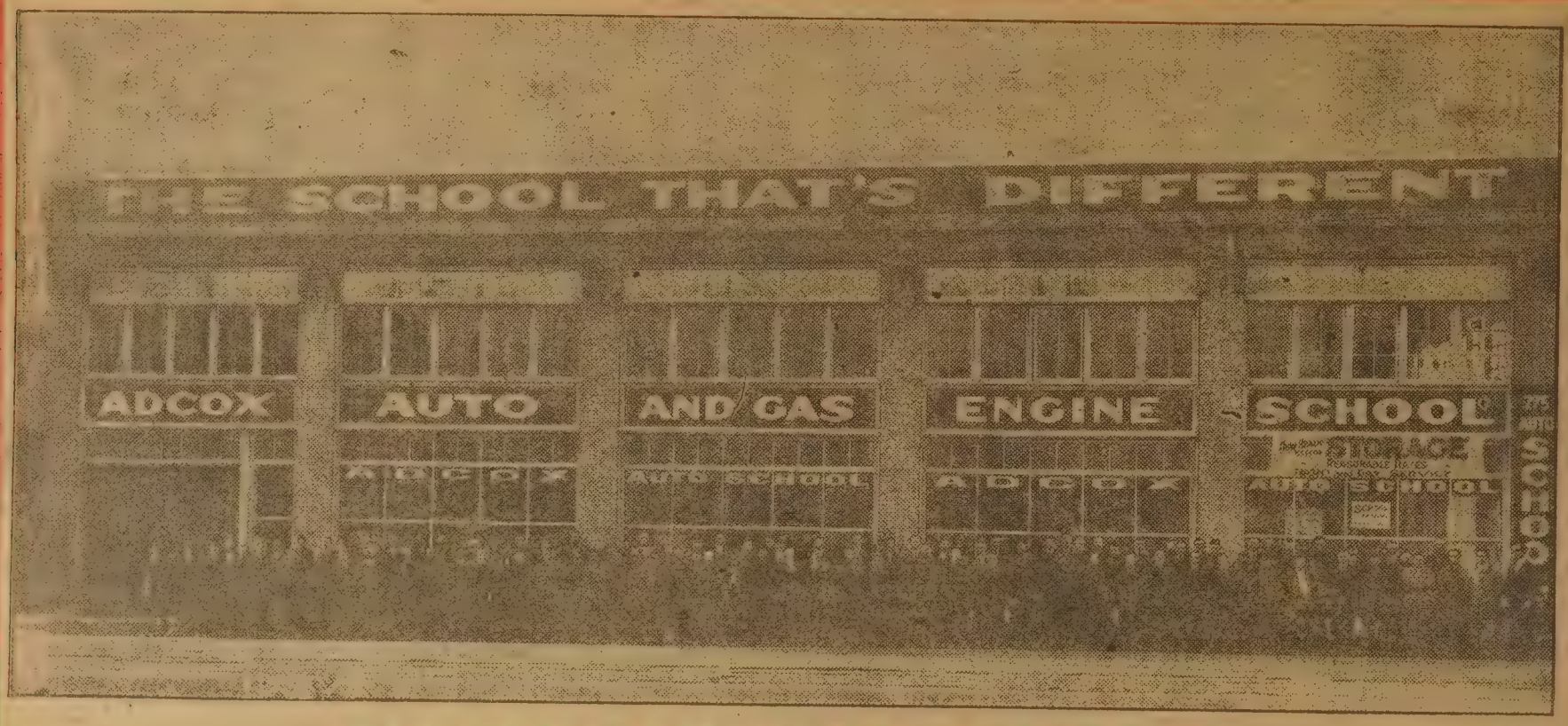
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You can have my wonderful, big catalog full of pictures and letters from my graduates "right on the job" making good at the Auto and Tractor business. It is a book you will like. You will read it two or three times—it will make you a friend of mine from the start. It's yours for the asking. Fill in the "Opportunity coupon" below.

The opportuinties away from home will be so alluring that thousands of the best auto men will seek new fields. But pause for a moment—what are we going to do here at home? We now have 5,595,499 autos, to say nothing of the 70,000 farm tractors, and the increase in the next five years will be at the rate of more than 1,000,000 per year, if men can be trained fast enough to keep the wheels turning.

It is a serious situation for the auto factories and shops, but a pleasant one for you if you are prepared. There never was a greater opportunity for you to fill a useful job—help your country and advance yourself. But you must act quickly. It is the quick thinkers, the ones who realize the big opportunity before them, that will fill in the coupon below and get my catalog. The moment the coupon is filled in you have taken the first step on the road to success.

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NOVEMBER 28, 1918.

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PUBLISHED WEEKLY.

# THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF




ONE year ago wanton destruction was stalking through a stricken world—devastating, slaying, maiming. Today the thought and energies of all mankind are turning in hope and thanksgiving to the tasks of peace.

One year ago shells were shrieking, cannon were booming, bombs were dropping down upon the innocent and the helpless. Today quiet and restfulness reign on last year's blood-red field.

One year ago factories were humming, farmers were plowing, ships were speeding to feed the raging fires of war. Today they hum, they plow, they speed on missions of mercy and of restoration.

One year ago might threatened right; the dark clouds of autocracy and oppression hung low over the weary world. Today right is might and the light of liberty is penetrating the clouds and melting them as mist before the sun of the morning.

Though the heart of the world still aches for the wounds of yesterday, though crosses rise on myriad nameless mounds and many homes in many lands are broken, the fruits of the struggle are greater than its sacrifices. Already, out of its wreckage a new world is rising in which human justice and human liberty will rule. The dark past is behind; a bright future is ahead. With thanksgiving and praise to the God from whom all blessings flow, mankind marches on.

# The One Way to solve the Problem of High Insurance Cost!

## *Every Property Owner of the Pacific Coast Should Know*

**THAT** seventeen years ago the Northwestern Mutual Fire Association of Seattle was organized, being then at the bottom of the list of fully two thousand other mutual companies in the United States, several of which were more than a hundred years old.

**THAT** it has passed all these companies and is now doing the largest mutual fire insurance business of any company in the United States.

**THAT** the company is really an organization of fifty thousand property owners co-operating to keep down fire waste and to provide payment of any losses they do not succeed in preventing.

**THAT** the fire losses of its policy holders are proportionately less than of any other group of property owners.

**THAT** it avoids the ordinary expensive and wasteful local agency system, and that through the savings in expenses and losses it has returned to its policyholders cash dividends and savings of more than $2,800,000.00, and has also accumulated more than $1,000,000.00 in cash resources for the protection of its policyholders. These figures represent only a fraction of the real service of the organization. The saving in fire waste and the influence of the organization on the rates of other companies have saved property owners many, many times the amount represented by dividends and accumulations.

**THAT** it has more cash resources proportionate to risks and the amount required to carry its policies to expiration than any one of the ten largest American stock companies.

**THAT** it has taken a step in advance of all other fire insurance companies in the United States in issuing a paid-up, non-assessable dividend-paying policy. In this it is following the example of all the larger successful life insurance companies in the United States.

**THAT** its policies cover a selected class of carefully inspected property so that its policyholders do not have to contribute to the payment of losses on hazardous and poorly protected property.

**THAT** its policy holders never have to worry about insurance rates, as higher rates simply mean larger dividends. It all eventually comes back to the policyholder, with the exception of the necessary losses and expenses.

**THAT** cooperating with the Northwestern Mutual Fire Association is the Martin General Agency, having the capacity of all the other strong mutual fire insurance companies doing business on the Pacific Coast. The Martin General Agency is the largest fire insurance agency in the Northwest. This agency enables the office to care for the largest lines of insurance.

**THAT** with such service and facilities at the command of every property owner there is no cause for worrying over insurance rates.

**THAT** the company has the highest class insurance experts and inspectors obtainable. These experts are at the service of every property owner, and many of the heaviest property owners of the state are having this office care for their entire insurance interests.

**THAT** this organization is owned entirely by the property owners. The whole ambition of the management is to render the most valuable service possible in reducing losses and in rendering the best possible insurance service at actual cost.

**We are gratified by the results accomplished, but not satisfied. We ask the cooperation of every property owner toward the enlargement of this service. If you are not getting the benefit of this service, why delay? A line to the head office will bring results.**

## *NORTHWESTERN MUTUAL FIRE ASSOCIATION*

**INLAND EMPIRE OFFICES,**
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**F. J. MARTIN, President.**
**Main Offices, Central Building, Seattle.**

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 48. THE RANCH PACIFIC DAIRYMAN HORN AND HOOF November 28, 1918

## Farmers Went Ahead and Won

### *In Spite of All Handicaps They Produced Food Supplies*

By GIFFORD PINCHOT.

I do not believe that the farmers of America begin to realize that what they have done is the greatest and most splendid patriotic service rendered by any class of our people in the great war. Without adequate labor, credit, or farm supplies, neglected by the government, misunderstood and abused by the city press, nevertheless and farmers produced the food we had to have. When it seemed to those who really knew that human strength could not suffice, American farmers grew the two great crops, without which we would have lost the war.

Their wonderful achievement was accomplished in the face of difficulties that were wholly unnecessary.

Three great blunders were made in dealing with food production while we were at war. The first was in giving our principal attention to the conservation of what food we had instead of to the production of more food. If even a small part of the effort and exhortation which have been devoted to saving food had been given to growing more food, there would have been vastly more food available, and most of the painful need for saving would have been done away.

The second blunder was in failing to make it possible for the farmer to get enough labor, farm supplies, and credit to give him a reasonable chance to raise the crops the nation and the world required.

The third blunder was in excluding the farmer from partnership in the conduct of the war, and especially from that part of it which had to do with food supply. Yet, according to the United States census, a full half of all our people live in the country and in small villages and towns, which are for the most part dependent on farming for their prosperity, and which have the same interests and the same outlook as the farming communities which lie about them.

In spite of all these blunders, needless, dangerous and exasperating as they were, the farmers went ahead and won out. There has been nothing finer outside of the conduct of our men at the front.

Although the guns are silent at last, for the American farmers the war is not yet ended. They have been fighting the Germans by sending men abroad and raising food at home. But now that our own splendid boys, side by side with the wonderful fighters of our allies, have beaten the Germans into submission, the farmers of America can not lay down their fighting tools. Two great enemies are still to be defeated. One is world-famine, which can be prevented only if the farmers of the United States keep up their marvelous record. The other is the persistent refusal of common justice and a fair share in our government to the men who feed us all.

Our farmers have seen their government advancing hundreds (if not thousands) of millions of dollars to help other industries, but not to help them. They have seen a limit set on the price of what they have to sell, but not on the price of what they have to buy. Their own problems were decided for them, and very often wrongly decided, without their being consulted. Their legitimate demands for a share in the management of the war, voiced again and again through the national board of farm organizations, were persistently denied. But looking beyond the ignorance and shortsightedness of officials, in the presence of the nation's need, they forgot everything but their duty as Americans, and they brought to pass what seemed altogether impossible.

All honor to the men who set patriotism above party, disregarded abuse and neglect, turned their backs upon selfishness and resentment, and in the face of the greatest difficulties accomplished what the safety of our country and the world absolutely required.

Every farmer knows that since the civil war this nation has been managed by city men for the advantage of city people. Laws and policies have been, and are still, in city hands. For example: There are today in congress 531 members in both houses, and only eight of them even claim to be farmers. One-third of our people live on the farm; and all of our people are dependent on the farm; yet only 1 1-2 per cent of our lawmakers are farmers. If an exact proportion were possible or practicable, which it is not, no less than 178 of our congressmen would be farmers.

It goes without saying that the farmers of America have no desire to deprive other classes in our population of the proper influence and just representation which is their due. Conditions which are unfair in the case of the farmers would be equally unfair if applied to others. What the farmers want is justice all around.

Every farmer knows that ever since the civil war what the government has done to help the farmer has been done still more to help the city man. Even in the matter of food production, the city man's point of view has been in control. What the city man wanted was cheap food. Therefore what was done for the farmer was directed almost without exception toward helping or inducing him to grow cheap food. But what the farmer got for himself and his wife and family out of what he produced was a wholly different matter.

A good example of the hostile city mind is supplied by the Baltimore Evening Sun of November 7th. In enumerating the causes behind the recent election it says:

"Possibly a still more potent influence was the farmers, who were sore because the government would not allow them to 'charge all the traffic would bear' for their wheat and limited them to twice the normal price and more instead of allowing them to gouge America and her allies to the limit. The farmers pay far less than their share of the income taxes and are reaping a rich harvest on their crops, including wheat, but they apparently strike at Wilson because he would not give them a free hand at profiteering."

All this is wrong and ought to stop. That is why the national board of farm organizations has undertaken, through its nation-wide agricultural reconstruction committee, to find out just what the farmers of America believe they are entitled to in the reconstruction after the war. To find out just what you want is the first step toward getting it. When a farmers' plan of reconstruction, thus formulated, has been criticized, corrected, and adopted by the organized farmers of America, there will be a real chance that justice for the farmer can be brought out of the great changes which must follow the conclusion of peace. But the whole united power behind it of one-third of our people, the farming third, will be none too much to change the old bad order and begin the new.

There ought to be a change. If the farmers of America make up their minds to get that change they can have it. To get it they must go after it all together. If they continue to scatter their forces the city mind will continue to dictate and decide for another 50 or 100 years.

**McIntosh Wrote It**—The article on page 8, discussing a scientific way to calculate the cost of producing milk, was written by C. J. McIntosh of Oregon Agricultural college. It is an article worthy of deep study by every reader who has a cow.

**The Farm Bureau**—H. W. Hochbaum of Idaho, in an article on page 7, tells how it operates.

**Who's Running Germany?**—A clue is given in Dr. Bryan's able discussion of German socialism on page 14.

## Call Off Stock Shows

Owing to the fact that the influenza epidemic has not abated as it was believed and hoped that it would, the state authorities have ruled that the Northwest Live Stock show must be called off for this year. Hence the board of directors have announced that it will not be held, though elaborate plans have been carried out to make it one of the best ever held in the west. The show was originally scheduled for several weeks ago, but was postponed because of the epidemic, which now necessitates its complete abandonment until next year, when it is expected a great show will be held. It is announced that the Shorthorn and Hereford sales which were scheduled for show week will be held on the show grounds on December 18 and 19, respectively. Joe Turner of Meyers Falls, Wash., is sales manager for the Shorthorn men, while L. R. McGee of North Portland, Ore., is manager for the Hereford men.

A dispatch from Portland says that the Pacific International show has also been called off with the exception of the fat stock show. The sales of purebred stock will also be held, it is stated, but it is not at this time announced definitely whether the fat stock show and the sales will occur on the original show dates or not. The show was scheduled for December 9-14.

## Famine Cannot Be Prevented

### *Europe Calls for More Than America Is Able to Provide*

Before starting for Europe, there to take up the stupendous task of providing for supplies for the hungry peoples of Europe, Food Administrator Hoover took a survey of the different great groups of commodities that will be available until the next harvest.

He finds that of wheat and rye there will be sufficient world supplies, with economical consumption—not sufficient for the real needs of the hungry nations, but as much as can be moved by the available ship tonnage.

Of high-protein feeds for dairy animals he reports a shortage of about 3,000,000 tons and of other feeds sufficient supplies, with economical consumption. The same is true of beans, peas and rice. The beef supply he considers sufficient to load all refrigerating ship capacity. Of sugar there are sufficient supplies for our normal consumption if other nations retain their present short rations. If they increase their ration we shall be confronted with a shortage. The only commodity of which there is a surplus is coffee.

The big shortage is in pork products, dairy products and vegetable oils, and here is where the American people will be asked, in all probability, to make extraordinary efforts to conserve.

Mr. Hoover frankly admits that there are conditions of famine in Europe that will be beyond our power to remedy. We have not the adequate food supplies to relieve all of the hunger in the war-stricken countries, and even if we had them there are not enough ships available to move the supplies to the stricken regions.

Yet extraordinary effort must be made to do our utmost. As Mr. Hoover says, vast masses of people in the European countries are now confronted with engulfment by absolute anarchy.

"If we value our own safety and the social organization of the world, the preservation of civilization itself, we can not sit idly by and see the growth of this cancer in the world's vitals. Famine is the mother of anarchy. From the inability of governments to secure food for their people grow revolution and chaos. From ability to supply their people grow stability of government and the defeat of anarchy. Did we put it on no higher plane than our interests, the protection of our institutions, we must bestir ourselves in the solution of this problem."

In other words, there is the same insistent demand in peace now, as well as in war before, for increased production and continued conservation by the consumers of the United States. Before leaving for Europe Mr. Hoover sent an earnest message to food administration officials and workers all over the Union to continue unflaggingly their efforts to prevent waste. That work seems in excellent hands, but it appears doubtful that the problem of increased production will have as intelligent aid and direction. Congress and the administration seem bewildered, and no one in authority has brought forward a definite program to help the farmers increase food production in 1919. The outlook would be much more encouraging if the government had a high-class national food production administrator—a man of the type of Mr. Hoover, who would now be doing in that realm what Mr. Hoover is doing so ably and vigorously in the field of world-wide conservation.

## Northwest Land Bank Is Leader

### *Has Loaned Farmers Over Twenty-One Million Dollars*

The federal farm loan bank, with its 12 branches, has loaned the farmers of the United States $139,378,156 since its organization less than two years ago. In this work the Spokane branch, which serves Washington, Oregon, Idaho and Montana, has led the field, having loaned to the farmers of these four states $21,659,900. In the entire United States more than 61,000 farmers have secured loans, of this number 9145 being in the four states of the northwest.

During the month of October $7,580,736 was loaned to 3075 farmers of the United States by the land banks. Again the bank at Spokane leads in amount of loans closed, with $1,260,180, with the bank at St. Paul running slightly behind in amount, $1,053,500. The other 10 banks closed loans in October as follows: Wichita, $760,600; Houston, $753,320; St. Louis, $708,406; New Orleans, $576,675; Omaha, $519,900; Louisville, $459,300; Berkeley, $456,000; Columbia, $402,925; Baltimore, $322,400, and Springfield, $307,530.

The following table shows the amount of loans applied for, approved and definitely closed since the bank was originally established:

| District: | Applied for | | Approved. | | Closed. | |
|---|---|---|---|---|---|---|
| | No. | Amount. | No. | Amount. | No. | Amount. |
| Springfield | 2,940 | $ 9,593,194 | 2,738 | $ 7,111,195 | 2,045 | $ 5,482,875 |
| Baltimore | 3,558 | 9,545,672 | 3,333 | 7,591,865 | 2,239 | 5,441,950 |
| Columbia | 12,310 | 22,254,446 | 6,218 | 11,553,654 | 3,697 | 6,932,820 |
| Louisville | 8,477 | 19,713,829 | 6,609 | 13,962,100 | 3,647 | 8,397,900 |
| New Orleans | 13,720 | 23,032,448 | 12,423 | 14,312,925 | 7,978 | 10,043,615 |
| St. Louis | 7,098 | 15,879,095 | 6,208 | 12,947,840 | 4,906 | 9,465,077 |
| St. Paul | 12,328 | 33,163,700 | 12,142 | 22,950,350 | 8,722 | 19,773,300 |
| Omaha | 5,257 | 25,197,870 | 5,035 | 20,767,740 | 3,761 | 15,642,740 |
| Wichita | 8,667 | 21,644,651 | 7,294 | 17,349,500 | 7,348 | 15,017,600 |
| Houston | 9,459 | 26,718,019 | 12,364 | 26,366,135 | 4,872 | 12,528,379 |
| Berkeley | 3,889 | 13,401,306 | 3,499 | 10,558,000 | 2,814 | 8,502,000 |
| Spokane | 16,468 | 45,251,882 | 12,615 | 29,225,120 | 9,145 | 21,659,900 |
| Totals | 104,171 | $265,396,112 | 90,473 | $194,696,424 | 61,174 | $139,378,156 |

### BEET GROWERS RECEIVE PAY.

The sugar companies for whom beets have been grown in the intermountain territory and the northwest this year have recently paid to the growers approximately $7,000,000 for this year's production. The payment covers receipts of beets for the first month of delivery season at 22 sugar factories. The Utah-Idaho Sugar company paid growers of Utah, Idaho and Washington approximately half of the $7,000,000 total. The Amalgamated Sugar company, of Ogden, Utah, paid its growers approximately $2,600,000, while other smaller companies paid amounts totaling about $1,000,000. It is said that this amount covers approximately one-half of this year's beet production. The beet tonnage of Utah, Idaho and Washington for this season is estimated at about 1,200,000 tons, and should make about 3,000,000 sacks of sugar, with a value of something like $30,000,000.

### INCREASE FAIR BOARD.

At a recent meeting of the directors of the Spokane Interstate fair it was voted to increase the membership of the board from 15 to 23 with the view of expanding the scope and usefulness of the fair by including additional men actively engaged in live stock or agricultural work.

T. S. Griffith was reelected president, F. M. Rothrock was elected treasurer and W. L. Tennant secretary. The enlarged board of trustees consists of the following men:

H. S. Martin, W. G. Paine, L. C. Barrett, M. Openheimer, R. Insinger, T. S. Lane, W. L. Tennant, D. L. Huntington, E. E. Faville, T. S. Griffith, F. W. Branson, E. F. C. Van Dissel, J. L. Smith, J. Goldstein, F. M. Rothrock, E. E. Flood, J. W. Graham, J. M. Van Kleek, George Harding, Grant Copeland, R. E. Bigelow, Charles H. King and John H. Roberts.

### NONPARTIZAN LEAGUE TO MEET.

A national convention of the national nonpartizan league is announced for St. Paul, December 3. President Townley has issued the call for the gathering.

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## A Psalm of Thanksgiving

Praise ye the Lord. Praise God in his sanctuary; praise him in the firmament of his power.

Praise him for his mighty acts; praise him according to his excellent greatness.

Praise him with the sound of the trumpet; praise him with the psaltery and harp.

Praise him with the timbrel and dance; praise him with stringed instruments and organs.

Praise him upon the loud cymbals; praise him upon the high-sounding cymbals.

Let every thing that hath breath praise the Lord. Praise ye the Lord. —Psalm 150.

## Who Pays the Price of Regulation?

Now that the war seems over, the government ought to find a practical way for rewarding the American farmers, particularly the wheat growers, for their sacrifices growing out of government regulation of the prices of farm products. Undoubtedly, if the government had not fixed the price of wheat, but had left the markets to the law of supply and demand, the wheat growers of this country would have received much better prices.

The purpose of our government in holding down the price of wheat was to help the European allies win the war by enabling them to buy cheaper bread products in the American markets. That was wise and generous, but who paid the price of that generosity? Not the American nation, which justly might have paid it, but the individual wheat growers of the United States.

The effect of government limitations of the price of wheat was also to give the American people cheaper bread than they would have had if the grain growers' markets had been left open to the law of supply and demand. That was charitable to the American consumer and the people of the states that grow little wheat, but who paid the charity? Again the farmers and the wheat growers, not the American people.

These facts are so apparent that they admit of no controversy and they should be taken into consideration by the government authorities at Washington when they come to deal with the future price of wheat.

The world's hunger is so great and the demand for bread is so extraordinary that many observers think that if the government were to take its hands entirely off of wheat prices there would be a runaway market and there is no telling where the price would go to.

Even though the war is over, a runaway wheat market would not be desirable, and the generous American farmer does not want it. His sympathies are keen for the starving people of Europe and he is more than willing to forego some part of his natural profits to prevent suffering and distress among the women and children of the afflicted countries.

We think the government could very properly and wisely strike a happy medium by fixing minimum and maximum prices for wheat. Say the present guaranteed price as a minimum, giving the farmer assurance that for his extraordinary efforts he will have a price at least as good as the present, and a higher maximum price beyond which the government would not allow wheat to be sold—perhaps three dollars a bushel. That would hold down speculation, give the farmer recognition for his patriotic attitude in the war and give the European people bread at fair prices.

Self-tinctured oratory may charm rather than convince.

## Pinchot Makes Strong Appeal in Behalf of the Farmers

In another column we give space to a thoughtful communication from Gifford Pinchot.

Mr. Pinchot, who is a man of fine ideals, unquestioned honesty and unfaltering interests in the public welfare, is entitled to a hearing. As chief forester under the Roosevelt administration he sprang into national prominence as a leader of the forces that stood for wise conservation of the country's natural resources. He made a long and gallant fight to protect from seizure by great capitalistic interests of what remained of the country's forests, water power and deposits of coal, oil and soil fertilizers. More recently he has been active in reorganizing the national board of farm organizations, and in that connection issues the communication in question.

Mr. Pinchot declares that the three great blunders were made in dealing with food production while we were at war. They are precisely the three blunders so often pointed out by The Farmer.

1. Giving our principal attention to the conservation of what food we had, instead of to the production of more food.

2. Failure to make it possible for the farmer to get enough labor, farm supplies and credit to give him a reasonable chance to raise the crops the nation and the world require.

3. The third blunder was in excluding the farmers from partnership in the conduct of the war, and especially that part of it which had to do with food supply.

These three blunders grew out of the government's failure to create a national food production administrator. If the country had had such an official, a man of preeminent ability, he would have formulated a clear-cut, helpful program of increased food production. He would have called on congress to drop its niggardly policy of providing ridiculously inadequate labor, farm supplies and credit and he would have insisted that the farmers of the nation have proportionate representation with organized labor on all of the war boards and commissions.

Mr. Pinchot makes a strong case and his appeal should make an impression upon official Washington.

You gain in knowledge as you grow in distinctions.

## Sightseers Should Stay at Home

Two or three years ago there was much discussion in this country as to whether or not the people of the United States were justified in traveling on the high seas, thereby increasing the possibility of a break between this country and Germany, because of the latter's submarine warfare. Many urged that Americans should stay off the water rather than cross Germany's ruthless path, but the opinion of the majority, that Germany should not be allowed to intimidate American citizens, ruled.

The situation is different now. There is no fear of Germany. She is not trying to bully the world today. Instead, she is begging for food to save many millions of her unfortunate people from starvation. Russia is hungry to the point of threatened starvation of a score of millions of her people. Belgium, France, England, Italy, Serbia, Rumania, Austria, Turkey, Armenia—the peoples of all these countries are in desperate straits, and America must rush to the rescue with every pound of food that all the available ships of the world can carry. Sightseers have no right today to occupy space on ocean vessels. If they have no better part to play in this tremendous crisis than wandering about the world to satisfy their curiosity, let them restrain that curiosity until the starving are fed. But better yet, let them join the world-patriotic producers, and help save humanity from terrible disaster.

He who masters definitions masters men.

## Don't Forget the Road Question

While the problems of war and of the first stages of reconstruction have been absorbing our interest, it has been wise and patriotic to forget some of the problems of normal times in our own communities. But it is now time to resurrect one of them with a whoop. Roads! There are no greater requirements for the welfare of rural life than good roads. Even the automobile can bring only half satisfaction to travel between farm and town when the roads are muddy and heavy. The wagon or the buggy trip is one so uninviting that it is not made often enough. But a good dirt road—it doesn't require pavement always to make a good highway—cuts the distance in two for man and beast. County and state authorities should be ever on the job to make the best roads possible and keep them in the best condition possible consistent with judicious expenditure of the people's money. And the farmer who lives along the road should be watchful for the appearance of cuts, poor drainage, chuck holes and the like. Half an hour and a dollar spent to correct a fault will often prevent weeks of bumpy or muddy travel and the expenditure of half a day and several dollars for later repair.

Some see with the brain; some only with the eye.

## Prices Go Down; Prices Go Up

A recent market report contained the following two consecutive sentences: "Packer dressed hogs have declined 3 cents a pound, and country dressed hogs from 2 to 3 cents a pound. Ham, bacon and lard have advanced 1 cent a pound."

In other words, on the same day that the producer was receiving 2 or 3 cents a pound less for his dressed meat, the consumer was paying 1 cent more for his cured meat. Many persons will ask why, and few of them will receive a satisfactory answer. Did the cost of curing meat increase 3 or 4 cents a pound during that day? Did the cost of rendering lard and putting it in containers go up 3 to 4 cents that day? If so, why? If they did not, who pocketed that 3 or 4 cents that was lost somewhere between the producer and the consumer?

Most friends are fortune made.

## Farmer Will Save Democracy

The central office of the national board of farm organizations appeals to the farmers of the nation to save democracy by the one and only method in this time of stress—by feeding the starving world.

We have won democracy by the sword, but nothing will hold democracy except food, says the appeal.

Every farmer should bear it well in mind that the efforts which have been made in the last two years are nothing compared with the efforts that must now be made in the light of the demands of a hungry world.

Organized business is already preparing to send agents with catalogs of machinery into these countries. Organized business is efficient, but it is madness to think of capturing the commerce of the world without first providing food.

If the American public is deluded by the cry of the city papers as to the high prices of farm products, if it is so short sighted as to try to force farmers to produce goods below the cost of production—a manifest impossibility—then it is clear that there will not be food enough for ourselves, let alone the new young democracies which so need our help.

The business man should understand that the only way to save the world from the bolsheviki is by feeding the world. Any other policy will make all our holy efforts turn to dust.

# Part of Army Is Coming Home

## *Pershing Will Keep Strong Force for Occupation Servic*

General March, chief of staff of the war department, announced last week that plans were under way to return to this country something like 400,000 of the men of the national army now in Europe. This number will be returned as soon as possible, and others will come later. The first to come are sick and wounded who are able to make the trip. Already a few transport loads of the latter are en route to America, according to reports from London. Some of the soldiers to return are some who have never reached France, but had arrived in England only. There is a double purpose in bringing back all the men who can be spared as soon as possible—first, to get them back into the industries of this country, and, second, to avoid the necessity of transporting supplies to them.

It is announced that General Pershing will retain in Europe about 1,200,000 men to use in occupying German territory, assisting in the reconstruction work and policing various disturbed sections whenever necessary.

**CASUALTIES HIGHER THAN ESTIMATED.**

The statement by General March shows that the American casualties are more than double the earlier estimate. The total casualties, including the trivial wounds as well as the deaths and the serious wounds, are given as over 236,000 up to the date of the signing of the armistice terms. Since that date there have been some deaths from disease and wounds previously received. The deaths up to that date totaled about 53,000. The total casualties were made up as follows:

| | |
|---|---|
| Killed and died of wounds | 36,154 |
| Died of disease | 14,811 |
| Deaths unclassified | 2,204 |
| Wounded | 179,625 |
| Prisoners | 2,163 |
| Missing | 1,160 |
| Total | 236,117 |

**GERMANY COMPLIES WITH TERMS.**

While definite official information as to the extent to which the Germans have carried out the terms of the armistice is not given out, it is evident from news dispatches that they are vacating the invaded soil of France and Belgium and that of the Rhineland as rapidly as they can. The allied armies are following them up closely in all their moves, so that any infringement of the terms of the armistice can be punished. All of French soil is freed of the invaders at this writing, and in several sections the allied armies are on German soil. Alsace-Lorraine, which was stolen from France by Germany after the Franco-Prussian war of 1870, is again occupied by the French, assisted by the Americans and British. Luxemburg has been freed, with American and allied troops occupying it. King Albert of Belgium, for four years driven out of this country by the invaders, and all that time fighting with his armies, has returned in triumph to his former capital. Reports tell of the leaving behind of large quantities of guns and munitions by the Germans in compliance with the armistice terms.

**GERMAN NAVY IS SURRENDERED.**

The most spectacular and dramatic naval event in the history of the world occurred last week when the German navy began the actual surrender of itself to the allied navies in compliance with the terms of the armistice. After lying at anchor for more than four years, bottled up in its own harbors by the British fleet and her allied fleets, taking no part in the war save through her submarine activities, the German fleet, second greatest in the world, steamed out into the North sea in a column more than 20 miles long and turned over its magnificent warships to commanders and crews of the allies. The surrender is not complete at this writing, though there is evidently no intention of avoiding the strict terms of the armistice. The major portion of the German fleet is anchored under heavy guard in British ports, commanded by allied naval officers and manned by allied crews. This includes a large number of the submarines that for three years have roved the sea, destroying life and commerce. The reports say that about 400 war vessels of various types, representing all the allied nations, were drawn up along the route of the surrender march to officially receive the conquered navy. Not a demonstration of any kind took place. No conversation, official or otherwise, except the barest orders necessary passed between the officers and those of the German fleet. No celebration was made in any respect.

**GERMAN GOVERNMENT TAKES HOLD.**

It is evident from the reports that sift through from Germany that the government in that country is coping fairly successfully with the great revolutionary conflict that has been threatening to engulf the nation in anarchy. The fact that the armistice terms are being carried out with comparatively little actual complication is evidence that those in charge are to a remarkable degree masters of the situation. The naval surrender could not have been effected so peaceably and orderly had there not been some actual authority in control of it.

**PRESIDENT WILSON GOING TO EUROPE.**

President Wilson has definitely announced that he is going to go to Europe to attend the peace conference. He probably will go immediately after the convening of congress, early next month, and it seems that he is planning to spend several weeks in Europe. It is not officially stated, but it is understood that he contemplates making the American embassy in Paris his official headquarters while in Europe, thus being technically enabled to continue in charge of affairs in this country as president, the embassy in a foreign capital being considered American soil. If President Wilson goes to Europe as planned it will be the first time that a United States president will have been out of the nation during his term of service.

**SECRETARY M'ADOO RESIGNS POSITIONS.**

William G. McAdoo, secretary of the United States treasury and director general of the railroads under government administration, has announced his resignation from both positions and President Wilson has announced his acceptance of the resignations. McAdoo leaves office on January 1. He gives as his reasons for quitting that the salary he receives is not sufficient for his family requirements. His salary is $12,000 a year. He has been generally considered as the most likely democratic candidate for president in 1920, but it is considered doubtful what effect his resignation will have on this possibility.

**KAISER STILL IN HOLLAND.**

The kaiser is still in Holland, whither he fled upon receipt of the terms of the armistice from General Foch. Whether he can be taken out by the allied authorities to be punished is a question that is being taken up by authorities on international law. There is great speculation as to what fate awaits the kaiser and his accomplices for the crimes committed. It is claimed that England has several definite legal indictments for murder standing against him and that the British authorities may endeavor to extradite him from Holland in order to put him on trial for these crimes. Execution and exile are talked as possible punishments.

**WORLD WAR CASUALTIES ESTIMATED.**

Many attempts are being made to estimate the losses of the nations that have participated in the war. Nothing official is available, and will not be for many months, probably. The allied military leaders have arrived at estimates that give an idea, though they must not be taken as accurate. They estimate the total losses at something like 26,000,000 men, including killed, died of wounds and disease, wounded and missing. Nation by nation, except Italy, which has not bene estimated, these estimates are as follows:

| | |
|---|---|
| Russia | 6,000,000 |
| Germany | 6,900,000 |
| Austria | 4,500,000 |
| France | 4,000,000 |
| Britain | 2,900,000 |
| Turkey | 750,000 |
| Belgium | 350,000 |
| Rumania | 200,000 |
| Bulgaria | 200,000 |
| America | 236,000 |

**WAR PROHIBITION BILL IS PASSED.**

Congress has finally passed and President Wilson has signed the agricultural appropriation bill which carried the amendment prohibiting the sale in this country of intoxicating beverages after June 30, 1918, until the demobilization of the army has been completed.

**WILL IMPROVE THE RAILROADS.**

It is announced that the railroad administration plans to expend $900,000,000 during the remainder of this year and next year in extending and improving the railroads of the country. This announcement comes with a view, in part, of allowing the steel mills and other factories that produce material needed by the roads to continue to operate actively for the purpose of stabilizing as much as possible the nation's industrial life.

**FOOD PRICES 16 PER CENT HIGHER.**

Statistics gathered by the United States bureau of labor indicate that the average increase in the price of 20 of the principal foods during the last year has been 16 per cent.

**DROP CASE AGAINST LA FOLLETTE.**

The United States senate committee on privileges and elections has voted, 9 to 2, to drop the case against Senator Robert M. La Follette of Wisconsin, who was charged with seditious utterances more than a year ago.

## *Territory Germany Had to Evacuate*

This map shows several vital features. All the shaded portion is the territory that Germany was required to evacuate on the western front. It shows how much of Belgium and France was still occupied when the armistice was signed. It shows Luxemburg. It shows the "Rhineland," that territory between the Rhine and the borders of Belgium, Luxemburg and France, which had to be evacuated. It shows the neutral strip some 20 miles wide along the eastern side of the Rhine river that Germany must get out of in a few days more.

And then it shows one other vital feature—the line held by the American armies alone at the time the armistice was signed. From Sedan southward nearly to Nancy the double line to which the two black arrows point was held by the Americans. This is a 52-mile stretch, nearly one-fourth of the entire battle line.




## *Washington Gleanings*

Mr. and Mrs. Joseph Parker and family moved last week from their farm home near Burlington to their residence in Mount Vernon.

George P. Hedger, recently of La Monte, Wash., has purchased the Bailey & Wicks farm of 640 acres, just west of Clarkston, for $30,000.

The state convention of the Good Roads association, which was postponed on account of the influenza situation, is now scheduled to meet in Pasco on December 5 and 6.

Louis Sonny of Centralia has purchased 80 acres of coal land in the Salzer valley, east of Centralia, from Jack Salzer. Mr. Sonny will open a small mine on the property.

Arthur A. Prouix of Almira has the contract to grade and gravel two miles of road from Grant county line west. The grade connects with the completed work of the Sunset highway.

Tentative arrangements were made by the Walla Walla board of education to extend the school year to June 20, eliminate one week of Christmas vacation and if possible eliminate the teachers' institute.

A. W. Bridge sold his newly purchased residence property at the south end of Rainier avenue, in Eatonville, to J. J. James, recently from Oregon but formerly the owner of a ranch on Lynch creek, near here.

The South Bend Canning company increased its sales one-third this year, the total sales amounting to $32,000. On account of the dry weather the loganberry crop was small this year. The Bean crop was also light.

The last of the Entiat apple crop going through the packing houses was hauled in from the orchards last week. It is expected that packing will finish by December 15. This year's tonnage handled by the Entiat Fruit Growers' league will be well over 135,000 boxes.

The byproducts plant at Wenatchee formerly owned by the Skookum Packers' association is now in operation under the management of D. DeShane of the Puyallup and Sumner Canning company. The plant has a capacity of eight to ten tons of fruit daily. It is now running about half capacity.

The apple shippers of the Wenatchee district loaded and turned over to the Great Northern 75 cars of apples in one day and night recently. In some cases the sidings were emptied of loaded cars twice during the 24 hours, which represented some unusually swift work on the part of the warehouse and loading crews.

The sale of John Arveson's 55-acre dairy ranch at the city limits of Centralia to Joseph Kuffer has been announced. The consideration was $12,000, the transfer including all stock, implements and crops. The sale of W. H. Hurd's 40-acre farm, four miles northwest of Centralia, to Fred Rickenbach, also was announced.

The United States bureau of markets has opened a branch office at Yakima. W. C. Quick and F. W. Allen are in charge of the offices. E. S. Coe, formerly district inspector, is also assigned to Yakima. The staff is to continue investigating and demonstrating proper storage and the best manner of handling fruit in storage.

A. E. Charlesworth, a business man of Vancouver, B. C., has purchased 87 acres of the Richard Hogan estate, known as the Scammon place, at Chehalis. Mr. Charlesworth expects to build a number of modern farm buildings and equip the farm with all the latest modern equipment. A son now at Pullman will assist in operating the place.

Lewis county is to have a land settlement bureau, organized along lines that will bring effective results to take up the great work of reconstruction following the return of the American soldiers from France, and the demobilization of the army and navy. N. B. Coffman of Chehalis is chairman of the work, and will be assisted by A. F. Marsh.

Following the sixth annual meeting of the Washington irrigation institute, to be held at Yakima December 17 and 18, there will be a session of the Washington State Land Settlement association. At the land settlement meeting plans for the development of the state by the returned soldiers, under some form of national aid, will be discussed.

The organization of the recently incorporated Yellow Pine Box and Lumber company of Entiat was held last week and the following executives elected by the board of directors: A. E. Case, president; John A. Gellatly, vice president; H. F. Williams, secretary; C. E. Gray, general manager and treasurer. Work on the new factory will commence in the spring.

The largest potato deal ever consummated in the Yakima valley was made when the Yakima Potato Growers' association agreed that Denney & Co., of Chicago, should market the entire 1918 crop held by members of the association. Growers in the association have 3000 acres planted in spuds, from which the crop will be betwen 1200 and 1500 carloads. Han Benz of Toppenish will act as manager.

Sugar beet growers of the Yakima valley were paid the sum of $40,000 as the first monthly payment for beets by the Utah-Idaho Sugar company, which pays for the beets delivered on the 15th of each month. But few of the beets have been harvested, and it is estimated that the December 15th payment will amount to $450,000. The amount paid represents 4000 tons of beets, approximately the crop from 250 acres.

During the shipping season, which is about completed at Yakima, 110 cars of winter pears were rolled from Yakima, according to the report made recently. The winter pears this season sold for betwen $45 and $50 a ton, so the total crop represents a gain of about $123,000 paid to the Yakima growers. Most of the winter crop was Winter Nellis pears, which were exceptionally good in quality this year, while the trees bore heavily.

# Corn and Hogs

## On Land Usually Summer Fallowed

By J. E. NESSLY.

Seventeen thousand dollars gross receipts from 280 acres is the returns C. A. Hood of near Pullman, Wash., received from land that would otherwise have been summer fallowed, had he not decided to raise corn and hogs instead of allowing the land to lie idle last summer. He has the land in fall wheat, with a good stand and prospects of a good crop of wheat next year, probably better than if the land had not produced a crop this year.

Mr. Hood is a successful grain farmer, but he also raises hogs and corn successfully, as shown by his record for this year. He has 45 acres of his land in alfalfa. He pastures hogs on this during the early summer months. Last spring he had 280 acres that he planned to plant to wheat this fall. Had he followed the usual practice of the Palouse country he would have plowed this up and let it lie idle until fall and would have sowed it to fall wheat. Of course he would have had to cultivate it several times and that would have meant added expense. He decided to try a new experiment and it has proved a success.

He planted 100 acres to peas and 180 acres in corn. He had several hundred head of hogs. These ran on the alfalfa and had a little grain until the peas were turning ripe. He cut and threshed 45 acres of peas and "hogged off" 55 acres. By the time the hogs had cleaned up these peas and had the ground in fine condition for fall seeding the corn was ready to begin feeding. The hogs were fed corn and as soon as a carload was ready for market they were sold. Mr. Hood has sold three carloads and "topped" the Spokane market with his cornfed hogs. The three carloads of hogs brought him $11,000. Two carloads averaged 260 pounds each and he got 17 1-4 cents a pound for them in Spokane, which made them average $44.84 each.

Mr. Hood has two carloads of hogs on hand. He is "topping these off" with corn and expects them to bring at least $6000, making a total of $17,000 that he will get from his alfalfa and the corn and peas grown on land that would otherwise have been summer fallowed. The difference in the cost of raising the corn and the peas over the cost of summer fallowing the ground is very little, and he figures that he has made at least $50 per acre net profit above what he would have made had he summer fallowed the land instead of raising a crop on it.

Another farmer, near Pullman, who has made money this year by raising a crop of hog feed on land that he would have summer fallowed is C. E. Jennings, who lives south of town on the Genesee branch of the Northern Pacific. Mr. Jennings raised a lot of squashes, getting a yield of almost 23 tons per acre. He found these to be excellent hog feed when mixed with a little grain and is getting splendid results from feeding squashes to hogs. His success in raising squashes for hog feed has induced a number of his neighbors to try the experiment next year. He has also sold a large amount of seed of these squashes to his neighbors who will raise squashes and corn on their summer fallow land next year and raise hogs to eat these products.

# Grades in Apples

## About the Different Grading Rules

By GRANVILLE LOWTHER.

There seems to be some confusion in the minds of people in general as to what the agitation about apple grades means. "What are the present grading rules?" "What are the proposed changes?" These questions may be answered by copying the present rules, and publishing, for comparison, the proposed rules. But even then, there might be some confusion, and I have concluded that perhaps the better way is to rearrange the requirements of the present grade rules, so as to make comparison less difficult. I will therefore arrange them in different order from that in which they appear in the state laws.

Washington state apple grading rules season 1918, require that apples for grade 1, first grade, or extra fancy, be clean, hand-picked, mature, smooth, sound, well formed. Apples must not have blister rot, blemishes, bruises, diseases, dry rot, insect-pests, limb rubs, russet (except within the base of the stems), scab, scald, scale, skin broken at stem, skin puncture, watercore (visible), worms, worm holes, worm stings.

**Rules Proposed by Government.**

1. They use the term, first grade, instead of extra fancy, or grade 1.

2. Instead of saying, "clean, hand-picked, mature, smooth, sound," they say, "handpicked, properly packed apples of one variety, normal shape, uniform size, free from dirt."

3. Instead of saying that they must not have "bitter rot, dry rot, russet, scab, diseases," they say, "free from diseases."

4. Instead of saying that they shall not have "blemishes, bruises, limb rubs, skin puncture or skin broken at the stem," they say, "free from mechanical injuries." They also have a clause reading, "except those so inconspicuous as to not be detected in the process of efficient grading." This latter clause is intended to give to the grower of high-grade fruit assurance that a buyer or inspector can not reduce the grade (as is sometimes done if the market drops), on account of "minute, unimportant or microscopic defects."

**Prefers Tentative Rules.**

My preference for the tentative rules is based in part on the fact that they are broader, simpler and more comprehensive. Then, if they are adopted, they become governmental, therefore universal in so far as the boxed apple business of the United States is concerned. This is better than a different measure or standard for each and every section or state.

The Washington state rules define second grade, grade 2 or fancy, as "Apples complying with the requirements of the first grade, except that slight sun scald or other blemishes not more than skin deep shall be permitted up to a total of 10 per cent of the surface of the apple."

The tentative grading rules define second grade in a similar manner, but define more clearly and fully, that apples of "this grade must have a perceptible blush of color, and be free from any defects that would affect the keeping quality or materially affect the attractiveness of the specimen." They define further what insect injuries, fungus injuries and mechanical injuries are permitted, and what not permitted.

Under the Washington state rules, third grade, C grade, or fancy, includes all remaining apples free from infection, except that two stings to each apple shall be permitted if shipped in closed packages and marked third grade, or C grade.

In the tentative rules, two healed-over stings are permitted in the second grade; also pin holes or other surface injuries that are healed over and do not injure the keeping qualities of the apple. Fungus diseases and mechanical injuries are interpreted more liberally than in the state rules, and apples are permitted in the second grade, that, according to a strict interpretation of state rules, would be placed in third grade.

The state rules provide for a combination grade "which may include all other apple varieties not provided for in first and second grades."

The tentative rules provide for "an orchard grade" that shall consist of handpicked apples of one variety, from which the culls have been taken. It shall be unlawful for a person to sort from a lot of apples any of the larger sizes or better grades and then pack the remainder as orchard grade.

According to the tentative rules, "culls consist of apples which do not meet the requirements of third grade."

The third grade, according to the tentative rules, includes many apples generally ruled as culls. It would not include apples showing decay, worm holes, scale, or apples which are badly deformed. But it would include windfalls, stem punctured, bruised, hail-pecked, sun-scalded, watercored, seriously blemished by scratches, russet, limb rubs, spray injury, slightly deformed, discolored by scab, Baldwin spot, storage spot, uncolored apples from red varieties, and all other apples not included in second grade except culls. This grade does not require uniformity in size. They are supposed to be a cooking grade, to be pared before eating and, therefore, may lack the appearance or quality of dessert fruit.

Uniform in size shall be construed to mean that apples shall not vary more than one-half inch in their greatest transverse diameter.

In the provisions of the tentative rules, there is what is known as tolerance; which means that variations may be permitted in all grades to the extent of 10 per cent below the standard; provided that not more than 5 per cent of culls shall be permitted in each grade. Tolerance shall be computed by weighing, measuring or counting the specimens judged to be below the standard of the grade. An additional tolerance of 5 per cent shall be allowed for apples below the size as specified on the box.

Our present grade rules have been developed by evolution of thought growing out of our experiences. They have been changed and better adapted from time to time, but they still need changing. Perhaps changes will continue indefinitely, as we gain in experience and knowledge.

Among the growers, there is considerable agitation for a "two grade pack." This will probably be one of the main points of discussion at the Spokane conference, December 10-14. It is argued that this would simplify and cheapen the work of sorting and packing. This contention is doubtless true, but whether it would cheapen the second grade so as to result in final loss, I am not sure.


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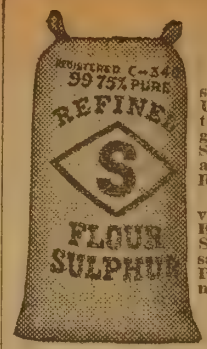
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For Lime Sulphur Solution, use our DIAMOND S Brand refined Flour Sulphur. We can furnish you this sulphur at such a low price that it will pay you to mix your own solution.

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# Lyman's Genuine Grimm Alfalfa

# Working Plan of Farm Bureau

## By H. W. HOCHBAUM, Idaho County Agent Leader

The county farm bureau is an organization of the representative rural people of the county. They are brought together in this organization to work out some of the outstanding farm and home problems of that county, under their own leadership. They are the people of a county who are most interested in the more profitable development of farming and the development of more satisfactory home and social conditions, brought together to determine just which are the most important problems that stand in the way. They then look about for the men and women of experience, best fitted to lead in the solution of these problems and, with the help of the county agent or other county extension leaders, get to work to meet these problems in organized fashion. In all this they will draw on the experience, interest and enthusiasm of the rural leaders throughout that county. Through the farm bureau a plan is carefully worked out to determine just how each problem may best be solved with the help of these leaders.

Thus, for example, a certain disease may be causing such losses of cattle throughout the county that profits are materially cut down.

The first essential is to recognize the problem.

The second, the determination to meet this problem over the county by getting every one to help.

The third, to show a practical method of meeting the problem with the help of local live stock men of experience and live stock specialists from the state or federal government.

Then a campaign may be made. Farmers throughout the county are shown the cheapest and most efficacious way of preventing losses from the disease. Farmers themselves lead other farmers to become interested in the methods and in getting every one to do it. The great majority are interested and, through the results obtained, take more active interest in the other problems a farm bureau may have outlined.

### The Working Force.

The governing head of the farm bureau is an executive committee. This is made up of president, vice president, secretary and treasurer and from five to seven other members, elected by the members. Each is chosen because of special fitness, by experience, to lead some phase of the program on which the farm bureau is working and to guide, advise and help the county agent in carrying forward that program.

The executive committee appoints a leader in each community to serve as chairman of a community committee. This community committee, comprised of from three to seven leaders, is selected again because of the experience and leadership of the individuals. Every committee member represents the farm bureau in his or her community, and the community in the farm bureau. Each serves to interest the people of that community in the problems on which the farm bureau is working. Each acquaints the farm bureau as a whole, with the local problems of that community. This committee is the working unit of the farm bureau in a community, the force through which the farm bureau reaches the people of a community, nonmembers as well as members. In all of its work the farm bureau tries to reach all the people. All the meetings are open to every one. There are no meetings of the members alone.

### Bureau for Every One.

The farm bureau is nonpolitical, nonsecret and nonsectarian. Democrat works with republican, and the granger with the man from the Farmers' union in getting others interested with them in working out the outstanding rural problems. There is in no sense competition with existing rural organizations nor any attempt at federation. The farm bureau's job is to help improve the farming and home life of a county, and people join it because they want to work with the farm bureau in carrying out this program. The main thought back of the membership fee is to find thereby just those rural people who are most interested in the better development of farming and home life, and who will work and lead because of this interest, and because of their faith. The officers and committeemen are selected because of their ability to lead and their experience. Many of these belong to other rural organizations. But in this more informal organization all work together to carry on the farm bureau's program. Summed up, the farm bureaus spell organized self-help.

# Plan Fruit Program

The program committee having in charge the Northwest Fruit Growers' conference, which meets in Spokane December 10, 11, 12 and 13, is planning on having a number of noted speakers present. Among them will be John Y. Beaty of Chicago, managing editor of System on the Farm. He will speak on the subject, "The Business Side of Fruit Growing." Other speakers will include W. S. Thornber of the state college extension department, Professor Whitten of California, for many years in the horticultural department of the University of Missouri; J. L. Dumas, well known northwest fruit grower; President E. H. Lindsley of the University of Idaho, and President E. O. Holland of the State College of Washington. It is also planned to have a representative of the bureau of markets from Washington, D. C., in attendance, but that one will be available is not yet definitely announced.

### Yuletide Candle Popular.

The lovely Yuletide candle is again in the window and bids fair to be a popular Christmas gift. The cheeriness of a great red candle makes it welcome this season when we cast about for a simple and cheery gift.

TO the Editor: Enclosed find five cents for farm service flag. As there are nine of us in the family and we all work, I guess we are entitled to nine stars. There are myself and wife and seven boys who all help. I am also enclosing herewith 50 cents for a three years' subscription to The Washington Farmer.

CHARLES L. CAN.

Clayton, Wash.





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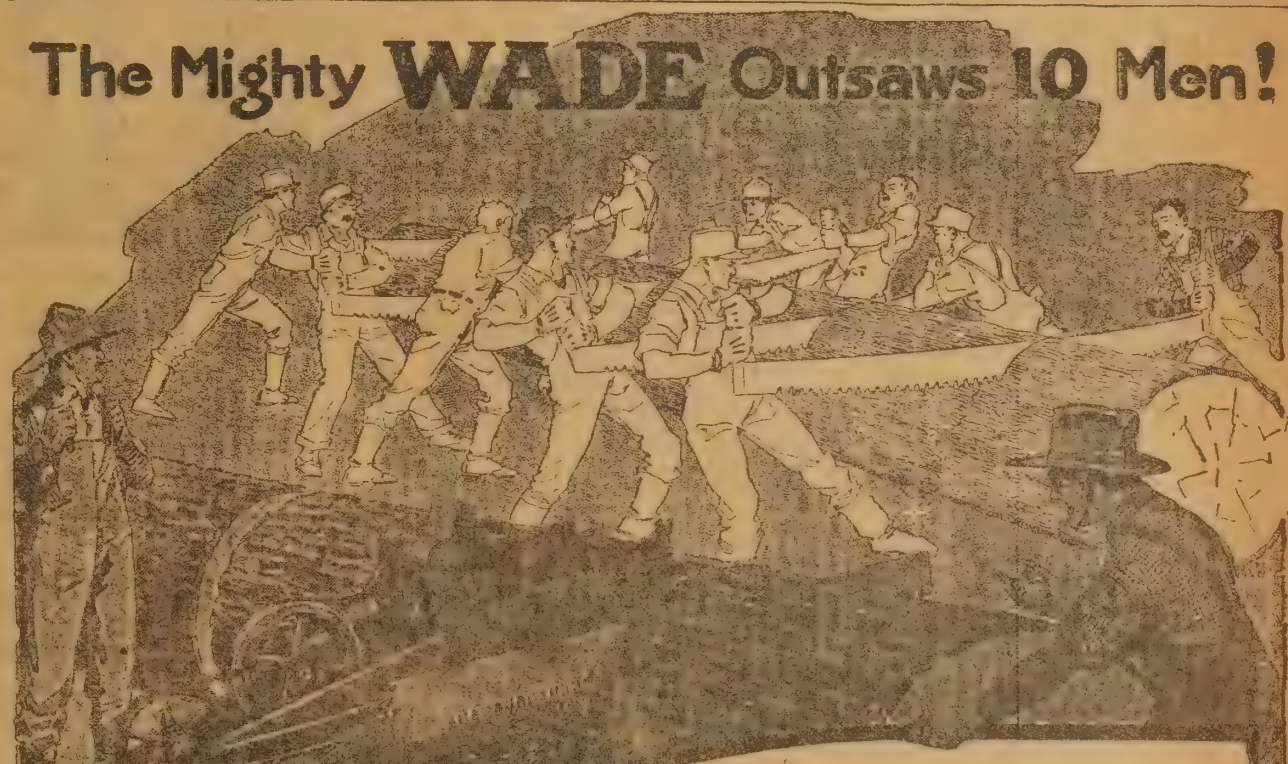
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A. B. NYSTROM, Editorial Contributor.

# Skimmed Milk Value

Recently a commission representing the food administration, the dairy commission of Wisconsin and the University of Wisconsin made an extensive investigation of certain phases of the dairy industry in that state, especially with a view to determining an equitable value for skimmed milk. The result of the investigation was the agreement that 80 cents per 100 pounds was a fair value of skimmed milk in that state. The commission determined this value on the basis of the value of corn, the value of the skimmed milk to be made the same as one-half the value of a bushel of corn. It was calculated that of the average 100 pounds of whole milk delivered at creameries 85 pounds should be considered skimmed milk. At the 80-cent per 100 pounds rate that would make the skimmed milk to each 100 pounds of whole milk worth 68 cents, which the producer should receive in addition to the price of the butterfat, in cases where he does not desire to receive the skimmed milk back for feeding on the farm.

These figures naturally would vary for different producing districts, especially when corn is used as the basis upon which they are determined. For feeding pigs and chickens skimmed milk has a value which in many cases would lead a producer to bring the skimmed milk home rather than sell it for the equivalent of half a bushel of corn.

# Figuring Cost of Milk Production

## *The Cost of the Main Dairy Feeds Is Used as the Basis*

Assuming prices as in the following table the cost of the 100 pounds of milk is ascertained in accordance with Dr. Pearson's figures thus:

| | | |
|---|---|---|
| Grain, 44 pounds at $55 | ($55x .022) | $1.21 |
| Silage, 188 pounds at $8 | ($ 8x .094) | .75 |
| Hay, 50 pounds at $27 | ($27x .025) | .67 |
| Bedding, 39 pounds at $10 | ($10x.0195) | .19 |
| Labor, 2.42 hours at 40c | | .97 |
| Average yearly herd cost, per hundredweight | | $3.79 |

This average herd cost in the nature of the case can not be the exact cost in practice, for the reason that so many varying factors enter into the consideration.

The above rapid method of figuring the cost of producing 100 pounds of milk anywhere that prices of feeding materials and labor are known is deduced from tables on milk production cost prepared by F. A. Pearson of the dairy division of the University of Illinois for the dairy districts of Chicago. The method is based on the cost of each of the three main classes of dairy feeds in a well-balanced ration—concentrated, succulence and roughage—plus cost of bedding and labor involved. The tables were prepared from data obtained from 35 dairymen, milking 1000 cows.

The approximate cost of producing 100 pounds of milk is found by multiplying the prevailing price of grain by .022, of silage by .094, of hay by .025, of bedding by .0195 and of one labor hour by 2.24, and adding the products.

These figures are less mysterious than they seem, being merely the cost of the grain, silage, hay, bedding and labor requisite to the production of 100 pounds of milk at $1 per ton and the number of man hours of labor. The amounts of these materials as ascertained by Dr. Pearson are as follows:

Grain, 44 pounds; silage, 188 pounds; hay, 50 pounds; bedding, 39 pounds. The first set of figures used in this article was obtained by multiplying each of these amounts by a dollar-a-ton price. It gives a sort of common denominator by which any dairyman or farmer may determine the cost with a fair degree of accuracy.

Among the varying factors entering into the computation are the efficiency of the cow, the quality of the feed, the efficiency of management and intelligence of labor. But the method will enable producers and consumers alike to reach a working knowledge of the cost, which should enable them, dairymen say, to adjust their differences due to lack of knowledge of what milk production costs under average production conditions.

"In addition to the above," says Dr. Pearson's report, "debits are horse labor, interest, buildings, equipment and miscellaneous costs. Credits not included are stock increase, manure and miscellaneous items. Both of these may be disregarded in the computation, because it may be assumed that they about offset each other."

Another varying factor is the fluctuating cost of production at different seasons of the year. The average cost of production for each month of the year may be obtained from a table of monthly deviations from the average monthly cost prepared by Dr. Pearson as follows:

| | P. C. | | P. C. |
|---|---|---|---|
| January | 119 | July | 83.7 |
| February | 114.3 | August | 94.2 |
| March | 116.5 | September | 96.7 |
| April | 94.2 | October | 109.2 |
| May | 73.2 | November | 118.3 |
| June | 70.6 | December | 126.3 |

By multiplying the average monthly cost by the percentage for any given month the cost of production for that month will be obtained. This will be true only to the degree that the production cost in Oregon or other dairy districts varies with the cost in the Chicago district. Due to the exceptionally fine dairy conditions obtaining on the western coast, the variation in summer and winter production cost may be considerably less than the variation in the Chicago district. The table is based on the record for 1000 cows in the Chicago district, over the 10-year period from 1907 to 1917.

(Note by writer: The Illinois data were submitted to the writer by Dr. W. H. Dreeson, who for several years worked on the records carried by the dairy farmers and who has recently joined the staff at the Oregon Agricultural college as instructor in rural economics. The cooperation of Professor E. B. Fitts, dairy extension specialist of the college extension service, in checking over the figures is also acknowledged.)

### Bells Invented by Egyptians.

The invention of bells is attributed to the Egyptians, who are credited with having made use of percussion instruments to announce the sacred fetes of Osiris.





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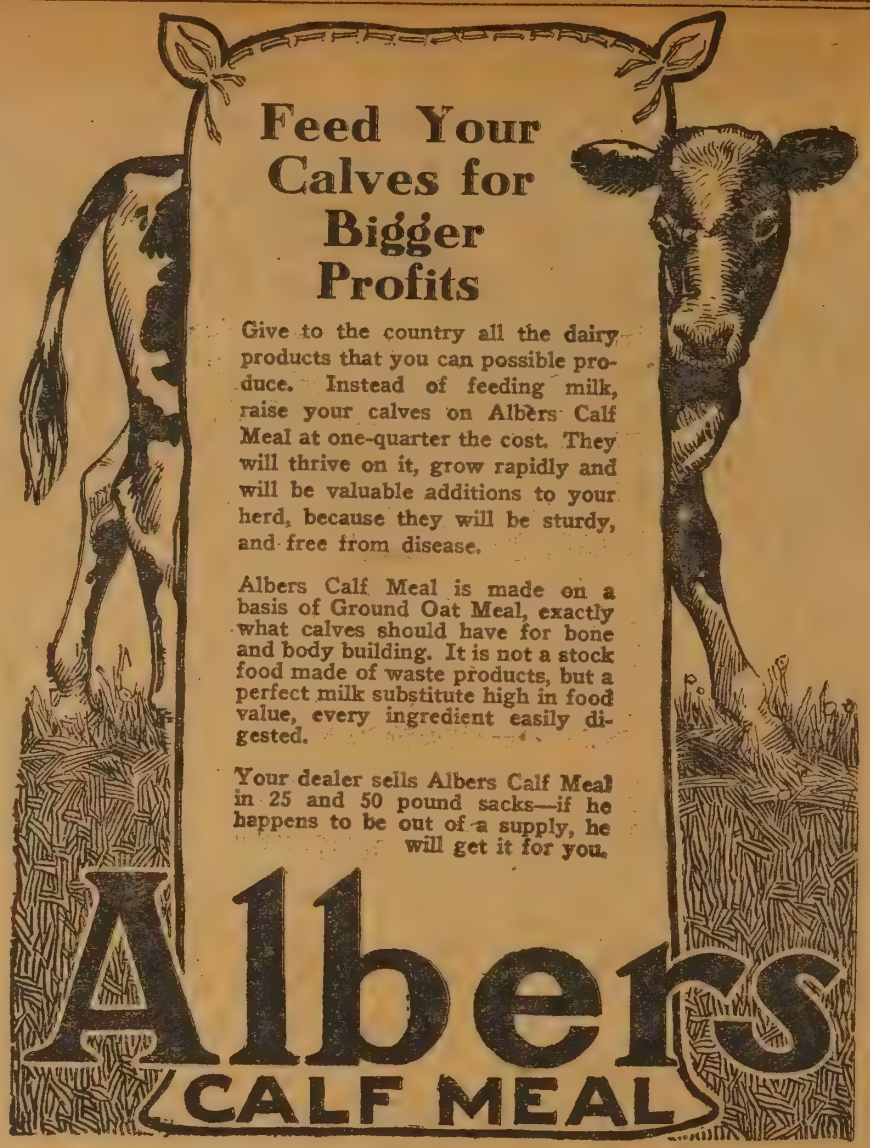
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An Illinois load of yearling Shorthorn steers made the world's market record at Chicago October 3, selling for $19.60 per cwt.

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E. J. IDDINGS, Editorial Contributor.

## Basis of Hay Value

There is no hope for the hay producer unless there is live stock to eat it, says G. R. Hyslop of the farm crops department of the Oregon Agricultural college. Professor Hyslop says that there must be a proper balance between the amount of hay produced and the amount of live stock produced, as hay value is determined ultimately by the live stock that there is to consume it. He says that if the present tendency of stockmen to dispose of their stock rather than to buy feed for it is continued there will inevitably be a surplus of hay next season and a corresponding period of low profits or loss for the hay producer.

## VETERINARY

By DR. S. B. NELSON.

**Catarrhal Enteritis**—I have a 5-year-old cow that has been well and in good flesh. She was all right and gave her usual amount of milk in the morning, but during the day she got sick. She would lie down and get up and seemed in pain and did not eat much. That night and next morning she gave very little milk and during the night she passed from her bowels what looked to be a small intestine or the lining from a large intestine. It was three or four yards in length. In a day or so she was giving her usual amount of milk and seems all right again. She has been on pasture of mixed grass and I feed her a little grain hay. Could you tell what was her trouble from the symptoms I have given? H. D.
Lyons, Ore.

Your cow is affected with a catarrhal enteritis and the portion discharged was a cast of the internal surface of the intestine, due to the exudation of semi-carbonous material from the mucus membrane. It may have been to a very large extent mucus in character.

**Cow Has Lost Her Cud**—We have a Holstein cow that has lost her cud as she doesn't rechew any more and is getting pretty thin. Would you kindly have Dr. S. B. Nelson tell us what to do for her? S. B.
Alberton, Mont.

The losing of the cud is a symptom in the cow that she is affected with some trouble and has lost her appetite, and her digestion has been stopped. Whenever the animal recovers from the trouble digestion resumes and the cud comes back. As you give no other symptoms except the losing of the cud I am going to take liberty of suggesting that in the majority of cases this occurs from digestive trouble, and therefore the digestive canal should be cleaned out and purged the very first thing. Give the cow, according to her size and strength, from one pound to one and three-quarters pounds of Epsom salts in three to four quarts of water. If she is not very strong try giving in lieu of the salts a pint of raw linseed oil night and morning, and with a quarter to half a pound of Epsom salts once every other day. After two or three days give her one ounce of compound tincture of gentian, one tablespoonful in a pint of water once daily. Do not be in a hurry to feed her, but begin very gradually with a small quantity of either green or easily digested food, such as a scalded bran mash, with plenty of liquid in it and a little bit of salt mixed with it.

**Catarrh and Goitre.**—Seven months ago we bought a 10-year-old horse that had a lump the size of a tea cup on throat, also slight swelling from temples to throat. When he lowers head to eat there is a thick whitish matter, sometimes green, runs from nose. It smells similar to skunk. It affects breathing when worked and seems sore. Doesn't cough, but makes an awful noise like he was snoring when resting and sleeping. Was worked hard and very poor when we bought him, but is fat and eats well now. Bowels and urine in good condition. What can we do for him? K. A. W.

I am of the opinion that your horse has two troubles, and that there is no relation between the lump on the throat and the condition of catarrh which he seems to be affected with. The lumps on the throat are probably swollen thyroid glands, generally known as goitre. Possibly the application of the U. S. P. iodine ointment, daily applied for a considerable period of time, may be of some value. The other condition, that is, the catarrhal one of the nostril, is due to some trouble up in the head. The fact that he makes a noise like snoring would seem to indicate that there is a lessening of the nasal passages, due either to the swelling of the tissues in there, or to foreign growth. Only the personal examination could make a positive diagnosis.

**Pigs May Have Rheumatism**—Could you please tell me what is wrong with my four month pigs? They become lame in their left hind legs then stiff over their backs, which becomes a continual paralysis in their hind quarters. Could this condition come from lying on the damp ground during the day. I feed carrots and shorts and they run on alfalfa. Could you give me an early reply through the Farmer, as I am anxious to know what to do. M. S.
Davenport, Wash.

It is quite possible that your pigs are suffering from rheumatism. I would suggest a purge of one ounce and a half of castor oil to each pig. The next day begin feeding 10 grains of potassium iodide in a little slop before you feed them their full amount. Give this once daily for five days.

**Pumpkins as Cow Feed** — Please advise through your paper if pumpkins are a good feed for milk cows as I have plenty of them, but have had no experience in feeding them. J. L. S.
Rockford, Wash.

Pumpkins are good feed for milk cows when they are fed as roots or mangels would be with sufficient grain and hay feed. They generally have very beneficial results.


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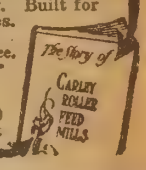


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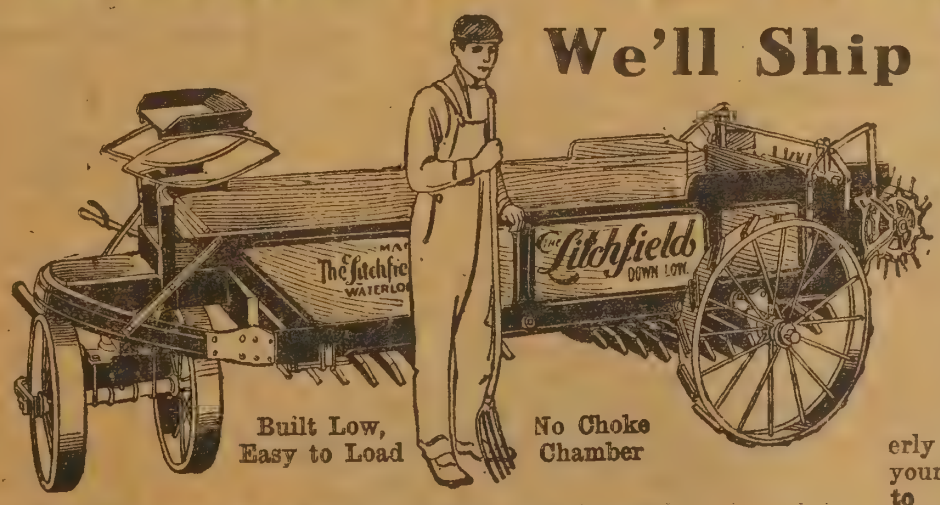
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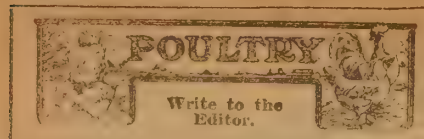
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JAMES DRYDEN, Editorial Contributor.

# Wheat Ban Removed

The order of the food administration removing the ban on the feeding of wheat to poultry and other live stock is welcome news, first, because it removes the specter of a bread famine, and second, it relieves to some extent the feed problem for poultry keepers in the northwest.

It is not desired nor expected by the food administration that large quantities of wheat be fed, but only in cases where it is difficult to secure other feed at a price that will make feeding profitable, or in cases where farmers may not have a market for the wheat. It will still be a patriotic duty to conserve the supply as much as possible, but there will be no particular patriotism in the farmer selling his wheat at $2 a bushel and buying corn or other feed at a higher price.

It has been pretty well demonstrated in these strenuous times that the feeder has gone through, that a good egg yield may be secured with whole grain entirely omitted from the ration. Corn, oats and barley have given good results. If the poultryman has the wheat by-products, bran and shorts, he can leave the whole wheat out of the ration and the egg basket will not show any lack of munitions.

There is no particular necessity now for the feeding of wheat. The prices of other coarse grains, corn, oats and barley, are now considerably lower than several months ago. With the large corn crop in the east and with December corn quoted at about $1.20 a bushel at this writing, that will mean that corn can be laid down in this territory at $50 a ton or less. At that price it will be poor business to feed wheat at $2 a bushel or better. Corn and a few oats with mill-run and the usual other extras will meet all the requirements of a good egg ration. J. D.

### WESTERN POULTRY WIN.

The final report from the Storrs experiment station, October 31, sums up the year's contest as follows:

"The seventh international egg laying contest at Storrs ended late Wednesday afternoon when hen 982, a White Leghorn from Lakewood, N. J., laid the last egg. The two outstanding features of the competition just ended are the remarkable performance of a pen of birds from Corvallis, Ore., and the individual work done by White Wyandotte hen No. 195 from Bridgeton, R. I. At this point it may be said that during the last five years the poultry department at Storrs has trapnested over 5000 hens, representing 30 different breeds and varieties, from 20 states and including birds from Canada and England. The pen of 'Oregons,' entered by the Oregon Agricultural college has beat them all. These 10 birds laid 2352 eggs, as compared with the best previous record of 2265, made two years ago by a pen of White Wyandottes."

The second best pen laid 2179 in the contest just closed. The Oregons, therefore, had a considerable lead of 173 eggs. The average pen laid 1589 eggs, or 763 eggs less than the Oregons laid. The latter average was 235.2 a hen.

It is believed that the record of the Oregons establishes a world record in laying contests for a pen of 10 birds. In one or two other cases with five birds in a pen this record has been exceeded. The smaller the number in a pen the greater the chance of a high record.

The Hollywood pen of Leghorns from Hollywood, Wash., won third place with a production of 204.3 a hen.

There were 100 pens in the competition. The best individual record was made by a hen of the Knight pen of Wyandottes, which laid 308 eggs, the first 300-egg record secured in that competition. The Press Bulletin says of this hen: "This bird is second best in a class of only four American hens with official records of more than 300 eggs each. The following table shows these four leading layers with their records, and where they were made:

White Leghorn, Delaware contest, 314 eggs: White Wyandotte, Storrs contest, 308 eggs; "Oregon," Oregon Agricultural college, 303 eggs; White Rock, Vineland contest, 301 eggs.

# Why Not a Fur Farm?

When one talks of a farm where fur-bearing animals are bred and raised for their fur, it too often seems that he is talking something more fanciful than practical. In the same way it is probable that if any one had suggested to the old nomads or the Indians that farms might be developed where horses and cattle and the like could be domesticated and produced for their labor or their meat, they would have dismissed the idea with a gutteral "Humph!"

There are many fox farms in the northland where foxes are raised for their fur, and, where logical methods are followed, the results are successful, just as logical methods of cattle or swine breeding produce success. In many parts of the world skunk farms are operated for the same purpose, as skunk fur is rapidly becoming one of the world's valuable products.

The question arises: Why could not domestication of many of the fur-bearing animals be effected in greater or less degree profitably? Muskrat fur, for instance, is valuable. Why could not a boy, through whose farm a stream runs actually fence in a part of that stream and raise muskrats? Or, if the locality were right, the mink? There are sections of the northwest where the raccoon is a common animal. Could he be domesticated or confined and produced for his fur? Weasel fur is worth taking whenever the slender little pest appears. Possibly it would be worth production under supervision.

It probably will be a long time before fur farming will become common. Possibly it never will. But it is not a far stretch of the imagination to see the time when the fur-bearing animal will be rare unless some steps are taken to increase, rather than diminish his numbers.

### WET ROADS BAD ON TIRES.

It is said that wet rubber is much more easily destroyed than dry rubber, and that for this reason travel over wet roads is much more destructive on auto or truck tires than is an equal amount over dry roads.

### Long Submarine Cable.

One of the longest submarine cables in the world is to be laid between Aden and Hong Kong at a cost of $8,000,000.

### Woman Is Deep-Sea Diver.

This country has one woman deep-sea diver.

# Power, Mechanics and Devices

The common term, "horsepower," used in connection with machinery has nothing to do with the power that an average horse is capable of developing. It is simply a term used to indicate the capacity of a machine for doing work. One horsepower is that capacity which will do work equivalent to raising 33,000 pounds one foot in a minute of time, or 550 pounds one foot in a second of time. This does not, of course, mean that a machine must be strong enough to lift or pull 33,000 pounds, but that it is capable of exerting a pull or lift of something much less than this, perhaps, through a much greater distance than one foot. For instance, a machine that had a pulling power of 330 pounds would do one horsepower of work if it exerted that 330-pound pull through a distance of 100 feet in one minute.

### ELECTRIC BUTTON ON THE FARM.

It's a great day for the farmer and his family when they can press, for the first time, an electric button in their own home. How much easier it is to press the button than to operate the pump by hand for an hour or more, and how much time it saves. While electricity is pumping the water, the farmer can be doing something else, perhaps pushing other electric buttons and starting other machines and appliances about the place.

By pressing an electric button, the farmer can also have plenty of safe, bright electric light wherever he wants it. There is no more groping about in the dark when he does the chores early in the morning or late at night. He can have a safe light in the hay loft, in the grain bin, behind the stalls, in the yard, in the cow barn and other buildings. He no longer needs to worry about the lantern upsetting and starting a fire—and how much better he can work with plenty of electric light!

The farmer's wife welcomes electric service with even greater joy and gladness than the farmer. The washing machine, churn, cream separator, sewing machine, vacuum cleaner, electric iron, electric fan and many other household appliances can all be operated by electricity. The electric light plant also makes it possible to have running water in the kitchen, bathroom and other parts of the house.

### RURAL MOTOR EXPRESS.

In a report to the members of the National Automobile Chamber of Commerce S. A. Miles, member of the motor truck committee, showed both an increase in the food supply of the country and a growing appreciation of the necessity for motor trucks for rural routes to the saving of the time of the farmers and to the lowering of costs of the food supplies to the general public.

What may be accomplished is indicated by a report of the Motor Truck Overland Express, which runs between Albert Lea, Iowa, and Mason City, Iowa. The company operates a three-quarter and a one and one-half ton truck, which recently made a trip of 42 miles in a rainstorm, over new dirt road, 84 miles for each car, in six hours and 40 minutes. The smaller truck carried 2200 pounds and the larger 3800 pounds. The expenses of the trip of both trucks, including overhead, depreciation, interest, etc., was $24.80. The same loads by freight would have cost $41.40.

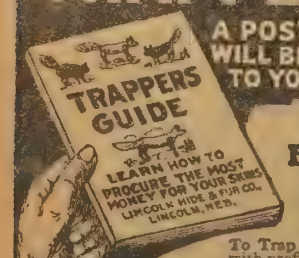




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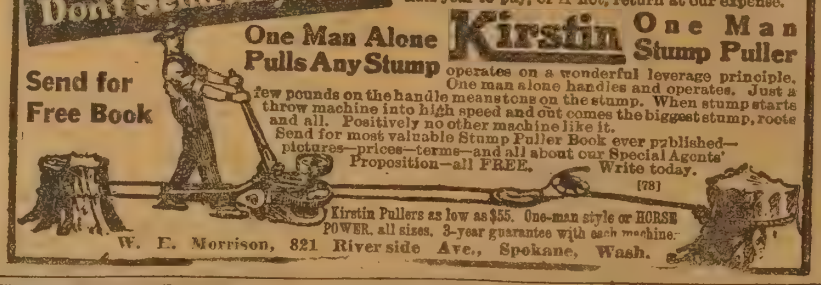
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GRANVILLE LOWTHER,
Editorial Contributor.

# Grafting Fruit Trees

I have a letter from Melvin J. Knorr, Medimont, Idaho, asking about the best time to graft orchard trees, the best method of grafting and the best kind of wax to use.

First in importance is selecting the grafts. Care should be observed to select grafts from wood of the previous year's growth, not water sprouts, for they are later in bearing. Select from the best bearing trees of the variety you desire, for trees, like animals, transmit their individual characteristics. The best time to select grafts is late in the autumn or early winter, before the wood freezes. But spring cuttings are generally used. If cut long before grafting, they should be kept in a damp place so that they will not become too dry before grafting.

The best time to graft is in the spring, after the sap begins to flow, as the buds are beginning to burst.

The ordinary method of grafting is called "cleft grafting," in which the scions are cut into wedge-shaped bases, then the stalk split and the wedge inserted into the cleft stalk. Care should be used to have the inner bark, or cambium of the graft come into contact with the cambium of the stalk, in order to insure proper circulation. Two grafts, and if the stalk is large, four are inserted into each and every stalk.

The formula for grafting wax most commonly used would be resin seven pounds, beeswax two pounds, tallow one pound. Heat, mix well together, pour into cold water, grease the hands and work it like taffy. I would not cut off all the top in one year. I would cut half or one-third the first year, one-third the second and one-third the third. Grafts and trees do better by this method than if all the grafting is done in one year.

G. L.

# Care of Trees

## Whitewashing and Painting Parts

BY GRANVILLE LOWTHER.

I have an inquiry about whitewashing the trunks, butts and large limbs of trees. Also a question about painting with linseed oil and white lead. The questions are from George M. Reasoner, Pasco, Wash. Mr. Reasoner asks further, "Do you think it possible that something will be found to destroy the codling moth?"

Now in regard to the first question, would say that whitewashing with lime has always been considered good for trees. However, if I were doing it, I would mix sulphur with the lime and put it on about twice as strong as for the ordinary spray for scale. This will get all kinds of scale, codling moth hibernating in the bark, and other insects.

The government whitewash for trees is recommended to be good. I have never tried it, but I have faith in it because it has the right ingredients and because it has been tried out by the government authorities. The formula is as follows:

Air-slacked lime, 30 pounds; tallow, four pounds; salt, five pounds; water enough to make the wash flow well.

As to painting the trees, authorities differ. There is no question in so far as I know about painting wounds to exclude the air; but when it comes to painting the whole surface of the trunk, it is claimed by some that it checks the circulation of air by stopping the pores of the bark and thereby causes the same kind of damage as would be caused by painting the skin of the human body, only not so severe.

Now in regard to the control of codling moth: I do not know what we can do except what we have been doing, but we will have to do it with greater vigor. There are contributory remedies. For instance, if we would scrape the loose bark off the trees many of the codling moth pupa that hibernate in the bark during the winter would be destroyed, provided the bark is burned or chickens allowed to gather them up. Then to whitewash the trees would kill scale and other insects. As orchards grow older and the bark on the trees furnishes better hiding places it will be harder to control pests. Now if all the contributory methods known are used in connection with the ordinary methods, which are the main remedies, then I think we will bring the pests under control. In all the fruit growing districts of the northwest there have been complaints during the last few years of the damage to fruits by orchard pests. I think that it is partly due to the fact that we are growing alfalfa in the orchards in order to improve the soil, and that often at the proper time for spraying we are cutting and saving the alfalfa hay. To spray at the right time would poison the hay enough to damage stock, and we wait until the hay is off—perhaps two or three days too late. However, this is not by any means the whole trouble. One man in our community has a theory that to have coal oil burners going in the orchard, one or two for each acre, at night would attract the moth, for like other moth they hide away in daytime and work at night, but would destroy themselves in the night by flying into the light.


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# German Socialism Defined

## *Will Fanaticism or Sanity Control Germany?*

By E. A. BRYAN, Idaho Commissioner of Education.

What class of people are the United States and the allies dealing with in Germany today? Will they be able to set up a government that can be depended upon as safe and sound and stable? Dr. Bryan has written the following article discussing the German socialist philosophy at the special request of this paper that its readers may better understand the great, new problem with which the allies must deal in bringing in an era of constructive world peace—Editor.

THERE have been many brands of socialism, or rather many uses and misuses of the term. Each man who calls himself a socialist makes his own definition and repudiates all others. So, whether his beliefs are merely for a broad philanthrophy on the one hand, or verge to the opposite extreme of red-handed anarchy on the other, he describes his position by this much-used and much-abused word.

What I call "German socialism" refers to the third great movement of socialistic thought in which the leaders were practically all German, and in which the system was characterized by the German despotic and all absorbing conception of the state.

Built upon this foundation, it has certain broad characteristics.

First, all the people in civilized nations are divided into two distinct and opposing classes—the proletariat and the bourgeoisie. These are foreign words and hard for the American to use and understand, but everybody belongs to the one or the other group.

Roughly speaking, the proletariat are non-property owners and the bourgeoisie are property owners; roughly speaking, the proletariat are the unattached wage-earners; the bourgeoisie are property owners and employers of labor. In Europe a bourgeoisie is a middle-class man, above a peasant or wage-earner, and below the gentry, socially speaking. He is a farmer, merchant, manufacturer or business man. Professional men are likewise classed as belonging to the bourgeoisie.

Oftentimes, the educated, whether owners of property or employers of labor or not, are classed as bourgeoisie. Oftentimes, too, socialist propagandists, highly educated, and perhaps rich, frequently described as the "intellectuals," class themselves with the proletariats and espouse their cause.

According to the theory, there is perpetual and eternal war between the proletariat and the bourgeoisie. Allegiance to the proletariat, or workers throughout the world, is superior to any national allegiance. Indeed, it is generally assumed that governments as they now exist are but instruments in the hands of the bourgeoisie for the exploitation of the proletariat. The war between these two classes can end only when all are reduced to the status of the proletariat. To reach that end, all the "instruments of production" must become the property of the state, and private property, except in consumable commodities, must cease to be. That is to say, not only must all railways, manufactures, mines, forests, etc., but all farm lands, tools, machines, live stock, and all other instrumentalities by which wealth is produced, must become public property, and must cease to be private property.

The farmer sometimes is fooled into thinking that he belongs to the proletariat. On the other hand, he is the most distinctive representative of the bourgeoisie or middle class. If ideal German socialism should prevail, he would lose his lands, horses, live stock, tools, machinery—everything by which he creates wealth, except his bare hands.

Second, the German socialism conceives of the supremacy of the state (the government) and the subjection of the individual. Officialdom, since all production would be by the state, would multiply almost infinitely. We would still have two classes, for there would be officialdom and the rest of us. The German autocracy, in which the autocratic bureau would be chosen by the people, but would be none the less but even more autocratic, would supplant present governments and not only production, but the minutest domestic affairs would be governed thereby. Enforced labor of each individual must follow such a scheme.

Third, the system is founded upon a purely materialistic theory of the race. Happiness, progress, self-expression, is determined wholly and solely by our material surroundings. Wealth brings happiness; its absence brings crime and misery. It is the one determining factor in the status of the human race.

It goes without saying, and yet is boldly professed by its great philosophic leaders, that the family as it now exists would disappear under such a regime. The church as it exists would disappear—and that is hailed with delight. The "overthrow of the existing order," of which the orators prate, but which is not understood by the commonalty, means the overthrow of society as it is founded on property and property rights, and the erection of a visionary Utopia, of which the world has no historical example upon the ruins of the present social order.

The commonalty does not fully understand when the orator talks about capitalism. They think he refers to some capitalist—J. P. Morgan, or some other. They do not refer to a capitalist or speculator. They refer to that system of government by which you own your farm, your plows, your stock—that system by which you have earned your living and saved something for a rainy day, that system by which you provide for your children and the old age of your parents.

Property, which is fundamentally attacked by bolshevism and other forms of socialism, was not made by any government or any class. It grew up and was not made. It is more fundamental than law and constitution and governments, whether monarchical or republican. Laws and constitution came to regulate it and secure it and prevent its abuse.

There are two fundamental institutions of human society—the family and property. The overthrow of the latter would render the former a breeding pen. Property is essential not only to the welfare and progress, but to the survival of the human race. All history shows this. No doctrine which arrays class against class can or should survive. The Christ doctrine, "All we are brethren," must be the foundation of all society. Economic inequality is both necessary and desirable. Its evils, governments must correct, and forever be the champions of the weak against the strong.

There is no more poisonous doctrine than the socialistic theories which are fundamental to bolshevism and German socialism. Whether the end is to be secured by murder and arson or by slower methods of evolution, the doctrine is equally false.

It is because of the belief that there is an eternal state of war between the proletariat of all nations and the bourgeoisie of all nations that we have spikes driven in saw logs to ruin the machinery, ties cut too short for use, matches thrown into wheat shocks, sabotage practiced by employes, work stopped under any pretext. It is war. The design is to make ownership unprofitable; to destroy the class that saves and owns and creates. I. W. W. ism, bolshevism and German socialism are fundamentally one—all alike aim at the overthrow of the existing order of society established on property and property rights.

One word more. The socialist party and the social democratic party of Germany today include thousands of men who do not accept the fundamental doctrines of German socialism or bolshevism. They are political parties and as such are primarily a protest against the oppression and injustice of the autocratic dynasty, by which Germany has been crushed. They are united in political protest against a political system whose overthrow they jointly seek. The members of these parties, perhaps a majority of them, would repudiate the economic and social doctrines of German socialists. It remains to be seen whether by intrigue, as in the case of the bolsheviki of Russia, the fanatics who hold to the fundamental theories of German socialism get control of the political organization which bears the name.

# SIDELIGHTS

**His One Mistake.**

"We played fool," declared the crown prince. "I see it now."

"Huh?"

"We had the whole world to pick a fight with."

"Well?"

"And look at the crowd we picked out."—Louisville Courier-Journal.

**His Preference.**

"I'm a very busy man, sir. What is your proposition?"

"I want to make you rich."

"Just so. Leave your recipe with me and I'll look it over later. Just now I'm engaged in closing up a little deal by which I expect to make $3.50 in real money."—Brooklyn Citizen.

**Completely Scrambled.**

A case of new-laid eggs upon his back, the toiler made his way along the pavement.

Guess what happened?

It did!

Ruefully the man regarded the scattered debris of shells and running yolks. Then he proceeded gingerly to collect the few eggs that had remained unbroken.

A passing pedestrian volunteered a cheering word.

"My poor man!" he exclaimed. "Have you dropped your eggs?"

"Oh, no, sir!" he answered, acidly. "No, indeed! I'm just giving a free demonstration of our new system of open-air cooking. I'm maikng an omelet!"

**Child Strategy.**

Janet, aged 9, was taken by her mother to lunch at the house of a friend.

The hostess was of the talkative variety, and, in her enjoyment of certain interesting little incidents she was relating, quite forgot to give Janet anything in the shape of food.

After a lapse of several minutes Janet could endure this situation no longer. So, raising her place as high as she could, she demanded in a shrill voice:

"Anybody here want a clean plate?"—From Everybody's Magazine.


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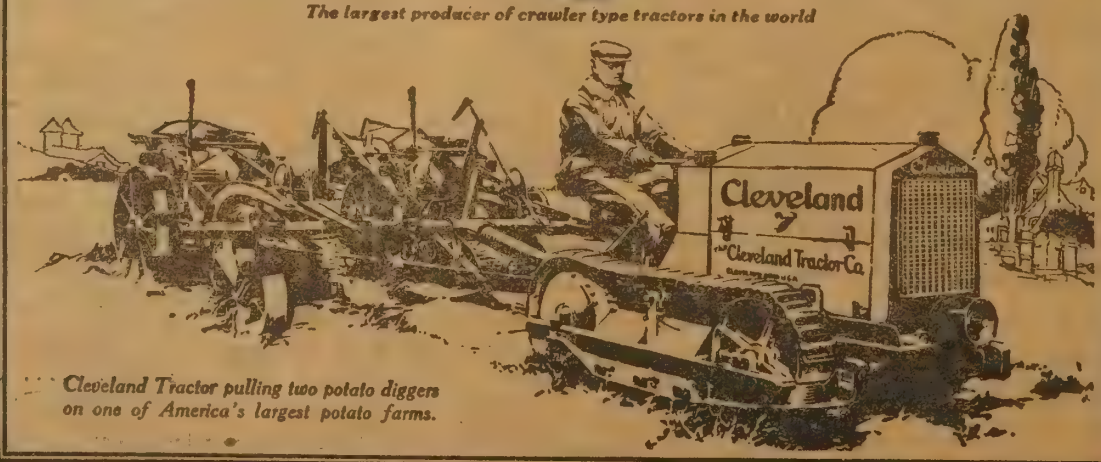
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# Washington Boys in War Service







From The Twice-a-Week Spokesman-Review.

**LIEUTENANT E. A. OLSON, Malo, Wash.**—Deserting his ranch for service with Uncle Sam, he enlisted in March, 1916, with the First replacement regiment at Camp McArthur, Texas. Mr. and Mrs. B. O. Olson are his parents.

**BERT FREEBURN, Prescott, Wash.**—Enlisted at Walla Walla, August 3, 1917, and is now at the front in France as a member of Battery D, 146th regiment, field artillery. He is the son of Mr. and Mrs. W. S. Freeburn.

**JAMES O. KURTS, Barry, Wash.**—Is a member of the United States marine corps, and is doing his bit for Uncle Sam now, serving at Bremerton navy yard. Before his enlistment in the service he was a homesteader of Roy, Wash.

# Works Both Night and Day



The above picture shows a tractor plowing at night using lights. This tractor saved the owner and his neighbors' crops by working both night and day. The machine is owned by L. S. Thom of Moorhead, Minn.

# Handicraft for Boys

By A. NEELY HALL.
(Copyright by A. Neely Hall.)

**FOR MOTHER'S KITCHEN AND PANTRY.**

Here are a few contrivances for the kitchen and pantry which will be appreciated by mother if made by her handy boy. Nothing better could be selected for her Christmas gift.

The tool rack shown in Fig. 1 is most convenient when hung directly over the kitchen worktable. The length of the hook strip will be determined by the space in which it is to hang, and by the number of

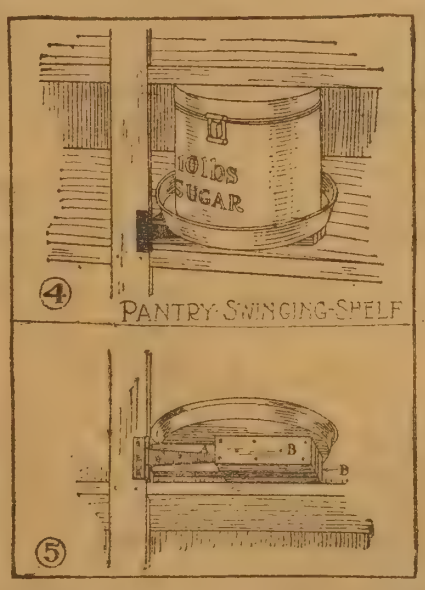



forks, spoons and other tools which it will be required to hold.

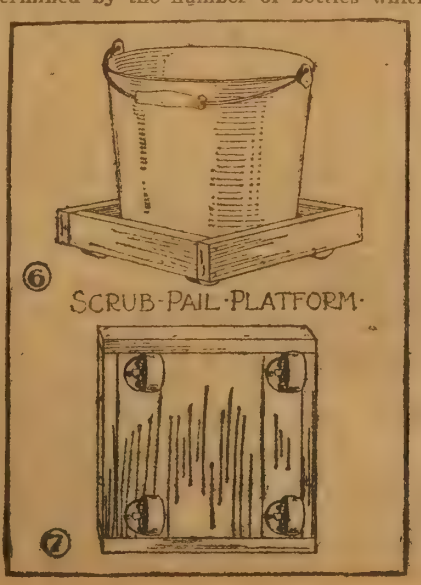
The appearance of the rack will be improved by planing a bevel on the face edges of the hook strip and the end blocks, as in the illustration. Use brass screws or galvanized nails for hooks, and screw a screweye into the top edge of each end block to hang the rack by.

The bottle rack in Fig. 2 will hold your mother's bottles of extract, catchup, sauces and dressings and eliminates the possibility of upsetting bottles when reaching for the one wanted.

Narrow strips should be used for the division strips of the rack, to save space and make the rack light in weight. Laths planed smooth on all sides will do for the




side and center strips, also for the cross strips. The ends must be about three inches wide. The lengths of the strips will be determined by the number of bottles which




it will be required to hold, and you can estimate the number after making an inventory of the bottles on your mother's pantry shelves.

Be careful to cut like pieces of uniform size, so they will fit together nicely. Also be careful to make the pockets large enough so the bottles will fit loosely in them. Use brads for assembling, and fasten together the front and rear portions separately so you can drive the brads through the long strips directly into the ends of the short cross strips (Fig. 3). Then connect the two frames by means of the end strips. Nail the bottom board to the under side of the end strips.

The swinging shelf shown in Fig. 4 is an excellent provision for the sugar and salt crocks, as it makes it possible to swing these out from between the pantry shelves, then back into place after using, without lifting them.

Fig. 5 shows how the swinging bracket is made of a strip two inches wide and 10 inches long (A), with a block two inches wide and six inches long nailed to each side of it at one end (B), and how to the top of this bracket a cake tin is screwed or nailed on which to set the crock. Hinge the end of the bracket strip A to one end of the shelf supports, or else set in an upright piece between two shelves to screw the hinge to. Use a medium-sized T hinge for this bracket.

In the same way that the swinging shelf eliminates the lifting of the sugar crock, the platform shown in Fig. 6 saves the lifting of the scrub pail from place to place while scrubbing, as it is provided with castors so it may be pushed about.

Fig. 7 shows how the castors are screwed to the platform, and how strips are nailed to the edges, forming a rim that prevents the pail from sliding off.

Either paint or shellac each article after assembling it, and if you have done your work carefully, mother will have something to be proud of.

# "Making Hay While the Sun Shines"



There's a time and place for everything and young America intends to strike while the iron is hot. The first words of the immortal "Will you be mine?" has already passed his lips and she, as Shakespeare wrote, is "sighing like a furnace."

# Me und—Napoleon




—Washington Evening Star.

# A CROOKED TRAIL---By Lewis B. Miller

Copyright by The Page Company, 1911.

**A story of a thousand-mile saddle trip up and down the Texas frontier in pursuit of a runaway ox.**

### SYNOPSIS.

Travis, a lad in his teens, lived on the Texas frontier in the days when Texas was a wild, unsettled region. One morning before daylight he started out to bring in the yoke of oxen for a day's plowing, but one of them was gone. He caught his pony and started to search for the stray. Going a little and a little further hour after hour, he continued until night caught him several miles from home with a tired pony, a borrowed saddle and lariat and little for himself or his dog to eat. A rabbit and wild turkey eggs served the purpose, and morning saw him again in pursuit of the ox after a night of disturbance by a mountain lion and marauding hounds. The next night he spent in the cabin of a crazy sheep herder who believed that cattle men were trying to kill him. He made the night hideous by his crazy ramblings and songs in the moonlight, and Travis was glad when the opportunity came to escape from him, and fall in with new friends, Frank and Stella Booth, at their farm home a little further on. The three young people became much interested in each other because of common plans for attending school the following year. It was here, also, that Travis got his first definite clue to the whereabouts of the stray steer. Together the two boys set out to hunt him, but he was farther away than they suspected. Startling adventures were in store for them, among the first of which was a night in a "haunted" house, the principal haunts being wild animals. The next day they found the stray ox, but suddenly a wall of water from a furious storm rushed down the river between them and the animal. The boys arranged to have the steer held in pasture till they could cross the raging river. The meantime they spent working with a farmer grubbing out live oak thickets. Some interesting experiences were awaiting them, however, rafting on the flooded river. Unwittingly they aid some cattle thieves to escape from the sheriff, at the same time getting farther behind in their race with the runaway ox.

## CHAPTER XII.

### The Mill Among the Mountains.



E now ran for our raft and after poling it out of the back-water inlet, we dragged and poled it up the south bank. But, prompted by the necessity for hurrying, we stopped considerably short of the point from which we had launched out on our previous voyages across the river.

This was a mistake, as we speedily learned. For scarcely had we got halfway across when it became plain to all of us that the raft must miss the intended landing-place by at least a hundred yards. And below the road there was nothing but upright bank.

In this emergency the sheriff, hastily knotting two of their lariats together, coiled them and hurled the end at us. Frank caught it dexterously, and then both of us, throwing down our poles, grasped the rope and braced our feet. Now the three men on the bank pulled us to land, in defiance of the current.

The sheriff's name, we were informed, was McCracken, and the two men with him were his deputies. They were armed to the teeth, every one. Though small of stature, Sheriff McCracken was big in courage as well as in voice. And we afterwards learned that he had some reputation as a catcher of outlaws. Indeed, his name was a terror to evil-doers. With the tenacity of a blood-hound he had been known to trail a criminal from one edge of the wide state to the other.

For a few days the three men had been hot on the trail of a notorious desperado, Bill Edsell by name. Both Frank and I had heard and read much of this fellow. He was guilty of many crimes. More than one officer of the law had gone down before him; and there was a price on his head, to be paid for capturing him, alive or dead.

When hard pressed by his pursuers, the desperado had suddenly disappeared, as if the earth had opened and swallowed him up. But just as they were about to abandon the chase as hopeless, the officers had learned, by the merest chance, that some of Edsell's friends had concealed him in a covered wagon, and were trying to get out of the country with him.

McCracken's party informed us that all the shots had been fired over our heads. But the sheriff declared that if Frank and I had not been on the raft, and in the most exposed position, he would have stopped the raft or riddled that wagon with bullets.

"I wonder what made those fellows lie to us about smallpox," said Frank.

"They may have done it to hurry you," McCracken answered. "But I rather guess they wanted to make sure you didn't get curious and go to nosing around their wagon."

"Well, they succeeded beautifully," I spoke up. "The wagon looked a little mysterious, and I might have been tempted to take a peep under the cover. But after smallpox was mentioned, I wouldn't have lifted that canvas for a gold-mine."

When we had explained that it would again be necessary to tow the raft a few hundred yards up stream, the sheriff said:

We haven't got a minute to spare. You boys stay on there, and we'll do the pulling."

After fastening their lariats to the raft, the other end of each lariat being looped over the saddle-horn, they led their horses up the hill, then sprang into their saddles. Immediately Frank and I had all we could do with our poles, and the raft was plowing the water up stream with the speed of a steamboat.

"This will be far enough," Frank soon called out.

The men now dismounted; and after we had loosed and they had coiled their lariats, they led their horses down a steep path and out upon the raft. Promptly we pushed off, and a few minutes later the raft butted its head against the south bank at the road. The officers at once led their horses ashore and mounted.

"Well, boys," said the sheriff, "you've rafted us across nicely, and we're many times obliged to you for it. There's a reward out for that desperado, and if we capture him there'll be at least ten dollars apiece coming to you for the information and help you've given us. And you shall have it as we pass back. But here's something for your trouble till then." He tossed us a five-dollar bill.

"We don't charge—" Frank began.

But the three were already galloping away, their spurs jingling, their holstered Winchesters hammering their saddles, and their holstered six-shooters flopping against their sides.

"Well, our hard half-day's work panned out something, didn't it?" remarked Frank, as he stooped and picked up the money. "They wouldn't give us time to explain that we didn't charge them anything, nor that we don't live here. Hope we shall not be hanging around the cowhouse when they come back by."

"That we won't! We've lost time enough already. Let's be moving."

We untied our rope, but left the raft moored to a tree with Frank's grape-vine. Some other traveler might have need of our makeshift ferry-boat.

It was now past dinner-time, but without stopping to eat we mounted our horses and started for the Edwards house, where we hoped to strike the trail of our cattle.

But before arriving there we met Edwards, coming on foot. He had been away from home, and had just returned. His wife had told him of the shots fired by McCracken's party, and he was curious to find out what they meant. Of course we had to relate the whole story of our morning's experiences.

Afterwards he insisted upon taking us home with him for dinner. While eating we learned how our cattle had happened to escape.

One corner of the pasture reached down into the bottom-land along the river, where the fence crossed a little branch, for water. After our cattle had been in the pasture a few days, the river rose so high that the back-water, following up the branch, floated the rail-fence and let it tumble down. The water retreated during the night, and before morning, it was supposed, Lep and his two followers had passed out through the broken fence and gone.

Edwards had not missed them till the afternoon of the following day. Then he rode a good many miles hunting for them, in different directions, but failed even to hear of them.

"The minute they got out they probably struck a bee-line for southwest Texas," I informed him.

A short time later Frank and I were in pursuit. We took the road we believed Lep had followed, and after riding several miles, we succeeded in finding a settler who had seen the three animals pass. Encouraged by this news, we pushed on faster.

The further we advanced the more broken the country became. Few people lived here, and those were well hid in the deep, narrow valleys. When night overtook us, there was no house at hand, and we camped on the bank of a creek. By daylight next morning we were in the saddle again.

During this day we had no end of trouble following the trail. The roads were so rocky that we could rarely distinguish a hoof-print. And the houses along the road were so few and far between that we seldom had an opportunity to make inquiries. More than once we strayed off on a false scent and had to retrace our steps.

Rougher and rougher grew the country as we advanced, till we found ourselves among cedar-brakes. Now there was little or nothing but mountains. Settlers were few, and roads ever fewer; and there was not much danger of our going astray.

Not long before night, while following our dim road as it wound through the odorous cedars and around the foot of a mountain, we came upon a small boy. He was sitting flat in the road, picking up some spilt corn grain by grain, chicken-like. His horse was browsing near by. The boy was on his way to mill, he told us. His sack had come untied, allowing half of his corn to spill and the other half to drop to the ground.

The accident had happened not long after noon, and the patient little mountaineer had been picking up his scattered corn ever since. There were but a few grains left now, and I dismounted, tied the sack, and lifted it upon the horse for him.

"That's what's been worryin' me 'most to death," he said.



"What's that?" asked Frank, as I picked up the freckle-faced, hardy-looking little knot of humanity and set him on top of his grist.

"Why, how to git this here sack up ag'in. Ain't many folks comes along here."

The boy rode with us. At length we came to a not very large, but very clear mountain stream. A hundred yards above the road, at a natural fall in the creek, stood a little water-mill. The mill-house, which was of cedar logs, was small; and the wheel was now in motion, the water pouring over it noisily.

The boy turned up toward the mill, and Frank and I went also. The miller, gray with the evidences of his calling, sat outside by the door, in the shade of the house, his chair tilted back against the rough wall. As we approached, he came out to carry in the boy's grist.

"Get down! Get down and come in!" he invited. And then he said to the boy: "Want it ground or swapped, Jimmy?"

"I did want it ground, but it's so late now—." He glanced toward the sun, which was almost touching the mountain-tops.

"Better swap it then," said the miller. "Just as good, anyhow.

He disappeared inside, but soon came out again, bringing the sack, well filled with meal now instead of corn. He put it upon the horse, behind its owner, and the boy rode back the way he had come.

Thinking that this man might have been watching the road, we explained what we were looking for.

"Yes, boys, I saw the very three animals you describe go by down there—let's see now, when was it? Oh, yes, about the middle of yesterday evenin'. I was settin' here by the door. The big, spotted fellow was in the lead, but the others kept right close behind him. The young cattle stopped every now and then to nibble a bite of grass, but the old one just kept joggin' along steady-like I couldn't help noticin' 'em."

"Well, we're glad to hear of the sly rascals once more," Frank assured him.

"How fur have you come lookin' for 'em?" the miller inquired, with a glance at Frank's saddle-bags.

"I'm nearly two weeks from home. Can't say just how many miles I have traveled," was my answer.

"I've been on the road about 10 days," said Frank. "But we were water-bound a good share of that time."

"You don't say so!" exclaimed the miller, dusting his clothes vigorously. "Well, you're nosin' the scene like old trailers. But get down—get down and stay all night with me. I'm here by myself, and I'll be the gladdest kind to have you."

We declined, telling him we would buy a few feeds of corn for our horses, if he had any to sell, and then go down the creek several hundred yards and camp. The grazing was rather too scanty here to depend on. But the miller insisted so earnestly that we finally consented to spend the night with him.

He furnished us shelled corn for our horses, and when we tried to pay him he refused to accept a cent. During the conversation which followed he made use of a favorite saying of his, which was a key to the man's character:

"Fellow that won't get down off of his horse and pour out his corn, to lend his neighbor his sack to go to mill with, ain't no neighbor at all."

The miller cooked and slept in two small rooms adjoining the mill-room; and in one of these we ate our supper, the mill grinding steadily all the while.

After we three had washed the dishes, the miller lighted a smoky lamp in the mill-room, and refilled the hopper. Then we all went out, taking our chairs, and sat in front of the door. The water had a musical sound as it poured down, broken by the step-like turning of the overshot wheel, and by the soft, gentle grinding, inside, of the little mill, not much larger and scarcely as noisy as a big coffee-mill.

"Powerful sight of company, that water is, after you once get used to it," the miller assured us. "When I first put up this mill here, nearly 15 years ago now, the noise bothered us a little, me and my wife. But after we'd been livin' by it awhile we just naturally come to like it. My wife used to say that when she got out of hearin' of this water-fall, she always felt kind of lost and lonesome-like. And when she died, three years ago last June, though she'd never said a word about it, I kind of thought she'd like it better; and so we dug her grave right out there at the foot of the mountain, in plain hearin' of the water. And I've let all my neighbors understand that when my time comes to go, I want to be laid out there, too."

After telling us this, the man remained silent for a minute or so, and we respected his silence.

But he was far from being a morbid or gloomy man, this mountaineer miller, living alone though he was. Indeed, we found him very cheerful. And he had become something of a philosopher in his way. He had settled here with the very first settlers. And not long afterwards he had started this water-mill. He told us many interesting experiences of those early days, some strange, some exciting, and most of them laughable. For he had a way of picking out cheerful things to talk about.

When bed-time came, the miller showed us our bed, in the room adjoining the mill-room.

"You two sleep there," he said.

"But where are you to sleep?" I wanted to know.

"Oh, I do most of my sleepin' in a chair these nights. You see, I'm behind with my grindin' just now, and have to run day and night to ketch up. My mill's little and grinds mighty slow. But I don't keep awake all night long—not me. I just fill the hopper chuck full of corn, then set down in my chair and tilt back against the wall and go to sleep. The mill makes a different noise when it runs empty, and that always wakes me. Then up I bounce and fill the hopper with corn ag'in. That way I get a lot of grindin' done at night, and don't lose much sleep either."

To shut out some of the noise, the miller closed the door between our room and the mill-room. But the sound of the little mill, chewing away steadily on its dry supper, came through the partition. And the music of the splashing water and the revolving water-wheel filled all the air. Instead of keeping me awake, as I had half expected, these sounds quickly lulled me to sleep.

Voices in the mill-room awoke me. The miller's was among them, but there were two others, both louder and harsher than the miller's quiet tones. I had not heard the men enter, but they had evidently just come, for one of them was explaining:

"I'm a sheriff, and this is one of my deputies. We've been trailing some cattle thieves, and just at dusk tonight we ran onto the rascals. For a little while, you'd better believe, we had it hot and heavy. They all got away—I don't know how much damage we did them. But they left my friend here with a bullet in his leg to remember them by. We saw your light and thought we'd stop in and try to dress the wound."

The voice of this speaker was strange, but the voice that followed was one I had certainly heard somewhere before, though I could not recall where.

"Thing got to hurtin' me so bad I couldn't hardly ride," the wounded man was complaining. "Like stickin' a knife clean through me every time the horse moved."

While I was wondering whose the familiar voice could be, the men in the other room were examining the wound, as I could make out from their conversation. Presently the miller said:

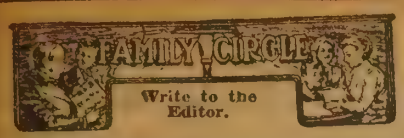
"Wait a minute, till I fetch a pan and some water and my bottle of turpentine. Best thing in the world to put on a wound, turpentine is."

He came through the partition door, leaving it partly open, and passed on into the kitchen.

From my position in bed I could now look into the mill-room, and could plainly see the two visitors. The one who had announced himself as sheriff was standing. He was an utter stranger to me. The other man was sitting in a chair, with one leg mostly bare, save for the dried blood crusted on it. At the sight of his face I gave a start, for I recognized him instantly, especially by the black mustache drooping over the corners of his mouth. He was the principal man in charge of the wagon we had rafted across the Cowhouse—the wagon with the desperado concealed in it.

"But who is the other man?" I questioned myself. And

(Continued on the following page.)




ALICE W. BARLAND, Editorial Contributor.

# Discontent

## Leads to Progress and Improvement

Dear Family Circle: It has been some time since we have had a quiet little chat together, and a number of things have been circling around in my mind lately that I want to put up to you.

This little personal letter is for those of you who are dissatisfied. I guess that will include all the readers of the Farmer and "then some."

It is a fine thing for the human race that people are not satisfied with things as they find them. Otherwise all progress would stop.

Before we go into this phase of the subject let us get it clear we are speaking of profitable discontent, and not the kind that makes every one around unhappy. A good healthy dissatisfaction brings about improvement and that is the kind we mean. Let us say that Mrs. Brown is dissatisfied with her house and every thing in it. She doesn't quite know what is the matter with it, but thinks if she had better furniture, like Mrs. Jones, she could have a pretty home. Now that the discontent germ has begun to work something is likely to happen.

Let us go into the living room, which of all the rooms in the house should be the most cheerful, and see what can be done.

We wouldn't dare make so free in Mrs. Brown's house if she had not started this discontent germ to working, but since she has we will look things over with her.

It is a good thing to walk through your house once in a while and take a look at it as if you had never seen it before. It is surprising how many things you will see that you hadn't noticed for a long time, and you will wonder why you have left them there and will swiftly consign them to the kitchen stove.

So Mrs. Brown, with critical eyes, scans her living room. She begins at the windows and notices that no two shades are drawn on the same line, and straightens them at once, noticing that the windows need washing and she gives them a good cleaning. Then she takes a look at the curtains, finds one tucked back over a picture to let in more light, and left there pulling the picture all crooked. As she straightens the picture she notices that the curtains are dusty and resolves to wash them as soon as she can, to match the clean windows. Next she begins to scan the walls of the room one by one. On one wall she discovers three calendars, hanging one over another, all of them out of date, all more or less soiled, and she takes them all down and puts them into the stove so no one will hang them up again. Along the casing of a door are three or four picture postal cards which have come to some member of the family, and have been stuck into the casing and allowed to remain there for months. She takes them down and is amazed that she has not done so before. On another wall is a shelf where the clock stands. On this "catch all" place there is a motley array of all kinds of things which should not be there. Mrs. Brown stands and looks at this as if she had never seen it before, and with determination in her eye, she begins to unload it. There comes down a pair of gloves, a bag of tobacco and a box of matches, a necktie and a pocket-handkerchief. These things were on one side of the clock. From the other side she takes a vase with some old withered and dusty autumn leaves, a picture advertising some new kind of jello, a clothes brush, a screwdriver, a sewing machine oil can, and an empty candy box. She straightened every picture, took down three that had been put up just before they were there, not because they were any improvement to the room, and were serving only to make a clutter.

She cleared the long reading table of papers that were some of them six weeks old, took off the wrinkled and dusty cloth, and put it away to be washed, leaving the pretty polished table top exposed, and decided to leave it that way always.

Next she looked the furniture over piece by piece, and it did not seem very promising, but it was all good hard wood, and she went for a bottle of furniture polish, long left unused, and with a woolen cloth she transformed that furniture in a short time, so she hardly knew it. She washed and polished the glass of every picture, swept the rug, then freshened it with a damp cloth dipped in ammonia and water, and washed all the dust from around the edges of the floor left uncovered by the rug.

She arranged the furniture conveniently around the room and put out the latest papers and newest magazines

The effect of these few changes was amazing and Mrs. Brown could hardly believe the place was hers. She no longer envied Mrs. Jones, for now her own living room at least was as bright and cheery, and as well furnished as her neighbor's.

This happy change came about because Mrs. Brown became discontented. I want to repeat, that progress and improvement follow a wholesome discontent, and when one becomes satisfied with himself he becomes uninteresting to others. A. W. B.

# Kewpie and Bib

By WINIFRED WORTH.





Bib.

These popular features are for the children. Every mother or relative of a child will want to make them:

1st Row—Ch. 35.

2d Row—Ch, 10 and join to 10th.

3d row—Ch. 15 and join to 15th.

4th Row—Ch. 10, 2 dc., 2 ch., 2 dc., turn, ch., 3, 2 dc., 2 ch., 2 dc., ch. 10.

5th Row—Make 42 t., ch. 10, 2 dc., ch, 3, 2 dc. ch. 3 and turn.

6th Row—2 dc., ch. 3, 2 dc., ch. 10, sk. 1, 1 sc. in outside across same until narrowed to 2, turn, join.

Edge—2 dc., 3 ch., 2 dc. in 1st, or end ch. 4, between 2 rows same. 2 dc., 3 ch., 2 dc. in ch. 4, join, ch. 4 on to next ch. 3, join all around, insert doll.

The Kewpie also can be made into a pincushion or hairpin holder by padding the front of Kewpie.

Ch. 33.

1st Row—I dc. in 3 st., 14 dc., 1 in each ch., 3 dc. in next ch., 15 dc., tu. and rib, continue until bib is required size, increase in same place with 3 dc. every row, work 1 row, c, all ro. and add ch, on each of neck to measure 11 inches.

# A Crooked Trail

(Continued from the preceding page.)

the answer that flashed into my mind was: "That must be the fellow that was in the wagon; that must be Bill Edsell himself." And I lay there staring at him.

Presently the miller passed back into the mill-room, shutting the partition door after him, and shutting the two men out of my sight. Instantly I sat up in bed.

"So that's the way the wind blows, is it?" I said to myself. "You fellows are at your lying tricks again. Instead of being officers, you're outlaws. And instead of getting that wound from cattle thieves, you got it from some sheriff. Yes, that's it; you've met Sheriff McCracken."

(To be continued.)


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# PATTERNS

2662-2671—Ladies' costume—Waist 2663 cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 2671 cut in seven sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. It will require 8 3-4 yards of 36-inch material for a 38-inch size for the entire costume. Width of skirt at lower edge is about 1 7-8 yard. Two separate patterns, 10 cents for each pattern.

2302—Girls' dress—Cut in four sizes: 6, 8, 10 and 12 years. Size 10 requires 4 3-4 yards of 36-inch material. Price, 10 cents.

2256—Ladies' dress—Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 36 requires 7 1-4 yards of 36-inch material. The dress measures about 2 1-2 yards at the foot. Price, 10 cents.

2197—Boys' suit—Cut in four sizes: 2, 3, 4 and 5 years. Size 4 requires 3 1-4 yards of 36-inch material. Price, 10 cents.

2292—Girls' coat with cape—Cut in four sizes: 6, 8, 10 and 12 years. Size 10 requires 5 1-2 yards of 44-inch material. Price, 10 cents.

2670—Misses' dress—Cut in three sizes: 16, 18 and 20 years. Size 18 requires 5 5-8 yards of 40-inch material. Width of skirt at lower edge is about 2 1-2 yards, with plaits drawn out. Price, 10 cents.

2359—Ladies' house dress—Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires six yards of 36-inch material. The skirt measures about 2 3-8 yards at the foot. Price, 10 cents.

2651—Girls' dress—Cut in five sizes: 6, 8, 10, 12 and 14 years. Size 10 requires 3 1-4 yards of 44-inch material. Price, 10 cents.

2314—Girls' gymnasium suit—Cut in five sizes: 4, 6, 8, 10 and 12 years. Size 12 requires four yards of 44-inch material. Price, 10 cents.

2674—Ladies' apron—Cut in four sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. Size medium will require 3 1-8 yards of 36-inch material. Price, 10 cents.

2300—An attractive set of toy animals. The patterns are cut in one size only. It will require half a yard of flannel for the sheep, three-fourths yard for the dog, and three-eights yard for the pig. Price, 10 cents.




Please fill in this order and mail with remittance to:
PATTERN DEPT., PACIFIC NORTHWEST FARM TRIO, Spokane, Wash.

Enclosed find.....cents for which send me the following:

Pattern No..... Size..... Pattern No..... Size.....

Pattern No..... Size..... Pattern No..... Size.....

Name .....

Postoffice ..... State .....

R. F. D. ..... Box No. ..... Street No. .....

Be sure to give the pattern number and the correct size.

### SWISS STEAK.

Have the frying pan smoking hot. Remove a piece of fat from the steak (round) and rub the pan with it; let the fat remain in the pan as for broiled steak, and cook until both sides are seared. Remove the steak from the pan, season with salt and pepper, and sprinkle with barley flour. Pound the steak with a potato masher or the blunt side of a butcher knife, to cut across the muscle fiber and send the flour into the meat. Return the steak to the hot frying pan; add enough boiling water to cover the steak. Cook slowly 16 minutes. Make a gravy from the liquid in the pan and pour over the steak.

# Use the Apples

Every surplus fall apple has in it possibilities for winter desserts or relishes. With the drain on transportation during the coming winter likely to make the importation of fruits more difficult, the pantry shelf should be well-stocked with local, home products preserved in some form as jelly, conserve, juices, or dried.

Canned fruit, canned tomatoes, dried fruit and bottled juices may be made into winter preserves. Let nothing go to waste at this season, urges the United States food administration; pumpkin, squash and carrots combine well with fruit in the making of jam. So can any surplus that can't be taken care of in other ways.

### Chipped Apples or Pears.

Hard fruit (apples or pears), 8 pounds.
Sugar, 1 pound.
Syrup, 2 pounds.
Ginger root or crystallized ginger.
Lemons 2.
Water, 2 quarts.

Wash and prepare fruit. Weigh after it is prepared. Add sugar to syrup and water. Add lemon juice and chopped rind and fruit. Cook slowly until fruit is tender and product is thick and dark.

### Peas 1000 Years Ago.

The discovery in Sweden of a loaf of bread made from pea flour in the time of the Vikings has disclosed the fact that peas were cultivated in Europe more than 1000 years ago.




# Your Christmas Shopping Problems

SUCH of these problems as can not be solved by inspecting the stocks of your home stores will receive sympathetic and prompt attention on the part of our Mail Order Department, upon receipt of a letter or postal card with particulars.

**The next best thing to being able to shop personally in this, the Northwest's finest store, is to have at one's disposal the efficient Frederick & Nelson Mail Order Service.**

Christmas stocks are completely ready—more delightfully diversified than ever before—with plenty of toys, of course, for the children's Christmas.

If you can conveniently come to Seattle for part of your holiday shopping, you will thoroughly enjoy a visit to this store, with its unusually complete provision for the convenience and comfort of its customers.

FREDERICK & NELSON
AT FIFTH AVENUE AND PINE STREET, SEATTLE.




(Address all letters to Aunt Nellie, care of The Washington Farmer, Spokane, Wash.)

Part of the time this summer Lucile Turnley of Yakima drove a derrick and she helped to mow the hay. Lucile was 11 years old March 31, and she lives on a 40-acre farm. She walks two miles to school.

Every Friday at school Naomi Ensley has sewing, and the pupils are making quilt tops for the Red Cross. Naomi can tat, but she likes to knit for our soldiers best. Her address is R. F. D. 1, Box 22, Almota, Wash. Her birthday was June 15, when she was 12 years old. If you are her twin she wants you to write.

High in the air, not on a tree, homeliest thing you ever did see. Florence Evans of Warden wants to know if the cousins can answer this riddle. Florence likes to read the other children's letters. She was 13 years old June 29. She has a little colt named Jack.

Glendale is the name of the school that Emma Bennett goes to. Emma's address is R. F. D. 2, Box 41, Addy, Wash., and she is 10 years old. Katherine Habura is her schoolmate. Two of her sisters are married and one of them has a dear little baby boy. Snap and Tip are pet dogs.

June is the name of Mary Harbison's doll. Mary lives at Nespelem and is going to raise some rabbits next year. She has joined the Junior Red Cross and will be 7 years old December 30.

Evelyn Amon's father farms a section of land near Kennewick. Evelyn tells about the live stock on their farm. They have 48 little pigs, 18 head of horses, two cows and a pet kitten, Tom. Evelyn was 9 years old August 10. Has she a twin?

For a pet Lorene Demaris of Dixie has a chicken with only one leg. Lorene was 9 years old November 14. On the farm they have two cows and two rabbits.

Mildred Demaris of Dixie has joined the Junior Red Cross and made about 100 gun wipes. Jack and Bunny are her two pet rabbits. Mildred is 10 years old.

Lucile Weaver has a cute little baby sister. For a long time Lucile has been reading the Corner, and she just wrote a letter to her Corner twin. She lives on a wheat ranch of 900 acres. We are glad she is a cousin now. Her home is near Eureka.

January 27, 1910, was the day that Zelma Parkinson of Twisp was born, and she is looking for a twin in the Corner. There are four horses, three colts and seven cows on the farm where Zelma lives. Zelma goes three and one-half miles to school.

"I have 15 chickens and the little girl next door has four chickens, so we had a great time keeping our chickens on their own side of the fence this summer," writes Ethalee Magee, who lives in a town called Twisp. Ethalee was 9 years old July 19. She is knitting a wash rag for mother and one for father, too.

This summer Virginia Wilson went to Spokane, and when she was there she rode on the merry-go-round. As she rode she reached out and caught a ring, and when she got a gold ring she had a free ride. Virginia lives on a 500-acre farm about 15 miles from Harrington.

Brother and Elsie Oshmore of Monse had a war garden this summer. In it they planted lettuce, peas, beans, corn and watermelons. It was watermelon time when Elsie wrote and she was wishing that Aunt Nellie and all the Corner cousins were there to help eat watermelons. We wish so, too. Elsie has a calf of her very own. She calls it Buttercup.

Sterling Saunder of Selah lives on a 140-acre farm. He has two sisters and three brothers. On the farm there are six horses, two mules, about 300 hogs and some cattle.

"Mother and I picked berries this summer and I made $15," writes Pearl Chaney of Yakima, who was 11 years old June 5. Pussy, Peggy and Pete are her pet kittens.

Gladys McNeilly of Colfax goes to school at St. John's academy and is in the sixth grade. In the summer she has lots of fun on the farm. Gladys was 11 years old August 22, and she is going to write again.

Three dear little kittens and two dogs, Jack and Bobbie Bum, are Phyllis Curtis' pets. Phyllis lives on a 480-acre farm near Fruitland and enjoys living in the country better than in the city. She is 7 years old, and her birthday is May 28. She wants a twin.

Helen McBride of Bickleton rides horseback a great deal. She lives on a 500-acre farm. Helen has two brothers and a married sister. One of her brothers runs a header in the summer time. Helen was 14 years old May 18, and she expects to graduate next May.

How do the cousins like Hooverizing? Elfreda McNeilly of Colfax likes it fine. Elfreda was 12 years old April 11, and she has blue eyes and dark hair. She likes to go to school. She can knit, crochet, embroider and sew.

We have room in the Corner for one more cousin, Ruth Harbison, of Nespelem, who is buying thrift stamps and knitting socks for the soldier boys. Ruth goes to Sunday school every Sunday. Will her twin please write to her? She will be 11 years old December 14.

The oldest brother of Mae Turnley has gone to war. Mae's addres is Route 5, Yakima, Wash. She was 9 years old, October 23. For pets she has one kitten, named Buster, and two dogs, Shep and Fritz.

"We have lots of bees on our farm and so has grandpa, who lives near us," writes Tessie Duffy of Midvale. Tessie rides Jim, a pony, to school. She was 9 years old October 30, and is in the fourth grade.

A fawn that will drink milk out of a pan is Phoebe Galbraith's pet. Phoebe lives seven miles from Welpinit, and she was 9 years old May 26. Grandma gave her a hen which set and hatched out 10 little baby chickens. Phoebe wants a twin.

(Address all letters to Aunt Nellie, Care of The Washington Farmer, Spokane, Wash.)

"Some dear little Orioles came and built a nest in our front yard," writes Florence Markham of Centerville, who was 9 years old December 24. Every night Florence goes after the cows. Her chum's name is Cora Wilson. King is her pony. Florence's hair is light and her eyes are blue. Another letter is coming from her soon.

No more candy or gum for Evalena Courch of Grandview, for a while, because the soldiers need the money more than she needs the candy, so she is going to spend her money for thrift stamps. Evalena was 11 years old last December 13. During vacation she went to Seattle.

Right in the pine woods, 16 miles north of Davenport, on a 260-acre farm on the Spokane river, lives Hazel Emmett, a cousin of ours, who was 12 years old June 20. Her father teaches there and Hazel is in the seventh grade. This summer she had about half an acre in garden and she raised winter beans, field corn, potatoes, tomatoes, Hubbard squash, and a few melons.

Carl Tubb of Corfu, is a splendid rider, and he has a pair of riding boots, a saddle, a bridle and the whole outfit. Carl is going to school and likes his teacher very much. He wants to correspond with some of the cousins. This is his second Corner letter.

The third letter that Henry Besel of Farmer writes to the Corner tells us that he has one $5 war stamp and six little stamps and that he is going to fill the book in which you can put $100 worth of stamps.

The sun shines beautifully where Ruth Noah lives, near Orin. Ruth was 11 years old last February 17. Has she a twin? May and Jocelyn are her sisters and Grandison is her brother. Mollie, Dandy, Tot and Babe are their horses.

Mae Noah of Orin was 9 years old May 22. She lives on a 160-acre farm, and has two calves and two cows.

"Grandma has come to visit us," writes Ruth Cory of Dairy, who has written to the Corner once before. Ruth can crochet and knit. She was 8 years old June 18, and if she has any twins she wishes them to write to her.

October 12, Myrtle Green was 7 years old. Has she a twin cousin? Myrtle lives near Almira and this is her first letter. She will write more next time.

Alice Knapp of Harrington has two brothers and two sisters. Cricket is the name of their pony. Alice is in the second grade at school.

"My aunt is a Red Cross nurse and one of my cousins is in the army," writes Ollie Ervin of Mead. Ollie likes to go to school. She would be glad if Goldie Smith would write to her and she would surely answer her letters.

Have any of the cousins ever driven a combine? Laura Lee wants to know, because one afternoon this summer Laura drove the combine with 20 horses. During harvest most every day some of her girl friends and she would go out and ride on the combine. Laura is 14 years old and in the eighth grade. She would like to correspond with any boy or girl cousin. Her address is P. O. 494, Ritzville, Wash.

Helen McGinnis, R. F. D. 1, Box 79, Ellensburg, lives on a farm of 13 acres, and will be 12 years old January 18. Helen enjoys reading the letters. Miss Pearson is her teacher.

"We have 39 rabbits and 12 of them are mine," writes Flossie Packwood of Entiat. Flossie was 11 years old July 25. She has two brothers and two sisters.

Maybe Effie Van Potter of Outlook is going to send us her picture. Effie will be 14 years old December 31, and she is looking for a twin. Effie reads the Corner every time. She has five sisters and three brothers.

This summer Elizabeth Cook of Mansfield helped mama do the canning. Elizabeth will be 9 years old March 15. She had a little vegetable war garden and a flower garden this summer. She has knitted eight squares, eight wash cloths and one pair of socks for the Red Cross.

Kinley, one of Jane Adams' brothers, is on the U. S. S. Alabama, a patrol battleship, and he enlisted in 1917. Jane lives near Sunnyside, and she was 9 years old September 3. She has a war saving stamp and three thrift stamps. She knows how to knit and tat.

George Schew is a farmer's son who used to live on a 160-acre tract about 14 miles from La Crosse and about nine miles from Hay, but father died and so now George makes his living on a 40-acre tract with his grandfather. One of George's brothers is a soldier in France. George will be 13 years old November 29. His address is route 1, La Crosse, Wash.

"Nobody should eat white bread until the war is over," says Beulah Shaw of route 1, Grandview, who writes about the war. "We should all buy thrift stamps and war savings stamps." Beulah knows how to knit. She sends love to Aunt Nellie and all the cousins.

When has a man four hands? What has a face but no mouth? What has an eye but can not see? Which is the best day for making pancakes? Do you know the answers to any of these riddles, which Agnes Jensen of Kittitas sends? Agnes was 11 years old April 26. She has three brothers and two sisters.

Every Friday at school, Naomi Ensley has sewing, and the pupils are making quilt tops for the Red Cross. Naomi can tat, but she likes to knit for our soldiers best. Her address is R. F. D. 1, Box 22, Almota, Wash. Her birthday was June 15, when she was 12 years old. If you are her twin she wants you to write.

During the last week Aunt Nellie has received letters from the following cousins: Iva Cook, Edna Newbry, Margaret Gullison, Reeva Carr, Edith Ruchert, Doris Godsey, Rovilla Fletcher, Marguerite Dobie, Veda Copeland, Evelyn Kiehn, Hazel Steiner, Alice Fredrickson, Edna Wolverton, Fanny Fay Brim, John Ranlon, Lela Swift, Marie Ames, Bernice Black, Leona Martin, Lee Martin, Teresa Germont, Myrtle Owens, Lois Stallcop, Harley Wynne Stallcop.

POULTRY SUPPLIES



of Every Kind. Diamond Egg Food and Scratch Food are properly blended for Winter Egg Making.

Write for Samples.

A Double-Quick Oat Sprouter will quickly pay for itself. Say how many chickens you feed and we will tell you the size to use and cost.

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Records sent parcel post prepaid to any address. Write for our monthly supplement, which carries all the new music. Sent FREE.



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Tommy Tumbles

The acrobatic doll. The most lifelike toy novelty yet devised. He affords fun and amusement by the hour for old or young.

Tommy stands nine inches high and has no gears or springs to get out of order. Tommy Tumbles makes the finest Christmas present for the girls and boys. 50c brings Tommy to your home.

D. G. GIFFORD.
Box 4026. Portland, Oregon.

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Learn profitable trade under ideal conditions. Costs less to live here than any other place. You can earn your room and board while learning. Over 5000 successful graduates. Finest corps of instructors. Big new building. Equipment includes Holt Caterpillar, Samson Sieve-Grip and International Titan tractors.

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Write for free 64-page illustrated catalogue.

Free Tractor Course. $50 course free for limited time. Ask about it.



# News for Breeders

H. I. Shotwell of Wenatchee, Washington, who, through E. W. Van Tassell purchased eight head of the Groves herd of Ayrshires, says that he considers Ayrshires the best breed to meet commercial needs in the production of milk. He says their milk has about the right fat content, and they are easy keepers. Mr. Shotwell runs a retail dairy in Wenatchee and speaks from experience. He buys most of his milk, but has a dairy farm of his own and expects to build up a big purebred Ayrshire herd.

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Herman Steffins of Monroe, Wash., was expecting a large official record this fall when his cow Madison Haydie 2d freshened, but the state college was at that time unable to furnish a tester. Haydie made an official record when 2 years old, two months after freshening, of almost exactly 18 pounds of butter. She was in better condition in every way at this, her second calving. Mr. Steffins has about 40 head of registered Holsteins. He used a son of the great cow Morgie Newman for a herd sire, and is now using Chimacum King Korndyke Sadie Vale, a son of Morgie Newman 2d. The young bull's three nearest dams average over 33 pounds of butter in seven days.

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J. B. Stump & Son, of Fair Acres Farm, of Monmouth, Ore., recently sold to H. R. Hartley and J. C. Hebinger of Harbor, Ore., a 6-month-old Jersey bull calf for $250. The calf is out of the imported cow Sulton's Elmo, that in an official test has produced 444 pounds of fat in 204 days from 8800 pounds of milk. She is practically sure of qualifying for a gold medal. The calf's sire is the Stump herd bull Dominus, whose dam and sire's dam are each gold medal cows. Harbor is on the coast, in the southern part of Curry county, and after being shipped to Grants Pass by rail the young bull still had a 125-mile ride to take by auto truck. Among the other cows on test in the Stump herd, Diamond of Fair Acres, a 3-year-old by Noble Peer, has 9881 pounds of milk and 464 pounds of fat in 184 days, and is milking very persistently.

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J. T. Compton & Sons, who are breeding Holsteins near Wenatchee, Wash., have the 2-year-old bull, Pride Fayne Valdessa, that has a remarkable producing ancestry. His three nearest dams' official records average over 33 pounds of butter in seven days, his five nearest dams over 30 pounds, and his 16 nearest dams over 28 pounds. His sire's dam long held the world's record for a year, and still has the second highest record. The dam's dam, Valdersa Scott 2d, has a seven-day record of 41.86 pounds of butter, and the grandsire on the sire's side, King Hengerveld Aaggie Fayne, is sire of 127 A. R. O. daughters, 35 of which produced over 30 pounds each. Mr. Compton now has 25 head of registered Holsteins, a majority of them from the Monroe herd. He has a few A. R. O. cows, and will test all his cows as soon as conditions warrant. One beautiful cow, Suza Kleiterp Pontiac, is of New York breeding, and was purchased from Mr. Royce of Tacoma. She has a record of 22.48 pounds of butter in seven days. Two acres of corn filled Mr. Compton's 40-ton silo. The corn is a yellow dent, with large ears, grown for years by Mr. Horan, another Wenatchee Holstein breeder. H. A. .




**SELDOM SEE**

a big knee like this, but your horse may have a bunch or bruise on his ankle, hock, stifle, knee or throat.

ABSORBINE
TRADE MARK REG. U.S. PAT. OFF.

will clean it off without laying up the horse. **No blister, no hair gone.** Concentrated—only a few drops required at an application. $2.50 per bottle delivered. Describe your case for special instructions, and Book 8 R free. ABSORBINE, JR., the antiseptic liniment for mankind, reduces Painful Swellings, Enlarged Glands, Weins, Bruises, Varicose Veins; allays Pain and Inflammation. Price $1.25 a bottle at druggists or delivered. Liberal trial bottle postpaid for 10c.
W. F. YOUNG, P. D. F., 371 Temple St., Springfield, Mass.

## BERKSHIRE SWINE

**BABY BERKSHIRE BOARS**

Also boars ready for service. Best breeding. Will ship subject to approval.
DR. GREEN & SON. Wapato, Wash.

## CHESTER WHITE SWINE

**Chester White Swine**

Choice weanling pigs spring gilts and service boars.
FRED H. HOFFMAN, Albion, Wash.

## HAMPSHIRE SWINE

HAMPSHIRE HOGS

have won every feeding contest entered since 1914. Weanling pigs, gilts, bred or open. Our blood lines can not be beat.
TUTTLE BROS. Kotin, Wash.

**The JERSEY** Makes a Dollar Worth More

Poor cows are like poor help—the more you feed them the less profitable they are. Jerseys make a dollar worth more because they give the biggest yield with the least amount of feed. In these days of conservation, the Jersey is the only breed for the working farmer who wants to lay something by for a rainy day. The least expensive breed to keep, the most beautiful and satisfactory breed to have. Buy one Jersey and you will never be satisfied until you have a herd. Write to breeders for pedigrees and prices. Ask us for the facts that have changed many a cow barn from a liability to an asset.
THE AMERICAN JERSEY CATTLE CLUB 314 WEST 23D STREET, NEW YORK CITY

**Goldie's Nehalem Beauty**

won grand champion of the Jersey breed for production, 1917. Her record, 80 per cent basis, 1131 lbs. butter as 4-year-old. We have two bull calves sired by her son. Their dam's yearling records: 492 lbs. (average per cent fat, 6.08) and 433 lbs. butter. Both have been grand champions in show ring.
CLIFFORD F. REID,
Wilcox Bldg., Portland, Ore.

**Who Wants This Bull?**

A double grandson of Kadia F., world's Jersey milk record for senior 4-year-old, 16,191 lbs. He is also a grandson of Holger and Engineer's Bluster. Because slightly broken colored, will be sold cheap. Other good young bulls and a few heifers and cows, same line of breeding.
N. H. SMITH, Oregon City, Ore.

**Doerfler Farm Jerseys**

Awarded first, second and third in milking contest, open to all breeds at Oregon State fair, 1918. Also first for 4 best cows, judged 50 per cent type and 50 per cent production. These were the 4 best prizes awarded. They also received many other prizes in the show ring, but type follows production: A few cows and a dandy bull for sale, with great records back of them.
F. A. DOERFLER, Prop. Silverton, Ore.

**Raleigh's Jolly Nobleman**

Our senior herd bull traces twenty-one times to Golden Lad 1242 and fifty-four times to Sultan P. 7, progenitors of more champion Jerseys than any other family of the breed.
EDGEWATER FARM.
E. T. Smith, Myrtle Creek, Ore.

**Meridian Dairy and Fruit Farm**

Oldest Jersey herd in northwest Washington. Young stock for sale, both sexes, from good, producing dams. Herd headed by Kolander's Eminent 148256. A very fine bunch of young stock, both sexes, for sale.
B. C. CRABTREE, Lynden, Wash.

LUCKIAMUTE FARM JERSEYS WON.
At Oregon state fair, 1918, with only 15 head shown. Junior and grand champion bull, junior champion heifer, 1, breeder's young herd; 1, calf herd; 1 and 3, get of sire; 1, 2, 3 and 4, produce of cow; 1 and 2, senior bull calf; 1, junior bull calf; 1, 3-year-old cow; 1, 2-year-old cow; 1 and 2, senior heifer calf; 9 other prizes. Young bulls from R. of M. dams.
FRANK LAUGHARY & SON,
Monmouth, Ore.

**ROSE LAWN JERSEYS OFFERS**

First prize junior bull calf, Idaho State Fair, Minnidoka Co. and Twin Falls Co. fairs. Sire, Rosys Jolly Golden Fern 135028.
Grand champion bull, above fair circuit. Dam Gem Nehalim Lassie, a reg. of merit cow line bred in blood of Hood Farm Torona, Oonan 23 and Figgis.
S. H. KAYLER.
Twin Falls, Ida.

**ASHBURN FARM**
REGISTER OF MERIT JERSEYS.

A bred herd, tried out for several generations by every breeding test. Only the best blood lines. Three proven matings. Nothing for sale except from tried sires. Increase of both sexes for sale.
J. M. DICKSON & SON.
Shedd, Ore.

**Ashnook Farm Jerseys**

Young bulls by Silver Chimes of S. B., whose first 6 daughters average 710 lbs. 80 per cent butter. A few good cows and heifers for sale.
DEL PERKINS, Carlton, Ore.

**Champion Eastern and Western Blood**

Four young bulls sired by Maple Park Chief, a son of Hood Farm Pogis 9th, that has more register of merit daughters than any other bull of the breed, living or dead. His dam is a half sister of Hood Farm Torono, who has seventy-three daughters in the register of merit and nine proven sons.

MAPLE PARK CHIEF, in a herd of 41 cows maintained on ordinary pasture, raised the average production of the offspring above their dams by 49 lbs. of fat per year. Each of his daughters so far freshening in the college herd is producing more than her dam at the same age. His potency as a great producing sire is well proven.

Two dams of these bulls are in the register of merit with good records. The other two are now on test and will qualify with a large margin. One is the daughter and two are granddaughters of the great Golden Glow's Chief, one of the four gold medal bulls of the breed, sire of 37 register of merit daughters, including Vive La France, now making a new world's record. They are good individuals and are offered at from $125 to $200—less than half their real value.

**O. A. C. Dairy Department Corvallis, Ore.**

**HIGH CLASS JERSEY BULL CHEAP**

Last Chance of Rocky Run, by Docter of Fair Acres, a register of merit sire; 5 daughters in the list, others on test. Dam, Buttercup of Rocky Run, R. of M. record, 474.25 lbs. fat at 3 years 10 mo, two milkings a day. She is a daughter of Rosaire Olga Lad, out of a R. of M. daughter of the great St. Mawes. Other young bulls and a few cows and heifers at reasonable prices.

**E. L. LLOYD, Monroe, Wash.**

**Golden Glows Chief 61460**

One of two gold medal Jersey bulls west of New England states. Bred by us. Two of his sons in service in our herd. A few animals, all ages, both sexes, for sale.
IRON MINE FARM, Oswego, Ore.
W. M. LADD, Owner.
D. BROOKS HOGAN, Mgr.

**All High Record Blood**

Bull calf out of Lucy of P. V., full sister to St. Mawes Susie; 936 lbs. butter in a year; to St. Mawes Blossom, 833 lbs., and to Susie's Twin Maiden, 642 lbs. Sire, Poppy's St. Mawes, son of St. Mawes Peppy, 1120 lbs.
ED CARY, Carlton, Ore.
Station, La Fayette, Ore.

**Anoka Farm Jerseys**

We have some choice young bulls up to six months old for sale, whose sire has a 714-lb. dam and 1120 lb. granddam. St. Mawes breeding. The Best in the West. Prices very reasonable. Address
R. B. SEELY,
R. 5, Sherwood, Ore.
Shipping Sta. Wilsonville, on Ore. Elec. Ry.

**LYNDEN JERSEY FARM**

Herd sire son of Fororio's Olindes Pogis, of Hood Farm and St. Mawes of Lynden, whose dam and granddam have records up to nearly 1000 lbs. of butter. Young bulls out of the Hood Farm bull for sale. Cows under official test and blue ribbon herd at Whitman county fair, 1917. You will find both type and production in the herd. For information write to
P. MEENDERINCH, Lynden, Wash.

**Ready for Service**

Young bulls of Golden Glow's Chief, and King Melia Ann strains, out of register of merit dams. Priced to meet the unfavorable conditions. Write for full particulars and pedigrees.
HENRY STEWART, Albany, Ore.

**Jersey Farm Dairy**

Peter Mouw's Poland China hogs, Cotswold sheep, White Leghorn and Buff Orpington poultry, carefully bred, great foundation stock.
E. S. PELOT, R. F. D. 5, Idaho Falls, Ida.

**Two Great Grandsires**

Young bull by a son of Foxhall's Fern Lad, sire of 6 register of merit daughters and out of a daughter of Golden Cicero, sire of 7 register of merit daughters. Young bull's dam has a private record of 476 lbs. fat as a 3-year-old and will be officially tested. Granddam a daughter of Upright's Chief, half-brother to Golden Glow's Chief. Also a few granddaughters of Golden Cicero.
WILLAMETTEDALE FARM,
TOM PETTIT, MGR. CORVALLIS, ORE.

**Register of Merit Cows**

Three registered Jersey cows, with good register of merit records. Two are on test again and will increase their records; all in class AA. Two are bred to the great sire FOXHALL'S FERN LAD. Come and see them or write for prices and full particulars.
FOX BROS. Silverton, Ore.

**WAIKIKI FARM**

Register of Merit Jerseys. Largest Jersey herd in the northwest. Young stock for sale.
IRA P. WHITNEY, Manager.
Route 7, Spokane, Wash.

**AT LAST**

We can again offer a bull ready for light service. His three nearest dams average 649 lbs. fat in one year. Solid color and a splendid individual. Write today as we have but the one ready to use.
JOHN B. STUMP & SON, Monmouth, Ore.

**Jersey Home Jerseys**

Young bull out of Olalla 2d, daughter of Olalla (806.25 lbs. butter as junior 3-year-old). Bull's sire, St. Mawes Prince, by Poppy's St. Mawes, and out of Gertie's Fern Princess (842.5 lbs. butter), both 80 per cent. Also other good young bulls.
THOMAS WILLIAMS, Forest Grove, Ore.

**St. Mawes—Rinda Lad**

The two most popular strains of Jerseys in the northwest. Young bulls from register of merit cows for sale.
G. G. HEWITT, Monmouth, Ore.

## SHEEP

**Romneys, Lincoln, Corriedale**

AND HAMPSHIRE EWES AND RAMS.

All pure bred, not registered. Have especially fine lot Hampshire ewe lambs, yearlings and three-year-olds. Any size lot. Write me on any kind of sheep deal.
H. STANLEY COFFIN, Yakima, Wash.

SHEEP AND SWINE.
Registered Shropshire, Hampshire and Oxford sheep. Registered big type Poland China and Duroc swine. Your personal inspection is invited. More than twenty years' exprience as a breeder of pure blood stock.
GRANT B. DIMICK, Oregon City, Ore.

## HORSES

KENTUCKY JACKS AND HORSES.
Big bone, Kentucky Mammoth Jacks, easy riding saddle horses. Write us describing your wants. We guarantee safe delivery and take Liberty bonds and W. S. S. at par.
THE COOK FARMS, Lexington, Ky.

IOWA PERCHERON FARM.
Percheron stallions and mares for sale, breeders' price.
M. C. CONLON, Redmond, Ore.

CLYDESDALE STALLION.
For Sale—Will give bargain on five-year-old registered stallion of proven worth.
C. F. JINDERLEE, Diamond, Wash.

## POULTRY AND RABBITS

**Rhode Island Red Cockerels Both Combs**

RHODE ISLAND WHITE COCKERELS—BOTH COMBS.
My stock is pedigreed and line bred. Buy your breeding stock in Mammoth Toulouse geese and Mammoth Bronze turkeys. Have pedigreed Belgian hares and Flemish Giant rabbits. Also registered Airedale puppies, Germer strain.
J. NONNENMACHER, R. F. D. 3, Yakima, Wn.

MAMMOTH WHITE HOLLAND TURKEYS.
Yearlings, Toms and young stock for sale. From prize winners. No eggs.
MRS. E. D. SITTON, Carlton, Ore.

# Breeders' Department

## SHORTHORN CATTLE

### The Rushes Farm Shorthorns

Both Grand Champions at Oregon State Fair, 1918.
Bulls and Heifers in Lewiston Sale.
Herd Headed by Challenge Plate III.

**G. W. DeLay**
**Hot Lake, Ore.**

### The Mounds Farm Shorthorns

Bulls in Service:
Good Prospect.
Violet King.
Bulls and Bred Heifers in Lewiston Sale.

**W. J. Townley**
**Union, Ore.**

### The Valley Junction Shorthorn Herd

W. W. GREEN & SONS, Owners

Home of General Hampton 390583 and Barmpton Ring 430122. A few choice bulls ready for service and a few choice cows and heifers for sale. Bred right and priced right. Farm located half way between Union and Union Junction on the Central R. R. of Oregon. Visitors always welcome.

Phone 644 Union. Union, Oregon.

REGISTERED SHORTHORN COWS.
Young bulls and heifers, sired by Scotch bulls; liberal terms.
CALDWELL CATTLE CO., Caldwell, Idaho.

## HOLSTEIN CATTLE

### A Rare Chance to Head Your Holstein Herd

We still have for sale five prize-winning purebred males, ranging in age from eight to eighteen months. Weight six hundred to one thousand lbs. Pedigrees furnished on application. Address
THE INTERMOUNTAIN INSTITUTE
Weiser, Idaho.

### Registered Holsteins

Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.
H. R. BOOMER, New Plymouth, Idaho.

### HOLSTEINS

Well bred young bulls for sale.
THOS. CARMICHAEL, Gaston, Ore.

### Holsteins and Berkshires

All ages for sale.
HUGH NISBET, Chimacum, Wash.

## AYRSHIRE CATTLE

### Wenatchee Ayrshires

Offspring of Cavalier's Hover O'Blink, son of the great Bargenoch Gay Cavalier, Imp., and out of Barboigh Maggie X, Imp. The dams are advanced register cows and include Lady Emperor Scott, that holds world's record for high test. Send for pedigrees and A. R. records.

E. W. VAN TASSELL, Wenatchee, Wash.

### Elbow Ayrshire Dairy

Young bulls out of heavy-producing dams, sired by Willowmoor Sentinel 16th, a bull with big A. R. records on both sides.

J. R. MABEN, Reedsport, Ore.

### EDGEWATER FARM

Young stock for sale, including senior calf, Edgewater Sentinel, grand champion 1918 Washton state fair. Herd government tuberculin tested.
ELBERT M. CHANDLER, Burbank, Wash.

## HEREFORD CATTLE

### Highland Stock Farm

offers for sale Hereford bulls, 1 or 2 years old. One or a carload.
PLATT BROS. Genesee, Idaho

## GUERNSEY CATTLE

### Registered Guernsey Cow for Sale,

Will be fresh Nov. 15. Registered Guernsey bull, four years old.
J. J. BLUM, Stayton, Ore.

**When you write to advertisers be sure to state that you saw their advertisement in this paper.**

## DUROC-JERSEY SWINE

### Registered Duroc Jersey Boars

Choice boars sired by Richard Pathfinder and Cherry King Orion Jr., and out of sows representing the best blood in the west. Big growthy fellows, with quality. Satisfaction guaranteed or money refunded. Write me for prices.

**Erik W. Olson**
VIRGINIA, IDAHO.

OVER 150 SPRING PIGS.
Sired by our grand champion Richards Defender, Richards Pathfinder and Cherry King Orion Jr., and out of our big type prize winning sows.
In the last three years at the Utah and Idaho state fairs our hogs won 76 champion and first prizes.
Can furnish unrelated pairs. Satisfaction guaranteed or money refunded. Priced very reasonable.
Richards Live Stock Company, Virginia, Idaho.

### Golden Rod Wins Again

Our herd was largest money winner at Oregon state fair, 1918.
One excellent boar of breeding age, bred gilts and weanling pigs of either sex.
DOERFLER BROS., Silverton Ore.
A. N. DOERFLER, Mgr.

FOUR DUROC GILTS BRED TO FARROW this fall, also spring pigs, on hand.
E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE, Yakima, Wash.

## POLAND CHINA SWINE

### Satisfaction or Money Back

Big Litter, Easy Feeding.
BIG TYPE POLAND CHINAS.
Fifty vigorous young boars, ready for service. Best breeding of the times and quality to equal it.
H. J. STILLINGS, Hermiston, Ore.

### Big Type Poland Chinas

Mouw, Fesenmeyer and Herring strains, either sex. Also registered Shorthorn cattle; good individuals.

H. J. HOWSER, Stites, Idaho.

SAMMY AND MOLLY WIN AGAIN.
Our herd boar, Sammy, and Hanna's Big Molly were again made grand champion Poland China boar and senior and grand champion sow, respectively, at the 1918 Idaho state fair. Correspondence solicited.
W. F. HOWARD & SONS. Caldwell, Idaho.

25 HEAD PURE BRED
China boars, 8 weeks to 8 months old, $25 to $50, according to age. These are from my prize winning herd, including 1st and 2d prize boars. They are from litters of 10 and 12 pigs.
C. W. SHUMATE, Tumwater, Wash.

### BIG TYPE POLANDS

Genuine—Guaranteed.
GEO. W. BUCK. Oregon City, Ore.

### FOUNDATION POLAND CHINAS

A few fall boars, ready for service, and one 2-year-old. Also a few choice gilts, bred or open. Our 40 years as a breeder and 33 years an exhibitor invites confidence in our being able to furnish the best of foundation stock.
**THOMAS BRUNK, R. D. 2, SALEM, OREGON**

## ANNUAL PACIFIC INTERNATIONAL SHORTHORN SALE

### Portland, Oregon, Thursday, Dec. 12

TO THE PROSPECTIVE BUYERS OF CHOICE SHORTHORNS

There will be sold at public appraisal in Portland, Oregon, Thursday, Dec. 12th,

**35 Head of Strictly Choice Females 35**
**15 Head of High Grade Bulls 15**

Sired by the best bulls in the northwest.

Particulars of consignments will be seen in the next issue of this paper.

Catalogues mailed on request by applying to

**Frank Brown Sales Manager**
CARLTON OREGON

## Pacific International Herefords At Auction

**60 Head Bulls, Cows and Heifers 60**

Ready for the Range or Ranch
Consigned by the
**Premier Hereford Breeders of the Northwest**

This is an offering of white-faces that will please admirers of the breed.

Sale is under the auspices of the Northwest Hereford Cattle Breeders' Association.

**Portland, Oregon**
**Wednesday, Dec. 11, 1918**

Catalogue can be had from
L. R. McGee, North Portland, Ore.

# Grain and Produce Markets

## Chicago Grain.

CHICAGO, Nov. 23.—Freezing weather that pointed to larger receipts did a good deal today to force the corn market to a lower level. Prices closed heavy, 2½ cents to 3⅛ cents net lower, with December $1.24½ and January $1.26 to $1.26⅛. Oats lost ⅝c to 1c. In provisions the result was an advance varying from 5c to $1.

Absence of fresh developments in regard to enlargement of food supplies for Europe tended also to shake the confidence of bulls.

Oats duplicated the action of corn. Most of the trade was of a like character.

Curtailment of hog receipts put strength into provisions. Moreover, shipments of lard and meats for the week were materially in excess of the total of a year ago.

### Cash Quotations.

CHICAGO, Nov. 23.—Corn, No. 2 yellow, nominal; No. 3 yellow, nominal; No. 4 yellow, $1.32. Oats, No. 3 white, 74@74¼c; standard, 74@74½c. Rye, No. 2, $1.64½@1.65. Barley, 95c@$1.05. Timothy, $7@10.25. Clover, nominal. Pork, nominal. Lard, $26.70. Ribs, nominal.

### Pacific Northwest Grain.

PORTLAND, Ore., Nov. 23.—Grain, future bids: Oats, No. 2 white feed, November, $54.50; December, $54.50; January, $54.50. Barley, standard feed, November, $50.25; December, $50; January, $50; standard "A," November, $51; December, $51; January, $51. Eastern oats and corn, in bulk: Oats, No. 3 white, November $50; December, $51; January, $51; 38 pounds clipped white, November $51; December, $53.50; January, $53.50. Corn, No. 3 yellow, November, $58; December, $56.50; January, $57; No. 3 mixed, November, $57.50; December, $55.50; January, $55.50.

### Minneapolis Grain.

MINNEAPOLIS, Nov. 23.—Flour—Unchanged; shipments, 52,668 barrels. Barley, 90@98c. Rye, No. 2, $1.63¼@1.64¼. Bran, $27.73. Wheat receipts 296 cars, compared with 339 cars a year ago. Cash, No. 1 northern, old, $2.23. Corn, No. 3 yellow, $1.43@1.48. Oats, No. 3 white, 70¾@71¼c. Flax, $3.63@3.65.

## Portland Market.

PORTLAND, Ore., Nov. 23.—Turkey receipts so far have been liberal, and the shipping demand has been strong enough to clean up everything at 40 cents. The bulk of the supply will come in the next day or two. Dealers expect the market to hold steady throughout. Live poultry is in fair demand at unchanged prices. Dressed meats are weak.

Cube butter is accumulating and the market is weaker, with 59 cents the best price available on extras. Prints are unchanged.

Eggs are holding steady, with Oregon candled moving at 65 cents and eastern at 59@64 cents.

There is a firmer feeling in the apple market, and with a growing export demand growers anticipate a substantial advance in the market. Potatoes and onions are ruling steady.

Butter—Cubes, extras, 59c; prints, 63c; butterfat, No. 1, 67c, delivered.

Eggs—Oregon ranch, candled, 65c; selects, 68c per dozen.

Cheese—Jobbers' buying prices, f. o. b. dock, Portland: Tillamook triplets, 36c; young Americas, 37c per pound. Coos and Curry, f. o. b. Myrtle Point, triplets, 35¾c.

Poultry—Hens, 27@28c; broilers, 28@30c; ducks, 30c; geese, 18c; turkeys, live, 30@31c; dressed, 40c.

Pork—Fancy, 19½@20c.

Veal—Fancy, 19c.

Potatoes—Oregons, $1.75@2 per cwt.

Hay—Buying prices, f. o. b. Portland: Eastern Oregon timothy, $30@33 per ton; valley timothy, $27; alfalfa, $28; valley grain hay, $26; clover, $27; straw, $9@10.

## Spokane Produce.

SPOKANE, Nov. 23.—The following are prices received by wholesalers from hotels, retailers, mining camps and the like:

Apples—Extra fancy Delicious, large, $3@3.25; medium, $3; choice medium, $2.50@2.75. Extra fancy Spitzenburg, medium to large, $3. Fancy, jumble pack, $2. Extra fancy Winter Banana, large, $2.50@2.75. Extra fancy Grimes, $1.75; orchard run, $1.50. Greenings, orchard run, wrapped, $1.50. Combination extra and fancy Wagners, $1.50@1.75. Winesaps, jumble pack, $1.75.

Cabbage—Crated, retrimmed Danish ballhead, 2@2 1-4c per lb.; red, 2 1-2c.

Carrots—Sacked, per cwt., $1.25@1.75; bunched stock, 20@35c per dozen bunches.

Celery—Large size, per doz. bunches, white, $1@1.25; smaller, 75c; hearts, 75c per doz.

Potatoes—Sacked white varieties, $1.75@2; California sacked Burbanks, from storage, quality and condition good, $2. Home-grown white varieties, $1.25@1.50.

Onions (Dry)—California Australian Brown, extra fancy, $2@2.25. Home-grown, $2@2.50. Green, 20@35c per dozen bunches.

Parsnips—Homegrown, $2.25@3 per cwt. Bunched stock, 35c per dozen bunches.

## Butter and Eggs.

PORTLAND, Ore., Nov. 23.—Butter—Firm. City creamery prints, extra, box lots, 63c; half boxes, ½c more; less than half boxes, 1c more. Buying price butterfat, Portland, 67c; cube extras, 59c.

SAN FRANCISCO, Nov. 23.—Eggs—extras, 80½c; fresh extra pullets, 63½c.

SAN FRANCISCO, Nov. 23.—Eggs—Fresh extras, 80½c; fresh extra pullets 63½c.

CHICAGO, Nov. 23.—Butter, firm creamery, 53@64c. Eggs, receipt, 2951 cases; unchanged.

## Live Stock Quotations.

### At Portland.

PORTLAND, Ore., Nov. 23.—Cattle—Market slow; receipts, 290. Steers, prime, $12.25@12.75; good to choice, $11@12; medium to good, $10@11; fair to medium, $8.50@9.50; common to fair, $6@8; cows and heifers, choice, $8@8.50; medium to good, $6.50@7.50; fair to medium, $5.50@6.50; canners, $3@4; bulls, $5@7; calves, $9@12; stockers and feeders, $6@8.

Hogs—Market dull; receipts, 780. Prime mixed, $17@17.50; medium mixed, $16.75@17; rough heavy, $15@16; pigs, $14@15; bulk, $17.

Sheep—Market steady; receipts, 50. Prime lambs, $11.50@12.75; fair to medium, $8.50@10.50; yearlings, $10@11; wethers, $9@10; ewes, $6.50@8.50.

### At Seattle.

SEATTLE, Nov. 23.—Hogs—Receipts, 48; steady. Prime light, $17.50@17.75; medium to choice, $17.25@17.50; medium heavy, $16.25@16.75; rough, $15.25@15.75; pigs, $15.25@16.25.

Cattle—Receipts, 71; steady. Best steers, $11@13; medium to choice, $10.50@11; medium to good, $8@8.50; medium, $7@7.50; bulls, $5@7.50; calves, $5@10.

### At Chicago.

CHICAGO, Nov. 23.—Hogs—Receipts, 7000; mostly 10c to 15c higher. Butchers, $17.70@18.10; light, $16.75@17.85; packing, $16.75@17.60; throwouts, $15.50@16.50; pigs, good to choice, $13.25@15.

Cattle—Receipts, 4000. Compared with a week ago, good and better native steers, firm; others steady to 15c lower; westerns, 25c to 40c higher; better grades of cows and heifers, steady; in-between kind, 15c to 25c lower; canner stock and bulls, 25c higher; calves, 25c lower; stockers and feeders steady, 25c higher.

Sheep—Receipts, 4000; market steady to easy compared with a week ago. Fat lambs steady to 10c higher; yearlings mostly 25c higher; sheep, steady to 25c higher; feeder market about steady.

### At Omaha.

OMAHA, Neb., Nov. 23.—Hogs—Receipts, 6000; market opened 10c to 15c higher; closed steady. Heavy, $17.10@17.35; mixed, $17.30@17.60; light, $17.50@17.80; pigs, $8@15; bulk of sales, $17.25@17.60.

Cattle—Receipts, 150; market steady. Native steers, $10.50@18.50; cows and heifers, $6.50@12; western steers, $9.50@16.50; Texas steers, $8.50@11.75; range cows and heifers, $8@10.50; canners, $4.50@5.85; stockers and feeders, $6@13; calves, $7.50@13.50.

Sheep—Receipts, 750; market steady. Wethers, $9@10; ewes, $7@9; lambs, $12@15; feeder lambs, $10@14; yearlings, $10@11; culls, $4.50@7.50.

### Spokane Union Stock Yards.

| | Cattle | Calves | Hogs | Sheep |
|---|---|---|---|---|
| Saturday, Nov. 23.. | 33 | .. | 14 | 170 |
| Friday, Nov. 22... | 96 | 4 | 98 | .... |
| Thursday, Nov. 21. | 125 | .. | 169 | .... |
| Wednesday, Nov. 20 | 366 | 3 | 594 | 220 |
| Tuesday, Nov. 19.. | 196 | 2 | 36 | .... |
| Monday, Nov. 18.. | 389 | 17 | 256 | 477 |
| Week ago ..... | 82 | 3 | 100 | .... |
| Year ago ..... | 88 | 50 | 70 | 2032 |
| Two years ago.... | 79 | 2 | 181 | .... |

Saturday, with its usual light receipts closed a very busy sale week at the stock yards. With a few drive-ins of cattle appearing late in the day, at the close of sale hours, the cattle section was practically unoccupied. No extraordinary shipments are reported for the coming week, and we quote steadiness for Monday at the following quotations:

| | |
|---|---|
| Prime steers | $12.00@13.00 |
| Good to choice steers | 10.75@11.75 |
| Medium to good steers | 9.50@10.50 |
| Fair to medium steers | 8.25@ 9.00 |
| Common to fair steers | 5.50@ 8.00 |
| Choice cows and heifers | 7.50@ 8.25 |
| Med. to good cows and heifers | 6.00@ 7.00 |
| Com. to med. cows and heifers | 4.75@ 5.75 |
| Canners | 3.00@ 4.25 |
| Bulls | 5.00@ 6.50 |
| Calves | 6.00@ 9.50 |
| Stockers and feeders | 6.00@ 8.00 |

A few light bunches of hogs constituted the swine offering, being mostly feeders. The stocker and feeder situation remains unchanged, with very little activity. The market is steady as follows:

| | |
|---|---|
| Prime mixed | $17.00@17.25 |
| Medium mixed | 16.75@17.00 |
| Rough heavies | 15.15@15.40 |
| Pigs | 14.75@16.25 |
| Stockers and feeders | 12.00@14.50 |
| Bulk of sales | 17.00 |

A carload of mostly breeding stock appeared in the sheep section, from which was sorted a few drafts of killers. The market is steady, as follows:

| | |
|---|---|
| Prime lambs | $10.00@11.00 |
| Fair to medium lambs | 8.50@ 9.50 |
| Prime yearlings | 8.00@ 9.00 |
| Prime wethers | 7.50@ 8.50 |
| Best mutton ewes | 6.50@ 7.50 |
| Breeding ewes, 1 to 3 years | 12.00@15.00 |
| Breeding rams | 25.00@50.00 |

### CORN CROP FIGURES GIVEN.

Corn production this year was 2,749,198,000 bushels, the department of agriculture announced in its November crop report giving the preliminary estimate of the crop.

Preliminary estimates of production of other crops follow:

Buckwheat, 18,370,000; potatoes, 39,101,000; sweet potatoes, 88,114,000; tobacco, 1,266,686,000 pounds; flaxseed, 14,646,000 bushels; pears, 10,342,000; apples, 197,360,000; sugar beets, 6,549,000 tons.

Kaffirs, 61,162,000 bushels; cranberries, 374,000 barrels; onions, 13,438,000 bushels; cabbage, 565,000 tons; sorghum syrup, 29,757,000 gallons; clover seed, 1,248,000 bushels; peanuts, 52,617,000 bushels.

### Would Can Potato Peelings.

One ardent Chicago disciple of Hoover was discovered recently canning potato peelings with the intention of feeding them to pigs next winter.

## Seattle Market.

SEATTLE, Nov. 23.—The tendency of the potato market is sharply lower today. There has been some inquiry for large commissary and hotel baking Gems, quoted at $35 f. o. b. The eastern markets will take a few cars of these on delivery within the next 30 days. Digging time is past and farmers have stored for stronger prices, just now a remote prospect. There can be no stiffening of potato quotations until a shipping demand is created.

About 75 carloads of potatoes are stored in Seattle.

Normal conditions are anticipated in the onion trade all season, with a current price of 3c per pound for fancy Oregons, which take the highest rating, due to their long keeping qualities. Yakima onions are moving at 2c per pound. There is a surplus of cheap stock that sells from 50c per sack upward.

A surplus of pullet eggs is backing up on standard fresh ranch eggs and is valuable only as indicating that the early winter lay is now on, probably two weeks earlier than usual. The market for standards was weak today, quotations of a cent off being made under pressure at 74c. There are predictions that prices will decline 2c to 3c early next week, as field reports indicate that there is an increase coming.

Western avenue jobbers are having difficulty in keeping their trade supplied with high standard butter, and it is stated that these standards to which consumers have been accustomed must be revised downward or the market advanced. The Seattle market is too low for practical service in bringing in California stock and Oregons, while plentiful, do not have the rating of Washington city creamery offerings. Country creamery butter is showing in limited quantities, but generally it can not be sold as a substitute for city creamery extras at the same price.

### Purchasing Prices.

Eggs—Select ranch, 60@70c per doz.; pullets, 56@60c.

Butter—Fresh dairy, 35c per lb; butterfat, 68c per lb.; bakers', 46c per lb.; raw milk, $3.50 per cwt.

Poultry—Broilers, live, 1918, 30c per lb.; hens, 2 lbs. and over, 28c lb.; under 2 1-2 lbs., 26c per lb.; old roosters, 20c per lb.; ducks, live, fat, 27@28c per lb.; squabs, large, $3.50 per doz.; geese, fat, live, 21@22c per lb.; Belgian hares, 14c per lb.; guineas, $6 per doz.; turkeys, young toms and hens, dry picked, 10 lbs. and up, 28@40c per lb.

Hogs—Light, 20@21c per lb.; heavy, 18@19c per lb.

Beef—Steers, fat, 12c per lb.; heifers, fat, 12c per lb.; cows and bulls, 10c per lb.

Veal—Fancy, light, 14@17c per lb.; do heavy, 12@16c per lb.

Mutton—Fat, 17c per lb.; spring lamb, fat, dressed, 16@20c per lb.

### Hides, Tallow and Wool.

Bid prices to producers: Salted hides, cows and steers, No. 1, 15c per lb.; do No. 2, 14c lb.; green hides, cows and steers, No. 1, 12c lb.; do No. 2, 11c lb.; salted, bulls or stags, No. 1, 12c lb.; do No. 2, 11c lb.; green, bulls or stags, No. 1, 10c lb.; do No. 2, 9c lb.; salted or green calf skins, No. 1, 32c lb.; No. 2, 30 1-2c lb.; salted or green kip skins, No. 1, 16c lb.; do No. 2, 14 1-2c lb.; dry hides, No. 1, 30c lb.; do No. 2, 29c lb.; dry bulls or stags, 25c lb.; dry salt hides, 24c lb.; dry calf skins (five lbs. and under), No. 1, 35c lb.; do No. 2, 33c; tallow, No. 1, 13c lb.

Horsehides, greens or salted, each, $2@4; do dry, each, 50c@$2.

Clean ranch wool, full growth, lb., 30@55c.

Sheep pelts—Long wool, each, $2.50@4.50; medium wool, each, $1.50@2.50; short wool, each, $1@1.50; shearlings, each, 35@75c.

Beeswax, per lb, 25@27c.

### Jobbing Prices to Dealers—Fruits.

Apples—Kings, $1.25@1.40 per box; Delicious, $2.25@3.25 per box; local cooking, $1@1.75 per box; Jonathans, $2.25@2.50 per box; orchard run, in lugs, 4@5c per lb.; "C" grade, $1.65@1.75 per box.

Potatoes—Yakima No. 1 Gems, $40 ton; Puget sound, $35 ton.

Hay and feed quotations, city prices, truckload delivery, are as follows:

Feed—Mill run, $34@37 per ton; scratch feed, $79; feed wheat, $80; all-grain chop, $69; oats, $63; sprouting oats, $74; rolled oats, $66; whole corn, $74; cracked corn, $76; rolled barley, $60; clipped barley, $63; alfalfa meal, $42; egg mash, $69@71.

Hay—Eastern Washington timothy, $39 per ton; do double compressed, $42; alfalfa, $35; straw, $17.

### MAINTAIN NOVEMBER HOG PRICE.

The food administration has announced its agreement to maintain the basic price of hogs for December at the same figure as for November, which was $17.70 per 100 pounds. The food administration urges that lighter weight hogs be kept off the market until well into December, with a view to preventing a possible breaking down in the present price levels.

### FRUIT WORKERS ELECT HEAD.

The Yakima Fruit Growers' union has selected A. R. Garden as its business agent for the coming year, according to a Yakima report. The union claims a membership of about 900 workers. It is understood that the organization is going to undertake to secure a wage scale through conference with the fruit growers and shippers.

### ONE EGG PRICE WEEKLY.

With a view to stabilizing the egg market, the San Francisco Dairy Produce exchange has agreed to a recommendation of the food administration that it quote a price on eggs once weekly instead of every day, as has heretofore been the custom.


FOOD SAVER

Big money maker for vegetable and fruit growers, farmers, dealers and consumers. This is the best and cheapest saver in the world.

Write for further information. Representatives wanted.

New-Way Drier Company

Humboldt Bank Building, San Francisco, Cal.

ATTENTION!

For choice alfalfa hay, prompt service and satisfaction guaranteed. Phone Elliott 4360, Seattle office, 2229 First ave., South, or wire or write us at Yakima, Washington.

Our prices are right.

ROVIG LUMBER CO.

HIDES WOOL FUR




RUBBER METAL SACKS

We pay full market value, correct weight and assortment, prompt returns. Write for prices. We want your business.

Pacific Hide & Fur Depot

Joseph Thiebes and C. T. Symmes.
1101-09 Railroad Ave., Spokane, Wash.

SUNNYBROOK

The Feed

that's best indeed. It's the "short cut" to profit these days of high prices on all grains and shortage of mill feeds.

SUNNYBROOK is a concentrated, balanced feed that contains ingredients essential to results.

UNION MEAT CO.
Sole Distributors.
Portland, Ore.





# Cheap Labor

## What About It After the War?

To the Editor of The Washington Farmer: I read a little article in your paper called, "We Are Making It at Home Now." The trick will be to keep making it at home after the war. We often do things ourselves when we can not get anybody to do it for us, but as soon as a competent worker offers his service, and we can make more money ourselves and pocket the difference in the wages between the two kinds of labor, we do not hesitate very long to engage the cheaper worker. Will the nature of the American nation have been changed enough after the war to stop importing of cheap labor? You will see that this is virtually the same as importing workers willing to do the work for half wages; that it means refusing to give part of our own nation the living wages we claim for ourselves, in forcing them to compete with this lower outside wage scale. All other talk is bosh. Our scientists have always known what they know today. When the labor of picking up the nails costs more to the contractor than the new nails delivered on the job, he tells his men not to bother with picking them up when they drop them. All work done by hand will always be more expensive than work done by machinery, and we like to import that on account of the lower money standard of other nations. But hand farm labor we can not import. We can not scab on that. But we can make fixed prices for farm products and force farmers to look for better paying business and let the farming come in hands of imported workers willing to work for one-half of the pay—for a while until they have a hold in the country, and, like Egypt's slaves, crowd the population out. Back to the farm is an idle slogan as long as the farmer does not get part in the shorter labor hours of the nation and the pay of the workers.

First of all, the nation must understand that a farmer is just as well entitled to an eight-hour labor day as the man who clamors for cheap bread and butter. The silliness to want all to work at the same time would work nice when a farmer (dairy) would milk his cows according to it. Many will have to work two half days or four fourths. But the choosing of a job is optional for the trainman who has to lay off a few hours between, just as well as for a farmer. Every work has its pros and cons, but all want the good side of the job and turn the bad side over to a black servant.

If wheat was $8 a bushel and the cost of production $8.01, no farmer could remain in business. When people can not see that national labor is as a chain and one link can make the chain unfit for use it is part of your duty to open their eyes. Teach the American people that the freedom they dream of does not exist.

MRS. A. W. RADEMAKER.
R. F. D. 3, Box 67A, Tacoma, Wash.

### French Prisoners Released.

One result of the recent armistice agreement is the release of about 420,000 French prisoners that have been held by the Germans or interned in neutral countries.

## Farmer War Map Just as Valuable After War Ends

Here is a good point made in a letter to the editor, with regard to the Farmer war map:

To the Editor—The war map reached me in good shape. It seems to me the best thing of the kind I have seen, and I have one on my study wall for reference. I hope the readers will not make the mistake of dropping all thought of the big conflict as soon as the treaty of peace is signed. The real history of the thing will then just begin to come out, and in tracing it in the authoritative books which will eventually be written, this Farmer map is just what is needed.

PAUL E. TRIEM.
Seattle, Wash.

# Farmers' Want Ads

**AGENTS WANTED** 9

AUTO—ASBESTOS WOOD ALCOHOL STARTER. Ford car owners will have them, other makes with visible manifold will buy them. Bonanza for agents and car owners to sell them. 100 demonstrations, 99 sales. Price $2 parcel post prepaid. Descriptive literature free. Address Process Auto Starter Co. dept. C, W. T. Salem, Ore.

# FARMERS' WANT ADS

This is the farmers' "Want," "Sale" and "Exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rate, 7 cents a word per insertion, with a special rate to farmer subscribers to the Washington Farmer of 6 cents a word per insertion for from 4 to 12 times, and 5 cents a word per insertion for 13 times or more.

All commercial and land advertising, 7 cents per word each insertion. Open also to nonsubscribers.

In using these columns advertisers must observe: (1) No advertisement will be inserted for less than 75 cents. (2) Every word, number and initial, including name and address, must be paid for. (3) Cash must accompany order.

Above rates also include insertion in The Oregon Farmer and The Idaho Farmer.

**HELP WANTED—Female** 1

COMPETENT GIRL, GENERAL HOUSEWORK; three in family; $35 per month. Apply Mrs. B. Seeley, 740 Patten Road, Portland, Ore.

**EDUCATIONAL** 48

IN BUSINESS OR ACTUAL LIFE THE BEST is none too good for you. Write Gooding college, Gooding, Idaho, Charles Wesley Tenny, president, today.

TELEGRAPHY—YOUNG WOMAN'S POPULAR vocation; good paying positions available. Write for booklet. Pacific Telegraph Institute, Spokane.

SEND NEWS NOTES TELLING OF THE work of your school today. Address the Educator, Gooding, Idaho.

**HONEY, BEESWAX—Wanted** 58

SEND SAMPLES OF YOUR HONEY AND beeswax. State quantity, price. Oregon Farm Products Co., 386 Halsey st., Portland.

**EGGS AND BUTTER WANTED.** 59

WE ARE ALWAYS IN THE MARKET FOR good eggs and dairy butter. Send us your next shipment. Oregon Farm Products Co., 386 Halsey st., Portland, Ore.

**MISCELLANEOUS—FOR SALE** 60

TRAP COYOTES—FULL INSTRUCTIONS ON a sure catch method and reliable scent recipes sent on receipt of $5. C. L. Willis, Dillard, Ore.

FOR SALE—175 TONS HAY, 50 HEAD OF grade Holstein cattle, 5 horses and machinery, with good lease. Walter Allison, Belfair, Wash.

**MISCELLANEOUS WANTED** 63

POULTRY WANTED.
We are cash buyers of poultry and dressed meats, also cream. Write us for prices, shipping tags and premium catalogue for cream shippers.
COMMERCIAL CREAMERY CO.
SPOKANE, WASH.

HIGHEST PRICES FOR POULTRY AND EGGS. Washington Meat & Poultry, 409 Second avenue, Spokane.

**LIGHTING EQUIPMENT** 74

THE SAFETY LAMP CO., N208 HOWARD ST., Spokane, Wash. Gasoline lighting and supplies.

**AUCTIONEERS** 75

M. SEIDENBACH, AUCTIONEER, GIVES best service. Sales solicited. 418 Fernwell, Spokane.

**MACHINERY—For Sale** 93

FOR FARM LUMBERING USE
"AMERICAN" PORTABLE SAWMILLS
Carried in stock by
HIGGINS MACHINERY COMPANY,
312 1st Ave., So., Seattle. Write for Catalog.

PRACTICALLY NEW "K" HAND STUMP puller, 200 feet cable, blocks, takeup, and root hook; cost $220, will take $100. James DeVine, Metaline Falls, Wash.

**AUTOMOBILES** 114

FORDS START EASY IN COLD WEATHER with our new 1919 carburetors; 34 miles per gallon; use cheapest gasoline or half kerosene; increased power; styles for any motor; very slow on high; attach it yourself; big profits to agents; money back guarantee; 30 days' trial. Air-Friction Carburetor Co., 321 Madison, Dayton, Ohio.

HEADQUARTERS FOR
used cars, trucks and tractors; printed list. Spokane Auto Market, W315 Sprague ave., Spokane, Wash.

AUTO RADIATORS, FENDERS AND LAMPS repaired. Lester Allen, 607 Second avenue, Spokane.

**STOVE AND FURNACE REPAIRS.** 126

WRITE M. S. RUBENS, SPOKANE, FOR ANY parts needed to repair stove, furnace.

**PETS—Dogs, Birds, Etc.** 171

FOR SALE—NICELY MARKED, PURE BRED Scotch collie pups. A. F. Mascher, Haines, Ore.

**RABBITS and HARES** 173

NEW ZEALAND REDS, YOUNG BUCKS AND does; pedigreed and registered; extra fine. E. Kelly, 834 Main st., Petaluma, Cal.

FOR SALE—WHITE ANGORA RABBITS, breeders, $1.50, 4 months, 60c. Austin Rull, Deep River, Wash.

**POULTRY** 174

BUY YOUR INCUBATOR NOW.
Incubators will be scarce and high next spring. Send for our list of new and used incubators and save money. Agents: Famous Queen incubators and brooder stoves. Queen Hatchery, 89 Pike st., Seattle.

PURE BRED MAMMOTH BRONZE TOMS; Hugo King strain. Also choice Bourbon Red Toms. Mrs. Sadie Osenbugge, Ruch, Ore.

WHITE WYANDOTTE COCKERELS; HEAVY laying strain; Just-a-Mere Croft. 4137 Sunnyside ave., Seattle, Wash.

FOR SOMETHING GOOD IN SILVER WYANdottes and Golden Campines, write G. G. Wherry, Payette, Idaho.

50 USED INCUBATORS FOR SALE, FROM 70 to 760 egg capacity. A. R. Badger, Centralia, Wash.

THOROUGHBRED BARRED ROCK ROOSTers, $2.50 each. Mrs. F. J. Dyche, Thornton, Wash.

SHIP US YOUR POULTRY. TOP PRICES. Home Poultry House, S173 Washington, Spokane.

THOROUGHBRED WHITE WYANDOTTE cockerels, $3, $5, $7. Wm. McReynolds, Salem, Ore.

PURE BRED MAMMOTH BRONZE TURKEYS. Mrs. C. R. Lowery, Route 2, Boise, Idaho.

**LIVE STOCK** 177

FOR SALE CHEAP—TWO REGISTERED shire stud colts, coming one and two years old next spring, at farmer's prices. Cut out the incumbrance. Write for particulars. J. A. Bowsie, Lostine, Ore.

**LIVE STOCK.** 177
Continued.

YOUNG JERSEY BULL AND SEVERAL young Jersey cows—St. Mawes breeding—all splendid animals. Also complete Empire milking machine, very reasonable. A. Adolphsen, R. 2, Chehalis, Wash.

FOR SALE—FINE REGISTERED BERKSHIRE boar pigs ready for service, $25 each, with papers; 1 registered Holstein bull calf, $35. Write Dean Ickes, Palouse, Wash.

WANTED—TO BUY REGISTERED HOLstein cows or heifers; price and description. H. H. Stiver, Box 697, Nampa, Idaho.

TWO REGISTERED GUERNSEY BULLS, ONE 5, one junior 2; will sell either. Fir Grove Farm, Clarks Fork, Idaho.

BARGAINS IN BIG TYPE POLANDS; CHOICE young boar and eight weeks' pigs. E. M. Dorsey, Pasco, Wash.

THREE REGISTERED SHORTHORN BULLS, 18 months old, for sale. Ernest W. Haag, Sandpoint, Idaho.

FOR SALE—WEANLING BIG TYPE POLAND China pigs. S. S. Mullen, Bellingham, Wash., R. 1, Box 86.

REGISTERED O. I. C. SWINE. BREEDING stock for sale. C. I. Ballard, Rickreall, Ore.

**HOTELS** 506

WHITE'S HOTEL AND RESTAURANT—Rooms, hot and cold water, 75c up. Breakfast 20c to 40c; dinner, 25c to 50c. Sprague and Stevens, Spokane.

GALAX HOTEL; NEW AND MODERN; 75c and $1. Main and Bernard, Spokane.

NEW MADISON HOTEL, 75C AND UP. 1ST and Madison, Spokane, Wash.

**RUBBER STAMPS AND SEALS** 384

FOR RUBBER STAMPS, STENCILS, BADGES, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

**ARTIFICIAL LIMBS** 424

SCHINDLER ARTIFICIAL LIMB CO., S115 Wall st., Spokane, Wash.

**TAXIDERMISTS** 426

FUR RUG MOUNTING A SPECIALTY, HEADS, animals and birds mounted. Withers Bros., 822 Sprague, Spokane.

FIRST-CLASS WORK, ALL BRANCHES TAXIdermy and furs. Mohr, Bernard st., Spokane.

**SEEDS.** 620

WE SPECIALIZE IN TIMOTHY, ALFALFA, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Idaho.

**FARM LANDS FOR SALE** 631

SNOHOMISH COUNTY, WASH., FARM LANDS. The greatest proposition on the market for the man who wants a farm. 12,000 acres to select from; 3½ miles salt water front; 20 miles of beautiful lake shore; good towns, railways, steamboats, factories, mills, schools, churches, paved roads; where the largest profits are made, where the great variety of crops and wonderful productive climate makes it the most productive farm section of America. Good lands in good localities, as low as $25 to $35 per acre. 10 yearly payments. Send for maps and literature to the Brownell Land Co., 904 Third ave., Seattle, Wash.

YOUR CHANCE IS IN CANADA—RICH LANDS and business opportunities offer you independence; farm lands $11 to $30 acre; irrigated lands, $35 to $50; twenty years to pay; $2000 loan in improvements; loan of live stock; taxes average under twenty cents an acre; no taxes on improvements, personal property or live stock; good markets, churches, schools, roads, telephones; excellent climate—crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklet. Allan Cameron, general superintendent land branch Canadian Pacific Ry., 30 Ninth ave., Calgary, Alberta.

160 ACRES TIMBER; MILLION FT. WHITE pine, 2 millions cedar, 1½ millions mixed and 3000 mixed cedar poles; clear price $4000, sell on terms or trade for residence. 160 acres Alberta, partly improved, clear; trade for Washington property. Union Investment Co., 406 Ziegler block, Spokane, Wash.

YAKIMA VALLEY RANCH; 40 ACRES; ONE mile from town; 20 acres alfalfa; 15 acres plowed ground; 5 acres pasture; house, barn, fully paid water right; thickly settled district; price $150 per acre, $1500 down; joining land held at $300 per acre. Roy C. Lichty, Sunnyside, Wash.

WONDERFUL WENATCHEE VALLEY.
Finest apple region in the world.
PROFITABLE BEARING ORCHARDS
IRRIGATED LANDS, STOCK RANCHES.
If interested, write us.
PFAU & GREER, WENATCHEE, WASH.

80—BEST BUY IN VALLEY; 50 ALFALFA; well improved; first man who knows a good thing will buy this on sight, $9000, cash $4000. Other alfalfa and grain farms under the new Warm Spring which is opening a great country. O. E. Carman, Vale, Ore.

FOR SALE—ALFALFA STOCK AND WHEAT farms, at a price that the land will pay for itself in two crops. Well improved land for $75 to $100 per acre, the cheapest water in the world. John Hardwick Realty Co., Vale, Ore.

IRRIGATED LANDS IN THE RICHEST SECtion of the great Okanogan valley, also stock ranches. Del Hart, Oroville, Wash.

STOCK, FRUIT AND WHEAT RANCHES IN heart of the rich Okanogan valley. Lindsay & Forsyth, Okanogan, Wash.

KENNEWICK IRRIGATED RANCH FOR SALE —22 acres; best location and ground in valley. L. Balerlipp, Kennewick, Wash.

**FARM LANDS—WANTED** 654

WANTED—TO HEAR FROM OWNERS OF land in Idaho, Washington or Oregon for sale or trade for western Montana land. Scott & Rummel, R. D. 1, Eureka, Mont.

**IRRIGATED LANDS—For Sale** 663

FOR SALE—40 ACRES; ON UMATILLA GOVernment irrigation project near Hermiston, Ore.; well improved and carrying government water right. A money maker, reasonable price and terms. W. J. Warner, Hermiston, Ore.


## Your Local HOME PAPER and Your State FARM PAPER at a Special Club Price

A clubbing arrangement has been made with a number of newspapers in your state whereby we can now offer you a one-year subscription to your local home paper and a one-year subscription to your state family farm paper at a special rate for both.

**YOUR HOME PAPER**

brings you all the local news and happenings of the social and commercial life of your community. It gives you the news of the home boys at the front and prints many interesting letters from them.

**YOUR FARM PAPER**

brings you, each week, all the news of the farm and farm home, with the agricultural developments of your state. Features for every member of the family, including women's and children's pages and colored comics. Also departments for every phase of farming.

Your Local Home Paper and Your State Farm Paper can now be sent to you for one year each at the special clubbing rate as quoted below:

| | |
|---|---|
| The Blaine Journal, Blaine, Wash., and The Washington Farmer | $1.50 |
| The Buckley Banner, Buckley, Wash., and The Washington Farmer | $1.50 |
| Castle Rock Independent, Castle Rock, Wash., and The Washington Farmer | $1.50 |
| The Cheney Free Press, Cheney, Wash., and The Washington Farmer | $1.50 |
| Chehalis Bee-Nugget, Chehalis, Wash., and The Washington Farmer | $1.50 |
| Cashmere Valley Record, Cashmere, Wash., and The Washington Farmer | $1.50 |
| The Everett Tribune, Everett, Wash., and The Washington Farmer | $3.00 |
| The Colville Examiner, Colville, Wash., and The Washington Farmer | $1.50 |
| Goldendale Sentinel, Goldendale, Wash., and The Washington Farmer | $2.00 |
| Puget Sound Mail, La Conner, Wash., and The Washington Farmer | $2.00 |
| The Montesano Vidette, Montesano, Wash., and The Washington Farmer | $2.00 |
| Oak Harbor News, Oak Harbor, Wash., and The Washington Farmer | $1.50 |
| The Morning Olympian, Olympia, Wash., and The Washington Farmer | $4.00 |
| The Weekly Recorder, Olympia, Wash., and The Washington Farmer | $1.00 |
| Puyallup Valley Tribune, Puyallup, Wash., and The Washington Farmer | $1.50 |
| The South Bend Journal, South Bend, Wash., and The Washington Farmer | $2.15 |
| Sumas News-Advocate, Sumas, Wash., and The Washington Farmer | $1.50 |
| Walla Walla Bulletin, Walla Walla, Wash., and The Washington Farmer | $5.00 |
| White Salmon Enterprise, White Salmon, Wn., and The Washington Farmer | $1.50 |
| The Zillah Free Press, Zillah, Wash., and The Washington Farmer | $1.50 |

Papers mailed to Canadian addresses require additional postage of 1 cent a copy.

## EXTRAORDINARY CLUBBING OFFER

A three-year subscription to your state farm paper and one year subscription to the following papers at the special price for both.

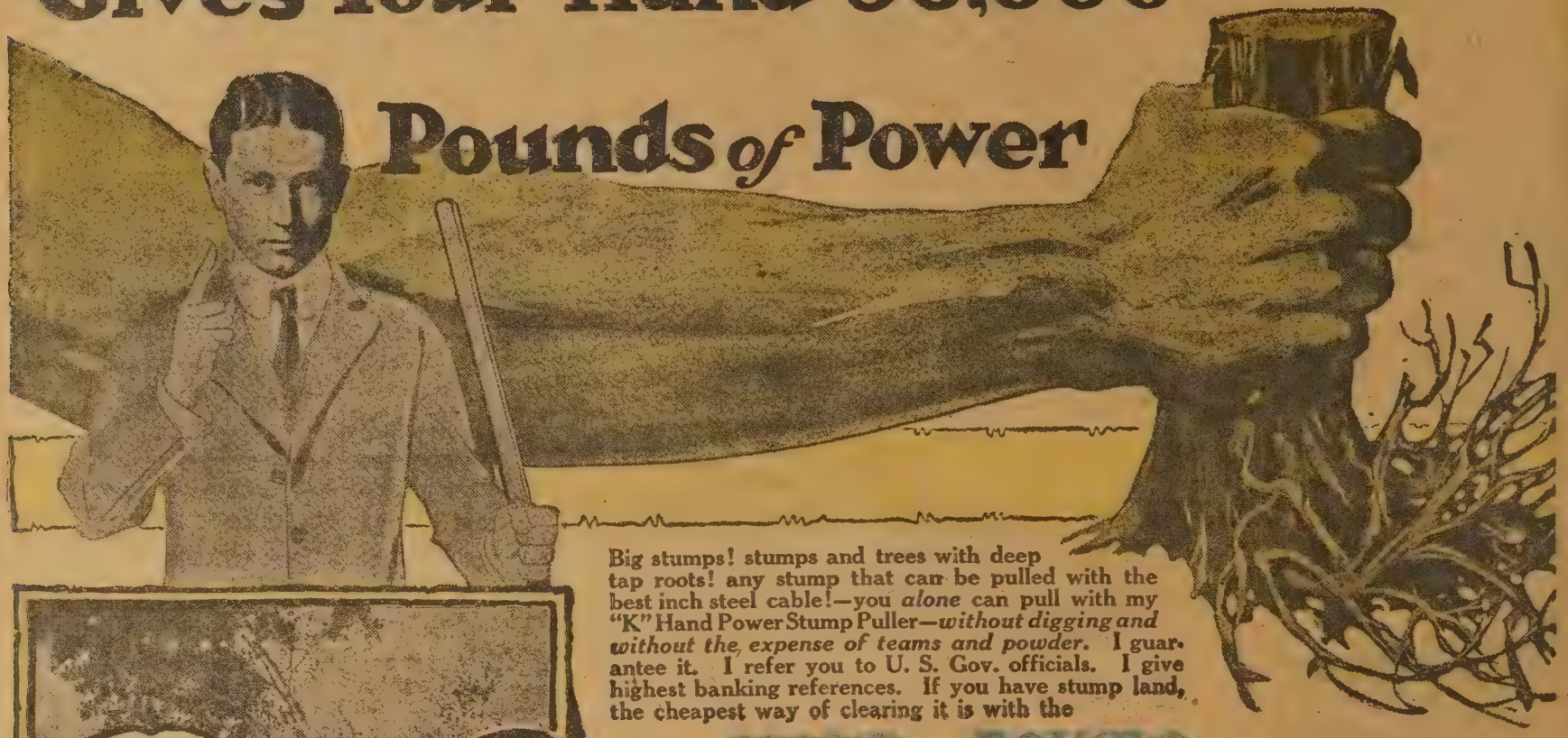
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| The Bellingham Daily Journal | $3.00 |
| The Sunday Spokesman-Review | 3.60 |
| The Spokane Daily Chronicle | 6.00 |
| The Daily Spokesman-Review | 6.00 |
| Daily and Sunday Spokesman-Review | 9.00 |

Take advantage of these special clubbing rates by sending your order today to your local home paper, or by mailing it direct to

**The Washington Farmer**
617 Central Bldg., Seattle, Wash.
Review Bldg., Spokane, Wash.

# My K Hand Stump Puller

## Gives Your Hand 96,000 Pounds of Power



Big stumps! stumps and trees with deep tap roots! any stump that can be pulled with the best inch steel cable!—you *alone* can pull with my "K" Hand Power Stump Puller—*without digging and without the expense of teams and powder.* I guarantee it. I refer you to U. S. Gov. officials. I give highest banking references. If you have stump land, the cheapest way of clearing it is with the

HAND POWER
**K Stump Puller**

Frank Hance, a *one-armed* farmer of Bowie, Md., pulling a double silver maple 3 ft. 8 in. in diameter at the ground, with deep tap roots. This is an easy pull for the "K," as the cable can be hitched high and the leverage is consequently greater.

### How the "K" Pulls Biggest Stumps

The "K" works on the leverage principle of the ordinary lifting jack, except that the power is applied on a cog-wheel instead of a standard. 100 lbs. push on the lever develops a 48-ton pull on the stump—all an inch steel cable will hold. One man operates it alone—no teams to pay for—no walking.

### A Mechanical Wonder

Made of finest steel—guaranteed against breakage. Weighs only 171 lbs.—easily carried or hauled about on its own truck wheels. Has two speeds—60 feet per minute for hauling in cable or for small stumps—slow speed for heavy pulls. *Works equally well on hillsides and marshes where horses can not* work

### Owners Praise It

H. Sinclair of the Dept. of the Interior, a U. S. Gov. official, writes: "The stump puller is a wonder."

Ernest Thompson Seton, author and naturalist, declares the "K" "a great success."

Hundreds of owners write in, telling of pulling six- and seven-foot stumps, of pulling faster and pulling bigger stumps than by any other machine.

**Special Offer** I am making a special offer to get a "K" Stump Puller introduced in every neighborhood. Write me today for full information and for free book on Land Clearing.

**Walter J. Fitzpatrick**
Box 32 182 Fifth St. San Francisco, Cal.



H. G. Hunzicker of Foster, Wash., pulling a 24-inch fir stump with deep tap roots out of hard ground, without using powder or cutting any roots.

**Tear Out and Mail Today**

Walter J. Fitzpatrick
Box 32 182 Fifth St., San Francisco, Cal.
Send me full particulars on your special offer and your free booklet on Land Clearing.

Name_____

Address_____

DECEMBER 5, 1918.

NOTICE TO READERS: When you finish reading this paper, place a U. S. 1-cent stamp on this notice, mail the paper and it will be placed in the hands of our soldiers or sailors destined to proceed overseas. NO WRAPPER. NO ADDRESS. A. S. Burleson, Postmaster Gen.

PUBLISHED WEEKLY.

# THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF

LIBRARY
COLLEGE OF AGRICULTURE
UNIVERSITY OF ILLINOIS
URBANA



There are millions of people now liberated from the German yoke for whose interests we have fought and bled for the last eighteen months. It is up to us to neglect no measure that will enable them to return to health, to self-support and to their national life.

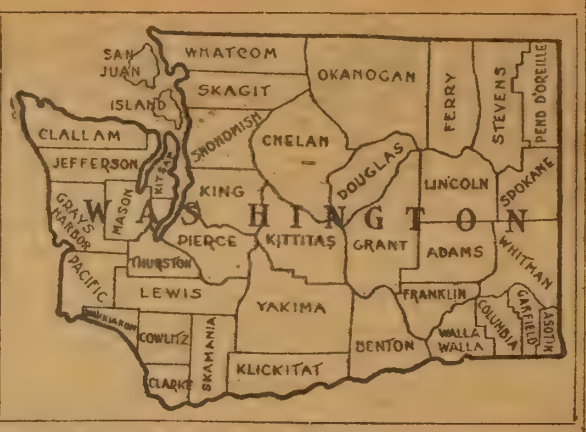
—Herbert Hoover.



## SEND THEM FOOD

# Produce What Market Requires

## When Prices Make It Profitable to Produce Stock or Fruit or Grain These Things Will Be Produced in Abundance




PROSSER, Benton County, Wash., Nov. 24.—We are having nice weather, no snow or cold weather yet. Fall plowing is about all done. The live stock on farms in this community are looking good. Some of the farmers are on the lookout for stock hogs to feed their corn to, as corn buyers don't pay enough. Only $25 to $30 a ton is offered. At the close of the war hundreds of ships will be released for regular ocean traffic. These ships will have plenty to do if the farmer can get a profit on what he has to sell. But on the other hand, if the farmer has to grow his corn, wheat, hogs and so on at a loss, these ships will be idle. One-third of the land in the west is idle; give the farmer a profit on what he grows and every foot will be farmed.

G. W. WILGUS.

### WANT REASONABLE PROFITS.

OMAK, Okanogan County, Wash., Nov. 25.—In regard to what the farmer can produce for export trade, it is a problem which the ordinary farmer can not understand. In a locality like ours he only produces what he can sell at the best price. Considering the cost of production, if he raises vegetables, he only has the local markets and is at the mercy of the local stores. The only products which he can depend on are stock, grain and fruit, but as he is not familiar with the cost of shipment to foreign markets, he will not undertake to produce what he is not sure will return a reasonable profit. Thousands of dollars are wasted each year by inability to dispose of some farm products without a market. On account of drouth the last season, farmers have been obliged to sell their stock down to a minimum on account of feed shortage. Fall rains have put the soil in excellent condition to go into the winter and the present prospect for a good crop next season is good.

J. O. WOODS.

### MOVEMENT OF GRAIN SLOW.

CENTERVILLE, Klickitat County, Wash., Nov. 25.—The chief thing the farmers of this county are looking to with interest is how soon can the movement of grain now in the warehouses be made, as up till just lately it has been impossible to sell on account of the inability to move the grain. We look for a more favorable settlement soon. Our county being principally a wheat producing section, we will have to rely on outside demand for our crops. With regard to the wool product, it would look just now as though we would be able to use it for sometime ourselves. The lumber business here is not very extensive at present; mostly local work between a few counties of the state. Our hogs naturally drift to the Portland market. Our chief problem of the present day is the adjusting of crop prices and those things we have to buy on an equal basis, so that no one shall suffer by the change. As I see it it don't make much difference as it is hard to make both ends meet in these times of high prices. I can't see that conditions are any better. Farm and stock conditions are fine here, better than for several years, with a prospect for an extra good crop next year. The grass is good for pasture. We have had a little snow, but it is gone now. Farmers who think they will be crowded in spring work are doing fall plowing now.

CLARENCE A. LESTER.

### LABOR IS FARM PROBLEM.

RITZVILLE, Adams County, Wash., Nov. 17.—In my opinion all kinds of grain and live stock could be shipped to foreign countries profitably by us providing other nations don't keep us out with a wall of high tariff and our seamen are willing to compete with seafaring people of other nations. We have proven that all kinds of live stock can be raised here equal to any that are being shipped in from Europe. The biggest farm problem remains as ever; it is shortage of good labor, and we hope that with the coming of peace we will be greatly relieved. The bountiful rains we had in the first part of this month have turned the pastures green, and live stock will go into the winter in good condition. Early fall seeding is safe and plowing will go on until it freezes up.

JACOB HARDER.

### SEED MUCH FALL WHEAT.

LA CROSSE, Whitman County, Wash., Nov. 1.—While many farmers have had fair crops and are in comfortable shape, there are also several who have not been so successful. The principal cause was a large acreage of spring seeding, which, as is well known, was handicapped by extreme dry weather, causing some very poor stands and many disappointments in yield. The high cost of seed combined with high wages and feed costs made many fields practically unprofitable. Thus many have not only not broke even, but caused several to carry their financial burden over another year, which is also a handicap to the financial institutions. Two poor seasons for fall wheat in succession and fair prospects of another one in the drier districts have been a severe strain on the farming community. While October had more than usual amount of rainy days, still they were only locally heavy, leaving many sections dry and at the end of the month rain is needed practically everywhere. A large acreage has been seeded to fall wheat and there are some fine stands, but many fields are spotted. The feed supply is very critical and must get favorable weather to tide stock through the winter. Much stock is being sold; more than safely should be.

M. E. SCHRECK.

### TURN ATTENTION TO LIVE STOCK.

SPOKANE, Spokane County, Wash., Nov. 21.—As the war has drawn to a close the big problem confronting the farmers in this section is that of producing grain while the prices are high. These prices are guaranteed for next year, but most people who are conversant with the conditions in other sections believe that grain prices are bound to fall in the future after the war closes. This will be largely due to the fact that much of the land which has been devastated in Europe will be used for the growing of grain crops next season. These crops can be grown quickly and easily by the European farmer

(Continued on page twenty-seven.)




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FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

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## Favors Irrigation Projects

### *Eastern Washington Holds Great Possibilities*

What of agricultural developments in Washington after the war? Governor Lister thinks prospects are better than ever before. In public utterances last week at Pullman and Spokane he urged the importance of enlarged irrigation in this state. In Yakima county last year the crops brought $30,000,000, "and there is plenty more land in this state just as good as the Yakima land, which can be irrigated."

Now that the United States government contemplates a gigantic program for the reclamation of arid, swamp and logged-off lands as a part of its reconstruction work after the war, interest is renewed in three large projects which have been very much in the public mind at different times in the last 10 or 12 years. The largest of these is what the government termed the Big Bend project. It was planned to cap the waters of the Pend Oreille river near the dividing line between Idaho and Washington and conduct them to a vast area of about 1,500,000 acres lying between Spokane and the Columbia river. Ten or 12 years ago the reclamation service maintained in the field for two or three years a large engineering force studying this project. At that time the government dropped the undertaking; not because of engineering obstacles nor lack of water, nor acre cost, nor the fertility of the soil, but for the sole reason that the project was considered too stupendous to be undertaken at that time.

Other communities were clamoring for recognition all over the west, and the reclamation fund was not sufficient to justify the irrigation of so vast a tract in any one state. The reclamation commissioner said at the time that it was the bigness of the project that drove the government away. The world clamor for food was not so insistent then. The government could not then see the need for reclamation on a large scale. But the nation has a broader view now. It is no longer terrified by the expenditure of millions of dollars. It only asks if the task is feasible and desirable.

A much smaller project, which was also carefully studied by United States government engineers, was known as the Palouse project. The problem under consideration was to divert the waters of the Palouse river, carry them through Washtucna coulee and spread them out upon 100,000 or 150,000 acres of rich, arid lands in the Pasco region. The third project taken up after the government had relinquished the Big Bend undertaking, aimed at the irrigation of some 500,000 or 600,000 acres of very fertile, but arid lands in the Quincy region. This is known as the Quincy project. Superficial surveys were made with a view to impounding the head waters of the Wenatchee river, carrying them down the mountains and under the Columbia river in a great siphon, and then out over the area mentioned.

These lands, however, were a part of the great domain that was included in the original Big Bend project, and if the latter improvement was made the more difficult plan of bringing water from the Cascade mountains would, of course, be eliminated.

Discussing these wonderful possibilities, Governor Lister said in an interview at Spokane: "The Pend Oreille river has water enough to irrigate 4,000,000 acres, and to the west and south of Spokane there are 2,500,000 acres of land, including the Palouse and Quincy projects. The government can well afford to spend $250,000,000 to put these lands under irrigation. The cost of putting them under water would only be the cost of 10 days of the war. In all the great development projects I have referred to the only way the problem could be well handled would be by governmental agencies, but we must do our part in this state."

The watering of these large areas of arid and semi-arid lands would alter the physical aspect of that region and make Washington a different state. A broad zone of desert and semi-desert land would vanish. Tourists crossing the state would look out upon another landscape. All through the growing season the country would be a continuous expanse of green from the Idaho line to the Columbia river. Agricultural productiveness would be immensely increased and the state's wealth enormously augmented. The subject is of such far-reaching importance and the reclamation would carry such enormous benefits through all the years of the future that Washington congressmen and senators will be fully justified in urging the matter upon the attention of the government at Washington.

## Apple Men Make Money

The apple crop of the four northwestern states is calculated to be worth about $21,000,000 this year. This is due not so much to the large crop as to the excellent price that is being received.

B. A. Perham of the Earle Fruit company estimates the production of the various apple growing districts as follows:

| | Cars. |
|---|---|
| Yakima | 6,000 |
| Wenatchee | 8,000 |
| Spokane | 900 |
| Southern Idaho | 100 |
| Lewiston | 300 |
| Walla Walla | 1,000 |
| Hood River | 1,500 |
| White Salmon | 200 |
| Western Oregon | 200 |
| Montana | 100 |
| Miscellaneous | 200 |
| Total | 18,500 |

This means a production of nearly 14,000,000 boxes.

P. R. Parks, general manager of the Spokane Fruit Growers' company, gives the following as the general trend of prices being received this year by northwestern growers for the three grades of apples recognized on the market:

| | Extra Fancy. | Fancy. | "C". |
|---|---|---|---|
| Rome Beauties | $1.85 | $1.60 | $1.40 |
| Baldwins | 1.65 | 1.40 | 1.25 |
| Winesaps | 2.00 | 1.75 | 1.50 |
| Spitzenburgs | 2.15 | 1.85 | 1.60 |
| Wageners | 1.60 | 1.35 | 1.15 |
| Jonathans | 1.90 to 2.25 | 1.60 to 2.00 | 1.40 to 1.75 |
| Delicious | 2.75 | 2.50 | 2.00 |
| Yel. Newtowns | 1.85 | 1.60 | 1.40 |
| Ben Davis | 1.50 | 1.30 | 1.15 |
| Black Ben Davis | 1.50 | 1.30 | 1.15 |
| Ganos | 1.50 | 1.30 | 1.15 |
| Staymans | 1.75 | 1.50 | 1.25 |

He says that these prices are 50 cents above 1917, 60 cents above 1916, 75 cents above 1915, and $1 above 1914.

### DAIRYMEN LOSE LEADER.

On November 22 W. D. Hoard, editor of Hoard's Dairyman, died at his home in Fort Atkinson, Wis. Mr. Hoard has been recognized throughout the United States as one of the dairy industry's best friends, not only as publisher of the dairy paper of which he was editor, but as governor of his state at one time and for several years a member of the board of regents of the University of Wisconsin.

> TO the Editor: Your Washington Farmer reaches us once a week, and I must say it is one of the best papers for a producer that we ever read. We would not be without it for twice the price.
>
> GEORGE M. M'DONALD.
> Coulee City, Wash.

## County Agents

### National Business Management

At the recent conference in Washington, D. C., of farm paper editors, called by Secretary Houston of the department of agriculture the work of county agents received most hearty support. It was my privilege to point out that in many instances the usefulness of the county agent system could be greatly enlarged by ignoring state lines.

For instance, take the Inland Empire of the Pacific northwest. This consists of a plateau between the Rocky mountains and the Cascade range, taking eastern Washington, northern Idaho, extending into northwestern Montana and down into a considerable section of eastern Oregon. The county agents in all the counties of the four states included in the Inland Empire should work together as a unit. Do they? No matter how much they may be inclined to do so, there are the four distinctly state departments of extension workers to be brought into conference; their petty differences of work to be ironed out, and even their unmentionable jealousies to be kept out of sight, and so on.

Now, good business management would see to it that these state differences should not be permitted. Occasionally county agents from different states do work together to the mutual benefit of their constituents, but that is in the nature of an exception that proves the rule.

Assisant Secretary Ousley was good enough to say that this matter would be looked into. Remedying instances like this, however, does not put an end to the system which so largely precludes initiative within lines of business efficiency.

C.A.S.

## Farmers' Rights Denied

The farmers of America have been denied the right to study the agricultural situation of Europe for themselves. This is astounding, but true. See Gifford Pinchot's story of it on page 6.

Guesswork will not do; success demands knowledge of the facts. This is true of any business, but especially true of dairying. The best judges of cows miss it once in a while unless they use the tester. "Tests Are the Proof," page 8.

Is the 1919 price of wheat guaranteed? On another page are extracts from President Wilson's price guarantee proclamation.

## Wheat Will Be Shipped Rapidly

All the wheat left in the interior of the northwestern states will be shipped out to market by early in January or at the latest by the first of February. This is the statement of M. H. Houser, northwestern representative of the federal grain buying corporation, in a letter to THE FARMER. The following is from Mr. Houser's communication:

"The Emergency Fleet corporation promised 100,000 tons of shipping for November, December and January. This was made good in November, but so far the full December tonnage has not yet been allotted. There was some needed for the quartermaster's department and the completion program did not quite come up to expectations. Anyway, with, say 250,000 tons for the three months, by taking flour which, with a deduction of the mill feed, would increase the placing of 25 per cent more wheat than if wheat were shipped, will take care of all the wheat remaining in the interior throughout the Pacific northwest, even to the extent of giving a movement, if necessary, from western Montana, and incidentally furnishing a liberal supply of mill feed.

**"We are not going to make any disposition whatsoever of the grain we have here at terminals until all wheat left in the interior is entirely taken care of. On account of the short crop and the rather early free movement, the amount of wheat left in farmers' hands in the Pacific northwest is a great deal less than last year, and from the data we have at hand on the available supplies unsold in the warehouses and the approximate amount yet to be delivered from the farms, I am quite sure that it should all be cared for sometime early in January, or at least there should be an entire clean-up under the most adverse circumstances by February 1.**

"At the present time we are endeavoring as much as possible to facilitate the movement from those sections that harvested later and could not obtain a free movement before the terminals were congested, so as to give them relief as early as possible.

**"Grain Bag Prices**—This matter is still under consideration. Plans have practically been formed for a stable basic price under governmental control, but the ending of the war will bring about changed working conditions. Nevertheless from the information I have at hand I think there is going to be a decided reduction under last year's prices."

## Big Dairy Meet

### To Be Held in Boise, Feb. 10-12, 1919

By RAY W. FELTON.

Representatives of dairy interests of 11 northwestern states will head toward Boise in February. The Western Dairy Products show will be held in Boise February 10, 11 and 12, in connection with the annual meetings of the Western Dairy Instructors' association and the Western Dairy conference and the Idaho State Dairymen's association, the Idaho State Butter and Cheese Makers' association and allied interests.

The meeting was brought to Boise this year through the efforts of the Boise Commercial club, which, as an organization, has given all practical and financial assistance possible to assure the success of the big meeting, realizing that a gathering of this character would serve as a great impetus to the dairy industry, now making rapid strides in Boise valley and southern Idaho.

It is the purpose of those in charge of preliminary arrangements to have representatives present from every dairy organization in the 11 western states included in the circuit. These include Montana, Wyoming, Colorado, New Mexico and all states west.

As this is written there are yet many things to be settled concerning the program, but the management of the show hopes to have present many dairy authorities of national reputation, including A. J. Glover, associate editor of Hoard's Dairyman; Helmer Rabild, in charge of dairy extension work, dairy division, United States department of agriculture; Roy C. Potts, in charge of dairy marketing work, bureau of markets, United States department of agriculture; Mr. Webster, manager of the Central Creameries of California, formerly dean of Kansas Agricultural college and also a former chief of the dairy division, United States department of agriculture. Besides these noted dairymen, all the instructors in the work in the 11 states are expected to be present. Some of these have national reputations as practical men, notably Professor Van Norman of the California Agricultural college, who is president of the National dairy show.

Professor Rabild's visit will prove highly interesting, because he is the father of the cow-testing association, having organized the first cow-testing association in Michigan about 20 years ago.

Large, light quarters have been secured for the show. There will be exhibits of dairy products, dairy equipment, besides butter and cheese scoring contests, milk testing and much other practical work, in addition to the lectures and discussions.

The Western Dairy Products show is fast assuming importance. The show at Yakima, Wash., last year was a great success, and this year's efforts bid fair to place it in a class with the national show, even though it is on a smaller scale.

The following people will have charge of the show: G. E. Frevert, manager, 318 Federal Bldg., Salt Lake City, Utah; G. D. Turnbow, assistant manager, Pullman, Wash.; C. F. Hoyt, superintendent milk and cream department, 318 Federal Bldg., Salt Lake City, Utah; V. D. Chappell, superintendent butter department, Corvallis, Ore.; F. R. Cammack, superintendent cheese department, Boise; H. L. Wilson, superintendent judging contests, 318 Federal Bldg., Salt Lake City, Utah; J. E. Dorman, president Western Dairy Instructors' association, 318 Federal Bldg., Salt Lake City, Utah; B. E. Hyatt, secretary Boise Commercial club, Boise, Idaho.

E. G. Woodward, professor dairy husbandry, Washington State college, Pullman, Wash., is secretary of the show.

### EUROPE IS AFTER SEED.

Reports from the seed markets of this country indicate that since the signing of the armistice a few weeks ago many orders and inquiries for field seeds of various kinds have been received from foreign countries, including Denmark, Norway, Argentina, England, Japan, Australia, Brazil and Sweden. It is apparent that many of these countries will attempt to secure their seed supplies in this country for next season's crops.

### CONSIDER NEW DIRECTOR.

A report from Pullman says that among the persons mentioned to succeed Ira D. Cardiff, who, more than a year ago, resigned his position as director of the state college experiment station, is Dean A. C. Johnson of the extension division of the Kansas Agricultural college. Mr. Johnson has recently paid a visit to the state college at Pullman.

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## Famine Can Not Be Avoided

National Food Administrator Hoover says frankly that there are hunger conditions in Europe that all the resources of the world can not alleviate in time to prevent famine and starvation on a gigantic scale. It is altogether possible that more men and women and children, principally the latter, will die for lack of food this winter than all the shells and shrapnel and gas of the four years' terrible war killed. Famine is the great destroyer. It not only destroys the physical life, but it destroys the mental vision, and fanaticism and anarchy run rampant where it exists. To feed the hungry is the greatest duty of America today. No effort should be spared to produce the utmost in foodstuffs, and no effort should be spared to provide and operate transportation facilities to carry them to the starving in the stricken lands of Europe.

There are not enough hogs in the world to supply the urgent need for pork and pork products.

## Grange Stands on Sound Platform

The national grange, in session at Syracuse, N. Y., adopted a reconstruction platform which calls for drastic government reforms and readjustments affecting agriculture. The grange recommends:

That the present system of marketing and distribution is clumsy, wasteful and inefficient and should be abolished and that unnecessary middlemen should be eliminated.

That the censorship on a free press and free speech should be removed and the zone system discontinued.

That the government should center its activities in the building of market and post roads instead of spending money on boulevards that are used by the few.

That agriculture shall be fully represented in all legislative bodies.

That secretaries of agriculture should be practical farmers.

That the farm land bank law shall be extended, discouraging land tenantry and abandoned farms.

That munition plants should be converted to the manufacture of fertilizers, freeing the nation from dependency on foreign supplies.

That urban standards of education should not become guides of the rural system.

Every one of these eight recommendations is sound and the national grange is rendering the country good service in pressing them upon the attention of the government. We do not believe that even the beneficiaries of the present system of marketing and distribution will deny that it is clumsy, wasteful and inefficient. That there are a great many unnecessary middlemen and that the system as now working lays unnecessary burdens upon producers and commissioners.

In the stress of war the American people loyally surrendered for the time being many of their liberties and privileges guaranteed to them under the constitution of the United States. Now that the war is ended there is no room for autocracy of any degree or description upon the free soil of this country. Free press and free speech should be restored to the people unimpaired and unshackled. In the past, as Gifford Pinchot pointed out in his letter to the readers of this journal last week, agriculture has not been fully represented in legislative bodies. That lack of representation, however, is the fault of the farmers themselves and is not inherent in our election laws. Just representation, therefore, must be sought in a greater spirit of loyalty among the farmers. No changes in the election machinery could possibly give them greater representation. They must of their own volition put forward able, upright candidates who are practical farmers, and then give these candidates their undivided support at the polls.

The plank bearing upon the farm land bank law expresses in essence what the farmer has been contending for ever since the law was enacted. We find ourselves in gross accord with the other planks in the foregoing platform and congratulate the national grange upon its formulation of a list of policies that are so sound and conservatively progressive.

Europe is already ordering live stock from America, which is a word to the wise farmer.

## Farmers Given a High-Handed Denial by the State Department

As our readers well know, THE FARMER is exceedingly reluctant to criticize any department of our national government. From the hour that war was declared until the armistice was signed, we strove constantly to support the government at every point. Such few criticisms as we made relating to the government's oversight of the great agricultural interests in the composition of its various war boards, its singling out of the farmers for restricted prices, and the niggardly policy of congress in providing credit for financially cramped farmers who were willing and eager to go forward with food production, were, as our readers will recall, temperate in tone.

Although the armistice is signed and the war seems practically over, we still hesitate to criticise the administration. President Wilson's record has been so wise and brilliant in many respects that it is a great pity it has been marred at some points.

Notwithstanding this reluctance to say anything but good of the administration, we feel that we would not be doing our duty if we failed to give space to the remarkable revelation made by Gifford Pinchot as given upon another page.

Mr. Pinchot is a man of high ideals, unchallenged integrity and sincere devotion to the public welfare. For years he worked to defend the people's resources from the rapacity of the great special interests. He now realizes, as few public men, the extent to which the farmer has been denied his rightful place in governmental affairs. He has won and held the confidence of the farmers of this country, and justly stands high in the councils of the National Board of Farm Organizations. He stood ready, without salary, to pay from his private purse the expense of going to Europe to study the plans and purposes of other nations for agricultural reconstruction after the war and the National Board of Farm Organizations was glad to delegate that duty to him.

Mr. Pinchot made all his preparations, but was astounded upon applying for the necessary passports by the flat refusal of the state department to permit him to go abroad.

The reader will note, upon reading the record, that the refusal was not based upon military grounds, but solely upon the amazing assertion that "the Council of National Defense is the only body which has been charged by the president with the problems of reconstruction and of discovering what direct efforts should be taken to this end. Furthermore, the department of agriculture has recently sent abroad a competent commission for the purpose of investigating the agricultural problems connected with reconstruction."

We do not believe that a higher-handed denial was ever made by the state department of the United States. In brief, the administration says that it will do all the investigating that it considers good for the American farmers, and will not permit the agricultural interests to study the problems of reconstruction for themselves.

That attitude is un-American, undemocratic and autocratic in highest degree. It is an indefensible position for any department of the government to take in this land of liberty and broad enlightenment.

It is one thing to produce a crop and another thing to market it profitably.

## Nature Is Kind to American People

Everybody is concerned over the high cost of shoes. As scarcity of tanning material contributes to that high cost, a writer in the Wall Street Journal says that, since the supply of hemlock bark is no longer sufficient, this country annually must send $30,000,000 to foreign countries for tanning material. We are importing, for example, Sicilian sumac worth from $2.50 to $4 per pound. Tons of that very material go to waste in the United States. After a frost, city people admire the sumac because of its flame-colored leaves. The country boy loves it because its hollow stems make fine pop and squirt guns, but the eastern farmer hates it because it grows everywhere. He is forever cutting it down, yet this "nuisance" contains 30 per cent tannin, the element required in tanning hides.

Just another item showing that in this land of almost boundless resources the American people are only beginning to understand how kind and methodical nature has been in its gifts to them. The wild products of yesterday run riot through the valleys and on the hillsides and make of themselves pests and nuisances maybe, but are a utilized resource of tomorrow.

We are learning to catch the truer and deeper meaning of the word science. Thirty or forty years ago the common acceptance of the term in the United States was very different from our present understanding. We rather thought that science was a bird that flew high, never touching the farm, the orchard or the stock range. Now we are beginning to glimpse the great truth that science is intensely democratic. It has become the friend, the partner and the servant of the farmer, the miner, the lumber man, the orchardist and all others who are engaged in useful callings of production.

When men and women now of middle age were boys and girls, they imagined that chemistry was locked up in drug stores and laboratories. Now they are seeing that it is in the soil, the rocks, the trees and every useful product of the land. It is as universal as the air, as all-permeating as the sunshine.

"One's habitual pursuits pass over into character."

## Fruit Conference Is Important

The fruit conference that is to be held in Spokane December 10-14, is one of the most important that the fruitgrowers and shippers of the northwest have had opportunity to attend. It should have an attendance of representatives of the industry from every fruit-growing district of all four northwestern states, and these delegates should attend with a full knowledge of the conditions of their sections and the needs of their fellow fruit men. The conference will take up big problems, problems the solution of which will mean much for the good or detriment of the industry during years to come.

## Stock Show Men Hard Hit

The live stock show schedule of the west has been destroyed by the influenza epidemic. Every winter show of importance from Los Angeles to Lewiston has been called off after months of preparation on the part of the association officials and the intended exhibitors. Many breeders had their animals carefully fitted at great expense. Many had advertised their proposed exhibits widely. It is unfortunate that the situation developed as it did, but it is encouraging to see the show men and the breeders of purebred stock already directing their efforts toward next winter's shows. Let the shows of 1919 mute the excellence of both years.

# Peace Party Goes to Europe

## *President Addresses Congress Before Leaving for France*

The winter session of congress convened at Washington, D. C., last Monday, and its first act was to listen to the address of President Wilson, who told its members officially of his trip to Europe at the head of this country's peace delegation. The president said that in view of the fact that it was his declaration of principles upon which the armistice had been signed and about which the discussions of the permanent peace conference would center, he felt it his duty to go to the conference and lay before it the full meaning of the "fourteen principles" which he had enunciated. He discussed in a general way some of the big problems that are to follow the war, emphasizing their importance and urging the cooperation of all departments of government and all citizens in their solution.

**PRESIDENT WILSON NAMES DELEGATES.**

Last Friday President Wilson announced his selection of delegates to represent this country at the peace conference in Europe. They will be himself, Secretary of State Robert Lansing, Colonel E. M. House, General Tasker H. Bliss and Henry White. Of these men, Secretary Lansing was appointed by the president to be secretary of state when W. J. Bryan resigned in 1915 because he was unwilling to sign a note to Germany that he thought might involve this country and Germany in war. Colonel House is a citizen of Texas, and has been recognized as the personal friend and adviser of President Wilson since the latter was elected. He has never held any prominent office. General Bliss is now in France, where he has been prominent in the councils of the allied military authorities, having been the representative of the American military authority at the conference at Versailles when the terms of the armistice were decided upon. Mr. White was one time United States ambassador to Italy, having been appointed by Roosevelt during the latter's term as president. He was later ambassador to France, and has held other less important appointive positions. It has been brought out since his selection by President Wilson as a peace delegate that his daughter is the wife of a Prussian count, and that in the early months of the war he expressed strong pro-German sentiments. He has been little in the eyes of the public of recent years, however, and little is known about his opinion on any of the big questions that will be involved in the discussion of peace conditions.

**SPECIAL REPRESENTATIVES MAY GO.**

Owing to the fact that the delegation contains no member as strictly a representative of business, it is being suggested that the business interests of the nation may send a commission to Europe to keep an eye on the work of the conference with a view to safeguarding the industrial life of America in whatever ways might become necessary or possible. Owing to the fact that no member of the United States senate, which body must ratify any peace treaty or treaties that this country makes with a foreign power, is included, there is talk at this writing that the senate may also send a committee across to keep in close touch with the developments so as to lay all the facts before that body when the ratification comes up later.

**TWO SHIPLOADS MAKE VOYAGE.**

Though there was a report current a few days ago that President Wilson planned to have strict censorship exercised over the deliberations of the peace conference, announcement has been made officially that no such censorship will be required, but that the American people will be kept constantly informed of the progres that is being made and the points upon which the discussions take place. In addition to the special vessel that is carrying the presidential party across the Atlantic, a special boat is being used by newspaper and press association representatives. Several hundred American newspaper correspondents were given passports to make the trip. The president and his party, which includes scores of persons, including secretaries and clerical workers, is making the trip on the steamer George Washington, one of the big vessels taken over from Germany early in the war.

**STUDENT ARMY TO BREAK UP.**

The war department has announced that all the student army training corps in the country are to be broken up as rapidly as practicable. This means that the students who are now attending such schools as the Oregon Agricultural college, the University of Idaho, the State College of Washington and the like as enlisted men will be given discharges and allowed to return to their homes if they desire. It also appears, though this is not positively stated, that, even though they decide to remain in school, they will do so as individual citizens, no longer a part of the military branches and no longer to receive the compensation that they have heretofore received. It is probable, however, that many will choose to remain in school and continue their regular college education.

It is announced that the marines will remain intact until the final signing of the peace terms. In only a few cases will discharges be given the enlisted men, and then only where it will not interfere with the present high standard of this branch of the service.

**BIG CASUALTY LISTS COME.**

The tabulation of casualties among the American expeditionary forces in Europe has progressed so well since the armistice began that names are being transmitted to this country sometimes as many as 3000 a day. They will continue to come in greater or smaller numbers for several weeks. Even though the fighting has ceased, there are still deaths occurring from wounds and diseases, but the bulk of the casualties that are being sent in now are those that occurred prior to November 11, the date of the armistice, but not tabulated at that time.

**DEMOBILIZATION IS BEGINNING.**

Though there is no plan under way that will interfere with the keeping of a million or more American soldiers in Europe until order is reestablished, actual demobilization of men is now getting a good start. General Pershing has announced the selection of army organizations totaling 83,114 men for early return to America. Four complete divisions, the 39th, 76th, 87th and 92d, will be sent home at once, with small units of several other divisions. The organizations included in this list are understood to number comparatively few northwest men, though men from this section are scattered throughout all the organizations of the army abroad and every division contains some.

Orders have also been issued for the return to civil life as rapidly as possible of more than 600,000 men now in the camps of the United States. Nearly 50,000 men and officers in the American camps have already been returned to their homes.

The war department predicts that there will have reached America at least 150,000 men from Europe by January 1.

**GERMANY WILL HOLD ELECTION.**

It is reported that an election will be held in Germany on February 16 for the purpose of electing some 500 members of "the constituent assembly." This date is fixed conditionally, the approval of the soldiers' and workmen's council, which meets to consider governmental matters on December 16, being awaited.

**PERU AND CHILE IN TROUBLE.**

Notwithstanding the powerful example set for them in Europe, Peru and Chile, South American republics, have been on the verge of war over a boundary dispute. The matter is not settled at this writing. The United States has offered its "good offices," with a view to assisting in settling the dispute.

## *The Kaiser Should Ponder This*

When fighting ceased on the signing of the armistice America had, in round numbers, 2,000,000 men in France. It had sent across the waters more than 2,000,000 men, but 58,000 of that gallant array lie dead upon the western battle front.

These numbers, staggering at first sight, lose much of their seriousness when it is remembered that only one man in 40 gave up his life. Our total casualties, including wounded, from the time we sent the first men across to the present time, were 260,000.

When we contrast our losses with the appalling death lists of the other countries, we may well return thanks to the Supreme Being that we have been saved from the frightful wastage of a long war. The mighty conflict, in fact, had only begun to touch our hearthstones. The British death roll is more than one million men—forty times that of the United States. France, with but little more than one-third of our population, has 1,500,000 dead. Germany, with a scant 70,000,000 population, has 3,000,000 dead.

The British have 1,000,000 crippled and more than another million wounded, convalescent and in German prison camps.

Exact figures are not at hand of the Russian death losses, but they are known to exceed those of any of the fighting countries.

These millions take no account of the Italian losses, the Austrian sufferers and the casualties in Belgium, Rumania, Bulgaria, Turkey, Serbia and other lands. When the totals shall be approximately known it is not improbable that the war killed, directly, more than ten million men; indirectly as many more. Countless civilians have perished from starvation, privation and disease.

In the light of these staggering figures, our losses, deeply as we mourn them, sink almost into insignificance.

One correspondent tells of looking out over a region that the eye could entirely reach where 10,000 men had fallen in death. Another says that when he stood on Vimy ridge, looking down into Lens, two and half miles away, with the Germans holding one half of that city and the allies the other half, he surveyed a field where nearly one million men had gone down.

When we reflect on these appalling figures, can we wonder that the afflicted nations cry out for vengeance on the kaiser?

## *France May Regain Alsace-Lorraine*

The shaded portion of this map shows the dual province of Alsace-Lorraine. This was formerly French territory, but following the Franco-Prussian war of 1870, which was won by Germany, the treaty of peace required that they be given to Germany. This has been considered a virtual theft ever since, and has rankled in the minds of the French people so much that the present war was no doubt fought on their part in the hope that these provinces would be returned to them at its close. It is probable that their desire will be granted by the peace terms.




## *Washington Gleanings.*

Gas has been discovered in the Ahtanum district, southwest of Yakima, according to a report made by I. S. Pue.

The Central Valley Grange hall at Dryad will be the meeting place of the Lewis County Pomona grange on December 7.

Potatoes from Skagit valley represent $625,000 in the pockets of the farmers this year. The yield is about 125 sacks to the acre.

Mayer brothers, who are threshing the bean crop in the vicinity of Uniontown, say the yield averages 300 pounds to the acre.

Kenneth McLeod of Milltown is exhibiting a four-pound potato in Mount Vernon. The average yield on his place this year is nearly 15 tons to the acre.

W. E. McDonald, who recently sold his place at Granger, has bought 60 acres of land one mile south of Toppenish from H. Christensen and George Parks.

Postmaster J. D. Medill of Yakima has received orders to transfer a considerable part of the Naches district from a rural route of the Yakima postoffice to a Selah rural route.

Harry W. Callihan has sold his farm two miles northeast of Espanola to Mose Ray of Bixby, Okla., who has taken possession. The place embraces 160 acres, and sold for $9000.

The Indian department is calling for bids for the sale of some 25,000,000 feet of standing yellow pine, red and white fir and larch timber situated on the Colville Indian reservation, about 15 miles east of Omak.

Two of the principal roads in Clarke county are to be put in good condition at once for winter travel. The road between Vancouver and Washougal and that between Vancouver and Battle Ground will be graded and rolled.

Secretary O. C. Whitney of the Washington State Educational association has announced the annual meeting of the association, which was originally scheduled for October 23, 24, 25 and 26, would be held in Seattle December 26, 27 and 28.

On account of the congestion of the hay crop at different points along branches of the Northern Pacific and a surplus of refrigerator cars, hay is now being shipped from here in reefers. There is a surplus of 200 reefers in this valley.

Contracts have been let, material purchased and arrangements completed for the sinking of a 300-foot double compartment shaft to develop the coal deposits known to exist on the property of the Wenatchee Orchard Land company in Moses coulee.

On account of the increasing flow of artesian water in the well of the Puget Sound and Columbia River Gas company, west of Hanford, drilling has stopped and a new hole will have to be started. The flow is estimated at over 2000 gallons per minute.

With the close of this year's salmon season cannery men of Grays Harbor estimate the pack at 60,000 cases, which is considered satisfactory for a normal season. Gillnet fishermen have been particularly successful, while the traps have not fared so well.

The Black Diamond Lumber company, of Winlock, has accepted an order from the United States shipping board calling for a complete ship bill of over 1,500,000 feet of lumber, with a guaranteed delivery in 60 days. The ship is being constructed in Portland.

The board of county commissioners of Klickitat county have approved the construction of a cement-concrete highway from White Salmon to Trout Lake. This will be a continuation of the hard-surfaced Hood View road, running for one and a half miles west of White Salmon.

Colonel George Sintz of Cashmere has sold his fine 28-acre tract and residence at Wenatchee to Elmer M. Harndon, an Alaska man, who, with his family, will take possession immediately. This property has two acres of bearing orchard and a house and other buildings, and was sold for $11,000.

Mud and not snow caused the closing of the Blewett pass route this season. As a result of the slippery condition of the road the Ellensburg stage line from Wenatchee has been discontinued for the winter. For the last few trips the Vantage route was used, but this did not prove satisfactory and the service has been stopped.

H. B. Russell of Ames, Iowa, representing the First National bank of Lake Mills, which owns 12,500 acres in the Barrel Springs section, between Yakima and the Columbia river, was in Yakima recently investigating the possibilities of establishing an irrigation system. An artesian well struck water at 650 feet.

F. F. Morris, J. M. Fleming and Thomas R. Robinson of Grandview, and Dr. T. R. Smythe of Mabton were elected delegates of the Grandview-Mabton-Byron district to the Spokane grade and pack conference in December. Growers in that district favor the adoption of the two grade pack and will make an effort to maintain the standard of extra fancy.

The installation of a 100-horsepower boiler in the Cascade creamery was begun last week. Manager S. J. Simonson says it will double the plant's capacity to make condensed milk. Mr. Simonson is considering the installation of a machine to make powdered milk as soon as he works up to the supply of 25,000 pounds of raw milk daily in the valley.

Water users of the Burbank project, 14,000 acres, are to take over the project in the near future, according to an announcement made by E. M. Chandler, consulting engineer. The project at Burbank is the only one of appreciable size remaining in this state under private ownership. There is $1,500,000 invested in this project, of which 5000 acres are cropped and handled by 300 water-users. Dwellers on the project, a part of which is highly developed, favor the formation of an irrigation district, Mr. Chandler says.

# After-War Farm Policies

## *Farmers Must Study Conditions First Hand*

**We know that the farmer has been refused reasonable representation in deciding and handling the great questions, even the farm questions, which have arisen out of the war.—Gifford Pinchot.**

The national board of farm organizations, August 29, 1918, passed a resolution declaring whereas the need of concerted action upon agricultural matters was never more imperative, therefore:

Be it resolved, that the chairman of this convention be authorized to appoint a committee, consisting of a chairman and 48 members, one from each of the several states, whose duty it shall be to determine the present status of organizations of farmers in the affairs of the nation and to examine and report what changes, in the widest sense, should be made in the reconstruction after the war, and how these changes can best be brought about.

Gifford Pinchot was appointed a member of this agricultural reconstruction committee, later was appointed chairman of a sub-committee "to collect all possible data about what is being done or planned by agricultural organizations throughout the world with reference to agricultural and economic reconstruction after the war."

Expressing his willingness to make the trip to Europe at his own personal expense he was "authorized and requested to represent the national board of farm organizations and its agricultural reconstruction committee in executing the purpose of the board to secure all available information as to plans and purposes of other nations for reconstruction after the war, which may interest or affect the farmers of America." Further, the object of his mission was declared "to obtain direct and authoritative information upon these subjects for the national board of farm organizations which, including as it does more than 3,000,000 organized farmers, desires this information for the benefit of its constituent bodies, their members and the people of the United States, more than half of whom live in the country."

He was also earnestly desired to convey personally to the farmers and farm organizations of our allies a resolution declaring: "We send our greetings to food producers of our allies and especially to the heroic women of France, England and Italy, who, while the younger men were holding the line, have rendered the most indispensable of all services to the cause of liberty."

It was moreover urged upon Mr. Pinchot to regard it as an especially important part of his mission to ascertain how best the farmers of America can assist the farmers of our allies in Europe in the great problems of agricultural reconstruction. These credentials of Mr. Pinchot were signed by William T. Creasy, chairman of the executive committee of the national board of farm organizations, as well as the chairman of its sub-committee on agricultural reconstruction.

Thereupon Mr. Pinchot made preparations for the trip and applied to the government for a passport. The passport was denied him in a letter dated October 10, 1918, and signed "for the secretary of state" by Alvey A. Adee, second assistant secretary, as follows:

The department has received the applications of yourself and Mr. P. Stephen Stahlnecker for passports to enable you to go to certain European countries for agricultural investigations on behalf of the federal board of farm organizations. In your letter of September 20 concerning the application of Mr. Stahlnecker you say that your object is to obtain "all available information as to the plans and purposes of the farmers of other nations for reconstruction after the war, which may interest or affect the farmers of America."

This department is informed by the secretary of agriculture that the council of national defense is the only body which has been charged by the president with the problems of reconstruction and of discovering what direction effort should take to this end. Furthermore, the department of agriculture has recently sent abroad a competent commission for the purpose of investigating the agricultural problems connected with reconstruction. This commission is now abroad and is in touch with the various governments and agricultural interests of the countries of Europe.

It would not appear, therefore, that your proposed trip is of such urgent necessity as to warrant the issuance of passports at this time: and I am obliged to inform you that this department does not deem it proper to issue the passports as requested.

October 15 Mr. Pinchot wrote to Secretary of State Lansing as follows:

I am in receipt of your letter of October 10, refusing the request of the national board of farm organizations, and my own request, that a passport be issued to me as its designated agent. The purpose of this request was to obtain "all available information as to the plans and purposes of the farmers of other nations for reconstruction after the war, which may interest or affect the farmers of America."

To speak plainly, but without offense, the substance of the letter is this: The secretary of agriculture deems it undesirable that the largest and most representative body of farmers in America be allowed to obtain information upon agricultural reconstruction abroad except through official channels, and the secretary of state accordingly declines to issue passports.

The organized farmers of the United States have the unquestionable right to seek, in their own way and through their own agents, first-hand information on any agricultural subject provided only that their doing so does not interfere with the military operations of the government. The denial of this right would be in line not with American democratic ideals, but rather with the policy and practice of autocratic governments. No free people could afford to accept it.

To refuse any but official information to the people of a democracy amounts to destroying their power to check up and control their official servants.

In numerous instances passports have been issued to enable commercial and other organizations to secure unofficial information of value to them. It does not appear why an organization of farmers should be treated differently.

For the reasons above indicated, I can not escape the conclusion that a mistake has been made. I have the honor, therefore, to ask that your decision may be reconsidered, and that the bar to the unofficial inquiry desired by the national board of farm organizations may be removed.

With reference to the above correspondence, The Farmer has received the following communication from Mr. Pinchot, dated November 23, 1918:

We know that the farmer has been deciding and handling the great questions, even the farm questions, which have arisen out of the war. Apparently it is intended to apply the same policy of repression and neglect to reconstruction after the war also.

Enclosed I hand you (for publication if you so desire) copies of recent unpublished letters between the state department and officers of the national board of farm organizations which tell their own story. I am sending you these letters after instead of before election in order to avoid any possible imputation of playing politics.

No reply to my letter to Secretary Lansing has been received, and I am now satisfied that it will not be answered.

# Nation May Become Dry

Indications are that within a comparatively short time the constitutional amendment establishing prohibition throughout the entire United States will become effective. This amendment was adopted by congress some time ago, but must, before becoming operative, be ratified by the legislatures of three-fourths of the states of the Union, or 36 states.

So far 14 states have ratified the amendment as follows: Mississippi, Virginia, Kentucky, South Carolina, Delaware, North Dakota, Massachusetts, Arizona, Georgia, Louisiana, Maryland, Montana and Texas.

Thirty-four state legislatures will convene this winter, and a majority of the states which they represent are under some form of prohibition at the present time. The following are the dry states whose legislatures meet this winter: Alabama, Arkansas, Colorado, Idaho, Indiana, Iowa, Kansas, Maine, Michigan, Nebraska, New Hampshire, New Mexico, North Carolina, Oklahoma, Oregon, Tennessee, Utah, Washington, West Virginia.

The following are the states not now under any form of prohibition, but whose legislatures will probably vote on the prohibition amendment this winter: California, Connecticut, Florida, Illinois, Minnesota, Missouri, Nevada, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, Wisconsin and Wyoming.

It will be noted from these tables that all four of the northwestern states are dry and will in all probability be found voting in favor of the constitutional amendment at their legislative sessions soon to convene. Montana has already ratified the amendment at a special session last February when the senate approved the amendment by a vote of 34 to 2 and the house by a vote of 67 to 8. With the exception of Louisiana, all of the 14 states that have ratified the amendment did so by overwhelming majorities. In that state the legislature ratified the amendment by a bare majority. In South Dakota, on the other hand, the vote in both houses of legislature was unanimous for ratification.

# Poison Field Mice

Poisoning and general clean-up measures are recommendations for control of field mice made by Professor G. F. Sykes, zoologist at the Oregon Agricultural college. His formula for poison, together with methods of preparation and use follow:

| | |
|---|---|
| Strychnine sulphate | 1 ounce |
| Boiling water | 1 pint |
| Syrup | 1 pint |
| Oil of Anise | A few drops |
| Wheat, barley or corn | 16 quarts |

Dissolve the strychnine in the boiling water, add the syrup and flavor with the anise oil; pour into a bucket of grain and stir thoroughly. If the bait is wet and sticky add a little corn meal or middlings. The poison thus prepared may be placed out by the spoonful in infested areas or in large quantities provided it is protected from the native birds. A simple method is to place over the poisoned grain a board raised on low props.

General control measures are fall plowing or stubble, clearing up fence lines and corners, utilizing straw piles, burning weeds and removing dead weeds and grass from around the roots and base of trees.

# Stock Business Grows

Walter D. Roberts, president of the Spokane union stock yards, says that the business in those yards has averaged half a million dollars per month for the last several months, making a total since the yards were organized of $5,000,000. Cattle receipts at the yards during the first 10 months of 1918 were 41,418 as against 19,267 last year. Hogs receipts this year have totalled 32,791 against 28,808 for last year. Sheep increased from 32,129 last year to 102,282 this year. Horses and mules received at the yards decreased almost half, or from 6065 last year to 3540 the first 10 months of this year. Mr. Roberts says it is the plan of the stock yards company to increase its facilities for handling stock to practically double its present capacity.

### YAKIMA COUNTY CANNING CLUBS.

**Conserve More Than $5000 of Food During the Present Season.**

Yakima county's 18 canning clubs promise, by their work during the critical year of 1918, to do their share in maintaining the lead of Yakima valley among industrial clubs in this country. A year or two ago Professor T. J. Newbill of the department of agriculture stated that two out of three of the best clubs in the entire United States were located in this one valley. These clubs were the Broadway Pig club and the Kiona-Benton Girls' Canning club, the latter located in Benton county.

During the present season the recently completed report of Miss Mae Mark, county club leader, shows that the Yakima county youngsters have earned in food conservation something over $5000. Special credit is given Margaret Kirk, who canned 1051 quarts of products. Miss Kirk gave up many things to make her work a success, and has a record of never missing a club meeting. Katherine Raichle, who canned 800 quarts; Dorothy Sullivan, 739 quarts, and Ellen Hummel, nearly 700 quarts, are also given special mention for quantity and quality of work. Elizabeth Frisque and Jeanette Dash helped make the club encampment at the state fair a success. Jean McAuley, of whose Belgian fruit one jar was sent to Washington, D. C., and one to the state college, and Margaret McDonald, who assisted in getting reports from the Tieton club, are credited with doing much to make canning club work a success in Yakima county.

### EXHIBIT FROM U. OF I.

At the fruit growers' conference to be held in Spokane, December 10 to 13 inclusive, the horticultural department of the University of Idaho will have on exhibition a display of hybrid seedling apples. These seedlings are of known parentage, and are the first fruiting, representing 300 crosses made from the leading commercial varieties grown here in the northwest. This display should be of unusual interest to the fruit growers, since no similar exhibit has before been staged in the northwest.

The apple breeding work in progress at the University of Idaho represents the largest breeding project of any experiment station in the United States. To date there are 10,915 hybrid seedlings growing on the university farm. J. E. N.

### Wheat Versus Flour.

It is declared possible to load a vessel with wheat in three or four days less time than to load it with flour, and the saving represents 20 per cent of the ship's time.

# Records From Contest

The report of the all-northwest egg laying contest, conducted at the state college, Pullman, Wash., shows some remarkable egg records. A pen of White Leghorns, owned by Paul B. Towne, Tekoa, Wash., finished the year on October 31 in first place, with 1261 eggs, beating the pen of Barred Rocks entered by the Oregon Agricultural college by only three eggs. The average of the five hens of the Towne pen was 252.2 eggs a hen, and of the O. A. C. pen 251.6, a difference of sixtenths of an egg a hen. These two pens have made records, the report says, "higher than any pens entered in any contest ever held in America."

The average production of all the pens in the contest, 135 in number, was 171 eggs a hen, a very satisfactory egg yield.

One individual hen in the contest laid more than 300 eggs. This was a White Leghorn hen entered by C. F. Williams of Salem, Ore., and the actual record was 311 eggs. This record has been exceeded by but one other hen in a laying contest in the United States. The second best record was 282 eggs, made by a White Leghorn hen entered by J. R. McRae of Portland, Ore.

The following are the highest pens for the year:

| | |
|---|---|
| Paul B. Towne, Tekoa, Wash., W. Leghorns | 1261 eggs |
| Oregon Agricultural college, Barred Rocks | 1258 eggs |
| F. W. Frederick, Phoenix, B. C., R. I. Whites | 1190 eggs |
| D. Tancred, Kent, Wash., W. Leghorns | 1174 eggs |
| D. J. Kingsbury, Twin Falls, Idaho R. I. Whites | 1174 eggs |
| H. Otto, Everett, Wash., W. Leghorns | 1163 eggs |
| C. F. Williams, Salem, Ore., W. Leghorns | 1163 eggs |
| Oregon Agricultural College, W. Leghorns | 1120 eggs |
| C. C. Lamb, Seattle, Wash., W. Leghorns | 1113 eggs |
| S. C. W. Leghorn Club | 1101 eggs |
| C. H. Numsen, Centralia, Wash., W. Leghorns | 1101 eggs |
| Hollywood Farm, Hollywood, Wash., W. Leghorns | 1090 eggs |
| Bliss & Bliss, Southworth, Wash., R. I. Whites | 1083 eggs. |
| J. R. McRae, Portland, Ore., W. Leghorns | 1079 eggs |
| J. R. McRae, Portland, Ore., R. I. Reds | 1068 eggs |
| H. E. Caldwell, Canutillo, Texas, R. I. Whites | 1051 eggs |
| F. E. Kneedler, St. Louis, Ill., W. Rocks | 1034 eggs |
| La Vista Farm, Baker, Ore., W. Leghorns | 1030 eggs |
| L. E. Harris & Co., Missoula, Mont., W. Leghorns | 1014 eggs |
| Mrs. Ed Vogt, Seattle, Wash., W. Leghorns | 1012 eggs |
| G. H. Scobey, Carrolls, Wash., W. Leghorns | 1004 eggs |

J. D.

# He That Runs May Read

Now that the rainy season has set in all ditches should have an unobstructed outlet.

There is more farm machinery ruined on some farms by being exposed to the elements than by active use.

Now is the time to see that the tops of the bee hives are on solid so that a strong, cold wind will not blow them off during the winter.

The leaks of a barn are not always found in the roof. Liquid manure, which as a rule is lost through a leaky floor, is just as much a loss as feed which is destroyed or spoiled by rain coming through a faulty roof.

Many instances have been known where a strong, cold north wind has come up during the night and frozen the roots in the cellar, which has not been closed up for cold weather. It is always best to have doors and windows ready so that they can be shut at an instant's notice.

A hole in the back of a hen house which causes a draught on the hens on a cold winter day, will do more damage than the time lost in nailing a board over it.

A good supply of dry wood not only pleases the cook, but also makes the wood man feel mighty comfortable when winter comes and he wants to sit by a warm fire.

It takes years to overcome the results in the offspring of breeding a good milk producer to a small, immature, scrub bull. The same rule applies to all other farm stock.

Now that the crops are off the fields the manure can be hauled each day direct to the fields, which will lighten the work in the spring when farm work is rushing. On the fields where there is no solid subsoil and localities where there is a heavy rainfall, however, it is best not to haul it on the land until just before planting time, because if it is hauled on during the rainy season the strength will all leach out and be of no benefit to the crops.

C. J. M.

### WOULD PUNISH THE KAISER.

The Cleveland United Presbyterian church in Ohio adopted the other day, a resolution demanding that the kaiser be justly punished for his crimes before peace terms are finally signed. The resolution was sent to President Wilson.

# Power, Mechanics and Devices

On the small farm, where a small amount of roots are raised the farmer can not always afford to buy an expensive root cutter, especially if he is beginning with limited means. Cutting roots with a knife is slow. A better way is to make a square, shallow box just for cutting roots. The roots are put into the box, and a sharp spade is used to cut them.

Chairman Hurley of the United States shipping board is recommending a campaign for the transportation of more food products from the farms to large shipping points over the public highways instead of by rail. He believes that the wider use of the auto truck for this purpose would not only assist greatly in handling the traffic of the country, but would also be of much benefit to the producers themselves.

## Country Home Lighting

An electric country home-lighting system is, in its essentials, closely comparable with the electric system employed on the modern gasoline-driven automobile. In either are to be found an engine, a generator, a storage battery, switching devices, wiring and incandescent lamps with their equipment. In the motor car, however, the necessity for economizing on space and weight introduces complications which need not and do not exist in country home-lighting plants.

The majority of country home-lighting outfits are supplied complete with gasoline, kerosene, or gas engine; generator, storage battery and switchboard. The engine is usually an improved form of the type at present in extended use for driving pumps, operating washing machines, running churns, etc. Its operation is simple; it is rarely necessary to do more than supply fuel and oil as required. The speed of the engine is usually controlled by means of a simple governor which either reduces the supply of fuel reaching the cylinder of the engine or causes the engine to miss explosions when the speed exceeds a certain rate. The generator is, of course, nothing more than a direct-current electric machine, which, when driven by the engine, will supply electrical energy at a nearly constant voltage. The storage battery, as its name implies, is a reservoir for the storage of electricity supplied by the generator. When the engine is running, lamps or other appliances receive their current direct from the generator.

If more energy is generated than is required by the appliances the surplus is stored in the battery for future use. When the engine is not running the energy which has been stored in the battery is available, so there is no interruption of service. The switchboard usually carries an "ammeter," which indicates the current flowing to or from the battery; a "voltmeter," which shows at what electrical pressure the current is being distributed to the various appliances; such switches and controlling devices as are necessary to the proper operation of the plant; and sometimes an ampere-hour meter which gives some indication of the amount of energy stored in the battery for future needs.

The rules for the proper care of any type of battery are simple and may be easily observed. Briefly, the points which must be borne in mind are: The battery should not be undercharged or overcharged to an excessive degree, or charged at too high a rate; it should not be overdischarged or discharged at too high a rate; a discharged lead battery should not be allowed to stand idle for long periods; the liquids in the cells must be kept at the proper height and only pure water used to replace that evaporated; the sediment which gradually forms within lead cells should not be allowed to reach the plates. The instructions of the manufacturer explain in detail the methods of testing cells to insure proper operating conditions at all times.

In size country home outfits range from about 500 watts upward. For the usual country or suburban home, consisting of seven or eight rooms with bathroom, attic, and basement, a plant with a generator capacity of 750 watts will provide ample energy for lighting the house and outbuildings, and will permit the use of an electric iron, small motors, or a toaster, during the daytime when the lighting system is not in use, or when not more than a few lights are used. Although a plant of smaller capacity would, under usual conditions, provide capacity sufficient for lighting alone, a size at least no smaller than 750 watts should be selected, because with a smaller plant electric irons and similar devices can not be used to the best advantage. In general, the capacity of the plant should be equal to the total wattage of the lamps which are likely to be in use at any one time, provided the required capacity, as calculated in this way, exceeds 750 watts.

The electric farm lighting system of the present day is in most cases a thoroughly practical plant and if given proper care is good for a long period of efficient service. The price of systems that are dependable ranges from $500 up, depending, of course, on the size of plant selected. The cost of upkeep is small so that once the plant is installed the great convenience and many advantages of having the home and premises well lighted is had for a very nominal figure.

## Ever Hear It This Way?

My neighbor, Brown, bought him a tractor last year. He told me toward fall it was all out of gear. He couldn't get service, couldn't fix it himself, so when it went wrong it was "laid on the shelf." He said he was sorry he bought the blamed thing, and would sell it for less than he gave before spring.

"Now listen here, Brown, I am mebby a fool, but with that good a tractor I'd sort of keep cool, and I'd learn all about it from bottom to top, so I'd know what was wrong if she came to a stop. The trouble is not with the tractor," I said. "It's a piece of machinery, but you've got a head. If you knew every part of it, how it should work, I don't think you'd let the thing lay down and shirk. You'd locate the trouble, and know what to do to keep it a going the season right through."

"But," says he, "can I learn how to know every part, how to fix up its 'innards,' to give it a start when it balks and just simply refuses to budge—when such a thing happens how am I to judge whether dynamite ought to be used or a touch to adjust the ignition or alter the clutch?"

"Now look's here, Brown," I reminded him then, "there's good tractor schools all around wanting men, and they make it their business to teach you to know the whys and the wherefores that make the thing go. If you'll just go to one of these schools I am sure that they'll teach you each tractor disease and its cure, or at least you'll find out how the critter is made, and how you can go about giving first aid; if she quits on the job or develops a break, you'll know the repairs it's essential to make."

"Your suggestion is good," answered Brown, "and what's more, I'm surprised that I never have sensed it before. I'll look up a school and enroll for position of learning to be my own chief mechanician. I'll learn how to handle this tractor," said he, "till I'm able to make the old thing climb a tree. I'll teach it to purr in the roughest of weather, I'll take it apart and I'll put it together; I'll go to a tractor school same as to college, and fill my head full of mechanical knowledge; for just as you say, any owner who chooses can handle expertly the tractor he uses. Time, trouble and money a man loses by fooling seems to me will be saved by some technical schooling."


*Top Dress with Nitrate*

# Plenty of Nitrate in Chile

The total amount of Nitrate of Soda in the vast Chilean Deposits is

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*Moline-Universal Power Lift Gang*—Extra strong construction, simple power lift operated by foot lever, equipped with quick attachable shares and combined rolling coulters and jointers. In average soil conditions this outfit will plow 9 acres a day

*Moline-Universal Disc Harrow*—Strongly constructed with 18-inch blades. Each gang has 3 large dust-proof bearings equipped with wood bushings. Easily and quickly adjusted. Built in 6 and 7-ft. sizes double cut, or 8, 9 and 10-ft. single cut.

*Moline Grain Drill*—Operator sits behind the drill where he can see work being done. Furnished in a great variety of sizes either as plain or fertilizer drill. Deposits seed with unvarying accuracy. Equipped with either single or double disc furrow openers.

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Mr Nile Kinnick of Adel, Iowa, operates a 400-acre farm and all the work is done by two men, two Moline-Universal Tractors and one team of mules. This is what he says about the Moline-Universal:

*"I was agreeably surprised with the ease with which we could cultivate corn, and for harvesting it far surpasses horses or mules. It appeals to me as an ideal tractor. It will actually replace horses, something that most farmers must consider when they plan to buy a tractor. The ease with which it is handled and the advantage of operating the outfit from the seat of the implement are facts that cannot be appreciated until one has tried it."*

This expresses in a nutshell the advantages of the Moline-Universal. It does *all farm work* including cultivating; *one man* operates both tractor and implement from the seat of the implement; it has *ample power* for heavy field and belt work, yet can be operated economically on light work.

Another big feature that makes the Moline-Universal superior to all other tractors is the complete Moline Line of Implements to be operated in connection with it. This does not mean it is necessary to purchase all of these implements with the tractor, as many horse drawn implements can be used successfully. But it does mean that a Moline-Universal owner can operate his tractor to full capacity at all times and make the best use of the operator's time by using Moline tractor implements. They do better work with the Moline-Universal, are of larger capacity, stronger construction, are designed to run at higher speeds than horse drawn implements, and will pay for themselves in a short time.

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*Moline Mower No. 4*—Built in 6, 7, 8 and 10-ft. cuts. The largest capacity mower in the world. Proportionately larger and stronger than ordinary mower. Equipped with spring draft rod. One man operates both tractor and mower.

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*Moline-Universal Tractor Attachor*—A great variety of equipment can be attached to rear crossbars, so that majority of operations in orchard and vineyard work and cane growing can be performed with this one outfit.




A. B. NYSTROM, Editorial Contributor.

# Tests Are the Proof

By A. E. Gipson.

It seems that sometimes the judges of dairy animals have to reverse themselves. While this may be somewhat disconcerting to the experts, it is only another reminder of the accepted saying that there are exceptions to every rule. The "conformation" theory in animal husbandry appears to be pretty well established, and yet is not infallible of itself. When it comes to the determining of the milk and butterfat production of the dairy cow, or her possibilities in that direction, the only way to be certain is to use the milk scale and tester.

The incident to which reference is made occurred at the national dairy show this year, when the Barnsville Cow Testing association of Ohio, with a complete record of the cows that were on exhibition, asked visitors at the show to pick the best five cows of the 11 shown. The account goes on to say that "in every case one or more poor producers were placed well toward the top, while good producers were shoved to the bottom. In this case all of the cows were Jerseys, and so special interest was aroused, says Hoard's Dairyman, when two somewhat noted Jersey judges placed the awards.

One of the cows, the report continues, had every appearance of being a good producer—deep, long body, good milk veins and rather desirable type. Naturally they placed her among the best five, but imagine their chagrin when they found her yearly production to be 2523 pounds of milk, containing 149 pounds of fat.

In answer to the claim that the poor showing of this cow was due to improper feeding, investigation showed that she came from a herd having several cows with records of over 500 pounds of fat and others with excellent production. The poor production of this particular cow was largely explained by her not being a persistent milker. Two of the 11 cows, with records of 417 and 421 pounds of fat each, were among those discarded by several in passing upon the merits of the herd shown. Hence there was naturally considerable confusion among the supposed experts when the real performances of the animals were disclosed by authenticated records from the cow testing association.

The incident related by no means discredits the contention that the dairy cow can usually be judged with reasonable accuracy by her physical conformation. But while this is true, it should be remembered that the only reliable test, as already indicated, is the one disclosed by the milk scale and the testing devices. Herein lies the certain value to the owner of milk cows of the cow testing association. It will locate definitely the unprofitable boarder as well as the revenue producer, and that is the essential thing to the success of the dairy, whether large or small. In the absence of the cow testing association careful use of the Babcock test and the scales will do the same.

Guesswork, and poor at that, has been the cause of lagging returns, if not of failure, in many a dairy, and it's an unsafe thing to rely on in any business enterprise.

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CORRECT WEIGHTS AND TESTS
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DON'T feed milk to calves. Feeding high-priced human food to calves is *waste*. Mature calves early, big and healthy on Blatchford's Calf Meal at ¼ the cost of milk. The other ¾ is *clear profit* to you. Write for the facts today.

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# Apple Pomace Good Feed

E. O. Erickson of the Jersey Home dairy, Yakima, Wash., reports excellent results with the use of apple pomace for silage. A 30-ton silo on the Erickson farm was used for storing pomace last season, and two more, one of 30 and one of 90 tons capacity, are soon to be erected. The pomace is put into the silos by means of a silage carrier, which has been fitted up to do the work.

"It may be a little harder to get pomace into the silo," says Mr. Erickson, "but once in, your trouble is ended. It doesn't have to be tramped down, as corn silage does. It settles air tight, and seals itself over in a hurry. I remember several years ago, before there was any talk of feeding the stuff, seeing a pile of it lying near the mill. It was spoiled on the surface, but when I took a stick and dug into it I found that it was just like silage inside."

Mr. Erickson says cows that will eat corn silage will eat pomace, and that even if they are not used to silage they will soon learn to look with eagerness for this by-product of the cider mills. All things considered—the ease with which it is stored, convenience in handling, etc.—he believes that present conditions under which much pomace is going to waste will soon be changed.

Two hundred or so head of registered Jerseys to which the pomace is being fed on the Erickson farm are housed under sanitary conditions. Jersey Home dairy is ideally situated, the buildings and exercise yards lying high, with just enough slope in the latter to insure good drainage. All of the buildings are modern. A 72-foot addition has recently been made to the milking barn, which makes the building 108 by 36 feet. The floors are concrete, and lots of sunlight is assured by the generous window surface. An Empire double unit milking machine has recently been installed, and Mr. Erickson states that he is well pleased with the way it is working.

"For the man who is willing to do his part, I believe a milking machine is a good investment," he comments. "They aren't fool-proof. You can't go away and leave the machine to run itself—but you can strip the cow next the one the machine is on while you keep track of it. The man who knows his cows best and who handles them as individuals will get the best results from his machine."

Mr. Erickson's brother, who is interested in the dairy business with him, is now in France with the American army. In a letter he told of sleeping in an old church whose walls and windows were pierced with shell holes. In the quiet French church-yard outside other American soldiers were sleeping—probably many of them farm boys.

### A MOVABLE MILK STAND.

In the newly settled districts of the country, where the roads are not made permanent and there is some work done on them each year, farmers find out that the road overseer who comes to supervise the road work takes their milk stands and breaks them when he takes them out of the road, especially if they are built on posts driven into the ground. To avoid this trouble of making new stands build them on runners, so that they can be removed at an instant's notice and later put in place again. C. J. M.

### Camel Hump Used as Food.

Camel hump is regarded as a great delicacy by the Arabians.




The Light
Allwork Tractor
Burns Kerosene

**Get Your Money's Worth In Work Every Season**

THE Light "Allwork" Tractor is built for all around work in any season of the year. Powerful for heavy plowing—light enough to get out on wet land in early spring or on a soft seed bed for harrowing and seeding—low enough for orchard cultivating—plenty of power for belt work. Here is the *practical* light-weight, high-power farm tractor. Free from freakish features—runs on four wheels; carries the largest 4-cylinder engine we know of on any 3-plow tractor. It sets crosswise on the frame, thus giving direct spur gear drive—no bevel gears. Belt pulley is on direct line with crank shaft.

*4 cylinders, 5 in. bore, 6 in. stroke, 750 R. P. M., develops 28 H.P. at belt and 14 P.P. at drawbar. Automobile type front axle, roller bearing rear axle—self-oiling steel gears thoroughly protected from dust. Weighs 5000 lbs. Develops 3000 lbs. drawbar pull and 4000 lbs. on low gear. Burns kerosene. Turns in 12-foot radius—pulls three plows (will pull four under favorable conditions)—will run 18-inch silage cutter, 28-inch separator—pull an 8-foot road grader. Gasoline or kerosene fuel. Two-speed transmission working in oil.*

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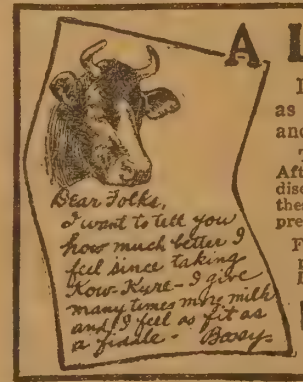
**Spring** Plow, harrow, drill, pull manure spreader, cultivate orchards, etc.

**Summer** Pulls binder, hay loader, drives clover huller, thresher, plows, etc.

**Autumn** Run silo filler, corn sheller, baling press. Plow, haul loads, etc.

**Winter** Run wood saw, feed grinder, pull stumps, general belt work, hauling.

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General Agents Oregon and Washington for the
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See Ad above. Write for catalogue.




**A Letter from Bossy**

If a cow could speak she would talk about her health as people do—because cows suffer from ailments, little and big, same as human beings.

The most common cow ailments, such as Abortion, Retained Afterbirth, Lost Appetite, Bunches, Scours, etc., result from a diseased condition of the digestive or genital organs. Any of these diseases and many others can be successfully treated or prevented by using Kow-Kure, the great cow medicine.

Feed dealers and druggists sell it—60c. and $1.20 packages. Free book, "The Home Cow Doctor," sent on request.

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Two cents per gallon when reduced to original consistency.
MILKOLINE is a highly condensed buttermilk—each gallon being equal to 50 gallons of buttermilk.
Every Hog and Poultry raiser should feed buttermilk—this makes it possible.
WRITE FOR CATALOGUE.
T. E. HOPKINS
5516 Wallingford Ave.
Seattle, Wash.

LIVE STOCK NOTES

Write to the Editor.

E. J. IDDINGS, Editorial Contributor.

# Wool Will Sell High

Northwest sheepmen will receive nearly $1 per pound for wool this year—the highest price on record—according to W. E. Evans, representative of New York woolens.

Mr. Evans represents a firm which is said to be one of the largest American wool buyers and, as a result, he is in close contact with the wool market.

"During the last three years wool prices have soared to such levels that flockmasters have grown rich in a single season. This was due to the fact that the English government declared an embargo on Australian wool. This product could not be imported from other parts of the world because ships were not available. The demand was increased when America entered the war and let contracts for army uniforms, hats, overcoats, woolen socks, sweaters and other wearing apparel.

"Although the demand was increasing, production was decreasing because the vast open western ranges had been invaded by the settler and the dry-land farmer. As soon as a country is settled and devoted to agricultural purposes, the production of wool on a large scale ceases.

"As a result of this combination of conditions, prices soared and northwestern sheepmen, I am told, reaped a golden harvest.

"With the war ended, you are wondering if prices will continue to advance. I say, yes. In Germany, Austria and other European countries there is not a stitch of wool or an inch of woolen clothing. The end of the war has opened up a great market for wool. France, England, Italy, Spain and other countries will also demand wool.

"While the demand has been increasing, production has steadily decreased to such and extent that America only produces one-third of the amount needed for manufacturing purposes in this country.

"I believe that present prices will not decline for at least three years." A. B. K.


## Get Guernseys

If you want to increase your dairy profits, you need to know about the cows whose average production, under test supervised by state agricultural colleges, is three times as great as the average of all dairy cows in the United States. Ask for "The Story of the Guernsey."

THE AMERICAN GUERNSEY CATTLE CLUB.
Box W., Peterboro, N. H.


## Shorthorn Beef Records

An Illinois load of yearling Shorthorn steers made the world's market record at Chicago October 3, selling for $19.60 per cwt.

An Iowa load of Shorthorns sold for $19.50 September 16, averaging $303 per head, the previous record.

A Wisconsin Shorthorn load made the Wisconsin record at $18.35 and a Shorthorn load bred in Montana made the record for range steers at $18.

American Shorthorn Breeders' Association
13 Dexter Park Ave., Chicago, Ill.


## DON'T KILL YOUR CATTLE

BY DRENCHING

Salts and oil are DANGEROUS. Few cattle die of constipation; many of PARALYSIS of the bowels. Give



LAXOTONIC

dry on the tongue. Positively prevents and overcomes both. Excellent for loss of appetite.

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Send for price list of medicines. Consult DR. DAVID ROBERTS about all animal ailments. Information free. Get a FREE copy of "The Cattle Specialist" with full information on Abortion in Cows.

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## Holsteins in America

The Holstein-Friesian breed of dairy cattle has been established in this country nearly 50 years and has made good. The breed is used to improve the dairy qualities of the cattle of Europe. It is in demand also in Canada, Mexico, Australia, New Zealand, South Africa, Japan, Argentina, Central America, and other countries, and holds all records for largest yield of milk and butter. They are large, strong, vigorous, prolific, and productive cattle.

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Send for our booklets—they contain much valuable information.

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WHITE SCOURS
BLACKLEG

Your Veterinarian can stamp them out with Cutter's Anti-Calf Scour Serum and Cutter's Germ Free Blackleg Filtrate and Aggressin, or Cutter's Blackleg Pills.

Ask him about them. If he hasn't our literature, write to us for information on these products.

The Cutter Laboratory
Berkeley, Cal., or Chicago, Ill.
*"The Laboratory That Knows How"*


## PEA FIELDS FEED HOGS.

Ostheller Bros. of Fairfield, Wash., report that they made a profit of $2300 by purchasing 267 head of stock hogs this fall and turning them in to glean their pea fields, the shattered peas being the principal feed by which this profit was made. The Fairfield district is one of the most prominent pea-growing districts in the United States, and those who have tried the hog business in connection with the pea growing consider that in any locality that will produce peas the fields provide an excellent source of hog feed.

# VETERINARY

By DR. S. B. NELSON.

**Mare bruises leg.**—I have a valuable 4-year-old mare that I was breaking and she got to kicking and bruised one of her hind legs. It is swollen and has broken and is running in several places. It is a kind of a yellow foam. What would you advise to do for her? C. P.

Des Moines, N. M.

I would suggest that you wash out the wound three times daily with a sufficient quantity of the following prescription: Sodium chloride, one ounce; sodium nitrate, one-half ounce; boiled water, three quarts. After mixing put in three quart bottles and use the quantity necessary with a syringe.

**Remedy for warts**—What is the best remedy for warts? I have a heifer that is to freshen in December and her teats are covered with warts. I also have a yearling heifer that has one ear covered with warts inside and out. It has one larger than a walnut inside the ear close to the head. It is a big black one. The others are all smaller. J. G. F.

Glenwood, Wash.

You will find the following sometimes to be of considerable value in the treatment of warts. Chloral hydrate, 1 1-2 drachms; acetic acid, absolute., drachs, 1 1-2; salicylic acid, drachm, 1; spirits of ether, drach, 1; collodion, 4 drachms. Apply to the warts twice daily.

### Methylene Blue for Abortion.

To the Editor of the Farmer: Several years ago we had a cow that had abortion. She was served four times and each time she would go about three months and then abort. We tried several remedies without success. At last we tried Methylene blue—a dyestuff that is perfectly harmless and is also used widely as an antiseptic. We obtained a small quantity of it and commenced to feed it early in pregnancy, giving one-half ounce mornings and evenings on the tongue, dry, for seven days, then letting up for four weeks, and then commencing over again. We kept this treatment up until she was well out in pregnancy. This treatment cured her. Since then she has had several healthy calves and there is no symptoms of her former trouble.

Methylene blue can be obtained at the drug stores. The medicinal grade, and not the commercial grade, should be used. At the present time it is very expensive, and hard to be had, as it comes from Europe and the supply is now cut off on account of the war. CARL J. MENZE.

Ferndale, Wash.

In commenting on the above, Dr. S. B. Nelson says: The above treatment is the treatment recommended and worked out by Dr. Richardson of the Vermont experiment station. Upon his findings and experiments it has been recommended throughout the state of Washington by veterinarians of the College of Veterinary Science and at many, many farmers' institutes, to be one of the valuable lines of treatment to be followed in an outbreak of abortion. There are two drawbacks to it. First is the expense of the treatment at the present time, which is practically prohibitive. The second is that when the treatment is used for a long period of time the intense blueness of the drug is transmitted to the surroundings and to many people that is quite objectionable. However, along with proper sanitation and sanitary conditions of the cow and her surroundings it is a splendid adjunct when it can be used without too great expense.


## -: AN INTERESTING SHORT STORY :-

We cannot prepare any better advertisement for

# GOMBAULT'S CAUSTIC BALSAM

than the following voluntary testimonial from a man who stands very high in all business and social circles where he is known:



No. 2131 Wyoming Avenue, Washington, D. C., November 26, 1917.

The Lawrence-Williams Co.,

Dear Sirs:—I have had GOMBAULT'S CAUSTIC BALSAM constantly in my home for thirty-three years and have used it for a large number of animal and human ailments. It is by far the most effective, reliable and economical medical preparation that I have ever known. Its persistent use for chronic rheumatism, lumbago, neuritis and kindred troubles bring sure relief. For sore throat, pains in chest and acute cramps it penetrates and relieves pain. For mosquito bites, bee stings and bites of all other vermin it instantly stops all irritation. For itching between the toes and on limbs, it is an instantaneous cure. For fresh cuts, wounds and old sores, it eliminates all danger from blood poisoning and hastens a cure. A few drops of CAUSTIC BALSAM is more effective than half a bottle of any other application that I know of.

Truly yours, M. J. LAWRENCE.

**GOMBAULT'S CAUSTIC BALSAM** has had a steady, reliable sale in France, where it is made, for forty-five years. In the United States and Canada, with only moderate advertising, it has had an increasing sale for thirty-five years. The demand is produced strictly by its merits. Price, $1.75 per bottle. Sold by druggists, or sent by Parcel Post on receipt of price. Guaranteed to give satisfaction. For further particulars and unlimited testimonials, address

**The Lawrence-Williams Co., Cleveland, Ohio**

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# Mike laughed at the Judge



*for chewing Gravely.*

The Judge came right back at Mike with a friendly chew—just a couple of little squares off his plug of Real Gravely.

Mike found that the chew stayed with him for a long while, and the more he chewed the better it tasted.

"There's the real tobacco satisfaction," says the Judge: "and it costs nothing extra to chew this class of plug."

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*It goes further—that's why you can get the good taste of this class of tobacco without extra cost.*

PEYTON BRAND

## Real Gravely Chewing Plug

*each piece packed in a pouch*

P. B. GRAVELY TOBACCO CO., DANVILLE, VA.



# BEET PULP

Larrowe's Dried.

## THE MILK MAKER

A limited supply of this feed available this season. Orders should be placed now—one-eighth usual amount allotted to Spokane. Write now, stating quantity desired.

Ask for information on **Cocoanut Meal.**

## SPOKANE SEED CO.

Dairy Supply Dept.

902-4-6-8-10 First Ave. Spokane





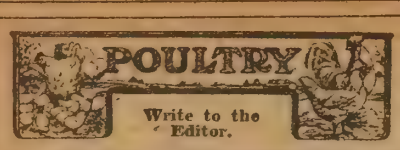

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PROMPT RETURNS—TOP PRICES


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JAMES DRYDEN, Editorial Contributor.

## Poultry Is Preeminent

The work of improving egg production by scientific breeding received a great impetus from the investigations of Dr. Raymond Pearl, biologist of the Maine experiment station for a number of years. For the last year of more Dr. Pearl has been statistician of the food administration bureau at Washington. As a result of his work and studies there he has formed some rather decided views as to the place poultry will take in the future in the economy of production, and he has expressed his views along this line in a letter published by the Reliable Poultry Journal. Part of his letter follows:

"I have been gratified because my work in the food administration has put me in a position to realize how acute the food problem may become under certain circumstances and also the studies we have conducted here have made it increasingly clear that the day of the large unit such as the beef animal in the production of necessary foods of animal origin, is rapidly passing. The steer is too uneconomic a transformer of energy to last long as a chief source of food for mankind. The war has very much accentuated this development and has turned our attention to the relatively greater economy in production of smaller units, such as poultry.

"With the steady increase in population in proportion to the habitable area of the earth there is bound to be a turn more and more toward the smaller animal unit as a producer of food. Among all such animals poultry is preeminent, but in order to maintain this position we must have highly developed poultry."

Highly developed for what? For egg and meat production. J. D.

## Use Care in Marketing

Poultry producers may not only assist greatly in the solution of the food problems but may as well secure much greater compensation for their efforts if they will follow a few careful rules in marketing, says the United States food administration. Among the points emphasized by the administration are the following:

Withhold from market all immature birds, except during the season for spring fries; never place moulting hens on the market; never market fowls that are in poor flesh; never market laying hens unless it is absolutely necessary. The food administration warns producers at this particular time of year that they should endeavor to slow up the delivery of poultry to the markets as there is a tendency to oversupply and thereby reduce the price of the poultry.

### BREEDING BARRED ROCKS.

**Except for Show, Shape and Color Are Not of Great Importance.**

To the Editor: Would like a few suggestions as to the color and shape of Barred Rocks to be kept for breeding purposes. Should they be light or dark?

Chewelah, Wash. W. K.

If one is breeding Barred Rocks, or any other breed, for egg production or for utility only the shape is not very important. When it comes to laying, they are like trotting horses, as some one has said, they "go" in all shapes. It is difficult to give in words a real conception of shape. The best way is to study the fowls themselves. If one is breeding for show, as shows are usually judged, he should study other show birds and read the "Standard of Perfection," which is the guide of the judge. The Standard says the Plymouth Rock cock should weigh 9 1-2 pounds and hen 7 1-2. The cockerels and pullets are lighter. They may be Plymouth Rocks, however, and not have the Standard weights. But in the show room the nearer they come to the Standard weights the better chance they have of winning a prize. When it comes to egg production the heavy producers are usually smaller than the Standard calls for.

In regard to color, if one has a flock of breeding hens of good color, to raise pullets from them of the same color the sire must be of lighter color; but to get cockerels of the same color as the hens a darker male should be used. The males always come lighter in color than the females. The Standard demands the same shade of color in each, and that is why many resort to double mating—one yard mated for producing pullets of exhibition color and another mated to produce males of right color. That is not nature, but the shows demand it. It makes no difference in their production whether they are light or dark. J. D.

### HATCHING TURKEYS.

**Natural Method Brings Best Results, but Incubator Can Be Used.**

To the Editor: Can you tell me through the columns of the Farmer whether turkey eggs can be successfully hatched in an incubator or not. I always have so many eggs in the spring before hens want to set and it is the early turkeys I want.

M. C.

Leahy, Wash.

Turkey eggs may be hatched in incubators, but very few are hatched that way. In cases like this, where eggs are plentiful and no hens ready to set, it would be a good idea to use the incubator. One should understand the operation of an incubator, however, or there is likely to be a waste of valuable eggs. Would advise the use of turkey hens for brooding the poults. By the time the eggs hatched there would likely be brooding hens ready for the poults. Chicken hens could also be used for brooding. It will be better to hatch by the natural method where broody turkeys are available. It is well to start a year in advance to get brooding hen turkeys. Hatch them early enough so they will be mature and be ready to lay next year early in the season, and there will be more early setters.

An experiment in hatching turkeys artificially was made by H. L. Blanchard at the Puyallup (Wash.)-experiment station a few years ago. J. D.

### PROBABLY WRYNECK.

To the Editor: Our chickens have been dying off ever since spring. They droop around for a day and then they squat down and curl their feet under them. Their necks get bent and their heads droop down. What is this disease, and the cause, and is there any cure for it? G. A. E.

Lynden, Wash.

From the symptoms given the chickens probably have wryneck. This usually comes from an overfat condition and lack of exercise. Try a dose of epsom salts, quarter teaspoonful to the bird, dissolved in water and mixed in a mash. Feed this when they are hungry, making sure that they all get a share. Give all the green food they will eat, and make them exercise for their grain feed in a deep litter of straw. Keep them a little hungry for a week or two. Give buttermilk, all they will drink. J. D.

### MONEY FROM DAY-OLD CHICKS.

Carl Douglas, living 17 miles from Seattle, purchased 100 day-old chicks in the spring of 1917. They were Rhode Island Reds, and were bred and hatched by Mrs. Dubor of Kirkland, Wash. The Douglas family raised all but four of the chicks, and this fall sold them in the Seattle market at 50 cents a pound, and now they want to give Mrs. Dubor credit for good, healthy stock of strong vitality.

**A War Precaution.**

Italian newspapers, to foil spies, no longer print "personal" liner advertisements.


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Spokane, Wash.




GRANVILLE LOWTHER,
Editorial Contributor.

## SHIPPING APPLES TO ENGLAND.

One of the buying firms of Hood River, Ore., is Dan Wuille & Co., of England. A. E. and W. R. Woolpert are the Hood River representatives. These gentlemen have a large orchard across the river at White Salmon, Wash.

"The apple crop of the district is a very good one," said A. E. Woolpert. "The Newtowns are a good yield and of high quality. The Spitzenbergs are a medium yield. Ortleys are good. These are the principal varieties here. We are exporters to all parts of the world. The Newtown holds up better than any other commercial apple, and is very popular in England.

"They raise lots of apples in England, but they are all early and not of first-rate quality. Australia and Tusueania ship apples to England, reaching that market in April and May. Then the local product fills in till American apples come in.

"Before the war Germany was a good market, red apples being preferred. South America is a large and growing market."

This firm owns thousands of acres of land in the Canary islands, and raises and exports bananas, oranges, grapefruit, potatoes, onions and tomatoes, and by this variety of products is selling all the year, and so reduces the "overhead."

Mr. Woolpert says the idea that irrigated fruit, properly raised, differs from other fruit is not correct. Too much water will affect fruit and vegetables injuriously, and so will too much rain. After a tree is 15 years old lack of sufficient moisture will be fatal. Trees need water and must have enough to support them or they will not produce full crops, and will finally die.

## USE EYES INTELLIGENTLY.

It's not so difficult for an outsider to break into the fruit producing business, according to W. H. Curtis of Yakima, Wash. Mr. Curtis used to be a newspaper man in Iowa, but now he raises and sells apples.

"The main thing in getting used to orchard work," comments Mr. Curtis, "is to keep your eyes open and not take too much advice. Advice, you know, is the cheapest thing in the world, and much of it isn't worth any more than it costs. When I came out here I didn't know anything about pruning, so I began to watch really expert pruners as they worked. What I wanted to discover was their aim—the thing they were trying to accomplish by pruning. And I succeeded so well that I think I may claim to be one of the best pruners, at any rate as far as my theory goes, in the county. It's largely a matter of using your eyes intelligently."

P. E. T.

## AUTO TRUCK IN ORCHARD.

The influence of the auto-truck was strongly felt in the great Wenatchee (Wash.) fruit district this season. The apple crop is reported to have been picked and packed more quickly than ever before. The fruit colored up rather late and picking thereby started late. But in spite of general war conditions labor was fairly plentiful and the work was quickly done. Growers, packers and buyers agree that the number of auto-trucks, both local and those that come from the outside for the season, helped prevent congestion in many an orchard and packing plant. Those big trucks that hauled from 250 to 300 boxes of apples at a load, kept the apples from accumulating where storage space was scarce, and got them quickly to the packing houses or cars. There has been no actual car shortage, though available cars were used as fast as they were furnished, and could frequently have been used faster. Box cars were used to some extent for shipping in the early part of the season.

## WANT FRUIT SHIP LINES.

Joseph Bigiorgio, president of the Earl Fruit company, says that he would like to see the government establish a direct steamship fruit line to Europe and other foreign countries. He says that the government is the only one now in position to inaugurate such a movement, but that after it became well started it might be taken over by private capital. His idea is that ships should be fitted especially for carrying fruit and that they should be operated on a regular schedule from the fruit ports with fruit as their major cargo at all seasons possible.

## MUST EXPORT APPLES.

"The principal question now interesting apple shippers and growers," says W. L. Wagner of the firm of Wagner & Sons of Chicago, "is the probability of being able to export a considerable quantity of this year's northwestern crop. Advices from the seaboard are to the effect that the steamship freight rate on apples will be about $4 a box. This, with other charges, would make the cost of laying a box of apples down in Liverpool more than $5."

## TWENTY-NINE-ACRE ORCHARD.

### Yields 4000 Boxes of Apples During the Second Year.

An agriculturist is distinguished from a farmer, it has been said, by the fact that the agriculturist makes his money in town and spends it on his farm, while the farmer makes his money on his farm and spends it in the city. Judged by this standard Arthur Lund, president and manager of the bank at Tonasket, Wash., is a farmer. Mr. Lund owns a 29-acre orchard near Omak, a little farther down the Okanogan valley. This is its second year of bearing, and he will have 4000 boxes. The varieties are Delicious, Spitzenberg and old style Winesaps, and I can personally say I was presented with about the finest specimens of all three varieties I ever saw, as to size, color and flavor. It is no wonder the fame of the Okanogan and Wenatchee Delicious is growing to be world-wide.

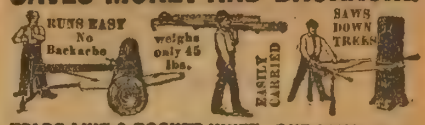
Mr. Lund gives credit for the success of his orchard to Soren Peterson, who has cared for it from the start and whose 29-acre older orchard yielded 12,000 boxes of apples this season, about 635 boxes per acre. Mr. Peterson has Delicious, Winesaps, Jonathans and a few Spitzenbergs. These orchards are under a government irrigation system, but are supplemented by a pumping plant from a lake on Peterson Brothers' land, which was operated before the government system was put in.

While Mr. Peterson modestly gives much credit to the climate, soil and sunshine of the valley he says raising apples here takes intelligent care, as it does anywhere. He first sprays in April with lime and sulphur. In May he sprays with arsenate of lead, while in blossom, and repeats twice through the summer. While there is no scale, the lime-sulphur is a preventive and is good for moss and many pests. The lead, of course, is for codling moth—the most troublesome pest in the Okanogan valley. The time of spraying varies according to need. Mr. Peterson also sprays for aphis when needed, which is as soon as they appear, sometimes as soon as the trees leave out. The spray for aphis is used all through the season. Most of the apples from both orchards are sold in Chicago, and bring fancy prices. H. A.

## MOTH IS COSTLY.

Conservative estimates indicate that the losses from the codling moth alone in the state of Washington this year, will total more than $4,000,000, says W. S. Thornber of the state college. This problem alone, if properly solved, will mean the difference between an absolute loss and a neat little profit on many a fruit farm.

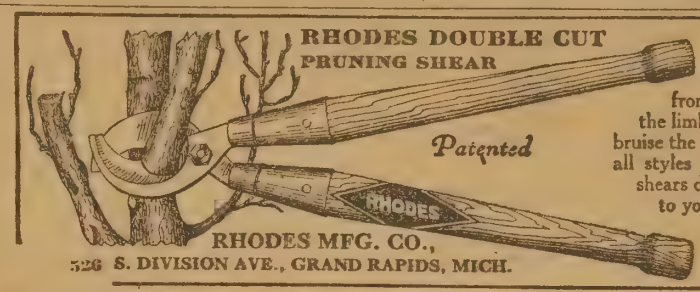
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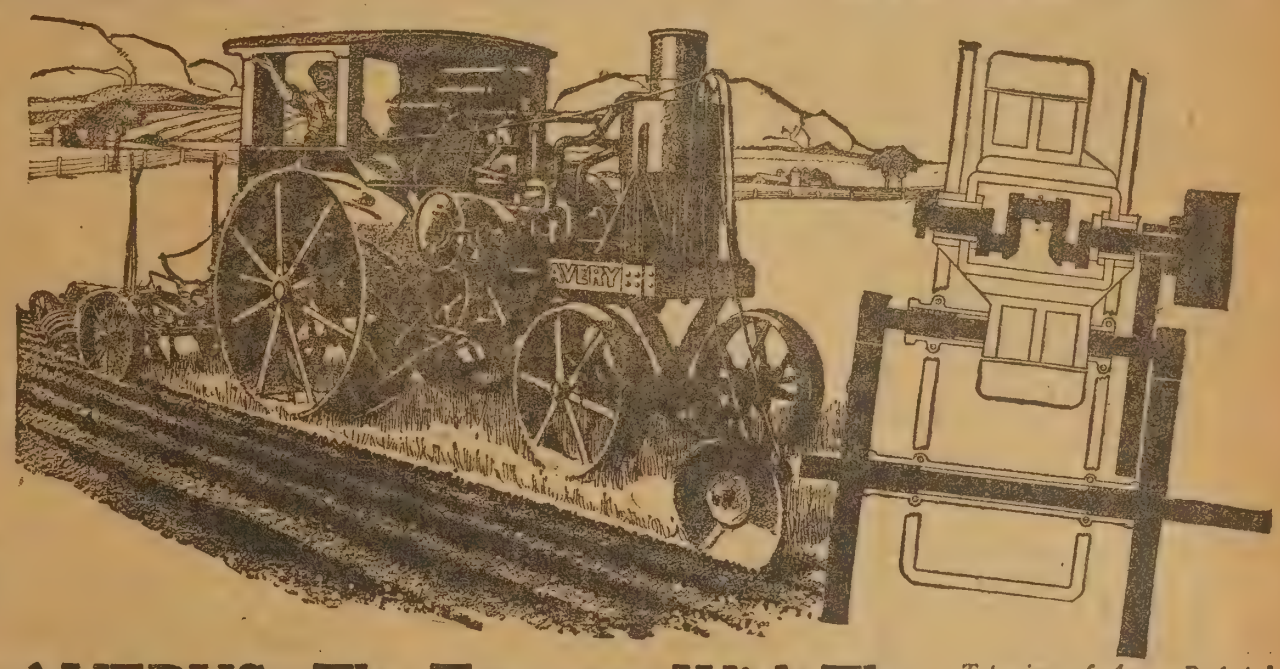



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THE **Perfected Opposed Motor** used in Avery Tractors has advantages for tractor work which no other tractor motor has.

An opposed motor distributes the weight correctly between the wheels, makes possible a narrow tractor—has a short crankshaft with only two bearings—is stronger in construction and runs at a low speed.

The **Avery Perfected Opposed Motor** has all these advantages—and then many more. We built it with the heaviest crankshaft in any motor, a round radiator with thermo-siphon cooling system, and valves in the head. Then we invented the wonderful Avery renewable inner cylinder walls, adjustable crankshaft boxes and gasifiers for burning kerosene and distillate. **No other motor used in any tractor has even half of these features.** The power of this motor is delivered to the belt wheel and drawbar by the simplest system built—the **Avery Patented Sliding Frame Transmission.**

This is the only transmission that makes possible a direct drive in either high, low, reverse or in the belt. It has only one clutch—only three shafts—only eight gears—all straight spur gears. The belt pulley is mounted on the crankshaft, and no crankshaft bearing on the frame or bevel gears are used. Without a question the **Avery Patented Sliding Frame Transmission** is the simplest and most efficient belt and drawbar transmission system built.

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You will find this same type of Motor and Transmission in all five sizes of Avery Tractors, from 8-16 to 40-80 h. p. The Avery line is a complete line of power farming machines, including also a special 5-10 h.p. Avery Tractor, the Avery Motor Cultivator and Avery "Grain-Saver" Threshers and Tractor Plows. They are *successfully used by farmers in all 48 States and 61 Foreign Countries.* Ask for catalog or see an Avery Dealer.

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Take particular note of these exclusive and protected Avery Features:

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7. Round Radiator, which catches the wind from any direction.
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9. Sliding Frame Transmission, which transmits the power to the belt wheel and the drawbar with the least loss, and is the simplest and most durable transmission system built.
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With wool as scarce and high as it is this year, every hour you employ in getting furs is **not only doubly profitable, but patriotically employed as well.**

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Take advantage of the high prices. Don't write—ship! Bundle up your furs, tie a Taylor tag on them and get them on the road to profits immediately. And if you need any further information or supplies, check and send the coupon.

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# Exterminating Coyotes

In view of the prevalence of rabies among wolves, the district United States forester at Portland, Ore., has announced the results of some very effective work that has been done by the forest service in destroying these animals. Supervisor C. J. Bingham of the Malheur national forest, in one month last winter, killed 32 coyotes in the vicinity of John Day, Ore., devoting only half his time to the work. An extract from Supervisor Bingham's report on his method of dealing with the coyotes is given herewith:

"A poison should be selected that will take effect immediately after being picked up by a wolf or coyote. I have used cyanide of potassium and strychnine and in former years have been very successful with traps, but have found none of them that will do the work as effectively as Sure Death capsules. The greatest objection to other poisons is that the animal strays off and is often lost, but with Sure Death capsules 20 yards is the greatest distance I ever found one from bait. The Northwestern Hide & Fur company, Minneapolis, Minn., sells a poison of this character in the shape of a small capsule, containing enough poison to immediately kill a coyote. In ordering these capsules it must be stated for what purpose they are intended, so that proper size will be given; different size capsules are required for different animals.

"To prepare capsules for use, take lard or butter, preferably a little rancid. Warm it until it is soft enough to handle well, but not enough to melt it. Care must be used not to touch the butter with the hands. Use a small wooden paddle that has no human scent to it. With this paddle cut off a piece of butter about the size of a marble; lay it on an unscented board and flatten it out; place the capsules on the strip of butter; roll the butter or lard around the capsule, leaving it as nearly round as possible. Take a small pair of wooden pincers and place the rolls in a jar that is free from scent. Never use metal to handle the butter or capsules—always wood. Then the bait thus prepared should be left to freeze or harden and kept in a cool place until used. The carcass of an old cow or horse should be used as bait—a fresh carcass preferred. Place the bait on top of knoll or hill. Avoid ground covered with brush. Do not kill the bait by shooting, but by severing the main arteries in the neck. All operations must be done from horseback, so that no odor will be left on the ground. Throw two or three dozen capsules around the carcass either in the snow or under natural debris."

# Joins Big Association

Word has been received that the Northwest Live Stock association, under whose auspices of the northwest live stock show has been developed into one of the greatest live stock features of the country, has been admitted to membership in the American Association of Fairs and Exhibitions. President Thomas Wren, Secretary O. P. Hendershot and R. C. Beach have been chosen by the board of directors of the northwest association as delegates to attend the meeting of the larger association in Chicago early this month.

Although it was necessary to call off this year's show at Lewiston, plans are already actively under way for next year's exposition, the board of directors having already selected November 6-12 as the dates. A building committee for the new live stock pavilion and cattle barns has been appointed, consisting of D. S. Wallace, R. C. Beach and Henry Thiessen. It is planned to allot $25,000 for the construction of the pavilion, which will be large enough to seat 35,000 people.

## MUSKRAT IS A PEST.

The muskrat is something of a pest, though he is not always recognized as such. He is a vegetarian, and lives off the grasses or the crops in the lowlands along the streams which he inhabits. He is especially fond of green corn, sometimes cutting down the stalks to get at the ears in roasting ear time. He also burrows through dams, sometimes doing damage in that way to irigating systems and the like. He is an enemy to some kinds of fish, though not as a rule to the game varieties. He generally gets the sluggish fish, which is not so great a crime. When the trappers capture the muskrat for his fur, they are not only securing this valuable product, but they are relieving the community of a pest.

## MAY REGULATE 1919 WOOL.

Wool growers as well as dealers and manufacturers are extremely interested in the possibility of government regulation of the 1919 crop and its prices. It is considered by many who are studying the question that it is probable the government may commandeer the next season's crop as a means of stabilizing the market. It is understood that England also probably will control its wool market for next season.

## TRAPPING SMALL GAME.

**Every Country Boy Should Get Busy.**

Perhaps the farm boys of the country—their elders, too—have not put two and two together enough to realize that there has never before been a time when trapping promised such big results as this coming season.

The reason is plain. Thousands of men who have trapped other years are now with Uncle Sam's fighting forces. That means a shortage of furs and a shortage means high prices.

Almost any farming section of the United States affords fine opportunities for profitable trapping. It isn't necessary to go off into the wilds to trap fur bearers whose skins bring good prices. Aren't there mink, muskrat, opossum, skunk, fox, weasel, badger, raccoon—or some of them—right at hand? Of course there are—and they sell as readily as skins from the interior of Alaska or the wilds of Canada. Here is safe, profitable sport.

This is a hint in time—to farm boys and others who either haven't trapped at all, or who have only gone at it with indifferent effort. A whole lot depends on being ready beforehand. The successful trapper begins looking over trapping grounds weeks before the first trap is set. He sees to it that his old traps are in good condition. He buys new traps early, in order that he may bury them in the ground or otherwise age them to destroy the scent of steel and iron before trapping begins.

One should write to the big fur houses and ask for their catalogues and booklets. Many of these contain valuable information obtained from "old-timers" about their methods and the habits of animals. Ask for the names of good, practical books on trapping. See what you can find out from those you know who have trapped. In other words, be energetic in looking up all the information you can.

The best part of it is that any intelligent boy can quickly learn trapping. It isn't mysterious. And it is both great sport and one of the best ways to make a considerable sum of money. Trapping isn't working hard for small pay in spare time and maybe doing work that is distasteful. The boy who traps is his own boss and doing something that stirs the blood with exercise and excitement, as well as with the financial reward.

## WANT TAXATION LAW CHANGED.

Petitions are being circulated in the fruit growing districts of central Washington recommending to the coming legislature that it amend the state taxation law so that fruit would be assessed on May 1 instead of March 1 as at present. Owing to the fact that there are always considerable quantities of apples held over the winter by the growers, due to lack of shipping facilities, the March 1 assessment nearly always is made against the producer, it is claimed. By changing the date to May 1 two months of the spring would be allowed in which fruit could be placed on the market and shipped without having to bear taxes.




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Bankers have learned the true lesson of economy—they know by experience, by their life's work, the value of a dollar.

Bankers, therefore, would be more than interested in our ability to convert their seldom-used upright piano into a modern 88-note, faultless player-piano at a genuine saving of 60 per cent over the price of a new player.

You, Mr. Banker, have all your life, been too busy to learn to play the piano. Here's your chance to actully play your own piano—the one in your home right now—without losing one minute of your valuable time in music lessons.

Wouldn't you really enjoy playing and singing with the family?

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Gentlemen: Without obligating me in any way you may send me further information on how to convert my upright into a modern 88 note player-piano, giving prices and terms.

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## Must Reclaim Land

R. H. Hayden, secretary of the Washington Irrigation institute, reports that the meeting to be held in Yakima on December 17, 18, will feature land settlement work.

"With the return of our boys from Europe," comments Mr. Hayden, "it becomes more than ever imperative for us to get this matter upon a constructive basis. We have practically no more free land to give, but we have a tremendous acreage which can be reclaimed by drainage or irrigation, and so made available for such returned soldiers as want to get upon farms."

On December 19, the day following the closing of the institute, the Washington State Land Settlement association will hold a conference in Yakima. Secretary Thomas B. Hill states that in addition to addresses by E. F. Benson, president of the association, and by Dr. Elwood Mead, the conference will take up for consideration legislation which it is desired to bring before the next session of the legislature. The California statute is the basis for the proposed Washington law. A commission of probably five members to administer the state land settlement laws; a revolving fund of one million dollars of state money, to be available for the same purpose; and provision for the acquirement of lands by the commission, the improvement of these lands, and sale to settlers on favorable terms, are among the features to be considered.

### ORCHARD COVERS 550 ACRES.

**It Is the Largest in Okanogan County, and Is Just Coming Into Bearing.**

The largest apple orchard in Okanogan county, Washington, and one of the large orchards of the entire northwest, is that of the Boston-Okanogan company, five miles below the town of Okanogan. The company owns 907 acres and the orchard covers 550 acres. There are six principal owners, all Boston capitalists.

The project was promoted by W. N. Mears in 1910. He looked over or investigated other apple regions in the northwest and liked this best. So the 900 acres was purchased in what was then known as Tar Heel flat; now Boston Heights. The land lies on two benches, 300 and 500 feet above the Okanogan river. The Pleasant Valley Irrigation and Power company already had a satisfactory little irrigation project. Water from Loop-loop creek is stored, with a 45-foot dam. It has a storage capacity for 2000 acres and other parties use most of the water.

Under the supervision of J. R. Everett, who is still the superintendent, trees were planted in 1911, 1912 and 1913. The trees are planted 30x30, with apple fillers of fast growing varieties. Permanent trees are Jonathans, Delicions, Rome Beauty, Arkansas Black and a few Spitzenbergs. The first apples from the orchard were gathered in 1915. In 1916 about five cars of apples were picked and in 1917 about eight cars. This year 27 cars will be shipped.

For growing trees Mr. Everett uses a semicover crop; that is, every other row is planted to alfalfa. This is plowed under the third year and the alternate row seeded. When the trees are about 7 years old the plan is to seed solid to alfalfa and plow under every third or fourth year. There is no scale, but the trees are sprayed for other insects, especially the codling moth. This year the apples are practically free from worms.

While the orchard has not come into bearing quite as soon as the stockholders hoped, this dry year's crop has been very satisfactory. Mr. Everett says that, while he likes that bench land, the entire Okanogan valley can not be excelled as an apple country.

Walter I. Badger is president of the company; his son, Walter I. Badger Jr., is secretary, and George P. Bullard, treasurer and manager. The company's offices are in Boston.

H. A.

### HIGHWAY WORK PROGRESSES.

The substantial concrete highway which Yakima county is putting in between the city of Yakima and Moxee City is beginning to foreshadow what it will eventually be. The complete highway will be about seven and one-half miles in length, and at the present time approximately two-thirds of this distance has been covered by the construction crew.

### SCALE IS UNUSUALLY BAD.

Mrs. J. B. Creighton of Yakima reports the scale unusually bad this season. The Creighton orchard consists of five acres, and is set principally to Wageners. The fruit was sold direct, rather than through an association.

TO the Editor of The Washington Farmer: For some little time past I have had the pleasure of reading The Washington Farmer. I am not farming, but want to say that, whether farming or not, your paper is a valuable asset in any home.

G. W. GANNON.
Tacoma, Wash.




# Your Christmas Shopping Problems

SUCH of these problems as can not be solved by inspecting the stocks of your home stores will receive sympathetic and prompt attention on the part of our Mail Order Department, upon receipt of a letter or postal card with particulars.

**The next best thing to being able to shop personally in this, the Northwest's finest store, is to have at one's disposal the efficient Frederick & Nelson Mail Order Service.**

Christmas stocks are completely ready—more delightfully diversified than ever before—with plenty of toys, of course, for the children's Christmas.

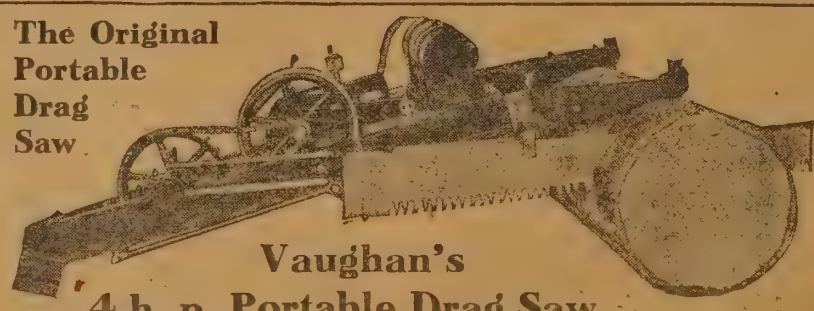
If you can conveniently come to Seattle for part of your holiday shopping, you will thoroughly enjoy a visit to this store, with its unusually complete provision for the convenience and comfort of its customers.

FREDERICK & NELSON

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**The Original Portable Drag Saw**



**Vaughan's**

**4 h. p. Portable Drag Saw**

WILL CUT 15 TO 20 CORDS OF WOOD IN 10 HOURS

Can be operated by one man. Two men can carry complete machine. 4 H. P. gasoline motor mounted on frame. One gallon of gasoline required to cut 8 to 12 cords of wood. Engine can be used for other work without removing from frame. No gears, cogs, belts or pulleys. Friction clutch prevents breakage if saw pinches. Saw makes about 125 strokes per minute. Will cut any size log up to 6 feet. Sprockets and cranks, etc., made of cast steel. All working parts guaranteed against defects in material and workmanship.

Net cash price for complete machine as shown in cut, $175 f. o. b. Spokane and common points. FOR SALE BY

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# Is 1919 Wheat Price Guaranteed?

## *Uncertainty Felt Concerning President's Proclamation*

What effect the coming of peace will have on the price of wheat next season is a question that has caused widespread discussion and difference of opinion throughout the United States. While President Wilson announced definitely in a proclamation issued in September that the present wheat price would be guaranteed throughout the country for next season, at the same time he issued a supplementary statement announcing that he would appoint a commission to investigate the cost of wheat production as a further basis for price regulation. This supplemental statement probably is the cause of the doubt that has been expressed as to next year's price. The best informed grain trade men appear to be somewhat in doubt on the general question.

President Wilson's September proclamation quoted the law which provides that whenever "an emergency exists requiring stimulation of the production of wheat," the president shall have authority to "determine and fix and to give public notice of what, under specified conditions, is a reasonable guaranteed price of wheat." The president then, in his proclamation, continues:

"Now, therefore, I, Woodrow Wilson, president of the United States, by virtue of the powers conferred upon me by said act of congress, and especially by section 14 thereof, do hereby find that an emergency exists requiring stimulation of the production of wheat, and that it is essential that the producers of wheat produced within the United States, shall have the benefit of the guarantee provided for in said section; and in order to make effective the guarantee by congress for the crop of 1919, and to assure such producer a reasonable profit, I do hereby determine and fix, and give public notice of reasonable guaranteed prices for No. 1 northern spring wheat and its equivalents at the respective principal primary markets as follows, to-wit:"

The prices to which he refers include New York, $2.39 1-2 per bushel; Chicago, $2.26 per bushel; Tacoma, Seattle, Portland, Astoria and San Francisco, $2.20 per bushel, and Salt Lake City, Utah; Great Falls, Mont.; Pocatello, Idaho, and Spokane, Wash., $2 per bushel.

The following is the note which the President issued in connection with his proclamation fixing the price as above stated:

"In issuing today the government's guarantee of the same price for the 1919 wheat crop that was guaranteed for the 1918 crop, I wish it to be understood that in the spring of 1919 I will appoint a disinterested commission who will secure for me the facts by that time disclosed as to the increased cost of farm labor and supplies, using the three-year pre-war average prices of wheat, of labor and of supply costs as a basis, and that from this information I shall determine whether there should be an increase in price above the present level, and, if so, what advance, in order to maintain for the farmer a good return. Should it then appear that an increase is deserved over the present guarantee, however, it will be applied only to those who have by next harvest already marketed their 1918 wheat.

"It is the desire and intention of all departments of the administration to give to the wheat grower a fair and stimulative return in order that the present acreage in wheat may be maintained.

"I find a great conflict of opinion among various sections of the country as to the price that should be named as a minimum guarantee. It must be obvious to all, however, that the factors which will make for increased or decreased cost of production of next year's harvest can not be determined until the near approach to the harvest.

"In giving a guaranteed price for wheat one year in advance (the only industry guaranteed by the government), there is involved a considerable national risk. If there should be peace or increased shipping available before the middle of 1920, Europe will naturally supply itself from the large stores of much cheaper wheat now in the southern hemisphere; and therefore the government is undertaking a risk which might in such an event result in a national loss of as much as $500,000,000 through an unsalable surplus; or in any event, in maintaining a high level of price to our own people for a long period subsequent to freedom in the world's markets.

"Despite this, the desirability of assuring a supply to the world of prime breadstuffs by insuring the farmer against the fluctuations in prices that would result from the uncertainties of the present situation and from the speculation those uncertainties entail seems to me to make the continuation of the guarantee for another year desirable. On the other hand, it is clear that before increasing this liability by large sums with the risks set forth above, and before increasing the burden of the consumer, the matter should be subjected to searching inquiry at the appropriate time—the time when the pertinent facts will be known.

"I feel confident that with this preliminary fixed guarantee and with the assurance that justice will in any event be done to the grower, he will continue the fine patriotic efforts by which he has served the country hitherto; that the government will have acted prudently; and that the consumer will be satisfied that his interests are not unduly sacrifieed, but just and exhaustive consideration given to every element of the matter at the proper time."

It is apparent from a close reading of this document that the president has definitely mixed a minimum price for No. 1 northern spring wheat and other grades in proportion at the various primary markets, and that any change that might be made next spring or summer as a result of the investigation of the commission which the president says he will appoint, would be changes upward rather than downward.

### BUYS 600-POUND SOW.

The packing plant of Hogan & Cushing of Moscow, Idaho, recently paid C. O. Grendahl $88.50 for a 600-pound Poland China sow. The price paid was 15 cents per pound with a dockage of 20 pounds.


**ECONOMY STOCK POWDER**



fed regularly to sheep will keep them free from worms. It also acts as a tonic, a laxative, a blood purifier and as an aid to digestion can not be improved upon. Will eliminate BLOAT and ALL AILMENTS COMMON TO SHEEP.

SEND FOR A FREE SAMPLE.

**Economy Hog and Cattle Powder Co.**

Hearst Building. San Francisco, Cal.

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to

**A. V. OVERMAN & CO.,** Live Stock Commission

Spokane Union Stockyards Spokane, Washington

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# Do *you* think there is no competition?

If anyone thinks there is no competition amongst the big packers he ought to go through a day's work with Swift & Company.

Let him begin at the pens when the live stock comes in; let him try to buy a nice bunch of fat steers quietly and at his own price, without somebody's bidding against him.

Let him realize the scrupulous care taken at the plant that not one thing is lost or wasted in order that costs may be held to a minimum.

Let him go up into the office where market reports are coming in — and reports of what other concerns are doing.

Let him watch the director of the Swift refrigerator fleet, maneuvering it over the face of the country like a fleet of battleships at sea.

Let him take a trip with a Swift & Company salesman and try to sell a few orders of meat.

Let him stay at a branch house for an hour or two and see the retail meat dealers drive their bargains to the last penny as they shop around among the packers' branch houses, the wholesale dealers, and the local packing plants.

And then, when the day is over, let him have half an hour in the accounting department, where he can see for himself on what small profits the business is done. (Less than 4 cents on each dollar of sales.)

If he still thinks there is no competition in the meat business it will be because he wants to think so.

**Swift & Company, U. S. A.**

A nation-wide organization owned by more than 23,000 stockholders

# Save Your Doctor's Time

By DR. LEONARD KEENE HIRSHBERG, A. B., M. A., M. D.

Recently George Creel, head of the committee on public information announced that the first United States soldiers to be killed in the war and the first to be wounded were both in the medical corps. This fact must have impressed you with the serious risks which are taken by the army doctors. Before we entered the war the bravery and sacrifice of our medical officers at the front had probably been too little appreciated.

The officers and enlisted men in the medical corps are the only soldiers who go into No. Man's Land with no defense whatever. The tireless work on the battlefield of the stretcher bearers, all of whom are in the medical corps, is full of danger. No profession has volunteered its services to the country more generously than the medical profession. About 24,000 physicians, or nearly a fourth of the eligible physicians of the country, have expressed their willingness to resign practice and go to war. Some have already received their training and gone to France; some are now waiting to be called, and about 2000 are in the camps receiving the special instruction that will fit them for a military life.

When a physician receives word that his offer to join the army has been accepted he is ordered to report for duty at once at one of the two training camps where army surgical schools are located. One is at Fort Riley, Kan., and the other is at Fort Oglethorpe, Ga. The doctors live in barracks at these camps just like any other soldier. The course of training lasts three months.



Dr. Hirshberg.

### War's Call for Doctors.

During the first month they drill and command companies of men, they study the organization of the army. The second month is occupied with the special duties of medical officers, and they are taught the new conditions and problems which confront an army on the battle fronts. The third month they concentrate upon some special branch of medical work. About 10 per cent go into head surgery, 10 per cent into X-ray work, 35 per cent into general surgery, and another 10 per cent into heart practice.

About 25,000 of our best physicians and surgeons are expected to volunteer, and will shortly be needed for our fourth and fifth million of men. Twenty-five thousand additional nurses are needed.

What you are expected to do is to learn and apply as much medical knowledge as you can to relieve the few doctors who must remain in civil life from the burdens of overwork, night calls and minor complaints.

At a medical meeting not long ago the doctors discussed night calls. It was discovered that 95 per cent of the summons from their much-needed slumbers were for fears, hysterias, cramps, colics, toothache, neuralgia and other pains, discomforts and anxieties which the silence of night usually exaggerates.

In other words, only five in every hundred medical calls and visits after midnight really and truly required that the doctor be roused from his much-needed sleep to dress and go out into the night.

### Meeting Simple Emergencies.

With nearly 50 per cent of the best doctors at war this means the unnecessary exhaustion of many of those who remain at home. Do you consider it just and fair to help destroy the very men you may urgently need? It is like the cry of "wolf" of the bad boy who guarded the sheep. At last, when you will really need the physician, he may not be able to answer your summons.

An earache can generally be relieved by applications of heat. Cramps, colic and stomachache can be alleviated with a hot soap suds enema, a glass of hot water and a mustard plaster over the seat of pain. If this does not suffice, one-half teaspoonful of aromatic spirits of ammonia in water will quiet the pains until the doctor is awake and comes in the course of the day's rounds. For the toothache, two or three drops of creosote on a pledget of cotton will suffice.

The fears, hysterias and emotional excitement of the wee sma' hours can be greatly abridged by the administration of 30 grains of bromide of potash in a glass of hot milk.

## WHAT THE CLOCKS SAVED.

One and a quarter million tons of coal have been saved during the seven months' operation of the "daylight saving" law, according to figures compiled by the United States fuel administration. When congress enacted the law to set the clocks of the nation ahead one hour, beginning Sunday, March 31, and ending October 27, the fuel administration made plans to gather facts from many sources in various sections in order to determine the saving in fuel that might be effected by the operation of the law. Figures from this data have been compiled and from these is made the estimate of the coal saved.

Among the many places which kept close watch on the operation of "daylight saving" very definite facts were obtained from one community of about 1,000,000 population. It was shown that in this one district the saving of coal was 17 1-2 tons per 1000 population over the period of seven months. These figures were checked against records obtained from other places in widely separated districts having the same relative conditions, and from the mass of facts thus gathered the estimate of 1,250,000 tons of coal saved is determined.

# Gigantic Task Ahead

A prominent French official estimates that it would require 100,000 men working six days a week for two years to reconstruct the devastated portions of northern France. He estimates that the losses to the territory by German occupation approximates $10,000,000,000. Among the losses he cites 1,510,000 head of cattle taken by the Germans into their own country.

A prominent Belgian authority estimates the loss of that country from German occupation at between $4,000,000,000 and $6,000,000,000. He says that the country has plenty of labor but that it must look to America for most of the raw materials and machinery necessary for reconstruction.

# SIDELIGHTS

### Speaking of Submarine.

"Father, what kind of beasts were the rams they used so much in the civil war?"

"They were probably the ancestors of the ewe boats of today, my boy."

### Houses Might Be Better.

Doctor—What you need is more exercise. What is your occupation?

Patient—I'm a piano lifter.

Doctor (recovering quickly)—Well—er—hereafter lift two at a time.—Boston Evening Transcript.

### He Might Try It.

"Flubdub has invited me to his golden wedding party."

"What of it?"

"What's the cheapest thing you can send on such an occasion?"

"You might try a gold fish. It might pass."—Louisville Courier-Journal.

### Dying by Inches.

Seth Woodbury was a tight-fisted old farmer. When his brother William died it was said that Seth had even grudged the money for proper medical care. Seth hitched up and drove to town to have a notice of his brother's death inserted in the local paper.

"There ain't no charges, be there?" he asked anxiously.

"Oh, yes, indeed," answered the editor, "our rate is a dollar an inch."

"Cracky!" muttered the old man; "an' Bill six foot two!"

### Pitied the Foe.

It was during the nerve-racking period of waiting for the signal to attack that a seasoned old sergeant noticed a young soldier fresh from home, visibly affected by the nearness of the coming fight. His face was pale, his teeth chattering and his knees tried to touch each other. It was sheer nervousness, but the sergeant thought it was sheer funk.

"Tompkins," he whispered, "is it trembling you are for your dirty skin?"

"No, sergeant," said he, making a brave attempt to still his limbs. "I'm trembling for the Germans; they don't know I'm here."

### Very Accommodating.

The wife of a successful young literary man had hired a buxom Dutch girl to do the housework. Several weeks passed, and from seeing her master constantly about the house the girl received an erroneous impression.

"Ogscuse me, Mrs. Blank," she said to her mistress one day, "but I like to say somedings."

"Well, Rena?"

The girl blushed fumbled with her apron, then replied, "Vell, you pay me four tollars a veek——"

"Yes, and I really can't pay you any more."

"It's not dot," responded the girl; "but I be villing to take tree tollars till—till your husband gets vork."—Boston Transcript.





## A Label That Defies Weather

The Raynster Label means the best in weather-proof clothing. It is the identifying mark on a complete line of raincoats for men, women, boys and girls—heavy rubber surfaced coats for outdoor workers, extremely dainty silk coats for women and girls, or fine imported cloth coats—suitable for overcoats or ulsters. These coats do double duty, they protect against rain or cold.

Be sure the Raynster Label is in the coat. That is the sign of full value for your money. In a garment showing the Raynster Label there is no question about materials or workmanship. It is the signature of quality. Look for the Raynster Label when you want a reliable raincoat.

Get a Raynster today. It is good insurance of health and clothing to provide a Raynster for each member of your family.

If you wish, we will send you the Style Book showing many Raynster models. Drop us a postal.

**United States Rubber Company**

Clothing Division
New York and Boston

# Washington Boys in War Service







From The Twice-a-Week Spokesman-Review.

**ANTON P. MESHISHNEK, Colton, Wash.**—Enlisted December 12, 1917, in the signal corps of the aviation department of the American forces. His present address is 30th Balloon company, Omaha, Neb. His parents live on a farm near Valley, Wash.

**EDWARD T. M'KOWN, Lind, Wash.**—He was drafted in September, 1918, and is now somewhere in France. His mother is Mrs. Jennie Terry of Lind, Wash. He is 25 years old and before his enlistment was employed with the O.-W. R. & N.

**LAWRENCE A EDDINGTON, Deer Park, Wash.** — Enlisted in August, 1917, and is now serving his country "somewhere on the battlefields of France." He is the son of Mr. and Mrs. J. E. Eddington of Deer Park, Wash.

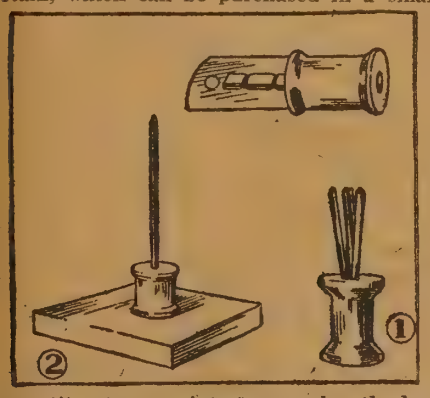
# Handicraft for Boys

By A. NEELY HALL.
(Copyright by A. Neely Hall.)

## SPOOLCRAFT CHRISTMAS GIFTS.

Every boy has right at hand all of the materials necessary for making Christmas gifts, in the empty spools from his mother's work basket, boards from grocery boxes, nails and one or two other things that are to be found in every household.

The spool toothpick holder (Fig. 1) is the simplest article to make. After finishing the wood of the spool, it is only necessary to glue a piece of felt or cardboard to one end to form a bottom to the holder. A brown Flemish or light-weathered oak stain, which can be purchased in a small

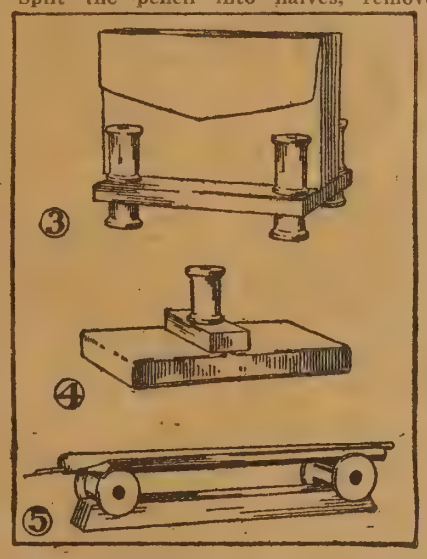



quantity at any paint store, makes the best finish. Directions come with the stains for applying them.

The paper-spindle (Fig. 2) is of a convenient size for a desk. A four-inch wire nail, a short silk spool, a base block two inches square, and a piece of felt for the under side of the base, are the materials you need to make it.

Enlarge the opening in one end of the spool so the head of the nail will set down into it. Then drop the nail through the hole, nail the base to the under side of the spool, and glue the felt to the base.

A handy ripping knife that will be appreciated by your mother is shown above the paper-spindle. A safety razor blade, a short length of a pencil, and a spool (A, B and C, Fig. 7) are required to make it. Split the pencil into halves, remove

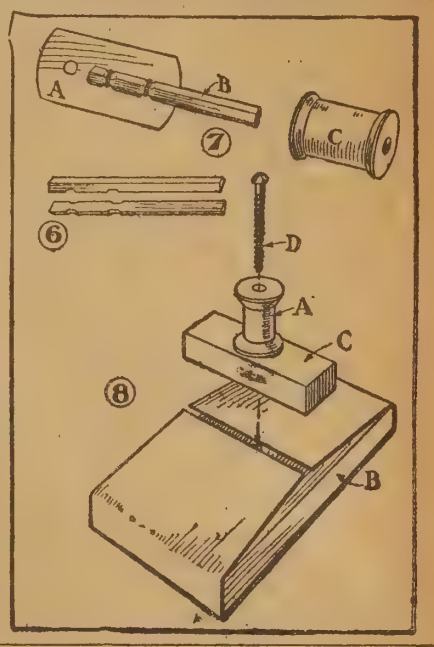



the lead, and notch the edges in two places near one end, spacing the notches the same distance apart that the holes in the razor blade are spaced (Fig. 6). Slip the blade between the pencil halves, and bind in place with strong linen thread passed through the holes and around the notches in the pencil. Then glue the free end of the pencil into the hole in the spool handle, and the little knife will be ready for use.

Four common thread spools of equal size, and a piece of box board three inches wide by five inches long are necessary for the stationary rack shown in Fig. 3. First nail the piece of board to the ends of the four long spools. Then nail the four short spools to the other side of the board, directly below the long spools, for feet.

One spool is used for the desk blotter (Fig. 4), that one forming the handle (A, Fig. 8). The base block (B, Fig. 8) is a piece of a box board two and a half inches by five inches in size, and the block C is two and a half inches long and one inch wide. Get a screw long enough to extend through handle A, through block C, and part way into base block B (a screw with a round head similar to D will look neatest), and screw the three pieces together. If the screw head is smaller than the hole in the spool handle, support it by means of a small metal washer slipped over the screw.

Fig. 8 shows how the blotter is cut to fit the bottom of the base block, and folded up over the ends to the center of the top. The ends are held to the base by block C. To release the ends for changing the blotter, it is only necessary to give the block C a one-half turn, so it extends lengthwise of the base block. Pad the blotter with an extra piece of blotting paper slipped between it and the base block.




# Good Reading for Gallant Men



American Red Cross Photo.

Cases of books gathered by the American Red Cross, being opened and distributed to American soldiers at the St. Denis hospital in England.

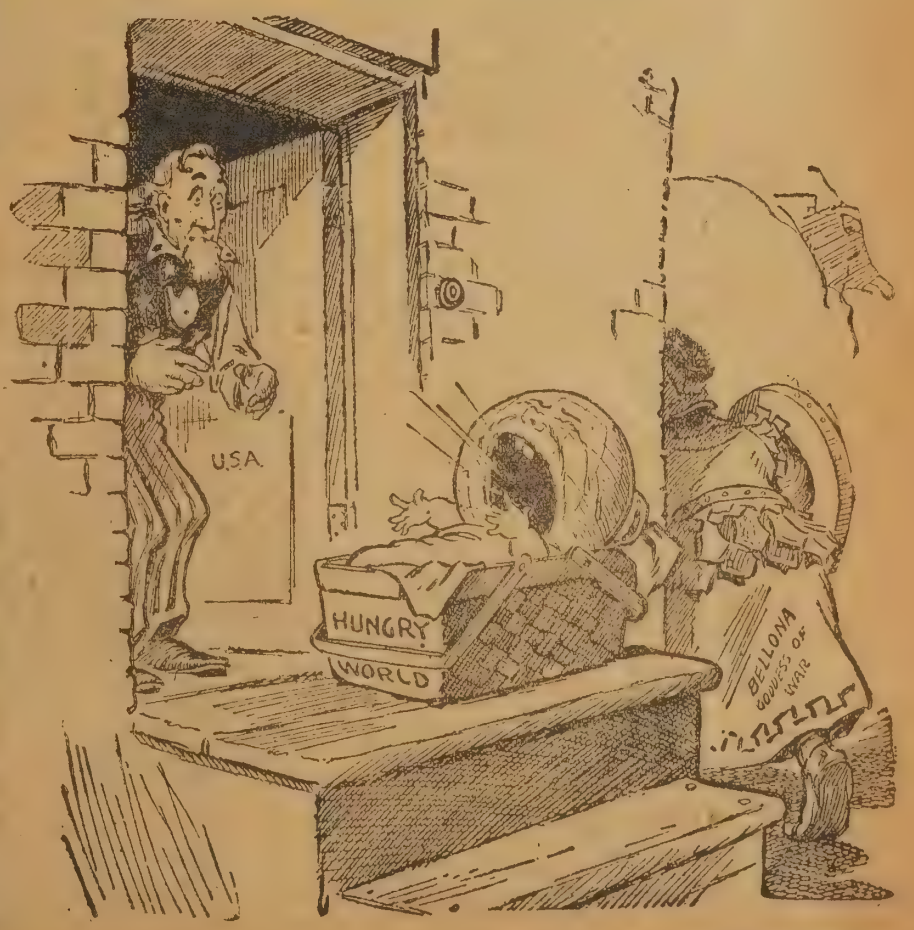
# A Domestic Scene Near the Marne



Copyright Underwood & Underwood.

No important member of the family was left behind of this French family who fled on the approach of the German hordes, south of the Marne, before their advance was stopped by the heroic and gallant counter-offensive of the French and American troops. The family took refuge in the forest and erected a portable shelter for their protection.

# Left on Our Doorstep




Chicago Daily Tribune.

# A CROOKED TRAIL---By Lewis B. Miller

Copyright by The Page Company, 1911.

**A story of a thousand-mile saddle trip up and down the Texas frontier in pursuit of a runaway ox.**

**SYNOPSIS.**

Travis, a lad in his teens, lived on the Texas frontier in the days when Texas was a wild, unsettled region. One morning before daylight he started out to bring in the yoke of oxen for a day's plowing, but one of them was gone. He caught his pony and started to search for the stray. Going a little and a little further hour after hour, he continued until night caught him several miles from home with a tired pony, a borrowed saddle and lariat and little for himself or his dog to eat. A rabbit and wild turkey eggs served the purpose, and morning saw him again in pursuit of the ox after a night of disturbance by a mountain lion and marauding hounds. The next night he spent in the cabin of a crazy sheep herder who believed that cattle men were trying to kill him. He made the night hideous by his crazy ramblings and songs in the moonlight, and Travis was glad when the opportunity came to escape from him, and fall in with new friends, Frank and Stella Booth, at their farm home a little further on. The three young people became much interested in each other because of common plans for attending school the following year. It was here, also, that Travis got his first definite clue to the whereabouts of the stray steer. Together the two boys set out to hunt him, but he was farther away than they suspected. Startling adventures were in store for them, among the first of which was a night in a "haunted" house, the principal haunts being wild animals. The next day they found the stray ox, but suddenly a wall of water from a furious storm rushed down the river between them and the animal. The boys arranged to have the steer held in pasture till they could cross the raging river. The meantime they spent working with a farmer grubbing out live oak thickets. Some interesting experiences were awaiting them, however, rafting on the flooded river. Unwittingly they aid some cattle thieves to escape from the sheriff, at the same time getting farther behind in their race with the runaway ox.

## CHAPTER XIII.

### Found and Lost Again.



NOW I turned to arouse my bed-fellow, but found him already wide awake. He had only just awakened, however, and had not caught sight of the visitors in the mill-room. But he, too, had half recognized the wounded man's voice; and he was not greatly surprised when I informed him who the man was, and whom I suspected his companion to be.

After listening a few minutes to the conversation in the other room, Frank slipped out of bed and stole to the door, where he peeped through a crevice. When he had come back and lain down, he whispered:

"Yes, that's our tricky fellow. I know his mark and brand. And the fellow with him must be bad Bill. Pretty impudent of them, trying to pass themselves on our friend for officers."

"What can we do, Frank?"

"Don't see that we can do anything. We couldn't arrest them, of course. It would take half a dozen men to do that, armed and desperate and on their guard as these fellows are."

"Well, it's a pity to let the rascals get away when they're wanted so badly. But it can't be helped, I suppose."

After the injured man had had his wound washed and bandaged, the other visitor inquired of the miller if he could furnish them something to eat. The miller offered to prepare them a warm supper if they cared to wait; but they had not time for that, they told him, and he went to the kitchen and brought in something already cooked. He also gave them corn to feed their horses. Not long afterwards they mounted and rode on.

Even before the hoof-beats of their horses had died away down the rocky road, Frank and I were up, informing the miller that he had entertained angels unawares—angels of darkness.

Our good friends could scarcely restrain his astonishment on learning how the wounded man must have received that bullet, and that one of the pair was probably the notorious, much-feared Bill Edsell.

"Well, they ought to be arrested, of course," the miller finally said. "And they will be sooner or later, I've no doubt—or killed. But, desperado or what not, when a man comes to me bleedin' and hungry, and asks me to bandage his wounds and give 'im a bite to eat, it's not in the heart of a mountaineer to say no."

We both indorsed this sentiment; and we certainly liked the miller all the better for uttering it.

A few hours still remained till daylight, and Frank and I went back to bed and to sleep. We had breakfast early next morning, and during the meal we discussed our visitors of the night before.

After reflection, the miller was disposed to doubt whether the man who had represented himself as a sheriff was really Edsell. One of McCracken's party had started to describe the desperado to us, but had stopped on learning that we had caught not so much as a glimpse of the fellow in the wagon. Our surmise as to the unknown man's identity was based solely on the fact that he was in company with the man who had been with Edsell. But the desperado had numerous friends, and, for reasons of prudence, would not be likely to stay with any one of them very long.

"He's been through this country once or twice, Edsell has," the miller told us. "That is, once or twice that we know of, and no tellin' how many times that most of us don't know of. I never set eyes on 'im myself, to recognize 'im, but I've talked with people that have; and while I don't recollect just what they said about 'im, I got the idy that he was a different-lookin' fellow from the man that was here last night. Of course I may be mistaken as to that, though."

"Come to think of it now, that man didn't look as much like a villain to me as the man he was with did—the wounded man," I remarked.

"That's just what I kept saying to myself all the time I was peeping through that crack at them," spoke up Frank.

"Well, the worst man don't always look the worst," observed the miller. "I've seen some mighty fierce-lookin' chaps that was just naturally scared at their own shadders. And I've knowed some quiet, harmless-lookin' fellows that would fight the very Old Scratch hisself if they once got started. I've not much doubt, though, that that fellow was a criminal. Birds of a feather flock together, and if he was all right he wouldn't be keepin' company with the friend of outlaws. But there's a good many hard characters hid away in these mountains, I guess, and he might have been any one of 'em."

The miller now told us something of Edsell that we had never heard before. Though a villain from head to heels, and richly deserving a rope, the desperado was a man of good education. Indeed, it was even reported that he was a graduate of some well-known eastern or southern college or university. That, however, was doubtless a surmise; for nobody really knew anything about his past—where he came from or anything else.

Both Frank and I were astonished at this news. Our acquaintance was mostly among people of little learning; and we had naturally supposed that educated persons, knowing better than others what is right, would be sure to do what is right. That may be true in the main, but there are numerous exceptions. As the miller expressed it:

"It takes somethin' besides book-learnin' to keep a man straight when he once makes up his mind to go crooked."

Immediately after breakfast we saddled our horses, and after vainly trying to induce the miller to accept something for our night's entertainment, we mounted and set out on our day's travel. The miller walked down to the road with us; and having wished us early success in our cattle-hunt, he urged us to stop and spend another night with him on our way back.

All day long we rode, keeping up our search through the mountainous country. It was much like the proverbial hunt for a needle in a haystack. The roads were dim and rough, and most of them ended utterly at some cabin of cedar logs hid away in some deep little cove. Half a dozen of these blind roads we followed out, and much of our time was spent in retracing our way.

About the middle of the afternoon we happened upon a settler who told us that our three cattle had stopped in front of his cabin the day before, and had licked awhile at some stones on which he salted his stock. They were then traveling a little east of south, instead of southwest. Like ourselves, Lep was evidently confused by the mountain roads, which seldom led in the direction he wanted to go. He knew his course, doubtless, but dared not cut across the mountains. And it was fortunate for us that he dared not.

Night overtook us in a wild gorge, between cedar-covered heights. And there in a little green, grassy spot we camped. Vic treed a squirrel in a young cedar. Frank shook it out for her, and we had it, broiled, for supper. Cedar branches broken off and spread under our blankets made us a fairly comfortable, but very rank-smelling bed. Daylight found us on the road again. By noon we had left the cedar-brakes behind. The country we now found ourselves in was still somewhat broken, but more people lived here, and the roads were better and more traveled.

Twice today we got word of our cattle. They were now heading toward the southwest again. But early in the afternoon we lost the trail—lost it as utterly as if the three horned brutes had grown wings and flown away.

House after house we inquired at, but Lep and his followers had not been seen. On we hurried, till six or eight houses had been passed. Then, knowing that something must be wrong, we took the back track.

"I don't understand it," grumbled Frank. "This road leads in the very direction they've been traveling all the time since they got out of the mountains. They must have turned aside to graze, and strayed off into the brush."

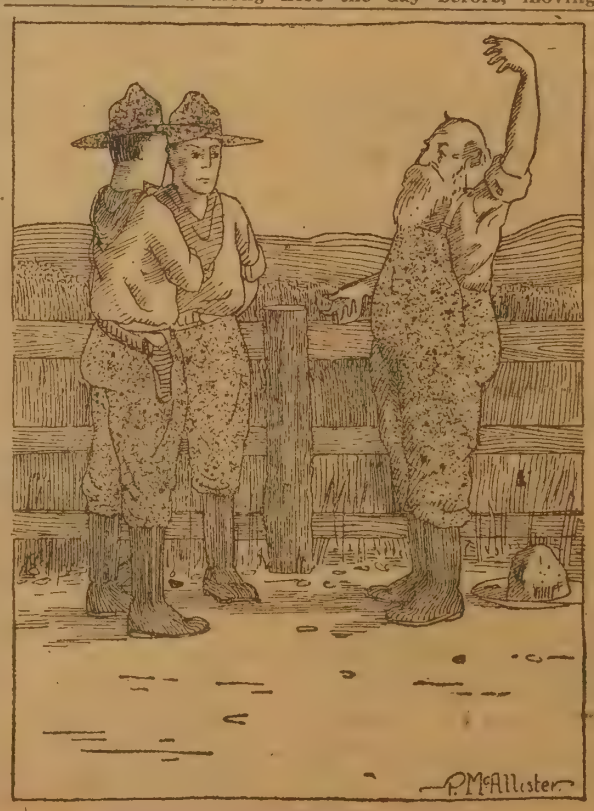
That was my opinion, too. So, riding back the way we had come, we hunted out the country on both sides of the road till we arrived at a well-traveled cross-road leading northwest and southeast.

"Do you think they could have followed either end of this?" asked Frank, as we reined up at the point of intersection.

"I don't see why they should. But they's certainly branched off somewhere, and we can only find out by trying."

And try we did. First we followed the cross-road a mile or two to the northwest, inquiring at every house, till we had convinced ourselves that Lep's party had not traveled that way. Then we came back to the crossing and started off in the opposite direction—toward the southeast.

At the first place where we inquired they assured us that no such animals as ours had passed; and at the second and third places we received similar replies. All spoke of a drove of cattle, driven by some cattle-buyers, that had marched along here the day before, moving toward the southeast. This was no news to us. The trail of the drove was very plain.



The old man describes the ox he saw.

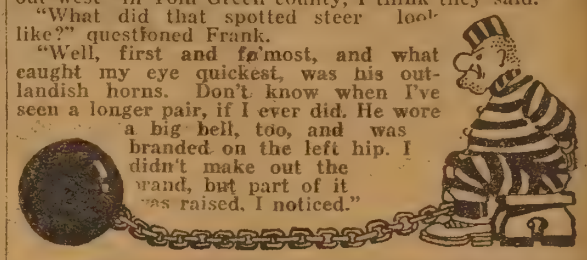
But at the fourth house, where we halted just at dusk, a different answer awaited us.

"I didn't see any three cattle go by by themselves," the farmer made reply. "But in that herd that passed along here yesterday, I noticed a good-sized spotted steer that answers the description of yours."

"That must have been some other spotted steer," I remarked. "What would the buyers be doing with our cattle among theirs?"

"Well, some of these cattle-buyers ain't any too partic'lar about what they pick up. They'd just as lieve hook onto a few strays as not. If the owner happens along and claims 'em, of course they turn 'em over to 'im. But if nobody comes they keep the cattle, and then they're just so much ahead. That outfit stopped here, and wanted to buy some young steers from me, but we split on prices. They're just makin' a big cattle-buyin' circuit, they told me. They expect to swing round a circle, and then drive back to their ranch some'r's away out west—in Tom Green county, I think they said."

"What did that spotted steer look like?" questioned Frank.



"Well, first and foremost, and what caught my eye quickest, was his outlandish horns. Don't know when I've seen a longer pair, if I ever did. He wore a big bell, too, and was branded on the left hip. I didn't make out the brand, but part of it was raised, I noticed."

The way the boys wanted to fix the thief.

A raised brand is one where the branding-iron has burnt two deep, and the hide puffs up above the surrounding hair, hard as horn.

"And his neck showed signs of the yoke," the farmer added.

Frank and I exchanged glances. "That's Lep all over," he remarked.

"Yes, that's either Lep or his twin brother," replied I. "And if he's with that drove, that will explain why our trail dropped out so suddenly. They must have met the drove at the cross-roads and got taken in. We'd better follow on and find out for sure."

"That's right; we'll follow on and find out," Frank agreed.

We proposed to ride on a few miles further, but the farmer insisted that we spend the night with him, and we did.

The rising sun saw us on the road again. The drove's trail was very distinct, and we lost no time in making inquiries. Occasionally, when we met somebody or passed people by the roadside, we asked how far ahead the cattle were. The drove was marching slowly, and by noon we were only a few miles behind.

We rode as fast as we dared, without tiring out our horses. Well on in the afternoon, coming to the top of a hill, we looked down into a valley and discovered the strung-out cattle, tramping steadily along the road.

"There's Lep! Don't you see him!" I cried, pointing to an animal, whose spotted back and great horns made him conspicuous among many others.

"And don't you hear his bell? I'd recognize that bell any time, anywhere."

"Well, if that isn't cool rascality for you!" said Frank. "One would suppose that every hoof in that drove belonged to those fellows. I can recognize one of mine from here, and I've no doubt—yes, there's the other one—the steer. They're all there all right."

"We've found them at last!" I said, exultantly, more elated over this fact than shocked or disappointed because we had found somebody driving them off.

The drove numbered a hundred and fifty head, if not more. There were four drivers in charge of the cattle, and a canvas-topped wagon rattled along in the wake of the drove.

We rode on at our accustomed gait, and soon passed the wagon and came up with the cattle. One driver kept in the rear, mostly, and him we engaged in conversation. If at all suspicious of us, he concealed the fact. After we had talked with him a few minutes, Frank remarked, carelessly:

"You've got three cattle in that drove that don't belong there."

"What three do you mean? P'int 'em out!" he roared.

Promptly I pointed to Lep. "That big, spotted fellow, with the bell on, belongs to me," I informed him.

"That spotted steer! Why, I've owned that brute ever since he was a suckin' calf, and his mammy before 'im. I'd just like to see the chap that can drive off old Spot without walkin' over my dead body!"

Both Frank and I were much taken aback. It had never occurred to us that the fellows would dare refuse to surrender our cattle.

"If you've owned him as long as you claim to have owned him, what's his brand?" I demanded, angrily.

"I'm not crammin' my skull with brands and sech like."

"Then which side is he branded on?" I demanded again. The ox was some distance ahead, and the brand could not be seen.

"On the outside!" the driver fairly shouted. And both he and the other drivers, who had dropped back near him, guffawed loudly at this joke.

"That's exactly what I thought you knew about it," I answered, contemptuously. "The fact is, you never set eyes on that ox till yesterday, and you know it as well as I do."

"Nor on that red two-year-old heifer over there close to him; nor on that brown yearling steer right over yonder," put in Frank, pointing. "They're our cattle, all three, and we've come for them."

"I raised all three of them brutes from calves!" the fellow blustered. "And no livin' man can tech a hair of 'em without wadin' knee-deep through our blood! Ain't that so, boys?"

"Bet your life it is!" shouted one of the drivers. And the others uttered similar expressions, all thickly punctuated with oaths.

"We're not blood-waders," Frank answered. "But we know what belongs to us, and we're going to have what's ours. Those three cattle are our property."

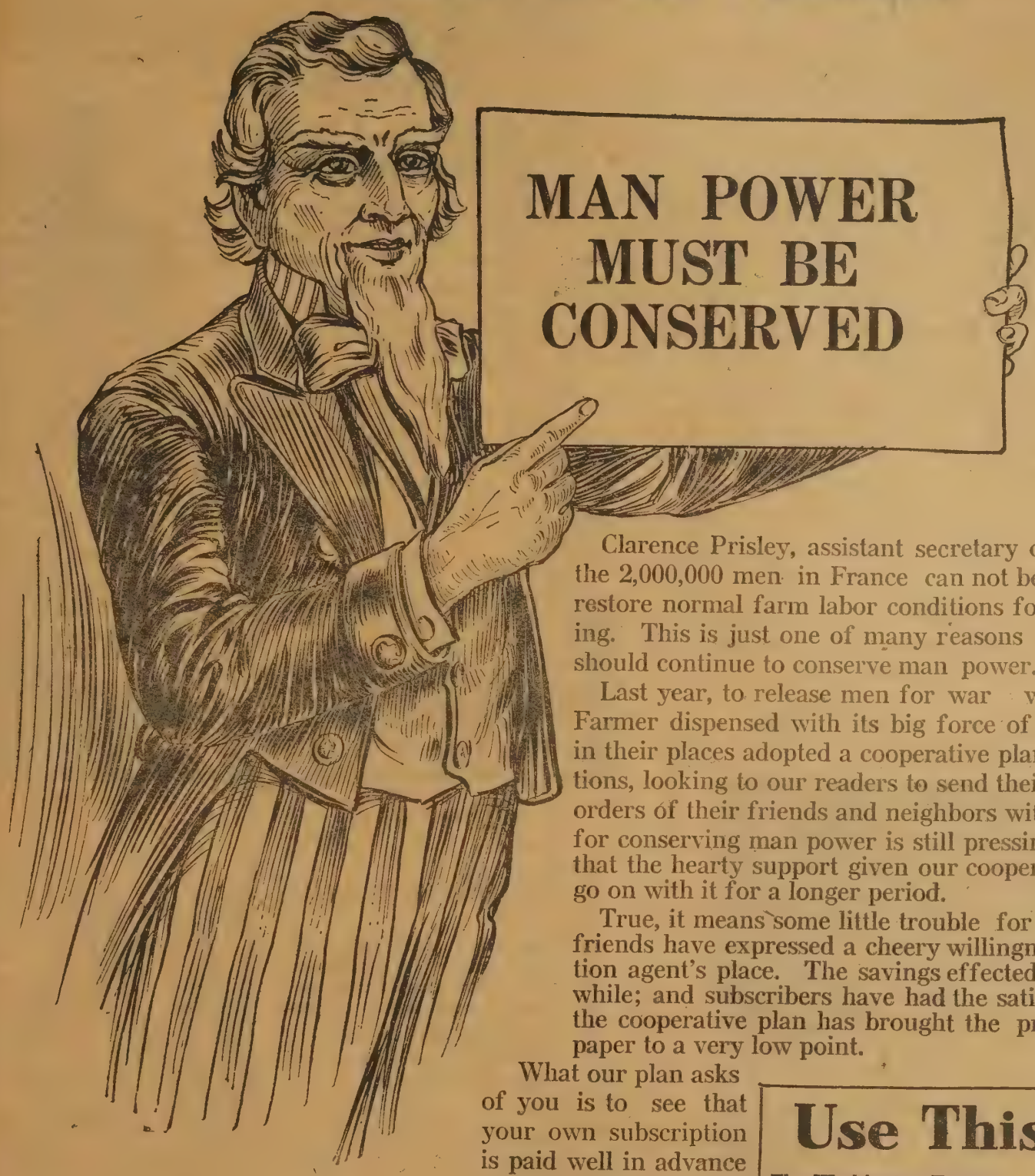
"And we're going to take them, one way or another!" I burst out, hotly. I was boiling over with wrath at their rascally, lying impudence.

The driver laughed insolently. "If you want 'em, just sail in and cabbage on 'em," he invited.

(Continued on page twenty-seven.)

# Save Money and Man Power

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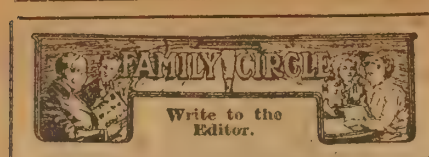
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ALICE W. BARLAND, Editorial Contributor.

## Methods of Saving

In these days, when we are continually trying to save along every line so as to be able to help our country that much more and to do as much Red Cross work as possible, one must not forget they can conserve on time and strength in various ways, which is important, too.

Take, for instance, syrup and molasses, which are used almost daily in the preparation of meals. It will save time and strength if one keeps a wide-mouth bottle filled with syrup and molasses. This will save getting out the syrup or molasses pail where only a small amount is wanted. I like to use molasses as much as possible when using the war flours as it covers any of the grain flavors many object to. This is especially true of barley flour and molasses always adds a pleasant flavor to any of the war breads, except where rice or corn is used. I also find adding a little soda will remove any acid flavor that is so often found in the war breads. This is just to improve the flavor and must not be considered as part of the leavening agent.

Make more cookies that can be dropped from a spoon. The time spent in rolling out cookies can be given to Red Cross work.

Keep an oil can with a curved spout filled with kerosene, so that when a few drops are needed it will save getting out the big oil can and in this way, one will prevent any unnecessary waste of kerosene.

In cooking rice, if the water is not used in making soup or bread, use it for starching waists, dresses, aprons, etc. It makes just the right degree of stiffness. I cook one cup of rice in a gallon of water. When the rice is cooked I strain it through a sieve. This makes enough starch in that amount of water.

I like to keep a dish especially for any butter scraps. These can then be used for seasoning and in various ways that butter is used. Brooms are very expensive now and it pays to save them. I use a dustless mop as much as possible. It not only saves the broom, but it saves getting a lot of dust scattered around. Between the dustless mop and a carpet sweeper I have made my best broom last two years. It is now ready for use in the kitchen, sweeping off the porches, cellar steps, etc. I also use my dustless mop in the kitchen as much as possible.

I like to use crushed egg shells to clean bottles, etc. The egg shell can be fed to the chickens.

Buttons have gone up in price too, so it pays to save them all. When removing a set of buttons from a garment put the buttons on a string before placing them in the button box. This will keep the buttons together and save the danger of one or more getting lost. M. P.

### RECIPE FOR ROCKS.

1½ cups syrup or honey
1½ cups sugar.
1 cup water.
1 teaspoon cloves.
2 teaspoons cinnamon.
1 teaspoon salt.
¼ lb fat.
1 teaspoon soda.
1 lemon.
3 cups flour.
1 lb. nuts.
1 lb. raisins.
3 eggs.

Boil together the syrup, sugar, water, spices and fat for five minutes. Take from the stove, add the grated rind and juice of the lemon, salt and soda. Stir well, add flour, and nuts, raisins, the eggs, slightly beaten and enough more flour to make a medium stiff batter. Let stand several hours or over night. Drop in spoonfuls on a greased pan, allowing plenty of space to spread. Bake in a moderate over.

Any kind of dried fruit, such as pears, cherries, figs, prunes, apricots or peaches, or a combination of two or more fruits may be used.

All fruits except raisins and cherries should be coarsely chopped, the nuts broken in coarse pieces and dredged with flour. By grinding fruit and nuts very fine and stirring into the syrup before adding flour a delicious fruit cookie is obtained. The amount of flour used varies slightly, depending on the kind of flour and syrup used.

Soft wheat flour absorbs less liquid than hard wheat flour. When using a thin syrup a little more flour is used than with a heavier syrup. MRS. W. F.

### Humpback Salmon in Rivers.

The humpback salmon is common in the west coast rivers of America, from California to Alaska, as well as on the Asiatic coast.

## Coverall Apron, Crochet Edge

By WINIFRED WORTH.



Every crochet and needleworker is interested in new apron designs. Try this one for your next one.

Details for crochet edge—Use No. 20 crochet cotton, ch. 10 t. back in 7th ch., ch. 2, t. in last st. of ch., ch. 5, tu., t. in t. then t. 3 times over ch., ch. 5, tu., t. in t., ch. 2, t. in 2nd st. of last b. ch. 5, tu., t. in t., then t. 3 times over next b. ch. 5, tu. back and catch in 1st b. made, tu., 3 dc. ch. 4, 3 dc. ch. 4, 3 dc. ch. 4, 3 dc. ch. 4, 3 dc. to make edge rp.

Requires 2 1-2 yards of a 27-inch cloth, a checked nainsook or any desirable cloth, and 4 1-2 yards of crocheted edging. See illustration for pattern of apron.



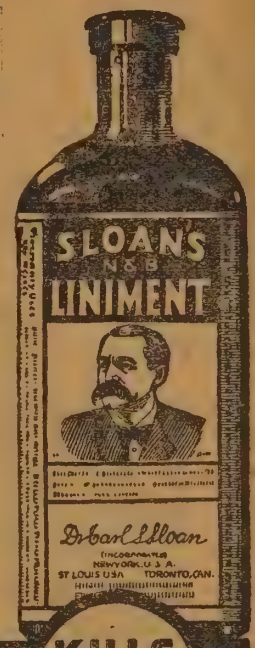

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Be sure to give the pattern number and the correct size.

### EXTRA MEALS WASTEFUL.

The real work of farm life leaves little time or appetite for afternoon teas and late suppers. Nevertheless the request of the food administration that the fourth meal be discontinued until food conditions are less serious suggests to all people simple hospitality. Company for dinner or supper should mean to the earnest woman a real chance to teach conservation in an agreeable form. The church supper or community dinner too, presents an opportunity to demonstrate how good is a dinner of simple home products when well cooked, and should be a substitute for one of the three regular meals. The extra meal and lavishness in food ought to be considered an offense against humanity and good taste so long as war-torn Europe needs to be comforted and fed.

### Brown Betty.

Soft bread crumbs, one and one-half cups; syrup, one-half cup; chopped apples, one pint; chopped raisins, one cup; melted butter substitute, vegetable fat, four teaspoons; cinnamon, one teaspoon; cloves, one-fourth teaspoon. Pour the melted fat over the bread crumbs and stir until the crumbs are evenly buttered. Put a layer of the crumbs into a well-greased pudding dish, mix the sugar, apples, raisins, cinnamon and cloves. Put a layer of the apple mixture over the crumbs and alternate until all is used, finishing with crumbs. Cover closely and bake for three-quarters of an hour in a moderate oven, uncover and brown. Serve hot with hard sauce or cold with cream.

### A Fruit Salad.

A combination of fruit which seems especially desirable for a fruit salad is as follows: One pear, two peaches, one-half grapefruit. Cut the fruit into small pieces, mix with either mayonnaise or other dressing and serve on lettuce. The artistic effect of this salad is enhanced by the addition of mint leaves. A half an apple, cut into small pieces, may be added if a more hearty salad is desired.

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Martha Washington Comfort Shoes
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(B431)




Mother was in Bellingham visiting father whon Lavina Hanford wrote. Lavina lives at Bridgeport and enjoys the cousins' letters. She will be 13 on November 10. Two of her brothers are in the army and Lavina has about $7 worth of thrift stamps and one war savings stamp.

Bessie Janney of Buckeye knows how to knit and she has six thrift stamps. Bessie was 8 years old May 3 and is in the third grade. She wishes her twin would write to her. Why is a school boy being flogged like your eye? Where would you prefer to have a boil?

Red and pink roses are the favorite flowers of Olive Cummins of Touchet. Olive is 15 years old and in the sophomore class in high school. Her birthday is June 6. She has a saddle pony named Charlie. Olive can crochet, embroider, sew and knit. She would like to correspond with some of the girls of the Corner.

Gladys Faulkner, route 6, box 22, Yakima, was surprised to read Clara Harrjson's letter in the Corner, because she used to know her when she lived in Snohomish. Clara was just a tiny tot then. Gladys has three sisters and one brother.

Tip, a dog, is what Opal Cavanaugh of Ephrata tells us about. Tip can do many tricks. He will stand on his hind feet and ask for something to eat. When you tell him to halt, he will do so. Opal was 12 years old June 16. Effie Luddington, who writes to the Corner, is a friend of hers. What relation is a child to its father if it isn't the father's own son? Opal will tell the answer the next time she writes.

Beatrice Smith of Chelan lives on a 300-acre farm and she thinks it is fun to belong to the poultry club. Beatrice likes to go to school. On the farm there are two mules, Pete and Mick, 14 cows and about 29 little chickens.

Mother and two brothers and Lois were in California all last winter, visiting grandmother. Lois Manchester lives at Lyle and tells about a picnic she went to this summer. They had cake, sandwiches, chicken, salads and ice cream to eat. Lois was 10 years old January 4, and she wants a twin.

During harvest time Gladys Cole worked outdoors most all the time. Gladys wishes some of the cousins to write to her. She lives on a 160-acre farm 11 miles north of Corfu. She has five horses of her own, Dolly, Pansy, Bud, Buckles and Nellie; three head of cattle, Ruth, Lightfoot and Silver Tip; and eight cats, Cloe, Irene, Chip, Cozy, Kit, Cyclone, Gerart and Wahoo. Two of Gladys' cousins are in the war. Gladys is going to write again.

This summer Alice Christensen went out camping. Alice lives on a 160-acre farm and her address is R. F. D. 3, box 143, Ellensburg. She is 12 years old and her birthday is June 5. For pets she has two dogs and three cats.

Mary Teegarden of Wapato has five brothers and one sister. Mary is 9 years old and in the fourth grade. June 7 is her birthday. She wants a twin.

Part of the time this summer, Lucile Turnley of Yakima drove a derrick and she helped to mow the hay. Lucile was 11 years old March 31, and she lives on a 40-acre farm. She walks two miles to school.

Reading and spelling are the studies that Zennie Stauffer likes best. Cousin Zennie lives at Wilbur and her papa overhauls and repairs cars. Zennie has knitted a washrag for the soldiers. She was 10 years old September 26. Her uncle is fighting in France.

High in the air, not on a tree, homeliest thing you ever did see. Florence Evans of Warden wants to know if the cousins can answer this riddle. Florence likes to read the other children's letters. She was 13 years old June 29. She has a little colt named Jack.

Lora Ensley, R. F. D. 1, Box 23, Almota, was 10 years old April 11. She wishes her twin would write to her. Thelma and Margaret are her sisters and Edwin is her brother. Brother has a pony named Beauty.

### Doris Rides Horseback.

Dear Aunt Nellie: I am 12 years old, and am in the sixth grade. We live one and one-half miles from Garfield, and we have three neighbors quite close to us. We have two horses and one cow. One of our horses is a fine saddle horse. I can ride pretty well. My birthday is November 4. Have I a twin? If I have tell them to write to me. I have a thrift stamp book. I have five stamps now and am going to buy $2 worth more. Doris Jenkins, R. F. D. 2, Garfield, Wash.

### Ida Likes to Draw.

Dear Aunt Nellie: I am 12 years old, and my birthday is February 25. I have four sisters and four brothers. I go to school, and am in the eighth grade. My favorite work is drawing. I had a little garden of my own this year and I had peas, beans, radishes, onions and pumpkins. I live out in the country. We have one dog, four cats, three cows, and four calves. We have about 100 chickens. We get from 20 to 30 eggs per day. Can you guess this riddle? Black within and red without, four corners round about. I have blue eyes and brown hair. Have I a twin? If I have I wish she would write to me. I would write to her.—Ida Schmidt, Mansfield, Wash.

### Reads Every Letter Every Week.

Dear Aunt Nellie: My father takes the Farmer and I read every letter every week and enjoy reading them. This is my second time I have written to you, and I hope it won't be the last. I was 13 years old October 5, 1918. I am in the seventh grade at school. I have found my twin and her name is Helen Cochan, and she is as old as I am. I have one brother, and he is 16 years old and his birthday is December 3. I will give you some riddles: A man lives in a house without doors, without windows, without a crack, how does he break out? We have 17 head of horses, three cows and one little calf. We have 15 little ducks. We have one dog and four little kittens.—Esther R. Oestrich, Box 575, Ritzville, Wash.

### Joyce Has Found Her Twin.

Dear Aunt Nellie: I have been reading the letters and looking for a twin for a long time, and now I have found one. Her name is Louise Hannah. My birthday is January 9. I will be 11 then. I now know several people that have birthdays on that day, but I have never found any one who will be 11 their next birthday. I am in the sixth grade. I go to the Edison school. I live on a small farm not far from the school. We have two horses, one cow and about five dozen chickens. We have an old cat and some kittens. We haven't any rabbits now, but I think we will get some. I have two brothers and no sisters. I can knit, crochet and tat.—Joyce Williams, Box 1800, Pullman, Wash.

### Lois Has War Stamp.

Dear Aunt Nellie: This is the first time I have written to the Children's Corner. I am 10 years old and in the fifth grade at school. I have one war savings stamp. My birthday is December 7. I live on a 448-acre farm, and I have one brother and three sisters. My sisters' names are Audry, La Reta and Freda, and brother's name is Lester. I am in the fifth grade at school. We have three horses. Their names are Prince, Nigger and Dolly. We have no dogs, but we have two cows and three calves. My sister Freda has a cat and its name is Blacky.—Lois Chace, R. F. D. No. 1, Box 76, Ellensburg, Wash.

### Edna Is a New Cousin.

Dear Aunt Nellie: This is the first time I have ever written to the Children's Corner. I was 13 years old October 9. Have I a twin? I have dark hair and brown eyes. I have two brothers and one sister. My brother's name is Leslie and the other one's name is Willis, and sister's name is Violet. We have five horses, two cows and one calf. The horses' names are Beauty, Kate, Billy, Nelly and Jude. Billy is my pony, and I have lots of fund riding him around. May I be a cousin?—Edna Sheckler, Republic, Wash.

### Pet Is a Pony.

Dear Aunt Nellie: My father has been taking the Farmer for almost one year, and I have been reading the letters every week, and enjoy them very much. I was 11 years old January 26. I have light hair and blue eyes and I am in the sixth grade at school. We live on a farm of 160 acres, and I have for my pet a pony. Her name is Fly. We have two dogs and an old cat. I have three little chickens and two old hens. We have two cows and one calf. We have about one mile to go to school. I like to go to school very much. I am glad it will soon start again. I would like to have some of the cousins write to me.—Violet Sheckler, Republic, Wash.

### Gladys' Second Corner Letter.

Dear Aunt Nellie: This is the second time I have written to the Children's Corner. I am 12 years old and in the fifth grade. My birthday is August 26. I have two sisters and two brothers. We have three canary birds, four pigs, five geese, and about 42 chickens. We have an eight-room house. We live on 20 acres of land. —Gladys Strong, Box 58, R. F. D. 1, Deer Park, Wash.

### Two Brothers and Two Sisters.

Dear Aunt Nellie: This is the first time I have written to your Corner. I hope you find my letter interesting and enjoy it very much. I like to read the letters the other cousins write. My birthday was October 26. I was 13 years old. I have brown hair, blue eyes and a medium complexion. I go to school, district No. 16. We have nearly 30 pupils. Mrs. Swan is my teacher. We have a Junior Red Cross established at our school. I have two brothers and two sisters. My oldest sister goes to high school in Vancouver. I belong to the canning, sewing and pig clubs. I live on a 480-acre ranch. If I have a twin I wish they would write to me.—Cecilia Colleary, R. F. D. No. 3, Goldendale, Wash.

### Who Is Grace's Twin?

Dear Aunt Nellie: I will write to the Children's Corner for my first time. Papa has taken the Farmer for a short time, and we like it very much. I enjoy reading the letters. I have two sisters and one brother. My sisters' names are Ruby and Jessie. My brother's name is Floyd. I live on a big farm and papa raises wheat. We have six horses. Their names are Tom, Barney, Dick, Dave, Major and Colonel. We have seven cows and heifers, Bossy, Flora, Roamy, Lady, Rose and Whiteface. We have two dogs, Bruce and Bobbie. We have one cat and his name is Dick. We have 50 turkeys and over 100 chickens. I was 11 years old September 28. Have I a twin? If I have, I wish he or she would write to me.—Grace Yowell, Riverside, Wash.

### Otis Orchard Cousin Writes.

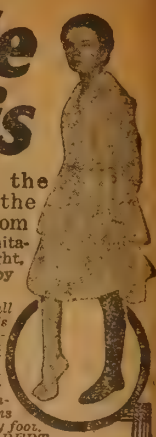
Dear Aunt Nellie: I am 11 years old. My birthday is June 30. Have I a twin? I am four feet, four inches tall and have light brown hair and brown eyes. My sisters' names are Doris and Jessie. Jessie is five and Doris is 15. Doris goes to high school and is in the third year. My brothers' names are Winslow, age 17, and Donald, age 13. My oldest brother graduated from high school in three years when he was only 16. We used to live in Spokane, which is only 15 miles from here. We own a 160-acre farm and have cows, horses, chickens, rabbits, two dogs and a cat. I can cook, tat, crochet and knit.—Alice Clift, Otis Orchards, Wash.

### Evalene's a Corner Cousin.

Dear Aunt Nellie: I was 12 September 1. Have I a twin? If so I wish he or she would write. I have three sisters and two brothers, Agnes, Vernice, Emily, Charlie and Maurice. I have one uncle in France. His name is Charlie. I raised a war garden this year. I like it on a farm. We have an old cat and a little cat. There were seven. Only one lived. Its name is Fluffy. It is blue. I have a doll. Its name is Nellie. named it after you. I have a $50 Liberty bond. I have to go one mile to go to school. I will close with lots of love to all the cousins and Aunt Nellie. May I be a cousin, Aunt Nellie?—Evalene Maurer, R. F. D. 1, Espanola, Wash.

(Address all letters to Aunt Nellie, care of The Washington Farmer, Spokane, Wash.)


**Infantile Paralysis**



These two letters and the photographs evidence the satisfactory results from treatment received at this Sanitarium by Miss Clara Gilbert, Delight, Ark., whose foot was deformed by Infantile Paralysis:

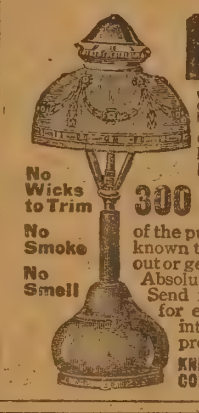


*I arrived home all right and my friends were greatly surprised to see me walk flat on my foot. When I came to your Sanitarium I walked on my toe. I will gladly answer all questions with regard to my foot.*
CLARA GILBERT,
Box 45, Delight, Arkansas.

*I cannot praise your Sanitarium too highly for your great work. Clara's friends were surprised to see her foot straight. She has been quite a show girl since. We will gladly answer any inquiries in regard to your work for Clara.*
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## News for Breeders

The sale of a Jersey bull to Mr. Weister of Skamokawa, Wash., over three years ago by J. C. Brown & Sons, Shedd, Ore., resulted in the sale, this fall, of two more bulls and eight females, besides a number of grade Jerseys. Every one of the heifers by Mr. Weister's bull proved to be an extra good producer. John McAvoy, a neighbor, tried to purchase the bull. As Mr. Weister did not care to sell, he bought his half-brother from Mr. Brown. With the bull he purchased two Register of Merit cows and fresh heifers. Jerald E. Senner, the Wankiakum county cow tester, helped him make the selection. Later Mr. Senner got four heifers for Frank Durrer and one for Berger Olson.

**YEARLING BRINGS $24,000.**

At the recent American Royal Live Stock show at Kansas City, S. A. Farmer & Son of Pearl, Mo., sold to S. H. Velie of Kansas City, a purebred Hereford yearling bull for the remarkable price of $24,000. This is said to be the highest price ever paid for a yearling bull of any of the beef breeds. It is also said that the price had only once been exceeded for a Hereford at any age, that being when Walter L. Yost of Kansas City paid $31,000 for Ardmore, grand champion Hereford bull of last year's American Royal. The $24,000 animal, Repeater 7th's Model, was bred by O. Harris & Son of Harris, Mo., having been sold by them to Farmer & Son as a calf. Reports of the American Royal say that the Herefords on show this year had a total value of $1,500,000.

**STOCK SALE DATES.**

Shorthorns—At North Portland, Ore., Dec. 12; at Lewiston, Idaho, December 18.

Herefords—At North Portland, Dec. 11; at Lewiston, Dec. 19.

Holsteins—At North Portland, Dec. 13.

**SHOW ON AT CHICAGO.**

The great International Live Stock show is on this week at Chicago. Breeders are competing with each other for a total of $75,000 in prizes. Reports indicate an excellent show of animals from many parts of the United States.

**JEPPESEN BUYS JERSEY BULL.**

C. O. Jeppesen of Rexburg, Idaho, recently purchased one of the Jersey senior yearling bulls bred by Edward Long of Buhl, Idaho.

**Tobacco Crop Breaks Record.**

This year's tobacco crop is estimated at 70,000,000 pounds more than last year, which was the largest crop on record.

# Breeders' Department

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### QUALITY SHETLANDS

"The women's pleasure and the children's delight." Richest Shetland breeding. Write for prices on early delivery.

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have won every feeding contest entered since 1914. Weanling pigs, gilts, bred or open. Our blood lines can not be beat.

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All pure bred, not registered. Have especially fine lot Hampshire ewe lambs, yearlings and three-year-olds. Any size lot. Write me on any kind of sheep deal.

H. STANLEY COFFIN, Yakima, Wash.

### Oxford Ram Lambs

All registered rams, including ram lambs sold, all yearling range rams sold. Could get one or two from another party. Still have a nice bunch of ram lambs for general trade.

FISK FARM, Spring Valley, Wash.

## POULTRY

### Rhode Island Red Cockerels

Both Combs

RHODE ISLAND WHITE COCKERELS—BOTH COMBS.

My stock is pedigreed and line bred. Buy your breeding stock in Mammoth Toulouse geese and Mammoth Bronze turkeys. Have pedigreed Belgian hares and Flemish Giant rabbits. Also registered Airedale puppies, Cermer strain.

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WESTERNWOLD RANCH, Prineville, Ore.

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Have bargain in 2 or 3 bull calves from high class cows. A son of

KING OF PONTIACS.

at the head of our herd. His dam a daughter of old Clothilde De Kol 2d, some Korndyke Pontiac blood, we will say. Write for prices.

A. V. BRADRICK & SON, Palouse, Wash.

### Bargains in Bull Calves

Sired by Segis Riverside Pontiac, that sold in Pacific International sale, 1914, for $1025, and whose dam has A. R. O. record of 31.47 lbs. butter in 7 days; 118.89 in 30 days, and big records all through his pedigree.

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Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.

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Well bred young bulls for sale.

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Bull calves out of A. R. dams; also a few females. All good individuals. Herd tuberculin tested.

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Hereford Cattle,
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Offspring of Cavalier's Hover O'Blink, son of the great Bargenoch Gay Cavalier, Imp., and out of Barboigh Maggie X, Imp. The dams are advanced register cows and include Lady Emperor Scott, that holds world's record for high test. Send for pedigrees and A. R. records.

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Young stock for sale, including senior calf, Edgewater Sentinel, grand champion 1918 Washton state fair. Herd government tuberculin tested.

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**Duroc Offering**

1 yearling boar, sired by grand champion boar and from grand champion sow.

3 March boars sired by

**Burke's Cherry King**

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The above boars were grown to show at Lewiston.

Fall pigs from our great sows sired by

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Choice young herd boars, old enough for service soon, sired by Richards Defender, Richards Pathfinder, and Victor Defender. Orders placed now for prize young gilts. They will be bred this fall to Idaho and Utah grand champion boars. Young pigs always for sale. Guaranteed to please.

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The today's type and breeding bar pigs for November delivery, $25.

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FOUR DUROC GILTS BRED TO FARROW this fall, also spring pigs, on hand.

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## CHESTER WHITE SWINE

### REGISTERED O. I. C.

SWINE.

Choice weaned pigs. Will ship subject to approval.

RINGGOLD FARM.
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Centralia, Wash.

### Schumacher's O. I. C.'s.

For sale—May and June boars, ready for service, from matured sows, with pedigree and from show ancestors. Also 18-month-old sows to farrow second litter in January.

E. C. SCHUMACHER, R. 1, Granger, Wash.

### COVE STOCK FARM

Unrelated fall and spring Chester White pigs from prize winning stock.

ARCHIE CONLEY, Cove, Ore.

### Chester White Swine

Choice weanling pigs; spring gilts and service boars.

FRED H. HOFFMAN, Albion, Wash.

## BERKSHIRE SWINE

### Kintyre Farm Berkshires

Weanling pigs, bred sows, service boars.

CLARK BROS., Yakima, Wash.

### Riverby Orchard Berkshires

Riverby Orchard Berkshires won 12 out of 15 first prizes at the Washington state fair, 1916, also many prizes, including grand champion sow at the Panama-Pacific world's fair. We offer for sale a few good boars and young sows.

D. C. BUNN, Prosser, Wash.

## POLAND CHINA SWINE

### LOCUST HILL HERD

Big Type and medium Poland China. Bred gilts and spring pigs of both strains, unrelated. Sixteen years a breeder of Poland Chinas in Oregon.

A. L. SWAGGART, Athena, Ore.

### Poland China Swine

Strictly first class breeding stock for sale at all times at reasonable prices. Several very choice young gilts and one fine, serviceable boar at a bargain; also young pigs, both sexes. (Everything registered free.)

C. B. COX, Mabton, Wn.

### Satisfaction or Money Back

Big Litter, Easy Feeding.

BIG TYPE POLAND CHINAS.

Fifty vigorous young boars, ready for service. Best breeding of the times and quality to equal it.

H. J. STILLINGS, Hermiston, Ore.

### Oaksdale Farm

Poland Chinas and Holsteins. Two fall boars at bargain prices for quick sale. A fine lot of early spring pigs. Best of breeding. A few well bred young bulls at very reasonable prices.

C. R. EVANS, Halsey, Ore.

BOAR PRICES FOR NEXT 30 DAYS.

On account of the influenza will not hold our fall boar sale, so in order to make room for our next crop of pigs will make special prices for the next 30 days. They are real herd boar material. Write for description and the price will interest you. Also 7 yearling Shorthorn bulls. Everything guaranteed to please or money back. Shipped C. O. D.

GREENLEAF STOCK RANCH, Greenleaf, Ida.

### Poland Chinas and Holsteins

Strictly big type spring pigs of both sexes. Well grown, good individuals, sired by A. Price. A few choice young bulls.

B. S. THURSTON & SON., Jefferson, Ore.

### BIG TYPE POLAND CHINAS

Winners of first prize junior herd, Oregon state fair, 1918. Big Bob Wonder and Sammy blood boar pigs of all ages, also a few good gilts.

LOE FARMS, Silverton, Ore.

### QUALITY AND UTILITY OUR HOBBY

Poland Chinas our breed. Young stock from prize winning ancestry. Satisfaction assured.

FRANK NEEDHAM, Eugene, Oregon.

25 HEAD PURE BRED

China boars, 6 weeks to 8 months old, $25 to $50, according to age. These are from my prize winning herd, including 1st and 2d prize boars. They are from litters of 10 and 12 pigs.

C. W. SHUMATE. Tumwater, Wash.

### BIG TYPE POLANDS

Genuine—Guaranteed.

GEO. W. BUCK, Oregon City, Ore.

QUALITY HERD.

If you want to improve your herd, try stock from my winners at the Oregon state fair.

RAY J. FOX, Lyons, Ore.

PURE BRED POLANDS.

Breeding stock of all ages. Will ship C. O. D., subject to approval.

HERBERT WILLARD, Dayton, Ore.

## ABERDEEN ANGUS

### Aberdeen Angus Cattle

A. H. EAGLESON & SONS,
Boise, Idaho.

When answering advertisements don't fail to mention this paper.

## HORSES

KENTUCKY JACKS AND HORSES.

Big bone, Kentucky Mammoth Jacks, easy riding saddle horses. Write us describing your wants. We guarantee safe delivery and take Liberty bonds and W. S. S. at par.

THE COOK FARMS, Lexington, Ky.

IOWA PERCHERON FARM.

Percheron stallions and mares for sale, breeders' price.

M. C. CONLON, Redmond, Ore.

### JUST RECEIVED



Another carload of Percheron and Belgian stallions. Most of the Percherons are of the famous Brilliant blood, sound and guaranteed to be breeders. Two, three, four and five year olds, weighing from 1700 pounds to 2200 pounds. The best lot of stallions that has ever been shipped to the northwest, and will be sold at very reasonable prices. Write for information or come to my barns and see them.

WILLIAM T. TRACY, Kennewick, Wash.

## The Northwest Shorthorn Breeders' Association

Will hold its Annual Fall Sale of

# REGISTERED SHORTHORNS

## At Lewiston, Idaho, Dec. 18, 1918

The offering consists of

## 35— BULLS —35
## 31—FEMALES—31

Selections have been made from the following breeders:

Day & Rothrock Co.
W. J. Townley.
W. H. Leonard
W. G. Cordiner
Joe Turner
H. L. Summers
University of Idaho
A. D. Dunn
G. W. De Lay
E. H. Harper
H. D. Wester
Jas. H. McCroskey & Son
W. Hoover.

Catalog mailed on request.

Geo. A. Gue,
Harry C. Cranke,
Auctioneers.

JOE TURNER,
Sales Manager.
Meyers Falls, Wash.

## Annual Holstein Sale Portland Union Stock Yards

**North Portland, Oregon**

**FRIDAY, DECEMBER 13, 10:30 A. M.**

If you are interested in Holstein cattle you must not pass this great show and sale by. I believe the consignments are the finest lot of individuals, well bred and in calf to WORLD'S GREATEST SIRES, ever offered in a western sale. The consignors speak for this assertion. The cows are young, either heavy in calf or fresh. The heifers are heavy in calf. Young bulls of splendid breeding. All tuberculin tested and consigned by the greatest breeders in the west, viz.:

CARNATION STOCK FARMS
HOLLYWOOD CO., WM. BISHOP
E. B. MARKS, J. VON HERBERG
WM. TODD & SONS AND FRED PETERSON

Write for catalogue, **Geo. A. Gue, Mgr., Yakima Wash.**

**AUCTIONEERS:**

**Geo. A. Gue Harry C. Cranke J. W. Hughes**

## Champion Eastern and Western Blood

Four young bulls sired by Maple Park Chief, a son of Hood Farm Pogis 9th, that has more register of merit daughters than any other bull of the breed, living or dead. His dam is a half sister of Hood Farm Torono, who has seventy-three daughters in the register of merit and nine proven sons.

MAPLE PARK CHIEF, in a herd of 41 cows maintained on ordinary pasture, raised the average production of the offspring above their dams by 49 lbs. of fat per year. Each of his daughters so far freshening in the college herd is producing more than her dam at the same age. His potency as a great producing sire is well proven.

Two dams of these bulls are in the register of merit with good records. The other two are now on test and will qualify with a large margin. One is the daughter and two are granddaughters of the great Golden Glow's Chief, one of the four gold medal bulls of the breed, sire of 37 register of merit daughters, including Vive La France, now making a new world's record. They are good individuals and are offered at from $125 to $200—less than half their real value.

**O. A. C. Dairy Department Corvallis, Ore.**

## Don't Delay. Get Your Breeding Stock Now

We had hoped to meet you at the Lewiston show, where we had planned to offer the swine breeders the finest lot of big, husky Duroc boars and gilts that we have ever owned, but the show is off. So now we are offering them through this ad. If our Durocs don't please you, the expense is all ours. Remember we won first and junior championship last year in the strongest class of boars ever shown at the Spokane fair.

Our prices are in keeping with the quality of our stock. Write us your wants.

**GARFIELD STOCK FARM**

Registered Holstein Cattle, Duroc Jersey Swine.
Garfield, Wash.

## ANNUAL PACIFIC INTERNATIONAL SHORTHORN SALE

### North Portland, Ore., Thursday, Dec. 12

TO THE PROSPECTIVE BUYERS OF CHOICE SHORTHORNS

There will be sold at public appraisal in Portland, Oregon, Thursday, Dec. 12th,

**35 Head of Strictly Choice Females 35**
**15 Head of High Grade Bulls 15**

Sired by the best bulls in the northwest.

Catalogues mailed on request by applying to

**Frank Brown Sales Manager**
**CARLTON OREGON**

## Pacific International Herefords At Auction

**60 Head Bulls, Cows and Heifers 60**

Ready for the Range or Ranch
Consigned by the
**Premier Hereford Breeders of the Northwest**

This is an offering of white-faces that will please admirers of the breed.

Sale is under the auspices of the Northwest Hereford Cattle Breeders' Association and will be held at

**North Portland, Oregon**
**Wednesday, Dec. 11, 1918**

Catalogue can be had from
L. R. McGee, North Portland, Ore.

# Grain and Produce Markets

## Grain Market.

CHICAGO, Dec. 2.—Official estimates that 300,000,000 people in transatlantic countries were depending largely on food conservation in the United States to avert hunger, had a bullish effect here today on grain and provisions. Corn closed firm 1 1-4c to 2 1-2c net higher, with December and January both $1.28 1-2 to $1.28 5-8. Oats finished 1-4c off to 1 3-8c up, and provisions at an advance of 10 to 60c.

Throughout the day the dominating factor in the corn market was the food administration statement as to the needs of huge supplies to meet the food shortage in Europe. A bullish construction was also placed on a statement by the secretary of agriculture that he could see no good reason for a drop in prices. Predictions that the coming United States wheat crop would be a record-breaking one failed to exert any lasting contrary influence on the trade.

Oats averaged higher in sympathy with corn. Receipts were not heavy, and country offerings to arrive were light.

Firmness in the hog market together with the strength of corn lifted provisions. Packing interests appeared to lead the buying.

### Pacific Northwest Grain.

PORTLAND, Ore., Dec. 2.—Future grain [illegible] Oats—No. 2 white feed, December, $54.50; January, $54.50. Barley—[illegible] feed, December, $50.50; January, [illegible] standard A, December and January. Eastern oats and corn in bulk—[illegible] white, December, $53.50; January, [illegible] No. 3 yellow, December, [illegible] January, $[illegible]; No. 3 mixed, December and January, $[illegible].

### Chicago Futures—Close.

Corn—December, $1.28 1-2; January, $[illegible].

Oats—December, [illegible]; January, 72 5-8c.

Pork—January, $[illegible].

Lard—December, $26.35; January, $26.15.

Ribs—January, $25.12; May, $24.40.

### Cash Quotations.

CHICAGO, Dec. 2.—Corn—No. 2 yellow, new, $1.38; No. 3 yellow, new, $1.37@1.40; No. 4 yellow, new, $1.32@1.37. Oats—No. 3 white, 72 3-4@74c; standard, 73 1-4@75c. Rye—No. 2, $1.62@1.62 1-2. Barley, 90c@$1. Timothy, $8@10. Clover and pork, nominal. Lard, $26.50. Ribs, nominal.

### Minneapolis Grain.

MINNEAPOLIS, Dec. 2.—Flour—Unchanged; shipments, 96,277 barrels. Barley, 84@93c; No. 2 rye, $1.60@1.61; bran, $27.73. Wheat—Receipts, 867 cars, compared with 471 cars a year ago. Cash No. 1 northern, $2.21 1-2. Corn—No. 3 yellow, $1.39@1.44. Oats—No. 3 white, 69 1-2@70c. Flax, $3.61@3.64.

## Live Stock Quotations.

### At Omaha.

OMAHA, Neb., Nov. 30.—Hogs—Receipts, 6300; market 10c to 20c higher. Heavy, $16.75@17.50; mixed, $17.25@17.50; light, $17.10@17.60; pigs, $10@16; bulk of sales, $17.25@17.50.

Cattle—Receipts, 400; market steady. Native steers, $11@18; cows and heifers, $6@12; western steers, $9.50@16.50; Texas steers, $8.50@12; cows and heifers, $5.50; feeders, $6@13; calves, $7.50@13.50.

Sheep—Receipts, 100; market steady. Culls, $4.50@7.50; wethers, $9@10; ewes, $7@8; feeder lambs, $10@14; lambs, $11@15, [illegible] $10@11.

### At Chicago.

CHICAGO, Nov. 30.—(United States Bureau of Markets.)—Hogs—Receipts, 24,000; market steady to a shade lower than yesterday's average. Butchers $17.50@17.80; [illegible] $16.75@17.65; packing, $16.75@17.40; [illegible] $15@16.60; pigs, good to [illegible] $15@15.50.

Cattle—Receipts, 2000; compared with a week ago choice and prime native, steady; [illegible] unevenly 25 cents lower; steady; best feeders, steady; medium and common stockers, 50c to [illegible] lower.

Sheep—Receipts [illegible]; compared with a week ago [illegible] to 25c lower; good [illegible] declining most; sheep, yearlings and [illegible] stock steady to 25c lower.

### At Portland.

PORTLAND, Ore., Nov. 30.—Cattle, steady; receipts, 55. Steers, prime, $12.25@12.75; good to choice, $11@12; medium to good, $10@11; fair to medium, $8.50@9.50; common to fair, $6@8; cows and heifers, choice, $8@8.50; medium to good, $6.50@[illegible]; fair to medium, $5.50@6.50; canners, $4@[illegible]; bulls, $5@7.50; calves, $9@12; [illegible] and feeders, $6@8.

Hogs—Steady; receipts 254. Prime mixed, $[illegible]@17; medium mixed, $16.50@16.75; rough heavies, $14.80@15; pigs, $14@15; [illegible], $16.90@17.

Sheep—Steady; receipts, 286. Prime lambs, $12@13; fair to medium, $9@11; yearlings, $10@11; wethers, $9@10; ewes, $6@8.

### At Seattle.

SEATTLE, Nov. 30.—Hogs—Receipts, 147; steady and listless. Prime lights, $17.40@17.50; medium to choice, $17.25@17.50; medium heavy, $16.25@16.50; rough heavies, $15.25@15.50; pigs, $15.25@16.50.

Cattle—Steady. Best steers, $11@13; medium to choice, $10.50@11; medium to good, $8@8.50; medium, $7@7.50; bulls, $5@7.50; calves, $5@10.

### Spokane Union Stock Yards.

| | Cattle. | Clvs. | Hgs. | Shp. |
|---|---|---|---|---|
| Saturday, Nov. 30 | ... | .. | ... | 34 |
| Friday, Nov. 29 | 132 | 4 | 352 | .. |
| Wednesday, Nov. 27 | 793 | 38 | 416 | 5 |
| Tuesday, Nov. 26 | 103 | .. | 336 | 87 |
| Monday, Nov. 25 | 289 | 23 | 156 | 9 |
| Week ago | 33 | .. | 14 | 170 |
| Year ago | 187 | 3 | 166 | .. |
| Two years ago | 16 | 14 | 23 | 4 |

Saturday's light receipts closed a very busy week at the stock yards and also closed a month of active trading that was equal to any of the other heavy months of the summer and early fall. A review of sales during November shows steady prices invariably had maintained. Saturday's trading was confined solely to Friday's late arrivals, which were made up mostly of stock cattle. The market closed firm, with prospects steady for the early month at the following quotations:

| | |
|---|---|
| Prime steers | $12.00@12.50 |
| Good to choice steers | 10.75@11.75 |
| Medium to good steers | 9.50@10.50 |
| Fair to medium steers | 8.50@ 9.00 |
| Common to fair steers | 5.50@ 8.00 |
| Choice cows and heifers | 7.50@ 8.25 |
| Med. to good cows and heifers | 6.00@ 7.00 |
| Com. to med. cows and heifers | 4.75@ 5.75 |
| Canners | 3.00@ 4.25 |
| Bulls | 5.00@ 6.50 |
| Calves | 6.00@ 9.50 |
| Stockers and feeders | 6.00@ 8.00 |

The hog section was free from an offering of fat hogs, a few drafts of stocker pigs being weighed from holdovers. The prices paid for hogs during November fluctuated but very little and closed at prices identical with that of October, except on the rough heavy hogs, which are taking a cut of an additional dollar per cwt., making this class of hogs $2 per cwt. less than bulk of fat hog sales. This ruling, recently inaugurated, is recognized universally. The market is firm, with prospects steady at the following quotations:

| | |
|---|---|
| Prime mixed | $17.00@17.25 |
| Medium mixed | 16.75@17.00 |
| Rough heavies | 15.00@15.25 |
| Pigs | 14.75@16.25 |
| Stockers and feeders | 12.00@14.00 |

The sheep division displayed a light offering of lambs and yearlings, the sale of which from their apparent thin condition indicates a strong demand for mutton killers. Unlike cattle and hogs, the sheep market during November was for the most part uncertain, with a natural trend to lower figures, the most radical change being a slump early in the month of $1 per cwt. on all classes. This effect on the local market was brought on by influences of the eastern markets, which in caring for the heavy fall runs created a tendency to weaken the market. Current quotations follow:

| | |
|---|---|
| Prime lambs | $10.00@11.00 |
| Fair to medium lambs | 8.50@ 9.50 |
| Prime yearlings | 8.00@ 9.00 |
| Prime wethers | 7.50@ 8.50 |
| Best mutton ewes | 6.50@ 7.50 |
| Breeding ewes, 1 to 4 years | 12.00@15.00 |
| Breeding rams | 25.00@50.00 |

Saturday's drive ins—H. Rosenswig, sheep.

## Seattle Market.

SEATTLE, Nov. 30.—Several Western avenue jobbers have discovered this week that Winesaps, as well as all other winter varieties, are ripening too fast for long keeping, and as a result there has been considerable hedging on futures. This breaking down is not heavy, but jobbers who had occasion to pull out boxes from their storage stocks found first traces of decay in a grade of fruit that has invariably resisted all softening influences.

The fancy apple trade is quiet. Buyers generally do not care to pay more than $2.25 to $2.50, and are insisting upon fruit that will move at that level.

The spud market is without life or activity. There is no shipping inquiry either for baking Gems or other grades. Western avenue jobbers are being offered government graded Yakima gems at $23 to $25 f. o. b. White river valley growers are holding for $25 to $26, declaring that they can not sell for less and take a profit. Wholesalers are compelled to run considerable of the stock after government grading, as this permits too much secondary stock with particular buyers. Quotations are $40.

Little hope is felt for any improvement in the shipping demand, as good Minnesota potatoes are selling at $1.25 to $1.35 per 100 pounds in Chicago and St. Paul. There is no opportunity for shipping east at a profit as long as markets there continue in their present condition.

The demand for root vegetables is strong, including Yakima yellow turnips. Onions are firm, with Oregons leading, due to their superior keeping qualities.

The fresh ranch egg market, which has been sagging in spots for two days, struck a sustained drop to 70 cents today. Jobbers had been selling 2 cents under the market, while others followed the 72-cent level. The market depended upon the volume of eggs each dealer was receiving. Pressure was so heavy this morning, however, that a decline was forced.

The increase in the volume of pullet eggs that has been shown on the market this fall is taken by jobbers to signify a heavily accentuated production during the coming season. It is apparent that many small poulters that quit a year ago because of the high prices of feed are now returning to the trade.

The butter market is at the point of strength where an advance is regarded as essential if wholesalers are to compete for butterfat, and on Monday some of the jobbers expect to advance prices 3 cents. Should this advance occur, as now seems probable, butterfat will go to 70 cents and city creamery extras in cubes to 64 cents, and in bricks 65 cents.

### Bid Prices to Producers.

Eggs—Select ranch, 65c per doz; pullets, 55c per doz.

Butter—Fresh dairy, 80c per lb; butterfat, 68c per lb; bakers', 28c per lb; raw milk, $3.50 per cwt.

Poultry—Broilers, live, 1918, under 2 lbs., 30c per lb; 2 lbs and over, 27c per lb; hens, 4 lbs and up, 28c per lb; under 4 lbs, 26c per lb; old roosters, 18@20c per lb; ducks, live, fat, 27c per lb; squabs, large, $3.50 per doz; geese, fat, live, 22@23c per lb; Belgian hares, 14c per lb; guineas, $6 per doz; turkeys, young toms and hens, dry picked, 10 lbs and up, 38@39c per lb.

Hogs—Light, 20c per lb; heavy, 18@19c per lb.

Beef—Steers, fat, 11@12c per lb; heifers, fat 10@12c per lb; cows and bulls, 10c per lb.

Veal—Fancy light, 20c per lb; fancy heavy, 12@16c per lb.

Mutton—Fat, 17c per lb; spring lambs, fat, dressed, 18@20c per lb.

Salted hides, cows and steers, No. 1, 14c per lb; No. 2, 13c per lb; green hides, cows and steers, No. 1, 11c per lb; No. 2, 10c per lb; salted, bulls or stags, No. 1, 11c per lb; No. 2, 10c per lb; green bulls or stags, No. 1, 9c per lb; No. 2, 8c per lb; salted or green calfskins, No. 1, 30c per lb; No. 2, 28½c per lb; salted or green kip skins, No. 1, 16c per lb; No. 2, 14½c per lb; dry hides, No. 1, 29c per lb; No. 2, 28c per lb; dry bulls or stags, 24c per lb; dry salt hides, 23c per lb; dry calfskins (5 lbs and under), No. 1, 33c per lb; No. 2, 30c per lb.

Horse hides—Green or salted, each, $2@4; dry, each, 50c@$2.

Wool—Clean ranch, full growth, 50@55c per lb.

Sheep pelts—Long wool, each, $2@3.50; medium wool, each, $1.50@2; short wool, each, $1@1.50; shearlings, each, 35@75c.

## Spokane Market.

SPOKANE, Dec. 2.—The newly issued wholesale price lists of the Carstens and Armour packing houses show that beef prices are a shade easier while mutton has a somewhat upward tendency. In neither case is the change likely to materially affect the retail prices.

Bacon and ham have advanced from 2 to 5 cents a pound. Lard remains steady.

### WHOLESALE MEATS.

**Beef**—Beef steers, 15@20c lb.; T. C. steers, 19c lb; cow beef, 10@14c lb.; heifers, 14 1-2@15c lb.; best loin, 24@25c lb.; steer chucks, 11@12c lb.; square chucks, 13c lb.; prime ribs, 11@12c lb.; rump and round, 17@19c lb.

**Mutton**—Breakers, 19@20c lb.; wethers, 18@19c lb.; ewes, 15@18c.

**Lambs**—Diamond T. C. lambs, 22c lb.; lambs, 20@22c lb.

**Pork**—Packer dressed hogs, 24@30c lb.; pork loins, 30@34c lb.; legs, 32@34c lb.; shoulders, 28c lb.; leaf lard, 27c lb.; tenderloins, frozen, 45c lb.; spareribs, 17c lb.; country dressed hogs with heads on, 19@21c lb. to producer; country dressed veal, 13@15c lb to producer.

**Smoked Meats**—Washington hams, 39c lb.; T. C. hams, 42c lb.; T. C. bacon, 53 1-2c lb.; Washington bacon, 45@49c lb.; picnics, 27c lb.; lean backs, 37c lb.

**Star Brand**—Star hams, 41 1-2@42 1-2c lb.; Shield hams, 39@40c lb.; picnics, 29c lb.; bacon backs, 37@39c lb.; Star bacon, 54@56c lb.; Shield bacon, 50@52c lb.; Simon Pure lard, 35@36c lb.; Shield lard, tierces, 30c lb.; White Cloud compound, tierces, 24 1-4c lb.

**Dry Salt Meats**—Clear bellies, 30@31c lb.; loin back, clear, 31c lb.

**Lard**—Tierces, 30c lb.; $22 buckets, per case; Diamond T. C. pure leaf lard, $16.55 case; Snowcap compound, tierces, 23 1-2c lb.

### POULTRY.

**Live Poultry**—Live hens, 20@22c lb.; spring chickens, 22c lb.; roosters, 10c lb.; ducks, 20c lb.; geese, 18c lb to producers, f. o. b. Spokane.

### BUTTER.

**Creamery Butter**—1-lb. prints, 57@60c lb.

### CHEESE.

**Wisconsin**—38@38 1-2c lb.; first-grade western, 37@38c lb.; cottage, 10@12 1-2c lb.

### EGGS.

Fresh local, 73@82c doz.; storage, 44 1-2@45c doz.

### GASOLINE, LINSEED OIL, ETC.

**Gasoline**—Red Crown, bulk, 25c gal.; Shell, 25c gal.; refined oil (Pearl), bulk, 13c gal.; Eocene, 15 1-2c gal. in bulk.

**Gasoline**—Red Crown, bulk, 25c gal.

**Linseed Oil**—Raw, bbl. $1.94 gal., cases $2.12 gal.; boiled, bbl, $1.96 gal., cases $2.14 gal.

**Turpentine**—Bulk, 96c gal.; cases $1.16 gal.

### GRAIN AND FEED.

**Rice**—Fancy head, $7.50@9.50 cwt.

**Flour**—Bluestem, $11; Blend, $11; graham, $9.75 bbl.; whole wheat, $10.35; eastern rye, $10; eastern rye meal, $10.20; oat flour, $12.80, two 100-lb. sacks.

**Oats**—$62 ton whole, $63@65 rolled, delivered in city; steam rolled No. 2, $65 ton.

**Corn**—$77 ton; cracked corn, $79 ton.

**Barley**—Rolled, $61 per ton.

**Oil Meal**—$75 per ton.

**Bran and Shorts**—$30 ton; if soft wheat feed, $32 ton.

**Hay**—Timothy, $39 per ton delivered; $36 by carload; alfalfa, $32 per ton delivered; $28 by carload.

## Portland Market.

PORTLAND, Ore., Dec. 2.—The food administration has released 10,000,000 pounds of northwestern prunes for civilian use. Of the 60,000,000 pounds commandeered, about 9,000,000 pounds have already been shipped to the east. In the produce line the egg market is the only one to show a tendency to advance. Oregon eggs are very scarce, as the winter lay has not yet materialized. Storage stocks are practically exhausted, and fresh eastern are higher at 64 cents. Fresh Oregons are quoted at 66 cents for ordinary candle and 70 cents for selects. Cube butter is weak with 59 cents asked for extras and 58 cents bid. There is still some cutting of print prices. The turkey market ended in a bad way for all concerned. The price dropped to 35 cents the day before Thanksgiving, and of the surplus carried over some are sold at 32 cents at the close of the week. The remainder went into storage. Poultry has also declined. Dressed meats are steady. The apple market is ruling steady, with the demand chiefly for the cheaper grades. Potatoes are unchanged, with Yakima Netted Gems bringing $2@2.25 and Deschutes Gems $2.25. Local Burbanks hold at $1.75@2. Onions are also steady at $1.85@2 for Oregons.

Butter—Cubes, extras, 59c; prints, 63c; butterfat, No. 1, 67c, delivered.

Eggs—Oregon ranch, candled, 66c; selects, 70c per dozen.

Cheese—Jobbers' buying prices, f. o. b. dock, Portland: Tillamook triplets, 36c; young Americas, 37c per pound. Coos and Curry, f. o. b. Myrtle Point, triplets, 35¾c.

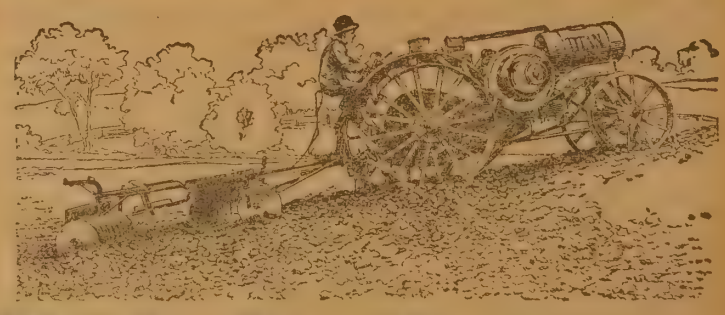
Poultry—Hens, 23@25c; broilers, 28@30c; ducks, 28@30c; geese, 25c; turkeys, dressed, 41@43c.

Pork—Fancy, 20@20½c.

Veal—Fancy, 20@20½c.

Potatoes—Oregons, $1.75@2 per cwt.

Hay—Buying prices, f. o. b. Portland: Eastern Oregon timothy, $30@33 per ton; valley timothy, $27; alfalfa, $28; valley grain hay, $26; clover, 27; straw, $9@10.

# When You Buy a Tractor—

REMEMBER, it's the plows, disks, drills, binders, ensilage cutters, feed grinders, threshers and the like that do your farm work. The tractor is useful only as it furnishes cheap, dependable power for **all** the other machines.

That's why we say, if you need a tractor, you can't make a mistake in buying an **International kerosene tractor.**

We have had over 75 years' experience with farm machines. We know the kind of power they require—all of them. For over twelve years we have sold tractors that supplied that kind of power. We know from experience that the sizes and styles of tractors we sell today will work with the machines you depend upon for your success and prosperity. And—our tractors all operate successfully on cheap kerosene.

When you buy an International kerosene tractor you buy with it the benefit of our long farm machine experience and all the advantages of dealing with a service organization which brings a well stocked branch house or a live, wide-awake retail dealer within telephone call of you. It may surprise you to know that an International tractor, plus these advantages, which no one else can give, costs you less per year of active service than any other tractor sold in anywhere near the same numbers.

**International Harvester Company of America**

(Incorporated)

Billings, Mont. Crawford, Neb. Denver, Colo. Helena, Mont.
Los Angeles, Cal. Portland, Ore. Salt Lake City, Utah
San Francisco, Cal. Spokane, Wash.

# A Crooked Trail

(Continued from page eighteen.)

"That spotted steer is mine, and I'll take him wherever I find him!" I declared. "Come on, Frank, let's cut our cattle out!"

We both urged our horses toward the drove. But before we had advanced a dozen yards, the driver's sharp voice called out:

"I'd hold up there a minute, if I's you!"

I was angry enough to ignore him, but something sinister in the tones caused me to look back—into the muzzles of four cocked six-shooters!"

We both reined up suddenly. We were angry, but not reckless. And there's no denying that four pistols aimed straight at one's head, with four reckless dare-devils behind them, have a wonderfully chilling effect even on the hottest temper. And mine was so hot just now that it almost sizzled and sputtered, like a red-hot iron dropped into a snow-drift.

Frank and I exchanged looks. "They've got the drop on us," he remarked, quietly.

There was nothing else to do, and we stood still where we were and let the cattle-thieves ride on. When 30 or 40 yards away, one of them—one who had not spoken before—turned in his saddle and called out:

"Let me give you two boys a little free advice. Turn round in the road and ride home, as straight as you can and as fast as you can. And don't stop to gabble with anybody on the way. If you do, you may be overhauled, and then your friends will grieve themselves to death waiting for you."

We sat in our saddles, staring at the fellow. His looks and tones were far more threatening than his words; but it was the man himself that caught our attention, rather than his threats. He had been some distance ahead at first, and we had failed to notice him. But now we recognized him instantly.

He was the man who had stopped at the mill among the mountains, with his wounded companion that night—the man who represented himself as a sheriff, and whom we had at first suspected of being the desperado, Bill Edsell.

For some reason both Frank and I preferred to face the fellows till the last of them was beyond shooting distance. Then with one accord, and without a word, we turned and started slowly back the road.

"The impudent scoundrel!" Frank presently burst out, irritated by those last threats. "Wouldn't I like to see him jerked up to a limb!"

"A good limb and a good rope would be the very things for him!"

Though we little suspected it now, the day was soon to come when, far out in the wilds, we should see that very thing. And justice to both of us requires me to state here that, so far from taking part in it or exulting over it, we did whatever we could to prevent it. It is one thing to wish something in hot blood, and another and very different thing to stand by deliberately and see the wish come to pass.

Bitter disappointment sank into our very souls as we reflected on this failure of ours to regain possession of our cattle; and that, too, after we had trailed them so long and so far. And the last driver's implied threats, that we might be pursued and shot if we dared to inform on the thieves, only added insult to injury. We were not seriously worried by the threats, however.

After riding several hundred yards, I turned in my saddle and gazed toward the cattle. I could still make out Lep's spotted back and white horns among the horned throng, and the sight fired my blood.

"Wish I had a Winchester!" I burst out, in hot, helpless rage. "I'd like to drive a few bullets at those scoundrels!"

"That wouldn't do. They're too many for us," replied Frank. "Our wisest way is to set the sheriff on the robbers. That'll hit them harder than anything we can do to them ourselves. The penitentiary is gaping for every one of them."

"And I hope to see every scoundrel of them on the road there!" answered I. "They'll shed some of their insolence, I rather guess, when they're togged out in striped duds."

We followed back the road to the first house, and there halted to make inquiries. After learning what county we were in, and the road to the county-seat, we set off rapidly to find the sheriff.

(To be continued.)

# What Market Requires

(Continued from page two.)

during the first year of reconstruction. This condition, of course, points to the fact that the American farmer should turn his attention to the live stock production, and have in his possession when cheap grain prices prevail, enough live stock to consume most of his grain. Beyond what is needed for home markets we must export large numbers of beef cattle, dairy cattle, hogs and sheep. It is this class of live stock that the European countries will want to buy either as breeding stock or as meat for consumption. Our farmers look forward to a greater diversity in their farming operations in order to properly meet the above conditions.

We have a surplus number of horses in Spokane county and have an excellent lot of purebred sows for breeding stock of hogs. Spokane county, I think, has the reputation of having more than its normal number of hogs on hand, and this is due to the fact that much stress has been placed upon the keeping of hogs for gleaning the pea fields in this county. Spokane has a surplus of several carloads of good dairy cows and heifers which should be placed in the hands of farmers having plenty of alfalfa hay. These consist of high grade Holstein and Jersey cattle and are from the very best breeding obtainable. Southern Idaho farmers would do well to get these cattle for their herds.

Fall plowing is proceeding very rapidly these days and with a few more weeks of open weather all land for spring crops will be plowed this fall.

J. R. SHINN,
County Agent.

### LOAN TO CATTLE RAISERS.

J. L. Gault, manager of the Spokane Cattle Loan company, announces that the company has made loans of $1,900,000 to stockraisers in Washington, Oregon, Idaho and Montana. About 200 stockraisers have borrowed through the company. Mr. Gault says that the month of October saw the completion of $5000 in loans.

### CHANGE THANKSGIVING DATE?

A recent conference of stock producers in the Hig Hole basin of Montana adopted a resolution in favor of changing the date of Thanksgiving day from the last Thursday in the month to November 11, which will be the anniversary of the signing of the armistice terms.


# FARMERS' WANT ADS

This is the farmers' "Want," "Sale" and "Exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rate, 7 cents a word per insertion, with a special rate to farmer subscribers to the Washington Farmer of 6 cents a word per insertion for from 4 to 12 times, and 5 cents a word per insertion for 13 times or more.

All commercial and land advertising, 7 cents per word each insertion. Open also to nonsubscribers.

In using these columns advertisers must observe: (1) No advertisement will be inserted for less than 75 cents. (2) Every word, number and initial, including name and address, must be paid for. (3) Cash must accompany order.

Above rates also include insertion in The Oregon Farmer and The Idaho Farmer.

**EDUCATIONAL** 45

IN BUSINESS OR ACTUAL LIFE THE BEST is none too good for you. Write Gooding college, Gooding, Idaho, Charles Wesley Tenny, president, today.

TELEGRAPHY—YOUNG WOMAN'S POPULAR vocation; good paying positions available. Write for booklet. Pacific Telegraph Institute, Spokane.

SEND NEWS NOTES TELLING OF THE work of your school today. Address the Educator, Gooding, Idaho.

**HONEY, BEESWAX—Wanted** 58

SEND SAMPLES OF YOUR HONEY AND beeswax. State quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

**EGGS AND BUTTER WANTED.** 59

WE ARE ALWAYS IN THE MARKET FOR good eggs and dairy butter. Send us your next shipment. Oregon Farm Products Co., 386 Halsey st., Portland, Ore.

**MISCELLANEOUS—FOR SALE** 60

TRAP COYOTES—FULL INSTRUCTIONS ON a sure catch method and reliable scent recipes sent on receipt of $5. C. L. Willis, Dillard, Ore.

FOR SALE—175 TONS HAY, 50 HEAD OF grade Holstein cattle, 5 horses and machinery, with good lease. Walter Allison, Belfair, Wash.

**MISCELLANEOUS WANTED** 63

CASH PAID FOR OLD FALSE TEETH. We pay up to $35 per set (broken or not). Send now. Cash sent by return mail. Package held 5 to 15 days for sender's approval of our offer. Highest prices paid for old gold, jewelry, gold crowns, bridges, dental gold, platinum, diamonds and silver. Send for free catalog of new jewelry.
UNITED STATES SMELTING WORKS, INC.
331 Goldsmith bldg., Milwaukee, Wis.

POULTRY WANTED.
We are cash buyers of poultry and dressed meats, also cream. Write us for prices, shipping tags and premium catalogue for cream shippers.
COMMERCIAL CREAMERY CO.
SPOKANE, WASH.

HIGHEST PRICES FOR POULTRY AND EGGS. Washington Meat & Poultry, 409 Second avenue, Spokane.

**LIGHTING EQUIPMENT** 74

THE SAFETY LAMP CO., N208 HOWARD ST., Spokane, Wash. Gasoline lighting and supplies.

AUTO RADIATORS, FENDERS AND LAMPS repaired. Lester Allen, 607 Second avenue, Spokane.

**MACHINERY—For Sale** 93

IMPORTANT NOTICE.
We not only stock "WITTE" gasoline engines, 2 to 30 h. p., but carry a full line of repair parts for them. Prompt service our hobby.
HIGGINS MACHINERY COMPANY.
312 1ST AVE., SO., SEATTLE, WASH.

**AUTOMOBILES** 114

HEADQUARTERS FOR USED CARS.
Trucks and tractors; printed list. Spokane Auto Market, W315 Sprague ave., Spokane, Wn.

**STOVE AND FURNACE REPAIRS.** 126

WRITE M. S. RUBENS, SPOKANE, FOR ANY parts needed to repair stove, furnace.

**RABBITS and HARES** 173

FOR SALE—WHITE ENGLISH RABBITS, breeders, $1.50; 4 months, 60c. Austin Rull, Deep River, Wash.

**POULTRY** 174

BUY YOUR INCUBATOR NOW.
Incubators will be scarce and high next spring. Send for our list of new and used incubators and save money. Agents: Famous Queen incubators and brooder stoves. Queen Hatchery, 29 Pike st., Seattle.

DANIEL'S WHITE PLYMOUTH ROCKS. THE greatest egg laying big bird known; send for our special offer on hatching eggs. Catalog free. Ideal Poultry Yards, Box 174, Hoquiam, Wash.

WHITE WYANDOTTE COCKERELS; HEAVY laying strain; Just-a-Mere Croft. 4137 Sunnyside ave., Seattle, Wash.

FOR SOMETHING GOOD IN SILVER WYANdottes and Golden Campines, write G. G. Wherry, Payette, Idaho.

50 USED INCUBATORS FOR SALE, FROM 70 to 700 egg capacity. A. R. Badger, Centralia, Wash.

THOROUGHBRED BARRED ROCK ROOSTers, $2.50 each. Mrs. F. J. Dyche, Thornton, Wash.

SHIP US YOUR POULTRY. TOP PRICES. Home Poultry House, 8173 Washington, Spokane.

**LIVE STOCK** 177

YOUNG JERSEY BULL AND SEVERAL young Jersey cows—St. Mawes breeding—all splendid animals. Also complete Empire milking machine, very reasonable. A. Adolphsen, R. 2, Chehalis, Wash.

FOR SALE CHEAP—TWO REGISTERED Shire stud colts, coming one and two years old next spring, at farmer's prices. Cut out the middleman. Write for particulars. J. A. Brewster, Lebanon, Ore.

TWO REGISTERED GUERNSEY BULLS, ONE 5, one junior 2; will sell either. Fir Grove Farm, Clarks Fork, Idaho.

BARGAINS IN BIG TYPE POLANDS; CHOICE young boar and eight weeks' pigs. E. M. Dorsey, Pasco, Wash.

THREE REGISTERED SHORTHORN BULLS, 18 months old, for sale. Ernest W. Haag, Sandpoint, Idaho.

FOR SALE—WEANLING BIG TYPE POLAND China pigs. S. S. Mullen, Bellingham, Wash., R. 1, Box 36.

REGISTERED O. I. C. SWINE. BREEDING stock for sale. C. I. Ballard, Rickreall, Ore.

**HOTELS** 506

WHITE'S HOTEL AND RESTAURANT—Rooms, hot and cold water, 75c up. Breakfast 20c to 40c; dinner, 25c to 50c. Sprague and Stevens, Spokane.

GALAX HOTEL; NEW AND MODERN; 75C and $1. Main and Bernard, Spokane.

NEW MADISON HOTEL, 75C AND UP. 1ST and Madison, Spokane, Wash.

**RUBBER STAMPS AND SEALS** 384

FOR RUBBER STAMPS, STENCILS, BADGES, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

**TAXIDERMISTS** 426

FUR RUG MOUNTING A SPECIALTY, HEADS, animals and birds mounted. Withers Bros., 822 Sprague, Spokane.

FIRST-CLASS WORK, ALL BRANCHES TAXIdermy and furs. Mohr, Bernard st., Spokane.

**SEEDS.** 620

WE SPECIALIZE IN TIMOTHY, ALFALFA, clovers, seed for forage crops. Write for prices. Mark Means Co., Lewiston, Idaho.

RYE GRASS SEED, LOCAL GROWN; GOOD quality, $12 per cwt. Rhoten Farms, Salem, Ore.

**FARM LANDS FOR SALE** 651

SNOHOMISH COUNTY, WASH., FARM LANDS. The greatest proposition on the market for the man who wants a farm. 12,000 acres to select from; 8½ miles salt water front; 20 miles of beautiful lake shore; good towns, railways, steamboats, factories, mills, schools, churches, paved roads; where the largest profits are made, where the great variety of crops and wonderful productive climate makes it the most productive farm section of America. Good lands in good localities, as low as $25 to $35 per acre. 10 yearly payments. Send for maps and literature to the Brownell Land Co., 904 Third ave., Seattle, Wash.

160 ACRES TIMBER; MILLION FT. WHITE pine, 2 millions cedar, 1½ millions mixed and 3000 mixed cedar poles; clear price $4000, sell on terms or trade for residence. 160 acres Alberta, partly improved, clear; trade for Washington property. Union Investment Co., 406 Ziegler block, Spokane, Wash.

WONDERFUL WENATCHEE VALLEY.
Finest apple region in the world.
PROFITABLE BEARING ORCHARDS
IRRIGATED LANDS, STOCK RANCHES.
If interested, write us.
PFAU & GREER, WENATCHEE, WASH.

FOR SALE—ALFALFA STOCK AND WHEAT farms, at a price that the land will pay for itself in two crops. Well improved land for $75 to $100 per acre, the cheapest water in the world. John Hardwick Realty Co., Vale, Ore.

65 ACRES IMPROVED RIVER BOTTOM WILlamette valley farm; 2 miles from Cottage Grove; at bargain; part in exchange or terms. Chas. T. Wilkinson, R. 4, Albany, Ore.

STOCK, FRUIT AND WHEAT RANCHES IN heart of the rich Okanogan valley. Lindsay & Forsyth, Okanogan, Wash.

KENNEWICK IRRIGATED RANCH FOR SALE —22 acres; best location and ground in valley. L. Baierlipp, Kennewick, Wash.

**FARM LANDS—WANTED** 654

WANTED—TO HEAR FROM OWNERS OF land in Idaho, Washington or Oregon for sale or trade for western Montana land. Scott & Rummel, R. D. 1, Eureka, Mont.

**IRRIGATED LANDS—For Sale** 663

FOR SALE—40 ACRES; ON UMATILLA GOVernment irrigation project near Hermiston, Ore.; well improved and carrying government water right. A money maker, reasonable price and terms. W. J. Warner, Hermiston, Ore.

## Chickens Sick or Not Doing Well?

**An Extraordinary Offer:** Germozone is a standard remedy everywhere for chicken troubles, roup, colds, cholera, swelled head, bowel complaint, chicken pox, canker, not doing well, not-laying, etc. Now our proposition: if no dealer there handling Germozone and you will agree to use it and pay if satisfied, we will send you a 75c package without a cent in advance. No pay if not satisfied. Can we do more? And we will send free 5 poultry booklets. Write today.
Local dealers handling Germozone will do the same.
GEO. H. LEE CO., Dept. 421 OMAHA, NEB.

## Your Local HOME PAPER and Your State FARM PAPER at a Special Club Price

A clubbing arrangement has been made with a number of newspapers in your state whereby we can now offer you a one-year subscription to your local home paper and a one-year subscription to your state family farm paper at a special rate for both.

**YOUR HOME PAPER**

brings you all the local news and happenings of the social and commercial life of your community. It gives you the news of the home boys at the front and prints many interesting letters from them.

**YOUR FARM PAPER**

brings you, each week, all the news of the farm and farm home, with the agricultural developments of your state. Features for every member of the family, including women's and children's pages and colored comics. Also departments for every phase of farming.

Your Local Home Paper and Your State Farm Paper can now be sent to you for one year each at the special clubbing rate as quoted below:

| | |
|---|---|
| The Blaine Journal, Blaine, Wash., and The Washington Farmer | $1.50 |
| The Buckley Banner, Buckley, Wash., and The Washington Farmer | $1.50 |
| Castle Rock Independent, Castle Rock, Wash., and The Washington Farmer | $1.50 |
| The Cheney Free Press, Cheney, Wash., and The Washington Farmer | $1.50 |
| Chehalis Bee-Nugget, Chehalis, Wash., and The Washington Farmer | $1.50 |
| Cashmere Valley Record, Cashmere, Wash., and The Washington Farmer | $1.50 |
| The Everett Tribune, Everett, Wash., and The Washington Farmer | $3.00 |
| The Colville Examiner, Colville, Wash., and The Washington Farmer | $1.50 |
| Goldendale Sentinel, Goldendale, Wash., and The Washington Farmer | $2.00 |
| Puget Sound Mail, La Conner, Wash., and The Washington Farmer | $2.00 |
| The Montesano Vidette, Montesano, Wash., and The Washington Farmer | $2.00 |
| Oak Harbor News, Oak Harbor, Wash., and The Washington Farmer | $1.50 |
| The Morning Olympian, Olympia, Wash., and The Washington Farmer | $4.00 |
| The Weekly Recorder, Olympia, Wash., and The Washington Farmer | $1.00 |
| Puyallup Valley Tribune, Puyallup, Wash., and The Washington Farmer | $1.50 |
| The South Bend Journal, South Bend, Wash., and The Washington Farmer | $2.15 |
| Sumas News-Advocate, Sumas, Wash., and The Washington Farmer | $1.50 |
| Walla Walla Bulletin, Walla Walla, Wash., and The Washington Farmer | $5.00 |
| White Salmon Enterprise, White Salmon, Wn., and The Washington Farmer | $1.50 |
| The Zillah Free Press, Zillah, Wash., and The Washington Farmer | $1.50 |

Papers mailed to Canadian addresses require additional postage of 1 cent a copy.

## EXTRAORDINARY CLUBBING OFFER

A three-year subscription to your state farm paper and one year subscription to the following papers at the special price for both.

| | |
|---|---|
| The Bellingham Daily Journal | $3.00 |
| The Sunday Spokesman-Review | 3.60 |
| The Spokane Daily Chronicle | 6.00 |
| The Daily Spokesman-Review | 6.00 |
| Daily and Sunday Spokesman-Review | 9.00 |

Take advantage of these special clubbing rates by sending your order today to your local home paper, or by mailing it direct to

**The Washington Farmer**
617 Central Bldg., Seattle, Wash.
or
Review Bldg., Spokane, Wash.

## A 350 to 900-Pound Separator

# For Only $2.00 DOWN

For this small payment down you can have a Brookfield cream separator. It is a close skimming, high-class machine, fully guaranteed, equal to the hardest service, tested by years of actual use. Our liberal offer makes it pay for itself as it goes along. You have a year to pay in small monthly payments. We back this offer with our 37 years of square dealing with hundreds of thousands of men and women everywhere in America. Write for free catalog and full details of our offer.

## The Brookfield

Thirty days' free trial on your own farm is your guarantee that the Brookfield Separator will meet any test. You run it yourself. You are the judge. We take all the risk. We could not make this exceptional offer if we did not know the Brookfield has come with flying colors through the severest trials. It is capable of standing up to the hardest work day in and day out. Now is your opportunity to get this separator for only $2.00 down. Don't miss writing for this offer. Cut off coupon and send it for free illustrated catalog and full details of our terms and low prices.



**1917 Prices If You Act Quick!**

**Beats Them All**

I am certainly satisfied with my separator. It runs very easy, is a close skimmer and is handy. In competition with 208 separators in our district, our separator outskimmed all others and left the least amount of cream in the skim milk.

(Signed) J. W. MEYERS,
West Salem, Ill.

**Special**

As long as our present supply of steel lasts you can buy at

**1917 Prices**

Act at once. Send the coupon today.

# Free Trial

There will be no expense whatever to you for your chance to prove the superiority of the Brookfield by giving it thirty days' free trial on your own farm. If you are not perfectly satisfied, you may return it and we will refund your $2.00 and all freight charges. No offer could possibly be fairer. We are confident enough in the Brookfield separator to send it to you and let you judge for yourself if it does all that we claim for it. So don't delay. Now, remember, should you ask for a free trial, you are to be the sole judge.

# Easy Payments

We have made the time payments especially low so that you have a full year in which to pay—while you are learning of the marvelous qualities of the Brookfield—how it gives you greater cream poundage and thus saves the money you pay for it. We charge you nothing for extending you credit. No interest is added. The Brookfield is sold in the exact way we carry on the other departments of our big business. There is no discount for cash. There is only one price for the Brookfield Separator—that is the *very* lowest.

## Mail Coupon for Free Catalog

**Straus & Schram (Inc.)**
Dept 4349 —W. 35th Street, Chicago, Ill.

Gentlemen:—Without any obligation on my part please send me your Free Catalog on the Brookfield Cream Separator, also full details on your 30 days' free trial offer, at the 1917 prices.

*Name*.....

*Address*.....

*P. O*..... *State*.....

Don't take a chance of missing this opportunity. Mail coupon and get the catalog describing the Brookfield Separator and what it will do. Remember, the Brookfield has to do its work in your dairy for thirty days and prove it is a perfectly made piece of dairy machinery and a money-maker for you.

You cannot afford not to send for the catalog and learn all about this separator and this offer. Our guarantee is back of this machine and back of every statement we make. Mail coupon today.

**Straus & Schram (Inc)**
Dept 4349 —W. 35th St., Chicago

## Superior Points of the Brookfield

**Skims all but $\frac{14}{1000}$ of 1% of Butter Fat**

This is the average work of the Brookfield as proved by certified test at Dairy Department of Purdue University, Lafayette, Indiana.

*BUILT LOW*—Top of milk tank only 35¾ inches from floor—easy to fill. Crank shaft 33 inches from floor and in right position for easiest turning, no back-breaking work.

*SPEED INDICATOR*—Brookfield Speedometer, patented, cannot be used by any other separator, insures correct speed at all times to get the maximum cream. Brookfield close skimming Sanitary Disc Bowl guaranteed to skim as close or closer than any other.

*LIGHT RUNNING*—Self oiling ball bearings and patented, self oiling, neck bearing, used exclusively by Brookfield Separators, make easiest possible running machine. Full guarantee covers this point.

*DURABLE*—All gears made of finest steel and in best workmanship, and enclosed and protected from dust. The Brookfield Separator will run for many years with no care except oiling.

*EASY TO CLEAN*—Every part of bowl and discs easy to see and clean. No corners or crevices. All bowl parts, tank and milk and cream covers heavily double tinned and smoothly polished.

DECEMBER 12, 1918.

NOTICE TO READERS: When you finish reading this paper, place a U. S. 1-cent stamp on this notice, mail the paper and it will be placed in the hands of our soldiers or sailors destined to proceed overseas. NO WRAPPER. NO ADDRESS. A. S. Burleson, Postmaster Gen.

UNIVERSITY OF ILLINOIS
URBANA

PUBLISHED WEEKLY.

# THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF



## The GREATEST MOTHER in the WORLD

# Organization Has Three-fold Object

## To Gather Information, To Assist in Marketing, To Increase Production at Low Cost Must Be Its Purposes




COLVILLE, Stevens County, Wash, Nov. 29.—The ending of the great world war is undoubtedly going to mean greater opportunities for the American farmer because of the greater shipping facilities and wider markets that will be available. I believe that the only way by which the farmers will be able to take advantage of this opportunity is as Chairman Burley of the shipping board has said, through organization, and I believe it should be organization along three very definite lines.

In the first place the organization should serve as an authentic information bureau, to issue advance recommendations as to the lines of agricultural work which most need developing and in consequence should be the most remunerative. If foreign markets are to be developed it should be comparatively easy to determine in some measure what those markets will demand and consequently what we need to produce. It could not be expected that this could serve as an absolute check, but it should be of considerable assistance to the farmer.

The organization should serve as a medium through which the farmer may be able to market his produce and thereby market at a cheaper rate than is now possible. I do not mean that the farmer must necessarily handle all of the marketing problems, from the time the produce leaves the farm until it gets into the hands of the consumer, although I do think that it will come to this unless marketing is done on a more economical basis than it has often been done, but the getting together of produce for community shipments will often mean no more work for the farmer and far less work for the present marketing agencies.

The organization should serve as a means of assisting the farmer to a more efficient system of farming and thereby a cheaper cost of production. The farmer should have the opportunity of asking for special lines of educational work and should earnestly endeavor to use this privilege and the information which comes to them through this and other sources. It is my opinion that a large part of the farmers can materially increase production by well established principles which are often entirely neglected at the present time.

It seems to me that the problem of organization and of organization along these lines, is going to be the big problem that the farmer is going to have to face and the sooner he becomes aware of it and realizes that his criticism must be constructive the earlier he is going to be able to realize a just return from his labors. I believe it is going to be possible to accomplish a large part of this through the thorough organization of the farm bureau. It will mean, perhaps, that the organization be carried farther than has been contemplated at the present time.

Live stock, grain and the dairy products are the products which probably it will be found possible to export profitably. This is the time above all others when every farmer, as far as possible, should be making every attempt to improve his live stock by the introduction of better breeding animals. The farmer who does this and then plans to raise all of his own feed and feeds a large part of what he raises, is the farmer who will be certain of a steady income. For this county especially, diversified farming should be the rule.

While considerable live stock has been sold from this county this year, enough breeding stock has been kept to insure the maintenance of the industry on the same rate of increase as has been common for the last few years. Inquiries for better sires are coming in and this should make a very material increase in valuation in some sections of the county. The open fall has had a marked tendency toward keeping cattle in the county.

Fall plowing has been carried on as far as the labor situation would permit, and the seeding of fall wheat has exceeded the ordinary acreage perhaps as much as 50 per cent.

E. C. DURDLE,
County Agent.

### NEED COMMUNITY CENTERS.

NEPPEL, Grant County, Wash., Nov. 26.—It will take some time to get the live stock industry in Grant county up to a point where stock can be used for export purposes. Good, fine breeds of stock are the prime necessity for the near future in getting a sound basis to work on. There are large opportunities for farmers to make money out of alfalfa by the feeding of stock, and it is sure and the safest route to prosperity. A future market is assured with the coming of peace and the new export trade of meat, live stock and grain. Not much fall plowing has been done in Grant county on account of shortage of horse feed, and that is the big winter problem that faces the farmers here. Community centers are one of the needs of Washington farmers and also trade schools in rural districts. The street sidewalks in towns would not be congested with idle men if those men had been taught a special trade when young. That is the reason Germany was in a position to put up the fight that she did—every man was a tradesman. It is time that the educators get the practical working unit going throughout the country. It may save the country from future I. W. W. and bolshevism. It is for want of work that idle men gather in cities and political fanatics arrange their ideas against living as workers at small wages and they charge their distress to the government, when in truth the seat of the trouble is that the poor, unskilled laborer is but the servant of the next man that hires him for a few days. Compulsory trade schools in community centers will in future be the tie that binds the American democracy together.

MARTIN PENHALLICK.

### LABOR STILL A PROBLEM.

CHIMAKUM, Jefferson County, Wash., Nov. 30.—As we see them now the big farm problems are the wages and men. Men are hard to get even at the going wages, and the farmer will not be able to afford to pay them until everything gets down to normal conditions. Now the great war is over and it is a question how the time is going to adjust itself.

Farm and live stock conditions are not very good. Many of the farmers are going into the winter with very little hay and on account of the high prices of hay we expect to see many stock in poor condition by the opening of spring next year. Some fall plowing has been done, but not as much as should have been done.

JOHN VAN TROJEN JR.

### MIGHT EXPORT DAIRY PRODUCTS.

PORT ANGELES, Clallam County, Wash., Dec. 1.—Your timely suggestion for the farmers to think about reaching across the sea naturally suggests to me that our state is essentially adapted for the exports of dairy products, and for export we should endeavor for concentrate our efforts on articles and products such as butter cheese, preserved milk and cream, fruits, etc. Denmark imports a large proportion of her fodder and her farmers have grown wealthy though exports of these things. The big conditions are here and our efforts intelgently directed will by degrees give the desired results. The conditions in Clallam county in so far as fall plowing is concerned are satisfactory and the farmers look forward to an inerease in area and yield for 1919. J. P. CHRISTENSEN.

### TRANSPORTATION A PROBLEM.

COLVILLE, Stevens County, Wash., Dec. 2.—The one great agricultural problem that sticks up most obtrusively from the wreck of the war is the matter of transportation. Internally, the movement of food and other necessaries of life has been but little short of breaking down at different times in spite of the government's control and it illustrates how closely the country has trimmed between plenty and need. With home transportation steadily improving and ocean shipping gradually being released, the time is almost in sight when the problem will be one of markets instead of transportation. Undoubtedly, within a year, or better stated, by the end of the harvest season of 1919, the food situation in the war-torn regions will have been largely met through local effort.

While farm food products will probably be maintained on a relatively high range of prices the lesson of forced conservation in all countries is bound to react on the demands made on the farmers of the United States. If ever there was a time when the government should look into the future and seek for markets for our raw products, it is today, before the rest of the world catches its stride again. Under the present conditions of organization among farmers the government will have to take this in hand or nothing will be done. It would be to the advantage of the farmers if markets could be found for the more condensed farm products rather than those which are raw and bulky. With abnormal prices for feed, live stock production has steadily fallen in the northwest. It will take twice as long for the world at large to recover its shortage of meats and fats as it will its lack of breadstuffs and America could better count on meeting this continuing demand by retaining a greater part of her foodstuffs to meet this requirement.

E. E. ELLIOTT.

### GOVERNMENT SHOULD HELP.

TWISP, Okanogan County, Wash., Nov. 27.—We believe Chairman Hurley knew exactly what he was talking about when he said the farmers should begin at once to organize in order to take advantage of the opportunity of exporting their products. It is my opinion that the farmers should get their produce to some port or shipping station and that the government should take charge and do the exporting. Farmers should organize so as to assist the government by getting their live stock and farm products together at certain dates and places. Most farm produce if carefully handled could be exported profitably, provided the market value at the destination exceeded the local market plus the shrinkage and expense of shipping. One of the big farm problems is marketing products. That one could be solved by the government fixing the price. Live stock are in good condition. The late rains started the grass and made good late pasture. More plowing and seeding was done this fall than the two preceding years and the grain is up nicely. Alfalfa hay is selling at $20 per ton in the stack. Potatoes are $1.50 a hundred. GEORGE LA RUE.

### CHIEF OUTPUT IS TIMBER.

STEVENSON, Skamania County, Wash., Dec. 1.—There is very little farming done in this section. Timber interests are about all we have here, timber and cordwood being the principal output and most mills and wood hauling stops at this season, and things are quiet. No grain is raised here worthy the name of crop. Some hay is raised, but the country consumes about all we produce and there is nothing exported except a few apples in the eastern end of the county. This is an ideal fruit country when once developed, which is not the case now. W. T. JACKSON.




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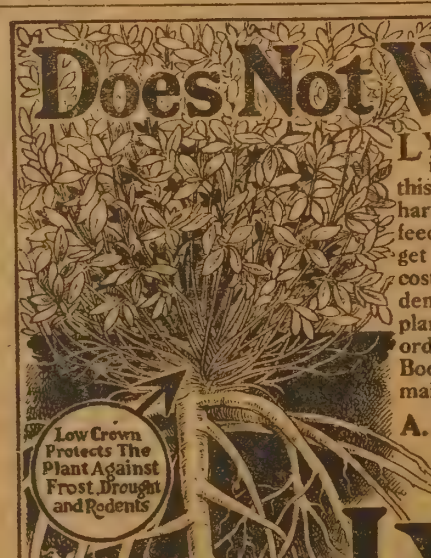
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FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 50. THE RANCH PACIFIC DAIRYMAN HORN AND HOOF December 12, 1918

# Wheat Price of $2.26 Will Stand for 1919 Crop

**The National Food Administration announces that the guaranteed price for the 1919 wheat crop, fixed at $2.26 a bushel, Chicago basis, will stand even though the Lever act, under which the price was fixed, should become inoperative through the conclusion of peace.**

**Unless there should be additional legislation the wheat crop of 1919 will be restored to the open markets of the world, the price to be governed as before the war by the law of supply and demand.**

The food administration has issued a statement interpreting the Lever act and pointing out that the law provides that "all rights or liabilities under this act arising before its termination shall continue, and may be enforced in the same manner as if the act had not terminated."

The clause just quoted by the food administration is from section 24 of the Lever act, which we here give in full:

"That the provisions of this act shall cease to be in effect when the existing state of war between the United States and Germany shall have terminated, and the act and date of such termination shall be ascertained and proclaimed by the president; but the termination of this act shall not affect any act done, or any right or obligation accruing or accrued, * * * but all rights and liabilities under this act arising before its termination shall continue and may be enforced in the same manner as if the act had not terminated."

It is quite clear that the entire law (unless sooner repealed) will stand until the peace treaty has been signed, then ratified by the United States senate and then proclaimed by the president. Undoubtedly the proclamation can not be issued until well into the year 1919. Until that presidential proclamation shall be made our wheat growers will continue to sell their product at the guaranteed price, but when the peace proclamation is issued a new condition will arise. The general provisions of the act will then cease to exist—the power now vested in the government to fix the price at which the farmer is required to sell his product will no longer exist. We take it that unless there should be additional legislation, the wheat crop of 1919 will then be restored to the open markets of the world, the price to be governed as before the war by the law of supply and demand.

As this construction is sound, the government will continue to guarantee a price of $2.26, Chicago basis, but when peace is proclaimed the wheat grower will be free to sell his product for higher prices, if higher prices should rule in the open markets of the world.

In justice to our wheat growers congress should let the law expire and not enact additional legislation at this session to restrict the price of wheat. The American wheat-growers have borne their part, loyally and cheerfully, all through the war. In a proper desire to provide our allies with relatively cheap bread, the United States government fixed the price of wheat, and the government price undoubtedly was lower than the prices that would have ruled if our government had kept its hand off the law of supply and demand.

That was an act of sound generosity—but the American wheat-growers, not the American people as a nation, paid for that generosity to our allies and to the people of the non-wheat growing states of this country.

The wheat-growers of the Pacific northwest are particularly entitled now to a square and generous deal. Farmers of the east and the middle west, for the most part, saw no incentive in the wheat price guarantee. They preferred to grow corn and other crops that were left on the old status—that is of no guarantee and no restriction as to price. But here in the Pacific northwest large areas are suited only to the growing of wheat. Farmers owning wheat lands were compelled by nature to go on growing wheat.

They grew price-controlled wheat, not only for the benefit of our allies, but for the benefit of the southern cotton-growing states. Cotton was left free to rise to the level of wartime prices, but the rise of wheat was checked at a given point by the hand of the government. Thus while the price of cotton rose 300 per cent over the normal average of peace, the price of wheat rose only 100 per cent, and that 100 per cent was eaten up by the increased cost of production.

With normal crops the wheat-growers in the Pacific northwest would have fared fairly well with $1.90 wheat. They would have had nothing like the prosperity that struck the cotton belt, but they would have made a good profit as farmer's profits go. Unfortunately this region suffered two short crops in succession, amounting in many places to total failure. Wheat-growing, on the whole, has been unprofitable here for the last two seasons.

It looks now as though the continuing price guarantee on the 1919 crop will be sheer fiction the coming year, as it has been sheer fiction during the war, that the government will not have to put up a dollar to make good the guarantee. Congress and the administration should now give the wheat-grower a square deal. It was an injustice to restrict his prices while letting cotton soar. Now that the war is ended it would be an outrage to continue the discrimination.

## New Dean Is Named

President E. O. Holland of the State College of Washington, at Pullman, has announced the appointment of Edward C. Johnson of the division of extension of the Kansas Agricultural college to be dean of the college of agriculture at Pullman. The position also carries with it the directorship of the state college experiment station. The new dean will begin his work about the first of January.

Dean Johnson is a native of Minnesota, of Scandinavian parentage, and was graduated from the University of Minnesota in 1906, his specialty being biological science.

At Minnesota he was a student assistant in botany in 1906 and instructor in botany in 1907, in which year he also earned his M. A. degree. He was appointed assistant pathologist in the United States department of agriculture in 1907, and in 1908 was made pathologist, in charge of the cereal disease work of the United States department of agriculture, in which position he remained until 1912. During this time he did graduate work in bacteriology in George Washington university. His summers were spent largely in the central west and the far west in the study of field crops.

In 1912 Mr. Johnson was elected superintendent of institutes and demonstrations at the Kansas institution, which changed him from investigational to statewide teaching and administrative work. He developed this field and in 1915 was elected dean of the division of extension in the Kansas Agricultural college.

### FORGOT TO SIGN NAME.

The Washington Farmer pattern department has received two unsigned orders for patterns. One is from a reader at Hunters, Wash., who ordered patterns Nos. 2457, size 46; 2626, size 46, and 2206, size 2 y. Another reader, living at Gerome, Wash., ordered patterns Nos. 2613, size 5, and 2206, size 4. If these persons will write in, giving their names and postoffices, the orders will be filled; otherwise it will be impossible.

### The Dog at Her Doorstep.

It is only now and then that the trials endured by the pioneer women of the west are really brought to light. Heaven only knows how severe some of them were. Read "The Dog at Her Doorstep" in this issue, page 16. It sketches the experiences of one of these women during one terrible summer.

### WINTER SCHOOL AT PULLMAN.

The annual winter school for farmers and housekeepers at the State College of Washington, Pullman, will begin January 6 and close February 14, 1919. The subjects taught include live stock farming, dairy farming, milk and its products, poultry raising, soils, crop production, horticulture, agricultural engineering, general courses and home economics.

All the courses are open to any one above the age of 16 who can read and write intelligently. A student may select as many of the subjects outlined as his time and the schedule will permit. For particulars address the Registrar, State College of Washington, Pullman, Wash.

### FARMERS' MEETING IS DELAYED.

Owing to the spread of influenza in Spokane and other cities and sections, the Farmers' union convention for Washington and northern Idaho is not being held this week as originally planned. When the gathering will be held is not known, but some announcement concerning the possibility probably will be made shortly after the return of President A. A. Elmore, who has been in California recently. Secretary A. D. Cross sent out cancellation of the former dates the middle of last week.

### FRUIT CONFERENCE CALLED OFF.

On account of the influenza situation throughout the state of Washington the joint convention of the Washington State Horticultural association, the Inland Empire Fruit Growers' association and the Washington State Grade and Pack conference, which was scheduled to be held in Spokane, December 10-13, was postponed for the present. As soon as the influenza situation clears itself, plans will be made for the convention on the same big scale as originally outlined.

The advantage of growers cooperating with the federal government in establishing permanent grades for northwestern apples is pointed out by C. I. Lewis, chief of the division of horticulture at the Oregon Agricultural college.

### INTERNATIONAL STOCK SHOW HELD.

The International Live Stock show at Chicago last week was of a high class, with especially high prices prevailing when animals of excellent classes were offered.

The highest price, probably ever received for a beef animal was paid for Fyvie Knight, an Angus, grand champion yearling, when he sold for $2.50 a pound, bringing $3350. It is planned to have the choicest cuts of this animal served to President Wilson and others of the world's leading statesmen in Paris during the peace conference.

A carload of Texas-bred Herefords owned by J. W. Frazier of Rardin, Ill., won the grand championship for carload lots.

C. F. Curtiss of the Iowa state college was elected president of the International association.

### GRAIN MEETING NEXT MONTH.

The annual meeting of the Washington Grain Growers, Shippers and Millers' association will be held at Pullman, January 7-9. E. G. Schafer of Pullman is secretary and has charge of the arrangements. H. J. McCroskey of Garfield is president.

**The great Red Cross membership campaign is coming. Motto: Everyone a member!**

## Townley Is Reelected

At a convention of delegates in St. Paul last week A. C. Townley was reelected president of the nonpartizan league. Delegates were present from 13 states, as follows: North Dakota, South Dakota, Minnesota, Idaho, Washington, Montana, Colorado, Texas, Nebraska, Iowa, Kansas, Oklahoma and Wisconsin.

In addition to reelecting Townley president, the conference increased his salary from $3600 to $5000 a year. One of the official statements given out said:

"A committee consisting of one farmer delegate from each of the 13 states in which the league is organizing reported on its examination of the league books and accounts. The report found the books had been accurately and efficiently kept. The audit showed that Mr. Townley during the 43 months that the league has been in existence drew for salary and expenses a total of $26,081.65."

The conference indorsed the activity of the labor organizations of Chicago in a movement designed to give labor greater political power in that city.

A program of policies was adopted, one feature of which was the indorsement of government ownership of the railroads. Other features of the program were: Complete enfranchisement of women, a system of farm loans by states from money borrowed from the federal government on state bonds, immediate reduction of freight and passenger rates, the liquidation of the national debt through reforms in income and inheritance taxation and the prevention of gambling in the necessities of life.

### A. V. BRADRICK DIES.

A. V. Bradrick, one of the well-known prebred live stock men in the northwest, died of pneumonia following Spanish influenza at a Spokane hospital last week. He has been active in the dairy industry, having associated with him his son, A. W. Bradrick of Palouse, Wash.

### Get Them Together.

Some have hay; some have stock. Get them together.

# THE WASHINGTON FARMER

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The Washington Farmer has established an INFORMATION BUREAU at the NATIONAL CAPITAL, which is at the service of its readers, and which they are asked to use freely. It is intended to be a clearing house of government information. Address inquires (including 3c stamp) to The Washington Farmer INFORMATION BUREAU, Washington, D. C.

## Labor, Capital and Enterprise

With the demobilization of our great armies and their return to civilian life, there will be an abundance of labor to carry forward the country's industries on a larger scale than ever before, for we have found new sources of labor in the country's womanhood.

Capital, too, will be abundant, for the war has made the United States the richest country on the globe.

But labor and capital are not in themselves sufficient. All can recall periods of profound industrial depression and commerical stagnation when both capital and labor were abundant. Labor was unemployed because frightened capital had gone into hiding.

There must then be a third factor that is essential to national prosperity. It is enterprise. When we have labor, capital and enterprise pulling together we have good times.

But enterprise can not exist where confidence is lacking.

Both labor and capital have the power to inspire confidence or to destroy it—labor by demanding the impossible, capital by imposing too heavy a burden on enterprise.

Nothing can be plainer than the ill consequences that will follow should labor demand impossible wages and capital impossible interest charges. The third support of the tripod, enterprise, will be taken away and the whole structure will suffer.

Of the three factors, labor and enterprise are the indispensables. Labor and enterprise can achieve something without capital. Capital can do nothing unless aided by enterprise and labor.

Idealism must have a groundwork in practicability, or the idealist will make himself laughing stock.

## Read Up This Winter

It used to be unpopular for a farmer to study scientific farming problems. But that is no longer true. The old methods are passing as producers discover that they can actually produce more and better stuff by improved methods of culture and fertilization. It is poor business to try to grow a certain crop on a certain piece of land whose soil does not contain the elements necessary for the growth of that particular crop when it does contain the elements necessary for some other crop. It is unwise to plant crops year after year on depleted soil when a crop of something to turn under or a treatment with a fertilizer of some kind would put the land in good condition. Neither is it wise to use the same crop season after season when a judicious rotation would keep the soil in a higher state of productivity. Winter days and evenings are excellent times to study these problems, and now, before the long evenings come on, is the time to write to the state college or the department of agriculture for bulletins and booklets on these vital subjects. If prejudice has prevented the use of this literature in the past, let no one be prejudiced longer against it. It is important; it means much to the producer who will study, as thousands who have can testify.

Ruin may mean ruin or it may mean reconstruction.

## Food Production in 1919

There will be many opinions of many men as to the food production problem of 1919. Some of these guesses will be more fortunate than others, but no one can foretell with certainty as to the coming year's crop of any specified food products.

In the meantime the great basic food and feed products—wheat, and corn, barley, oats, potatoes and hay, pork, beef, mutton and dairy productions—must be had. Which one of these will pay the best in the year 1919 and which one will give the least return to the producer? No man can now say. The farmer in general who depends exclusively on any one or two of them for his living, for his expenses and for his profit, assumes a risk which he can not afford to do.

One thing will be just as important in 1919 as it has been in 1918—safety first calls on every farmer to raise as much of food supplies for his own family as his farm will produce. No matter what is his specialty as a farmer, a good cow or two, a pig or two, a good beef animal, a few hens and ample supply from the farm garden and home orchard will help out immensely.

Cash never flows in abundantly on the ordinary farm, but much of the cash expenditure of the wage earner in town may be saved by the farmer. When the books are balanced at the end of the year the farmer who handles little money but farms wisely may have just as much as the wage earner who handles many times the amount.

Figure out destiny when you have nothing else to do.

## If the Hungry Compete for Food

The greatest problem in the world today is the food problem. There have been famines, but never a time when the peoples of so many great nations were threatened by dire hunger as they are today. How to solve the problem of feeding this hungry world demands the best thought of the best minds of the age. The legislative and executive powers of all the nations must exert themselves quickly and wisely. There must be provided not only the food and means with which to transport it, but there must be provided ways of safeguarding the interest of both producer and consumer.

There is no price a starving man will not pay for food if he can get it. Not only will he pay the last cent he has and pledge all he ever hopes to have, but he will trample over his fellows if necessary to obtain what his empty stomach craves. What if the food supply of the world (which today means to great extent the food supply of America) were thrown open to competitive bidding of the hungry nations? What if the ability to buy, for cash or on credit, were to be made the sole condition of sale to any nation of starving folk? The questions are too big to answer off-hand, but it is probable that some deserving peoples would go wholly without food or nearly so, while others no more deserving or no more worthy of preservation would have plenty. It is possible also that profiteering in the markets would be excessive; that unscrupulous manipulators would take advantage of the plight of the unfortunate in many lands and pile up unwarrantable profits, at the expense, not only of the foreign consumer, but of the consumer at home as well.

The people of this country must be on the alert. They must not allow their representatives at Washington to overlook the great problem or delay too long in facing it squarely, doing their share to place adequate safeguards about the world's food supply for the protection of the consumers of all nations.

## Let Your Criticisms Be Known

There are two kinds of criticism—one which destroys without building up anything, and one which has as its object the construction of something new and worth while for everything old and less worth while which it opposes. Every one who criticises should weigh his criticism carefully before giving it expression to assure himself that it is of the constructive and not destructive variety. Having once convinced himself of the justification of his position, it is his duty not only to himself, but to his fellows, to give his opinions effective expression.

A high official in one of the departments of government at Washington, D. C., referring to a contemplated action by that department vitally affecting the farming interests of the country, said recently: "We have received only one adverse expression of opinion on this matter." But one can not talk to farmers familiar with that particular situation in the northwest without hearing many criticisms of the proposal referred to. The trouble is they talk among themselves freely on the subject, but too often fail to put their criticism in effective form and present it where it will do good. That department at Washington no doubt actually believes, because it has received only one protest, that the farmers are practically unanimous in favor of this proposal, when, as a matter of fact, if they actually expressed their opinion, it would probably show a majority opposed to some of its features. Congressmen and senators are intended to be the servants of their constituents. Farmers should make known emphatically to their representatives in congress their opinions on great questions affecting their industry.

Every farmer should study the possibility of improving his soil by the use of lime.

## Le the Boys Stay in School

Throughout the country there are many hundreds of farm boys who have been taking the student army training corps work in the colleges and universities under the provisions of the war department. Now comes the word that these student army corps are to be demobilized. Question: Will these boys return to the farm immediately or will they remain in school?

There are, of course, many cases in which it will be necessary for them to return to the farms to assist in the very necessary and commendable work of food production. There are many other cases in which they could well be allowed to remain in school. In every instance where the conditions are such that the production on the farm could be successfully continued without their help, they should not only be permitted to remain in school, but induced to do so by their parents. It is possible that their enlistment in the student army corps a few months ago was a turning point in their lives. Only the most stringent circumstances should be permitted to interfere with the development of the new life which they have been permitted to begin.

Pride is pride, whether it is pride of ignorance or pride of knowledge, and before you are through with it, the one leaves you in about the same position as the other.

## Grain Problems Are Coming Up

The annual convention of the grain growers, millers, dealers and shippers is to be held again at Pullman in January. There never was a time when so many questions of vital interest to the grain producer were to come up. The producer must not make the mistake this year that he so often makes. He must not stay away from the convention and let the miller and warehouseman and dealer do the talking and voting. He must be there in force and present his own case and see to it that the actions taken embody features desirable from the standpoint of the one who plows and sows and sacks and hauls and pays harvest bills. The farmer can not expect his interests to be protected unless he protects them himself. What is needed at this convention, and all other conventions of an agricultural nature, is a large attendance of actual farmers—men who do the work with horny hands and overalls, not farmers who live in town on the income from thousand-acre farms that some one else operates.

# President Due in Paris Saturday

## *Is Keeping in Touch With the White House by Wireless*

President Wilson's special ship, the George Washington, has been delayed on her epoch-making voyage to Europe with the presidential peace party by rough weather. At this writing it is believed that the landing will be made at Brest, France, on Friday, December 13, making the president's arrival at Paris a day later than planned.

December 17 has been chosen as the tentative date for the convening of the preliminary peace conference. It is understood that the allied delegates will meet together until they have agreed upon the principal terms of the peace, and that the German delegates will not be taken into the conference until this has been done. It is expected that the latter will be called in to sign the peace agreements and not to take part in forming them. While there is nowhere any evidence that any of the allied nations desire to render anything but full justice to the German people, it is overwhelmingly evident that the peace is to be a dictated peace and not a negotiated peace, as was evident during the fighting of the last year. How long it will take to arrive at the agreements is wholly problematical, but it is hoped to have them in shape for the final conference by the latter part of January.

**WILL ALLIES AGREE PEACEABLY?**

This is one of the biggest questions of the present time. Victory over Prussianism has been won by unity of action among the allied nations. Will they be able to get together on a common ground for the conclusion of a peace that will determine to a large degree their national development during the coming generations?

That President Wilson foresees grave possibilities of failure on the part of France and England and this country to harmonize all their interests is the conclusion some have arrived at in view of his decision to attend the conference in person and of his failure to make any statement of his definite purposes prior to his departure.

**LEAGUE OF NATIONS PROBLEMATICAL.**

One of the questions that is scheduled to come up at the peace conference is that of the formation of a league of nations such as to create an international police power and limit the military or naval power of any individual nation. There is wide difference of opinion on this matter. Some great statesmen consider it absolutely essential to the future peace of the world. Others believe it highly impracticable. President Wilson is an ardent advocate of the proposed league. A. J. Balfour, secretary of foreign affairs for England, likewise favors it. Recently he said, concerning the proposal:

"I do not think the world can be made safe for democracy merely by multiplying the number of democratic states. I think a league of nations a vital necessity if this war is to produce all the good we expect to come out of it. The United States would have to bear a large share in the work it involves. It should be something more than a mere instrument to prevent war. The world is more complicated than we are inclined to think. It would be folly to imagine it possible to constitute a world with states endowed with equal powers and rights. But I wish to say emphatically, in my opinion, to devise in concert workable machinery for them is one of the highest functions the conference can deal with."

**ALLIES REACH THE RHINE.**

The date has arrived when, in accordance with the terms of the armistice signed on November 11, all that portion of Germany west of the Rhine river must be vacated by the Germans. While concise official reports are lacking, it is evident that these terms have been lived up to in the main. The allied forces are occupying a number of points on the Rhine river. Little difficulty has been experienced in making the advance following the withdrawal, and the great occupation that has taken place is one of the marvelous things of international history. On December 11 the 30 days of the armistice are ended. At this writing it is not stated how the provisions will be continued, but it is evident that the allies will permit the terms to continue indefinitely or until the Germans violate some of them in such way as to warrant the resort to arms by the allies to enforce them. Without such supplemental agreement the state of war would be resumed automatically at the end of 30 days.

**LIKELY TO TAKE CHARGE OF KAISER.**

It is growing more and more evident that the allied nations will sooner or later demand the surrender of the kaiser by Holland. What to do with him is one of the questions that will be taken up at the preliminary peace conference.

**INFLUENZA TAKES HEAVY TOLL.**

It is estimated that Spanish influenza and pneumonia had taken a toll of betwen 300,000 and 400,000 persons outside the army camps in the United States and that the deaths in the camps have reached at least 20,000. The meaning of these facts is better realized when it is remembered that the deaths from all causes among the American soldiers in Europe were only about 50,000 up to the signing of the armistice. Insurance companies have been hard hit by the epidemic, and it is said that the government has incurred liabilities on its army insurance of more than $170,000,000 in American camps alone.

**LOSS OF LIFE AT SEA IS SMALL.**

American loss of life at sea as a result of the war totals only about 775, according to government figures. There were 145 American vessels sunk by the enemy, with a total carrying capacity of a little more than 350,000 tons.

**ANOTHER LIBERTY LOAN IS COMING.**

The United States treasury department is definitely planning for a fifth Liberty loan campaign, which will probably come the latter part of April. It is probable that bonds to a total of about $5,000,000,000 will be placed on the market at that time under the same conditions as those of previous Liberty loan issues.

**GERMANY RELEASES PRISONERS.**

As a result of the armistice agreement, Germany and Austria have released approximately 1,500,000 allied prisoners of war.

**NEW TREASURY SECRETARY NAMED.**

President Wilson has appointed Representative Carter Glass of Virginia to succeed William G. McAdoo as secretary of the United States treasury. The senate has confirmed the appointment. Mr. Glass will resign from congress immediately and begin his duties as treasurer December 16. Treasurer McAdoo recently resigned.

**BUSINESS WILL SEND DELEGATES.**

Business interests of this country have decided to send a committee to Europe to be present during the peace conference, with a view to being of assistance to the present delegation in determining industrial questions that may arise.

**WAR COSTS UNITED STATES HEAVILY.**

Secretary McAdoo of the United States treasury, in the report which he recently prepared, says that for the 15 months of this country's participation in the war up to June 30, 1918, the actual war expenditures of the government had been over $13,000,000,000. About half of this amount, he said, represented permanent investment, such as ships, shipyards, war vessels, camps, buildings and loans to the allies.

**TURKS MASSACRE MILLIONS.**

A report from Constantinople says that since the outbreak of war four years ago there have been 3,000,000 persons massacred in territory under Turkish control and that another million are now on the verge of starvation.

# Farmers Pay Promptly

## Their Payments Insure Stability of Farm Bank

Farmers have borrowed $139,378,000 from the 12 federal farm loan banks since their organization in March, 1917. Against these loans the national farm loan board has issued bonds amounting to $140,122,000.

Contrary to the gloomy forebodings of the opponents of this system, the farmers are making their payments promptly. The official report shows that only $86,000 in loans was overdue and that trifling delinquency occurred almost entirely in sections where there had been crop failures. Eighty-six thousand dollars seems a large sum, and is a large sum in ordinary transactions, but when we consider the magnitude of the loans it is seen that this delinquency amounts to only about 60 cents, on the average, in each $1000 borrowed by farmers.

The report further shows that the Spokane, Wichita and Houston banks have an actual surplus and the Spokane and the St. Paul banks will begin shortly to repay the government for the stock originally subscribed. The government, it will be recalled, appropriated $9,000,000 in the beginning as a sort of revolving fund to set the banks going. Under the growth of the system this $9,000,000 will be returned to the federal treasury, and the process of returning, as the official report shows, has begun in the Spokane and St. Paul districts.

It is highly gratifying to the friends of the system everywhere, and particularly to those of us who worked for it in this region, that the Spokane bank beats all others in the monthly volume of business and in the total loans closed and paid to farmer borrowers. The November report of President D. G. O'Shea of the Spokane bank shows that while the influenza epidemic was sweeping the country and business generally was disorganized the Spokane district bank closed new loans totaling $1,246,800.

Loans closed up to the close of business November 30 give a grand total of $22,903,800, leading the other districts by a wide margin. This represents loans to 9610 farmers, averaging close to $2400 each. Mr. O'Shea states that the average of loans is gradually increasing, as big borrowers, who held off at first until they could see how the system would work, are now applying for loans.

Since it began business the bank has received 23,206 applications for loans aggregating $62,000,000. Of this number about 9000 have been rejected or withdrawn and the balance are in process of being closed. Bonds of the Spokane bank have been sold, mainly in the east, in the amount of $23,000,000.

"The business of the federal land bank continued to expand and grow, and there seems no appreciable diminution in the volume of business it has to consider," said President O'Shea. "Its services are apparently appreciated by the farmers generally throughout this district. There is every indication that its business will be continuous and roach an enormous volume. There has been almost no delinquency in meeting the amortization payments, with the exception of a few farmers in drouth-stricken areas, where conditions have made it hard for them to pay regularly."

## *Where Germany's Fleet Died*

This map shows the northwestern corner of Germany, its outlet to the ocean and the locality of the harbors that have made its world commerce possible. In these waters were bottled up the German vessels that had to sail forth and surrender to the allied fleets. See Helgoland, the natural fortress that Germany bought from England years ago for a song. Note the Kiel canal, Cuxhaven and Bremen. Follow down the coast to Ostend and Zeebrugge. It is easy to see why Germany wanted to add this coast line to her possessions.




## *Washington Gleanings.*

The Methow-Pateros unit finished packing about 40,000 boxes of apples at their warehouse last week.

C. B. Sprague, Kitsap county agent, with headquarters at Port Orchard, has resigned and intends to go into farming in Clackamas county, Oregon.

R. K. Tiffany, project manager of the reclamation service in the Yakima valley, has asked A. P. Davis, director of the service, for $3,000,000 to develop Yakima valley irrigation systems during the coming year.

According to the annual report of A. B. Nystrom, Lewis county agent, there are more than 10,000 dairy cows in Lewis county. These are owned by approximately 1300 farmers. Most of the county's crops are grown to feed this stock.

Three hundred thousand silver trout eggs have been assigned to Thurston county. The eggs will be hatched at the Chambers Creek hatchery and the county game commission will be notified when the fry will be ready for shipment.

The weather around Sprague continues mild and open, which permits stock to run in the fields and saves feed, which is scarce in that part of the country. Farmers report considerable moisture in the ground, but that more is needed, for the soil became very dry the last two years.

The farmers of Whitman county are overwhelmingly in favor of the formation of a league of nations as a means of promoting international harmony if the expressions of the farmers in attendance at the county convention of the farmers' union held at Pullman last week can be taken as a criterion.

Marvin Chase, state hydraulic engineer, after meeting managers and directors of canals diverting water from Yakima and Naches rivers, says that at their request the state will take over supervision of the Yakima river and watershed to conserve the water supply and equalize distribution for irrigation.

The William Turner place at Wenatchee has been purchased by Frank Schnell of Claresholm, Alberta. The price was approximately $601,000. The Turner holdings comprise 790 acres, 60 acres in the finest of commercial orchard, and a modern home. In five years Mr. Turner took off $125,000 worth of fruit.

H. E. Shultz, a farmer living near Raymond, has produced splendid crops of corn this year. He makes his farm an experiment farm, and this year grew 112 varieties of corn. His seed came from foreign countries as well as from different states of the Union. Of these 62 varieties proved of value in this climate.

The Walla Walla county commissioners have set December 16 as the date for hearing the petition of the people of Burbank asking for the organization of an irrigation district near the junction of the Snake and Columbia rivers. The petition was signed by 80 persons, including most of the land holders under the project.

E. T. Newbry, who purchased the Tarble ranch of 320 acres of bottom land three miles south of Chewelah several months ago, will plant 50 acres to red clover for seed. He planted 40 acres to oats last spring and harvested an excellent crop. Mr. Newbry believes that timothy is a crop of the past, and has plowed his under, sowing alfalfa in the clay bottoms.

Seed growing is to be added to the industries of the Yakima valley, according to a report on the returns of S. D. Woodruff & Son, seed growers, who operated a 200-acre experiment plant this season. The returns will show 50,000 pounds of pumpkin and skuash seeds and 30,000 pounds of beans. The results give a net profit of $100 to the acre in addition to possible byproducts.

G. E. Friesen has been awarded a contract to make a $30,000 diking improvement for the enlarged diking district which includes a big acre age between Union and selah gaps. The plan is to build eight dikes at various angles with the banks to confine the Yakima river in its main channel and do away with the annual danger of flooding the low lands. Last years flood did about $70,000 worth of damage in the diking district affected by the proposed improvement.

The warehouse and evaporator plant of the Selah Growers' association burned to the ground recently, causing a $50,000 loss, three-fourths of which is covered by insurance. S. M. McKee, president of the association, says the cause of the fire, which started in a kiln, is unknown and that the association will rebuild on a fireproof basis for the coming season. Ties of the Northern Pacific railroad track in front of the plant were burned out and 450 tons of apples stored beside it were totally destroyed. Stockholders have unanimously voted to rebuild the plant, which will cost about $15,000.

The thirteenth annual convention of the Washington Grain Growers, Shippers and Millers' association, known as the wheat convention, will be held at the state college at Pullman January 7, 8 and 9. Special emphasis will be given to reconstruction problems as destined to affect wheat growers, millers and shippers. Grain grading demonstrations will occupy a prominent place in the discussions and deliberations of the convention, at which it is also planned to organize a Washington Pure Seed Growers' association.

# Build Better Farm Highways

## *Road Association Plans Legislative Recommendations*

**"Now that the war is over an active campaign must immediately be inaugurated looking toward the building of highways into neglected agricultural districts so that farm products may be transported by gasoline-propelled trucks.**

**"Special attention must be given to development of roads in districts with large agricultural production so that the cost of transportation may be reduced to the minimum."**

These are two paragraphs taken from the resolutions adopted by the Washington State Good Roads association at its convention last week in Pasco. They will go with those resolutions as part of the recommendations to be made by the association to the state legislature which meets in January. The enactment of road legislation in accordance with that idea would mark a long step in the direction of securing utility roads rather than scenic roads. This does not mean, of course, that great arterial highways throughout the state are not greatly to be desired and essential in the same degree that the arterial irrigation canal is essential to an irrigation project. But it does mean that good roads into the farming communities are as essential to good agricultural transportation as lateral irrigation ditches are to a good irrigation system.

One of the big questions at the good roads convention was whether or not the state should issue bonds for road construction on a large scale or whether it should continue the "pay as you go" method of road construction. P. H. Carlyon of Olympia, state senator from Thurston county, and for many years one of the good roads leaders in the state, is a leader in the movement for the issuance of bonds. Governor Lister is among those who oppose this method of road construction. It is expected that the question will be a prominent one in the legislative session at Olympia this winter. The resolutions adopted by the convention included the following recommendation in addition to those quoted in the opening of this article:

"That the principle of using automobile license revenues as a basis for a bond issue for the state is worthy of serious and careful consideration by the senate and house roads and bridges committees.

"That in devising any new laws or changes in the present laws, either based upon motor license fees or otherwise, the permanent highway fund and permanent highway maintenance fund for counties must be maintained.

"The association reaffirms its belief that the permanent highway law is our most effective road law and that it should not be tampered with, except that a clause should be inserted therein which will permit counties to apply their portion of the fund to an interest and sinking fund account for taking care of a county bond issue for road construction if they so desire. Maintenance funds and methods must not be weakened, but rather strengthened. This should apply to not only permanent highways, but to state roads or other roads which may be provided for by supplemental legislation.

"We believe that argument of cities of the first and second class for small percentage of automobile license money with which to construct and maintain bona fide arterial connections is well founded.

"All hard surfacing shall begin at city limits of principal paved centers or be continuation of hard surfaced standard roads already constructed out from these trade centers.

"We recommend that the legislature continue the two recognized road divisions of this state, namely: Western division (all west of the Columbia river, excepting Okanogan and Ferry counties) and the eastern division (all that east of the Columbia river, plus Ferry and Okanogan) and that construction go forward simultaneously in these two divisions on the ratio of assessed valuation and that the same rule apply to federal aid.

"That provision be made for the immediate construction of at least one east and west cross-state road.

"That the only license fee required from the owner of any motor vehicle be that collected by the state.

"That the present law providing for maximum vehicle loads be amended to provide for the maximum loads that trucks shall carry, taking into consideration the speed of the truck."

The convention elected N. B. Coffman of Chehalis president of the association for the ensuing year, and selected Yakima as the place for the next annual meeting. The executive committee as elected at the convention is as follows:

John P. Hartman, King county, chairman; Frank W. Guilbert, Spokane; E. C. Burlingame, Walla Walla; J. H. Smith, Snohomish; Lee Monahan, King; Torgor Peterson, Pierce; J. J. Donovan, Whatcom; A. F. Eldredge, King; F. R. Haupt, Adams; J. L. Dumas, Columbia; F. Garrett Fisher, Pierce; A. B. Fosseen, Yakima; J. E. Calder, Grays Harbor; F. J. Wilmer, Whitman; Fred L. Wolf, Pend Oreille; J. C. Hubbell, Kittitas; J. G. Kulzer, Stevens; Edgar Dry, Grant; Arthur D. Jones, Spokane; W. R. Ammon, Benton.

Vice presidents, France Terrace, King; F. W. Schultz, Chelan; Oliver Hall, Whitman; E. M. Gillette, Chelan; J. A. Fontaine, Columbia.

Legislative committee; C. L. Morris, King; Eli Rockey, Pacific; W. A. Bollinger, Okanogan; L. H. Brown, Spokane; C. L. McKenzie, Whitman.

S. B. L. Penrose of Walla Walla advocated a trunk highway along the north bank of the Columbia river from Vancouver to Kennewick. Secretary of State I. M. Howell recommended that motor vehicles be required to pay a greater proportion of the construction and maintenance costs of the roads than in the past, especially as to the main arterial highways. He suggested that the license fees on these vehicles be utilized for the construction and maintenance of the trunk roads and taxes applied to the construction of branch roads into the rural districts.

# State Legislative Methods

## *Ben Johnson Attacks Autocracy in Washington Legislature*

State Senator E. Ben Johnson of Spokane county is rendering the public valuable service by attacking autocracy in the Washington legislature. Senator Johnson, who speaks with the weight of long legislative experience, analyzes with great force and clearness the legislative methods at Olympia. He shows how the rules committees of the house and senate have a stranglehold on the other members of the legislature. In a public statement Senator Johnson says:

"When a bill is introduced in either house, it is read and referred for consideration to the proper committee. Thus a bill relating to highways is referred to the committee on roads and bridges. This committee considers the bill carefully, perhaps holding public hearings, and makes a written report, favorable or unfavorable."

So far the procedure is correct and not in conflict with public rights and welfare. As Senator Johnson says, after all this we might expect that a bill reported favorably would be voted on. "But it will never appear again, never be debated or voted on, unless it is placed on the calendar by the rules committee. This gives the rules committee of each house the power to defeat bills by simply failing to put them on the calendar."

This power to defeat bills in secret, Senator Johnson points out, also permits the rules committee, to a large extent, to secure the passage or defeat of bills on the calendar, because by simply leaving their bills off the calendar they can unmercifully punish any legislator who votes against their wishes. Hence the decisions of the rules committees are never overturned, and important legislative actions are generally determined behind the veil of secrecy.

The rules committee of each house meets daily, in secret, to make up the calendar for the next day. No public record is made of the votes of the members of these rules committees; no person not a member of the committee is permitted to be present; there are no majority or minority reports; all is secret as the grave.

The evil, as the Spokane senator says, exists under house rule 2, which provides that "the committee on rules and order shall have charge of the daily calendar of the house and direct the clerk the order in which the business of the house shall be transacted."

Legislators who want this system continued claim that the rights of the legislature in general are safeguarded by rule 40, which provides that "A bill may be advanced or placed on the calendar by a vote of a majority of all members present voting in the affirmative." In point of fact, however, rule 40 is a dead letter and has not been successfully invoked for many years. The reason is well understood at Olympia. As the rules committee acts in secret other members can not, for the greater part of the session, know what is its attitude toward a bill or bills in which they are interested. They are kept on the anxious seat, with constant knowledge that an appeal to the open house would be futile and put them in bad with the all-powerful "organization." With its autocratic powers the rules committee holds a menacing club over all the other members.

This all-powerful and autocratic committee should be abolished. In a number of states where this evil has been overthrown the calendar is made up automatically as the various committees report out bills for action. In other states the whole house itself makes up its daily calendar. Senator Johnson, himself a republican, offers this pertinent inquiry:

"How can the republican party persuade the farmers and the laboring men that their requests have had fair consideration in the legislature if this system of secrecy is maintained? They have important matters for consideration, and they not only know that a square deal in the legislature needs no cloak of secrecy, but they can point to such stanch republican states as Oregon, California, Kansas, Wisconsin, Ohio, Michigan and Minnesota where no such secret power exists. In those states every favorably reported bill is disposed of in public with full responsibility."

This, however, is not a partizan question. The line of cleavage is not between the republican and democratic parties, but between powerful special interests on one hand, that will fight tenaciously to continue autocracy in the legislature, and the great mass of people, on the other hand, who are against autocracy and believe that it should be smashed wherever it rests its head. We have seen the big autocrats overthrown at Berlin. The time has now come for the people to march upon the little autocrats in their state capitols.

# Beet Pulp Shortage

Dairymen of eastern Washington and northern Idaho to considerable extent depend on beet pulp as a succulent winter feed. This is particularly true of those who have no ensilage. In these districts 800 tons of beet pulp is consumed annually in normal times.

This year, owing to the shortage of the sugar beet crop in the California and Washington districts beet pulp for general distribution has been very much curtailed. In the general allotment to various districts eastern Washington and northern Idaho will only be allowed 120 tons.

Spokane is the distributing point for beet pulp for the district comprising northern Idaho and eastern Washington and it is said that the supply will soon be gone; the tonnage allotted is now coming in. Beet pulp averages 20 tons to the car, and the total amount which Spokane will receive this season will be six cars or 120 tons. Usually speaking not less than 40 cars are allotted this season.

No beet pulp is shipped into Spokane from southern Idaho as the acreage there supplies the pulp eastward.

# Power, Mechanics and Devices

**The purpose of this department is to give helpful suggestions to its readers. The editor invites letters that give experiences or practical ideas along the lines of "power, mechanics and devices" on the farm. Inquiries from any one on any point in which he or she is interested, whether previously touched upon in the department or not, will receive personal reply by mail.**

## Drainage Problem

By A. O. MOW, Moscow, Idaho.

In several of the middle states much of the most fertile and productive land now was under water 20 years ago. Then it was not worth anything, and today it brings the most valuable crops. The change was brought about by drainage, mostly made by laying tiles from open courses through the lands where the water was wont to stand.

In this northern Idaho country farmers have been making "good" money (really more than they deserve) and have refused to notice that they were abusing their most valuable opportunity. Quite generally, among these smiling hills, where they communicate with the lower and richer flats and valleys, there are oozy places, bogs and springs which rarely can be properly seeded and even then fail to bring satisfactory returns.

Many of the most aspiring and progressive farmers are seriously aware that the inefficiency of those wet patches are too great a loss and would eagerly and quickly drain them were it not for the prohibitive price of drain tile in this country.

It is for this reason that the writer, who has met this problem here, is offering the farmer this solution. Make covered or underground drains by grading them with a spirit level to the depth they should be. Fix a plug three feet six inches long and three or four or six inches in diameter, according to the capacity of the drain you need. The plug should be slightly tapered for three feet and in the six-inch end have a 3-4-inch hole bored through in which to insert a strong cord or wire for a pull. It will also be better slightly flattened and fluted on the bottom side.

Provide two collars of some waste sheet-iron, 12 by 18 or more inches, at one end of which cut a half circular hole that will set over the plug. You need a pinch bar or iron rod.

Have sand and cement where you begin digging, and a box in which to mix the concrete. Beginning your ditch line, dig as deep as your outlet should be and eight or more feet back. Leave the bottom rounding, grade and clean. Lay in the plug, flute down; set a collar at end and at mark six inches from other end. Mix concrete (one to seven is good), and cover the plug between collars one-half inch to one inch deep. Then continue the digging. After about 20 minutes, shovel loose, fine dirt onto your concrete and procede to pull the plug by putting the bar through the loop, pushing the end firmly into the bottom of the ditch and pulling at the other end. Keep the pull low so as not to lift the plug. Continue repeating this process and you will succeed with a well-made, concrete-tiled and almost inexpensive drain, which will improve your farming land 100 per cent.

I have a drain in operation which cost me 21 cents a rod money outlay (cement costing $3.30 per bbl).

### FARM FIRE PROTECTION.

Now that modern machinery has found its place on the farm, gasoline, oils and other highly inflammable material used in connection with it call for additional safeguards against fire.

Some good fire extinguisher should be kept where it is handy to get at quickly. The pump type, holding about a quart of chemical, is handy and efficient on nearly all kinds of small fire. It puts out blazing gasoline, kerosene, acetylene gas and other highly inflammable substances where water often only spreads the flames. A woman or child can operate such an extinguisher as it is light and easy to handle. The liquid in any good fire extiguisher can be pumped over delicate machinery or a fine fabric, it is said, without injury. It is good until used, so there is no upkeep expense.

The fluid is practically freeze-proof, so the extinguisher can be safely left in the barn or unheated garage during the winter.

A good extinguisher of the type mentioned can be obtained for a few dollars. The farmer will find such an expenditure in the nature of an investment, as it reduces insurance rates on passenger cars, trucks or tractors, considerably, and thereby pays for itself, besides being available for instant use in any fire **emergency.**

# Hollywood Veeman Fayne



Hollywood Veeman Fayne, the handsome Holstein bull calf shown herewith, is owned by M. Horan and sons, Wenatchee, Wash. He was purchased from Hollywood farm for $1000, and Mr. Horan feels that he got him cheap, for he is not only richly bred, but a great individual. His sire, Hollywood Homestead Veeman, is out of Phoebe Veeman Pauline Beryl, that has an official record of 32.7 pounds of butter in seven days, and is the dam of a 31-pound daughter and a 30-pound daughter, and goes back to the most famous dams and sires. The calf's dam, Hollywood Artis, was sold by Hollywood farm at the Detroit sale to John Arfman of Fairmount farm for $1500. She has a 2-year-old record of 22.59 pounds of butter, and a 5-year record of 32.4 pounds from 577.3 pounds of milk. She is by King Palmyra Fayne, sire of three 30-pound daughters. Her dam, Petiertje Flora Artis, produced 36.14 pounds of butter in seven days, and 140.06 pounds in 30 days. Mr. Horan now has a herd of 29 purebred Holsteins. His first registered Holstein was purchased only three years ago. He had the first purebred herd of Shorthorns in Chelan county, and later had registered Jerseys. Now he has settled in Holsteins, purchasing his foundation stock at different northwest Holstein sales, as he found what suited him. Some of the best lines of the breed are in his herd. He will do official testing as soon as his boys get back from the war. Mr. Horan was once known as the "Apple King," and he still has quite an orchard. For the reason that his land is thus occupied, he does not pasture his cattle, but uses soiling crops of alfalfa and oats, as well as silage and alfalfa hay, and keeps the cows confined in small space. He grows his own alfalfa and has two big silos, both filled with corn, for this winter's feeding. One of them, a hoop silo, was built this year and used by the county agriculturist as a demonstration silo. H. A.

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A. B. NYSTROM, Editorial Contributor.

# Bitter Milk

## More Prevalent in Winter Months

By A. B. NYSTROM.

Inquiries concerning the cause and remedy for bitter milk and difficult churning are usually very prevalent every winter. In order to be able to meet these conditions the following information is given for the benefit of our readers:

There are two kinds of bitter fermentations; those that are present at the time of milking and those that appear after the milk has ben left standing for 12 hours or more. Bitter milk is usually more prevalent in the winter than during the summer months. There are two reasons for this. In the first place, at low temperatures, the bacteria that cause bitter milk develop faster than the bacteria which cause the milk to sour. The result of this fact is that when milk is contaminated with both kinds of organisms, gaining entrance through the dust in the barn air or from unclean utensils, the milk turns bitter before it sours. This very often happens with cream, and when such a condition exists the cream will not churn readily, due to the fact that the abnormal fermentation has hardened the fat globules so they will not stick together.

Bitter cream and the resulting difficult churning can be overcome by means of a starter. This starter is nothing but a pure culture of lactic acid bacteria (clean sour milk) which has developed a mild acid in the milk and caused it to clabber. Sometimes a little buttermilk saved from the previous churning may be used. The danger in using buttermilk is that the fermentation may not be what you want. There may be some of the abnormal fermentation in the buttermilk. For that reason clean skimmilk set away at 80 degrees farenheit and kept at that temperature until it clabbers makes the best starter. If pure culture starter is available it is better than the home-made skimmilk starter.

The kind of feed the cow eats has an effect on the flavor of the milk and churnability of the cream. Dry feed will cause hard fat globules. The lack of variety in the ration, and especially the absence of green or succulent feed, throws the cow's system out of order and she can not ward off an attack of garget or any other disease which may cause bitter milk in the udder. The lack of exercise has the same effect.

Prevention is the only method of controlling this difficulty. The proper ration, plenty of exercise, clean quarters, with fresh air and sunlight, will usually prevent the appearance of the bitter fermentation in the udder. A clean barn, clean cows, clean milkers and sterile utensils will prevent the development of the abnormal fermentation after the milk is produced. If the milk tastes bitter when it is first produced, look to the cow for the trouble. If it develops upon standing, clean up the barn and utensils. There is nothing that can be added to the bitter milk or cream to overcome the fermentation. A clean starter, however, will be helpful.

# Should Have a Cow

R. P. Bean, agriculturist with the Yakima, Wash., irrigation project, considers the development of the dairy industry one of the most important phases of development work in Yakima county.

"The fruit industry is well established, and is a fine thing—as far as it goes," comments Mr. Bean. "But many of our most conservative and level-headed fruit growers are now convinced that fruit with cows and possibly hogs is a much more stable source of income than fruit alone. The one-man herd or the one-family herd is the thing that interests me most. The man who goes into dairying on a big scale must have capital, and with this requisite he could just as easily go into any of a number of other occupations. But the small dairy herd is an absolute necessity for the small farmer. The cow is simply a machine for consuming hay, grain and roughage and turning out pay checks. The small farmer needs her."

Hogs, as a side line to go with dairy farming, form an ideal combination, in the opinion of the project agriculturist. Hogs have done remarkably well wherever they have been tried in Yakima county. There have been three outbreaks of cholera on the various units of this project, but in each instance prompt use of vaccine checked the disease before it became epidemic. Mr. Bean reports fine cooperation from the farmers, at these critical times.

## DAIRY AND LIVE STOCK OUTLOOK.

### With Cheap Hay Already in Sight, Yakima Men Are Encouraged.

George A. Gue of Yakima, while deploring the way in which the flue epidemic has hit the fall circuit of live stock shows, thinks that the dairy and live stock outlook in general could hardly be better. With cheap hay already in sight and with the probability of cheaper mill feed in the not too distant future, the genial auctioneer who has been preaching the doctrine of year-in-and-year-out live stock farming is certainly in a position to say, "I told you so!" If history repeats itself, as it is pretty apt to do, Mr. Gue's prediction that feed prices will come down while the price of good beef and dairy cattle will go up is certain to be fulfilled.

Another straw—and one of considerable magnitude—which shows the direction the wind is getting into, is the return of H. C. Davis to the fold of Holstein breeders. During the spring of this year Mr. Davis declared that he could not afford to stay in the dairy business because it was costing him upwards of 70 cents a pound to produce butter fat, notwithstanding the quality of his cows and the high standard of his barn and farm equipment. Now rumor has it that he will soon be filling his old niche in the temple of famous northwestern breeders.

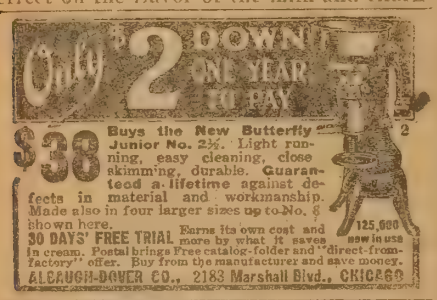
## COW ON SMALL FRUIT FARM.

S. O. Pool, who breeds and deals in Jerseys at Wenatchee, Wash., reports three carloads sold in the Wenatchee district in the last two years. About half of these were high grades, the balance registered stock. Mr. Pool considers the Jersey the cow best suited to the small fruit farm, where feed is an object. He believes the demand will grow and dairying will increase as soon as conditions become normal, following the war, and feed prices come down. All of Mr. Pool's herd, with one exception, are register of merit cows, and all his calves but one out of register of merit dams. Raleigh's Golden Mollie, one of his cows, produced 12,000 pounds of milk and 530 pounds of fat with her first calf. Mr. Pool is a strong believer in one family cow, or a few cows on every fruit ranch, especially in the irrigated country, where alfalfa grows so well.

H. A.

## FEEDS MANY CALVES.

In a communication to The Farmer, B. P. Turner of Boise says: "We have raised 26 calves from the milk of one Holstein cow and are now selling her milk to the cheese factory."




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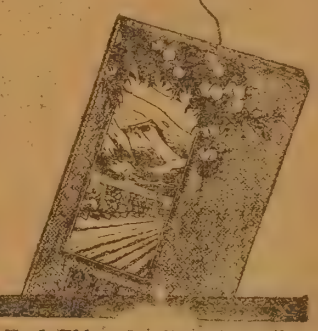
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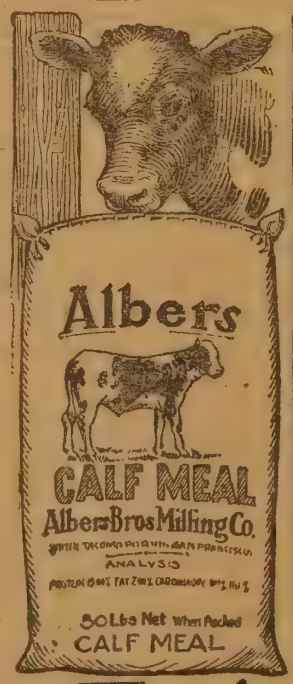
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## Sunflowers for Silage

In recent reports from Yellowstone county, Mont., where they claim that corn does very well, it is said that the farmers are much interested in raising sunflowers for ensilage. It has been demonstrated this season that the tonnage per acre of sunflowers has been from two to three times that of corn. According to agricultural college of Montana tests, the feeding value is almost equal, pound for pound.

At a recent meeting of the farm bureau of Yellowstone county, it was reported that on one irrigated farm the sunflowers are averaging 34 tons per acre as compared to 11 tons of corn. But it is mostly in the dry land districts that the sunflowers are receiving the greatest welcome. It was just a year ago that the advocating of the sunflower to the farmers of the locality was begun.

One of the big disappointments the last season has been experienced by some of the farmers who planted sunflowers. They never cultivated them once, yet they expected to harvest a crop. Sunflowers must be cultivated just like any other crop to get the heaviest yield. It is important that the farmers next season who plant sunflowers make up their minds that they must receive attention while growing, otherwise it will be a case of time and money wasted. A. B. K.

### RUSSIA'S FUTURE SAFE.

**Past Resources Have Not Been Lost.**

Arthur Deaton, former representative in Russia of the George Broomhall's Corn Trade News is most hopeful regarding the immediate future of that country. He points out that Russia has not really lost much material wealth through the war, though she has suffered terrific losses in men. Her works and fields, mines, forests and oil wells remain, and her debt is not at all overwhelming, only about a billion dollars to outside creditors. Mr. Deaton believes that production can quickly surpass anything attained before, once there is a stable government in order in the country. Railway developments in Serbia will lead to rapid settlement of that great land in the future. Before the war one factory at Elizabethgrad turned out 18,000 fine radial seed drills annually, and Mr. Deaton believes this output can be easily doubled. Besides this they are capable of turning out some thousands of the popular peasant horse gear threshers as well as large ones to be driven by oil engines. The little horse gear threshers turn out about 800 bushels of clean grain per day.

### WOMEN COW TESTERS MAKE GOOD.

The dairy specialist of the United States department of agriculture reports that the women who have become cow testers in the cow testing associations in the United States have been thoroughly successful in their undertaking. Labor shortage, due to the war conditions, was the main reason for the women undertaking this work, and at the present time, says the department of agriculture, there is a field for many more women testers who properly fit themselves for their duty. It is believed that the number of cow testing associations could be doubled in the near future if enough testers were available. There are several women engaged in this line of work in the northwest and only recently the dairy department of the University of Idaho sent broadcast an appeal for other women to enter this work.

### PETER THE GREAT'S COLTS.

Score another big year for the Laurel Hall sire, Peter the Great, 2:07 1-4. As usual, the youngsters by the great son of Pilot Medium were prominent in the futurities and such an array of three-year-old trotters by one sire were never before seen out in a single season. Six three-year-old trotters that beat 2:06 in races. At the opening of the Grand circuit at North Randal, the Lexington-owned colt, Hollyrood Bob, started the harness horse world by trotting a mile in 2:04 3-4, and Chestnut Peter, another of the tribe, forced him out, being timed separately in 2:05. Selka, still another of the tribe, was a close third, and she was separately timed in 2:05 1-4.

### FOOD PRICES TO STAY UP.

Secretary D. F. Houston of the U. S. department of agriculture, predicts that there will be comparatively no reduction in the present prices of food for another year. He also expresses the belief that while this country has to feed at least nine European nations, there will be left sufficient food supplies for the American people. He says that America must feed England, France, Belgium, Poland, Holland, Norway, Switzerland, Germany and Austria.

### CANADA'S NEW FLOUR PRICES.

The new flour price for the 98-pound sack of government standard flour has been fixed at $5.43 1-2 instead of $5.17 1-2, the price which has prevailed for several months. This is an advance of 50 cents a barrel or $10.85 advance in flour prices as based on the higher grade of wheat produced this year and the recent advance of 3 1-2 cents a bushel on the price of wheat.

### DOUGLAS COUNTY SHIPS TURKEYS.

It is estimated that approximately 20,000 turkeys have been fitted for the outside markets in Douglas county. The market value of these birds is estimated at $75,000 to $80,000.

TO the Editor: We have had the Farm Service Flag which you sent us posted in our office and have now secured four subscriptions for your papers. Please send two cotton felt pennants, together with two extra stars for each flag. Please leave them unattached. Send the pennants to this office. I enclose $1 to pay for the four single year subscriptions.

THOMAS HOLT.
Hartford, Conn. Commissioner.


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fed regularly to sheep will keep them free from worms. It also acts as a tonic, a laxative, a blood purifier and as an aid to digestion can not be improved upon. Will eliminate BLOAT and ALL AILMENTS COMMON TO SHEEP.

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**NOTE: Skimmed milk is a dairy by-product. Vast quantities of it are either fed to live stock or wasted. The opening of a new market for skimmed milk is of real importance to the entire Dairy Industry of the United States. The facts set forth below deserve the thoughtful consideration of the farm people of America, and of all Agricultural Extension Workers.**

# HEBE

## —and the new market for a dairy by-product

The utilization of by-products is a matter of first importance to practically all lines of commercial enterprise.

Until recent years by-products were generally wasted as useless. Cottonseed for instance was either dumped or burned—gluten was discarded by starch making industries—now both are valuable stock feeds and have many other uses—gasoline was a waste product of the kerosene refineries—coal tar, now the base of many valuable products, was a nuisance to the gas plants—and there are scores of other instances where waste has been turned into profit.

Economists tell us were it not for the utilization of by-products our whole economic structure would be seriously impaired.

Skimmed milk is a dairy by-product heretofore largely used as a feed for stock, or else wasted.

Thanks to scientific minds, processes have been developed for utilizing skimmed milk as a human food by perfectly combining with it refined, edible cocoanut fat, which restores in large measure the food value of the animal fat which has been extracted—the result is a palatable, nutritious food product, marketed under the trade name HEBE.

Hebe is properly and plainly labeled and sold for just what it is—"a compound of evaporated skimmed milk and vegetable fat." It is recommended principally for cooking, baking and for coffee and its use for these purposes fills an economic need. Hebe is a licensed product and its profits are subject to the regulations of the U. S. Government.

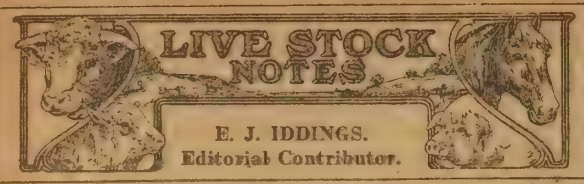



Through Hebe, skimmed milk is lifted from its status as a feed for stock and dignified by recognition as a food for human kind. Hebe thus opens to the dairying industry a new and more important market for its great by-product, skimmed milk—which is a matter of primary importance to all farm people.

A booklet telling the interesting story of Hebe and its value to the dairy industry will be sent free on request. Address The Hebe Company, 3210 Consumers Building, Chicago.

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## Must Study Breeding

Recently a carload of beef steers, raised and fitted in Kansas, sold on the Kansas City market for $25 a hundred pounds, averaging over $403 each. H. J. Waters, commenting on this remarkable sale in an article in the Kansas City Star, said that it brought to light the two price essentials in beef production—breeding and feeding.

"The steers had been bred well and fed well," he said. "In almost any state of the cattle market there are many animals offered for slaughter which have been bred better than they have been fed, but one year with another the vast majority of cattle coming to market show evidences of better feeding than breeding. Feeding valuable grain to coarse boned and poorly bred stock is a waste which we ought no longer to commit.

"We are breeding our animals less scientifically now than we are feeding them. Indeed, feeding is almost an exact science. We know that combinations of certain grains and hays will produce satisfactory growth or will fatten animals with certainty.

"Feeding processes can be learned from books or in the school, provided the rules learned are applied with common sense and judgment. No so with breeding—it is yet largely a sealed book, something which no one can tell another how to do. While we know much more about breeding then we did even a few years ago, yet we haven't enough knowledge to mate animals with a great degree of certainty as to results.

"The thing in breeding of prime importance which we do not know, however, is that permanent success comes only from developing both the male and female lines of the herd. Great progress can be made by the use of good sires on plain dams, but soon the limit is reached beyond which further improvement is slow. By building up both lines there is scarcely any limit to progress.

"The $25-a-hundred steers furnished a striking example of the truth of the statement. The foundation stock from which these world-record steers came was a lot of very plain cows, on which good sires were used. But that was 20 years ago. Good sires have been used without interruption since, but only the best cows were saved from year to year as mother stock. It is only by following this plan persistently that permanent success in breeding any class of stock will be attained."

## Put Animals in Shape

Regardless of the kind of live stock on the farm, it is highly desirable that they be put in the most thrifty condition possible before entering the winter. This is true of sheep, horses, cattle, hogs and even poultry. If there are animals in the herd or flock that are for any reason lacking in vigor and strength, a little special attention should be given them before the winter sets in. A little feed in the form of hay or grain in addition to what they are securing in pasture will often make the difference between a rugged animal ready to stand the vicissitudes of winter and one incapable of combating the cold and conforming to the necessary change in feed methods. It is also much cheaper to put this additional thrift into the system of an animal during the warmer weather when there is feed in the pasture than after the colder weather comes in and higher priced feeds become necessary.

### SACRIFICE BREEDING STOCK.

Figures secured by the Montana live stock board on cattle shipments show a state of affairs threatening the development of the Montana cattle growing industry. Owing to the scarcity of feed in the state, as the authorities infer, breeding stock is being sacrificed on a large scale. The increase in the shipments of calves from 1915 to 1917 was 3821 per cent. Percentage increases in shipments of cows and bulls also was very great while the increase in beef stock shipments was not remarkable. The average per cent of increase on all classes to all markets is 778.

These figures were obtained to be sent to the railway authorities to induce them to grant a lower rate on importations of breeding cattle to Montana to check this tendency and help out the breeding industry. It is believed that the shipments this year over last will show an increase of 100 per cent, shipments for the eight months ending September 1, 1918, being 84,437 against 32,269 in the same period in 1917.

A. B. K.

### FEED COTTONSEED CAKE.

Several inquiries have been received of late from subscribers, asking concerning winter feeding of cattle. Professor E. L. Potter of O. A. C. states that he has suggested in many instances the use of cottonseed cake instead of grain.

As between oil meal, soy bean meal and cottonseed cake there is little difference in their value, the latter having as high as 43 per cent protein. The two former are off the market here. The best cake is not obtainable, but a fair quality from South America and from California is on the market. In a letter to one inquirer, Professor Potter writes:

"I would feed from one to two pounds a day of the cottonseed cake. Where the cattle are merely being wintered and no gain is expected you could winter them on two pounds of cottonseed cake and straw, and they should do fairly well."

### Must Be Reasonable.

Unreasonable regulations will not regulate long.

### Shorthorn Beef Records

An Illinois load of yearling Shorthorn steers made the world's market record at Chicago October 3, selling for $19.60 per cwt.

An Iowa load of Shorthorns sold for $19.50 September 16, averaging $303 per head, the previous record.

A Wisconsin Shorthorn load made the Wisconsin record at $18.35 and a Shorthorn load bred in Montana made the record for range steers at $18.

**American Shorthorn Breeders' Association**
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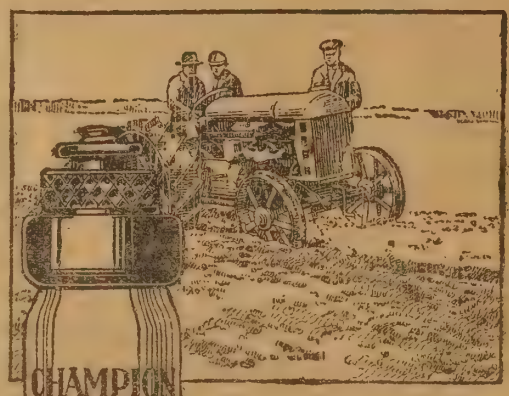
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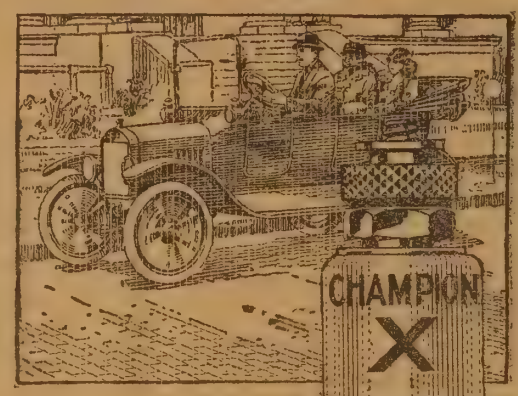
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# VETERINARY

**Calf Has the Scours.**

I have a Jersey heifer calf, five months old, that has the scours. Four days ago it was almost fat enough for beef. First scours started, then later it passed blood and matter. Now it is down, unable to eat anything. It has been eating vetch and oat hay and running in fair pasture. It groans as if it has the cramps.

F. E. W.

Saginaw, Ore.

In regard to your Jersey calf I will say: Stop feeding her; give her plenty of water to drink; give her one drachm of creolin in six ounces of warm water. Give her from 10 to 15 drops of turpentine in one ounce of raw linseed oil three times daily, morning, noon and night. You have a very serious thing to deal with, but you may get results from this treatment.

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**Sheep Catch Cold.**—I have 356 ewes, 56 lambs, five bucks, all registered Hampshires. Now I wish you could tell me what is the matter with my sheep. They run at the nose and have a bad cough. I lost one ewe. Please tell me what is the trouble or where I can get some literature about this breed of sheep and diseases. A. D. B.

New Meadows, Idaho.

Be sure to have good warm quarters for the sheep. With so many sheep affected I am of the opinion that it is a cold due to some kind of exposure. I do not know of a better remedy for as large a bunch of sheep as this is than that remedy which Dr. E. E. Baker recommends in his book on "Treatment of Diseases of Sheep," which is to fix troughs for them to eat out of and fix a top board through which small holes are made just so the sheep's nose will go through to the grain. Smear this hole with tar in order that the sheep may treat itself to a good smearing of tar about the nostrils. It will eat some of the tar also under these conditions, and that is a good stimulant to the mucous membrane of the nose and windpipe. This may help.

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**Remedy for Piles**—I have a 6-months-old pig which has the piles very bad. He has had all the sour milk and green stuff that he wanted. I didn't feed any grain till just the last week or so. I have been giving some in the milk or dry. It has been this way for about a month. It seems to be worse this morning. Can you please tell me what would be a good cure? It doesn't seem to be constipated. W. H. P.

Rexford, Mont.

Stop feeding the sour milk for a few days and let the pig run on green stuff and feed him, if possible, about a quarter to half a pound of rolled grain daily, preferably oats. Apply the following remedy to the piles. Fluid extract of belladonna, 1-2 ounce; fluid extract of ergot, 1-2 ounce. Apply this morning and evening for some time.

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**Affected With Ringworm**—I have some calves that are affected with scurvy. Can you tell me of a remedy? M. B.

Dupuyer, Mont.

You do not give a very good description of the trouble affecting your calves. I have an idea, however, that it is ringworm. I may recommend that you paint the ringworm with a 5 per cent solution of silver nitrate. Immediately afterwards treat the same spot with tincture of iodine. Make the treatment cover about half an inch large space around the outside of the scurf. Two or three treatments are generally sufficient to cause a recovery.

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**May Be Swamp Fever**—I have a 3-year-old mare that weighs about 1300, that has been ailing since January 1918. There is no veterinary near here, so I will tell you her symptoms as nearly as I can, and would like your opinion. She doesn't seem to have control of her feet, and especially her hind feet, which she sometimes drags when she walks and doesn't seem able to set them down where they should go. This is more noticeable when going down hill. Throws hips and head from side to side when she walks. Seems in perfect health otherwise and has a good appetite. There seems to be the right quantity and quality of urine. Have treated for kidneys and she doesn't flinch when I press over her kidneys. M. B. W.

Neppel, Wash.

You do not give very definite descriptions of the symptoms which the 3-year-old mare has; but you do mention the fact that she does not have control of her hind legs. I wonder if you might not have animal affected with the disease known as swamp fever. This disease is chronic in character, and has as one of its characteristic symptoms the loss of control of the hind quarters, not so that she can not get up or down or go; but she reels from side to side, especially when she trots. In addition to these symptoms, the animal is dumpy by spells, can not work without being easily fatigued. This disease does not yield to treatment readily at all. There have been some reported favorable results from the administration of arsenic. It has been recommended that it be given in very large doses in order to get results. You might try giving 10 grains of arsenic in pill form or even on the grain, once daily for a few days to see if that will help her. This is a very large dose; but it has been recommended in this size dose for this trouble.

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**Mare's Udder Infected.**—Could you tell us through your paper what ails our 5-year-old mare? One day last spring she had been worked on the drill until noon. Nothing seemed wrong when she was put in the barn. After noon, on bringing her from the barn, she was stiff and could hardly walk. On examination her bag was found to be badly swollen. She was turned out to pasture for several days. Finally her bag broke and ran. She has been used a little as a saddle horse and for light work since, but every few days she gets a little stiff and her bag breaks and runs. We would be very grateful if you could tell us through your valuable paper what is wrong. She raised a Shetland colt in the summer of 1917. Would that have anything to do with it? She has never been bred since. Would it be advisable to breed her? E. B. B.

Tonasket, Wash.

The mare has an infection of the udder. Some people liken it to lumpy jaw in cattle, but there is some difference of opinion whether it is due to a geotryomyces or to a streptococcic infection. If you can carry out the following treatment you may get favorable results without an operation removing the udder entirely. Give the mare one drachm of potassium iodide on her feed morning and evening until she begins to run at the eyes. Then stop and let her rest for a few days, and continue the treatment. The little abscesses in the udder should be thoroughly opened, and broken down and should be daily injected with a small quantity of Lugol's solution of iodine. This should be done daily.


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JAMES DRYDEN, Editorial Contributor.

# Utility Is the Word

The winter months are the poultry show months, and they are at hand. Nearly every city of importance holds its poultry and pet stock show, including rabbits. If these shows can stimulate the actual production of egg and meat producing animals, they are to be commended, and this they can do if properly managed.

There really is little room in the world today for the strictly show animal, be he horse, sheep, cow or chicken, but there is increasing room for the animal that helps do the world's work or helps with his own flesh or product to feed the hungry.

That Europe is going to call upon America for meat animals and meat in large quantities during the next year or two is unquestionable. What is going to be the effect on the poultry business? Are poultry products going to be exported in correspondingly increased amounts?

Poultry and poultry products are less suitable for exportation than beef or cured meats, but they will be exported in some quantities. What is more important, they will be more in demand at home. There is no prospect that beef and mutton and bacon will be cheap until Europe gets back into the full swing of production, and until these things do become cheap there is no danger that poultry and eggs will be low. They are most excellent foods, especially the eggs, and should therefore command a good market in the cities where meats of all kinds are high. They can also be made to take the place of much meat on the farm, and thereby release pork or beef for the market that will demand it.

These are reasons why the poultry shows can be of real service to a hungry world this winter. They can stimulate the production of these desirable food products both for home and outside consumption. But there should be little stress placed on the birds that are just show birds. Utility is the great word of today.

# Cleanliness Is First

It has been said that cleanliness is one of the first essentials in preventing or combating almost every known disease, and is as true in the poultry yard as in the home or the hospital. It is especially essential in the prevention of tuberculosis in poultry.

Clean feeding ground is the first in importance. Keep the feeding ground and feeding troughs clean and there will be small chance of the disease spreading. In cases where the flock affected is not extraordinarily valuable, one of the surest and perhaps the cheapest ways to get rid of tuberculosis is to kill the diseased birds and thoroughly cleanse the premises where they have been housed or yarded.

It is not always easy to identify the disease positively. Lameness is one symptom, the joints of the fowls sometimes being affected. There is sometimes a wasting away until the fowl becomes little more than feathers and bones, but in some instances bad cases have not produced this result. The only sure way to determine whether the trouble is tuberculosis is to dissect one of the affected fowls.

The liver and the intestines are usually the organs most affected. The spleen is also frequently affected. When the tubercle enters the liver it is shown by white, yellowish spots that are gritty when touched with a knife. The spots grow larger as the disease progresses. The spots on the liver are the first danger signal to look for. The spots are somewhat raised, and are thus distinguished from the spots caused by the parasitic disease coccidiosis. The latter is, however, a disease peculiarly affecting little chickens. The liver is usually enlarged, caused by the growth of the tubercles.

The tubercles on the intestines range in size from a pinhead to a pea, or even larger. In early stages it may require close examination to see them, but not so in advanced stages. As the disease progresses the walls of the intestines break down and living tubercle pass out of the fowls in the excreta. This is the source of infection for others of the flock.

In some cases the disease is accompanied by a dropsical condition. The abdomen becomes filled with water. Frequently it is accompanied by diarrhea, but not always. The birds do not lose their appetites.

### THINK EGG AND POULTRY PROSPECTS GOOD.

M. C. Wire and Son, proprietors of Walnut Crest Poultry farm, Newberg, Ore., report their 800 White Leghorn pullets laying 55 to 60 per cent of eggs per day. And with fresh eggs worth five cents each, wholesale, this makes quite a snug little income from the pullets. They have been in the laying house about a month. The eggs, when I saw several days' laying, Thanksgiving day, were of fair size and would hardly be taken for pullet eggs. Practically all the second-year hens will be saved for day old chick hatching. Large orders for day-old chicks have already been received. The cockerels in use this year are Hollywood stock and are a fine lot of birds. The Messrs. Wire believe egg and poultry prospects to be good. Feed prices are not quite so high as they were, egg prices are being maintained and there appears to be a real shortage of poultry.

H. A.

### GET AFTER THE LICE.

The free use of a lice powder is always in order, says the department of agriculture. Sodium fluorid makes an effective lice powder. In applying the powder hold the fowl by the feet, head down, and work the powder well down into the feathers.

Free use of kerosene or crude petroleum on the roosts and in the cracks will exterminate mites.

### Don't Lose the Fertilizer.

Do not let the manure value be washed off the soil by heavy rains or melting snows.

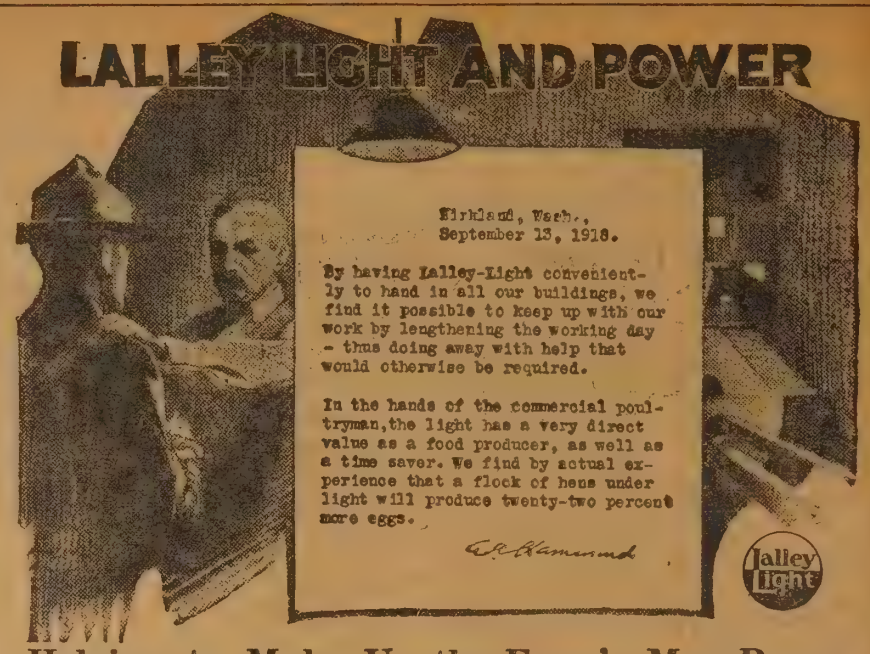
### Destroy His Winter Home.

Destroy the pests' hibernating place.


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Mrs. H. M. Patton, Waverly, Mo., writes: "I fed 2 boxes of 'More Eggs' to my hens and broke the egg record. I got 1500 eggs from 160 hens in exactly 21 days." You can do as well. Any poultry raiser can easily double his profits by doubling the egg production of his hens. A scientific tonic has been discovered that revitalizes the flock and makes hens work all the time. The tonic is called "More Eggs." Give your hens a few cents' worth of "More Eggs," and you will be amazed and delighted with results. "More Eggs" will double this year's production of eggs, so, if you wish to try this great profit maker, write E. J. Reefer, poultry expert, Desk 1559, Reefer Bldg., Kansas City, Mo., for a $1 package of "More Eggs" Tonic. Or send $2.25 today and get three regular $1 packages on special discount for a season's supply. A million-dollar bank guarantees if you are not absolutely satisfied your money will be returned on request and the "More Eggs" costs you nothing. You take no risk. Write today. Pin a dollar bill to your letter, or send $2.25 special discount for 3 packages. Or ask Mr. Reefer to send you free his poultry book that tells the experience of a man who has made a fortune out of poultry.—Adv.






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War is teaching thousands of farmers that Lalley-Light is a labor-saving necessity of utmost value; and that after the war the need for it will be even greater than now.

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Frank Waterhouse Co., Pine St. and Bellevue, Seattle, Wash.
Oregon Motor Car Co., 8th and Davis Sts., Portland, Ore.
Riegel Brothers, 1307 First Ave., Spokane, Wash.

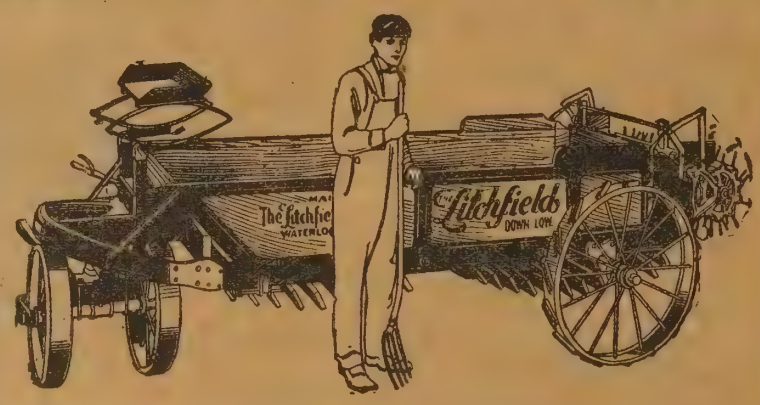
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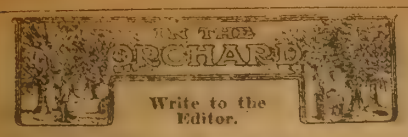
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GRANVILLE LOWTHER,
Editorial Contributor.

# Beet Troubles

## Diseases and Pests in Northwest

The beet industry is destined to be one of the important money producing industries of the Pacific northwest. I have watched its development in Kansas, Oklahoma, Colorado, California and Utah and am satisfied that the soil, climate and relations to other industries, make this one of the favored spots for the growing of sugar beets. To nome one industry, that of fruit growing, there is more sugar used in the preparation of fruits for uses as human food than any other industry. This is perhaps the best fruit growing country in the world. I therefore think it proper to give some space to the diseases and pests to which sugar beets are subject.

The same general rules apply to beets as apply to fruits. The diseases are generally caused by bacteria or fungi. In either case the Bordeaux mixture is a remedy, provided the spray can be made to reach the seat of the disease. In cases of powdery mildew, no other forms of mildew on the leaf, this can generally be done. In case of bacteria on the root as beet scab, root rot or similar diseases, the sprays can not be applied to the root, and a change of crops is often necessary.

The pests can be controlled in much the same manner as fruit pests. The sucking insects, such as aphids, chinch bugs, can be controlled by the tobacco spray or the coal oil emulsion.

The chewing insects, such as blister beetles and army worm, can be controlled with the poison sprays.

The insects that feed upon the roots are difficult to reach and generally a change of crops is the best remedy. For a year or two, grow alfalfa, corn or something else and plant to beets after the pests have died. G. L.

### APPLES ROTTING EARLY.

I have a letter from M. H. Covert, Almira, Wash., saying that his apples that keep ordinarily until May, are now rotting. Mr. Covert wants to know the cause and what to do to prevent it. My answer is that I do not know. Our own apples are not keeping as well as usual, and that seems to be a general complaint. Our apples ripened before they had colored as they ordinarily color. If we left them on the trees until they got the proper color they dropped more than usual. If we picked them at the usual stage of ripeness, they had not the usual color. So we had to decide between lack of color and overripeness. We put away a few carloads thinking we would keep them until the early spring market; but found they would not hold up properly until spring, so we disposed of them for earlier consumption.

We think the causes were the sudden changes in weather conditions, with waves of extremes of temperature, considering that it was the growing season. But we do not know. G. L.

### MAKING ROOM FOR PRUNES.

Several rows of apple trees on the M. E. Taylor place, near Yakima, Wash., are being grubbed out to make room for prunes. The rest of the seven-acre orchard is made up of peaches and pears, neither of which require the extensive spraying given to apples. Pears are usually given two arsenical sprays annually, for instance, while apples may receive five or six.

Peaches and pears seem to have gained considerably in favor this year in this part of the state, the former making a particularly good record in the orchards adjacent to the North Gap. Superior air drainage, making for freedom from early and late frosts, perhaps has a bearing on this matter of local superiority.

### AT THE EDITOR'S DESK.

There has come to the editor's desk a new member of the series of farm manuals issued by Lippincott. This is "Productive Sheep Husbandry," by W. C. Coffey, professor of sheep husbandry at the University of Illinois. In common with the other manuals, this book takes up the subject at the beginning and carries it along to a logical conclusion. It is an entertaining, practical book. Nobody can read it without increasing his knowledge materially

### GET POTASH AT HOME.

The federal war industries board has turned over to the United States department of the interior the developing of the potash industry in this country, with a view to producing all this fertilizing element needed on American farms in America. Heretofore this country has been largely dependent on Germany for its supply of all kinds of commercial fertilizer.

### Hard Lines.

First English boy—Comin' fishin', Bill?
Second ditto—No, can't come fishin' today; I lost my worm ticket.

### IS SPRAYED HAY DANGEROUS?

Mrs. E. Wurl of Yakima is somewhat skeptical on the subject of orchard hay poisoning. All the hay raised on the Wurl orchard was sold, but the buyer reported excellent results from feeding it; and if sprayed hay will kill horses and cattle, as is sometimes declared, Mrs. Wurl wonders why her geese and chickens and rabbits, which had free access to the orchard grass, were not affected.

"Perhaps there was something else the matter with the way those animals that died were fed," she concludes. "There are different ways of feeding, you know—I believe in giving farm animals all they will eat. It cost a little more to feed as you go along, but things grow faster.

The Wurls are planting part of their place to prunes, and in justification of this, Mrs. Wurl points to a single prune tree in her front yard, from which she sold $7.50 worth of fruit.

### HAD FAITH IN FRUIT INDUSTRY.

F. M. Clossen five years ago came to Wenatchee, Wash., from Iowa. He had no experience with fruit. Nevertheless he purchased a 10-acre orchard, making a first payment and giving a mortgage for $12,000. With his wife and two sons, about grown, all of which had the same faith in the country and the fruit industry, as well as the same energy as himself, he went to work with his apples. This fall Mr. Clossen paid off the last of the mortgage from the profits on the farm. Winesaps, Spitzenbergs and Jonathans are the principal varieties on the place. Mr. Clossen found that an orchard takes constant care, pruning, spraying, and other work. But he has had it during the bad times of the early part of the war and has proved a good profit can be realized. H. A.




"A dip in time saved mine"

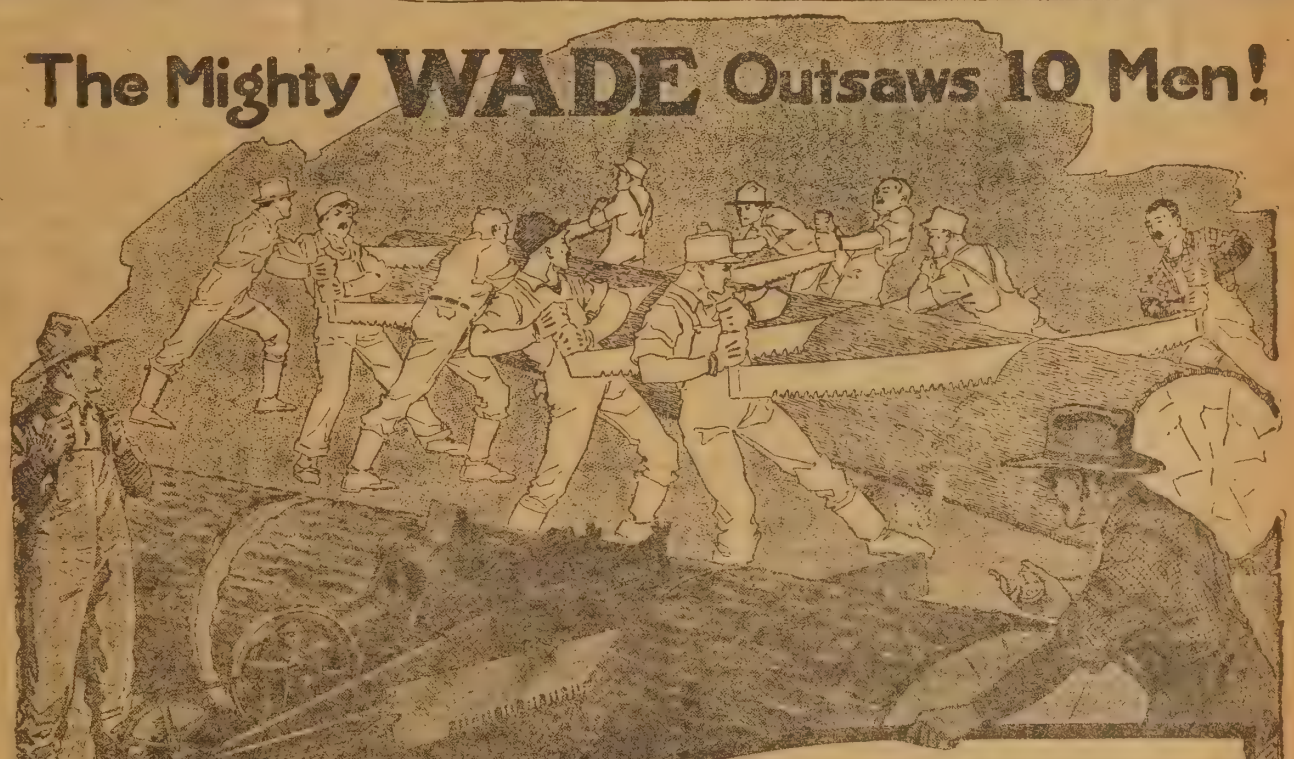
Harness rots because the natural oils of the leather fiber dry out, and dust, sweat and moisture get in and cause rot. Eureka Harness Oil takes the place of the natural oils and keeps rot out—keeps harness strong, flexible and jet black. No animal oils in "Eureka"; rats, mice and other rodents dislike it and won't gnaw harness dressed with

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I cut thirteen and one-half ricks of cottonwood in six hours.—J. W. Stratton, Atkins, Ark.

One gallon of gasoline will cut six to ten cords of wood; it depends on the kind of timber you cut. —W. D. Thomas, Bull Run, Ore.

Thirty-six inches in diameter, yellow birch, is the largest I have cut and I cut down to six inches.—P. L. Cole, West Duluth, Minn.

My WADE saw paid for itself six times over.—F. W. Taylor, Swisshome, Ore.

I am making $250 a month with my WADE.—F. A. Storts, Orville, Cal.

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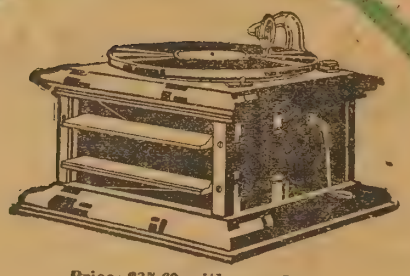
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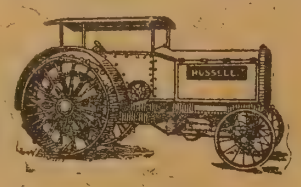
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# O ALL FARM FOLKS
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*n Earth." Good will and hope and cheer are*

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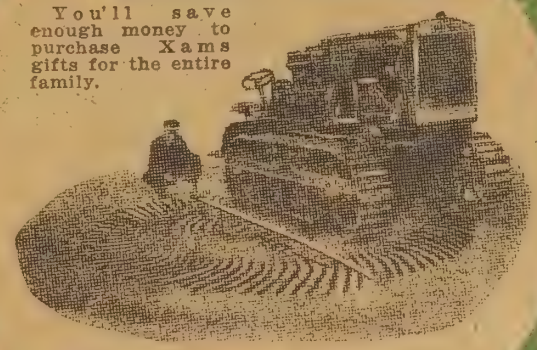
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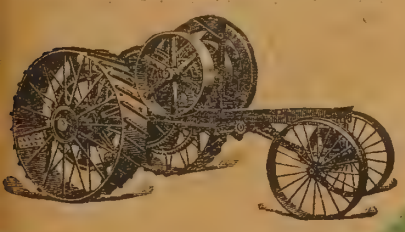


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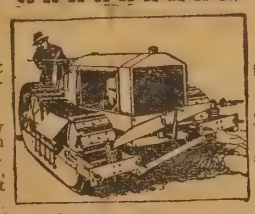


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# The Dog at Her Doorstep

By JOE L. ASHLOCK

The dog was lean and bony. His coat was black, with a splash of white on his breast. He stood at the door with an appeal in his meek, brown eyes.

"Who lost you?" asked Jack.

The black fellow, whose bones stuck up against the loose folds of his skin like the propping of a circus tent, said nothing. Very slightly he wagged his tail. His humble glance went to Minnie, who had screamed a little at the huge black form which a moment before had loomed so suddenly at their door; and then to little Bob, who was won at once. He toddled up to the dog, saying, "Doggie, doggie, nice doggie!"

"We know a good dog, don't we, son?" remarked Jack. He stooped to pat the animal's huge head, and then, with sudden intentness, examined the strong leather collar about his neck.

"See that," said he, in a low voice.

What Minnie saw was a round disk of metal cunningly laid into the collar. Cut in the rich yellow metal was a small crown, surmounted by the engraved heads of a fox and a bear. Underneath the crown were two crossed swords. The engraving had been beautifully done, and unquestionably the plate was of gold.

"I wonder who you are, and how in the world you ever lost yourself in this bunchgrass country," mused Jack. "Is your master the king of England, the czar of Russia, the mikado of Japan—or who, anyway?"

The dog wagged his tail—this time quite vigorously.

"Talks United States, anyhow," said Jack. "Well, old man, you're welcome in our bunchgrass home. Have a drink?"

The animal lapped up a full basin of water without pausing, and then his sad brown eyes mutely appealed for more, which was given to him.

"Poor thing," said Minnie. "You must be nearly dead."

The note of sympathy in her voice did the big, black fellow worlds of good. He gave her a thankful look, circled about twice, and plumped down upon the doorstep. He rested his huge muzzle on his paws, also huge, and heaved a mighty sigh, the exhaust of which from his nostrils disturbed a fly that rested on the sunny doorsill. It buzzed away, returned, circled about and alighted on the offending nose, which instantly jerked upward in a prodigious snap that laid bare a glistening armament of teeth and a cave-like red throat.

"Jupiter!" exclaimed Jack. "Look at those teeth! And did you ever see a dog with such muscles?"

It was true. The black giant's legs, breast and neck were girded with pliant masses of muscle. Such jaws! Mighty they were, with the crushing power of a vise. He seemed an odd sort of vagabond.

"Minnie, that's no ordinary scrub dog," said Jack. "There's something to him—he's a regular nobleman; and along with that he's a gentleman."

The fly, or another one, returned. The dog snapped it in with the deadly quickness of a bear trap. Watching him, Jack laughed.

"Keep him while I'm away this summer, Minnie. You'll be safe here in the bunchgrass; but it's good to have a dog about sometimes. When he gets fed up and rested likely he'll drift along."

"He'll eat us out of house and home," demurred Minnie, whose year on a bunchgrass homestead with scarcely any money and the nearest grocery store fifty miles away had made her nervous on the food question.

"Keep him, anyway," decided Jack. "I'll earn an extra five or ten in the harvest fields to help pay for his feed. I sure do like a good dog."

On the morrow Jack Farley was to depart for the Walla Walla harvest fields a hundred and fifty miles south. All summer and until mid-autumn he would work in the hay harvest, then in the grain fields, threshing and hauling wheat to market, he and his team. He would earn five hundred dollars, maybe, if work was steady; and then, with his wagon loaded with flour, bacon, dried fruit, apples, pears, sugar, salt and other provisions needed by a bunchgrass homesteader and the precious cash in his pocket, he would pull back to the small cabin, alone in the big bunchgrass prairie, where Minnie and little Bob were holding down the claim. Ah, their claim! Some day it would be a real home, a home with green fields, trees about the house, an orchard, a well with a windmill and water piped into the house; near neighbors and markets! Such a home! And all their own!

The railroad was coming next year, people said, for the surveyors had already been through. Jack would begin digging his well as soon as he got back from the harvest fields south, and go down just as far as his money would let him.

Tears gathered in Minnie's eyes as she thought of the lonely four months in the big prairie with her husband away. No neighbors, only Kirkland coming once a week to fill their water barrel on the shady side of the house. But their home! She could stand anything if only they could win a home of their own out of this great, gray, silent bunchgrass prairie.

She knew they would win. Many times in the stillness of the prairie night, when only the stars were awake, with little Bob nestling at her side like a baby rabbit, she had prayed that they should win. She believed that prayers were answered.

The team was hitched. Little Bob clung to Jack's neck and cried softly, begging to be taken with his daddy. Minnie fought back her tears and smiled brightly.

"Be sure and keep the dog, Minnie," urged Jack, nervously. "He's a mighty good dog, all right. Nothing like him was ever seen in these parts. My guess is that he belonged to that foreign duke, or count, or something, that was brought here last spring looking up new land for colonization. They say he had a whale of a big black dog which he gave to somebody, and afterward the dog ran away. Somebody may come along and give you a young fortune for that dog—but don't let him go till I get back. You're a good dog—aren't you, Tramp?"

"You'll take good care of Minnie and Bob, won't you, old fellow," he whispered, so low that his wife and baby could not hear. It gnawed his soul to leave Minnie and Bob there all alone—but their home!

Tramp shot out his warm, red tongue and lightly touched the caressing hand. Deep and solemn and true in his humble brown eyes was a promise.

The canvas-covered wagon had vanished beneath the gray-grass skyline. Minnie sat on the lonely doorstep with little Bob in her arms and cried softly. She prayed, presently; prayed that Jack would be safe and well all summer; that she and little Bob would be well, that "no plague should come near their household," as was promised in the psalms.

While she prayed a warm breath fanned her tear-wet cheek, a huge, hairy muzzle was thrust between the hands that covered her face, and a warm, red tongue touched her cheek with the lightness of silk. Minnie sprang up, no longer afraid or sad, and sang blithely as she hurried through the simple tasks of her household. Tramp lay on the doorstep with head on his mighty paws and eyes partly closed. Very soon little Bob was curled against him fast asleep.

A fly lit on the baby's cheek. Tramp was no sanitarian. He did not know that flies may carry typhoid, diphtheria, yellow fever, and so on. All he knew was that flies tickled his nose and tickled the hair between his toes, arousing him from slumber with a quaking sneeze or a frantic backward kick. He hated flies. With dexterity he clicked his long, flashing teeth within half an inch of the sleeping face. For a moment he watched with lips slightly curled. The fly did not return. So he laid his ponderous head on his huge paws and dozed with an ear to the ground.

The summer weeks sped by. The grass dried up, the sky became brassy and cloudless, and for miles about the prairie was gray and silent. Late in August fires caught in the mountains northward and the smoke rolled down upon the prairie, obscuring the landscape and stinging the nostrils.

Kirkland said there was no danger of prairie fire, for the flames could not possibly jump the river.

"They say it's driving out the animals, though," he said. "Some bears have been seen over in Dry coulee, and the cougars are killing calves."

Minnie turned cold and shuddered. Kirkland noticed her alarm. "There's no danger," he assured her. "I shouldn't have told you, mayby. Don't be afraid."

Minnie tried to answer bravely, but she was sick with dread. For nights thereafter she slept in fear, bolting the door, and making fast the single window of their cabin. Little Bob slept badly, and awoke in the mornings pale and tired. He needed pure air. So did she. So, with fresh resolution, she slept at night with the door and window open.

She awoke one night with a start. Bolt upright she sat in bed, staring through the open door into the silent, moonlit night. She saw nothing but the bare yard, and beyond the knee-high bunchgrass, which stretched away and away like a gray-gold ocean.

Listening intently, she heard softly padding footsteps, and suddenly a huge black form loomed in the doorway. She screamed; then felt foolish, for it was only Tramp. He growled, barked softly, and continued to growl.

There was no whine of dismay, no looking about for some one to offer protection. Only the deep, resonant, rumbling growl that was so savage and menacing that Minnie trembled. She hugged little Bob to her side—and thanked God for the loyal, fearless dog on her doorstep.

She spoke to Tramp with a quake in her voice. His blazing eyes flashed briefly in her direction, but they were unseeing, intent on another thought or danger. It was a new Tramp that she beheld such a one as she had never seen before. He was strangely, fearfully unlike the meek animal that weeks before had humbly crept to that same doorway. In his singular transformation Minnie feared the great dog; yet she trusted him implicitly.

Suddenly he disappeared. His deep growling encircled the house. Getting up, Minnie peered out fearfully and saw Tramp, walking partly sidewise, with teeth bared to some invisible enemy which apparently had gone around the house. On the doorstep the dog growled savagely.

Minnie's glance followed that of her protector. Her heart grew cold and beat faintly. In the pale moonlight she saw a large, cat-like head rise stealthily out of the yellow bunchgrass not a hundred feet from her doorway. The head was tawny, the ears were short and erect, and the round, unwinking eyes blazed yellow and green in the moonlight.

Tramp's growl rumbled into a roar, full-throated and deep. Softly, every muscle taut as a bowstring, he left the doorstep. Two phosphorescent streaks marked the quick sinking of the head out in the grass. The dog shot forward with a roar. Minnie screamed, and Bob awoke, crying; but neither small voice was audible in the dreadful sounds that rang forth in the houseyard. Steady, resonant and fearless came Tramp's deep, menacing growls as he clamped and tore with powerful jaws at the writhing, tawny form that shot from under and all about, uttering fierce, cat-like screams.

Fascinated, Minnie watched the battle. Tramp ceased to rage and roar. He even quit growling. He went about his business calmly and with deliberation. Into the back of the shrinking neck he bit slowly, thoughtfully, giving occasional little sidewise shakes and twists. A powerful, crunching twist, and his work was done. The cougar lay still as a stone; and the dog, cautiously loosening his hold, sniffed the carcass to make sure that his enemy was dead.

Panting a little, he returned to the doorstep and sank down there in a satisfied way, throwing back his head now and then and opening his wide, red mouth to gulp in the clean, cool night air.

Lighting a lamp, Minnie examined his wounds, which he permitted good-naturedly, though she knew that now and then she hurt him. She washed them clean with warm water and a little carbolic acid; and made liberal use of her scant supply of arnica.

Once, while she labored, Tramp sprang up with a growl. With upraised head he sniffed the air and listened. Minnie listened too.

She heard a sound, faint, far away, a yawning wail which seemed nearly human. Tramp growled again, and bristled. The wail was not repeated.

The mountain fires died down, the smoke thinned away, and the brass in the sky faded to a thin, dusty blue with never a cloud to break the monotony of it all. The squirrels went into the ground for their long sleep. Coyotes, grown hungry and lean, gathered in packs and roamed through the bunchgrass in an all but vain quest for food.

Tramp did not pay much attention to the coyotes till one day when a fat hen that roamed too far out in the grass was caught by one of the stealthy creatures. Minnie ran helplessly after the fleeing animal, waving her broom. A black streak shot by her. The coyote saw its pursuer, dropped the hen, and darted away; but Tramp overhauled him. Thrice he lunged at the cleverly dodging animal, and missed.

The fourth time he overhauled the fleet, fox-like creature slowly, as if measuring his distance and thinking. He timed his fateful lunge carefully, surely, and caught the coyote by the back of the neck. Deeply he bit into the neck, and then shook the animal like a rat.

Coming up with her broom, Minnie noticed with surprise that he had killed the coyote by exactly the hold that he had used on the cougar.

After this the big, black dog kept a watchful eye on the chickens, and wary was the coyote that got within a hundred yards of the henyard. Often at night when the wild creatures howled and wailed in the big gulch south of the house, Tramp would rise from the doorstep and speed silently away. Sometimes there would be blood on his jaws when he returned.

His growls at the door awakened Minnie one night. She went to the doorway and listened. The moon was dark, and in the black night she could see nothing. Presently she heard a yawning, half-human wail adrift in the lonely wastes of the night. Back in bed, with little Bob curled warmly at her side, she again thanked God for the powerful, fearless dog at her doorway.

One cool afternoon in the first days of September a man came to the door. He was dirty, had bloodshot eyes, a snoutish nose and prominent yellow teeth. Unbidden, he entered the house and demanded something to eat.

Minnie had retreated to the farthest corner of the room. Little Bob clung to her skirts.

"Hurry up," snapped the man. "I want a 'square' with a lot of trimmin's!"

Trembling with fear, the woman set out the best she had; a loaf of bread, some cold boiled ham, some cold beans and some stewed dried peaches. With a shaking hand she threw tea into the pot. The man looked on with growing disapproval.

"Ditch the pig," he commanded. "I hear a noice like chickens. Git one of them hens—a big, fat one!"

Minnie faltered something about there not being time.

"That's all right. I got plenty of time," he said, with an ugly, sneering grin. "Needn't be in a hurry to git rid of me, little woman. We've got all the time there is."

His leering grin widened. "Where's your men folks?"

Minnie stammered something about expecting her husband home any moment.

The man laughed viciously.

"Git out!" he sneered. "Your man is south in the harvest; you're alone." He laughed again. Minnie shuddered.

Little Bob could stand it no longer. He broke into a loud wail.

"Shut up," snapped the man. "I don't want no kids howlin' around. Stuff the dishrag in his mouth—shut up, I tell you."

Stumbling with fear, Minnie snatched up the frightened child and darted past the man out of the house. He started to follow.

"Goin' after that chicken?" he called.

She falteringly replied that she was.

In the daytime Tramp had found the doorstep an inconvenient place to sleep; so he had repaired to a comfortable nest in the small stack of wild hay out near the henyard. As Minnie stumbled and ran into the poultry yard the dog rose to meet her, yawning sleepily. He had been busy the night before—the coyotes had howled. So he had chased them and broken their necks till dawn, returning home weary and hungry.

"Tramp!" sobbed Minnie. "O Tramp; help me!"

But Tramp did not at once understand. He caressed her white cheek lightly. She knelt beside the dog with one arm clasping his thick neck.

"See," she said, pointing to the house. Tramp saw nothing unusual there. Puzzlement was in his gentle, brown eyes.

Just then a sound came from the house, as if something had fallen. Maybe the man was hunting for money and hurling things about. Tramp pricked up his ears and sniffed. A dangerous fire kindled in his eyes.

"Sic 'im!" hissed Minnie, pointing to the house. There was another sound at the house.

Minnie felt the huge, bony frame of the dog turn to steel. His eyes blazed with a murderous light. Sniffing ominously, he padded swiftly and catlike toward the house. Near the corner his teeth flashed bare and he darted from view.

Suddenly, in a burning vision, Minnie saw the great dog as he had been in the battle with the cougar: a raging demon, with jaws that gripped and clamped and tore, eyes aflame, teeth bared to slay, every muscle in his great body as hard as iron. He would kill the man—no, not that! It would be terrible, horrible! With feet that scarcely touched the ground, Minnie darted after the dog.

There came an uproar from the house before she had covered a third of the distance. The man shouted, defiantly at first, and then in terror. There was a crash and a roar of fury from the dog, more crashes, more yells. Minnie darted up to the doorway, frantic with terror.

She found the fight over. The man was prostrate on the floor. Tramp was trying to thrust his dangerous muzzle under his neck. The first wild fury of the dog had passed, and he was in that cool, deadly mood which made him terrible in battle.

"Take 'im off, lady," begged the man. "He's tryin' to kill me!"

"Tramp! Tramp!" shrieked Minnie. But the dog heeded her not at all. Again he tried to thrust his nose underneath the man's neck, and by using his arms and hugging the floor for dear life the terror-stricken man saved himself.

The man who had invaded Minnie's house, grossly insulting her, now dare not lift himself an inch from the floor. The dog paid no attention whatever to his victim's throat, which he could have slashed any instant. His whole attention was bent on trying to turn the man over so as to get at the back of his neck. As if puzzled, he drew back slightly, after several failures. The man started to rise; the black demon went for his neck with such a lightning lunge that Minnie, gripping him by the neck, was thrown to the floor. By the width of a hair he missed the hold, clamping the man's arm instead, which he immediately released and again tried to thrust his muzzle under for the neck hold. It was a strange, terrible battle. Sweat poured in streams from the ruffian's face, and he alternately cursed, prayed, howled and begged Minnie to take the dog away.

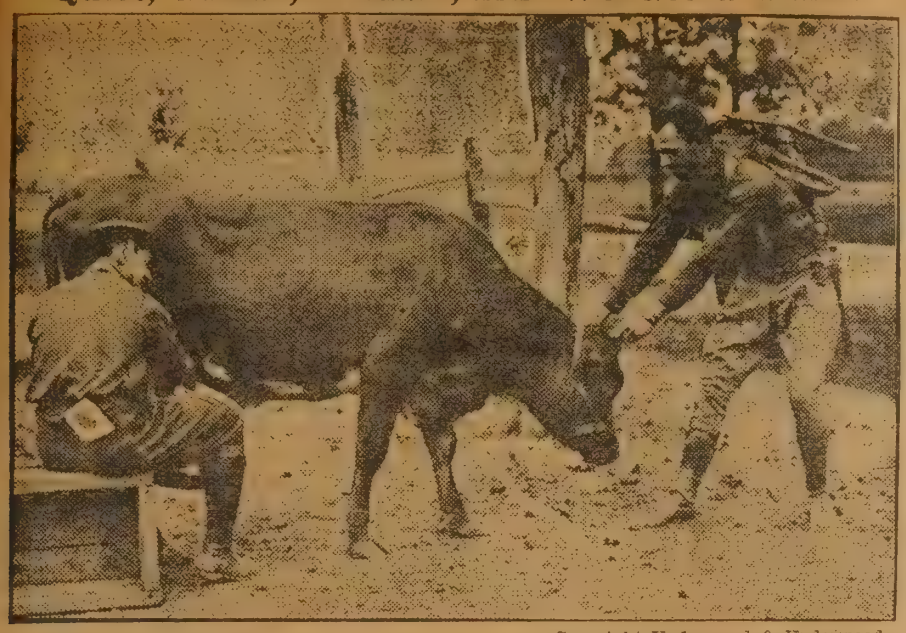
With a great cry Minnie rose from the floor, where she had been thrown and clasped the dog about the neck. He was as immovable as a tree. Again he tried to lunge under for his fatal, crunching neck hold.

"Tramp! Leave be!" commanded Minnie. Her first frantic terror had passed. She began to think and plan and to study the great dog who had been taught to kill in this way and was now doing simply as he had been taught. Pitting her will against the instinct of the dog, she no longer screamed at him, but sternly commanded him to obey her. At last he gave her an annoyed, puzzled look, and seemed to hesitate. Remembering his narrow escape of a moment before, the terror-stricken ruffian hugged the floor more closely than ever.

Taking instant advantage of the dog's

(Continued on page twenty-seven.)

## "Quiet, Please, Madam, Till We Get a Drink"



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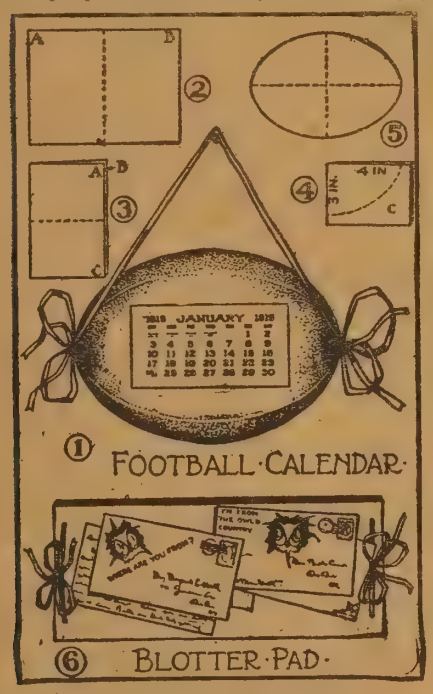
After months of hardships, these American boys appreciate their peaceful surroundings. They are here seen obtaining their morning's milk.

## Handicraft for Girls

By DOROTHY PERKINS.
(Copyright by A. Neely Hall.)

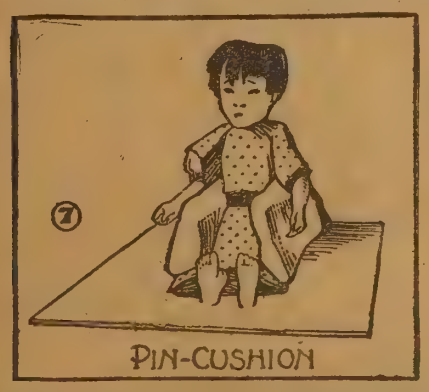
### HOMEMADE GIFTS FOR CHRISTMAS.

It's lots of fun making Christmas gifts, and the girl who will give up the time to the work will be surprised to find how inexpensively she can provide something useful and pretty for every one whom she wishes to remember. Likely some of the materials can be found at home, and a considerable saving in the cost of the rest can be made by getting your friends to buy with you, because often you have to pay




as much for a small quantity of material as for three or four times as much.

The football calendar in Fig 1 is a novel gift that brother will appreciate for his room. The football is made of cardboard. To make it symmetrical the edges must be curved alike, and the surest way of getting



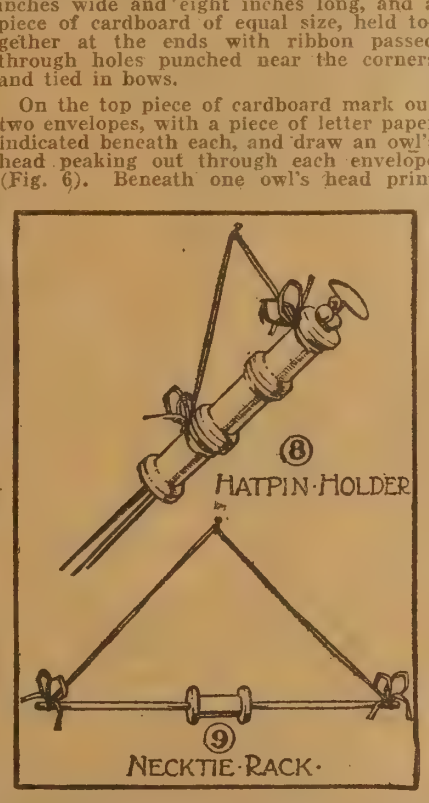

them so is by means of a paper pattern (Fig. 5). To make this pattern, take a piece of paper 7 by 9 inches in size, fold it along its center as indicated in dotted lines in Fig. 2, bringing corner A over to corner B (Fig. 3), then fold it again, bringing corner A to corner C (Fig. 4). From the folded corner measure off a distance of three inches along the short folded edge, and four inches along the long folded edge. Then draw an arc of an ellipse between the points marked off (Fig. 4), cut along the arc, unfold, and you will have the pattern shown in Fig. 5. Place the pattern upon the cardboard, mark out around it, and cut out the piece.

Color the football with brown crayon or water-color, and shade the surface to make it look round.

Buy a small calendar pad at the stationery store and paste it to the center of the football. Then tie a bow in each end of a piece of baby ribbon long enough to form a loop for hanging up the calendar by, and sew these bows to the ends of the football.

Father or mother will be pleased with a blotter-pad like that shown in Fig. 6. It is made of four pieces of blotter four inches wide and eight inches long, and a piece of cardboard of equal size, held together at the ends with ribbon passed through holes punched near the corners and tied in bows.

On the top piece of cardboard mark out two envelopes, with a piece of letter paper indicated beneath each, and draw an owl's head peaking out through each envelope (Fig. 6). Beneath one owl's head print




the words "Where are you from?" and beside the other head "I'm from the owl'd country"; then address the envelopes and stick a cancelled postage stamp upon each.

The Japanese pincushion in Fig. 7 consists of a little Japanese doll with a cushion tucked under each arm, seated upon a piece of heavy cardboard. Use a piece of cardbord four inches square for the base, and cover it with bright colored silk. Sew the doll upon this base. Make the pincushions out of silk stuffed with cotton.

Fig. 8 shows a unique hatpin holder for mother's or sister's dresser, made of three thread spools glued end to end, with a piece of narrow ribbon tied to the end spools to hang the holder by.

The necktie rack in Fig. 9 is made of a ribbon spool slipped over a stick 16 inches long, with a piece of ribbon tied to each end of the stick. The spool will hold the stick far enough away from the wall to permit slipping neckties over it.

### His Ignorance!

"Liza, what fo' you buy that udder box of shoe blackin'?"

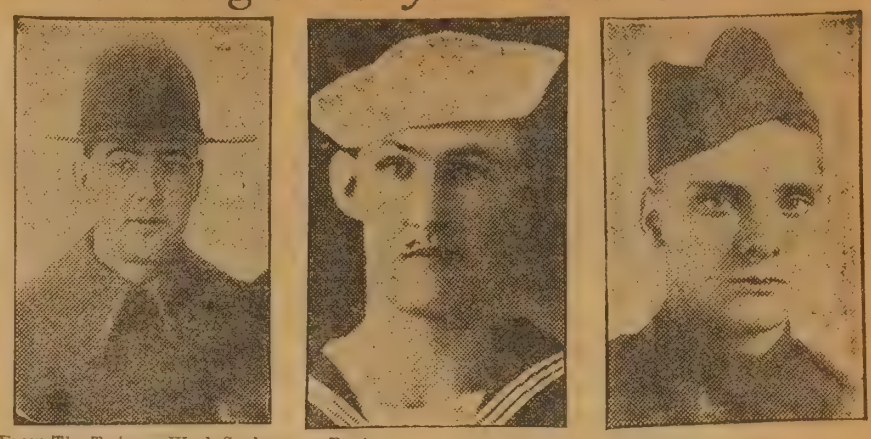
"Go on, niggah, dat ain't shoe blackin'; dat's my massage cream."—Awgwan.

### Again, the Slackers.

"How's that pretty conductress making out? Can she make 'em step lively?"

"Rather. They begin to step lively the minute they spy her."—Kansas City Journal.

## Washington Boys in War Service



From The Twice-a-Week Spokesman-Review.

DELBERT C. GAFFNEY, Yakima, Wash. — Enlisted July 23, 1917, at Everett, Wash., as cook in the 12th He was sent to Fort Casey, Wash., but was later transferred to the supply company of the 63d artillery. His wife and parents live in Yakima.

GLENN GAFFNEY, Yakima, Wash.—Enlisted in the navy as a cook and was sound navy yard until assigned to the U. S. S. Bellingham. He is the youngest son of Mr. and Mrs. George Gaffney of Yakima, Wash., who have another son, Delbert, in the army.

FLOYD H. WOLFE, Deer Park, Wash.—In July, 1918, he enlisted in the motor truck service of the U. S. army and is now a member of Motor Truck Company No. 492, attached to motor supply train No 240. He is the son of Mrs. Hulette, who resides at Colville, Wash.

## Playing Piano Amid Ruins of Cambrai



British Official Photo.

These few British Tommies, among the first to enter the recaptured city of Cambrai, discovered a battered piano and immediately settled down for recreation.

## Another Unconditional Surrender




Rocky Mountain News.



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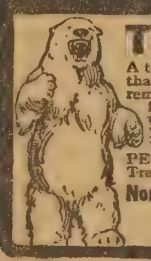
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# Meat Exports

## Cattle Losses in Europe Serious

By RICHARD HAMILTON BYRD.

Larger importations of meat and pork products from the United States, thus lessening the slaughtering of native animals, will be the most effective means of restoring the depleted animal herds of the united kingdom, France and Italy. This is the information received from Dr. Vernon Kellogg of the food administration, now in France on official business. Dr. Kellogg declares that the losses of cattle in France and Italy are especially serious, not only on account of the meat and milk ordinarily obtained from this source, but also on account of the loss of the services of cattle, which are used as work animals on farms in both countries. He says in part:

"The most recent statistics on animal herds, indicating the number now existing in allied countries, show a loss of cattle in France of 17 per cent; in Italy, of 14 per cent, with the united kingdom showing no loss. Sheep and goats, France, 40 per cent; Italy, 1 per cent; united kingdom, 10 per cent. Pigs, France, 49 per cent; Italy, 12 1-2 per cent; united kingdom, 25 per cent. Horses and mules, France, 37 1-2 per cent; Italy, 25 per cent; united kingdom, not including animals not employed in agriculture, 4 1-2 per cent.

"The losses in cattle in France and Italy are not only serious on account of the meat involved, but are especially serious on account of milk and also of work, as cattle are used largely in both countries as work animals on the farms. It is highly important that the herds be restored as rapidly as possible, which can be done most effectively by larger importations of meat and pork products from America to lessen the slaughtering of native animals.

"The French and Belgian people now being released from formerly occupied territories are demanding, and needing, increased amounts of food over the former relief ration in order to restore health and strength so as to be able to work, thus making larger demands on imports from America."

Dr. Kellogg strikingly shows the shortage of butter and sugar in France through his personal experience. "I have now been in France three weeks," he says, "eating in restaurants and hotels of all grades, and I have had butter on the table once, and a total of six lumps of sugar. Saccharine is universally used in coffee and tea. The small sugar ration is mostly reserved for cooking."

### EVER EAT A MUSKRAT?

It is quite doubtful if many of the tables of the northwest have ever had a roast muskrat or a muskrat fry as the main dish upon it, but it is a fact that this animal is a choice article of food with many. It is declared to be sold readily on many markets. When on sale it is referred to as "marsh rabbit," probably because rabbit sounds more tempting than rat. The fact remains, however, that they are muskrats, but the additional fact is that their habits are such as to make it appear that they should be good for food. They feed on the choicest of vegetable foods and their habits of living are clean.

Farmers' Bulletin 869, of the department of agriculture, which deals with the muskrat as a pest, a food animal and as a valuable fur bearer, gives the following recipe for frying it:

> Wash thoroughly and cut in quarters. Let it lie in salt water an hour or more, then wash, dry with a cloth and season. Dip the pieces in a prepared egg batter and dust them with flour or meal. Place the lard in a frying pan and let it get hot. Then put in the muskrat and fry very slowly for an hour. Prepare a gravy of milk, butter, flour and parsley and season to taste. After it thickens, pour it over the cooked muskrat.

Warning is given to use care in skinning the animal, so that the fur does not come in contact with the flesh. The musk glands usually come off with the skin, but if some of the odor remains, it may be removed from the animals killed in the winter time by thorough washing. In summer the odor more or less pervades the entire body, so that success in cooking the muskrat in the summer is doubtful. To those who desire to take the animal for his fur, which is valuable these days, it is highly inadvisable to bother him until winter, anyway, when both the meat and the fur will be good.

### MUST SAFEGUARD LIVE STOCK.

William H. Hoskins, dean of the New York veterinary college, recently issued a warning to the live stock producers of America against those things which are detrimental to the livestock industry. He declared that the country should be divided into zones with an "animal engineer" in charge of every zone.

"In the last 15 years," he said, "the population of the country has increased 20 per cent, whereas in the same time there has been an actual decrease of 2 per cent in the number of beef cattle, which explains the high cost of beef, shoes and leather.

"The loss sustained by the United States from infectious and contagious diseases among animals in the last year has amounted to $250,000,000."


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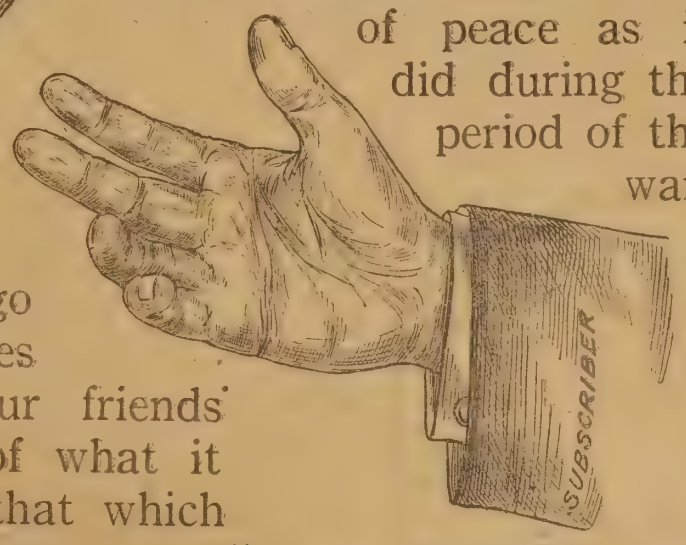

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# A CROOKED TRAIL---By Lewis B. Miller

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**A story of a thousand-mile saddle trip up and down the Texas frontier in pursuit of a runaway ox.**

SYNOPSIS.

Travis, a lad in his teens, lived on the Texas frontier in the days when Texas was a wild, unsettled region. One morning before daylight he started out to bring in the yoke of oxen for a day's plowing, but one of them was gone. He caught his pony and started to search for the stray. Going a little and a little further hour after hour, he continued until night caught him several miles from home with a tired pony, a borrowed saddle and lariat and little for himself or his dog to eat. A rabbit and wild turkey eggs served the purpose, and morning saw him again in pursuit of the ox after a night of disturbance by a mountain lion and marauding hounds. The next night he spent in the cabin of a crazy sheep herder who believed that cattle men were trying to kill him. He made the night hideous by his crazy ramblings and songs in the moonlight, and Travis was glad when the opportunity came to escape from him, and fall in with new friends, Frank and Stella Booth, at their farm home a little further on. The three young people became much interested in each other because of common plans for attending school the following year. It was here, also, that Travis got his first definite clue to the whereabouts of the stray steer. Together the two boys set out to hunt him, but he was farther away than they suspected. Startling adventures were in store for them, among the first of which was a night in a "haunted" house, the principal haunts being wild animals. The next day they found the stray ox, but suddenly a wall of water from a furious storm rushed down the river between them and the animal. The boys arranged to have the steer held in pasture till they could cross the raging river. The meantime they spent working with a farmer grubbing out live oak thickets. Some interesting experiences were awaiting them, however, rafting on the flooded river. Unwittingly they aid some cattle thieves to escape from the sheriff, at the same time getting farther behind in their race with the runaway ox. Later they find the ox and the cattle that Frank has lost in a big herd that are being driven away by cattle thieves. The thieves refuse to turn them over and trouble begins.

## CHAPTER XIV.

### Outwitted by the Cattle-Thieves.

We had started from near the county-line, and the county-seat was 12 miles away. Night came down upon us before we had covered half the distance. Now we stopped at a farm-house, and obtained some corn and oats for our horses and some supper for ourselves. After resting an hour or so, we saddled up again and rode on.

It must have been between 9 and 10 o'clock when we entered the square of the unlighted little town. First we made our way to the sheriff's office, in the courthouse, and pounded awhile on a locked, unresponsive door. Then we started out in quest of the sheriff's residence. It was on the outskirts of the town, we were told; but not till we had stopped at two or three wrong houses did we discover the right one.

The sheriff was in bed, and when we finally succeeded in drawing him out to the gate, he came grumbling, evidently in a bad temper over his interrupted slumbers. He listened to our story in surly silence, broken only by an occasional gruff, ill-natured question.

"Well, come round to the office in the morning, and I'll go with you after the fellows," he finally told us.

"Why not make the ride tonight?" asked Frank. It won't take half as long."

"No, I'm not going tonight," was the growling reply. "I've got something else to do besides gad about over the country in the dark."

"I thought sheriffs and doctors always went when they were needed, and not when it was convenient," I put in, as respectfully as I could. The mere suggestion of delay frightened me.

"Well, I won't stir a step till morning; so that's all there is to it," was the gruff reply.

Frank tried to argue the matter, but the longer the sheriff was talked to the grumpier he became. Soon he turned around and started back to the house.

"All right! We'll see you early tomorrow morning," I called after him. Then we rode away.

First we hunted up a livery-stable and bought some feed for our horses. Carrying that, we rode out to a prairie which came close up to the town, and there we camped under a big live-oak.

"All this slowness is enough to drive a fellow frantic," I grumbled to my friend. "No telling where that gang will be with our cattle by the time we get back over there tomorrow."

"That's right. Still, this is more convenient in some respects. Our horses are too tired for any more traveling just now. If there'd been another ride tonight, we'd have had to put them in the livery-stable and hire others. By morning, though, they'll be ready for the road again. Let's hope those fellows won't try to run away."

"Don't bank on that, Frank. They know we'll have the officers after them."

"They may believe they gave us such a scare that we'll never stop running till we get home."

"I'd like to think they're big enough gumps to believe that; but I'm afraid they're not."

We, as well as our horses, were very weary; and without doubt we should have slept soundly but for the hogs that swarmed around our camp all night long. A hundred times at least Vic chased them back from our immediate vicinity; and every time one of them felt her sharp teeth it squealed loudly enough to frighten away sleep. Indeed, as I recall that night, it seems little more than a long nightmare of grunts and squeals.

"No more camps around town for me, if you please," growled Frank, next morning. "This beats a hog-ranch out of sight. These long-legged long-noses that forage a town over are allways on the edge of starvation; and they're impudence itself."

In the dim dawn we ate a breakfast of cold scraps from Frank's saddle-bags; and by the time it was light we were mounted and riding round to the court-house, which stood in the center of the square and of the town. The sheriff's office was still locked fast, and we sought his residence again. To our disgust, he and all his family were still abed and asleep.

We "rousted" him out. But at least two hours had dragged by before he had swallowed his last bite of breakfast. Frank and I waited and waited and waited, till we were well-nigh beside ourselves with impatience. And to try us still further, every time Dugan saw us—Dugan was the sheriff's name—he grumbled and growled at us because we had twice broken into his sleep.

At last, however, he was ready to do something, and we all marched over to the courthouse. There the warrant for the cattle-thieves was made out. Then Dugan, after telling us to wait, announced that he was now going out for his horse and some deputies.

"We want a force strong enough to overawe the thieves," he informed us, as he passed out at the door, leaving us alone in the office.

"The sleepy-headed old poky-easy! Will he never get a move on him?" said Frank, almost through his teeth.

"It's not in him to hurry," I answered. "He's first cousin to a snail."

"Yes, and full brother to a terrapin," declared my friend.

But at last, after our patience had been worn to frazzles, the sheriff returned with three deputies. They were all mounted now, and all armed, with six-shooters and Winchester rifles. Frank and I sprang into our saddles, and away the six of us went. The sun had already traveled far on his day's journey. But, late or early, we two were delighted to see the road under us once more.

Instead of going to the place where we had left the cattle, Dugan decided that we should cut across the country and intercept the thieves further down the same road. Frank and I were willing enough; for we were afraid that the party might have traveled most of the night, and would be very hard to overhaul. However, there was also danger that they had changed their course; in which event we might be traveling away from them instead of toward them.

Even when under way we moved rather slowly; or at least it so seemed to my impatience. And it was high noon when we arrived at the road along which the thieves were supposed to be traveling. A glance showed us that a considerable drove of cattle had passed by here very recently, and we turned and rode after them. From a man in a wagon we learned that the drove was only a few miles ahead. Now we quickened our pace.

An hour or two later we rounded a bend in the road, and found ourselves close upon the cattle and their drivers. They were moving along at a very leisurely gait. Plainly not the slightest attempt had been made to run away.

There were but three drivers now, we noticed. The man whom we had once suspected of being Bill Edsell—and who, we had yet to learn, was in reality that much-dreaded desperado—was no longer among them. But the other three we easily recognized as the fellows who had thrust their pistols into our faces the day before.

The six of us rode along quietly till we had almost passed the drivers. Then, of a sudden, Sheriff Dugan and his deputies wheeled, each with a cocked six-shooter, covered the three men, and ordered them to throw up their hands.

Somewhat to my surprise, the fellows who had been so bold and defiant the day before now submitted meekly, without offering to draw a weapon, or making even a show of resistance. Up went their six hands as one hand.

"What—what does this mean?" inquired their leader, mildly, with just indignation enough in his tones to make his words sound sincere. It was the same fellow who had blustered to us about wading through blood knee-deep.

"It means that I'm the sheriff of this county," answered that officer pompously, "and that I have a warrant for your arrest."

He drew the paper from his pocket and proceeded to read it. All the time both he and his deputies held their cocked six-shooters in the faces of their three prisoners. Frank and I sat quietly in our saddles, interested spectators of the striking scene.

"What are you arrestin' us fur? I don't quite understand," said the driver, still very mildly, after the reading had ended.

"Why, didn't you hear? For stealing cattle. Or at least for having stolen cattle in your possession and refusing to surrender them to the owners."

One of the deputies now rode up close to the prisoners and searched them, each in turn, but failed to find a single weapon. Dugan was surprised, and so were Frank and I. But we needn't have been. The prisoners, foreseeing the sheriff's visit, had doubtless left their six-shooters in their wagon.

"You can put down your hands now," Dugan told them. And he and he deputies put up their weapons.

"Sheriff," said the drover, "there's my cattle. Ain't a single cow-brute in that herd but what I've bought and paid hard cash fur. Most of 'em I've got bill of sales fur. If any of 'em's stole, it wasn't me that stole 'em. Who is it accuses us of stealin' any of 'em?"

"These boys here." The sheriff made a motion toward Frank and me.

The drover looked at us mildly, and then at the officer. "What animals in this outfit do they claim, sheriff?"

"Point 'em out, boys," said Dugan to us.

We turned toward the drove. The cattle had stopped, but most of them were scattering over some open land to graze. So excited had we been over the arrest that we had failed to notice the drove. Now we ran our eyes over them, hastily at first, then again, more carefully. Soon we looked at each other; blank consternation in our faces.

"Well, why don't you point 'em out, without waiting all day?" demanded the sheriff, irritably.

"They're not here. They've all been cut out," Frank replied.

Dugan utter an angry exclimation. "Didn't you two make oath that these men had your cattle in their herd?" he demanded.

"Of course we did," answered Frank, with some spirit. "But we didn't make oath that they'd keep them there for all time. They've been cut out, I told you."

"We've been so eternally long getting here, they could have been cut out and run off a hundred times," growled I, bitterly disappointed and disgusted.

That was true enough. But there are many true things it were wiser to leave unsaid. And certainly my remark, and probably Frank's also, belonged to that class. The sheriff had a peevish, spiteful temper, and our thrusts at his slowness irritated him and turned him hopelessly against us.

"Are these the same men that you claim to have seen driving off your cattle yesterday?" he demanded of us.

"They're three of them," I replied. "One that was here yesterday is not here now."

Then the sheriff turned to the drover. "Did these chaps"—he jerked his thumb contemptuously toward us—"come to you yesterday evening and lay claim to some of your cattle?"

"Yes; they come tearin' onto us and claimed that black-and-white steer over there, and some half a dozen yearlin's and two-year-olds. And when I wouldn't let 'em ride right in and cut out what they wanted, they ripped and cussed around like all git-out. First they threatened to shoot us. And when they found we wouldn't bulldoze worth a cent, they rode off sweari' they'd sic' the sheriff on us. And they've been as good as their word about that, I see."

This was too much. Neither Frank nor I ever used profanity under any circumstances. But we could use pretty vigorous language sometimes, when our tempers blazed up; and this was one of the times.

"Well, you're the biggest liar!" I burst out, hotly.

But Dugan stopped me with a motion of his hand. "Wait till it's your put-in," he ordered, in tones that did not soothe my already sorely-tried temper.

"Are there any cattle out of this drove that were in it yesterday?" he inquired.

The drover hesitated, as if from the desire of a conscientious man to be very careful in his statements.

"Narry hoof," he declared. "We bought a few late yesterday evenin,' and fifteen or twenty head more this mornin,' but narry cow-brute did we let go. Ain't that so, boys?" he appealed to his fellow-prisoners.

Both declared unhesitatingly that he spoke the truth. Frank started to say something, and so did I; but Dugan, without looking at us, cut us off with a contemptuous gesture.

"I believe every word you say, men. And I owe all three of you an apology for stopping you as I did. But I've been imposed on. You can go on about your business now. And as for you chaps," he sneered, turning to Frank and me, "I've half a mind to arrest both of you and clap you in jail, and let you lay there a few weeks, just to learn you not to act so smart next time."

This was said in a malicous, spiteful way, which the words alone give little impression of.

I was astounded at the turn affairs had taken. And having no doubt that the sheriff's power in such matters was little short of absolute, I dared not open my mouth. But Frank, the son of a justice of the peace, had picked up numerous scraps of law in his father's court, and understood his rights better.

"Put us in jail if you dare!" he returned, angrily. "We haven't violated any law, and we've got plenty of friends that will stand by us till the last. Nice suit for damages you'll have on your hands—you and your bondsmen! And you'll pay us a hundred dollars in gold for every day we spend behind bars."

Dugan sneered, and his deputies and the cattle-men laughed loudly, derisively. The cattle-men could well afford to laugh. But the officers made no move to arrest us.

Frank turned his horse. "Let's be riding, Travis. When the officers of the law take sides with thieves to cheat honest people, it's high time for honest people to be hustling for themselves."

We started back the road, followed by the jeers of Dugan's party and the thieves. Once I turned to reply, sarcastically, but Frank stopped me.

"Don't waste breath on such fellows," he said aloud. Then he added, in a lower tone: "We'd better travel from here as fast as we can. The officers will soon go, and then that robber-gang will be none too good to follow us and shoot us down, for spite. I've heard of such things more than once."

Soon we noticed the sheriff's party following. Not caring to come in contact with them again, we rode fast enough to leave them far behind.

"Disgusting, isn't it?" I remarked, as we trotted along. "Excuse me from any further dealings with that kind of fellows. Sheriffs and deputy-sheriffs are sorry truck anyhow," I added, with the natural tendency of youth to jump at hasty and sweeping conclusions.

"That they are!" Frank agreed with me, in hearty disgust. "We could have done better by ourselves."

"We couldn't possibly have done worse," I declared.

"Now, Travis, the question is: What became of those cattle?"

Both of us studied long and hard before attempting to answer it.

"That gang may have sold them to somebody along the road," finally suggested Frank.

"Or that other man that was with the outfit yesterday may have driven them off some other way," was my surmise.

"Yes, either of those things might have happened, Travis. And then comes another question: If that man drove them off, where will he drive them to?"

"He's likely to follow some roundabout course till the danger blows over, and they circle back to the drove."

"If we knew he'd do that, we ought to be following on."

"Yes, if we knew, Frank. But we don't know—we can't know till we find out. We'd better ride on back till we run across the cattle themselves, or learn what's gone with them. Even if we don't find them, we ought to stumble onto their trail somewhere. Then we'll not be running around blindfolded."

"That's right, I guess. We'd better try to strike the scent again. Old Lep's an easy brute to track. He's so noticeable that wherever he passes in daylight you can get news of him. And we ought to be expert trailers by this time—hard to shake off."

So we followed back the road, seeking diligently, searching tirelessly, for the lost trail. House after house, house after house we inquired at. Though every farmer recalled the drove of cattle, nobody seemed to have caught even a glimpse of Lep. But our persevering search was not to go unrewarded.

(To be continued.)

### Unidentified.

Recently, during the operations of the British Egyptian expeditionary force in Palestine, a town to the south of Beersheba was captured and in it was discovered a splendid example of mosiac pavement.

The excavation of it was placed in charge of a chaplain, and while the work was proceeding some human bones were discovered.

Elated at the find, the padre immediately wired to great headquarters, saying:

"Have found the bones of saint."

Shortly after the reply came back:

"Unable to trace Saint in casualty list. Obtain particulars of regimental number and regiment from his identity disc."—Detroit Free Press.

### Common Sense.

A lady litigant wished Lord Fisher to try her case himself. He told her that it would be tried by a certain learned judge without a jury, adding:

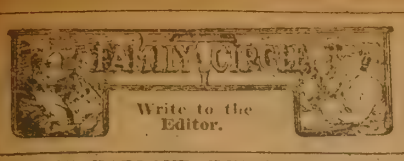
"He is a capital lawyer, you know, and will try it nicely."

"Oh, yes, my lord," she replied, "the justice is all very well as to law but my case really requires common sense."

### Control Needed.

"My kettle of preserves has exploded and is spouting all over the kitchen. What had I better do?"

"Send for one of these experts on food control."—Louisville Courier-Journal.




ALICE W. BARLAND, Editorial Contributor.

## For the Sweet Tooth

The following is a recipe for popcorn balls:

One cup syrup, one tablespoon vinegar, two to three quarts of popped corn.

Boil together the syrup and vinegar until syrup hardens when dropped in cold water. Pour over freshly popped corn and mould into balls or fancy shapes. Either honey, maple syrup, molasses, white cane syrup or corn syrup may be used.

**Syrup Nougatines.**

Boil one and one-half cups light colored syrup and one-half cup water to 246 degrees F. or until it forms a firm ball when tried in cold water. Pour slowly onto a well-beaten white of one egg, beating constantly with a wire whisk. Place bowl over water kept just below the boiling point and fold and turn three or four minutes. Remove from the fire, add one-half teaspoon vanilla or other flavoring, and continue folding until mixture is nearly cool. Add one cup of chopped salted peanuts or a mixture of any desired candied fruits and nuts. Spread half an inch thick on wax paper, cover with wax paper and cut in rectangular pieces.

**Peanut Brittle.**

One cup white corn syrup, one tablespoon vinegar, one-quarter teaspoon salt, one teaspoon vanilla, one cup freshly roasted peanuts, halved.

Cook the corn syrup, vinegar and salt in a saucepan until a little dropped in cold water forms a soft ball. Put the peanuts and this syrup into an iron skillet and stir until the syrup becomes a golden brown. Remove from the fire and stir in vanilla. Have ready a shallow buttered pan, pour candy in and spread out in a thin sheet. Allow to cool, then remove from pan and crack into pieces.

**Hunky Dory.**

Two cups popped corn, one cup pecan or walnut meats, three cakes sweet chocolate, two tablespoons rich cream.

Break the chocolate into small pieces and melt it over hot water. As soon as it is melted, add the cream, corn and nuts. Stir quickly with a silver fork and lift out in small lumps. Place on waxed paper to dry.

**REAL STUFF IN THIS GIRL.**

At one of the Wyoming boys' and girls' club conferences held recently in Star Valley was a leader of one of the local canning clubs who had ridden horseback 15 miles to a neighbor's, left her animal to rest, borrowed another horse, and continued to the conference, many miles further, arriving at Star Valley at 9:15 in the morning. About 5 o'clock in the afternoon this girl started on her return, exchanged animals at the neighbor's house, went on to her home, did the regular chores of the night, and reported on the happenings at the conference to the other members of her home. Traveling thus by relay, the girl attended all three days of the conference.

## How Correct Posture Increases Height

By Dr. Leonard Keene Hirshberg, A. B., M. A., M. D.



Dr. Hirshberg.

Until the gristle and soft, bony fabric of the body becomes rigid and calcified by the brittleness which invades the human structure with the onset of years, there is always a chance to acquire more height and growth.

Some of the elements which go to make up height are the real world around in which you live—sunlight and food, open air work, play and sleep; the height of your ancestors on both sides several generations back and the health or activity of your pituitary, thyroid and other glands.

Athletics, muscular work and exercises generally contribute to the growth and development of your bony structure. The mighty influence exerted by the emotions and the emotion-making glands such as the pituitary and the thyroid are easily illustrated. It is known that overactivity and enlargement of the pituitary gland changes a small or moderately short man into a giant. Huge backwoodsmen and circus giants are commonly found to have overgrown pituitary glands or absent thyroids.

**Take Daily Exercises.**

There are on record inoculation experiments with pituitary gland extract, which, in a few instances, produced the contradictory effect of thyroid glands—the appearance of giantism.

Play and exercise which extend the skeleton lengthwise and stretch the arms, legs, spine and trunk, help to increase the height. Reaching upward and pushing the legs vertically away from the hips for 15-minute intervals two or three times a day has made some persons taller.

The same effect can be better obtained by learning to swim with the easy, arm stretch forward strokes. The overhand, the crawl and the trudgeon strokes, as well as the long sweeping side stroke, acquired with astonishing ease, will help materially in the augmentation of your height.

It is inadvisable, if not dangerous, to take pituitary or other glands in order to become taller. Medicines, drugs and other internal ministrations to most people are more vicious than buzz-saws to babies.

The balance of a man's head on his spine is not perfect at best, but if the head is kept erect and well balanced, shoulders thrown well back and upward, and the weight of your skeleton balanced well forward on the ball of your feet, as much as an inch may eventually be added to your height.

## Child's Sweater in Crochet

By WINIFRED WORTH.



They're wearing sweaters all the year round these days, so the children want to get in the whirl of fashion as well as any one. Make this sweater for them.

Use No. 3 Perle cotton or Germantown yarn.

Ch. 50.

1st row—1 dc. in each st.

2d row—1dc. in each st. (use back st. for rib st.)

3d row—Same as 1st.

4th row—1 dc. in each st. ch. 5.

5th and 6th rows—Same as 1st.

7th row—Same as 4th.

8th row—Same as 1st.

9th row—1 dc. in each st. ch. 9.

10th to 15th rows—dc. in each st.

16th row—Dc in each st. leave off 7 dc. (to start neck) make 5 rib rows and rp. 9th row for left shoulder, when sweater is required size join. Sleeves are made the same. Finish off neck, sleeves and bottom with 10 rows of dc. Fasten with buttons on shoulder. To open down front start sweater in center of front and join at shoulder.

This sweater can be made to fit any child or young lady, opened down the front, by making a ch. the length of front of sweater.




# Applied Patriotism

Woman has made herself indispensable to the Nation's war activities. This is being demonstrated daily in many splendid ways. The telephone operator takes her place in the front ranks of our "national army" of women.

Back of the scenes, invisible, her war work is to make telephone communication possible. Through her the Chief of Staff in Washington speaks to the Cantonment Commandant in a far-off state. The touch of her fingers forges a chain of conversation from Shipping Board to shipyard, Quartermaster General to supply depot, merchant to manufacturer, city to country, office to home.

Without her this increasing complexity of military, business and civil life could not be kept smoothly working. Hers is patriotism applied. She is performing her part with enthusiasm and fidelity.

The increasing pressure of war work continually calls for more and more telephone operators, and young women in every community are answering the summons—cheerfully and thoughtfully shouldering the responsibilities of the telephone service upon which the Nation depends. Each one who answers the call helps speed up the winning of the war.

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Tabulations made by the U. S. department of agriculture show that the average income over cost of feed from one cow that produces 450 lbs. fat is equal to the average income over cost of feed from 20 cows that produce 100 lbs. each. The average of all official Guernsey records is 450 lbs. fat. Learn more about these profitable cows. Ask for our free booklet, "The Story of the Guernsey."
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# PATTERNS

2691—Girls' dress. Cut in 3 sizes: 12, 14 and 16 years. Size 14 will require 4 3-4 yards of 36-inch material. Price 10 cents.

2705—Girls' dress. Cut in 4 sizes: 4, 6, 8 and 10 years. Size 10 will require 3 5-8 yards of 36-inch material. Price, 10 cents.

2567—Girls' dress. Cut in 4 sizes: 10, 12, 14 and 16 years. Size 12 will require 3 yards of 36-inch material for the foundation. The overblouse will require 2 1-4 yards. Price, 10 cents.

2683—A youthful dress. Cut in 4 sizes: 14, 16, 18 and 20 years. Size 16 will require 5 1-8 yards of 36-inch material. Width of skirt at lower edge is about 1 3-4 yards. Price, 10 cents.

2688-2687—A smart costume. Waist 2688 cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Skirt 2687 cut in six sizes: 22, 24, 26, 28, 30 and 32 inches waist measure. To make the costume of 36-inch material for a 38-inch size will require 6 1-8 yards. Width of skirt at lower edge is about 1 7-8 yards. Two separate patterns. 10 cents for each pattern.

2686—Lady's house dress. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 6 yards of 36-inch material. Width at lower edge is 2 1-2 yards, with plaits drawn out. Price, 10 cents.

2692—Girls' dress. Cut in 4 sizes: 6, 8, 10 and 12 years. Size 10 will require 5 1-4 yards of 27-inch material. Price, 10 cents.

2132—Lady's "cover all" apron. Cut in 4 sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. It requires 4 7-8 yards of 36-inch material for a medium size. Price, 10 cents.

2676—Lady's waist. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 2 3-4 yards of 36-inch material. Price, 10 cents.

2447—Girls' dress. Cut in 4 sizes: 2, 4, 6 and 8 years. Size 6 requires 2 3-4 yards of 36-inch material. Price, 10 cents.

2486—Boys' suit. Cut in 4 sizes: 3, 4, 5 and 6 years. Size 4 requires 2 1-8 yards of 40-inch material. Price, 10 cents.

2696—Lady's maternity skirt. Cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. Size 24 requires 4 yards of 44-inch material. Width of skirt is about 2 1-2 yards at the foot, with plaits drawn out. Price, 10 cents.




Please fill in this order and mail with remittance to:
PATTERN DEPT., PACIFIC NORTHWEST FARM TRIO, Spokane, Wash.

Enclosed find.....cents for which send me the following:

Pattern No.....Size..... Pattern No.....Size.....

Pattern No.....Size..... Pattern No.....Size.....

Name .....

Postoffice ..... State .....

R. F. D. ..... Box No. ..... Street No. .....
Be sure to give the pattern number and the correct size.

## FRESH RHUBARB IN WINTER.

Fresh rhubarb may be secured for winter use by following directions given below, says a writer in the Yellowstone County Farm Bureau Bulletin of Montana:

Dig up strong rhubarb roots and allow them to freeze solidly for a day or two. Then place the roots close together on the cellar floor. If the air in the cellar is very dry, the roots should be covered with soil, otherwise it will not be necessary. The cellar should be kept dark. In a few weeks long, tender pink stalks will form. As these are pulled more form until the strength of the roots is spent. Roots sufficient to cover a floor space six feet square will supply a large family with fresh rhubarb of the finest quality.

Roots which have been forced in this manner may be planted out of doors in the spring, but they will need at least two years in which to recuperate before being forced again.

### At That, He Was Right.

Caller—I sent you a poem about three weeks ago. What have you done with it?

Editor—I'm holding it. Every little while lately I get to thinking that we are not getting out as good a paper as we ought, and then I take that poem and see how much worse the sheet might be, and that makes me cheerful again. Say, how much'll you take for it?—Transcript.

### Child's "Sandwich Dress."

Plaid silks and velvets combine to make the dresses of children. One of the prettiest was called a "sandwich dress," two panels of velvet formed the back and front and an underslip of gay plaid was the filling for sides and sleeves.




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The acrobatic doll. The most lifelike toy novelty yet devised. He affords fun and amusement by the hour for old or young.
Tommy stands nine inches high and has no gears or springs to get out of order. Tommy Tumbles makes the finest Christmas present for the girls and boys. 50c brings Tommy to your home.
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My Dear Corner Cousins: One of our regular Corner Cousins has very kindly sent us a recipe for oat meal cookies, which sounds good, and I am sure is good, so we will try it:

One-half a cup of shortening, one-half a cup sugar and one egg; four tablespoonfuls of water, five tablespoonfuls of sweet milk and nine tablespoonfuls of sweet cream and two cups of rolled oats. Two cups of flour and a little salt, one teaspoon of cinnamon and one-half teaspoon of nutmeg; one-half teaspoon of soda and one teaspoonful of baking powder.

I have some very good recipes especially suitable for the holidays, and some of these will follow. The first will be carrot pudding. Lovingly, AUNT NELLIE.

"I have never seen a letter in the Children's Corner from Spokane Bridge, so I will write one, as I live there," says Pearle Smith in her Corner letter. Pearle has one sister and four brothers, one of whom is in France.

Alice Graham of Rocklyn is in the fifth and sixth grades. She has one kitten named Tom. Alice was 13 years old August 15. This is her third letter.

"Sister is working in Spokane and I have been keeping house for almost a year because mama is dead," writes Anna Bell Gangewer of Tiger. Anna is going to take a long trip to Pennsylvania all by herself. We want her to write and tell us all about it. Anna sends love to Aunt Nellie and all the cousins.

An orchard ranch four miles from Chelan is the home of Elvin McQuarie of Beebe. Elvin has good times at school. Laddie, Ida, Blanche and Agnes are his brothers and sisters.

Donald McDonald of Tum Tum was 12 years old, February 25, and he hopes his twin will write to him. There are two rabbits, two cows and two pigs on his farm. Donald will write again.

This is our first letter from Esther Crider of Thornton. May 31 Esther was 8 years old. She is in the fourth grade.

Anna, Buttercup and Pansy are pet cows, Buster, Dick and King are pet horses on the farm, where Anne Raisio lives, near Northport. Anne loves the letters. She was 11 years old September 7.

Margaret Wilkinson of Thornton, lives with her uncle and aunt. She was 10 years old July 3, and is in the fourth grade.

A bantam, a kitten and an old mother rabbit are Ivy Ward's pets. Ivy lives on a farm near Wenatchee. She has one brother and one sister, Charlie and Ethel. They walk two miles to school.

Melvin Hadford of Spokane has fun riding down hills on his coaster, and the cat likes to ride with him. Melvin hauls in wood for mama on his coaster. This is his third letter.

If you are 13 years old and your birthday is January 18, Della Crumpacker of Pomeroy wants you to correspond with her, because you are her twin. Della rides three miles to school. She can sew, knit, tat and crochet.

It is lots of fun to try out all the new recipes for making bread, Inda Scott thinks. Inda lives on a 150-acre farm seven miles from Waterville. She baked bread the day she wrote. July 8 is her birthday and she is 14 years old. She has $15 worth of war stamps.

A little girl 9 years old, Mabel Main, of Goldendale, has a pony named Lolo, and her sister has a pony named Dandy. Elmer and Paul, two of Mabel's brothers, are in France. Mother is Mabel's teacher.

Our little 6-year-old cousin, Lester Collins of Goldendale, goes to school with his sister. He is in the first grade. Topsy is his little dog.

"Brother and I go to Spring Creek school," writes Phoebe Collins of Goldendale. Phoebe is 11 years old and her birthday was June 8. She has a little nephew nearly 2 years old.

During vacation, Dessie Jones of Prosser visits her grandma. Dessie was 10 years old July 16, and she is in the fifth grade.

"Tell all the cousins hello for me," writes Anna Brandt of Leahy, who has not written to us for a long, long time. Anna had a war garden this summer. She planted watermelons, muskmelons, popcorn, beets, lettuce and radishes. She has 20 war saving stamps. Anna liked our grown-up cousin's letter. If you had a birthday October 13 and were 10 years old, write to Anna, because she is your twin.

At last, Ida Smalley of White Salmon has found her twin. Her name is Margaret King. Ida's pets are a black pullet and a little black kitten, Kate. Ida loves to read the letters and will write again soon.

Tessie Duffy and her sister have the very best times imaginable. They have two dollies, Alice and Dorothy; they make mud cakes and go swimming in the ditch every summer day; they slide down the banks into the water and go up on the hill to get clay for making marbles. Doesn't it all sound jolly? Tessie lives at Midvale and her mamma sews for the Red Cross. Thank you for the little poem, Tessie, it is lovely and Aunt Nellie wishes she could put in the Corner.

All last term Thomas oJnes wsa neither tardy nor absent and so he got a big certificate. Thomas' address is Box 48, R. F. D. 1, Almira, Wash. He was 8 years old February 23. Catherine, Jane, Eleanor, John and Griffith are his sisters and brothers.

Farm life is the best of all, Ethel Short of Molson thinks. Ethel likes to read the Children's Corner. Her favorite flowers are roses and baby breath. Next March 7 Ethel will be 11 years old. She can sew and knit.

One of Matilda Hilger's brothers is in a camp in Virginia and mama has not seen him for 12 years. Matilda has never seen him. Matilda lives on a farm nine miles from Lamont. She will be 10 years old on December 8. Has she a twin?

A little white pup named Fuzzy and a yellow canary bird are Mary Jean Shelton's pets. Mary was 9 years old last December 23, and if you are her twin please write to her. Her address is R. F. D. 3, Box 129. Ellensburg, Wash. Mary has three-fourths of a mile to go to school.

Luda Yeager lives on a farm five miles from Wilson Creek and goes to a country school. July 21 was her birthday and she was 10 years old. If you are her twin she wants you to write to her. A dog named Watch, three cats, three little kittens, a mother rabbit and two little gray ones are pets.

Fred and Ernest, two of Barbara Jenkins' brothers, are in the service. Barbara lives on a farm one and one-half miles from Garfield. She is in the third grade and was 8 years old September 11.

There were over 100 tomatoes on Doris Jones' two tomato plants this summer. Doris lives in Ritzville. She has no sisters or brothers. She takes music lessons.

Barney is the name of Raymond Klotzbach's pony. Raymond lives on a farm near Fruitland. He rides three and one-half miles to school on his pony. His pets are two rabbits and one dog. Raymond was 9 years old May 26.

"I am glad that the boys won't have to fight any more," writes Lena Wiltz of Addy. Lena reads all the letters in the Corner. She was 13 years old March 27. Has she a twin?

Bessie Robinson of Lantz wants Edith Tarvis to write to her. Bessie is 12 years old and in the fifth grade. Clyde, Lantz, Alice, Maude, Alma and Florence are her sisters and brothers.

A little white pony that she can ride anywhere is Thelma Chapman's pet. Thelma is 12 years old and in the sixth grade. She lives at Granger and is working to earn money for war stamps.

A farm half a mile from Garfield is the home of Mary Dalan. Mary was 12 years old May 31, and she is in the fourth grade. Josephine and Amy are her two sisters.

In the summer time Earl Joplin of Baird stays with his uncle and herds cows. He rides a gray pony named Daisy. One of Earl's uncles is in the service and has been to France three times. Earl is 9 years old.

**Enjoys Farm Life.**

Dear Aunt Nellie: May I join the Children's Corner? This is my first letter I have written to the Corner. I am 13 years old and in the seventh grade. My birthday is April 2. Have I a twin? If so I would like to correspond with him or her. I go to the Twelve Mile school. My teacher's name is Miss Olivia Ashbrow. There are only 25 pupils in our school. I live on a 200-acre farm. I enjoy the life of a farm far more than I would a city life. We have about 20 head of cows, eight horses, two pigs and four sheep. At night, when I come home from school I have to go down by the railroad and bring the cows home. We are shipping milk to the Broadview Dairy at Spokane. We ship one can a day. I hope the cousins are all well and Aune Nellie also. My father takes the Farmer, and I always read the letters. I think they are very interesting. There are two other girls from my school who are going to write to Aunt Nellie.—Helen Huguenir, Route 1, Addy, Wash.

**Likes the Corner.**

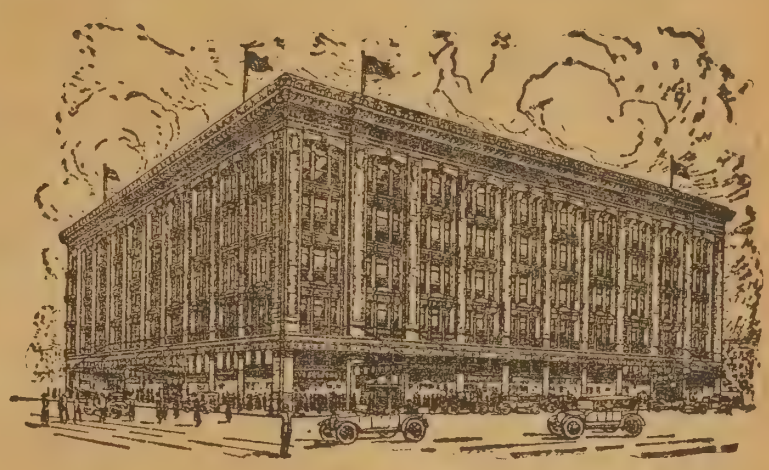
Dear Aunt Nellie: We have a 120-acre tract. We have four cows, two calves, one bull and five horses. We have 58 turkeys and 17 chickens. I am 14 years old. My birthday is January 22. I am in the seventh grade. My teacher is Mr. Lloyd. He had to go to Pennsylvania. I am a deaf girl. I go to school every year. I have four brothers and one sister. My brothers' names are Norman, Albert, Philip and George. My sister's name is Mary. Norman joined the army. He is 25 years old. I have a friend who lives in Spokane, whose name is Melba Brown.—Emma Layambe, Route 1, Wapato, Wash.

**Rides Her Pony to School.**

Dear Aunt Nellie: May I become a cousin? I was 14 years old August 14, 1918. Have I a twin? If so I wish they would write to me. I have a dark complexion, light brown hair, brown eyes and am five feet one inch tall. I know how to crochet and knit. I am in the eighth grade in school. I have two miles and a half to go school. I ride my pony to school. Her name is Bonney. I have a father, mother and two sisters, one 19 years old and the other 25 years old. We live near the banks of the Snake river. My father runs a railroad pump and owns about 200 acres of land. We have a small garden and a small orchard. I had a girl friend come and visit me today. She is going to stay for a couple of days. Her name is Alberta Raymond. When we were reading the cousins' letters this evening we decided to write. This afternoon we went down to the river and took some pictures. My mother and sisters are knitting for the Red Cross. I hope to be your niece.—Bertha J. Walker, Kahlotus, Wash. Box 59.

During the last two weeks Aunt Nellie has received letters from the following cousins: Esther Peterson, Henry Besel, Mabel Stevens, Rainier Wittika, Marjorie Hunt, Caroline Hunt, Mabel Crofoot, Bonnie Beck, Irma Polson, Myrtle Penley, Carrie Lattimer, Minnie Vaughn, Mildretta Vaughn, Cecil Barnett, Hanna Schafer, Mary Thompson, Mildred Thompson, Olive Thompson, Juanita Cornvall, May Barnett, Lloyd Smith, Helen Torgeson, Pauline Thompson, Opal Jones, Anna Carlson, Stella Kahl, Leonard Johnson, Stella Lambert, Alven Gaetz, Coral Chapman, Iva Chapman, Dick Engle, Frida Daubel, Ralph Kisler, Wilma Yarwood, Derla McManamon, Thelma Emert, Florence Burr, Mabel Sutton, Gladys Sandbrink, Irene Overdorff, Henry Dew, Nellie Kelly, Elsie Jensen, Rosemary Goodale.

Address all letters to Aunt Nellie, care of The Washington Farmer, Spokane, Wash.



Your Christmas Shopping Problems

SUCH of these problems as can not be solved by inspecting the stocks of your home stores will receive sympathetic and prompt attention on the part of our Mail Order Department, upon receipt of a letter or postal card with particulars.

**The next best thing to being able to shop personally in this, the Northwest's finest store, is to have at one's disposal the efficient Frederick & Nelson Mail Order Service.**

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AT FIFTH AVENUE AND PINE STREET, SEATTLE.

# News for Breeders

Secretary T. W. Tomlinson of the American National Live Stock association has issued a call for the twenty-second annual convention of the association in Denver, January 21-23. Such matters are scheduled to be considered as the work of the bureau of markets, price regulation of hides and wool, disease prevention among live stock, range and feed problems and general post-war readjustments necessary to the industry.

Unwilling to be deprived of their show at Lewiston by the abandonment of the live stock show this year, the Shorthorn breeders of the northwest have announced that on the date of their sale, which is Wednesday, December 18, they will hold a strictly purebred Shornhorn show. The show will occur in the forenoon, to be followed in the afternoon by the sale. The $1000 contributed by the Northwest Shorthorn Breeders' association, the American Shorthorn Breeders' association and the Northwest Live Stock show originally intended for distribution as prizes for Shorthorn entries last month will be distributed as prizes for the Shorthorn show December 18. Joe Turner of Myers Falls, Wash., is in charge of the arrangements for the show and sale.

## POULTRY

### Rhode Island Red Cockerels
Both Combs

RHODE ISLAND WHITE COCKERELS—BOTH COMBS.

My stock is pedigreed and line bred. Buy your breeding stock in Mammoth Toulouse geese and Mammoth Bronze turkeys. Have pedigreed Belgian hares and Flemish Giant rabbits. Also registered Airedale puppies, Cermer strain.

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### Rominger's S. C. W. Leghorns

and R. I. Reds. Pullets two to ten dollars. Cockerels, $2.50 to $15. Hatching eggs January, 1919.

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Member N. W. R. I. Red Club and R. I. Red Club of America.

MAMMOTH WHITE HOLLAND TURKEYS.

Yearlings, Toms and young stock for sale. From prize winners. No eggs.

MRS. E. D. SITTON, Carlton, Ore.

## AYRSHIRE CATTLE

### Wenatchee Ayrshires

Offspring of Cavalier's Hover O'Blink, son of the great Bargenoch Gay Cavalier, Imp., and out of Barboigh Maggie X, Imp. The dams are advanced register cows and include Lady Emperor Scott, that holds world's record for high test. Send for pedigrees and A. R. records.

E. W. VAN TASSELL, Wenatchee, Wash.

### Elbow Ayrshire Dairy

Young bulls out of heavy-producing dams, sired by Willowmoor Sentinel 16th, a bull with big A. R. records on both sides.

J. R. MABEN, Reedsport, Ore.

### EDGEWATER FARM

Young stock for sale, including senior calf, Edgewater Sentinel, grand champion 1918 Washton state fair. Herd government tuberculin tested.

ELBERT M. CHANDLER, Burbank, Wash.

## HEREFORD CATTLE

### Highland Stock Farm

offers for sale Hereford bulls, 1 or 2 years old. One or a carload.

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HAMPSHIRE HOGS

have won every feeding contest entered since 1914. Weanling pigs, gilts, bred or open. Our blood lines can not be beat.

TUTTLE BROS. Asotin, Wash.

## DOGS

### Thoroughbred Collies for Sale

Out of registered dogs and bitches; nothing but large, healthy, young stock shipped; satisfaction guaranteed; best breeding on the coast. Write me for prices and description.

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RAINBOW COLLIE KENNEL.

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MILK GOAT DOES.

A few young ones soon to freshen. Immune from tuberculosis. Best milk for invalids and children. $50 up.

D. J. GILBERT, Newburg, Ore.

# OK JERSEYS

JERSEYS are the "O. K." breed for the working farmer. They are bred to make money for the owners. Feed in the manger is gold in the milk pail if it goes through a Jersey. There is no other breed that produces so much for so little as the Jersey. Beautiful as a picture, hardy in all climates, a genuine satisfaction and continuous source of income. Ask breeders for pedigrees and prices and let us send you some revelation facts about the money making Jersey.

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### Raleigh's Jolly Nobleman

Our senior herd bull traces twenty-one times to Golden Lad 1242 and fifty-four times to Sultan P. 7, progenitors of more champion Jerseys than any other family of the breed. His dam is out of a daughter of Golden Lad 1242.

EDGEWATER FARM,
Myrtle Creek, Ore,

### Meridian Dairy and Fruit Farm

Oldest Jersey herd in northwest Washington. Young stock for sale, both sexes, from good, producing dams. Herd headed by Kolander's Eminent 148256. A very fine bunch of young stock, both sexes, for sale.

B. C. CRABTREE, Lynden, Wash.

LUCKIAMUTE FARM JERSEYS WON.

At Oregon state fair, 1918, with only 15 head shown. Junior and grand champion bull, junior champion heifer, 1, breeder's young herd; 1, calf herd; 1 and 3, get of sire; 1, 2, 3 and 4, produce of cow; 1 and 2, senior bull calf; 1, junior bull calf; 1, 3-year-old cow; 1, 2-year-old cow; 1 and 2, senior heifer calf; 9 other prizes. Young bulls from R. of M. dams.

FRANK LAUGHARY & SON,
Monmouth, Ore.

### ROSE LAWN JERSEYS OFFERS

First prize junior bull calf, Idaho State Fair, Minnidoka Co. and Twin Falls Co. fairs. Sire, Rosys Jolly Golden Fern 135928.

Grand champion bull, above fair circuit. Dam Gem Nehalim Lassie, a reg. of merit cow line bred in blood of Hood Farm Torona, Oonan 23 and Figgis.

S. H. KAYLER,
Twin Falls, Ida.

### ASHBURN FARM

REGISTER OF MERIT JERSEYS.

A bred herd, tried out for several generations by every breeding test. Only the best blood lines. Three proven matings. Nothing for sale except from tried sires. Increase of both sexes for sale.

J. M. DICKSON & SON.
Shedd, Ore.

### Goldie's Nehalem Beauty

won grand champion of the Jersey breed for production, 1917. Her record, 80 per cent basis, 1131 lbs. butter as 4-year-old. We have two bull calves sired by her son. Their dam's yearling records: 492 lbs. (average per cent fat, 6.03) and 433 lbs. butter. Both have been grand champions in show ring. Also a few females.

CLIFFORD F. REID,
Wilson bldg. Portland, Ore.

### Who Wants This Bull?

A double grandson of Kadia F., world's Jersey milk record for senior 4-year-old, 16,191 lbs. He is also a grandson of Helger and Engineer's Bluster. Because slightly broken colored, will be sold cheap. Other good young bulls and a few heifers and cows, same line of breeding.

N. H. SMITH, Oregon City, Ore.

### Doerfler Farm Jerseys

Awarded first, second and third in milking contest, open to all breeds at Oregon State fair, 1918. Also first for 4 best cows, judged 50 per cent type and 50 per cent production. These were the 4 best prizes awarded. They also received many other prizes in the show ring, but type follows production: A few cows and a dandy bull for sale, with great records back of them.

F. A. DOERFLER, Prop. Silverton, Ore.

### Ashnook Farm Jerseys

Young bulls by Silver Chimes of S. B., whose first 6 daughters average 710 lbs. 80 per cent butter. A few good cows and heifers for sale.

DEL PERKINS, Carlton, Ore.

### WHERE CAN YOU BEAT IT?

Young bull, ready for service. Sire's dam, St. Mawes Poppy, 1120 lbs. 85 per cent butter, or 1196 lbs. 80 per cent, in a year. Is 75 per cent same blood as Poppy's Grace, that has recently finished year's test as junior 2-year-old, with 601 lbs. 85 per cent butter. His dam and dam's dam both register of merit cows. Priced at $250 for quick sale.

F. E. FLYNN, Perrydale, Ore.

### HIGH CLASS JERSEY BULL CHEAP

Last Chance of Rocky Run, by Doctor of Fair Acres, a register of merit sire; 5 daughters in the list, others on test. Dam, Buttercup of Rocky Run, R. of M. record, 474.25 lbs. fat at 3 years 10 mo, two milkings a day. She is a daughter of Rosaire Olga Lad, out of a R. of M. daughter of the great St. Mawes. Other young bulls and a few cows and heifers at reasonable prices.

E. L. LLOYD, Monroe, Wash.

### Ashwood Farm Jerseys

Senior herd bull—HOLGER—with 13 daughters in register of merit and more on test. Junior herd bull—ST. MAWES OF ASHWOOD—a son of Poppy's St. Mawes. Young bulls for sale at reasonable prices.

McARTHUR & STAUFF, Rickreall, Ore.

### Five Gold Medal Bulls

in the Jersey Breed. Golden Glow's Chief (bred by us), only one west of Michigan. Only one other sire has more 800 lbs. fat record daughters. Two of his sons are our present herd sires. Bull calves by them to offer.

IRON MINE FARM, W. M. Ladd, Owner.
Oswego, Oregon. D. Brooks Hogan, Mgr.

### All High Record Blood

Bull calf out of Lucy of P. V., full sister to St. Mawes Susie; 936 lbs. butter in a year; to St. Mawes Blossom, 823 lbs., and to Susie's Twin Maiden, 642 lbs. Sire, Poppy's St. Mawes, son of St. Mawes Poppy, 1120 lbs.

ED CARY, Carlton, Ore.
Station, La Fayette, Ore.

### Anoka Farm Jerseys

We have some choice young bulls up to six months old for sale, whose sire has a 714-lb. dam and 1120 lb. granddam. St. Mawes breeding. The Best in the West. Prices very reasonable. Address

R. B. SEELY,
R. 5, Sherwood, Ore.
Shipping Sta. Wilsonville, on Ore. Elec. Ry.

### LYNDEN JERSEY FARM

Herd sire son of Fororio's Olindes Pogis, of Hood Farm and St. Mawes of Lynden; whose dam and granddam have records up to nearly 1000 lbs. of butter. Young bulls out of the Hood Farm bull for sale. Cows under official test and blue ribbon herd at Whitman county fair, 1917. You will find both type and production in the herd. For information write to

P. MEENDERINCH, Lynden, Wash.

### Ready for Service

Young bulls of Golden Glow's Chief, and King Melia Ann strains, out of register of merit dams. Priced to meet the unfavorable conditions. Write for full particulars and pedigrees.

HENRY STEWART, Albany, Ore.

### Jersey Farm Dairy

Peter Mouw's Poland China hogs, Cotswold sheep, White Leghorn and Buff Orpington poultry, carefully bred, great foundation stock.

E. S. PELOT, R. F. D. 5, Idaho Falls, Ida.

### Both Grandsires Great

Young bull by a son of Foxhall's Fern Lad, sire of 6 register of merit daughters and out of a daughter of Golden Cicero, sire of 7 register of merit daughters. Young bull's dam has a private record of 476 lbs. fat as a 3-year-old and will be officially tested. Granddam a daughter of Uuright's Chief, half-brother to Golden Glow's Chief. Also a few granddaughters of Golden Cicero.

WILLAMETTEDALE FARM,
TOM PETTIT, MGR., CORVALLIS, ORE.

### Register of Merit Cows

Three registered Jersey cows, with good register of merit records. Two are on test again and will increase their records; all in class AA. Two are bred to the great sire FOXHALL'S FERN LAD. Come and see them or write for prices and full particulars.

FOX BROS. Silverton, Ore.

### WAIKIKI FARM

Register of Merit Jerseys. Largest Jersey herd in the northwest. Young stock for sale.

IRA P. WHITNEY, Manager.
Route 7, Spokane, Wash.

### AT LAST

We can again offer a bull ready for light service. His three nearest dams average 649 lbs. fat in one year. Solid color and a splendid individual. Write today as we have but the one ready to use.

JOHN B. STUMP & SON, Monmouth, Ore.

### Jersey Home Jerseys

Young bull out of Olalla 2d, daughter of Olalla (806.25 lbs. butter as junior 3-year-old). Bull's sire, St. Mawes Prince, by Poppy's St. Mawes, and out of Gertie's Fern Princess (842.5 lbs. butter), both 80 per cent. Also other good young bulls.

THOMAS WILLIAMS, Forest Grove, Ore.

### St. Mawes—Rinda Lad

The two most popular strains of Jerseys in the northwest. Young bulls from register of merit cows for sale.

G. G. HEWITT, Monmouth, Ore.

### When You Write to Advertisers

be sure to say that you saw their advertisement in this paper.

## BERKSHIRE SWINE

### BABY BERKSHIRE BOARS

Also boars ready for service. Best breeding. Will ship subject to approval.

DR. GREEN & SON. Wapato, Wash.

## CHESTER WHITE SWINE

### Chester White Swine

Choice weanling pigs; spring gilts and service boars.

FRED H. HOFFMAN. Albion, Wash.

**When answering advertisements don't fail to mention this paper.**

## SHEEP

### Romneys, Lincoln, Corriedale

AND HAMPSHIRE EWES AND RAMS.

All pure bred, not registered. Have especially fine lot Hampshire ewe lambs, yearlings and three-year-olds. Any size lot. Write me on any kind of sheep deal.

H. STANLEY COFFIN, Yakima, Wash.

SHEEP AND SWINE.

Registered Shropshire, Hampshire and Oxford sheep. Registered big type Poland China and Duroc swine. Your personal inspection is invited. More than twenty years' exprience as a breeder of pure blood stock.

GRANT B. DIMICK, Oregon City, Ore.

## HORSES

KENTUCKY JACKS AND HORSES.

Big bone Kentucky Mammoth Jacks, easy riding saddle horses. Write us describing your wants. We guarantee safe delivery and take Liberty bonds and W. S. S. at par.

THE COOK FARMS, Lexington, Ky.

IOWA PERCHERON FARM.

Percheron stallions and mares for sale, breeders' price.

M. C. CONLON, Redmond, Ore.

### Belgian Horses

Herd sire, grand champion Idaho state fair. Winnings also include grand champion mare. Correspondence solicited.

H. H. SMITH. Nampa, Idaho.

# Breeders' Department

## CHANGE IN DATE

### LEWISTON HEREFORD SALE

### 60---Head Bulls and Cows---60

Consigned by

the Leading Hereford Breeders

of the Northwest

## Thursday, December 19, 1918

### Sales Pavilion Northwest Live Stock Show

Lewiston, Idaho

Auspices

### Northwest Hereford Cattle Breeders' Assn.

Catalog can be had from L. R. McGee, Sec.

North Portland, Oregon

**CHANGE IN DATE**

## POLAND CHINA SWINE

### *HEAVY BONED SPRING BOARS AND BRED SOWS*

Boars, March farrow, weigh fully 275 pounds. Sows of different ages, most of them bred to Bob Wonder, the most popular blood in the U. S. Prices from $60 up. Also a crop of fall pigs ready to ship. With no stock shows this winter, this is your opportunity to select high-class breeding stock at reasonable prices. Stock will be shipped c. o. d., subject to your approval.

***HERBERT WILLARD, Dayton, Ore.***

### Big Type Poland Chinas

Mouw, Fesenmeyer and Herring strains, either sex. Also registered Shorthorn cattle; good individuals.

**H. J. HOWSER,** **Stites, Idaho.**

**SAMMY AND MOLLY WIN AGAIN.**

Our herd boar, Sammy, and Hanna's Big Molly were again made grand champion Poland China boar and senior and grand champion sow, respectively, at the 1918 Idaho state fair. Correspondence solicited.

**W. F. HOWARD & SONS.** **Caldwell, Idaho.**

### BIG TYPE POLANDS

Genuine—Guaranteed.

**GEO. W. BUCK.** **Oregon City, Ore.**

### Satisfaction or Money Back

Big Litter, Easy Feeding.

**BIG TYPE POLAND CHINAS.**

Fifty vigorous young boars, ready for service. Best breeding of the times and quality to equal it.

**H. J. STILLINGS, Hermiston, Ore.**

**25 HEAD PURE BRED**

China boars, 6 weeks to 8 months old, $25 to $50, according to age. These are from my prize winning herd, including 1st and 2d prize boars. They are from litters of 10 and 12 pigs.

**C. W. SHUMATE,** **Tumwater, Wash.**

**HIGH CLASS SPRING BOARS.**

Best of big type breeding; well grown, $40 to $60. Also two July gilts, $30 each.

**O. T. MURPHY & SON,** **Hubbard, Ore.**

## DUROC-JERSEY SWINE

**OVER 150 SPRING PIGS.**

Sired by our grand champion Richards Defender, Richards Pathfinder and Cherry King Orion Jr., and out of our big type prize winning sows.

In the last three years at the Utah and Idaho state fairs our hogs won 76 champion and first prizes.

Can furnish unrelated pairs. Satisfaction guaranteed or money refunded. Priced very reasonable.

**Richards Live Stock Company,** **Virginia, Idaho.**

**FOUR DUROC GILTS BRED TO FARROW**

this fall, also spring pigs, on hand.

E. E. PRICE, CABINET, IDAHO, OR

**JAMES N. PRICE,** **Yakima, Wash.**

**REGISTERED DUROC AND HAMPSHIRE HOGS.**

Must sell to make room. Both breeds. Carry best blood lines.

**F. E. KINGSBURY,** **Malaga, Wash.**

### Registered Duroc Jersey Boars

Choice boars sired by Richard Pathfinder and Cherry King Orion Jr., and out of sows representing the best blood in the west. Big growthy fellows, with quality. Satisfaction guaranteed or money refunded. Write me for prices.

### Erik W. Olson

**VIRGINIA, IDAHO.**

When answering advertisements don't fail to mention this paper.

## SHORTHORN CATTLE

### Annual Show and Sale of Registered Short Horns

**At Lewiston, Idaho, Dec. 18, 1918.**

**$1000—in cash prizes—$1000.**

Contributed by American Shorthorn Breeders' association, Northwest Shorthorn Breeders' and Northwest Livestock association.

Judging of stock and awarding of prizes in the forenoon. Sale in afternoon.

Sale offering consists of

### 35— BULLS —35

### 31—FEMALES—31

Selections have been made from the following breeders:

| | |
|---|---|
| Day & Rothrock Co. | A. D. Dunn. |
| W. J. Townley. | G. W. De Lay. |
| W. H. Leonard. | E. H. Harper. |
| W. G. Cordiner. | H. D. Wester. |
| Joe Turner. | Jas. H. McCroskey |
| J. R. Wyatt & Son. | & Son. |
| University of Idaho. | W. Hoover. |

Catalog mailed on request.

Geo. A. Gue,
Harry C. Cranke,
Auctioneers.

JOE TURNER,
Sales Manager.
Meyers Falls, Wash.

### The Rushes Farm Shorthorns

Both Grand Champions at Oregon State Fair, 1918.

Bulls and Heifers in Lewiston Sale.

Herd Headed by Challenge Plate III.

### G. W. DeLay

**Hot Lake, Ore.**

### The Mounds Farm Shorthorns

Bulls in Service:
Good Prospect.
Violet King.

Bulls and Bred Heifers in Lewiston Sale.

### W. J. Townley

**Union, Ore.**

### The Valley Junction Shorthorn Herd

**W. W. GREEN & SONS, Owners**

Home of General Hampton 390583 and Barmpton Ring 430122. A few choice bulls ready for service and a few choice cows and heifers for sale. Bred right and priced right. Farm located half way between Union and Union Junction on the Central R. R. of Oregon. Visitors always welcome.

**Phone 644 Union.** **Union, Oregon.**

**REGISTERED SHORTHORN COWS.**

Young bulls and heifers, sired by Scotch bulls; liberal terms.

**CALDWELL CATTLE CO.,** **Caldwell, Idaho.**

**SHORTHORN AND POLE DURHAM CALVES.**

One 15 months old Shorthorn bull; good breeding and choice individuals at very reasonable prices. Also a few Duroc-Jersey gilts of August and September farrow.

**BEN E. KELLEY,** **Penawawa, Wash.**

When answering advertisements don't fail to mention this paper.

## HOLSTEIN CATTLE

### THE HOLLYWOOD FARM

announce that

the four registered Holstein bulls advertised here, whose four nearest dams average in official test well above 4% butter fat,

**HAVE BEEN SOLD**

We have others just as good, and we have heifers to sell of the same high class breeding.

Write us about them.

**Hollywood** **Near Seattle** **Hollywood Farm**

### Registered Holsteins

Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.

**H. R. BOOMER,** **New Plymouth, Idaho.**

### HOLSTEINS

Well bred young bulls for sale.

**THOS. CARMICHAEL.** **Gaston, Ore.**

### Holsteins and Berkshires

All ages for sale.

**HUGH NISBET,** **Chimacum, Wash.**

### A Rare Chance to Head Your Holstein Herd

We still have for sale five prize-winning purebred males, ranging in age from eight to eighteen months. Weight six hundred to one thousand lbs. Pedigrees furnished on application. Address

**THE INTERMOUNTAIN INSTITUTE**
**Weiser, Idaho.**

When answering advertisements don't fail to mention this paper.

# Grain and Produce Markets

## Grain Market.

CHICAGO, Dec. 7.—Bears had things much their own way in the corn market today, owing chiefly to expected big receipts on Monday and to the loosening of some of the wartime curbs on trading. Prices although steady at the finish, were 1⅞c to 2½c net lower, with January $1.28½ to $1.28⅝ and February $1.28 to $1.28⅛. Oats closed ½c to 1c down, and provisions off 7c to $1.

Liquidations, stop-loss selling, bear pressure and apparent lack of buying power all contributed to the weakness shown in the corn market. Even the usual week-end adjustment of trades brought about no important rallies. There were predictions that receipts here Monday would total 500 cars.

Oats descended with corn. On the decline, however, there was fair buying, said to be against Omaha and Minneapolis shipping sales to the seaboard.

Scattered selling was sufficient to make prices reflect the down-turns of grain and hogs. May deliveries bore the brunt of the pressure.

**Cash Quotations.**

Chicago, Dec. 7.—Corn—No. 2 yellow, $1.50; No. 3, $1.45; No. 4 yellow, $1.37½@1.40½. Oats—No. 3 white, 73@74c; standard, 73¼@74¼c. Rye—No. 2, $1.62@1.63. Barley, $9@10.35. Timothy, $8@11; clover, nominal. Pork, nominal. Lard, $26.15. Ribs, nominal.

**Chicago Futures.**

| | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| Corn— | | | | |
| Jan. | 1.30 | 1.30½ | 1.27⅞ | 1.28½ |
| Feb. | 1.29½ | 1.29¾ | 1.27½ | 1.28 |
| Oats— | | | | |
| Jan. | .72 | .72¼ | .71½ | .71¾ |
| Feb. | .71¾ | .72 | .71¼ | .71½ |
| Pork— | | | | |
| Jan. | | 48.15 | 48.00 | 48.10 |
| May | 45.00 | | | 45.00 |
| Lard— | | | | |
| Jan. | 26.15 | 26.20 | 26.15 | 26.15 |
| May | 25.45 | 25.45 | 25.25 | 25.27 |
| Ribs— | | | | |
| Jan. | 25.60 | 25.62 | 25.52 | 25.55 |
| May | 24.80 | 24.80 | 24.60 | 24.62 |

**Pacific Northwest Grain.**

PORTLAND, Dec. 7.—Grain future bids: Oats, No. 2 white feed, December, $54; January, $54.50; barley, standard feed, December, $49; January, $49; barley, standard "A," December, $49, January $49.50. Eastern oats and corn in bulk: Oats, No. 3 white, December and January, $51; 38-pounds, clipped, December $52; January, $52.75; corn, No. 3 yellow, December, $57.50; January, $57; No. 3 mixed, December, $57; January, $56. Sales, 100 tons December feed barley at $57, 300 tons January yellow corn at $57.50.

**Minneapolis Grain.**

MINNEAPOLIS, Minn., Dec. 7.—Wheat—Receipts, 610 cars, compared with 183 cars a year ago. Cash—No. 1 northern, $2.23. Corn—No. 3 yellow, $1.36@1.39. Oats—No. 3 white, $1.36@1.39. Oats—No. 3 white, 68½@69½c. Flax, $3.46@3.47⅛. Flour, 10c lower. In carload lots, standard flour at $10.30 a barrel, in 98-pound cotton sacks. Shipments, 81,569 barrels. Barley, 84@93c. Rye—No. 2, $1.58½@1.59. Bran, $27.73.

## Live Stock Quotations.

**At Omaha.**

OMAHA, Neb., Dec. 7.—Hogs—Receipts, 6700; market steady. Heavy, $16.75@17.40; mixed, $17.10@17.30; light, $17@17.45; pigs, $10@16.25. Bulk of sales at $17@17.40.

Cattle—Receipts, 400; market steady. Native steers, $10.50@18.50; cows and heifers, $6@12.50; western steers, $9.50@16.50; Texas steers, $8@12; cows and heifers, $6@11; canners, $4.50@6; stockers and feeders, $6@13; calves, $7.50@13.50.

Sheep—Receipts, 2400; market steady. Culls, $4.50@7.50; wethers, $9.50@10.50; ewes, $7.50@9; lambs, $13.50@15.15; feeder lambs, $10@14.15; yearlings, $10.50@11.50.

**At Chicago.**

CHICAGO, Dec. 7.—(United States Bureau of Markets.)—Hogs—Receipts 32,000; left over from yesterday, 37,168. Market slow; trading confined largely to good hogs, such selling steady to 10c lower; light and packing grades neglected; big supply of hogs going over in first hands, thousands without bids, killing facilities being overtaxed. Pigs and underweights unevenly lower; butchers, $17.40@17.75; light, $16.85@17.60; packing, $16.75@17.35; throwouts, $15.75@16.50; pigs, $14@15.25.

Cattle—Receipts, 5000; compared with a week ago, beef steers 25c to 50c higher; butcher stock up 50c to 75c; bulls, 25c to 50c higher; calves, steady; desirable feeders, strong to 25c higher; others steady.

Sheep—Receipts, 3000; compared with a week ago, fat lambs 15c to 25c higher; yearlings, mostly 25c higher; wethers, 25c to 50c up; ewes, strong to 25c higher; feeders, steady.

**At Seattle.**

SEATTLE, Dec. 7.—Hogs—Receipts 208; dull. Prime light, $17@17.25; medium to choice, $16.75@17; medium to heavy, $15.75@16.25; rough heavies, $14.75@15.25; pigs, $14.75@16.25.

Cattle—Receipts, 35; dull. Best steers, $11@13; medium to good, $8@8.50; medium, $7@7.50; bulls, $5@7.50; calves, $5@10.

**Spokane Union Stock Yards.**

| | Ctl. | Clvs. | Hgs. | Shp. |
|---|---|---|---|---|
| Saturday, Dec. 7 | 33 | .. | 126 | .. |
| Friday, Dec. 6 | 225 | 5 | 477 | .. |
| Thursday, Dec. 5 | 284 | 44 | 189 | 47 |
| Wednesday, Dec. 4 | 494 | 83 | 544 | .. |
| Tuesday, Dec. 3 | 43 | 2 | 114 | .. |
| Monday, Dec. 2 | 445 | 33 | 291 | .. |
| Week ago | .. | .. | .. | 34 |
| Year ago | 47 | .. | 129 | .. |
| Two years ago | 45 | .. | 21 | .. |

Saturday's receipts were light, as anticipated, with but one straight carload of cattle and one carload of hogs arriving. These, together with a few drive-ins, constituted the day's offering. The cattle receips, while very light, contained some very good cows, with the steer end amounting to practically nothing. At the close of trading everything in the yards had changed hands and the market closed steady at the following quotations:

| | |
|---|---|
| Prime steers | $12.00@12.50 |
| Good to choice steers | 10.75@11.75 |
| Medium to good steers | 9.50@10.50 |
| Fair to medium steers | 8.25@ 9.00 |
| Common to fair steers | 5.50@ 8.00 |
| Choice cows and heifers | 7.50@ 8.25 |
| Med. to good cows and heifers | 6.00@ 7.00 |
| Com. to med. cows and heifers | 4.75@ 5.75 |
| Canners | 3.00@ 4.25 |
| Bulls | 5.00@ 6.50 |
| Calves | 6.00@ 9.50 |
| Stockers and feeders | 6.00@ 8.00 |

The hog run was made up mostly of stockers and feeders. What few fat hogs were offered carried but plain kill, and bulk of sales for this class of stuff at $16.50@16.65 denotes steadiness at the following quotations:

| | |
|---|---|
| Prime mixed | $16.60@16.75 |
| Medium mixed | 16.50@16.60 |
| Rough heavies | 14.60@14.75 |
| Pigs | 14.50@16.00 |
| Stockers and feeders | 12.00@14.50 |

Bulk of sales at $16.65.

No sheep were reported arriving up till a late hour, and nothing reported in transit. The absence of sheep in any quantity for some time past has strengthened the demand here considerably and an extremely strong market exists at the following quotations:

| | |
|---|---|
| Prime lambs | $10.00@11.00 |
| Fair to medium lambs | 8.50@ 9.50 |
| Prime yearlings | 8.00@ 9.00 |
| Prime wethers | 7.50@ 8.50 |
| Best mutton ewes | 6.50@ 7.50 |
| Breeding ewes, 1 to 4 years | 12.00@15.00 |

**At Portland.**

PORTLAND, Ore., Dec. 7.—Cattle—Steady; receipts, 77. Steers, prime, $11.50@12; good to choice, $10.50@11.50; medium to good, $9.50@10.50; fair to medium, $8@9; common to fair, $5.50@7.50; cows and heifers, $7.75@8; medium to good, $6@7; fair to medium, $5@6; canners, $3@4; bulls, $5@7; calves, $9@12; stockers and feeders, $6@9.

Hogs—Steady; receipts, 509. Prime mixed, $16.75@17; medium mixed, $16.50@16.75; rough heavies, $14.75@16; pigs, $14@15; bulk, $16.85.

Sheep—Steady; receipts, 46. Prime lambs, $12@13; fair to medium, $9@11; yearlings, $10@11; wethers, $9@10; ewes, $6@8; rough heavies, $14.60@14.75.

## Portland Market.

PORTLAND, Ore., Dec. 7.—The cube butter market is in better shape since a carload was shipped east. Extras are held at 61 cents. Prints are firm at the recent advance.

The scarcity of eggs has become acute, and selects are now bringing 75 cents. Supplies of storage and eastern fresh eggs have been cleaned off the market. There has been some increase in the home lay, but not enough yet to count.

Poultry and dressed meats drag, with moderate receipts.

The potato market is weak and tending lower. Yakima Netted Gems are selling locally at $1.85@2, and the best Oregon Burbanks at $1.50@1.75, with ungraded stock going at $1.35. Farmers are getting $1.25. The onion market is also slow, Oregons bringing $1.75@2 and Californias $1.50. Apples hold steady, with only a fair local demand.

Hops have climbed to 28 cents. London firms are doing all the buying, and have nearly cleaned out the northwest. They are also offering 20 cents for contracts for the next three years.

Butter—Cubes, extras, 59c; prints, 62c; butterfat, No. 1, 67c, delivered.

Eggs—Oregon ranch, candled, 71c; selects, 72c per dozen.

Cheese—Jobbers' buying prices, f. o. b dock, Portland: Tillamook triplets, 36c; young Americas, 37c per pound. Coos and Curry, f. o. b. Myrtle Point, triplets, 35¾c.

Poultry—Hens, 23@26c; ducks, 28@30c; geese, 18@20c; turkeys, dressed 34c.

Pork—Fancy, 20@20½c.

Veal—Fancy, 20c.

Potatoes—Oregon Burbanks, $1.50.

Hay—Buying prices, f. o. b. Portland: Eastern Oregon timothy, $30@33 per ton; valley timothy, $27; alfalfa, $28; valley grain hay, $26; clover, $27; straw, $9@10.

## Seattle Market.

SEATTLE, Wash., Dec. 7.—The export demand will take care of all the extra fancy apples now held in eastern Washington, and coupled with a brisk demand in the east, will, it is believed, sustain the present f. o. b. prices of $2.15 to $2.25 to the end of the season. Growers and shippers are now more than ever inclined to hold.

**Bid Prices to Producers.**

Eggs—Select ranch, 68@69c per doz.; pullets, 58c per doz.

Butter—Fresh dairy, 30c per lb.; butterfat, 70c per lb.; bakers', 28c per lb.; raw milk, $3.60 per cwt.

Poultry—Broilers, live, 1918, under 2 lbs., 30c per lb.; 2 lbs. and over, 27c per lb.; hens, 4 lbs. and up, 28c per lb.; under 4 lbs., 26c per lb.; old roosters, 18@20c per lb.; ducks, live, fat, 27c per lb.; squabs, large, $3.50 per doz.; geese, fat, live, 22@23c per lb.; Belgian hares 14c per lb.; guineas, $6 per doz.; turkeys, young toms and hens, dry picked, 10 lbs. and up, 37c per lb.

Hogs—Light, 20c per lb.; heavy, 18@19c per lb.

Beef—Steers, fat, 11@12c per lb.; heifers, fat, 10@12c per lb.; cows and bulls, 10c per lb.

Veal—Fancy light, 20c per lb.; do heavy, 12@16c per lb.

Mutton—Fat, 17c per lb.; spring lambs, fat, dressed, 18@20c per lb.

Salted hides, cows and steers, No. 1, 14c per lb.; do No. 2, 13c per lb.; green hides, cows and steers, No. 1, 11c per lb.; do No. 2, 10c per lb.; salted, bulls or stags, No. 1, 11c per lb.; do No. 2, 10c per lb.; green, bulls or stags, No. 1, 9c per lb.; do No. 2, 8c per lb.; salted or green calf skins, No. 1, 30c per lb.; do No. 2, 28 1-2c per lb.; salted or green kip skins, No. 1, 16c per lb.; do No. 2, 14 1-2c per lb.; dry hides, No. 1, 29c per lb.; do No. 2, 28c per lb.; dry bulls or stags, 24c per lb.; dry salt hides, 23c per lb.; dry calf skins (5 lbs. and under), No. 1, 33c per lb.; do No. 2, 30c per lb.

Horse hides—Green or salted, each, $2@4; do dry, each 50c@$2.

Wool—Clean ranch, full growth, 50@55c per lb.

Sheep pelts—Long wool, each, $2@3.50; medium wool, each, $1.50@2; short wool, each, $1@1.50; shearlings, each, 35@75c.

**Jobbing Prices to Dealers.**

Apples—Kings, $1@1.25 per box; Delicious, $2.25@3.25 per box; local cooking, $1@1.25 per box; orchard run, in lugs, 4@5c per lb.; "C" grade, $1.10@1.40 per box.

Beets—New, $1.50@1.75 per sack.

Cabbage—Washington, 1 1-2@1 3-4c per lb.

Carrots—New, 75c@1 per cwt.

Cauliflower—$4 per crate.

Celery—White Plume, $1.25@1.35 per doz. bunches.

Onions—Green, 35c per doz.; Walla Walla, $2 per cwt.; white pickling, $3 per box; Fannos, $2.50 per cwt.

Potatoes—Yakima baking Gems, $32@35 per ton; local, $24@28 per ton.

Feed—Mill run, $34@37 per ton; scratch feed, $78; feed wheat, $80; all-grain chop, $69; oats, $64; sprouting oats, $70; rolled oats, $66; whole corn, $72; cracked corn, $74; rolled barley, $60; clipped barley, 63; alfalfa meal, $40; egg mash, $69@71.

Hay—Eastern Washington timothy, $39 per ton; do double compressed, $42; alfalfa, $33; straw, $17.

## Spokane Market.

SPOKANE, Dec. 6.—The following are general quotations on the city markets:

Ground artichokes, 2 lbs for 25c; cabbage, 4c lb; cabbage, red, 6c lb; cauliflower, 35c and 40c each; celery, 10c, 15c stalk, 2 for 25c; celery hearts, 15c a bunch; cuumbers, 20c each; brussels sprouts, 20c lb; horseradish root, 20c lb; head lettuce, 15c each, 2 for 25c; onions, green, 3 bunches, 10c; onions, dry, 7 lbs for 25c; potatoes, 10 lbs 25c, 50 lbs $1.25, 100 lbs $2; potatoes, sweet, 5 lbs, 25c; peppers, green, 20c lb; parsley, 5c a bunch; pumpkins 3c lb; carrots, 2 bunches, 15c; tomatoes, hothouse, 35c lb; tomatoes, California, 20c lb.

**WHOLESALE MEATS.**

**Beef**—Beef steers, 15@20c lb; T. C. steers, 19c lb; cow beef, 10@14c lb; heifers, 14½@15c lb; best loin, 24@25c lb; steer chucks, 11@12c lb; square chucks, 13c lb; prime ribs, 11@12c lb; rump and round, 17@19c lb.

**Mutton**—Breakers, 19@20c lb; wethers, 18@19c lb; ewes, 15@18c.

**Lambs**—Diamond T. C. lambs, 22c lb; lambs, 20@22c lb.

**Pork**—Packer dressed hogs, 24@30c lb; pork loins, 30@34c lb; legs, 32@34c lb; shoulders, 28c lb; leaf lard, 27c lb; tenderloins, frozen, 45c lb; spareribs, 17c lb; country dressed hogs, with head on, 19@21c lb to producers; country dressed veal, 13@15c lb to producers.

**Smoked Meats**—Washington hams, 39c lb; T. C. Hams, 42c lb; T. C. bacon, 53½c lb; Washington bacon, 45@49c lb; picnics, 27c lb; lean backs, 37c lb.

**Star Brand**—Star hams, 41½@42½c lb; Shield hams, 39@40c lb; picnics, 29c lb; bacon backs, 37@39c lb; Star bacon, 54@56c lb; Shield bacon, 50@52c lb; Simon Pure lard, 35@36c lb; Shield lard, tierces, 30c lb; White Cloud compound, tierces, 24¼c lb.

**Dry Salt Meats**—Clear bellies, 30@31c lb; loin back, clear, 31c lb.

**Lard**—Tierces, 30c lb; $22 buckets, per case; Diamond T. C. pure leaf lard, $16.55 case; Snowcap compound, tierces, 23½c lb.

**POULTRY.**

**Live Poultry**—Live hens, 20@22c lb; spring chickens, 22c lb; roosters, 10c lb; ducks, 20c lb; geese, 18c lb to producers, f. o. b. Spokane.

**BUTTER.**

**Creamery Butter**—1-lb prints, 57@60c lb.

**CHEESE.**

**Wisconsin**—38@38½c lb; first-grade western, 37@38c lb; cottage, 10@12½c lb.

**EGGS.**

Fresh local, 73@82c doz; storage, 46¾@51 1-2c doz.

**GASOLINE, LINSEED OIL, ETC.**

**Gasoline**—Red Crown, bulk, 25c gal; Shell, 25c gal; refined oil (Pearl), bulk, 13c gal; Eocene, 15½c gal in bulk.

**Gasoline**—Red Crown, bulk, 25c gal, bulk.

**Linseed Oil**—Raw, bbl, $1.94 gal, cases, $2.12 gal; boiled, bbl., $1.96 gal, cases, $2.14 gal.

**GRAIN AND FEED.**

**Rice**—Fancy head, $7.50@9.50 cwt.

**Flour**—Bluestem, $11; blend, $11; graham, $9.75 bbl; whole wheat, $10.35; eastern rye, $10; eastern rye meal, $10.20; oat flour, $12.80 two 100-lb sacks.

**Oats**—$62 ton whole, $63@65 rolled, delivered in city; steam rolled No. 2, $65 ton.

**Corn**—$77 ton; cracked corn, $79 ton.

**Barley**—Rolled, $61 per ton.

**Oil Meal**—$75 per ton.

**Bran and Shorts**—$30 ton; if soft wheat feed, $32 ton.

**Hay**—Timothy, $39 per ton, delivered, $36 by carload; alfalfa, $32 per ton, delivered, $28 by carload.


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RUBBER METAL SACKS

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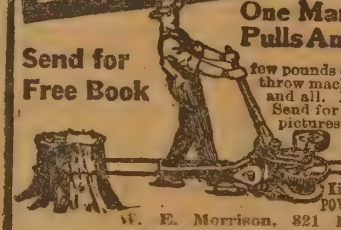
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STANDARD OIL COMPANY
(California)

# The Dog at Her Doorstep

(Continued from page sixteen.)

Indecision, Minnie renewed her commands, and, with strength born of despair, tugged at his thick, stubborn neck. At last she was heeded. Tramp permitted himself to be pulled away from his victim, but slowly. His teeth were still bared, and his eyes gleamed wickedly.

"Run! Run!" implored Minnie. "He'll kill you!"

Cautiously, his face mottled yellow and purple, horror in his eyes, the man edged toward the door. Then he ran, nor did he cease running as long as Minnie could see him.

Tramp stalked stiffly from the house. He was offended, apparently. He met little Bob rounding the corner of the house and weeping lustily. The dog relented sufficiently to caress the child lightly with his silky, red tongue. It would be interesting to know the thoughts that ran dog-wise in the animal's mind. To all appearances he felt humiliated and discouraged; and with sadness in his gentle brown eyes he paddled silently back to his nest in the hay and curled up to sleep.

Autumn at last! The haze of summer cleared from the sky and the sun shone a little farther away, but warm and comforting in the day. At night it was chilly. Jack Farley should be home almost any day. The coyotes had quit howling about the cabin at night, for it wasn't a safe thing to do. For many nights Tramp had slept undisturbed on the doorstep, and Minnie felt strong and brave. She thought lightly of the battles with the cougar and the man, and had all but forgotten the thin, eerie wails which twice she had heard in the night.

"They say there's a cougar denned up somewhere over in Dry coulee," said Kirkland one day when he came with the water. "Richardson's cowboys have been hunting it all summer. They think maybe it's the mate to the one Tramp killed. If you're afraid, we'll send one of our girls over to stay with you."

The same sickening fear clutched Minnie's heart; but she choked it down. Jack should be home soon; and there was Tramp, the hero, at her doorstep. She said she wasn't a bit afraid.

"You're a brave little woman, all right," said Kirkland, with admiration in his eyes. "But—well, I wouldn't be a cougar for a million dollars with that dog around. You're safe, I think."

Several days passed with no cause for alarm, and Minnie again felt safe. Hourly she scanned the distant point in the prairie where first the white-covered wagon should appear.

She was surprised in midafternoon one day by hearing Bob call to her from where he was playing in the grass not far from the house:

"Mama, mama, see kitty! See kitty!"

Several months before he had had a kitty, but it had disappeared. A coyote had caught it, perhaps. Minnie absently thought it might be another kitten, or the same one returned. Afterward the absurdity of such a notion occurred to her.

"Yes, dear, play with the kitty," she called.

As she turned back into the house she caught a glimpse of the child stooping as if to pick up the kitty. Instantly he cried out in pain. Holding up a hand for his mama to see, he backed away from the "kitty," calling.

"See han'! See han'!"

She ran toward him, alarmed; perhaps it was a wild animal, or even a snake. She had covered scarcely half the distance when a roundish, yellow head with upright ears and yellow, unwinking eyes rose from the grass not thirty feet from little Bob.

"Tramp! Tramp!" she screamed, and frantically rushed to her child.

With strange distinctness she heard Tramp's startled bark, which instantly changed to a roar of wrath. He, too, had seen the cougar's head. Asleep in the haystack, with the wind blowing wrong, he had neither scented nor heard the stealthy approach of the beast.

From the rear came the pounding of the dog's feet as he swept after her. She saw the fierce, tawny head sink, then rise partly with curling black lips and glistening fangs. Something stirred in the grass near Bob. Tramp, sweeping up like a cyclone, snatched up the moving thing, crunched it once and tossed it kicking in the air. It was a cougar kitten. He lunged at another tawny little form, which evaded him. Then the cougar mother took a hand. With a piercing snarl she flashed through the air, ripping the sod with her claws where she struck. She took two jerky leaps to get her distance, crouched an instant with snapping jaws and lashing tail; and in a mighty bound hurled herself at the dog with force that would have staggered an ox. The two went down in a whirling heap, with the cougar uppermost.

Minnie had reached Bob and snatched him to her. She was dazed a little, terrified, but strangely attracted. Afterward she wondered why she had not sought safety in flight. But she did not flee. She stood rooted to the spot, arms tightly clasping little Bob, eyes tensely drawn to the furious battle that raged at her very feet.

Tramp fought calmly, shrewdly, dangerously. In a slight pause Minnie saw his wide, powerful jaws and fearless, blazing eyes; in the next instant a roundish, tawny head with sneering black lips and teeth like daggers whirled uppermost. The battle raged toward her. She ran backward to avoid the uprearing, whirling beasts, and nearly fell. When they receded she followed, hovering near, watchful and praying.

Suddenly astonishment held her still. In the furious rolling and rearing of the beasts one movement had seemed a little steadier, a little surer than the others—then a pause. Tramp had his hold—the vise-like grip in which he had slain the first cougar, the one he had tried to secure on the man, and which had been instantly fatal to the coyote. More than ever before, Minnie realized that Tramp was no ordinary dog, and that by some very skilful master he had been trained to kill.

With cunning leverage shrewdly retained the dog worked his enemy lower and lower to the ground. With senses reeling, Minnie realized that the cougar was dying. As if through a mist, she saw the beasts slightly uprearing, and caught the gleam of round, yellow eyes which became glazed and lifeless. Then it was dark.

Little Bob's arms were around her neck, and his crying voice seemed to awaken her. She started up numbly. Tramp was licking her hand. The mists fell away, suddenly, and she sprang to her feet with little Bob in her arms.

There was no need for alarm. The cougar was dead. With drawn breath Minnie stepped near the gaunt, lifeless beast and marveled at its powerful, sinewy limbs and wicked jaws. She could see that it was thin, weakened, perhaps, from hunger; but yet it was a wonderful thing that such a beast could be slain in fair combat by the gentle-eyed, humble dog at her feet.

Something stirred near the gaunt, tawny form, and Minnie drew back with a little cry. She looked long and with pity. It was the cougar kitten, as large as an average-sized cat, that had crept back to its dead mother. A strange sorrow for the savage little orphan saddened the heart of the human mother, and she stooped toward the little creature. It turned upon her with needle claws and eyes glowing green. Bob wiggled with alarm and cried:

"See han'! See han'!" He showed mama his scratched little fist. Mama must leave the bad kitty alone.

With a lump in her throat, Minnie turned away, leaving the kitten cowering beside its dead mother. Tramp made no move to harm it, but followed his mistress with humility and love in his gentle brown eyes. Minnie saw that he was suffering from deep wounds. With loving words and many a tender pat on his huge, bleeding head, she urged him to the house. He limped wearily, but uttered no sound.

First she gave him water, and he drank thirstily, plunging his huge, blood-stained muzzle deeply into the cool liquid. Slowly, painfully, with a foreleg nearly dragging, he went to the doorstep and sank down.

He laid his wet muzzle on his paws; but that wasn't comfortable. Something was wrong. He stared reflectively at the widening pool of blood on the doorstep. Minnie noticed it, too, and hastened for her remedies.

One paw was good, anyhow; so the dog laid his muzzle on the uninjured paw. There was a message in the ground. He lifted his head quickly and looked in the direction of the sound. A wagon was coming. The man in the seat waved his hat.

Perhaps Tramp recognized the man as he who, a long time ago, had given him water at this same doorstep. He did not bark.

Hastening to the dog with warm, sterilized water and clean cloths, Minnie saw the approaching wagon, and the man in it who waved his hat. She responded briefly; then sank beside Tramp and strove swiftly and tenderly to check the flow of blood from his wounds. Comforted, the dog sighed and closed his eyes.

A fly buzzed near, and then drank from the crimson pool which had ceased to spread over the doorstep and was blackening at the edges. Satiated presently, the insect circled around and lit on the dog's nose, which snapped upward with quickness that sent the small disturber somersaulting through the air.

Another buzz! Tramp snapped viciously and missed! Wrathfully he flailed at the winged marauder with his well paw, and missed. Alarmed, the fly buzzed dolorously away, then back and around the dog's head. With teeth wickedly agleam and an evil light in his brown eyes, Tramp moved his head in a circle with his enemy till it buzzed away. Sighing a little, he hunched into a more comfortable position and dozed.

## CORN IN THE OKANOGAN.

Messrs. McGlaughlin and McGinty, two farmers of the Okanogan valley, not far from the town of Okanogan, each produced over 100 bushels of corn per acre from local seed. A few years since Mr. McGinty took to the Spokane corn show two varieties of corn, grown from seed he had developed. The managers of the show were so impressed with the corn it was decided to give each variety recognition and a name. They were called Mackie's Gold Mine and Mackie's Silver Mine. County Agriculturist Holt is proud of his county's record on corn growing. He urges and predicts still more and better corn. H. A.

# FARMERS' WANT ADS

This is the farmers' "Want," "Sale" and "Exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rate, 7 cents a word per insertion, with a special rate to farmer subscribers to the Washington Farmer of 6 cents a word per insertion for from 4 to 12 times, and 5 cents a word per insertion for 13 times or more.

All commercial and land advertising, 7 cents per word each insertion. Open also to nonsubscribers.

In using these columns advertisers must observe: (1) No advertisement will be inserted for less than 75 cents. (2) Every word, number and initial, including name and address, must be paid for. (3) Cash must accompany order.

Above rates also include insertion in The Oregon Farmer and The Idaho Farmer.

### SITUATIONS WANTED—Female 18

WANTED—CHARGE OF A COMFORTABLE country home of well-to-do bachelor or widower, stockman or farmer; capable housekeeper and cook; 45 years, with bright, ambitious boy, wanting to learn from experience; best of references. Write Mrs. M. Hensman, 8220 Washington street, Spokane, Wash.

### SITUATIONS WANTED—Male 21

THOROUGHLY EXPERIENCED AND CAPable creamery man and butter maker seeks job calling for a broad knowledge of the creamery business, where he can make his services very valuable. Address P. O. Box 499, Ritzville, Wash.

### EDUCATIONAL 45

IN BUSINESS OR ACTUAL LIFE THE BEST is none too good for you. Write Gooding college, Gooding, Idaho, Charles Wesley Tenny, president, today.

TELEGRAPHY—YOUNG WOMAN'S POPULAR vocation; good paying positions available. Write for booklet. Pacific Telegraph Institute, Spokane.

SEND NEWS NOTES TELLING OF THE work of your school today. Address the Educator, Gooding, Idaho.

### HONEY, BEESWAX—Wanted 58

SEND SAMPLES OF YOUR HONEY AND beeswax. State quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

### EGGS AND BUTTER WANTED. 59

WE ARE ALWAYS IN THE MARKET FOR good eggs and dairy butter. Send us your next shipment. Oregon Farm Products Co., 386 Halsey st., Portland, Ore.

### MISCELLANEOUS—FOR SALE 60

TRAP COYOTES—FULL INSTRUCTIONS ON a sure catch method and reliable scent recipes sent on receipt of $5. C. L. Willis, Dillard, Ore.

FOR SALE—175 TONS HAY, 50 HEAD OF grade Holstein cattle, 5 horses and machinery, with good lease. Walter Allison, Belfair, Wash.

### MISCELLANEOUS WANTED 63

POULTRY WANTED.
We are cash buyers of poultry and dressed meats, also cream. Write us for prices, shipping tags and premium catalogue for cream shippers.
COMMERCIAL CREAMERY CO.
SPOKANE, WASH.

HIGHEST PRICES FOR POULTRY AND EGGS. Washington Meat & Poultry, 469 Second avenue, Spokane.

### LIGHTING EQUIPMENT 74

THE SAFETY LAMP CO., 1208 HOWARD ST., Spokane, Wash. Gasoline lighting and supplies.

### MACHINERY—For Sale 93

FOR FARM LUMBERING USE
"AMERICAN" PORTABLE SAWMILLS
Carried in stock by
HIGGINS MACHINERY COMPANY.
312 1st Ave., So., Seattle. Write for Catalog.

FOR SALE—CLEVELAND TRACTOR; USED 25 days; perfect shape, except track, which will need repairing; also tractor plow; bargain. Byrd J. Clark, Lyle, Wash.

### AUTOMOBILES 114

FORDS START EASY IN COLD WEATHER with our new 1919 carburetors; 34 miles per gallon; use cheapest gasoline or half kerosene; increased power; style for any motor; very slow on high; attach it yourself; big profits to agents; money back guarantee; 30 days' trial. Air-Friction Carburetor Co., 321 Madison, Dayton, Ohio.

HEADQUARTERS FOR USED CARS.
Trucks and tractors; printed list. Spokane Auto Market, W315 Sprague ave., Spokane, Wn.

AUTO RADIATORS, FENDERS AND LAMPS repaired. Lester Allen, 607 Second avenue, Spokane.

### STOVE AND FURNACE REPAIRS. 126

WRITE M. S. RUBENS, SPOKANE, FOR ANY parts needed to repair stove, furnace.

### PETS—Dogs, Birds, Etc. 171

WANTED—YOUNG, TRAINED AND GUARANteed wolf dogs; state kind and price. Chas. Kemsley, Sublett, Idaho.

### RABBITS and HARES 173

FOR SALE—WHITE ENGLISH RABBITS, breeders, $1.50; 4 months, 60c. Austin Rull, Deep River, Wash.

### POULTRY 174

BUY YOUR INCUBATOR NOW.
Incubators will be scarce and high next spring. Send for our list of new and used incubators and save money. Agents: Famous Queen incubators and brooder stoves. Queen Hatchery, 89 Pike st., Seattle.

DANIEL'S WHITE PLYMOUTH ROCKS. THE greatest egg laying big bird known; send for our special offer on hatching eggs. Catalog free. Ideal Poultry Yards, Box 174, Hoquiam, Wash.

EXCELLENT S. C. BUFF ORPINGTONS AND S. C. White Plymouth Rock cockerels, $2 and $2.50 each. Mrs. James Camp, Route No. 3, Rosalia, Wash.

WHITE WYANDOTTE COCKERELS; HEAVY laying strain; Just-a-Mere, Croft. 4137 Sunnyside ave., Seattle, Wash.

FOR SOMETHING GOOD IN SILVER WYANdottes and Golden Campines, write G. G. Wherry, Payette, Idaho.

50 USED INCUBATORS FOR SALE, FROM 70 to 700 egg capacity. A. R. Badger, Centralia, Wash.

SHIP US YOUR POULTRY. TOP PRICES. Home Poultry House, 8173 Washington, Spokane.

WILD AND BRONZE TURKEYS; BREEDERS, for sale. E. Y. Sanders, Roy, Wash.

### LIVE STOCK 177

REGISTERED CHESTER WHITE BOARS, ready for service; weighing 200 lbs.; sired by Palouse-Wonder, by King Senator, No. 35809, and by Wonders Daughter, No. 77910, and blue ribbon sows. H. S. Curtis, Palouse, Wash.

C. I. C. HOGS, BOTH SEX; BEST OF BREEDing. Dr. S. T. Miller, Twisp, Wash.

### LIVE STOCK. Continued. 177

YOUNG JERSEY BULL AND SEVERAL young Jersey cows—St. Mawes breeding—all splendid animals. Also complete Empire milking machine, very reasonable. A. Adolphsen, R. 2, Chehalis, Wash.

FOR SALE CHEAP—TWO REGISTERED Shire stud colts, coming one and two years old next spring, at farmer's prices. Cut out the middleman. Write for particulars. J. A. Brewster, Lebanon, Ore.

DUROC BARGAIN—REGISTERED YEARLING boar; a great breeder, $55; worth double. Shadeland Farms, Amity, Ore.

TWO REGISTERED GUERNSEY BULLS, ONE 5, one junior 2; will sell either. Fir Grove Farm, Clarks Fork, Idaho.

THREE REGISTERED SHORTHORN BULLS, 18 months old, for sale. Ernest W. Haag, Sandpoint, Idaho.

### HORSES and VEHICLES 183

3400-LB. TEAM; ONE GRAY AND ONE black; well trained on logging work; about 7 years old; pronounced by veterinary surgeons to be worth $700; to move at once, will be sold for $500. Inquire Copeland, 802 E. Pike st., Seattle.

3000-LB. PAIR OF 7-YEAR-OLD BAYS, HARness and wagon for $975. Inquire Copeland, 802 E. Pike st., Seattle.

### HOTELS 306

WHITE'S HOTEL AND RESTAURANT—Rooms, hot and cold water, 75c up. Breakfast 20c to 40c; dinner, 25c to 50c. Sprague and Stevens, Spokane.

GALAX HOTEL; NEW AND MODERN; 75C and $1. Main and Bernard, Spokane.

NEW MADISON HOTEL, 75C AND UP. 1ST and Madison, Spokane, Wash.

### RUBBER STAMPS AND SEALS 384

FOR RUBBER STAMPS, STENCILS, BADGES, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

### TAXIDERMISTS 426

FUR RUG MOUNTING A SPECIALTY, HEADS, animals and birds mounted. Withers Bros., 822 Sprague, Spokane.

FIRST-CLASS WORK, ALL BRANCHES TAXIdermy and furs. Mohr, Bernard st., Spokane.

### SEEDS. 620

RYE GRASS SEED, LOCAL GROWN; GOOD quality, $12 per cwt. Rhoten Farms, Salem, Ore.

### FARM LANDS FOR SALE 651

SNOHOMISH COUNTY, WASH., FARM LANDS. The greatest proposition on the market for the man who wants a farm. 12,000 acres to select from; 3½ miles salt water front; 20 miles of beautiful lake shore; good towns, railways, steamboats, factories, mills, schools, churches, paved roads; where the largest profits are made, where the great variety of crops and wonderful productive climate makes it the most productive farm section of America. Good lands in good localities, as low as $25 to $35 per acre. 10 yearly payments. Send for maps and literature to the Brownell Land Co., 904 Third ave., Seattle, Wash.

YOUR CHANCE IS IN CANADA—RICH LANDS and business opportunities offer you independence; farm lands $11 to $30 acre; irrigated lands, $35 to $50; twenty years to pay; $2000 loan in improvements; loan of live stock; taxes average under twenty cents an acre; no taxes on improvements, personal property or live stock; good markets, churches, schools, roads, telephones; excellent climate—crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklet. Allan Cameron, general superintendent land branch Canadian Pacific Ry., 30 Ninth ave., Calgary, Alberta.

NO CROP FAILURES.
800-acre stock and wheat farm (Vermilion, Alberta); partly cultivated; fair set buildings; watered by two lakes; good soft water. Price, including 50 tons hay, $15,000; small payment down, balance easy terms, at 6 per cent.
UNION INVESTMENT COMPANY,
406 ZIEGLER BLK., SPOKANE, WASH.

160 ACRES TIMBER; MILLION FT. WHITE pine, 2 millions cedar, 1½ millions mixed and 3000 mixed cedar poles; clear price $4000, sell on terms or trade for residence. 160 acres Alberta, partly improved, clear; trade for Washington property. Union Investment Co., 406 Ziegler block, Spokane, Wash.

FOR SALE—ALFALFA STOCK AND WHEAT farms, at a price that the land will pay for itself in two crops. Well improved land for $75 to $100 per acre, the cheapest water in the world. John Hardwick Realty Co., Vale, Ore.

FOR SALE—ONE OF THE BEST 80S IN THE Payette valley; well improved; high state of cultivation; crop this year $6000. For particulars, address owner, Box 68, Route 1, New Plymouth, Idaho.

### FARM LANDS—WANTED 654

WANTED—TO HEAR FROM OWNERS OF land in Idaho, Washington or Oregon for sale or trade for western Montana land. Scott & Rummel, R. D. 1, Eureka, Mont.

IF YOU WANT TO SELL OR EXCHANGE your property, write me. John J. Black, 80 st., Chippewa Falls, Wis.

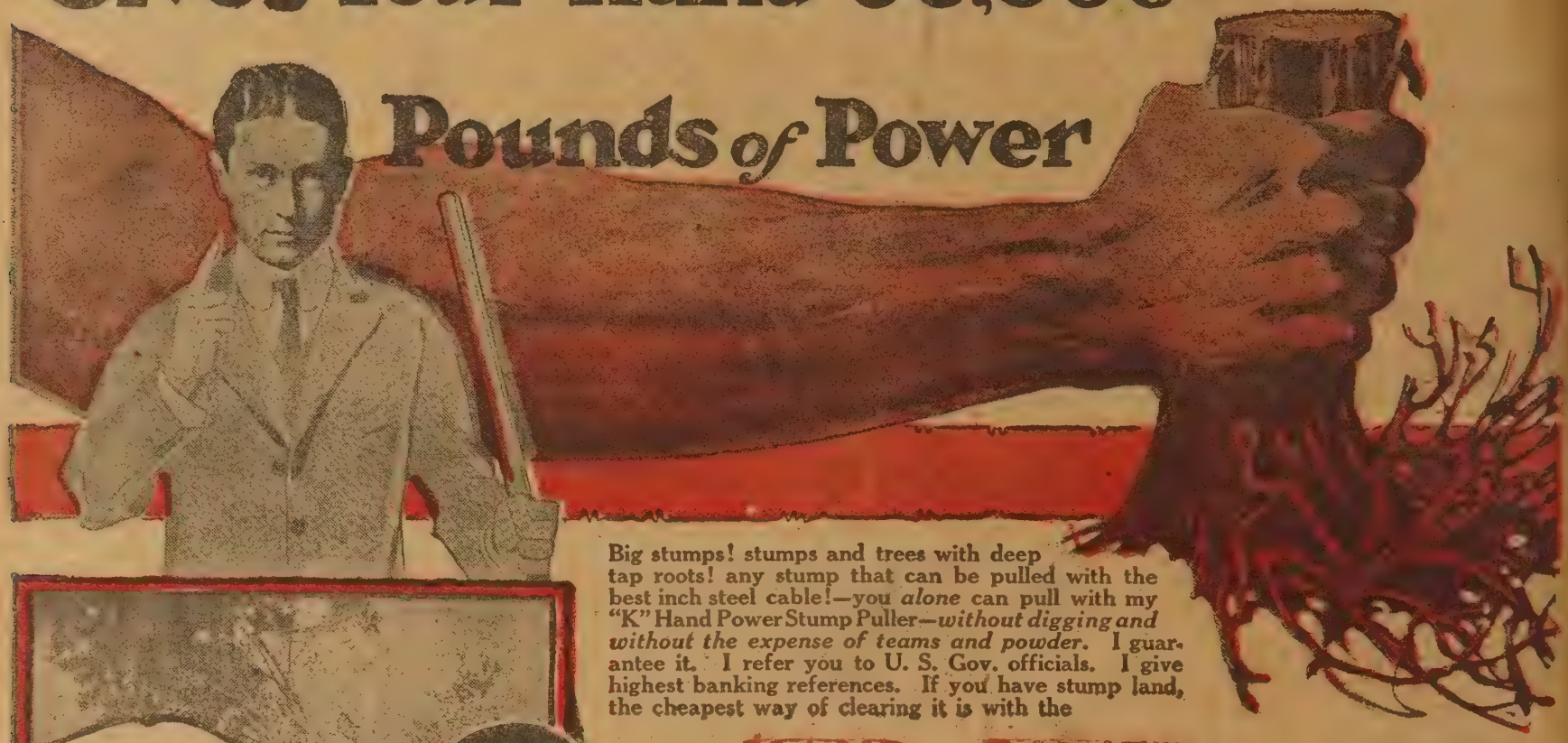
WANTED—TO HEAR FROM OWNER OF farm or unimproved land for sale. O. K. Hawley, Baldwin, Wis.

**Just What You Want**
may be offered in this weeks' Want Ads at a bargain. It's a good idea to look them over every week.

When answering advertisements don't fail to mention this paper.

# My K Hand Stump Puller

## Gives Your Hand 96,000 Pounds of Power



Big stumps! stumps and trees with deep tap roots! any stump that can be pulled with the best inch steel cable!—you *alone* can pull with my "K" Hand Power Stump Puller—*without digging and without the expense of teams and powder.* I guarantee it. I refer you to U. S. Gov. officials. I give highest banking references. If you have stump land, the cheapest way of clearing it is with the

HAND POWER

# K Stump Puller

Frank Hance, a *one-armed* farmer of Bowie, Md., pulling a double silver maple 3 ft. 8 in. in diameter at the ground, with deep tap roots. This is an easy pull for the "K," as the cable can be hitched high and the leverage is consequently greater.

### How the "K" Pulls Biggest Stumps

The "K" works on the leverage principle of the ordinary lifting jack, except that the power is applied on a cog-wheel instead of a standard. 100 lbs. push on the lever develops a 48-ton pull on the stump—all an inch steel cable will hold. One man operates it alone—no teams to pay for—no walking.

### A Mechanical Wonder

Made of finest steel—guaranteed against breakage. Weighs only 171 lbs.—easily carried or hauled about on its own truck wheels. Has two speeds—60 feet per minute for hauling in cable or for small stumps—slow speed for heavy pulls. *Works equally well on hillsides and marshes where horses can not work*

### Owners Praise It

H. Sinclair of the Dept. of the Interior, a U. S. Gov. official, writes: "The stump puller is a wonder."

Ernest Thompson Seton, author and naturalist, declares the "K" "a great success."

Hundreds of owners write in, telling of pulling six- and seven-foot stumps, of pulling faster and pulling bigger stumps than by any other machine.

**Special Offer** I am making a special offer to get a "K" Stump Puller introduced in every neighborhood. Write me today for full information and for free book on Land Clearing.

**Walter J. Fitzpatrick**

Box 32 182 Fifth St. San Francisco, Cal.



H. G. Hunzicker of Foster, Wash., pulling a 24-inch fir stump with deep tap roots out of hard ground, without using powder or cutting any roots.

**Tear Out and Mail Today**

Walter J. Fitzpatrick
Box 32 182 Fifth St., San Francisco, Cal.
Send me full particulars on your special offer and your free booklet on Land Clearing.

Name_____

Address_____

DECEMBER 19, 1918. Washington's Great Farm Magazine EVERY WEEK

# THE WASHINGTON FARMER

SUCCESSOR TO
THE RANCH PACIFIC DAIRYMAN HORN AND HOOF



Answer the
Red Cross
Christmas Roll Call
All you need is a heart and a dollar




**THIS year America harvested a mighty crop of corn.** It will run well over two-and-a-half billion bushels, which, huge as it is, is still about one-fourth billion bushels less than the yearly average.

Most of us can remember some twenty-five years ago when corn sold for 15c a bushel, or less. Yet today it brings many times that much. What gives it its value?

Corn is worth money ***principally because it can profitably be fed to cattle and hogs.*** More than eighty per cent of the country's corn crop is consumed upon the farms for feed. And the reason it can be consumed where it is produced is that the farmer or stockman has convenient, nearby markets where he can sell his livestock any day in the year and receive spot cash for his shipments.

## The Prop of the Feeding Industry

If there were no quick markets, if the killing of cattle, hogs and sheep were in the undeveloped stage in which it was when the evolution of the packing industry began, could farmers today afford to plant millions of acres to corn and feed it to their animals?

Livestock makes the value of corn—not corn the value of livestock. Rough grains would be worth little if there were no demand for grain-fed animals, and lands devoted to corn-growing would never have attained their present high value without the development of marketing outlets for stock, created by the packing industry.

## Making a 12 Months' Selling Season

In the opening up and maintenance of these markets Armour and Company have played an important part. Armour plants are located as near to centers of production as economical operation will permit. Modern refrigerator cars carry the meats and the meat products to every part of the country. There are over four hundred Armour branch houses in heavy consuming centers each with its corps of trained salesmen still further extending the markets.

And for many years it has been the Armour policy to reinvest over ninety per cent of the entire earnings of the business in new plants and equipment, instead of taking them out in dividends. Thus have markets been expanded and developed to insure safety for American livestock growers.

Whether you grow corn to sell to others to feed, or feed it to livestock yourself, it is well to bear in mind the part that Armour and Company have played in giving it the value that it has today.

Armour's QUALITY PRODUCTS

This is the Mark Under Which Your Best Products Reach the Consumer

**ARMOUR AND COMPANY**
CHICAGO

## *Replenishing Europe's Depleted Herds*

**Since the war began, there has been a decrease in European meat-animals by some 114,000,000 head. Potatoes, wheat and like food-stuffs can be produced in quantities in a few months after peace is declared. But it will take years to build up a sufficient supply of cattle, hogs and sheep in devastated Belgium and France. The world will continue to look to American producers for meat for a long time to come.**

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 51. THE RANCH PACIFIC DAIRYMAN HORN AND HOOF December 19, 1918

# Need One Big Boss, Sure Enough

## *Peace Conditions, No Less Than War Conditions, Demand Farm Production Administrator*

The crisis demands the immediate appointment of the ablest available man in the country as national war-time food production administrator, who will fire the imagination of all the people, consumer as well as producer, to the supreme necessity of increased food production, and who will establish far-reaching cooperation with the agricultural department, agricultural colleges and farmers in all sections of the country in meeting their war-time food production difficulties, just as Hoover has brought home to every family the need of food conservation, and just as the Red Cross campaign has swept the entire nation under the leadership of Davison.

The above is the closing paragraph of a telegram sent to President Wilson from Spokane, December 28, 1917, launching the movement for the immediate appointment of a national food production administrator. Representative interests of the Pacific northwest were included in the signatures for this telegram, the first to sign being The Pacific Northwest Farm Trio, by its managing editor.

"Crisis Demands Food Production Administrator," was the heading under which this movement was first chronicled in THE FARMER of January 31, 1918. Reprints of the telegram were also sent broadcast throughout the country and here are some of the replies received:

**Senator Miles Poindexter of Washington: Am immediately recommending to the president favorable action upon the suggestions contained in your joint telegram, which I think is highly meritorious.**

**Senator William E. Borah of Idaho: I have your letter of the 31st. I think your idea a good one and I shall be glad to cooperate in any way I can.**

**Hon. Champ Clark, speaker of the house of representatives: I have your note with the enclosures. Your general idea is one I have been preaching for a good while. I have tried to persuade the powers that be to that effect, apparently, without success.**

**Governor Arthur Capper, Kansas: I am in full accord with the movement, and for several months I have been doing everything in my power to arouse our people to the necessity of raising every possible pound of foodstuffs.**

**Governor Lynn J. Frazier of North Dakota: Your message sent to the president provides the means which I believe would be a great assistance in the increase of food production for next year.**

**Governor Sidney J. Catts of Florida: I have your letter of recent date, in which you tell me that the biggest war problem of today is war supplies, and asking me if your telegram to the president does not help. I am sure it does.**

**Wesley Webb, secretary of the Delaware state board of agriculture: Your telegram to President Wilson on food production strikes the matter squarely and solidly, and it has the hearty and unqualified support of the department of agriculture of Delaware.**

**C. P. Norgord, Wisconsin state commissioner of agriculture: Your appeal to President Wilson I believe is seconded by all of those who know the food situation, and the present prospects for the coming crop.**

**P. G. Holden, director of agricultural extension department of the International Harvester company: I am in hearty sympathy with the suggestion which you make, but I also want to add that I think it should be done with the least possible delay.**

Many other letters were received, some heartily indorsing, others seeing the need, but doubting as to the method to be pursued, and so on.

As has been stated elsewhere, THE FARMER has continued to insist upon the crying need for a national food production administrator. Moreover, while in Washington, D. C., last month, taking part in a conference with farm editors and the secretary of agriculture, the managing editor of THE FARMER received and presented to that conference the following telegram from Ben C. Holt of Spokane, of the Holt Manufacturing company:

I am in full accord with proposed appointment of national food production administrator. The problem is now one of increased food production rather than food conservation. The latter can not be further enlarged by American people, but the field of increased production offers immense possibilities. Secretary Houston has rendered service of incalculable benefit, and I am convinced that his work would be tremendously benefited by a food production administrator of the caliber of Hoover, Schwab or Ryan.

THE FARMER has continued this campaign even down to its issue of November 28, 1918, when it published Gifford Pinchot's strong appeal in behalf of the farmer, and said editorially:

Mr. Pinchot declares that three great blunders were made in dealing with food production while we were at war. They are precisely the three blunders so often pointed out by THE FARMER.

1. Giving our principal attention to the conservation of what food we had, instead of to the production of more food.

2. Failure to make it possible for the farmer to get enough labor, farm supplies and credit to give him a reasonable chance to raise the crops the nation and the world require.

3. The third blunder was in excluding the farmers from partnership in the conduct of the war, and especially that part of it which had to do with food supply.

These three blunders grew out of the government's failure to create a national food production administrator. If the country had had such an official, a man of preeminent ability, he would have formulated a clear-cut, helpful program of increased food production. He would have called on congress to drop its niggardly policy of providing ridiculously inadequate labor, farm supplies and credit and he would have insisted that the farmers of the nation have proportionate representation with organized labor on all of the war boards and commissions.

Mr. Pinchot makes a strong case and his appeal should make an impression upon official Washington.

It is becoming more and more evident every day that peace conditions no less than war conditions demand the ablest available man in the country as a farm production administrator.

The following is reproduced from the editorial page of The Country Gentleman of December 7, 1918. The growing recognition of the outstanding need for a national food production administrator is extremely gratifying to THE FARMER We have been insisting in season and out of season that the agricultural crisis throughout the world demanded that food production in the United States should be put upon a thorough business basis, with a man of national caliber at its head:

### One Big Boss

Are we to have one big boss for food for peace?

Are we to have unified command of the new and greater production that the American farmer must shoulder?

Hoover has been a master of conservation.

There has been no master of production.

There has been no sympathetic understanding leadership for the farmer in our government during the war.

We barely squeezed through and fed ourselves and our allies.

Now we face the enormously greater burden of feeding the half-starved peoples of all Europe as well as our allies and ourselves.

The American farmer demands leadership that he can trust; that he can follow with enthusiasm; that he can sweat for to the limit.

Give us less namby-pamby complacency in the department of agriculture and vastly more big slashing all-American "git up and git." Give us a commander in the field and save us from a continuation on the job of an indoor laboratory chieftain who can see the farmer only as a molecule to be applied by formula to the great warm-blooded human task of saving the world from famine.

# Increased Fire Insurance Is Opposed

H. O. Fishback, state insurance commissioner of Washington, is making a commendable stand against the general increase in fire insurance rates, amounting to 10 per cent, which became effective on November 1. This increase was ordered in by the insurance companies.

"Our laws," Commissioner Fishback explains, "are such that the insurance commissioner is without authority to prevent what he considers to be the arbitrary and unjust action of those in control of stock fire insurance in this state."

Mr. Fishback announces that his department will prepare drafts of such measures as are thought necessary to place under the control of the commissioner the regulation of all rate increases, giving him such supervisory authority over the making of rates as will best protect the citizens from unreasonable and arbitrary action by the managers of rating bureaus or combinations of companies or their managers. Legislation will also be proposed for the enactment ow laws controlling applications for insurance and better inspection of properties.

Commissioner Fishback is convinced that the proposed 10 per cent increase is unwarranted and has the records to sustain his contention. In a statement to the public he shows that the insurance business has been very profitable in this state, particularly in the last two years.

The commissioner says:

The premiums and losses of stock fire insurance companies for the last five years covering Washington risks, as shown by the reports on file in this department, are as follows:

| Year. | Premiums. | Losses. |
|---|---|---|
| 1913 | $5,050,170 | $2,865,247 |
| 1914 | 5,373,492 | 3,287,314 |
| 1915 | 5,053,368 | 3,316,855 |
| 1916 | 5,415,284 | 2,668,096 |
| 1917 | 6,772,368 | 2,185,416 |
| Total five years.. | $27,664,682 | $14,322,928 |

It will thus be seen that $27,664,682 was paid to stock companies and $14,322,928 was received by property owners in return for payment of losses. This is at the rate of a return to policyholders in losses of approximately 53 cents out of each dollar paid during a five-year period. The above result alone would not justify a general increase.

Conditions during the last two years, however, have been considerably changed for the better. The department has been doing a good deal of fire prevention work and through the very hearty cooperation and assistance of local organizations in the various municipalities and outlying districts a better feeling has been created and much cooperative assistance has been secured for the protection of property against loss by fire. The work has resulted in cleaning up and safeguarding properties of all kinds so that the possibility of loss by fire from carelessness or through malicious actions has been greatly reduced.

The department claims that through the result of this work and also the fact that more attention is being given to better construction of buildings and their equipment a better loss record has been obtained and that the ratio is showing a decrease over past years, which is more clearly illustrated by taking the figures of premiums and losses for the last two years, which cover the period of the more active work in fire prevention:

| Year. | Premiums. | Losses. |
|---|---|---|
| 1916 | $5,415,284 | $2,668,096 |
| 1917 | 6,772,368 | 2,185,416 |
| Totals | $12,187,652 | $4,853,512 |

**Heavier Premium Income.**

This shows a loss ratio or return to policyholders in the last two years of approximately 40 cents on each dollar paid, while the loss ratio for the last year (1917) for which we have complete figures is much lower than any year of the group, being a little over 32 per cent. Our best information covering the current year shows that the companies are receiving a much heavier premium income and are still experiencing a very favorable loss record.

The reform sought by Commissioner Fishback should have the earnest and aggressive support of the farmers of Washington. It is preposterous longer to let the companies have a completely free hand in the making of rates that should be put under government control and regulation.

But this reform will not be easily won. It will be fought at Olympia by the insurance interests, and unless the farmers and the public in general are vigilant in demanding their rights Commissioner Fishback's bill to put the powerful insurance companies under state regulation will be pigeon-holed in committee or suppressed by the powerful rules committees of the senate and the house.

# Join Red Cross

## Great Christmas Drive Is Now On

There is no other single organization but the Red Cross that could go before the American people and in one week secure a membership of many millions. Last year just before Christmas, it did it. This year it is making its appeal once again, and as more than 20,000,000 persons willingly and gladly paid their membership fee then—a freewill offering for the relief of suffering humanity—so now will these and other millions refill this wonderful society's purse that it may continue its work of humanity during these desperate days of starvation in so many stricken lands of Europe. Its great Christmas membership drive is on this week. The motto must be, "Every one a member."

The following is a proclamation issued by President Wilson, calling the campaign to the attention of the American people:

To the American people:

One year ago 22,000,000 Americans, by enrolling as members of the Red Cross at Christmas time, sent to the men who were fighting our battles overseas a stimulating message of cheer and good will. They made it clear that our people were of their own free choice united with their government in the determination not only to wage war with the instruments of destruction, but also by every means in their power to repair the ravages of the invader and sustain and renew the spirit of the army and of the homes which they represented. The friends of the American Red Cross in Italy, Belgium and France have told and will tell again the story of how the Red Cross workers restored morale in the hospitals, in the camps and at the cantonments, and we ought to be very proud that we have been permitted to be of service to those whose sufferings and whose glory are the heritage of humanity.

Now, by God's grace, the Red Cross Christmas message of 1918 is to be a message of peace as well as a message of good will. But peace does not mean that we can fold our hands. It means further sacrifice. We must prove conclusively to an attentive world that America is permanently aroused to the needs of the new era, our old indifference gone forever.

The exact nature of the future service of the Red Cross will depend upon the program of the associated governments, but there is immediate need today for every heartening word and for every helpful service. We must not forget that our soldiers and our sailors are still under orders and still have duties of the highest consequence, and that the Red Cross Christian membership means a great deal to them. The people of the saddened lands, moreover, returning home today where there are no homes, must have the assurance that the hearts of our people are with them in the dark and doubtful days ahead. Let us, so far as we can, help them back to faith in mercy and in future happiness.

As president of the Red Cross, conscious in this great hour of the value of such a message from the American people, I should be glad if every American would join the Red Cross for 1919, and thus send forth to the whole human family the Christmas greeting for which it waits and for which it stands in greatest need.

WOODROW WILSON.

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The Washington Farmer has established an INFORMATION BUREAU at the NATIONAL CAPITAL, which is at the service of its readers, and which they are asked to use freely. It is intended to be a clearing house of government information. Address inquires (including 3c stamp) to The Washington Farmer INFORMATION BUREAU, Washington, D. C.

## Heaven Reaches Down to Earth

Four years of horror have just passed; four years of unprecedented inhumanity have stained the world's calendar with blood. Sin, wickedness and fiendishness beyond understanding have been amuck, and agony and misery of mind and body have been the fruits. Even at this Christmastide the world is sick with sorrow, hunger and want. Millions are without food. Thousands and thousands are maimed and diseased. Numberless mounds rise over the dead; countless human bones bleach where there was no one to hide them from the elements; unnumbered homes are bereft. And today, at this happy Christmas season in our fortunate land, little children in the stricken lands of Europe are dying by the hundreds and thousands for want of food and shelter. It is the most terrible scene upon which the world ever looked. It is hell itself brought to earth.

But heaven is reaching down with a healing touch. All is not sin; all is not want; all is not misery and sickness and suffering. The world is not lost; inhumanity is not its master. Over all God rules. The great heart of mankind is stirred to deeds of love as never before in the history of earth. The hand of brotherliness is stretching forth, reaching into the uttermost corners of the weary land, seeking and saving that which has been all but lost. Not even the machine of war itself was so organized for its work of destruction as is the machine of mercy for its work of redemption. With no more zeal did civilization rally for its holy war against frightfulness than it now rallies for its war against suffering under the leadership of the great, Christlike organization, the American Red Cross.

The Red Cross is everywhere. It reaches to where Armenian thousands have perished or are perishing at the hand of the heartless Turk. It ventures unafraid into the disease-stricken areas where the god of war spread his desolation. It enters the home that was robbed of its bread winner and visited with unspeakable horror during those terrible days of Hun invasion. It ministers even to him who was an enemy. It succors the needy at home.

Today this organization appeals to the people of this happy nation, this land that escaped the terrors that visited Belgium and France. It asks that the American people share a little of their surplus with the sick and the hungry and the shelterless. It asks one dollar. One dollar! Simply a membership fee, not a gift, not a contribution, not absence from home for a year or for years in the fields across the sea. But it asks that membership of all the American people. Last Christmas more than 20,000,000 men, women and children responded to the appeal. This year—is there a person in all this land who, if he possess more than the bare necessities of life, will refuse? Is there one who will neglect to do his share to save a life? Is there one who will clutch his purse and let a child die? Heaven forbid! "Answer the Red Cross Christmas roll call. A heart and a dollar are all that is required."

Some one has said that sin is the choice of the lesser good.

## Banking Accommodations for Farmers

Secretary Houston of the department of agriculture says in his annual report that investigations by the department have shown there are many farmers prevented by circumstances from securing banking accommodations they need.

It strikes us that the secretary's recommendation falls considerably short of the true solution of this need. He advises the provision of a system of personal credit unions for the benefit of the individuals whose financial circumstances and scale of operations make it difficult for them to obtain accommodations through ordinary channels. He seems, however, to have only hazy views upon this method, as he says it is difficult to outline what further can be done by the federal government directly to stimulate personal credit unions.

The secretary then passes the buck to the individual states. The conclusion up to the present time, he says, seems to be that the field is one primarily for the states to occupy through sound legislation and points out that in the last five years state laws more or less adapted to the purpose have been enacted in Massachusetts, New York, Rhode Island, Wisconsin, Texas, North Carolina, South Carolina, Utah and Oregon.

The problem is not nearly so difficult as Secretary Houston regards it. It needs only an enlargement of the machinery of the present farm loan bank system. The organization is perfected, the officials and their employes chosen and office quarters provided, and there is only needed the addition of a personal credit bureau to fill the needs which Secretary Houston admits exist and should be met.

The advantages of this plan are self-evident. It would reduce the overhead expenses to the minimum and would put personal credit under the control of a going organization of public officials who are best qualified of all others to pass upon the individual farmer's personal credit. Broad, comprehensive action by the federal government is much to be preferred to the plan of single state action advocated by the secretary. It would have the merit of uniformity and simplicity, where state plans, framed by different legislatures, would be confusing and conflicting. It is a mystery to us that Secretary Houston can not grasp a fact so outstanding and act upon it.

Uncertainties make life interesting; sometimes more so to others than to one's self.

## Should Prevent Double Freight

The stock yards have done a great thing for the live stock industry of the northwest by turning poorly finished stock or stuff that was well fitted to be breeding stock back to farmers who were in a position to finish them or use them for breeding purposes. They have done much to create a sentiment against marketing stock that should not be marketed. Thousands of head have been shipped to the yards in unfit condition and have been reshipped to farmers who could handle them. Many of them have gone back to the same communities from which they came.

There is a point to consider. It is good business to send them back, but it would be better business if the communities would see to it that they were not sent in in the first place. Instead of shipping them 200 miles and back, it would be better to drive them or haul them, as the case might be, 10 miles across country to the farm or ranch that could keep them till the proper time to market. Here is one of the great things that community organizations can do, and that, in many instances, they are doing.

## One Farmer's Habit

I know a farmer who, while driving through the country districts, is always comparing crops, soils and whatever progress is made on various farms, with much interest to himself. He has a remarkably clear memory of the past history of different farms and the methods followed in farming operations. On some farms he will notice where a ditch has been made in a field with a certain type of soil, and in the future he will notice the resultant change in the texture of the soil and the change in the size and appearance of the crop harvested. If a farmer is raising a new crop he notices all the details concerning it. If a farmer is feeding a new feed to his stock he inquires for the personal experiences of the farmer. If he notices a farmer who has a hand device which will save time and lighten labor he is ready to profit by the experiences of the other farmer.

Individually we must not close our eyes and shut our ears to the world. Whatever we can use to our own advantage we must be willing to use and improve on, no matter by whom it is practiced, as long as it will be of constructive benefit to us. Nationally we must observe what other countries are doing and adopt whatever fits our needs. If we practice ancestor worship or custom worship like the Chinese, closing our eyes and ears and not observing others, we will be the victims of a psychological illusion. C. J. M.

## Farmers Cooperate Successfully

There has been a general feeling that cooperation was something complex and baffling. Some forms of it may be, but there is a practical sort of cooperation that is simple. It requires unity of purpose and a little honest, business-like direction. It doesn't require a big organization with lots of red tape to ship a carload of stock gathered from a half dozen farms, but it often pays. It doesn't take a big organization to carry on a rabbit killing campaign, a squirrel poisoning campaign, a grasshopper eradication campaign. It doesn't require a big organization with a lot of capital stock and incorporators and lawyers' fees to ship out a carload of potatoes or ship in a carload of feed. Just a little business direction and a spirit of community helpfulness will do it as well as a big corporation. Such things as these are being done all over the country. There is hardly an issue of this paper that doesn't contain a narrative of some such experience to prove it. Farmers are cooperating in matters of this kind successfully. And this does not mean that the big, inclusive cooperative organization is not practical. It is. That' too, has been proved. But it is safe to use the smaller beginnings as stepping stones to the larger, rather than jump too hastily into great organizations.

## Northwest Poultry Are Winners

At the national egg laying contest conducted at Storrs, Conn., during the past year, a pen of northwestern hens won first place against competition from all over America, and they led by a margin so great that there was no occasion for a "recount of the eggs." Not only that, but a pen of northwestern hens won third place in the contest. The winners of first place were the pen of ten hens from the Oregon Agricultural college, which has an enviable record in poultry development. They laid 2352 eggs in the twelve months, or an average of over 235 each, which is almost two eggs for every three days of the year, Sundays included. The winner of third place was the Hollywood pen from Hollywood, Wash., which laid 2043 eggs in the year, or over 204 each. It is probable that the record made by the Oregon hens is a world record, though this is not positively established. These winnings are a great credit to the poultry industry of the northwest, and to the men and women who have developed it.

## Consider the Winter Schools

The season of the winter schools at the colleges is approaching. There are numerous courses offered—farm management, dairying, live stock, gas engines, home economics, soils and many others. They afford a great opportunity.

# Wilson Will See Devastations

## *Preliminary Peace Conference Convenes Early Next Month*

The announcement from France that the preliminary peace conference will not convene formally until early in January and that in the meantime President Wilson will be conducted over the devastated areas of France and Belgium bears deep significance. The president will see for the first time with his own eyes the nature and extent of the depredations of the German military organization. For the first time he will hear personally General Pershing's story of the nature of German methods of warfare. For the first time he will see prisoners of war returning from German prison camps; for the first time see Belgian and French girls and women returning from their enforced employment in Germany.

Is it not more than a possibility that the conference has been delayed by the European allies, in part, at least, to permit America's president to see these things from the European point of view and to see Germany and Germans "close up"? The president's expressed determination to see brought about a just peace is no better known than his remarkable patience with German wrongs prior to this country's entrance into the war, and there is reason to believe that the European allies are somewhat fearful that his influence in the peace conference will result in a peace too liberal to Germany in view of the latter's crimes. To illustrate, here is an extract from the address of welcome by President Poincare of France at the reception to President Wilson in Paris last week:

"You, Mr. President, will be able to measure with your own eyes the extent of the disasters, and the French government will make known to you the authentic documents in which the German general staff developed with astounding cynicism its progress of pillage and industrial annihilation. Your noble conscience will pronounce a verdict on these facts.

"Should this guilt remain unpunished, could it be renewed, the most splendid victories would be in vain.

"Mr. President, France has struggled, has endured and has suffered during four long years; she has bled at every vein; she has lost the best of her children; she mourns for her youths. She yearns now, even as you do, for a peace of justice and security.

"It was not that she might be exposed once again to aggressions that she submitted to such sacrifice. Nor was it in order that criminals should go unpunished, that they might lift their heads again to make ready for new crimes, that under your strong leadership America armed herself and crossed the ocean."

### FRANCE WANTS THOROUGH SAFEGUARDS.

"Peace must make amends for the misery and sadness of yesterday, and it must be a guarantee against the dangers of tomorrow," continued the French president. "The association which has been formed for the purpose of war between the United States and the allies and which contains the seed of the permanent institutions of which you have spoken so eloquently, will find from this day forward a clear and profitable employment in the concerted search for equitable decisions and in the mutual support which we need if we are to make our rights prevail.

"Whatever safeguards we may erect for the future no one, alas, can assert that we shall forever spare to mankind the horrors of new wars. Five years ago the processes of science and the state of civilization might have permitted the hope that no government, however autocratic, would have succeeded in hurling armed nations upon Belgium and Serbia.

**Without lending ourselves to the illusion that posterity will be forever more safe from these collective follies, we must introduce into the peace we are going to build up all the conditions of justice and all the safeguards of civilization that we can."**

### ETERNAL PRINCIPLES OF RIGHT.

That the underlying purposes of both France and America were the same in fighting the battles of the war was declared by President Wilson in his reply to President Poincare's address of welcome.

"From the first the thought of the people of the United States turned toward something more than the mere winning of this war," he said. "It turned to the establishment of eternal principles of right and justice.

"It realized that merely to win the war was not enough; that it must be won in such a way and the questions raised by it settled in such a way as to insure the future peace of the world and lay the foundations for the freedom and happiness of its many peoples and nations.

"Never before has war worn so terrible a visage or exhibited more grossly the debasing influence of illicit ambitions. I am sure that I shall look upon the ruin wrought by the armies of the central empires with the same repulsion and deep indignation that they stir in the hearts of men of France and Belgium."

### GREAT RECEPTION TO THE PRESIDENT.

President Wilson reached Paris Saturday. Upon his landing at Brest he was accorded a tremendous ovation, which continued until he reached the French capital, where 2,000,000 people joined in a joyous welcome. It is stated that even the day of the signing of the armistice did not see Paris so boisterously enthusiastic. Thirty-six thousand French soldiers lined the ways for the president's entrance into the city. Praises for America were heard on every hand. A spirit of the greatest friendship was manifest.

It is interesting to note that in neither President Poincare's nor President Wilson's addresses at the formal reception was any reference made to the cooperation of England in the war just closed. While this bears little or no significance, it does call to mind that England's relationship to the settlement of the peace issues is unlike that of either France or America.

### ENGLAND'S POWER RESTS ON THE SEA.

There was a keener commercial rivalry between England and Germany than between Germany and any of the other allies. Not only England's national life, but her commercial life, her maritime power, which ranked first in all the world, were at stake when Germany ran amuck. "Brittania rules the waves" has been England's motto. What if the peace conference agrees to the formation of a league of nations that will prevent any nation ruling the waves? What if the motto becomes "The league of nations rules the waves"? Will England whose sea supremacy played a great part in winning the war, agree to be shorn of that individual power? This is one of the big problems that the peace conference will have to deal with, and there has been expression of fear that a break in the allied harmony might result from this problem.

### GERMANY IS BIDDING TO AMERICA.

Undoubtedly Germany is depending upon America for whatever of liberality the peace conference may grant her. Her spokesmen indicate it in their words and her leaders by their deeds. Since the war closed, and before, all messages relative to peace or assistance have been directed to America. Instead of receiving the soldiers of America with a show of resentment as they occupy German territory, the people of Germany are reported to be fawning upon them in an attempt to win their friendship. This attitude is natural, in view of the fact that America so long showed patience with German ruthlessness, and is known to be a nation of liberal sentiments toward all peoples.

### ALLIED ARMIES ARE EAST OF PHINE.

The allied forces of occupation have now occupied all the German territory west of the Rhine and have crossed to the east bank to hold the semi-circular areas commanding the bridges of most strategic importance. This practically completes the occupation of German territory designated in the armistice terms. The terms of the armistice have been extended to apply until January 17, the original 30 days having expired a few days ago. It is probable that, from time to time, the armistice will be further extended until the final peace is agreed upon, unless the Germans fail to live up to some of its agreements, when it might be terminated upon 48 hours' notice and a state of war automatically be resumed.

### WANT VOLUNTEER SYSTEM ABANDONED.

That the volunteer system of raising an army is unsatisfactory and should never again be resorted to in America is the opinion expressed by Provost Marshal General Crowder, who has controlled the machinery of the selective draft during the recent war. He declares that the selective service law has enabled the government in this war to register 23,740,000 Americans, put into the field nearly 3,000,000 fighters and to have in readiness to entrain on November 11, when the armistice was signed, 2,000,000 more soldiers, all within a period of 18 months. It would be a "calamity," he said, for the United States to revert to the volunteer system in view of such a successful test of selective service, adding that the American conscripts had shown the valor, aggressiveness and initiative of the most seasoned troops.

### CONTROL RAILROADS FOR FIVE YEARS.

One of the biggest questions before congress received a new interest last week when Director General McAdoo, in charge of the railroads for the government, recommended to congress that government control of the roads be extended for a period of five years, or until January 1, 1924. While Mr. McAdoo said that he had permission from President Wilson to say that the president's view of the problem accorded with that recommendation, it came closely following the statement by the president to congress that he had no specific recommendation to make.

Mr. McAdoo argued, in presenting the matter to congress, that for the railroads to remain under government control for 21 months after the concluding of a final peace, as provided by the present law, would mean that neither the government nor the railroad owners could go ahead with needed improvement and development, but that the 21 months would be practically a stand-still period for the railroad industry. He said that there were two alternatives: To extend the period of government control or to return the lines to their private ownership at the earliest possible date following the concluding of peace. He urged that the time be extended, saying that now was the appropriate time for the experiment of government control to be given a thorough trial under peace conditions.

The proposal met with both approval and disapproval in congress. Opponents of government ownership said that it was intended as another step toward permanent ownership and control by the government. Mr. McAdoo said that he had no such idea in mind, but was wholly disinterested in the question except that it should be tried out and decided upon a sound basis.

A large group of railroad executives gave out a statement that to extend the period of government control would "lead to delay and confusion and demoralization of the organization of the roads."

# More Food on Hand This Year

## Food Survey Compares Stocks of Past Two Years

A food survey of the commercial stocks of grain, flour and miscellaneous products in the United States on November 1, 1918, was made by the United States bureau of markets. According to the figures given, there was a total of 275,000,000 bushels of wheat reported by 12,538 firms on hand November 1, 1918, as against 80,000,000 bushels November 1, 1917, reported by 10,630 firms. In other words, there were more than two and a half times as much wheat on hand this year as there was a year ago, comparing the number of firms reporting as well as the number of bushels reported.

Stocks of corn reported on hand November 1, 1918, total 17,000,000 bushels, as against about 5,000,000 bushels last year; of oats, 80,000,000 bushels as against 67,000,000 bushels last year; of barley, 34,000,000 bushels as against 23,000,000 bushels last year; of rye, 15,000,000 bushels as against 8,000,000 bushels last year; of wheat-flour, 5,385,000 barrels as against 3,344,000 barrels last year.

Cold storage stock of apples reported November 1, 1918, gives a total of 3,607,000 barrels as against 3,296,000 barrels last year; of eggs, 3,659,000 cases as against 4,411,000 cases last year; of frozen eggs, 13,242,000 pounds as against 16,000,000 pounds last year; of butter, 83,906,000 pounds as against 99,764,000 pounds last year; of American cheese 33,656,000 pounds as against 77,433,000 pounds last year.

## *Washington Gleanings*

A branch containing ripe raspberries, many blooms and fruit in formation was picked December 5 by C. W. J. Reckers of White Salmon.

M. Brinkerhoff has been named Okanogan county superintendent of schools to succeed Miss Georgian Donals, who resigned to become principal at Tonasket.

The annual report of the Wenaha forest reserve shows 26 fires last year, of which five were set by careless campers. Twenty were caused by lightning and one was incendiary.

William Bishop of Chimacum says that the demand for purebred dairy cattle all over the country is just beginning, and he foresees the greatest call for breeding stock in the history of the United States.

Under the leadership of M. J. Newhouse, Clarke county agent, the agricultural council was reorganized and a county branch of the farm bureau was organized. Nine community county districts were laid off, with committees in charge.

Three hundred thousand silver trout eggs have been assigned to the Skagit game commission from the state headquarters, to be hatched at the Samiah hatchery. This is the greatest allotment of trout ever made that county at a single time.

A stockmen's brand book, the first published in the vicinity of Okanogan, has been issued by the Independent. It contains the brands and earmarks used by 750 stockmen who are members of the different stock associations using the ranges of the Colville and Okanogan national forests.

Yakima poultry fanciers have decided to make no attempt to hold the annual poultry show on account of the difficulties of doing so under influenza conditions. Money is available to finance the exhibition, but it is believed impossible to get together a creditable display.

Many Seattle school war gardens produced more than enough to pay for this winter's fuel, declared Robert P. Chapman, who had charge of the war garden work last winter. Mr. Chapman has been made regional director of the United States school garden army in Washington and Oregon. He is now urging everybody to get things ready for next year's planting.

The Getchell grange met recently and the following officers were elected: Master, J. W. Hawes; overseer, I. K. Hope; stewart, C. E. Westlund; chaplain, N. A. Knowlton; secretary, P. J. Gehl; treasurer, J. H. Miller; lecturer, Mrs. Emma Jones; assistant stewart, Albert Griffith; lady assistant stewart, Mrs. P. J. Gehl; doorkeeper, J. T. Jackson; ceres, Mrs. O. K. Anderson; pomona, Mrs. N. A. Knowlton; Flora, Mrs. J. H. Miller.

Well-signed petitions for the construction of 19 miles of hard-surfaced road, under the Donohue road law, were filed with the Yakima county commissioners. The commissioners favor granting the petition and will have surveys made in 1919, construction to be done in 1920. The petitions call for a 10-mile extension of bitulithic road from Piland bridge to Zillah, and for a nine-mile road connecting Sunnyside and Grandview.

Yakima valley fruit shipments to date in 1918 represent a value of $8,353,400, of which over $5,000,000 is the value fixed for 4000 cars of winter apples. Fruit experts estimate 300 cars of apples remain to be moved, thus bringing the value of the year's crop to about $8,000,000. This will equal the value of the 1917 bumper crop, though less 2000 cars. Since July 1 about 7500 cars of fruit have been shipped, of which but 650 cars were peaches, though normal peach shipments are 2000 acres.

Lester Holt, supervising engineer of the Indian reclamation service, with headquarters in Yakima, has received word that $718,000 has been recommended for work on the reservation for the coming year. This is the last of six such payments to be made. For maintenance of laterals and canals in the Wapato project $15,000, and for salaries at the Indian agency $3000 are allowed. The remainder of the appropriation is to be spent in big construction work, of which $500,000 will be spent on the Yakima diversion dam, below Union Gap.

Cull apples used in byproducts plants along produce row alone in Yakima this year, according to a count made last week, total 15,100 tons. The average price paid was $8 a ton. The total return to the farmers was $120,000. Culls are now almost as much in demand as fancy-grade fruit. The byproducts made from this mass of apples includes 400,000 gallons of apple cider or vinegar, 400 tons dried or dehydrated apples, 500,000 cases canned apples, 15,000 cases of apple butter. The byproducts plants now have 3800 tons of culls in storage for future use.

At the annual meeting of the Tieton Water Users' association at Yakima recently, R. K. Tiffany, project manager, recommended that ranchers take over the management and operation of the canal, thus leaving the reclamation service workers free to devote their attention to the large construction work planned for the after-the-war program. At present the work is handled through the Denver office. Indications are that the ranchers, who this year have a $2,000,000 crop, will adopt the plan. H. M. Gilbert, president, was reelected, as was R. H. Hayden, for six years secretary. F. J. Wilcox, Yakima, was elected trustee to succeed J. D. Griffith, Tieton, and Fingel A. Gothberg, Tieton, elected to succeed W. L. Lemon of Yakima, now a captain in the army.

W. P. Conser of White Salmon believes he has proven that a small flock of well-bred poultry can be profitably kept, notwithstanding the high cost during the last year of grain. His record of 20 White Leghorn pullets follows: Began their pullet year on October 21, 1917, at 6 months old; first egg was laid at age of 5 months and 5 days. Production for full 12 months, beginning on above date, has been: Balance of October, 129; November, 344; December, 286; January, 282; February, 248; March, 455; April, 562; May, 455; June, 377; July, 311; August, 188; September, 212; October, to 21, 78, making a total of 3927 eggs. The total value of same has been $157.08; cost of feed, $73, leaving a net profit of $84.08. Average cost of feed, per hen, $3.65; of eggs, per hen, 196 7-20; profit, per hen, $4.20 2-5.

# Yakima Farm Problems

## *Trying to Find the Truth About "Orchard Hay?"*

By PAUL E. TRIEM.

Although the Yakima valley as a whole has had a prosperous year and the total of its farm production has grown wonderfully, yet there are problems which remain to be solved.

Many of these problems are hold-overs from previous seasons; some of them are new, or at any rate have during the present summer attained a distinctness which for the first time raises them into public attention. For instance, what will be the solution of the labor tension of recent years, a tension drawn somewhat tighter this season by the formation of a fruit-workers' union? What is the future of organized selling and of other association work? Is scale gradually increasing throughout the valley, or was the increase noted this summer due to unusual climatic conditions? What is the truth about "orchard hay"? As a contribution of evidence toward the solution of these and similar practical questions affecting the Yakima country, the following interviews with practical growers are submitted:

W. H. Curtis, an old newspaper man formerly connected with the Des Moines (Iowa) "Register and Leader," probably has given these community problems as much earnest attention as any citizen of the county. Mr. Curtis does not question the seriousness of the orchard hay problem—It is impossible to doubt that the arsenical spray in particular must have a deleterious effect on farm animals, when conveyed to the latter through the medium of recently sprayed orchard hay, but he calls attention to one weak spot in a frequently advocated remedy:

"The menace of sprayed forage is serious enough," explains Mr. Curtis, "but the plan which some orchardists have tried of delaying spraying until the hay has been cut is apt to prove an expensive one. One of my neighbors followed this method, and the result was that his crop contained 25 per cent of wormy apples; my crop, just adjoining his, contained less than 1 per cent. I think it is a serious mistake to sacrifice the apple crop for the sake of what little hay can be harvested from between the rows."

Mr. Curtis calls attention to the importance of the farm storage house for fruit. "This matter of the individual farmer providing storage for his crop directly affects the stability of the apple market, and also this big labor problem," he says. "If there is suitable provision on the farm for storing the crop of fruit raised, it is not necessary for the orchardist to rush his apples or pears to market and take whatever price may be offered at the time. Moreover, the crop once stored can be packed by the producer and his family during the winter—it is never too cold here to haul fruit to the station, and this lengthening out of the packing season puts the key to much of the labor problem into the hands of the man who raises the fruit. He can pack it himself, and so be independent of professional packers."

In regard to the matter of selling individually or collectively, Mr. Curtis probably may be called a "liberal." Although one of the early members of associated selling bodies in the valley, he sold his crop direct this year. Two of the changes which selling organizations will have to effect before they will inspire enthusiasm in the minds of producers, Mr. Curtis thinks, are simplification of machinery at the office end, cutting out needless refinement and excrescences in the way of officers and staff, and the speeding up of returns to the growers, many of whom are working on a none too abundant capital.

G. E. Thomas, who farms the W. E. Coumbes orchard just west of Yakima, says that he has had no trouble in feeding orchard hay, but that he is careful not to spray too close to cutting time. Mr. Thomas sold his crop direct, and thinks he saved money by so doing. He is particularly pleased with the returns from his 1700-box peach crop, which brought him 85 cents a box as compared with about 45 cents last season. He reports considerable trouble with scale this year, a fresh outbreak of infection occurring after the pest had apparently been subdued early in the season. He is selling his cull apples to the cider mill for $8 a ton.

T. H. Toll of Dow & Toll has had no trouble from feeding orchard hay, but has had considerable trouble with scale. Mr. Toll thinks there should be more rigid enforcement of the inspection laws, as applied to the production end. He calls attention to the fact that neighbors do not like to report neighbors, even where a bad case of orchard infection is evident.

# Power, Mechanics and Devices

**The purpose of this department is to give helpful suggestions to its readers. The editor invites letters that give experiences or practical ideas along the lines of "power, mechanics and devices" on the farm. Inquiries from any one on any point in which he or she is interested, whether previously touched upon in the department or not, will receive personal reply by mail.**

## Farm Dairies

### To Furnish Supply of Hot Water

By N. D. SHOWALTER, President State Normal School, Cheney, Wash.

Most of the farm dairies are provided with running water in the milk houses, but very few of them have installed systems which furnish an adequate supply of hot water. Each dairyman knows, however, that this is very essential to general sanitation and to the proper care of dairy products in accordance with modern methods. Many farmers have thought a hot water system would prove entirely too expensive and because of this have gone forward year after year materially handicapped in caring for dairy products in the best way. But a hot water plant is neither expensive nor difficult to install.

An independent plant has proved to be most satisfactory, so this article will be confined to the single plan. It is more satisfactory because plenty of hot water is needed constantly and such a plant must be operated throughout the entire year. When the heating system is connected with any other auxiliary plant which only furnishes heating part of the time, the supply of hot water must necessarily be irregular. The independent plant can, of course, be fired as needed, but it is generally best to keep continuous fire through the day. Such will only require a small amount of coal put in occasionally with dampers properly adjusted.

The first requisite for such a hot water plant is water pressure. The running water now used should be collected into a tank of considerable size placed on an elevation above the milk house. The water can then be piped to and connected with the heater, which will give best service when installed near to or in a separate compartment of the milk building.

The apparatus consists of a hot water tank of sufficient size for the needs and the small water jacket heater especially manufactured for this purpose. The size of the tank and the size of the heater will depend entirely upon the amount of water needed—an estimate of the cost will be furnished you by any good plumber. A 50-gallon tank will take care of the needs of 15 to 20 cows, and the complete apparatus, including the price of the heater with special installation by a competent plumber should not cost over $150. Installation should be carefully made and a test made with cold water pressure for leakage before the heater is used. If such a plant is properly installed, it will be found entirely reliable and will give entire satisfaction.

Two kinds of water jacket heaters are generally used. In each case the fire box is surrounded by a water jacket. The heating apparatus is small and will not weigh more than 100 pounds. A small pipe or flue is necessary to care for the smoke, though the amount of fuel consumed is very small indeed. The best service is secured by firing the heater slowly for a time and gradually building up a bed of hot coals which fill the entire fire box to the level of the bottom of the fuel door. This is best done by dampening the coal and causing it to coke rapidly. When the bowl of the heater is well filled with coking coals, the heater may be shut up and will furnish heat for hours without any attention.

Any good hardware company or first-class plumber will furnish you with any additional information or will furnish you with circulars giving details of such a heating plant.

### SCHOOLS FOR TRACTOR OWNERS.

Many tractor and farm machinery houses follow the practice nowadays of holding free service schools for the benefit of those who wish to learn the proper care, adjustment and operation of the machine they may be using. These service schools do not, of course, pretend to give a complete course of technical training, such as is offered by the large motor and tractor schools where expert instructors teach every detail and scientific principle of tractor and motor car operation.

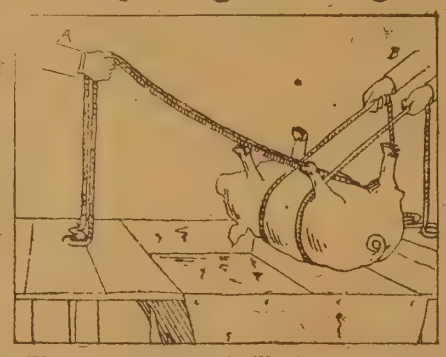
The free service school affords excellent opportunity to become familiar with many of the essential things that every tractor owner should know. In an article on the subject of the service school, L. R. Van Volkenburg, service engineer for the Avery company, says, among other good things:

"In following service work, as the writer has for a great many years, he has noted one very marked feature regarding the handling of machinery, i. e., the trouble that is experienced is due very largely to ignorance on the part of the operator as to the proper care and adjustment of the machine being used. There is a popular conception among users of tractors and other machinery that the so-called expert (this term, however, should never be used, he should be called a service man) is a man with a superior intelligence to the common operator. This, however, is a mistake. The only reason that the service man can go out and make a machine perform correctly where the operator can not, is that this service man has made a study of this particular machine and has familiarized himself with its adjustment and the function of its different parts. In a great many cases, the service man is mentally inferior to the man who is operating the machine. This means that if the operator would just take a little pains to educate himself along the same line as the service man has done, he could become a better operator and even more expert in the care and adjustment of the machine than the service man whom he employs.

"A very large per cent of trouble encountered in operating tractors and other machinery is due to the neglect of little things, which, if attended to at the proper time, would entirely eliminate the cause of the trouble as well as the trouble itself. Many times one minute spent making an adjustment or tightening a bolt will prevent the necessity of the machine being laid up for several days waiting for a service man to come to make the proper repairs or adjustments, and in such cases the actual cost involved would have educated the operator to a point where the trouble could have been avoided entirely.

Those who own tractors can ascertain whether the company whose make of tractor they are using holds service schools, by taking the matter up by letter or through the dealer from whom they bought the machine.

## Easy Hog Scalding




The sketch herewith illustrates an easy and convenient method of handling a hog in the process of scalding. Two ropes are placed around the animal so that one passes just in front of the hind legs and one just behind the front legs. One man takes the position shown by the letter A in the sketch and another the position shown by the letter B. The hog is lowered into the scalding vat by being allowed to roll with the ropes. After being lowered he may easily be rolled over in the water by the same method, each man holding his ends of the ropes sufficiently tight to keep them from slipping about the body.

When the animal is sufficiently scalded one of the men crosses to the other side of the vat and lays his ropes down so that one man stands on each rope, probably over the edge of the platform to prevent slipping. Each man then takes a hold of one of the other ends and together they roll the hog up out of the vat and onto the platform.

# The Milch Cows Win

## Dairyman-Orchardist Tells Story

By PAUL E. TRIEM.

R. B. Stewart, whose trimly-kept fruit and dairy farm adjoins the paved road between Selah and Yakima, has been weighing his orchard in one pan of the scales of justice and his Holsteins in the other. And, according to Mr. Stewart, the trees have been found wanting.

"I make more from the four acres I devote to cows," he comments, "than from the six acres I have in trees; and in addition to this, I have the manure from the cow stable to put back into the land. At the present price of dairy products," adds Mr. Stewart, "even allowing for the high price of feed, there is no reason why the dairyman should not make money."

It is inevitable that a man with so decided an opinion on the disputed point of possible dairy profits should have decided opinions on other branches of the business, and this Yakima farmer certainly has them. "Have I had any trouble with poisoning from orchard hay?" he repeats. "No—not a bit, for the simple reason that I don't feed it. I have never yet found a satisfactory way of raising two crops on the same ground. I tried it with soy beans and corn, but couldn't get the beans to mature; there was too much shade from the growing corn crop. Yes, I feed pomace, and find it very satisfactory. It has its disadvantages, however, the principle one of which I should say is the fact that it is cheap. Because of this cheapness, the dairyman is tempted to over-feed. He starts his cows out on pomace, finds that they begin to gain on it, and then he simply throws it to them. The results of this too liberal feeding are not satisfactory—pomace is not a balanced ration in itself. Fed with mill-run and alfalfa, it is fine. I feed in addition to this about two pounds daily of oil meal or soy bean meal, and also some corn silage. This combination has worked fine."

Mr. Stewart has a 50-ton silo which he built himself. It is constructed of tongued and grooved two-by-fours, lined on the inside with water-proof paper and finished on the outside with regular siding. The Stewart corn crop runs about 12 tons of silage to the acre.

Reverting to the hay question, Mr. Stewart commented on the influx of western Washington buyers earlier in the season. "I don't want to be critical," he says, "and of course it's always easier to see mistakes after they've been made, but really, now is the time to buy hay. I have it on the best of authority that Yakima county hay can be bought, in some localities at any rate, for $17 a ton in the tack. Why is it so cheap? Well, you would be surprised if you knew the number of dairy cattle that have been sold off here during this time of high priced feed. All the robber cows went, of course, and there were some mighty good cattle sold over the block. If a good cow got temporarily off her feed and it looked as if she might have to be fed for some time before she would be back in shape, the only thing to do was to sell her to the butcher. And the result is that today this part of the state finds itself with lots of hay, and not much to feed it to. The cows have been sold for beef, and the sheep have been moved to cheaper feeding grounds."

All the milk from the Stewart Holsteins is sold to retailers. Mr. Stewart has the milk tested at frequent intervals, and he himself weighs the output from the individual cows. In this way he secures many of the benefits of belonging to a testing association.

# Cows Make High Records in Production of Milk

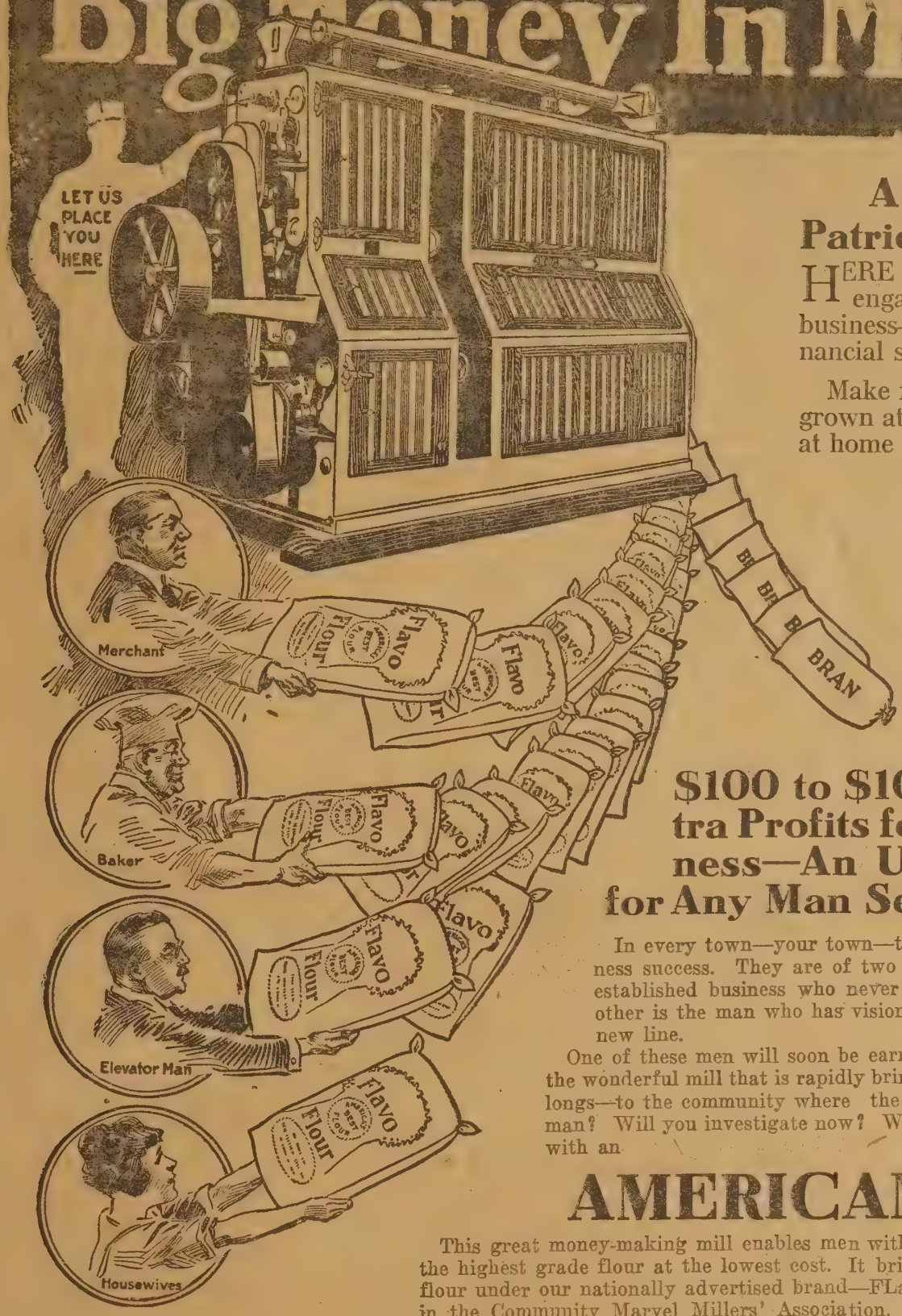
The cow producing the greatest number of pounds of butterfat during October in the Whitman Cow Testing association was Pilot's Model, Jersey, owned by Jay P. Graves of Spokane. This young cow has produced 1752.7 pounds of 4.57 per cent milk, which contains 80.1 pounds of butterfat. Her high record extends over her entire milking periods. As a senior two-year-old she gave 12,653 pounds of milk, 618 pounds of butterfat. As a senior three-year-old she gave 16,076 pounds of milk, 744 pounds of butterfat. She is to be bred to Count's Foxy Lad, whose dam, Eminent's Foxy Belle, was the second senior three-year-old Jersey cow in America. Her record is 14,907 pounds of milk, 815 pounds of butterfat. She won two special A. J. C. C. prizes, one for Jersey cow having best progeny and the other for a cow having the best register of merit record. Pilot's Model won grand champion prize at the Spokane Interstate fair, 1918.

The cow giving the greatest number of pounds of milk for October was Pauline Tiffany Annie Dekol No. 194172, Holstein. She is owned by A. V. Bradrick & Son of Palouse. During October she gave 2058 pounds of 3.1 per cent milk, which produces 63.8 pounds of butterfat. She will be bred to Mr. Braderick's bull, King Pontiac Segis of Brookside, No. 195818. This bull is the son of King of the Pontiacs by a 26.7-pound daughter of Prince Segis Korndyke. This young bull has the best Holstein blood in America back of him and when mated with a cow of such milk production as Pauline Tiffany Annie DeKol, the offspring should be dairy cattle of the highest merit.

The following records are from the official reports of P. C. Johnson, tester:

| Owner. Name of Cow. | Breed | Age. | When Fresh. | Pounds Milk. | Test. | Pounds Butter Fat. |
|---|---|---|---|---|---|---|
| Jay P. Graves, Pilot's Model | Jersey | 5 | 8-25-18 | 1752.7 | 4.57 | 80.1 |
| Jay P. Graves, Fancy Iron Duchess | Jersey | 6 | 8- 9-18 | 1567.5 | 4.63 | 72.6 |
| T. S. Griffith, King Milan's M. | Jersey | 10 | 5-20-18 | 1332.0 | 5.18 | 69.0 |
| Jay P. Graves, Bessie of S. Lane | Jersey | 6 | 9- 9-18 | 1283.9 | 5.32 | 68.3 |
| A. H. Reilly, Bess | G. Hol. | 8 | 9-22-18 | 1941.0 | 3.37 | 65.4 |
| T. S. Griffiths, E. Jimps Owl | Jersey | 5 | 7- 6-18 | 1627.0 | 4.01 | 65.2 |
| A. V. Bradrick, Pauline | Holstein | 6 | 9-22-18 | 2058.0 | 3.10 | 63.8 |
| A. H. Reilly, No. 41 | G. Hol. | 6 | 7-27-18 | 1603.0 | 3.97 | 63.6 |
| Jay P. Graves, Nelly's Tilda | Jersey | 5 | 9-25-18 | 1061.4 | 5.94 | 63.1 |
| B. W. Powers, Landseer | Jersey | 4 | 9- 2-18 | 1070.0 | 5.80 | 62.1 |
| Jay P. Graves, Waikiki's Frances | Jersey | 2 | 3-23-18 | 872.4 | 6.97 | 60.8 |
| Jay P. Graves, Waikiki's Landseer Fern | Jersey | 4 | 9- 7-18 | 1069.6 | 5.27 | 56.4 |
| A. H. Poston, Maggie | G. Hol. | 8 | 8- 4-18 | 1104.0 | 5.10 | 56.3 |
| T. S. Griffith, B. Lads Ella | Jersey | 8 | 8- 9-18 | 1103.0 | 4.99 | 55.0 |
| Jay P. Graves, M. Princely Legacy | Jersey | 9 | 6- 2-18 | 1037.3 | 5.27 | 54.7 |
| A. H. Reilly, No. 34 | G. Hol. | 8 | 7-11-18 | 1448.0 | 3.57 | 51.7 |
| A. H. Reilly, No. 47 | G. Hol. | 8 | 7- 4-18 | 1451.0 | 3.47 | 50.3 |

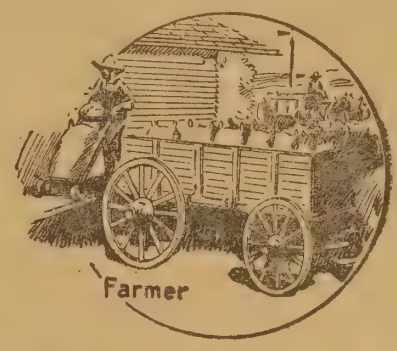
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A. B. NYSTROM, Editorial Contributor.

# Will a Silo Pay?

## Its Wide Spread Use Answers Yes

There are still many farmers, some of them dairy farmers or men with a few cows, who are uncertain as to whether the silo is a practical, economical feed storer. There are many today who are debating with themselves whether or not they should build a silo or continue the old-fashioned methods of feeding.

To him who will look around there is an answer to the question. Practically all the really successful dairymen are using silos. After years of experiments and widespread study of the dairy feeding problems, the great mass of the dairymen of America have adopted the silo as one of the greatest steps toward the solution of these problems.

One writer says on this subject:

"The silo is the best and cheapest form of providing succulent winter feed. It is the cheapest farm building we can erect. It will house feed nutrients at a lower cost per ton than the hay mow in the barn will protect a like feeding value in the form of hay or other roughage from the weather. It increases the producing capacity of the farm at least 10 per cent, and will often increase its stock carrying capacity 25 per cent. It is the cheapest place to store the corn crop, for an acre of corn can be placed in the silo at a cost not exceeding that of shocking, husking, grinding and shredding, and it will preserve more feed acre than any other system of handling. It saves a third of the value of the corn crop that is otherwise largely wasted. It requires less labor to feed silage and there is less waste of fodder by the cows. It is the cheapest and most convenient method of soiling."

# Don't Let Her Shiver

It has been said often, several times in these columns, but it can not be said too often: Don't let the cow use up her energy trying to keep warm. It is folly to allow her to stand out in the cold or to fill her up with ice-cold water when a little care would enable her to be housed or shedded and furnished with water at a medium temperature. The dairy cow is a sensitive animal. The loss from cold is not the only loss from exposure. There is an actual loss through the subconscious effect of suffering. Just as men work better or fight better when their morale is kept at a high standard, so does a cow do her best producing when she is in a state of comfort and content in both mind and body. Care to prevent chilling will go far toward producing this state of morale.

### MUST FEED SCIENTIFICALLY.

One of the objects of cow testing associations, in addition to the weeding out of unprofitable animals, is the development of systematic and scientific feeding. That this is a field well worthy of consideration is indicated by the report of one association which showed that during a two-year period cows that received 1200 pounds of concentrates produced an average income above feed cost of $33 per cow; that cows which received from 1200 to 1800 pounds of concentrates during the same period yielded an income above feed cost of $43 per animal and that those which were fed over 1800 pounds of concentrate yielded a net profit of $55 a head.

### PACK BUTTER IN BRINE.

While storage butter under whatever conditions of preservation are followed is not as good as the fresh article, it is frequently desirable that it be stored away for later use. This is true on the farm as well as in the large commercial storage plants. A practical method of preserving butter in reasonable condition is to cover it in an earthen jar with a solution of salt water strong enough to float an egg. The jar used should be thoroughly cleansed by scalding in order to remove every possibility of undesirable odor or taste. Butter so preserved need not be packed into the jar in one mass as is so often done, but will keep even better, it is claimed, if put down in pound rolls or prints. This allows the solution to cover all parts of the butter and avoids to a considerable degree the difficulty resulting from air which is inevitably present in small amounts in a large pack of butter.

### WHICH SHOULD BE SOLD?

Whether it is more profitable to sell butter-fat or to make it into butter on the farm is a question that many farm homes consider. Every producer can figure this up for himself on the basis of local conditions, as a rule, but it is apparent that in most cases where there is a reasonably accessible market for butter-fat it is at least as profitable to sell the butter-fat as the butter and requires much less labor. One student of this problem says that ordinarily one pound of butter-fat will make about 1.16 pounds of butter. Ordinarily it would appear that this does not give sufficient margin to warrant the making of butter at home unless a special market is developed for it or unless there is no immediate market for the butter-fat. This is undoubtedly more true now than ever with the prices of butter-fat ranging so high.

# Farm Labor

## Increase Needed in Next Decade

By RICHARD HAMILTON BYRD.

"Food prices will never reach the level they occupied five years ago, and, of course, there is no possibility that the prices of 20 years ago will ever return, but I do believe that a reasonable drop will take place inside of the next year," remarked Theodore Henderson, an Iowa stockman, farmer and banker, who has been in Washington, D. C. "The movement brought about by the war to increase production has had a very great effect upon the farmers all over the country, and more so than elsewhere in the western states. It is particularly gratifying that the boys on the farms are now taking a keen interest in production. Iowa is a grain-feeding state, as you may know. Very little corn is sent out of the state, because practically all of it is fed. The Iowa boys have shown what is possible for the younger members of a farmer's family to do. Recently at the state fair more than 100 baby beeves were exhibited by the members of the boys' and girls' clubs. These beeves averaged 967 pounds in weight and sold for an average of $187.

"All of this, to my mind, is highly encouraging. Any one who thinks knows that the constantly increasing population means greater production. With the signing of the peace treaty the United States will become the greatest nation on earth, and we may expect a greater tide of immigration than ever before. These immigrants will be welcome if we can send them into the proper channels of endeavor upon their arrival. What we shall need more than anything else in the next decade is an increase in farm labor. Europeans are particularly well quilified for farm work, and we can use many thousands of them on the farms. Indeed, we shall have to provide for additional labor on the farms. I believe, however, that tihngs are going to work out in good shape. There is a strong tendency toward a back-to-the-farm movement, and if this occurs we can hope for reasonable food prices in the future."

### Rush Back Farmer Boys.

Every effort will be made by the war and navy departments to return from France with the utmost speed men who have knowledge of agriculture and who are willing to work on the farms, it was said in official circles. The need for farm laborers was never more urgent than at the present time. The food supply of the world is dependent upon the number of men who can be recruited for agriculture.

Among the plans suggested to the farm service division of the United States employment service is one to send a number of representatives to France to confer with commanding officers with a view to obtaining a census of the men who are ready and willing to go on farms. It is not proposed, however, to ask the war and navy departments to give exclusive privileges of return to men who will be available for farm work.

It is proposed to suggest that as many of this class as practicable shall be included in the early return of men to their homes. It is contended in the report by the United States employment service that there is a shortage of 2,000,000 men on the farms. At any rate they say this number could be profitably used in developing the farms of the country and increasing production of fruits, cereals, vegetables, live stock and other kinds of food.

In the far west and southwest there is great demand for cowboys. The training the American soldiers have received abroad especially fits them for this kind of outdoor work. Stock production must increase with the production of cereals and vegetables. The number of available cattle, sheep and hogs has greatly diminished since the beginning of hostilities.

# What Is Milk Worth?

Milk could be bought at several cents a quart more than the present price in any of the markets of the northwest and still be a cheaper food than most of the other foods that are consumed, according to a set of figures presented by R. W. Washburn of the University of Minnesota at a recent meeting of the Oregon Dairymen's league. Here are his figures:

| | Retail Price | Cost per lb. Edible Solids | In Comparison Milk is Worth |
|---|---|---|---|
| Fat Porterhouse | 30c lb. | $ .80 | 20.00c qt. |
| Round steak | 25c lb. | .81 | 20.00c qt. |
| Hamburger | 25c lb. | .75 | 19.00c qt. |
| Eggs | 30c doz. | .85 | 21.00c qt. |
| Eggs | 45c doz. | 1.27 | 32.00c qt. |
| Broiler chicken | 25c lb. | 1.70 | 38.25c qt. |
| Fat fowl | 20c lb. | .80 | 20.00c qt. |
| Turkey, fat | 25c lb. | .75 | 18.75c qt. |
| White fish | 20c lb. | 1.44 | 35.00c qt. |
| Oysters, solids | 40c qt. | 2.00 | 50.00c qt. |
| Ham | 40c lb. | 1.04 | 27.00c qt. |
| Ham | 30c lb. | .78 | 19.00c qt. |
| Cheese | 30c lb. | .48 | 19.00c qt. |

Mr. Washburn said that corn and oat meal, wheat flour and rice are the cheapest sources of energy for adults, that milk is a less expensive food than most meats and vegetables; that growing children need low fat or skim milk daily. He said the total annual consumption per capita in the United States for milk is less than $6, while for liquor it is $32.

### PLAN SPOKANE POULTRY SHOW.

The Spokane Poultry Breeders' association has announced the selection of January 20-25 as the dates for its annual poultry show. The show has been omitted a number of times in recent years, but it is the association's plan to put on an exceptionally good exhibit this year. William Purdy has been selected as judge for this year's show. J. R. Walker of Spokane is secretary of the association.

The object of this association is to develop and improve the markets for poultry products and encourage the breeder of all varieties of poultry, whether fancy or utility, in the Inland Empire and to improve the quality. The association aims to promote the greatest and keenest competition in all varieties and the breeding of more and better poultry for increased egg production, and to show the public the particular merits of standard bred poultry.


CREAMERY RESULTS




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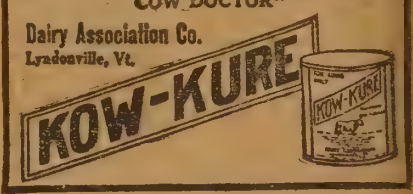
You do not need a veterinary for most of the ailments common among dairy cows. Barrenness, Retained Afterbirth, Lost Appetite, Scouring, Bunches, Abortion, etc., are nearly always a direct result of impaired organs of digestion and reproduction.

You can successfully treat and eliminate these diseases yourself with the aid of Kow-Kure. This well-known cow medicine acts directly on the affected organs and promptly restores a normal condition. Take one of your backward cows and put it to the test.

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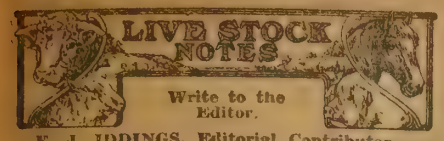
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The Ford automobile engine, illustrated here, like all *internal combustion engines*, requires an oil that holds its full lubricating qualities at cylinder heat, burns clean in the combustion chambers and goes out with exhaust. ZEROLENE LIGHT fills these requirements perfectly, *because it is correctly refined from selected California asphalt-base crude.*

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ZEROLENE is the correct oil for all types of automobile engines. It is the correct oil for your automobile. Get our lubrication chart showing the correct consistency for your car.
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*The Standard Oil for Motor Cars*




E. J. IDDINGS, Editorial Contributor.

# Put on Finish

## Pays Best to Market Choice Meat

Thomas Conway of the Carstens Packing company of Spokane is a strong believer in the practice of properly fitting meat animals for market.

"Take a steer just off the grass in poor flesh, really not fit for marketing," he says by way of illustration. "He weighs, say, 1000 pounds and ought to be put in the feed lots for three months to add 200 pounds in weight and to gain the finish that will make him a prime steer in any market. Every stockman and every packer knows that it is an economic crime to dress him in his underfed condition when a little alfalfa would add 50 per cent to his value to the grower and would give the consumer a perfect article of food. However, there is a misguided demand for cheap meat, and so the steer goes to the block. He sells for 9c a pound or $90, and owing to his underfed condition he dresses only 50 per cent, or 500 pounds to the carcass. That meat sells wholesale at 17c a pound, or $85. The apparent loss to the packer is made up by the hide, the tongue, the liver, the kidneys and some tallow, which realize enough to cover the handling cost and some profit. When the retailer gets this meat he sells a part of the forequarters at a loss, the loins at a profit and the hind quarter at a little more than the average cost of the entire carcass. The beef retails say at an average of 21c a pound, or $105. This carcass with its 500 pounds of beef contains, however, about 160 pounds of bones and inedible trimmings, so the consumer gets only 340 pounds of net meat which cost him an average of practically 31c a pound.

"Now suppose that same steer has been fininshed in the feed lot to weigh 1200 pounds. Instead of selling at 9c, the animal brings 13c a pound, or $156. That is an advance of 866 in the price realized by the grower. The carcass now dresses 58 per cent, or 696 pounds, and it sells wholesale at 22c a pound, or $153.12. The meat is retailed straight through at an average price of say 26c a pound, or $181. This carcass, however, contains hardly more bone and inedible trimmings than did the same steer in poor flesh. Let us deduct say 180 pounds for bones and waste, leaving 516 pounds of net food, which cost the consumer at retail $181, or an average of only 35c a pound net as against 31c for the meat from a lean and unpalatable steer."

# VETERINARY

By DR. S. B. NELSON.

**Heifer Is Ailing**—I have a 2-year old heifer coming in fresh with her first calf next April that has been looking sick now for 10 days. Her fore legs are considerably swollen up. She also is swollen up above her eyes, and is often shivering. She was out several nights when it was cold and raining, so we thought she had a cold and gave her several doses of black pepper and ginger in warm water, but she did not improve. She is eating, but not as she ought to. She is a very nice animal, and tuberculin tested. Can you tell me what is the matter and if there is anything we can apply? F. W.

Seattle, Wash.

I am not able to make a diagnosis of the trouble affecting your heifer. If she is as nice a heifer as you say I would suggest that you have one of the local Seattle veterinarians see her. You have good men practicing in Seattle.

**Milk Runs Out of Teats**—I have a cow whose milk runs out of the two teats on left side. Is there any remedy for it, and could you tell me the cause? Any pressure whatever on the udder causes the milk to run out. A SUBSCRIBER.

Walla Walla, Wash.

Try wrapping the lower end of the teat with electric paint. Do not wrap it too tightly so as to stop the circulation; but just so there is a slight pressure to close the opening. Try that for some time and see if it will cause the irritation to close the opening normally.

**Sow Refuses to Eat**—I have a sow that farrowed May 6. She has never to my knowledge been in heat since. About a month ago she refused to eat, vomiting frequently, seemed badly constipated, lies around listlessly a good deal, sometimes wanders off aimlessly, seeming not to know what she is doing. After about a week she improved a little, ate fairly well for a few days, then all the former symptoms returned and this has been repeated over and over again. Her abdomen seems full and hard, and she seems to hate to lie down or get up. I have fed her shorts or millfeed in milk most of the time. She drinks water and milk pretty freely. Please tell me what is the matter and what to do for her. J. W. G.

Prosser, Wash.

I am not able to make a diagnosis of the trouble affecting your sow. I think that either one of two things is the trouble with her. Either she has inflammation of the womb, which would show itself by a slight discharge; or she has inflammation of the cericoneum—probably the latter. I think it is going to be a very difficult trouble to treat; but I am simply going to suggest that if you possible can get her to eat it that you give her 10 grains of potassium iodine in her milk morning and evening. That may possibly cause a change so that the poisoning material will be overcome and absorbed and excreted.

**Impaction of Colon**—I have lost several horses lately through their feed becoming packed in the colon. Have used liberal quantities of oil, but have never been able to move the clog. Can you suggest anything to use which would have more effect than oil? H. S. T.

Pasco, Wash.

The trouble that you mention is one of the most severe troubles that comes to the attention of the veterinarian. The treatment depends upon the individual animal and treatments vary according to the conditions found in the individual animal. Therefore, I can not give you a specific treatment that will cover all the cases. I am going to give you in addition to what you are doing a general treatment, which may help. Give one quart of raw linseed oil once daily, morning or evening. The opposite morning or evening give one pound of Epsom salts in one pint of heavy syrup diluted with one quart to two quarts of water. You may continue that safely generally for two, three or even four days. Do not feed the animal anything for three, four or five days when it is affected with impaction of the colon, but give the animal plenty of water even if you have to give it to him by artificial means. Enemas given frequently in large quantities are also of value.

**Heifer Off Feed**—I have a half-blood Holstein heifer that has not done well all summer. She has given a very good quantity of milk—two and one-half or three gallons per day—until just lately, but her hair has been rough all summer. Lately, on splendid feed of green oats and clover and timothy, she has nearly dried up. I haven't paid very much attention to her until a few days ago, and I notice that she breathes rather hard all the time and especially so after walking in from the pasture. She is never feeding when I go after them, and I never see her chew her cud. Last night I put her in the barn for the first time and her bowels only moved a little and the dung was not nearly as soft as it ought to be on the kind of feed she is on. It was more like she was on dry hay or straw. I shall give her a dose of salts and would be glad if you can let me know of a course of treatment for her. One teat was nearly covered with warts when she first began milking in the spring, but these have all dropped off, so the teat is clean now, but she has a few near and on her udder of the flat kind. W. C. A.

Cusick, Wash.

Give your cow one drachm of potassium iodide in a pint of water morning and evening for four days. Give her also from six to eight ounces of raw linseed oil morning and evening for three, four or five days.

# Facts About Rye

About 96 per cent of the world's crop of rye is produced and consumed in Europe. As a crop it is of greatest relative importance in the German empire, the Netherlands, Russia, Belgium and Austria-Hungary.

In Russia the wheat and rye crops are nearly equal in importance.

The European rye belt is somewhat farther north than the wheat belt.

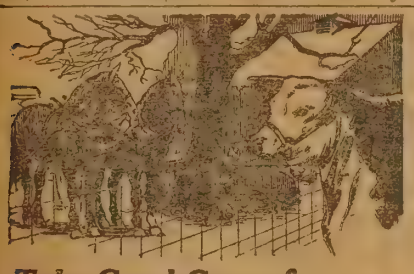
The ability of rye to produce satisfactory yields in regions of sever winter temperatures, poor soils or rough topography is well known. Although rye may be either autumn or spring sown fully 99 per cent of the crop is fall sown.

Rye forms less than one per cent of the total value of all crops in the United States and is grown mostly in regions having cool climates and sandy soils. The rye belt extends across the lake states about 300 miles north of the winter wheat belt.

Although rye has been called "the grain of poverty" because it will grow on soil too poor for successful production of wheat, corn or barley, it thrives best on fertile soils. In two of the principal centers of rye production, eastern Pennsylvania and southeastern Michigan, it competes successfully with other crops for the occupancy of the best soils.

In eastern New York, New Jersey and Pennsylvania, rye straw is often as valuable as the grain. Rye straw being longer and tougher than the wheat or oat straws, is in demand as bedding for horses and is also used in packing fruit trees, pottery and many other products, for the production of straw articles, and in the manufacture of paper.

About two-thirds of the rye grain produced in the United States is used as feed for domestic animals. In Europe rye is used mostly for bread.

*Take Good Care of Your Live Stock*

DO NOT let them suffer from neglect. Keep up their efficiency and value now, when so much is dependent on them.

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Sloan's Liniment Kills Pain


# Packers' Combine Still Operates

## *So Says Federal Trade Commission in Its Latest Report*

Supplementing its report on the packing industry of the United States, in which, a few months ago, it declared that a gigantic combine existed between the five big packing concerns in America, the federal trade commission declares that the combination still exists in such a degree as to restrain trade and control the sale of live stock, fresh meats and by-products. The five big packers named are Swift & Co., Armour & Co., Morris & Co., Wilson & Co., and the Cudahy Packing company. This latest report was submitted to congress a few days ago, and congressional action is likely to be considered at an early date.

Drawing conclusions from what it terms voluminous and detailed evidence, the trade commission says that these five companies are in agreement for the division of the live stock purchases throughout the United States according to certain fixed percentages. The following are other conclusions reached by the commission as set forth in the report filed with congress:

"That this national live stock division is reenforced by local agreements among the members of the general combination operating at each of the principal markets, as at Denver, where Armour and Swift divide their live stock fifty-fifty.

"That these national and local live stock purchase agreements constitute a restraint of interstate commerce in live animals and in the sale of meat and other animal products, stifling competition among the five companies, substantially controlling the prices to be paid live stock producers and the prices to be charged consumers of meat and other animal products and giving the members of the combination unfair and illegal advantages over actual and potential competitors.

"That the five companies exchange confidential information which is not made available to their competitors and employ jointly paid agents to secure information which is used to control and manipulate live stock markets.

"That Swift & Co., Armour & Co., Morris & Co., and Wilson company, Inc., through their subsidiary and controlled companies in South America combined with certain other companies to restrict and control shipments of beef and other meats from South America to the United States and other countries.

"That the five companies act collusively through their buyers in the purchase of live stock.

"That the five companies act collusively in the sale of fresh meat.

"That there is a joint contribution to funds expended under their secret control to influence public opinion and governmental action and thus to maintain the power of their combination.

"That the agreements, understandings and pools hereinbefore recited are reenforced by the community of interest among the five companies above named through joint ownership, either corporate or individual, of various enterprises. Two or more of the interests thus have joint ownership or representation in 108 concerns as far as ascertained to July, 1918."


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JAMES DRYDEN, Editorial Contributor.

# Profit in Poultry

## Let the Rooster Make It for You

The writer knows a poultryman who is making several thousand dollars profit a year just because he has been securing males each year of high producing pedigree to mate with his breeding flock. The roosters have made a difference between no profit and a good profit.

The poultryman who makes a success works hard, of course. He must give good care; must feed good rations and feed regularly, and he must pay special attention to the hatching of the chicks and the raising of them. He makes a success by doing all that, and also by paying special attention to the breeding of his flock.

The man who doesn't make a profit, the man whose eggs cost him a dollar a dozen to produce when he can sell them for only 65 cents a dozen, may and often does work just as hard as the other man whose eggs cost to produce 30 cents a dozen. He gets up as early in the morning, perhaps, and works as late at night; probably later, because when he gathers only 25 eggs per hundred hens when he should be getting 50, he works a little more and blames himself for not working harder. He makes trips around the houses and stops up cracks in the walls, and tacks down curtains on the windows to make the hens more comfortable, and does a hundred other things which may be all right, but not necessary. When the pullets don't begin to lay in the fall, he buys some more expensive feed, and feeds them oftener, until the feed cost is high. He does everything he can to make them lay so as to reduce the cost per dozen. But he has forgotten one thing; he has not delegated some of the work to the rooster.

If the rooster is from a heavy laying family; if he is one of those trapnested pedigreed kind whose dam and grandams have records around 200 eggs a year, he will produce pullets that will be heavy layers. J. D.

# Preventing Diseases

A large portion of the letters of inquiry in regard to poultry have to do with diseases. A majority of those letters would be necessary if more attention was given to the matter of preventing diseases. Letters should be written, of course, when trouble comes and the poultryman does not know what to do, but prevention is better than cure.

In nine cases out of 10 the diseases complained of come from mistakes in care and management, and the disease often indicates where the misfakes occur.

If the chicken suffers from colds or so-called roup, the trouble is in the housing conditions. Enough attention or study was not given to the housing. When the influenza or roup sweeps through his flock and kills off half the hens, the poultryman is then in a receptive mood to consider changing his housing plans and get rid of some set notions of his own.

There are too many "notions" in the poultry business. As a rule the poultrykeeper is subject to suggestion or reason like other humans, but the majority of humans do not think that any particular reasoning or thinking is necessary when dealing with chickens. But when the hens don't lay and eggs are 70 cents a dozen, and when the hens are sneezing and dying when they should be laying and making the owner rich, he begins to do a little thinking, and it is a good thing to think even then. But instead of this violent mental exercise when trouble comes it would have been better, before the trouble came, to ward it off by a mild mental diversion. Prevention is better than cure.

J. D.

# Afraid of Words

## That Is Why Some Poultrymen Fail

There are a few words in the modern dictionary which, though becoming quite common, seems to baffle a lot of people. They are given credit for possessing a mystic nature that the common mortal is not supposed to fathom. One of these words is "balanced" when applied to the problem of the feeding ration. But there is no occasion to be afraid of the word, for it is perfectly simple.

The balanced-ration idea of feeding is that the maintenance of the body of the animal in question, together with the production of milk or eggs or labor, as the case may be, requires certain very definite elements of nutriment. There are three of them; Protein, carbohydrates and fats.

In the case of the hen, the protein element in the food goes to produce muscle (lean meat) and a certain well defined part of the egg. The carbohydrates and the fats, which perform in a general way the same functions, furnish heat and fat for the body and for the making of the egg. The yolk of the egg contains a high percentage of fat.

It is a simple problem on the part of the poultry scientist to determine almost exactly how much of each of these elements is required to produce a certain number of eggs in a given time and keep the body of the hen properly nourished and strengthened. It is found that for good egg production these elements should be given the hen in the ratio of about one part of the protein element to four parts of the carbohydrates and fats elements.

To illustrate the need of a mixed ration: Wheat contains about seven times as much of the carbohydrates and fats as it does of the protein. If wheat were fed alone, the heat and fat producing elements would be given, therefore, nearly twice as much per unit of the muscle building element as required. This would amount not only to a weakness through lack of muscle builder and rebuilder, but to an actual waste of the heat and fat making elements. On the other hand, take a meat scrap diet: This ordinarily would contain more protein than carbohydrates and fats together, which would throw the ration out of balance in the opposite direction.

But take the two together, for a rough example of balancing the ration. It would be possible to so combine the wheat and the meat scraps that the protein in the wheat plus the protein in the scraps would about equal one-fourth of the carbohydrates and fats in the wheat plus the carbohydrates and fats in the meat scraps. This would be approximately a properly balanced ration. This does not mean, however, that this is necessarily an ideal ration, for there are many other things that may well be considered in the feeding problem. But it does illustrate the point: That the word "balanced" is not a word of mystery, but a simple word that may be simply applied to the feeding problems of the poultry yard.

### MATING GEESE.

To the Editor: Will you be good enough to tell us if one can successfully run one gander with two or three geese, instead of letting the geese mate; that is, run a gander with each goose? F. E. S.
Juliaetta, Idaho.

Two or three geese may be mated to one gander. Four would be a maximum.

J. D.

### RUNS HOGS IN ORCHARD.

S. E. Cox of Fruitvale, Yakima county, has a thrifty bunch of Berkshires running in his orchard, cleaning up after the pickers. Mr. Cox considers the present season a very satisfactory one, and states that he has had no trouble in getting plenty of good orchard help. Scale has been somewhat worse than average years, he admits, but this in his opinion is due to seasonal causes and not to any permanent increase in the pest itself.

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GRANVILLE LOWTHER,
Editorial Contributor.

I would rather be an apple king in the Inland Empire than to be the king of Austria, or the emperor of Germany.

The best government for a child is one that prepares it to govern itself. So with the child-like nations; but the governors of those nations should have the interests of the child-like races at heart and not use them for purposes of self-aggrandizement and exploitation.

The evolutionists have told us where we came from, but the kaiser would like to know where he is going to.

Remember that a tree is rooted to the ground, and can not run about in search of food. The bird can fly, the fish can swim, the beast can walk, the insect can crawl; but the tree must have the food where its roots can reach it.

What is an "irrigation project?" It is a scheme to take water that is running to waste, and put it on land that is no good, and make it support a dense population of well-to-do, happy and contented people. The people of the Inland Empire will cooperate with the people of the West Side in reclaiming their logged-off lands, if they will cooperate with us in reclaiming our arid lands. G. L.

## Big Question

### At Grade and Pack Conference

I have recently attended two meetings of local "grade and pack conferences," held by the fruit growers of the Yakima valley. The first was a meeting of the growers residing in the vicinity of Yakima, and was held for the purpose of discussion and the election of delegates to the state meeting to be held at Spokane. The other meeting was a meeting of delegates elected from the various sections of the county—Grandview, Granger, Zilla, Parker, Toppenish, Mabton, Wapato, Selah, Naches, Ahtanum, Moxee and other points. These delegates met at Yakima to discuss the questions involved and see if they could reach some general agreement.

All the questions discussed were of benefit to the growers, because they brought out the many viewpoints and angles, giving us larger ideas of the marketing situation and our relations as growers to the consuming public.

However, I felt that there was danger that we overlook the really large question involved, because of our confusion over a number of smaller things. The big question, as I see it, is whether the states producing the boxed apples will get together and adopt a uniform standard pack. The question of "two or three grades," "two or three healed-over stings," "visible and invisible water core," and others of like character, are important, but only in a very limited degree in their relations to the "uniform standard."

I do not wish to make these questions appear ludicrous, but I could scarcely help thinking, during the discussion, of the two colored men who furnished the basis for a story that runs about as follows:

"Say, Sam, did yo' hea about dat little cullud boy as got killed de odder day?"

"Naw, I nebber heard ob no cullud boy as got killed."

"Well, he did, an it was de saddest case I ebber heard about. Yo' see, he went down to Marse Jones' watter millyun patch, to git a water millyun. And when he was cummin' home, crossin' de railroad, he set down on a rail to plug de water millyun to see if it 'wuz ripe, an a train cum 'long and killed him."

"Well, dat was awful," said the other. "I s'pose yo' dident hear if de water millyun was ripe did ye?" G. L.

## Few Rules for Pruning

Some orchardists are already beginning to prune. It is a good plan to begin early and get that part of the work out of the way before the time for spraying in the early spring. I realize that no one can tell any other one just how to prune, for there are as many ideals of how any particular tree should be pruned as there are persons engaged in the business. However, there are a few simple rules that every one will agree it is better to observe, provided his attention is called to them and he gives the subject any thought.

**Pruning Grapes.**

Grapes should be pruned in the late autumn. They may be pruned in the early spring, but spring pruning is much more likely to result in a waste of sap than late fall pruning.

There are certain terms generally used in speaking of the different parts of the vine, and they are as follows:

A shoot is a green, immature growth, less than one year old.

A cane is a matured shoot.

An arm is a cane two or more years of age, is a permanent part of the vine, usually fastened to the trellis in a horizontal position and on which the spurs and branches are produced.

A branch is a division of an arm or shoot.

A spur is a cane that has been shortened from one to three joints; if left longer it is called a cane.

The stem is the permanent portion of the vine, below arms and canes.

Grape vines yield more fruit and larger fruit, if heavily pruned, than if they are permitted to run everywhere and produce a heavy wood growth.

Remember, the fruit of next year will be produced on wood that grew this year, on wood that grew last year. Last year's wood produced this year's wood that will produce next year's fruit. It is therefore desirable to remove as much as possible of the old wood, without sacrificing too much of the wood that will produce next year's fruit.

**Pruning Apple Trees.**

Cut out all dead branches, and if the death is caused by blight, or some other bacterial disease, cut below the diseased portion.

Cut close to the parent stem or trunk, so that the wound will heal.

If two branches interfere with one another, sacrifice the less desirable of the two.

Some varieties tend to send up perpendicular branches; these should be pruned so as to give the top as much as possible a spreading tendency and thus let in the sunlight.

Some varieties have spreading tops; these should be pruned so as to sacrifice the overhanging branches that interfere with cultivation, and that produce the poorer quality and less colored fruit.

Branches on old trees that reach a height where it is difficult to spray them well, or to pick the fruit, should be cut back. G. L.

### WEIGH VARIETIES IN THE BALANCE.

On the 10-acre orchard owned by E. F. Mash of Yakima, Wash., drastic methods have been resorted to to bring financial returns from trees which were proving unproductive. Several rows of Stamens and Wagners have been "dehorned" and grafted to Rome Beauties. Most of the work seems to have been very successful, and the majority of the trees have developed an abundance of healthy, new wood, from which leaders may easily be selected.

The tendency to weigh varieties in the balance, and to throw out those which do not average up with the better commercial sorts, is constantly going on. Many of the old orchards were planted either to varieties which have proved poor sellers, or were so broken up by the craze for an "assortment" that it has been difficult to sell the fruit to advantage. These mistakes are now being corrected either by taking out the trees or by cutting back to the scaffold limbs and grafting. P. E. T.

## Food Production

### Greater in France Despite War

France actually increased her percentage of food production last year more than the United States, notwithstanding the dreadful losses from war. This is the report made by C. W. Barron, a noted financial authority and writer who went to Europe last summer to study international conditions and who was in France in September.

With nearly all of her able-bodied men fighting the Germans, or dead in heroic graves, France's women, children and old men worked as never before to save their country from starvation. Strive as we may, our imaginations can never grasp the full import of that heroic record. We can never quite understand what it meant to these patient women, these weary children, these stooped and aged men in long hours of exhaustive toil. Laboring beyond their feeble strength, through scorching sun and drenching rains, through the frosts of autumn and the bitter snows of winter, they held themselves unfaltering in the line of duty. All the war correspondents, and hosts of workers in the Red Cross, the Y. M. C. A. and other overseas agencies have testified in amazement to the heroism of these heroes of the soil.

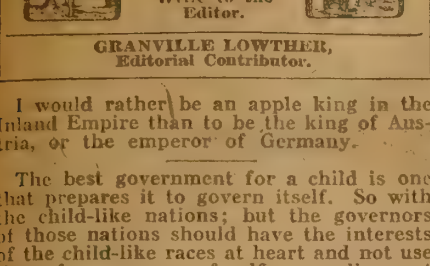
Many correspondents have written in astonishment at the strange scenes they witnessed themselves, of women and children working in fields that were actually under fire. It is a story of tremendous suffering, noble endurance and sublime courage, never surpassed in all the long history of the world.

### HOLSTEIN BREEDER GROWS CORN.

Herman Steffins, Holstein breeder of Monroe, Wash., grows Smoky Dent corn and, in spite of its dark color, considers it the best corn for the Coast country. It matures early and has a large number of ears. The ears are not large, but are of very uniform size, and Mr. Steffens likes the flavor and texture of the corn.

### SUGAR RESTRICTIONS OFF.

Announcement has been made by the food administration that the restrictions on the use of sugar in homes and public eating places are removed. This act is taken because of the increase in the supply of the Louisiana cane sugar and western beet sugar. The new Cuban crop is also expected to arrive soon.

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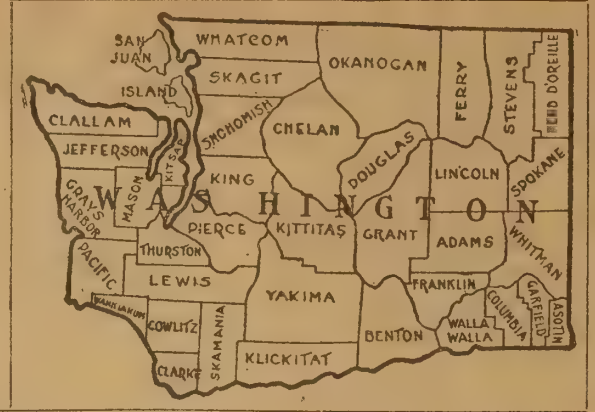
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# In Union There Is Strength

## If Farmers Are to Take Advantage of the New Opportunities They Must Get Together and Cooperate in Their Efforts




DARRINGTON, Snohomish County, Wash., December 2.—The question is how can the farmers in general be benefited by the opportunity offered by world markets? As near as I can see, it would be for all the farmers to come together, form a union and cooperate, not letting only a few men take an active interest in it, but one and all. Select a few men with experience to represent the union and deal directly with the agents of their respective counties and I believe that the farmers would get what they are entitled to and the sharks would not get all the profit. I would like some older, wiser and more experienced men to give their opinion on this subject, but I do know that in union there is strength. No doubt that domestic animals will be in demand to restock the European countries and most likely will prove a good article for export, as also will grains of all kinds. As I am in the dairy business and know the conditions of the present time regarding wages and prices for cream and milk, considering the prices we have to pay for feed, I am a little doubtful as to what it may be in six months or a year from now, for prices are almost sure to drop. If we have an eight-hour day law applied to farm labor I am afraid some of the dairymen will have to go out of business. Only the ones that have their own help could run a dairy farm and make any profit. The only way out of it is for all farmers to unite so they will be able to set a price on their products and sell directly to the consumer. That is the way I see things. A few of the farmers in this section took advantage of the few nice days we had and broke up old meadows, but very little has been done so far. The continued mild weather will help out some towards the feed as there is still some pasture. Stock in general is in good condition. C. B. NEIDERPRUM.

### CROP CONDITIONS FAVORABLE.

LA CROSSE, Whitman County, Wash., Dec. 6.—Crop conditions are, as a rule, favorable. Most of the fall wheat is up and most of it has a good stand. There is at least five times more acreage seeded this fall compared with last year, also considerable more than the usual acreage for fall seeding. The weather conditions are ideal—good growing weather. The precipitation, however, stayed far behind, the total precipitation since January 1 to date being 8.97 inches. More rain is needed as the soil is wet only from four to six inches. Live stock is doing well. M. E. SCHRECK.

### RANGE CATTLE DOING FINE.

METHOW, Okanogan County, Wash., Dec. 4.—I have no opinion that would carry any weight as to what kind of farm products could be profitably exported. The exporting business is one that the average farmer knows nothing about. In eastern Canada we used to export cattle and sheep mostly. I can not see any bigger problems than usual on the coming of peace. Grain and meats will stay up in price until Europe gets in shape to feed herself again. Then they are bound to come down. Farm conditions are better than for three years. The fall wheat is all up and the present mild weather is good for it. Live stock conditions are also good. The range cattle are still out on the range and doing fine, thereby saving lots of $25 hay. Quite a bit of fall plowing has been done. CHARLES GRANT.

### SEED CROP PROSPECTS GOOD.

LA CONNER, Skagit County, Wash., Dec. 10.—This fall has been an ideal one for getting the winter-over crops in shape, that is, the seed crops, such as cabbage and root crops. While the early summer was very dry the crops have kept on growing to date, and are still growing as there have been no frosts that have been heavy enough to kill even the leaves. No heavy rains until a week ago. If the present crops winter over there will be an enormous crop of seed from this section next year. Seed growing has come to stay. The conditions are equally as good for other crops. Many are getting their plowing well under way. I. W. ALEXANDER.

## Message

### To Disabled Soldiers and Sailors

"Do you know that most of the men who have taken vocational training in France got better jobs than before they went into the service?" Above is a sentence from a pamphlet issued by the federal board for vocational education, and addressed to the disabled soldiers and sailors in the hospital. An extract is also made from a communication by the director of vocational training in Canada, who speaks of a man who was a teamster before entering the war. He was afterwards trained as a machinist at McGill university, and after graduation went to a bridge company, where he became foreman in six months. In England there is a one-armed telephone engineer who was a butcher before the war; a hand bootmaker with no legs who used to be a laborer; an armless carpenter, who is now a building inspector; a laborer with both legs paralyzed, who has learned to run 20 looms unaided.

The federal board says that the worst mistake a disabled man can make is to drift into a low grade, unskilled occupation. Let Uncle Sam tell you how you can be fitted for a better job, and how you will be provided with means for the support of yourself and dependents during your training. Just write to the federal board for vocational education, Washington, D. C.

### NOT A PATH OF ROSES.

R. Henderson, whose five-acre apple orchard adjoins the city of Yakima, does not believe the orchardist's path is exactly one of roses. If it isn't one thing it's another. This year, for instance, aphis made a concerted attack on the Henderson orchard, and Mr. Henderson had to spray five times, not only for aphis but, as usual, against coddling moth and scale. He secured a fair crop, which probably would have been much larger but for the full crop of last year.

### A HEAVY CORN CROP.

When Horace Steele, who lives in the Boyd district, near Chelan, Wash., threshed his wheat September 26, he went right on and cut his corn and filled his silo. County Agriculturist Meigle says it was one of the heaviest crops of corn he ever say. The 12-inch corn cutter used is owned cooperatively, in a district where the cooperative spirit is very strong. The corn crop covered 35 acres, of which 25 acres were put in the silo. Nearly half the ears were pulled off as the corn was taken to the cutter, so heavy was it eared, and then, Mr. Meikle says, the silage is still very strong. The balance of the ears were saved for hog feeding. After the corn was cut Mr. Steele waited until the rain came, and then disked the ground and seeded it to small grain. Farmers in that district often seed right in the corn rows, without disking. H. A.

### ALFALFA CROP KNEE HIGH.

Fred R. Reed of Yakima is skeptical as to the pot of gold buried at the foot of the apple tree.

"General farming is good enough for me," he comments, glancing with considerable pride at the silo which adjoins his barn. "My herd of cows is small, and at present it's made up of grades, but I believe in the dependability of live stock farming."

On November 20th the fourth crop of alfalfa on the Reed farm was standing nearly knee high, ready to furnish an excellent late fall pasture when needed.

### FARMERS BUILD PACKING HOUSES.

Within the last year 50 or 60 farmers in Chelan county, Washington, have built fruit packing houses fitted with graders and with the lower part ventilated, air-cooled storage. Government experts spent the entire summer at and around Wenatchee, Wash., giving advice on the manner of building and equipment. County Agriculturist Meikle called my attention to the permanency of the fruit industry, as well as to the recognized necessity of being able to store fruit in case of car shortage. H. A.

### SHIP MUCH PRODUCE.

A report from Yakima states that the Yakima valley has this season shipped nearly 15,000 carloads of agricultural products. Of these shipments about half are fruit. Hay is the other principal item. Other produce includes 200 cars of potatoes, 400 cars of grain, 140 cars of live stock.


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## Banker and Farm Loans

Editor Washington Farmer: I see an editorial in your paper of November 21, in which you reply to E. Huxford of Cherokee, Iowa, in his remarks attacking the federal farm loan system, as being favoritism to the farmer.

I am glad you said just what you did, through the columns of your paper, and we are destined to have more of it in the future, for that is one of the coming issues.

If I may be permitted, I would like to add further the following suggestions: The bankers, not the farmers, have been specially favored by the government. I am not attacking the banking system, nor any particular banker. I grant that the banking system is an evolution of economic conditions, and that in its present form it is better than any system that has preceded us. But has it reached the highest possible point of perfection, beyond which there is nothing better? If so it is different from any other human institution. Now I want to suggest some possible improvements.

I would suggest that instead of maintaining a system of private or corporate banks, charging 10 per cent interest payable in advance, for short time loans, that the government take over the whole banking system, and charge 4 or 5 per cent for loans. Can the government do this? Yes, for they have already demonstrated it in the present "farm loan system." This would do away with the expense of maintaining so large an army of detectives and bank inspectors. It would make our deposits absolutely safe. It would turn loose at least half the bankers now in the business for productive industries. The intelligent banker today knows that his business exists, because the government maintains a system expensive to the people, which is already outgrown. G. L.

## Money for Good Roads

L. W. Page, director of the bureau of roads of the federal government, is authority for the statement that state and federal money for road construction in the United States during 1919 will approximate $100,000,000. In a recent letter on the subject Mr. Page says:

"In view of the fact that restrictions on highway work have been removed by the action of the war industries board, the fuel administration, the railroad administration, and the United States highways council, a great revival in road building should result.

"In my judgment, no more effective means of insuring employment, particularly to unskilled labor, in the transition period from war to peace can be devised than the vigorous prosecution of all public improvement work. I believe it would be better to go ahead with road work wherever it is needed rather than to wait for a period of lower prices. The benefits of improved highways are immediate to say nothing of the great desirability of having all labor employed and money active.

"Federal aid funds already available, and those which will be made available July 1, 1919, will aggregate $50,000,000, of which amount not over $5,000,000 has been expended. It is quite probable, therefore, that state and federal funds for construction purposes will, during 1919, run well over $100,000,000. This should constitute a material factor in carrying on the vigorous year's work.

"Every assistance which the bureau of public roads can render will be available to the states in dealing with the various problems which may arise."

### HANDLE FURS PROPERLY.

Houses buying the pelts of fur animals declare that large numbers of valuable furs are made valueless because of improper preparation for shipment. One point they emphasize is that they must be well dried before being packed and that the trapper must not therefore be in too big a hurry to cash in on them. It is said that many pelts are received which have never been dried at all but were merely rolled into a tight bundle and shipped to market, where they inevitably arrived in a condition that made them of little if any value. It is also urged that trappers do not wrap their furs for shipment in anything that excludes the air, such as paper. Even well dried furs will be damaged in shipment if the air can not circulate about them. Another point is that fat or flesh that clings to the pelts should be removed before preparing to ship. Never allow a pelt to be dried so that it wrinkles.

### DON'T GO AWAY TO TRAP.

Most folks have the idea that one must get far out into the wilds before being able to make a success of trapping fur bearing animals. Contrary to this idea, a prominent fur man recently said that trapping is most profitable in the well settled districts where there is sure to be something for the animals to live on. One of the Kansas City fur dealers reports that his greatest business comes from Kansas City itself in the form of pelts taken from animals in the immediate vicinity of that large city. During the trapping season it is said that several thousand pelts of various kinds are received by the fur houses of Kansas City and St. Louis alone.

### OAT HEAD MEASURES 25 INCHES.

To the Editor of The Washington Farmer: I have in my possession a few heads of oats. I claim the record of the state or states. One oat-head measures 25 inches, containing 440 grains, and a number of others measure from 18 inches to 23 inches. There are two stalks with two distinct heads. I sowed one-half gallon of oats that measured on the average of 18 inches. If there is any one who can beat them, and can show the goods, kindly let me hear. HENRY PRIRZNER.
Matlock, Wash.

### SELLS SKUNK HIDES.

A report from Hood River, Ore., says that M. Fuhrman of Klickitat county, Wash., not only rid his farm of a considerable number of pests in the form of skunks and muskrats, but that he sold the pelts of 45 of them to a Hood River dealer for $133. Mr. Fuhrman tumbled onto this little sideline by attempting to destroy the animals that were killing his poultry, later discovering that their fur had a real market value.


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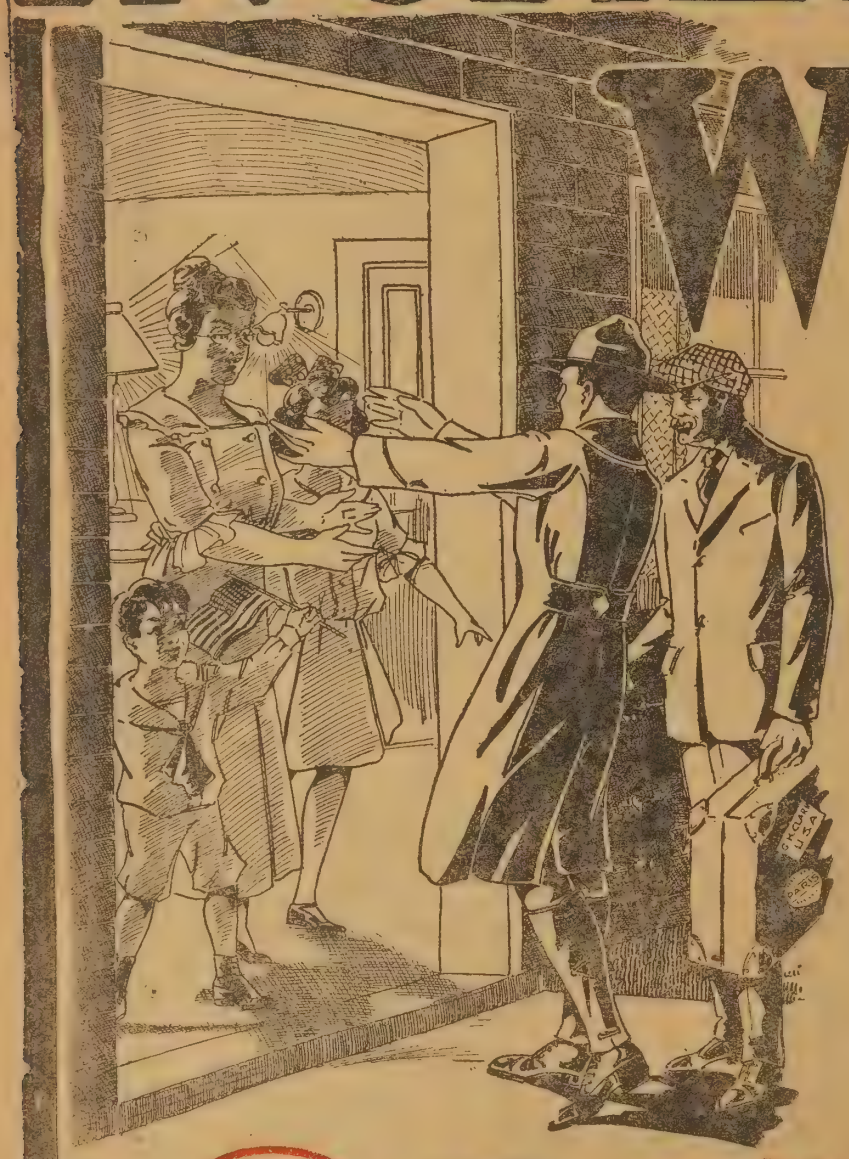
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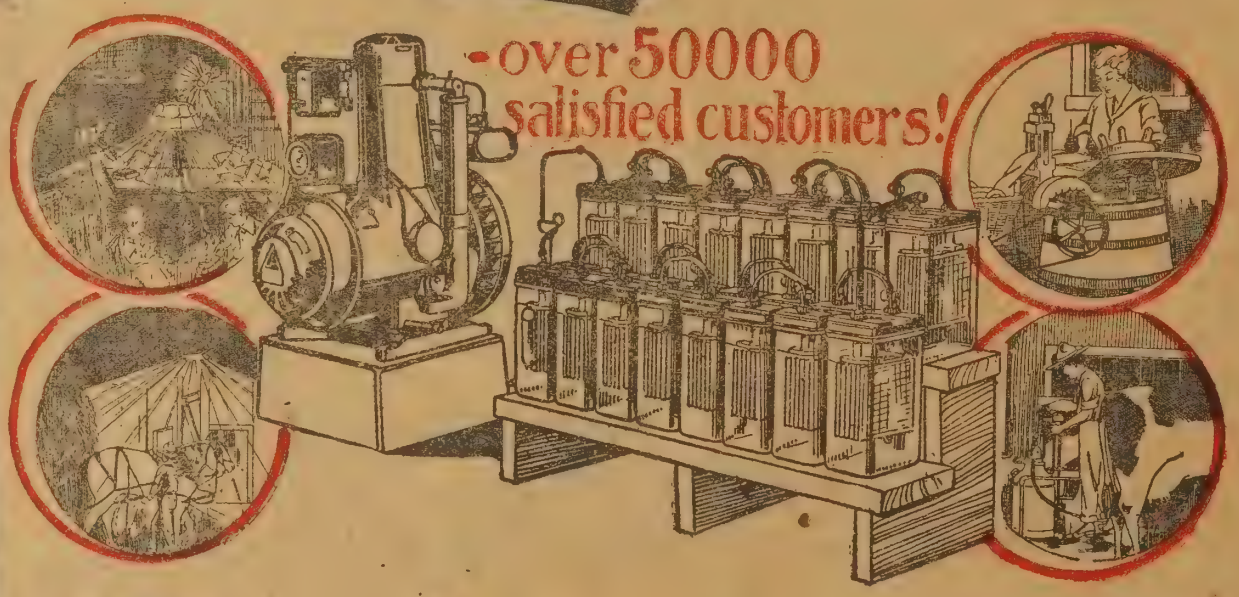
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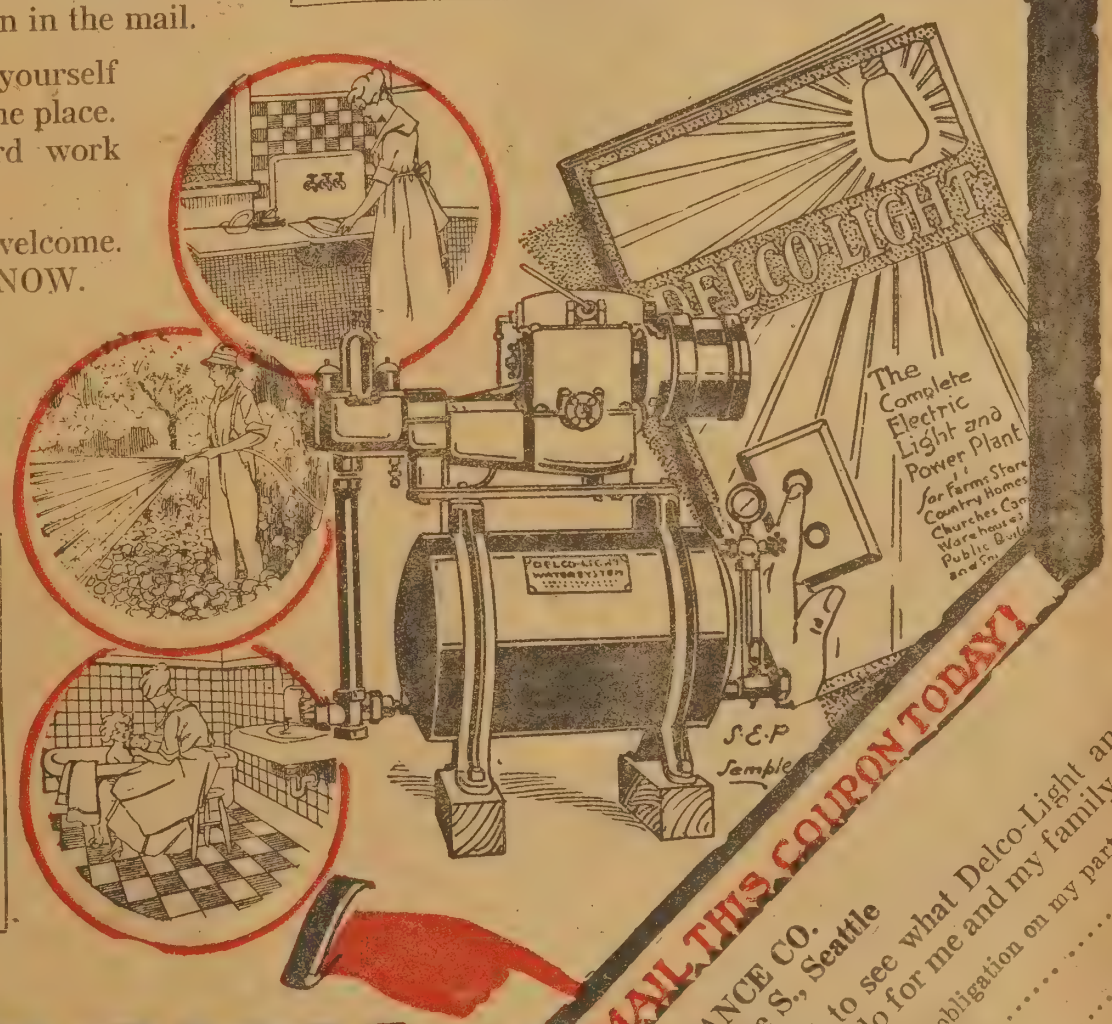
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# Agrarian Group Is Inevitable

## *Largest Single Group of People, Yet With Least Political Power*

To the Editor: About a year ago in March I wrote a contributed editorial on "An Agrarian Party." I did not keep a copy nor did I keep a clipping of it. I should like to have a copy of it and say some more things on that matter. We have been, for a long time, so accustomed to two great parties with an occasional offshoot of some wild-eyed demagogue that we can hardly conceive of "groups" which act with solidarity on certain matters while usually acting in harmony with one or the other of the great political divisions. Yet in England and every European country such subgroups are the common thing. It is now evident that we shall have a labor group which will throw its weight with one or the other party. I think an agrarian group is inevitable and the sooner it comes the better, if it may not be led by demagogues and socialists. The hope of the agrarian states (west and south chiefly) lies in the United States senate and the dual system. That is to say, for a century at least, if the agrarian group were class conscious it could control the senate and the electoral college. A man might either be a republican or a democrat and yet be an agrarian and on industrial lines vote accordingly. The agrarians form the largest single group of people and yet have the least political power. Under this democratic administration we pander wholly to the consumer and the labor element. The best section of the agricultural press, including such papers as your own and Wallace's Farmer, ought to organize and outline a policy of public education along these lines.

Boise, Idaho. E. A. BRYAN.

The article to which Dr. Bryan refers appeared in The Farmer of March 29, 1917, and is reproduced below.

### A NATIONAL AGRARIAN PARTY.

The time is fast approaching when the formation of a national agrarian political party will be worthy of careful consideration. It does not require a close observer to perceive that economic questions are becoming the determining factor in political alignments. The wage-earning, labor union faction of society has become pretty thoroughly organized, and already places the aspirations of the group above any past political connections or predilections. Though the farmers and the laborers in the various industries have some things in common, particularly the fact of physical labor, they have many interests which are not in common and which are diametrically opposed.

For example, the cost of food products: the farmer wishes it to be high that he may receive a legitimate reward for his labor; the laborer wishes it to be low that the outlay for living may be less. For example again, taxes. The wage earner wishes large public expenditure that work may be plenty and wages high. He will always vote for a bond issue for the construction of public works. On the other hand, the farmer is a payer of taxes and opposes this increase, as a rule.

The truth is that the farmer is a capitalist who is his own employer, and in almost every instance when there appears to be diverse interests between capital and labor he finds his personal interests on the side of capital, even though he is one of the most diligent workers in the world.

While 80 to 85 per cent of our people were yet engaged in agriculture there was no need of an agricultural political party. But now that there are scarcely 40 per cent of the population engaged in farming, now that commercial interest, banking interests, manufacturing interests, transportation interests and labor interests are so concentrated, so thoroughly organized and have such ready access to the public ear, the time approaches when this largest and most fundamental class must consider the means of its own protection and the advancement of its own interests.

The Patrons of Husbandry (the grange) and the Farmers' Cooperative and Educational union, by the terms of their organization are nonpolitical, and, as a matter of fact, their membership belong to all political parties. They are chiefly educational and social, and confine their political activity chiefly to propaganda for certain specific economic ends, such as rural delivery or parcels post. Such organizations must continue their usefulness, but do not quite meet the requirement of a national agrarian party, always with a large congressional representation, the party always aligning itself for offensive or defensive legislation in the interests of its class.

In many countries with constitutional governments there are and there have been in the past agrarian parties. In few countries is the government so distinctly in the hands of one or the other of two great political parties. Rather, is it in the hands of one or the other allied groups of parties, as the government of Great Britain prior to the war was in the hands of the liberals, composed of the liberal party proper, the Irish group, the labor group, etc.

The "issues" between the republican and democratic party are no longer sufficiently radical or comprehensive to meet the demands of their adherents. The recent campaign (written in March, 1917) and election show that the high tariff and free trade no longer represents a true dividing line even though it as yet remained the most distinctive feature. Two party names, these or others, may continue, but they are likely to be made up of groups, such as the labor group or agrarian group, free to align themselves, as interest may dictate.

Our labor friends have been loudly proclaiming "nonpartizanism," yet they form the most partizan of parties, acting with a solidarity and an organization unequaled by any other party of the day. "Nonpartizan" has been made a shibboleth to jar loose the membership of a dominant party. A distinctively "agrarian" party is easily within the possibilities of the next decade. When it comes it will likely be a state as well as a national party, for its issues will be as strongly affected by state as by national legislation. This fact may modify the attitude of the country toward the election of a president by popular vote, for while the majority of the population is urban the majority of the states is rural.

# Sugar as a Body Building Food

By DR. LEONARD KEENE HIRSHBERG, A. B., M. A., M. D.

Not every man can say as he eats that he "judiciously drank and greatly daring dined." As a rule things sweet to taste prove sour to digestion. Sugar and candies when eaten to excess often make a sour stomach and a bad temper.



Dr. Hirshberg.

If you think of your anatomy as one of the beautiful homes seen in the movies, you can easily conceive of the dozen or two food substances as the pillars, cornices, capitals, arches and other architectural elements of the human building called man. Such materials are employed to construct your life cosmos and thereafter to keep it in fuel, heat, energy and complete repair.

The stuff that meats, eggs, wheat, peas, beans, cereals and legumes are largely made of is called protein, albuminous or nitrogenous materials. These are the brain, brawn and blood builders. They make flesh and bone.

### What Sugar Does.

Minerals, salts, ash and water, each aid in fertilizing and distributing the various materials to the tissues.

Sugars and sweets furnish force and fuel for body-building, the heat produced by sugar being changed into muscular effort.

The nourishment or nutritive quality of a particular kind of food depends upon its easy digestion, ease of absorption and desirability by the body in the way of its need of energy-making or heat-producing foods. Many persons crave sweets because of the satisfaction this kind of food gives to the taste, digestion and the repair requirements of human heat and energy reservoirs.

Most persons in time of peace and plenty commonly eat as much candy and cakes as they can afford to buy. The desire for "something sweet" is gratified by sugary products, and the needs of man are met by its wonderful yield of 98 8-10 per cent of energy.

Exhaustion, poor endurance, "that tired feeling," fatigue, weakness, debility, the want of vitality in the aged, even sleeplessness, are all relieved at times by eating candy and sugar. Chocolate candy and cocoa are frequently given credit for restorative effects which belong to the sugar mixed with them. The same is true of coffee.

### Some "Sweet" Hints.

Chocolate is higher in real food value than almost anything in cakes and candies, other than sugar, because it supplies with each pound eaten 2860 calories.

Walnuts, pecans, almonds, filberts and peanuts provide some 1500 valories per pound.

Gum drops, taffy, licorice balls, hard sweets, tough caramels and candy are made of corn syrup, glucose or all sugar, whether it is cane sugar or another kind, become converted into glucose in the mouth and stomach. These candies are just as good as the more expensive grades, and also are as nutritious and stimulating. Glucose is the normal sugar of the blood and tissues, producing 1559 calories to the pound.

# Grinding Out Farmers

## *The Good Lord Is Yet Doing Most of the Work*

When I was in Washington last spring at the conference of farm editors with Secretary Houston one of the bureau heads of the agricultural department was called in and asked regarding the conditions of stockmen who were feeding cattle and hogs for the market. He replied that it was not as easy as it might seem to gather information that would answer this question. Farmers who were busy feeding stock were too busy to write or fill out questionnaires. Replies generally came from those who had time to write.

Again I was reminded of this incident when I was in Washington last month to attend another conference of farm editors with Secretary Houston. The magnitude of the department of agriculture grows upon me. Buildings upon buildings filled with scientists and specialists and experts of all kinds where mountains of information are piled up with regard to every branch of farming. Regiments of people doing farm extension work are traveling over the country ready to scatter the knowledge of better farming and more attractive farm living. Dr. True, at the head of this work, told us that during the present year $15,000,000 was being spent in extension work by the department of agriculture. This includes county agents, home demonstration agents, traveling specialists, as well as the sending out of quantities of leaflets and bulletins telling how to produce more crops and more live stock.

Listening with all attention to the summary from these vast accumulations of agricultural knowledge I just wondered how much of it was being vitalized in the minds and hearts of the farm folks.

I was told in Chicago by a man who I presume was receiving a high salary to promote a certain business enterprise which had to do with farmers that farmers must be made to see the value of better ways of farming, that, like children, they must be made to take medicine even if it is not palatable. I do not know but that will work in the corn belt, but I certainly have my doubts regarding the success of any man who goes out among the farmers of the Pacific northwest and tells them how they must farm, whether they are disposed to listen to him or not.

It all comes back to the proposition that mountains of agricultural information and regiments of agricultural missionaries are as sounding brass and tinkling cymbal if the farmers are not responsive.

Is it reasonable to expect a farmer or, for that matter, any man in any occupation to learn to adapt better methods if he is not already doing pretty tolerably well in that business or occupation?

The farmer must take the initiative. He must vision the prize of better farming; of better home for his family; of better opportunities for his children. Such a farmer is already striving for these better things. If he is shown how he can make more money by decreasing the cost of production, by using more farm machinery, by selling cooperatively with his neighbor, by taking advantage of the thousand and one things which he can obtain for the asking from the agricultural department, from the county agent, then he is ready to ask of this knowledge, judge of its application to himself and try it out in a moderate way until he is sure it is what he wants.

A few years ago I was talking with a man who was born and raised in the Willamette valley of Oregon. His father took up a donation claim and was a well-known pioneer. With his brother he fell heir to more or less of the estate. One of them followed a profession, the other went to farming. The professional man, from his income, helped his brother on the farm. He said to me: "Everything in the way of a new farm machine my brother has got. He is posting himself with farm bulletins and listening to all the agricultural college knowledge he can get. He is a student of the latest improvement in the farming business. Yet he doesn't make good and I am spending my money for that which doesn't satisfy."

In other words, we forget that there is such a thing as very tolerable farming fashioned after the slow development of the ages and the gradual introduction of modern ways.

You can not jump real farmers into new ways over night. The department of agriculture can not make a farmer, nor can the agricultural college, nor can the county agent nor the banker nor can any other agency. This is not a peculiarity with farmers. The law school can not make a successful lawyer, nor can a theological school make a successful minister, nor can a technical school make a successful engineer. Nine points must be in the individual, then the tenth point of outside help may spell success.

E A S

# SIDELIGHTS

### Take the Right Half.

He—I hope you didn't believe all they said about me.

She—I never believe more than half I hear.

He—Yes; but the trouble with you women is that you always believe the wrong half.

### A Mistake Somewhere.

Wix—I see by this paper that more than one-half of the world's population is feminine.

Nix—I don't believe it. If it were so how do you account for the fact that one-half of the world doesn't know how the other half lives?—Idle Hour.

### A Barrier of Ill Will.

"A good neighbor, you say?"

"Ideal," replied Mr. Crusterleigh warmly. "The best neighbor I ever had."

"Ah! I presume you have similar tastes and all that sort of thing."

"Similar tastes, nothing. That fellow has such a profound contempt for me and I have so much contempt for him that he would see me in hades before he would let a member of his family borrow anything from a member of my family."—Birmingham Age-Herald.

### Hadn't Read of a Flood.

A traveling man, the story goes, one night found himself obliged to remain in a small town on account of a washout on the railroad.

The rain was still coming down in torrents. The traveling man turned to the waitress.

"This certainly looks like the flood."

"The what?"

"The flood. You've read about the flood, and the ark landing on Mount Ararat, surely."

"My! mister, I ain't seen a paper for three days."

### Oh, These Congressmen.

A member of congress and his wife had been to Baltimore one afternoon. When they left the train at Washington, D. C., on their return, the wife discovered that her umbrella, which had been entrusted to the care of her husband, was missing.

"Where's my umbrella?" she demanded.

"I fear I have forgotten it, my dear," meekly answered the statesman. "It must still be in the train."

"And to think that the affairs of the nation are entrusted to a man who doesn't know enough to take care of a woman's umbrella!"—The Lamb.

### I Wonder Why.

"There was a good deal of baseball played in London last summer, and the doughboys often took English girls to see the game," said Earl Dunmore at a Washington reception.

"I heard of a doughboy who said to a girl as they entered the ball grounds together:

"'If there is anything you want explained, tell me. I guess a lot of things seem meaningless to you.'

"'Everything seems meaningless,' said the girl, 'and some things seem idiotic.'

"'What seems idiotic?' asked the doughboy.

"'Well,' said the girl, 'why do you call seats the stands?'"—Detroit Free Press.

### Not So Very Much.

"Have you taken anything for your complaint?" asked an Arkansas doctor of a long, lank, hungry-looking man who came to him for advice.

"Well, I ain't been taking much of anything, doc—that is, nothing to speak of. I tuk a couple o' bottles o' Pinkweed bitters a while back, an a bottle of Quackham's Invigorator, with a couple o' boxes of Curem's Pills and a lot o' quinine and some dandelion tea my old woman made. I've got a mustard plaster on my back an' a liver pad on, an' I'm wearing an 'lectric belt, an' takin' cod liver oil four times a day, with a dose or two of ginger ev'ry other day. 'Septing for that I ain't takin' nothin'."

# Handicraft for Boys

By A. NEELY HALL.
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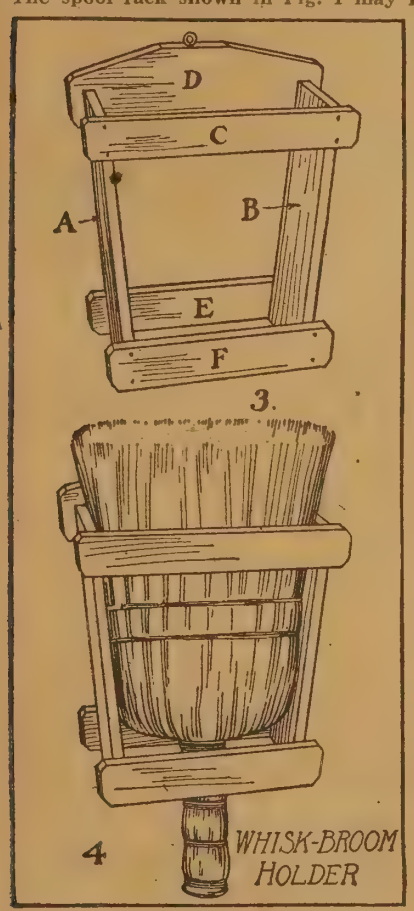
## HOME-MADE CHRISTMAS GIFTS.

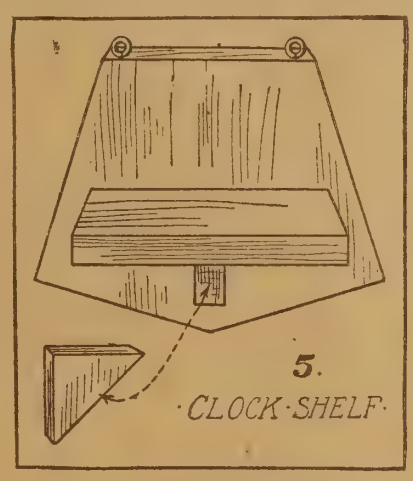
The gifts illustrated below have been designed along very simple lines with




the idea of providing articles that can be constructed easily with the tools almost every boy owns.

The spool rack shown in Fig. 1 may be made out of a boxboard three-eighths inch thick. The base piece should be cut about 4 1-2 inches wide and 6 inches long, with the top edge beveled off all around as shown. Lacking a plane, the beveling can be done by rubbing the edge with sandpaper. The two upright pieces should measure about 3 inches wide and 3 inches high. Cut the sides and top of these on a slant as shown, being careful to get opposite edges equal. If you find it too hard to cut the edges slanted in this way you may leave them straight and possibly round off the corners instead. After preparing the upright pieces bore a hole through each three-fourths inch below the top and large enough for a nail 4 1-2 inches long to slip through. If you haven't a gimlet with which to bore, make the holes by driving a nail through the pieces. The nail forms a spindle for the thread spool to turn upon. Fasten the uprights at the edges of the base block with nails driven through the base into their ends.




The size to make the little calendar board shown in fig. 2 depends upon the size of the calendar pad you can get. Various sizes of calendar pads are sold in the stationery stores, and cost two or three cents apiece. When you get the calender place it upon a piece of wood and mark out around it a design similar to that shown in Fig. 2. A piece of cigar box wood makes a very pretty board, and this wood is easily cut with a sharp knife. Fasten the calendar to the board with small tacks and screw a screw eye into the top edge of the board to hang up the calendar by.

The whisk-broom holder shown in Fig. 4 is made of six easily cut strips (Fig. 3.) Cigar-box wood will do nicely. Make strips A and B 1 1-2 inches wide by 4 inches long, C three-fourths inch wide by 4 1-2 inches long, 1 1-4 inches wide by the length of C, and E and F of the same size as C. Nail strips C, D, E and F to the edges of strips A and B, with C, E and F even with the ends of A and B, and the lower edge of D even with the lower edge of C. Allow the ends of the strips to project as shown. Screw a small screw eye into the center of the top edge of strip D, by which to hang up the rack.

Figure 5 shows an attractive shelf for a bedroom or kitchen clock. It is made of three pieces of wood, a back board, a shelf and a bracket. These may be cut from a box board. Use your own judgment as to the sizes to make them. After cutting them out, nail the back board to the edge of the shelf, then fasten the triangular bracket between the shelf and back board, in the exact center of their widths. Screw two screw eyes into top of back board for hangers.

Stain each gift with one of the modern stain finishes sold in paint stores, or where you have used cigarbox wood, simply rub up the surfaces with boiled linseed oil.

# From Producer to Consumer via American Red Cross



In one of the remote districts of Washington, where she is far removed from the busy marts of trade, lives "Grandmother" Hegg, a loyal American. Anxious to do her bit, through the American Red Cross, toward keeping the Yankee fighting men warm and comfortable, and, in order to expedite matters, sho brought forth her spinning wheel, long since consigned to the attic, to produce her own yarn.

'Grandmother" Hegg well remembers the time when all wool was spun by hand in private homes for family consumption, and, although she had been out of practice for many years, it did not take her long to acquire her old-time dexterity at the picturesque task.

And, here in the illustration, she is shown at her work—a work that has provided yarn for more than 1800 knitted garments since April 7, 1917. At her left is Mrs. Ella Wolf, who has carded the wool preparatory for spinning, and at the right, Miss Cora Hegg is demonstrating the final step in the process of producing a sweater made from the wool spun by "Grandmother" Hegg. It is believed these garments are the nearest thing to wearing apparel direct from producer to consumer that have been distributed to the men in the service.

## Not Like It Used to Be.

Stranger—Farm products cost more than they used to.

The Farmer—Yes. When a farmer is supposed to know the botanical name of what he's raisin' an' the entomological name of the insect that eats it, an' the pharmaceutical name of the chemical that will kill it, somebody's got to pay.

# Washington Boys in War Service



From The Twice-a-Week Spokesman-Review.

**RAYMOND L. GARVER, Deer Park, Wash.**—Enlisted in the service of his country in May, 1918, and arrived in France in July, where he has been serving with motor truck company 437.

**LIEUTENANT C. GROSHONG, Deer Park, Wash.**—Enlisted in the United States army, and is now stationed at Camp Joseph E. Johnston, Jacksonville, Fla., with the sixth company.

**ENSIGN F. GROSHONG, Deer Park, Wash.**—Enlisted in the United States navy in July, 1917, and trained at Annapolis, Md. A brother, Chester, is a lieutenant in the army. The parents of the boys live in Deer Park.

# Answer to the Christmas Roll Call




Every American is called upon to join the American Red Cross during Christmas roll call week, December 16-23.

# A CROOKED TRAIL—By Lewis B. Miller

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**A story of a thousand-mile saddle trip up and down the Texas frontier in pursuit of a runaway ox.**

SYNOPSIS.

Little did Travis Holloway realize, as he trudged off through the woods to bring in the calves and the oxen, that he was leaving his Texas frontier home to be gone many weeks. And little did he realize the adventure that those weeks held for him. Lep, his father's big spotted ox, was gone, and Travis, catching his pony, started to hunt him, riding bareback and without bridle. He breakfasted at a neighbor's where he borrowed bridle and saddle. Following a clue as to the whereabouts of the stray ox, he traveled too far to return home that night, and camped on the prairie with unseasoned rabbit meat and wild turkey eggs for his supper and breakfast. Next day and the next he went on and on. He had all but caught up with the lost animal when he arrived at the home of another frontier family, where he became acquainted with Frank and Stella Booth. Had he not tarried to spend the night and the next day with them, sure that the ox was with their cattle nearby, he would have found him and cut his travels short. But instead, the ox, accompanied by some of Frank's cattle, was gone. Together the boys started out in pursuit, and together they were destined to meet adventure after adventure for weeks. A haunted house, a hidden well, a swollen river, cattle thieves and sheriffs figured in their travels. Unwittingly they help the thieves, who later refuse to release their cattle. Even the sheriff fails to assist them, and they undertake, by a clever method, to secure them themselves.

## CHAPTER XV.

### Driving Away Our Own Cattle.

AT last, just as night was settling down, we halted at a neat-looking farm-house set in the midst of a grove of hackberries; and there, in reply to our questions, we learned what we were so anxious to learn.

"Do I recollect any long-horned, spotted steer in that bunch of cattle? Well, I ruther guess I do," the farmer at the woodpile assured us. "Couldn't well help noticin' that animal. He was mostly white, with reddish-brown spots, and wore a bell. He was in the herd when it stopped here, late yesterday evenin', but not when it moved on."

And then, in answer to our eager questions, the man threw down his ax and came out to explain.

"I'll tell you how it was. While the first drove was standin' here, another drove not quite as big happened along, and the owner of it wanted to buy some cattle. I told 'im I'd just parted with the last hoof I had to spare. I'd sold five head to the first man. But the first buyer he spoke up and said ruther than have the other fellow disappointed, he'd sell 'im a few cattle. So they dickered around awhile, and finally traded. I saw the money change hands. One of the cattle that changed owners was that big, spotted steer. There was six or eight others went with 'im; but I didn't notice any of the rest of 'em very close."

"What way did he drive from here—the man that bought the spotted steer?" I inquired.

"That outfit come along that cross-road there, and kept on west from here."

"And that's the way our cattle went," remarked Frank.

"No doubt about it," I answered.

"Did any of the hands desert the first drove and take up with the other?" questioned Frank.

The man shook his head. "No changin' hands that I saw."

"How many men were with the first drove?" I wanted to know.

"Three, not countin' the wagon-driver; and they all went on with it."

"So the man we'd seen at the water-mill must have left the outfit before they got this far," remarked Frank.

THE farmer was evidently getting very curious to know what all these inquiries meant. And we now explained exactly how matters stood, dwelling particularly on our experiences with the cattle-thieves and the sheriff.

"That fellow Dugan is a slow-poke and a crosspatch and a fool to boot," the man declared, indignantly. "I said so before he was elected, and I still stand by it. I worked ag'inst 'im the last time, and I expect to fight 'im harder if he ever tries for office ag'in. He's a disgrace to the county."

We were now about to start out on the other road, on the trail of our cattle, but the farmer would not hear to our riding any further tonight. So we said with him. Next morning he announced:

"If you boys just say the word, I'll saddle my horse and ride to town with you, and we'll make that fellow Dugan do something, whether he wants to or not; or we'll know the reason why."

"We're many times obliged to you, sir," replied Frank. "But we both got all we wanted of that bunch of slowness. Even if he tried to do anything, our cattle could be run all the way to Mexico before he could get well in motion."

"That's all so—every word of it," agreed the farmer.

"Our cattle have got into honest hands now, I hope, and we oughtn't to have much trouble getting possession of them when we once overtake them," I remarked.

The farmer scratched his head, doubtfully. "I wouldn't be too dead certain about the honest part," he replied. "The man that bought your cattle may be as honest as the day is long—or he may not. I didn't notice anything suspicious about 'im. But I didn't notice anything suspicious about the other fellows, either. They may all be buyin' some cattle and pickin' up some the easiest way they can. And the whole business looks suspicious to me now. That's an old trick for cattle-thieves to meet openly somewhere and swap stolen stock; so that if any of 'em get caught, they can prove by good witnesses that they bought every hoof in their herds."

WHEN we had saddled and mounted and were about to ride away, the farmer said:

"Well, I hope you'll find your cattle, and get 'em without much trouble. But I doubt it you will. Whatever you do, keep your eyes open. Cattle-thieves are desperate fellows, most of 'em; and they're dangerous for unarmed boys to deal with, especially out in that thin-settled country where you'll be likely to overhaul 'em. Between murder and the penitentiary, they'll choose murder every pop. If I can be of any help to you, don't fail to let me know. I'll go with you any time, day or night, rain or shine. And so will some of my neighbors. We don't love a horsethief or a cattle-thief around here."

We thanked him warmly and were quickly riding away, on the new-found trail of our cattle.

"What shall we do when we run onto that outfit?" I inquired of my traveling-companion.

"That's a riddle for us to solve. But they've got thirty-six hours the start, and maybe thirty or forty miles, and there'll be plenty of time to think up something. Unless they lie by somewhere, it may take up two or there days to overhaul them. We don't want to ride too hard."

"No. We must't break our horses down. But there's one thing I've already decided, Frank. From here on we depend on ourselves. No more leaning on broken sticks or sheriffs for me."

"Nor for me," he agreed, heartily enough.

ALL day long, save only for a short rest and grazing spell at noon, we followed the trail of the moving cattle. But they were marching briskly, and were still a good many miles in the lead when night called a halt on us. We camped near a farm-house, going to the house for our supper and for feed for our horses.

Another day, from sunup till sundown, we rode the trail, still without overtaking the drove. During the last few days we had seen little besides open, comparatively level country. But late this last afternoon we entered a rougher region. Here the settlements were scattering, and the country was largely given up to stock-raising.

Night found us a few miles from any house, and we camped in a little circular patch of prairie, hedged in for the most part with thickets of dogwood and greenbriers.

At the last cross-roads store we had bought some cheese and crackers and a chunk of dried beef. But I was hungry for fresh meat. Snatching Frank's six-shooter out of the saddle-bags, I whistled to Vic and started off in quest of game. Fifteen minutes later I had returned with two squirrels, one of which we broiled and ate for supper and the other for breakfast.

THE drove we were trailing was now only a few miles ahead, as we learned by inquiring at the first house we came to next morning. The owner of the drove had stopped there to buy some steers, and we learned by chance that his name was Hart. We might have overtaken the party by noon; but for some reason we slackened our speed. Our nooning-place was a dry camp, but about 3 o'clock we came to a clear, running creek.

"Look here, Frank," said I, "we're right on the heels of that outfit, and still we don't know what we're going to do when we come up with it. Why not lie by here till morning? The rest will be good for our horses. And by morning we ought to know—must know just what to do and say when we find our cattle."

My friend was willing enough, and we went into camp a few hundred yards from the road. First we found a deep place and had a good swim, amusing ourselves in the clear, cool stream for an hour or two. Then, having no change of clothes with us, we washed our underclothes, shirts and socks as thoughly as we could in the cold water. We had done this once before, while flood-bound on the Cowhouse. Afterwards, clad in nothing but our pantaloons, we hung our clothes on some bushes in the sunshine to dry, and then retreated to the shade to keep from blistering.

Now we threw ourselves down on the grass, by our saddles, and fell to debating the hard question we had stopped here to decide. The horses were grazing, and Vic, weary after much traveling, was sound asleep. At last we ourselves fell asleep and slept till late.

WHEN morning came, we had still not decided upon any definite plan of action. However, we would push on till we overtook the drove, and then let circumstances determine our course. Much would depend upon the estimate we formed of Hart, the owner of the drove. If we believed him to be an honest man, the matter would be simple enough. But if he seemed of doubtful character—



Frank Cautiously loaded his six-shooter.

That problem was still too hard for us, but we rode on, nevertheless. We must have been only two or three miles behind the cattle when, between 9 and 10 o'clock, we came to a log schoolhouse in the woods by the roadside. Wagons were standing around and horses were hitched to trees; and a little crowd of people had assembled, not in the schoolhouse, but under a brush-shed, or arbor, in front of the door. They were singing earnestly as we rode by.

"Did you know it was Sunday?" asked Frank.

"No; I'd forgot all about the days of the week. Wish we had time to stop. I always go to Sunday-school and preaching when I'm home."

"So do I. Let's stop anyhow. It don't seem just the thing to be hunting cattle on Sunday. We can overhaul that drove by noon tomorrow."

"I don't know so well about that, Frank. Sunday or not, it seems necessary for us to do some traveling today. But we might stop for Sunday school, and for preaching, if there is preaching, and then ride on. We can keep close behind the cattle that way."

We had soon unsaddled and lariated out our horses, and hung up our saddles, and were back at the arbor. We had no coats, and our clothes were not all that could be desired for the occasion. But clothes cut a very small figure in frontier meetings. Few of the men and boys present were dressed any better than we were.

SUNDAY school had just begun, and we went under the arbor and seated ourselves on a log, flattened a little on top with an axe for the purpose. We sat down in the rear of everybody else, but were soon invited into a class, and went. After Sunday school there was a sermon. And after the sermon we started for our horses, but a settler followed us and brought us back.

"This is a basket-meetin'," he informed us. "There'll be plenty for everybody, and to spare. And nobody ain't allowed to leave without their dinner."

So we ate with the crowd under the arbor. And very nicely they treated us. We were the only strangers present, it seems, and they vied with one another in looking after our wants. We had intended to take the road very soon after dinner, but were prevailed upon to wait till after the afternoon sermon, at 3 o'clock. When the services had ended, we saddled up and rode on our way.

Now we traveled faster than usual, to make up for lost time; and we intended to keep riding for at least two hours of the night. But half an hour after dark we saw a light glimmering ahead, and presently found ourselves opposite a considerable camp.

The camp was perhaps 200 yards from the road, in a little cove set back among the hills. A good-sized campfire was burning, and several men, ghostly figures in the reddish light, were moving back and forth around it. One of them, a negro, was cooking supper. Saddles lay scattered about, and a covered wagon, dimly visible, stood not many yards back. Some horses could be made out, and the occasional lowing of unseen cattle came from somewhere beyond the camp.

'Here they are, Frank," said I, reining up. "We've overhauled them at last."

"That's what we have. They don't seem to have made many miles today. But they must have traveled late, or they'd have had supper over before now."

"Shall we turn out and camp with them?"

'Let's see. No, I'm for riding ahead. I'd rather come onto the outfit in daylight. We don't know what kind of fellows they are. If they're thieves, they might smell a mouse if we stopped there tonight."

"That's so. But how do we know our cattle are there? Stolen animals change hands often, they say. They're too hot to hold long. If we could just find out—"

Here the deep tones of a big bell broke out on the night, ringing as if the wearer, while lying down, had turned his head to lick himself.

"Yes, they're there!" I exclaimed, but cautiously. "That's Lep's bell. I'd know that bell at midnight in Africa."

"Well, if Lep's there, the others are close around, I guess. So we needn't worry about that."

SOON we were riding on. The bell rang again, more than once, and as I listened to it I could not help saying:

"If we only—if we only had those three cattle out!"

"Yes, if we just had!" echoed Frank. "Let's hope that by this time tomorrow night we may have them out and a good long stretch on the road toward home."

Three-quarters of a mile further on we turned aside, up into another cove, and camped for the night. After eating a cold supper, we stretched ourselves on our blankets and talked over the situation. And a very puzzling, worrying situation we found it. Now that the critical time was almost upon us, we found ourselves growing anxious and nervous, and more or less excited.

Bright and early next morning we were awake and astir. But instead of taking the road, we remained quietly in camp. It was an hour or two later when the drove marched by. A strip of woods hid us from anybody passing along the road, but we could distinctly hear the shouts of the drivers, the ding-donging of Lep's bell, the lowing of the cattle, and even the tramping of many hoofed feet.

WHILE the procession was moving by, Frank was busy reloading some empty chambers of his six-shooter.

"What's that for?" I wanted to know.

"Oh, nothing in particular. But this is a wild country, and we don't know what we may run against out here. It's just as well to be prepared. No use being left at the mercy of a gang of cattle-thieves, if that's what they are."

Now we mounted and returned to the road. The cattle were not far ahead. The shouts of the cowboys could still be heard, rebounding from hill to hill.

First we overtook the wagon. After a few words with its black driver, we rode on, and a little later came up with the cattle.

There were four men in charge of the drove, and the first thing we noticed about them was that every one had a six-shooter belted around him. There was nothing unlawful in this. In enacting the law against weapon-carrying, the legislature had exempted the western portion of the state. And we had recently crossed the dividing line. While I understood the habits of cowboys, from having been among them, the fact that they had taken the first lawful opportunity to buckle on their weapons did not, as it seemed to me, speak very favorably of their peaceful intentions.

One of the men—we soon learned that it was Hart, the proprietor—was riding behind the cattle; and we rode up and engaged him in conversation.

"Where are you driving your cattle from?" I inquired.

"From wherever we can pick them up. This is a buyin' round-up we're on now."

"And where are you taking them to?" asked Frank.

"To my ranch, out beyond Fort Concho. It's a good distance out—entirely beyond the settlements. We're movin' in that direction now, but we expect to wind about a good deal before we get there. I want to take in as many cattle as I can, at reasonable prices?"

"About what are you paying for cattle these days?" inquired Frank. It was a question that any farmer or stock-raiser would be apt to ask.

"Well, that, of course, depends on what they are, their ages and so forth."

"That spotted steer over yonder with the bell on—what do you count him worth?" I ventured to inquire, with affected carelessness.

"Well, I forked over twenty dollars for him, only three or four days ago. But that was dirt-cheap. He's worth twice that if he's worth a cent. He's broke to work. His neck will tell you that. I got 'im from a buyer that didn't have any use for 'im. Wouldn't have bought 'im if I hadn't got 'im at a bargain. Ruther guess I'll sell 'im or swap 'im off to some farmer before we get out of the settlements. I'm not buyin' anything but young steers and heifers and cows to take out to the ranch."

Hart now dashed out to whip back an animal that had broken away from the drove, and Frank and I were left alone together.

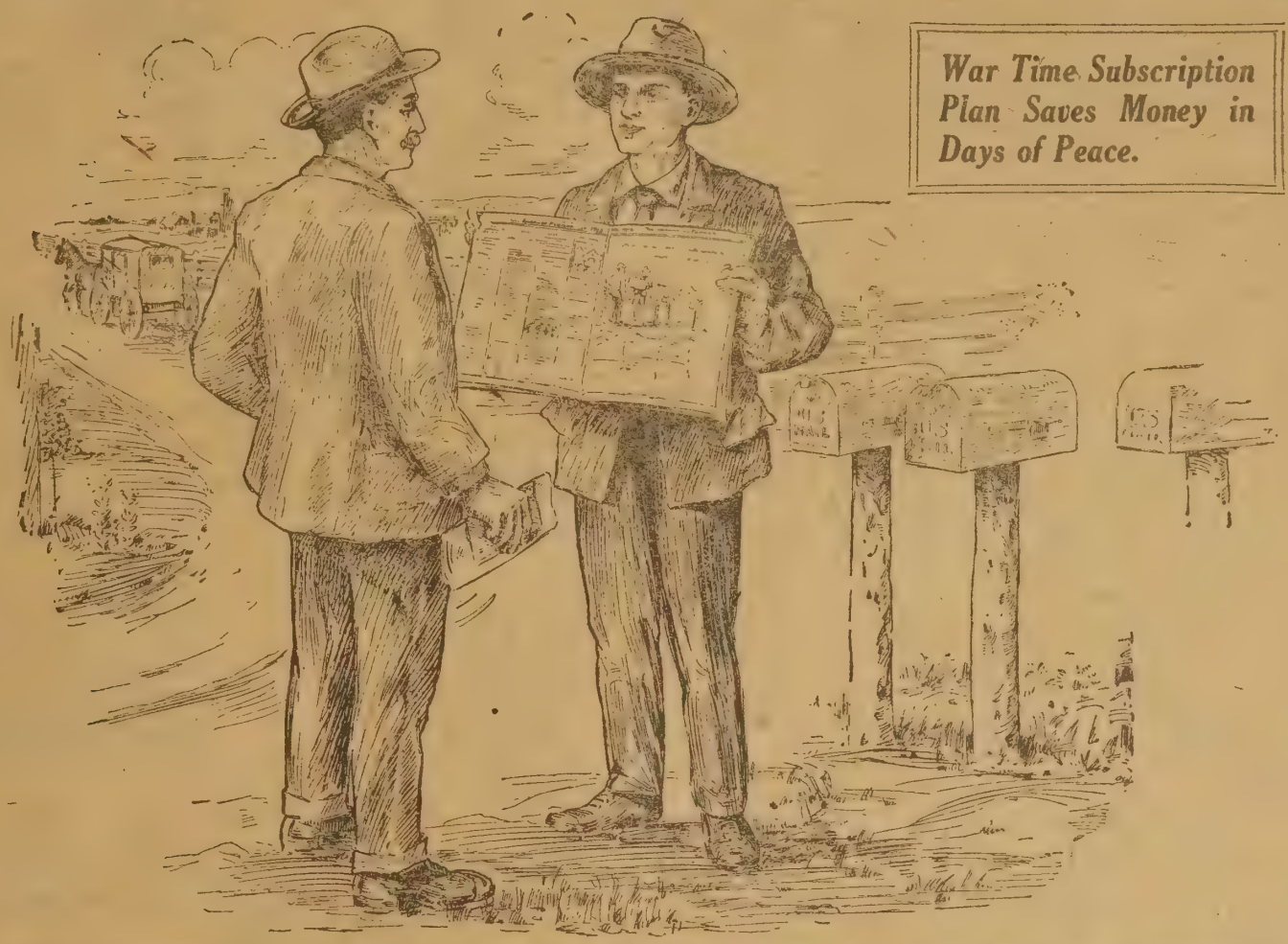
"Well, how do you size him up?" I inquired, in a low tone.

His brow wrinkled into a frown—a frown of doubt and indecision. "I can't make much out of him. What do you think?"

"He don't look to me like a very good man or a very bad

(Continued on page twenty three.)

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ALICE W. BARLAND, Editorial Contributor.

# Christmas Gifts

## Search the Attic and Old Trunks

By MRS. EDYTH TOZIER WEATHERED.

Has there been any practical reciprocity from this horrible war? Yes, it is bringing to the front each day wholesome lessons in economy. Many pioneers and older sons and daughters of pioneers have received drastic instructions along lines of conservation and substitutes in days long gone by, and often it is both interesting and amusing to listen to arguments given on this subject of economy by those who never were compelled to really exercise their views along economical lines. However, there is not a pioneer son or daughter who would care to blot from memory the days of substitutes and shortages. Never again did we think "history would repeat itself" and we would be turning backward to the long ago conditions. God has given to the soil many natural endowments of edibles which have grown to "blush unseen and waste its sweetness on desert air." Today they are called substitutes—in pioneer days they were substantials.

While we are looking for table supplies and diving deep into domestic science research for foods, let us not forget the attic and the old trunks, for in them you will bring to light the possibilities for pretty and useful articles for raiment and household accessories. Old silk skirts and waists can be ripped apart and washed and pressed. Often a little girl can have a silk petticoat which had been denied. Pin cushions, soft pillow tops, bags, etc., can be made. A piece of old broom handle can be padded and covered for a veil or necktie roll. Coat hangers can be covered. Handkerchief cases may be made from old silk or a chamois covering to be rolled and carried in the hand bag. Old white silk waists can be used for children's handkerchiefs. "Handy Sally" is a little roll made from an old piece of silk or ribbon in which is a pocket containing different colored silks, a yard or two wound on a small card—this is to be carried in a purse. This is handy for women who travel to and from their work and often find a glove needing immediate attention.

An old soft rain coat can be used in a great many ways—bathing caps with pretty linings, and we once knew of a little girl making for her mother a cap to be used on rainy days when hanging out clothes. This cap had a small circular cape effect which kept the rain from the neck. An old rain coat can be made into a music roll with pretty lining—or a book protector for school children. An old rain coat can be made into working gloves, and another useful article is a pocket on which is tacked a piece of sheep skin or heavy woolen cloth, to be used for a stove polisher. A like pocket also makes a splendid shoe polisher. The same plan can be made more dainty and rolled so as to slip into a man's traveling bag and thus save many a hotel towel from being blackened. This can also be added to a lady's traveling bag. Many men use talcum after shaving and a large chamois on a piece of silk can be rolled and added to toilet articles.

A little boy once was hard pressed for something to give his Uncle John—something that wouldn't require expenditure of money, and, after racking his young brain, set to work whittling some paddles of small dimensions. The family could not make out their use until the boy explained how he had heard Uncle John tell how he had used his jack knife, nail file and other articles to keep some of the country hotel windows from rattling. The young nephew had solved the problem. Then, too, Uncle John received from the same source a bunch of quill toothpicks all from home resources. It is wonderful what can be made from by-products when one takes the time and has the inclination to manufacture.

We know of a woman who made her two little girls each a muff, cap and neck-piece out of an old brown plush over-skirt that had been thrown away. She steamed and brushed it. The lining was of brown satin taken from a man's discarded coat.

Pretty corset covers can be made from worn-out underwear. There can always be found some unworn parts and plenty of laces. Worn white lace waists make dainty and pretty doilies, tops for pincushions and handkerchiefs.

We once knew several country children who formed themselves into a Christmas club. They lived a long distance from a city and they had no money with which to purchase material so they used their inventive powers. The useful articles that developed from that club of little folks could well be a lesson for older heads and give splendid arguments for the conservation orators of today. Oh! pioneer days have taught many pupils.

There have been many "Hooverized" Christmases in the northwest—the days when children were satisfied with a stick of striped candy, an orange and cooky dough made into shapes of animals, stars and moons. Then there was last year's doll in a new dress. Brother received a cap, mittens, a bat and a ball. Oh! these extravagant Christmases and "swappin' bees," that take the good old sentiment out of the real Christmas of Ye Olden Times. Who is to blame? Why, parents and others who themselves have taught and indulged children's and others' desire for extravagance.

Why not begin now to Hooverize Christmas as well as to Hooverize on edibles? Children and adults will be better for the return of Yuletide sentiments of long ago. They can learn to use cast-offs and by-products in the manufacture of useful articles and those to whom made-at-home presents are given, enjoy the gift much more and do not feel the next year's reciprocity obligation. Yes, this war was a great adjustor of unreasonable extravagances.

# Crochet Baby Sack

By WINIFRED WORTH.



During the cool days baby must have plenty of warm sacks to ward off the chilly breezes. This one is easy to crochet.

Use No. 5 Perle cotton. Make a chain the desired length of sack in the front.

1st row—Dc. in each ch.

2nd row—Ch. 2, dc. in each st.

3rd, 4th and 5th rows—Same as 2nd row.

6th row (Make points ch. down 3 st. at end of row)—1 t. sk., 1 dc., 1 t., back in skipped dc.

7th, 8th and 9th rows—Same as 6th row.

Continue until sack is required size. The sleeves are made the same. Finish off with 5 ch., 1 dc., 5 ch.

2nd row—7 dc. in 5 ch. of 1st row, 4 dc. in next 5 ch. ch. 5, catch in 4th st. of 7th dc. just made. Fill in with 4 dc. p., 4 dc., then 3 dc. in unfinished ch. of 1st row.

### CHRISTMAS PLUM PUDDING.

Now is the time to make the Christmas plum pudding, and the following inexpensive recipe, sent out by Miss Mary Sutherland of the Washington State college, is quite suited to the requirements for conservation:

3-4 lb. dry stale bread crumbs.
1 cup scalded milk.
3-4 cup Karo, honey or syrup.
3 eggs.
1-2 lb. raisins seeded, cut and floured.
1-4 lb. currants.
1-4 lb. finely chopped figs.
2 oz. finely cut citron.
1-2 lb. suet or 3-4 cup Wesson oil.
1-4 cup cider.
1-2 grated nutmeg.
1 teaspoon cinnamon.
1-3 teaspoon mace.
1 1-2 teaspoon salt.
3-4 cup chopped nut meats.

Soak bread crumbs in milk, let stand until cool. Add syrup, beaten egg yolks, raisins, currants, figs, and citron; add fat, then cider, and remaining spices—fold in stiffly beaten whites of eggs. Turn into buttered moulds and steam 5 to 6 hours.

**Sauce.**

Thicken cup of boiling water with 3-4 tablespoon cornstarch mixed with 3 tablespoons cold water. Add 1-2 cup Karo, syrup, or honey. Add a few grains salt and 2 tablespoons lemon juice.

# Stuffing for the Fowl

What's a Christmas turkey without stuffing? The back may be the best part of a goose, but surely the stuffing is a very important part of any Christmas fowl. Bread dressing is only one of the many kinds given here by the United States food administration.

**Puritan Stuffing.**

2 cups bread (use stale bread; if you have none, make some other dressing).
Hot water to moisten.
2 tablespoons turkey fat.
1 egg.
1 teaspoon sage.
1-2 cup milk or more if necessary.
2 teaspoons salt.
1-4 teaspoon pepper.
1 teaspoon sage.
1-4 cup chopped black walnuts.

Remove crusts of bread and wring out of hot water. Add the moist bread to the hot turkey fat. Beat egg and mix with milk. Add this mixture gradually to the bread and fat. Add to seasonings and cook for 2 minutes, then use for stuffing fowl.

**Rice and Giblet Stuffing.**

Boil until tender 1-2 cup rice in boiling salted water. Drain, pour cold water through the rice and dry thoroughly in a warm oven. Brown in one tablespoon fat, one onion and the giblets which have been put through the meat grinder. Add this to the rice together with 1 teaspoon salt, 1-2 teaspoon thyme, 1-2 teaspoon sage, 1-2 teaspoon marjoram, 1-2 teaspoon pepper and a few grains of cayenne pepper. Mix all thoroughly together and use for stuffing fowl. This quantity is enough for stuffing a 3 to 4 pound chicken.

**Chestnut Stuffing.**

Peel one pound of chestnuts, put them in boiling water and let them soak until the brown skin can be rubbed off, then wash them in cold water and drain. Brown four tablespoons of fat with two of syrup, add soup or hot water, then add chestnuts and stew until partly soft, being careful to keep them whole. Then take them out and cool them. Fill chicken or turkey with this stuffing, sew up the opening and proceed with the roasting.

**Potato Stuffing.**

To 2 cups riced potato add 3 small onions which have been chopped and cooked with 2 tablespoons chopped salt pork, 1-2 teaspoon marjoram, 1 teaspoon salt, 1-4 teaspoon white pepper, 1-4 teaspoon paprika, few grains cayenne, 1 tablespoon chopped parsley or 1 teaspoon dried parsley and 1 tablespoon melted margarine. Mix all together and use for stuffing.

### NO RELAXATION IN FOOD SAVING.

For the first time since its inception, the food administration will not frown upon the use of wheat bread. It has announced that all regulations requiring the use of wheat substitutes in baking are suspended and that the white loaf may return to its own. Restricted consumption of wheat bread is still advocated, however. Carrying on of conservation is requested by the food administration. There is to be no relaxation in the general food saving program.

### APPLES FOR WINTER USE.

Every surplus fall apple has in it possibilities for winter desserts or relishes. With the drain on transportation during the coming winter likely to make the importation of fruits more difficult, the pantry shelf should be well stocked with local home products preserved in some form, as jelly, conserve, juices or dried.

Apples offer infinite possibilities for winter sweets.

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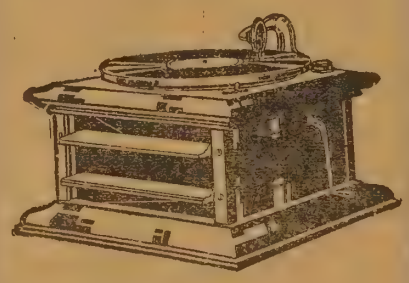
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# PATTERNS

**To secure the latest of these high-class patterns for its patrons, it is necessary for the Farmer to send east for them, so please order the patterns you desire about two weeks before you want to use them.**

2376—Girls' dress. Cut in four sizes: 4, 6, 8 and 10 years. Size 8 requires 3 1-2 yards of 44-inch material. Price 10 cents.

2516—Ladies' cape coat. Cut in four sizes: Small, 32-34; medium, 36-38; large, 40-42; and extra large, 44-46 inches bust measure. Size medium will require 5 1-2 yards of 54-inch material. Price 10 cents.

2677—Misses' dress. Cut in three sizes: 16, 18 and 20 years. Width of skirt at lower edge is 1 3-4 yards. Size 16 will require 3 5-8 yards of 54-inch material. Price 10 cents.

2678—Child's rompers. Cut in four sizes: 2, 4, 6 and 8 years. Size 4 will require 2 3-4 yards of 36-inch material. Price 10 cents.

2327—Ladies' dress. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Size 38 requires 6 yards of 36-inch material. The skirt portion measures a little over 2 yards at the foot. Price 10 cents.

2379—Girls' dress. Cut in five sizes: 6, 8, 10, 12 and 14 years. Size 10 requires 4 3-8 yards of 36-inch material. Price 10 cents.

2675—Ladies' house dress. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 6 1-8 yards of 36-inch material. Width at lower edge is about 2 1-3 yards. Price 10 cents.

2706—Girls' dress. Cut in three sizes: 12, 14 and 16 years. Size 14 will require 4 1-2 yards of 36-inch material. Price 10 cents.

2681—Girls' dress. Cut in four sizes: 6, 8, 10 and 12 years. Size 12 will require 3 3-4 yards of 44-inch material. Price 10 cents.

2435—Ladies' apron. Cut in four sizes: small, 32-34; medium, 36-38; large, 40-42; and extra large, 44-46 inches bust measure. A medium size requires 4 5-8 yards of 36-inch material. Price 10 cents.

2693-2701—A good business costume. Waist 2693, cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 2701, cut in seven sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. For a medium size the waist will require 2 3-8 yards of 36-inch material. The skirt will require 3 3-8 yards of 44-inch material. Width at lower edge is 2 1-4 yards with plaits drawn out. Two separate patterns 10 cents for each.

2684—Ladies' combination. Cut in sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. Size medium requires 2 5-8 yards of 36-inch material. Price 10 cents.




Please fill in this order and mail with remittance to:
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Be sure to give the pattern number and the correct size.

## CRANBERRY RECIPES.

**Different Ways of Preparing the Fruit With Syrup.**

The following recipes for using cranberries are taken from the Washington federal food administration bulletin:

**Cranberry Cake.**

1 cup corn syrup, 1-2 cup Wesson oil, 1 egg, 1 1-2 cups stewed cranberries, 2 cups flour (1 white flour, 1 barley flour), 1 teaspoon soda, cinnamon, nutmeg, 1-2 teaspoon cloves, a little salt.

Place yoke of egg in bowl, add syrup and oil alternately, beating together, then add one and one-half cups cranberries and sift flour with dry ingredients into former. Beat and divide into layers, frost with following icing: 1 cup corn syrup, 1-4 cup water; boil until form hard ball in cold water; then add slowly to beaten white of one egg.

**Cranberry Relish.**

Wash cranberries and grind through coarse chopper. Add equal parts of corn syrup to cranberries. Place on fire and heat. When at boiling point bottle or serve.

**Cranberry Pie.**

1 1-2 cups split cranberries (raw), 1-2 cup seeded raisins, 1 cup water. Place on stove and bring to boil. Add 1 cup corn syrup and 1 1-2 tablespoons corn starch moistened in cold water with 1 teaspoon vanilla added. When thickened remove from fire and place in pie crust. Place strips on top.

**Cranberry Marmalade.**

Two quarts cranberries, 1 1-2 pounds seedless raisins, 6 cups corn syrup. Water juice and pulp of three oranges. Wash berries and cover with water. Cook and force through a sieve and add other ingredients. Cook until thick. Put in glass jars.

## RICE CROP SHOWS INCREASE.

The first official estimate of the rice crop in Japan this year places it at about 302,000,000 bushels, an increase of about 26,000,000 bushels over the average for the last 10 years. The new rice is now being placed on the market.

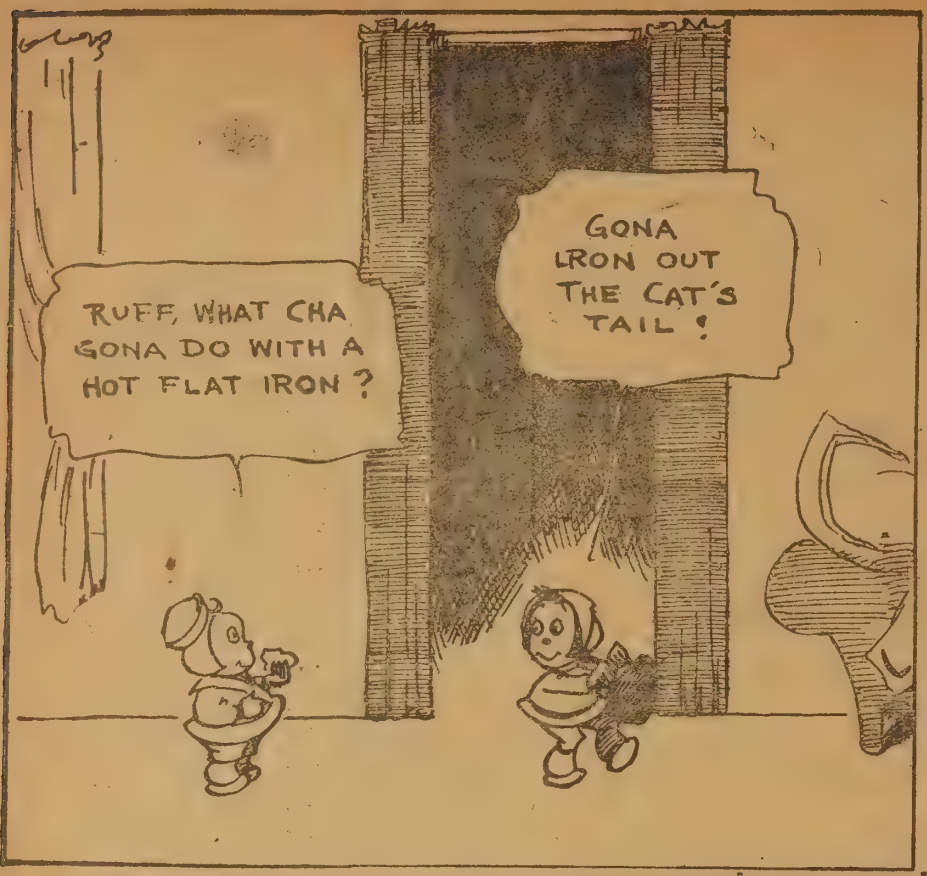
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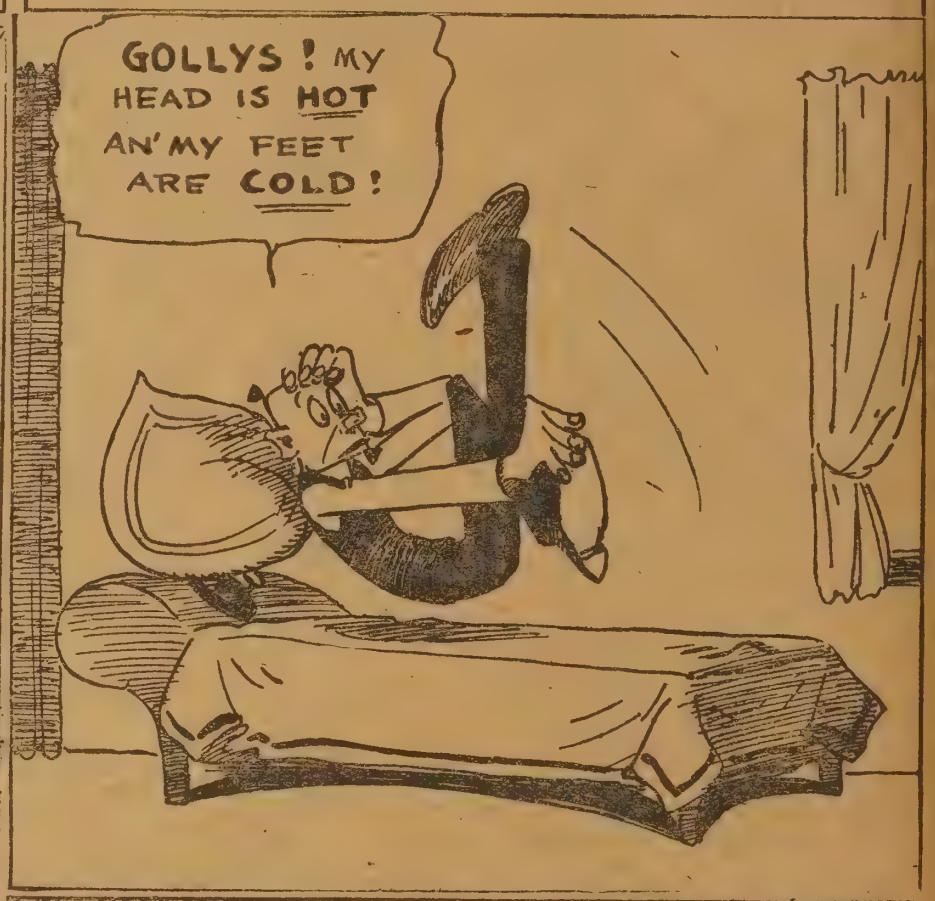
# RUFF AND REDDY CAUSE A BAD CASE OF COLD FEET

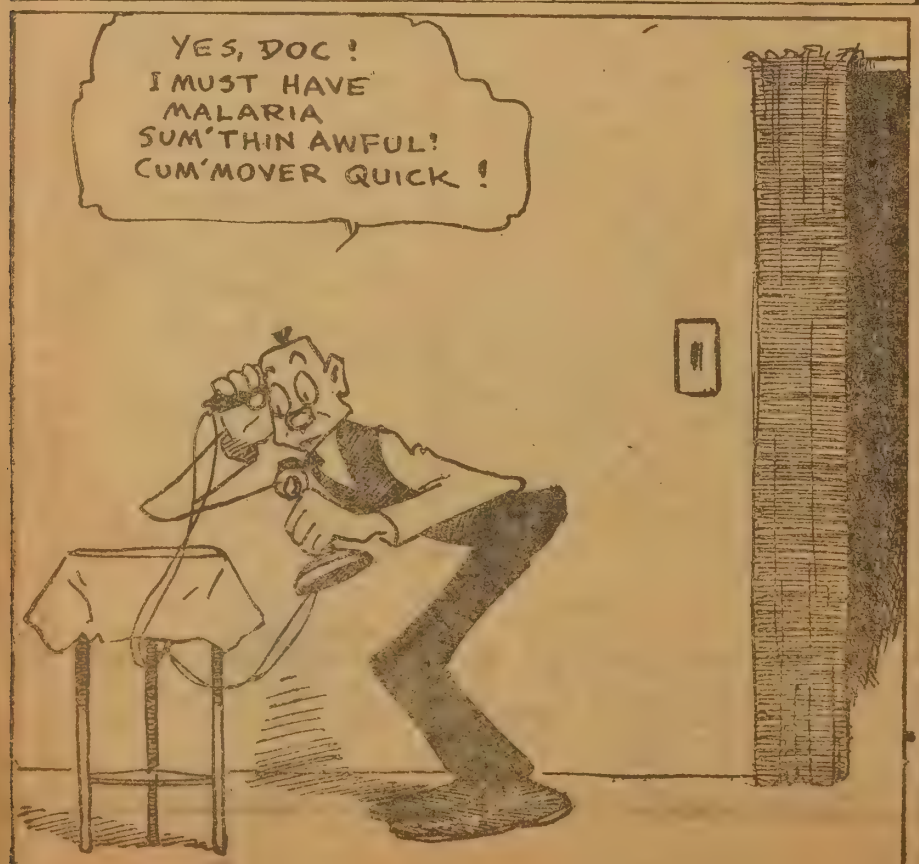


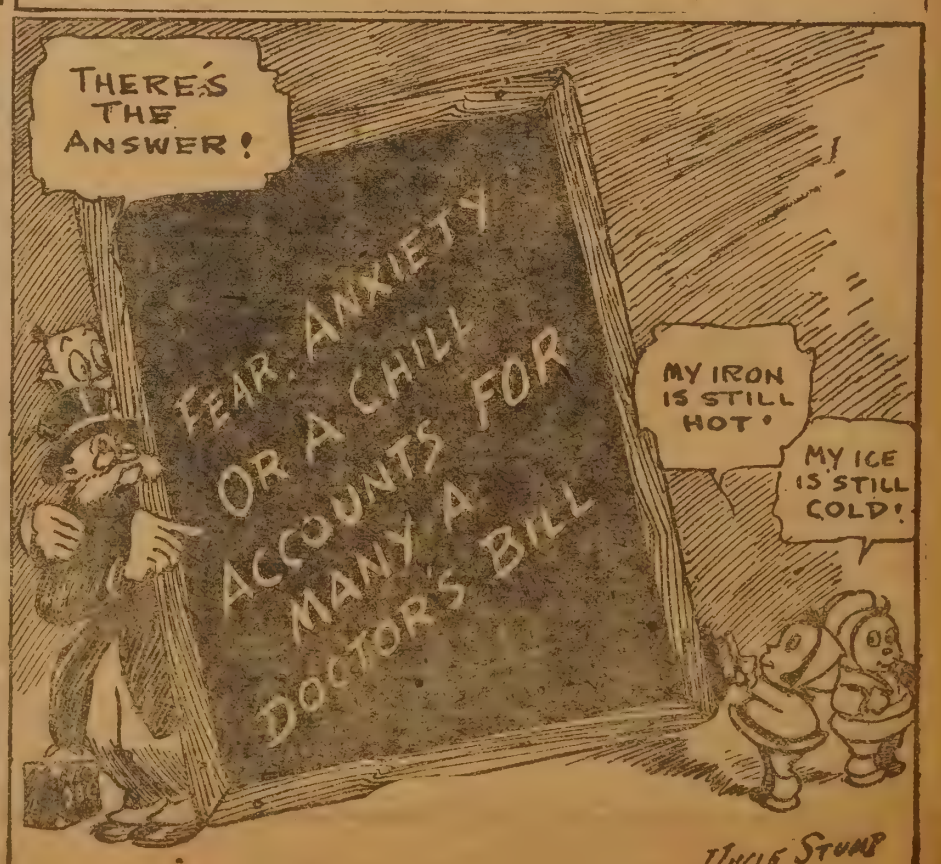







UNCLE STUMP




Dear Corner Cousins: Last week, I promised you some good holiday recipes, and here they are:

**Carrot Pudding.**

Grate one cup of potatoes, to which add one teaspoon baking soda, add one cup grated carrots, one cup of sugar, one cup of raisins, one-half a cup of shortening, either suet or butter and lard mixed; one cup of flour, one-half a teaspoon nutmeg, one-half teaspoon cinnamon, one-half teaspoon cloves. Grease pail, cover tight and steam three to four hours. A double boiler may be used, but do not lift the lid while steaming. Serve hot. This makes a delicious pudding and I prefer it to plum pudding. The potatoes and carrots may be put through the food-chopper with the smallest knife on.

**Economy Eggless Cake.**

One-half pound of raisins stewed 15 minutes in cold water and one-fourth cup of lard or Crisco. Then add one-half a cup of cold water. While this is boiling slowly, sift one cup of sugar and two cups of flour, one-half a teaspoon each of cinnamon, cloves, nutmeg and salt, and one-half tablespoon baking soda. Add raisins and make in loaf in slow oven from 40 to 60 minutes. This cake keeps very well if you are not fond of cake, and if you are and mother hides some of it, it will be still better after a week. AUNT NELLIE.

---

April 25 Bonnie Beck of Grandview was 12 years old, and she hopes she has a twin. Bonnie and her little sister walk about a mile and a half to school. They have 11 pet rabbits that are very tame.

---

Christina Grant of Methow doesn't think Elizabeth Brown is so unlucky after all because she knows a girl who was 13 August 29. Katinka Tollesfen, who lives at Langley, is Christina's twin. Christina has two cousins in the army.

---

This winter, Alta Howsden of Pateros is going to town to school. Alta lives on a farm in the Big Bend. She was 11 years old April 1.

---

A busy little farm boy, Aubrey La Plant, of Marcus, disks, harrows, plows and husks corn. Besides he finds time to knit for the soldiers. Aubrey lives on a 160-acre farm on the Marcus flat. He has two pets, a dog, Dick, and a horse, Dolly. Aubrey will be 12 years old August 22, 1919.

---

All the many nice letters of the Corner are read by Mildred Riley, a Pomeroy cousin, and she enjoys them every one. Mildred walks two and one half miles to school. During intermission, the pupils have lots of fun playing with the football. Della Crumpacker is her cousin. Mildred lives on an 870-acre farm and would rather live in the country than in the city.

---

Here are some real twins, Alice and Alma Root, of Kettle Falls, whose birthdays are July 6, and they are 12 years old. Have they some Corner twins? If so will they write a letter? Alice and Alma live on a fruit ranch and for pets have nine rabbits and a shepherd dog. They go to school in a van.

---

"Our little kittens have their eyes open now," writes Letha Peterson, R. F. D. 2, St. John, "and every time I go in the house they come to meet me." There are four white ones and one is a maltese. The big dog, Shep, chases the piggies. Letha has a doll named Rose.

---

Annie Croghan of Valley has a brother, Philip, in the army overseas. She has a pet cat, a pet pig, a pet chicken and a pet kitten. If Annie has a twin, she wishes they would write to her. She was 9 years old October 27.

---

"Bonnydale is the name of our farm," writes June Campbell, who lives two miles from Waverly. June rides her pony to school. When their Scotch collie, Shep, is hungry, he scratches at the window and barks until he is fed. June was 11 years old June 26, and if she has any twins she wishes they would write to her.

---

Beatrice Clay has lots of fun at school, and playing house and climbing trees. Beatrice lives near St. John, and they have some apples as big as a saucer.

---

One day Augusta Lewis of Sunset picked up 15 sacks of potatoes. She has knitted a sweater, a washrag, four quilt blocks, and a pair of wristlets. She sold her lamb and bought a war saving stamp with the proceeds.

---

A boy cousin, George Farmer, of Greenacres, was 11 years old December 17. Has he a twin? George lives on a 160-acre farm. He can ride two of the horses and runs the car. He has six pigs of his own.

---

"I hope Helen and Edith Callaway will see my letter in the Corner," writes Dorothy Callaway, Box 258, Valley, "because they have the same name as I." Dorothy lives on a farm. She will be 13 years old January 31.

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The members of the Junior Red Cross society to which Lucile McKinney belongs are supposed to gather bottles, jar lids, old jar rubbers and old spoons. Lucile lives on an 80-acre farm near Rockford. She will be 9 years old February 10.

---

While mama and papa are east, Vivian Kidwell of Pomeroy is staying with her grandma and her aunt. Vivian has two horses, Brownie and Tag; two cows, Rose and Pansy; a calf, Bud, and four lambs, Buster, Tiny, Billy and Nannie. If Vivian has a twin she wishes them to write to her. She will be 10 years old July 15.

---

"One of our big pigs has five of the funniest liftle pigs," writes Lura Herrick, Box 154, Springdale. Laura is feeling fine and hopes the cousins are, too. She thought the old soldier's letter was very nice and is glad that he likes our Corner, too. Harold, Walter and Earl are Laura's three brothers.

---

Emma Pohle is knitting an old rose afghan square for the Red Cross. Her brothers are Ernest, Otto, Albert and Willie, who is in limited service. One of her uncles is somewhere in France. Emma's address is R. R. 5, Box 23, Spokane, Wash. She was 10 years old September 21.

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**Two Funny Records.**

Dear Aunt Nellie: I am 11 years old and in the fifth grade. I have light hair and blue eyes. I am about four feet two inches and a half tall. I would like to have any of the cousins write to me. I will write to them. I like to go to school. I like all the studies. I would like to have Aunt Nellie write some more stories. We have three little colts, Maude, Cricket and Blaze. We have a cow named Nellie. Her calf is red. His name is Sullivan. We have a graphophone. We have two funny records. The names are "Nigger Loves a Watermelon, Ha! Ha! Ha!" and "Old Dan Tucker." Did any of the cousins ever hear the song of "Nigger Loves a Watermelon?" My birthday is March 24. I live in the country. I have never been out of Washington and Oregon. May I be a cousin, Aunt Nellie?—Dorotha Hicks, age 11, Coulee City, Wash.

**Sunflower Is 10 Feet High.**

Dear Aunt Nellie: My father has taken The Farmer for three or four years. I have enjoyed reading the letters in the Corner. May I become a member? I live on a 160-acre farm. We have over 100 head of cattle. I like to ride horseback. We live four and one-half miles from town. I was 12 May 8, and am in the seventh and eighth grades at school. We had a war garden. One of our sunflowers is 10 feet five inches tall. I wish some of the boy cousins would write to me. I have one sister and one brother. My sister is 15 years old. She got an eighth grade diploma this spring. My brother is eight years old. He is in the fourth grade. I have three thrift stamps and expect to buy more soon. I can knit. I knitted three squares for an afghan.—Ralph Springston, Quincy, Wash.

**Earns Stamp Money.**

Dear Aunt Nellie: I enjoy reading the Children's Corner very much. I am 10 years old and I am in the eighth grade. My birthday is February 17. I have light blue eyes and light brown hair. Have I a twin? If so I hope he or she will write. May I be a cousin? I live in Walla Walla, but I am working in Touchet. I am staying with Mrs. Jacobs and baby while Mr. Jacobs has gone harvesting. Mrs. Jacobs has two cows and their names are Jersey and Reggy. Their dogs' name is Brownie. The cat's name is Tom. He caught two rabbits. Brownie kept the hawks and other big birds away. They have 60 acres of alfalfa. I have one sister and her name is Helen and three brothers, Alva, Owen and Glen. I am earning money to buy thrift stamps. I can knit and crochet. joined the Red Cross. I hope all the cousins are well.—Nina Fisk, Touchet, Wash.

**Knits for the Red Cross.**

Dear Aunt Nellie. May I become a cousin? I was 14 years old April 21, 1918. Have I a twin? If so I wish they would write to me. I have a fair complexion, blue eyes, auburn hair and am five feet five inches tall. I have a father, mother and two brothers. Edwin is 10 and Earnest is 5. We have each a Belgian hare. Their names are Major Bobtail, Madame Betty and Lady Belle. I am visiting my friend, Bertha Walker. We took some pictures. She lives near Snake river. She is writing, too. I know how to knit and crochet. I have knitted two pairs of socks for the Red Cross. My father and mother knit for the Red Cross, also. I hope to be your niece.—Alberta M. Raymond, Box 17, Kahlotus, Wash.

**Can the Cousins Guess These Riddles?**

Dear Aunt Nellie: I live on a 10-acre farm and I have one dog and three cats. The dog is a Spitz. His name is Jeff. The cats' names are Cutie, Nigger and Molly. They are good cats. We have one pig, one horse, four big rabbits and three little ones. We have 12 hens and 42 little chickens. What is it you hear but can not see? What is it that has ears but can not hear? What is it that has a tongue and can not talk? What is it that does not stop running? I will give answers to the riddles next time I write. I am 11 years old. My birthday is March 30. If I have a twin I wish she or he would write.—Lillian Edwall, R. F. D. 1, Medical Lake, Wash.

**Little Pet Nanny Goat.**

Dear Aunt Nellie: I am 13 years old. My birthday is May 9. Have I a twin? If so I wish he or she would write to me. I live on a farm six miles from Addy. Mama is working out and keeping us children. The man she is working for now has 200 sheep, 20 goats, three horses, four head of cattle, two large pigs and five little ones, 25 chickens, one pigeon and 50 rabbits. I own a little pet nanny goat. I am in the seventh grade. I have two brothers. I have an uncle in the army. I belong to the Junior Red Cross and have knitted several nine-inch squares. This is my first letter to the Children's Corner.—Eva Dunlap, R. F. D. 1, Box 2, Addy, Wash.

**Military Training at School.**

Dear Aunt Nellie: This is the third time I have written to the Children's Corner. I am 12 years old and in the sixth grade at school. My birthday is September 18. My teacher's name is Miss Campbell. I have one brother in the navy and one is going to enlist in the navy or the marines. My brother who is in the navy is at Mare Island (California) Electrical Training school. I have one married sister, one single sister and eight brothers. Our school has military training. The principal is Mr. Jaques. We have nine horses and one colt. The colt's name is Fannie.—Albert M. Needham, Wilcox, Wash.

**Lives on 400-Acre Farm.**

Dear Aunt Nellie: I am 11 years old. My birthday is December 14. Have I a twin? If so I would like to hear from her. I live on a 400-acre farm. We have 19 head of horses, 15 cows and two little calves. We also have five pigs and four dozen chickens. We have 300 little chickens. I have two dogs, three big cats and four little kittens. We take the Farmer and I enjoy reading the other letters very much. I stay with my grandma in town and go to school. I am in the sixth grade. I have a brother and a sister younger than I am. I will write again.—Ethel Milles, Box 15, Bluestem, Wash.

**Four Sisters and Two Brothers.**

Dear Aunt Nellie: I like to read the letters. My sisters' names are Sylvia Mae, age 15, Bessie Marie, age eight, Helen Rowena, age six, and Nina Fay, age seven months. My brothers' names are Willard Lee, age 10, and Eugene Adelbert, age four. We all go to school but two. I will give my description. I am real light, have dark hair, blue eyes and am about five feet and one-fourth of an inch tall. I am 12 years old. My birthday is December 17. Have I a twin? If I have I wish they would write to me. I will answer their letters.—Hattie Bell Hogan, Tyler, Wash.

**Likes to Go to School.**

Dear Aunt Nellie: I am 10 years old and my birthday is April 12. Have I a twin? I have one sister and one brother, my brother's name is Clayton, aged 3 months. We have one cow and calf. I have four sheep. We live 11 miles southwest of Ellensburg. We have a car and we have made two trips to grandma's and are going to make another. I like to go to school. I am in the fourth grade. We have four scholars in our school. I have to go a mile and a half.—Zeldo May Northrup, Smyrna, Wash.

**Helping Win the War.**

Dear Aunt Nellie: I am 14 years old and my birthday is June 24. I am in the eighth grade and I go to the Bear Creek school. I am buying war saving stamps to help whip the Huns. I have bought $5 worth and I think I will buy $5 worth more. I have three pets, a dog, and his name is Chig; a cat, Tom, and a red rooster, Yankee. I will tell you more about my pets next time. I have four sisters and one brother. We have nine cows, five calves and two horses. I hope I have a twin.—Ula Easterling, Winthrow, Wash.

**In the Ninth Grade.**

Dear Aunt Nellie: I haven't written to you for a long time, so I thought I'd write again. I saw my name in the roll of honor. I am in the ninth grade this year. I saw what Esther Chalenor wrote. I know her. I live just about one mile from her. I trust that Aunt Nellie and the cousins are well and happy.—Stella B. Ervin, Mead, Wash.

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(Address all letters to Aunt Nellie, care of The Washington Farmer, Spokane, Wash.)

# A Crooked Trail

(Continued from page eighteen.)

man. Guess he's astraddle of the fence between straight and crooked."

"That must be about the way he looks to me. I don't believe he's dishonest enough to steal. But is he honest enough to give up stolen cattle that he has paid cash for?"

"He may be, but I doubt it. The only way to find out for certain is to try him."

"And if we do, we stand a fine chance to look into some more six-shooters."

"No more of that kind of thing for me, if you please. But if we don't laiy claim to our cattle, what can we do?"

Frank looked worried. "Wish I knew," he said.

Hart now returned to the road. And soon he began to question us:

"Which way you travelin', boys?"

"We're out for a little trip," Frank answered him. "Don't know yet just how far we'll go. Fine weather; crops all laid by; nothing much to do at home. We might as well see some of the country as not."

We rode on together for a short time, talking on various topics. Presently a steer left the drove, and Hart dashed away in furious pursuit. A cow made off on the other side, and I galloped round her and brought her back. Hart now returned to us and said:

"Reckon you boys wouldn't like a job at cattle-drivin', would you?"

"Well now, we might," I answered, turning questioning eyes toward Frank. This was something we had not foreseen.

"Don't know why we shouldn't," Frank replied, speaking to Hart; but his answer was also addressed to me—to the question I had looked.

"If you didn't want too much money, don't know but what I might use you for a while," remarked the drover. "There wouldn't be a great sight for you to do. We've got hands enough to look after this little bunch as it is now. Only about 250 head in it, all told. But I expect to buy a few hundred head more. And if I had other hands, I could run off through the country and find more cattle than I can pick up along the main-traveled road. We couldn't move as fast as we're movin' now, but we'd get more cattle in the same length of time. What do you want a month?"

"How much can you pay?" answered Frank.

"Would fifteen dollars be enough?"

"Could you make it twenty?"

"Don't believe I could stretch it to that, considerin' the easy work. We're not rushin' things much this trip. But as you've got your own horses and saddles, I might add a dollar or two—say seventeen a month. Well, call it eighteen."

"How long will you want us?" I questioned.

"Until we get through buyin', and strike the trail for the ranch. I might even take you on up there if you wanted to go. But, of course, you can drop out whenever you feel like it."

Frank and I considered the offer. I had already made up my mind to accept it, less for the sake of the wages than because of the opportunity afforded us to stay with our cattle till we could get possession of them.

"Well, what do you say, Travis?" asked Frank, turning to me.

"We're going in the same direction anyway. "Let's call it a bargain."

"All right. A bargain it is," Frank remarked to the drover. "When do you want us to start in?"

"Right away, if you feel like it. After dinner I want to take two of the boys and run off into the country a few miles, to see what we can round up. The rest of you can keep the cattle joggin' along till we overhaul you. Better drop back and leave your saddle-bags and things in the wagon."

We rode back, and after ridding ourselves of all unnecessary encumbrances, were soon up with the drove again, busy, shouting cowboys now.

Thus it came about that, instead of claiming our cattle and starting home with them, we had actually hired ourselves to the drover to help drive them further away.

(To be continued.)



Western Branch: Washington Shoe Mfg. Co., Seattle, Wash.

# Stockmen Organize

## Will Manage Pacific International

For the purpose of guaranteeing the future of the Pacific International Live Stock show a large number of the representative stockmen met during the show last week and formed a permanent organization, with Frank Brown of Carleton, Ore., prominent Shorthorn breeder, president and E. L. Potter of O. A. C. secretary. The stockmen present expressed strong approval of the plan to choose a manager who would devote his time to the interests of the annual show and receive a fair salary for his services.

The board of directors, who, with the officers and manager, will conduct the show, were chosen as follows, indications being given of the live stock interests that each represents:

Vice president, William Pollman, range cattle, Baker, Ore.; Henry Thiessen, Herefords, Sweetwater, Idaho; C. L. Hawley, Guernseys and Lincoln sheep, McCoy, Ore.; F. M. Rothrock, Shorthorns, Spokane, Wash.; A. D. Dunn, Shorthorns, Wapato, Wash.; F. A. Koser, Cotswold sheep, Rickreall, Ore.; Otto Battles, Aberdeen Angus cattle, Yakima, Wash.; A. C. Ruby, Percheron, Belgian and Shirt horses, Portland; Thomas Carmichael, Holsteins, Gaston, Ore.; Ray J. Fox, Poland China swine, Lyons, Ore.; Edward Cary, Jerseys, Carlton, Ore.; F. H. Porter, Red Polled cattle, Halsey, Ore.; Nat McDougal, Portland Hunt club; George Gue, Holsteins, Yakima, Wash.; C. C. Berkley, range sheep, Hay Creek, Ore.

### WAUKON COW HEADS LIST.

To the Editor: I have just received from Supervisor R. C. Johnson, the November report of the Whitman-Spokane Cow Testing association. I am pleased to note that a cow owned by A. H. Reilly of Waukon, Wash., heads the 50-pound list for the month. The cow is a grade Holstein, 8 years old. She freshened in October, and in the month of November she produced 2[illegible] pounds of milk, 71.4 pounds of butterfat.

Mr. Reilly has been a member of the association for just three months. I first met Mr. Reilly some 10 or 12 years ago, when he came into my class room at the state college at Pullman as a student to take some elementary work in dairy farming. He was a good student, and it is evident from the results that he is securing that he is now far above the average as a practical dairyman.

I have not had the pleasure of visiting Mr. Reilly's place, but from the talks I have had with him I feel that his success is due in a large measure to his ability to feed his cows intelligently.

IRA P. WHITNEY,
President Whitman-Spokane Cow Testing Association.

### DAUGHTREY RESIGNS.

William H. Daughtrey has resigned as president of the Portland Union stock yards. At this writing his successor has not been announced.


## Get Guernseys

If you want to increase your dairy profits, you need to know about the cows whose average production, under test supervised by state agricultural colleges, is three times as great as the average of all dairy cows in the United States. Ask for "The Story of the Guernsey."

THE AMERICAN GUERNSEY CATTLE CLUB.
Box W., Peterboro, N. H.

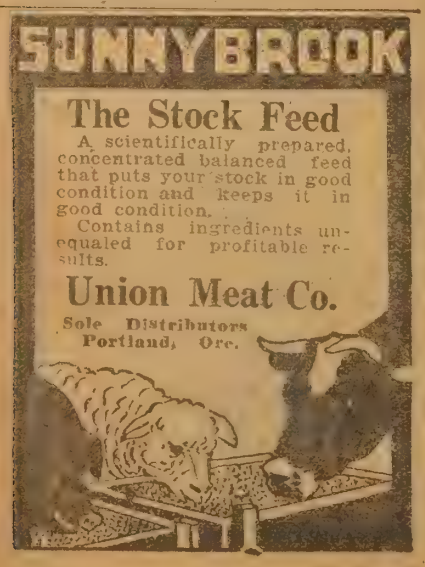

## Shorthorn Beef Records

An Illinois load of yearling Shorthorn steers made the world's market record at Chicago October 8, selling for $19.60 per cwt.

An Iowa load of Shorthorns sold for $19.50 September 16, averaging $308 per head, the previous record.

A Wisconsin Shorthorn load made the Wisconsin record at $18.35 and a Shorthorn load bred in Montana made the record for range steers at $18.


American Shorthorn Breeders' Association
13 Dexter Park Ave., Chicago, Ill.





# Lady Stewart of Meinie

In 1910 E. W. Van Tassell of Wenatchee, Wash., purchased from J. W. Clise of Seattle the Ayrshire cow, Lady Stewart of Meinie. Today Mr. Van Tassell has a herd of 26 registered Ayrshires, of which 14 are descended from Lady; and he has sold quite a few. In June last, Mr. Van Tassell bought the J. P. Graves herd of 14 Ayrshires, but resold 10 to H. I. Shotwell of Wenatchee and a bull calf to the state college at Pullman, Wash., and another to Smith & Neiman of Tonasket.



Mr. Van Tassell did his first official testing in March, 1917. He now has seven with completed records and four on test, though two of them are on for the second time. It is his intention to test the entire herd, generally with first calf, and usually at least once again.

Mr. Van Tassell put Lady Stewart of Meinie on test when she was 11 years and 10 months old. She produced 10,759 pounds of milk with an average test of 3.82 per cent fat. She is still a good breeder and good producer. She has had for Mr. Van Tassell seven heifers and one bull calf. One daughter, Lady Robinetta, as a junior 2-year-old, produced 10,885 pounds of milk, with a test of 3.65. A senior 2-year-old has produced 8973 pounds of milk, testing 4.31. One granddaughter has qualified with considerably above the requirements and another, a junior 2-year-old, will finish with over 11,000 pounds of milk.

Among the cows purchased from J. P. Graves is Emperor's Lady Scott. She had a record when purchased of a little over 9000 pounds of milk, but holds the world's record for high average test for an Ayrshire, of 5.69 per cent. Mr. Van Tassell has her daughter and son also.

The first bull Mr. Van Tassell purchased was Willowmoor Robinhood 16th. He was bought from J. W. Clise and was a son of Willowmoor Robinhood, sire of 19 A. R. daughters, with the highest average test of the daughter of any bull of the breed and the largest average production of the daughters of any bull except two. His dam, Barleigh Snowdrop, imp., has two completed records and another nearly done, all over 10,000 pounds of milk.

The present herd sire, Willowmoor Robinhood 39th, is by Willowmoor Robinhood 31st, another son of Willowmoor Robinhood. A half-sister holds the world's record in the junior 2-year-old class, and a full-sister in the senior 2-year-old class, while the granddam on the dam's side was high cow in the 4-year-old class in 1911.

It will thus be seen that Mr. Van Tassell has selected what appears to be the greatest producing lines of Ayrshires. When it is remembered that he is in the heart of probably the greatest apple region in the world, the trend toward dairying, even in this great fruit region, is seen at once, and Mr. Van Tassell's enterprise and foresight in building up a very high class Ayrshire herd will be commended.

When I was in Wenatchee Mr. Van Tassell was building a new brick dairy barn 50x32, with no loft, with latest modern conveniences and hay shed at one end. He is an apple grower, like most of the Wenatchee farmers, but he knows Ayrshire breeding, loves the Ayrshires and says dairying is a necessary adjunct of any kind of farming. H. A.

# Baby Beef Contest

The management of the Stevens County Live Stock show, which is held at Colville each year, is anxious to add another feature in the way of a baby beef contest to the program for next year. Any boy or girl 18 years of age or under, who lives in Stevens county, may enter the contest, but it will be necessary that we have the assurance that at least 10 individuals will finish the contest before the final plans can be arranged, says E. C. Dendle, Stevens county agriculturist. Three prizes will be given—$25 to the contestant producing the best baby beef, $15 for the second best, and $10 as a third prize.

By baby beef is meant fat cattle between 1 and 2 years of age and weighing from 800 to 1100 pounds. They should not have been allowed to lose their calf fat. Young stock of this age, if given the proper care will make from 25 to 40 per cent more gain than mature cattle on the same feed.

Calves selected for this contest should be those which are being weaned or those which have just finished the weaning period, or those which will remain with the cow all winter and be weaned when they go onto the grass in the spring. March, April or May calves will make the size and weight wanted next October. They should be of the beef type, although it is not necessary that they be thoroughbred stock. They should be of good quality as evidenced by fineness of hair, texture of skin and smoothness of flesh, and general refinement about the head and other parts of the body. A calf of this type should make a good profit for the individual who would give to it the proper attention and feed. I would not want to advise individuals to enter the contest without an available supply of feed on the home farm. The necessity of buying all feeds would make the proposition rather uncertain for the feeder, as the costs would be high.

If you are eligible to enter this contest and are desirous of doing so or would like any further information County Agent Dendle will be glad to take the matter up with you in the near future.

### GOLD MEDAL ANIMAL.

The A. J. C. C. awards a gold medal to each and every bull of the breed that sires three cows that make 700 pounds or over of fat in a year and carries a living calf at least 155 days during the period covered by their tests. A letter from the A. J. C. C. dated November 18, 1918, says that there are five gold medal bulls in the breed. One Oregon bull, Golden Glow's Chief 61460, bred by W. S. Ladd estate, is the only one of the five west of Michigan.

### Read the Veterinary Column.

The veterinary column of this paper has saved many valuable animals for those who have been its regular readers.

### BUY MORE WAR STAMPS.

The necessity of the American people investing their savings in war stamps and thrift stamps is again emphasized by Secretary McAdoo, who, in a letter to the governor of the federal reserve bank of San Francisco, says: "It is of the most importance that our people shall continue to save in order that they may help the government complete the victories we have gained in Europe, meet the expenses of the war and provide the means of supporting our army in Europe until it is released from duty and of bringing it back to American soil. We must, therefore, keep up the war savings campaign and induce every one to invest to the extent of his means in savings stamps and thrift stamps, which are obligations of the United States government, and which are the best investments for the savings of the people."

### KICKED BY SHOW ANIMAL.

E. B. Marks, Holstein breeder of Yakima, Wash., was kicked in the face by a black-and-white during the live stock show at Portland last week. While his injuries were painful, they did not prove serious.

### REPORT OF SALES NEXT WEEK.

The full report of the purebred cattle sales held at the Pacific International Live Stock show will be given in next week's issue of this paper. They are omitted this week for lack of space.


THE BEST LINIMENT
OR PAIN KILLER FOR THE HUMAN BODY
Gombault's
Caustic Balsam
IT HAS NO EQUAL

For the Human Body—It is penetrating, soothing and healing, and for all Old Sores, Bruises or Wounds, Felons, Boils, Corns and Bunions. CAUSTIC BALSAM has no equal as a Liniment.

We would say to all who buy it that it does not contain a particle of poisonous substance and therefore no harm can result from its external use. Persistent, thorough use will cure many old or chronic ailments and it can be used on any case that requires an outward application with perfect safety.

A Perfectly Safe and Reliable Remedy for Sore Throat, Chest Cold, Backache, Neuralgia, Sprains, Strains, Lumbago and all Stiff Joints

REMOVES THE SORENESS—STRENGTHENS MUSCLES

Cornhill, Tex.—"One bottle Caustic Balsam did my rheumatism more good than $120.00 paid in doctor's bills." OTTO A. BEYER.

Price $1.75 per bottle. Sold by druggists or sent by us express prepaid. Write for booklet R.
The LAWRENCE-WILLIAMS COMPANY, Cleveland, O.

Calf Enemies
WHITE SCOURS
BLACKLEG

Your Veterinarian can stamp them out with Cutter's Anti-Calf Scour Serum and Cutter's Germ Free Blackleg Filtrate and Aggressin, or Cutter's Blackleg Pills.

Ask him about them. If he hasn't our literature, write to us for information on these products.

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"The Laboratory That Knows How"



Butter Making in Holland

Butter making is the chief business of the Holland Dairymen, the originators of the Holstein-Friesian breed of cattle. Upwards of forty million pounds of butter per year is exported from that little country, which is more per cow, and more per acre, than does any other country export.

If interested in
HOLSTEIN CATTLE
Send for our booklets—they contain much valuable information.
HOLSTEIN - FRIESIAN ASSOCIATION OF AMERICA, Box 207, Brattleboro, Vt.

KENTUCKY JACKS AND HORSES.
Big bone, Kentucky Mammoth Jacks, easy riding saddle horses. Write us describing your wants. We guarantee safe delivery and take Liberty bonds and W. S. S. at par.
THE COOK FARMS, Lexington, Ky.



JUST RECEIVED

Another carload of Percheron and Belgian stallions. Most of the Percherons are of the famous Brilliant blood, sound and guaranteed to be breeders. Two, three, four and five year olds, weighing from 1700 pounds to 2200 pounds. The best lot of stallions that has ever been shipped to the northwest, and will be sold at very reasonable prices. Write for information or come to my barns and see them.

WILLIAM T. TRACY, Kennewick, Wash.

FEED SUPPLY

Every one realizes the importance of proper feeding, and the difficulty in the past of securing the proper feeds.

We have on hand at present time beet pulp, cocoanut oil meal, oil meal, alfalfa meal. Quotations gladly made on any or all of the above if you advise us the quantity wanted.

The Inland Seed Co. Spokane, Wash.

# Breeders' Department

## DUROC-JERSEY SWINE

### DUROCS

THE GRAND CHAMPION SOW IS DEAD. We have a few of her pigs still for sale. Also fall litters, one of 17, from her prize-winning daughters. Priced right. Satisfaction guaranteed.
CRESCENT STOCK FARM. Johnson, Wash.

### Garfield Stadacona Boy

First prize and champion Duroc at Spokane, 1917. Farrowed March, 1917, weight 500 lbs. If you want size and quality in your spring crop of pigs, buy this boar at practically the price of pork, but hurry.
GARFIELD STOCK FARM, Garfield, Wash.

### FOR SALE

Choice young herd boars, old enough for service soon, sired by Richards Defender, Richards Pathfinder, and Victor Defender. Orders placed now for prize young gilts. They will be bred this fall to Idaho and Utah grand champion boars. Young pigs always for sale. Guaranteed to please.
V. R. FISHER, Oxford, Idaho.

### Mt. Angel College Stock Farm

Two March boars and one two-year-old boar of excellent type and heavy bone.
ST. BENEDICT, ORE.

### Otto's Jersey Lawn Durocs

The today's type and breeding bar pigs for November delivery, $25.
L. S. OTTO, Filer, Idaho.

FOUR DUROC GILTS BRED TO FARROW this fall, also spring pigs, on hand.
E. E. PRICE, CABINET, IDAHO, OR
JAMES N. PRICE, Yakima, Wash.

Registered Duroc and Hampshire Hogs.
Must sell to make room. Both breeds. Carry best blood lines.
F. E. KINGSBURY, Malaga, Wash.

DUROC JERSEY BOARS
ready for service. Also bred gilts, from prize winning stock.
D. M. ADAMS, R. D. No. 1, Spokane.

## CHESTER WHITE SWINE

### REGISTERED O. I. C.

SWINE.
Choice weaned pigs. Will ship subject to approval.
RINGGOLD FARM.
J. H. West, Prop., Rt. 1, Box 15,
Centralia, Wash.

### Schumacher's O. I. C.'s.

For sale—May and June boars, ready for service, from matured sows, with pedigree and from show ancestors. Also 18-month-old sows to farrow second litter in January.
E. C. SCHUMACHER, R. 1, Granger, Wash.

### COVE STOCK FARM

Unrelated fall and spring Chester White pigs from prize winning stock.
ARCHIE CONLEY, Cove, Ore.

### Chester White Swine

Choice weanling pigs; spring gilts and service boars.
FRED H. HOFFMAN. Albion, Wash.

## SHEEP

### Oxford Ram Lambs

All registered rams, including ram lambs sold, all yearling range rams sold. Could get one or two from another party. Still have a nice bunch of ram lambs for general trade.
FISK FARM, Spring Valley, Wash.

## POULTRY

### Rhode Island Red Cockerels
Both Combs

RHODE ISLAND WHITE COCKERELS—BOTH COMBS.
My stock is pedigreed and line bred. Buy your breeding stock in Mammoth Toulouse geese and Mammoth Bronze turkeys. Have pedigreed Belgian hares and Flemish Giant rabbits. Also registered Airedale puppies; Cermer strain.
J. NONNENMACHER, R. F. D. 3, Yakima, Wn.

### Rominger's S. C. W. Leghorns

and R. I. Reds. Pullets two to ten dollars. Cockerels, $2.50 to $15. Hatching eggs January, 1919.
MRS. ROMINGER, Underwood, Wash.
Member N. W. R. I. Red Club and R. I. Red Club of America.

When answering advertisements don't fail to mention this paper.

## POLAND CHINA SWINE

### LOCUST HILL HERD

Big Type and medium Poland China. Bred gilts and spring pigs of both strains, unrelated. Sixteen years a breeder of Poland Chinas in Oregon.
A. L. SWAGGART, Athena, Ore.

### Poland China Swine

Strictly first class breeding stock for sale at all times at reasonable prices. Several very choice young gilts and one fine, serviceable boar at a bargain; also young pigs, both sexes.
(Everything registered free.)
C. B. COX, Mabton, Wn.

### Satisfaction or Money Back

Big Litter, Easy Feeding.
BIG TYPE POLAND CHINAS.
Fifty vigorous young boars, ready for service. Best breeding of the times and quality to equal it.
H. J. STILLINGS, Hermiston, Ore.

### Big Type Poland Chinas

Mouw, Fesenmeyer and Herring strains, either sex. Also registered Shorthorn cattle; good individuals.
H. J. HOWSER, Stites, Idaho.

### Oaksdale Farm

Poland Chinas and Holsteins. Two fall boars at bargain prices for quick sale. A fine lot of early spring pigs. Best of breeding. A few well bred young bulls at very reasonable prices.
C. R. EVANS, Halsey, Ore.

BOAR PRICES FOR NEXT 30 DAYS.
On account of the influenza will not hold our fall boar sale, so in order to make room for our next crop of pigs will make special prices for the next 30 days. They are real herd boar material. Write for description and the price will interest you. Also 7 yearling Shorthorn bulls. Everything guaranteed to please or money back. Shipped C. O. D.
GREENLEAF STOCK RANCH, Greenleaf, Ida.

### Poland Chinas and Holsteins

Strictly big type spring pigs of both sexes. Well grown, good individuals, sired by A. Price, A few choice young bulls.
B. S. THURSTON & SON., Jefferson, Ore.

### BIG TYPE POLAND CHINAS

Winners of first prize junior herd, Oregon state fair, 1918. Big Bob Wonder and Sammy blood boar pigs of all ages, also a few good gilts.
LOE FARMS, Silverton, Ore.

### QUALITY AND UTILITY OUR HOBBY

Poland Chinas our breed. Young stock from prize winning ancestry. Satisfaction assured.
FRANK NEEDHAM, Eugene, Oregon.

HIGH CLASS SPRING BOARS.
Best of big type breeding; well grown, $40 to $60. Also two July gilts, $30 each.
O. T. MURPHY & SON, Hubbard, Ore.

### BIG TYPE POLANDS

Genuine—Guaranteed.
GEO. W. BUCK. Oregon City, Ore.

QUALITY HERD.
If you want to improve your herd, try stock from my winners at the Oregon state fair.
RAY J. FOX, Lyons, Ore.

PURE BRED POLANDS.
Breeding stock of all ages. Will ship C. O. D., subject to approval.
HERBERT WILLARD, Dayton, Ore.

## BERKSHIRE SWINE

### Kintyre Farm Berkshires

Weanling pigs, bred sows, service boars.
CLARK BROS., Yakima, Wash.

### Riverby Orchard Berkshires

Riverby Orchard Berkshires won 12 out of 15 first prizes at the Washington state fair, 1916, also many prizes, including grand champion sow at the Panama-Pacific world's fair. We offer for sale a few good boars and young sows.
D. C. BUNN, Prosser, Wash.

## HAMPSHIRE SWINE

HAMPSHIRE HOGS
have won every feeding contest entered since 1914. Weanling pigs, gilts, bred or open. Our blood lines can not be beat.
TUTTLE BROS. Asotin, Wash.

## HOLSTEIN CATTLE

### The Hollywood Farm Offers Four Registered Holstein Bulls

Ready for Service. Well Marked.
Bred for Production. Straight on Top.
Their dams' official records are up to 29.71 lbs. butter, with lots of milk.
The average of the official records of their 5 nearest dams is:
Bull No. 809, 7 days' milk, 515.3 lbs.; butter, 27.18 lbs.; average test, 4.2% butter fat.
Bull No. 803, 7 days' milk, 504.6 lbs.; butter, 27.2 lbs; average test, 4.3% butter fat.
Bull No. 787, 7 days' milk, 557.7 lbs.; butter, 29.71 lbs.; average test, 4.3% butter fat.
Bull No. 786, 7 days' milk, 531.8 lbs.; butter, 25.25 lbs.; average test, 3.9% butter fat.
To make room for our increase, these bulls are priced to sell. Consider the high feed prices and raise only high producing stock.
HOLLYWOOD, WASH Near Seattle. HOLLYWOOD FARM.

### A Rare Chance to Head Your Holstein Herd

We still have for sale five prize-winning purebred males, ranging in age from eight to eighteen months. Weight six hundred to one thousand lbs. Pedigrees furnished on application. Address
THE INTERMOUNTAIN INSTITUTE
Weiser, Idaho.

### A. R. O. Holsteins

Have bargain in 2 or 3 bull calves from high class cows. A son of
KING OF PONTIACS.
at the head of our herd. His dam a daughter of old Clothilde De Kol 2d, some Korndyke Pontiac blood, we will say. Write for prices.
A. V. BRADRICK & SON, Palouse, Wash.

### 365 DAY HOLSTEINS

We are offering a bull calf, born June 27th, the two nearest dams of which average 19,866 lbs. milk, 855 lbs. butter for their yearly A. R. records. One a Jr. 2, the other a junior 4-year-old. The herd with yearly records.
WESTERNWOLD RANCH, Prineville, Ore.

### Bargains in Bull Calves

Sired by Segis Riverside Pontiac, that sold in Pacific International sale, 1914, for $1025, and whose dam has A. R. O. record of 31.47 lbs. butter in 7 days; 118.89 in 30 days, and big records all through his pedigree.
ERNEST JOHNSON, Scappoose, Ore.

### HOLSTEINS

Well bred young bulls for sale.
THOS. CARMICHAEL. Gaston, Ore.

### Registered Holsteins

Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.
H. R. BOOMER, New Plymouth, Idaho.

## JERSEY CATTLE

### TO REDUCE MY HERD
### A Few Choice Jersey Cows For Sale

Most of these cows are from Charles Miller foundation stock, good, big, roomy cows that have proven themselves to be good producers. A few just fresh.
These cows are bred to Diamond's Lord Draconis, a bull of rich breeding and perfect Jersey type, whose daughter, Diamond of Fair Acres, as a 3-year-old on official test, produced 84.36 pounds fat in July; 78.98 pounds in August and 71.27 pounds in September. Will be sold far below their value. Terms to responsible parties. One bull calf.

### W. H. McCONNEL, Shedd, Oregon

## SHORTHORN CATTLE

SHORTHORN AND POLE DURHAM CALVES.
One 15 months old Shorthorn bull; good breeding and choice individuals at very reasonable prices. Also a few Duroc-Jersey gilts of August and September farrow.
BEN E. KELLEY, Penawawa, Wash.

### H. H. SCHILDMAN

breeder of registered Shorthorn cattle, Hampshire sheep and big type Poland China hogs.
Filer, Idaho.

REGISTERED SHORTHORN COWS.
Young bulls and heifers, sired by Scotch bulls; liberal terms.
CALDWELL CATTLE CO., Caldwell, Idaho.

## AYRSHIRE CATTLE

### Wenatchee Ayrshires

Offspring of Cavalier's Hover O'Blink, son of the great Bargenoch Gay Cavalier, Imp., and out of Barboigh Maggie X, Imp. The dams are advanced register cows and include Lady Emperor Scott, that holds world's record for high test. Send for pedigrees and A. R. records.
E. W. VAN TASSELL, Wenatchee, Wash.

### EDGEWATER FARM

Young stock for sale, including senior calf, Edgewater Sentinel, grand champion 1918 Washton state fair. Herd government tuberculin tested.
ELBERT M. CHANDLER, Burbank, Wash.

## DOGS

### Thoroughbred Collies for Sale

Out of registered dogs and bitches; nothing but large, healthy, young stock shipped; satisfaction guaranteed; best breeding on the coast. Write me for prices and description.
W. A. HARRINGTON, 4812 42d S. West,
SEATTLE, WASH.
RAINBOW COLLIE KENNEL.

## SHETLAND PONIES

### QUALITY SHETLANDS

"The women's pleasure and the children's delight." Richest Shetland breeding. Write for prices on early delivery.
DR. GREEN & SON, Wapato, Wash.

## GUERNSEY CATTLE

### Looney Farm Guernseys

Langwater, Glenwood and other best strains have won more show honors than any other herd in the west. A few very choice young bulls from heavy producing dams. Write for particulars to
DAVID H. LOONEY. Jefferson, Ore.

### FAIRVIEW FARM

Breeders of high class registered and grade Guernseys.
A. J. SINNES,
Route 5. Mt. Vernon, Wash.

### Orchard Hill Farm

"HOME OF HIGH-CLASS GUERNSEYS"
Dr. Park Weed Willis, Owner, Redmond, Wn.

### RED WING GUERNSEYS

Bull calves out of A. R. dams; also a few females. All good individuals. Herd tuberculin tested.
A. I. & J. HUGHES. Oregon City, Ore.

## HEREFORD CATTLE

### Highland Stock Farm

offers for sale Hereford bulls, 1 or 2 years old. One or a carload.
PLATT BROS. Genesee, Idaho

### BULL RANCH

Hereford Cattle.
Berkshire Hogs.
Hampshire Sheep.
CHAS. BULL, Mabton, Wash.

## ABERDEEN ANGUS

### Aberdeen Angus Cattle

A. H. EAGLESON & SONS,
Boise, Idaho.

## MILK GOATS

MILK GOAT DOES.
A few young ones soon to freshen. Immune from tuberculosis. Best milk for invalids and children. $50 up.
D. J. GILBERT, Newburg, Ore.

# Grain and Produce Markets

## Grain Market.

CHICAGO, Dec. 14.—Pronounced weakness developed in the corn market today owing largely to the outlook for an increase of receipts. The close was heavy, 2¼c to 3¼c net lower and with January and May both $1.35⅞ to $1.36. Oats finished 1⅜c to 2c off, and provisions down 50c to $1.

Forecasts of cold, dry weather tended to stimulate selling inasmuch as continued mild temperatures and excessive dampness have been seriously retarding the crop movement. Reports that congestion abroad would compel a readjustment of the food administration shipping program were also influential toward making sentiment more bearish.

Oats shared the depression of corn. Furthermore, there were reports of reselling of cash oats by the government.

Provisions fell with hogs and grain. Big receipts of hogs next week were expected, notwithstanding that killing facilities here were already overtaxed. Immense shipments of meats and lard to the seaboard from Chicago seemed for the time being overtaxed.

### Cash Quotations.

CHICAGO, Dec. 14.—Corn—No. 2 yellow, nominal; No. 3 yellow, $1.49; No. 4 yellow, $1.48@1.48½. Oats—No. 3 white, 73@74½c; standard, 73¾@75c. Rye—No. 2, $1.61½. Barley, $99c@$1.04. Timothy, $8@11. Clover, nominal. Pork, nominal. Lard, $25.50. Ribs, nominal.

### Chicago Futures.

| Corn— | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| Jan. | 1.37½ | 1.38½ | 1.35¾ | 1.35⅞ |
| May | 1.37½ | 1.38½ | 1.36¾ | 1.35⅞ |
| Oats— | | | | |
| Jan. | .73⅞ | .74⅛ | .72½ | .72½ |
| May | .74¼ | .74⅞ | .72⅞ | .72⅞ |
| Pork— | | | | |
| Jan. | 48.60 | 48.60 | 47.85 | 47.85 |
| May | 45.35 | 45.35 | 44.35 | 44.35 |
| Lard— | | | | |
| Jan. | 35.90 | 25.90 | 25.50 | 25.50 |
| May | 25.55 | 25.65 | 25.32 | 25.32 |
| Ribs— | | | | |
| Jan. | 25.90 | 25.90 | 25.50 | 25.50 |
| May | 25.22 | 25.22 | 24.67 | 24.67 |

### Pacific Northwest Grain.

PORTLAND, Ore., Dec. 14.—Grain future bids: Oats—No. 2 white, December, $54.50; January, $55. Barley—Standard feed, December, $49; January, $49.50; standard A, December, $49.50; January, $50. Eastern oats and corn, in bulk: Oats—No. 3 white, December $50.50; January, $54.50; 38-pound clipped white, December, $53.50; January, $53.75. Corn—No. 3 yellow, December $60; January, $59.50; No. 3 mixed, December $59.50; January, $58.50. Sales, 100 tons December No. 3 eastern white oats at $51.50.

### Minneapolis Grain.

MINNEAPOLIS, Minn., Dec. 14.—Flour, unchanged. Shipments 81,574 barrels. Barley, 86@94c. Rye, No. 2, $1.56@1.56½. Bran, $27.73. Wheat receipts, 578 cars, compared with 259 cars a year ago. Cash, No. 1 northern, $2.24½@2.25. Corn, No. 3 yellow, $1.43@1.45. Oats, No. 3 white, 63¾@70½c. Flax, $3.51½@3.53½.

## Live Stock Quotations.

### At Omaha.

OMAHA, Neb., Dec. 14.—Hogs—Receipts, 2500; market steady to 5@10c higher; heavy, $16.75@17.75; mixed, $17@17.20; light, $16.50@17.25; pigs, $15@16. Bulk of sales at $17@17.25.

Cattle—Receipts, 500; market steady. Native steers, $11@16.50; cows and heifers, $8.50@12.50; western steers, $9.50@16.50; Texas steers, $8.50@12; cows and heifers, $6@11; canners, $5@6; stockers and feeders, $6@15; calves, $7.50@13.50.

Sheep—Receipts, 100; market steady. Culls, $4.50@7.50; wethers, $10@10.75; ewes, $7.50@9.25; lambs, $13@15; feeder lambs, $10@14.25; yearlings, $10.50@11.55.

### At Chicago.

CHICAGO, Dec. 14.—(United States Bureau of Markets.)—Hogs—Receipts, 55,000; market mostly 10 cents lower; slaughtering facilities overtaxed and many thousand hogs over without a bid. Top, $17.70; bulk of sales at $17.35@17.65. Butchers, $17.50@17.70; light, $16.85@17.55; packing, $16.75@17.45; throwouts, $15.75@16.75; pigs, good to choice, $14@15.50.

Cattle—Receipts, 3000; compared with a week ago beef and butcher cattle mostly 25c to 50c lower; canners about steady; calves $1 lower; good weight feeders steady to 25c lower; common stock off more.

Sheep—Receipts, 6000; compared with a week ago lambs mostly 35c to 50c lower; sheep and yearlings weak to 25c lower.

### At Portland.

PORTLAND, Ore., Dec. 14.—Cattle—Market steady; receipts, 150. Steers, prime, $11@12; good to choice, $10.50@11.50; medium to good, $9.50@10.50; fair to medium, $8@9; common to fair, $5.50@7.50; cows and heifers, choice, $7.75@8; medium to good, $6@7; fair to medium, $5@6; canners, $5@6; bulls, $5@7; calves, $9@12; stockers and feeders, $6@9.

Hogs—Market steady; receipts, 381. Prime mixed, $16.75@17.10; medium mixed, $16@16.75; rough heavies, $14.75@16; pigs, $14@15; bulk, $16.85.

Sheep—Market steady; receipts 991. Prime lambs, $12@13; fair to medium, $9@11; yearlings, $10@11; wethers, $9@10; ewes, $6@8; rough heavies, $14.60@14.75.

### Spokane Union Stock Yards.

| | Cattle | Calves | Hogs | Sheep |
|---|---|---|---|---|
| Monday, Dec. 16 | 283 | 8 | 215 | .. |
| Saturday, Dec. 14 | 125 | 2 | 16 | .. |
| Friday, Dec. 13 | 187 | 10 | 205 | 56 |
| Thursday, Dec. 12 | 67 | .. | 70 | .. |
| Wednesday, Dec. 11 | 208 | 19 | 99 | 103 |
| Tuesday, Dec. 10 | 32 | .. | 163 | 138 |
| Week ago | 443 | 31 | 393 | .. |
| Year ago | 130 | .. | 102 | .. |
| Two years ago | 189 | .. | 372 | .. |

Monday's market opened with a little lighter run of cattle than ordinary, but all classes are holding their own in price; the good ones being in demand. Market closed strong at the following:

| | |
|---|---|
| Prime steers | $12.00@12.50 |
| Good to choice steers | 10.75@11.75 |
| Medium to good steers | 9.50@10.50 |
| Fair to medium steers | 8.25@ 9.00 |
| Common to fair steers | 5.50@ 8.00 |
| Choice cows and heifers | 7.50@ 8.25 |
| Medium to good cows and heifers | 6.00@ 7.00 |
| Common to medium cows and heifers | 4.75@ 5.75 |
| Canners | 3.50@ 4.50 |
| Bulls | 5.00@ 7.50 |
| Calves | 9.00@10.00 |
| Stockers and feeders | 6.00@ 9.50 |

The number of hogs for Monday was not up to the general run, neither did they run in numbers to quality, being more or less mixed. Market closed strong at the following quotations:

| | |
|---|---|
| Prime mixed | $16.75@17.00 |
| Medium mixed | 16.50@16.75 |
| Rough heavies | 14.60@14.75 |
| Pigs | 14.50@16.00 |
| Stockers and feeders | 12.00@14.50 |

While there were no receipts of sheep, the market shows a tendency to be stronger at the following:

| | |
|---|---|
| Prime lambs | $12.00@12.50 |
| Fair to medium lambs | 9.25@11.50 |
| Prime yearlings | 10.25@11.50 |
| Prime wethers | 9.25@10.25 |
| Best mutton ewes | 7.50@ 8.50 |
| Breeding ewes, 1 to 4 years | 13.00@15.50 |

### Monday's Shippers.

Cattle—O. A. Bittrick, Bonners Ferry, Idaho, 1 carload; McInturff & King, Cheney, Wash., 1 carload; George Whitlow, Wilbur, Wash., 3 carloads; C. Priest, Pullman, Wash., 3 carloads; William Biggert, Pateros, Wash., cattle.

Hogs—A. S. Elder, St. Regis, Mont., 1 carload hogs.

Drive-ins—A. Blake, cattle; J. J. Nichols, hogs; W. C. Powell, hogs; W. L. Adams, hogs; C. M. McCarroll, cattle; A. G. Spring, cattle; J. M. Johnson, hogs; H. D. McDonald, hogs; A. Johnson, hogs; E. Oglesbee, cattle.

### Saturday's Sales.

STEERS.

| No. | Av. Wt. | Price. | No. | Av. Wt. | Price. |
|---|---|---|---|---|---|
| 36 | 677 | $ 7.75 | 9 | 887 | $ 8.50 |
| 9 | 1096 | 10.25 | 24 | 888 | 8.50 |
| 1 | 970 | 9.00 | 25 | 851 | 8.50 |

COWS.

| | | | | | |
|---|---|---|---|---|---|
| 1 | 1125 | 7.50 | 2 | 1100 | 5.80 |
| 2 | 873 | 6.50 | 1 | 1030 | 5.50 |
| 4 | 868 | 6.50 | | | |

BULLS.

| | | |
|---|---|---|
| 2 | 1508 | 6.25 |

HOGS.

| | | | | | |
|---|---|---|---|---|---|
| 4 | 240 | 16.75 | 5 | 160 | 16.00 |
| 6 | 172 | 16.75 | 11 | 159 | 16.00 |
| 5 | 178 | 16.00 | 1 | 400 | 14.75 |

### At Seattle.

SEATTLE, Dec. 14.—Hogs—Receipts, 100; strong. Prime lights, $17.25@17.30; medium to choice, $16.75@17; medium to heavy, $15.75@16.25; rough heavies, $14.75@15.25; pigs, $14.75@16.25.

Cattle—Receipts, none; strong. Best steers, $11@13; medium to choice $10.50@11; medium to good, $8@8.50; medium, $7@7.50; bulls, $5@7.50; calves, $5@10.

### MORE MILLS.

The manufacture of potato flour in the United States is a war created industry. The largest mill is at Idaho Falls, Idaho. A number of companies recently have been organized to build.

Congress a few months ago appropriated $250,000 for experiments in the dehydration of vegetables and the manufacture of potato flour.

## Portland Market.

PORTLAND, Ore., Dec. 16.—Three cars of Oregon butter have been shipped east and there are further inquiries from New York. Cube extras are quoted at 61@61½ cents. Prints are steady at the 65-cent basis.

Oregon eggs are very scarce, and readily command 72@73 cents for ordinary candled. A car of eastern storage eggs is due, which will slightly relieve the situation.

The demand for poultry is better, particularly heavy hens. Dressed meats are slow, and pork is especially weak.

The local apple market was slow in the last week, but prices were firm in sympathy with the strength at shipping points.

Potatoes incline to weakness. On the street jobbers ask $1.75@1.85 for the best Burbanks and $2@2.25 for Netted Gems.

Onions are also quiet, with Washington and Oregon Yellow Danvers bringing $1.75@2.

There is only a small call for beans, and with the government order practically filled prices have fallen back to 7@7¼ cents for whites and navys.

Butter—Cubes, extras, 59c; prints, 62c; butterfat, No. 1, 67c, delivered.

Eggs—Oregon ranch, candled, 72@73c; selects, 75c per dozen.

Cheese—Jobbers' buying prices, f. o. b. dock, Portland: Tillamook triplets, 36c; young Americas, 37c per pound. Coos and Curry, f. o. b. Myrtle Point, triplets, 35¾c.

Poultry—Hens, 23@28c; ducks, 28@30c; geese, 18@20c; turkeys, dressed, 34c.

Pork—Fancy, 20@20½c.

Veal—Fancy, 19@20c.

Potatoes—Oregon Burbanks, $1.75@1.80.

Hay—Buying prices, f. o. b. Portland: Eastern Oregon timothy, $30@33 per ton; valley timothy, $27; alfalfa, $28; valley grain hay, $26; clover, $27; straw, $9@10.

## Portland Grain.

PORTLAND, Ore., Dec. 16.—There has been more movement in the coarse grain market recently, as stocks have been increased by several large shipments from the east. Prices are holding about steady. Closing bids at the exchange were: Sacked oats, $54.50@55; bulk oats, $51.50@53.75; bulk corn, $58.50@60; feed barley, $49@49.50; brewing barley, $49.50@51.

There is a 30-cent hop market again in the northwest. Buyers have paid 29@29½ cents, and would go the other half cent for desirable lots if growers would sell. Several hundred bales changed hands in the last week, and less than 1000 bales now remain unsold in the northwest.

### FARM RECONSTRUCTION CONFERENCE.

A conference to consider the various programs of reconstruction adopted by different farmer organizations and to work out a joint farmers' program for economic reconstruction in America, and for international reconstruction, will be held under the auspices of the farmers' national headquarters, in the National hotel, Washington, D. C., Tuesday and Wednesday, January 7 and 8, 1919. A number of farmer organizations, including state granges, state farmers' unions, the American Society of Equity, and the Gleaners, have pledged their cooperation in this conference. Any farmer organization, national, state or local, is entitled to representation.

### HOG PRICE FOR JANUARY.

The price of hogs for the month of January has been fixed by the food administration at $17.50. This price will be the daily average cost of the packers' droves on the Chicago market. No hogs will sell under $16.50, except stags, sows, skips, throwouts and pigs under 150 pounds. The limit on pigs was raised from 130 to 150 pounds a few weeks ago.

# Increase of Freight Rates

## *Is Unfair to the Producers of the Pacific Northwest*

Our readers will recall that THE FARMER entered an emphatic protest when Director-General McAdoo ordered an arbitrary 25 per cent blanket increase in freight rates.

We then drew attention to the very apparent fact that the order was unintelligent and unfair.

Some of the railroads, notably the transcontinental lines, were earning fine profits, others were doing moderately well, yet others were bankrupt and another class of lines on the verge of bankruptcy.

Secretary McAdoo's broadcast distribution of rate increase benefits was exactly on a par with an effort to alleviate poverty in a country by distributing county aid to all the people in the county. We now have before us a statement issued a few days ago by the secretary which throws a flood of revealing light on the practical operation of his method of broadcast increase of freight rates.

When congress took over the railroads for public operation it appropriated $500,000,000 fund to be drawn upon by the director-general for the relief of such roads as were being conducted at a loss and the purchase of new equipment. Mr. McAdoo's statement shows where that money has gone. Four far eastern lines have received $212,065,000 of it—the Pennsylvania lines, $77,670,000; the New York Central lines, $59,870,000; the New York, New Haven and Hartford, $50,450,000, and the Baltimore and Ohio, $24,075,000. The list of railroads that have drawn upon the revolving fund is a long one. They are almost altogether roads serving other regions than the Pacific coast.

On the other hand the list of roads that have paid surplus profits into the fund is a short one. For example, while the Pennsylvania lines were drawing out more than $77,000,000, the Northern Pacific was paying in $6,778,000; the Union Pacific system, $7,300,000; the Atcheson, Topeka and Santa Fe, $11,200,000; the Chicago-Burlington-Quincy, $3,950,000; the Chicago and Northwestern, $3,270,000, and the Los Angeles and Salt Lake, $1,500,000. Only 16 railroads have turned over, in individual cases, surplus earnings up to December 1, 1918, in excess amounts advanced to them by the railroad administration.

**This means, as THE FARMER pointed out when the rate increase was ordered, that the people of the Pacific west are made to support not only their own railroads, but to help support distant lines in regions where the people have long enjoyed low freight rates.**

We warn our readers that there is grave danger that these high and unjust freight rates will be continued after the government returns the lines to their original owners. The Wall Street Journal declares that good authorities hold that if the present form of federal possession were to cease at any time within the time limit of 21 months after the end of the war present freight and passenger rates would remain the only lawful rates until they were altered in due course at public hearings by the interstate commerce commission. Our people were led to believe that the increase was only a war-time necessity. Now it begins to dawn upon them that the increased rates are cinched upon them and will only be shaken off with a mighty effort.

### Drain the Barnyard.

In the first place, the barn should be built on ground that drains naturally, but if it isn't, special effort should be made to keep it from getting muddy or filthy.

# Wheat Convention

Tentative plans for the program of the thirteenth annual convention of the Washington Grain Growers', Shippers' and Millers' association are now in the hands of Secretary E. G. Schafer at Pullman, and call for the holding of this meeting, the wheat convention, as it is generally known, at the state college on January 7, 8 and 9.

According to the present plans the program of the convention will be marked by the unusual diversity of its subject matter, and especial emphasis to reconstruction problems which are destined to affect wheat growers, millers and shippers in the immediate future. Grain grading demonstrations, according to the federal grain standards, will occupy a prominent place in the discussions and deliberations of the convention, at which it is also planned to organize a Washington Pure Seed Growers' association.

For the accommodation of those who attend, it is planned to serve meals on the campus, obviating the necessity of their leaving the college grounds between sessions of the convention.

The program, to which a few speakers and subjects are yet to be added is as follows:

Address of welcome, President E. O. Holland; president's annual address, H. J. McCroskey, Garfield; "Grain Wasted in Threshing," R. J. Stephens, Spokane; "Tillage Methods for Wheat," F. J. Sievers, soils technologist, W. S. C.; "Cost of Growing Wheat," Byron Hunter, U. S. department of agriculture; "The Smut of Oats in Washington," F. D. Heald, plant pathologist, W. S. C.; "The Most Profitable Wheat Varieties," Secretary E. G. Schafer; "Sheep and Wheat-Growing," H. E. Goldsworthy, Rosalia; "Hogs and Wheat-Growing," Roy Perringer, Belmont; "Peas and Hogs," J. R. Shinn, county agriculturist, Spokane county; "Pure Seed Growing and Seed Certification," F. L. Kennard, Colfax, and E. F. Gaines, Pullman; "Smaller Wheat Farms," J. M. Klemgard, Pullman; "Wheat-Growers and the Federal Land Bank," J. C. Jewett, Spokane; "Better Homes on the Farms," Dean W. G. Beach, W. S. C.

## Spokane Market.

SPOKANE, Dec. 16.—The following are today's market quotations:

**Beef**—Beef steers, 13@21c lb.; T. C. steers, 19c lb.; cow beef, 10@15c lb.; heifers, 14 1-2@15c lb.; beef loin, 18@28c lb.; steer chucks, 10@12c lb.; square chucks, 11@13c lb.; prime ribs, 15@20c lb.; rump and round, 16@19c lb.

**Mutton**—Breakers, 19@21c lb.; wethers, 18@19c lb.; ewes, 15@18c.

**Lambs**—Diamond T. C. lambs, 22c lb.; lambs, 22@23c.

**Pork**—Packer dressed hogs, 25@27c lb.; pork loins, 30@35c lb.; legs, 32@34c lb.; shoulders, 25@28c lb.; leaf lard, 27c lb.; tenderloins, frozen, 45c lb.; spareribs, 17@19c lb.; country dressed hogs, with head on, 19@21c lb. to producer; country dressed veal, 13@15c lb. to producer.

**Smoked Meats**—Washington hams, 39c lb.; T. C. hams, 42c lb.; T. C. bacon, 53 1-2c lb.; Washington bacon, 45@49c lb.; picnics, 28c lb.; lean backs, 38c lb.; Boston butts, 35c lb.

**Star Brand**—Star hams, 40@40 1-2c lb.; Shield hams, 38@38 1-2c lb.; picnics, 28c lb.; bacon backs, 36@37c lb.; Star bacon, 53@54c lb.; Shield bacon, 44@48c lb.; Boston butts, 34c lb.; Simon Pure lard, 31 1-2@34c lb.; Shield lard, tierces, 28 1-2c lb.; White Cloud compound, tierces, 24 1-2c lb.

**Dry Salt Meats**—Clear bellies, 31@35c lb.; loin back, clear, 31c lb.; rib chunks, 25c lb.

**Lard**—Tierces, 29c lb.; $21.30 buckets, per case; Diamond T. C. pure leaf lard, $16.55 case; Snowcap compound, tierces, 23 1-2c lb.

### POULTRY.

**Live Poultry**—Live hens, 20@22c lb.; spring chickens, 22c lb; roosters, 10c lb.; ducks, 20c lb.; geese, 18c lb to producers, f. o. b. Spokane.

### BUTTER.

**Creamery Butter**—1-lb. prints, 57@60c lb.

### CHEESE.

**Wisconsin**—38@38 1-2c lb.; first-grade western, 37@38c lb.; cottage, 10@12 1-2c lb.

### EGGS.

Fresh local, 73@82c doz.; Minnesota fresh eggs, $23 case; storage eggs, $16 case.

### GASOLINE, LINSEED OIL, ETC.

**Gasoline**—Red Crown, bulk, 25c gal.; Shell, 25c gal.; refined oil (Pearl), bulk, 13 1-2c gal.; Eocene, 15 1-2c gal. in bulk.

**Linseed Oil**—Raw, bbl., $1.94 gal., cases $2.12 gal.; boiled, bbl., $1.96 gal., cases, $2.14 gal.

**Turpentine**—Bulk, 86c gal.; cases, $1.06 gal.

**White Lead**—Strictly pure white lead in oil, ton lots, 13 1-2c lb.; 50-lb. lots, 14c.

### GRAIN AND FEED.

**Rice**—Fancy head, $7.50@9.50 cwt.

**Flour**—Bluestem, $11; blend, $11; graham, $9.75 bbl.; whole wheat, $10.35; eastern rye, $10; eastern rye meal, $10.20; oat flour, $12.80, two 100-lb. sacks.

**Oats**—$62 ton whole, $63@65 rolled, delivered in city; steam rolled No. 2, $65 ton.

**Corn**—$77 ton; cracked corn, $79 ton.

**Barley**—Rolled, $61 per ton.

**Oil Meal**—$75 per ton.

**Bran and Shorts**—$30 ton; if soft wheat feed, $32 ton.

**Hay**—Timothy, $39 per ton delivered; $36, by carload; alfalfa, $32 per ton delivered, $28 by carload.

**EDGEWATER SAM.**

Great grandson of Beuchan Peter Pan, undefeated grand champion Great Britain and America, for sale. The first herd in Washington of any breed on government accredited list.
**ELBERT M. CHANDLER, Burbank, Wash.**

## FRENCH FARM LANDS.

### To Be Reclaimed on a Big Scale by War Tractors.

Those who have visited French farm lands report that the fields that once yielded abundant crops seem blasted beyond all hope of recovery. The pockmarks of the small shells are everywhere, and at frequent intervals are huge craters, yards across and many feet deep, where the larger shells have exploded. At some points entire farms have disappeared, for here the troops sank their mines which when fired engulfed whole companies and entirely changed the contour of the land. The fertile top soil is gone, buried beneath the upturned sterile clay and sand. Back and forth across all this devastation run endless masses of trenches, man-deep, with earthen ramparts before them, cutting up the fields until plowing or cultivating seems an utter impossibility.

Such is the condition in which returning French and Belgian farmers will find their once fertile acres. It will be a disheartening sight, for with the old horse and scraper method of leveling, it would mean years of work before the land would again be fit for cultivation.

Here is where the farm tractor will drop its war charge, the heavy gun and go to work for those simple peasant folk. Hitched to a big land leveler, it will cut off the earthen ramparts, fill the trenches, craters and shell holes, and otherwise redeem the land.

### Talk Business Matters Over.

Take your wife into your confidence on the matters that mean dollars and cents in your business.

# FARMERS' WANT ADS

This is the farmers' "Want," "Sale" and "Exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rate, 7 cents a word per insertion, with a special rate to farmer subscribers to the Washington Farmer of 6 cents a word per insertion for from 4 to 12 times, and 5 cents a word per insertion for 13 times or more.

All commercial and land advertising, 7 cents per word each insertion. Open also to nonsubscribers.

In using these columns advertisers must observe: (1) No advertisement will be inserted for less than 75 cents. (2) Every word, number and initial, including name and address, must be paid for. (3) Cash must accompany order.

Above rates also include insertion in The Oregon Farmer and The Idaho Farmer.

### SITUATIONS WANTED—Male 21

THOROUGHLY EXPERIENCED AND CAPable creamery man and butter maker seeks job calling for a broad knowledge of the creamery business, where he can make his services very valuable. Address P. O. Box 499, Ritzville, Wash.

### EDUCATIONAL 45

GOODING COLLEGE, GOODING, IDAHO, offers practical winter courses, review subjects, college and academic work and a special summer session for you. Write today.

TELEGRAPHY—YOUNG WOMAN'S POPULAR vocation; good paying positions available. Write for booklet. Pacific Telegraph Institute, Spokane.

SEND NEWS NOTES TELLING OF THE work of your school today. Address the Educator, Gooding, Idaho.

### HONEY, BEESWAX—Wanted 58

SEND SAMPLES OF YOUR HONEY AND beeswax. State quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

### MISCELLANEOUS—FOR SALE 60

FOR SALE OR RENT—MONEY-MAKING blacksmith shop, Melrose, Idaho; full set tools, engine and power machinery; chop mill side line. W. N. Garner, Peck, Idaho.

TRAP COYOTES—FULL INSTRUCTIONS ON a sure catch method and reliable scent recipes sent on receipt of $5. C. L. Willis, Dillard, Ore.

FOR SALE—175 TONS HAY, 50 HEAD OF grade Holstein cattle, 5 horses and machinery, with good lease. Walter Allison, Belfair, Wash.

### MISCELLANEOUS WANTED 63

CASH PAID FOR OLD FALSE TEETH. We pay up to $35 per set (broken or not). Send now. Cash sent by return mail. Package held 5 to 15 days for sender's approval of our offer. Highest prices paid for old gold jewelry, gold crowns, bridges, dental gold, platinum, diamonds and silver. Send for fall catalog of new jewelry.
UNITED STATES SMELTING WORKS, INC.
331 Goldsmith bldg., Milwaukee, Wis.

POULTRY WANTED.
We are cash buyers of poultry and dressed meats, also cream. Write us for prices, shipping tags and premium catalogue for cream shippers.
COMMERCIAL CREAMERY CO.
SPOKANE, WASH.

### LIGHTING EQUIPMENT 74

THE SAFETY LAMP CO., N208 HOWARD ST., Spokane, Wash. Gasoline lighting and supplies.

### MACHINERY—For Sale 93

IMPORTANT NOTICE.
We not only stock "WITTE" gasoline engines, 2 to 30 h. p., but carry a full line of repair parts for them. Prompt service our hobby.
HIGGINS MACHINERY COMPANY.
312 1ST AVE., SO., SEATTLE.

FOR SALE—CLEVELAND TRACTOR; USED 25 days, in perfect running order and good as new; also tractor plow, bargain. Byrd J. Clark, Lyle, Wash.

BARGAIN—ONE 9X18 CASE TRACTOR; slightly used; one 2-bottom John Deere engine gang, almost new. Murphy & Harold, Albany, Ore.

SAVE $300—ONE NEW 12X24 SAMPSON Sieve grip tractor, with 14-inch extension rims. Price $1650. J. R. Wallis, Albany, Ore.

### AUTOMOBILES 114

HEADQUARTERS FOR USED CARS.
Trucks and tractors; printed list. Spokane Auto Market. W315 Sprague ave., Spokane, Wn.

AUTO RADIATORS, FENDERS AND LAMPS repaired. Lester Allen, 607 Second avenue, Spokane.

### STOVE AND FURNACE REPAIRS. 120

WRITE M. S. RUBENS, SPOKANE, FOR ANY parts needed to repair stove, furnace.

### POULTRY 174

BUY YOUR INCUBATOR NOW.
Incubators will be scarce and high next spring. Send for our list of new and used incubators and save money. Agents: Famous Queen incubators and brooder stoves. Queen Hatchery, 99 Pike st., Seattle.

DANIEL'S WHITE PLYMOUTH ROCKS. THE greatest egg laying big bird known; send for our special offer on hatching eggs. Catalog free. Ideal Poultry Yards, Box 174, Hoquiam, Wash.

WHITE WYANDOTTE COCKERELS; HEAVY laying strain; Just-a-Mere Croft, 4137 Sunnyside ave., Seattle, Wash.

FOR SOMETHING GOOD IN SILVER WYANdottes and Golden Campines, write G. G. Wherry, Payette, Idaho.

WILL EXCHANGE—TWO BLACK BREASTED red game stags for brood cock. N. W. Wernett, Mesa, Wash.

PURE MAMMOTH BRONZE TURKEYS, PRIZE winning stock. Mrs. F. Browning, R. No. 1, Caldwell, Idaho.

### POULTRY Continued 174

PURE BARON WHITE LEGHORNS, 248-282 egg strain. Cockerels, $2.50. Sadie O'Hara, Perma, Mont.

50 USED INCUBATORS FOR SALE, FROM 70 to 700 egg capacity. A. R. Badger, Centralia, Wash.

SHIP US YOUR POULTRY. TOP PRICES. Home Poultry House, 8173 Washington, Spokane.

WILD AND BRONZE TURKEYS; BREEDERS, for sale. E. Y. Sanders, Roy, Wash.

BOURBON RED TURKEYS. MRS. ROSINBUM, Burley, Idaho.

### LIVE STOCK 177

FOR SALE CHEAP—TWO REGISTERED Shire stud colts, coming one and two years old next spring, at farmer's prices. Cut out the middleman. Write for particulars. J. A. Brewster, Lebanon, Ore.

TWO REGISTERED GUERNSEY BULLS, ONE 5, one junior 2; will sell either. Fir Grove Farm, Clarks Fork, Idaho.

REGISTERED POLAND CHINA PIGS AND open gilts. H. F. Valliere, Rickreall, Ore.

O. I. C. HOGS, BOTH SEX; BEST OF BREEDing. Dr. S. T. Miller, Twisp, Wash.

### FUEL DEALERS 279

FOR SALE—MILLWOOD, 16-IN., WHOLEsale. Write Watkins Fuel Co., Yakima, Wash.

### HOTELS 306

WHITE'S HOTEL AND RESTAURANT—Rooms, hot and cold water, 75c up. Breakfast 20c to 40c; dinner 25c to 50c. Sprague and Stevens, Spokane.

GALAX HOTEL; NEW AND MODERN; 75C and $1. Main and Bernard, Spokane.

NEW MADISON HOTEL, 75C AND UP. 1ST and Madison, Spokane, Wash.

### RUBBER STAMPS AND SEALS 384

FOR RUBBER STAMPS, STENCILS, BADGES, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

### TAXIDERMISTS 426

FUR RUG MOUNTING A SPECIALTY, HEADS, animals and birds mounted. Withers Bros., 822 Sprague, Spokane.

FIRST-CLASS WORK, ALL BRANCHES TAXIdermy and furs. Mohr, Bernard st., Spokane.

### FARM LANDS FOR SALE 651

SNOHOMISH COUNTY, WASH., FARM LANDS.
The greatest proposition on the market for the man who wants a farm. 12,000 acres to select from; 3½ miles salt water front; 20 miles of beautiful lake shore; good towns, railways, steamboats, factories, mills, schools, churches, paved roads; where the largest profits are made, where the great variety of crops and wonderful productive climate makes it the most productive farm section of America. Good lands in good localities, as low as $25 to $35 per acre. 10 yearly payments. Send for maps and literature to the Brownell Land Co., 904 Third ave., Seattle, Wash.

NO CROP FAILURES.
800-acre stock and wheat farm (Vermilion, Alberta); partly cultivated; fair set buildings; watered by two lakes; good soft water. Price, including 50 tons hay, $15,000; small payment down, balance easy terms, at 6 per cent.
UNION INVESTMENT COMPANY.
406 ZIEGLER BLK., SPOKANE, WASH.

EXCELLENT FARM; 6 MILES FROM SPOKkane; on state road; 120 acres; 30 cultivated; 14 in fall wheat; 5-acre bearing orchard, balance timber; good house, barn and other buildings; 2 good horses, hay for winter feed, farm implements included in price, $12,000. Attractive terms. I. B. Welch, Route No. 2, Spokane, Wash.

FOR SALE—ALFALFA STOCK AND WHEAT farms, at a price that the land will pay for itself in two crops. Well improved land for $75 to $100 per acre, the cheapest water in the world. John Hardwick Realty Co., Vale, Ore.

FRUIT TREES, ORNAMENTALS, SHRUBS, vines, etc.; complete assortment of general nursery stock; lowest quotations given on application. We can use a few good, reliable salesmen. Albany Nurseries, Inc., Albany, Ore.

FOR SALE—ONE OF THE BEST 80S IN THE Payette valley; well improved; high state of cultivation; crop this year $6000. For particulars, address owner, Box 68, Route 1, New Plymouth, Idaho.

20 ACRES, JOINING DIXON; ALL IN ALFALfa; just the place for dairying and poultry; seven-room house, barn, orchard and well. R. B. Bates, Dixon, Mont.

### FARM LANDS—WANTED 654

SELL YOUR PROPERTY. WE WILL PLACE a full description of your property with dealers and possible buyers in every state in union for a small fee. Information free. Real Estate Salesman Co., Dept. 10, Lincoln, Neb.

IF YOU WANT TO SELL OR EXCHANGE your property, write me. John J. Black, 80 st., Chippewa Falls, Wis.


# POULTRYMEN Now Is the Time

to begin advertising your breeding stock and hatching eggs.

## NOW IS THE TIME

to begin booking orders for baby chicks.

Farm folks know that the best birds for egg production are those that are hatched early. They know that pullets that are old enough to begin laying in late summer and early fall are the best money makers, because they are producing when eggs bring highest prices.

## BEGIN NOW

to call the attention of our big family of more than 80,000 subscribers to the good birds and eggs you have to offer. Your ad with us will reach more farm homes throughout the Pacific Northwest than you can reach through any other farm paper. Those poultrymen who have been advertising with us since early last fall have been getting excellent results. And buying will be much more brisk from this time on.

WRITE TODAY FOR SPECIAL POULTRY ADVERTISING RATES AND LET US SEND YOU FREE OF CHARGE A SUPPLY OF BLANKS THAT WILL BE OF HELP TO YOU IN GETTING ORDERS.

## The Pacific Northwest Farm Trio

Review Building
Spokane, Wash.

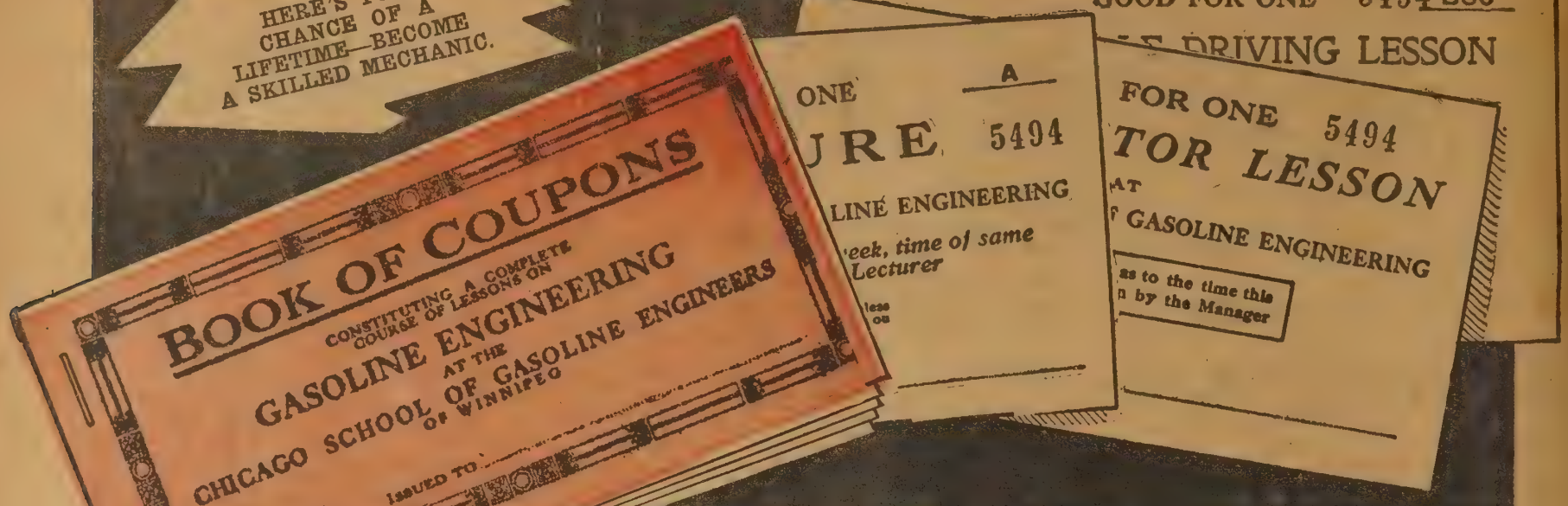
**The Pacific Northwest Farm Trio,**
**36 Review Bldg., Spokane, Wash.**

Please send me your poultry advertising rates and a supply of free blanks to aid me in getting orders.

Signed .....

P. O..... State .....

HERE'S YOUR CHANCE OF A LIFETIME—BECOME A SKILLED MECHANIC.




# The Book that Guarantees you Satisfaction!

*This book contains a coupon for every lesson you get, and you don't give up a single coupon until you are satisfied with the particular lesson it covers. You can't beat that*

**A world at peace offers you the greatest future ever known. The war has demonstrated the value of trucks, tractors and aeroplanes, and all of them will come into general use. Pleasure cars will come back and the demand for skilled mechanics will be greater than ever. And many of the millionaires of the automobile industry started in as skilled mechanics.**

## *"Making $5000-a-Year Mechanics"*

We have printed a little book about an ordinary farmer boy and his success that you will find mighty interesting reading. The coupon will bring it to you free.

## MEN—YOUNG MEN—GIRLS—CAN YOU QUALIFY?

If you can, the biggest trade schools in the world offer you a practical course that has been O. K.'d by Uncle Sam and that gives you actual experience and contact with all branches of the trade.

You have to be born with a natural ability, though, in order to become a first-class mechanic, and it is a waste of both time and money for those who have not the natural ability to take this course.

Consequently, before enrolling, you are furnished a vocational analysis form which, when filled in and returned to us, enables us to judge of the advisability of your taking it. We give you this service absolutely free of charge, and even if you prove to have the necessary ability, you are not in any way obligated to take the course. Just fill in and send the coupon at the bottom of this page and we will send you your analysis form by return mail.



TRADE HEMPHILL'S SCHOOLS

Left: Students Getting Practical Instruction in Our Electrical Dept.

Right: Working on All Makes of Cars.

20th and HAWTHORNE
PORTLAND, ORE.

HEMPHILL'S TRADE SCHOOLS, Portland, Oregon.
Gentlemen: Please send me, free of charge, your Vocational Analysis Form, your booklet, "Making $5000 a Year Mechanics," and your catalog of courses.

Name .....

Address .....

TR2

Washington's Great Farm Magazine

EVERY WEEK

# THE WASHINGTON FARMER

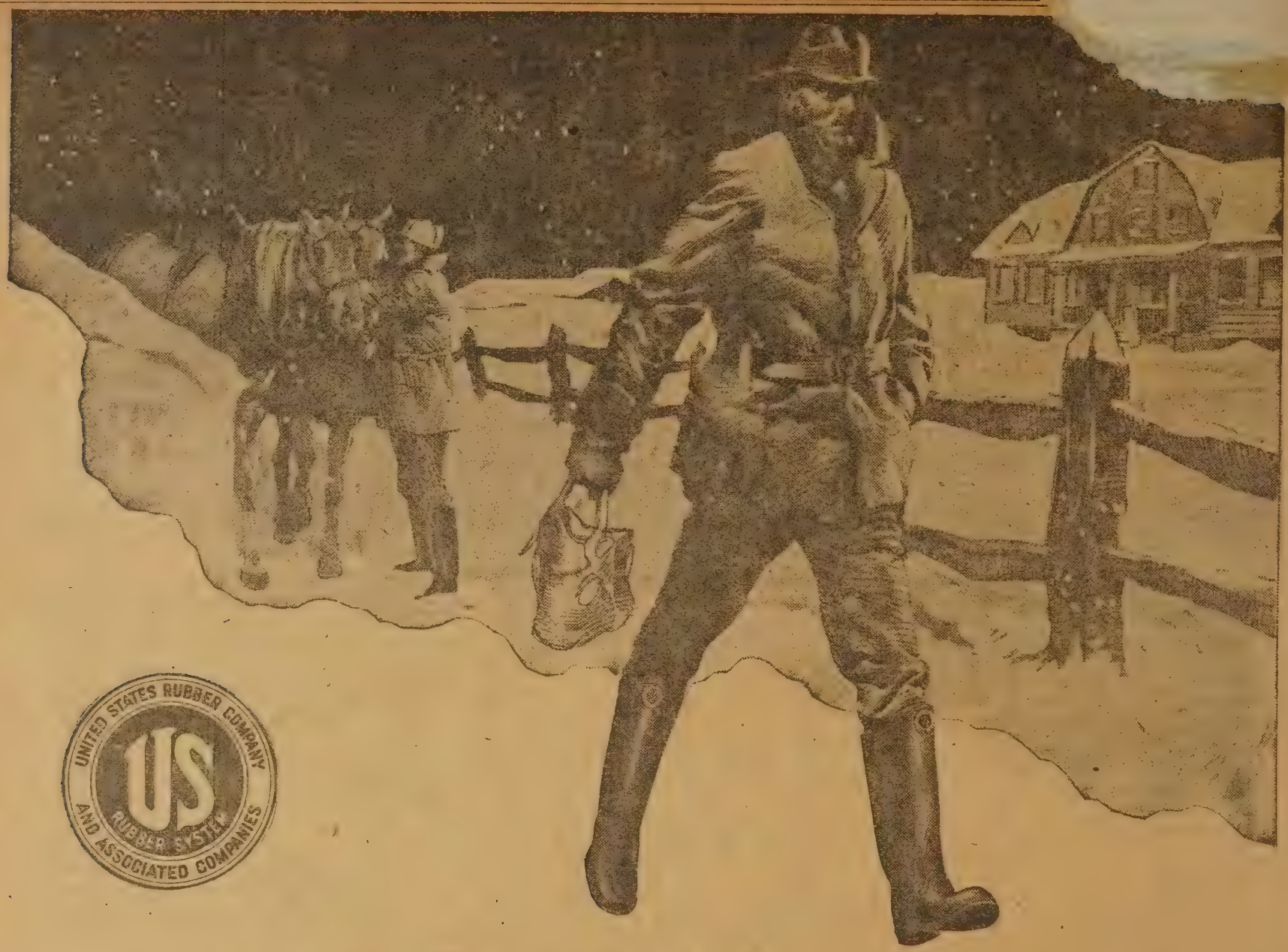
SUCCESSOR TO

THE RANCH · PACIFIC DAIRYMAN · HORN AND HOOF



## Uncle Sam's New Year's Greeting

BEING Americans and being young, they will not ask or expect pensions. They will want work. They will want, if possible, a chance for a home of their own. * * * Why not say to this inquiring soldier man: America offers you a farm if you will help in its making and pay for it out of what you make out of it?




# If The War Had Continued!

If the war had continued, the pair of U. S. "Protected" rubber boots that you will now be able to buy at your dealer's this winter would have gone to France for one of the boys "over there."

But, as the trenches are empty, there is no need for trench boots; so our Government is now allowing us to provide heavy-service, double-duty U. S. "Protected" rubber footwear for the outdoor worker at home

Uncle Sam has furnished "our boys" with the best rubber boots that money can buy, and, in both the Army and Navy, there probably are as many U. S. "Protected" rubber boots as all other brands combined.

U. S. "Protected" rubber boots will outwear any ordinary rubber boots. The "boys" will tell you so when they come back. Every pair is sturdily constructed, reinforced where the wear is hardest, staunch and serviceable, and yet full of comfort. Every pair of "U. S." means warm, dry, comfortable feet for the wearer, whatever the work or weather.

The "U. S. Seal"—trade mark of the largest rubber manufacturer in the world—is on every pair of U. S. rubber boots. Look for it. It is your protection.



## United States Rubber Company

New York

**U. S. Rubber Footwear**

FOR GOOD FARMING, ATTRACTIVE COUNTRY HOMES AND HAPPY COUNTRY PEOPLE

# THE WASHINGTON FARMER

SUCCESSOR TO

Vol. 41. No. 52. THE RANCH PACIFIC DAIRYMAN HORN AND HOOF December 26, 1918

## To Put Settlers on 3,500,000 Acres

### *"The New Spirit of America" Daring the Development of Vast Domain of Farm Homes on Central Plateau of Eastern Washington*

By N. W. DURHAM

**As this issue of THE FARMER goes to press, word comes from Washington, D. C., that Secretary Lane of the department of the interior has appeared in person before the irrigation committee of the house of representatives in congress and formally recommended that this session of congress appropriate $100,000,000 "to reclaim logged-off, arid and swamp land in every part of the country." This apparently is a formal beginning of this great movement.—Editor.**

Senator Jones of Washington has introduced a bill directing Secretary Lane and the reclamation service to make preliminary surveys for the Big Bend irrigation project. For this work, his bill would appropriate $50,000.

The Big Bend irrigation project was given extended consideration by the United States reclamation service 15 years ago. The government maintained a corps of engineers in that field for two or three seasons and finally dropped the undertaking, chiefly because of its magnitude.

Lying in the encircling arm of the Columbia river, as that majestic stream flows in a great bend through the state of Washington, the government engineers found an area of about 3,500,000 acres of arid and semi-arid lands whose production could be tremendously increased under irrigation. The daring engineering feat was considered of tapping the Spokane or the Pend Oreille near the Idaho line and conveying water through a great canal in the southwesterly direction to these fertile, but thirsty, lands.

At that time, however, the reclamation fund was insufficient to justify the government in taking up so costly a project, but now that Secretary Lane of the interior department is urging upon congress the advisability of taking up the reclamation of arid swamp and logged-off lands in a big way, interest in the Big Bend project is revived. Governor Ernest Lister is making a vigorous investigation of its possibilities and has become convinced of its probable feasibility. He is now at the national capitol, presenting the matter to Secretary Lane. The governor also has directed State Hydraulic Engineer Chase and State Geologist Landes to go over the proposed route of the canal immediately and advise him if the project has any insurmountable obstacles.

This enterprise should enlist the active interest of the people of the Pacific northwest. Secretary Lane is known to be favorably disposed towards a proposed gigantic irrigation project in the Colorado river region. In his letter to President Wilson last May he said that a survey and study has been in the course of consummation by the reclamation service of the great Colorado basin, "that this great project, I believe will appeal to the new spirit of America. It would mean the conquest of an empire in the southwest. It is believed that more than 3,000,000 acres of arid land could be reclaimed by the completion of the upper and lower Colorado basin project."

As the great southwest will work for the Colorado project, the great northwest should rally to the support of the Big Bend project. In magnitude the latter matches the Colorado enterprise. Its soil fertility is unsurpassed and its climatic advantages are superior to the southwest. It is pierced by four transcontinental railroads and fronts upon an open region to the sea. Its products would have a short haul to the home markets of nearby cities with a population of more than one million. Its surplus flowing out through the gateways of the Columbia river and the Puget sound would have cheap open transportation to the markets of the world.

If the Big Bend project shall be found feasible from an engineering test, the great northwest, from Minnesota to the sea, should be an enthusiastic unit for it, for it is apparent that if the southwest project should be adopted and the northwest enterprise rejected, the current of immigration and investment will flow along the southern zone and away from the northern routes, the loss would not be confined to the state of Washington. Minnesota, Dakota, Montana, Idaho and Oregon would feel it. The fact is, the nation needs both developments and both should appeal to "the new spirit of America," to adopt the eloquent phrase of Secretary Lane.

## Should Make Legislators Understand

By request of The Washington Farmer, State Senator E. Ben Johnson of Spokane county, contributes the following illuminating article on "Autocracy at Olympia." Senator Johnson shows how "Cannonism" has a powerful grip on the Washington legislature; how the all-powerful rules committee, sitting and acting in secret, like the German bundesrath, decides what bills may be considered by the legislature and what bills shall not see the light of day.

To the Readers of The Washington Farmer: It is a fundamental requirement of representative government that the voters shall be fully apprised of the acts of their representatives through public sessions and records. Surely, the voters have the same right to know by whom and why a bill is defeated in committee, as when defeated on the floor of house or senate. No honest legislator can object to having the public observe his every legislative act. Why, then, should a system of secret and irresponsible control through rules committees be maintained in the Washington legislature?

When a bill is introduced in either house, it is read and referred to a committee for consideration; thus, a bill relating to farming interests is referred to the committee on agriculture. This committee studies the bill, perhaps calls in experts and holds public hearings, then returns it with written recommendations attached, signed by the members of the committee. There may be two reports, majority and minority, but public record is obtained of how each member of the committee acts.

So far, all is well and if the report is favorable, the bill ought now to be considered by the legislative body and disposed of in public, and that is the procedure in other well governed states, Ohio, Michigan, Minnesota, Wisconsin, Kansas, California and Oregon, for instance. But in Washington legislative procedure the bill, at this point, passes into the control of a rules committee, and will never be considered in public or voted on by the legislative body, unless the rules committee, in secret session, decides to place it on the calendar.

The rules committee of each house meets daily to make up the calender for the next day, and no star chamber of old or modern German bundesrath could proceed with greater secrecy or less responsibility. No report is given out or record kept of how the committee members vote; there are no signed reports as to the different bills; all the committee hands in is a list of bills to be considered next day. Bills not placed on the calender are defeated by failing to come to the consideration of the legislative body, but until the last day's calender is handed out, no one can say which bills the rules committee has defeated in secret. It is then too late for effective protest.

The possession of this power to defeat bills in secret gives a majority of the rules committee autocratic control over legislative action, since any member who dares to vote against their wishes can be punished by leaving his bills off the calendar. Nearly all the bills are actually passed in the last 10 days of the session, which must end on the 60th day, and there is then a tremendous congestion of bills. While the rules appear to permit bills to be taken away from the rules committee and placed on the calendar, under actual conditions it is all but impossible and is never done. The fate of most of the important bills is thus actually determined in secret.

This is substantially the system which was used in congress some years ago, known as "Cannonism," which the whole country denounced, and which Senator Poindexter helped to overthrow. In this state it appears to be a relic of the old days of legislative scandal and railroad control, when the principal legislative object was to thwart public opinion and escape individual responsibility.

A vigorous effort will be made at this session to abolish the system of secret control by rules committees, and substitute the public and responsible procedure in use in other states. It requires a change of rules which have been continued from session to session in the past, and will be vigorously resisted by all those who desire to avoid publicity and responsibility. The voters should make their legislators understand in no uncertain terms that secrecy and autocracy must be abolished.

E. BEN JOHNSON.

## Figuring Cost of Farm Products

### *Secretary Houston and W. J. Spillman at Odds Over Question*

The strained relations between Secretary of Agriculture Houston and Dr. J. W. Spillman are made public in an Associated Press dispatch from Washington. As the dispatch indicates this controversy hinges on the vital problem of the cost of producing farm crops and farm animals, and the trustworthiness of the methods employed in getting at that cost.

Professor Spillman, as he is remembered and highly regarded in the Pacific northwest, having been for a number of years at the head of the agricultural department of the state college of Washington at Pullman, is one of the recognized students of farm management the country over.

Here is the dispatch from Washington:

> In a letter today to Chairman Gore of the senate agricultural committee W. J. Spillman, former chief of the department of agriculture office of farm management, took exception to the recent statement of Secretary Houston that the department was without trustworthy estimates of the cost of farm production. Mr. Spillman reviewed at length investigations made by his office, and added:
>
> "There is no possibility, no matter how extensive the investigation, of getting more than a reasonably accurate approximation to a final result. This was done in the investigations under discussion."
>
> Mr. Spillman contended that the farmers are entitled to know the results obtained and to say whether the reports prepared on wheat growing represent the facts in the case. He also suggested that the committee is entitled to know why the work of his office in this connection was suspended three months last fall and winter.

The trouble began some years ago when very early in his administration Secretary Houston took out from under the supervision of Dr. Spillman the extension work of the department of agriculture in certain states and placed in these states a large number of workers who were identified with the Rockefeller foundations.

Dr. Spillman called the attention of congress and others to the striking tendencies in this direction. It developed at the discussions arising over this subject that in all probability the appointment of Secretary Houston was due to the suggestions of Colonel House, they having been warm friends in Texas. It also became known that Colonel House was one of the prominent oil men, having acquired his wealth in that way. It also became known that at an earlier period Secretary Houston had been appointed on the hookworm commission, which was a Rockefeller foundation; on the federal education board, a Rockefeller foundation; and on the general education board, a Rockefeller foundation, and that upon his appointment as secretary of agriculture he had appointed a son of the head of the general education board as his private secretary. During this period the number of extension workers in Rockefeller pay increased very greatly. The results was a congressional inquiry into this matter and the secretary was called upon to give the list of persons receiving money from this source. It developed that there were about 600. As a result when the Smith-Lever act was passed providing large sums of money for extension work, provision in it was made that gifts should not be received from anybody outside the state where the money was to be expended.

Doubtless Secretary Houston's suspicion of Dr. Spillman's attitude with regard to this legislation further increased the tension between the two men. It is only as these personal relations affect seriously the farming interests of the country that they become of public importance.

It is important that the farmers themselves, and the consuming public as well, should know what it costs to produce wheat and corn, pork and beef, eggs and butter and so on.

Was Dr. Spillman following the best methods in finding out these costs?

Was the farm management office hampered in this important work?

It is time for this matter to be cleared up by official inquiry.

Evidence is accumulating that THE FARMER has taken the right stand in its contention for the appointment of the ablest available man as national food production administrator.

## Dismiss Bouck Case

Federal Judge Neterer of the district court of Seattle has dismissed the case against William Bouck, master of the Washington State grange, who was charged with seditious utterances. The dismissal is made at the request of Clarence L. Reames, special assistant United States attorney general. Reames was instrumental in bringing the indictment against Bouck, but in asking the dismissal against the case, says that the evidence he received is so contradictory as to render it inadvisable to proceed with the prosecution

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## *Chicago Greatest Agricultural Center*

Chicago is the greatest agricultural center of the United States, of North America and, for that matter, of the entire world. The Temple of Agriculture at Chicago, advocated by the Chicago Tribune, is the outward symbol of a great inward need for United States government agricultural headquarters in that central city, under the charge of a national food production administrator.

The greatest agricultural development of the next 50 years will take place in the states northwest from Chicago reaching to the Pacific coast.

A large part of the enormous coming trade of the United States with Siberia, Russia, Japan and China will be transported by rail on lines southwest from Puget sound and the mouth of the Columbia river to Chicago and farther east.

While San Francisco and the Panama canal will divide the coming trade of the Pacific, the commercial belt around the world remains in a northwesterly direction from Chicago. Already great transcontinental lines are in operation leading from Chicago to the Pacific northwest: the Great Northern railway, the Northern Pacific, the Chicago, Milwaukee & St. Paul, the Union Pacific lines from Granger northwest, the Burlington lines from Kansas City and Denver to the northwest, as well as the Chicago Northwestern through connections.

Wisconsin, Minnesota, North Dakota, Montana, Idaho, Washington, as well as Oregon, Wyoming, South Dakota, Nebraska and Iowa, are distinctively Chicago territory so far as the Pacific trade centering on Puget sound and the mouth of the Columbia is concerned. These states include a vast territory more than 500 miles in width and more than 1500 miles in length.

As the great agricultural center of the United States, Chicago's interests are vitally bound up with the agricultural interests of these 11 states, and, so far as basic agricultural development will have to do with the coming trade of the Pacific, Chicago's interests are as much concerned with regard to the agricultural development of Oregon, Washington, Idaho and Montana, as with that of Wisconsin, Minnesota and Iowa.

When a great business house like that of the International Harvester company, or that of Armour and Company, send out their regional executives, these executives are urged to make good in their own way and by their own methods, provided that they do not contravene the general policies of the central organization. When the department of agriculture attempts to control detailed work of subordinates throughout the country from the varying conditions of Florida and Idaho, of Texas and North Dakota, that department largely loses sight of the work to be done in its eagerness to take care of the machinery designed to do it.

As the great center of the agricultural interests of the country, Chicago should contain the central executive office of the national department of agriculture, while the laws for the conduct of the department of agriculture are made and interpreted and the books are kept at the national capital.

The Temple of Agriculture in Chicago should house a national food production administrator, having charge of the regional food production administrators throughout the country, coordinating and making efficient all the food production agencies of public as well as of private character.

## *A Wonderful Year Is Ahead*

A year terrible in its wonders is behind us. A year glorious in its possibilities is ahead. To have lived during the past year and taken part in its stupendous demonstration of power and its overwhelming victory of right over unrighteousness was the privilege of the ages. To live during the period of reconstruction that is just dawning is a prospect too alluring to becloud with language.

But as we face that prospect let us not magnify the idea of reconstruction. Let us rather emphasize the idea of new construction, not rebuilding of the old, but a building of the new where the old once stood. Let us, as we enter upon this first new year of the world's new life, lay deep the foundation of better things than those that have been sacrificed, great and good though much that is gone has been. And let us not cross oceans or continents to do it. Let us each begin at home. Banish that miserable allusion that distance lends enchantment! The brightest spot on earth is our own dooryard if we will but open our eyes to see, not yonder in another state or another nation. Let the two big words of this new year be Here and now. Right here, right now is our opportunity.

And let us not look for big things to do. The biggest thing in the world is the little thing well done, and in every home, on every farm, in every village the little thing is lying in wait for the willing hand to undertake. Undertake it. Accomplish it in a big way, and power will be given to accomplish the larger thing beyond it.

The new year is at hand. It can not be a year of accomplishment for the world unless it is a year of accomplishment at home. It can not be a year of accomplishment at home unless it is a year of accomplishment by each individual of the tasks that nature wisely places before him.

Each thing I do throughout this year
To make my home a better one
Will make the world a better world
To live in when that thing is done.

## *Should Not Go Too Strong*

Great effort is being made throughout the entire country to stimulate the production of live stock during the coming season. The depletion of the herds and flocks of Europe, together with large home demands, is the basis for the belief that there is a great future immediately ahead of the live stock industry.

This is true, and every one who can assist in supplying the world's need of live stock and live stock products will be doing not only himself but the people of other nations a benefit. But the industry must not be overstimulated. Every farmer who goes into it for the first time or who increases his interests in it should do so after careful calculation of the possibilities that his conditions present. The industry will be injured and not benefited by the man who undertakes to produce more live stock than he is prepared to handle properly. Such farmer himself will be the keenest sufferer from his mistake. Every man who undertakes to increase production the coming year must coldly calculate the possibilties of feed production, labor supply, marketing facilities and similar problems.

## *Waiting for Workers*

The United States, according to estimates, possesses more than a billion acres of land that can be used for agricultural production. Less than 400 million acres of this vast tillable domain now are used. To reach with the plow our unused 600 million acres, as President E. O. Holland, of the State College of Washington, well says, mighty feats in engineering, drainage, irrigation and clearing must be accomplished.

Moreover right at hand is the task of provisioning, comforting and rehabilitating areas of the old world that have been swept away by the fury of war. Russia, in particular, will want our help. Even before the war the state college received calls for scientifically trained young men in Siberia. Russian and Siberian students have attended instruction at Pullman, and every one of them agreed that in her reconstruction Russia would look to America for help more than any other nation in the world.

It must be rembered also that before 1914 there came to the United States each year over 1,000,000 immigrants. During the past four years the flow has ceased, consequently the farms have been depleted of help and every industry has had to run short-handed.

No one should be disturbed over the fear that the return to civil life of millions of soldiers and munition workers may be followed by extensive unemployment and social unrest. There has never been a time in all human history when the world was so rich in opportunity as today.

## *Should Prevent Double Freight*

The stock yards have done a great thing for the live stock industry of the northwest by turning poorly finished stock or stuff that was well fitted to be breeding stock back to farmers who were in a position to finish them or use them for breeding purposes. They have done much to create a sentiment against marketing stock that should not be marketed. Thousands of head have been shipped to the yards in unfit condition and have been reshipped to farmers who could handle them. Many of them have gone back to the same communities from which they came.

There is a point to consider. It is good business to send them back, but it would be better business if the communities would see to it that they were not sent in in the first place. Instead of shipping them 200 miles and back, it would be better to drive them or haul them, as the case might be, 10 miles across country to the farm or ranch that could keep them till the proper time to market. Here is one of the great things that community organizations can do, and that, in many instances, they are doing.

## *Schools Demand First Interest*

The schools of a community are the most vital asset that it has. There is no other one thing that more definitely expresses the prosperity and development of a neighborhood than the character of school that its children attend. And there is nothing that more definitely expresses the character of the school, all things considered, than the building in which it is held and the grounds surrounding the building.

The schoolhouse may be attractive in appearance or unattractive. It may be comfortable and sanitary or not. It may possess facilities for a liberal education, or just a reading, writing and arithmetic education. The boys and girls, in fact, the grown-ups of the community, are inspired to better effort by attractive buildings and grounds than by the unattractive. The health and contentment of the boys and girls depend in no little degree on the construction of the school building with reference to ventilation, warmth and convenience. The whole life of the community is vitally affected by the broadening of the course of study and experiment to include domestic science, agriculture, or even carpentry and blacksmithing. Let there be no reflection made on the "three r's," for they are the foundation stones of education. They are fundamental. But the day is at hand when education must be made more and more practical, when it must more and more aid directly in the industrial life of the community.

# International Situation Hopeful

## *World Peace Problems Are Big but Not Insurmountable*

While the problems that the peace conference soon to meet in Versailles, France, must solve remain grave and puzzling, there is a more hopeful tone in the reports that come from the various European centers of government now than heretofore. Statesmen of all the allied nations appear agreed upon the principal objects to be obtained by the peace treaties. There is a general agreement on the fundamental principles of a league of nations to enforce peace. The details of reaching the main objects are troublesome, however, but the underlying fear that the allies might disagree seriously among themselves seems to be passing.

President Wilson has been in conference with the leading statesmen of France and Italy. He is now taking up the big problems with British statesmen, being the guest of England for a period as he has been the guest of France. On the surface, there is no evidence of anything in the form of antagonism between any of the nations involved in the great, world settlement.

**FRANCE SUGGESTS LEAGUE PLAN.**

That a society of nations is not only possible, but absolutely necessary for the preservation of world peace, is the belief of the leaders in France, who, in setting forth a plan for such a society, say:

"We are convinced that a durable peace can be assured only in substituting for a reign of force that of organized right. It is the object of our association to aid in the constitution of a society, first of part, and then of all the nations. This society should, according to the recent declaration of President Wilson, be a most essential party in securing the maintenance of peace."

Their statement then continues in part:

"The essentials of the plan are:

"First, compulsory arbitration without limitation of exception. This leaves out the old exception of questions involving national honor and dignity.

"Second, limitation of armaments.

"Third, the establishment of a council of administration of the nations for the formulation of new international law procedure.

"Fourth, the application of 'sanctions' for making effective the decisions of the society of nations. 'Sanctions' is a diplomatic expression meaning the various steps for enforcing compliance. They are four-fold."

The four steps in "sanction" outlined by the French statesmen are:

Diplomatic sanction, by which any recalcitrant nation would be cut off from diplomatic relations with all the other nations of the society; judicial sanction, by which such nation would be cut off from the courts of the nations of the society; economic sanction, by which such nation could be cut off from international commerce or received foods and materials, and military sanction, by which the nations of the society might conduct military operations to compel obedience from the recalcitrant nation.

**FREEDOM OF THE SEAS IS PROBLEM.**

The matter of freedom of the seas, as outlined by President Wilson in his 14 original conditions of peace, remains a troublesome and indefinite problem, though it is reported that discussions of the matter by allied statesmen indicate the possibility of harmonizing views on it. One British attitude is expressed in the London Times, which says:

"Far from there being any necessary antagonism between the British and American views of the so-called freedom of the seas, there is revealed the possibility of an Anglo-American agreement respecting the main lines of the declaration of maritime rights and duties to be worked out, not at the peace conference, but at future conferences."

**MAY SINK GERMAN WAR VESSELS.**

Instead of attempting to apportion the captured German naval vessels among the allied nations to make up in part for the losses that these nations have incurred through German depredations of one kind or another, it is possible if not in fact probable that the allies will agree to take this fleet out on the high seas and sink it. There is wide differences of opinion as to the advisability of this step but there are indications that both England and America may decide that it is the wiser method of solving the problem.

**GERMAN INTERNAL SITUATION IS SHAKY.**

There is little evidence coming to light to indicate that the political situation in Germany is being cleared up. On the other hand, there are evidences that some believe indicate that the allies must either hedge the German people in and let them fight out their own problems through a considerable period of revolution or actually invade the country and take military possession of it. A statement last week indicated that General Von Hindenburg was doing his best to keep the army in shape to conduct a counter revolutionary movement to offset the socialist revolution that is now attempting to control German affairs. The statement indicated that he planned the establishment of a military line of defense a few miles back of the present neutral zone along the Rhine river. Some have expressed the belief that it was part of a big plan having as its object the return of the Hohenzollerns to the throne when Hindenburg dramatically refused to withdraw from the army as did Ludendorf and others of the military leaders. Some believe now that he is still acting in the capacity of military leader for the kaiser and that both are watching for the psychological moment when a trick might be turned leading to the return of the Hohenzollern family.

**THE ALLIES MUST CONTROL.**

That the allied nations can not permit Germany to exist in a state of reckless revolution during the next few decades is evident when it is remembered that indemnities totaling many billions of dollars are due the allies from Germany. It would seem, in view of this fact, that unless some element in Germany is capable of bringing about an early restoration of order it will be necessary for the allied armies to move in and take charge and put the German people to work earning the wherewithal to pay the allied losses. It will require a highly efficient German nation, working through a period of many years to support itself and pay just indemnities to France, Belgium, England, and the other allies.

**WORLD-WIDE HOUSECLEANING DUE.**

The war has been but one step in the world's housecleaning. The peace conference will be a second step and already in this country and in the European countries investigations are forcing themselves into the limelight. Instead of ceasing with the coming of peace the efforts to disclose the real story of pro-Germanism in allied nations, especially in America, is being stimulated. It reaches into diplomatic, military, civil and industrial life. Investigations reveal stupendous expenditures in war construction with practically nothing to show for it, such as the aeroplane revelation and the Hog Island ship yards revelation, showing the expenditure of many millions with little effective results. Just who played the leading roles in the German propaganda movement in this country is apparently destined to come to light also.

# Farm Crops of $12,272,412,000

The department of agriculture's final estimates on the farm crops of 1918 present eloquent proof that the American farmer made an extraordinary effort this year to respond to the government's call for increased food production.

With a total value of $12,272,412,000, the nation's principal farm crops this year were worth more, based on prices paid to farmers December 4, than in any year in the history of American agriculture. This year's total exceeds that of the former record year, 1917, by more than $614,000,000. There also was a marked increase in acreage, the 355,895,722 total exceeding that of last year by 10,700,000 acres.

**WHEAT CROP VALUE, $1,874,263,000.**

The 1918 wheat acreage was 59,110,000 acres, an increase over 1917 of more than 14,000,000 acres. This year's yield is given at 917,100,000 bushels, with a farm value on December 1 of $1,874,263,000. This was an increased yield over 1917 of more than 280,000,000 bushels, with an increased value over 1917 of nearly $600,000,000. The average yield per acre this year was 15.5 bushels, as against 14.1 bushels last year.

There was a slight decrease this year in the oat harvest, but a considerable increase in barley, rye, flax seed and sugar beets.

Our readers will be interested in the acre yield of the various crops of this country. The average all over the United States this year was: Wheat, 15.5 bushels; oats, 34.6; barley, 26.5; rye, 14.4; potatoes, 94.7 bushels.

**TOBACCO CROP, $374,318,000.**

It is interesting to compare the value of some of the great staple crops of the south with those of the north. The 1918 tobacco crop had a farm value this year of $374,318,000, but a little more than one-tenth of the total value of this year's corn crop, and less than one-fifth of the value of the nation's wheat crop. This year's cotton production is valued at $1,616,207,000.

Values of some of the small crops are as follows: Sugar beets, $58,341,000; maple sugar and syrup, $12,074,000; sorghum syrup, $28,017,000; beans, $93,639,000; peanuts, $91,522,000; broom corn, $13,598,000; onions, $16,268,000.

**APPLE CROP, $98,824,000.**

Turning to fruits, the government reports the apple crop at 25,404,000 barrels, valued at $98,824,000; the peach crop is given at 40,185,000 bushels, valued at $66,587,000; the pear crop is 10,342,00 bushels, valued at $14,200,000. Florida and California grew 19,587,000 bushels of oranges, valued at $92,723,000.

These cheering crop figures are looked upon with satisfaction by government officials, showing that the nation will be in even better position to fulfil its pledge of 20,000,000 tons of foodstuffs to Europe next year than had been expected.

# All at Sea Over Railroads

The nation seems all at sea over the railroad problems. The law under which the government took over the railroads for operation provides for their return to their owners within a period not exceeding 21 months after the termination of the war. President Wilson frankly confessed in his recent message to congress that he had "no confident judgment" of his own on the question of the policy to be adopted toward the railroads. "I do not see how any thoughtful man can have, who knows anything of the complexity of the problem," the president added. He emphasizes his declaration of openmindedness by further adding, "Let me say at once that I have no answer ready," but the president was scarcely well on his way across the Atlantic when Director-General McAdoo startled the country with an urgent recommendation that the government's operation of the railroads be extended until January 21, 1924. Mr. McAdoo added the surprising explanation that "the president has given me permission to say that this conclusion accords with his own views of the matter."

**GOVERNMENT OWNERSHIP IN PEACE.**

Apparently Director-General McAdoo feels that the principle of government ownership has not been sufficiently tested under war conditions and wants a longer trial in time of peace.

It must be acknowledged that the results of government operations have not been a very strong argument for government ownership of the railroads. When congress turned the lines over to Director-General McAdoo, it appropriated $500,000,000 as a revolving fund, intended to meet any possible deficits of operation. It did not take Mr. McAdoo very long to realize that this $500,000,000 fund would be very soon exhausted and he would have to go to congress for another appropriation very soon. To meet that problem he advanced freight rates 25 per cent, a stupendous increase.

**CAN NOT MAKE BOTH ENDS MEET.**

Even with that increase and the carrying capacity of the railroads strained to the limit by the rush of war business, Mr. McAdoo was not able to make both ends meet. In the single month of November, he had to draw upon his revolving fund for $46,493,391. At that rate, a $500,000,000 fund would last a little more than a year. In fact, less than two-fifths of the fund remains, and winter operations, always more expensive than other periods of the year, is very likely to wipe out what remains.

Possibly that is why Secretary McAdoo resigned. It is not impossible that he made up his mind to get out from under while the dodging was good.

## *Washington Gleanings*

W. D. Beck of Warden, Wash., has traded 320 acres of wheat land to T. F. Sense of Elk City, Idaho, for 3320 acres of hay land near Elk City.

A red fox was caught alive five miles east of Garfield recently by Charles Cromwell, a rancher. It is a valuable animal, as there are few in the community.

Surfacing of five miles of Sunset highway in the vicinity of Govan was completed last week. Eight thousand cubic yards of gravel were placed, costing about $14,000.

The British steamer Yankalilla arrived in Port Townsend December 14 with 6309 tons of wheat, the largest cargo of Australian grain to arrive on the coast since the war began.

Yakima Valley beet growers received $300,000 for beets taken to the Idaho-Utah Sugar Factory during November. Products worth over $500,000 already have been made at the factory this season.

Frank West has been elected president of the Yakima Valley Fruit Growers' union, which claims a membership of 900, succeeding H. M. Cassidy. W. B. Turner was elected secretary and Thomas Whalen guide.

The resignation of W. F. Kirkman and J. F. Pingrey, supervisors of drainage district No. 2 of Burbank, were accepted by the Walla Walla county commissioners, and H. J. Staufacher and Charles Hess, both residents of Burbank, were appointed.

J. D. Neville, Lewis county engineer, whose term expires the first of the year, has been chosen by the Portland Cement association as district engineer for their association for all of southwest Washington. He will make his headquarters in Chehalis.

The annual report of the boys' and girls' club in Walla Walla county shows that six poultry club members made a net profit of $203. The total value of all products produced by all the club members reporting is $2383, the cost of production was $1154, leaving $1229 as the net profit.

The officers of the Island county fair association have just made an itemized report of receipts and disbursements for this year. It shows total receipts of $1003.62, of which $386.75 was from gate receipts and $551.67 was from concessions. The disbursements were $960.60, leaving a balance of $43.02.

Walla Walla county's first sugar beet harvest will soon be completed. Among the yields are: H. F. Schmelzer, 300 tons from 30 acres; Grant Allsbury, College Place, 26 tons from one and three-quarters acres; Gray Sheets, 15 tons from five acres; D. G. Thomas, two and a half tons from one-quarter acre.

A rabbit drive was made a few days ago at Warden by 12 men and they brought in over 100 jack rabbits. The drive was made to ascertain whether there were many jack rabbits to injure the wheat fields and orchards. They are more numerous than was expected and other drives are already scheduled.

C. L. McLous has sold his alfalfa ranch, two miles south of Ephrata, to Mr. Ninemuth of Bellingham, Wash., for $25,000. The McLous ranch consists of 40 acres in alfalfa, which yields four cuttings of hay a season, a modern dwelling, a large barn and pumping plants for irrigation. The water is distributed over the land with pipes and ditches.

A grain survey covering the different varieties of wheat taken from the farms on the breaks of the Columbia and the flats north of Wilbur and Almira has been completed by Lincoln county agriculturist Charles D. Gaines. It was found by the agriculturist that on the hill section winter wheat last year averaged 27.74 bushels, while spring grain yielded but 14.7 bushels.

Forest Supervisor P. T. Harris of Okanogan, will meet with the stockmen's associations to take applications for 1919 grazing permits on the following dates: Chiliwist, December 27; Loop Loop, December 28; Conconully, January 2; Loomis, January 3; Pine Creek, January 4; Brewster, January 6; Lower Methow, January 7; Twisp, January 8, and Methow Valley, January 9.

E. F. Benson, state commissioner of agriculture, and Frank Meredith, secretary of the state fair, are considering plans for the state fair for the coming year. Mr. Benson says he will ask the legislature for an appropriation of $60,000, which is an increase over the amount asked of the last session of but $2000. Mr. Benson says he would spend the money in the erection of new poultry buildings, new dairy products hall and a show ring for cattle.

The annual report of Assessor Grover B. Fore to the state bureau of inspection shows that the levy for Okanogan county will produce $506,693.89 in 1918 taxes. The average levy for the county this year is 54 mills. Of the total about 43 per cent will be spent in the schools; about 11 per cent goes to the state, other than for schools; about 20 per cent for roads and bridges; 4 per cent for the redemption of old warrants, and 14 per cent for current expense.

Adams county commissioners have accepted the bid of the Lumbermen's Trust company, Portland, Ore., for $5000 worth of bonds at par, sold under the Donehue road law. The funds will be used in construction of eight miles of permanent highway on Michigan prairie, east of Hatton. Thomas Goodenough, a farmer near Hatton, was awarded the contract to build the road for $54,000.

The crop report for 1918 of the Wapato Indian project was filed recently, showing returns this season from 74,481 acres to be $7,205,500, an increase of over $1,000,000 above the crop returns of 1917. The reservation farmers responded to the government's call for an increase in the essential food production by adding 4500 acres more of wheat land and 1200 acres of sugar beets, and in addition raised 4983 hogs, as compared with 3305 the previous year, and kept 2554 milch cows, as compared with 2386 in 1917. Silos, a sure sign of permanent development in the live stock industry, increased 50 per cent.

# Propose Giant Land Settlement Plan

## *Every Returned Washington Soldier May Find Himself the Possessor of a Fine Tract*

By SOESTER I. ANTHON.

IF the plans made by the Washington irrigation institute, at its sixth annual meeting in Yakima, and by the Washington Land Settlement association, which held its first public conference in Yakima on December 19, are finally carried out, every returned Washington soldier may find himself the possessor of a fine tract of land, fully equipped with the necessities for its development, supplied with expert assistance and advice during the period he is learning the business of farming and given 40 years in which to pay for the land and the initial improvements. The type of land to be farmed is to be selected by the soldier himself; he may have his choice between an irrigated ranch in the Yakima valley, a farm created from the logged-off lands of western Washington, or a home on a reclaimed swamp area.

**REPRESENTATIVE GATHERING.** Never in the history of the irrigation institute has there been as representative a gathering as assembled this year. From the opening address of President Elbert M. Chandler, who pleaded for a definite provision for the returned soldiers instead of merely a spectacular reception upon their return, through the address of R. K. Tiffany, project manager of the U. S. reclamation service at Yakima, who outlined the possibilities in developing the 3,000,000 acres of now unreclaimed land, to the final adoption of the land settlement bill, the meeting centered about the reclamation of the state's waste lands. E. F. Benson, state commissioner of agriculture, and one of the property owners of the land to come under the proposed high line canal, Mayor Ole Hanson of Seattle, N. B. Coffman of Chehalis, and other citizens of the same high type spoke of the importance of making it possible for the soldier to acquire the land and of the tremendous development which would follow after the "back to the land" movement got under way.

Both sessions of the irrigation institute, held in the Commercial club, and attended by 200 interested irrigationists, were used for the consideration of the proposed giant land settlement plan. Mr. Tiffany, in his address, warned the men that, if the state of Washington were to receive any share of the federal aid proposed in Secretary Franklin K. Lane's suggested bill, the land must be farmed and not the farmers. He said that any possibilities of mere speculation must be removed and that the farmers must require the land at its real value and not its speculative value. He added that the settlement of each soldier on a farm of splendid possibilities was little enough to do for men who had risked their lives, a sentiment which proved highly popular.

All the Washington irrigation projects were discussed by men eloquent about the merits of each proposed development. Alex McPherson of Pasco, formerly commissioner of agriculture of Idaho, explained the merits of the Lower Snake river project; F. A. Wiggins of Toppenish spoke of the great productivity to be expected from the Wapato project which, now incomplete, produced crops worth three times the amount expended on development work; E. D. Mineah, a prophet of the wonder of the Horse Heaven section for 14 years, asked its immediate development; George T. Crane favored immediate construction of the Methow project; A. O. Johnson was spokesman for the wonders of the Quincy-Palouse-Spokane 300,000-acre project, and Judge Ralph Kauffman of Ellensburg favored the Kittitas high line system. Yakima boosters in number, backed by the organized effort of the Yakima Commercial club under the leadership of Mr. Tiffany, favor the Yakima high line, which will add 120,000 acres of as fine land as there is in the Yakima valley to the irrigation section. In his address Mr. Tiffany spoke of a time when there will be not less than 600,000 acres of land under cultivation in the Yakima valley.

**E. M. CHANDLER AGAIN PRESIDENT** At the business session of the institute on the closing day Mr. Chandler, who is himself one of the successful farmers under the Burbank project, was reelected president. Robert Insinger, Spokane, and Ralph Kauffman, Ellensburg, were named vice presidents; R. H. Hayden, Yakima, is secretary, and G. V. Finley, Yakima, treasurer.

Resolutions presented by the special committee, of which Mr. Benson is chairman, indorsed the land settlement plan of Secretary Lane and proposed changes in the irrigation and water codes.

Following the session of the irrigation institute the Land Settlement association met at what proved to be practically a continuation of the institute sessions. It was attended largely by the same men, and considered the land settlement plan in detail.

As a result of the sessions a bill will be introduced in the legislature as the first step in the reconstruction policy of the state. It will carry two appropriations, one of $2,500,000 to be used in the development of land projects, and one of $50,000 for administrative expenses. A land settlement board, to consist of three persons to receive an annual salary of $5000 each, will be created. The board will be bi-partisan, not more than two of its members belonging to the dominant political party. In other respects the proposed bill follows closely the California land settlement statute. It provides for cooperation between the federal and state governments in acquiring and developing the land, and also for state aid during the preliminary development. This aid is to consist of furnishing equipment, buildings and stock necessary for successful farming, as well as expert advice and assistance. The act recognizes that many of the returned soldiers, out of whom it is hoped to make prosperous farmers, have no knowledge of farming as a practical business. The land will be thrown open to soldiers first, then to any patriotic citizens, women to have equal rights with men.

**FOR ONE STATE ASSOCIATION** Indications are that all the land settlement and reconstruction work will be considered under one state association to devote its energies exclusively to land settlement and the promotion of agriculture in the state. It is likely that this body will come into being at the reconstruction meeting to be held in Tacoma on December 27-28. Mayor Hanson, one of the influential persons at the association and the father of the King County Reconstruction congress, stated that he was not in favor of having any section wrapped up in its local interests, and that he believed all districts should work together for the greater development of the state. Mr. Coffman, one of the most influential persons of the meeting, spoke of the importance of coordinating the state road program and the state land settlement program, another feature to be worked out at the Tacoma gathering.

The final land settlement bill approved by the association was drafted by Howard A. Hanson of Seattle. All worthy Americans who desire to farm and live in the open can acquire land by availing themselves of the opportunities offered through it. After investigating and determining upon a project for development the board will proceed to acquire title to the land for settlers and for farm laborers. The lands will be improved by clearing, drainage, irrigation, seeding, planting, erecting suitable buildings, and also making provisions for live stock upon the several farm allotments.

**MANAGER FOR EACH PROJECT.** A project manager is to be placed in charge of each project, whose business will be to render all possible assistance to the accepted settlers. This assistance is to be gradually withdrawn after the farmers have learned their business. The appropriation of $2,500,000 by the state, would, under the act, entitle the state to an additional investment by the government of $25,000,000. The state appropriation is to be placed in a revolving fund to be returned to the state without interest at the end of 50 years. The land settlement board, if the plans carry, is to be given the right of eminent domain in acquiring lands within any approved project where owners can not be located or may refuse to sell to the board. The plan of the convention was to procure, as soon as possible, a suitable project of arid lands, another of swamp lands and another of logged-off lands as demonstration projects.

In order to carry out the proposed legislation, Mr. Hanson moved that a committee be appointed to go to Washington, D. C., to confer with Secretary Lane to see that provision is made at the earliest possible date for utilizing federal money in reclamation work in the state. The committee has not yet been appointed, though Mayor Hanson has been suggested as its logical head, and will undoubtedly be named for that position.

**NEW MEMBERS ARE LISTED.** Growth of the irrigation institute, which as usual closed with the annual banquet, may be seen from the following list of new members:

Yakima—D. V. Morthland, L. D. Humphrey, R. S. Calland, T. A. Noble, L. M. Holt, L. D. Geaney, J. G. Terry, W. L. Wright, R. F. Brindley, H. P. James, T. S. Johnson, F. J. Wilcox, George Weikel, F. L. Miller, J. L. Forman, J. E. Hearron, B. G. Vincent, Burr Flagg, M. W. Richards, E. C. Scott, C. E. Crownover, E. W. Wigley, W. L. Flagg, W. A. Stuart, L. H. Nichols, Robert J. Burrill, M. E. Luthans, A. H. Gullickson, F. H. McCoy, C. L. Twohy, D. H. Williams, H. R. Linse, H. W. Chase, B. F. Barge, L. D. Luce, J. D. Storrs, S. W. Grubb, H. Paddock, W. L. Dimmick, G. C. Finley, H. R. Humphrey, W. N. Perrin, F. D. Fitts, A. P. Eschbach, J. L. Hughes, J. Tyson, A. H. Bair, C. S. Channing, G. A. French, L. E. Burge, E. Woodcock, H. M. Gilbert, W. B. Clark, D. R. Redmon, O. A. Steward, Thomas Hope, Paul Heintz, H. H. Wende, E. A. Shannafelt, E. A. Fisk, R. P. Bean, N. P. Hull.

Prosser—E. C. Houston, W. R. Ammon, J. M. Wamba, M. B. Shelby, B. E. McGregor, C. L. Ammon, E. W. R. Taylor, P. P. Maddox, C. D. Little, Lon Boyle, A. G. McNeil,

Sunnyside—G. A. Rodman, J. G. Heinz, William Hitchcock, H. L. Miller, D. W. Harrington, C. A. Moore, H. E. Nicolai, W. B. Bridgman, W. Satterlee, S. J. Harrison.

Zillah—W. H. Alsbury, W. R. Newland, J. A. Cheyne, Lars Rasmussen, C. M. Keyes, M. F. Lewis, E. Yetter, A. B. Hickenbottom, J. W. Fitts, C. H. Furman.

Yelm—F. H. Royce, L. M. Goldsmith, L. N. Rice.

Naches—J. C. La Fortune, W. McKinney, M. M. Burge, J. B. Taylor, F. J. Kandle, J. M. Everett, J. S. Moore, D. C. Smith, E. Y. Robinson, C. Kail, E. H. Powell.

Grandview—C. A. Christenson, W. F. Elser, W. H. Murray, H. W. Moore, Farwell Morris, E. J. Brand, Adam Foisy.

Selah—L. C. Farr, George Longmire, D. Longmire, A. J. Lotz, F. C. Eastwold, L. Longmire, A. J. Dollenbacher.

Ephrata—W. E. Southard.

Chehalis—V. B. Cox, Alexander McPherson, J. B. Conruy, A. D. McPherson, A. F. Marsh, N. B. Coffman.

Outlook—P. J. Quesenberry, W. M. Clark.

Seattle—F. P. Goss, H. A. Harrison, W. C. Buell, T. E. Halland, W. J. Rankin, Ole Hanson, F. W. Graham, H. L. Hillman.

Harwood—G. R. Byrd.

Quincy—A. E. Johnson, G. E. Sanderson.

Kennewick—Gordon C. Moores.

Tacoma—John Vint.

Olympia—M. L. Dean, C. J. Bartholet.

Granger—F. B. Dye, L. M. Hilton, O. Nelson, W. J. Oord.

Montesano—E. Torpen.

Bremerton—H. H. Hopper.

Okanogan—Harry J. Kerr.

Pullman—H. Kimbrough, F. J. Sievers, O. L. Waller.

Moxee—D. Walters.

Fruitvale—W. J. Jewell.

Tieton—Harry Antles.

Walla Walla—C. P. Hartvedt.

Neppel—H. W. Reaugh.

Wapato—H. A. Aken, W. P. Sawyer, W. G. Martin, C. W. Marks, C. M. Mudd.

Mabton—O. H. Schlein, C. B. Cox.

Wenatchee—E. M. Gillette.

Brewster—G. T. Crane.

Waterville—M. B. Howe.

Dayton—J. L. Dumas.

Oroville—F. S. Beal.

Tacoma—J. M. Gaynor.

Coulee City—Clifton Ham.

Spokane—M. E. Hay, T. S. Lane.

Denver—C. F. Gleason.

Toppenish—W. A. Wiggins, C. J. Atwood.

Ellensburg—Mitchell Stevens.

Berkeley—Dr. Samuel Fortier.

### GOOD THINGS COMING.

**Wherein Wage Earners and Farmers Differ Politically**—Soon THE FARMER will publish several timely articles by Dr. E. A. Bryan. They will be worth reading. Farmers should organize. Read what Dr. Bryan has to say about that. Farmers as a class have to look out for their political interests. Read what Dr. Bryan has to say about that.

**Our Dual System of Government**—In another article Dr. Bryan points out how the farmers must primarily look to the United States senate for the protection and furtherance of their own interests.

These will follow up Dr. Bryan's article on the "Agrarian Party," which has aroused much interest. As is well known, Dr. Bryan was for 20 years president of the state college of Washington at Pullman, has been a practical farmer and is now at the head of the state educational system in Idaho. You may not always agree with Dr. Bryan, but that is all the more reason for reading his articles. If we only read that with which we always agree we never will get ahead. The clash of opinions is what makes men, what makes farmers and wage earners and doctors and lawyers. It is the purpose of THE FARMER to give you something to thing about as well as something to agree with.

## Ten-Foot Corn Stalks



The above picture shows J. T. Sanderson with his Yellow Dent corn, which grew 10 feet high, and had ears one foot long and three inches wide. This corn was grown by Mr. Sanderson on the T. Budwin ranch, in the Glenrose district, near Spokane.

### PRESENT AMERICAN SOCIALISM.

**It Is Not What It Was a Brief Two Years Ago.**

Referring to the recent articles of Dr. Bryan on "Paternalism in Government," and on "German Socialism," as well as to E. E. Elliott, on "Collectiveism and Individualism," H. W. Mangold of Adrian, Wash., writes to the Farmer:

The present American socialism is not what it was a brief two years ago, the war having caused a split that has resulted in at least three factions of socialists, the majority of whom supported the war to the utmost, with a small minority who ssubmitted and another that openly opposed, and in the inevitable reorganization which will come some principles will be differently stated than formerly.

Dr. Bryan knows that socialism is one of the manifestations of the evolutionary forces of society, that it is the effect of a cause somewhere, and that it itself is evolutionary. As the conditions of labor and labor exploitation change so may the declared paramount demands of the socialists change. While it is true that the history of socialism began with attempts at communism no writer who wishes to be taken seriously attempts to link them together or confuse them today.

There is no German socialism, nor American socialism; it is international. There are different doctrines laid down in different countries about some special aspect of the thing, but fundamentally it is the same in all countries. The taking by legal procedure of the product of the many by the few. Capitalism is the cause; socialism the effect.

### LOCAL GRANGE IS FORMED.

At a recent meeting of farmers in Spokane county, the Moran prairie grange was formed with the following officers, installation being conducted by J. A. Graves:

Master—J. W. Wilson.
Overseer—Amon Graves.
Lecturer—J. W. Perigo.
Steward—J. W. White.
Assistant steward—P. Bloom.
Chaplain—Mrs. J. W. Wilson.
Treasurer—M. Krois.
Secretary—R. Johnson.
Gatekeeper—Olaf Peterson.
Ladies' assistant steward—Ruth Johnson.
Secress—Lydia Graves.
Pomona—Elsie Johnson.
Flora—Oril Wilson.

### ORCHARD RETURNS PROFIT.

F. G. Carlisle of Kettle Falls reports that this year he received from his 14-acre orchard 5978 boxes of apples and 78 boxes of pears in addition to the small fruits necessary to supply his home. In addition to this fruit yield he sold alfalfa hay from the orchard for $772 and kept enough alfalfa to winter his four horses, two cows and 15 brood sows. In addition he pastured during a portion of the season 80 head of hogs in his orchard. The apples that he harvested were of excellent grade.

# Shorthorns Sell Below Their Value

That their loss was the gain of the men who are building up better herds throughout the northwest, and that they were willing from that point of view to accept the loss, was the sentiment expressed by the Shorthorn breeders who sold 45 head of purebreds at Lewiston last week for much less than the quality of stock sold justified. Influenza resulted in a small attendance, which in turn caused the low prices. The 45 head brought a total of $9440, an average of about $209.80. The top price was paid by Duke Dudley of Nez Perce, Idaho, for the handsome white bull, Rainier 592116, two years old, consigned by William H. Leonard of Pomeroy, Wash. The average for the 24 bulls sold, all of which were under two years except the champion, was $191.50. The top price for heifers was $400, paid by Day & Rothrock of Sprague, Wash., for Marsh Violet 3d, consigned by W. J. Townley of Union, Ore. The average for the 21 cows and heifers sold was $230.80, approximately $39 a head higher than the average for the bulls.

Richard Hanna, herdsman for the State college of Washington, judged the animals in the show that preceded the sale. First and second in the two classes into which the entries were divided were as follows:

Bulls calved prior to September 1, 1917—First, Rainier 592116, shown by William H. Leonard, Pomeroy, Wash.; second, Jewel's Welcome 588585, shown by H. D. Wester, Nez Perce, Idaho.

Bulls calved since September 1, 1917—Choice Knight, shown by Day & Rothrock of Sprague, Wash.; second, True Victor 699990, shown by A. D. Dunn, Wapato, Wash.

Grand champion bull—Rainier 592116.

Females calved prior to September 1, 1917—Marsh Violet 3d, shown by W. J. Townley, Union, Ore., second.

Duchess 356th 612683, shown by Townley.

Females calved since September 1, 1917—First, Venus of Dunbro 700011, shown by A. D. Dunn, Wapato, Wash.; no second.

Grand champion female—Venus of Dunbro 700011.

The following is a complete list of the Shorthorn sales at Lewiston, including the consignors, the animal, its age, the purchaser and the price paid:

**Bulls.**

Consigned by H. D. Wester, Nez Perce, Idaho.
Jewel's Welcome 588585, yearling—H. W. Haywood, Weippe, Idaho ..... $ 205
Golden Gem 3d, 647319, yearling—John Dan, Lewiston, Idaho ..... 145
Consigned by Walter Hoover, Nez Perce, Idaho.
Water Wagon 632204, yearling—Joe Turner, Myers Falls, Wash. ..... 140
Consigned by A. D. Dunn, Wapato, Wash.
True Victor 699990, 11 months—Day & Rothrock, Sprague, Wash. ..... 205
King of Dunbro 683770, yearling—D. L. Rosengrants, Lewiston, Idaho ..... 135
Consigned by W. J. Townley, Union, Ore.
Iris King 669085, yearling—Harry Cranke, Nez Perce, Idaho ..... 160
Prince D. 669090, yearling—Harry Cranke, Nez Perce, Idaho ..... 145
Mounds King 345th 575161, yearling—Harry Cranke, Nez Perce, Idaho ..... 150
Consigned by G. W. De Lay, Hot Lake, Ore.
Violet Prospect 621860, yearling—Joe Turner, Myers Falls, Wash. ..... 175
King Linwood 621856, yearling—Joe Turner, Myers Falls, Wash. ..... 155
Baron Campbell 621854, yearling—Day & Rothrock, Sprague, Wash. ..... 200
Violet Star 621861, yearling—Joe Turner, Myers Falls, Wash. ..... 195
Rushes Goods 621859, yearling—Harry Cranke, Nez Perce, Idaho ..... 125
Consigned by Wm. H. Leonard, Pomeroy, Wash.
Right U. R. 696185, yearling—Joe Turner, Myers Falls, Wash. ..... 130
Michief 696184, yearling—William Mulhall, Lewiston, Idaho ..... 195
Lordly Lad 696182, yearling—J. P. McCann, Lewiston, Idaho ..... 210
Rainier 592116, two-year-old—Duke Dudley, Nez Perce, Idaho ..... 455
Joe Tucker 696181, yearling—Joe Turner, Myers Falls, Wash. ..... 135
Consigned by Erl F. Harper, Johnson, Wash.
Mayview Crown 631747, yearling—R. B. McKissick, Lewiston, Idaho ..... 205
Mayview Caesar 631748, yearling—Joe Turner, Myers Falls, Wash. ..... 200
Consigned by Joe Turner, Myers Falls, Wash.
Maid's Masterpiece 692847, yearling—Day & Rothrock, Sprague, Wash. ..... 205
Perseverance 692848, yearling—Day & Rothrock, Sprague, Wash. ..... 200
Consigned by Day & Rothrock, Sprague, Wash.
Choice Knight, yearling—G. W. DeLay, Hot Lake, Ore. ..... 225
Consigned by University of Idaho.
Welcome Prince (Reg. applied for), yearling—Huston McCroskey, Garfield, Wash. ..... 300
Consigned by J. R. Wyatt & Son, Bozeman, Mont.
Golden Clipper 657156, yearling—F. E. Leeper, Stites, Idaho ..... 135

**Cows and Heifers.**

Consigned by Day & Rothrock, Sprague, Wash.
Leona 2d 650626, yearling—G. W. DeLay, Hot Lake, Ore. ..... 200
Lily Onward 4th 650627, yearling—F. S. Vaughan, Lenore, Idaho ..... 180
Consigned by A. D. Dunn, Wapato, Wash.
Roan Princess 2d 700007, yearling—Earl F. Harper, Johnson, Wash. ..... 280
Venus of Dunbro 700011, yearling—William Mulhall, Lewiston, Idaho ..... 345
Ida Dunbro 591044, two-year-old—Huston McCroskey, Garfield, Wash. ..... 240
Dunbro Blossom 592250, yearling—Huston McCroskey, Garfield, Wash. ..... 200
Consigned by W. J. Townley, Union, Ore.
Marsh Violet 3d, yearling—Day & Rothrock, Sprague, Wash. ..... 400
Duchess 356th 612683, yearling—Carl Grief, Uniontown, Wash. ..... 250
Gay Frantic 669096, yearling—William Mulhall, Lewiston, Idaho ..... 200
Violet Frantic 612687, yearling—William Mulhall, Lewiston, Idaho ..... 275
Consigned by G. W. DeLay, Hot Lake, Ore.
Golden Darling 621864, yearling—Carl Grief, Uniontown, Wash. ..... 200
Good Duchess 621865, yearling—William Mulhall, Lewiston, Idaho ..... 200
Consigned by William H. Leonard, Pomeroy, Wash.
Rosie 696195, yearling—G. W. DeLay, Hot Lake, Ore. ..... 155
Sarah Bernhardt 696197, yearling—William Mulhall, Lewiston, Idaho ..... 165
Hettie Green 696187, yearling—Jesse Bardwell, Agatha, Idaho ..... 150
Lady Ordeans 240670, (calf at foot), five-year-old—Day & Rothrock, Sprague, Wash. ..... 200
Primrose 240676, (calf at foot), four-year-old—Neal Vaughan and Claire Wellman, Lenore, Idaho ..... 215
Consigned by J. H. McCroskey & Sons, Fishtrap, Wash.
Victor's Amanda 155104, (calf at foot), five-year-old—H. L. Stafford, Lenore, Idaho ..... 340
Consigned by University of Idaho.
Miss Mysie 3d 86347, nine-year-old—Harry Cranke, Nez Perce, Idaho ..... 220
Consigned by Joe Turner, Myers Falls, Wash.
Graceful Mary 579328, six-year-old, (calf at foot)—Harry Cranke, Nez Perce, Idaho ..... 295

# Holstein Men Optimistic

Optimism as to the future of the dairy business and the progress of Holstein achievement was expressed at the banquet of the Northwest Holstein breeders Friday evening, December 13, at the Imperial hotel. George Gue introduced O. M. Plummer as toastmaster, and following his leading, good natured badinage was interspersed with more serious remarks. William Bishop, in reviewing the progress in the Holstein breed, in numbers and performance, said we are not leading the Holstein cow; she is leading us. We are behind the greatest breed on earth and some of us have not yet caught up. He considered the sale fairly successful, and was glad to greet the new breeders who bought. Mr. Stewart of the Carnation stock farm told how much better Holsteins sell back east. He did not think the cattle brought all they were worth, but expected to see prices improve. Alma D. Katz, president of the Oregon Dairy league, spoke briefly on the value of organization. He congratulated the Holstein breeders on their prosperity. Thomas Carmichael expressed admiration for the spirit of the breeders. Professor Brandt of the O. A. C. expressed pleasure at the prospect of the Pacific International Stock show continuing and hoped to bring students for a judging contest. Mr. Plummer declared the show would put on one contest for animal husbandry students. Other speakers were Professor Fitts, W. K. Newell of the food administration, E. B. Marks, J. Luscher, Mr. Stimson, Mr. Burnham and George Gue. Mrs. Gue scored on her husband in a story she told.

Following the banquet, the Oregon Holstein breeders held a business meeting, at which S. B. Hall of Gresham was elected president. J. W. Pomeroy, Scappoose, vice president; George Frakes, Scappoos, secretary; and J. Luscher, Fairview; A. H. Burns, Troutdale, and Thomas Carmichael, Gaston, directors.

## ARMENIAN AND SYRIAN RELIEF.

To save from starvation fully 4,000,000 Armenians, Syrians and Grekes, a campaign to raise $30,000,000, or about 30 cents per capita, throughout the United States will be made the week of January 12 to 19, 1919. So interested was President Woodrow Wilson in the cause of these suffering peoples that preparatory to sailing for Europe, on his peace mission, he issued a proclamation, calling on the people of this country for funds, which he signed and left for release at this time, in which he says:

"It is estimated that about 4,000,000 Armenians, Syrian, Greek and other war sufferers in the near east will require outside help to sustain them through the winter. Many of them are now hundreds of miles from their homeland. The vast majority of them are helpless women and children.

"I, therefore, again call upon the people of the United States to make even more generous contributions than they have made heretofore to sustain through the winter months those, who, through no fault of their own, have been left in a starving, shelterless condition, and to help reestablish these ancient and sorely oppressed people in their former homes on a self-supporting basis."

## EXPRESS RATES ON MILK UP.

It is feared by milk producers that the increase in express rates on milk, butterfat and cream, effective January 1, will result in the producer having another item added to his cost of production and marketing. There is, however, an unanimous sentiment that the producer should not be required to bear this additional cost.

## SHIP CARLOAD OF BUTTER.

The Commercial Creamery company's branch establishment at Spokane recently shipped to New York a carload of butter valued at about $20,000. R. A. Goodhue of the company, said he believed it was the first carload of Washington butter ever sent to the Atlantic coast.


# Warm and Safe for Farm Family

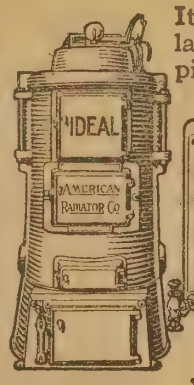


When the work takes you away for the day in barns or fields, or to town, the family will be safe and comfortable with IDEAL-AMERICAN heating, making the whole house as warm as June

IDEAL-AMERICAN heating is the best paying, most economical equipment you can put on your farm. It is a permanent improvement and a wise investment—never wears out, always on the job, burns any fuel you have, and gives the most heat at the least cost. Thousands of farm homes which are Ideally heated do not know the terrors of the hard winters.

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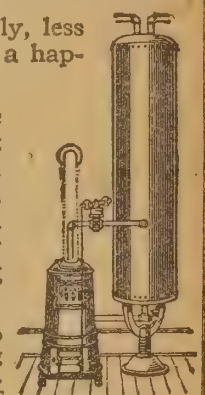
**You can buy an IDEAL-AMERICAN Radiator Heating Outfit for fewer bushels of grain than you could in 1916! Think it over!**




It means better health for the family, less labor for you, absolute comfort, and a happier, easier life on the farm.

Not necessary to have water pressure. You get back the first cost even if you sell or lease, and you get big yearly fuel savings; so why delay on a sure, high-paying investment like this?

Call up your dealer today and ask him to give you an estimate for installing IDEAL-AMERICAN heating this week. It can be done in a few days in any kind of buildings without disturbing the family.



Our IDEAL Hot Water Supply Boilers will supply plenty of warm water for home and stock at small cost of few dollars for fuel for season. Temperature kept just right by *Sylphon* Regulator. Write for booklet.

IDEAL Boilers will supply ample heat on *one charging of coal* for 8 to 24 hours, depending on severity of weather. Every ounce of fuel is made to yield utmost results.

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# How Should Grain Be Rationed Out to Dairy Cow?

| Class of Cows | Roughage | Grain to Balance Roughage | Milk from Roughage | Grain Mixture | Pounds of Grain to Feed per Day. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 |
|---|---|---|---|---|---|
| I. Holsteins Ayrshires Shorthorns and cows of mixed breeding testing 3.5% to 4% | Balance, as alfalfa or clover hay with corn or oat silage or potatoes or roots. Or oat and pea hay or clover and timothy hay or pea straw along with silage (oats and peas or wheat and vetch or clover and timothy) or rape. | O | 13 to 15 | A | 15 17 20 22 24 26 29 31 33 35 38 40 42 44 47 49 51 53 56 58 |
| | | | | B | 15 18 20 23 25 28 30 33 35 38 40 43 45 48 50 53 55 58 60 63 |
| | High protein as alfalfa or clover hay. | 10 pounds corn and corn cob meal or corn chop or barley | 30 to 35 | A | 32 34 37 39 41 43 46 48 50 52 55 57 59 62 65 67 69 71 74 76 |
| | | | | B | 32 35 37 40 42 45 47 50 52 55 57 60 62 65 67 70 72 75 77 80 |
| | | 7 pounds dried beet pulp. | 20 to 23 | A | 22 24 26 29 31 33 35 38 40 42 44 47 49 51 53 56 58 60 62 65 |
| | | | | B | 22 24 27 29 32 34 37 39 42 44 47 49 52 54 57 59 62 64 67 69 |
| | Low protein as timothy or wild or oat hays or pea straw, either alone or with corn or oat silage or potatoes or roots. | 1 lb. linseed oil-meal or cottonseed meal or soy bean meal. | O | A | 2 4 7 9 11 13 16 18 20 22 25 27 29 31 34 36 38 40 43 45 |
| | | | | B | 2 5 7 10 12 15 17 20 22 25 27 30 32 35 37 40 42 45 47 50 |
| II. Pure-bred and high grade Jerseys and Guernseys, testing approximately 5% | Balance, as alfalfa or clover hay with corn or oat silage or potatoes or roots. Or oat and pea hay or clover and timothy hay or pea straw along with silage (oats and peas or wheat and vetch or clover and timothy) or rape. | O | 6 to 10 | C | 8 9 11 13 15 16 18 20 22 23 25 27 29 30 32 34 36 37 39 41 |
| | | | | D | 8 10 13 15 17 19 22 24 26 28 31 33 35 37 40 42 44 46 49 51 |
| | High protein as alfalfa hay or clover hay. | 10 pounds corn and corn cob meal or corn chop or barley | 20 to 25 | C | 22 23 25 27 29 30 32 34 36 37 39 41 43 44 46 48 50 51 53 55 |
| | | | | D | 22 24 26 29 31 33 35 38 40 42 44 47 49 51 53 56 58 60 62 65 |
| | | 6 pounds dried beet pulp. | 15 to 18 | C | 17 18 20 22 24 25 27 29 31 32 34 36 38 39 41 43 45 46 48 50 |
| | | | | D | 17 19 22 24 26 29 31 33 35 37 40 42 44 46 49 51 53 55 58 60 |
| | Low protein as timothy or wild or oat hays or pea straw, either alone or with corn or oat silage or potatoes or roots. | 1 lb. linseed oil-meal or cottonseed meal or soy bean meal. | O | C | 2 3 5 7 9 10 12 14 16 17 19 21 23 24 26 28 30 31 33 35 |
| | | | | D | 2 4 7 9 11 13 16 18 20 22 25 27 29 31 34 36 38 40 43 45 |
| Class of cows | Roughage. | Grain to Balance Roughage | Milk from Roughage | Grain Mixture | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 |

Pounds of Milk Cow is Producing Per Day

Pounds of Grain to Feed per Day.

The accompanying table is one prepared by Professor E. G. Woodward of the dairy department of the state college of Washington, and K. B. Musser, dairy extension specialist. It is designed to help the dairyman or the farmer with one or two dairy animals to know how much grain and of what kind to feed the cow that is receiving a given amount of hay.

### GOOD GRAIN MIXTURES.

The following are the grain mixtures referred to in the table below under the heading, "grain mixture." They can be made in smaller amounts than indicated by simply using the same proportion of the grain or meal indicated:

**For Cows of Class 1.**

| Group A mixtures: | Group B mixtures: |
|---|---|
| Corn .....100 lbs. | Corn .....100 lbs. |
| Bran .....300 lbs. | Oats .....100 lbs. |
| Linseed oil meal ..... 50 lbs. | Linseed oil-meal .....100 lbs. |
| Total .....450 lbs. | Total .....300 lbs. |
| | Corn .....100 lbs. |
| Corn .....100 lbs. | Oats .....100 lbs. |
| Bran .....400 lbs. | Pea meal ..400 lbs. |
| Pea meal ..100 lbs. | |
| Total .....600 lbs. | Total .....600 lbs. |
| | Dried beet pulp .....200 lbs. |
| Bran .....200 lbs. | Bran .....100 lbs. |
| Oats .....200 lbs. | Linseed oil-meal .....200 lbs. |
| Linseed oil-meal ..... 50 lbs. | |
| Total .....450 lbs. | Total .....500 lbs. |
| | Dried beet pulp .....200 lbs. |
| Bran .....200 lbs. | Oats .....100 lbs. |
| Sports .....200 lbs. | Linseed oil-meal .....250 lbs. |
| Oats .....100 lbs. | |
| Total .....500 lbs. | Total .....550 lbs. |

**For Cows of Class 2.**

| Group C mixtures: | Group D mixtures: |
|---|---|
| Corn .....100 lbs. | Corn .....100 lbs. |
| Bran .....300 lbs. | Oats .....200 lbs. |
| Linseed oil meal ..... 25 lbs. | Linseed oil meal .....175 lbs. |
| Total .....425 lbs. | Total .....475 lbs. |
| | Corn .....100 lbs. |
| Corn .....100 lbs. | Oats .....100 lbs. |
| Bran .....400 lbs. | Pea meal ..300 lbs. |
| Pea meal ..550 lbs. | |
| Total .....1050 lbs. | Total .....500 lbs. |
| | Dried beet pulp .....200 lbs. |
| Bran .....100 lbs. | Bran .....100 lbs. |
| Oats .....200 lbs. | Linseed oil-meal .....175 lbs. |
| Linseed oil-meal ..... 30 lbs. | |
| Total .....330 lbs. | Total .....475 lbs. |
| | Dried beet pulp .....200 lbs. |
| Bran .....100 lbs. | Oats .....100 lbs. |
| Sports .....100 lbs. | Linseed oil-meal .....210 lbs. |
| Oats .....100 lbs. | |
| Total .....300 lbs. | Total .....510 lbs. |

In the mixtures given above barley may be substituted for corn. Cottonseed meal or soybean meal may be substituted for linseed oilmeal. Chopped alfalfa may be substituted for bran at the rate of 125 pounds to each 100 pounds of bran wherever this does not make the ration too bulky for the animals fed. Mill run or wheat feed may be substituted for bran approximately pound for pound.

### Direction for Using Table.

Suppose we desire to know the proper grain ration for a Holstein cow receiving clover hay as roughage and producing 40 pounds of milk daily. Look in the first column of the table and you will see Holsteins listed under class 1. In the second column clover hay is given among the high protein roughages. In the third column is shown the kind and amount of different grains, which may be fed in order to properly balance the roughage. In the fourth column is shown the amount of milk which can be produced from the roughage, together with the grain used in balancing it; for example beet pulp. In the next column is shown the group of grain mixture used; for example, one of the mixtures of group A shown below. This cow is giving 40 pounds of milk daily, and in order to determine the grain necessary to feed, follow out the proper line to the number 40. Then follow that column up or down to the line, which indicates the pounds of the grain mixture to feed per day. Remember that these are daily rations, and should be divided equally among the feeds of the day.

It should be remembered that the amounts suggested to be fed daily are only approximate, and are meant to serve only as a guide. All cows should be fed according to the following rule:

Give the cow all the roughage that she will eat, and in addition, enough of one of the grain mixtures to keep her in good condition.

Select a clean, smooth floor, if possible in front of the bin where the mixture is to be stored. Spread the different kinds of feed out on a floor in thin layers, one on top of the other, covering the surface six to eight feet square. Mix thoroughly by turning two or three times with a scoop shovel in the same manner as material is turned in mixing concrete. When thoroughly mixed scoop into the bin.

If a feed cart or truck is available for bringing the grain from the bin, the roughage can be placed in one end, and the grain mixture in the other.

Where good roughages as alfalfa, clover and oat hay, silage and rape are fed, and the cows have been kept in fair condition while in milk, dry cows can be brought through on roughage with but little grain. Heifers should be fed sufficient grain to allow for proper development, which necessitates a fair state of flesh at freshening time, for example, one to three pounds of barley may be fed daily.

Economizing in the feeding of calves to the extent of retarding growth is false in its results. Supply the best ration on the farm to the calves. Their growth and vitality will be ample return for the investment.

# First Prize Under Year Heifer



The Jersey heifer shown herewith is owned by John Kemmling, near Prineville, Ore., and was first prize under year heifer at the Interstate fair at Prineville, the first week in October, 1918. Mr. Kemmling purchased her in dam from Ed Cary, Carlton, Ore. Her dam's full sister has a great record as a junior 2-year-old in Mr. Cary's herd.

### PLAN FOR SILAGE NOW.

To the Editor: In reading over your paper I see where you ask for experience in silo feeding. For the last four years I have fed silage to cattle, sheep and horses with very good results. I have made a practice of feeding a carload of steers every year, but this winter will feed a carload of lambs for February market. My experience in feeding silage has been that it is the only feed for fattening or wintering stock cattle. It is a cheap and substantial feed. Silage is easier and much quicker to handle than hay and there is absolutely no waste. I believe that the time is not far off when there will be a silo on every farm as it is one of the best investments a farmer can make. A silo is the means of keeping more and better live stock at less expense. It also acts as a means of preserving feed that would be wasted if it were not for the silo. At present I have two silos on my farm, one having a capacity of 140 tons and the other a 40-ton size. The small one I use for summer feeding of milch cows. This fall I sowed some winter rye, winter vetch and sweet clover that I will put into the silo next summer. Now is the time to plan for your silo and silage crop for next year as the need of feed was never greater than at the present. A. E. WARSINSKE.
Daisy, Wash.

### GETS ACCREDITED HERD CERTIFICATE.

E. M. Chandler has just received the following letter from Sam B. Foster of the United States department of agriculture:

"I am enclosing accredited herd certificate No. 1010, which is recognition of the standing of your herd at Burbank, Wash. This is the first certificate issued in favor of any herd in the state of Washington."

### Another Loan Is Coming.

A fifth Liberty loan is coming next spring. Figure on your part.


Pig-a-Boo DIGESTER TANKAGE

A mixed ration with Pig-a-Boo makes healthier hogs and will put more weight in meat and bone in less time and at less cost than any other feed. Send for FREE BOOKLET. Contains information of value.

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North Portland Oregon

ABSORBINE
TRADE MARK REG. U.S. PAT. OFF

Reduces Bursal Enlargements, Thickened, Swollen Tissues, Curbs, Filled Tendons, Soreness from Bruises or Strains; stops Spavin Lameness, allays pain. Does not blister, remove the hair or lay up the horse. $2.50 a bottle at druggists or delivered. Book 1 R free.
ABSORBINE, JR., for mankind—an antiseptic liniment for bruises, cuts, wounds, strains, painful, swollen veins or glands. It heals and soothes. $1.25 a bottle at druggists or postpaid. Will tell you more if you write. Made in the U. S. A. by
W. F. YOUNG, P. D. F., 371 Temple St., Springfield, Mass.

BARREN COWS AND MARES
Can Be Made to Breed by the Use of
Hood Farm Breeding Powder

It restores the breeding functions; corrects the irregularity of the cows that do not come in season; removes the irritation and restores the organs to normal condition in cows that are constantly in season. Order today, mentioning this paper. Prices by mail, $1.15, $2.75 or $5.00. Injection Tube 90c, with $5.00 order, 75c.
C. I. HOOD CO., Lowell, Mass.


### Shorthorn Beef Records

An Illinois load of yearling Shorthorn steers made the world's market record at Chicago October 3, selling for $19.60 per cwt.

An Iowa load of Shorthorns sold for $19.50 September 16, averaging $308 per head, the previous record.

A Wisconsin Shorthorn load made the Wisconsin record at $18.35 and a Shorthorn load bred in Montana made the record for range steers at $18.

American Shorthorn Breeders' Association
13 Dexter Park Ave., Chicago, Ill.


GET GUERNSEYS

Tabulations made by the U. S. department of agriculture show that the average income over cost of feed from one cow that produces 450 lbs. fat is equal to the average income over cost of feed from 20 cows that produce 100 lbs. each. The average of all official Guernsey records is 450 lbs. fat. Learn more about these profitable cows. Ask for our free booklet, "The Story of the Guernsey."
THE AMERICAN GUERNSEY CATTLE CLUB,
BOX W, PETERBORO, N. H.

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CORRECT WEIGHTS AND TESTS
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BEET PULP
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THE MILK MAKER
There is no question of its milk-making value. Costs less than oats or barley.
COCOANUT MEAL
A substitute for Oil Cake Meal
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502-4-6-8-10 First Ave., Spokane.

LIVE STOCK NOTES

Write to the Editor.

E. J. IDDINGS, Editorial Contributor.

# When to Dehorn

## Either Spring or Fall All Right

To the Editor: A short time ago I noticed some one writing on the subject of dehorning cattle and said that now (in the fall) was the best time to dehorn. My observation and experience give me a different opinion and I wish to correct what I believe to be a mistake.

The operation of dehorning cattle causes them to bleed more or less and many of them bleed profusely. In the fall all animals are getting themselves in shape to live through the winter with the most comfort possible and the loss of blood at this time is a serious setback. They will suffer with the cold and will require more feed and be in bad condition in the spring. Dehorning cattle is an operation of some concern and taking all points in consideration I find that the early spring or well before fly-time is the best time to dehorn. A. J. WILLIAMSON.

Cedar Springs Farm, Cocolalla, Idaho.

With reference to the above, Professor E. L. Potter of the Oregon Agricultural college says:

"The article in question, I believe, stated as follows: 'Right now is a good time to dehorn calves and yearlings, but is rather late for older cattle.' It happens that this article was written along in the spring, but was not published until September; hence 'right now' meant spring rather than September. The next statement, however, 'The fall is a good time. The work should be done just as soon as the flies are gone,' still holds good, and while we really prefer to dehorn cattle in the spring, we have nevertheless had the very best results by dehorning in the fall just as soon as the flies are gone. While we realize the force of our correspondent's argument, will say that we have never had any trouble with cattle dehorned in the fall, but once in a while in the spring an animal will heal very slowly and in such case may not get well until fly time, which will make a good deal of trouble. Either spring or fall is entirely all right if the work is done quite early so as to allow plenty of time for the animals to heal, in one case before fly time, and in the other case, before severe winter weather."

# VETERINARY

By DR. S. B. NELSON.

**Pigs Get Stiff.**—I have five shoats that have got stiff. They all seemed to get stiff about the same time. It seems to be in their legs and feet. I had six in the same pen and a few days before the five got stiff I took one of the six out and he is all right. Their pen got pretty muddy. Can it be rheumatism and what can I do to help them? T. R. L.

Ephrata, Wash.

Try letting your pigs go without feed one day, and give them a nice sloppy meal, and into this meal put one ounce of castor oil for each pig. The following day begin giving from 5 to 10 grains of potassium iodide in the feed once daily. The dose should depend upon the size of the pig.

**Hemorrhage Causes Blindness.**—Will you please give me some advice on a 3-year-old horse I have? He is over 3 years old and was not castrated until this year in May. Ever since that he has been almost totally blind. He had an abnormal skin growth that had to be cut away and consequently he bled a good deal and was weak for several weeks, but is now in good flesh and looking well, but is still as blind as ever. Is there any remedy for this now or is it too late to treat it? If so, I would appreciate a remedy very much as he is a good-sized horse.

Davenport, Wash. C. S.

There is no remedy that I know of for the blindness caused by great loss of blood. I have not in my experience seen an animal recover its sight after going blind from excessive hemorrhage. I can not offer you any treatment.

**Foot Is Misformed.**—I have a mare that has a bum foot. She has been lame since March, but we thought then it was ringbone, so we blistered that about seven times but with no results, so we tried to shoe her and pour oil on her hoof, but that does no good either. Her hoof is awful hard. We have cleaned out her foot and her frog is hard. She has had a barbed wire cut on her foot, too, but that was a long time ago, so her foot is some misformed. What would you advise me to use on it? L. M. A.

Govan, Wash.

I would be of the opinion that possibly the misforming of the foot due to the barbed wire cut which she received a long time ago may cause a constant irregular pressure on the bone of the foot. I could not give you any advice regarding the treatment, because I do not know what the foot is like. I would suggest to you that you call in your nearest veterinarian or take the mare to him and let him see it, and possibly he could give you advice that would benefit the mare.

**Castration of Sheep.**—I have a bunch of spring sheep which have never been castrated and have been informed that it can not be done without the loss of the sheep, after they are weaned. I would like to have some advice concerning the proper ways, means and time concerning this. C. D. B.

Riparia, Wash.

The mortality rate following castration of sheep increases with age, even under the most careful conditions. Any pleasant day, not too hot, is a seasonable time to operate. The two fore and the hind right leg should be fastened together with a cord. Then the person assisting in the work should grasp the hind left leg and press it against the body. This gives a good field for operation. The field of operation should be thoroughly disinfected—possibly painted with iodine is the best. About as favorable an operation is to remove the lower third of the scrotum with one sweep of the knife. Make a clean-cut incision. Then, perform the operation, the same as for another animal. After the operation, the lamb should be placed in a nice clean sanitary place. If the weather is favorable, the pasture is the best place of all. The wound should be examined every day to see whether or not it has become infected, and if so it should be thoroughly cleansed and disinfected daily. Remember that fly time is a serious time to operate.


## LIVESTOCK SHIPPERS' INFORMATION

| | Cattle | Sheep | Hogs |
|---|---|---|---|
| 1918 (10 months) | 41,413 | 102,282 | 32,791 |
| 1917 | 19,267 | 32,129 | 28,808 |
| GAIN | 22,151 | 70,153 | 3,983 |

These figures, showing the remarkable increase in receipts the past year, indicate how well we are pleasing and serving the growers and shippers of the northwest.

You can get better prices at your home market in Spokane. We cater to large and small shippers alike.

Write for Weekly Market Letter with Quotations.

**SPOKANE UNION STOCKYARDS**

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## How to Realize Most Money From Your Live Stock

**First,** select the nearest market that pays top prices for your stock.
**Second,** consign your shipment to the commission firm that gives you best service.

The Spokane Union Stockyards, with its reputation for the highest prices in the northwest, answers the first requirement. That our firm handles more stock than all our competitors combined indicates what shippers think of our service.

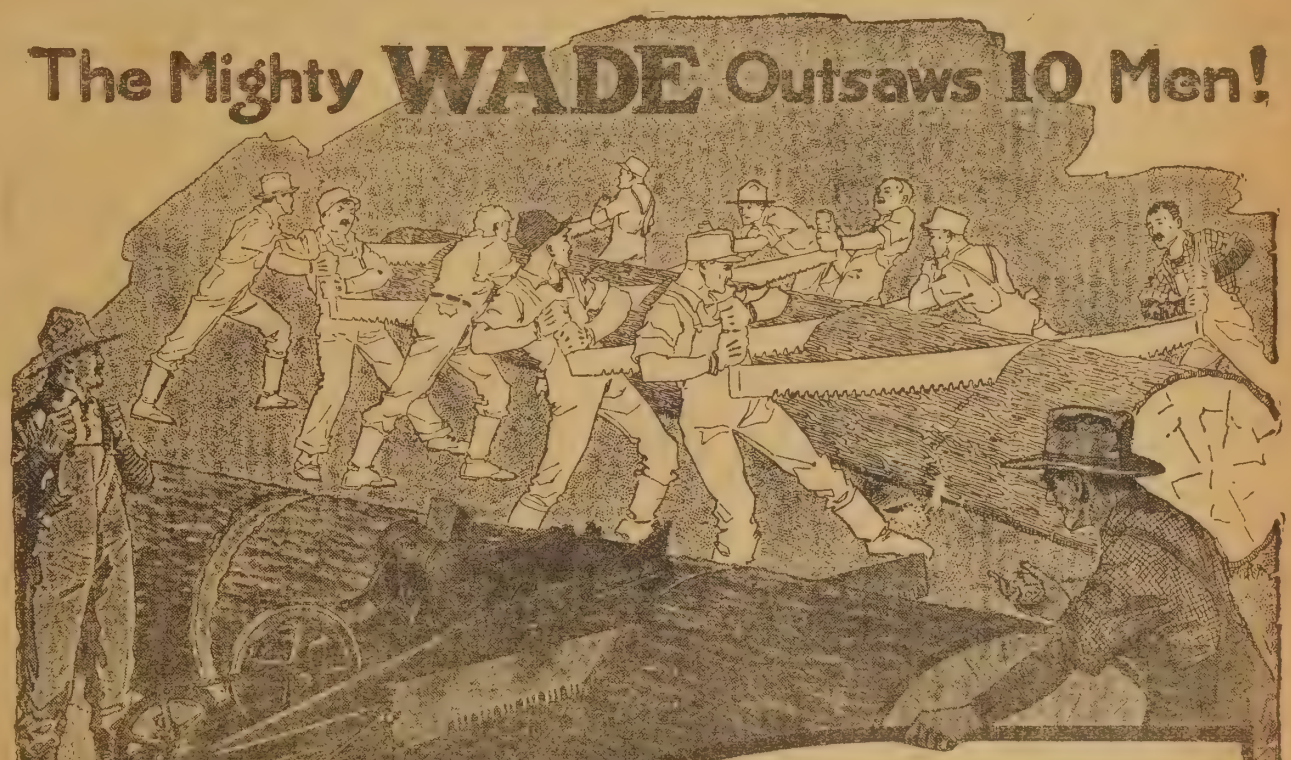
We can fill your feeder and stocker orders.

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In answering advertisements please mention this paper.

## The Mighty WADE Outsaws 10 Men!



A money-maker and hard work saver for land clearers and wood-cutting contractors. One man can move it from cut to cut. Simple and reliable. Hundreds in use all over the United States—in the woods of the Pacific Northwest, California, Minnesota, Arkansas, New York. When not in use for wood cutting the 4-H.-P. motor will run feed mills, feed choppers, pumps, etc.

## Read What These Owners of Wade Drag Saws Say:

"One afternoon my brother-in-law and I took my WADE into the woods and sawed three hard maple trees into 16-inch blocks, the trees averaging about two and one-half feet at the stump. He expected it would take me from eight to ten hours to do the job, but it was all done in three hours.—F. W. Hiller, Vernon, N. Y.

I cut thirteen and one-half ricks of cottonwood in six hours.—J. W. Stratton, Atkins, Ark.

One gallon of gasoline will cut six to ten cords of wood; it depends on the kind of timber you cut. —W. D. Thomas, Bull Run, Ore.

Thirty-six inches in diameter, yellow birch, is the largest I have cut and I cut down to six inches.—P. L. Cole, West Duluth, Minn.

My WADE saw paid for itself six times over.—F W. Taylor, Swisshome, Ore.

I am making $250 a month with my WADE.—F A. Storts, Orville, Cal.

I cut down to eight inches in diameter.—F. T. Swank, Park Falls, Wis.

**America must burn more wood for fuel. One Wade will do 10 men's work at one-tenth the cost. Write for free book. "How Dan Ross Cuts 40 Cords a Day." Full details and special price.**

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A 53 YEAR REPUTATION BACKS THE WADE

POULTRY

Write to the Editor.

JAMES DRYDEN, Editorial Contributor.

# Poultry Farming

## Is Successful on a Large Scale

By JAMES DRYDEN.

It looks as though the public will have to revise its estimate of the man who attempts to raise poultry on a large scale as one who is headed surely for bankruptcy. Outside of Petaluma, Cal., and one or two districts on the Atlantic coast, there were no large successful poultry farms 10 years ago. There were no pretentious special poultry farms. There were, however, in almost every county in the land evidences where the attempt had been made and abandoned. In fact the country was strewn with the wrecks of ambitious poultry ventures. There was money in the business; it had been put there and left there.

The evidence was against the theory that there was money in poultry-keeping for the man who wished to specialize in poultry production and give his entire attention to it. It appeared to be a business of small units altogether and must remain so, so far as practical demonstrations had shown.

Because the practical demonstration is lacking, however, is not always proof that the theory is wrong.

During the last few years there has been considerable development of the theory of special poultry farms, or poultry-keeping as a special business. There have sprung up in the northwest many poultry farms, more or less extensive and successful, which are disproving the old notion that it could not be done. Men have been studying and experimenting until some of them have been successfully putting the new ideas or discoveries into practice. It has been a persistent campaign of education and investigation, and it is now bearing fruit, and the fruit is the egg basket or the 30-dozen egg case. The experiment stations, though as a rule poorly equipped for experimentation on poultry lines, have been working out problems, and the thousands of poultrymen who have started and probably failed have been adding to the sum of knowledge for the benefit of later comers if not for their own, until the man who is able to take advantage of all those experiments and experiences is now able to make a showing. By gathering a new idea here and another there and welding them together, in other words, making the best of the available knowledge, he is making a success of special poultry farming.

There are many such farms in the northwest that are now at least doing well. Some of the owners are making good money.

It has been a question of better knowledge along three lines that has made the change from failure to success—better feeding, better housing and better breeding. It has taken all three.

The most important advance in feeding has been a better use of animal food and green food; in housing, more fresh air; and in breeding, selecting the breeders on basis of trapnest records. Those are the main factors that are responsible for the success of these farms. Twenty or even 10 years ago large poultry farms were started without a knowledge of these essentials. To make the fowls comfortable the poultryman closed up the cracks and the windows. He knows now that the hen's idea of comfort is an open-front or fresh-air house. He may have fed the green food if it happened to be handy, and the meat scrap he would try one week and do without it the next. As to breeding, all hens were good if they looked well. At any rate the importance of breeding from selected heavy producing stock was not then realized, and if it was the trapnest had not been sufficiently long or generally enough in use to make it possible for the poultryman to secure strains with the blood of several generations of heavy layers.

It is different now. We have the fresh-air house, the balanced ration and the heavy layer. That combination has done it.

The commercial poultryman's problems, however, are not all solved. He has many and serious problems ahead, but he is doing well.

It can not fairly be said that commercial farms, except possibly in the districts mentioned, have stood the test of time, for they have hardly been long enough in evidence. Time is an important factor in poultry-keeping, because many a poultry farm that has made money for a year or two years or three years, has later, under apparently similar methods, failed to show results. The indications are, however, that some of our large northwest farms will stand this best and severest test of all time.

### Study This Winter.

There are lots of good things to read this winter.

**CHICKENS SICK?** Roup, Colds, Canker, Bowel Complaint, Limberneck, Sorehead, etc., the best remedy is always GERMOZONE. At most dealers or 75c postpaid with 5 book poultry library free. GEO. H. LEE CO., Dept. 421 Omaha, Neb.

# Use Good Roosters

Nothing would increase egg production faster than—what? The farmer and farmer's wife to feed the hens better? To provide a better house for them? To work harder? No, but to use better roosters. A good rooster will not lay eggs, but he will sire pullets that will produce eggs and produce them in abundance.

A good rooster will transmit the good qualities of his dam to his offspring. If his dam and grandam were good layers he will give to his daughters the good qualities of his dam. The more good layers he has behind him; that is, the more ancestors he has that were good layers, the more certain will his offspring be good layers.

There is abundant evidence that the male exercises a wonderful influence in the egg laying family. And yet farmers will buy males just because they happen to have a certain number of points in the comb, or a certain shade of color in the feather. The northwest has excellent strains of layers, and as much trapnesting is done here as in any other section of the country, and poultry-keepers and farmers have opportunity to purchase pedigreed males, males that have been bred from a line of heavy producers, and they should take advantage of it. No one other thing can be done that will be a greater boon to the poultry industry and a greater profit-maker for the poultryman than the purchase of good utility trapnest-bred males. It is the cheapest method to increase production. J. D.


# Laid Eggs Every Day

A. P. Woodard of St. Cloud, Florida, writes: "We get from 40 to 50 eggs per day. Before using 'More Eggs' we were getting only 8 and 9 eggs a day."

Any poultry raiser can easily double his profits by doubling the egg production of his hens. "More Eggs" is a scientific tonic that revitalizes the flock and makes the hens work all the time. "More Eggs" will double the production of eggs. Poultry raisers everywhere are making big profits by giving their hens "More Eggs." The results of a few cents' worth will amaze you.

Send $1.00 to E. J. Reefer, the poultry expert, 1586 Feefer Bldg., Kansas City, Missouri, for a package of "More Eggs." A million-dollar bank guarantees if you are not absolutely satisfied your dollar will be returned on request. Send a dollar today, or send $2.25 and get 3 regular $1.00 packages on special discount for a full season's supply, or write to Mr. Reefer for his free poultry book that tells the experiences of a man who has made a fortune out of poultry.—Adv.

# There's a Salesman from Virginia



who was chewing and swapping yarns with the men on the Post Office corner. "Have a chew," says he to Jake. Jake doesn't think he's chewing unless his cheek bulges out like he had the mumps. "Call *that* a chew?" he snorts. "Sure!" says the salesman. "This is Real Gravely. That small chew satisfies, and the longer you chew it the better it tastes. That's why it doesn't cost anything extra to chew this class of tobacco."

• • • •

*It goes further—that's why you can get the good taste of this class of tobacco without extra cost.*

PEYTON BRAND

## Real Gravely Chewing Plug

*each piece packed in a pouch*

P. B. GRAVELY TOBACCO CO., DANVILLE, VA.

Protect your spindles with Mica Axle Grease. It forms an even, slippery coating which prevents friction and makes easier pulling—no hot boxes—just like putting ball bearings on your wagon. And it lasts twice as long as common axle grease. Get a can from your dealer today.

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Soldiers of our class of 430 men, trained as auto mechanics under war department contract. Contract called for training 1800 men for United States government.

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You should go to a practical automobile and tractor school and learn this attractive and well-paying business, and, of course, you want to go to the best. The U. S. GOVERNMENT WAR DEPT. spent thousands of dollars employing expert inspectors to locate the best schools in the country where soldiers could be trained as auto and tractor mechanics, and this is the **only school** in the **entire west** which was equipped to train the men as required by the WAR DEPT. Don't spend your money with schools that are not fully prepared to teach this business in a thoroughly practical manner. Now that the war is over we are offering all of the government equipment in our private school for the exclusive use of our students. You have never had such an opportunity before to use such wonderful equipment and receive such a practical training. We are offering a special rate for a short time only to students who enroll at once. Write today for catalogue and rates. Don't delay.

## MODERN AUTOMOBILE AND TRACTOR SCHOOLS

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*AMERICA'S GREATEST SCHOOLS*




GRANVILLE LOWTHER,
Editorial Contributor.

# The Orchardist's Cow

By C. I. Lewis, O. A. C.

A few years ago there was a strong movement among the orchardists of the northwest to introduce dairy cattle quite extensively. In many sections there has been a strong reaction against this, due to the fact that the growers attempted to keep too many animals. The idea of a cow to an acre is beautiful in theory, but has not worked out very well in practice with most of our orchardists. The average fruit grower of the northwest has no pasture and no land for the production of grain and often can produce only a limited amount of forage. One of the cardinal principles of dairying is to be able to produce most of the food that the animals consume. Very few orchardists can do this. They rarely have any pasture or land other than the orchard that can be devoted to the growing of grain or forage. It is true, however, that many men who formerly kept no cow are keeping a family cow, and where they formerly kept but one are finding that they can arrange their affairs so as to perhaps keep two or three economically and with profit. There has been a general movement over the Pacific northwest, which is a very sane and healthy one; namely, an honest attempt to produce as much as possible of what the family consumes. We find the family cow, a pig or two, a few chickens and a good garden where a few years ago most of these were not possessed by the average orchardist. There has been a slight reaction in chicken raising, due to attempting it on too large a scale and finding the food problem a serious one. There are, however, more chickens being kept in small flocks than was formerly the case and this is a very desirable movement.

# What Causes Rosette?

By Granville Lowther.

In the hope of learning the cause and the cure of rosette, I took one of the trees in our orchard that was the worst affected and began to dig around the roots, thinking perhaps the disease was one of the roots and that the difficulty on the top was only a symptom. We had been giving the orchard clean cultivation and cutting the little rootlets off to a depth of three or four inches; and in irrigating the water puddled so that the water did not penetrate more than eight or ten inches, and with four inches cut off at the top by clean cultivation and the water puddled in the middle, the lower strata were without sufficient water. The trees were literally starved because they could not get plant food. I examined other trees and orchards, and I found a number of conditions on all of them and in every case they were on the roots. I came to the conclusion that whatever tends to destroy the little root hairs will tend to cause rosette. Too much water will do it, not enough water will do it, a stratum of hardpan, rock or alkali will do it. In other words I believe that whatever will prevent the upper limbs from getting a sufficiency of plant food will result in rosette, which is really a lack of development.

Now I travel quite a little and I have made investigations in the different sections, Washington, Oregon, Idaho, Colorado and the middle and eastern states, and rosette is in every section. It is not quite so pronounced in the humid sections as here, but it is everywhere. Alfalfa is the best remedy that I know for this rosette. It opens up the soil that puddles and lets the water down and it stops the cutting off of the tender roots near the surface.

# Stock for Orchard

By E. J. Iddings.

Granted that live stock keeping by an orchards, is quoted as saying that he only consider the kinds of live stock that are best adapted to the fruit farm. A few horses will always be kept, but many orchardists question the advisability of trying to breed horses in connection with an orchard plant. Beef cattle are produced most successfully and profitably where there is ample room and cheap grass. In a similar way sheep have, in past years, been regarded as better adapted to cheaper lands that are devoted largely to grazing purposes. In the last two or three years, however, hundreds of small flocks of sheep have been bought by the farmer and it will only be a short time, if the present tendency prevails, when sheep on the western farms will be as common as they have for years been on the farms of Ohio and Indiana. There is a possibility of using a small band of sheep in connection with the orchard. For the average man engaged in fruit growing, however, the dairy cow and the brood sow lend themselves better to his needs. These two classes of animals fit well together on the farm and make a splendid combination for use in connection with the orchard.

## APPLE RESTRICTIONS OFF.

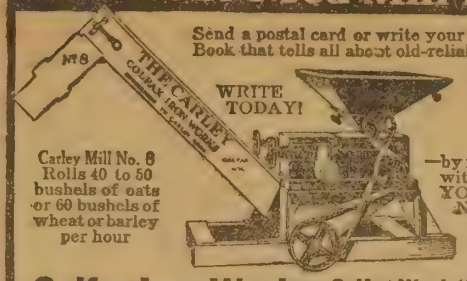
All restrictions on the importation of American apples by England have been removed, according to a statement from the national capital. The only barrier existing to prevent the shipment of apples from this country to England is the shortage of shipping facilities, the statement says, and as soon as adequate cargo space can be obtained the trade may be resumed. The British government, however, continues to control apple prices, which probably will result in lighter shipments than would be the case if the market would be entirely open.

## INVESTIGATE STORAGE PLANTS.

A federal inquiry is under way in Chicago involving every cold storage plant of any importance in that city, the object being to determine if possible the reason for the present high price of butter, eggs and other storage foods.


CARLEY Feed Mill Book—FREE!

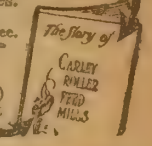
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BE SURE AND MENTION THIS PAPER

ATKINS SILVER STEEL SAWS

A Really Good Saw Saves You Money

Labor is scarce. Time is money. And timber is too valuable to trust to poor tools. An Atkins Saw will save you many times its cost in lumber, labor and money. It will pay you to throw away any saw that sticks and binds and get an Atkins Steel Saw.

*You can't get Atkins patented segment grinding in any other make of saw.* It prevents sticking and binding because from the tooth edge—the thickest part—the blade tapers to the back. Atkins saw blades also taper from the ends to the middle—designed to cut faster and easier—wherever the teeth go the rest of the blade follows.

*You can't get Silver Steel in any other saw.* It is the highest type of saw steel—developed in Atkins laboratories—gas tempered, tested and proved—the result of three hundred years of metal working experience in the Atkins family. Read the letter at the right, proving how Silver Steel holds an edge longer. It makes an Atkins outlast any other Saw.

There is an Atkins Saw for every purpose and the Atkins name on it is a guarantee that the saw will run easier, cut faster and hold its edge longer. *Look for the name—Atkins.*

Thousands of dealers in good tools, in every state, are ready to sell and guarantee you the time-and-money saving Atkins satisfaction. If your dealer is not one of them, write us before you buy any other saw.

"The Saw on the Farm"

—a book of carpenter helps tells how to build, how to make neat joints, how to care for saws. We will send it to you FREE, together with information on any type of saw made. Send us your name and address.

The Frozen Timber Test

Up in the lumber camps, in zero weather, experienced lumbermen know the greatest test of any saw is its ability to hold an edge in cutting frozen timber.

Here is what A. T. Marceau of 1210 Fifth Street, Wausau, Wis., says in a letter:

"I have places where they have run these Atkins cross-cut saws for three days in frozen timber without filing. The filer told me he asked the men when they came in at night why they did not bring the saws in for filing and their reply was that they were not dull. This one instance was at Menominee Indian Reservation, Neopit, Wis., Camp No. 15, Dan Hunley, foreman. Please note the supreme test of any cross-cut saw is frozen timber."

Under any and all conditions Atkins Silver Steel Saws hold their edge longer and cut faster and easier.



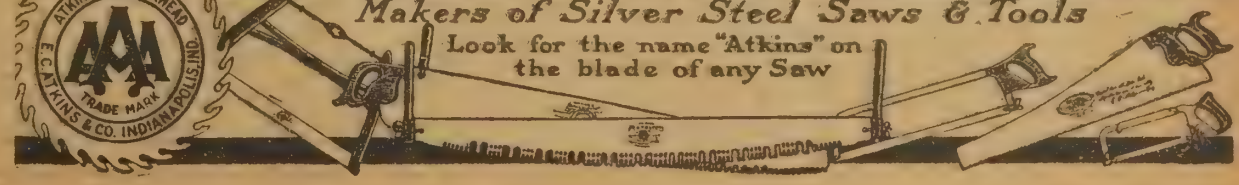
HAND SAWS—*For your carpenter work, use the kind of saws most carpenters use—the Atkins. You'll do better work, easier and quicker, when you are repairing or building things.*

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E. C. Atkins & Co. Inc., Indianapolis, Ind.
*Makers of Silver Steel Saws & Tools*
Look for the name "Atkins" on the blade of any Saw



# Fat Stock Compete at Portland

In spite of the postponement of the show and the cancelling of other show dates in the Coast country, and unsettled conditions generally, there was a showing of fat stock at the Pacific International of which exhibitors, as well as the management, could be justly proud.

The following are the fat stock awards:

**Car Lots of Beef Cattle.**

First prize and grand champion two-year-old steers. Grade Aberdeen Angus, fed and shown by Cofoid & McGaw, Troutdale, Ore. Sold to Union Meat Co., Portland, for $16.50 per cwt.

Second prize, grade Herefords, bred and shown by Dobbins & Huffman, Joseph, Ore.—Willard Commission Co., North Portland, $15.75.

Third prize, grade Angus, bred and shown by Dixon & McDowell, Prineville, Ore.—Union Meat Co., $15.25.

Fourth prize, grade Angus, Dixon & McDowell—Union Meat Co., $15.

Fifth prize, grade Angus, Dixon & McDowell.—Hunt Commission Co., North Portland, $13.75.

First prize yearling, bred and shown by Congdon & Battles, Yakima, Wash.—J. M. Gill, Portland, $14.25.

First prize and champion feeder steer, shown by Dixon & McDowell.—J. L. Sterrett Packing Co., Portland, $12.90.

**Pure Bred Shorthorn Steers.**

First prize and champion yearling—University of Idaho, not sold.

Second prize yearling, A. D. Dunn, Wapato, Wash.—Portland Hotel, $15.25.

Third prize yearling, Geo. Bertrand, Castle Rock, Wash.—T. R. Howatt, Portland, $15.25.

First prize under year, U. of I.—Not sold.

Second prize, under year, U. of I.—Not sold.

Three best steers, U. of I.

**Pure Bred Hereford Steers.**

First prize, two-year-old, Chas. Bull, Mabton Wash.—T. R. Howitt, $13.25.

First prize and champion yearling, Washington State College—Barton & Co., Seattle, $15.50.

Second prize yearling, U. of I.—Barton & Co., $15.25.

**Pure Bred Angus Steers.**

First prize and champion two-year-old, U. of I.—Barton & Co., $15.25.

First prize yearling, U. of I.—Union Meat Co., $15.

**Grade and Cross-Bred Steers, Spayed or Martin Heifers.**

First prize and grand champion of the show, Washington State College—Barton & Co., $20.

Second prize, two-year-old, U. of I.—Tom Howatt, $16.

Third prize, two-year-old, W. S. C.—Jas. Henry, Seattle, $15.75.

Fourth and fifth prizes, Cofoid & McGaw.—Imperial hotel, Portland, $16 and $15.50.

First prize, yearling, U. of I.—Union Meat Co., $15.

Second prize, yearling, W. S. C.—M. J. Gill, $15.25.

Third prize, yearling, Chas. Bull.—Sevier Com. Co., $10.

First prize, under 1 year, W. S. C.—Union Meat Co., $15.

Three best steers, W. S. C.

**Medium Wool Fat Sheep.**

First prize and reserve champion yearling wether, W. S. C.—Portland hotel, $25.

Second and third prizes, W. S. C.

First prize and grand champion wether lamb, W. S. C.—Benson Commission Co., Portland, $35.50.

Second and third prizes, W. S. C.

First prize pen of three wethers, W. S. C.—Union Meat Co., $16.50.

Second prize pen of three wethers, W. S. C.—Union Meat Co., $13.

Third prize pen of three wethers, Chas. Adams, Portland.

First prize pen of three wether lambs, W. S. C.—Union Meat Co., $17.

Second prize pen of three wether lambs, T. B. Johnson, LaGrande.—Union Meat Co., $15.

Third prize pen of three wether lambs, Chas. Adams.

**Long Wool Fat Sheep.**

First, second and third prize yearlings, W. S. C.—Sold as first prize pen of three wethers.—Union Meat Co., $14.75.

**Car Lots Fat Sheep.**

First prize and champion car lot lambs, grade Shropshires, T. B. Johnson.—Union Meat Co., $16.

Second prize car lot lambs, grade Rambouillets, Dobbins & Hoffman, Joseph, Ore.—Tom Howatt, $14.25.

Third prize car lot lambs, Dobbins & Hoffman.—Tom Howatt, $14.

Fourth prize car lot lambs, Dobbins & Hoffman.—Tom Howatt, $13.75.

First prize yearling, grade Shropshire ewes, McKennon & Ledbetter, Alicel, Ore.—Benson Commission Co., $14.25.

Second prize yearling, grade Rambouillet ewes, Dobbins & Hoffman.—Union Meat Co., $9.

**Car Lots Heavy Hogs.**

First prize and grand champion load Berkshires, T. B. Johnson, LaGrande, Ore.—Union Meat Co., $20.

Second prize grade Durocs and Berkshires, J. M. McFadden, Corvallis, Ore.—Union Meat Co., $18.25.

Third prize, Poland Chinas, J. W. Chandler, LaGrande, Ore.—Jas. Henry, Seattle, $18.10.

First prize light hogs, Poland Chinas, T. B. Johnson.—Union Meat Co., $18.75.

Second prize light hogs, Poland Chinas, A. L. Swaggart, Athena, Ore.—Union Meat Co., $18.25.

First prize pen of three, 225 lbs., and over, pure bred Poland Chinas, Ray J. Fox, Lyons, Ore.—Bodine & Clark Commission Co., $23.

Second prize pen of three heavy hogs, Berkshires, J. N. McFadden.—Union Meat Co., $19.25.

Third prize pen heavy hogs, Poland Chinas, A. L. Swaggart.—Sterrett Packing Co., $19.30.

First prize pen, 175 to 225 lbs., Poland Chinas, T. B. Johnson.—Sterrett Packing Co., $24.25.

# Hereford Men Elect

On Wednesday evening, December 12, the Northwest Hereford association, at a meeting in Portland, elected the following officers: President, Henry Thiessen, Sweetwater, Idaho; vice president, A. H. Barnum, Moro, Ore., Secretary-treasurer, L. R. McGee, North Portland, Ore.; directors, Charles Bull, Mabton, Wash., and W. P. Emery Macleay, Ore. A constitution and by-laws was adopted and, in other words, the organization was perfected. Plans for a spring sale were also discussed.

The 29 catalogued Herefords that were sold at Lewiston December 19 averaged a little higher than did the Shorthorns sold the previous day, owing to the fact, perhaps, that the territory immediately surrounding Lewiston is more of a Hereford country than it is a Shorthorn country. The 29 animals averaged $246.20, the 15 bulls averaging $241.65, and the 14 cows and heifers averaging $251.

The top animal of the sale was Fairfax Farmer 640406, a yearling heifer sold by A. O. Huntley of Cuprum, Idaho, to George Reinhardt & Sons of Nez Perce, Idaho, for $420. The second high animal was Bill Bryan 2d 611649, that was sold by Henry Thiessen of Sweetwater to J. P. Zenner of Uniontown, Wash., for $370. This 2-year-old was winner of the grand championship among the bulls.

Harry Cranke, himself a breeder of Herefords on his farm at Nez Perce, Idaho, conducted the sale, which was managed by L. R. McGee of Portland, Ore., secretary of the Hereford Breeders' association.

The following are sales of the catalogued animals, indicating the consignor, the animal, the age, the buyer and the price paid:

**Bulls.**

Consigned by O. P. Hendershot, Lewiston, Idaho.
Edgar 672731, two-year-old—D. S. Wallace, Lewiston, Idaho ..... $ 145
Consigned by A. O. Huntley, Cuprum, Idaho.
Carey Donald 700038, yearling—Charles Bull, Mabton, Wash. ..... 125
Gancan 631607, yearling—J. M. Perkins, Fraser, Idaho ..... 210
Woodrow M. 700050, yearling—M. L. Hastings, Phillipsburg, Mont. ..... 210
Gabriel Fairfax 700041, eight-year-old—John Mayer, Uniontown, Wash. ..... 340
Gabriel D. 741835, eight months—J. L. Chapman, Asotin, Wash. ..... 135
Romeo 631611, yearling—G. W. DeLay, Hot Lake, Ore. ..... 150
Consigned by Platt Bros., Genesee, Idaho.
Cody, yearling—C. J. Knight, Cloverland, Wash. ..... 245
Glover 651715, yearling—M. L. Hastings, Phillipsburg, Mont. ..... 345
Victor Lee 6th 674575, yearling—M. L. Hastings, Phillipsburg, Mont. ..... 300
Consigned by August Schroeder, Cottonwood, Idaho.
Generous 3d 636408, yearling—James Barkley, Lewiston, Idaho ..... 300
Consigned by Henry Thiessen, Sweetwater, Idaho.
Beau Ideal 701795, yearling—E. L. Martin, Sweetwater, Idaho ..... 350
Perfector 2d 706686, yearling—M. L. Hastings, Phillipsburg, Mont. ..... 200
Bill Bryan 2d 611649, two-year-old—J. P. Zenner, Uniontown, Wash. ..... 370
Perfect Beau Jr. 706685, yearling—Mrs. Belle Knotgrass, Clarkston, Wash. ..... 200

**Cows and Heifers.**

Consigned by O. P. Hendershot, Lewiston, Idaho.
Eva 556616, three-year-old—C. J. Miller, Nez Perce, Idaho ..... 170
Snowbird 598061, two-year-old—C. J. Miller, Nez Perce, Idaho ..... 155
Snowflake 2d 598062, (calf at foot), two-year-old—J. M. Perkins, Fraser, Idaho.. 225
Della 552314, (calf at foot), three-year-old—C. J. Miller, Nez Perce, Idaho ..... 215
Adelia 611995, (calf at foot), two-year-old—John Mayer, Uniontown, Wash. ..... 305
Asa B 2d 611994 (calf at foot), two-year-old—J. H. Holt, Kendrick, Idaho..... 215
Lady Sunbeam 598058, two-year-old—J. M. Perkins, Fraser, Idaho ..... 200
Consigned by A. O. Huntley, Cuprum, Idaho.
Sarah Donald 700049, yearling—J. M. Perkins, Fraser, Idaho ..... 165
Lady Elbert 6th 622322, (calf at foot), two-year-old—J. M. Perkins, Fraser, Idaho ..... 235
Modie Lad 700047, yearling—Henry Thiessen, Sweetwater, Idaho ..... 255
May York 412574, (calf at foot), six-year-old—Platt Bros., Genesee, Idaho ..... 365
Fairfax Farmer 640406, yearling—George Reinhardt & Sons, Nez Perce, Idaho ... 420
Nodie 412639, five-year-old—George Reinhardt & Sons, Nez Perce, Idaho ..... 325
Donated by Henry Thiessen, Sweetwater, Idaho, to be sold for benefit of the Red Cross.
Pretty Lass 3d 701820, eleven months—John Mayer, Uniontown, Wash. ..... 225

## HIGHWAY BEING WORKED.

OTHELLO, Adams County, Wash., Dec. 14.—The month of December has been fine for all fall-sown grain, and all grain looks well. There has not been a bit of frost in the ground yet. The stock is coming through so far in fine shape, and if present weather holds much longer the winter will be short. Some seeding was done up to the very last of November. The road masters are doing good work on our highways, putting them in fine shape for winter. As to cooperative organizations, there are none to speak of in Adams county. We have noticed that when crops are good and prices are high the farmer is generally contented, does not pay much attention to the profits the other fellow makes, but keeps righ on "sawing wood." It is poor crops or low prices that breed discontent; then we resort to organizing to shift the burden.

A. O. LEE.

## FEED SITUATION BETTER.

COLFAX, Whitman County, Wash., Dec. 14.—Weather in the Palouse continues excellent for outdoor farm work. A considerable amount of plowing is still being done. Live stock management has been greatly helped and the feed situation is not nearly so acute as it otherwise would have been. Stock is still out of doors, and straw is being utilized to good advantage. Some hay is being shipped in from Idaho and Washington points.

F. L. KENNARD,
County Agent.

## WILL GROW SEED CROPS.

An experiment was carried on during the last season by S. D. Woodruff & Son, seed growers, tending to prove the practicability of seed growing on a large scale in the Yakima valley. This concern operated a 200-acre farm this season producing large quantities of squash, pumpkin and bean seed. Their experiment, it is reported, resulted in a net profit of something like $100 per acre in addition to the by-products obtained.

## TRACTOR SCHOOL ANNOUNCED.

The Holt Manufacturing company has announced its sixth annual tractor school, to be held in Spokane beginning February 3 and continuing two weeks. An owner of a "caterpillar" tractor is entitled to the course free, or he may designate a member of his family to attend. Persons not owning tractors will be charged a tuition fee of $25. Among the subjects that will be studied are the following:

Gas engine principles and types, fuels and carbureters; carbureter adjustment, ignition—high and low tension systems, magnetos, governing and cooling mechanism, lubrication, tractor operation, valve timing, engine troubles, tillage methods, tractor overhauling, tractor management—contracting, tractor implements—plows and hitches.

Actual practice work will be done in the following:

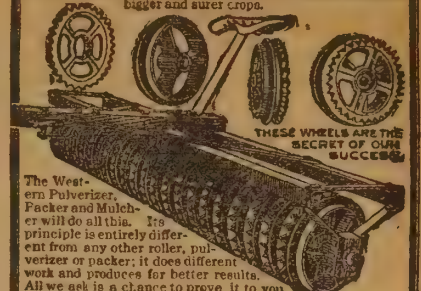
Carbureter adjustment, ignition timing, valve timing, ignition troubles, clutch adjustment, gas engine testing, belt lacing, babbitting of bearings, soldering, field practice—driving, forge practice—welding, combined harvester practice.

The increasing interest in the Holt school is indicated by the fact that the first year, 1914, there were 96 tractor men attended; in 1915, there were 116; in 1916 there were 210; in 1917 there were 342, and in 1918 there were 447.


**The Threshing Problem Solved** Threshes cowpeas and soy beans from the mown vines, wheat, oats, rye and barley. A perfect combination machine. Nothing like it. "The machine I have been looking for for 20 years." W. F. Massey. "It will meet every demand." H. A. Morgan, Director Tenn. Exp. Station. Booklet free.
KOGER PEA & BEAN THRESHER CO.;
Booklet 15 Morristown, Tenn.

**GOOD FARMING PAYS**

Every farmer and land owner should be interested in something that will save labor, time, horse-power, seed and make bigger and surer crops.




The Western Pulverizer, Packer and Mulcher will do all this. Its principle is entirely different from any other roller, pulverizer or packer; it does different work and produces far better results. All we ask is a chance to prove it to you at our own expense.

Our FREE ILLUSTRATED CATALOGUE proves our statement and contains lots of valuable information on up-to-date and better farming and is worth its weight in gold to any farmer or land owner who doesn't think he knows it all. Send for it today

WESTERN LAND ROLLER CO., Box 420 Hastings, Neb.

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SPOKANE SEED CO.
FERTILIZER Dept.
SPOKANE, WASH.

Write now about your needs of superphosphate, land plaster, etc. Fertilizer booklet free.

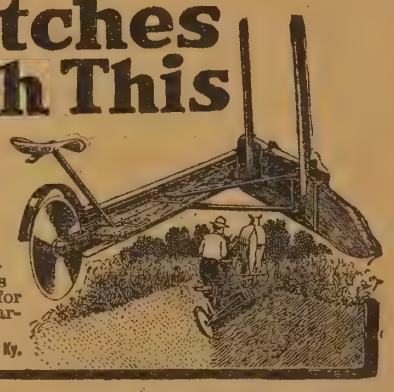

**The department editors of this paper are anxious to be of service to you. Do not fail to write to us if they can be of help to you.**


**Cut Your Ditches With This**

Cuts ditches, cleans out old ditches, scrapes and levels land, grades roads quicker, cheaper and better than any other machine ever built. It's the

**Simplex** DITCHER-TERRACER

Sent on 10 days' Trial



Cuts V-shaped ditch up to 4 feet. Fine for terracing. Light draft. All steel; reversible. Does work of 100 men, and does it better. Write for catalog and prices. Sold on money back guarantee. You will want a Simplex.

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General Sales Agents for the Pacific Northwest

**Does Not Winterkill**

LYMAN'S Grimm Alfalfa has proven itself the most profitable to sow in this locality because of its wonderful hardiness, immense yields and high feeding value. It requires less seed to get a stand, offsetting its higher first cost. Productive of seed which is in demand at good prices. Decide to plant genuine Grimm and place your order early to avoid disappointment. Booklet, testimonials and seed sample mailed free.




A. B. LYMAN, Grimm Alfalfa Introducer
EXCELSIOR, MINN.
Original Home of Grimm Alfalfa

**Lyman's Genuine Grimm Alfalfa**

# Power, Mechanics and Devices

**The purpose of this department is to give helpful suggestions to its readers. The editor invites letters that give experiences or practical ideas along the lines of "power, mechanics and devices" on the farm. Inquiries from any one on any point in which he or she is interested, whether previously touched upon in the department or not, will receive personal reply by mail.**

What have you learned during the year 1918 which has been helpful to you on the farm or in the farm home?

Has it helped you to make a little more money? Have you been able to do the same amount of work a little easier and not take quite so long to do it? Has it brought some added help or comfort to the good wife of the home? Has it encouraged the young folks to become more interested in farm matters?

All these things are possible. Somebody is always finding out a better way. If you'll tell of your own better way it will induce others to tell of their better ways and you may learn of something which would be of even more help to you than that which you have already found out.

Here is the department for you to exchange views, tell each other of farm devices, of the use of power, of farm mechanics generally as you have applied them to your own farm work. Write to the Editor. Send us drawings and we will try and have them fixed up. Write just as you talk and we will fix that up, too, if it needs it. Tell us what you have found out. Ask us what you want to do, know and let this be a question box in reality.

### SIZE OF FARM AND TRACTOR.

**Increase in the Acreage Which Can Be Farmed by One Man.**

Tractors using gasoline or kerosene are increasing in numbers on eastern farms, says Bulletin 1004, of the United States department of agriculture. Though the use of a tractor may be expected to reduce the man labor required for farm operations, thus permitting one man to accomplish more work and so farm more land than with horses, it is obvious that a farm business must be of sufficient size to permit its economical use in order to justify the necessary investment. That is, many small farms must either use the old methods or hire a tractor, because the small amount of work to be done each year does not warrant owning it.

Among the more important facts disclosed by a study of the use of the tractor for farm work are those relating to the increase in the acreage which can be farmed by one man when a tractor is used in connection with horses over that farmed with horses alone. Eighty-four per cent of these New York tractor owners say that the tractor has proved a profitable investment to them. Of this number a little over one-third, after purchasing the machine, increased the acreage they were farming. On the other hand, of the men who found the tractor unprofitable, only one-tenth increased their acreage after purchase of the tractor.

This comparatively high percentage of the entire number of tractor owners who have enlarged their farms is significant, for whereas there has been a tendency for the size of general farms to increase in recent years owing to the influence of improved farm equipment, this increase in general is not nearly so pronounced as on farms where tractors are used.

With the tractor, as with any other farm machine, it is important that a suitable size should be selected for a given acreage. By far the larger part of the tractors sold at this time pull either two, three or four plows, with the three-plow size the most numerous, taking the country as a whole. In the state of New York, judging by the reports received from tractor owners, the number of three-plow machines sold in 1916 was slightly less than one-third of the total number of two-plow outfits sold in that state. In 1917, however, the three-plow machines amounted to about two-thirds of the number of the two-plow rigs.

An important point in this connection is the fact that it is exceedingly difficult to keep a gas tractor in such condition that it will develop a high percentage of its rated power at all times, since wear in different parts, imperfect adjustment, etc., may greatly reduce the amount of power it will develop. Hence, a machine which will develop adequate power to meet requirements when new and in perfect order, may prove very unsatisfactory for both field and belt work after having been used a short time.

Another point is that soil conditions in the eastern part of the United States are such as to require considerably more power to do the work of plowing than in most of the middle west and western sections. The difference is so great that many machines which pull three plows in sections where plowing is comparatively easy, can pull only two plows under eastern conditions.

### ABOUT MILKING MACHINES.

All milking machines are alike in one respect, and that is that they draw milk from the cow's teat by vacuum. The original milking machine was using continuous vacuum that would draw the milk all right, but it would also draw the blood from the bag into the teat, injuring the cow. For this reason the original milking machine was not a success. Improvement of an intermittent vacuum and others have followed.

All milking machines using vacuum to draw the milk usually employ a vacuum pump in the milk house operated by a gas engine or an electric motor. Here are two or three instances of the introduction of the milking machine on western Washington dairy farms.

Otto Tamm of Enumclaw used to keep a bunch of hired men to milk his cows. He finally installed a milking machine and his son was running it. The son was drafted and now his sister is operating the milking machine and they have that many less men to feed, while the income is the same as when they gave their money to the hired men.

The Meadowbrook farm at North Bend is milking about 300 cows and for years has had the usual experience with milkers coming and going all the time.

Last March they installed a milking machine in one barn and there one man milks and cares for 57 cows. They have now installed a milking machine in another barn where two men milk 90 cows. At $100 per month for milkers it does not take long to save enough in wages to pay for the milking machines.

### FARM BUTCHERING.

In our neighborhood there is a farmer who has things arranged handy for what little butchering he does. He has a permanent frame built about 18 feet high, like a swing. A pair of double blocks are hung from the top of this and used to hoist the carcass up and down. Directly beneath this he has a barrel for scalding hogs. Next to the barrel he has two saw horses with boards lying on top to lay the hog on to scrape it. This is just about the right height to scrape a hog conveniently. After the hog is scalded and scraped the barrel and frame can be moved out of the way for convenience in removing the entrails. Within a few feet of the device for butchering he has a large tank for heating water. This is made of steel sheeting and planks. The planks form two sides and the sheeting two ends and the bottom. This tank is also used to cook potatoes for fattening hogs. Before butchering, the knives are sharpened, all tools made ready in a convenient place, and the water heated. The hogs are not fed the day before. With the blocks the carcass can be hung up so that no marauding animals can get at it. C. J. M.

### JACK UP THE HIND WHEEL.

It is said that a successful way to start a car when the starter fails to work is to jack up one of the rear wheels, putting the gears in high and turning the wheel in the direction in which it revolves in driving the car forward. A few turns of the wheel take the place of the cranking, it is stated, and are usually more effective in a stubborn case. The advice says to be sure to place the gearshift lever in neutral before letting down the wheel to prevent the car plunging forward. It is also necessary that the car be sufficiently braced to prevent falling, which would have the same effect as though the gear were not in neutral.

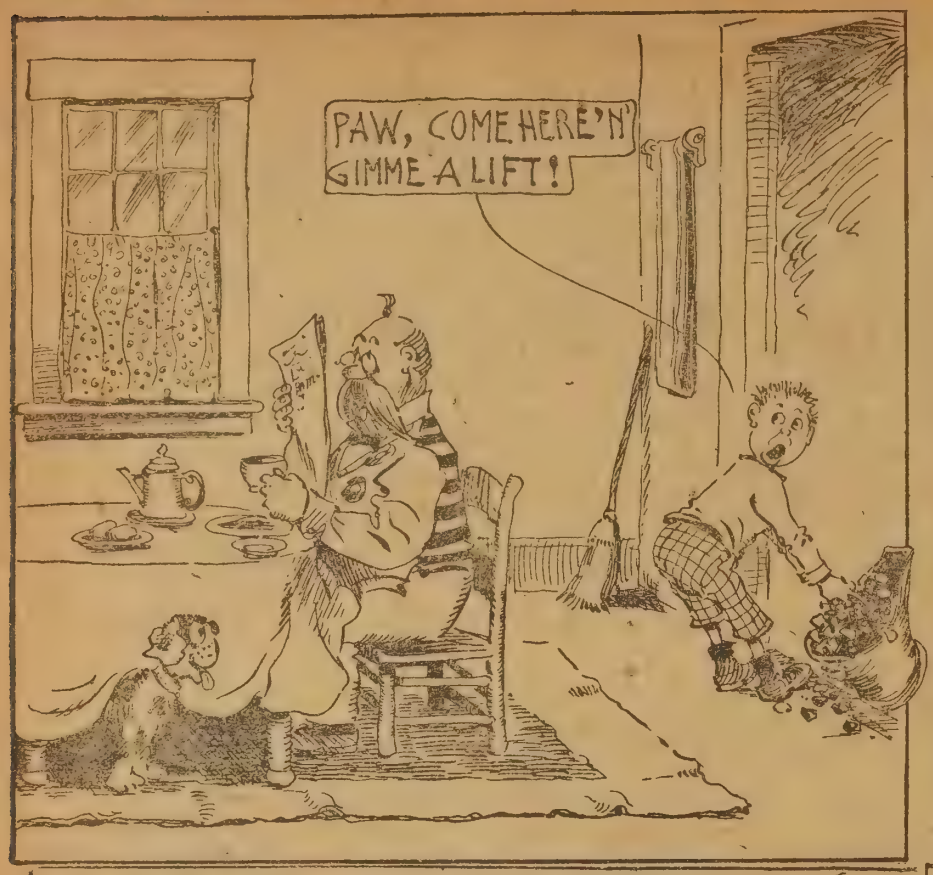
### CONCRETE CORNER POST BASE.

Those who have had trouble, as practically all farmers have in making their corner posts stand the strain upon them, may be interested in the plan practiced by many of setting their corner posts in a base of concrete. One person explaining his method says that he digs his post hole something like two feet across, sets the post in the center and pours around it a mixture of rock and concrete with some old wire thrown in for reinforcement. A post set in this manner, he says, will stand almost any strain that is ever placed upon it.




The Dunham Culti-Packer and John Deere Disc Harrow pulled by Waterloo Boy Tractor.

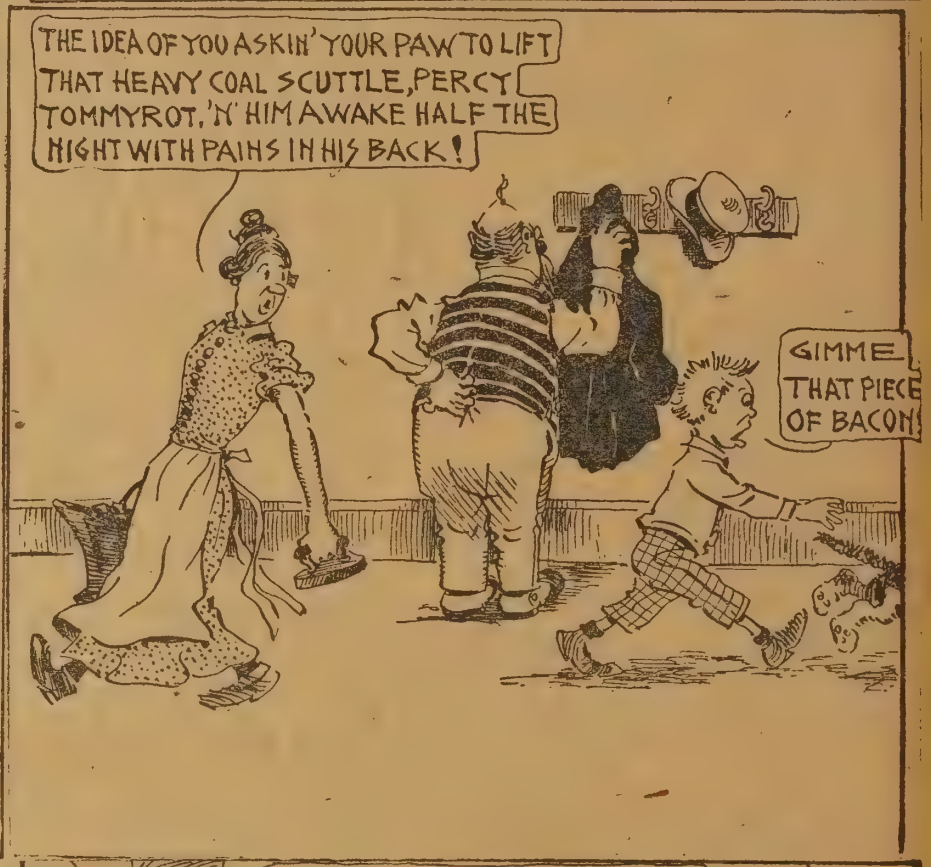
# SURE, IT WOULD HURT POOR PAW'S BACK TOO MUCH















# Purebred Cattle Sell at Portland

The sale of the Northwest Shorthorn association at North Portland December 12 was a very successful event. Even the poor attendance at the show and other untoward conditions did not seem to affect the sale very much. The offering was good, and especially strong in good young females. Four figures were reached twice in the females and twice again in the bulls. Chris Olsen of Haines bought the top bull, Hercules Stamp, consigned by Day & Rothrock of Sprague, Wash. This bull was champion of the show and was a very low down, beefy bull with a lot of quality. He was sired by Gainford Perfection, and from the Ramsden family, a good Scotch family of Campbell breeding.

Another good prospect as a herd bull is Brigadier General, consigned by Frank Brown of Carlton, Ore., and bought by Mossie & Sons of Ukiah, Ore. This is a Canadian bull of good Scotch breeding, and a promising individual. He is of quite different type from Hercules Stamp and is of the growthy, rather upstanding type, but smooth and a good one. Robert Rutter of Ellensburg, Wash., was the runner up on both of these bulls.

The heifer stuff was very choice and while apparently bringing good money, would have brought more in the east. Four of them were particularly fine and brought from $740 to $1010. The first heifer sold was also one of the choice ones, but being the first only brought $550, which was hardly her value. The top heifer was a beautiful calf consigned by Frank Brown and sold to W. O. Cummings of Mount Vernon, Ore. This heifer was grand champion female of the sale, one of the blockiest, neatest things we have seen in a long time. The first prize yearling, Dale's Queen, was consigned by Day & Rothrock and sold to M. R. Biggs of Prineville, Ore. This was another very thick, blocky roan, and a really good one. The buyers were quite discriminating, as a whole, and bid right up on the best ones. The average of $422 was very satisfactory. The bulls averaged $425 and the heifers, $421.

## The Hereford Sale

The sale of Herefords was fairly successful. Prices, however, were not quite as strong as last year and bidding not as spirited. The quality of the stuff ranged second rate to very high class. The best was in keen demand and brought good prices while the demand for the poorer cattle was less active. However, December is not a good time for selling range bulls. It is a good time for high-class herd bulls and for good females, but the range cattle prefer to wait until about spring before buying, especially as many of them have not made any arrangements for carrying any new bulls through the winter. The top animal of the sale was the bull, Royal Perfection, consigned by Henry Theissen, and sold to Edwards Bros. of Fossil, Ore., for $1900. This was a show bull and a good one, very meaty and massive. He was sired by the good bull, Beau Perfection 26th, his dam by Caldo 2d, and the second dam by Beau Brummel. With good individuality and such choice breeding he was worth the money, and Edwards Bros. are to be congratulated on his purchase. A half-brother to this bull sold to J. D. Miles of Livingston, Mont., for $1325. This bull was very much like the bull the Edwards Bros. bought, and was a close second to him in every way. The top female was Lady Rex 29th, also consigned by Henry Theissen and sold to J. D. Miles of Livingston, Mont., for $1400. She was a daughter of Rex Donald and was a beautiful show heifer and heavy with calf. She was a good buy.

## The Holstein Sale

The sixth annual Holstein sale at North Portland, Ore., December 13, was a very fair sale, when the general situation is considered. There were no sensational prices, and it is true that many of the animals did not bring all they were worth, especially the bulls. Some with extremely good breeding were not appreciated, but most of the consignments brought close to a fair value. Many of them went to beginners who will make good and be better buyers later.

Top price was realized for the beautiful young cow, Cascade Ruth, consigned by William Todd & Sons, carrying a double infusion of the blood of their former great herd sire, Sir Johanna Ruth Fayne. She was taken by Mt. Angel college stock farm of St. Benedict, Ore., at $600. Hollywood Homestead Fayne, a beautiful white heifer of the Hollywood consignment, went to Dr. C. W. Cornelius of Portland for $110, and Dr. Cornelius also took Von Heim Cristeria Mechthilde, one of the Von Herberg cows, for $400.

Only one animal, a bull, went below $100, and a very classy Von Herberg consignment went to Albert Johnson of Scappoose, Ore., for $590. The following is a complete list of animals sold, buyers and prices paid:

**HEREFORDS.**

**Bulls.**

Consigned by Henry Thiessen, Sweetwater, Idaho.

Perfect Beau, born Nov. 1, 1917—sold to Hilton and Burgess, Fossil, Ore. ..... $ 375
I Perfection Jr., born Jan. 15, 1917—J. D. Miles, Livingston, Mont. ..... 1325
Royal Perfection, born Dec. 10, 1916—Edwards Bros., Fossil, Ore. ..... 1900
Discretion 15th, born ....—Henry Cranke, Nez Perce, Idaho ..... 300
Perfection Beau 5th, born Jan. 2, 1918—Harry Cranke ..... 415
Beau Ideal Jr., born Nov. 21, 1917—W. J. Welch, Haines, Ore. ..... 300
Beau Ideal 5th, born Jan. 5, 1918—Harry Cranke ..... 240
Beau Ideal 1st, born Dec. 5, 1917—Harry Barnhouse, Mitchell Ore. ..... 400
Consigned by A. H. Barnum, Moro, Ore.
Dawson, born Sept. 23, 1917—J. M. Hoag, Blalock, Ore. ..... 300
Better Rex 4th, born Sept. 27, 1917—Peter Truckat, Mitchell, Ore. ..... 270
Consigned by Chas. Bull, Mabton, Wash.
Menlo 3d, born March 14, 1917—Frank Martin, Satus, Wash. ..... 250
Barney, born Oct. 20, 1917—Frank Martin 200
Menlo Donald, born Nov. 1, 1917—Dick Barnhouse ..... 220
Howli Schwampo 2d, born May 9, 1917—Dick Barnhouse ..... 225
Consigned by Geo. Chandler, Baker, Ore.
Ben Generous, born Sept. 29, 1917—Dick Barnhouse ..... 225
Beau Generous, born Nov. 29, 1917—William Pollman, Baker, Ore. ..... 225
Lord Generous, born Nov. 19, 1916—William Pollman ..... 375
Hesoid Generous, born Oct. 7, 1917—T. B. Johnson, LaGrande, Ore. ..... 275
Helman Generous, born Nov. 1, 1917—Chas. Bull, Mabton, Wash. ..... 400
Consigned by W. P. Emery, Madeay, Ore.
Admiral Dewey, born Oct. 12, 1917—William Pollman ..... 155
Perfect Donald, born March 20, 1917—Chas. Bull ..... 400
Roosevelt Donald, born Feb. 16, 1917—Peter Whittaker, Corvallis, Ore. ..... 200
Premier Donald, born Feb. 14, 1917—Dick Barnhouse ..... 150
Consigned by Platt Bros., Genesee, Idaho.
George Herndon, born April 20, 1917—Dick Barnhouse ..... 105
Donald Lad, born May 1, 1917—Shoestring Valley Live Stock Co., Yoncalla, Ore. ... 160
Hope Fairfax, born Dec. 1, 1917—Dick Barnhouse ..... 225
Consigned by August Schroeder, Cottonwood, Idaho.
Generous Actor, born July 4, 1917—O. D. Teal, Echo, Ore. ..... 335
Consigned by University of Idaho, Moscow, Idaho.
Idaho Fair, born Oct. 2, 1916—Ray Phillippi, Airlie, Ore. ..... 475

**Females.**

Consigned by Henry Theissen.
Lady Rex 29th, born Jan. 25, 1916—J. D. Miles ..... 1400
Consigned by A. H. Barnum, Moro, Ore.
Princess Valley 8th, born May 10, 1917—Ray Phillippi ..... 375
Consigned by W. P. Emery.
Prairie Flower, born March 30, 1917—Peter Whittaker ..... 275
Consigned by University of Idaho.
Martha Fair, born Dec. 24, 1916—Edwards Bros. ..... 325
Consigned by Chas. Bull.
Beaulieu, born March 20, 1917—Henry Thiessen ..... 260

Summary:

28 bulls, $10,455; average ..... $373.00
6 cows, $2635; average ..... 527.40
33 animals, $13,090; average ..... 396.65

**SHORTHORNS.**

**Bulls.**

Consigned by Frank Brown, Carlton, Ore.
Brigadier General, born September 1, 1916—Sold to Mossie & Sons, Ukiah, Ore ... 1055
Count Glouster, born September 9, 1917—Cyril Gagnon, Walla Walla ..... 450
Consigned by A. D. Dunn, Wapato, Wash.
Northover, born September 22, 1917—William Stegeman, Bickleton, Wash. ..... 410
Consigned by A. Chalmers, Forest Grove, Ore.
Prince Imperial, born September 21, 1915—George Dixon, Prineville, Ore. ..... 310
Consigned by A. M. Haradon, Yamhill, Ore.
Royal Hero, born April 20, 1916—George Dixon ..... 300
Consigned by Day & Rothrock, Sprague, Wash.
Hercules Stamp, born April 11, 1917—C. E. Olsen, Haines, Ore. ..... 1375
Consigned by George Bertrand, Castle Rock, Wash.
Chief's Goldmine, born April 14, 1916—Frank Brown, Carlton, Ore. ..... 525
Chief's Bonny Golden, born November 1, 1917—John Bodingheimer, Shaw, Ore. .. 400
Consigned by E. F. Anderson & Son, Albany, Ore.
Lockloman Archer, born January 22, 1918—Tom Brogan, Antelope, Ore. ..... 250
Consigned by Schmidt Bros., Hoff, Ore.
Oregon Victor, born September 12, 1917—Tom Brogan ..... 250
Sadie's Prince, born October 15, 1917—W. B. Shaver, Molalla, Ore. ..... 215
Consigned by University of Idaho, Moscow, Idaho.
Cornerstone Prince, born February 28, 1915—E. H. Holoway, Albany, Ore. ..... 425
Consigned by M. R. Biggs, Prineville, Ore.
Quicksilver, born February 11, 1917—George Dixon ..... 235
Block Lad, born October 12, 1917—A. R. Able, Yakima, Wash. ..... 190
John D., born November 26, 1916—William Pollman, Baker, Ore. ..... 220
Consigned by W. O. Cummings, Mt. Vernon, Ore.
Craigielea's Stamp, born March 17, 1911—William Daughtrey, Portland ..... 190

**Females.**

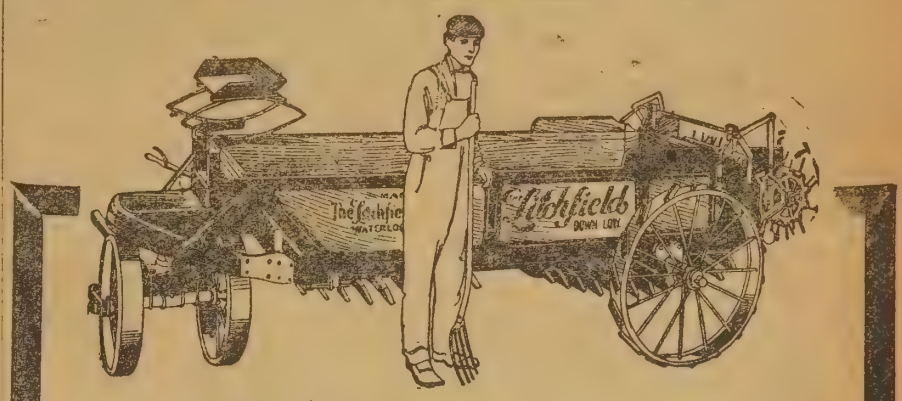
Consigned by Frank Brown.
Perfection Pearl, born September 3, 1917—W. O. Cummings, Mt. Vernon, Ore. ... 1010
Perfection Welcome, born September 8, 1917—W. O. Cummings ..... 550
Consigned by A. D. Dunn.
Dewdrop, born January 9, 1917—J. H. Hulbert, Mt. Vernon, Wash. ..... 740
April Hopes, born March 15, 1917—J. D. McGuire, Temno, Wash. ..... 435
Rosa Dunbro, born December 6, 1916—T. B. Hoover, Fossil, Ore. ..... 400
Roan Cassie, born February 9, 1917—Washington State College, Pullman, Wash. ..... 500
Violet, born November 7, 1916—Day & Rothrock, Sprague, Wash. ..... 775
Roan Lady, born November 29, 1916—J. D. McGuire ..... 325
Consigned by A. Chalmers, Forest Grove, Ore.
Violet Mary, born February 23, 1916—Frank Brown ..... 310
Princess Mough C, born July 28, 1916—T. B. Hoover ..... 200
Violet Rosalie, born December 30, 1915—John W. McKenzie, Port Orford, Ore ... 285
Violet's Bough 2d, born April 25, 1916—T. B. Hoover ..... 200
Consigned by Day & Rothrock.

(Continued on page twenty-four.)





Wilson's Modern Business College
Seattle




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# American Red Cross Hospital Farm at Sarisbury, England

By CAPT. FRANK S. PEER, Ithaca, N. Y.

**Frank S. Peer, who has recently been commissioned a captain in the field service of the American Red Cross in England, is widely known in America as an expert in cattle breeding and intensive farming. His "international farm" on the Island of Guernsey in the English channel, is a famous showplace and a model of its kind. He is an authority on Guernsey and Jersey cattle, and some of the finest specimens of these cows have recently been donated, through him, to stock the dairy farm at the American hospital at Sarisbury, near Southampton, England, where accommodations are being prepared for 3000 American soldiers, sick and wounded.—Editor.**

The Jersey cow was my first love—at least among animals of the bovine family. I look back on the day when I secured my first Jersey cow as a red-letter day in my experience as a breeder. This was 'way back in the early seventies.

I still recall most vividly my first visit to the island of Jersey, in the English channel. It was in the spring of 1892. I had been spending five or six weeks en route via the Azores, Portugal, Spain and France, and I can assure you that I never was so pleased to reach a place as I was at that time when at last I set foot in a spot where I could hear my native tongue spoken.

Since that day my fondness for the island has "grown by what it fed upon." American farmers will forgive me for indulging in these personal reminiscences, particularly when I confess to them that I am writing this on my birthday. I am not going to say which one, as I do not care to see it expressed in numerals. I am feeling, in regard to my age, something like an old cattleman I knew near Rochester, N. Y., who, when asked his age, replied: "Well, really, I most forget, but as near as I can calculate, I am either 69 or 96. The truth is," he added reflectively, "I've been afraid to look in a glass for the last 10 years for fear I would be tempted to count the wrinkles on my horns, and then I might learn for a fact that I was 96 instead of 69."

After Jersey, I came to love Guernsey also. For several years I have had a little home there. For 26 years I have spent considerable time each year on these two beautiful islands. Of course they are chiefly notable in the farmer world as the home of the Jersey and Guernsey cattle. One of their most attractive features to me has always been the wonderful production of the soil. I have always been something of an enthusiast on the subject of intensive agriculture, and in this respect I believe these two little islands stand head and shoulders above any equal acreage of farming land in the world.

We are endeavoring to install this same type of intensive agriculture at the hospital farm at Sarisbury England. Here the American Red Cross has purchased an estate of 186 acres, where accommodations are being prepared for more than 3000 American sick and wounded soldiers. The hospital buildings will occupy about 10 acres of tillable land. Some 60 odd acres will be devote dto the needs of the hospital, cultivated on Channel island lines of agriculture.

The farm organization is on the departmental system, modeled after a farm organization which I installed several years ago near Wheeling, W. Va., for the Hon. E. W. Oglovay. There will be six departments at Sarisbury, each one under an experienced director, and each department will be answerable to a comptroller, who will debit it with every expenditure for its work and credit it with everything which it produces. The six departments will be as follows: The farm, producing soiling crops and food for the cattle; the garden, consisting of about 15 acres of vegetable and garden truck; the cattle, consisting of 60 head, equally divided between Jerseys and Guernseys; the swine, about 100 to 150 head; the poultry, about 1500 to 2000 head, and the dairy where the milk will be separated, bottled and sent to the hospital.

At present the Sarisbury farm is in a low state of cultivation, and a good deal of hay, straw and grain must be bought for several years before the farm becomes self-sustaining for the number of stock we have installed. But that does not worry me, for I have been through the same mill on my Guernsey farm and feel that what has been done can be done again.

Speaking from memory and in round numbers, I believe the island of Jersey contains about 20,000 acres of tillable land, including orchards and gardens. With a pre-war population of 55,000 and 40,000 to 50,000 visitors annually, the island also supports 12,000 cattle, 7000 horses, and 10,000 swine, to say nothing of goats, sheep, dogs and poultry. This figures out at about three persons and one and one-half animals for every acre of land farmed. The marvelous feature, however, is that this 20,000 acres not only largely supplies all this number of people and farm stock, but in addition provides for export five to 10 million dollars' worth of agricultural products yearly.

I doubt if there is a finer example of intensive agriculture anywhere in the world. The little island of Guernsey does even better per acre than Jersey, but she has something like 700 acres under glass, while Jersey is strictly confined to straight farming.

The channel islands, then, are an object lesson in agriculture and horticulture to all the world, and especially to Great Britain. Now that the British government has committed itself to a policy of encouraging small farms for the purpose of keeping its young men at home, there could be no better schooling for the embryo farmers than to send them to the channel islands for a time as farm pupils before putting them on a farm of their own.

I am sometimes almost afraid to tell the truth in England regarding the size of the crops the island farmers are able to win from their soil, for it sounds like a fairy tale. Here is what these farmers are getting per acre:

Potatoes, 300 to 500 bushels.
Wheat, 50 to 75 bushels.
Oats, 75 to 150 bushels.
Hay, 3 to 5 tons.
Roots, 50 to 100 tons.

If what has been done can not be done again—we mean at least to give it a try at the Red Cross farm at Sarisbury. If it fails we may have the satisfaction of knowing why.

Our cows, as has already been told, are a donation from the farmers of the two channel islands. Jersey has given us 30 of its finest blooded dairy cows, and Guernsey has given us the same number. About four of the cows from each of the islands were given outright by individual farmers, the pick of their herds. The rest were provided by individual subscriptions, running all the way from $1 to $125. The subscriptions in Jersey reached a total of about $8500 and in Guernsey about $6000.



**Convalescent American soldiers are learning farming and dairying at the American Red Cross military hospital at Sarisbury, near Southampton, England. The hospital farm includes about 186 acres, which is being developed along lines of an up-to-date American farm. It is the largest American hospital farm in Europe.**

**The cattle on the farm are divided equally between Jerseys and Guernseys, all these cows being the gift of farmers on the islands of Jersey and Guernsey, in the English channel.**

**Much of the farm work on the 186-acre farm is done by convalescent soldiers.**

## As to Sanity

Amidst all your gettings, get sanity. Sanity is the modern name for wisdom.

There is a lot of insanity in the world. Insanity varies infinitely as to kind and as to degree. Some one special thing looks dark to a man, he becomes pessimistic. He has a touch of insanity. While optimism is a more agreeable species of insanity it has its drawbacks just the same.

Over-indulgence in pleasure, or under-indulgence in work both give evidence of an unbalanced mind.

While moderation and temperance are commonly connected with breadth of view and sanity of thought, yet sanity is at the basis of extremes as well. When American boys went over the top in the war they had behind them a training of sanity. After going over the top they were able to meet the reactions of fate with magnificent heroism. They had a basis of sanity which saved them from the paralysis of panic. When Clemenceau, before assuming the premiership of the government in France, asked his physician if he might hope for a limited period of unremitting duties during the war, he was acting on the broadest sanity. I saw a home war worker the other day who has given his services to the country. He entered that service a strong, vigorous man, with health of body and health of mind. Two years have left him in a condition that his physician says he may die in an hour's notice or he may live for years. The functions of his heart are irreparably damaged, but he said:

"I am glad I did it. I would do it again. It is worth while."

There was sanity underneath all this extreme taxing of the physical system, with its consequent pains and penalties.

Sanity furnishes the basis of good judgment, that judgment which shall dictate moderate or excessive endeavor, which shall match the body and the mind against the nature of the task.

C.A.S.

## Why We Have Scandalmongers

By DR. LEONARD KEENE HIRSHBERG, A. B., M. A., M. D.

The weakness which you are prompt to see in others is often a reflection of your own. Furthermore, it has its foundation more than likely in your own unrecognized physical infirmities.

Whenever you hear a woman or a man speak ill of another you should recall the tests made by experimental psychologists. This test often proves that there is present in the tale-bearer and critic an unconscious perception that she herself has the same weakness that is alleged against the absent one.

Fear, cowardice and an inferior physical and mental make-up in the scandalmonger makes such a person speak evil of the man or woman who is unconsciously recognized as a superior intellectually and physically.

No matter how wise, how noble, how young another may be, there are always many who "would spell him backward."

While the casual, swift, superficial medical examination may not always show a dispenser of scandal and criticism to be sick physically or mentally careful tests physiological and pathological show such women and men to be unstable emotionally and physically not all they should be.



Dr. Hirshberg

**Symptoms Are Plain.**

The very fact that such persons take the pleasures, laughter and gayety of others in bad part, helps to prove that they are ill.

They fret, chafe, grumble, croak, lament, knit they brows and exhibit such vexation of the spirit at the joys and merriment of others that their own strength and health can not but be undermined—if it has not already been so.

You are often compelled to observe that women, who become old, housed-in, and deficient in the number of their friendships, exhibit a sour, embittered, crabbed criticism of others. This indicates that their sentiments and points of view have become mortified and disheartened by the developments of some structural or internal disturbance.

Their tissues have taken on a diseased, damaged or disarranged state and the various parts of their fabric have ceased to harmonize. Physiological concord and unity have given way to pathological discord and disruption.

The healthy man or woman takes a more liberal, just and charitable view of the words and actions of others. The frank behavior of friends and acquaintances are not taken to task by him. His health, vitality and success give him a broad outlook on life. He is tolerant and knows that there are more sides to an appearance or an act of behavior than a murmurer, a gossiper and a neighborhood censurer presents.

Emotional instability and a loss of that mental balance which makes for intolerance of others and a search for their foibles and weaknesses indicates sickness. Often some occult, hidden anatomical disease such as bacteria and infection in the gall bladder is responsible for the repinings, naggings and scandal tales. On the other hand, defective vision, undeveloped muscles or the foul air of darkened, unventilated rooms is at the bottom of the mischief.

One woman, estimable in many respects, was much given to gossip at the expense of her neighbors' reputations. Her husband was a big, successful, broad-minded man, who never spoke ill of others and could not abide his wife's snobbishness and talebearings. They had six young children and the husband did not wish them to grow up narrow, bitter, hypercritical and bigoted like his wife, whom he nevertheless loved.

The woman was brought to me as a patient, and, after elaborate tests were made, the diagnosis of her trouble was loss of emotional stability and defective muscle sense with anemia. She was given more help at home and induced to take up outdoor sports and athletics. In three months' time she became a different person—gay, smiling, liberal in her views, tolerant of what others did and a genial, cheery, emotionally well-balanced woman.

## SIDELIGHTS

**He Was So Slow!**

"Our shipping program was in a bad way, but Charlie Schwab has given it a helping hand."

The speaker was Stanley Hawkins, director of camp singing in Camp Dix. He went on:

"Yes, Schwab has helped shipbuilding as efficaciously as the pretty girl helped her bashful adorer.

"As girl and adorer sat on the beach in the moolight side by side, the young man said:

"'Is your little Pekinese affectionate?'

"'Affectionate? Indeed he is!' the girl replied. 'Here, Fido! Come here and show Tom Jones how to kiss me.'"—Detroit Free Press.

**Modern Definitions.**

Appendicitis: A modern pain costing about $200 more than the old-fashioned stomach-ache.

Bachelor: From the Latin baculus, a stick unattached; hence an unattached man, which any lady may stick, stick to, or get stuck on.

Backbiter: A mosquito.

Blue: The only color we can feel. Invisible blue: A policeman.

Cinder: One of the first things to catch your eye in traveling.

Dust: Mud with the juice squeezed out.

Fly: A familiar summer boarder, who mingles with the cream of society, gets stuck on the butter and leaves his spec behind.

Pole cat: A small animal to be killed with a pole—the longer the pole, the better.—Brush and Pail.

**Editor Has Trials.**

Most any man can be an editor, says the town knocker.

All the editor has to do is to sit at a desk six days a week and 'edit' such stuff as this:

Mrs. Jones of Cactus Creek let a can opener slip last week and cut herself in the pantry.

A mischievous lad of Piketown threw a stone and cut Mr. Pike in the alley last week.

Joe Doe climbed on the roof of his house last week looking for a leak and fell, striking himself on the back porch.

While Harold Green was escorting Miss Violet Wise from the church social last Saturday night a savage dog attacked them and bit Mr. Green on the public square.

Isaiah Trimmer of Running Creek was playing with a cat Friday when it scratched him on the veranda.

Mr. Frank, while harnessing a broncho last Saturday, was kicked just south of his corn crib.

# Washington's War Service Boys







From The Twice-a-Week Spokesman-Review.

**VERNON KILGORE,** Daisy, Wash., enlisted in the navy in September, 1916, and trained at San Francisco. He saw active service at the first of the war, but was later sent to school at Newport, R. I. He is now in the submarine service.

**CLARENCE KILGORE,** Daisy, Wash., enlisted in the army, and is now in the ninth balloon company serving in France. He is a graduate of the Lewis and Clark high school of Spokane, Wash., and is the son of S. J. Kilgore of Daisy, Wash.

**CARL FERRIS,** Deer Park, Wash., enlisted in the U. S. navy in November, 1917, and was soon assigned to the U. S. S. Bill, which makes trips out of New York city. Mrs. M. Ferris, his mother, is a resident of Neer Park, Wash.

# Handicraft for Girls

By DOROTHY PERKINS.
(Copyright by A. Neely Hall.)

## A HOME-MADE RECIPE CABINET.

Every girl will be interested in this little cabinet made for keeping together favorite cooking recipes. There is a place in it for every kind of recipe, and, with a guide-card to show just where each recipe is placed, it is possible to find exactly what is wanted without a minute's delay.

Make a cabinet for your mother's recipes. Then make another in which to start a

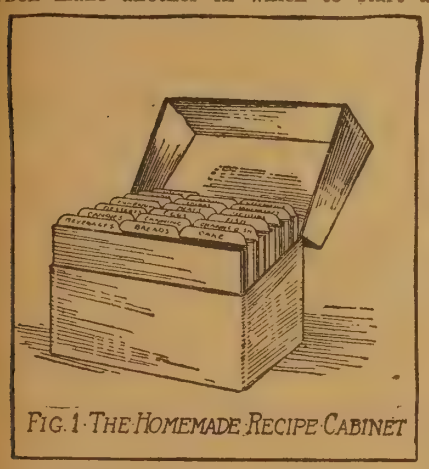
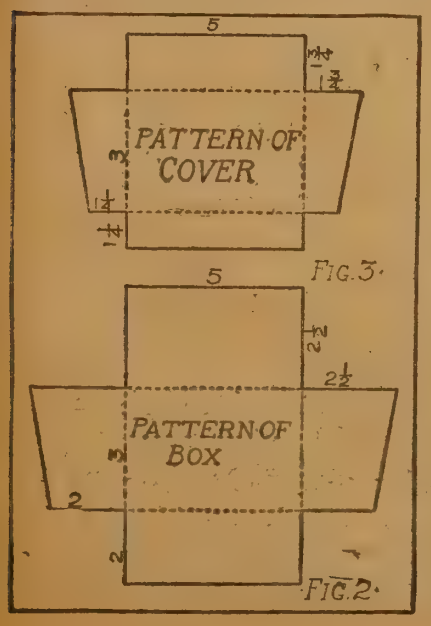
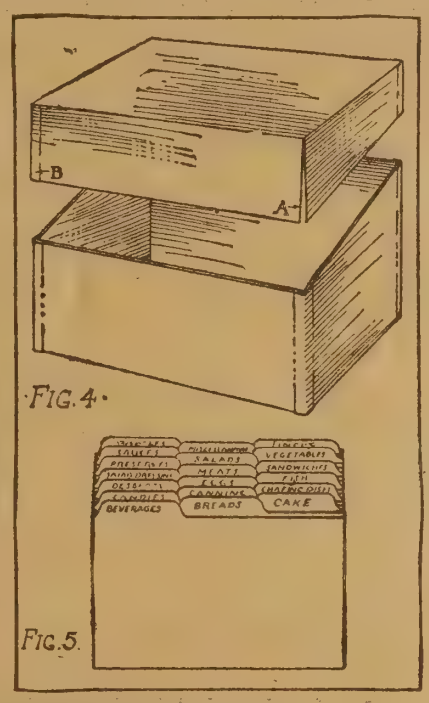


FIG. 1. THE HOMEMADE RECIPE CABINET

collection of your own. The work is easy and quickly done. Any cardboard box can be used for working material. Mark out the bottom, two sides, and two ends in the form shown in the pattern of Fig. 2. Draw the lines with ruler and pencil, using the dimensions given. Then, when you have marked out the piece, cut out along the outside lines. With a pocket knife score along the outer lines of the bottom piece, as indicated by dotted lines, and bend up the side and end pieces until their ends meet. Bind the corners together with strips of linen, coated with glue and lapped over the corners as shown in Fig. 4. The pattern for the cover is shown in Fig. 3. Mark it out in the same way that you marked out the box. Score it as indicated by the dotted lines, and bend up the sides and ends until their ends meet. Corner A (Fig. 4) shows how the corners are brought together, and corner B shows how they are bound with the linen strips.




Hinge the cover to the cabinet box with a cloth hinge strip similar to the strips bound over the corners. Make the hinge extend the full length of the cover. Then with the cover attached, get a piece of light-weight cambric of a dark gray or other durable color, and cover the outside of the cabinet, gluing the cloth to the cardboard, and stretching it tightly and neatly over the corners.

The indexed guide cards are of cardboard, and made as shown in Fig. 5. They should measure 3 3-8 inches high by a length equal to a trifle less than the inside length of the box. Divide the upper edge of each card into three parts, and prepare the projecting tabs as shown, making each a trifle longer than one-third of the length of the card, and three-eighth inch high. Cut away the card either side of the tab. The first card, you will notice, has the tab on the left end, the second has it in the center, and the third on the right end. The fourth is the same as the first, the fifth the same as the second, the sixth the same as the third, and so on.

You can make up your own recipe classifications, but the following cover about every heading necessary: Beverages, breads, cake, candies, canning, chafing dish, desserts, eggs, fish, frozen desserts, meats, pickling, preserves, salads, sandwiches, sauces, soups, vegetables, miscellaneous.

For the cards on which to write recipes, use a heavy grade of note paper. Cut each of the length and height of the index cards. Fifty cards will probably be enough to start with.

# Warrants Optimism

## Great Plans for Future Under Way

By A. E. GIPSON.

The colossal plan proposed by the government for land reclamation, primarily to meet the needs of our returning soldiers, and then to be extended to home-seekers generally, if carried out as it should be, will be far-reaching, almost beyond conception. It will not only include some 15,000,000 acres in the arid portions of the country, which are to be brought under adequate irrigation systems, but will embrace vastly more of swamp and other lands in different parts of the country. The total acreage is not yet definitely known, but is supposed to mount up above the hundred million mark. Engineers have been doing preliminary work for some time on the different projects, and the information is given out that they are now rounding it into form so that actual construction may be started on some of them, at least, within the next few months.

The soldiers are to be given the preference in construction work, and liberal wages, and after the lands have been redeemed, they are to be given the opportunity to secure a farm, fully equipped, if desired, and on terms of payment that will be very easy.

This appears to be Secretary Lane's plan, briefly outlined, and ought to mean a great deal, both to the soldier boys, and to the entire country.

These big jobs and a nation-wide campaign for good roads, to say nothing of innumerable other enterprises, both public and private, that will doubtless be launched ought to go far towards providing employment for years to come to all who may need it. Better still, it should put the masses of the people, who may desire farm homes, and improved conditions, in position to secure the same without encountering the obstacles that people with little or no financial resources so often encounter. Furthermore, the proposed development, it is announced, is to be along improved civic lines, with community centers, and entirely modern equipments, and facilities for making ideal farm homes.

Of course, this outline is simply preliminary and tentative, but even if carried out in a modified form, has possibilities so beneficent that one can hardly help being enthusiastic over them, and to regard with distinct optimism the demonstrations about to be made. Sane and wise leadership will be needed in carrying out the essentials of these gigantic undertakings, and so the master minds of agriculture should be called to service in the general campaign that is about to be launched.

## Then and Now




YELLOW.

The Evening Star, Washington.

## Watering Animals in Japan



The accompanying photograph, taken on a burning hot day in August, shows one of the many temporary drinking buckets which the Society for the Prevention of Cruelty to Animals kept connected with hydrants at prominent street crossings and corners in Osaka, Japan, during the hot summer months. Another year the society plans to erect permanent drinking fountains in all the principal squares of the city, according to a letter received by "Our Dumb Animals" from Ralph P. Bridgman, temporary honorable secretary of the Osaka Y. M. C. A.

Reading from right to left the characters on the bucket in the picture say (first line) "Temporary bucket," and (second line) "Osaka Society for the Prevention of Cruelty to Animals."." The signs above the bucket are for drivers and passers-by; "Please supply horses and cattle with water here. After supplying, stop the water running. Osaka Society for the Prevention of Cruelty to animals."

### ASOTIN FRUIT OUTPUT.

Asotin county fruit growers in southeastern Washington, according to Inspector Charles G. Andrus, have received the net sum of $143,909 for fresh fruit shipped during the 1918 season. Additional were hundreds of tons of fruit handled by local canneries, which paid fruit men $44,619, making a grand total of $187,529.

### WASH. WOOLGROWERS' ASSOCIATION.

In compliance with a request from the health authorities here the annual meeting of the Washington Wool Growers' association, originally scheduled for December 19, has been postponed to January 10 and 11.

# A CROOKED TRAIL---By Lewis B. Miller

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**A story of a thousand-mile saddle trip up and down the Texas frontier in pursuit of a runaway ox.**

**SYNOPSIS.**

Little did Travis Holloway realize, as he trudged off through the woods to bring in the calves and the oxen, that he was leaving his Texas frontier home to be gone many weeks. And little did he realize the adventure that those weeks held for him. Lep, his father's big spotted ox, was gone, and Travis, catching his pony, started to hunt him, riding bareback and without bridle. He breakfasted at a neighbor's where he borrowed bridle and saddle. Following a clue as to the whereabouts of the stray ox, he traveled too far to return home that night, and camped on the prairie with unseasoned rabbit meat and wild turkey eggs for his supper and breakfast. Next day and the next he went on and on. He had all but caught up with the lost animal when he arrived at the home of another frontier family, where he became acquainted with Frank and Stella Booth. Had he not tarried to spend the night and the next day with them, sure that the ox was with their cattle nearby, he would have found him and cut his travels short. But instead, the ox, accompanied by some of Frank's cattle was gone. Together the boys started out in pursuit and together they were destined to meet adventure after adventure for weeks. A haunted house, a hidden well, a swollen river, cattle thieves and sheriffs figured in their travels. Unwittingly they help the thieves, who later refuse to release their cattle. Even the sheriff fails to assist them, and they undertake, by a clever method, to secure them themselves. They fall in with cattlemen and hire out to them, actually helping to drive their own stock farther and father away from home.

## CHAPTER XVI.

### Where Heroes Had Fallen.

NOT till our party had halted for noon could Frank and I snatch a chance to talk over the strange situation in which we now found ourselves. Soon after dinner Hart, accompanied by two of his cowboys, Ame Watson and Ben Dankins, rode off on a hunt for cattle that could be bought. The other hand, Newt Lindsay, remained at the camp to help us keep watch over the drove.

But a short while after Hart had gone Newt, remarking that there was little to do, and that he was about to go to sleep, strolled away up the creek in quest of ripe grapes, Sam, the black cook, having washed and put away the few dinner-dishes and pots and pans, cut himself a dogwood fishing-pole, tied a line to the little end of it, and set off down the valley.

"Reckon little mess o' fish taste mighty good 'long 'bout supper-time," he remarked as he passed us. "Dey bites de bes' kin' in de cool, shady places, fish does," he added, suggestively.

Most of the cattle were standing or lying in the shade, lazily switching flies and chewing their cuds. Vic was exploring the near-by woods for squirrels. Frank and I had resaddled our horses, but had turned them loose to graze, while we ourselves took refuge in the friendly shadow of a gigantic sycamore.

"Well, here we are," I remarked, soon after we had been left alone.

"Yes, here we are," repeated Frank. "There lie our cattle, there stand our horses, already saddled, and there's the road toward home. What's to hinder us from jumping into our saddles, driving up our cattle and taking the back trail?"

"Sure enough, what is to hinder us?" I answered. "Not a thing in the world I can see—except one."

"That's right—except one," agreed Frank. "When a man hires us to take care of his cattle, and trusts us, we can't play him that kind of a mean trick."

"No, we couldn't sneak off like that. The gate's open, but there are bars behind it, and they're still up. It looks like a fine chance to get out of the pen, but it's not half as good as it looks. We've got to wait for something better."

"Still, it's a curious shape affairs have worked themselves into. I couldn't imagined such a thing as this yesterday."

"Though we can't do as we please with our cattle, they're in our hands. And that's something gained. It's more than we've been able to say before since we started from home."

"Yes, we've made a long step forward there, Travis. We can look after them ourselves now, and see that they don't slip out of our fingers again. They're in our possession. Now the question comes: How can we get them under our control, so that we can cut them out and drive for home with them?"

"That's a puzzle. The only way I can think of is to march straight up to Hart, put in our claim, and have it out with him then and there."

"But what will he say—and do?" asked Frank. "I have a suspicion that he's pretty hot-tempered, and that the fire flies when he gets mad."

"From several little things I saw, I'd guess him off about the same way. But what are we to do? We can't let him keep our cattle just to keep him in a good humor."

"No, of course not. Still, I'd rather get a little better acquainted with him, and on friendlier terms with him, before we stir him up. He seems like a pretty square sort of a man, but we may have our eyes opened by the time we've worked for him a few days."

"I'll tell you, Frank. We're earning fair wages now; and as long as that lasts I'm in no great rush to get home. Not much work to do there, for pay, this time of year. Suppose we stay with Hart a week or so, and see what will turn up. Maybe things will take some unexpected twist, like they did this morning."

"All right. That may prove the easiest way out of the woods," Frank agreed. And after a little more discussion, the subject was dropped for the time.

NEWT, the grape-hunter, came back a good while later; and so, finally, did Sam, the fisherman. Sam now began to harness his wagon-mules, and Newt and Frank and I punched up and rounded up the cattle and got them under way. This was according to our instructions.

About the middle of the afternoon we came upon Hart and his two hands, waiting by the roadside with a little bunch of cows and young cattle they had bought. The new cattle were thrust into the drove, and the three men made another short circuit, striking the road again three or four miles ahead. The second time they returned empty-handed. But a little later Hart bought several yearlings from a settler living on our line of march.

All the new cattle had to be watched closely at first, to keep them from breaking out of the drove.

We were now nearing the Colorado river. When night came down upon us, we had camped in sight of it; and next morning we marched across. From here on, if we had proceeded toward Hart's ranch, our course would have been due west, and parallel with the river. The Colorado, at our crossing-point, runs south; but a little further north it bends almost at right angles, and above that for many miles its general course is east. The road we were now following was well beaten and dusty. It was the Fort Concho trail. Hart's ranch, we were told, was situated on the Fort Concho river, a tributary of the Colorado, two days' travel beyond the fort.

But instead of moving on toward Fort Concho, we now headed almost due south, in the direction of San Antonio.

The country was more or less broken, and rather thinly settled. But all the settlers were cattle-raisers, and most of them had at least a few head to sell. And that was what we were out for.

HART now informed us that we would travel southward, he did not know how far, then bend west and double back, striking the Fort Concho trail 20 or 30 miles nearer the fort than where we were leaving it. The circuit he expected to make would occupy from a week to three weeks, according to the rapidity with which we accumulated cattle.

"Well, Frank, we're tied up for several days now, it seems," remarked I, the first time we were alone together after the turn southward. "We'd better not try to get our cattle away till this buying circuit winds up."

"No, I don't see that we can well," he answered, thoughtfully. "But we must be ready to cut loose and strike for home the first minute after we get back to that main-traveled trail."

I agreed with him; and again we dropped the subject for the present, though it was never out of our thoughts long at a time, I think.

Now we both wrote letters home and mailed them at the first postoffice we came to. We explained that we had found the cattle at last, and had them with us; but that the man in whose drove they now were had offered us fair wages to accompany him on a little cattle-buying trip, and we would not start for home for a few days yet. As heretofore, we were careful to say, we would write at least a postal-card from every postoffice on our route.

Not caring to worry our friends as we ourselves were worried, we did not inform them that our cattle were not actually in our possession, and that we did not know how we could get possession of them. On that point, however, we had fully made up our minds. Get possession of them we would, one way or another.

Sometimes, for a change, Frank and I rode out with Hart on his little side-trips, to help him drive back the cattle he bought. Usually, however, our work was with the main drove. At first Newt or one of the other cowboys always remained with us; but after two or three days Hart got sufficient confidence to leave the cattle in our care. We not only held them under herd during his absence, but we also did most of the driving, starting and stopping according to his instructions.

EVERY day we made two drives of 10 to 12 miles each. By this plan the cattle were always either marching or grazing or resting; and they had no time left to grow restless. With the exception of those just turned into the drove, which had to be watched to keep them from breaking out or slipping off into the brush, they gave us far less trouble than we had expected.

One morning, three or four days after we had turned southward, Frank and I underwent a very unpleasant experience.

Immediately after breakfast, Hart, accompanied by three cowboys, Ame and Ben and Newt, rode ahead to begin the day's buying. Having allowed the cattle to graze an hour or two longer, Frank and I rounded them up and drove on, followed by Sam with the wagon.

After traveling a few miles we overtook Hart, dismounted by the roadside, in front of a cabin. The three hands had ridden on, but Hart was talking to a settler, a big, bushy-bearded man dressed in pantaloons and shirt of soiled buckskin. Scarcely had the leaders marched by the cabin when Hart signaled a halt. We galloped around till we got ahead of the cattle, and quickly brought them to a standstill. Then Hart called out:

"Travis, I wish you'd ride in there and cut out that bell-steer for me."

Lep was the only belled animal in the drove. I pushed in among the cattle and brought him out, stopping in front of the two men. Already I had serious misgivings, which increased to positive alarm when Hart turned to the settler and said:

"There's that work-steer. He's a good one, too. I'll either swap him for other cattle, or sell 'im, just as you please. He's the only animal in the drove that ever wore a yoke, I guess. If you've got an odd steer that will match 'im, he's worth every cent I ask for 'im, and more."

Then they proceeded to try to trade. I withdrew a few yards, but not out of ear-shot, and waited anxiously, almost in terror, as I thought of the complicated situation that would follow the transfer of Lep to a stranger.

WE had recently told Hart that we expected to stay with him at least till we touched the Fort Concho trail again. If Lep was sold or swapped off, he would be left here, while Frank's two animals would go on with the drove. What we ourselves should do under those circumstances there was no knowing. Bitterly I regretter now that we had not explained matters to Hart the day we hired ourselves to him, instead of weakly procrastinating as we had done.

Presently Frank rode over to me and said, in low tones:

"You know what's on foot there, don't you?"

"Do you think they'll make a bargain of it?"

"Yes, I do," I answered, with some agitation.

"I believe they will, Frank."

"Then, if they do, we've got to blurt out the truth here and now, or forever hereafter keep our mouths shut. We won't dare hold it in a minute longer. If we keep silent and let that steer pass into the hands of an innocent purchaser, without making any claim or protest, you never can claim him, by law or any other way. Maybe your father could, but you can't."

Frank knew more of law than I did. But this view of the matter struck me at once as being at least the best kind of common-sense.

Every word that reached our ears seemed to indicate that Hart and the settler were on the point of coming to an agreement. After listening a short time I said:

"If they trade I'll speak out right away. And you'd better claim your cattle, too. Hart will be mad, mad, mad when we step in and knock his trade in the head. And we can't blame him much."

"Mad's no name for it, Travis. He'll be crazy—wild. I'd rather punch a hornets' nest 20 times any day. He'll swear till the air's blue, and then tell us to make tracks. No doubt about that. But it will only serve us right. We oughtn't to have let this matter drag so long."

"Well, if he chases us off and our cattle with us, we can stand it," I said. "But if he holds our cattle—"

"Listen!" whispered Frank.

The settler and Hart had almost come to an understanding, as it seemed. But now, before closing the trade the settler was walking around Lep, giving him a critical inspection.

And the inspection, it soon became evident, was not altogether satisfacory. Though he did not say so in so many words, I easily understood that he was afraid of Lep—afraid that the ox would prove vicious and give trouble under the yoke. Those horns did look threatening. On that point I could easily have relieved the man's fears; but, needless to say, I was as silent as a gate-post.

Seeing that the man in buckskin was trying to back out, Hart, who had only a limited stock of patience, promptly lost what little he had. He ignored the settler, and sprang upon the horse and shouted, with ill-concealed irritation:

"Drive on, boys! We've fooled away too much time here already!"

And drive on we did, with a hearty good will, glad to have Lep still in the drove; and even gladder, perhaps, to have escaped the fury of our quick-tempered employer.

"But the same trouble is liable to turn up again any day," Frank remarked to me, after Hart had left us. "And it'll be pretty sure to end differently next time. We'd better have a plain talk with Hart right soon."

"That's the thing. We'll have it just as soon as—as soon as we catch him in a good humor."

But a disagreeable duty is never made easier by being put off—rather harder. And from day to day we still kept postponing the dreadful interview. And the longer we delayed the harder it seemed to us to explain why we had not made our claim the first day instead of waiting all this time.

OUR party kept on marching southward, from 20 to 25 miles a day; and every day we added 20 or 30 cattle to the drove. Soon we found ourselves but little more than a day's march from San Antonio.

Hart had not intended to travel any further south. In fact, he had not at first expected to advance as far down as this. But, having a little business in San Antonio, he now decided to go on and look after it.

We went into camp a few miles north of the town one night. And next morning Hart, in company with Ben Dankins and Ame Watson, and followed by Sam with the wagons, set off in that direction. They would bring back some supplies.

It was about 2 o'clock when the party returned. Now Newt Lindsay, Frank and I got ready for a visit. Hart paid all of us some money, Frank and me $10 apiece; though we had not asked for it, and had no intention of spending much. We were going to see rather than to spend.

It was with feelings of keenest interest that I rode into the historic old town. From my childhood I had heard much of it; and much I had read of it, in the history of Texas and elsewhere. "San Antone," all old Texans called it. It contained nearly 20,000 people, and was, at the time of our visit, without a railroad. In fact, it was a city set out in the wilderness. Its population was largely, though by no means wholly, made up of Mexicans.

In appearance it was scarcely an attractive place, even to our inexperienced eyes. We rode up and down its principal streets, and finally dismounted in a plaza. Most of the visiting people present, except the Mexicans, seemed to be cowboys from the neighboring ranches.

One of the peculiar things we noticed in the streets was a wagon train, loaded with barrels of flour, drawn by oxen and driven by Mexican teamsters. It was just coming in from Austin, the nearest railroad point. Strictly speaking, it was only a cart train. But every cart had a big frame on it, so that a huge wagonload was deftly balanced on its two wheels. Each cart was pulled by several yoke of oxen; and the yokes, instead of having bows, were lashed to the oxen's horns.

"Did you ever hear of anything half as foolish?" laughed Frank.

"You needn't laugh. It's no laughing matter," I told him. "At least those oxen don't think so, I imagine."

"No, I'd say not," spoke up Newt. "It's about the same thing as if a man, instead of puttin' harness on his horses was to hitch his halter straps back to the wagon and make 'em pull by their noses."

"But why don't they learn better?" asked Frank. "I see other ox teams here, working with yokes and bows."

"Oh, a Greaser never learns anything," replied Newt, contemptuously. "If he did, he wouldn't be a Greaser."

One place in San Antonio we all wanted to see—were resolved not to go back without seeing. And after looking over the city and buying the few things we had need for, we directed our steps to the Alamo.

That thick-walled battle-scarred old mission house would have been interesting in itself; but it was rendered many times more interesting to us because of one great historical event. For here, on March 6, 1836, had fallen, after a bloody struggle, Colonel Travis and all the 189 heroes who laid down their lives to cripple the Power of Santa Ana and break the tyranny of Mexico.

The old building was at this time private property; but the man living there cheerfully showed us through. Strange feelings, which I shall not attempt to describe, thrilled me as I stood in the room where Davy Crockett, the famous backwoodsman and congressman, had made his last stand, fighting with his clubbed, broken rifle till he was shot down. In another room we saw where Bowie, the man with the terrible knife, had risen from his sick bed to sell his life as dearly as possible.

"And how many Mexicans fell while they were storming this building?" inquired Frank.

"The official report, made by one of the Mexican generals, put their loss at about 500, I think," answered the owner of the building. "And that's the number given in most of the histories of Texas. But the alcalde that had charge of burying the dead always insisted that he buried 1500. Hard to say who told the truth. But 500 or 1500, old Santy Anny needed every man of 'em about six weeks later, when Sam Houston turned on 'im at San Jacinto and literally wiped out his army, and took old Santy prisoner."

"The one big mistake Houston made was when he didn't introduce Santy Anny to the first good limb he came to, instead of turnin' 'im loose to live 40 years longer," declared Newt, resentfully. For the treacherous, cruel Mexican general had long been an object of bitter hatred in Texas.

"Well it's better to—to err on the side of mercy than against mercy," remarked Frank. And undoubtedly he was right.

We lingered about the Alamo till night was upon us, then mounted and rode back to camp.

(To be continued.)



**PROUTYS**
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on anything advertised in this paper in which you are interested. Keep a supply of postal cards handy so that when you find something you want to learn more about you can write a card for free literature about it.


# Learn to Handle Fur

By George La Rue, Twisp, Wash.

Furs, as well as other commodities, have advanced in value so much that trapping may keep pace with other occupations. At present we find unusual inducements along most any legal pursuit or business we may choose to take up. The great advance in the fur market and the fact that many boys and men like the sport of trapping, will start quite an army of men and boys in pursuit of the fur bearers. Most amateurs will think only of catching the animal that wears the valuable coat and will overlook the art of disrobing, stretching and drying the skin so it will be the most valuable. Handling the fur after it is caught is just as important as catching the animal. Very few trappers take as much interest as they should in learning to handle furs. Most furs bring the most when cased, but merely casing the pelt is not all there is to do. Having had some experience in buying furs I have found them handled in many ways. Some will take the fur off and keep it a month without stretching, others will pull a fur over an old rough board and hang it up on the south side of a building so as to dry it quickly. Most of those fellows want the top quotations for their furs and sometimes feel as if they have been robbed when they are paid more than the buyer can get for them. Sometimes I have soaked a valuable skin and restretched it, but I would much rather skin two animals and handle the furs at first than work one over after it is dry. When casing a fur, split down the back of each hind leg to the root of the tail and down the tail half way or far enough so you can pull the bone out of the tail without pulling the tail off. That is all the splitting that is necessary. Just skin down to the end of the nose and be careful not to cut the pelt and leave as little flesh on the pelt as possible. Turn the flesh side in until you can get a stretcher board prepared and when ready to stretch turn it flesh side out and stretch that way. Tack it fast to the stretcher at the root of the tail and the end of each hind leg, and it is best to have a narrow piece of board to stick down between the stretcher board and the fur. Have it long enough to reach about the full length of the fur and push it down between the front legs and tack it at the back end. Hang in a cool, dry, shady place to dry. A good trapper in a good locality should clear considerable money in a season while the present high prices continue. Sometimes I feel like quitting the farm and going after the high priced fur.

# Corn Looms Big

Corn is by far the most important crop in the United States. The acreage and also the value of the corn crop is greater than that of wheat, oats, barley, rye, buckwheat, rice, fruits and nuts combined. The relative importance of corn as compared with other cereals has remained fairly constant since the first agricultural census of 1840.

The climatic boundaries of the region of greatest production of corn in the United States is the mean summer temperature of 70 degrees to 80 degrees, a mean night temperature exceeding 58 degrees, a frostless season of over 140 days, and an annual precipitation of 25 to 50 inches, of which seven inches occur during July and August.

Corn is the great American crop, grown on three-fourths of all the farms in the United States, which produce nearly three-fourths of all the corn in the world.

Within the United States, three-fourths of all the corn produced is grown in the Mississippi valley.

Outside of the south, very little of the corn is directly consumed by man, most of the crop is fed to cattle and hogs and consumed as feed.

The production of corn in Europe is about one-fourth of that in the United States.

The broad, fertile plains of Hungary places that country in the lead among European regions in corn acreage and production.

In Rumania, corn is both the chief food of the people and an important article of export. Corn in Egypt is grown entirely under irrigation. The crop is planted in July and harvested in October and November, being irrigated about every 10 days.

The corn acreage in Mexico ranks next to that in the United States. Most of the corn in Mexico is grown in small patches of a few acres leased by the peons, from large landholders, and is produced by very primitive methods. The corn is used mostly for corn bread, which, together with beans, constitutes the staple diet of the Mexican people.

The corn crop of Argentina occupies 21 per cent of the land and crops and in per capita production Argentina ranks next to the United States.

Most of the corn raised in Argentina is of the flinty type, which stands transportation well.


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ALICE W. BARLAND, Editorial Contributor.

# Chapped Hands

## Learn to Use Simple Remedies

By MARGARET PALMER.

It won't be long until the children, as well as the grown-ups, will be complaining of chapped hands, lips and cheeks. This is one of the real trials that every mother has to battle with and now is the best time to get ready for this trouble by laying in a few simple remedies. Then learn and teach the children how to use them and protect themselves from getting chapped hands, lips and face. This will prevent much pain and suffering for them and save lots of work and time for every mother.

Cocoa butter, camphor ice and mutton tallow are very healing. The latter can be made at home without any expense. If put in a clean, small, round tin box to harden and if it is kept covered it will keep fresh and nice for a long time.

It is best if used at night rather than during the day. If it is used in the day time, the grease will gather dust. This will make the hands look bad as the dirt and grime will work into the chapped skin and as the tallow heals the skin quickly, it will make the hands look and feel worse than when they were just chapped.

Always wash the face and hands thoroughly with some good, pure white soap in warm water, but do not use the soap too liberally. Dry thoroughly, then dip the hands in a little vinegar—it will smart, but is very healing. Next dip the finger tips into melted tallow and rub well into the skin and wherever there is any roughness, as well as all chapped parts. Just a very little of the tallow will be needed. More than this will be too much.

This treatment is one of the surest and best ways of healing cracked lips, hands and fingers from exposure and rough work.

Another healing application is made of equal parts of glycerine and lemon juice. This is nice to use in mild cases or as a preventive or after the skin has started to heal by using the tallow. Medicated vaseline can also be used in the same way as the tallow is used and is very good, but not as effective as the tallow.

If the hands have become dirty while they are chapped or the cheeks or chin, as is often the case with children, and if the dirt seems to be in the skin, rub it with plain lard or camphor ice or cocoa butter, rubbing with the same motion as the soap was being used, leaving it on a few minutes. Then wash off with warm water and a little cornmeal instead of soap. If the cornmeal does not remove most of the dirt, use a little soap. Dry thoroughly and apply the tallow. The next morning wash the hands again in warm water, using a little soap. After they have been dried, dust with a little cornmeal which will help the healing along.

Every woman is always troubled in doing fine needlework if her hands are rough. In a measure this can be prevented if a little forethought is used and such must be done by every woman who does all or a part of her housework and outside work as well. Nothing will roughen the hands as much as general housework, a little gardening or outside work and with the first snap of cold weather the hands will be in perfect condition for chapping and discoloring.

It is impossible to wear gloves for all dry work, but they can be worn very often to save the hands. It is best to have three pairs of cotton flannel working gloves for this purpose. One to be used in doing the outside work and the other for the dirtiest work in the house and one for general purposes. One would not come amiss in the cellar to go over the vegetables as they are picked over or even getting those for a meal.

Try and do as much of the wet work as possible at the same time. After having the hands in the water for some time—after washing them thoroughly—dip them in cold water two or three times. Dry thoroughly. The cold water will harden the pores of the skin and make them less sensitive. It is an excellent plan after having the hands in water some time to rub a little honey and lemon juice on them. Use two tablespoons of honey to one of lemon juice. Keep this handy and it will save rough and chapped hands many times during the cold weather. Always wear gloves as far as possible in doing rough work of any kind. All this takes but a few moments, but it is worth the comfort as well as the improvement in the appearance of the hands for the time and trouble it takes.

### METHODS OF SAVING.

**How to Freshen Old Velvet; About Bleaching of Flour Sacks.**

The following hints for saving are sent out by the extension department of the Washington State college:

Place a hot iron flat side up on the kitchen work table. On either side of the iron place a brick to serve as a resting place for the cloth. Take a piece of damp cloth and stretch it out over the bricks. You now have a steaming arrangement for renovating velvet in need of freshening. Place the velvet over the steaming cloth, brushing up the nap with a fine soft brush. It must be done quickly to prevent the nap becoming too wet.

Use your flour sacks. They can be made into serviceable kitchen aprons, bags, tea towels, dish cloths, dust cloths, etc. (after they are ripped, washed and bleached). To bleach them, soak in a solution made by dissolving as nearly as possible 1-2 to 1 ounce chloride of lime for each gallon of water (strain sediment through a cloth). Rinse thoroughly and boil in good suds.

### MEANS MORE THAN STEW AND HASH.

This new war on waste means far more than "stews" and "hashes" and "bread puddings," more than the gospel of the "clean plate." It calls for balanced rations, scientific feeding and learning to look a calorie in the face with due respect and without fear.

The training and discipline of last year will help. Go forward on this foundation and acquire that economic cookery for which certain countries are famed, but which they learned through long centuries of short meat and dairy supplies.

There is no time to wait on this expensive teacher—experience. Take the short cut based on knowledge of food values. You are called now, in the name of humanity, to adjust your table at once, and to practice the most rigid economy in the face of apparent plenty.

Economy and good food can go together only when based on knowledge, whether learned from experience or books. So learn to face a calorie and respect the ration.

# Making Over

Because actual fighting is over, we must not assume that conditions are normal and feel that our carefully limited use of the woolen supply can cease at once, for just now the world's supply of woolen, linen and other raw materials is extremely low, and no one of these should be consumed in any but the most essential work, says a writer in the extension service bulletin of the Washington State college.

Through fashion and improper care more money is wasted on clothing than on food. It is said that American women wear out only 15 per cent of the garments they buy. They must now use the other 85 per cent.

| Garment. | After Alteration. |
|---|---|
| Woman's long coat.. | Short coat. Child's coat. Skirt. One-piece dress. |
| Woman's suit..... | Girl's suit. One-piece dress. Dress for girl. Suit for boy. |
| Man's trousers..... | Boy's trousers. |
| Woman's dress..... | Remodel by combining with other materials. Jumper dress with white sleeves. Girl's dress. |
| White or silk waist.. | Slip to wear under voile or crepe waist. |
| Wool skirt..... | Ripped, washed and recut. Coat for a child. Bloomers. |
| Wash skirt..... | Ripped and recut on better lines, contrasting material used to lengthen or widen, for pockets, belt, etc. Middy, waist, rompers, petticoat or aprons. |

Few women realize the necessity and value of pressing. Many a suit has been discarded because it looked shabby and had lost its freshness. Careful pressing will prevent bagging and a decidedly unattractive, wrinkled appearance. Constant care in mending, cleaning and pressing woolen and silk garments will lengthen their period of usefulness, and in this way conserve our supply of raw materials until the readjustments following war have taken place.

### Do Not Let It Rot.

The old sack or board or pile of rubbish should not be allowed to lie on the ground and rot. If it is not worth saving, burn it up.

# Christmas Leftovers

## What Good Dinners They Do Make!

The days following Christmas are rich ones for the housekeeper who likes to see what good meals she can prepare out of "a little bit of nothing." Desserts, salads, casseroles and creamed dishes are natural results of a big meal.

Do not let cold pieces of roast fowl be passed out to the children for lunches when they could be made into a meat course for the whole family. Desserts can be reheated, served with a new sauce or fruit and made to appear like new deserts.

Creamed turkey, goose, duck or chicken makes an excellent dish for either luncheon or dinner following Christmas. All the little pieces, not large enough to serve, and those bits that cling to bones can be readily diced, heated well and covered with a cream sauce.

The celery which was left makes a delicious salad when combined with shredded turkey and a little boiled dressing. A small pie made of turkey or whatever fowl you had makes a delicious way of serving left-overs. The "crust" may be made of mashed potatoes or hominy as is sometimes done in Shepherd's pie.

Vegetable hash is one way of using up small quantities of left-over vegetables. Squash, potatoes and turnips may be put into an oiled baking dish, covered with crumbs and grated cheese, and baked till brown.

Bread pudding will not only use up any odds and ends of bread and cake that may have been left, but if the left-over cranberries are baked with it, it makes a dessert that is delicious as well as food saving.

Do not waste a single piece of food left from the meal if you have to serve a different kind of food to every member of the family. But recall your knowledge of casseroles and salads and see if you can not make a delicious dish for the whole family out of the Christmas left-overs.


# Sanitary Methods

Upon thorough inspection, made at the request of President Higley, the health board has approved the sanitary arrangements and conduct of the Northwestern Business College.

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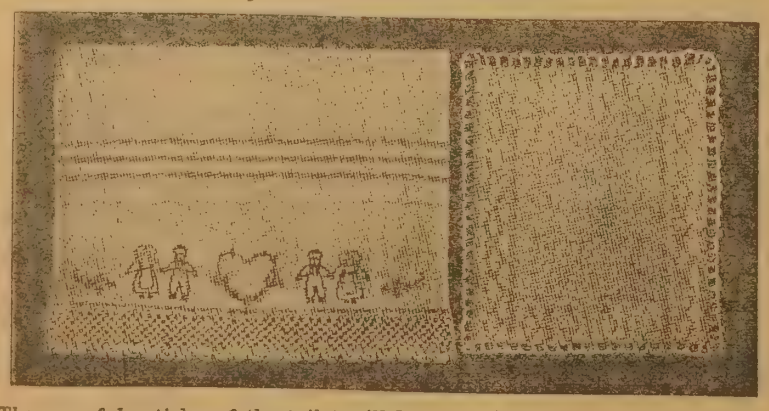
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# Towel and Wash Cloth

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These useful articles of the toilet will be appreciated by every housewife.

**Towel.**

Ch. 21.

1st row—2 t. in 4th ch. from needle, 2 ch., 2 t. in same st., 2 ch., 4 t., 2 ch., miss 3 ch., 4 t., 2 ch., 4 t., 2 ch., ch. 9, 1 dc. in last ch.

2d row—Ch. 3, 14 dc. over 9 ch., 4 t. over 2 ch., rp. twice, 2 t., 2 ch., 2 t. over 2 ch., 2 ch. t., tu.

3d row—5 ch., 2 t., 2 ch., 2 t. over 2 ch., 4 t. over 2 ch., rp. 3 t., 2 ch. t., miss 2 t. in 9 t. of 2d row.

4th row—4 t., 1 dc. in each 2 ch., 4 t., 2 ch. 3 tims 2 t., 2 ch., 2 t., 2 ch., 1 t., tu.

**Wash Cloth.**

Five in. square of sl. st. to imitate knitting.

Border in fancy st. of rib st., rib 4 st. sl. st. 5 rib 7 sl. st., rp. until border is 2 inches wide.

Edge—Ch. 9dc. 7 ch. 9 dc. 7, rp. to end.

2d row—5 dc., p., 5 dc., ro.




# PATTERNS

**Please order the patterns you desire at least two weeks before you wish to use them. Desiring to obtain the latest high-class-patterns for its readers, The Farmer has made arrangements to have them sent direct from the east, and, under present mailing conditions, it takes about that time for them to reach you.**

2680—Ladies' dress: Cut in 7 sizes, 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 7 yards of one material, 40 inches wide. To make sleeves and overblouse of contrasting material as illustrated will require 3 5-8 yards of material 27 inches wide for the 38-inch size. The dress measures about 2 yards at the lower edge. Price 10 cents.

2367—Girls' dress: Cut in 4 sizes, 10, 12, 14 and 16 years. Size 14 will require 4 3-4 yards of 36-inch material. Price, 10 cents.

2702—Ladies' coat: Cut in 7 sizes, 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 4 1-8 yards of 54-inch material. Price, 10 cents.

2694—Girls' dress: Cut in 4 sizes, 6, 8, 10 and 12 years. Size 10 will require 3 1-2 yards of 40-inch material. Price, 10 cents.

2198—Girls' dress: Cut in 5 sizes, 6, 8, 10, 12 and 14 years. Size 10 will require 4 3-4 yards of 36-inch material. Price, 10 cents.

2271—Dress for misses and small women: Cut in 3 sizes, 16, 18 and 20 years. Size 18 will require 4 7-8 yards of 44-inch material. The dress measures about 2 yards at the foot. Price, 10 cents.

1974—Child's outdoor set. Cut in 4 sizes, 2, 3, 4 and 5 years. It requires 3 1-4 yards of 44-inch material for a 4-year size. Price, 10 cents.

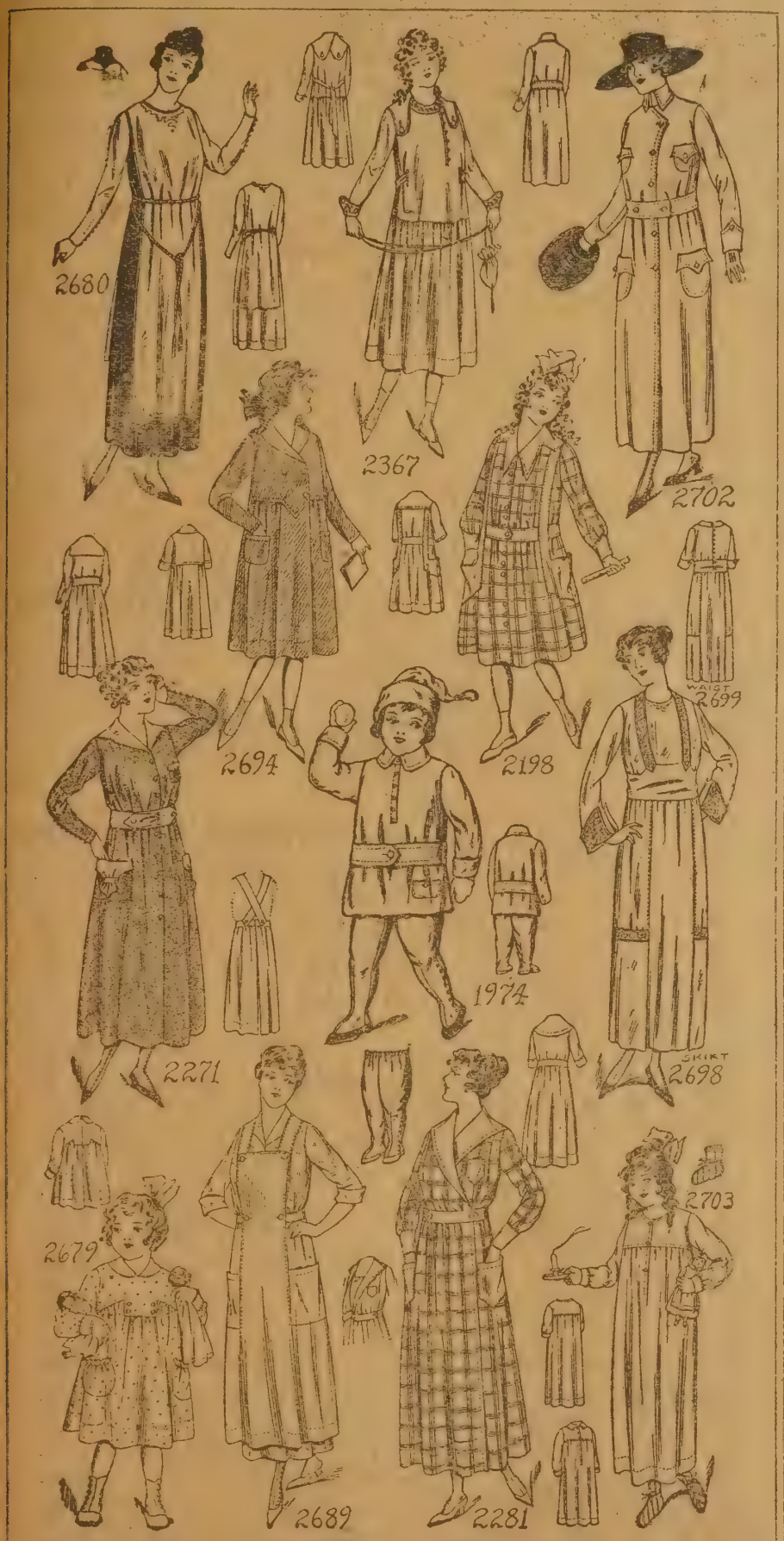
2699-2698—Ladies' costume: Waist 2699 cut in 7 sizes, 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 2698 cut in 7 sizes, 22, 24, 26, 28, 30, 32 and 34 inches waist measure. To make the dress of one material will require 5 1-2 yards of 40 inches wide, for a medium size. Width of skirt at lower edge is 2 yards with plaits drawn out. TWO separate patterns 10 cents FOR EACH pattern.

2679—Girls' dress: Cut in 4 sizes, 2, 4, 6 and 8 years. Size 4 will require 2 3-8 yards of 36-inch material. Price, 10 cents.

2689—Ladies' apron: Cut in 4 sizes, small, medium, large and extra large. Size medium will require 3 5-8 yards of 36-inch material. Price, 10 cents.

2281—Ladies' house dress: Cut in 7 sizes, 34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 6 1-2 yards of 44-inch material. The skirt portions measure about 2 3-8 yards at the foot. Price, 10 cents.

2703—Girls' night dress and bed sock: Cut in 7 sizes, 1, 2, 4, 6, 8, 10 and 12 years. Size 10 years requires for the gown, 3 3-8 yards of material 36-inches wide and for a pair of socks, 5-8 yard 22 inches wide, or wider. Price, 10 cents.




Please fill in this order and mail with remittance to:
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### PICTURE BOOKS FOR BABY.

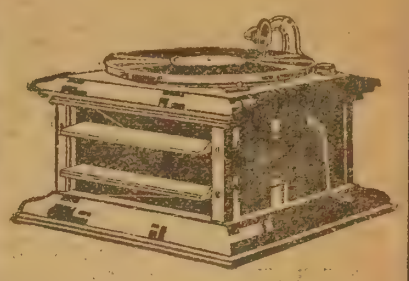
"Buy only the best picture-books for my baby!" a mother exclaims. "Why, anything will do, if it is bright-colored and will not tear."

But will anything do? Baby's brain is eager and alert. He is taking in a stock of ideas to use when he begins to speak and read, says Frances Jenkins Olcott of the United States bureau of education. He is imitative, and is learning to do the things he sees done in his pictures. He is developing his sense of color.

Pictures may be made the beginning of baby's education as well as a delight to him. And what a joy he takes in entering into the life he seems in each bright-colored print! But he will not learn from them unless they please him. He likes best primary colors, and large figures of animals and of children at work or play. His first books should be untearable, so that he will not be able to destroy them whenever the impulse seizes him. The term untearable or indestructible, however, does not guarantee that a book will not be destroyed by rough handling.


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Put honey, butter, cream and salt into a sauce pan. Boil until it forms a hard ball when tested in cold water. Remove from the fire and stir in the lemon extract and pour on buttered plates. Mark into squares before cold.

AUNT NELLIE.

### Likes Outdoor Sports.

Dear Aunt Nellie: We have quite a large number in our family. There are 10 of us. I have three brothers, Henry 16, Walter 5 and Oscar 3. My sisters are Louise 12, Ella, 11, Gertrude 2, and my baby sister is 1 month old. I am five feet eight inches tall and weigh 135 pounds. I am 14 years old and my birthday is January 2. I have blue eyes and light brown curly hair. I passed the eighth grade this last spring and I wear glasses. My favorite sports are tennis, horseback riding, bicycle riding, and I have read several books, for I love to read. Louise and Ella and Walter go to school now. We live on a farm by Lone Pine and have six horses. Their names are Dick, Jim, George, Duke, the saddle horse, and Maude and Nell. Our two cows are Peb and Patricia. We have four hogs and about 45 chickens. I have a pet dog and have taught him to shake hands, fetch sticks and play with a ball. His name is Carlo. We have four cats. My sister Louise and I took music lessons last summer from mama. We have an organ. I have just about found my twin. His name is Lester Large, but I forgot his address. He is the same age and height. We used to live in Idaho. My father took the Farmer awhile back, but only began to take it again some time ago. We have been here two years and are going to move again soon. I am sending a few riddles: Which candle burns the longest, wax or tallow? I think my sister Louise will write soon. Ella has written already and found her twin. I will close with love to Aunt Nellie and the cousins.—Agnes Helena Liere, R. F. D. 1, Tekoa, Wash.

### Brother Is Coming to Visit.

Dear Aunt Nellie: I love to read the letters from the cousins. My brother has just gotten over the typhoid fever. He was in the hospital for six weeks and just got home. He is 16 years old. I have been corresponding with some of the cousins, but at present I am only writing to Irene Clarke and Retta Gray. I was 14 years old July 23 and am in the eighth grade. There are two rooms in our school. There are 12 pupils in our room and about 30 pupils in both rooms. My cousin, who is in the U. S. navy on the battleship New Orleans, on the Atlantic coast, is coming out to see us next month and I can hardly wait to see him. He enlisted last summer in July. He is a gunner. I would be glad to hear from some of the cousins or any one who would like to write to me. I will send my picture the next time I write.—Virginia Clarke, Penawawa, Wash.

### Will Write to Two Cousins.

Dear Aunt Nellie: I was 13 years old September 16. My hair is dark brown. I weigh 99 pounds. I am four feet nine inches tall. I have brown eyes. Have I a twin? If I have I wish they would write to me. I am in the seventh grade. I have almost found two twins. They are 13 years old and their birthdays are July 8 and April 2. If you think that I can call them my twins I will write to them. They are Eva Priddy, Route 2, Touchet, Wash., and Clara Pohle, Spokane, Wash. I have five brothers and one sister. We have four horses and two colts. The horses' names are Maud, Gipsy, Betsy and Effy. The colts' names are Florence and Trixy. We have two cows. Their names are Flossy and Mary Jane.—Myrtle Garrett, R. F. D. 1, Box 15, Okanogan, Wash.

### Not Her Last Letter.

Dear Aunt Nellie: I like to write to the Corner and I enjoy the cousins' letters very much. I wrote to Linda Anderson and she answered it and I answered her letter again, but she didn't write any more, so I wrote to her last week again. I don't think this is going to be my last letter to the Corner. I am going to try and answer Ella Mae Payton's riddles. Something that goes up and down the hill and yet it stands still. Tongue. One hundred eyes and never a nose. Thimble. I would like to get a letter from Ella Mae Payton. I will give some riddles now. The more you take from it the bigger it gets. What has tongue and can't walk? I rode and yet I walk. I sit down and walk. As I was going over the bridge to London I met a man with a wheelbarrow full of fingers and thumbs. My brother who was in Camp Lewis is in France now. I have one uncle in France, too, but he isn't where my brother is. He is in a blacksmith shop. I spent a couple of weeks with my aunt and uncle. I had a dandy time over there. We went fishing and we went to a couple of shows in Waterville. We are going to move. Maybe next summer we are going to have a picnic on the lake and we are going to camp out, too. Arthur Halla is going to rent this place. He is our best friend. I am sending you part of a peacock feather with this letter. Love to Aunt Nellie and the cousins.—Luella Venneberg, Manson, Wash. (Thank you, dear, for the peacock feather. It is beautiful.—Aunt Nellie.)

### Visiting Grandmother.

Dear Aunt Nellie: I wonder if I have a twin? I was 10 years old June 10. I have three sisters, Marie 17, twin sisters Genevieve and Geneva, they are 14, two brothers, David and Alfred. Alfred is in France. David belongs to the home guards, as does my cousin, Wesley Turner. I stayed this summer with my Grandma Davison and Uncle Charlie. I like reading the Children's Corner very much. Wasn't I surprised and glad to read Lella Wilson's letter. Her teacher, Miss Mary Agnes Wright, was my teacher also. I was one of the little green leaves in the school play. My mama has a picture of Lella and her dog. It is fine. She has a picture of Richard also. They live on Lopey island. I like the island fine. Uncle Charlie has some pet cats. Their names are Suesetta, Fuzetta, Brindletta and Black Tom Tinker. They are white, yellow, spotted and black. He has three horses, Pet, Babe and Queen; also three cows, Red, Spot and Speck. Grandma's place has 160 acres. There are quite a lot of fruit trees and a fine spring. The valley looks very nice from here.—George Claud Turner, Lock Box 23, Thorp, Wash.

### A Good Time at School.

Dear Aunt Nellie: I read the letters and am interested in them. I was 11 last May 22, and I am in the fifth grade. I would like to hear from a cousin the same age and I would write to him or her if I know them or not. We live in the country, and I go to a country school. It is about one and one-half miles from our house, and I walk to school. My teacher's name is Miss Taylor. We like her fine. There are only five children in our school, but we have a good time any way. There are two girls and three boys. There are two years' difference between me and the other girl, but we are both about the same size. Last year I knitted 12 squares and I bought two war savings stamps. I have three brothers and no sisters. My brothers are Lloyd, Glen and Walter. Walter is 18 years old, Lloyd is 17, and Glen is 2 months old. He is very cute. My pets are a gold fish and two cats. —Lela Thorpe, Edwall, Wash.

### Pets Teach Children Kindness.

Dear Aunt Nellie: I am wondering if I may be a cousin. May I? I am a big girl 15 years old June 5, 1918. Have I a twin? I would like to correspond with some of the cousins, if they would care to write to me. I live on a 260-acre farm near Colville. I have many pets and I would not part with them for the world. I think they are the most wonderful things for children as it teaches them kindness. I have two Red Cross pins and some war savings stamps, and I intend to have more. My father has a Liberty bond. I have one brother. He is only 3 months old. He has light hair and blue eyes and weighs 17 pounds. We have 24 pupils in our school. I took the state examination for the eighth grade last May, but I failed in one subject. My teacher's name is Miss Ashburn. I think she is the best teacher we have had. With best wishes to all the cousins and much love to Aunt Nellie, I will say goodby.—Bertha Marion Brown, Route 1, Addy, Wash.

### Teacher Is Kind and Nice.

Dear Aunt Nellie: My papa takes the Farmer. I like to read the children's letters. I enjoy them ever so much. We live on a farm of 20 acres, mostly fruit. We have two horses, one cow, and for our pets, three kittens and one bird dog named Judy. I have two sisters, Helen and Josie, and one brother, Lester, who is 9 years old. My father fought in the Spanish-American war. I have two uncles in France now and one in Camp Lewis. Have I a twin? If so I wish they would write to me. My birthday is November 24. I am in the fourth grade. My teacher's name is Miss Hamilton. We like her, too, she is so kind and nice. There are 50 pupils in our room. I have light hair and brown eyes. I only weigh 55 pounds. I was 11 my last birthday.—May Sanders, Route 4, Box 136, Yakima, Wash.

### Wins Prizes at Sunday School.

Dear Aunt Nellie: This is the fourth time I have written to the Corner. I hope it will not be the last. I am 14 years old. My birthday is June 30. I have been corresponding with a girl who lives at Eureka, Wash. Her name is Beulah Gluck. She is 13 years old. Her birthday is October 6. I am in the eighth grade. There are 11 pupils in our school. My teacher's name is J. H. Hill. I like him fine. We have nine cows, seven calves, seven horses, four sheep, one dog and one cat. I call the cat Sir Laviene. He is a black cat. I helped one of my aunts drive about 11 head of cattle about 17 miles and a half. We went on horseback. I surely was tired when I got home. We started about 10 a. m. and got home about 3:30 p. m. We have a Sunday school at Cliffs and I go every Sunday I can. The superintendent of our Sunday school gives prizes. I got nearly every one. I learned every one of the names of the books in the old and new testaments, the Ten Commandments, five chapters of Mark. As prizes I got a blue crocheted dust cap, a pin of the Cross and Crown, and $1.50. I have bought one war savings samp and I intend to buy more.—I will write again.—Beulah Walker, Cliffs, Wash.

### Learn to Be Strong and Industrious.

Dear Aunt Nellie: I like to go to school very much, and hope that all the cousins do. My birthday is May 23. Have I a twin? I would like to correspond with any of them. My two cousins and a friend wrote. We do not take the Farmer, but our neighbor does and I get to read some of the letters, but not all as I wish I could. I am in the seventh grade and go to the Glenwood school. My friend, Lela Bailey, saw her friend's letter in the paper. Her name was Marie Kilgore of Deep Creek, Wash. I read it and thought it a nice letter. Lela said she might write. She is my nearest neighbor. We go to school to learn to be strong, healthy, industrious men and women. I hope we all want to be that. I, at least, want to be. I hope the kaiser finds his thinking cap and thinks a while, don't you?—Ruth Reynolds, aged 12, Elberton, Wash.

### Save Food for the Soldiers.

Dear Aunt Nellie: I hope every girl and boy will do all they can to help Uncle Sammie. I am going to buy a war savings stamp. Edith Crabb and I used to write to each other, but she never answered my last letter. My subject is about the war. I think the boys were pretty brave to go over there and fight. To make it easier for them we should not waste and we should eat less, so they can have food. I send my love to Aunt Nellie and all the cousins.—Beulah Shaw, Grandview, Wash., 10, April 11.

### A Visit in Spokane.

Dear Aunt Nellie: Mama takes the Farmer. I like to read the letters. I will be 15 years old December 23. I have dark brown hair and dark complexion. I am five feet three and one-half inches tall. Have I a twin? If so I would like to hear from her or him. I have two sisters, Minnie, who is 13 years old, and Gladys, who is three years old. We live on a farm containing 150 acres. We have two horses, Mollie and Daisy. They are black. My teacher's name is Miss Bowen. I like her fine. I can tat, crochet and knit a little. I can play on the piano a little, too. My pape has a car and we have lots of fun riding all over in it. My sister Minnie and I spent a week in Spokane, guests of our former teacher, Miss Sutliff, and, oh, the fun we had. She took us everywhere and we had such a nice visit. Then we returned home with Mr. and Mrs. Bowen in their car.—Olive Wilkinson, Ford, Wash.

### Vacation at Grandma's.

Dear Aunt Nellie: I thought I would like to join the Cousin's Corner. I was 10 years old January 7. Have I a twin? I am in the third grade. I go to school in Pomeroy, Wash. I live about 12 blocks from school. I like to take my vacation in the country at my grandma's house. My grandma lives 18 miles from Pomeroy. I had a fine time picking flowers and berries. I help grandpa get the cows and help him milk. I like to hear the birds sing. Grandma has 10 little birds. We have one dog, Tippy. I have two sisters, Thelma, who is nine years old and Anna May, who is five years old. I have one brother Albert. He is seven years old. I will write again.—Velma Martin, Pomeroy, Wash.

### Many Apples This Year.

Dear Aunt Nellie: This is my first letter, but I hope it is not the last. I am 13 years old and my birthday is October 28. Have I a twin? If I have he or she may write. I am in the fifth grade. We have lots of apples this year. I have two brothers and four sisters, Sven and Bertil, Bertha, Florence and Silvie. Bertha and Florence are twins and Silvie is the baby. We have one cow, two horses, three pigs, one sheep and lots of chickens. I have an uncle in the war. His name is Sven. I hope the kaiser will be killed.—Karin Molinder, Box 48, Benton City, Wash.

### Evelyn Finds Her Twin.

Dear Aunt Nellie: In reading the Children's Corner, I discovered I had a twin, so I thought I would write to the Corner. My twin is Agneta Bruhn of Wilbur, Wash. I wish she would write to me. This is the first time I have written to the Corner, but it will not be the last. I am in the fifth grade, and am 11 years old.—Evelyn Haworth, R. F. D. 1, Box 144, Colville, Wash.

(Address all letters to Aunt Nellie, care of The Washington Farmer, Spokane, Wash.)

AUGUST 2. 1914. NOVEMBER 11, 1918.

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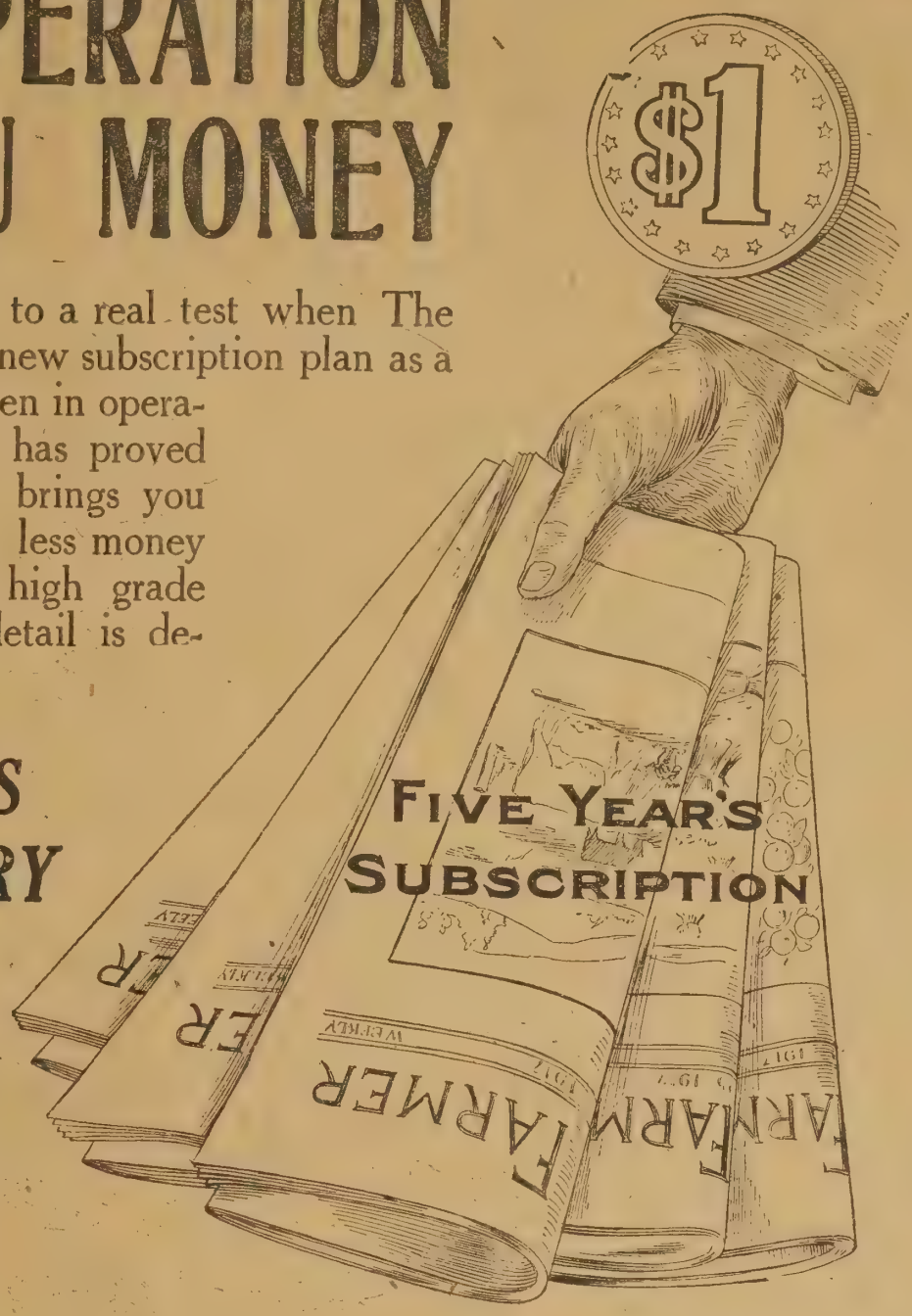
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# News for Breeders

George S. Ball of North Yakima, on December 10 purchased from Earl Wood of Silverton, Ore., the Berkshire gilt which won grand championship of the breed at all the shows at which she was shown this ington State fairs. She is a most promising animal, with best breed type, good feet and legs, strong back and length of body. She should be a formidable competitor if shown next season.

The Methow Valley Live Stock company, of which Mr. Parsons of San Francisco is president and W. S. Gaynor of Winthrow, Wash., vice president and manager, have a herd of about 40 purebred Herefords in the valley near Winthrop. For a herd header they have Panama 72d, a son of old Panama, bred by A. B. Cook. The foundation cows are mostly from L. L. Young of Nampa, Idaho, and are big, breedy cows that are producing high-class show calves from the high-class sire mentioned. It is probable the company will show Herefords at least at Spokane and Yakima next fall. They will come out strong, if at all, and in any case expect to build up a great show herd. The company runs about 500 head of range cattle, with Hereford tops.

RESCUES SOME GOOD ONES.

"I have some cattle in this sale myself, and I may be hurting my own sales, but I won't let good bulls like that go at such prices," declared Joe Turner of Myers Falls, Wash., as he put in a bid on a fine yearling Shorthorn at Lewiston, Idaho, Dec. 18. The bidding was slow and some of the stock were selling at far below their real value. Mr. Turner bought six head of young bulls. Ray & Rothrock of Sprague, Wash., also bought several head of bulls and heifers, paying the top price of the heifer sale, $400, for Marsh Violet, consigned by W. J. Townley of Union, Ore.

# Purebreds Sell

(Continued from page fifteen.)

Dale's Queen, born April 24, 1917—M. R. Biggs, Prineville, Ore. ..... 1000
Irene 4th, born March 29, 1917—G. A. Wells, Independence, Ore. ..... 280
Consigned by A. N. Haradon, Yamhill, Ore.
Duchess of Sunrise, born February 1, 1915—J. W. Davis, Ridgefield, Wash. ..... 400
Welcome Snowflake, born September 3, 1916—M. R. Biggs ..... 350
Consigned by E. F. Anderson & Son.
Lillydale, born September 5, 1912—C. A. McCrow, Dallas, Ore. ..... 150
Dale's Lady, born September 11, 1916—Mossie & Sons ..... 360
Locklomon Lillydale 2d, born January 15, 1918—G. A. Wells ..... 230
Twin of above—G. A. Wells ..... 230
Locklomon Welcome, born January 2, 1918—C. Myers, Husum, Wash. ..... 220
Consigned by University of Idaho.
Welcome Lady, Born April 1, 1911—R. C. Burchart, Lebanon, Ore. ..... 230
Consigned by M. R. Biggs.
Maggie 3d, born January 5, 1917—Orville Yancy, Prineville, Ore. ..... 315
Consigned by W. O. Cummings.
Evergreen Gem 2d, born September 15, 1917—Mossie & Sons ..... 210
Summary:
16 bulls, $6800; average ..... 425
24 cows, $10,105; average ..... 421
40 animals, $10,905; average ..... 422

HOLSTEINS.
Bulls.

Consigned by Carnation Stock Farms, Seattle, Wash.
King Segis Oak Dekol, born May 31, 1917—Sold to Charles B. Fischer, Thomas, Wash. ..... 80
Carnation Segis Pietje, born March 18, 1918—W. J. Livingston, Orchards, Wash. 150
Ollie Johanno Prince, born July 18, 1917—Lon Kimamon, Beaverton, Ore. ..... 140
Consigned by Hollywood Farm, Hollywood, Wash.
Hollywood Segis Beets DeKol, born July 20, 1918—Frank Connell, Hillsboro,

(Continued on page twenty-seven.)


## CHESTER WHITE SWINE

## CHESTER WHITE SWINE

June, July and Sept. gilts. Will ship subject to approval.
FRED H. HOFFMAN, Albion, Wash.

## PIGEONS

## FOR SALE—PIGEONS

WHITE GIANT RUNTS. High class breeding stock that raises 1½-pound squab in 4 weeks. Prize winning show and utility stock from $8 per pair up. Satisfaction guaranteed or money refunded.
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The pump has been blamed for much watered milk that really came from poor cows. Why waste feed on cows that skim their own milk when feed cost? Jerseys will produce the highest percentage of butter fat at the lowest Raise the standard of your herd to the highest degree with Jerseys. The man who begins with one Jersey is never satisfied until he has a herd. He can see the profit without close figuring. Start now. Write to breeders for pedigrees and prices. Let us send you the Jersey facts that will open your eyes to the possibilities of this money-making breed.
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### Raleigh's Jolly Nobleman

Our senior herd bull traces twenty-one times to Golden Lad 1242 and fifty-four times to Sultan P. 7, progenitors of more champion Jerseys than any other family of the breed. His dam is out of a daughter of Golden Lad 1242.
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Oldest Jersey herd in northwest Washington. Young stock for sale, both sexes, from good, producing dams. Herd headed by Kolander's Eminent 148256. A very fine bunch of young stock, both sexes, for sale.
B. C. CRABTREE, Lynden, Wash.

LUCKIAMUTE FARM JERSEYS WON.
At Oregon state fair, 1918, with only 15 head shown. Junior and grand champion bull, junior champion heifer, 1, breeder's young herd; 1, calf herd; 1 and 3, get of sire; 1, 2, 3 and 4, produce of cow; 1 and 2, senior bull calf; 1, junior bull calf; 1, 3-year-old cow; 1, 2-year-old cow; 1 and 2, senior heifer calf; 9 other prizes. Young bulls from R. of M. dams.
FRANK LAUGHARY & SON. Monmouth, Ore.

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First prize junior bull calf, Idaho State Fair, Minnidoka Co. and Twin Falls Co. fairs. Sire, Rosys Jolly Golden Fern 135028.
Grand champion bull, above fair circuit. Dam Gem Nehalim Lassie, a reg. of merit cow line bred in blood of Hood Farm Torona, Oonan 23 and Figgis.
S. H. KAYLER, Twin Falls, Idaho.

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A bred herd, tried out for several generations by every breeding test. Only the best blood lines. Three proven matings. Nothing for sale except from tried sires. Increase of both sexes for sale.
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### Goldie's Nehalem Beauty

won grand champion of the Jersey breed for production, 1917. Her record, 80 per cent basis, 1131 lbs. butter as 4-year-old. We have two bull calves sired by her son. Their dam's yearling records: 492 lbs. (average per cent fat, 6.08) and 433 lbs. butter. Both have been grand champions in show ring. Also a few females.
CLIFFORD F. REID, Wilcox bldg., Portland, Ore.

### Who Wants This Bull?

A double grandson of Kadia D., world's Jersey milk record for senior 4-year-old, 16,191 lbs. He is also a grandson of Holger and Engineer's Bluster. Because slightly broken colored, will be sold cheap. Other good young bulls and a few heifers and cows, same line of breeding.
N. H. SMITH, Oregon City, Ore.

### Doerfler Farm Jerseys

Awarded first, second and third in milking contest, open to all breeds at Oregon State fair, 1918. Also first for 4 best cows, judged 50 per cent type and 50 per cent production. These were the 4 best prizes awarded. They also received many other prizes in the show ring, but type follows production: A few cows and a dandy bull for sale, with great records back of them.
F. A. DOERFLER, Prop., Silverton, Ore.

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Young bull, ready for service. Sire's dam, St. Mawes Poppy, 1129 lbs. 85 per cent butter, or 1190 lbs. 80 per cent, in a year. Is 75 per cent same blood as Poppy's Grace, that has recently finished year's test as junior 2-year-old, with 601 lbs. 85 per cent butter. His dam and dam's dam both register of merit cows. Priced at $250 for quick sale.
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### Five Gold Medal Bulls

in the Jersey breed. Golden Glow's Chief (bred by us), only one west of Michigan. Only one other sire has more 500 lbs. fat record daughters. Two of his sons are our present herd sires. Bull calves by them to offer.
IRON MINE FARM, W. M. Ladd, Owner. Oswego, Oregon. D. Brooks Hogan, Mgr.

### Come to the Fountain Head

The original St. Mawes herd. Every cow is in register of merit or on test. We now offer a bull calf that is a grandson of St. Mawes Poppy and St. Mawes Susie, the two greatest daughters of the great St. Mawes, averaging over 900 pounds of fat.
ED CARY, Carlton, Ore.

### Anoka Farm Jerseys

We have some choice young bulls up to six months old for sale, whose sire has a 714-lb. dam and 1120-lb. granddam, St. Mawes breeding. The Best in the West. Prices very reasonable. Address.
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Young bulls of Golden Glow's Chief, and King Melia Ann strains, out of register of merit dams. Priced to meet the unfavorable conditions. Write for full particulars and pedigrees.
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Peter Mouw's Poland China hogs, Cotswold sheep, White Leghorn and Buff Orpington poultry, carefully bred, great foundation stock.
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### A Bit of Courtesy

When writing to any of the Jersey breeders advertising in these columns, you will confer a favor to the breeder and to the American Jersey Cattle club by mentioning this paper, as they want to be able to trace the exact source of their inquiries. Will you do this, please?

### Both Grandsires Great

Young bull, by a son of Foxhall's Fern Lad, sire of 6 register of merit daughters and out of a daughter of Golden Cicero, sire of 7 register of merit daughters. Young bull's dam has a private record of 476 lbs. fat as a 3-year-old, and will be officially tested. Granddam a daughter of Upright's Chief, half-brother to Golden Glow's Chief. Also a few granddaughters of Golden Cicero.
WILLAMETTEDALE FARM, TOM PETTIT, MRG., CORVALLIS, ORE.

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Three registered Jersey cows, with good register of merit records. Two are on test again and will increase their records; all in class AA. Two are bred to the great sire, FOXHALL'S FERN LAD. Come and see them or write for prices and full particulars.
FOX BROS. Silverton, Ore.

### AT LAST

we can again offer a bull ready for light service. His three nearest dams average 649 lbs. fat in one year. Solid color and a splendid individual. Write today, as we have but the one ready to use.
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We are offering a few choice individuals of excellent breeding.
Write for sale list and photographs.
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Young bull out of Olalla 2d, daughter of Olalla (806.25 lbs. butter as junior 3-year-old). Bull's sire, St. Mawes Prince, by Poppy's St. Mawes, and out of Gertie's Fern Princess (342.5 lbs. butter), both 80 per cent. Also other good young bulls.
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The two most popular strains of Jerseys in the northwest. Young bulls from register of merit cows for sale.
G. G. HEWITT. Monmouth, Ore.

### Ashnook Farm Jerseys

Young bulls by Silver Chimes of S. B., whose first 6 daughters average 710 lbs. 80 per cent butter. A few good cows and heifers for sale.
DEL PERKINS. Carlton, Ore.

## BERKSHIRE SWINE

PRIZE WINNING BERKSHIRES.
At Washington and Oregon state fairs, 1918, my Berkshires won both championships and every first prize for which shown. Open gilts, bred gilts of all ages, to farrow in March and April. The grand champion and other boars of all ages. All guaranteed to be breeders.
EARL WOOD, Silverton, Ore.

### BABY BERKSHIRE BOARS

Also boars ready for service. Best breeding. Will ship subject to approval.
DR. GREEN & SON. Wapato, Wash.

## SHEEP

SHEEP AND SWINE.
Registered Shropshire, Hampshire and Oxford sheep. Registered big type Poland China and Duroc swine. Your personal inspection is invited. More than twenty years' exprience as a breeder of pure blood stock.
GRANT B. DIMICK, Oregon City, Ore.

When answering advertisements don't fail to mention this paper.

## POULTRY

### Cockerals, $3.50 and $5.00

Rhode Island Reds, both combs. Rhode Island Whites, both combs. My stock is pedigreed and line bred. Mammoth Toulouse geese, $5. Mammoth Bronze turkeys, males, $8 and $10; females, $5 and $6. Have pedigreed Belgian hares and registered Flemish Giant rabbits.
HIGHLAND FRUIT AND POULTRY RANCH, J. NONNENMACHER, R. F. D. No. 3, Yakima, Wash.

### Rominger's S. C. W. Leghorns

and R. I. Reds. Pullets two to ten dollars. Cockerels, $2.50 to $15. Hatching eggs January, 1919.
MRS. ROMINGER, Underwood, Wash.
Member N. W. R. I. Red Club and R. I. Red Club of America.

MAMMOTH WHITE HOLLAND TURKEYS.
Yearlings, Toms and young stock for sale. From prize winners. No eggs.
MRS. E. D. SITTON, Carlton, Ore.

DANIEL'S WHITE PLYMOUTH ROCKS.
The greatest egg laying big bird known; send for our special offer on hatching eggs. Catalog free.
IDEAL POULTRY YARDS, BOX 171, HOQUIAM, WASH.

## POLAND CHINA SWINE

### Satisfaction or Money Back

Big Litter. Easy Feeding.
BIG TYPE POLAND CHINAS.
Fifty vigorous young boars, ready for service. Best breeding of the times and quality to equal it.
H. J. STILLINGS, Hermiston, Ore.

### Big Type Poland Chinas

Mouw, Dreamwever and Herring strains, either sex. Also registered Shorthorn cattle; good individuals.
H. J. HOWSER, Stites, Idaho.

SAMMY AND MOLLY WIN AGAIN.
Our herd boar, Sammy, and Hanna's Big Molly were again made grand champion Poland China boar and sow or and grand champion, sow, respectively, at the 1918 Idaho state fair. Correspondence solicited.
W. F. HOWARD & SONS. Caldwell, Idaho.

### BIG TYPE POLANDS

Gilts—Guaranteed.
GEO. W. BUCK, Oregon City, Ore.

# Breeders' Department

## SHORTHORN CATTLE

### The Rushes Farm Shorthorns

Both Grand Champions at Oregon State Fair, 1918.
Bulls and Heifers in Lewiston Sale.
Herd Headed by Challenge Plate III.

**G. W. DeLay**
**Hot Lake, Ore.**

### The Mounds Farm Shorthorns

Bulls in Service:
Good Prospect.
Violet King.
Bulls and Bred Heifers in Lewiston Sale.

**W. J. Townley**
**Union, Ore.**

### The Valley Junction Shorthorn Cattle

Herd headed by General Hampton No. 390583, assisted by Barmpton Ring 430122 and Scottish King 597412. These bulls are all prize winners in strong competition. We have 12 bulls sired by the above sires running in age from 12 to 18 months for sale; also a few pure bred cows and heifers for sale if sold soon.

**W. W. GREEN & SONS,** **Union, Oregon.**

**REGISTERED SHORTHORN COWS.**
Young bulls and heifers, sired by Scotch bulls; liberal terms.
**CALDWELL CATTLE CO.,** **Caldwell, Idaho.**

When you write to advertisers be sure to state that you saw their advertisement in this paper.

## HOLSTEIN CATTLE

### The Hollywood Farm Offers Four Registered Holstein Bulls

**Ready for Service.** **Well Marked.**
**Bred for Production.** **Straight on Top.**

Their dams' official records are up to 29.71 lbs. butter, with lots of milk.
The average of the official records of their 5 nearest dams is:
Bull No. 809, 7 days' milk, 515.3 lbs.; butter, 27.18 lbs.; average test, 4.2% butter fat.
Bull No. 803, 7 days' milk, 504.6 lbs.; butter, 27.2 lbs; average test, 4.3% butter fat.
Bull No. 787, 7 days' milk, 557.7 lbs.; butter, 29.71 lbs.; average test, 4.3% butter fat.
Bull No. 786, 7 days' milk, 531.8 lbs.; butter, 25.25 lbs.; average test, 3.9% butter fat.
To make room for our increase, these bulls are priced to sell. Consider the high feed prices and raise only high producing stock.

**HOLLYWOOD, WASH** **Near Seattle.** **HOLLYWOOD FARM.**

### Registered Holsteins

Finely bred bull calves for sale at prices that are an inducement for you to finish raising them.
**H. R. BOOMER,** **New Plymouth, Idaho.**

### HOLSTEINS

Well bred young bulls for sale.
**THOS. CARMICHAEL.** **Gaston, Ore.**

### Holsteins and Berkshires

All ages for sale.
**HUGH NISBET,** **Chimacum, Wash.**

### A Rare Chance to Head Your Holstein Herd

We still have for sale five prize-winning purebred males, ranging in age from eight to eighteen months. Weight six hundred to one thousand lbs. Pedigrees furnished on application. Address
**THE INTERMOUNTAIN INSTITUTE**
**Weiser, Idaho.**

## AYRSHIRE CATTLE

### Wenatchee Ayrshires

Offspring of Cavalier's Hover O'Blink, son of the great Bargenoch Gay Cavalier, Imp., and out of Barboigh Maggie X, Imp. The dams are advanced register cows and include Lady Emperor Scott, that holds world's record for high test. Send for pedigrees and A. R. records.

**E. W. VAN TASSELL, Wenatchee, Wash.**

### Elbow Ayrshire Dairy

Young bulls out of heavy-producing dams, sired by Willowmoor Sentinel 16th, a bull with big A. R. records on both sides.

**J. R. MABEN,** **Reedsport, Ore.**

**EDGEWATER SAM.**
Great grandson of Beuchan Peter Pan, undefeated grand champion Great Britain and America, for sale. The first herd in Washington of any breed on government accredited list.
**ELBERT M. CHANDLER,** **Burbank, Wash.**

## HEREFORD CATTLE

### Highland Stock Farm

offers for sale Hereford bulls, 1 or 2 years old. One or a carload.
**PLATT BROS.** **Genesee, Idaho**

## HAMPSHIRE SWINE

**HAMPSHIRE HOGS**

have won every feeding contest entered since 1914. Weanling pigs, gilts, bred or open. Our blood lines can not be beat.

**TUTTLE BROS.** **Asotin, Wash.**

When answering advertisements don't fail to mention this paper.

## DUROC-JERSEY SWINE

### Registered Duroc Jersey Boars

Choice boars sired by Richard Pathfinder and Cherry King Orion Jr., and out of sows representing the best blood in the west. Big growthy fellows, with quality. Satisfaction guaranteed or money refunded. Write me for prices.

**Erik W. Olson**
**VIRGINIA, IDAHO.**

### Bargains in Bred Gilts

On account of the influenza I have not been able to show at the Lewiston and Portland shows. In order to make room for my young pigs I am offering Duroc gilts at 10 per cent off for the next 30 days. My herd won the most prizes with strong competition making a clean sweep of all firsts and seconds under a year at the Washington State fair this fall. These gilts will be bred to my $500 Iowa boar, King Orion Gano. You will make no mistake in buying one of these gilts. Satisfaction guaranteed.

**S. D. CORNELL,** **Grandview, Wash.**

**FOUR DUROC GILTS BRED TO FARROW**
this fall, also spring pigs, on hand.
E. E. PRICE, CABINET, IDAHO, OR
**JAMES N. PRICE,** **Yakima, Wash.**

**Registered Duroc and Hampshire Hogs.**
Must sell to make room. Both breeds. Carry best blood lines.
**F. E. KINGSBURY,** **Malaga, Wash.**

**DUROC JERSEY BOARS**
ready for service. Also bred gilts, from prize winning stock.
**D. M. ADAMS, R. D. No. 1,** **Spokane.**

**OVER 150 SPRING PIGS.**
Sired by our grand champion Richards Defender, Richards Pathfinder and Cherry King Orion Jr., and out of our big type prize winning sows.
In the last three years at the Utah and Idaho state fairs our hogs won 76 champion and first prizes.
Can furnish unrelated pairs. Satisfaction guaranteed or money refunded. Priced very reasonable.
**Richards Live Stock Company, Virginia, Idaho.**

# Every Live Stock Breeder Should Weigh These Facts Carefully

Right now there's a brisk demand for good breeding animals, buyers waiting, we believe, for every head of first-class stock you wish to sell. You will see this condition reflected in what Mr. Wilson says in the following letter:

Greenleaf, Idaho, Dec. 11, 1918.

**Pacific Northwest Farm Trio, Spokane, Wash.**

Gentlemen: I am shipping out boars as fast as I can get them to the express office. Have four to ship tomorrow. Have shipped seven and got nine letters today and one telegram to ship at once. It makes a man feel good when he is shipping to men who have bought before, as he knows his stuff is making good. Got 17 inquiries in the last five days, and 15 mentioned either the Idaho Farmer, The Oregon Farmer or The Washington Farmer. Your papers surely are doing us good. Also got three inquiries for bull calves.

With best regards,

A. L. WILSON,
Manager Greenleaf Stock Farm.

More than 80,000 up-to-date, progressive farm families right here in your own section read The Washington Farmer, The Idaho Farmer and The Oregon Farmer every week. An ad with us enables you to offer anything you wish to sell to

**More Than 80,000 Possible Buyers**

## The Pacific Northwest Farm Trio

**Review Bldg., Spokane, Wash.**

**Send Coupon Today for Our Special Live Stock Adv. Rate.**

**The Pacific Northwest Farm Trio.**
**36 Review Bldg., Spokane, Wash.**
I have the following animals for sale:

..... ..... ..... .....

..... ..... ..... .....

Please send me your live stock adv. rates.

Name ..... ..... .....

P. O. Address ..... ..... .....

# Grain and Produce Markets

## Grain Market.

CHICAGO, Dec. 21.—Notwithstanding that new high price levels for the season were touched today by December and January corn, the entire market later developed weakness owing to a sharp cut in quotations on undesirable holdings. The close was unsettled to 1 1-8 lower, with January 138 5-8 to 138 3-4, and May 135 3-4 to 135 7-8.

Oats gave way with corn.

In provisions as in grain the effort to free the yards from leftover hogs had an evident bearish effect.

**Chicago Futures.**

| | Open. | High. | Low. | Close. |
|---|---|---|---|---|
| Corn— | | | | |
| Jan. | 1.40 | 1.41 | 1.38½ | 1.38½ |
| May | 1.37⅛ | 1.37½ | 1.35⅝ | 1.35¾ |
| Oats— | | | | |
| Jan. | .71⅜ | .71½ | .70¾ | .70¾ |
| May | .71⅝ | .71¾ | .71 | .71 |
| Pork— | | | | |
| Jan. | | | | 47.00 |
| May | 44.00 | 44.00 | 43.00 | 43.00 |
| Lard— | | | | |
| Jan. | 24.30 | 24.30 | 24.00 | 24.00 |
| May | 24.50 | 24.55 | 24.10 | 24.20 |
| Ribs— | | | | |
| Jan. | 24.37 | 25.37 | 24.75 | 24.75 |
| May | 24.15 | 24.10 | 23.72 | 23.75 |

**Pacific Northwest Grain.**

PORTLAND, Ore., Dec. 21.—

| Grain futures (bids)— | Dec. | Jan. | Feb. |
|---|---|---|---|
| Oats, No. 2 white fed. | $54.00 | $55.00 | $55.50 |
| Barley, standard fed. | 49.00 | 49.50 | 50.00 |
| Barley, standard A | 50.00 | 50.50 | 51.50 |
| Eastern oats and corn in bulk— | | | |
| Oats, No. 3 white | 50.00 | 51.00 | 51.50 |
| Oats, 38-lb. clipped wht | 52.00 | 53.00 | 53.50 |
| Corn, No. 3 yellow | 61.00 | 60.00 | 60.00 |
| Corn, No. 3 mixed | 60.00 | 59.00 | 59.00 |

**Minneapolis Grain.**

MINNEAPOLIS, Minn., Dec. 21.—Flour unchanged. Shipments, 88,326 barrels. Barley, 86@94c. Rye, No. 2, $1.54½@1.55. Bran, $42. Wheat receipts, 467 cars, compared with 258 cars a year ago. Cash;: No. 1 northern, $2.21½@2.23. Corn, No. 3 yellow, $1.47@1.49. Oats, No. 3 white, 67½@68c. Flax, $3.56@3.58.

## Live Stock Quotations.

**At Omaha.**

OMAHA, Neb., Dec. 21.—Hogs—Receipts 5200; steady; closing lower. Heavy, $16.75@17.15; mixed, $16.90@17; light, $16.50@17.10; pigs, $10@15.50; bulk of sales, $16.80@17.10.

Cattle—Receipts 400; steady; native steers, $10.50@18.50; cows and heifers, $7@10; western steers, $9.50@16; Texas steers, $8.50@12.25; range cows and heifers, $6.50@11; canners, $5.75@6.75; stockers and feeders, $6@15; calves, $6.75@13.75.

Sheep—Receipts 500; culls, $6.50@7.50; wethers, $10@10.50; ewes, $6.50@7.80; lambs, $12@14.25; feeder lambs, $10@14.50; yearlings, $10@11.

**At Chicago.**

CHICAGO, Dec. 21.—(U. S. Bureau of Markets.)—Hogs—Receipts 7000; mostly steady with yesterday; bulk sales, $17.25@17.60; butchers, $17.40@17.65; light, $16.65@17.40; packing, $16.50@17.40; throwouts, $15.50@16.50; pigs, good to choice, $15.75@14.75.

Cattle—Receipts 300; compared with a week ago, beef steers 50 cents to 75 cents lower; fat cows and heifers about steady; other classes 50 cents to 75 cents lower; bulls, 25 cents to 50 cents lower. Canners, 25 cents higher; calves, $2 lower; stockers and feeders about steady.

Sheep—Receipts 2000; compared with a week ago, fat lambs 25 cents to 50 cents lower; wethers and yearlings, 50 to 75 cents lower; ewes steady to 25 cents lower; feeding lambs generally steady.

**At North Salt Lake.**

NORTH SALT LAKE, Dec. 19.—Cattle—Receipts 158; demand strong. Steers, choice, $11@12; good, $10@11; fair, $8@9. Choice cows and heavy heifers, $7.50@8.25; fair to good cows and heifers, $6.50@7.25; cutters, $5@5.75; canners, $4@4.75; fat bulls, $6.50@7; bologna bulls, $5.50@6.25; veal calves, $9@11.

**At Seattle.**

SEATTLE, Dec. 21.—Hogs—Receipts 204. Steady. Prime lights, $17.25@17.45; medium to choice, $17@17.25; medium heavies, $16@16.40; rough heavies, $15@15.40; pigs, $15@16.40.

Cattle receipts 67. Strong. Best steers, $11@13; medium to choice, $10.50@11.50; common to good, $6@8.50; best cows and heifers, $8.50@9.50; common to medium, $5@7.50; bulls, $5@7.50; calves, 57@12.

**At Portland.**

PORTLAND, Ore., Dec. 21.—Cattle steady. Receipts 14. Steers, prime, $12@12.50; good to choice, $11@12; medium to good, $9.50@11; fair to medium, $8.50@9.50; common to fair, $7.50@8.50; cows and heifers, choice, $8.50@9.25; medium to good, $7.50@8.50; fair to medium, $6.50@ canners, $3.50@4.50; bulls, $6@8; , $8@12; stockers and feeders, $7@9. steady; receipts 883. Prime mixed, .85@17.15; medium mixed, $16.50@ .85; rough heavies, $14.75@16; pigs, $14@15; bulk of sales, $16.85@17.

Sheep steady; receipts 1316. Prime 2@13; fair to medium, $9@11; $10@11.50; wethers, $9@10; 3; rough heavies, $14.60@14.75.

**Spokane Union Stock Yards.**

| | Cattle | Calves | Hogs | Sheep |
|---|---|---|---|---|
| Dec. 21 | 276 | 4 | 283 | ... |
| Dec. 20 | 69 | 1 | 489 | ... |
| day, Dec. 19 | 88 | 1 | 282 | ... |
| Dec. 18 | 286 | 35 | 864 | ... |
| Tuesday, Dec. 17 | 5 | ... | 79 | ... |
| Monday, Dec. 16 | 283 | 8 | 215 | ... |
| Week ago | 125 | 2 | 16 | ... |
| Year ago | 64 | ... | 381 | ... |
| Two years ago | 139 | ... | 275 | 487 |

Saturday's receipts were the heaviest at the yards for several weeks past. All trains being late, most of the stock arrived too late to be placed on today's market. While the week's receipts have been light the market has been very active, with the demand exceeding the supply. Cattle of good quality meet a ready sale at the following quotations:

| | |
|---|---|
| Prime steers | $12.00@12.50 |
| Good to choice steers | 10.75@11.75 |
| Medium to good steers | 9.50@10.50 |
| Fair to medium steers | 8.25@ 9.00 |
| Common to fair steers | 5.50@ 8.00 |
| Choice cows and heifers | 7.50@ 8.25 |
| Medium to good cows and heifers | 6.00@ 7.00 |
| Common to medium cows and heifers | 4.75@ 5.75 |
| Canners | 3.50@ 4.50 |
| Bulls | 5.00@ 7.50 |
| Calves | 9.00@10.00 |
| Stockers and feeders | 6.00@ 9.50 |

The receipts of hogs for the week have been very satisfactory. The quality has averaged very good and all shipments found a ready market in line with the following quotations:

| | |
|---|---|
| Prime mixed | $16.75@17.00 |
| Medium mixed | 16.50@16.75 |
| Rough heavies | 14.60@14.75 |
| Pigs | 14.50@16.00 |
| Stockers and feeders | 12.00@14.50 |

There were no sheep receipts today. The market remains steady at the following prices:

| | |
|---|---|
| Prime lambs | $12.00@13.50 |
| Fair to medium lambs | 9.25@11.50 |
| Prime yearlings | 10.25@11.50 |
| Best mutton ewes | 7.50@ 8.50 |
| Prime wethers | 9.25@10.25 |

## Spokane Market.

SPOKANE, Dec. 21.—The following prices are quoted on the city markets:

**Retail Fruit**—Jonathan apples, five pounds 25 cents; Delicious apples, three pounds 25 cents; Emperor grapes, 35c to 50 cents a pound; Angelo pears, 36 cents a basket; oranges, 65 to 80 cents a dozen; lemons, 40 cents a dozen; grapefruit, 10 and 15 cents each, 2 for a quarter; huckleberries, 2 pounds 35 cents; cranberries, 20 cents a pound; black figs, 40 cents; white figs, 40 and 45 cents a pound; pulled figs, 55 cents a pound; Fard dates, 75 cents a pound; bananas, 15 cents a pound; pine nuts, 60 cents a pound.

**Retail Vegetables**—Artichokes, 20 cents a pound; cabbage, 4c lb.; red cabbage, 6c lb.; cauliflower, 25c, 30c and 35c each; celery, 10c, 15c a stick, 2 for 25c; celery hearts, 15c and 20c a bundle; cucumbers, 25c each; horseradish root, 25c lb.; head lettuce, 10c and 15c each; leaf lettuce, 35c lb.; onions, green, 5c bunch; onions, dry, 7 lbs. 25c; potatoes, 10 lbs. 25c, 50 lbs. $1.25, 100 lbs. $2; sweet potatoes, 4 lbs. 25c; green peppers, 20c string; red peppers, pimentoes, 30c lb.; parsley, 5c bunch; pumpkins, 3c lb.; squash, 3c lb.; carrots, beets, turnips, 10c a bunch; 2 bunches, 15c; carrots, beets, turnips, rutabagas, parsnips (bulk), 3 lbs. 10c; tomatoes, 35c lb.; radishes, 5c bunch; watercress, 5c bunch.

**WHOLESALE MEATS.**

**Beef**—Beef steers, 13@21c lb.; T. C. steers, 19c lb.; cow beef, 10@15c lb.; heifers, 14½@15½c lb.; beef loin, 18@28c lb.; steer chucks, 10@12 lb.; square chucks, 11@13c lb.; prime ribs, 15@20c lb.; rump and round, 16@19c lb.

**Mutton**—Breakers, 19@21c lb.; wethers, 18@19c lb.; ewes, 15@18c.

**Lambs**—Diamond T. C. lambs, 22c lb.; lambs, 20@23c.

**Pork**—Packer dressed hogs, 26@27c lb.; pork loins, 30@35c lb.; legs, 32@34c lb.; shoulders, 25@28c lb.; leaf lard, 27c lb.; tenderloins, frozen, 45c lb.; spareribs, 17@19c lb.; country dressed hogs, with head on, 19@21c lb. to producer; country dressed veal, 13@15c lb. to producer.

**Smoked Meats**—Washington hams, 38c lb.; T. C. hams, 40c lb.; T. C. bacon, 53½c lb.; Washington bacon, 44@48c lb.; picnics, 28c lb.; lean backs, 36@37c lb.; Boston butts, 35c lb.

**Dry Salt Meats**—Clear bellies, 31@35c lb.; loin back, clear, 31c lb.; rib chunks, 25c lb.

**Lard**—Tierces, 28c lb.; $26.50 per case; Snowcap compound, tierces, 23½c lb.

**POULTRY.**

**Live Poultry**—Live hens, 20@22c lb.; spring chickens, 22c lb.; roosters, 10c lb.; ducks, 20c lb.; geese, 18c lb. to producers, f. o. b. Spokane; turkeys, 43@44c lb.

**BUTTER.**

**Creamery Butter**—1-lb. prints, 57@60c pound.

**CHEESE.**

**Wisconsin**—38@38½c lb.; first-grade western, 37@38c lb.; cottage, 10@12½c lb.

**EGGS.**

Fresh local, 73@82c doz.; Minnesota fresh eggs, $23 case; storage eggs, $16 case.

**GASOLINE, LINSEED OIL, ETC.**

**Gasoline**—Red Crown, bulk, 23c gal. Shell, 25c gal.; refined oil (Pearl), bulk, 13½c gal.; eocene, 15½c gal. in bulk.

**Gasoline**—Red Crown, bulk, 25c gal.

**Linseed Oil**—Raw, bbl., $1.94 gal., cases $2.12 gal.; boiled, bbl., $1.96 gal., cases $2.14 gal.

**Turpentine**—Bulk, 86c gal.; cases $1.06 gal.

**White Lead**—Strictly pure white lead in oil, ton lots, 13½c lb.; 50-lb. lots, 14c.

**GRAIN AND FEED.**

**Rice**—Fancy head, $7.50@9.50 cwt.

**Flour**—Bluestem, $11; blend, $11; graham, $9.75 bbl.; whole wheat, $10.35; eastern rye, $10; eastern rye meal, $10.20; oat flour, $12.80, two 100-lb. sacks.

**Oats**—$62 ton whole, $63@65 rolled, delivered in city; steam rolled No. 2, $65 ton.

**Corn**—$77 ton; cracked corn, $79 ton.

**Barley**—Rolled, $61 per ton.

**Oil Meal**—$75 per ton.

**Bran and Shorts**—$30 ton; if soft wheat feed, $32 ton.

**Hay**—Timothy, $39 per ton delivered, $36 by carload; alfalfa, $32 per ton delivered, $28 by carload.

## Portland Market.

PORTLAND, Ore., Dec. 21.—Poultry dealers think turkeys will be higher for Christmas than at Thanksgiving. The price at the close of the week on choice dressed was 42@42½c. The receipts were only fair and cleaned up on shipping orders. Other poultry was also scarce. Retailers announce a 50c market for the week. At Thanksgiving the retail market opened at 45c and slumped to 35c.

Eggs are coming in more freely but are selling well at 72@73c for ordinary candled and these prices are likely to hold until after the holiday.

Butter is slow and the market is weaker. Cube extras are held at 61c with 60c asked.

There is a firm local apple market, but the demand is mostly for cheap grades. Potatoes are weak and tending lower. Onions are holding their own.

Further sales of hops at 30 cents have reduced Oregon stock to 950 bales. There is little inquiry for contracts at 20 cents.

Butter—Cubes, 60@61c; prints, 62c; butterfat, No. 1, 67c, delivered.

Eggs—Oregon ranch, candled, 72@73c; selects, 76c per doz.

Cheese—Jobbers' buying prices, f. o. b. dock, Portland: Tillamook triplets, 36c; young Americas, 37c per pound, Coos and Curry, f. o. b. Myrtle Point, triplets, 35¾c.

Poultry—Hens, 25@28c; ducks, 28@30c; geese, 18@20c; turkeys, dressed, 42@42½c.

Pork—Fancy, 19@20c.

Veal—Fancy, 20@21c.

Potatoes—Oregon Burbanks, $1.50.

## Portland Grain.

PORTLAND, Ore., Dec. 21.—The mill feed has been completely upset by the removal of milling restrictions by the food administration. New prices have not been named, but are likely to be any day. It is the belief in the trade that mill feed will be advanced at least $10 a ton and flour reduced slightly. Millers point out that in order to compete for government flour orders with the middle west they must cut export grades of flour severely and they can only do this by raising feed prices. Unless they can get these flour orders they say they can make neither flour nor mill feed. Patents will be ground as before the war and will likely sell at the present price of government 100 per cent flour and the latter be reduced about 25 cents.

There was no trading in the coarse grain in the latter half of the week. Closing bids were: Sacked oats, $54@55; eastern oats, $50@53.50; bulk corn, $59@61; feed barley, $49@50; milling barley, $50@51.

# Want Model Apiary

The Washington State Beekeepers' association is planning to ask the state legislature for an appropriation of $4000 for the purpose of establishing a model apiary in connection with the state college experiment station at Prosser. This action was agreed upon at the recent convention of the association held in Yakima. Another plan of the association is to secure the appointment of an expert to assist in combating the disease known as foul brood, which is claimed to have reduced the production of honey in several sections as much as 25 per cent.

Dr. A. J. Pressey was elected president of the association for the ensuing year. The other officers chosen are J. P. Hostetter, Puyallup, vice president; C. B. Saxton, Harwood, secretary; H. L. Hart, Yakima, treasurer.

## Seattle Market.

SEATTLE, Dec. 21.—The following a present market quotations here:

**Prices to Producers.**

Eggs—Select ranch, 70c per doz.; pulle 64@65c per doz.; Oregon, eastern Was ington and Idaho, loss off, 60c per doz.

Butter—Fresh dairy, 30c per lb.; butte fat, 70c per lb.; bakers', 28@30c per l raw milk, $3.60 per cwt.

Poultry—Broilers, live, under 2 lbs., per lb.; 2 lbs and over, 26c per lb.; he 3 and 3 1-2 lbs., 26c per lb.; over 4 lb 28c per lb.; old roosters, 18c per lb.; duck live, fat, 28c per lb.; squabs, large, $3. per doz.; geese, fat, live, 26c per lb.; Be gian hares, 14c per lb.; guineas, $6 p doz.; turkeys, young toms and hens, d picked, 8 lbs. and up, 38@40c per lb.

Hogs—Choice light, 20c per lb.; heav 18@19c per lb.

Beef—Steers, fat, 11@12c per lb.; hei ers, fat, 11@12c per lb.; cows and bull fat, 10c per lb.

Veal—Fancy light, 20c per lb.; do heav 12@16c per lb.

Mutton—Fat, 17c per lb.; spring lamb fat, dressed, 18@20c per lb.

Bid prices to producers: Salted hide cows and steers. No. 1, 14c per lb.; do N 2, 13c per lb.; green hides, cows a steers, No. 1, 11c per lb.; do No. 2, 10c p lb.; salted, bulls or stags, No. 1, 11c p lb.; do No. 2, 10c per lb.; green bulls stags, No. 1, 9c per lb.; do No. 2, 8c per l salted or green calfskins, No. 1, 30c p lb.; do No. 2, 28 1-2c per lb; salted green kip skins, No. 1, 16c per lb.; do N 2, 14 1-2c per lb.; dry hides, No. 1, 29c p lb.; do No. 2, 28c per lb.; dry bulls or stag 24c per lb.; dry calf hides, 23c per l dry calfskins (5 lbs. and under), No. 1, 3 per lb.; do No. 2, 30c per lb.

Horse Hides—Green or salted, each, $2 4; do dry, 50c@$2.

Wool—Clean ranch, full growth, 50 55c per lb.

Sheep Pelts—Long wool, each $2@3.5 medium wool, each, $1.50@2; short woo each, $1@1.50; shearlings, 35@75c.

**Prices to Retailers.**

Hay and feed quotations, city price truckload delivery, are as follows:

Feed—Mill run, $34@37 per ton; scratc feed, $78; feed wheat, $80; all grain cho $69; oats, $65; sprouting oats, $70; roll oats, $67; whole corn, $72; cracked cor $74; rolled barley, $60; clipped barley, $6 alfalfa meal, $40; egg mash, $59@71.

Hay—Eastern Washington timothy, $3 per ton; do double compressed $42; alfalf $33; straw, $17.

Potatoes—Yakima baking Gems, $32 35 per ton; local, $24@28 per ton.

## DAIRY ASSOCIATION ELECTS.

The Washington State Dairy associatio elected the following officers at its mee ing at Kent December 18-19:

Donald McInnes, Dungeness, president J. C. Burnham, Enumclaw, vice president Mrs. Ada Miller, secretary and treasure Alex. Todd of Yakima, E. L. Brewer, Sa sop, and A. E. Smith, Sumas, were electe to the board of directors.

**FISH** Salmon in brine, 100 lbs. meat, shipping weight 165 lbs., price $14; 50 lbs., $7. Smoked salmon, 20 lbs., $4.00. Dried cod, 10 lbs., $1.75. Herring, in brine, 50 lbs., $5.00; 25 lbs., $2.75. Cash with order.

T. A. BEARD,
4322 Winslow Place, Seattle, Washington.

**Special Tractor and Gas Engine Course**

by

DPT. AGRICULTURAL ENGINEERING, STATE COLLEGE OF WASHINGTON.

Classes start Monday, January 6th, and every second week thereafter up to March 3d. Course includes four weeks' instruction for each class. Enrollment limited to 20 students in any one class.

In writing for information and enrolling blank, state whether you wish to join class starting January 6th, 20th, February 3d, 17th, or March 3d.

**Address Registrar, State College of Washington**

***Pullman, Washington***



**An ounce of "Eureka" means $ $ to you**

Eureka Harness Oil gives long life to harness. That means dollars to you. Protects leather fiber from dust, sweat and moisture, which cause rot. Replaces the natural oils that have dried out. Keeps harness strong, flexible and jet black. No animal oils in "Eureka"; rats, mice and other rodents dislike it and won't gnaw harness dressed with

**EUREKA HARNESS OIL**

MADE BY STANDARD OIL COMPANY (CALIFORNIA)

# Purebreds Sell

(Continued from page twenty-four)

Ore. ... 400
Hollywood Segis Pontiac, born January 1918—Farr & Snyder, Warren, Ore. ... 155
Consigned by E. B. Marks, Yakima, Wash.
Echo Segis, born February 25, 1918—J. H. Bower, Monroe, Ore. ... 215
Echo Cornucopia, born March 15, 1917—Charles E. Dicker ... 160
Consigned by William Bishop, Chimacum, Wash.
Lulu Jr. born May 12, 1918—R. Hefferber, Helsdale, Ore. ... 295
Consigned by J. Von Herberg, Seattle, Wash.
Von Heim Sir Hartog, Armsby born May 21, 1917—Albert Johnson, Scappoose, Ore. ... 300

Females.

Consigned by Carnation Stock Farm.
Interlodge Lady Lytle, born December 28, 1915—E. J. Hoffman, Cornelius, Ore. ... 325
Riverview Aaggie Korndyke Klaver—Earl Oakes, Ferndale, Wash. ... 310
Lady Blondet DeKol 2d, born August 1, 1911—S. V. Burchart, Granger, Wash. ... 325
Rachel Burke, born July 25, 1912—E. J. Hoffman ... 320
Crinsby Gluck Johanna, born October 28, 1912—C. L. Jamieson, Walla Walla, Wash. ... 230
Ingleo Segis Gelsche, born October 11, 1916—Frank McKechnie, Allen, Ore. ... 225
Pontiac Inka Clothilde 2d, born March 20, 1914—Hollywood Farm, Hollywood, Wash. ... 195
Lady Cornelia Rooker, born December 11, 1915—Dr. C. W. Cornelius, Portland, Ore. ... 280
Queen Rag Apple Mechtilde, born November 18, 1915—H. A. Lamb, Woodland, Ore. ... 350
Teunise Lass 2d, born September 28, 1915—Carnation Farm, Calvin, Canada, Wash. ... 215
Wynnwood Homestead Canada 2d, born February 4, 1914—J. H. Yates, Lenard, Ore. ... 260
Ingleo Gerben Bloom, born May 17, 1916—C. W. Cornelius ... 170
Consigned by William Teed & Sons, Yakima, Wash.
Cascade May 2d, born April 18, 1916—Carnation Stock Farm ... 355
Cascade Martha, born April 2, 1915—Carnation Stock Farm ... 400
Cascade Grace Alix, born February 20, 1915—Carnation Stock Farm ... 325
Cascade Johanna Betsey, born May 23, 1916—E. J. Hoffman ... 260
Cascade Colantha Johanna, born May 23, 1916—Earl Oakes ... 305
Cascade Ruth, born February 2, 1913—Mt. Angel College Stock Farm, St. Benedict, Ore ... 600
Consigned by Hollywood Farm.
Augusta Palmer Johanna, born March 17, 1911—John Farr, Warren, Ore. ... 365
Queen Hengerveld Gelsche, born June 4, 1915—J. H. Hulbert, Mt. Vernon, Wash. ... 260
Hollywood Bess Pietertje Fayne, born April 3, 1913—J. H. Bower ... 360
Hollywood Bessie Pietertje Fayne, born August 17, 1916—J. H. Hulbert ... 200
Hollywood Maid DeKol, born January 29, 1915—C. W. Cornelius ... 365
Hollywood Homestead Fayne, born March 12, 1916—C. W. Cornelius ... 410
Consigned by E. B. Marks.
Crinsby DeKol Model, born October 31, 1916—Charles E. Bernard, Beaverton, Ore. ... 100
Maidota Queen DeKol, born December 20, 1916—S. V. Burchart ... 330
Lucy Segis 2d, born August 16, 1917—S. V. Burchart ... 375
Prilly Segis Cornucopia, born April 8, 1917—Earl Oakes ... 235
Myrtle Jewel Cornucopia Tritomia, born February 7, 1917—John Bower ... 355
Miss Johanna Aaggie—W. N. Hathorn, Laurel, Ore. ... 220
Duchess Hengerveld Segis 5th, born February 23, 1917—A. Gunnell, Marshfield, Ore. ... 250
Duchess Fayne Johanna, born January 31, 1917—Jesse L. Hansen, Beaverton, Ore. ... 250
Lady Abbekerk Snowball, born November 12, 1916—Abe Steller, Portland, Ore. ... 300
Maidota Prilly, born May 3, 1916—DuBois Brothers, Orchards, Wash. ... 175
Lucy Longfield 2d, born November 20, 1916—Earl Oakes ... 335
Springdale Melinda DeKol Model, born September 3, 1917—Earl Oakes ... 160
Springdale Pontiac Model, born April 13, 1917—W. N. Hathorn ... 210
Bonnie Fobes, born March 26, 1917—A. B. Mills, Salem, Ore. ... 305
Consigned by William Bishop.
Chimacum Wayne Monarch Cornucopia, born January 22, 1916—Hollywood ... 305
Chimacum Korndyke Lulu, born September 15, 1916—Earl Oakes ... 210
Chimacum Sadie Vale Zether, born October 7, 1916—Jesse Hansen ... 200
Consigned by J. Von Herberg.
Marie Tritomia, born September 24, 1915—Charles Fischer ... 290
Von Heim Cristeria Mechtilde, born February 22, 1915—Carnation Farm ... 425
Crinsby Beets Belle, born December 17, 1914—John Farr ... 320
Lady Canary Violetta, born May 18, 1915—S. V. Burchart ... 505
Belle Mechtilde of Lulu, born January 26, 1909—C. L. Jamieson ... 245
Nancy Johanna of Greenbank, born September 12, 1914—Charles Fischer ... 385
Von Heim Netherland Champion, born November 16, 1915—J. H. Bower ... 305
Echo Estatia Lulu, born November 9, 1913—Charles E. Barnard ... 400
Princess Canary Gertrude, born April 1, 1913—J. H. Bower ... 310
Consigned by Fred Peterson, Center, Wash.
Regis Queen Dotty Johanna—J. H. Bower 165
Tarboo Rose DeKol, born November 21, 1910—J. Van Dorsebuere, Warren, Ore. 160
Babe Rose DeKol 2d, born December 28, 1916—Robischer, Sherwood, Ore. ... 160
Katrina DeKol of Tarboo—W. J. Peterson, Tillamook, Ore. ... 285
Summary:
9 bulls, $1945; average ... 216
54 females, $15,660; average ... 290
63 animals, $17,605; average ... 279

# FARMERS' WANT ADS

This is the farmers' "Want," "Sale" and "Exchange" department for small advertisements of farmers, including live stock and poultry.

Advertising rate, 7 cents a word per insertion, with a special rate to farmer subscribers to the Washington Farmer of 6 cents a word per insertion for from 4 to 12 times, and 5 cents a word per insertion for 13 times or more.

All commercial and land advertising, 7 cents per word each insertion. Open also to nonsubscribers.

In using these columns advertisers must observe: (1) No advertisement will be inserted for less than 75 cents. (2) Every word, number and initial, including name and address, must be paid for. (3) Cash must accompany order.

Above rates also include insertion in The Oregon Farmer and The Idaho Farmer.

### EDUCATIONAL 45

GOODING COLLEGE, GOODING, IDAHO, offers practical winter courses, review subjects, college and academic work and a special summer session for you. Write today.

TELEGRAPHY—YOUNG WOMAN'S POPULAR vocation; good paying positions available. Write for booklet. Pacific Telegraph Institute, Spokane.

SEND NEWS NOTES TELLING OF THE work of your school today. Address the Educator, Gooding, Idaho.

### HONEY, BEESWAX—Wanted 58

SEND SAMPLES OF YOUR HONEY AND beeswax. State quantity, price. Oregon Farm Products Co., 380 Halsey st., Portland.

### MISCELLANEOUS—FOR SALE 60

FOR SALE OR RENT—MONEY-MAKING blacksmith shop, Melrose, Idaho; full set tools, engine and power machinery; chop mill side line. W. N. Garner, Peck, Idaho.

TRAP COYOTES—FULL INSTRUCTIONS ON a sure catch method and reliable scent recipes sent on receipt of $5. C. L. Willis, Dillard, Ore.

### MISCELLANEOUS WANTED 63

POULTRY WANTED.

We are cash buyers of poultry and dressed meats, also cream. Write us for prices, shipping tags and premium catalogue for cream shippers.

COMMERCIAL CREAMERY CO.
SPOKANE, WASH.

### MISCELLANEOUS—Sale or trade 66

THRIFTY HARDWARE, LUMBER AND IMplement business for sale, or would consider satisfactory ranch; western Oregon; no competition; best location in state; healthy, mild climate; ¾ wheat country, balance diversified. Watts & Rogers, Weston, Ore. Umatilla.

### FARM LIGHT PLANTS 73

FOR SALE OR TRADE—ACETYLENE GAS lighting plant; new and in perfect condition; 15-burner capacity. L. E. Nevins, Sylvan, Wash.

### LIGHTING EQUIPMENT 74

THE SAFETY LAMP CO., N208 HOWARD ST., Spokane, Wash. Gasoline lighting and supplies.

### MACHINERY—For Sale 93

FOR FARM LUMBERING USE
"AMERICAN" PORTABLE SAWMILLS.
We have a No. 2 mill set up on our display floor and actually run it with a "Witte" gasoline engine. Come in and see just what you are getting for your money.
HIGGINS MACHINERY COMPANY.
312 1st Ave. So., Seattle. Write for Catalog.

FOR SALE—CLEVELAND TRACTOR; USED 25 days, in perfect running order and good as new; also tractor plow; bargain. Byrd J. Clark, Lyle, Wash.

### MACHINERY—Wanted 96

WANTED—"K" HAND POWER STUMP PULler. L. E. Nevins, Sylvan, Wash.

### AUTOMOBILES 114

FORDS START EASY IN COLD WEATHER with our new 1919 carburetors; 34 miles per gallon; use cheapest gasoline or half kerosene; increased power; style for any motor; very slow on high; attach it yourself; big profits to agents; money back guarantee; 30 days' trial. Air-Friction Carburetor Co., 321 Madison, Dayton, Ohio.

HEADQUARTERS FOR USED CARS.
Trucks and tractors; printed list. Spokane Auto Market, W315 Sprague ave., Spokane, Wn.

AUTO RADIATORS, FENDERS AND LAMPS repaired. Lester Allen, 607 Second avenue, Spokane.

### STOVE AND FURNACE REPAIRS. 126

WRITE M. S. RUBENS, SPOKANE, FOR ANY parts needed to repair stove, furnace.

### POULTRY 174

200,000 BABY CHICKS.

White Leghorn, Barred Rock, Rhode Island Red, hatched right, priced right, stock right. Agents Queen incubators and brooder stoves. Also a large number of used incubators at ½ price of new. Send for catalog and particulars. A pleased customer is our greatest pleasure. Queen Hatchery, 89 Pike street, Seattle.

WANTED—WHITE WYANDOTTE HENS OR White Rocks, also Bourbon red turkey hens. Write prices. Box 77, Cunningham, Wash.

FOR SOMETHING GOOD IN SILVER WYANdottes and Golden Campines, write G. G. Wherry, Payette, Idaho.

PURE MAMMOTH BRONZE TURKEYS, PRIZE winning stock. Mrs. F. Browning, R. No. 1, Caldwell, Idaho.

50 USED INCUBATORS FOR SALE, FROM 70 to 700 egg capacity. A. R. Badger, Centralia, Wash.

WILD AND BRONZE TURKEYS; BREEDERS, for sale. E. Y. Sanders, Roy, Wash.

BOURBON RED TURKEYS. MRS. ROSINBUM, Burley, Idaho.

### LIVE STOCK 177

CHOICE REGISTERED POLAND CHINA gilts, May farrowed. S. C. White Leghorn cock and cockerels. Maynard Smith, Penawawa, Wash.

SHORTHORN CATTLE, PERCHERON HORSES of both sexes. Wm. Mulhall, stock show grounds, Lewiston, Idaho.

FOR SALE—REGISTERED GUERNSEY BULL, old enough for service, of the Langwater strain. F. J. Lewis, Banks, Ore.

REGISTERED DUROC JERSEYS, SWINE breeders' stock for sale. L. Pyles, Pasco, Wash.

### LIVE STOCK Continued. 177

REGISTERED POLAND CHINA PIGS AND open gilts. H. F. Vallicre, Rickreall, Ore.

O. I. C. HOGS, BOTH SEX; BEST OF BREEDing. Dr. S. T. Miller, Twisp, Wash.

### HAY FOR SALE 200

ALFALFA HAY FOR SALE BY OWNER—100 tons No. 1 alfalfa hay. C. B. Cox, Mabton, Wash.

### FUEL DEALERS 279

FOR SALE—MILLWOOD, 16-IN., WHOLEsale. Write Watkins Fuel Co., Yakima, Wash.

### HOTELS 506

WHITE'S HOTEL AND RESTAURANT—Rooms, hot and cold water, 75c up. Breakfast 20c to 40c; dinner, 25c to 50c. Sprague and Stevens, Spokane.

GALAX HOTEL; NEW AND MODERN; 75C and $1. Main and Bernard, Spokane.

NEW MADISON HOTEL, 75C AND UP. 1ST and Madison, Spokane, Wash.

### RUBBER STAMPS AND SEALS 384

FOR RUBBER STAMPS, STENCILS, BADGES, numbering machines, checks, seals, etc., write Pacific Coast Stamp Works, Seattle and Spokane.

### TAXIDERMISTS 426

FUR RUG MOUNTING A SPECIALTY, HEADS, animals and birds mounted. Withers Bros., 822 Sprague, Spokane.

FIRST-CLASS WORK. ALL BRANCHES TAXIdermy and furs. Mohr, Bernard st., Spokane.

### SEEDS. 620

FIELD PEAS, TURNIP, RUTABAGA, POTATO seed. Send for circular. Also choice land for sale or rent. 10 to 100 acres cleared. W. H. Kaufman, Bellingham, Wash., Route No. 2.

### FARM LANDS FOR SALE 651

SNOHOMISH COUNTY, WASH., FARM LANDS. The greatest proposition on the market for the man who wants a farm. 12,000 acres to select from; 3½ miles salt water front; 20 miles of beautiful lake shore; good towns, railways, steamboats, factories, mills, schools, churches, paved roads; where the largest profits are made, where the great variety of crops and wonderful productive climate makes it the most productive farm section of America. Good lands in good localities, as low as $25 to $35 per acre. 10 yearly payments. Send for maps and literature to the Brownell Land Co., 904 Third ave., Seattle, Wash.

YOUR CHANCE IS IN CANADA—RICH LANDS and business opportunities offer you independence; farm lands $11 to $30 acre; irrigated lands, $35 to $50; twenty years to pay; $2000 loan in improvements; loan of live stock; taxes average under twenty cents an acre; no taxes on improvements, personal property or live stock; good markets, churches, schools, roads, telephones; excellent climate—crops and live stock prove it. Special homeseekers' fare certificates. Write for free booklet. Allan Cameron, general superintendent land branch Canadian Pacific Ry., 30 Ninth ave., Calgary, Alberta.

YAKIMA HAY RANCH.
110 acres of hay land; 30 acres in alfalfa, 30 acres ready to seed and 50 acres unimproved. The 50 acres can be prepared for crop at a cost of $10 per acre. The soil on this place is all first class and will grow large crops of alfalfa. Price $115 per acre. Half cash. This is a bargain, come and look at it. Roy C. Lichty, Sunnyside, Wash.

NO CROP FAILURES.
800-acre stock and wheat farm (Vermilion, Alberta); partly cultivated; fair set buildings; watered by two lakes; good soft water. Price, including 50 tons hay, $15,000; small payment down, balance easy terms, at 6 per cent.
UNION INVESTMENT COMPANY.
406 ZIEGLER BLK., SPOKANE, WASH.

EXCELLENT FARM; 6 MILES FROM SPOKkane; on state road; 120 acres; 30 cultivated; 14 in fall wheat; 5-acre bearing orchard, balance timber; good house, barn and other buildings; 2 good horses, hay for winter feed, farm implements included in price, $12,000. Attractive terms. I. B. Welch, Route No. 2, Spokane, Wash.

IN THE RICH WILLAMETTE VALLEY.
Fine home farm 160 acres, well improved; high state of cultivation and fertility; water, wood, fruit, flowers, fishing, hunting. Railroad station on place, rural route, telephone, store, school, church handy; good roads; reasonable price; good terms. Box 7, Yamhill, Ore.

FOR SALE—ONE OF THE BEST 80S IN THE Payette valley; well improved; high state of cultivation; crop this year $6000. For particulars, address owner, Box 68, Route 1, New Plymouth, Idaho.

20 ACRES, JOINING DIXON; ALL IN ALFALfa; just the place for dairying and poultry; seven-room house, barn, orchard and well. R. B. Bates, Dixon, Mont.

### FARM LANDS—WANTED 654

SELL YOUR PROPERTY. WE WILL PLACE a full description of your property with dealers and possible buyers in every state in union for a small fee. Information free. Real Estate Salesman Co., Dept. 10, Lincoln, Neb.

IF YOU WANT TO SELL OR EXCHANGE your property, write me. John J. Black, 80 st., Chippewa Falls, Wis.

### CITY REALTY—Not Spokane 696

FOR SALE—5-ROOM BUNGALOW, PLASTered, fireplace, hardwood floors, numerous built-in features; finished in Oregon curly fir; full cement basement, electric lights, water, bath, 2 acres in bearing orchard; only eleven blocks from main business section of Coeur d'Alene; built by owner for home; house, land and improvements cost $7000, cash price, $5000. Address James H. Frazier, owner, Coeur d'Alene, Idaho.

# Where Money Piles Up

"Personally, I am in favor of turning off beef as long twos or as three-year-old stuff," says Grant Copeland, a prominent live stock man of Whitman county, Wash. "The steer that will grow from 850 to 1150 pounds in his third year will only add 150 pounds in his fourth year, and the cost of feeding that into him is excessive. At the same time interest is accumulating on an increasing investment. The ideal operation for our farmers is to buy two-year-old stuff weighing about 850 pounds, carry it through the fall and winter and turn it off as prime beef. The ideal of an 1150-pound steer at 30 months is on a par with the ideal of a 200-pound hog at 8 months. Both represent the point where the money piles up rapidly. But the thing always to remember is to handle only well-bred stock that has been pushed with feed from weaning. Then the pasture and the feed should not be crowded. A crowded pasture means stunted beef and inability to turn off finished cattle by the time they are 3 years old wipes out the best profits in the business."

# Your Local HOME PAPER and Your State FARM PAPER at a Special Club Price

A clubbing arrangement has been made with a number of newspapers in your state whereby we can now offer you a one-year subscription to your local home paper and a one-year subscription to your state family farm paper at a special rate for both.

**YOUR HOME PAPER**

brings you all the local news and happenings of the social and commercial life of your community. It gives you the news of the home boys at the front and prints many interesting letters from them.

**YOUR FARM PAPER**

brings you, each week, all the news of the farm and farm home, with the agricultural developments of your state. Features for every member of the family, including women's and children's pages and colored comics. Also departments for every phase of farming.

Your Local Home Paper and Your State Farm Paper can now be sent to you for one year each at the special clubbing rate as quoted below:

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| The Blaine Journal, Blaine, Wash., and The Washington Farmer | $1.50 |
| The Buckley Banner, Buckley, Wash., and The Washington Farmer | $1.50 |
| Castle Rock Independent, Castle Rock, Wash., and The Washington Farmer | $1.50 |
| The Cheney Free Press, Cheney, Wash., and The Washington Farmer | $1.50 |
| Chehalis Bee-Nugget, Chehalis, Wash., and The Washington Farmer | $1.50 |
| Cashmere Valley Record, Cashmere, Wash., and The Washington Farmer | $1.50 |
| The Everett Tribune, Everett, Wash., and The Washington Farmer | $3.00 |
| The Colville Examiner, Colville, Wash., and The Washington Farmer. | $1.50 |
| Goldendale Sentinel, Goldendale, Wash., and The Washington Farmer. | $2.00 |
| Puget Sound Mail, La Conner, Wash., and The Washington Farmer | $2.00 |
| The Montesano Vidette, Montesano, Wash., and The Washington Farmer | $2.00 |
| Oak Harbor News, Oak Harbor, Wash., and The Washington Farmer | $1.50 |
| The Morning Olympian, Olympia, Wash., and The Washington Farmer | $4.00 |
| The Weekly Recorder, Olympia, Wash., and The Washington Farmer | $1.00 |
| Puyallup Valley Tribune, Puyallup, Wash., and The Washington Farmer | $1.50 |
| The South Bend Journal, South Bend, Wash., and The Washington Farmer | $2.15 |
| Sumas News-Advocate, Sumas, Wash., and The Washington Farmer | $1.50 |
| Walla Walla Bulletin, Walla Walla, Wash., and The Washington Farmer | $5.00 |
| White Salmon Enterprise, White Salmon, Wn., and The Washington Farmer | $1.50 |
| The Zillah Free Press, Zillah, Wash., and The Washington Farmer | $1.50 |

**Papers mailed to Canadian addresses require additional postage of 1 cent a copy.**

## EXTRAORDINARY CLUBBING OFFER

A three-year subscription to your state farm paper and one year subscription to the following papers at the special price for both.

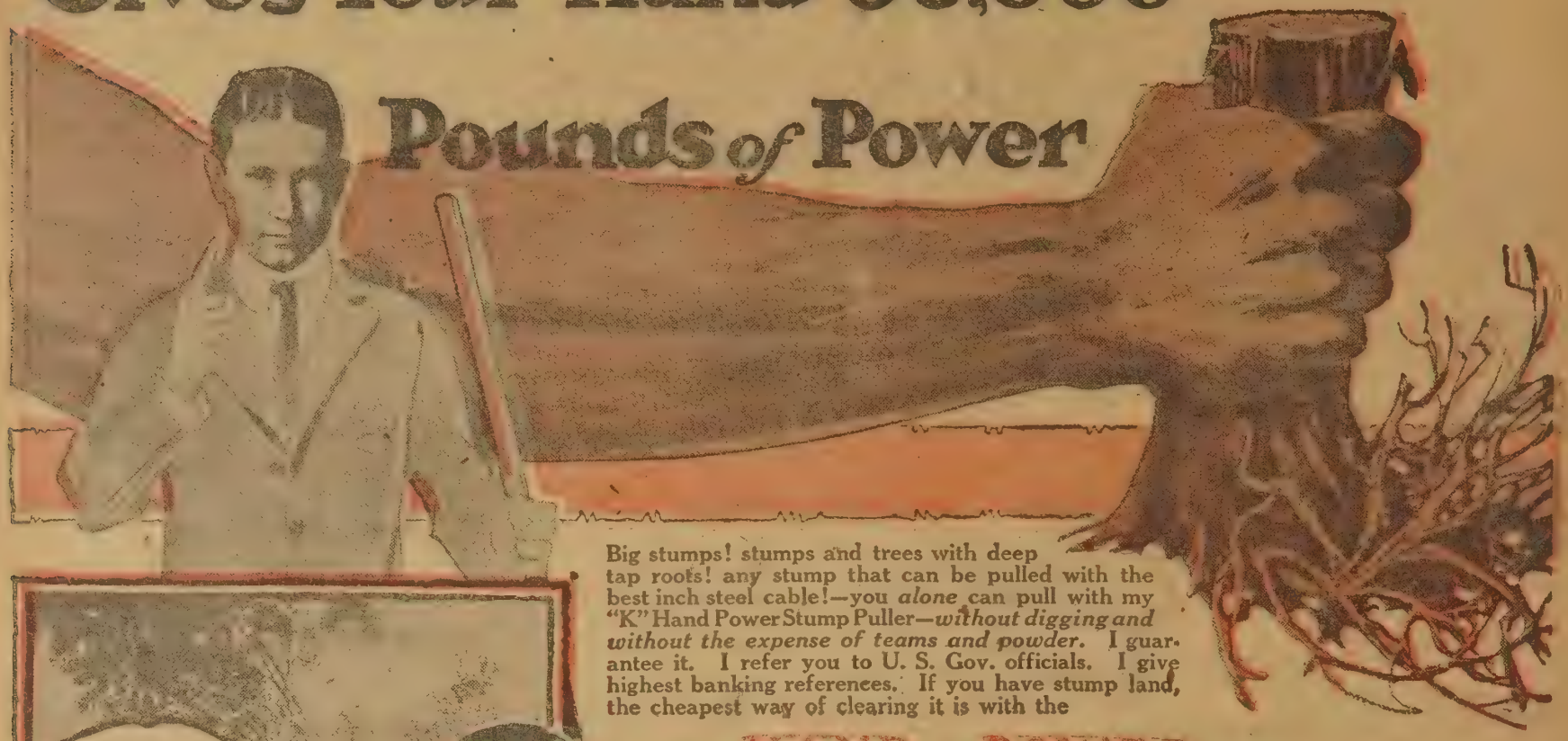
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| The Bellingham Daily Journal | $3.00 |
| The Sunday Spokesman-Review | 3.60 |
| The Spokane Daily Chronicle | 6.00 |
| The Daily Spokesman-Review | 6.00 |
| Daily and Sunday Spokesman-Review | 9.00 |

Take advantage of these special clubbing rates by sending your order today to your local home paper, or by mailing it direct to

**The Washington Farmer**
617 Central Bldg., Seattle, Wash.
or
Review Bldg., Spokane, Wash.

# My K Hand Stump Puller

## Gives Your Hand 96,000 Pounds of Power



Big stumps! stumps and trees with deep tap roots! any stump that can be pulled with the best inch steel cable!—you *alone* can pull with my "K" Hand Power Stump Puller—*without digging and without the expense of teams and powder.* I guarantee it. I refer you to U. S. Gov. officials. I give highest banking references. If you have stump land, the cheapest way of clearing it is with the

Frank Hance, a *one-armed* farmer of Bowie, Md., pulling a double silver maple 8 ft. 8 in. in diameter at the ground, with deep tap roots. This is an easy pull for the "K," as the cable can be hitched high and the leverage is consequently greater.

## K HAND POWER Stump Puller

### How the "K" Pulls Biggest Stumps

The "K" works on the leverage principle of the ordinary lifting jack, except that the power is applied on a cog-wheel instead of a standard. 100 lbs. push on the lever develops a 48-ton pull on the stump—all an inch steel cable will hold. One man operates it alone—no teams to pay for—no walking.

### A Mechanical Wonder

Made of finest steel—guaranteed against breakage. Weighs only 171 lbs.—easily carried or hauled about on its own truck wheels. Has two speeds—60 feet per minute for hauling in cable or for small stumps—slow speed for heavy pulls. *Works equally well on hillsides and marshes where horses can not* work

### Owners Praise It

H. Sinclair of the Dept. of the Interior, a U. S. Gov. official, writes: "The stump puller is a wonder."

Ernest Thompson Seton, author and naturalist, declares the "K" "a great success."

Hundreds of owners write in, telling of pulling six- and seven-foot stumps, of pulling faster and pulling bigger stumps than by any other machine.

**Special Offer** I am making a special offer to get a "K" Stump Puller introduced in every neighborhood. Write me today for full information and for free book on Land Clearing.

**Walter J. Fitzpatrick**

Box 32 182 Fifth St. San Francisco, Cal.

H. G. Hunzicker of Foster, Wash., pulling a 24-inch fir stump with deep tap roots out of hard ground, without using powder or cutting any roots.

**Tear Out and Mail Today**

Walter J. Fitzpatrick
Box 32 182 Fifth St., San Francisco, Cal.

Send me full particulars on your special offer and your free booklet on Land Clearing.

Name _____

Address _____

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